Professional Lake Management
P.O. Box 132, Caledonia MI 49316
Phone (616) 891-1294

On-Site Lake Evaluation Record

Lake Name Pontiac County Oakland State MI

Evaluated by Jaimee Bale Date 9-23-02

Purpose of evaluation: AVAS Survey

Evaluations Performed

Aquatic Vegetation Evaluation
- [x] Aquatic vegetation survey
- [ ] Aquatic vegetation brief check

Vegetation evaluation methods
- [x] Visual evaluation
- [x] Sample collection with rake
- [ ] Sonar profiling
- [ ] GPS-mapped sample locations

- [ ] Water quality sampling
  - ____ On-site (Temperature, DO, Secchi disk)
  - ____ Water samples collected for ____ analysis
- [ ] GPS data collection
  - [ ] Depth survey
  - [ ] Shoreline mapping
  - [ ] Reference point location
- [ ] Other ____

Overall Condition of Lake

- [ ] excellent (no problems or developing problems noted)
- [ ] very good (no immediate action required)
- [x] fair (management required soon)
- [ ] poor (management needed as soon as possible)
- [ ] very poor (management action past due—IMMEDIATE response required)

Problems Noted

- [x] Excessive growth of exotic plants (mark locations on map)
  - [x] Eurasian watermilfoil
  - [ ] curlyleaf pondweed
  - [ ] other ____
- [ ] Excessive growth of native plants (note plant species and mark locations on map)
- [ ] Excessive filamentous algae growth (mark location on map)
- [x] Poor water clarity
- [ ] Blue-green algal blooms

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RECOMMENDATIONS

☒ Herbicide application (mark locations on map)
Need for herbicide treatments is: ☐ urgent, ☒ serious, ☐ moderate, ☐ slight

☒ Algaecide application (mark locations on map)
Need for algae treatments is: ☐ urgent, ☒ serious, ☐ moderate, ☐ slight

☒ Harvesting (mark locations on map) (Chara only)
Need for harvesting is: ☐ urgent, ☒ serious, ☐ moderate, ☐ slight

☐ Shoreline stabilization (mark locations on map)
Need for shoreline stabilization is: ☐ urgent, ☐ serious, ☐ moderate, ☐ slight

☐ Erosion control (mark locations on map)
Need for erosion control is: ☐ urgent, ☐ serious, ☐ moderate, ☐ slight

☐ Other _____

NOTES

Pontiac Lake has a good abundance of Eurasian Watermilfoil that has re-established. The chara population is also very abundant. Chara is a good algae to have in a lake. Chara covers the bottom of a lake like a carpet and can sometimes inhibit the growth of other plants. Chara also acts as a natural filter and can increase water clarity. Chara should only be managed in areas where it is reaching the waters surface, causing a recreational nuisance. The EWM will need "major" management next year, due to the fact that it is prevelant around much of the shoreline.

Lake:Pontiac County: Oakland Survey Date : 23 Sep 2002

Standard Aquatic Vegetation Summary Sheet

		Total number of AVAS's for each Density Category					Calculations			Sum of Columns 5-8	Total No. of AVAS	Col 9 divided by Col 10
Code No	Plant Name	A 1	B 2	C 3	D 4	A x 1 5	B x 10 6	C x 40 7	D x 80 8	9	10	11
1	Eurasian watermilfoil	7	56	34	4	7	560	1360	320	2247	119	18.88
2	Curly leaf pondweed		1				10			10	119	0.08
3	Chara	10	38	51	10	10	380	2040	800	3230	119	27.14
4	Thinleaf pondweed	2				2				2	119	0.02
5	Flatstem pondweed											
6	Robbins pondweed											
7	Variable pondweed	1	1			1	10			11	119	0.09
8	White stem pondweed											
9	Richardsons pondweed											
10	Illinois pondweed	3				3				3	119	0.03
11	Large leaf pondweed	14	34	2		14	340	80		434	119	3.65
12	American pondweed											
13	Floating leaf pondweed											
14	Water stargrass	3	15	4		3	150	160		313	119	2.63
15	Wild celery	17	50	1		17	500	40		557	119	4.68
16	Sagittaria (submersed)											
17	Northern watermilfoil											
18	Green watermilfoil											
19	Two-leaved watermilfoil											
20	Coontail	20	7			20	70			90	119	0.76
21	Elodea	4				4				4	119	0.03
22	Bladderwort											
23	Mini Bladderwort											
24	Buttercup											
25	Naiad	6	13	2		6	130	80		216	119	1.82
26	Brittle naiad											
27	Sago Pondweed	15	43	3		15	430	120		565	119	4.75
28												
29												
30	Water Lily	8	10	6		8	100	240		348	119	2.92
31	Spatterdock	6	6			6	60			66	119	0.55
32	Water shield											
33	Lemna minor											
34	Greater duckweed											
35	Watermeal											
36	Arrowhead											
37	Pickerelweed											
38	Arrow arum											
39	Cattail	2	14	5		2	140	200		342	119	2.87
40	Bulrush											
41	Iris											
42	Swamp loosestrife											
43	Purple loosestrife											
44												
45												

Total cumulative cover **70.91**