APPENDIX A – LAKE MENDOTA PLANT STATISTICS

Table 1: Aquatic Plant Community Statistics 2011

Number of sites sampled	776
Number of sites with vegetation	378
Number of sites shallower than maximum depth of plants	736
Frequency of occurrence at sites shallower than maximum depth of plants	51.36%
Simpson Diversity Index	0.88
Maximum Depth of Plants (Feet)	16
Taxonomic Richness (Number Taxa)	16
Average Number of Species per Site (less than max depth of plant growth)	0.80
Average Number of Species per Site (sites with vegetation)	1.56
Average Number of Native Species per Site (less than max depth of plant growth)	0.55
Average Number of Native Species per Site (sites with vegetation)	1.48

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	3.70	1.90	2.38	14	1.00
Coontail	21.96	11.28	14.12	83	1.17
Muskgrass	0.26	0.14	0.17	1	1.00
Common waterweed	5.03	2.58	3.23	19	1.11
Water star-grass	2.12	1.09	1.36	8	1.00
Small duckweed	0.26	0.14	0.17	1	1.00
Eurasian watermilfoil	43.92	22.55	28.23	166	1.16
Bushy pondweed	0.53	0.27	0.34	2	1.00
American lotus	0.79	0.41	0.51	3	1.00
White water lily	0.53	0.27	0.34	2	1.00
Illinois pondweed	0.26	0.14	0.17	1	1.00
Clasping-leaf pondweed	6.35	3.26	4.08	24	1.13
Flat-stem pondweed	6.61	3.40	4.25	25	1.00
Wild celery	46.03	23.64	29.59	174	1.07
Common watermeal	0.26	0.14	0.17	1	1.00
Horned pondweed	16.93	8.70	10.88	64	1.06

			Co	Coefficient of Conservatism				
Genus	Species	Common Name	1989	1990	1991	2006	2011	
Ceratophyllum	demersum	Coontail	3	3	3	3	3	
Chara	sp.	Muskgrass				7	7	
Elodea	canadensis	Common waterweed	3	3	3	3	3	
Heteranthera	dubia	Water star-grass	6	6	6	6	6	
Lemna	minor	Small duckweed				4	4	
Najas	flexilis	Bushy pondweed					6	
Nelumbo	lutea	American lotus	7	7	7	7	7	
Nymphaea	odorata	White water lily	6	6	6	6	6	
Potamogeton	foliosus	Leafy pondweed		6	6	6		
Potamogeton	illinoensis	Illinois pondweed					6	
Potamogeton	richardsonii	Clasping-leaf pondweed	5	5	5	5	5	
Potamogeton	zosteriformis	Flat-stem pondweed	6			6	6	
Stuckenia	pectinata	Sago pondweed	3	3	3	3		
Vallisnera	americana	Wild celery	6	6	6	6	6	
Wolffia	columbiana	Common watermeal					5	
Zannichellia	palustris	Horned pondweed				7	7	
		Total Species	9	9	9	13	14	
		Mean C	5.00	5.00	5.00	5.31	5.50	
		Floristic Quality Index (FQI)	15.00	15.00	15.00	19.14	20.58	

Table 3: Historical and 2011 Floristic Quality Index, Lake Mendota, Dane County,WI

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

С

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.

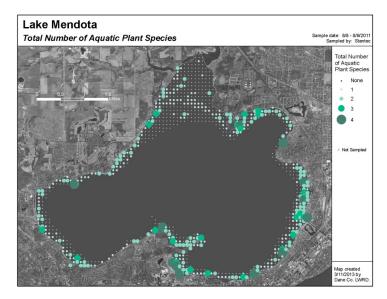
9-10 taxa restricted to a narrow range of synecological conditions, with low tolerance of disturbance.

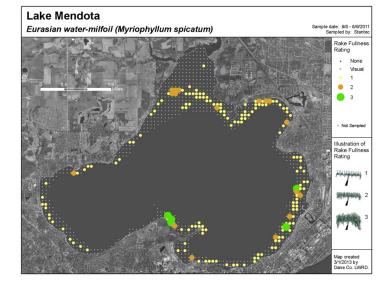
Table 4: Historical Aquatic Plan	nt Community Sta	atistics, Lake			
Mendota, Dane County, Wisco	nsin.				
	1989	1990	1991	2006	2011
F.o.o. at sites shallower than maximum depth of plants				67.04	51.36
Most Dominant Species	Coontail	Coontail	Eurasian Watermilfoil	Coontail	Wild Celery
	Eurasian Watermilfoil	Eurasian Watermilfoil	Coontail	Eurasian Watermilfoil	Eurasian Watermilfoil
	Sago Pondweed	Sago Pondweed	Sago Pondweed	Common Waterweed	Coontail
	Water Star- grass	Wild Celery	Water Star- grass	Wild Celery	Horned Pondweed
	Wild Celery	Water Star- grass	Common Waterweed	Water Star- grass	Flat-stem Pondweed
Maximum Depth of Plants		13	13	16	16
Species Richness	11	11	11	16	16
Community FQI	15	15	15	19.14	20.58
Average Coefficient of Conservatism	5	5	5	5.31	5.5

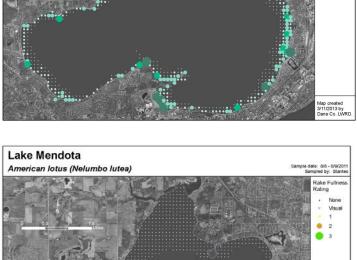
Table 5: Historical Aquatic Plant Occurrences, Lake Mendota, Dane County, Wisconsin.

			% Relative Frequency of Occurrence					
Genus	Species	Common Name	1989	1990	1991	2006	2011	
Algae	sp.	Filamentous algae				14.9	2.4	
Ceratophyllum	demersum	Coontail	42.5	42.4	40.9	19.6	14.1	
Chara	sp.	Muskgrass				0.2	0.2	
Elodea	canadensis	Common waterweed	3.6	3.3	7.0	9.7	3.2	
Heteranthera	dubia	Water star-grass	5.8	5.5	7.7	6.2	1.4	
Lemna	minor	Small duckweed				0.8	0.2	
Myriphyllum	spicatum	Eurasian watermilfoil	34.1	32.0	40.9	19.6	28.2	
Najas	flexilis	Bushy pondweed					0.3	
Nelumbo	lutea	American lotus	0.3	1.1	0.2	0.1	0.5	
Nymphaea	odorata	White water lily	0.3	0.3	0.8	0.2	0.3	
Potamogeton	crispus	Curly-leaf pondweed	0.7	0.5	0.9	2.5		
Potamogeton	foliosus	Leafy pondweed		0.1	1.5	3.7		
Potamogeton	illinoensis	Illinois pondweed					0.2	
Potamogeton	richardsonii	Clasping-leaf pondweed	0.5	0.4	0.6	1.6	4.1	
Potamogeton	zosteriformis	Flat-stem pondweed	0.1			0.4	4.3	
Stuckenina	pectinata	Sago pondweed	6.8	8.5	8.3	5.5		
Vallisnera	americana	Wild celery	5.4	5.8	6.3	9.0	29.6	
Wolffia	columbiana	Common watermeal					0.2	
Zannichellia	palustris	Horned pondweed				1.3	10.9	

APPENDIX B – AQUATIC PLANT DISTRIBUTIONS LAKE MENDOTA (2011)



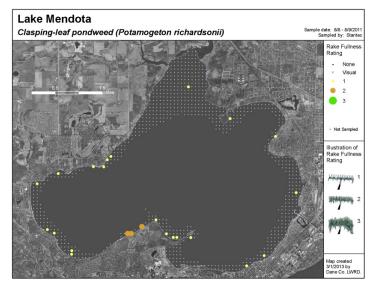


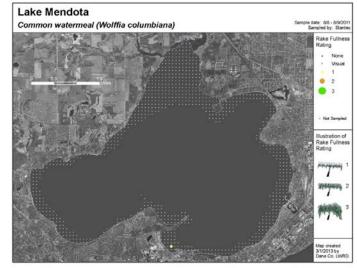


Lake Mendota

Total Number of Aquatic Plant Species (no exotics)







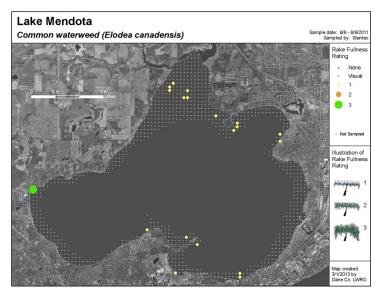
Appendices to 2013 Lake Mendota Aquatic Plan Management Plan Amendment

e date: 8/8 - 8/9/20 Sampled by: Stant

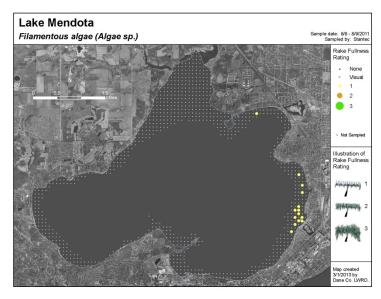
> • 3 • 4

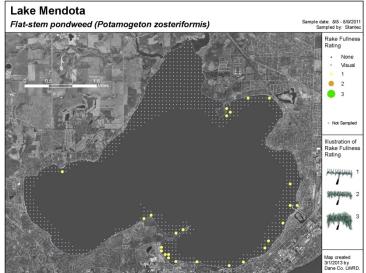
Fotal Numbe of Aquatic Plant Specie

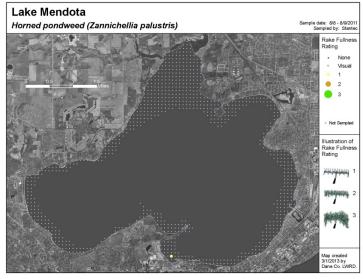
None

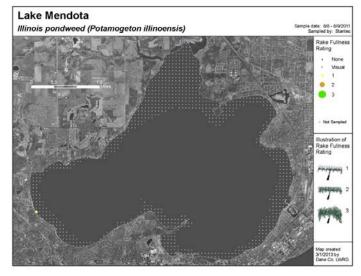


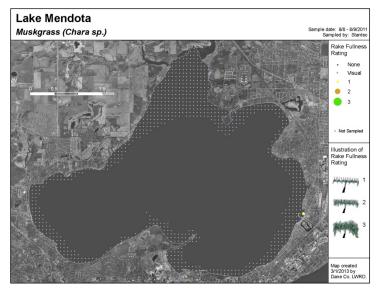
Lake Mendota Coontail (Ceratophyllum demersum) Sample date: 8/8 - 8/9/2011 Sampled by: Stanted Rake Fullnes Rating . None Visual • 2 3 Not Sampled Illustration of Rake Fullnes Rating HAR HAR erney Map created 3/1/2013 by











Lake Mendota Sample date: 8/8 - 8/9/201 Sampled by: Stante Slender naiad (Najas flexilis) Rake Fullne Rating • v None Visual 1 • 2 9 3 Not Sampler Illustration of Rake Fullnes Rating wirping stada 7 Map created 3/1/2013 by Dane Co. LW

