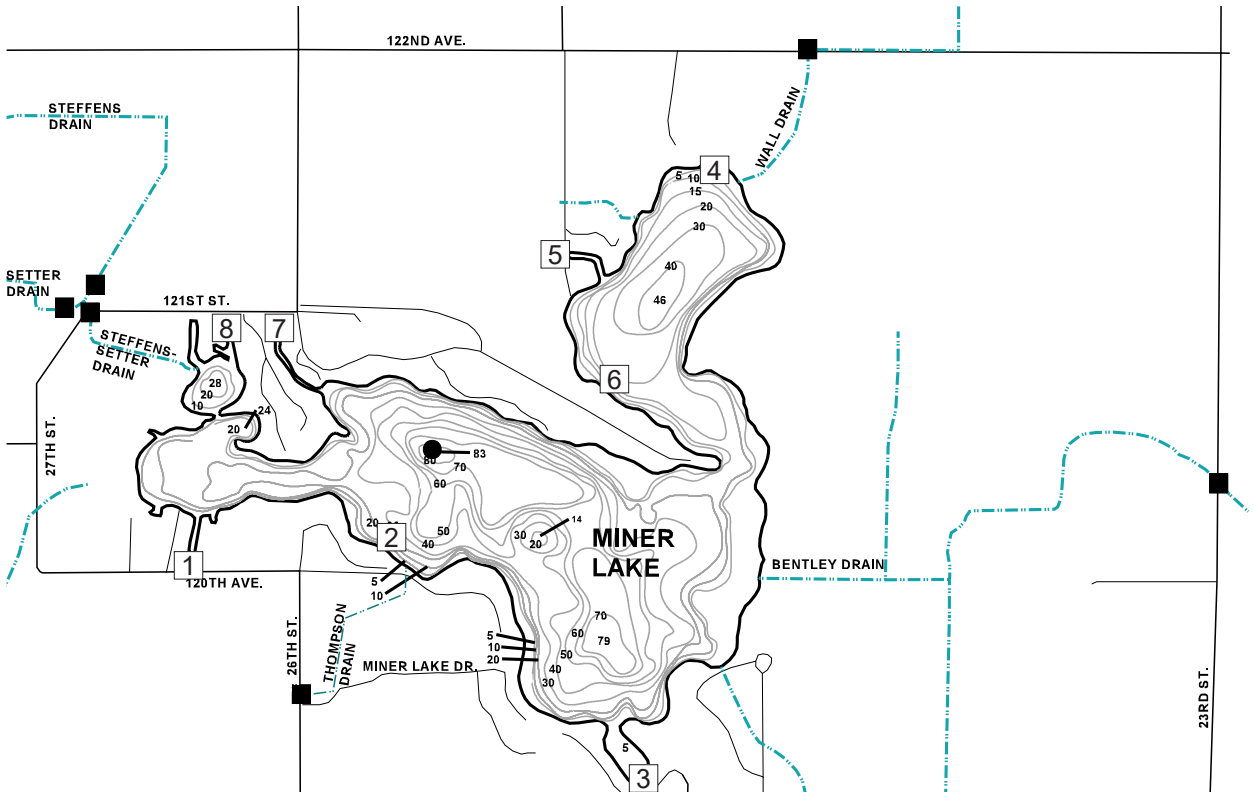


**TABLE 1
LAKE CLASSIFICATION CRITERIA**

Lake Classification	Total Phosphorus ($\mu\text{g/L}$) ¹	Chlorophyll-a ($\mu\text{g/L}$) ¹	Secchi Transparency (feet)
Oligotrophic	Less than 10	Less than 2.2	Greater than 15.0
Mesotrophic	10 to 20	2.2 to 6.0	7.5 to 15.0
Eutrophic	Greater than 20	Greater than 6.0	Less than 7.5



- = Deep-basin Sampling Locations
- = Tributary Sampling Locations
- 1 = Bacteriological Sampling Locations

Figure 1. Miner Lake sampling location map.

¹ $\mu\text{g/L}$ = micrograms per liter = parts per billion.

**TABLE 2
MINER LAKE 2015 DEEP BASIN WATER QUALITY DATA**

Date	Sample Depth (feet)	Temperature (°F)	Dissolved Oxygen (mg/L) ¹	Total Phosphorus (µg/L) ²	pH (S.U.) ³	Total Alkalinity (mg/L as CaCO ₃) ⁴
8-Apr-15	1	42	7.6	19	7.9	179
8-Apr-15	10	42	11.4	22	7.9	174
8-Apr-15	20	42	11.4	20	7.9	
8-Apr-15	30	42	11.6	18	7.8	182
8-Apr-15	40	42	11.6	16	7.8	181
8-Apr-15	50	41	11.3	24	7.8	187
8-Apr-15	60	40	9.3	19	7.6	186
8-Apr-15	70	39	6.7	22	7.5	192
8-Apr-15	80	38	5.2	39	7.3	193
17-Aug-15	1	81	9.3	6	9	163
17-Aug-15	10	78	9.7	<5	9	164
17-Aug-15	20	60	1.1	<5	8.1	198
17-Aug-15	30	48	1.3	<5	8	199
17-Aug-15	40	45	1.2	<5	8	201
17-Aug-15	50	44	1.2	23	8	199
17-Aug-15	60	44	0.9	37	7.9	203
17-Aug-15	70	44	1.0	59	7.9	204
17-Aug-15	80	43	1.2	160	7.9	208

**TABLE 3
MINER LAKE 2015 SURFACE WATER QUALITY DATA**

Date	Secchi Transparency (feet)	Chlorophyll-a (µg/L) ²
8-Apr-15	6.5	0
17-Aug-15	5.0	1

1 mg/L = milligrams per liter = parts per million.

2 µg/L = micrograms per liter = parts per billion.

3 S.U. = standard units

4 mg/L as CaCO₃ = milligrams per liter as calcium carbonate.

TABLE 4
MINER LAKE SUMMARY STATISTICS, 1996-2015

	Total Phosphorus (µg/L)¹	Secchi Transparency (feet)	Chlorophyll-a (µg/L)²
Average	47	8.9	2.0
Standard Deviation	78	2.2	2.3
Median	24	8.5	1.3
Minimum	5	5.0	0.0
Maximum	869	14.0	8.2
Number of Samples	224	24	26

¹ µg/L = micrograms per liter

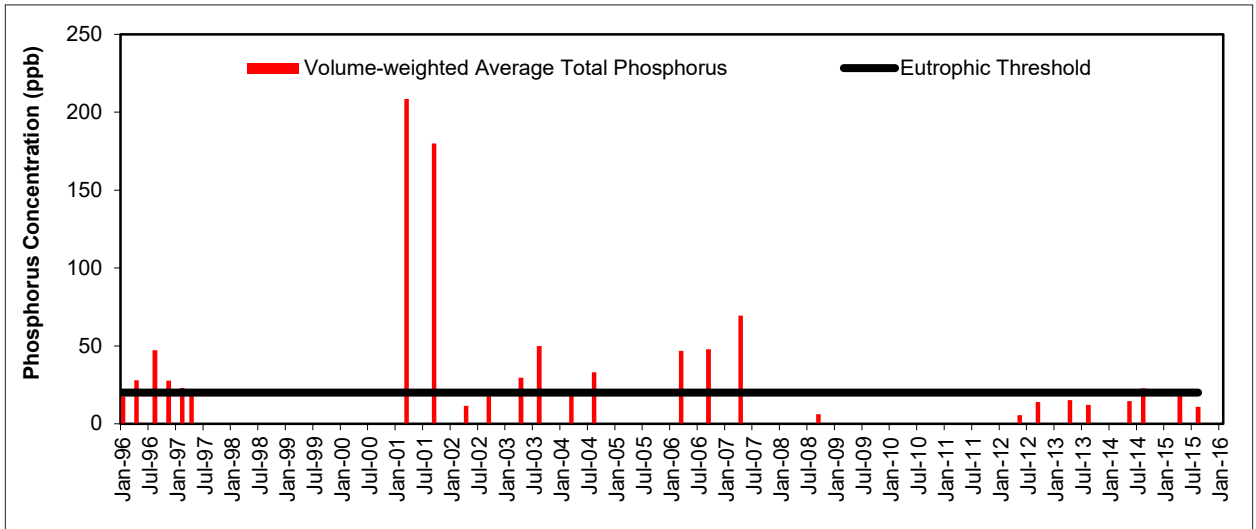


Figure 2. Volume-weighted average total phosphorus concentrations, 1996 - 2015.

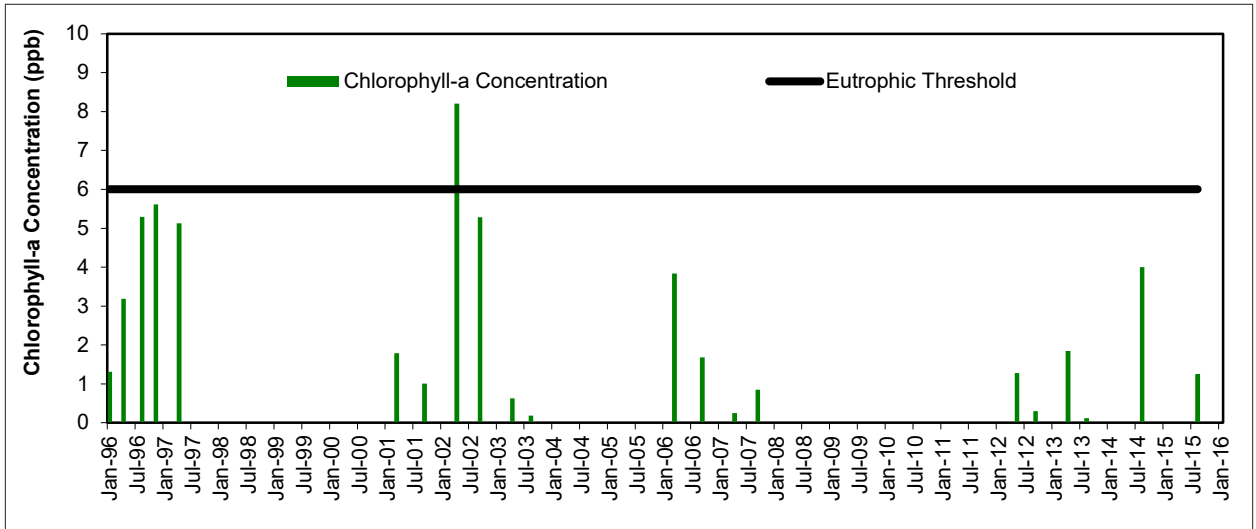


Figure 3. Chlorophyll-a concentrations, 1996 - 2015.

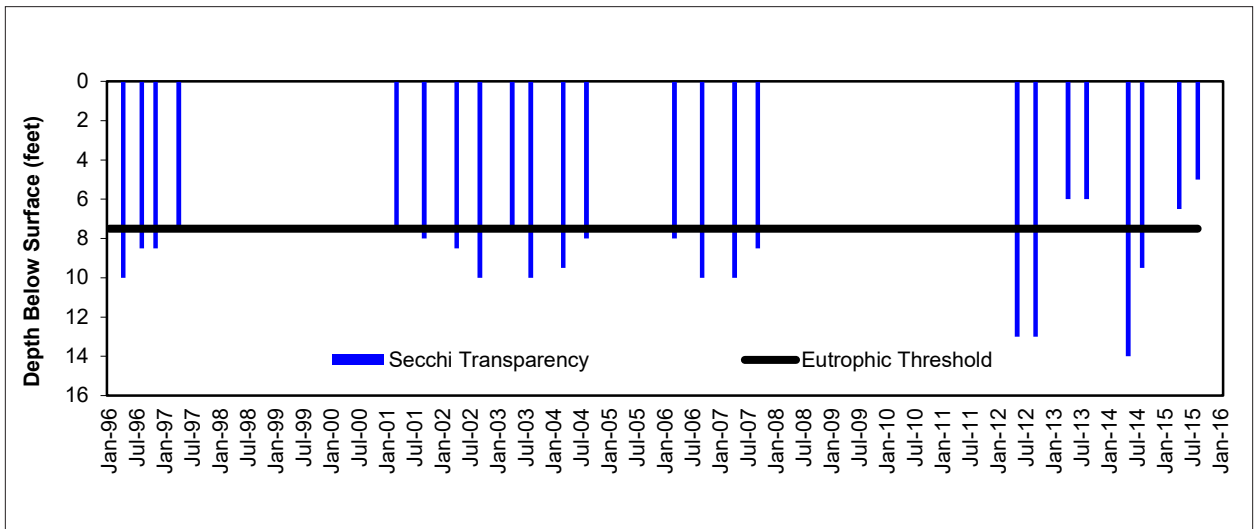


Figure 4. Secchi transparency measurements, 1996 - 2015.

TABLE 5
MINER LAKE 2015 AVAS Aquatic Plant Survey Data

Standard Aquatic Vegetation Summary Sheet



Lake Name: Miner Lake
 County: Allegan
 Surveyor: Rick Buteyn, Lindsey Schulte
 Survey Date: 9-Jul-15
 Total Number of AVAS Sites: 124

Code No	Plant Name	Occurrence per Density Category				Relative Density Calculations				Relative Density for Entire Littoral Zone		Code No	Plant Name
		A	B	C	D	A x 1	B x 10	C x 40	D x 80	Sum	%		
1	Eurasian milfoil	12	39	14		12	390	560	0	962	7.8	1	Eurasian milfoil
2	Curly leaf pondweed		4			0	40	0	0	40	0.3	2	Curly leaf pondweed
3	Chara		28	22	41	0	280	880	3,280	4,440	35.8	3	Chara
4	Thinleaf pondweed	20	33	3	3	20	330	120	240	710	5.7	4	Thinleaf pondweed
5	Flatstem pondweed	9	12		1	9	120	0	80	209	1.7	5	Flatstem pondweed
6	Robbins pondweed					0	0	0	0	0	0.0	6	Robbins pondweed
7	Variable pondweed					0	0	0	0	0	0.0	7	Variable pondweed
8	Whitestem pondweed		1			0	10	0	0	10	0.1	8	Whitestem pondweed
9	Richardson's pondweed					0	0	0	0	0	0.0	9	Richardson's pondweed
10	Illinois pondweed	1				1	0	0	0	1	0.0	10	Illinois pondweed
11	Large leaf pondweed	8	38	10		8	380	400	0	788	6.4	11	Large leaf pondweed
12	American pondweed		2	1		0	20	40	0	60	0.5	12	American pondweed
13	Floating leaf pondweed	2	1			2	10	0	0	12	0.1	13	Floating leaf pondweed
14	Water stargrass	7	27	10	1	7	270	400	80	757	6.1	14	Water stargrass
15	Wild celery	3	34	12		3	340	480	0	823	6.6	15	Wild celery
16	Sagittaria					0	0	0	0	0	0.0	16	Sagittaria
17	Northern milfoil					0	0	0	0	0	0.0	17	Northern milfoil
18	M. verticillatum					0	0	0	0	0	0.0	18	M. verticillatum
19	M. heterophyllum					0	0	0	0	0	0.0	19	M. heterophyllum
20	Coontail	11	41	11	1	11	410	440	80	941	7.6	20	Coontail
21	Elodea		2			0	20	0	0	20	0.2	21	Elodea
22	Utricularia spp.	2	1			2	10	0	0	12	0.1	22	Utricularia spp.
23	Bladderwort-mini					0	0	0	0	0	0.0	23	Bladderwort-mini
24	Buttercup					0	0	0	0	0	0.0	24	Buttercup
25	Najas spp.		2			0	20	0	0	20	0.2	25	Najas spp.
26	Brittle naiad					0	0	0	0	0	0.0	26	Brittle naiad
27	Sago pondweed	6	15	5		6	150	200	0	356	2.9	27	Sago pondweed
30	Nymphaea	8	19	8	6	8	190	320	480	998	8.0	30	Nymphaea
31	Nuphar	2	16	9	3	2	160	360	240	762	6.1	31	Nuphar
32	Brasenia					0	0	0	0	0	0.0	32	Brasenia
33	Lemna minor					0	0	0	0	0	0.0	33	Lemna minor
34	Spirodella					0	0	0	0	0	0.0	34	Spirodella
35	Watermeal					0	0	0	0	0	0.0	35	Watermeal
36	Arrowhead	2	5	1		2	50	40	0	92	0.7	36	Arrowhead
37	Pickerelweed		2	1	1	0	20	40	80	140	1.1	37	Pickerelweed
38	Arrow arum					0	0	0	0	0	0.0	38	Arrow arum
39	Cattails	3	17	3	12	3	170	120	960	1,253	10.1	39	Cattails
40	Bulrushes	2	29	9	1	2	290	360	80	732	5.9	40	Bulrushes
41	Iris					0	0	0	0	0	0.0	41	Iris
42	Swamp loosestrife	1	8	2	2	1	80	80	160	321	2.6	42	Swamp loosestrife
43	Purple loosestrife	3				3	0	0	0	3	0.0	43	Purple loosestrife
44	Starry stonewort		3	1	16	0	30	40	1,280	1,350	10.9	44	Starry stonewort
45	Phragmites australis			1		0	0	40	0	40	0.3	45	Phragmites australis

Total: 127.8