# CSLAP 2012 Lake Water Quality Summary: Schroon Lake

## **General Lake Information**

**Location** Towns of Chester, Horicon and Schroon

County Essex and Warren Upper Hudson River

**Size** 1,670.6 hectares (4,126.4 acres)

Lake Origins Natural

Watershed Area 136,000 hectares (335,920 acres)

Retention Time0.4 yearsMean Depth17 metersSounding Depth44 metersPublic Access?DEC launch

Major Tributaries Schroon River, Alder Creek, Mill Brook, Rogers Brook,

Spectacle Brook, Sucker Brook, Sucker Brook

**Lake Tributary To...** Schroon River to Hudson River

**WQ Classification** AA (potable water)

**Lake Outlet Latitude** 43.728 **Lake Outlet Longitude** -73.812

**Sampling Years** 1987-1995, 1997-2012

**2012 Samplers** Chuck and Nancy Harste, Bob and Barbara Colegrove, Mike

and Susan Purdy

Main Contact Chuck Harst and Bob Colegrove

## 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 2012. The CSLAP reports for each of the past several years can be found on the NYSFOLA website at <a href="http://nysfola.mylaketown.com">http://nysfola.mylaketown.com</a>. The 2011 CSLAP report and scorecard for Schroon Lake can also be found on the NYSDEC web page at <a href="http://www.dec.ny.gov/lands/77872.html">http://www.dec.ny.gov/lands/77872.html</a>.

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 sample 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 <a href="www.schroonlakeassociation.com">www.schroonlakeassociation.com</a>. The East Shore Schroon Lake Association maintains a website at <a href="www.essla.org">www.essla.org</a>.

# **Summary of 2012 CSLAP Sampling Results**

# **Evaluation of 2012 Annual and Monthly Results Relative to 2006-2011**

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 – Schroon Lake" section in Appendix C.

# **Evaluation of Eutrophication Indicators**

Chlorophyll *a* samples (filters) were not submitted from the north basin in 2012, but phosphorus and water clarity readings in both basins, and algae levels in the south basin, were close to normal in 2012. Algae levels in the north basin have decreased slightly since the early 1990s, despite a slight increase in phosphorus readings since the mid 2000s. None of these indicators has exhibited any clear long-term trends in the south basin. Lake productivity is fairly stable (or varies unpredictably) over the course of the typical summer in both basins, and no seasonal trends in these indicators were apparent in 2012.

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). 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 phosphorus 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 typically higher chlorophyll *a* readings 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 Schroon Lake are similar to those measured at the lake surface. 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**

NOx readings were also higher than normal in 2012 in the north basin, and ammonia readings were higher than normal in 20112 in the south basin. However, both sets of readings were still very low. pH readings were higher than normal in both sites in 2012, but still well within the acceptable range, despite a slight increase in pH over the last decade in the south basin. Color readings were lower than normal in the south basin in 2012. It is likely that most of the small changes in these indicators represent normal variability, since, among these limnological indicators, only the slight rise in pH among these in the south basin was statistically significant. 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. The fluoroprobe screening samples analyzed by SUNY ESF in 2012 indicated low overall algae levels and low percentages of blue green algae (the early

August results from the north basin do not appear to be accurate or representative of normal conditions in this basin).

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 and 2012, despite no significant changes in water clarity. Aquatic plant coverage was less favorable (more dense growth) in the south basin in 2012, and plant coverage is reported by the CSLAP volunteers to have increased slightly in recent years. These small changes in water quality assessments (north basin) and plant coverage (south basin) do not appear to have affected recreational assessments, which continue to be highly favorable, and have not changed over time. Recreational and water quality assessments improve slightly during the typical summer in both basins, but this was not apparent in 2012. 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 2012 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. This is consistent with the fluoroprobe screening results from 2012 indicating low levels of blue green algae in nearly all samples. An analysis of algae samples indicate microcystin and anatoxin readings below the levels needed to support safe swimming and potable water use in both basins.

**Lake Condition Summary-North Basin** 

Category	Indicator	Min	87-12 Avg	Max	2012 Avg	Classification	2012 Change?	Long-term Change?
Eutrophication	Water Clarity	2.25	4.07	10.00	3.60	Mesotrophic	Within Normal Range	No Change
ndicators	Chlorophyll a	0.05	2.97	12.40		Mesotrophic		Decreasing Slightly
	Total Phosphorus	0.001	0.008	0.024	0.009	Oligotrophic	Within Normal Range	Increasing Slightly
Potable Water ndicators	Hypolimnetic Ammonia	0.01	0.03	0.11	0.02	Close to Surface NH4 Readings	Lower Than Normal	Not known
	Hypolimnetic Arsenic	0.34	1.37	4.00	0.50	Elevated Deepwater As	Lower Than Normal	Not known
	Hypolimnetic Iron	0.01	0.66	3.01	1.51	Elevated Deepwater Fe	Higher than Normal	Not known
	Hypolimnetic Manganese	0.01	0.09	0.28	0.14	Low Manganese Levels	Higher than Normal	Not known
imnological ndicators	Hypolimnetic Phosphorus	0.000	0.011	0.059	0.016	Close to Surface TP Readings	Higher than Normal	Not known
	Nitrate + Nitrite	0.00	0.04	0.30	0.02	Low NOx	Lower Than Normal	No Change
	Ammonia	0.00	0.03	0.20	0.02	Low Ammonia	Within Normal Range	No Change
	Total Nitrogen	0.07	0.31	1.34	0.22	Low Total Nitrogen	Within Normal Range	No Change
	рН	6.19	7.45	9.07	7.76	Circumneutral	Higher than Normal	No Change
	Specific Conductance	26	69	104	75	Softwater	Within Normal Range	No Change
	True Color	3	18	52	17	Intermediate Color	Within Normal Range	No Change
	Calcium	2.9	6.2	11.6	6.3	Not Susceptible to Zebra Mussels	Within Normal Range	No Change
ake Perception	WQ Assessment	1	1.4	3	1.0	Crystal Clear	More Favorable Than Normal	No Change
	Aquatic Plant Coverage	1	1.2	2	1.0	Plants Not Visible	Within Normal Range	No Change
	Recreational Assessment	1	1.8	5	1.5	Excellent	Within Normal Range	No Change
Biological Condition	Phytoplankton		··			Open water-low blue green algae biomass	Not known	Not known
	Macrophytes					Excellent quality of aquatic plant community	Not known	Not known
	Zooplankton		·			Not 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
ocal Climate	Air Temperature	10	21.8	38	25.0		Within Normal Range	No Change
Change	Water Temperature	11	21.5	33	23.1		Within Normal Range	No Change
Harmful Algal Blooms	Open Water Phycocyanin	-1	11	61	2	No readings indicate high risk of BGA	Not known	Not known
	Open Water FP Chl.a	1	4	14	4	Few readings indicate high algae levels	Not known	Not known
	Open Water FP BG Chl.a	1	3	11	3	Few readings indicate high BGA levels	Not known	Not known
	Open Water Microcystis	<dl< td=""><td>0.2</td><td>0.5</td><td>0.2</td><td>Mostly undetectable open water MC-LR Open water Anatoxin-a</td><td>Not known</td><td>Not known</td></dl<>	0.2	0.5	0.2	Mostly undetectable open water MC-LR Open water Anatoxin-a	Not known	Not known
	Open Water Anatoxin a	<dl< td=""><td><dl< td=""><td><dl< td=""><td><dl< td=""><td>not detectable  No shoreline blooms</td><td>Not known</td><td>Not known</td></dl<></td></dl<></td></dl<></td></dl<>	<dl< td=""><td><dl< td=""><td><dl< td=""><td>not detectable  No shoreline blooms</td><td>Not known</td><td>Not known</td></dl<></td></dl<></td></dl<>	<dl< td=""><td><dl< td=""><td>not detectable  No shoreline blooms</td><td>Not known</td><td>Not known</td></dl<></td></dl<>	<dl< td=""><td>not detectable  No shoreline blooms</td><td>Not known</td><td>Not known</td></dl<>	not detectable  No shoreline blooms	Not known	Not known
	Shoreline Phycocyanin					sampled for PC  No shoreline blooms	Not known	Not known
	Shoreline FP Chl.a		ļ 	ļ		sampled for FP	Not known	Not known
	Shoreline FP BG Chl.a					No shoreline blooms sampled for FP	Not known	Not known
	Shoreline Microcystis		1			No shoreline bloom MC- LR data	Not known	Not known
	Shoreline Anatoxin a	<dl< td=""><td><dl< td=""><td><dl< td=""><td><dl< td=""><td>Shoreline bloom Anatoxin-a not detectable</td><td>Not known</td><td>Not known</td></dl<></td></dl<></td></dl<></td></dl<>	<dl< td=""><td><dl< td=""><td><dl< td=""><td>Shoreline bloom Anatoxin-a not detectable</td><td>Not known</td><td>Not known</td></dl<></td></dl<></td></dl<>	<dl< td=""><td><dl< td=""><td>Shoreline bloom Anatoxin-a not detectable</td><td>Not known</td><td>Not known</td></dl<></td></dl<>	<dl< td=""><td>Shoreline bloom Anatoxin-a not detectable</td><td>Not known</td><td>Not known</td></dl<>	Shoreline bloom Anatoxin-a not detectable	Not known	Not known

**Lake Condition Summary-South Basin** 

Category	Indicator	Min	87-12 Avg	Max	2012 Avg	Classification	2012 Change?	Long-term Change?
Eutrophication	Water Clarity	2.30	4.19	9.00	4.90	Mesotrophic	Within Normal Range	No Change
ndicators	Chlorophyll a	0.05	1.42	6.50	2.00	Oligotrophic	Within Normal Range	No Change
	Total Phosphorus	0.003	0.009	0.026	0.005	Oligotrophic	Within Normal Range	No Change
Potable Water ndicators	Hypolimnetic Ammonia	0.00	0.06	0.67	0.19	Close to Surface NH4 Readings	Higher than Normal	Not known
	Hypolimnetic Arsenic	0.34	0.68	1.00	1.00	Low Deepwater Arsenic Levels	Higher than Normal	Not known
	Hypolimnetic Iron	0.01	1.17	5.32	0.12	Highly Elevated Deepwater Fe	Lower Than Normal	Not known
	Hypolimnetic Manganese	0.01	0.13	0.68	0.03	Low Manganese Levels	Lower Than Normal	Not known
imnological ndicators	Hypolimnetic Phosphorus	0.002	0.010	0.059	0.014	Close to Surface TP Readings	Higher than Normal	Not known
	Nitrate + Nitrite	0.00	0.04	0.17	0.02	Low NOx	Within Normal Range	No Change
	Ammonia	0.00	0.03	0.14	0.04	Low Ammonia	Higher than Normal	No Change
	Total Nitrogen	0.09	0.28	1.04	0.21	Low Total Nitrogen	Within Normal Range	No Change
	рН	6.25	7.49	8.77	7.84	Circumneutral	Higher than Normal	Increasing Significantly
	Specific Conductance	35	68	96	68	Softwater	Within Normal Range	No Change
	True Color	6	21	50	13	Intermediate Color	Lower Than Normal	No Change
	Calcium	4.2	6.0	8.4	6.3	Not Susceptible to Zebra Mussels	Within Normal Range	No Change
ake	WQ Assessment	1	1.4	3	1.3	Crystal Clear	Within Normal Range	No Change
Perception	Aquatic Plant Coverage	1	1.7	3	2.5	Subsurface Plant Growth	Less Favorable than Normal	Slightly Degrading
	Recreational Assessment	1	1.7	4	1.7	Excellent	Within Normal Range	No Change
Biological Condition	Phytoplankton					Open water-low blue green algae biomass	Not known	Not known
	Macrophytes		<del></del>	+	+	Excellent quality of aquatic plant community	Not known	Not known
	Zooplankton		ļ		ļ	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
ocal Climate	Air Temperature	6	21.0	37	21.8		Within Normal Range	No Change
Change	Water Temperature	12	20.6	29	20.3		Within Normal Range	No Change
Harmful Algal Blooms	Open Water Phycocyanin	0	13	57	2	No readings indicate high risk of BGA	Not known	Not known
	Open Water FP Chl.a	2	2	3	2	No readings indicate high algae levels	Not known	Not known
	Open Water FP BG Chl.a	1	1	2	1	No readings indicate high BGA levels	Not known	Not known
	Open Water Microcystis	<dl< td=""><td>0.1</td><td>0.0</td><td>&lt;0.30</td><td>Mostly undetectable open water MC-LR</td><td>Not known</td><td>Not known</td></dl<>	0.1	0.0	<0.30	Mostly undetectable open water MC-LR	Not known	Not known
	Open Water Anatoxin a	<dl< td=""><td><dl< td=""><td><dl< td=""><td><dl< td=""><td>Open water Anatoxin-a consistently not detectable</td><td>Not known</td><td>Not known</td></dl<></td></dl<></td></dl<></td></dl<>	<dl< td=""><td><dl< td=""><td><dl< td=""><td>Open water Anatoxin-a consistently not detectable</td><td>Not known</td><td>Not known</td></dl<></td></dl<></td></dl<>	<dl< td=""><td><dl< td=""><td>Open water Anatoxin-a consistently not detectable</td><td>Not known</td><td>Not known</td></dl<></td></dl<>	<dl< td=""><td>Open water Anatoxin-a consistently not detectable</td><td>Not known</td><td>Not known</td></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 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. 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.

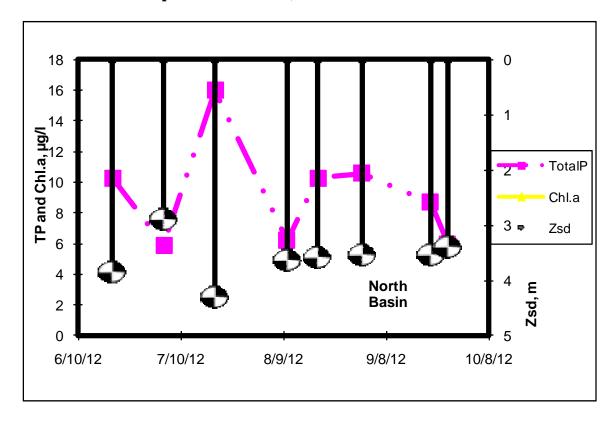
#### **Additional Comments and Recommendations**

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

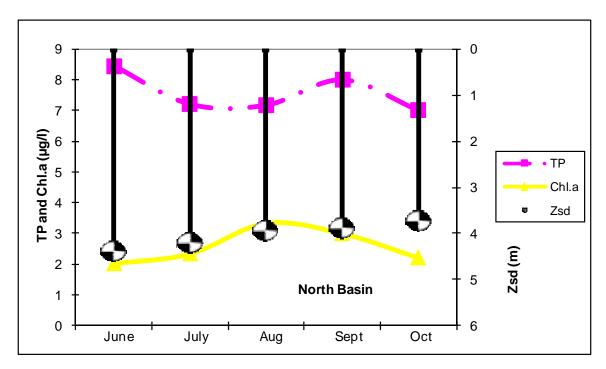
# **Aquatic Plant IDs-2012**

None submitted for identification.

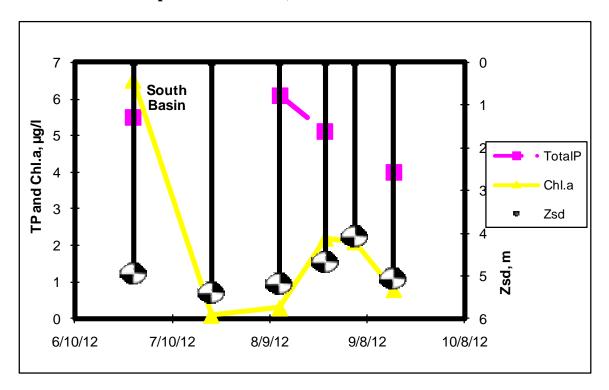
# Time Series: Trophic Indicators, 2012- North Basin



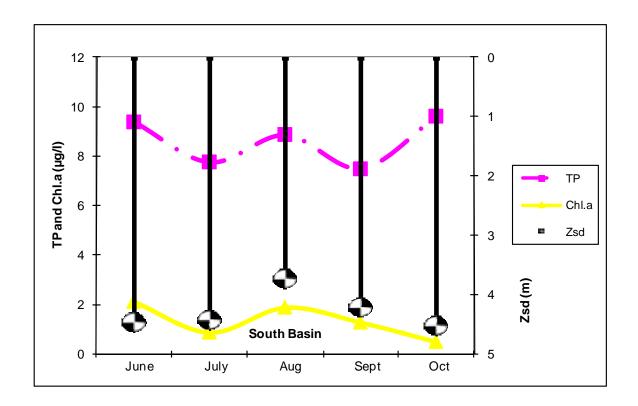
# Time Series: Trophic Indicators, Typical Year (1987-2012)-North Basin



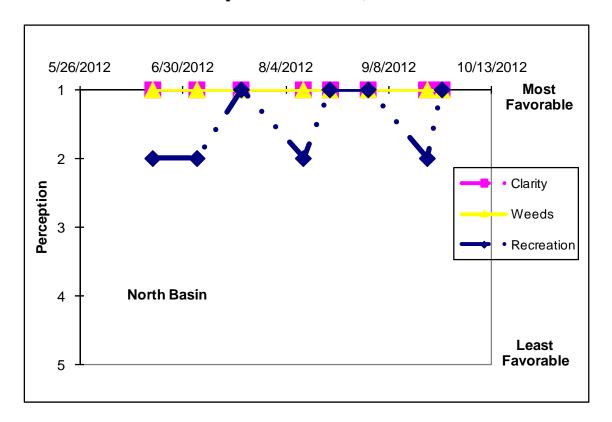
# Time Series: Trophic Indicators, 2012- South Basin



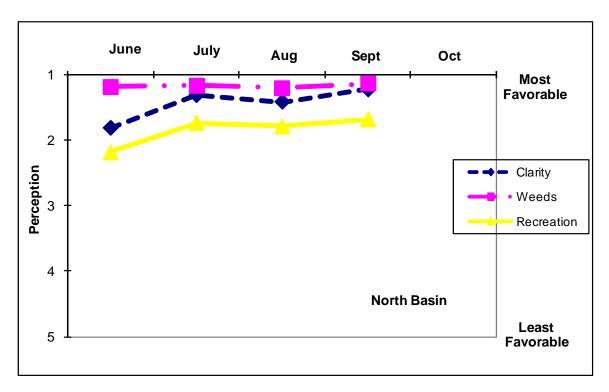
# Time Series: Trophic Indicators, Typical Year (1987-2012)- South Basin



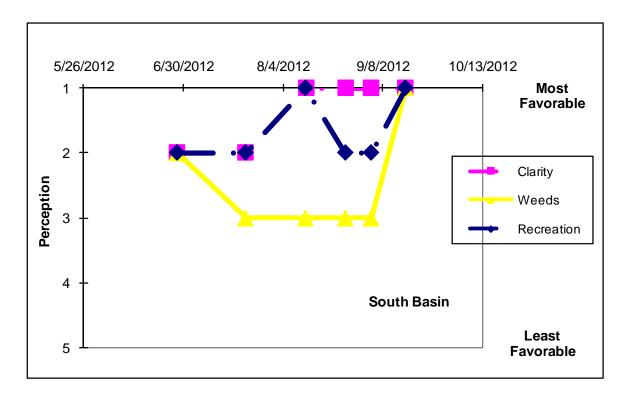
# Time Series: Lake Perception Indicators, 2012-North Basin



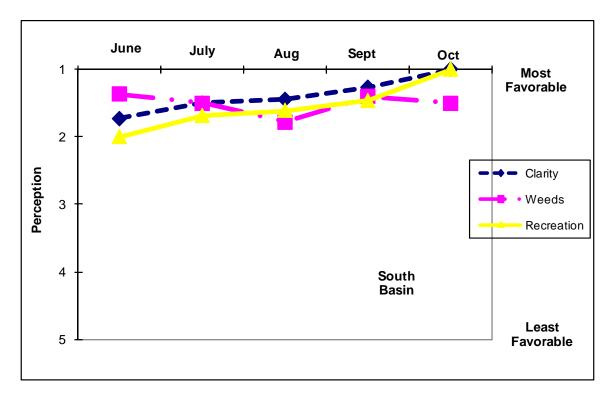
Time Series: Lake Perception Indicators, Typical Year (1987-2012)-North Basin



# Time Series: Lake Perception Indicators, 2012-South Basin



Time Series: Lake Perception Indicators, Typical Year (2003-2012)-South Basin



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

LNum	4.70 5.80
34   Schroon L-N   7/1/1987   20.0   3.00   1.5   0.006   0.15   16   7.58   60	
34 Schroon L-N 7/8/1987 21.0 4.00 1.5 0.006 0.12 14 7.09 60  34 Schroon L-N 7/13/1987 21.0 3.00 1.5 0.005 0.10 16 6.91 61  34 Schroon L-N 7/21/1987 20.0 4.00 1.5 0.001 0.09 16 7.23 62  34 Schroon L-N 7/21/1987 20.0 4.00 1.5 0.001 0.09 16 7.23 62  34 Schroon L-N 8/21/1987 20.0 4.00 1.5 0.009 0.06 15 7.51 62  34 Schroon L-N 8/4/1987 20.0 4.00 1.5 0.005 0.06 17 7.87 64  34 Schroon L-N 8/4/1987 45.0 4.15 1.5 0.009 0.03 111 7.02 63  34 Schroon L-N 8/1/1987 45.0 4.15 1.5 0.009 0.03 111 7.02 63  34 Schroon L-N 8/14/1987 23.0 3.35 1.5 0.007 0.03 177 7.26 64  34 Schroon L-N 8/14/1987 23.0 3.35 1.5 0.005 0.02 12 7.63 64  34 Schroon L-N 8/30/1987 25.0 4.25 1.5 0.005 0.02 17 7.26 66  34 Schroon L-N 8/30/1987 25.0 4.25 1.5 0.005 0.02 17 7.52 66  34 Schroon L-N 9/91/987 24.0 3.83 1.5 0.006 0.02 9 7.36 62  34 Schroon L-N 9/91/987 23.0 5.35 1.5 0.006 0.02 9 7.36 62  34 Schroon L-N 9/14/1987 23.0 5.35 1.5 0.006 0.02 9 7.36 62  34 Schroon L-N 9/14/1987 23.0 5.10 1.5 0.007 0.03 11 7.34 68  35 Schroon L-N 8/17/1988 25.0 5.25 1.5 0.006 0.02 9 7.76 63  36 Schroon L-N 7/6/1988 25.0 5.25 1.5 0.004 0.01 1 15 7.75 80  37 Schroon L-N 8/16/1988 25.0 5.05 1.5 0.004 0.05 5 7.92 70  38 Schroon L-N 8/16/1988 25.0 5.05 1.5 0.004 0.05 5 7.92 70  39 Schroon L-N 8/16/1988 25.0 5.05 1.5 0.006 0.02 77 7.79 70  30 Schroon L-N 8/16/1988 25.0 5.45 1.5 0.006 0.02 77 7.79 70  31 Schroon L-N 8/16/1988 25.0 5.45 1.5 0.006 0.02 77 7.79 70  34 Schroon L-N 8/16/1988 25.0 5.45 1.5 0.006 0.02 77 7.79 70  34 Schroon L-N 8/16/1988 13.0 4.50 1.5 0.006 0.02 77 7.79 70  34 Schroon L-N 8/16/1988 13.0 4.50 1.5 0.006 0.02 77 7.79 70  34 Schroon L-N 8/16/1989 25.0 5.45 1.5 0.006 0.02 77 7.79 70  34 Schroon L-N 8/16/1989 25.0 5.55 1.5 0.006 0.02 77 7.79 70  34 Schroon L-N 8/16/1989 25.0 5.55 1.5 0.006 0.00 70 77 7.79 70  34 Schroon L-N 8/16/1989 25.0 5.55 1.5 0.006 0.00 70 77 7.79 70  34 Schroon L-N 8/16/1989 25.0 5.55 1.5 0.006 0.00 70 77 7.79 70  34 Schroon L-N 8/16/1989 25.0 5.55 1.5 0.006 0.00 70 77 7.79 70  34 Schroon L-N 8/16/1989 25.0 5.55 1.5 0.006 0.00 70 77 77	
34 Schroon L-N 7/13/1987 21.0 3.00 1.5 0.005 0.10 16 6.91 61 34 Schroon L-N 7/21/1987 20.0 4.00 1.5 0.009 0.06 15 7.23 62 34 Schroon L-N 7/27/1987 20.0 4.00 1.5 0.009 0.06 15 7.51 62 34 Schroon L-N 8/4/1987 20.0 4.00 1.5 0.005 0.06 17 7.87 64 34 Schroon L-N 8/4/1987 20.0 4.00 1.5 0.005 0.06 17 7.87 64 34 Schroon L-N 8/14/1987 23.7 3.50 1.5 0.005 0.03 11 7.22 63 34 Schroon L-N 8/14/1987 23.7 3.50 1.5 0.007 0.03 17 7.26 64 34 Schroon L-N 8/14/1987 23.0 3.35 1.5 0.005 0.02 12 7.63 64 34 Schroon L-N 8/14/1987 23.0 3.35 1.5 0.005 0.02 12 7.63 64 34 Schroon L-N 8/24/1987 23.0 3.15 1.5 0.005 0.02 12 7.63 64 34 Schroon L-N 8/24/1987 23.0 3.15 1.5 0.005 0.02 10 7.52 66 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 9/91/1987 24.0 3.83 1.5 0.006 0.08 8 7.48 71 69 34 Schroon L-N 9/14/1987 23.5 5.35 1.5 0.003 0.01 6 7.17 69 34 Schroon L-N 9/21/1987 23.0 5.10 1.5 0.007 0.03 11 7.34 68 34 Schroon L-N 9/21/1987 23.0 5.10 1.5 0.007 0.03 11 7.34 68 34 Schroon L-N 9/21/1987 23.0 5.10 1.5 0.007 0.03 11 7.34 68 34 Schroon L-N 9/21/1988 25.0 5.05 1.5 0.004 0.11 15 7.75 80 34 Schroon L-N 8/41/1988 25.0 5.05 1.5 0.004 0.08 6 7.93 76 34 Schroon L-N 8/41/1988 25.0 5.05 1.5 0.004 0.08 6 7.93 76 34 Schroon L-N 8/41/1988 25.0 5.05 1.5 0.004 0.08 6 7.93 76 34 Schroon L-N 8/41/1988 25.0 5.05 1.5 0.004 0.08 6 7.93 76 34 Schroon L-N 8/41/1988 25.0 5.05 1.5 0.004 0.08 6 7.92 70 34 Schroon L-N 8/41/1988 25.0 5.05 1.5 0.004 0.08 6 7.92 70 34 Schroon L-N 8/41/1988 25.0 5.05 1.5 0.004 0.08 6 7.92 70 34 Schroon L-N 8/41/1988 25.0 5.05 1.5 0.004 0.00 77 7.79 70 34 Schroon L-N 9/26/1988 18.0 5.75 1.5 0.004 0.00 77 7.79 70 34 Schroon L-N 8/26/1988 18.0 5.75 1.5 0.006 0.02 77 7.79 70 34 Schroon L-N 9/26/1988 18.0 5.75 1.5 0.006 0.02 77 7.79 70 34 Schroon L-N 9/26/1988 18.0 5.75 1.5 0.006 0.02 77 7.79 70 34 Schroon L-N 9/26/1988 18.0 5.75 1.5 0.006 0.00 70 70 70 70 70 70 70 70 70 70 70 70 7	4.40
34         Schroon L-N         7/21/1987         20.0         4.00         1.5         0.001         0.09         16         7.23         62           34         Schroon L-N         7/27/1987         20.0         4.00         1.5         0.009         0.06         15         7.51         62           34         Schroon L-N         8/4/1987         20.0         4.00         1.5         0.005         0.06         17         7.87         64           34         Schroon L-N         8/14/1987         23.0         3.5         1.5         0.007         0.03         11         7.02         63           34         Schroon L-N         8/14/1987         23.0         3.35         1.5         0.005         0.02         12         7.63         64           34         Schroon L-N         8/24/1987         23.0         3.15         1.5         0.005         0.02         10         7.52         66           34         Schroon L-N         8/9/1987         24.0         3.83         1.5         0.005         0.02         9         7.36         62           34         Schroon L-N         9/14/1987         23.5         5.35         1.5         0.005	4.00
34         Schroon L-N         7/27/1987         20.0         4.00         1.5         0.009         0.06         15         7.51         62           34         Schroon L-N         8/4/1987         20.0         4.00         1.5         0.005         0.06         17         7.87         64           34         Schroon L-N         8/7/1987         45.0         4.15         1.5         0.009         0.03         11         7.02         63           34         Schroon L-N         8/17/1987         23.0         3.55         1.5         0.007         0.03         17         7.26         64           34         Schroon L-N         8/17/1987         23.0         3.35         1.5         0.005         0.02         12         7.63         64           34         Schroon L-N         8/30/1987         25.0         4.25         1.5         0.005         0.02         10         7.52         66           34         Schroon L-N         8/30/1987         24.0         3.83         1.5         0.005         0.02         9         7.36         62           34         Schroon L-N         9/14/1987         23.5         5.35         1.5         0.003	7.60
34         Schroon L-N         8/4/1987         20.0         4.00         1.5         0.005         0.06         17         7.87         64           34         Schroon L-N         8/7/1987         45.0         4.15         1.5         0.009         0.03         11         7.02         63           34         Schroon L-N         8/14/1987         23.7         3.50         1.5         0.007         0.03         17         7.26         64           34         Schroon L-N         8/17/1987         23.0         3.35         1.5         0.005         0.02         12         7.63         64           34         Schroon L-N         8/24/1987         23.0         3.15         1.5         0.005         0.02         10         7.52         66           34         Schroon L-N         9/9/1987         24.0         3.83         1.5         0.005         0.02         9         7.36         62           34         Schroon L-N         9/9/1987         24.0         3.83         1.5         0.005         0.02         9         7.36         62           34         Schroon L-N         9/9/1987         23.0         5.10         1.5         0.001         <	5.60
34         Schroon L-N         8/7/1987         45.0         4.15         1.5         0.009         0.03         11         7.02         63           34         Schroon L-N         8/4/1987         23.7         3.50         1.5         0.007         0.03         17         7.26         64           34         Schroon L-N         8/24/1987         23.0         3.35         1.5         0.005         0.02         10         7.52         66           34         Schroon L-N         8/24/1987         23.0         3.15         1.5         0.005         0.02         10         7.52         66           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           34         Schroon L-N         9/14/1987         23.0         5.15         1.5         0.006         0.08         8         7.48         71           34         Schroon L-N         9/2/1987         23.0         1.5         0.001         0.01         <	6.20
34         Schroon L-N         8/14/1987         23.7         3.50         1.5         0.007         0.03         17         7.26         64           34         Schroon L-N         8/17/1987         23.0         3.35         1.5         0.005         0.02         12         7.63         64           34         Schroon L-N         8/24/1987         23.0         3.15         1.5         0.005         0.02         10         7.52         66           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         7.1           34         Schroon L-N         9/14/1987         23.5         5.35         1.5         0.003         0.01         6         7.17         69           34         Schroon L-N         9/14/1987         23.5         5.35         1.5         0.003         0.01         11         7.34         68           34         Schroon L-N         7/6/1988         25.0         5.25         1.5         0.004	8.70
34         Schroon L-N         8/24/1987         23.0         3.15         1.5         0.005         0.02         10         7.52         66           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         23.0         3.83         1.5         0.006         0.08         8         7.48         71           34         Schroon L-N         9/14/1987         23.5         5.35         1.5         0.003         0.01         6         7.17         69           34         Schroon L-N         9/9/21/987         23.0         5.10         1.5         0.003         0.01         6         7.17         69           34         Schroon L-N         7/6/1988         25.0         5.25         1.5         0.004         0.01         15         7.75         80           34         Schroon L-N         8/4/1988         25.0         5.05         1.5         0.004         0.05         5         7.92         70           34         Schroon L-N         8/16/1988         25.0         5.05         1.5         0.001         <	6.10
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           34         Schroon L-N         9/14/1987         23.5         5.35         1.5         0.003         0.01         6         7.17         69           34         Schroon L-N         9/22/1987         23.0         5.10         1.5         0.007         0.03         11         7.34         68           34         Schroon L-N         7/6/1988         22.5         4.30         1.5         0.004         0.01         15         7.75         80           34         Schroon L-N         7/20/1988         25.0         5.05         1.5         0.004         0.08         6         7.93         76           34         Schroon L-N         8/16/1988         25.0         5.05         1.5         0.004         0.05         5         7.92         70           34         Schroon L-N         8/31/1988         25.0         5.25         1.5         0.004         <	4.70
34         Schroon L-N         9/9/1987         24.0         3.83         1.5         0.006         0.08         8         7.48         71           34         Schroon L-N         9/14/1987         23.5         5.35         1.5         0.003         0.01         6         7.17         69           34         Schroon L-N         9/22/1987         23.0         5.10         1.5         0.007         0.03         11         7.34         68           34         Schroon L-N         7/6/1988         22.5         4.30         1.5         0.004         0.01         15         7.75         80           34         Schroon L-N         7/20/1988         25.0         5.25         1.5         0.004         0.08         6         7.93         76           34         Schroon L-N         8/4/1988         25.0         5.05         1.5         0.004         0.08         5         7.92         70           34         Schroon L-N         8/31/1988         25.0         5.20         1.5         0.001         0.02         7         7.79         70           34         Schroon L-N         9/12/1988         25.0         5.45         1.5         0.006 <t< td=""><td>10.10</td></t<>	10.10
34         Schroon L-N         9/14/1987         23.5         5.35         1.5         0.003         0.01         6         7.17         69           34         Schroon L-N         9/22/1987         23.0         5.10         1.5         0.007         0.03         11         7.34         68           34         Schroon L-N         7/6/1988         22.5         4.30         1.5         0.004         0.11         15         7.75         80           34         Schroon L-N         7/20/1988         25.0         5.25         1.5         0.004         0.08         6         7.93         76           34         Schroon L-N         8/4/1988         25.0         5.05         1.5         0.004         0.05         5         7.92         70           34         Schroon L-N         8/19/1988         25.0         5.05         1.5         0.001         0.02         7         7.69         65           34         Schroon L-N         8/31/1988         25.0         5.45         1.5         0.006         0.02         7         7.79         70           34         Schroon L-N         9/12/1988         25.0         5.45         1.5         0.005         <	
34         Schroon L-N         9/22/1987         23.0         5.10         1.5         0.007         0.03         11         7.34         68           34         Schroon L-N         7/6/1988         22.5         4.30         1.5         0.004         0.11         15         7.75         80           34         Schroon L-N         7/20/1988         25.0         5.25         1.5         0.004         0.08         6         7.93         76           34         Schroon L-N         8/4/1988         25.0         5.05         1.5         0.004         0.05         5         7.92         70           34         Schroon L-N         8/16/1988         25.0         4.50         1.5         0.004         0.05         5         7.92         70           34         Schroon L-N         8/11/1988         25.0         5.20         1.5         0.006         0.02         7         7.79         70           34         Schroon L-N         9/12/1988         25.0         5.45         1.5         0.005         0.02         7         7.72         72         34         Schroon L-N         9/26/1988         18.0         5.75         1.5         0.005         0.02	9.70
34         Schroon L-N         7/6/1988         22.5         4.30         1.5         0.004         0.11         15         7.75         80           34         Schroon L-N         7/20/1988         25.0         5.25         1.5         0.004         0.08         6         7.93         76           34         Schroon L-N         8/4/1988         25.0         5.05         1.5         0.004         0.05         5         7.92         70           34         Schroon L-N         8/16/1988         25.0         4.50         1.5         0.001         0.02         7         7.69         65           34         Schroon L-N         8/31/1988         25.0         5.20         1.5         0.006         0.02         7         7.79         70           34         Schroon L-N         9/12/1988         25.0         5.45         1.5         0.005         0.02         7         7.72         72           34         Schroon L-N         9/26/1988         18.0         5.75         1.5         0.003         0.02         7         7.58         71           34         Schroon L-N         7/5/1989         23.0         4.90         1.5         0.006 <td< td=""><td>5.30</td></td<>	5.30
34         Schroon L-N         7/20/1988         25.0         5.25         1.5         0.004         0.08         6         7.93         76           34         Schroon L-N         8/4/1988         25.0         5.05         1.5         0.004         0.05         5         7.92         70           34         Schroon L-N         8/16/1988         25.0         4.50         1.5         0.001         0.02         7         7.69         65           34         Schroon L-N         8/31/1988         25.0         5.20         1.5         0.006         0.02         7         7.79         70           34         Schroon L-N         9/12/1988         25.0         5.45         1.5         0.005         0.02         7         7.72         72           34         Schroon L-N         9/26/1988         18.0         5.75         1.5         0.003         0.02         7         7.58         71           34         Schroon L-N         6/27/1989         23.0         4.90         1.5         0.006         0.08         15         7.68         64           34         Schroon L-N         7/5/1989         24.0         4.60         1.5         0.003 <t< td=""><td>3.50</td></t<>	3.50
34         Schroon L-N         8/4/1988         25.0         5.05         1.5         0.004         0.05         5         7.92         70           34         Schroon L-N         8/16/1988         25.0         4.50         1.5         0.001         0.02         7         7.69         65           34         Schroon L-N         8/31/1988         25.0         5.20         1.5         0.006         0.02         7         7.79         70           34         Schroon L-N         9/12/1988         25.0         5.45         1.5         0.005         0.02         7         7.72         72           34         Schroon L-N         9/26/1988         18.0         5.75         1.5         0.003         0.02         7         7.58         71           34         Schroon L-N         6/27/1989         23.0         4.90         1.5         0.006         0.08         15         7.68         64           34         Schroon L-N         7/5/1989         24.0         4.60         1.5         0.003         0.07         17         7.77         64           34         Schroon L-N         7/17/1989         24.0         4.60         1.5         0.003         <	3.63
34         Schroon L-N         8/16/1988         25.0         4.50         1.5         0.001         0.02         7         7.69         65           34         Schroon L-N         8/31/1988         25.0         5.20         1.5         0.006         0.02         7         7.79         70           34         Schroon L-N         9/12/1988         25.0         5.45         1.5         0.005         0.02         7         7.72         72           34         Schroon L-N         9/26/1988         18.0         5.75         1.5         0.003         0.02         7         7.58         71           34         Schroon L-N         6/27/1989         23.0         4.90         1.5         0.006         0.08         15         7.68         64           34         Schroon L-N         7/5/1989         24.0         4.60         1.5         0.003         0.07         17         7.77         64           34         Schroon L-N         7/17/1989         20.0         4.25         1.5         0.008         0.06         17         7.42         64           34         Schroon L-N         7/31/1989         18.3         4.85         1.5         0.005	2.15
34         Schroon L-N         8/31/1988         25.0         5.20         1.5         0.006         0.02         7         7.79         70           34         Schroon L-N         9/12/1988         25.0         5.45         1.5         0.005         0.02         7         7.72         72           34         Schroon L-N         9/26/1988         18.0         5.75         1.5         0.003         0.02         7         7.58         71           34         Schroon L-N         6/27/1989         23.0         4.90         1.5         0.006         0.08         15         7.68         64           34         Schroon L-N         7/5/1989         24.0         4.60         1.5         0.003         0.07         17         7.77         64           34         Schroon L-N         7/17/1989         20.0         4.25         1.5         0.008         0.06         17         7.42         64           34         Schroon L-N         7/31/1989         18.3         4.85         1.5         0.005         0.03         12         7.58         71           34         Schroon L-N         8/14/1989         24.4         3.65         1.5         0.003	2.15
34         Schroon L-N         9/12/1988         25.0         5.45         1.5         0.005         0.02         7         7.72         72           34         Schroon L-N         9/26/1988         18.0         5.75         1.5         0.003         0.02         7         7.58         71           34         Schroon L-N         6/27/1989         23.0         4.90         1.5         0.006         0.08         15         7.68         64           34         Schroon L-N         7/5/1989         24.0         4.60         1.5         0.003         0.07         17         7.77         64           34         Schroon L-N         7/17/1989         20.0         4.25         1.5         0.008         0.06         17         7.42         64           34         Schroon L-N         7/31/1989         18.3         4.85         1.5         0.005         0.03         12         7.58         71           34         Schroon L-N         8/14/1989         24.4         3.65         1.5         0.003         0.01         13         7.41         69           34         Schroon L-N         8/29/1989         18.3         3.10         1.5         0.004	2.96
34         Schroon L-N         9/26/1988         18.0         5.75         1.5         0.003         0.02         7         7.58         71           34         Schroon L-N         6/27/1989         23.0         4.90         1.5         0.006         0.08         15         7.68         64           34         Schroon L-N         7/5/1989         24.0         4.60         1.5         0.003         0.07         17         7.77         64           34         Schroon L-N         7/17/1989         20.0         4.25         1.5         0.008         0.06         17         7.42         64           34         Schroon L-N         7/31/1989         18.3         4.85         1.5         0.005         0.03         12         7.58         71           34         Schroon L-N         8/14/1989         24.4         3.65         1.5         0.003         0.01         13         7.41         69           34         Schroon L-N         8/29/1989         18.3         3.10         1.5         0.004         0.01         10         7.58         70           34         Schroon L-N         9/21/1989         25.0         3.55         1.5         0.004	2.15
34         Schroon L-N         6/27/1989         23.0         4.90         1.5         0.006         0.08         15         7.68         64           34         Schroon L-N         7/5/1989         24.0         4.60         1.5         0.003         0.07         17         7.77         64           34         Schroon L-N         7/17/1989         20.0         4.25         1.5         0.008         0.06         17         7.42         64           34         Schroon L-N         7/31/1989         18.3         4.85         1.5         0.005         0.03         12         7.58         71           34         Schroon L-N         8/14/1989         24.4         3.65         1.5         0.003         0.01         13         7.41         69           34         Schroon L-N         8/29/1989         18.3         3.10         1.5         0.004         0.01         10         7.58         70           34         Schroon L-N         9/11/1989         25.0         3.55         1.5         0.007         0.01         9         7.44         71           34         Schroon L-N         9/25/1989         25.0         3.75         1.5         0.006	3.77
34         Schroon L-N         7/5/1989         24.0         4.60         1.5         0.003         0.07         17         7.77         64           34         Schroon L-N         7/17/1989         20.0         4.25         1.5         0.008         0.06         17         7.42         64           34         Schroon L-N         7/31/1989         18.3         4.85         1.5         0.005         0.03         12         7.58         71           34         Schroon L-N         8/14/1989         24.4         3.65         1.5         0.003         0.01         13         7.41         69           34         Schroon L-N         8/29/1989         18.3         3.10         1.5         0.004         0.01         10         7.58         70           34         Schroon L-N         9/11/1989         25.0         3.55         1.5         0.004         0.01         10         7.58         70           34         Schroon L-N         9/25/1989         25.0         3.55         1.5         0.007         0.01         9         7.44         71           34         Schroon L-N         7/2/1990         24.0         4.20         1.5         0.009	3.03
34         Schroon L-N         7/17/1989         20.0         4.25         1.5         0.008         0.06         17         7.42         64           34         Schroon L-N         7/31/1989         18.3         4.85         1.5         0.005         0.03         12         7.58         71           34         Schroon L-N         8/14/1989         24.4         3.65         1.5         0.003         0.01         13         7.41         69           34         Schroon L-N         8/29/1989         18.3         3.10         1.5         0.004         0.01         10         7.58         70           34         Schroon L-N         9/11/1989         25.0         3.55         1.5         0.007         0.01         9         7.44         71           34         Schroon L-N         9/25/1989         25.0         3.75         1.5         0.006         0.01         16         7.62         67           34         Schroon L-N         7/2/1990         24.0         4.20         1.5         0.009         0.10         15         7.37         62           34         Schroon L-N         7/19/1990         25.0         4.70         1.5         0.004	2.64
34         Schroon L-N         7/31/1989         18.3         4.85         1.5         0.005         0.03         12         7.58         71           34         Schroon L-N         8/14/1989         24.4         3.65         1.5         0.003         0.01         13         7.41         69           34         Schroon L-N         8/29/1989         18.3         3.10         1.5         0.004         0.01         10         7.58         70           34         Schroon L-N         9/11/1989         25.0         3.55         1.5         0.007         0.01         9         7.44         71           34         Schroon L-N         9/25/1989         25.0         3.75         1.5         0.006         0.01         16         7.62         67           34         Schroon L-N         7/2/1990         24.0         4.20         1.5         0.009         0.10         15         7.37         62           34         Schroon L-N         7/19/1990         25.0         4.70         1.5         0.004         0.06         15         7.61         65           34         Schroon L-N         7/30/1990         25.0         5.10         1.5         0.004	2.55
34       Schroon L-N       8/14/1989       24.4       3.65       1.5       0.003       0.01       13       7.41       69         34       Schroon L-N       8/29/1989       18.3       3.10       1.5       0.004       0.01       10       7.58       70         34       Schroon L-N       9/11/1989       25.0       3.55       1.5       0.007       0.01       9       7.44       71         34       Schroon L-N       9/25/1989       25.0       3.75       1.5       0.006       0.01       16       7.62       67         34       Schroon L-N       7/2/1990       24.0       4.20       1.5       0.009       0.10       15       7.37       62         34       Schroon L-N       7/19/1990       25.0       4.70       1.5       0.004       0.06       15       7.61       65         34       Schroon L-N       7/30/1990       25.0       5.10       1.5       0.004       0.06       14       70         34       Schroon L-N       8/15/1990       25.0       4.00       1.5       0.005       0.04       16       7.70       64	2.11
34     Schroon L-N     8/29/1989     18.3     3.10     1.5     0.004     0.01     10     7.58     70       34     Schroon L-N     9/11/1989     25.0     3.55     1.5     0.007     0.01     9     7.44     71       34     Schroon L-N     9/25/1989     25.0     3.75     1.5     0.006     0.01     16     7.62     67       34     Schroon L-N     7/2/1990     24.0     4.20     1.5     0.009     0.10     15     7.37     62       34     Schroon L-N     7/19/1990     25.0     4.70     1.5     0.004     0.06     15     7.61     65       34     Schroon L-N     7/30/1990     25.0     5.10     1.5     0.004     0.06     14     70       34     Schroon L-N     8/15/1990     25.0     4.00     1.5     0.005     0.04     16     7.70     64	4.31
34     Schroon L-N     9/11/1989     25.0     3.55     1.5     0.007     0.01     9     7.44     71       34     Schroon L-N     9/25/1989     25.0     3.75     1.5     0.006     0.01     16     7.62     67       34     Schroon L-N     7/2/1990     24.0     4.20     1.5     0.009     0.10     15     7.37     62       34     Schroon L-N     7/19/1990     25.0     4.70     1.5     0.004     0.06     15     7.61     65       34     Schroon L-N     7/30/1990     25.0     5.10     1.5     0.004     0.06     14     70       34     Schroon L-N     8/15/1990     25.0     4.00     1.5     0.005     0.04     16     7.70     64	4.23
34     Schroon L-N     9/25/1989     25.0     3.75     1.5     0.006     0.01     16     7.62     67       34     Schroon L-N     7/2/1990     24.0     4.20     1.5     0.009     0.10     15     7.37     62       34     Schroon L-N     7/19/1990     25.0     4.70     1.5     0.004     0.06     15     7.61     65       34     Schroon L-N     7/30/1990     25.0     5.10     1.5     0.004     0.06     14     70       34     Schroon L-N     8/15/1990     25.0     4.00     1.5     0.005     0.04     16     7.70     64	4.03 3.70
34         Schroon L-N         7/2/1990         24.0         4.20         1.5         0.009         0.10         15         7.37         62           34         Schroon L-N         7/19/1990         25.0         4.70         1.5         0.004         0.06         15         7.61         65           34         Schroon L-N         7/30/1990         25.0         5.10         1.5         0.004         0.06         14         70           34         Schroon L-N         8/15/1990         25.0         4.00         1.5         0.005         0.04         16         7.70         64	4.33
34         Schroon L-N         7/19/1990         25.0         4.70         1.5         0.004         0.06         15         7.61         65           34         Schroon L-N         7/30/1990         25.0         5.10         1.5         0.004         0.06         14         70           34         Schroon L-N         8/15/1990         25.0         4.00         1.5         0.005         0.04         16         7.70         64	4.12
34         Schroon L-N         7/30/1990         25.0         5.10         1.5         0.004         0.06         14         70           34         Schroon L-N         8/15/1990         25.0         4.00         1.5         0.005         0.04         16         7.70         64	3.69
34 Schroon L-N 8/15/1990 25.0 4.00 1.5 0.005 0.04 16 7.70 64	0.69
	7.29
	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	1
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	
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	
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	рН	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	Ca	3.92
34	Schroon L-N		43.9	4.00	1.0		0.13			176.65	17	6.32	59		1.00
34		7/21/2004	44.5	4.38	1.0	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	0.02	0.31	102.98	17	8.29	91	9.1	3.70
34	Schroon L-N		43.3	3.85	1.0	0.003	0.01	0.01	0.39	155.96	12	7.17	74	0.1	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		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	0.30	32.46	33	8.20	88	0.1	1.49
34	Schroon L-N		44.8	3.10	1.0	0.008	0.03		0.17	12.20	18	7.10	70		4.11
34	Schroon L-N		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		44.2	2.65	1.0	0.015	0.00	0.01	0.34	12.17	35	6.76	72	2.9	2.84
34	Schroon L-N		44.0	3.90	1.0	0.013	0.03	0.01	0.23	6.12	25	6.94	81		2.62
34		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		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		44.8	2.75	1.5	0.013	0.10		0.25	19.52	22	7.53	40	5.8	0.39
34		6/29/2006	44.2	2.60	1.0	0.014					21	6.96	62		2.65
34	Schroon L-N		44.8	2.90	1.0		0.04	0.02	0.57	45.85	35	7.36	55		2.76
34		8/10/2006	44.2	2.70	1.0		0.03	0.04	0.67	55.69	26	7.53	48		3.41
34		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		44.2	3.70	1.0	0.009	0.03		0.41	47.64	10	8.25	59		2.51
34		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		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		30.0	7.10	1.5	0.007		0.02	0.15	46.67		7.90	66		0.22
34	Schroon L-N		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		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		02.0	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		30.5	4.65	1.5	0.005	0.00	0.00	0.18	74.39	18	8.34	60	0.0	0.46
34	Schroon L-N		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		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		02.0	2.75		0.008		0.02	0.13	35.25	35	6.19	49	6.1	0.10
34	Schroon L-N			2.85		0.020	0.06	0.04	0.18	19.60	45	6.39	30		0.10
34	Schroon L-N			2.90		0.008	0.06	0.02	0.16	46.86	52	7.23	58		0.10
34	Schroon L-N			3.20		0.009	0.01	0.01	0.21	49.74	47	7.30	56		0.70
34	Schroon L-N			3.05			0.01	0.01	0.14	49.05	38	7.40	26	5.1	6.90
34	Schroon L-N			3.30		0.011	0.01	0.01	0.12	24.02	28	7.27	62		12.40
34	Schroon L-N		44.5	3.50			0.01	0.01	0.14	12.64	40	7.58	35		12110
34	Schroon L-N			3.90		0.013	0.02	0.02	0.32	53.74	34	7.38	44		0.30
34		5/25/2010	35.7	6.40	1.5	0.006	0.10	0.04	0.02	00	16	8.44	65	11.6	0.20
34	Schroon L-N		37.4	5.38	1.5	0.008		0.03	0.19	54.13	10	7.61	70		0.20
34	Schroon L-N		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			5.20	1.5	0.009				52.22	8	7.56	41	6.4	0.30
34	Schroon L-N					0.009					6	6.93	89	0	3.50
34	Schroon L-N			2.50	1.5	0.009				57.69	46	6.82	82		1.60
34	Schroon L-N		40.0	3.23	1.0	0.008				69.26	31	7.29	84	6.2	0.05
34	Schroon L-N			4.10	1.0	0.006				103.20	17	6.41	72		2.90
34	Schroon L-N			3.55	1.0	0.006				98.10	30	8.42	90		0.05
34	Schroon L-N			3.30	1.0	0.010				34.74	25	7.21	74		2.70
34	Schroon L-N			3.10	1.5	0.018				32.18	24	8.59	75	6.1	3.80
34	Schroon L-N			2.50		0.006				98.61	36	6.92	63		1.40
34	Schroon L-N			2.65	1.5	0.014				139.96	32	7.20	53		3.80
34	Schroon L-N			2.45	1.5	0.005				165.92	40	6.63	68		4.20
34	Schroon L-N			3.85	1.5	0.010			0.35	75.18	22	6.83	72	5.9	
34	Schroon L-N			2.90	1.5	0.006			0.13	49.59	20	8.01	78		
34	Schroon L-N			4.30	1.5	0.016				39.46	19	8.65	78		
34	Schroon L-N			3.65	1.5	0.006				55.71	15	6.62	76		
34		8/19/2012		3.60	1.5		0.01	0.02		36.31	16	8.38	77	6.7	
34	Schroon L-N			3.55	1.5					49.19	13	8.79	90		
34	Schroon L-N			3.55	1.5			0.02		53.69	18	7.35	79		
34		9/26/2012		3.40	1.5	0.006		0.02		78.75	11	7.46	54		
34	Schroon L-N		43.6	3.05	30.5	0.005				94.25					
34	Schroon L-N		44.2	3.25	30.5					74.39					
34	Schroon L-N		44.3	4.10	23.0	0.006			0.41	65.68					
34	Schroon L-N		43.6	3.30						6806.88					
34	Schroon L-N		42.6	8.50	30.5					1377.45					
													l		

I Nium	DNome	Doto	Zhat	Zod	Zaamn	Tot D	NO2	NII I 4	TDN	TN/TD	NO	Г.	Ma	۸۵
LNum	PName Schroon L-N									TN/TP 114.58	NO2	Fe	Mn	As
34					30.5						-			
34	Schroon L-N				20.5	0.004					-			
34	Schroon L-N		42.6	4.50		0.004					-			
34	Schroon L-N				30.5	0.004				58.33				
34	Schroon L-N				30.5	0.005				95.49				
34	Schroon L-N				30.5	0.005				4.93				
34	Schroon L-N				43.0	0.004				73.96				
34	Schroon L-N				00.5	0.006				60.18				
34	Schroon L-N				30.5	0.004				143.61				
34	Schroon L-N				30.5	0.003				91.30				
34	Schroon L-N				30.5	0.002								
34	Schroon L-N				44.2	0.005				27.26				
34	Schroon L-N				30.5	0.004				22.04				
34	Schroon L-N				30.5	0.005				207.35				
34	Schroon L-N		44.5		30.5	0.005			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				25.0	0.038								
34	Schroon L-N				25.0	0.034								
34	Schroon L-N	6/16/2006	44.8		30.5	0.007								
34	Schroon L-N				30.5	0.011								
34	Schroon L-N				30.5	0.010								
34	Schroon L-N				30.5	0.013								
34	Schroon L-N				30.5	0.005								
34	Schroon L-N				30.5	0.004								
34	Schroon L-N				30.5	0.004								
34	Schroon L-N				33.0	0.059								
34	Schroon L-N				30.0	0.005								
34	Schroon L-N				30.5	0.005								
34	Schroon L-N				30.5	0.003								
											-			
34	Schroon L-N				31.0	0.005					-			
34	Schroon L-N				30.5	0.004								
34	Schroon L-N				30.5	0.002								
34	Schroon L-N				30.0	0.005		0.05						
34	Schroon L-N				40.0	0.010		0.05						
34	Schroon L-N				45.0									
34	Schroon L-N					0.005		0.02						
34	Schroon L-N					0.007								
34	Schroon L-N				46.0	0.008		0.01				0.10	0.10	1.70
34	Schroon L-N				41.5	0.057								
34	Schroon L-N				42.0	0.043		0.04				2.60	0.24	0.34
34	Schroon L-N				43.0	0.031								
34	Schroon L-N				35.0	0.008		0.04				0.03		
34	Schroon L-N				35.0	0.014		0.04				0.03		
34	Schroon L-N				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			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			3.10	43.5	0.006		0.03				0.26	0.04	0.50
34	Schroon L-N			2.65	48.0	0.007		0.03				0.01	0.01	
34	Schroon L-N			-	46.0	0.009		0.01						
34	Schroon L-N				50.0							0.60	0.02	
34	Schroon L-N				42.0	0.025		0.03						
34	Schroon L-N				42.0	5.525		0.00				0.93	0.13	
34	Schroon L-N				42.0							0.00	0.10	
34	Schroon L-N				46.0							3.01	0.20	0.50
34	Schroon L-N				44.0	0.015		0.02				5.01	0.20	0.50
34	Schroon L-N				43.0	0.013		0.02				1 12	0.27	1.00
J4	SCHOOL L-IN	312012012			43.0							1.12	∪.∠/	1.00

LNum	PName	Date	Zbot	Zsd	Zsamp	Tot.P	NO3	NH4	TDN	TN/TP	TColor	рН	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	0	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	00.0	5.00	1.0	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
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	80.0	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	<i>-</i> -	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 73		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		6.0	1.56
34.1	Schroon L-S Schroon L-S	6/22/2008 7/23/2008	33.0 43.0	3.90 4.45	1.5 1.5	0.026	0.04	0.01	0.25	21.11	21 15	6.98 8.24	58 58	6.0	0.71
34.1	Schroon L-S	8/18/2008	33.0	2.30	1.5	0.004	0.01	0.00	0.27	114.69	13	7.76	61		0.10
34.1	Schroon L-S	8/27/2008	33.0	2.85	1.5	0.003	0.01	0.00	0.27	56.77	26	7.78	66		0.10
34.1	Schroon L-S	9/15/2008	55.0	2.00		0.007	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		0.004	0.02	0.02	0.20	77.22	20	7.52	65	7.5	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	11.0	5.30	1.5	0.004	0.03	0.01	0.17	95.26	17	8.30	79		0.10
34.1		06/30/2009	25.0	4.55	1.0	0.009	0.04	0.01	0.09	22.00	36	7.23	60	5.4	0.29
34.1		07/10/2009		3.36	1.5	0.012	0.03	0.01	0.22	41.04	50	7.95	53	0	0.48
34.1		07/19/2009		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			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			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			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			5.93	1.5	0.006		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		6/13/2010		4.10		0.010	0.07	0.01	0.30	64.50	13	7.66	74	8.0	2.80
34.1			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		189.94	28	7.63	83		0.10
34.1				3.85		0.006		0.02		49.22	26	7.65	78		0.10
34.1	Schroon L-S			4.45		0.009	0.02			88.50	16	7.29	85		2.10
34.1	Schroon L-S		44.0	4.95		0.017		0.05		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		16.08	13	7.80	83		0.50
34.1	Schroon L-S			5.75	1.5	0.020		0.05		36.02	12	7.32	83	4.5	1.00
34.1	Schroon L-S			6.15	1.5	0.018		0.04		32.82	27	8.50	93	4.2	0.10
34.1	Schroon L-S	7/19/2011		5.20	1.5	0.011		0.04		58.27	32	7.13	57		0.20
34.1	Schroon L-S			5.15	1.5	0.011		0.04		31.75	23	8.22	60		0.40
34.1	Schroon L-S			4.30	1.5	0.009		0.02		58.00	20	7.78	70 65	<i>5 -</i>	0.60
34.1	Schroon L-S	8/31/2011		3.65	1.5	0.010		0.04		61.56	30	7.36 7.13	65 57	5.5	0.05
34.1		9/18/2011		3.90	1.5	0.013		0.03	0.28	45.83 78.53					0.10
34.1	Schroon L-S Schroon L-S	6/28/2012	30 E	3.10 4.95	1.5 1.5	0.009		0.03		78.53 59.60	28 17	7.52	41 35	5.8	0.40 6.50
34.1	Schroon L-S	7/22/2012	30.5	5.40	1.5	0.000	0.07	0.03	0.15	8.78	17	7.83 7.67	41	ა.ნ	0.10
34.1	Schroon L-S			5.40	1.5	0.006		0.02		86.92	10	8.77	91		0.10
34.1	Schroon L-S	8/26/2012	30.0	4.68	1.5	0.005	0.02	0.03		81.96	6	8.75	96		2.20
J4. I	JUNIOUI L-3	0/20/2012	JU.U	<del>4</del> .∪0	1.0	0.005	0.01	0.02	0.18	01.30	U	0.73	30		Z.ZU

LNum	PName	Date	Zhot	Zcd	Zcomn	Tot D	NO3	NILIA	TDN	TN/TD	TColor	nЦ	Cond25	Ca	Chl.a
34.1	Schroon L-S				1.5	TOLF	0.01	0.14		14.09	10	6.75	73	6.7	2.10
34.1	Schroon L-S				1.5	0.004				145.20	13	7.25	75	0.7	0.80
_	Schroon L-S		30.0	5.06		0.004				36.88	6		147		0.60
34.1					30.5	0.004					· O	6.96	147		1 11
34.1	Schroon L-S				30.5			0.02		96.23					1.41
34.1	Schroon L-S				30.5	0.003				80.33					
34.1	Schroon L-S				34.0	0.004				73.96					<b></b>
34.1	Schroon L-S				30.5	0.004			0.26	72.43					<b></b>
34.1	Schroon L-S				30.5		0.18			63.58					<b></b>
34.1	Schroon L-S				30.5	0.004				32.65					<b></b>
34.1	Schroon L-S				30.5	0.004				95.82					<b></b>
34.1	Schroon L-S				34.4	0.007		0.02		64.33					<b></b>
34.1	Schroon L-S				30.5	0.003				95.72					<b></b>
34.1	Schroon L-S				30.5	0.004		0.03	1.04	291.49					
34.1	Schroon L-S				30.5	0.003				75.72					
34.1	Schroon L-S				30.5	0.005				87.92					
34.1	Schroon L-S				30.5	0.002				108.94					
34.1	Schroon L-S		36.0		30.5	0.004	0.15	0.01	0.27	69.27					
34.1	Schroon L-S		36.0		30.5	0.004			0.45	108.66					
34.1	Schroon L-S				30.5	0.007									
34.1	Schroon L-S				25.0	0.004									
34.1	Schroon L-S	8/2/2005			25.0	0.013									
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				30.5	0.004									
34.1	Schroon L-S				30.5	0.009									
34.1	Schroon L-S				33.0	0.006									
34.1	Schroon L-S				30.5	0.004									
34.1	Schroon L-S				33.0	2.650									
34.1	Schroon L-S					1.389									
34.1	Schroon L-S					1.401									
34.1	Schroon L-S					0.005									
34.1	Schroon L-S				33.0	0.004									
34.1	Schroon L-S		77.0		30.5	0.004									
34.1	Schroon L-S		25.0		34.7	0.009		0.01							
34.1	Schroon L-S				36.5	0.005		0.01							
34.1	Schroon L-S				35.0	0.007		0.01							
34.1	Schroon L-S				35.0	0.006		0.01							
	Schroon L-S	08/21/2009	35.7			0.006		0.01					0.10	0.10	0.90
34.1	Schroon L-S				35.0	0.005		0.01					0.10	0.10	0.50
34.1	Schroon L-S				35.0	0.003		0.01					0.10	0.10	0.34
34.1	Schroon L-S				55.0	0.007		0.01					0.10	0.10	0.54
34.1	Schroon L-S				45.0	0.008		0.02					2.70	0.20	$\overline{}$
34.1	Schroon L-S				45.0	0.054		0.02						0.20	$\overline{}$
34.1	Schroon L-S				42.0	0.037		0.05						0.21	
34.1	Schroon L-S				26.0	0.020		0.67					5.32	0.68	
34.1	Schroon L-S			6 4 5	36.0	0.035		0.03					0.04	0.04	
34.1	Schroon L-S			6.15	33.0	0.018		0.05						0.01	$\vdash$
34.1	Schroon L-S			5.15	36.0	0.007		0.05						0.01	0.50
34.1	Schroon L-S			3.65	36.0	0.012		0.03						0.01	0.50
34.1	Schroon L-S			3.10	36.0	0.007		0.02					0.01	0.01	$\vdash$
34.1	Schroon L-S				27.5	0.029		0.03					0.00	0.00	$\square$
34.1	Schroon L-S				25.0	0.005		0.67					0.06	0.02	
34.1	Schroon L-S				27.5	0.006		0.35					0.00	0.05	
34.1	Schroon L-S				27.5	0.05-		0.5-					0.08	0.02	$\square$
34.1	Schroon L-S				27.5	0.006		0.20							
34.1	Schroon L-S	9/16/2012	<u> </u>		27.5		<u> </u>						0.23	0.06	1.00

												AQ-	AQ-	MC-			FP-	FP-	HAB
LNum	PName	Date	Site	TAir	TH20	QA	QB	QC	QD	QF	QG	PC	Chla	LR	Ana-a	Сус	Chl	BG	form
34	Schroon L-N		epi	25	20														
34	Schroon L-N		ері	18	20														
34	Schroon L-N		ері	20	20														
34	Schroon L-N		ері	24	25														
34	Schroon L-N		ері	20	22														
34	Schroon L-N		epi	23	23														igsquare
34	Schroon L-N		epi	25	22														
34	Schroon L-N		ері	24	22														
34	Schroon L-N		epi	25	23														igsquare
34	Schroon L-N		epi	25	23														
34	Schroon L-N		epi	19	20														
34	Schroon L-N		epi	20	19														
34	Schroon L-N		epi	20	19														
34	Schroon L-N		epi	17	18														
34	Schroon L-N		epi	18	15														
34	Schroon L-N		epi	27	26														
34	Schroon L-N	1	epi	24	26														<b>-</b>
34	Schroon L-N		epi	28	27														<b>-</b>
34	Schroon L-N		epi	21	25														
34	Schroon L-N		epi	23	20				-							-	1		<del>                                     </del>
34	Schroon L-N	1	epi	16	19											-	-		
34 34	Schroon L-N Schroon L-N		epi epi	16 22	16 22											-			-
34	Schroon L-N		epi	20	20														
34	Schroon L-N		•	22	20														
34	Schroon L-N		epi	24	22														
34	Schroon L-N		epi epi	23	23														
34	Schroon L-N		epi	22	20														
34	Schroon L-N		epi	20	20														
34	Schroon L-N		epi	10	15														
34	Schroon L-N		epi	28	24														
34	Schroon L-N		epi	24	22														
34	Schroon L-N	1	epi	26	28														
34	Schroon L-N		ері	22	23														
34	Schroon L-N		epi	22	22														
34	Schroon L-N		epi	10	17														
34	Schroon L-N	1	epi	17	14														
34	Schroon L-N		epi	21	23														
34	Schroon L-N		epi	24	28														
34	Schroon L-N		epi	18	23														
34	Schroon L-N	1	epi	20	23														
34	Schroon L-N		epi	20	21														
34	Schroon L-N		ері	27	27														
34	Schroon L-N		epi	24	23	1	2	1											
34	Schroon L-N		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	ері	22	21	1	2	1	5										
34	Schroon L-N	6/25/2002	ері	28	24	2	2	2											
34	Schroon L-N	-	ері	25	23	1	1	2	5										
34	Schroon L-N		ері	25	24	1	1	2	5										
34	Schroon L-N	8/6/2002	ері	18	24	1	1	4	5										
34	Schroon L-N		ері	26	26	2	2	1											
34	Schroon L-N		ері	27	23.5	2	1	2	5										
34	Schroon L-N		ері	25	21	1	1	1											
34	Schroon L-N		ері	35	23	2	1	1	8								<u> </u>		
34	Schroon L-N		ері	26	26	1	1	1									<u> </u>		
34	Schroon L-N		ері	23	23	1	1	1	8								<u> </u>		
34	Schroon L-N		ері	25	26	2	1	2	5								<u> </u>		
34	Schroon L-N		ері	22	24	1	1	1	<u> </u>				ļ				ļ		<u> </u>
34	Schroon L-N		ері	21		2	1	5	58				ļ				ļ		<u> </u>
34	Schroon L-N	9/17/2003	ері	23	21	1	1	1											

												AQ-	AQ-	MC-			FP-	FP-	HAB
LNum	PName	Date	Site	TAir	TH20	QA	QB	QC	QD	OF	OG		Chla		Ana-a	Сус	Chl	BG	form
34	Schroon L-N		epi	23		1	1	1	5	Ψ.	~~		0		7 11 10 0	0,0	0		
34	Schroon L-N		epi	20	20	3	1	3	8										
34	Schroon L-N		ері	25	21	2	1	1	0										
34	Schroon L-N	7/7/2004	epi	21	21	2	1	2	5										
34	Schroon L-N		epi	27	23	1	1	2	5										
34	Schroon L-N			19	23	2	1	3	5										
34	Schroon L-N		epi epi	21	20	2	1	4	5										
34	Schroon L-N	9/1/2004	epi epi	20	20	1	1	3	5										
34	Schroon L-N		epi epi	18	18	2	1	2	0										
34	Schroon L-N			23	18	2	1	3	0										
34	Schroon L-N		epi epi	18	23	3	1	4	5										
34	Schroon L-N		epi	25	24	2	1	3	5										
34	Schroon L-N		ері	22	22	2	1	1	0										
34	Schroon L-N		epi	18	22	1	1	2	5										
34	Schroon L-N		epi	18	20	2	1	2	5										
34	Schroon L-N		epi	21	21	1	1	1	0										
34			ері	14	18	1	1	1	0										
34	Schroon L-N		epi epi	25	16	2	1	2	5										
34	Schroon L-N		epi epi	19	17	2	1	4	58										
34	Schroon L-N		epi epi	22	22	2	2	3	5										
34	Schroon L-N		epi epi	17	22	2	2	2	5										
34	Schroon L-N		epi	12	19	2	2	3	5										
34	Schroon L-N		epi epi	18	18	2	2	3	5										
34	Schroon L-N		epi	14	17	2	2	3	5										
34	Schroon L-N		ері	16	.,	1	1	4	5										
34	Schroon L-N		epi	21	20	1	'	1	0										
34	Schroon L-N		ері	18	22	2	2	3	6										
34	Schroon L-N		epi	19	21	1	2	2	0										
34	Schroon L-N		epi	17	17	2	1	1	0										
34	Schroon L-N		epi	18	20	2	2	2	0										
34	Schroon L-N		ері	12	18	1	1	1	0										
34	Schroon L-N		epi	15	16	1	2	1	0										
34	Schroon L-N		ері	21	22	1	2	1	0										
34	Schroon L-N		epi	25	23	1	1	1	5										
34	Schroon L-N		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		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		ері	22	15	1	1	1	6	0	0								
34	Schroon L-N		ері	20	19	2	1	1	0	0	0								
34	Schroon L-N		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	ері	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		ері	26	25	1	1	1	0	0	0	5.50	2.70						
34	Schroon L-N	7/23/2011	ері	38	33	1	1	1	0	0	0	5.10	2.20						
34	Schroon L-N		ері	30	25	1	1	1	0	0	0	8.30	3.50		·				
34	Schroon L-N	8/17/2011	ері	23	24	1	1	1	0	0	0	12.00	2.80		·				
34	Schroon L-N		ері	17	21	1	1	1	0	0	0	7.60	2.30						
34	Schroon L-N	9/7/2011	ері	22	23	1	1	1	0	0	0	5.80	3.80						
34	Schroon L-N		ері	20	20	1	1	2	0	0	0	7.40	1.80						
34	Schroon L-N	9/28/2011	ері	21	21	1	1	2	0	0	0	7.70	3.70						
34	Schroon L-N		ері	34	27	1	1	2	0	0	0	0.00		<0.30	<0.423		1.17	0.56	
34	Schroon L-N		ері	25	27	1	1	2	0	0	0	-0.50		0.31	<0.392				
34	Schroon L-N		ері	29	25	1	1	1	0	0	0	1.40		<0.30					ı
34	Schroon L-N		epi	22	24	1	1	2	0	0	0	3.00		<0.30				10.72	ı
34	Schroon L-N		ері	29	23	1	1	1	0	0	0	2.20		0.46	<3.299			0.88	I
34	Schroon L-N	9/1/2012	epi	27	24	1	1	1	0	0	0	1.10	0.20	<0.30	<3.299		1.02	0.56	ı

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LNum	PName	Date	Site	TAir	TH20	QA	QB	QC	QD	\ -	06	AQ- PC	Chla	MC- LR	Ana-a	Cvc	FP- Chl	FP- BG	HAB form
34	Schroon L-N		epi	20	18	1	1	2	0	<del>بر</del> 0	0	4.70		0.35	<3.205	Сус	CIII	ВО	101111
34	Schroon L-N		epi	16	17	1	1	1	0	0	0	3.50		< 0.30			1 68	0.65	- 1
34	Schroon L-N		hypo	22	10	-	-		0	0	0	3.30	0.00	<b>\0.30</b>	<b>\3.203</b>		1.00	0.03	-
34	Schroon L-N		hypo	28	12														
34	Schroon L-N		hypo	25	12														
34	Schroon L-N		hypo	25															
34	Schroon L-N		hypo	18	10														
34	Schroon L-N		•	26	9														
34	Schroon L-N		hypo	27	10.0														
34	Schroon L-N			25	11														
34	Schroon L-N			23	9														
34	Schroon L-N		hypo		9														
34	Schroon L-N		,,		8														
34	Schroon L-N		hypo		8														
34	Schroon L-N		hypo		12														
34	Schroon L-N		hypo		7														
34	Schroon L-N		•		7														
34	Schroon L-N		hypo		7														
34	Schroon L-N		hypo		7														
34	Schroon L-N		hypo		6														
34	Schroon L-N		hypo		7														
34	Schroon L-N		hypo		7														
34	Schroon L-N		hypo		5														
34	Schroon L-N				6														
34	Schroon L-N		hypo		5														
34	Schroon L-N				6														
34	Schroon L-N		•		6														
34	Schroon L-N		•		7														
34	Schroon L-N	9/27/2005	hypo		5														
34	Schroon L-N				9														
34	Schroon L-N				8														
34	Schroon L-N				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														
34	Schroon L-N	7/5/2008	hypo		5														
34	Schroon L-N	7/21/2008	hypo		5														
34	Schroon L-N		hypo		5														
34	Schroon L-N				4														
34	Schroon L-N				4														
34	Schroon L-N				5														
34	Schroon L-N				5														
34	Schroon L-N				9														
34	Schroon L-N				11								ļ						
34	Schroon L-N				9														
34	Schroon L-N				10														
34	Schroon L-N				10								-						
34	Schroon L-N				9								ļ						
34	Schroon L-N				6														
34	Schroon L-N				6														
34	Schroon L-N				5						<u> </u>								
34	Schroon L-N				10														
34	Schroon L-N				10														
34	Schroon L-N		hypo		8								-						
34	Schroon L-N				10						<u> </u>								
34	Schroon L-N				8														
34	Schroon L-N				11								-						
34	Schroon L-N		hypo		12								-						
34	Schroon L-N	7/20/2012	nypo	<u> </u>	11							J							

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I Nium	PName	Doto	Site	TAir	TUOO	QA	QB	QC	QD		00	AQ- PC	AQ- Chla		Ana a	Cva	FP- Chl	FP- BG	HAB
LNum		Date		TAII	TH20	QA	QБ	QU	Qυ	QΓ	QG	PC	Chia	LK	Ana-a	Сус	Cni	БС	form
34	Schroon L-N		hypo		13														
34	Schroon L-N		hypo		9														
34	Schroon L-N		hypo		7														
34	Schroon L-N		hypo		7														
34	Schroon L-N		hypo		7														
34	Schroon L-N		hypo		11														
34.1	Schroon L-S		ері	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	ері	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		epi	18	21	2	1	2	5										
34.1	Schroon L-S		epi	23	21	1	1	1											
34.1	Schroon L-S		epi	16		1	1	1	5										
34.1		6/11/2004	epi	23	19	3	1	3	8										
34.1	Schroon L-S		epi	25	21	2	1	1	0										
34.1	Schroon L-S	7/7/2004		19	21	2	1	2	5										
			epi														1		
34.1	Schroon L-S		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		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		ері	17	17	2	1	1	0										
34.1	Schroon L-S		ері	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		epi	24	21	1	1	1	0										
34.1	Schroon L-S		epi	17	17	1	1	1	0										
34.1	Schroon L-S		epi	25	17	2	2	2	5										
34.1	Schroon L-S		epi	21	18	2	1	4	5										
	Schroon L-S		•	22			2	3	5										
34.1			epi		22	2													
34.1	Schroon L-S		epi	18	22	2	2	1	5										
34.1	Schroon L-S		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		epi	13	16	2	2	3	5										
34.1	Schroon L-S		epi	16	21	1	2	1	0										
34.1	Schroon L-S	7/23/2008	ері	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	ері	24	21	1	1	1	0										
34.1	Schroon L-S		epi	24	22														
34.1	Schroon L-S		epi	6	12	1	2	1	8										
34.1	Schroon L-S			16	19	1	3	1	0										
34.1	Schroon L-S			26	19	1	3	1	0							1			
34.1	Schroon L-S			19	18	1	3	2	0										
34.1	Schroon L-S			21	20	2	3	2	28							1			
34.1	Schroon L-S			23	22	1	3	2	0					0.01					
34.1	Schroon L-S			7	18	1	3	1	0			15.4		0.01		1			
				13		1	3					17.9		0.00		1	1		
34.1	Schroon L-S			13	18	- 1	3	1	0				<u> </u>	0.02			-	-	
34.1	Schroon L-S			4-	4.5		<u> </u>	<u> </u>	_	_		19.4		0.01					
34.1	Schroon L-S		epi	18	18	1	1	2	0	0	0						1		
34.1	Schroon L-S		ері	28	26	1	1	2	0	0	0						<u> </u>		
34.1	Schroon L-S		ері	37	29	1	1	1	0	0									
34.1	Schroon L-S		ері	28	26	1	1	2	0	0	0								
34.1	Schroon L-S	8/12/2010	ері	24	25							7.00		0.01					
34.1	Schroon L-S		ері	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		43.51							
34.1	Schroon L-S			13	12	1	3	1	0	0		57.04							
34.1	Schroon L-S		epi	33	22	1	1	1	0	0	0								
<u> </u>	300011 E U	.,	ام	_ 55		•	<u> </u>	<u> </u>				1	1	ı		1	1	1	

LNum	
34.1   Schroon L-S   7/31/2011   epi   17   22   1   3   1   0   0   0   4.10   1.97	BG form
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   0   3.40   5.10	
34.1   Schroon L-S   6/28/2012   epi   27   20   2   2   2   0   0   0   0   0	
34.1   Schroon L-S   7/22/2012   epi   28   22   2   3   2   0   0   0   0   4.80   0.50   <0.30   <0.537   3.21	
34.1   Schroon L-S   8/12/2012   epi   24   23   1   3   1   0   0   0   4.80   0.50   <0.30   <0.537   3.21	
34.1   Schroon L-S   8/26/2012   epi   18   21   1   3   2   0   0   0   2.00   0.40   <0.30   <0.551   2.22	F
34.1   Schroon L-S   9/4/2012   epi   17   20   1   3   2   0   0   0   1.60   0.40   <0.30   <0.725   2.43	
34.1         Schroon L-S         9/16/2012         epi         17         18         1         1         1         0         0         0         0.30         <3.205	
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         9/30/2003         hypo         7           34.1         Schroon L-S         9/30/2003         hypo         7           34.1         Schroon L-S         9/30/2004         hypo         8           34.1         Schroon L-S         6/11/2004         hypo         6           34.1         Schroon L-S         6/23/2004         hypo         6           34.1         Schroon L-S         7/2/12004         hypo         6           34.1         Schroon L-S         8/18/2004         hypo         6           34.1         Schroon L-S         8/14/2004         hypo         6           34.1         Schroon L-S         8/14/2004         hypo	
34.1         Schroon L-S         7/8/2003         hypo         9           34.1         Schroon L-S         8/5/2003         hypo         8           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         15           34.1         Schroon L-S         9/30/2003         hypo         7           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         6/23/2004         hypo         6           34.1         Schroon L-S         7/7/2004         hypo         6           34.1         Schroon L-S         8/18/2004         hypo         6           34.1         Schroon L-S         8/18/2004         hypo         6           34.1         Schroon L-S         9/1/2004         hypo         6           34.1         Schroon L-S         9/14/2004         hypo	J.89
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         8/9/2003         hypo         11           34.1         Schroon L-S         9/2/2003         hypo         8           34.1         Schroon L-S         9/17/2003         hypo         8           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         6/23/2004         hypo         5           34.1         Schroon L-S         6/21/2004         hypo         6           34.1         Schroon L-S         8/18/2004         hypo         6           34.1         Schroon L-S         8/18/2004         hypo         6           34.1         Schroon L-S         8/18/2004         hypo         6           34.1         Schroon L-S         9/1/2004         hypo         6           34.1         Schroon L-S         8/14/2004         hypo	
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         6/12/2004         hypo         6           34.1         Schroon L-S         7/7/2004         hypo         6           34.1         Schroon L-S         7/21/2004         hypo         6           34.1         Schroon L-S         8/18/2004         hypo         6           34.1         Schroon L-S         8/14/2004         hypo         6           34.1         Schroon L-S         8/14/2004         hypo         6           34.1         Schroon L-S         9/14/2004         hypo         6           34.1         Schroon L-S         8/14/2004         hypo         6           34.1         Schroon L-S         8/19/2005         hypo	
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         9/30/2003         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         8/14/2004         hypo         6           34.1         Schroon L-S         8/14/2004         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         8/2/2005         hypo	
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       8/48/2004       hypo       6         34.1       Schroon L-S       8/18/2004       hypo       7         34.1       Schroon L-S       9/14/2004       hypo       6         34.1       Schroon L-S       9/14/2004       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       8/16/2005       hypo       6         34.1       Schroon L-S       8/16/2005       hypo       7         34.1       Schroon L-S       8/30/2005       hypo       7 <td></td>	
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       6/21/2005       hypo       6         34.1       Schroon L-S       8/16/2005       hypo       8         34.1       Schroon L-S       8/16/2005       hypo       7         34.1       Schroon L-S       8/13/2005       hypo       7         34.1       Schroon L-S       9/27/2005       hypo       7 <td></td>	
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       6/21/2005       hypo       6         34.1       Schroon L-S       8/19/2005       hypo       8         34.1       Schroon L-S       8/2005       hypo       7         34.1       Schroon L-S       8/30/2005       hypo       7         34.1       Schroon L-S       8/30/2005       hypo       7         34.1       Schroon L-S       9/27/2005       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       8/18/2004       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       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       8/16/2005       hypo       7         34.1       Schroon L-S       8/30/2005       hypo       7         34.1       Schroon L-S       9/13/2005       hypo       7         34.1       Schroon L-S       9/27/2005       hypo       7         34.1       Schroon L-S       6/16/2006       hypo       8 <td></td>	
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       6/21/2005       hypo       8         34.1       Schroon L-S       8/2/2005       hypo       8         34.1       Schroon L-S       8/30/2005       hypo       7         34.1       Schroon L-S       8/30/2005       hypo       7         34.1       Schroon L-S       9/13/2005       hypo       7         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       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       9/14/2004       hypo       6         34.1       Schroon L-S       6/21/2005       hypo       6         34.1       Schroon L-S       8/2/2005       hypo       8         34.1       Schroon L-S       8/30/2005       hypo       7         34.1       Schroon L-S       8/30/2005       hypo       7         34.1       Schroon L-S       9/13/2005       hypo       7         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       6/16/2006       hypo       6         34.1       Schroon L-S       6/28/2006       hypo       6	
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       8/2/2005       hypo       8         34.1       Schroon L-S       8/2/2005       hypo       6         34.1       Schroon L-S       8/30/2005       hypo       7         34.1       Schroon L-S       8/30/2005       hypo       7         34.1       Schroon L-S       9/13/2005       hypo       7         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       6         34.1       Schroon L-S       6/28/2006       hypo       6         34.1       Schroon L-S       6/28/2006       hypo       5	
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       9/14/2004       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       8/2/2005       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       7         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       6         34.1       Schroon L-S       6/28/2006       hypo       5	
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       8/2/2005       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       6         34.1       Schroon L-S       6/28/2006       hypo       5	
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       8/2/2005       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       6/28/2006       hypo       5	
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       6/28/2006       hypo       5	
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       6/28/2006       hypo       5	
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       8/2/2005       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       8/16/2005       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     8/30/2005     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     7/27/2006     hypo     5	
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     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     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         6/28/2006         hypo         8           34.1         Schroon L-S         7/27/2006         hypo         5	
34.1 Schroon L-S 7/27/2006 hypo 5	
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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	
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	

												AQ-	AQ-	MC-			FP-	FP-	HAB
LNum	PName	Date	Site	TAir	TH20	QΑ	QB	QC	QD	QF	QG	PC	Chla	LR	Ana-a	Сус	Chl	BG	form
34.1	Schroon L-S	8/31/2011	hypo		5														
34.1	Schroon L-S	10/9/2011	hypo		5														
34.1	Schroon L-S	6/28/2012	hypo		7														
34.1	Schroon L-S	7/22/2012	hypo		7														
34.1	Schroon L-S	8/12/2012	hypo		7														
34.1	Schroon L-S	8/26/2012	hypo		6														
34.1	Schroon L-S	9/4/2012	hypo		6			·											
34.1	Schroon L-S	9/16/2012	hypo		6														

**Legend Information** 

Indicator	Description	Detection Limit	Standard (S) / Criteria (C)
General Inform	nation	1	
Lnum	lake number (unique to CSLAP)		
Lname	name of lake (as it appears in the Gazetteer of NYS Lakes)		
Date	sampling date		
Field Paramete	ers		
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 Par	ameters		
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
Са	calcium (mg/l)	1 mg/l	none
Chl.a	chlorophyll a (ug/l)	0.01 ug/l	none
Fe	iron (mg/l)	0.1 mg/1	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 (aquaflor) (unitless)	1 unit	none
AQ-Chl	Chlorophyll a (aquaflor) (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	Cylindrospermposin (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 Assessme	nt		•
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	HAB evaluation; A = spilled paint, B = pea soup, C = streaks, D = green dots, E = bubbling scum, F = green/brown tint, G = duckweed, H = other, I = no bloom		

# Appendix B- Monthly Evaluation of Schroon Lake (North) Data, 2006-2012

**June Data** 

	2006	2007	2008	2009	2010	2011	2012
Zsd	NORMAL		NORMAL		NORMAL		NORMAL
TP	NORMAL		NORMAL		NORMAL		NORMAL
Chl.a	NORMAL		LOW		LOW		
NOx	HIGH		NORMAL		NORMAL		NORMAL
NH4	NORMAL		NORMAL		NORMAL		NORMAL
TN	NORMAL		LOW		NORMAL		NORMAL
рН	NORMAL		NORMAL		NORMAL		NORMAL
SpCond	NORMAL		NORMAL		NORMAL		NORMAL
Color	NORMAL		NORMAL		LOW		NORMAL
Са	NORMAL		NORMAL				NORMAL
QA	NORMAL		NORMAL		NORMAL		NORMAL
QB	NORMAL		NORMAL		NORMAL		NORMAL
QC	NORMAL		HIGH		NORMAL		NORMAL
TH20	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

**July Data** 

	2006	2007	2008	2009	2010	2011	2012
Zsd	NORMAL		HIGH	NORMAL	NORMAL	NORMAL	NORMAL
TP	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
Chl.a	NORMAL		LOW	LOW	NORMAL	NORMAL	
NOx	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
NH4	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
TN	HIGH		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
рН	NORMAL		NORMAL	LOW	HIGH	NORMAL	HIGH
SpCond	NORMAL		NORMAL	LOW	NORMAL	NORMAL	NORMAL
Color	NORMAL		NORMAL	HIGH	NORMAL	NORMAL	NORMAL
Са				NORMAL		NORMAL	
QA	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QB	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
TH20	NORMAL	ooth	NORMAL	NORMAL	NORMAL	HIGH	NORMAL

High = average monthly reading  $> 90^{th}$  percentile reading for lake, 2000-2010 Low = average monthly reading  $< 10^{th}$  percentile reading for lake, 2000-2010 Normal = average monthly reading between  $10^{th}$  and  $90^{th}$  percentile reading for lake, 2000-2010

**August Data** 

	2006	2007	2008	2009	2010	2011	2012
Zsd	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
TP	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
Chl.a	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	
NOx	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
NH4	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
TN	HIGH		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
рН	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SpCond	NORMAL		NORMAL	LOW	NORMAL	NORMAL	NORMAL
Color	NORMAL		NORMAL	HIGH	LOW	NORMAL	NORMAL
Са	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QA	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QB	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
TH20	NORMAL		NORMAL	LOW	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

F							
	2006	2007	2008	2009	2010	2011	2012
Zsd	NORMAL		NORMAL	NORMAL		LOW	NORMAL
TP	NORMAL		NORMAL	NORMAL		NORMAL	NORMAL
Chl.a	NORMAL		NORMAL	HIGH		NORMAL	
NOx	NORMAL		NORMAL	NORMAL		HIGH	NORMAL
NH4	NORMAL		LOW	NORMAL		NORMAL	NORMAL
TN	NORMAL		NORMAL	NORMAL		HIGH	NORMAL
рН	NORMAL		HIGH	NORMAL		NORMAL	NORMAL
SpCond	NORMAL		NORMAL	LOW		NORMAL	NORMAL
Color	NORMAL		NORMAL	NORMAL		HIGH	NORMAL
Са							
QA	NORMAL		NORMAL	NORMAL		NORMAL	NORMAL
QB	NORMAL		NORMAL	NORMAL		NORMAL	NORMAL
QC	NORMAL		NORMAL	NORMAL		NORMAL	NORMAL
TH20	NORMAL		LOW	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

# Monthly Evaluation of Schroon Lake (South) Data, 2006-2012

**June Data** 

	2006	2007	2008	2009	2010	2011	2012
Zsd	NORMAL		NORMAL	NORMAL	NORMAL		NORMAL
TP	NORMAL		HIGH	NORMAL	NORMAL		NORMAL
Chl.a	NORMAL		NORMAL	NORMAL	NORMAL		HIGH
NOx	HIGH		NORMAL	NORMAL	NORMAL		NORMAL
NH4	NORMAL		NORMAL	NORMAL	NORMAL		NORMAL
TN	NORMAL		NORMAL	LOW	NORMAL		NORMAL
рН	NORMAL		LOW	NORMAL	NORMAL		NORMAL
SpCond	NORMAL		NORMAL	NORMAL	NORMAL		LOW
Color	NORMAL		NORMAL	HIGH	NORMAL		NORMAL
Са	NORMAL		NORMAL	NORMAL	HIGH		NORMAL
QA	NORMAL		NORMAL	NORMAL	NORMAL		NORMAL
QB	NORMAL		NORMAL	NORMAL	NORMAL		NORMAL
QC	NORMAL		NORMAL	NORMAL	NORMAL		NORMAL
TH20	NORMAL		NORMAL	NORMAL	NORMAL		NORMAL

High = average monthly reading > 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	2012
Zsd	NORMAL		NORMAL	NORMAL	NORMAL	HIGH	HIGH
TP	NORMAL		LOW	NORMAL	NORMAL	NORMAL	HIGH
Chl.a	HIGH		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
NOx	NORMAL			NORMAL	NORMAL	HIGH	NORMAL
NH4	NORMAL			NORMAL	NORMAL	NORMAL	NORMAL
TN	HIGH			NORMAL	NORMAL	NORMAL	NORMAL
рН	HIGH		HIGH	NORMAL	NORMAL	NORMAL	NORMAL
SpCond	LOW		NORMAL	NORMAL	NORMAL	NORMAL	LOW
Color	HIGH		NORMAL	HIGH	NORMAL	NORMAL	NORMAL
Са						LOW	
QA	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QB	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
TH20	NORMAL	·	NORMAL	NORMAL	HIGH	NORMAL	NORMAL

High = average monthly reading  $> 90^{th}$  percentile reading for lake, 2000-2010 Low = average monthly reading  $< 10^{th}$  percentile reading for lake, 2000-2010 Normal = average monthly reading between  $10^{th}$  and  $90^{th}$  percentile reading for lake, 2000-2010

**August Data** 

	2006	2007	2008	2009	2010	2011	2012
Zsd	NORMAL		LOW	NORMAL	NORMAL	NORMAL	NORMAL
TP	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
Chl.a	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
NOx	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
NH4	NORMAL		LOW	NORMAL	NORMAL	NORMAL	NORMAL
TN	HIGH		NORMAL	LOW	NORMAL	NORMAL	NORMAL
рН	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	HIGH
SpCond	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	HIGH
Color	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	LOW
Са	NORMAL			NORMAL	NORMAL	NORMAL	
QA	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QB	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
TH20	NORMAL		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** 

F							
	2006	2007	2008	2009	2010	2011	2012
Zsd	NORMAL		NORMAL	NORMAL	HIGH	NORMAL	NORMAL
TP	NORMAL		LOW	NORMAL	HIGH	NORMAL	NORMAL
Chl.a	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
NOx	NORMAL		NORMAL	NORMAL	NORMAL	HIGH	NORMAL
NH4	HIGH		NORMAL	NORMAL	NORMAL	NORMAL	HIGH
TN	NORMAL		NORMAL	LOW	NORMAL	NORMAL	NORMAL
рН	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	LOW
SpCond	NORMAL		NORMAL	NORMAL	HIGH	NORMAL	NORMAL
Color	LOW		NORMAL	NORMAL	NORMAL	NORMAL	LOW
Са			LOW				HIGH
QA	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QB	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC	NORMAL		NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
TH20	NORMAL		NORMAL	NORMAL	NORMAL	LOW	NORMAL

High = average monthly reading  $> 90^{th}$  percentile reading for lake, 2000-2010 Low = average monthly reading  $< 10^{th}$  percentile reading for lake, 2000-2010 Normal = average monthly reading between  $10^{th}$  and  $90^{th}$  percentile reading for lake, 2000-2010

# Appendix C- Priority Waterbody Listing for Schroon Lake

## Schroon Lake (1104-0002)

## **Impaired Seg**

Revised: 12/11/2006

#### Waterbody Location Information

Water Index No: H-391 (portion 3)/P374 Drain Basin: Upper Hudson River

Hydro Unit Code: 02020001/090 Str Class: A Upper Hudson
Waterbody Type: Lake Reg/County: 5/Warren Co. (57)

Waterbody Type: Lake Reg/County: 5/Warren Co. (57)
Waterbody Size: 4128.1 Acres Quad Map: SCHROON LAKE (F-25-0)

Seg Description: entire lake

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

Use(s) Impacted Severity Problem Documentation

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

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)

Lead Agency/Office: ext/EPA Resolution Potential: Low

TMDL/303d Status: 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 mesoligotropic, 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)

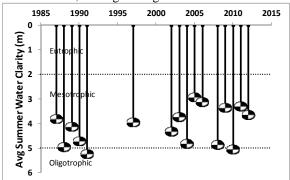
Public perception of the Schroon Lake and its uses are also evaluated as part of the CSLAP program. These assessment also indicate recreational suitability of the lake to be mostly favorable since the lake was first evaluated and continuing through the most recent assessment. Recreational conditions 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.

# Appendix D- Long Term Trends: Schroon Lake-North Basin

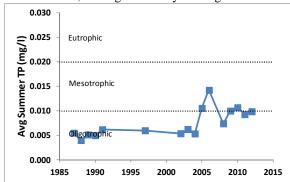
## Long Term Trends: Water Clarity

- No trends apparent
- Most readings typical of *mesoligotrophic* lakes, in range of algae and TP levels



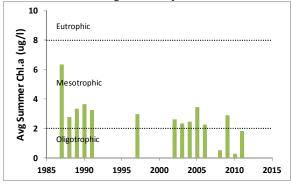
### Long Term Trends: Phosphorus

- Slight increase in TP levels since mid 2000s
- Most readings typical of *mesoligotrophic* lakes, in range of clarity and algae levels



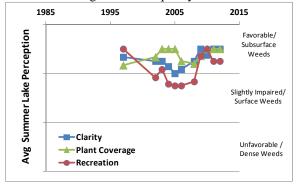
## Long Term Trends: Chlorophyll a

- Algae levels decreasing slightly
- Most readings typical of *mesoligotrophic* lakes, in range of clarity and TP levels



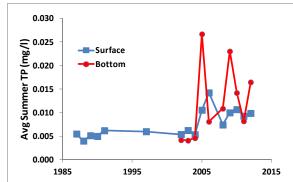
#### Long Term Trends: Lake Perception

- No trends apparent
- Recreational perception more closely linked to changes in water quality than weeds



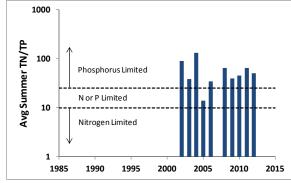
### Long Term Trends: Bottom Phosphorus

- Bottom TP slightly higher than surface TP
- Not likely that TP is migrating significantly from bottom to surface



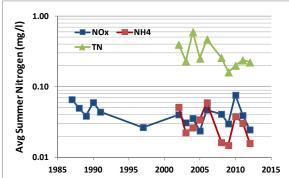
#### Long Term Trends: N:P Ratio

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



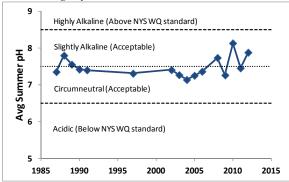
## Long Term Trends: Nitrogen

- No trends apparent
- Low NOx, ammonia, and total nitrogen readings



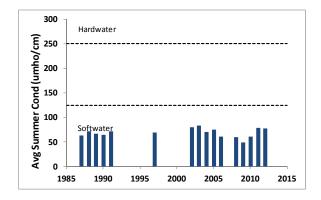
### Long Term Trends: pH

- No trends despite rising pH in south site
- Most readings typical of *circumneutral* to *slightly alkaline* lakes



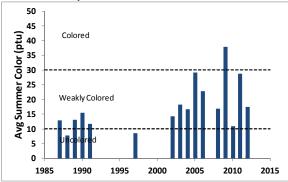
#### Long Term Trends: Conductivity

- No trends apparent
- Most readings typical of softwater lakes



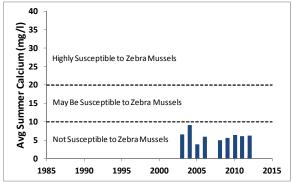
#### Long Term Trends: Color

- Higher color recently not part of trend
- Most readings typical of *uncolored* to *weakly colored* lakes



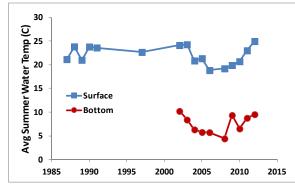
#### Long Term Trends: Calcium

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



#### Long Term Trends: Water Temperature

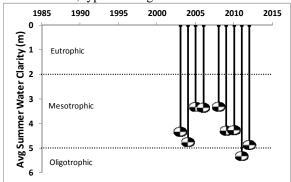
- No trends apparent in surface temperatures
- Low deepwater temperatures indicate strong thermal stratification



# **Appendix D- Long Term Trends: Schroon Lake-South Basin**

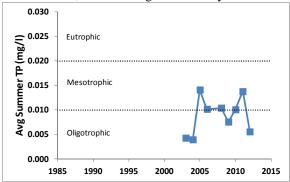
# Long Term Trends: Water Clarity

- No trends apparent
- Most readings typical of *mesoligotrophic* lakes, typical of algae and TP levels



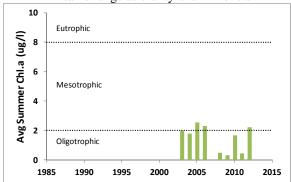
#### Long Term Trends: Phosphorus

- No long term trend
- Most readings typical of *mesoligotrophic* lakes, similar to algae and clarity levels



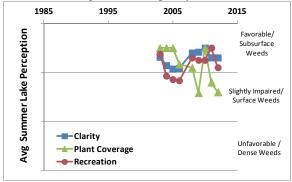
#### Long Term Trends: Chlorophyll a

- No trends apparent
- Most readings typical of *oligotrophic* lakes, in same range as clarity and TP levels



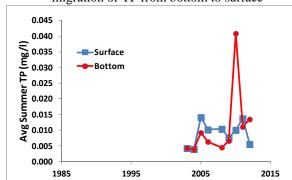
## Long Term Trends: Lake Perception

- Slight increase in aquatic plant growth
- Recreational perception more closely linked to changes in water quality than weeds



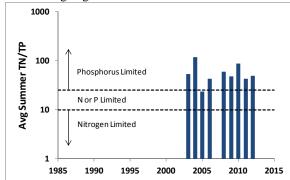
# Long Term Trends: Bottom Phosphorus

- Most bottom TP similar to surface TP
- Despite strong thermal layer, likely little migration of TP from bottom to surface



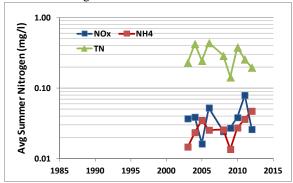
#### Long Term Trends: N:P Ratio

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



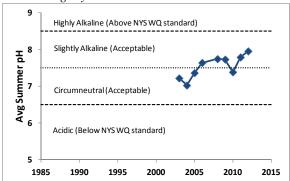
### Long Term Trends: Nitrogen

- No trends apparent
- Low NOx, ammonia, and total nitrogen readings



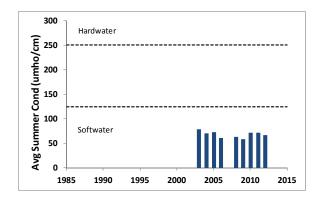
#### Long Term Trends: pH

- pH increasing since early 2000s
- Most readings typical of *circumneutral* to *slightly alkaline* lakes



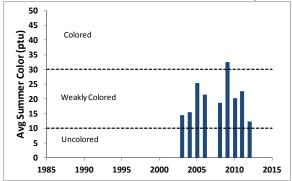
#### Long Term Trends: Conductivity

- No trends apparent
- Most readings typical of *softwater* lakes



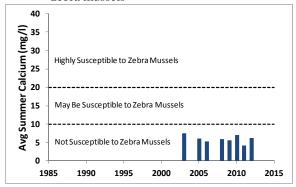
#### Long Term Trends: Color

- No trends apparent
- Most readings typical of *weakly colored* lakes, and shouldn't affect water clarity



### Long Term Trends: Calcium

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



#### Long Term Trends: Water Temperature

- No trends apparent in surface temperatures
- Low deepwater temperatures indicate strong thermal stratification

