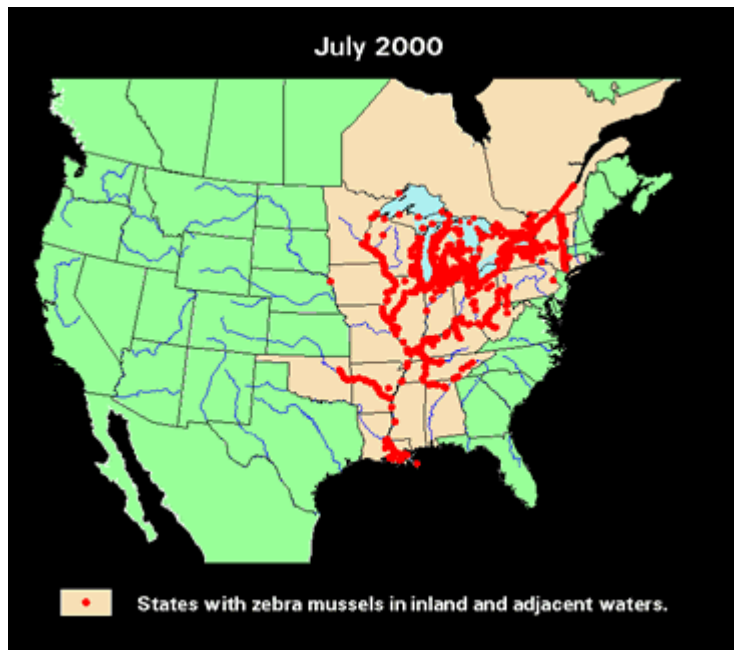


Please note that while links are indicated the data is provided on the pages following the problem.

2001 Interdisciplinary Contest in Modeling ICM 2001 Problem

Our Waterways - An Uncertain Future



Zebra mussels, *Dreissena polymorpha*, are small, fingernail-sized, freshwater mollusks unintentionally introduced to North America via ballast water from a transoceanic vessel. Since their introduction in the mid 1980s, they have spread through all of the Great Lakes and to an increasing number of inland waterways in the United States and Canada. Zebra mussels colonize on various surfaces, such as docks, boat hulls, commercial fishing nets, water intake pipes and valves, native mollusks and other zebra mussels. Their only known predators, some diving ducks, freshwater drum, carp, and sturgeon, are not numerous enough to have a significant effect on them. Zebra mussels have significantly impacted the Great Lakes ecosystem and economy. Many communities are trying to control or eliminate these aquatic pests. **SOURCE:** Great Lakes Sea Grant Network <http://www.sgnis.org/>.

Researchers are attempting to identify the environmental variables related to the zebra mussel infestation in North American waterways. The relevant factors that may limit or prevent the spread of the zebra mussel are uncertain. You will have access to some reference data to

include listings of several chemicals and substances in the water system that may affect the spread of the zebra mussel throughout waterways. Additionally, you can assume individual zebra mussels grow at a rate of 15 millimeters per year with a life span between 4 - 6 years. The typical mussel can filter 1 liter of water each day.

Requirement A : Discuss environmental factors that could influence the spread of zebra mussels.

Requirement B : Utilizing the chemical data provided at:

<http://www.comap/undergraduate/contests/icm/imagesdata/LakeAChem1.xls>,
and the mussel population data provided at:

<http://www.comap/undergraduate/contests/icm/imagesdata/LakeAPopulation1.xls>

model the population growth of zebra mussels in Lake A. Be sure to review the **Information about the collection of the zebra mussel data**.

Requirement C : Utilizing additional data on Lake A from another scientist provided at:

<http://www.comap/undergraduate/contests/icm/imagesdata/LakeAChem2.xls>
and additional mussel population data provided at:

<http://www.comap/undergraduate/contests/icm/imagesdata/LakeAPopulation2.xls>

corroborate the reasonableness of your model from Requirement B. As a result of this additional data, adjust your earlier model. Analyze the performance of your model. Discuss the sensitivity of your model.

Requirement D : Utilizing the Chemical data from two lakes (Lake B and Lake C) in the United States provided at

<http://www.comap/undergraduate/contests/icm/imagesdata/LakeB.xls>
and

<http://www.comap/undergraduate/contests/icm/imagesdata/LakeC.xls>

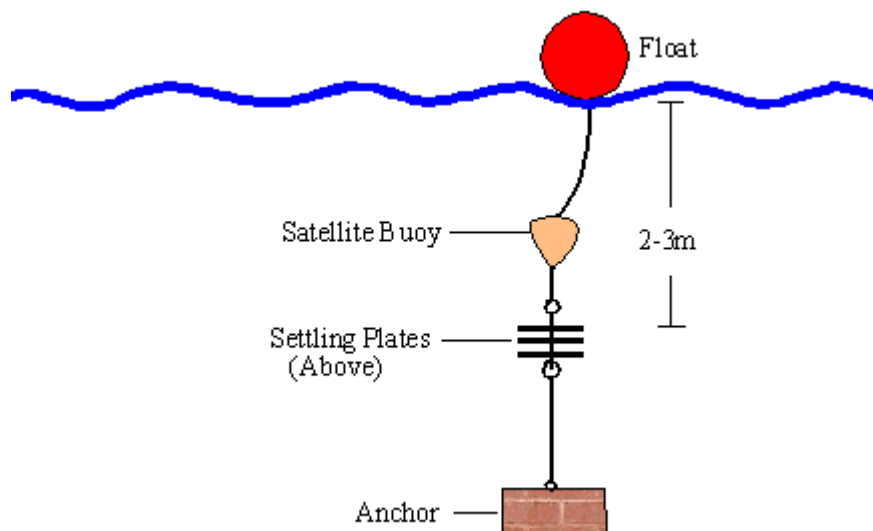
determine if these lakes are vulnerable to the spread of zebra mussels. Discuss your prediction.

Requirement E: The community in the vicinity of Lake B (in requirement D) is considering specific policies for the de-icing of roadways near the lake during the winter season. Provide guidance to the local government officials regarding a policy on “de-icing agents.” In your guidance include predictions on the long-term impact of de-icing on the zebra mussel population.

Requirement F: It has been recommended by a local community in the United States to introduce *round goby* fish. Zebra mussels are not often eaten by native fish species so they represent a dead end ecologically. However, round gobies greater than 100 mm feed almost exclusively on zebra mussels. Ironically, because of habitat destruction, the goby is endangered in its native habitat of the Black and Caspian Seas in Russia. In addition to your technical report, include a carefully crafted report (3-page maximum) written explicitly for the local community leaders that responds to their recommendation to introduce the round goby. Also suggest ways to help reduce the growth of the mussel within and among waterways.

Information about the collection of the zebra mussel data

The developmental state of the Zebra mussel is categorized by three stages: veligers (larvae), settling juveniles, and adults. Veligers (microscopic zebra mussel larvae) are free-swimming, suspended in the water for one to three weeks, after which they begin searching for a hard surface to attach to and begin their adult life. Looking for zebra mussel veligers is difficult because they are not easily visible by the naked eye. Settled juvenile zebra mussels can be felt on smooth surfaces like boats and motors. An advanced zebra mussel infestation can cover a surface, even forming thick mats sometimes reaching very high densities. The density of juveniles was determined along the lake using three 15X15 cm settling plates. The top plate remained in the water for the entire sampling season (**S - seasonal**) to estimate seasonal accumulation. The middle and bottom plates are collected after specific periods (**A – alternating**) of time denoted by "Lake Days" in the data files.



The settling plates are placed under the microscope and all juveniles on the undersides of the plate are counted and densities are reported as juveniles/m².



Below is chemical data that was collected between 1992 and 1999 on Lake A at 10 different sites. The sites range from southern locations (site 1) to northern locations (site 10). The zebra mussel was first introduced in the southern portion of the lake.

Lake Test	Abbreviation	UNITS
Alkalinity	Alk	mg/L as CaCO ₃
Calcium	Ca	mg/L
Chlorophyll	Chl-a	ug/L
Chloride	Cl	mg/L
Iron	Fe	ug/L
Potassium	K	mg/L
Magnesium	Mg	mg/L
Sodium	Na	mg/L
pH	pH	pH
Secchi Disk Transparency	Secchi	meters
Temperature	Temp	oC

Lake Location	Test	Minimum Value	25th Percentile	Population Median	75th Percentile	Maximum Value
1	Alk	63.8	81.6	86.8	91.9	104.5
1	Ca	23.2	24.8	26.8	27.2	27.5
1	Chl-a	0.69	4.13	6.27	9.45	15.55
1	Cl	9.3	13.1	15.3	17.9	27
1	Fe	301	381	501	595	963
1	K	1	1.2	1.2	1.3	2.3
1	Mg	5.1	5.7	6.6	6.7	6.7
1	Na	6.8	9.4	11.4	12.6	12.9
1	pH	6.58	7.54	7.68	7.83	8.58
1	Secchi	0.2	0.6	0.9	1.1	1.8
1	Temp	8.5	16.1	20.2	21.7	24.2
Lake Location	Test	Minimum Value	25th Percentile	Population Median	75th Percentile	Maximum Value
2	Alk	51.7	66.3	72.4	76.3	88.9
2	Ca	18	21.6	22.3	22.7	23.2
2	Chl-a	1.41	3.84	5.52	7.62	22.94
2	Cl	9.6	13.2	14.9	18.2	31.8
2	Fe	50	83	143	539	709
2	K	1.3	1.4	1.5	1.5	2
2	Mg	4.5	5.1	5.2	5.4	6.2
2	Na	9.3	10.6	13.4	15.6	20.6
2	pH	6.83	7.79	8	8.25	8.68

Below you find zebra mussel population data that was collected at 10 different sites on Lake A. The sites range from southern locations (site 1) to northern locations (site 10). The zebra mussel was first introduced in the southern portion of the Lake A.

See File: **Collection** for information on collectioning zebra mussel data

Lake Test	Abbreviation	Units
Type of Plate	QA	A - Alternating S - Seasonal
Days in the Water	Lake Days	Days
Density of juveniles	Density	juveniles/m ²

Lake Location	Date	QA	Lake Days	Density
1	7/12/1994	A	31	133
1	7/18/1994	A	37	0
1	9/2/1994	A	46	133
1	9/21/1994	A	65	133
1	11/2/1994	A	82	578
1	11/2/1994	S	154	2,089
1	7/12/1995	A	28	222
1	7/25/1995	A	13	178
1	8/22/1995	A	28	3,378
1	9/12/1995	A	21	694,000
1	10/18/1995	S	98	498,000
1	10/18/1995	S	98	354,000
1	10/18/1995	A	36	604,000
1	6/24/1996	A	19	0
1	9/3/1996	A	14	116,000
1	9/17/1996	A	28	440,000
1	9/30/1996	A	27	22,978
1	11/4/1996	A	48	2,311
1	11/4/1996	A	35	4,400
1	11/4/1996	S	105	386,000
1	6/4/1997	A	30	0
1	6/18/1997	A	27	80,000
1	7/2/1997	A	28	42,000
1	7/17/1997	A	29	2,622
1	8/1/1997	A	30	1,778
1	8/18/1997	A	32	52,000
1	9/4/1997	A	34	398,000
1	9/19/1997	A	32	318,000
1	10/8/1997	S	156	146,489
1	10/8/1997	A	34	46,000
1	10/8/1997	A	19	11,200
1	5/29/1998	A	30	4,267
1	6/17/1998	A	34	10,889
1	7/7/1998	A	39	5,600
1	7/20/1998	A	33	23,467
1	8/3/1998	A	27	13,378
1	8/20/1998	A	31	80,000

Lake A Chem 2 --This chemical data on Lake A was provided by another researcher

Lake Test	Abbreviation	UNITS
Stratum	U / E / H	Samples are obtained from both the Epilimnion (E) , (the topmost and warmest layer of water), and the Hypolimnion (H) (the cold deep water layer) and Unstratified (U) .
Total Phosphorus	TP	mg/L
Dissolved Phosphorus	DP	mg/L
Calcium	Ca	mg/L
Magnesium	Mg	ug/L
Total Nitrogen	TN	mg/L
Temperature	Temp	oC
Chlorophyll	Chl-a	ug/L

Lake Location	Date	Stratum	T	DP	Ca	Mg	TN	Temp	Chl-a
1	5/13/1992	U	0.03	0.01			0.58		
1	5/26/1992	U	0.05	0.02			0.70	15.80	
1	6/11/1992	U	0.05	0.02			0.69	21.30	10.18
1	6/23/1992	U	0.06	0.02			0.51	20.00	4.69
1	7/15/1992	U	0.06	0.01			0.73	21.90	
1	7/28/1992	U	0.05	0.01			0.67	22.40	
1	8/11/1992	U	0.05	0.01			0.73	22.50	
1	8/25/1992	U	0.05	0.01			0.54	21.50	6.43
1	9/17/1992	U	0.06	0.02			0.57	20.40	7.50
1	10/6/1992	U	0.06	0.01			0.63	12.20	
1	10/30/1992	U	0.06	0.02			0.57		
1	5/4/1993	U	0.01	0.01			0.42	14.10	
1	6/1/1993	U	0.04	0.01			0.39	17.30	
1	6/8/1993	U	0.04	0.01			0.40	17.50	
1	6/30/1993	U	0.05	0.01			0.49		
1	7/14/1993	U	0.09	0.02			0.79		
1	8/5/1993	U	0.08	0.01			0.57		
1	8/13/1993	U	0.06	0.01			0.36		
1	8/19/1993	U	0.05	0.01			0.48		
1	8/26/1993	U	0.06	0.01					
1	9/2/1993	U	0.08	0.01			0.44	23.50	
1	9/22/1993	U	0.07	0.01			0.54	16.10	
1	10/6/1993	U	0.05	0.01			0.45		

Lake A Population 2--New Researcher Information

Below you find zebra mussel population data that was collected at 10 different sites on Lake A. The sites range from southern locations (site 1) to northern locations (site 10). The zebra mussel was first introduced in the southern portion of the Lake A.

See File: **Collection** for information on collectioning zebra mussel data

Lake Test	Abbreviation	Units
Density of juveniles	Density	juveniles/m ²

Lake Location	Date	Number
1	7/1/1994	100
1	8/1/1994	70
1	9/1/1994	50
1	10/1/1994	248
1	11/1/1994	1045
1	7/12/1995	222
1	8/1/1995	50
1	9/1/1995	70
1	10/1/1995	40,000
1	11/1/1995	200,385
1	7/1/1996	39
1	8/1/1996	4,843
1	9/1/1996	30,033
1	10/1/1996	949,433
1	11/1/1996	49,333
0	7/1/1997	0
1	8/1/1997	20,456
1	9/1/1997	44,678
1	10/1/1997	345,555
1	11/1/1997	98,789
1	7/1/1998	605
1	8/1/1998	84,132
1	9/1/1998	599,432
1	10/1/1998	454,932
1	11/1/1998	49,332
1	7/1/1999	93
1	8/1/1999	45
1	9/1/1999	83,962
1	10/1/1999	539,229
1	11/1/1999	30,012
1	7/1/2000	0
1	8/1/2000	50
1	9/1/2000	9,483
1	10/1/2000	592,339
1	11/1/2000	467,876
Lake Location	Date	

Chemical Data on Lake B

Name	Code	Units
Depth	Z	meters
pH	pH	standard units
Chloride	CL	mg/l
Sulfate	SO4	mg S/l
Total Phosphorus	TP	ug P/l
Nitrate	NO3	mg N/l
Ammonia	NH4	mg N/l
Chlorophyll	CHLA	ug/l
Total Nitrogen	TN	mg N/l
Calcium	Ca	mg/l
Magnesium	Mg	mg/l
Sodium	Na	mg/l
less than	-	

Date	PH	COND	CL	SO4	CA	TP	NO3	NH4	CHLA	Mg	Na	TN
18-Feb-97	7.42	124	13.4	2.9	11.89	4.9	0.06	-0.01	1.47	2.6	9.34	0.19
22-Apr-97	7.62	128	13.1	2.7	11.65	6	0.08	-0.01	1.28	2.57	9.23	0.22
7-May-97	7.43	115	12.71	2.6	10.69	5.5	0.06	0.01	1.7	2.48	8.16	0.18
20-May-97	7.37	119	10.87	2	10.35	6.3	0.06	-0.01	2.18	2.26	7.36	0.18
3-Jun-97	7.35	125	10.27	3.2	10.98	4.1	0.01	-0.01	0.67	2.35	6.87	0.18
18-Jun-97	7.61	110.6	12.08	3	11.06	7.1	0.058	0.01	3.03	2.43	6.94	0.18
24-Jul-97	7.29	109.8	10.3	3.1	11.35	5.3	0.01	-0.01	2.49	2.44	6.96	0.2
21-Aug-97	7.64	118.2	10.05	3	10.95	2.1	-0.005	0.01	2.24	2.37	6.78	0.16
22-Sep-97	7.97	115.9	10.05	3	11.61	8.8	-0.005	-0.01	4.18		6.64	0.14
22-Oct-97	7.26	123	11.47	3	13.8	5.5	0.01	-0.01	2.13		6.72	0.16
4-Nov-97	7.41	115.2	10.73	2.6	11.53	10.4	0.021	-0.01	8.65		6.55	0.19
26-Feb-98	7.19	133.7	15.88	2.86	13.8	6.2	0.048	0.01	3.63	2.44	9.06	0.22
15-Apr-98	7.46	109.9	12.74	2.49	12.5	3.5	0.04	0.012	1.26	2.27	7.46	0.17

Chemical Data on Lake C

Name	Code	Units
pH	pH	standard units
Secchi Depth	Zsec	meters
Sulfate	SO4	mg S/l
Total Soluble Phosphorus	TFP	ug P/l
Nitrate	NO3	mg N/l
Calcium	Ca	mg/l
Magnesium	Mg	mg/l
Sodium	Na	mg/l
Potassium	K	mg/l

Date	PH	NO3	SO4	Ca	Mg	Na	K
May-92	4.71	2.51	6	1.6	0.25	0.55	0.4
Jun-92	4.78	2.3	5.75	1.25	0.251	0.49	0.3
Jul-92	4.77	1.8	6.2	1.3	0.2	0.35	0.35
Aug-92	4.81	1.5	5.9	1.65	0.25	0.45	0.3
Sep-92	4.79	1.4	6.25	1.15	0.256	0.3	0.25
Oct-92	4.8	1.3	6.7	1.3	0.258	0.35	0.3
Nov-92	4.79	1.3	6.75	1.2	0.23	0.34	0.3
Dec-92	4.52	1.3	6.7	1.45	0.22	0.3	0.28
Jan-93	4.45	1.5	6.8	1.51	0.23	0.32	0.3
Feb-93	4.59	1.9	6.5	1.35	0.22	0.33	0.25
Mar-93	4.31	2.4	5.5	1.3	0.21	0.27	0.24
Apr-93	4.7	2	5.6	1.2	0.24	0.27	0.23
May-93	4.75	4.3	5.5	1.2	0.24	0.25	0.26
Jun-93	4.76	2	5.6	0.85	0.23	0.3	0.26
Jul-93	4.8	1.7	6.2	1.85	0.25	0.3	0.26
Aug-93	4.78	1.6	6.25	1.2	0.24	0.29	0.24
Sep-93	4.78	1.1	5.5	1.2	0.23	0.29	0.23
Oct-93	4.77	1	5.8	1.2	0.23	0.3	0.27
Nov-93	4.78	1	5.7	1.1	0.22	0.29	0.25
Dec-93	4.41	1.1	6.5	1.3	0.24	0.31	0.24
Jan-94	4.58	1.7	5.6	1.15	0.23	0.33	0.24
Feb-94	4.42	1.5	6.2	1.25	0.23	0.29	0.25
Mar-94	4.6	2.1	6.4	1.35	0.22	0.3	0.26
Apr-94	4.25	3.9	5.4	1.15	0.23	0.31	0.25
May-94	4.61	2.6	5.45	1.2	0.23	0.32	0.26
Jun-94	4.75	2.5	5.45	1.2	0.23	0.33	0.25
Jul-94	4.65	2.1	5.4	1.25	0.23	0.3	0.26
Aug-94	4.68	1.7	5.9	1.25	0.22	0.35	0.26
Sep-94	4.78	1.5	5.9	1.2	0.22	0.3	0.25
Oct-94	4.8	1.4	5.9	1.25	0.22	0.33	0.25
Nov-94	4.8	1.45	6.35	1.2	0.22	0.32	0.25
Dec-94	4.79	1.7	6.1	1.25	0.22	0.31	0.25

Jan-95	4.76	2.3	5.5	1.15	0.23	0.5	0.25
Feb-95	4.68	2.4	5.1	1.25	0.22	0.55	0.27
Mar-95	4.6	2.3	5.7	1.2	0.22	0.49	0.24
Apr-95	4.55	2.2	5.4	1.25	0.22	0.35	0.27
May-95	4.75	2	5.55	1.21	0.23	0.36	0.25
Jun-95	4.82	1.7	5.55	1.2	0.24	0.31	0.26
Jul-95	4.77	1.5	5.5	1.25	0.23	0.31	..26
Aug-95	4.83	1.3	5.7	1.15	0.24	0.3	0.27
Sep-95	4.77	1.2	5.6	1.18	0.23	0.32	0.3
Oct-95	4.85	1	5.75	1.3	0.23	0.32	0.25
Nov-95	4.89	1.6	5.9	1.2	0.23	0.32	0.28
Dec-95	4.78	2	6	1.35	0.24	0.5	0.27
Jan-96	4.8	2.3	4.75	1.25	0.23	0.45	0.26
Feb-96	4.62	2.7	5.15	1.35	0.24	0.25	0.26
Mar-96	4.55	3.2	4.8	1.25	0.23	0.3	0.25
Apr-96	4.43	4.8	4.7	1.15	0.23	0.29	0.26
May-96	4.76	2.8	4.4	1.15	0.23	0.28	0.25
Jun-96	4.66	2.6	5.1	1.16	0.22	0.3	0.26
Jul-96	4.67	2.5	5.05	1.15	0.23	0.28	0.27
Aug-96	4.7	1.9	5.75	1.15	0.23	0.29	0.27
Sep-96	4.77	1.7	5.8	1.2	0.22	0.3	0.27
Oct-96	4.9	1.5	5.5	1.15	0.23	0.287	0.26
Nov-96	4.9	1.5	5.2	1.11	0.23	0.27	0.25
Dec-96	4.61	2.4	4.3	0.85	0.22	2.8	0.26
Jan-97	4.61	2.7	4.6	1.1	0.22	2.8	0.25
Feb-97	4.42	4.4	4.8	0.85	0.23	0.27	0.26
Mar-97	4.4	4.8	5	1.1	0.23	0.26	0.25
Apr-97	4.43	2.7	4.95	1.1	0.23	0.28	0.24
May-97	4.69	2.6	5.1	1.2	0.23	0.26	0.26
Jun-97	4.8	2.3	5.01	1.05	0.23	2.8	0.25
Jul-97	4.8	1.8	5.35	1.1	0.23	0.28	0.26
Aug-97	4.86	1.6	5.5	1.15	0.23	0.27	0.26
Sep-97	4.91	1.4	5	1	0.23	0.27	0.25
Oct-97	4.84	1.5	5.4	1.1	0.23	0.275	0.25
Nov-97	4.87	1	5.4	1.05	0.23	0.28	0.25
Dec-97	4.85	2.7	4.65	1.1	0.22	0.27	0.25
Jan-98	4.495	2.6	4.7	1.1	0.22	0.26	0.24
Feb-98	4.57	2.9	4.75	1.05	0.22	0.28	0.24
Mar-98	4.53	2.5	4.65	0.095	0.22	0.29	0.23
Apr-98	4.68	2	4.75	1.15	0.22	0.29	0.24
May-98	4.88	1.9	4.7	0.95	0.22	0.28	0.2
Jun-98	4.93	1.6	5.1	0.95	0.22	0.29	0.25
Jul-98	4.71	1.3	4.75	1	0.23	0.35	0.25
Aug-98	4.89	1	5.1	1	0.22	0.35	0.25
Sep-98	4.8	0.8	5.1	1.05	0.22	0.32	0.25
Oct-98	4.93	0.8	5.15	1	0.22	0.34	0.25
Nov-98	5.1	0.9	5.4	1.2	0.22	0.33	0.25
Dec-98	4.91	0.9	5.2	1.2	0.23	0.33	0.24
Jan-99	4.94	1	4.8	1.05	0.22	0.33	0.28
Feb-99	4.55	1.7	4.9	1.2	0.22	0.31	0.24
Mar-99	4.68	1.5	4.9	1.1	0.22	0.3	0.26
Apr-99	4.73	1.9	4.9	1.1	0.23	0.19	0.24

May-99	4.87	1.6	5.1	1.05	0.22	0.28	0.25
Jun-99	4.86	1.3	5.2	1.2	0.22	0.29	0.26
Jul-99	4.88	1	5.25	1.2	0.23	0.3	0.26
Aug-99	5.99	0.9	5.5	1.15	0.22	0.3	0.26
Sep-99	5.2	0.8	5.3	1.2	0.22	0.3	0.25
Oct-99	4.8	0.85	5.2	1.2	0.22	0.26	0.25
Nov-99	4.99	0.9	4.9	1.1	0.22	0.28	0.25
Dec-99	4.9	1.2	4.95	1.2	0.23	0.27	0.25
Jan-00	4.74	2.3	4.75	0.9	0.22	0.26	0.24
Feb-00	4.54	2.4	4.9	1	0.22	0.25	0.25
Mar-00	4.56	2	4.6	0.75	0.23	0.24	0.25
Apr-00	4.71	1.8	4.6	0.8	0.23	0.23	0.24
May-00	4.74	1.3	4.6	0.85	0.22	0.22	0.25
Jun-00	4.8	1	4.5	1.2	0.23	0.24	0.24
Jul-00	4.77	0.8	4.4	0.95	0.24	0.25	0.24
Aug-00	4.94	0.6	4.3	0.9	0.25	0.19	0.23
Sep-00	4.95	0.5	4.4	1	0.23	0.2	0.25

30-Apr-98	7.83	109.6	13.47	2.6	11.5	3.3	0.032	0.006	1.47	2.31	7.78	0.21
12-May-98	7.25	107.8	12.25	2.47	10.4	4.2	0.015	0.019	0.96	2.2	7.33	0.16
12-May-98	7.49	110.7	12.31	2.54	10.5	4.4	0.023	0.019	0.92	2.2	7.23	0.15
26-May-98	8.01	112.2	13.7	2.61	10.7	4.1	0.014	lt 0.005	2.14	2.35	7.44	0.16
10-Jun-98	7.58	108.1	13.97	2.65	11.1	4.8	0.005	0.007	1	2.35	7.29	0.15
10-Jun-98	7.62	110.9	13.83	2.62	10.8	7.2	0.006	0.012	1.1	2.29	6.97	0.13
16-Jul-98	7.85	112.5	12.94	2.48	10.5	7.2	lt 0.005	0.01	2.32	2.27	7.19	0.2
6-Aug-98	7.3	114	13.47	2.6	11.4	5.1	lt 0.005	lt 0.005	2.82	2.34	7.19	0.19
1-Sep-98	8.02	111.7	12.26	2.54	10.2	7	lt 0.005	lt 0.005	2.59	2.18	6.84	0.2
30-Sep-98	7.9	112.7	12.74	2.63	10.5	6.4	lt 0.005	lt 0.005	2.43	2.21	7.01	0.2
30-Sep-98	7.9	111.8	12.01	2.56	10.4	5.7	lt 0.005	lt 0.005	2.46	2.19	7.05	0.18
13-Oct-98	7.82	113.7	12.81	2.66	12.4	7.9	lt 0.005	0.005	3.07	2.25	6.8	0.34
2-Nov-98	7.86	107.1	12.76	2.59	11.5	11.2	lt 0.005	lt 0.005	4.81	2.27	6.86	0.27
2-Mar-99	7.52	137.4	22.1	2.9	12.1	5.8	0.05	lt 0.01	0.57	2.39	12.14	0.18
2-Mar-99	7.5	137.5	21.9	2.88	12.5	5.8	0.05	lt 0.01	0.64	2.39	11.92	0.18
14-Apr-99	7.52	131.9	19.3	2.7	13.1	12.7	0.05	lt 0.01	2.49	2.45	9.69	0.24
27-Apr-99	7.64	119.8	15.9	2.74	12.2	6.3	0.02	lt 0.01	2.8	2.35	8.06	0.19
12-May-99	7.84	109.1	13.5	2.62	11	5.8	lt 0.01	lt 0.01	0.94	2.34	7.43	0.15
12-May-99	7.88	107.2	13.3	2.57	11.8	4.6	lt 0.01	lt 0.01	0.85	2.55	7.77	0.16
26-May-99	7.66	106	11.9	2.64	12	6.9	0.01	0.011	1.66	2.18	7.09	0.16
9-Jun-99	8.03	109	12.5	2.59	11.1	3.7	lt 0.01	lt 0.01	0.52	2.17	7.16	0.15
23-Jun-99	7.92	111.2	12.4	2.74	11.1	2.9	lt 0.01	lt 0.01	1.21	2.42	7.28	0.14
21-Jul-99	7.91	114.4	12.1	2.55	11.4	6.4	lt 0.01	lt 0.01	1.85	2.43	7.23	0.14
11-Aug-99	7.34	116.7	12.3	2.6	11.7	4.8	lt 0.01	lt 0.01	2.37	2.43	7.07	0.17
11-Aug-99	7.69	118.1	12.9	2.58	11.7	5.3	lt 0.01	lt 0.01	2.14	2.42	7.05	0.18
9-Sep-99	8.02	121.1	12.7	2.53	12.7	7.3	lt 0.01	lt 0.01	1.9	2.51	7.34	0.17
6-Oct-99	7.63	104.4	12.5	2.61	11.5	6.7	0.01	lt 0.01	2.98	2.42	6.9	0.19
20-Oct-99	7.31	116.3	12.6	2.55	11.4	8.8	lt 0.01	lt 0.01	4.49	2.44	6.97	0.15
4-Nov-99	7.53	113.1	13.5	2.89	11.6	4.8	0.014	lt 0.01	1.83	2.44	7.12	0.17

2	7/1/1994	0
2	8/1/1994	67
2	9/1/1994	456
2	10/1/1994	8,767
2	11/1/1994	6,788
2	7/12/1995	76
2	8/1/1995	789
2	9/1/1995	568
2	10/1/1995	55
2	11/1/1995	32
2	7/1/1996	2,834
2	8/1/1996	9,584
2	9/1/1996	2,433,282
2	10/1/1996	1,943,383
2	11/1/1996	746,294
2	7/1/1997	232
2	8/1/1997	134,543
2	9/1/1997	32,452
2	10/1/1997	12,512
2	11/1/1997	41,234
2	7/1/1998	64
2	8/1/1998	3,224
2	9/1/1998	955,487
2	10/1/1998	3,425
2	11/1/1998	11,123
2	7/1/1999	843
2	8/1/1999	35,543
2	9/1/1999	23,452
2	10/1/1999	233,523
2	11/1/1999	22,344
2	7/1/2000	89
2	8/1/2000	6,578
2	9/1/2000	1,345,786
2	10/1/2000	1,578,563
2	11/1/2000	684,741

Lake Location

Date

3	7/1/1994	98
3	8/1/1994	9,868
3	9/1/1994	21,852
3	10/1/1994	66,087
3	11/1/1994	89,890
3	7/12/1995	877
3	8/1/1995	2,543
3	9/1/1995	32,462
3	10/1/1995	252,352
3	11/1/1995	23,455
3	7/1/1996	5,758
3	8/1/1996	34,563
3	9/1/1996	6,789
3	10/1/1996	2,345,234
3	11/1/1996	463,345
3	7/1/1997	0

3	8/1/1997	757
3	9/1/1997	67,858
3	10/1/1997	2,854,329
3	11/1/1997	1,325,234
3	7/1/1998	987
3	8/1/1998	89,897
3	9/1/1998	97,907
3	10/1/1998	346,534
3	11/1/1998	35,663
3	7/1/1999	0
3	8/1/1999	34,634
3	9/1/1999	34,634
3	10/1/1999	567,344
3	11/1/1999	67,965
3	7/1/2000	47
3	8/1/2000	365
3	9/1/2000	2,356
3	10/1/2000	574,574
3	11/1/2000	35,633

Lake Location

Date

4	7/1/1994	0
4	8/1/1994	0
4	9/1/1994	43
4	10/1/1994	3
4	11/1/1994	32
4	7/12/1995	0
4	8/1/1995	345
4	9/1/1995	34
4	10/1/1995	2,452
4	11/1/1995	23,455
4	7/1/1996	57
4	8/1/1996	5,754
4	9/1/1996	9,775
4	10/1/1996	24,352
4	11/1/1996	24,243
4	7/1/1997	5
4	8/1/1997	97
4	9/1/1997	1,441
4	10/1/1997	134,562
4	11/1/1997	412
4	7/1/1998	23
4	8/1/1998	347,447
4	9/1/1998	235,212
4	10/1/1998	32,452
4	11/1/1998	252,345
4	7/1/1999	55
4	8/1/1999	363
4	9/1/1999	23,523
4	10/1/1999	25,634
4	11/1/1999	34,653
4	7/1/2000	87
4	8/1/2000	5,634

4	9/1/2000	345,634
4	10/1/2000	435,634
4	11/1/2000	56,345

Lake Location	Date	
5	7/1/1994	0
5	8/1/1994	0
5	9/1/1994	0
5	10/1/1994	0
5	11/1/1994	0
5	7/12/1995	0
5	8/1/1995	0
5	9/1/1995	0
5	10/1/1995	0
5	11/1/1995	0
5	7/1/1996	0
5	8/1/1996	56
5	9/1/1996	356
5	10/1/1996	3,566
5	11/1/1996	5,643
5	7/1/1997	78
5	8/1/1997	745
5	9/1/1997	45,745
5	10/1/1997	67,456
5	11/1/1997	56,356
5	7/1/1998	657
5	8/1/1998	53,634
5	9/1/1998	346,546
5	10/1/1998	1,258,654
5	11/1/1998	564,546
5	7/1/1999	67
5	8/1/1999	5,698
5	9/1/1999	9,953
5	10/1/1999	1,346,346
5	11/1/1999	789,574
5	7/1/2000	255
5	8/1/2000	34,523
5	9/1/2000	1,286,836
5	10/1/2000	234,523
5	11/1/2000	46,346

Lake Location	Date	
6	7/1/1994	0
6	8/1/1994	0
6	9/1/1994	0
6	10/1/1994	0
6	11/1/1994	0
6	7/12/1995	0
6	8/1/1995	0
6	9/1/1995	0
6	10/1/1995	0
6	11/1/1995	0
6	7/1/1996	0
6	8/1/1996	0

6	9/1/1996	0
6	10/1/1996	0
6	11/1/1996	0
6	7/1/1997	0
6	8/1/1997	0
6	9/1/1997	56
6	10/1/1997	242
6	11/1/1997	342
6	7/1/1998	0
6	8/1/1998	43
6	9/1/1998	95
6	10/1/1998	277
6	11/1/1998	658
6	7/1/1999	89
6	8/1/1999	645
6	9/1/1999	0
6	10/1/1999	245
6	11/1/1999	345
6	7/1/2000	95
6	8/1/2000	54
6	9/1/2000	455
6	10/1/2000	355
6	11/1/2000	32

Lake Location

Date

7	7/1/1994	0
7	8/1/1994	0
7	9/1/1994	0
7	10/1/1994	0
7	11/1/1994	0
7	7/12/1995	0
7	8/1/1995	0
7	9/1/1995	0
7	10/1/1995	0
7	11/1/1995	0
7	7/1/1996	0
7	8/1/1996	0
7	9/1/1996	0
7	10/1/1996	0
7	11/1/1996	0
7	7/1/1997	0
7	8/1/1997	0
7	9/1/1997	0
7	10/1/1997	0
7	11/1/1997	0
7	7/1/1998	0
7	8/1/1998	0
7	9/1/1998	0
7	10/1/1998	0
7	11/1/1998	0
7	7/1/1999	0
7	8/1/1999	65
7	9/1/1999	467

7	10/1/1999	45
7	11/1/1999	547
7	7/1/2000	0
7	8/1/2000	64
7	9/1/2000	436
7	10/1/2000	731
7	11/1/2000	98

Lake Location	Date	
8	7/1/1994	0
8	8/1/1994	0
8	9/1/1994	0
8	10/1/1994	0
8	11/1/1994	0
8	7/12/1995	0
8	8/1/1995	0
8	9/1/1995	0
8	10/1/1995	0
8	11/1/1995	0
8	7/1/1996	0
8	8/1/1996	0
8	9/1/1996	0
8	10/1/1996	0
8	11/1/1996	0
8	7/1/1997	0
8	8/1/1997	0
8	9/1/1997	0
8	10/1/1997	0
8	11/1/1997	0
8	7/1/1998	0
8	8/1/1998	0
8	9/1/1998	76
8	10/1/1998	457
8	11/1/1998	3,456
8	7/1/1999	8
8	8/1/1999	574
8	9/1/1999	3,521
8	10/1/1999	6,245
8	11/1/1999	7,896
8	7/1/2000	85
8	8/1/2000	2,345
8	9/1/2000	54,673
8	10/1/2000	13,434
8	11/1/2000	3,245

Lake Location	Date	
9	7/1/1994	0
9	8/1/1994	0
9	9/1/1994	0
9	10/1/1994	0
9	11/1/1994	0
9	7/12/1995	0
9	8/1/1995	0
9	9/1/1995	0

9	10/1/1995	0
9	11/1/1995	0
9	7/1/1996	0
9	8/1/1996	0
9	9/1/1996	0
9	10/1/1996	0
9	11/1/1996	0
9	7/1/1997	0
9	8/1/1997	0
9	9/1/1997	64
9	10/1/1997	956
9	11/1/1997	5,632
9	7/1/1998	54
9	8/1/1998	73
9	9/1/1998	32,423
9	10/1/1998	234,234
9	11/1/1998	4,423
9	7/1/1999	42
9	8/1/1999	4,352
9	9/1/1999	234,525
9	10/1/1999	344,525
9	11/1/1999	35,254
9	7/1/2000	96
9	8/1/2000	574
9	9/1/2000	34,563
9	10/1/2000	324,523
9	11/1/2000	34,522

Lake Location

Date

10	7/1/1994	0
10	8/1/1994	0
10	9/1/1994	0
10	10/1/1994	0
10	11/1/1994	0
10	7/12/1995	0
10	8/1/1995	0
10	9/1/1995	0
10	10/1/1995	0
10	11/1/1995	0
10	7/1/1996	0
10	8/1/1996	75
10	9/1/1996	553
10	10/1/1996	35
10	11/1/1996	674
10	7/1/1997	0
10	8/1/1997	0
10	9/1/1997	54
10	10/1/1997	638
10	11/1/1997	6,563
10	7/1/1998	0
10	8/1/1998	0
10	9/1/1998	83
10	10/1/1998	522

10	11/1/1998	343
10	7/1/1999	0
10	8/1/1999	0
10	9/1/1999	373
10	10/1/1999	844
10	11/1/1999	632
10	7/1/2000	0
10	8/1/2000	0
10	9/1/2000	643
10	10/1/2000	341
10	11/1/2000	32

1	10/18/1993	U	0.06	0.01			0.43		
1	10/27/1993	U	0.03	0.01			0.37	10.00	
1	5/16/1994	U	0.03	0.01			0.47	14.50	
1	5/24/1994	U	0.04	0.01					
1	6/2/1994	U	0.03	0.01			0.40	18.00	
1	6/15/1994	U	0.04	0.01			0.47	21.60	
1	6/28/1994	U	0.07	0.01			0.71		
1	7/12/1994	U	0.05	0.02			0.84	24.20	
1	7/27/1994	U	0.13	0.05			0.95	23.80	
1	8/4/1994	U	0.09						
1	9/2/1994	U	0.06	0.01			0.40	18.90	
1	9/21/1994	U	0.05	0.02			0.54	17.80	
1	10/4/1994	U	0.05	0.02			0.89		
1	10/10/1994	U	0.05	0.01			0.55	12.90	
1	5/12/1995	U	0.04	0.01			0.53	13.30	10.89
1	5/26/1995	U	0.03	0.01			0.31	16.00	9.14
1	6/14/1995	U	0.06	0.02			0.44	19.50	9.63
1	7/12/1995	U	0.08	0.03			0.60	23.50	7.29
1	7/25/1995	U	0.07	0.02			0.58	24.10	14.39
1	8/10/1995	U	0.06	0.02			0.50		
1	8/22/1995	U	0.05	0.01			0.48	23.80	15.55
1	8/30/1995	U	0.07	0.01					
1	9/12/1995	U	0.06	0.01			0.56	17.10	7.87
1	10/3/1995	U	0.05	0.01			0.41	13.90	8.16
1	10/5/1995	U	0.06	0.01					
1	6/11/1996	U	0.04	0.02			0.68	18.80	6.63
1	6/24/1996	U	0.04	0.02			0.66	22.40	3.51
1	7/9/1996	U	0.06	0.03			0.72	21.00	5.56
1	7/22/1996	U	0.06	0.03			0.74	19.80	3.00
1	7/22/1996	U	0.05						
1	8/5/1996	U	0.06	0.03			0.79	21.00	4.13
1	8/19/1996	U	0.04	0.02			0.65	21.50	3.45
1	8/20/1996	U	0.04						
1	9/3/1996	U	0.05	0.01			0.40	21.00	13.46
1	9/10/1996	U	0.05						
1	9/17/1996	U	0.05	0.02			0.48	20.80	4.49
1	9/30/1996	U	0.04	0.01			0.49	16.00	2.73
1	10/1/1996	U	0.05						
1	5/22/1997	U	0.03	0.01			0.47	13.20	6.36
1	6/4/1997	U	0.02						
1	6/4/1997	U	0.03	0.01			0.30	17.20	6.91
1	6/18/1997	U	0.04						
1	6/18/1997	U	0.03	0.02			0.49	19.20	10.91
1	7/2/1997	U	0.04	0.02			0.56	21.50	5.45
1	7/7/1997	U	0.04						
1	7/17/1997	U	0.06	0.02			0.59	22.00	7.91
1	8/1/1997	U	0.04	0.02			0.56	22.30	6.27
1	8/4/1997	U	0.04						
1	8/18/1997	U	0.06	0.02			0.49	22.10	3.82
1	8/28/1997	U	0.03						
1	9/4/1997	U	0.04	0.02			0.43	20.80	4.18
1	9/19/1997	U	0.03	0.01			0.46	19.10	4.55

1	9/24/1997	U	0.03						
1	10/8/1997	U	0.03	0.01			0.45	14.70	3.09
1	11/5/1997	U	0.03	0.02			0.57	11.50	
1	4/29/1998	U	0.03	0.01			0.52	10.00	4.47
1	5/12/1998	U	0.06						
1	5/14/1998	U	0.06	0.03			0.42	16.10	4.76
1	5/29/1998	U	0.05	0.02			0.49	21.50	10.94
1	6/10/1998	U	0.04						
1	6/17/1998	U	0.09	0.05			1.19	20.70	0.76
1	7/3/1998	U	0.05						
1	7/7/1998	U	0.05	0.03			0.57	21.10	3.88
1	7/20/1998	U	0.04	0.01			0.54	22.30	5.74
1	7/29/1998	U	0.05						
1	8/3/1998	U	0.04	0.02			0.41	21.80	3.35
1	8/20/1998	U	0.06	0.04			0.56	20.00	0.69
1	8/27/1998	U	0.04						
1	9/1/1998	U	0.04	0.02			0.68	22.00	3.88
1	9/21/1998	U	0.04						
1	9/22/1998	U	0.04	0.01			0.39	18.00	4.24
1	10/7/1998	U	0.03						
1	4/15/1999	U	0.03	0.01	23.20	5.07	0.44	8.50	4.72
1	5/17/1999	U	0.03	0.01			0.32	15.50	7.27
1	5/18/1999	U	0.04	0.01	27.50	6.71	0.45		
1	6/1/1999	U	0.04	0.02			0.49	18.20	10.18
1	6/9/1999	U	0.05	0.02			0.42		
1	6/14/1999	U	0.05	0.02			0.47	21.00	11.64
1	7/1/1999	U	0.04	0.02			0.52	20.80	9.45
1	7/19/1999	U	0.05	0.02	26.80	6.72	0.86	21.00	10.18
1	7/20/1999	U	0.06	0.03	27.20	6.61	0.56		
1	7/29/1999	U	0.04	0.01			0.44	21.80	13.58
1	8/4/1999	U	0.06	0.03			0.52		
1	8/11/1999	U	0.06	0.02			0.51		6.30
1	8/23/1999	U	0.04	0.02			0.44	21.00	5.09
1	8/25/1999	U	0.04	0.01			0.41		
1	9/7/1999	U	0.05	0.01			0.38	22.00	12.12
1	9/13/1999	U		0.03			0.38		
1	9/24/1999	U	0.07	0.04	24.80	5.67	0.89	16.00	1.09
1	10/7/1999	U	0.04	0.03			0.73	13.50	3.64
Lake Location	Date	Stratum	TP (mg/l)	DP (mg/l)	Ca (mg/l)	Mg(mg/l)	TN(mg/l)	Temp	Chl-a
2	5/13/1992	U	0.03	0.01			0.63		
2	5/20/1992	U	0.03	0.01			0.58	16.20	
2	6/3/1992	U	0.05	0.01			0.61	17.70	
2	6/16/1992	U	0.05	0.02			0.54	20.30	8.58
2	7/14/1992	U	0.04	0.01			0.54	20.80	
2	7/28/1992	U	0.02	0.01			0.38	21.90	
2	8/11/1992	E	0.03	0.01			0.43	22.00	
2	8/11/1992	H	0.02	0.01			0.81	14.90	
2	8/25/1992	E	0.03	0.01			0.42	22.20	13.67
2	8/25/1992	H	0.03	0.01			0.43	17.30	
2	9/14/1992	U	0.03	0.01			0.51	18.80	
2	9/17/1992	U	0.04	0.01			0.40	19.90	4.02

2	10/6/1992	U	0.04	0.01			0.38	12.80	
2	10/30/1992	U	0.03	0.01			0.27		
2	11/20/1992	U	0.03	0.01			0.41	2.70	
2	4/28/1993	U	0.06	0.02			0.48	8.00	
2	5/18/1993	U	0.03	0.01			0.36	15.40	
2	6/10/1993	U	0.04	0.01			0.28		
2	6/30/1993	U	0.03	0.01			0.38		
2	7/14/1993	U	0.03	0.02			0.40		
2	8/5/1993	E	0.03	0.01			0.33		
2	8/5/1993	H	0.02	0.01			0.35		
2	8/18/1993	E	0.03	0.01			0.39		
2	8/26/1993	U	0.03	0.01					
2	9/2/1993	E	0.03	0.01			0.39	22.90	
2	9/22/1993	U	0.04	0.01			0.37	15.80	
2	10/6/1993	U	0.03	0.01			0.36		
2	10/18/1993	U	0.03	0.01			0.32		
2	10/27/1993	U	0.03	0.01			0.34	10.00	
2	5/10/1994	U	0.03	0.01			0.46	13.50	
2	5/24/1994	U	0.03	0.01					
2	6/2/1994	U	0.05	0.01			0.36	15.90	
2	6/15/1994	E	0.04	0.01			0.49	23.20	
2	6/15/1994	H	0.03	0.01			0.36	13.40	
2	6/28/1994	U	0.03	0.02			0.43	22.00	
2	7/12/1994	E	0.02	0.01			0.28	24.00	
2	7/12/1994	H	0.02	0.01			0.29	14.10	
2	7/27/1994	E	0.02	0.01			0.35	24.80	
2	7/27/1994	H	0.02	0.01			0.35	13.00	
2	8/4/1994	U	0.03	0.01					
2	9/2/1994	U	0.06	0.01			0.37	19.00	
2	9/21/1994	U	0.07	0.01			0.48	18.80	
2	10/4/1994	U	0.07	0.02			0.57		
2	10/5/1994	U	0.07	0.02			0.52	13.10	
2	11/3/1994	U	0.04	0.01			0.47	9.10	
2	5/4/1995	E	0.02	0.01			0.43	14.20	
2	6/22/1995	U	0.03	0.01			0.34	20.20	5.05
2	7/12/1995	E	0.03	0.01			0.29	24.00	4.08
2	7/12/1995	H	0.03	0.01			0.27	17.80	
2	7/25/1995	E	0.03	0.01			0.29	23.00	4.67
2	7/25/1995	H	0.03	0.01			0.27	15.20	
2	8/10/1995	U	0.03	0.01			0.59		
2	8/22/1995	U	0.02	0.01			0.33	22.60	4.37
2	8/30/1995	E	0.04	0.02					
2	9/12/1995	U	0.04	0.01			0.36	16.80	12.44
2	9/20/1995	U	0.04	0.02			0.36	15.00	4.96
2	10/3/1995	U	0.03	0.02			0.33	15.90	6.12
2	10/5/1995	U	0.04	0.02			0.42		
2	6/11/1996	U	0.03	0.01			0.46	20.60	6.24
2	6/24/1996	E	0.02	0.01			0.48	21.00	4.68
2	6/24/1996	H	0.02	0.01			0.48		
2	7/9/1996	E	0.03	0.01			0.40	21.60	11.71
2	7/9/1996	H	0.03	0.01			0.34		
2	7/22/1996	U	0.03	0.01			0.48	19.00	9.81

2	7/22/1996	U	0.03						
2	8/5/1996	E	0.03	0.01			0.71	23.20	8.78
2	8/5/1996	H	0.02	0.02			0.52		
2	8/20/1996	U	0.03	0.01			0.46	21.80	4.68
2	8/20/1996	U	0.03						
2	9/3/1996	U	0.03	0.01			0.56	20.30	7.02
2	9/10/1996	U	0.03						
2	9/16/1996	U	0.03	0.01			0.38	20.80	2.54
2	9/30/1996	U	0.04	0.03			0.47	16.80	2.30
2	10/1/1996	U	0.04						
2	5/22/1997	U	0.02	0.09			0.34	12.70	1.41
2	6/4/1997	E	0.02	0.00			0.30	16.60	6.18
2	6/4/1997	H	0.01	0.00			0.38		
2	6/4/1997	U	0.02						
2	6/18/1997	E	0.03	0.01			0.44	17.70	3.64
2	6/18/1997	H	0.02	0.01			0.50		
2	6/18/1997	U	0.03						
2	7/2/1997	E	0.02	0.01			0.25	23.10	2.48
2	7/2/1997	H	0.01	0.01			0.42		
2	7/7/1997	U	0.02						
2	7/17/1997	E	0.02	0.01			0.51	23.20	2.73
2	7/17/1997	E	0.03						
2	7/17/1997	H	0.02	0.01			0.21		
2	8/1/1997	U	0.03	0.02			0.35	22.60	5.45
2	8/4/1997	U	0.03						
2	8/18/1997	U	0.03	0.02			0.36	21.50	2.55
2	8/28/1997	U	0.03						
2	9/4/1997	U	0.03	0.02			0.43	20.20	6.27
2	9/19/1997	E	0.03	0.01			0.32	18.90	5.45
2	9/19/1997	H	0.03	0.02			0.43		
2	9/24/1997	U	0.03						
2	10/8/1997	U	0.03	0.02			0.32	14.10	6.55
2	11/5/1997	U	0.03	0.02			0.36	10.20	3.64
2	4/29/1998	U	0.03	0.01			0.44	9.10	4.12
2	5/12/1998	U	0.03						
2	5/14/1998	E	0.02	0.01			0.25	15.00	7.06
2	5/14/1998	H	0.02	0.01			0.32	7.80	
2	5/29/1998	E	0.03	0.01			0.32	19.70	2.82
2	5/29/1998	H	0.02	0.01			0.38		
2	6/10/1998	U	0.02						
2	6/17/1998	E	0.04	0.02			0.38	21.20	6.88
2	6/17/1998	H	0.03	0.01			0.41	12.80	
2	7/3/1998	U	0.04						
2	7/7/1998	E	0.05	0.02			0.51	22.00	22.94
2	7/7/1998	H	0.03	0.02			0.55		
2	7/20/1998	E	0.03	0.01			0.57	25.80	7.94
2	7/20/1998	H	0.02	0.01			0.52		
2	7/29/1998	E	0.02						
2	7/29/1998	H	0.02						
2	8/3/1998	E	0.03	0.02			0.32	21.80	7.06
2	8/3/1998	H	0.03	0.02			0.40		
2	8/20/1998	U	0.04	0.03			0.34	20.10	2.66

2	8/27/1998	U	0.03						
2	9/1/1998	E	0.03	0.02			0.47	21.20	3.71
2	9/1/1998	H	0.03	0.03			0.61	17.30	
2	9/21/1998	U	0.03						
2	9/22/1998	U	0.03	0.02			0.33	18.10	1.68
2	10/7/1998	U	0.03						
2	4/15/1999	U	0.04	0.02	22.30	5.03	0.59	6.80	5.58
2	5/6/1999	U	0.02	0.01			0.47	13.00	7.51
2	5/17/1999	E	0.02	0.01			0.30	14.30	5.82
2	5/17/1999	H	0.01	0.01			0.40		
2	5/18/1999	U	0.02	0.01	22.80	5.16	0.36		
2	6/1/1999	E	0.02	0.01			0.30	19.10	5.58
2	6/1/1999	H	0.01	0.01			0.44		
2	6/9/1999	U	0.03	0.02			0.37		
2	6/14/1999	E	0.02	0.01			0.31	20.00	9.70
2	6/14/1999	H	0.02	0.01			0.35		
2	7/19/1999	E	0.04	0.02	22.20	5.43	0.45	21.00	10.67
2	7/19/1999	H	0.02	0.01	18.00	4.54	0.39		
2	7/20/1999	U	0.03	0.02	21.40	5.14	0.38		
2	7/29/1999	E	0.04	0.02			0.40	21.20	12.61
2	7/29/1999	H	0.06	0.05			0.52		
2	8/4/1999	U	0.05	0.03			0.40		
2	8/11/1999	U	0.06	0.04			0.41	20.10	20.61
2	8/23/1999	U	0.07	0.05			0.48	21.30	8.73
2	8/24/1999	U	0.06	0.04			0.41		
2	9/7/1999	U	0.07	0.06			0.47	23.00	4.00
2	9/15/1999	U	0.06	0.05			0.41		
2	9/24/1999	U	0.06	0.04	23.20	6.22	0.46	16.00	1.43
2	10/7/1999	U	0.05	0.04			0.42	14.10	3.88

Lake Location	Date	Stratum	TP (mg/l)	DP (mg/l)	Ca (mg/l)	Mg(mg/l)	TN(mg/l)	Temp	Chl-a
3	5/7/1992	U	0.02	0.01			0.72	6.7	
3	5/7/1992	U	0.02	0.01			0.64	3.8	
3	5/20/1992	E	0.02	0.01			0.59	9.2	
3	5/20/1992	H	0.01	0.01			0.57	4	
3	6/3/1992	E	0.02	0.01			0.6	13.5	
3	6/3/1992	H	0.02	0.01			0.68	8.8	
3	6/16/1992	E	0.02	0.01			0.49	17.9	
3	6/16/1992	H	0.01	0.01			0.52	5.5	3.22
3	7/2/1992	E	0.01	0.01			0.55	17	
3	7/2/1992	H	0.01	0.01			0.53	6.2	
3	7/29/1992	E	0.01	0.01			0.37	19.2	
3	7/29/1992	H	0.01	0.01			0.45	7.8	
3	8/10/1992	E	0.01	0.01			0.45		
3	8/10/1992	H	0.01	0.01			0.58		
3	8/18/1992	E	0.01	0.01			0.38		
3	8/18/1992	H	0.01	0.02			0.52		
3	9/2/1992	E	0.01	0			0.41		
3	9/2/1992	H	0.01	0.01			0.61		
3	9/25/1992	E	0.01	0.01			0.46	15.5	
3	9/25/1992	H	0.01	0.01			0.5	13.7	
3	10/8/1992	E	0.01	0.01			0.37		

3	10/8/1992	H	0.01	0.01	0.45		
3	10/27/1992	E	0.01	0	0.42	10.4	
3	10/27/1992	H	0.01	0.01	0.37	9.7	
3	4/29/1993	E	0.03	0.02	0.52	2.9	
3	4/29/1993	H	0.03	0.02	0.49	3	
3	5/18/1993	E	0.02	0.01	0.46	8.8	
3	5/18/1993	H	0.02	0.01	0.5		
3	6/10/1993	E	0.01	0.01	0.36		
3	6/10/1993	H	0.02	0.01	0.41		
3	6/30/1993	E	0.01	0.01	0.42		
3	6/30/1993	H	0.02	0.01	0.48		
3	7/14/1993	E	0.01	0.01	0.37		
3	7/14/1993	H	0.04	0.02	0.55		
3	8/5/1993	E	0.01	0	0.36		
3	8/5/1993	H	0.01	0.01	0.48		
3	8/18/1993	E	0.02	0.01	0.47		
3	8/18/1993	H	0.02	0.02	0.57		
3	8/26/1993	U	0.01	0.01			
3	9/2/1993	E	0.01	0.01	0.34		
3	9/2/1993	H	0.01	0.01	0.49		
3	9/21/1993	E	0.01	0.01	0.38		
3	9/21/1993	H	0.02	0.01	0.49		
3	10/8/1993	U	0.01	0.01	0.44		
3	10/20/1993	E	0.01	0.01			
3	5/10/1994	U	0.02	0.02	0.54	5.3	
3	6/14/1994	E	0.01	0	0.48		
3	6/15/1994	E	0.02	0.01	0.48	12.2	
3	6/15/1994	H	0.02	0.01	0.53	4.9	
3	6/28/1994	E	0.03	0.01	0.38	16.3	
3	6/28/1994	H	0.02	0.01	0.44	4.9	
3	7/12/1994	E	0.01	0.01	0.41	21.2	
3	7/12/1994	H	0.01	0.01	0.46	5.8	
3	7/27/1994	H	0.02	0.01	0.47	5.8	
3	7/27/1994	U	0.01	0.01	0.37	21	
3	8/3/1994	E	0.02	0.01			
3	9/2/1994	E	0.01	0.01	0.22	18.8	
3	9/2/1994	H	0.02	0.01	0.39	6	
3	9/21/1994	E	0.01	0.01	0.41	16.2	
3	9/21/1994	H	0.02	0.01	0.52	6.1	
3	10/4/1994	E	0.02	0.01	0.59		
3	10/5/1994	E	0.01	0	0.36	13.3	
3	10/5/1994	H	0.01	0.01	0.52	7.2	
3	5/16/1995	U	0.01	0	0.46	6.6	4.07
3	6/22/1995	E	0.01	0	0.35	15.9	1.26
3	6/22/1995	H	0.01	0	0.41	6.1	
3	7/19/1995	E	0.01	0.01	0.28	19.8	1.52
3	7/19/1995	H	0.01	0.01	0.4	4	
3	8/2/1995	E	0.01	0.01	0.31	21.1	2.14
3	8/2/1995	H	0.01	0.01	0.39	5.2	
3	8/3/1995	E	0.01	0.01	0.38		
3	8/3/1995	H	0.01	0.01	0.45		
3	8/29/1995	E	0.01	0	0.24	19.2	

3	8/29/1995	H	0.01	0	0.4	4.7	
3	9/20/1995	U	0.01	0	0.33	13.4	3.89
3	9/27/1995	U	0.01	0.01	0.34	13.2	1.65
3	10/26/1995	U	0.01	0.01	0.43		
3	6/7/1996	U	0.01	0.01	0.43	9.5	2.54
3	6/20/1996	U	0.01	0.01	0.43	15.2	2.15
3	7/8/1996	U	0.01	0.02	0.44		4.1
3	7/22/1996	E	0.01				
3	7/22/1996	H	0.01				
3	7/24/1996	E	0.02	0.01	0.53	15.5	1.64
3	7/24/1996	H	0.01	0.01	0.43		
3	8/6/1996	U	0.02	0.01	0.48	19.8	3.22
3	8/20/1996	E	0.02	0.01	0.43	19	6.05
3	8/20/1996	E	0.01				
3	8/20/1996	H	0.02	0.01	0.48		
3	8/20/1996	H	0.01				
3	9/4/1996	E	0.01	0.01	0.41	19.8	3.28
3	9/4/1996	H	0.01	0.01	0.56		
3	9/10/1996	E	0.02				
3	9/10/1996	H	0.01				
3	9/16/1996	U	0.01	0.01	0.46	19.8	4.25
3	10/9/1996	U	0.01	0.01	0.39	12.8	3.41
3	5/14/1997	U	0.02	0.01	0.61	3.2	2.18
3	5/29/1997	U	0.02	0.01	0.41	11	6.73
3	6/5/1997	U	0.02				
3	6/10/1997	E	0.02	0.01	0.35	12.5	8.18
3	6/10/1997	H	0.01	0.01	0.53		
3	6/18/1997	U	0.01				
3	6/27/1997	E	0.01	0	0.38	16.2	2.55
3	6/27/1997	H	0.02	0	0.45		
3	7/1/1997	E	0.01				
3	7/1/1997	H	0.01				
3	7/18/1997	E	0.01	0.01	0.45	20	1.91
3	7/18/1997	H	0.01	0.01	0.46		
3	7/31/1997	U	0.01	0.01	0.48	20.5	2.18
3	8/4/1997	E	0.01				
3	8/4/1997	H	0.02				
3	8/19/1997	U	0.01	0.01	0.44	20	6.55
3	8/28/1997	E	0.01				
3	8/28/1997	H	0.01				
3	9/11/1997	E	0.01	0.01	0.39	17.5	4.36
3	9/11/1997	H	0.01	0.01	0.49		
3	9/29/1997	U	0.01	0.01	0.47	14.2	4
3	10/8/1997	U	0.01	0.01	0.43	13.1	5.18
3	10/9/1997	E	0.01				
3	10/9/1997	H	0.01				
3	11/5/1997	U	0.01	0.01	0.46	10.2	4
3	5/5/1998	U	0.02	0.01	0.5	9	3.71
3	5/20/1998	U	0.02	0.01	0.45	14.3	5.29
3	6/9/1998	E	0.02				
3	6/9/1998	H	0.01				
3	6/12/1998	U	0.02	0.01	0.36	14.2	3.44

3	6/25/1998	U	0.01	0.01			0.31	20.1	4.06
3	7/3/1998	E	0.02						
3	7/3/1998	H	0.01						
3	7/14/1998	E	0.02	0.01			0.64	18.8	3.09
3	7/14/1998	H	0.01	0.01			0.56		
3	7/28/1998	E	0.01	0.01			0.46	20.1	0.88
3	7/28/1998	H	0.01	0.01			0.44		
3	8/4/1998	E	0.02						
3	8/4/1998	H	0.01						
3	8/10/1998	E	0.01	0.01			0.41	19.2	1.59
3	8/10/1998	H	0.01	0.01			0.42		
3	8/27/1998	E	0.02						
3	8/27/1998	H	0.02						
3	8/31/1998	E	0.02	0.01			0.49	19.8	8.38
3	8/31/1998	H	0.01	0.01			0.57		
3	9/18/1998	E	0.01						
3	9/18/1998	H	0.01						
3	9/21/1998	E	0.02	0.01			0.32	18	2.12
3	9/21/1998	H	0.01	0.01			0.45		
3	10/23/1998	U	0.01						
3	5/6/1999	U	0.02	0.01	18.3	4.66	0.56	13.5	13.58
3	6/7/1999	U	0.01	0			0.54	13.2	3.64
3	6/11/1999	E	0.01	0.01			0.39		
3	6/11/1999	H	0.01	0.01			0.5		
3	7/1/1999	E	0.01	0.01			0.32	18.4	5.09
3	7/1/1999	H	0.01	0.01			0.47		
3	7/21/1999	E	0.01	0.01	17.4	4.43	0.42	18.7	2.18
3	7/21/1999	H	0.02	0.01	17	4.33	0.45		
3	7/26/1999	E	0.02	0.01	17.7	4.43	0.4		
3	7/26/1999	H	0.01	0.01	17.8	4.38	0.51		
3	8/3/1999	E	0.02	0.01			0.43	20.6	13.58
3	8/3/1999	H	0.02	0.01			0.43		
3	8/5/1999	E	0.02	0.01			0.38		
3	8/5/1999	H	0.01	0.01			0.47		
3	8/11/1999	E	0.02	0.01			0.41	18.8	8.24
3	8/11/1999	H	0.01	0.01			0.46		
3	8/23/1999	E	0.01	0.01			0.33	21	13.09
3	8/23/1999	H	0.01	0.01			0.44		
3	8/24/1999	E	0.01	0			0.4		
3	8/24/1999	H	0.01	0.01			0.5		
3	9/7/1999	E	0.01	0.01			0.38	20.5	3.64
3	9/7/1999	H	0.01	0.01			0.45		
3	9/15/1999	E	0.02	0.01			0.4		
3	9/15/1999	H		0.01			0.49		
3	9/24/1999	U	0.01	0.01	15.5	4	0.44	15.8	2.42
3	10/12/1999	U	0.01	0.01			0.44	14	8.24

Lake Location	Date	Stratum	TP (mg/l)	DP (mg/l)	Ca (mg/l)	Mg(mg/l)	TN(mg/l)	Temp	Chl-a
4	5/7/1992	U	0.01	0.01			0.56	2.7	
4	5/7/1992	U	0.01	0.01			0.56	3.1	
4	5/20/1992	E	0.02	0.01			0.55	6.8	
4	5/20/1992	H	0.01	0.01			0.52	4	

4	6/9/1992	E	0.02	0.01	0.43	14.4
4	6/9/1992	H	0.01	0.01	0.46	4.5
4	6/23/1992	E	0.01	0.01	0.48	
4	6/23/1992	H	0.01	0.01	0.54	
4	7/9/1992	E	0.01	0.01	0.51	
4	7/9/1992	H	0.01	0.01	0.53	
4	7/22/1992	E		0.01	0.65	
4	7/22/1992	H	0.01	0.01	0.52	
4	8/10/1992	E	0.01	0.01	0.43	
4	8/10/1992	H	0.01	0.01	0.58	
4	8/18/1992	E	0.02	0.01	0.41	
4	8/18/1992	H	0.01	0.01	0.5	
4	9/2/1992	E	0.01	0.01	0.38	
4	9/2/1992	H	0.01	0.01	0.55	
4	9/16/1992	E	0.01	0	0.42	
4	9/16/1992	H	0.01	0.01	0.51	
4	10/1/1992	E	0.01	0.01	0.33	
4	10/1/1992	H	0.01	0.01	0.57	
4	10/14/1992	E	0.01	0	0.37	
4	10/14/1992	H	0.01	0.01	0.48	
4	11/9/1992	E	0.01	0.01	0.39	9.1
4	11/9/1992	H	0.01	0.01	0.39	9.1
4	5/10/1993	E	0.01	0.01	0.44	
4	5/10/1993	H	0.01	0.01	0.47	
4	5/20/1993	E	0.02	0.01	0.43	
4	5/20/1993	H	0.02	0.01	0.45	
4	6/16/1993	E	0.03	0.01	0.34	
4	6/16/1993	H	0.02	0.01	0.41	
4	6/29/1993	E	0.01	0.01	0.41	
4	6/29/1993	H	0.01	0.01	0.49	
4	7/8/1993	E	0.02			
4	7/20/1993	E	0.02	0.01	0.39	
4	7/20/1993	H	0.01	0.01	0.48	
4	8/3/1993	E	0.01	0.01	0.36	
4	8/3/1993	H	0.01	0.01	0.46	
4	8/18/1993	E	0.01	0.01	0.41	
4	8/18/1993	H	0.02	0.01	0.6	
4	8/24/1993	E	0.01	0.01		
4	9/7/1993	E	0.01	0.01	0.33	
4	9/7/1993	H	0.02	0.02	0.48	
4	9/22/1993	E	0.01	0.01	0.35	
4	9/22/1993	H	0.01	0.02	0.48	
4	10/6/1993	E	0.01	0	0.39	
4	10/6/1993	H	0.01	0.01	0.48	
4	10/19/1993	E	0.01	0		
4	10/28/1993	U	0.01	0.01	0.45	
4	5/20/1994	U	0.01	0.01	0.55	7.6
4	6/1/1994	U	0.02	0.01	0.53	
4	6/14/1994	E	0.02	0	0.49	
4	6/28/1994	E	0.01	0.01	0.38	
4	7/13/1994	E	0.01	0.01	0.4	
4	7/29/1994	H	0.01	0.01	0.5	

4	8/3/1994	E	0.01	0			
4	9/3/1994	E	0.01	0.01	0.24		
4	9/21/1994	E	0.01	0	0.53		
4	10/12/1994	E	0.01	0.01			
4	5/2/1995	U	0.01	0.01	0.69		
4	6/6/1995	E	0.01	0	0.41	13.7	1.75
4	6/6/1995	H	0.01	0	0.4	14.7	
4	7/11/1995	E	0.01	0.01	0.32	20.5	
4	7/11/1995	H	0.01	0.01	0.37	4.9	2.14
4	7/27/1995	E	0.01	0.01	0.32		
4	7/27/1995	H	0.01	0.01	0.39		
4	8/16/1995	E	0.01	0	0.3		
4	8/16/1995	H	0.01	0	0.67		
4	8/30/1995	E	0.01	0			
4	9/19/1995	E	0.03	0.01	0.31		
4	9/19/1995	H	0.01	0.01	0.43		
4	10/10/1995	E	0.01	0.01	0.39		
4	10/10/1995	H	0.01	0.01	0.45		
4	10/26/1995	U	0.02	0.01	0.4		
4	6/12/1996	E	0.02	0.01	0.48	12.6	4.88
4	6/12/1996	H	0.01	0.01	0.46	12.6	
4	6/28/1996	E	0.01	0	0.41		3.9
4	6/28/1996	H	0.01	0.01	0.62		
4	7/18/1996	E	0.01				
4	7/18/1996	H	0.01				
4	7/23/1996	U	0.01	0.01	0.37	16	2.15
4	8/1/1996	E	0.01	0	0.37	18.9	2.73
4	8/1/1996	H	0.01	0.01	0.52		
4	8/15/1996	E	0.01	0.01	0.43	21	3.9
4	8/15/1996	H	0.01	0.01	0.55		
4	8/29/1996	E	0.01	0	0.41	18.8	8.78
4	8/29/1996	H	0.01	0.01	0.5		
4	9/4/1996	E	0.02				
4	9/4/1996	H	0.01				
4	9/10/1996	E	0.01	0	0.38	19.2	3.98
4	9/10/1996	H	0.01	0.01	0.5		
4	9/24/1996	E	0.01	0	0.43	18	3.12
4	9/24/1996	H	0.01	0.01	0.54		
4	10/10/1996	E	0.01				
4	10/10/1996	H	0.01				
4	5/28/1997	U	0.02	0.01	0.48	7.8	4.91
4	6/3/1997	U	0.02				
4	6/9/1997	U	0.01	0.01	0.54	14.9	6.36
4	6/19/1997	U	0.02				
4	6/24/1997	U	0.01	0.01	0.48	15.2	3
4	7/1/1997	E	0.01				
4	7/1/1997	H	0.01				
4	7/11/1997	E	0.01	0	0.35	17.9	3.41
4	7/11/1997	H	0.01	0.01	0.42		
4	7/15/1997	E	0.01				
4	7/15/1997	H	0.01				
4	7/30/1997	E	0.01	0	0.38	18	0.62

4	7/30/1997	H	0.01	0.01			0.47		
4	8/12/1997	E	0.01	0.01			0.37	20.1	3
4	8/12/1997	H	0.01	0.01			0.5		
4	8/19/1997	E	0.01						
4	8/19/1997	H	0.01						
4	9/8/1997	U	0.01	0.01			0.42	17.9	4.5
4	10/7/1997	E	0.01	0.01			0.39	13.3	4.23
4	10/7/1997	E	0.01						
4	10/7/1997	H	0.01	0.01			0.49		
4	10/7/1997	H	0.01						
4	10/15/1997	U	0.01	0.01			0.53	13	4.55
4	5/13/1998	U	0.01	0.01			0.28	8.3	2.38
4	5/18/1998	U	0.02						
4	5/28/1998	U	0.01	0.01			0.43	13.8	3.18
4	6/8/1998	E	0.01						
4	6/8/1998	H	0.01						
4	6/10/1998	U	0.01	0.01			0.34	14.8	1.41
4	6/24/1998	U	0.01	0.01			0.37	17.2	3.18
4	7/6/1998	E	0.01						
4	7/6/1998	H	0.01						
4	7/16/1998	E	0.01	0.01			0.46	19.2	2.47
4	7/16/1998	H	0.01	0			0.57		
4	7/30/1998	E	0.01	0.01			0.49	21.1	4.94
4	7/30/1998	H	0.01	0			0.46		
4	7/31/1998	E	0.01						
4	7/31/1998	H	0.01						
4	8/11/1998	E	0.01	0.01			0.26	21.8	4.24
4	8/11/1998	H	0.01	0.01			0.38		
4	8/27/1998	E	0.01						
4	8/27/1998	H	0.01						
4	8/28/1998	E	0.01	0.01			0.42	19.9	3
4	8/28/1998	H	0.01	0.01			0.47		
4	9/18/1998	E	0.02						
4	9/18/1998	E	0.01	0.01			0.32		3.35
4	9/18/1998	H	0.01						
4	9/18/1998	H	0.02	0.01			0.42		
4	10/6/1998	E	0.01	0			0.39	13.7	1.54
4	10/6/1998	H	0.01	0.01			0.45		
4	10/13/1998	E	0.01						
4	10/13/1998	H	0.01						
4	5/4/1999	U	0.01	0.01	17	4.22	0.55		
4	5/14/1999	U	0.01	0.01			0.45	5.8	3.88
4	6/4/1999	E	0.01	0.01			0.46	12	6.55
4	6/4/1999	H	0.01	0.01			0.5		
4	6/7/1999	E	0.01	0.01			0.42		
4	6/7/1999	H	0.01	0.01			0.45		
4	6/21/1999	U	0.01	0.01			0.44	17.8	8.73
4	6/30/1999	E	0.02	0.01			0.39		
4	6/30/1999	H	0.01	0.01			0.48		
4	7/16/1999	E	0.01	0.01			0.39	19.2	2.42
4	7/16/1999	H	0.01	0.01			0.48		
4	7/28/1999	E	0.01	0.01	16	4.09	0.37	21.2	2.54

4	7/28/1999	E	0.01	0.01	16.4	4.08	0.34		
4	7/28/1999	H	0.01	0.01	15.4	3.93	0.45		
4	7/28/1999	H	0.01	0.01	16.5	4.11	0.49		
4	8/10/1999	E	0.01	0.01			0.38	18	7.51
4	8/10/1999	E	0.01	0.01			0.35		
4	8/10/1999	H	0.01	0.01			0.47		
4	8/10/1999	H	0.01	0.01			0.45		
4	8/24/1999	E	0.01	0.01			0.33	20.8	8.73
4	8/24/1999	H	0.01	0.01			0.45		
4	8/31/1999	E	0.01	0			0.31		
4	8/31/1999	H	0.01	0.01			0.49		
4	9/9/1999	E	0.01	0			0.31	21.4	8.24
4	9/9/1999	H	0.01	0.01			0.47		
4	9/28/1999	E	0.01	0.01			0.37		
4	9/28/1999	H	0.01	0.01			0.44		
4	9/28/1999	U	0.01	0.01	17	4.2	0.42	16	7.51
4	10/19/1999	U	0.01	0.01			0.53		3.15
4	10/19/1999	U	0.01	0.01	17	4.26	0.45		

Lake Location	Date	Stratum	TP (mg/l)	DP (mg/l)	Ca (mg/l)	Mg(mg/l)	TN(mg/l)	Temp	Chl-a
5	5/15/1992	U	0.02	0.01			0.58		5.9
5	5/15/1992	U	0.01	0.01			0.56		
5	5/20/1992	U	0.03	0.01			0.56	9.1	
5	6/9/1992	U	0.02	0.01			0.48	13.6	
5	6/23/1992	U	0.01	0.01			0.46		
5	7/9/1992	U	0.01	0.01			0.48		
5	7/22/1992	U	0.01	0.01			0.44		
5	8/10/1992	U	0.01	0.01			0.43		
5	8/18/1992	E	0.01	0.01			0.39		
5	8/18/1992	H	0.01	0			0.4		
5	9/2/1992	U	0.01	0.01			0.34		
5	9/16/1992	U	0.01	0.01			0.45		
5	10/1/1992	U	0.01	0.01			0.37		
5	10/14/1992	U	0.01	0.01			0.39		
5	11/9/1992	U	0.01	0.01			0.38	9.1	
5	5/10/1993	U	0.02				0.46		
5	5/20/1993	U	0.03	0.01			0.51		
5	6/16/1993	E	0.02	0.01			0.34		
5	6/29/1993	U	0.02	0.01			0.42		
5	7/8/1993	E	0.01						
5	7/23/1993	U	0.01	0.01			0.37		
5	8/6/1993	E	0.01	0.01			0.43		
5	8/6/1993	H	0.01	0.01			0.4		
5	8/18/1993	E	0.03	0.01			0.43		
5	8/18/1993	H	0.01	0.01			0.44		
5	8/24/1993	E	0.01	0.01					
5	9/7/1993	E	0.01	0.01			0.36		
5	9/7/1993	H	0.01	0.01			0.36		
5	9/21/1993	E	0.01	0.01			0.43		
5	10/6/1993	E	0.01	0.01			0.4		
5	10/14/1993	U	0.01	0.01					
5	5/20/1994	U	0.01	0.01			0.49	7.1	

5	6/1/1994	U	0.02	0.01	0.55		
5	6/14/1994	E	0.02	0	0.46		
5	6/28/1994	E	0.02	0.01	0.41		
5	7/13/1994	E	0.01	0.01	0.34		
5	7/29/1994	E	0.01	0.01	0.53		
5	8/3/1994	E	0.01	0			
5	8/11/1994	U	0.01	0	0.33	19.9	
5	9/3/1994	E	0.01	0.01	0.26		
5	9/21/1994	U	0.01	0.01	0.4		
5	10/13/1994	E	0.01	0.01			
5	6/6/1995	U	0.01	0	0.41		1.97
5	7/11/1995	U	0.01	0.01	0.42	20.8	2.92
5	7/27/1995	U	0.01	0.01	0.3		
5	8/16/1995	U	0.01	0	0.25		
5	9/19/1995	U	0.01	0.01	0.36		
5	10/10/1995	U	0.01	0.01	0.4		
5	6/19/1996	U	0.02	0.01	0.51	16	2.93
5	7/3/1996	E	0.02	0.01	0.45		2.93
5	7/3/1996	H	0.01	0.01	0.36		
5	7/18/1996	E	0.01				
5	7/18/1996	H	0.01				
5	7/23/1996	U	0.02	0	0.43	16.8	0.88
5	8/1/1996	E	0.01	0	0.38	19.6	2.63
5	8/1/1996	H	0.02	0	0.48		
5	8/15/1996	U	0.01	0.01	0.47	21.1	4.57
5	8/29/1996	U	0.01	0.01	0.44	18.8	8.43
5	9/4/1996	U	0.02				
5	9/10/1996	U	0.01	0	0.45	19.8	3.28
5	9/24/1996	U	0.01	0	0.45	17.6	2.15
5	10/10/1996	U	0.01				
5	10/17/1996	U	0.01	0.01	0.42	9.5	1.76
5	5/28/1997	U	0.01	0.01	0.43	8.2	1.75
5	6/3/1997	U	0.02				
5	6/9/1997	E	0.01	0	0.41	15.5	5.64
5	6/9/1997	H	0.01	0	0.51		
5	6/19/1997	U	0.01				
5	6/24/1997	U	0.01	0.01	0.42	17	3.41
5	7/1/1997	E	0.01				
5	7/1/1997	H	0.01				
5	7/11/1997	E	0.01	0	0.33	18.2	1.45
5	7/11/1997	H	0.01	0.01	0.39		
5	7/15/1997	E	0.01				
5	7/15/1997	H	0.01				
5	7/30/1997	U	0.01	0.01	0.38	20.1	2.18
5	8/12/1997	E	0.01	0	0.37	20.5	2.73
5	8/12/1997	H	0.01	0.01	0.48		
5	8/19/1997	U	0.01				
5	9/8/1997	E	0.01	0.01	0.35	18	3.68
5	9/8/1997	H	0.01	0.01	0.48		
5	10/7/1997	U	0.01				
5	10/7/1997	U	0.01	0.01	0.4	14	3.27
5	10/15/1997	U	0.01	0.01	0.4	13	5.27

5	5/13/1998	U	0.01	0.01			0.3	10.1	4.06
5	5/18/1998	E	0.02						
5	5/28/1998	U	0.01	0			0.41	16.8	5.65
5	6/8/1998	E	0.01						
5	6/10/1998	U	0.01	0.01			0.3	14.3	1.5
5	6/24/1998	E	0.03	0.01			0.37	21.4	8.82
5	6/24/1998	H	0.01	0			0.31		
5	7/6/1998	E	0.02						
5	7/6/1998	H	0.01						
5	7/16/1998	U	0.02	0.01			0.56	21.2	3.53
5	7/30/1998	E	0.01	0.01			0.37	21.2	5.47
5	7/30/1998	H	0.01	0.01			0.38	14	
5	7/31/1998	E	0.01						
5	7/31/1998	H	0.01						
5	8/11/1998	E	0.02	0.01			0.24	22	3.53
5	8/11/1998	H	0.01	0			0.3		
5	8/27/1998	E	0.02						
5	8/28/1998	U	0.01	0			0.46		3
5	9/18/1998	E	0.01						
5	9/18/1998	U	0.02	0.01			0.34	17.7	2.65
5	10/6/1998	U	0.01	0.01			0.39	13.7	1.5
5	5/4/1999	U	0.01	0.01	16.9	4.17	0.48		
5	5/14/1999	U	0.01	0.01			0.54	4.8	3.39
5	6/4/1999	E	0.01	0			0.41	14	4.61
5	6/4/1999	H	0.01	0			0.49		
5	6/7/1999	U	0.01	0.01			0.41		
5	6/21/1999	E	0.01	0.01			0.36	18.2	11.64
5	6/21/1999	H	0.01	0.01			0.4		
5	6/30/1999	E	0.02	0.01			0.46		
5	6/30/1999	H	0.01	0.01			0.65		
5	7/16/1999	U	0.01	0.01			0.39	20.2	3.64
5	7/28/1999	U	0.01	0.01	16.8	4.13	0.58		
5	7/28/1999	U	0.01	0.01	15.6	3.98	0.36	21.2	2.91
5	8/10/1999	U	0.01	0.01			0.35	18.3	5.33
5	8/10/1999	U	0.01	0.01			0.5		
5	8/24/1999	U	0.01	0.01			0.32	22	9.21
5	8/31/1999	U	0.01	0			0.44		
5	9/9/1999	U	0.01	0			0.3	21.5	11.64
5	9/28/1999	U	0.01	0.01	16.9	4.26	0.38	16.2	14.06
5	9/28/1999	U	0.01	0.01			0.4		
5	10/19/1999	U	0.01	0.01			0.4		3.64
5	10/19/1999	U	0.01		17	4.27	0.43		

Lake Location	Date	Stratum	TP (mg/l)	DP (mg/l)	Ca (mg/l)	Mg(mg/l)	TN(mg/l)	Temp	Chl-a
6	5/19/1992	E	0.01	0			0.52	12.1	
6	5/19/1992	H	0.01	0			0.51	6.9	
6	6/9/1992	E	0.01	0.01			0.4	17.3	
6	6/9/1992	H	0.01	0.01			0.46	8.4	
6	6/23/1992	E	0.01	0.01			0.42		
6	6/23/1992	H	0.02	0.01			0.5		
6	7/9/1992	E	0.01	0			0.44		
6	7/9/1992	H	0.01	0.01			0.49		

6	7/22/1992	E	0.01	0	0.39		
6	7/22/1992	H	0.01	0	0.57		
6	8/10/1992	E	0.01	0	0.46		
6	8/10/1992	H	0	0	0.7		
6	8/18/1992	E	0.01	0	0.29		
6	8/18/1992	H	0.01	0.01	0.55		
6	9/2/1992	E	0.01	0	0.37		
6	9/2/1992	H	0.01	0	0.55		
6	9/16/1992	E	0.01	0	0.36		
6	9/16/1992	H	0.01	0	0.53		
6	10/1/1992	E	0.01	0	0.3		
6	10/1/1992	H	0.01	0	0.51		
6	10/14/1992	E	0.01	0	0.3		
6	10/14/1992	H	0.01	0	0.27		
6	11/10/1992	U	0.01	0.01	0.29	5.4	
6	5/12/1993	E	0.01	0.01	0.4	9	
6	5/12/1993	H	0.02	0.01	0.43	5.3	
6	5/26/1993	E	0.01	0	0.37		
6	5/26/1993	H	0.01	0.01	0.42		
6	6/9/1993	E	0.01	0	0.3		
6	6/9/1993	H	0.01	0	0.38		
6	6/29/1993	E	0.01	0	0.32		
6	6/29/1993	H	0.01	0	0.42		
6	7/8/1993	E	0.01				
6	7/20/1993	E	0.01	0.01	0.34		
6	7/20/1993	H	0.01	0.01	0.48		
6	8/6/1993	E	0.01	0.01	0.38		
6	8/6/1993	H	0.01	0	0.49		
6	8/17/1993	E	0.01	0.01	0.27		
6	8/17/1993	H	0.01	0.01	0.55		
6	9/7/1993	E	0.01	0.01	0.29		
6	9/7/1993	H	0.01	0.01	0.48		
6	9/21/1993	E	0.01	0.01	0.28		
6	9/21/1993	H	0.01	0	0.47		
6	10/6/1993	E	0.01	0	0.34		
6	10/6/1993	H	0.01	0	0.38		
6	10/14/1993	U	0.01	0			
6	11/9/1993	U	0.01	0	0.39	5.5	
6	5/18/1994	U	0.01	0	0.54	8.1	
6	5/27/1994	U	0.02	0.02	0.49		
6	6/15/1994	E	0.01	0	0.49		
6	6/28/1994	E	0.01	0.01	0.41		
6	7/13/1994	E	0.01	0.01	0.38		
6	7/29/1994	H	0.01	0	0.65	14.1	
6	8/11/1994	E	0.01	0	0.29	21	
6	9/3/1994	E	0.01	0.01	0.29		
6	9/21/1994	E	0.01	0	0.45		
6	5/11/1995	E	0.01	0	0.42	6.3	2.1
6	5/11/1995	U					
6	5/11/1995	U					
6	5/11/1995	U					
6	5/11/1995	U					

6	5/11/1995	U						
6	5/11/1995	U						
6	5/11/1995	U						
6	5/11/1995	U						
6	5/11/1995	U						
6	6/5/1995	E	0.01	0	0.38	17.5	2.88	
6	6/5/1995	H	0.01	0	0.47	9.1		
6	7/7/1995	E	0.01	0	0.31	22.4	2.06	
6	7/7/1995	H	0.01	0	0.5	8.7		
6	7/20/1995	E	0.01	0	0.26	21	1.75	
6	7/20/1995	H	0.01	0	0.38	7.3		
6	8/16/1995	E	0.02	0.01	0.35			
6	8/16/1995	H	0.01	0	0.48			
6	8/25/1995	E	0.02	0	0.29	20.2	3.06	
6	8/25/1995	H	0.01	0	0.41	8.7		
6	9/19/1995	E	0.01	0	0.3	15.8	1.75	
6	9/19/1995	H	0.01	0	0.42	8.8		
6	10/12/1995	U	0.01	0.01	0.37	13.1	1.93	
6	10/19/1995	U	0.02	0	0.42			
6	6/17/1996	E	0.01	0	0.42	20.5	2.34	
6	6/17/1996	H	0.01	0.01	0.46			
6	6/26/1996	E	0.01					
6	6/26/1996	H	0.01					
6	6/27/1996	E	0.01		0.41	17	2.71	
6	6/27/1996	H	0.01	0	0.5			
6	7/12/1996	E	0.01	0.01	0.4	18	1.95	
6	7/12/1996	H	0.01	0.01	0.51			
6	7/18/1996	E	0.01					
6	7/18/1996	H	0.01					
6	7/30/1996	E	0.01	0	0.4	20.6	3.22	
6	7/30/1996	H	0.01	0	0.5			
6	8/1/1996	E	0.01					
6	8/1/1996	H	0.01					
6	8/12/1996	E	0.01	0.01	0.37	20.2	2.34	
6	8/12/1996	H	0.01	0.01	0.54			
6	8/19/1996	E	0.01					
6	8/19/1996	H	0.01					
6	8/26/1996	E	0.01	0	0.35	20		
6	8/26/1996	H	0.01	0.01	0.54			
6	9/4/1996	E	0.01					
6	9/4/1996	H	0.01					
6	9/9/1996	E	0.01	0.01	0.4	20.1	1.52	
6	9/9/1996	H	0.01	0	0.69			
6	9/23/1996	E	0.01	0	0.36	19.2	3.16	
6	9/23/1996	H	0.01	0.01	0.57			
6	9/24/1996	E	0.01					
6	9/24/1996	H	0.01					
6	10/7/1996	U	0.01	0	0.4	14.2	3.66	
6	10/10/1996	U	0.01					
6	5/27/1997	U	0.01	0.01	0.41	6.8	3.82	
6	5/28/1997	U	0.01					
6	6/6/1997	U	0.01	0	0.48	13.8	4.36	

6	6/19/1997	U	0.01				
6	6/30/1997	E	0.01	0	0.33	20.8	5.05
6	6/30/1997	H	0.01	0	0.45		
6	7/2/1997	E	0.01				
6	7/2/1997	H	0.01				
6	7/10/1997	E	0.01	0.01	0.32		5.18
6	7/10/1997	H	0.01	0.01	0.46		
6	7/15/1997	E	0.01				
6	7/15/1997	H	0.01				
6	7/28/1997	E	0.01	0	0.44	20.8	2.32
6	7/28/1997	H	0.01	0	0.61		
6	8/11/1997	E	0.01	0.01	0.33	22.1	2.18
6	8/11/1997	H	0.01	0	0.53		
6	8/18/1997	E	0.01				
6	8/18/1997	H	0.01				
6	9/2/1997	E	0.01	0.01	0.31	21	2.45
6	9/2/1997	H	0.01	0.01	0.5		
6	9/18/1997	E	0.01	0.01	0.35	18.8	3.82
6	9/18/1997	H	0.01	0	0.57		
6	10/6/1997	E	0.01				
6	10/6/1997	H	0.01				
6	10/9/1997	E	0.01	0	0.4	13.3	3.64
6	10/9/1997	H	0.01	0	0.52		
6	10/30/1997	U	0.01	0.01	0.41	11.1	4.36
6	5/11/1998	U	0.01	0	0.31	12.3	3.79
6	5/18/1998	U	0.02				
6	5/19/1998	E	0.01	0.01	0.44	17	2.74
6	5/19/1998	H	0.01	0.01	0.5		
6	6/8/1998	E	0.01				
6	6/8/1998	H	0.01				
6	6/16/1998	E	0.01	0	0.32	16.8	2.29
6	6/16/1998	H	0.01	0	0.44		
6	6/30/1998	E	0.02	0.01	0.43	21.1	3
6	6/30/1998	H	0.01	0	0.53		
6	7/7/1998	E	0.01				
6	7/7/1998	H	0.01				
6	7/15/1998	E	0.01	0	0.52	20.5	5.82
6	7/15/1998	H	0.01	0	0.56		
6	7/29/1998	E	0.01	0	0.38		3.18
6	7/29/1998	H	0.01	0	0.48		
6	8/3/1998	E	0.01				
6	8/3/1998	H	0.01				
6	8/11/1998	E	0.01	0.01	0.28	21.8	2.38
6	8/11/1998	H	0.01	0.01	0.38		
6	8/26/1998	E	0.01				
6	8/26/1998	E	0.01	0.01	0.38	20.7	3.26
6	8/26/1998	H	0.01				
6	8/26/1998	H	0.01	0.01	0.57		
6	9/17/1998	E	0.01	0.01	0.36	17.5	2.82
6	9/17/1998	E	0.01				
6	9/17/1998	H	0.01	0	0.49		
6	9/17/1998	H	0.01				

6	10/5/1998	U	0.01	0			0.45	13.8	2.03
6	5/4/1999	U	0.01	0.01	13	2.54	0.47		
6	5/14/1999	U	0.01	0.01			0.46	10.7	4.12
6	6/2/1999	E	0.02	0.01			0.48	16.6	4.61
6	6/2/1999	H	0.01	0			0.47		
6	6/7/1999	E	0.01	0.01			0.47		
6	6/7/1999	H	0.01	0.01			0.48		
6	6/22/1999	E	0.01	0.01			0.44	20.1	2.91
6	6/22/1999	H	0.01	0.01			0.63		
6	6/30/1999	E	0.01	0			0.38		
6	6/30/1999	H	0.01	0.01			0.53		
6	7/9/1999	E	0.01	0.01			0.36	19.8	3.64
6	7/9/1999	H	0.01	0			0.54		
6	7/22/1999	E	0.01	0.01	13.8	2.76	0.37	20.4	3.88
6	7/22/1999	H	0.01	0.01	13	2.61	0.47		
6	7/28/1999	E	0.01	0.01	13.9	2.73	0.37		
6	7/28/1999	H	0.01	0.01	13	2.55	0.53		
6	8/4/1999	E	0.01	0			0.34	20.2	8.97
6	8/4/1999	H	0.01	0.01			0.51		
6	8/10/1999	E	0.01	0			0.32		
6	8/10/1999	H	0.01	0			0.44		
6	8/12/1999	E	0.01	0.01			0.28	20.4	8.24
6	8/12/1999	H	0.01	0.01			0.5		
6	8/26/1999	E	0.01	0			0.25	22.2	6.79
6	8/26/1999	H	0.01	0.01			0.48		
6	8/31/1999	E	0.01	0			0.25		
6	8/31/1999	H	0.01	0			0.57		
6	9/8/1999	E	0.01	0			0.26	21.5	5.33
6	9/8/1999	H	0.01	0			0.5		
6	9/28/1999	E	0.01				0.32		
6	9/28/1999	H	0.01	0.01			0.4		
6	9/29/1999	E	0.01	0	13.7	2.72	0.31	17	4.12
6	9/29/1999	H	0.01	0	13.4	2.64	0.49		

Lake Location	Date	Stratum	TP (mg/l)	DP (mg/l)	Ca (mg/l)	Mg(mg/l)	TN(mg/l)	Temp	Chl-a
7	5/12/1992	E	0.02	0.01			0.43		
7	5/12/1992	H	0.01	0.01			0.44		
7	5/19/1992	E	0.02	0.01			0.48	9.1	
7	5/19/1992	H	0.01	0.01			0.44	6.2	
7	6/4/1992	E	0.01	0.01			0.49	14.2	
7	6/4/1992	H	0.02	0.01			0.39	8.2	
7	6/24/1992	E	0.01	0.01			0.44		
7	6/24/1992	H	0.02	0.01			0.47		
7	7/8/1992	E	0.01	0.01			0.39		
7	7/8/1992	H	0.02	0.01			0.47		
7	7/21/1992	E	0.01	0.01			0.34		
7	7/21/1992	H	0.02	0.01			0.47		
7	8/4/1992	E	0.01	0.01			0.36		
7	8/4/1992	H	0.02	0.02			0.46		
7	8/19/1992	E	0.01	0.01			0.34		
7	8/19/1992	H	0.03	0.02			0.49		
7	9/1/1992	E	0.01	0.01			0.37		

7	9/1/1992	H	0.03	0.02	0.48		
7	9/15/1992	E	0.01	0.01	0.28		
7	9/15/1992	H	0.02	0.02	0.45		
7	9/30/1992	E	0.01	0.01	0.29		
7	9/30/1992	H	0.02	0.02	0.35		
7	10/13/1992	E	0.02	0.01	0.24		
7	10/13/1992	H	0.01	0.01	0.27		
7	11/2/1992	E	0.01	0.01	0.31	10.4	
7	11/2/1992	H	0.01	0.01	0.26	10.1	
7	5/6/1993	E	0.02	0.01	0.39	5	
7	5/6/1993	H	0.02	0.01	0.34	3.8	
7	5/26/1993	E	0.02	0.01	0.3		
7	5/26/1993	H	0.01	0	0.35		
7	6/9/1993	E	0.01	0.01	0.28		
7	6/9/1993	H	0.01	0.01	0.27		
7	6/29/1993	E	0.01	0.01	0.32		
7	6/29/1993	H	0.01	0.01	0.41		
7	7/7/1993	E	0.01				
7	7/23/1993	E	0.01	0.01	0.31		
7	7/23/1993	H	0.02	0.01	0.45		
7	8/4/1993	E	0.01	0.01	0.3		
7	8/4/1993	H			0.46		
7	8/17/1993	E	0.02	0.01	0.53		
7	8/17/1993	H	0.02	0.02	0.52		
7	9/1/1993	E	0.01	0.01			
7	9/8/1993	E	0.01	0.01	0.32	21	
7	9/8/1993	H	0.02	0.02	0.44	11.5	
7	9/20/1993	E	0.02	0.01	0.33		
7	9/20/1993	H	0.03	0.02	0.44		
7	10/5/1993	E	0.02	0.01	0.32		
7	10/20/1993	U	0.01	0.01			
7	5/18/1994	U	0.02	0.01	0.52	6.2	
7	5/27/1994	U	0.02	0.01	0.41		
7	6/14/1994	E	0.02	0.01	0.44	14.4	
7	6/14/1994	H	0.02	0.01	0.47	7.8	
7	6/15/1994	E	0.02	0	0.47		
7	6/27/1994	U	0.02	0.01	0.42		
7	7/14/1994	E	0.01	0.01	0.38		
7	7/27/1994	H	0.03	0.02	0.64		
7	8/11/1994	E	0.01	0.01	0.31	20.4	
7	8/11/1994	H	0.02	0.02	0.43	10.8	
7	9/7/1994	E	0.01	0.01	0.21		
7	9/21/1994	E	0.01	0.01	0.4		
7	10/24/1994	E	0.02	0.01		13.3	
7	5/18/1995	U	0.01	0.01	0.35	6.4	3.28
7	6/5/1995	E	0.02	0.01	0.28	15.5	6.03
7	6/5/1995	H	0.01	0	0.3	8.9	
7	7/5/1995	E	0.01	0.01	0.3	21.8	1.58
7	7/5/1995	H	0.01	0.01	0.31	10	
7	7/31/1995	E	0.01	0.01	0.24	22.3	1.94
7	7/31/1995	H	0.02	0.01	0.3	9.3	
7	8/14/1995	E	0.01	0.01	0.31		

7	8/14/1995	H	0.03	0.02	0.39		
7	8/23/1995	E	0.01	0.01	0.32	22.2	3.3
7	8/23/1995	H	0.02	0.02	0.35	10	
7	9/14/1995	U	0.01	0.01	0.3	16.8	4.47
7	9/21/1995	U	0.02	0.01	0.31	15.5	6.12
7	10/12/1995	U	0.02	0.01	0.35		
7	10/13/1995	U	0.02	0.01	0.31	13.8	1.58
7	6/17/1996	U	0.01	0.01	0.31	16.8	4.1
7	6/26/1996	E	0.01				
7	6/26/1996	H	0.01				
7	6/27/1996	E	0.01	0.01	0.35	16.2	3.41
7	6/27/1996	H	0.01	0.01	0.41		
7	7/11/1996	E	0.02	0.01	0.32	17.3	3.32
7	7/11/1996	H	0.02	0.01	0.34		
7	7/18/1996	E	0.01				
7	7/18/1996	H	0.01				
7	7/30/1996	E	0.01	0.01	0.32	19.2	4.1
7	7/30/1996	H	0.02	0.02	0.42		
7	8/1/1996	E	0.02				
7	8/1/1996	H	0.02				
7	8/8/1996	E	0.01	0.01	0.38	19.8	5.07
7	8/8/1996	H	0.02	0.01	0.47		
7	8/19/1996	E	0.01				
7	8/19/1996	H	0.01				
7	8/22/1996	U	0.01	0.01	0.43	20.2	4.29
7	9/4/1996	E	0.02				
7	9/4/1996	H	0.02				
7	9/5/1996	E	0.01	0.01	0.32	20.1	4.29
7	9/5/1996	H	0.02	0.02	0.49		
7	9/19/1996	E	0.01	0.01	0.33	20.2	2.63
7	9/19/1996	H	0.02	0.02	0.53		
7	9/25/1996	E	0.02				
7	9/25/1996	H	0.02				
7	10/16/1996	U	0.02	0.01	0.37	10.8	3.04
7	5/27/1997	U	0.02	0.01	0.32		4.64
7	6/3/1997	U	0.01	0	0.33	10.2	3.95
7	6/3/1997	U	0.01				
7	6/11/1997	E	0.01	0.01	0.39	15.8	2.18
7	6/11/1997	H	0.01	0.01	0.43		
7	6/19/1997	U	0.01				
7	6/30/1997	E	0.01	0.01	0.34	18.9	1.61
7	6/30/1997	H	0.01	0.01	0.38		
7	7/2/1997	E	0.01				
7	7/2/1997	H	0.01				
7	7/10/1997	E	0.02	0.01	0.33		2.18
7	7/10/1997	H	0.02	0.01	0.39		
7	7/16/1997	E	0.02				
7	7/16/1997	H	0.01				
7	7/24/1997	E	0.01	0.01	0.83	20	5.32
7	7/24/1997	H	0.02	0.01	0.44		
7	8/7/1997	E	0.02	0.01	0.33	20.8	5.45
7	8/7/1997	H	0.02	0.01	0.43		

7	8/18/1997	E	0.03					
7	8/18/1997	H	0.01					
7	8/26/1997	U	0.02	0.01		0.4	20.8	4.77
7	9/16/1997	E	0.01	0.01		0.36	19	5.45
7	9/16/1997	H	0.02	0.01		0.52		
7	10/6/1997	U	0.01	0.01		0.41	13.8	13.82
7	10/6/1997	U	0.02					
7	10/16/1997	U	0.01	0.01		0.37	13.5	4.18
7	5/11/1998	U	0.02	0.01		0.28	8.7	5.29
7	5/19/1998	U	0.01	0.01		0.39	15.2	2.65
7	6/8/1998	E	0.01					
7	6/8/1998	H	0.02					
7	6/8/1998	U	0.01	0.01		0.31	14.1	2.56
7	6/22/1998	U	0.01	0.01		0.28	17.2	
7	7/7/1998	E	0.02					
7	7/7/1998	H	0.01					
7	7/8/1998	E	0.03	0.01		0.38	19.9	3.35
7	7/8/1998	H	0.02	0.01		0.44		
7	7/21/1998	E	0.01	0.01		0.31	20.8	4.24
7	7/21/1998	H	0.02	0.01		0.45		
7	8/3/1998	E	0.01					
7	8/3/1998	H	0.01					
7	8/4/1998	E	0.01	0.01		0.28	21.2	4.06
7	8/4/1998	H	0.02	0.01		0.35		
7	8/26/1998	E	0.01					
7	8/26/1998	H	0.02					
7	8/27/1998	E	0.01	0.01		0.37	21	1.85
7	8/27/1998	H	0.02	0.02		0.47		
7	9/17/1998	E	0.02	0.01		0.31		4.76
7	9/17/1998	E	0.02					
7	9/17/1998	H	0.03	0.02		0.45		
7	9/17/1998	H	0.02					
7	10/5/1998	U	0.02	0.01		0.43	14.2	3.35
7	5/7/1999	U	0.01	0.01	16.9	3.7		
7	5/19/1999	U	0.01	0.01		0.36	9.2	4.61
7	6/3/1999	E	0.01	0.01		0.34	15.2	4.61
7	6/3/1999	H	0.01	0.01		0.3		
7	6/7/1999	E	0.01	0.01		0.41		
7	6/7/1999	H	0.01	0.01		0.38		
7	6/23/1999	E	0.02	0.01		0.42	19.2	2.42
7	6/23/1999	H	0.02	0.02		0.45		
7	7/1/1999	E	0.01	0.01		0.34		
7	7/1/1999	H	0.02	0.01		0.43		
7	7/14/1999	E	0.02	0.01		0.34	19.3	4.85
7	7/14/1999	H	0.02	0.02		0.38		
7	7/27/1999	E	0.02	0.01	17	3.67		
7	7/27/1999	E	0.01	0.01	16.1	3.61		
7	7/27/1999	H	0.03	0.03	17.2	3.7	21.3	6.06
7	7/27/1999	H	0.03	0.03	16.1	3.56		
7	8/12/1999	E	0.02	0.01		0.31	18.5	6.06
7	8/12/1999	E	0.02	0.01		0.26		
7	8/12/1999	H	0.03	0.02		0.39		

7	8/12/1999	H	0.03	0.02			0.38		
7	8/30/1999	E	0.02	0.01			0.3	20.8	7.51
7	8/30/1999	H	0.03	0.03			0.42		
7	9/1/1999	E	0.01	0			0.29		
7	9/1/1999	H	0.03	0.03			0.44		
7	9/29/1999	U	0.03	0.02	16.8	3.67	0.37	17.2	8.24
7	10/5/1999	U	0.03	0.02			0.39		
7	10/15/1999	U	0.03	0.02			0.35	14.3	4.85

Lake Location	Date	Stratum	TP (mg/l)	DP (mg/l)	Ca (mg/l)	Mg(mg/l)	TN(mg/l)	Temp	Chl-a
8	5/12/1992	U	0.02	0.01			0.58	10.5	
8	5/12/1992	U	0.01	0.01			0.5	9.1	
8	5/19/1992	U	0.01	0.01			0.52	8.7	
8	5/19/1992	U	0.01	0.01			0.56	6.4	
8	6/4/1992	U	0.02	0.01			0.59	13.9	
8	6/24/1992	U	0.02	0.01			0.5		
8	7/8/1992	U	0.01	0.01			0.61		
8	7/21/1992	U	0.01	0.01			0.47		
8	8/4/1992	U	0.02	0.01			0.4		
8	8/19/1992	U	0.01	0.01			0.39		
8	9/1/1992	U	0.01	0.01			0.43		
8	9/15/1992	U	0.01	0.01			0.48		
8	9/30/1992	U	0.01	0			0.32		
8	10/13/1992	U	0.01	0.01			0.37		
8	5/12/1993	U	0.02	0.01			0.44		
8	5/12/1993	U	0.01	0.01			0.47		
8	5/26/1993	U	0.01	0.01			0.43		
8	6/9/1993	U	0.02	0.01			0.35		
8	6/29/1993	U	0.02	0.01			0.44		
8	7/7/1993	E	0.01						
8	7/21/1993	U	0.02	0.01			0.38		
8	8/4/1993	E	0.02	0.01			0.44		
8	8/17/1993	E	0.01	0.01			0.34		
8	8/25/1993	E	0.01	0.01					
8	9/8/1993	U	0.01	0.01			0.33		
8	9/20/1993	E	0.01	0.01			0.39		
8	10/5/1993	E	0.01	0.01			0.39		
8	10/14/1993	E	0.02	0.01					
8	5/19/1994	U	0.01	0.01			0.48	7.4	
8	5/27/1994	U	0.01	0			0.52		
8	6/15/1994	U	0.02	0.01			0.58		
8	6/27/1994	U	0.02	0.02			0.46		
8	7/12/1994	E	0.01	0.01			0.42		
8	7/27/1994	E	0.02	0.01			0.59		
8	8/3/1994	E	0.01	0.01					
8	9/7/1994	E	0.01	0.01			0.29		
8	9/21/1994	U	0.02	0.01			0.42		
8	10/12/1994	E	0.01	0.01					
8	5/3/1995	U	0.01	0.01			0.55		
8	6/5/1995	U	0.02	0			0.37	14.8	2.47
8	7/5/1995	U	0.02	0.01			0.47	20.3	1.07
8	7/27/1995	U	0.02	0.01			0.38		

8	8/14/1995	U	0.03				0.33		
8	9/19/1995	U	0.01	0.01			0.33		
8	10/10/1995	U	0.02	0.01			0.32		
8	6/18/1996	U	0.01	0			0.45	14	3.51
8	6/26/1996	E	0.01						
8	6/26/1996	H	0.01						
8	7/2/1996	U	0.01	0			0.41		4.39
8	7/16/1996	U	0.01						
8	7/17/1996	U	0.02	0			0.42	17.7	3.66
8	7/31/1996	U	0.01	0			0.43	18	2.55
8	8/14/1996	U	0.01	0.01			0.38	19.9	2.73
8	8/28/1996	U	0.01	0.01			0.4	19	6.56
8	9/4/1996	U	0.01						
8	9/11/1996	U	0.01	0			0.39	21	3.8
8	9/25/1996	U	0.01						
8	9/26/1996	U	0.01	0.01			0.39	16.1	1.95
8	10/18/1996	U	0.01	0.01			0.38	8.9	1.32
8	5/23/1997	U	0.01	0.01			0.39	6.5	4.91
8	6/3/1997	U	0.01						
8	6/5/1997	U	0.01	0			0.37	11.3	7.36
8	6/19/1997	U	0.01	0.01			0.42	16.7	4.84
8	6/19/1997	U	0.01						
8	7/2/1997	U	0.01						
8	7/7/1997	U	0.01	0.01			0.29	18.2	2.73
8	7/15/1997	U	0.01						
8	7/21/1997	E	0.01	0.01			0.32	17.8	1.28
8	7/21/1997	H	0.01	0.01			0.38		
8	8/4/1997	U	0.01	0.01			0.42	19.9	3.55
8	8/7/1997	U	0.01						
8	8/20/1997	U	0.01	0.01			0.34	20.2	3
8	9/15/1997	U	0.01	0.01			0.32	19	3.82
8	10/2/1997	U	0.01	0.01			0.38	13.2	2.59
8	10/6/1997	U	0.01						
8	10/20/1997	U	0.01	0			0.41	12.5	5.64
8	5/12/1998	U	0.02	0.01			0.31	10.2	3.71
8	5/18/1998	U	0.01						
8	5/25/1998	U	0.01	0			0.43	13.2	1.76
8	6/9/1998	U	0.01	0.01			0.34	14.3	1.41
8	6/11/1998	U	0.01						
8	6/23/1998	U	0.01	0.01			0.29	21.2	4.94
8	7/2/1998	U	0.02						
8	7/13/1998	U	0.02	0.01			0.43	19	2.03
8	7/27/1998	U	0.02	0.01			0.55	20.2	3.18
8	7/30/1998	U	0.01						
8	8/7/1998	U	0.01	0.01			0.25	21.2	5.12
8	8/27/1998	U	0.01	0.01			0.41	19.3	2.03
8	8/28/1998	U	0.01						
8	9/8/1998	U	0.01	0.01			0.38	18.4	2.38
8	9/17/1998	U	0.01						
8	9/29/1998	U	0.01	0.01			0.45	15	0.66
8	4/19/1999	U	0.01	0.01	14.4	3.66	0.51	4.8	3.64
8	4/29/1999	U	0.01	0.01	16.7	4.02	0.53		

8	6/2/1999	U	0.01	0			0.57	16.7	4.61
8	6/2/1999	U	0.01	0.01			0.43		
8	6/16/1999	U	0.01	0.01			0.42	16	4.49
8	7/1/1999	U	0.01	0.01			0.43		
8	7/6/1999	U	0.01				0.43	20.2	4.12
8	7/20/1999	U	0.02	0.01			0.4	19	5.33
8	7/27/1999	U	0.01	0.01	16.3	4.07	0.36		
8	8/2/1999	U	0.01	0.01	16.6	4.13	0.37	21.2	5.58
8	8/12/1999	U	0.01	0			0.33		
8	8/18/1999	U	0.01	0.01			0.37	18	8.48
8	8/31/1999	U	0.01	0.01			0.32	20.2	4.61
8	8/31/1999	U	0.01	0.01			0.27		
8	9/27/1999	U	0.01	0.01	16.3	4.09	0.39	16	3.64
8	9/28/1999	U	0.01	0.01			0.39		
8	10/19/1999	U	0.01	0.01	16.7	4.19	0.42		
8	10/21/1999	U	0.01	0.01			1.03	12.2	2.18

Lake Location	Date	Stratum	TP (mg/l)	DP (mg/l)	Ca (mg/l)	Mg(mg/l)	TN(mg/l)	Temp	Chl-a
9	5/12/1992	U	0.02	0.01			0.53		
9	5/12/1992	U	0.02	0.01			0.54		
9	5/19/1992	U	0.02	0.01			0.5	12.2	
9	6/4/1992	U	0.01	0.01			0.48	14	
9	6/24/1992	U	0.01	0.01			0.41		
9	7/8/1992	U	0.01	0.01			0.42		
9	7/21/1992	U	0.01	0.01			0.41		
9	8/4/1992	U	0.02	0.01			0.37		
9	8/19/1992	U	0.02	0.01			0.37		
9	9/1/1992	U	0.02	0.01			0.4		
9	9/15/1992	U	0.02	0.01			0.41		
9	9/30/1992	U	0.01	0.01			0.26		
9	10/13/1992	U	0.01	0.01			0.3		
9	5/11/1993	U	0.02	0.01			0.44	7.1	
9	5/27/1993	U	0.02	0.01			0.42		
9	6/11/1993	U	0.01	0.01			0.36		
9	6/28/1993	U	0.01	0.01			0.39		
9	7/7/1993	E	0.01						
9	7/21/1993	E	0.03	0.01			0.37		
9	7/21/1993	H	0.01	0.02			0.4		
9	8/4/1993	U	0.02	0.01			0.38	22.2	
9	8/17/1993	E	0.02	0.01			0.41		
9	8/25/1993	E	0.02	0.01					
9	9/3/1993	U	0.02	0.01			0.38	22.1	
9	9/20/1993	U	0.02	0.01			0.33	16.5	
9	10/5/1993	U	0.03	0.01			0.35	11	
9	10/14/1993	U	0.02	0.01					
9	10/29/1993	U	0.02	0.01			0.43		
9	5/11/1994	U	0.02	0.01			0.5	7	
9	5/23/1994	U	0.02	0					
9	6/1/1994	U	0.01	0.01			0.42	9.7	
9	6/15/1994	U	0.01	0.01			0.48		
9	7/11/1994	U	0.02	0.01			0.36	22	
9	7/26/1994	U	0.02	0.01			0.3	23.4	

9	8/5/1994	U	0.03	0.01			
9	8/26/1994	U	0.01	0.01	0.41	20.2	
9	9/7/1994	U	0.01	0	0.18	16.4	
9	9/22/1994	U	0.01	0	0.34	16.1	
9	10/4/1994	U	0.01	0.01	0.29	11.8	
9	10/14/1994	U	0.01	0.01			
9	5/17/1995	U	0.01	0	0.38	7.9	3.21
9	5/25/1995	U	0.01	0.01	0.42	11.4	2.19
9	6/27/1995	U	0.01	0	0.33	22.7	0.9
9	7/14/1995	U	0.02	0.01	0.24	23.1	2.53
9	8/3/1995	U	0.02	0.01	0.37	23.7	9.72
9	8/14/1995	U	0.02	0.01	0.32		
9	8/24/1995	U	0.02	0.01	0.26	20.4	2.92
9	9/15/1995	U	0.01	0.02	0.26	16	3.91
9	10/2/1995	U	0.01	0.01	0.22	13.2	0.39
9	10/12/1995	U	0.02	0.01	0.32		
9	6/13/1996	U	0.02	0.01	0.5	16.5	4.88
9	6/25/1996	U	0.03	0.01	0.49	17.3	2.24
9	7/10/1996	U	0.02	0.01	0.46	15.8	8.49
9	7/18/1996	U	0.02				
9	7/25/1996	U	0.01	0	0.42	16.1	5.27
9	8/2/1996	U	0.02				
9	8/7/1996	U	0.02	0.01	0.43	20.2	5.2
9	8/19/1996	U	0.02				
9	8/23/1996	U	0.02	0.01	0.44	20.4	6.15
9	9/3/1996	U	0.02				
9	9/6/1996	U	0.01	0.01	0.38	21	3.51
9	9/20/1996	U	0.01	0.01	0.34	19	2.15
9	9/25/1996	U	0.01				
9	10/4/1996	U	0.01	0.01	0.36	13.8	2.11
9	5/19/1997	U	0.01	0.01	0.42	6.5	3.27
9	6/2/1997	U	0.01	0	0.38	10.2	3
9	6/5/1997	U	0.01				
9	6/17/1997	U	0.02	0.01	0.45	16.2	2.55
9	7/7/1997	U	0.02				
9	7/8/1997	U	0.01	0.01	0.35	19.5	2.73
9	7/23/1997	U	0.01	0.01	0.8	18.6	1.03
9	8/1/1997	U	0.01				
9	8/5/1997	U	0.01	0.01	0.32	20.9	2.18
9	8/25/1997	U	0.01	0.01	0.31	20.1	3.82
9	9/9/1997	U	0.01	0.01	0.35	17.9	5.05
9	10/1/1997	U	0.01	0.01	0.31	12.9	1.38
9	10/6/1997	U	0.01				
9	10/13/1997	U	0.01	0.01	0.36	13	1.9
9	10/30/1997	U	0.01	0.01	0.38	9	0.88
9	4/30/1998	U	0.01	0.01	0.52	5.1	1.72
9	5/13/1998	U	0.01				
9	5/15/1998	U	0.01	0.01	0.29	12	1.41
9	6/2/1998	U	0.02	0.01	0.42	15	0.95
9	6/11/1998	U	0.01				
9	6/19/1998	U	0.01	0.01	0.24	19.8	1.94
9	7/2/1998	U	0.03				

9	7/10/1998	U	0.02	0.01			0.39	19	1.85
9	7/22/1998	U	0.02	0.01			0.45	21	3.26
9	7/27/1998	U	0.01						
9	8/5/1998	U	0.02	0.01			0.24	22.7	8.38
9	8/21/1998	U	0.01	0.01			0.44	19	0.97
9	8/28/1998	U	0.02						
9	9/2/1998	U	0.01	0.01			0.42	21.2	1.32
9	9/22/1998	U	0.01						
9	9/24/1998	U	0.01	0.01			0.38	15	0.6
9	10/22/1998	U	0.01						
9	4/21/1999	U	0.01	0.01	16.6	4.14	0.45	5	2.53
9	5/19/1999	U	0.01	0	15.2	3.84	0.37		
9	5/21/1999	U	0.01	0.01			0.39	12.1	0.46
9	6/4/1999	U	0.01	0.01			0.38		
9	6/17/1999	U	0.02	0.01			0.4	18.3	1.35
9	7/7/1999	U	0.03	0.02			0.47		
9	7/12/1999	U	0.03	0.02			0.44	19.2	2.91
9	7/26/1999	U	0.02	0.01	15.7	4.02	0.34	21	6.79
9	7/29/1999	U	0.02	0.02	15.5	3.92	0.28		
9	8/6/1999	U	0.02	0.02			0.36	20.1	3.88
9	8/17/1999	U	0.02	0.01			0.3		
9	8/20/1999	U	0.02	0.01			0.33	22	5.33
9	9/1/1999	E	0.02	0.01			0.26	21.3	3.39
9	9/1/1999	H	0.01	0.01			0.46		
9	9/2/1999	U	0.01	0.01			0.29		
9	9/14/1999	U	0.03	0.02			0.32	20	4.85
9	10/5/1999	U	0.01	0.01	16.4	4.12	0.38	14.1	3.15
9	10/6/1999	U	0.02	0.01			0.35		

Lake Location	Date	Stratum	TP (mg/l)	DP (mg/l)	Ca (mg/l)	Mg(mg/l)	TN(mg/l)	Temp	Chl-a
10	5/11/1992	U	0.04	0.01			0.99	13.8	7.64
10	5/11/1992	U	0.03	0.02			0.86	10.7	
10	5/27/1992	U	0.04	0.01			0.72	15.8	
10	6/2/1992	U	0.03	0.01			0.72		
10	6/22/1992	U	0.05	0.03			0.47	19.4	3.35
10	6/29/1992	U	0.03	0.01			0.57	19.9	
10	7/27/1992	U	0.04	0.02			0.56	22.3	
10	8/12/1992	U	0.03	0.02			0.59	21.2	
10	8/26/1992	U	0.05	0.02			0.75	22.3	20.37
10	9/22/1992	U	0.04	0.02			0.57	17.8	9.38
10	10/21/1992	U	0.04	0.02			0.42	12.8	
10	5/6/1993	U	0.07	0.02			1.01	10.8	
10	5/27/1993	U	0.04	0.02			0.7		
10	6/11/1993	U	0.03	0.01			0.48		
10	6/28/1993	U	0.05	0.03			0.82		
10	7/7/1993	U	0.05						
10	7/21/1993	U	0.05	0.03			0.86		
10	8/4/1993	U	0.05	0.03			0.65		
10	8/17/1993	U	0.05	0.04			0.69		
10	8/25/1993	U	0.05	0.03					
10	9/3/1993	U	0.05	0.03			0.58	22.3	
10	9/20/1993	U	0.04	0.03			0.58	16	

10	10/5/1993	U	0.07	0.04	0.53	10	
10	10/20/1993	U	0.05	0.03			
10	10/29/1993	U	0.07	0.03	0.89	7	
10	5/11/1994	U	0.03	0.01	0.73	11	
10	6/8/1994	U	0.03	0.01	0.64	17	
10	7/11/1994	U	0.03	0.01	0.66	23.6	
10	7/26/1994	U	0.03	0.02	0.39	24.2	
10	8/2/1994	U	0.04	0.02			
10	9/7/1994	U	0.03	0.01	0.48	16	
10	9/19/1994	U	0.04	0.01	0.74	16	
10	10/4/1994	U	0.04	0.01	0.72	11.7	
10	10/17/1994	U	0.03	0.01			
10	5/10/1995	U	0.03	0.01	0.66	11.3	4.47
10	5/25/1995	U	0.03	0.01	0.51	14.9	10.21
10	6/27/1995	U	0.04	0.02	0.64	24.8	7.87
10	7/14/1995	U	0.04	0.02	0.55	23.2	9.33
10	8/3/1995	U	0.04	0.02	0.6	23.2	10.94
10	8/14/1995	U	0.08	0.03	0.83		
10	8/24/1995	U	0.07	0.02	0.69	20.1	19.68
10	9/15/1995	U	0.05	0.01	0.72	15.3	29.16
10	10/2/1995	U	0.04	0.01	0.84	13	14.4
10	10/12/1995	U	0.05	0.02	0.85		
10	6/13/1996	U	0.03	0.01	0.79	21	7.32
10	6/25/1996	U	0.03	0.02	0.71	20.7	2.69
10	7/10/1996	U	0.03	0.01	0.54	19.2	11.71
10	7/18/1996	U	0.03				
10	7/25/1996	U	0.04	0.02	0.63	19.2	10.54
10	8/2/1996	U	0.05				
10	8/7/1996	U	0.04	0.01	1.02	22	10.24
10	8/19/1996	U	0.06				
10	8/23/1996	U	0.05	0.03	0.67	21	7.61
10	9/3/1996	U	0.09				
10	9/6/1996	U	0.08	0.02	1.18	22	38.05
10	9/20/1996	U	0.09	0.01	0.15	19.1	79.02
10	9/25/1996	U	0.06				
10	10/4/1996	U	0.09	0.01	0.99	12.3	70.24
10	5/19/1997	U	0.04	0.01	0.81	8	15.68
10	6/2/1997	U	0.03	0	0.5	14.8	10.64
10	6/5/1997	U	0.04				
10	6/20/1997	U	0.07	0.03	0.59	18.7	2.91
10	7/7/1997	U	0.04				
10	7/8/1997	U	0.05	0.03	0.44	20.5	1.91
10	7/23/1997	U	0.07	0.04	0.28	19.7	4.36
10	8/1/1997	U	0.06				
10	8/5/1997	U	0.06	0.02	0.81	21.5	6.18
10	8/25/1997	U	0.08	0.05	0.84	20.3	17.45
10	9/9/1997	U	0.07	0.05	0.59	17.8	4.36
10	10/1/1997	U	0.07	0.04	0.52	12.2	7.09
10	10/6/1997	U	0.05				
10	10/13/1997	U	0.06	0.03	0.64	12.1	20.45
10	10/30/1997	U	0.06	0.02	0.57	7.5	14.55
10	4/30/1998	U	0.03	0.01	0.8	9	7.06

10	5/13/1998	U	0.03						
10	5/15/1998	U	0.03	0.01			0.39	17.5	8.82
10	6/2/1998	U	0.08	0.02			0.47	17.7	5.74
10	6/19/1998	U	0.03	0.02			0.25	22	8.82
10	6/30/1998	U	0.04						
10	7/10/1998	U	0.04	0.02			0.41	20.5	3.18
10	7/22/1998	U	0.03	0.01			0.54	22.5	8.38
10	8/4/1998	U	0.03						
10	8/5/1998	U	0.03	0.01			0.33	22.2	5.82
10	8/21/1998	U	0.05	0.01			0.65	21.2	11.47
10	8/28/1998	U	0.04						
10	9/9/1998	U	0.05	0.01			0.69	17.2	12.79
10	9/22/1998	U	0.04						
10	9/25/1998	U	0.04	0.02			0.48	14.1	2.47
10	10/22/1998	U	0.04						
10	4/21/1999	U	0.03	0.01	11.9	2.67	0.83	8	13.58
10	5/17/1999	U	0.05	0.01	12	2.7	0.57		
10	6/3/1999	U	0.04	0.02			0.44	18.2	14.54
10	6/4/1999	U	0.04	0.02			0.58		
10	6/17/1999	U	0.04	0.03			0.5	19.5	19.39
10	7/7/1999	U	0.07	0.02			0.6		
10	7/12/1999	U	0.06	0.03			0.56	19.2	31.51
10	7/26/1999	U	0.07	0.01	12.7	3.27	1.05	21.6	112.72
10	7/29/1999	U	0.09	0.02	12.8	3.19	0.96		
10	8/6/1999	U	0.11	0.02			1.14	20.3	116.36
10	8/17/1999	U	0.1	0.02			1.01		
10	8/20/1999	U	0.08	0.03			0.96	24	98.18
10	9/1/1999	U	0.06	0.02			0.66	22	17.94
10	9/2/1999	U	0.06	0.02			0.75		
10	9/21/1999	U	0.08	0.03	11.9	3.22	0.77	17	23.03
10	10/5/1999	U	0.05	0.03			0.79	14	15.51

1	9/1/1998	A	42	438,000
1	9/22/1998	A	33	226,000
1	10/15/1998	S	169	96,711
1	10/15/1998	A	45	11,333
1	5/17/1999	A	32	0
1	6/1/1999	A	29	0
1	6/14/1999	A	27	30,044
1	7/1/1999	A	30	638,000
1	7/19/1999	A	34	102,000
1	7/29/1999	A	28	86,756
1	8/11/1999	A	22	62,533
1	8/23/1999	A	24	582,000
1	9/7/1999	A	26	269,867
1	9/24/1999	A	31	142,000
1	10/7/1999	A	175	113,067
1	10/7/1999	A	30	0
1	5/31/2000	A	34	0
1	6/15/2000	A	31	0
1	6/28/2000	A	29	23,867
1	7/19/2000	A	34	718,000
1	8/2/2000	A	35	266,000
1	8/18/2000	A	30	13,422
1	9/1/2000	A	30	132,000
1	9/18/2000	A	31	314,000
1	10/12/2000	S	168	97,600
1	10/12/2000	A	42	138,000

Lake Location	Date	QA	Lake Days	Density
2	5/23/1994	A	18	0
2	6/7/1994	A	33	0
2	6/23/1994	A	39	0
2	8/2/1994	A	15	0
2	8/22/1994	A	20	5,600
2	9/1/1994	A	30	2,844
2	9/15/1994	A	24	1,689
2	9/28/1994	A	27	267
2	6/21/1995	A	29	0
2	6/29/1995	A	8	44
2	8/2/1995	A	14	44
2	8/22/1995	A	20	44
2	9/12/1995	A	21	622
2	9/25/1995	A	13	178
2	10/18/1995	S	111	267
2	10/18/1995	S	111	0
2	10/18/1995	A	23	0
2	6/4/1996	A	34	0
2	6/24/1996	A	54	1,022
2	7/9/1996	A	35	1,378
2	8/5/1996	A	27	3,676,000
2	8/20/1996	A	42	2,770,000
2	9/3/1996	A	29	858,000
2	9/16/1996	A	27	314,000
2	9/30/1996	A	27	11,200

2	11/4/1996	S	185	9,156
2	11/4/1996	A	35	178
2	11/4/1996	A	49	2,444
2	6/4/1997	A	30	0
2	6/18/1997	A	22	400
2	7/2/1997	A	28	192,000
2	8/1/1997	A	15	718,000
2	8/1/1997	A	44	1,284,000
2	6/17/1998	A	34	44
2	7/7/1998	A	39	10,667
2	7/20/1998	A	33	21,200
2	8/3/1998	A	27	311
2	8/20/1998	A	31	356
2	9/1/1998	A	42	400
2	9/22/1998	A	33	444
2	10/13/1998	A	43	0
2	10/13/1998	S	152	30,578
2	5/17/1999	A	32	0
2	6/1/1999	A	29	0
2	6/14/1999	A	27	0
2	7/1/1999	A	30	3,956
2	7/19/1999	A	34	12,178
2	7/29/1999	A	28	18,756
2	8/11/1999	A	22	66,000
2	8/23/1999	A	24	26,400
2	9/7/1999	A	26	30,756
2	5/31/2000	A	34	0
2	6/15/2000	A	31	0
2	6/28/2000	A	29	242,000
2	7/19/2000	A	34	2,964,000
2	8/2/2000	A	35	498,000

Lake Location	Date	QA	Lake Days	Density
3	6/25/1998	A	50	178
3	7/28/1998	A	69	41,956
3	8/10/1998	A	46	544,000
3	8/31/1998	A	33	0
3	9/21/1998	A	31	0
3	10/13/1998	A	44	0
3	10/13/1998	S	161	6,622
3	6/7/1999	A	34	0
3	6/24/1999	A	30	11,422
3	7/15/1999	A	38	272,000
3	8/3/1999	A	40	1,260,000
3	8/23/1999	A	38	346,000
3	9/7/1999	A	34	12,756
3	9/17/1999	A	10	0
3	9/17/1999	A	24	0
3	9/17/1999	A	137	180,267
3	6/21/2000	A	16	0
3	7/7/2000	A	33	68,978
3	7/21/2000	A	30	1,122,000
3	8/7/2000	A	30	624,000

3	8/24/2000	A	34	270,000
3	9/7/2000	A	31	88,000
3	10/2/2000	S	119	171,556

Lake Location	Date	QA	Lake Days	Density
4	7/11/1997	A	32	0
4	7/30/1997	A	36	133
4	7/30/1997	A	36	72,000
4	8/12/1997	A	32	24,000
4	9/8/1997	A	40	1,556
4	10/7/1997	A	29	1,378
4	10/7/1997	A	56	489
4	10/7/1997	S	120	17,822
4	6/24/1998	A	27	0
4	7/16/1998	A	36	0
4	7/30/1998	A	25	133
4	8/11/1998	A	26	0
4	8/28/1998	A	29	44
4	9/18/1998	A	38	0
4	10/6/1998	A	40	0
4	10/6/1998	S	141	0
4	6/21/1999	A	40	0
4	7/16/1999	A	40	35,556
4	7/28/1999	A	37	188,000
4	8/10/1999	A	25	13,244
4	8/24/1999	A	27	89
4	9/9/1999	A	30	489
4	9/28/1999	A	136	84,000
4	9/28/1999	A	18	44
4	9/28/1999	A	33	0
4	6/16/2000	A	41	0
4	6/29/2000	A	28	0
4	7/13/2000	A	27	222
4	7/31/2000	A	32	1,111
4	8/15/2000	A	32	2,489
4	8/31/2000	A	31	489
4	9/20/2000	S	138	1,556
4	9/20/2000	A	35	400

Lake Location	Date	QA	Lake Days	Density
5	5/24/1994	A	15	0
5	6/9/1994	A	31	0
5	7/7/1994	A	27	0
5	7/21/1994	A	41	0
5	8/1/1994	A	25	0
5	8/22/1994	A	21	0
5	9/1/1994	A	6	0
5	9/14/1994	A	23	0
5	9/29/1994	A	5	0
5	10/14/1994	A	6	0
5	11/2/1994	S	1	44
5	11/2/1994	A	34	0
5	6/21/1995	A	26	0
5	7/10/1995	A	19	0

5	7/19/1995	A	26	0
5	8/4/1995	A	16	133
5	8/18/1995	A	2	133
5	8/30/1995	A	26	44
5	9/25/1995	A	26	44
5	10/23/1995	S	26	2,400
5	10/23/1995	A	28	133
5	10/23/1995	S	124	1,956
5	6/4/1996	A	26	0
5	6/19/1996	A	50	0
5	7/3/1996	A	29	0
5	7/23/1996	A	34	89
5	8/15/1996	A	43	80,000
5	8/29/1996	A	26	56,000
5	9/10/1996	A	26	1,911
5	9/24/1996	A	27	1,156
5	10/25/1996	S	176	48,311
5	10/25/1996	A	45	44
5	10/25/1996	A	35	667
5	6/9/1997	A	32	0
5	6/24/1997	A	27	0
5	7/11/1997	A	32	14,000
5	7/30/1997	A	36	500,000
5	8/12/1997	A	32	448,000
5	9/8/1997	A	40	40,000
5	10/7/1997	A	29	1,467
5	10/7/1997	S	152	67,022
5	10/7/1997	A	56	11,378
5	6/10/1998	A	28	0
5	6/24/1998	A	27	0
5	7/16/1998	A	36	2,089
5	7/30/1998	A	25	1,234,000
5	8/11/1998	A	26	566,000
5	8/28/1998	A	29	10,356
5	9/18/1998	A	38	8,578
5	10/6/1998	S	147	178,489
5	10/6/1998	A	40	0
5	6/4/1999	A	35	0
5	6/21/1999	A	38	711
5	7/16/1999	A	42	320,000
5	7/28/1999	A	37	1,306,000
5	8/10/1999	A	24	338,000
5	8/24/1999	A	26	11,378
5	9/28/1999	A	48	23,778
5	10/19/1999	A	39	0
5	10/19/1999	A	173	195,378
5	6/1/2000	A	26	0
5	6/16/2000	A	27	0
5	6/29/2000	A	28	0
5	7/13/2000	A	27	24,267
5	7/31/2000	A	32	1,136,000
5	8/15/2000	A	32	942,000

5	8/31/2000	A	31	13,778
5	9/20/2000	A	35	20,000
5	10/13/2000	S	161	89,422
5	10/13/2000	A	43	5,156

Lake Location	Date	QA	Lake Days	Density
6	5/24/1994	A	12	0
6	6/9/1994	A	28	0
6	7/6/1994	A	42	0
6	7/25/1994	A	45	0
6	8/3/1994	A	28	0
6	8/22/1994	A	28	0
6	9/1/1994	A	29	0
6	9/14/1994	A	23	0
6	9/27/1994	A	26	0
6	10/14/1994	A	30	0
6	10/26/1994	S	154	0
6	6/20/1995	A	13	0
6	6/29/1995	A	9	0
6	7/19/1995	A	20	0
6	8/4/1995	A	16	0
6	8/15/1995	A	11	0
6	9/5/1995	A	21	0
6	9/19/1995	A	14	0
6	9/26/1995	A	7	0
6	10/23/1995	S	125	0
6	10/23/1995	A	27	0
6	10/23/1995	S	125	0
6	6/4/1996	A	35	0
6	6/17/1996	A	48	0
6	6/27/1996	A	23	0
6	7/12/1996	A	26	0
6	7/30/1996	A	33	0
6	8/12/1996	A	31	0
6	8/26/1996	A	27	0
6	9/9/1996	A	28	0
6	9/23/1996	A	29	0
6	10/7/1996	A	27	0
6	10/25/1996	A	32	0
6	10/25/1996	A	18	0
6	10/25/1996	S	176	0
6	6/30/1997	A	34	0
6	7/10/1997	A	34	0
6	7/28/1997	A	28	0
6	8/11/1997	A	32	0
6	9/2/1997	A	36	0
6	9/18/1997	A	38	0
6	10/9/1997	S	135	0
6	10/9/1997	A	37	0
6	6/16/1998	A	36	0
6	6/30/1998	A	43	0
6	7/15/1998	A	29	0
6	8/26/1998	A	28	0

6	9/17/1998	A	37	0
6	10/5/1998	A	41	0
6	10/5/1998	S	68	0
6	6/2/1999	A	32	0
6	6/22/1999	A	38	0
6	7/8/1999	A	36	133
6	7/22/1999	A	30	0
6	8/4/1999	A	26	0
6	8/24/1999	A	33	44
6	9/8/1999	A	35	0
6	9/29/1999	A	25	0
6	11/23/1999	S	207	0
6	11/23/1999	A	75	0
6	6/8/2000	A	43	0
6	6/20/2000	A	28	0
6	7/5/2000	A	28	0
6	7/20/2000	A	30	0
6	8/3/2000	A	28	44
6	8/21/2000	A	31	0
6	9/11/2000	A	38	0
6	9/25/2000	A	34	0
6	10/17/2000	S	175	0

Lake Location	Date	QA	Lake Days	Density
7	5/24/1994	A	15	0
7	6/9/1994	A	31	0
7	7/6/1994	A	42	0
7	7/25/1994	A	45	0
7	8/3/1994	A	28	0
7	8/19/1994	A	25	0
7	9/1/1994	A	28	0
7	9/14/1994	A	26	0
7	9/27/1994	A	26	0
7	10/14/1994	A	30	0
7	10/26/1994	A	29	0
7	10/26/1994	S	154	0
7	6/20/1995	A	13	0
7	6/29/1995	A	9	0
7	7/18/1995	A	19	0
7	8/3/1995	A	16	0
7	8/15/1995	A	12	0
7	9/1/1995	A	17	0
7	9/13/1995	A	12	0
7	9/26/1995	A	13	0
7	10/23/1995	S	125	0
7	10/23/1995	S	125	0
7	10/23/1995	A	27	0
7	6/17/1996	A	13	0
7	7/2/1996	A	28	0
7	7/17/1996	A	31	0
7	7/31/1996	A	29	0
7	8/14/1996	A	28	0
7	8/28/1996	A	28	0

7	9/11/1996	A	28	0
7	9/26/1996	A	30	0
7	10/18/1996	S	136	0
7	10/18/1996	A	22	0
7	10/18/1996	A	37	0
7	6/19/1997	A	31	0
7	7/7/1997	A	32	0
7	7/21/1997	A	32	0
7	8/4/1997	A	28	0
7	8/20/1997	A	30	0
7	9/15/1997	A	42	0
7	10/2/1997	A	43	0
7	10/2/1997	S	136	44
7	6/9/1998	A	28	0
7	6/23/1998	A	33	0
7	7/13/1998	A	34	0
7	7/27/1998	A	34	89
7	8/7/1998	A	25	44
7	8/27/1998	A	31	0
7	9/8/1998	A	32	0
7	9/29/1998	A	21	0
7	9/29/1998	A	34	0
7	9/29/1998	S	140	0
7	6/16/1999	A	34	0
7	7/6/1999	A	42	0
7	7/20/1999	A	34	178
7	8/2/1999	A	28	0
7	8/18/1999	A	28	0
7	9/1/1999	A	30	0
7	9/13/1999	A	25	0
7	6/22/2000	A	33	0
7	7/11/2000	A	32	0
7	7/24/2000	A	32	89
7	8/14/2000	A	33	0
7	8/28/2000	A	34	0
7	9/14/2000	A	31	0
7	10/11/2000	S	146	0

Lake Location	Date	QA	Lake Days	Density
8	6/17/1994	A	39	0
8	7/6/1994	A	57	0
8	7/25/1994	A	37	0
8	8/3/1994	A	28	0
8	8/19/1994	A	24	0
8	9/1/1994	A	29	0
8	9/14/1994	A	26	0
8	9/27/1994	A	26	0
8	10/14/1994	A	30	0
8	10/26/1994	S	169	0
8	10/26/1994	A	29	0
8	6/19/1995	A	14	0
8	6/29/1995	A	10	0
8	7/18/1995	A	19	0

8	8/3/1995	A	16	0
8	8/15/1995	A	12	0
8	9/1/1995	A	17	0
8	9/13/1995	A	12	0
8	9/26/1995	A	13	0
8	10/23/1995	A	27	0
8	10/23/1995	S	126	44
8	10/23/1995	S	126	89
8	6/18/1996	A	14	0
8	7/2/1996	A	28	0
8	7/17/1996	A	30	0
8	7/31/1996	A	29	44
8	8/14/1996	A	28	18,578
8	8/28/1996	A	28	32,178
8	9/11/1996	A	14	311
8	9/26/1996	A	30	0
8	10/18/1996	S	136	5,822
8	10/18/1996	A	22	89
8	10/18/1996	A	37	44
8	6/5/1997	A	28	0
8	6/19/1997	A	27	0
8	7/7/1997	A	32	356
8	7/21/1997	A	32	7,644
8	8/4/1997	A	28	7,111
8	8/20/1997	A	30	3,022
8	9/15/1997	A	42	1,244
8	10/2/1997	A	17	0
8	10/2/1997	A	43	44
8	10/2/1997	S	147	622
8	6/9/1998	A	28	0
8	6/23/1998	A	33	0
8	7/13/1998	A	34	0
8	7/27/1998	A	34	667
8	8/7/1998	A	25	667
8	8/27/1998	A	31	311
8	9/8/1998	A	32	0
8	9/29/1998	S	140	89
8	9/29/1998	A	34	0
8	9/29/1998	A	21	0
8	5/24/1999	A	35	0
8	6/16/1999	A	33	0
8	7/6/1999	A	42	711
8	7/20/1999	A	34	4,222
8	8/2/1999	A	27	3,467
8	8/18/1999	A	29	222
8	9/1/1999	A	30	44
8	9/13/1999	A	25	178
8	9/27/1999	A	26	0
8	10/21/1999	A	186	1,022
8	10/21/1999	A	38	0
8	6/21/2000	A	32	0
8	7/11/2000	A	32	0

8	7/24/2000	A	33	0
8	8/14/2000	A	33	1,733
8	8/28/2000	A	34	933
8	9/14/2000	A	30	0
8	10/11/2000	S	146	0

Lake Location	Date	QA	Lake Days	Density
9	6/17/1994	A	39	0
9	7/6/1994	A	57	0
9	7/25/1994	A	37	0
9	8/3/1994	A	28	0
9	8/19/1994	A	25	0
9	9/1/1994	A	29	0
9	9/14/1994	A	26	0
9	9/27/1994	A	26	0
9	10/14/1994	A	30	0
9	10/26/1994	S	170	0
9	10/26/1994	A	29	0
9	6/19/1995	A	12	0
9	6/27/1995	A	8	0
9	7/18/1995	A	21	0
9	8/3/1995	A	16	0
9	9/1/1995	A	29	0
9	9/15/1995	A	14	0
9	9/26/1995	A	11	0
9	10/23/1995	S	126	0
9	10/23/1995	A	126	0
9	10/23/1995	A	27	0
9	6/25/1996	A	21	0
9	7/10/1996	A	35	0
9	7/25/1996	A	30	0
9	8/7/1996	A	28	44
9	8/23/1996	A	29	89
9	9/6/1996	A	29	44
9	9/20/1996	A	29	0
9	10/4/1996	A	28	0
9	10/25/1996	S	35	0
9	10/25/1996	A	21	0
9	10/25/1996	A	143	178
9	6/17/1997	A	40	0
9	7/8/1997	A	36	0
9	7/23/1997	A	36	26,000
9	8/5/1997	A	28	98,000
9	8/25/1997	A	33	19,867
9	9/9/1997	A	35	2,356
9	9/25/1997	S	140	21,111
9	9/25/1997	A	31	1,067
9	9/25/1997	A	16	133
9	6/2/1998	A	32	0
9	6/19/1998	A	35	0
9	7/10/1998	A	38	44
9	7/22/1998	A	33	2,622
9	8/5/1998	A	26	2,756

9	8/21/1998	A	30	1,111
9	9/2/1998	A	28	356
9	9/24/1998	A	35	44
9	10/16/1998	A	44	0
9	10/16/1998	S	169	2,133
9	7/7/1999	A	30	44
9	7/26/1999	A	49	13,600
9	8/6/1999	A	30	21,378
9	8/20/1999	A	25	8,044
9	9/1/1999	A	26	2,356
9	9/14/1999	A	25	311
9	10/5/1999	A	21	0
9	10/5/1999	A	34	222
9	10/5/1999	A	120	11,511
9	6/13/2000	A	43	0
9	6/27/2000	A	28	0
9	7/12/2000	A	30	89
9	7/26/2000	A	30	13,867
9	8/11/2000	A	30	210,000
9	8/25/2000	A	30	76,000
9	9/13/2000	A	32	16,978
9	10/3/2000	S	156	47,244

Lake Location	Date	QA	Lake Days	Density
10	5/31/1994	A		0
10	6/17/1994	A	17	0
10	7/6/1994	A	35	0
10	7/25/1994	A	37	0
10	9/1/1994	A	13	0
10	9/14/1994	A	26	0
10	6/27/1995	A	33	0
10	7/14/1995	A	17	0
10	8/3/1995	A	20	0
10	8/24/1995	A	21	0
10	9/15/1995	A	22	0
10	7/10/1996	A	14	0
10	7/25/1996	A	29	0
10	8/7/1996	A	28	0
10	9/6/1996	A	3	0
10	9/6/1996	A	30	0
10	9/6/1996	S	74	0
10	6/20/1997	A	32	0
10	7/8/1997	A	36	0
10	7/23/1997	A	33	0
10	8/5/1997	A	28	0
10	8/25/1997	A	33	0
10	9/9/1997	A	35	0
10	10/1/1997	S	135	0
10	10/1/1997	A	22	0
10	10/1/1997	A	37	0
10	6/19/1998	A	35	0
10	7/22/1998	A	2	0
10	8/5/1998	A	47	44

10	8/21/1998	A	2	0
10	9/9/1998	A	26	0
10	10/16/1998	S	130	0
10	10/16/1998	A	46	0
10	6/17/1999	A	58	0
10	7/12/1999	A	40	0
10	7/26/1999	A	40	0
10	8/6/1999	A	25	0
10	8/20/1999	A	25	0
10	9/1/1999	A	25	0
10	9/21/1999	A	32	0
10	10/5/1999	A	35	0
10	10/5/1999	S	168	0
10	6/13/2000	A	43	0
10	6/27/2000	A	29	0
10	7/12/2000	A	30	0
10	7/26/2000	A	30	0
10	8/8/2000	A	27	0

2	Secchi	0.2	0.8	1.2	1.6	3
2	Temp	2.7	13.9	17.7	20.1	25.8
Lake Location	Test	Minimum Value	25th Percentile	Population Median	75th Percentile	Maximum Value
3	Alk	46.8	52.1	53.7	54.9	60.6
3	Ca	15.5	17.1	17.6	17.8	18.3
3	Chl-a	0.88	2.18	3.64	5.16	13.58
3	Cl	10.8	11.7	12	12.3	13.8
3	Fe	20	28	31	48	57
3	K	1.2	1.3	1.3	1.3	1.4
3	Mg	4	4.3	4.4	4.4	4.7
3	Na	8	8.3	8.5	8.7	8.8
3	pH	6.21	7.61	7.75	7.97	8.8
3	Secchi	1.8	3.2	4	5	7.2
3	Temp	1.8	6.4	9.7	14.6	21.2
Lake Location	Test	Minimum Value	25th Percentile	Population Median	75th Percentile	Maximum Value
4	Alk	46.3	50.3	51.1	52	55
4	Ca	15.4	16.2	16.5	17	17
4	Chl-a	0.62	2.64	3.41	4.9	8.78
4	Cl	10.7	11.5	11.8	12.1	12.9
4	Fe	20	22	28	40	100
4	K	1.2	1.3	1.3	1.3	1.4
4	Mg	3.9	4.1	4.1	4.2	4.3
4	Na	7.6	8.1	8.2	8.2	8.3
4	pH	7.05	7.62	7.84	8.1	8.7
4	Secchi	2.5	4.4	5.3	6.3	8.9
4	Temp	2.7	6	8.2	14	21.8
Lake Location	Test	Minimum Value	25th Percentile	Population Median	75th Percentile	Maximum Value
5	Alk	47.5	50.5	51.6	52.6	56.3
5	Ca	15.6	16.8	16.9	16.9	17
5	Chl-a	0.88	2.65	3.41	5.33	14.06
5	Cl	11.1	11.5	11.8	12.2	13.6
5	Fe	20	20	24	31	41
5	K	1.2	1.3	1.3	1.3	1.4
5	Mg	4	4.1	4.2	4.3	4.3
5	Na	8	8.3	8.3	8.4	8.4
5	pH	7.47	7.82	8.02	8.33	8.97
5	Secchi	2	4	4.9	5.8	9
5	Temp	4.8	14	17.7	20.2	22
Lake Location	Test	Minimum Value	25th Percentile	Population Median	75th Percentile	Maximum Value
6	Alk	30.2	33.5	34.7	36.9	39.6
6	Ca	13	13	13.4	13.8	13.9
6	Chl-a	1.52	2.34	3.16	4.12	8.97
6	Cl	8.4	9.5	10	10.4	11.3
6	Fe	21	31	45	52	107
6	K	0.9	1	1	1	1.1
6	Mg	2.5	2.6	2.6	2.7	2.8
6	Na	6	6.1	6.1	6.4	6.5
6	pH	6.94	7.25	7.59	7.88	8.6

6	Secchi	2	3.8	4.3	5.1	9
6	Temp	4.3	8.9	13.1	19.2	22.4
Lake Location	Test	Minimum Value	25th Percentile	Population Median	75th Percentile	Maximum Value
7	Alk	39.1	46.2	46.6	47.3	48.9
7	Ca	16.1	16.3	16.9	17	17.2
7	Chl-a	1.58	3.1	4.21	5.02	13.82
7	Cl	9.2	9.6	9.7	9.8	10.6
7	Cond	87	122	140	147	288
7	Fe	20	20	22	28	75
7	K	1.6	1.7	1.7	1.7	1.7
7	Mg	3.6	3.6	3.7	3.7	3.7
7	Na	5.9	6	6.1	6.2	6.3
7	pH	7.05	7.42	7.66	8.04	8.6
7	Secchi	3	4.4	5	5.6	8.6
7	Temp	3	9.2	11.8	16.8	22.3
Lake Location	Test	Minimum Value	25th Percentile	Population Median	75th Percentile	Maximum Value
8	Alk	44.6	48.4	49.2	50.7	54.4
8	Ca	15.6	16.6	16.6	16.9	17.1
8	Chl-a	0.59	2.12	3.51	4.49	10.18
8	Cl	10.5	11.2	11.5	11.8	12.5
8	Fe	20	21	22	34	38
8	K	1.2	1.3	1.3	1.3	1.3
8	Mg	3.9	4	4.1	4.2	4.7
8	Na	7.5	7.9	8	8.2	8.2
8	pH	7.21	7.66	7.82	8.04	8.94
8	Secchi	2.8	4.2	5	5.7	9
8	Temp	2	6.3	9.8	15.8	22.2
Lake Location	Test	Minimum Value	25th Percentile	Population Median	75th Percentile	Maximum Value
9	Alk	44.4	47.8	49	50.2	54
9	Ca	15.2	15.5	15.7	16.4	16.6
9	Chl-a	0.39	1.64	2.64	3.89	9.72
9	Cl	10	11	11.3	11.6	12.6
9	Fe	20	24	27	33	43
9	K	1.1	1.1	1.3	1.3	1.3
9	Mg	3.8	3.9	4	4.1	4.1
9	Na	7.2	7.7	7.8	7.8	8.2
9	pH	6.52	7.79	7.95	8.13	8.57
9	Secchi	0.6	3.3	4.1	5	6.6
9	Temp	5	13	17.3	20.4	23.7
Lake Location	Test	Minimum Value	25th Percentile	Population Median	75th Percentile	Maximum Value
10	Alk	21.3	34.9	37.8	45	52.8
10	Ca	11.9	11.9	12	12.7	12.8
10	Chl-a	1.91	7.08	10.59	18.3	116.36
10	Cl	4.3	7.3	7.9	8.5	10.7
10	Fe	146	159	216	277	489
10	K	1.3	1.3	1.4	1.4	1.6
10	Mg	2.7	2.7	3.2	3.2	3.3
10	Na	4.6	4.7	5.6	5.7	6.2

10	pH	5.85	7.61	7.86	8.23	9.66
10	Secchi	0.6	1.3	1.6	2.1	3.5
10	Temp	7	14	18.9	21.2	24.8