wausauPAPER

December 15, 2011

Ms. Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

RE: Wausau Paper Mills, LLC
Rhinelander Hydroelectric Project No. P-2161
2011 Invasive Species Report for the Rhinelander Hydroelectric Project

Dear Secretary Bose:

We are submitting on behalf of Wausau Paper Mill, LLC, which owns and operates the Rhinelander Hydroelectric Project (FERC no. P-2161), the following:

(1) *2011 Invasive Species Report for the Rhinelander Hydroelectric Project* dated December 2011 authored by Ashley McLaughlin;
(2) Agency consultation request to Nicholas J. Utrup, U.S. Fish and Wildlife Service, dated October 17, 2011; and
(3) Agency consultation request to Cheryl Laatsch, Wisconsin Department of Natural Resources dated October 27, 2011.

Wausau Paper Mills, LLC has not received any comment from either the U.S Fish and Wildlife Service or the Wisconsin Department of Natural Resources in response to the agency consultation request letters. Please contact me with any questions or concerns. Thank you for your consideration.

Wausau Paper is filing 2 hard copies with Peggy Harding at the Chicago Regional Office.

Very Truly Yours

WAUSAU PAPER – Rhinelander Mill

Tim Hasbargen
Manager of Engineering & Utilities

Enclosures

cc: Peggy Harding / Chicago Regional Office (2 hard copies)

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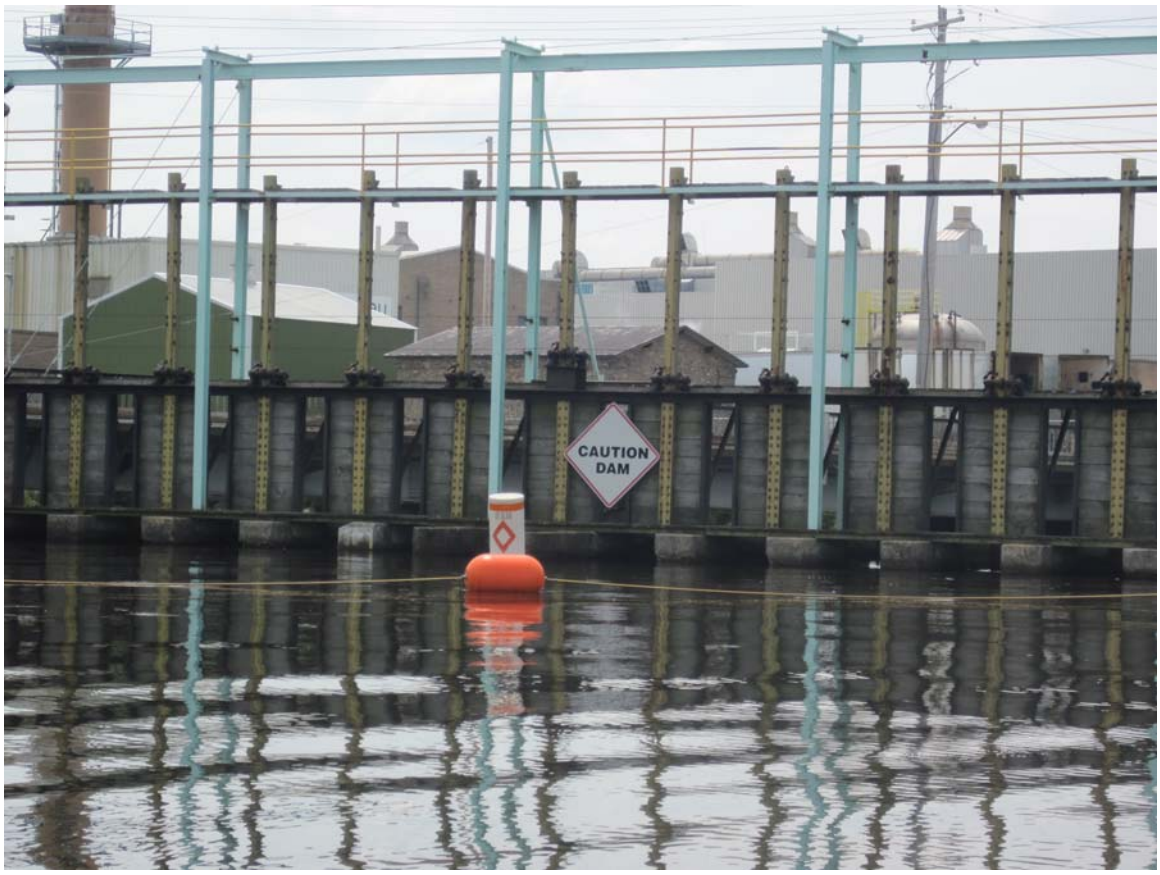
2011
INVASIVE SPECIES REPORT
FOR THE
RHINELANDER HYDROELECTRIC PROJECT
ONEIDA COUNTY, WISCONSIN
FERC PROJECT NO. 2161



Submitted By
Wausau Paper Mills, LLC

December 2011
Prepared By
Ashley McLaughlin
Wausau Paper Mills, LLC

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1.0 Summary

From June 24 through August 12, a collaboration of people from the Wisconsin Department of Natural Resources (DNR), Wausau Paper Corporation, University of Wisconsin Center for Limnology (CFL) - Trout Lake, and Oneida County Land and Water Conservation Department (LWCD) conducted a point intercept aquatic plant survey on each of the five waterbodies that make up the Rhinelander Flowage (Boom Lake, Bass Lake, Thunder Lake, Lake Creek, and the Rhinelander Flowage) in order to inventory the aquatic plant community and look for aquatic invasive species such as Eurasian water milfoil (EWM) and curly-leaf pondweed (CLP). In addition, meander surveys were completed where Curly-Leaf Pondweed was found or suspected, and to look for purple loosestrife (PL) along the rest of the flowage. Crews also conducted spiny waterflea and zebra muscle veliger sampling.

During the point intercept aquatic plant surveys, a two-headed rake on a fifteen foot pole was used to sample plants from pre-established gps points within each waterbody. Data were collected from 178 points in Boom Lake, 87 points in Bass Lake, 99 points in Thunder Lake, 98 points in Lake Creek, and 586 points in the upstream portion of the Wisconsin River beginning in McNaughton. Seventeen percent of the 1267 total points located in the Rhinelander flowage due to depth, heavy plant growth impeding navigation, or stumps. The upstream portion of the Wisconsin River was substantially different from the four connecting lake bodies sampled and housed a large Wild Rice population.

Plant species were identified and rated by abundance at each point with a maximum depth of 14 feet for plant growth. Boom Lake contained 21 species, Bass Lake contained 14 species, Thunder Lake contained 13 species, Lake Creek contained 15 species, and the Wisconsin River contained 42 species.

Curly-leaf londweed (*Potamogeton crispus*) was a new discovery for the water system, during our point intercept survey. It was found in two areas of the flowage: one during our point intercept survey at point 380 of the upstream Rhinelander Flowage portion and another at an area an angler reported closer to Boom Lake. We later completed a gridline meander survey in both areas to locate and map curly-leaf pondweed colonies.

Eurasian Water Milfoil (*Myriophyllum spicatum*) was not found during our point intercept or meander surveys.

A shoreline meander survey was completed between August 3 and August 12 to search for purple loosestrife (*Lythrum salicaria*) which was found at 18 sites in 2011, compared to 17 sites in 2010. Ten sites were new discoveries and 16 previous sites had no purple loosestrife growth. Purple loosestrife was clipped at 10 sites and dug up at 2 sites. The removed plants were dried and burned. No beetle damage above the dam was observed; however, plants below the dam were severely damaged and live beetles were observed at site PL 034. The majority of purple loosestrife was found below the Davenport Street Bridge, with the largest collection behind the V.F.W (site PL 032). Purple loosestrife

informational packets were distributed to homeowners who had occurrences of purple loosestrife on their properties.

Yellow Iris, or YI (*Iris pseudacorus*) was also documented during the point intercept survey. It was found only above the dam with the majority located along the Hodag Park shoreline which belongs to the City of Rhinelander. Information about Yellow Iris was forwarded to the City Parks Department.

Spiny Waterfleas (*Bythotrephes longimanus*) and Zebra Mussels (*Dreissena polymorpha*) were also monitored for presence/absence on August 4 by towing nets through the water to collect specimens, which were then sent to the Wisconsin DNR- Plymouth Service Center for identification. All results were negative

2.0 Methods

The survey area encompassed the entire Rhinelander Flowage system, from just below the McNaughton Bridge to the Kemp Street Bridge and then into Pine Lake, ending in Lake Creek.

2.1 Point Intercept Survey used for Curly Leaf Pondweed, Eurasian Water Milfoil, and Yellow Iris

A team including Kyle McLaughlin-Wisconsin DNR, Hnue Yang-Wisconsin DNR, Sandy Wickman-Wisconsin DNR, Carol Warden-UW CFL, Nick Gianola-UW CFL, Courtney Kruger-UW CFL, Ashley McLaughlin-Wausau Paper, and Tim Plude-Oneida County LWCD conducted a point intercept aquatic plant survey on the five separate water bodies (Boom Lake, Bass Lake, Thunder Lake, Lake Creek, and Rhinelander Flowage) that make up the entire Rhinelander Flowage in Oneida County, WI on June 24 to July 13.

A point intercept sampling technique was used with a rake pole and a rake on a rope to sample aquatic plants at 1267 potential sites, located at predetermined GPS locations. At first, all points were sampled until a maximum depth of plant growth was determined. Following Wisconsin DNR protocol, (we used the formula: 1.7 x the measured secchi reading of 4.5 ft + 6 ft = 13.65 ft maximum depth for plant growth) we determined points deeper than 14 feet did not need to be sampled because conditions in the Rhinelander Flowage were not favorable for any plant growth below that depth. We sampled many points below 14 feet initially, to determine the cut-off of plant growth and realized we would no longer needed to use the rope rake, since the pole rake could reach depths of 15 feet and the rope rake was intended for deeper sampling points.

We divided into two boats with three people in each. One person was driving the boat and navigating to each point using a GPS, the second person was recording data and labeling plant specimens, and the last person, using the rake was rating the abundance of plants on the rake and identifying the plants after touching the rake to the bottom and twisting it three times. All points throughout the Rhinelander Flowage were spaced 80

meters apart. Using the rake, depth and bottom sediments (muck, sand, or rock) were determined. We also used a scale 0-3 to determine rake fullness (0 no plants, 1 some plants, 2 rake is about half full, 3 rake is full of plants) and we used a scale of 1-3 to record the abundance of each plant species at each point. We used visuals (plants observed within 6 feet of the boat but not collected on the rake) and boat surveys (plants identified along the shoreline and further than 6 feet from the boat) to collect more information about aquatic plants in the entire Rhinelander Flowage.

Yellow Iris sightings were recorded as boat surveys and visuals.

A plant specimen was taken for each species, which was later pressed, dried, and labeled and delivered to Dr. Robert Freckmann at the University of Wisconsin-Stevens Point for identification confirmation.

For a brief overview of plant diversity and its importance, see Appendix: Aquatic Plants of the Rhinelander Flowage. The complete data sheet is available electronically.

2.2 Meander Survey used for mapping Curly-Leaf Pondweed

A meander survey was used to locate CLP colonies. During this process, a gridline pattern was used to motor around the points that had already been sampled during the point intercept survey. This was done with one boat, and three people. One person was driving and two people looking over the front and sides of the boat, into the water to see CLP growing below the surface. Many floating pieces of CLP were found but only six sites in two areas of the flowage were located where it was rooted. A GPS was used to mark the sites where CLP was rooted. All CLP plants, rooted and floating, were removed and disposed of.

2.3 Shoreline Survey used for Purple Loosestrife

A shoreline survey was used to monitor for PL. During the shoreline survey, a team of two people in one boat was used. Ashley McLaughlin –Wausau Paper, Tim Plude-Oneida County LWCD, Courtney Kruger- UW CFL, and Kyle McLaughlin-Wisconsin DNR were all contributors to the survey. There was a driver, and a spotter. The spotter was responsible for counting the number of plants, looking for beetle damage, and clipping or pulling the plants if possible. The driver, using a GPS, navigated as close to shore as possible, took GPS points of new purple loosestrife locations, and recorded the number of plants. We used a motor boat above the dam, and a canoe below the dam. We placed the pulled and clipped PL in a black garbage bag to prevent spreading seeds and we later burned the removed plants.

The survey was completed among three days: one day for the above dam portion and two days for the below the dam portion. The area between Hobo Island and the Phillip Street bridge was surveyed by foot on the third day.

2.4 Spiny Waterflea Monitoring

Following Wisconsin DNR protocol, three sites were sampled for spiny waterfleas on August 4, 2011 by Ashley McLaughlin-Wausau Paper, Kyle McLaughlin- Wisconsin DNR, and Nick Giannola-UW CFL. We had a team of three people, one driver, one recorder, and one netter. Using a spiny waterflea net (0.5m opening, 254 micron mesh) with an attached cup at the bottom to catch specimens, we towed the net in an oblique pattern through the thermocline of the water column behind the boat for 100 meters at a low boat speed: about 1.8 mi/hr. The net was then pulled back into the boat and quickly submerged three more times to wash any specimens into the cup. The cup was disconnected from the net and the contents of the cup were swirled to release extra water. The remainder was then poured into a specimen bottle. The cup was rinsed with ethanol and the rinsed materials were captured in the specimen bottle. The bottle was labeled and put into a cooler with ice. The sequence was repeated at the other two sites and the same specimen bottle was used for all the collection points.

The samples were then sent to the Wisconsin DNR-Plymouth Service Center for identification following the shipping protocol for hazardous materials. Negative results were confirmed in late September.

2.5 Zebra Mussel Veliger Monitoring

Three points were sampled for zebra mussel veligers on August 5, 2011 by Ashley McLaughlin-Wausau Paper, Kyle McLaughlin- Wisconsin DNR, and Nick Giannola-UW CFL. We had a team of three people: one driver, one recorder, and one netter. We first took a secchi disc reading which was 4.5 feet, and determined the number of net tows which would need to be taken: one, one meter vertical tow at three different locations. We used a zebra mussel veliger net (0.5m opening, 64 micron mesh) with an attached cup at the bottom to catch specimens. The net was submerged one meter into the water and then pulled back out. The net was rinsed and the cup was disconnected. The contents of the cup were swirled to release extra water and the sample was poured into a specimen bottle. The cup was rinsed with ethanol and the rinsed materials were captured in the specimen bottle. The bottle was labeled and put into a cooler with ice. The sequence was repeated two more times at other locations.

The samples were then sent to the Wisconsin DNR -Plymouth Service Center for identification following shipping protocol for hazardous materials. Negative results were confirmed in late September.

See Appendix Monitoring for Spiny Water Fleas and Zebra Mussels for locations sampled.

3.0 Observations

3.1 Curly leaf pondweed

Curly-leaf pondweed was a new discovery in the Rhinelander Flowage. It was located in two areas. The first was near “First Landing,” off of a 90 degree bend in River Rd in Pine Lake Township. The second location was in a bay across from the Wausau Paper dam near Boom Lake.

A little background about the aquatic plant survey in 2011: in 2010, a Wisconsin DNR employee found a floating piece of CLP while he was fishing on Boom Lake. He presented the specimen to other Wisconsin DNR staff for identification confirmation. After confirmation, the Wisconsin DNR lakes team visited the Rhinelander Flowage and conducted a shoreline meander search for rooted CLP in the water body using a rake to pull plants from the bottom. They did not find any CLP so they decided to conduct a point intercept survey on the Rhinelander Flowage in 2011 to locate the CLP.

Maps and a results table are included in Appendix Curly-leaf Pondweed of this report.

3.1.A. Discovery at “First Landing”

The first discovery was during the point intercept survey on July 12, 2011 at point 380 of the Rhinelander Flowage (upstream portion) by our team when a piece of the plant was found on the pole rake (this point was then named CLP 1). After completing the point intercept survey and not locating anymore CLP, it was decided to use a gridline meander survey of the bay to thoroughly investigate the area and map CLP beds. The bay was revisited on July 17, August 3, and completed on August 4. Many floating fragments were found, but due to the stained water, it was difficult to see where CLP might be growing. However, four additional points were found with rooted plants in the bay and GPS points were taken. The largest colony was found at CLP 1.

We observed the CLP had little sign of die-back in early August since it was still flexible and vibrant green. The plant experts on our team suspected due to the cool, flowing water of the river system, it is possible that the CLP growing season is longer than in other area lakes. CLP that was found rooted was pulled. Floating fragments were also removed.

3.1.B. Discovery near Boom Lake

The second discovery came later in the field season, on August 8, 2011, when a fishing guide boated Ashley McLaughlin (Wausau Paper) to the new discovery site. The rooted plant that was found was at the end of its life and was black and crumbly. The plant was pulled.

The site was visited again on August 12, 2011 with a rake pole and our team for a more extensive search. A meander survey was completed in the area with no further CLP found; however, a GPS point was taken in order to monitor the area in the future.

3.2 Eurasian Water Milfoil

A point intercept survey for EWM was done simultaneously with the CLP survey. No EWM was found but there were many northern water milfoil plants present. The maximum depth sampled was 14 feet.

It should be noted that EWM has been discovered below the Rainbow Flowage Dam which flows into the Rhinelander Flowage.

3.3 Purple loosestrife

A shoreline meander survey for PL was completed on three different days. On August 3, the above dam portion was completed. On August 9, the below dam portion was done. And on August 12, a survey was completed on foot directly below the dam area. Eight previous locations still existed and ten new locations were found. Sixteen old locations did not have visible plants. Ten areas were clipped and two were pulled.

Before the first survey was completed in 2006 by another team, theWisconsin DNR reported that Galerucella beetles had been released on an island downstream of the dam, which explains the observed beetled damage during our survey and the living beetles found at site PL034. No herbicide use or further beetle release methods have been used since the annual surveys began in 2006.

Some PL collected during the shoreline survey below the dam on August 9, 2011.

3.3.A. Above Dam Locations

Seven out of nine above dam locations contained PL in 2011. Purple loosestrife was not found at PL025 and PL026. No new discoveries were found. Informational packets were tied to docks near plant locations. The packets included an identification brochure and a letter with Ashley McLaughlin's contact information for assistance removing plants. Owners of site PL014 were contacted and informed about the PL on their property. They plan to remove it if it comes back. Purple loosestrife was clipped at six sites during the survey and the flowers were placed in a black garbage bag and later burned. Purple loosestrife at site PL018 was pulled. There was no observed beetle damage above the dam.

3.3B. Below Dam Locations

There were 11 purple loosestrife locations found below the dam, of which, 10 were new discoveries and 13 historic locations were not present. Site PL019 was the only historic location with plants still present. Purple loosestrife sightings declined as surveyors moved upstream toward the dam.

The plants seemed very abundant. Beetle damage was found on most plants between the boat landing near Ripco Credit Union and the dam. Down stream of the boat landing, almost no damage was found. It should also be noted that live beetles were observed on plants directly behind the Wisconsin DNR during our survey. Plants with observed beetles or severe beetle damage were not pulled; instead the flower heads were clipped to maintain a food source for the beetles and encourage their return. Site PL027 had plants but due to the significant beetle damage, no flowers were present.

New site PL032, directly behind the V.F.W, was the largest population of PL observed. Growing among the cattails, the PL population consisted of over 100 plants and had no beetle damage. Some of the old canes appeared to have been cut in prior years. The majority of the PL plants in this area were over five feet tall and seemed to be growing very aggressively. The flower heads in this area were cut and removed.

Maps and a results table are included in Appendix Purple Loosestrife of this report.

Ashley McLaughlin, 5'3" standing among PL at Site PL032.

3.4 Yellow Iris

Yellow Iris was found along the shores of Boom Lake, Bass Lake, Thunder Lake and the upriver portion of the Rhinelander Flowage. No GPS points were taken but YI locations were recorded as boat survey results during our point intercept plant survey. The majority of YI was found in Hodag Park. The Parks Director has been forwarded YI information from the Wisconsin DNR website. In the future, a map of YI locations may be helpful to understand how quickly the species is spreading. Many native iris plants were also observed throughout the Rhinelander Flowage.

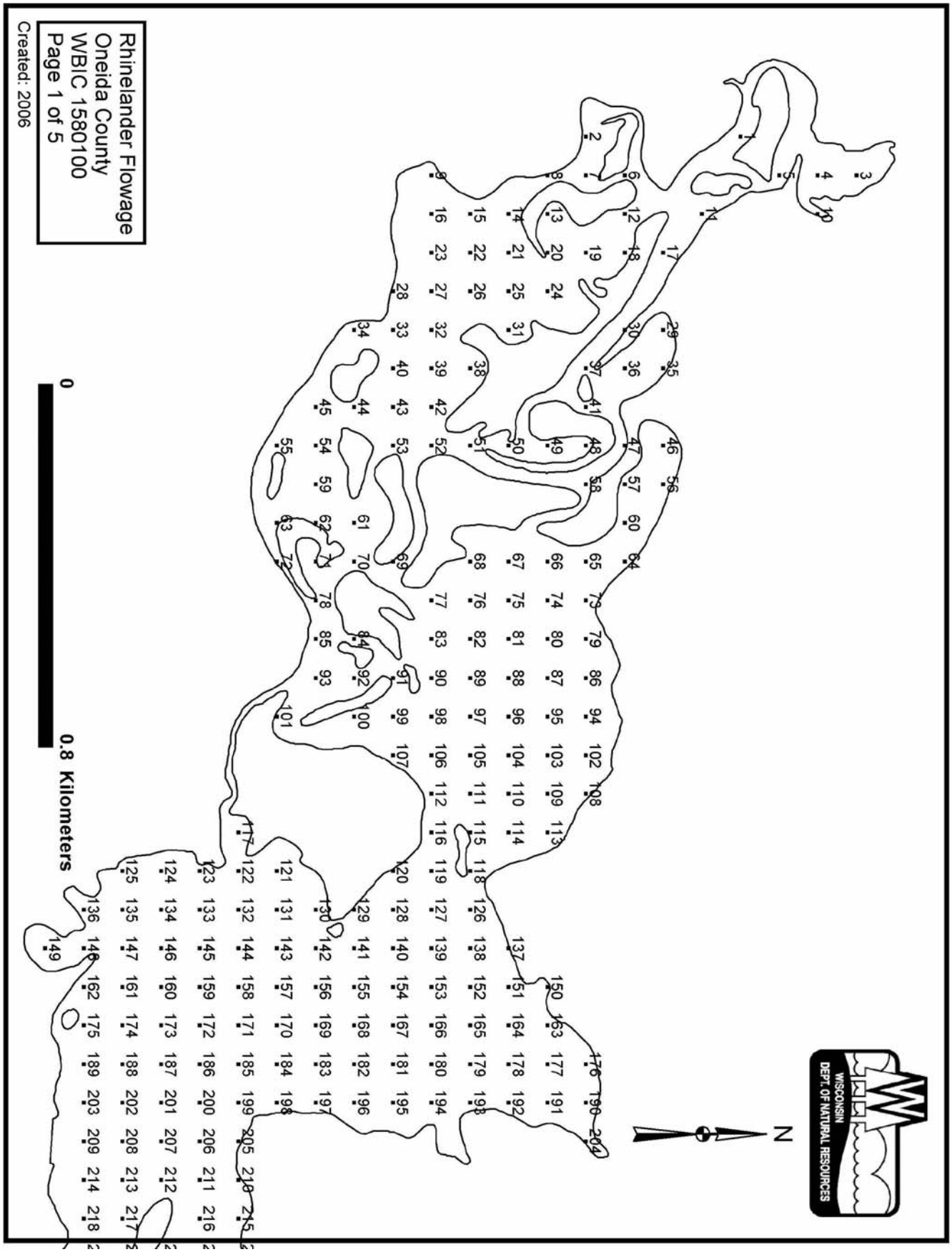
3.5 Spiny Waterfleas

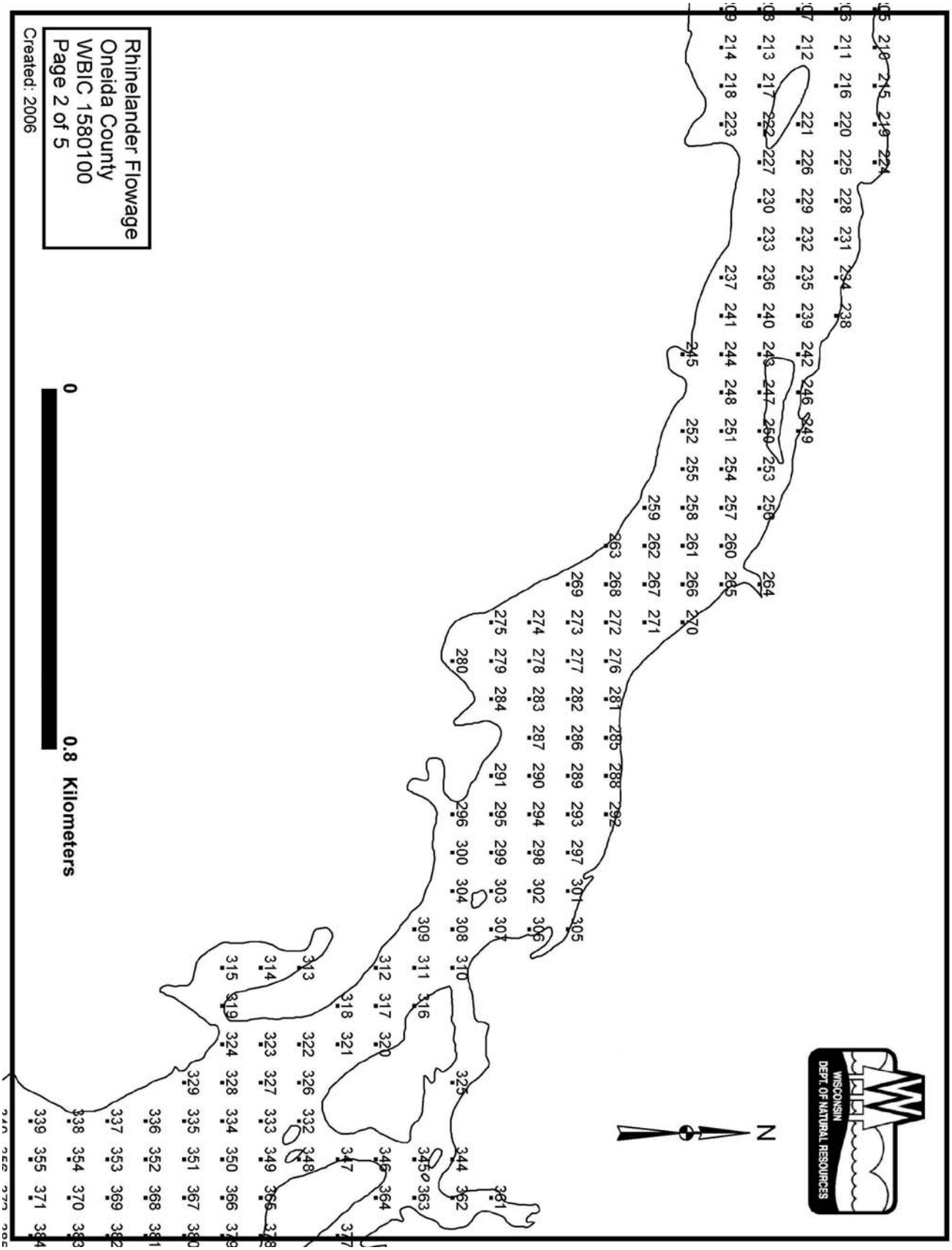
The collection bottle from our monitoring tows was sent to the Wisconsin DNR - Plymouth Service Center for review. The lab results were negative for spiny waterfleas.

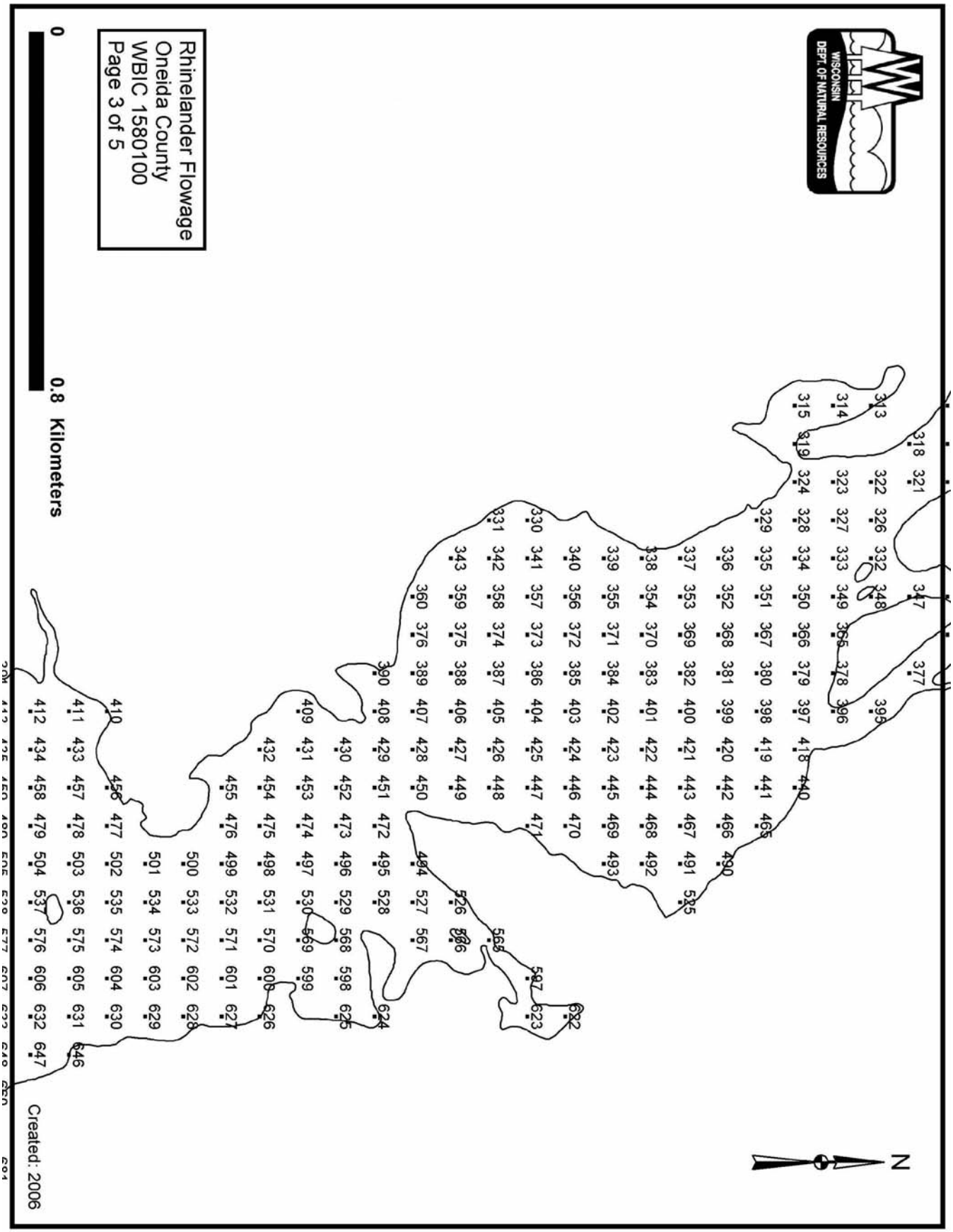
3.6 Zebra Mussel Veligers

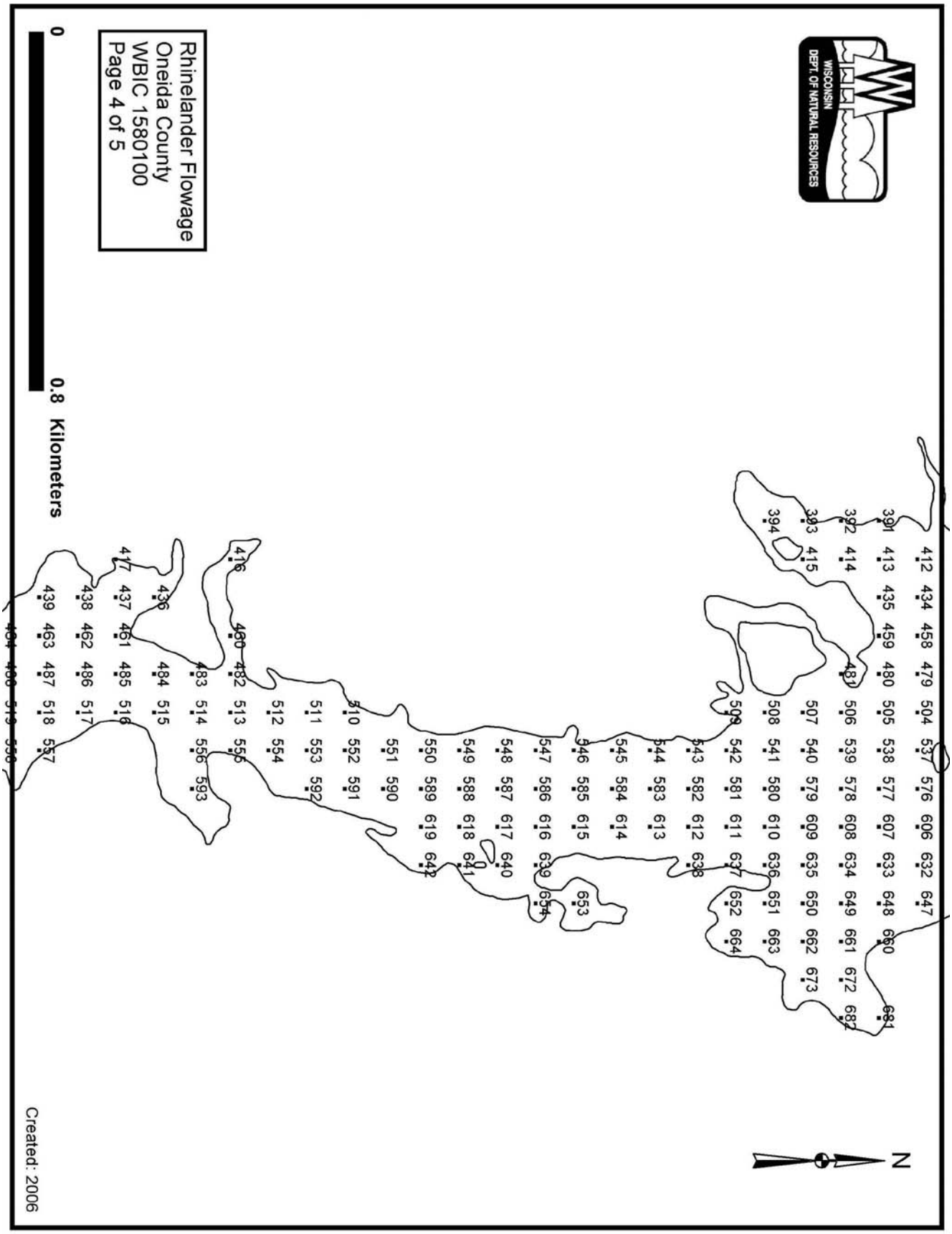
The collection bottle from our monitoring tows was sent to the Wisconsin DNR-Plymouth Service Center for review. The lab results were negative for zebra mussel veligers.

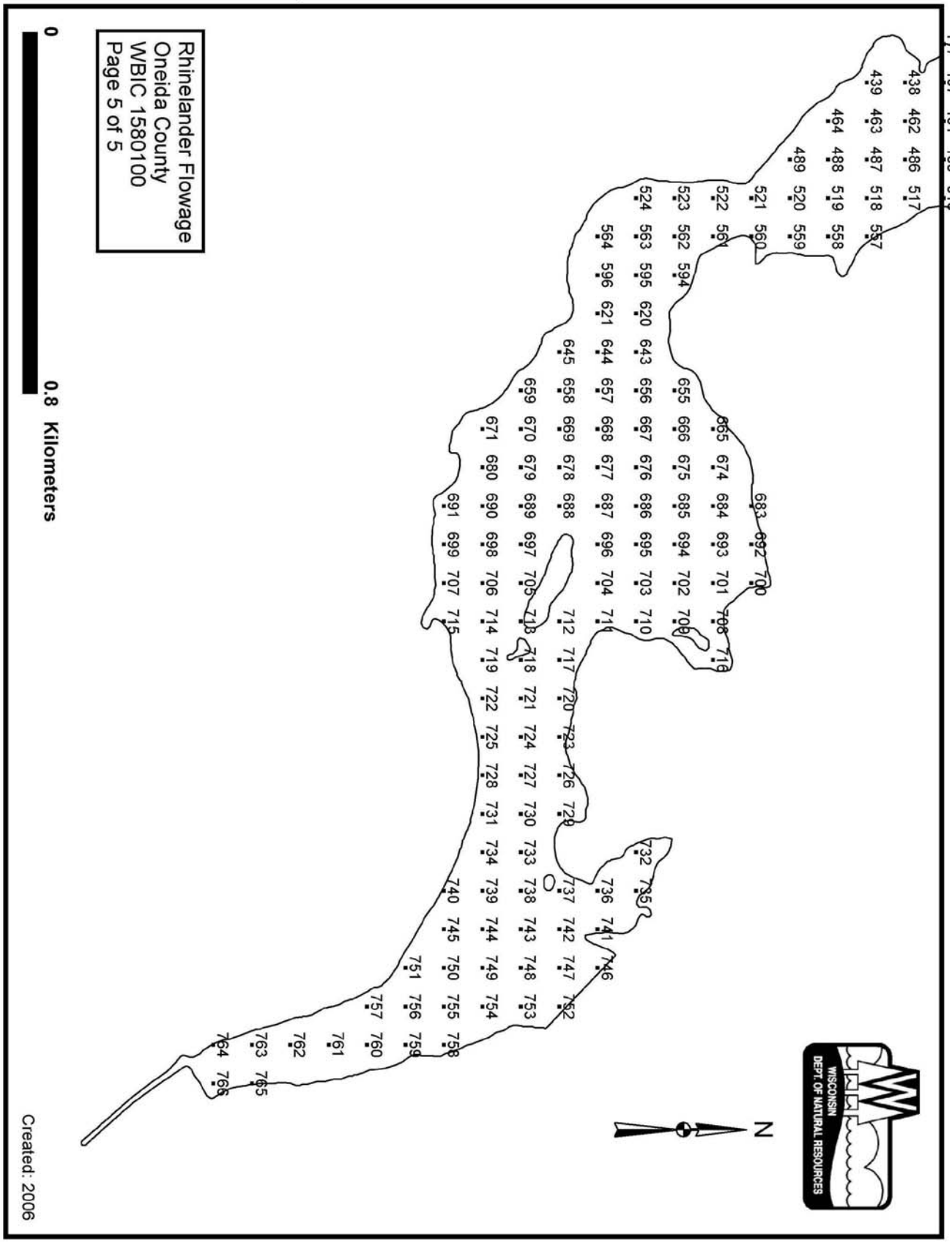
Appendix
Curly Leaf Pondweed

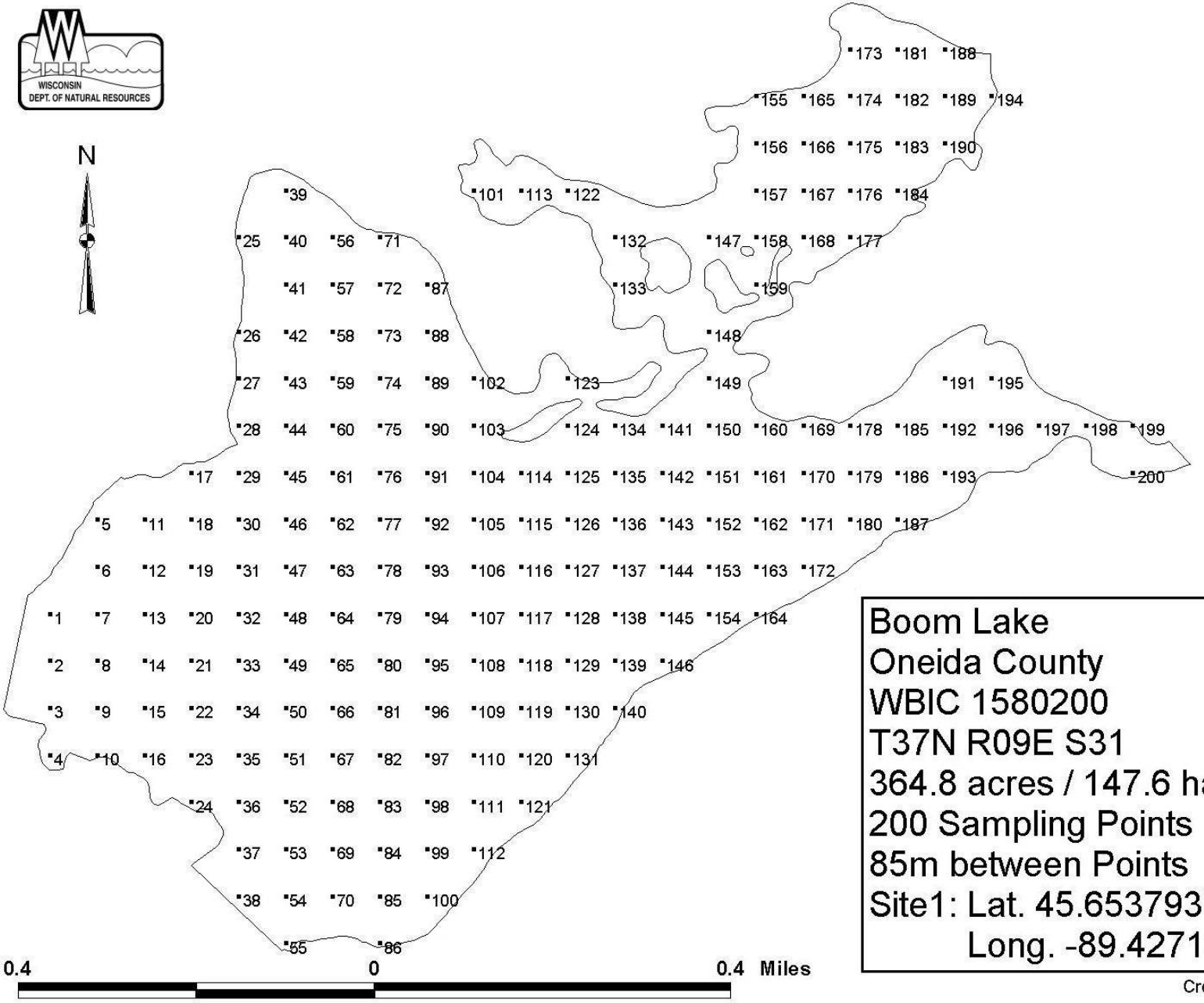


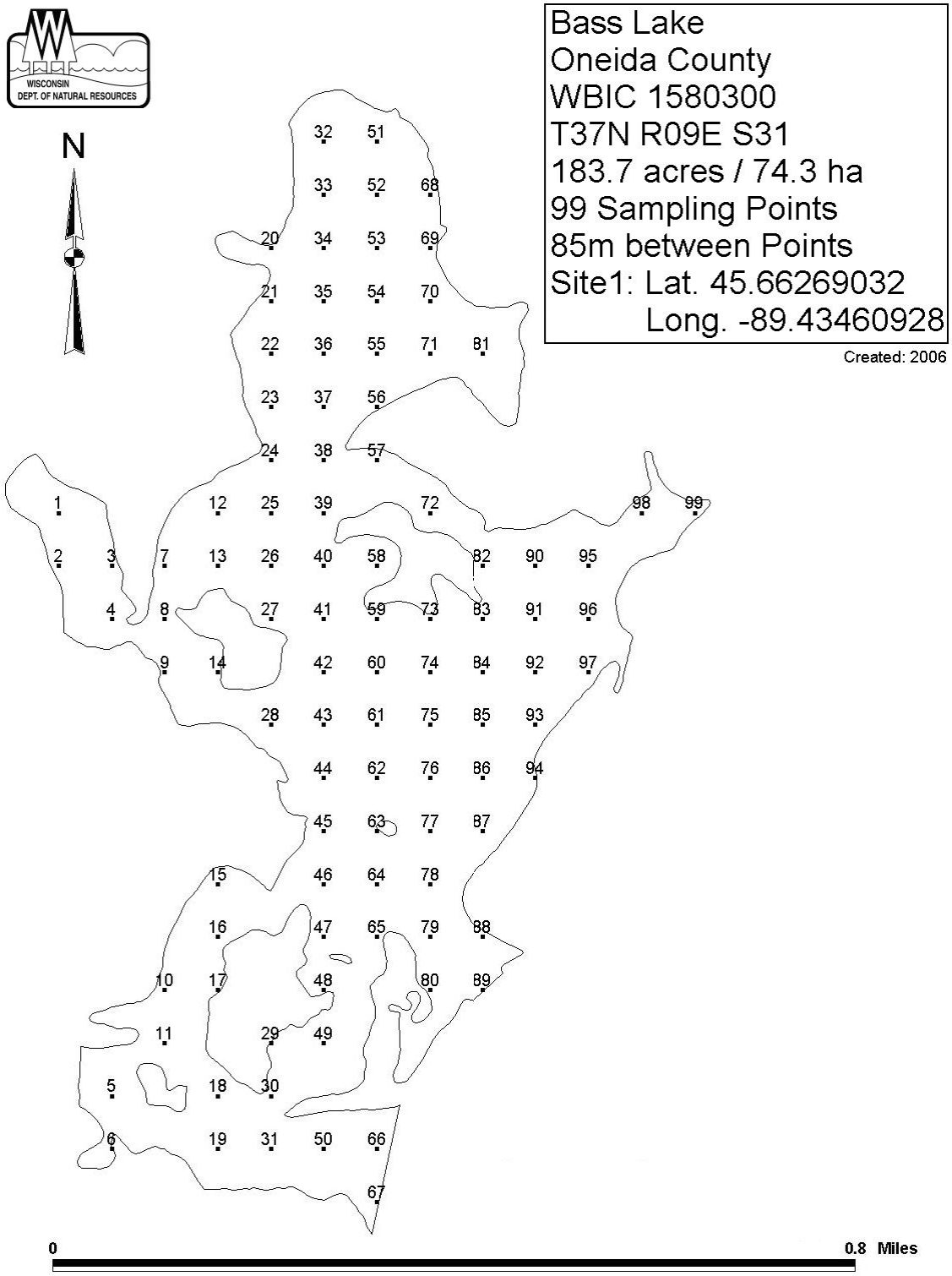


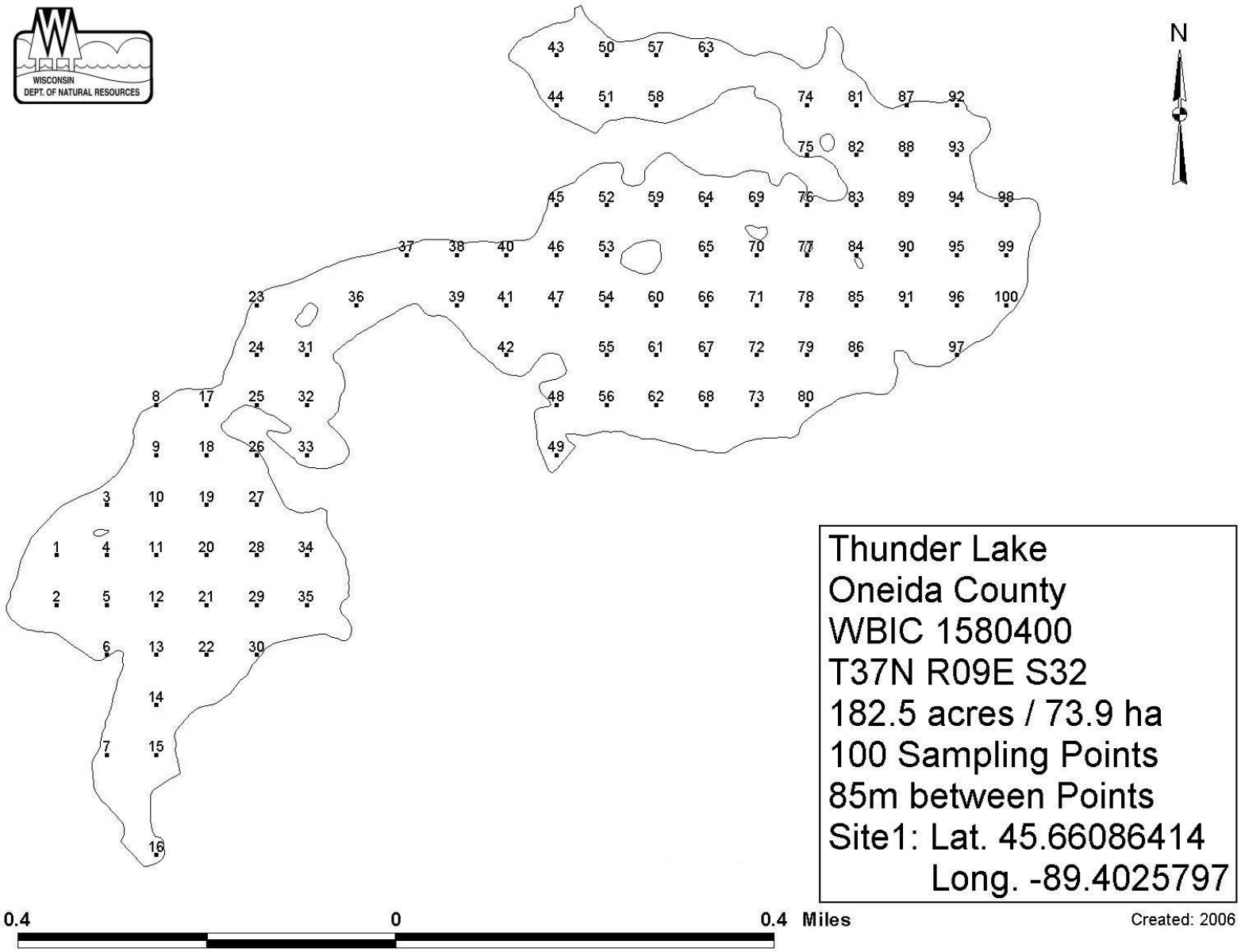








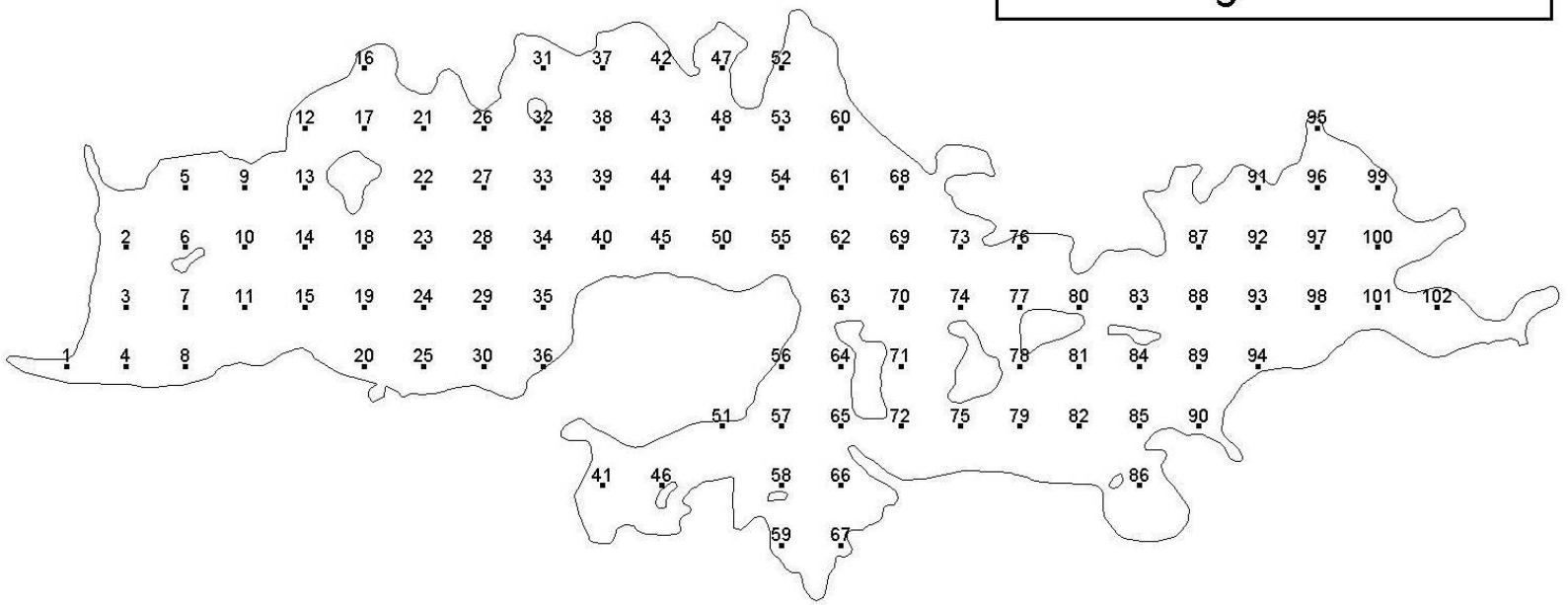




WISCONSIN
DEPT. OF NATURAL RESOURCES

Lake Creek
Oneida County
WBIC 1580500
T37N R09E S29
188.2 acres / 76.2 ha
102 Sampling Points
85m between Points
Site1: Lat. 45.66905349
Long. -89.41779539

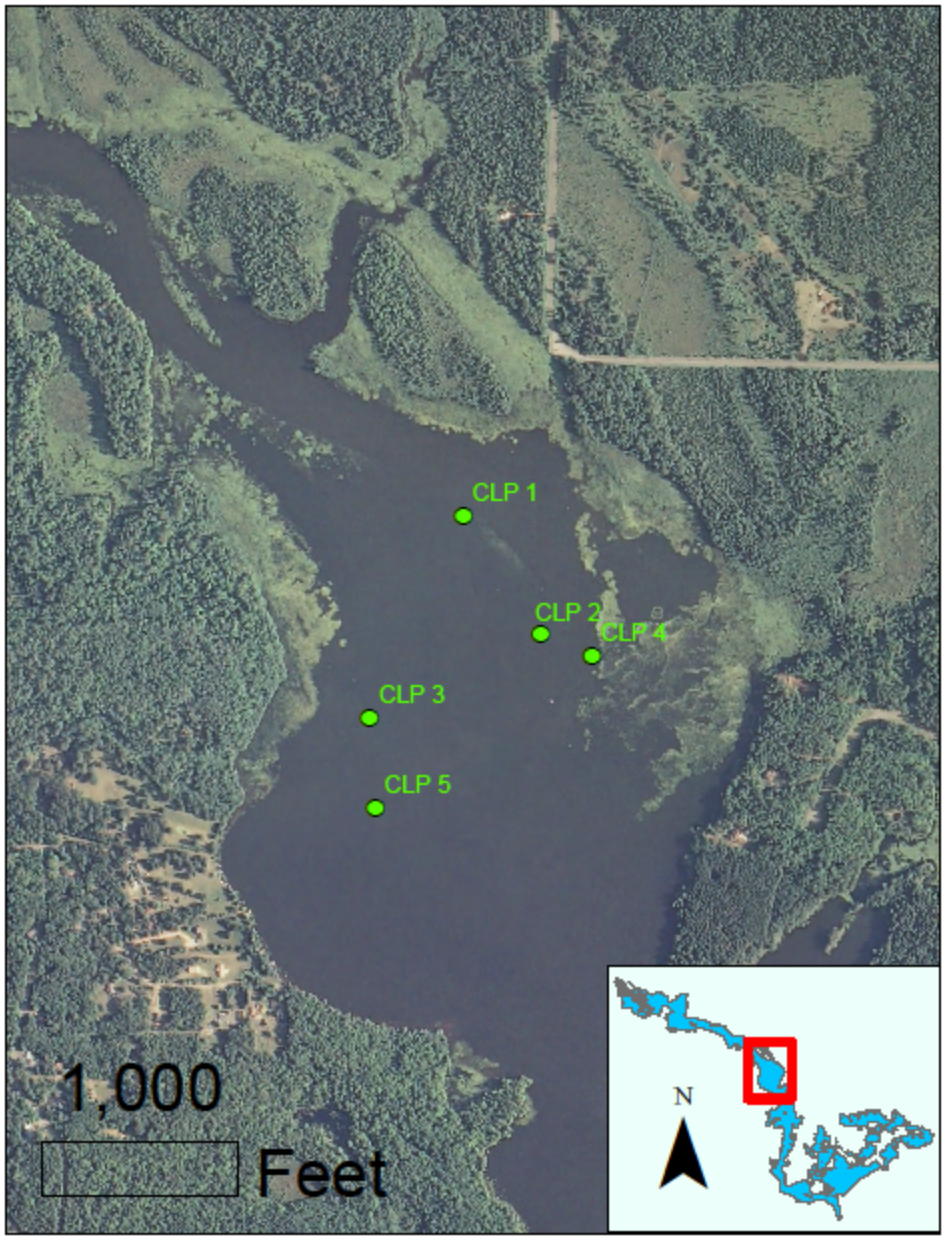
N



0.5 0 0.5 Miles

Created: 2006

Upper Rhinelander Flowage
Curly-leaf Pondweed Locations



Curly-Leaf Pondweed Locations
Observed During the 2011 Plant Survey

Lower Rhinelander Flowage
Curly-leaf Pondweed Locations

Curly-Leaf Pondweed Locations Observed During the 2011 Plant Survey

Rhinelander Flowage
Curly Leaf Pondweed Data Sheet

SITE NUMBER	COLONY OR SINGLE PLANT	PLANT HEALTH	COMMENTS
CLP 1	COLONY	HEALTHY	AREA NEEDS TO BE OBSERVED IN FOLLOWING YEARS FOR FURTHER PLANT GROWTH. THIS AREA IS THE MOST ROBUST CLP AREA LOCATED ON THE FLOWAGE.
CLP 2	SINGLE PLANT	HEALTHY	AREA NEEDS TO BE OBSERVED IN FOLLOWING YEARS FOR FURTHER PLANT GROWTH. PLANT WAS PULLED.
CLP 3	COLONY	HEALTHY	AREA NEEDS TO BE OBSERVED IN FOLLOWING YEARS FOR FURTHER PLANT GROWTH. AREA COULD HAVE HIDDEN PLANTS.
CLP 4	SINGLE PLANT	HEALTHY	AREA NEEDS TO BE OBSERVED IN FOLLOWING YEARS FOR FURTHER PLANT GROWTH. SINGLE PLANT, VERY SHORT.
CLP 5	SINGLE PLANT	HEALTHY	AREA NEEDS TO BE OBSERVED IN FOLLOWING YEARS FOR FURTHER PLANT GROWTH.
CLP6	SINGLE PLANT	NOT HEALTHY	AREA NEEDS TO BE OBSERVED IN FOLLOWING YEARS FOR FURTHER PLANT GROWTH. THE SINGLE PLANT WAS SITED DURING DIEBACK. LOCATION NEAR BOOM LAKE.

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum* , Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus* ,Curly-leaf pondweed	*Myriophyllum sibiricum* , Northern water-milfoil	
2	1	45.7109675	-89.51358717	5	S	P		1				
3	2	45.7079074	-89.51361371				NONNAVIGABLE (PLANTS)					
4	3	45.713258	-89.51247519				NONNAVIGABLE (PLANTS)					
5	4	45.7124929	-89.51248184				NONNAVIGABLE (PLANTS)					
6	5	45.7117279	-89.51248849	1	R	P		1				
7	6	45.7086677	-89.5125151	8	S	P						
8	7	45.7079027	-89.51252175	3	M	P		2				
9	8	45.7071377	-89.5125284	7	S	P						
10	9	45.7048425	-89.51254835	5	S	P						
11	10	45.7124883	-89.51138979				NONNAVIGABLE (PLANTS)					
12	11	45.7101932	-89.51140979				NONNAVIGABLE (PLANTS)					
13	12	45.7086631	-89.51142312	6	S	P						
14	13	45.707133	-89.51143645				NONNAVIGABLE (PLANTS)					
15	14	45.706368	-89.51144312				NONNAVIGABLE (PLANTS)					
16	15	45.7056029	-89.51144978	4	S	P						
17	16	45.7048379	-89.51145645				NONNAVIGABLE (PLANTS)					
18	17	45.7094234	-89.51032447	5	S	P						
19	18	45.7086584	-89.51033115				NONNAVIGABLE (PLANTS)					
20	19	45.7078934	-89.51033783				NONNAVIGABLE (PLANTS)					
21	20	45.7071283	-89.51034451				NONNAVIGABLE (PLANTS)					
22	21	45.7063633	-89.51035119				NONNAVIGABLE (PLANTS)					
23	22	45.7055982	-89.51035787				NONNAVIGABLE (PLANTS)					
24	23	45.7048332	-89.51036454				NONNAVIGABLE (PLANTS)					
25	24	45.7071236	-89.50925256				NONNAVIGABLE (PLANTS)					
26	25	45.7063586	-89.50925926				NONNAVIGABLE (PLANTS)					
27	26	45.7055936	-89.50926595				NONNAVIGABLE (PLANTS)					
28	27	45.7048285	-89.50927264				NONNAVIGABLE (PLANTS)					
29	28	45.7040635	-89.50927934	2	M	P		1				
30	29	45.7094141	-89.50814049				NONNAVIGABLE (PLANTS)					
31	30	45.708649	-89.5081472	4	S	P		1				

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum* , Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus* ,Curly-leaf pondweed	*Myriophyllum sibiricum* , Northern water-milfoil	
32	31	45.7063539	-89.50816732				NONNAVIGABLE (PLANTS)					
33	32	45.7048238	-89.50818074	2	M	P		2				
34	33	45.7040588	-89.50818745	5	M	P		3				
35	34	45.7032937	-89.50819416				NONNAVIGABLE (PLANTS)					
36	35	45.7094094	-89.5070485				NONNAVIGABLE (PLANTS)					
37	36	45.7086443	-89.50705522				NONNAVIGABLE (PLANTS)					
38	37	45.7078793	-89.50706195	3	S	P		1				
39	38	45.7055842	-89.50708212	2	M	P		3				
40	39	45.7048191	-89.50708884	2	M	P		1				
41	40	45.7040541	-89.50709557	7	S	P						
42	41	45.7078746	-89.50596999				NONNAVIGABLE (PLANTS)					
43	42	45.7048144	-89.50599694	3	M	P		2				
44	43	45.7040494	-89.50600368	3	S	P		2				
45	44	45.7032843	-89.50601042				NONNAVIGABLE (PLANTS)					
46	45	45.7025193	-89.50601716				NONNAVIGABLE (PLANTS)					
47	46	45.7093999	-89.50486452				NONNAVIGABLE (PLANTS)					
48	47	45.7086349	-89.50487127				NONNAVIGABLE (PLANTS)					
49	48	45.7078698	-89.50487803				NONNAVIGABLE (PLANTS)					
50	49	45.7071048	-89.50488478				NONNAVIGABLE (PLANTS)					
51	50	45.7063397	-89.50489153	3	S	P		1				
52	51	45.7055747	-89.50489829	3	S	P		2				
53	52	45.7048097	-89.50490504	3	S	P		2				
54	53	45.7040446	-89.50491179	4	S	P		2				
55	54	45.7025145	-89.5049253				NONNAVIGABLE (PLANTS)					
56	55	45.7017495	-89.50493205				NONNAVIGABLE (PLANTS)					
57	56	45.7093952	-89.50377253				NONNAVIGABLE (PLANTS)					
58	57	45.7086301	-89.5037793				NONNAVIGABLE (PLANTS)					
59	58	45.7078651	-89.50378607				NONNAVIGABLE (PLANTS)					
60	59	45.7025098	-89.50383345				NONNAVIGABLE (PLANTS)					
61	60	45.7086254	-89.50268732				NONNAVIGABLE (PLANTS)					

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum* , Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus* ,Curly-leaf pondweed	*Myriophyllum sibiricum* , Northern water-milfoil	
62	61	45.7032701	-89.50273481				NONNAVIGABLE (PLANTS)					
63	62	45.7025051	-89.50274159				NONNAVIGABLE (PLANTS)					
64	63	45.70174	-89.50274837	2	M	P		2				
65	64	45.7086206	-89.50159535				NONNAVIGABLE (PLANTS)					
66	65	45.7078556	-89.50160215				NONNAVIGABLE (PLANTS)					
67	66	45.7070905	-89.50160895				NONNAVIGABLE (PLANTS)					
68	67	45.7063255	-89.50161575				NONNAVIGABLE (PLANTS)					
69	68	45.7055605	-89.50162254				NONNAVIGABLE (PLANTS)					
70	69	45.7040304	-89.50163614	2	M	P		1				
71	70	45.7032653	-89.50164294	6	M	P		1				
72	71	45.7025003	-89.50164974	2	M	P		3				
73	72	45.7017353	-89.50165653	6	S	P						
74	73	45.7078508	-89.50051019				NONNAVIGABLE (PLANTS)					
75	74	45.7070858	-89.500517				NONNAVIGABLE (PLANTS)					
76	75	45.7063207	-89.50052382				NONNAVIGABLE (PLANTS)					
77	76	45.7055557	-89.50053063	2	M	P		3			2	
78	77	45.7047907	-89.50053744				NONNAVIGABLE (PLANTS)					
79	78	45.7024955	-89.50055788	2	M	P		2				
80	79	45.707846	-89.49941823				NONNAVIGABLE (PLANTS)					
81	80	45.707081	-89.49942506				NONNAVIGABLE (PLANTS)					
82	81	45.706316	-89.49943189	3	M	P		3				
83	82	45.7055509	-89.49943872	3	M	P		2				
84	83	45.7047859	-89.49944554				NONNAVIGABLE (PLANTS)					
85	84	45.7032558	-89.4994592	5	S	P		1				
86	85	45.7024908	-89.49946603	3.5	M	P		2				
87	86	45.7078412	-89.49832627				NONNAVIGABLE (PLANTS)					
88	87	45.7070762	-89.49833312				NONNAVIGABLE (PLANTS)					
89	88	45.7063112	-89.49833996	2.5	M	P		1				
90	89	45.7055461	-89.4983468	2	M	P		2				
91	90	45.7047811	-89.49835365				NONNAVIGABLE (PLANTS)					

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum* , Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus* ,Curly-leaf pondweed	*Myriophyllum sibiricum* , Northern water-milfoil	
92	91	45.704016	-89.49836049				NONNAVIGABLE (PLANTS)					
93	92	45.703251	-89.49836733				NONNAVIGABLE (PLANTS)					
94	93	45.702486	-89.49837417	2	M	P		3				
95	94	45.7078364	-89.49723432				NONNAVIGABLE (PLANTS)					
96	95	45.7070714	-89.49724117				NONNAVIGABLE (PLANTS)					
97	96	45.7063064	-89.49724803				NONNAVIGABLE (PLANTS)					
98	97	45.7055413	-89.49725489				NONNAVIGABLE (PLANTS)					
99	98	45.7047763	-89.49726175	3	S	P		1				
100	99	45.7040113	-89.49726861	5	M	P		2				
101	100	45.7032462	-89.49727546	2	M	P		3			V	
102	101	45.7017161	-89.49728918	5.5	S	P						
103	102	45.7078316	-89.49614236				NONNAVIGABLE (PLANTS)					
104	103	45.7070666	-89.49614923				NONNAVIGABLE (PLANTS)					
105	104	45.7063016	-89.4961561				NONNAVIGABLE (PLANTS)					
106	105	45.7055365	-89.49616298				NONNAVIGABLE (PLANTS)					
107	106	45.7047715	-89.49616985	1.5	M	P		2				
108	107	45.7040064	-89.49617672	2	M	P		1				
109	108	45.7078268	-89.4950504				NONNAVIGABLE (PLANTS)					
110	109	45.7070618	-89.49505729				NONNAVIGABLE (PLANTS)					
111	110	45.7062967	-89.49506418	3	M	P		3				
112	111	45.7055317	-89.49507107	7	S	P						
113	112	45.7047667	-89.49507795	5	M	P		2				
114	113	45.7070569	-89.49396535	2.5	M	P		2				
115	114	45.7062919	-89.49397225	2.5	M	P		3			2	
116	115	45.7055269	-89.49397915	8	M	P		2				
117	116	45.7047618	-89.49398606	3.5	S	P		1				
118	117	45.7009366	-89.49402056				NONNAVIGABLE (PLANTS)					
119	118	45.705522	-89.49288724	5	S	P						
120	119	45.704757	-89.49289416	3	M	P		2				
121	120	45.7039919	-89.49290108	1	S	P		1				

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum* , Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus* Curly-leaf pondweed	*Myriophyllum sibiricum* , Northern water-milfoil	
122	121	45.7016968	-89.49292182				NONNAVIGABLE (PLANTS)					
123	122	45.7009318	-89.49292874				NONNAVIGABLE (PLANTS)					
124	123	45.7001668	-89.49293566				NONNAVIGABLE (PLANTS)					
125	124	45.6994017	-89.49294257				NONNAVIGABLE (PLANTS)					
126	125	45.6986367	-89.49294949				NONNAVIGABLE (PLANTS)					
127	126	45.7055172	-89.49179533				NONNAVIGABLE (PLANTS)					
128	127	45.7047521	-89.49180226	9	S	P						
129	128	45.7039871	-89.49180919				NONNAVIGABLE (PLANTS)					
130	129	45.7032221	-89.49181613	5	S	P		1				
131	130	45.702457	-89.49182306	2.5	M	P		3			V	
132	131	45.701692	-89.49182999	2.5	M	P		3			V	
133	132	45.7009269	-89.49183692	3	M	P		3				
134	133	45.7001619	-89.49184385	3	M	P		1				
135	134	45.6993969	-89.49185078	2.5	M	P		2				
136	135	45.6986318	-89.49185771				NONNAVIGABLE (PLANTS)					
137	136	45.6978668	-89.49186464	3	M	P		2				
138	137	45.7062774	-89.49069647				NONNAVIGABLE (PLANTS)					
139	138	45.7055123	-89.49070342				NONNAVIGABLE (PLANTS)					
140	139	45.7047473	-89.49071036				NONNAVIGABLE (PLANTS)					
141	140	45.7039822	-89.49071731				NONNAVIGABLE (PLANTS)					
142	141	45.7032172	-89.49072426	2	M	P		1				
143	142	45.7024522	-89.4907312				NONNAVIGABLE (PLANTS)					
144	143	45.7016871	-89.49073815	2	M	P		3				
145	144	45.7009221	-89.4907451	3	M	P		3			1	
146	145	45.700157	-89.49075204	3	M	P		3				
147	146	45.699392	-89.49075899	2.5	M	P		3				
148	147	45.698627	-89.49076593	3	M	P		3				
149	148	45.6978619	-89.49077288				NONNAVIGABLE (PLANTS)					
150	149	45.6970969	-89.49077982				NONNAVIGABLE (PLANTS)					
151	150	45.7070375	-89.48959758				NONNAVIGABLE (PLANTS)					

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed	*Myriophyllum sibiricum*, Northern water-milfoil	
152	151	45.7062725	-89.48960454				NONNAVIGABLE (PLANTS)					
153	152	45.7055074	-89.48961151				NONNAVIGABLE (PLANTS)					
154	153	45.7047424	-89.48961847				NONNAVIGABLE (PLANTS)					
155	154	45.7039774	-89.48962543	3.5	M	P		2				
156	155	45.7032123	-89.48963239	1.5	M	P		2				
157	156	45.7024473	-89.48963935				NONNAVIGABLE (PLANTS)					
158	157	45.7016822	-89.48964631				NONNAVIGABLE (PLANTS)					
159	158	45.7009172	-89.48965327	3	M	P		1				
160	159	45.7001522	-89.48966023	3	M	P		3			V	
161	160	45.6993871	-89.48966719	3.5	M	P		3			2	
162	161	45.6986221	-89.48967415	3.5	M	P		1				
163	162	45.697857	-89.48968111				NONNAVIGABLE (PLANTS)					
164	163	45.7070326	-89.48850564				NONNAVIGABLE (PLANTS)					
165	164	45.7062676	-89.48851262				NONNAVIGABLE (PLANTS)					
166	165	45.7055026	-89.4885196				NONNAVIGABLE (PLANTS)					
167	166	45.7047375	-89.48852657				NONNAVIGABLE (PLANTS)					
168	167	45.7039725	-89.48853355	4	M	P		2				
169	168	45.7032074	-89.48854053	2.5	M	P		2				
170	169	45.7024424	-89.4885475				NONNAVIGABLE (PLANTS)					
171	170	45.7016774	-89.48855448				NONNAVIGABLE (PLANTS)					
172	171	45.7009123	-89.48856145	2	M	P		2				
173	172	45.7001473	-89.48856843	6	S	P		1				
174	173	45.6993822	-89.4885754	3	M	P		2				
175	174	45.6986172	-89.48858238	3	M	P		3				
176	175	45.6978522	-89.48858935				NONNAVIGABLE (PLANTS)					
177	176	45.7077928	-89.48740671				NONNAVIGABLE (PLANTS)					
178	177	45.7070277	-89.4874137	2	M	P		3				
179	178	45.7062627	-89.48742069				NONNAVIGABLE (PLANTS)					
180	179	45.7054977	-89.48742769	2.5	M	P		2				
181	180	45.7047326	-89.48743468	4	M	P		2				

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed	*Myriophyllum sibiricum*, Northern water-milfoil	
182	181	45.7039676	-89.48744167	4	M	P		3				
183	182	45.7032025	-89.48744866	3	M	P		2			V	
184	183	45.7024375	-89.48745565				NONNAVIGABLE (PLANTS)					
185	184	45.7016725	-89.48746264	4	M	P		1				
186	185	45.7009074	-89.48746963	4	M	P		1				
187	186	45.7001424	-89.48747662	4.5	M	P		1				
188	187	45.6993774	-89.48748361	8	M	P						
189	188	45.6986123	-89.4874906	4	M	P		1				
190	189	45.6978473	-89.48749759				NONNAVIGABLE (PLANTS)					
191	190	45.7077879	-89.48631475				NONNAVIGABLE (PLANTS)					
192	191	45.7070228	-89.48632176	2.5	M	P		2			1	
193	192	45.7062578	-89.48632877	3	M	P		1				
194	193	45.7054928	-89.48633577	3.5	M	P						
195	194	45.7047277	-89.48634278	5	M	P						
196	195	45.7039627	-89.48634979	10	M	P						
197	196	45.7031976	-89.48635679	2	M	P		3			1	
198	197	45.7024326	-89.4863638	2.5	M	P		3			1	
199	198	45.7016676	-89.48637081	3.5	M	P		1				
200	199	45.7009025	-89.48637781	3.5	M	P		1				
201	200	45.7001375	-89.48638482	2	M	P		1				
202	201	45.6993724	-89.48639182				NONNAVIGABLE (PLANTS)					
203	202	45.6986074	-89.48639883	7.5	S	P						
204	203	45.6978424	-89.48640583	3	M	P		1			V	
205	204	45.707783	-89.4852228	1.5	M	P		1				
206	205	45.7008976	-89.48528599				NONNAVIGABLE (PLANTS)					
207	206	45.7001326	-89.48529301	4	M	P		1				
208	207	45.6993675	-89.48530003	4	M	P		1				
209	208	45.6986025	-89.48530705	2	M	P		1				
210	209	45.6978375	-89.48531407	3	M	P						
211	210	45.7008927	-89.48419417	3	M	P						

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum* , Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus* ,Curly-leaf pondweed	*Myriophyllum sibiricum* , Northern water-milfoil	
212	211	45.7001277	-89.4842012	10	M	P						
213	212	45.6993626	-89.48420824	5	M	P						
214	213	45.6985976	-89.48421527	2	S	P		1				
215	214	45.6978325	-89.48422231	3	M	P		1			1	
216	215	45.7008878	-89.48310235	7	R	P						
217	216	45.7001227	-89.4831094	2	S	P		3				
218	217	45.6985926	-89.4831235	2.5	M	P		1			1	
219	218	45.6978276	-89.48313055				NONNAVIGABLE (PLANTS)					
220	219	45.7008828	-89.48201053				NONNAVIGABLE (PLANTS)					
221	220	45.7001178	-89.48201759				NONNAVIGABLE (PLANTS)					
222	221	45.6993527	-89.48202466	3	M	P		1				
223	222	45.6985877	-89.48203172				NONNAVIGABLE (PLANTS)					
224	223	45.6978227	-89.48203879	3	M	P		2				
225	224	45.7008779	-89.48091871				NONNAVIGABLE (PLANTS)					
226	225	45.7001128	-89.48092579	7	M	P						
227	226	45.6993478	-89.48093287	4	M	P		2				
228	227	45.6985827	-89.48093995	3	M	P		2				
229	228	45.7001079	-89.47983399	3	M	P		2				
230	229	45.6993428	-89.47984108	4	M	P		2				
231	230	45.6985778	-89.47984817	4	M	P		2				
232	231	45.7001029	-89.47874218				NONNAVIGABLE (PLANTS)					
233	232	45.6993378	-89.47874929	4	M	P						
234	233	45.6985728	-89.4787564	5	M	P		1				
235	234	45.7000979	-89.47765038				NONNAVIGABLE (PLANTS)					
236	235	45.6993328	-89.4776575				NONNAVIGABLE (PLANTS)					
237	236	45.6985678	-89.47766462				NONNAVIGABLE (PLANTS)					
238	237	45.6978028	-89.47767175	9	S	P						
239	238	45.7000929	-89.47655857				NONNAVIGABLE (PLANTS)					
240	239	45.6993279	-89.47656571				NONNAVIGABLE (PLANTS)					
241	240	45.6985628	-89.47657285				NONNAVIGABLE (PLANTS)					

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed	*Myriophyllum sibiricum*, Northern water-milfoil	
242	241	45.6977978	-89.47657999				NONNAVIGABLE (PLANTS)					
243	242	45.6993228	-89.47547392				NONNAVIGABLE (PLANTS)					
244	243	45.6985578	-89.47548108				NONNAVIGABLE (PLANTS)					
245	244	45.6977928	-89.47548823	6	M	P		1				
246	245	45.6970277	-89.47549538	2	M	P		2				
247	246	45.6993178	-89.47438214				NONNAVIGABLE (PLANTS)					
248	247	45.6985528	-89.4743893				NONNAVIGABLE (PLANTS)					
249	248	45.6977878	-89.47439647	5	M	P		1				
250	249	45.6993128	-89.47329035				NONNAVIGABLE (PLANTS)					
251	250	45.6985478	-89.47329753				NONNAVIGABLE (PLANTS)					
252	251	45.6977827	-89.47330471	5	M	P		2				
253	252	45.6970177	-89.4733119				NONNAVIGABLE (PLANTS)					
254	253	45.6985427	-89.47220576				NONNAVIGABLE (PLANTS)					
255	254	45.6977777	-89.47221296	7	M	P						
256	255	45.6970126	-89.47222015	3	M	P		3				
257	256	45.6985377	-89.47111399				NONNAVIGABLE (PLANTS)					
258	257	45.6977726	-89.4711212	8	R	P						
259	258	45.6970076	-89.47112841	3	M	P		3				
260	259	45.6962426	-89.47113562	4	M	P		2				
261	260	45.6977676	-89.47002944	7	M	P						
262	261	45.6970025	-89.47003667				NONNAVIGABLE (PLANTS)					
263	262	45.6962375	-89.4700439				NONNAVIGABLE (PLANTS)					
264	263	45.6954725	-89.47005112	2	M	P		1				
265	264	45.6985275	-89.46893044				NONNAVIGABLE (PLANTS)					
266	265	45.6977625	-89.46893769	4	R	P		1				
267	266	45.6969975	-89.46894493	8	R	P						
268	267	45.6962324	-89.46895217	7	M	P						
269	268	45.6954674	-89.46895941	7	M	P						
270	269	45.6947024	-89.46896665	8	M	P						
271	270	45.6969924	-89.46785319				NONNAVIGABLE (PLANTS)					

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum* , Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus* ,Curly-leaf pondweed	*Myriophyllum sibiricum* , Northern water-milfoil	
272	271	45.6962274	-89.46786044				NONNAVIGABLE (PLANTS)					
273	272	45.6954623	-89.4678677				NONNAVIGABLE (PLANTS)					
274	273	45.6946973	-89.46787496				NONNAVIGABLE (PLANTS)					
275	274	45.6939322	-89.46788221				NONNAVIGABLE (PLANTS)					
276	275	45.6931672	-89.46788947	9	M	P						
277	276	45.6954572	-89.46677599				NONNAVIGABLE (PLANTS)					
278	277	45.6946922	-89.46678326				NONNAVIGABLE (PLANTS)					
279	278	45.6939272	-89.46679053				NONNAVIGABLE (PLANTS)					
280	279	45.6931621	-89.4667978				NONNAVIGABLE (PLANTS)					
281	280	45.6923971	-89.46680507	5	M	P		1				
282	281	45.6954521	-89.46568428				NONNAVIGABLE (PLANTS)					
283	282	45.6946871	-89.46569156				NONNAVIGABLE (PLANTS)					
284	283	45.6939221	-89.46569885				NONNAVIGABLE (PLANTS)					
285	284	45.693157	-89.46570613	12	M	P						
286	285	45.695447	-89.46459257				NONNAVIGABLE (PLANTS)					
287	286	45.694682	-89.46459987				NONNAVIGABLE (PLANTS)					
288	287	45.6939169	-89.46460717	9	M	P						
289	288	45.6954419	-89.46350085	5	M	P		1				
290	289	45.6946769	-89.46350817	8	M	P						
291	290	45.6939118	-89.46351549				NONNAVIGABLE (PLANTS)					
292	291	45.6931468	-89.4635228	2	M	P		3			V	
293	292	45.6954368	-89.46240914	3	M	P		2				
294	293	45.6946717	-89.46241647	6	M	P		1				
295	294	45.6939067	-89.4624238	4	M	P		1				
296	295	45.6931417	-89.46243113	3	M	P		1				
297	296	45.6923766	-89.46243846	3	M	P		3			1	
298	297	45.6946666	-89.46132478	10	M	P						
299	298	45.6939015	-89.46133212	4	M	P		1				
300	299	45.6931365	-89.46133947	5	M	P		1				
301	300	45.6923715	-89.46134681	5	M	P		1				

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum* , Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus* ,Curly-leaf pondweed	*Myriophyllum sibiricum* , Northern water-milfoil	
302	301	45.6946614	-89.46023308				NONNAVIGABLE (PLANTS)					
303	302	45.6938964	-89.46024044	1	M	P		1				
304	303	45.6931314	-89.4602478	4	M	P		1				
305	304	45.6923663	-89.46025516	13	R	P						
306	305	45.6946563	-89.45914139				NONNAVIGABLE (PLANTS)					
307	306	45.6938912	-89.45914876				NONNAVIGABLE (PLANTS)					
308	307	45.6931262	-89.45915614				NONNAVIGABLE (PLANTS)					
309	308	45.6923612	-89.45916351	3	M	P		1				
310	309	45.6915961	-89.45917089				NONNAVIGABLE (PLANTS)					
311	310	45.692356	-89.45807186				NONNAVIGABLE (PLANTS)					
312	311	45.6915909	-89.45807925	4	M	P		1				
313	312	45.6908259	-89.45808664	4	M	P		1				
314	313	45.6892958	-89.45810142				NONNAVIGABLE (PLANTS)					
315	314	45.6885308	-89.45810881				NONNAVIGABLE (PLANTS)					
316	315	45.6877658	-89.45811619				NONNAVIGABLE (PLANTS)					
317	316	45.6915858	-89.45698762				NONNAVIGABLE (PLANTS)					
318	317	45.6908207	-89.45699502	12	S	P						
319	318	45.6900557	-89.45700242	11	M	P						
320	319	45.6877606	-89.45702463				NONNAVIGABLE (PLANTS)					
321	320	45.6908155	-89.4559034	2	M	P		2				
322	321	45.6900505	-89.45591082	4	M	P		1				
323	322	45.6892855	-89.45591824	12	S	P						
324	323	45.6885204	-89.45592566	1	M	P						
325	324	45.6877554	-89.45593307				NONNAVIGABLE (PLANTS)					
326	325	45.6923404	-89.45479692				NONNAVIGABLE (PLANTS)					
327	326	45.6892803	-89.45482665	4	M	P		1				
328	327	45.6885152	-89.45483408	2	M	P		3				
329	328	45.6877502	-89.45484151	4	M	P		3				
330	329	45.6869851	-89.45484894				NONNAVIGABLE (PLANTS)					
331	330	45.6823949	-89.45489353	8	M	P						

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum* , Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus* Curly-leaf pondweed	*Myriophyllum sibiricum* , Northern water-milfoil	
332	331	45.6816299	-89.45490096	13	M	P						
333	332	45.689275	-89.45373506	6	M	P						
334	333	45.68851	-89.45374251	9	M	P						
335	334	45.687745	-89.45374995	2	M	P		3				
336	335	45.6869799	-89.4537574	4	M	P		3				
337	336	45.6862149	-89.45376485	2	M	P		1				
338	337	45.6854499	-89.45377229	2	M	P		1				
339	338	45.6846848	-89.45377974	3	M	P		1				
340	339	45.6839198	-89.45378718	4	M	P		1				
341	340	45.6831548	-89.45379463	10	M	P						
342	341	45.6823897	-89.45380207	4	M	P						
343	342	45.6816247	-89.45380952	6	M	P		1				
344	343	45.6808596	-89.45381696	8	M	P						
345	344	45.69233	-89.45261362				NONNAVIGABLE (PLANTS)					
346	345	45.6915649	-89.45262108				NONNAVIGABLE (PLANTS)					
347	346	45.6907999	-89.45262855				NONNAVIGABLE (PLANTS)					
348	347	45.6900349	-89.45263601				NONNAVIGABLE (PLANTS)					
349	348	45.6892698	-89.45264347				NONNAVIGABLE (PLANTS)					
350	349	45.6885048	-89.45265093	7	M	P						
351	350	45.6877397	-89.45265839	3	M	P		1				
352	351	45.6869747	-89.45266586	4	M	P		3				
353	352	45.6862097	-89.45267332	5	M	P		1				
354	353	45.6854446	-89.45268078	5	M	P						
355	354	45.6846796	-89.45268824	4	M	P		2				
356	355	45.6839146	-89.4526957	5	M	P		1				
357	356	45.6831495	-89.45270316	9	M	P						
358	357	45.6823845	-89.45271062	5	M	P		1				
359	358	45.6816195	-89.45271808	5	M	P		1				
360	359	45.6808544	-89.45272554	6	M	P						
361	360	45.6800894	-89.452733	11	M	P						

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum* , Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus* ,Curly-leaf pondweed	*Myriophyllum sibiricum* , Northern water-milfoil	
362	361	45.6930898	-89.45151449				NONNAVIGABLE (PLANTS)					
363	362	45.6923247	-89.45152197				NONNAVIGABLE (PLANTS)					
364	363	45.6915597	-89.45152945				NONNAVIGABLE (PLANTS)					
365	364	45.6907947	-89.45153693				NONNAVIGABLE (PLANTS)					
366	365	45.6884995	-89.45155936	2	M	P		1				
367	366	45.6877345	-89.45156684	8	M	P						
368	367	45.6869695	-89.45157431	4	M	P		3				
369	368	45.6862044	-89.45158179	5	M	P		1				
370	369	45.6854394	-89.45158926	5	M	P		1				
371	370	45.6846744	-89.45159674	6	M	P		1				
372	371	45.6839093	-89.45160421	6	M	P						
373	372	45.6831443	-89.45161169	7	M	P		1				
374	373	45.6823793	-89.45161916	5	M	P						
375	374	45.6816142	-89.45162664	5	M	P						
376	375	45.6808492	-89.45163411	6	M	P		1				
377	376	45.6800841	-89.45164159	11	M							
378	377	45.6900244	-89.4504528				NONNAVIGABLE (PLANTS)					
379	378	45.6884943	-89.45046779	3	M	P		3				
380	379	45.6877293	-89.45047528	9	M	P						
381	380	45.6869642	-89.45048277	3	M	P		2		1		
382	381	45.6861992	-89.45049026	5	M	P		1				
383	382	45.6854342	-89.45049775	6	M	P						
384	383	45.6846691	-89.45050524	6	M	P						
385	384	45.6839041	-89.45051273	8	M	P						
386	385	45.683139	-89.45052022	4	M	P		1				
387	386	45.682374	-89.45052771	5	M	P						
388	387	45.681609	-89.4505352	7	M	P						
389	388	45.6808439	-89.45054269	8	M	P						
390	389	45.6800789	-89.45055018	5	M	P		1				
391	390	45.6793139	-89.45055766	2	S	P		2				

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum* , Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus* Curly-leaf pondweed	*Myriophyllum sibiricum* , Northern water-milfoil	
392	391	45.6716635	-89.45063253	3	M	P		1				
393	392	45.6708985	-89.45064001	5	M	P		3				
394	393	45.6701334	-89.4506475	4	M	P		3				
395	394	45.6693684	-89.45065498	4	M	P		2				
396	395	45.6892541	-89.44936871				NONNAVIGABLE (PLANTS)					
397	396	45.688489	-89.44937621	2	M	P		1			1	
398	397	45.687724	-89.44938372	3	M	P		1			1	
399	398	45.686959	-89.44939123	8	M	P						
400	399	45.6861939	-89.44939873	4	M	P		1				
401	400	45.6854289	-89.44940624	5	M	P		1				
402	401	45.6846639	-89.44941374	5	M	P						
403	402	45.6838988	-89.44942125	4	M	P						
404	403	45.6831338	-89.44942875	5	M	P						
405	404	45.6823688	-89.44943626	6	M	P						
406	405	45.6816037	-89.44944376	11	M	P						
407	406	45.6808387	-89.44945126	5	M	P		1				
408	407	45.6800736	-89.44945877	7	S	P						
409	408	45.6793086	-89.44946627	7	M	P						
410	409	45.6777785	-89.44948128	7	M	P						
411	410	45.6739533	-89.44951878	2	S	P		1				
412	411	45.6731883	-89.44952628	6	M	P						
413	412	45.6724233	-89.44953378	5	M	P		2				
414	413	45.6716582	-89.44954128	5	M	P		3				
415	414	45.6708932	-89.44954878	5	M	P		1				
416	415	45.6701282	-89.44955628				NONNAVIGABLE (PLANTS)					
417	416	45.6586526	-89.44966874	7	M	P						
418	417	45.6563575	-89.44969122	2	M	P		2			V	
419	418	45.6877187	-89.44829216	2	M	P		2				
420	419	45.6869537	-89.44829968	4	M	P		2				
421	420	45.6861887	-89.4483072	4	M	P		1				

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum* , Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus* ,Curly-leaf pondweed	*Myriophyllum sibiricum* , Northern water-milfoil	
422	421	45.6854236	-89.44831472	11	S	P						
423	422	45.6846586	-89.44832224	4		P		1				
424	423	45.6838936	-89.44832976	4	M	P		1				
425	424	45.6831285	-89.44833728	4	M	P		1			1	
426	425	45.6823635	-89.4483448	6	M	P		1				
427	426	45.6815985	-89.44835232	9	M	P						
428	427	45.6808334	-89.44835984	6	M	P						
429	428	45.6800684	-89.44836736	7	M	P						
430	429	45.6793033	-89.44837488	8	S	P						
431	430	45.6785383	-89.44838239	8	M	P						
432	431	45.6777733	-89.44838991	7	M	P		1				
433	432	45.6770082	-89.44839743	7	M	P						
434	433	45.673183	-89.44843501	7	M	P						
435	434	45.672418	-89.44844252	7	M	P						
436	435	45.671653	-89.44845004	5	M	P		1				
437	436	45.6571172	-89.44859276	4	M	P		1				
438	437	45.6563522	-89.44860027	3	M	P		2			1	
439	438	45.6555872	-89.44860778	4	M	P		2				
440	439	45.6548221	-89.44861529	5	M	P						
441	440	45.6877135	-89.4472006				NONNAVIGABLE (PLANTS)					
442	441	45.6869484	-89.44720814	2	M	P		2				
443	442	45.6861834	-89.44721568	3	M	P		1				
444	443	45.6854184	-89.44722321	3	M	P		2				
445	444	45.6846533	-89.44723075	3	M	P		2				
446	445	45.6838883	-89.44723828	3	M	P		2			1	
447	446	45.6831233	-89.44724582	3	M	P		2			1	
448	447	45.6823582	-89.44725335	6	M	P						
449	448	45.6815932	-89.44726088	9	M	P						
450	449	45.6808281	-89.44726842	6	M	P						
451	450	45.6800631	-89.44727595	13	M	P						

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum* , Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus* ,Curly-leaf pondweed	*Myriophyllum sibiricum* , Northern water-milfoil	
452	451	45.6792981	-89.44728348	5	M	P		2				
453	452	45.678533	-89.44729102	7	M	P						
454	453	45.677768	-89.44729855	7	M	P						
455	454	45.677003	-89.44730608	7	M	P						
456	455	45.6762379	-89.44731361	6	M	P						
457	456	45.6739428	-89.4473362	6	M	P		1				
458	457	45.6731778	-89.44734373	6	R	P		1				
459	458	45.6724127	-89.44735126	8	M	P						
460	459	45.6716477	-89.44735879	7	M	P						
461	460	45.658642	-89.44748675	7	M	P						
462	461	45.6563469	-89.44750933	13	M	P						
463	462	45.6555819	-89.44751685	12	M	P						
464	463	45.6548168	-89.44752437	12	M	P						
465	464	45.6540518	-89.4475319	13	M	P						
466	465	45.6869431	-89.4461166	2	M	P		2			1	
467	466	45.6861781	-89.44612415	3	M	P		2			1	
468	467	45.6854131	-89.4461317	3	M	P		2			1	
469	468	45.684648	-89.44613925	3	M	P		2				
470	469	45.683883	-89.4461468	4	M	P		2				
471	470	45.683118	-89.44615435	4	M	P		1				
472	471	45.6823529	-89.4461619									
473	472	45.6792928	-89.44619209	8	M	P						
474	473	45.6785277	-89.44619964	7	M	P						
475	474	45.6777627	-89.44620718	9	M	P						
476	475	45.6769977	-89.44621473	6	M	P		2				
477	476	45.6762326	-89.44622228	8	M	P						
478	477	45.6739375	-89.44624491	4	M	P		1				
479	478	45.6731725	-89.44625246	4	R	P		1			1	
480	479	45.6724075	-89.44626	5	M	P		1				
481	480	45.6716424	-89.44626755	11	M	P		1				

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum* , Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus* Curly-leaf pondweed	*Myriophyllum sibiricum* , Northern water-milfoil	
482	481	45.6708774	-89.44627509	3	S	P						
483	482	45.6586368	-89.44639576	9	M	P						
484	483	45.6578717	-89.4464033	12	M	P						
485	484	45.6571067	-89.44641084	12	M	P						
486	485	45.6563416	-89.44641838	9	M	P						
487	486	45.6555766	-89.44642592	9	M	P						
488	487	45.6548116	-89.44643345	9	M	P						
489	488	45.6540465	-89.44644099	9	M	P						
490	489	45.6532815	-89.44644853	15	S	P						
491	490	45.6861728	-89.44503262				NONNAVIGABLE (STUMPS)					
492	491	45.6854078	-89.44504019				NONNAVIGABLE (STUMPS)					
493	492	45.6846427	-89.44504775	3	M	P		1			1	
494	493	45.6838777	-89.44505532	4	M	P		1				
495	494	45.6800525	-89.44509313	7	M	P						
496	495	45.6792875	-89.4451007	8	M	P						
497	496	45.6785225	-89.44510826	11	M	P						
498	497	45.6777574	-89.44511582	6	M	P		1				
499	498	45.6769924	-89.44512338	10	M	P						
500	499	45.6762273	-89.44513094	7.5	M	P						
501	500	45.6754623	-89.4451385	8	M	P						
502	501	45.6746973	-89.44514606	4	M	P		1				
503	502	45.6739322	-89.44515363	2	M	P		1				
504	503	45.6731672	-89.44516119	4.5	M	P		1				
505	504	45.6724022	-89.44516875	7	S	P						
506	505	45.6716371	-89.4451763	9	S	P						
507	506	45.6708721	-89.44518386	11	M	P						
508	507	45.670107	-89.44519142	8	S	P		1				
509	508	45.669342	-89.44519898	3	M	P		2				
510	509	45.668577	-89.44520654	1	S	P		2				
511	510	45.6609266	-89.44528211	3	M	P		1				

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum* , Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus* Curly-leaf pondweed	*Myriophyllum sibiricum* , Northern water-milfoil	
512	511	45.6601615	-89.44528966	3	M	P		3			1	
513	512	45.6593965	-89.44529722	8	M	P						
514	513	45.6586315	-89.44530477	13	M	P						
515	514	45.6578664	-89.44531232	9	M	P						
516	515	45.6571014	-89.44531988	9	M	P						
517	516	45.6563363	-89.44532743	7	M	P						
518	517	45.6555713	-89.44533498	8	M	P						
519	518	45.6548063	-89.44534254	8	M	P						
520	519	45.6540412	-89.44535009	9	M	P						
521	520	45.6532762	-89.44535764	10	S	P						
522	521	45.6525112	-89.44536519	12	S	P						
523	522	45.6517461	-89.44537275	9	M	P						
524	523	45.6509811	-89.4453803	9	M	P						
525	524	45.650216	-89.44538785	9	M	P						
526	525	45.6854025	-89.44394868				NONNAVIGABLE (STUMPS)					
527	526	45.6808123	-89.44399415	6.5	M	P						
528	527	45.6800472	-89.44400173				NONNAVIGABLE (STUMPS)					
529	528	45.6792822	-89.4440093	6	M	P		1				
530	529	45.6785171	-89.44401688	7	M	P						
531	530	45.6777521	-89.44402446	6.5	M	P		1				
532	531	45.6769871	-89.44403203	7	M	P						
533	532	45.676222	-89.44403961	10.5	M	P						
534	533	45.675457	-89.44404719	8	M	P						
535	534	45.674692	-89.44405476	7.5	M	P						
536	535	45.6739269	-89.44406234	8	M	P						
537	536	45.6731619	-89.44406991	7.5	M	P						
538	537	45.6723969	-89.44407749	3	M	P		2				
539	538	45.6716318	-89.44408506	9	M	P						
540	539	45.6708668	-89.44409263	8	M	P						
541	540	45.6701017	-89.44410021	11	M	P						

1	J sampling point	K Latitude (need electronic copy of site locations)	L Longitude (need electronic copy of site locations)	M Depth (ft)	N Dominant sediment type (M=muck, S=Sand, R=Rock)	O Sampled holding rake pole (P) or rake rope (R)?	P comments	Q Total Rake Fullness	R *Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	S *Potamogeton crispus*, Curly-leaf pondweed	T *Myriophyllum sibiricum*, Northern water-milfoil	U
542	541	45.6693367	-89.44410778	9	M	P						
543	542	45.6685717	-89.44411535	4	M	P		2				
544	543	45.6678066	-89.44412293	3	M	P		2				
545	544	45.6670416	-89.4441305	6	M	P						
546	545	45.6662766	-89.44413807	7	M	P						
547	546	45.6655115	-89.44414564	9	M	P						
548	547	45.6647465	-89.44415322	12	M	P						
549	548	45.6639814	-89.44416079	12	M	P						
550	549	45.6632164	-89.44416836	10	M	P						
551	550	45.6624514	-89.44417593	15	M	P						
552	551	45.6616863	-89.4441835	8	M	P						
553	552	45.6609213	-89.44419107	9	M	P						
554	553	45.6601562	-89.44419864	9	M	P						
555	554	45.6593912	-89.44420621	9	S	P						
556	555	45.6586262	-89.44421378	6	M	P						
557	556	45.6578611	-89.44422135	5	M	P		2				
558	557	45.654801	-89.44425162	4	M	P						
559	558	45.6540359	-89.44425919	4	M	P		2				
560	559	45.6532709	-89.44426675	6	S	P		2				
561	560	45.6525058	-89.44427432	3.5	S	P		1				
562	561	45.6517408	-89.44428189	16	M	P						
563	562	45.6509758	-89.44428945	13.5	M	P						
564	563	45.6502107	-89.44429702	9	M	P						
565	564	45.6494457	-89.44430458	9.5	M	P						
566	565	45.681572	-89.44289513	3	M	P		1			1	
567	566	45.6808069	-89.44290273	6	M	P						
568	567	45.6800419	-89.44291032	7	M	P						
569	568	45.6785118	-89.4429255	3	M	P		2				
570	569	45.6777468	-89.44293309	7	M	P		1				
571	570	45.6769818	-89.44294069	8	M	P						

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed	*Myriophyllum sibiricum*, Northern water-milfoil	
572	571	45.6762167	-89.44294828	7	M	P						
573	572	45.6754517	-89.44295587	8	M	P						
574	573	45.6746866	-89.44296346	8	M	P						
575	574	45.6739216	-89.44297105	9	M	P						
576	575	45.6731566	-89.44297864	10	M	P						
577	576	45.6723915	-89.44298623	11	M	P						
578	577	45.6716265	-89.44299382	9	M	P						
579	578	45.6708615	-89.44300141	9	M	P						
580	579	45.6700964	-89.44300899	9	M	P						
581	580	45.6693314	-89.44301658	9	M	P						
582	581	45.6685664	-89.44302417	9	M	P						
583	582	45.6678013	-89.44303176	13	M	P						
584	583	45.6670363	-89.44303935	9	M	P						
585	584	45.6662712	-89.44304693	10	M	P						
586	585	45.6655062	-89.44305452	14	M	P						
587	586	45.6647412	-89.44306211	7	M	P						
588	587	45.6639761	-89.44306969	4	M	P		2				
589	588	45.6632111	-89.44307728	4	M	P		2				
590	589	45.662446	-89.44308486	5	S	P		1				
591	590	45.661681	-89.44309245	7	M	P						
592	591	45.660916	-89.44310003	12	M	P						
593	592	45.6601509	-89.44310762	14	M	P						
594	593	45.6578558	-89.44313037	3	M	P		2				
595	594	45.6509705	-89.44319861	9	M	P						
596	595	45.6502054	-89.44320619	13	M	P						
597	596	45.6494404	-89.44321377	10	M	P						
598	597	45.6823317	-89.44179609				NONNAVIGABLE (STUMPS)					
599	598	45.6785065	-89.44183413	7	M	P		1				
600	599	45.6777415	-89.44184173	4	S	P		1				
601	600	45.6769764	-89.44184934	11	M	P						

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed	*Myriophyllum sibiricum*, Northern water-milfoil	
602	601	45.6762114	-89.44185694	7.5	M	P						
603	602	45.6754464	-89.44186455	7.5	M	P						
604	603	45.6746813	-89.44187215	8	M	P						
605	604	45.6739163	-89.44187976	12.5	M	P						
606	605	45.6731512	-89.44188736	11	M	P						
607	606	45.6723862	-89.44189497	8	M	P						
608	607	45.6716212	-89.44190257	12	M	P						
609	608	45.6708561	-89.44191018	8.5	M	P						
610	609	45.6700911	-89.44191778	9	M	P						
611	610	45.6693261	-89.44192538	14	M	P						
612	611	45.668561	-89.44193299	9	M	P						
613	612	45.667796	-89.44194059	10	M	P						
614	613	45.667031	-89.44194819	9	M	P						
615	614	45.6662659	-89.44195579	5	S	P						
616	615	45.6655009	-89.44196339	3	S	P		2				
617	616	45.6647358	-89.441971	5.5	M	P		2				
618	617	45.6639708	-89.4419786	6	M	P		1				
619	618	45.6632058	-89.4419862	6	M	P						
620	619	45.6624407	-89.4419938	6	M	P						
621	620	45.6502001	-89.44211536	9	M	P						
622	621	45.6494351	-89.44212296	14	M	P						
623	622	45.6830914	-89.44069701				NONNAVIGABLE					
624	623	45.6823263	-89.44070464				NONNAVIGABLE					
625	624	45.6792662	-89.44073513	6	M	P						
626	625	45.6785012	-89.44074275	4	S	P		1				
627	626	45.6769711	-89.44075799	3	S	P		1				
628	627	45.6762061	-89.44076561	13	M	P						
629	628	45.675441	-89.44077323	8	M	P						
630	629	45.674676	-89.44078085	8	S	P						
631	630	45.6739109	-89.44078847	8.5	M	P						

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed	*Myriophyllum sibiricum*, Northern water-milfoil	
632	631	45.6731459	-89.44079609	8.5	M	P						
633	632	45.6723809	-89.44080371	8	M	P						
634	633	45.6716158	-89.44081133	8	M	P						
635	634	45.6708508	-89.44081895	8	M	P						
636	635	45.6700858	-89.44082657	8	M	P						
637	636	45.6693207	-89.44083418	8.5	M	P						
638	637	45.6685557	-89.4408418	5.5	R	P						
639	638	45.6677907	-89.44084942	1.5	S	P		1				
640	639	45.6647305	-89.44087989	4	M	P		1				
641	640	45.6639655	-89.4408875	6	M	P		1				
642	641	45.6632004	-89.44089512	6	M	P						
643	642	45.6624354	-89.44090273	6	M	P						
644	643	45.6501948	-89.44102454	7	M	P		1				
645	644	45.6494297	-89.44103215	8.5	M	P						
646	645	45.6486647	-89.44103976	9.5	M	P						
647	646	45.6731406	-89.43970482	0.5	S	P						
648	647	45.6723755	-89.43971245	8	M	P						
649	648	45.6716105	-89.43972009	9	M	P						
650	649	45.6708455	-89.43972772	6	M	P		1				
651	650	45.6700804	-89.43973535	7	M	P						
652	651	45.6693154	-89.43974299	6	S	P		1				
653	652	45.6685503	-89.43975062	6.5	M	P						
654	653	45.6654902	-89.43978115				NONNAVIGABLE					
655	654	45.6647252	-89.43978878	4	M	P		2				
656	655	45.6509545	-89.43992608	7	M	P		1				
657	656	45.6501894	-89.43993371	5.5	M	P		2				
658	657	45.6494244	-89.43994133	9.5	M	P						
659	658	45.6486593	-89.43994896	13	M	P						
660	659	45.6478943	-89.43995658	9	M	P						
661	660	45.6716051	-89.43862884				NONNAVIGABLE					

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum* , Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus* ,Curly-leaf pondweed	*Myriophyllum sibiricum* , Northern water-milfoil	
662	661	45.6708401	-89.43863649	5	M	P		1				
663	662	45.6700751	-89.43864414	6.5	M	P						
664	663	45.66931	-89.43865179	7	M	P						
665	664	45.668545	-89.43865944	6	M	P						
666	665	45.6517141	-89.4388276	8	M	P		1				
667	666	45.6509491	-89.43883524	8	M	P						
668	667	45.6501841	-89.43884288	5	M	P		2				
669	668	45.649419	-89.43885052	8.5	M	P						
670	669	45.648654	-89.43885816	11	M	P						
671	670	45.6478889	-89.4388658	9	M	P						
672	671	45.6471239	-89.43887344	9	M	P						
673	672	45.6708347	-89.43754527	6	M	P						
674	673	45.6700697	-89.43755293	6.5	M	P						
675	674	45.6517088	-89.43773675	8.5	M	P						
676	675	45.6509437	-89.4377444	7	M	P		1				
677	676	45.6501787	-89.43775206	9	M	P						
678	677	45.6494137	-89.43775971	9	M	P						
679	678	45.6486486	-89.43776737	10	M	P						
680	679	45.6478836	-89.43777502	11	M	P						
681	680	45.6471185	-89.43778267	9.5	M	P						
682	681	45.6715944	-89.43644636	5.5	M	P		1				
683	682	45.6708294	-89.43645404	3	M	P		1				
684	683	45.6524684	-89.43663822	1	M	P						
685	684	45.6517034	-89.43664589	7.5	M	P		1				
686	685	45.6509384	-89.43665356	8	M	P						
687	686	45.6501733	-89.43666123	9	M	P						
688	687	45.6494083	-89.4366689	8.5	M	P						
689	688	45.6486433	-89.43667657	8.5	M	P						
690	689	45.6478782	-89.43668424	10.5	M	P						
691	690	45.6471132	-89.43669191	10	M	P						

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum* , Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus* Curly-leaf pondweed	*Myriophyllum sibiricum* , Northern water-milfoil	
692	691	45.6463481	-89.43669957	3.5	S	P		2				
693	692	45.6524631	-89.43554735	8	M	P						
694	693	45.651698	-89.43555504	8.5	M	P						
695	694	45.650933	-89.43556272	7	M	P						
696	695	45.6501679	-89.43557041	9	M	P						
697	696	45.6494029	-89.43557809	8	S	P						
698	697	45.6478728	-89.43559346	6	M	P		1				
699	698	45.6471078	-89.43560114	12	M	P						
700	699	45.6463427	-89.43560882	10	S	P						
701	700	45.6524577	-89.43445648	1.5	R	P		1				
702	701	45.6516926	-89.43446418	8.5	M	P						
703	702	45.6509276	-89.43447188	8.5	M	P						
704	703	45.6501626	-89.43447958	8	M	P						
705	704	45.6493975	-89.43448728	8.5	M	P						
706	705	45.6478674	-89.43450268	5.5	M	P		2				
707	706	45.6471024	-89.43451037	6	M	P		1				
708	707	45.6463374	-89.43451807	8	S	P						
709	708	45.6516872	-89.43337333	7.5	S	P						
710	709	45.6509222	-89.43338104	8.5	M	P						
711	710	45.6501571	-89.43338875	7.5	S	P						
712	711	45.6493921	-89.43339647	4	S	P		2				
713	712	45.6486271	-89.43340418	9	M	P						
714	713	45.647862	-89.4334119	2	S	P		2			V	
715	714	45.647097	-89.43341961	6	R	P						
716	715	45.646332	-89.43342732	1.5	R	P		1				
717	716	45.6516818	-89.43228247	7.5	M	P						
718	717	45.6486217	-89.43231339	9	M	P						
719	718	45.6478566	-89.43232112	2	S	P		2			V	
720	719	45.6470916	-89.43232884	10	M	P						
721	720	45.6486162	-89.43122259	3	S	P		1				

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed	*Myriophyllum sibiricum*, Northern water-milfoil	
722	721	45.6478512	-89.43123034	9.5	M	P						
723	722	45.6470862	-89.43123808	15	M	P						
724	723	45.6486108	-89.4301318	3	S	P		1				
725	724	45.6478458	-89.43013956	10	M	P						
726	725	45.6470807	-89.43014731	3.5	S	P		2				
727	726	45.6486053	-89.429041	9.5	M	P						
728	727	45.6478403	-89.42904878	15	M	P						
729	728	45.6470753	-89.42905655	4	S	P		1				
730	729	45.6485999	-89.42795021	6.5	S	P						
731	730	45.6478349	-89.427958	12.5	M	P						
732	731	45.6470698	-89.42796579	7	S	P						
733	732	45.6501245	-89.42684381	9	M	P						
734	733	45.6478294	-89.42686722	13	M	P						
735	734	45.6470643	-89.42687502	7.5	S	P						
736	735	45.650119	-89.42575299	6	S	P						
737	736	45.649354	-89.42576081	9	M	P						
738	737	45.6485889	-89.42576862	5	S	P		2				
739	738	45.6478239	-89.42577644	14	M	P						
740	739	45.6470589	-89.42578426	9.5	M	P						
741	740	45.6462938	-89.42579207	3.5	S	P		1				
742	741	45.6493485	-89.42467	8	S	P						
743	742	45.6485835	-89.42467783	8.5	S	P						
744	743	45.6478184	-89.42468566	14	M	P						
745	744	45.6470534	-89.42469349	11	M	P						
746	745	45.6462883	-89.42470133	7	S	P						
747	746	45.649343	-89.42357919	8.5	S	P						
748	747	45.648578	-89.42358704	11.5	M	P						
749	748	45.6478129	-89.42359489	8	S	P						
750	749	45.6470479	-89.42360273	14	M	P						
751	750	45.6462828	-89.42361058	10.5	M	P						

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum* , Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus* ,Curly-leaf pondweed	*Myriophyllum sibiricum* , Northern water-milfoil	
752	751	45.6455178	-89.42361842	4	M	P		3				
753	752	45.6485724	-89.42249625	11	M	P						
754	753	45.6478074	-89.42250411	11	M	P						
755	754	45.6470424	-89.42251197	11.5	M	P						
756	755	45.6462773	-89.42251983	13	M	P						
757	756	45.6455123	-89.42252769	12.5	M	P						
758	757	45.6447473	-89.42253555	8	M	P						
759	758	45.6462718	-89.42142908	5	S	P						
760	759	45.6455068	-89.42143696	10	S	P						
761	760	45.6447417	-89.42144483	13.5	M	P						
762	761	45.6439767	-89.42145271	14	M	P						
763	762	45.6432117	-89.42146058	12	M	P						
764	763	45.6424466	-89.42146846	10	S	P						
765	764	45.6416816	-89.42147633	2	S	P		2				
766	765	45.6424411	-89.42037779	5	S	P		2				
767	766	45.6416761	-89.42038567	9	M	P						

	A	B
1	**Boat Survey**	
2	**Lake**	Rhinelander Flowage
3	**County**	Oneida
4	**WBIC**	1580100
5	**Date of Survey**	
6	**Field Crew**	KM, AM, NY, NG,
7		CW, CK, TP
8		
9		
10	**Nearest Point**	**Species seen, habitat information**
11	8	Zizania palustris, Sparganium species
12	9	Nymphea odorata
13	28	Sparganium species
14	32	Schoenoplectus pungens
15	38	Nuphar variegata
16	39	Schoenoplectus pungens
17	42	Nuphar variegata, Nymphea odorata, Pontaderia cordata
18	43	Nuphar variegata, Nymphea odorata, Pontaderia cordata
19	52	Pontaderia cordata
20	63	Eleocharis palustris, Carex species, Sparganium species
21	69	Potamogeton zosteriformis
22	70	Nymphea odorata, Sparganium species, Schoenoplectus tabernaemontani, Eleocharis acicularis, Sagattaria latifolia
23	72	Zizania palustris, Nymphea odorata, Sparganium species, Carex species, Schoenoplectus taberaemontani
24	81	Nuphar variegata, Zizania palustris
25	82	Sparganium species
26	84	Nymphae odorata, Eleocharis palustris, Sparganium species
27	88	Sparganium Species
28	89	Potamogeton natans, Sagittaria species
29	93	Sagittaria species
30	101	Calla palustris
31	110	Nyphar variegata, Zizania palustris, Nymphea odorata, Sparganium species
32	111	Zizania palustris, Nymphea odorata, Sparganium species, Potamogeton vaseyi
33	112	Yellow iris, Potamogeton richardsonii
34	113	Pontaderia cordata
35	116	Eleocharis palustris
36	118	Zizania palustris, Potamogeton zosteriformis, Eleocharis palustris
37	127	Zizania palustris, Nymphea odorata
38	130	Nuphar variegata, Potamogeton natans
39	136	Schoenoplectus acutus, Eleocharis palustris, Calla palustris, Sparganium species
40	154	Ceratophyllum demersum, Nymphea odorata, Nuphar variegata
41	158	Potamogeton amplifolius
42	167	Zizania palustris, Nymphea odorata, Potamogeton amplifloius
43	173	Potamogeton amplifolius, Lemna minor, Sparganium species
44	185	Zizania palustris, Nymphea odorata, Schoenoplectus acutus
45	186	Schoenoplectus acutus
46	199	Nymphea odorata, Vallisneria americana, Sparganius species, Schoenoplectus acutus
47	202	Zizania palustris, Nymphea odorata
48	204	Potamogeton zosteriformis
49	208	Sparganium species
50	212	Zizania palustris, Schoenoplectus acutus
51	215	Zizania palustris, Vallisneria americana
52	217	Nymphea odorata, Pontaderia cordata
53	223	Pontaderia cordata
54	225	Zizania palustris, Nymphea odorata, Nuphar variegata
55	227	Zizania palustris
56	229	Nuphar variegata
57	230	Zizania palustris, Nuphar variegata
58	233	Zizania palustris, Nymphea odorata, Nuphar variegata
59	237	Zizania palustris, Nymphea odorata
60	244	Zizania palustris
61	255	Nuphar variegata, Nymphea odorata
62	257	Zizania palustris
63	258	Nuphar variegata
64	260	Zizania palustris
65	265	Nuphar variegata, Pontaderia cordata, Schoenoplectus tabernaemontani

	A	B
10	**Nearest Point**	**Species seen, habitat information**
66	266	Zizania plaustris, Nuphar variegata, Nymphea odorata
67	267	Nuphar variegata, Nymphea odorata
68	268	Nymphea odorata
69	275	Zizania palustris, Nuphar variegata, Nymphea odorata
70	280	Zizania palustris
71	284	Zizania palustris, Schoenoplectus tabernaemontani
72	287	Zizania palustris
73	289	Zizania palustris
74	294	Nuphar variegata,Nymphea odorata
75	296	Nuphar variegata
76	297	Ranunculus aquatilis, Pontaderia cordata
77	303	Nitella
78	317	Nymphea odorata
79	323	Nymphea odorata
80	339	Nuphar variegata
81	372	Zizania palustris
82	396	Nuphar variegata, Brasenia schreberi
83	418	Nuphar variegata
84	441	Pontaderia cordata
85	482	Nuphar variegata
86	489	Sparganium fluctuans, Nymphea odorata, Ceratophyllum demersum, Sparganium species, Brasenia schreberi
87	502	Potamogeton richardsonii
88	511	Pontaderia cordata
89	517	Sparganium fluctuans, Nymphea odorata
90	542	Nymphea odorata, Nuphar variegata
91	543	Nymphea odorata
92	556	Nymphea odorata, Sparganium fluctuans
93	558	Nuphar variegata
94	565	Pontaderia cordata, Nymphea odorata, Sparganium species, Calla palustris
95	569	Sparganium species
96	594	Sparganium fluctuans, Nymphea odorata, Nuphar variegata, Brasenia schreberi, Sparganium species
97	614	Equisetum fluviatile
98	615	Nymphea odorata, Sparganium fluctuans, Equisetum fluviatile, Brasenia schreberi
99	617	Sparganium fluctuans, Nuphar variegata
100	627	Vallisneria americana, Nymphea odorata, Sparganium fluctuans, Potamogeton spirillus
101	628	Sparganium fluctuans
102	629	Sparganium fluctuans
103	639	Sagittaria species, Pontaderia cordata, Equistetum fluviatile, Sparganium species, Sch acu, Elodea, Typha latifolia, Unknown emergent 1, Spirodela polyrhiza, Lemna trisulca, Calla palustris, Eleocharis palustris
104	640	Nuphar variegata, Sagittaria species, Pontaderia cordata, Sparganium species, Lemna minor
105	641	Sparganium fluctuans
106	707	Sparganium species
107	708	Sparganium fluctuans, Nymphea odorata
108	728	Brasenia schreberi, Nuphar variegata, Sparganium fluctuans
109	729	Nuphar variegata, Sparganium fluctuans, Sagittaria species
110	735	Nymphea odorata, Brasenia schreberi, Sparganium species
111	737	Nuphar variegata, Potamogeton richardsonii, Sparganium fluctuans
112	751	Nuphar variegata
113	759	Typha latifolia

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitiude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed		*Myriophyllum sibiricum*, Northern water-milfoil
2	1	45.6537937	-89.42716359	20	M	R						
3	2	45.6530287	-89.42717139	16	S	R						
4	3	45.6522637	-89.42717919	6	S	P		1				
5	4	45.6514986	-89.42718699	8	M	P						
6	5	45.6553183	-89.42605706	13	S	P						
7	6	45.6545533	-89.42606488	22	M	R						
8	7	45.6537883	-89.42607269	22	M	R						
9	8	45.6530232	-89.42608051	22	M	R						
10	9	45.6522582	-89.42608832	20	M	R						
11	10	45.6514931	-89.42609614	2	S	P		1				
12	11	45.6553128	-89.42496614	21	M	R						
13	12	45.6545478	-89.42497397	23	M	R						
14	13	45.6537828	-89.4249818	22	M	R						
15	14	45.6530177	-89.42498963	24	M	R						
16	15	45.6522527	-89.42499746	26	M	R						
17	16	45.6514877	-89.42500529	22	M	R						
18	17	45.6560724	-89.42386737	11	S	P						
19	18	45.6553074	-89.42387522	22			TOO DEEP					
20	19	45.6545423	-89.42388306	24			TOO DEEP					
21	20	45.6537773	-89.42389091	24			TOO DEEP					
22	21	45.6530122	-89.42389875	27			TOO DEEP					
23	22	45.6522472	-89.4239066	26	M	R						
24	23	45.6514822	-89.42391444	23	M	R						
25	24	45.6507171	-89.42392228	7	S	P						
26	25	45.6598921	-89.42273713	1	S	P						

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitiude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed		*Myriophyllum sibiricum*, Northern water-milfoil
27	26	45.658362	-89.42275285	1.5	S	P		1				
28	27	45.657597	-89.42276071	2	S	P		1				
29	28	45.6568319	-89.42276857	2	S	P		1				
30	29	45.6560669	-89.42277643	20	M	R						
31	30	45.6553018	-89.42278429	23			TOO DEEP					
32	31	45.6545368	-89.42279215	25			TOO DEEP					
33	32	45.6537718	-89.42280001	28			TOO DEEP					
34	33	45.6530067	-89.42280787	30			TOO DEEP					
35	34	45.6522417	-89.42281573	25			TOO DEEP					
36	35	45.6514767	-89.42282359	24			TOO DEEP					
37	36	45.6507116	-89.42283145	20			TOO DEEP					
38	37	45.6499466	-89.42283931	12	R	P						
39	38	45.6491815	-89.42284716	12	M	P						
40	39	45.6606516	-89.42163824	5.5	M	P						
41	40	45.6598865	-89.42164612	9	M	P						
42	41	45.6591215	-89.42165399	9	M	P						
43	42	45.6583565	-89.42166187	10	S	P						
44	43	45.6575914	-89.42166975	13.5	M	P						
45	44	45.6568264	-89.42167762	11.5	S	P						
46	45	45.6560614	-89.4216855	21.5	M	R						
47	46	45.6552963	-89.42169337	23			TOO DEEP					
48	47	45.6545313	-89.42170125	26			TOO DEEP					
49	48	45.6537663	-89.42170912	29			TOO DEEP					
50	49	45.6530012	-89.42171699				TOO DEEP					
51	50	45.6522362	-89.42172487				TOO DEEP					

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitiude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed		*Myriophyllum sibiricum*, Northern water-milfoil
52	51	45.6514711	-89.42173274				TOO DEEP					
53	52	45.6507061	-89.42174061				TOO DEEP					
54	53	45.6499411	-89.42174849	16			TOO DEEP					
55	54	45.649176	-89.42175636	13	S	P						
56	55	45.648411	-89.42176423	2	S	P		1				
57	56	45.659881	-89.42055511	9	M	P						
58	57	45.659116	-89.420563	10	S	P						
59	58	45.6583509	-89.42057089	14.5	M	P						
60	59	45.6575859	-89.42057878	16	M	P						
61	60	45.6568209	-89.42058667	16	M	R						
62	61	45.6560558	-89.42059456	22			TOO DEEP					
63	62	45.6552908	-89.42060245	24			TOO DEEP					
64	63	45.6545258	-89.42061034	28			TOO DEEP					
65	64	45.6537607	-89.42061823				TOO DEEP					
66	65	45.6529957	-89.42062612				TOO DEEP					
67	66	45.6522307	-89.42063401				TOO DEEP					
68	67	45.6514656	-89.42064189				TOO DEEP					
69	68	45.6507006	-89.42064978				TOO DEEP					
70	69	45.6499355	-89.42065767	20			TOO DEEP					
71	70	45.6491705	-89.42066556	18			TOO DEEP					
72	71	45.6598755	-89.41946409	4.75	S	P		1				
73	72	45.6591104	-89.419472	11	M	P						
74	73	45.6583454	-89.41947991	15	M	P						
75	74	45.6575804	-89.41948781	16	M	P						
76	75	45.6568153	-89.41949572	17	M	P						

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitiude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed		*Myriophyllum sibiricum*, Northern water-milfoil
77	76	45.6560503	-89.41950362	21	M	R						
78	77	45.6552853	-89.41951153	25			TOO DEEP					
79	78	45.6545202	-89.41951943	27			TOO DEEP					
80	79	45.6537552	-89.41952734				TOO DEEP					
81	80	45.6529902	-89.41953524				TOO DEEP					
82	81	45.6522251	-89.41954314				TOO DEEP					
83	82	45.6514601	-89.41955105				TOO DEEP					
84	83	45.650695	-89.41955895				TOO DEEP					
85	84	45.64993	-89.41956685	20			TOO DEEP					
86	85	45.649165	-89.41957475	16			TOO DEEP					
87	86	45.6483999	-89.41958266	2	S	P						
88	87	45.6591049	-89.41838101	10	M	P						
89	88	45.6583399	-89.41838893	14.75	M	P						
90	89	45.6575748	-89.41839685	16	M	R						
91	90	45.6568098	-89.41840477	16	S	R						
92	91	45.6560448	-89.41841269	21	M	R						
93	92	45.6552797	-89.41842061	24			TOO DEEP					
94	93	45.6545147	-89.41842853				TOO DEEP					
95	94	45.6537496	-89.41843644				TOO DEEP					
96	95	45.6529846	-89.41844436				TOO DEEP					
97	96	45.6522196	-89.41845228				TOO DEEP					
98	97	45.6514545	-89.4184602				TOO DEEP					
99	98	45.6506895	-89.41846812				TOO DEEP					
100	99	45.6499245	-89.41847603	20			TOO DEEP					
101	100	45.6491594	-89.41848395	19			TOO DEEP					

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitiude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed		*Myriophyllum sibiricum*, Northern water-milfoil
102	101	45.6606294	-89.41727414				NONNAVIGABLE (PLANTS)					
103	102	45.6575693	-89.41730588	12	S	P						
104	103	45.6568042	-89.41731382	13	S	P						
105	104	45.6560392	-89.41732175	20	M	R						
106	105	45.6552742	-89.41732968	21	M	R						
107	106	45.6545091	-89.41733762	22			TOO DEEP					
108	107	45.6537441	-89.41734555	25			TOO DEEP					
109	108	45.652979	-89.41735349	24			TOO DEEP					
110	109	45.652214	-89.41736142	21			TOO DEEP					
111	110	45.651449	-89.41736935	18			TOO DEEP					
112	111	45.6506839	-89.41737728	21			TOO DEEP					
113	112	45.6499189	-89.41738522	18			TOO DEEP					
114	113	45.6606238	-89.41618311				NONNAVIGABLE (PLANTS)					
115	114	45.6560336	-89.41623081	20	M	R						
116	115	45.6552686	-89.41623876	20	S	R						
117	116	45.6545036	-89.41624671	21.5	M	R						
118	117	45.6537385	-89.41625466	19			TOO DEEP					
119	118	45.6529735	-89.41626261	23			TOO DEEP					
120	119	45.6522084	-89.41627056	21			TOO DEEP					
121	120	45.6514434	-89.4162785	13.5	S	P						
122	121	45.6506784	-89.41628645	20			TOO DEEP					
123	122	45.6606183	-89.41509209	3.5	M	P		1			V	
124	123	45.6575581	-89.41512395	4	M	P		2				
125	124	45.6567931	-89.41513191	14	S	P						
126	125	45.656028	-89.41513988	19	M	R						

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitiude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed	*Myriophyllum sibiricum*, Northern water-milfoil	
127	126	45.655263	-89.41514784	19	M	R						
128	127	45.654498	-89.41515581	18	M	R						
129	128	45.6537329	-89.41516377	21	M	R						
130	129	45.6529679	-89.41517173	20			TOO DEEP					
131	130	45.6522029	-89.4151797	21			TOO DEEP					
132	131	45.6514378	-89.41518766	14	S	P						
133	132	45.6598476	-89.41400904	4	M	P		3				
134	133	45.6590826	-89.41401702	4	M	P		1			1	
135	134	45.6567875	-89.41404096	17	S	R						
136	135	45.6560225	-89.41404894	18	M	R						
137	136	45.6552574	-89.41405692	20			TOO DEEP					
138	137	45.6544924	-89.4140649	19	M	R						
139	138	45.6537273	-89.41407288	17	M	R						
140	139	45.6529623	-89.41408086	20			TOO DEEP					
141	140	45.6521973	-89.41408883	8	S	P						
142	141	45.6567819	-89.41295001	15	S	P						
143	142	45.6560169	-89.41295801	19	M	R						
144	143	45.6552518	-89.412966	16	S	R						
145	144	45.6544868	-89.412974	19	M	R						
146	145	45.6537217	-89.41298199	16	M	R						
147	146	45.6529567	-89.41298998	7	S	P						
148	147	45.6598364	-89.41182703	5	M	P		1				
149	148	45.6583063	-89.41184305	6	M	P		1				
150	149	45.6575413	-89.41185106	3	S	P		2				
151	150	45.6567763	-89.41185906	18.5			TOO DEEP					

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitiude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed	*Myriophyllum sibiricum*, Northern water-milfoil	
152	151	45.6560112	-89.41186707	18.5			TOO DEEP					
153	152	45.6552462	-89.41187508	18.5			TOO DEEP					
154	153	45.6544812	-89.41188309	19			TOO DEEP					
155	154	45.6537161	-89.4118911	16			TOO DEEP					
156	155	45.6621259	-89.41071194	2	M	P		3			1	
157	156	45.6613609	-89.41071997	3.5	M	P		3			1	
158	157	45.6605958	-89.41072799	4.5	M	P		3				
159	158	45.6598308	-89.41073602	4.5	M	P		3				
160	159	45.6590658	-89.41074404	3	M	P		2			V	
161	160	45.6567707	-89.41076812	14	S	P						
162	161	45.6560056	-89.41077614	18			TOO DEEP					
163	162	45.6552406	-89.41078416	18			TOO DEEP					
164	163	45.6544755	-89.41079219	18			TOO DEEP					
165	164	45.6537105	-89.41080021	5	S	P		1				
166	165	45.6621203	-89.40962089	4	M	P		3				
167	166	45.6613552	-89.40962893	12.5	M	P		1				
168	167	45.6605902	-89.40963697	13.5	M	P						
169	168	45.6598252	-89.40964501	4.5	M	P		2			1	
170	169	45.656765	-89.40967717	9	R	P						
171	170	45.656	-89.40968521	17.5			TOO DEEP					
172	171	45.655235	-89.40969324	18			TOO DEEP					
173	172	45.6544699	-89.40970128	16			TOO DEEP					
174	173	45.6628797	-89.40852178	4	M	P		1				
175	174	45.6621146	-89.40852983	9.75	M	P		1				
176	175	45.6613496	-89.40853789	22			TOO DEEP					

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitiude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed	*Myriophyllum sibiricum*, Northern water-milfoil	
177	176	45.6605846	-89.40854595	23			TOO DEEP					
178	177	45.6598195	-89.408554	8.5	M	P		1				
179	178	45.6567594	-89.40858622	6	S	P						
180	179	45.6559943	-89.40859427	14	M	P						
181	180	45.6552293	-89.40860233	15	M	P						
182	181	45.662874	-89.40743071	3	M	P		3			1	
183	182	45.662109	-89.40743878	5.5	M	P		2				
184	183	45.6613439	-89.40744685	10	M	P		2				
185	184	45.6605789	-89.40745492	5.5	M	P		2				
186	185	45.6567537	-89.40749527	11	M	P						
187	186	45.6559887	-89.40750334	11.5	S	P						
188	187	45.6552237	-89.40751141	7	S	P						
189	188	45.6628683	-89.40633964	1.5	S	P		2			V	
190	189	45.6621033	-89.40634773	4	M	P		3				
191	190	45.6613383	-89.40635582	4	M	P		3				
192	191	45.6575131	-89.40639624	9	S	P						
193	192	45.6567481	-89.40640432	12	M	P						
194	193	45.655983	-89.40641241	10.5	M	P						
195	194	45.6620976	-89.40525668	2.5	M	P		2			V	
196	195	45.6575074	-89.40530528	6	S	P						
197	196	45.6567424	-89.40531338	10.5	M	P						
198	197	45.6567367	-89.40422243	10	M	P						
199	198	45.656731	-89.40313148	8	M	P		1				
200	199	45.6567253	-89.40204053	8	M	P		1				
201	200	45.6559603	-89.40204868	8	S	P						

	A	B	C
1	**Boat Survey**		
2	**Lake**	Boom Lake	
3	**County**	Oneida	
4	**WBIC**	1580200	
5	**Date of Survey**	6/27/11-6/28/11	
6	**Field Crew**	KM, AM, NG,NY	
7			
8			
9			
10	**Nearest Point**	**Species seen, habitat information**	
11	4	Nuphar variegata, Yello iris, Pontaderia cordata	
12	17	Yellow Iris, Ceratophyllum demersium, Vallisneria Americana, Sparganium fluctuans, Potamogeton zosterifolis, Potamogeton richardsonii	
13	25	Nuphar variegata, Brasenia schreberi, Sparganium angustifolium, Pontaderia cordata	
14	39	Yellow iris, Nymphea odorata	
15	55	Pontaderia cordata, Nuphar variegata	
16	56	Yellow iris	
17	87	Yellow iris	
18	102	Sparganium fluctuans	
19	112	Yellow iris	
20	113	Eleocharis acicularis	
21	146	Yellow iris	
22	149	Brasenia schreberi, Potamogeton richardsonii, Nymphea odorata, Vallisneria americana, Sparganium fluctuans	
23	159	Yellow iris	
24	165	Pontaderia cordata	
25	178	Brasenia schreberi, Potamogeton richardsonii, Nymphea odorata, Vallisneria americana, Sparganium fluctuans	
26	188	Yellow iris	
27	197	Nuphar variegata, Pontaderia cordata, Sparganium fluctuans	
28	198	Nuphar variegata, Brasenia schreberi, Nymphea odorata, Sparganium fluctuans	
29	199	Nuphar variegata, Brasenia schreberi, Pontaderia cordata, Sparganium species, Sparganium fluctuans, Nymphea odorata	
30	200	Pontaderia cordata, Nymphea odorata, Nuphar variegata	

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitiude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed	*Myriophyllum sibiricum*, Northern water-milfoil	
2	1	45.6626903	-89.43460928	5	M	P		3				
3	2	45.6619253	-89.43461698	5	M	P		3				
4	3	45.6619199	-89.43352593	2.75	M	P		2				
5	4	45.6611548	-89.43353364	1	M	P		2				
6	5	45.6542695	-89.43360307	8	M	P		1				
7	6	45.6535045	-89.43361078				TEMPORARY OBSTACLE					
8	7	45.6619145	-89.43243487	5	M	P		3				
9	8	45.6611494	-89.4324426	4.5	M	P		3				
10	9	45.6603844	-89.43245033	6	M	P		3				
11	10	45.6557942	-89.43249671	7.5	M	P						
12	11	45.6550291	-89.43250443	9	M	P						
13	12	45.6626741	-89.43133608	4.5	M	P		3			1	
14	13	45.661909	-89.43134382	5	M	P		3				
15	14	45.660379	-89.43135931	4.5	M	P		1				
16	15	45.6573188	-89.43139029	6	M	P						
17	16	45.6565538	-89.43139803	6	M	P		1				
18	17	45.6557887	-89.43140577	5.5	M	P						
19	18	45.6542587	-89.43142126	9	M	P						
20	19	45.6534936	-89.431429	5.5	M	P						
21	20	45.6664938	-89.4302062	0.5	S							
22	21	45.6657288	-89.43021396	15			DEEP					
23	22	45.6649638	-89.43022173	15			DEEP					
24	23	45.6641987	-89.43022949	12	M	P						
25	24	45.6634337	-89.43023725	5	M	P		2			1	
26	25	45.6626686	-89.43024501	5	M	P		2				

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitiude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed		*Myriophyllum sibiricum*, Northern water-milfoil
27	26	45.6619036	-89.43025277	5	M	P		3				
28	27	45.6611386	-89.43026053	6.5	M	P		2				
29	28	45.6596085	-89.43027605	4.25	M	P		3				
30	29	45.6550183	-89.4303226	6	M	P						
31	30	45.6542532	-89.43033035	8	M	P						
32	31	45.6534882	-89.43033811	9.5	M	P						
33	32	45.6680184	-89.42909951	11	M	P						
34	33	45.6672534	-89.42910728	15	M	P						
35	34	45.6664884	-89.42911506				DEEP					
36	35	45.6657233	-89.42912284				DEEP					
37	36	45.6649583	-89.42913061				DEEP					
38	37	45.6641933	-89.42913839	12	M	P						
39	38	45.6634282	-89.42914617	3.5	M	P		3				
40	39	45.6626632	-89.42915394	2	M	P		3			V	
41	40	45.6618982	-89.42916172	5	M	P		3				
42	41	45.6611331	-89.42916949	4	M	P		3				
43	42	45.6603681	-89.42917727	5	M	P		3				
44	43	45.659603	-89.42918504	5.5	M	P		1				
45	44	45.658838	-89.42919281	5	M	P		1				
46	45	45.658073	-89.42920059	7.5	M	P						
47	46	45.6573079	-89.42920836	7	M	P		1				
48	47	45.6565429	-89.42921613	11	M	P						
49	48	45.6557779	-89.42922391	6.5	M	P						
50	49	45.6550128	-89.42923168	8	M	P		1				
51	50	45.6534827	-89.42924722	9.5	S	P						

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitiude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed	*Myriophyllum sibiricum*, Northern water-milfoil	
52	51	45.668013	-89.42800834	12	M	P						
53	52	45.667248	-89.42801613				DEEP					
54	53	45.6664829	-89.42802392				DEEP					
55	54	45.6657179	-89.42803171				DEEP					
56	55	45.6649528	-89.4280395				DEEP					
57	56	45.6641878	-89.42804729	5	M	P		1				
58	57	45.6634228	-89.42805508	3	M	P		3			1	
59	58	45.6618927	-89.42807066	4.75	M	P		3				
60	59	45.6611277	-89.42807845	4.5	M	P		1			1	
61	60	45.6603626	-89.42808624	5	M	P		3				
62	61	45.6595976	-89.42809403	6	M	P		1				
63	62	45.6588326	-89.42810182	7	M	P		3				
64	63	45.6580675	-89.42810961				TEMPORARY OBSTACLE					
65	64	45.6573025	-89.4281174	5	S	P		1				
66	65	45.6565374	-89.42812518	2	M	P		1				
67	66	45.6534773	-89.42815633									
68	67	45.6527123	-89.42816412	14	S	P						
69	68	45.6672425	-89.42692497	5	S	P		1				
70	69	45.6664775	-89.42693278	2.5	S	P		1				
71	70	45.6657124	-89.42694059	13.5	M	P						
72	71	45.6649474	-89.42694839	10.5	M	P						
73	72	45.6626523	-89.42697181	4	M	P		3				
74	73	45.6611222	-89.42698742	4	M	P		2				
75	74	45.6603572	-89.42699522	5	M	P		3				
76	75	45.6595921	-89.42700302	6	M	P		2				

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitiude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum* , Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus* , Curly-leaf pondweed	*Myriophyllum sibiricum* , Northern water-milfoil	
77	76	45.6588271	-89.42701083	6.5	M	P		3				
78	77	45.6580621	-89.42701863	7.5	M	P		3				
79	78	45.657297	-89.42702643	7	M	P		1				
80	79	45.656532	-89.42703424	6	M	P		2				
81	80	45.6557669	-89.42704204	5.5	M	P		1				
82	81	45.6649419	-89.42585728	4	M	P		1				
83	82	45.6618818	-89.42588856	3	M	P		3				
84	83	45.6611167	-89.42589638	4.5	M	P		3				
85	84	45.6603517	-89.4259042	5.5	M	P		3				
86	85	45.6595866	-89.42591202	4.5	M	P		3			V	
87	86	45.6588216	-89.42591984	5	M	P		3				
88	87	45.6580566	-89.42592765	6	M	P		3				
89	88	45.6565265	-89.42594329	2	M	P		2				
90	89	45.6557615	-89.42595111	2.5	M	P						
91	90	45.6618763	-89.42479751	4.25	M	P		3				
92	91	45.6611112	-89.42480534	4	M	P		3				
93	92	45.6603462	-89.42481318	6	M	P		3				
94	93	45.6595812	-89.42482101	5	M	P		2				
95	94	45.6588161	-89.42482885	1.75	M	P		1				
96	95	45.6618708	-89.42370646	4	M	P		3				
97	96	45.6611057	-89.42371431	5	M	P		3				
98	97	45.6603407	-89.42372216	4.5	M	P		2				
99	98	45.6626303	-89.42260754				NONNAVIGABLE (PLANTS)					
100	99	45.6626248	-89.42151648				NONNAVIGABLE (PLANTS)					

	A	B	C
1	**Boat Survey**		
2	**Lake**	Bass Lake	
3	**County**	Oneida	
4	**WBIC**	1580300	
5	**Date of Survey**	06/27/2011	
6	**Field Crew**	SW,CK,NG	
7			
8			
9			
10	**Nearest Point**	**Species seen, habitat information**	
11	1	*Pontaderia cordata, Nymphea odorata, Brasenia schreberi*	
12	2	*Nuphar variegata, Iris versicolor*	
13	3	Pontaderia cordata, Nymphea odorata, Yellow iris	
14	4	Calla palustris, Sparganium species, Myriophyllum sibiricum	
15	6	Yellow iris	
16	7	Nuphar variegata	
17	8	Brasenia schreberi	
18	9	Yellow iris, Pontaderia cordata, Sparganium species	
19	49	Polygonum amphibium	
20	57	Pontaderia cordata, Calla palustris, Sparganium species	
21	59	Brasenia schreberi, Pontaderia cordata, Nuphar variegata	
22	71	Typha angustifolia	
23	73	Pontaderia cordata, Sparganium species, Nuphar variegata	
24	80	Pontaderia cordata, Nymphea odorata, Brasenia schreberi	
25	83	Nymphea odorata, Nuphar variegata, Brasenia schreberi, Pontaderia cordata	
26	88	Pontaderia cordata, Brasenia schreberi	
27	94	Pontaderia cordata, Brasenia schreberi, Sparganium fluctuans, Sparganium species	
28	97	Sparganium fluctuans	

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitiude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed		*Myriophyllum sibiricum*, Northern water-milfoil
2	1	45.6608641	-89.4025797	7	M	P						
3	2	45.6600991	-89.40258784	7	M	P						
4	3	45.6616235	-89.40148052	7	M	P						
5	4	45.6608584	-89.40148867	7	M	P						
6	5	45.6600934	-89.40149682	7	M	P						
7	6	45.6593284	-89.40150498	2	M	P		2				
8	7	45.6577983	-89.40152128	8	M	P						
9	8	45.6631478	-89.40037315	4	S	P						
10	9	45.6623828	-89.40038131	8	M	P						
11	10	45.6616178	-89.40038948	11	M	P						
12	11	45.6608527	-89.40039765	12	M	P						
13	12	45.6600877	-89.40040581	11	M	P						
14	13	45.6593227	-89.40041398	11	M	P						
15	14	45.6585576	-89.40042214	10.5	M	P						
16	15	45.6577926	-89.40043031	9.5	M	P						
17	16	45.6562625	-89.40044664	4.5	M	P						
18	17	45.6631421	-89.39928208	10.5	M	P						
19	18	45.6623771	-89.39929026	7	M	P						
20	19	45.661612	-89.39929844	7.5	S	P						
21	20	45.660847	-89.39930662	7.5	M	P						
22	21	45.660082	-89.3993148	7.5	M	P						
23	22	45.6593169	-89.39932298	8	M	P						
24	23	45.6646664	-89.39817461	2	M	P		1				
25	24	45.6639014	-89.39818281	8	M	P						
26	25	45.6631363	-89.39819101	2	M	P		2				

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitiude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed		*Myriophyllum sibiricum*, Northern water-milfoil
27	26	45.6623713	-89.3981992	3.5	M	P		1				
28	27	45.6616063	-89.3982074	4.5	S	P		1				
29	28	45.6608412	-89.3982156	7	M	P						
30	29	45.6600762	-89.39822379	7	M	P						
31	30	45.6593112	-89.39823199	3	M	P		2				
32	31	45.6638956	-89.39709172	10.5	M	P						
33	32	45.6631306	-89.39709994	7	M	P						
34	33	45.6623656	-89.39710815	4	M	P		1				
35	34	45.6608355	-89.39712457	6	M	P						
36	35	45.6600705	-89.39713278	6	M	P		1				
37	36	45.6646549	-89.39599241	12.5	M	P						
38	37	45.6654141	-89.39489307	5	R	P						
39	38	45.6654084	-89.39380196	7.5	M	P						
40	39	45.6646433	-89.39381021	7	S	P						
41	40	45.6654026	-89.39271084	9	M	P						
42	41	45.6646375	-89.39271912	10.5	M	P						
43	42	45.6638725	-89.39272739	7.5	M	P						
44	43	45.6684569	-89.39158658	7	M	P						
45	44	45.6676919	-89.39159487	9	M	P						
46	45	45.6661618	-89.39161144	6	M	P						
47	46	45.6653968	-89.39161973	7.5	M	P						
48	47	45.6646317	-89.39162802	10.5	M	P						
49	48	45.6631017	-89.39164459	1.5	S	P		1				
50	49	45.6623366	-89.39165288				NONNAVIGABLE (PLANTS)					
51	50	45.6684511	-89.39049541	7	S	P						

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitiude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed		*Myriophyllum sibiricum*, Northern water-milfoil
52	51	45.667686	-89.39050371	9.5	S	P						
53	52	45.666156	-89.39052032	7	M	P						
54	53	45.6653909	-89.39052862	7.5	M	P						
55	54	45.6646259	-89.39053692	10	M	P						
56	55	45.6638609	-89.39054522	7.5	M	P						
57	56	45.6630959	-89.39055352	6.5	M	P						
58	57	45.6684452	-89.38940424	9	M	P						
59	58	45.6676802	-89.38941255	7	M	P						
60	59	45.6661502	-89.38942919	7	M	P						
61	60	45.6646201	-89.38944582	12	M	P						
62	61	45.6638551	-89.38945414	7.5	M	P						
63	62	45.66309	-89.38946246	3.5	M	P		1				
64	63	45.6684394	-89.38831306	7	S	P						
65	64	45.6661443	-89.38833806	7	M	P						
66	65	45.6653793	-89.38834639	8	M	P						
67	66	45.6646143	-89.38835473	11	M	P						
68	67	45.6638492	-89.38836306	8	M	P						
69	68	45.6630842	-89.38837139	7	M	P						
70	69	45.6661385	-89.38724694	6	M	P						
71	70	45.6653734	-89.38725528	7	M	P						
72	71	45.6646084	-89.38726363	7.5	M	P						
73	72	45.6638434	-89.38727198	11.5	M	P						
74	73	45.6630783	-89.38728032	7	M	P						
75	74	45.6676627	-89.38613909	9.5	M	P						
76	75	45.6668976	-89.38614745	6	M	P		1				

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitiude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed		*Myriophyllum sibiricum*, Northern water-milfoil
77	76	45.6661326	-89.38615581	2	M	P		3				
78	77	45.6653676	-89.38616417	1.5	S	P		2				
79	78	45.6646025	-89.38617253	8	M	P						
80	79	45.6638375	-89.38618089	10	M	P						
81	80	45.6630725	-89.38618925	5	M	P		1				
82	81	45.6676568	-89.38504793	6	S	P						
83	82	45.6668918	-89.38505631	6	M	P		2				
84	83	45.6661267	-89.38506468	6.5	M	P						
85	84	45.6653617	-89.38507306	3	M	P		2				
86	85	45.6645967	-89.38508144	10.5	M	P						
87	86	45.6638317	-89.38508981	7	M	P						
88	87	45.6676509	-89.38395678	4.5	M	P		1				
89	88	45.6668859	-89.38396517	7.5	M	P						
90	89	45.6661209	-89.38397356	7.5	M	P						
91	90	45.6653558	-89.38398195	7.5	M	P						
92	91	45.6645908	-89.38399034	9	M	P						
93	92	45.667645	-89.38286562	5.5	M	P						
94	93	45.66688	-89.38287403	5	M	P						
95	94	45.666115	-89.38288243	9.5	M	P						
96	95	45.6653499	-89.38289084	5.5	M	P						
97	96	45.6645849	-89.38289925	6	M	P						
98	97	45.6638199	-89.38290765	3	M	P		2				
99	98	45.6661091	-89.38179131	5	M	P		3				
100	99	45.665344	-89.38179973	4	M	P		3				
101	100	45.664579	-89.38180815	2	S	P		3				

	A	B
1	**Boat Survey**	
2	**Lake**	Thunder Lake
3	**County**	Oneida
4	**WBIC**	1580400
5	**Date of Survey**	6/27/11-6/28/11
6	**Field Crew**	KM, AM, NY
7		
8		
9		
10	**Nearest Point**	**Species seen, habitat information**
11	3	Nuphar variegata, Pontaderia cordata
12	4	Nuphar variegata
13	15	*Brasenia schreberi, Nuphar variegata, Pontaderia cordata*
14	22	*Nymphea odorata*
15	32	Pontaderia cordata, Nymphea odorata, Nuphar variegata, Brasenia schreberi
16	33	Nymphea odorata, Pontaderia cordata, Nuphar variegata
17	36	Pontaderia cordata, Nuphar variegata
18	38	Pontaderia cordata, Nuphar variegata
19	39	Pontaderia cordata, Nuphar variegata, Brasenia schreberi
20	40	Pontaderia cordata, Nuphar variegata, Brasenia schreberi, Nymphea odorata
21	43	Pontaderia cordata, Nymphea odorata, Nuphar variegata
22	45	Pontaderia cordata, Nuphar variegata, Brasenia schreberi
23	46	Pontaderia cordata, Nuphar variegata, Brasenia schreberi
24	48	Pontaderia cordata, Brasenia schreberi, Nymphea odorata, Dulichium arundinaceum
25	50	Pontaderia cordata, Nymphea odorata, Brasenia schreberi
26	51	Brasenia schreberi, Pontaderia cordata
27	52	Brasenia schreberi, Pontaderia cordata
28	58	Nymphea odorata, Brasenia Schreberi
29	62	Pontaderia cordata, Dulichium arundinaceum, Nuphar variegata
30	63	Brasenia schreberi, Nuphar variegata, Nymphea odorata, Pontaderia cordata, Typha latifolia
31	70	Brasenia schreberi, Pontaderia cordata, Nuphar variegata
32	80	Nymphea odorata, Pontaderia cordata, Nuphar variegata, Calla palustrius, Spirodela polyrhiza, Utricularia vulgaris
33	81	Nuphar variegata, Brasenia schreberi, Pontaderia cordata
34	82	Nuphar variegata, Nymphea odorata, Pontaderia cordata
35	83	Nuphar variegata, Brasenia schreberi, Pontaderia cordata
36	92	Nuphar variegata, Brasenia schreberi, Pontaderia cordata
37	93	Pontaderia cordata, Brasenia schreberi
38	96	Ceradophyllum demersium
39	97	Potamogeton natans
40	100	Calla palustrius, Schoenoplectus tabernaemontani, Sagittaria cristata, Iris versicolor, Typha latifolia, Typha angustifolia, Potamogeton epihydrus

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitiude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed		*Myriophyllum sibiricum*, Northern water-milfoil
2	1	45.6690535	-89.41779539				NONNAVIGABLE (PLANTS)					
3	2	45.670578	-89.4166883				NONNAVIGABLE (PLANTS)					
4	3	45.669813	-89.41669625	2	M	P		2				
5	4	45.6690479	-89.4167042	3	M	P		3				
6	5	45.6713375	-89.41558912	5	M	P						
7	6	45.6705724	-89.41559708	3	M	P		2				
8	7	45.6698074	-89.41560505	5	M	P						
9	8	45.6690424	-89.41561301	4	M	P		2				
10	9	45.6713319	-89.41449789	6	M	P						
11	10	45.6705668	-89.41450587	8	M	P						
12	11	45.6698018	-89.41451384	9	M	P						
13	12	45.6720913	-89.41339867	4	M	P		3			V	
14	13	45.6713263	-89.41340666	5	M	P						
15	14	45.6705612	-89.41341465	6	M	P						
16	15	45.6697962	-89.41342264	9	M	P						
17	16	45.6728507	-89.41229941	2	M	P		1				
18	17	45.6720857	-89.41230742	2	M	P		2				
19	18	45.6705556	-89.41232343	6	M	P						
20	19	45.6697906	-89.41233144	7	M	P						
21	20	45.6690256	-89.41233945	10	M	P						
22	21	45.6720801	-89.41121617	2	M	P		2				
23	22	45.671315	-89.41122419	6	M	P						
24	23	45.67055	-89.41123222	6	M	P						
25	24	45.669785	-89.41124024	7	M	P						
26	25	45.6690199	-89.41124826	9	M	P						

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitiude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed	*Myriophyllum sibiricum*, Northern water-milfoil	
27	26	45.6720744	-89.41012493	3	M	P		1				
28	27	45.6713094	-89.41013296	6	M	P						
29	28	45.6705444	-89.410141	9	M	P						
30	29	45.6697793	-89.41014904	10	M	P						
31	30	45.6690143	-89.41015707	6	M	P						
32	31	45.6728338	-89.40902563	3	M	P		1			V	
33	32	45.6720688	-89.40903368	2	M	P		2				
34	33	45.6713038	-89.40904173	8	M	P						
35	34	45.6705387	-89.40904978	6	M	P						
36	35	45.6697737	-89.40905783	6	M	P						
37	36	45.6690087	-89.40906588	5	M	P						
38	37	45.6728282	-89.40793437	3	M	P		1				
39	38	45.6720632	-89.40794243	5	M	P		1				
40	39	45.6712981	-89.4079505	6	M	P						
41	40	45.6705331	-89.40795857	9	M	P						
42	41	45.667473	-89.40799083	3	M	P		3			1	
43	42	45.6728225	-89.40684311	4	M	P		1				
44	43	45.6720575	-89.40685119	6	M	P		1				
45	44	45.6712925	-89.40685927	9	M	P						
46	45	45.6705274	-89.40686735	6	M	P						
47	46	45.6674673	-89.40689967	4	M	P		1			V	
48	47	45.6728169	-89.40575185	3	M	P						
49	48	45.6720518	-89.40575994	6	M	P						
50	49	45.6712868	-89.40576804	11	M	P						
51	50	45.6705218	-89.40577614	6	M	P						

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitiude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed		*Myriophyllum sibiricum*, Northern water-milfoil
52	51	45.6682267	-89.40580042	4.5	M	P						
53	52	45.6728112	-89.40466059	5	M	P		1				
54	53	45.6720461	-89.4046687	6	M	P		1				
55	54	45.6712811	-89.40467681	11	M	P						
56	55	45.6705161	-89.40468492	6	M	P		1				
57	56	45.668986	-89.40470114	5	M	P						
58	57	45.668221	-89.40470925	5.5	M	P						
59	58	45.6674559	-89.40471736	5	M	P						
60	59	45.6666909	-89.40472547	3	M	P		1			V	
61	60	45.6720404	-89.40357745	6	M	P						
62	61	45.6712754	-89.40358558	7.5	M	P						
63	62	45.6705104	-89.40359371	6.5	M	P						
64	63	45.6697454	-89.40360183	6	M	P						
65	64	45.6689803	-89.40360996	5	M	P						
66	65	45.6682153	-89.40361808	6	M	P						
67	66	45.6674503	-89.40362621	2.5	M	P		2				
68	67	45.6666852	-89.40363433	2.5	M	P		3				
69	68	45.6712697	-89.40249435	7	M	P						
70	69	45.6705047	-89.40250249	11	M	P						
71	70	45.6697397	-89.40251063	9	M	P						
72	71	45.6689746	-89.40251877	10	M	P						
73	72	45.6682096	-89.40252691	6	M	P						
74	73	45.670499	-89.40141128	5	M	P		2				
75	74	45.6697339	-89.40141943	5	M	P		2				
76	75	45.6682039	-89.40143574	9	M	P						

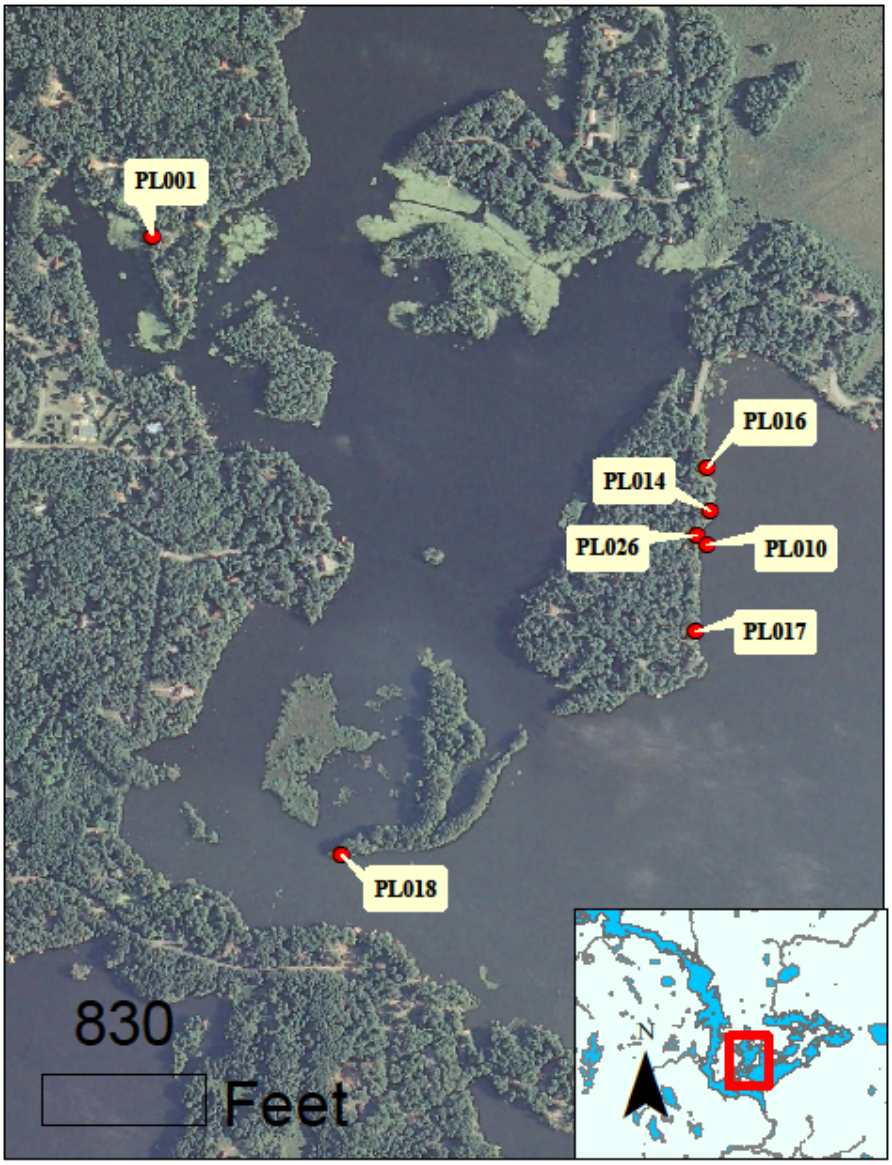
	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitiude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed	*Myriophyllum sibiricum*, Northern water-milfoil	
77	76	45.6704932	-89.40032006	5.5	M	P		2				
78	77	45.6697282	-89.40032823	4.5	M	P		1				
79	78	45.6689632	-89.4003364	6	M	P		2				
80	79	45.6681982	-89.40034457	9	M	P						
81	80	45.6697225	-89.39923704	6.5	M	P						
82	81	45.6689575	-89.39924522	9.5	M	P						
83	82	45.6681924	-89.3992534	9.5	M	P						
84	83	45.6697167	-89.39814584	6.5	M	P		1				
85	84	45.6689517	-89.39815404	10	M	P						
86	85	45.6681867	-89.39816224	9	M	P						
87	86	45.6674216	-89.39817044	4.5	M	P		2				
88	87	45.670476	-89.39704643	5	M	P		1				
89	88	45.669711	-89.39705464	6.5	M	P						
90	89	45.668946	-89.39706285	9.5	M	P						
91	90	45.6681809	-89.39707107	6	M	P						
92	91	45.6712353	-89.39594698				NONNAVIGABLE (PLANTS)					
93	92	45.6704703	-89.39595521	5	M	P		2				
94	93	45.6697052	-89.39596344	6.5	M	P		1				
95	94	45.6689402	-89.39597167	3.5	M	P		1				
96	95	45.6719945	-89.39484751				NONNAVIGABLE (PLANTS)					
97	96	45.6712295	-89.39485576	3.5	M	P		3			1	
98	97	45.6704645	-89.394864	4.5	M	P		2				
99	98	45.6696994	-89.39487225	10.5	M	P		1				
100	99	45.6712237	-89.39376453	4	M	P		3				
101	100	45.6704587	-89.39377279	6	M	P						

	J	K	L	M	N	O	P	Q	R	S	T	U
1	sampling point	Latitiude (need electronic copy of site locations)	Longitude (need electronic copy of site locations)	Depth (ft)	Dominant sediment type (M=muck, S=Sand, R=Rock)	Sampled holding rake pole (P) or rake rope (R)?	comments	Total Rake Fullness	*Myriophyllum spicatum*, Eurasian water-milfoil or Hybrid water-milfoil	*Potamogeton crispus*, Curly-leaf pondweed	*Myriophyllum sibiricum*, Northern water-milfoil	
102	101	45.6696937	-89.39378105	10	M	P						
103	102	45.6696879	-89.39268985	4.5	M	P						

	A	B	C
1	**Boat Survey**		
2	**Lake**	Lake Creek	
3	**County**	Oneida	
4	**WBIC**	1580500	
5	**Date of Survey**	6/28/11-6/29/11	
6	**Field Crew**	CW, KM, AM, NY	
7			
8			
9			
10	**Nearest Point**	**Species seen, habitat information**	
11	6	Pontaderia cordata	
12	12	Pontaderia cordata	
13	20	Iris versicolor	
14	22	Nyphea odorata	
15	25	*Pontaderia cordata*	
16	32	*Pontaderia cordata*	
17	35	*Nymphea odorata*	
18	37	*Potamogeton natans, Pontaderia cordata*	
19	41	*Pontaderia cordata*	
20	42	Pontaderia cordata, Iris versicolor	
21	43	Nymphea odorata	
22	46	Pontaderia cordata, Calla palustris, Potamogeton natans	
23	47	Potamogeton natans, Pontaderia cordata, Nymphea odorata, Brasenia schreberi, Ceradophyllum demersium, Nuphar variegata, Typha latifolia	
24	50	Nymphea odorata	
25	51	Calla palustris, Pontaderia cordata, Iris versicolor	
26	52	Pontaderia cordata, Nuphar variegata, Nymphea odorata, Iris versicolor, Dulichium arundinaceum	
27	53	Pontaderia cordata	
28	63	Nymphea odorata	
29	64	Nymphea odorata, Pontaderia cordata	
30	65	Brasenia Schreberi, Nymphea odorata, Pontaderia cordata	
31	67	Pontaderia cordata, Nuphar variegata	
32	68	Pontaderia cordata, Nuphar variegata	
33	72	Nymphea odorata, Pontaderia cordata	
34	73	Nuphar variegata	
35	76	Nymphea odorata, Pontaderia cordata	
36	80	Nymphea odorata, Brasenia schreberi	
37	86	Pontaderia cordata, Nymphea odorata	
38	90	Nuphar variegata, Pontaderia cordata	
39	99	Nuphar variegata, Pontaderia cordata	
40	102	Nuphar variegata, Pontaderia cordata, Typha latifolia	

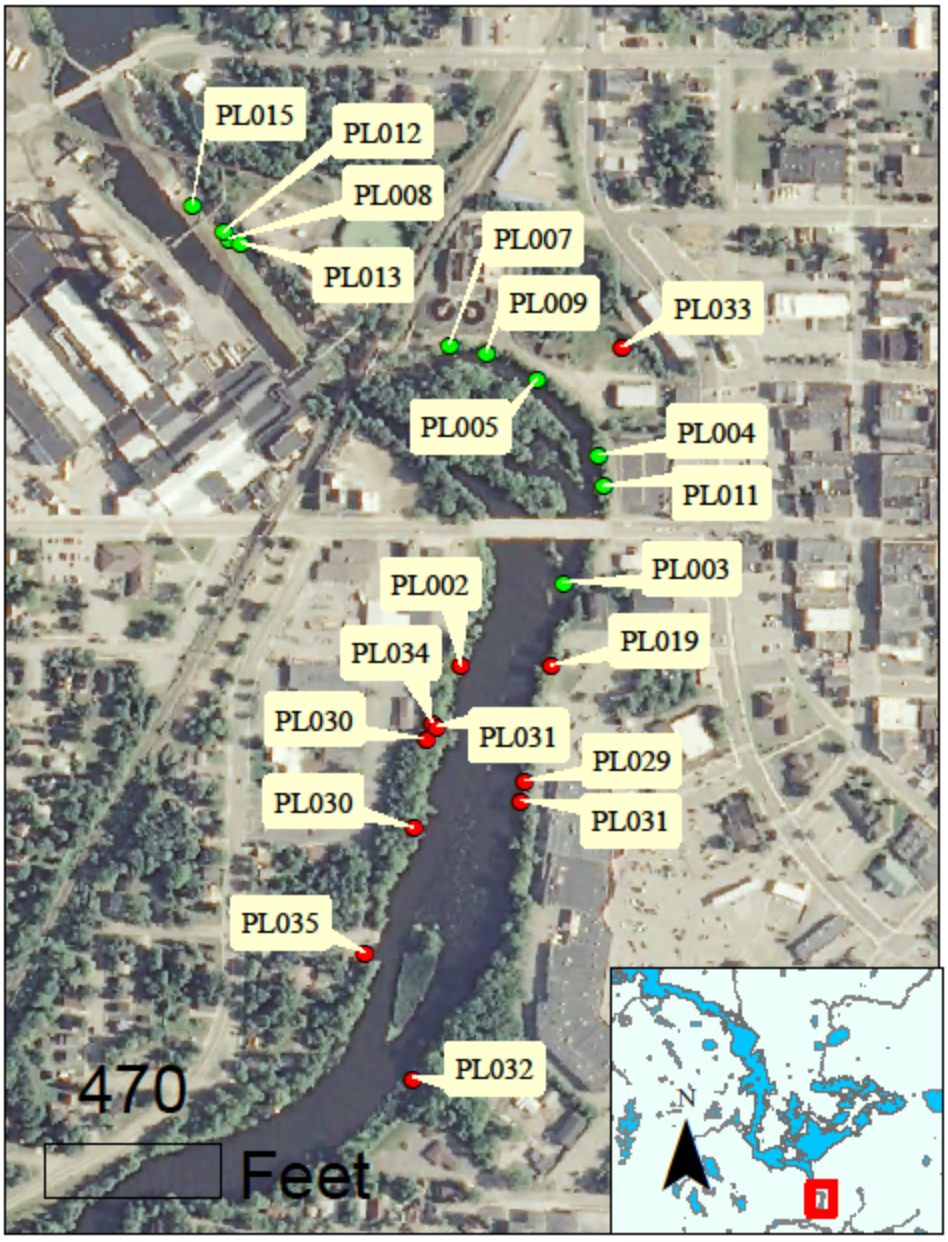
Appendix
Purple Loosestrife

Above Dam Rhinelander Flowage
Purple Loosestrife Locations



- Purple Loosestrife observed prior to but not including 2011
- Purple Loosestrife observed in 2011

Below Dam Rhinelander Flowage
Purple Loosestrife Locations



Purple Loosestrife observed prior to but not including 2011

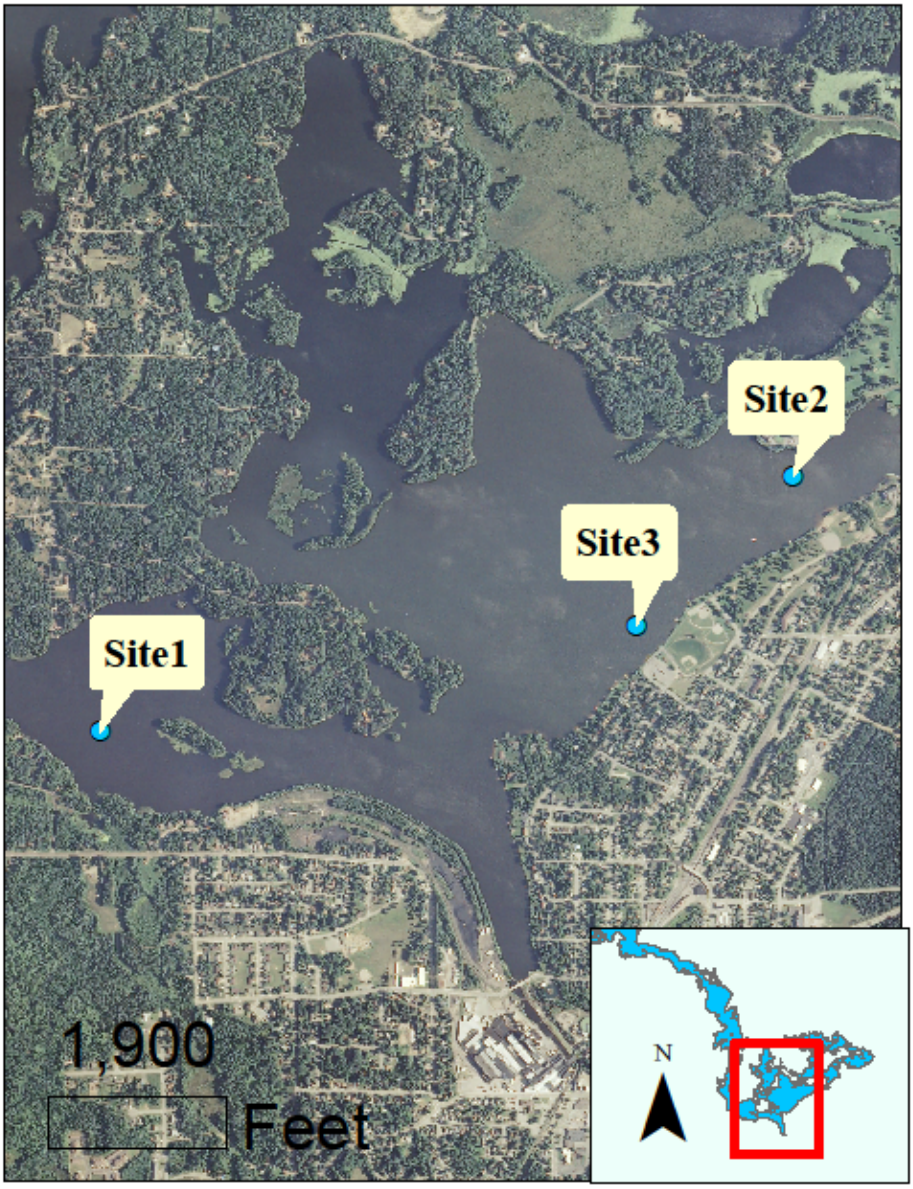
Purple Loosestrife observed in 2011

SITE #	Latitude	Longitude	# OF PLANTS	PRESENT LAST YEAR?	PULLED THIS YEAR?	PULLED LAST YEAR?	BEETLE DAMAGE?	YEAR FIRST OBSERVED	COMMENTS
PL001	45.66255558	-89.43352777	3	YES	NO	NO	NO	2006	LEFT BROCHURE FOR LANDOWNER AND CUT THE FLOWERS
PL002	45.63680554	-89.41697225	10	YES	NO	NP	YES	2006	NOT FLOWERING BUT PLANTS WERE PRESENT
PL003	45.63741666	-89.41588889	0	NO	NP	NP	NP	2006	NOT PRESENT
PL004	45.63836114	-89.4155278	0	YES	NP	YES	NP	2006	NOT PRESENT
PL005	45.63891669	-89.41616667	0	NO	NP	NP	NP	2006	NOT PRESENT
PL007			0	YES	NP	YES	NP	2006	NOT PRESENT
PL008	45.63994448	-89.41938892	0	NO	NP	NP	NP	2006	NOT PRESENT
PL009	45.63911115	-89.41669447	0	YES	NP	YES	NP	2006	NOT PRESENT
PL010	45.65824997	-89.42255552	1	YES	NO	NO	NO	2007	LEFT BROCHURE FOR LANDOWNER AND CUT THE FLOWERS
PL011	45.63813885	-89.41547222	0	NO	NP	NP	NP	2007	NOT PRESENT
PL012	45.63999997	-89.41944441	0	NO	NP	NP	NP	2007	NOT PRESENT
PL013	45.63991665	-89.41927778	0	NO	N	NP	NP	2007	NOT PRESENT
PL014	45.6587222	-89.42250003	3	YES	NO	NO	NO	2008	CONTACTED LANDOWNER AND CUT THE FLOWERS
PL015	45.64019443	-89.41977776	0	NO	NP	NP	NP	2008	NOT PRESENT
PL016	45.65930558	-89.42255552	10	YES	NO	NO	NO	2009	LEFT BROCHURE FOR LANDOWNER AND CUT THE FLOWERS
PL017	45.6570278	-89.42277781	1	YES	NO	YES	NO	2009	LEFT BROCHURE FOR LANDOWNER AND CUT THE FLOWERS
PL018	45.65394443	-89.42980553	4	YES	YES	YES	NO	2009	4 PLANTS PULLED
PL019	45.63680554	-89.41602778	1	YES	NO	YES	YES	2009	FLOWERS CLIPPED
PL020	45.6593056	89.41575	0	YES	NP	YES	NP	2010	NOT PRESENT
PL021	45.6386667	89.4157222	0	YES	NP	YES	NP	2010	NOT PRESENT
PL022	45.6390833	89.4005556	0	YES	NP	YES	NP	2010	NOT PRESENT
PL023	45.6627778	89.4338889	0	YES	NP	NO	NP	2010	NOT PRESENT
PL024	45.6606667	89.4391667	0	YES	NP	NO	NP	2010	NOT PRESENT
PL025	45.6609167	89.4386944	0	YES	NP	NO	NP	2010	NOT PRESENT
PL026	45.65837586	-89.42275417	2	NO	NO	NO	NO	2011	2 PLANTS PULLED
PL027	45.63626465	-89.41733292	3	NO	YES	NO	YES	2011	3 PLANTS PULLED, SEVERE BETTLE DAMAGE, NO FLOWERING HEADS

SITE #	Latitude	Longitude	# OF PLANTS	PRESENT LAST YEAR?	PULLED THIS YEAR?	PULLED LAST YEAR?	BEETLE DAMAGE?	YEAR FIRST OBSERVED	COMMENTS
PL028	45.63636155	-89.41722605	50	NO	NO	NO	YES	2011	FLOWERS CLIPPED, HEAVY BEETLE DAMAGE
PL029	45.63595888	-89.41630505	15	NO	NO	NO	NO	2011	FLOWERS CLIPPED
PL030	45.63561372	-89.41747148	13	NO	NO	NO	YES	2011	FLOWERS CLIPPED, LIGHT BEETLE DAMAGE
PL031	45.63581362	-89.41634889	3	NO	NO	NO	YES	2011	FLOWERS CLIPPED, LIGHT BEETLE DAMAGE
PL 32	45.633994	-89.4171916	100	NO	NO	NO	YES	2011	FLOWERS CLIPPED, LIGHT BEETLE DAMAGE, HEAVIEST POPULATED PL LOCATION FOUND IN 2011
PL 33	45.6391554	-89.41527709	1	NO	YES	NO	NO	2011	PLANT PULLED
PL 34	45.63638971	-89.41727023	2	NO	NO	NO	YES	2011	HEAVY BEETLE DAMAGE, LIVING BEETLES
PL 35	45.63469917	-89.41798638	1	NO	YES	NO	NO	2011	PLANT PULLED

Appendix Monitoring for Spiny Waterfleas and Zebra Mussels

Rhinelander Flowage Zebra Mussel and Spiny Waterflea Monitoring Locations



- Purple Loosestrife observed prior to but not including 2011
- Purple Loosestrife observed in 2011

Spiny Waterflea Sampling Points Data Sheet

Name	Secchi Depth	Depth Sampled	Tow Pattern	Results
SWF 1	4.5 feet	8 feet	Oblique	Negative
SWF 2	3.5 feet	12 feet	Oblique	Negative
SWF 3	3.5 feet	8 feet	Oblique	Negative

Zebra Mussle and Velliger Sampling Points Data Sheet

Name	Secchi Depth	Number of tows	Depth of tows	Results
ZM 1	4.5 feet	1 - vertical	1 Meter	Negative
ZM 2	3.5 feet	1 - vertical	1 Meter	Negative
ZM 3	3.5 feet	1 - vertical	1 Meter	Negative

Appendix
Aquatic Plants of the Rhinelander Flowage

The Importance of Aquatic Plants

Aquatic plants are an integral part of an aquatic ecosystem, increasing aquatic habitats for both humans and animals. They not only help regulate chemicals in a water body providing better water quality, but they also produce oxygen, protect the shoreline, and add beauty.

Birds, fish, and other creatures need aquatic plants for survival. Not only do aquatic plants produce live-giving oxygen, but also provide food, shelter, cover, and a unique ecosystem for animals such as beavers, bugs, fish, and birds.

As they consume phosphorus, nitrogen, and other nutrients from the water, aquatic plants can improve water quality. High levels of chemicals such as these can pollute a body of water, decreasing oxygen levels for living organisms and which can be critical for fish populations. And aquatic plants are known to help break down chemicals and keep a balanced ecosystem that could otherwise lead to nuisance algal blooms.

Aquatic plants also capture sediments using their complex root systems, reducing erosion, and trapping debris. Large areas of standing aquatic plants such as pond lilies and rushes reduce erosion by slowing water movement and breaking waves before the water reaches shore.

Lastly, from their vibrant colors, delicateness, and dramatic textures; aquatic plants are undeniably beautiful and together they add uniqueness, natural mystique, and ambiance to our Northwoods' water systems.

Rhinelander Flowage, Oneida County Aquatic Plant Survey Summary Statistics

Total number of sites visited	**586**
Total number of sites with vegetation	**262**
Total number of sites shallower than maximum depth of plants	**520**
Frequency of occurrence at sites shallower than maximum depth of plants	**50.38**
Simpson Diversity Index	**0.93**
Maximum depth of plants (ft)**	**10.00**
Number of sites sampled using rake on Rope (R)	**0**
Number of sites sampled using rake on Pole (P)	**585**
Average number of all species per site (shallower than max depth)	**1.32**
Average number of all species per site (veg. sites only)	**2.61**
Average number of native species per site (shallower than max depth)	**1.31**
Average number of native species per site (veg. sites only)	**2.61**
Species Richness	**42**
Species Richness (including visuals)	**48**

Rhinelander Flowage, Oneida County Floristic Quality Index Summary

N	**38**
mean C	**6.84**
FQI	**42.178**

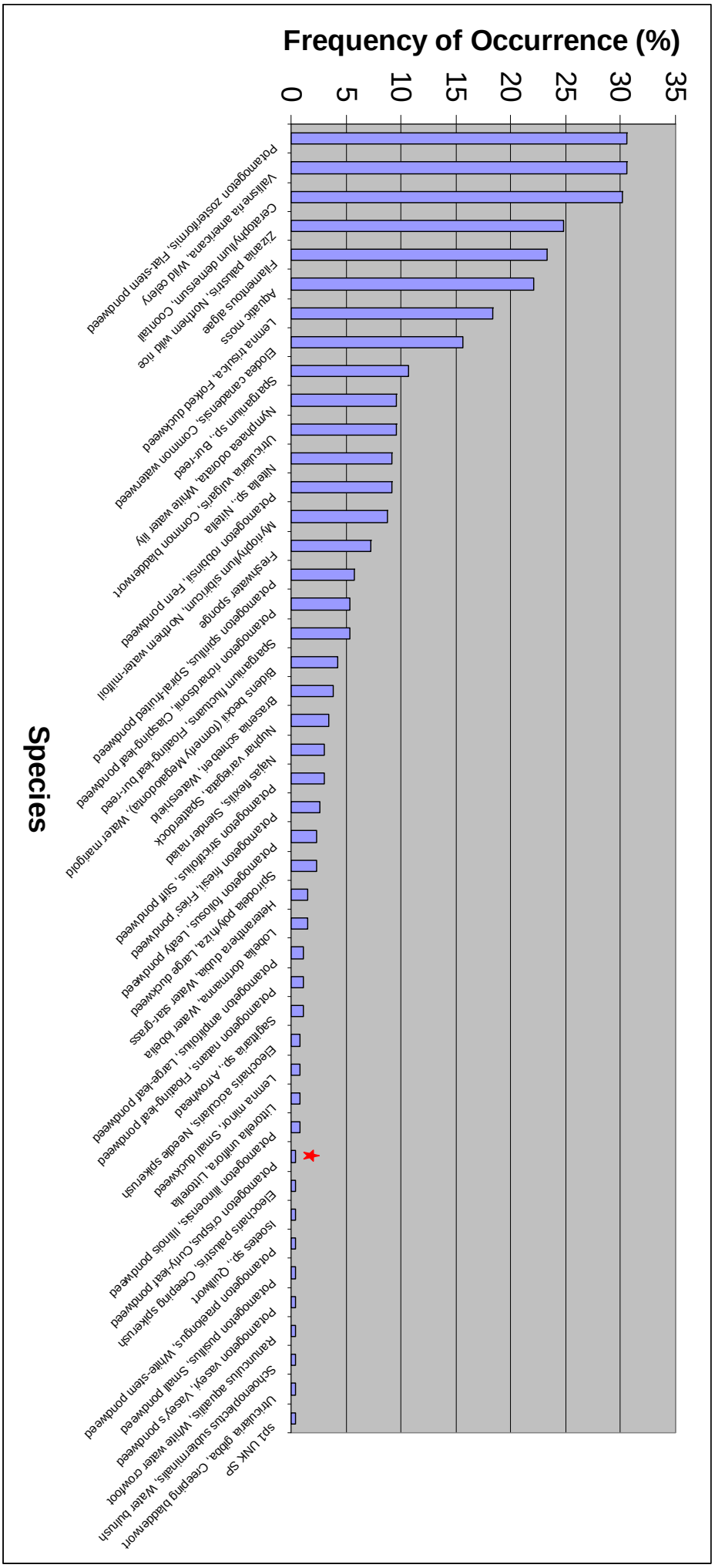


Figure 1. Rhinelander Flowage, Oneida County aquatic plant species frequency of occurrence within vegetated zones.

Boom Lake, Oneida County Aquatic Plant Survey Summary Statistics

Total number of sites visited	**178**
Total number of sites with vegetation	**35**
Total number of sites shallower than maximum depth of plants	**67**
Frequency of occurrence at sites shallower than maximum depth of plants	**52.24**
Simpson Diversity Index	**0.90**
Maximum depth of plants (ft)**	**12.50**
Number of sites sampled using rake on Rope (R)	**38**
Number of sites sampled using rake on Pole (P)	**85**
Average number of all species per site (shallower than max depth)	**1.49**
Average number of all species per site (veg. sites only)	**2.86**
Average number of native species per site (shallower than max depth)	**1.49**
Average number of native species per site (veg. sites only)	**2.86**
Species Richness	**21**
Species Richness (including visuals)	**24**

Boom Lake, Oneida County Floristic Quality Index Summary

N	**20**
mean C	**6.6**
FQI	**29.516**

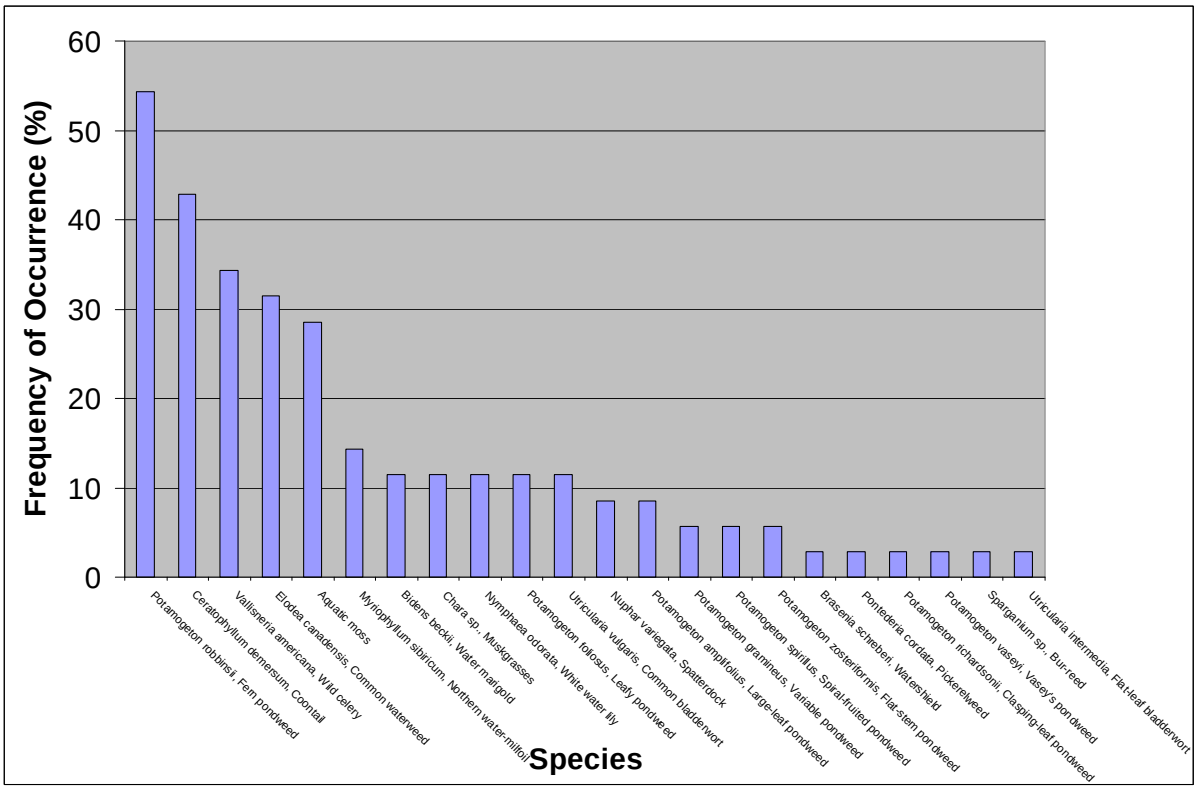


Figure 2. Boom Lake, Oneida County aquatic plant species frequency of occurrence within vegetated zones.

Bass Lake, Oneida County Aquatic Plant Survey Summary Statistics

Total number of sites visited	**87**
Total number of sites with vegetation	**61**
Total number of sites shallower than maximum depth of plants	**72**
Frequency of occurrence at sites shallower than maximum depth of plants	**84.72**
Simpson Diversity Index	**0.84**
Maximum depth of plants (ft)**	**8.00**
Number of sites sampled using rake on Rope (R)	**0**
Number of sites sampled using rake on Pole (P)	**84**
Average number of all species per site (shallower than max depth)	**1.57**
Average number of all species per site (veg. sites only)	**1.85**
Average number of native species per site (shallower than max depth)	**1.57**
Average number of native species per site (veg. sites only)	**1.85**
Species Richness	**14**
Species Richness (including visuals)	**18**

Bass Lake, Oneida County Floristic Quality Index Summary

N	**15**
mean C	**6**
FQI	**22.45**

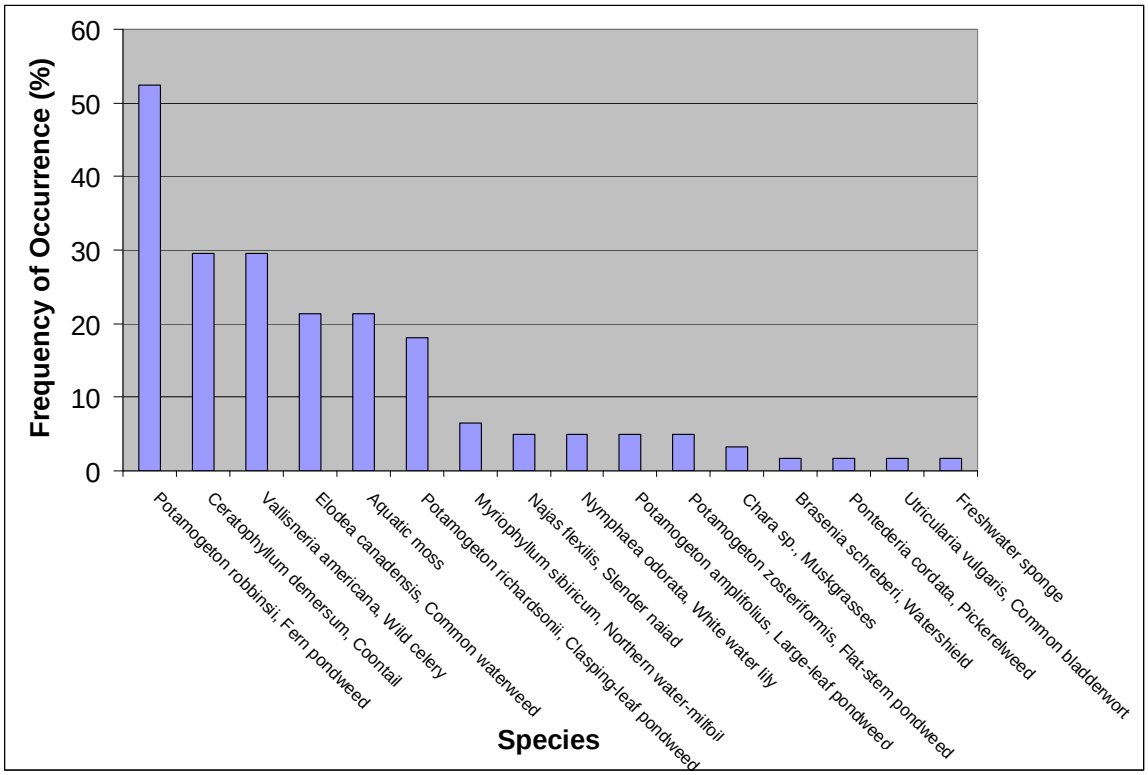


Figure 3. Bass Lake, Oneida County aquatic plant species frequency of occurrence within vegetated zones.

Thunder Lake, Oneida County Aquatic Plant Survey Summary Statistics

Total number of sites visited	**99**
Total number of sites with vegetation	**21**
Total number of sites shallower than maximum depth of plants	**32**
Frequency of occurrence at sites shallower than maximum depth of plants	**65.63**
Simpson Diversity Index	**0.87**
Maximum depth of plants (ft)**	**6.00**
Number of sites sampled using rake on Rope (R)	**0**
Number of sites sampled using rake on Pole (P)	**99**
Average number of all species per site (shallower than max depth)	**1.44**
Average number of all species per site (veg. sites only)	**2.19**
Average number of native species per site (shallower than max depth)	**1.44**
Average number of native species per site (veg. sites only)	**2.19**
Species Richness	**13**
Species Richness (including visuals)	**18**

Thunder Lake, Oneida County Floristic Quality Index Summary

N	**13**
mean C	**6.46**
FQI	**23.297**

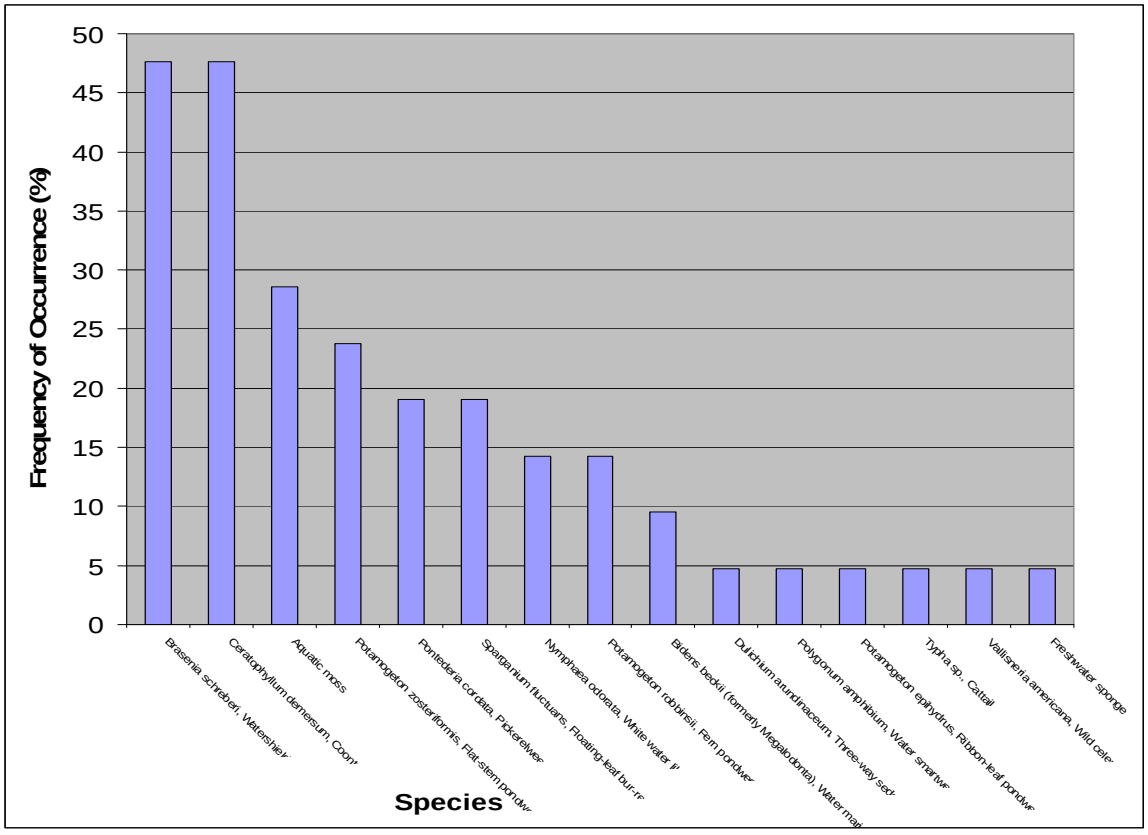


Figure 4. Thunder Lake, Oneida County aquatic plant species frequency of occurrence within vegetated zones.

Lake Creek, Oneida County Aquatic Plant Survey Summary Statistics

Total number of sites visited	98
Total number of sites with vegetation	29
Total number of sites shallower than maximum depth of plants	95
Frequency of occurrence at sites shallower than maximum depth of plants	30.53
Simpson Diversity Index	0.83
Maximum depth of plants (ft)**	10.50
Number of sites sampled using rake on Rope (R)	0
Number of sites sampled using rake on Pole (P)	98
Average number of all species per site (shallower than max depth)	0.73
Average number of all species per site (veg. sites only)	2.38
Average number of native species per site (shallower than max depth)	0.73
Average number of native species per site (veg. sites only)	2.38
Species Richness	15
Species Richness (including visuals)	26

Lake Creek Oneida County Floristic Quality Index Summary

N	15
mean C	6.73
FQI	26.078

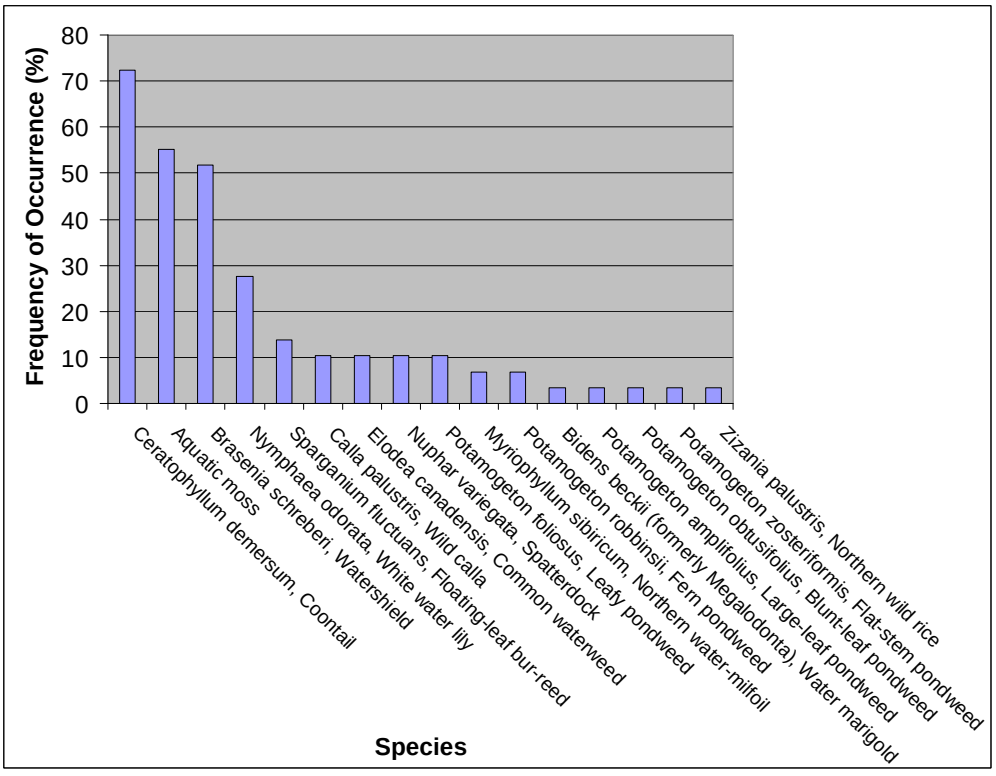


Figure 5. Lake Creek, Oneida County aquatic plant species frequency of occurrence within vegetated zones.

Appendix
Additional Information

Wausau Paper's Clean Boats, Clean Waters, Boat Inspections

Throughout the summer of 2011, Wausau Paper Corporation was involved in Aquatic Invasive Species monitoring on the Rhinelander Flowage beyond what they have been in prior years. Instead of contracting an aquatic plant survey like in years prior, WPC devoted an employee entirely to A.I.S. monitoring efforts with assistance from the Rhinelander-Wisconsin Department of Natural Resources lakes team. The WPC employee participated in: Clean Boats, Clean Waters watercraft inspections, a point intercept aquatic plant survey, aquatic invasive species meander surveys, purple loosestrife monitoring, zebra mussel and spiny waterflea monitoring, and community outreach attempts.

It should be mentioned that beyond collecting all the data and producing this report: 87 hours were spent at boat landings throughout the Rhinelander Flowage where watercraft inspections were preformed on 252 boats, and 500 people were educated about A.I.S. and the laws set in place to protect Wisconsin's water systems.

Data collected at the boat landings from WPC indicates 95% of boaters were familiar with the laws related to A.I.S. WPC recorded two violations when boaters did not clean aquatic plants off their trailers. When asked what the easiest way to contact boaters about A.I.S was, 365 of the 500 contacted boaters said a person at boat landings was most effective. And 83% of people would use a boat wash station to clean their boats if there was one available at the boat landing.

wausauPAPER

October 27, 2011

Mr. Nicholas J. Utrup
Wisconsin Hydropower Coordinator
U.S. Fish and Wildlife Service
Green Bay Ecological Service Field Office
2661 Scott Tower Drive
New Franken, WI 54229

Re: Rhinelander Hydroelectric Project
FERC Project No. 2161
Wausau Paper Mills, LLC
2011 Invasive Species Report for the Rhinelander Hydroelectric Project, Rhinelander, Oneida County, Wisconsin

Dear Mr. Utrup:

Pursuant to Article 406 of its FERC license for the Rhinelander Hydroelectric Project (FERC Project No. 2161), Wausau Paper Mills, LLC, is obligated to monitor invasive species such as purple loosestrife (*Lythrum salicaria*) and Eurasian water milfoil (*Myriophyllum spicatum*). On May 11, 2011, FERC issued its Order Amending Invasive Species Management Plan Pursuant to Article 406 ("Order"). In accordance with ordering paragraph (C) of the Order, Wausau Paper Mills, LLC hereby submits its *2011 Invasive Species Report for the Rhinelander Hydroelectric Project, Rhinelander, Oneida County, Wisconsin*, authored by Ashley McLaughlin, for agency review and comment.

We would like to clarify a point concerning ordering paragraph (B) of the Order, which obligates the licensee to "provide funds to hire a seasonal aquatic invasive species person (from mid-May through August) whose duties shall focus on controlling and monitoring invasive species within the project area . . ." Wisconsin's fiscal year ends on June 30. Due to the unprecedented budgetary measures enacted by the legislature this past spring and summer, it would have been impossible for the WDNR to hire a seasonal aquatic invasive species employee by mid-May, as contemplated by the Order. In order to meet the requirements of the Order in timely manner in light of Wisconsin's extraordinary budgetary constraints, Wausau Paper Mills, LLC hired the employee, Ashley McLaughlin (whom the WDNR had identified as the person of its choice), through an employment agency. While the work and the work product are in our view exemplary, this arrangement was administratively awkward. For example, since Ms. McLaughlin was not technically a WDNR employee, she was not permitted to operate the boat. Consequently, the WDNR had to supply an employee for that purpose. It is our understanding that the arrangement during the summers of 2012, 2013, 2014, and 2015 will revert to that as set forth in ordering paragraph (B) of the Order, i.e. the seasonal aquatic invasive species person will

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tel 715 369 4100 fax 715 369 4450
www.wausaupaper.com

be hired by WDNR, and Wausau Paper Mills, LLC will reimburse the WDNR for that person's wages.

Please respond with any comments within 30 days of receipt of this letter. If you will have no comments, we would appreciate receiving word to that effect. In the absence of response within 30 days, we will assume that comments are not forthcoming.

If you have any questions, please do not hesitate to contact me. Thank you for your attention and consideration.

Very truly yours,
WAUSAU PAPER - RHINELANDER

Tim Hasbargen, Manager of Engineering & Utilities

Enclosure

cc: Peggy A. Harding / Regional Engineer

wausauPAPER

October 27, 2011

Ms. Cheryl Laatsch
Wisconsin Department of Natural Resources
101 S. Webster – OE/7
Madison, WI 53703

Re: Rhinelander Hydroelectric Project
FERC Project No. 2161
Wausau Paper Mills, LLC
2011 Invasive Species Report for the Rhinelander Hydroelectric Project, Rhinelander, Oneida County, Wisconsin

Dear Ms. Laatsch:

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Very truly yours,
WAUSAU PAPER - RHINELANDER

Tim Hasbargen, Manager of Engineering & Utilities

Enclosure

cc: Peggy A. Harding / Regional Engineer

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