APPENDIX A – LAKE WAUBESA PLANT STATISTICS 2011

Aquatic Plant Community Statistics	2011
Number of sites sampled	987
Number of sites with vegetation	223
Number of sites shallower than maximum depth of plants	353
Frequency of occurrence at sites shallower than maximum depth of plants	63.17%
Simpson Diversity Index	0.86
Maximum Depth of Plants (Feet)	7
Taxonomic Richness (Number Taxa)	14
Average Number of Species per Site (less than max depth of plant growth)	1.41
Average Number of Species per Site (sites with vegetation)	2.24
Average Number of Native Species per Site (less than max depth of plant growth)	1.08
Average Number of Native Species per Site (sites with vegetation)	1.87

Table 1: 2011 Aquatic Plant Community	y Statistics, Lake Waubesa, Dane County, WI
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Species	Frequency of	Frequency of	Percent	Number of	Average
	Occurrence	Occurrence at Site	Relative	Intercept Points	Density
	within	Shallower Than	Frequency of	Where Detected	
	vegetated	Max Depth of	Occurrence		
	areas	Plants			
Filamentous algae	1.35	0.85	0.60	3	1.00
River bulrush	0.45	0.28	0.20	1	1.00
Coontail	60.99	38.53	27.25	136	1.25
Muskgrass	1.35	0.85	0.60	3	1.00
Common	9.42	5.95	4.21	21	1.00
waterweed					
Water star-grass	11.66	7.37	5.21	26	1.00
Small duckweed	4.48	2.83	2.00	10	1.00
Eurasian watermilfoil	47.09	29.75	21.04	105	1.05
Curly-leaf pondweed	4.93	3.12	2.20	11	1.00
Clasping-leaf pondweed	1.35	0.85	0.60	3	1.00
Flat-stem pondweed	37.22	23.51	16.63	83	1.00
Large duckweed	4.04	2.55	1.80	9	1.00
Wild celery	2.24	1.42	1.00	5	1.00
Horned pondweed	37.22	23.51	16.63	83	1.00

Table 3: Historical and 2011 Floristic Quality Index, Lake Waubesa, DaneCounty, WI

				Coeffecient of Conservatism	
Genus	Species	Common Name	2006	2011	
Bolboschoenus	fluviatilis	River bulrush		6	
Ceratophyllum	demersum	Coontail	3	3	
Chara	sp.	Muskgrass		7	
Elodea	canadensis	Common waterweed	3	3	
Heteranthera	dubia	Water star-grass	6	6	
Lemna	minor	Small duckweed	4	4	
Myriophyllum	sibiricum	Northern watermilfoil	6		
Potamogeton	foliosus	Leafy pondweed	6		
Potamogeton	richardsonii	Clasping-leaf pondweed	5	5	
Potamogeton	zosteriformis	Flat-stem pondweed	6	6	
Spirodela	polyrhiza	Large duckweed	5	5	
Stuckenia	pectinata	Sago pondweed	3		
Typha	angustifolia	Narrow-leaved cattail	1		
Vallisnera	americana	Wild celery	6	6	
Zannichellia	palustris	Horned pondweed	7	7	
		Total Species	13	11	
		Mean C	4.69	5.27	
		Floristic Quality Index (FQI)	16.92	17.49	

Please note: There is no Coefficient of Conservatism for exotic species such as Eurasian Watermilfoil or for species not identified to the species level (*Sagittaria sp.*).

Coefficient of Conservatism C

0-3 taxa found in wide variety of plant communities and very tolerant of disturbance.

4-6 taxa typically associated with specific plant communities and tolerate moderate disturbance.

7-8 taxa found in narrow range of plant communities and tolerate minor disturbance.

9-10 taxa restricted to a narrow range of synecological conditions, with low tolerance of disturbance.

Table 4: Historical Aquatic Plant Community Statistics, Lake Waubesa, Dane County, Wisconsin.

	2006	2011
F.o.o. at sites shallower than maximum depth of plants	52.61	63.17
Most Dominant Species*	Coontail	Coontail
		Eurasian
	Small Duckweed	Watermilfoil
		Flat-stem
	Filamentous Algae	Pondweed
		Horned
	Leafy Pondweed	Pondweed
		Water Star-
	Eurasian Watermilfoil	grass
Maximum Depth of Plants	14	11
Species Richness	14	14
Community FQI	16.92	17.49
Average Coefficient of Conservatism	4.69	5.27
* - Based on number of sample points collected at. Visual observations are		

* - Based on number of sample points collected at. Visual observations are included.

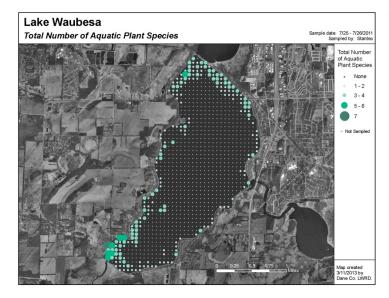
Table 5: Historical Aquatic Plant Occurrences, Lake Waubesa, Dane County, Wisconsin.

			% Relative F.o.o.	
Genus	Species	Common Name	2006	2011
Algae	sp.	Filamentous algae	27.5	0.6
Bolboschoenus	fluviatilis	River bulrush		0.2
Ceratophyllum	demersum	Coontail	32.9	27.3
Chara	sp.	Muskgrass		0.6
Elodea	canadensis	Common waterweed	0.9	4.2
Heteranthera	dubia	Water star-grass	2.6	5.2
Lemna	minor	Small duckweed	0*	2.0
Myriophyllum	sibiricum	Northern watermilfoil	4.3	
Myriophyllum	spicatum	Eurasian watermilfoil	10.0	21.0
Potamogeton	crispus	Curly-leaf pondweed	1.5	2.2
Potamogeton	foliosus	Leafy pondweed	11.3	
Potamogeton	richardsonii	Clasping-leaf pondweed	1.1	0.6
Potamogeton	zosteriformis	Flat-stem pondweed	3.7	16.6
Spirodela	polyrhiza	Large duckweed	0.2	1.8
Stuckenia	pectinata	Sago pondweed	2.4	
Typha	angustifolia	Narrow-leaved cattail	0*	
Vallisnera	americana	Wild celery	0.2	1.0
Zannichellia	palustris	Horned pondweed	1.5	16.6
0* - Species was sampled visually				

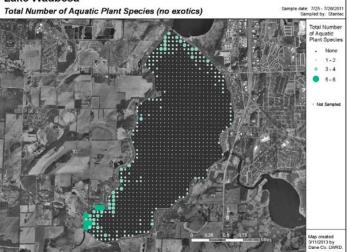
0* - Species was sampled visually only, statistical data was not

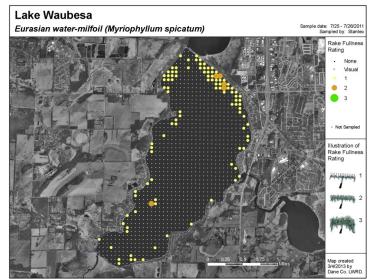
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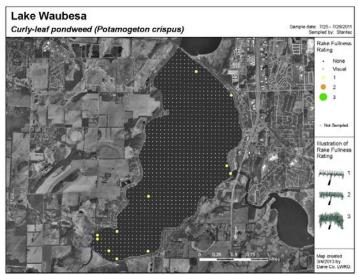
APPENDIX B – AQUATIC PLANT DISTRIBUTIONS LAKE WAUBESA (2011)

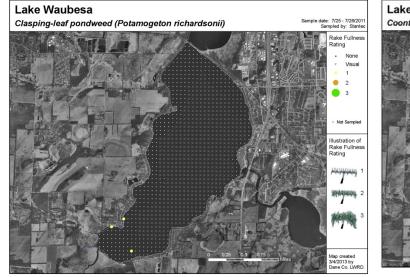


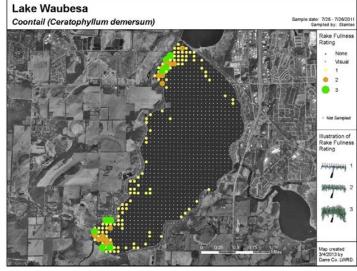
Lake Waubesa

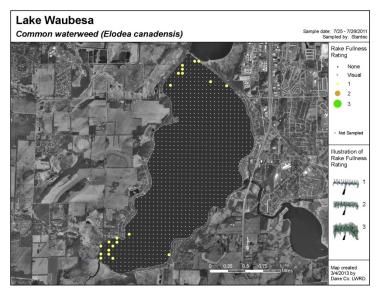


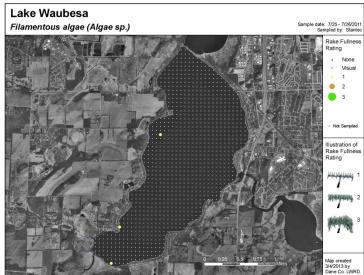


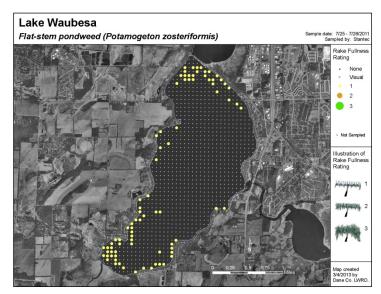


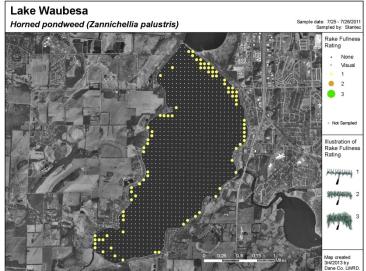


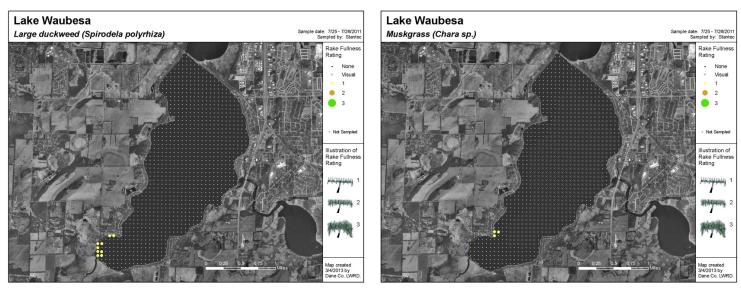












Appendices to 2013 Lake Waubesa Aquatic Plant Management Plan Amendment

