

Lake Oscaleta Questions and Answers, 2015 CSLAP

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

A1. Conditions in Lake Oscaleta were close to normal in 2015. Water clarity was slightly higher than usual, particularly early in the summer, and no shoreline blooms were reported.

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

A2. Chloride sampling results were typical of lakes with moderate to high impacts from road salt runoff, although no biological impacts have been measured. This may be consistent with the steady increase in conductivity.

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

A3. Lake Oscaleta had slightly higher water clarity, and slightly lower nutrient levels and algae levels, than other nearby lakes. Aquatic plant coverage is comparable to the plant coverage in most of these nearby lakes.

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

A4. Conductivity readings have increased over the last decade, perhaps related to slightly elevated chloride levels. Phosphorus readings rose slightly at the surface and lake bottom from 2007 to 2015, although this has not resulted in any other (apparent) trophic changes..

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

A5. Water quality conditions already indicated a potential susceptibility to blooms, but these may still occur. The rise in phosphorus may have exacerbated these conditions. Potential sources of conductivity (eroding materials) should be evaluated, given the small rise in conductivity over the last decade.

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 will help to improve lake health by reducing nutrient and sediment loading to the lake. This may be particularly important given the apparent rise in conductivity in recent years. 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				
Potable Water				Not applicable
Swimming				No impacts
Recreation				Algae levels
Aquatic Life				High pH
Aesthetics				Invasive plants
Habitat				Invasive plants
Fish Consumption				
	PWL	Average Year	2015	Primary issue

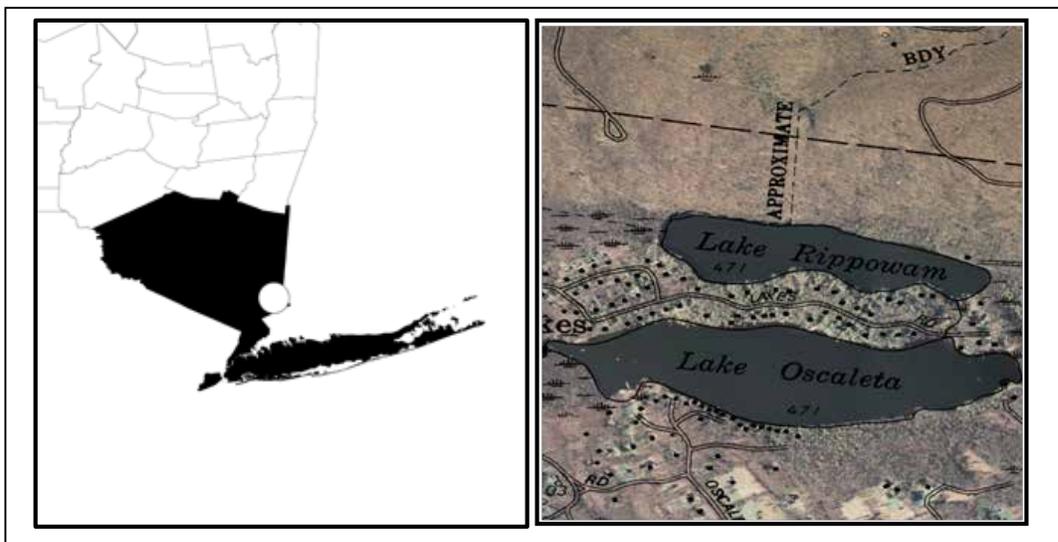
 Supported / Good
 Threatened / Fair
 Stressed / Poor
 Impaired
 Not Known

CSLAP 2015 Lake Water Quality Summary: Lake Oscaleta

General Lake Information

Location	Town of South Salem
County	Westchester
Basin	Lower Hudson River
Size	23.3 hectares (57.6 acres)
Lake Origins	Natural
Watershed Area	645 hectares (1,593.2 acres)
Retention Time	0.7 years
Mean Depth	6.8 meters
Sounding Depth	11.5 meters
Public Access?	no
Major Tributaries	no named tribs
Lake Tributary To...	Lake Waccabuc to Waccabuc River to Cross River to Cross River Reservoir to...to Hudson River
WQ Classification	B (contact recreation = swimming)
Lake Outlet Latitude	41.297
Lake Outlet Longitude	-73.569
Sampling Years	2006-2011, 2013-2015
2015 Samplers	Janet Andersen and Lou Feeney
Main Contact	Janet Andersen

Lake Map



Background

Lake Oscaleta is a 58 acre lake found in the town of Lewisboro in Westchester County, just north of the New York City region of New York State. The lake was first sampled as part of CSLAP in 2006.

It is one of 19 CSLAP lakes among the more than 630 lakes and ponds found in Westchester County, and one of 67 CSLAP lakes among the more than 1370 lakes and ponds in the Lower Hudson River drainage basin.

Lake Uses

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

The following local stocking record is reported by the Three Lakes Council for Lake Waccabuc, Lake Rippowam, and Lake Oscaleta:

Year	Waccabuc	Rippowam	Oscaleta
1996	No stocking		
1998	none	250 smallmouth bass	250 smallmouth bass
1999	800 11" brown trout	none	200 11" brown trout
2000	500 trout (location not known)		
2001	300 11" brown trout	none	120 11" brown trout
2002	No stocking		
2003	350 10" brown trout	none	150 10" brown trout
2004	400 11" brown trout	none	250 11" brown trout
2006	425 11" brown trout	none	225 11" brown trout
2007	No stocking		
2008	none	none	350 brown trout
2009	200 11" brown trout	none	300 11" brown trout
2010	300 11" brown trout	none	200 11" brown trout
2011	No stocking		
2012	350 brown trout		150 brown trout
2013	250 brown trout	None	250 brown trout
2014	350 brown trout	None	150 brown trout
2015	350 brown trout		150 brown trout

The state record hybrid striped bass was caught in Lake Waccabuc in 2004, according to the state records: <http://www.dec.ny.gov/outdoor/7935.html>. Fish species in the Lake Oscaleta, as of 1987 (as noted in the ALSC survey of the lake), included alewife, bluegill, brown bullhead, chain pickerel, common carp, golden shiner, largemouth bass, pumpkinseed sunfish, white sucker, and yellow perch.

General statewide fishing regulations are applicable in Lake Oscaleta. In addition, local regulations include a limit of five bass (small or large mouth) with a size limit of 12 inches from June 21st to November 30th, five trout of any size from April 1st to October 15th, five pickerel with a size limit of 15 inches between May 3rd and March 15th, 25 crappie with a size limit of nine inches, 50 perch or sunfish of any size, and no catch or size limit for carp or suckers.

Historical Water Quality Data

CSLAP sampling was conducted on Lake Ooscaleta each year from 2006-2011 and in 2013 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 reports for Lake Ooscaleta can also be found on the NYSDEC web page at <http://www.dec.ny.gov/lands/77829.html>.

Cornell University conducted an aquatic plant survey of the lakes in 1970. A summary of the survey can be found on the Three Lakes Council web page.

Lake Ooscaleta was sampled in 1987 as part of the Adirondack Lake Survey Corporation (ALSC) study of more than 1500 lakes in the Adirondacks and southern New York. These data show that Lake Ooscaleta was less productive in 1987 than in recent years, based on slightly higher water transparency and lower nutrient levels. Dissolved oxygen readings were depressed near the lake bottom, although these readings did not bottom out. The lake was dominated by submergent plants- although milfoil and pondweeds were identified, it was not reported if these corresponded to exotic species. Phragmites were found at the lake. The lake was also sampled by Cedar Eden Environmental LLC in 2003 in anticipation of developing a Lake and Watershed Management Plan for the lake.

SUNY Purchase conducted some limited studies of the lakes from 1976 through 1983. The results from these studies can be found on the Three Lakes Council web page.

None of the ephemeral inlets has been monitored through the NYSDEC Rotating Intensive Basins (RIBS) program or the state stream macroinvertebrate monitoring program. The lake was not been sampled by DEC fisheries staff in support of fish stocking activities.

Lake Association and Management History

Lake Ooscaleta (and its sister lakes Lake Rippowam and Lake Waccabuc) is served by the Three Lakes Council, which was organized in 1970 and has been involved in a variety of lake and watershed management activities. These include:

- CSLAP sampling on all three lakes
- setting up a Google Group to support communication on lake stewardship and watershed topics
- providing education about yard care—lake water quality and phosphorus, yard waste, pet care, aquatic plants and invasives, town wetland permits re: docks, shoreline buffers,
- setting boat speed limits (25hp town law Waccabuc, 10hp town law Ooscaleta/Rippowam, no 25hp motors allowed at Two Lake club beach)
- fish stocking and encouraging participating in creel census
- conducting residential surveys
- management of Brazilian elodea (*Egeria densa*)
- conducting egg addling to control nuisance waterfowl
- hiring a lake manager for counsel and aquatic plant surveys
- algae and zooplankton sampling to help understand the food web
- issuing boat stickers to help discourage transient boats that might carry invasive species

The Three Lakes Council maintains a website at <http://www.threelakescouncil.org>.

Summary of 2015 CSLAP Sampling Results

Evaluation of 2015 Annual Results Relative to 2006-2014

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 –Lake Oscaleta” section in Appendix C.

Evaluation of Eutrophication Indicators

Secchi disk transparency readings were slightly higher than usual in 2015, but neither chlorophyll *a* nor total phosphorus readings exhibited similar changes. None of these trophic indicators has exhibited any clear long-term trends, suggesting water quality stability, although phosphorus readings has increased slightly (but not in a statistically significant way) since the mid-2000s. Deepwater phosphorus readings were substantially higher than normal in 2014 and 2015; this may have contributed to higher fall productivity.

Lake productivity usually decreases significantly from April through July, increases slightly from July through October, and then increases substantially through later in the fall. These seasonal patterns suggest that both spring runoff and lake turnover influence algae growth, particularly if unusually warm weather is present in the spring and fall. These conditions were generally apparent in 2015.

The lake can be characterized as *mesoeutrophic*, based on water clarity (typical of *mesotrophic* lakes), total phosphorus and chlorophyll *a* (both typical of *eutrophic* lakes)- this trophic assessment was generally appropriate for 2015 and is fairly similar to the assessment for Lake Rippowam and Lake Waccabuc. The trophic state index (TSI) evaluation suggests that algae levels are slightly higher than expected given the nutrient levels and water clarity, suggesting both patchy algae growth and a high susceptibility to small increases in nutrient loading. Overall trophic conditions are summarized in the Lake Scorecard and Lake Condition Summary Table.

Evaluation of Potable Water Indicators

Algae levels may be sufficiently high 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. Deepwater phosphorus and especially ammonia readings are higher to those at the lake surface, and would likely impact deepwater intakes for potable water use. Deepwater phosphorus readings were much higher than usual in 2014 and 2015, but this did not correspond to higher than usual deepwater ammonia readings. This suggests that oxygen deficits in the deep waters may be variable. Potable water conditions, at least as measurable through CSLAP, are summarized in the Lake Scorecard and Lake Condition Summary Table.

Evaluation of Limnological Indicators

Conductivity readings have steadily increased in Lake Oscaleta since the mid-2000s, including in 2015. Total nitrogen and ammonia readings were higher than usual in 2015, though still fairly

low, and these readings have increased slightly in recent years. Each of the other limnological indicators (NO_x, pH, calcium and color) was close to normal in 2015, and none of these indicators has exhibited any clear long-term trends.

Chloride levels in the 2015 samples, collected for the first time through CSLAP and cited in Appendix A, ranged from 31 to 32 mg/l. These values fall within the lower end of “major” road salt runoff levels cited by the New Hampshire DES. These readings are well below the state potable water quality standard of 250 mg/l and slightly above the range of values found in most NYS lakes. These readings suggest a moderate to high likelihood of biological impacts from road salt, although these impacts have not been measured, and may be related to steady increase in conductivity. 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

Zooplankton, and macroinvertebrate data have not been collected through CSLAP at Lake Oscaleta. The fluoroprobe samples analyzed by SUNY ESF over the last few years showed low to moderate overall algae levels in most (open water) samples and very low blue green algae levels in all samples. Algae communities are typically dominated by green algae and other (non-blue green) algae species in the open water. No shoreline blooms were reported or sampled in the last few years.

The CSLAP macrophyte surveys conducted by the ALSC, Allied Biological and CSLAP identified at least 23 different aquatic plant species at the lake, including one protected plant species (*Potamogeton diversifolius*, threadleaf pondweed) and four exotic plant species (*Myriophyllum spicatum*, Eurasian watermilfoil; *Najas minor*, brittle naiad; *Phragmites* sp, Phragmites; and *Potamogeton crispus*, curly-leafed pondweed). The modified floristic quality index (FQI) indicates that the quality of the aquatic plant community is “fair”.

Fish information collected through the ALSC indicates a mix of coldwater (at least one species), coolwater (at least three species) and warmwater (at least ten species) fish. This suggests that the lake is primarily a warmwater fishery.

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

Evaluation of Lake Perception

Recreational assessments were slightly more favorable than usual in 2014 and close to normal in 2015. This occurred despite a small increase in aquatic plant coverage in both years, but may be consistent with slightly higher water clarity and more favorable water quality assessments. None of these indicators of lake perception has exhibited any clear long-term trends. Recreational assessments continue to be sensitive to changes in aquatic plant coverage and, to a lesser extent, water quality. Recreational assessments degrade slightly during the typical summer, consistent with slight seasonal degradation in water quality assessments and slight seasonal increases in

plant coverage. This is also consistent with seasonal changes in lake productivity. However, strong seasonal changes in lake perception were not apparent in 2015. Overall lake perception is summarized in the Lake Scorecard and Lake Condition Summary Table.

Evaluation of Local Climate Change

Water temperatures were higher than normal in 2015, but no long-term changes have been apparent in either air or water temperature.

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 at times indicate susceptibility for harmful algal blooms (HABs), but blooms have not been reported, and blue green algae levels were low in 2015. As noted above, most open water samples have been comprised of a mix of algae species, and shoreline blooms have not been reported. An analysis of algae samples over this time showed microcystin (algal toxin) readings in the open water that are well below the levels associated with unsafe swimming.

Lake Condition Summary

Category	Indicator	Min	Annual Avg	Max	2015 Avg	Classification	2015 Change?	Long-term Change?
Eutrophication Indicators	Water Clarity	0.50	2.76	4.20	3.01	Mesotrophic	Within Normal Range	No Change
	Chlorophyll <i>a</i>	0.16	10.33	53.64	10.60	Eutrophic	Within Normal Range	No Change
	Total Phosphorus	0.011	0.022	0.055	0.024	Eutrophic	Within Normal Range	No Change
Potable Water Indicators	Hypolimnetic Ammonia	0.03	0.92	1.85	0.97	Highly Elevated Deepwater NH4	Within Normal Range	Not known
	Hypolimnetic Arsenic							Not known
	Hypolimnetic Iron							Not known
	Hypolimnetic Manganese							Not known
Limnological Indicators	Hypolimnetic Phosphorus	0.013	0.064	0.190	0.094	Close to Surface TP Readings	Higher than Normal	Not known
	Nitrate + Nitrite	0.00	0.01	0.06	0.01	Low NOx	Within Normal Range	No Change
	Ammonia	0.01	0.03	0.12	0.02	Low Ammonia	Within Normal Range	No Change
	Total Nitrogen	0.22	0.42	0.80	0.40	Low Total Nitrogen	Within Normal Range	No Change
	pH	7.01	7.91	9.36	7.67	Alkaline	Within Normal Range	No Change
	Specific Conductance	71	140	178	145	Intermediate Hardness	Within Normal Range	No Change
	True Color	1	16	35	13	Intermediate Color	Within Normal Range	No Change
	Calcium	9.3	12.9	17.5	10.0	May be Susceptible to Zebra Mussels	Within Normal Range	No Change
Lake Perception	WQ Assessment	1	2.3	4	1.9	Not Quite Crystal Clear	Within Normal Range	No Change
	Aquatic Plant Coverage	1	2.4	4	2.7	Subsurface Plant Growth	Within Normal Range	No Change
	Recreational Assessment	1	2.3	4	1.8	Excellent	More Favorable Than Normal	No Change

Category	Indicator	Min	Annual Avg	Max	2015 Avg	Classification	2015 Change?	Long-term Change?
Biological Condition	Phytoplankton					Open water-low blue green algae biomass	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					Eurasian watermilfoil	Not known	Not known
Local Climate Change	Air Temperature	2	23.7	36	22.8		Within Normal Range	No Change
	Water Temperature	5	20.8	31	19.8		Lower Than Normal	No Change
Harmful Algal Blooms	Open Water Phycocyanin	0	37	286	6	Most readings indicate low risk of BGA	Not known	Not known
	Open Water FP Chl.a	2	4	8	3	No readings indicate high algae levels	Not known	Not known
	Open Water FP BG Chl.a	0	0	2	0	No readings indicate high BGA levels	Not known	Not known
	Open Water Microcystis	<DL	0.3	0.9	<0.30	Mostly undetectable open water MC-LR	Not known	Not known
	Open Water Anatoxin a	<DL	<DL	<DL	<DL	Open water Anatoxin-a consistently not 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 data	Not known	Not known

Evaluation of Lake Condition Impacts to Lake Uses

The 2007 NYSDEC Priority Waterbody Listings (PWL) for the Lower Hudson River drainage basin indicate that *recreation* may be *stressed* by excessive weeds and algae in Lake Oscaleta. The PWL listing for Lake Oscaleta can be found in Appendix B.

Potable Water (Drinking Water)

The CSLAP dataset at Lake Oscaleta, 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. The algae levels in the lake may *threaten* any "unofficial" potable water usage.

Public Bathing

The CSLAP dataset at Lake Oscaleta, including water chemistry data, physical measurements, and volunteer samplers' perception data, suggests that public bathing, if conducted at a public swimming beach, should be fully supported, and no impacts were apparent in 2015. Additional information about bacteria levels is needed to determine if pathogens impact swimming.

Recreation (Swimming and Non-Contact Uses)

The CSLAP dataset on Lake Oscaleta, including water chemistry data, physical measurements, and volunteer samplers' perception data, suggest that recreation at times may be *impaired* by

excessive algae, but lesser impacts were apparent in 2015. The presence of Eurasian watermilfoil may also *threaten* this use.

Aquatic Life

The CSLAP dataset on Lake Oscaleta, including water chemistry data and physical measurements, suggest that aquatic life may be *stressed* by elevated pH, deepwater anoxia, and the presence of exotic plants, and *threatened* by road salt runoff. Additional data are needed to evaluate the food and habitat conditions for aquatic organisms in the lake.

Aesthetics and Habitat

The CSLAP dataset on Lake Oscaleta, including volunteer samplers' perception data, suggest that aesthetics may be *fair* due to excessive algae (although these impacts are not apparent in some years), and habitat may be *fair* due to invasive plants.

Fish Consumption

There are no fish consumption advisories on Lake Oscaleta.

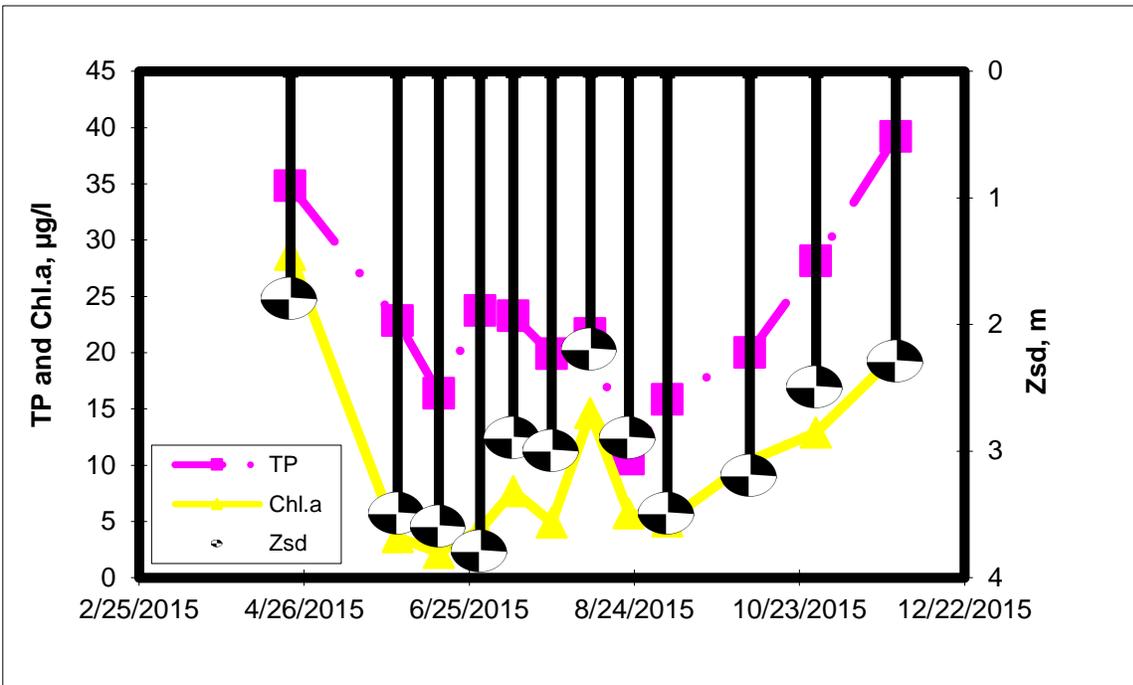
Additional Comments and Recommendations

Aquatic plant surveys should continue to be conducted at Lake Oscaleta to determine if the plant community is comprised by other plants, or if the Brazilian elodea previously found in Lake Waccabuc has migrated into this lake. Lake residents should continue to report any shoreline blooms and otherwise avoid exposure to surface scums or heavily discolored water.

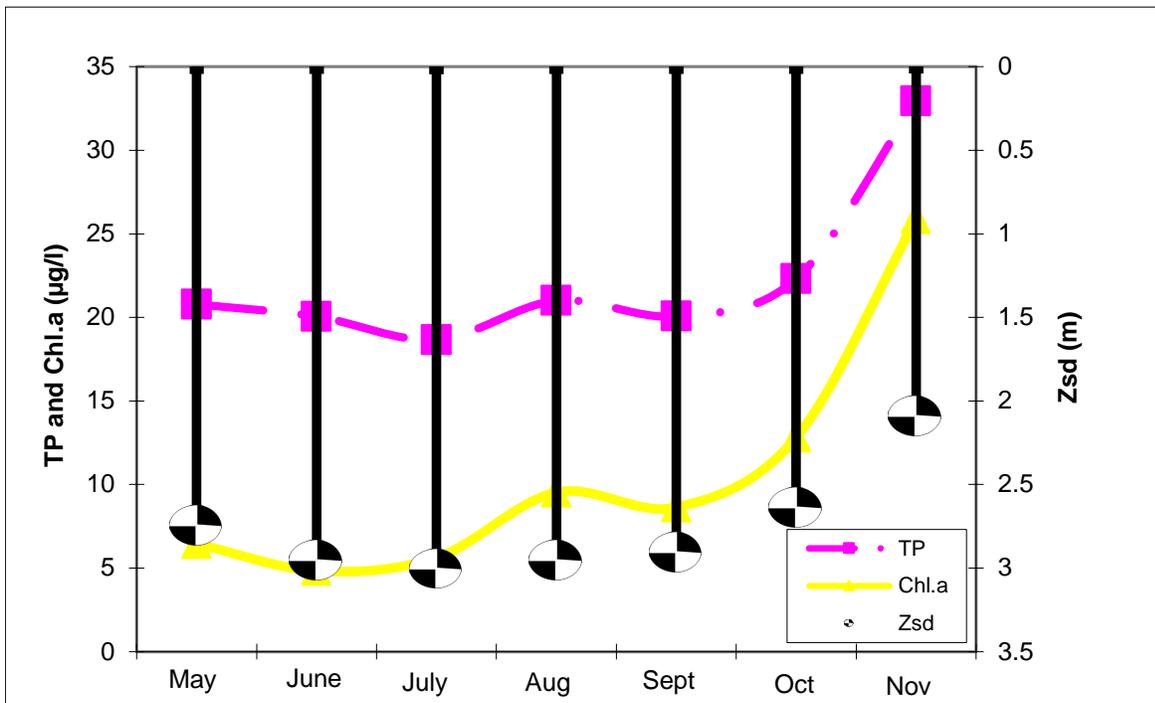
Aquatic Plant IDs-2015

None submitted for identification in 2015.

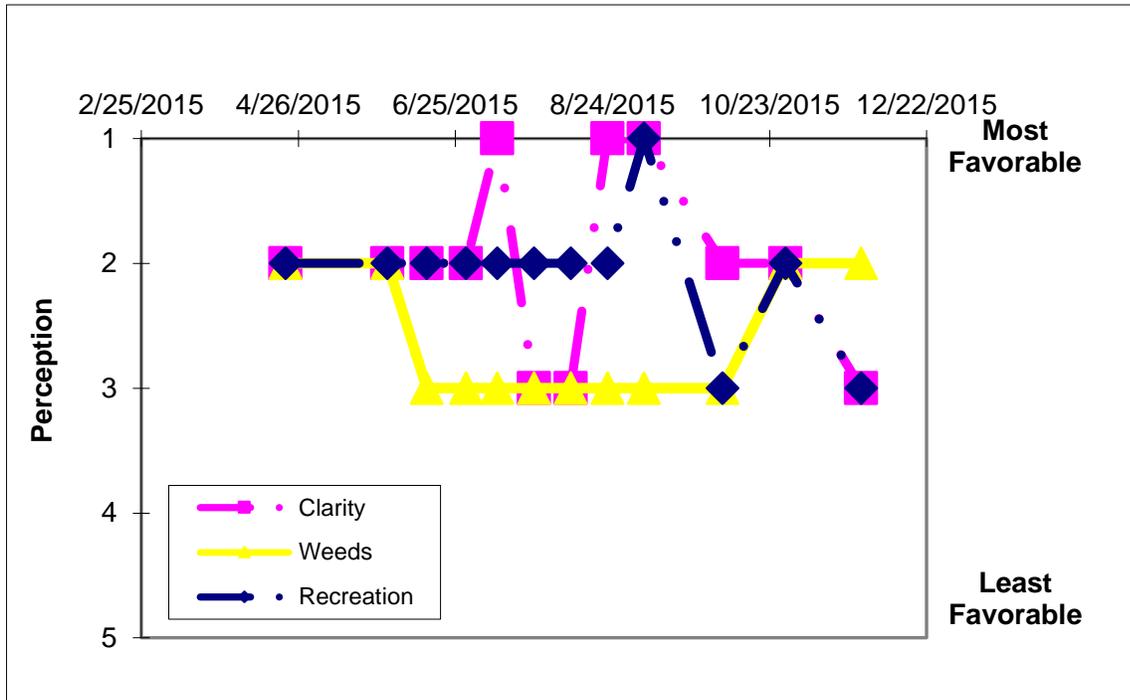
Time Series: Trophic Indicators, 2015



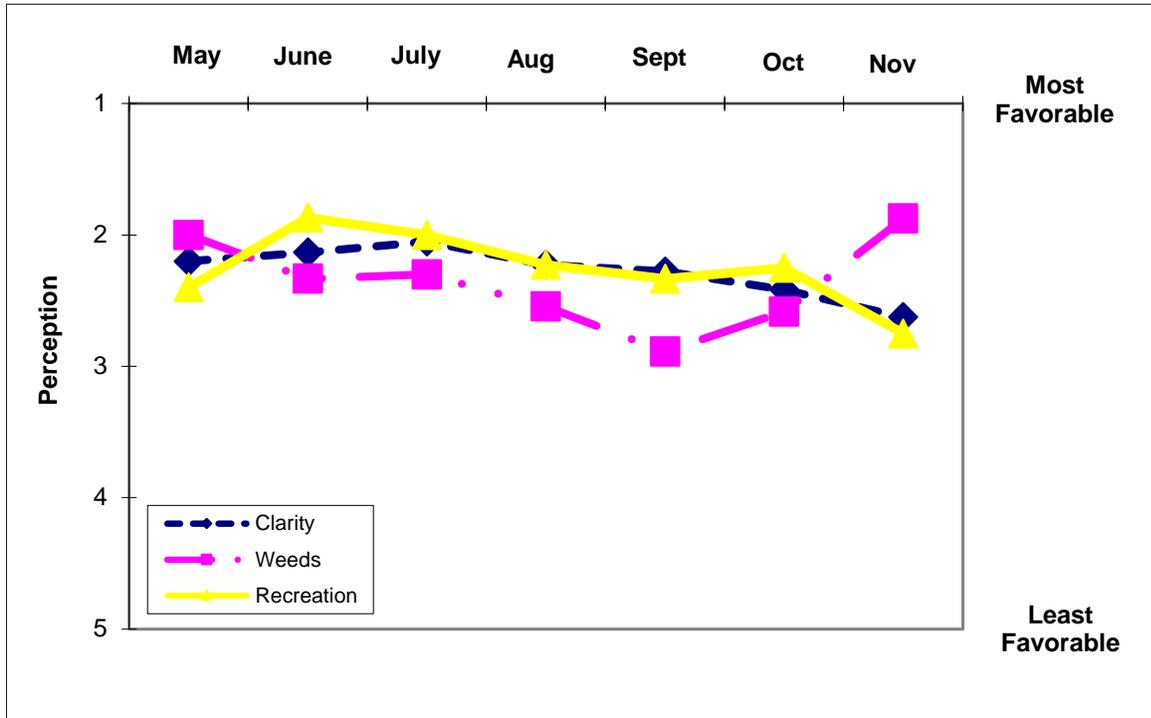
Time Series: Trophic Indicators, Typical Year (2006-2015)



Time Series: Lake Perception Indicators, 2015



Time Series: Lake Perception Indicators, Typical Year (2006-2015)



Appendix A- CSLAP Water Quality Sampling Results for Lake Oscaleta

LNum	LName	Date	Zbot	Zsd	Zsamp	Tot.P	NO3	NH4	TDN	TN/TP	TColor	pH	Cond25	Ca	Chl.a	Cl
205	L Oscaleta	6/12/2006	10.6	2.26	1.5	0.024	0.03	0.04			17	7.78	135	15.6	10.46	
205	L Oscaleta	6/25/2006	10.7	2.25	1.5	0.034	0.02	0.02			12	7.62	128		0.16	
205	L Oscaleta	7/9/2006	10.5	2.35	1.5	0.016	0.01	0.06	0.48	29.63	15	8.89	121		4.97	
205	L Oscaleta	7/22/2006	11.0	2.50	1.5	0.030	0.01	0.01	0.50	16.68	21	8.70	133		8.11	
205	L Oscaleta	8/5/2006	10.8	1.70	1.5	0.055	0.02	0.03	0.57	10.32	35	9.11	131	11.7	24.62	
205	L Oscaleta	8/19/2006	10.6	0.50	1.5	0.031	0.01	0.01			24	9.36	124		53.64	
205	L Oscaleta	9/9/2006	10.7	3.10	1.5	0.036	0.02	0.12	0.80	22.02	18	7.68	138		5.17	
205	L Oscaleta	10/7/2006	10.8	2.35	1.5	0.024	0.01	0.05	0.48	19.99	15	7.39	151		10.07	
205	L Oscaleta	7/7/2007	10.8	4.05	1.5	0.012	0.01	0.03	0.37	70.8	17	7.54	150	11.9	3.68	
205	L Oscaleta	7/22/2007	10.8	2.93	1.5	0.018	0.01	0.01	0.42	51.1	15	8.56	108		7.55	
205	L Oscaleta	8/5/2007	10.8	3.60	1.5	0.019	0.01	0.01	0.60	70.3	16	8.15	131		2.90	
205	L Oscaleta	8/19/2007	10.8	3.40	1.5	0.017	0.00	0.01	0.66	85.9	8	7.98	131		7.37	
205	L Oscaleta	9/2/2007	10.8	3.88	1.5	0.030	0.00	0.01	0.61	44.6	17	7.14	112	11.9	4.48	
205	L Oscaleta	9/16/2007	10.7	3.05	1.5	0.017	0.01	0.01	0.48	60.8	12	7.65	137		11.11	
205	L Oscaleta	9/30/2007	10.9	3.30	1.5	0.015	0.04	0.02	0.68	103.4	14	8.00	121		10.85	
205	L Oscaleta	10/21/2007	10.7	3.30	1.5	0.025	0.01	0.02	0.76	67.7	12	7.45	124		13.35	
205	L Oscaleta	5/10/2008	10.9	2.85	1.5	0.021	0.01	0.02			9	8.30	129		5.25	
205	L Oscaleta	5/24/2008	10.8	3.20	1.5	0.019	0.02	0.04	0.38	44.39	15	8.91	156		3.76	
205	L Oscaleta	6/8/2008	10.7	3.35	1.5	0.017		0.02	0.34	42.38	18	8.17	172		7.53	
205	L Oscaleta	6/22/2008	11.5	1.85	1.5	0.016	0.00	0.01	0.49	69.15		8.75	95	12.7	4.47	
205	L Oscaleta	7/6/2008	10.7	2.45	1.5	0.013	0.03	0.03	0.22	37.31	16	8.22	142		6.15	
205	L Oscaleta	7/20/2008	10.3	2.80	1.5	0.016	0.01	0.01	0.32	44.46	12	7.72	104		3.51	
205	L Oscaleta	8/3/2008	10.4	3.05	1.5	0.011	0.00	0.01	0.49	97.30	13	7.51	132		3.76	
205	L Oscaleta	8/17/2008	10.7	3.73	1.5	0.024	0.00	0.01	0.23	21.33	9	7.81	122	12.5	4.17	
205	L Oscaleta	9/1/2008	10.6	3.75	1.5	0.017	0.00	0.01	0.33	43.60	23	8.27	150		3.46	
205	L Oscaleta	9/14/2008	10.9	2.73	1.5	0.014	0.01	0.01	0.34	53.59	16	7.43	142		8.75	
205	L Oscaleta	9/28/2008	10.8	2.60	1.5	0.022	0.01	0.03	0.35	36.03	15	7.79	134		16.05	
205	L Oscaleta	10/11/2008	10.8	2.63	1.5	0.018	0.01	0.01	0.41	51.92		7.20	152		12.28	
205	L Oscaleta	10/25/2008	10.8	2.00	1.5	0.022	0.01	0.06	0.39	39.86		7.10	149		15.80	
205	L Oscaleta	11/9/2008	10.8	2.35	1.5	0.032	0.02	0.09				7.10	157		26.14	
205	L Oscaleta	11/29/2008	10.6	2.50	1.5	0.031	0.04	0.09	0.50	35.98		7.10			48.04	
205	L Oscaleta	4/17/2009	10.8	1.8	1.5	0.025						8.73			40.2	
205	L Oscaleta	5/18/2009	10.8	2.3	1.5	0.021						8.01			15.3	
205	L Oscaleta	06/20/2009	11.0	2.80	1.5	0.017	0.00	0.02	0.37	47.60	18	7.86	143	14.7	15.27	
205	L Oscaleta	07/05/2009	11.0	2.50	1.5	0.019	0.01	0.01	0.39	45.29	20	8.22	158		6.49	
205	L Oscaleta	07/19/2009	10.8	2.90	1.5	0.018	0.02	0.02	0.36	45.13	25	8.03	71		4.61	
205	L Oscaleta	08/03/2009	10.8	3.05	1.5	0.017	0.01	0.02	0.32	39.83	18	7.31	124		4.65	
205	L Oscaleta	08/16/2009	10.7	3.55	1.5	0.015	0.01	0.06	0.32	47.47	19	7.59	127	17.5	4.20	
205	L Oscaleta	08/30/2009	10.8	3.15	1.5	0.017	0.01	0.01	0.30	38.76	21	7.71	139		6.70	
205	L Oscaleta	09/13/2009	10.4	2.80	1.5	0.014	0.01	0.04	0.36	57.71	20	7.11	137		6.20	
205	L Oscaleta	10/04/2009	10.7	2.95	1.5	0.015	0.01	0.01	0.34	49.25	19	7.77	140		8.20	
205	L Oscaleta	10/30/2009	10.9	1.85	1.5											
205	L Oscaleta	11/29/2009				9.3	0.030					7.06				
205	L Oscaleta	4/11/2010					0.021								28.10	
205	L Oscaleta	5/7/2010					0.019								6.50	
205	L Oscaleta	6/4/2010					0.015								0.20	
205	L Oscaleta	6/26/2010	10.7	3.80	1.5	0.015	0.01	0.01	0.31	45.75	11	8.76	157	14.1	3.70	
205	L Oscaleta	7/10/2010	10.7	3.85	1.5	0.013	0.01	0.03	0.34	57.88	1	8.91	132		3.10	
205	L Oscaleta	7/25/2010	10.7	3.00	1.5	0.017	0.01	0.02	0.28	36.07	13	8.54	157		6.20	
205	L Oscaleta	8/8/2010	10.7	2.75	1.5	0.016	0.01	0.02	0.43	58.58	12	7.67	165		9.30	
205	L Oscaleta	8/21/2010	10.7	3.20	1.5	0.014	0.02	0.03	0.34	54.68	11	7.39	167	12.0	9.20	
205	L Oscaleta	9/6/2010	10.7	2.90	1.5	0.015	0.02	0.02	0.36	53.15	12	7.72	169		7.10	
205	L Oscaleta	9/20/2010	10.7	2.90	1.5	0.016	0.01	0.02	0.42	57.25	17	7.19	171		8.40	
205	L Oscaleta	10/2/2010	10.9	3.60	1.5	0.013	0.01	0.03	0.48	81.52	10	7.49	170		8.50	
205	L Oscaleta	10/31/2010					0.029								18.80	
205	L Oscaleta	11/28/2010					0.032								40.80	
205	L Oscaleta	4/22/2011	11.0	1.85	1.5	0.029						7.97	147		15.30	
205	L Oscaleta	5/14/2011	10.9	2.20	1.5	0.023						8.72			3.80	
205	L Oscaleta	6/4/2011	10.8	2.75	1.5	0.021						8.07	153		4.90	
205	L Oscaleta	6/26/2011	11.0	2.80	1.5	0.023	0.01	0.03	0.29	28.52	17	7.54	178	12.4	3.00	
205	L Oscaleta	7/1/2011	10.9	3.95	1.5	0.018	0.01	0.03	0.40	50.13	14	7.65	145		3.30	
205	L Oscaleta	7/24/2011	10.8	2.93	1.5	0.019	0.01	0.02	0.39	46.38	16	7.38	135		3.50	
205	L Oscaleta	8/2/2011	10.7	2.55	1.5	0.031	0.05	0.03	0.50	35.93	14	8.45	138		8.20	

LNum	LName	Date	Zbot	Zsd	Zsamp	Tot.P	NO3	NH4	TDN	TN/TP	TColor	pH	Cond25	Ca	Chl.a	Cl
205	L Oscaleta	8/21/2011	10.7	2.85	1.5	0.016	0.02	0.02	0.40	55.00	21	7.40	160	12.6	7.40	
205	L Oscaleta	9/3/2011	10.9	2.50	1.5	0.028	0.01	0.03	0.49	38.19	26	8.58	144		7.80	
205	L Oscaleta	9/17/2011	11.0	1.60	1.5	0.026	0.01	0.02	0.49	41.61	34	7.75	106		14.00	
205	L Oscaleta	10/8/2011	10.9	2.42	1.5	0.032	0.02	0.02	0.48	33.52	31	7.59	138		17.30	
205	L Oscaleta	11/6/2011	10.8	1.75	1.5	0.031						7.27	137		17.00	
205	L Oscaleta	11/26/2011	10.8	2.05	1.5	0.036						7.38	137		24.90	
205	L Oscaleta	3/14/2012	10.8	1.80	1.5	0.031						8.37	134			
205	L Oscaleta	5/18/2012	10.8	2.85	1.5	0.018						8.54	139		4.60	
205	L Oscaleta	6/11/2012	10.9	3.10	1.5	0.019						8.65	142		5.70	
205	L Oscaleta	6/24/2012	10.8	2.85	1.5	0.016	<LOD	0.04	0.38	51.83	15	8.50	141	13.6	3.50	
205	L Oscaleta	7/15/2012	10.7	3.60	1.5	0.014	<LOD	<LOD	0.30	48.50	13	7.94	148		2.90	
205	L Oscaleta	7/29/2012	10.8	3.15	1.5	0.017	<LOD	0.02	0.25	33.07	13	8.04	143		4.80	
205	L Oscaleta	8/11/2012	10.8	3.25	1.5	0.020	<LOD	0.02	0.41	45.67	11	8.25	143		6.10	
205	L Oscaleta	8/26/2012	10.7	2.60	1.5	0.019	0.01	0.02	0.54	64.45	13	8.64	145	13.4	7.40	
205	L Oscaleta	9/9/2012	10.7	2.20	1.5	0.018	<LOD	0.01	0.48	58.18	12	8.66	142		14.70	
205	L Oscaleta	9/21/2012	10.7	2.15	1.5							7.88	140			
205	L Oscaleta	10/6/2012	10.7	2.55	1.5	0.020	0.02	0.02	0.41	45.45	20	8.04	138		7.10	
205	L Oscaleta	11/25/2012	10.7	1.70	1.5	0.029						7.54	142		9.30	
205	L Oscaleta	4/8/2013	10.8	1.65	1.5	0.027						8.60	143		25.80	
205	L Oscaleta	5/20/2013	10.7	2.90	1.5	0.019						8.04	150		6.90	
205	L Oscaleta	6/15/2013	11.0	3.08	1.5	0.020	0.06	0.03	0.55	61.87	27	8.29	141		2.40	
205	L Oscaleta	6/29/2013	10.8	2.39	1.5	0.024			0.38	34.56	19	7.88	141		4.80	
205	L Oscaleta	7/14/2013	10.7	2.85	1.5	0.024	0.03	0.03	0.31	27.95	21	8.23	151		12.70	
205	L Oscaleta	7/28/2013	10.7	2.25	1.5	0.023			0.53	51.32	24	7.63	94			
205	L Oscaleta	8/11/2013	10.7	2.85	1.5	0.029	0.01	0.03	0.52	39.74	19	8.01	143		7.00	
205	L Oscaleta	8/25/2013	10.7	3.08	1.5	0.014			0.46	73.58	16	8.16	145		5.00	
205	L Oscaleta	9/8/2013	10.7	2.80	1.5	0.016	0.01	0.01	0.42	58.32	21	7.61	135		5.70	
205	L Oscaleta	9/22/2013	10.6	3.25	1.5	0.021			0.43	44.35	19	8.03	155		8.40	
205	L Oscaleta	10/28/2013	10.6	2.05	1.5	0.023						7.23	137		15.10	
205	L Oscaleta	12/1/2013	10.9	2.10	1.5	0.033						7.90	139		30.70	
205	L Oscaleta	6/7/2014	10.8	3.50	1.5	0.019	0.01	0.04	0.38	44.00	16	7.54	115	10.8	3.70	
205	L Oscaleta	6/21/2014	10.7	3.20	1.5	0.021			0.39	41.75	15	7.27	158		5.80	
205	L Oscaleta	7/5/2014	10.7	3.45	1.5	0.019	0.01	0.04	0.37	42.63	11	7.97	110		3.80	
205	L Oscaleta	7/20/2014	10.8	2.80	1.5	0.026			0.38	32.57	14	7.17	159		8.80	
205	L Oscaleta	8/3/2014	10.8	3.35	1.5	0.026	0.01	0.01	0.52	44.86	4	7.57	136	9.3	8.70	
205	L Oscaleta	8/17/2014	10.7	3.55	1.5	0.023			0.38	36.34	13	7.51	151		4.80	
205	L Oscaleta	8/30/2014	10.7	4.20	1.5	0.018	0.01	0.01	0.35	42.78	15	7.83	148		4.20	
205	L Oscaleta	9/12/2014	10.6	3.45	1.5	0.020			0.40	43.57	12	7.31	149		9.60	
205	L Oscaleta	10/12/2014	10.7	3.00	1.5	0.023						7.48	155		16.80	
205	L Oscaleta	11/3/2014	10.6	2.10	1.5	0.029						7.53	156		19.40	
205	L Oscaleta	11/30/2014	10.9	2.00	1.5	0.040						7.98	155		27.50	
205	L Oscaleta	4/21/2015	10.9	1.80	1.5	0.031									28.70	
205	L Oscaleta	5/30/2015	10.8	3.50	1.5	0.020	0.04	0.03	0.43	21.09	15	7.45	169	13.1	3.60	
205	L Oscaleta	6/14/2015	10.9	3.60	1.5	0.015			0.41	28.55	12	6.96	176		2.20	
205	L Oscaleta	6/29/2015	10.8	3.80	1.5	0.021	0.00	0.03	0.52	24.90	16	7.06	174		4.30	31.7
205	L Oscaleta	7/11/2015	10.9	2.90	1.5	0.021			0.46	22.43	19	7.51	126		7.70	
205	L Oscaleta	7/25/2015	10.8	3.00	1.5	0.018	0.01	0.03	0.42	23.92	18	7.98	157	13	4.90	
205	L Oscaleta	8/8/2015	10.8	2.20	1.5	0.019			0.82	42.92	19	8.25	183		14.60	
205	L Oscaleta	8/22/2015	10.7	2.90	1.5	0.009	0.01	0.04	0.62	66.13	12	8.42	169		5.70	31.2
205	L Oscaleta	9/5/2015	10.7	3.50	1.5	0.014			0.62	44.50	9	8.56	164		5.00	
205	L Oscaleta	10/5/2015	10.8	3.20	1.5	0.018									10.40	
205	L Oscaleta	10/29/2015	10.8	2.50	1.5	0.025									12.90	
LNum	LName	Date	Zbot	Zsd	Zsamp	Tot.P	NO3	NH4				Fe	Mn	As	NO2	
205	L Oscaleta	6/25/2006	10.7		9.2	0.038										
205	L Oscaleta	7/9/2006	10.5		9.0	0.044										
205	L Oscaleta	7/22/2006	11.0		9.5	0.046										
205	L Oscaleta	8/5/2006	10.8		9.0	0.051										
205	L Oscaleta	8/19/2006	10.6		9.0	0.082										
205	L Oscaleta	9/9/2006	10.7		9.0	0.077										
205	L Oscaleta	10/7/2006	10.8		9.5	0.061										
205	L Oscaleta	7/7/2007	10.8		9.0	0.057										
205	L Oscaleta	7/22/2007	10.8		9.0	0.017										
205	L Oscaleta	8/5/2007	10.8		9.0	0.067										
205	L Oscaleta	8/19/2007	10.8		9.0	0.013										
205	L Oscaleta	9/2/2007	10.8		9.0	0.089										

LNum	LName	Date	Zbot	Zsd	Zsamp	Tot.P	NO3	NH4			pH	Cond	As	NO2
205	L Oscaleta	9/16/2007	10.7		9.0	0.073								
205	L Oscaleta	9/30/2007	10.9		9.0	0.075								
205	L Oscaleta	10/21/2007	10.7		9.0	0.090								
205	L Oscaleta	5/10/2008			9.0	0.028								
205	L Oscaleta	5/24/2008			9.0	0.033								
205	L Oscaleta	6/8/2008			9.0	0.017								
205	L Oscaleta	6/22/2008			11.0	0.058								
205	L Oscaleta	7/6/2008			9.2	0.063								
205	L Oscaleta	7/20/2008			9.3	0.079								
205	L Oscaleta	8/3/2008			9.0	0.088								
205	L Oscaleta	8/17/2008			9.0	0.096								
205	L Oscaleta	9/1/2008			9.0	0.081								
205	L Oscaleta	9/14/2008			9.0	0.066								
205	L Oscaleta	9/28/2008			9.0	0.049								
205	L Oscaleta	10/11/2008				0.062								
205	L Oscaleta	10/25/2008				0.062								
205	L Oscaleta	11/9/2008				0.039								
205	L Oscaleta	11/29/2008			9.0	0.027								
205	L Oscaleta	4/17/2009			9.3	0.022				7.58				
205	L Oscaleta	5/18/2009			9.3	0.031				7.1				
205	L Oscaleta	06/20/2009	11.0		9.0	0.058	0.67							
205	L Oscaleta	07/05/2009	11.0		9.5	0.062	0.80							
205	L Oscaleta	07/19/2009	10.8		9.0	0.066	0.03							
205	L Oscaleta	08/03/2009	10.8		9.3	0.069	0.91							
205	L Oscaleta	08/16/2009	10.7		9.2	0.075	0.05							
205	L Oscaleta	08/30/2009	10.8		9.2	0.075	1.42							
205	L Oscaleta	09/13/2009	10.4		9.0	0.044	0.32							
205	L Oscaleta	10/04/2009	10.7		9.1	0.044	1.09							
205	L Oscaleta	11/29/2009			9.3	0.030				7.06				
205	L Oscaleta	4/11/2010				0.033								
205	L Oscaleta	5/7/2010				0.039								
205	L Oscaleta	6/4/2010				0.061								
205	L Oscaleta	6/26/2010	10.7		9.2	0.068	0.56							
205	L Oscaleta	7/10/2010	10.7		9.2	0.085	0.69							
205	L Oscaleta	7/25/2010	10.7		9.2	0.099	0.80							
205	L Oscaleta	8/8/2010	10.7		9.0	0.061	0.68							
205	L Oscaleta	8/21/2010	10.7		9.2	0.070	1.01							
205	L Oscaleta	9/6/2010	10.7		9.2	0.089								
205	L Oscaleta	9/20/2010	10.7		9.2	0.090	1.73							
205	L Oscaleta	10/2/2010	10.9		9.5	0.094	1.85							
205	L Oscaleta	10/31/2010				0.038								
205	L Oscaleta	11/28/2010				0.038								
205	L Oscaleta	4/22/2011	11.0			0.029								
205	L Oscaleta	5/14/2011	10.9			0.029								
205	L Oscaleta	6/4/2011	10.8			0.041								
205	L Oscaleta	6/26/2011	11.0		9.5	0.030	0.59						0.01	
205	L Oscaleta	7/1/2011	10.9		9.3	0.036	0.73						0.01	
205	L Oscaleta	7/24/2011	10.8		9.2	0.060	0.72						0.01	
205	L Oscaleta	8/2/2011	10.7		9.2	0.044	0.77							
205	L Oscaleta	8/21/2011	10.7		0.4	0.065	1.03						0.01	
205	L Oscaleta	9/3/2011	10.9		9.4	0.096	1.46						0.01	
205	L Oscaleta	9/17/2011	11.0		9.5	0.129	1.73						0.01	
205	L Oscaleta	10/8/2011	10.9		9.5	0.109	1.49						0.01	
205	L Oscaleta	11/6/2011			9.3	0.033								
205	L Oscaleta	11/26/2011			9.3	0.033								
205	L Oscaleta	5/18/2012			9.3	0.056				6.96	144			
205	L Oscaleta	6/11/2012			9.4	0.088				7.11	148			
205	L Oscaleta	6/24/2012			9.3	0.093	0.61			7.05	137		0.01	
205	L Oscaleta	7/15/2012			9.1	0.098	0.69			6.91	136		0.01	
205	L Oscaleta	7/29/2012			9.3	0.082	0.90						0.01	
205	L Oscaleta	8/11/2012			9.2	0.079	0.96			6.84	145		0.01	
205	L Oscaleta	8/26/2012			9.2	0.135	0.42			7.01	152		0.01	
205	L Oscaleta	9/9/2012			9.2	0.037	0.31			6.83	167		0.01	
205	L Oscaleta	9/21/2012			9.2					6.80	169			
205	L Oscaleta	10/6/2012			9.2	0.084	1.81			6.86	170		0.01	
205	L Oscaleta	11/25/2012			9.2	0.026				7.57	142		0.01	

LNum	LName	Date	Zbot	Zsd	Zsamp	Tot.P	NO3	NH4			pH	Cond	As	NO2
205	L Oscaleta	4/8/2013			9.3	0.023					7.90	141		
205	L Oscaleta	5/20/2013			9.2	0.033					7.05	148		
205	L Oscaleta	6/15/2013			9.0	0.042		0.34						
205	L Oscaleta	7/14/2013			9.2	0.039		0.88						
205	L Oscaleta	8/11/2013			9.2	0.090		1.29						
205	L Oscaleta	9/8/2013				0.077		1.70						
205	L Oscaleta	10/28/2013			9.1	0.076					6.77	182		
205	L Oscaleta	12/1/2013			9.4	0.024					7.66	139		
205	L Oscaleta	6/7/2014			9.3	0.047		0.39						
205	L Oscaleta	6/21/2014			9.2	0.051								
205	L Oscaleta	7/5/2014			9.2	0.055		0.83						
205	L Oscaleta	7/20/2014			9.3	0.094								
205	L Oscaleta	8/3/2014			9.3	0.092		1.39						
205	L Oscaleta	8/17/2014			9.2	0.119								
205	L Oscaleta	8/30/2014			9.2	0.137		1.28						
205	L Oscaleta	9/12/2014			9.1	0.166								
205	L Oscaleta	10/12/2014			9.2	0.190								
205	L Oscaleta	11/3/2014			9.1	0.053								
205	L Oscaleta	11/30/2014			9.4	0.032								
205	L Oscaleta	4/21/2015			9.4	0.029								
205	L Oscaleta	5/30/2015			9.3	0.042		0.50						
205	L Oscaleta	6/14/2015			9.4	0.042								
205	L Oscaleta	6/29/2015			9.3	0.026		0.75						
205	L Oscaleta	7/11/2015			9.4	0.071								
205	L Oscaleta	7/25/2015			9.3	0.079		0.94						
205	L Oscaleta	8/8/2015			9.3	0.118								
205	L Oscaleta	8/22/2015			9.2	0.084		1.54						
205	L Oscaleta	9/5/2015			9.2	0.140								
205	L Oscaleta	10/5/2015			9.3	0.188								
205	L Oscaleta	10/29/2015			9.3	0.206								

LNum	LName	Date	Site	TAir	TH2O	QA	QB	QC	QD	QF	QG	AQ-PC	AQ-Chl	MC-LR	Ana	Cyl	FP-Chl	FP-BG	HAB form	Shore HAB
205	L Oscaleta	6/12/2006	epi	23	20	3	2	2	0											
205	L Oscaleta	6/25/2006	epi	23	24	2	2	3	2											
205	L Oscaleta	7/9/2006	epi	27	25	2	2	2	12											
205	L Oscaleta	7/22/2006	epi	25	27	2	2	2	125											
205	L Oscaleta	8/5/2006	epi	31	31	4	2	3	1234											
205	L Oscaleta	8/19/2006	epi	32	27	4	3	4	134											
205	L Oscaleta	9/9/2006	epi	29	23	2	3	2	12											
205	L Oscaleta	10/7/2006	epi	15	17	2	2	2	25											
205	L Oscaleta	7/7/2007	epi	28	25	2	2	2	2											
205	L Oscaleta	7/22/2007	epi	26	25	2	2	2	2											
205	L Oscaleta	8/5/2007	epi	25	28	2	2	2	2											
205	L Oscaleta	8/19/2007	epi	24	25	1	3	2	2											
205	L Oscaleta	9/2/2007	epi	25	24	2	4	3	2											
205	L Oscaleta	9/16/2007	epi	20	22	2	3	3	2											
205	L Oscaleta	9/30/2007	epi	20	21	2	3	3	2											
205	L Oscaleta	10/21/2007	epi	21	18	3	3	2	2											
205	L Oscaleta	5/10/2008	epi	19	16															
205	L Oscaleta	5/24/2008	epi	20	16	2	2	2	5											
205	L Oscaleta	6/8/2008	epi	32	23	3	2	2	8											
205	L Oscaleta	6/22/2008	epi	28	25	2	4	3	2											
205	L Oscaleta	7/6/2008	epi	29	26	3	2	3	2											
205	L Oscaleta	7/20/2008	epi	30	29	2	3	2	2											
205	L Oscaleta	8/3/2008	epi	26	27	2	3	3	2											
205	L Oscaleta	8/17/2008	epi	26	25	2	3	3	2											
205	L Oscaleta	9/1/2008	epi	24	24	2	3	3	2											
205	L Oscaleta	9/14/2008	epi	27	23	3	3	3	23											
205	L Oscaleta	9/28/2008	epi	25	20	2	3	3	2											
205	L Oscaleta	10/11/2008	epi	20	17	3	3	2	2											
205	L Oscaleta	10/25/2008	epi	17	13															
205	L Oscaleta	11/9/2008	epi	15	12	2	2	2	1											
205	L Oscaleta	11/29/2008	epi	8	6	2	2	2	8											
205	L Oscaleta	4/17/2009	epi	17	11															
205	L Oscaleta	5/18/2009	epi	13	17															

LNum	LName	Date	Site	TAir	TH2O	QA	QB	QC	QD	QF	QG	AQ-PC	AQ-Chl	MC-LR	Ana	Cyl	FP-Chl	FP-BG	HAB form	Shore HAB
205	L Oscaleta	06/20/2009	epi	27	22	3	1	2	12											
205	L Oscaleta	07/05/2009	epi	23	24	2	1	2	12											
205	L Oscaleta	07/19/2009	epi	27	25	2	2	2	2											
205	L Oscaleta	08/03/2009	epi		26	2	2	1	0											
205	L Oscaleta	08/16/2009	epi	30	27	2	2	2	2					0.00						
205	L Oscaleta	08/30/2009	epi	27	25	2	2	2	2											
205	L Oscaleta	09/13/2009	epi	25	21	2	2	2	2											
205	L Oscaleta	10/04/2009	epi	23	18	3	3	2	2			37.1		0.04						
205	L Oscaleta	10/30/2009	epi	17	13	2	3	4	58			68.5		0.54						
205	L Oscaleta	11/29/2009	epi		9															
205	L Oscaleta	6/26/2010	epi	30	26	1	2	1	2											
205	L Oscaleta	7/10/2010	epi	31	28	1	2	1	2											
205	L Oscaleta	7/25/2010	epi	31	28	3	2	2	2											
205	L Oscaleta	8/8/2010	epi	35	27	3	2	3	23			56.00		0.01						
205	L Oscaleta	8/21/2010	epi	30	10	1	3	2	2			285.60								
205	L Oscaleta	9/6/2010	epi	25	23	3	2	2	23			100.00		0.07						
205	L Oscaleta	9/20/2010	epi	22	21	3	3	3	25											
205	L Oscaleta	10/2/2010	epi	19	20	3	2	1	2			165.00		0.93						
205	L Oscaleta	4/22/2011	epi	15	10	2	1	2	5	7	0									
205	L Oscaleta	5/14/2011	epi	20	18															
205	L Oscaleta	6/4/2011	epi	25	22	2	2	2	2	0	6									
205	L Oscaleta	6/26/2011	epi	30	24	3	2	2	2	0	0	28.00	11.40							
205	L Oscaleta	7/1/2011	epi	31	27	2	2	2	2	0	0	12.80	4.50							
205	L Oscaleta	7/24/2011	epi	30	29	2	2	2	8	0	0	14.40	3.99							
205	L Oscaleta	8/2/2011	epi	32	28	2	2	2	2	0	0	31.60	5.40	0.33						
205	L Oscaleta	8/21/2011	epi	36	26	2	2	2	2	0	0	22.40	5.10							
205	L Oscaleta	9/3/2011	epi	32	24	2	2	2	2	0	0	22.70	6.20							
205	L Oscaleta	9/17/2011	epi	20	20	3	3	2	2	0	0	88.10	9.20							
205	L Oscaleta	10/8/2011	epi	23	17	2	2	2	2	0	0	82.50	10.60							
205	L Oscaleta	11/6/2011	epi	14	10	3	2	3		0	0									
205	L Oscaleta	11/26/2011	epi	18	8	3	2	3	235	4	0									
205	L Oscaleta	3/14/2012	epi	19	8	3	1	3	5											
205	L Oscaleta	5/18/2012	epi	18	19	3	2	3	1356	4	4									
205	L Oscaleta	6/11/2012	epi	24	22	1	2	2	25		4									
205	L Oscaleta	6/24/2012	epi	25	26	3	2	2	3											
205	L Oscaleta	7/15/2012	epi	29	29	2	2	2	2											
205	L Oscaleta	7/29/2012	epi	26	26	3	2	2	2											
205	L Oscaleta	8/11/2012	epi	28	28	3	2	2	12			9.06		<0.08						
205	L Oscaleta	8/26/2012	epi	28	10	3	2	2	123											
205	L Oscaleta	9/9/2012	epi	21	25	3	3	2	2	4		34.28		0.53						
205	L Oscaleta	9/21/2012	epi	21	21	3	3	2	12											
205	L Oscaleta	10/6/2012	epi	21	19	2	2	2	2			9.85		0.55						
205	L Oscaleta	11/25/2012	epi	2	7	3	1	4	15											
205	L Oscaleta	4/8/2013	epi	14	8	3	2	4	15											
205	L Oscaleta	5/20/2013	epi	21	18	2	2	3	5											
205	L Oscaleta	6/15/2013	epi	27	20	2	2	1	2	0	0	3.50	2.70	<0.30	<0.440		2.10	0.00	i	i
205	L Oscaleta	6/29/2013	epi	29	27	2	3	3	2	0	0	2.80	2.40	<0.30	<0.650		2.50	0.60	i	i
205	L Oscaleta	7/14/2013	epi	32	28	2	3	3	2	0	0	13.20	4.60	<0.30	<0.910		5.20	0.80	i	i
205	L Oscaleta	7/28/2013	epi	27	27	2	3	2	2	0	7	15.40	4.20	<0.30	<0.380		8.40	0.90	i	i
205	L Oscaleta	8/11/2013	epi	29	24	2	3	2	2	0	0	8.90	3.10	<0.30	<0.380		4.10	0.70	i	i
205	L Oscaleta	8/25/2013	epi	24	23	3	3	3	2	0	0	6.50	2.80	0.33	<0.570		2.40	0.00	i	i
205	L Oscaleta	9/8/2013	epi	20	21	2	3	2	25	0	0	21.30	5.30	0.34	<1.240		6.20	0.60	i	i
205	L Oscaleta	9/22/2013	epi	25	24	2	3	2	2	0	0	21.20	4.60	0.54	<0.050		5.00	0.70	i	i
205	L Oscaleta	10/28/2013	epi	13	13	3	3	3	5											
205	L Oscaleta	12/1/2013	epi	9	5	2	2	2	5											
205	L Oscaleta	4/13/2014	epi	18	11	3	2	3	15	7	7									
205	L Oscaleta	5/11/2014	epi	21	17	2	2	2	5	7	0									
205	L Oscaleta	6/7/2014	epi	30	23	2	3	1	28	0	0	0.40	1.90	<1.83	<0.17	<0.001	1.67	0.00	i	i
205	L Oscaleta	6/21/2014	epi	27	24	1	3	1	28	7	0	2.10	0.80	<0.58	<0.44	<0.002	2.54	0.00	i	i
205	L Oscaleta	7/5/2014	epi	26	25	1	3	1	28	0	7	1.80	0.40	<0.62	<0.03	<0.002	1.59	0.00	i	i
205	L Oscaleta	7/20/2014	epi	27	26	2	3	2	28	0	0	5.40	0.60	<0.39	<0.03	<0.001	1.81	0.28	f	f
205	L Oscaleta	8/3/2014	epi	27	25	2	3	2	2	0	0	3.30	0.80	<0.33	<0.01	<0.002	3.80	0.00	f	f
205	L Oscaleta	8/17/2014	epi	27	24	2	3	2	2	0	3	3.10	0.50	<0.39	<0.03	<0.001	1.60	0.01	i	i
205	L Oscaleta	8/30/2014	epi	28	25	1	3	1	2	0	0	4.20	0.40	<0.29	<0.14	<0.002	1.95	0.19	i	i
205	L Oscaleta	9/12/2014	epi	22	23	2	3	2	23	0	0	28.20	0.80	<0.24	<0.03	<0.001	5.64	1.62	i	i

LNum	LName	Date	Site	TAir	TH2O	QA	QB	QC	QD	QF	QG	AQ-PC	AQ-Chl	MC-LR	Ana	Cyl	FP-Chl	FP-BG	HAB form	Shore HAB
205	L Oscaleta	10/12/2014	epi	17	17	2	3	2	2	0	0									
205	L Oscaleta	11/3/2014	epi	14	12	2	2	2	25	0	0									
205	L Oscaleta	11/30/2014	epi	12	6	3	2	3	125	4	0									
205	L Oscaleta	4/21/2015	epi	17	11	2	2	2	158	0	0								i	i
205	L Oscaleta	5/30/2015	epi	28	26	2	2	2	26	0	0	6.90	0.70	<0.66	<0.313	<1.561	3.00	0.40	H	I
205	L Oscaleta	6/14/2015	epi	30	29	2	3	2	28	7	0	3.40	0.50	<0.55	<0.027	<0.318	1.00	0.00	I	I
205	L Oscaleta	6/29/2015	epi	25	25	2	3	2	2	0	0	14.00	0.60	<0.63	<0.007	<0.040	2.20	0.50	I	E
205	L Oscaleta	7/11/2015	epi	29	26	1	3	2	28	0	0	8.70	1.10	<0.76	<0.003	<0.011	4.20	0.00	I	I
205	L Oscaleta	7/25/2015	epi	28	29	3	3	2	2	4	7	10.80	0.70	<0.30	<0.002	<0.014	3.00	1.10	I	I
205	L Oscaleta	8/8/2015	epi	28	26	3	3	2	1, 2	0	0	35.20	1.50	<0.44	<0.035	<0.020	9.40	3.30	F	E
205	L Oscaleta	8/22/2015	epi	27	27	1	3	2	12	0	0			<0.21	<0.003	<0.010	4.40	0.90	I	E
205	L Oscaleta	9/5/2015	epi	27	26	1	3	1	23	0	7	11.70	0.80	<0.37	<0.012	<0.031	2.70	0.40	I	E
205	L Oscaleta	10/5/2015	epi	18	17	2	3	3	25	0	0								i	i
205	L Oscaleta	10/29/2015	epi	20	14	2	2	2	2	0	0								i	i
205	L Oscaleta	11/27/2015	epi	16	9	3	2	3	1235	0	0								i	i
205	L Oscaleta	7/22/2006	hypo		8															
205	L Oscaleta	8/19/2006	hypo		8															
205	L Oscaleta	9/9/2006	hypo		8															
205	L Oscaleta	10/7/2006	hypo		9															
205	L Oscaleta	7/7/2007	hypo		8															
205	L Oscaleta	7/22/2007	hypo		8															
205	L Oscaleta	8/5/2007	hypo		8															
205	L Oscaleta	8/19/2007	hypo		9															
205	L Oscaleta	9/2/2007	hypo		8															
205	L Oscaleta	9/16/2007	hypo		9															
205	L Oscaleta	9/30/2007	hypo		9															
205	L Oscaleta	10/21/2007	hypo		9															
205	L Oscaleta	5/10/2008	hypo		7															
205	L Oscaleta	5/24/2008	hypo		7															
205	L Oscaleta	6/8/2008	hypo		7															
205	L Oscaleta	6/22/2008	hypo		7															
205	L Oscaleta	7/6/2008	hypo		8															
205	L Oscaleta	7/20/2008	hypo		8															
205	L Oscaleta	8/3/2008	hypo		8															
205	L Oscaleta	8/17/2008	hypo		8															
205	L Oscaleta	9/1/2008	hypo		8															
205	L Oscaleta	9/14/2008	hypo		9															
205	L Oscaleta	9/28/2008	hypo		9															
205	L Oscaleta	10/11/2008	hypo		9															
205	L Oscaleta	10/25/2008	hypo		10															
205	L Oscaleta	11/9/2008	hypo		10															
205	L Oscaleta	11/29/2008	hypo		6															
205	L Oscaleta	4/17/2009	hypo		9															
205	L Oscaleta	5/18/2009	hypo		9															
205	L Oscaleta	06/20/2009	hypo		9															
205	L Oscaleta	07/05/2009	hypo		9															
205	L Oscaleta	07/19/2009	hypo		9															
205	L Oscaleta	08/03/2009	hypo		10															
205	L Oscaleta	08/16/2009	hypo		10															
205	L Oscaleta	08/30/2009	hypo		10															
205	L Oscaleta	09/13/2009	hypo		10															
205	L Oscaleta	10/04/2009	hypo		10															
205	L Oscaleta	10/30/2009	hypo		12															
205	L Oscaleta	11/29/2009	hypo		9															
205	L Oscaleta	6/26/2010	hypo		8															
205	L Oscaleta	7/10/2010	hypo		9															
205	L Oscaleta	7/25/2010	hypo		9															
205	L Oscaleta	8/8/2010	hypo		9															
205	L Oscaleta	8/21/2010	hypo		25															
205	L Oscaleta	9/6/2010	hypo		10															
205	L Oscaleta	9/20/2010	hypo		11															
205	L Oscaleta	10/2/2010	hypo		10															
205	L Oscaleta	4/22/2011	hypo		10															
205	L Oscaleta	5/14/2011	hypo		9															
205	L Oscaleta	6/4/2011	hypo		9															

LNum	LName	Date	Site	TAir	TH2O	QA	QB	QC	QD	QF	QG	AQ-PC	AQ-Chl	MC-LR	Ana	Cyl	FP-Chl	FP-BG	HAB form	Shore HAB
205	L Oscaleta	6/26/2011	hypo		9															
205	L Oscaleta	7/1/2011	hypo		9															
205	L Oscaleta	7/24/2011	hypo		9															
205	L Oscaleta	8/2/2011	hypo		9															
205	L Oscaleta	8/21/2011	hypo		10															
205	L Oscaleta	9/3/2011	hypo		10															
205	L Oscaleta	9/17/2011	hypo		10															
205	L Oscaleta	10/8/2011	hypo		10															
205	L Oscaleta	4/8/2013	hypo		6															
205	L Oscaleta	5/20/2013	hypo		10															
205	L Oscaleta	6/15/2013	hypo		8															
205	L Oscaleta	7/14/2013	hypo		9															
205	L Oscaleta	8/11/2013	hypo		9															
205	L Oscaleta	9/8/2013	hypo																	
205	L Oscaleta	10/28/2013	hypo		10															
205	L Oscaleta	12/1/2013	hypo		5															
205	L Oscaleta	6/7/2014	hypo		10															
205	L Oscaleta	6/21/2014	hypo		10															
205	L Oscaleta	7/5/2014	hypo		9															
205	L Oscaleta	7/20/2014	hypo		10															
205	L Oscaleta	8/3/2014	hypo		10															
205	L Oscaleta	8/17/2014	hypo		9															
205	L Oscaleta	8/30/2014	hypo		11															
205	L Oscaleta	9/12/2014	hypo		10															
205	L Oscaleta	10/12/2014	hypo		10															
205	L Oscaleta	11/3/2014	hypo		11															
205	L Oscaleta	11/30/2014	hypo		6															
205	L Oscaleta	4/21/2015	hypo		5															
205	L Oscaleta	5/30/2015	hypo		10															
205	L Oscaleta	6/14/2015	hypo		11															
205	L Oscaleta	6/29/2015	hypo		11															
205	L Oscaleta	7/11/2015	hypo		9															
205	L Oscaleta	7/25/2015	hypo		11															
205	L Oscaleta	8/8/2015	hypo		9															
205	L Oscaleta	8/22/2015	hypo		10															
205	L Oscaleta	9/5/2015	hypo		10															
205	L Oscaleta	10/5/2015	hypo		9															
205	L Oscaleta	10/29/2015	hypo		10															
205	L Oscaleta	11/27/2015	hypo		9															

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		

recreational suitability of the lake to be generally favorable. The recreational suitability of Lake Rippowam is described most frequently as "excellent." The lake itself is most often described as "not quite crystal clear." Recreational suitability in Lake Oscaleta was described most frequently as "slightly" impacted with the lake typically described as having "definite algal greenness." Assessments have noted that aquatic plants and algal growth have occasional impact on uses. (DEC/DOW, BWAM/CSLAP, September 2007)

Lake Uses

This lake waterbody is designated class B, suitable for use as a public bathing beach, general recreation and aquatic life support, but not as a 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 public bathing use is generally the responsibility of state and/or local health departments.

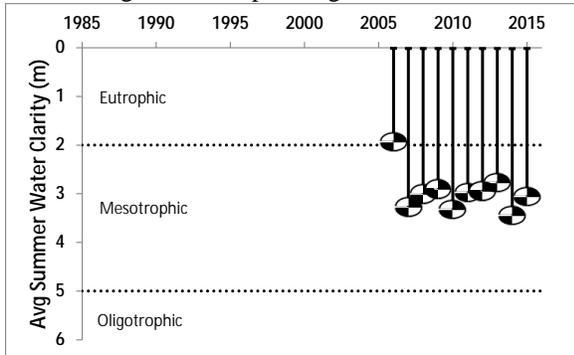
New York City Watershed

Lake Oscaleta and Lake Rippowam are 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)

Appendix C- Long Term Trends: Lake Oscaleta

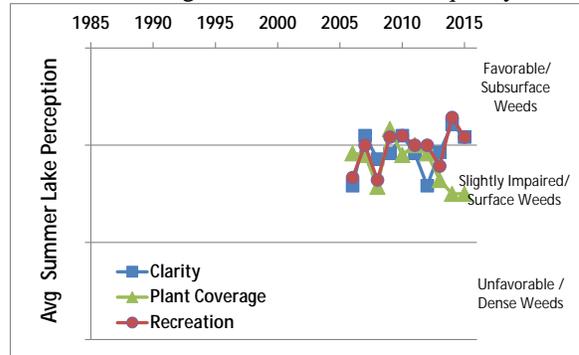
Long Term Trends: Water Clarity

- Fairly stable water clarity last few years
- Most readings typical of *mesotrophic* lakes, higher than expected given TP & chl levels



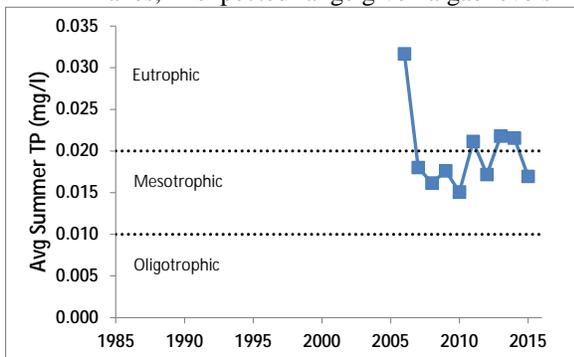
Long Term Trends: Lake Perception

- ↑ plant coverage, better WQ perception
- Recreational perception more closely linked to changes in weeds than water quality



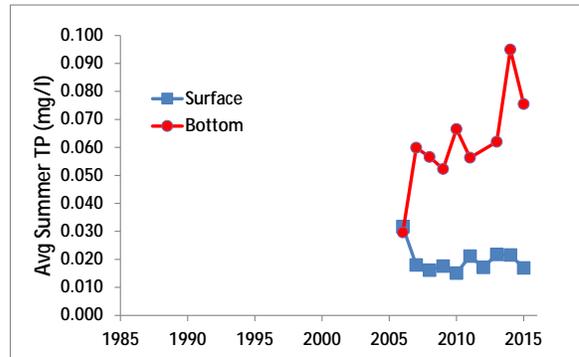
Long Term Trends: Phosphorus

- TP ↑ slightly but variably after 2007
- Most readings typical of *mesoeutrophic* lakes, in expected range given algae levels



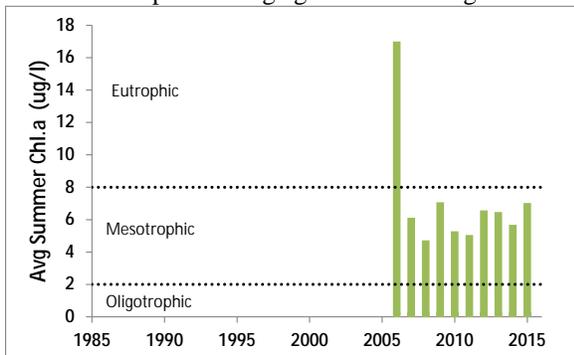
Long Term Trends: Bottom Phosphorus

- Bottom TP slightly higher and rising?
- Suggests that bottom TP may contribute to rise in surface TP in fall



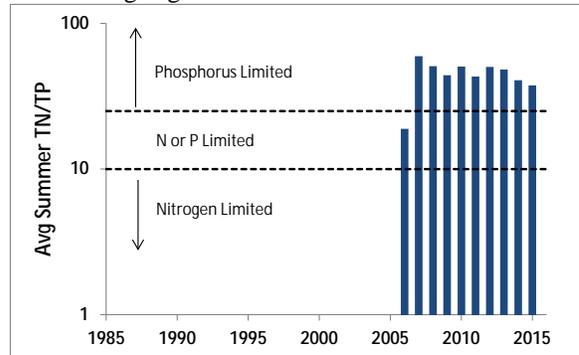
Long Term Trends: Chlorophyll a

- Algae levels stable since 2007
- Most readings typical of *mesotrophic* lakes, in expected range given TP readings



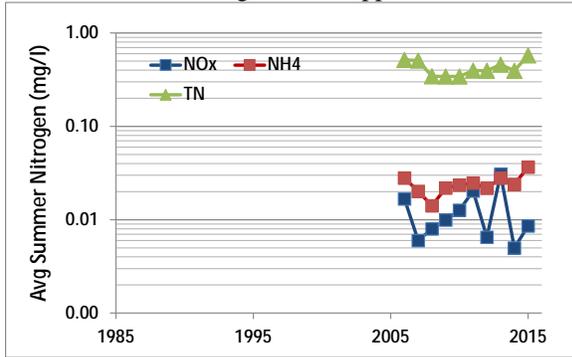
Long Term Trends: N:P Ratio

- No trends apparent; slight recent decrease
- Most readings indicate phosphorus limits algae growth



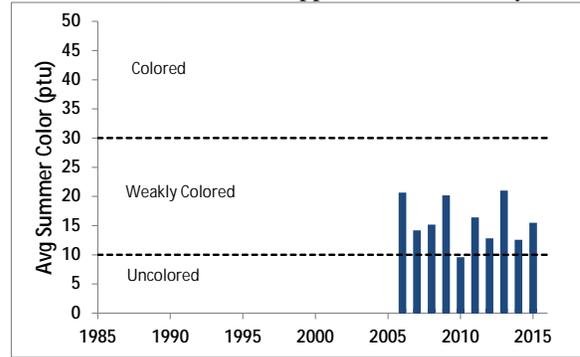
Long Term Trends: Nitrogen

- N indicators may be stable; slight increase in NH4
- Overall nitrogen levels appear to be low



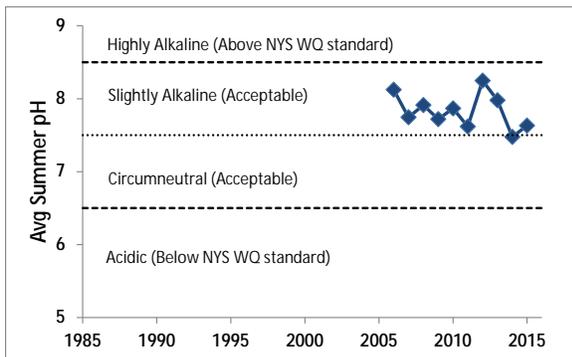
Long Term Trends: Color

- Color readings stable (or at least variable)
- Most readings typical of *weakly colored* lakes, but do not appear to affect clarity



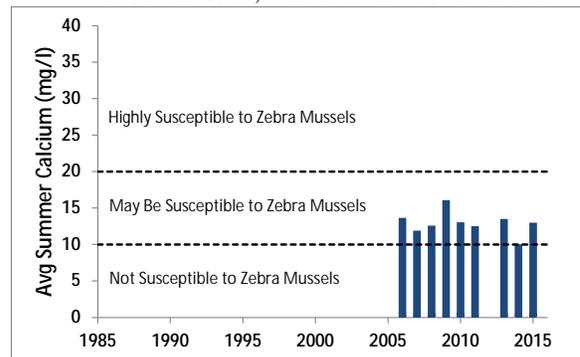
Long Term Trends: pH

- pH dropped last few yrs; no long-term trend
- Most readings typical *slightly alkaline* lakes]



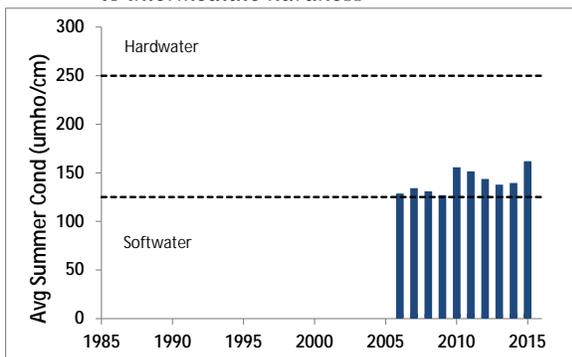
Long Term Trends: Calcium

- No trends apparent; little variability
- Most readings indicate low susceptibility to zebra mussels, which are not found in lake



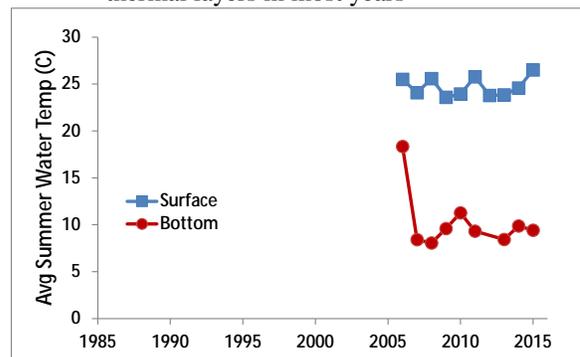
Long Term Trends: Conductivity

- Slight increase since late 2000s
- Most readings typical of lakes with *softwater* to *intermediate hardness*



Long Term Trends: Water Temperature

- No trends apparent
- Lower deepwater temperature indicate strong thermal layers in most years



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

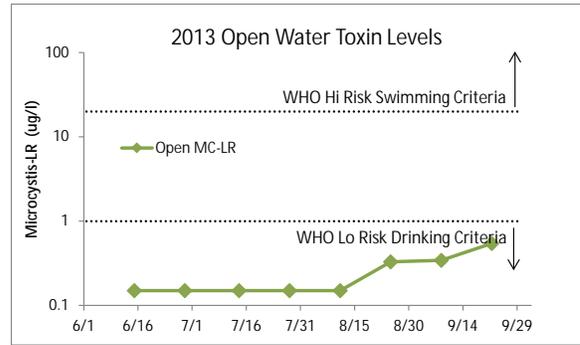


Figure D2:
2013 Open Water Microcystin-LR



Figure D3:
2013 Shoreline Total and BGA Chl.a

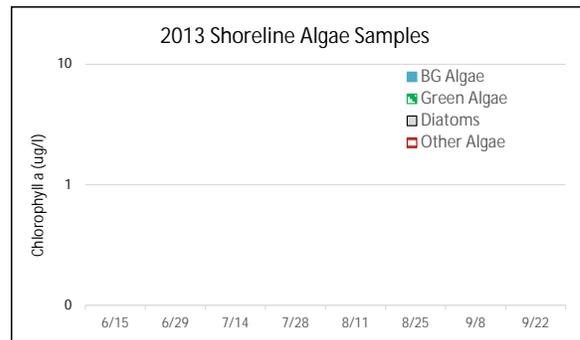


Figure D4:
2013 Shoreline Microcystin-LR

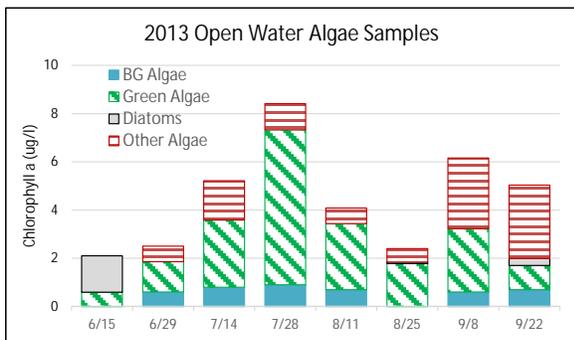


Figure D5:
2013 Open Water Algae Types

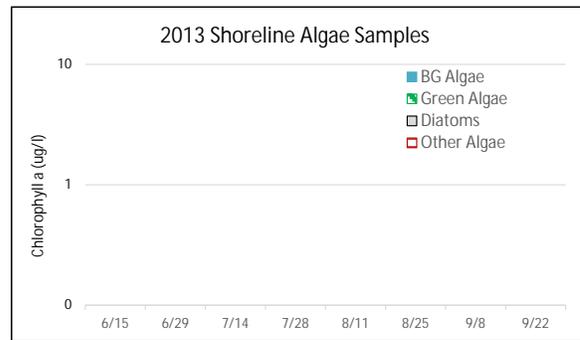


Figure D6:
2013 Shoreline Algae Types

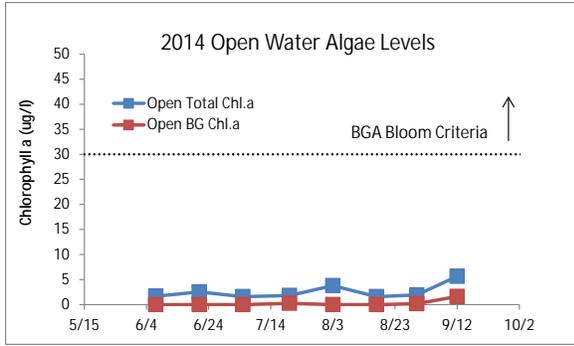


Figure D7:
2014 Open Water Total and BGA Chl.a

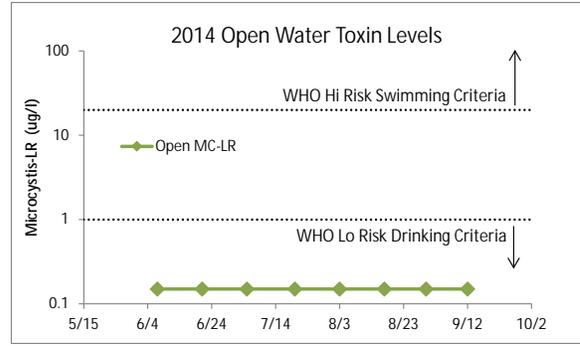


Figure D8:
2014 Open Water Microcystin-LR



Figure D9:
2014 Shoreline Total and BGA Chl.a

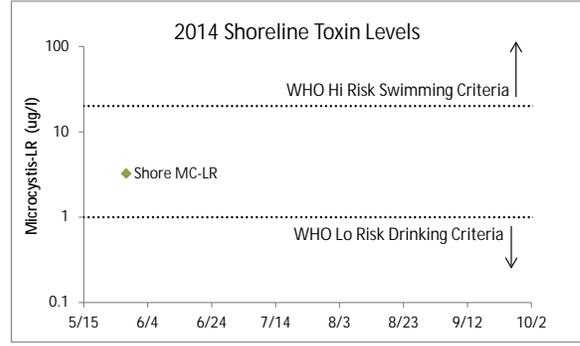


Figure D10:
2014 Shoreline Microcystin-LR

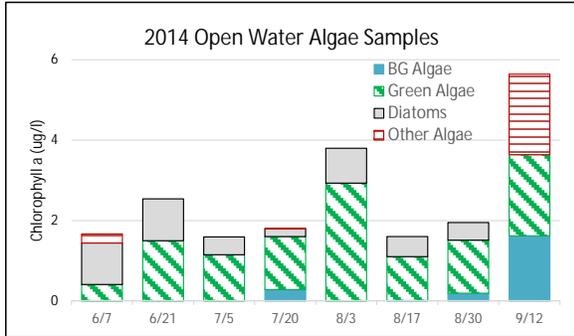


Figure D11:
2014 Open Water Algae Types

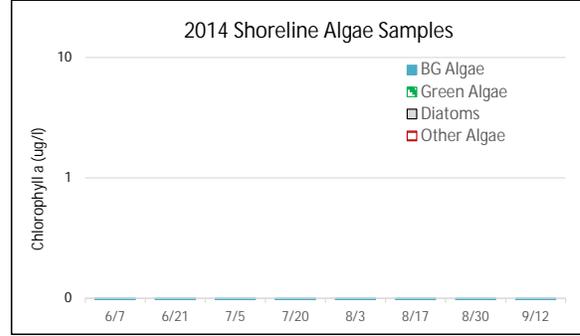


Figure D12:
2014 Shoreline Algae Types

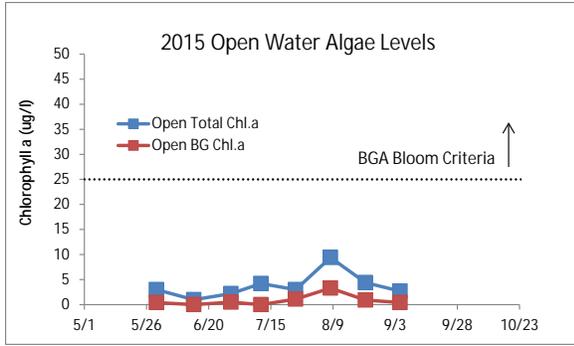


Figure D13:
2015 Open Water Total and BGA Chl.a

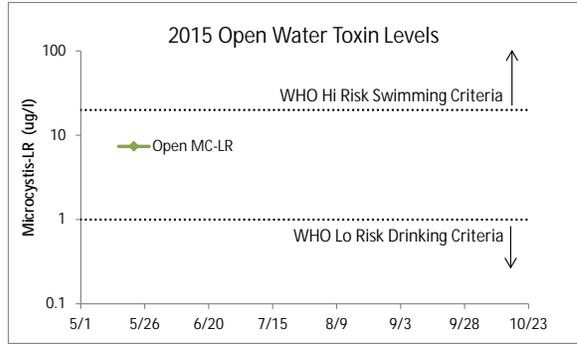


Figure D14:
2015 Open Water Microcystin-LR



Figure D15:
2015 Shoreline Total and BGA Chl.a

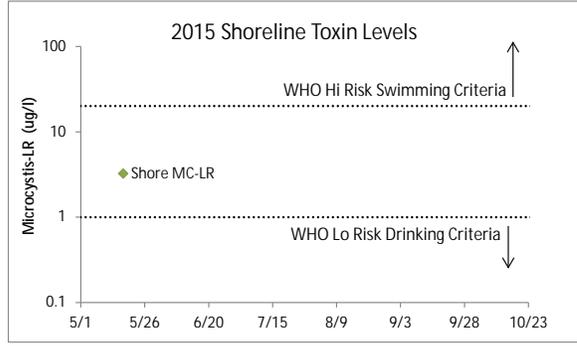


Figure D16:
2015 Shoreline Microcystin-LR

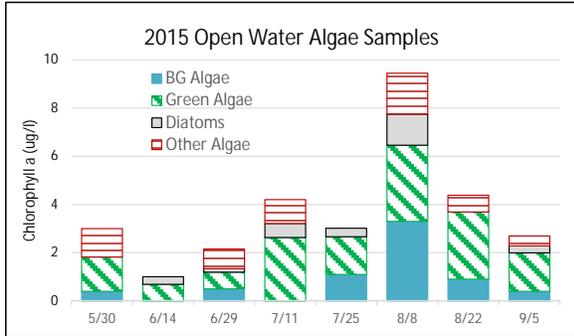


Figure D17:
2015 Open Water Algae Types

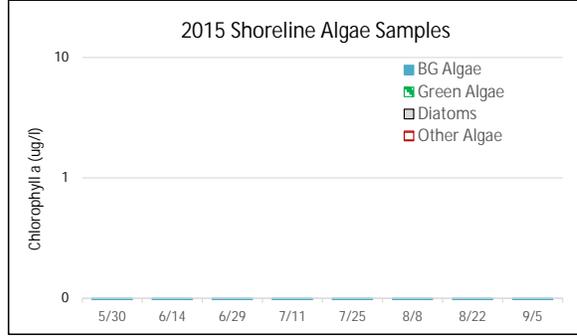


Figure D18:
2015 Shoreline Algae Types

Appendix E: AIS Species in Westchester County

The table below shows the invasive aquatic plants and animals that have been documented in Westchester 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).

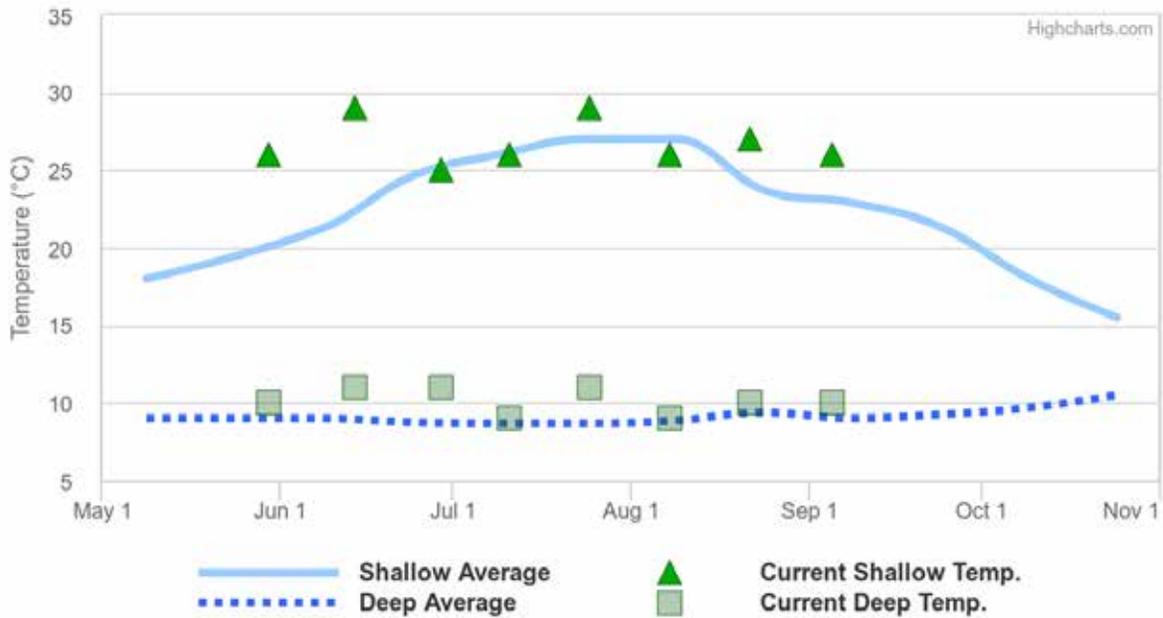
This list is not complete, but instead represents only those species that have been reported and verified within the county. If any additional aquatic invasive species (AIS) are known or suspected in these or other waterbodies in the county, this information should be reported through iMap invasives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

Aquatic Invasive Species - Westchester County			
Waterbody	Kingdom	Common name	Scientific name
Cross River Reservoir	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Cross River Reservoir	Animal	Virile crayfish	<i>Orconectes virilis</i>
Croton River	Plant	Hydrilla	<i>Hydrilla verticillata</i>
Croton River	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Croton River	Plant	Brittle naiad	<i>Najas minor</i>
Croton River	Plant	Curly leafed pondweed	<i>Potamogeton crispus</i>
Grassy Sprain Reservoir	Animal	American alligator	<i>Alligator mississippiensis</i>
Howlands Lake	Plant	Brittle naiad	<i>Najas minor</i>
Hudson River	Plant	Water chestnut	<i>Trapa natans</i>
Hudson River	Animal	Zebra mussel	<i>Dreissena polymorpha</i>
Huguenot Lake	Animal	American alligator	<i>Alligator mississippiensis</i>
Lake Katonah	Plant	Curly leafed pondweed	<i>Potamogeton crispus</i>
Lake Lincolndale	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Lake Lincolndale	Plant	Brittle naiad	<i>Najas minor</i>
Lake Mohegan	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Lake Oscaleta	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Lake Oscaleta	Plant	Brittle naiad	<i>Najas minor</i>
Lake Oscaleta	Plant	Curly leafed pondweed	<i>Potamogeton crispus</i>
Lake Rippowam	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Lake Waccabuc	Plant	Brazilian elodea	<i>Egeria densa</i>
Lake Waccabuc	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Lake Waccabuc	Plant	Brittle naiad	<i>Najas minor</i>
Lake Waccabuc	Plant	Curly leafed pondweed	<i>Potamogeton crispus</i>
Lake Waccabuc	Plant	Water chestnut	<i>Trapa natans</i>

Waterbody	Kingdom	Common name	Scientific name
Lounsbury Pond	Plant	Water chestnut	<i>Trapa natans</i>
Mohansic Lake	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Muscoot Reservoir	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Muscoot Reservoir	Animal	Rusty crayfish	<i>Orconectes rusticus</i>
Muscoot Reservoir	Plant	Curly leafed pondweed	<i>Potamogeton crispus</i>
Muscoot Reservoir	Plant	Water chestnut	<i>Trapa natans</i>
New Croton Reservoir	Plant	Hydrilla	<i>Hydrilla verticillata</i>
New Croton Reservoir	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Peach Lake	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Pine Lake	Plant	Water chestnut	<i>Trapa natans</i>
Tarrytown Reservoir	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Teatown Lake	Plant	European four leaf clover	<i>Marsilea quadrifolia</i>
Teatown Lake	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Teatown Lake	Plant	Water chestnut	<i>Trapa natans</i>
Titicus Reservoir	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Troublesome Brook n of Tuckahoe	Animal	Asian Clam	<i>Corbicula fluminea</i>
Truesdale Lake	Plant	Curly leafed pondweed	<i>Potamogeton crispus</i>
Vernay Lake	Plant	Curly leafed pondweed	<i>Potamogeton crispus</i>
Wallace Pond	Plant	Curly leafed pondweed	<i>Potamogeton crispus</i>
Wampus Lake Reservoir	Plant	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Wampus Lake Reservoir	Plant	Curly leafed pondweed	<i>Potamogeton crispus</i>

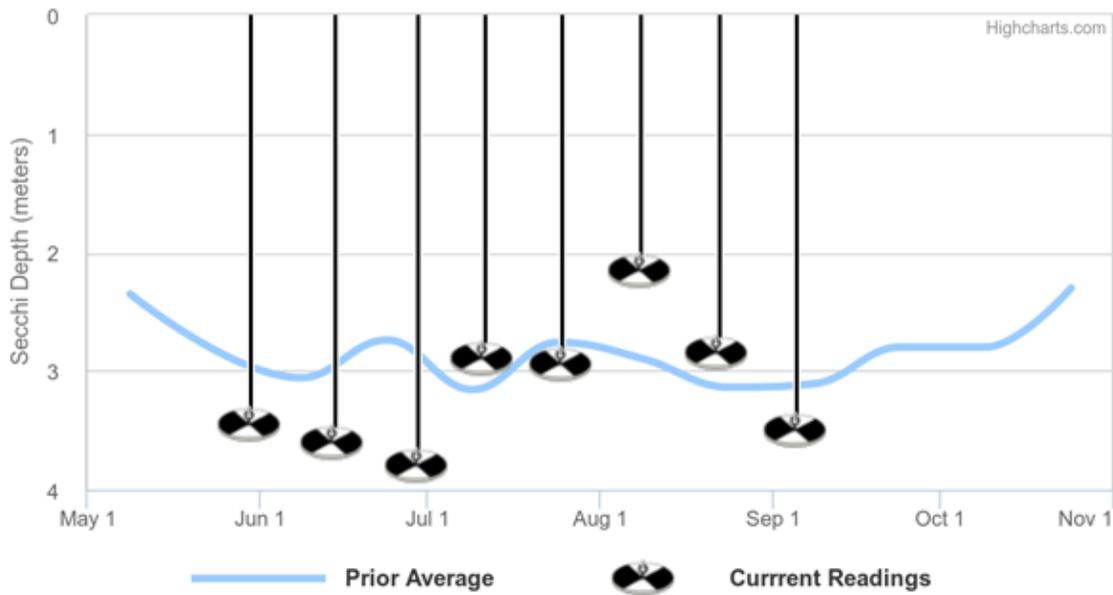
Appendix F: Current Year vs. Prior Averages for Lake Oscaleta

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 2006 to 2014. This year's deep water sample temperatures are tending to be higher than normal when compared to the average of readings collected from 2006 to 2014.

Current Year Secchi Readings vs. Prior Average



This year's session Secchi readings are about the same as the average of readings collected from 2006 to 2014

Appendix G: Watershed and Land Use Map for Lake Osaleta

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.

