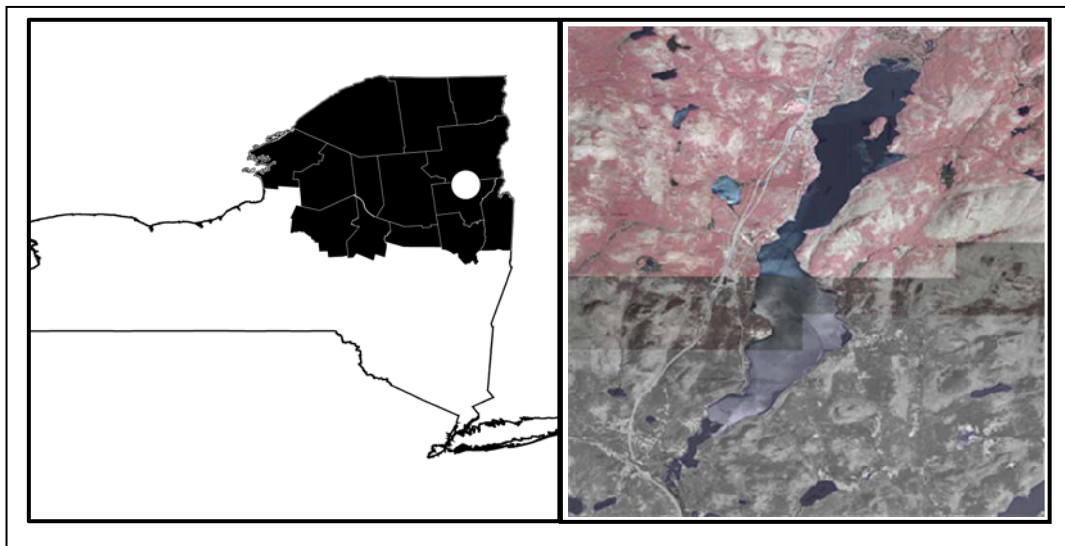


## CSLAP 2011 Lake Water Quality Summary: Schroon Lake

### General Lake Information

<b>Location</b>	Towns of Chester, Horicon and Schroon
<b>County</b>	Essex and Warren
<b>Basin</b>	Upper Hudson River
<b>Size</b>	1,670.6 hectares (4,126.4 acres)
<b>Lake Origins</b>	Natural
<b>Watershed Area</b>	136,000 hectares (335,920 acres)
<b>Retention Time</b>	0.4 years
<b>Mean Depth</b>	17 meters
<b>Sounding Depth</b>	44 meters
<b>Public Access?</b>	DEC launch
<b>Major Tributaries</b>	Schroon River, Alder Creek, Mill Brook, Rogers Brook, Spectacle Brook, Sucker Brook, Sucker Brook
<b>Lake Tributary To...</b>	Schroon River to Hudson River
<b>WQ Classification</b>	AA (potable water)
<b>Lake Outlet Latitude</b>	43.728
<b>Lake Outlet Longitude</b>	-73.812
<b>Sampling Years</b>	1987-1995, 1997-2011
<b>2011 Samplers</b>	Chuck and Nancy Harste, Kevin and Shannon Nessler, Carson Gillespie, Michael and Susan Purdy, and Bob and Barbara Colegrove
<b>Main Contact</b>	Helen Wildman and Bill McGhie

### Lake Map



## **Background**

Schroon Lake is a 4125 acre, class AA lake found in the Town of Schroon in Essex County and the town of Horicon in Essex County, in southeastern Adirondack region of New York State. It was first sampled as part of CSLAP in 1987.

It is one of nine CSLAP lakes among the more than 270 lakes found in Essex County, one of 12 CSLAP lakes among the 120 lakes in Warren County, and one of 24 CSLAP lakes among the more than 470 lakes and ponds in the Upper Hudson River drainage basin.

## **Lake Uses**

Schroon Lake is a Class AA lake; this means that the best intended use for the lake is for potable water use—drinking, contact recreation—swimming and bathing, non-contact recreation—boating and angling, aquatic life, and aesthetics. The lake is used by lake residents and visitors for swimming, boating and other recreation via shoreline properties and a public boat launch.

The state stocks about 7,300 six to seven inch lake trout and about 3,000 seven inch landlocked salmon each year at Schroon Lake. Fish species in the lake include Atlantic salmon, black crappie, brown bullhead, lake trout, largemouth bass, northern pike, pumpkinseed sunfish, rainbow smelt, rock bass, white sucker, and yellow perch.

General statewide fishing regulations are applicable in Schroon Lake. In addition, for sunfish, yellow perch, and pickerel, the open season lasts all year long, with no daily take or size limit. For landlocked salmon, open season lasts all year long, with a minimum size limit of 15 inches and a daily take limit of three fish. There is a daily limit of two lake trout and a minimum size of 18 inches. For trout, there is a daily take limit of five fish, but no size limits or limits on the length of the open season.

In addition to the statewide fish consumption advisories, there are several fish advisories governing consumption of fish in Schroon Lake. For lake trout greater than 27 inches in length, yellow perch more than 13 inches in length, or smallmouth bass of any size, the New York State Department of Health recommends no more than a single meal per month.

## **Historical Water Quality Data**

CSLAP sampling was conducted on Schroon Lake from 1987 to 1995, and 1997 to 2011. The CSLAP reports for each of the past several years can be found on the NYSFOLA website at <http://nysfola.mylaketown.com>. The 2009 and 2010 CSLAP reports for Schroon Lake can also be found on the NYSDEC web page at <http://www.dec.ny.gov/lands/77872.html>.

Schroon Lake has been sampled through a number of major monitoring programs. It was sampled in 1992 as part of the US Environmental Protection Agency (USEPA) Environmental Monitoring and Assessment Program (EMAP), a short-term nationwide monitoring program in which samples lakes are randomly chosen. The lake was also sampled in 1991 as part of the USEPA Temporal Integrated Monitoring (TIME) program used to evaluate lake acidity and other water quality issues. Schroon Lake was also sampled through several NYSDEC monitoring programs prior to CSLAP, including the Lake Classification and Inventory (LCI) survey and its predecessor ambient lake monitoring program in 1982, 1973 and 1972. The lake has also been

regularly sampled by NYSDEC Fisheries staff, recently in 1983, 1984, 1989, and 1998, and originally by the Conservation Department (the predecessor to the NYSDEC) as part of the Biological Survey of the Black River basin in 1931. The lake was also sampled extensively by Adirondack Ecologists (AE) through consulting work conducted by Steve LaMere.

The data from the USEPA and NYSDEC monitoring programs from the early 1970s through the early 1990s indicated that water quality conditions were similar to that measured through CSLAP starting in the late 1980s. There was depressed pH in the 1982 LCI surface sample, but it is likely that this was not representative of the lake.

The 1932 Biological Survey was intended in part to evaluate water quality conditions as they relate to fisheries management, so much of the information collected cannot be easily compared to the CSLAP dataset. The summary information for the lake included the following:

*“Within the area bounded by its shores are a variety of depths and bottom conditions which meet the life requirements of several species of fishes. A large part of the lakes is over 50 feet deep and in most places the bottom slopes rapidly away from the shores which are made for the most part of sand, gravel, or rubble. The oxygen and temperature relationships are especially good, the oxygen value of 8.1 parts per million which obtains on the bottom in 130 feet of water surpassing all other records secured in the deep part of lakes in the watershed. In spite of these excellent conditions in the deeper portions of the lake there are few records of lake trout for this season.*

*The principal weed beds are located at the head and foot of the lake and extend into the river at the foot. Few weeds grow along the greater part of the shoreline because of the hard bottom and the action of winds which have an unobstructed sweep of the length of the lake.*

*(Schroon Lake) has a rather irregular shoreline which provides several large bays, some of which support considerable weed areas. The most extensive weed areas were found in the narrow bay at the south end and in the mouth of the Schroon River. Another weed area was found at the north end west of the Schroon River”*

The water quality data showed much higher water transparency than in any of the monitoring programs conducted 40 to 60 years later. Dissolved oxygen levels were very high even at the lake bottom in 130 feet of water.

None of the major tributaries to the lake (Mill Brook, Sucker Brook, Spectacle Brook, Rogers Brook, and the Schroon River) have been sampled through the state Rotating Intensive Basins (RIBS) stream monitoring program. However, Mill Brook at Adirondack and the Schroon River at Schroon Falls were sampled as part of the state stream biomonitoring program in 2001. The summary of those sampling results is as follows, as appearing in the 30 Year Trends in Water Quality of Rivers and Streams in New York State (1972-2002):

*“(Mill Brook) This small tributary of Schroon Lake was sampled at Adirondack in 2001, and was assessed as non-impacted. Two metrics were within the range of slight impact, and the headwater correction factor was applied to these. The stream habitat of boulders was not conducive to a diverse fauna.*

(Schroon River) The upstream site at Schroon Falls was assessed as slightly impacted in 2001. Although the fauna contained many clean-water mayflies, stoneflies, and caddisflies, species richness was low, possibly due to the substrate of boulders embedded in sand. A similarly reduced fauna was found at the downstream Warrensburg site. Previous sampling assessed the Schroon Falls site as non-impacted in 1994. The Warrensburg site was assessed as non-impacted in 1994, slightly impacted in 1993, and non-impacted in 1987 and 1988. Further sampling of these sites is recommended to determine if the decline is genuine.”

## **Lake Association and Management History**

Schroon Lake is served by the Schroon Lake Association and the East Shore Schroon Lake Association. The former was founded in 1911, the latter in 1964, and these associations collectively oversee much of the management of the lake. This includes:

- Hiring a lake manager to evaluate water quality data, conduct milfoil hand harvesting and matting, and recommending other management actions
- Development of a lake management master plan
- Conducting association and outreach educational efforts
- Conducting Scientific studies
- Supporting management activities through donations and SLA arts and crafts show
- Coordinating volunteer weed watchers through the APIPP program
- Developing a volunteer Milfoil Scout Program

The Schroon Lake Association maintains a website at [www.schroonlakeassociation.com](http://www.schroonlakeassociation.com). The East Shore Schroon Lake Association maintains a website at [www.essla.org](http://www.essla.org).

## **Summary of 2011 CSLAP Sampling Results**

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

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

### **Evaluation of Eutrophication Indicators**

Water clarity was lower than normal in the north basin in 2011, but not in the south basin, and no long-term changes in water transparency have been apparent at either site. Algae levels, as measured by chlorophyll *a*, were lower than normal in the south basin and close to normal in the north basin; however, these readings have decreased over time in the north basin and increased in the south basin (although on average these readings remain low). This appears to contradict a long-term increase in phosphorus readings in the north basin, although the latter does not appear to have translated into a measurable change in either algae levels or water clarity. None of these indicators has exhibited any clear long-term trends in the south basin. The lake continues to be characterized as *mesoligotrophic* at both sites, based on water clarity (typical of *mesotrophic* lakes), total phosphorus readings (typical of *oligotrophic* lakes) and chlorophyll *a* readings (typical of *mesotrophic* lakes in the north basin and *oligotrophic* lakes in the south basin), although phosphorus readings in the south basin were more typical of *mesotrophic* lakes. No seasonal changes in lake productivity are typically apparent in either site during the summer,

although water clarity decreased during the summer in both basins in 2011. The trophic state indices (TSI) evaluation suggests that each of these trophic indicators is “internally consistent”—each of these indicators is in the expected range given the readings of the other indicators—although algae levels were lower than expected in the south basin in 2011. Overall trophic conditions are summarized on the Lake Scorecards. Lake productivity appears to be slightly higher in the north basin than in the south basin, based on higher chlorophyll *a* readings usually measured in the north basin, although the difference in the water quality conditions in these basins is not significant. Overall trophic conditions are summarized on the Lake Scorecard and Lake Condition Summary Table.

### **Evaluation of Potable Water Indicators**

Algae levels are 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. Hypolimnetic phosphorus and ammonia readings in the north basin of Schroon Lake are slightly higher than those measured at the lake surface. Deepwater phosphorus readings in the south basin have been much higher than those at the lake surface, but only periodically. These data will continue to be evaluated to determine if they are representative of normal conditions in the south basin. Deepwater iron, manganese and arsenic levels appear to be low in the north basin, but higher iron readings were apparent at times in the south basin. This suggests that deepwater intakes may support potable water use in the north basin, and would probably support this use in the south basin. Potable water conditions, at least as measurable through CSLAP, are summarized in the Lake Scorecard and Lake Condition Summary Table.

### **Evaluation of Limnological Indicators**

NO<sub>x</sub> readings were also higher than normal in 2011 in both sites, although no long-term changes were apparent. Color readings were higher than normal in the north basin, and ammonia readings were higher than normal in the south basin, and calcium readings were lower than normal, but none of these indicators has exhibited any long-term trends. pH readings have increased slightly in the south basin over the last nine years, although these readings are still only slightly alkaline. It is likely that most of the small changes in these indicators represent normal variability. Overall limnological conditions for both basins are summarized in the Lake Scorecard. Limnological conditions were mostly comparable in both basins. Overall limnological conditions are summarized in the Lake Scorecard and Lake Condition Summary Table.

### **Evaluation of Biological Condition**

Macrophyte communities in the lake have been evaluated by the Darrin Freshwater Institute. These plant surveys found a high plant diversity, with at least 20 plant species, including two protected plant species (*Myriophyllum alterniflorum*, alternate flower watermilfoil, and *Potamogeton alpinus*, northern pondweed) and one invasive exotic plant species (*Myriophyllum spicatum*, Eurasian watermilfoil). The modified floristic quality index (FQI) indicates the quality of the aquatic plant community is “excellent.”

The fish community in the lake is comprised of a mix of coldwater (at least two species), coolwater (at least five species) and warmwater (at least five species) fish. This indicates that the lake supports a two story fishery.

Phytoplankton, zooplankton and macroinvertebrate surveys have not been conducted through CSLAP at Schroon Lake, although historical data from previous studies may be included in future generations of the CSLAP reports.

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

### **Evaluation of Lake Perception**

Water quality assessments in the north basin of Schroon Lake were more favorable than normal in 2011, but not in the south basin, and recreational assessments were more favorable than normal in the south basin in 2011, but not in the north basin. Aquatic plant coverage was close to normal in both basins, and none of these indicators has exhibited any significant long-term changes. Recreational and water quality assessments degrade slightly during the typical summer in the south basin, but this is not apparent in most years in the north basin, and in neither basin in 2011. Overall lake perception is summarized on the Lake Scorecard and Lake Condition Summary Table. Lake perception was comparable at both sampling sites.

### **Evaluation of Local Climate Change**

Water and air temperature readings in the summer index period were close to normal in 2011 in both sampled basins, and neither air nor water temperature readings has exhibited any long-term change. It is not likely that 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. Phycocyanin readings have been well below the levels indicating susceptibility for harmful algal blooms (HABs) in the open water and within shoreline blooms in both basins. An analysis of algae samples indicate microcystin readings below the levels needed to support safe swimming and potable water use in both basins.

# Lake Condition Summary-North

Category	Indicator	Min	87-11 Avg	Max	2011 Avg	Classification	2011 Change?	Long-term Change?
Eutrophication Indicators	Water Clarity	2.25	4.10	10.00	3.11	Mesotrophic	Lower Than Normal	No Change
	Chlorophyll <i>a</i>	0.05	2.97	12.40	2.36	Mesotrophic	Within Normal Range	Decreasing Slightly
	Total Phosphorus	0.001	0.007	0.024	0.009	Oligotrophic	Within Normal Range	Increasing Slightly
Potable Water Indicators	Hypolimnetic NH4	0.01	0.03	0.11	0.02	Close to Surface NH4 Readings	Lower Than Normal	Not known
	Hypolimnetic As	0.34	1.55	4.00	2.25	Low Deepwater Arsenic Levels	Higher than Normal	Not known
	Hypolimnetic Iron	0.01	0.38	2.60	0.15	Elevated Deepwater Fe	Lower Than Normal	Not known
	Hypolimnetic Mn	0.01	0.07	0.24	0.01	Low Manganese Levels	Lower Than Normal	Not known
Limnological Indicators	Hypolimnetic TP	0.000	0.011	0.059	0.008	Close to Surface TP Readings	Within Normal Range	Not known
	Nitrate + Nitrite	0.00	0.04	0.30	0.07	Low NOX	Higher than Normal	No Change
	Ammonia	0.00	0.03	0.20	0.04	Low Ammonia	Within Normal Range	No Change
	Total Nitrogen	0.07	0.32	1.34	0.34	Low Total Nitrogen	Within Normal Range	No Change
	pH	6.19	7.43	9.07	7.33	Circumneutral	Within Normal Range	No Change
	Specific Conductance	26	68	104	72	Softwater	Within Normal Range	No Change
	True Color	3	18	52	29	Intermediate Color	Higher than Normal	No Change
	Calcium	2.9	6.2	11.6	6.2	Not Susceptible to Zebra Mussels	Within Normal Range	No Change
Lake Perception	WQ Assessment	1	1.4	3	1.0	Crystal Clear	More Favorable Than Normal	No Change
	Plant Coverage	1	1.2	2	1.0	Plants Not Visible	Within Normal Range	No Change
	Rec. Assessment	1	1.8	5	1.3	Excellent	Within Normal Range	No Change
Biological Condition	Phytoplankton					No evidence of HABs	Not known	Not known
	Macrophytes					Excellent quality of aquatic plant community	Not known	Not known
	Zooplankton					Not evaluated through CSLAP	Not known	Not known
	Macroinvertebrates					Not evaluated through CSLAP	Not known	Not known
	Fish					Two story fishery	Not known	Not known
	Invasive Species					Eurasian watermilfoil	Not known	Not known
Local Climate Change	Air Temperature	10	21.6	38	24.5		Within Normal Range	No Change
	Water Temperature	11	21.3	33	23.8		Within Normal Range	No Change
Harmful Algal Blooms	Open Water Phycocyanin	5	17	61	7	All readings indicate low risk of BGA	Not known	Not known
	Open Water Microcystis	0.0	0.0	0.0	0.0	All readings indicate low lakewide toxins	Not known	Not known
	Shoreline Phycocyanin					No shoreline BGA blooms reported	Not known	Not known
	Shoreline Microcystis					No shoreline BGA blooms reported	Not known	Not known
	Other Toxins					Anatoxin-a and cylindrospermopsin not measured	Not known	Not known

## Lake Condition Summary-South

Category	Indicator	Min	03-11 Avg	Max	2011 Avg	Classification	2011 Change?	Long-term Change?
Eutrophication Indicators	Water Clarity	2.30	4.12	9.00	4.49	Mesotrophic	Within Normal Range	No Change
	Chlorophyll <i>a</i>	0.05	1.37	4.85	0.26	Oligotrophic	Lower Than Normal	Increasing Slightly
	Total Phosphorus	0.003	0.009	0.026	0.012	Oligotrophic	Within Normal Range	No Change
Potable Water Indicators	Hypolimnetic NH4	0.00	0.04	0.67	0.04	Close to Surface NH4 Readings	Within Normal Range	Not known
	Hypolimnetic As	0.34	0.58	0.90	0.50	Low Deepwater Arsenic Levels	Within Normal Range	Not known
	Hypolimnetic Iron	0.01	1.49	5.32	0.01	Highly Elevated Deepwater Fe	Lower Than Normal	Not known
	Hypolimnetic Mn	0.01	0.16	0.68	0.01	Low Manganese Levels	Lower Than Normal	Not known
Limnological Indicators	Hypolimnetic TP	0.002	0.110	2.650	0.011	Elevated Deepwater TP	Lower Than Normal	Not known
	Nitrate + Nitrite	0.00	0.04	0.17	0.08	Low NOx	Higher than Normal	No Change
	Ammonia	0.00	0.02	0.09	0.03	Low Ammonia	Higher than Normal	No Change
	Total Nitrogen	0.09	0.29	1.04	0.26	Low Total Nitrogen	Within Normal Range	No Change
	pH	6.25	7.46	8.50	7.66	Circumneutral	Within Normal Range	Increasing Slightly
	Specific Conductance	37	68	93	63	Softwater	Within Normal Range	No Change
	True Color	11	21	50	27	Intermediate Color	Within Normal Range	No Change
	Calcium	4.2	5.9	8.4	4.9	Not Susceptible to Zebra Mussels	Lower Than Normal	No Change
Lake Perception	WQ Assessment	1	1.5	3	1.4	Crystal Clear	Within Normal Range	No Change
	Plant Coverage	1	1.6	3	2.3	Subsurface Plant Growth	Within Normal Range	No Change
	Rec. Assessment	1	1.7	4	1.0	Excellent	More Favorable Than Normal	No Change
Biological Condition	Phytoplankton					No evidence of HABs	Not known	Not known
	Macrophytes					Excellent quality of aquatic plant community	Not known	Not known
	Zooplankton					Not evaluated through CSLAP	Not known	Not known
	Macroinvertebrates					Not evaluated through CSLAP	Not known	Not known
	Fish					Two story fishery	Not known	Not known
	Invasive Species					Eurasian watermilfoil	Not known	Not known
Local Climate Change	Air Temperature	6	20.9	37	21.9		Within Normal Range	No Change
	Water Temperature	12	20.6	29	19.8		Within Normal Range	No Change
Harmful Algal Blooms	Open Water Phycocyanin	3	16	57	5	All readings indicate low risk of BGA	Not known	Not known
	Open Water Microcystis	0.0	0.0	0.0	0.0	All readings indicate low lakewide toxins	Not known	Not known
	Shoreline Phycocyanin	15	18	19		Shoreline blooms not likely associated with BGA	Not known	Not known
	Shoreline Microcystis	0.0	0.0	0.0	0.0	Shoreline bloom toxins below drinking water and swimming criteria	Not known	Not known
	Other Toxins					Anatoxin-a and cylindrospermopsin not measured	Not known	Not known



## **Evaluation of Lake Condition Impacts to Lake Uses**

The 2006 NYSDEC Priority Waterbody Listings (PWL) for the Upper Hudson River drainage basin indicated that *fish consumption is impaired* in Schroon Lake due to PCBs and mercury. The PWL listing for Schroon Lake is shown in Appendix C.

### **Potable Water (Drinking Water)**

The CSLAP dataset at Schroon Lake, including water chemistry data, physical measurements, and volunteer samplers' perception data, is inadequate to evaluate the use of the lake for potable water. The limited data related to algae levels indicate that the lake may presently support potable water usage, although deepwater intakes in both basins may be *threatened* by elevated iron levels.

### **Contact Recreation (Swimming)**

The CSLAP dataset at Schroon Lake, including water chemistry data, physical measurements, and volunteer samplers' perception data, suggests that swimming and contact recreation should be fully supported, although slightly depressed water clarity readings in the south basin may *threaten* this use. Additional information about bacterial levels is needed to evaluate the safety of the water for swimming.

### **Non-Contact Recreation (Boating and Fishing)**

The CSLAP dataset on Schroon Lake, including water chemistry data, physical measurements, and volunteer samplers' perception data, suggest that non-contact recreation should be fully supported, although this use may ultimately be *threatened* by the presence of Eurasian watermilfoil.

### **Aquatic Life**

The CSLAP dataset on Schroon Lake, including water chemistry data, physical measurements, and volunteer samplers' perception data, suggest that aquatic life may be *threatened* by deepwater hypoxia in the south basin, and by the presence of exotic plants. Additional data are needed to evaluate the food and habitat conditions for aquatic organisms in the lake.

### **Aesthetics**

The CSLAP dataset on Schroon Lake, including water chemistry data, physical measurements, and volunteer samplers' perception data, suggest that aesthetics should be fully supported.

### **Fish Consumption**

There are several fish consumption advisories for Schroon Lake—the NYS Department of Health recommends no more than one meal per month for lake trout greater than 27" in length, yellow perch greater than 13 inches in length, or smallmouth bass of any size.

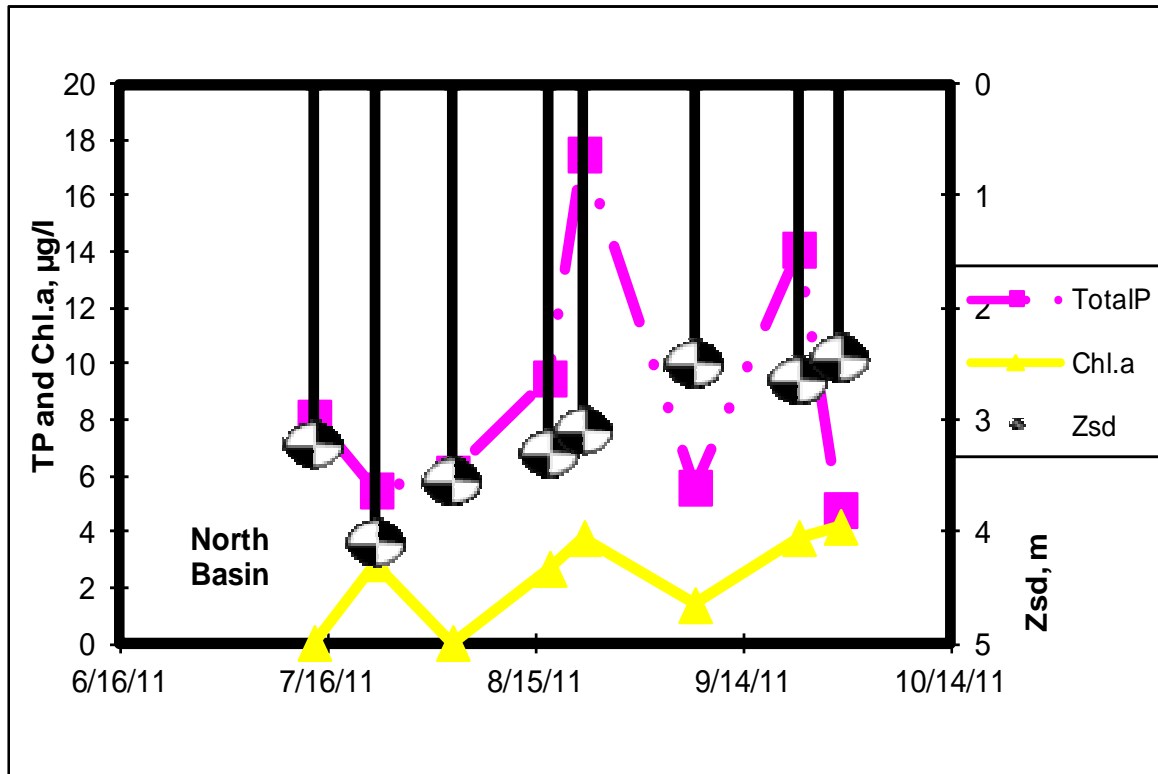
## **Additional Comments and Recommendations**

Additional information might be needed to determine if the Eurasian watermilfoil populations in the lake have significantly affected the biological integrity of the lake.

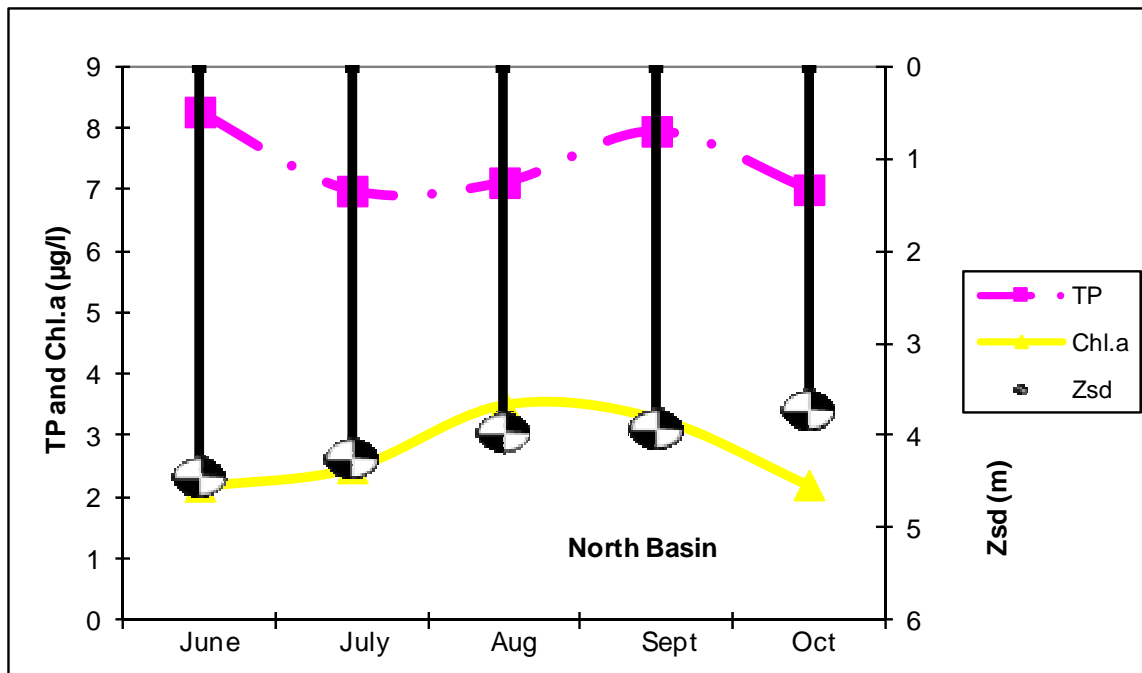
### **Aquatic Plant IDs-2011**

None submitted for identification.

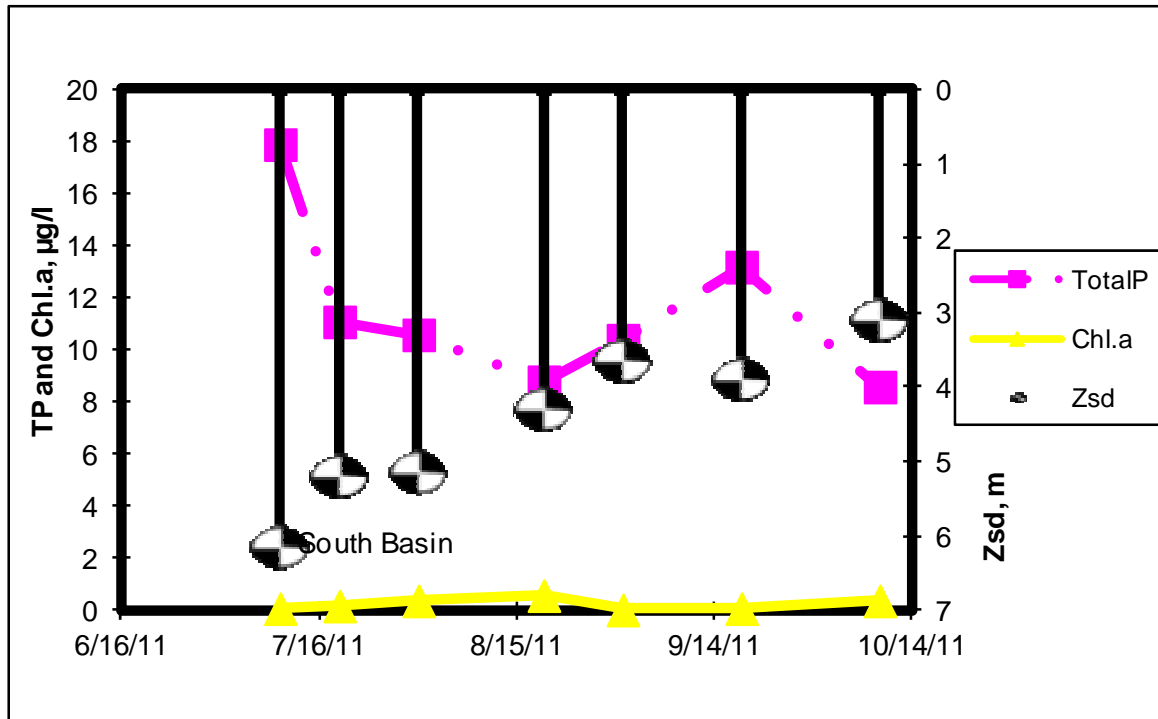
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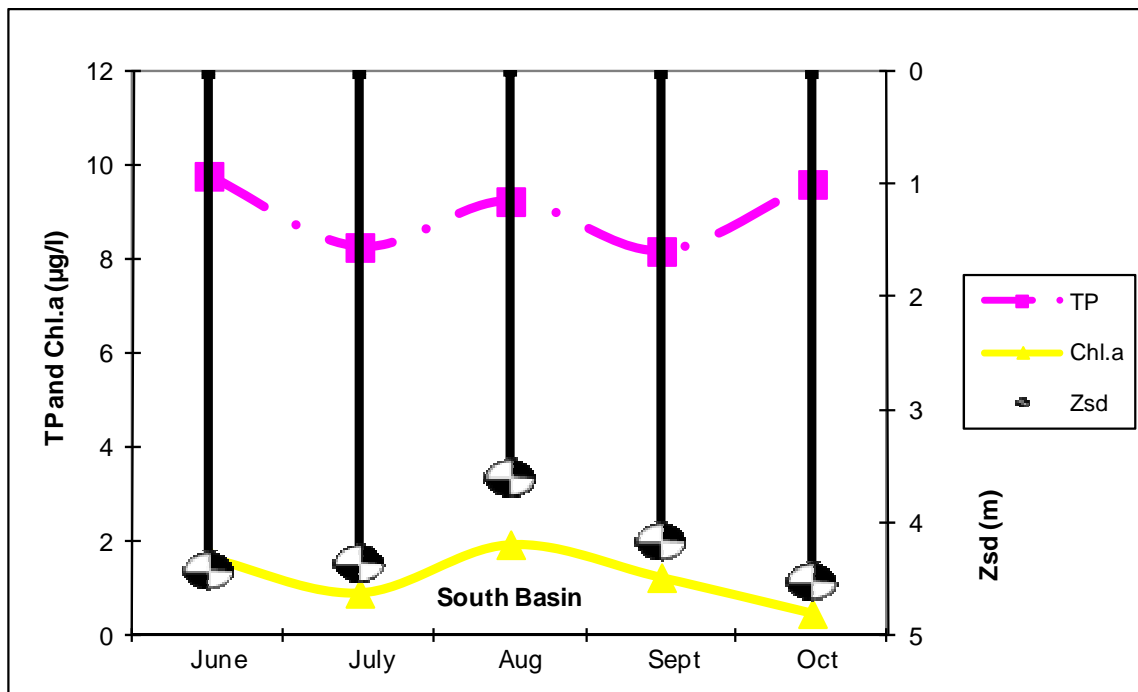
### Time Series: Trophic Indicators, Typical Year (1987-2011)-North Basin



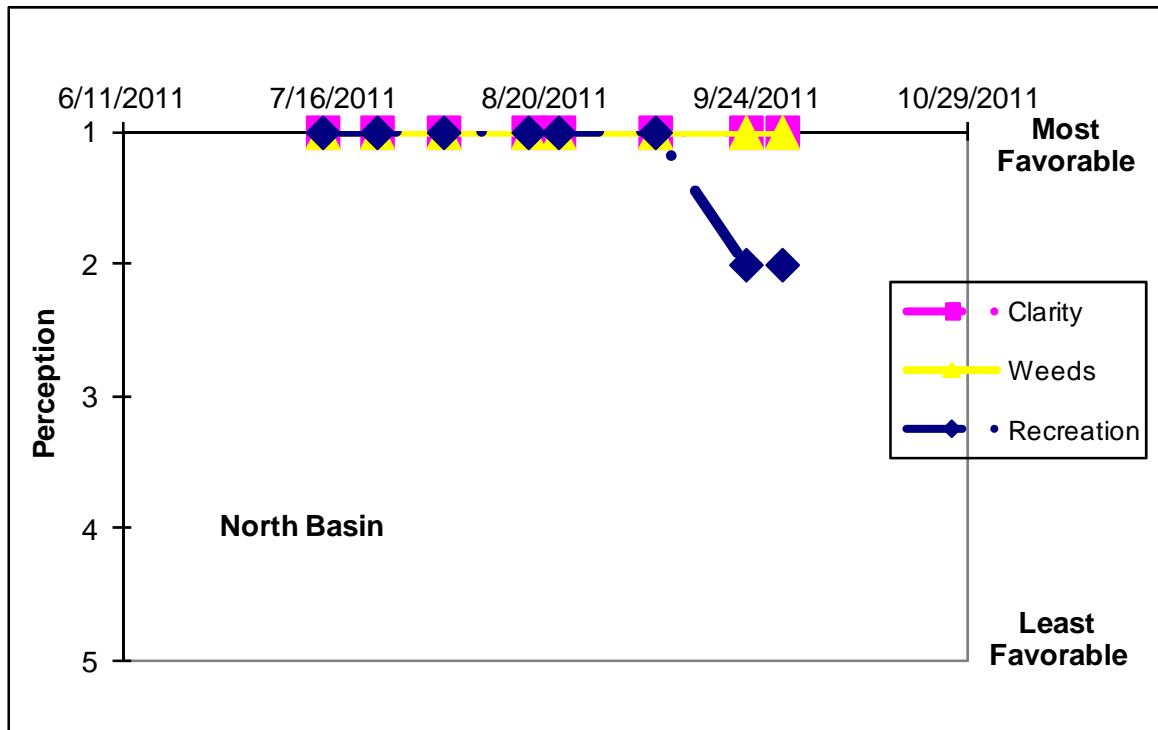
### Time Series: Trophic Indicators, 2011- South Basin



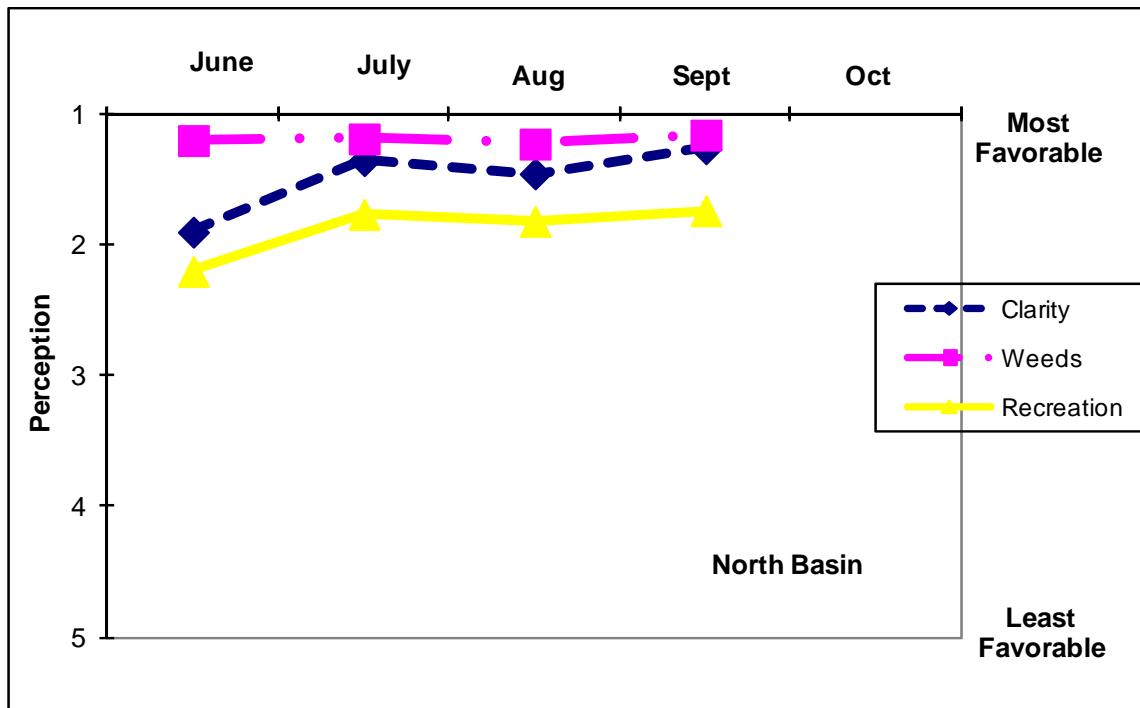
### Time Series: Trophic Indicators, Typical Year (1987-2011)- South Basin



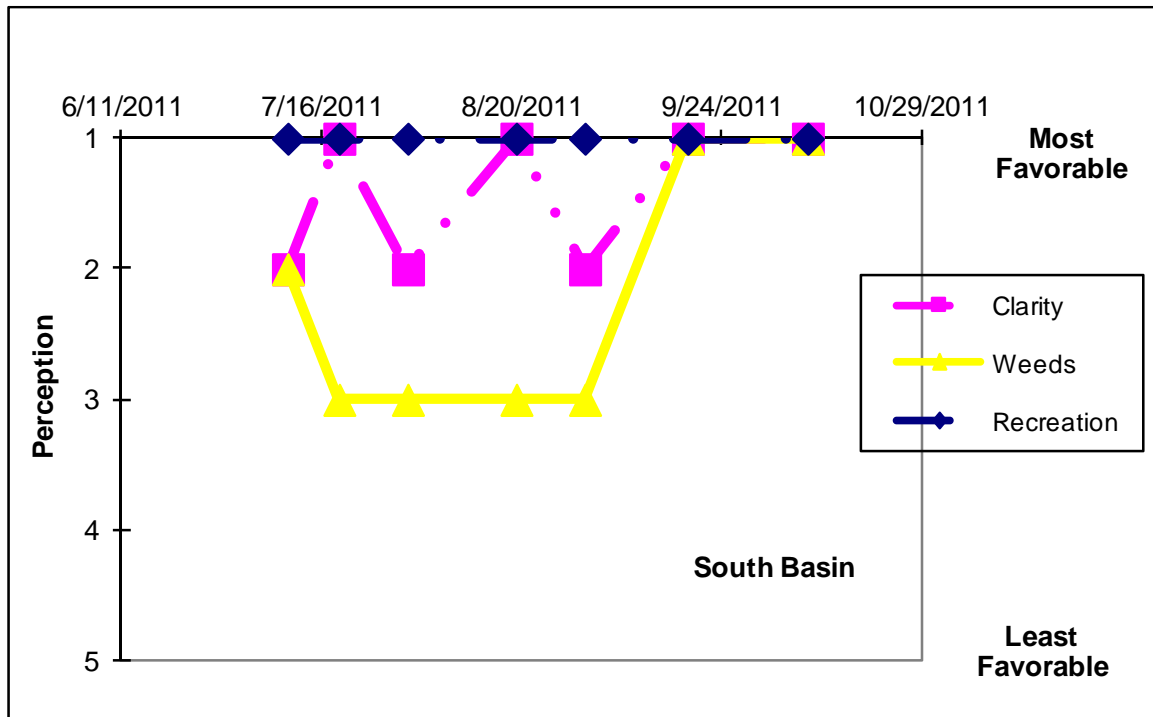
### Time Series: Lake Perception Indicators, 2011-North Basin



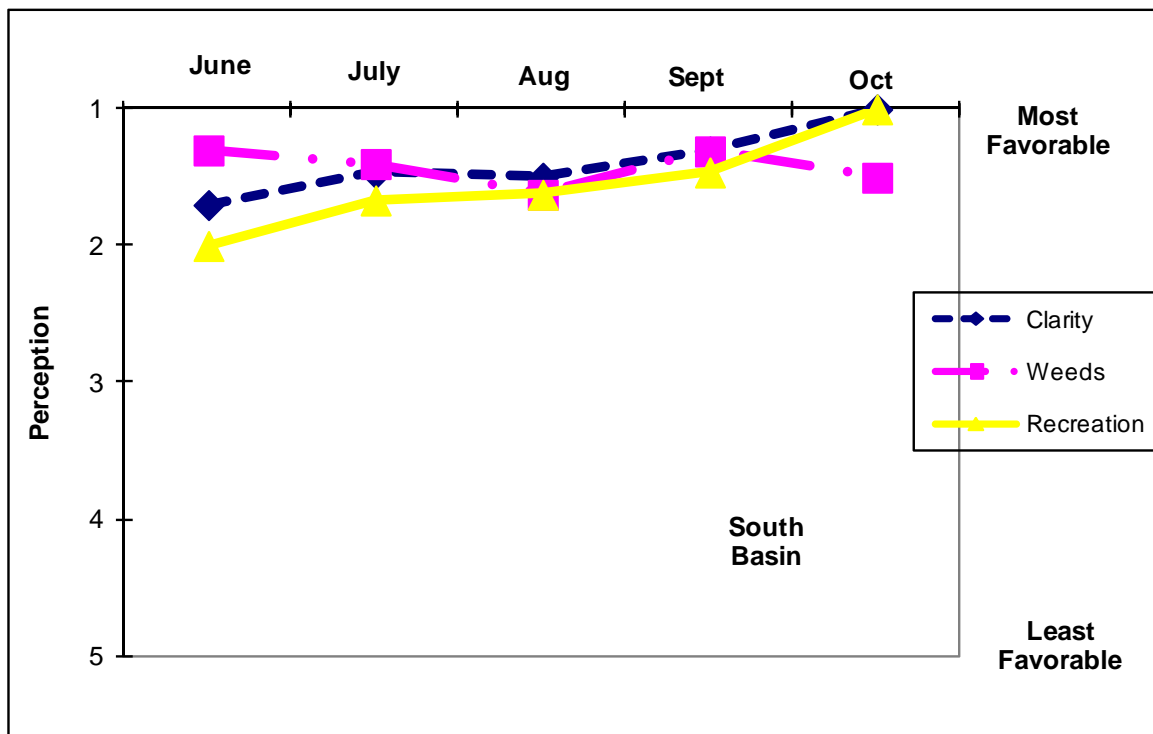
### Time Series: Lake Perception Indicators, Typical Year (1987-2011)-North Basin



### Time Series: Lake Perception Indicators, 2011-South Basin



### Time Series: Lake Perception Indicators, Typical Year (2003-2011)-South Basin



## Appendix A- CSLAP Water Quality Sampling Results for Schroon Lake

LNum	PName	Date	Zbot	Zsd	Zsamp	Tot.P	NO3	NH4	TDN	TN/TP	TColor	pH	Cond25	Ca	Chl.a
34	Schroon L-N	6/23/1987	2.0		1.5	0.005	0.14				16	7.33	62		4.70
34	Schroon L-N	7/1/1987	20.0	3.00	1.5	0.006	0.15				16	7.58	60		5.80
34	Schroon L-N	7/8/1987	21.0	4.00	1.5	0.006	0.12				14	7.09	60		4.40
34	Schroon L-N	7/13/1987	21.0	3.00	1.5	0.005	0.10				16	6.91	61		4.00
34	Schroon L-N	7/21/1987	20.0	4.00	1.5	0.001	0.09				16	7.23	62		7.60
34	Schroon L-N	7/27/1987	20.0	4.00	1.5	0.009	0.06				15	7.51	62		5.60
34	Schroon L-N	8/4/1987	20.0	4.00	1.5	0.005	0.06				17	7.87	64		6.20
34	Schroon L-N	8/7/1987	45.0	4.15	1.5	0.009	0.03				11	7.02	63		8.70
34	Schroon L-N	8/14/1987	23.7	3.50	1.5	0.007	0.03				17	7.26	64		6.10
34	Schroon L-N	8/17/1987	23.0	3.35	1.5	0.005	0.02				12	7.63	64		4.70
34	Schroon L-N	8/24/1987	23.0	3.15	1.5	0.005	0.02				10	7.52	66		10.10
34	Schroon L-N	8/30/1987	25.0	4.25	1.5	0.005	0.02				9	7.36	62		
34	Schroon L-N	9/9/1987	24.0	3.83	1.5	0.006	0.08				8	7.48	71		9.70
34	Schroon L-N	9/14/1987	23.5	5.35	1.5	0.003	0.01				6	7.17	69		5.30
34	Schroon L-N	9/22/1987	23.0	5.10	1.5	0.007	0.03				11	7.34	68		3.50
34	Schroon L-N	7/6/1988	22.5	4.30	1.5	0.004	0.11				15	7.75	80		3.63
34	Schroon L-N	7/20/1988	25.0	5.25	1.5	0.004	0.08				6	7.93	76		2.15
34	Schroon L-N	8/4/1988	25.0	5.05	1.5	0.004	0.05				5	7.92	70		2.15
34	Schroon L-N	8/16/1988	25.0	4.50	1.5	0.001	0.02				7	7.69	65		2.96
34	Schroon L-N	8/31/1988	25.0	5.20	1.5	0.006	0.02				7	7.79	70		2.15
34	Schroon L-N	9/12/1988	25.0	5.45	1.5	0.005	0.02				7	7.72	72		3.77
34	Schroon L-N	9/26/1988	18.0	5.75	1.5	0.003	0.02				7	7.58	71		3.03
34	Schroon L-N	6/27/1989	23.0	4.90	1.5	0.006	0.08				15	7.68	64		2.64
34	Schroon L-N	7/5/1989	24.0	4.60	1.5	0.003	0.07				17	7.77	64		2.55
34	Schroon L-N	7/17/1989	20.0	4.25	1.5	0.008	0.06				17	7.42	64		2.11
34	Schroon L-N	7/31/1989	18.3	4.85	1.5	0.005	0.03				12	7.58	71		4.31
34	Schroon L-N	8/14/1989	24.4	3.65	1.5	0.003	0.01				13	7.41	69		4.23
34	Schroon L-N	8/29/1989	18.3	3.10	1.5	0.004	0.01				10	7.58	70		4.03
34	Schroon L-N	9/11/1989	25.0	3.55	1.5	0.007	0.01				9	7.44	71		3.70
34	Schroon L-N	9/25/1989	25.0	3.75	1.5	0.006	0.01				16	7.62	67		4.33
34	Schroon L-N	7/2/1990	24.0	4.20	1.5	0.009	0.10				15	7.37	62		4.12
34	Schroon L-N	7/19/1990	25.0	4.70	1.5	0.004	0.06				15	7.61	65		3.69
34	Schroon L-N	7/30/1990	25.0	5.10	1.5	0.004	0.06				14		70		0.69
34	Schroon L-N	8/15/1990	25.0	4.00	1.5	0.005	0.04				16	7.70	64		7.29
34	Schroon L-N	9/4/1990	25.0	5.60	1.5	0.003	0.04				18	7.01	64		2.56
34	Schroon L-N	9/17/1990	25.0	3.80	1.5	0.005	0.04				19	7.36	67		8.00
34	Schroon L-N	10/1/1990	25.0	4.95	1.5	0.005	0.08				18	6.73	66		2.81
34	Schroon L-N	7/9/1991	25.0	6.50	1.5	0.003	0.10				15	7.60	66		2.17
34	Schroon L-N	7/22/1991	25.0	5.72	1.5	0.005	0.07				10	7.04	88		1.89
34	Schroon L-N	8/6/1991	25.0	5.80	1.5	0.009	0.03				14	7.08	69		3.67
34	Schroon L-N	8/19/1991	20.0	4.30	1.5	0.005	0.01				9	7.65	69		4.42
34	Schroon L-N	9/3/1991	25.0	3.90	1.5	0.009	0.01				11	7.64	69		4.20
34	Schroon L-N	9/16/1991	25.0	3.70	1.5	0.010	0.01				9	7.60	69		3.11
34	Schroon L-N	7/20/1997		4.00	1.5	0.008	0.05				10	7.51	68		3.48
34	Schroon L-N	8/3/1997	9.3	5.05	1.5	0.004	0.02				9	7.53	69		3.03
34	Schroon L-N	9/8/1997		2.80	1.5	0.006	0.01				7	6.89	72		2.50
34	Schroon L-N	6/10/2002	43.6	3.05	1.0		0.10	0.02	1.01		14	7.25	73		0.95
34	Schroon L-N	6/25/2002	44.2	3.25	1.0	0.007	0.07	0.04	0.47	68.14	15	7.25	73		2.68
34	Schroon L-N	7/9/2002	44.3	4.10	1.0	0.007	0.06	0.07	0.32	45.20	15	7.27	77		
34	Schroon L-N	7/23/2002	43.6	3.30	2.0	0.005	0.04	0.07	0.34	64.37	19	7.29	81		3.37
34	Schroon L-N	8/6/2002	42.6	8.50	1.0	0.002	0.03	0.06	0.47	235.76	11	7.56	86		1.79
34	Schroon L-N	8/20/2002	44.2	3.30		0.006	0.02	0.05	0.47	77.36	15	7.64	87		2.37
34	Schroon L-N	9/3/2002	43.9	3.50		0.005	0.02	0.01	0.31	60.94	12	7.43	82		3.03
34	Schroon L-N	9/17/2002	42.6	4.50	1.0	0.005	0.00	0.01	0.31	60.13	16	7.64	86		3.47
34	Schroon L-N	6/24/2003	44.2	3.45	1.0		0.08	0.02	0.19		22	7.28	82	6.2	1.45
34	Schroon L-N	7/8/2003	42.7	4.15	1.0	0.006	0.06	0.03	0.21	36.65	12	7.34	84		1.15
34	Schroon L-N	7/22/2003	44.5	5.54		0.004	0.04	0.02	0.21	47.79	21	7.48	88		2.63
34	Schroon L-N	8/5/2003	43.0	2.75	1.0	0.007	0.00	0.03	0.24	32.27	17	7.25	84		4.61
34	Schroon L-N	8/19/2003	42.7	3.10		0.007	0.01	0.02	0.29	40.99	21	7.19	81	6.9	3.58
34	Schroon L-N	9/2/2003	43.9	3.40	1.0	0.007	0.00	0.02	0.25	37.09	17	7.08	84		0.87
34	Schroon L-N	9/17/2003	44.0	3.60	1	0.005	0.01	0.02	0.07	12.15	13	7.25	88		2.36
34	Schroon L-N	9/30/2003	45.1	3.88		0.004	0.00	0.01	0.28	75.66	12	7.22	81		0.46
34	Schroon L-N	6/11/2004		6.75		0.011	0.07	0.02	0.19	17.30	22	6.32	79		2.36

LNum	PName	Date	Zbot	Zsd	Zsamp	Tot.P	NO3	NH4	TDN	TN/TP	TColor	pH	Cond25	Ca	Chl.a
34	Schroon L-N	6/23/2004	44.2	10.00	1.0	0.003	0.05	0.02	0.31	108.66	19	6.29	81		3.92
34	Schroon L-N	7/7/2004	43.9	4.00	1.0	0.006	0.13	0.08	1.11	176.65	17	6.32	59		1.00
34	Schroon L-N	7/21/2004	44.5	4.38		0.004	0.02	0.02	1.34	311.07	14	7.40	83		0.60
34	Schroon L-N	8/4/2004	44.5	4.05	1.0	0.003	0.02	0.03	0.31	102.98	17	8.29	91	9.1	3.70
34	Schroon L-N	8/18/2004	43.3	3.85	1.0	0.003	0.01	0.01	0.39	155.96	12	7.17	74		3.90
34	Schroon L-N	9/1/2004	44.8	3.40	1.0	0.009	0.01	0.01	0.34	36.74		7.02	61		2.30
34	Schroon L-N	9/14/2004	43.3	4.10	1.0	0.009	0.02	0.03	0.38	41.12	22	7.48	51		2.10
34	Schroon L-N	6/21/2005	46.0	2.80	1.0	0.008	0.01	0.08	0.13	13.21	35	7.50	60	5.1	4.17
34	Schroon L-N	7/5/2005	44.8	2.25	1.0	0.009	0.03	0.03	0.30	32.46	33	8.20	88		1.49
34	Schroon L-N	7/19/2005	44.8	3.10	1.0	0.008	0.03	0.04	0.17	12.20	18	7.10	70		4.11
34	Schroon L-N	8/2/2005	44.0	2.85	1.0	0.011	0.03	0.01	0.35	9.63		7.02	83		5.51
34	Schroon L-N	8/16/2005	44.2	2.65	1.0	0.015			0.34	12.17	35	6.76	72	2.9	2.84
34	Schroon L-N	8/30/2005	44.0	3.90	1.0	0.013	0.03	0.01	0.23	6.12	25	6.94	81		2.62
34	Schroon L-N	9/13/2005	45.0	3.30	1.0	0.010	0.01	0.01	0.18	5.30	14	7.40	83		1.99
34	Schroon L-N	9/27/2005	45.1	4.45	1.0	0.018	0.02	0.20	0.27	15.22	3	7.25	104		1.67
34	Schroon L-N	6/16/2006	44.8	2.75	1.5	0.013	0.10	0.01	0.25	19.52	22	7.53	40	5.8	0.39
34	Schroon L-N	6/29/2006	44.2	2.60	1.0	0.014					21	6.96	62		2.65
34	Schroon L-N	7/27/2006	44.8	2.90	1.0	0.012	0.04	0.02	0.57	45.85	35	7.36	55		2.76
34	Schroon L-N	8/10/2006	44.2	2.70	1.0	0.012	0.03	0.04	0.67	55.69	26	7.53	48		3.41
34	Schroon L-N	8/24/2006	43.3	3.30	1.0	0.016	0.04	0.03	0.59	36.49	31	7.55	62	6.0	2.84
34	Schroon L-N	9/7/2006	44.2	3.70	1.0	0.009	0.03	0.02	0.41	47.64	10	8.25	59		2.51
34	Schroon L-N	9/20/2006	44.2	2.85	1.0	0.009	0.04	0.02	0.53	62.26	17	7.31	75		1.68
34	Schroon L-N	6/22/2008	33.0	4.00	1.5	0.008	0.04	0.02	0.15	41.95	20	7.38	53	4.0	0.10
34	Schroon L-N	7/5/2008	30.0	7.10	1.5	0.007	0.13	0.02	0.15	46.67		7.90	66		0.22
34	Schroon L-N	7/21/2008	31.0	5.35	1.5	0.008	0.03	0.01	0.23	62.66	13	7.95	53		0.10
34	Schroon L-N	8/1/2008	32.0	5.55	1.5	0.005	0.01	0.02	0.32	134.03	15	7.78	58		0.28
34	Schroon L-N	8/18/2008		4.35	1.5	0.008	0.00	0.01	0.17	49.10	20	8.10	56	5.9	0.80
34	Schroon L-N	8/29/2008	30.5	4.65	1.5	0.005	0.00	0.00	0.18	74.39	18	8.34	60		0.46
34	Schroon L-N	9/16/2008	33.5	4.95	1.5	0.007	0.03	0.00	0.17	51.68	26	7.91	66		0.46
34	Schroon L-N	9/25/2008	32.0	5.40	1.5	0.008	0.02	0.00	0.19	53.67	21	9.07	68		0.10
34	Schroon L-N	07/02/2009		2.75		0.008	0.06	0.02	0.13	35.25	35	6.19	49	6.1	0.10
34	Schroon L-N	07/20/2009		2.85		0.020	0.06	0.04	0.18	19.60	45	6.39	30		0.10
34	Schroon L-N	08/13/2009		2.90		0.008	0.06	0.02	0.16	46.86	52	7.23	58		0.10
34	Schroon L-N	08/22/2009		3.20		0.009	0.01	0.01	0.21	49.74	47	7.30	56		0.70
34	Schroon L-N	08/30/2009		3.05		0.006	0.01	0.01	0.14	49.05	38	7.40	26	5.1	6.90
34	Schroon L-N	09/03/2009		3.30		0.011	0.01	0.01	0.12	24.02	28	7.27	62		12.40
34	Schroon L-N	09/13/2009	44.5	3.50		0.024	0.01	0.01	0.14	12.64	40	7.58	35		
34	Schroon L-N	09/21/2009	50.3	3.90		0.013	0.02	0.02	0.32	53.74	34	7.38	44		0.30
34	Schroon L-N	5/25/2010	35.7	6.40	1.5	0.006	0.10	0.04			16	8.44	65	11.6	0.20
34	Schroon L-N	6/4/2010	37.4	5.38	1.5	0.008	0.07	0.03	0.19	54.13	10	7.61	70		0.20
34	Schroon L-N	7/13/2010	37.4	4.25	1.5	0.007	0.09	0.03	0.17	52.61	15	8.70	80		0.30
34	Schroon L-N	7/27/2010	36.6	5.40		0.019	0.04	0.04	0.23	26.72	11	8.66	55		0.40
34	Schroon L-N	8/17/2010	37.4	5.20	1.5	0.009	0.10	0.05	0.22	52.22	8	7.56	41	6.4	0.30
34	Schroon L-N	8/28/2010	42.0	4.00		0.009	0.01	0.02	0.28	68.22	6	6.93	89		3.50
34	Schroon L-N	10/7/2010		2.50	1.5	0.009	0.05	0.02	0.24	57.69	46	6.82	82		1.60
34	Schroon L-N	7/14/2011	40.0	3.23	1.0	0.008	0.07	0.02	0.26	69.26	31	7.29	84	6.2	0.05
34	Schroon L-N	7/23/2011		4.10	1.0	0.006	0.05	0.03	0.26	103.20	17	6.41	72		2.90
34	Schroon L-N	8/3/2011		3.55	1.0	0.006	0.03	0.05	0.27	98.10	30	8.42	90		0.05
34	Schroon L-N	8/17/2011		3.30	1.0	0.010	0.02	0.02	0.15	34.74	25	7.21	74		2.70
34	Schroon L-N	8/22/2011		3.10	1.5	0.018	0.01	0.05	0.26	32.18	24	8.59	75	6.1	3.80
34	Schroon L-N	9/7/2011		2.50		0.006	0.04	0.02	0.25	98.61	36	6.92	63		1.40
34	Schroon L-N	9/22/2011		2.65	1.5	0.014	0.30	0.10	0.90	139.96	32	7.20	53		3.80
34	Schroon L-N	9/28/2011		2.45	1.5	0.005	0.07	0.04	0.36	165.92	40	6.63	68		4.20
34	Schroon L-N	6/10/2002	43.6	3.05	30.5	0.005	0.14	0.04	0.51	94.25					
34	Schroon L-N	6/25/2002	44.2	3.25	30.5	0.007	0.14	0.09	0.53	74.39					
34	Schroon L-N	7/9/2002	44.3	4.10		0.006	0.15	0.07	0.41	65.68					
34	Schroon L-N	7/23/2002	43.6	3.30		0.000	0.16	0.05	0.54	6806.88					
34	Schroon L-N	8/6/2002	42.6	8.50	30.5	0.000	0.17	0.03	0.55	1377.45					
34	Schroon L-N	8/20/2002	44.2	3.30	30.5	0.006	0.21	0.05	0.66	114.58					
34	Schroon L-N	9/3/2002	43.9	3.50		0.004	0.16	0.01	0.42	97.76					
34	Schroon L-N	9/17/2002	42.6	4.50	30.5	0.004	0.23	0.01	0.48	114.01					
34	Schroon L-N	6/24/2003			30.5	0.004	0.20	0.03	0.25	58.33					
34	Schroon L-N	7/8/2003			30.5	0.005	0.24	0.06	0.45	95.49					
34	Schroon L-N	7/22/2003			30.5	0.005	0.19	0.03	0.03	4.93					
34	Schroon L-N	8/5/2003			43.0	0.004	0.10	0.01	0.28	73.96					
34	Schroon L-N	8/19/2003				0.006	0.19	0.03	0.34	60.18					

LNum	PName	Date	Zbot	Zsd	Zsamp	Tot.P	NO3	NH4	TDN	TN/TP		NO2	Fe	Mn	As
34	Schroon L-N	9/2/2003			30.5	0.004	0.17	0.01	0.63	143.61					
34	Schroon L-N	9/17/2003			30.5	0.003	0.24	0.02	0.25	91.30					
34	Schroon L-N	9/30/2003			30.5	0.002	0.21	0.01	0.41	194.89					
34	Schroon L-N	6/11/2004			44.2	0.005	0.20	0.05	0.15	27.26					
34	Schroon L-N	6/23/2004	44.2		30.5	0.004	0.18	0.02	0.09	22.04					
34	Schroon L-N	7/7/2004	43.9		30.5	0.005	0.23	0.02	0.98	207.35					
34	Schroon L-N	7/21/2004	44.5		30.5	0.005	0.28	0.11	0.72	154.26					
34	Schroon L-N	8/4/2004				0.005	0.20	0.01	0.35	76.63					
34	Schroon L-N	8/18/2004				0.003	0.18	0.01	0.42	132.85					
34	Schroon L-N	9/1/2004				0.005	0.19	0.01	0.26	57.51					
34	Schroon L-N	9/14/2004	43.3		30.5	0.006	0.03	0.04	0.33	59.04					
34	Schroon L-N	6/21/2005			30.5	0.010									
34	Schroon L-N	7/19/2005			25.0	0.014									
34	Schroon L-N	8/2/2005			25.0	0.036									
34	Schroon L-N	8/16/2005			25.0	0.028									
34	Schroon L-N	8/30/2005			25.0	0.038									
34	Schroon L-N	9/13/2005			25.0	0.034									
34	Schroon L-N	6/16/2006	44.8		30.5	0.007									
34	Schroon L-N	6/29/2006	44.2		30.5	0.011									
34	Schroon L-N	7/27/2006	44.8		30.5	0.010									
34	Schroon L-N	8/10/2006	44.2		30.5	0.013									
34	Schroon L-N	8/24/2006	43.3		30.5	0.005									
34	Schroon L-N	9/7/2006	44.2		30.5	0.004									
34	Schroon L-N	9/20/2006	44.2		30.5	0.008									
34	Schroon L-N	6/22/2008	33.0		33.0	0.059									
34	Schroon L-N	7/5/2008	30.0		30.0	0.005									
34	Schroon L-N	7/21/2008	31.0		30.5	0.005									
34	Schroon L-N	8/1/2008	32.0		30.5	0.003									
34	Schroon L-N	8/18/2008			31.0	0.005									
34	Schroon L-N	8/29/2008	30.5		30.5	0.004									
34	Schroon L-N	9/16/2008	33.5		30.5	0.002									
34	Schroon L-N	9/25/2008	32.0		30.0	0.005									
34	Schroon L-N	07/02/2009			40.0	0.010		0.05							
34	Schroon L-N	07/20/2009			45.0										
34	Schroon L-N	08/13/2009			39.0	0.005		0.02							
34	Schroon L-N	08/22/2009			43.0	0.007									
34	Schroon L-N	08/30/2009			46.0	0.008		0.01				0.10	0.10	1.70	
34	Schroon L-N	09/03/2009			41.5	0.057									
34	Schroon L-N	09/13/2009	44.5		42.0	0.043		0.04				2.60	0.24	0.34	
34	Schroon L-N	09/21/2009	50.3		43.0	0.031									
34	Schroon L-N	5/25/2010	35.7		35.0	0.008		0.04				0.03			
34	Schroon L-N	7/13/2010	37.4		35.0	0.014		0.04				0.03			
34	Schroon L-N	8/17/2010	37.4		35.0	0.021		0.03				0.03			
34	Schroon L-N	8/28/2010	42.0		42.0										1.20
34	Schroon L-N	7/14/2011	40.0	3.23	39.0	0.007		0.02				0.21	0.01		
34	Schroon L-N	8/3/2011		3.55	42.0	0.013		0.01				0.15	0.01		
34	Schroon L-N	8/22/2011		3.10	43.5	0.006		0.03				0.26	0.04	0.50	
34	Schroon L-N	9/22/2011		2.65	48.0	0.007		0.03				0.01	0.01	4.00	

LNum	PName	Date	Zbot	Zsd	Zsamp	Tot.P	NO3	NH4	TDN	TN/TP	TColor	pH	Cond25	Ca	Chl.a
34.1	Schroon L-S	6/24/2003	35.7	3.95	1.0	0.004	0.15	0.02	0.17	41.00	16	7.31	72	8.4	0.49
34.1	Schroon L-S	7/8/2003	36.6	4.85	1.0	0.004	0.07	0.01	0.32	78.09	11	7.38	74		1.16
34.1	Schroon L-S	7/22/2003	34.0	6.14		0.004	0.05	0.03	0.28	73.80	15	7.44	77		2.05
34.1	Schroon L-S	8/5/2003	34.0	3.95	1.0	0.004	0.00	0.02	0.28	64.14	17	7.15	78		3.15
34.1	Schroon L-S	8/19/2003	36.6	3.30	1.0	0.004	0.00	0.01	0.23	62.40	11	7.23	79	6.7	2.83
34.1	Schroon L-S	9/2/2003	32.6	4.60	1.0	0.004	0.00	0.01	0.16	40.20	17	7.24	81		1.96
34.1	Schroon L-S	9/17/2003	35.0	4.95	1.0	0.004	0.00	0.01	0.11	27.86	13	7.04	85		2.21
34.1	Schroon L-S	9/30/2003	35.0	2.83	1.5	0.006	0.02	0.01	0.29	47.41	17	6.97	86		2.22
34.1	Schroon L-S	6/11/2004		5.00		0.006	0.09	0.02	0.38	62.83	22	6.26	73		1.22
34.1	Schroon L-S	6/23/2004	34.7	9.00	1.0	0.004	0.05	0.01	0.29	80.38	16	6.25	72		2.09
34.1	Schroon L-S	7/7/2004	34.4	4.50	1.0	0.003	0.09	0.03	1.04	301.24	16	6.76	74		0.50
34.1	Schroon L-S	7/21/2004	34.5	4.00		0.005	0.05	0.07	0.36	77.23	13	7.54	76		0.40
34.1	Schroon L-S	8/4/2004	35.1	3.70	1.0	0.005	0.02	0.02	0.23	45.52	17	7.77	85		3.30
34.1	Schroon L-S	8/18/2004	36.0	2.90	1.0	0.003	0.02	0.01	0.35	138.23	14	7.20	63		2.70
34.1	Schroon L-S	9/1/2004	36.0	4.10	1.0	0.003	0.03	0.01	0.38	124.89		7.02	61		2.60



LNum	PName	Date	Zbot	Zsd	Zsamp	Tot.P	NO3	NH4	TDN	TN/TP	TColor	pH	Cond25	Ca	Chl.a
34.1	Schroon L-S	9/14/2004	36.0	5.00	1.0	0.006	0.03	0.03	0.34	61.04	18	6.64	64		1.20
34.1	Schroon L-S	6/21/2005	36.0	3.00	1.0	0.006	0.01	0.08	0.33	53.51	28	8.00	65	5.9	2.30
34.1	Schroon L-S	7/5/2005	25.0	2.80	1.0	0.005	0.02	0.06	0.25	45.84	23	7.80	64		1.23
34.1	Schroon L-S	7/19/2005	34.1	3.40	1.0	0.014	0.01	0.05	0.17	12.12	15	7.29	72		2.80
34.1	Schroon L-S	8/2/2005	34.0	3.15	1.0	0.014	0.04	0.02	0.31	21.91	39	7.02	76		4.85
34.1	Schroon L-S	8/16/2005	35.0	3.10	1.0	0.019	0.03	0.02	0.29	15.81	40	6.83	72	6.3	2.12
34.1	Schroon L-S	8/30/2005	34.0	4.48	1.0	0.021	0.01	0.01	0.19	8.92	20	7.31	90		2.52
34.1	Schroon L-S	9/13/2005	33.0	3.25	1.0	0.019	0.01	0.01	0.17	8.83	14	7.30	73		2.18
34.1	Schroon L-S	9/27/2005	34.1	4.10	1.0	0.010	0.02	0.03	0.15	15.33	16	7.06	82		1.17
34.1	Schroon L-S	6/16/2006	34.8	3.45	1.0	0.011	0.10	0.01	0.27	24.29	13	7.27	48	5.0	2.09
34.1	Schroon L-S	6/28/2006	36.0	3.25	1.0	0.010	0.08	0.03	0.41	41.11	18	7.75	60		2.79
34.1	Schroon L-S	7/27/2006	34.1	3.09	1.0	0.011	0.03	0.02	0.50	46.49	37	8.40	37		3.65
34.1	Schroon L-S	8/10/2006	35.1	3.00	1.0	0.011	0.04	0.02	0.62	59.20	28	7.81	66		3.91
34.1	Schroon L-S	8/24/2006	36.0	3.15	1.0	0.009	0.05	0.03	0.66	77.15	17	7.55	74	5.7	0.41
34.1	Schroon L-S	9/7/2006	36.0	3.15	1.0	0.005	0.03	0.03	0.51	103.52	11	7.60	60		2.67
34.1	Schroon L-S	9/20/2006	36.0	3.00	1.0	0.010	0.04	0.09	0.46	45.87	13	7.86	73		1.56
34.1	Schroon L-S	6/22/2008	33.0	3.90	1.5	0.026	0.04	0.01	0.25	21.11	21	6.98	58	6.0	0.71
34.1	Schroon L-S	7/23/2008	43.0	4.45	1.5	0.004					15	8.24	58		0.10
34.1	Schroon L-S	8/18/2008	33.0	2.30	1.5	0.005	0.01	0.00	0.27	114.69		7.76	61		0.10
34.1	Schroon L-S	8/27/2008	33.0	2.85		0.007	0.01	0.00	0.17	56.77	26	7.88	66		0.10
34.1	Schroon L-S	9/15/2008				0.004	0.02	0.02	0.20	110.27	19	7.65	69	4.3	0.10
34.1	Schroon L-S	9/20/2008	33.0	4.40		0.006	0.02	0.01	0.20	77.22	20	7.52	65		0.10
34.1	Schroon L-S	9/23/2008	44.0	4.23		0.005	0.03	0.01	0.19	86.66	19	7.74	77		0.64
34.1	Schroon L-S	10/7/2008		5.30	1.5	0.004	0.03	0.01	0.17	95.26	17	8.30	79		0.10
34.1	Schroon L-S	06/30/2009	25.0	4.55		0.009	0.04	0.01	0.09	22.00	36	7.23	60	5.4	0.29
34.1	Schroon L-S	07/10/2009	37.0	3.36	1.5	0.012	0.03	0.01	0.22	41.04	50	7.95	53		0.48
34.1	Schroon L-S	07/19/2009	35.7	4.40	1.5	0.009	0.04	0.03	0.12	30.00	32	7.56	50		0.33
34.1	Schroon L-S	08/04/2009	35.7	4.30	1.5	0.007	0.02	0.02	0.12	40.00	30	7.44	58		0.32
34.1	Schroon L-S	08/21/2009	35.7	3.75	1.5	0.005	0.01	0.01	0.13	59.13	31	7.91	54	5.8	0.60
34.1	Schroon L-S	09/01/2009	35.7	3.85	1.5	0.005	0.02	0.03	0.13	53.78	27	8.15	49		0.50
34.1	Schroon L-S	09/17/2009	35.7	5.93	1.5	0.006	0.01	0.01	0.11	38.06	20	7.44	58		0.10
34.1	Schroon L-S	10/02/2009	35.7	3.95		0.005	0.04	0.02	0.13	54.59	24	7.62	64		0.40
34.1	Schroon L-S	6/13/2010	45.0	4.10		0.010	0.07	0.01	0.30	64.50	13	7.66	74	8.0	2.80
34.1	Schroon L-S	6/27/2010	46.0	4.08		0.011	0.05	0.03	0.47	93.80	19	7.09	50		1.80
34.1	Schroon L-S	7/8/2010	47.0	4.10		0.007	0.02	0.02	0.61	189.94	28	7.63	83		0.10
34.1	Schroon L-S	7/31/2010	42.0	3.85		0.006	0.02	0.02	0.13	49.22	26	7.65	78		0.10
34.1	Schroon L-S	8/12/2010	48.0	4.45		0.009	0.02	0.04	0.35	88.50	16	7.29	85		2.10
34.1	Schroon L-S	8/24/2010	44.0	4.95		0.017	0.05	0.05	0.40	50.61	20	7.00	62	6.1	3.30
34.1	Schroon L-S	9/7/2010		5.25	1.5	0.025	0.01	0.02	0.18	16.08	13	7.80	83		0.50
34.1	Schroon L-S	10/10/2010		5.75	1.5	0.020	0.05	0.05	0.33	36.02	12	7.32	83		1.00
34.1	Schroon L-S	7/10/2011		6.15	1.5	0.018	0.17	0.04	0.27	32.82	27	8.50	93	4.2	0.10
34.1	Schroon L-S	7/19/2011		5.20	1.5	0.011	0.08	0.04	0.29	58.27	32	7.13	57		0.20
34.1	Schroon L-S	7/31/2011		5.15	1.5	0.011	0.08	0.04	0.15	31.75	23	8.22	60		0.40
34.1	Schroon L-S	8/19/2011		4.30	1.5	0.009	0.02	0.02	0.23	58.00	20	7.78	70		0.60
34.1	Schroon L-S	8/31/2011		3.65	1.5	0.010	0.06	0.04	0.29	61.56		7.36	65	5.5	0.05
34.1	Schroon L-S	9/18/2011		3.90	1.5	0.013	0.10	0.03	0.28	45.83	30	7.13	57		0.10
34.1	Schroon L-S	10/9/2011		3.10	1.5	0.009	0.07	0.03	0.31	78.53	28	7.52	41		0.40
34.1	Schroon L-S	6/24/2003			30.5	0.004	0.16	0.02	0.15	36.88	6	6.96	147		
34.1	Schroon L-S	7/8/2003			30.5	0.004	0.17	0.02	0.36	96.23					1.41
34.1	Schroon L-S	7/22/2003			30.5	0.003	0.17	0.01	0.27	80.33					
34.1	Schroon L-S	8/5/2003			34.0	0.004	0.10	0.01	0.28	73.96					
34.1	Schroon L-S	8/19/2003			30.5	0.004	0.03	0.01	0.26	72.43					
34.1	Schroon L-S	9/2/2003			30.5	0.007	0.18	0.00	0.45	63.58					
34.1	Schroon L-S	9/17/2003			30.5	0.004	0.05	0.01	0.14	32.65					
34.1	Schroon L-S	9/30/2003			30.5	0.004	0.24	0.01	0.42	95.82					
34.1	Schroon L-S	6/11/2004			34.4	0.007	0.17	0.02	0.43	64.33					
34.1	Schroon L-S	6/23/2004	34.7		30.5	0.003	0.14	0.02	0.24	95.72					
34.1	Schroon L-S	7/7/2004	34.4		30.5	0.004	0.25	0.03	1.04	291.49					
34.1	Schroon L-S	7/21/2004	34.5		30.5	0.003	0.14	0.03	0.25	75.72					
34.1	Schroon L-S	8/4/2004	35.1		30.5	0.005	0.18	0.02	0.41	87.92					
34.1	Schroon L-S	8/18/2004	36.0		30.5	0.002	0.15	0.01	0.25	108.94					
34.1	Schroon L-S	9/1/2004	36.0		30.5	0.004	0.15	0.01	0.27	69.27					
34.1	Schroon L-S	9/14/2004	36.0		30.5	0.004			0.45	108.66					
34.1	Schroon L-S	6/21/2005			30.5	0.007									
34.1	Schroon L-S	7/19/2005			25.0	0.004									
34.1	Schroon L-S	8/2/2005			25.0	0.013									

LNum	PName	Date	Zbot	Zsd	Zsamp	Tot.P	NO3	NH4	TDN	TN/TP			Fe	Mn	As
34.1	Schroon L-S	8/16/2005			25.0	0.011									
34.1	Schroon L-S	8/30/2005			25.0	0.013									
34.1	Schroon L-S	9/13/2005			25.0	0.006									
34.1	Schroon L-S	9/27/2005			25.0	0.012									
34.1	Schroon L-S	6/16/2006	34.8		30.5	0.006									
34.1	Schroon L-S	6/28/2006	36.0		30.5	0.007									
34.1	Schroon L-S	8/10/2006	35.1		30.5	0.003									
34.1	Schroon L-S	8/24/2006	36.0		30.5	0.010									
34.1	Schroon L-S	9/7/2006	36.0		30.5	0.004									
34.1	Schroon L-S	9/20/2006	36.0		30.5	0.009									
34.1	Schroon L-S	6/22/2008	33.0		33.0	0.006									
34.1	Schroon L-S	7/23/2008	43.0		30.5	0.004									
34.1	Schroon L-S	8/18/2008	33.0		33.0	2.650									
34.1	Schroon L-S	8/27/2008	33.0			1.389									
34.1	Schroon L-S	9/15/2008				1.401									
34.1	Schroon L-S	9/20/2008	33.0			0.005									
34.1	Schroon L-S	9/23/2008	44.0		33.0	0.004									
34.1	Schroon L-S	10/7/2008			30.5	0.004									
34.1	Schroon L-S	06/30/2009	25.0		34.7	0.009		0.01							
34.1	Schroon L-S	07/10/2009	37.0		36.5	0.005									
34.1	Schroon L-S	07/19/2009	35.7		35.0	0.007		0.01							
34.1	Schroon L-S	08/04/2009	35.7		35.0	0.006									
34.1	Schroon L-S	08/21/2009	35.7		35.0	0.006		0.01				0.10	0.10	0.90	
34.1	Schroon L-S	09/01/2009	35.7		35.0	0.005									
34.1	Schroon L-S	09/17/2009	35.7		35.0	0.007		0.01				0.10	0.10	0.34	
34.1	Schroon L-S	10/02/2009	35.7			0.008									
34.1	Schroon L-S	6/13/2010	45.0		45.0	0.054		0.02				2.70	0.20		
34.1	Schroon L-S	7/8/2010	47.0		47.0	0.059		0.05				4.80	0.27		
34.1	Schroon L-S	7/31/2010	42.0		42.0	0.037		0.05				1.85	0.21		
34.1	Schroon L-S	8/24/2010	44.0			0.020		0.67				5.32	0.68		
34.1	Schroon L-S	10/10/2010			36.0	0.035		0.03							
34.1	Schroon L-S	7/10/2011		6.15	33.0	0.018		0.05				0.01	0.01		
34.1	Schroon L-S	7/31/2011		5.15	36.0	0.007		0.05				0.01	0.01		
34.1	Schroon L-S	8/31/2011		3.65	36.0	0.012		0.03				0.01	0.01	0.50	
34.1	Schroon L-S	10/9/2011		3.10	36.0	0.007		0.02				0.01	0.01		

LNum	PName	Date	Site	TAir	TH20	QA	QB	QC	QD	QFQG	AQ-PC	AQ-Chla	MC-LR	Anatoxin-a	Cyclin
34	Schroon L-N	6/23/1987	epi	25	20										
34	Schroon L-N	7/1/1987	epi	18	20										
34	Schroon L-N	7/8/1987	epi	20	20										
34	Schroon L-N	7/13/1987	epi	24	25										
34	Schroon L-N	7/21/1987	epi	20	22										
34	Schroon L-N	7/27/1987	epi	23	23										
34	Schroon L-N	8/4/1987	epi	25	22										
34	Schroon L-N	8/7/1987	epi	24	22										
34	Schroon L-N	8/14/1987	epi	25	23										
34	Schroon L-N	8/17/1987	epi	25	23										
34	Schroon L-N	8/24/1987	epi	19	20										
34	Schroon L-N	8/30/1987	epi	20	19										
34	Schroon L-N	9/9/1987	epi	20	19										
34	Schroon L-N	9/14/1987	epi	17	18										
34	Schroon L-N	9/22/1987	epi	18	15										
34	Schroon L-N	7/6/1988	epi	27	26										
34	Schroon L-N	7/20/1988	epi	24	26										
34	Schroon L-N	8/4/1988	epi	28	27										
34	Schroon L-N	8/16/1988	epi	21	25										
34	Schroon L-N	8/31/1988	epi	23	20										
34	Schroon L-N	9/12/1988	epi	16	19										
34	Schroon L-N	9/26/1988	epi	16	16										
34	Schroon L-N	6/27/1989	epi	22	22										
34	Schroon L-N	7/5/1989	epi	20	20										
34	Schroon L-N	7/17/1989	epi	22	20										
34	Schroon L-N	7/31/1989	epi	24	22										
34	Schroon L-N	8/14/1989	epi	23	23										

LNum	PName	Date	Site	TAir	TH20	QA	QB	QC	QD	QFQG	AQ-PC	AQ-Chla	MC-LR	Anatoxin-a	Cyclin
34	Schroon L-N	8/29/1989	epi	22	20										
34	Schroon L-N	9/11/1989	epi	20	20										
34	Schroon L-N	9/25/1989	epi	10	15										
34	Schroon L-N	7/2/1990	epi	28	24										
34	Schroon L-N	7/19/1990	epi	24	22										
34	Schroon L-N	7/30/1990	epi	26	28										
34	Schroon L-N	8/15/1990	epi	22	23										
34	Schroon L-N	9/4/1990	epi	22	22										
34	Schroon L-N	9/17/1990	epi	10	17										
34	Schroon L-N	10/1/1990	epi	17	14										
34	Schroon L-N	7/9/1991	epi	21	23										
34	Schroon L-N	7/22/1991	epi	24	28										
34	Schroon L-N	8/6/1991	epi	18	23										
34	Schroon L-N	8/19/1991	epi	20	23										
34	Schroon L-N	9/3/1991	epi	20	21										
34	Schroon L-N	9/16/1991	epi	27	27										
34	Schroon L-N	7/20/1997	epi	24	23	1	2	1							
34	Schroon L-N	8/3/1997	epi	31	25	1	1	1							
34	Schroon L-N	9/8/1997	epi		20	2	2	1							
34	Schroon L-N	6/10/2002	epi	22	21	1	2	1	5						
34	Schroon L-N	6/25/2002	epi	28	24	2	2	2							
34	Schroon L-N	7/9/2002	epi	25	23	1	1	2	5						
34	Schroon L-N	7/23/2002	epi	25	24	1	1	2	5						
34	Schroon L-N	8/6/2002	epi	18	24	1	1	4	5						
34	Schroon L-N	8/20/2002	epi	26	26	2	2	1							
34	Schroon L-N	9/3/2002	epi	27	23.5	2	1	2	5						
34	Schroon L-N	9/17/2002	epi	25	21	1	1	1							
34	Schroon L-N	6/24/2003	epi	35	23	2	1	1	8						
34	Schroon L-N	7/8/2003	epi	26	26	1	1	1							
34	Schroon L-N	7/22/2003	epi	23	23	1	1	1	8						
34	Schroon L-N	8/5/2003	epi	25	26	2	1	2	5						
34	Schroon L-N	8/19/2003	epi	22	24	1	1	1							
34	Schroon L-N	9/2/2003	epi	21		2	1	5	58						
34	Schroon L-N	9/17/2003	epi	23	21	1	1	1							
34	Schroon L-N	9/30/2003	epi	23		1	1	1	5						
34	Schroon L-N	6/11/2004	epi	20	20	3	1	3	8						
34	Schroon L-N	6/23/2004	epi	25	21	2	1	1	0						
34	Schroon L-N	7/7/2004	epi	21	21	2	1	2	5						
34	Schroon L-N	7/21/2004	epi	27	23	1	1	2	5						
34	Schroon L-N	8/4/2004	epi	19	23	2	1	3	5						
34	Schroon L-N	8/18/2004	epi	21	20	2	1	4	5						
34	Schroon L-N	9/1/2004	epi	20	20	1	1	3	5						
34	Schroon L-N	9/14/2004	epi	18	18	2	1	2	0						
34	Schroon L-N	6/21/2005	epi	23	18	2	1	3	0						
34	Schroon L-N	7/5/2005	epi	18	23	3	1	4	5						
34	Schroon L-N	7/19/2005	epi	25	24	2	1	3	5						
34	Schroon L-N	8/2/2005	epi	22	22	2	1	1	0						
34	Schroon L-N	8/16/2005	epi	18	22	1	1	2	5						
34	Schroon L-N	8/30/2005	epi	18	20	2	1	2	5						
34	Schroon L-N	9/13/2005	epi	21	21	1	1	1	0						
34	Schroon L-N	9/27/2005	epi	14	18	1	1	1	0						
34	Schroon L-N	6/16/2006	epi	25	16	2	1	2	5						
34	Schroon L-N	6/29/2006	epi	19	17	2	1	4	58						
34	Schroon L-N	7/27/2006	epi	22	22	2	2	3	5						
34	Schroon L-N	8/10/2006	epi	17	22	2	2	2	5						
34	Schroon L-N	8/24/2006	epi	12	19	2	2	3	5						
34	Schroon L-N	9/7/2006	epi	18	18	2	2	3	5						
34	Schroon L-N	9/20/2006	epi	14	17	2	2	3	5						
34	Schroon L-N	6/22/2008	epi	16		1	1	4	5						
34	Schroon L-N	7/5/2008	epi	21	20	1		1	0						
34	Schroon L-N	7/21/2008	epi	18	22	2	2	3	6						
34	Schroon L-N	8/1/2008	epi	19	21	1	2	2	0						

LNum	PName	Date	Site	TAir	TH20	QA	QB	QC	QD	QF	QG	AQ-PC	AQ-Chla	MC-LR	Anatoxin-a	Cyclin
34	Schroon L-N	8/18/2008	epi	17	17	2	1	1	0							
34	Schroon L-N	8/29/2008	epi	18	20	2	2	2	0							
34	Schroon L-N	9/16/2008	epi	12	18	1	1	1	0							
34	Schroon L-N	9/25/2008	epi	15	16	1	2	1	0							
34	Schroon L-N	07/02/2009	epi	21	22	1	2	1	0							
34	Schroon L-N	07/20/2009	epi	25	23	1	1	1	5							
34	Schroon L-N	08/13/2009	epi	25		1	1	2	0					0.01		
34	Schroon L-N	08/22/2009	epi	26		1	1	1	0							
34	Schroon L-N	08/30/2009	epi	24	17	1	1	2	0							
34	Schroon L-N	09/03/2009	epi	25	23	1	1	1	0			14.0				
34	Schroon L-N	09/13/2009	epi	22	22	1	1	1	0			16.0		0.03		
34	Schroon L-N	09/21/2009	epi	25	21	1	1	1	0			26.4				
34	Schroon L-N	5/25/2010	epi	22	15	1	1	1	6	0	0					
34	Schroon L-N	6/4/2010	epi	20	19	2	1	1	0	0	0					
34	Schroon L-N	7/13/2010	epi	22	23	1	1	1	0	0	0					
34	Schroon L-N	7/27/2010	epi	21		1	1	1	0	0	0	61.09				
34	Schroon L-N	8/17/2010	epi	18	21	1	1	1	0	0	0	38.94				
34	Schroon L-N	8/28/2010	epi	27	25	1	1	1	0	0	0					
34	Schroon L-N	10/7/2010	epi	11	11	1	1	4	5	0	0	20.00		0.01		
34	Schroon L-N	7/14/2011	epi	26	25	1	1	1	0	0	0	5.50	2.70			
34	Schroon L-N	7/23/2011	epi	38	33	1	1	1	0	0	0	5.10	2.20			
34	Schroon L-N	8/3/2011	epi	30	25	1	1	1	0	0	0	8.30	3.50			
34	Schroon L-N	8/17/2011	epi	23	24	1	1	1	0	0	0	12.00	2.80			
34	Schroon L-N	8/22/2011	epi	17	21	1	1	1	0	0	0	7.60	2.30			
34	Schroon L-N	9/7/2011	epi	22	23	1	1	1	0	0	0	5.80	3.80			
34	Schroon L-N	9/22/2011	epi	20	20	1	1	2	0	0	0	7.40	1.80			
34	Schroon L-N	9/28/2011	epi	21	21	1	1	2	0	0	0	7.70	3.70			
34	Schroon L-N	6/10/2002	hypo	22	10											
34	Schroon L-N	6/25/2002	hypo	28	12											
34	Schroon L-N	7/9/2002	hypo	25												
34	Schroon L-N	7/23/2002	hypo	25												
34	Schroon L-N	8/6/2002	hypo	18	10											
34	Schroon L-N	8/20/2002	hypo	26	9											
34	Schroon L-N	9/3/2002	hypo	27	10.0											
34	Schroon L-N	9/17/2002	hypo	25	11											
34	Schroon L-N	6/24/2003	hypo		9											
34	Schroon L-N	7/8/2003	hypo		9											
34	Schroon L-N	7/22/2003	hypo		8											
34	Schroon L-N	8/5/2003	hypo		8											
34	Schroon L-N	8/19/2003	hypo		12											
34	Schroon L-N	9/2/2003	hypo		7											
34	Schroon L-N	9/17/2003	hypo		7											
34	Schroon L-N	9/30/2003	hypo		7											
34	Schroon L-N	6/11/2004	hypo		7											
34	Schroon L-N	6/23/2004	hypo		6											
34	Schroon L-N	7/7/2004	hypo		7											
34	Schroon L-N	7/21/2004	hypo		7											
34	Schroon L-N	9/14/2004	hypo		5											
34	Schroon L-N	7/19/2005	hypo		6											
34	Schroon L-N	8/2/2005	hypo		5											
34	Schroon L-N	8/16/2005	hypo		6											
34	Schroon L-N	8/30/2005	hypo		6											
34	Schroon L-N	9/13/2005	hypo		7											
34	Schroon L-N	9/27/2005	hypo		5											
34	Schroon L-N	6/16/2006	hypo		9											
34	Schroon L-N	6/29/2006	hypo		8											
34	Schroon L-N	7/27/2006	hypo		5											
34	Schroon L-N	8/10/2006	hypo		5											
34	Schroon L-N	8/24/2006	hypo		5											
34	Schroon L-N	9/7/2006	hypo		5											
34	Schroon L-N	9/20/2006	hypo		5											
34	Schroon L-N	6/22/2008	hypo		3											

LNum	PName	Date	Site	TAir	TH20	QA	QB	QC	QD	QFQG	AQ-PC	AQ-Chla	MC-LR	Anatoxin-a	Cyclin
34	Schroon L-N	7/5/2008	hypo		5										
34	Schroon L-N	7/21/2008	hypo		5										
34	Schroon L-N	8/1/2008	hypo		5										
34	Schroon L-N	8/18/2008	hypo		4										
34	Schroon L-N	8/29/2008	hypo		4										
34	Schroon L-N	9/16/2008	hypo		5										
34	Schroon L-N	9/25/2008	hypo		5										
34	Schroon L-N	07/20/2009	hypo		9										
34	Schroon L-N	08/13/2009	hypo		11										
34	Schroon L-N	08/22/2009	hypo		9										
34	Schroon L-N	09/03/2009	hypo		10										
34	Schroon L-N	09/13/2009	hypo		10										
34	Schroon L-N	09/21/2009	hypo		9										
34	Schroon L-N	5/25/2010	hypo		6										
34	Schroon L-N	7/13/2010	hypo		6										
34	Schroon L-N	8/17/2010	hypo		5										
34	Schroon L-N	8/28/2010	hypo		10										
34	Schroon L-N	7/14/2011	hypo		10										
34	Schroon L-N	8/3/2011	hypo		8										
34	Schroon L-N	8/22/2011	hypo		10										
34	Schroon L-N	9/22/2011	hypo		8										
34.1	Schroon L-S	6/24/2003	epi	36	24	2	1	1	8						
34.1	Schroon L-S	7/8/2003	epi	27	25	1	1	1							
34.1	Schroon L-S	7/22/2003	epi	23	23	1	1	1	8						
34.1	Schroon L-S	8/5/2003	epi	26	24	2	1	2	5						
34.1	Schroon L-S	8/19/2003	epi	22	24	1	1	1							
34.1	Schroon L-S	9/2/2003	epi	18	21	2	1	2	5						
34.1	Schroon L-S	9/17/2003	epi	23	21	1	1	1							
34.1	Schroon L-S	9/30/2003	epi	16		1	1	1	5						
34.1	Schroon L-S	6/11/2004	epi	23	19	3	1	3	8						
34.1	Schroon L-S	6/23/2004	epi	25	21	2	1	1	0						
34.1	Schroon L-S	7/7/2004	epi	19	21	2	1	2	5						
34.1	Schroon L-S	7/21/2004	epi	27	23	1	1	2	5						
34.1	Schroon L-S	8/4/2004	epi	20	24	2	1	3	5						
34.1	Schroon L-S	8/18/2004	epi	20	20	2	1	4	5						
34.1	Schroon L-S	9/1/2004	epi	20	21	1	1	2	5						
34.1	Schroon L-S	9/14/2004	epi	17	17	2	1	1	0						
34.1	Schroon L-S	6/21/2005	epi	23	19	2	1	3	0						
34.1	Schroon L-S	7/5/2005	epi	18	22	3	1	4	5						
34.1	Schroon L-S	7/19/2005	epi	25	24	2	1	3	5						
34.1	Schroon L-S	8/2/2005	epi	23	22	2	1	1	0						
34.1	Schroon L-S	8/16/2005	epi	20	22	1	1	2	5						
34.1	Schroon L-S	8/30/2005	epi	16	20	2	1	2	5						
34.1	Schroon L-S	9/13/2005	epi	24	21	1	1	1	0						
34.1	Schroon L-S	9/27/2005	epi	17	17	1	1	1	0						
34.1	Schroon L-S	6/16/2006	epi	25	17	2	2	2	5						
34.1	Schroon L-S	6/28/2006	epi	21	18	2	1	4	5						
34.1	Schroon L-S	7/27/2006	epi	22	22	2	2	3	5						
34.1	Schroon L-S	8/10/2006	epi	18	22	2	2	1	5						
34.1	Schroon L-S	8/24/2006	epi	13	19	2	2	3	5						
34.1	Schroon L-S	9/7/2006	epi	18	18	2	2	3	5						
34.1	Schroon L-S	9/20/2006	epi	13	16	2	2	3	5						
34.1	Schroon L-S	6/22/2008	epi	16	21	1	2	1	0						
34.1	Schroon L-S	7/23/2008	epi	21	23	1	1	1	5						
34.1	Schroon L-S	8/18/2008	epi	24	24	1	1	1	15						
34.1	Schroon L-S	8/27/2008	epi	28	23	1	3	1	0						
34.1	Schroon L-S	9/20/2008	epi	24	21	1	1	1	0						
34.1	Schroon L-S	9/23/2008	epi	24	22										
34.1	Schroon L-S	10/7/2008	epi	6	12	1	2	1	8						
34.1	Schroon L-S	06/30/2009	epi	16	19	1	3	1	0						
34.1	Schroon L-S	07/10/2009	epi	26	19	1	3	1	0						
34.1	Schroon L-S	07/19/2009	epi	19	18	1	3	2	0						

LNum	PName	Date	Site	TAir	TH20	QA	QB	QC	QD	QF	QG	AQ-PC	AQ-Chla	MC-LR	Anatoxin-a	Cyclin
34.1	Schroon L-S	08/04/2009	epi	21	20	2	3	2	28							
34.1	Schroon L-S	08/21/2009	epi	23	22	1	3	2	0					0.01		
34.1	Schroon L-S	09/01/2009	epi	7	18	1	3	1	0			15.4				
34.1	Schroon L-S	09/17/2009	epi	13	18	1	3	1	0			17.9		0.02		
34.1	Schroon L-S	10/02/2009	epi									19.4		0.01		
34.1	Schroon L-S	6/13/2010	epi	18	18	1	1	2	0	0	0					
34.1	Schroon L-S	6/27/2010	epi	28	26	1	1	2	0	0	0					
34.1	Schroon L-S	7/8/2010	epi	37	29	1	1	1	0	0	0					
34.1	Schroon L-S	7/31/2010	epi	28	26	1	1	2	0	0	0					
34.1	Schroon L-S	8/12/2010	epi	24	25							7.00		0.01		
34.1	Schroon L-S	8/24/2010	epi	20	22	1	1	1	0	0	n	29.32				
34.1	Schroon L-S	9/7/2010	epi	16	19	1	1	1	0	0	0	43.51				
34.1	Schroon L-S	10/10/2010	epi	13	12	1	3	1	0	0	0	57.04				
34.1	Schroon L-S	7/10/2011	epi	33	22	1	1	1	0	0	0					
34.1	Schroon L-S	7/19/2011	epi	26	24	2	2	1	0	0		2.80	2.50			
34.1	Schroon L-S	7/31/2011	epi	17	22	1	3	1	0	0	0	4.10	1.97			
34.1	Schroon L-S	8/19/2011	epi	17	22	2	3	1	0	0	0	6.00	2.50			
34.1	Schroon L-S	8/31/2011	epi	23	18	1	3	1	0	0	0	8.90	2.20			
34.1	Schroon L-S	9/18/2011	epi	13	16	2	3	1	0	0	0	4.70	2.40			
34.1	Schroon L-S	10/9/2011	epi	25	15	1	1	1	0	0	0	3.40	5.10			
34.1	Schroon L-S	6/24/2003	hypo		9											
34.1	Schroon L-S	7/8/2003	hypo		9											
34.1	Schroon L-S	7/22/2003	hypo		7											
34.1	Schroon L-S	8/5/2003	hypo		8											
34.1	Schroon L-S	8/19/2003	hypo		11											
34.1	Schroon L-S	9/2/2003	hypo		8											
34.1	Schroon L-S	9/17/2003	hypo		15											
34.1	Schroon L-S	9/30/2003	hypo		7											
34.1	Schroon L-S	6/11/2004	hypo		8											
34.1	Schroon L-S	6/23/2004	hypo		6											
34.1	Schroon L-S	7/7/2004	hypo		5											
34.1	Schroon L-S	7/21/2004	hypo		6											
34.1	Schroon L-S	8/4/2004	hypo		6											
34.1	Schroon L-S	8/18/2004	hypo		7											
34.1	Schroon L-S	9/1/2004	hypo		6											
34.1	Schroon L-S	9/14/2004	hypo		6											
34.1	Schroon L-S	6/21/2005	hypo		6											
34.1	Schroon L-S	7/19/2005	hypo		8											
34.1	Schroon L-S	8/2/2005	hypo		6											
34.1	Schroon L-S	8/16/2005	hypo		7											
34.1	Schroon L-S	8/30/2005	hypo		7											
34.1	Schroon L-S	9/13/2005	hypo		8											
34.1	Schroon L-S	9/27/2005	hypo		7											
34.1	Schroon L-S	6/16/2006	hypo		6											
34.1	Schroon L-S	6/28/2006	hypo		8											
34.1	Schroon L-S	7/27/2006	hypo		5											
34.1	Schroon L-S	8/10/2006	hypo		5											
34.1	Schroon L-S	8/24/2006	hypo		5											
34.1	Schroon L-S	9/7/2006	hypo		7											
34.1	Schroon L-S	9/20/2006	hypo		5											
34.1	Schroon L-S	7/23/2008	hypo		8											
34.1	Schroon L-S	8/18/2008	hypo		9											
34.1	Schroon L-S	8/27/2008	hypo		10											
34.1	Schroon L-S	9/20/2008	hypo		9											
34.1	Schroon L-S	9/23/2008	hypo		8											
34.1	Schroon L-S	10/7/2008	hypo		6											
34.1	Schroon L-S	06/30/2009	hypo		6											
34.1	Schroon L-S	07/10/2009	hypo		5											
34.1	Schroon L-S	07/19/2009	hypo		5											
34.1	Schroon L-S	08/04/2009	hypo		5											
34.1	Schroon L-S	08/21/2009	hypo		5											
34.1	Schroon L-S	09/01/2009	hypo		5											

LNum	PName	Date	Site	TAir	TH20	QA	QB	QC	QD	QF	QG	AQ-PC	AQ-Chla	MC-LR	Anatoxin-a	Cyclin
34.1	Schroon L-S	6/13/2010	hypo		10											
34.1	Schroon L-S	7/8/2010	hypo		9											
34.1	Schroon L-S	7/31/2010	hypo		10											
34.1	Schroon L-S	8/24/2010	hypo		10											
34.1	Schroon L-S	10/10/2010	hypo		5											
34.1	Schroon L-S	7/10/2011	hypo		5											
34.1	Schroon L-S	7/31/2011	hypo		14											
34.1	Schroon L-S	8/31/2011	hypo		5											
34.1	Schroon L-S	10/9/2011	hypo		5											

## Legend Information

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



## Appendix B- Monthly Evaluation of Schroon Lake (North) Data, 2006-2011

### June Data

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

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

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

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

### July Data

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

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

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

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

## August Data

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

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

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

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

## September Data

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

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

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

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

## Monthly Evaluation of Schroon Lake (South) Data, 2006-2011

### June Data

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

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

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

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

### July Data

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

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

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

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

## August Data

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

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

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

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

## September Data

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

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

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

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

## Appendix C- Priority Waterbody Listing for Schroon Lake

### Schroon Lake (1104-0002)

Impaired Seg

#### Waterbody Location Information

Revised: 12/11/2006

<b>Water Index No:</b>	H-391 (portion 3)/P374	<b>Drain Basin:</b>	Upper Hudson River
<b>Hydro Unit Code:</b>	02020001/090	<b>Str Class:</b>	A
<b>Waterbody Type:</b>	Lake	<b>Reg/County:</b>	5/Warren Co. (57)
<b>Waterbody Size:</b>	4128.1 Acres	<b>Quad Map:</b>	SCHROON LAKE (F-25-0)
<b>Seg Description:</b>	entire lake		

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

<b>Use(s) Impacted</b>	<b>Severity</b>	<b>Problem Documentation</b>
FISH CONSUMPTION	Impaired	Known

#### Type of Pollutant(s)

Known: METALS (mercury), PRIORITY ORGANICS (PCBs)  
 Suspected: ---  
 Possible: ---

#### Source(s) of Pollutant(s)

Known: ---  
 Suspected: TOX/CONTAM. SEDIMENT  
 Possible: UNKNOWN SOURCE

#### Resolution/Management Information

<b>Issue Resolvability:</b>	1 (Needs Verification/Study (see STATUS))	
<b>Verification Status:</b>	4 (Source Identified, Strategy Needed)	
<b>Lead Agency/Office:</b>	ext/EPA	<b>Resolution Potential:</b> Low
<b>TMDL/303d Status:</b>	2b (Multiple Segment/Categorical Water, Fish Consumption))	

#### Further Details

Fish consumption in Schroon Lake is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of larger lake trout (over 27 inches), larger yellow perch (over 13 inches) and smallmouth bass; the advisories are the result of elevated PCB and mercury levels. The most recent laboratory results from lake trout and yellow perch collected in 1989 (DFW) suggest that PCB and other organochlorine concentrations in fish have declined, but mercury concentrations in lake trout were still relatively high. The source of mercury is considered to be atmospheric deposition, as there are not other apparent sources in the lake watershed. The advisory for this lake related to PCBs was issued prior to 1998-99; the mercury advisory was added in 2000-01. (2006-07 NYS DOH Health Advisories and DEC/FWMR, Habitat, December 2006).

Water column, soil and bottom sediment samples taken by the regional staff (1990) and central office (1991, DEC/DOW BMA report June 1992) showed only very low concentrations of PCBs and mercury. Macroinvertebrate sampling (1991) found no significant levels of PCBs in invertebrates, but mercury was found above levels of concern in crayfish in Schroon River above the inlet. Based on the various data gathered it was determined jointly by DFW and BMA staff that although PCB and other organochlorine contamination of Schroon Lake lake trout is no longer as serious, monitoring of the Fisheries resource should be continued, since sensitive species of fish-eating wildlife are at risk. No additional

biological sampling of the Schroon River inlet or its tributaries was recommended, as DFW data suggested mercury concentrations, though elevated, were typical of other waters affected by atmospheric deposition of mercury in this region of NYS. (DEC/DOW and FWMR, BWAM and Habitat, 2000)

Schroon Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1987 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 mesoligotrophic, or moderately unproductive. Phosphorus levels in the lake are consistently below criteria that would indicate impacted recreational uses and transparency measurements satisfy what is recommended for swimming beaches. (DEC/DOW, BWAM/CSLAP, May 2006)

Public perception of the Schroon Lake and its uses are also evaluated as part of the CSLAP program. These assessment also indicate recreational suitability of the lake to be mostly 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 regularly described as "not quite crystal clear." Aquatic plant are not typically visible from the lake surface. (DEC/DOW, BWAM/CSLAP, May 2006)

This waterbody is included on the NYS 2006 Section 303(d) List of Impaired Waters. The lake was included on Part 2b of the List as a Fish Consumption Water.