

CSLAP 2011 Lake Water Quality Summary: Lake Truesdale

General Lake Information

Location	Town of Lewisboro
County	Westchester
Basin	Lower Hudson River
Size	33.7 hectares (83.2 acres)
Lake Origins	Augmented by Dam
Watershed Area	960 hectares (2,371.2 acres)
Retention Time	0.1 years
Mean Depth	1.4 meters
Sounding Depth	2.9 meters
Public Access?	no
Major Tributaries	no named tribs
Lake Tributary To...	unnamed outlet to Waccabuc River to Cross River to Cross River Reservoir to...to Hudson River
WQ Classification	B (contact recreation = swimming)
Lake Outlet Latitude	41.288
Lake Outlet Longitude	-73.558
Sampling Years	1999-2011
2011 Samplers	Debbie Fink and Ray Morse
Main Contact	Debbie Fink and Vi Patek

Lake Map



Background

Lake Truesdale is an 83 acre, class B lake found in the Town of Lewisboro in Westchester County, in the Lower Hudson River basin of New York State. Lake Truesdale was first sampled as part of CSLAP in 1999.

It is one of 15 CSLAP lakes among the more than 90 lakes found in Westchester County, and one of 41 CSLAP lakes among the more than 360 lakes and ponds in the Lower Hudson River drainage basin.

Lake Uses

Lake Truesdale is a Class B lake; this means that the best intended use for the lake is for contact recreation—swimming and bathing, non-contact recreation—boating and fishing, aquatic life, and aesthetics. The lake is used by lake residents and invited guests for swimming and non-power boating—there is no public access to the lake.

It is not known by the report authors if Lake Truesdale has been stocked by lake residents or municipal officials.

General statewide fishing regulations are applicable in Lake Truesdale.

Historical Water Quality Data

CSLAP sampling was conducted on Lake Truesdale from 1999 to 2011. The CSLAP reports for each of the past several years can be found on the NYSFOLA website at <http://nysfola.mylaketown.com>. The 2009 and 2010 CSLAP reports for Lake Truesdale can also be found on the NYSDEC web page at <http://www.dec.ny.gov/lands/77829.html>.

Lake Truesdale has not been sampled by the NYSDEC as part of any of the larger regional or statewide lake monitoring programs prior to CSLAP. It is not known if the lake has been sampled by the regional fisheries staff as part of fisheries management activities on the lake, or through any local monitoring programs or activities.

Neither the unnamed ephemeral tributaries, nor any outlet of the lake has been sampled as part of the state Rotating Intensive Basins (RIBS) stream chemistry or state macroinvertebrate biological monitoring program.

Lake Association and Management History

Lake Truesdale is represented by the Lake Truesdale Property Owners Association and the Truesdale Estates Association. These associations are involved in a variety of lake management actions, including:

- septic pumpout services (discounted)
- beach rules
- recommended homeowner actions to manage lake- yard care, discouraging waterfowl feeding, buffer zones, septic pumpout, etc.
- plant management via committee working with Allied Biological (using Aquathol K and copper)
- stormwater management projects
- restrictions on snowmobiles, ATVs, and gas powered boats

More information can be found at <http://truesdalelake.com/>.

Summary of 2011 CSLAP Sampling Results

Evaluation of 2011 Annual and Monthly Results Relative to 2006-2010

The Lake Condition Summary Table below and Appendix B compare annual and monthly results from 2011 to those measured in previous CSLAP sampling seasons. The pertinent deviations from normal conditions are discussed below.

Evaluation of Eutrophication Indicators

Total phosphorus readings in Lake Truesdale were lower than normal in 2011, but chlorophyll *a* and Secchi disk transparency readings were close to normal in 2011, and none of these trophic indicators has exhibited any long-term trends. Lake productivity consistently increases during the summer, as manifested in decreasing water clarity and increasing nutrient and algae levels. This seasonal pattern was also observed in 2011. The lake continues to be characterized as *eutrophic*, based on water clarity, total phosphorus and chlorophyll *a* readings (all typical of *eutrophic* lakes). The trophic state indices (TSI) evaluation suggests that each of the trophic indicators is “internally consistent.” In other words, water clarity, chlorophyll *a* and total phosphorus readings were each in the expected range given the readings for the other trophic indicators. Overall trophic conditions are summarized on the Lake Scorecard and Lake Condition Summary Table.

Evaluation of Potable Water Indicators

Algae levels are high enough to render the lake susceptible to taste and odor compounds or elevated DBP (disinfection by product) compounds that could affect the potability of the water, although the lake is not used for this purpose. Potable water conditions, at least as measurable through CSLAP, are summarized in the Lake Scorecard and Lake Condition Summary Table.

Evaluation of Limnological Indicators

pH readings were higher than normal in 2011, particularly in July and September, and these readings have increased slightly since first evaluated in the late 1990s. Conductivity readings were lower than normal, particularly in September, but no long-term trends have been apparent. Total nitrogen and water color readings have increased since the late 1990s, but these readings were close to normal in 2011. None of the other limnological indicators has exhibited a long-term change, and it is likely that the small changes in most of these indicators from year to year represent normal (or weather-induced) variability. Overall limnological conditions are summarized in the Lake Scorecard and Lake Condition Summary Table.

Evaluation of Biological Condition

Macrophyte surveys conducted through CSLAP and by Allied Biological have identified at least seven aquatic plant species, including at least one exotic plant species (*Potamogeton crispus*, curly-leafed pondweed). The modified floristic quality index (FQI) for the lake indicates that the quality of the aquatic plant community is “fair.”

Information about the composition of the fish community is not available, but it is likely that Lake Truesdale supports a warmwater fishery.

Phytoplankton, zooplankton, and macroinvertebrate surveys have not been conducted through CSLAP at Lake Truesdale.

Biological conditions in the lake are summarized in the Lake Scorecard and Lake Condition Summary Table.

Evaluation of Lake Perception

Water quality assessments, aquatic plant coverage, and recreational assessments in Lake Truesdale were more favorable than normal in 2011, but none of these indicators of lake perception has exhibited a long-term trend. Water quality and recreational assessments typically degrade during the summer, the latter despite a seasonal decrease in aquatic plant coverage. These assessments did not exhibit these seasonal trends during all of the 2011 sampling season. Overall lake perception is summarized on the Lake Scorecard and Lake Condition Summary Table.

Evaluation of Local Climate Change

Air and water temperatures were close to normal during the June-September index period in 2010, and neither air nor water temperatures have exhibited a change in the last ten years. It is not known if this is an indication of the lack of local climate change or if these changes cannot be well evaluated through CSLAP.

Evaluation of Algal Toxins

Algal toxin levels can vary significantly within blooms and from shoreline to lake, and the absence of toxins in a sample does not indicate safe swimming conditions. Phycocyanin readings at times exceed the levels indicating susceptibility for harmful algal blooms (HABs) in the open water, and highly elevated readings were apparent in shoreline blooms. An analysis of algae samples indicate microcystin readings well below the levels needed to support safe swimming in the open water, but bloom microcystin readings consistently exceed this threshold.

Lake Condition Summary

Category	Indicator	Min	99-11 Avg	Max	2011 Avg	Classification	2011 Change?	Long-term Change?
Eutrophication Indicators	Water Clarity	0.53	1.22	2.70	1.39	Eutrophic	Within Normal Range	No Change
	Chlorophyll <i>a</i>	0.24	27.40	116.0	21.66	Eutrophic	Within Normal Range	No Change
	Total Phosphorus	0.018	0.058	0.125	0.045	Eutrophic	Lower Than Normal	No Change
Potable Water Indicators	Hypolimnetic NH4					Lake not thermally stratified		
	Hypolimnetic As					Lake not thermally stratified		
	Hypolimnetic Iron					Lake not thermally stratified		
	Hypolimnetic Mn					Lake not thermally stratified		
Limnological Indicators	Hypolimnetic TP	0.022	0.060	0.091		Close to Surface TP Readings	Not measured in 2011	Not known
	Nitrate + Nitrite	0.00	0.02	0.14	0.03	Low NOx	Within Normal Range	No Change
	Ammonia	0.01	0.07	0.36	0.03	Low Ammonia	Within Normal Range	No Change
	Total Nitrogen	0.01	0.74	1.52	0.78	Intermediate Total Nitrogen	Within Normal Range	Increasing Slightly
	pH	6.99	8.02	9.17	8.52	Alkaline	Higher than Normal	Increasing Slightly
	Specific Conductance	110	263	342	206	Hardwater	Lower Than Normal	No Change
	True Color	11	35	94	44	Intermediate Color	Within Normal Range	Increasing Significantly
	Calcium	21.4	26.5	30.9	18.9	Highly Susceptible to Zebra Mussels	Within Normal Range	No Change
Lake Perception	WQ Assessment	1	2.8	4	2.3	Definite Algal Greenness	More Favorable Than Normal	No Change
	Plant Coverage	1	1.8	4	1.0	Subsurface Plant Growth	More Favorable Than Normal	No Change
	Rec. Assessment	1	2.7	4	2.0	Slightly Impaired	More Favorable Than Normal	No Change
Biological Condition	Phytoplankton					Not measured through CSLAP	Not known	Not known
	Macrophytes					Fair quality of the aquatic plant community	Not known	Not known
	Zooplankton					Not measured through CSLAP	Not known	Not known
	Macroinvertebrates					Not measured through CSLAP	Not known	Not known
	Fish					Warmwater fishery	Not known	Not known
	Invasive Species					Curly-leafed pondweed	Not known	Not known
Local Climate Change	Air Temperature	16	24.9	34	25.1		Within Normal Range	No Change
	Water Temperature	17	24.2	31	23.4		Within Normal Range	No Change
Harmful Algal Blooms	Open Water Phycocyanin	21	83	161	72	Some readings indicate high risk of BGA	Not known	Not known
	Open Water Microcystis	0.0	0.2	0.5	0.5	All readings indicate low lakewide toxins	Not known	Not known
	Shoreline Phycocyanin	2766400	2766400	2766400		Some significant shoreline BGA blooms occur	Not known	Not known
	Shoreline Microcystis	22.5	36.9	51.2	51.2	Shoreline bloom toxins above drinking water and swimming criteria	Not known	Not known
	Other Toxins					Low anatoxin-a and cylindrospermopsin	Not known	Not known

Evaluation of Lake Condition Impacts to Lake Uses

Lake Truesdale is presently among the lakes listed on the 2008 Lower Hudson River basin Priority Waterbody List (PWL), with recreation listed as *impaired*, and aesthetics and aquatic life listed as *stressed* due to excessive algae and weeds. The 2008 PWL listing for the lake is shown in Appendix C.

Potable Water (Drinking Water)

The CSLAP dataset at Lake Truesdale, including water chemistry data, physical measurements, and volunteer samplers' perception data, is inadequate to evaluate the use of the lake for potable water, and the lake is not classified for this use. These data suggest that any "unsanctioned" use of the lake for potable water may be compromised by excessive algae levels in the lake.

Contact Recreation (Swimming)

The CSLAP dataset at Lake Truesdale, including water chemistry data, physical measurements, and volunteer samplers' perception data, suggests that swimming and contact recreation may be *impaired* by excessive algae and nutrients, and by poor water clarity, although bacterial data are needed to evaluate the safety of the lake for swimming.

Non-Contact Recreation (Boating and Fishing)

The CSLAP dataset on Lake Truesdale, including water chemistry data, physical measurements, and volunteer samplers' perception data, suggest that non-contact recreation may at times be *threatened* by the presence of curly-leafed pondweed and excessive weed growth, although "excessive weeds" were not cited as impacting recreational uses in 2010 or 2011, perhaps due to active management.

Aquatic Life

The CSLAP dataset on Lake Truesdale, including water chemistry data, physical measurements, and volunteer samplers' perception data, suggest that aquatic life may be *stressed* by elevated pH and *threatened* by the presence of exotic plants, although additional data are needed to evaluate the food and habitat conditions for aquatic organisms in the lake.

Aesthetics

The CSLAP dataset on Lake Truesdale, including water chemistry data, physical measurements, and volunteer samplers' perception data, suggest that aesthetics may be *stressed* by shoreline algae blooms and *threatened* by open water algae and, at times, excessive weeds.

Fish Consumption

There is no fish consumption advisories posted for Lake Truesdale.

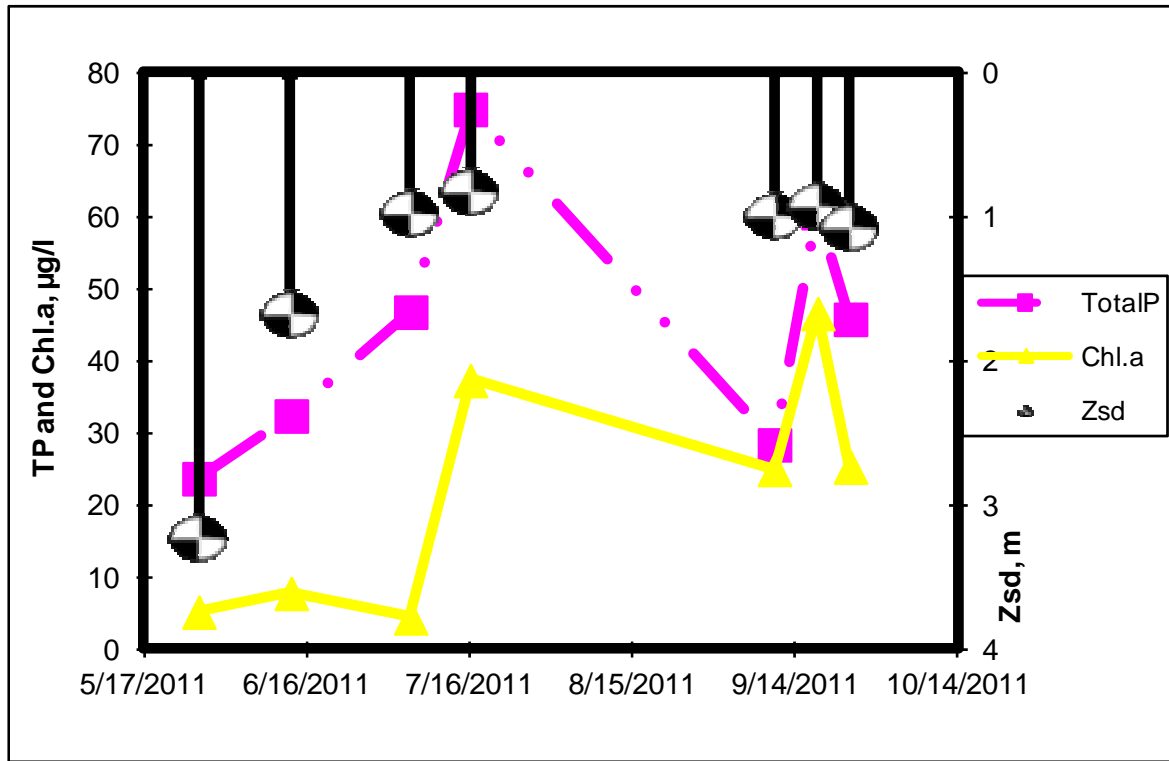
Additional Comments and Recommendations

A full aquatic plant and fisheries survey of the lake may help to improve the evaluation of biological conditions in the lake.

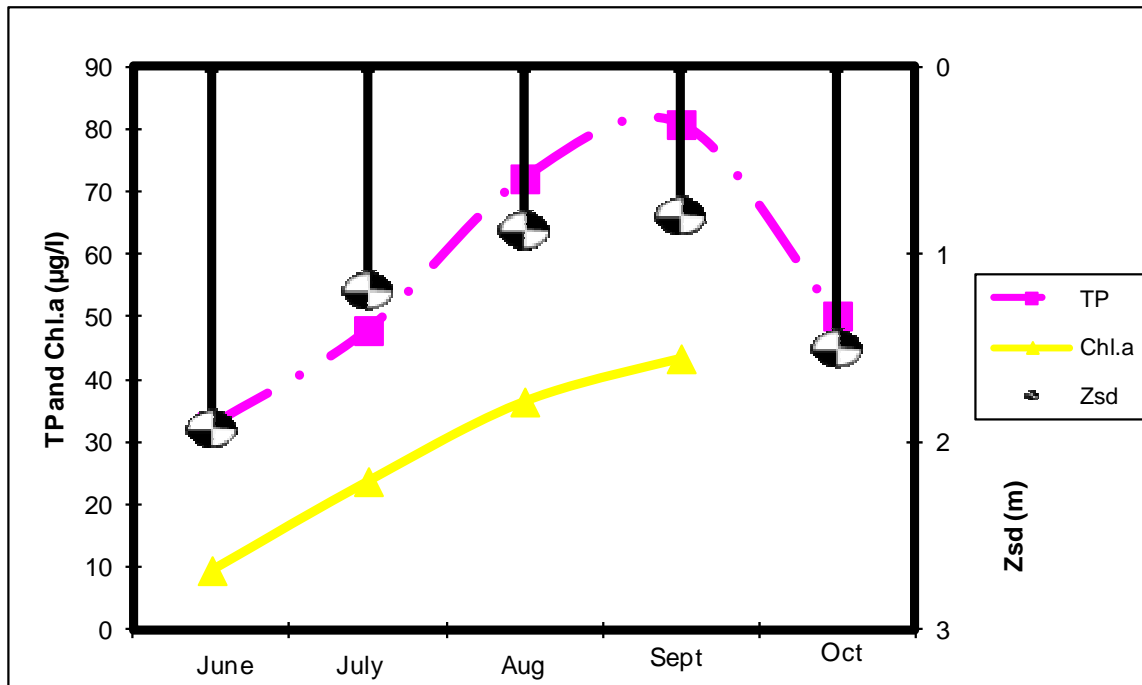
Aquatic Plant IDs-2011

None submitted for identification

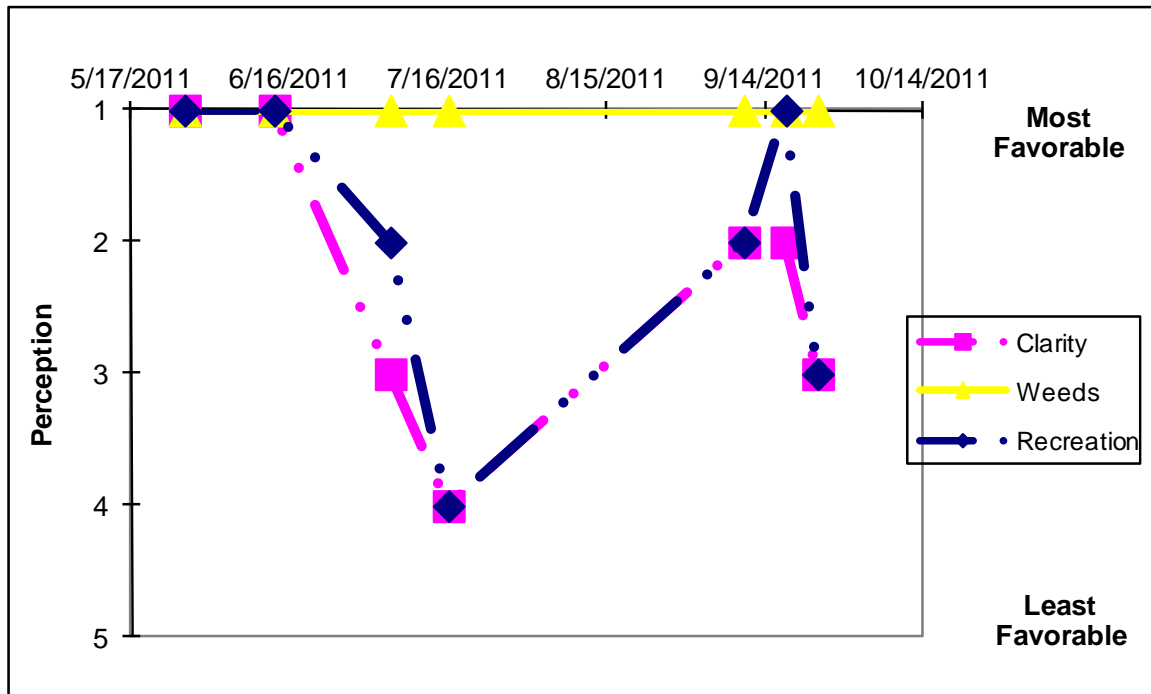
Time Series: Trophic Indicators, 2011



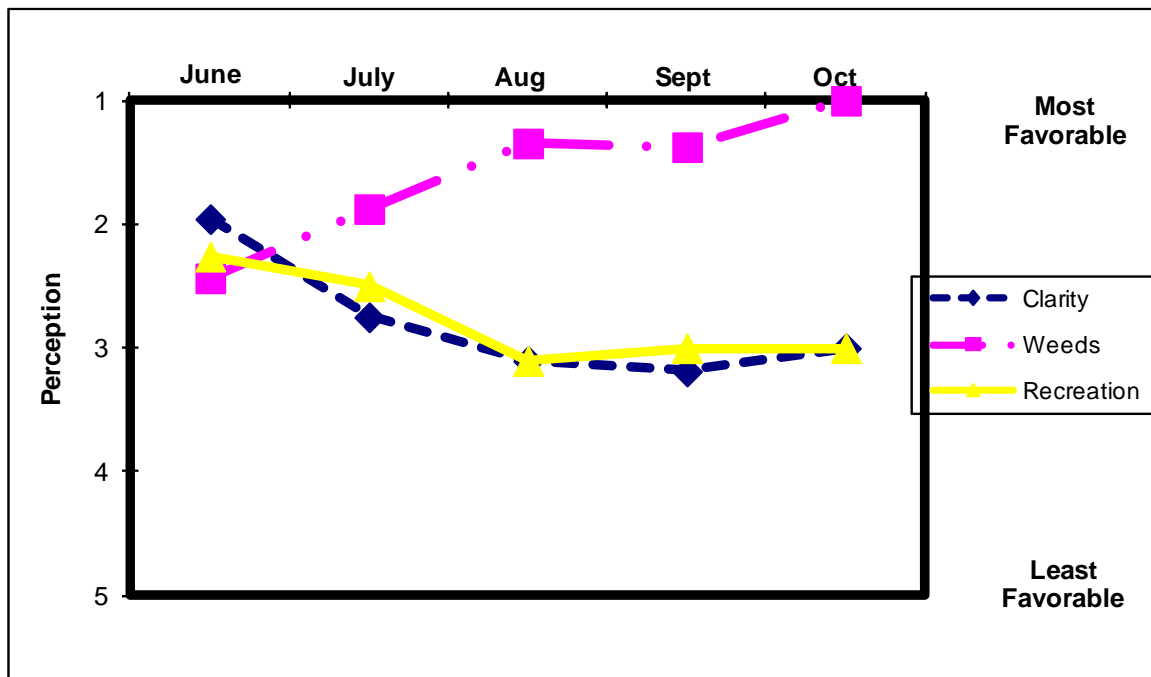
Time Series: Trophic Indicators, Typical Year (1999-2011)



Time Series: Lake Perception Indicators, 2011



Time Series: Lake Perception Indicators, Typical Year (1999-2011)



Appendix A- CSLAP Water Quality Sampling Results for Lake Truesdale

LNum	PName	Date	Zbot	Zsd	Zsamp	Tot.P	NO3	NH4	TDN	TN/TP	TColor	pH	Cond25	Ca	Chl.a
162	L Truesdale	6/5/1999	3.4	2.35	1.0	0.026	0.01				32	7.94	252		11.80
162	L Truesdale	6/19/1999	3.2	1.38	1.5	0.039	0.01				28	7.02	268		23.40
162	L Truesdale	7/3/1999	3.1	1.35	1.5	0.046	0.01				23	7.54	272		2.37
162	L Truesdale	7/16/1999	2.9	1.38	1.5	0.038	0.01				18	7.38	280		18.20
162	L Truesdale	7/31/1999	3.0	1.10	1.5	0.047	0.01				18	8.81	275		36.00
162	L Truesdale	8/15/1999	2.9	0.68	1.5	0.063	0.01				17	7.16	285		71.00
162	L Truesdale	8/28/1999	3.1	0.78	1.5	0.074	0.01				24	7.99	292		81.50
162	L Truesdale	9/11/1999	3.0	0.65	1.5	0.084	0.01				30	7.49	289		69.50
162	L Truesdale	6/17/2000	3.0	2.15	1.5	0.018	0.01				26	7.21	252		3.72
162	L Truesdale	7/1/2000	3.5	1.90	1.5	0.026	0.01				29	7.07	257		8.65
162	L Truesdale	7/17/2000	3.2	1.18	1.5	0.038	0.01				20	7.98	262		52.50
162	L Truesdale	7/29/2000	2.9	0.55	1.5	0.051	0.01				24	7.73	261		3.56
162	L Truesdale	8/12/2000	3.2	0.98	1.5	0.056	0.02				27	7.98	267		14.20
162	L Truesdale	8/26/2000	3.0	0.64	1.5	0.080	0.01				34	8.12	275		16.00
162	L Truesdale	9/10/2000	3.2	0.63	1.5	0.120	0.01				26	8.02	273		116.00
162	L Truesdale	9/23/2000	3.0	0.70	1.5	0.095	0.01				33	8.13	277		64.50
162	L Truesdale	6/2/2001	3.1	1.98	1.5	0.027	0.01				21	7.81	305		8.70
162	L Truesdale	6/30/2001	3.1	1.15	1.5	0.045	0.01				28	8.85	268		19.40
162	L Truesdale	7/7/2001	3.0	0.75	1.5	0.063	0.01				24	7.86	270		81.00
162	L Truesdale	7/29/2001	3.0	0.70	1.5	0.074	0.01				21	7.70	280		32.80
162	L Truesdale	8/4/2001	3.1	0.73	1.5	0.092	0.01				27	8.05	291		37.08
162	L Truesdale	8/26/2001	2.9	0.68	1.5	0.095	0.01				17	7.02	297		27.49
162	L Truesdale	9/8/2001	2.9	0.63	1.5	0.081	0.14				21	7.31	296		
162	L Truesdale	9/29/2001	3.0	0.88	1.5	0.078	0.03				30	7.10	293		
162	L Truesdale	6/1/2002	3.0	1.70	1.5	0.026	0.00	0.02	0.49	41.95	32	8.01	303		4.07
162	L Truesdale	6/15/2002	3.2	1.32	1.5	0.029	0.01	0.03	0.51	38.91	26	7.52	278		11.65
162	L Truesdale	7/4/2002	3.0	1.70	1.5	0.030	0.01	0.02	0.39	29.26	33	8.38	282		3.97
162	L Truesdale	7/20/2002	3.1	1.27	1.5	0.045	0.01	0.03	0.72	35.05	20	8.42	292		19.63
162	L Truesdale	8/27/2002	3.0	1.00	1.5	0.068	0.00	0.02	1.06	34.24	20	8.18	306		22.58
162	L Truesdale	9/1/2002	3.0	0.95	1.5	0.072	0.03	0.08	0.70	21.38	13	7.65	304		28.12
162	L Truesdale	9/8/2002	3.0	0.82	1.5	0.047	0.00	0.01	0.60	27.82	18	8.86	296		11.88
162	L Truesdale	9/22/2002	2.9	1.00		0.065	0.00	0.02	0.66	22.26	19	8.45	303		20.24
162	L Truesdale	6/14/2003	3.0	1.77	1.5	0.025	0.00	0.03	0.34	29.77	27	7.55	288	25.0	9.90
162	L Truesdale	6/21/2003	2.9	2.02	1.5	0.028	0.04	0.02	0.31	24.43	34	8.51	290		6.59
162	L Truesdale	7/19/2003	3.1	1.72	1.5	0.044	0.00	0.16	0.42	21.23	25	7.67	322		8.81
162	L Truesdale	7/26/2003	2.7	1.22	1.5	0.050	0.01	0.05	0.15	6.48	29	7.91	318		16.34
162	L Truesdale	8/2/2003	2.9	1.15	1.5	0.057	0.05	0.08	0.25	9.79	30	7.52	321		27.38
162	L Truesdale	8/30/2003	2.9	1.47	1.5	0.054	0.01	0.07	0.51	20.65	25	7.68	311		13.60
162	L Truesdale	9/6/2003	3.0	1.27	1.5	0.064	0.07	0.09			32	7.64	307		24.26
162	L Truesdale	9/13/2003	2.8	0.82	1.5	0.096	0.00	0.01	0.18	4.10	23	7.73	293		36.34
162	L Truesdale	6/5/2004	2.8	2.68	1.5	0.024	0.05	0.02			23	7.94	274		1.46
162	L Truesdale	6/13/2004	2.7	2.53	1.5	0.025	0.04	0.01	0.01	0.44	32	7.29	222		0.50
162	L Truesdale	6/26/2004	2.9	1.98	1.5	0.035	0.01	0.01	0.17	10.67	30	7.22	319		11.10
162	L Truesdale	7/3/2004	3.0	2.48	1.5	0.021	0.04	0.01	1.30	134.13	20		315		1.90
162	L Truesdale	8/11/2004	2.8	1.68	1.5	0.057	0.01	0.03	0.54	20.68	19	8.13	274	30.4	32.20
162	L Truesdale	8/20/2004	2.8	1.08	1.5	0.056	0.01	0.03	1.10	43.32	33	8.39	308		46.01
162	L Truesdale	8/29/2004	2.8	1.03	1.5	0.049	0.01	0.01	0.60	26.79	37	8.51	276		37.50
162	L Truesdale	10/3/2004	3.0	1.68	1.5	0.042	0.08	0.09	0.54	28.21	36	7.76	231		
162	L Truesdale	6/5/2005	2.8	2.70	1.5		0.02	0.05	0.15		34	8.55	263	24.3	0.24
162	L Truesdale	6/19/2005	2.9	2.08	1.5	0.041	0.02	0.01	0.20	10.63					5.71
162	L Truesdale	6/25/2005	2.8	1.28	1.5	0.031	0.02	0.01	0.19	13.63	11	8.05	312		14.56
162	L Truesdale	7/2/2005	2.9	0.73	1.5	0.026	0.13	0.01	0.56	47.94	29	8.20	305		18.34
162	L Truesdale	8/7/2005	2.7	0.75	1.5	0.042	0.03	0.02	0.53	27.58	44	8.42	161	28.0	15.37
162	L Truesdale	8/14/2005	2.7	0.68	1.5	0.064	0.13	0.01	0.58	19.82	18	8.57	277		14.86
162	L Truesdale	8/20/2005	2.5	0.68	1.5	0.083	0.13	0.01	0.41	10.84	44	7.92	277		29.59
162	L Truesdale	9/25/2005	2.4	0.58	1.5	0.089	0.03	0.01	0.61	15.05	25	8.16	298		49.30
162	L Truesdale	5/27/2006	2.8	1.98	1.5										3.46
162	L Truesdale	6/3/2006	3.1	2.13	1.5	0.020	0.04	0.04	0.62	68.78			234		6.18
162	L Truesdale	6/17/2006	2.9	1.43	1.5	0.037	0.01	0.01	0.61	36.41	25	8.21	227		9.32
162	L Truesdale	7/1/2006	2.7	1.18	1.5	0.043	0.01	0.05	0.63	32.51	28	8.47	193		12.70
162	L Truesdale	7/23/2006	2.9	0.88	1.5	0.059	0.01	0.03	0.78	29.18	77	8.36	182	22.9	46.97
162	L Truesdale	7/29/2006	3.1	0.98	1.5	0.058	0.01	0.02	1.02	38.96	56	8.43	160		28.24
162	L Truesdale	8/6/2006	2.6	0.98	1.5	0.068	0.01	0.01	0.70	22.65	60	8.65	236		38.37

LNum	PName	Date	Zbot	Zsd	Zsamp	Tot.P	NO3	NH4	TDN	TN/TP	TColor	pH	Cond25	Ca	Chl.a
162	L Truesdale	8/20/2006	2.5	0.53	1.5	0.083	0.01	0.03	1.19	31.45	67	8.72	167		93.24
162	L Truesdale	7/10/2007	2.7	0.98	1.5	0.057	0.01	0.01	0.81	31.01	48	9.17	148	26.5	9.28
162	L Truesdale	8/5/2007	2.6	0.78	1.5	0.064	0.01	0.13	1.24	42.29	47	8.56	192		49.53
162	L Truesdale	8/9/2007	2.7	0.53	1.5	0.099	0.01	0.07	1.24	27.73	59	9.05	110		29.38
162	L Truesdale	8/16/2007	2.8	0.68	1.5	0.104	0.01	0.04	1.52	32.33	88	9.11	131		60.48
162	L Truesdale	8/20/2007	2.8	0.63	1.5	0.125	0.02	0.03	1.37	24.21	64	8.21	224	21.4	57.44
162	L Truesdale	8/31/2007	2.9	0.88	1.5	0.070	0.01	0.02	0.94	29.44	69	8.54	184		34.94
162	L Truesdale	9/9/2007	2.4	1.05	1.5	0.057	0.00	0.03	1.10	42.90	24	7.88	215		30.78
162	L Truesdale	10/7/2007	2.6	1.33	1.5	0.058	0.01	0.20	1.21	45.46	24	8.04	249		28.58
162	L Truesdale	6/5/2008	2.8	2.48	1.5	0.032	0.02	0.05	0.48	33.81	18	7.89	308	28.2	3.13
162	L Truesdale	6/18/2008	2.7	2.38	1.5	0.029	0.03	0.13	0.59	45.45	27	8.01	247		8.18
162	L Truesdale	7/15/2008	2.8	1.23	1.5	0.066	0.02	0.12	1.00	33.32	26	7.76	305		17.25
162	L Truesdale	7/24/2008	2.6	0.95	1.5	0.099	0.02	0.04	0.49	10.98	29	7.92	186		40.14
162	L Truesdale	8/1/2008	2.8	1.13	1.5	0.061	0.01	0.15	0.70	25.13	53	8.80	268	27.9	47.08
162	L Truesdale	8/25/2008	2.8	0.98	1.5	0.101	0.01	0.15	0.68	14.82	50	8.49	264		14.55
162	L Truesdale	9/4/2008	2.4	0.68	1.5	0.105	0.01	0.08	1.12	23.44	42	8.51	220		58.76
162	L Truesdale	9/15/2008	2.6	0.68	1.5	0.106	0.02	0.35	1.47	30.57	35	8.39	207		82.76
162	L Truesdale	06/15/2009	3.1	1.23	1.5	0.033	0.01	0.01	0.51	34.11	32	7.86	204	24.4	23.71
162	L Truesdale	06/23/2009	3.1	2.68	1.5	0.045	0.01	0.12	0.68	33.27	45	7.46	271		27.50
162	L Truesdale	07/05/2009	3.1	1.43	1.5	0.037	0.01	0.02	0.55	32.79	38	8.15	249		11.54
162	L Truesdale	07/17/2009	2.9	1.03	1.5	0.049	0.02	0.04	0.76	34.15	46	8.27	220		64.96
162	L Truesdale	08/05/2009	2.9	0.93	1.5	0.064	0.02	0.13	1.07	36.77	64	7.80	208	30.9	24.72
162	L Truesdale	08/12/2009	3.1	1.08	1.5	0.069	0.02	0.20	1.26	40.30	31	6.99	227		25.80
162	L Truesdale	08/26/2009	3.0	0.68	1.5	0.063	0.01	0.05	0.94	32.48	73	8.34	224		31.00
162	L Truesdale	09/15/2009	3.0	0.68	1.5	0.068	0.02	0.07	0.93	29.94	56	7.80	223		1.30
162	L Truesdale	10/09/2009													
162	L Truesdale	6/4/2010	3.0	2.25	1.5	0.036	0.02	0.05			41	8.48	199	26.7	2.10
162	L Truesdale	6/19/2010	2.8	0.78	1.5	0.067	0.03	0.02			70	8.29	311		5.90
162	L Truesdale	7/1/2010	3.0	1.08	1.5	0.031	0.02	0.11	0.72	50.70	48	7.54	327		14.90
162	L Truesdale	7/15/2010	3.0	0.93	1.5	0.054	0.02	0.31	1.00	41.00	69	7.92	332		20.00
162	L Truesdale	8/4/2010	2.8	0.88	1.5	0.048	0.03	0.36	1.16	53.21	27		274	28.0	33.80
162	L Truesdale	8/25/2010	2.9	0.68	1.5	0.082	0.08	0.36	1.48	39.49	76	7.95	342		31.40
162	L Truesdale	9/2/2010	2.8	0.73	1.5	0.067	0.03	0.10	1.13	37.35	94	8.32	318		13.60
162	L Truesdale	9/2/2010	grab		bloom										
162	L Truesdale	9/24/2010	2.8	0.73	1.5	0.086	0.01	0.12	1.32	33.84	27	7.82	338		62.20
162	L Truesdale	5/27/2011	3.7	3.23	1.5	0.024	0.01	0.01	0.46	42.79	35	8.17	174	21.7	5.20
162	L Truesdale	6/13/2011	3.0	1.68	1.5	0.032	0.01	0.04	0.33	22.48	32	7.31	267		7.80
162	L Truesdale	7/5/2011	3.0	0.98	1.5	0.047	0.01	0.02	0.84	39.39	29	8.89	291		4.40
162	L Truesdale	7/16/2011	2.9	0.83	1.5	0.075	0.02	0.02	1.42	41.68	60	9.04	222		37.30
162	L Truesdale	7/16/2011	grab		bloom										
162	L Truesdale	9/10/2011	3.2	1.00	1.5	0.028	0.17	0.04	0.98	75.76	57	8.90	103	16.0	25.00
162	L Truesdale	9/18/2011	3.0	0.93	1.5	0.061	0.02	0.03	0.69	25.01	49	8.50	194		46.60
162	L Truesdale	9/24/2011	3.1	1.08	1.5	0.046	0.01	0.03	0.74	35.50	44	8.85	191		25.30
162	L Truesdale	06/15/2009	3.1	1.23	1.5	0.033	0.01	0.01	0.51	34.11	32	7.86	204	24.4	23.71
162	L Truesdale	6/5/2005	2.8			0.022									
162	L Truesdale	6/19/2005	2.9			0.055									
162	L Truesdale	6/25/2005	2.8			0.034									
162	L Truesdale	7/2/2005	2.9			0.065									
162	L Truesdale	8/7/2005	2.7			0.083									
162	L Truesdale	8/14/2005	2.7			0.053									
162	L Truesdale	8/20/2005	2.5			0.078									
162	L Truesdale	9/25/2005	2.4			0.091									

LNum	PName	Date	Site	TAir	TH20	QA	QB	QC	QD	QF	QG	AQ-PC	AQ-Chla	MC-LR	Anatoxin-a	Cyclin
162	L Truesdale	6/5/1999	epi	30	25	2	2	2								
162	L Truesdale	6/19/1999	epi	25	22	2	2	2								
162	L Truesdale	7/3/1999	epi	28	25	3	2	2								
162	L Truesdale	7/16/1999	epi	34	25	2	2	2								
162	L Truesdale	7/31/1999	epi	29	29	3	2	2								
162	L Truesdale	8/15/1999	epi	20	24	3	1	3								
162	L Truesdale	8/28/1999	epi	21	24	4	2	4	13							
162	L Truesdale	9/11/1999	epi	23	23	3	1	2								
162	L Truesdale	6/17/2000	epi	31	24	2	2	1	6							
162	L Truesdale	7/1/2000	epi	24	25	2	3	2	2							
162	L Truesdale	7/17/2000	epi	26	25	3	3	3	13							

LNum	PName	Date	Site	TAir	TH20	QA	QB	QC	QD	QF	QG	AQ-PC	AQ-Chla	MC-LR	Anatoxin-a	Cyclin
162	L Truesdale	7/29/2000	epi	21	22	4	2	4	134							
162	L Truesdale	8/12/2000	epi	22	25	4	2	4	1345							
162	L Truesdale	8/26/2000	epi	26	22	4	1	4	134							
162	L Truesdale	9/10/2000	epi	27	25	4	1	4	13							
162	L Truesdale	9/23/2000	epi	16	19	3	1	3	35							
162	L Truesdale	6/2/2001	epi	20	18	1	2	2	5							
162	L Truesdale	6/30/2001	epi	32	28	2	3	3								
162	L Truesdale	7/7/2001	epi	26	24	3	3	2	1							
162	L Truesdale	7/29/2001	epi	26	25	3	1	3	13							
162	L Truesdale	8/4/2001	epi	25	25	3	2	3	15							
162	L Truesdale	8/26/2001	epi	24	25	3	1	2	1							
162	L Truesdale	9/8/2001	epi	26	24	3	2	3	1							
162	L Truesdale	9/29/2001	epi	17	18	2	1	2	56							
162	L Truesdale	6/1/2002	epi	26	24	2	3	1								
162	L Truesdale	6/15/2002	epi	16	19	2	3	2	5							
162	L Truesdale	7/4/2002	epi	33	30	2	2	2	8							
162	L Truesdale	7/20/2002	epi	24	26	3	1	2								
162	L Truesdale	8/27/2002	epi	21	23	3	2	4	13							
162	L Truesdale	9/1/2002	epi	16	20	2	1	2	5							
162	L Truesdale	9/8/2002	epi	25	22	3	1	4	13							
162	L Truesdale	9/22/2002	epi	25	24	3	1	2								
162	L Truesdale	6/14/2003	epi	18	19	1	3	3	25							
162	L Truesdale	6/21/2003	epi	18	19	1	3	3	25							
162	L Truesdale	7/19/2003	epi	22	24	3	2	2	2							
162	L Truesdale	7/26/2003	epi	31	26	3	2	3	138							
162	L Truesdale	8/2/2003	epi	25	25	3	2	4	135							
162	L Truesdale	8/30/2003	epi	25	24	3	2	4	1234							
162	L Truesdale	9/6/2003	epi	19	20	3	2	2	8							
162	L Truesdale	9/13/2003	epi	18	20	4	3	3	1358							
162	L Truesdale	6/5/2004	epi	17	20	1	4	3	258							
162	L Truesdale	6/13/2004	epi	24	22	1	4	4	24							
162	L Truesdale	6/26/2004	epi	21	24	3	4	4	1245							
162	L Truesdale	7/3/2004	epi	22	24	2	3	4	1248							
162	L Truesdale	8/11/2004	epi	25	24	3	1	2	15							
162	L Truesdale	8/20/2004	epi	30	27	4	1	3	13							
162	L Truesdale	8/29/2004	epi	30	26	3	1	4	13							
162	L Truesdale	10/3/2004	epi	17	17	3	1	2	5							
162	L Truesdale	6/5/2005	epi	27	21	2	3	3	3							
162	L Truesdale	6/19/2005	epi	21	23	2	2	2	8							
162	L Truesdale	6/25/2005	epi	26	27	3	2	2	8							
162	L Truesdale	7/2/2005	epi	27	26	3	2	3	13							
162	L Truesdale	8/7/2005	epi	26	27	3	1	3	1							
162	L Truesdale	8/14/2005	epi	30	29	3	1	2	1							
162	L Truesdale	8/20/2005	epi	22	24	3	1	3	35							
162	L Truesdale	9/25/2005	epi	18	20	3	1	4	1							
162	L Truesdale	5/27/2006	epi	22	20	2	4	4	125							
162	L Truesdale	6/3/2006	epi	18	22	2	2	2	5							
162	L Truesdale	6/17/2006	epi	20	21	2	3	2	0							
162	L Truesdale	7/1/2006	epi	28	25	3	1	3	1							
162	L Truesdale	7/23/2006	epi	25	26	3	2	2	0							
162	L Truesdale	7/29/2006	epi	31	29	3	1	3	1							
162	L Truesdale	8/6/2006	epi	27	30	4	1	3	13							
162	L Truesdale	8/20/2006	epi	30	26	3	1	3	1							
162	L Truesdale	7/10/2007	epi	28	31	3	1	3	0							
162	L Truesdale	8/5/2007	epi	32	29	4	1	3	13							
162	L Truesdale	8/9/2007	epi	25	28	4	1	3	13							
162	L Truesdale	8/16/2007	epi	27	26		1	4	134							
162	L Truesdale	8/20/2007	epi	21	23	4	1	4	134							
162	L Truesdale	8/31/2007	epi	27	28		1	2	0							
162	L Truesdale	9/9/2007	epi	32	26	3	1	4	13							
162	L Truesdale	10/7/2007	epi	25	22	3	1	4	13							

LNum	PName	Date	Site	TAir	TH20	QA	QB	QC	QD	QF	QG	AQ-PC	AQ-Chla	MC-LR	Anatoxin-a	Cyclin
162	L Truesdale	6/5/2008	epi	18	20	1	1	1	8							
162	L Truesdale	6/18/2008	epi	20	23	2	1	1	0							
162	L Truesdale	7/15/2008	epi	26	27	2	1	2	1							
162	L Truesdale	7/24/2008	epi	23	26	2	1	2	5							
162	L Truesdale	8/1/2008	epi	30	27	2	1	2	0							
162	L Truesdale	8/25/2008	epi	22	25	3	1	3	13							
162	L Truesdale	9/4/2008	epi	23	24	4	1	3	134							
162	L Truesdale	9/15/2008	epi	24	23	4	1	3	13							
162	L Truesdale	06/15/2009	epi	29	25	3	1	2	1							
162	L Truesdale	06/23/2009	epi	25	21	3	2	3	235							
162	L Truesdale	07/05/2009	epi	23	20	3	2	2	158							
162	L Truesdale	07/17/2009	epi	26	27	3	2	2	1							
162	L Truesdale	08/05/2009	epi	30	26	4	2	3	13							
162	L Truesdale	08/12/2009	epi	29	26	4	1	4	134							
162	L Truesdale	08/26/2009	epi	31	28	3	2	3	13							
162	L Truesdale	09/15/2009	epi	22	21	3	2	3	13			91.04		0.28		
162	L Truesdale	10/09/2009	epi											0.07		
162	L Truesdale	6/4/2010	epi	30	26	2	2	2	0	0	0					
162	L Truesdale	6/19/2010	epi	33	25	3	2	2	1	0	0					
162	L Truesdale	7/1/2010	epi	20	24	2	2	2	1	0	0					
162	L Truesdale	7/15/2010	epi	31	28	3	2	3	1	0	0					
162	L Truesdale	8/4/2010	epi	33	28	3	2	2	1	0	0	59.35				
162	L Truesdale	8/25/2010	epi	24	22	3	2	2	15	0	0					
162	L Truesdale	9/2/2010	epi	33	29	4	2	4	134	0	0	161.00		0.00		
162	L Truesdale	9/2/2010	bioom									2766400		22.53		
162	L Truesdale	9/24/2010	epi	24	22	3	2	3	1	0	0					
162	L Truesdale	5/27/2011	epi	28	24	1	1	1	0	0	0					
162	L Truesdale	6/13/2011	epi	20	22	1	1	1	0	0	0	21.00	4.60			
162	L Truesdale	7/5/2011	epi	28	27	3	1	2	0	0	0	30.60	22.80			
162	L Truesdale	7/16/2011	epi	31	30	4	1	4	134	4	4	148.30	12.90	0.51	<0.5	<0.1
162	L Truesdale	7/16/2011	bioom											51.21	<8	<0.4
162	L Truesdale	9/10/2011	epi	25	22	2	1	2	0	0	4	55.80	13.20			
162	L Truesdale	9/18/2011	epi	20	19	2	1	1	0	0	0	79.00	19.60			
162	L Truesdale	9/24/2011	epi	24	20	3	1	3	5	0	0	97.00	12.80			

Legend Information

<i>Indicator</i>	<i>Description</i>	<i>Detection Limit</i>	<i>Standard (S) / Criteria (C)</i>
General Information			
Lnum	lake number (unique to CSLAP)		
Lname	name of lake (as it appears in the Gazetteer of NYS Lakes)		
Date	sampling date		
Field Parameters			
Zbot	lake depth at sampling point, meters (m)		
Zsd	Secchi disk transparency or clarity	0.1m	1.2m (C)
Zsamp	water sample depth (m) (epi = surface, hypo = bottom)	0.1m	none
Tair	air temperature (C)	-10C	none
TH20	water temperature (C)	-10C	none
Laboratory Parameters			
Tot.P	total phosphorus (mg/l)	0.003 mg/l	0.020 mg/l (C)
NOx	nitrate + nitrite (mg/l)	0.01 mg/l	10 mg/l NO3 (S), 2 mg/l NO2 (S)
NH4	total ammonia (mg/l)	0.01 mg/l	2 mg/l NH4 (S)
TN	total nitrogen (mg/l)	0.01 mg/l	none
TN/TP	nitrogen to phosphorus (molar) ratio, = (TKN + NOx)*2.2/TP		none
TCOLOR	true (filtered) color (ptu, platinum color units)	1 ptu	none
pH	powers of hydrogen (S.U., standard pH units)	0.1 S.U.	6.5, 8.5 S.U. (S)
Cond25	specific conductance, corrected to 25C (umho/cm)	1 umho/cm	none
Ca	calcium (mg/l)	1 mg/l	none
Chl.a	chlorophyll a (ug/l)	0.01 ug/l	none
Fe	iron (mg/l)	0.1 mg/l	1.0 mg/l (S)
Mn	manganese (mg/l)	0.01 mg/l	0.3 mg/l (S)
As	arsenic (ug/l)	1 ug/l	10 ug/l (S)
AQ-PC	Phycocyanin (aquafior) (unitless)	1 unit	none
AQ-Chl	Chlorophyll a (aquafior) (ug/l)	1 ug/l	none
MC-LR	Microcystis-LR (ug/l)	0.01 ug/l	1 ug/l potable (C) 20 ug/l swimming (C)
Ana	Anatoxin-a (ug/l)	0.3 ug/l	none
Cyl	Cylindrospermopsin (ug/l)	0.1 ug/l	none
Lake Assessment			
QA	water quality assessment; 1 = crystal clear, 2 = not quite crystal clear, 3 = definite algae greenness, 4 = high algae levels, 5 = severely high algae levels		
QB	aquatic plant assessment; 1 = no plants visible, 2 = plants below surface, 3 = plants at surface, 4 = plants dense at surface, 5 = surface plant coverage		
QC	recreational assessment; 1 = could not be nicer, 2 = excellent, 3 = slightly impaired, 4 = substantially impaired, 5 = lake not usable		
QD	reasons for recreational assessment; 1 = poor water clarity, 2 = excessive weeds, 3 = too much algae, 4 = lake looks bad, 5 = poor weather, 6 = litter/surface debris, 7 = too many lake users, 8 = other		
QF, QG	Health and safety issues today (QF) and past week (QG); 0 = none, 1 = taste/odor, 2 = GI illness humans/animals, 3 = swimmers itch, 4 = algae blooms, 5 = dead fish, 6 = unusual animals, 7 = other		

Appendix B- Monthly Evaluation of Lake Truesdale Data, 2006-2011

June Data

	2006	2007	2008	2009	2010	2011
<i>Zsd</i>	NORMAL		HIGH	NORMAL	NORMAL	NORMAL
<i>TP</i>	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL
<i>Chl.a</i>	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL
<i>NOx</i>	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL
<i>NH4</i>	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL
<i>TN</i>	NORMAL		NORMAL	NORMAL		NORMAL
<i>pH</i>	NORMAL		NORMAL	NORMAL	NORMAL	LOW
<i>SpCond</i>	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL
<i>Color</i>	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL
<i>Ca</i>			NORMAL	NORMAL	NORMAL	
<i>QA</i>	NORMAL		LOW	NORMAL	NORMAL	LOW
<i>QB</i>	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL
<i>QC</i>	NORMAL		LOW	NORMAL	NORMAL	LOW
<i>TH20</i>	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL

High = average monthly reading > 90th percentile reading for lake, 2000-2010

Low = average monthly reading < 10th percentile reading for lake, 2000-2010

Normal = average monthly reading between 10th and 90th percentile reading for lake, 2000-2010

July Data

	2006	2007	2008	2009	2010	2011
<i>Zsd</i>	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
<i>TP</i>	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
<i>Chl.a</i>	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
<i>NOx</i>	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
<i>NH4</i>	NORMAL	NORMAL	NORMAL	NORMAL	HIGH	NORMAL
<i>TN</i>	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
<i>pH</i>	NORMAL	HIGH	NORMAL	NORMAL	NORMAL	HIGH
<i>SpCond</i>	LOW	LOW	NORMAL	NORMAL	HIGH	NORMAL
<i>Color</i>	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
<i>Ca</i>	NORMAL	NORMAL				
<i>QA</i>	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
<i>QB</i>	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
<i>QC</i>	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
<i>TH20</i>	NORMAL	HIGH	NORMAL	NORMAL	NORMAL	HIGH

High = average monthly reading > 90th percentile reading for lake, 2000-2010

Low = average monthly reading < 10th percentile reading for lake, 2000-2010

Normal = average monthly reading between 10th and 90th percentile reading for lake, 2000-2010

August Data

	2006	2007	2008	2009	2010	2011
Zsd	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	
TP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	
Chl.a	HIGH	NORMAL	NORMAL	NORMAL	NORMAL	
NOx	NORMAL	NORMAL	NORMAL	NORMAL	HIGH	
NH4	NORMAL	NORMAL	NORMAL	NORMAL	HIGH	
TN	NORMAL	HIGH	NORMAL	NORMAL	HIGH	
pH	HIGH	HIGH	HIGH	NORMAL	NORMAL	
SpCond	NORMAL	LOW	NORMAL	NORMAL	NORMAL	
Color	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	
Ca		LOW	NORMAL	HIGH	NORMAL	
QA	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	
QB	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	
QC	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	
TH20	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	

High = average monthly reading > 90th percentile reading for lake, 2000-2010

Low = average monthly reading < 10th percentile reading for lake, 2000-2010

Normal = average monthly reading between 10th and 90th percentile reading for lake, 2000-2010

September Data

	2006	2007	2008	2009	2010	2011
Zsd		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
TP		NORMAL	HIGH	NORMAL	NORMAL	NORMAL
Chl.a		NORMAL	HIGH	LOW	NORMAL	NORMAL
NOx		LOW	NORMAL	NORMAL	NORMAL	HIGH
NH4		NORMAL	HIGH	NORMAL	NORMAL	NORMAL
TN		NORMAL	HIGH	NORMAL	NORMAL	NORMAL
pH		NORMAL	NORMAL	NORMAL	NORMAL	HIGH
SpCond		NORMAL	NORMAL	NORMAL	HIGH	LOW
Color		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
Ca						
QA		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QB		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
TH20		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL

High = average monthly reading > 90th percentile reading for lake, 2000-2010

Low = average monthly reading < 10th percentile reading for lake, 2000-2010

Normal = average monthly reading between 10th and 90th percentile reading for lake, 2000-2010

Truesdale Lake (1302-0054)

Impaired Seg

Waterbody Location Information

Revised: 04/30/2008

Water Index No:	H- 31-P44-35-P109- 6-13-P115a	Drain Basin:	Lower Hudson River
Hydro Unit Code:	02030101/130	Str Class:	B
Waterbody Type:	Lake	Reg/County:	3/Westchester Co. (60)
Waterbody Size:	82.4 Acres	Quad Map:	PEACH LAKE (P-26-3)
Seg Description:	entire lake		

Water Quality Problem/Issue Information (CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Aquatic Life	Stressed	Possible
RECREATION	Impaired	Known
Aesthetics	Stressed	Known

Type of Pollutant(s)

Known: ALGAL/WEED GROWTH (algal blooms, vegetation)
Suspected: - - -
Possible: Pathogens

Source(s) of Pollutant(s)

Known: HABITAT MODIFICATION
Suspected: URBAN/STORM RUNOFF, On-Site/Septic Syst
Possible: Agriculture

Resolution/Management Information

Issue Resolvability:	1 (Needs Verification/Study (see STATUS))	
Verification Status:	4 (Source Identified, Strategy Needed)	
Lead Agency/Office:	ext/NYCW	Resolution Potential: Medium
TMDL/303d Status:	n/a->1*,4c*	

Further Details

Overview

Recreational uses in Truesdale Lake are considered to be impaired due to algal growth and low water transparency. Elevated nutrient (phosphorus) loads attributed to nonpoint sources are the primary contributor to these impairments.

Water Quality Sampling

Truesdale Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1999 and continuing through 2006. An Interpretive Summary report of the findings of this sampling was published in 2007. These data indicate that the lake continues to be best characterized as eutrophic, or highly productive, based on low water transparency, and high nutrient (primarily phosphorus) and algae levels. Phosphorus levels in the lake consistently exceed (and often significantly exceed) the state phosphorus guidance value indicating impacted/stressed recreational uses. Corresponding transparency measurements rarely meet what is recommended for swimming beaches. Measurements of pH typically fall within the state water quality range of 6.5 to 8.5; occasionally high pH does not appear to impact aquatic life in the lake. The lake water is moderately to highly colored, and may influence transparency when algae levels are low. (DEC/DOW, BWAM/CSLAP, October 2007)

Recreational Assessment

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. This most recent assessment indicates recreational suitability of the lake to be somewhat favorable. The recreational suitability of the lake is described most frequently as "slightly" impacted for most recreational uses. The lake itself is most often described as having "definite algae greenness," an assessment that is more favorable than expected based on measured water quality characteristics. Assessments have noted that aquatic plants rarely grows to the lake surface, likely a result of active weed management (herbicide). (DEC/DOW, BWAM/CSLAP, October 2007)

Lake Uses

This lake waterbody is designated class B, suitable for use as a public bathing beach, for general recreation and aquatic life support, but not as public water supply. Water quality monitoring by NYSDEC focuses primarily on support of general recreation and aquatic life. Samples to evaluate the bacteriological condition and bathing use of the lake or to evaluate contamination from organic compounds, metals or other inorganic pollutants have not been collected as part of the CSLAP monitoring program. Monitoring to assess potable water supply and public bathing use is generally the responsibility of state and/or local health departments.

New York City Watershed

Truesdale Lake is tributary to the Croton System of New York City water supply reservoirs (see New Croton Reservoir, Segment 1302-0010). A Watershed Agreement is in place between NYCDEP and the Croton Watershed communities which sets forth programs and funding for watershed protection. In addition, NYCDEP has developed a phosphorus TMDL for the entire Croton System Watershed to aid in the management of nutrients. An Implementation Plan for this TMDL is being developed. (NYCDEP, July 2006)

Section 303(d) Listing

Truesdale Lake not is currently included on the NYS 2008 Section 303(d) List of Impaired Waters. However this updated assessment suggests it is appropriate to include this waterbody on the 2010 List. It is recommended that a listing for phosphorus be added to Part 1 of the List, indicating a waterbody with an impairment requiring TMDL development. (DEC/DOW, BWAM/WQAS, May 2008)

The recreational use (swimming) and aesthetics in Truesdale Lake are thought to be limited by algal blooms, excessive aquatic vegetation and eutrophication. Chemical treatment of the lake to control weed growth has been used in the past. Failing and/or inadequate on-site septic systems serving lake shore residences and other runoff from urban/suburban development in the watershed are considered likely sources of pollutants. (Putnam County WQCC, 1996)

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