

# A

## APPENDIX A

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**Public Participation Materials**



## ***Forest Lake Association***

### **Forest Lake Management Planning Project**

***Kick-off Meeting***  
August 6, 2016



**Timothy A. Hoyman, CLM**  
**Onterra LLC**  
*Lake Management Planning*

## ***Presentation Outline***

- Onterra, LLC
- Why Create a Management Plan?
- Elements of a Lake Management Planning Project
  - Data & Information
  - Planning Process
- Early-Season AIS Survey Results



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*Lake Management Planning*

## ***Onterra, LLC***

- Founded in 2005
- Staff
  - Three lead ecologists
  - Three field technicians
  - Five summer interns
- Services
  - Science and planning
- Philosophy
  - Promote realistic planning
  - Assist, not direct



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## ***Why Create a Lake Management Plan?***

- To create a better understanding of the lake's positive and negative attributes.
- To discover ways to minimize the negative attributes and maximize the positive attributes.
- To foster realistic expectations and dispel myths.
- To create a snapshot of the lake for future reference and planning.



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## Why Create a Lake Management Plan?

- WDNR strongly recommends lakes conducting active management update aspects of the plan every 5 years.
- Having a current and approved plan makes the sponsor eligible for WDNR grants that implement an action.
- Conducting large-scale management requires a current and approved plan.



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## Elements of an Effective Lake Management Plan

### Data and Information Gathering

*Environmental & Sociological*

### Planning Process

*Brings it all together*



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## Data and Information Gathering

- Study Components
  - Water Quality Analysis
  - Watershed Assessment
  - Shoreline & CWH Assessment
  - Aquatic Plant Surveys
    - Native and Exotic
  - Fisheries Data Integration
  - Stakeholder Survey



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## Planning Process

### General Membership Meetings

- Project Kick-off Meeting
- Project Wrap-up Meeting

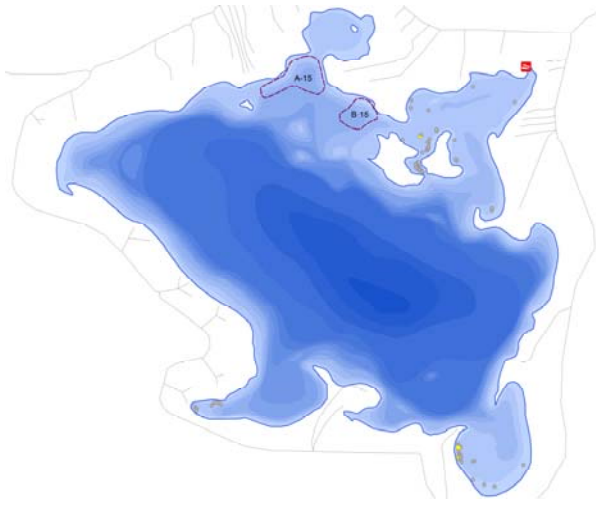
### Planning Committee Meetings (2)

- Study Results (including a stakeholder survey)
- Conclusions & Initial Recommendations
- Develop Management Goals
- Develop Management Actions
  - Timeframe
  - Facilitator(s)



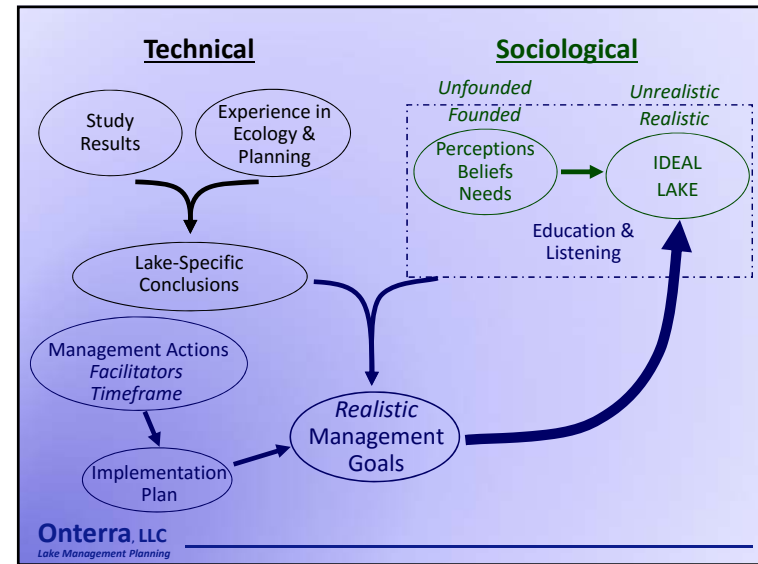
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# ESAIS Results



Onterra LLC  
Land Management Partners

Onterra LLC  
Land Management Partners





**Forest Lake Association**



**Forest Lake  
Management Planning Project  
Planning Meeting I  
July 19, 2017**




**Tim Hoyman, CLM**  
Onterra LLC  
*Lake Management Planning*

### **Presentation Outline**

- **Lake Management Planning Project Overview**
- **Study Results**
  - Water Quality
  - Watershed
  - Shoreland
  - Aquatic Plants
- **“Big Picture”**

*Stakeholder Survey*



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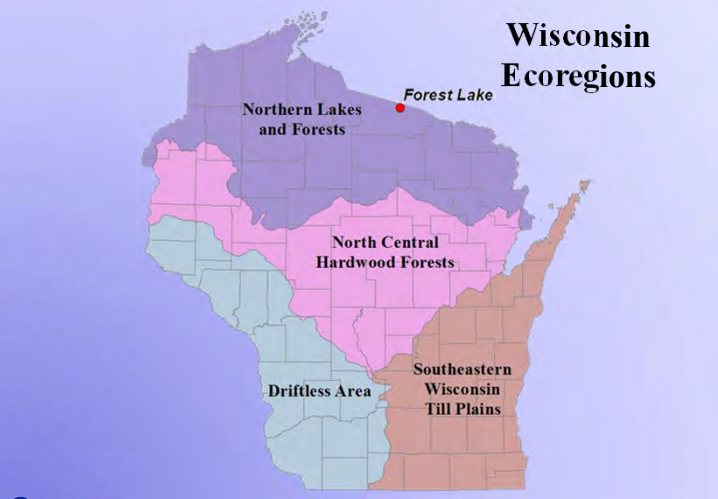
### **Study and Plan Goals**

- Collect & Analyze Data
- Construct Long-Term & Useable Plan



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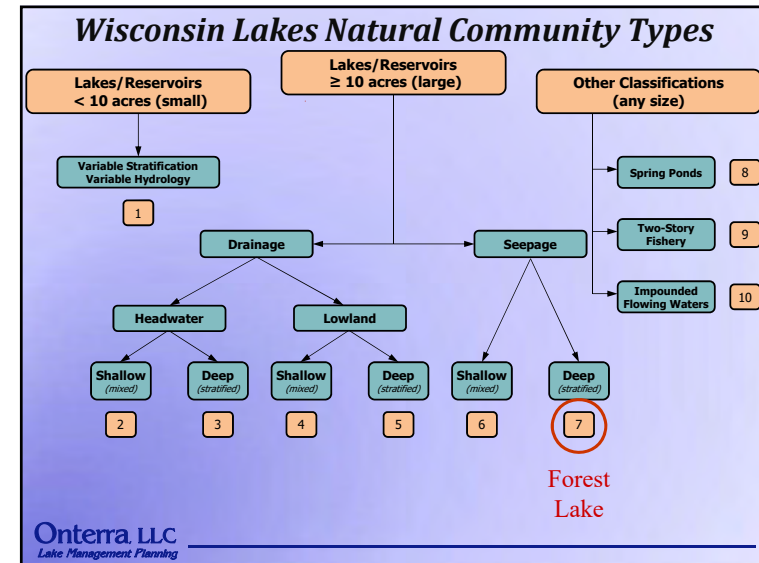
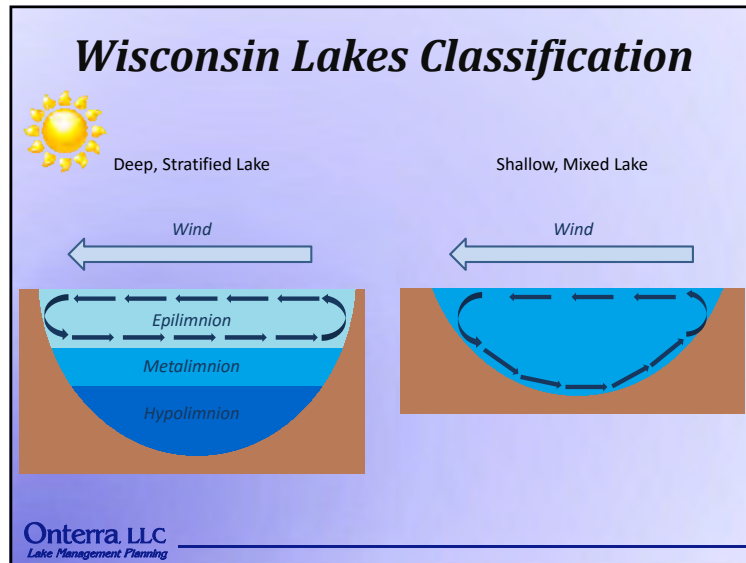
### **Wisconsin Ecoregions**



Northern Lakes and Forests  
Forest Lake  
North Central Hardwood Forests  
Driftless Area  
Southeastern Wisconsin Till Plains

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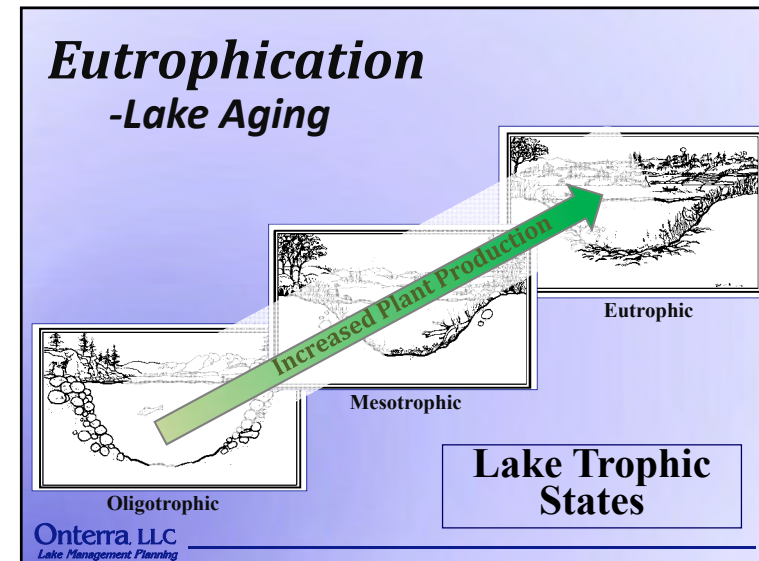




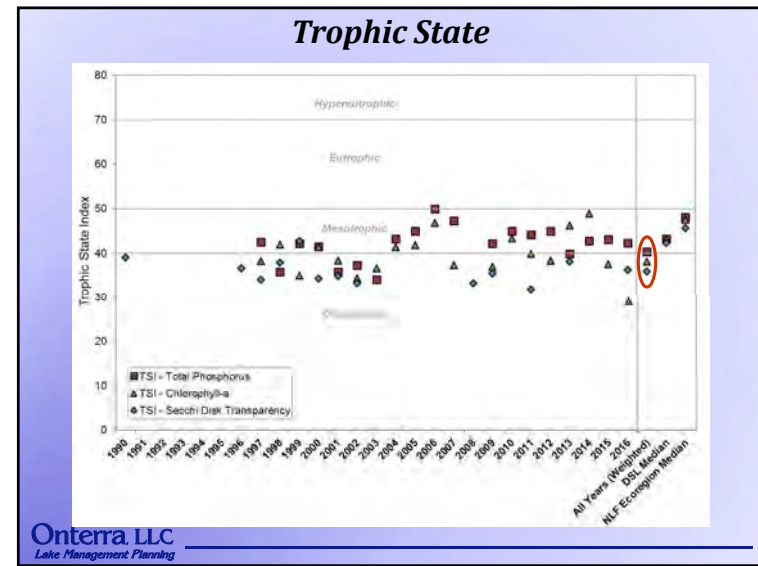
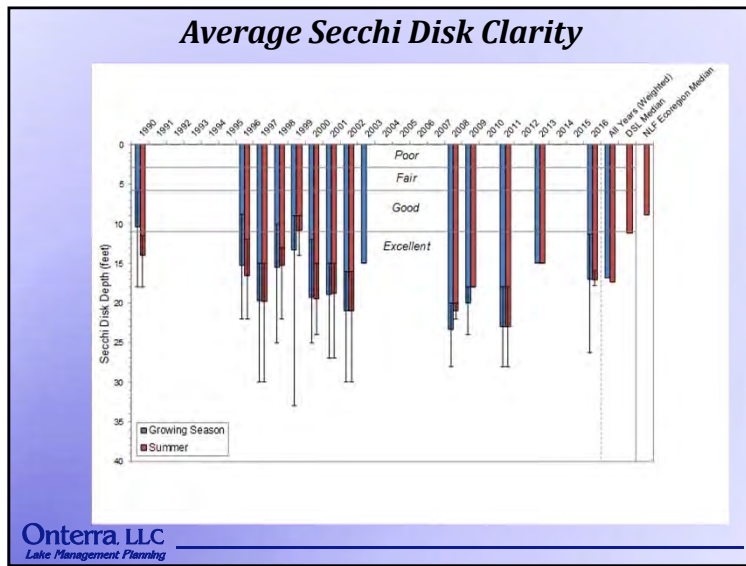
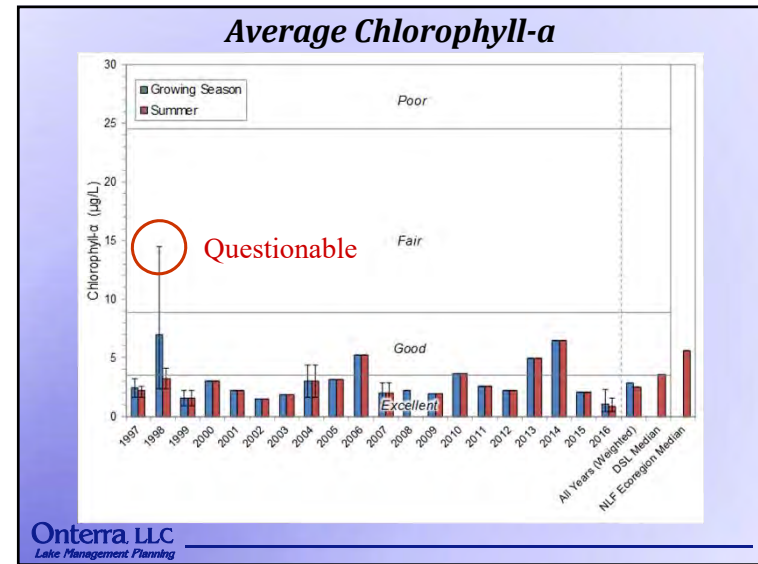
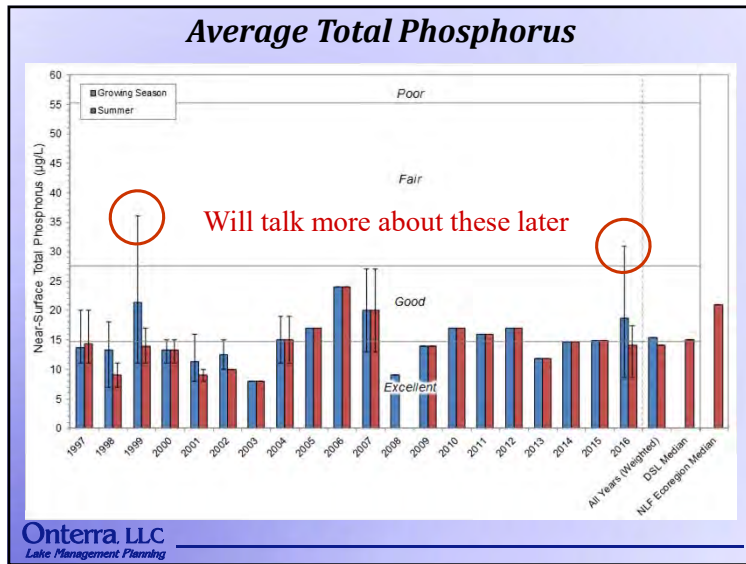
### Introduction to Lake Water Quality

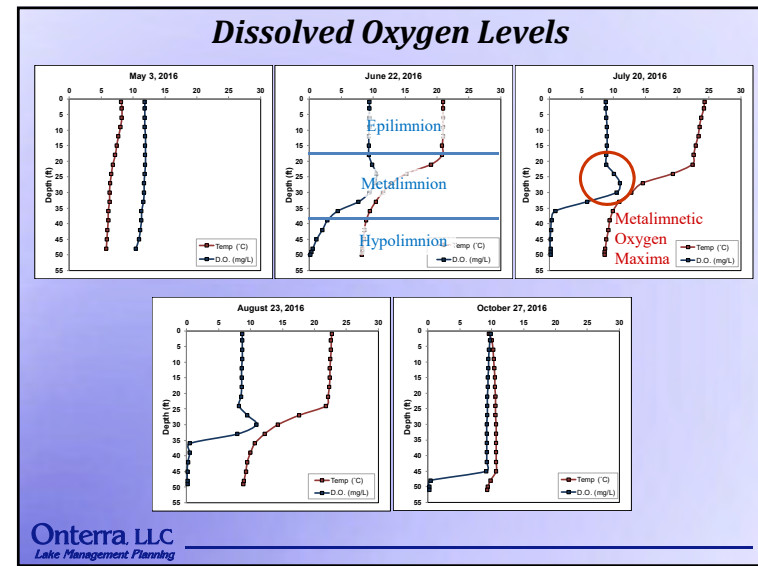
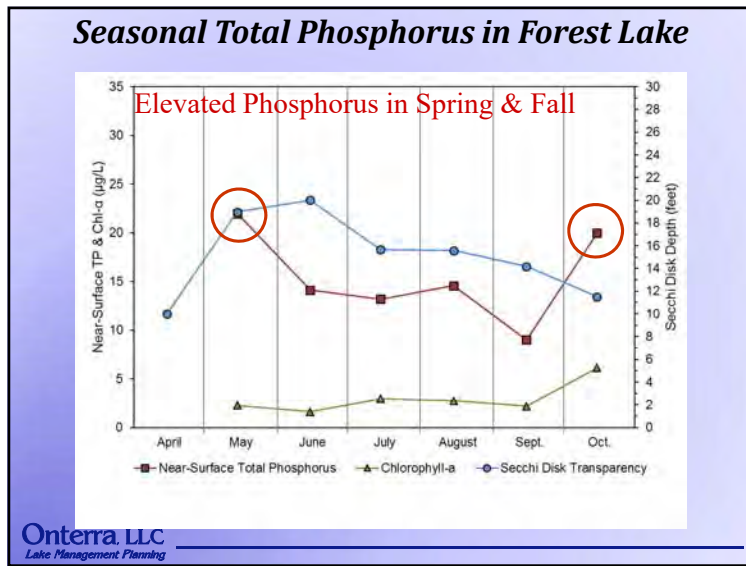
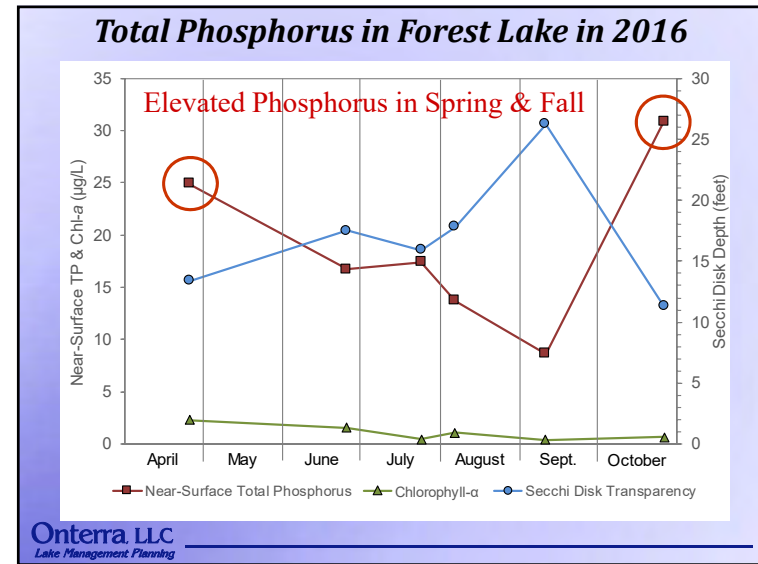
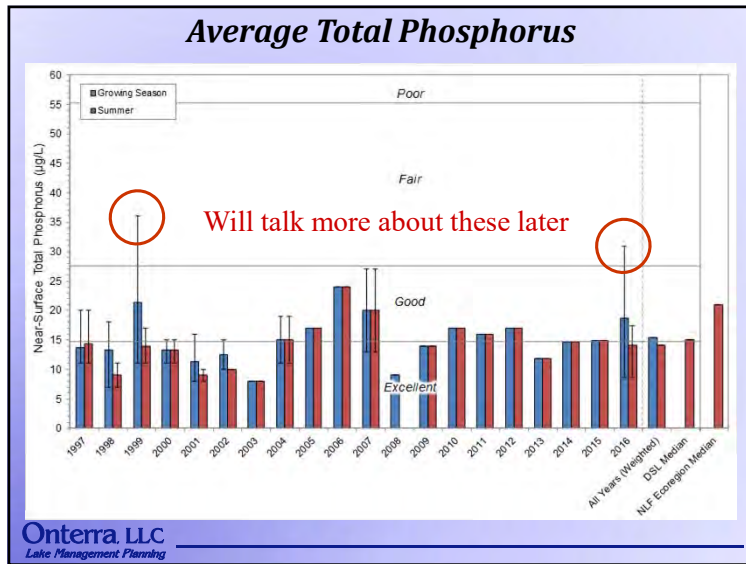
- ↑ Phosphorus**  
Naturally occurring & essential for all life  
Regulates phytoplankton biomass in **most** WI lakes  
Most often 'limiting plant nutrient' (shortest supply)  
Human activity often increases P delivery to lakes
- ↑ Chlorophyll-*a***  
Pigment used in photosynthesis  
Used as surrogate for phytoplankton biomass
- ↓ Secchi Disk Transparency**  
Measure of water clarity  
Measured using a Secchi disk

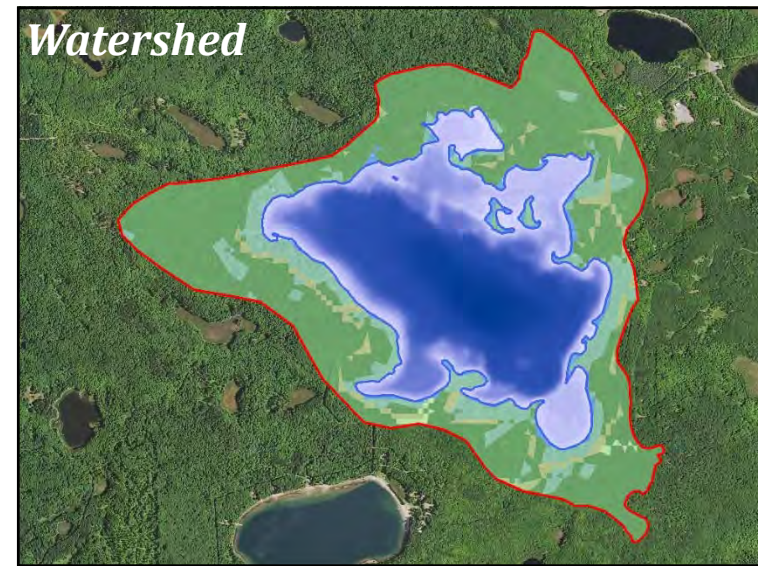
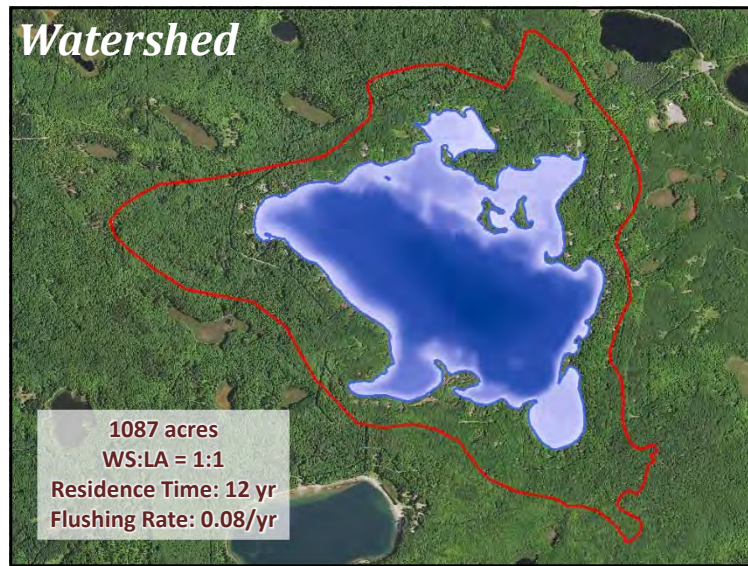
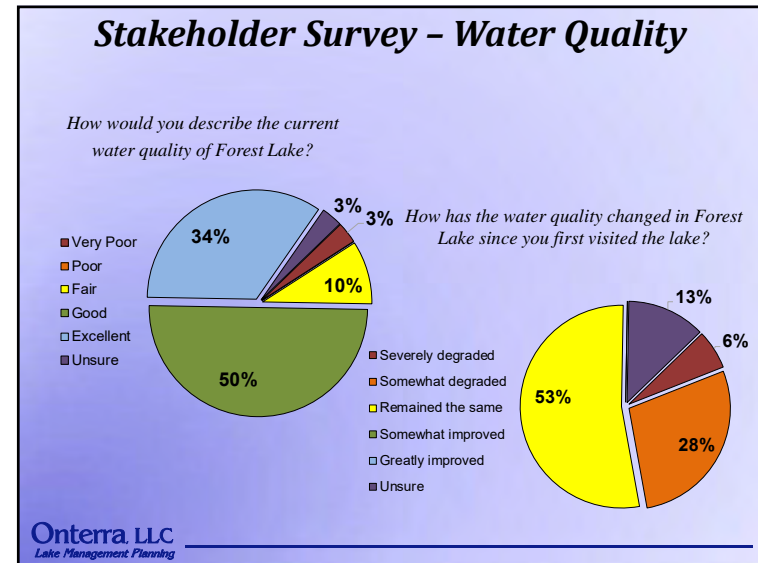
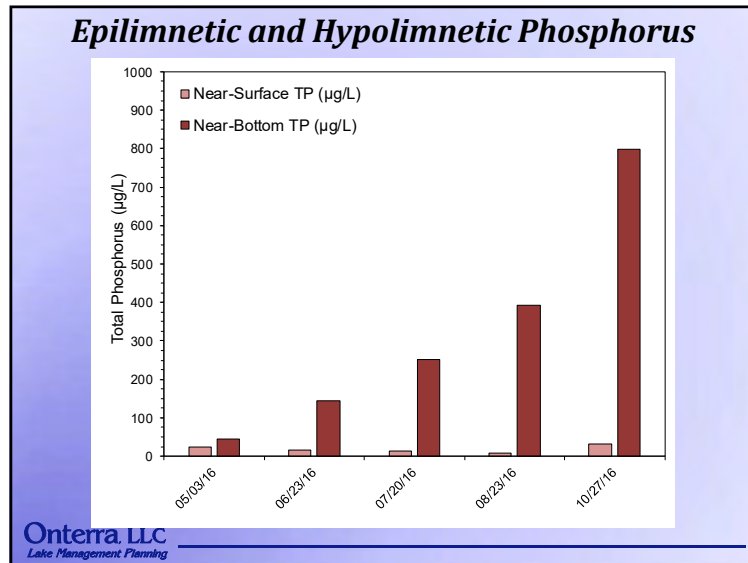
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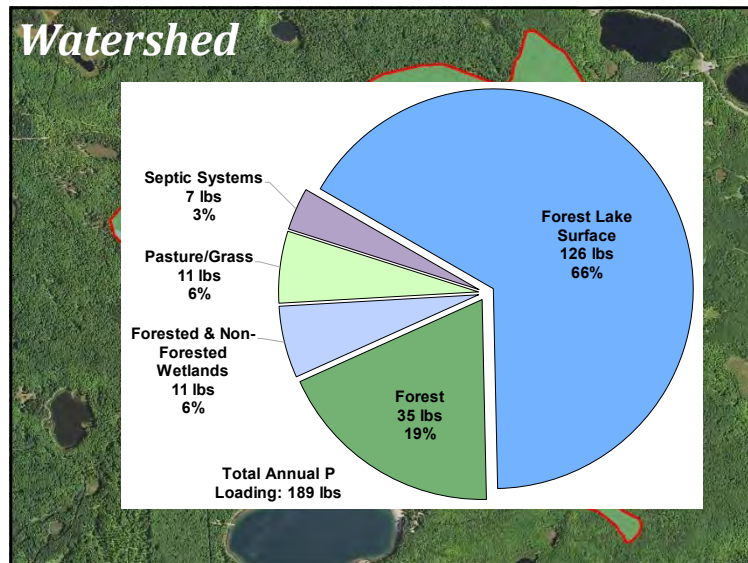
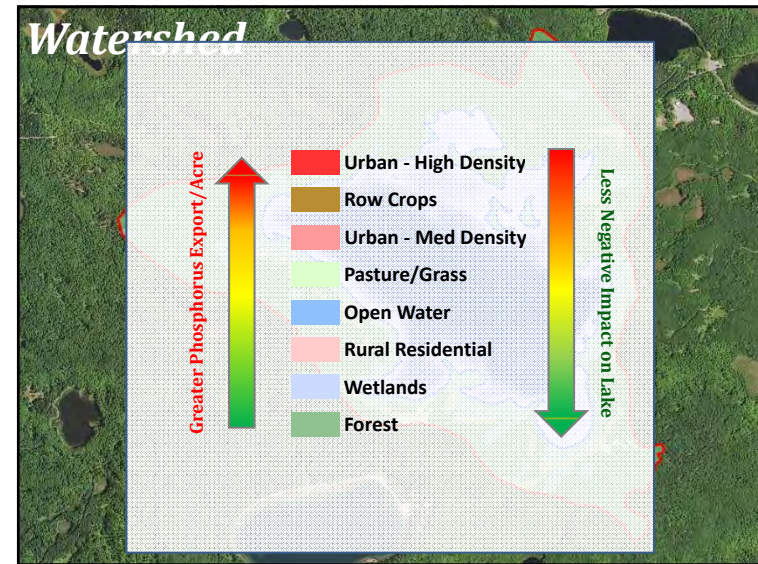
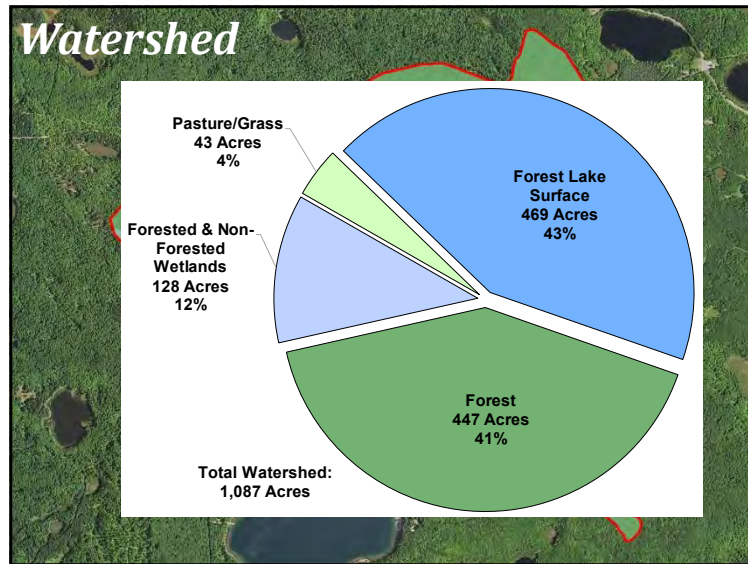












### Shoreland Assessment

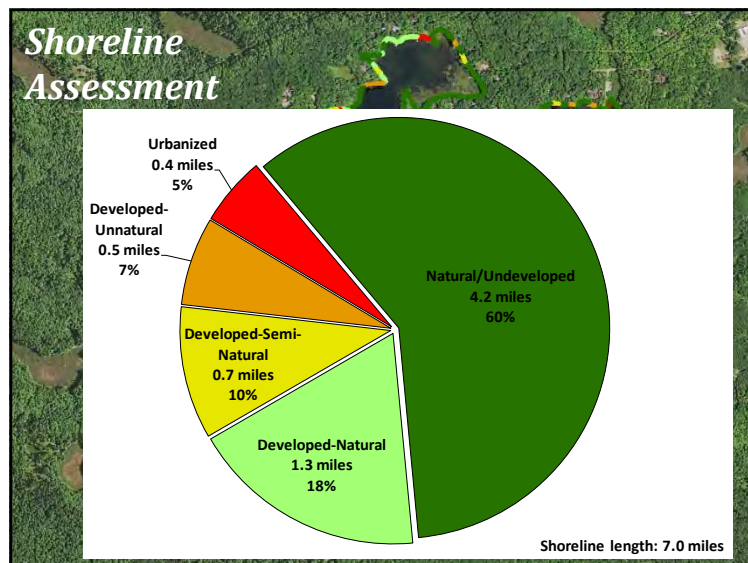
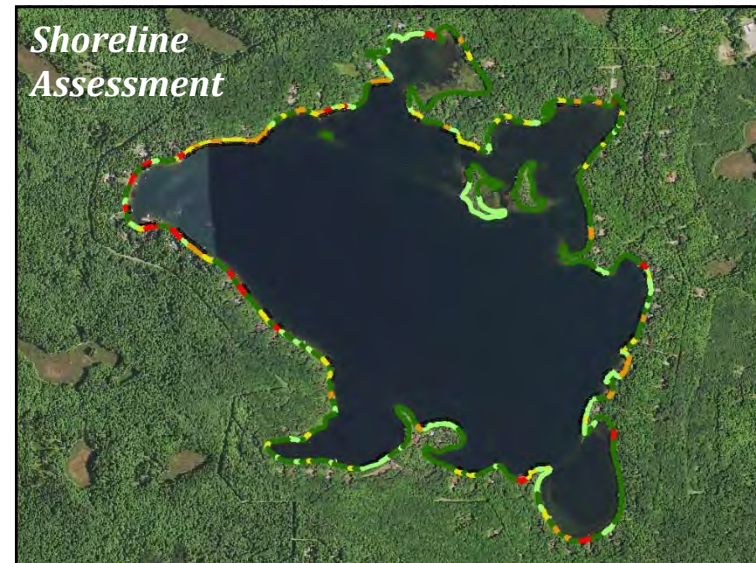
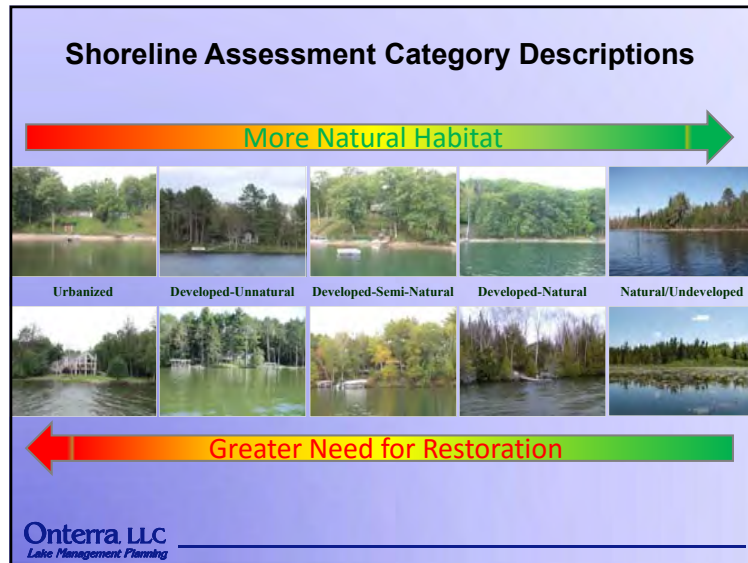
- Shoreland area is important for buffering runoff and provides valuable habitat for aquatic and terrestrial wildlife.
- It does not look at lake shoreline on a property-by-property basis.
- Assessment ranks shoreland area from shoreline back 35 feet

**Urbanized**

Range →



**Natural**

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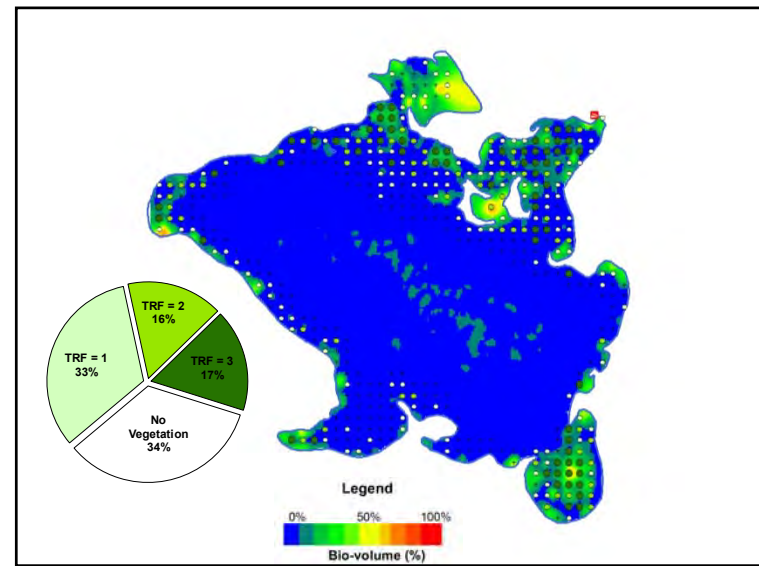
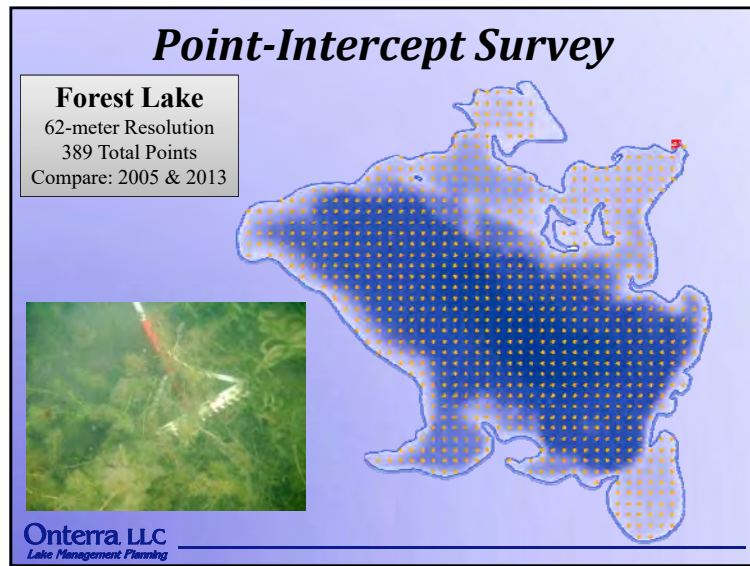
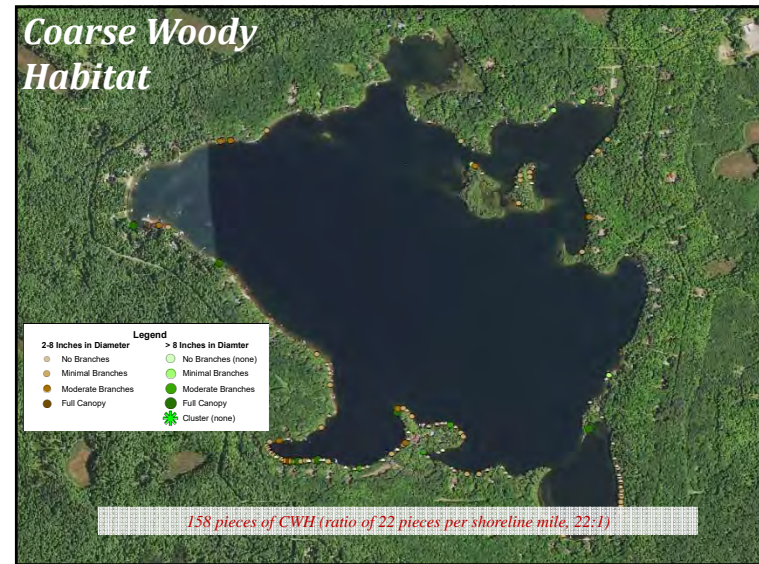
### Coarse Woody Habitat

- Provides shoreland erosion control and prevents suspension of sediments.
- Preferred habitat for a variety of aquatic life.
  - Periphyton growth fed upon by insects.
  - Refuge, foraging and spawning habitat for fish.
  - Complexity of CWH important.
- Changing of logging and shoreland development practices = reduced CWH in Wisconsin lakes.
- Survey aimed at quantifying CWH in system.

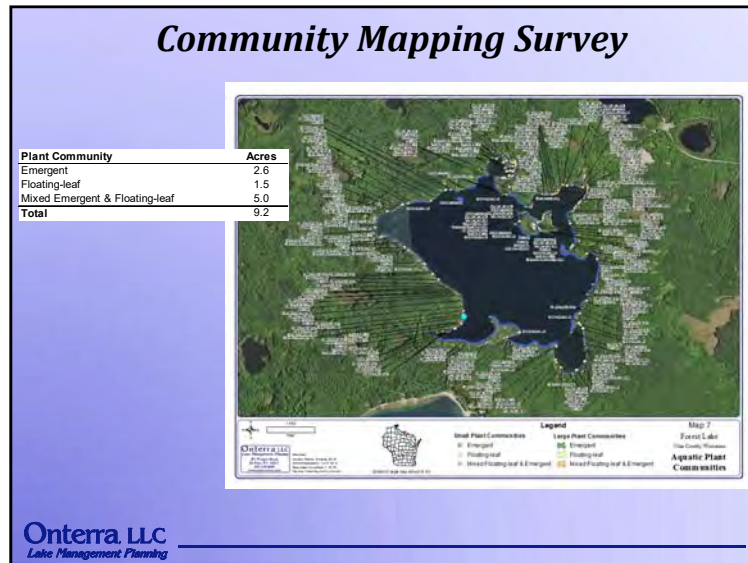
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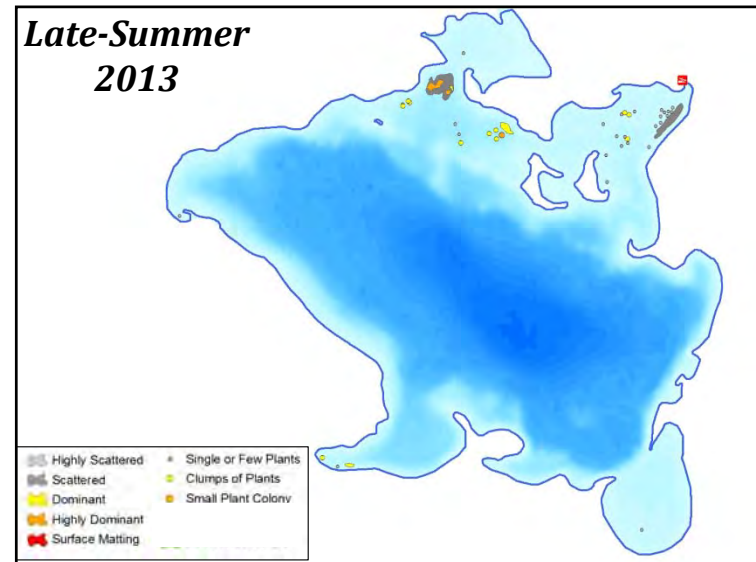
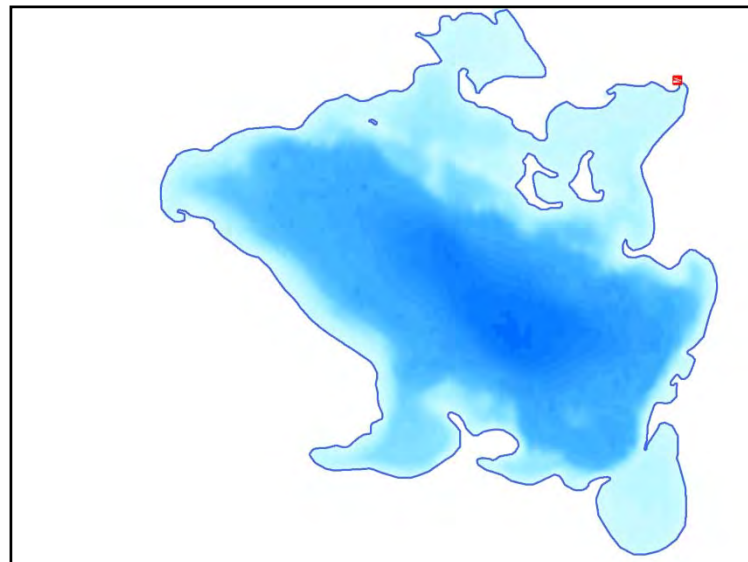


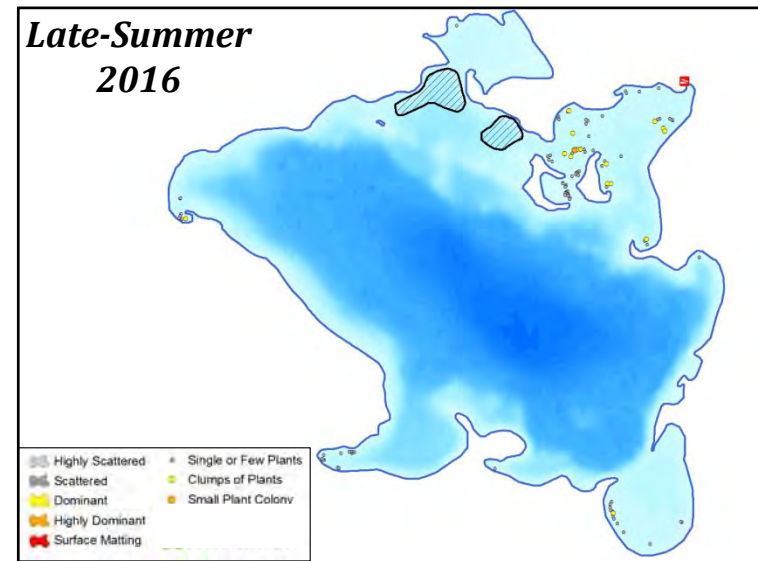
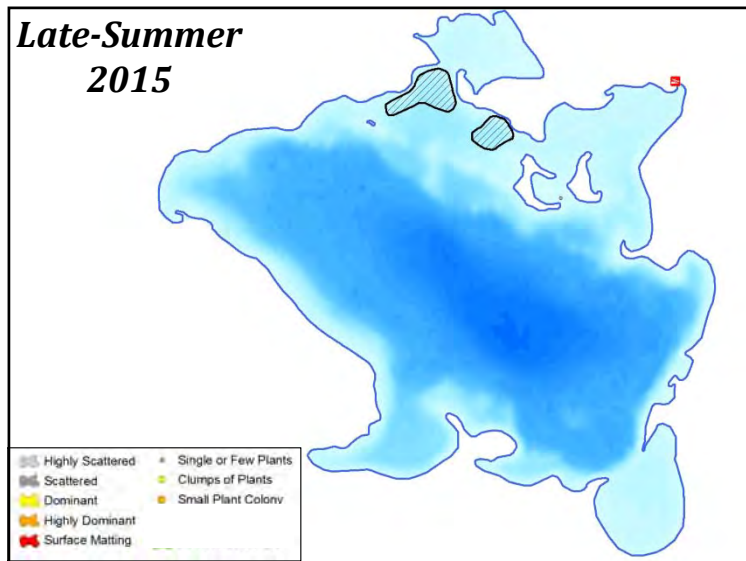
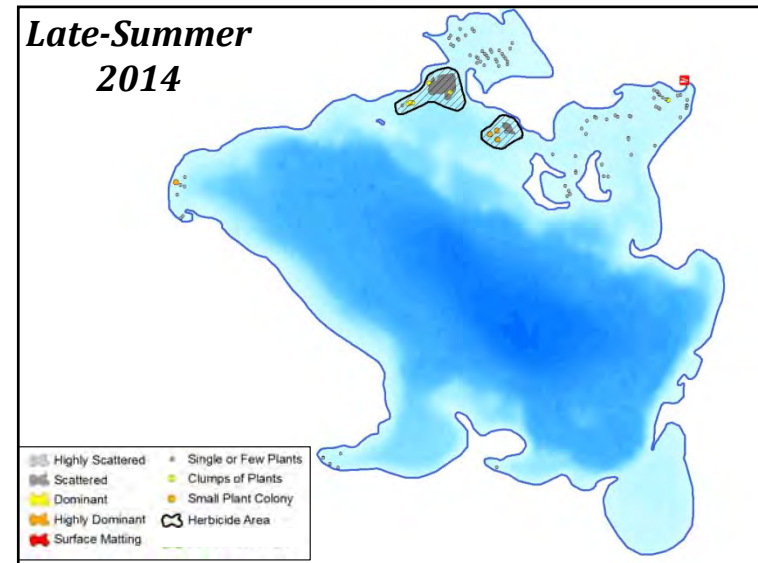
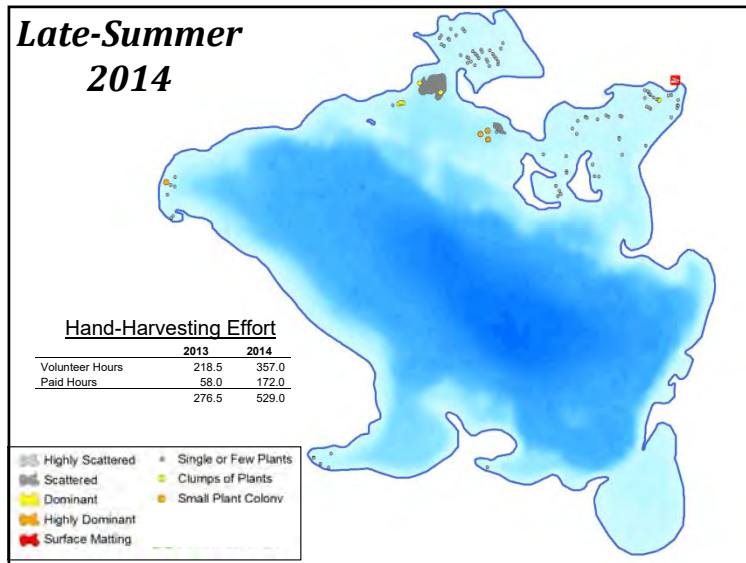


### Eurasian Water Milfoil

- **First documented during early summer of 2001**
  - **Conducted 2,4-D (granular ester) treatment & hand-harvesting in 2001**
- **Conducted volunteer-based hand-harvesting annually**
- **Increase in EWM prompted association to hire Onterra in 2011**
- **DNA analysis of single sample in 2013 indicated pure-strain EWM**

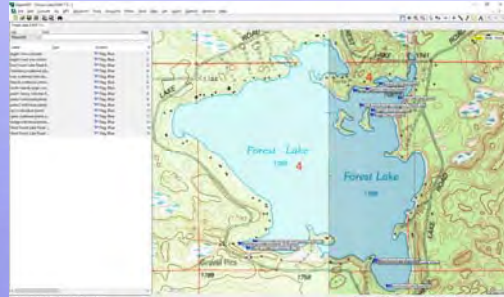
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## Additional EWM Monitoring

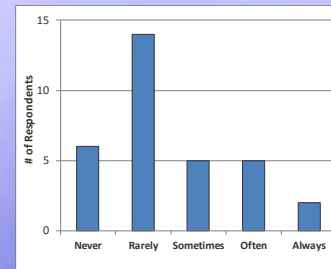
- 2017 Late-Summer EWM Mapping Survey Planned
- Recently received volunteer data to assist with the survey (Thanks Tom M.!)



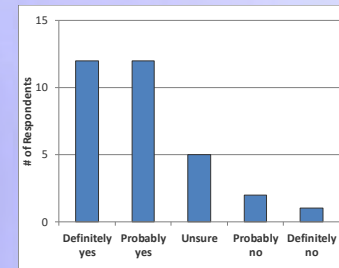
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## Stakeholder Survey – Aquatic Plants

During the open water season, how often does aquatic plant growth, including algae, negatively impact your enjoyment of Forest Lake?



Do you believe aquatic plant control is needed on Forest Lake?



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## Conclusions

- Water quality for deep, seepage lake is good to excellent.
  - Historical data indicates no trends in water quality.
  - Good evidence exists indicating that internal phosphorus loads impacts overall nutrient budget, but not excessively.
- Overall the watershed is in very good condition
  - Land cover exports minimal phosphorus.
  - Shoreland zone is not highly developed, but additional development and/or shoreland habitat changes may be largest impact to lake's health.
- Aquatic plant population is very good
  - Indicates lake's over all good health
  - EWM is present, but not impacting ecology or use of lake.

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## Next Step

### Develop Implementation Plan

Define *challenges* that lake and FLA must meet  
Convert those challenges to *goals*

Example Challenge: Keep good water quality

*Goal:* Maintain Current Water Quality in Forest Lake

Develop *actions* to meet the goal:

*Management Action:* Monitor water quality (CLMN)

*Management Action:* Maintain & improve shoreland buffer

Add facilitator and timeline to each action

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# B

## APPENDIX B

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### Stakeholder Survey Response Charts and Comments



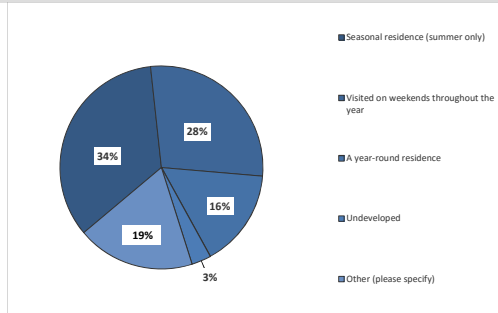
**Forest Lake - Anonymous Stakeholder Survey**

Surveys Distributed: 87  
Surveys Returned: 32  
Response Rate: 37%

**Forest Lake Property**

**1. How is your property on Forest Lake utilized?**

Answer Options	Response Percent	Response Count
Seasonal residence (summer only)	34.4%	11
Visited on weekends throughout the year	28.1%	9
A year-round residence	15.6%	5
Undeveloped	3.1%	1
Other (please specify)	18.8%	6
<b>answered question</b>		<b>32</b>
<b>skipped question</b>		<b>0</b>

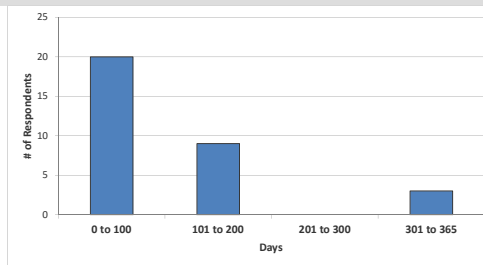


Number	Other (please specify)
1	Seasonal in summer, occasional visits in winter
2	Three season (Spring, Summer Fall)
3	Heavily during summer and occasionally year round
4	We spend about 20 weeks there per year. All seasons.
5	summer and periodic visits throughout the year
6	Year-round home but not used as our primary residence

**2. How many days each year is your property used by you or others?**

Answer Options	Response Count
<b>answered question</b>	
32	
<b>skipped question</b>	
0	

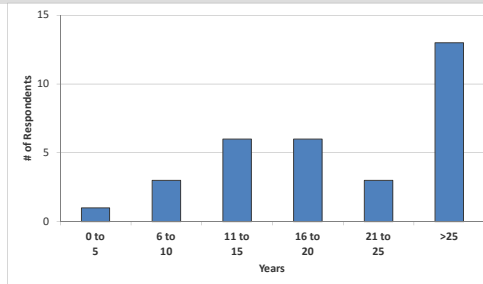
Category (# of days)	Responses	Count	Percentage
0 to 100	20	63%	
101 to 200	9	28%	
201 to 300	0	0%	
301 to 365	3	9%	



**3. How long have you owned your property on Forest Lake?**

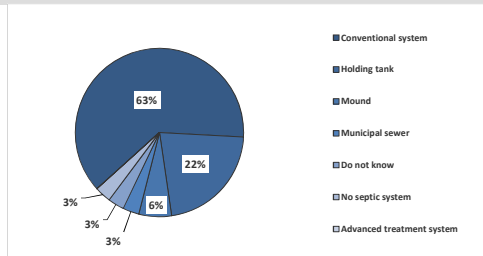
Answer Options	Response Count
<b>answered question</b>	
32	
<b>skipped question</b>	
0	

Category (# of years)	Responses	Count	Percentage
0 to 5	1	3%	
6 to 10	3	9%	
11 to 15	6	19%	
16 to 20	6	19%	
21 to 25	3	9%	
>25	13	41%	



**4. What type of septic system does your property utilize?**

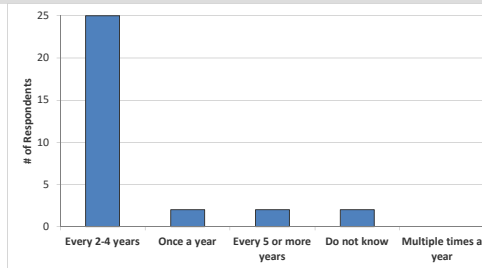
Answer Options	Response Percent	Response Count
Conventional system	62.5%	20
Holding tank	21.9%	7
Mound	6.3%	2
Municipal sewer	3.1%	1
Do not know	3.1%	1
No septic system	3.1%	1
Advanced treatment system	0.0%	0
<b>answered question</b>		<b>32</b>
<b>skipped question</b>		<b>0</b>





**5. How often is the septic system on your property pumped?**

Answer Options	Response Percent	Response Count
Every 2-4 years	80.6%	25
Once a year	6.5%	2
Every 5 or more years	6.5%	2
Do not know	6.5%	2
Multiple times a year	0.0%	0
<b>answered question</b>		<b>31</b>
<b>skipped question</b>		<b>1</b>

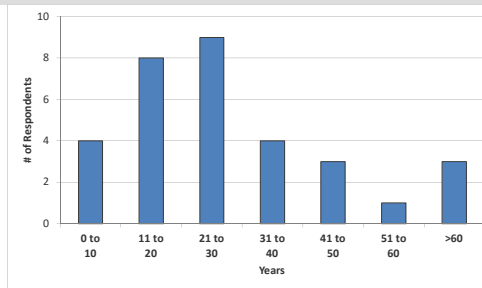


**Recreational Activity on Forest Lake**

**6. How many years ago did you first visit Forest Lake?**

Answer Options	Response Count
<b>answered question</b>	
<b>32</b>	
<b>skipped question</b>	
<b>0</b>	

Category (# of days)	Responses	% Response
0 to 10	4	13%
11 to 20	8	25%
21 to 30	9	28%
31 to 40	4	13%
41 to 50	3	9%
51 to 60	1	3%
>60	3	9%



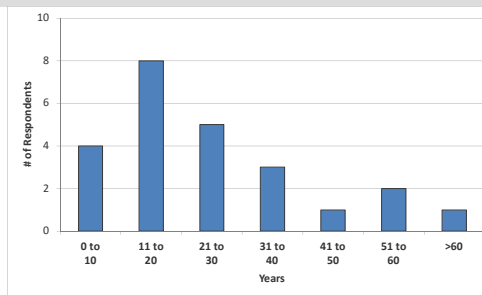
**7. Have you personally fished on Forest Lake in the past three years?**

Answer Options	Response Percent	Response Count
Yes	78.1%	25
No	21.9%	7
<b>answered question</b>		<b>32</b>
<b>skipped question</b>		<b>0</b>

**8. For how many years have you fished Forest Lake?**

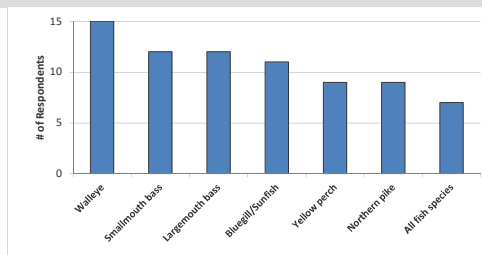
Answer Options	Response Count
<b>answered question</b>	
<b>24</b>	
<b>skipped question</b>	
<b>8</b>	

Category (# of years)	Responses	% Response
0 to 10	4	17%
11 to 20	8	33%
21 to 30	5	21%
31 to 40	3	13%
41 to 50	1	4%
51 to 60	2	8%
>60	1	4%



**9. What species of fish do you like to catch on Forest Lake?**

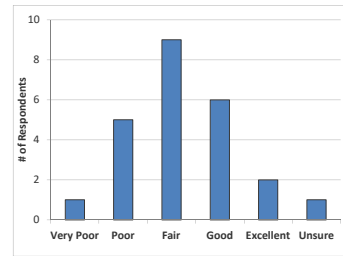
Answer Options	Response Percent	Response Count
Walleye	60.0%	15
Smallmouth bass	48.0%	12
Largemouth bass	48.0%	12
Bluegill/Sunfish	44.0%	11
Yellow perch	36.0%	9
Northern pike	36.0%	9
All fish species	28.0%	7
Other (please specify)	0.0%	0
<b>answered question</b>		<b>25</b>
<b>skipped question</b>		<b>7</b>





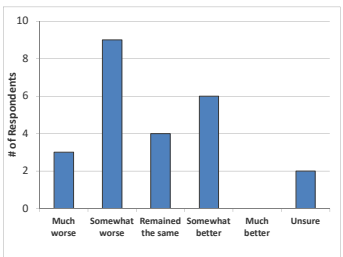
**10. How would you describe the current quality of fishing on Forest Lake?**

Answer Options	Very Poor	Poor	Fair	Good	Excellent	Unsure	Response Count
	1	5	9	6	2	1	24
<i>answered question</i>							<b>24</b>
<i>skipped question</i>							<b>8</b>



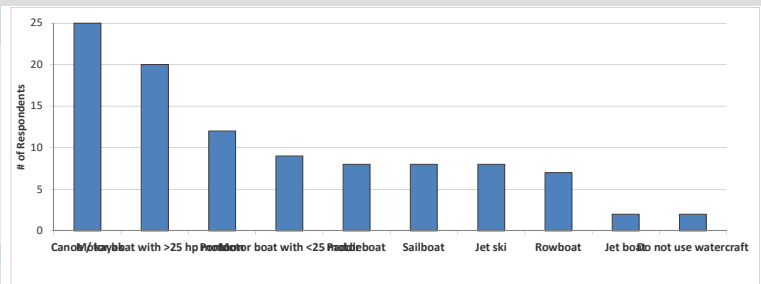
**11. How has the quality of fishing changed on Forest Lake since you have started fishing the lake?**

Answer Options	Much worse	Somewhat worse	Remained the same	Somewhat better	Much better	Unsure	Response Count
	3	9	4	6	0	2	24
<i>answered question</i>							<b>24</b>
<i>skipped question</i>							<b>8</b>



**12. What types of watercraft do you currently use on Forest Lake?**

Answer Options	Response Percent	Response Count
Canoe / kayak	80.6%	25
Motor boat with greater than 25 hp motor	64.5%	20
Pontoon	38.7%	12
Motor boat with 25 hp or less motor	29.0%	9
Paddleboat	25.8%	8
Sailboat	25.8%	8
Jet ski	25.8%	8
Rowboat	22.6%	7
Jet boat	6.5%	2
Do not use watercraft	6.5%	2
<i>answered question</i>		<b>31</b>
<i>skipped question</i>		<b>1</b>



**13. Do you use your watercraft on waters other than Forest Lake?**

Answer Options	Response Percent	Response Count
Yes	29.0%	9
No	71.0%	22
<i>answered question</i>		<b>31</b>
<i>skipped question</i>		<b>1</b>

**14. What is your typical cleaning routine after using your watercraft on waters other than Forest Lake?**

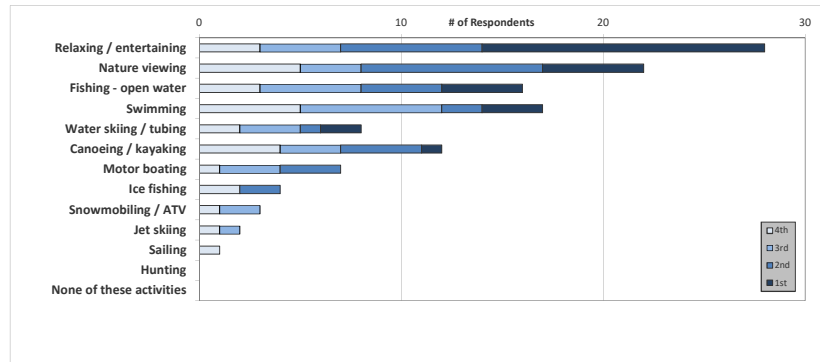
Answer Options	Response Percent	Response Count
Remove aquatic hitch-hikers (ex. - plant material, clams, mussels)	88.9%	8
Drain bilge	44.4%	4
Power wash boat	11.1%	1
Rinse boat	0.0%	0
Apply bleach	0.0%	0
Do not clean boat	0.0%	0
Other (please specify)		1
<i>answered question</i>		<b>9</b>
<i>skipped question</i>		<b>23</b>

Number	Other (please specify)
1	Kayaks. They are dried for days before transport

**15. For the list below, rank up to four activities that are important reasons for owning your property on Forest Lake, with 1 being the most important activity.**

Answer Options	1st	2nd	3rd	4th	Rating Average	Response Count
Relaxing / entertaining	14	7	4	3	1.86	28
Nature viewing	5	9	3	5	2.36	22
Fishing - open water	4	4	5	3	2.44	16
Swimming	3	2	7	5	2.82	17
Water skiing / tubing	2	1	3	2	2.63	8
Canoeing / kayaking	1	4	3	4	2.83	12
Motor boating	0	3	3	1	2.71	7
Ice fishing	0	2	0	2	3	4
Snowmobiling / ATV	0	0	2	1	3.33	3
Jet skiing	0	0	1	1	3.5	2
Sailing	0	0	0	1	4	1
Hunting	0	0	0	0	0	0
None of these activities are important to me	0	0	0	0	0	0
Other (please specify below)	3	0	0	1	1.75	4
<b>answered question</b>						<b>4</b>
<b>skipped question</b>						<b>32</b>

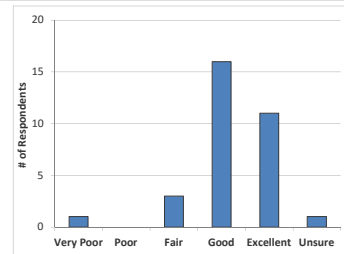
- Number "Other" responses**
- Enjoying a scenic view of the lake without noise from the road.
  - socializing with lake friends  
Biggest reason is to get away to a slower pace of life and to enjoy the outdoor nature and beauty of it's scerenity. We also like to simply be by and on the water in many fasions as it is not necessarily the activity, it is simply to be on and by the water. Maybe it's the simple fact that people seem to be enjoying themselves when on and by the water
  - Spot for family to gather during the summer



**Forest Lake Current and Historic Condition, Health and Management**

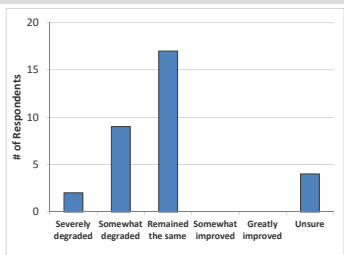
**16. How would you describe the current water quality of Forest Lake?**

Answer Options	Very Poor	Poor	Fair	Good	Excellent	Unsure	Response Count
	1	0	3	16	11	1	32
<b>answered question</b>							<b>32</b>
<b>skipped question</b>							<b>0</b>



**17. How has the current water quality changed in Forest Lake since you first visited the lake?**

Answer Options	Severely degraded	Somewhat degraded	Remained the same	Somewhat improved	Greatly improved	Unsure	Response Count
	2	9	17	0	0	4	32
<b>answered question</b>							<b>32</b>
<b>skipped question</b>							<b>0</b>



**18. Before reading the statement above, had you ever heard of aquatic invasive species?**

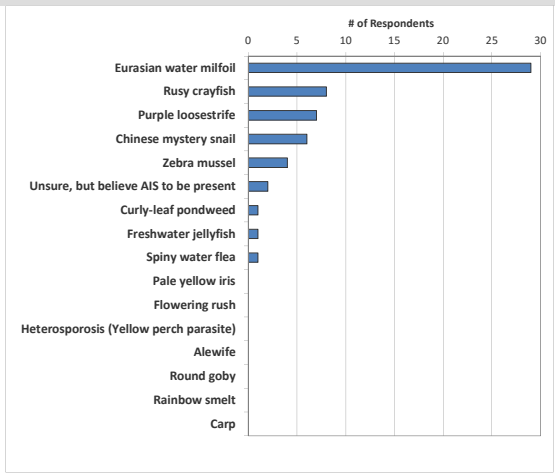
Answer Options	Response Percent	Response Count
Yes	96.9%	31
No	3.1%	1
<b>answered question</b>		<b>32</b>
<b>skipped question</b>		<b>0</b>

**19. Do you believe aquatic invasive species are present within Forest Lake?**

Answer Options	Response Percent	Response Count
Yes	80.6%	25
I think so but can't be certain	19.4%	6
No	0.0%	0
<b>answered question</b>		<b>31</b>
<b>skipped question</b>		<b>1</b>

**20. Which aquatic invasive species do you believe are in Forest Lake?**

Answer Options	Response Percent	Response Count
Eurasian water milfoil	93.5%	29
Rusy crayfish	25.8%	8
Purple loosestrife	22.6%	7
Chinese mystery snail	19.4%	6
Zebra mussel	12.9%	4
Unsure, but believe AIS to be present	6.5%	2
Curly-leaf pondweed	3.2%	1
Freshwater jellyfish	3.2%	1
Spiny water flea	3.2%	1
Pale yellow iris	0.0%	0
Flowering rush	0.0%	0
Heterosporosis (Yellow perch parasite)	0.0%	0
Alewife	0.0%	0
Round goby	0.0%	0
Rainbow smelt	0.0%	0
Carp	0.0%	0
Other (please specify)	6.5%	2
<b>answered question</b>		<b>31</b>
<b>skipped question</b>		<b>1</b>



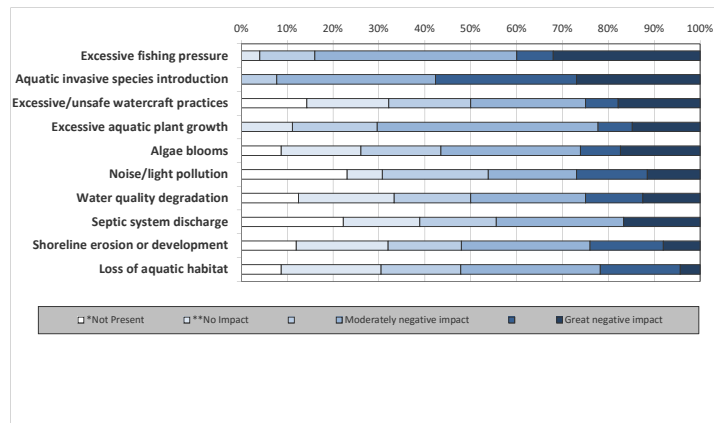
- Number "Other" responses**
- 1 swimmer's itch
  - 2 Duck itch

**21. To what level do you believe each of the following factors may currently be negatively impacting Forest Lake?**

\* Not Present means that you believe the issue does not exist on Forest Lake.  
\*\* No Impact means that the issue may exist on Forest Lake but it is not negatively impacting the lake.

Answer Options	*Not Present	**No Impact	Moderately negative impact	Great negative impact	Unsure: Need more information	Rating Average	Response Count
Excessive fishing pressure	0	1	3	11	2	2.1	30
Aquatic invasive species introduction	0	0	2	9	8	2.4	30
Excessive watercraft traffic or unsafe watercraft practices	4	5	5	7	2	1.5	30
Excessive aquatic plant growth (excluding algae)	0	3	5	13	2	1.77	30
Algae blooms	2	4	4	7	2	1.38	29
Noise/light pollution	6	2	6	5	4	1.33	30
Water quality degradation	3	5	4	6	3	1.23	30
Septic system discharge	4	3	3	5	0	0.89	28
Shoreline erosion or development	3	5	4	7	4	1.27	30
Loss of aquatic habitat	2	5	4	7	4	1.21	28
Other (please specify)							4
<b>answered question</b>							<b>31</b>
<b>skipped question</b>							<b>1</b>

- Number Other (please specify)**
- 1 swimmer's itch - 5 swimmers itch has an enormous
  - 2 negative impact on our use of the lake
  - 3 Swimmers itch...great neg. impact Improper application of lawn fertilizers and therefore run-off from
  - 4 lager upper end homes on the west northwest and north shores

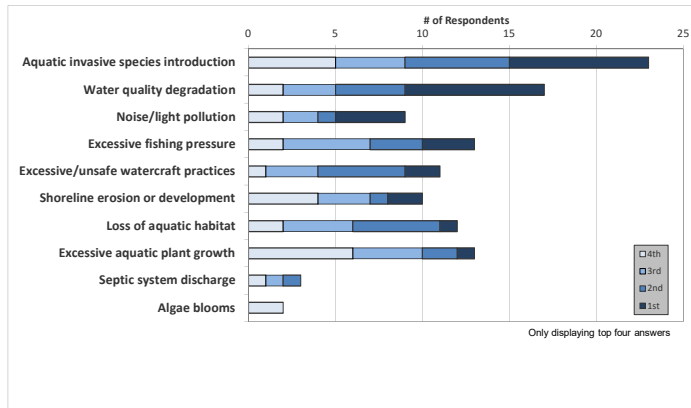


**22. From the list below, please rank your concerns regarding Forest Lake, with 1 being your greatest concern.**

Answer Options	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	Response Count
Aquatic invasive species introduction	8	6	4	5	3	1	2	0	0	0	0	29
Water quality degradation	8	4	3	2	1	1	4	2	2	3	0	30
Noise/light pollution	4	1	2	2	0	3	2	0	1	6	6	27
Excessive fishing pressure	3	3	5	2	3	4	1	1	4	1	1	28
Excessive watercraft traffic or unsafe watercraft practices	2	5	3	1	3	0	2	7	3	1	0	27
Shoreline erosion or development	2	1	3	4	1	3	4	3	4	0	2	27
Loss of aquatic habitat	1	5	4	2	5	3	2	3	1	0	0	26
Excessive aquatic plant growth (excluding algae)	1	2	4	6	1	6	4	4	1	0	0	29
Septic system discharge	0	1	1	1	2	4	5	3	3	7	1	28
Algae blooms	0	0	0	2	9	3	1	3	4	4	0	26
Other (please specify)	3	0	0	0	0	0	0	0	1	1	0	5
<b>answered question</b>												<b>32</b>
<b>skipped question</b>												<b>0</b>

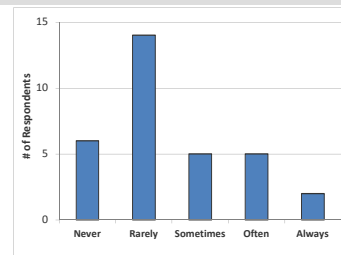
**Number** "Other" responses

- 1 swimmers itch
- 2 poor quality of boat ramp
- 3 swimmers itch (snails and merganser ducks)
- 4 Rude homeowners
- 5 Not sure  
Need to control the things we can control. They are outside fisherman carrying in invasive species at the landing. Not sure how to address this. Next is controlling run-off issues from our properties, from improper fertilizers to septic systems to changing the terrain at the shorelines to how our grading of the land has changed the run-off patterns when we built our homes. Also, to those like the new owners of the teardown property to the west of Bruce Smith, PLEASE abide by the no-cut zoning rules of trees and drainage during thier building period. They blatently did not abide by the laws, so should we feel uncomfortable not confronting them? I think not, or sooner than later, this all just spreads like a disease! Sorry for my venting on this, but it is just not right and I can not understand how people can do this!
- 6



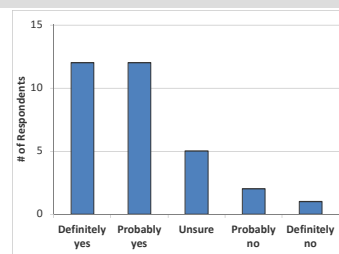
**23. During open water season how often does aquatic plant growth, including algae, negatively impact your enjoyment of Forest Lake?**

Answer Options	Never	Rarely	Sometimes	Often	Always	Response Count
	6	14	5	5	2	32
<b>answered question</b>						<b>32</b>
<b>skipped question</b>						<b>0</b>



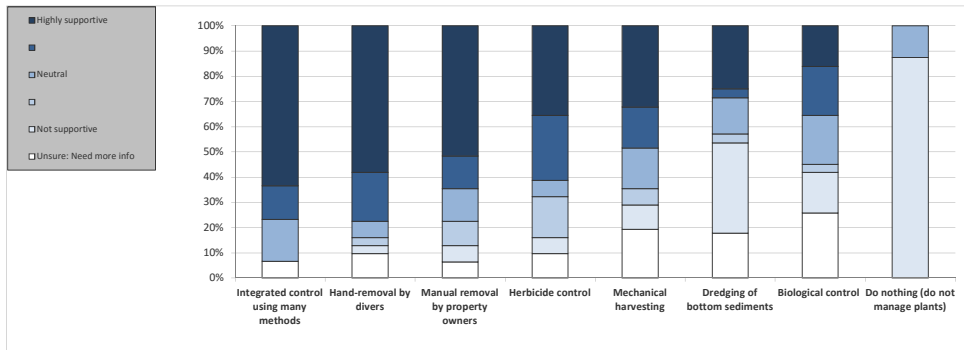
**24. Considering your answer to the question above, do you believe aquatic plant control is needed on Forest Lake?**

Answer Options	Definitely yes	Probably yes	Unsure	Probably no	Definitely no	Response Count
	12	12	5	2	1	32
<b>answered question</b>						<b>32</b>
<b>skipped question</b>						<b>0</b>



**25. Aquatic plants can be managed using many techniques. What is your level of support for the responsible use of the following techniques on Forest Lake?**

Answer Options	Not supportive	Neutral	Highly supportive	Unsure: Need more info	Rating Average	Response Count		
Integrated control using many methods	0	0	5	4	19	2	2.93	30
Hand-removal by divers	1	1	2	6	18	3	3	31
Manual removal by property owners	2	3	4	4	16	2	2.71	31
Herbicide control	2	5	2	8	11	3	2.58	31
Mechanical harvesting	3	2	5	5	10	6	2	31
Dredging of bottom sediments	10	1	4	1	7	5	1.54	28
Biological control	5	1	6	6	5	8	1.45	31
Do nothing (do not manage plants)	21	0	3	0	0	0	0.88	24
<b>answered question</b>						<b>32</b>		
<b>skipped question</b>						<b>0</b>		



**25. In 2015, did you know that aquatic herbicides were applied in a targeted approach in Forest Lake to help control Eurasian water milfoil?**

Answer Options	Response Percent	Response Count
Yes	78.1%	25
I think so but can't say for certain	9.4%	3
No	12.5%	4
<b>answered question</b>		<b>32</b>
<b>skipped question</b>		<b>0</b>

**27. How do you feel about the use of herbicides to treat Eurasian water milfoil in previous years?**

Answer Options	Completely support	Moderately support	Unsure	Moderately oppose	Completely oppose	Rating Average	Response Count
	18	5	6	2	0	1.74	31
<b>answered question</b>							<b>31</b>
<b>skipped question</b>							<b>1</b>

**28. What is your level of support or opposition for future targeted aquatic herbicide use to treat infestations of Eurasian water milfoil in Forest Lake?**

Answer Options	Completely support	Moderately support	Unsure	Moderately oppose	Completely oppose	Rating Average	Response Count
	20	6	4	2	0	1.63	32
<b>answered question</b>							<b>32</b>
<b>skipped question</b>							<b>0</b>

**29. What is the reason or reasons you oppose the future targeted use of aquatic herbicides to treat infestations of Eurasian water milfoil in Forest Lake?**

Answer Options	Response Percent	Response Count
Potential impacts to native aquatic plant species	100.0%	2
Potential impacts to native (non-plant) species such as fish, insects, etc.	100.0%	2
Potential impacts to human health	50.0%	1
Potential cost of treatment is too high	0.0%	0
Other (please specify)	50.0%	1
<b>answered question</b>		<b>2</b>
<b>skipped question</b>		<b>30</b>

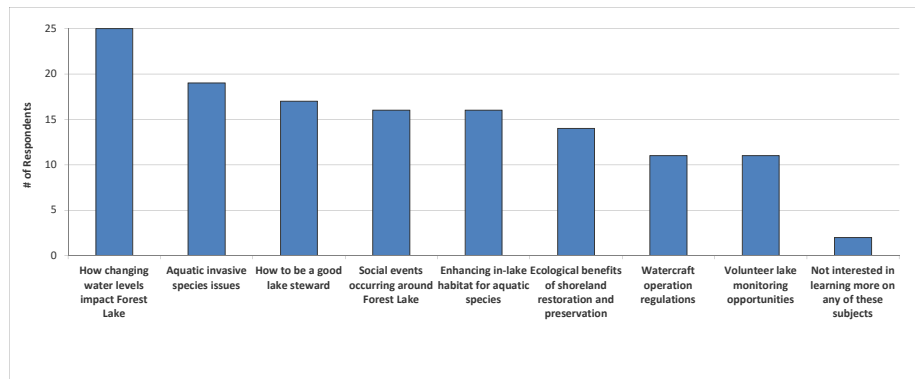
**Number "Other" responses**

1 Herbicides (chemicals) should only be used when absolutely necessary.

**30. Stakeholder education is an important component of every lake management planning effort. Which of these subjects would you like to learn more about?**

Answer Options	Response Percent	Response Count
How changing water levels impact Forest Lake	78.1%	25
Aquatic invasive species issues	59.4%	19
How to be a good lake steward	53.1%	17
Social events occurring around Forest Lake	50.0%	16
Enhancing in-lake habitat for aquatic species	50.0%	16
Ecological benefits of shoreland restoration and preservation	43.8%	14
Watercraft operation regulations	34.4%	11
Volunteer lake monitoring opportunities	34.4%	11
Not interested in learning more on any of these subjects	6.3%	2
Other (please specify)	9.4%	3
<b>answered question</b>		<b>32</b>
<b>skipped question</b>		<b>0</b>

Number	Other (please specify)
1	As a recent past president of FLA with a 60 year history with Forest Lake, I am aware of all of these subjects and do not require additional education.
2	cause and prevention of lake itch
3	Swimmers itch



**Forest Lake Association (FLA)**

**31. Before receiving this mailing, have you ever heard of the FLA?**

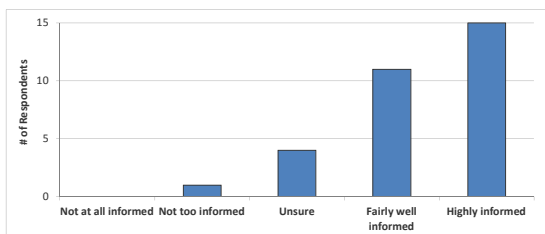
Answer Options	Response Percent	Response Count
Yes	96.9%	31
No	3.1%	1
<b>answered question</b>		<b>32</b>
<b>skipped question</b>		<b>0</b>

**32. What is your membership status with the FLA?**

Answer Options	Response Percent	Response Count
Current member	96.8%	30
Former member	3.2%	1
Never been a member	0.0%	0
<b>answered question</b>		<b>31</b>
<b>skipped question</b>		<b>1</b>

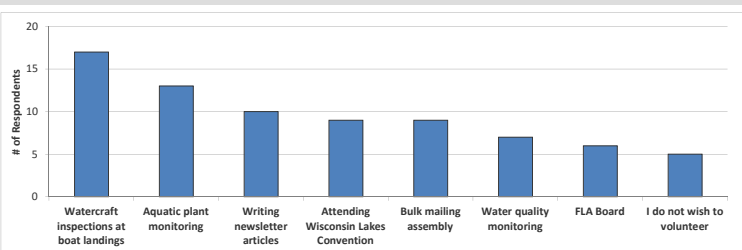
**33. How informed has (or had) the FLA kept you regarding issues with your lake and its management?**

Answer Options	Not at all informed	Not too informed	Unsure	Fairly well informed	Highly informed	Response Count
	0	1	4	11	15	31
<b>answered question</b>						<b>31</b>
<b>skipped question</b>						<b>1</b>



**34. The effective management of your lake will require the cooperative efforts of numerous volunteers. Please circle the activities you would be willing to participate in if the FLA requires additional assistance.**

Answer Options	Response Percent	Response Count
Aquatic plant monitoring	53.1%	17
Water quality monitoring	40.6%	13
Watercraft inspections at boat landings	31.3%	10
FLA Board	28.1%	9
I do not wish to volunteer	28.1%	9
Attending Wisconsin Lakes Convention	21.9%	7
Bulk mailing assembly	18.8%	6
Writing newsletter articles	15.6%	5
<b>answered question</b>		<b>32</b>
<b>skipped question</b>		<b>0</b>



**35. Please feel free to provide written comments concerning the Forest Lake, its current and/or historic condition and its management.**

Answer Options	Response Count
<b>answered question</b>	<b>14</b>
<b>skipped question</b>	<b>18</b>

Number	Response Text
1	Thank you to those whose efforts resulted in the grant.
2	I highly respect the efforts of the FLA. It is obvious that many hours have been put forth to take care of the lake. Thank you Swimmers itch has the greatest negative impact on our use and enjoyment of FL. We view this as a significant issue impacting property values and desirability of FL home ownership. We would be open to any/all suggestions for eliminating the problem including introduction of chemical controls. We have also noticed an increase in the goose population at FL in recent years with negative implications. It would be helpful to receive more information regarding why these changes have occurred in recent years, if known. Is there something similar to a trade association for lake associations, whereby we could learn how other lakes have dealt with these issues? If so, we would support FLA joining such an organization to gather more ideas/solutions to the issues facing our lake.
3	Other issues, such as noise pollution and proper watercraft etiquette, would seem to be more a matter of education rather than intervention. However, we have seen an increase in these types of issues as well. For many years, it was a source of pride to be a homeowner on FL. Recently, it has felt like the quality of our lake has been reduced significantly, with community members even making negative comments regarding our lake or commiserating on how awful it must be to live on "that lake". For people who have been coming to FL for a long time, this turn of events is quite disturbing. It upsets me when I hear stories of board members bullying Forest Lake Property owners into complying with Association rules without hearing and taking into consideration the individual situation involved. I do not want my ownership to be micromanaged by other owners. I feel the reputation of the FLA makes it more difficult to sell our properties when the time comes. Buyers seldom know about our water quality issues. I am concerned about ground water quality. Does the chemical used seep into our well water supply? The lake side of our lots gets a lot of attention. I would like to see the FLA show more concern about the road side of our lots. ( The scenic beauty , how the road easement is maintained, the noise from ATV's )
5	The volunteers who have worked tirelessly over the years should be heartily commended!!!
6	Beautiful lake under significant pressure on shorelines particularly Having a long history on Forest Lake, I would caution those newer to the Lake not to over react to changes in the in the lake. Over my 60 years involvement with the lake, I have observed water levels rise and fall, weeds come and go, fishing great and not so great, periods of rain and periods of drought, ice out early and ice out late, lake busy and lake quiet...
7	My experience has been that most issues affecting the lake are cyclical and only require human intervention on rare occasions. The one issue that would be irreversible and could permanently harm Forest Lake would be over development. A vigilant Board working closely with homeowners to ensure awareness and compliance with the deed restrictions is critical to maintaining this beautiful natural resource for future generations. One need only look to lakes in southern Wisconsin, Illinois and Indiana to see what over development looks like.
8	I think the Forest Lake Association does a nice job and I can't understand why 100% of the owners of property on the lake are not members
9	Appreciate the board taking the time to do this survey. Also for all the efforts made by board members The overall experience of spending time on the lake is a combination of values: water quality, serenity, quiet enjoyment combined with reasonable boat traffic. Jet skis have become more prevalent and users need to abide by regulations better. Proliferation of fireworks outside of the 4th of July week can really disturb and disrupt a quiet evening on the lake and negatively impacts wildlife. Leaf blowers are increasingly being used and for longer periods of time. Their usage should be minimized as their high decibel noise carries over water to neighbors.
11	We love our lake! It has been well taken care of and we will do everything we can to help preserve it for the future.
12	Very concerned with swimmers itch. Forest Lake never had this problem in the past. How can it be controlled? Our kids And friends do not want to swim because of this issue. The lake level is substantially lower than it was in the 1960's. However, the quality of the very good. Species of fish have changed from lots of bass and pan fish in the '60's to walleye in the 70's and 80's and back to bass when the walleye stocking stopped.
13	We are blessed to have minimal development, as most, but not all of the property owners, have balanced lake access with maintaining a natural shoreline. Over the decades, the FHA board has worked hard to balance lake use with lake stewardship, and for this, they deserve many thanks. In fact, including light pollution and all of the other topics in the survey demonstrates their collective interest in address all topics. Thank-you!
14	I sincerely appreciate all that people have done as they step forward and help through FLA and other efforts. I know it is not an easy job! We all simply need to feel comfortable approaching others that appear to be doing things not in the best interest of the lake, and when we do, do it with grace, such as first, seek to understand in a non-confrontational manner. Then, once you feel you understand the situation, then try to get the person to understand the consequences of their behavior an appropriately for them to either put things back into original condition and/or stop from doing what they have improperly been doing in the past. I know this sounds easy to do, but I am smart enough to know it is nearly impossible!!! But, we should at least all try and understand our efforts are for the betterment of all... not just us today, but for those that will come after us. Thanks again.....





# C

## APPENDIX C

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Water Quality Data



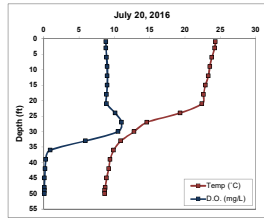


Forest Lake

Date: 7/20/2016  
Time: 12:30  
Weather: 50% clouds, breezy, 80F  
Entry: JLV

Max Depth: 51.1  
LS Depth (ft): 3.0  
LB Depth (ft): 49.0  
Secchi Depth (ft): 15.9

Depth (ft)	Temp (C)	D.O. (mg/L)	pH	Sp. Cond. (µS/cm)
1	24.3	8.8		
3	22.2	8.7		
6	22.8	8.9		
9	22.9	9.0		
12	23.3	9.0		
15	22.9	8.9		
18	22.6	8.9		
21	22.4	8.9		
24	19.3	10.1		
27	14.8	11.0		
30	12.2	10.4		
33	10.9	8.9		
36	9.5	0.3		
39	9.2	0.3		
42	9.2	0.3		
45	8.9	0.1		
48	8.7	0.1		
49	8.2	0.1		
50	8.6	0.1		



Parameter	LS	LB
Total P (µg/L)	13.70	252.00
Dissolved P (µg/L)	ND	60.00
Chl.a (µg/L)	1.05	NA
TN (µg/L)	548.00	1100.00
NO <sub>3</sub> -N (µg/L)	ND	ND
NH <sub>4</sub> -N (µg/L)	ND	577.00
Total N (µg/L)	548.00	1100.00
Lab Cond. (µS/cm)	68.70	65.90
Lab pH	7.99	6.90
Alkalinity (mg/L CaCO <sub>3</sub> )	11.40	39.40
Total Susp. Solids (mg/L)	ND	4.40
Calcium (mg/L)	8.08	NA
Magnesium (mg/L)	2.99	NA
Hardness (mg/L)	30.80	NA
Color (SU)	5.00	NA
Turbidity (NTU)	NA	NA

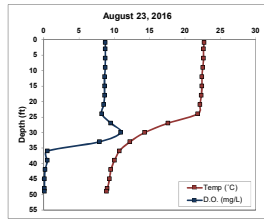
Data collected by TAH (Ontario)

Forest Lake

Date: 8/23/2016  
Time: 14:30  
Weather: Clear, Breezy, 75F  
Entry: JMB

Max Depth: 52.0  
LS Depth (ft): 3.0  
LB Depth (ft): 48.0  
Secchi Depth (ft): 17.8

Depth (ft)	Temp (C)	D.O. (mg/L)	pH	Sp. Cond. (µS/cm)
1	22.2	8.7		
3	22.6	8.7		
6	22.6	8.7		
9	22.8	8.7		
12	22.4	8.8		
15	22.4	8.8		
18	22.3	8.8		
21	22.1	8.8		
24	21.8	8.2		
27	17.2	9.1		
30	14.3	10.9		
33	12.2	7.9		
36	10.1	0.4		
39	10.0	0.3		
42	9.3	0.2		
45	9.3	0.1		
48	9.0	0.1		
49	8.5	0.1		



Parameter	LS	LB
Total P (µg/L)	8.52	392.00
Dissolved P (µg/L)	NA	NA
Chl.a (µg/L)	0.37	NA
TN (µg/L)	NA	NA
NO <sub>3</sub> -N (µg/L)	NA	NA
NH <sub>4</sub> -N (µg/L)	NA	NA
Total N (µg/L)	NA	NA
Lab Cond. (µS/cm)	NA	NA
Lab pH	NA	NA
Alkalinity (mg/L CaCO <sub>3</sub> )	NA	NA
Total Susp. Solids (mg/L)	NA	NA
Calcium (mg/L)	NA	NA
Magnesium (mg/L)	NA	NA
Hardness (mg/L)	NA	NA
Color (SU)	NA	NA
Turbidity (NTU)	NA	NA

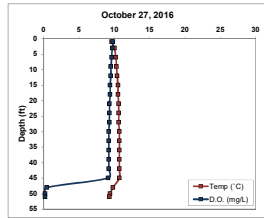
Data collected by TAH (Ontario)

Forest Lake

Date: 10/27/2016  
Time: 9:20  
Weather: 100% clouds, 40F  
Entry: JMB

Max Depth: 52.3  
LS Depth (ft): 3.0  
LB Depth (ft): 50.0  
Secchi Depth (ft): 11.3

Depth (ft)	Temp (°C)	D.O. (mg/L)	pH	Sp. Cond. (µS/cm)
1	9.8	9.9		
3	10.0	9.9		
6	10.2	9.9		
9	10.3	9.8		
12	10.4	9.9		
15	10.3	9.8		
18	10.0	9.4		
21	10.0	9.3		
24	10.0	9.2		
27	10.0	9.3		
30	10.0	9.2		
33	10.0	9.2		
36	10.0	9.2		
39	10.0	9.2		
42	10.0	9.2		
45	10.0	9.1		
48	9.8	0.4		
50	9.2	0.2		
51	9.3	0.2		



Parameter	LS	LB
Total P (µg/L)	30.00	750.00
Dissolved P (µg/L)	NA	NA
Chl-a (µg/L)	0.95	NA
TN (µg/L)	NA	NA
NO <sub>3</sub> -N (µg/L)	NA	NA
NH <sub>4</sub> -N (µg/L)	NA	NA
Total N (µg/L)	NA	NA
Lab Cond. (µS/cm)	NA	NA
Lab pH	NA	NA
Alkalinity (mg/L CaCO <sub>3</sub> )	NA	NA
Total Susp. Solids (mg/L)	ND	13.20
Calcium (mg/L)	NA	NA
Magnesium (mg/L)	NA	NA
Hardness (mg/L)	NA	NA
Color (SU)	NA	NA
Turbidity (NTU)	NA	NA

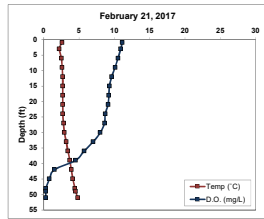
Data collected by JMB (Criteria)

Forest Lake

Date: 2/21/2017  
Time: 11:15  
Weather: 0% clouds, 5mph wind, 40F  
Entry: JMB

Max Depth: 51.9  
LS Depth (ft): 3.0  
LB Depth (ft): 49.0  
Secchi Depth (ft): 35.1

Depth (ft)	Temp (°C)	D.O. (mg/L)	pH	Sp. Cond. (µS/cm)
1	2.2	11.1		
3	2.2	10.9		
6	2.2	10.4		
9	2.6	10.1		
12	2.7	9.8		
15	2.7	9.5		
18	2.7	9.2		
21	2.7	8.1		
24	2.7	8.7		
27	2.7	8.8		
30	2.9	8.0		
33	3.2	7.0		
36	3.4	5.7		
39	3.7	4.5		
42	3.9	3.4		
45	4.1	0.8		
48	4.4	0.8		
49	4.5	0.3		
51	4.8	0.3		



Parameter	LS	LB
Total P (µg/L)	17.70	1300.00
Dissolved P (µg/L)	4.40	80.00
Chl-a (µg/L)	NA	NA
TN (µg/L)	480.00	2000.00
NO <sub>3</sub> -N (µg/L)	ND	10.00
NH <sub>4</sub> -N (µg/L)	150.00	1970.00
Total N (µg/L)	480.00	2870.00
Lab Cond. (µS/cm)	NA	NA
Lab pH	NA	NA
Alkalinity (mg/L CaCO <sub>3</sub> )	NA	NA
Total Susp. Solids (mg/L)	NA	NA
Calcium (mg/L)	NA	NA
Magnesium (mg/L)	NA	NA
Hardness (mg/L)	NA	NA
Color (SU)	NA	NA
Turbidity (NTU)	NA	NA

Data collected by TWH & JMB (Criteria); ice depth: 1.4ft.

Water Quality Data

Parameter	Surface		Bottom	
	Count	Mean	Count	Mean
Secchi Depth (feet)	6	18.5	NA	NA
Total P (µg/L)	6	18.9	5	575.4
Dissolved P (µg/L)	3	4.8	3	36.7
Chl-a (µg/L)	5	1.0	0	NA
TKN (µg/L)	3	492.3	3	1405.0
NO <sub>3</sub> -N (µg/L)	3	ND	3	19.1
NH <sub>4</sub> -N (µg/L)	3	105.0	3	1243.5
Total N (µg/L)	3	492.3	3	1411.4
Lab Cond. (µS/cm)	2	69.5	2	78.1
Alkal (mg/l CaCO <sub>3</sub> )	2	31.7	2	35.9
Total Susp. Solids (mg/l)	3	ND	3	8.8
Calcium (mg/L)	2	8.3	0	NA
Magnesium (mg/L)	2	2.6	0	NA
Hardness (mg/L)	2	31.3	0	NA
Color (SU)	2	5.0	0	NA
Turbidity (NTU)	0	NA	0	NA

Trophic State Index (TSI)

Year	TP	Chl-a	Secchi
1990			38.1
1991			
1992			
1993			
1994			
1995			
1996			36.7
1997	42.5	38.3	34.1
1998	35.8	42.0	37.9
1999	42.2	35.1	42.8
2000	41.5	41.4	34.3
2001	35.8	38.3	34.9
2002	37.4	34.4	33.2
2003	34.1	36.7	
2004	43.2	41.3	
2005	45.0	41.9	
2006	50.0	46.8	
2007	47.3	37.3	
2008			33.2
2009	42.2	37.0	35.5
2010	45.0	43.3	43.3
2011	44.1	39.9	31.9
2012	45.0	38.4	
2013	39.9	46.3	38.1
2014	42.8	48.9	
2015	43.1	37.5	
2016	42.3	29.1	36.2
All Years (Weighted)	42.3	38.6	36.0
DSL Median	43.2	43.2	42.4
NLF Ecoregion Median	48.1	47.5	45.7

Year	Secchi (feet)				Chlorophyll-a (µg/L)				Total Phosphorus (µg/L)			
	Growing Season		Summer		Growing Season		Summer		Growing Season		Summer	
	Count	Mean	Count	Mean	Count	Mean	Count	Mean	Count	Mean	Count	Mean
1990	7	10.4	3	14.0								
1991	0	0	0	0								
1992	0	0	0	0								
1993	0	0	0	0								
1994	0	0	0	0								
1995	0	0	0	0								
1996	12	15.2	9	16.6								
1997	10	19.7	9	19.8	4	2.4	3	2.2	4	13.8	3.0	14.3
1998	14	15.5	9	15.2	3	7.0	2	3.2	4	13.3	2.0	9.0
1999	8	13.3	5	10.8	2	1.6	2	1.6	3	21.3	2.0	14.0
2000	8	19.3	6	19.5	1	3.0	1	3.0	3	13.3	3.0	13.3
2001	5	18.9	4	18.8	1	2.2	1	2.2	3	11.3	2.0	9.0
2002	3	21.0	3	21.0	1	1.5	1	1.5	2	12.5	1.0	10.0
2003	1	15.0	0	0	1	1.9	1	1.9	1	8.0	1.0	8.0
2004	0	0	0	0	2	3.0	2	3.0	2	15.0	2.0	15.0
2005	0	0	0	0	1	3.2	1	3.2	1	17.0	1.0	17.0
2006	0	0	0	0	1	5.2	1	5.2	1	24.0	1.0	24.0
2007	0	0	0	0	2	2.0	2	2.0	2	20.0	2.0	20.0
2008	3	23.3	2	21.0	1	2.2	0	0	1	9.0	0.0	0.0
2009	3	20.0	2	18.0	1	1.9	1	1.9	1	14.0	1.0	14.0
2010	0	0	0	0	1	3.7	1	3.7	1	17.0	1.0	17.0
2011	2	23.0	2	23.0	1	2.6	1	2.6	1	16.0	1.0	16.0
2012	0	0	0	0	1	2.2	1	2.2	1	17.0	1.0	17.0
2013	1	15.0	1	15.0	1	5.0	1	5.0	1	11.9	1.0	11.9
2014	0	0	0	0	1	6.5	1	6.5	1	14.6	1.0	14.6
2015	0	0	0	0	1	2.0	1	2.0	1	14.9	1.0	14.9
2016	6	17.0	3	17.1	6	1.1	4	0.9	6	18.7	4.0	14.1
All Years (Weighted)		16.6		17.3		2.8		2.5		15.4		14.1
DSL Median				11.2				3.6				15.0
NLF Ecoregion Median				8.9				5.6				21.0



# D

## APPENDIX D

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### Watershed Analysis WiLMS Results



Date: 1/27/2017 Scenario: Forest Lake Current

Lake Id: Forest Lake

Watershed Id: 0

**Hydrologic and Morphometric Data**

Tributary Drainage Area: 618.0 acre

Total Unit Runoff: 14 in.

Annual Runoff Volume: 721.0 acre-ft

Lake Surface Area <As>: 469 acre

Lake Volume <V>: 11371 acre-ft

Lake Mean Depth <z>: 24.2 ft

Precipitation - Evaporation: 5.5 in.

Hydraulic Loading: 936.0 acre-ft/year

Areal Water Load <qs>: 2.0 ft/year

Lake Flushing Rate <p>: 0.08 1/year

Water Residence Time: 12.15 year

Observed spring overturn total phosphorus (SPO): 22 mg/m<sup>3</sup>

Observed growing season mean phosphorus (GSM): 15.4 mg/m<sup>3</sup>

% NPS Change: 0%

% PS Change: 0%

**NON-POINT SOURCE DATA**

Land Use	Acre (ac)	Low	Most Likely	High	Loading %	Low	Most Likely	High	
		Loading (kg/ha-year)				Loading (kg/year)			
Row Crop AG	0.0	0.50	1.00	3.00	0.0	0	0	0	0
Mixed AG	0.0	0.30	0.80	1.40	0.0	0	0	0	0
Pasture/Grass	43	0.10	0.30	0.50	6.0	2	5	9	
HD Urban (1/8 Ac)	0.0	1.00	1.50	2.00	0.0	0	0	0	0
MD Urban (1/4 Ac)	0.0	0.30	0.50	0.80	0.0	0	0	0	0
Rural Res (>1 Ac)	0.0	0.05	0.10	0.25	0.0	0	0	0	0
Wetlands	128	0.10	0.10	0.10	6.0	5	5	5	
Forest	447	0.05	0.09	0.18	18.8	9	16	33	
Lake Surface	469.0	0.10	0.30	1.00	65.8	19	57	190	

**POINT SOURCE DATA**

Point Sources	Water Load (m <sup>3</sup> /year)	Low (kg/year)	Most Likely (kg/year)	High (kg/year)	Loading %

**SEPTIC TANK DATA**

Description	Low	Most Likely	High	Loading %
Septic Tank Output (kg/capita-year)	0.3	0.5	0.8	
# capita-years		59		
% Phosphorus Retained by Soil	98	90	80	
Septic Tank Loading (kg/year)	0.35	2.95	9.44	3.4

**TOTALS DATA**

<b>Description</b>	<b>Low</b>	<b>Most Likely</b>	<b>High</b>	<b>Loading %</b>
Total Loading (lb)	77.8	190.9	541.6	100.0
Total Loading (kg)	35.3	86.6	245.7	100.0
Areal Loading (lb/ac-year)	0.17	0.41	1.15	0.0
Areal Loading (mg/m <sup>2</sup> -year)	18.60	45.61	129.45	0.0
Total PS Loading (lb)	0.0	0.0	0.0	0.0
Total PS Loading (kg)	0.0	0.0	0.0	0.0
Total NPS Loading (lb)	35.2	58.8	102.4	96.6
Total NPS Loading (kg)	16.0	26.7	46.4	96.6

**Phosphorus Prediction and Uncertainty Analysis Module**

Date: 1/27/2017 Scenario: 54

Observed spring overturn total phosphorus (SPO): 22.0 mg/m<sup>3</sup>Observed growing season mean phosphorus (GSM): 15.4 mg/m<sup>3</sup>Back calculation for SPO total phosphorus: 0.0 mg/m<sup>3</sup>Back calculation GSM phosphorus: 0.0 mg/m<sup>3</sup>

% Confidence Range: 70%

Nurenberg Model Input - Est. Gross Int. Loading: 0 kg

<b>Lake Phosphorus Model</b>	<b>Low</b>	<b>Most Likely</b>	<b>High</b>	<b>Predicted</b>	<b>% Dif.</b>
	Total P	Total P	Total P	-Observed	
	(mg/m <sup>3</sup> )	(mg/m <sup>3</sup> )	(mg/m <sup>3</sup> )	(mg/m <sup>3</sup> )	
Walker, 1987 Reservoir	10	24	68	9	58
Canfield-Bachmann, 1981 Natural Lake	8	14	26	-1	-6
Canfield-Bachmann, 1981 Artificial Lake	9	15	25	0	0
Rechow, 1979 General	2	4	10	-11	-71
Rechow, 1977 Anoxic	10	23	67	8	52
Rechow, 1977 water load<50m/year	2	6	16	-9	-58
Rechow, 1977 water load>50m/year	N/A	N/A	N/A	N/A	N/A
Walker, 1977 General	9	21	60	-1	-5
Vollenweider, 1982 Combined OECD	7	16	37	-3	-16
Dillon-Rigler-Kirchner	7	18	50	-4	-18
Vollenweider, 1982 Shallow Lake/Res.	6	12	30	-7	-37
Larsen-Mercier, 1976	7	17	47	-5	-23
Nurnberg, 1984 Oxidic	6	15	41	0	0

Lake Phosphorus Model	Confidence		Parameter	Back Calculation (kg/year)	Model Type
	Lower Bound	Upper Bound			
Walker, 1987 Reservoir	13	52	Tw	0	GSM
Canfield-Bachmann, 1981 Natural Lake	4	40	FIT	1	GSM
Canfield-Bachmann, 1981 Artificial Lake	5	43	FIT	1	GSM
Rechow, 1979 General	2	8	L qs	0	GSM
Rechow, 1977 Anoxic	13	51	FIT	0	GSM
Rechow, 1977 water load<50m/year	3	13	FIT	0	GSM
Rechow, 1977 water load>50m/year	N/A	N/A	N/A	N/A	N/A
Walker, 1977 General	10	48	FIT	0	SPO
Vollenweider, 1982 Combined OECD	7	33	FIT	0	ANN
Dillon-Rigler-Kirchner	10	38	P L qs p	0	SPO
Vollenweider, 1982 Shallow Lake/Res.	6	25	FIT	0	ANN
Larsen-Mercier, 1976	10	36	P Pin	0	SPO
Nurnberg, 1984 Oxidic	7	33	FIT	0	ANN



# E

## APPENDIX E

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### Aquatic Plant Survey Data



































# F

## APPENDIX F

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### Agency Comments and Responses Regarding Draft Documents





- When referencing the majority, the findings must be greater than 50%. This should not be confused with a modal or plurality where the most frequent response may not be the majority. By referencing a modal response as the majority (when it is not the majority), the data is being misrepresented. Please review and correct these areas.

Corrected

- Table of Contents Figure 3.4-3 page 55 is not referenced

Corrected

- Page 41 para. 2 "Please note that the use of powered cutters may require mechanical harvesting permit..."
  - o May should be changed to does require a permit

Corrected

- Page 41 the methods described in the manual removal may also be conducted on behalf of the riparian by a contractor, nursery/landscaping company, highschool/college student on summer vacation, etc. if the rules under NR 109.06(2) are followed:

Verbiage regarding the use of contractors has been added.

**(2)** A riparian owner who manually removes aquatic plants from a body of water or uses mechanical devices designed for cutting or moving vegetation to control plants on an exposed lake bed that abuts the owner's property provided that the removal meets all of the following:

(a) 1. Removal of native plants is limited to a single area with a maximum width of no more than 30 feet measured along the shoreline provided that any piers, boatlifts, swimrafts and other recreational and water use devices are located within that 30-foot wide zone and may not be in a new area or additional to an area where plants are controlled by another method; or

2. Removal of nonnative or invasive aquatic plants as designated under s. [NR 109.07](#) when performed in a manner that does not harm the native aquatic plant community; or

3. Removal of dislodged aquatic plants that drift on-shore and accumulate along the waterfront.

(b) Is not located in a sensitive area as defined by the department under s. [NR 107.05 \(3\) \(i\) 1.](#), or in an area known to contain threatened or endangered resources or floating bogs.

(c) Does not interfere with the rights of other riparian owners.

(d) If wild rice is involved, the procedures of s. [NR 19.09 \(1\)](#) shall be followed.

- Page 56 para. 3 ..." calcium carbonate incrustations which from on these plants" ... from should be form

Corrected

- Page 76 Add a sentence at the end of the first paragraph: Cisco are present in Forest Lake , but in low numbers, based on a 2014 WDNR survey.

Corrected

- Table 3.6-4. a. No catfish in this lake or sauger, and hybrids

Corrected

b. Fix smallmouth and largemouth reg description. There is a 18 in min and a one fish aggregate bag limit on both species. the catch and release regulation applies only to smallmouth and is a one bag starting June 16, 2017 (third Saturday in June). The season for both bass species closes March 4, 2018 (first Sunday in March).

Updated to 2019 fishing regulations

- Page 82 Management Action: "Conduct EWM Population Control..." statement should be added to include WIDNR staff in discussions when triggers for herbicide management are reached.

Added verbiage to that section.

- Page 91 DNR contacts John Pruess is no longer a water guard please remove.

Removed John's listing.