

# A

## APPENDIX A

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**Public Participation Materials**






**Beaver Dam Lake Improvement Association, Inc.**

**Beaver Dam Lake Management Planning Project Kick-off Meeting**  
August 23, 2014

**Tim 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



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## Onterra, LLC

- Founded in 2005
- Staff
  - Four full-time ecologists
  - One part-time ecologist
  - Two field technicians
  - Four summer interns
- Services
  - Science and planning
- Philosophy
  - Promote realistic planning
  - Assist, not direct




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A goal without a plan is just a wish!

## 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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## ***Elements of an Effective Lake Management Planning Project***

### **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
  - Aquatic Plant Surveys
  - Fisheries Data Integration
  - Shoreline Assessment
  - Stakeholder Survey (completed)



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## ***Water Quality Analysis***

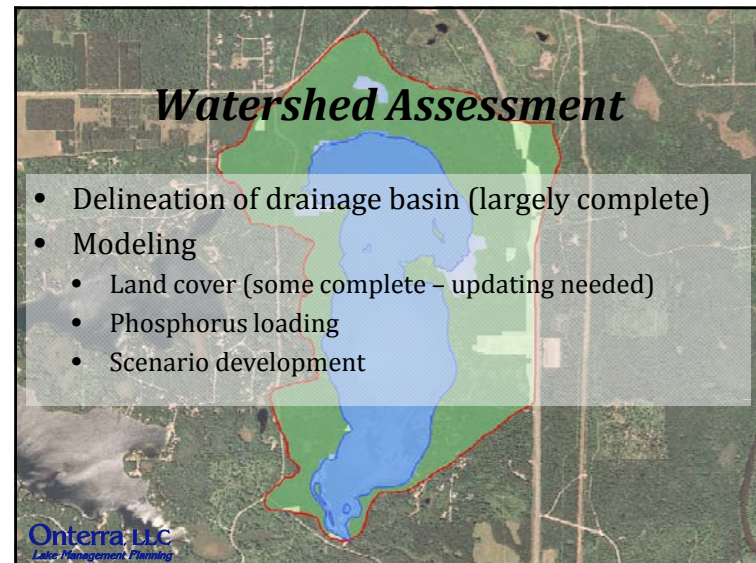
- General water chemistry (current & historical)
  - Onterra
  - Citizens Lake Monitoring Network
- Nutrient analysis
  - Lake trophic state (Eutrophication)
  - Limiting plant nutrient
- Supporting data for watershed modeling



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## ***Watershed Assessment***

- Delineation of drainage basin (largely complete)
- Modeling
  - Land cover (some complete – updating needed)
  - Phosphorus loading
  - Scenario development



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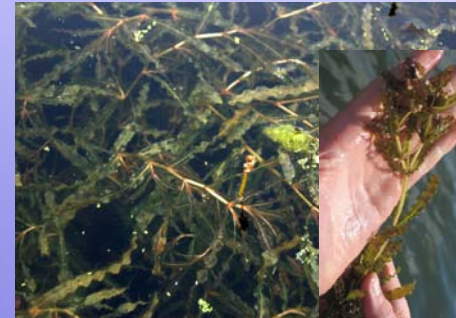
## *Aquatic Plant Surveys*

- Concerned with both native and non-native plants
- Multiple surveys used in assessment
  - Point-intercept survey
  - Aquatic plant community mapping

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## Non-native Aquatic Plants

### Curly-leaf Pondweed



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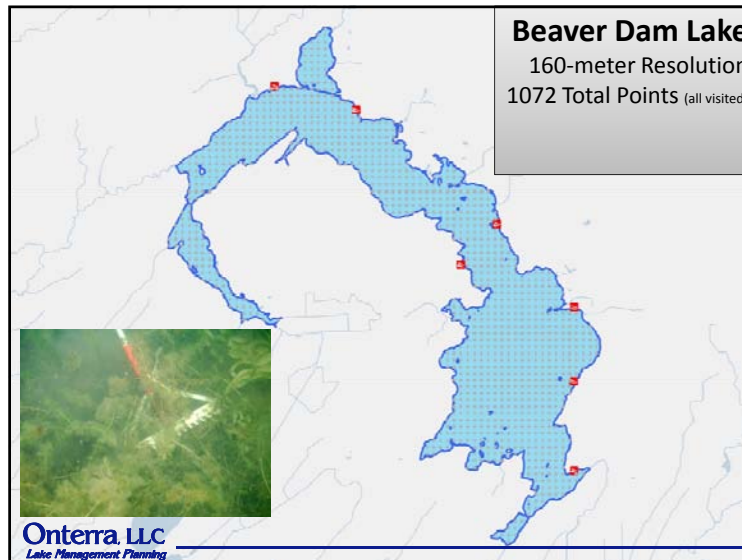
## Non-native Aquatic Plants

### Eurasian Water Milfoil

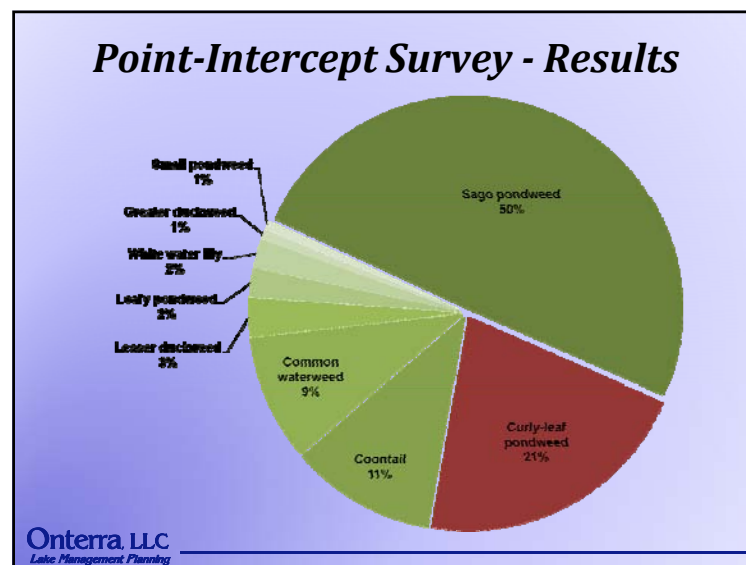
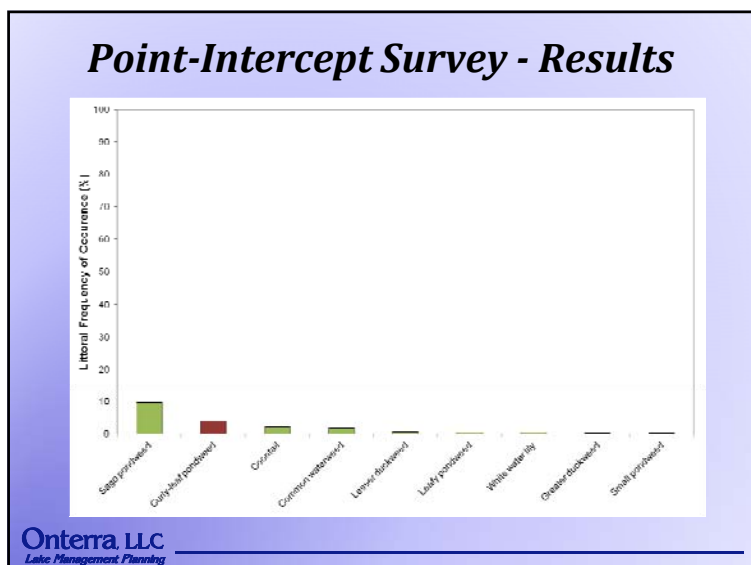
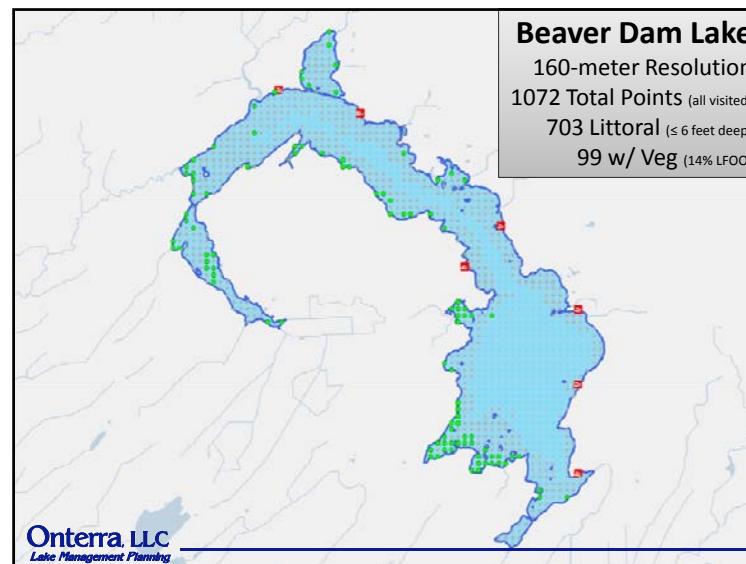
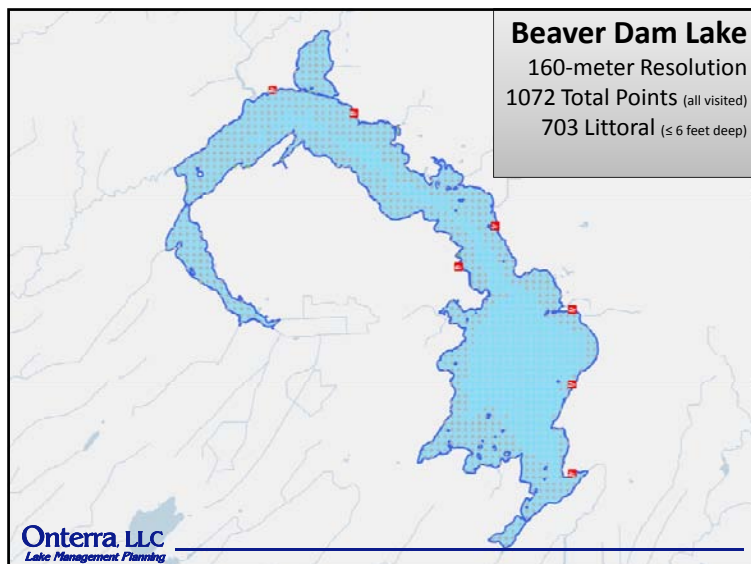


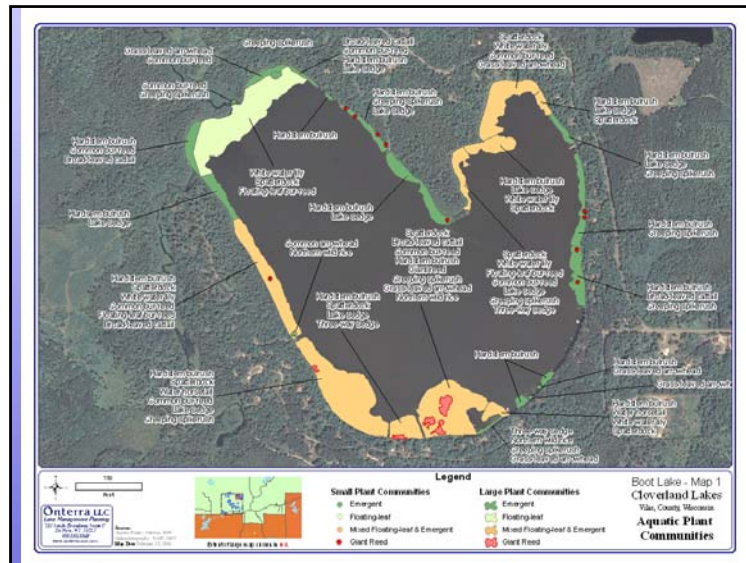
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**Beaver Dam Lake**  
160-meter Resolution  
1072 Total Points (all visited)



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### Fisheries Data Integration

- No fish sampling completed
- Assemble data from WDNR, USGS, & USFWS,
- Fish survey results summaries (if available)
- Carp biomass survey results
- Use information in planning as applicable



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### Shoreland Assessment

- Shoreland area is important for buffering runoff and provides valuable habitat for aquatic and terrestrial wildlife.
- Assessment ranks shoreland area from shoreline back 35 feet
- Assess shoreland development and habitat
  - Coarse woody habitat

Urbanized



Natural



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### Planning Process

#### Planning Committee Meetings

Study Results (including a stakeholder survey)  
Conclusions & Initial Recommendations

- Management Goals
- Management Actions
- Timeframe
- Facilitator(s)

**Implementation Plan**



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*Beaver Dam Lake  
Improvement Association, Inc.*

**Beaver Dam Lake  
Management Planning Project  
Planning Meeting I  
March 11, 2015**

**Brenton Butterfield &  
Tim Hoyman**  
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## **Presentation Outline**

- Current Project Overview / Update
  - Planning Process
  - Study Results
    - Water Quality
    - Watershed
    - Shoreland Assessment
    - Aquatic Plants
    - Fisheries
- Next Steps



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## **Summary of Project Results**

**Water Quality**

- Very poor
- But it's a complex story

**Watershed & Immediate Shoreline**

- Watershed highly disturbed – comprised mainly of agriculture
- Shoreline comprised of both undeveloped and highly developed areas

**Aquatic Plant Community**

- Sparse and highly degraded

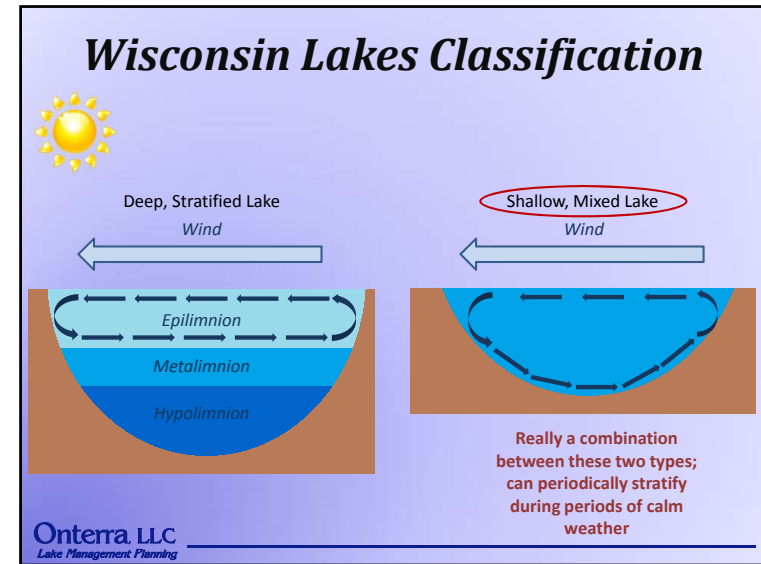
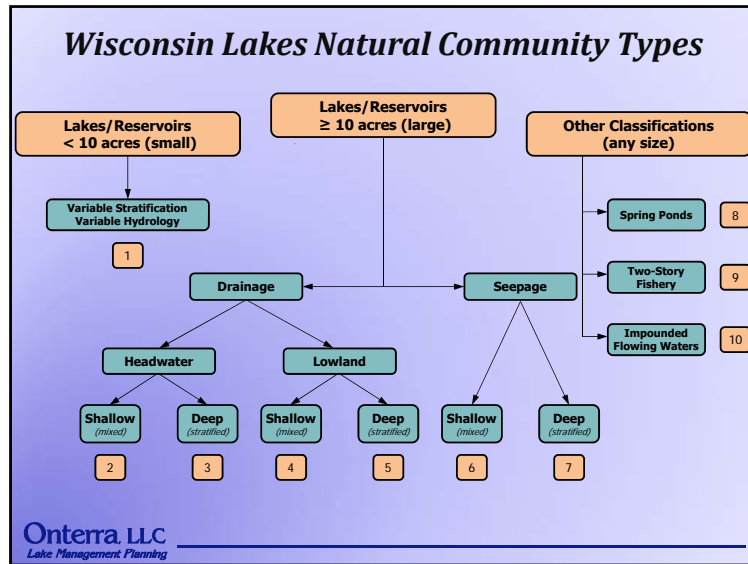
**Fisheries**

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## **Water Quality**

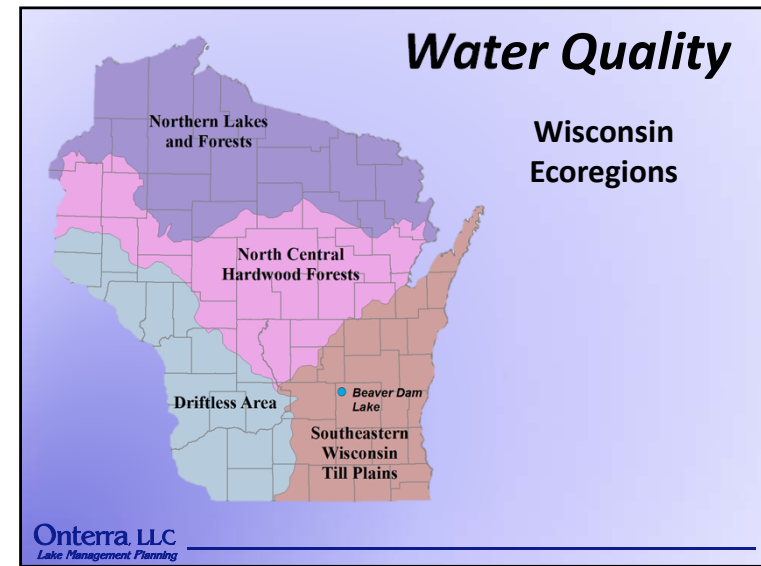
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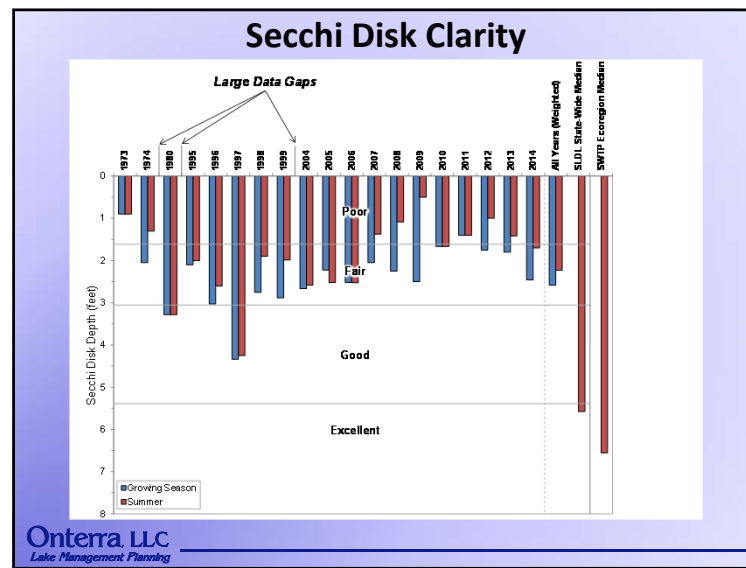
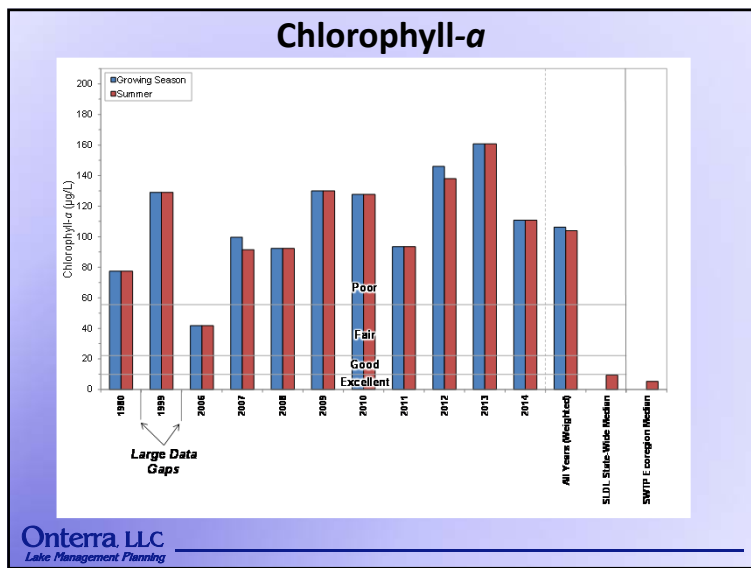
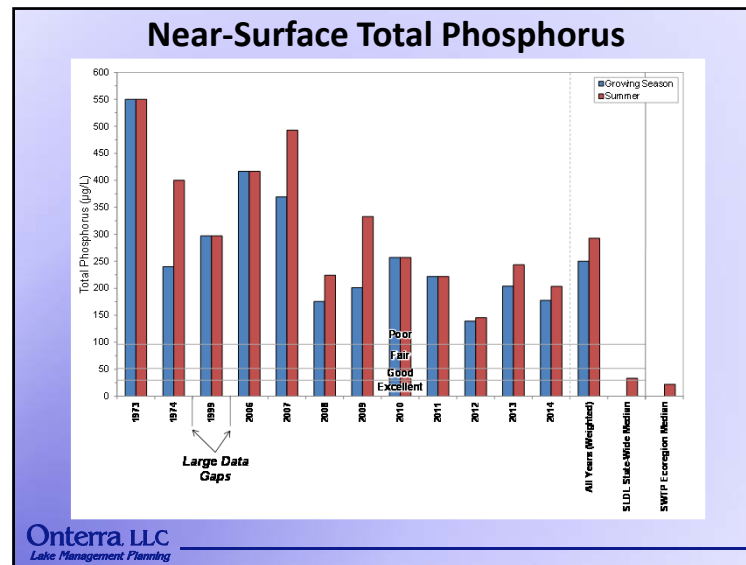
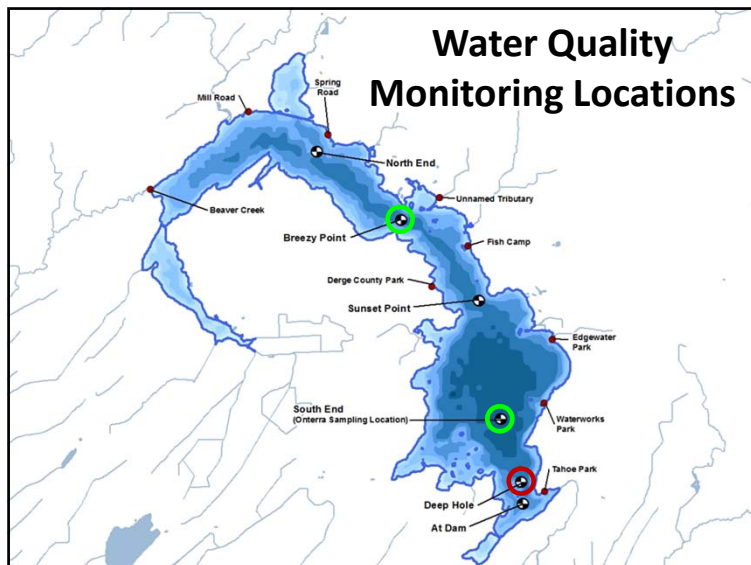
### Water Quality

- ↑ Phosphorus (Limiting Plant Nutrient)
  - Nitrogen:Phosphorus Ratio
  - July 2014: 15:1
  - August 2014: 10:1
  - Indication of co-limitation; however, lower ratio is due to increased levels of phosphorus
- ↑ Chlorophyll-*a* (Algal Abundance)
  - Very High
- ↓ Water Clarity (Secchi Disk)
  - Very Low

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## Eutrophication -Lake Aging

**Important Note:** BDL is a man-made flowage. Eutrophication in flowages is very rapid.

Oligotrophic

Mesotrophic

Eutrophic

**Lake Trophic States**

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## Shallow Lakes are Special

**Clear State**

**Turbid State**

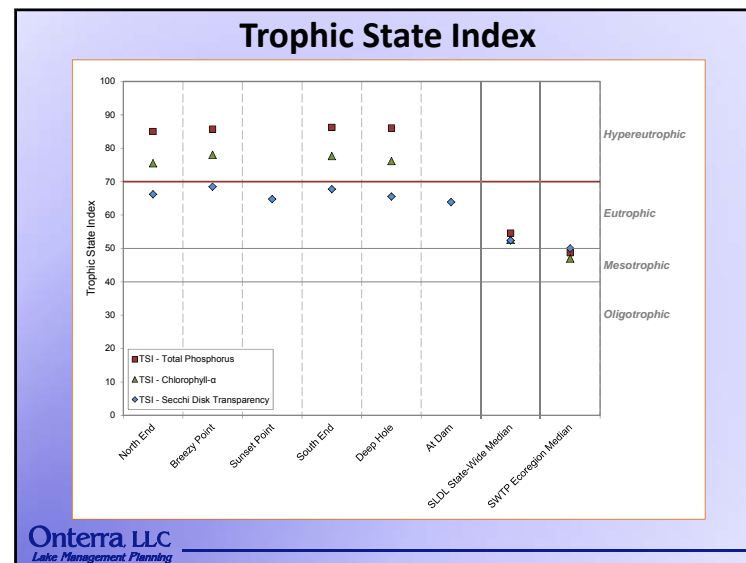
Aquatic Plants are Incredibly Important

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## Cultural Eutrophication

*Accelerated eutrophication caused by human activity.*

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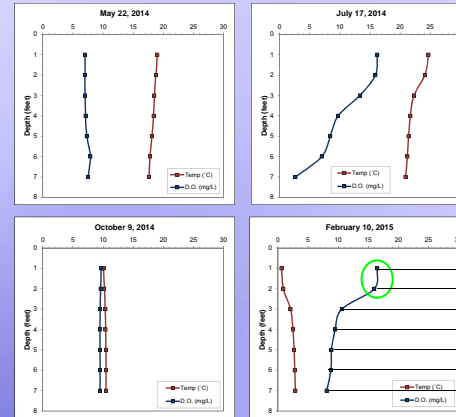


### Beaver Dam Lake Impairment Listing

- BDL was listed on the EPA's 303(d) list of impaired waters in 2010 and has been relisted in 2012 and 2014.
- Total phosphorus concentrations exceed 40 µg/L threshold for shallow lowland drainage lakes.
- Chlorophyll-*a* TSI value exceeds 71
- Both parameters above exceed thresholds for fish/aquatic life and recreation

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### Dissolved Oxygen



#### Oxygen Supersaturation

- Can become toxic to some fish at 110% (gas bubble disease)
- Believed to be due to under-ice phytoplankton bloom (dinoflagellate).

#### % Oxygen Saturation

- 115% Supersaturation
- 112%
- 77%
- 70%
- 65%
- 60%

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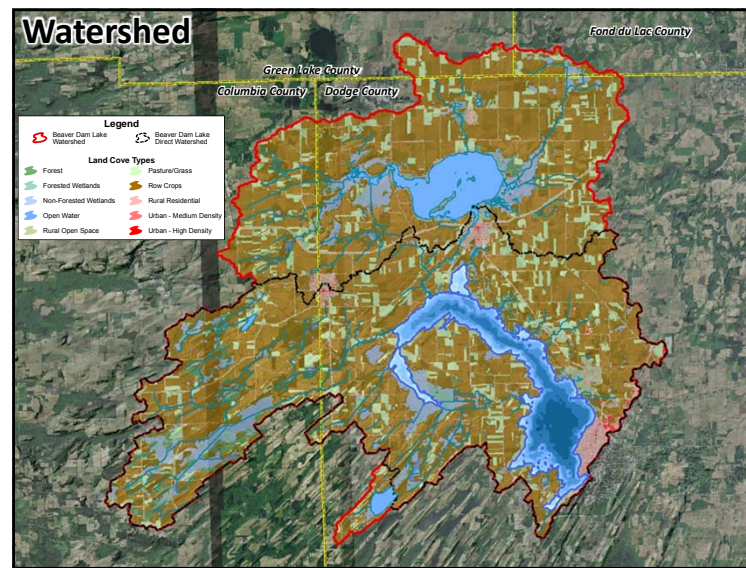
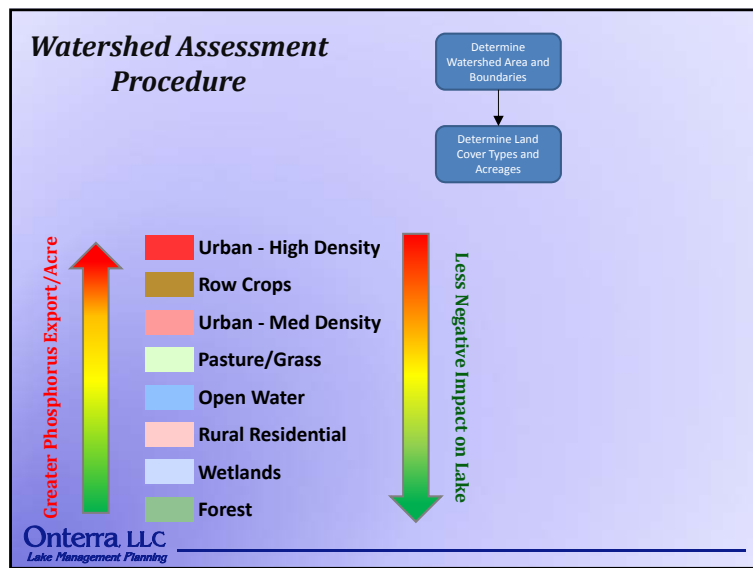
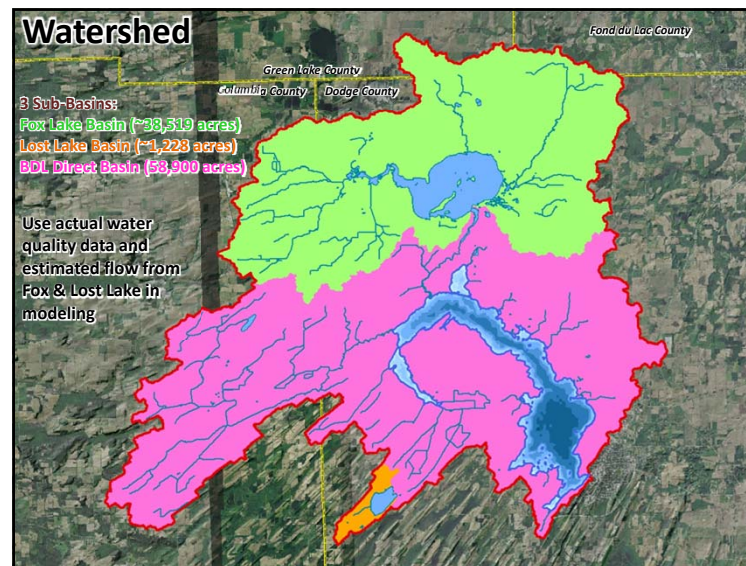
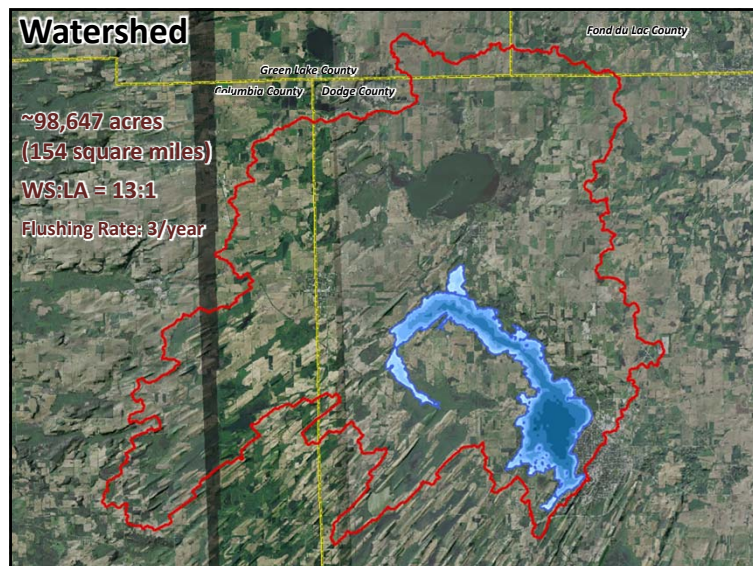


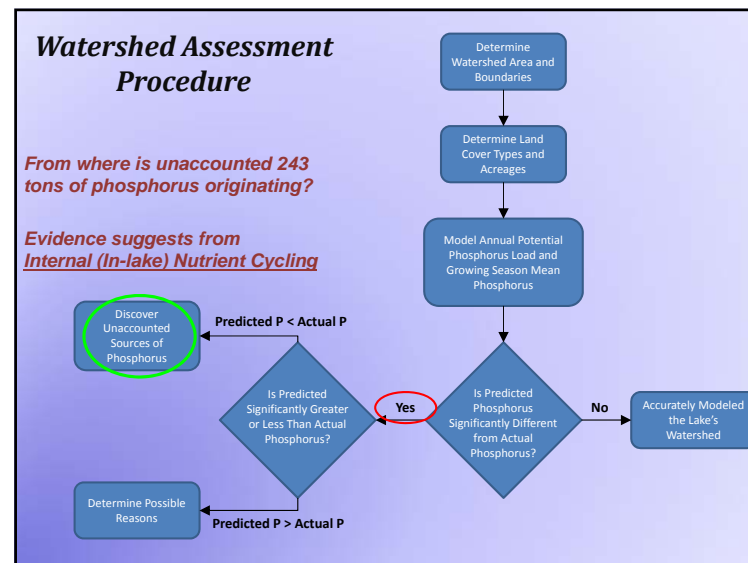
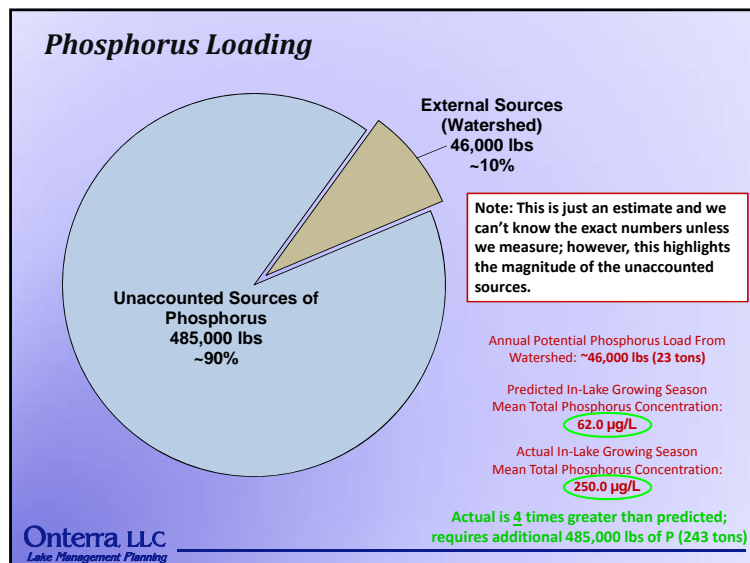
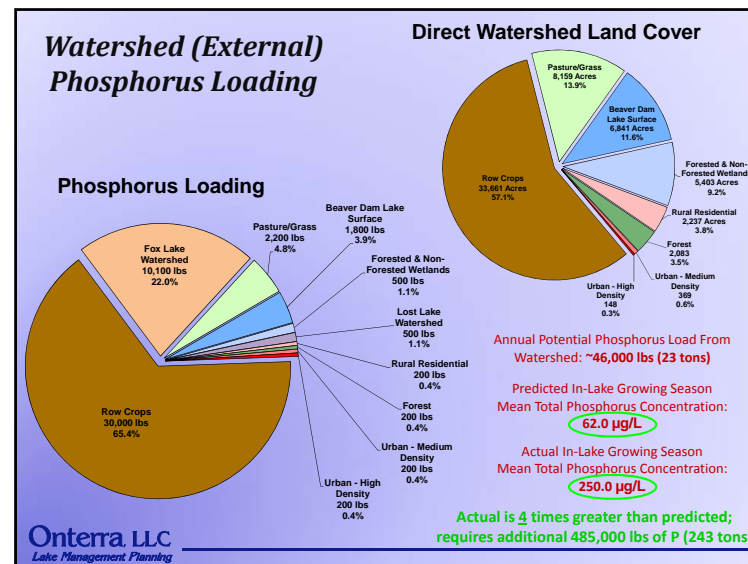
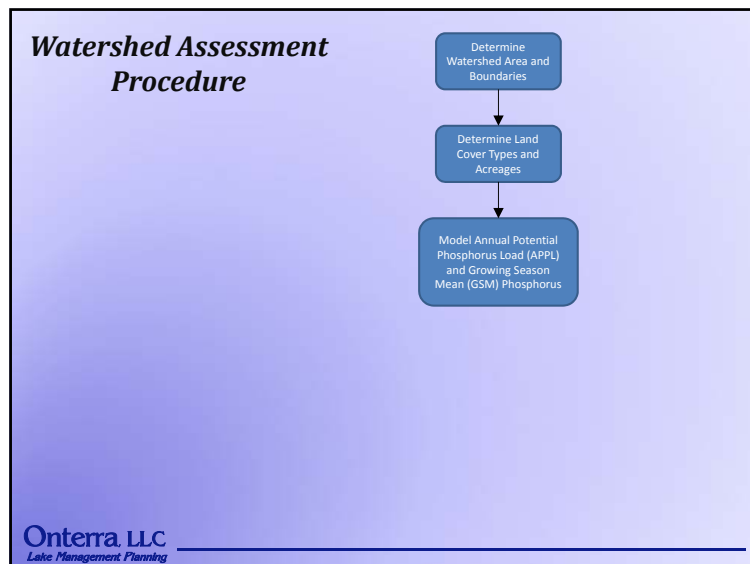
### Watershed Assessment Procedure

Determine Watershed Area and Boundaries

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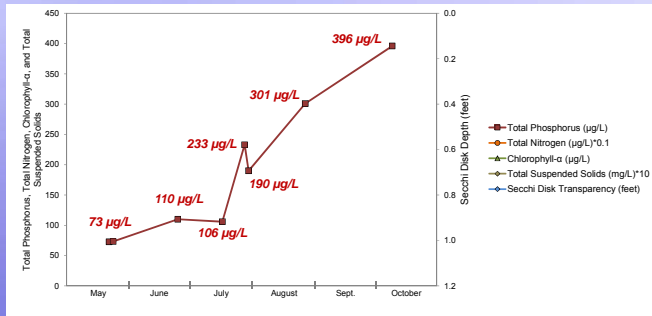






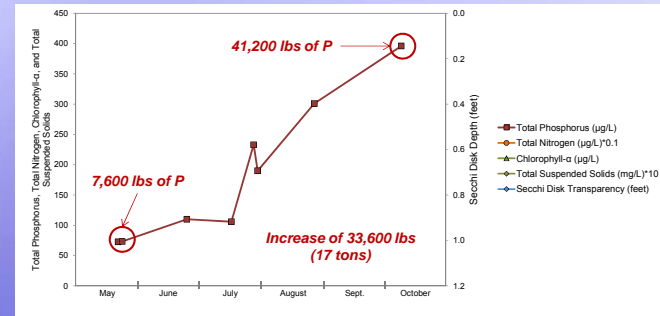
### Evidence of Internal Nutrient Cycling

- What is internal nutrient cycling?
  - Release of nutrients (phosphorus) from sediments and/or resuspension of nutrient-laden sediments
- Seasonal dynamics of nutrients in Beaver Dam Lake point to internal nutrient cycling: 2014 water quality



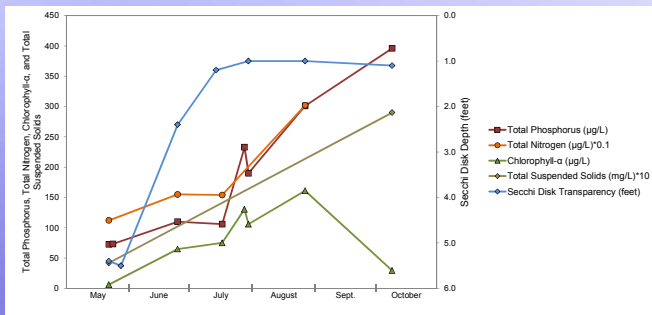
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### Evidence of Internal Nutrient Cycling

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  - Release of nutrients (phosphorus) from sediments and/or resuspension of nutrient-laden sediments
- Seasonal dynamics of nutrients in Beaver Dam Lake point to internal nutrient cycling: 2014 water quality



### Evidence of Internal Nutrient Cycling

- Typically, nutrients would be highest following spring runoff and after large precipitation events
- Nutrients in BDL are lowest in spring and continually increase over the course of the growing season
- What are the sources of internally recycled nutrients in BDL?

1. Wind-induced sediment resuspension
2. Common carp
3. Release from bottom sediments



### Sources Internal Nutrient Cycling

- Wind-induced sediment resuspension
  - Water movement resuspends bottom sediments and organic matter
  - Occurs in water bodies with:
    - Large surface area (BDL: 6,841 acres/maximum fetch length of 6 miles)
    - Shallow water (BDL Mean Depth: 5.7 feet)
    - Little aquatic vegetation (Only 9% of BDL contains vegetation)
    - Soft, flocculent sediments (95% of BDL contains soft sediments)
- Common Carp
  - Resuspend bottom sediments (foraging & spawning behavior)
  - Excretion also adds nutrients
  - Physically uprooting vegetation in combination with foraging behavior increases susceptibility of to wind-induced resuspension

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### Sources Internal Nutrient Cycling Cont.

- Release of P from bottom sediments during anoxia
  - Periods of stratification causing anoxia during calm weather can release P from bottom sediments
- Release of P from bottom sediments during periods of high pH
  - Ability of P to remain bound to sediment weakens as pH increases
  - Photosynthesizing algae remove CO<sub>2</sub> from the water increasing pH
  - High algal biomass can create high pH (BDL 2014 pH: 9.0)

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### How much does each internal source contribute? With current data, we can only estimate.

#### Common Carp

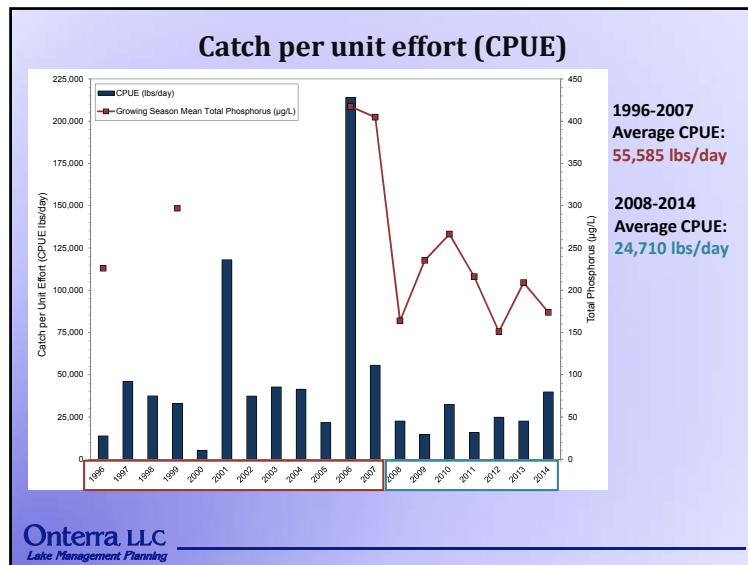
- LaMarra (1975): 1 pound of carp produces 0.11 pounds of P
  - 2014 BDL Carp Study: Approximately 340 lbs carp/acre
  - Carp generate estimated 256,000 lbs of P annually

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### Pounds of carp (and buffalo) Removed

Year	Common Carp (lbs)	Bigmouth Buffalo (lbs)
1996	100,000	0
1997	1,700,000	0
1998	350,000	0
1999	280,000	0
2000	10,000	0
2001	120,000	0
2002	420,000	0
2003	850,000	0
2004	650,000	0
2005	550,000	0
2006	220,000	0
2007	900,000	0
2008	450,000	150,000
2009	200,000	100,000
2010	480,000	0
2011	180,000	0
2012	580,000	0
2013	720,000	100,000
2014	1,480,000	150,000

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**How much does each internal source contribute?**

*With current data, we can only estimate.*

**Phosphorus Release from Bottom Sediments**

- Penn et al. (2000): Calculated phosphorus release rates from sediments in hypereutrophic lake in New York at pH of 7.5
  - Applied these rates to BDL
  - From May – August, under oxic conditions, estimated that >40,000 lbs of phosphorus released from bottom sediments
  - Higher release rates may be present in BDL due to higher pH
  - Periods of anoxia likely also increase release rate
  - Again, just an estimate, but highlights significance

**Water Quality Scenario Development**

**Current Conditions:**

GSM Total Phosphorus: **250 µg/L**  
GSM Secchi: **2.6 feet**

1. What if 25% of both external and internal sources of P were reduced?
  - **Predicted TP: 216 µg/L; no change in water clarity**
2. What if 100% of agriculture in watershed was converted to forest, no reductions to internal load?
  - **Predicted TP: 240 µg/L; no change in water clarity**
3. What if 100% of internal loading was reduced, no change to external loading?
  - **Predicted TP: 62 µg/L; increase in water clarity of 0.2 inches**

**Phosphorus needs to be reduced to 47 µg/L to increase water clarity by 1 foot to 3.6 feet**

**Water Quality Scenario Development**

**Current Conditions:**

GSM Total Phosphorus: **250 µg/L**  
GSM Secchi: **2.6 feet**

1. What if 25% of both external and internal sources of P were reduced?
  - This does not mean that nothing should not or were cannot be done
  - **Pre**
2. What if 100% of agriculture in watershed was converted to forest, no reductions to internal load?
  - Reductions in external phosphorus may be done to lengthen period of higher water clarity in spring which may allow plants to establish deeper
  - **Pre**
3. What if 100% of internal loading was reduced, no change to external loading?
  - Enhancing littoral and shoreline habitat will be done to reduce sediment resuspension and erosion **inches**
  - **Pr**

**Phosphorus needs to be reduced to 47 µg/L to increase water clarity by 1 foot to 3.6 feet**



### Shoreland Assessment

- Shoreland area is important for buffering runoff and provides valuable habitat for aquatic and terrestrial wildlife.
- EPA National Lakes Assessment results indicate shoreland development has greatest negative impact to health of our nation's lakes.
- 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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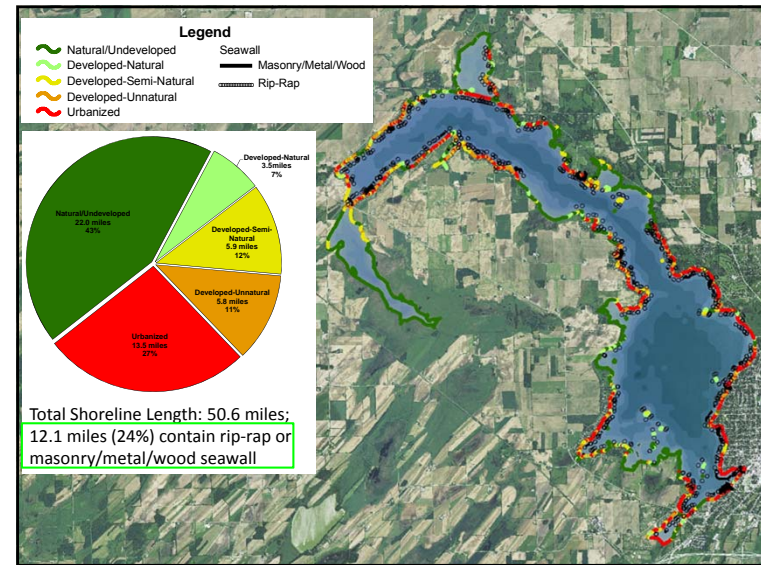
### Shoreline Assessment Category Descriptions

More Natural Habitat →

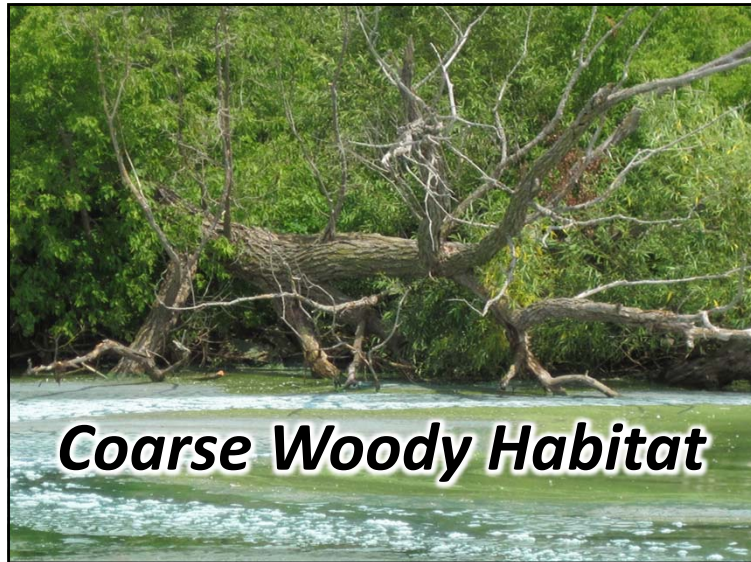
Urbanized	Developed-Unnatural	Developed-Semi-Natural	Developed-Natural	Natural/Undeveloped

← Greater Need for Restoration

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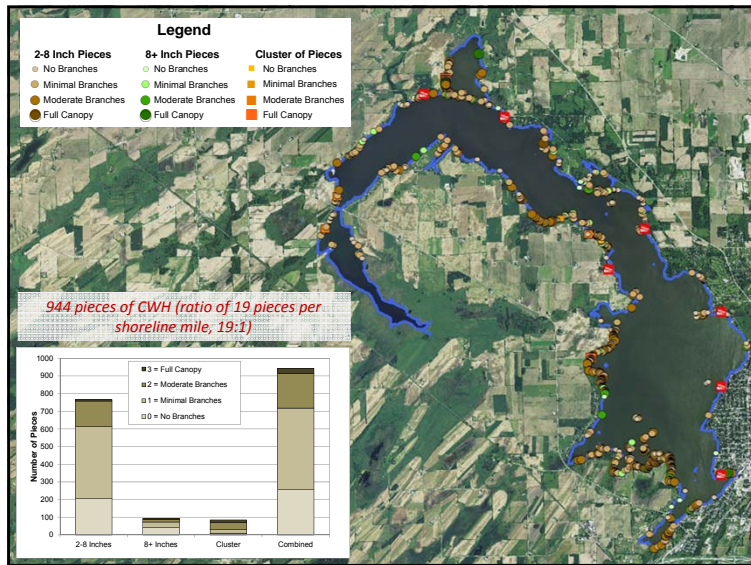


### Coarse Woody Habitat

- 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 Beaver Dam Lake

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## Aquatic Plant Surveys

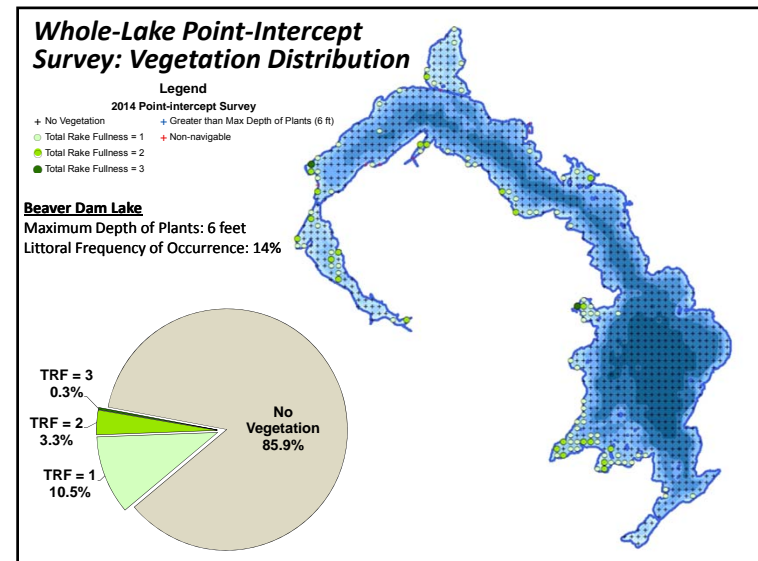
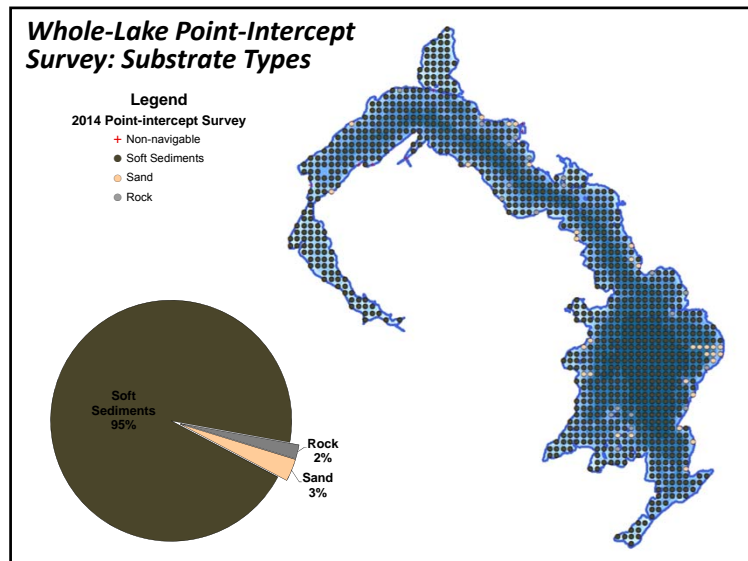
- Concerned with both native and non-native plants
- Multiple surveys used in assessment
  - Point-intercept survey
    - Systematic sampling method
    - Can compare lakes within same ecoregion
  - Plant community mapping
    - Accurately map floating-leaf & emergent communities
    - May compare to future surveys

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### Whole-Lake Point-Intercept Survey (July 14, 16, & 17, 2014)

**Beaver Dam Lake**  
160-meter resolution  
1,072 total points

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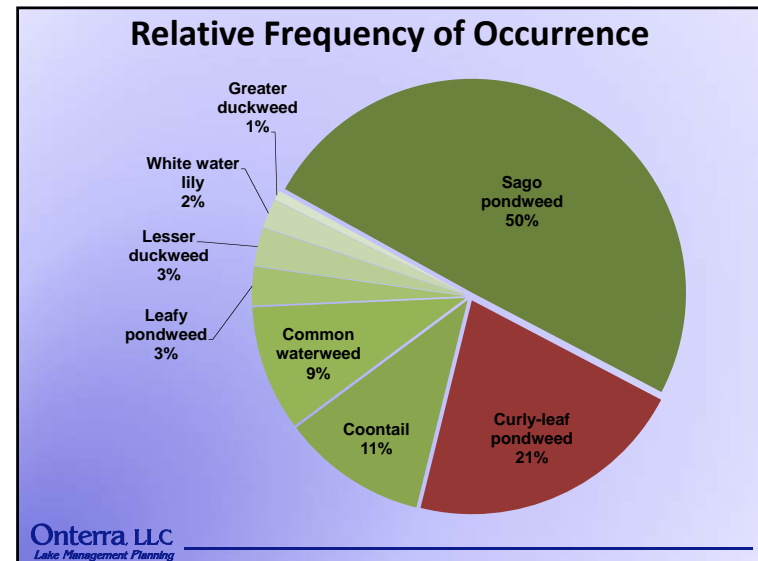
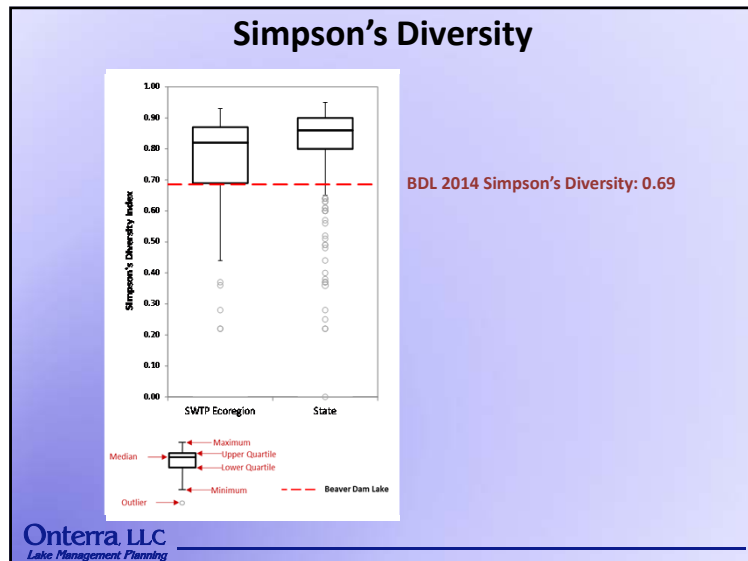
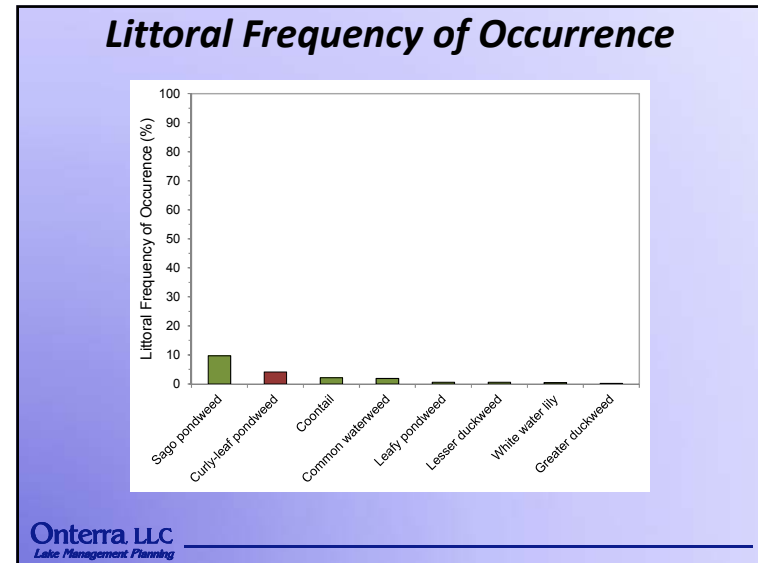


### Plant Data Overview

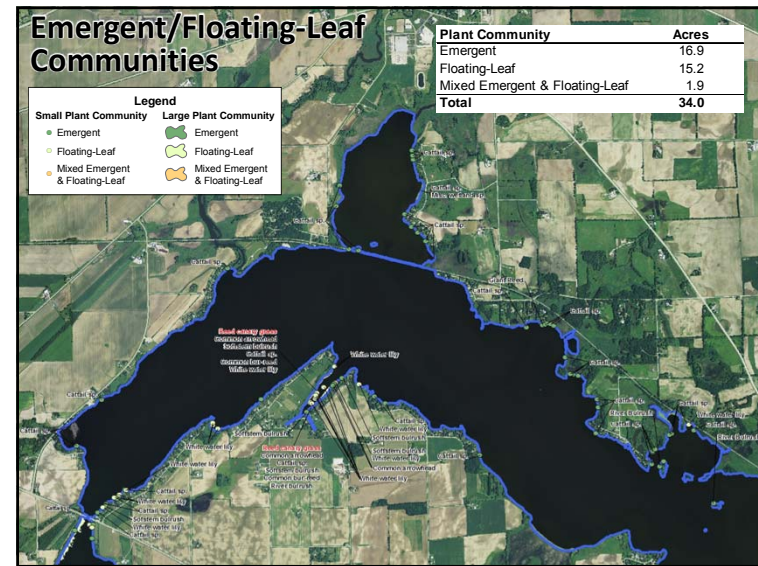
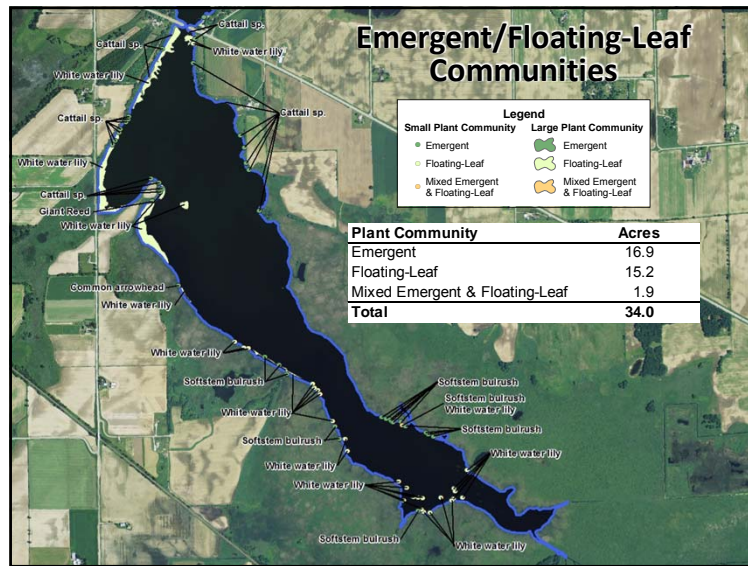
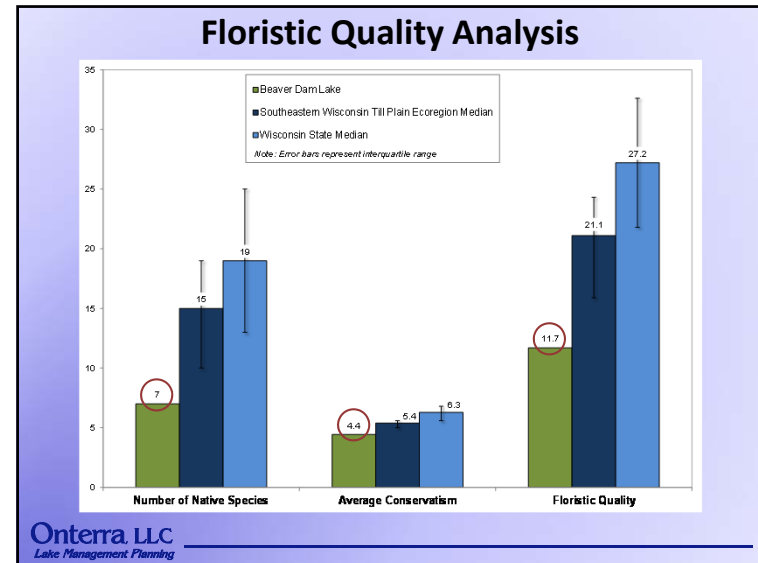
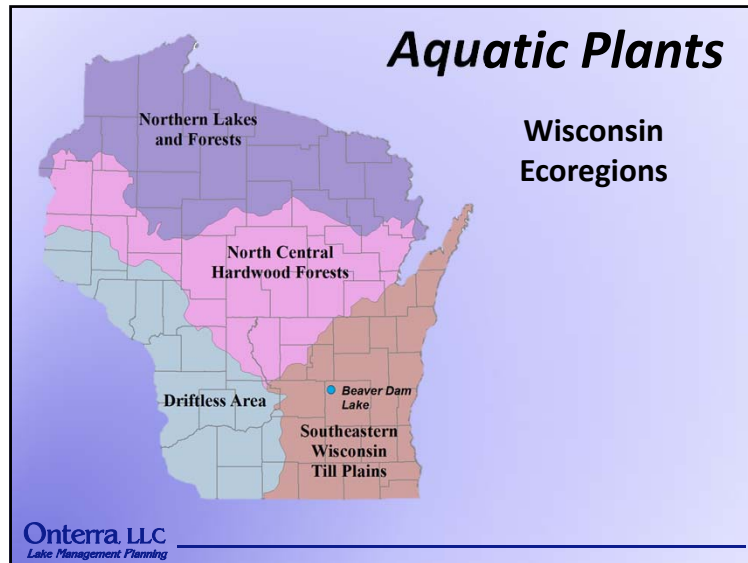
**14 Native Species**  
**3 Non-Native Species**  
 Curly-leaf pondweed  
 Eurasian water milfoil  
 Reed canary grass

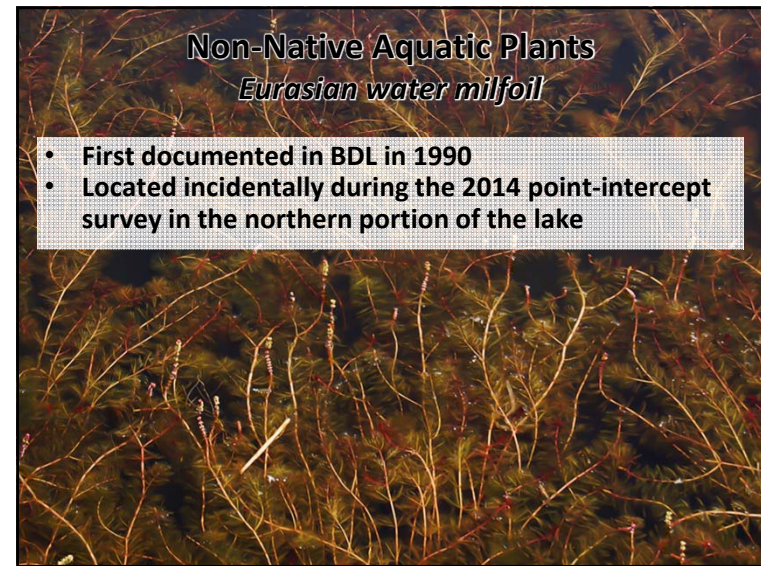
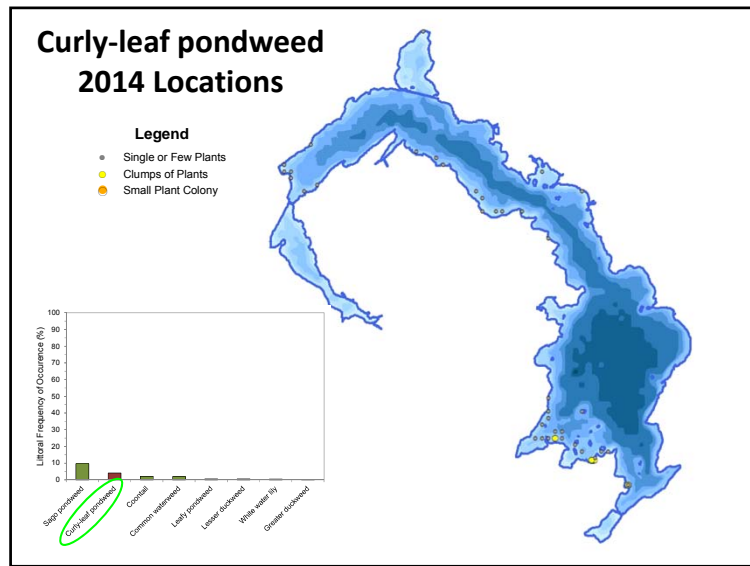
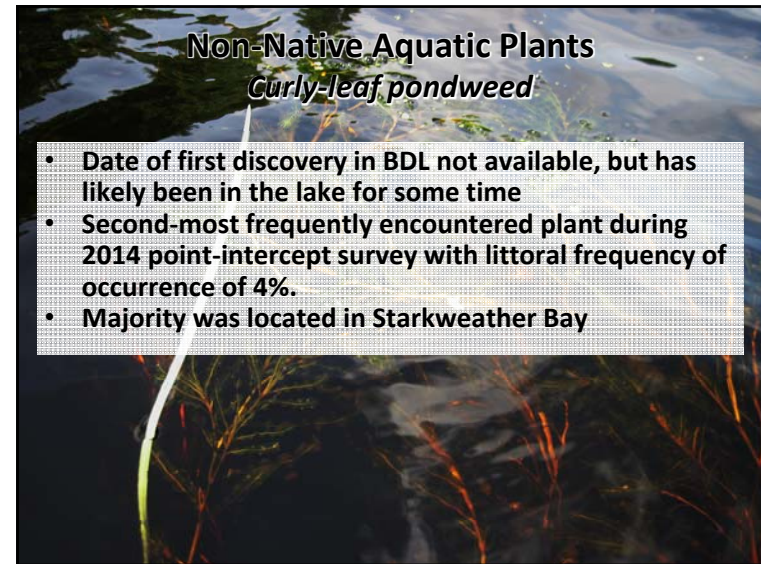
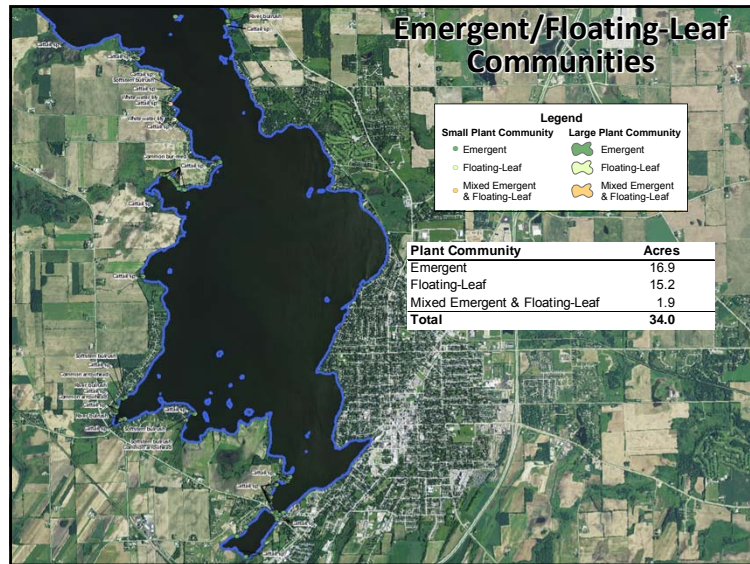
Growth Form	Scientific Name	Common Name	Coefficient of Conservatism (C)	2014 (Onterra)
Emergent	<i>Bolboschoenus fluitans</i>	River bulrush	5	I
	<i>Phalaris arundinacea</i>	Reed canary grass	Exotic	I
	<i>Phragmites australis</i> subsp. <i>americanus</i>	Giant reed	5	I
	<i>Sagittaria latifolia</i>	Common arrowhead	3	I
	<i>Schoenoplectus tabernaemontani</i>	Softstem bulrush	4	I
	<i>Sparganium eurycarpum</i>	Common bur-reed	5	I
FL	<i>Nymphaea odorata</i>	White water lily	6	X
Submergent	<i>Ceratophyllum demersum</i>	Coontail	3	X
	<i>Elodea canadensis</i>	Common waterweed	3	X
	<i>Heteranthera dubia</i>	Water stargrass	6	I
	<i>Myricophyllum spicatum</i>	Eurasian water milfoil	Exotic	I
	<i>Potamogeton crispus</i>	Curly-leaf pondweed	Exotic	X
	<i>Potamogeton foliosus</i>	Leafy pondweed	6	X
	<i>Potamogeton strictifolius</i>	Stiff pondweed	8	I
	<i>Stuckenia pectinata</i>	Sago pondweed	3	X
FF	<i>Lemna minor</i>	Lesser duckweed	5	X
	<i>Spirodela polytriza</i>	Greater duckweed	5	X

FL = Floating-leaf; FF = Free-floating  
 X = Located on rake during point-intercept survey; I = Incidental Species

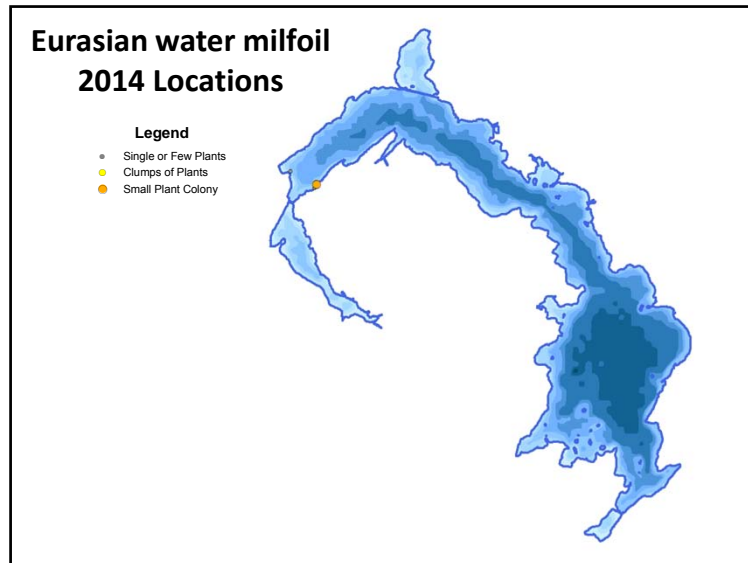












### Additional Plants of Concern

- Reed canary grass
  - Found along shorelines in northern portion of lake

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## ***Fisheries***

***Information will be presented by  
Laura Stemick-Thompson at Second  
Planning Meeting***

### Conclusions

- Water quality in Beaver Dam Lake is poor
  - While highly disturbed watershed delivers a large amount of phosphorus to the lake annually, evidence suggests internal sources are currently the most significant source of phosphorus to the lake
  - Internal sources include wind-induced sediment resuspension, common carp sediment resuspension & excretion, and phosphorus release from sediment during periods of anoxia and/or high pH
  - Nutrient concentrations increase markedly over the growing season
  - Large reduction in total phosphorus concentrations starting in 2008; may be due to carp harvesting
  - Lake is listed as impaired on the EPA's 303(d) list due to exceeding nutrient and algae thresholds for fish and aquatic life and recreation

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## Conclusions

- **Watershed**
  - Watershed is highly disturbed, with the majority being comprised of agricultural land which delivers high amounts of phosphorus and sediment to the lake
- **Shoreline Condition**
  - 50% is comprised of natural/undeveloped areas
  - 38% is comprised of highly developed shorelines
- **Aquatic plant community**
  - Based upon standard analysis, native community is of low quality
  - Lake is sparsely vegetated and contains low species richness & diversity
  - Native species present are tolerant of turbid, eutrophic conditions
  - Low light availability and common carp limit plant growth
  - Overall, lake is lacking emergent and floating-leaf vegetation
  - While exotic plants are present, they are not abundant

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## Next Steps...

1. **Planning Committee to meet again with Onterra ecologists to develop Implementation Plan framework**
  - Implementation Plan
    - Includes realistic management goals (to meet challenges)
    - Management goals include one or more management actions
    - Management actions include a facilitator and a timeframe

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## Implementation Plan Example

- **Management Goal: Enhance Beaver Dam Lake’s water quality and habitat value**
  - Management Action: Conduct periodic water level drawdowns to promote growth of aquatic vegetation
  - Carp removal...

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## Planning Meeting II Outline

- Summary of study conclusions from Planning Meeting I
- What restoration actions have been utilized on other turbid, shallow lakes
  - Are these actions applicable to Beaver Dam Lake?
- Actions that Onterra feels are most applicable and realistic
- Next steps in the planning process

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## Study Conclusions

- Water Quality & Watershed
  - Lake is *Hypereutrophic*
    - Total phosphorus GSM: 250 µg/L (very high)
    - Chlorophyll-*a* GSM: 106 µg/L (very high)
    - Secchi disk transparency GSM: 2.6 feet (very low)
  - Agriculturally-dominated watershed (71%) delivers large amount of P to the lake, but...
  - Modeling & water quality data indicate internal sources are currently most significant sources of P to the lake
    - Wind-induced sediment resuspension
    - Common carp (sediment resuspension/excretion)
    - Release of P from bottom sediments during periods of anoxia and/or high pH
  - Lake is listed as impaired on the EPA's 303(d) list due to exceeding nutrient and algae thresholds for fish and aquatic life and recreation

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## Study Conclusions

- Shoreline Condition
  - 50% is comprised of natural/undeveloped areas
  - 38% is comprised of highly developed shorelines
- Aquatic plant community
  - Based upon standard analysis, native community is of low quality
  - Lake is sparsely vegetated and contains low species richness & diversity
  - Native species present are tolerant of turbid, eutrophic conditions
  - Low light availability and common carp limit plant growth
  - Overall, lake is lacking emergent and floating-leaf vegetation
  - While exotic plants are present, they are not abundant
- **Big challenges are going to require big solutions**

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### **Beaver Dam Lake Primary Ecological Challenges**

- Poor water quality (High nutrients, algae, sediments)
- Very sparse & degraded aquatic plant community (habitat)

Making significant strides in water quality improvement is likely not realistic (Scenarios from Planning Meeting I)

**Improving habitat should be the primary focus. Improvements in habitat will also have benefits to water quality.**

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### **Restoring Shallow Lakes: What We Know**

- Alternative stable states:

Clear, Macrophyte-Dominated




Vs.

Turbid, Phytoplankton-Dominated




**Very difficult to revert back to clear state**

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### **Restoring Shallow Lakes: What We Know**

- What causes shift from clear to turbid?
  - Aquatic macrophyte decline via:
    - Eutrophication
    - Benthivorous fish (e.g. carp)
    - Water level stabilization
- Turbid state is maintained by absence of aquatic macrophytes
  - Sediment resuspension (wind and carp)
  - Loss of zooplankton habitat
  - Loss of competition for nutrients
- To restore shallow lakes, focus has been on increasing aquatic macrophytes
- How to increase aquatic macrophytes?

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### **Restoring Shallow Lakes: What We Know**

How do we increase aquatic macrophytes?  
 What efforts have been utilized on shallow lakes?  
 Efforts have focused on increasing water clarity.

1. Reducing external sources of P  
 Often ineffective when significant internal sources of P remain
2. 'Biomanipulation' through fish removal (planktivores)  
 Likely not effective on Beaver Dam Lake due to:
  - Presence of filamentous cyanobacteria (hard for zooplankton to eat)
  - Wind-induced sediment resuspension
  - Interconnected lakes (other population sources)
  - Targets fish species that people fish for (perch, bluegill, etc.)
 However, stocking of predatory fish to prey on planktivores may be an effective management strategy.

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### Restoring Shallow Lakes: What We Know

What other strategies can be used to increase aquatic macrophytes if increased water clarity cannot be achieved?

- **Water Level Management**
  - Stable water levels aid in maintaining turbid state (vegetation reduction)
  - Creating water level fluctuations that more closely resemble natural fluctuations have been used in an effort to restore shallow lakes
  - Lower water levels early in the growing season increase light availability and allow macrophytes to expand and establish deeper areas
  - Increase establishment of emergent plants

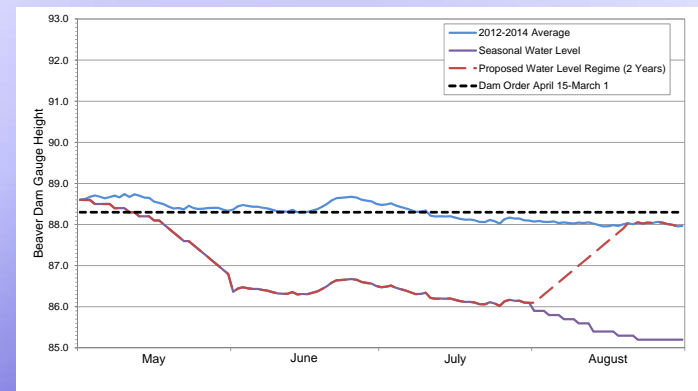
### Beaver Dam Lake Summary of Management Options to Increase Aquatic Macrophytes

- Increase water clarity by:
  - ~~Reducing external P-loading~~
  - ~~Biomanipulation (removal of planktivores)~~
- Water Level Management
- Continue carp removal

### Management Goal: Enhance Beaver Dam Lake's water quality and habitat value

- Management Action: Conduct experimental water level reduction to promote growth of aquatic vegetation
- Continue annual carp removal

### Beaver Dam Lake Water Level Management



### Beaver Dam Lake Water Level Management

Current dam order is to try and maintain water levels at 88.3 feet from April 15-Mach 1

- Proposed Adaptive Water Level Management for BDL**
  - 2.0-foot water level reduction (86.3 feet) by June 1<sup>st</sup> through August 1<sup>st</sup> for two consecutive years.
  - Quantitative monitoring to determine:
    - Changes in emergent & submergent vegetation
    - Changes in water quality

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### Beaver Dam Lake Water Level Management

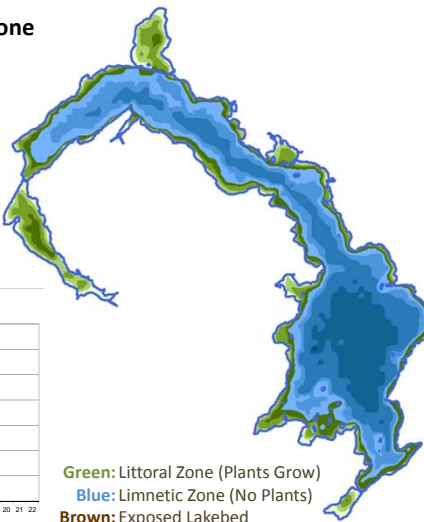
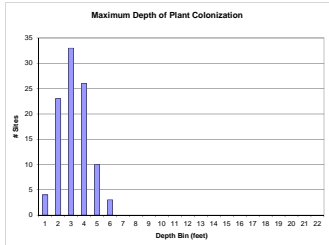
- Desired Outcomes of Water Level Management**
  - Habitat Improvement
    - Increased emergent & submergent vegetation
    - Facilitate expansion of submergent macrophyte community
  - Water quality improvements (?)

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### Beaver Dam Lake Littoral Zone

2014

- 87% of vegetation recorded in 1-4 feet
- ~2,300 acres of littoral area

Green: Littoral Zone (Plants Grow)  
Blue: Limnetic Zone (No Plants)  
Brown: Exposed Lakebed

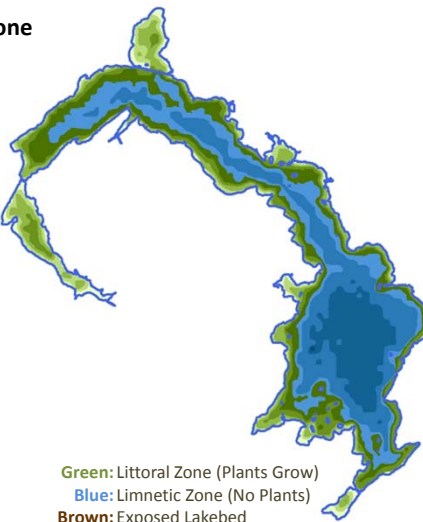
### Beaver Dam Lake Littoral Zone

2014

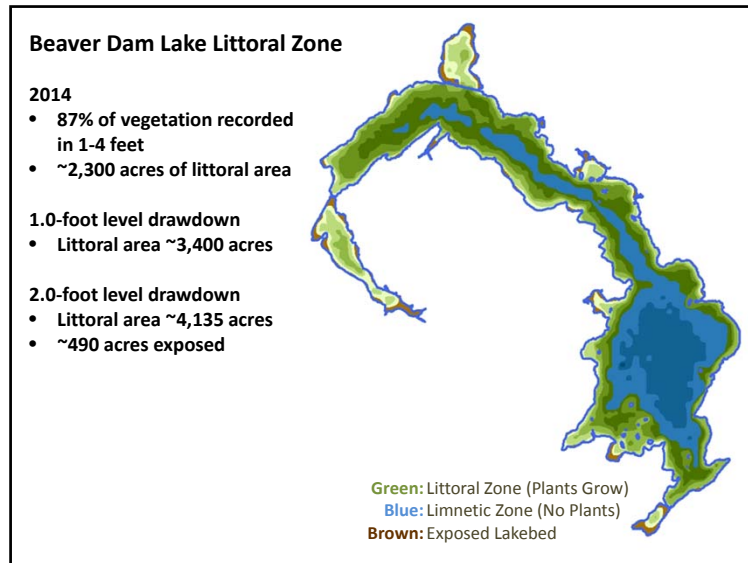
- 87% of vegetation recorded in 1-4 feet
- ~2,300 acres of littoral area

1.0-foot level drawdown

- Littoral area ~3,400 acres



Green: Littoral Zone (Plants Grow)  
Blue: Limnetic Zone (No Plants)  
Brown: Exposed Lakebed



**Beaver Dam Lake Water Level Management**

- **Unintended Consequences of Water Level Reduction**
  - Decreased public/private access to the lake
    - Bathymetric study
  - Reduction in lake area that is usable for recreational purposes
  - Macrophytes may reach 'nuisance' levels in areas
    - May have to initiate mechanical harvesting (contract or purchase)
  - EMW and/or CLP may expand
    - Initiate AIS control strategies
- **Potential roadblocks to desired results**
  - May not overcome wind and/or carp induced sediment resuspension
  - Can the dam maintain required outflow?
  - City approval
  - Investigate construction of islands to reduce fetch and increase areas for aquatic macrophyte growth

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- We do not want to ignore external sources of P

**Management Goal: Reduce impact of Beaver Dam Lake's watershed on lake quality**

— Management Actions:

- Investigate updating 9-Key Element Watershed Plan
- Inventory what has been done and what needs to be done (TMDL)
- Create a more detailed nutrient budget? Tributary monitoring?

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**Next Steps**

- Water Level Management
  - Is this something the BDLIA wants to pursue?
  - Educational campaign followed by stakeholder poll?
- Additional challenges
  - Shoreline restoration
  - Association-related challenges
    - Education, outreach, etc.

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### Planning Meeting III Agenda

- Apparent challenges already discussed
  - Poor Water Quality
  - Poor Fish & Wildlife Habitat
  - Shoreline Development
  - Winter Fishkills
- Discuss management goals & associated actions to address these challenges
- Discuss any additional challenges
- Next steps...

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### Beaver Dam Lake Challenges

**Challenge:** Poor Water Quality  
**Management Goal:** Improve Beaver Dam Lake's Water Quality  
**Management Action:** Continue CLMN volunteer water quality monitoring  
**Timeline:** Continuation of current effort  
**Facilitator:** Bob Roell (Suggested)

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### Beaver Dam Lake Challenges

**Challenge:** Poor Water Quality  
**Management Goal:** Improve Beaver Dam Lake's Water Quality  
**Internal Loading Actions**  
**Management Action:** Continue annual carp removal through commercial harvesting (~40-60% exploitation)  
**Timeline:** Continuation of current effort  
**Facilitator:** BDLIA Board of Directors (suggested)

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### Beaver Dam Lake Challenges

**Challenge:** Poor Water Quality

**Management Goal:** Improve Beaver Dam Lake's Water Quality

**Internal Loading Actions**

**Management Action:** Redo carp population/biomass study in 2019 and reassess carp removal strategy

**Timeline:** Initiate 2017/2018

**Facilitator:** BDLIA Board of Directors (suggested)

### Beaver Dam Lake Challenges

**Challenge:** Poor Water Quality

**Management Goal:** Improve Beaver Dam Lake's Water Quality

**Internal Loading Actions**

**Management Action:** Further investigate feasibility of limiting lake fetch to reduce wind-induced sediment resuspension

**Timeline:** Begin 2015

**Facilitator:** BDLIA Board of Directors (suggested)

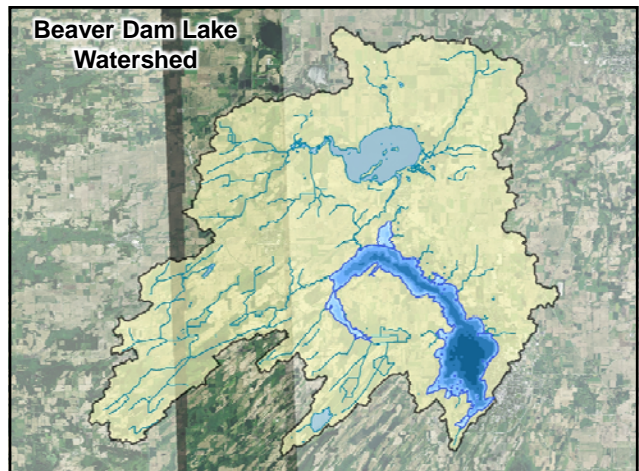
### Beaver Dam Lake Challenges

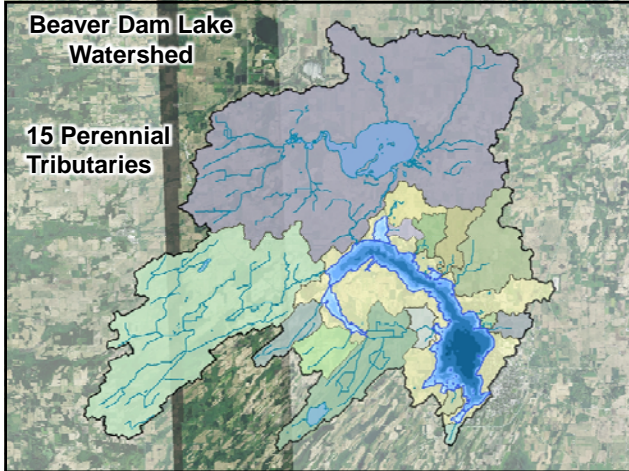
**Challenge:** Poor Water Quality

**Management Goal:** Improve Beaver Dam Lake's Water Quality

**External Loading Actions**

**Management Action:** Measure tributary phosphorus inputs, or complete advanced watershed modeling, or both?





### Beaver Dam Lake Challenges

**Challenge:** Poor Water Quality  
**Management Goal:** Improve Beaver Dam Lake's Water Quality  
 Dodge County Land & Water Plan

The graph shows the trend of sediment load in Dodge County from 1990 to 2010. The y-axis represents sediment load in millions of tons per year, ranging from 0 to 1,200. The x-axis represents years from 1990 to 2010. The data shows a significant peak in sediment load around 2002, followed by a sharp decline and a period of relative stability with a slight upward trend towards the end of the period. A green circle highlights the data points from approximately 2005 to 2010, indicating a period of lower sediment load.

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### Beaver Dam Lake Challenges

**Challenge:** Poor Water Quality  
**Management Goal:** Improve Beaver Dam Lake's Water Quality

**External Loading Actions**  
**Management Action:** Follow-up with Dodge County & to determine what best-management practices have already been implemented and how the BDLIA can aid in continued improvements to the lake's watershed.  
**Timeline:** Begin 2015  
**Facilitator:** Bill Foley?

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### Beaver Dam Lake Challenges

**Challenge:** Poor Water Quality  
**Management Goal:** Improve Beaver Dam Lake's Water Quality

**External Loading Actions**  
**Management Action:** Investigate procedure/cost to update 9-Key Element Watershed Plan  
**Timeline:** Begin 2015  
**Facilitator:** BDLIA Board of Directors?

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### Beaver Dam Lake Challenges

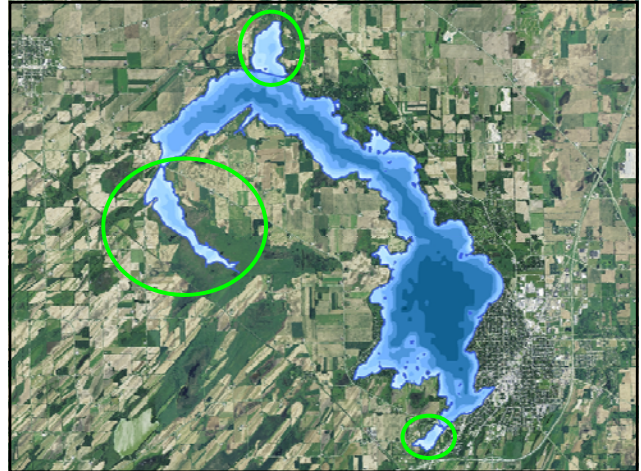
**Challenge:** Poor Fish & Wildlife Habitat/Shoreline Development

**Management Goal:** Increase & Enhance Fish & Wildlife Habitat in and around Beaver Dam Lake

**Management Action:** Investigate feasibility and benefits of restoring Rakes Bay, Moon Bay, & Bayside Bay (carp removal & barrier installation)

**Timeline:** Begin 2015

**Facilitator:** BDLIA Board of Directors (suggested)



### Beaver Dam Lake Challenges

**Challenge:** Poor Fish & Wildlife Habitat/Shoreline Development

**Management Goal:** Increase & Enhance Fish & Wildlife Habitat in and around Beaver Dam Lake

**Management Action:** Restore developed shoreland areas on Beaver Dam Lake

**Management Action:** Protect natural shoreland areas on Beaver Dam Lake

**Timeline:** Continuation of current effort

**Facilitator:** BDLIA Board of Directors (suggested)

### Beaver Dam Lake Challenges

**Challenge:** Winter Fishkills

**Management Goal:** Prevent winter fishkills on Beaver Dam Lake

**Management Action:** Continue aeration program on Beaver Dam Lake during the winter

**Timeline:** Continuation of current effort

**Facilitator:** BDLIA Board of Directors?



### Additional Challenges

- X Coarse Woody Habitat
- X Sediment Reduction
- X Water Level Fluctuation (Dam control)
- X Aquatic Plants (nuisance levels in bays)
- Stakeholder education & outreach (primarily study results)
- X Fisheries Plan (stocking budget, what should be stocked?/limits)
- X Outreach to grade/middle schools
- X Disconnect of zoning regulations between state, county, and city
- X Zebra mussel monitoring
- X Protecting the lake from new AIS
- Monitoring current AIS (CLP & EWM)
- Increase association membership/participation
- X Lake District?
- X Strengthen relationship with other management entities
- County-wide organization

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### Additional Challenges cont.

- Recreational hazards/safety
- Promoting passive recreation (kayaking, etc.)
- Enforcement
- Blue-green algae response
- Groundwater contamination

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### Continued Project Timeline

- **May 5, 2015:** Implementation Plan Framework Developed
- **June 5, 2015:** Onterra provides 1<sup>st</sup> draft of Implementation Plan to Planning Committee and WDNR
- **June 12, 2015:** Comments from Planning Committee are due to Onterra
- **June 24, 2015:** First official draft of Management Plan provided to Planning Committee ahead of June 30<sup>th</sup> board meeting
- Any comments provided from the board will be addressed prior to July 28<sup>th</sup> meeting

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***Beaver Dam Lake Improvement Association, Inc.***

**Beaver Dam Lake Management Planning Project**  
**Wrap-Up Meeting**  
**August 22, 2015**

**Tim Hoyman, CLM**  
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## ***Presentation Outline***

- Project Goals
- Overall Study Conclusions
- Key Study Results – Detailed
- Management Goals and Actions
- Questions



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## ***Study and Plan Goals***

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




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## ***From the Kick-Off Meeting***

### ***Data and information gathering***

- Study Components
  - Water Quality Analysis
  - Watershed Assessment
  - Aquatic Plant Surveys
  - Fisheries Data Integration
  - Shoreline Assessment
  - Stakeholder Survey (completed)

**It is a very complicated story**



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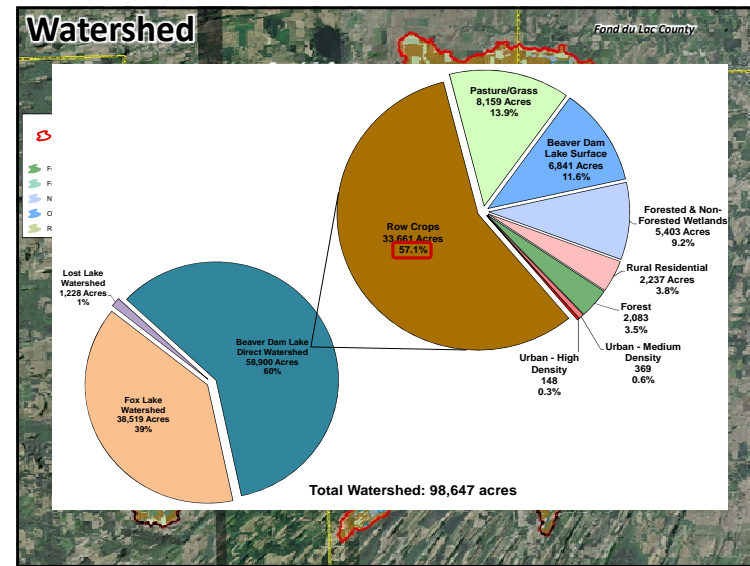
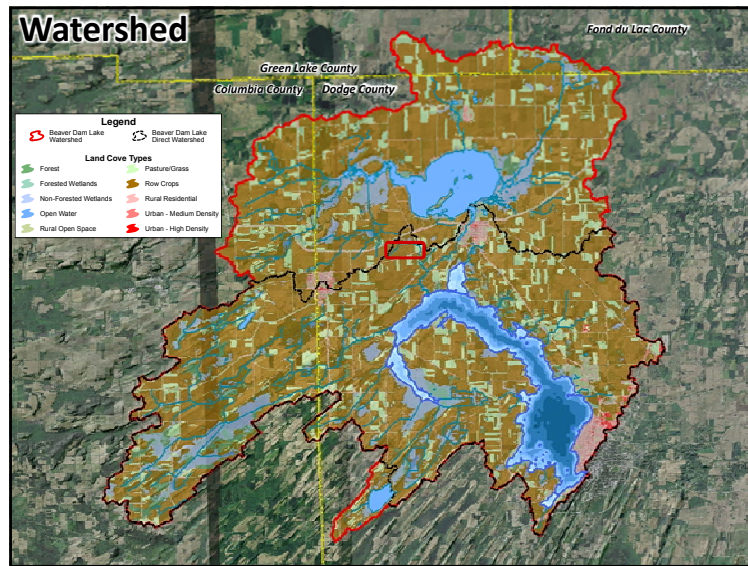
### Overall Project Conclusions

- **Water Quality (nutrients and algae)**
  - Overall, water quality is very poor (lake is *hypereutrophic*)
  - Excessive concentrations of nutrients and algae (algae-dominated)
  - Very low water clarity
- **Aquatic Plant Community (native and non-native)**
  - Native plant community is of low quality
  - Turbid conditions/carp suppress submersed aquatic plant growth
  - Low number of native species present
  - Lake is lacking important emergent & floating-leaf communities
  - Eurasian water milfoil & curly-leaf pondweed present
- **Watershed (drainage basin)**
  - Agriculture makes up 71% of land cover
  - Accounts for ~10% of annual phosphorus budget

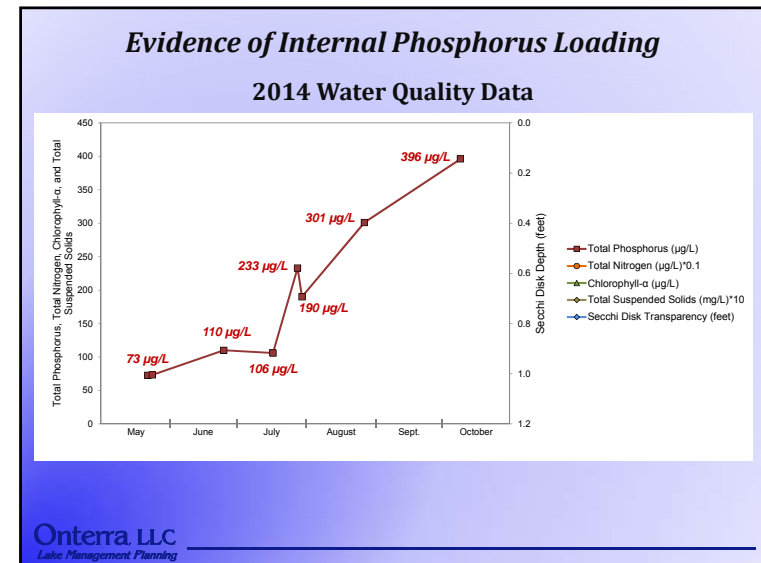
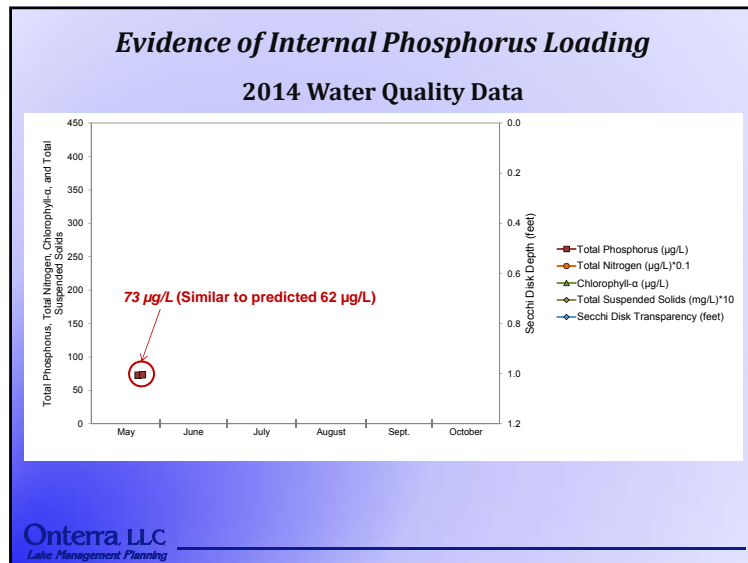
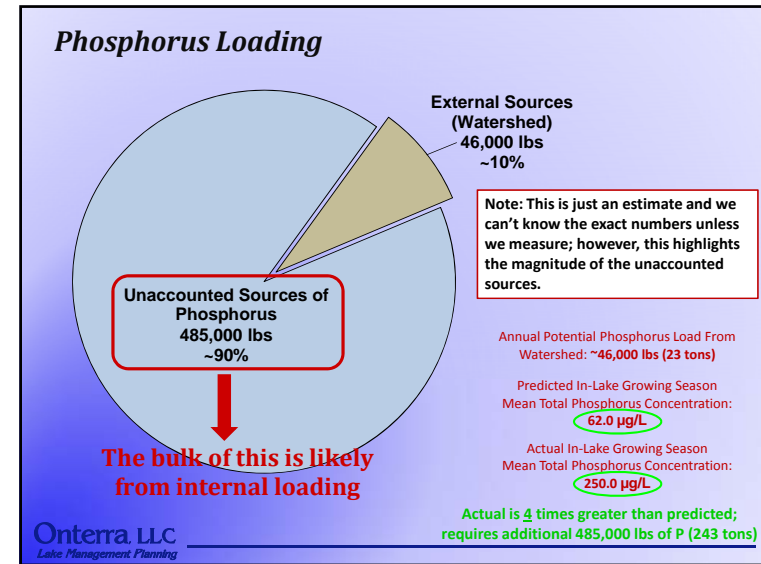
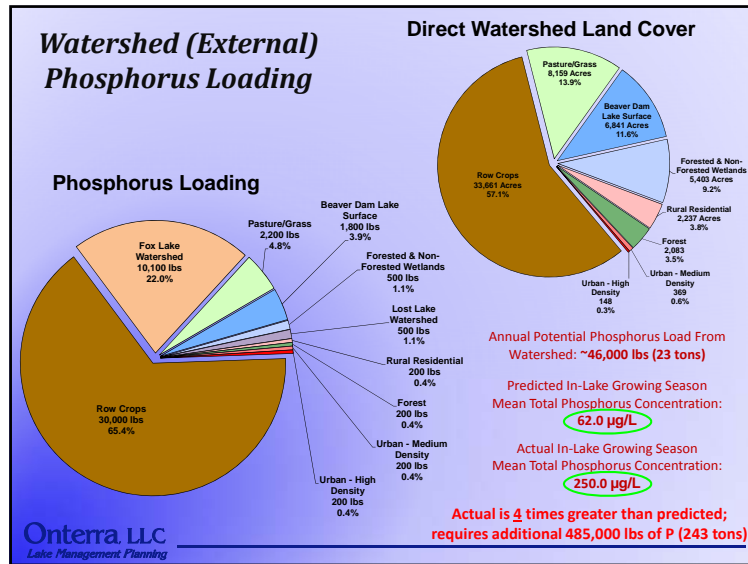
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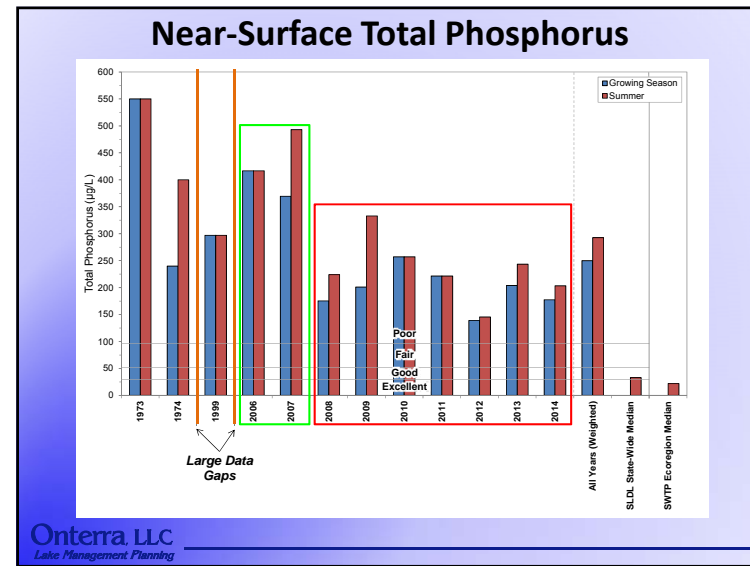
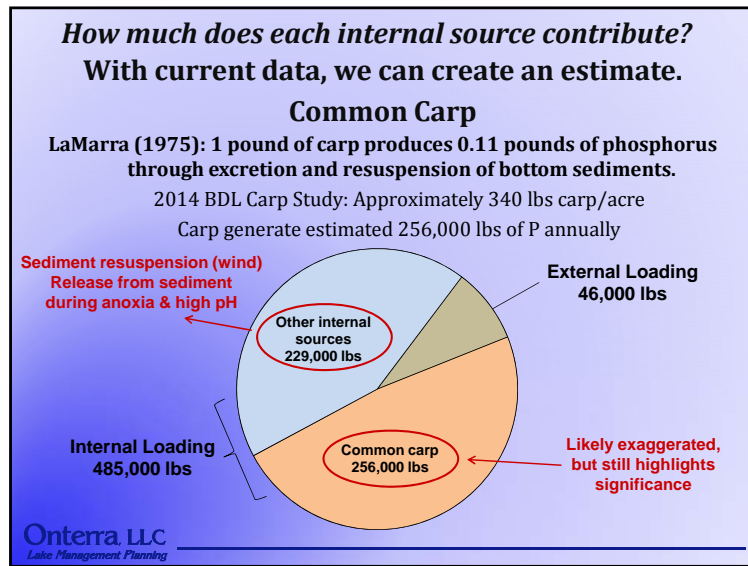
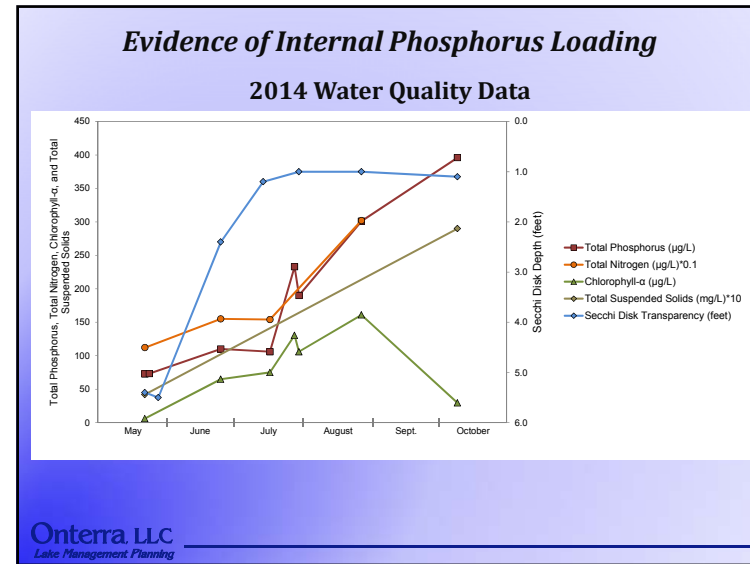
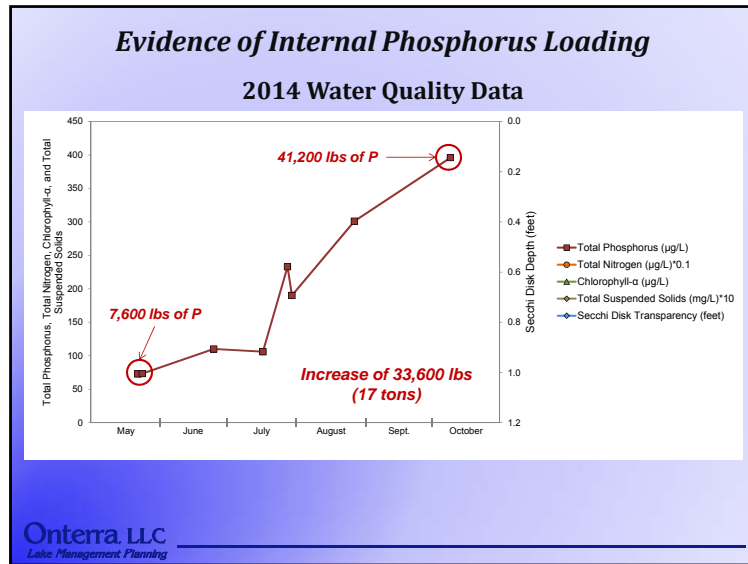
### Watershed Assessment Procedure

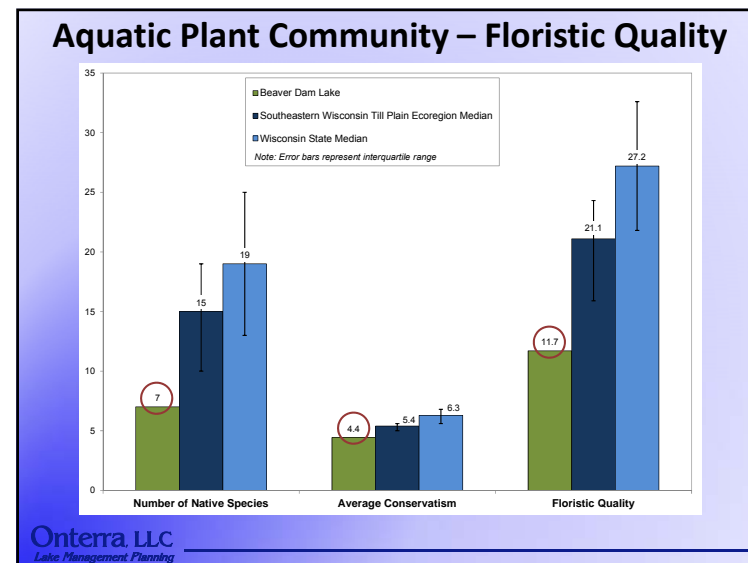
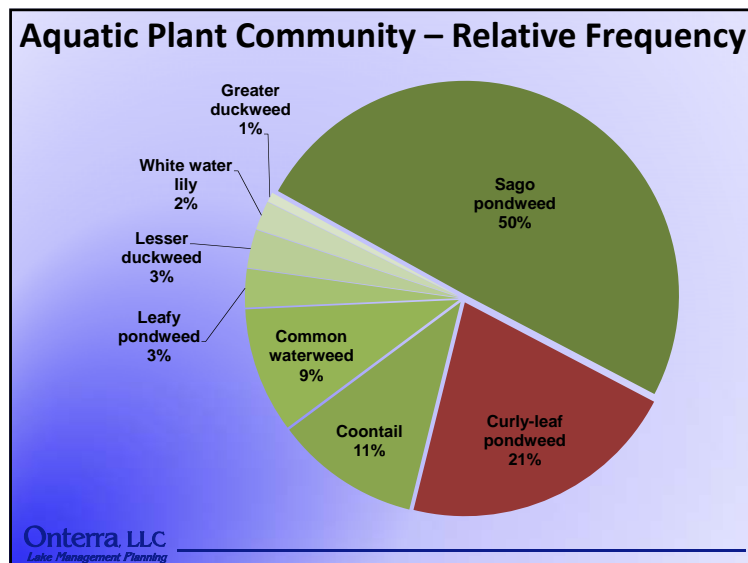
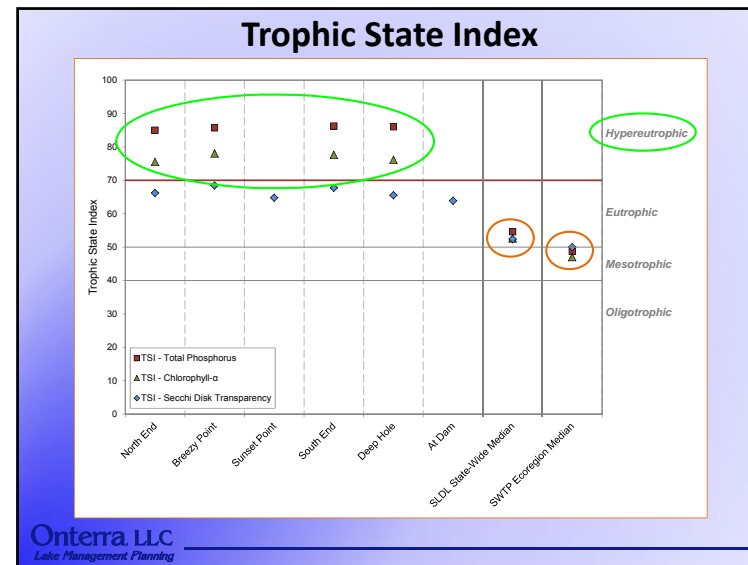
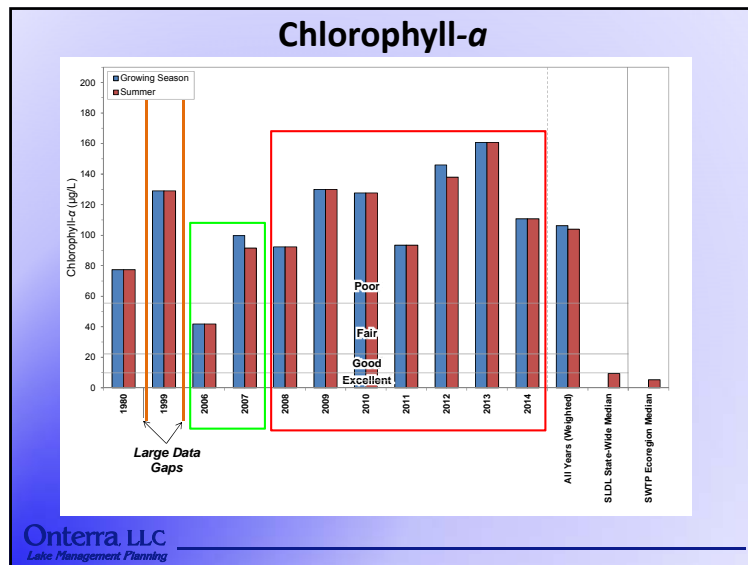
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**So, what does this all mean and what should we do?**


Alternative stable states of shallow lake systems

**Clear State**  
Macrophyte-Dominated



Vs.

**Turbid State**  
Algae-Dominated



**Very difficult to revert back to clear state**

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**So, what does this all mean and what should we do?**


**The ecology of Beaver Dam Lake is in a turbid state**

- High nutrient pollution
- Poor water quality
- Low quality native plant population
- Possibly increasing non-native plant population

**Earlier studies pointed to the watershed as primary nutrient source**

This is **not** the case – internal nutrient loading is responsible for roughly 90% of phosphorus found in water column

The watershed load is important, but small improvements would be overcome by effects of internal load.



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**So, what does this all mean and what should we do?**

**Water level fluctuation could produce more plants and a clear state**

- Drawdown water levels June-July in two consecutive years
- Studies have shown this could result in more aquatic plants for 7 years
- Not an option for Beaver Dam primarily due to recreation/tourism

**Alternative management goals and actions developed**

- Improve water quality
- Increase quality habitat
- Enhance fishery
- Increase recreational opportunities

Management Goals  
Management Actions  
Timeframe  
Facilitator(s)

↓

**Implementation Plan**

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**Management Goal:**

**Improve Beaver Dam Lake's Water Quality**

***Management Actions***

- 1. Continue monitoring of Beaver Dam Lake's water quality through WDNR Citizens Lake Monitoring Network.**  
*Important for tracking long-term changes.*
- 2. Continue annual harvesting of common carp from Beaver Dam Lake.**  
*Target 40-60% of population annually.*  
*Tune methodology and target size class to maximize benefit.*  
*BDLIA offer incentive to contractor to assure target harvest?*
- 3. Reassess common carp population in Beaver Dam Lake in 2020**  
*Will allow assessment of Action 2 above.*

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**Management Goal:**  
**Improve Beaver Dam Lake's Water Quality**

*Management Actions*

4. **Further investigate feasibility of limiting lake fetch to reduce wind-induced sediment resuspension**  
*Has this worked elsewhere? Design? Cost?*
5. **Investigate feasibility of dredging specific areas of the lake to create barriers to reduce wind-induced sediment resuspension and/or improve navigation on Beaver Dam Lake**  
*Tied with Action 5 above with added benefit of navigation.*
6. **Conduct nutrient budget analysis on Beaver Dam Lake**  
*Focus on major tributaries. Will aid in understanding internal sources as well.*

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**Management Goal:**  
**Improve Beaver Dam Lake's Water Quality**

*Management Actions*

7. **Collaborate with Dodge, Columbia, Green Lake, and Fond du Lac County land conservation departments to determine how the BDLIA can participate and assist with implementation of best management practices within Beaver Dam Lake's watershed**  
*Aimed at assuring that each county is doing what they can in Beaver Dam Lake watershed.*
8. **Investigate procedure/cost to update Nine-Key Element Watershed Plan for Beaver Dam Lake**  
*9KE Plan gains access to EPA funds for watershed projects. Current plan expires in 2019.*

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**Management Goal:**  
**Increase and Enhance Fish and Wildlife Habitat in and around Beaver Dam Lake**

*Management Actions*

1. **Initiate aquatic plant community enhancement project on Rakes Bay, Trestle Bay, and Bayside Bay by restricting access to common carp**  
*Aimed at maintaining/restoring aquatic plant habitat in these areas for the benefit of the entire fishery.*
2. **Investigate restoring highly developed shoreland areas on Beaver Dam Lake**  
*These restorations would increase quality habitat in Beaver Dam Lake.*

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**Management Goal:**  
**Increase and Enhance Fish and Wildlife Habitat in and around Beaver Dam Lake**

*Management Actions*

3. **Provide Beaver Dam Lake stakeholders with educational materials on the benefits of maintaining a natural shoreline and how to minimize impacts to the lake from lakeshore properties**  
*Tied with Action 2 above.*
4. **Preserve natural shoreland areas on Beaver Dam Lake**  
*This is an educational initiative for property owners of undeveloped parcels.*
5. **Reevaluate Beaver Dam Lake's Dam Order**  
*Dropping of water level while ice is still on is causing shoreline erosion and property damage.*

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**Management Goal:**  
**Enhance the Fishery of Beaver Dam Lake**  
**Management Actions**

1. **Work with WDNR and private landowners to expand course woody habitat in Beaver Dam Lake**  
*CWH is important in maintaining fishery and grant funds are easily available.*
2. **Work with fisheries managers to enhance the fishery of Beaver Dam Lake**  
*Continuation of good communication with WDNR. Investigate fish screen at dam.*
3. **Reevaluate winter aeration of Beaver Dam Lake to prevent winter fish kills**  
*Is the current linear deployment of diffusers the most effective arrangement?*

**Onterra, LLC**  
*Lake Management Planning*

**Management Goal:**  
**Increase Recreational Enjoyment and Safety on Beaver Dam Lake**  
**Management Actions**

1. **Promote passive recreation (kayaking, canoeing, etc.) on Beaver Dam Lake**  
*Partner with WI Dept. of Tourism and Chamber of Commerce. Also improve public access to lake.*
2. **Reevaluate placement of slow-no-wake buoys on western side of Beaver Dam Lake**  
*Assure effective placement of current buoys.*
3. **BDLIA to educate Beaver Dam Lake stakeholders on potential risks of blue-green algae**  
*Education on hazards and WDNR contact information.*

**Onterra, LLC**  
*Lake Management Planning*

**Management Goal:**  
**Monitor Existing Aquatic Invasive Species in Beaver Dam Lake**  
**Management Actions**

1. **Initiate assessment of Beaver Dam Lake’s curly-leaf pondweed and Eurasian water milfoil populations**  
*Seeking AIS Grant in 2015 to complete these studies in 2016. Active management strategy will be developed with results.*
2. **Passively monitor Beaver Dam Lake’s zebra mussel population**  
*Casual monitoring and reporting by Beaver Dam Lake property owners.*

**Onterra, LLC**  
*Lake Management Planning*

# Thank You

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*Many of the graphics used in this presentation were supplied by:*



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**Onterra, LLC**  
*Lake Management Planning*

# B

## APPENDIX B

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Water Quality Data











**Water Quality Data**

2014-2015 Parameter	Surface		Bottom	
	Count	Mean	Count	Mean
Secchi Depth (feet)	4	2.5	NA	NA
Total P (µg/L)	5	187.7	4	185.6
Dissolved P (µg/L)	2	32.6	2	33.4
Chl a (µg/L)	4	50.5	0	NA
TKN (µg/L)	5	1922.0	2	631.0
NO3+NO2-N (µg/L)	5	87.5	2	93.8
NH3-N (µg/L)	3	121.0	2	125.3
Total N (µg/L)	5	1957.0	2	724.8
Lab Cond. (µS/cm)	2	465.0	2	466.0
Lab pH	2	8.6	2	8.4
Alkal (mg/l CaCO3)	2	184.5	2	185.0
Total Susp. Solids (mg/l)	2	16.6	1	27.5
Calcium (µg/L)	1	41.0	0	NA
Magnesium (mg/L)	1	27.8	0	NA
Hardness (mg/L)	1	217.0	0	NA
Color (SU)	2	30.0	0	NA
Turbidity (NTU)	0	NA	0	NA

**Morphological / Geographical Data**

Parameter	Value
Acreage	
Volume (acre-feet)	
Perimeter (miles)	
Shoreland Development Factor	
Maximum Depth (feet)	
County	
WBIC	
Lillie Mason Region (1983)	SWTP Ecoregion
Nichols Ecoregion (1999)	NLFL

**Watershed Data**

WILMS Class	Acreage	kg/yr	lbs/yr
Forest			0.0
Open Water			0.0
Pasture/Grass			0.0
Row Crops			0.0
Urban - Rural Residential			0.0
Wetland			0.0
Watershed to Lake Area			

**Trophic State Index (TSI)**

Year	TP	Chl-a	Secchi
1973	95.1		78.6
1974	90.5		73.3
1980		73.3	60.0
1991	90.3	75.7	61.0
1992	89.2	85.2	77.3
1993	82.1	68.1	79.0
1994	75.9	65.3	
1995	80.7	73.6	67.1
1996			63.4
1997			56.3
1998			67.9
1999	86.3	78.3	67.2
2004			62.1
2005			65.8
2006	91.2	73.0	65.0
2007	92.6	77.2	66.3
2008	80.7	74.9	70.5
2009	90.7	80.5	87.1
2010	84.7	78.4	69.2
2011	81.7	75.2	73.9
2012	77.2	80.3	79.0
2013	83.5	79.0	72.1
2014	72.4	73.0	74.5
All Years (Weighted)	86.1	76.9	65.5
Shallow, Lowland Drainage Lakes	54.6	52.6	52.4
SWTP Ecoregion	48.7	47.0	50.0

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		
1973	1	0.9	1	0.9					1	550.0	1.0	550.0		
1974	2	2.1	1	1.3					2	240.0	1.0	400.0		
1980	3	3.3	3	3.3	5	77.4	5	77.4						
1991	4	2.8	3	3.1	8	108.9	6	99.2	9	384.1	7.0	392.4		
1992	1	1.0	1	1.0	4	170.3	2	261.0	4	245.0	2.0	365.0		
1993	4	1.1	3	0.9	1	45.5	1	45.5	9	212.4	7.0	223.1		
1994	1	0.5	0		3	110.4	1	34.3	3	298.3	1.0	145.0		
1995	11	2.0	4	2.0	4	95.9	2	79.7	4	193.3	2.0	201.5		
1996	9	3.0	5	2.6	2	29.8	0		2	226.0	0.0			
1997	11	4.3	7	4.3										
1998	10	2.8	5	1.9										
1999	9	2.9	6	2.0	1	129.0	1	129.0	2	297.0	2.0	297.0		
2004	11	2.9	8	2.8										
2005	7	1.9	5	2.2										
2006	12	2.3	10	2.3	6	75.5	6	75.5	6	417.3	6.0	417.3		
2007	5	2.1	2	2.1	6	113.2	4	115.6	7	404.7	4.0	461.5		
2008	6	2.2	3	1.6	4	91.4	4	91.4	6	163.7	4.0	202.3		
2009	3	2.5	1	0.5	2	162.0	2	162.0	4	235.3	2.0	405.5		
2010	3	1.7	3	1.7	5	130.5	5	130.5	5	266.4	5.0	266.4		
2011	4	1.3	4	1.3	4	93.9	4	93.9	4	216.0	4.0	216.0		
2012	5	1.2	2	0.9	6	161.7	4	159.0	8	151.1	4.0	158.3		
2013	5	1.8	3	1.4	6	138.3	6	138.3	8	209.0	6.0	245.3		
2014	3	2.6	1	1.2	3	36.9	1	75.1	4	173.9	2.0	113.5		
All Years (Weighted)		2.5		2.2		109.3		112.0		262.8		293.8		
Shallow, Lowland Drainage Lakes				5.6				9.4				33.0		
SWTP Ecoregion				6.6				5.3				22.0		

July 2014 N: 1540.0  
July 2014 P: 106.0

Summer 2014 N:P 15 :1



# C

## APPENDIX C

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**Watershed Analysis WiLMs Results:**



**Date: 5/19/2015 Scenario: Beaver Dam Lake Watershed Current - External Sources Only**

Lake Id: BeaverDam\_WS\_Current\_1

Watershed Id: 0

**Hydrologic and Morphometric Data**

Tributary Drainage Area: 52060.0 acre

Total Unit Runoff: 7.5 in.

Annual Runoff Volume: 32537.5 acre-ft

Lake Surface Area <As>: 6841 acre

Lake Volume <V>: 38237 acre-ft

Lake Mean Depth <z>: 5.6 ft

Precipitation - Evaporation: 2.4 in.

Hydraulic Loading: 115072.7 acre-ft/year

Areal Water Load <qs>: 16.8 ft/year

Lake Flushing Rate <p>: 3.01 1/year

Water Residence Time: 0.33 year

Observed spring overturn total phosphorus (SPO): 148 mg/m<sup>3</sup>

Observed growing season mean phosphorus (GSM): 256 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	33661	0.50	1.00	3.00	65.5	6811	13623	40868	
Mixed AG	0.0	0.30	0.80	1.40	0.0	0	0	0	
Pasture/Grass	8159	0.10	0.30	0.50	4.8	330	991	1651	
HD Urban (1/8 Ac)	148	1.00	1.50	2.00	0.4	60	90	120	
MD Urban (1/4 Ac)	369	0.30	0.50	0.80	0.4	45	75	119	
Rural Res (>1 Ac)	2237	0.05	0.10	0.25	0.4	45	91	226	
Wetlands	5403	0.10	0.10	0.10	1.1	219	219	219	
Forest	2083	0.05	0.09	0.18	0.4	42	76	152	
Lake Surface	6841.0	0.10	0.30	1.00	4.0	277	831	2769	

**POINT SOURCE DATA**

Point Sources	Water Load (m <sup>3</sup> /year)	Low (kg/year)	Most Likely (kg/year)	High (kg/year)	Loading %
Fox Lake	28300000	0.0	4569.6	0.0	22.0
Lost Lake	818000	0.0	227.8	0.0	1.1
Flushing Rate Correction	71000000	0.0	0.0	0.0	0.0

**SEPTIC TANK DATA**

Description	Low	Most Likely	High	Loading %
Septic Tank Output (kg/capita-year)	0.3	0.5	0.8	
# capita-years	0.0			
% Phosphorus Retained by Soil	98	90	80	
Septic Tank Loading (kg/year)	0.00	0.00	0.00	0.0

**TOTALS DATA**

Description	Low	Most Likely	High	Loading %
Total Loading (lb)	17260.1	45835.2	101683.5	100.0
Total Loading (kg)	7829.1	20790.7	46123.3	100.0
Areal Loading (lb/ac-year)	2.52	6.70	14.86	0.0
Areal Loading (mg/m <sup>2</sup> -year)	282.80	750.99	1666.03	0.0
Total PS Loading (lb)	0.0	10576.3	0.0	23.1
Total PS Loading (kg)	0.0	4797.4	0.0	23.1
Total NPS Loading (lb)	16649.7	33427.8	95579.9	76.9
Total NPS Loading (kg)	7552.3	15162.8	43354.8	76.9



**Phosphorus Prediction and Uncertainty Analysis Module**

Date: 5/19/2015 Scenario: Beaver Dam Lake Watershed Current - External Sources Only

Observed spring overturn total phosphorus (SPO): 148.0 mg/m<sup>3</sup>

Observed growing season mean phosphorus (GSM): 256.0 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%

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

Lake Phosphorus Model	Low Total P (mg/m <sup>3</sup> )	Most Likely Total P (mg/m <sup>3</sup> )	High Total P (mg/m <sup>3</sup> )	Predicted -Observed (mg/m <sup>3</sup> )	% Dif.
Walker, 1987 Reservoir	26	70	155	-186	-73
Canfield-Bachmann, 1981 Natural Lake	35	78	144	-178	-70
Canfield-Bachmann, 1981 Artificial Lake	31	62	102	-194	-76
Rechow, 1979 General	16	42	94	-214	-84
Rechow, 1977 Anoxic	46	123	274	-133	-52
Rechow, 1977 water load<50m/year	34	90	200	-166	-65
Rechow, 1977 water load>50m/year	N/A	N/A	N/A	N/A	N/A
Walker, 1977 General	37	98	217	-50	-34
Vollenweider, 1982 Combined OECD	29	64	122	-138	-68
Dillon-Rigler-Kirchner	16	43	95	-105	-71
Vollenweider, 1982 Shallow Lake/Res.	23	55	111	-147	-73
Larsen-Mercier, 1976	35	93	206	-55	-37
Nurnberg, 1984 Oxidic	19	51	114	-205	-80

Lake Phosphorus Model	Confidence		Parameter Fit?	Back Calculation (kg/year)	Model Type
	Lower Bound	Upper Bound			
Walker, 1987 Reservoir	37	128	FIT	0	GSM
Canfield-Bachmann, 1981 Natural Lake	24	225	FIT	1	GSM
Canfield-Bachmann, 1981 Artificial Lake	19	179	FIT	1	GSM
Rechow, 1979 General	21	78	FIT	0	GSM
Rechow, 1977 Anoxic	66	224	FIT	0	GSM
Rechow, 1977 water load<50m/year	47	166	P	0	GSM
Rechow, 1977 water load>50m/year	N/A	N/A	N/A	N/A	N/A
Walker, 1977 General	44	191	FIT	0	SPO
Vollenweider, 1982 Combined OECD	29	120	FIT	0	ANN
Dillon-Rigler-Kirchner	23	78	P	0	SPO
Vollenweider, 1982 Shallow Lake/Res.	25	104	FIT	0	ANN
Larsen-Mercier, 1976	51	167	P Pin	0	SPO
Nurnberg, 1984 Oxidic	24	98	FIT	0	ANN

# D

## APPENDIX E

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**Aquatic Plant Survey Data**





Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Rake Fullness	Peramogonon crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Peramogonon foliosus	Spirodela polyhiza	Stuckenia pectinata	Filamentous algae	
1	43.548995	-88.918425	0	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	1	1	Muck	Pole	SAMPLED			1	V	1	1			1			1	
2	43.547573	-88.920431	1	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	2	2	Muck	Pole	SAMPLED			0										
3	43.547555	-88.918450	2	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	3	2	Muck	Pole	SAMPLED			0										
4	43.546152	-88.922437	3	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	4	2	Muck	Pole	SAMPLED			0										
5	43.546133	-88.920456	4	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	5	3	Muck	Pole	SAMPLED			0										
6	43.546114	-88.918476	5	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	6	3	Muck	Pole	SAMPLED			1								1		
7	43.544730	-88.924443	6	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	7	3	Muck	Pole	SAMPLED			0										
8	43.544711	-88.922462	7	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	8	3	Muck	Pole	SAMPLED			0										
9	43.544693	-88.920482	8	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	9	3	Muck	Pole	SAMPLED			0										
10	43.544674	-88.918502	9	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	10	3	Muck	Pole	SAMPLED			0										
11	43.543289	-88.924468	10	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	11	3	Muck	Pole	SAMPLED			0										
12	43.543271	-88.922488	11	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	12	3	Muck	Pole	SAMPLED			0										
13	43.543252	-88.920508	12	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	13	4	Muck	Pole	SAMPLED			0										
14	43.543233	-88.918528	13	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	14	4	Muck	Pole	SAMPLED			0										
15	43.541849	-88.924494	14	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	15	3	Muck	Pole	SAMPLED			0										
16	43.541830	-88.922514	15	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	16	4	Muck	Pole	SAMPLED			0										
17	43.541812	-88.920533	16	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	17	4	Muck	Pole	SAMPLED			0										
18	43.541793	-88.918553	17	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	18	4	Muck	Pole	SAMPLED			0										
19	43.541774	-88.916573	18	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	19	3	Muck	Pole	SAMPLED			1		1	1							
20	43.540427	-88.926499	19	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	20	1	Muck	Pole	SAMPLED			1								1		
21	43.540409	-88.924519	20	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	21	3	Muck	Pole	SAMPLED			0										
22	43.540390	-88.922539	21	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	22	2	Muck	Pole	SAMPLED			0										
23	43.540371	-88.920559	22	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	23	4	Muck	Pole	SAMPLED			0										
24	43.540353	-88.918579	23	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	24	3	Muck	Pole	SAMPLED			0										
25	43.538987	-88.926525	24	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	25	2	Muck	Pole	SAMPLED			2								2		
26	43.538968	-88.924545	25	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	26	3	Muck	Pole	SAMPLED			0										
27	43.538950	-88.922565	26	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	27	3	Muck	Pole	SAMPLED			0										
28	43.538931	-88.920585	27	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	28	3	Muck	Pole	SAMPLED			0										
29	43.538912	-88.918605	28	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	29	3	Muck	Pole	SAMPLED			0										
30	43.537528	-88.924571	29	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	30	2	Muck	Pole	SAMPLED			1								1		
31	43.537509	-88.922591	30	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	31	3	Muck	Pole	SAMPLED			0										
32	43.537490	-88.920611	31	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	32	3	Muck	Pole	SAMPLED			0										
33	43.537472	-88.918631	32	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	33	3	Muck	Pole	SAMPLED			0										
34	43.537453	-88.916651	33	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	34	3	Muck	Pole	SAMPLED			0										
35	43.536180	-88.934496	34	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	35	2	Muck	Pole	SAMPLED			1								1		
36	43.536162	-88.932516	35	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	36	3	Rock	Pole	SAMPLED			0										
37	43.536143	-88.930536	36	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	37	4	Muck	Pole	SAMPLED			0										
38	43.536125	-88.928556	37	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	38	5	Muck	Pole	SAMPLED			0										
39	43.536106	-88.926576	38	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	39	5	Muck	Pole	SAMPLED			0										
40	43.536087	-88.924596	39	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	40	5	Muck	Pole	SAMPLED			0										
41	43.536069	-88.922616	40	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	41	0			TERRESTRIAL													
42	43.536050	-88.920636	41	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	42	5	Muck	Pole	SAMPLED			0										
43	43.536031	-88.918656	42	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	43	3	Muck	Pole	SAMPLED			0										
44	43.536013	-88.916676	43	Beaver Dam Lake	Dodge	7/17/2014	TWH & SDF	44	3	Muck	Pole	SAMPLED			1								1		
45	43.534758	-88.936501	44	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	45	4	Muck	Pole	SAMPLED			0										
46	43.534740	-88.934521	45	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	46	5	Muck	Pole	SAMPLED			0										

Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Raie Fullness	Peramogeton crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Peramogeton foliosus	Spirodela polyrhiza	Stuckenia pectinata	Filamentous algae	
47	43.534721	-88.932541	46	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	47	5	Muck	Pole	SAMPLED			0										
48	43.534703	-88.930561	47	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	48	5	Muck	Pole	SAMPLED			0										
49	43.534684	-88.928582	48	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	49	5	Muck	Pole	SAMPLED			0										
50	43.534666	-88.926602	49	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	50	6	Muck	Pole	SAMPLED			0										
51	43.534647	-88.924622	50	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	51	5	Muck	Pole	SAMPLED			0										
52	43.534628	-88.922642	51	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	52	5	Muck	Pole	SAMPLED			0										
53	43.534610	-88.920662	52	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	53	5	Muck	Pole	SAMPLED			0										
54	43.534591	-88.918682	53	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	54	6	Muck	Pole	SAMPLED			0										
55	43.534572	-88.916702	54	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	55	6	Muck	Pole	SAMPLED			0										
56	43.533354	-88.940486	55	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	56	3	Muck	Pole	SAMPLED			1			1							
57	43.533336	-88.938506	56	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	57	4	Muck	Pole	SAMPLED			0										
58	43.533318	-88.936526	57	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	58	5	Muck	Pole	SAMPLED			0										
59	43.533299	-88.934547	58	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	59	6	Muck	Pole	SAMPLED			0										
60	43.533281	-88.932567	59	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	60	6	Muck	Pole	SAMPLED			0										
61	43.533262	-88.930587	60	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	61	6	Muck	Pole	SAMPLED			0										
62	43.533244	-88.928607	61	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	62	6	Muck	Pole	SAMPLED			0										
63	43.533225	-88.926627	62	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	63	6	Muck	Pole	SAMPLED			0										
64	43.533206	-88.924647	63	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	64	6	Muck	Pole	SAMPLED			0										
65	43.533188	-88.922668	64	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	65	6	Muck	Pole	SAMPLED			0										
66	43.533169	-88.920688	65	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	66	6	Muck	Pole	SAMPLED			0										
67	43.533150	-88.918708	66	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	67	6	Muck	Pole	SAMPLED			0										
68	43.533132	-88.916728	67	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	68	6	Muck	Pole	SAMPLED			0										
69	43.533113	-88.914748	68	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	69	6	Muck	Pole	SAMPLED			0										
70	43.533094	-88.912768	69	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	70	5	Muck	Pole	SAMPLED			0										
71	43.531914	-88.940511	70	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	71	4	Muck	Pole	SAMPLED			0										
72	43.531896	-88.938532	71	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	72	5	Muck	Pole	SAMPLED			0										
73	43.531877	-88.936552	72	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	73	6	Muck	Pole	SAMPLED			0										
74	43.531859	-88.934572	73	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	74	6	Muck	Pole	SAMPLED			0										
75	43.531840	-88.932592	74	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	75	6	Muck	Pole	SAMPLED			0										
76	43.531822	-88.930612	75	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	76	6	Muck	Pole	SAMPLED			0										
77	43.531803	-88.928633	76	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	77	7	Muck	Pole	SAMPLED			0										
78	43.531785	-88.926653	77	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	78	6	Muck	Pole	SAMPLED			0										
79	43.531766	-88.924673	78	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	79	6	Muck	Pole	SAMPLED			0										
80	43.531747	-88.922693	79	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	80	7	Muck	Pole	SAMPLED			0										
81	43.531729	-88.920713	80	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	81	5	Muck	Pole	SAMPLED			0										
82	43.531710	-88.918734	81	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	82	6	Muck	Pole	SAMPLED			0										
83	43.531691	-88.916754	82	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	83	6	Muck	Pole	SAMPLED			0										
84	43.531673	-88.914774	83	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	84	6	Muck	Pole	SAMPLED			0										
85	43.531654	-88.912794	84	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	85	6	Muck	Pole	SAMPLED			0										
86	43.531635	-88.910814	85	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	86	5	Muck	Pole	SAMPLED			0										
87	43.530492	-88.942516	86	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	87	4	Muck	Pole	SAMPLED			0										
88	43.530473	-88.940537	87	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	88	5	Muck	Pole	SAMPLED			0										
89	43.530455	-88.938557	88	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	89	6	Muck	Pole	SAMPLED			0										
90	43.530437	-88.936577	89	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	90	6	Muck	Pole	SAMPLED			0										
91	43.530418	-88.934597	90	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	91	6	Muck	Pole	SAMPLED			0										
92	43.530400	-88.932618	91	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	92	6	Muck	Pole	SAMPLED			0										

Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Raft Fullness	Peramogeton crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Peramogeton foliosus	Spirodela polyhiza	Stuckenia pectinata	Filamentous algae	
93	43.530381	-88.930638	92	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	93	7	Muck	Pole	SAMPLED			0										
94	43.530363	-88.928658	93	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	94	7	Muck	Pole	SAMPLED			0										
95	43.530344	-88.926678	94	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	95	7	Muck	Pole	SAMPLED			0										
96	43.530326	-88.924699	95	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	96	7	Muck	Pole	SAMPLED			0										
97	43.530307	-88.922719	96	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	97	7	Muck	Pole	SAMPLED			0										
98	43.530288	-88.920739	97	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	98	6	Muck	Pole	SAMPLED			0										
99	43.530270	-88.918759	98	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	99	6	Muck	Pole	SAMPLED			0										
100	43.530251	-88.916780	99	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	100	6	Muck	Pole	SAMPLED			0										
101	43.530232	-88.914800	100	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	101	6	Muck	Pole	SAMPLED			0										
102	43.530213	-88.912820	101	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	102	6	Muck	Pole	SAMPLED			0										
103	43.530194	-88.910840	102	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	103	5	Muck	Pole	SAMPLED			0										
104	43.530176	-88.908861	103	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	104	3	Sand	Pole	SAMPLED			0										
105	43.529088	-88.946501	104	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	105	4	Sand	Pole	SAMPLED			0										
106	43.529070	-88.944521	105	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	106	5	Muck	Pole	SAMPLED			0										
107	43.529051	-88.942542	106	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	107	5	Muck	Pole	SAMPLED			0										
108	43.529033	-88.940562	107	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	108	6	Muck	Pole	SAMPLED			0										
109	43.529015	-88.938582	108	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	109	6	Muck	Pole	SAMPLED			0										
110	43.528996	-88.936602	109	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	110	6	Muck	Pole	SAMPLED			0										
111	43.528978	-88.934623	110	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	111	6	Muck	Pole	SAMPLED			0										
112	43.528959	-88.932643	111	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	112	7	Muck	Pole	SAMPLED			0										
113	43.528941	-88.930663	112	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	113	6	Muck	Pole	SAMPLED			0										
114	43.528922	-88.928684	113	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	114	7	Muck	Pole	SAMPLED			0										
115	43.528904	-88.926704	114	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	115	6	Muck	Pole	SAMPLED			0										
116	43.528885	-88.924724	115	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	116	7	Muck	Pole	SAMPLED			0										
117	43.528867	-88.922744	116	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	117	7	Muck	Pole	SAMPLED			0										
118	43.528848	-88.920765	117	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	118	7	Muck	Pole	SAMPLED			0										
119	43.528829	-88.918785	118	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	119	7	Muck	Pole	SAMPLED			0										
120	43.528810	-88.916805	119	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	120	6	Muck	Pole	SAMPLED			0										
121	43.528792	-88.914826	120	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	121	6	Muck	Pole	SAMPLED			0										
122	43.528773	-88.912846	121	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	122	6	Muck	Pole	SAMPLED			0										
123	43.528754	-88.910866	122	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	123	6	Muck	Pole	SAMPLED			0										
124	43.528735	-88.908887	123	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	124	4	Rock	Pole	SAMPLED			0										
125	43.528716	-88.906907	124	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	125	5	Muck	Pole	SAMPLED			0										
126	43.528697	-88.904927	125	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	126	5	Muck	Pole	SAMPLED			0										
127	43.528678	-88.902947	126	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	127	5	Muck	Pole	SAMPLED			0										
128	43.528659	-88.900968	127	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	128	5	Sand	Pole	SAMPLED			0										
129	43.528640	-88.898988	128	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	129	3	Sand	Pole	SAMPLED			0										
130	43.528621	-88.897008	129	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	130	0			ROCKS													
131	43.527666	-88.948506	130	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	131	5	Muck	Pole	SAMPLED			0										
132	43.527648	-88.946526	131	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	132	5	Muck	Pole	SAMPLED			0										
133	43.527629	-88.944546	132	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	133	6	Muck	Pole	SAMPLED			0										
134	43.527611	-88.942567	133	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	134	6	Muck	Pole	SAMPLED			0										
135	43.527593	-88.940587	134	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	135	6	Muck	Pole	SAMPLED			1			1							
136	43.527574	-88.938607	135	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	136	6	Muck	Pole	SAMPLED			0										
137	43.527556	-88.936628	136	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	137	7	Muck	Pole	SAMPLED			0										
138	43.527537	-88.934648	137	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	138	6	Muck	Pole	SAMPLED			0										

Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Raft Fullness	Peramogon crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Peramogon foliosus	Spirodela polyhiza	Stuckenia pectinata	Filamentous algae	
139	43.527519	-88.932668	138	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	139	6	Muck	Pole	SAMPLED			0										
140	43.527500	-88.930689	139	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	140	6	Muck	Pole	SAMPLED			0										
141	43.527482	-88.928709	140	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	141	5	Muck	Pole	SAMPLED			0										
142	43.527463	-88.926729	141	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	142	5	Muck	Pole	SAMPLED			0										
143	43.527445	-88.924750	142	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	143	6	Muck	Pole	SAMPLED			0										
144	43.527426	-88.922770	143	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	144	6	Muck	Pole	SAMPLED			0										
145	43.527407	-88.920790	144	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	145	6	Muck	Pole	SAMPLED			0										
146	43.527389	-88.918811	145	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	146	7	Muck	Pole	SAMPLED			0										
147	43.527370	-88.916831	146	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	147	6	Muck	Pole	SAMPLED			0										
148	43.527351	-88.914851	147	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	148	6	Muck	Pole	SAMPLED			0										
149	43.527332	-88.912872	148	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	149	6	Muck	Pole	SAMPLED			0										
150	43.527314	-88.910892	149	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	150	6	Muck	Pole	SAMPLED			0										
151	43.527295	-88.908913	150	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	151	6	Muck	Pole	SAMPLED			0										
152	43.527276	-88.906933	151	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	152	6	Muck	Pole	SAMPLED			0										
153	43.527257	-88.904953	152	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	153	6	Muck	Pole	SAMPLED			0										
154	43.527238	-88.902974	153	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	154	5	Muck	Pole	SAMPLED			0										
155	43.527219	-88.900994	154	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	155	5	Muck	Pole	SAMPLED			0										
156	43.527200	-88.899014	155	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	156	5	Muck	Pole	SAMPLED			0										
157	43.527181	-88.897035	156	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	157	0			ROCKS													
158	43.526243	-88.950510	157	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	158	5	Muck	Pole	SAMPLED			0										
159	43.526225	-88.948531	158	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	159	5	Muck	Pole	SAMPLED			0										
160	43.526207	-88.946551	159	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	160	6	Muck	Pole	SAMPLED			0										
161	43.526189	-88.944572	160	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	161	6	Muck	Pole	SAMPLED			0										
162	43.526171	-88.942592	161	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	162	6	Muck	Pole	SAMPLED			0										
163	43.526152	-88.940612	162	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	163	7	Muck	Pole	SAMPLED			0										
164	43.526134	-88.938633	163	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	164	7	Muck	Pole	SAMPLED			0										
165	43.526115	-88.936653	164	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	165	7	Muck	Pole	SAMPLED			0										
166	43.526097	-88.934673	165	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	166	6	Muck	Pole	SAMPLED			0										
167	43.526079	-88.932694	166	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	167	6	Muck	Pole	SAMPLED			0										
168	43.526023	-88.926755	167	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	168	4	Muck	Pole	SAMPLED			0										
169	43.526004	-88.924775	168	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	169	5	Muck	Pole	SAMPLED			0										
170	43.525986	-88.922796	169	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	170	6	Muck	Pole	SAMPLED			0										
171	43.525967	-88.920816	170	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	171	6	Muck	Pole	SAMPLED			0										
172	43.525948	-88.918836	171	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	172	6	Muck	Pole	SAMPLED			0										
173	43.525930	-88.916857	172	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	173	6	Muck	Pole	SAMPLED			0										
174	43.525911	-88.914877	173	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	174	7	Muck	Pole	SAMPLED			0										
175	43.525892	-88.912898	174	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	175	7	Muck	Pole	SAMPLED			0										
176	43.525873	-88.910918	175	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	176	6	Muck	Pole	SAMPLED			0										
177	43.525854	-88.908938	176	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	177	6	Muck	Pole	SAMPLED			0										
178	43.525835	-88.906959	177	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	178	6	Muck	Pole	SAMPLED			0										
179	43.525816	-88.904979	178	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	179	6	Muck	Pole	SAMPLED			0										
180	43.525797	-88.903000	179	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	180	6	Muck	Pole	SAMPLED			0										
181	43.525778	-88.901020	180	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	181	5	Muck	Pole	SAMPLED			0										
182	43.525759	-88.899041	181	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	182	4	Rock	Pole	SAMPLED			0										
183	43.524821	-88.952515	182	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	183	4	Muck	Pole	SAMPLED			1	1									
184	43.524803	-88.950535	183	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	184	5	Muck	Pole	SAMPLED			0										



Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Raize Fullness	Peramogeton crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Peramogeton foliosus	Spirodela polyrhiza	Stuckenia pectinata	Filamentous algae	
185	43.524785	-88.948556	184	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	185	6	Muck	Pole	SAMPLED			0										
186	43.524767	-88.946576	185	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	186	6	Muck	Pole	SAMPLED			0										
187	43.524748	-88.944597	186	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	187	6	Muck	Pole	SAMPLED			0										
188	43.524730	-88.942617	187	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	188	6	Muck	Pole	SAMPLED			0										
189	43.524712	-88.940638	188	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	189	6	Muck	Pole	SAMPLED			0										
190	43.524693	-88.938658	189	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	190	6	Muck	Pole	SAMPLED			0										
191	43.524675	-88.936678	190	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	191	6	Muck	Pole	SAMPLED			0										
192	43.524657	-88.934699	191	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	192	5	Muck	Pole	SAMPLED			0										
193	43.524601	-88.928760	192	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	193	1	Muck	Pole	SAMPLED			2		1	1					1		
194	43.524583	-88.926780	193	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	194	3	Muck	Pole	SAMPLED			2		2								
195	43.524545	-88.922821	194	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	195	5	Muck	Pole	SAMPLED			0										
196	43.524527	-88.920842	195	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	196	5	Muck	Pole	SAMPLED			0										
197	43.524508	-88.918862	196	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	197	6	Muck	Pole	SAMPLED			0										
198	43.524489	-88.916883	197	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	198	6	Muck	Pole	SAMPLED			0										
199	43.524470	-88.914903	198	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	199	6	Muck	Pole	SAMPLED			0										
200	43.524452	-88.912924	199	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	200	7	Muck	Pole	SAMPLED			0										
201	43.524433	-88.910944	200	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	201	7	Muck	Pole	SAMPLED			0										
202	43.524414	-88.908964	201	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	202	7	Muck	Pole	SAMPLED			0										
203	43.524395	-88.906985	202	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	203	7	Muck	Pole	SAMPLED			0										
204	43.524376	-88.905005	203	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	204	7	Muck	Pole	SAMPLED			0										
205	43.524357	-88.903026	204	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	205	6	Muck	Pole	SAMPLED			0										
206	43.524338	-88.901046	205	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	206	6	Rock	Pole	SAMPLED			0										
207	43.524319	-88.899067	206	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	207	5	Muck	Pole	SAMPLED			0										
208	43.524300	-88.897087	207	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	208	3	Muck	Pole	SAMPLED			0										
209	43.523399	-88.954519	208	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	209	4	Muck	Pole	SAMPLED			0										
210	43.523381	-88.952540	209	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	210	5	Muck	Pole	SAMPLED			0										
211	43.523363	-88.950560	210	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	211	6	Muck	Pole	SAMPLED			0										
212	43.523344	-88.948581	211	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	212	6	Muck	Pole	SAMPLED			0										
213	43.523326	-88.946601	212	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	213	6	Muck	Pole	SAMPLED			0										
214	43.523308	-88.944622	213	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	214	6	Muck	Pole	SAMPLED			0										
215	43.52329	-88.942642	214	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	215	6	Muck	Pole	SAMPLED			0										
216	43.523271	-88.940663	215	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	216	6	Muck	Pole	SAMPLED			0										
217	43.523253	-88.938683	216	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	217	6	Muck	Pole	SAMPLED			0										
218	43.523235	-88.936704	217	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	218	4	Muck	Pole	SAMPLED			0										
219	43.523161	-88.928786	218	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	219	2	Muck	Pole	SAMPLED			1		1	1							
220	43.523086	-88.920867	219	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	220	4	Muck	Pole	SAMPLED			1	1	1								
221	43.523067	-88.918888	220	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	221	5	Muck	Pole	SAMPLED			0										
222	43.523049	-88.916908	221	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	222	5	Muck	Pole	SAMPLED			0										
223	43.52303	-88.914929	222	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	223	6	Muck	Pole	SAMPLED			0										
224	43.523011	-88.912949	223	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	224	6	Muck	Pole	SAMPLED			0										
225	43.522992	-88.91097	224	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	225	7	Muck	Pole	SAMPLED			0										
226	43.522973	-88.90899	225	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	226	7	Muck	Pole	SAMPLED			0										
227	43.522955	-88.907011	226	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	227	7	Muck	Pole	SAMPLED			0										
228	43.522936	-88.905031	227	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	228	7	Muck	Pole	SAMPLED			0										
229	43.522917	-88.903052	228	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	229	7	Muck	Pole	SAMPLED			0										
230	43.522898	-88.901072	229	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	230	6	Muck	Pole	SAMPLED			0										

Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Raie Fullness	Peramogeton crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Peramogeton foliosus	Spirodela polyhiza	Stuckenia pectinata	Filamentous algae	
231	43.522879	-88.899093	230	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	231	6	Muck	Pole	SAMPLED			0										
232	43.522859	-88.897113	231	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	232	5	Muck	Pole	SAMPLED			1				1						
233	43.521995	-88.958503	232	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	233	3	Muck	Pole	SAMPLED			1			1					1		
234	43.521977	-88.956524	233	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	234	4	Muck	Pole	SAMPLED			0										
235	43.521958	-88.954544	234	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	235	5	Muck	Pole	SAMPLED			0										
236	43.52194	-88.952565	235	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	236	6	Muck	Pole	SAMPLED			0										
237	43.521922	-88.950585	236	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	237	6	Muck	Pole	SAMPLED			0										
238	43.521904	-88.948606	237	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	238	6	Muck	Pole	SAMPLED			0										
239	43.521886	-88.946626	238	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	239	6	Muck	Pole	SAMPLED			0										
240	43.521867	-88.944647	239	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	240	6	Muck	Pole	SAMPLED			0										
241	43.521849	-88.942667	240	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	241	5	Muck	Pole	SAMPLED			0										
242	43.521831	-88.940688	241	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	242	5	Muck	Pole	SAMPLED			0										
243	43.521813	-88.938708	242	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	243	4	Muck	Pole	SAMPLED			0										
244	43.521739	-88.930791	243	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	244	0			NONNAVIGABLE (PLANTS)													
245	43.52159	-88.914955	244	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	245	5	Muck	Pole	SAMPLED			1	1									
246	43.521571	-88.912975	245	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	246	5	Muck	Pole	SAMPLED			0										
247	43.521552	-88.910996	246	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	247	6	Muck	Pole	SAMPLED			0										
248	43.521533	-88.909016	247	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	248	6	Muck	Pole	SAMPLED			0										
249	43.521514	-88.907037	248	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	249	7	Muck	Pole	SAMPLED			0										
250	43.521495	-88.905057	249	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	250	7	Muck	Pole	SAMPLED			0										
251	43.521476	-88.903078	250	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	251	7	Muck	Pole	SAMPLED			0										
252	43.521457	-88.901099	251	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	252	6	Muck	Pole	SAMPLED			0										
253	43.521438	-88.899119	252	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	253	6	Muck	Pole	SAMPLED			0										
254	43.521419	-88.89714	253	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	254	6	Muck	Pole	SAMPLED			0										
255	43.5214	-88.89516	254	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	255	5	Rock	Pole	SAMPLED			0										
256	43.520572	-88.960508	255	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	256	3	Muck	Pole	SAMPLED		YES	3	1	1	1	1			1	3		
257	43.520554	-88.958528	256	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	257	4	Muck	Pole	SAMPLED			0										
258	43.520536	-88.956549	257	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	258	5	Muck	Pole	SAMPLED			0										
259	43.520518	-88.954569	258	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	259	5	Muck	Pole	SAMPLED			0										
260	43.5205	-88.95259	259	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	260	5	Muck	Pole	SAMPLED			0										
261	43.520482	-88.95061	260	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	261	6	Muck	Pole	SAMPLED			0										
262	43.520464	-88.948631	261	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	262	6	Muck	Pole	SAMPLED			0										
263	43.520445	-88.946651	262	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	263	5	Muck	Pole	SAMPLED			0										
264	43.520427	-88.944672	263	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	264	0			TERRESTRIAL													
265	43.520409	-88.942693	264	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	265	2	Muck	Pole	SAMPLED			1								1		
266	43.52039	-88.940713	265	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	266	0			TERRESTRIAL													
267	43.520149	-88.914981	266	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	267	2	Muck	Pole	SAMPLED			1								1		
268	43.52013	-88.913001	267	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	268	3	Sand	Pole	SAMPLED			1	1									
269	43.520111	-88.911022	268	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	269	3	Muck	Pole	SAMPLED			0										
270	43.520093	-88.909042	269	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	270	5	Muck	Pole	SAMPLED			0										
271	43.520074	-88.907063	270	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	271	6	Muck	Pole	SAMPLED			0										
272	43.520055	-88.905084	271	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	272	7	Muck	Pole	SAMPLED			0										
273	43.520036	-88.903104	272	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	273	7	Muck	Pole	SAMPLED			0										
274	43.520017	-88.901125	273	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	274	7	Muck	Pole	SAMPLED			0										
275	43.519998	-88.899145	274	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	275	7	Muck	Pole	SAMPLED			0										
276	43.519979	-88.897166	275	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	276	6	Muck	Pole	SAMPLED			0										

Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Rake Fullness	Peramogeton crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Peramogeton foliosus	Spirodela polyhiza	Stuckenia pectinata	Filamentous algae
277	43.51996	-88.895187	276	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	277	5	Sand	Pole	SAMPLED			0									
278	43.519132	-88.960532	277	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	278	3	Muck	Pole	SAMPLED			2	1	1	1	1		1		2	
279	43.519114	-88.958553	278	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	279	4	Muck	Pole	SAMPLED			1	1	1							
280	43.519096	-88.956574	279	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	280	5	Muck	Pole	SAMPLED			0									
281	43.519059	-88.952615	280	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	281	6	Muck	Pole	SAMPLED			0									
282	43.519041	-88.950635	281	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	282	5	Muck	Pole	SAMPLED			0									
283	43.519023	-88.948656	282	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	283	5	Muck	Pole	SAMPLED			0									
284	43.518652	-88.909068	283	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	284	3	Muck	Pole	SAMPLED			0									
285	43.518633	-88.907089	284	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	285	5	Muck	Pole	SAMPLED			0									
286	43.518614	-88.90511	285	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	286	6	Muck	Pole	SAMPLED			0									
287	43.518595	-88.90313	286	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	287	6	Muck	Pole	SAMPLED			0									
288	43.518576	-88.901151	287	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	288	7	Muck	Pole	SAMPLED			0									
289	43.518557	-88.899171	288	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	289	7	Muck	Pole	SAMPLED			0									
290	43.518538	-88.897192	289	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	290	6	Muck	Pole	SAMPLED			0									
291	43.518519	-88.895213	290	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	291	6	Muck	Pole	SAMPLED			0									
292	43.5185	-88.893233	291	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	292	5	Muck	Pole	SAMPLED			0									
293	43.518404	-88.883337	292	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	293	3	Muck	Pole	SAMPLED			1	1								
294	43.518384	-88.881357	293	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	294	3	Muck	Pole	SAMPLED			0									
295	43.517673	-88.958578	294	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	295	4	Muck	Pole	SAMPLED			1	1		1					1	
296	43.517655	-88.956598	295	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	296	5	Muck	Pole	SAMPLED			0									
297	43.517637	-88.954619	296	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	297	6	Muck	Pole	SAMPLED			0									
298	43.517619	-88.95264	297	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	298	5	Muck	Pole	SAMPLED			0									
299	43.517601	-88.95066	298	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	299	5	Muck	Pole	SAMPLED			0									
300	43.517193	-88.907115	299	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	300	4	Muck	Pole	SAMPLED			0									
301	43.517174	-88.905136	300	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	301	5	Muck	Pole	SAMPLED			0									
302	43.517155	-88.903156	301	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	302	6	Muck	Pole	SAMPLED			0									
303	43.517136	-88.901177	302	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	303	6	Muck	Pole	SAMPLED			0									
304	43.517117	-88.899198	303	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	304	7	Muck	Pole	SAMPLED			0									
305	43.517098	-88.897218	304	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	305	6	Muck	Pole	SAMPLED			0									
306	43.517079	-88.895239	305	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	306	6	Muck	Pole	SAMPLED			0									
307	43.51706	-88.89326	306	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	307	6	Muck	Pole	SAMPLED			0									
308	43.51704	-88.89128	307	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	308	6	Muck	Pole	SAMPLED			0									
309	43.517002	-88.887322	308	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	309	2	Muck	Pole	SAMPLED			1								1	
310	43.516983	-88.885343	309	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	310	3	Rock	Pole	SAMPLED			0									
311	43.516963	-88.883363	310	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	311	3	Muck	Pole	SAMPLED			0									
312	43.516944	-88.881384	311	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	312	3	Muck	Pole	SAMPLED			0									
313	43.516925	-88.879405	312	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	313	3	Muck	Pole	SAMPLED			2								2	
314	43.516233	-88.958602	313	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	314	0			TERRESTRIAL												
315	43.516215	-88.956623	314	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	315	4	Muck	Pole	SAMPLED			0									
316	43.516197	-88.954644	315	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	316	5	Muck	Pole	SAMPLED			0									
317	43.516179	-88.952665	316	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	317	5	Muck	Pole	SAMPLED			0									
318	43.51616	-88.950685	317	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	318	3	Muck	Pole	SAMPLED			0	V								
319	43.515734	-88.905162	318	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	319	4	Muck	Pole	SAMPLED			0									
320	43.515715	-88.903182	319	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	320	4	Muck	Pole	SAMPLED			0									
321	43.515696	-88.901203	320	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	321	6	Rock	Pole	SAMPLED			0									
322	43.515676	-88.899224	321	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	322	7	Muck	Pole	SAMPLED			0									

Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Raie Fullness	Paramogeton crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Paramogeton foliosus	Spirodela polyhiza	Stuckenia pectinata	Filamentous algae	
323	43.515657	-88.897245	322	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	323	7	Muck	Pole	SAMPLED			0										
324	43.515638	-88.895265	323	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	324	7	Muck	Pole	SAMPLED			0										
325	43.515619	-88.893286	324	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	325	7	Muck	Pole	SAMPLED			0										
326	43.5156	-88.891307	325	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	326	6	Muck	Pole	SAMPLED			0										
327	43.515581	-88.889328	326	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	327	6	Muck	Pole	SAMPLED			0										
328	43.515562	-88.887348	327	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	328	5	Muck	Pole	SAMPLED			0										
329	43.515542	-88.885369	328	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	329	3	Rock	Pole	SAMPLED			0										
330	43.515523	-88.88339	329	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	330	4	Muck	Pole	SAMPLED			0										
331	43.515504	-88.881411	330	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	331	4	Muck	Pole	SAMPLED			0										
332	43.515484	-88.879431	331	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	332	2	Muck	Pole	SAMPLED			0										
333	43.514792	-88.958627	332	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	333	3	Muck	Pole	SAMPLED			2								2		
334	43.514774	-88.956648	333	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	334	4	Muck	Pole	SAMPLED			0										
335	43.514756	-88.954669	334	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	335	4	Muck	Pole	SAMPLED			1	1							1		
336	43.514738	-88.952689	335	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	336	3	Sand	Pole	SAMPLED			0										
337	43.514293	-88.905188	336	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	337	3	Muck	Pole	SAMPLED			2								2		
338	43.514274	-88.903208	337	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	338	4	Muck	Pole	SAMPLED			1	1									
339	43.514255	-88.901229	338	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	339	5	Muck	Pole	SAMPLED			0										
340	43.514236	-88.89925	339	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	340	6	Muck	Pole	SAMPLED			0										
341	43.514217	-88.897271	340	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	341	6	Muck	Pole	SAMPLED			0										
342	43.514198	-88.895292	341	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	342	7	Muck	Pole	SAMPLED			0										
343	43.514179	-88.893312	342	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	343	7	Muck	Pole	SAMPLED			0										
344	43.51416	-88.891333	343	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	344	7	Muck	Pole	SAMPLED			0										
345	43.51414	-88.889354	344	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	345	7	Muck	Pole	SAMPLED			0										
346	43.514121	-88.887375	345	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	346	6	Muck	Pole	SAMPLED			0										
347	43.514102	-88.885396	346	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	347	6	Muck	Pole	SAMPLED			0										
348	43.514083	-88.883416	347	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	348	6	Muck	Pole	SAMPLED			0										
349	43.514063	-88.881437	348	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	349	5	Muck	Pole	SAMPLED			0										
350	43.514044	-88.879458	349	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	350	5	Muck	Pole	SAMPLED			0										
351	43.514024	-88.877479	350	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	351	5	Muck	Pole	SAMPLED			0										
352	43.514005	-88.8755	351	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	352	5	Muck	Pole	SAMPLED			0										
353	43.513985	-88.87352	352	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	353	5	Muck	Pole	SAMPLED			0										
354	43.513966	-88.871541	353	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	354	3	Muck	Pole	SAMPLED			0	V									
355	43.513352	-88.958652	354	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	355	3	Muck	Pole	SAMPLED			0										
356	43.513334	-88.956673	355	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	356	3	Muck	Pole	SAMPLED			0										
357	43.512834	-88.903235	356	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	357	2	Rock	Pole	SAMPLED			0										
358	43.512815	-88.901255	357	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	358	5	Muck	Pole	SAMPLED			1	1									
359	43.512796	-88.899276	358	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	359	6	Muck	Pole	SAMPLED			0										
360	43.512777	-88.897297	359	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	360	6	Muck	Pole	SAMPLED			0										
361	43.512757	-88.895318	360	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	361	6	Muck	Pole	SAMPLED			0										
362	43.512738	-88.893339	361	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	362	6	Muck	Pole	SAMPLED			0										
363	43.512719	-88.89136	362	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	363	7	Muck	Pole	SAMPLED			0										
364	43.5127	-88.88938	363	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	364	7	Muck	Pole	SAMPLED			0										
365	43.512681	-88.887401	364	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	365	7	Muck	Pole	SAMPLED			0										
366	43.512661	-88.885422	365	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	366	7	Muck	Pole	SAMPLED			0										
367	43.512642	-88.883443	366	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	367	7	Muck	Pole	SAMPLED			0										
368	43.512623	-88.881464	367	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	368	6	Muck	Pole	SAMPLED			0										

Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Rake Fullness	Peramogeton crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Peramogeton foliosus	Spirodela polyhiza	Stuckenia pectinata	Filamentous algae	
369	43.512584	-88.877506	368	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	369	5	Muck	Pole	SAMPLED			0										
370	43.512565	-88.875526	369	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	370	5	Muck	Pole	SAMPLED			0										
371	43.512545	-88.873547	370	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	371	5	Muck	Pole	SAMPLED			0										
372	43.512526	-88.871568	371	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	372	5	Muck	Pole	SAMPLED			0										
373	43.511911	-88.958677	372	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	373	5	Muck	Pole	SAMPLED			0										
374	43.511374	-88.901282	373	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	374	3	Muck	Pole	SAMPLED			0										
375	43.511355	-88.899302	374	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	375	5	Muck	Pole	SAMPLED			0										
376	43.511336	-88.897323	375	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	376	5	Muck	Pole	SAMPLED			0										
377	43.511317	-88.895344	376	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	377	6	Muck	Pole	SAMPLED			0										
378	43.511298	-88.893365	377	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	378	5	Muck	Pole	SAMPLED			0										
379	43.511279	-88.891386	378	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	379	5	Muck	Pole	SAMPLED			0										
380	43.51126	-88.889407	379	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	380	6	Muck	Pole	SAMPLED			0										
381	43.51124	-88.887428	380	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	381	6	Muck	Pole	SAMPLED			0										
382	43.511221	-88.885449	381	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	382	7	Muck	Pole	SAMPLED			0										
383	43.511202	-88.88347	382	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	383	7	Muck	Pole	SAMPLED			0										
384	43.511182	-88.88149	383	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	384	6	Muck	Pole	SAMPLED			0										
385	43.511163	-88.879511	384	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	385	6	Muck	Pole	SAMPLED			0										
386	43.511144	-88.877532	385	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	386	6	Muck	Pole	SAMPLED			0										
387	43.511124	-88.875553	386	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	387	6	Muck	Pole	SAMPLED			0										
388	43.511105	-88.873574	387	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	388	6	Muck	Pole	SAMPLED			0										
389	43.511085	-88.871595	388	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	389	5	Muck	Pole	SAMPLED			0										
390	43.510489	-88.960681	389	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	390	2	Muck	Pole	SAMPLED			1						1				
391	43.510471	-88.958702	390	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	391	3	Muck	Pole	SAMPLED			0										
392	43.509934	-88.901308	391	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	392	3	Muck	Pole	SAMPLED			2	1	2								
393	43.509915	-88.899329	392	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	393	3	Muck	Pole	SAMPLED			0										
394	43.509896	-88.89735	393	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	394	4	Muck	Pole	SAMPLED			1	1									
395	43.509877	-88.89537	394	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	395	4	Muck	Pole	SAMPLED			1	1									
396	43.509858	-88.893391	395	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	396	3	Rock	Pole	SAMPLED			0										
397	43.509819	-88.889433	396	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	397	3	Muck	Pole	SAMPLED			1	1							1		
398	43.5098	-88.887454	397	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	398	5	Muck	Pole	SAMPLED			0										
399	43.509781	-88.885475	398	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	399	6	Muck	Pole	SAMPLED			0										
400	43.509761	-88.883496	399	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	400	5	Muck	Pole	SAMPLED			0										
401	43.509742	-88.881517	400	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	401	7	Muck	Pole	SAMPLED			0										
402	43.509723	-88.879538	401	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	402	6	Muck	Pole	SAMPLED			0										
403	43.509703	-88.877559	402	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	403	6	Muck	Pole	SAMPLED			0										
404	43.509684	-88.87558	403	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	404	6	Muck	Pole	SAMPLED			0										
405	43.509664	-88.873601	404	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	405	6	Muck	Pole	SAMPLED			0										
406	43.509645	-88.871622	405	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	406	6	Muck	Pole	SAMPLED			0										
407	43.509625	-88.869643	406	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	407	3	Muck	Pole	SAMPLED			0										
408	43.509049	-88.960705	407	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	408	3	Muck	Pole	SAMPLED			2		1						1		
409	43.509031	-88.958726	408	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	409	3	Muck	Pole	SAMPLED			0										
410	43.508321	-88.883523	409	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	410	6	Muck	Pole	SAMPLED			0										
411	43.508302	-88.881544	410	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	411	6	Muck	Pole	SAMPLED			0										
412	43.508282	-88.879565	411	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	412	7	Muck	Pole	SAMPLED			0										
413	43.508263	-88.877586	412	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	413	7	Muck	Pole	SAMPLED			0										
414	43.508243	-88.875607	413	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	414	6	Muck	Pole	SAMPLED			0										



Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Raft Fullness	Peramogon crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Peramogon foliosus	Spirodela polyhiza	Stuckenia pectinata	Filamentous algae	
415	43.508224	-88.873628	414	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	415	6	Muck	Pole	SAMPLED			0										
416	43.508204	-88.871649	415	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	416	6	Muck	Pole	SAMPLED			0										
417	43.508185	-88.86967	416	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	417	4	Muck	Pole	SAMPLED			0										
418	43.507626	-88.962709	417	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	418	2	Muck	Pole	SAMPLED			0										
419	43.507608	-88.96073	418	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	419	3	Muck	Pole	SAMPLED			0										
420	43.50759	-88.958751	419	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	420	3	Muck	Pole	SAMPLED			1								1		
421	43.507572	-88.956772	420	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	421	3	Muck	Pole	SAMPLED			0										
422	43.5069	-88.885528	421	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	422	4	Muck	Pole	SAMPLED			1								1		
423	43.50688	-88.883549	422	Beaver Dam Lake	Dodge	7/14/2014	DAC & EAT	423	4	Muck	Pole	SAMPLED			0										
424	43.506861	-88.88157	423	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	424	5	Muck	Pole	SAMPLED			0										
425	43.506842	-88.879591	424	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	425	6	Muck	Pole	SAMPLED			0										
426	43.506822	-88.877612	425	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	426	7	Muck	Pole	SAMPLED			0										
427	43.506803	-88.875633	426	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	427	7	Muck	Pole	SAMPLED			0										
428	43.506783	-88.873654	427	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	428	6	Muck	Pole	SAMPLED			0										
429	43.506764	-88.871675	428	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	429	6	Muck	Pole	SAMPLED			0										
430	43.506744	-88.869697	429	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	430	3	Muck	Pole	SAMPLED			0										
431	43.506186	-88.962734	430	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	431	3	Muck	Pole	SAMPLED			0										
432	43.506168	-88.960755	431	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	432	3	Muck	Pole	SAMPLED			0										
433	43.50615	-88.958776	432	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	433	3	Muck	Pole	SAMPLED			0										
434	43.506132	-88.956797	433	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	434	3	Muck	Pole	SAMPLED			0										
435	43.506114	-88.954818	434	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	435	2	Muck	Pole	SAMPLED			0										
436	43.505421	-88.881597	435	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	436	6	Sand	Pole	SAMPLED			0										
437	43.505401	-88.879618	436	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	437	6	Muck	Pole	SAMPLED			0										
438	43.505382	-88.877639	437	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	438	6	Muck	Pole	SAMPLED			0										
439	43.505362	-88.87566	438	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	439	7	Muck	Pole	SAMPLED			0										
440	43.505343	-88.873681	439	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	440	7	Muck	Pole	SAMPLED			0										
441	43.505323	-88.871702	440	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	441	6	Muck	Pole	SAMPLED			0										
442	43.505304	-88.869723	441	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	442	5	Muck	Pole	SAMPLED			0										
443	43.504763	-88.964737	442	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	443	2	Muck	Pole	SAMPLED			2						1				
444	43.504745	-88.962758	443	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	444	3	Muck	Pole	SAMPLED			0										
445	43.504727	-88.96078	444	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	445	3	Muck	Pole	SAMPLED			0										
446	43.504709	-88.958801	445	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	446	4	Muck	Pole	SAMPLED			0										
447	43.504691	-88.956822	446	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	447	4	Muck	Pole	SAMPLED			0										
448	43.504673	-88.954843	447	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	448	3	Muck	Pole	SAMPLED			0										
449	43.50398	-88.881623	448	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	449	3	Sand	Pole	SAMPLED			0	V									
450	43.503961	-88.879645	449	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	450	5	Muck	Pole	SAMPLED			0										
451	43.503942	-88.877666	450	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	451	6	Muck	Pole	SAMPLED			0										
452	43.503922	-88.875687	451	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	452	6	Muck	Pole	SAMPLED			0										
453	43.503903	-88.873708	452	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	453	7	Muck	Pole	SAMPLED			0										
454	43.503883	-88.871729	453	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	454	6	Muck	Pole	SAMPLED			0										
455	43.503864	-88.86975	454	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	455	6	Muck	Pole	SAMPLED			0										
456	43.503844	-88.867771	455	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	456	5	Muck	Pole	SAMPLED			0										
457	43.503323	-88.964762	456	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	457	2	Muck	Pole	SAMPLED			1						1				
458	43.503305	-88.962783	457	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	458	2	Muck	Pole	SAMPLED			1		1								
459	43.503287	-88.960804	458	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	459	3	Muck	Pole	SAMPLED			0										
460	43.503269	-88.958825	459	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	460	3	Muck	Pole	SAMPLED			0										

Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Raft Fullness	Peramogeton crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Peramogeton foliosus	Spirodela polyrhiza	Stuckenia pectinata	Filamentous algae	
461	43.503251	-88.956846	460	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	461	4	Muck	Pole	SAMPLED			0										
462	43.503233	-88.954868	461	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	462	4	Muck	Pole	SAMPLED			0										
463	43.502501	-88.877692	462	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	463	6	Muck	Pole	SAMPLED			0										
464	43.502482	-88.875714	463	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	464	6	Muck	Pole	SAMPLED			0										
465	43.502462	-88.873735	464	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	465	7	Muck	Pole	SAMPLED			0										
466	43.502443	-88.871756	465	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	466	7	Muck	Pole	SAMPLED			0										
467	43.502423	-88.869777	466	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	467	6	Muck	Pole	SAMPLED			0										
468	43.502404	-88.867798	467	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	468	6	Muck	Pole	SAMPLED			0										
469	43.502384	-88.86582	468	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	469	4	Sand	Pole	SAMPLED			0										
470	43.501846	-88.960829	469	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	470	3	Muck	Pole	SAMPLED			0										
471	43.501828	-88.95885	470	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	471	4	Muck	Pole	SAMPLED			0										
472	43.50181	-88.956871	471	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	472	4	Muck	Pole	SAMPLED			0										
473	43.501792	-88.954892	472	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	473	4	Muck	Pole	SAMPLED			1								1		
474	43.501774	-88.952914	473	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	474	3	Muck	Pole	SAMPLED			2								2		
475	43.50108	-88.879698	474	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	475	0			NONAVIGABLE (PLANTS)													
476	43.501061	-88.877719	475	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	476	5	Muck	Pole	SAMPLED			0										
477	43.501041	-88.87574	476	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	477	6	Muck	Pole	SAMPLED			0										
478	43.501022	-88.873762	477	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	478	7	Muck	Pole	SAMPLED			0										
479	43.501002	-88.871783	478	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	479	7	Muck	Pole	SAMPLED			0										
480	43.500983	-88.869804	479	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	480	7	Muck	Pole	SAMPLED			0										
481	43.500963	-88.867825	480	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	481	6	Muck	Pole	SAMPLED			0										
482	43.500944	-88.865847	481	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	482	5	Muck	Pole	SAMPLED			0										
483	43.500388	-88.958875	482	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	483	3	Muck	Pole	SAMPLED			0										
484	43.50037	-88.956896	483	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	484	4	Muck	Pole	SAMPLED			0										
485	43.500352	-88.954917	484	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	485	4	Muck	Pole	SAMPLED			2								2		
486	43.500334	-88.952939	485	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	486	3	Muck	Pole	SAMPLED			0										
487	43.49962	-88.877746	486	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	487	5	Muck	Pole	SAMPLED			0										
488	43.499601	-88.875767	487	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	488	6	Muck	Pole	SAMPLED			0										
489	43.499581	-88.873788	488	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	489	7	Muck	Pole	SAMPLED			0										
490	43.499562	-88.87181	489	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	490	7	Muck	Pole	SAMPLED			0										
491	43.499542	-88.869831	490	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	491	7	Muck	Pole	SAMPLED			0										
492	43.499523	-88.867852	491	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	492	6	Muck	Pole	SAMPLED			0										
493	43.499503	-88.865873	492	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	493	5	Sand	Pole	SAMPLED			0										
494	43.499483	-88.863895	493	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	494	4	Muck	Pole	SAMPLED			0										
495	43.498947	-88.9589	494	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	495	3	Muck	Pole	SAMPLED			0										
496	43.498929	-88.956921	495	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	496	4	Muck	Pole	SAMPLED			0										
497	43.498911	-88.954942	496	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	497	4	Muck	Pole	SAMPLED			1								1		
498	43.498893	-88.952963	497	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	498	4	Muck	Pole	SAMPLED			1								1		
499	43.49818	-88.877772	498	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	499	4	Muck	Pole	SAMPLED			0										
500	43.49816	-88.875794	499	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	500	6	Muck	Pole	SAMPLED			0										
501	43.498141	-88.873815	500	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	501	6	Muck	Pole	SAMPLED			0										
502	43.498121	-88.871836	501	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	502	7	Muck	Pole	SAMPLED			0										
503	43.498102	-88.869858	502	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	503	7	Muck	Pole	SAMPLED			0										
504	43.498082	-88.867879	503	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	504	7	Muck	Pole	SAMPLED			0										
505	43.498063	-88.8659	504	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	505	6	Muck	Pole	SAMPLED			0										
506	43.498043	-88.863922	505	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	506	4	Sand	Pole	SAMPLED			0										

Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Rake Fullness	Peramogon crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Peramogon foliosus	Spirodela polyhiza	Stuckenia pectinata	Filamentous algae	
507	43.497471	-88.954967	506	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	507	4	Muck	Pole	SAMPLED			0										
508	43.497453	-88.952988	507	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	508	4	Muck	Pole	SAMPLED			1								1		
509	43.497435	-88.95101	508	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	509	4	Muck	Pole	SAMPLED			0										
510	43.49672	-88.875821	509	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	510	5	Muck	Pole	SAMPLED			0										
511	43.496701	-88.873842	510	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	511	6	Muck	Pole	SAMPLED			0										
512	43.496681	-88.871863	511	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	512	6	Muck	Pole	SAMPLED			0										
513	43.496662	-88.869885	512	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	513	7	Muck	Pole	SAMPLED			0										
514	43.496642	-88.867906	513	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	514	7	Muck	Pole	SAMPLED			0										
515	43.496622	-88.865927	514	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	515	6	Muck	Pole	SAMPLED			0										
516	43.496603	-88.863949	515	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	516	6	Muck	Pole	SAMPLED			0										
517	43.496563	-88.859992	516	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	517	4	Rock	Pole	SAMPLED			0										
518	43.496544	-88.858013	517	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	518	5	Muck	Pole	SAMPLED			0										
519	43.496524	-88.856034	518	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	519	5	Muck	Pole	SAMPLED			0										
520	43.496504	-88.854056	519	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	520	4	Muck	Pole	SAMPLED			0										
521	43.49603	-88.954992	520	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	521	3	Muck	Pole	SAMPLED			0										
522	43.496012	-88.953013	521	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	522	3	Muck	Pole	SAMPLED			2								2		
523	43.495994	-88.951035	522	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	523	4	Muck	Pole	SAMPLED			0										
524	43.495976	-88.949056	523	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	524	3	Muck	Pole	SAMPLED			0										
525	43.49528	-88.875847	524	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	525	5	Muck	Pole	SAMPLED			0										
526	43.49526	-88.873869	525	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	526	5	Muck	Pole	SAMPLED			0										
527	43.495241	-88.87189	526	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	527	6	Muck	Pole	SAMPLED			0										
528	43.495221	-88.869912	527	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	528	7	Muck	Pole	SAMPLED			0										
529	43.495202	-88.867933	528	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	529	7	Muck	Pole	SAMPLED			0										
530	43.495182	-88.865954	529	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	530	7	Muck	Pole	SAMPLED			0										
531	43.495162	-88.863976	530	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	531	6	Muck	Pole	SAMPLED			0										
532	43.495143	-88.861997	531	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	532	6	Muck	Pole	SAMPLED			0										
533	43.495123	-88.860019	532	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	533	6	Muck	Pole	SAMPLED			0										
534	43.495103	-88.85804	533	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	534	6	Muck	Pole	SAMPLED			0										
535	43.495083	-88.856062	534	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	535	6	Muck	Pole	SAMPLED			0										
536	43.495064	-88.854083	535	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	536	6	Muck	Pole	SAMPLED			0										
537	43.494554	-88.951059	536	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	537	3	Muck	Pole	SAMPLED			0										
538	43.494536	-88.949081	537	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	538	4	Muck	Pole	SAMPLED			0										
539	43.493839	-88.875874	538	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	539	3	Muck	Pole	SAMPLED			0										
540	43.49382	-88.873895	539	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	540	4	Muck	Pole	SAMPLED			0										
541	43.4938	-88.871917	540	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	541	5	Muck	Pole	SAMPLED			0										
542	43.493781	-88.869938	541	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	542	7	Muck	Pole	SAMPLED			0										
543	43.493761	-88.86796	542	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	543	7	Muck	Pole	SAMPLED			0										
544	43.493742	-88.865981	543	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	544	7	Muck	Pole	SAMPLED			0										
545	43.493722	-88.864003	544	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	545	7	Muck	Pole	SAMPLED			0										
546	43.493702	-88.862024	545	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	546	7	Muck	Pole	SAMPLED			0										
547	43.493682	-88.860046	546	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	547	6	Muck	Pole	SAMPLED			0										
548	43.493663	-88.858067	547	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	548	6	Muck	Pole	SAMPLED			0										
549	43.493643	-88.856089	548	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	549	6	Muck	Pole	SAMPLED			0										
550	43.493623	-88.85411	549	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	550	6	Muck	Pole	SAMPLED			0										
551	43.493603	-88.852132	550	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	551	5	Muck	Pole	SAMPLED			0										
552	43.493095	-88.949106	551	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	552	3	Muck	Pole	SAMPLED			0										

Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Raize Fullness	Peramogeton crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Peramogeton foliosus	Spirodela polyhiza	Stuckenia pectinata	Filamentous algae	
553	43.493077	-88.947127	552	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	553	4	Muck	Pole	SAMPLED			0										
554	43.49234	-88.869965	553	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	554	6	Muck	Pole	SAMPLED			0										
555	43.492321	-88.867987	554	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	555	6	Muck	Pole	SAMPLED			0										
556	43.492301	-88.866008	555	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	556	6	Muck	Pole	SAMPLED			0										
557	43.492281	-88.86403	556	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	557	7	Muck	Pole	SAMPLED			0										
558	43.492262	-88.862051	557	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	558	7	Muck	Pole	SAMPLED			0										
559	43.492242	-88.860073	558	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	559	7	Muck	Pole	SAMPLED			0										
560	43.492222	-88.858094	559	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	560	7	Muck	Pole	SAMPLED			0										
561	43.492203	-88.856116	560	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	561	6	Muck	Pole	SAMPLED			0										
562	43.492183	-88.854137	561	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	562	6	Muck	Pole	SAMPLED			0										
563	43.492163	-88.852159	562	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	563	6	Muck	Pole	SAMPLED			0										
564	43.492143	-88.850181	563	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	564	3	Rock	Pole	SAMPLED			0										
565	43.491636	-88.947152	564	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	565	3	Muck	Pole	SAMPLED			0										
566	43.491618	-88.945174	565	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	566	3	Muck	Pole	SAMPLED			0										
567	43.4916	-88.943195	566	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	567	2	Muck	Pole	SAMPLED			0										
568	43.491017	-88.881863	567	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	568	2	Muck	Pole	SAMPLED			1								1		
569	43.490919	-88.871971	568	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	569	4	Muck	Pole	SAMPLED			0										
570	43.4909	-88.869992	569	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	570	6	Muck	Pole	SAMPLED			0										
571	43.49088	-88.868014	570	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	571	7	Muck	Pole	SAMPLED			0										
572	43.490861	-88.866035	571	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	572	7	Muck	Pole	SAMPLED			0										
573	43.490841	-88.864057	572	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	573	7	Muck	Pole	SAMPLED			0										
574	43.490821	-88.862078	573	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	574	7	Muck	Pole	SAMPLED			0										
575	43.490802	-88.8601	574	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	575	7	Muck	Pole	SAMPLED			0										
576	43.490782	-88.858122	575	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	576	7	Muck	Pole	SAMPLED			0										
577	43.490762	-88.856143	576	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	577	6	Muck	Pole	SAMPLED			0										
578	43.490742	-88.854165	577	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	578	6	Muck	Pole	SAMPLED			0										
579	43.490722	-88.852186	578	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	579	5	Muck	Pole	SAMPLED			0										
580	43.490196	-88.947177	579	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	580	2	Muck	Pole	SAMPLED			0										
581	43.490178	-88.945199	580	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	581	3	Muck	Pole	SAMPLED			0										
582	43.49016	-88.94322	581	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	582	3	Muck	Pole	SAMPLED			0										
583	43.490141	-88.941242	582	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	583	3	Muck	Pole	SAMPLED			0										
584	43.489595	-88.883868	583	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	584	2	Muck	Pole	SAMPLED			YES 3									3	
585	43.489576	-88.881889	584	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	585	2	Muck	Pole	SAMPLED			2								2		
586	43.489557	-88.879911	585	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	586	2	Muck	Pole	SAMPLED			1								1		
587	43.489479	-88.871997	586	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	587	5	Muck	Pole	SAMPLED			0										
588	43.489459	-88.870019	587	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	588	7	Muck	Pole	SAMPLED			0										
589	43.48944	-88.868041	588	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	589	7	Muck	Pole	SAMPLED			0										
590	43.48942	-88.866062	589	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	590	7	Muck	Pole	SAMPLED			0										
591	43.489401	-88.864084	590	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	591	7	Muck	Pole	SAMPLED			0										
592	43.489381	-88.862105	591	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	592	8	Muck	Pole	SAMPLED			0										
593	43.489361	-88.860127	592	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	593	7	Muck	Pole	SAMPLED			0										
594	43.489342	-88.858149	593	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	594	7	Muck	Pole	SAMPLED			0										
595	43.489322	-88.85617	594	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	595	7	Muck	Pole	SAMPLED			0										
596	43.489302	-88.854192	595	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	596	6	Muck	Pole	SAMPLED			0										
597	43.489282	-88.852214	596	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	597	5	Muck	Pole	SAMPLED			0										
598	43.488719	-88.943246	597	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	598	3	Muck	Pole	SAMPLED			0										

Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Raft Fullness	Paramegaton crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Paramegaton foliosus	Spirodela polyrhiza	Stuckenia pectinata	Filamentous algae	
599	43.488701	-88.941267	598	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	599	3	Muck	Pole	SAMPLED			0										
600	43.488682	-88.939289	599	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	600	3	Muck	Pole	SAMPLED			0										
601	43.488136	-88.881916	600	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	601	2	Muck	Pole	SAMPLED			1								1		
602	43.488116	-88.879938	601	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	602	3	Muck	Pole	SAMPLED			1								1		
603	43.488097	-88.877959	602	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	603	3	Muck	Pole	SAMPLED			1								1		
604	43.488078	-88.875981	603	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	604	4	Muck	Pole	SAMPLED			0										
605	43.488058	-88.874002	604	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	605	5	Muck	Pole	SAMPLED			0										
606	43.488039	-88.872024	605	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	606	6	Muck	Pole	SAMPLED			1								1		
607	43.488019	-88.870046	606	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	607	7	Muck	Pole	SAMPLED			0										
608	43.487999	-88.868067	607	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	608	7	Muck	Pole	SAMPLED			0										
609	43.48798	-88.866089	608	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	609	8	Muck	Pole	SAMPLED			0										
610	43.48796	-88.864111	609	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	610	7	Muck	Pole	SAMPLED			0										
611	43.487941	-88.862132	610	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	611	7	Muck	Pole	SAMPLED			0										
612	43.487921	-88.860154	611	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	612	8	Muck	Pole	SAMPLED			0										
613	43.487901	-88.858176	612	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	613	7	Muck	Pole	SAMPLED			0										
614	43.487881	-88.856198	613	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	614	7	Muck	Pole	SAMPLED			0										
615	43.487862	-88.854219	614	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	615	5	Rock	Pole	SAMPLED			0										
616	43.487842	-88.852241	615	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	616	5	Muck	Pole	SAMPLED			0										
617	43.487822	-88.850263	616	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	617	6	Muck	Pole	SAMPLED			0										
618	43.487802	-88.848284	617	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	618	6	Muck	Pole	SAMPLED			0										
619	43.487782	-88.846306	618	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	619	5	Muck	Pole	SAMPLED			0										
620	43.487729	-88.943271	619	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	620	2	Muck	Pole	SAMPLED			0										
621	43.487224	-88.937336	620	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	621	2	Muck	Pole	SAMPLED			1								1		
622	43.487187	-88.933379	621	Beaver Dam Lake	Dodge	7/14/2014	BTB & CMC	622	1	Muck	Pole	SAMPLED			2	1		1		2			1		
623	43.486695	-88.881942	622	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	623	2	Muck	Pole	SAMPLED			1								1		
624	43.486676	-88.879964	623	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	624	2	Muck	Pole	SAMPLED			0										
625	43.486657	-88.877986	624	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	625	3	Muck	Pole	SAMPLED			0										
626	43.486637	-88.876008	625	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	626	5	Muck	Pole	SAMPLED			0										
627	43.486618	-88.874029	626	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	627	6	Muck	Pole	SAMPLED			0										
628	43.486598	-88.872051	627	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	628	7	Muck	Pole	SAMPLED			0										
629	43.486579	-88.870073	628	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	629	7	Muck	Pole	SAMPLED			0										
630	43.486559	-88.868094	629	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	630	8	Muck	Pole	SAMPLED			0										
631	43.486539	-88.866116	630	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	631	7	Muck	Pole	SAMPLED			0										
632	43.48652	-88.864138	631	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	632	8	Muck	Pole	SAMPLED			0										
633	43.4865	-88.86216	632	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	633	8	Muck	Pole	SAMPLED			0										
634	43.48648	-88.860181	633	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	634	7	Muck	Pole	SAMPLED			0										
635	43.486461	-88.858203	634	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	635	8	Muck	Pole	SAMPLED			0										
636	43.486441	-88.856225	635	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	636	7	Muck	Pole	SAMPLED			0										
637	43.486421	-88.854246	636	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	637	7	Muck	Pole	SAMPLED			0										
638	43.486401	-88.852268	637	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	638	7	Muck	Pole	SAMPLED			0										
639	43.486381	-88.85029	638	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	639	6	Muck	Pole	SAMPLED			0										
640	43.486362	-88.848312	639	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	640	6	Muck	Pole	SAMPLED			0										
641	43.486342	-88.846333	640	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	641	6	Muck	Pole	SAMPLED			0										
642	43.485197	-88.876034	641	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	642	5	Muck	Pole	SAMPLED			0										
643	43.485177	-88.874056	642	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	643	7	Muck	Pole	SAMPLED			0										
644	43.485158	-88.872078	643	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	644	7	Muck	Pole	SAMPLED			0										



Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Raie Fullness	Paramoetion crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Paramoetion foliosus	Spirodela polyhiza	Stuckenia pectinata	Filamentous algae	
645	43.485138	-88.8701	644	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	645	7	Muck	Pole	SAMPLED			0										
646	43.485119	-88.868121	645	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	646	8	Muck	Pole	SAMPLED			0										
647	43.485099	-88.866143	646	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	647	8	Muck	Pole	SAMPLED			0										
648	43.485079	-88.864165	647	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	648	8	Muck	Pole	SAMPLED			0										
649	43.48506	-88.862187	648	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	649	8	Muck	Pole	SAMPLED			0										
650	43.48504	-88.860208	649	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	650	8	Muck	Pole	SAMPLED			0										
651	43.48502	-88.85823	650	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	651	8	Muck	Pole	SAMPLED			0										
652	43.485001	-88.856252	651	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	652	7	Muck	Pole	SAMPLED			0										
653	43.484981	-88.854274	652	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	653	7	Muck	Pole	SAMPLED			0										
654	43.484961	-88.852295	653	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	654	7	Muck	Pole	SAMPLED			0										
655	43.484941	-88.850317	654	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	655	7	Muck	Pole	SAMPLED			0										
656	43.484921	-88.848339	655	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	656	7	Muck	Pole	SAMPLED			0										
657	43.484901	-88.846361	656	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	657	6	Muck	Pole	SAMPLED			0										
658	43.484881	-88.844383	657	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	658	6	Muck	Pole	SAMPLED			0										
659	43.484861	-88.842404	658	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	659	4	Muck	Pole	SAMPLED			0										
660	43.483776	-88.878039	659	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	660	4	Muck	Pole	SAMPLED			0										
661	43.483756	-88.876061	660	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	661	6	Muck	Pole	SAMPLED			0										
662	43.483737	-88.874083	661	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	662	7	Muck	Pole	SAMPLED			0										
663	43.483717	-88.872105	662	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	663	7	Muck	Pole	SAMPLED			0										
664	43.483698	-88.870126	663	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	664	7	Muck	Pole	SAMPLED			0										
665	43.483678	-88.868148	664	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	665	8	Muck	Pole	SAMPLED			0										
666	43.483659	-88.86617	665	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	666	7	Muck	Pole	SAMPLED			0										
667	43.483639	-88.864192	666	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	667	8	Muck	Pole	SAMPLED			0										
668	43.483619	-88.862214	667	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	668	8	Muck	Pole	SAMPLED			0										
669	43.4836	-88.860235	668	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	669	8	Muck	Pole	SAMPLED			0										
670	43.48358	-88.858257	669	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	670	8	Muck	Pole	SAMPLED			0										
671	43.48356	-88.856279	670	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	671	8	Muck	Pole	SAMPLED			0										
672	43.48354	-88.854301	671	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	672	8	Muck	Pole	SAMPLED			0										
673	43.48352	-88.852323	672	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	673	7	Muck	Pole	SAMPLED			0										
674	43.483501	-88.850345	673	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	674	7	Muck	Pole	SAMPLED			0										
675	43.483481	-88.848366	674	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	675	7	Muck	Pole	SAMPLED			0										
676	43.483461	-88.846388	675	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	676	7	Muck	Pole	SAMPLED			0										
677	43.483441	-88.84441	676	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	677	7	Muck	Pole	SAMPLED			0										
678	43.483421	-88.842432	677	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	678	6	Muck	Pole	SAMPLED			0										
679	43.482335	-88.878066	678	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	679	5	Sand	Pole	SAMPLED			0										
680	43.482316	-88.876088	679	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	680	6	Muck	Pole	SAMPLED			0										
681	43.482296	-88.87411	680	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	681	7	Muck	Pole	SAMPLED			0										
682	43.482277	-88.872131	681	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	682	8	Muck	Pole	SAMPLED			0										
683	43.482257	-88.870153	682	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	683	7	Muck	Pole	SAMPLED			0										
684	43.482238	-88.868175	683	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	684	8	Muck	Pole	SAMPLED			0										
685	43.482218	-88.866197	684	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	685	8	Muck	Pole	SAMPLED			0										
686	43.482199	-88.864219	685	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	686	8	Muck	Pole	SAMPLED			0										
687	43.482179	-88.862241	686	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	687	8	Muck	Pole	SAMPLED			0										
688	43.482159	-88.860262	687	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	688	8	Muck	Pole	SAMPLED			0										
689	43.48214	-88.858284	688	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	689	8	Muck	Pole	SAMPLED			0										
690	43.48212	-88.856306	689	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	690	8	Muck	Pole	SAMPLED			0										

Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Raie Fullness	Peramogeton crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Peramogeton foliosus	Spirodela polyhiza	Stuckenia pectinata	Filamentous algae	
691	43.4821	-88.854328	690	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	691	8	Muck	Pole	SAMPLED			0										
692	43.48208	-88.85235	691	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	692	7	Muck	Pole	SAMPLED			0										
693	43.48206	-88.850372	692	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	693	7	Muck	Pole	SAMPLED			0										
694	43.48204	-88.848394	693	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	694	7	Muck	Pole	SAMPLED			0										
695	43.48202	-88.846416	694	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	695	7	Muck	Pole	SAMPLED			0										
696	43.482	-88.844437	695	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	696	7	Muck	Pole	SAMPLED			0										
697	43.48198	-88.842459	696	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	697	6	Muck	Pole	SAMPLED			0										
698	43.48196	-88.840481	697	Beaver Dam Lake	Dodge	7/16/2014	EEH & SDF	698	5	Muck	Pole	SAMPLED			0										
699	43.480914	-88.880071	698	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	699	5	Sand	Pole	SAMPLED			0										
700	43.480895	-88.878092	699	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	700	6	Muck	Pole	SAMPLED			0										
701	43.480875	-88.876114	700	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	701	7	Muck	Pole	SAMPLED			0										
702	43.480856	-88.874136	701	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	702	7	Muck	Pole	SAMPLED			0										
703	43.480837	-88.872158	702	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	703	7	Muck	Pole	SAMPLED			0										
704	43.480817	-88.87018	703	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	704	8	Muck	Pole	SAMPLED			0										
705	43.480797	-88.868202	704	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	705	8	Muck	Pole	SAMPLED			0										
706	43.480778	-88.866224	705	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	706	8	Muck	Pole	SAMPLED			0										
707	43.480758	-88.864246	706	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	707	8	Muck	Pole	SAMPLED			0										
708	43.480739	-88.862268	707	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	708	8	Muck	Pole	SAMPLED			0										
709	43.480719	-88.86029	708	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	709	8	Muck	Pole	SAMPLED			0										
710	43.480699	-88.858311	709	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	710	8	Muck	Pole	SAMPLED			0										
711	43.480679	-88.856333	710	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	711	8	Muck	Pole	SAMPLED			0										
712	43.48066	-88.854355	711	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	712	8	Muck	Pole	SAMPLED			0										
713	43.48064	-88.852377	712	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	713	8	Muck	Pole	SAMPLED			0										
714	43.48062	-88.850399	713	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	714	7	Muck	Pole	SAMPLED			0										
715	43.4806	-88.848421	714	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	715	7	Sand	Pole	SAMPLED			0										
716	43.48058	-88.846443	715	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	716	7	Sand	Pole	SAMPLED			0										
717	43.48056	-88.844465	716	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	717	7	Sand	Pole	SAMPLED			0										
718	43.48054	-88.842487	717	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	718	6	Sand	Pole	SAMPLED			0										
719	43.48052	-88.840509	718	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	719	5	Sand	Pole	SAMPLED			0										
720	43.479513	-88.884053	719	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	720	4	Muck	Pole	SAMPLED			0										
721	43.479493	-88.882075	720	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	721	5	Muck	Pole	SAMPLED			0										
722	43.479474	-88.880097	721	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	722	6	Muck	Pole	SAMPLED			0										
723	43.479454	-88.878119	722	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	723	6	Muck	Pole	SAMPLED			0										
724	43.479435	-88.876141	723	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	724	7	Muck	Pole	SAMPLED			0										
725	43.479416	-88.874163	724	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	725	8	Muck	Pole	SAMPLED			0										
726	43.479396	-88.872185	725	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	726	7	Muck	Pole	SAMPLED			0										
727	43.479377	-88.870207	726	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	727	8	Muck	Pole	SAMPLED			0										
728	43.479357	-88.868229	727	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	728	8	Muck	Pole	SAMPLED			0										
729	43.479337	-88.866251	728	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	729	8	Muck	Pole	SAMPLED			0										
730	43.479318	-88.864273	729	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	730	8	Muck	Pole	SAMPLED			0										
731	43.479298	-88.862295	730	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	731	8	Muck	Pole	SAMPLED			0										
732	43.479278	-88.860317	731	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	732	8	Muck	Pole	SAMPLED			0										
733	43.479259	-88.858339	732	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	733	8	Muck	Pole	SAMPLED			0										
734	43.479239	-88.856361	733	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	734	8	Muck	Pole	SAMPLED			0										
735	43.479219	-88.854383	734	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	735	8	Muck	Pole	SAMPLED			0										
736	43.479199	-88.852404	735	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	736	8	Muck	Pole	SAMPLED			0										

Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Raft Fullness	Peramogonon crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Peramogonon foliosus	Spirodela polyhiza	Stuckenia pectinata	Filamentous algae
737	43.479179	-88.850426	736	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	737	8	Muck	Pole	SAMPLED			0									
738	43.47916	-88.848448	737	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	738	7	Muck	Pole	SAMPLED			0									
739	43.47914	-88.84647	738	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	739	7	Muck	Pole	SAMPLED			0									
740	43.47912	-88.844492	739	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	740	7	Sand	Pole	SAMPLED			0									
741	43.4791	-88.842514	740	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	741	6	Sand	Pole	SAMPLED			0									
742	43.47908	-88.840536	741	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	742	5	Sand	Pole	SAMPLED			0									
743	43.478091	-88.886058	742	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	743	2	Muck	Pole	SAMPLED			1								1	
744	43.478072	-88.88408	743	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	744	4	Muck	Pole	SAMPLED			0									
745	43.478053	-88.882102	744	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	745	4	Muck	Pole	SAMPLED			0									
746	43.478033	-88.880124	745	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	746	5	Muck	Pole	SAMPLED			0									
747	43.478014	-88.878146	746	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	747	6	Muck	Pole	SAMPLED			0									
748	43.477995	-88.876168	747	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	748	7	Muck	Pole	SAMPLED			0									
749	43.477975	-88.87419	748	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	749	8	Muck	Pole	SAMPLED			0									
750	43.477956	-88.872212	749	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	750	8	Muck	Pole	SAMPLED			0									
751	43.477936	-88.870234	750	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	751	8	Muck	Pole	SAMPLED			0									
752	43.477917	-88.868256	751	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	752	8	Muck	Pole	SAMPLED			0									
753	43.477897	-88.866278	752	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	753	8	Muck	Pole	SAMPLED			0									
754	43.477877	-88.8643	753	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	754	8	Muck	Pole	SAMPLED			0									
755	43.477858	-88.862322	754	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	755	8	Muck	Pole	SAMPLED			0									
756	43.477838	-88.860344	755	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	756	8	Muck	Pole	SAMPLED			0									
757	43.477818	-88.858366	756	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	757	8	Muck	Pole	SAMPLED			0									
758	43.477799	-88.856388	757	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	758	8	Muck	Pole	SAMPLED			0									
759	43.477779	-88.85441	758	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	759	8	Muck	Pole	SAMPLED			0									
760	43.477759	-88.852432	759	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	760	8	Muck	Pole	SAMPLED			0									
761	43.477739	-88.850454	760	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	761	8	Muck	Pole	SAMPLED			0									
762	43.477719	-88.848476	761	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	762	7	Muck	Pole	SAMPLED			0									
763	43.477699	-88.846498	762	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	763	7	Muck	Pole	SAMPLED			0									
764	43.477679	-88.84452	763	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	764	7	Muck	Pole	SAMPLED			0									
765	43.477659	-88.842542	764	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	765	6	Sand	Pole	SAMPLED			0									
766	43.476632	-88.884106	765	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	766	3	Muck	Pole	SAMPLED			1								1	
767	43.476612	-88.882128	766	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	767	4	Muck	Pole	SAMPLED			0									
768	43.476593	-88.88015	767	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	768	5	Muck	Pole	SAMPLED			0									
769	43.476574	-88.878172	768	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	769	6	Muck	Pole	SAMPLED			0									
770	43.476554	-88.876194	769	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	770	7	Muck	Pole	SAMPLED			0									
771	43.476535	-88.874216	770	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	771	7	Muck	Pole	SAMPLED			0									
772	43.476515	-88.872239	771	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	772	8	Muck	Pole	SAMPLED			0									
773	43.476496	-88.870261	772	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	773	7	Muck	Pole	SAMPLED			0									
774	43.476476	-88.868283	773	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	774	8	Muck	Pole	SAMPLED			0									
775	43.476457	-88.866305	774	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	775	7	Muck	Pole	SAMPLED			0									
776	43.476437	-88.864327	775	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	776	8	Muck	Pole	SAMPLED			0									
777	43.476417	-88.862349	776	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	777	8	Muck	Pole	SAMPLED			0									
778	43.476398	-88.860371	777	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	778	8	Muck	Pole	SAMPLED			0									
779	43.476378	-88.858393	778	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	779	8	Muck	Pole	SAMPLED			0									
780	43.476358	-88.856415	779	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	780	8	Muck	Pole	SAMPLED			0									
781	43.476338	-88.854437	780	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	781	8	Muck	Pole	SAMPLED			0									
782	43.476318	-88.852459	781	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	782	8	Muck	Pole	SAMPLED			0									

Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Rake Fullness	Peramogon crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Peramogon foliosus	Spirodela polyhiza	Stuckenia pectinata	Filamentous algae	
783	43.476299	-88.850481	782	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	783	8	Muck	Pole	SAMPLED			0										
784	43.476279	-88.848503	783	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	784	7	Muck	Pole	SAMPLED			0										
785	43.476259	-88.846525	784	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	785	7	Muck	Pole	SAMPLED			0										
786	43.476239	-88.844547	785	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	786	5	Rock	Pole	SAMPLED			0										
787	43.475153	-88.880177	786	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	787	5	Sand	Pole	SAMPLED			0										
788	43.475133	-88.878199	787	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	788	6	Sand	Pole	SAMPLED			0										
789	43.475114	-88.876221	788	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	789	7	Muck	Pole	SAMPLED			0										
790	43.475094	-88.874243	789	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	790	9	Muck	Pole	SAMPLED			0										
791	43.475075	-88.872265	790	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	791	8	Muck	Pole	SAMPLED			0										
792	43.475055	-88.870287	791	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	792	7	Muck	Pole	SAMPLED			0										
793	43.475036	-88.868309	792	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	793	8	Muck	Pole	SAMPLED			0										
794	43.475016	-88.866332	793	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	794	8	Muck	Pole	SAMPLED			0										
795	43.474997	-88.864354	794	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	795	8	Muck	Pole	SAMPLED			0										
796	43.474977	-88.862376	795	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	796	8	Muck	Pole	SAMPLED			0										
797	43.474957	-88.860398	796	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	797	8	Muck	Pole	SAMPLED			0										
798	43.474937	-88.85842	797	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	798	8	Muck	Pole	SAMPLED			0										
799	43.474918	-88.856442	798	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	799	8	Muck	Pole	SAMPLED			0										
800	43.474898	-88.854464	799	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	800	8	Muck	Pole	SAMPLED			0										
801	43.474878	-88.852486	800	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	801	7	Muck	Pole	SAMPLED			0										
802	43.474858	-88.850508	801	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	802	7	Muck	Pole	SAMPLED			0										
803	43.474838	-88.84853	802	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	803	7	Muck	Pole	SAMPLED			0										
804	43.474818	-88.846553	803	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	804	6	Muck	Pole	SAMPLED			0										
805	43.473732	-88.882181	804	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	805	3	Muck	Pole	SAMPLED			0										
806	43.473712	-88.880204	805	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	806	5	Muck	Pole	SAMPLED			0										
807	43.473693	-88.878226	806	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	807	7	Muck	Pole	SAMPLED			0										
808	43.473673	-88.876248	807	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	808	7	Muck	Pole	SAMPLED			0										
809	43.473654	-88.87427	808	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	809	7	Muck	Pole	SAMPLED			0										
810	43.473634	-88.872292	809	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	810	7	Muck	Pole	SAMPLED			0										
811	43.473615	-88.870314	810	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	811	7	Muck	Pole	SAMPLED			0										
812	43.473595	-88.868336	811	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	812	7	Muck	Pole	SAMPLED			0										
813	43.473576	-88.866359	812	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	813	8	Muck	Pole	SAMPLED			0										
814	43.473556	-88.864381	813	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	814	8	Muck	Pole	SAMPLED			0										
815	43.473536	-88.862403	814	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	815	8	Muck	Pole	SAMPLED			0										
816	43.473517	-88.860425	815	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	816	8	Muck	Pole	SAMPLED			0										
817	43.473497	-88.858447	816	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	817	8	Muck	Pole	SAMPLED			0										
818	43.473477	-88.856469	817	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	818	8	Muck	Pole	SAMPLED			0										
819	43.473457	-88.854491	818	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	819	8	Muck	Pole	SAMPLED			0										
820	43.473438	-88.852514	819	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	820	7	Muck	Pole	SAMPLED			0										
821	43.473418	-88.850536	820	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	821	6	Sand	Pole	SAMPLED			0										
822	43.473398	-88.848558	821	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	822	6	Muck	Pole	SAMPLED	for a		0										
823	43.472272	-88.88023	822	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	823	5	Muck	Pole	SAMPLED			0										
824	43.472252	-88.878252	823	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	824	7	Muck	Pole	SAMPLED			0										
825	43.472233	-88.876275	824	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	825	7	Muck	Pole	SAMPLED			0										
826	43.472214	-88.874297	825	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	826	7	Muck	Pole	SAMPLED			0										
827	43.472194	-88.872319	826	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	827	8	Muck	Pole	SAMPLED			0										
828	43.472175	-88.870341	827	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	828	7	Muck	Pole	SAMPLED			0										

Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Raize Fullness	Peramogeton crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Peramogeton foliosus	Spirodela polyrhiza	Stuckenia pectinata	Filamentous algae
829	43.472155	-88.868363	828	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	829	7	Muck	Pole	SAMPLED			0									
830	43.472135	-88.866385	829	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	830	8	Muck	Pole	SAMPLED			0									
831	43.472116	-88.864408	830	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	831	8	Muck	Pole	SAMPLED			0									
832	43.472096	-88.86243	831	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	832	8	Muck	Pole	SAMPLED			0									
833	43.472076	-88.860452	832	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	833	8	Muck	Pole	SAMPLED			0									
834	43.472057	-88.858474	833	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	834	8	Muck	Pole	SAMPLED			0									
835	43.472037	-88.856496	834	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	835	8	Muck	Pole	SAMPLED			0									
836	43.472017	-88.854519	835	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	836	8	Muck	Pole	SAMPLED			0									
837	43.471997	-88.852541	836	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	837	7	Muck	Pole	SAMPLED			0									
838	43.471977	-88.850563	837	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	838	6	Muck	Pole	SAMPLED			0									
839	43.471957	-88.848585	838	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	839	5	Muck	Pole	SAMPLED			0									
840	43.470831	-88.880257	839	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	840	5	Muck	Pole	SAMPLED			0									
841	43.470812	-88.878279	840	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	841	6	Muck	Pole	SAMPLED			0									
842	43.470793	-88.876301	841	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	842	7	Muck	Pole	SAMPLED			0									
843	43.470773	-88.874323	842	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	843	7	Muck	Pole	SAMPLED			0									
844	43.470754	-88.872346	843	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	844	7	Muck	Pole	SAMPLED			0									
845	43.470734	-88.870368	844	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	845	7	Muck	Pole	SAMPLED			0									
846	43.470715	-88.86839	845	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	846	7	Muck	Pole	SAMPLED			0									
847	43.470695	-88.866412	846	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	847	8	Muck	Pole	SAMPLED			0									
848	43.470675	-88.864435	847	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	848	8	Muck	Pole	SAMPLED			0									
849	43.470656	-88.862457	848	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	849	8	Muck	Pole	SAMPLED			0									
850	43.470636	-88.860479	849	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	850	8	Muck	Pole	SAMPLED			0									
851	43.470616	-88.858501	850	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	851	8	Muck	Pole	SAMPLED			0									
852	43.470596	-88.856524	851	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	852	8	Muck	Pole	SAMPLED			0									
853	43.470577	-88.854546	852	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	853	7	Muck	Pole	SAMPLED			0									
854	43.470557	-88.852568	853	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	854	7	Muck	Pole	SAMPLED			0									
855	43.470537	-88.85059	854	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	855	7	Muck	Pole	SAMPLED			0									
856	43.470517	-88.848613	855	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	856	5	Sand	Pole	SAMPLED			0									
857	43.46941	-88.882261	856	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	857	4	Muck	Pole	SAMPLED			1	V						1		
858	43.469391	-88.880283	857	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	858	5	Muck	Pole	SAMPLED			0									
859	43.469372	-88.878306	858	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	859	6	Muck	Pole	SAMPLED			0									
860	43.469352	-88.876328	859	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	860	7	Muck	Pole	SAMPLED			0									
861	43.469333	-88.87435	860	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	861	7	Muck	Pole	SAMPLED			0									
862	43.469313	-88.872372	861	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	862	7	Muck	Pole	SAMPLED			0									
863	43.469294	-88.870395	862	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	863	7	Muck	Pole	SAMPLED			0									
864	43.469274	-88.868417	863	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	864	7	Muck	Pole	SAMPLED			0									
865	43.469255	-88.866439	864	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	865	8	Muck	Pole	SAMPLED			0									
866	43.469235	-88.864462	865	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	866	8	Muck	Pole	SAMPLED			0									
867	43.469215	-88.862484	866	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	867	8	Muck	Pole	SAMPLED			0									
868	43.469196	-88.860506	867	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	868	8	Muck	Pole	SAMPLED			0									
869	43.469176	-88.858528	868	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	869	8	Muck	Pole	SAMPLED			0									
870	43.469156	-88.856551	869	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	870	8	Muck	Pole	SAMPLED			0									
871	43.469136	-88.854573	870	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	871	8	Muck	Pole	SAMPLED			0									
872	43.469116	-88.852595	871	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	872	7	Muck	Pole	SAMPLED			0									
873	43.469097	-88.850618	872	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	873	7	Muck	Pole	SAMPLED			0									
874	43.46797	-88.882288	873	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	874	4	Muck	Pole	SAMPLED			1								1	



Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Raft Fullness	Peramogon crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Peramogon foliosus	Spirodela polyhiza	Stuckenia pectinata	Filamentous algae	
875	43.467951	-88.88031	874	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	875	6	Muck	Pole	SAMPLED			0										
876	43.467931	-88.878332	875	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	876	6	Muck	Pole	SAMPLED			0										
877	43.467912	-88.876355	876	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	877	7	Muck	Pole	SAMPLED			0										
878	43.467892	-88.874377	877	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	878	7	Muck	Pole	SAMPLED			0										
879	43.467873	-88.872399	878	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	879	6	Muck	Pole	SAMPLED			0										
880	43.467853	-88.870422	879	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	880	6	Rock	Pole	SAMPLED			0										
881	43.467834	-88.868444	880	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	881	7	Muck	Pole	SAMPLED			0										
882	43.467814	-88.866466	881	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	882	7	Muck	Pole	SAMPLED			0										
883	43.467794	-88.864489	882	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	883	7	Muck	Pole	SAMPLED			0										
884	43.467775	-88.862511	883	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	884	8	Muck	Pole	SAMPLED			0										
885	43.467755	-88.860533	884	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	885	8	Muck	Pole	SAMPLED			0										
886	43.467735	-88.858556	885	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	886	8	Muck	Pole	SAMPLED			0										
887	43.467716	-88.856578	886	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	887	8	Muck	Pole	SAMPLED			0										
888	43.467696	-88.8546	887	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	888	8	Muck	Pole	SAMPLED			0										
889	43.467676	-88.852623	888	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	889	7	Muck	Pole	SAMPLED			0										
890	43.467656	-88.850645	889	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	890	5	Rock	Pole	SAMPLED			0										
891	43.466529	-88.882314	890	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	891	4	Muck	Pole	SAMPLED			1	1							1		
892	43.46651	-88.880337	891	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	892	6	Muck	Pole	SAMPLED			0										
893	43.466491	-88.878359	892	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	893	7	Muck	Pole	SAMPLED			0										
894	43.466471	-88.876381	893	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	894	7	Muck	Pole	SAMPLED			0										
895	43.466452	-88.874404	894	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	895	6	Muck	Pole	SAMPLED			0										
896	43.466432	-88.872426	895	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	896	4	Rock	Pole	SAMPLED			0	V									
897	43.466413	-88.870448	896	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	897	6	Muck	Pole	SAMPLED			0										
898	43.466393	-88.868471	897	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	898	7	Muck	Pole	SAMPLED			0										
899	43.466374	-88.866493	898	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	899	5	Rock	Pole	SAMPLED			0										
900	43.466354	-88.864516	899	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	900	8	Muck	Pole	SAMPLED			0										
901	43.466334	-88.862538	900	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	901	8	Muck	Pole	SAMPLED			0										
902	43.466315	-88.86056	901	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	902	8	Muck	Pole	SAMPLED			0										
903	43.466295	-88.858583	902	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	903	8	Muck	Pole	SAMPLED			0										
904	43.466275	-88.856605	903	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	904	8	Muck	Pole	SAMPLED			0										
905	43.466255	-88.854627	904	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	905	7	Muck	Pole	SAMPLED			0										
906	43.466236	-88.85265	905	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	906	6	Muck	Pole	SAMPLED			0										
907	43.465108	-88.884318	906	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	907	3	Muck	Pole	SAMPLED			1								1		
908	43.465089	-88.882341	907	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	908	5	Muck	Pole	SAMPLED			1	1									
909	43.46507	-88.880363	908	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	909	6	Muck	Pole	SAMPLED			0										
910	43.46505	-88.878386	909	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	910	6	Muck	Pole	SAMPLED			0										
911	43.465031	-88.876408	910	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	911	6	Muck	Pole	SAMPLED			0										
912	43.465011	-88.87443	911	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	912	6	Muck	Pole	SAMPLED			0										
913	43.464992	-88.872453	912	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	913	6	Muck	Pole	SAMPLED			0										
914	43.464972	-88.870475	913	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	914	6	Muck	Pole	SAMPLED			0										
915	43.464953	-88.868498	914	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	915	6	Muck	Pole	SAMPLED			0										
916	43.464933	-88.86652	915	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	916	7	Muck	Pole	SAMPLED			0										
917	43.464914	-88.864542	916	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	917	7	Muck	Pole	SAMPLED			0										
918	43.464894	-88.862565	917	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	918	8	Muck	Pole	SAMPLED			0										
919	43.464874	-88.860587	918	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	919	8	Muck	Pole	SAMPLED			0										
920	43.464855	-88.85861	919	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	920	8	Muck	Pole	SAMPLED			0										

Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Rake Fullness	Peramogeton crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Peramogeton foliosus	Spirodela polyhiza	Stuckenia pectinata	Filamentous algae	
921	43.464835	-88.856632	920	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	921	8	Muck	Pole	SAMPLED			0										
922	43.464815	-88.854655	921	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	922	7	Muck	Pole	SAMPLED			0										
923	43.463668	-88.884345	922	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	923	4	Muck	Pole	SAMPLED			1	1									
924	43.463649	-88.882367	923	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	924	5	Muck	Pole	SAMPLED			0										
925	43.463629	-88.88039	924	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	925	6	Muck	Pole	SAMPLED			0										
926	43.46361	-88.878412	925	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	926	6	Muck	Pole	SAMPLED			0										
927	43.46359	-88.876435	926	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	927	6	Muck	Pole	SAMPLED			0										
928	43.463571	-88.874457	927	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	928	6	Muck	Pole	SAMPLED			0										
929	43.463552	-88.87248	928	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	929	6	Muck	Pole	SAMPLED			0										
930	43.463532	-88.870502	929	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	930	6	Muck	Pole	SAMPLED			0										
931	43.463512	-88.868524	930	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	931	5	Muck	Pole	SAMPLED			0										
932	43.463493	-88.866547	931	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	932	5	Rock	Pole	SAMPLED			0										
933	43.463473	-88.864569	932	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	933	7	Muck	Pole	SAMPLED			0										
934	43.463454	-88.862592	933	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	934	7	Muck	Pole	SAMPLED			0										
935	43.463434	-88.860614	934	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	935	8	Muck	Pole	SAMPLED			0										
936	43.463414	-88.858637	935	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	936	8	Muck	Pole	SAMPLED			0										
937	43.463394	-88.856659	936	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	937	8	Muck	Pole	SAMPLED			0										
938	43.463375	-88.854682	937	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	938	7	Muck	Pole	SAMPLED			0										
939	43.463355	-88.852704	938	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	939	5	Sand	Pole	SAMPLED			0										
940	43.463335	-88.850727	939	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	940	4	Muck	Pole	SAMPLED			0										
941	43.462247	-88.886349	940	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	941	3	Muck	Pole	SAMPLED			1								1		
942	43.462228	-88.884371	941	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	942	5	Muck	Pole	SAMPLED			0										
943	43.462208	-88.882394	942	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	943	5	Muck	Pole	SAMPLED			0										
944	43.462189	-88.880416	943	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	944	5	Muck	Pole	SAMPLED			1	1									
945	43.462169	-88.878439	944	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	945	6	Muck	Pole	SAMPLED			1	1									
946	43.46215	-88.876461	945	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	946	6	Muck	Pole	SAMPLED			0										
947	43.462131	-88.874484	946	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	947	6	Muck	Pole	SAMPLED			0										
948	43.462111	-88.872506	947	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	948	6	Muck	Pole	SAMPLED			0										
949	43.462092	-88.870529	948	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	949	5	Sand	Pole	SAMPLED			0										
950	43.462072	-88.868551	949	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	950	5	Muck	Pole	SAMPLED			0										
951	43.462052	-88.866574	950	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	951	6	Sand	Pole	SAMPLED			0										
952	43.462033	-88.864596	951	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	952	6	Muck	Pole	SAMPLED			0										
953	43.462013	-88.862619	952	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	953	7	Muck	Pole	SAMPLED			0										
954	43.461994	-88.860641	953	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	954	7	Muck	Pole	SAMPLED			0										
955	43.461974	-88.858664	954	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	955	8	Muck	Pole	SAMPLED			0										
956	43.461954	-88.856686	955	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	956	8	Muck	Pole	SAMPLED			0										
957	43.461934	-88.854709	956	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	957	7	Muck	Pole	SAMPLED			0										
958	43.461914	-88.852732	957	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	958	7	Muck	Pole	SAMPLED			0										
959	43.461895	-88.850754	958	Beaver Dam Lake	Dodge	7/14/2014	EEH & SDF	959	6	Muck	Pole	SAMPLED			0										
960	43.460826	-88.888353	959	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	960	2	Muck	Pole	SAMPLED			2									2	
961	43.460806	-88.886375	960	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	961	5	Muck	Pole	SAMPLED			1	1								1	
962	43.460787	-88.884398	961	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	962	4	Muck	Pole	SAMPLED			1	1									
963	43.460768	-88.88242	962	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	963	4	Muck	Pole	SAMPLED			2	1								2	
964	43.460748	-88.880443	963	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	964	5	Muck	Pole	SAMPLED			2	2									
965	43.460729	-88.878465	964	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	965	5	Muck	Pole	SAMPLED			1	1									
966	43.46071	-88.876488	965	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	966	6	Muck	Pole	SAMPLED			0										

Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Raie Fullness	Peramogeton crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Peramogeton foliosus	Spirodela polyhiza	Stuckenia pectinata	Filamentous algae	
967	43.46069	-88.874511	966	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	967	5	Muck	Pole	SAMPLED			0										
968	43.460671	-88.872533	967	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	968	5	Muck	Pole	SAMPLED			0										
969	43.460651	-88.870556	968	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	969	5	Muck	Pole	SAMPLED			0										
970	43.460632	-88.868578	969	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	970	5	Muck	Pole	SAMPLED			0										
971	43.460612	-88.866601	970	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	971	6	Muck	Pole	SAMPLED			0										
972	43.460592	-88.864623	971	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	972	6	Muck	Pole	SAMPLED			0										
973	43.460573	-88.862646	972	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	973	7	Muck	Pole	SAMPLED			0										
974	43.460553	-88.860668	973	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	974	7	Muck	Pole	SAMPLED			0										
975	43.460533	-88.858691	974	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	975	7	Muck	Pole	SAMPLED			0										
976	43.460514	-88.856714	975	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	976	7	Muck	Pole	SAMPLED			0										
977	43.460494	-88.854736	976	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	977	7	Muck	Pole	SAMPLED			0										
978	43.460474	-88.852759	977	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	978	7	Muck	Pole	SAMPLED			0										
979	43.460454	-88.850781	978	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	979	6	Muck	Pole	SAMPLED			0										
980	43.460434	-88.848804	979	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	980	4	Sand	Pole	SAMPLED			0										
981	43.459404	-88.890357	980	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	981	3	Muck	Pole	SAMPLED		YES	2		1						2		
982	43.459385	-88.888379	981	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	982	4	Muck	Pole	SAMPLED			0										
983	43.459366	-88.886402	982	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	983	4	Muck	Pole	SAMPLED			1								1		
984	43.459347	-88.884424	983	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	984	3	Muck	Pole	SAMPLED			1								1		
985	43.459269	-88.876515	984	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	985	5	Muck	Pole	SAMPLED			0										
986	43.45925	-88.874537	985	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	986	4	Muck	Pole	SAMPLED			2	1							1		
987	43.45923	-88.87256	986	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	987	5	Muck	Pole	SAMPLED			0										
988	43.459211	-88.870582	987	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	988	4	Rock	Pole	SAMPLED			0										
989	43.459191	-88.868605	988	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	989	5	Muck	Pole	SAMPLED			0										
990	43.459172	-88.866628	989	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	990	5	Muck	Pole	SAMPLED			0										
991	43.459152	-88.86465	990	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	991	6	Muck	Pole	SAMPLED			0										
992	43.459132	-88.862673	991	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	992	6	Muck	Pole	SAMPLED			0										
993	43.459113	-88.860696	992	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	993	7	Muck	Pole	SAMPLED			0										
994	43.459093	-88.858718	993	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	994	7	Muck	Pole	SAMPLED			0										
995	43.459073	-88.856741	994	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	995	7	Muck	Pole	SAMPLED			0										
996	43.459053	-88.854763	995	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	996	8	Muck	Pole	SAMPLED			0										
997	43.459034	-88.852786	996	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	997	7	Muck	Pole	SAMPLED			0										
998	43.459014	-88.850809	997	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	998	6	Muck	Pole	SAMPLED			0										
999	43.457964	-88.890383	998	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	999	3	Muck	Pole	SAMPLED			1			1					1		
1000	43.457945	-88.888406	999	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1000	3	Muck	Pole	SAMPLED			2			2					1		
1001	43.457829	-88.876541	1000	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1001	3	Muck	Pole	SAMPLED			1								1		
1002	43.45779	-88.872587	1001	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1002	5	Muck	Pole	SAMPLED			1	1							1		
1003	43.45777	-88.870609	1002	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1003	4	Muck	Pole	SAMPLED			01-3										
1004	43.457751	-88.868632	1003	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1004	4	Muck	Pole	SAMPLED			0										
1005	43.457731	-88.866655	1004	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1005	2	Muck	Pole	SAMPLED			1	V						1			
1006	43.457712	-88.864677	1005	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1006	3	Muck	Pole	SAMPLED			1	1									
1007	43.457672	-88.860723	1006	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1007	6	Muck	Pole	SAMPLED			0										
1008	43.457653	-88.858745	1007	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1008	6	Muck	Pole	SAMPLED			0										
1009	43.457633	-88.856768	1008	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1009	7	Muck	Pole	SAMPLED			0										
1010	43.457613	-88.854791	1009	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1010	7	Muck	Pole	SAMPLED			0										
1011	43.457593	-88.852813	1010	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1011	7	Muck	Pole	SAMPLED			0										
1012	43.457573	-88.850836	1011	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1012	6	Muck	Pole	SAMPLED			0										

Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Raize Fullness	Paramogeton crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Paramogeton foliosus	Spirodela polyrhiza	Stuckenia pectinata	Filamentous algae
1013	43.456388	-88.876568	1012	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1013	3	Muck	Pole	SAMPLED	le nus	YES	2								2	
1014	43.456369	-88.874591	1013	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1014	3	Muck	Pole	SAMPLED			1								1	
1015	43.456349	-88.872613	1014	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1015	4	Muck	Pole	SAMPLED			1								1	
1016	43.45633	-88.870636	1015	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1016	4	Muck	Pole	SAMPLED			1								1	
1017	43.45631	-88.868659	1016	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1017	3	Muck	Pole	SAMPLED			1	V							1	
1018	43.456232	-88.86075	1017	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1018	6	Muck	Pole	SAMPLED			0									
1019	43.456212	-88.858772	1018	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1019	6	Muck	Pole	SAMPLED			0									
1020	43.456192	-88.856795	1019	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1020	6	Muck	Pole	SAMPLED			0									
1021	43.456173	-88.854818	1020	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1021	6	Muck	Pole	SAMPLED			0									
1022	43.456153	-88.85284	1021	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1022	7	Muck	Pole	SAMPLED			0									
1023	43.456133	-88.850863	1022	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1023	6	Muck	Pole	SAMPLED			0									
1024	43.454967	-88.878572	1023	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1024	2	Muck	Pole	SAMPLED			1								1	
1025	43.454948	-88.876595	1024	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1025	2	Muck	Pole	SAMPLED			2		1	1					1	
1026	43.454791	-88.860777	1025	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1026	5	Muck	Pole	SAMPLED			0									
1027	43.454772	-88.858799	1026	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1027	6	Muck	Pole	SAMPLED			0									
1028	43.454752	-88.856822	1027	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1028	6	Muck	Pole	SAMPLED			0									
1029	43.454732	-88.854845	1028	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1029	5	Muck	Pole	SAMPLED			0									
1030	43.454712	-88.852868	1029	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1030	7	Muck	Pole	SAMPLED			0									
1031	43.454693	-88.85089	1030	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1031	4	Sand	Pole	SAMPLED			0									
1032	43.453351	-88.860804	1031	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1032	5	Muck	Pole	SAMPLED			0									
1033	43.453331	-88.858827	1032	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1033	6	Muck	Pole	SAMPLED			0									
1034	43.453312	-88.856849	1033	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1034	6	Muck	Pole	SAMPLED			0									
1035	43.453292	-88.854872	1034	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1035	6	Muck	Pole	SAMPLED			0									
1036	43.453272	-88.852895	1035	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1036	7	Muck	Pole	SAMPLED			0									
1037	43.453252	-88.850918	1036	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1037	6	Muck	Pole	SAMPLED			0									
1038	43.453212	-88.846963	1037	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1038	5	Muck	Pole	SAMPLED			0									
1039	43.453192	-88.844986	1038	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1039	6	Muck	Pole	SAMPLED			0									
1040	43.451891	-88.858854	1039	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1040	5	Muck	Pole	SAMPLED			0									
1041	43.451871	-88.856876	1040	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1041	6	Muck	Pole	SAMPLED			0									
1042	43.451851	-88.854899	1041	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1042	6	Muck	Pole	SAMPLED			0									
1043	43.451832	-88.852922	1042	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1043	6	Muck	Pole	SAMPLED			0									
1044	43.451812	-88.850945	1043	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1044	6	Muck	Pole	SAMPLED			0									
1045	43.451792	-88.848968	1044	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1045	6	Muck	Pole	SAMPLED			0									
1046	43.451772	-88.846991	1045	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1046	5	Muck	Pole	SAMPLED			0									
1047	43.45045	-88.858881	1046	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1047	4	Muck	Pole	SAMPLED			1	V							1	
1048	43.450431	-88.856904	1047	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1048	6	Muck	Pole	SAMPLED			0									
1049	43.450411	-88.854926	1048	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1049	6	Muck	Pole	SAMPLED			0									
1050	43.450391	-88.852949	1049	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1050	6	Muck	Pole	SAMPLED			0									
1051	43.450371	-88.850972	1050	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1051	6	Muck	Pole	SAMPLED			0									
1052	43.450351	-88.848995	1051	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1052	6	Muck	Pole	SAMPLED			0									
1053	43.44901	-88.858908	1052	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1053	4	Muck	Pole	SAMPLED			1								1	
1054	43.44899	-88.856931	1053	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1054	6	Muck	Pole	SAMPLED			0									
1055	43.448971	-88.854954	1054	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1055	5	Muck	Pole	SAMPLED			0									
1056	43.448951	-88.852977	1055	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1056	6	Muck	Pole	SAMPLED			0									
1057	43.448931	-88.851	1056	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1057	5	Muck	Pole	SAMPLED			1								1	
1058	43.447589	-88.860912	1057	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1058	4	Muck	Pole	SAMPLED			0									

Point Number	Latitude	Longitude	ID	Lake Name	County	Date	Field Crew	Point Number	Depth (ft)	Sediment	Pole, Rope	Comments	Notes	Nuisance	Total Rake Fullness	Peramogeton crispus	Ceratophyllum demersum	Elodea canadensis	Lemna minor	Nymphaea odorata	Peramogeton foliosus	Spirodela polyrhiza	Stuckenia pectinata	Filamentous algae
1059	43.44757	-88.858935	1058	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1059	5	Muck	Pole	SAMPLED			0									
1060	43.44755	-88.856958	1059	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1060	6	Muck	Pole	SAMPLED			0									
1061	43.446149	-88.860939	1060	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1061	5	Muck	Pole	SAMPLED			0									
1062	43.446129	-88.858962	1061	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1062	5	Muck	Pole	SAMPLED			0									
1063	43.444709	-88.860966	1062	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1063	4	Muck	Pole	SAMPLED			0									
1064	43.443307	-88.864947	1063	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1064	3	Muck	Pole	SAMPLED			0									
1065	43.443288	-88.86297	1064	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1065	3	Muck	Pole	SAMPLED			0									
1066	43.441887	-88.86695	1065	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1066	3	Muck	Pole	SAMPLED			0									
1067	43.441867	-88.864974	1066	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1067	4	Muck	Pole	SAMPLED			0									
1068	43.440485	-88.870931	1067	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1068	2	Muck	Pole	SAMPLED			0									
1069	43.440466	-88.868954	1068	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1069	3	Muck	Pole	SAMPLED			0									
1070	43.440446	-88.866977	1069	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1070	2	Muck	Pole	SAMPLED			0									
1071	43.440427	-88.865001	1070	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1071	3	Muck	Pole	SAMPLED			0									
1072	43.439006	-88.867004	1071	Beaver Dam Lake	Dodge	7/14/2014	TWH & JLW	1072	2	Muck	Pole	SAMPLED			0									