

**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
MARBLE-COLDWATER LAKE CHAIN 2015 DEEP BASIN WATER QUALITY DATA
MARBLE LAKE**

Date	Sample Depth (feet)	Temperature ($^{\circ}\text{F}$)	Dissolved Oxygen (mg/L)²	pH (S.U.)³	Total Alkalinity (mg/L)²	Total Phosphorus ($\mu\text{g/L}$)¹
16-Apr-15	1	48	12.4	8.3	206	40
16-Apr-15	12	48		8.3	204	51
16-Apr-15	24	48	12.3	8.2	204	41
16-Apr-15	36	45	9.8	8.0	204	25
16-Apr-15	48	43	10.1	7.9	204	31
16-Apr-15	58	42	9.2	7.8	210	29
24-Aug-15	1	75	8.8	8.6	182	19
24-Aug-15	12	75	9.2	8.4	185	15
24-Aug-15	24	65	1.5	7.6	210	16
24-Aug-15	36	50	0.4	7.8	214	14
24-Aug-15	48	46	0.4	7.6	207	39
24-Aug-15	58	44	0.3	7.9	213	84

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

TABLE 3
MARBLE-COLDWATER LAKE CHAIN 2015 DEEP BASIN WATER QUALITY DATA
ARCHER LAKE

Date	Sample Depth (feet)	Temperature (°F)	Dissolved Oxygen (mg/L)¹	pH (S.U.)²	Total Alkalinity (mg/L)¹	Total Phosphorus (µg/L)³
15-Apr-15	1	53	12.8	8.3	210	21
15-Apr-15	17	48	10.5	8.0	212	28
15-Apr-15	34	41	3.4	7.3	227	27
24-Aug-15	1	77	7.8	8.7	228	20
24-Aug-15	17	66	1.5	7.9	226	40
24-Aug-15	34	45	0.0	7.5	255	237

TABLE 4
MARBLE-COLDWATER LAKE CHAIN 2015 DEEP BASIN WATER QUALITY DATA
BARTHOLOMEW LAKE

Date	Sample Depth (feet)	Temperature (°F)	Dissolved Oxygen (mg/L)¹	pH (S.U.)²	Total Alkalinity (mg/L)¹	Total Phosphorus (µg/L)³
15-Apr-15	1	53	10.9	8.3	210	47
15-Apr-15	27	43	8.5	7.7	216	18
15-Apr-15	54	39	0.5	7.4	233	182
24-Aug-15	1	75	8.8	8.7	239	13
24-Aug-15	27	46	1.2	7.8	231	19
24-Aug-15	54	41	0.0	7.5	274	469

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

² S.U. = standard units

³ µg/L = micrograms per liter = parts per billion.

**TABLE 5
MARBLE-COLDWATER LAKE CHAIN 2015 DEEP BASIN WATER QUALITY DATA
MUD LAKE**

Date	Sample Depth (feet)	Temperature (°F)	Dissolved Oxygen (mg/L)¹	pH (S.U.)²	Total Alkalinity (mg/L)¹	Total Phosphorus (µg/L)³
15-Apr-15	1	56	13.8	8.5	216	40
15-Apr-15	10	51	12.1	8.3	213	32
15-Apr-15	20	48	7.2	7.7	221	24
25-Aug-15	1	72	7.3	8.5	243	23
25-Aug-15	10	72	6.5	8.4	244	35
25-Aug-15	20	53	0.0	7.5	290	320

**TABLE 6
MARBLE-COLDWATER LAKE CHAIN 2015 DEEP BASIN WATER QUALITY DATA
LONG LAKE**

Date	Sample Depth (feet)	Temperature (°F)	Dissolved Oxygen (mg/L)¹	pH (S.U.)²	Total Alkalinity (mg/L)¹	Total Phosphorus (µg/L)³
15-Apr-15	1	53	13.3	8.3	182	46
15-Apr-15	21	46	7.0	7.6	182	28
15-Apr-15	42	41	0.8	7.3	208	187
25-Aug-15	1	75	8.9	8.8	208	10
25-Aug-15	20	60	0.4	7.8	215	27
25-Aug-15	40	46	0.0	7.5	235	542

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

² S.U. = standard units

³ µg/L = micrograms per liter = parts per billion.

TABLE 7
MARBLE-COLDWATER LAKE CHAIN 2015 DEEP BASIN WATER QUALITY DATA
COLDWATER LAKE

Date	Sample Depth (feet)	Temperature (°F)	Dissolved Oxygen (mg/L) ¹	pH (S.U.) ²	Total Alkalinity (mg/L) ¹	Total Phosphorus (µg/L) ³
16-Apr-15	1	48	11.1	8.2	159	<5
16-Apr-15	18	48	11.0	8.1	157	19
16-Apr-15	36	47	11.9	8.1	162	8
16-Apr-15	54	45	10.3	8.0	158	7
16-Apr-15	72	44	12.7	8.0	154	8
16-Apr-15	89	44		8.0	158	11
25-Aug-15	1	73	8.6	8.6	143	<5
25-Aug-15	18	73	9.2	8.7	143	8
25-Aug-15	36	54	3.5	8.0	161	<5
25-Aug-15	54	50	2.0	7.8	164	<5
25-Aug-15	72	49	2.2	7.7	161	<5
25-Aug-15	88	48	0.7	7.6	168	<5

TABLE 8
MARBLE-COLDWATER LAKE CHAIN 2015 SURFACE WATER QUALITY DATA

Lake	Date	Secchi Transparency (feet)	Chlorophyll-a (µg/L) ³
Marble	16-Apr-15	5.0	3
Archer	15-Apr-15	5.5	2
Bartholomew	15-Apr-15	4.0	3
Mud	15-Apr-15	5.0	1
Long	15-Apr-15	4.0	4
Coldwater	16-Apr-15	15.0	0
Marble	24-Aug-15	4.0	2
Archer	24-Aug-15	4.5	3
Bartholomew	24-Aug-15	5.0	1
Mud	25-Aug-15	5.0	5
Long	25-Aug-15	4.0	4
Coldwater	25-Aug-15	9.5	0

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

² S.U. = standard units

³ µg/L = micrograms per liter = parts per billion.

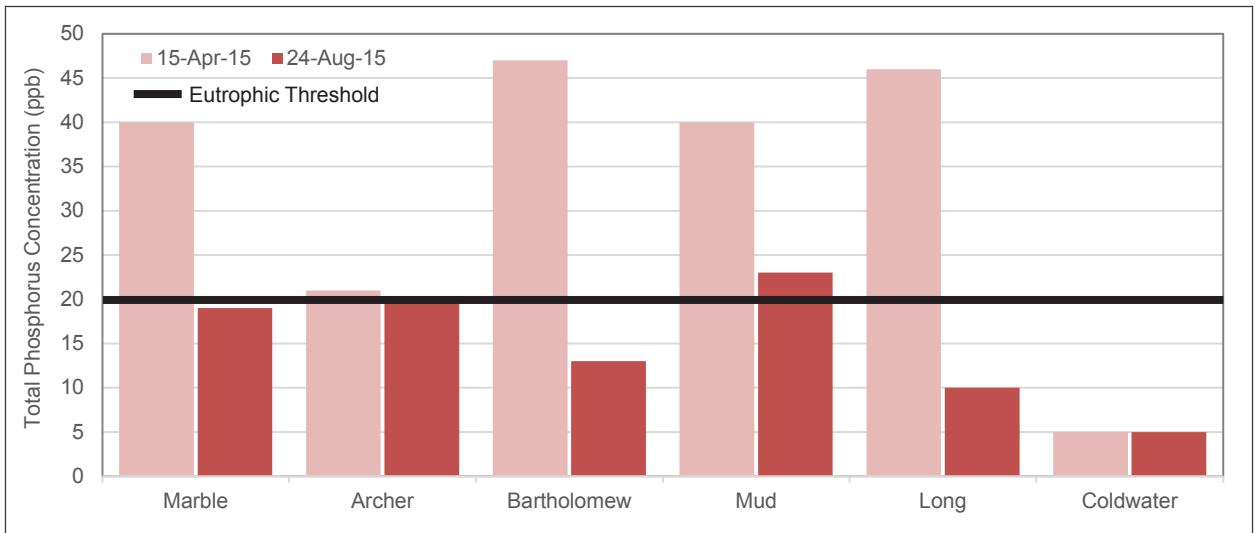


Figure 1. Marble-Coldwater Lake Chain 2015 surface total phosphorus concentrations.

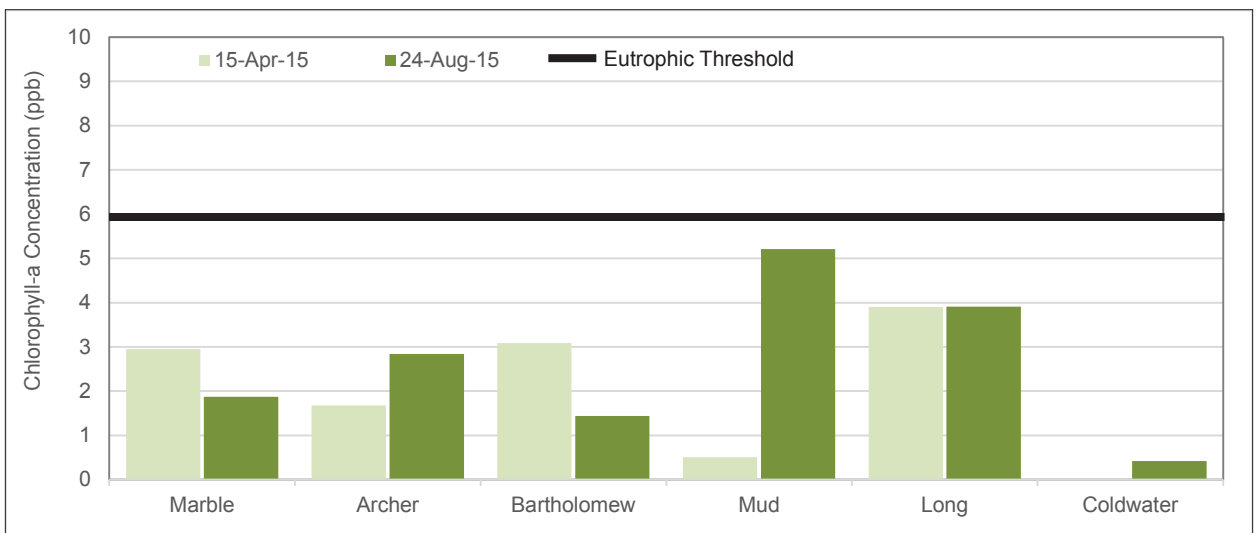


Figure 2. Marble-Coldwater Lake Chain 2015 chlorophyll-a concentrations.

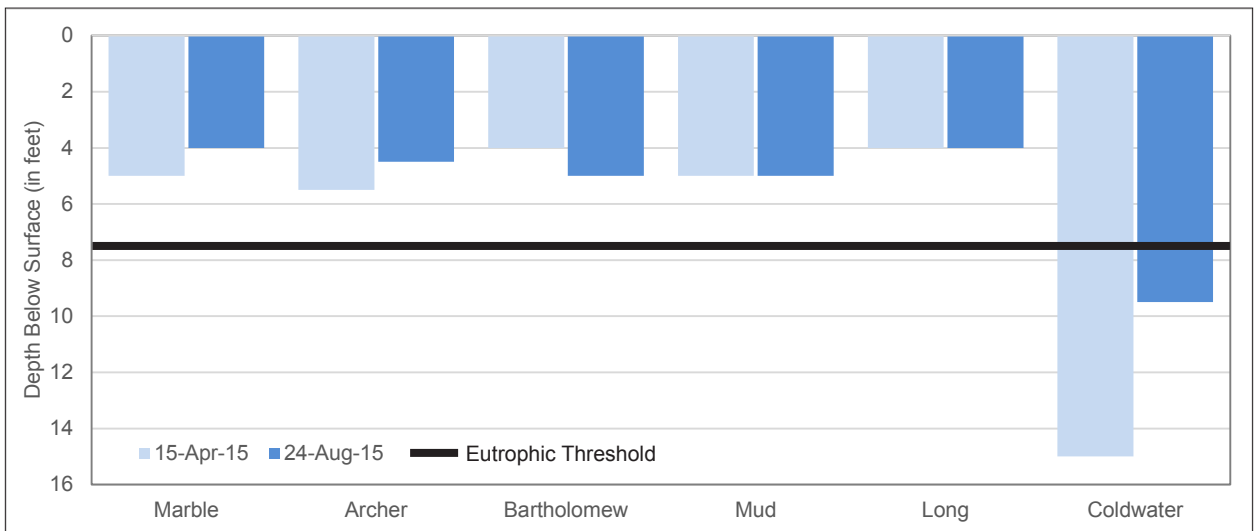


Figure 3. Marble-Coldwater Lake Chain 2015 Secchi transparency measurements.

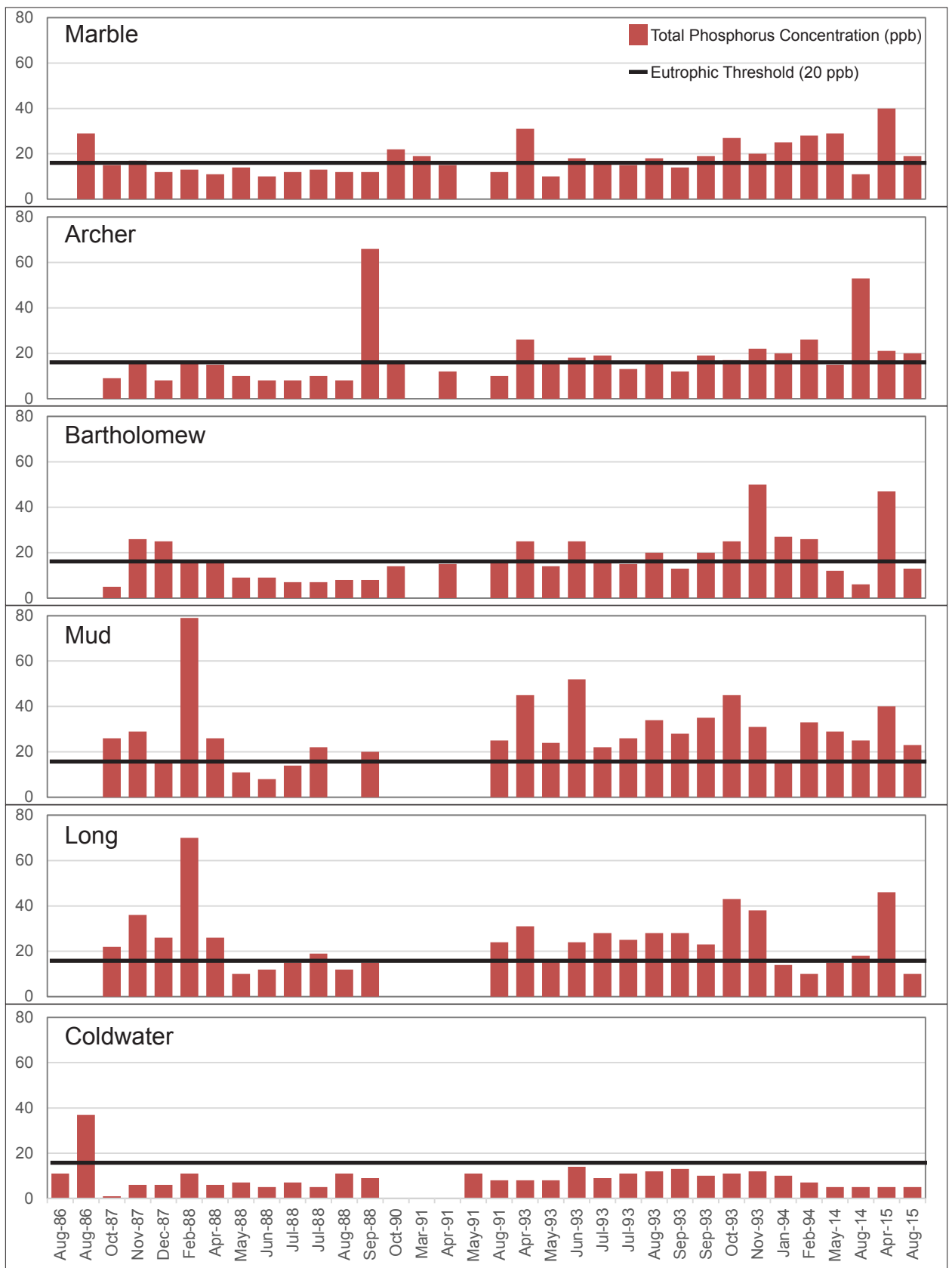


Figure 4. Marble-Coldwater Lake Chain surface total phosphorus concentrations, 1986 - 2015.