

THE VULNERABILITY OF LAKES, PONDS AND RESERVOIRS  
IN THE HUDSON HIGHLANDS TO ACIDIFICATION

by

Andrew Becker

and

Robert H. Boyle

April, 1986

Hudson River Fishermen's Association  
Castle Rock Field Station  
Route 9D  
Garrison, NY 10528  
(914) 424-4149

(now Riverkeeper)

This report was made possible in part by funding from  
the Open Space Institute.

## Table of Contents

Summary.....	i
Acknowledgments.....	ii
Introduction.....	1
Sampling and Testing Procedures.....	4
Acidified Water bodies of the Hudson Highlands, 1985.....	5
A Record of Alkalinity Values for 62 Lakes, Ponds and Reservoirs in the Hudson Highlands.....	6
Discussion.....	9
Conclusions.....	10
Appendix A: Available pH and Alkalinity Data for Lakes, Ponds and Reservoirs in the Hudson Highlands, 1936 to present.....	A1
Appendix B: Water Quality Data (grouped by source).....	B1
Appendix C: Gazetteer of Lakes, Ponds, and Reservoirs of the Hudson Highlands.....	C1
Appendix D: Conversion Factors for Selected Water Chemistry Parameters.....	D1

## Summary

A survey of 43 lakes, ponds and reservoirs in the Hudson Highlands in August, 1985, showed that nine are completely acidified, that is they have lost their total alkalinity. A tenth lake, Island Pond, has only a trace, 0.07 parts per million, of alkalinity remaining. An additional 15 water bodies have less than six parts per million alkalinity, which makes them very vulnerable to acid deposition.

In sum, a total of 25 water bodies have lost their alkalinity or are at serious risk. Most of the lakes are in Harriman State Park, south of West Point, N. Y., and the Harvard Black Rock Forest, northwest of West Point. All 25 lakes are at elevations of approximately 800 feet or more.

### Acknowledgments

255-5453

We would like to thank Ronald Pierce of the New York State Department of Environmental Conservation, Dr. George R. Hendrey of the Brookhaven National Laboratory, Dr. Michael Oppenheimer of the Environmental Defense Fund, Dr. James Simpson of the Lamont-Doherty Geological Observatory, Roger Archer of the United States Geological Survey, and Nash Castro and Carl Johnson of the Palisades Interstate Park Commission, for their time and assistance.

## Table of Contents

Summary.....	i
Acknowledgments.....	ii
Introduction.....	1
Sampling and Testing Procedures.....	4
Acidified Water bodies of the Hudson Highlands, 1985.....	5
A Record of Alkalinity Values for 62 Lakes, Ponds and Reservoirs in the Hudson Highlands.....	6
Discussion.....	9
Conclusions.....	10
Appendix A: Available pH and Alkalinity Data for Lakes, Ponds and Reservoirs in the Hudson Highlands, 1936 to present.....	A1
Appendix B: Water Quality Data (grouped by source).....	B1
Appendix C: Gazetteer of Lakes, Ponds, and Reservoirs of the Hudson Highlands.....	C1
Appendix D: Conversion Factors for Selected Water Chemistry Parameters.....	D1

## INTRODUCTION

In the last 15 years, acid deposition, popularly known as acid rain, has become a matter of international concern. Acid deposition is caused by the emission of sulfur and nitrogen oxides from the combustion of fossil fuels from such sources as power plants, smelters, industrial boilers, refineries, commercial institutions and residences and vehicles. About two-thirds of the sulfur dioxide found in the atmosphere of the United States emanates from power plants alone.

Aloft in the atmosphere, these oxides can be transformed into sulfuric acid and nitric acid, and air currents can sometimes carry them hundreds of miles from their source. When these acids fall to earth as "wet" deposition in rain, snow or sleet, or as "dry" deposition in the form of particles, aerosols or gases, they can have damaging and possibly irreversible impacts on vulnerable lands and waters.

Acidity is measured on the pH scale, which runs from zero to 14. Seven is neutral. Numbers above seven are increasingly alkaline, while numbers below seven are increasingly acidic. The pH scale is logarithmic. Thus water with a pH of 5 is ten times more acidic than water with a pH of 6, and water with a pH of 4 is 100 times more acidic than water with a pH value of 6.

The effect that acid deposition may have on a body of water depends on the nature of the rocks and soils in the watershed. A watershed with calcareous soils or rocks containing calcium carbonate can buffer acid deposition in much the same way that an Alka-Seltzer tablet neutralizes an acid stomach. The buffering capacity of a water body can be determined by measuring its alkalinity. For example, a lake with a total alkalinity of 25 parts per million (ppm) is not deemed vulnerable to acid deposition, but a lake with an alkalinity of 6 ppm or less is vulnerable because its alkalinity can be exhausted in time by recurring acid deposition.

The New York State Department of Environmental Conservation (DEC) classifies a lake with a pH of 6 as "Satisfactory." Fish populations are present, and there is no immediate problem. A lake with a pH of 5.0 to 6.0 is classified as "Endangered." Fish populations are present, but often at reduced levels. A lake with a pH of less than 5.0 is deemed "Critical." Fish populations are non-existent or nearly so.

Low pH interferes with the salt balance that freshwater fishes need to maintain in their body tissues and blood plasma. In addition, increasing acidification can also mobilize aluminum which can be lethal to fish even at pH levels ordinarily considered safe. Besides losing its fish life, an acidified body of water also loses other organisms, such as crustaceans, insects and molluscs.

As a general rule, vulnerable bodies of water are found in areas that (1) are downwind of polluting sources and (2) have hard rock and/or thin soils. Acidified waters that have lost fish populations have been identified in southwestern Sweden, southern Norway, parts of eastern Canada and the northeastern United States, particularly in the Adirondack Mountains of New York.

The rain that falls on the Hudson Highlands has an average pH of 4.3, which is slightly more acidic than the rain falling on the Adirondacks. Rain with a pH of 4.3 is 22 times more acidic than unpolluted rain.

Geologically, the hills or mountains of the Hudson Highlands would appear to be poorly buffered, particularly in the markedly glaciated higher elevations which often show bare expanses of bed rock. The Highlands are part of an ancient formation, the Reading Prong, which curves in a northeasterly direction from Reading, Pa., into western Connecticut. The Hudson Highlands are composed almost entirely of hard Precambrian metamorphic and igneous rock that is hundreds of millions years old.

Historically, the Hudson Highlands are of great significance to the nation. During the American Revolution, the British grand strategy was to seize the Hudson Valley, divide the colonies in two and then dismember them at will. Washington countered by fortifying the Hudson Highlands at West Point and other locations. The British were never able to seize control of the valley after the defeat of Burgoyne at Saratoga and the discovery of Benedict Arnold's attempted betrayal of West Point. As a result, the British eventually lost the war.

In the 19th century, the renowned scenery of the Hudson Highlands inspired the artists of the Hudson River School who gave birth to American landscape painting. In this century, the Highlands have assumed great recreational importance. Thousands of acres on both shores are maintained by the Palisades Interstate Park Commission, which has its headquarters at Bear Mountain, and by the Taconic State Park Commission which operates Fahnestock and Hudson Highlands state parks near Cold Spring. The Palisades Interstate Park System attracts up to seven million people a year, three times the number of visitors to Yellowstone National Park. Other large holdings include the United States Military Academy at West Point and the Harvard Black Rock Forest near Cornwall. In 1963, the start of the fight against Consolidated Edison's plan to build a pumped storage power plant at Storm King Mountain at the north gate of the Highlands helped spark the environmental movement of the 1970s.

Our study primarily focussed on lakes, ponds and reservoirs in the Hudson Highlands that were believed to be acidified or vulnerable to acidification because of their naturally low buffering capacity. In part, it augments previous surveys

conducted by Dr. George R. Hendrey of the Brookhaven National Laboratory, the Palisades Interstate Park Commission and the New York State Department of Environmental Conservation.

On the following pages is a listing, "Acidified Water Bodies in the Hudson Highlands, 1985," which offers the description and location of each of the 10 lakes, ponds and reservoirs found to be acidified.

This listing is followed by a table entitled, "A Record of Alkalinity Values for 62 Lakes, Ponds and Reservoirs" in the Hudson Highlands. In addition to the 43 water bodies tested for this study, the table includes 19 others that were not studied but for which past alkalinity records exist. A brief word about how we determined the average alkalinity values for this table. We used only surface water data in determining these averages so as to avoid including bottom samples contaminated by sediments. We also discarded several values taken by the Department of Environmental Conservation with a Hach kit. These values were way out of line with laboratory measurements taken shortly afterwards.

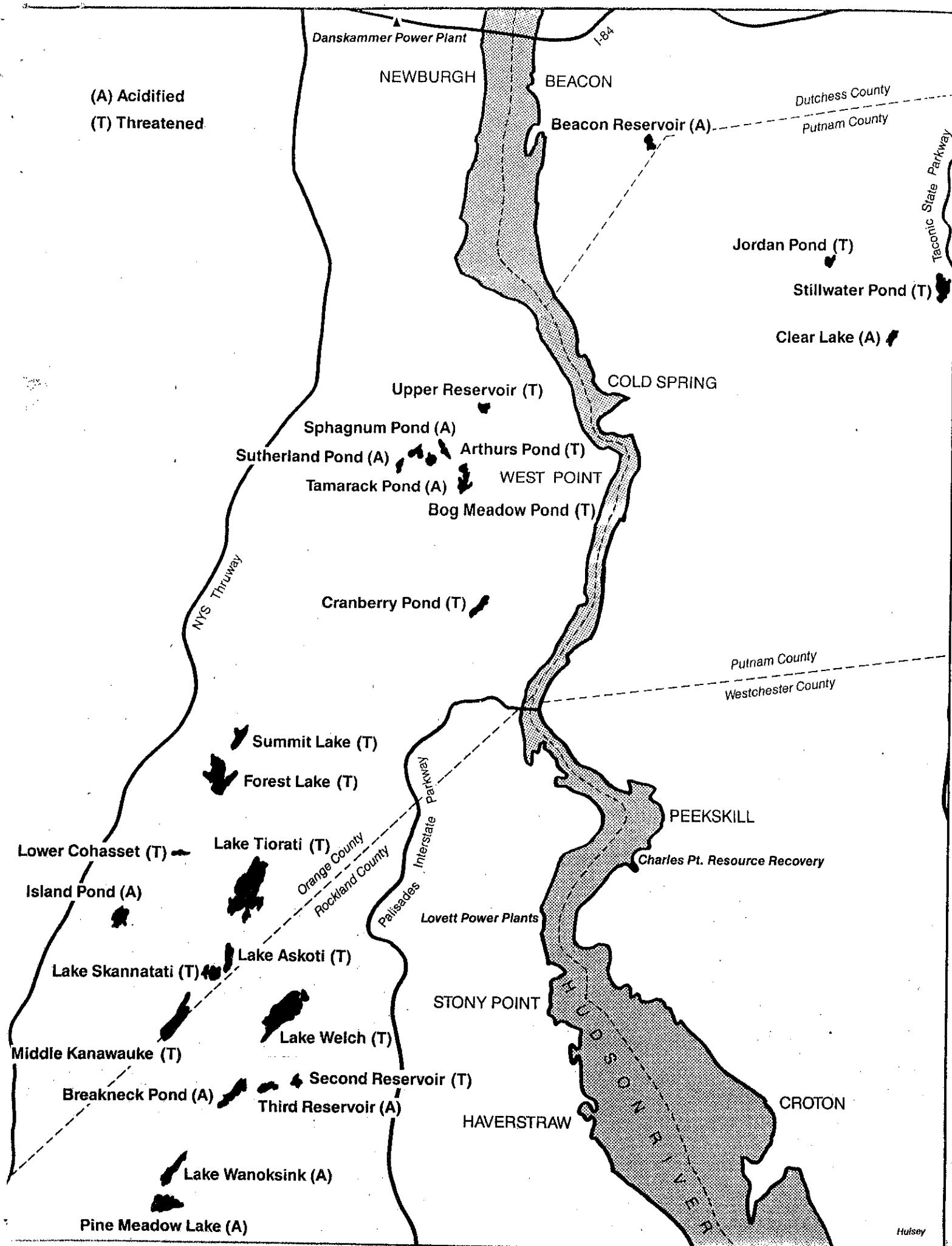
Appendix A is entitled "Available pH and Alkalinity Data for Lakes, Ponds and Reservoirs in the Hudson Highlands, 1936 to Present." Each water body is listed in numerical order in accordance with the state numbering system for the Lower Hudson Watershed. In state usage, all numbers for lakes, ponds and reservoirs are preceded by the letter "P" for Pond.

Appendix B: "Water Quality Data (grouped by source)" is a complete compilation of all the water chemistry data gathered.

Appendix C is a "Gazeteer of Lakes, Ponds and Reservoirs of the Hudson Highlands," which gives elevations and coordinates.

## Sampling and Testing Procedures

All sampling for the Hudson River Fishermen's Association was conducted in August, 1985. Clean one liter plastic bottles were obtained from Carpenter Environmental Associates in Northvale, N.J., before each day of testing. Samples were taken at the outlet of each lake when possible, or else they were obtained from the surface, off a dam or rock outcropping. Each bottle was rinsed three times in the water to be tested and then filled. In most cases three samples were taken for each lake to assure consistency of the lab's measurements. The samples were stored on ice and brought back to the lab where they were tested for pH and alkalinity. Some samples were tested for sulfates, nitrates, chloride, ammonium. The pH was measured with an Orion millivolt meter with a glass electrode as was the ammonium. The lab conducted all measurements in accordance with Standard Methods for the Examination of Water and Wastewater, 16th Edition, 1985, prepared and published jointly by the American Public Health Association, American Water Works Association and Water Pollution Control Federation.



Acidified Water Bodies of the Hudson Highlands, August, 1985

- 1.) Third Reservoir: 2.5 miles west of Letchworth Village.  
Elevation 1076 ft. UTM\* coordinates x=577 y=4562  
alkalinity 0.00 ppm, pH 4.8 Color of water: clear
- 2.) Tamarack Pond: Harvard Black Rock Forest, Cornwall, west of the U.S. Military Academy, West Point.  
Elevation 1305 UTM coordinates x=581 y=4583  
alkalinity 0.00 ppm, pH 4.8 Color of water: clear
- 3.) Island Pond: just east of N.Y.S. Thruway seven miles north of Sloatsburg in Harriman State Park.  
Elevation 970 ft. UTM coordinates x=572 y=4568  
alkalinity 0.07 ppm, pH 4.9 Color of water: clear
- 4.) Beacon Reservoir: near the summit of Mount Beacon, south east of the city of Beacon.  
Elevation 1285 ft. UTM coordinates x=588 y=4593  
alkalinity 0.00 ppm, pH 5.0 Color of water: clear
- 5.) Sutherland Pond: Harvard Black Rock Forest, Cornwall, west of the U.S. Military Academy, West Point.  
Elevation 1246 ft. UTM coordinates x=580 y=4583  
alkalinity 0.00 ppm, pH 5.0 Color of water: clear
- 6.) Breakneck Pond: four miles west of Letchworth Village near Johnston Rd. in Harriman State Park.  
Elevation 1085 UTM coordinates x=575 y=4562  
alkalinity 0.00 ppm, pH 5.2 Color of water: clear
- 7.) Clear Lake: near Fahnestock Memorial State Park 1.5 miles above Oscawana Lake in Putnam County.  
Elevation 890 ft. UTM coordinates x=597 y=4587  
alkalinity 0.00 ppm, pH 5.3 Color of water: clear
- 8.) Sphagnum Pond: Harvard Black Rock Forest, Cornwall, west of the U.S. Military Academy, West Point.  
Elevation 1250 ft. UTM coordinates x=581 y=4583  
alkalinity 0.00 ppm, pH 5.3 Color of water: clear
- 9.) Lake Wanoksink: four miles east-northeast of Sloatsburg in Harriman State Park.  
Elevation 1036 ft. UTM coordinates x=574 y=4559  
alkalinity 0.00 ppm, pH 5.4 Color of water: clear
- 10.) Pine Meadow Lake: three miles east-northeast of Sloatsburg in Harriman State Park.  
Elevation 978 ft. UTM coordinates x=573 y=4558  
alkalinity 0.00 ppm, pH 5.5 Color of water: clear

\* Universal Transect Mercator

A Record of Alkalinity Values for 62 Lakes, Ponds, and Reservoirs

Average Alkalinity values  
(ppm as CaCO<sub>3</sub>)

Bodyname	pre 1965	1965- 1975	1975- 1980	1980- 1981	1981- 1982	1982- 1983	1983- 1984	1984- 1985
Breakneck P.	8.6				0.5	1.2	0.0	0.00
Third Res.				0.7		-0.30		0.00
Clear Lake				0.2	0.12			0.00
Sphagnum P.								0.00
Tamarack P.								0.00
Sutherland P.								0.00
Beacon R. (P345)						-0.74		0.00
Lake Wanoksink					1.5	1.5	1.5	0.00
Pine Meadow L.	9.8				1.0	0.32	0.0	0.00
Island Pond	5.1		8.5		1.75	0.48	0.0	0.07
Second Res.								0.42
Arthurs Pond								1.56
Cranberry P. (P185)								2.10
Stillwater P.	6.2		13.7		5.5			2.60
Lake Askotin	15.0				5.0	2.56	0.75	2.61
Jordan Pond								2.73
Forest Lake	6.0			2.4		4.10		3.24
Lake Tiorati	9.5		14.0		6.0	4.5	3.0	3.48
L.Skannatati	19.0				4.5	3.8	0.5	3.72
Bog Meadow P.								4.19
Lake Welch		14.0			3.5	5.0	3.0	4.74
Upper Res.								5.46
Lower Cohasset	11.0				6.25	3.5	1.5	5.56
Summit Lake	9.6					4.25	5.66	
Kanawauke P1003a	---						5.72	

## A Record of Alkalinity Values for 62 Lakes, Ponds, and Reservoirs

(cont.)

Average Alkalinity values  
(ppm as CaCO<sub>3</sub>)

Bodyname	pre 1965	1965- 1975	1975- 1980	1980- 1981	1981- 1982	1982- 1983	1983- 1984	1984- 1985
Cranberry Lake	9.6				9.7		7.28	6.48
Aleck Meadow R.								6.63
Upper L. Cohasset	9.8							7.67
Pelton Pond		34.22	14.0		16.2			7.74
Upper Twin Lake	9.6					7.75	7.75	2.0
Lake Te-ata	10.4					8.5	8.0	
Cranberry P. (P1001)	24.2							8.88
Lower Twin Lake	14.6							9.36
Echo Lake	16.2					16.25		10.73
Canopus Lake		7.0			25.9			11.77
Broccy Cr. Res.								12.32
Mombasha Lake	19.5							14.90
Cold Spr. R.P217								17.03
Queensboro Lake						26.5	18.56	
Lake Valhalla								19.76
Lake Barnes	25.2					25.0	20.25	21.78
Lake Tibet								22.82
Lake Surprise								28.57

A Record of Alkalinity Values for 62 Lakes, Ponds, and Reservoirs  
(cont.)

The Following Lakes Were Not Sampled in 1985

Average Alkalinity values  
(ppm as CaCO<sub>3</sub>)

Bodyname	pre 1965	1965-	1975-	1980-	1981-	1982-	1983-	1984-	1985
First Reservoir		1975	1980	1981	1982	1983	1984	1985	
			4.0						
Oscawana Lake	11.4		17						
Mud Lake					16.4		14.8		
Hessian Lake		8.8						12.0	
Turkey Hill Pond	15.6							4.5	
Silver Mine Lake	16.6	11.7						7.5	
Lake Nawahunta	14.8							17.0	
Mine Lake							6.0		
Lake Massawippa	20.2								
Lake Sebago	5.9	14				7.5	5.0	3.75	
Lake Skemonto						1.75	0.71	0.75	
Kanawauke P1003	7.6					5.0	4.5	2.25	
Kanawauke P1003b	6.2								
Spruce Pond	4.4				1.7		1.91		
Lake Stahahe	10.6				20.0	8.5	7.5	5.8	
Round Lake		20.0							
Sterl. For. P1021c		10							
Sterling Lake	4.0								
Greenwood Lake	11.2	22.2							

## Discussion

Of the 43 lakes, ponds and reservoirs studied, nine were found to have no alkalinity at all. One lake, Island Pond, had a trace, 0.07, of alkalinity, but a pH of 4.9. According to the New York State DEC classification, Island Pond, Tamarack Pond and Third Reservoir are to be considered "Critical" because all three lakes have a pH of less than 5.

The other seven lakes with no alkalinity had pHs ranging from 5 to 5.5. These lakes are classified as "Endangered" by the state standard, which means that fish populations are present, but often at reduced levels. It is worth noting, however, that a DEC study of Beacon Reservoir in the summer of 1984 failed to find any fish whatsoever. Beacon Reservoir near the summit of Mount Beacon was the second highest water body sampled for this study. It is located at an elevation of 1285 feet. As a general rule, an acre of land in the Northeast receives about 50 pounds of sulfate per year in wet and dry deposition, but in 1984 Dr. George R. Hendrey of the Brookhaven National Laboratory and Dr. Michael Oppenheimer, senior scientist with the Environmental Defense Fund, calculated that the Beacon Reservoir watershed received almost 100 pounds of sulfate per acre per year. Their calculations indicate that local sources of sulfur dioxide emissions have played an unusually high role in the acidification of Beacon Reservoir.

In our opinion, using pH in the 5 to 6 range to classify lakes as "Endangered" is somewhat arbitrary because pH alone can be misleading, dropping sharply only as the alkalinity is finally exhausted. It is equally important to know the alkalinity value of a water body and whether or not that value is decreasing. Thus, we also had each water body tested for alkalinity. A total of 15 of them had alkalinity values ranging from 0.42 to 5.72, all less than the 6 parts per million value showing vulnerability to acid deposition.

There are historical records for 14 of the 25 lakes which have alkalinites of less than 6 ppm, and all 14 have suffered losses of alkalinity over time. Three of the 10 lakes which have no alkalinity previously had substantial alkalinites ranging from 5 to 10 ppm. This pronounced a loss cannot reasonably be attributed to error, systematic or otherwise.

Unfortunately, historical records could not be obtained for the five lakes in the Harvard Black Rock Forest. Three of these lakes have no alkalinity, and the other two are vulnerable. In addition, Lake Skemonto and Spruce Pond were reported to have low alkalinites in 1984, but they were not sampled for this study.

## Conclusions

It is obvious from this study and past surveys that a significant percentage of lakes, pond and reservoirs in the Hudson Highlands have been and are being acidified. This includes a number of water bodies in or near highly used state parks. This is especially true of those located in the higher elevations. They are more vulnerable because of their poorly buffered bedrock geology, and also apparently because they can, at least in the case of the Beacon Reservoir, intercept pollutants of local origin.

Strict emission controls are urgently needed for the Hudson Highlands. It is obvious that the region is already suffering from what may be irreparable damage. To allow an increase in emissions loading would be to write a prescription for potential disaster. In this regard we are particularly concerned about emissions from the recently built Charles Point garbage plant in Peekskill and the coal conversions envisioned by Orange and Rockland and Central Hudson for their Lovett, and Danskammer facilities.

It is recommended that further studies be continued, especially in the Harvard Black Rock Forest owned by Harvard University. Research on soils, nutrients and silviculture in the forest began in 1928 and continued actively into the late 1950s. A thorough examination of published Bulletins and Papers and unpublished records, including comprehensive meteorological data compiled by forest scientists (see The Black Rock Forest Bulletin, No. 14, 1949, page 74) may yield valuable information on the possible effects of acid deposition on soils, tree growth, cycling and water bodies in the Hudson Highlands. We stress this point because Harvard has been considering the sale of the forest, even though it might prove to be the "Rosetta Stone" that could decipher the effects that atmospheric pollutants have had on the Hudson Highlands.

Bill, N.B.,

## Appendix A

### Available PH and Alkalinity Data for Lakes, Ponds and Reservoirs in the Hudson Highlands, 1936 to present

(indexed by state number)

#### Abbreviations for sources of data:

CD	- NYS Conservation Department (DEC after July 1, 1970)
DEC	- NYS Department of Environmental Conservation
Hendrey	- Dr. George R. Hendrey, Brookhaven National Laboratory
HRFA	- Hudson River Fishermen's Association, Garrison
PIPC	- Palisades Interstate Park Commission, Bear Mountain
USGS	- United States Geological Survey, Albany

Note: Although much of the data are in unpublished reports, all 1936 data of the Conservation Department can be found in A Biological Survey of the Lower Hudson Watershed, Albany, 1937.

Appendix A  
Hudson Highlands Water Quality Data  
1936 to Present

P51

**Secor Lake**

\*

Date	Alk (ppm)	pH	Source	Depth (ft)
08/19/36	28.4	7.0	CD	B-10
08/19/36	30.2	9.0	CD	B-7
08/19/36	26.2	8.8	CD	S
10/19/71	48	7.4	USGS	
01/16/75	25	4.7	USGS	

P52

**Kirk Lake**

Date	Alk (ppm)	pH	Source	Depth (ft)
07/10/36	23.0	6.9	CD	15
07/10/36	22.2	7.5	CD	5
07/10/36	23.8	6.9	CD	B-15
07/10/36	30.0	6.7	CD	B-23
07/10/36	24.0	7.4	CD	B-8
07/10/36	24.2	7.6	CD	S
07/15/48	36.0	7.5	CD	12
07/15/48		7.5	CD	8
07/15/48		7.2	CD	B-13
07/15/48	44.0	6.4	CD	B-20
07/15/48	36.0	7.5	CD	S
07/15/48		7.5	CD	S

P53

**Lake Mahopac**

Date	Alk (ppm)	pH	Source	Depth (ft)
07/09/36	26.0	7.9	CD	10
07/09/36	23.6	7.8	CD	15
07/09/36	25.0	7.4	CD	25
07/09/36	26.0	7.1	CD	30
07/09/36	29.0	6.8	CD	45
07/09/36	25.6	7.8	CD	5
07/09/36	24.6	7.8	CD	B-20
07/09/36	30.0	6.9	CD	B-62
07/09/36	23.4	7.4	CD	B-9
07/09/36	21.8	8.0	CD	S
09/04/70	47.8	6.0	DEC	25
09/04/70	47.8	6.0	DEC	55
09/04/70	47.8	7.0	DEC	S

\* Total alkalinity as CaCO<sub>3</sub>

Appendix A

P53

Lake Mahopac (cont.)

Date	Alk(ppm)	pH	Source	Depth(ft)
08/02/77	41.0	7.5	DEC	15
08/02/77		7.5	DEC	20
08/02/77	41.0	7.2	DEC	24
08/02/77	41.0	6.8	DEC	30
08/02/77	41.0	6.6	DEC	40
08/02/77	41.0	6.6	DEC	50
08/02/77	41.0	7.5	DEC	S

P72

Pine Pond

Date	Alk(ppm)	pH	Source	Depth(ft)
07/22/36	22.8	6.6	CD	B-45
08/28/36	16.0	6.6	CD	B-10
08/28/36	16.0	6.6	CD	B-10
08/28/36	16.0	6.6	CD	B-15
08/28/36	16.0	6.6	CD	B-15
08/28/36	16.0	6.6	CD	B-5
08/28/36	16.0	6.6	CD	B-5
08/28/36	16.0	6.8	CD	S
08/28/36	16.0	6.8	CD	S

P76

Boyd Corners Reservoir

Date	Alk(ppm)	pH	Source	Depth(ft)
07/22/36	20.6	7.8	CD	10
07/22/36	21.8	7.9	CD	10
07/22/36	21.0	7.6	CD	15
07/22/36	21.0	6.9	CD	20
07/22/36	19.4	6.7	CD	30
07/22/36	20.6	6.6	CD	40
07/22/36	22.6	7.1	CD	B-19
07/22/36	20.6	6.6	CD	B-32
07/22/36	22.8	6.6	CD	B-45
07/22/36	21.8	7.8	CD	S

P79

White Pond

Date	Alk(ppm)	pH	Source	Depth(ft)
08/24/36	10.2	7.2	CD	B-10
08/24/36	12.2	7.0	CD	B-10
08/24/36	14.0	6.8	CD	B-14
08/24/36	13.8	7.?	CD	B-8
08/24/36	4.6	7.0	CD	S
07/02/58		8.0	CD	
07/02/58		8.0	CD	

## Appendix A

P79

### White Pond (cont.)

Date	Alk (ppm)	pH	Source	Depth (ft)
06/09/78	21.0	7.4	DEC	10
06/09/78	21.0	7.3	DEC	15
06/09/78	21.0	7.4	DEC	5
06/09/78	21.0	7.5	DEC	S
06/23/78	21.0	7.3	DEC	10
06/23/78	21.0	7.3	DEC	15
06/23/78	21.0	7.3	DEC	5
06/23/78	21.0	7.3	DEC	S
07/19/78	21.0	7.6	DEC	10
07/19/78	21.0	7.4	DEC	14
07/19/78	21.0	7.6	DEC	5
07/19/78	21.0	7.6	DEC	S
08/14/78	21.0	7.2	DEC	10
08/14/78	21.0	7.2	DEC	14
08/14/78	21.0	7.2	DEC	5
08/14/78	21.0	7.3	DEC	S
05/29/79	21.0	7.2	DEC	10
05/29/79	21.0	7.2	DEC	13
05/29/79	21.0	7.2	DEC	5
05/29/79	21.0	7.2	DEC	S
06/18/79	27.0	7.8	DEC	10
06/18/79	21.0	7.8	DEC	15
06/18/79	21.0	7.8	DEC	5
06/18/79	27.0	7.8	DEC	S
07/13/79	27.0	7.6	DEC	10
07/13/79	27.0	6.8	DEC	14
07/13/79	27.0	7.6	DEC	5
07/13/79	27.0	7.6	DEC	S
08/14/79	27.0	7.0	DEC	10
08/14/79	27.0	7.0	DEC	15
08/14/79	27.0	7.0	DEC	5
08/14/79	27.0	7.0	DEC	S

### Lake Deforest

Date	Alk (ppm)	pH	Source	Depth (ft)
01/10/72	74	7.6	USGS	

P150a

### First Reservoir

Date	Alk (ppm)	pH	Source	Depth (ft)
01/10/72	4	6.0	USGS	
08/18/85		6.5	HRFA	

P150b

### Second Reservoir

Date	Alk (ppm)	pH	Source	Depth (ft)
08/08/85	0.00	5.8	HRFA	
08/08/85	0.97	5.7	HRFA	
08/08/85	0.29	5.7	HRFA	
08/18/85		5.8	HRFA	

Appendix A

P150c

Lake Welch

Date	Alk (ppm)	pH	Source	Depth (ft)
08/08/78	14.0	7.4	DEC	10
08/08/78	14.0	7.0	DEC	15
08/08/78	14.0	6.5	DEC	20
08/08/78	14.0	6.4	DEC	25
08/08/78	34.0	6.8	DEC	B-28
08/08/78	14.0	7.4	DEC	S
08/16/82	1.0	6.6	PIPC	
09/24/82	6.0	6.6	PIPC	
06/16/83	5.0	6.4	PIPC	
08/11/83	5.0	6.4	PIPC	
06/14/84	3.0	6.6	PIPC	
08/20/84	3.0	6.4	PIPC	
08/08/85	4.58	6.8	HRFA	
08/08/85	5.85	6.9	HRFA	
08/08/85	3.80	7.0	HRFA	

P150d

Breakneck Pond

Date	Alk (ppm)	pH	Source	Depth (ft)
09/08/36	8.6	6.0	CD	10
09/08/36	8.6	6.0	CD	B-11
09/08/36	8.6	6.2	CD	B-12
09/08/36	8.6	6.6	CD	S
09/08/36	8.6	6.6	CD	S
07/ /81		4.6	Hendrey	
08/16/82	1.0	4.9	PIPC	
09/24/82	0.0	5.0	PIPC	
06/16/83	1.0	4.7	PIPC	
08/11/83	2.0	5.2	PIPC	
08/15/83	----	5.8	DEC	1M
6-8/ /83	0.46	5.6	DEC	S-3
06/14/84	0.0	4.7	PIPC	
08/ /84		5.3	DEC	
08/20/84	0.0	5.3	PIPC	
08/08/85	0.00	5.2	HRFA	
08/08/85	0.00	5.2	HRFA	
08/08/85	0.00	5.2	HRFA	
08/13/85	0.00	5.3	HRFA	
08/13/85	0.00	5.3	HRFA	
08/18/85		5.4	HRFA	

Appendix A

P150j

Third Reservoir

Date	Alk (ppm)	pH	Source	Depth (ft)
07/ /81	0.7	4.7	Hendrey	
6-8/ /83	-0.30	5.0	DEC	S-3
08/08/85	0.00	4.7	HRFA	
08/08/85	0.00	4.7	HRFA	
08/08/85	0.00	4.8	HRFA	
08/13/85	0.00	4.8	HRFA	
08/13/85	0.00	4.8	HRFA	
08/18/85		4.8	HRFA	

P152

Lake Tiorati

Date	Alk (ppm)	pH	Source	Depth (ft)
07/21/36	10.0	6.4	CD	B-12
07/21/36	8.6	6.8	CD	B-15
07/21/36	15.8	6.2	CD	B-21
07/21/36	24.8	6.4	CD	B-25
07/21/36	9.0	6.6	CD	B-8
07/21/36	10.0	6.6	CD	S
07/21/36	9.0	6.6	CD	S
09/12/78	14.0	7.0	DEC	20
09/12/78	34.0	6.7	DEC	30
09/12/78	14.0	7.0	DEC	S
08/16/82	4.0	6.5	PIPC	
09/24/82	8.0	6.7	PIPC	
06/16/83	2.0	6.5	PIPC	
08/11/83	7.0	6.5	PIPC	
06/14/84	3.0	6.7	PIPC	
07/ /84		6.7	DEC	
08/20/84	3.0	6.9	PIPC	
08/07/85	3.71	6.7	HRFA	
08/07/85	3.66	6.7	HRFA	
08/07/85	3.07	6.7	HRFA	

P163a

Camp Field Reservoir

Date	Alk (ppm)	pH	Source	Depth (ft)
12/13/71	40	7.2	USGS	

Appendix A

P165f

**Broccy Creek Reservoir**

Date	Alk (ppm)	pH	Source	Depth (ft)
08/19/85		6.8	HRFA	
08/19/85	11.70		HRFA	
08/19/85	13.36		HRFA	
08/19/85	11.90		HRFA	

P167

**Indian Lake**

Date	Alk (ppm)	pH	Source	Depth (ft)
09/01/36	15.6	6.2	CD	20
09/01/36	15.6	6.2	CD	40
09/01/36	15.6	6.2	CD	65
09/01/36	15.6	7.0	CD	B-11
09/01/36	15.6	6.2	CD	B-43
09/01/36	15.6	6.2	CD	B-91
09/01/36	15.6	7.4	CD	S
02/15/51	26.0	6.5	CD	30
02/15/51	25.0	6.3	CD	45
02/15/51	26.0	6.3	CD	B-60

P168a

**Canopus Lake**

Date	Alk (ppm)	pH	Source	Depth (ft)
06/17/68	7.0	8.5	CD	?
06/17/68	7.0	8.5	CD	S
07/ /81	25.9	6.7	Hendrey	
08/12/85	11.70	7.4	HRFA	
08/12/85	12.09	7.5	HRFA	
08/12/85	11.51	7.7	HRFA	

P168b

**Pelton Pond**

Date	Alk (ppm)	pH	Source	Depth (ft)
07/21/65	34.2		CD	?
07/21/65	34.2	7.0	CD	?
07/21/65	34.2	6.0	CD	?
08/23/77	14.0	6.6	DEC	10
08/23/77		6.4	DEC	10
08/23/77	14.0	6.5	DEC	12
08/23/77		6.3	DEC	12
08/23/77	14.0	6.2	DEC	14
08/23/77		6.3	DEC	14
08/23/77	14.0	6.2	DEC	16
08/23/77		6.3	DEC	16
08/23/77	14.0	6.2	DEC	18
08/23/77		6.3	DEC	18
08/23/77	14.0	6.7	DEC	4

Appendix A

P168b

Pelton Pond (cont.)

Date	Alk(ppm)	pH	Source	Depth(ft)
08/23/77		6.6	DEC	4
08/23/77	41	6.7	DEC	45
08/23/77		6.7	DEC	8
08/23/77		6.6	DEC	8
08/23/77	14.0	6.7	DEC	S
08/23/77		6.6	DEC	S
07/ /81	16.2	6.3	Hendrey	
08/12/85	8.58	6.8	HRFA	
08/12/85	6.63	6.8	HRFA	
08/12/85	8.00	7.1	HRFA	

P168f

Beaver Pond

Date	Alk(ppm)	pH	Source	Depth(ft)
07/28/65	17.1	6.5	CD	?
07/28/65	17.1	6.0	CD	?
08/04/82	13.6	6.5	DEC	10
08/04/82	13.6	6.6	DEC	5
08/04/82	13.6	6.8	DEC	S

P168g

Hidden Lake

Date	Alk(ppm)	pH	Source	Depth(ft)
07/15/65	34.2	6.0	CD	?
07/15/65	34.2		CD	?

P175

Oscawana Lake

Date	Alk(ppm)	pH	Source	Depth(ft)
07/16/36	10.8	7.7	CD	10
07/16/36	11.2	7.8	CD	10
07/16/36	11.0	7.7	CD	15
07/16/36	11.2	7.8	CD	5
07/16/36	13.0	8.0	CD	5
07/16/36	12.0	6.8	CD	B-18
07/16/36	12.6	7.6	CD	B-20
07/16/36	10.6	6.4	CD	B-25
07/16/36	11.6	7.8	CD	S
07/16/36	11.6	7.8	CD	S
08/27/62		7.0	CD	17
08/27/62		6.4	CD	20
08/27/62		6.2	CD	22
08/27/62		6.3	CD	B-25

## Appendix A

P176

Mud Lake

Date	Alk (ppm)	pH	Source	Depth (ft)
07/ /81	16.4	6.2	Hendrey	
08/24/83	20.5	6.5	DEC	16
08/24/83	20.5	6.8	DEC	1M
6-8/ /83	8.94	7.1	DEC	B-16
6-8/ /83	9.07	7.2	DEC	S-3

P177

Clear Lake

Date	Alk (ppm)	pH	Source	Depth (ft)
07/ /81	0.2	5.0	Hendrey	
08/24/83	----	5.8	DEC	1M
08/24/83	----	5.7	DEC	26
08/24/83	----	5.5	DEC	70
6-8/ /83	0.26	5.5	DEC	26
6-8/ /83	1.51	5.9	DEC	B-10
6-8/ /83	0.12	5.3	DEC	S-3
06/ /84		5.1	DEC	
08/28/85	0.00	5.3	HRFA	
08/28/85	0.00	5.3	HRFA	
08/28/85	0.00	5.4	HRFA	

P183

Bryant Pond

Date	Alk (ppm)	pH	Source	Depth (ft)
08/19/36	54.8	6.2	CD	B-10
08/19/36	28.2	6.4	CD	B-5
08/19/36	29.4	7.0	CD	S

P183aa

Stillwater Pond

Date	Alk (ppm)	pH	Source	Depth (ft)
06/24/42	8.0	6.0	CD	15
06/24/42	12.0	5.9	CD	B
06/24/42	6.0	6.7	CD	S
06/26/42	8.0	6.7	CD	10
06/26/42	8.0	6.3	CD	13
06/26/42	8.0	6.2	CD	15
06/26/42	9.0	6.0	CD	18
06/26/42	10.0	6.0	CD	B
06/26/42	6.0	6.7	CD	S
06/27/42	7.0	6.7	CD	10
06/27/42	10.0	6.3	CD	15
06/27/42	12.0	6.1	CD	18
06/27/42	23.0	6.0	CD	24
06/27/42	32.0	6.0	CD	B
06/27/42	6.0	6.8	CD	S

Appendix A

P183aa

Stillwater Pond (cont.)

Date	Alk (ppm)	pH	Source	Depth (ft)
07/17/51	8.0	7.0	CD	10
07/17/51	12.0	6.5	CD	15
07/17/51		6.3	CD	20
07/17/51	12.5	6.4	CD	26
07/17/51	7.0	7.3	CD	S
07/18/51	10.0	6.2	CD	17
07/18/51	8.0	6.8	CD	9
07/18/51	6.0	7.2	CD	S
03/05/62		6.4	CD	10
03/05/62		6.4	CD	20
03/05/62		6.4	CD	29
08/27/62		6.0	CD	17.5
08/27/62		6.3	CD	5
08/28/62		6.0	CD	22
08/28/62		6.0	CD	25
08/28/62		6.0	CD	B-28
03/10/66		5.0	CD	20
07/25/77	13.7	6.5	DEC	16
07/25/77	13.7	6.3	DEC	20
07/25/77	20.5	6.3	DEC	25
07/25/77	20.5	6.3	DEC	29
07/25/77	13.7	6.8	DEC	6
07/ /81	5.5	6.0	Hendrey	
08/12/85	2.14	6.7	HRFA	
08/12/85	3.51	6.4	HRFA	
08/12/85	2.14	6.7	HRFA	

P183e

Lake Tibet

Date	Alk (ppm)	pH	Source	Depth (ft)
08/12/85	22.23	7.3	HRFA	
08/12/85	23.40	7.2	HRFA	
08/12/85	22.82	7.2	HRFA	

P184

Hessian Lake

Date	Alk (ppm)	pH	Source	Depth (ft)
07/31/36	8.4	6.7	CD	19
07/31/36	12.0	6.8	CD	B-10
07/31/36	8.8	6.7	CD	B-20
07/31/36	10.8	6.2	CD	B-39
07/31/36	8.8	6.7	CD	S
06/14/84	12.0	7.3	PIPC	
08/20/84	12.0	7.5	PIPC	

## Appendix A

### P184a

### Queensboro Lake

Date	Alk (ppm)	pH	Source	Depth (ft)
06/14/84	19.0	7.1	PIPC	
08/20/84	34.0	6.9	PIPC	
08/06/85	18.09	7.1	HRFA	
08/06/85	18.43	7.1	HRFA	
08/06/85	19.16	7.2	HRFA	

### P184b

### Turkey Hill Pond

Date	Alk (ppm)	pH	Source	Depth (ft)
07/25/36	54.0	6.2	CD	B-17
07/25/36	46.4	6.2	CD	B-21
07/25/36	15.6	6.4	CD	S
06/14/84	5.0	6.6	PIPC	
08/20/84	4.0	8.4	PIPC	

### P184c

### Silver Mine Lake

Date	Alk (ppm)	pH	Source	Depth (ft)
07/23/36	17.8		CD	B-13
07/23/36	22.0		CD	B-17
07/23/36	18.0		CD	B-18
07/23/36	31.8		CD	B-19
07/23/36	18.0		CD	B-8
07/23/36	16.6		CD	S
03/11/70	10.0	6.7	CD	5
03/11/70	15.0	6.2	CD	B-23
07/16/70	15.0	7.0	DEC	12
07/16/70	25.0	6.5	DEC	17
07/16/70	15.0	7.0	DEC	5
07/16/70	75.0	6.8	DEC	B-24
08/06/71	15.0	7.0	DEC	15
08/06/71	50.0	6.5	DEC	20
08/06/71	80.0	6.7	DEC	B-25
08/06/71	10.0	7.2	DEC	S
06/14/84	6.0	7.2	PIPC	
08/20/84	9.0	7.4	PIPC	

### P184d

### Lake Nawahunta

Date	Alk (ppm)	pH	Source	Depth (ft)
06/25/36	15.2	7.0	CD	B-5
06/25/36	18.0	6.8	CD	B-7
06/25/36	14.8	7.0	CD	S

## Appendix A

P184d

Lake Nawahunta (cont.)

Date	Alk (ppm)	pH	Source	Depth (ft)
06/14/84	13.0	7.1	PIPC	
08/20/84	21.0	7.2	PIPC	

P185

Cranberry Pond

Date	Alk (ppm)	pH	Source	Depth (ft)
08/13/85	2.15	5.5	HRFA	
08/13/85	2.05	5.5	HRFA	

P188

Mine Lake

Date	Alk (ppm)	pH	Source	Depth (ft)
06/14/84	6.0	6.7	PIPC	
08/20/84	6.0	6.8	PIPC	

P188a

Lake Massawippa

Date	Alk (ppm)	pH	Source	Depth (ft)
07/28/36	22.6	6.8	CD	B-10
07/28/36	71.4	6.0	CD	B-16
07/28/36	20.2	6.8	CD	S

P188b

Lake Te-ata

Date	Alk (ppm)	pH	Source	Depth (ft)
07/28/36	13.0	6.4	CD	B-15
07/28/36	45.0	6.4	CD	B-31
07/28/36	25.6	6.6	CD	B-33
07/28/36	10.4	6.8	CD	S
08/16/82	9.0	6.6	PIPC	
09/24/82	8.0	7.0	PIPC	
06/16/83	7.0	6.9	PIPC	
08/11/83	9.0	6.7	PIPC	
08/06/85	8.77	7.1	HRFA	
08/06/85	8.48	7.2	HRFA	
08/06/85	9.12	7.2	HRFA	

Appendix A

P189

Lower Twin Lake

Date	Alk (ppm)	pH	Source	Depth (ft)
07/27/36	9.8	6.4	CD	B-11
07/27/36	9.6	6.2	CD	B-20
07/27/36	15.0	6.2	CD	B-35
07/27/36	14.6	6.8	CD	S
08/06/85	10.14	6.8	HRFA	
08/06/85	8.53	6.9	HRFA	
08/06/85	9.41	6.8	HRFA	

P190

Upper Twin Lake

Date	Alk (ppm)	pH	Source	Depth (ft)
07/27/36	13.8	6.8	CD	B-10
07/27/36	14.0	6.2	CD	B-50
07/27/36	9.6	6.2	CD	M-25
07/27/36	9.6	6.8	CD	S
08/16/82	8.0	6.6	PIPC	
09/24/82	7.5	6.8	PIPC	
06/16/83	6.5	6.7	PIPC	
08/11/83	9.0	6.8	PIPC	
06/14/84	4.0	6.4	PIPC	
08/20/84	0.0	6.7	PIPC	
08/06/85	7.90	7.1	HRFA	
08/06/85	7.61	7.1	HRFA	
08/06/85	7.99	7.1	HRFA	
08/18/85		7.2	HRFA	

P192

Bull Pond

Date	Alk (ppm)	pH	Source	Depth (ft)
08/18/85		6.7	HRFA	

P192b

Lake Barnes

Date	Alk (ppm)	pH	Source	Depth (ft)
07/28/36	21.0	6.8	CD	B-5
07/28/36	25.8	6.4	CD	B-9
07/28/36	25.2	7.2	CD	S
06/16/83	18.0	7.2	PIPC	
08/11/83	32.0	7.1	PIPC	
06/14/84	16.5	7.2	PIPC	
08/20/84	24.0	7.4	PIPC	
08/06/85	21.55	7.2	HRFA	
08/06/85	21.35	7.2	HRFA	
08/06/85	22.45	7.2	HRFA	

Appendix A

P193

Summit Lake

Date	Alk (ppm)	pH	Source	Depth (ft)
07/27/36	9.6	6.2	CD	B-16
07/27/36	27.6	6.2	CD	B-28
07/27/36	9.6	6.4	CD	S
06/14/84	4.5	6.4	PIPC	
08/20/84	4.0	6.3	PIPC	
08/07/85	4.58	6.0	HRFA	
08/07/85	5.27	6.0	HRFA	
08/07/85	7.12	5.9	HRFA	

P193a

Brooks Lake

Date	Alk (ppm)	pH	Source	Depth (ft)
08/04/36	47.2	6.6	CD	B-8
08/04/36	46.8	6.6	CD	B-9
08/04/36	38.2	9.4	CD	S

P192b

Barnes Lake

Date	Alk (ppm)	pH	Source	Depth (ft)
08/16/82	26.0	7.6	PIPC	
09/24/82	28.0	7.6	PIPC	

P200

Bog Meadow Pond

Date	Alk (ppm)	pH	Source	Depth (ft)
08/15/85		7.3	HRFA	
08/15/85	4.19	6.6	HRFA	

P217

Cold Spring Reservoir (lower)

Date	Alk (ppm)	pH	Source	Depth (ft)
08/12/85	17.45	7.7	HRFA	
08/12/85	16.67	7.8	HRFA	
08/12/85	16.96	7.7	HRFA	

P220

Lake Surprise

Date	Alk (ppm)	pH	Source	Depth (ft)
08/12/85	28.67	9.6	HRFA	
08/12/85	28.96	9.5	HRFA	
08/12/85	28.08	9.5	HRFA	

Appendix A

P222d

**Aleck Meadow Reservoir**

Date	Alk (ppm)	pH	Source	Depth (ft)
08/15/85	6.63	8.0	HRFA	
08/15/85		8.0	HRFA	

P222e

**Arthurs Pond**

Date	Alk (ppm)	pH	Source	Depth (ft)
08/15/85	1.56	6.9	HRFA	
08/15/85		6.3	HRFA	

P222f

**Sphagnum Pond**

Date	Alk (ppm)	pH	Source	Depth (ft)
08/15/85		5.2	HRFA	
08/15/85	0.00	5.3	HRFA	

P222g

**Tamarack Pond**

Date	Alk (ppm)	pH	Source	Depth (ft)
08/15/85	0.00	4.8	HRFA	
08/15/85		---	HRFA	

P223

**Upper Reservoir**

Date	Alk (ppm)	pH	Source	Depth (ft)
08/15/85		8.0	HRFA	
08/15/85	5.46	7.8	HRFA	

P228

**Sutherland Pond**

Date	Alk (ppm)	pH	Source	Depth (ft)
08/15/85	0.00	5.0	HRFA	
08/15/85		5.0	HRFA	

P331

**Melzingah Reservoir**

Date	Alk (ppm)	pH	Source	Depth (ft)
6-8/ /83	12.56	7.3	DEC	S-3

P345

**Beacon Reservoir**

Date	Alk (ppm)	pH	Source	Depth (ft)
09/06/83	13.4	5.0	City of Beacon	S-3
09/06/83	13.4	5.3	City of Beacon	B-16
6-8/ /83	-0.74	4.8	DEC	S-3
06/ /84		5.0	DEC	
10/23/84	<10	5.1	City of Beacon	

Appendix A

P345

Beacon Reservoir (cont.)

Date	Alk (ppm)	pH
08/26/85	0.00	5.0
08/26/85	0.00	5.0

Source Depth(ft)

HRFA

Depth(ft)

HRFA

P345a

Beacon Reservoir (AKA Cargill R.)

Date	Alk (ppm)	pH
07/ /81	15.9	6.7

Source Depth(ft)

Hendrey

Depth(ft)

P345cc

Jordan Pond

Date	Alk (ppm)	pH
08/12/85	2.73	6.6
08/12/85	2.63	6.9
08/12/85	2.83	6.6

Source Depth(ft)

HRFA

Depth(ft)

HRFA

HRFA

P345e

Date	Alk (ppm)	pH	Source	Depth(ft)
09/01/36	101.0	7.6	CD	B-11
09/01/36	106.0	7.8	CD	B-5
09/01/36	85.5	8.0	CD	B-7
09/01/36	98.8	8.0	CD	S

P345k

Lake Valhalla

Date	Alk (ppm)	pH
08/28/85	19.60	8.4
08/28/85	19.79	8.4
08/28/85	19.89	7.9

Source Depth(ft)

HRFA

Depth(ft)

HRFA

HRFA

P345m

Weise Pond

Date	Alk (ppm)	pH
07/ /81	24.7	6.3

Source Depth(ft)

Hendrey

Depth(ft)

P352

Sylvan Lake

Date	Alk (ppm)	pH
08/26/36	115.0	8.6
08/26/36	127.0	7.6
08/26/36	127.0	7.6
08/26/36	119.0	8.4
08/26/36	119.8	8.2
08/26/36	127.0	8.2

Source Depth(ft)

CD

10

CD

100

CD

110

CD

20

CD

30

CD

40

## Appendix A

P352

### Sylvan Lake (cont.)

Date	Alk (ppm)	pH	Source	Depth (ft)
08/26/36	127.0	7.6	CD	50
08/26/36	127.0	7.6	CD	60
08/26/36	127.0	7.6	CD	70
08/26/36	127.0	7.6	CD	80
08/26/36	127.0	7.6	CD	90
08/26/36	127.0	7.6	CD	B-100
08/26/36	127.0	7.6	CD	B-124
08/26/36	118.8	8.4	CD	B-25
08/26/36	125.0	8.0	CD	B-50
08/26/36	127.0	7.8	CD	B-75
08/26/36	114.4	8.6	CD	S
08/22/61		7.4	CD	20
08/22/61		7.4	CD	30
08/22/61		7.4	CD	50
08/22/61		7.4	CD	65
08/22/61		7.2	CD	70
08/22/61		7.0	CD	B-80
08/22/61		7.6	CD	S
07/23/68	116.3	9.5	CD	86
07/23/68	116.3	9.5	CD	S
08/21/81	107.0	8.6	DEC	10
08/21/81	150.0	7.4	DEC	110
08/21/81	164.0	7.4	DEC	120
08/21/81	130.0	8.6	DEC	20
08/21/81	130.0	8.6	DEC	30
08/21/81	144.0	8.0	DEC	40
08/21/81	130.0	8.5	DEC	5
08/21/81	137.0	7.7	DEC	60
08/21/81	144.0	7.7	DEC	80

P352a

### Iron Mine Pond

Date	Alk (ppm)	pH	Source	Depth (ft)
08/31/36	156.0	8.0	CD	20
08/31/36	154.6	7.4	CD	40
08/31/36	156.0	7.4	CD	B-33
08/31/36	158.0	7.6	CD	B-40
08/31/36	158.0	7.4	CD	B-58
08/31/36	156.2	8.0	CD	M-20
08/31/36	125.0	8.2	CD	S

P353

### Whaley Lake

Date	Alk (ppm)	pH	Source	Depth (ft)
07/24/36	19.0	7.4	CD	15
07/24/36	18.6	6.7	CD	25
07/24/36	20.6	7.3	CD	5

Appendix A

P353

Whaley Lake (cont.)

Date	Alk (ppm)	pH	Source	Depth (ft)
07/24/36	21.2	7.5	CD	5
07/24/36	21.0	7.5	CD	B-11
07/24/36	20.0	7.3	CD	B-13
07/24/36	39.0	6.7	CD	B-34
07/24/36	19.6	7.4	CD	S

P1001

Cranberry Pond

Date	Alk (ppm)	pH	Source	Depth (ft)
08/31/59	36	7.3	USGS	
12/03/59	12	6.0	USGS	
02/11/60	8	5.6	USGS	
07/12/60	35	7.4	USGS	
08/31/61	30	7.0	USGS	
08/16/85	8.97		HRFA	
08/16/85	8.78		HRFA	

P1002b

Lake Wanoksink

Date	Alk (ppm)	pH	Source	Depth (ft)
08/16/82	1.5	5.1	PIPC	
09/24/82	1.5	5.8	PIPC	
06/16/83	1.0	4.7	PIPC	
08/11/83	2.0	5.1	PIPC	
06/14/84	0.0	5.0	PIPC	
08/ /84		5.3	DEC	
08/20/84	3.0	5.9	PIPC	
08/08/85	0.00	5.0	HRFA	
08/08/85	0.00	6.0	HRFA	
08/08/85	0.00	5.1	HRFA	

P1002d

Pine Meadow Lake

Date	Alk (ppm)	pH	Source	Depth (ft)
08/07/36	44.0	6.0	CD	B-14
08/07/36	41.0	6.0	CD	B-16
08/07/36	9.4	6.2	CD	B-9
08/07/36	9.8	6.3	CD	S
08/16/82	1.0	5.1	PIPC	
09/24/82	1.0	5.4	PIPC	

Appendix A

P1002d

Pine Meadow Lake (cont.)

Date	Alk (ppm)	pH	Source	Depth (ft)
06/16/83	0.0	4.5	PIPC	
08/11/83	1.0	4.8	PIPC	
08/17/83	----	5.9	DEC	1M
6-8/ /83	-0.03	5.3	DEC	S-3
06/14/84	0.0	4.7	PIPC	
08/ /84		5.0	DEC	
08/20/84	0.0	4.9	PIPC	
08/08/85	0.00	5.9	HRFA	
08/08/85	0.00	5.4	HRFA	
08/08/85	0.00	5.3	HRFA	

P1002e

Lake Sebago

Date	Alk (ppm)	pH	Source	Depth (ft)
07/16/36	8.0	6.0	CD	B-16
07/16/36	8.0	6.0	CD	B-7
07/16/36	7.8	6.0	CD	B-8
07/16/36	6.0	6.0	CD	S
07/17/36	28.0	6.4	CD	B-22
07/17/36	5.8	6.4	CD	B-28
07/17/36	7.8	6.4	CD	B-4
07/17/36	44.4	6.4	CD	M-14
07/17/36	5.8	6.6	CD	S
09/05/78	14	7.1	DEC	18
09/05/78	14	6.9	DEC	22
09/05/78	14	6.7	DEC	25
09/05/78	14	7.2	DEC	S
08/16/82	7.0	6.9	PIPC	
09/24/82	8.0	6.9	PIPC	
06/16/83	3.0	6.7	PIPC	
08/11/83	7.0	6.8	PIPC	
06/14/84	2.5	6.0	PIPC	
08/20/84	5.0	6.8	PIPC	

P1002f

Lake Skemonto

Date	Alk (ppm)	pH	Source	Depth (ft)
08/16/82	2.0	6.0	PIPC	
09/24/82	1.5	6.3	PIPC	
06/16/83	0.5	5.7	PIPC	
08/11/83	3.0	6.1	PIPC	
08/16/83	----	6.0	DEC	16
08/16/83	----	6.4	DEC	1M
08/16/83	----	5.9	DEC	20

Appendix A

P1002f

Lake Skemonto (cont.)

Date	Alk (ppm)	pH	Source	Depth (ft)
6-8/ /83	1.85	6.3	DEC	16
6-8/ /83	4.14	6.7	DEC	B-20
6-8/ /83	1.62	6.3	DEC	S-3
06/14/84	0.5	5.6	PIPC	
08/ /84		6.2	DEC	
08/20/84	1.0	6.0	PIPC	

P1003

Lower Lake Kanawauke

Date	Alk (ppm)	pH	Source	Depth (ft)
07/20/36	14.0	6.2	CD	B-18
07/20/36	13.2	6.6	CD	B-9
07/20/36	7.6	6.6	CD	S
08/16/82	5.0	6.5	PIPC	
09/24/82	5.0	6.8	PIPC	
06/16/83	3.0	6.8	PIPC	
08/11/83	6.0	6.5	PIPC	
06/14/84	1.5	6.2	PIPC	
08/20/84	3.0	6.5	PIPC	

P1003a

Middle Lake Kanawauke

Date	Alk (ppm)	pH	Source	Depth (ft)
07/20/36	12.6	6.2	CD	B-7
07/20/36	12.2	6.2	CD	B-9
07/20/36	1.6	6.7	CD	S
08/08/85	6.09	6.8	HRFA	
08/08/85	5.61	6.8	HRFA	
08/08/85	5.46	6.8	HRFA	

P1003b

Upper Lake Kanawauke

Date	Alk (ppm)	pH	Source	Depth (ft)
07/21/36	7.8	6.0	CD	B-12
07/21/36	9.4	6.0	CD	B-36
07/21/36	5.0	6.4	CD	M-18
07/21/36	6.2	6.4	CD	S

Appendix A

P1003d

Lake Skannatati

Date	Alk (ppm)	pH	Source	Depth (ft)
08/18/49	20.0	6.0	CD	14
08/18/49	48.0	6.0	CD	B-16
08/18/49	20.0	6.0	CD	B-5
08/18/49	19.0	6.0	CD	M-9
08/18/49	20.0	6.0	CD	S
08/18/49	18.0	6.1	CD	S
08/16/82	3.0	6.1	PIPC	
09/24/82	6.0	6.7	PIPC	
06/16/83	0.5	5.9	PIPC	
08/11/83	4.0	6.4	PIPC	
08/15/83	6.8	6.4	DEC	1M
6-8/ /83	3.87	6.6	DEC	S-3
06/14/84	1.0	5.8	PIPC	
07/ /84		6.5	DEC	
08/20/84	0.0	6.4	PIPC	
08/06/85	3.02	6.4	HRFA	
08/06/85	5.61	6.3	HRFA	
08/06/85	2.54	6.4	HRFA	

P1003e

Lake Askoti

Date	Alk (ppm)	pH	Source	Depth (ft)
08/20/47		6.3	CD	10
08/20/47		6.0	CD	15
08/20/47		6.3	CD	18
08/20/47		6.4	CD	5
08/20/47		6.1	CD	S
08/10/48		6.1	CD	15
08/10/48		6.0	CD	20
08/19/49	18.0	6.0	CD	18
08/19/49	26.0	6.0	CD	19
08/19/49	36.0	6.0	CD	20
08/19/49	93.0	6.0	CD	B-23
08/19/49	17.0	6.0	CD	M-12
08/19/49	15.0	6.0	CD	S
08/16/82	4.0	6.2	PIPC	
09/24/82	6.0	6.4	PIPC	
06/16/83	1.5	5.9	PIPC	
08/11/83	3.0	6.4	PIPC	
08/15/83	20.5	6.6	DEC	1M
08/15/83	13.7	6.1	DEC	20
6-8/ /83	3.19	6.6	DEC	S-3

Appendix A

P1003e

Lake Askoti (cont.)

Date	Alk (ppm)	pH	Source	Depth (ft)
06/14/84	0.5	6.2	PIPC	
07/ /84		6.6	DEC	
08/20/84	1.0	6.5	PIPC	
08/06/85	2.47	6.7	HRFA	
08/06/85	2.73	6.6	HRFA	
08/06/85	2.63	6.7	HRFA	

P1005

We-Wah Lake

Date	Alk (ppm)	pH	Source	Depth (ft)
08/20/36	23.4	8.5	CD	10
08/20/36	28.0	6.7	CD	B-15
08/20/36	23.2	8.5	CD	S

P1007

Tuxedo Lake

Date	Alk (ppm)	pH	Source	Depth (ft)
08/20/36	15.0	6.6	CD	.....
08/20/36	15.0	6.8	CD	.....
08/20/36	15.8	6.9	CD	.....
08/20/36	15.0	7.3	CD	10
08/20/36	15.8	7.5	CD	10
08/20/36	15.0	7.3	CD	20
08/20/36	15.4	7.5	CD	20
08/20/36	15.0	7.2	CD	30
08/20/36	15.0	6.5	CD	40
08/20/36	17.0	6.5	CD	50
08/20/36	15.0	7.0	CD	B-32
08/20/36	31.0	6.7	CD	B-60
08/20/36	15.8	7.5	CD	S
09/06/73	20	6.8	USGS	

P1007C

Spruce Pond

Date	Alk (ppm)	pH	Source	Depth (ft)
08/05/36	27.4	6.0	CD	B-16
08/05/36	5.8	6.4	CD	B-4
08/05/36	4.4	6.2	CD	S
07/ /81	1.7	5.5	Hendrey	
08/16/83	27.4	5.9	DEC	16
08/16/83	20.5	5.6	DEC	1M
6-8/ /83	9.16	7.0	DEC	B-16
6-8/ /83	1.91	6.1	DEC	S-3

Appendix A

P1010

Mombasha Lake

Date	Alk (ppm)	pH	Source	Depth (ft)
04/27/64	15	6.5	USGS (HH65USGS)	
06/03/64	24	6.8	USGS (HH65USGS)	
08/16/85	14.92		HRPA	
08/16/85	14.87		HRFA	

P1011

Lake Stahahé

Date	Alk (ppm)	pH	Source	Depth (ft)
07/23/36	10.6	6.4	CD	B-11
07/23/36	10.4	6.4	CD	B-11
07/23/36	10.6	6.6	CD	B-7
07/23/36	10.6	6.6	CD	B-8
07/23/36	10.6	6.6	CD	S
07/ /81	20.0	6.5	Hendrey	
08/16/82	6.0	6.3	PIPC	
09/24/82	11.0	6.7	PIPC	
06/16/83	3.0	6.5	PIPC	
08/11/83	12.0	6.6	PIPC	
06/14/84	5.6	6.5	PIPC	
08/20/84	6.0	6.6	PIPC	

P1014

Echo Lake

Date	Alk (ppm)	pH	Source	Depth (ft)
07/30/36	20.6	7.0	CD	B-3
07/30/36	20.2	7.0	CD	B-4
07/30/36	24.2	6.4	CD	B-8
07/30/36	20.6	7.2	CD	S
04/27/64	10	6.2	USGS	
06/03/64	18	6.7	USGS	
08/23/83	20.5	7.0	DEC	1M
6-8/ /83	12.00	7.2	DEC	S-3
08/26/85	10.82	6.9	HRFA	
08/26/85	10.63	6.9	HRFA	

P1014a

Lower Cohasset Lake

Date	Alk (ppm)	pH	Source	Depth (ft)
07/24/36	10.6	6.3	CD	B-16
07/24/36	10.0	6.6	CD	B-7
07/24/36	11.0	7.0	CD	S

## Appendix A

P1014a

Lower Cohasset Lake (cont.)

Date	Alk(ppm)	pH	Source	Depth(ft)
08/16/82	4.0	6.6	PIPC	
09/24/82	8.5	6.7	PIPC	
06/16/83	2.0	6.5	PIPC	
08/11/83	5.0	6.5	PIPC	
06/14/84	3.0	6.3	PIPC	
08/20/84	0.0	6.8	PIPC	
08/07/85	6.78	6.8	HRFA	
08/07/85	5.70	6.5	HRFA	
08/07/85	4.19	6.5	HRFA	

P1014b

Upper Lake Cohasset

Date	Alk(ppm)	pH	Source	Depth(ft)
07/24/36	10.0	6.0	CD	B-10
07/24/36	16.6	6.2	CD	B-13
07/24/36	8.8	6.8	CD	B-8
07/24/36	9.8	6.8	CD	S
08/07/85	7.80	6.3	HRFA	
08/07/85	7.65	6.7	HRFA	
08/07/85	7.56	6.6	HRFA	

P1015

Cranberry Lake

Date	Alk(ppm)	pH	Source	Depth(ft)
07/30/36	5.6	6.8	CD	B-11
07/30/36	8.2	6.8	CD	B-11
07/30/36	19.8	6.0	CD	B-16
07/30/36	9.6	6.8	CD	S
07/ /81	9.7	6.2	Hendrey	
08/23/83		6.7	DEC	12
08/23/83		6.9	DEC	1M
6-8/ /83	7.28	6.2	DEC	S-3
08/07/85	5.27	6.7	HRFA	
08/07/85	5.66	6.4	HRFA	
08/07/85	8.43	6.4	HRFA	

Appendix A

P1016

Forest Lake

Date	Alk(ppm)	pH	Source	Depth(ft)
07/29/36	8.6	6.6	CD	B-17
07/29/36	3.0	6.8	CD	B-30
07/29/36	11.8	6.0	CD	B-52
07/29/36	8.6	6.8	CD	B-9
07/29/36	8.8	6.6	CD	M-26
07/29/36	6.0	6.7	CD	S
07/ /81	2.4	6.3	Hendrey	
08/23/83	20.5	6.8	DEC	1M
08/23/83	20.5	6.6	DEC	22
08/23/83	20.5	6.0	DEC	40
6-8/ /83	4.20	6.7	DEC	22
6-8/ /83	7.49	7.0	DEC	B-38
6-8/ /83	4.10	6.7	DEC	S-3
08/07/85	2.78	6.3	HRFA	
08/07/85	3.90	6.3	HRFA	
08/07/85	3.05	6.7	HRFA	

P1016a

Island Pond

Date	Alk(ppm)	pH	Source	Depth(ft)
07/22/36	4.0	5.5	CD	100
07/22/36	4.4	5.5	CD	123
07/22/36	4.0	5.6	CD	20
07/22/36	3.0	5.6	CD	40
07/22/36	4.0	5.5	CD	60
07/22/36	4.0	5.5	CD	80
07/22/36	5.6	5.5	CD	B-30
07/22/36	5.0	5.6	CD	M-25
07/22/36	4.8	6.0	CD	S
07/22/36	5.4	6.0	CD	S
07/27/60		6.0	CD	45
07/27/60		6.0	CD	5
07/27/60		6.0	CD	B-95
07/15/75	8.5	5.7	DEC	105
07/15/75	8.5	6.2	DEC	15
07/15/75	8.5	6.0	DEC	15
07/15/75	8.5	5.7	DEC	45
07/15/75	8.5	5.7	DEC	60
08/16/82	1.0	5.2	PIPC	
09/24/82	2.5	5.4	PIPC	
06/16/83	0.0	4.8	PIPC	
08/11/83	1.0	5.0	PIPC	
6-8/ /83	0.26	5.2	DEC	10
6-8/ /83	0.52	5.4	DEC	B-90
6-8/ /83	0.44	5.4	DEC	S-3

Appendix A

P1016a

Island Pond (cont.)

Date	Alk (ppm)	pH	Source	Depth (ft)
06/14/84	0.0	4.9	PIPC	
08/ /84		5.1	DEC	
08/20/84	0.0	5.0	PIPC	
08/07/85	0.10	4.8	HRFA	
08/07/85	0.00	4.9	HRFA	
08/07/85	0.13	4.6	HRFA	
08/16/85	0.10		HRFA	
08/16/85	0.00		HRFA	
08/18/85		5.3	HRFA	

P1021

Round Lake

Date	Alk (ppm)	pH	Source	Depth (ft)
09/10/65		6.5	CD	27
09/10/65		6.5	CD	5
07/20/77	20	7.3	DEC	10
07/20/77	27	6.7	DEC	13
07/20/77	34	6.5	DEC	20
07/20/77	62	6.5	DEC	B-25
07/20/77	20	9.3	DEC	S

P1021c

Sterling Forest Lake

Date	Alk (ppm)	pH	Source	Depth (ft)
03/27/75	10	6.9	USGS	

P1025

Sterling Lake

Date	Alk (ppm)	pH	Source	Depth (ft)
09/19/36	4.0	7.0	CD	10
09/19/36	4.0	7.0	CD	15
09/19/36	4.0	7.0	CD	25
09/19/36	4.0	6.9	CD	30
09/19/36	4.0	6.5	CD	45
09/19/36	4.0	6.4	CD	75
09/19/36	4.0	6.4	CD	90
09/19/36	4.0	6.4	CD	B-110
09/19/36	4.0	6.6	CD	B-40
09/19/36	4.0	7.0	CD	S
02/07/73	38	7.4	USGS	

## Appendix B

Water Quality Data (grouped by source)

Appendix B

HRFA Water Quality Data, Summer 1985

Bodyname	Number	pH	Alk mg/l	SO4 mg/l	NO3 mg/l	NH4 mg/l	Cl mg/l
Aleck Meadow Reservoir	P222d	8.0	6.63	5.8			
Aleck Meadow Reservoir	P222d	8.0					
Arthurs Pond	P222e	6.9	1.56	11.3			
Arthurs Pond	P222e	6.3					
Barnes Lake	P192b	7.2	22.45	6.6			
Barnes Lake	P192b	7.2	21.35	7.1			
Barnes Lake	P192b	7.2	21.55	6.6			
Beacon Reservoir	P345				<0.1	<0.02	
Beacon Reservoir	P345	5.0	0.00	13.9			
Beacon Reservoir	P345				<0.1	<0.02	
Beacon Reservoir	P345	5.0	0.00	12.9			
Bog Meadow Pond	P200	6.6	4.19	8.0			
Bog Meadow Pond	P200	7.3					
Breakneck Pond	P150d	5.2	0.00	6.2			
Breakneck Pond	P150d	5.2	0.00	6.8			
Breakneck Pond	P150d	5.2	0.00	6.0			
Breakneck Pond	P150d	5.3	0.00	5.9			0.5
Breakneck Pond	P150d	5.3	0.00	5.6			0.5
Breakneck Pond	P150d				<0.1	<0.02	
Breakneck Pond	P150d				<0.1	0.04	
Breakneck Pond	P150d	5.4					
Broccy Creek Reservoir	P165f		11.90	11.8			2.6
Broccy Creek Reservoir	P165f		13.36	12.5			2.3
Broccy Creek Reservoir	P165f		11.70	12.4			2.1
Broccy Creek Reservoir	P165f				<0.1	0.08	
Broccy Creek Reservoir	P165f				<0.1	0.08	
Broccy Creek Reservoir	P165f	6.8					
Bull Pond	P192	6.7					
Canopus Lake	P168a	7.7	11.51	8.0			
Canopus Lake	P168a	7.5	12.09	7.9			
Canopus Lake	P168a	7.4	11.70	7.9			
Clear Lake	P177	5.4	0.00	9.6			
Clear Lake	P177	5.3	0.00	9.9			
Clear Lake	P177				<0.1	<0.02	
Clear Lake	P177	5.3	0.00	9.7			
Cold Spring Reservoir	P217	7.8	16.67	10.7			
Cold Spring Reservoir	P217	7.7	17.45	10.1			
Cold Spring Reservoir	P217	7.7	16.96	11.2			
Cranberry Lake	P1015	6.4	5.66	6.5			
Cranberry Lake	P1015	6.4	8.43	6.3			
Cranberry Lake	P1015	6.7	5.27	6.4			

Appendix B

HRFA Water Quality Data, Summer 1985  
(cont.)

Bodyname	Number	pH	Alk mg/l	SO4 mg/l	NO3 mg/l	NH4 mg/l	Cl mg/l
Cranberry Pond	P1001		8.78	6.5			1
Cranberry Pond	P1001		8.97	6.6			1.5
Cranberry Pond	P1001				<0.1	<0.02	
Cranberry Pond	P1001				<0.1	<0.02	
Cranberry Pond	P184b	5.5	2.05	5.4			0.8
Cranberry Pond	P184b	5.5	2.15	5.7			1.2
Cranberry Pond	P184b				<0.1	0.02	
Cranberry Pond	P184b				<0.1	0.02	
Echo Lake	P1014	6.9	10.82	6.6			
Echo Lake	P1014				<0.1	<0.02	
Echo Lake	P1014				<0.1	<0.02	
Echo Lake	P1014	6.9	10.63	6.5			
First Reservoir	P150a	6.5					
Forest Lake	P1016	6.3	2.78	9.1			
Forest Lake	P1016	6.3	3.90	9.0			
Forest Lake	P1016	6.7	3.05	8.6			
Island Pond	P1016a	4.8	0.10	10.1			
Island Pond	P1016a	4.6	0.13	9.6			
Island Pond	P1016a	4.9	0.00	9.8			
Island Pond	P1016a		0.00	8.9			0.8
Island Pond	P1016a		0.10	9.0			1
Island Pond	P1016a				<0.1	<0.02	
Island Pond	P1016a				<0.1	<0.02	
Island Pond	P1016a	5.3					
Jordan Pond	P345cc	6.9	2.63	14.3			
Jordan Pond	P345cc	6.6	2.73	13.8			
Jordan Pond	P345cc	6.6	2.83	13.8			
Lake Askoti	P1003e	6.6	2.73	8.1			
Lake Askoti	P1003e	6.7	2.63	8.4			
Lake Askoti	P1003e	6.7	2.47	8.3			
Lake Cohasset	P1014a	6.5	5.70	8.5			
Lake Cohasset	P1014a	6.5	4.19	9.2			
Lake Cohasset	P1014a	6.8	6.78	9.3			
Lake Kanawauke	P1003a	6.8	5.46	7.7			
Lake Kanawauke	P1003a	6.8	6.09	7.7			
Lake Kanawauke	P1003a	6.8	5.61	7.4			
Lake Skannatati	P1003d	6.4	3.02	7.0			
Lake Skannatati	P1003d	6.3	5.61	7.1			
Lake Skannatati	P1003d	6.4	2.54	7.6			
Lake Surprise	P220	9.5	28.96	10.9			
Lake Surprise	P220	9.5	28.08	11.0			
Lake Surprise	P220	9.6	28.67	11.3			
Lake Te-ata	P188b	7.2	8.48	8.7			
Lake Te-ata	P188b	7.1	8.77	8.5			
Lake Te-ata	P188b	7.2	9.12	8.6			

## Appendix B

HRFA Water Quality Data, Summer 1985  
(cont.)

Bodyname	Number	pH	Alk mg/l	SO4 mg/l	NO3 mg/l	NH4 mg/l	C1 mg/l
Lake Tibet	P183e	7.2	22.82	4.2			
Lake Tibet	P183e	7.3	22.23	4.4			
Lake Tibet	P183e	7.2	23.40	4.2			
Lake Tiorati	P152	6.7	3.07	8.0			
Lake Tiorati	P152	6.7	3.66	8.3			
Lake Tiorati	P152	6.7	3.71	8.5			
Lake Valhalla	P345k	8.4	19.60	8.0			
Lake Valhalla	P345k	8.4	19.79	8.0			
Lake Valhalla	P345k	7.9	19.89	8.4			
Lake Valhalla	P345k				<0.1	0.02	
Lake Valhalla	P345k				<0.1	0.02	
Lake Wanoksink	P1002b	5.0	0.00	8.2			
Lake Wanoksink	P1002b	6.0	0.00	8.1			
Lake Wanoksink	P1002b	5.1	0.00	8.2			
Lake Welch	P150c	6.8	4.58	7.3			
Lake Welch	P150c	6.9	5.85	7.1			
Lake Welch	P150c	7.0	3.80	7.8			
Lower Twin Lake	P189	6.8	10.14	7.9			
Lower Twin Lake	P189	6.9	8.53	8.1			
Lower Twin Lake	P189	6.8	9.41	7.7			
Mombasha Lake	P1010		14.92	6.8			32.3
Mombasha Lake	P1010		14.87	7.1			26.9
Mombasha Lake	P1010				<0.1	0.02	
Mombasha Lake	P1010				<0.1	<0.02	
Pelton Pond	P168b	7.1	8.00	8.3			
Pelton Pond	P168b	6.8	6.63	8.5			
Pelton Pond	P168b	6.8	8.58	8.8			
Pine Meadow Lake	P1002d	5.3	0.00	7.4			
Pine Meadow Lake	P1002d	5.9	0.00	7.2			
Pine Meadow Lake	P1002d	5.4	0.00	7.4			
Queensboro Lake	P184a	7.1	18.09	9.4			
Queensboro Lake	P184a	7.1	18.43	9.1			
Queensboro Lake	P184a	7.2	19.16	9.4			
Second Reservoir	P150b	5.8	0.00	7.3			
Second Reservoir	P150b	5.7	0.97	7.3			
Second Reservoir	P150b	5.7	0.29	7.2			
Second Reservoir	P150b	5.8					
Sphagnum Pond	P222f	5.3	0.00	7.2			
Sphagnum Pond	P222f	5.2					
Stillwater Pond	P183aa	6.7	2.14	9.4			
Stillwater Pond	P183aa	6.7	2.14	9.1			
Stillwater Pond	P183aa	6.4	3.51	9.0			
Summit Lake	P193	6.0	4.58	7.7			
Summit Lake	P193	6.0	5.27	7.5			
Summit Lake	P193	5.9	7.12	7.7			
Sutherland Pond	P228	5.0	0.00	8.1			
Sutherland Pond	P228	5.0					

## Appendix B

HRFA Water Quality Data, Summer 1985  
(cont.)

Bodyname	Number	pH	Alk mg/l	SO4 mg/l	NO3 mg/l	NH4 mg/l	Cl mg/l
Tamarack Pond	P222g	4.8		0.00	6.3		
Tamarack Pond	P222g		7.8				
Third Reservoir	P150j	4.7		0.00	7.3		
Third Reservoir	P150j	4.7		0.00	7.4		
Third Reservoir	P150j	4.8		0.00	7.5		
Third Reservoir	P150j	4.8		0.00	7.1		0.5
Third Reservoir	P150j	4.8		0.00	6.9		1.0
Third Reservoir	P150j					<0.1	0.02
Third Reservoir	P150j					<0.1	<0.02
Third Reservoir	P150j	4.8					
Upper Lake Cohasset	P1014b	6.3		7.80	7.7		
Upper Lake Cohasset	P1014b	6.6		7.56	7.5		
Upper Lake Cohasset	P1014b	6.7		7.65	7.5		
Upper Reservoir	P223	7.8		5.46	11.4		
Upper Reservoir	P223	8.0					
Upper Twin Lake	P190	7.1		7.90	8.6		
Upper Twin Lake	P190	7.1		7.61	8.8		
Upper Twin Lake	P190	7.1		7.99	8.8		
Upper Twin Lake	P190	7.2					

Appendix B

Lake Sampled in July by Dr. George R. Hendrey  
Brookhaven National Laboratory

Bodyname	Number	pH	Alk. ppm	Color ppm	UTMX	UTMY
Lake		7.3	36.8	10	591	4592
Pond		6.0	10.7	90	594	4592
Pond		6.7	35.2	30	598	4594
Pond		8.3	83.1	20	599	4595
Pond		9.7	50.8	40	600	4594
Stillwater Pond	( P183aa)	6.0	5.5	5	598	4588
Clear Lake	( P177 )	5.0	0.2	3	596	4586
Canopus Lake	( P168a )	6.7	25.9	15	597	4590
Weise Pond	( P345m )	6.3	24.7	40	593	4592
Beacon Reservoir	( P345a )	6.7	15.9	10	593	4593
Pelton Pond	( P168b )	6.3	16.2	50	597	4590
Mud Lake	( P176 )	6.2	16.4	10	596	4586
Spruce Pond	( P1007c )	5.5	1.7	40	568	4565
Cranberry Lake	( P1015 )	6.2	9.7	10	574	4571
Forest Lake	( P1016 )	6.3	2.4	2	574	4572
Third Reservoir	( P150j )	4.7	0.7	2	576	4561
Sheppard Pond		7.9	32.8	2	564	4554
Breakneck Pond	( P150d )	4.6	----	0	575	4561
Lake Stahahe	( P1011 )	6.5	20.0		570	4565

Appendix B

Lakes Sampled by the Palisades Interstate Park Commission  
1982-1984

Bodyname	Number	pH	Alk. ppm	Hard. ppm	Cond. um/cm <sup>2</sup>	Date
Askoti Lake	P1003e	6.2	4.0		52	08/16/82
Askoti Lake	P1003e	6.4	6.0		52	09/24/82
Askoti Lake	P1003e	5.9	1.5	11		06/16/83
Askoti Lake	P1003e	6.4	3.0	10		08/11/83
Askoti Lake	P1003e	6.2	0.5			06/14/84
Askoti Lake	P1003e	6.5	1.0	9		08/20/84
Breakneck Pond	P150d	4.9	1.0		30	08/16/82
Breakneck Pond	P150d	5.0	0.0		29	09/24/82
Breakneck Pond	P150d	4.7	1.0	9		06/16/83
Breakneck Pond	P150d	5.2	2.0	10		08/11/83
Breakneck Pond	P150d	4.7	0.0			06/14/84
Breakneck Pond	P150d	5.3	0.0	6		08/20/84
Echo Lake	P1014	6.3	3.0			06/14/84
Echo Lake	P1014	6.8	0.0	10		08/20/84
Hessian Lake	P184	7.3	12.0			06/14/84
Hessian Lake	P184	7.5	12.0	26		08/20/84
Island Pond	P1016a	5.2	1.0		39	08/16/82
Island Pond	P1016a	5.4	2.5		36	09/24/82
Island Pond	P1016a	4.8	0.0	11		06/16/83
Island Pond	P1016a	5.0	1.0	10		08/11/83
Island Pond	P1016a	4.9	0.0			06/14/84
Island Pond	P1016a	5.0	0.0	9		08/20/84
Lake Barnes	P193b	7.6	26.0		155	08/16/82
Lake Barnes	P193b	7.6	28.0		160	09/24/82
Lake Barnes	P192b	7.2	18.0	28		06/16/83
Lake Barnes	P192b	7.1	32.0	42		08/11/83
Lake Barnes	P192b	7.2	16.5			06/14/84
Lake Barnes	P192b	7.4	24.0	37		08/20/84
Lake Cohasset	P1014a	6.6	4.0		49	08/16/82
Lake Cohasset	P1014a	6.7	8.5		47	09/24/82
Lake Cohasset	P1014a	6.5	2.0	14		06/16/83
Lake Cohasset	P1014a	6.5	5.0	12		08/11/83
Lake Kanawauke	P1003	6.5	5.0		70	08/16/82
Lake Kanawauke	P1003	6.8	5.0		69	09/24/82
Lake Kanawauke	P1003	6.8	3.0	14		06/16/83
Lake Kanawauke	P1003	6.5	6.0	12		08/11/83
Lake Kanawauke	P1003	6.2	1.5			06/14/84
Lake Kanawauke	P1003	6.5	3.0	11		08/20/84
Lake Nawahunta	P184d	7.1	13.0			06/14/84
Lake Nawahunta	P184d	7.2	21.0	30		08/20/84
Lake Sebago	P1002e	6.9	7.0		65	08/16/82
Lake Sebago	P1002e	6.9	8.0		63	09/24/82
Lake Sebago	P1002e	6.7	3.0	14		06/16/83
Lake Sebago	P1002e	6.8	7.0	14		08/11/83
Lake Sebago	P1002e	6.0	2.5			06/14/84
Lake Sebago	P1002e	6.8	5.0	12		08/20/84

## Appendix B

### Lakes Sampled by the Palisades Interstate Park Commission 1982-1984 (cont.)

Bodyname	Number	pH	Alk. ppm	Hard. ppm	Cond. um/cm <sup>2</sup>	Date
Lake Skannatati	P1003d	6.1	3.0		45	08/16/82
Lake Skannatati	P1003d	6.7	6.0		43	09/24/82
Lake Skannatati	P1003d	5.9	0.5	10		06/16/83
Lake Skannatati	P1003d	6.4	4.0	10		08/11/83
Lake Skannatati	P1003d	5.8	1.0			06/14/84
Lake Skannatati	P1003d	6.4	0.0	9		08/20/84
Lake Skemonto	P1002f	6.0	2.0		32	08/16/82
Lake Skemonto	P1002f	6.3	1.5		33	09/24/82
Lake Skemonto	P1002f	5.7	0.5	12		06/16/83
Lake Skemonto	P1002f	6.1	3.0	16		08/11/83
Lake Skemonto	P1002f	5.6	0.5			06/14/84
Lake Skemonto	P1002f	6.0	1.0	9		08/20/84
Lake Stahahe	P1011	6.3	6.0		105	08/16/82
Lake Stahahe	P1011	6.7	11.0		105	09/24/82
Lake Stahahe	P1011	6.5	3.0	18		06/16/83
Lake Stahahe	P1011	6.6	12.0	6		08/11/83
Lake Stahahe	P1011	6.5	5.6			06/14/84
Lake Stahahe	P1011	6.6	6.0	16		08/20/84
Lake Te-ata	P188b	6.6	9.0		54	08/16/82
Lake Te-ata	P188b	7.0	8.0		57	09/24/82
Lake Te-ata	P188b	6.9	7.0	17		06/16/83
Lake Te-ata	P188b	6.7	9.0	19		08/11/83
Lake Tiorati	P152	6.5	4.0		52	08/16/82
Lake Tiorati	P152	6.7	8.0		51	09/24/82
Lake Tiorati	P152	6.5	2.0	14		06/16/83
Lake Tiorati	P152	6.5	7.0	14		08/11/83
Lake Tiorati	P152	6.7	3.0			06/14/84
Lake Tiorati	P152	6.9	3.0	11		08/20/84
Lake Wanoksink	P1002b	5.1	1.5		28	08/16/82
Lake Wanoksink	P1002b	5.8	1.5		27	09/24/82
Lake Welch	P150c	6.6	1.0		57	08/16/82
Lake Welch	P150c	6.6	6.0		53	09/24/82
Lake Welch	P150c	6.4	5.0	11		06/16/83
Lake Welch	P150c	6.4	5.0	15		08/11/83
Lake Welch	P150c	6.6	3.0			06/14/84
Lake Welch	P150c	6.4	3.0	12		08/20/84
Mine Lake	P188	6.7	6.0			06/14/84
Mine Lake	P188	6.8	6.0	14		08/20/84
Pine Meadow Lake	P1002d	5.1	1.0		28	08/16/82
Pine Meadow Lake	P1002d	5.4	1.0		28	09/24/82
Pine Meadow Lake	P1002d	4.5	0.0	6		06/16/83
Pine Meadow Lake	P1002d	4.8	1.0	8		08/11/83
Pine Meadow Lake	P1002d	4.7	0.0			06/14/84
Pine Meadow Lake	P1002d	4.9	0.0	6		08/20/84
Queensboro Lake	P184a	7.1	19.0			06/14/84
Queensboro Lake	P184a	6.9	34.0	48		08/20/84
Silver Mine Lake	P184c	7.2	6.0			06/14/84
Silver Mine Lake	P184c	7.4	9.0	18		08/20/84
Summit Lake	P193	6.4	4.5			06/14/84
Summit Lake	P193	6.3	4.0	16		08/20/84

Appendix B

Lakes Sampled by the Palisades Interstate Park Commission  
1982-1984  
(cont.)

Bodyname	Number	pH	Alk. ppm	Hard. ppm	Cond. um/cm <sup>2</sup>	Date
Turkey Hill Pond	P184b	6.6	5.0			06/14/84
Turkey Hill Pond	P184b	8.4	4.0	14		08/20/84
Upper Twin Lake	P190	6.6	8.0		45	08/16/82
Upper Twin Lake	P190	6.8	7.5		45	09/24/82
Upper Twin Lake	P190	6.7	6.5	17		06/16/83
Upper Twin Lake	P190	6.8	9.0	17		08/11/83
Upper Twin Lake	P190	6.4	4.0			06/14/84
Upper Twin Lake	P190	6.7	0.0	13		08/20/84
Wanoksink Lake	P1002c	4.7	1.0	9		06/16/83
Wanoksink Lake	P1002c	5.1	2.0	6		08/11/83
Wanoksink Lake	P1002c	5.0	0.0			06/14/84
Wanoksink Lake	P1002c	5.9	3.0	6		08/20/84

Appendix B

Data Obtained from United States Geological Survey  
Albany, New York

Bodyname	pH	Hard. ppm	Ca ppm	Mg ppm	Alk. ppm	SO4 ppm	Cl ppm	NO3 ppm	Date
Sterling Forest Lake	6.9	18	5.0	1.3	10	12	3.4	.01	03/27/75
Tuxedo Lake	6.8	28	8.2	1.9	20	12	2.6	.11	09/06/73
Secor Lake	7.4	63	18	4.3	48	16	21	.50	10/19/71
Secor Lake	4.7	32	8.2	2.7	25	13	8.6	.33	01/16/75
Lake Mahopac	5.2		15	3.6	41	14	26	.12	04/24/75
Oscawana Lake	26		7.5	1.8	17	12	6.5	.02	05/06/75
Camp Field Reservoir	7.2	54	14	4.7	40	17	16	.50	12/13/71
First Reservoir	6.0	11	3.1	.90	4	12	2.2	.03	01/10/72
Lake Deforest	7.6	93	28	5.6	74	24	37	.50	01/10/72
Cranberry Lake	7.3	38			36				08/31/59
Cranberry Lake	5.6	22			8				02/11/60
Cranberry Lake	6.0	21	5.8	1.6	12	16	2.2	.6	12/03/59
Cranberry Lake	7.4	38			35				07/12/60
Cranberry Lake	7.0	38			30				08/31/61
Mombasha Lake	6.8	34			24	14	3.0	.6	06/03/64
Mombasha Lake	6.5	28			15	17	3.5	.4	04/27/64
Echo Lake	6.2	26			10	15	2.5	.4	04/27/64
Echo Lake	6.7	35			18	15	3.0	1.0	06/03/64
Echo Lake	6.2	26			10	15	2.5	.4	04/27/64

Appendix B

Data Obtained from New York State Conservation Department  
and the Department of Environmental Conservation

Number	Bodyname	pH	Depth (ft.)	Alk. (ppm)	Date
P51	Secor Lake	9.0	B-7	30.2	08/19/36
P51	Secor Lake	8.8	S	26.2	08/19/36
P51	Secor Lake	7.0	B-10	28.4	08/19/36
P52	Kirk Lake	7.6	S	24.2	07/10/36
P52	Kirk Lake	7.5	5	22.2	07/10/36
P52	Kirk Lake	6.9	15	23.0	07/10/36
P52	Kirk Lake	6.7	B-23	30.0	07/10/36
P52	Kirk Lake	7.4	B-8	24.0	07/10/36
P52	Kirk Lake	6.9	B-15	23.8	07/10/36
P52	Kirk Lake	7.5	S	36.0	07/15/48
P52	Kirk Lake	7.5	12	36.0	07/15/48
P52	Kirk Lake	6.4	B-20	44.0	07/15/48
P52	Kirk Lake	7.5	S		07/15/48
P52	Kirk Lake	7.5	8		07/15/48
P52	Kirk Lake	7.2	B-13		07/15/48
P53	Lake Mahopac	7.8	5	25.6	07/09/36
P53	Lake Mahopac	7.8	15	23.6	07/09/36
P53	Lake Mahopac	7.4	25	25.0	07/09/36
P53	Lake Mahopac	7.1	30	26.0	07/09/36
P53	Lake Mahopac	6.8	45	29.0	07/09/36
P53	Lake Mahopac	6.9	B-62	30.0	07/09/36
P53	Lake Mahopac	7.9	10	26.0	07/09/36
P53	Lake Mahopac	8.0	S	27.0	07/09/36
P53	Lake Mahopac	7.4	B-9	23.4	07/09/36
P53	Lake Mahopac	7.8	B-20	24.6	07/09/36
P53	Lake Mahopac	7.0	S	47.8	09/04/70
P53	Lake Mahopac	6.0	25	47.8	09/04/70
P53	Lake Mahopac	6.0	55	47.8	09/04/70
P53	Lake Mahopac	7.5	S	41.0	08/02/77
P53	Lake Mahopac	7.5	15	41.0	08/02/77
P53	Lake Mahopac	7.5	20		08/02/77
P53	Lake Mahopac	7.2	24	41.0	08/02/77
P53	Lake Mahopac	6.8	30	41.0	08/02/77
P53	Lake Mahopac	6.6	40	41.0	08/02/77
P53	Lake Mahopac	6.6	50	41.0	08/02/77
P72	Pine Pond	6.6	B-10	16.0	08/28/36
P72	Pine Pond	6.8	S	16.0	08/28/36
P72	Pine Pond	6.6	B-15	16.0	08/28/36
P72	Pine Pond	6.6	B-5	16.0	08/28/36
P72	Pine Pond	6.6	B-10	16.0	08/28/36
P72	Pine Pond	6.8	S	16.0	08/28/36
P72	Pine Pond	6.6	B-15	16.0	08/28/36
P72	Pine Pond	6.6	B-5	16.0	08/28/36
P76	Boyd Corners Reservoir	7.8	S	21.8	07/22/36
P76	Boyd Corners Reservoir	7.6	15	21.0	07/22/36
P76	Boyd Corners Reservoir	6.7	30	19.4	07/22/36
P76	Boyd Corners Reservoir	6.6	40	20.6	07/22/36
P76	Boyd Corners Reservoir	7.8	10	20.6	07/22/36
P76	Boyd Corners Reservoir	7.1	B-19	22.6	07/22/36
P76	Boyd Corners Reservoir	7.9	10	21.8	07/22/36
P76	Boyd Corners Reservoir	6.9	20	21.0	07/22/36

## Appendix B

Data Obtained from New York State Conservation Department  
and the Department of Environmental Conservation  
(cont.)

Number	Bodyname	pH	Depth (ft.)	Alk. (ppm)	Date
P76	Boyd Corners Reservoir	6.6	B-32	20.6	07/22/36
P76	Boyd Corners Reservoir	6.6	B-45	22.8	07/22/36
P79	White Pond	7.2	B-8	13.8	08/24/36
P79	White Pond	7.2	B-10	10.2	08/24/36
P79	White Pond	7.0	B-10	12.2	08/24/36
P79	White Pond	7.0	S	4.6	08/24/36
P79	White Pond	6.8	B-14	14.0	08/24/36
P79	White Pond	8.0	?		07/02/58
P79	White Pond	8.0	?		07/02/58
P79	White Pond	7.5	S	21.0	06/09/78
P79	White Pond	7.4	5	21.0	06/09/78
P79	White Pond	7.4	10	21.0	06/09/78
P79	White Pond	7.3	15	21.0	06/09/78
P79	White Pond	7.3	S	21.0	06/23/78
P79	White Pond	7.3	5	21.0	06/23/78
P79	White Pond	7.3	10	21.0	06/23/78
P79	White Pond	7.3	15	21.0	06/23/78
P79	White Pond	7.6	S	21.0	07/19/78
P79	White Pond	7.6	5	21.0	07/19/78
P79	White Pond	7.6	10	21.0	07/19/78
P79	White Pond	7.4	B-14	21.0	07/19/78
P79	White Pond	7.3	S	21.0	08/14/78
P79	White Pond	7.2	5	21.0	08/14/78
P79	White Pond	7.2	10	21.0	08/14/78
P79	White Pond	7.2	B-14	21.0	08/14/78
P79	White Pond	7.2	S	21.0	05/29/79
P79	White Pond	7.2	5	21.0	05/29/79
P79	White Pond	7.2	10	21.0	05/29/79
P79	White Pond	7.2	13	21.0	05/29/79
P79	White Pond	7.8	S	27.0	06/18/79
P79	White Pond	7.8	5	21.0	06/18/79
P79	White Pond	7.8	10	27.0	06/18/79
P79	White Pond	7.8	15	21.0	06/18/79
P79	White Pond	7.6	S	27.0	07/13/79
P79	White Pond	7.6	5	27.0	07/13/79
P79	White Pond	7.6	10	27.0	07/13/79
P79	White Pond	6.8	B-14	27.0	07/13/79
P79	White Pond	7.0	S	27.0	08/14/79
P79	White Pond	7.0	5	27.0	08/14/79
P79	White Pond	7.0	10	27.0	08/14/79
P79	White Pond	7.0	15	27.0	08/14/79
P150c	Lake Welch	7.4	S	14.0	08/08/78
P150c	Lake Welch	7.4	10	14.0	08/08/78
P150c	Lake Welch	7.0	15	14.0	08/08/78
P150c	Lake Welch	6.5	20	14.0	08/08/78
P150c	Lake Welch	6.4	25	14.0	08/08/78
P150c	Lake Welch	6.8	B-28	34.0	08/08/78
P150d	Breakneck Pond	5.3	3		6-8/ /84
P150d	Breakneck Pond	6.6	S	8.6	09/08/36
P150d	Breakneck Pond	6.0	B-10	8.6	09/08/36
P150d	Breakneck Pond	6.0	B-11	8.6	09/08/36

Appendix B

Data Obtained from New York State Conservation Department  
and the Department of Environmental Conservation  
(cont.)

Number	Bodyname	pH	Depth (ft.)	Alk. (ppm)	Date
P150d	Breakneck Pond	6.6	S	8.6	09/08/36
P150d	Breakneck Pond	6.2	B-12	8.6	09/08/36
P150d	Breakneck Pond	5.8	1M	13.7	08/15/83
P152	Lake Tiorati	6.7	3		6-8/ /84
P152	Lake Tiorati	6.4	B-25	24.8	07/21/36
P152	Lake Tiorati	6.6	S	10.0	07/21/36
P152	Lake Tiorati	6.4	B-12	10.0	07/21/36
P152	Lake Tiorati	6.6	S	9.0	07/21/36
P152	Lake Tiorati	6.2	B-21	15.8	07/21/36
P152	Lake Tiorati	6.6	B-8	9.0	07/21/36
P152	Lake Tiorati	6.8	B-15	8.6	07/21/36
P152	Lake Tiorati	7.0	S	14.0	09/12/78
P152	Lake Tiorati	7.0	20	14.0	09/12/78
P152	Lake Tiorati	6.7	30	34.0	09/12/78
P167	Indian Lake	7.0	B-11	15.6	09/01/36
P167	Indian Lake	6.2	B-43	15.6	09/01/36
P167	Indian Lake	7.4	S	15.6	09/01/36
P167	Indian Lake	6.2	20	15.6	09/01/36
P167	Indian Lake	6.2	40	15.6	09/01/36
P167	Indian Lake	6.2	65	15.6	09/01/36
P167	Indian Lake	6.2	B-91	15.6	09/01/36
P167	Indian Lake	6.5	30	26.0	02/15/51
P167	Indian Lake	6.3	45	25.0	02/15/51
P167	Indian Lake	6.3	B-60	26.0	02/15/51
P168a	Canopus Lake	8.5	S	7	06/17/68
P168a	Canopus Lake	8.5		7	06/17/68
P168b	Pelton Pond			34.2	07/21/65
P168b	Pelton Pond	7.0		34.2	07/21/65
P168b	Pelton Pond	6.0		34.2	07/21/65
P168b	Pelton Pond	6.7	S	14.0	08/23/77
P168b	Pelton Pond	6.7	4		08/23/77
P168b	Pelton Pond	6.7	8		08/23/77
P168b	Pelton Pond	6.6	10	14.0	08/23/77
P168b	Pelton Pond	6.5	12	14.0	08/23/77
P168b	Pelton Pond	6.2	14	14.0	08/23/77
P168b	Pelton Pond	6.2	16	14.0	08/23/77
P168b	Pelton Pond	6.2	18	14.0	08/23/77
P168b	Pelton Pond	6.7	45	41	08/23/77
P168b	Pelton Pond	6.6	S		08/23/77
P168b	Pelton Pond	6.6	4		08/23/77
P168b	Pelton Pond	6.6	8		08/23/77
P168b	Pelton Pond	6.4	10		08/23/77
P168b	Pelton Pond	6.3	12		08/23/77
P168b	Pelton Pond	6.3	14		08/23/77
P168b	Pelton Pond	6.3	16		08/23/77
P168b	Pelton Pond	6.3	18		08/23/77
P168f	Beaver Pond	6.5		17.1	07/28/65
P168f	Beaver Pond	6.0		17.1	07/28/65
P168f	Beaver Pond	6.8	S	13.6	08/04/82
P168f	Beaver Pond	6.6	5	13.6	08/04/82
P168f	Beaver Pond	6.5	10	13.6	08/04/82

Appendix B

Data Obtained from New York State Conservation Department  
and the Department of Environmental Conservation  
(cont.)

Number	Bodyname	pH	Depth (ft.)	Alk. (ppm)	Date
P168g	Hidden Lake	6.0		34.2	07/15/65
P168g	Hidden Lake			34.2	07/15/65
P175	Oscawana Lake	7.8	S	11.6	07/16/36
P175	Oscawana Lake	7.7	10	10.8	07/16/36
P175	Oscawana Lake	6.8	B-18	12.0	07/16/36
P175	Oscawana Lake	7.8	S	11.6	07/16/36
P175	Oscawana Lake	7.8	5	11.2	07/16/36
P175	Oscawana Lake	7.7	15	11.0	07/16/36
P175	Oscawana Lake	6.4	B-25	10.6	07/16/36
P175	Oscawana Lake	8.0	5	13.0	07/16/36
P175	Oscawana Lake	7.8	10	11.2	07/16/36
P175	Oscawana Lake	7.6	B-20	12.6	07/16/36
P175	Oscawana Lake	7.0	17		08/27/62
P175	Oscawana Lake	6.4	20		08/27/62
P175	Oscawana Lake	6.2	22		08/27/62
P175	Oscawana Lake	6.3	B-25		08/27/62
P176	Mud Lake	6.8	1M	20.5	08/24/83
P176	Mud Lake	6.5	16	20.5	08/24/83
P177	Clear Lake	5.1	S		6-8/ /84
P177	Clear Lake	5.8	1M	13.7	08/24/83
P177	Clear Lake	5.7	26	13.7	08/24/83
P177	Clear Lake	5.5	70	13.7	08/24/83
P183	Bryant Pond	6.4	B-5	28.2	08/19/36
P183	Bryant Pond	7.0	S	29.4	08/19/36
P183	Bryant Pond	6.2	B-10	54.8	08/19/36
P184	Hessian Lake	6.8	B-10	12.0	07/31/36
P184	Hessian Lake	6.7	S	8.8	07/31/36
P184	Hessian Lake	6.7	19	8.4	07/31/36
P184	Hessian Lake	6.2	B-39	10.8	07/31/36
P184	Hessian Lake	6.7	B-20	8.8	07/31/36
P184aa	Stillwater Pond	5.9	B	12.0	06/24/42
P184aa	Stillwater Pond	6.0	15	8.0	06/24/42
P184aa	Stillwater Pond	6.7	S	6.0	06/24/42
P184aa	Stillwater Pond	6.0	B	10.0	06/26/42
P184aa	Stillwater Pond	6.2	15	8.0	06/26/42
P184aa	Stillwater Pond	6.0	18	9.0	06/26/42
P184aa	Stillwater Pond	6.7	10	8.0	06/26/42
P184aa	Stillwater Pond	6.3	13	8.0	06/26/42
P184aa	Stillwater Pond	6.7	S	6.0	06/26/42
P184aa	Stillwater Pond	6.0	B	32.0	06/27/42
P184aa	Stillwater Pond	6.0	24	23.0	06/27/42
P184aa	Stillwater Pond	6.1	18	12.0	06/27/42
P184aa	Stillwater Pond	6.3	15	10.0	06/27/42
P184aa	Stillwater Pond	6.7	10	7.0	06/27/42
P184aa	Stillwater Pond	6.8	S	6.0	06/27/42
P184aa	Stillwater Pond	6.4	26	12.5	07/17/51
P184aa	Stillwater Pond	6.3	20		07/17/51
P184aa	Stillwater Pond	6.5	15	12.0	07/17/51
P184aa	Stillwater Pond	7.0	10	8.0	07/17/51
P184aa	Stillwater Pond	7.3	S	7.0	07/17/51
P184aa	Stillwater Pond	6.2	17	10.0	07/18/51

Appendix B

Data Obtained from New York State Conservation Department  
and the Department of Environmental Conservation  
(cont.)

Number	Bodyname	pH	Depth (ft.)	Alk. (ppm)	Date
P184aa	Stillwater Pond	6.8	9	8.0	07/18/51
P184aa	Stillwater Pond	7.2	S	6.0	07/18/51
P184aa	Stillwater Pond	6.4	10		03/05/62
P184aa	Stillwater Pond	6.4	20		03/05/62
P184aa	Stillwater Pond	6.4	29		03/05/62
P184aa	Stillwater Pond	6.3	5		08/27/62
P184aa	Stillwater Pond	6.0	17.5		08/27/62
P184aa	Stillwater Pond	6.0	22		08/28/62
P184aa	Stillwater Pond	6.0	25		08/28/62
P184aa	Stillwater Pond	6.0	B-28		08/28/62
P184aa	Stillwater Pond	5.0	20		03/10/66
P184aa	Stillwater Pond	6.8	6	13.7	07/25/77
P184aa	Stillwater Pond	6.5	16	13.7	07/25/77
P184aa	Stillwater Pond	6.3	20	13.7	07/25/77
P184aa	Stillwater Pond	6.3	25	20.5	07/25/77
P184aa	Stillwater Pond	6.3	29	20.5	07/25/77
P184b	Turkey Hill Pond	6.2	B-17	54.0	07/25/36
P184b	Turkey Hill Pond	6.4	S	15.6	07/25/36
P184b	Turkey Hill Pond	6.2	B-21	46.4	07/25/36
P184c	Silver Mine Lake		B-13	17.8	07/23/36
P184c	Silver Mine Lake		B-18	18.0	07/23/36
P184c	Silver Mine Lake		B-17	22.0	07/23/36
P184c	Silver Mine Lake		B-8	18.0	07/23/36
P184c	Silver Mine Lake		S	16.6	07/23/36
P184c	Silver Mine Lake		B-19	31.8	07/23/36
P184c	Silver Mine Lake	6.7	5	10.0	03/11/70
P184c	Silver Mine Lake	6.2	B-23	15.0	03/11/70
P184c	Silver Mine Lake	7.0	5	15.0	07/16/70
P184c	Silver Mine Lake	7.0	12	15.0	07/16/70
P184c	Silver Mine Lake	6.5	17	25.0	07/16/70
P184c	Silver Mine Lake	6.8	B-24	75.0	07/16/70
P184c	Silver Mine Lake	7.2	S	10.0	08/06/71
P184c	Silver Mine Lake	7.0	15	15.0	08/06/71
P184c	Silver Mine Lake	6.5	20	50.0	08/06/71
P184c	Silver Mine Lake	6.7	B-25	80.0	08/06/71
P184d	Lake Nawahunta	7.0	S	14.8	06/25/36
P184d	Lake Nawahunta	6.8	B-7	18.0	06/25/36
P184d	Lake Nawahunta	7.0	B-5	15.2	06/25/36
P188a	Lake Massawippa	6.0	B-16	71.4	07/28/36
P188a	Lake Massawippa	6.8	S	20.2	07/28/36
P188a	Lake Massawippa	6.8	B-10	22.6	07/28/36
P188b	Lake Te-ata	6.4	B-15	13.0	07/28/36
P188b	Lake Te-ata	6.8	S	10.4	07/28/36
P188b	Lake Te-ata	6.6	B-33	25.6	07/28/36
P188b	Lake Te-ata	6.4	B-31	45.0	07/28/36
P189	Lower Twin Lake	6.8	S	14.6	07/27/36
P189	Lower Twin Lake	6.2	B-35	15.0	07/27/36
P189	Lower Twin Lake	6.2	B-20	9.6	07/27/36
P189	Lower Twin Lake	6.4	B-11	9.8	07/27/36
P190	Upper Twin Lake	6.8	S	9.6	07/27/36
P190	Upper Twin Lake	6.2	M-25	9.6	07/27/36

Appendix B

Data Obtained from New York State Conservation Department  
and the Department of Environmental Conservation  
(cont.)

Number	Bodyname	pH	Depth (ft.)	Alk. (ppm)	Date
P190	Upper Twin Lake	6.2	B-50	14.0	07/27/36
P190	Upper Twin Lake	6.8	B-10	13.8	07/27/36
P192b	Lake Barnes	6.8	B-5	21.0	07/28/36
P192b	Lake Barnes	7.2	S	25.2	07/28/36
P192b	Lake Barnes	6.4	B-9	25.8	07/28/36
P193	Summit Lake	6.2	B-16	9.6	07/27/36
P193	Summit Lake	6.4	S	9.6	07/27/36
P193	Summit Lake	6.2	B-28	27.6	07/27/36
P193a	Brooks Lake	6.6	B-8	47.2	08/04/36
P193a	Brooks Lake	9.4	S	38.2	08/04/36
P193a	Brooks Lake	6.6	B-9	46.8	08/04/36
P345	Beacon Reservoir	5.0	S		6-8/ /84
P345e		7.8	B-5	106.0	09/01/36
P345e		7.6	B-11	101.0	09/01/36
P345e		8.0	S	98.8	09/01/36
P345e		8.0	B-7	85.5	09/01/36
P352	Sylvan Lake	8.6	S	114.4	08/26/36
P352	Sylvan Lake	8.6	10	115.0	08/26/36
P352	Sylvan Lake	8.4	20	119.0	08/26/36
P352	Sylvan Lake	8.2	30	119.8	08/26/36
P352	Sylvan Lake	8.2	40	127.0	08/26/36
P352	Sylvan Lake	7.6	50	127.0	08/26/36
P352	Sylvan Lake	7.6	60	127.0	08/26/36
P352	Sylvan Lake	7.6	70	127.0	08/26/36
P352	Sylvan Lake	7.6	80	127.0	08/26/36
P352	Sylvan Lake	7.6	90	127.0	08/26/36
P352	Sylvan Lake	7.6	100	127.0	08/26/36
P352	Sylvan Lake	7.6	110	127.0	08/26/36
P352	Sylvan Lake	7.6	B-124	127.0	08/26/36
P352	Sylvan Lake	7.6	B-100	127.0	08/26/36
P352	Sylvan Lake	7.8	B-75	127.0	08/26/36
P352	Sylvan Lake	8.4	B-25	118.8	08/26/36
P352	Sylvan Lake	8.0	B-50	125.0	08/26/36
P352	Sylvan Lake	7.6	S		08/22/61
P352	Sylvan Lake	7.4	20		08/22/61
P352	Sylvan Lake	7.4	30		08/22/61
P352	Sylvan Lake	7.4	50		08/22/61
P352	Sylvan Lake	7.4	65		08/22/61
P352	Sylvan Lake	7.2	70		08/22/61
P352	Sylvan Lake	7.0	B-80		08/22/61
P352	Sylvan Lake	9.5	S	116.3	07/23/68
P352	Sylvan Lake	9.5	B-86	116.3	07/23/68
P352	Sylvan Lake	8.5	5	130.0	08/21/81
P352	Sylvan Lake	8.6	10	107.0	08/21/81
P352	Sylvan Lake	8.6	20	130.0	08/21/81
P352	Sylvan Lake	8.6	30	130.0	08/21/81
P352	Sylvan Lake	8.0	40	144.0	08/21/81
P352	Sylvan Lake	7.7	60	137.0	08/21/81
P352	Sylvan Lake	7.7	80	144.0	08/21/81
P352	Sylvan Lake	7.4	110	150.0	08/21/81
P352	Sylvan Lake	7.4	120	164.0	08/21/81

Appendix B

Data Obtained from New York State Conservation Department  
and the Department of Environmental Conservation  
(cont.)

Number	Bodyname	pH	Depth (ft.)	Alk. (ppm)	Date
P352a	Iron Mine Lake	8.0.	M-20	156.2	08/31/36
P352a	Iron Mine Lake	7.6	B-40	158.0	08/31/36
P352a	Iron Mine Lake	8.0	20	156.0	08/31/36
P352a	Iron Mine Lake	7.4	40	154.6	08/31/36
P352a	Iron Mine Lake	7.4	B-58	158.0	08/31/36
P352a	Iron Mine Lake	8.2	S	125.0	08/31/36
P352a	Iron Mine Lake	7.4	B-33	156.0	08/31/36
P353	Whaley Lake	7.4	S	19.6	07/24/36
P353	Whaley Lake	7.4	15	19.0	07/24/36
P353	Whaley Lake	6.7	25	18.6	07/24/36
P353	Whaley Lake	6.7	B-34	39.0	07/24/36
P353	Whaley Lake	7.3	5	20.6	07/24/36
P353	Whaley Lake	7.3	B-13	20.0	07/24/36
P353	Whaley Lake	7.5	5	21.2	07/24/36
P353	Whaley Lake	7.5	B-11	21.0	07/24/36
P1002b	Lake Wanoksink	5.3	3		6-8/ /84
P1002d	Pine Meadow Lake	5.0	3		6-8/ /84
P1002d	Pine Meadow Lake	6.3	S	9.8	08/07/36
P1002d	Pine Meadow Lake	6.0	B-16	41.0	08/07/36
P1002d	Pine Meadow Lake	6.0	B-14	44.0	08/07/36
P1002d	Pine Meadow Lake	6.2	B-9	9.4	08/07/36
P1002d	Pine Meadow Lake	5.9	1M	13.7	08/17/83
P1002e	Lake Sebago	6.0	B-16	8.0	07/16/36
P1002e	Lake Sebago	6.0	S	6.0	07/16/36
P1002e	Lake Sebago	6.0	B-8	7.8	07/16/36
P1002e	Lake Sebago	6.0	B-7	8.0	07/16/36
P1002e	Lake Sebago	6.6	S	5.8	07/17/36
P1002e	Lake Sebago	6.4	B-28	5.8	07/17/36
P1002e	Lake Sebago	6.4	M-14	44.4	07/17/36
P1002e	Lake Sebago	6.4	B-22	28.0	07/17/36
P1002e	Lake Sebago	6.4	B-4	7.8	07/17/36
P1002e	Lake Sebago	7.2	S	14	09/05/78
P1002e	Lake Sebago	7.1	18	14	09/05/78
P1002e	Lake Sebago	6.9	22	14	09/05/78
P1002e	Lake Sebago	6.7	25	14	09/05/78
P1002f	Lake Skemonto	6.2	3		6-8/ /84
P1002f	Lake Skemonto	6.4	1M	20.5	08/16/83
P1002f	Lake Skemonto	6.0	16	20.5	08/16/83
P1002f	Lake Skemonto	5.9	20	20.5	08/16/83
P1003	Lower Lake Kanawauke	6.6	S	7.6	07/20/36
P1003	Lower Lake Kanawauke	6.2	B-18	14.0	07/20/36
P1003	Lower Lake Kanawauke	6.6	B-9	13.2	07/20/36
P1003a	Middle Lake Kanawauke	6.2	B-7	12.6	07/20/36
P1003a	Middle Lake Kanawauke	6.7	S	1.6	07/20/36
P1003a	Middle Lake Kanawauke	6.2	B-9	12.2	07/20/36
P1003b	Upper Lake Kanawauke	6.4	S	6.2	07/21/36
P1003b	Upper Lake Kanawauke	6.4	M-18	5.0	07/21/36
P1003b	Upper Lake Kanawauke	6.0	B-36	9.4	07/21/36
P1003e	Lake Askoti	6.6	3		6-8/ /84
P1003d	Lake Skannatati	6.5	3		6-8/ /84
P1003d	Lake Skannatati	6.0	S	20.0	08/18/49

Appendix B

Data Obtained from New York State Conservation Department  
and the Department of Environmental Conservation  
(cont.)

Number	Bodyname	pH	Depth (ft.)	Alk. (ppm)	Date
P1003d	Lake Skannatati	6.0	B-5	20.0	08/18/49
P1003d	Lake Skannatati	6.1	S	18.0	08/18/49
P1003d	Lake Skannatati	6.0	M-9	19.0	08/18/49
P1003d	Lake Skannatati	6.0	14	20.0	08/18/49
P1003d	Lake Skannatati	6.0	B-16	48.0	08/18/49
P1003d	Lake Skannatati	6.4	1M	6.8	08/15/83
P1003e	Askoti Lake	6.3	18		08/20/47
P1003e	Askoti Lake	6.0	15		08/20/47
P1003e	Askoti Lake	6.3	10		08/20/47
P1003e	Askoti Lake	6.4	5		08/20/47
P1003e	Askoti Lake	6.1	S		08/20/47
P1003e	Askoti Lake	6.1	15		08/10/48
P1003e	Askoti Lake	6.0	20		08/10/48
P1003e	Askoti Lake	6.0	S	15.0	08/19/49
P1003e	Askoti Lake	6.0	M-12	17.0	08/19/49
P1003e	Askoti Lake	6.0	18	18.0	08/19/49
P1003e	Askoti Lake	6.0	19	26.0	08/19/49
P1003e	Askoti Lake	6.0	20	36.0	08/19/49
P1003e	Askoti Lake	6.0	B-23	93.0	08/19/49
P1003e	Askoti Lake	6.6	1M	20.5	08/15/83
P1003e	Askoti Lake	6.1	20	13.7	08/15/83
P1005	We-Wah Lake	8.5	S	23.2	08/20/36
P1005	We-Wah Lake	8.5	10	23.4	08/20/36
P1005	We-Wah Lake	6.7	B-15	28.0	08/20/36
P1007	Tuxedo Lake	7.3	10	15.0	08/20/36
P1007	Tuxedo Lake	7.3	20	15.0	08/20/36
P1007	Tuxedo Lake	7.0	B-32	15.0	08/20/36
P1007	Tuxedo Lake	7.5	S	15.8	08/20/36
P1007	Tuxedo Lake	7.5	10	15.8	08/20/36
P1007	Tuxedo Lake	7.5	20	15.4	08/20/36
P1007	Tuxedo Lake	7.2	30	15.0	08/20/36
P1007	Tuxedo Lake	6.5	40	15.0	08/20/36
P1007	Tuxedo Lake	6.5	50	17.0	08/20/36
P1007	Tuxedo Lake	6.7	B-60	31.0	08/20/36
P1007	Tuxedo Lake	6.6		15.0	08/20/36
P1007	Tuxedo Lake	6.8		15.0	08/20/36
P1007	Tuxedo Lake	6.9		15.8	08/20/36
P1007c	Spruce Pond	6.4	B-4	5.8	08/05/36
P1007c	Spruce Pond	6.2	S	4.4	08/05/36
P1007c	Spruce Pond	6.0	B-16	27.4	08/05/36
P1007c	Spruce Pond	5.6	1M	20.5	08/16/83
P1007c	Spruce Pond	5.9	16	27.4	08/16/83
P1011	Lake Stahahe	6.6	B-7	10.6	07/23/36
P1011	Lake Stahahe	6.4	B-11	10.6	07/23/36
P1011	Lake Stahahe	6.6	B-8	10.6	07/23/36
P1011	Lake Stahahe	6.6	S	10.6	07/23/36
P1011	Lake Stahahe	6.4	B-11	10.4	07/23/36
P1014	Echo Lake	7.0	B-3	20.6	07/30/36
P1014	Echo Lake	7.2	S	20.6	07/30/36
P1014	Echo Lake	6.4	B-8	24.2	07/30/36
P1014	Echo Lake	7.0	B-4	20.2	07/30/36

Appendix B

Data Obtained from New York State Conservation Department  
and the Department of Environmental Conservation  
(cont.)

Number	Bodyname	pH	Depth (ft.)	Alk. (ppm)	Date
P1014	Echo Lake	7.0	1M	20.5	08/23/83
P1014a	Lower Lake Cohasset	6.6	B-7	10.0	07/24/36
P1014a	Lower Lake Cohasset	7.0	S	11.0	07/24/36
P1014a	Lower Lake Cohasset	6.3	B-24	10.6	07/24/36
P1014b	Upper Lake Cohasset	6.0	B-10	10.0	07/24/36
P1014b	Upper Lake Cohasset	6.2	B-13	16.6	07/24/36
P1014b	Upper Lake Cohasset	6.8	S	9.8	07/24/36
P1014b	Upper Lake Cohasset	6.8	B-8	8.8	07/24/36
P1015	Cranberry Lake	6.0	B-16	19.8	07/30/36
P1015	Cranberry Lake	6.8	S	9.6	07/30/36
P1015	Cranberry Lake	6.8	B-11	5.6	07/30/36
P1015	Cranberry Lake	6.8	B-11	8.2	07/30/36
P1015	Cranberry Lake	6.9	1M		08/23/83
P1015	Cranberry Lake	6.7	12		08/23/83
P1016	Forest Lake	6.6	B-17	8.6	07/29/36
P1016	Forest Lake	6.8	B-30	3.0	07/29/36
P1016	Forest Lake	6.8	B-9	8.6	07/29/36
P1016	Forest Lake	6.7	S	6.0	07/29/36
P1016	Forest Lake	6.6	M-26	8.8	07/29/36
P1016	Forest Lake	6.0	B-52	11.8	07/29/36
P1016	Forest Lake	6.8	1M	20.5	08/23/83
P1016	Forest Lake	6.6	22	20.5	08/23/83
P1016	Forest Lake	6.0	40	20.5	08/23/83
P1016a	Island Pond	5.1	3		6-8/ /84
P1016a	Island Pond	6.0	S	4.8	07/22/36
P1016a	Island Pond	5.6	20	4.0	07/22/36
P1016a	Island Pond	5.6	40	3.0	07/22/36
P1016a	Island Pond	5.5	60	4.0	07/22/36
P1016a	Island Pond	5.5	80	4.0	07/22/36
P1016a	Island Pond	5.5	100	4.0	07/22/36
P1016a	Island Pond	5.5	B-123	4.4	07/22/36
P1016a	Island Pond	6.0	S	5.4	07/22/36
P1016a	Island Pond	5.6	M-25	5.0	07/22/36
P1016a	Island Pond	5.5	B-50	5.6	07/22/36
P1016a	Island Pond	6.0	5		07/27/60
P1016a	Island Pond	6.0	45		07/27/60
P1016a	Island Pond	6.0	95		07/27/60
P1016a	Island Pond	6.2	?	8.5	07/15/75
P1016a	Island Pond	6.0	15	8.5	07/15/75
P1016a	Island Pond	5.7	45	8.5	07/15/75
P1016a	Island Pond	5.7	60	8.5	07/15/75
P1016a	Island Pond	5.7	105	8.5	07/15/75
P1021	Round Pond	6.5	5		09/10/65
P1021	Round Pond	6.5	27		09/10/65
P1021	Round Pond	9.3	S	20	07/20/77
P1021	Round Pond	7.3	10	20	07/20/77
P1021	Round Pond	6.7	13	27	07/20/77
P1021	Round Pond	6.5	20	34	07/20/77
P1021	Round Pond	6.5	B-25	62	07/20/77
P1025	Sterling Lake	7.0	S	4.0	09/19/36
P1025	Sterling Lake	7.0	15	4.0	09/19/36

Appendix B

Data Obtained from New York State Conservation Department  
and the Department of Environmental Conservation  
(cont.)

Number	Bodyname	pH	Depth (ft.)	Alk. (ppm)	Date
P1025	Sterling Lake	6.9	30	4.0	09/19/36
P1025	Sterling Lake	6.5	45	4.0	09/19/36
P1025	Sterling Lake	6.4	75	4.0	09/19/36
P1025	Sterling Lake	6.4	90	4.0	09/19/36
P1025	Sterling Lake	6.4	B-110	4.0	09/19/36
P1025	Sterling Lake	7.0	10	4.0	09/19/36
P1025	Sterling Lake	7.0	25	4.0	09/19/36
P1025	Sterling Lake	6.6	B-40	4.0	09/19/36
P1026	Greenwood Lake	8.9	S	10.0	08/11/36
P1026	Greenwood Lake	9.0	10	10.2	08/11/36
P1026	Greenwood Lake	8.6	20	10.4	08/11/36
P1026	Greenwood Lake	6.6	30	10.4	08/11/36
P1026	Greenwood Lake	6.4	40	16.0	08/11/36
P1026	Greenwood Lake	6.5	50	18.0	08/11/36
P1026	Greenwood Lake	6.5	B-57	19.0	08/11/36
P1026	Greenwood Lake	7.0	20	11.0	08/11/36
P1026	Greenwood Lake	6.6	30	11.0	08/11/36
P1026	Greenwood Lake	6.6	B-43	20.4	08/11/36
P1026	Greenwood Lake	7.2	B-3	29.0	08/14/36
P1026	Greenwood Lake	7.3	B-2	29.0	08/14/36
P1026	Greenwood Lake	7.9	B-3	12.0	08/14/36
P1026	Greenwood Lake	7.6	S	11.6	08/14/36
P1026	Greenwood Lake	7.6	B-5	11.6	08/14/36
P1026	Greenwood Lake	8.6	S	10.0	08/14/36
P1026	Greenwood Lake	7.4	B-8	10.6	08/14/36
P1026	Greenwood Lake	8.8	10	10.0	08/14/36
P1026	Greenwood Lake	8.3	B-17	10.0	08/14/36
P1026	Greenwood Lake	7.4	B-6	11.6	08/14/36
P1026	Greenwood Lake	9.0	S	10.0	08/15/36
P1026	Greenwood Lake	8.6	15	9.0	08/15/36
P1026	Greenwood Lake	6.8	25	9.4	08/15/36
P1026	Greenwood Lake	6.4	35	12.0	08/15/36
P1026	Greenwood Lake	6.4	B-39	16.0	08/15/36
P1026	Greenwood Lake	8.6	S	10.0	08/15/36
P1026	Greenwood Lake	7.7	B-10	10.8	08/15/36
P1026	Greenwood Lake	9.0	S	11.0	08/15/36
P1026	Greenwood Lake	8.6	B-7	10.2	08/15/36
P1026	Greenwood Lake	8.3	B-3	26.0	08/15/36
P1026	Greenwood Lake	6.6	B-2	32.0	08/21/36
P1026	Greenwood Lake	6.0	S	15.5	02/21/51
P1026	Greenwood Lake	6.0	20	17.0	02/21/51
P1026	Greenwood Lake	6.0	B-40	23.0	02/21/51
P1026	Greenwood Lake	7.3	S	33.0	09/05/51
P1026	Greenwood Lake	6.8	B-9	35.0	09/05/51
P1026	Greenwood Lake	6.3	25	34.0	09/05/51
P1026	Greenwood Lake	6.1	30	30.0	09/05/51
P1026	Greenwood Lake	6.7	B-40	36.0	09/05/51
P1026	Greenwood Lake	6.6	25	32.0	09/05/51
P1026	Greenwood Lake	6.3	30	37.0	09/05/51
P1026	Greenwood Lake	6.6	40	42.0	09/05/51
P1026	Greenwood Lake	6.6	B-55	45.0	09/05/51

## Appendix B

Data Obtained from New York State Conservation Department  
 and the Department of Environmental Conservation  
 (cont.)

Number	Bodyname	pH	Depth (ft.)	Alk. (ppm)	Date
P1026	Greenwood Lake	7.5	S	30	08/18/71
P1026	Greenwood Lake	7.0	9	15	08/18/71
P1026	Greenwood Lake	7.5	S	15	08/18/71
P1026	Greenwood Lake	7.0	22	20	08/18/71
P1026	Greenwood Lake	7.3	S	25	08/18/71
P1026	Greenwood Lake	6.5	30	25	08/18/71
P1026	Greenwood Lake	6.7	B-42	35	08/18/71
P1026	Greenwood Lake	7.5	S	20	08/18/71
P1026	Greenwood Lake	7.0	20	20	08/18/71
P1026	Greenwood Lake	6.8	26	20	08/18/71
P1026	Greenwood Lake	6.8	28	20	08/18/71
P1026	Greenwood Lake	6.7	30	20	08/18/71
P1026	Greenwood Lake	6.7	40	30	08/18/71
P1026	Greenwood Lake	7.5	S	30	08/18/71
P1026	Greenwood Lake	7.0	10	15	08/18/71
P1026	Greenwood Lake	7.5	S	15	08/18/71
P1026	Greenwood Lake	7.0	22	20	08/18/71
P1026	Greenwood Lake	7.0	25		08/18/71
P1026	Greenwood Lake	6.5	28		08/18/71
P1026	Greenwood Lake	8.4	S	20.5	08/09/72
P1026	Greenwood Lake	8.3	10	27.4	08/09/72
P1026	Greenwood Lake	6.6	25	27.4	08/09/72
P1026	Greenwood Lake	6.5	30	27.4	08/09/72
P1026	Greenwood Lake	6.8	40	40.0	08/09/72

Appendix B

Additional Data from the Department of Environmental Conservation  
Summer 1983

Bodyname	Number	pH	Alk. ppm	Cond. um/cm <sup>2</sup>	ph(hach)	Depth(ft)
Beacon Reservoir	P345	4.8	-0.74	43.0	5.0	S-3
Breakneck Pond	P150d	5.6	0.46	31.4	5.8	S-3
Clear Lake	P177	5.3	0.12	42.7	5.8	S-3
Clear Lake	P177	5.5	0.26	42.3	5.7	26
Clear Lake	P177	5.9	1.51	42.7	5.5	B-70
Cranberry Lake	P1015	6.2	7.28	45.0	6.9	S-3
Echo Lake	P1014	7.2	12.00	59.1	7.0	S-3
Forest Lake	P1016	6.7	4.10	42.7	6.8	S-3
Forest Lake	P1016	6.7	4.20	42.9	6.6	22
Forest Lake	P1016	7.0	7.49	46.1	6.0	B-38
Island Pond	P1016a	5.4	0.44	42.0	5.5	S-3
Island Pond	P1016a	5.2	0.26	43.1	5.2	10
Island Pond	P1016a	5.4	0.52	50.0	5.1	B-90
Lake Askoti	P1003e	6.6	3.19	47.8		S-3
Lake Skannatati	P1003d	6.6	3.87	46.6	6.4	S-3
Lake Skemonto	P1002f	6.3	1.62	36.3	6.4	S-3
Lake Skemonto	P1002f	6.3	1.85	37.3	6.0	16
Lake Skemonto	P1002f	6.7	4.14	38.3	5.9	B-20
Melzingah Reservoir	P331	7.3	12.56	72.3	6.9	S-3
Mud Pond	P176	7.2	9.07	58.1		S-3
Mud Pond	P176	7.1	8.94	59.1		B-16
Pine Meadow Lake	P1002d	5.3	-0.03	32.2	5.9	S-3
Spruce Pond	P1007c	6.1	1.91	39.5	5.6	S-3
Spruce Pond	P1007c	7.0	9.16	53.1	5.9	B-16
Third Reservoir	P150j	5.0	-0.30	30.9	5.7	S-3

\* Alkalinites in ueq/l were multiplied by .06102 to give ppm as CaCO<sub>3</sub>.

Appendix C

Alphabetical Gazetteer of Lakes, Ponds, and Reservoirs  
of the Hudson Highlands

\*

Bodyname	Number	Elev.	UTMX	UTMY
Adolphs Pond	P204b	850	585	4582
Aleck Meadow Reservoir	P222d	1030	582	4584
Ambreys Pond	P150m	270	582	4566
Amdur Park Lake	P1017e	848	570	4578
Arthurs Pond	P222e	1230	582	4583
Askoti Lake	P1003e	911	576	4566
Ballard Lake	P64a	909	608	4596
Barnes Lake	P192b	894	576	4575
Barrett Pond	P71	777	605	4587
Barrett Pond	P345i	375	590	4591
Beacon Reservoir	P345	1285	588	4593
Beacon Reservoir (Cargill)	P345a	882	593	4594
Black Pond	?	703	604	4596
Blendale Lake	P1016g	890	570	4572
Elythea Lake	P1016k	870	569	4571
Bog Meadow Pond	P200	1141	583	4582
Boyd Corners Reservoir	P76	581	604	4590
Breakneck Pond	P150d	1085	575	4562
Breeds Pond	P220a	430	582	4587
Broccy Creek Reservoir	P165f	537	587	4575
Brook Hollow	P188e	690	579	4576
Brooks Lake	P193a	150	584	4576
Browns Pond	P65	701	611	4595
Bryant Pond	P183	670	600	4581
Bull Pond	P192	1021	577	4577
Camp Field Reservoir	P163a	370	592	4573
Canopus Lake	P168a	914	597	4591
Cat Pond	P206a	630	590	4585
Catfish Pond	P207b	710	592	4584
Cheesecote Pond	P148a	738	580	4562
China Pond	P75	768	605	4588
Clear Lake	P177	890	597	4567
Clear Pool	P75a	829	606	4590
Cold Spring Reservoir (lower)	P217	626	588	4591
Cold Spring Reservoir (upper)	P218	647	588	4591
Coronet Lake	P1017d	710	570	4577
Cortland Lake	P165b	96	591	4576
Cragston Lake	P197	310	585	4578
Cranberry Lake	P1015	1015	574	4571
Cranberry Pond	P185	864	583	4578
Cranberry Pond	P1001	510	567	4554
Cromwell Lake	P231	750	571	4577
Crystal Lake	P197b	150	586	4578
Curry Pond	P198b	650	588	4577
Dales Pond	P210	510	589	4585
Dassori Pond	P204a	710	586	4581
Delafield Pond	P211	310	586	4583
Denton Lake	P89j	745	612	4597
Dickiebusch Lake	P165e	90	588	4574

\* Universal Transect Mercator coordinates

Appendix C

Alphabetical Gazetteer of Lakes, Ponds, and Reservoirs  
of the Hudson Highlands  
(cont.)

Bodyname	Number	Elev.	UTMX	UTMY
Duck Pond	P207c	890	593	4586
Eagle Lake	P1021	450	564	4556
Echo Lake	P1014	709	573	4569
Filers Lake	P231d	530	575	4576
First Reservoir	P150a	680	579	4563
Forest Lake	P1016	1050	575	4572
Forest Road Lake	P1017g	620	569	4576
Garrison Pond	P195a	130	585	4576
Gayhead Pond	P350	268	600	4601
Greenwood Lake	P1026	630	557	4559
Hessian Lake	P184	155	584	4574
Hillburn Reservoir	P999c	595	568	4553
Indian Lake	P167	493	593	4580
Island Pond	P1016a	970	572	4568
Jacox Pond	P216	409	590	4588
Jims Pond	P199b	1250	582	4582
John Pond	P76k	710	602	4594
Jordan Pond	P345cc	910	595	4589
Kirk Lake	P52	587	604	4582
Kloibers Pond	P1010b	982	566	4568
Lake Alice	P165a	410	589	4577
Lake Antrim	P995b	295	572	4551
Lake Askoti	P1003c	911	575	4566
Lake Barnes	P192b	894	576	4575
Lake Boyce	P159a	250	583	4566
Lake Celeste	P166	437	592	4580
Lake Cohasset	P1014a	863	574	4570
Lake Dutchess	P65a	728	611	4597
Lake Elizabeth	P203	590	589	4580
Lake Frederick	P231f	712	576	4576
Lake Georgina	P192a	1104	576	4577
Lake Gilead	P61	497	611	4584
Lake Gleneida	P74	505	610	4586
Lake Kanawauke	P1003a	827	574	4564
Lake Massawippa	P188a	830	577	4575
Lake Nawahunta	P184d	781	578	4572
Lake Peekskill	P171	291	593	4577
Lake Sapphire	P1016i	850	570	4571
Lake Sebago	P1002e	771	572	4561
Lake Skannatati	P1003d	889	575	4566
Lake Skemonto	P1002f	829	573	4563
Lake Stahahe	P1011	710	570	4565
Lake Surprise	P220	711	587	4590
Lake Te-ata	P188b	862	577	4574
Lake Tibet	P183e	816	602	4590
Lake Tiorati	P152	1032	576	4568
Lake Valhalla	P345k	610	589	4592
Lake Wanoksink	P1002b	1036	574	4559
Lake Welch	P150c	1010	577	4564
Lake Winape	P1009b	819	568	4570
Laths Pond	P206	630	590	4586

Appendix C

Alphabetical Gazetteer of Lakes, Ponds, and Reservoirs  
of the Hudson Highlands  
(cont.)

Bodyname	Number	Elev.	UTMX	UTMY
Lily Pond	P1003f	990	574	4563
Little Buck Mountain Pond	P76f	827	607	4593
Little Cedar Pond	P1022	1030	560	4559
Little Dam Lake	P1008	719	568	4568
Little Long Pond	?	827	573	4565
Little Whaley Lake	P354	917	612	4602
Loch Lyall	P207a	509	591	4585
Lockwood Pond	P70	845	605	4587
Long Pond	P186	752	581	4580
Lower Cohasset Lake	P1014a	863	574	4570
Lower Lake Kanawauke	P1003	797	573	4563
Lower Twin Lake	P189	864	577	4574
Ludington Lake	P64h	1035	608	4600
Lusk Reservoir	P204	327	587	4582
Melzingah Reservoir	P331	430	586	4591
Middle Lake Kanawauke	P1003a	827	574	4564
Mine Lake	P188	644	580	4578
Mombasha Lake	P1010	855	566	4570
Mountain Lake	P1004	750	567	4560
Mountain Lakes (east)	P1017c	570	570	4575
Mountain Lakes (west)	P1017b	570	570	4575
Mud Lake	P176	750	597	4586
Nuclear Lake	P351j	758	613	4606
Oscawana Lake	P175	510	596	4583
Owl Lake	P151b	690	580	4567
Parce Pond	P1118	673	614	4603
Peckermans Pond	P232	493	574	4574
Pells Pond	P197a	170	586	4579
Pelton Pond	P168b	1010	598	4590
Penneywater Pond	P350a	245	599	4601
Pine Meadow Lake	P1002d	978	573	4558
Pine Pond	P72	600	608	4591
Popolopen Brook	P184e	10	584	4575
Popolopen Lake	P191	678	579	4578
Potake Pond	P1001a	618	566	4554
Prison Reservoir	P351h	521	612	4608
Queensboro Lake	P184a	453	581	4573
Ramapo River (pool)	P1002	350	568	4556
Reeves Pond	P208	750	592	4585
Roe Pond	P199c	210	586	4580
Round Lake	P1021	668	566	4574
Round Pond	P187	1038	582	4581
Sagamore Lake	P76j	656	602	4592
Sandy Beach Lake	P1021e	770	561	4557
Second Reservoir	P150b	948	578	4562
Seven Hills Lake	P77c	637	605	4593
Shadowmere Lake	P1016h	870	570	4571
Sheppard Pond	?	637	565	4554
Silver Mine Lake	P184c	715	579	4571
South Lake	P67e	788	608	4595

Appendix C

Alphabetical Gazetteer of Lakes, Ponds, and Reservoirs  
of the Hudson Highlands  
(cont.)

Bodyname	Number	Elev.	UTMX	UTMY
Sphagnum Pond	P222f	1250	581	4583
Spring Lake	P229e	470	574	4578
Spruce Pond	P1007c	731	568	4565
Spy Pond	P165c	110	590	4575
Sterling Forest Lake	P1021c	650	562	4557
Sterling Lake	P1025	750	562	4562
Stillwater Pond	P183aa	895	598	4588
Stillwell Lake	P187a	604	580	4578
Stump Pond	P63	689	611	4595
Summit Lake	P193	1067	575	4574
Sutherland Pond	P228	1246	580	4583
Sylvan Lake	P352	323	605	4607
Tamarack Pond	P222g	1305	581	4583
Third Reservoir	P150j	1076	577	4562
Tomkins Lake	P150i	405	585	4569
Turkey Hill Pond	P184b	610	580	4574
Tuxedo Lake	P1007	557	566	4560
Upper Cohasset Lake	P1014b	901	574	4569
Upper Cranberry Pond	P171b	530	594	4579
Upper Lake Cohasset	P1014b	901	574	4569
Upper Lake Kanawauke	P1003b	827	574	4564
Upper Reservoir	P223	977	583	4585
Upper Twin Lake	P190	898	577	4573
Wallace Pond	P165	168	589	4574
Wanoksink Lake	P1002c	1036	574	4559
We-Wah Lake	P1005	494	567	4563
Weise Pond	P345m	1090	592	4593
Westminster Lake	P89k	813	612	4597
Weyants Pond	P184h	550	581	4575
Whaley Lake	P353	705	611	4602
White Pond	P79	829	606	4594
Wiccopée Reservoir	P183a	723	599	4586
Willow Lake	P345u	390	593	4597

## Appendix C

Gazeteer of Unnamed Lakes, Ponds, and Reservoirs  
of the Hudson Highlands

Number	Elev.	UTMX	UTMY
P52d	675	612	4594
P52e	784	611	4594
P64b	975	610	4598
P64c	935	608	4599
P64d	815	608	4597
P64e	841	609	4599
P64f	825	609	4599
P64g	930	608	4599
P67a	635	609	4594
P67b	645	609	4594
P67d	783	608	4595
P72a	805	607	4593
P76a	884	606	4598
P76b	635	605	4591
P76c	825	606	4591
P76d	825	605	4591
P76e	725	606	4592
P76f	690	603	4592
P77	678	604	4590
P89f	715	613	4598
P89g	725	613	4598
P89h	690	613	4598
P89i	700	613	4598
P89l	700	613	4598
P89n	765	600	4600
P102b	905	614	4599
P146a	270	582	4563
P147	490	582	4564
P148b	430	580	4564
P150e	70	583	4565
P150f	90	583	4565
P150h	270	582	4567
P150j	310	583	4568
P150k	830	579	4565
P150n	250	583	4564
P159b	40	584	4565
P160a	50	587	4568
P161a	221	585	4567
P161b	7	585	4567
P161c	30	588	4569
P165d	410	592	4579
P167b	630	595	4585
P167c	810	595	4586
P168	310	595	4583
P168c	750	596	4587
P168f	870	595	4587
P168g	930	596	4588
P169a	290	591	4572
P169b	190	593	4575

Appendix C

Gazeteer of Unnamed Lakes, Ponds, and Reservoirs  
of the Hudson Highlands  
(cont.)

Number	Elev.	UTMX	UTMY
P169d	310	595	4578
P173	381	595	4579
P173a	360	595	4579
P174	390	595	4580
P174a	410	596	4580
P174b	460	596	4580
P174c	450	596	4581
P182a	390	595	4579
P184e	530	582	4576
P184f	530	582	4577
P184h	410	582	4575
P184i	370	583	4575
P184j	410	582	4574
P184k	430	582	4574
P184l	430	582	4574
P184m	430	582	4574
P184o	710	581	4569
P184p	530	583	4576
P185a	730	581	4579
P185b	670	581	4578
P185c	710	582	4579
P185d	690	582	4579
P185e	750	581	4579
P185f	710	583	4579
P185g	730	583	4580
P186a	730	583	4580
P186b	969	581	4581
P190a	950	577	4573
P193b	300	584	4577
P194	10	585	4575
P195	10	585	4576
P198a	650	588	4577
P198c	550	589	4578
P199	200	586	4580
P199a	1110	583	4581
P199d	550	585	4581
P201	130	588	4580
P202	220	589	4580
P205	590	591	4582
P205a	230	589	4582
P205b	703	593	4583
P206b	650	590	4586
P206c	510	590	4587
P206d	510	590	4587
P207d	360	590	4584
P207f	510	591	4583
P215	290	589	4588
P219a	590	586	4589
P220p	850	579	4583
P221	170	582	4588

## Appendix C

Gazeteer of Unnamed Lakes, Ponds, and Reservoirs  
 of the Hudson Highlands  
 (cont.)

Number	Elev.	UTMX	UTMY
P222a	221	581	4588
P222b	430	581	4588
P222h	310	580	4586
P227	490	576	4579
P227b	550	575	4577
P227c	400	576	4580
P229f	470	574	4578
P229g	550	574	4579
P229h	550	574	4579
P229i	730	575	4578
P229j	470	574	4577
P230o	490	574	4574
P231e	630	575	4576
P231h	630	575	4577
P231l	730	575	4575
P231n	510	574	4574
P232p	490	574	4574
P258d	589	563	4571
P259	630	563	4570
P330	370	586	4591
P330a	110	585	4592
P340o	1110	595	4594
P345b	850	594	4587
P345dd	790	593	4588
P345e	295	598	4597
P345j	450	590	4594
P345l	750	592	4592
P345ll	710	592	4592
P345mm	850	592	4593
P345n	1095	594	4593
P345oo	370	590	4590
P345p	870	596	4592
P345pp	370	590	4590
P345q	160	588	4595
P345r	205	589	4596
P345rr	30	586	4593
P345uu	790	598	4593
P345v	245	597	4602
P345vv	790	596	4593
P350aa	255	600	4602
P350b	315	603	4603
P350e	311	603	4603
P351a	300	605	4605
P351b	405	608	4605
P351d	775	607	4601
P351e	420	607	4608
P351f	365	608	4608
P351g	365	608	4607
P352a	335	605	4606
P352b	345	605	4606
P355a	455	609	4607

## Appendix C

Gazeteer of Unnamed Lakes, Ponds, and Reservoirs  
of the Hudson Highlands  
(cont.)

Number	Elev.	UTMX	UTMY
P355c	581	590	4594
P467a	794	594	4585
P998h	350	575	4556
P999	370	576	4557
P999a	410	578	4560
P999b	410	578	4560
P1006	509	566	4562
P1007a	690	566	4565
P1007d	830	569	4568
P1007g	686	568	4567
P1008a	790	567	4568
P1009	750	569	4570
P1010c	890	569	4566
P1010d	870	566	4571
P1010e	890	566	4572
P1016f	770	570	4573
P1016m	530	572	4573
P1018a	750	569	4573
P1018b	710	569	4574
P1018c	730	568	4573
P1021f	530	564	4557
P1022a	1030	560	4560
P1024	620	562	4557
P1024a	640	562	4558
P1026a	910	562	4565
P1026b	90	562	4565
P1026c	630	560	4564
P1026e	630	559	4564
P1118a	655	614	4603

Appendix D

Conversion Factors  
(Milligrams per Liter - Microequivalents per Liter)

Ion	$\mu\text{eq/L} = \text{mg/L} \times$	$\text{mg/L} = \mu\text{eq/L} \times$
Al 3+	111.2	0.008994
B 3+	227.5	0.003603
Ba 2+	14.56	0.06867
Ca 2+	49.90	0.02004
Cr 3+	57.70	0.01733
Cu 2+	31.47	0.03177
Fe 2+	35.81	0.02792
Fe 3+	53.72	0.01862
H +	992.2	0.001008
K+	25.58	0.03910
Li +	144.1	0.006941
Mg 2+	82.29	0.01215
Mn 2+	36.40	0.02747
Mn 4+	72.81	0.01373
Na +	43.50	0.02299
NH4 +	55.44	0.01804
Pb 2+	9.653	0.1036
Sr 2+	22.83	0.04381
Zn 2+	30.59	0.03269
BO2 -	23.36	0.04281
Br -	12.52	0.07990
Cl -	28.21	0.03545
CO3 2-	33.33	0.03000
CrO4 2-	17.24	0.05800
F -	52.64	0.01900
HCO3 -	16.39	0.06102
HPO4 2-	20.84	0.04799
H2PO4 -	10.31	0.09699
HS -	30.24	0.03307
HSO3 -	12.34	0.08107
HSO4 -	10.30	0.09707
I -	7.880	0.1269
NO2 -	21.74	0.04601
NO3 -	16.13	0.06200
OH -	58.80	0.01701
PO4 3-	31.59	0.03166
S 2-	62.38	0.01603
SiO3 2-	26.29	0.03804
SO3 2-	24.98	0.04003
SO4 2-	20.82	0.04803

Acknowledgments

255-5453

We would like to thank Ronald Pierce of the New York State Department of Environmental Conservation, Dr. George R. Hendrey of the Brookhaven National Laboratory, Dr. Michael Oppenheimer of the Environmental Defense Fund, Dr. James Simpson of the Lamont-Doherty Geological Observatory, Roger Archer of the United States Geological Survey, and Nash Castro and Carl Johnson of the Palisades Interstate Park Commission, for their time and assistance.

Boys & Girls Club of  
Lodi, N.J.

Debbie Jensen PIPC 786-2701  
Cal Johnson x280  
Joe Nolan

John Reed, Camp Dept.  
PPC

Jerry Bogen

Zippy Fleischer  
634-2327

John Hob  
786-5206  
Tarkas Corp

Stone Pt.  
786-2716

Martin Cornell 634-7901

AFB Office Center  
in Eelic Center  
in GSA Building

## Summary

A survey of 43 lakes, ponds and reservoirs in the Hudson Highlands in August, 1985, showed that nine are completely acidified, that is they have lost their total alkalinity. A tenth lake, Island Pond, has only a trace, 0.07 parts per million, of alkalinity remaining. An additional 15 water bodies have less than six parts per million alkalinity, which makes them very vulnerable to acid deposition.

In sum, a total of 25 water bodies have lost their alkalinity or are at serious risk. Most of the lakes are in Harriman State Park, south of West Point, N. Y., and the Harvard Black Rock Forest, northwest of West Point. All 25 lakes are at elevations of approximately 800 feet or more.