

**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

**TABLE 2
HESS LAKE 2018 DEEP BASIN WATER QUALITY DATA**

Date	Station	Sample Depth (feet)	Temperature (°F)	Dissolved Oxygen (mg/L) ²	Total Phosphorus ($\mu\text{g/L}$) ¹	Total Suspended Solids (mg/L) ²	Chloride (mg/L) ²	pH (S.U.) ³	Total Alkalinity (mg/L as CaCO_3) ⁴
12-Apr-18	1	1	45	9.5	19	10	13	9.0	137
12-Apr-18	1	5	45	9.8	25	9	13	8.9	137
12-Apr-18	1	10	45	9.8	21	24	15	8.9	142
12-Apr-18	1	13	45	9.4	20	11	13	8.9	135
12-Apr-18	2	1	44	9.2	22	8	13	9.4	139
12-Apr-18	2	5	44	9.6	21	8	13	9.3	142
12-Apr-18	2	10	44	9.6	5	10	13	9.4	138
12-Apr-18	2	15	44	9.3	<5	11	14	9.4	137
12-Apr-18	2	20	44	9.8	16	9	13	9.4	137
12-Apr-18	3	1	45	9.8	12	5	13	9.4	138
12-Apr-18	3	5	44	9.5	16	10	13	9.4	136
12-Apr-18	3	10	44	10.8	<5	14	13	9.4	136
12-Apr-18	3	15	44	11.5	<5	10	13	9.3	140
20-Aug-18	1	1	78	8.9	16	20	16	8.7	114
20-Aug-18	1	5	74	9.7	22	20	16	8.6	114
20-Aug-18	1	10	69	1.3	58	13	31	7.0	155
20-Aug-18	1	13	69	0.0	90	11	15	6.8	189
20-Aug-18	2	1	79		16	15	15	8.7	114
20-Aug-18	2	5	79	9.5	35	20	15	8.8	112
20-Aug-18	2	10	73	10.0	17	19	15	8.7	114
20-Aug-18	2	15	71	6.9	18	16	16	8.2	117
20-Aug-18	2	20	71	0.0	43	20	16	6.9	192
20-Aug-18	3	1	79	8.2	12	12	15	8.7	112
20-Aug-18	3	5	78	7.5	80	26	15	8.7	114
20-Aug-18	3	10	73	9.2	45	14	16	8.5	112
20-Aug-18	3	16	73	0.7	48	18	15	6.9	164

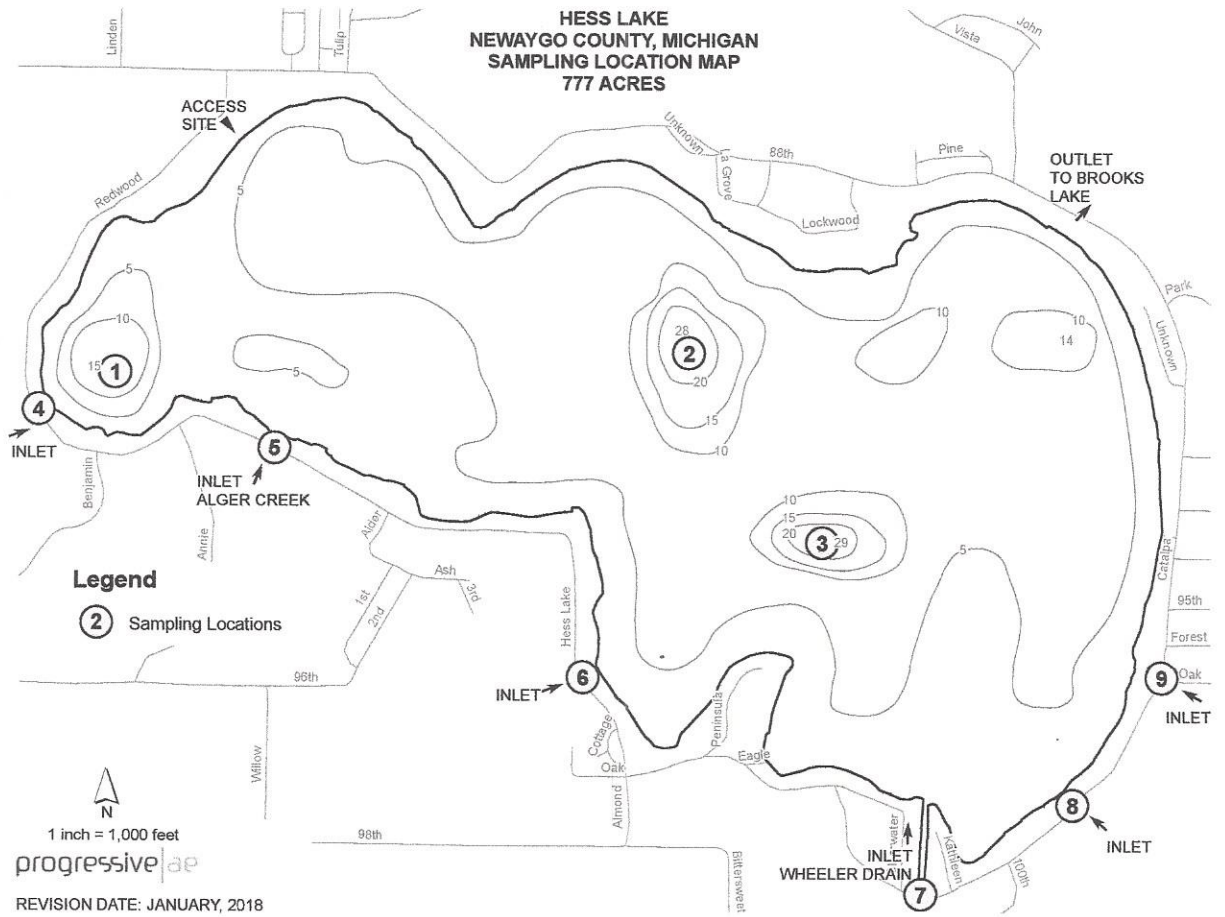
1 $\mu\text{g/L}$ = micrograms per liter = parts per billion.

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

3 S.U. = standard units

mg/L CaCO_3 = milligrams per liter as calcium carbonate.

**HESS LAKE
NEWAYGO COUNTY, MICHIGAN
SAMPLING LOCATION MAP
777 ACRES**



Legend
 ② Sampling Locations



1 inch = 1,000 feet

progressive|ae

REVISION DATE: JANUARY, 2018

TABLE 3
HESS LAKE 2018 SURFACE WATER QUALITY DATA

Date	Station	Secchi Transparency (feet)	Chlorophyll-a ($\mu\text{g/L}$) ¹
12-Apr-18	1	2.5	4
12-Apr-18	2	2.5	11
12-Apr-18	3	2.5	12
20-Aug-18	1	2.0	5
20-Aug-18	2	1.5	4
20-Aug-18	3	2.0	3

TABLE 4
HESS LAKE 2018 STORM DRAIN MONITORING DATA

Date	Station	Stream	Discharge (cfs) ²	Total Phosphorus ($\mu\text{g/L}$) ³	Total Suspended Solids (mg/L) ⁴
12-Apr-18	4	West trib	0.2	5	<4
12-Apr-18	5	Alger Creek	1.2	45	21
12-Apr-18	6	South trib	0.3	<5	<4
12-Apr-18	7	Wheeler Drain	10.5	329	194
12-Apr-18	8	Southeast trib	0.4	22	19
12-Apr-18	9	East trib	—	7	9
20-Aug-18	4	West trib	0	—	—
20-Aug-18	5	Alger Creek	—	55	6
20-Aug-18	6	South trib	0	—	—
20-Aug-18	7	Wheeler Drain	1.5	61	8
20-Aug-18	8	Southeast trib	0.1	35	8
20-Aug-18	9	East trib	—	64	<4

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

2 cfs = cubic feet per second

3 $\mu\text{g/L}$ = micrograms per liter = parts per billion.

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