

Forest Lake Questions and Answers, 2015 CSLAP

Q1. What is the condition of our lake this year?

A1. Water quality conditions in Forest Lake were close to normal in 2015, based on similar water clarity and nutrient levels (although algae levels were slightly lower than usual). The lake occasionally exhibits high levels of weed growth, but shoreline algae blooms were again not reported.

Q2. Is there anything new that showed up in the testing this year?

A2. The chloride sampling results were consistent with those in lakes exhibiting only minor impacts associated with road salt runoff.

Q3. How does the condition of our lake this year compare with other lakes in the area?

A3. Forest Lake has slightly lower water clarity, but much lower algae and nutrient levels, than most lakes in the area, and shoreline blooms are not regularly reported in the lake. The lake exhibits slightly more extensive coverage of aquatic plants (may be native or exotic plants), but this problem is common to some other lakes in the areas.

Q4. Are there any trends in our lake's condition?

A4. Algae levels have increased since the mid 2000s, resulting in a slight drop in water clarity over the same period. There have also been small changes in plant coverage and pH (increasing), and in water color (decreasing).

Q5. Should we be concerned about the condition of our lake? Are we close to a tipping point?

A5. Forest Lake may be susceptible to algae blooms, given the rise in algae levels, although these have not been reported in the lake. The primary issues in the lake relate to nuisance (invasive or native) weed growth, which is more significant in some years than in others.

Q6. Are any actions indicated, based on the trends and this year's results?

A6. Individual stewardship activities such as pumping your septic system, growing a buffer of native plants next to the water bodies, and reducing erosion from shoreline properties and runoff into the lake should be continued to maintain water quality by reducing nutrient and sediment loading to the lake. Visiting boats should be inspected to reduce the risk of new invasive species, since nearby lakes harbor several invasive plants not presently found in the lake.

Lake Use				
	PWL	Average Year	2015	Primary issue
Potable Water	□	□	□	Not applicable
Swimming	●	●	●	Not applicable
Recreation	●	●	●	No impacts
Aquatic Life	●	●	●	No impacts
Aesthetics	●	▲	▲	Native plants
Habitat	●	●	●	No impacts
Fish Consumption	●	□	□	

● Supported / Good
▲ Threatened / Fair
◆ Stressed / Poor
 Impaired
 Not Known

CSLAP 2015 Lake Water Quality Summary: Forest Lake (Warren County)

General Lake Information

Location	Town of Lake Luzerne
County	Warren
Basin	Upper Hudson River
Size	18.1 hectares (44.7 acres)
Lake Origins	Natural
Watershed Area	307.8 hectares (760.3 acres)
Retention Time	0.2 years
Mean Depth	1.6 meters
Sounding Depth	3.3 meters
Public Access?	no
Major Tributaries	Lake Vanare, Lake Allure
Lake Tributary To...	unnamed outlet to unnamed tribs to Stewart Brook to Hudson River
WQ Classification	B (contact recreation = swimming)
Lake Outlet Latitude	43.363
Lake Outlet Longitude	-73.793
Sampling Years	2001-2010, 2012-2015
2015 Samplers	Rosealba O'Boyle
Main Contact	Rosealba O'Boyle

Lake Map



Background

Forest Lake is a 45 acre, class B lake found in the Town of Lake Luzerne in Warren County, in the Upper Hudson River region of New York State. It was first sampled as part of CSLAP in 2001.

It is one of 12 CSLAP lakes among the nearly 300 lakes found in Warren County, and one of 32 CSLAP lakes among the more than 1370 lakes and ponds in the Upper Hudson River drainage basin.

Lake Uses

Forest Lake 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 for swimming, boating and other recreation via shoreline properties; the lake does not have public access.

Forest Lake is not stocked by the state, and it is not known if private stocking occurs.

General statewide fishing regulations are applicable in Forest Lake. Statewide fish consumption advisories apply to Forest Lake—no site-specific advisories have been issued for the lake.

Historical Water Quality Data

CSLAP sampling was conducted on Forest Lake from 2001 to 2010, and 2012 to 2015. The CSLAP reports for each of the past several years can be found on the NYSFOLA website at <http://nysfola.mylaketown.com>. The most recent CSLAP report for Forest Lake can also be found on the NYSDEC web page at <http://www.dec.ny.gov/lands/77831.html>.

Forest Lake was not sampled by the NYSDEC as part of any of the major state ambient lake monitoring programs. It is not known if the lake was sampled as part of any regional or local water quality monitoring efforts or as part of fisheries management activities on the lake.

Neither the tributaries (Lake Vanare outlet, Lake Allure outlet, Berry Pond Brook) to nor the outlet of the lake has been monitored through the NYSDEC Rotating Intensive Basins (RIBS) or stream biomonitoring programs.

Lake Association and Management History

Forest Lake is served by the Northwoods Association. The lake association involved in a variety of lake management activities, including:

- community activities
- fishing derby
- picnic and social events

The Northwoods Association maintains a website, at <http://northwoodsassociation.com/> .

Summary of 2015 CSLAP Sampling Results

Evaluation of 2015 Annual and Monthly Results Relative to 2001-2014

The summer (mid-June through mid-September) average readings are compared to historical averages for all CSLAP sampling seasons in the “Lake Condition Summary” table, and are compared to individual historical CSLAP sampling seasons in the “Long Term Data Plots – Forest Lake” section in Appendix C.

Evaluation of Eutrophication Indicators

Algae levels were slightly lower than normal in 2015, despite a small but statistically insignificant longer-term increase since the mid-2000s. This was coincident with a slight decrease in water clarity readings over the same period, although this change has also not been statistically significant. No clear changes in phosphorus levels have occurred over this period, and both phosphorus and water clarity were close to normal in 2015.

Phosphorus and (to a lesser extent) algae levels typically decrease during the summer, but water clarity does not change appreciably over the same period. None of these indicators changed over the summer of 2015.

The lake continues to be characterized as *mesotrophic*, based on water clarity, chlorophyll *a* and total phosphorus (all typical of *mesotrophic* lakes) readings. The trophic state indices (TSI) evaluation suggests that each of the trophic indicators are “internally” consistent- that is, each indicator can be well predicted by any of the other indicators. Overall trophic conditions are summarized on the Lake Scorecard and Lake Condition Summary Table.

Evaluation of Potable Water Indicators

Algae levels are usually not 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, but the lake is not classified for this use. Forest Lake is not thermally stratified, at least on a consistent basis, so deepwater samples have not been collected in the lake (and deepwater intakes to avoid surface algae-enriched waters are not possible). Potable water conditions, at least as measurable through CSLAP, are summarized in the Lake Scorecard and Lake Condition Summary Table.

Evaluation of Limnological Indicators

Total nitrogen readings were slightly lower than normal in 2013 and 2014, but higher than normal in 2015. Each of the other limnological indicators was close to normal in 2015. pH readings have increased slightly since the early 2000s, while color readings have decreased slightly since the mid-2000s. However, these small changes are probably within the normal range of variability for Forest Lake.

Chloride levels in the since 2015 sample, collected for the first time through CSLAP and cited in Appendix A, were 18 ug/l. This value falls within the “moderate” road salt runoff levels cited by the New Hampshire DES. This reading is well below the state potable water quality standard of

250 mg/l and within the range of values found in most NYS lakes. These readings suggest a low to moderate likelihood of biological impacts from road salt. Additional data will help to determine if these represent normal readings for the lake.

Overall limnological conditions are summarized in the Lake Scorecard and Lake Condition Summary Table.

Evaluation of Biological Condition

The limited information about the fish community in the lake is comprised of a mix of coolwater (at least one species) and warmwater (at least three species) fish. It is likely that additional fish species are found in the lake.

Macrophyte, phytoplankton, zooplankton and macroinvertebrate surveys have not been conducted through CSLAP at Forest Lake- it is not known if invasive plants are present in the lake. The fluoroprobe screening samples analyzed by SUNY ESF in the last several years indicated low overall algae levels and low levels of blue green algae. The algae community was comprised of a mix of algae species, particularly green algae in 2013 and diatoms and green algae in 2014 and 2015. No shoreline blooms were reported or sampled.

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

Evaluation of Lake Perception

Water quality, aquatic plant, and recreational assessments were close to normal in the last few years. Most of the less favorable assessments have been attributed to “excessive weed growth.” It is not known if the more frequent occurrences of excessive weed growth was associated with native or exotic plants; it should be noted that many nearby lakes have one or more invasive plant species. Neither water quality nor recreational assessments has exhibited any long-term trends, although plant coverage has increased slightly over the last decade. Aquatic plant coverage increases during the typical summer, but this does not translate to clear seasonal changes in recreational conditions. No clear changes were apparent in 2015. Overall lake perception is summarized on the Lake Scorecard and Lake Condition Summary Table.

Evaluation of Local Climate Change

Water and air temperature readings in the summer index period were higher than normal in the last several years, and water temperatures have increased slightly in the last decade. It is not known if any of the small changes in air or water temperature readings are indicative of local climate change in the lake.

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. Fluoroprobe readings are below the levels indicating susceptibility for harmful algal blooms (HABs) as measured by SUNY ESF in the last several years. An analysis of algae samples indicated non-detectable

levels of algal toxins, and thus well below the levels needed to support safe swimming. No shoreline blooms have been reported, at least in recent years.

Lake Condition Summary

Category	Indicator	Min	Annual Avg	Max	2015 Avg	Classification	2015 Change?	Long-term Change?
Eutrophication Indicators	Water Clarity	1.70	2.61	3.25	2.65	Mesotrophic	Within Normal Range	No Change
	Chlorophyll <i>a</i>	0.60	4.24	16.30	3.70	Mesotrophic	Within Normal Range	No Change
	Total Phosphorus	0.007	0.013	0.024	0.013	Mesotrophic	Within Normal Range	No Change
Potable Water Indicators	Hypolimnetic Ammonia							Not known
	Hypolimnetic Arsenic							Not known
	Hypolimnetic Iron	0.00	0.00	0.00	0.00	Low Iron Levels	Within Normal Range	Not known
	Hypolimnetic Manganese							Not known
Limnological Indicators	Hypolimnetic Phosphorus							Not known
	Nitrate + Nitrite	0.00	0.02	0.28	0.02	Low NOx	Within Normal Range	No Change
	Ammonia	0.01	0.03	0.12	0.03	Low Ammonia	Within Normal Range	No Change
	Total Nitrogen	0.15	0.40	2.60	0.55	Low Total Nitrogen	Higher than Normal	No Change
	pH	6.51	7.50	8.59	7.70	Circumneutral	Within Normal Range	No Change
	Specific Conductance	34	104	238	104	Softwater	Within Normal Range	No Change
	True Color	2	23	66	19	Intermediate Color	Within Normal Range	No Change
	Calcium	1.5	7.5	11.0	7.4	Not Susceptible to Zebra Mussels	Within Normal Range	No Change
	Lake Perception	WQ Assessment	1	1.1	2	1.2	Crystal Clear	Within Normal Range
Aquatic Plant Coverage		1	2.8	5	2.7	Surface Plant Growth	Within Normal Range	No Change
Recreational Assessment		1	1.4	3	1.2	Could Not Be Nicer	Within Normal Range	No Change
Biological Condition	Phytoplankton					Open water-low blue green algae biomass	Not known	Not known
	Macrophytes					Excellent quality of aquatic plant community?	Not known	Not known
	Zooplankton					Not measured through CSLAP	Not known	Not known
	Macroinvertebrates					Not yet evaluated	Not known	Not known
	Fish					Warmwater fisheries	Not known	Not known
	Invasive Species					None reported	Not known	Not known
Local Climate Change	Air Temperature	6	26.6	37	28.8		Higher Than Normal	No Change
	Water Temperature	12	24.2	30	25.8		Within Normal Range	No Change

Category	Indicator	Min	Annual Avg	Max	2015 Avg	Classification	2015 Change?	Long-term Change?
Harmful Algal Blooms	Open Water Phycocyanin	0	4	16	2	No readings indicate high risk of BGA	Not known	Not known
	Open Water FP Chl.a	1	2	4	1	No readings indicate high algae levels	Not known	Not known
	Open Water FP BG Chl.a	0	0	1	0	No readings indicate high BGA levels	Not known	Not known
	Open Water Microcystis	<DL	0.2	0.4	<DL	Mostly undetectable open water MC-LR	Not known	Not known
	Open Water Anatoxin a	<DL	<DL	0.0	<DL	Open water Anatoxin-a at times detectable	Not known	Not known
	Shoreline Phycocyanin					No shoreline blooms sampled for PC	Not known	Not known
	Shoreline FP Chl.a					No shoreline blooms sampled for FP	Not known	Not known
	Shoreline FP BG Chl.a					No shoreline blooms sampled for FP	Not known	Not known
	Shoreline Microcystis					No shoreline bloom MC-LR data	Not known	Not known
	Shoreline Anatoxin a					No shoreline bloom Anatoxin-a data	Not known	Not known

Evaluation of Lake Condition Impacts to Lake Uses

The 2007 NYSDEC Priority Waterbody Listings (PWL) for the Upper Hudson River drainage basin indicates “no use impairments” for Forest Lake. The PWL listing for Forest Lake is shown in Appendix B.

Potable Water (Drinking Water)

The CSLAP dataset at Forest Lake, 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 used for this purpose.

Public Bathing

The CSLAP dataset at Forest Lake, including water chemistry data, physical measurements, and volunteer samplers’ perception data, suggests that public bathing, if conducted at a public swimming beach, would be fully supported, although additional information about bacterial levels is needed to evaluate the safety of the water for swimming.

Recreation (Swimming and Non-Contact Uses)

The CSLAP dataset on Forest Lake, including water chemistry data, physical measurements, and volunteer samplers’ perception data, suggest that recreation should be fully supported, although occasional occurrences of “excessive weed growth” may *threaten* this use.

Aquatic Life

The CSLAP dataset on Forest Lake, including water chemistry data, physical measurements, and volunteer samplers’ perception data, suggest that aquatic life should be supported, although this use may be *threatened* by the presence of excessive weeds. Additional data are needed to evaluate the food and habitat conditions for aquatic organisms in the lake.

Aesthetics and Habitat

The CSLAP dataset on Forest Lake, including water chemistry data, physical measurements, and volunteer samplers' perception data, suggest that aesthetics may be *threatened* by excessive weeds in some years. Habitat should be fully supported.

Fish Consumption

There are no fish consumption advisories posted for Forest Lake.

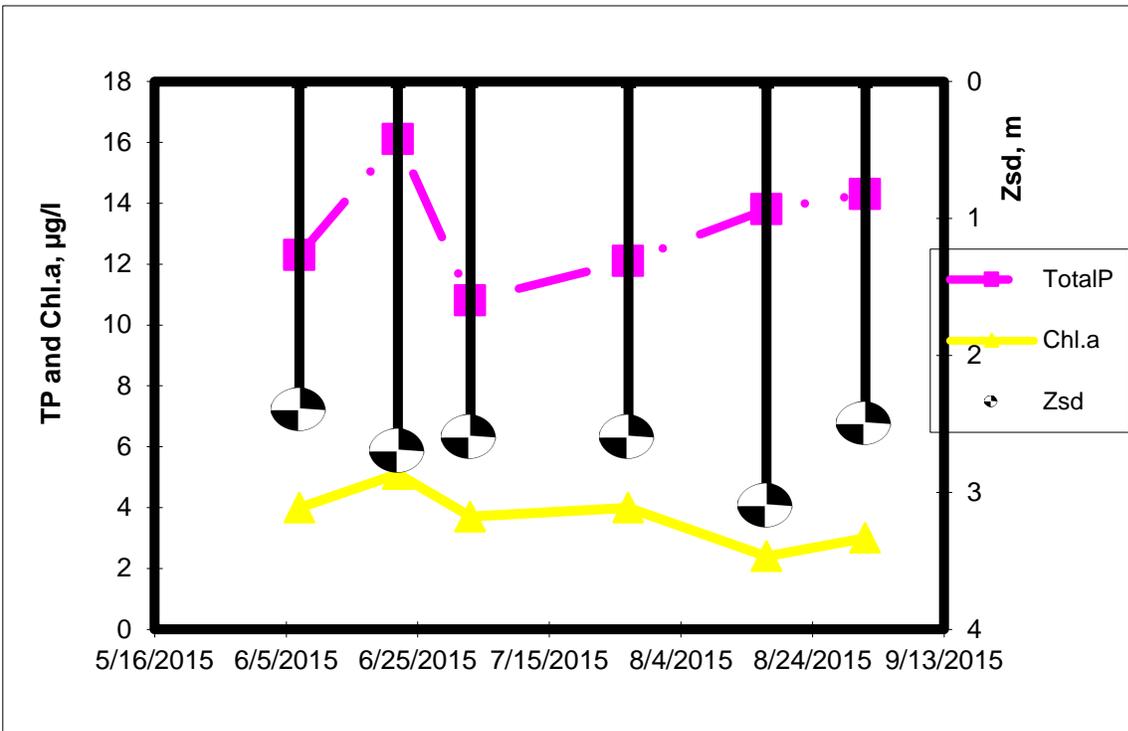
Additional Comments and Recommendations

Additional plant survey data should be collected to determine if invasive, exotic plants are found in the lake, and the extent to which aquatic plants influenced recreational assessments of Forest Lake, particularly given that “excessive weed growth” is frequently reported in the lake. Any nutrient loading sources to the lake should be evaluated given the recent rise in algae levels. Lake residents should report any shoreline algae blooms observed at the lake.

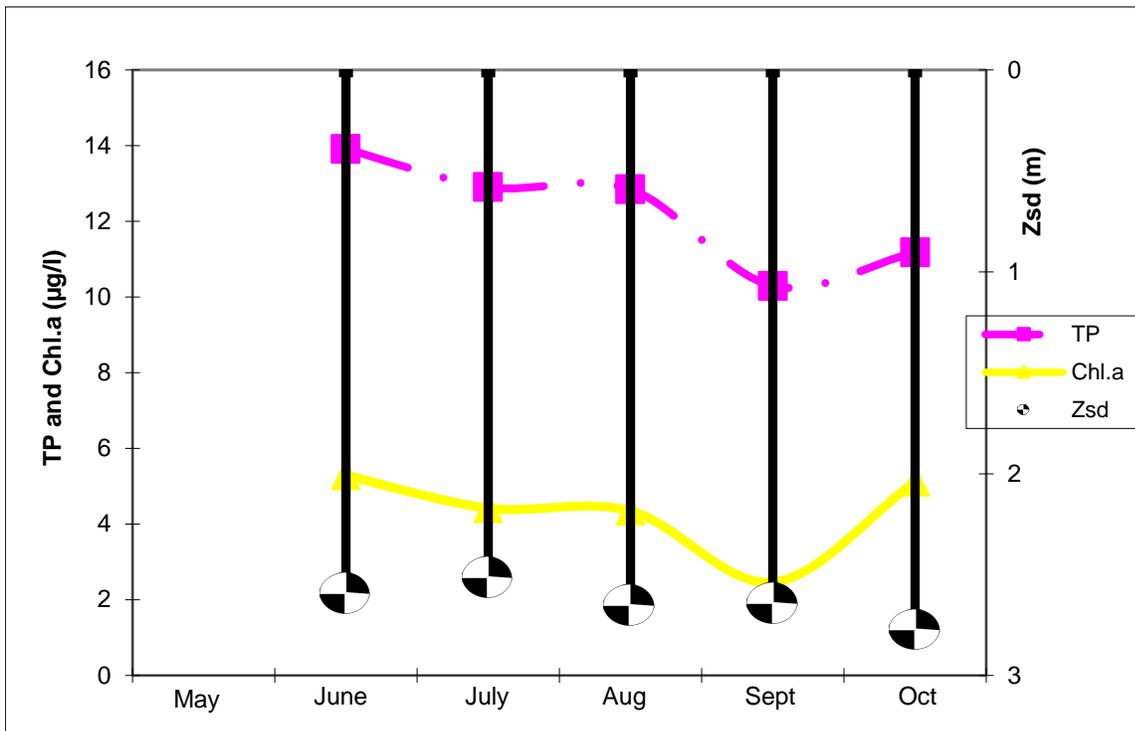
Aquatic Plant IDs-2015

None submitted for identification in 2015.

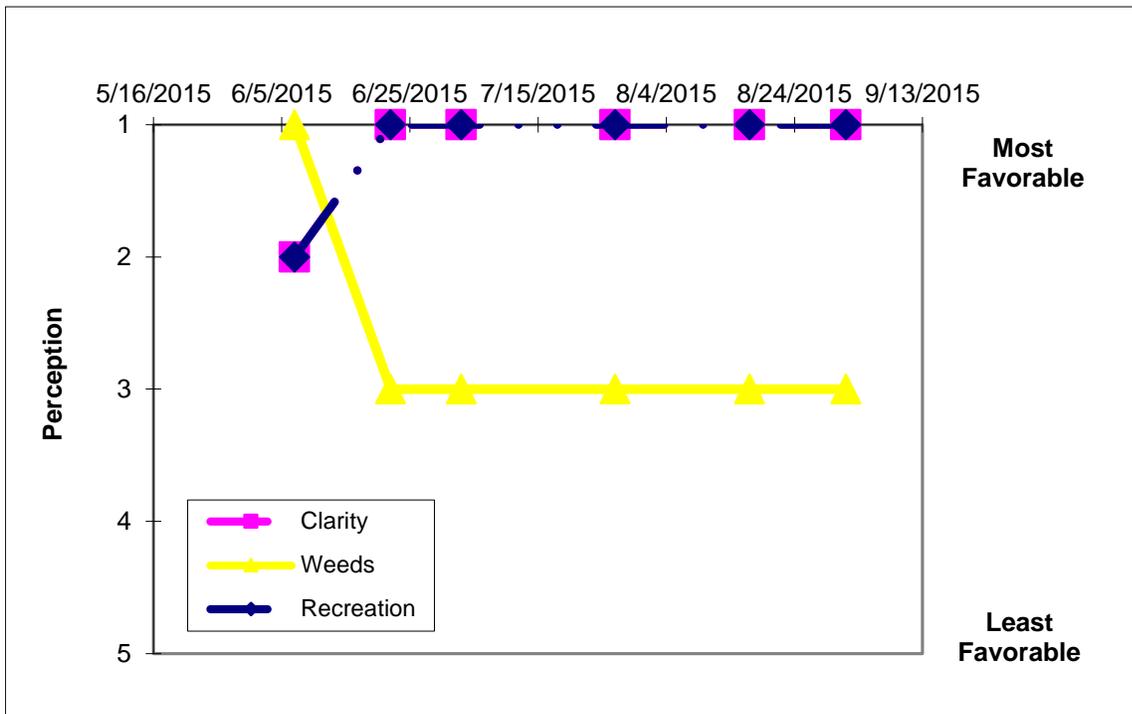
Time Series: Trophic Indicators, 2015



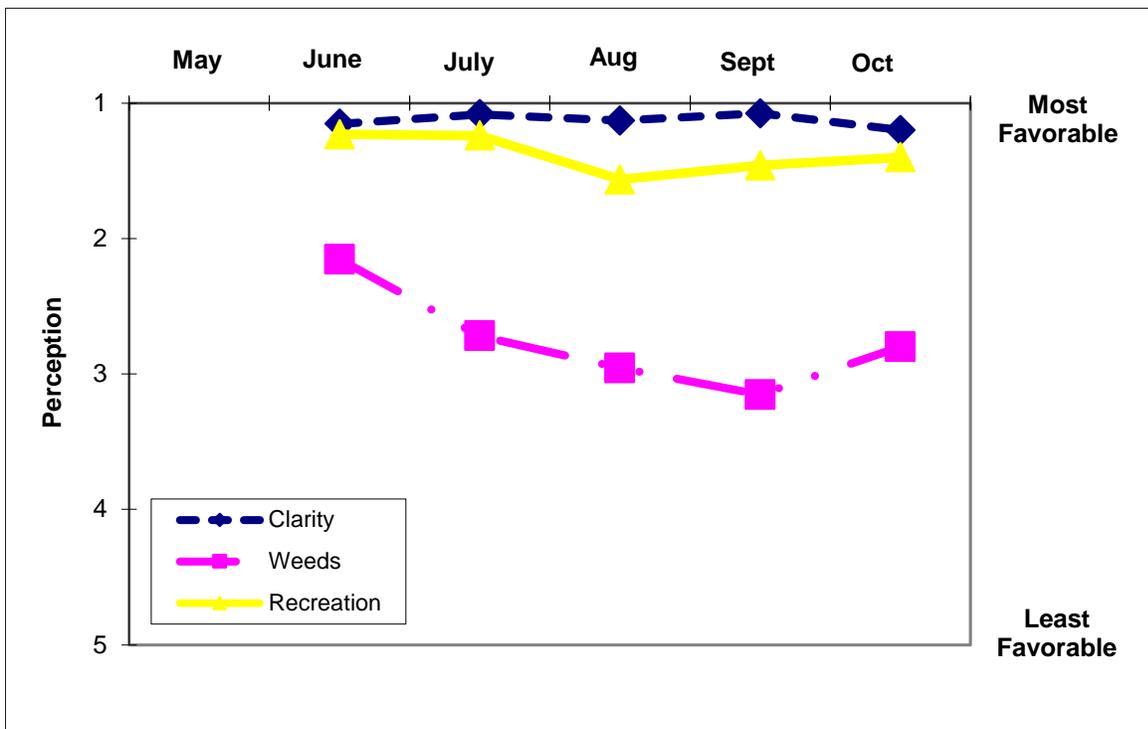
Time Series: Trophic Indicators, Typical Year (2001-2015)



Time Series: Lake Perception Indicators, 2015



Time Series: Lake Perception Indicators, Typical Year (2001-2015)



Appendix A- CSLAP Water Quality Sampling Results for Forest Lake

LNum	PName	Date	Zbot	Zsd	Zsamp	Tot.P	NO3	NH4	TDN	TN/TP	TColor	pH	Cond25	Ca	Chl.a	Cl
177	Forest L	6/2/2001	3.5	2.60	1.5	0.013	0.01				25	6.51	34		5.10	
177	Forest L	6/25/2001	3.1	2.60	1.5	0.014	0.01				23	6.54	82		6.10	
177	Forest L	7/9/2001	3.5	2.85	1.5	0.012	0.01				19	7.63	94		4.88	
177	Forest L	7/24/2001	3.3	2.25		0.007	0.01				15	7.37	105			
177	Forest L	8/6/2001	2.7	2.70	1.5	0.013	0.01				11	7.72	114		0.68	
177	Forest L	8/19/2001	3.0	2.48	1.5	0.010	0.01				14	7.26	127		1.78	
177	Forest L	9/5/2001	2.7	2.30	1.5	0.008	0.01				10	7.16	137		1.00	
177	Forest L	9/17/2001	2.5	2.20	2.2	0.007	0.01				10	7.98	144		2.63	
177	Forest L	06/23/02	3.0	2.35	1.5	0.013	0.07	0.09	0.44	76.46	25	7.10		1.5	2.86	
177	Forest L	07/01/02		2.55	3.0	0.016	0.00	0.09	0.36	50.49	32	7.36	84		2.37	
177	Forest L	07/15/02	3.3	2.75		0.011	0.00	0.06	0.51	105.17	11	6.87	106		1.12	
177	Forest L	07/29/02	3.1	2.68	1.5	0.010	0.02	0.02	0.36	76.89	14	7.43	109		5.74	
177	Forest L	08/12/02	3.3	2.55	1.5	0.018	0.19	0.07	0.66	78.83	13			3.2	3.86	
177	Forest L	08/26/02	2.8	2.55	1.5	0.013	0.02	0.08	0.54	90.09	17	7.21	124		6.03	
177	Forest L	09/09/02					0.00	0.12	0.51		12	7.17	136		0.77	
177	Forest L	09/30/02		2.40	1.5	0.009	0.01	0.09	2.60	665.09	14	7.17	110		1.42	
177	Forest L	10/15/02	2.4	2.20	1.5		0.00	0.03	0.36		13	7.38	124		10.24	
177	Forest L	7/8/2003	3.0	2.75		0.015	0.01	0.06	0.29	43.11	33	7.13	118	8.6	3.91	
177	Forest L	8/18/2003	3.3	3.25		0.010	0.00	0.02	0.31	66.07	38	7.13	88		4.80	
177	Forest L	8/25/2003	2.8	1.80	0.8	0.019	0.01	0.05	0.21	24.26	36	6.92	93		9.66	
177	Forest L	8/31/2003	3.1	2.65	1.5	0.015	0.04	0.01			37	7.35	108		2.87	
177	Forest L	9/16/2003	2.5	2.50	1.5		0.02	0.02	0.28		25	7.41	91	7.6	1.85	
177	Forest L	6/7/2004	3.4	2.55		0.015	0.01	0.02			25	6.53	99		1.69	
177	Forest L	6/28/2004	3.5	2.75			0.02	0.04	0.89		18	6.62	106		1.20	
177	Forest L	7/19/2004	3.3	2.38			0.28	0.02	1.28		16	6.63	97		1.50	
177	Forest L	8/3/2004	3.3	2.25		0.015	0.02	0.01	0.48	69.01	41	6.90	44		9.50	
177	Forest L	8/17/2004	3.3	2.95	1.5	0.012	0.01	0.01	0.21	38.77	34	7.55	81	9.7	5.80	
177	Forest L	9/6/2004	3.2	3.00	1.5	0.009	0.01	0.02	0.29	69.28	34	7.52	74		3.40	
177	Forest L	6/11/2005	3.3	3.05		0.013	0.07	0.02	0.15	25.17	15	7.54		7.8	3.20	
177	Forest L	7/11/2005	3.2	2.40		0.010	0.01	0.01	0.16	34.15	19	7.20	87			
177	Forest L	7/25/2005	3.3	2.58		0.011	0.01	0.01	0.16	33.96	35	7.80	98		2.24	
177	Forest L	8/17/2005	2.8	2.80		0.009	0.01	0.01	0.29	74.30	51	8.52	115		1.93	
177	Forest L	9/4/2005	3.3	3.25	1.5	0.011	0.01	0.01	0.18	34.26	9	7.58	125	9.4	4.10	
177	Forest L	10/4/2005	3.1	3.13		0.016	0.01	0.01	0.21	28.88	25	7.51	126		3.46	
177	Forest L	6/25/2006	3.3	2.65		0.009	0.02	0.01	0.43	100.86	22	7.17	76	6.0	4.30	
177	Forest L	7/24/2006	3.6	2.10		0.014	0.02	0.02	0.43	67.73	45	6.65	57		3.83	
177	Forest L	7/15/2007	3.4	2.25		0.022	0.03	0.05	0.60	61.4	25	8.54	238	8.3	8.19	
177	Forest L	7/25/2007	3.1	2.70	2.5	0.013	0.01	0.01	0.46	79.6	24	7.51	99		4.69	
177	Forest L	8/16/2007	2.9	2.85		0.011	0.01	0.01	0.48	97.1	17	8.55	94		2.05	
177	Forest L	8/30/2007	2.9	2.85		0.009	0.01	0.02	0.54	129.1	15	8.59	116		6.25	
177	Forest L	9/18/2007	2.4	2.35		0.011	0.00	0.01	0.53	111.5	15	8.15	140	9.7	1.28	
177	Forest L	10/2/2007	2.9	2.85		0.009	0.01	0.01	0.57	136.4	15	7.61	113		2.36	
177	Forest L	6/16/2008	3.3	2.78	1.5	0.014	0.01	0.02	0.30	47.56	12	7.57	99	8.7	4.10	
177	Forest L	7/1/2008	3.3	2.90	1.5	0.013	0.02	0.02	0.33	56.64	13	8.15	116		3.92	
177	Forest L	7/15/2008	3.3	2.88	1.5	0.013	0.02	0.03	0.23	40.58	16	7.87	144		4.26	
177	Forest L	7/29/2008	3.3	2.15	1.5	0.020	0.03	0.02	0.26	29.05	52	7.61	73		9.27	
177	Forest L	8/13/2008	3.3	2.85	1.5	0.012	0.02	0.02	0.18	31.91	32	7.97	81	6.1	5.33	
177	Forest L	9/9/2008	3.2	2.71	1.5	0.009	0.00	0.06	0.24	56.53	21	8.00	84		3.57	
177	Forest L	10/15/2008	3.2	3.00	1.5	0.009	0.01	0.01	0.24	60.10	16	7.21	94		2.54	
177	Forest L	06/28/2009	3.1	3.10	1.5	0.015	0.01	0.02	0.19	29.23	49	8.38	92	7.4	5.17	
177	Forest L	07/20/2009	3.2	2.83	1.5	0.011	0.04	0.03	0.26	53.34	38	7.68	63		5.11	
177	Forest L	08/03/2009	3.2	2.05	1.5	0.024	0.01	0.01	0.26	23.55	66	7.55	48		1.81	
177	Forest L	08/18/2009	3.3	2.78	1.5	0.009	0.03	0.02	0.24	61.14	45	7.19	62		5.60	
177	Forest L	09/14/2009	3.2	2.80	1.5	0.014	0.01	0.02	0.27	44.49	50	7.74	83	9.3	7.40	
177	Forest L	10/05/2009	3.1	2.70	1.5	0.010	0.02	0.01	0.21	44.21	37	7.11	91		7.00	
177	Forest L	6/17/2010	2.9	2.50		0.024	0.02	0.02	0.45	41.16	22	7.49	118	7.9	9.70	
177	Forest L	7/12/2010	3.2	2.83	1.5	0.012	0.01	0.02	0.28	49.54	11	7.90	129		3.60	
177	Forest L	8/2/2010	2.9	2.43	1.5	0.012	0.02	0.02	0.21	37.95	18	7.46	147		4.90	
177	Forest L	8/18/2010	2.8	2.82		0.012	0.01	0.01	0.27	47.40	10	7.49	160		3.90	
177	Forest L	8/28/2010	3.2	2.68		0.013	0.01	0.02	0.45	79.55	11	7.72	137	11.0	4.60	
177	Forest L	7/10/2012	3.2	2.80	1.5	0.014	0.05	0.02	0.26	42.38	31	8.11	90	7.7	5.80	
177	Forest L	7/23/2012	3.0	2.28	1.5	0.012	0.04	0.03	0.34	61.97	24	7.96	102		3.50	
177	Forest L	8/12/2012	3.2	2.45	1.5	0.013	0.02	0.04	0.27	45.68	19	7.25	105		8.80	

LNum	PName	Date	Zbot	Zsd	Zsamp	Tot.P	NO3	NH4	TDN	TN/TP	TColor	pH	Cond25	Ca	Chl.a	Cl
177	Forest L	9/2/2012	3.1	3.00	1.5	0.012	0.01	0.03	0.40	75.41	16	6.93	116		2.20	
177	Forest L	7/8/2013	2.9	2.23	1.5	0.016	0.01	0.03	0.17	23.53	27	6.88	86		8.80	
177	Forest L	7/22/2013	3.0	1.98	1.5	0.016			0.29	41.07	25	7.25	87		2.50	
177	Forest L	8/5/2013	3.1	2.20	1.5	0.012	0.01	0.02	0.17	31.32	24	7.81	95		2.40	
177	Forest L	8/21/2013	3.2	3.13	1.5	0.010			0.36	78.50	22	8.30	118		1.30	
177	Forest L	9/3/2013	3.1	2.95	1.5	0.011	0.01	0.01	0.29	60.55	20	8.56	126		0.60	
177	Forest L	9/26/2013	2.4	2.40	1.5	0.010			0.34	77.92	11	7.73	142		1.30	
177	Forest L	6/21/2014	3.2	1.70	1.5	0.008	0.03	0.02	0.37	100.77	38	6.68	71	5.7	16.30	
177	Forest L	7/18/2014	2.5	2.10	1.5	0.012			0.21	40.21	23	6.77	89		5.30	
177	Forest L	7/30/2014	3.0	2.50	1.5	0.010	0.01	0.03	0.28	58.60	2	7.71	99		3.50	
177	Forest L	8/21/2014	2.9	2.90	1.5	0.010			0.27	61.69	18	7.76	110		3.80	
177	Forest L	6/7/2015	3.1	2.40	1.5	0.012	0.02	0.03	0.27	22.28	23	7.26	90	6.8	4.00	
177	Forest L	6/22/2015	2.9	2.70	1.5	0.016			0.16	9.75	18	7.37	100		5.10	
177	Forest L	7/3/2015	3.0	2.60	1.5	0.011	0.01	0.03	0.34	31.67	21	7.67	87		3.70	18.4
177	Forest L	7/27/2015	2.6	2.60	1.5	0.012			0.29	24.05	20	7.71	114		4.00	
177	Forest L	8/17/2015	3.1	3.10	1.5	0.014	0.03	0.03	0.79	57.46	15	7.99	107	8.0	2.40	
177	Forest L	9/1/2015	2.5	2.50	1.5	0.014			1.45	101.54	15	8.19	127		3.00	

LNum	PName	Date	Type	TAir	TH20	QA	QB	QC	QD	QE	QF	QG	AQ-PC	AQ-Chla	MC-LR	Ana-a	Cylin	FP-Chl	FP-BG	HAB form	Shore HAB
177	Forest L	6/2/2001	epi	17	16	1	1	1	5												
177	Forest L	6/25/2001	epi	28	24	1	3	1													
177	Forest L	7/9/2001	epi	28	24	1	3	1													
177	Forest L	7/24/2001	epi	32	28	1	2	2													
177	Forest L	8/6/2001	epi	31	28	1	4	1	2												
177	Forest L	8/19/2001	epi	28	24	2	3	3													
177	Forest L	9/5/2001	epi	22	21	1	3	2	2												
177	Forest L	9/17/2001	epi	21	18	1	3	3	2												
177	Forest L	06/23/02	epi	31	24	2	1	2	8												
177	Forest L	07/01/02	epi	32	28	2	1	2	8												
177	Forest L	07/15/02	epi	20	26	1	3	1													
177	Forest L	07/29/02	epi	30	27	1	3	1													
177	Forest L	08/12/02	epi	31	27	1	3	1													
177	Forest L	08/26/02	epi	26	23	2	2	2													
177	Forest L	09/30/02	epi	14	18	1	3	2													
177	Forest L	10/15/02	epi	6	12	2	2	2													
177	Forest L	7/8/2003	epi	29	27	1	2	1	0												
177	Forest L	8/18/2003	epi	31	28	1	2	1	0												
177	Forest L	8/25/2003	epi	32	26	1	3	1	0												
177	Forest L	8/31/2003	epi	21	22	1	2	1	0												
177	Forest L	9/16/2003	epi	19	19	2	2	2	0												
177	Forest L	6/7/2004	epi	27	19	1	2	1	0												
177	Forest L	6/28/2004	epi	21	22	1	3	1	0												
177	Forest L	7/19/2004	epi	29	28	1	3	1	0												
177	Forest L	8/3/2004	epi	24	25	1	3	1	0												
177	Forest L	8/17/2004	epi	23	24	1	3	1	0												
177	Forest L	9/6/2004	epi	21	22	1	3	1	0												
177	Forest L	6/11/2005	epi	26	26	1	2	1	0												
177	Forest L	7/11/2005	epi	28	26		2	1	0												
177	Forest L	7/25/2005	epi	27	27	1	3	2	0												
177	Forest L	8/17/2005	epi	30	27	1	3	2	2												
177	Forest L	9/4/2005	epi	23	23	1	4	2	2												
177	Forest L	10/4/2005	epi	27	18	1	3	2	0												
177	Forest L	6/25/2006	epi	30	26	1	2	1	0												
177	Forest L	7/24/2006	epi	33	23	1	3	1	0												
177	Forest L	7/15/2007	epi	27	24	1	2	1	0												
177	Forest L	7/25/2007	epi	29	24	1	3	1	0												
177	Forest L	8/16/2007	epi	27	26	1	3	1	0												
177	Forest L	8/30/2007	epi	34	26	1	3	2	2												
177	Forest L	9/18/2007	epi	24	18	1	3	1	0												
177	Forest L	10/2/2007	epi	25	20	1	3	1	0												
177	Forest L	6/16/2008	epi	27	26	1	2	1	0												
177	Forest L	7/1/2008	epi	27	27	1	3	1	0												
177	Forest L	7/15/2008	epi	30	27	1	3	1	0												
177	Forest L	7/29/2008	epi	23	23	1	3	1	0												
177	Forest L	8/13/2008	epi	21	21	1	3	1	0												

LNum	PName	Date	Type	TAir	TH20	QA	QB	QC	QD	QF	QG	AQ-PC	AQ-Chla	MC-LR	Ana-a	Cylin	FP-Chl	FP-BG	HAB form	Shore HAB
177	Forest L	9/9/2008	epi	30	25	1	3	1	0											
177	Forest L	10/15/2008	epi	12	14	1	3	1	0											
177	Forest L	06/28/2009	epi	25	24	1	3	1	0											
177	Forest L	07/20/2009	epi	28	24	1	3	1	0											
177	Forest L	08/03/2009	epi	25	23	1	3	1	1											
177	Forest L	08/18/2009	epi	30	26	1	3	1	6											
177	Forest L	09/14/2009	epi	32	23	1	3	1	0			15.52								
177	Forest L	10/05/2009	epi	18	16	1	3	1	0			6.77								
177	Forest L	6/17/2010	epi	20	22	1	3	1	0	0	0									
177	Forest L	7/12/2010	epi	33	30	1	3	3	2	0	0									
177	Forest L	8/2/2010	epi	32	28	2	3	3	2	0	0									
177	Forest L	8/18/2010	epi	31	27	1	3	2	2	0	0									
177	Forest L	8/28/2010	epi	27	25	1	3	3	2	0	0									
177	Forest L	7/10/2012	epi	29	28	1	3	1	0	0	0	1.50	0.30	<0.30	<0.328		0.60	0.00	F	
177	Forest L	7/23/2012	epi	37	29	1	4	2	2	0	0	1.20	0.40	<0.30	<0.585		1.23	0.29	I	
177	Forest L	8/12/2012	epi	31	29	1	4	3	2			3.30	1.00	<0.30	<0.537		2.77	0.54	I	
177	Forest L	9/2/2012	epi	28	27	1	5	1	2	0	0	2.50	0.40	<0.30	<0.580		1.95	1.27	I	
177	Forest L	7/8/2013	epi	34	28	1	1	1	0	0	0	9.90	5.10	0.44	<0.510		3.90	0.00	F	
177	Forest L	7/22/2013	epi	32	30	2	3	1	1	0	0	2.90	3.50	<0.30	<0.370		3.50	0.00		
177	Forest L	8/5/2013	epi	27	27	1	3	1	0	0	0	1.30	2.70	<0.30	<0.390		1.30	0.00	I	I
177	Forest L	8/21/2013	epi	37	26	1	3	1	0	0	0	1.40	1.10	<0.30	<0.570		0.90	0.20	I	I
177	Forest L	9/3/2013	epi	28	28	1	3	1	0	0	0			0.45	<19.130		1.80	0.00	I	I
177	Forest L	9/26/2013	epi	21	21	1	3	1	0	0	0	1.00	1.10	<0.30	<10.600		0.60	0.00	I	I
177	Forest L	6/21/2014	epi	24	24	1	2	2	6	0	0	4.00	0.90	<0.58	<0.44	<0.002	2.80	0.00	i	i
177	Forest L	7/18/2014	epi	27	27	1	3	1	0	0	0	3.20	0.60	<0.39	<0.24	<0.002	2.30	0.00	i	i
177	Forest L	7/30/2014	epi	26	26	1	3	1	0	0	0	3.20	0.60	<0.31	<0.24	<0.002			i	i
177	Forest L	8/21/2014	epi	21	24	1	3	2	0	0	0	2.50	0.40	<0.39	<0.03	<0.001	1.00	0.00	i	i
177	Forest L	6/7/2015	epi	27	23	2	1	2	0	0	0	3.60	5.70	<0.77	<0.126	<1.739	1.80	0.00	I	I
177	Forest L	6/22/2015	epi	32	25	1	3	1	0	0	0	4.30	0.70	<0.55	<0.004	<0.024	1.40	0.00	I	I
177	Forest L	7/3/2015	epi	25	24	1	3	1	0	0	0	1.30	0.80	<0.63	<0.010	<32.565	1.70	0.00	I	
177	Forest L	7/27/2015	epi	31	29	1	3	1	0	0	0	1.20	0.30	<0.23	<0.002	<0.014	0.70	0.00	I	I
177	Forest L	8/17/2015	epi	28	28	1	3	1	0	0	6	0.05	0.40	<0.28	<0.008	<0.021	0.80	0.00	I	I
177	Forest L	9/1/2015	epi	30	26	1	3	1	0	0	0	2.90	0.40	<0.39	0.00	<0.031	1.00	0.00	I	I

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 = epilimnion or surface; bot = 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, Cl	calcium, chloride (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)	variable	none
Cyl	Cylindrospermopsin (ug/l)	0.1 ug/l	none
FP-Chl, FP-BG	Fluoroprobe total chlorophyll, fluoroprobe blue-green chlorophyll (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		
HAB form, Shore HAB	HAB evaluation; A = spilled paint, B = pea soup, C = streaks, D = green dots, E = bubbling scum, F = green/brown tint, G = duckweed, H = other, I = no bloom		

Appendix B- Priority Waterbody Listing for Forest Lake

Forest Lake (1104-0193)

NoKnownImpct

Waterbody Location Information

Revised: 12/11/2006

Water Index No:	H-391-14-1-P340	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020001/110	Str Class:	A
Waterbody Type:	Lake	Reg/County:	5/Warren Co. (57)
Waterbody Size:	25.7 Acres	Quad Map:	THE GLEN (G-25-3)
Seg Description:	entire lake		

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

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

Known: ---

Suspected: ---

Possible: ---

Source(s) of Pollutant(s)

Known: ---

Suspected: ---

Possible: ---

Resolution/Management Information

Issue Resolvability: 8 (No Known Use Impairment)

Verification Status: (Not Applicable for Selected RESOLVABILITY)

Lead Agency/Office: n/a

Resolution Potential:

TMDL/303d Status: n/a ()

Further Details

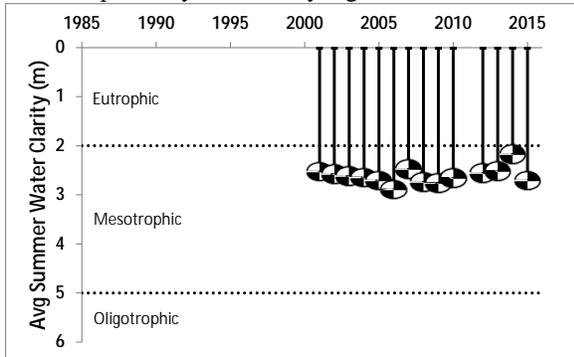
Forest Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 2001 and continuing through 2005. An Interpretive Summary report of the findings of this sampling was published in 2006. These data indicate that the lake continues to be best characterized as mesotrophic, or moderately productive. Phosphorus levels in the lake regularly fall below criteria that would indicate impacted recreational uses and transparency measurements consistently satisfy what is recommended for swimming beaches, despite the shallow depth of the lake. (DEC/DOW, BWAM/CSLAP, May 2006)

Public perception of the Forest Lake and its uses are also evaluated as part of the CSLAP program. These assessment also indicate recreational suitability of the lake to be highly favorable since the lake was first evaluated and continuing through the most recent assessment. Recreational conditions in the lake have been most often described as "could not be nicer" to "excellent" for most uses. The lake is usually described as "crystal clear." Although aquatic plant surveys have not been conducted through CSLAP, higher weed densities have been reported in the most recent years. Weed growth in the lake should continued to be monitored. (DEC/DOW, BWAM/CSLAP, May 2006)

Appendix C- Long Term Trends: Forest Lake

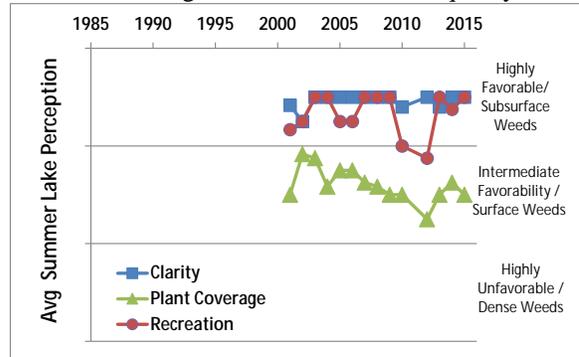
Long Term Trends: Water Clarity

- No clear trends, but slight ↓ since mid-2000s
- Most readings typical of *mesotrophic* lakes, probably affected by algae and color



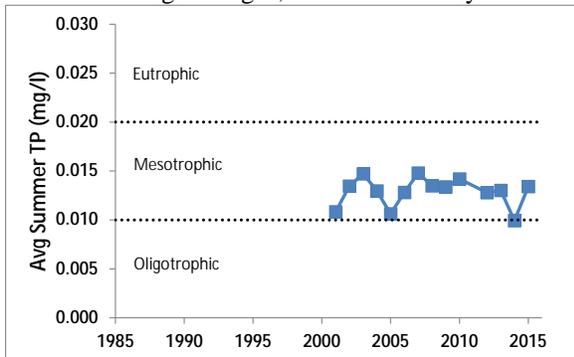
Long Term Trends: Lake Perception

- Long-term ↑ weed growth
- Recreational perception more closely linked to changes in weeds than water quality



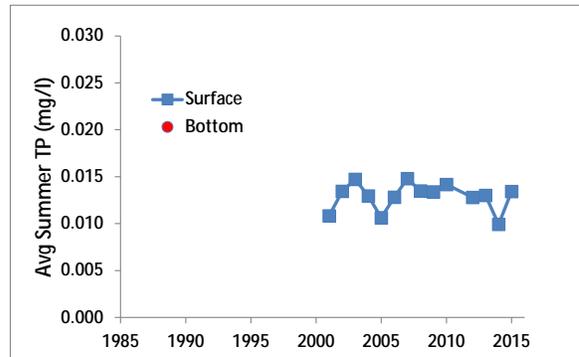
Long Term Trends: Phosphorus

- No long trend
- Most readings typical of *mesotrophic* lakes, in range of algae, lower than clarity



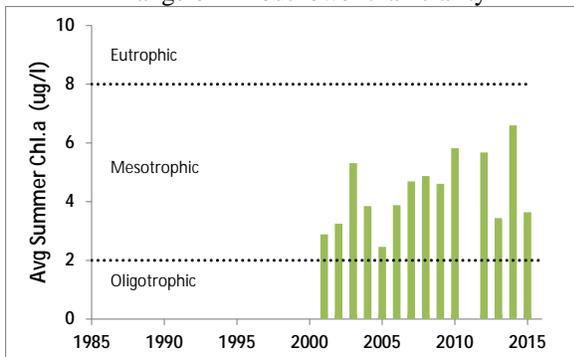
Long Term Trends: Bottom Phosphorus

- No bottom TP data
- Surface and bottom TP usually similar in shallow lakes



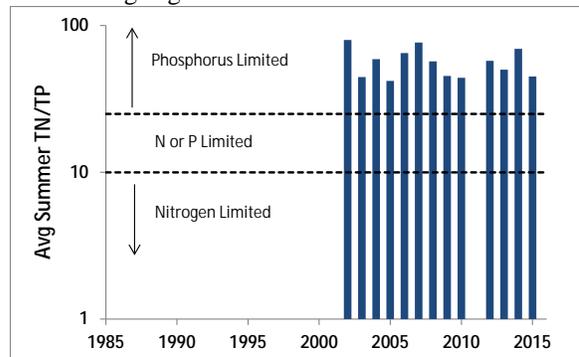
Long Term Trends: Chlorophyll a

- Slight rise in algae levels since mid-00s
- Most readings typical of *mesotrophic* lakes, in range of TP but lower than clarity



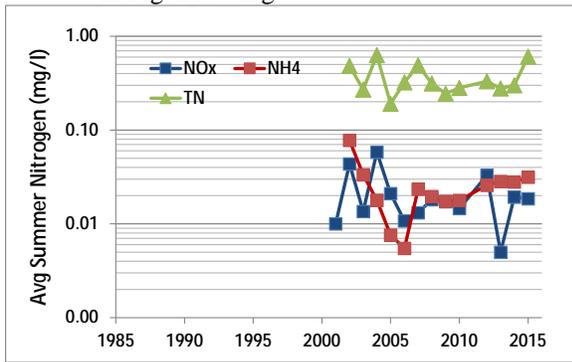
Long Term Trends: N:P Ratio

- No trends apparent
- Most readings indicate phosphorus limits algae growth



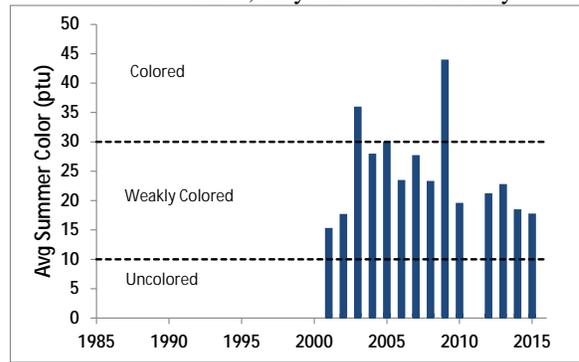
Long Term Trends: Nitrogen

- No trends apparent; readings highly variable
- Generally low NOx, ammonia, and total nitrogen readings



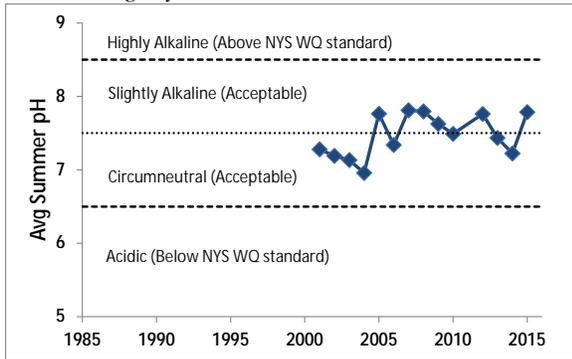
Long Term Trends: Color

- Slight ↓ since early 2000s peak
- Readings typical of *weakly colored* to *colored* lakes; may affect water clarity



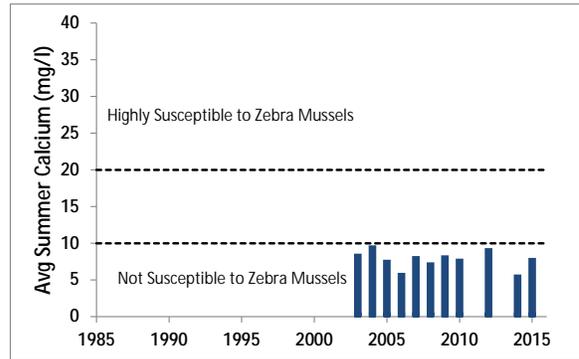
Long Term Trends: pH

- Long-term rise with some variability
- Most readings typical of *circumneutral* to *slightly alkaline* lakes



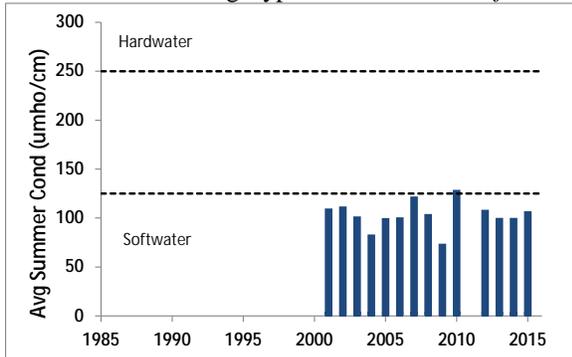
Long Term Trends: Calcium

- No trends apparent
- Most readings indicate low susceptibility to zebra mussels



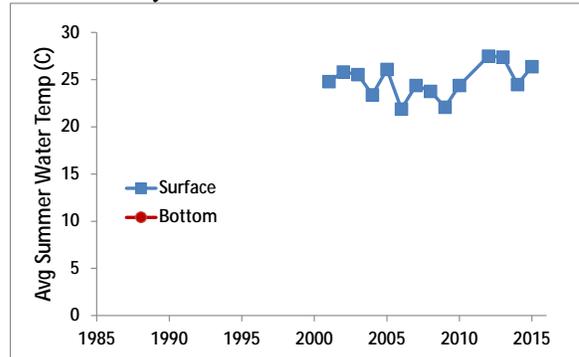
Long Term Trends: Conductivity

- No clear long-term trend with mostly stable readings
- Most readings typical of lakes with *soft water*



Long Term Trends: Water Temperature

- No trends apparent, but recent ↑
- Similar surface and bottom temperatures likely in shallow lakes



Appendix D: Algae Testing Results from SUNY ESF Study

Most algae are harmless, naturally present, and an important part of the food web. However excessive algae growth can cause health, recreational, and aesthetic problems. Some algae can produce toxins that can be harmful to people and animals. High quantities of these algae are called harmful algal blooms (HABs). CSLAP lakes have been sampled for a variety of HAB indicators since 2008. This was completed on selected lakes as part of a NYS DOH study from 2008-2010. In 2011, enhanced sampling on all CSLAP lakes was initiated through an EPA-funded project that has continued through the current sampling season. This study has evaluated a number of HAB indicators as follows:

- Algae types - blue green, green, diatoms, and "other"
- Algae densities
- Microscopic analysis of bloom samples
- Algal toxin analysis

Some of these results are reported in other portions of these reports. This appendix the seasonal change in blue green algae, other algae types, and the primary algal toxin (microcystin-LR, a liver toxin). Analysis was completed on open water samples and, for some lakes, shoreline samples that were collected when visual evidence of blooms were apparent. Results are compared to the DEC criteria of 25-30 ug/l blue green chlorophyll a and 20 ug/l microcystin-LR (based on the World Health Organization (WHO) threshold for unsafe swimming conditions) and the WHO provisional criteria for long-term protection of treated water supplies (= 1 ug/l microcystin-LR). The data for algae types are drawn from a high end fluorometer used by SUNY ESF. While these results are useful for timely approximation of lake conditions, they are not as accurate as the total chlorophyll results measured as a regular part of CSLAP since 1986 in all open water samples. Therefore these results are used judiciously in the assessment of sampled waterbodies.

Two separate samples are evaluated. A sample is taken at the CSLAP sample point at the deepest point of the lake at every sample session. In addition, shoreline samples can be taken when a bloom is visible. It should be noted that shoreline conditions can vary significantly over time and from one location to another. The shoreline bloom sampling results summarized below are not collected as routinely as open water samples, and therefore represent snapshots in time. It is assumed that sampling results showing high blue green algae and/or toxin levels indicate that algae blooms may be common and/or widespread on these lakes. However, the absence of elevated blue green algae and toxin levels does not assure the lack of shoreline blooms on these lakes. Elevated open water readings may indicate a higher likelihood of shoreline blooms, but in some lakes, these shoreline blooms have not been (well) documented.

The results from these samples are summarized within the CSLAP report for the lake.



Figure D1:
2013 Open Water Total and BGA Chl.a

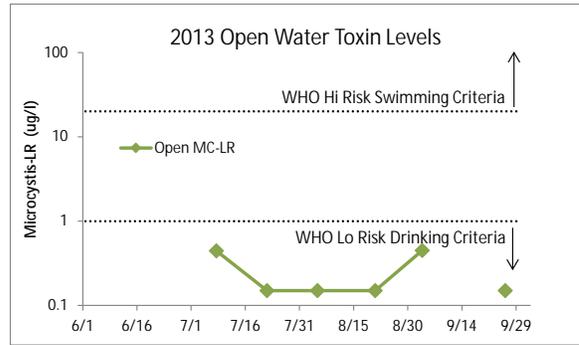


Figure D2:
2013 Open Water Microcystin-LR



Figure D3:
2013 Shoreline Total and BGA Chl.a

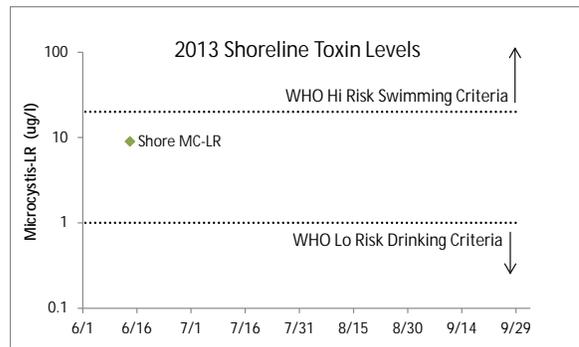


Figure D4:
2013 Shoreline Microcystin-LR

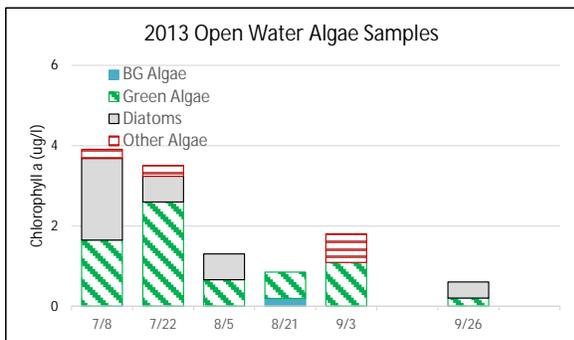


Figure D5:
2013 Open Water Algae Types

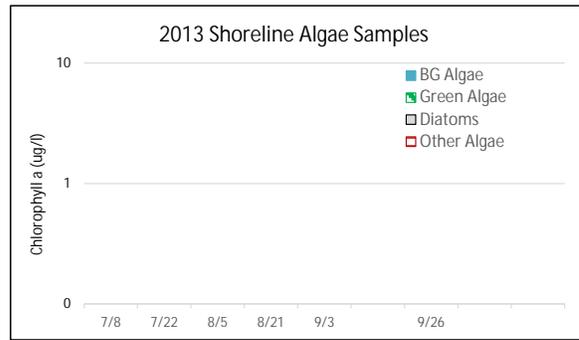


Figure D6:
2013 Shoreline Algae Types

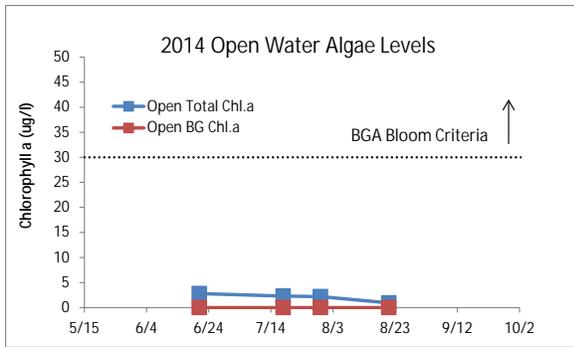


Figure D7:
2014 Open Water Total and BGA Chl.a

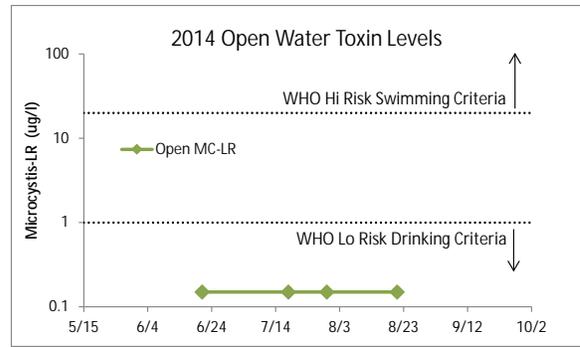


Figure D8:
2014 Open Water Microcystin-LR

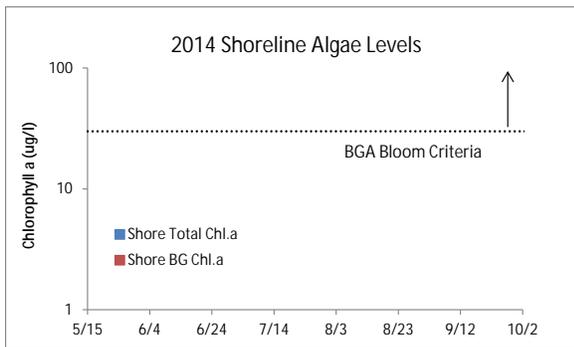


Figure D9:
2014 Shoreline Total and BGA Chl.a

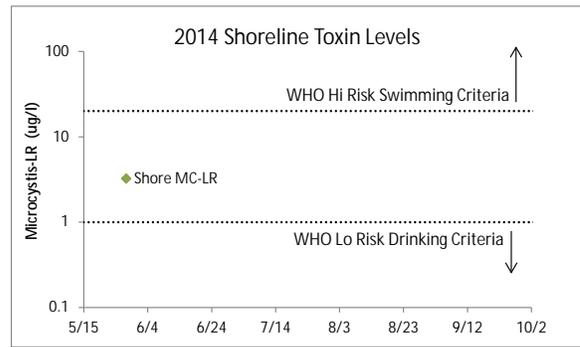


Figure D10:
2014 Shoreline Microcystin-LR

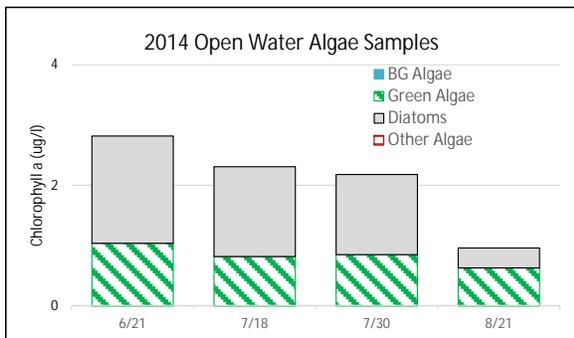


Figure D11:
2014 Open Water Algae Types

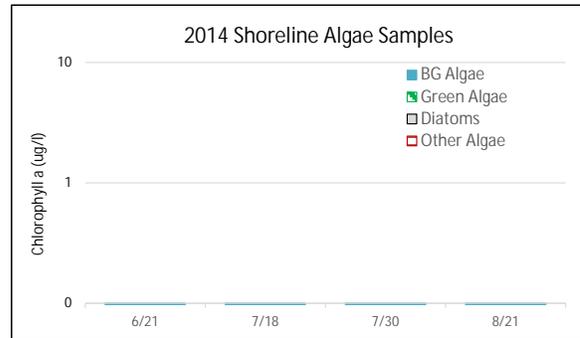


Figure D12:
2014 Shoreline Algae Types

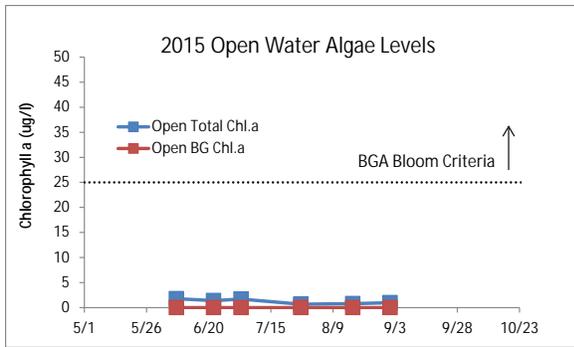


Figure D13:
2015 Open Water Total and BGA Chl.a

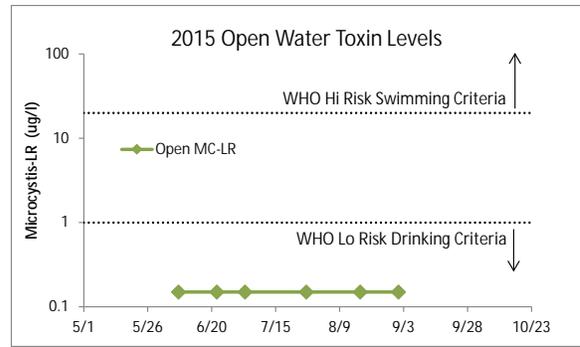


Figure D14:
2015 Open Water Microcystin-LR

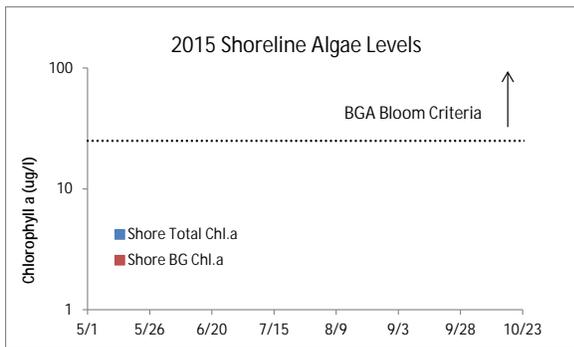


Figure D15:
2015 Shoreline Total and BGA Chl.a

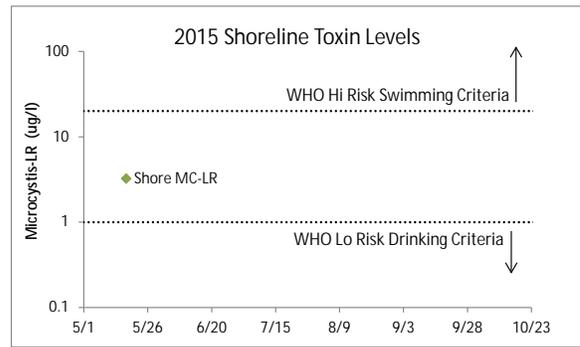


Figure D16:
2015 Shoreline Microcystin-LR

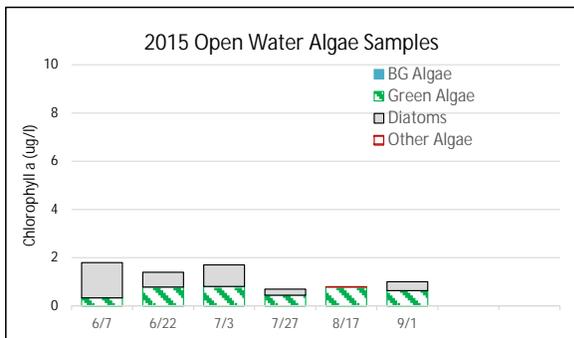


Figure D17:
2015 Open Water Algae Types

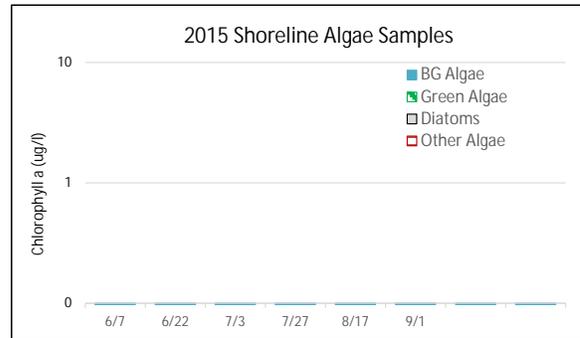


Figure D18:
2015 Shoreline Algae Types

Appendix E: AIS Species in Warren County

The table below shows the invasive aquatic plants and animals that have been documented in Warren County, as cited in either the iMapInvasives database (<http://www.imapinvasives.org/>) or in the NYSDEC Division of Water database. These databases may include some, but not all, non-native plants or animals that have not been identified as “Prohibited and Regulated Invasive Species” in New York state regulations (6 NYCRR Part 575; http://www.dec.ny.gov/docs/lands_forests_pdf/islist.pdf).

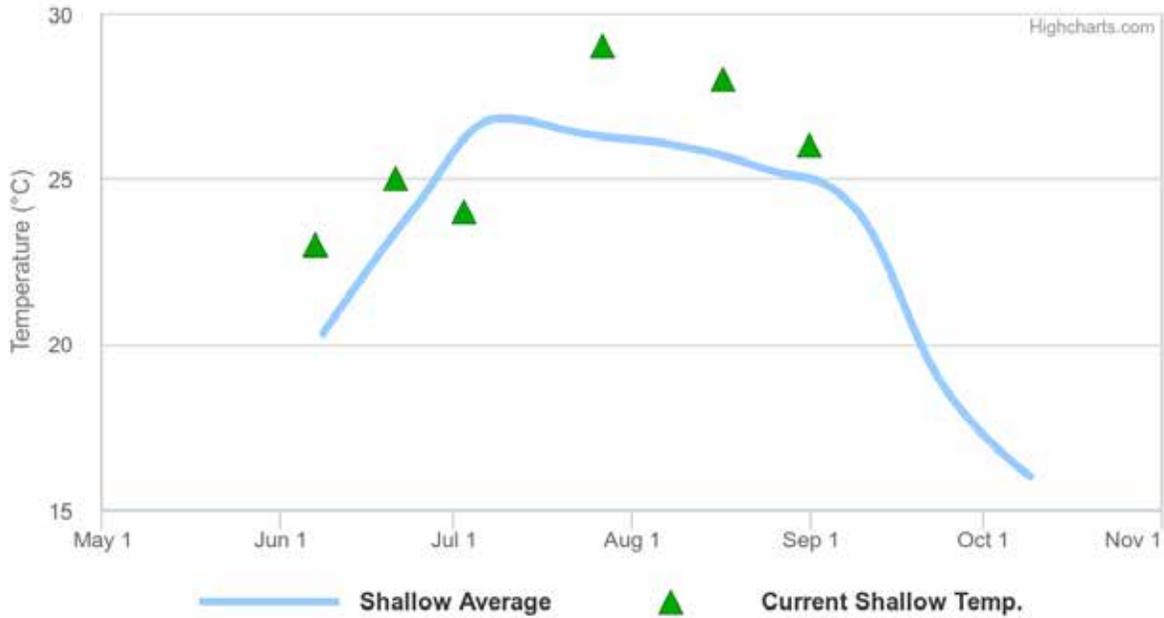
This list is not complete, but instead represents only those species that have been reported and verified within the county. If any additional aquatic invasive species (AIS) are known or suspected in these or other waterbodies in the county, this information should be reported through iMap invasives or by contacting NYSDEC at dowinfo@dec.ny.gov.

Aquatic Invasive Species – Warren County			
Waterbody	Kingdom	Common name	Scientific name
Brant Lake	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Brant Lake	Plant	Curly leafed pondweed	<i>Potamogeton crispus</i>
Brant Lake	Plant	Curly leafed pondweed	<i>Potamogeton crispus</i>
Crandall Pond	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Daggett Pond	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Friends Lake	Animal	Banded mystery snail	<i>Viviparus georgianus</i>
Glen Lake	Animal	Zebra mussel	<i>Dreissena polymorpha</i>
Glen Lake	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Glen Lake	Plant	Brittle naiad	<i>Najas minor</i>
Glen Lake	Plant	Curly leafed pondweed	<i>Potamogeton crispus</i>
Hovey Pond	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Lake George	Animal	Spiny waterflea	<i>Bythotrephes longimanus</i>
Lake George	Animal	Asian clam	<i>Corbicula fluminea</i>
Lake George	Animal	Zebra mussel	<i>Dreissena polymorpha</i>
Lake George	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Lake George	Plant	Brittle naiad	<i>Najas minor</i>
Lake George	Animal	Virile crayfish	<i>Orconectes virilis</i>
Lake George	Plant	Curly leafed pondweed	<i>Potamogeton crispus</i>
Lake Luzerne	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Lake Luzerne	Plant	Curly leafed pondweed	<i>Potamogeton crispus</i>
Lake Sunnyside	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Loon Lake	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
North Pond	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Schroon Lake	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>

Waterbody	Kingdom	Common name	Scientific name
Schroon Lake	Plant	Curly leafed pondweed	<i>Potamogeton crispus</i>
Trout Lake	Animal	Rusty crayfish	<i>Orconectes rusticus</i>

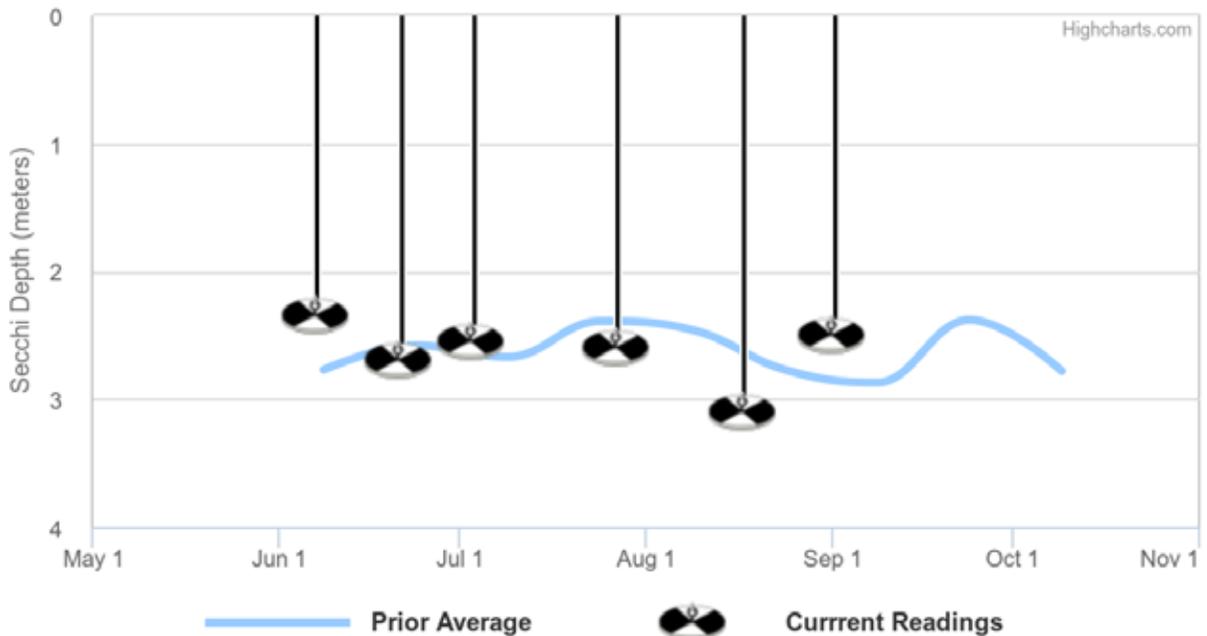
Appendix F: Current Year vs. Prior Averages for Forest Lake-W

Current Year Water Temperatures vs. Prior Average



This year's shallow water sample temperatures are tending to be higher than normal when compared to the average of readings collected from 2001 to 2014.

Current Year Secchi Readings vs. Prior Average



This year's session Secchi readings are tending to be lower than normal when compared to the average of readings collected from 2001 to 2014

Appendix G: Watershed and Land Use Map for Forest Lake

This watershed and land use map was developed using USGS StreamStats and ESRI ArcGIS using the 2006 land use satellite imagery. The actual watershed map and present land uses within this watershed may be slightly different due to the age of the underlying data and some limits to the use of these tools in some geographic regions and under varying flow conditions. However, these maps are intended to show the approximate extent of the lake drainage basin and the major land uses found within the boundaries of the basin.

