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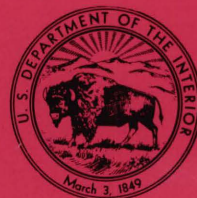
LIMNOLOGICAL DATA REPORT FOR THE MAINE DEPARTMENT OF
ENVIRONMENTAL PROTECTION — U.S. GEOLOGICAL SURVEY
COOPERATIVE LAKE STUDIES PROJECT

U.S. GEOLOGICAL SURVEY

Open-File Report

Prepared in cooperation with the
Maine Department of Environmental Protection

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LIMNOLOGICAL DATA REPORT FOR THE MAINE DEPARTMENT OF
ENVIRONMENTAL PROTECTION-U.S. GEOLOGICAL SURVEY
COOPERATIVE LAKE STUDIES PROJECT

By Derrill J. Cowing¹ and Matthew Scott²

ABSTRACT

The report contains physical, chemical, and biological information collected on 43 Maine lakes during the 1975 calendar year. Methods for the collection and analysis of the hydrologic data are outlined.

Physical characteristics listed include drainage area, surface area, surface elevation, volume, maximum depth, mean depth, epilimnion depth, epilimnion volume, and length of shoreline. Water-quality analyses are listed for up to 27 parameters on the lake-sample sites and 5 parameters on flowing tributaries. Biological analyses include phytoplankton data for 4 of the study lakes, zooplankton data for 4 of the study lakes, benthic macroinvertebrate data for 25 of the study lakes, and bacterial data for lake tributaries.

¹Hydrologist, U.S. Geological Survey, Augusta, Maine

²Chief, Division of Lakes and Biological Studies, Maine Department of Environmental Protection, Augusta, Maine

INTRODUCTION

This report is the second in a series of three annual data reports to be released from the Maine Department of Environmental Protection-U.S. Geological Survey cooperative lake studies project. The report contains physical, chemical, and biological information collected on 43 study lakes during the 1975 calendar year. The study lakes are listed in table 1, p. 3, in the order in which they are presented in the data section of this report. The approximate location of each lake is shown in figure 1, p. 4. A cross reference can be made from the lake list to the map by observing the downstream order number associated with a particular lake in the list and its location (in an abbreviated form) on the map. The first report in this series (Blue Book), presenting data collected in 1974, was released in October, 1975.

ACKNOWLEDGMENTS

This report was prepared by the U.S. Geological Survey in cooperation with the Maine Department of Environmental Protection. The Maine Department of Inland Fisheries and Wildlife provided lake-survey information on all of the study lakes, which greatly assisted the design of sampling programs and calculation of many morphometric characteristics.

Table 1.--List of study lakes by downstream order number.

Downstream Order Number	Lake Name	Page
01012700	Portage Lake near Portage, Me.	19
01012900	Eagle Lake at Wallagrass Station, Me.	22
01017200	Madawaska Lake near Stockholm, Me.	27
01018200	Eastern Grand Lake at Forest City, Me.	30
01019250	Tomah Lake near Forest, Me.	36
01021450	Mopang Lake near Beddington, Me.	40
01022200	Pleasant River Lake near Beddington, Me.	44
01022300	Beddington Lake near Beddington, Me.	51
01023100	Hopkins Pond near North Mariaville, Me.	54
01023200	Upper Lead Mountain Pond near Beddington, Me.	56
01023300	Spectacle Pond near Waltham, Me.	64
01023800	Molasses Pond near Eastbrook, Me.	66
01024300	Floods Pond near Otis, Me.	68
01024400	Beech Hill Pond near Otis, Me.	71
01024480	Phillips Lake near Green Lake, Me.	73
01024500	Green Lake at Green Lake, Me.	76
01025500	Branch Lake near Ellsworth, Me.	78
01029300	Upper Shin Pond at Shin Pond, Me.	83
01029310	Lower Shin Pond at Shin Pond, Me.	85
01030100	Pleasant Pond near Island Falls, Me.	87
01031990	Upper Wilson Pond near Greenville, Me.	90
01032000	Lower Wilson Pond near Greenville, Me.	94
01036300	Pushaw Lake near West Old Town, Me.	97
01037100	Brewer Lake near East Orrington, Me.	101
01042800	Saddleback Lake near Dallas, Me.	104
01046900	Porter Lake near New Vineyard, Me.	107
01047700	Wilson Pond near Wilton, Me.	110
01047800	Clearwater Pond at Allens Mills, Me.	113
01049450	Woodbury Pond at Litchfield, Me.	117
01050300	Haley Pond at Rangeley, Me.	119
01055050	Webb Lake near Weld, Me.	129
01055170	Long Pond near North Livermore, Me.	132
01055190	Minnehonk Lake at Mount Vernon, Me.	135
01055400	Brettuns Pond at Brettuns Mills, Me.	137
01059780	Crystal Lake at Dry Mills, Me.	140
01060200	Coffee Pond at Crescent Lake, Me.	143
01060250	Raymond Pond near East Raymond, Me.	146
01060300	Crescent Lake near East Raymond, Me.	148
01060400	Nubble Pond near East Raymond, Me.	150
01060500	Panther Pond near Raymond, Me.	153
01064120	Highland Lake at Highland Lake, Me.	156
01064145	Forest Lake near South Gray, Me.	159
01070000	Great East Lake near Milton Mills, N.H.	166

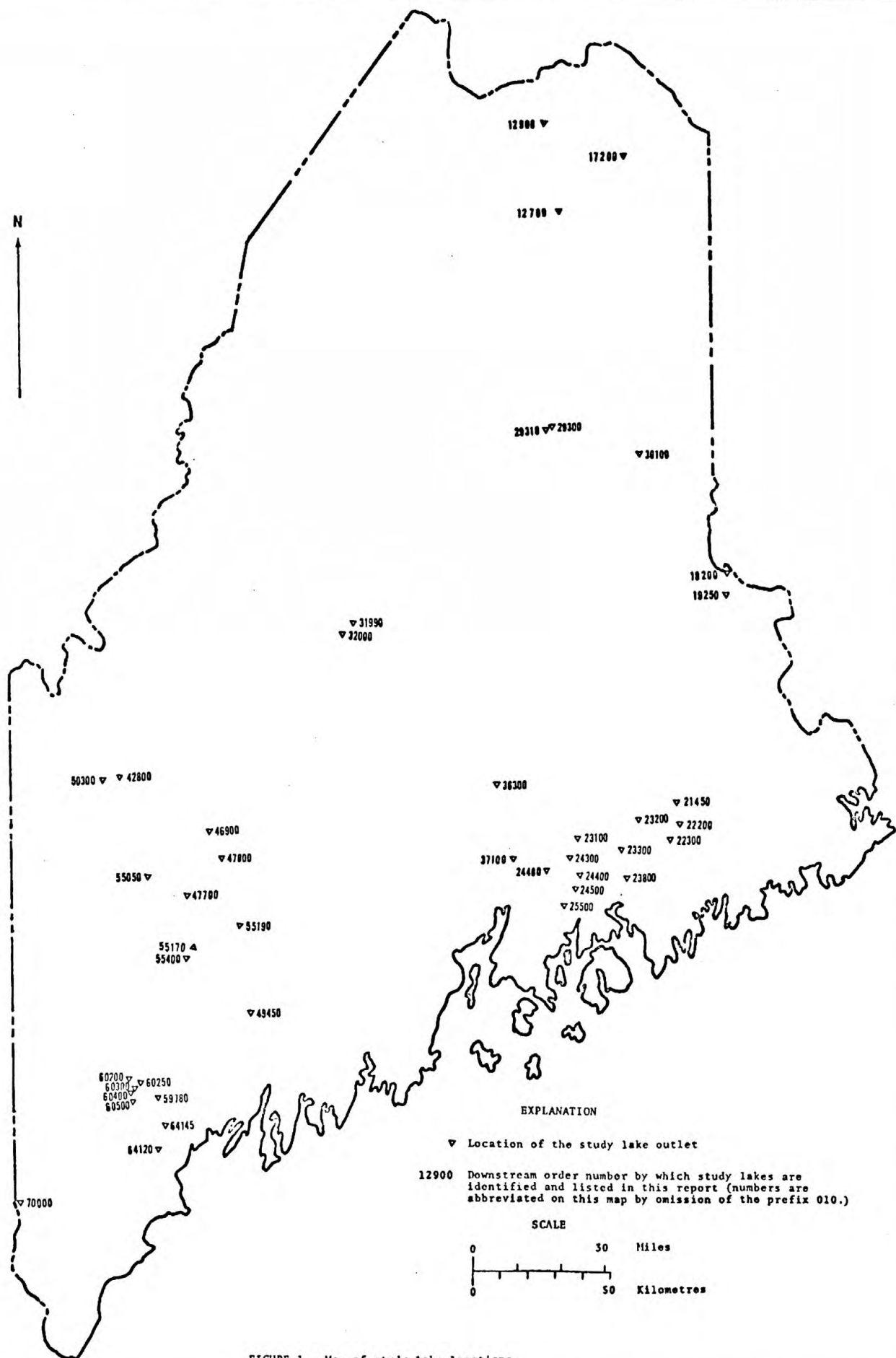


FIGURE 1.--Map of study lake locations.

COLLECTION AND ANALYSIS OF HYDROLOGIC DATA

Lake Morphometric Information

Primary sources of data used to compute the morphometric characteristics of the study lakes were Maine Department of Inland Fisheries and Wildlife (IF and W) lake surveys and U.S. Geological Survey (Survey) topographic quadrangle maps. The nine characteristics published in this report, along with an explanation and the methods used in computing them, are as follows:

Drainage area is that area, measured in a horizontal plane and enclosed by a topographic divide, from which direct surface runoff from precipitation normally drains into the lake outlet. Drainage areas were outlined and planimetered from the latest Survey topographic quadrangle maps.

Surface area is the area of the lake surface, as given by the IF and W lake survey file.

Surface elevation is the water-level elevation for the lake, as given on the latest Survey topographic quadrangle map.

Volume is the total volume of the lake, as computed by depth contouring the IF and W lake survey bathymetric map and calculating the volume of each stratum of water and summing them. The formula for computing the volume of a stratum is presented and explained by Hutchinson (1957).

Maximum depth is the maximum known depth of the lake, as listed in the IF and W lake survey file, or as observed by project personnel if the sample site depth exceeded the previously known maximum depth.

Mean depth is calculated by dividing the volume of the lake by its surface area.

Epilimnion depth is the approximate depth of the upper, homothermal, circulating part of a lake that is thermally stratified. It is determined by examination of the water-temperature profile at the lake-sample site (or sites) during the profile-sampling trip in late summer. Only 33 of the study lakes have been summer-profile sampled.

Epilimnion volume is the approximate volume of water in the epilimnion part of a thermally stratified lake. It is computed by constructing an area-depth curve for the lake, using the information generated in computing the lake volume, and the epilimnion depth. The area under the curve from the surface (depth 0) to the epilimnion depth equals the volume of the epilimnion.

Length of shoreline is the length of the lake shore measured with a digitizer on the latest Survey topographic quadrangle map. This figure does not include the shoreline length of the islands.

In the data section of this report all the above characteristics are given in English units followed by International System units (SI). Table 2, p. 7, lists the appropriate factors for making the conversions.

Table 2.--Factors for converting English units to International System units (SI).

Multiply English Units	by	to obtain SI Units
Feet (ft)	.3048	metres (m)
Miles (mi)	1.609	kilometres (km)
Acres	4047	square metres (m ²)
	.4047	square hectometres (hm ²)
Square miles (mi ²)	2.590	square kilometres (km ²)
Acre-feet (acre-ft)	1233	cubic metres (m ³)
	1.233x10 ⁻³	cubic hectometres (hm ³)

Water-Quality Information

Sampling Procedure

Two sampling schemes were used to obtain water-quality information on the study lakes. The first sampling scheme involved 35 of the study lakes. Each of the lakes was visited 12 times during the open-water season, and five parameters were measured over the deep area of the lake basin. Field parameters included air temperature, water temperature, and Secchi disc transparency. Laboratory determinations included analysis of a point sample collected just below the surface for total phosphorus concentration and analysis of a depth-integrated sample, from the top 10 metres (33 feet) or, in shallower lakes, the entire water column, for chlorophyll a concentration.

A second depth-integrated sample, identical to the chlorophyll a sample, was taken on four of the study lakes for a phytoplankton analysis. The sample was preserved by adding formalin to make a 5 percent solution. At the end of the field season the samples were analyzed by the Maine Department of Environmental Protection, Division of Lakes and Biological Studies.

The second sampling scheme involved 25 of the 35 lakes included in the first sampling scheme, plus eight lakes not sampled as described above. Winter samples were collected from 27 of the lakes in March and April, and summer samples were taken from 20 lakes in September. All lake samples were collected at the deep basin (or basins in multiple basin lakes). Field determinations included air temperature, Secchi disc transparency,

profile measurements of dissolved oxygen and water temperature, with color, pH, specific conductance, and alkalinity measurements of point samples from the water column. Laboratory analyses of point samples from the water column included the following 15 parameters:

Total orthophosphorus	Dissolved silica
Total phosphorus	Total iron
Ammonia nitrogen	Total manganese
Total nitrite	Total calcium (summer only)
Total nitrate	Total magnesium (summer only)
Total Kjeldahl nitrogen	Total sodium (summer only)
Dissolved chloride	Total potassium (summer only)
Dissolved sulfate	

In addition to the lake samples, flowing tributaries were sampled for water temperature, specific conductance, total phosphorus, and bacteria.

Sample Analysis

The methods for collecting and analyzing water samples for the determination of minerals and gases are described by Brown and others (1970).

Methods for collecting and analyzing aquatic biological and microbiological samples are presented by Slack and others (1973).

All phytoplankton samples were analyzed using a Nikon inverted microscope and a calibrated settling chamber. The smaller and generally more abundant cells were counted in an initial scan at 1200x of 0.1 to 0.5 ml of sample. The larger,

and less abundant, cells that did not appear in the initial scan in sufficient numbers were then counted in a scan of 300x of 5-ml of sample. "Cells per ml", "colonies per ml", and "volume counted" were recorded for each taxon. The abbreviation "sol" is used in the colonies per ml column to indicate that a taxa is solitary rather than colonial. Species identifications were made whenever possible. The references and keys used in these identifications are listed under "selected references".

Zooplankton samples were analyzed only on four lakes of special interest to regional fishery biologists. Populations were sampled by the use of a standard Wisconsin style plankton net (mesh size #20). Five vertical tows were made from the bottom of the water column to the surface in the deepest part of the lake. Samples were preserved in 5 percent formalin. All crustaceans present in 1 to 4 1-ml subsamples were identified according to Edmondson (1959) and counted in a 1-ml Sedgwick-Rafter cell at a magnification of 100x or 400x. Densities were reported as no/m³. Rotifers were not counted but were identified and noted when especially abundant.

Benthic macroinvertebrate samples were taken in the profundal zone of each lake at the time of the winter baseline sample. The samples were collected with an Ekman dredge. Five dredge samples were sieved through a #30 mesh screen, fixed in 5 percent formalin and stained with rose bengal (Harleco #348). Samples were hand-sorted and preserved in a solution of 60 percent ethanol, 5 percent

formalin and 5 percent glycerine. Each sample was cleaned of any extraneous material, including organism cases and tubes (except mollusk shells), blot-dried, and weighed on a Mettler P1210 balance. Organisms were identified and counted under appropriate magnification to generic or specific level, with the exception of certain groups (Nematoda, Hydracarina, Ostracoda). The references and keys used in these identifications are listed under "selected references".

EXPLANATION OF PRESENTATION OF LAKE DATA

In the data section of this report, information is listed concerning the physical, chemical, and biological properties of the study lakes. The following is an explanation of the data presented, in approximately the order of presentation.

River basin is the name of the major river basin in which the lake is located.

Downstream order number (station number) is the eight-digit number assigned at the outlet of each lake to identify the site in the U.S. Geological Survey national downstream-order numbering system. The numbering system in Maine starts in the headwaters of the St. John River basin and proceeds down the Atlantic coast by river basin. For a more detailed explanation see "Water Resources Data for Maine - 1974".

Lake name is the name of the study lake, as listed in the IF and W lake survey file and the nearest community identified on the latest Survey topographic quadrangle map.

Location gives the latitude and longitude of the lake outlet, the county in which the outlet is located, and the direction and distance to the community in the lake name.

Drainage area through Length of shoreline are headings that list morphometric characteristics of the study lake, as explained on pages 5 and 6.

U.S.G.S. quadrangles is a listing of the currently available 7-1/2-minute and 15-minute series topographic quadrangles that show the study lake.

State of Maine MIDAS number is the four-digit number used to identify the study lake in the computer data files of the Maine Informational Display Analysis System.

The next item shown for each study lake is a map showing approximate sample-site locations. In lakes with multiple deep basins, multiple sample sites are differentiated on the map and in the data tables by numbers. Tributaries are designated on the map and in the tables by letters.

(Note: For a few of the lakes, tributaries appear to be missing, for instance, an A, B, and D appear, but no C. However, the data from all flowing tributaries sampled are listed.)

In the data tables that follow the map, all lake-sample-site chemical data are presented, followed by the tributary data. The letter "B" preceding the number of colonies in the tributary bacteriological data indicates that the data are based on a non ideal colony count. Latitude and longitude are given for each sample site just before the data collected there. The last data presented for the study lakes are the biological analyses. Phytoplankton and zooplankton analyses characterize the populations on the days the samples were taken.

Temperature values in this report are listed in degrees Celsius (°C). Table 3, p. 14, is useful for converting these values to degrees Fahrenheit (°F).

Table 3.--Degrees Celsius (°C) to degrees Fahrenheit (°F)

°C	°F	°C	°F	°C	°F
0	32	10	50	20	68
1	34	11	52	21	70
2	36	12	54	22	72
3	37	13	55	23	73
4	39	14	57	24	75
5	41	15	59	25	77
6	43	16	61	26	79
7	45	17	63	27	81
8	46	18	64	28	82
9	48	19	66	29	84

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A state index showing topographic maps and distributors is
available free on request to -

Eastern Region - Map Distribution
U.S. Geological Survey
1200 South Eads Street
Arlington, VA 22202

LAKE DATA

ST. JOHN RIVER BASIN

01012700 Portage Lake near Portage, Maine

LOCATION.--Lat 46°49'00", long 68°30'51", Aroostook County, 0.2 mi (0.3 km) west of Portage.

DRAINAGE AREA.--207 mi² (536 km²).

SURFACE AREA.--2,474 acres (10.0 km²).

SURFACE ELEVATION.--609 ft (185.6 m).

VOLUME.--19,000 acre-ft (23.4 hm³).

MAXIMUM DEPTH.--25 ft (7.6 m).

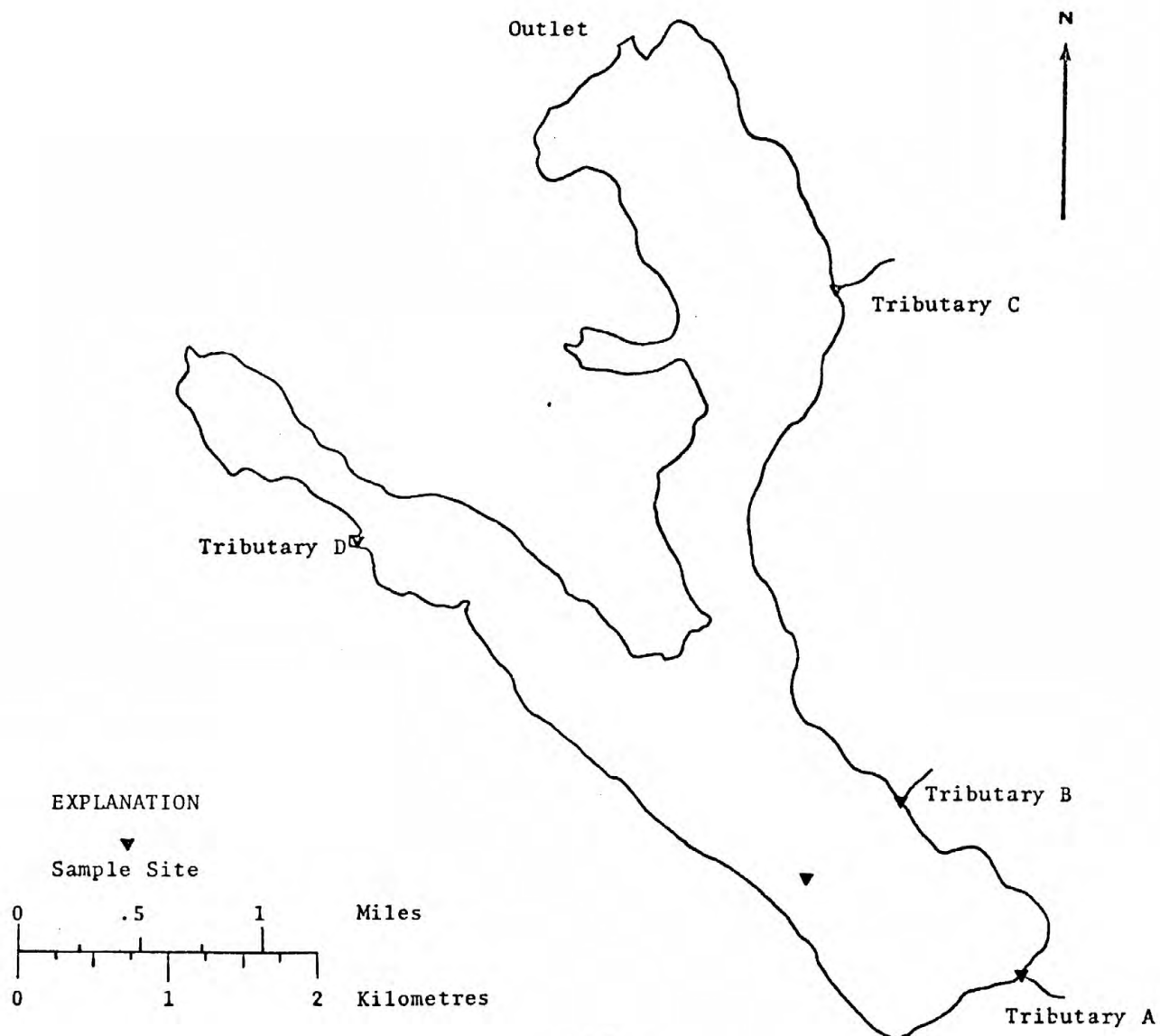
MEAN DEPTH.--8 ft (2.4 m).

EPILIMNION DEPTH.--Lake not stratified.

LENGTH OF SHORELINE.--91,000 ft (28,000 m).

U.S.G.S. QUADRANGLES.--Portage and Winterville 15-minute.

STATE OF MAINE MIDAS NUMBER.--1602.



ST. JOHN RIVER BASIN

01012700 Portage Lake near Portage, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼-SAMPLE SITE LOCATION.--Lat 46°45'54", long 68°29'58".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
APR.							
16...	0915	.6	14.0	.4	3.8	.007	.3
MAY							
28...	1130	.3	--	--	3.2	.009	2.0
JUNE							
11...	1130	.3	22.0	17.0	3.6	.009	2.4
25...	1100	.3	19.5	21.0	2.9	.009	2.8
JULY							
11...	1210	.3	25.0	23.0	3.3	.008	3.0
23...	1110	.3	23.0	24.5	3.5	.013	3.0
AUG.							
06...	1145	.3	18.0	23.5	2.9	.008	2.5
21...	1015	.3	20.0	24.0	2.1	.012	2.7
SEP.							
05...	1330	.3	18.5	19.0	3.7	.011	7.1
17...	1100	.3	16.0	15.5	3.4	.010	3.2
OCT.							
02...	0850	.3	14.5	14.3	3.0	.009	2.5
15...	1245	.3	5.0	10.0	4.1	.013	1.8
28...	1120	.3	16.0	9.0	4.7	.014	2.0

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
APR.										
16...	0915	.6	14.0	.4	3.8	14.4	67	6.8	22	40
16...	0930	5.5	--	4.1	--	8.8	62	6.6	26	40
MAY										
28...	1130	.3	--	--	3.2	--	--	--	--	--
28...	1135	5.5	--	--	--	--	--	--	--	--

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
APR.										
16...	.3	.001	.007	.06	.00	.12	.12	.08	.14	.26
16...	--	.004	.009	.05	.00	.09	.09	.10	.15	.24
MAY										
28...	2.0	.003	.009	.00	--	--	.03	.19	.19	.22
28...	--	.002	.007	.01	--	--	.04	.27	.28	.32

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
APR.										
16...	1.2	.7	4.6	4.7	100	10	--	--	--	--
16...	1.1	.9	3.7	5.1	100	30	--	--	--	--
MAY										
28...	1.0	--	--	--	--	--	--	--	--	--
28...	1.4	--	--	--	--	--	--	--	--	--

ST. JOHN RIVER BASIN

01012700 Portage Lake near Portage, Maine--Continued

- ▼- TRIBUTARY A SAMPLE SITE LOCATION.--Lat 46°45'38", long 68°28'54".
 ▼- TRIBUTARY B SAMPLE SITE LOCATION.--Lat 46°46'17", long 68°29'29".
 ▼- TRIBUTARY C SAMPLE SITE LOCATION.--Lat 46°48'09", long 68°29'45".
 ▼- TRIBUTARY D SAMPLE SITE LOCATION.--Lat 46°47'13", long 68°32'18".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	APR. 16...	0945	.3	1.0	196	.096	B220	56
Tributary B	APR. 16...	1000	.3	.7	68	.011	0	0
Tributary C	APR. 16...	1005	.3	.0	70	.011	B2	0
Tributary D	APR. 16...	1015	.3	.0	56	.006	0	0

BIOLOGICAL ANALYSES

The following is a benthic macroinvertebrate analysis of a sample taken 16 April 1975 at the lake sample site.

Total Wet Weight (g/m²) = 18.27

Taxa	Number/m ²
ARTHIROPODA	
Insecta	
Ephemeroptera \	
<u>Hexagenia sp.</u>	35
Diptera	
Culicidae	
<u>Chaoborus punctipennis.</u>	95
Chironomidae	
<u>Procladius sp.</u>	130
<u>Chironomus sp.</u>	87
MOLLUSCA	
Pelecypoda	
Sphaeriidae	
<u>Pisidium sp.</u>	9
Gastropoda	
Viviparidae	
<u>Campeloma sp.</u>	17
TOTAL	370

ST. JOHN RIVER BASIN

01012900 Eagle Lake at Wallagrass Station, Maine

LOCATION.--Lat 47°06'35", long 68°35'04", Aroostook County, at Wallagrass Station.

DRAINAGE AREA.--760 mi² (1,968 km²).

SURFACE AREA.--5,581 acres (22.59 km²).

SURFACE ELEVATION.--574 ft (175.0 m).

VOLUME.--250,000 acre-ft (308 hm³).

MAXIMUM DEPTH.--140 ft (42.7 m).

MEAN DEPTH.--45 ft (13.7 m).

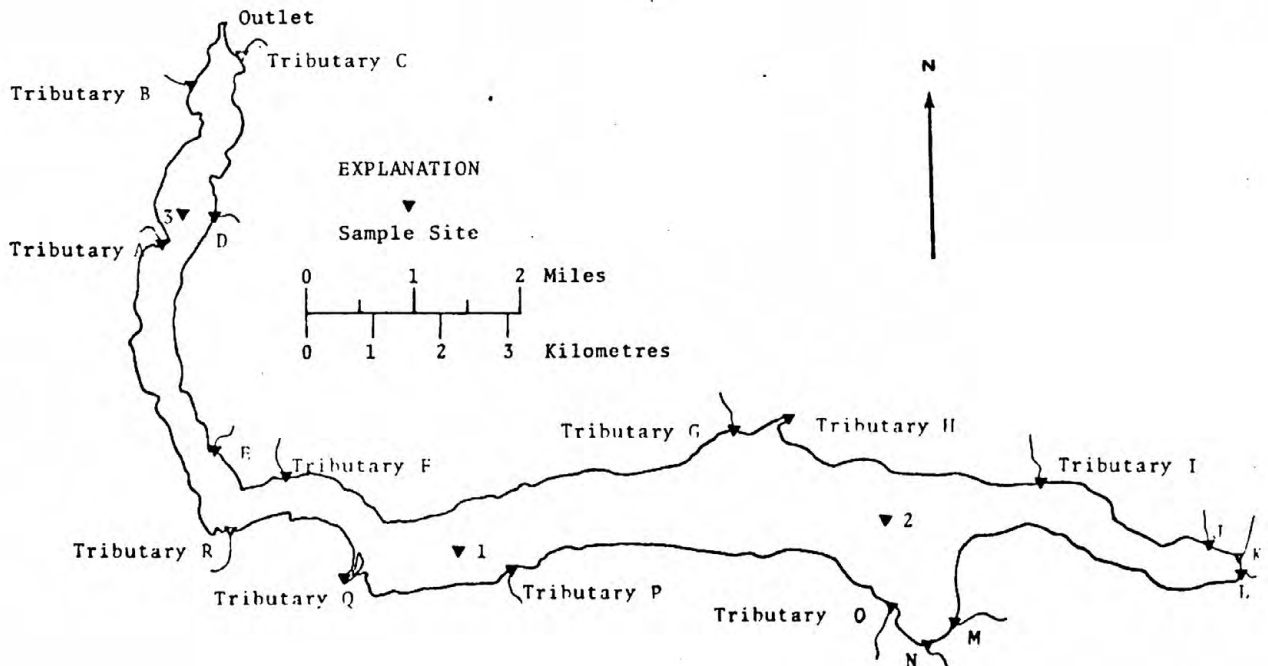
EPILIMNION DEPTH.--33 ft (10.0 m).

EPILIMNION VOLUME.--140,000 acre-ft (173 hm³).

LENGTH OF SHORELINE.--180,000 ft (55,000 m).

U.S.G.S. QUADRANGLES.--Eagle Lake and Square Lake 15-minute.

STATE OF MAINE MIDAS NUMBER.--1634.



ST. JOHN RIVER BASIN

01012900 Eagle Lake at Wallagrass Station, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼1-SAMPLE SITE LOCATION.--Lat 47°02'17", long 68°32'29".

DATE	TIME	DEPTH (M)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	TRANSPAR-ENCY (SECCHI DISK) (M)	TOTAL PHOS-PHORUS (P) (MG/L)	CHLORO-PHYLL A (UG/L)
MAY							
28...	1000	.3	13.5	12.0	3.7	.011	2.1
JUNE							
11...	1100	.3	22.0	15.0	4.4	.008	1.5
25...	1220	.3	20.0	19.0	4.1	.007	2.0
JULY							
11...	1100	.3	24.0	23.8	3.9	.006	2.6
23...	1045	.3	19.0	22.5	4.3	.006	2.4
AUG.							
06...	1110	.3	18.0	24.0	4.7	.008	2.4
21...	1230	.3	20.0	21.0	5.0	.008	2.4
SEP.							
05...	1200	.3	19.0	18.5	4.4	.009	--
09...	1400	.6	13.0	16.4	5.1	.009	--
17...	1010	.3	15.0	15.0	5.2	.004	3.9
OCT.							
02...	0950	.3	13.0	14.3	4.8	.006	4.0
15...	1130	.3	5.6	11.5	5.5	.007	3.7
28...	1100	.3	14.0	10.0	5.5	.010	3.4

DATE	TIME	DEPTH (M)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	TRANSPAR-ENCY (SECCHI DISK) (M)	DIS-SOLVED OXYGEN (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	ALKALINITY AS CaCO3 (MG/L)	COLOR (PLATINUM-COBALT UNITS)
MAY										
28...	1000	.3	13.5	12.0	3.7	--	--	--	--	--
28...	1005	21.3	--	--	--	--	--	--	--	--
28...	1010	42.4	--	--	--	--	--	--	--	--
SEP.										
09...	1400	.6	13.0	16.4	5.1	10.0	50	7.2	19	10
09...	1415	8.0	--	16.4	--	9.6	50	7.1	19	15
09...	1430	14.0	--	7.5	--	7.8	51	6.6	18	15
09...	1445	35.0	--	5.8	--	6.5	54	6.4	18	30

DATE	CHLORO-PHYLL A (UG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	AMMONIA GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)
MAY										
28...	2.1	.003	.011	.02	--	--	.09	.24	.26	.35
28...	--	.001	.008	.00	--	--	.09	.18	.18	.27
28...	--	.001	.007	.00	--	--	.09	.54	.54	.63
SEP.										
09...	--	.001	.009	.00	.00	.01	.01	.20	.20	.21
09...	--	.001	.010	.01	.00	.01	.01	.20	.21	.22
09...	--	.001	.010	.03	.00	.14	.14	.26	.29	.43
09...	--	.003	.036	.00	.01	.14	.15	.14	.14	.29

DATE	TOTAL NITRO-GEN (NO3) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNE-SIUM (MG) (MG/L)	TOTAL POTAS-SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
MAY										
28...	1.5	--	--	--	--	--	--	--	--	--
28...	1.2	--	--	--	--	--	--	--	--	--
28...	2.8	--	--	--	--	--	--	--	--	--
SEP.										
09...	.93	1.1	5.1	1.9	90	10	8.9	.5	.2	1.3
09...	.97	.7	5.1	1.9	100	10	11	.7	.2	1.3
09...	1.9	.7	5.4	2.7	110	10	10	.8	.2	1.3
09...	1.3	1.2	5.0	3.5	1600	50	20	.7	.2	1.3

ST. JOHN RIVER BASIN

01012900 Eagle Lake at Wallagrass Station, Maine--Continued

▼2-SAMPLE SITE LOCATION.--Lat 47°02'35", long 68°27'18".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CAC03 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
SEP.										
09...	1100	.6	13.0	16.8	5.0	10.2	51	7.2	19	20
09...	1115	12.0	--	16.8	--	9.9	51	7.2	19	20
09...	1130	20.0	--	8.2	--	8.1	57	6.5	18	30
09...	1145	27.0	--	6.2	--	6.8	58	6.6	18	40

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
SEP.										
09...	--	.001	.011	.00	.00	.00	.00	.23	.23	.23
09...	--	.001	.011	.01	.00	.01	.01	.24	.25	.26
09...	--	.001	.010	.01	.00	.14	.14	.22	.23	.27
09...	--	.005	.012	.00	.01	.13	.14	.16	.16	.30

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG) (MG/L)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
SEP.										
09...	1.0	.9	4.9	1.8	80	10	9.4	.5	.2	1.3
09...	1.2	2.1	4.9	1.8	130	0	15	.7	.2	1.4
09...	1.6	1.3	5.0	2.8	150	20	9.1	.7	.2	1.2
09...	1.3	1.6	4.8	3.2	200	30	8.4	.5	.3	1.3

ST. JOHN RIVER BASIN

01012900 Eagle Lake at Wallagrass Station, Maine--Continued

▼ 3 SAMPLE SITE LOCATION.--Lat 47°05'07", long 68°35'28".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
SEP.										
08...	1500	.6	20.0	17.0	4.5	9.9	53	7.2	20	20
08...	1515	3.0	--	16.6	--	9.5	57	7.2	20	20
08...	1530	15.0	--	9.0	--	6.3	56	6.2	19	25
08...	1545	22.0	--	8.0	--	4.8	60	6.4	19	30

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA GEN- (N) (MG/L)	TOTAL NITRO- NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
SEP.										
08...	--	.001	.004	.00	.00	.01	.01	.20	.20	.21
08...	--	.001	.007	.00	.00	.01	.01	.18	.18	.19
08...	--	.001	.006	.01	.00	.14	.14	.17	.18	.32
08...	--	.004	.013	.02	.00	.14	.14	.16	.18	.32

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG) (MG/L)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
SEP.										
08...	.93	1.3	5.1	2.0	100	10	12	1.0	.3	1.3
08...	.84	1.1	4.8	2.0	70	10	10	1.8	.3	1.3
08...	1.4	1.1	4.8	3.3	100	20	8.0	1.5	.3	1.2
08...	1.4	.9	4.6	3.9	260	130	8.0	1.5	.3	1.3

▼-TRIBUTARY A SAMPLE SITE LOCATION.--Lat 47°04'53", long 68°35'45".

▼-TRIBUTARY B SAMPLE SITE LOCATION.--Lat 47°06'13", long 68°35'25".

▼-TRIBUTARY C SAMPLE SITE LOCATION.--Lat 47°06'25", long 68°34'50".

▼-TRIBUTARY D SAMPLE SITE LOCATION.--Lat 47°05'07", long 68°35'08".

▼-TRIBUTARY E SAMPLE SITE LOCATION.--Lat 47°03'10", long 68°35'10".

▼-TRIBUTARY F SAMPLE SITE LOCATION.--Lat 47°02'54", long 68°34'21".

▼-TRIBUTARY G SAMPLE SITE LOCATION.--Lat 47°03'18", long 68°28'58".

▼-TRIBUTARY H SAMPLE SITE LOCATION.--Lat 47°03'24", long 68°28'26".

▼-TRIBUTARY I SAMPLE SITE LOCATION.--Lat 47°02'53", long 68°25'20".

▼-TRIBUTARY J SAMPLE SITE LOCATION.--Lat 47°02'20", long 68°23'16".

▼-TRIBUTARY K SAMPLE SITE LOCATION.--Lat 47°02'15", long 68°22'58".

▼-TRIBUTARY L SAMPLE SITE LOCATION.--Lat 47°02'09", long 68°22'59".

▼-TRIBUTARY M SAMPLE SITE LOCATION.--Lat 47°01'42", long 68°26'22".

▼-TRIBUTARY N SAMPLE SITE LOCATION.--Lat 47°01'33", long 68°26'41".

▼-TRIBUTARY O SAMPLE SITE LOCATION.--Lat 47°01'51", long 68°27'06".

▼-TRIBUTARY P SAMPLE SITE LOCATION.--Lat 47°02'09", long 68°31'43".

▼-TRIBUTARY Q SAMPLE SITE LOCATION.--Lat 47°02'05", long 68°33'36".

▼-TRIBUTARY R SAMPLE SITE LOCATION.--Lat 47°02'28", long 68°35'02".

ST. JOHN RIVER BASIN

01012900 Eagle Lake at Wallagrass Station, Maine--Continued

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	SEP. 09...	0800	.3	14.8	68	.007	B7	B18
Tributary B	SEP. 09...	0810	.3	14.5	74	.022	B90	B34
Tributary C	SEP. 09...	0820	.3	15.0	86	.010	47	84
Tributary D	SEP. 09...	0830	.3	12.0	73	.009	B1	B8
Tributary E	SEP. 09...	0840	.3	16.5	48	.007	25	40
Tributary F	SEP. 09...	0850	.3	13.2	132	.008	B2	--
Tributary G	SEP. 09...	0900	.3	13.8	88	.016	B150	90
Tributary H	SEP. 09...	0910	.3	17.2	60	.010	0	0
Tributary I	SEP. 09...	0920	.3	14.5	28	.032	B150	64
Tributary J	SEP. 09...	0930	.3	11.8	173	.008	B3	B10
Tributary K	SEP. 09...	0940	.3	11.0	164	.006	B1	0
Tributary L	SEP. 09...	0950	.3	11.5	74	.012	B4	B8
Tributary M	SEP. 09...	1000	.3	14.0	99	.011	B8	76
Tributary N	SEP. 09...	1010	.3	15.2	101	.025	B11	B6
Tributary O	SEP. 09...	1020	.3	14.2	86	.018	56	B2
Tributary P	SEP. 09...	1030	.3	12.5	68	.010	B9	86
Tributary Q	SEP. 09...	1040	.3	15.5	60	.007	B5	B4
Tributary R	SEP. 09...	1050	.3	13.8	78	.011	B80	B30

ST. JOHN RIVER BASIN

01017200 Madawaska Lake near Stockholm, Maine

LOCATION.--Lat 47°00'09", long 68°12'22", Aroostook County, 3.5 mi (5.6 km) west of Stockholm.

DRAINAGE AREA.--32.0 mi² (82.9 km²).

SURFACE AREA.--1,526 acres (6.18 km²).

SURFACE ELEVATION.--576 ft (175.6 m).

VOLUME.--24,000 acre-ft (29.6 hm³).

MAXIMUM DEPTH.--38 ft (11.6 m).

MEAN DEPTH.--16 ft (4.9 m).

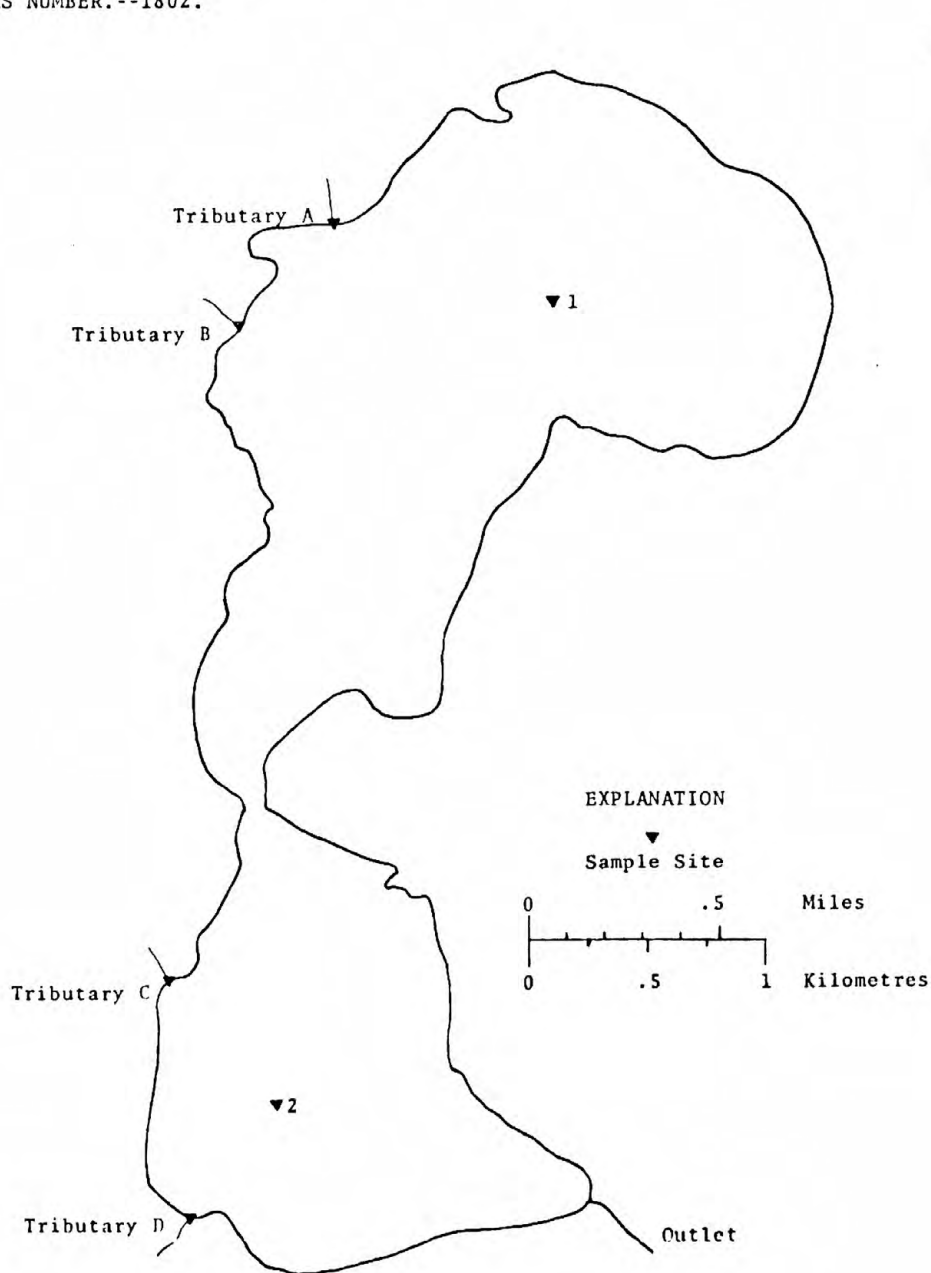
EPILIMNION DEPTH.--26 ft (8.0 m).

EPILIMNION VOLUME.--23,000 acre-ft (28.4 hm³).

LENGTH OF SHORELINE.--54,000 ft (16,000 m).

U.S.G.S. QUADRANGLES.--Stockholm 15-minute.

STATE OF MAINE MIDAS NUMBER.--1802.



ST. JOHN RIVER BASIN

01017200 Madawaska Lake near Stockholm, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼ 1 - SAMPLE SITE LOCATION.--Lat 47°02'14", long 68°12'21".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
MAY							
28...	0815	.3	13.0	13.0	3.5	.009	1.7
JUNE							
11...	1030	.3	22.0	17.0	3.5	.008	1.1
25...	1305	.3	20.0	20.0	4.0	.007	1.9
JULY							
11...	0940	.3	20.8	23.0	4.1	.007	1.6
23...	1030	.3	20.0	24.0	4.6	.008	1.6
AUG.							
06...	1040	.3	18.0	23.0	4.4	.008	1.7
21...	1250	.3	20.0	21.0	5.0	.008	2.3
SEP.							
05...	1130	.3	18.0	18.5	4.0	.009	--
08...	1100	.6	19.5	16.8	3.5	.006	--
17...	0830	.3	13.0	16.0	3.5	.010	2.9
OCT.							
02...	1115	.3	13.0	14.5	4.2	.009	2.2
15...	1115	.3	2.0	10.0	3.6	.011	2.0
28...	1045	.3	14.0	10.0	4.7	.010	1.8

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
MAY										
28...	0815	.3	13.0	13.0	3.5	--	--	--	--	--
28...	0820	4.6	--	--	--	--	--	--	--	--
28...	0825	9.1	--	--	--	--	--	--	--	--
SEP.										
08...	1100	.6	19.5	16.8	3.5	8.9	48	7.1	15	30
08...	1130	10.0	--	16.0	--	8.3	48	7.1	15	30

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
MAY										
28...	1.7	.004	.009	.06	--	--	.06	.22	.28	.34
28...	--	.002	.013	.01	--	--	.07	.23	.24	.31
28...	--	.001	.006	.01	--	--	.06	.22	.23	.29
SEP.										
08...	--	.001	.006	.01	.00	.01	.01	.22	.23	.24
08...	--	.002	.012	.00	.00	.01	.01	.35	.35	.36

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
MAY										
28...	1.5	--	--	--	--	--	--	--	--	--
28...	1.4	--	--	--	--	--	--	--	--	--
28...	1.3	--	--	--	--	--	--	--	--	--
SEP.										
08...	1.1	1.8	4.4	2.2	240	20	10	1.3	.3	1.6
08...	1.6	1.7	4.1	2.0	210	30	11	1.4	.3	1.6

ST. JOHN RIVER BASIN

01017200 Madawaska Lake near Stockholm, Maine--Continued

▼ 2 - SAMPLE SITE LOCATION.--Lat 47°00'27", long 68°13'22".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
SEP.										
08...	1000	.6	19.0	17.0	3.7	9.3	47	7.1	15	25
08...	1015	8.0	--	16.1	--	7.8	48	7.1	16	40
08...	1030	9.0	--	13.2	--	.8	51	6.7	15	40

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
SEP.										
08...	--	.001	.007	.00	.00	.00	.00	.16	.16	.16
08...	--	.001	.008	.01	.00	.00	.00	.16	.17	.17
08...	--	.004	.012	.03	.00	.00	.00	.24	.27	.27

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
SEP.										
08...	.71	1.1	4.3	2.1	140	20	7.1	1.2	.3	1.6
08...	.75	1.7	4.3	1.9	150	30	8.0	1.2	.3	1.6
08...	1.2	1.0	5.0	3.5	580	560	7.0	1.2	.3	1.5

▼ -TRIBUTARY A SAMPLE SITE LOCATION.--Lat 47°02'26", long 68°13'04".

▼ -TRIBUTARY B SAMPLE SITE LOCATION.--Lat 47°02'12", long 68°13'23".

▼ -TRIBUTARY C SAMPLE SITE LOCATION.--Lat 47°00'42", long 68°13'45".

▼ -TRIBUTARY D SAMPLE SITE LOCATION.--Lat 47°00'10", long 68°13'36".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	SEP. 08...	1215	1.0	9.5	183	.007	870	818
Tributary B	SEP. 08...	1230	1.0	13.0	87	.013	8110	814
Tributary C	SEP. 08...	1245	1.0	11.8	109	.009	86	46
Tributary D	SEP. 08...	1300	1.0	11.8	96	.013	8150	818

ST. CROIX RIVER BASIN

01018200 Eastern Grand Lake at Forest City, Maine

LOCATION.--Lat 45°39'54", long 67°44'10", Washington County, 0.5 mi (0.8 km) west of Forest City.

DRAINAGE AREA.--138 mi² (357 km²).

SURFACE AREA.--16,070 acres (65.03 km²).

SURFACE ELEVATION.--434 ft (132.3 m).

VOLUME.-- 500,000 acre-ft (616 hm³).

MAXIMUM DEPTH.--128 ft (39.0 m).

MEAN DEPTH.--31 ft (9.4 m).

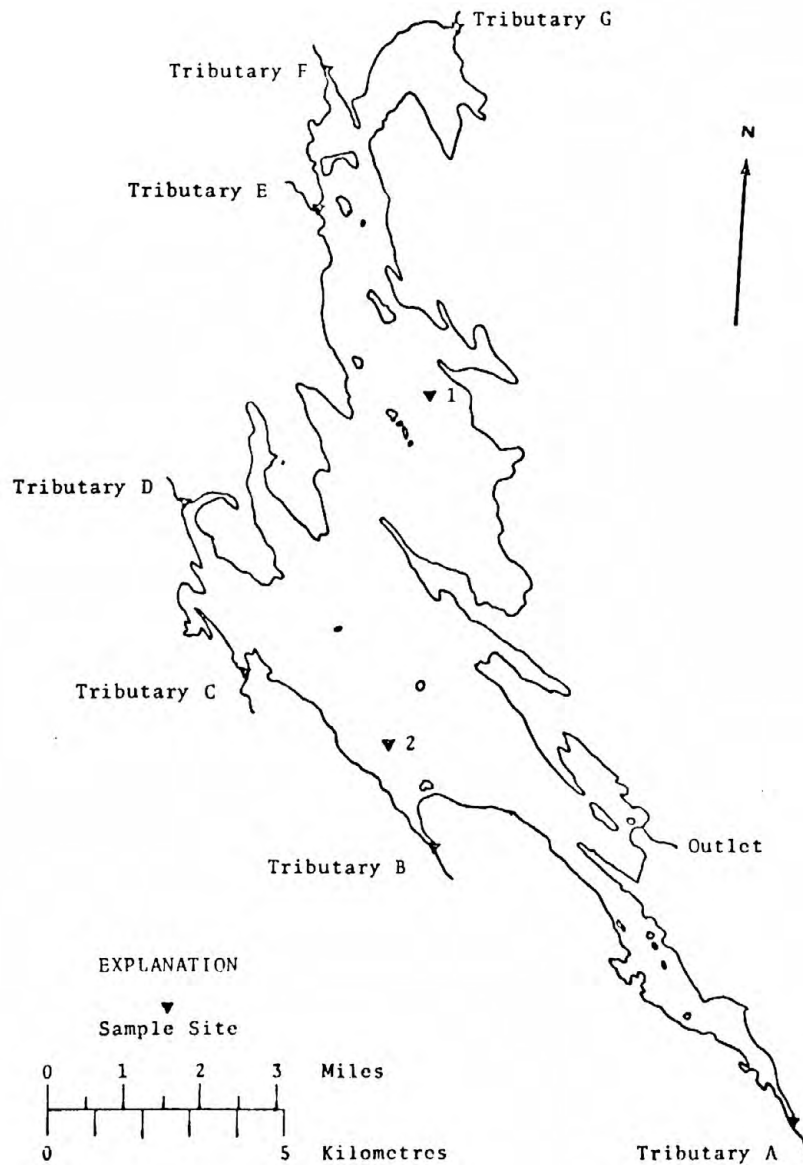
EPILIMNION DEPTH.--66 ft (20.0 m).

EPILIMNION VOLUME.--480,000 acre-ft (592 hm³).

LENGTH OF SHORELINE.--390,000 ft (120,000 m).

U.S.G.S. QUADRANGLES.--Amity, Danforth, and Forest 15-minute.

STATE OF MAINE MIDAS NUMBER.--1070.



ST. CROIX RIVER BASIN

01018200 Eastern Grand Lake at Forest City, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼ 1 - SAMPLE SITE LOCATION.--Lat 45°44'49", long 67°47'28".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
APR.										
09...	1240	.6	1.0	.9	7.5	14.4	34	6.8	10	10
09...	1300	12.2	--	3.8	--	8.1	32	6.3	12	20
09...	1315	21.3	--	4.1	--	4.8	35	6.3	14	20
SEP.										
15...	1400	.6	16.0	16.4	6.5	9.5	33	7.1	11	20
15...	1415	10.0	--	16.0	--	9.3	34	7.1	11	20
15...	1430	21.0	--	15.9	--	9.1	28	7.2	11	15

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
APR.										
09...	1.4	.001	.005	.02	.00	.03	.03	.12	.14	.17
09...	--	.001	.006	.02	.01	.08	.09	.13	.15	.24
09...	--	.005	.009	.00	.00	.11	.11	.08	.08	.19
SEP.										
15...	--	.002	.010	.01	.00	.00	.00	.19	.20	.20
15...	--	.001	.011	.01	.00	.00	.00	.26	.27	.27
15...	--	.002	.008	.01	.01	.00	.01	.18	.19	.20

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
APR.										
09...	.75	1.5	3.7	1.0	70	1900	--	--	--	--
09...	1.1	1.6	3.7	2.7	120	10	--	--	--	--
09...	.84	1.8	3.3	3.7	150	40	--	--	--	--
SEP.										
15...	.89	1.0	3.7	1.0	70	10	5.0	.2	.2	1.1
15...	1.2	.9	3.8	1.0	80	10	4.9	.4	.2	1.2
15...	.89	1.4	3.5	1.0	90	10	4.9	.2	.2	1.1

ST. CROIX RIVER BASIN

01018200 Eastern Grand Lake at Forest City, Maine--Continued

▼ 2 - SAMPLE SITE LOCATION.--Lat 45°40'45", long 67°48'21".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
APR.										
09...	0930	.6	1.0	.8	8.5	13.5	34	6.8	9	10
09...	0945	16.8	--	2.5	--	11.3	34	6.5	18	20
09...	1000	33.5	--	3.2	--	.6	51	6.5	25	70
SEP.										
15...	1200	.6	14.5	16.1	8.4	9.5	34	6.9	11	10
15...	1215	16.0	--	16.0	--	9.2	25	6.9	12	10
15...	1230	21.0	--	13.2	--	5.3	34	6.2	12	10
15...	1245	28.0	--	11.3	--	4.0	34	6.2	11	15

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
APR.										
09...	.9	.001	.004	.00	.00	.05	.05	.09	.09	.14
09...	--	.001	.005	.00	.00	.04	.04	.05	.05	.09
09...	--	.013	.099	.60	.00	.02	.02	.16	.76	.78
SEP.										
15...	--	.002	.008	.02	.00	.01	.01	.17	.19	.20
15...	--	.002	.007	.01	.00	.00	.00	.20	.21	.21
15...	--	.001	.007	.01	.00	.04	.04	.18	.19	.23
15...	--	.002	.009	.03	.00	.06	.06	.12	.15	.21

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG) (MG/L)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
APR.										
09...	.62	1.6	3.2	1.4	40	1100	--	--	--	--
09...	.40	1.6	3.3	1.7	70	20	--	--	--	--
09...	3.5	1.6	3.0	5.2	3000	3100	--	--	--	--
SEP.										
15...	.89	1.2	3.5	1.0	70	0	5.9	.2	.2	1.2
15...	.93	1.2	3.5	1.1	60	10	5.8	.2	.2	1.1
15...	1.0	1.0	3.4	1.9	50	70	4.9	.3	.2	1.2
15...	.93	.6	3.4	2.5	130	160	6.8	.5	.2	1.2

ST. CROIX RIVER BASIN

01018200 Eastern Grand Lake at Forest City, Maine--Continued

▼-TRIBUTARY A SAMPLE SITE LOCATION.--Lat 45°36'48", long 67°41'59".
 ▼-TRIBUTARY B SAMPLE SITE LOCATION.--Lat 45°39'36", long 67°47'23".
 ▼-TRIBUTARY C SAMPLE SITE LOCATION.--Lat 45°41'38", long 67°50'25".
 ▼-TRIBUTARY D SAMPLE SITE LOCATION.--Lat 45°43'34", long 67°51'25".
 ▼-TRIBUTARY E SAMPLE SITE LOCATION.--Lat 45°46'54", long 67°49'14".
 ▼-TRIBUTARY F SAMPLE SITE LOCATION.--Lat 45°48'29", long 67°49'03".
 ▼-TRIBUTARY G SAMPLE SITE LOCATION.--Lat 45°48'59", long 67°46'52".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	APR. 09...	1010	.3	.0	50	.022	B1	0
	SEP. 15...	1200	.3	9.5	38	.015	B4	B2
Tributary B	APR. 09...	1015	.3	.0	52	.011	0	0
	SEP. 15...	1210	.3	11.8	57	.010	30	B34
Tributary C	APR. 09...	1020	.3	.5	44	.007	B1	0
	SEP. 15...	1220	.3	15.5	28	.009	B10	B8
Tributary D	APR. 09...	1030	.3	2.7	34	.006	0	0
	SEP. 15...	1230	.3	12.5	38	.007	B9	B230
Tributary E	APR. 09...	1035	.3	.5	39	.021	0	0
	SEP. 15...	1230	.3	11.3	47	.010	55	B2
Tributary F	APR. 09...	1040	.3	.5	75	.013	B1	0
	SEP. 15...	1240	.3	12.5	188	.014	B150	B300
Tributary G	APR. 09...	1050	.3	2.2	49	.009	0	0
	SEP. 15...	1250	.3	14.8	40	.009	B13	0

ST. CROIX RIVER BASIN

01018200 Eastern Grand Lake at Forest City, Maine--Continued

BIOLOGICAL ANALYSES

The following is a zooplankton analysis of a depth integrated sample taken 22 August 1974 at lake sample site ▼1.

DOMINANT ZOOPLANKTON

Taxa	no./m ³	Volume Counted (MLS)
ARTHIROPODA		
Crustacea		
Cladocera		
Bosminidae		
<u>Bosmina coregoni</u>	760	1
Daphniidae		
<u>Ceriodaphnia pulchella</u>	76	1
<u>Daphnia ambigua</u>	76	1
<u>Daphnia catawba</u>	76	1
<u>Daphnia longiremis</u>	76	1
<u>Daphnia retrocurva</u>	150	1
Holopedidae		
<u>Holopedium gibberum</u>	300	1
Siddidae		
<u>Diaphanosoma brachyurum</u>	380	1
Copepoda		
Calanoida	2800	1
Cyclopoida	2600	1
Nauplii	82000	1
Total	89000	

The following is a zooplankton analysis of a depth integrated sample taken 22 August 1974 at lake sample site ▼2.

DOMINANT ZOOPLANKTON

Taxa	no./m ³	Volume Counted (MLS)
ARTHIROPODA		
Crustacea		
Cladocera		
Bosminidae		
<u>Bosmina coregoni</u>	1200	1
<u>Bosmina longirostris</u>	58	1
Daphniidae		
<u>Ceriodaphnia pulchella</u>	58	1
<u>Daphnia ambigua</u>	400	1
<u>Daphnia catawba</u>	120	1
<u>Daphnia galeata</u>	58	1
<u>Daphnia pulex</u>	58	1
<u>Daphnia retrocurva</u>	290	1
Holopedidae		
<u>Holopedium gibberum</u>	58	1
Copepoda		
Calanoida	2500	1
Cyclopoida	3600	1
Nauplii	22000	1
Total	30000	

ST. CROIX RIVER BASIN

01018200 Eastern Grand Lake at Forest City, Maine--Continued

The following is a benthic macroinvertebrate analysis of a bottom sample taken 9 April 1974 at lake sample site ▼1.

Total Wet Weight (g/m²) = 81.66
3.90 without Lampsilis sp.

Taxa	Number/m ²
NEMATODA	100
ANNELIDA	
Oligochaeta	
Tubificidae	
<u>Limnodrilus</u> spp.	140
<u>Tubifex</u> sp.	35
Hirudinea	
Glossiphoniidae	
<u>Helobdella</u> sp.	9
ARTHROPODA	
Crustacea	
Ostracoda	9
Insecta	
Megaloptera	
<u>Sialis</u> sp.	17
Diptera	
Culicidae	
<u>Chaoborus punctipennis</u>	410
Chironomidae	
<u>Procladius</u> sp.	370
<u>Cryptochironomus</u> sp.	26
<u>Trichocladius</u> sp.	26
<u>Polypedilum</u> sp.	26
<u>Phaenopsectra-Tribelos</u>	52
<u>Micropectra</u> sp.	540
MOLLUSCA	
Pelecypoda	
Sphaeriidae	
<u>Pisidium</u> sp.	480
<u>Lampsilis</u> sp.	9
Gastropoda	
Valvatidae	
<u>Valvata</u> sp.	9
TOTAL	2300

The following is a benthic macroinvertebrate analysis of a bottom sample taken 9 April 1974 at lake sample site ▼2.

Total Wet Weight (g/m²) = 1.56

Taxa	Number/m ²
NEMATODA	9
ANNELIDA	
Oligochaeta	
Tubificidae	
<u>Limnodrilus</u> sp.	9
ARTHROPODA	
Insecta	
Diptera	
Culicidae	
<u>Chaoborus punctipennis</u>	150
Chironomidae	
<u>Procladius</u> sp.	240
<u>Chironomus</u> sp.	35
<u>Triclotopus</u> sp.	9
MOLLUSCA	
Pelecypoda	
Sphaeriidae	
<u>Pisidium</u> sp.	170
TOTAL	620

ST. CROIX RIVER BASIN

01019250 Tomah Lake near Forest, Maine

LOCATION.--Lat 45°35'13", long 67°44'37", Washington County, 1.5 mi (2.4 km) northwest of Forest.

DRAINAGE AREA.--0.7 mi² (1.8 km²).

SURFACE AREA.--56 acres (227,000 m²).

SURFACE ELEVATION.--542 ft (165.2 m).

VOLUME.--1,200 acre-ft (1.48 hm³).

MAXIMUM DEPTH.--46 ft (14.0 m).

MEAN DEPTH.--21 ft (6.4 m).

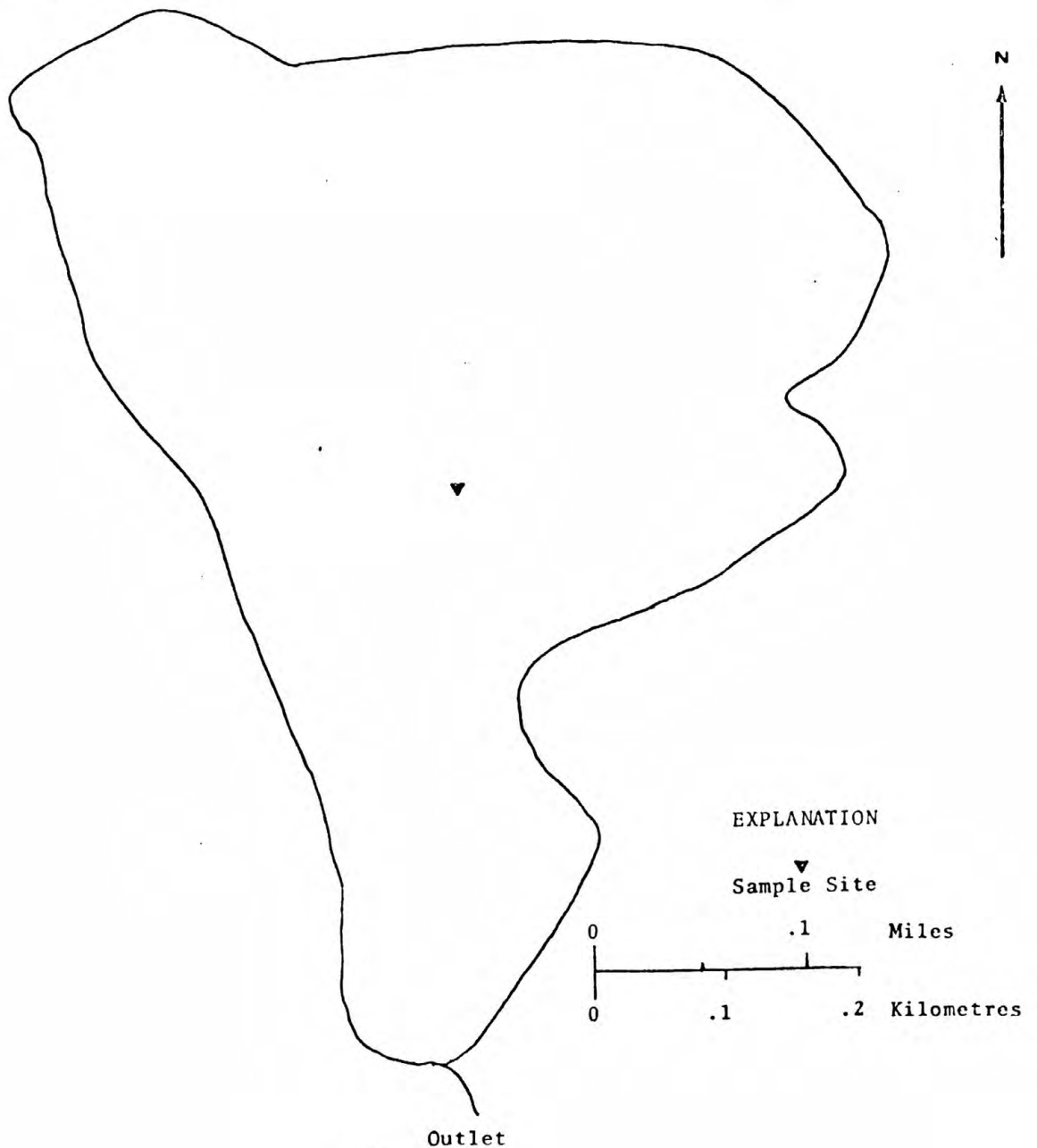
EPILIMNION DEPTH.--15 ft (4.6 m).

EPILIMNION VOLUME.--700 acre-ft (863,000 hm³).

LENGTH OF SHORELINE.--7,000 ft (2,100 m).

U.S.G.S. QUADRANGLES.--Forest 15-minute.

STATE OF MAINE MIDAS NUMBER.--0135.



ST. CROIX RIVER BASIN

01019250 Tomah Lake near Forest, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼-SAMPLE SITE LOCATION.--Lat 45°35'26", long 67°44'36".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
APR.										
08...	1400	.6	4.0	1.7	8.2	13.1	21	6.3	4	5
08...	1415	6.1	--	3.9	--	9.6	29	6.1	4	5
08...	1430	12.2	--	4.1	--	3.5	30	5.5	4	5
SEP.										
16...	0830	.6	11.5	16.0	8.7	10.1	17	6.4	3	7
16...	0845	8.0	--	16.0	--	9.9	17	6.4	3	10
16...	0900	12.0	--	10.0	--	.3	21	5.7	3	25

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
APR.										
08...	1.4	.001	.005	.07	.01	.04	.05	.02	.09	.14
08...	--	.001	.005	.03	.00	.01	.01	.11	.14	.15
08...	--	.001	.006	.09	.00	.08	.08	.13	.22	.30
SEP.										
16...	--	.002	.009	.01	.00	.00	.00	.14	.15	.15
16...	--	.002	.009	.01	.00	.00	.00	.13	.14	.14
16...	--	.002	.017	.01	.00	.00	.00	.27	.28	.28

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG) (MG/L)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
APR.										
08...	.62	.9	3.5	2.0	60	10	--	--	--	--
08...	.66	1.3	2.8	1.6	50	20	--	--	--	--
08...	1.3	.7	2.9	2.2	290	90	--	--	--	--
SEP.										
16...	.66	.5	3.8	1.3	120	10	2.5	.1	.1	1.0
16...	.62	.6	3.3	1.3	80	10	1.5	.0	.1	.9
16...	1.2	.9	5.4	1.5	420	110	2.5	.1	.2	.9

ST. CROIX RIVER BASIN

01019250 Tomah Lake near Forest, Maine--Continued

BIOLOGICAL ANALYSES

The following is a zooplankton analysis of a depth integrated sample taken 13 March 1974 at the lake sample site.

DOMINANT ZOOPLANKTON

Taxa	no./m ³	Volume Counted (MLS)
ARTHIROPODA		
Crustacea		
Cladocera		
Bosminidae		
<u>Bosmina coregoni</u>	98	4
Copepoda		
Calanoida	98	4
Cyclopoida	32	4
Nauplii	1300	4
Total	1600	

ROTIFERA - Keratella spp., Asplanchna spp., and Polyarthra spp. comprised most all of zooplankton.

The following is a zooplankton analysis of a depth integrated sample taken 22 August 1974 at the lake sample site.

DOMINANT ZOOPLANKTON

Taxa	no./m ³	Volume Count (MLS)
ARTHIROPODA		
Crustacea		
Cladocera		
Bosminidae		
<u>Bosmina coregoni</u>	1800	2
<u>Bosmina longirostris</u>	310	2
Daphniidae		
<u> Ceriodaphnia lacustris</u>	180	2
<u>Daphnia retrocurva</u>	60	2
Siddidae		
<u>Diaphanosoma brachyurum</u>	60	2
Copepoda		
Calanoida	3500	1
Cyclopoida	4500	1
Nauplii	3300	1
Total	13000	

ROTIFERA - Asplanchna spp., Keratella spp., and Polyarthra spp. equally abundant to crustaceans.

The following is a zooplankton analysis of a depth integrated sample taken 8 April 1975 at the lake sample site.

DOMINANT ZOOPLANKTON

Taxa	No./m ³	Volume Counted (MLS)
ARTHIROPODA		
Crustacea		
Cladocera		
Bosminidae		
<u>Bosmina coregoni</u>	150	4
Copepoda		
Calanoida	78	4
Nauplii	690	4
Total	920	

ROTIFERA - Kellicottia spp. and Polyarthra spp. equally abundant to crustaceans.

ST. CROIX RIVER BASIN

01019250 Tomah Lake near Forest, Maine--Continued

The following is a zooplankton analysis of a depth integrated sample taken 16 September 1975 at the lake sample site.

DOMINANT ZOOPLANKTON

Taxa	no./ _m ³	Volume Counted (MLS)
ARTHROPODA		
Crustacea		
Cladocera		
Bosminidae		
<u>Bosmina coregoni</u>	5700	2
<u>Bosmina longirostris</u>	1100	2
Daphnidae		
<u>Ceriodaphnia lacustris</u>	820	2
<u>Daphnia ambigua</u>	270	2
Sidae		
<u>Diaphanosoma brachyurum</u>	270	2
Copepoda		
Calanoida	10000	1
Cyclopoida	6000	1
Nauplii	32000	1
Total	56000	

ROTIFERA - Keratella spp. and Polyarthra spp. more abundant than crustaceans.

The following is a benthic macroinvertebrate analysis of a bottom sample taken 8 April 1975 at the lake sample site.

Total Wet Weight (g/m²) = 18.10

Taxa	Number/m ²
NEMATODA	26
ANNELIDA	
Oligochaeta	
Tubificidae	
<u>Limnodrilus</u> spp.	4000
<u>Tubifex</u> sp.	370
ARTHROPODA	
Insecta	
Diptera	
Culicidae	
<u>Chaoborus punctipennis</u>	530
Chironomidae	
<u>Chironomus</u> spp.	410
<u>Tanytarsus</u> sp.	26
TOTAL	5400

MACHIAS RIVER BASIN

01021450 Mopang Lake near Beddington, Maine

LOCATION.--Lat 44°54'52", long 67°58'45", Washington County, 5.0 mi (8.0 km) northeast of Beddington.

DRAINAGE AREA.--11.1 mi² (28.7 km²).

SURFACE AREA.--1,487 acres (6.02 km²).

SURFACE ELEVATION.--341 ft (103.9 m).

VOLUME.--33,000 acre-ft (40.7 hm³).

MAXIMUM DEPTH.--81 ft (24.7 m).

MEAN DEPTH.-- 22 ft (6.7 m).

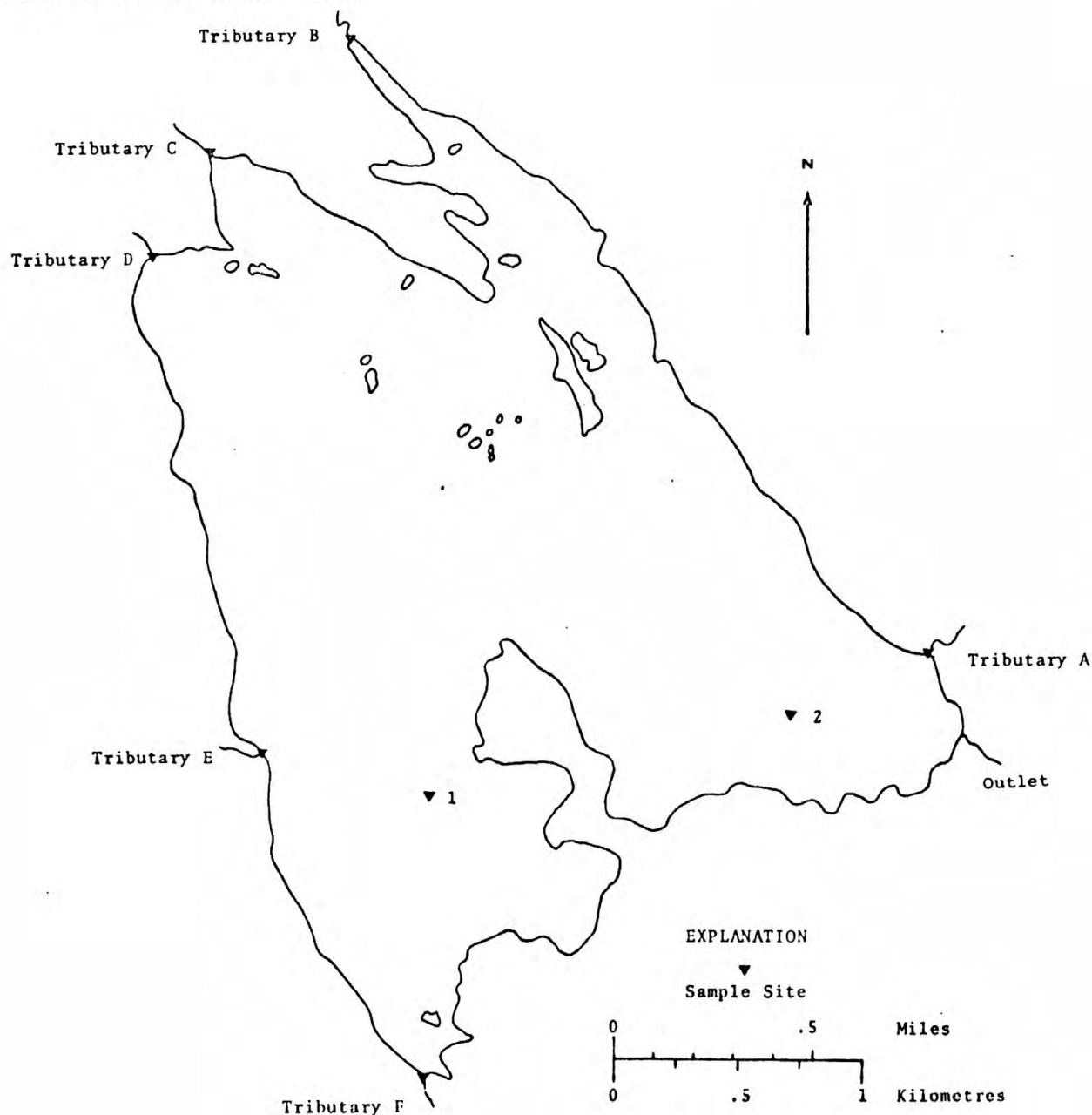
EPILIMNION DEPTH.--30 ft (9.1 m).

EPILIMNION VOLUME.--29,000 acre-ft (35.8 hm³).

LENGTH OF SHORELINE.--55,000 ft (17,000 m).

U.S.G.S. QUADRANGLES.--Lead Mountain and Tug Mountain 15-minute.

STATE OF MAINE MIDAS NUMBER.--1172.



MACHIAS RIVER BASIN

01021450 Mopang Lake near Beddington, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼ 1 - SAMPLE SITE LOCATION.--Lat 44°54'34", long 68°00'24".

DATE	TIME	DEPTH (N)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
APR.							
01...	1200	.6	2.0	1.0	8.8	.003	.9
MAY							
13...	1115	.6	13.0	9.2	6.7	.004	1.8
JUNE							
09...	0930	.3	9.0	8.5	9.1	.004	1.0
23...	1030	.3	30.0	20.0	9.0	.006	1.5
JULY							
08...	1330	.3	25.0	23.0	8.0	.005	1.9
22...	1030	.3	22.0	23.0	7.6	.004	2.4
AUG.							
04...	1000	.3	21.2	23.0	8.6	.005	2.3
19...	0945	.3	20.0	24.0	8.0	.007	2.5
SEP.							
03...	1100	.3	16.0	18.5	7.0	.006	1.9
17...	1045	.3	22.0	18.0	6.5	.002	2.0
29...	1015	.3	18.0	16.0	7.2	.006	2.1
OCT.							
15...	1130	.3	10.0	11.5	7.0	.006	2.3
27...	1045	.3	8.5	11.0	7.2	.005	2.0

DATE	TIME	DEPTH (N)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)	COLOR (PLAT- INUM- CORAL UNITS)
APR.										
01...	1200	.6	2.0	1.0	8.8	14.7	36	6.2	2	10
01...	1215	12.2	--	3.0	--	11.1	33	6.1	3	15
01...	1230	22.9	--	4.0	--	6.6	32	6.0	5	15
MAY										
13...	1115	.6	13.0	9.2	6.7	--	--	--	--	--
13...	1130	10.2	--	--	--	--	--	--	--	--
13...	1145	21.3	--	--	--	--	--	--	--	--

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
APR.										
01...	.9	.001	.003	.06	.01	.08	.09	.06	.12	.21
01...	--	.001	.003	.04	.01	.02	.03	.08	.12	.15
01...	--	.001	.006	.11	.00	.04	.04	.08	.19	.23
MAY										
13...	1.8	.001	.004	.08	--	--	.04	.05	.13	.17
13...	--	.001	.005	.01	--	--	.04	.09	.10	.14
13...	--	.001	.005	.05	--	--	.04	.07	.12	.16

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
APR.										
01...	.93	1.8	3.3	1.8	90	10	--	--	--	--
01...	.66	1.8	2.8	2.4	90	10	--	--	--	--
01...	1.0	1.5	2.9	3.9	180	130	--	--	--	--
MAY										
13...	.80	--	--	--	--	--	--	--	--	--
13...	.60	--	--	--	--	--	--	--	--	--
13...	.70	--	--	--	--	--	--	--	--	--

MACHIAS RIVER BASIN

01021450 Mopang Lake near Beddington, Maine--Continued

▼2 -SAMPLE SITE LOCATION.--Lat 44°54'47", long 67°59'16".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CAC03 (MG/L)	COLOR (PLAT- INUM- CORALT UNITS)
APR.										
01...	1045	.6	-2.0	1.0	9.1	13.6	36	6.3	3	15
01...	1100	6.1	--	3.4	--	12.6	34	6.1	2	15
01...	1115	10.7	--	4.0	--	7.2	34	6.1	4	20

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
APR.										
01...	--	.001	.004	.05	.01	.02	.03	.06	.11	.14
01...	--	.001	.004	.05	.01	.02	.03	.03	.08	.11
01...	--	.001	.005	.05	.01	.03	.04	.09	.14	.18

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
APR.										
01...	.62	1.9	1.7	2.2	90	10	--	--	--	--
01...	.49	1.7	2.4	2.3	90	0	--	--	--	--
01...	.80	1.7	2.7	3.2	90	20	--	--	--	--

▼-TRIBUTARY B SAMPLE SITE LOCATION.--Lat 44°56'01", long 68°00'30".

▼-TRIBUTARY C SAMPLE SITE LOCATION.--Lat 44°55'55", long 68°01'06".

▼-TRIBUTARY D SAMPLE SITE LOCATION.--Lat 44°55'41", long 68°01'16".

▼-TRIBUTARY E SAMPLE SITE LOCATION.--Lat 44°54'38", long 68°00'52".

▼-TRIBUTARY F SAMPLE SITE LOCATION.--Lat 44°53'58", long 68°00'20".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary B	APR.							
	01...	1130	.3	.1	36	.007	0	0
Tributary C	APR.							
	01...	1210	.3	.5	21	.005	0	0
Tributary D	APR.							
	01...	1220	.3	1.0	21	.004	0	0
Tributary E	APR.							
	01...	1220	.3	.1	21	.005	0	0
Tributary F	APR.							
	01...	1230	.3	.1	48	.007	0	0

MACHIAS RIVER BASIN

01021450 Mopang Lake near Beddington, Maine--Continued

BIOLOGICAL ANALYSES

The following is a benthic macroinvertebrate analysis of a bottom sample taken 31 March 1975 at lake sample site v1.

Total Wet Weight (g/m²) = 3.03

Taxa	Number/m ²
ANNELEIDA	
Oligochaeta	
Tubificidae	
<u>Limnodrilus spp.</u>	190
ARTHIROPODA	
Arachnoidea	
Hydracarina	9
Insecta	
Diptera	
Culicidae	
<u>Chaoborus punctipennis</u>	800
Chironomidae	
Procladius sp.	61
Chironomus spp.	500
Tanytarsus sp.	17
<u>Micropsectra sp.</u>	9
TOTAL	1600

PLEASANT RIVER BASIN

01022200 Pleasant River Lake near Beddington, Maine

LOCATION.--Lat 44°50'05", long 67°57'51", Washington County, 4.0 mi (6.4 km) east of Beddington.

DRAINAGE AREA.--15.0 mi² (38.8 km²).

SURFACE AREA.--949 acres (3.84 km²).

SURFACE ELEVATION.--317 ft (96.6 m).

VOLUME.--13,000 acre-ft (16.0 hm³).

MAXIMUM DEPTH.--56 ft (17.1 m).

MEAN DEPTH.--14 ft (4.3 m).

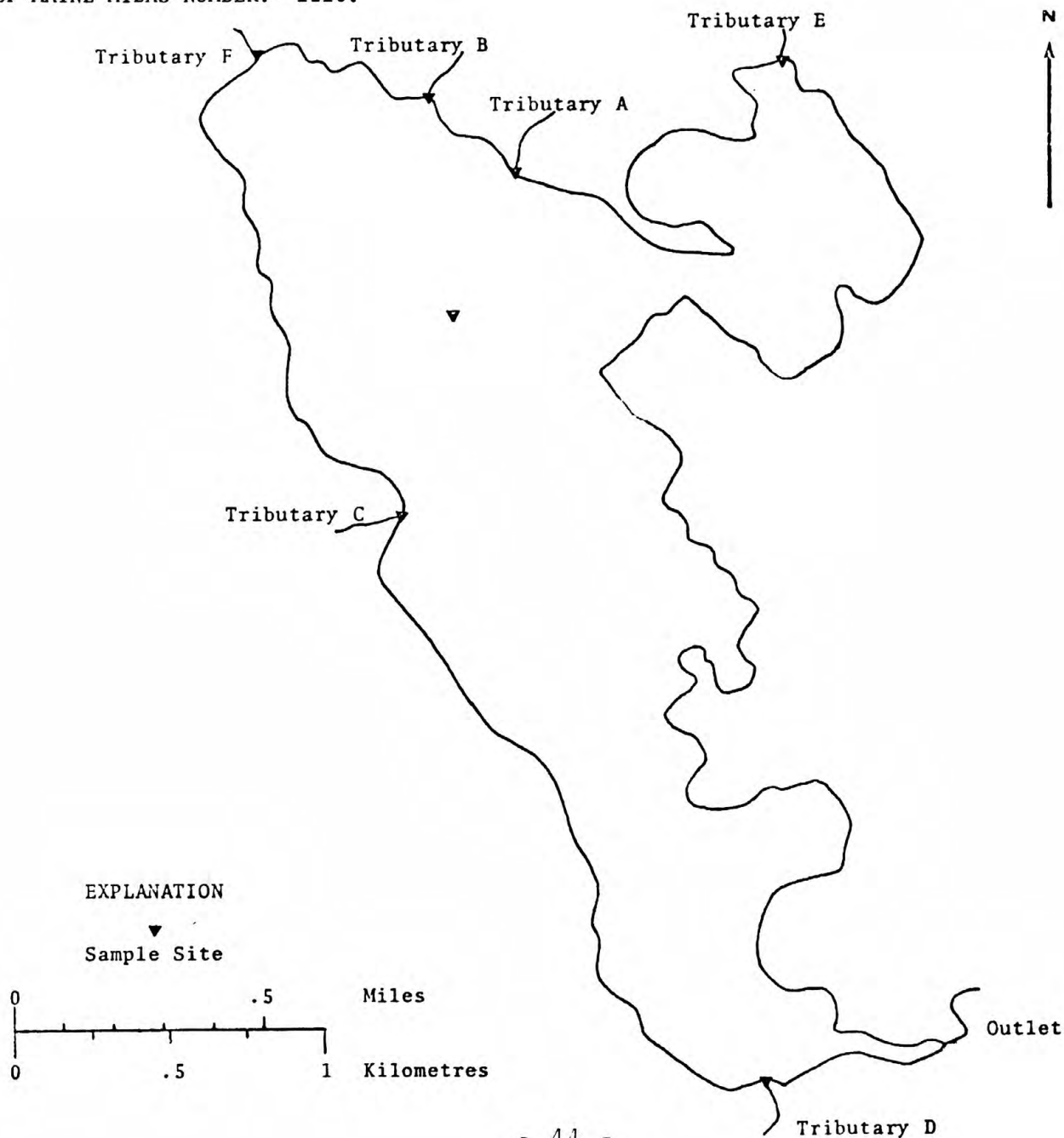
EPILIMNION DEPTH.--35 ft (10.7 m).

EPILIMNION VOLUME.--12,000 acre-ft (14.8 hm³).

LENGTH OF SHORELINE.--47,000 ft (14,000 m).

U.S.G.S. QUADRANGLES.--Tug Mountain 15-minute.

STATE OF MAINE MIDAS NUMBER.--1210.



PLEASANT RIVER BASIN

01022200 Pleasant River Lake near Beddington, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼ -SAMPLE SITE LOCATION.--Lat 44°51'23", long 67°58'58".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
APR.							
02...	1045	.6	4.0	2.0	4.9	.008	.6
MAY							
13...	1130	.6	13.0	11.0	4.5	.008	1.2
JUNE							
09...	1020	.3	11.0	14.0	5.2	.006	1.8
23...	1115	.3	27.0	22.0	4.8	.006	1.8
JULY							
08...	1600	.3	24.0	24.0	4.2	.005	1.5
22...	1100	.3	22.5	23.0	5.4	.006	1.4
AUG.							
04...	1035	.3	21.2	23.0	5.2	.006	1.5
19...	1045	.3	20.0	25.0	5.8	.007	1.7
SEP.							
03...	1140	.3	18.0	18.5	5.6	.008	1.9
17...	1120	.3	21.5	18.5	4.9	.008	2.1
29...	1045	.3	18.0	16.0	4.8	.008	2.3
OCT.							
15...	1205	.3	11.5	11.5	5.5	.010	2.3
27...	1125	.3	11.0	11.5	5.4	.007	2.0

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
APR.										
02...	1045	.6	4.0	2.0	4.9	13.8	22	5.7	2	35
02...	1100	7.6	--	3.8	--	11.0	21	5.6	3	35
02...	1115	15.2	--	3.4	--	4.6	25	5.6	5	60
MAY										
13...	1130	.6	13.0	11.0	4.5	--	--	--	--	--
13...	1145	7.6	--	--	--	--	--	--	--	--
13...	1200	15.2	--	--	--	--	--	--	--	--

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
APR.										
02...	.6	.002	.008	.06	.01	.05	.06	.06	.12	.18
02...	--	.002	.005	.01	.01	.02	.03	.00	.01	.04
02...	--	.002	.008	.07	.01	.08	.09	.05	.12	.21
MAY										
13...	1.2	.002	.008	.03	--	--	.02	.08	.11	.13
13...	--	.002	.006	.04	--	--	.04	.09	.13	.17
13...	--	.002	.005	.03	--	--	.02	.09	.12	.14

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
APR.										
02...	.80	3.0	4.9	3.6	100	10	--	--	--	--
02...	.18	3.0	2.8	4.5	160	20	--	--	--	--
02...	.93	3.0	2.0	6.3	500	380	--	--	--	--
MAY										
13...	.60	--	--	--	--	--	--	--	--	--
13...	.80	--	--	--	--	--	--	--	--	--
13...	.60	--	--	--	--	--	--	--	--	--

PLEASANT RIVER BASIN

01022200 Pleasant River Lake near Beddington, Maine--Continued

- ▼--TRIBUTARY A SAMPLE SITE LOCATION.--Lat 44°51'51", long 67°59'06".
 ▼--TRIBUTARY B SAMPLE SITE LOCATION.--Lat 44°51'53", long 67°59'15".
 ▼--TRIBUTARY C SAMPLE SITE LOCATION.--Lat 44°51'04", long 67°59'07".
 ▼--TRIBUTARY D SAMPLE SITE LOCATION.--Lat 44°50'04", long 67°58'17".
 ▼--TRIBUTARY E SAMPLE SITE LOCATION.--Lat 44°51'52", long 67°58'09".
 ▼--TRIBUTARY F SAMPLE SITE LOCATION.--Lat 44°51'51", long 67°59'34".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	APR. 02...	1100	.3	.4	44	.005	0	0
Tributary B	APR. 02...	1110	.3	.9	37	.004	0	0
Tributary C	APR. 02...	1120	.3	.1	32	.004	0	0
Tributary D	APR. 02...	1130	.3	1.8	19	.006	0	0
Tributary E	APR. 02...	1140	.3	.3	50	.007	0	0
Tributary F	APR. 02...	1050	.3	1.8	74	.003	0	0

BIOLOGICAL ANALYSES

The following is a phytoplankton analysis of a depth integrated sample taken 13 May 1975 from the top 10 metres (33 feet) of the water column at the lake sample site.

Taxa	Cells per ml.	Colonies per ml.	Volume Counted (ml.)
Chlorophyta			
Chlamydomonas sp.	6	sol	.5
Oocystis pusilla	16	14	.5
Chrysophyta			
Asterionella formosa	120	24	.5
Cyclotella stelligera	74	sol	.5
Cyclotella stelligera or glomenata	58	sol	.5
Fragillaria crotonensis	10	6	.5
Melosira italica	54	10	.5
Synedra sp.	2	sol	.5
U.K. Pennate	40	sol	.5
Caromulina sp.	8	sol	.5
Chrysophyte statospore	250	sol	.5
Dinobryon bavaricum	4	sol	.5
Dinobryon sertularia	6	sol	.5
Dinobryon sp.	2	sol	.5
Kephyrion ovale	32	sol	.5
Oocromonas sp.	6	sol	.5
Salpingoeca frequentissima	10	sol	.5
Cyanophyta			
Chroococcus dispersus v. minor	160	4	.5
Microcystis firma	44	4	.5
Euglenophyta			
Trachelomonas sp.	2	sol	.5
Pyrrophyta			
Cryptomonas sp.	28	sol	.5

PLEASANT RIVER BASIN

01022200 Pleasant River Lake near Beddington, Maine--Continued

The following is a phytoplankton analysis of a depth integrated sample taken 9 June, 1975 from the top 10 metres (33 feet) of the water column at the lake sample site.

Taxa	Cells per ml.	Colonies per ml.	Volume Counted (ml.)
Chlorophyta			
Ankistrodesmuna falcatus	8	6	.5
Chlamydomonas sp.	4	sol	.5
Cosmarium sp.	.2	sol	.5
Geminella sp.	3.4	.2	.5
Gloocystis sp.	60	2	.5
Golenkinia radiata	2	sol	.5
Oocystis pusilla	8	2	.5
Sphaerocystis Schroeteri	82	10	.5
Staurastrum cingulum	.2	sol	.5
UNK Volvocales biflagellate	16	sol	.5
Chrysophyta			
Asterionella formosa	170	32	.5
Cyclotella stelligera	160	sol	.5
Cyclotella stelligera and glomerata	33	sol	.5
Melosira distans	16	14	.5
Melosira ambigua	13	.6	.5
Rhizosolenia eriensis	4	sol	.5
Synedra sp.	4	sol	.5
UNK Pennate	54	sol	.5
Charonulina sp.	180	sol	.5
Chrysophyte statospore	92	sol	.5
Dinobryon bavaricum	14	sol	.5
Kephyrion ovale	16	sol	.5
Mallomonas caudata	2	sol	.5
Mallomonas globosa	4	sol	.5
Mallomonas taururata	8	sol	.5
Mallomonas sp.	4	sol	.5
Salpingoeca frequentissima	4	sol	.5
Cyanophyta			
Coelosphaerium Naegelianum	190	1.4	5
Pyrrophyta			
Cryptomonas sp.	30	sol	.5
Rhodomonas minuta v. nannoplanktica	24	sol	.5
Peridinium sp.	.2	sol	.5

The following is a phytoplankton analysis of a depth integrated sample taken 8 July 1975 from the top 10 metres (33 feet) of the water column at the lake sample site.

Taxa	Cells per ml.	Colonies per ml.	Volume Counted (ml.)
Chlorophyta			
Ankistrodesmus falcatus	15	sol	.33
Artarodesmus lacus	.2	sol	.5
Scenedesmus serratus	.8	.2	.5
Spondylosium planum	1.6	.2	.5
Sphaerocystis Schroeteri	24	3	.33
Staurastrum cingulum	.2	sol	.5
Tetraedron minimum	3	sol	.33
Chrysophyta			
Asterionella formosa	500	87	.33
Cyclotella stelligera	210	sol	.33
Cyclotella stelligera or glomerata	33	sol	.33
Melosira ambigua	3.6	.2	.5
Melosira distans	3	sol	.33
Rhizosolenia eriensis	81	sol	.33
Synedra sp.	3	sol	.33
Tabellaria fenestrata	6.4	1.0	.5
UNK Pennate	39	sol	.33
Dinobryon divergens	6	sol	.33
Chrysophyte statospore	84	sol	.33
Chrysophyte statospore A	290	sol	.33
Kephyrion ovale	6	sol	.33
Salpingoeca frequentissima	60	sol	.33
Cyanophyta			
Coelosphaerium Naegelianum	60	.6	.5
Merismopedia punctata	430	9	.33
Merismopedia tenuissima	1200	12	.33
Euglenophyta			
Euglena sp.	3	sol	.33
Pyrrophyta			
Cryptomonas sp.	9	sol	.33
Rhodomonas minuta v. nannoplanktica	12	sol	.33

PLEASANT RIVER BASIN

01022200 Pleasant River Lake near Beddington, Maine--Continued

The following is a phytoplankton analysis of a depth integrated sample taken 19 August 1975 from the top 10 metres (33 feet) of the water column at the lake sample site.

Taxa	Cells per ml.	Colonies per ml.	Volume Counted (ml.)
Chlorophyta			
Ankistrodesmus falcatus	21	sol	.33
Arthrodesmus incus	.2	sol	5
Chlamydomonas sp.	9	sol	.33
Geminella sp.	27	9	.33
Oocystis parva	21	15	.33
Scenedesmus bijuga	21	12	.33
Scenedesmus serratus	12	3	.33
Sphaerocystis schroeteri	54	9	.33
Staurastrum arachne	.2	sol	5
Staurastrum pentacerum	.2	sol	5
Chrysophyta			
Asterionella formosa	4.8	.8	5
Cyclotella comta	.2	sol	5
Cyclotella stelligera	51	sol	.33
Cyclotella stelligera or glomerata	30	sol	.33
Melosira ambigua	54	6	.33
Melosira distans	18	sol	.33
Rhizosolenia eriensis	45	sol	.33
Synedra sp.	6	sol	.33
Tabellaria fenestrata	.8	.2	5
U.K. Pennate	21	sol	.33
Chromulina sp.	72	sol	.33
Chrysophyte statospore	36	sol	.33
Chrysophyte statospore A	3	sol	.33
Dinobryon sp.	6	sol	.33
Kephyrion ovale	6	sol	.33
Mallomonas sp.	3	sol	.33
Ochromonas sp.	48	sol	.33
Salpingoeca frequentissima	9	sol	.33
Cyanophyta			
Aphanocapsa elachista v. conferta	2200	6	.33
Aphanocapsa delectatissima	270	6	.33
Aphanothece clathrata	3400	63	.33
Chroococcus limneticus	15	3	.33
Coelosphaerium Naegelianum	150	3	.33
Merismopedia punctata	230	6	.33
Merismopedia tenuissima	1700	72	.33
Microcystis aureginosa	600	3	.33
Euglenophyta			
Trachelomonas sp.	9	sol	.33
Pyrrophyta			
Cryptomonas sp.	9	sol	.33
Rhodomonas minuta v. nannoplanktica	33	sol	.33
Peridinium sp.	3	sol	.33

PLEASANT RIVER BASIN

01022200 Pleasant River Lake near Beddington, Maine--Continued

The following is a phytoplankton analysis of a depth integrated sample taken 17 September 1975 from the top 10 metres (33 feet) of the water column at the lake sample site.

Taxa	Cells per ml.	Colonies per ml.	Volume Counted (ml.)
Chlorophyta			
Ankistrodesmus falcatus	30	sol	.1
Closterium sp.	.2	sol	.5
Nephrocystium limaeticum	40	10	.1
Chrysophyta			
Asterionella formosa	4.4	.8	5
Cyclotella stelligera	130	sol	.1
Cyclotella stelligera or glomerata	80	sol	.1
Melosira distans	90	sol	.1
Melosira italica	14	.6	5
Rhizosolenia eriensis	30	sol	.1
Tabellaria fenestrata	6.6	1.0	5
U.K. Pennate	60	sol	.1
Chromulina sp.	320	sol	.1
Chrysophyte statospore	60	sol	.1
Chrysosphaerella longispina	3.0	.2	5
Dinobryon bavaricum	20	sol	.1
Dinobryon pediforme	10	sol	.1
Kephyrion ovale	10	sol	.1
Kephyriopsis sp.	10	sol	.1
Mallomonas sp.	10	sol	.1
Ochromonas sp.	130	sol	.1
Salpingoeca frequentissima	10	sol	.1
Salpingoeca sp.	10	sol	.1
Cyanophyta			
Aphanothece clathrata	6200	90	.1
Merismopedia tenuissima	2400	100	.1
Euglenophyta			
U.K. Euglenophyta	10	sol	.1
Pyrrophyta			
Cryptomonas sp.	40	sol	.1
Rhodomonas minuta v. nannoplanktica	50	sol	.1
Peridinium sp.	10	sol	.1

The following is a phytoplankton analysis of a depth integrated sample taken 15 October 1975 from the top 10 metres (33 feet) of the water column at the lake sample site.

Taxa	Cells per ml.	Colonies per ml.	Volume Counted (ml.)
Chlorophyta			
Ankistrodesmus falcatus	25	sol	.2
Arthrodesmus incus	5	sol	.2
Nephrocystium sp.	30	5	.2
Sphaerocystis Schroeteri	180	25	.2
Stauroastrum cingulum	.2	sol	5
Chrysophyta			
Asterionella formosa	40	5	.2
Cyclotella comta	10	sol	.2
Cyclotella stelligera	5	sol	.2
Cyclotella stelligera or glomerata	20	sol	.2
Fragellaria sp.	7.6	.2	5
Melosira distans	5	sol	.2
Melosira italica	5.0	.2	5
Rhizosolenia eriensis	85	sol	.2
Synedra sp.	10	sol	.2
Tabellaria fenestrata	12	1.6	5
U.K. Pennate	35	sol	.2
Chrysococcocystis sp.	10	sol	.2
Chrysophyte statospore	80	sol	.2
Chrysosphaerella longispina	4.0	.2	5
Chromulina sp.	50	sol	.2
Dinobryon bavaricum	10	sol	.2
Gloeobotrys limaeticus	30	10	.2
Mallomonas tonsurata	15	sol	.2
Ochromonas sp.	90	sol	.2
Salpingoeca frequentissima	5	sol	.2
Cyanophyta			
Aphanothece clathrata	50	5	.2
Gomphosphaeria aponina	900	10	.2
Merismopedia tenuissima	80	5	.2
Pyrrophyta			
Cryptomonas sp.	25	sol	.2
Rhodomonas minuta v. nannoplanktica	15	sol	.2

PLEASANT RIVER BASIN

01022200 Pleasant River Lake near Beddington, Maine--Continued

The following is a benthic macroinvertebrate analysis of a bottom sample taken 2 April 1975 at the lake sample site.

Total Wet Weight (g/m²) = 5.80

Taxa	Number/m ²
NEMATODA	43
ANNELIDA	
Oligochaeta	
Tubificidae	
<u>Limnodrilus</u> spp.	110
<u>Tubifex</u> sp.	9
ARTHIROPODA	
Insecta	
Trichoptera	
<u>Phylocentropus</u> sp.	9
Diptera	
Culicidae	
<u>Chaoborus punctipennis</u>	2500
Chironomidae	
<u>Procladius</u> sp.	100
<u>Chironomus</u> spp.	150
<u>Cryptochironomus</u> sp.	9
<u>Tanytarsus</u> sp.	110
<u>Microsectra</u> sp.	26
MOLLUSCA	
Pelecypoda	
Sphaeriidae	
<u>Pisidium</u> sp.	140
TOTAL	3200

NARRAGUAGUS RIVER BASIN

01022300 Beddington Lake near Beddington, Maine

LOCATION.--Lat 44°48'34", long 68°02'02", Washington County, 2.0 mi (3.2 km) southeast of Beddington.

DRAINAGE AREA.--80.6 mi² (208.8 km²).

SURFACE AREA.--404 acres (1.63 km²).

SURFACE ELEVATION.--256 ft (78.0 m).

VOLUME.--7,200 acre-ft (8.88 hm³).

MAXIMUM DEPTH.--60 ft (18.3 m).

MEAN DEPTH.--18 ft (5.5 m).

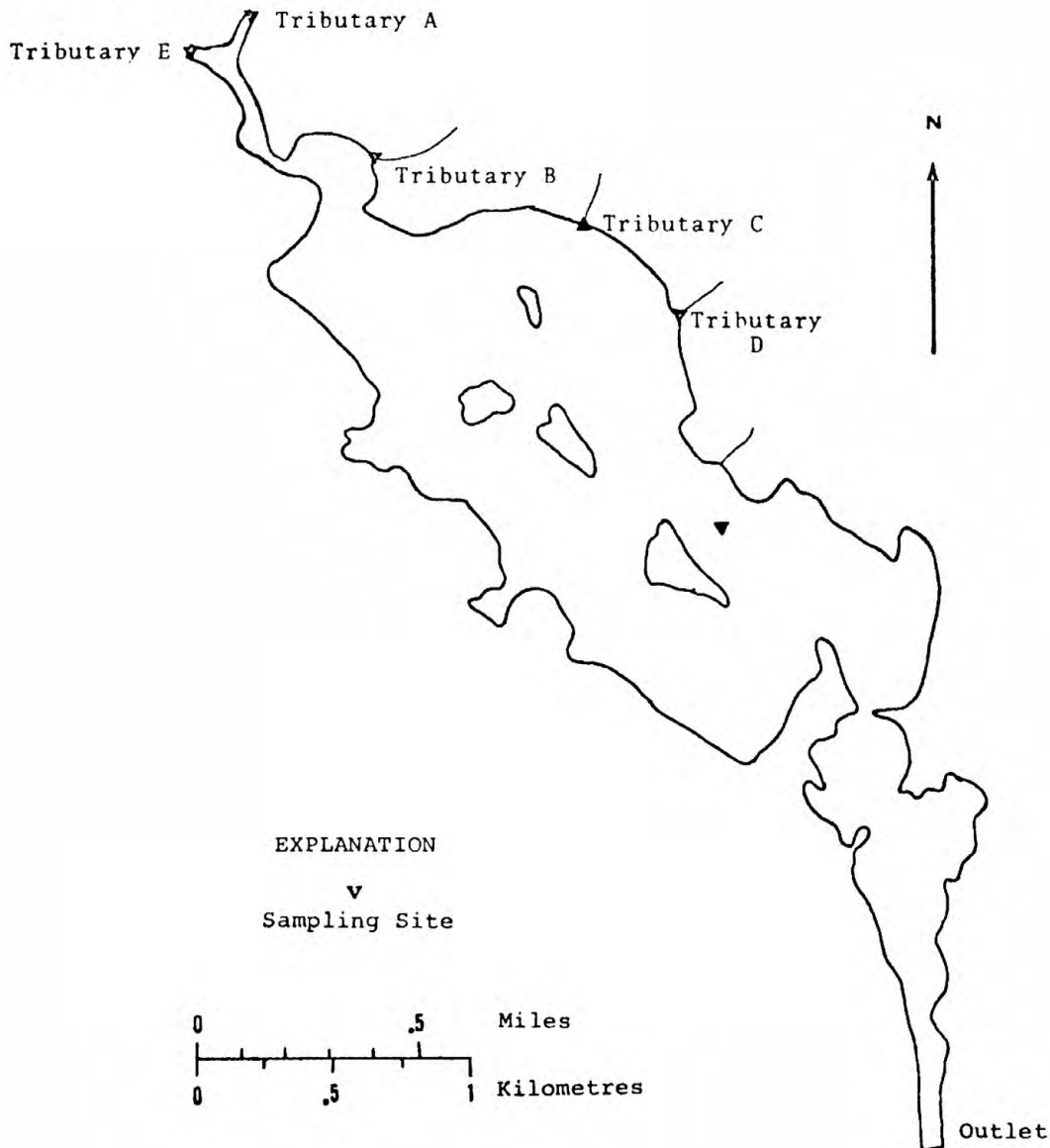
EPILIMNION DEPTH.--23 ft (7.0 m).

EPILIMNION VOLUME.--6,300 acre-ft (7.77 hm³).

LENGTH OF SHORELINE.--37,000 ft (11,000 m).

U.S.G.S. QUADRANGLES.--Lead Mountain 15-minute.

STATE OF MAINE MIDAS NUMBER.--4524.



NARRAGUAGUS RIVER BASIN

01022300 Beddington Lake near Beddington, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼-SAMPLE SITE LOCATION.--Lat 44°49'12", long 68°02'36".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
APR.							
01...	1345	.6	3.0	.8	3.7	.007	.3
MAY							
13...	1200	.6	15.0	13.2	4.2	.008	1.0
JUNE							
09...	1200	.3	12.0	13.0	5.0	.009	1.0
23...	1200	.3	27.0	22.0	3.3	.009	1.2
JULY							
08...	1430	.3	24.0	24.0	3.6	.007	1.5
22...	1145	.3	24.0	24.0	3.9	.009	2.0
AUG.							
04...	1130	.3	20.7	22.0	4.2	.009	1.6
19...	1145	.3	21.0	23.5	3.7	.012	1.7
SEP.							
03...	1225	.3	18.0	18.0	3.7	.011	2.0
08...	1530	.6	19.0	18.5	3.9	.009	--
17...	1200	.3	26.0	19.2	4.2	.010	2.3
29...	1130	.3	19.0	16.0	4.3	.009	2.2
OCT.							
15...	1240	.3	11.5	11.0	3.8	.012	2.4
27...	1200	.3	12.0	11.0	3.3	.014	1.5

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
APR.										
01...	1345	.6	3.0	.8	3.7	14.4	53	6.0	4	50
01...	1400	7.6	--	2.0	--	12.0	53	6.2	7	65
01...	1415	16.8	--	3.1	--	4.6	58	6.1	8	70
MAY										
13...	1200	.6	15.0	13.2	4.2	--	--	--	--	--
13...	1215	9.1	--	--	--	--	--	--	--	--
13...	1230	16.8	--	--	--	--	--	--	--	--
SEP.										
08...	1530	.6	19.0	18.5	3.9	9.3	36	6.8	10	35
08...	1545	7.0	--	9.9	--	4.9	34	6.2	9	40
08...	1550	10.0	--	6.0	--	6.5	22	6.2	6	35
08...	1600	18.0	--	5.0	--	2.5	31	6.2	7	75

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
APR.										
01...	.3	.002	.007	.07	.01	.06	.07	.04	.11	.18
01...	--	.002	.007	.08	.01	.07	.08	.03	.11	.19
01...	--	.004	.012	.08	.01	.08	.09	.05	.13	.22
MAY										
13...	1.0	.002	.003	.04	--	--	.01	.12	.16	.17
13...	--	.002	.007	.03	--	--	.01	.10	.13	.14
13...	--	.002	.007	.04	--	--	.03	.08	.12	.15
SEP.										
08...	--	.001	.009	.02	.00	.01	.01	.18	.20	.21
08...	--	.001	.009	.03	.00	.04	.04	.14	.17	.21
08...	--	.001	.003	.02	.00	.07	.07	.15	.17	.24
08...	--	.002	.011	.03	.00	.11	.11	.10	.13	.24

NARRAGUAGUS RIVER BASIN

01022300 Beddington Lake near Beddington, Maine -Continued

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
APR.										
01...	.80	3.0	4.1	5.8	160	20	--	--	--	--
01...	.84	3.5	3.9	7.4	190	10	--	--	--	--
01...	.97	2.9	3.9	7.9	340	40	--	--	--	--
MAY										
13...	.80	--	--	--	--	--	--	--	--	--
13...	.60	--	--	--	--	--	--	--	--	--
13...	.70	--	--	--	--	--	--	--	--	--
SEP.										
08...	.93	2.5	3.0	5.7	210	10	4.9	.4	.5	2.2
08...	.93	2.3	3.8	5.7	190	40	3.7	.3	.4	1.8
08...	1.1	2.7	3.9	5.8	210	30	3.9	.2	.4	1.7
08...	1.1	2.4	4.1	6.4	700	160	2.8	.2	.4	1.7

▼-TRIBUTARY A SAMPLE SITE LOCATION.--Lat 44°50'32", long 68°04'13".

▼-TRIBUTARY B SAMPLE SITE LOCATION.--Lat 44°49'53", long 68°03'23".

▼-TRIBUTARY C SAMPLE SITE LOCATION.--Lat 44°49'36", long 68°02'50".

▼-TRIBUTARY D SAMPLE SITE LOCATION.--Lat 44°49'30", long 68°02'32".

▼-TRIBUTARY E SAMPLE SITE LOCATION.--Lat 44°49'53", long 68°04'54"

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP TOCOC- CI (COL- ONIES PER 100 ML)
Tributary A	APR. 01...	1410	.3	1.0	73	.006	0	0
	SEP. 08...	1700	.3	17.0	38	.007	0	66
Tributary B	APR. 01...	1420	.3	4.0	52	.007	0	0
Tributary C	APR. 01...	1430	.3	.1	73	.005	0	0
	SEP. 08...	1710	.3	15.5	43	.012	20	B2
Tributary D	APR. 01...	1440	.3	7.0	58	.007	0	0
Tributary E	SEP. 08...	1720	.3	12.0	45	.008	26	B14

BIOLOGICAL ANALYSES

The following is a benthic macroinvertebrate analysis of a bottom sample taken 26 March 1975 at the lake sample site.

Total Wet Weight (g/m²) = 2.94

Taxa	Number/m ²
ANNELIDA	
Oligochaeta	
Tubificidae	
<u>Tubifex sp.</u>	9
ARTHIPODA	
Insecta	
Diptera	
Culicidae	
Chaoborus <u>punctipennis</u>	1800
Chironomidae	
Procladius sp.	17
Chironomus spp.	87
Phaenopsectra-Tribelos	95
Tanytarsus sp.	160
Brillia sp.	9

TOTAL 2200

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UNION RIVER BASIN

01023100 Hopkins Pond near North Mariaville, Maine

LOCATION.--Lat 44°47'37", long 68°26'21", Hancock County, 4.0 mi (6.4 km) west of North Mariaville.

DRAINAGE AREA.--3.2 mi² (8.3 km²).

SURFACE AREA.--442 acres (1.79 km²).

SURFACE ELEVATION.--361 ft (110.0 m).

VOLUME.--9,900 acre-ft (12.2 hm³).

MAXIMUM DEPTH.--65 ft (19.8 m).

MEAN DEPTH.--22 ft (6.7 m).

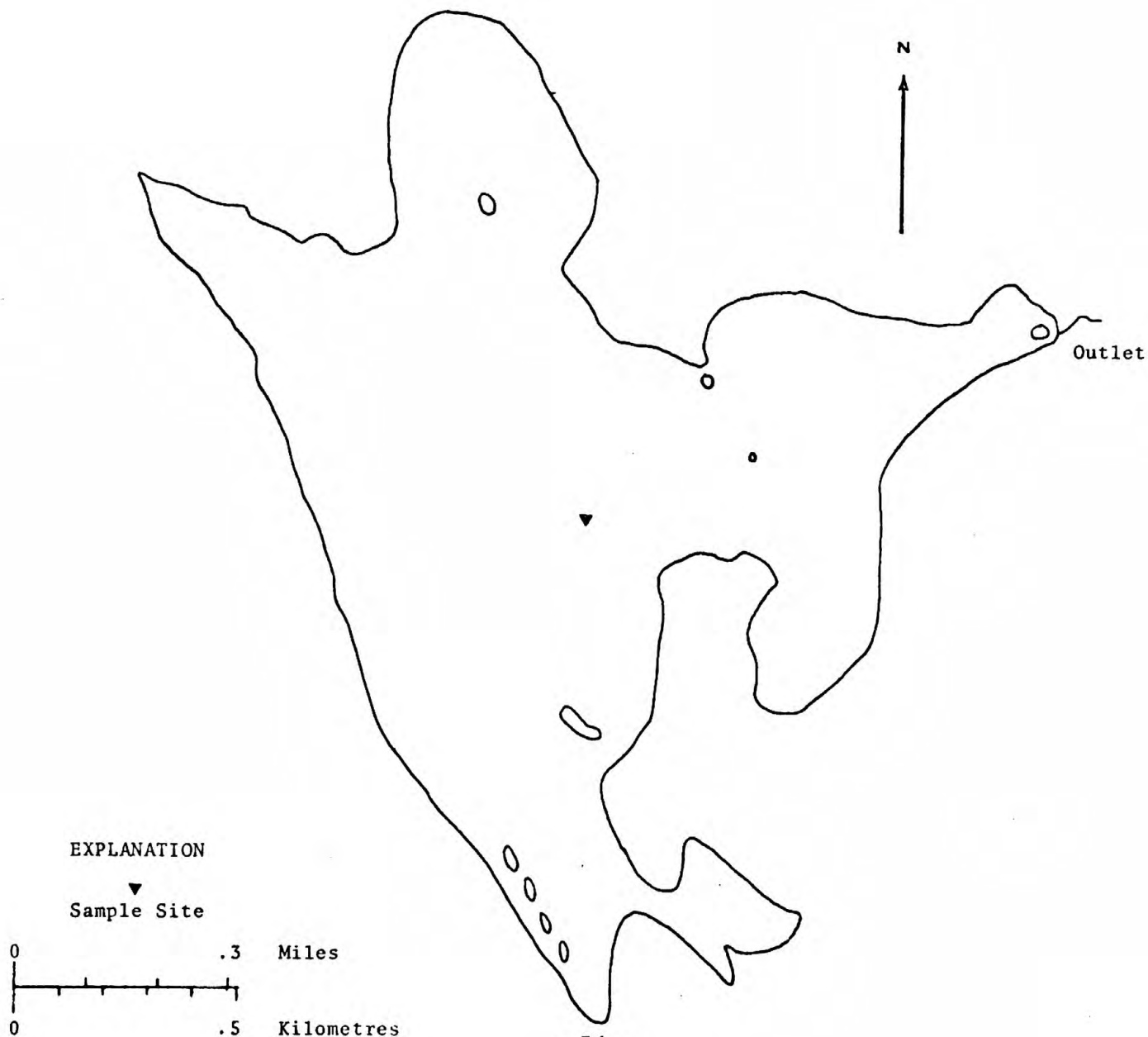
EPILIMNION DEPTH.--33 ft (10.0 m).

EPILIMNION VOLUME.--8,900 acre-ft (11.0 hm³).

LENGTH OF SHORELINE.--33,000 ft (10,000 m).

U.S.G.S. QUADRANGLES.--Great Pond 15-minute.

STATE OF MAINE MIDAS NUMBER.--4538.



UNION RIVER BASIN

01023100 Hopkins Pond near North Mariaville, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼ -SAMPLE SITE LOCATION.--Lat 44°47'22", long 68°27'10".

DATE	TIME	DEPTH (M)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	TRANSPAR-ENCY (SECCHI DISK) (M)	TOTAL PHOSPHORUS (P) (MG/L)	CHLORO-PHYLL A (UG/L)
MAY							
07...	1615	.6	7.0	7.0	6.5	.007	2.1
JUNE							
03...	1400	.3	20.5	17.0	7.1	.006	2.3
16...	1500	.3	18.5	16.5	8.7	.005	1.7
JULY							
08...	1545	.3	23.5	24.0	8.1	.004	1.3
22...	1520	.3	27.4	25.5	8.5	.005	1.2
AUG.							
04...	1440	.3	20.0	24.0	8.2	.005	2.0
19...	1420	.3	18.5	22.5	8.8	.006	1.3
SEP.							
02...	1525	.3	16.0	18.8	8.9	.008	1.5
16...	1355	.3	19.0	16.0	7.3	.007	1.2
24...	1300	.3	13.5	16.1	8.3	.010	--
30...	1100	.3	21.5	17.5	8.4	.003	1.7
OCT.							
14...	1320	.3	17.5	13.0	6.2	.009	1.5
NOV.							
03...	1420	.3	15.0	10.0	6.5	.005	1.8

DATE	TIME	DEPTH (M)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	TRANSPAR-ENCY (SECCHI DISK) (M)	DIS-SOLVED OXYGEN (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	ALKALINITY AS CaCO3 (MG/L)	COLOR (PLAT-INUM-COBALT UNITS)
MAY										
07...	1615	.6	7.0	7.0	6.5	--	--	--	--	--
07...	1630	9.1	--	--	--	--	--	--	--	--
07...	1645	18.3	--	--	--	--	--	--	--	--
SEP.										
24...	1300	.3	13.5	16.1	8.3	10.8	25	6.9	4	5
24...	1310	10.0	--	15.9	--	10.2	25	6.8	3	7
24...	1320	12.0	--	9.9	--	7.7	29	6.1	3	7
24...	1330	18.0	--	7.2	--	7.2	31	6.0	5	25

DATE	CHLORO-PHYLL A (UG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)
MAY										
07...	2.1	.002	.007	.05	--	--	.06	.08	.13	.19
07...	--	.002	.005	.01	--	--	.03	1.3	1.3	1.3
07...	--	.001	.006	.02	--	--	.03	.77	.79	.82
SEP.										
24...	--	--	.010	.00	.01	.01	.02	.17	.17	.19
24...	--	--	.010	.01	.01	.24	.25	.10	.11	.36
24...	--	--	.010	.00	.01	.07	.08	.16	.16	.24
24...	--	--	.009	.03	.01	.00	.01	.22	.25	.26

DATE	TOTAL NITROGEN (NO3) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNE-SIUM (MG)	TOTAL POTAS-SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
MAY										
07...	.80	--	--	--	--	--	--	--	--	--
07...	5.9	--	--	--	--	--	--	--	--	--
07...	3.6	--	--	--	--	--	--	--	--	--
SEP.										
24...	.84	1.1	3.2	1.8	40	0	9.9	.1	.2	1.3
24...	1.6	1.2	3.0	1.9	50	0	6.0	.1	.2	1.4
24...	1.1	1.4	3.0	1.9	80	30	3.0	.1	.2	1.3
24...	1.2	.9	2.6	3.2	290	180	8.7	.1	.2	1.4

UNION RIVER BASIN

01023200 Upper Lead Mountain Pond near Beddington, Maine

LOCATION.--Lat 44°51'05", long 68°08'56", Hancock County, 3.5 mi (5.6 km) west of Beddington.

DRAINAGE AREA.--6.9 mi² (17.9 km²).

SURFACE AREA.--1,021 acres (4.13 km²).

SURFACE ELEVATION.--355 ft (108.2 m).

VOLUME.--25,000 acre-ft (30.8 hm³).

MAXIMUM DEPTH.--57 ft (17.4 m).

MEAN DEPTH.--24 ft (7.3 m).

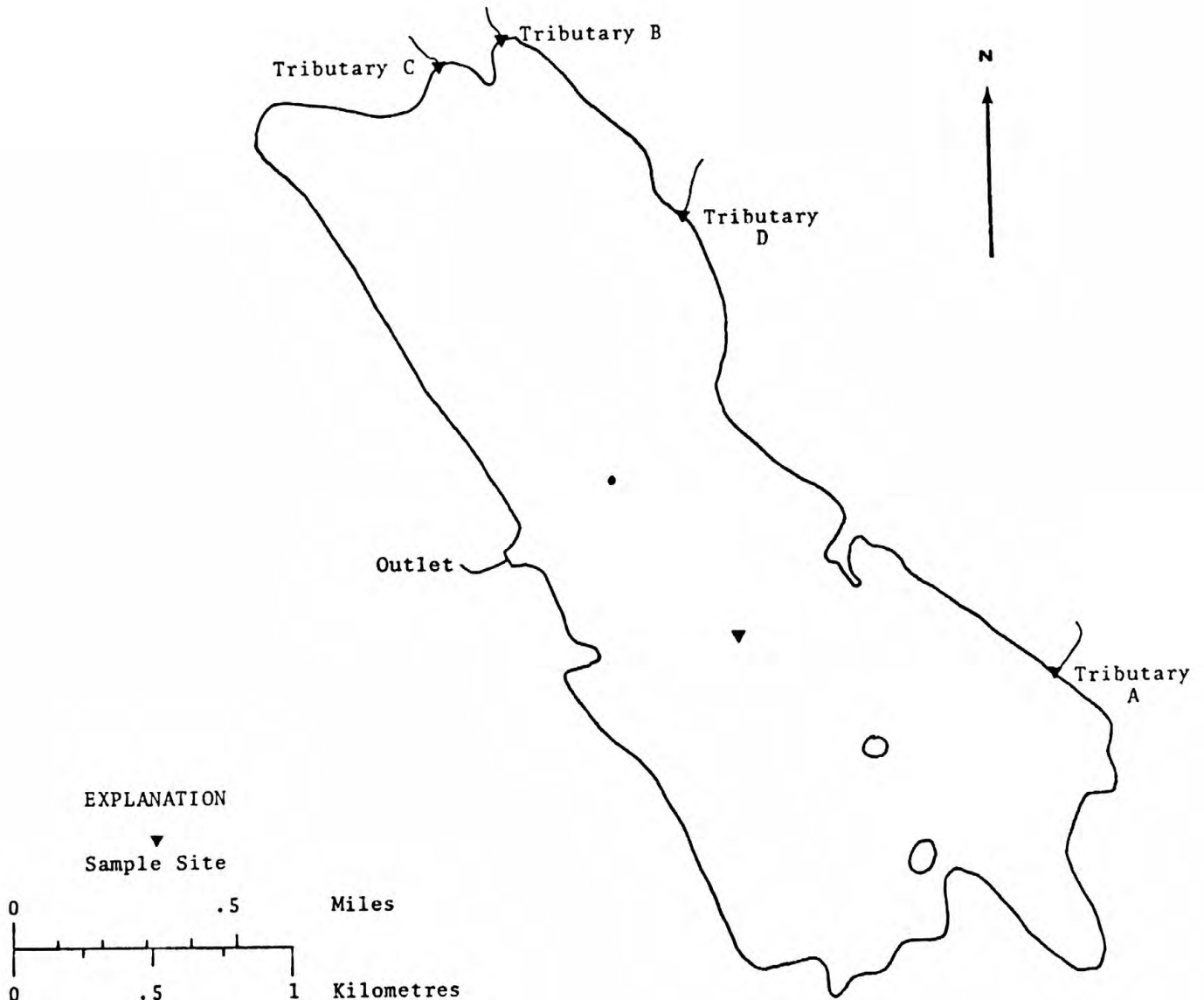
EPILIMNION DEPTH.--33 ft (10.0 m).

EPILIMNION VOLUME.--25,000 acre-ft (30.8 hm³).

LENGTH OF SHORELINE.--37,000 ft (11,000 m).

U.S.G.S. QUADRANGLES.--Lead Mountain 15-minute.

STATE OF MAINE MIDAS NUMBER.--4482.



UNION RIVER BASIN

01023200 Upper Lead Mountain Pond near Beddington, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼ - SAMPLE SITE LOCATION. --Lat 44°50'54", long 68°08'17".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
APR.							
02...	1445	.6	3.5	2.0	9.0	.004	.6
MAY							
13...	1300	.6	11.0	10.0	5.9	.007	1.8
JUNE							
09...	1300	.3	12.0	14.0	7.6	.005	2.1
23...	1230	.3	28.5	22.0	6.2	.005	2.6
JULY							
08...	1330	.3	22.0	23.0	6.5	.005	2.4
22...	1225	.3	23.5	24.0	7.1	.006	2.7
AUG.							
04...	1210	.3	18.5	23.0	7.4	.007	2.5
19...	1230	.3	24.0	24.0	7.3	.008	2.3
SEP.							
03...	1300	.3	16.5	18.0	6.7	.007	--
08...	1130	.6	18.0	18.3	6.2	.006	--
17...	1300	.3	22.0	19.0	6.4	.008	2.1
29...	1200	.3	19.0	16.0	6.9	.005	2.3
OCT.							
15...	1325	.3	11.5	12.0	6.7	.007	2.1
27...	1250	.3	11.0	12.0	6.8	.007	--

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
APR.										
02...	1445	.6	3.5	2.0	9.0	13.3	26	5.9	4	10
02...	1500	9.1	--	4.0	--	6.7	24	5.5	5	15
02...	1515	12.2	--	4.5	--	2.5	27	5.5	6	15
MAY										
13...	1300	.6	11.0	10.0	5.9	--	--	--	--	--
13...	1315	6.1	--	--	--	--	--	--	--	--
13...	1330	10.7	--	--	--	--	--	--	--	--
SEP.										
08...	1130	.6	18.0	18.3	6.2	9.5	26	6.8	5	1
08...	1145	6.0	--	18.0	--	7.6	26	6.7	4	1
08...	1200	12.0	--	14.5	--	2.4	28	6.6	5	30

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
APR.										
02...	.6	.001	.004	.04	.00	.00	.00	.05	.09	.09
02...	--	.001	.004	.05	.00	.01	.01	.19	.24	.25
02...	--	.001	.006	.12	.00	.03	.03	.04	.16	.19
MAY										
13...	1.8	.001	.007	.03	--	--	.01	.08	.11	.12
13...	--	.002	.005	.03	--	--	.02	.16	.19	.21
13...	--	.001	.006	.03	--	--	.02	.11	.14	.16
SEP.										
08...	--	.001	.006	.02	.00	.01	.01	.17	.19	.20
08...	--	.001	.006	.02	.00	.01	.01	.21	.23	.24
08...	--	.004	.012	.05	.00	.01	.01	.12	.17	.18

01023200 Upper Lead Mountain Pond near Beddington, Maine--Continued

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
APR.										
02...	.40	2.1	2.6	1.8	90	10	--	--	--	--
02...	1.1	2.2	1.8	2.8	200	10	--	--	--	--
02...	.84	2.3	1.7	4.8	320	290	--	--	--	--
MAY										
13...	.50	--	--	--	--	--	--	--	--	--
13...	.90	--	--	--	--	--	--	--	--	--
13...	.70	--	--	--	--	--	--	--	--	--
SEP.										
08...	.89	2.8	3.7	1.4	100	20	2.0	.2	.4	1.7
08...	1.1	2.9	3.5	1.4	140	30	2.5	.2	.4	1.7
08...	.80	2.5	3.4	1.7	290	110	1.9	.2	.4	1.8

▼-TRIBUTARY A SAMPLE SITE LOCATION.--Lat 44°50'52", long 68°07'25".

▼-TRIBUTARY B SAMPLE SITE LOCATION.--Lat 44°52'06", long 68°08'54".

▼-TRIBUTARY C SAMPLE SITE LOCATION.--Lat 44°52'03", long 68°09'09".

▼-TRIBUTARY D SAMPLE SITE LOCATION.--Lat 44°51'45", long 68°08'25".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	APR. 02...	1510	.3	2.5	28	.020	0	0
Tributary B	APR. 02...	1520	.3	1.5	30	.008	0	0
	SEP. 08...	1315	.3	17.0	41	.015	B65	B6
Tributary C	APR. 02...	1530	.3	.1	23	.005	0	0
Tributary D	SEP. 08...	1330	.3	14.8	36	.021	B2	74

BIOLOGICAL ANALYSES

The following is a phytoplankton analysis of a depth integrated sample taken 13 May 1975 from the top 10 metres (33 feet) of the water column at the lake sample site.

Taxa	Cells per ml.	Colonies per ml.	Volume Counted (ml.)
Chlorophyta			
Arthrodesmus incus	.2	sol	.5
Closterium sp.	3	sol	.33
Crucigenia quadrata	15	6	.33
Gloeocystis vesiculosa	12	3	.33
Oocystis pusilla	15	6	.33
Tetraedron minimum	12	sol	.33
Chrysophyta			
Asterionella formosa	5.6	1.8	.5
Cyclotella comta	3	sol	.33
Cyclotella stelligera	480	sol	.33
Cyclotella stelligera or glomerata	30	sol	.33
Melosira ambigua	12	3	.33
Phizoselenia criensis	51	sol	.33
Synedra sp.	3	sol	.33
Tabellaria fenestrata	19	2.6	.5
ULK Pennate	15	sol	.33
Chromulina sp.	110	sol	.33
Chrysophyte statospore	180	sol	.33
Dinobryon sp.	6	sol	.33
Kephyrion ovale	30	sol	.33
Mallomonas globosa	9	sol	.33
Ochromonas sp.	27	sol	.33
Salpingoeca frequentissima	9	sol	.33
Euglenophyta			
Trachelomonas sp.	3	sol	.33
Pyrrophyta			
Cryptomonas sp.	- 58 -	63	sol .33

UNION RIVER BASIN

01023200 Upper Lead Mountain Pond near Beddington, Maine--Continued

The following is a phytoplankton analysis of a depth integrated sample taken 9 June 1975 from the top 10 metres (33 feet) of the water column at the lake sample site.

Taxa	Cells per ml.	Colonies per ml.	Volume Counted (ml.)
Chlorophyta			
Ankistrodesmus falcatus	30	15	.2
Archirodesmus incus		sol	5
Chlamydomonas sp.	15	sol	.2
Closterium sp.	5	sol	.2
Oocystis parva	80	10	.2
Pediastrum tetras	1.4	.2	5
Quadrigula closteriodes	2.4	.2	5
Chrypophyta			
Asterionella formosa	2.6	.6	5
Cyclotella comta	20	sol	.2
Cyclotella stelligera	320	sol	.2
Cyclotella stelligera or glomerata	20	sol	.2
Melosira ambigua	22	1.6	5
Melosira diatoms	5	sol	.2
Rhizosolenia eriensis	15	sol	.2
Synedra sp.	10	sol	.2
Tabellaria fenestrata	12	2.6	5
UNK Pennate	80	sol	.2
Chromulina sp.	55	sol	.2
Chrysophyte statospore	10	sol	.2
Dinobryon bavaricum	10	5	.2
Dinobryon sp.	5	sol	.2
Gloeobotrys limneticus	240	40	.2
Kephyrion ovale	5	sol	.2
Mallomonas globosa	5	sol	.2
Mallomonas sp.	10	sol	.2
Ochromonas sp.	180	sol	.2
Cyanophyta			
Aphanothece clathrata	100	5	.2
Coelosphaerium Naegelianum	30	.2	5
Merismopedia tenuissima	40	5	.2
Oscillatoria limnetica	100	5	.2
Pyrrophyta			
Cryptomonas sp.	15	sol	.2
Rhodomonas minuta v. nannoplanktica	50	sol	.2
Rhodomonas sp.	15	sol	.2

UNION RIVER BASIN

01023200 Upper Lead Mountain Pond near Beddington, Maine--Continued

The following is a phytoplankton analysis of a depth integrated sample taken 8 July 1975 from the top 10 metres (33 feet) of the water column at the lake sample site.

Taxa	Cells per ml.	Colonies per ml.	Volume Counted (ml.)
Chlorophyta			
Ankistrodesinus falcatus	15	sol	.33
Chlamydomonas sp.	6	sol	.33
Gloeocystis planktonica	96	27	.33
Oocystis parva	24	6	.33
Oocystis sp.	12	3	.33
Quadrigula closterioides	3	sol	.33
Spinaerocystis schroeteri	24	3	.33
Staurastrum arachne	.2	sol	5
Staurastrum cingulum	.2	sol	5
Chrysophyta	66	18	.33
Asterionella formosa	60	sol	.33
Cyclotella comta	99	sol	.33
Cyclotella stelligera	9	sol	.33
Cyclotella stelligera or glomerata	30	sol	.33
Melosira distans	30	sol	.33
Rhizosolenia eriensis	3	sol	.33
Synedra sp.	50	10.2	5
Tabellaria fenestrata	63	sol	.33
U.K. Pennate	24	6	.33
Melosira ambigua	9	sol	.33
Chromulina sp.	6	sol	.33
Chrysosphaerella longispina	14	.4	5
Dinobryon bovaricum	3	sol	.33
Dinobryon sertularia	11	.4	5
Gloeobotrys limneticus	24	3	.33
Malomonas sp.	9	sol	.33
Ochromonas sp.	18	sol	.33
Salpingocca frequentissima	6	sol	.33
Cyanophyta			
Aphanothoece clathrata	690	15	.33
Chroococcus limneticus	24	3	.33
Gomphosphaeria aponina	240	3	.33
Merismopedia tenuissima	160	6	.33
Pyrrophyta			
Cryptomonas sp.	12	sol	.33

UNION RIVER BASIN

01023200 Upper Lead Mountain Pond near Beddington, Maine--Continued

The following is a phytoplankton analysis of a depth integrated sample taken 19 August 1975 from the top 10 metres (33 feet) of the water column at the lake sample site.

Taxa	Cells per ml.	Colonies per ml.	Volume Counted (ml.)
Chlorophyta			
Ankistrodesmus falcatus	45	33	.33
Arthrodesmus incus	.2	sol	5
Chlamydomonas sp.	9	sol	.33
Gyrodinium aureolum	.8	.2	5
Oocystis sp.	6	3	.33
Pediastrum tetras	.8	.2	5
Quadrifidula closteriodes	9	3	.33
Scenedesmus serratus	12	3	.33
Scenedesmus sp.	24	6	.33
Sphaerocystis Schroeteri	60	39	.33
Staurastrum cingulum	.6	sol	5
Chrysophyta			
Asterionella formosa	17	5.8	5
Cyclotella comta	3	sol	.33
Cyclotella stelligera	36	sol	.33
Cyclotella stelligera or glomerata	21	sol	.33
Melosira ambigua	6.8	.8	5
Melosira distans	27	18	.33
Rhizosolenia eriensis	66	sol	.33
Synedra sp.	21	sol	.33
Tabellaria fenestrata	72	18.0	5
UNK Pennate	21	sol	.33
Chromulina sp.	51	sol	.33
Chrysophyte statospore	48	sol	.33
Dinobryon bavaricum	3	sol	.33
Dinobryon sp.	3	sol	.33
Gloeobotrys limneticus	21	6	.33
Mallomonas caudata	6	sol	.33
Ochromonas sp.	33	sol	.33
Mallomonas acaroides	.4	sol	5
Synura uvella	4.0	.2	5
Cyanophyta			
Aphanothece clathrata	180	6	.33
Chroococcus limneticus	3.0	9	.33
Gloeocapsa punctata	48	3	.33
Gomphosphaeria aponina	450	3	.33
Merismopedia tenuissima	1000	24	.33
Oscillatoria limnetica	30	3	.33
UNK B G around golden granules	150	6	.33
Euglenophyta			
Trachelomonas sp.	3	sol	.33
Pyrrophyta			
Cryptomonas sp.	15	sol	.33
Rhodomonas minuta v. nannoplanktica	9	sol	.33
Ceratium hirundinella	.2	sol	5
Peridinium sp.	3	sol	.33

UNION RIVER BASIN

01023200 Upper Lead Mountain Pond near Beddington, Maine--Continued

The following is a phytoplankton analysis of a depth integrated sample taken 17 September 1975 from the top 10 metres (33 feet) of the water column at the lake sample site.

Taxa	Cells per ml.	Colonies per ml.	Volume Counted (ml.)
Chlorophyta			
Ankistrodesmus falcatus	40	sol	.2
Closterium sp.	5	sol	.2
Geminella sp.	20	10	.2
Oocystis parva	20	5	.2
Pediastrum tetras	60	15	.2
Quadrigula closterioides	25	15	.2
Sphaerocystis Schroeteri	40	5	.2
Staurostrum quadricuspidatum	.4	sol	5
Tetraedron minimum	5	sol	.2
Chrysophyta			
Asterionella formosa	66	13.8	5
Cyclotella comta	10	sol	.2
Cyclotella stelligera	35	sol	.2
Cyclotella stelligera or glomerata	10	sol	.2
Melosira distans	5	sol	.2
Melosira italica	50	15	.2
Melosira sp.	5	sol	.2
Rhizosolenia eriensis	120	sol	.2
Synedra sp.	20	sol	.2
Tabellaria fenestrata	22	4.6	5
Ulna Pennate	40	sol	.2
Chromulina sp.	100	sol	.2
Chrysophyte statospore	120	sol	.2
Chrysosphaerella longispina	9.4	.4	5
Dinobryon bavaricum	5	sol	.2
Dinobryon divergens	75	10	.2
Dinobryon suecicum	10	sol	.2
Dinobryon sp.	5	sol	.2
Mallomonas sp.	20	sol	.2
Ochromonas sp.	100	sol	.2
Cyanophyta			
Aphanothece clathrata	1800	35	.2
Croococcus limneticus	230	40	.2
Merismopedia tenuissima	1400	110	.2
Pyrrophyta			
Cryptomonas sp.	35	sol	.2
Rhodomonas minuta v. nannoplanktica	15	sol	.2
Peridinium limbatum	.6	sol	5
Ceratium hirundinella	.2	sol	5

UNION RIVER BASIN

01023200 Upper Lead Mountain Pond near Beddington, Maine--Continued

The following is a phytoplankton analysis of a depth integrated sample taken 15 October 1975 from the top 10 metres (33 feet) of the water column at the lake sample site.

Taxa	Cells per ml.	Colonies per ml.	Volume Counted (ml.)
Chlorophyta			
Ankistrodesmus falcatus	20	sol	.2
Closterium sp.	10	sol	.2
Cosmarium botrytis	.2	sol	5
Cosmarium sp.	.4	sol	5
Crucigenia quadrata	2.4	.6	5
Elakatothrix gelatinosa	30	10	.2
Oocystis parva	30	15	.2
Pediastrum tetras	20	5	.2
Quadrigula closteriside	10	5	.2
Scenedesmus sp.	40	15	.2
Sphaerocystis schroeteri	10	5	.2
Staurastrum cingulum	.2	sol	5
Chrysophyta			
Asterionella formosa	15	3.0	5
Cyclotella comta	5	sol	.2
Cyclotella stelligera	30	sol	.2
Melosira distans	10	5	.2
Melosira italica	40	8.0	5
Rhizosolenia ericenis	100	sol	.2
Rhopalodia sp.	.2	sol	5
Synedra sp.	15	sol	.2
Tabellaria fenestrata	22	5.0	5
U.K. Pennate	45	sol	.2
Chromulina sp.	120	sol	.2
Chrysococcocystis sp.	5	sol	.2
Chrysophyta statospore	75	sol	.2
Chrysosphaerella longispina	150	5	.2
Dinobryon bavarium	20	sol	.2
Dinobryon divergens	5	sol	.2
Gloeobotrys limneticus	30	5	.2
Kephyrion ovale	10	sol	.2
Mallomonas caudata	5	sol	.2
Ochromonas sp.	15	sol	.2
Synura uvella	5	5	.2
Cyanophyta			
Aphanothece clathrata	1600	45	.2
Croococcus limneticus	410	25	.2
Gomphosphaeria aponina	3200	20	.2
Merismopedia tenuissima	220	25	.2
Microcystis aureginosa	300	5	.2
U.K. Blue-green clusters around golden granules	520	15	.2
Pyrrophyta			
Cryptomonas sp.	35	sol	.2
Rhodomonas minuta v. nannoplanktica	20	sol	.2
Peridinium limbatum	.2	sol	5

The following is a benthic macroinvertebrate analysis of a bottom sample taken 2 April 1975 at the lake sample site.

Total Wet Weight (g/m²) = 5.46

Taxa	Number/m ²
ANNELIDA	
Oligochaeta	
Tubificidae	
Limnodrilus sp.	17
ARTHIROPODA	
Insecta	
Diptera	
Culicidae	
Chaoborus punctipennis	1800
Chironomidae	
Procladius sp.	9
Chironomus spp.	160
Tanytarsus sp.	43
Micropsectra sp.	9
MOLLUSCA	
Pelecypoda	
Sphaeriidae	
Pisidium sp.	9

TOTAL 2000

UNION RIVER BASIN

01023300 Spectacle Pond near Waltham, Maine

LOCATION.--Lat 44°45'14", long 68°14'38", Hancock County, 6.0 mi (9.6 km) northeast of Waltham.

DRAINAGE AREA.--48.0 mi² (124.3 km²).

SURFACE AREA.--1,754 acres (7.10 km²).

SURFACE ELEVATION.--255 ft (77.7 m).

VOLUME.--14,000 acre-ft (17.3 hm³).

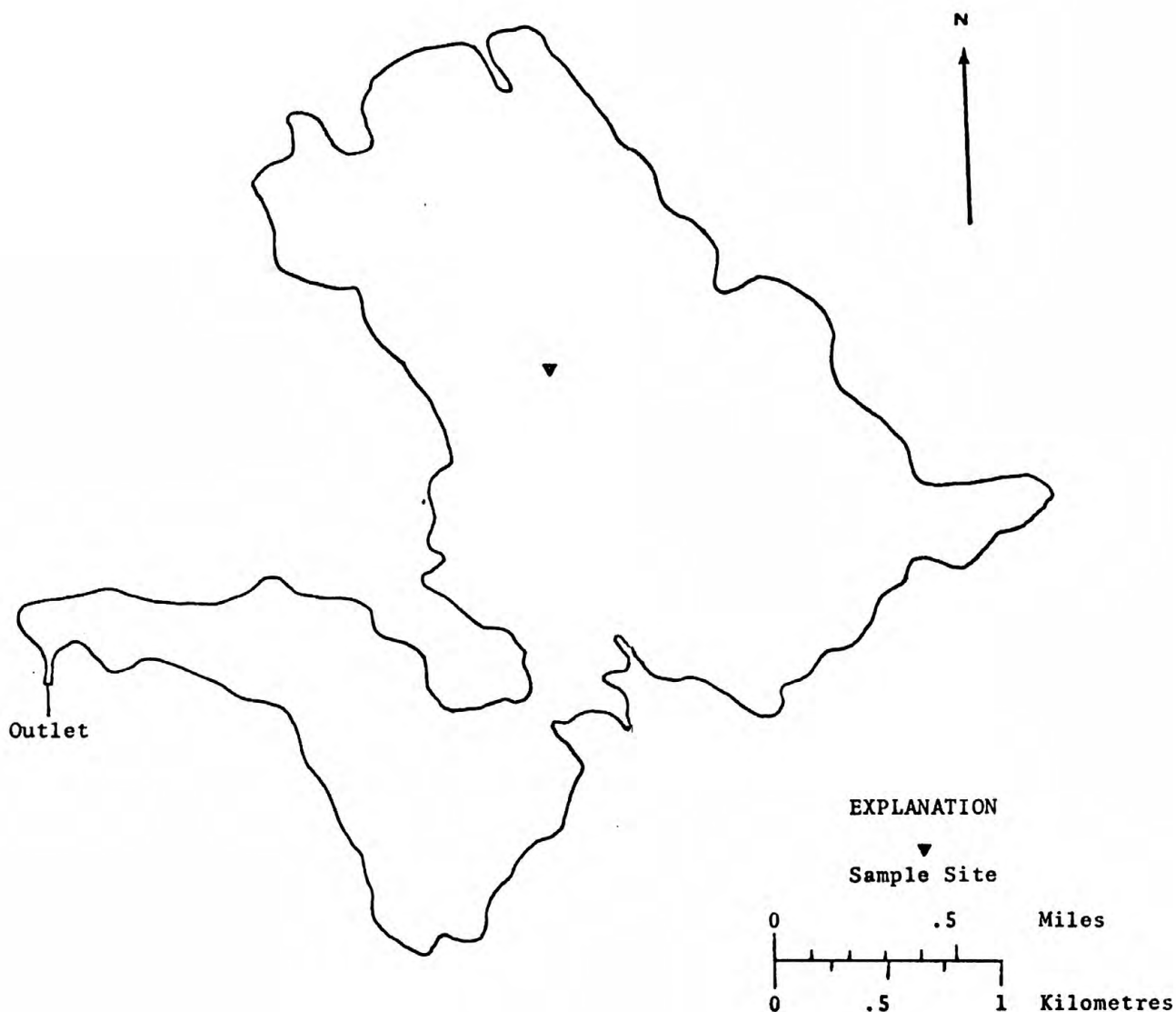
MAXIMUM DEPTH.--30 ft (9.1 m).

MEAN DEPTH.--8 ft (2.4 m).

LENGTH OF SHORELINE.--96,000 ft (29,000 m).

U.S.G.S. QUADRANGLES.--Lead Mountain and Tunk Lake 15-minute.

STATE OF MAINE MIDAS NUMBER.--4450.



UNION RIVER BASIN

01023300 Spectacle Pond near Waltham, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼ - SAMPLE SITE LOCATION.--Lat 44°45'48", long 68°12'43".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
MAY							
13...	1500	.6	16.0	12.5	3.9	.012	2.2
JUNE							
09...	1445	.3	12.0	14.0	3.5	.009	2.0
23...	1330	.3	28.0	23.0	4.0	.009	2.4
JULY							
08...	1200	.3	22.5	24.0	4.2	.007	2.4
22...	1430	.3	26.0	24.5	4.7	.009	2.2
AUG.							
04...	1330	.3	20.5	23.5	4.5	.007	1.8
19...	1330	.3	25.5	24.0	4.0	.008	2.3
SEP.							
03...	1410	.3	15.5	18.0	4.6	.012	1.6
17...	1430	.3	18.0	17.0	5.0	.005	1.7
29...	1335	.3	19.5	17.0	5.0	.004	2.5
OCT.							
15...	1420	.3	13.0	11.5	4.3	.009	1.8
27...	1425	.3	10.0	11.0	4.2	.011	1.5

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)
MAY							
13...	1500	0.6	16.0	12.5	3.9	2.20	.002
13...	1515	7.0	--	--	--	--	.002

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)
MAY							
13...	.012	.04	.01	.12	.16	.17	.80
13...	.013	.04	.00	.12	.16	.16	.70

UNION RIVER BASIN

01023800 Molasses Pond near Eastbrook, Maine

LOCATION.--Lat 44°39'27", long 68°12'48", Hancock County, 2.0 mi (3.2 km) east of Eastbrook.

DRAINAGE AREA.--9.0 mi² (23.3 km²).

SURFACE AREA.--1,252 acres (5.07 km²).

SURFACE ELEVATION.--210 ft (64.0 m).

VOLUME.--21,000 acre-ft (25.9 hm³).

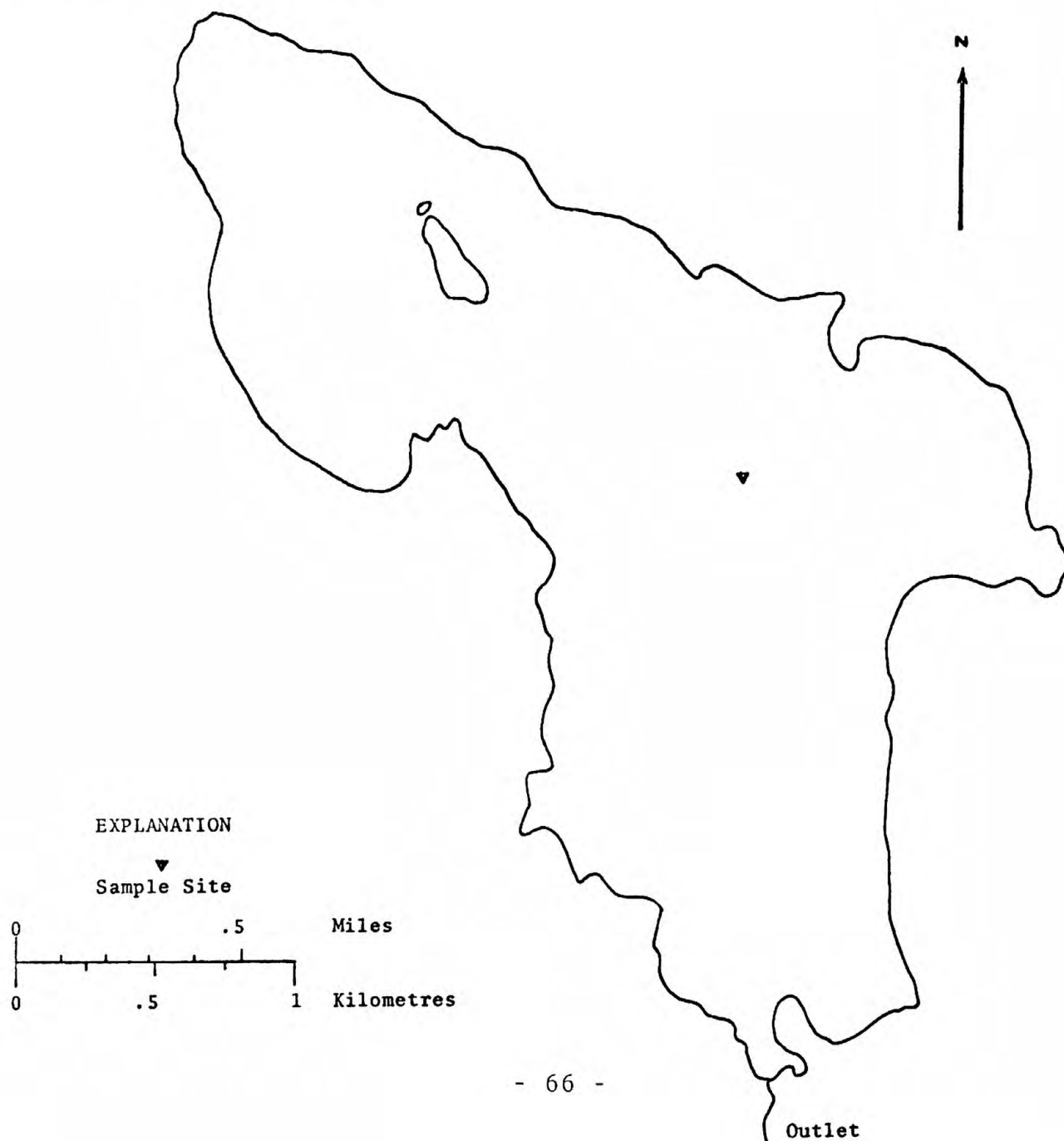
MAXIMUM DEPTH.--47 ft (14.3 m).

MEAN DEPTH.--17 ft (5.2 m).

LENGTH OF SHORELINE.--45,000 ft (14,000 m).

U.S.G.S. QUADRANGLES.--Tunk Lake 15-minute.

STATE OF MAINE MIDAS NUMBER.--4448.



UNION RIVER BASIN

01023800 Molasses Pond near Eastbrook, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO 1975

▼ - SAMPLE SITE LOCATION.--Lat 44°40'34", long 68°12'48".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
MAY							
13...	1600	.6	16.0	11.7	4.5	.008	2.2
JUNE							
09...	1600	.3	11.5	14.5	5.0	.007	2.2
23...	1540	.3	31.0	22.0	5.7	.005	1.7
JULY							
08...	1030	.3	22.0	24.0	8.0	.005	1.2
22...	1600	.3	25.5	24.0	7.5	.006	1.4
AUG.							
04...	1500	.3	20.0	23.0	8.0	.006	1.6
19...	1430	.3	25.0	24.0	6.7	.007	1.4
SEP.							
03...	1540	.3	16.5	19.0	8.7	.009	1.6
17...	1530	.3	19.0	18.0	8.2	.007	1.1
29...	1505	.3	19.0	17.0	7.6	.004	1.5
OCT.							
15...	1535	.3	13.0	12.0	7.6	.006	1.0
27...	1540	.3	7.0	11.0	7.5	.009	1.1

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)
MAY							
13...	1600	0.6	16.0	11.7	4.5	2.20	.002
13...	1615	6.1	--	--	--	--	.002
13...	1630	12.2	--	--	--	--	.001

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)
MAY							
13...	.008	.03	.01	.16	.19	.20	.90
13...	.005	.03	.01	.09	.12	.13	.60
13...	.006	.01	.00	.11	.12	.12	.50

UNION RIVER BASIN

01024300 Floods Pond near Otis, Maine

LOCATION.--Lat 44°43'38", long 68°28'18", Hancock County, 2.5 mi (4.0 km) northwest of Otis.

DRAINAGE AREA.--8.2 mi² (21.2 km²).

SURFACE AREA.--654 acres (2.65 km²).

SURFACE ELEVATION.--298 ft (90.8 m).

VOLUME.--26,000 acre-ft (32.0 hm³).

MAXIMUM DEPTH.--147 ft (44.8 m).

MEAN DEPTH.--40 ft (12.2 m).

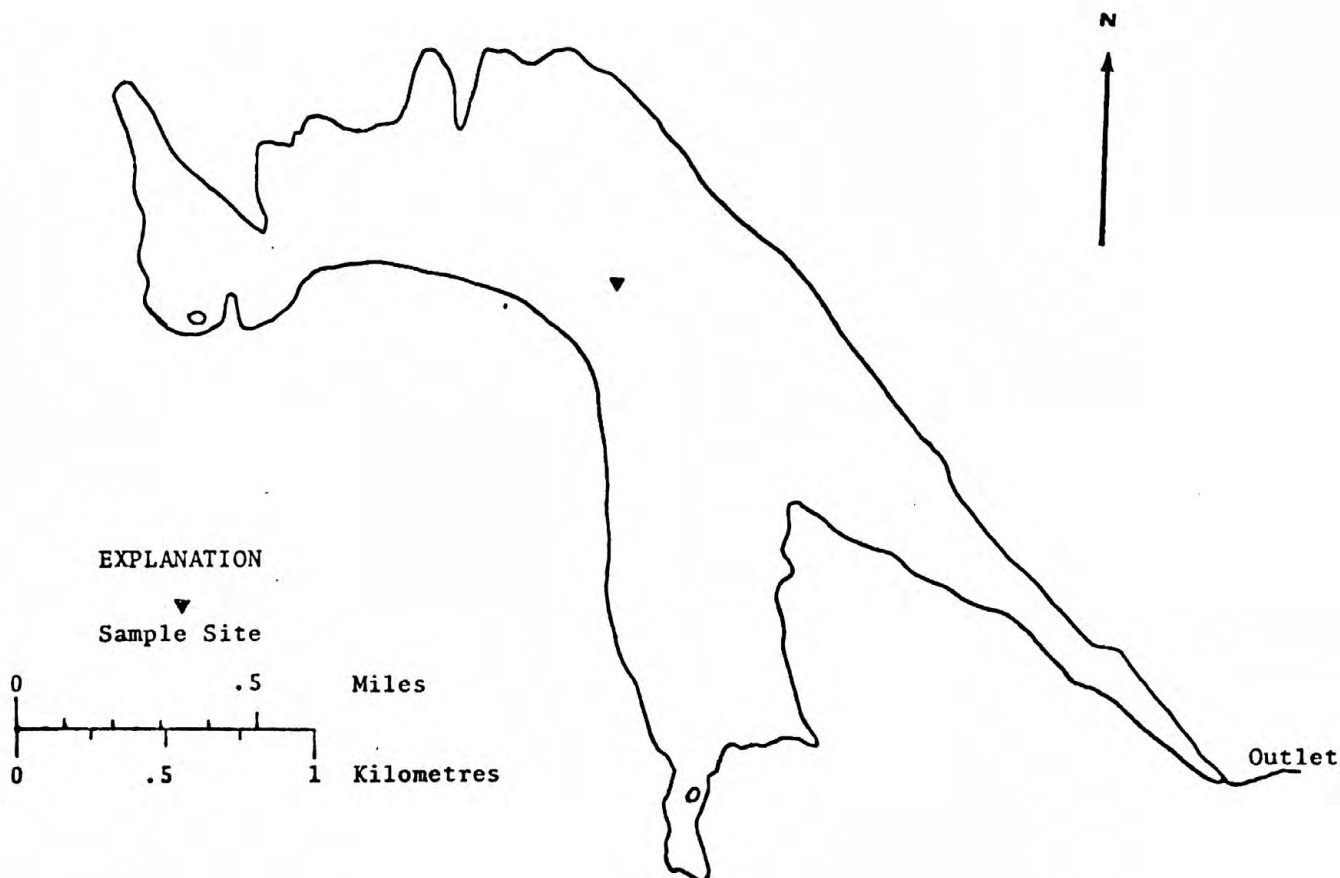
EPILIMNION DEPTH.--15 ft (4.6 m).

EPILIMNION VOLUME.--8,600 acre-ft (10.6 hm³).

LENGTH OF SHORELINE.--62,000 ft (19,000 m).

U.S.G.S. QUADRANGLES.--Ellsworth and Orland 15-minute.

STATE OF MAINE MIDAS NUMBER.--4370.



UNION RIVER BASIN

01024300 Floods Pond near Otis, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼--SAMPLE SITE LOCATION.--Lat 44°44'28", long 68°29'52".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CAC03 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
MAR.										
25...	1600	.6	6.0	1.5	7.9	14.0	23	6.5	3	20
25...	1620	19.8	6.0	2.2	--	12.3	21	6.3	3	20
25...	1640	39.6	--	2.8	--	8.6	25	6.1	3	20
SEP.										
24...	1050	.3	16.0	16.2	8.8	9.9	26	6.9	4	15
24...	1100	8.0	--	15.9	--	9.4	28	6.8	4	15
24...	1110	12.0	--	7.6	--	9.6	31	6.5	4	17
24...	1120	40.0	--	5.5	--	8.2	33	6.2	6	20

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
MAR.										
25...	.5	.001	.005	.03	.01	.06	.07	.11	.14	.21
25...	--	.001	.005	.02	.01	.03	.04	.07	.09	.13
25...	--	.002	.008	.03	.01	.07	.08	.11	.14	.22
SEP.										
24...	--	--	.009	.00	.00	.00	.00	.10	.10	.10
24...	--	--	.006	.00	.00	.00	.00	.01	.01	.01
24...	--	--	.008	.00	.01	.03	.04	.06	.06	.10
24...	--	--	.006	.00	.00	.06	.06	.13	.13	.19

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG) (MG/L)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
MAR.										
25...	.93	2.2	3.0	3.5	80	10	--	--	--	--
25...	.58	2.2	2.8	3.5	90	10	--	--	--	--
25...	.97	12	2.9	4.5	100	20	--	--	--	--
SEP.										
24...	.44	2.4	3.1	2.6	40	0	3.1	.1	.2	1.9
24...	.04	2.4	3.1	2.6	40	0	4.0	.1	.2	1.8
24...	.44	2.3	3.1	3.3	30	0	5.3	.1	.2	1.8
24...	.84	2.2	3.1	3.8	70	10	17	.2	.2	2.0

UNION RIVER BASIN

01024300 Floods Pond near Otis, Maine--Continued

BIOLOGICAL ANALYSES

The following is a zooplankton analysis of a depth integrated sample taken 25 March 1975 at the lake sample site.

Taxa	no./m ³	Volume Counted (MLS)
ARTHIROPODA		
Crustacea		
Cladocera		
Bosminidae		
Bosmina coregoni	88	4
Bosmina longirostris	22	4
Daphnidae		
Daphnia ambigua	11	4
Daphnia spp.	11	4
Copepoda		
Calanoida	1600	1
Cyclopoida	400	1
Nauplii	11000	1
Total	13000	

The following is a benthic macroinvertebrate analysis of a bottom sample taken 25 March 1975 at the lake sample site.

Total Wet Weight (g/m²) = 5.98

Taxa	Number/m ²
NEMATODA	87
ANNELIDA	
Oligochaeta	
Tubificidae	
Limnodrilus spp.	220
Tubifex sp.	69
ARTHIROPODA	
Insecta	
Diptera	
Culicidae	
Chaoborus punctipennis	2400
Chironomidae	
Procladius sp.	78
Chironomus spp.	160
Phaenopsectra-Tribelos	130
Tanytarsus sp.	9
Ceratopogonidae	
Palpomyia-Bezzia	17
MOLLUSCA	
Pelecypoda	
Sphaeriidae	
Pisidium sp.	43
TOTAL	3200

UNION RIVER BASIN

01024400 Beech Hill Pond near Otis, Maine

LOCATION.--Lat 44°40'14", long 68°25'58", Hancock County, 1.5 mi (2.4 km) south of Otis.

DRAINAGE AREA.--9.5 mi² (24.6 km²).

SURFACE AREA.--1,351 acres (5.47 km²).

SURFACE ELEVATION.--199 ft (60.6 m).

VOLUME.--52,000 acre-ft (64.1 hm).

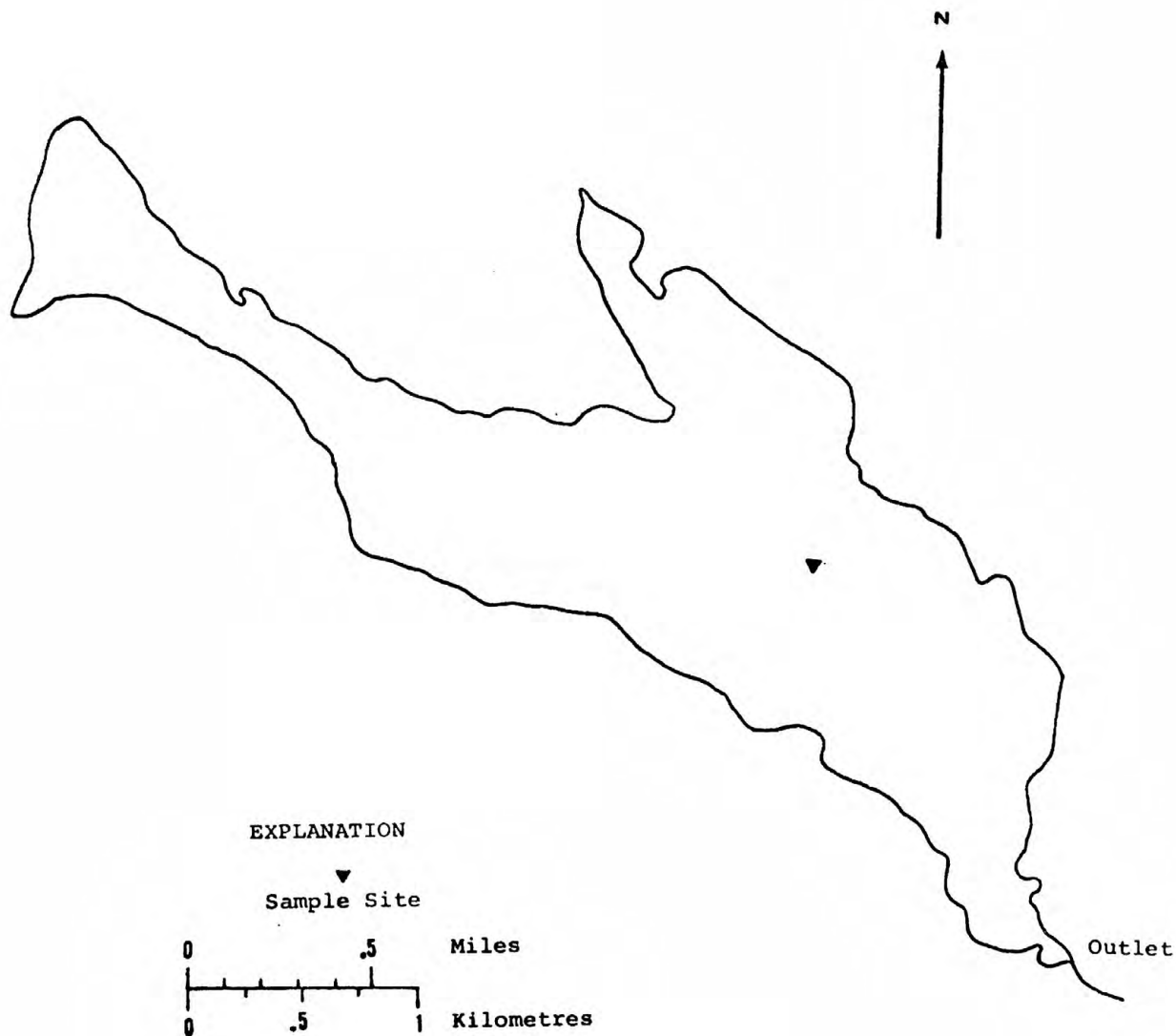
MAXIMUM DEPTH.--104 ft (31.7 m).

MEAN DEPTH.--38 ft (11.6 m).

LENGTH OF SHORELINE.--60,000 ft (18,000 m).

U.S.G.S. QUADRANGLES.--Ellsworth 15-minute.

STATE OF MAINE MIDAS NUMBER.--4352.



UNION RIVER BASIN

01024400 Beech Hill Pond near Otis, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼ -SAMPLE SITE LOCATION.--Lat 44°41'16", long 68°26'49".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
MAY							
07...	1500	.6	7.0	6.0	9.0	.003	1.5
JUNE							
03...	1305	.3	20.5	16.0	8.5	.006	1.1
16...	1415	.3	16.5	16.0	8.5	.006	1.0
JULY							
08...	1430	.3	24.0	24.0	8.1	.004	1.7
22...	1400	.3	25.0	25.0	7.7	.005	1.6
AUG.							
04...	1320	.3	20.5	24.0	8.5	.006	1.7
19...	1315	.3	22.0	22.5	9.5	.006	.8
SEP.							
02...	1415	.3	15.5	19.0	10.7	.005	1.2
16...	1250	.3	16.0	16.5	9.7	.005	1.0
30...	1200	.3	20.0	17.0	9.6	.003	1.2
OCT.							
14...	1220	.3	17.5	13.5	8.5	.007	1.4
NOV.							
03...	1330	.3	17.0	11.0	8.0	.005	1.4

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)
MAY							
07...	1500	0.6	7.0	6.0	9.0	1.50	.001
07...	1515	15.2	--	--	--	--	.001
07...	1530	30.5	--	--	--	--	.001

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)
MAY							
07...	.003	.00	.03	.10	.10	.13	.60
07...	.003	.00	.03	.20	.20	.23	1.0
07...	.003	.01	.03	.17	.18	.21	.90

UNION RIVER BASIN

01024480 Phillips Lake near Green Lake, Maine

LOCATION.--Lat 44°41'02", long 68°35'12", Hancock County, 2.0 mi (3.2 km) northwest of Green Lake.

DRAINAGE AREA.--11.8 mi² (30.6 km²).

SURFACE AREA.--828 acres (3.35 km²).

SURFACE ELEVATION.--228 ft (69.5 m).

VOLUME.--26,000 acre-ft (32.0 hm³).

MAXIMUM DEPTH.--105 ft (32.0 m).

MEAN DEPTH.--31 ft (9.4 m).

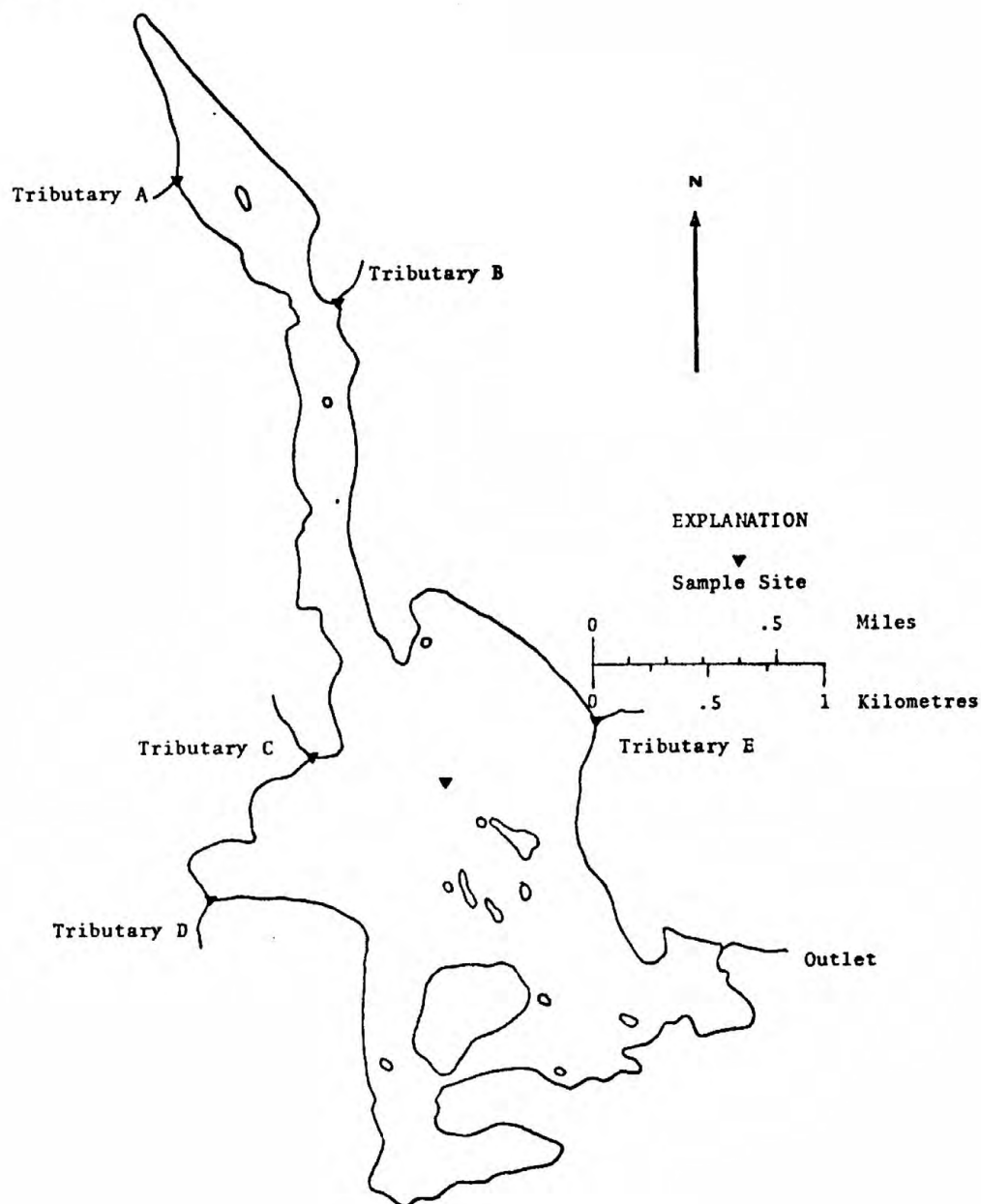
EPILIMNION DEPTH.--20 ft (6.1 m).

EPILIMNION VOLUME.--13,000 acre-ft (16.0 hm³).

LENGTH OF SHORELINE.--62,000 ft (19,000 m).

U.S.G.S. QUADRANGLES.--Orland 15-minute.

STATE OF MAINE MIDAS NUMBER.--4300.



UNION RIVER BASIN

01024480 Phillips Lake near Green Lake, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼- SAMPLE SITE LOCATION.--Lat 44°41'26", long 68°36'06".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
MAR.							
26...	1700	.6	.0	1.2	9.8	.005	.6
MAY							
07...	1100	.6	5.5	6.5	8.0	.004	1.0
JUNE							
03...	1045	.3	22.5	18.0	8.6	.005	1.4
16...	1030	.3	15.5	15.0	7.7	.005	--
JULY							
08...	1115	.3	22.0	24.0	8.6	.004	1.6
22...	1110	.3	24.0	25.0	8.0	.004	.7
AUG.							
04...	1030	.3	20.0	24.0	8.4	.005	1.4
19...	1030	.3	22.5	23.0	8.5	.006	1.6
SEP.							
02...	1145	.3	16.0	19.5	8.7	.005	1.5
16...	1045	.3	16.0	17.0	8.4	.007	1.4
30...	1430	.3	18.5	17.0	8.6	.004	--
OCT.							
14...	0930	.3	16.0	14.0	7.5	.008	.9
NOV.							
03...	1105	.3	16.0	11.1	6.1	.005	1.2

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
MAR.										
26...	1700	.6	.0	1.2	9.8	14.2	44	6.3	7	5
26...	1715	15.2	--	3.2	--	11.4	41	6.3	7	5
26...	1730	30.5	--	3.6	--	8.5	51	6.1	8	5
MAY										
07...	1100	.6	5.5	6.5	8.0	--	--	--	--	--
07...	1115	15.2	--	--	--	--	--	--	--	--
07...	1130	30.5	--	--	--	--	--	--	--	--

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
MAR.										
26...	.6	.001	.005	.02	.02	.10	.12	.09	.11	.23
26...	--	.001	.004	.01	.01	.02	.03	.08	.09	.12
26...	--	.001	.006	.01	.01	.05	.06	.09	.10	.16
MAY										
07...	1.0	.001	.004	.02	--	--	.04	.13	.15	.19
07...	--	.001	.004	.03	--	--	.05	.08	.11	.16
07...	--	.001	.004	.03	--	--	.04	.08	.11	.15

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
MAR.										
26...	1.0	3.9	3.5	3.8	80	20	--	--	--	--
26...	.53	3.9	3.2	3.4	70	10	--	--	--	--
26...	.71	4.3	3.4	4.1	90	30	--	--	--	--
MAY										
07...	.80	--	--	--	--	--	--	--	--	--
07...	.70	--	--	--	--	--	--	--	--	--
07...	.70	--	--	--	--	--	--	--	--	--

UNION RIVER BASIN

01024480 Phillips Lake near Green Lake, Maine--Continued

▼-TRIBUTARY A SAMPLE SITE LOCATION.--Lat 44°42'52", long 68°37'02".

▼-TRIBUTARY B SAMPLE SITE LOCATION.--Lat 44°42'34", long 68°36'32".

▼-TRIBUTARY C SAMPLE SITE LOCATION.--Lat 44°41'32", long 68°36'34".

▼-TRIBUTARY D SAMPLE SITE LOCATION.--Lat 44°41'09", long 68°36'50".

▼-TRIBUTARY E SAMPLE SITE LOCATION.--Lat 44°41'36", long 68°35'37".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	MAR. 26...	1800	.3	1.0	60	.005	B1	0
Tributary B	MAR. 26...	1810	.3	1.0	78	.006	0	0
Tributary C	MAR. 26...	1820	.3	1.0	53	.005	0	0
Tributary D	MAR. 26...	1830	.3	1.0	48	.014	B1	0
Tributary E	MAR. 26...	1840	.3	1.0	141	.003	B1	0

UNION RIVER BASIN

01074500 Green Lake at Green Lake, Maine

LOCATION.--Lat 44°37'36", long 68°26'44", Hancock County, at Green Lake.

DRAINAGE AREA.--57.5 mi² (148.9 km²).

SURFACE AREA.--2,989 acres (12.10 km²).

SURFACE ELEVATION.--159 ft (48.5 m).

VOLUME.--107,000 acre-ft (131 km³).

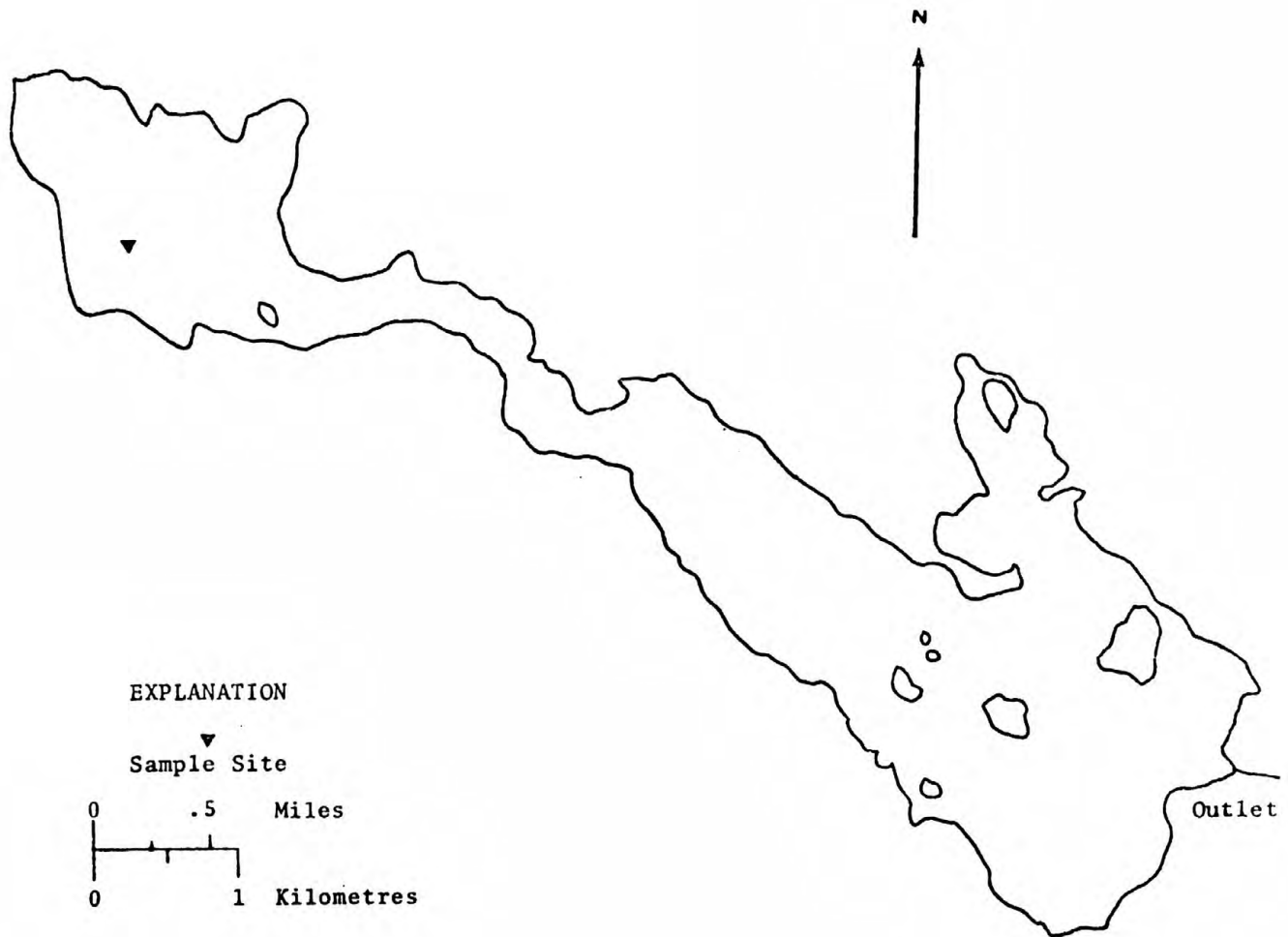
MAXIMUM DEPTH.--170 ft (51.8 m).

MEAN DEPTH.--36 ft (11.0 m).

LENGTH OF SHORELINE.--110,000 ft (34,000 m).

U.S.G.S. QUADRANGLES.--Ellsworth and Orland 15-minute.

STATE OF MAINE MIDAS NUMBER.--4294.



UNION RIVER BASIN

01024500 Green Lake at Green Lake, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼ - SAMPLE SITE LOCATION.--Lat 44°39'42", long 68°32'31".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
MAY							
07...	1215	.6	6.0	6.0	8.0	.004	.7
JUNE							
03...	1120	.3	20.5	17.0	6.7	.006	.5
16...	1100	.3	17.0	15.5	6.0	.006	--
JULY							
08...	1150	.3	22.0	24.0	6.8	.004	1.6
22...	1150	.3	25.0	25.0	7.5	.005	1.6
AUG.							
04...	1105	.3	21.5	24.0	7.6	.005	1.4
19...	1110	.3	21.0	22.5	6.7	.006	1.6
SEP.							
02...	1245	.3	16.0	19.0	7.5	.012	1.6
16...	1115	.3	16.0	16.5	6.8	.004	1.8
30...	1400	.3	21.0	17.0	7.3	.004	2.0
OCT.							
14...	1030	.3	16.0	14.0	6.0	.018	2.1
NOV.							
03...	1140	.3	16.0	11.1	6.3	.007	1.8

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)
MAY							
07...	1215	0.6	6.0	6.0	8.0	.700	.002
07...	1220	15.2	--	--	--	--	.001
07...	1225	30.5	--	--	--	--	.001

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)
MAY							
07...	.004	.02	.05	.13	.15	.20	.90
07...	.005	.01	.06	.15	.16	.22	1.0
07...	.004	.00	.05	.18	.18	.23	1.0

UNION RIVER BASIN

01025500 Branch Lake near Ellsworth, Maine

LOCATION.--Lat 44°34'03", long 68°30'27", Hancock County, 4.5 mi (7.2 km) northwest of Ellsworth.

DRAINAGE AREA.--30.9 mi² (80.0 km²).

SURFACE AREA.--2,703 acres (10.94 km²).

SURFACE ELEVATION.--238 ft (72.5 m).

VOLUME.--88,000 acre-ft (108 hm³).

MAXIMUM DEPTH.--124 ft (37.8 m).

MEAN DEPTH.--32 ft (9.8 m).

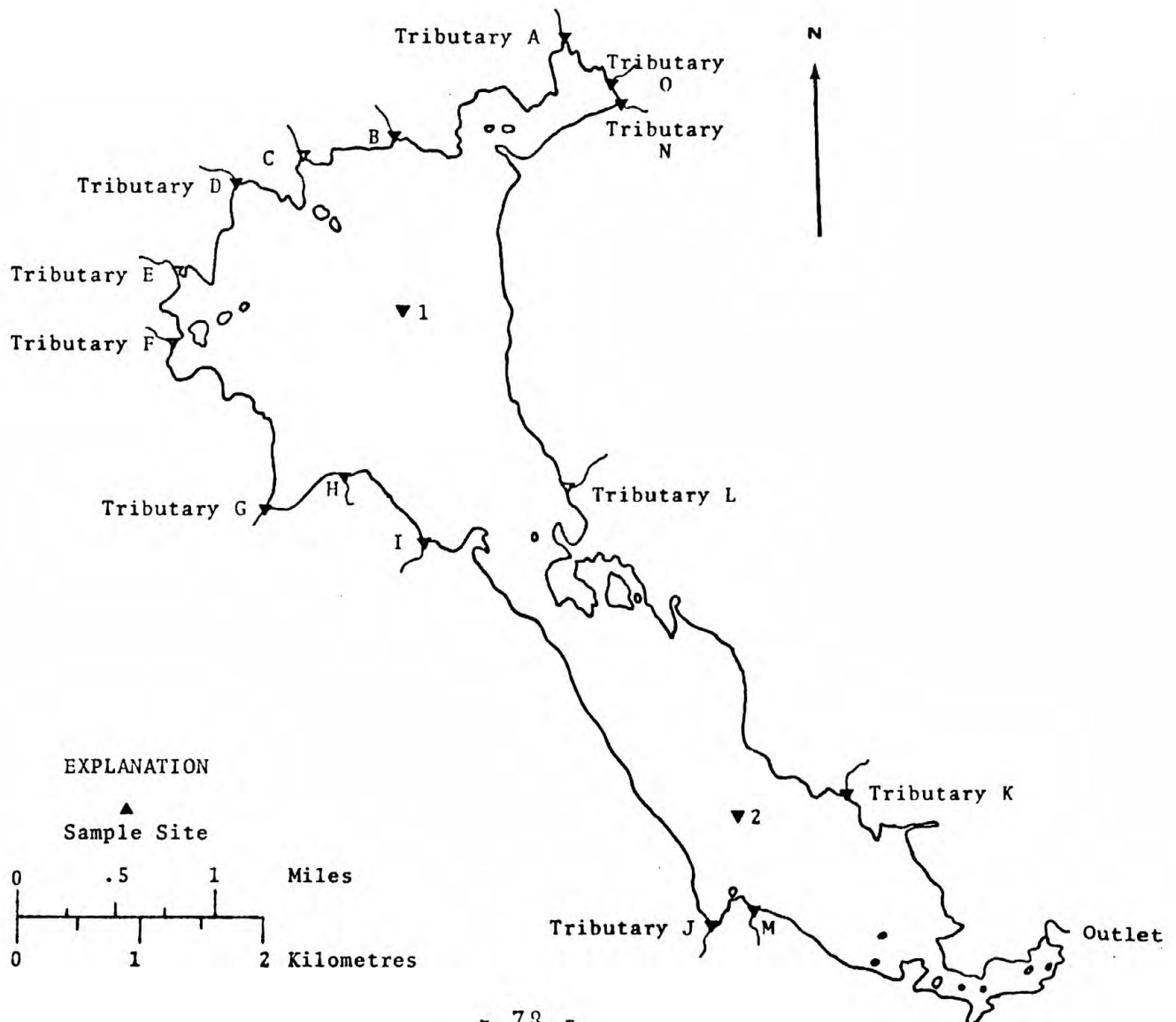
EPILIMNION DEPTH.--36 ft (11.0 m).

EPILIMNION VOLUME.--68,000 acre-ft (83.8 hm³).

LENGTH OF SHORELINE.--110,000 ft (34,000 m).

U.S.G.S. QUADRANGLES.--Orland 15-minute

STATE OF MAINE MIDAS NUMBER.--4328.



UNION RIVER BASIN

01025500 Branch Lake near Ellsworth, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼ 1 - SAMPLE SITE LOCATION.--Lat 44°36'48", long 68°34'19".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)				
MAR.											
26...	1230	.6	4.0	1.8	7.3	.006	.7				
MAY											
07...	1315	.6	6.0	6.0	8.6	.004	1.2				
JUNE											
03...	1200	.3	23.0	16.5	7.9	.005	2.1				
16...	1200	.3	14.0	15.0	8.2	.006	--				
JULY											
08...	1230	.3	23.0	24.0	7.7	.004	1.7				
22...	1235	.3	27.0	25.0	8.0	.005	1.8				
AUG.											
04...	1145	.3	20.0	24.0	7.9	.004	2.0				
19...	1200	.3	19.5	22.5	8.2	.006	1.7				
SEP.											
02...	1300	.3	16.0	19.0	8.4	.006	1.8				
16...	1150	.3	16.0	16.5	6.6	.004	2.1				
23...	1045	.6	16.0	16.8	7.4	.007	--				
30...	1515	.3	17.5	17.5	7.5	.004	2.1				
OCT.											
14...	1115	.3	16.0	14.0	7.0	.009	2.2				
NOV.											
03...	1215	.3	14.0	11.0	8.0	.008	1.9				

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
MAR.										
26...	1230	.6	4.0	1.8	7.3	14.1	45	6.4	3	10
26...	1245	15.2	--	2.9	--	11.8	51	6.2	3	10
26...	1300	30.5	--	3.2	--	9.3	53	6.0	4	15
MAY										
07...	1315	.6	6.0	6.0	8.6	--	--	--	--	--
07...	1330	15.2	--	--	--	--	--	--	--	--
07...	1345	30.5	--	--	--	--	--	--	--	--
SEP.										
23...	1045	.6	16.0	16.8	7.4	10.2	30	6.8	4	15
23...	1100	11.0	--	16.0	--	9.9	26	6.0	4	15
23...	1115	17.0	--	10.0	--	7.6	30	6.0	4	15
23...	1130	27.0	--	7.0	--	6.7	38	6.2	4	15

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
MAR.										
26...	.7	.002	.006	.05	.01	.12	.13	.10	.15	.28
26...	--	.001	.005	.01	.01	.04	.05	.10	.11	.16
26...	--	.001	.007	.01	.01	.05	.06	.07	.08	.14
MAY										
07...	1.2	.001	.004	.00	--	--	.04	.11	.11	.15
07...	--	.001	.004	.00	--	--	.04	.11	.11	.15
07...	--	.001	.004	.03	--	--	--	--	.11	--
SEP.										
23...	--	.004	.007	.00	.00	.01	.01	.18	.18	.19
23...	--	.001	.006	.00	.00	.01	.01	.16	.16	.17
23...	--	.002	.003	.00	.00	.04	.04	.11	.11	.15
23...	--	.001	.003	.00	.00	.08	.08	.00	.00	.08

UNION RIVER BASIN

01025500 Branch Lake near Ellsworth, Maine--Continued

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
MAR.										
26...	1.2	3.2	3.2	2.6	80	10	--	--	--	--
26...	.71	3.4	2.9	2.6	70	10	--	--	--	--
26...	.62	3.9	2.8	3.2	90	20	--	--	--	--
MAY										
07...	.70	--	--	--	--	--	--	--	--	--
07...	.70	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
SEP.										
23...	.84	3.5	3.0	1.7	60	10	5.6	.3	.2	2.0
23...	.75	3.5	3.0	1.7	100	220	17	6.5	1.1	3.7
23...	.66	3.5	4.0	2.2	90	10	8.5	.8	.2	2.0
23...	.35	3.6	3.3	2.9	80	10	6.0	.3	.2	2.0

▼ 2-SAMPLE SITE LOCATION.--Lat 44°34'36", long 68°32'18".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
MAR.										
26...	1000	.6	4.0	1.0	7.3	14.4	53	6.3	2	20
26...	1015	6.1	--	2.8	--	12.8	53	6.3	3	20
26...	1030	13.7	--	3.8	--	7.5	50	6.3	4	20
SEP.										
23...	1345	.6	15.0	16.8	7.3	10.1	32	6.8	4	10
23...	1400	11.0	--	16.0	--	9.4	26	6.7	4	10
23...	1415	14.0	--	12.5	--	2.7	34	5.7	4	15
23...	1430	17.0	--	12.1	--	2.2	31	6.0	4	15

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
MAR.										
26...	--	.002	.006	.04	.01	.14	.15	.11	.15	.30
26...	--	.001	.004	.01	.01	.01	.02	.07	.08	.10
26...	--	.001	.005	.00	.01	.06	.07	.00	.00	.07
SEP.										
23...	--	.002	.003	.00	.00	.00	.00	.26	.26	.26
23...	--	.002	.008	.00	.00	.00	.00	.50	.50	.50
23...	--	.004	.007	.01	.00	.07	.07	.14	.15	.22
23...	--	.001	.008	.01	.00	.06	.06	.16	.17	.23

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
MAR.										
26...	1.3	3.0	2.7	1.8	90	10	--	--	--	--
26...	.44	3.2	3.3	2.2	130	10	--	--	--	--
26...	.31	2.9	2.7	2.7	170	20	--	--	--	--
SEP.										
23...	1.2	3.5	3.1	1.2	40	10	12	.2	.2	2.0
23...	2.2	3.3	3.2	1.2	60	10	5.0	.3	.2	2.0
23...	.97	3.3	3.2	1.9	70	50	4.0	.2	.2	2.0
23...	1.0	3.5	3.1	2.1	140	110	3.0	.3	.2	2.0

UNION RIVER BASIN

01025500 Branch Lake near Ellsworth, Maine--Continued

▼--TRIBUTARY A SAMPLE SITE LOCATION.--Lat 44°37'57", long 68°33'23".
 ▼--TRIBUTARY B SAMPLE SITE LOCATION.--Lat 44°37'32", long 68°34'24".
 ▼--TRIBUTARY C SAMPLE SITE LOCATION.--Lat 44°37'28", long 68°34'59".
 ▼--TRIBUTARY D SAMPLE SITE LOCATION.--Lat 44°37'19", long 68°35'24".
 ▼--TRIBUTARY E SAMPLE SITE LOCATION.--Lat 44°36'56", long 68°35'46".
 ▼--TRIBUTARY F SAMPLE SITE LOCATION.--Lat 44°36'37", long 68°35'47".
 ▼--TRIBUTARY G SAMPLE SITE LOCATION.--Lat 44°35'55", long 68°35'10".
 ▼--TRIBUTARY I SAMPLE SITE LOCATION.--Lat 44°35'46", long 68°34'11".
 ▼--TRIBUTARY J SAMPLE SITE LOCATION.--Lat 44°34'04", long 68°32'26".
 ▼--TRIBUTARY K SAMPLE SITE LOCATION.--Lat 44°34'40", long 68°31'39".
 ▼--TRIBUTARY M SAMPLE SITE LOCATION.--Lat 44°32'09", long 68°34'09".
 ▼--TRIBUTARY N SAMPLE SITE LOCATION.--Lat 44°37'42", long 68°33'04".
 ▼--TRIBUTARY O SAMPLE SITE LOCATION.--Lat 44°37'45", long 68°33'06".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	MAR. 26...	1315	.3	1.0	62	.004	0	0
	SEP. 30...	1715	.3	14.5	52	.006	--	--
Tributary B	MAR. 26...	1330	.3	1.0	43	.004	B100	B2
Tributary C	MAR. 26...	1340	.3	1.0	52	.004	B1	0
	SEP. 23...	0900	.3	13.0	41	.011	21	B32
Tributary D	MAR. 26...	1350	.3	1.0	64	.007	0	0
	SEP. 23...	0915	.3	13.5	50	.007	37	42
Tributary E	MAR. 26...	1400	.3	1.0	52	.008	0	0
	SEP. 23...	0930	.3	14.8	50	.008	54	B2
Tributary F	MAR. 26...	1410	.3	1.0	50	.009	0	0
	SEP. 30...	1730	.3	17.0	34	.009	--	--
Tributary G	MAR. 26...	1420	.3	1.0	48	.007	B1	0
	SEP. 30...	1745	.3	17.0	26	.007	--	--
Tributary I	MAR. 26...	1430	.3	1.0	44	.007	0	0
	SEP. 30...	1800	.3	14.0	31	.010	--	--
Tributary J	MAR. 26...	1440	.3	1.0	46	.057	B1	0
	SEP. 23...	0945	.3	13.2	34	.020	B3	50
Tributary K	MAR. 26...	1450	.3	1.0	71	.009	0	0
	SEP. 23...	1000	.3	15.5	49	.027	B15	78
Tributary M	SEP. 23...	1015	.3	13.2	44	.013	B11	B26
Tributary N	SEP. 30...	1815	.3	14.0	38	.010	--	--
Tributary O	SEP. 30...	1830	.3	16.0	--	.025	--	--

UNION RIVER BASIN

01025500 Branch Lake near Ellsworth, Maine--Continued

BIOLOGICAL ANALYSES

The following is a benthic macroinvertebrate analysis of a bottom sample taken 26 March 1975 at lake sample site ▼ 1.

Total Wet Weight (g/m²) = 8.31

Taxa	Number/m ²
NEMATODA	9
ANNELIDA	
Oligochaeta	
Tubificidae	
<u>Limnodrilus spp.</u>	69
ARTHROPODA	
Insecta	
Diptera	
Culicidae	
<u>Chaoborus punctipennis</u>	3400
Chironomidae	
Procladius sp.	220
<u>Endochironomus sp.</u>	52
Tanytarsus sp.	410
Trichocladius sp.	9
Unknown	9
Ceratopogonidae	
Palpomyia-Bezzia	9
MOLLUSCA	
Pelecypoda	
Sphaeriidae	
<u>Pisidium sp.</u>	670
TOTAL	4900

PENOBSCOT RIVER BASIN

01029300 Upper Shin Pond at Shin Pond, Maine

LOCATION.--Lat 46°06'32", long 68°33'18", Penobscot County, 0.7 mi (1.1 km) northeast of Shin Pond.

DRAINAGE AREA.--17.4 mi² (45.1 km²).

SURFACE AREA.--544 acres (2.20 km²).

SURFACE ELEVATION.--790 ft (240.8 m).

VOLUME.--10,000 acre-ft (12.3 hm³).

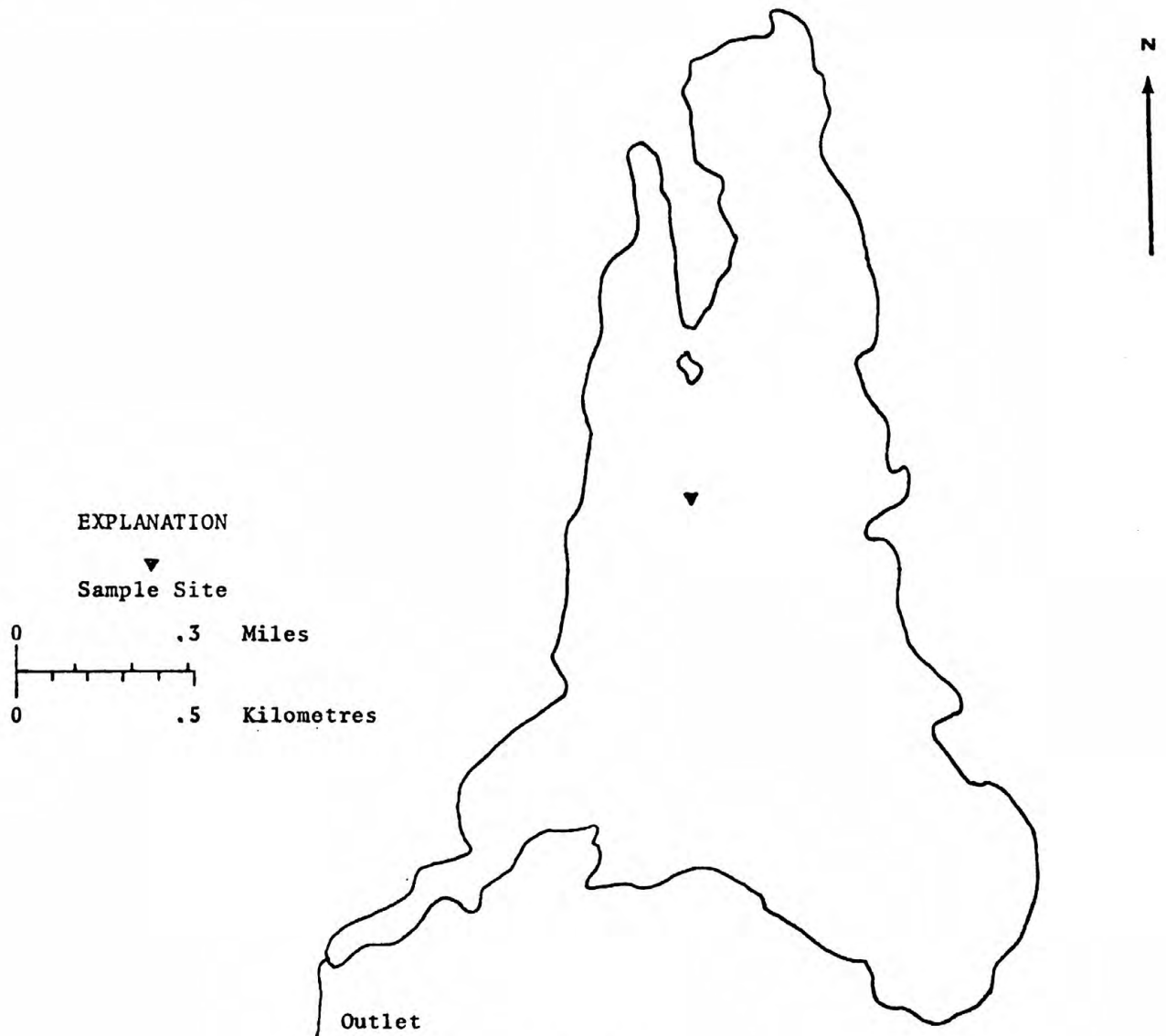
MAXIMUM DEPTH.--64 ft (19.5 m).

MEAN DEPTH.--18 ft (5.5 m).

LENGTH OF SHORELINE.--35,000 ft (11,000 m).

U.S.G.S. QUADRANGLES.--Shin Pond 15-minute.

STATE OF MAINE MIDAS NUMBER.--2202.



PENOBSCOT RIVER BASIN

01029300 Upper Shin Pond at Shin Pond, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼ - SAMPLE SITE LOCATION.--Lat 46°07'16", long 68°32'28".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
MAY							
28...	1415	.3	--	--	3.6	.009	2.7
JUNE							
11...	1300	.3	23.0	17.0	4.2	.013	2.2
25...	1030	.3	20.0	21.5	3.6	.007	3.1
JULY							
11...	1500	.3	22.0	22.0	4.2	.007	2.8
23...	1220	.3	23.0	24.5	4.8	.006	2.2
AUG.							
06...	1330	.3	18.0	23.5	3.9	.007	2.4
21...	1055	.3	18.5	22.0	3.2	.008	2.2
SEP.							
05...	1400	.3	20.0	17.5	3.2	.009	4.5
17...	1215	.3	16.0	17.0	4.6	.011	2.6
OCT.							
02...	1545	.3	10.3	15.0	4.1	.007	2.8
15...	1315	.3	5.0	11.5	4.0	.010	3.6
28...	1240	.3	17.0	10.5	3.9	.008	3.9

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)
MAY							
28...	1415	0.3	--	--	3.6	2.70	.002
28...	1420	7.0	--	--	--	--	.002
28...	1425	17.7	--	--	--	--	.002

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)
MAY							
28...	.009	.02	.02	.98	1.0	1.0	4.5
28...	.008	.01	.07	.21	.22	.29	1.3
28...	.011	.03	.09	.28	.31	.40	1.8

PENOBSCOT RIVER BASIN

01029310 Lower Shin Pond at Shin Pond, Maine

LOCATION.--Lat 46°06'22", long 68°34'29", Penobscot County, at Shin Pond.

DRAINAGE AREA.--23.6 mi² (61.1 km²).

SURFACE AREA.--560 acres (2.27 km²).

SURFACE ELEVATION.--778 ft (237.1 m).

VOLUME.--6,500 acre-ft (8.01 hm³).

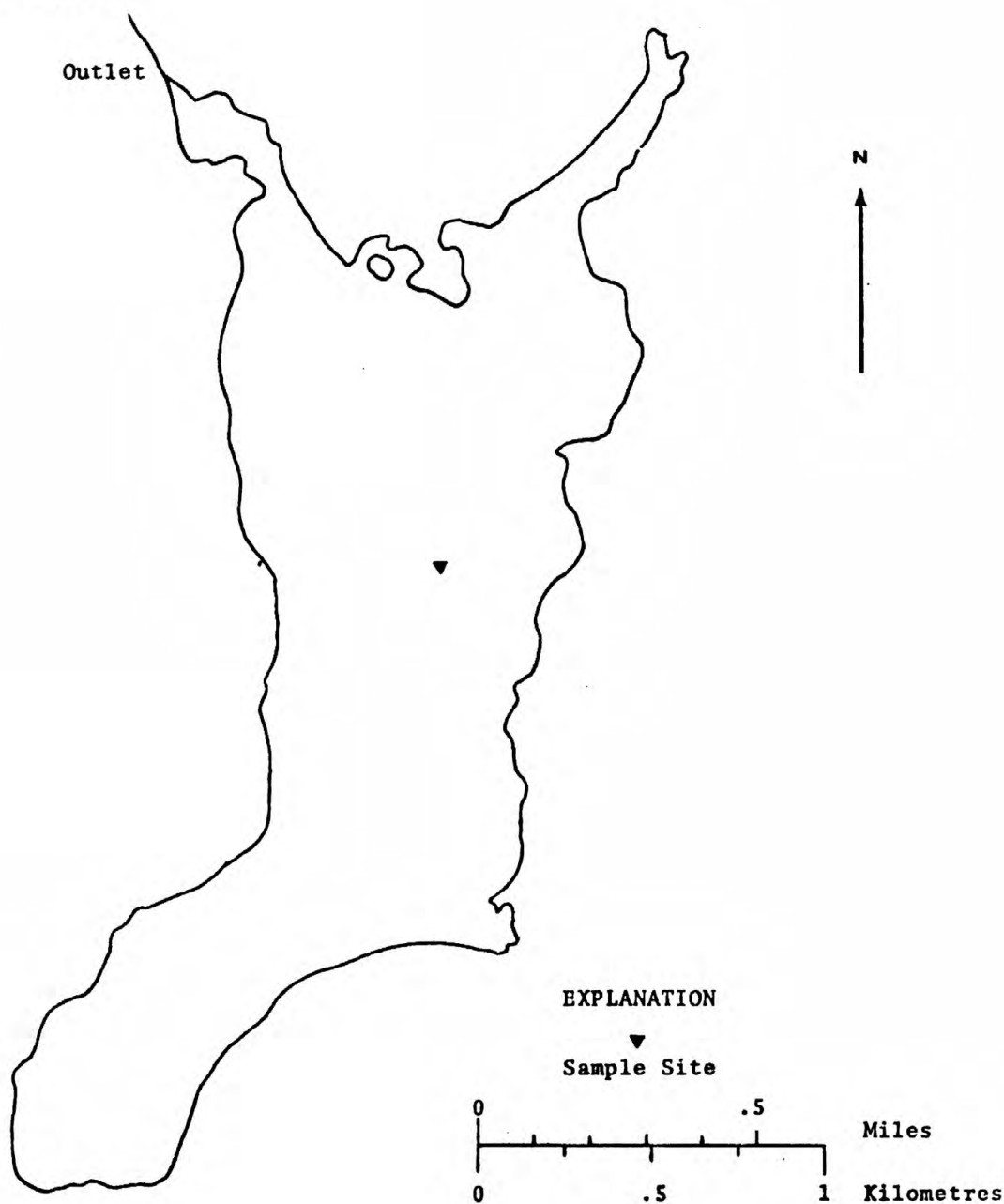
MAXIMUM DEPTH.--25 ft (7.6 m).

MEAN DEPTH.--12 (3.6 m).

LENGTH OF SHORELINE.--39,000 ft (12,000 m).

U.S.G.S. QUADRANGLES.--Shin Pond 15-minute.

STATE OF MAINE MIDAS NUMBER.--2198.



PENOBSCOT RIVER BASIN

01029310 Lower Shin Pond at Shin Pond, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼ - SAMPLE SITE LOCATION.--Lat 46°05'38", long 68°34'06".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
MAY							
28...	1345	.3	--	--	4.0	.008	4.1
JUNE							
11...	1320	.3	23.0	17.0	4.2	.008	1.9
25...	1015	.3	20.0	21.5	4.4	.007	1.9
JULY							
11...	1235	.3	22.0	23.0	4.3	.008	2.1
23...	1220	.3	23.0	24.0	4.5	.007	3.3
AUG.							
06...	1345	.3	18.5	23.5	4.3	.008	2.5
21...	1045	.3	20.0	21.0	4.0	.010	4.0
SEP.							
05...	1410	.3	20.0	17.5	3.4	.009	--
17...	1330	.3	16.0	17.0	5.0	.003	2.8
OCT.							
02...	1615	.3	10.0	15.0	5.4	.008	1.9
15...	1320	.3	5.0	10.0	5.4	.009	2.1
28...	1240	.3	18.0	10.5	4.9	.013	2.0

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)
MAY							
28...	1345	0.3	--	--	4.0	4.10	.002
28...	1350	4.9	--	--	--	--	.001

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)
MAY							
28...	.008	.02	.01	.22	.24	.25	1.1
28...	.008	.02	.00	.21	.23	.23	1.0

PENOBSCOT RIVER BASIN

01030100 Pleasant Pond near Island Falls, Maine

LOCATION.--Lat 46°01'04", long 68°08'16", Aroostook County, 6.0 mi (9.6 km) east of Island Falls.

DRAINAGE AREA.--7.2 mi² (18.6 km²).

SURFACE AREA.--1,832 acres (7.41 km²).

SURFACE ELEVATION.--536 ft (163.4 m).

VOLUME.--58,000 acre-ft (71.5 hm³).

MAXIMUM DEPTH.--67 ft (20.4 m).

MEAN DEPTH.--32 ft (9.8 m).

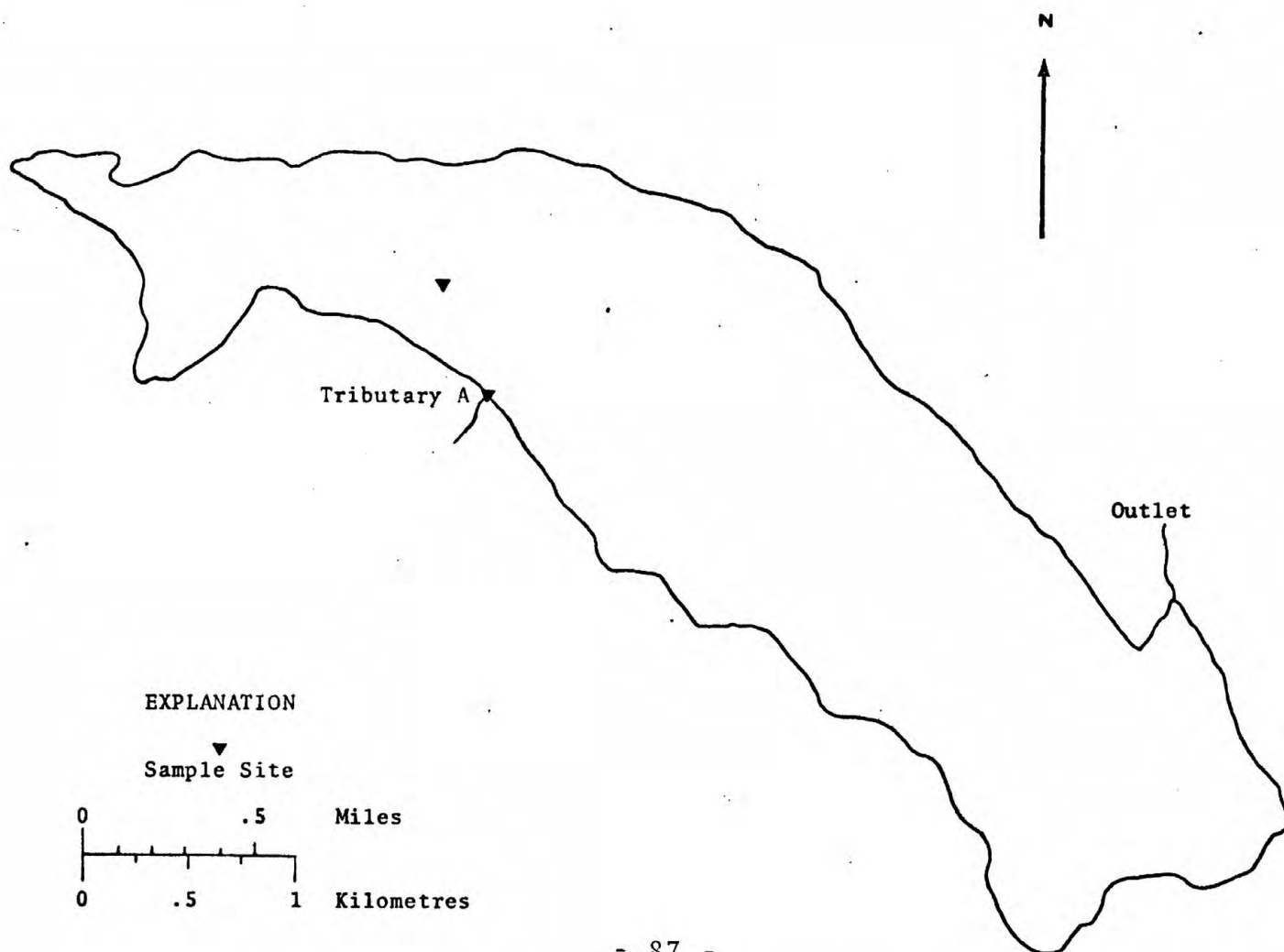
EPILIMNION DEPTH.--30 ft (9.1 m).

EPILIMNION VOLUME.--45,000 acre-ft (55.5 hm³).

LENGTH OF SHORELINE.--54,000 ft (16,000 m).

U.S.G.S. QUADRANGLES.--Smyrna Mills 15-minute.

STATE OF MAINE MIDAS NUMBER.--1728.



PENOBSCOT RIVER BASIN

01030100 Pleasant Pond near Island Falls, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼- SAMPLE SITE LOCATION.--Lat 46°01'53", long 68°10'03".

DATE	TIME	DEPTH (M)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	TRANSPAR-ENCY (SECCHI DISK) (M)	TOTAL PHOSPHORUS (P) (MG/L)	CHLORO-PHYLL A (UG/L)
APR.							
15...	1300	.6	15.0	1.2	12.7	.004	.8
MAY							
28...	1510	.3	--	--	7.1	.007	1.8
JUNE							
11...	1000	.3	20.0	14.5	8.2	.005	.9
25...	0945	.3	19.0	19.0	9.3	.004	.5
JULY							
11...	1700	.3	20.5	22.0	10.4	.011	.9
23...	1000	.3	21.0	24.0	11.5	.004	.6
AUG.							
06...	1010	.3	18.5	23.0	11.7	.005	.8
21...	1010	.3	20.0	21.5	10.7	.006	.6
SEP.							
05...	1100	.3	19.0	19.0	9.8	.007	1.3
17...	1115	.3	16.0	17.5	7.2	.004	1.8
OCT.							
02...	1440	.3	13.0	15.5	6.9	.004	2.3
15...	1030	.3	2.0	13.0	6.5	.008	2.8
28...	1015	.3	13.0	10.5	6.4	.011	2.7

DATE	TIME	DEPTH (M)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	TRANSPAR-ENCY (SECCHI DISK) (M)	DIS-SOLVED OXYGEN (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	ALKALINITY AS CaCO3 (MG/L)	COLOR (PLATINUM-COBALT UNITS)
APR.										
15...	1300	.6	15.0	1.2	12.7	13.9	33	6.8	7	0
15...	1315	7.6	--	2.9	--	12.5	31	6.7	7	0
15...	1330	16.8	--	4.5	--	6.1	30	6.1	7	0
MAY										
28...	1510	.3	--	--	7.1	--	--	--	--	--
28...	1515	9.1	--	--	--	--	--	--	--	--
28...	1520	18.3	--	--	--	--	--	--	--	--

DATE	CHLORO-PHYLL A (UG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)
APR.										
15...	.8	.001	.004	.02	.01	.08	.09	.13	.15	.24
15...	--	.001	.004	.01	.00	.02	.02	.04	.05	.07
15...	--	.002	.008	.01	.00	.08	.08	.15	.16	.24
MAY										
28...	1.8	.001	.007	.01	--	--	.00	.17	.18	.18
28...	--	.001	.011	.01	--	--	.01	.18	.19	.20
28...	--	.001	.010	.04	--	--	.01	.42	.46	.47

DATE	TOTAL NITROGEN (NO3) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG)	TOTAL POTASSIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
APR.										
15...	1.1	1.1	4.9	.2	50	10	--	--	--	--
15...	.31	1.5	4.1	.3	50	10	--	--	--	--
15...	1.1	1.2	4.1	2.9	110	120	--	--	--	--
MAY										
28...	.80	--	--	--	--	--	--	--	--	--
28...	.90	--	--	--	--	--	--	--	--	--
28...	2.1	--	--	--	--	--	--	--	--	--

PENOBSCOT RIVER BASIN

01030100 Pleasant Pond near Island Falls, Maine--Continued

▼--TRIBUTARY A SAMPLE SITE LOCATION.--Lat 46°01'33", long 68°10'40".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	APR. 15...	1345	2.0	1.2	30	.009	B3	0

BIOLOGICAL ANALYSES

The following is a benthic macroinvertebrate analysis of a bottom sample taken 16 April 1975 at the lake sample site.

Total Wet Weight (g/m²) = 4.42

Taxa	Number/m ²
ARTHROPODA	
AraCinoidea	
Hydracarina	9
Insecta	
Diptera	
Culicidae	
<u>Chaoborus punctipennis</u>	190
Chironomidae	
<u>Procladius</u> sp.	390
<u>Chironomus</u> sp.	9
<u>Tanytarsus</u> sp..	3000
MOLLUSCA	
Pelecypoda	
Sphaeriidae	
<u>Pisidium</u> sp.	360
TOTAL	4000

PENOBSCOT RIVER BASIN

01031990 Upper Wilson Pond near Greenville, Maine

LOCATION.--Lat 45°29'34", long 69°29'58", Piscataquis County, 5.2 mi (8.4 km) northeast of Greenville.

DRAINAGE AREA.--20.4 mi² (52.8 km²).

SURFACE AREA.--940 acres (3.80 km²).

SURFACE ELEVATION.--1,123 ft (342.3 m).

VOLUME.--13,000 acre-ft (16.0 hm³).

MAXIMUM DEPTH.--64 ft (19.5 m).

MEAN DEPTH.--14 ft (4.3 m).

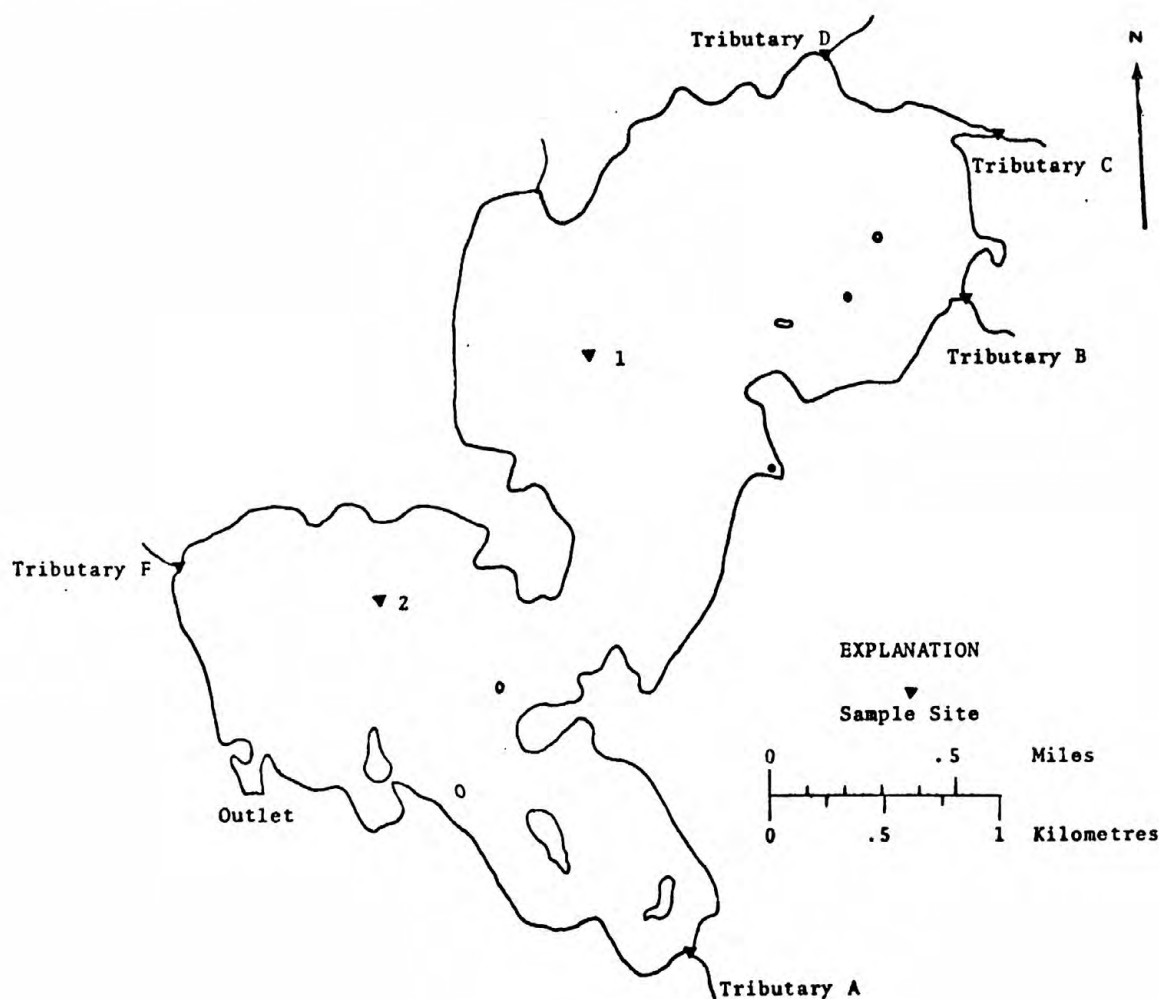
EPILIMNION DEPTH.--10 ft (3.0 m).

EPILIMNION VOLUME.--6,800 acre-ft (8.38 hm³).

LENGTH OF SHORELINE.--46,000 ft (14,000 m).

U.S.G.S. QUADRANGLES.--First Roach Pond, Greenville, and Sebec Lake 15-minute.

STATE OF MAINE MIDAS NUMBER.--0410.



PENOBSCOT RIVER BASIN

01031990 Upper Wilson Pond near Greenville, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼ 1-SAMPLE SITE LOCATION.--Lat 45°30'23", long 69°29'03".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
APR.										
14...	1000	.6	6.5	1.0	3.7	12.9	30	6.7	7	15
14...	1015	9.1	--	2.9	--	7.7	32	6.1	9	35
14...	1030	18.3	--	3.2	--	2.5	39	6.1	14	90
SEP.										
10...	1415	.6	14.5	15.3	3.2	9.7	26	6.7	10	25
10...	1430	11.0	--	9.3	--	1.6	29	6.1	10	35
10...	1445	18.0	--	6.4	--	.4	37	6.1	16	100

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
APR.										
14...	.7	.002	.006	.05	.00	.20	.20	.07	.12	.32
14...	--	.002	.006	.02	.00	.17	.17	.09	.11	.28
14...	--	.003	.012	.10	.01	.18	.19	.00	.10	.29
SEP.										
10...	--	.001	.012	.00	.00	.00	.00	.16	.16	.16
10...	--	.001	.011	.01	.00	.19	.19	.14	.15	.34
10...	--	.003	.069	.01	.01	.22	.23	.24	.25	.48

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
APR.										
14...	1.4	.3	2.8	3.9	50	10	--	--	--	--
14...	1.2	.9	3.5	6.0	160	60	--	--	--	--
14...	1.3	.6	2.7	7.0	600	930	--	--	--	--
SEP.										
10...	.71	.2	2.8	3.8	190	110	7.0	.3	.3	.8
10...	1.5	.5	2.8	6.0	320	920	6.9	.3	.3	.8
10...	2.1	.3	2.6	6.5	1100	2200	6.0	.3	.3	.8

PENOBSCOT RIVER BASIN

01031990 Upper Wilson Pond near Greenville, Maine--Continued

▼ 2 - SAMPLE SITE LOCATION.--Lat 45°29'51", long 69°29'39".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINITY AS CACO3 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
APR.										
14...	1230	.6	9.0	.8	3.8	12.6	25	6.7	7	25
14...	1300	6.1	--	4.5	--	5.3	32	6.1	9	30
SEP.										
10...	1245	.6	14.0	15.5	2.30	9.4	26	6.9	10	30
10...	1300	8.0	--	15.2	--	9.3	27	6.9	9	30
10...	1315	12.0	--	8.0	--	.2	65	6.5	28	40

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
APR.										
14...	1.5	.002	.007	.04	.00	.15	.15	.10	.14	.29
14...	--	.003	.009	.03	.00	.13	.13	.07	.10	.23
SEP.										
10...	--	.001	.017	.00	.00	.01	.01	.18	.18	.19
10...	--	.002	.011	.00	.00	.00	.00	.30	.30	.30
10...	--	.003	.019	.35	.00	.01	.01	.29	.64	.65

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG) (MG/L)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
APR.										
14...	1.3	.7	2.6	4.4	60	20	--	--	--	--
14...	1.0	.5	2.8	6.6	190	200	--	--	--	--
SEP.										
10...	.84	.4	2.7	3.6	180	110	3.5	.3	.3	.9
10...	1.3	.2	2.8	3.9	230	110	9.5	.3	.3	.9
10...	2.9	.2	5.4	8.3	5400	5300	5.0	.3	.4	.8

PENOBSCOT RIVER BASIN

01031990 Upper Wilson Pond near Greenville, Maine--Continued

▼-TRIBUTARY A SAMPLE SITE LOCATION.--Lat 45°29'12", long 69°28'44".

▼-TRIBUTARY B SAMPLE SITE LOCATION.--Lat 45°30'32", long 69°28'04".

▼-TRIBUTARY C SAMPLE SITE LOCATION.--Lat 45°30'49", long 69°28'04".

▼-TRIBUTARY D SAMPLE SITE LOCATION.--Lat 45°30'56", long 69°28'28".

▼-TRIBUTARY F SAMPLE SITE LOCATION.--Lat 45°29'56", long 69°30'12".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	APR. 14...	1050	.3	2.2	42	.002	0	0
	SEP. 10...	1500	.3	16.0	45	.010	B7	B4
Tributary B	APR. 14...	1100	.3	.0	23	.006	B1	0
	SEP. 10...	1515	.3	15.0	28	.017	37	B6
Tributary C	APR. 14...	1120	.3	.0	22	.005	B1	0
	SEP. 10...	1530	.3	15.5	35	.045	B8	B6
Tributary D	SEP. 10...	1545	.3	15.3	33	.011	B10	B2
Tributary F	APR. 14...	1110	.3	2.0	35	.004	0	0

BIOLOGICAL ANALYSES

The following is a benthic macroinvertebrate analysis of a bottom sample taken 14 April 1975 at lake sample site ▼ 1.

Total Wet Weight (g/m²) = 11.69

Taxa	Number/m ²
ANNELIDA	
Oligochaeta	
Lumbriculidae	
Lumbriculus sp.	78
Tubificidae	
Limnodrilus spp.	410
Tubifex sp.	26
ARTHIROPODA	
Insecta	
Diptera	
Culicidae	
Chaoborus punctipennis	4100
Chironomidae	
Chironomus spp.	1100

PENOBSCOT RIVER BASIN

01032000 Lower Wilson Pond near Greenville, Maine

LOCATION.--Lat 45°27'25", long 69°31'50", Piscataquis County, 3.0 mi (4.8 km) east of Greenville.

DRAINAGE AREA.--32.8 mi² (85.0 km²).

SURFACE AREA.--1,380 acres (5.58 km²).

SURFACE ELEVATION.--1,122 ft (342.0 m).

VOLUME.--40,000 acre-ft (49.3 hm³).

MAXIMUM DEPTH.--107 ft (32.6 m).

MEAN DEPTH.--29 ft (8.8 m).

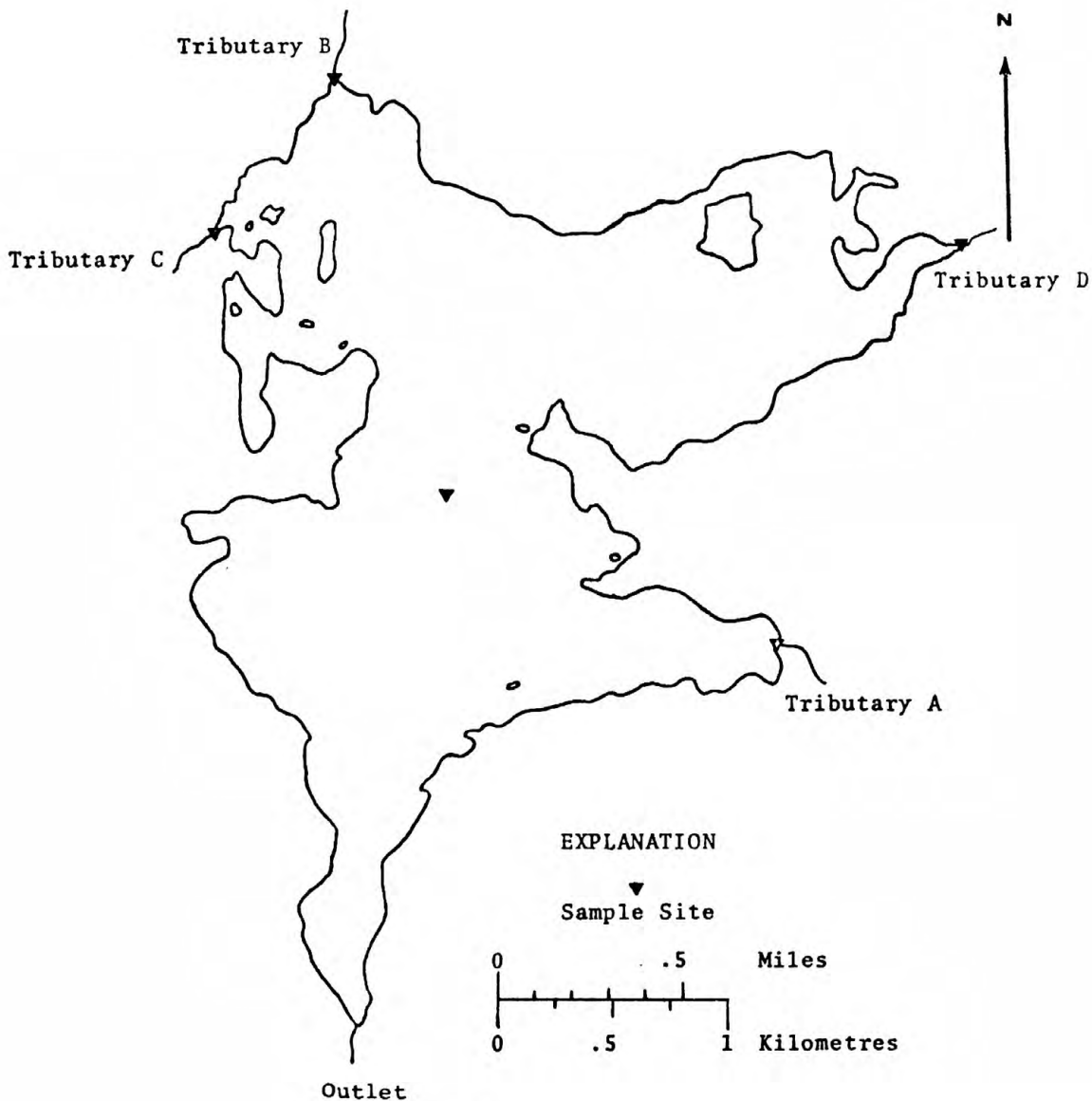
EPILIMNION DEPTH.--10 ft (3.0 m).

EPILIMNION VOLUME.--12,000 acre-ft (14.8 hm³).

LENGTH OF SHORELINE.--61,000 ft (18,000 m).

U.S.G.S. QUADRANGLES.--Greenville and Sebec Lake 15-minute.

STATE OF MAINE MIDAS NUMBER.--0342.



PENOBSCOT RIVER BASIN

01032000 Lower Wilson Pond near Greenville, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975:

▼ - SAMPLE SITE LOCATION.--Lat 45°28'43", long 69°31'37".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CAC03 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
APR.										
14...	1430	.6	12.0	1.7	6.7	13.1	26	6.7	8	10
14...	1500	12.2	--	2.5	--	11.0	25	6.6	7	20
14...	1530	25.9	--	3.1	--	4.5	33	6.1	11	40
SEP.										
10...	1730	.6	13.0	15.1	5.6	9.8	25	6.8	8	7
10...	1745	9.0	--	15.1	--	9.8	25	6.8	8	10
10...	1800	14.0	--	7.6	--	6.6	25	6.2	8	15
10...	1815	28.0	--	6.1	--	5.6	29	6.2	8	17

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
APR.										
14...	.6	.001	.004	.04	.00	.11	.11	.07	.11	.22
14...	--	.002	.004	.02	.00	.08	.08	.03	.05	.13
14...	--	.003	.011	.07	.00	.11	.11	.05	.12	.23
SEP.										
10...	--	.001	.010	.00	.00	.01	.01	.16	.16	.17
10...	--	.001	.008	.00	.00	.01	.01	.16	.16	.17
10...	--	.004	.009	.00	.00	.14	.14	.15	.15	.29
10...	--	.001	.009	.01	.00	.15	.15	.16	.17	.32

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG) (MG/L)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
APR.										
14...	.97	.7	2.8	3.0	1000	20	--	--	--	--
14...	.58	.1	2.8	3.3	50	10	--	--	--	--
14...	1.0	.3	2.3	6.0	340	1100	--	--	--	--
SEP.										
10...	.75	.8	2.8	2.7	80	10	6.0	.2	.2	.8
10...	.75	.9	2.8	2.8	120	20	7.0	.4	.2	.9
10...	1.3	.8	2.9	4.2	110	40	3.5	.2	.3	.9
10...	1.4	.8	2.8	4.4	210	150	4.5	.2	.2	1.0

PENOBSCOT RIVER BASIN

01032000 Lower Wilson Pond near Greenville, Maine--Continued

▼-TRIBUTARY A SAMPLE SITE LOCATION.--Lat 45°28'20", long 69°30'32".

▼-TRIBUTARY B SAMPLE SITE LOCATION.--Lat 45°29'40", long 69°32'01".

▼-TRIBUTARY C SAMPLE SITE LOCATION.--Lat 45°29'18", long 69°32'23".

▼-TRIBUTARY D SAMPLE SITE LOCATION.--Lat 45°29'18", long 69°29'57".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	APR. 14...	1550	.3	1.6	21	.003	B1	0
	SEP. 10...	1830	.3	11.5	27	.007	B1	B24
Tributary B	APR. 14...	1600	.3	2.3	38	.003	0	0
	SEP. 10...	1845	.3	10.5	52	.007	B2	46
Tributary C	SEP. 10...	1900	.3	15.0	30	.015	B1	B2
Tributary D	APR. 14...	1620	.3	2.9	30	.005	--	--

BIOLOGICAL ANALYSES

The following is a benthic macroinvertebrate analysis of a bottom sample taken 14 April 1975 at the lake sample site.

Total Wet Weight (g/m²) = 4.07

Taxa	Number/m ²
NEMATODA	9
ANNELIDA	
Oligochaeta	
Tubificidae	
<u>Limnodrilus sp.</u>	9
ARTHROPODA	
Insecta	
Diptera	
Culicidae	
<u>Chaoborus punctipennis</u>	1600
Chironomidae	
<u>Procladius sp.</u>	100
<u>Chironomus sp.</u>	190
<u>Phaenopsectra-Tribeles</u>	78
<u>Tanytarsus sp.</u>	52
<u>Micropsectra sp.</u>	9
<u>Cricotopus sp.</u>	9

TOTAL 2100

PENOBSCOT RIVER BASIN

01036300 Pushaw Lake near West Old Town, Maine

LOCATION.--Lat 44°58'08", long 68°49'07", Penobscot County, 2.5 mi (4.0 km) southwest of West Old Town.

DRAINAGE AREA.--113 mi² (293 km²).

SURFACE AREA.--5,056 acres (20.5 km²).

SURFACE ELEVATION.--115 ft (35.0 m).

VOLUME.--53,000 acre-ft (65.3 hm³).

MAXIMUM DEPTH.--28 ft (8.5 m).

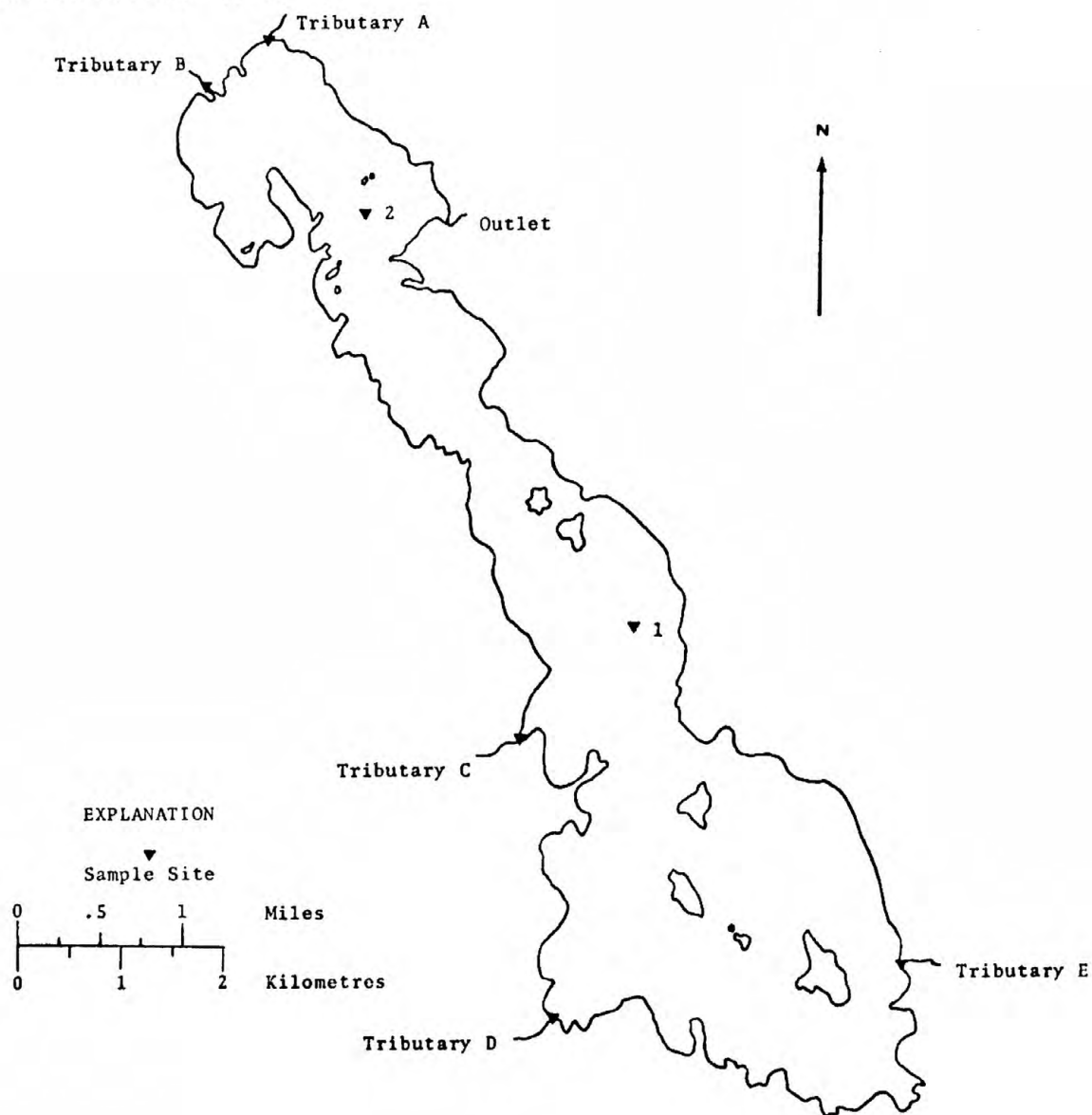
MEAN DEPTH.--10 ft (3.0 m).

EPILIMNION DEPTH.--Lake not stratified.

LENGTH OF SHORELINE.--120,000 ft (36,000 m).

U.S.G.S. QUADRANGLES.--Bangor 15-minute.

STATE OF MAINE MIDAS NUMBER.--0080.



PENOBSCOT RIVER BASIN

01036300 Pushaw Lake near West Old Town, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼ 1-SAMPLE SITE LOCATION.--Lat 44°56'13", long 68°47'44".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
MAR. 25...	1015	.6	7.0	3.5	3.7	.012	.4
MAY 07...	1815	.6	7.8	10.0	2.5	.015	9.1
JUNE 11...	1415	.3	27.0	21.5	2.3	.010	3.8
25...	1420	.3	23.0	24.0	3.2	.009	2.3
JULY 13...	1530	.3	21.7	22.2	3.7	.009	2.1
23...	1320	.3	26.0	25.5	3.6	.010	3.4
AUG. 06...	1430	.3	20.0	24.5	3.0	.012	3.0
21...	0930	.3	21.0	23.0	3.3	.012	2.4
SEP. 05...	1500	.3	20.0	19.0	3.4	.012	2.9
18...	0915	.3	16.5	16.0	4.0	.014	2.3
OCT. 08...	0840	.3	10.0	13.0	3.7	.012	2.5
15...	1415	.3	8.2	13.0	3.5	.017	2.6
28...	0930	.3	12.0	11.5	4.2	.020	2.2

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CAC03 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
MAR. 25...	1015	.6	7.0	3.5	3.7	12.5	43	6.5	16	40
25...	1030	5.5	--	4.8	--	3.6	52	6.3	19	65
MAY 07...	1815	.6	7.8	10.0	2.50	--	--	--	--	--
07...	1820	6.1	--	--	--	--	--	--	--	--

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
MAR. 25...	.4	.004	.012	.07	.01	.09	.10	.18	.25	.35
25...	--	.010	.018	.08	.01	.19	.20	.20	.28	.48
MAY 07...	9.1	.010	.015	.05	--	--	.01	.36	.41	.42
07...	--	.003	.016	.02	--	--	.02	.39	.41	.43

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
MAR. 25...	1.6	2.8	3.2	1.1	140	60	--	--	--	--
25...	2.1	4.1	5.6	3.7	190	20	--	--	--	--
MAY 07...	1.9	--	--	--	--	--	--	--	--	--
07...	1.9	--	--	--	--	--	--	--	--	--

PENOBSCOT RIVER BASIN

01036300 Pushaw Lake near West Old Town, Maine--Continued

BIOLOGICAL ANALYSES

The following is a benthic macroinvertebrate analysis of a bottom sample taken 25 March 1975 at the lake sample site ▲1.

Total Wet Weight (g/m²) = 1.99

Taxa	Number/m ²
NEMATODA	17
ARTHROPODA	
Insecta	
Ephemeroptera	
<u>Hexagenia sp.</u>	9
Diptera	
Culicidae	
<u>Chaoborus punctipennis</u>	1100
Chironomidae	
<u>Procladius sp.</u>	35
<u>Coelotanytus sp.</u>	43
<u>Chironomus sp.</u>	9
<u>Tanytarsus sp.</u>	17
Ceratopogonidae	
<u>Palpomyia-Bezzia</u>	9
MOLLUSCA	
Pelecypoda	
Sphaeriidae	
<u>Pisidium sp.</u>	87
Unionidae	9
Gastropoda	
Valvatidae	
<u>Valvata sp.</u>	9
TOTAL	1300

PENOBSCOT RIVER BASIN

01037100 Brewer Lake near East Orrington, Maine

LOCATION.--44°43'28", long 68°44'11", Penobscot County, 2.5 mi (4.0 km) southeast of East Orrington.

DRAINAGE AREA.--12.0 mi² (31.1 km²).

SURFACE AREA.--881 acres (3.56 km²).

SURFACE ELEVATION.--115 ft (35.0 m).

VOLUME.--20,000 acre-ft (24.7 hm³).

MAXIMUM DEPTH.--48 ft (14.6 m).

MEAN DEPTH.--23 ft (7.0 m).

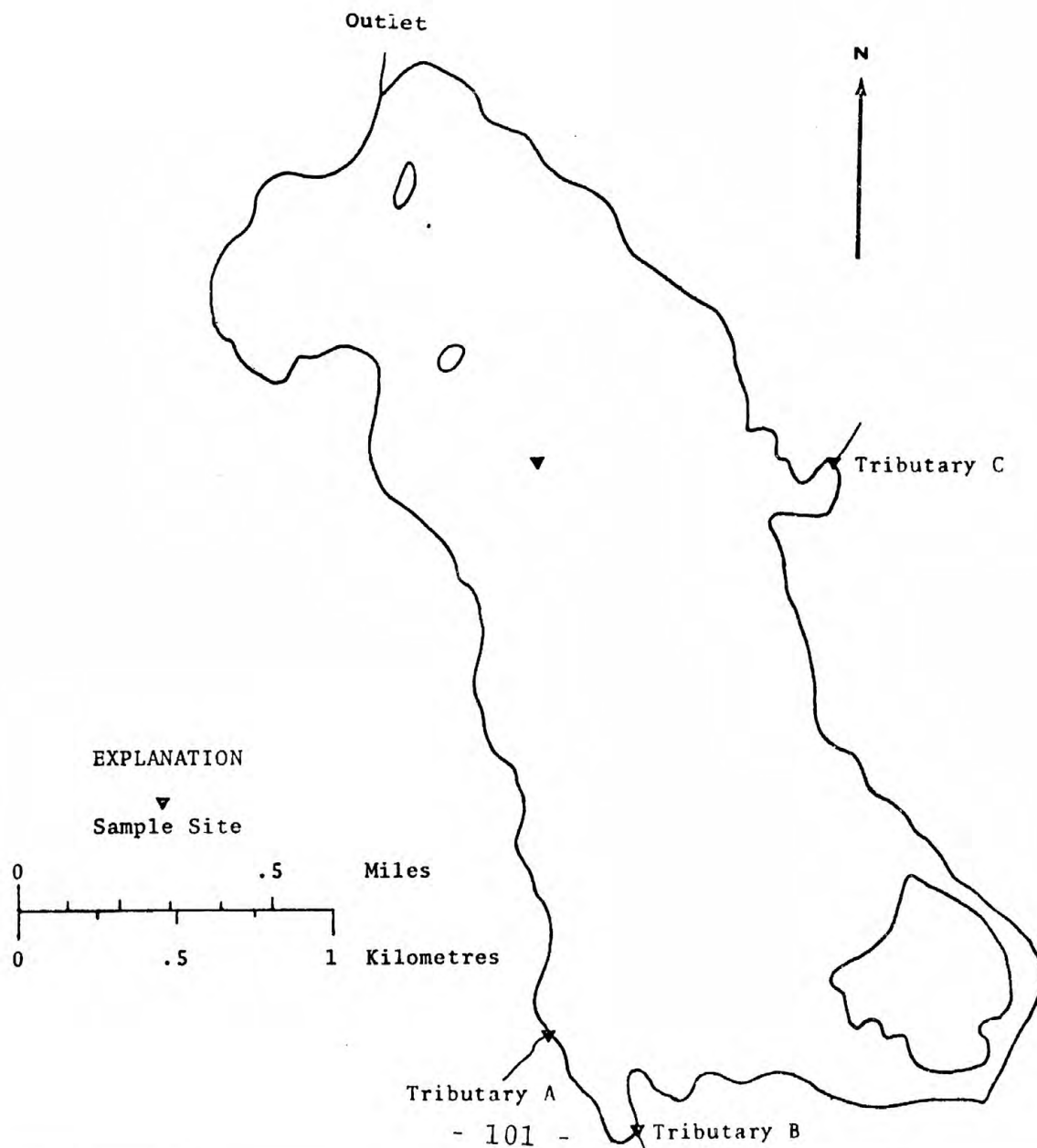
EPILIMNION DEPTH.--33 ft (10.0 m).

EPILIMNION VOLUME.--19,000 acre-ft (23.4 hm³).

LENGTH OF SHORELINE.--37,000 ft (11,000 m).

U.S.G.S. QUADRANGLES.--Orland 15-minute.

STATE OF MAINE MIDAS NUMBER.--4284.



PENOBSCOT RIVER BASIN

01037100 Brewer Lake near East Orrington, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼-SAMPLE SITE LOCATION.--Lat 44°42'52", long 68°43'48".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)			
MAY										
07...	0930	.6	7.0	7.5	4.5	.009	3.0			
JUNE										
03...	0945	.3	24.0	16.5	3.6	.011	1.6			
16...	0930	.3	13.5	16.0	3.7	.008	--			
JULY										
08...	1000	.3	23.0	23.5	6.0	.007	2.5			
22...	1000	.3	23.5	24.5	5.8	.007	2.8			
AUG.										
04...	0920	.3	20.0	24.5	6.9	.007	2.3			
19...	0925	.3	20.0	22.5	6.1	.009	2.6			
SEP.										
02...	1045	.3	14.0	19.0	4.3	.009	3.3			
09...	1130	.6	22.5	18.8	3.7	.012	--			
16...	0930	.3	16.0	17.0	2.9	.008	4.2			
30...	0945	.3	18.0	17.0	3.4	.010	7.3			
OCT.										
14...	0830	.3	18.0	14.0	2.5	.013	16			
NOV.										
03...	1000	.3	12.0	11.0	1.5	.014	31			

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LILITY AS CACO3 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
MAY										
07...	0930	.6	7.0	7.5	4.5	--	--	--	--	--
07...	0935	6.1	--	--	--	--	--	--	--	--
07...	0940	10.7	--	--	--	--	--	--	--	--
SEP.										
09...	1130	.6	22.5	18.8	3.7	9.0	31	6.9	8	10
09...	1145	10.0	--	18.2	--	7.5	32	6.8	8	7
09...	1155	12.0	--	15.2	--	.2	39	6.3	15	80
09...	1205	14.0	--	14.3	--	.1	53	6.6	19	45

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
MAY										
07...	3.0	.002	.009	.05	--	--	.02	.11	.16	.18
07...	--	.002	.008	.03	--	--	.02	.18	.21	.23
07...	--	.002	.010	.08	--	--	.03	.10	.18	.21
SEP.										
09...	--	.001	.012	.00	.00	.00	.00	1.6	1.6	1.6
09...	--	.001	.010	.00	.00	.01	.01	.34	.34	.35
09...	--	.026	.045	.07	.00	.00	.00	.31	.38	.38
09...	--	.075	.116	.13	.00	.00	.00	.21	.34	.34

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
MAY										
07...	.80	--	--	--	--	--	--	--	--	--
07...	1.0	--	--	--	--	--	--	--	--	--
07...	.90	--	--	--	--	--	--	--	--	--
SEP.										
09...	7.1	2.5	3.4	.6	140	20	6.7	.2	.2	2.0
09...	1.6	3.2	3.8	.8	130	20	2.8	.2	.2	2.0
09...	1.7	2.3	4.6	3.5	1400	660	3.0	.2	.2	2.0
09...	1.5	2.1	6.3	4.3	3500	1100	3.1	.3	.3	2.1

PENOBSCOT RIVER BASIN

01037100 Brewer Lake near East Orrington, Maine--Continued

▼-TRIBUTARY A SAMPLE SITE LOCATION.--Lat 44°41'51", long 68°43'44".

▼-TRIBUTARY B SAMPLE SITE LOCATION.--Lat 44°41'38", long 68°43'28".

▼-TRIBUTARY C SAMPLE SITE LOCATION.--Lat 44°42'52", long 68°43'02".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	SEP. 09...	1300	.3	14.0	41	.017	22	--
Tributary B	SEP. 09...	1330	.3	18.0	30	.010	B9	--
Tributary C	SEP. 09...	1400	.3	--	--	.011	B11	B6

KENNEBEC RIVER BASIN

01042800 Saddleback Lake near Dallas, Maine

LOCATION.--Lat 44°58'36", long 70°33'41", Franklin County, 2.0 mi (3.2 km) south of Dallas.

DRAINAGE AREA.--11.0 mi² (28.5 km²)

SURFACE AREA.--358 acres (1.45 km²).

SURFACE ELEVATION.--1,746 ft (532.2 m).

VOLUME.--2,600 acre-ft (3.20 hm³).

MAXIMUM DEPTH.--14 ft (4.3 m).

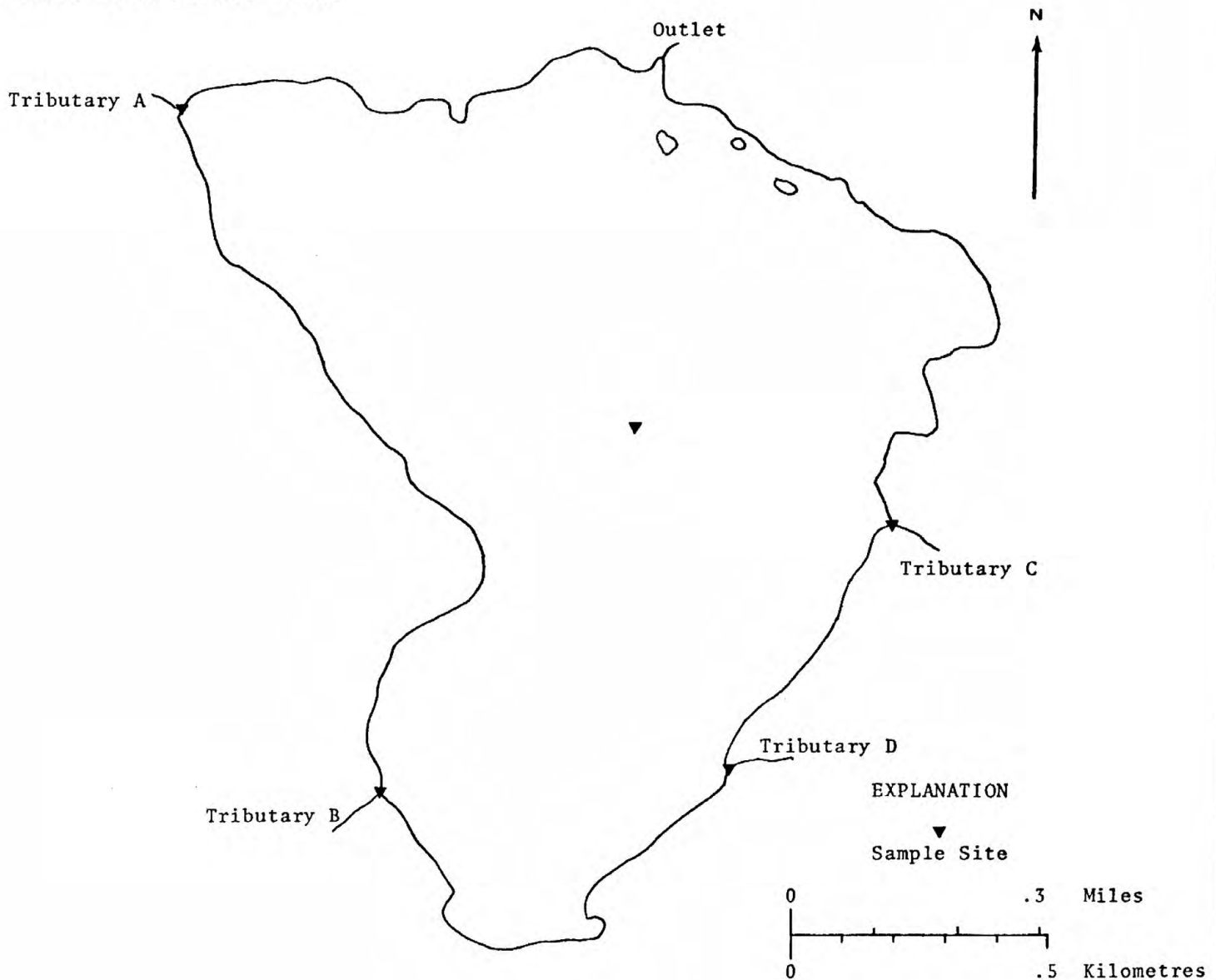
MEAN DEPTH.--7 ft (2.1 m).

EPILIMNION DEPTH.--Lake not stratified.

LENGTH OF SHORELINE.--18,000 ft (5,500 m).

U.S.G.S. QUADRANGLES.--Rangeley 15-minute.

STATE OF MAINE MIDAS NUMBER.--3536.



KENNEBEC RIVER BASIN

01042800 Saddleback Lake near Dallas, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼-SAMPLE SITE LOCATION.--Lat 44°58'14", long 70°33'43".

DATE	TIME	DEPTH (M)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	TRANSPAR-ENCY (SECCHI DISK) (M)	DIS-SOLVED OXYGEN (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	ALKALINITY AS CaCO3 (MG/L)	COLOR (PLATINUM-COBALT UNITS)
APR.										
07...	1300	.6	-1.2	2.0	3.2	13.6	23	5.4	2	25
07...	1330	3.0	--	4.0	--	4.5	26	5.7	5	40
MAY										
20...	1300	.6	24.0	15.2	4.4	--	--	--	--	--
20...	1330	3.6	--	--	--	--	--	--	--	--
SEP.										
02...	1400	.3	18.0	16.5	2.70	9.1	24	7.0	7	25
02...	1410	4.0	--	16.0	--	7.8	24	6.9	7	25

DATE	CHLORO-PHYLL A (UG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)
APR.										
07...	2.2	.001	.012	.04	.00	.38	.38	.17	.21	.59
07...	--	.001	.008	.05	.00	.16	.16	.08	.13	.29
MAY										
20...	--	.001	.007	.02	--	--	.17	.30	.32	.49
20...	--	.001	.010	.02	--	--	.20	.24	.26	.46
SEP.										
02...	--	.002	.008	.00	.00	.00	.00	.34	.34	.34
02...	--	.002	.008	.01	.00	.01	.01	.35	.36	.37

DATE	TOTAL NITRO-GEN (NO3) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL CAL-CIUM (CA) (MG/L)	TOTAL MAG-NE-SIUM (MG)	TOTAL PO-TAS-SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
APR.										
07...	2.6	2.4	3.7	4.0	160	20	--	--	--	--
07...	1.3	1.9	3.8	5.4	2000	90	--	--	--	--
MAY										
20...	2.2	--	--	--	--	--	--	--	--	--
20...	2.0	--	--	--	--	--	--	--	--	--
SEP.										
02...	1.5	1.8	4.1	2.7	410	30	9.7	.4	.3	1.2
02...	1.6	1.8	4.3	2.7	330	20	6.4	.3	.3	1.4

▼-TRIBUTARY A SAMPLE SITE LOCATION.--Lat 44°58'33", long 70°34'19".

▼-TRIBUTARY C SAMPLE SITE LOCATION.--Lat 44°58'09", long 70°33'19".

	DATE	TIME	DEPTH (M)	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	TOTAL PHOS-PHORUS (P) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCHI (COL. ONIES PER 100 ML)
Tributary A	SEP. 02...	1430	.3	11.0	61	.007	--	--
Tributary C	APR. 07...	1345	.3	.1	21	.011	0	0
	MAY 20...	1340	.3	9.5	--	.005	--	--
	SEP. 02...	1445	.3	13.5	25	.006	--	--

KENNEBEC RIVER BASIN

01042800 Saddleback Lake near Dallas, Maine--Continued

BIOLOGICAL ANALYSES

The following is a benthic macroinvertebrate analysis of a bottom sample taken 7 April 1975 at the lake sample site.

Total Wet Weight (g/m^2) = 2.86

Taxa	Number/ m^2
ANNELIDA	
Oligochaeta	
Tubificidae	
<u>Limnodrilus</u> spp.	43
<u>Tubifex</u> sp.	9
ARTHROPODA	
Insecta	
Diptera	
Culicidae	
<u>Chaoborus</u> punctipennis	1100
Chironomidae	
Procladius sp.	220
Chironomus spp.	170
Tanytarsus sp.	78
Micropsectra sp.	26
MOLLUSCA	
Pelecypoda	
Sphaeriidae	
<u>Pisidium</u> sp.	52
TOTAL	1700

KENNEBEC RIVER BASIN

01046900 Porter Lake near New Vineyard, Maine

LOCATION.--Lat 44°48'16", long 70°08'48", Franklin County, 1.5 mi (2.4 km) west of New Vineyard

DRAINAGE AREA.--5.5 mi² (14.2 km²).

SURFACE AREA.--527 acres (2.13 km²).

SURFACE ELEVATION.--629 ft (191.7 m).

VOLUME.--13,000 acre-ft (16.0 hm³).

MAXIMUM DEPTH.--86 ft (26.2 m).

MEAN DEPTH.--25 ft (7.6 m).

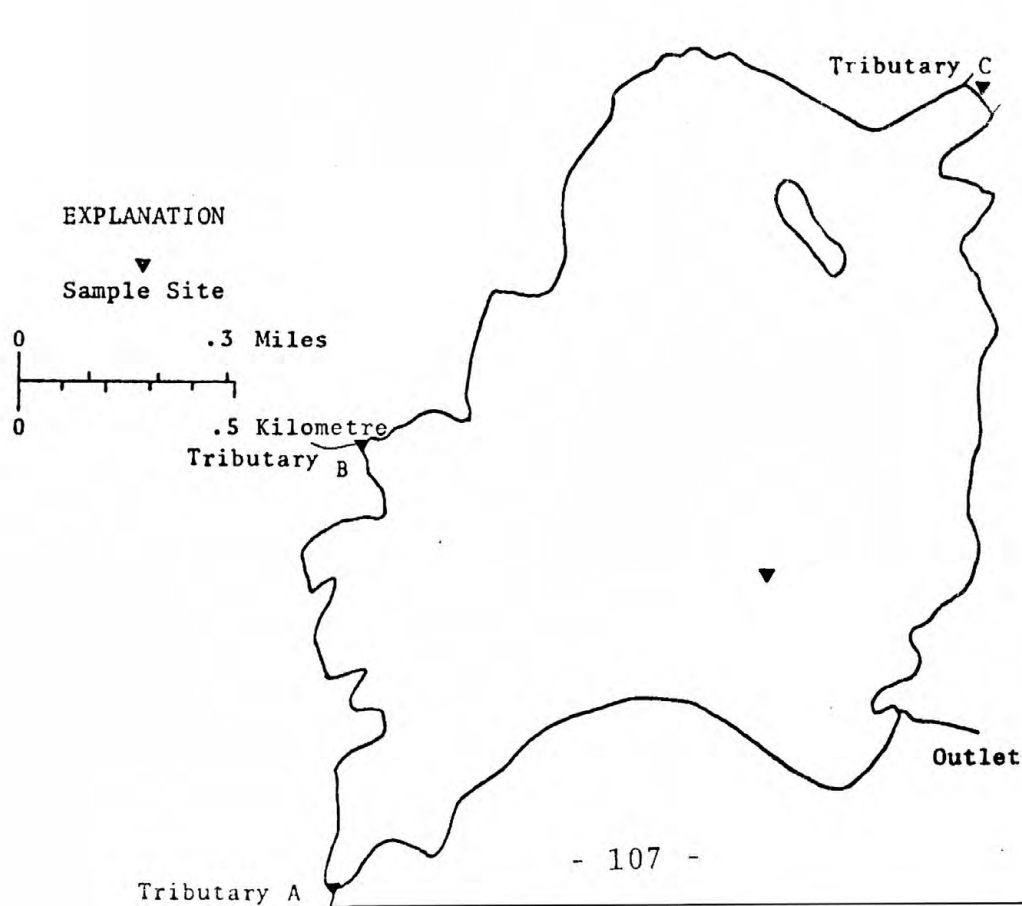
EPILIMNION DEPTH.--26 ft (8.0 m).

EPILIMNION VOLUME.--9,400 acre-ft (11.6 hm³).

LENGTH OF SHORELINE.--22,000 ft (6,700 m).

U.S.G.S. QUADRANGLES.--Kingfield 15-minute.

STATE OF MAINE MIDAS NUMBER.--0012.



KENNEBEC RIVER BASIN

01046900 Porter Lake near New Vineyard, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼—SAMPLE SITE LOCATION.--Lat 44°48'27", long 70°09'03".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
MAR.							
18...	0900	.6	1.0	.5	6.8	.005	.8
MAY							
06...	1315	.6	12.0	6.0	6.4	.005	1.9
JUNE							
02...	1200	.3	17.5	17.5	5.8	.007	3.5
18...	1030	.3	24.0	19.0	6.3	.007	2.3
JULY							
07...	1100	.3	21.5	25.0	5.2	.004	3.1
21...	1000	.3	23.5	25.5	5.7	.009	3.4
AUG.							
05...	1240	.3	27.5	27.0	7.4	.005	3.7
18...	1230	.3	25.0	24.0	6.6	.006	4.0
SEP.							
02...	1300	.3	19.5	20.0	7.0	.009	4.0
17...	1040	.3	25.0	17.0	6.6	.006	4.4
22...	1330	.6	19.0	16.1	6.5	.010	--
29...	1050	.3	19.0	15.0	7.2	.006	2.5
OCT.							
15...	1115	.3	11.0	10.5	6.8	.008	2.7
NOV.							
06...	1030	.3	6.5	9.0	4.5	.006	2.4

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CAC03 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
MAR.										
18...	0900	.6	1.0	.5	6.8	13.9	21	6.7	6	20
18...	0915	12.2	--	4.0	--	9.4	45	6.1	6	20
18...	0930	22.9	--	4.0	--	.6	34	6.1	11	70
MAY										
06...	1315	.6	12.0	6.0	6.4	--	--	--	--	--
06...	1320	12.2	--	--	--	--	--	--	--	--
06...	1325	22.9	--	--	--	--	--	--	--	--
SEP.										
22...	1330	.6	19.0	16.1	6.5	9.9	24	6.9	6	15
22...	1345	8.0	--	15.7	--	9.5	24	6.7	6	15
22...	1400	11.0	--	7.2	--	4.7	28	6.4	6	20
22...	1415	24.0	--	6.0	--	.6	31	6.3	6	30

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
MAR.										
18...	.8	.001	.005	.06	.00	.03	.03	.15	.21	.24
18...	--	.001	.004	.04	.00	.02	.02	.00	.04	.06
18...	--	.004	.012	.13	.00	.22	.22	.31	.44	.66
MAY										
05...	1.9	.001	.005	.00	--	--	.02	.12	.12	.14
06...	--	.001	.007	.01	--	--	.03	.10	.11	.14
06...	--	.001	.006	.00	--	--	.03	.19	.19	.22
SEP.										
22...	--	.000	.010	.00	.00	.00	.00	.14	.14	.14
22...	--	.001	.009	.00	.00	.00	.00	.16	.16	.16
22...	--	.001	.012	.00	.00	.00	.00	.09	.09	.09
22...	--	.001	.016	.00	.00	.08	.08	.17	.17	.25

KENNEBEC RIVER BASIN

01046900 Porter Lake near New Vineyard, Maine--Continued

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG) (MG/L)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
MAR.										
18...	1.1	1.8	3.9	1.6	20	0	--	--	--	--
18...	.27	2.0	3.7	2.0	70	20	--	--	--	--
18...	2.9	1.8	4.0	3.7	870	690	--	--	--	--
MAY										
06...	.60	--	--	--	--	--	--	--	--	--
06...	.60	--	--	--	--	--	--	--	--	--
06...	1.0	--	--	--	--	--	--	--	--	--
SEP.										
22...	.62	1.2	2.9	1.1	110	10	22	.4	.2	1.1
22...	.71	1.3	2.9	1.1	90	20	5.0	.4	.2	1.2
22...	.40	1.3	2.9	1.9	180	40	5.9	.3	.2	1.1
22...	1.1	1.2	2.9	2.6	490	160	7.0	.3	.2	1.1

▼-TRIBUTARY A SAMPLE SITE LOCATION.--Lat 44°48'02", long 70°09'46".

▼-TRIBUTARY B SAMPLE SITE LOCATION.--Lat 44°48'35", long 70°09'43".

▼-TRIBUTARY C SAMPLE SITE LOCATION.--Lat 44°49'02", long 70°08'40".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. ONIES PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	MAR. 18...	0945	.3	1.0	36	.003	0	0
Tributary B	MAR. 18...	1000	.3	.5	23	.011	0	0
	SEP. 22...	1200	.3	13.8	50	.012	B8	0
Tributary C	MAR. 18...	1015	.3	.0	38	.051	B2	0
	SEP. 22...	1230	.3	18.2	28	.015	B2	0

BIOLOGICAL ANALYSES

The following is a benthic macroinvertebrate analysis of a bottom sample taken 18 March 1975 at the lake sample site.

Total Wet Weight (g/m²) = 2.86

Taxa	Number/m ²
NEMATODA	9
ANNELIDA	
Oligochaeta	
Tubificidae	
Limnodrilus spp.	220
Tubifex sp.	35
ARTHIROPODA	
Insecta	
Diptera	
Culicidae	
Chaoborus punctipennis	650
Chironomidae	
Procladius sp.	140
Chironomus sp.	35
Tanytarsus sp.	95
Brillia sp.	26

TOTAL 1200

KENNEBEC RIVER BASIN

01047700 Wilson Pond near Wilton, Maine

LOCATION.--Lat 44°35'09", long 70°14'01:, Franklin County, 0.5 mi (0.8 km) west of Wilton.

DRAINAGE AREA.--27.0 mi² (69.9 km²).

SURFACE AREA.--480 acres (1.94 km²).

SURFACE ELEVATION.--570 ft (173.7 m).

VOLUME.--13,000 acre-ft (16.0 hm³).

MAXIMUM DEPTH.--88 ft (26.8 m).

MEAN DEPTH.--27 ft (8.2 m).

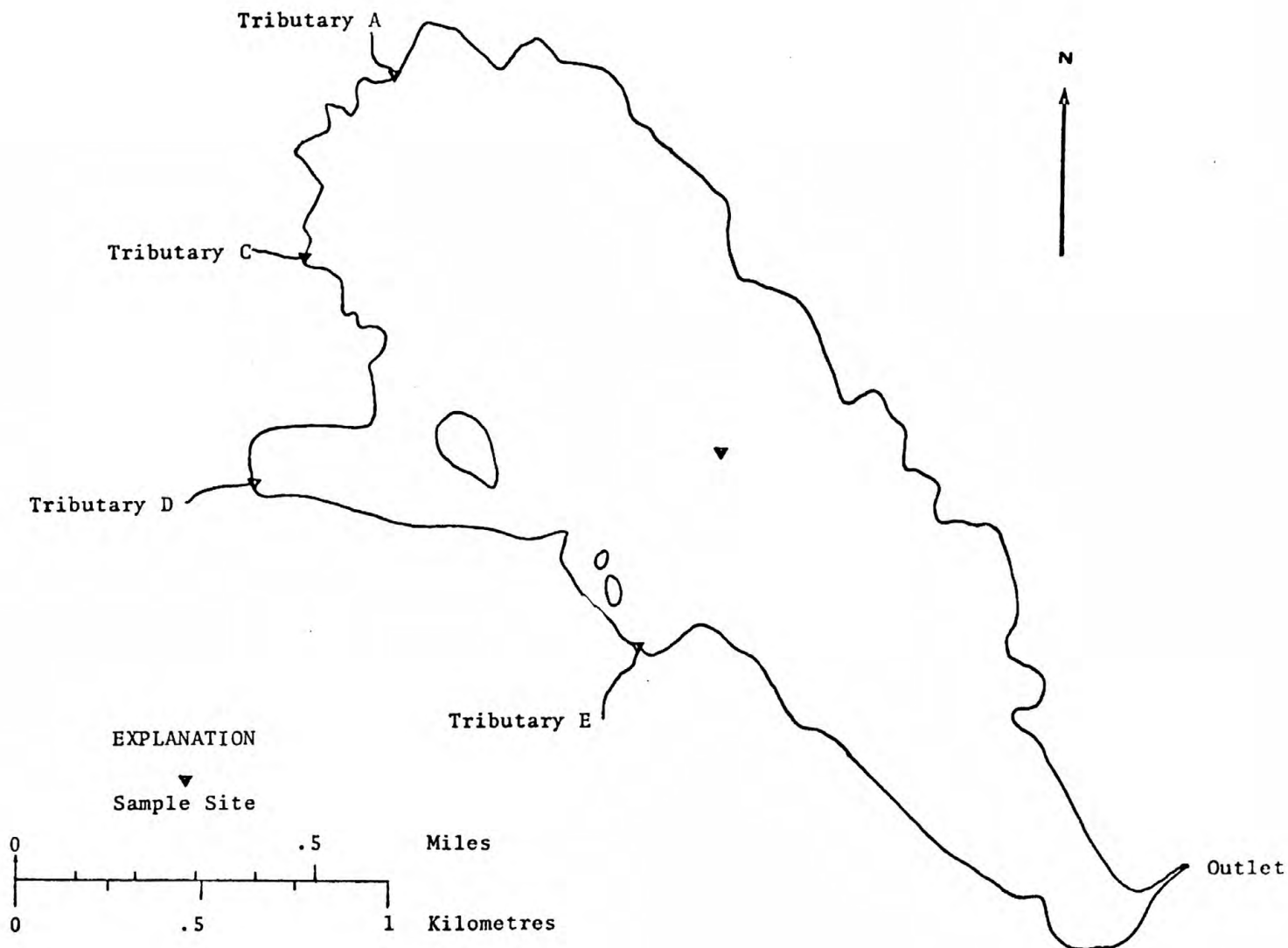
EPILIMNION DEPTH.--15 ft (4.6 m).

EPILIMNION VOLUME.--5,500 acre-ft (6.78 hm³).

LENGTH OF SHORELINE.--33,000 ft (10,000 m).

U.S.G.S. QUADRANGLES.--East Dixfield and Wilton 7 1/2-minute, Dixfield and Farmington 15-minute.

STATE OF MAINE MIDAS NUMBER.--3682.



KENNEBEC RIVER BASIN

01047700 Wilson Pond near Wilton, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼ - SAMPLE SITE LOCATION.--Lat 44°35'46", long 70°14'58".

DATE	TIME	DEPTH (M)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	TRANSPAR-ENCY (SECCHI DISK) (M)	TOTAL PHOSPHORUS (P) (MG/L)	CHLORO-PHYLL A (UG/L)
MAR.							
17...	1000	.6	2.5	.8	3.8	.026	.3
MAY							
06...	1100	.6	12.0	5.0	5.3	.006	.9
JUNE							
02...	1000	.3	20.0	16.0	5.5	.008	1.7
18...	1200	.3	26.0	20.0	5.2	.008	1.0
JULY							
07...	0915	.3	19.0	24.2	5.9	.004	2.4
21...	1130	.3	24.5	26.0	5.0	.007	3.9
AUG.							
05...	1050	.3	25.0	25.0	5.5	.005	5.0
18...	1035	.3	24.0	24.0	5.3	.007	3.8
SEP.							
02...	1105	.3	20.0	19.0	5.2	.007	5.3
17...	1300	.3	20.5	17.0	4.4	.006	5.1
29...	1240	.3	21.1	15.8	4.3	.005	4.6
OCT.							
15...	1310	.3	11.0	10.5	4.9	.008	4.7
NOV.							
06...	1200	.3	8.5	9.0	4.0	.008	3.1

DATE	TIME	DEPTH (M)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	TRANSPAR-ENCY (SECCHI DISK) (M)	DIS-SOLVED OXYGEN (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	ALKA-LINITY AS CAC03 (MG/L)	COLOR (PLAT-INUM-COBALT UNITS)
MAR.										
17...	1000	.6	2.5	.8	3.8	11.7	37	6.1	8	15
17...	1015	10.7	--	2.4	--	10.2	35	6.1	7	15
17...	1030	19.8	--	2.9	--	7.1	35	6.1	7	25
MAY										
06...	1100	.6	12.0	5.0	5.3	--	--	--	--	--
06...	1105	10.7	--	--	--	--	--	--	--	--
06...	1110	19.8	--	--	--	--	--	--	--	--

DATE	CHLORO-PHYLL A (UG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)
MAR.										
17...	.3	.001	.026	.02	.00	.14	.14	.04	.06	.20
17...	--	.003	.021	.01	.00	.11	.11	.09	.10	.21
17...	--	.003	.026	.04	.01	.15	.16	.02	.06	.22
MAY										
06...	.9	.001	.006	.01	--	--	.09	.08	.09	.18
06...	--	.002	.006	.02	--	--	.09	.08	.10	.19
06...	--	.002	.009	.01	--	--	.09	.11	.12	.21

DATE	TOTAL NITRO-GEN (NO3) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL CAL-CIUM (CA) (MG/L)	TOTAL MAG-NE-SIUM (MG)	TOTAL PO-TAS-SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
MAR.										
17...	.89	2.9	3.7	6.9	200	20	--	--	--	--
17...	.93	4.2	3.7	4.3	190	30	--	--	--	--
17...	.97	4.7	3.3	4.9	450	150	--	--	--	--
MAY										
06...	.80	--	--	--	--	--	--	--	--	--
06...	.80	--	--	--	--	--	--	--	--	--
06...	.90	--	--	--	--	--	--	--	--	--

01047700 Wilson Pond near Wilton, Maine--Continued

▼-TRIBUTARY E SAMPLE SITE LOCATION.--Lat 44°35'29", long 70°15'08".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (NG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	MAR. 17...	1045	.3	7.0	30	.013	0	0
Tributary C	MAR. 17...	1130	.3	.5	50	.039	0	0
Tributary D	MAR. 17...	1145	.3	.2	85	.007	0	B16
Tributary E	MAR. 17...	1200	.3	.5	133	.110	B6	B18

The following is a benthic macroinvertebrate analysis of a bottom sample taken 17 March 1975 at the lake sample site.

Number/m²

17

9

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KENNEBEC RIVER BASIN

01047800 Clearwater Pond at Allens Mills, Maine

LOCATION.--Lat. 44°42'57", long 70°04'56", Franklin County, at Allens Mills.

DRAINAGE AREA.--6.1 mi² (15.8 km²).

SURFACE AREA.--751 acres (3.04 km²).

SURFACE ELEVATION.--561 ft (171.0 m).

VOLUME.--33,000 acre-ft (40.7 hm³).

MAXIMUM DEPTH.--120 ft (36.6 m).

MEAN DEPTH.--44 ft (13.4 m).

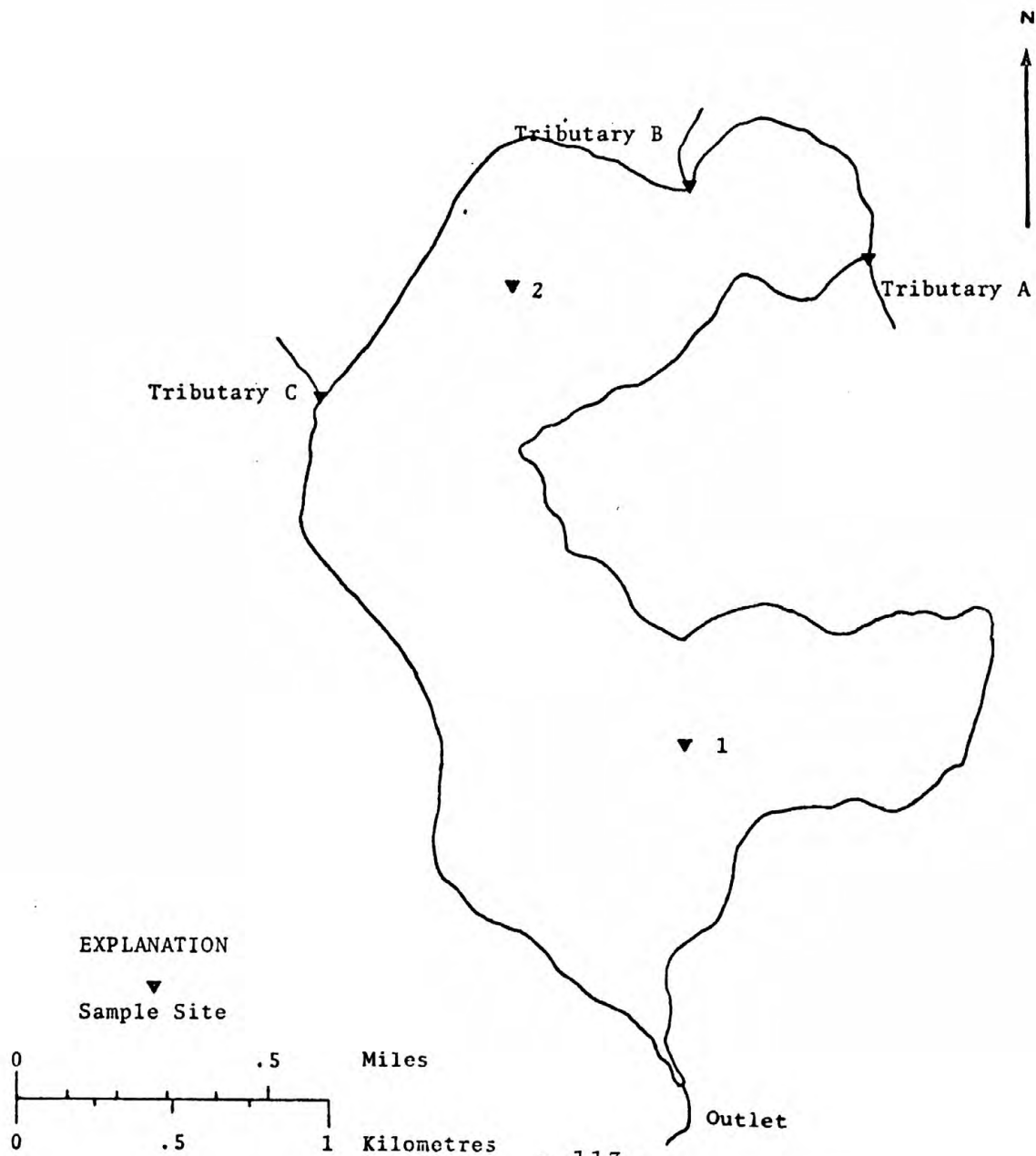
EPILIMNION DEPTH.--20 ft (6.1 m).

EPILIMNION VOLUME.--13,000 acre-ft (16.0 hm³).

LENGTH OF SHORELINE.--36,000 ft (11,000 m).

U.S.G.S. QUADRANGLES.--New Sharon 7 1/2-minute and Farmington 15-minute.

STATE OF MAINE MIDAS NUMBER.--5190.



KENNEBEC RIVER BASIN

01047800 Clearwater Pond at Allens Mills, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼ 1-SAMPLE SITE LOCATION.--Lat 44°43'28", long 70°04'52".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
MAR.							
18...	1200	.6	10.0	.4	12.2	.006	.5
MAY							
06...	1420	.6	14.0	5.0	9.9	.003	1.8
JUNE							
02...	1330	.3	17.0	16.0	8.8	.006	1.3
18...	0930	.3	22.5	18.0	9.2	.006	1.3
JULY							
07...	1230	.3	22.0	24.2	8.5	.007	1.0
21...	0900	.3	23.0	24.5	7.3	.005	1.6
AUG.							
05...	1330	.3	26.0	26.0	8.5	.007	1.7
18...	1410	.3	25.0	24.0	9.0	.005	1.2
SEP.							
02...	1400	.3	19.0	20.5	10.2	.005	1.6
17...	0945	.3	17.5	17.0	9.8	.004	1.3
29...	1000	.3	20.2	15.5	10.5	.003	1.6
OCT.							
15...	1000	.3	11.0	11.0	10.6	.007	1.2
NOV.							
06...	0930	.3	6.5	9.7	11.0	.005	1.0

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINITY AS CaCO3 (MG/L)	COLOR (PLAT- NUM- COBALT UNITS)
MAR.										
18...	1200	.6	10.0	.4	12.2	13.8	34	6.7	10	0
18...	1215	16.8	--	3.0	--	11.1	31	6.5	9	0
18...	1230	33.5	--	3.5	--	8.4	31	6.3	10	0
MAY										
06...	1420	.6	14.0	5.0	9.9	--	--	--	--	--
06...	1425	16.8	--	--	--	--	--	--	--	--
06...	1430	32.0	--	--	--	--	--	--	--	--

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
MAR.										
18...	.5	.001	.006	.03	.00	.02	.02	.14	.17	.19
18...	--	.001	.007	.02	.00	.02	.02	.11	.13	.15
18...	--	.002	.006	.01	.00	.04	.04	.00	.01	.05
MAY										
06...	1.8	.001	.003	.02	--	--	.02	.09	.11	.13
06...	--	.001	.005	.03	--	--	.04	.16	.19	.23
06...	--	.001	.004	.09	--	--	.02	.00	.09	.11

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG) (MG/L)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
MAR.										
18...	.84	1.5	5.0	2.4	380	0	--	--	--	--
18...	.66	1.1	4.6	2.1	40	0	--	--	--	--
18...	.22	--	9.6	3.0	60	20	--	--	--	--
MAY										
06...	.60	--	--	--	--	--	--	--	--	--
06...	1.0	--	--	--	--	--	--	--	--	--
06...	.50	--	--	--	--	--	--	--	--	--

KENNEBEC RIVER BASIN

01047800 Clearwater Pond at Allens Mills, Maine--Continued

▼ 2 - SAMPLE SITE LOCATION.--Lat 44°44'17", long 70°05'21".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
MAR.										
18...	1500	.6	10.0	.5	12.8	13.4	34	6.8	10	0
18...	1515	16.8	--	3.0	--	11.4	31	6.7	10	0
18...	1530	32.0	--	3.3	--	8.8	31	6.3	11	0

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
MAR.										
18...	--	.001	.004	.05	.00	.03	.03	.02	.07	.10
18...	--	.001	.004	.03	.00	.01	.01	.00	.03	.04
18...	--	.001	.005	.05	.00	.06	.06	.08	.13	.19

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
MAR.										
18...	.44	1.8	6.0	3.0	60	0	--	--	--	--
18...	.18	--	7.7	2.3	20	10	--	--	--	--
18...	.84	2.0	4.4	3.0	70	30	--	--	--	--

▼-TRIBUTARY A SAMPLE SITE LOCATION.--Lat 44°44'16", long 70°04'33".

▼-TRIBUTARY B SAMPLE SITE LOCATION.--Lat 44°44'28", long 70°04'57".

▼-TRIBUTARY C SAMPLE SITE LOCATION.--Lat 44°44'03", long 70°05'50".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	MAR. 18...	1245	.3	2.0	36	.006	0	0
Tributary B	MAR. 18...	1300	.3	1.5	44	.003	0	0
Tributary C	MAR. 18...	1315	.3	1.0	48	.002	0	0

KENNEBEC RIVER BASIN

01047800 Clearwater Pond at Allens Mills, Maine--Continued

BIOLOGICAL ANALYSES

The following is a benthic macroinvertebrate analysis of a bottom sample taken 18 March 1975 at lake sample site ▼ 1.

Total Wet Weight (g/m²) = 1.91

Taxa	Number/m ²
NEMATODA	360
ANNELIDA	
Oligochaeta	
Tubificidae	
<u>Tubifex sp.</u>	9
ARTHROPODA	
Crustacea	
Ostracoda	9
Insecta	
Diptera	
Chironomidae	
<u>Procladius sp.</u>	52
Phaenopsectra-Tribelos	17
Chironomus spp.	17
<u>Micropsectra sp.</u>	940
MOLLUSCA	
Pelecypoda	
Sphaeriidae	
<u>Pisidium sp.</u>	360
TOTAL	1800

KENNEBEC RIVER BASIN

01049450 Woodbury Pond at Litchfield, Maine

LOCATION.--Lat 44°12'46", long 69°56'09", Kennebec County, at Litchfield.

DRAINAGE AREA.--15.4 mi² (39.9 km²).

SURFACE AREA.--436 acres (1.76 km²).

SURFACE ELEVATION.--176 ft (53.6 m).

VOLUME.--7,300 acre-ft (9.00 hm³).

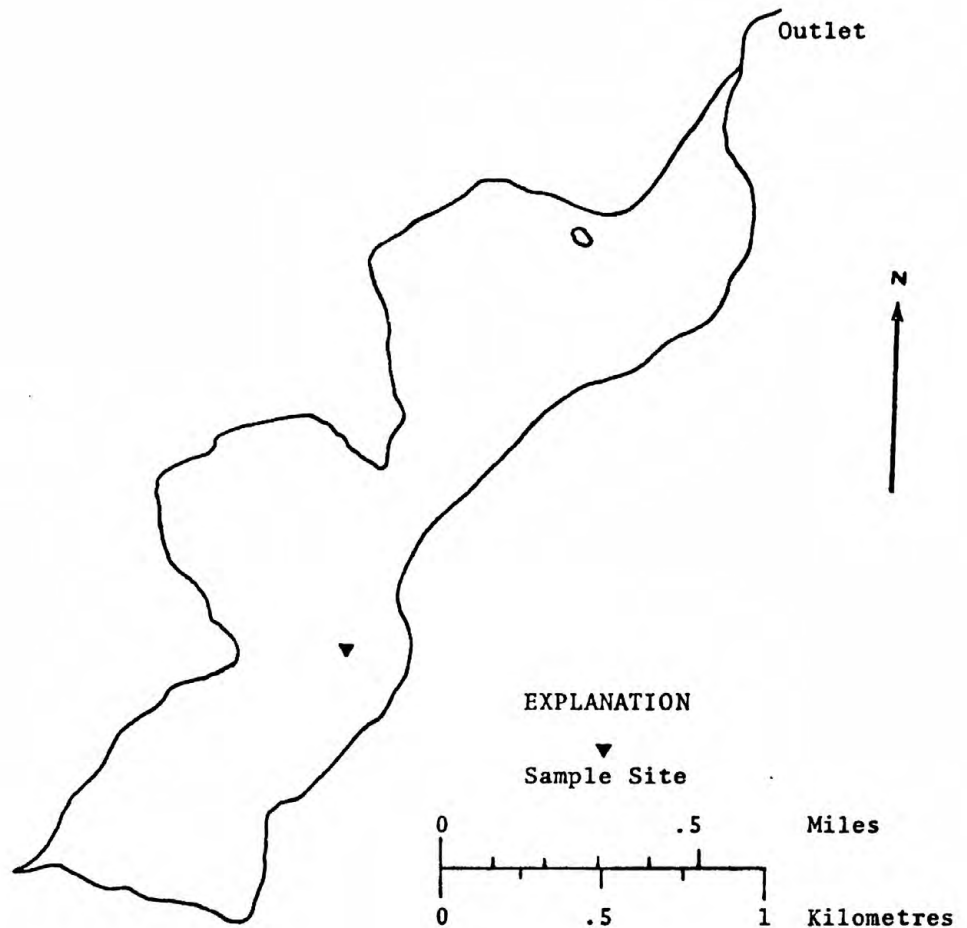
MAXIMUM DEPTH.--62 ft (18.9 m).

MEAN DEPTH.--17 ft (5.2 m).

LENGTH OF SHORELINE.--41,000 ft (12,000 m).

U.S.G.S. QUADRANGLES.--Gardiner 15-minute.

STATE OF MAINE MIDAS NUMBER.--5240.



KENNEBEC RIVER BASIN

01049450 Woodbury Pond at Litchfield, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼-SAMPLE SITE LOCATION.--Lat 44°11'43", long 69°57'08".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
MAY							
07...	1100	.6	16.0	9.5	7.2	.006	3.0
JUNE							
02...	1500	.3	21.0	20.0	6.4	.007	3.3
19...	0900	.3	23.0	21.0	5.2	.006	3.6
JULY							
08...	1500	.3	24.0	24.0	7.2	.008	4.2
21...	1445	.3	27.0	27.0	6.0	.007	4.9
AUG.							
05...	1525	.3	29.0	28.5	7.1	.006	2.5
18...	1550	.3	25.0	25.0	6.4	.007	2.8
SEP.							
02...	1600	.3	18.0	21.0	5.7	.009	2.6
17...	1530	.3	20.0	18.0	6.7	.007	2.3
29...	1530	.3	21.0	17.9	6.4	.004	2.8
OCT.							
15...	1530	.3	15.0	12.0	7.3	.006	2.6
NOV.							
06...	1425	.3	10.5	10.0	4.5	.011	3.8

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)
MAY							
07...	1100	0.6	16.0	9.5	7.2	3.00	.002

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)
MAY							
07...	.006	.01	.06	.18	.19	.25	1.1

ANDROSCOGGIN RIVER BASIN

01050300 Haley Pond at Rangeley, Maine

LOCATION.--44°57'52", long 70°38'32", Franklin County, at Rangeley.

DRAINAGE AREA.--9.9 mi² (25.6 km²).

SURFACE AREA.--170 acres (688,000 m²).

SURFACE ELEVATION.--1,524 ft (464.5 m).

VOLUME.--1,300 acre-ft (1.60 hm³).

MAXIMUM DEPTH.--23 ft (7.0 m).

MEAN DEPTH.--8 ft (2.4 m).

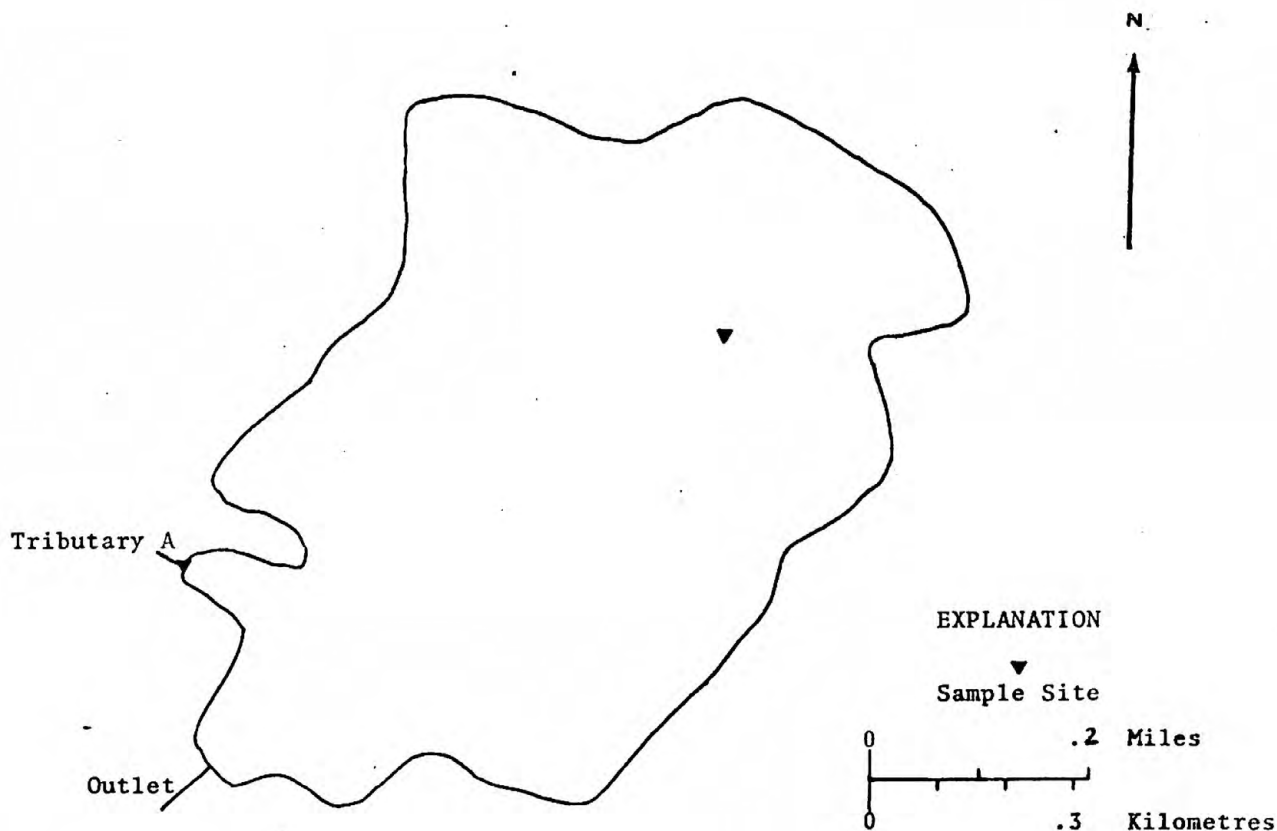
EPILIMNION DEPTH.--5 ft (1.5 m).

EPILIMNION VOLUME.--700 acre-ft (863,000 hm³).

LENGTH OF SHORELINE.--13,000 ft (4,000 m).

U.S.G.S. QUADRANGLES.--Rangeley 15-minute.

STATE OF MAINE MIDAS NUMBER.--3534.



ANDROSCOGGIN RIVER BASIN

01050300 Haley Pond at Rangeley, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR 1975 TO DECEMBER 1975

▼-SAMPLE SITE LOCATION.--Lat 44°58'09", long 70°37'58".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
APR.										
07...	1215	.3	.0	.4	3.0	13.3	52	6.7	9	20
07...	1230	1.5	--	2.8	--	3.2	67	6.4	16	25
07...	1245	3.0	--	4.0	--	.9	76	6.2	16	25
07...	1300	4.6	--	4.5	--	.4	91	6.1	21	40
07...	1315	6.1	--	5.1	--	.2	102	6.1	25	55
SEP.										
02...	1130	.3	21.0	18.0	2.50	6.9	68	7.1	20	--
02...	1140	1.5	--	18.0	--	6.7	68	7.1	18	--
02...	1150	3.0	--	17.0	--	6.5	70	7.1	18	--
02...	1200	4.5	--	17.0	--	5.6	70	7.0	18	--
02...	1210	6.0	--	16.5	--	4.5	72	6.9	18	--

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
APR.										
07...	1.3	.001	.006	.03	--	--	.19	--	--	--
07...	--	.004	.030	.07	--	--	.33	--	--	--
07...	--	.006	.030	.07	--	--	.35	--	--	--
07...	--	.045	.065	.34	--	--	.29	--	--	--
07...	--	.060	.085	.40	--	--	.27	--	--	--
SEP.										
02...	--	.001	.020	.48	--	--	.04	--	--	--
02...	--	.004	.027	.48	--	--	.05	--	--	--
02...	--	.001	.025	.48	--	--	.05	--	--	--
02...	--	.005	.025	.51	--	--	.04	--	--	--
02...	--	.007	.020	.54	--	--	.05	--	--	--

▼-TRIBUTARY A SAMPLE SITE LOCATION.--Lat 44°58'01", long 70°38'29".

DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A							
APR.							
07...	1330	--	--	--	2.3	--	--
SEP.							
02...	1230	--	--	--	1.9	B9	B8

ANDROSCOGGIN RIVER BASIN

01050300 Haley Pond at Rangeley, Maine--Continued

BIOLOGICAL ANALYSES

The following is a phytoplankton analysis of a depth integrated sample taken 20 May 1975 from the entire water column at the lake sample site.

Taxa	Cells per ml.	Colonies per ml.	Volume Counted (ml.)
Chlorophyta			
Ankistrodesmus falcatus	330	sol	.1
Chlamydomonas sp.	10	sol	.1
Crucigenia quaduata	40	10	.1
Dictyosphaerium pulchellum	680	90	.1
Gloeocystis planktonica	690	180	.1
Golenkinia radiata	380	sol	.1
Scenedesmus opoliensis	120	30	.1
Tetraedron minimum	10	sol	.1
Chrysophyta			
Asterionella formosa	18	4.8	5
Cyclotella stelligera	310	sol	.1
Cyclotella stelligera or glomerata	260	sol	.1
Fragillaria crotonensis	250	30	.1
Melosira ambigua	150	20	.1
Rhizosolenia eriensis	30	sol	.1
Synedra rumpens	180	sol	.1
Tabellaria fenestrata	8.0	.8	5
UNK Pennate	60	sol	.1
Chrysophyte statospore	160	sol	.1
Chromulina sp.	70	sol	.1
Dinobryon bavaricum	40	sol	.1
Dinobryon sertularia	10	sol	.1
Kephyrion ovale	80	sol	.1
Mallomonas globosa	20	sol	.1
Mallomonas pseudocoronata	10	sol	.1
Mallomonas sp.	10	sol	.1
Ochromonas sp.	60	sol	.1
Cyanophyta			
Merismopedia elagens	840	10	.1
Euglenophyta			
Trachelomonas sp.	10	sol	.1
Pyrrophyta			
Cryptomonas sp.	260	sol	.1
Rhodomonas minuta v. nannoplanktica	100	sol	.1
Peridinium sp.	30	sol	.1

ANDROSCOGGIN RIVER BASIN

01050300 Haley Pond at Rangeley, Maine--Continued

The following is a phytoplankton analysis of a depth integrated sample taken 2 July 1975 from the entire water column at the lake sample site.

Taxa	Cells per ml.	Colonies per ml.	Volume Counted (ml.)
Chlorophyta			
Carteria sp.	40	20	.1
Coelastrum reticulatum	3.0	.2	5
Cosmarium hammeri	.2	sol	5
Dictyosphaerium pulchellum	80	20	.1
Pedrastrum duplex	23	.8	5
Pediastrum tetras	50	10	.1
Scenedesmus dimorphus	40	10	.1
Scenedesmus opoliensis	40	20	.1
Sphaerocystis schroeteri	90	30	.1
Staurostrum curvatum	.8	sol	5
Chrysophyta			
Cyclotella comta	10	sol	.1
Cyclotella stelligera	50	sol	.1
Fragillaria crotonensis	200	60	.1
Melosira ambigua	60	10	.1
UNK Pennate	10	sol	.1
Chromulina sp.	10	sol	.1
Kephyrion ovale	80	sol	.1
Mallomonas acaroides	20	sol	.1
Mallomonas anglica	10	sol	.1
Mallomonas caudata	20	sol	.1
Mallomonas Raymonchii	10	sol	.1
Mallomonas sp.	10	sol	.1
Cyanophyta			
Anabaena planktonica	14000	350	.1
Cynarcus hammiformis	20	10	.1
Pyrrophyta			
Peridinium sp.	.2	sol	5

The following is a phytoplankton analysis of a depth integrated sample taken 2 September 1975 from the entire water column at the lake sample site.

Taxa	Cells per ml.	Colonies per ml.	Volume Counted (ml.)
Chlorophyta			
Ankistrodesmus falcatus	10	sol	.1
Chlamydomonas sp.	20	sol	.1
Dictyosphaerium Ehrenbergianum	440	20	.1
Dictyosphaerium pulchellum	80	20	.1
Gloeocystis planktonica	40	10	.1
Golenkinia radiata	10	sol	.1
Oocystis parva	40	10	.1
Oocystis sp.	110	sol	.1
Pediastrum tetras	3.2	.2	5
Scenedesmus acuminatus	40	10	.1
Scenedesmus arcuatus	120	20	.1
Scenedesmus armatus	560	180	.1
Scenedesmus bijuga	40	10	.1
Scenedesmus denticulatus	80	20	.1
Scenedesmus hystrix	660	250	.1
Scenedesmus opoliensis	130	60	.1
Scenedesmus quadricauda	180	80	.1
Selenestrum gracilis	4.8	.2	5
Sphaerocystis schroeteri	6.0	.6	5
Spondylosium sp.	20	10	.1
Tetraedron regulare v. granulata	30	sol	.1
Tetraedron sp.	.2	sol	5
Treubaria setigerum	10	sol	.1

ANDROSCOGGIN RIVER BASIN

01050300 Haley Pond at Rangeley, Maine--Continued

Chrysophyta			
<i>Cyclotella stelligera</i>	140	sol	.1
<i>Cyclotella stelligera</i> or <i>glomerata</i>	200	sol	.1
<i>Fragillaria crotonensis</i>	4.2	.4	5
<i>Melosira distans</i>	20	10	.1
<i>Melosira italica</i>	100	30	.1
<i>Synedra rumpens</i> v. <i>familiaris</i>	10	sol	.1
<i>Rhizosolenia eriensis</i>	20	sol	.1
UNK Pennate	100	sol	.1
<i>Chromulina</i> sp.	10	sol	.1
<i>Chrysococcocystis</i> sp.	10	sol	.1
<i>Chrysophyte</i> statospore	80	sol	.1
<i>Kephyrion ovale</i>	10	sol	.1
<i>Kephyrion rubri-claustri</i>	10	sol	.1
<i>Ochromonas</i> sp.	20	sol	.1
Cyanophyta			
<i>Anabaena planktonia</i>	130	30	.1
<i>Coelosphaerium kutzingianum</i>	300	10	.1
<i>Microcystis holsatica</i> v. <i>minor</i>	600	10	.1
Pyrrophyta			
<i>Cryptomonas</i> sp.	160	sol	.1
<i>Rhodomonas minuta</i> v. <i>nannoplanktica</i>	40	sol	.1
<i>Cystodinium</i> sp.	20	sol	.1

The following is a phytoplankton analysis of a depth integrated sample taken 6 October 1975 from the entire water column at the lake sample site.

Taxa	Cells per ml.	Colonies per ml.	Volume Counted (ml.)
Chlorophyta			
<i>Asteriococcus limneticus</i>	110	40	.1
<i>Crucigenia apiculata</i>	120	30	.1
<i>Crucigenia tetrapedia</i>	40	10	.1
<i>Dictyosphaerium Larenbergianum</i>	200	30	.1
<i>Dictyosphaerium pulchellum</i>	280	40	.1
<i>Elakatotrix gelatinosa</i>	40	30	.1
<i>Gloeocystis planktonica</i>	400	50	.1
<i>Kirchneriella</i> sp.	30	10	.1
<i>Micratinium pusillum</i>	6.4	.6	5
<i>Oocystis Borgei</i>	50	40	.1
<i>Oocystis parva</i>	120	30	.1
<i>Pediastrum tetras</i>	4.8	.6	5
<i>Scenedesmus acuminatus</i>	80	20	.1
<i>Scenedesmus arcuatus</i>	30	10	.1
<i>Scenedesmus armatus</i>	550	170	.1
<i>Scenedesmus denticulatus</i>	60	20	.1
<i>Scenedesmus hystrix</i>	280	110	.1
<i>Scenedesmus opoliensis</i>	320	140	.1
<i>Sphaerocystis Schroeteri</i>	520	70	.1
<i>Spondylosium</i> sp.	90	80	.1
<i>Staurostrum curvatum</i>	.8	sol	5
<i>Tetraedron minimum</i>	20	sol	.1
<i>Tetraedron minimum</i> v. <i>scrabiculatum</i>	70	sol	.1
<i>Xanthidium subnastiferum</i>	10	sol	.1
Chrysophyta			
<i>Asterionella formosa</i>	.8	.8	5
<i>Cyclotella stelligera</i>	330	sol	.1
<i>Cymbella</i> sp.	10	sol	.1
<i>Fragillaria crotonensis</i>	140	7.4	5
<i>Fragillaria</i> sp.	5.0	.2	5
<i>Melosira ambigua</i>	130	30	.1
<i>Melosira distans</i>	30	20	.1
<i>Synedra</i> sp.	10	sol	.1
<i>Tabellaria fenestrata</i>	.8	.2	5
UNK pennate	320	sol	.1
<i>Chrysophyte</i> statospore (probably <i>Dinobryon divergens</i>)	80	sol	.1
<i>Chrysosphaerella longispina</i>	40	10	.1
<i>Dinobryon bavaricum</i>	100	sol	.1
<i>Dinobryon divergens</i>	60	sol	.1
<i>Kephyrion ovale</i>	10	sol	.1
<i>Mallomonas pseudocoronata</i>	.8	sol	5
<i>Mallomonas</i> sp.	.2	sol	5
Cyanophyta			
<i>Chroococcus limneticus</i>	3.2	.2	5
<i>Coelosphaerium kutzingianum</i>	130	2	5
<i>Microcystis aureginosa</i>	1000	.2	5
Pyrrophyta			
<i>Cryptomonas</i> sp.	50	sol	.1
<i>Rhodomonas minuta</i> v. <i>nannoplanktica</i>	10	sol	.1

ANDROSCOGGIN RIVER BASIN

01050300 Haley Pond at Rangeley, Maine--Continued

The following is a phytoplankton analysis of a depth integrated sample taken 4 November 1975 from the entire water column at the lake sample site.

Taxa	Cells per ml.	Colonies per ml.	Volume Counted (ml.)
Chlorophyta			
Ankistrodesmus falcatus	10	sol	.1
Ankistrodesmus ralfsii	.2	sol	.5
Crucigenia quadrata	160	10	.1
Dictyosphaerium pulchellum	260	40	.1
Elakotothrix gelatinosa	30	20	.1
Gloecocystis planktonica	40	10	.1
Gloecocystis vesiculosa	80	10	.1
Colenkinia radiata	40	sol	.1
Pediastrum tetras	1.6	.2	.5
Planktosphaeria gelatinosa	300	40	.1
Oocystis pusillum	140	50	.1
Scenedesmus acumunatus	9.6	2.4	.5
Scenedesmus arcuatus	12	1.6	.5
Scenedesmus armatus	19	6.4	.1
Scenedesmus denticulatus	1.4	.4	.1
Scenedesmus hystrix	4.0	1.4	.1
Scenedesmus opoliensis	2.8	.8	.1
Spondylosium sp.	10	sol	.1
Staurastrum curvatum	1.2	sol	.5
Chrysophyta			
Asterionella formosa	10	sol	.1
Cyclotella stilligera	160	sol	.1
Cyclotella stelligera or glomerata	170	sol	.1
Cyclotella catenata	12	.4	.5
Fragillaria crotonensis	50	10	.1
Melosira italica or ambigua	120	30	.1
UNK Pennate	60	sol	.1
Chrysophyte statospore	40	sol	.1
Chrysosphaerella longispina	200	10	.1
Dinobryon divergens	110	40	.1
Dinobryon sertularia	10	sol	.1
Kephyrion ovale	70	sol	.1
Ochromonas sp.	2100	sol	.1
Cyanophyta			
Aphanocapsa delicatissima	1100	20	.1
Chroococcus limneticus	2.8	.2	.5
Cynarcus hamiformis	30	sol	.1
Gomphosphaeria lacustris	10	.2	.5
Euglenophyta			
Trachelomonas sp.	.2	sol	.5
Pyrrophyta			
Cryptomonas sp.	150	sol	.1
Rhodomonas minuta v. nannoplanktica	20	sol	.1
Peridinium sp.	2.4	sol	.5

ANDROSCOGGIN RIVER BASIN

01050300 Haley Pond at Rangeley, Maine--Continued

The following is a zooplankton analysis of a depth integrated sample taken 26 March 1974 at the lake sample site.

DOMINANT ZOOPLANKTON		
Taxa	no./m ³	Volume Counted (MLS)
ARTHIROPODA		
Crustacea		
Cladocera		
Bosminidae		
<u>Bosmina coregoni</u>	580	4
Copepoda		
Cyclopoida	510	4
Nauplii	650	4
TOTAL	1700	

ROTIFERA - Filinia spp., Keratella spp. and Polyarthra spp. more abundant than crustaceans.

The following is a zooplankton analysis of a depth integrated sample taken 22 May 1974 at the lake sample site.

DOMINANT ZOOPLANKTON		
Taxa	no./m ³	Volume Counted (MLS)
ARTHIROPODA		
Crustacea		
Cladocera		
Bosminidae		
<u>Bosmina coregoni</u>	480	4
<u>Bosmina longirostris</u>	69	4
Chydoridae		
<u>Pleuroxus</u> spp.	69	4
Daphnidae		
<u>Ceriodaphnia pulchella</u>	410	4
Holopedidae		
<u>Holopedium gibberum</u>	750	4
Copepoda		
Calanoida	200	4
Cyclopoida	880	4
Nauplii	4500	4
TOTAL	7400	

The following is a zooplankton analysis of a depth integrated sample taken 13 June 1974 at the lake sample site.

DOMINANT ZOOPLANKTON		
Taxa	no./m ³	Volume Counted (MLS)
ARTHIROPODA		
Crustacea		
Cladocera		
Bosminidae		
<u>Bosmina coregoni</u>	12000	1
<u>Bosmina longirostris</u>	300	1
Chydoridae		
<u>Alona monacantha</u>	300	1
Daphnidae		
<u>Ceriodaphnia lacustris</u>	2400	1
<u>Ceriodaphnia pulchella</u>	900	1
<u>Daphnia ambigua</u>	300	1
<u>Daphnia retrocurva</u>	300	1
Holopedidae		
<u>Holopedium gibberum</u>	1500	1
Copepoda		
Calanoida	1800	1
Cyclopoida	5700	1
Nauplii	2400	1
TOTAL	28000	

ROTIFERA - Asplanchna spp. greatly more abundant and Keratella spp. equally abundant to crustaceans.

ANDROSCOGGIN RIVER BASIN

01050300 Haley Pond at Rangeley, Maine--Continued

The following is a zooplankton analysis of a depth integrated sample taken 20 August 1974 at the lake sample site.

DOMINANT ZOOPLANKTON

Taxa	no./m ³	Volume Counted (MLS)
ARTHIROPODA		
Crustacea		
Cladocera		
Bosminidae		
<u>Bosmina coregoni</u>	23000	1
<u>Bosmina longirostris</u>	1800	1
Daphnidae		
<u>Ceriodaphnia lacustris</u>	10000	1
<u>Ceriodaphnia pulchella</u>	10000	1
<u>Ceriodaphnia quadrangula</u>	1000	1
<u>Ceriodaphnia reticulata</u>	260	1
<u>Daphnia ambigua</u>	260	1
<u>Daphnia retrocurva</u>	260	1
Holopedidae		
<u>Holopedium gibberum</u>	6300	1
Sididae		
<u>Diaphanosoma brachyurum</u>	1000	1
Copepoda		
Calanoida	260	1
Cyclopoida	6500	1
Nauplii	4700	1
Total	65000	

The following is a zooplankton analysis of a depth integrated sample taken 1 October 1974 at the lake sample site.

DOMINANT ZOOPLANKTON

Taxa	no./m ³	Volume Counted (MLS)
ARTHIROPODA		
Crustacea		
Cladocera		
Bosminidae		
<u>Bosmina coregoni</u>	6800	1
<u>Bosmina longirostris</u>	540	1
Daphnidae		
<u>Ceriodaphnia lacustris</u>	2200	1
<u>Ceriodaphnia pulchella</u>	1600	1
<u>Daphnia retrocurva</u>	540	1
Holopedidae		
<u>Holopedium gibberum</u>	540	1
Copepoda		
Cyclopoida	4300	1
Nauplii	270	1

TOTAL 17000

The following is a zooplankton analysis of a depth integrated sample taken 4 November 1974 at the lake sample site.

DOMINANT ZOOPLANKTON

Taxa	no./m ³	Volume Counted (MLS)
ARTHIROPODA		
Crustacea		
Cladocera		
Bosminidae		
<u>Bosmina coregoni</u>	12000	1
<u>Bosmina longirostris</u>	600	1
Daphnidae		
<u>Ceriodaphnia pulchella</u>	1500	1
<u>Daphnia parvula</u>	900	1
Holopedidae		
<u>Holopedium gibberum</u>	300	1
Copepoda		
Cyclopoida	2700	
Nauplii	900	1
		1

TOTAL 19000

ANDROSCOGGIN RIVER BASIN

01050300 Haley Pond at Rangeley, Maine--Continued

The following is a zooplankton analysis of a depth integrated sample taken 20 May 1975
at the lake sample site.

DOMINANT ZOOPLANKTON

Taxa	no./m ³	Volume Counted (MLS)
ARTHIROPODA		
Crustacea		
Cladocera		
Bosminidae		
<u>Bosmina coregoni</u>	260	4
Chydoridae		
<u>Pleuroxus spp.</u>	66	4
Holopediidae		
<u>Holopedium gibberum</u>	66	4
Sididae		
<u>Diaphanosoma brachyurum</u>	66	4
Copepoda		
Cyclopoida	600	4
Nauplii	3000	4
		4
TOTAL	4100	

ROTIFERA - Filinia spp. and Conochiloides spp. greatly more abundant than crustaceans.

The following is a zooplankton analysis of a depth integrated sample taken 2 July 1975
at the lake sample site.

DOMINANT ZOOPLANKTON

Taxa	no./m ³	Volume Counted (MLS)
ARTHIROPODA		
Crustacea		
Cladocera		
Bosminidae		
<u>Bosmina coregoni</u>	13000	1
<u>Bosmina longirostris</u>	890	1
Daphniidae		
<u>Ceriodaphnia lacustris</u>	1200	1
<u>Ceriodaphnia pulchella</u>	600	1
<u>Daphnia ambigua</u>	2100	1
<u>Daphnia retrocurva</u>	300	1
Sididae		
<u>Diaphanosoma brachyurum</u>	600	1
Copepoda		
Cyclopoida	1500	1
Nauplii	1200	1
		1
TOTAL	21000	

The following is a zooplankton analysis of a depth integrated sample taken 2 September 1975
at the lake sample site.

DOMINANT ZOOPLANKTON

Taxa	no./m ³	Volume Counted (MLS)
ARTHIROPODA		
Crustacea		
Cladocera		
Bosminidae		
<u>Bosmina coregoni</u>	1400	2
Daphniidae		
<u>Ceriodaphnia lacustris</u>	5700	2
<u>Ceriodaphnia pulchella</u>	14000	2
<u>Daphnia ambigua</u>	17000	2
<u>Daphnia parvula</u>	1400	2
<u>Daphnia retrocurva</u>	34000	2
Copepoda		
Cyclopoida	110000	
Nauplii	110000	1
		1
Total	290000	

ROTIFERA - Keratella spp., Asplanchna spp., and Polyartara spp., comprised most all of zooplankton

ANDROSCOGGIN RIVER BASIN

01050300 Haley Pond at Rangeley, Maine--Continued

The following is a zooplankton analysis of a depth integrated sample taken 6 October 1975 at the lake sample site.

DOMINANT ZOOPLANKTON

Taxa	no./m ³	Volume Counted (MLS)
ARTHROPODA		
Crustacea		
Cladocera		
Bosminidae		
<u>Bosmina coregoni</u>	1200	2
Daphnidae		
<u>Ceriodaphnia lacustris</u>	2500	2
<u>Ceriodaphnia pulchella</u>	1900	2
<u>Daphnia ambigua</u>	1200	2
<u>Daphnia retrocurva</u>	2500	2
Copepoda		
Cyclopoida	22000	2
Nauplii	8100	2
TOTAL	39000	

The following is a zooplankton analysis of a depth integrated sample taken 4 November 1975 at the lake sample site.

DOMINANT ZOOPLANKTON

Taxa	no./m ³	Volume Counted (MLS)
ARTHROPODA		
Crustacea		
Cladocera		
Bosminidae		
<u>Bosmina coregoni</u>	44000	2
<u>Bosmina longirostris</u>	9600	2
Glydoridae		
<u>Alona monacantha</u>	2500	2
Daphnidae		
<u>Daphnia ambigua</u>	2500	2
<u>Daphnia retrocurva</u>	640	2
Copepoda		
Cyclopoida	38000	2
Nauplii	8300	2
TOTAL	100000	

ANDROSCOGGIN RIVER BASIN

01055050 Webb Lake near Weld, Maine

LOCATION.--Lat 44°39'42", long 70°25'43", Franklin County, 1.0 mi (1.6 km) west of Weld.

DRAINAGE AREA.--75.7 mi² (196.1 km²).

SURFACE AREA.--2,146 acres (8.68 km²).

SURFACE ELEVATION.--678 ft (206.6 m).

VOLUME.--55,000 acre-ft (67.8 hm³).

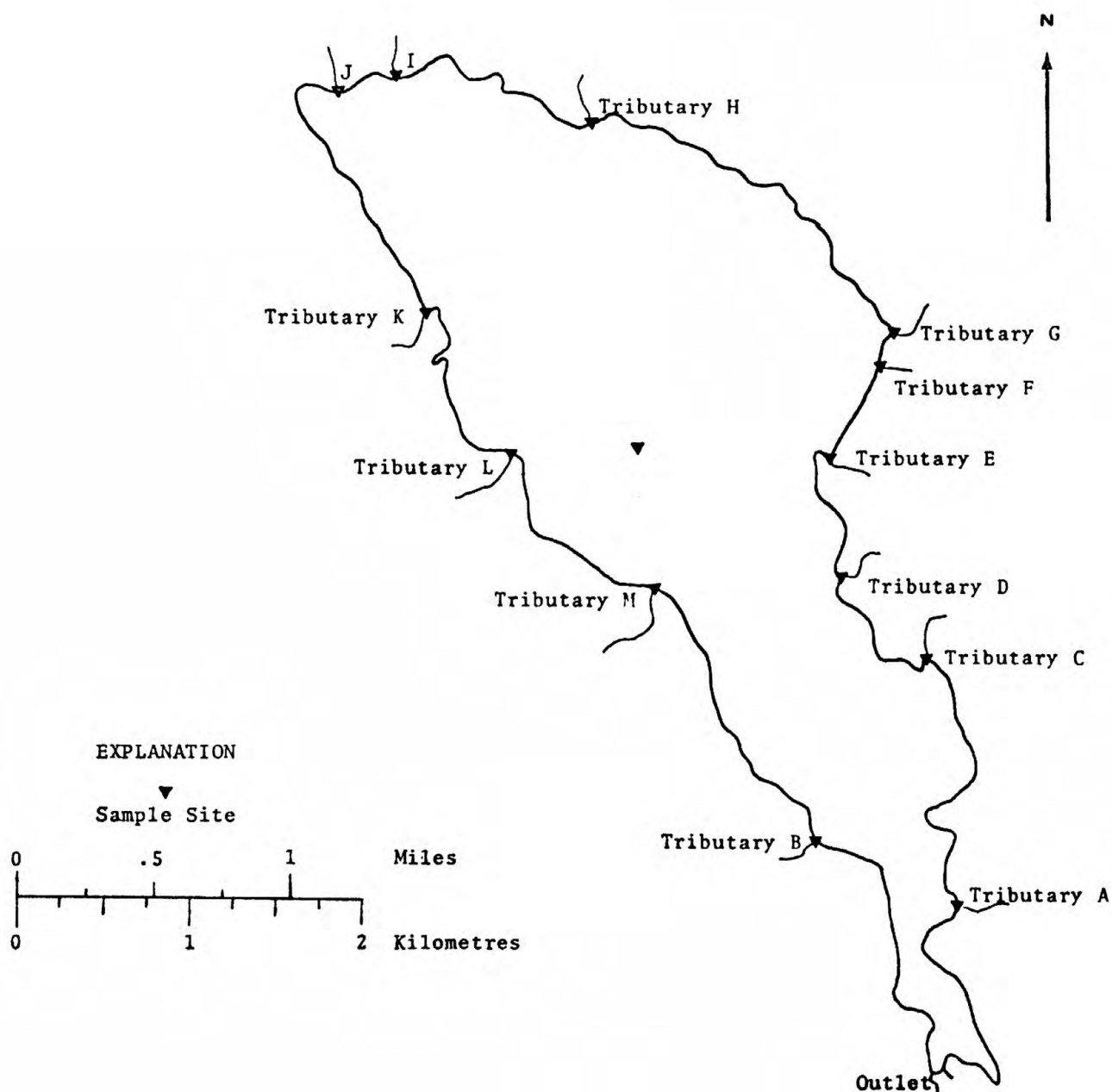
MAXIMUM DEPTH.--42 ft (12.8 m).

MEAN DEPTH.--26 ft (7.9 m).

EPILIMNION DEPTH.--Lake not stratified.

U.S.G.S. QUADRANGLES.--Dixfield 15-minute.

STATE OF MAINE MIDAS NUMBER.--3672.



ANDROSCOGGIN RIVER BASIN

01055050 Webb Lake near Weld, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼-SAMPLE SITE LOCATION.--Lat 44°41'40", long 70°27'07".

DATE	TIME	DEPTH (M)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	TRANSPAR-ENCY (SECCHI DISK) (M)	TOTAL PHOSPHORUS (P) (MG/L)	CHLORO-PHYLL A (UG/L)
MAY							
06...	1215	.6	12.0	5.0	5.0	.007	1.3
JUNE							
02...	1100	.3	17.5	15.5	3.7	.009	4.9
18...	1115	.3	24.0	20.0	5.8	.007	1.2
JULY							
07...	1000	.3	25.5	24.2	5.2	.004	2.1
21...	1045	.3	24.0	25.5	5.7	.006	2.8
AUG.							
05...	1135	.3	25.5	26.0	6.9	.008	2.4
18...	1125	.3	23.0	23.5	6.3	.006	2.1
SEP.							
02...	1200	.3	18.0	19.5	5.2	.008	2.6
17...	1000	.6	12.0	15.9	4.4	.009	--
17...	1200	.3	20.0	17.0	4.3	.011	2.3
29...	1130	.3	20.5	16.0	4.6	.005	4.2
OCT.							
15...	1220	.3	11.0	11.0	4.7	.012	4.2
NOV.							
06...	1115	.3	8.5	9.0	3.5	.009	4.9

DATE	TIME	DEPTH (M)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	TRANSPAR-ENCY (SECCHI DISK) (M)	DIS-SOLVED OXYGEN (MG/L)	SPECIFIC CONDUCT-ANCE (MICRO-MHOS)	PH (UNITS)	ALKALINITY AS CaCO3 (MG/L)	COLOR (PLATINUM-COBALT UNITS)
MAY										
06...	1215	.6	12.0	5.0	5.0	--	--	--	--	--
06...	1220	6.1	--	--	--	--	--	--	--	--
06...	1225	12.2	--	--	--	--	--	--	--	--
SEP.										
17...	1000	.6	12.0	15.9	4.4	9.1	28	6.7	8	25
17...	1020	6.0	--	15.9	--	9.0	28	6.7	9	25
17...	1040	12.0	--	15.8	--	8.7	35	6.7	8	30

DATE	CHLORO-PHYLL A (UG/L)	TOTAL ORTHO-PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)
MAY										
06...	1.3	.002	.007	.07	--	--	.10	.08	.15	.25
06...	--	.001	.007	.00	--	--	.09	.14	.14	.23
06...	--	.001	.007	.00	--	--	.09	.14	.14	.23
SEP.										
17...	--	--	.009	.00	.00	.00	.00	.17	.17	.17
17...	--	--	.009	.00	.00	.01	.01	.11	.11	.12
17...	--	--	.009	.00	.00	.00	.00	.10	.10	.10

DATE	TOTAL NITROGEN (NO3) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG/L)	TOTAL POTASSIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
MAY										
06...	1.1	--	--	--	--	--	--	--	--	--
06...	1.0	--	--	--	--	--	--	--	--	--
06...	1.0	--	--	--	--	--	--	--	--	--
SEP.										
17...	.75	.7	3.8	4.9	210	90	3.0	.1	.5	1.3
17...	.53	.2	3.0	4.8	220	100	4.9	.2	.6	1.4
17...	.44	.8	3.5	4.8	240	90	4.0	.1	.5	1.3

ANDROSCOGGIN RIVER BASIN

01055050 Webb Lake near Weld, Maine--Continued

▼-TRIBUTARY A SAMPLE SITE LOCATION.--Lat 44°40'16", long 70°25'36".
 ▼-TRIBUTARY B SAMPLE SITE LOCATION.--Lat 44°40'21", long 70°25'58".
 ▼-TRIBUTARY C SAMPLE SITE LOCATION.--Lat 44°41'05", long 70°25'49".
 ▼-TRIBUTARY D SAMPLE SITE LOCATION.--Lat 44°41'20", long 70°25'59".
 ▼-TRIBUTARY E SAMPLE SITE LOCATION.--Lat 44°41'37", long 70°26'03".
 ▼-TRIBUTARY F SAMPLE SITE LOCATION.--Lat 44°41'59", long 70°26'00".
 ▼-TRIBUTARY G SAMPLE SITE LOCATION.--Lat 44°42'04", long 70°25'57".
 ▼-TRIBUTARY H SAMPLE SITE LOCATION.--Lat 44°42'48", long 70°27'24".
 ▼-TRIBUTARY I SAMPLE SITE LOCATION.--Lat 44°43'08", long 70°28'08".
 ▼-TRIBUTARY J SAMPLE SITE LOCATION.--Lat 44°43'01", long 70°28'25".
 ▼-TRIBUTARY K SAMPLE SITE LOCATION.--Lat 44°42'07", long 70°28'01".
 ▼-TRIBUTARY L SAMPLE SITE LOCATION.--Lat 44°41'40", long 70°27'39".
 ▼-TRIBUTARY M SAMPLE SITE LOCATION.--Lat 44°41'15", long 70°27'00".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	SEP. 17...	1215	.3	10.0	72	.018	B10	--
Tributary B	SEP. 17...	1230	.3	11.0	89	.010	B8	--
Tributary C	SEP. 17...	1245	.3	12.0	91	.051	21	--
Tributary D	SEP. 17...	1300	.3	11.5	54	.007	B13	--
Tributary E	SEP. 17...	1315	.3	14.0	62	.011	47	--
Tributary F	SEP. 17...	1330	.3	16.0	82	.008	B150	--
Tributary G	SEP. 17...	1345	.3	16.5	78	.008	40	--
Tributary H	SEP. 17...	1400	.3	11.0	52	.011	39	--
Tributary I	SEP. 17...	1415	.3	11.5	116	.006	B4	--
Tributary J	SEP. 17...	1430	.3	14.5	36	.005	B10	--
Tributary K	SEP. 17...	1445	.3	16.0	30	.005	0	--
Tributary L	SEP. 17...	1500	.3	13.0	41	.006	B3	--
Tributary M	SEP. 17...	1515	.3	12.7	39	.003	B6	--

ANDROSCOGGIN RIVER BASIN

01055170 Long Pond near North Livermore, Maine

LOCATION.--Lat 44°25'31", long 70°12'03", Androscoggin County, 0.3 mi (0.5 km) southeast of North Livermore.

DRAINAGE AREA.--3.6 mi² (9.3 km²).

SURFACE AREA.--203 acres (822,000 m²).

SURFACE ELEVATION.--473 ft (144.2 m).

VOLUME.--2,000 acre-ft (2.47 hm³).

MAXIMUM DEPTH.--18 ft (5.5 m).

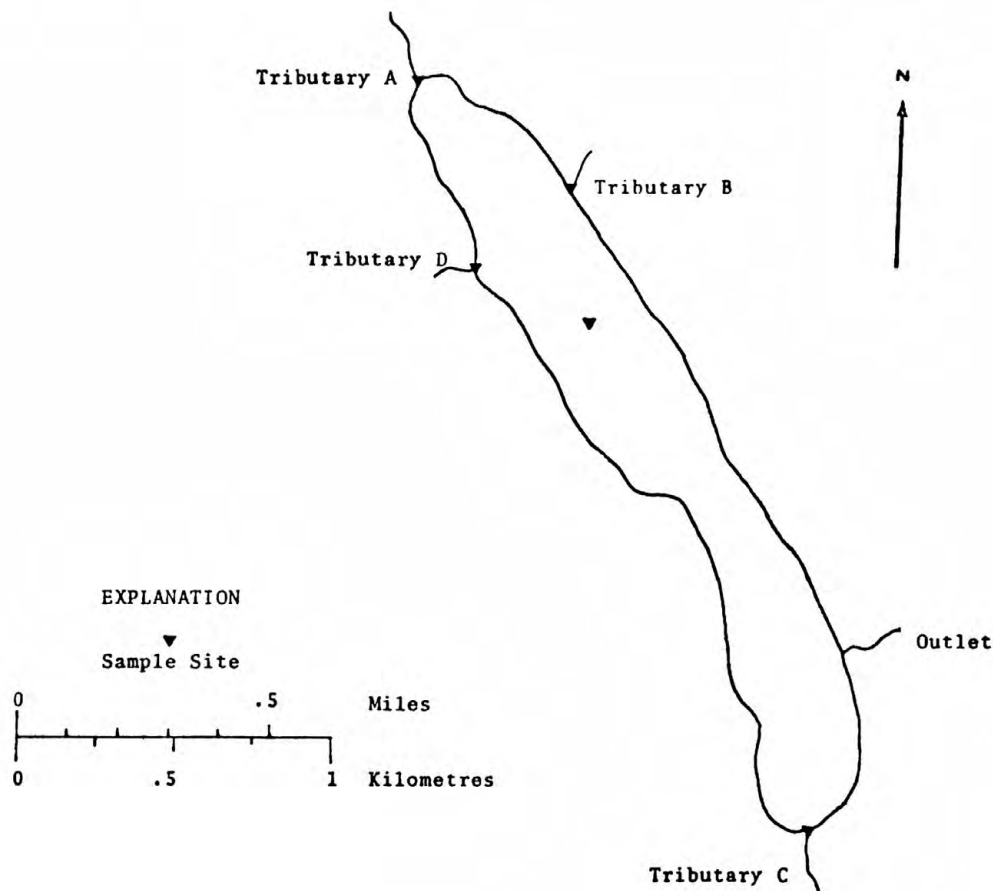
MEAN DEPTH.--10 ft (3.0 m).

EPILIMNION DEPTH.--Lake not stratified.

LENGTH OF SHORELINE.--18,000 ft (5,500 m).

U.S.G.S. QUADRANGLES.--Livermore Falls 7 1/2-minute.

STATE OF MAINE MIDAS NUMBER.--3816.



ANDROSCOGGIN RIVER BASIN

01055170 Long Pond near North Livermore, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼-SAMPLE SITE LOCATION.--Lat 44°26'05", long 70°12'35".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
MAR.							
17...	1615	.6	6.0	1.0	4.9	.017	.2
MAY							
06...	1015	.6	13.0	7.0	4.9	.009	3.0
JUNE							
02...	0930	.3	21.0	19.0	4.0	.016	2.4
18...	1400	.3	27.0	22.0	3.4	.009	4.4
JULY							
07...	0845	.3	18.0	24.8	4.0	.007	3.5
21...	1315	.3	27.0	27.0	4.8	.007	3.4
AUG.							
05...	0950	.3	25.0	25.5	4.7	.007	3.2
18...	0925	.3	24.0	24.0	3.7	.011	3.2
SEP.							
02...	1000	.3	17.0	20.0	3.8	.008	3.5
17...	1345	.3	19.5	17.5	3.4	.010	3.5
29...	1400	.3	23.1	16.3	3.9	.007	3.8
OCT.							
15...	1350	.3	12.5	11.0	3.9	.012	3.4
NOV.							
06...	1230	.3	10.0	9.0	2.5	.014	4.1

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CaCO3 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
MAR.										
17...	1615	.6	6.0	1.0	--	10.4	52	6.2	10	10
17...	1630	4.6	--	4.0	--	6.3	59	6.1	10	10
MAY										
06...	1015	.6	13.0	7.0	4.9	--	--	--	--	--
06...	1020	4.6	--	--	--	--	--	--	--	--

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
MAR.										
17...	.2	.001	.017	.05	.01	.06	.07	.18	.23	.30
17...	--	.003	.019	.11	.01	.08	.09	.21	.32	.41
MAY										
06...	3.0	.002	.009	.01	--	--	.08	.17	.18	.26
06...	--	.001	.010	.01	--	--	.08	.15	.16	.24

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
MAR.										
17...	1.3	6.4	5.2	2.1	70	10	--	--	--	--
17...	1.8	8.2	5.4	2.7	80	20	--	--	--	--
MAY										
06...	1.2	--	--	--	--	--	--	--	--	--
06...	1.1	--	--	--	--	--	--	--	--	--

ANDROSCOGGIN RIVER BASIN

01055170 Long Pond near North Livermore, Maine--Continued

▼--TRIBUTARY A SAMPLE SITE LOCATION.--Lat 44°26'31", long 70°12'57".

▼--TRIBUTARY B SAMPLE SITE LOCATION.--Lat 44°26'17", long 70°12'35".

▼--TRIBUTARY C SAMPLE SITE LOCATION.--Lat 44°25'16", long 70°12'52".

▼--TRIBUTARY D SAMPLE SITE LOCATION.--Lat 44°26'12", long 70°12'08".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	MAR. 17...	1645	.3	.1	50	.038	--	0
Tributary B	MAR. 17...	1700	.3	.2	214	.033	B2	0
Tributary C	MAR. 17...	1715	.3	.7	39	.030	B4	0
Tributary D	MAR. 17...	1730	.3	2.0	49	.017	0	0

BIOLOGICAL ANALYSES

The following is a benthic macroinvertebrate analysis of a bottom sample taken 17 March 1975 at lake sample site.

Total Wet WEIGHT (g/m²) = 5.54

Taxa	Number/m ²
ANNELIDA	
Oligochaeta	
Tubificidae	
Limnodrilus spp.	78
Tubifex sp.	130
ARTHROPODA	
Insecta	
Megaloptera	
Sialis sp.	17
Diptera	
Culicidae	
Chaoborus punctipennis	540
Chironomidae	
Procladius sp.	290
Pentaneurini	9
Chironomus spp.	160
Cryptochironomus sp.	280
Brillia sp.	780
Psectrocladius sp.	9
Unknown	9
Ceratopogonidae	
Palpolyia-Bezzia	26
MOLLUSCA	
Pelecypoda	
Sphaeriidae	
Pisidium sp.	17

TOTAL 2300

ANDROSCOGGIN RIVER BASIN

01055190 Minnehonk Lake at Mount Vernon, Maine

LOCATION.--Lat 44°29'15", long 69°59'35", Kennebec County, at Mount Vernon.

DRAINAGE AREA.--16.8 mi² (43.5 km²).

SURFACE AREA.--99 acres (401,000 m²).

SURFACE ELEVATION.--329 ft (100.3 m).

VOLUME.--3,000 acre-ft (3.70 hm³).

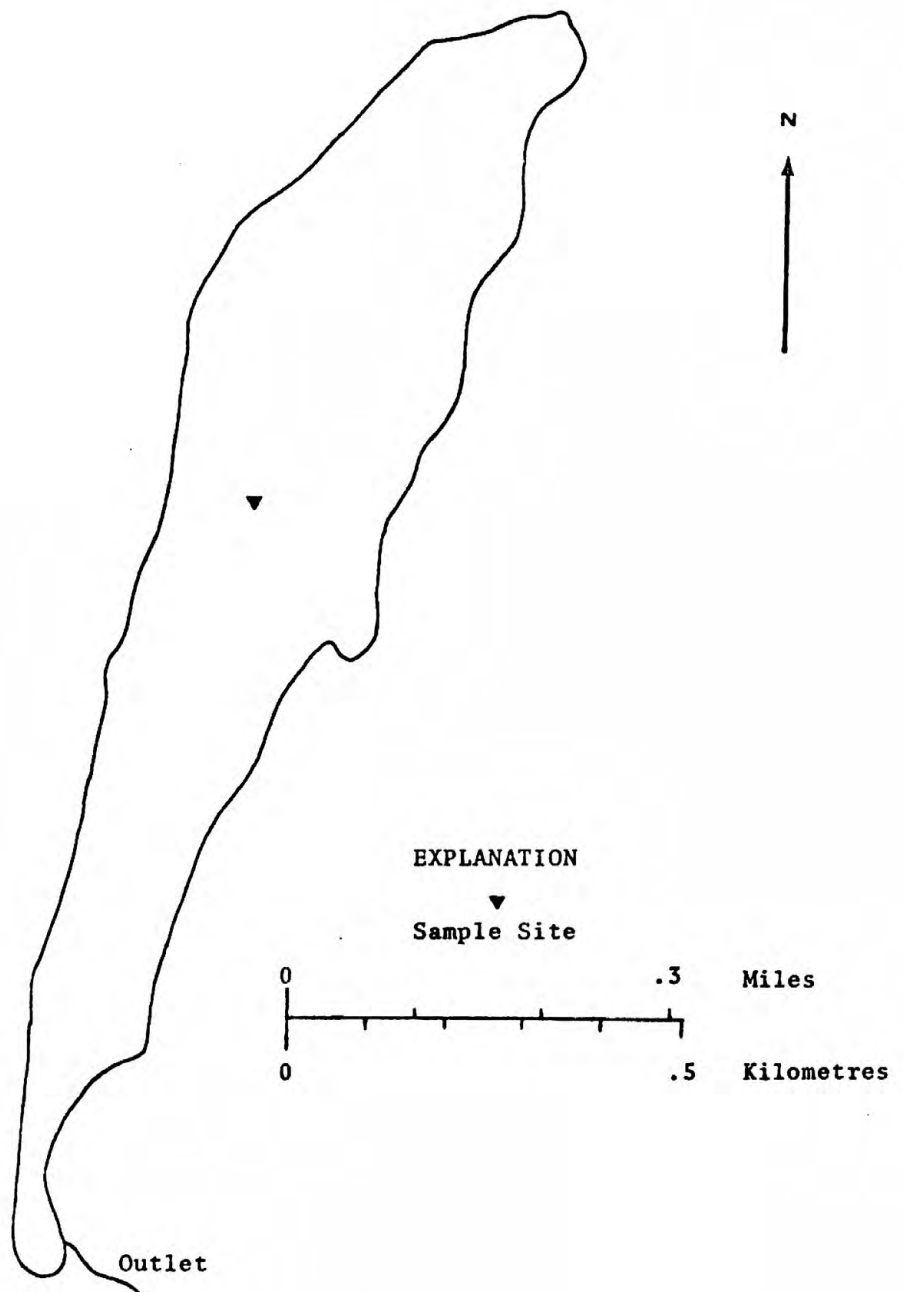
MAXIMUM DEPTH.--73 ft (22.2 m).

MEAN DEPTH.--30 ft (9.1 m).

LENGTH OF SHORELINE.--11,000 ft (3,400 m).

U.S.G.S. QUADRANGLES.--Augusta and Norridgewock 15-minute.

STATE OF MAINE MIDAS NUMBER.--5812.



ANDROSCOGGIN RIVER BASIN

01055190 Minnehonk Lake at Mount Vernon, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼-SAMPLE SITE LOCATION.--Lat 44°29'47", long 69°59'22".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
MAY							
06...	1600	.6	14.5	7.0	5.4	.007	1.4
JUNE							
02...	1430	.3	19.0	20.0	5.5	.007	2.9
18...	0830	.3	20.0	19.0	3.9	.008	2.6
JULY							
07...	1300	.3	21.0	25.8	4.9	.007	3.1
21...	0830	.3	23.0	26.0	4.5	.007	3.2
AUG.							
05...	1420	.3	27.0	26.5	6.2	.008	3.9
18...	1500	.3	27.0	25.0	5.1	.007	3.6
SEP.							
02...	1500	.3	19.0	21.0	4.7	.008	2.7
17...	0830	.3	13.0	18.0	4.7	.006	2.7
29...	0900	.3	19.0	15.5	4.3	.005	2.6
OCT.							
15...	0900	.3	12.0	11.5	5.3	.009	2.8
NOV.							
06...	0845	.3	7.0	9.5	4.1	.008	3.0

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)
MAY							
06...	1600	0.6	14.5	7.0	5.4	1.40	.002
06...	1605	9.1	--	--	--	--	.001
06...	1610	19.8	--	--	--	--	.002

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)
MAY							
06...	.007	.00	.09	.13	.13	.22	1.0
06...	.006	.01	.10	.08	.09	.19	.80
06...	.008	.01	.11	.16	.17	.28	1.2

ANDROSCOGGIN RIVER BASIN

01055400 Brettuns Pond at Brettuns Mills, Maine

LOCATION.--Lat 44°23'12", long 70°14'48", Androscoggin County, 0.2 mi (0.3 km) northeast of Brettuns Mills.

DRAINAGE AREA.--4.1 mi² (10.6 km²).

SURFACE AREA.--154 acres (623,000 m²).

SURFACE ELEVATION.--400 ft (121.9 m).

VOLUME.--2,700 acre-ft (3.3 hm³).

MAXIMUM DEPTH.--42 ft (12.8 m).

MEAN DEPTH.--18 ft (5.5 m).

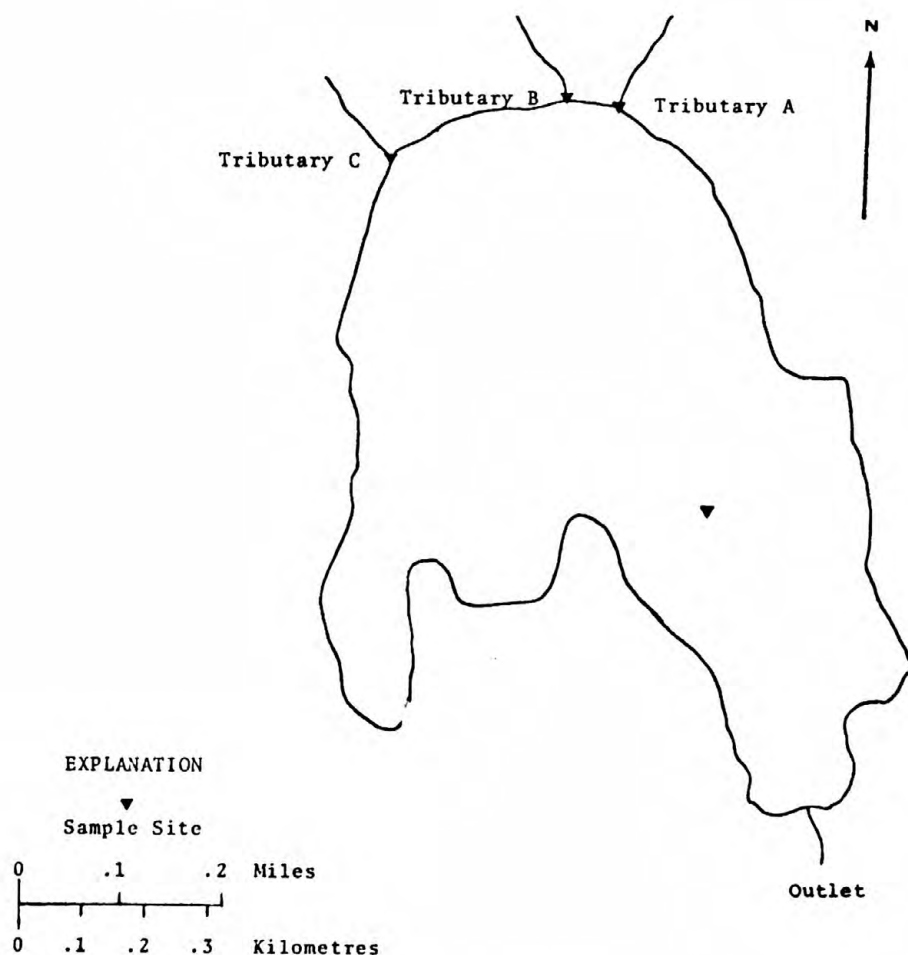
EPILIMNION DEPTH.--15 ft (4.6 m).

EPILIMNION VOLUME.--1,800 acre-ft (2.2 hm³).

LENGTH OF SHORELINE.--15,000 ft (4,600 m).

U.S.G.S. QUADRANGLES.--Canton and Livermore Falls 7 1/2-minute.

STATE OF MAINE MIDAS NUMBER.--3608.



ANDROSCOGGIN RIVER BASIN

01055400 Brettuns Pond at Brettuns Mills, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼--SAMPLE SITE LOCATION.--Lat 44°23'27", long 70°14'55".

DATE	TIME	DEPTH (M)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	TRANSPAR-ENCY (SECCHI DISK) (M)	TOTAL PHOSPHORUS (P) (MG/L)	CHLORO-PHYLL A (UG/L)
MAR.							
17...	1400	.6	7.0	1.2	6.7	.026	.5
MAY							
06...	0930	.6	13.0	7.5	4.6	.008	2.5
JUNE							
02...	0900	.3	18.0	18.0	6.3	.007	4.8
18...	1430	.3	27.0	20.5	6.4	.008	.9
JULY							
07...	0815	.3	18.0	23.5	5.8	.006	3.2
21...	1345	.3	27.0	27.0	4.7	.007	4.3
AUG.							
05...	0930	.3	23.0	25.0	4.8	.008	5.2
18...	0900	.3	23.0	24.0	4.5	.008	4.6
SEP.							
02...	0945	.3	17.0	20.0	3.7	.009	4.6
17...	1410	.3	19.0	17.5	4.3	.011	7.2
29...	1420	.3	22.0	16.8	5.7	.006	5.8
OCT.							
15...	1420	.3	13.0	11.5	3.5	.013	8.8
NOV.							
06...	1315	.3	8.5	10.0	3.2	.014	6.5

DATE	TIME	DEPTH (M)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	TRANSPAR-ENCY (SECCHI DISK) (M)	DIS-SOLVED OXYGEN (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	ALKALINITY AS CaCO3 (MG/L)	COLOR (PLATINUM-COBALT UNITS)
MAR.										
17...	1400	.6	7.0	1.2	6.7	12.0	37	6.2	12	30
17...	1415	4.6	--	4.0	--	7.2	52	6.2	13	20
17...	1430	10.7	--	4.5	--	2.7	56	6.1	16	30
MAY										
06...	0930	.6	13.0	7.5	4.6	--	--	--	--	--
06...	0935	4.6	--	--	--	--	--	--	--	--
06...	0940	10.7	--	--	--	--	--	--	--	--

DATE	CHLORO-PHYLL A (UG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)
MAR.										
17...	.5	.003	.026	.02	.00	.30	.30	.05	.07	.37
17...	--	.003	.017	.04	.01	.24	.25	.11	.15	.40
17...	--	.002	.021	.03	.00	.32	.32	.15	.18	.50
MAY										
06...	2.5	.001	.003	.01	--	--	.25	.18	.19	.44
06...	--	.002	.009	.01	--	--	.25	.20	.21	.46
06...	--	.002	.010	.02	--	--	.25	.19	.21	.46

DATE	TOTAL NITROGEN (NO3) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
MAR.										
17...	1.6	6.8	6.3	6.2	120	10	--	--	--	--
17...	1.8	4.7	4.6	2.6	50	0	--	--	--	--
17...	2.2	4.6	4.9	3.7	360	360	--	--	--	--
MAY										
06...	1.9	--	--	--	--	--	--	--	--	--
06...	2.0	--	--	--	--	--	--	--	--	--
06...	2.0	--	--	--	--	--	--	--	--	--

ANDROSCOGGIN RIVER BASIN

01055400 Brettuns Pond at Brettuns Mills, Maine--Continued

▼-TRIBUTARY A SAMPLE SITE LOCATION.--Lat 44°23'51", long 70°15'03".

▼-TRIBUTARY B SAMPLE SITE LOCATION.--Lat 44°23'52", long 70°15'07".

▼-TRIBUTARY C SAMPLE SITE LOCATION.--Lat 44°23'48", long 70°15'17".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	MAR. 17...	1445	.3	.7	64	.043	B2	0
Tributary B	MAR. 17...	1500	.3	1.7	76	.036	0	0
Tributary C	MAR. 17...	1515	.3	.1	68	.010	0	B4

BIOLOGICAL ANALYSES

The following is a benthic macroinvertebrate analysis of a bottom sample taken 17 March 1975 at the lake sample site.

Total Wet Weight (g/m²) = 4.68

Taxa	Number/m ²
ANNELIDA	
Oligochaeta	
Tubificidae	
<u>Limnodrilus</u> <u>sp.</u>	43
<u>Tubifex</u> <u>sp.</u>	78
ARTHIROPODA	
Arachnoidea	
Hydracarina	9
Insecta	
Diptera	
Culicidae	
<u>Chaoborus</u> <u>punctipennis</u>	1500
Chironomidae	
<u>Procladius</u> <u>sp.</u>	450
<u>Chironomus</u> <u>sp.</u>	95
TOTAL	2200

ROYAL RIVER BASIN

01059780 Crystal Lake at Dry Mills, Maine

LOCATION.--Lat 43°55'17", long 70°21'40", Cumberland County, 0.5 mi (0.8 km) northwest of Dry Mills.

DRAINAGE AREA.--1.9 mi² (4.9 km²).

SURFACE AREA.--189 acres (765,000 m²).

SURFACE ELEVATION.--306 ft (93.3 m).

VOLUME.--5,500 acre-ft (6.78 hm³).

MAXIMUM DEPTH.--59 ft (18.0 m).

MEAN DEPTH.--29 ft (8.8 m).

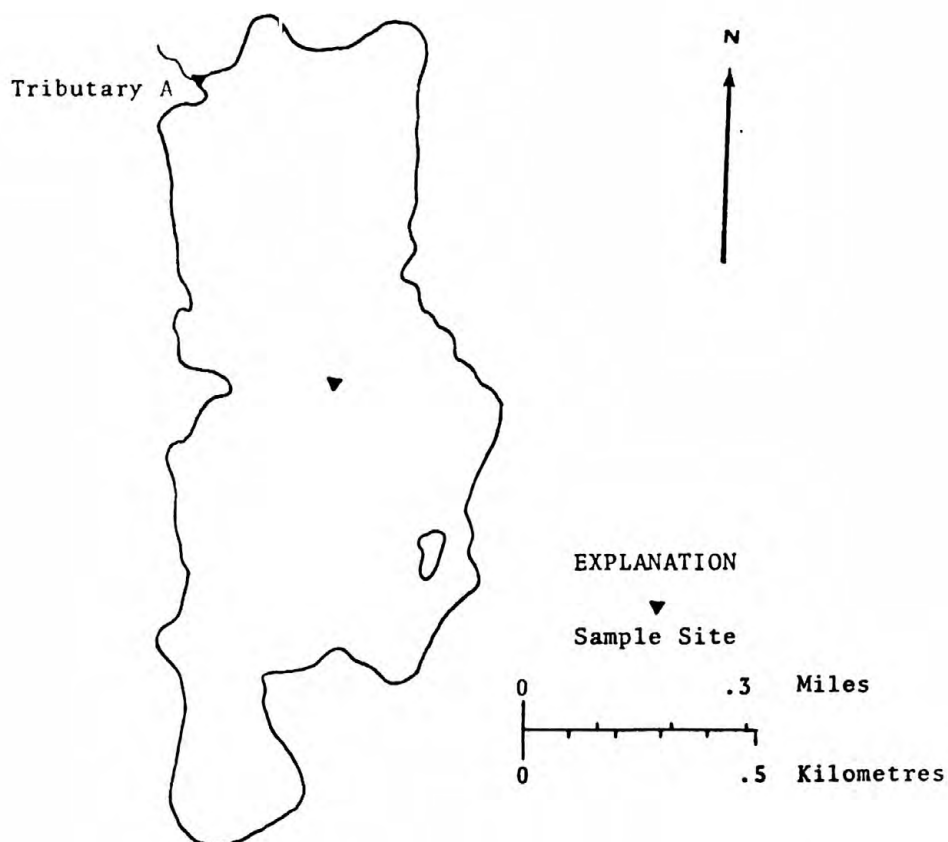
EPILIMNION DEPTH.--23 ft (7.0 m).

EPILIMNION VOLUME.--3,400 acre-ft (4.19 hm³).

LENGTH OF SHORELINE.--15,000 ft (4,600 m).

U.S.G.S. QUADRANGLES.--Gray 15-minute.

STATE OF MAINE MIDAS NUMBER.--3708.



ROYAL RIVER BASIN

01059780 Crystal Lake at Dry Mills, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼-SAMPLE SITE LOCATION.--Lat 43°55'45", long 70°21'33".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
MAR.							
10...	1030	.6	-6.0	1.0	6.7	.021	2.0
APR.							
30...	1630	.6	15.0	7.0	5.8	.007	2.8
JUNE							
05...	1330	.3	19.5	19.0	5.6	.010	4.6
17...	1445	.3	24.0	19.0	5.7	.007	3.9
JULY							
07...	1415	.3	21.0	24.0	5.8	.004	4.0
21...	1415	.3	27.0	26.5	7.0	.005	3.7
AUG.							
05...	1515	.3	32.0	29.5	8.0	.006	4.2
18...	1500	.3	27.0	25.0	7.4	.006	5.5
SEP.							
03...	1430	.3	17.0	19.0	7.6	.006	7.1
15...	1515	.3	18.0	18.5	7.6	.006	5.8
23...	1400	.6	21.0	17.6	8.4	.011	--
OCT.							
02...	1350	.3	21.0	18.0	8.5	.004	3.8
14...	1450	.3	18.0	14.5	7.3	.008	2.9
NOV.							
03...	1430	.3	19.0	11.3	5.5	.007	3.0

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CAC03 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
MAR.										
10...	1030	.6	-6.0	1.0	6.7	14.2	21	6.6	6	20
10...	1045	6.1	--	3.0	--	11.6	20	6.6	6	20
10...	1100	12.2	--	4.0	--	1.8	21	6.0	7	40
APR.										
30...	1630	.6	15.0	7.0	5.8	--	--	--	--	--
30...	1640	6.1	--	--	--	--	--	--	--	--
30...	1650	12.2	--	--	--	--	--	--	--	--
SEP.										
23...	1400	.6	21.0	17.6	8.4	9.6	46	6.7	3	3
23...	1415	7.0	--	16.2	--	9.7	49	6.5	3	4
23...	1430	9.0	--	9.9	--	4.6	58	6.7	4	4
23...	1445	14.0	--	7.0	--	.2	88	5.9	12	50

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
MAR.										
10...	2.0	.001	.021	.09	.01	.08	.09	.09	.18	.27
10...	--	.001	.010	.06	.01	.02	.03	.11	.17	.20
10...	--	.001	.023	.27	.01	.09	.10	.20	.47	.57
APR.										
30...	2.8	.001	.007	.08	--	--	.06	.06	.14	.20
30...	--	.002	.009	.07	--	--	.05	.09	.16	.21
30...	--	.001	.007	.09	--	--	.06	.05	.14	.20
SEP.										
23...	--	.001	.011	.00	.00	.01	.01	.17	.17	.18
23...	--	.001	.011	.00	.00	.01	.01	.16	.16	.17
23...	--	.000	.011	.00	.00	.01	.01	.18	.18	.19
23...	--	.001	.025	.22	.00	.01	.01	.49	.71	.72

ROYAL RIVER BASIN

01059780 Crystal Lake at Dry Mills, Maine--Continued

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG) (MG/L)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
MAR.										
10...	1.2	1.5	3.3	2.0	100	10	--	--	--	--
10...	.89	.8	2.3	1.4	100	10	--	--	--	--
10...	2.5	1.6	2.4	2.9	780	330	--	--	--	--
APR.										
30...	.90	--	--	--	--	--	--	--	--	--
30...	.90	--	--	--	--	--	--	--	--	--
30...	.90	--	--	--	--	--	--	--	--	--
SEP.										
23...	.80	2.3	2.7	1.1	310	10	6.4	.2	.2	1.5
23...	.75	2.6	2.9	1.1	90	0	3.0	.1	.1	1.5
23...	.84	2.2	2.7	1.1	40	0	3.6	.2	.1	1.7
23...	3.2	2.5	3.9	3.0	2400	420	6.9	.3	.2	1.5

▼-TRIBUTARY A SAMPLE SITE LOCATION.--Lat 43°56'08", long 70°21'42".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	MAR. 10...	1315	.3	--	38	.028	--	0
	SEP. 23...	1600	.3	15.0	54	.016	34	42

BIOLOGICAL ANALYSES

The following is a benthic macroinvertebrate analysis of a bottom sample taken 10 March 1975 at the lake sample site.

Total Wet Weight (g/m²) = 5.63

Taxa	Number/m ²
ANNELIDA	
Oligochaeta	
Lumbriculidae	
<u>Lumbriculus</u> <u>sp.</u>	87
ARTHIROPODA	
Insecta	
Diptera	
Culicidae	
<u>Chaoborus</u> <u>punctipennis</u>	3000
Chironomidae	
<u>Chironomus</u> <u>spp.</u>	110

TOTAL 3200

PRESUMPSCOT RIVER BASIN

01060200 Coffee Pond at Crescent Lake, Maine

LOCATION.--Lat 43°59'03", long 70°29'35", Cumberland County, 1.0 mi (1.6 km) west of Crescent Lake.

DRAINAGE AREA.--1.0 mi² (2.6 km²).

SURFACE AREA.--137 acres (554,000 m²).

SURFACE ELEVATION.--466 ft (142.0 m).

VOLUME.--4,500 acre-ft (5.55 hm³).

MAXIMUM DEPTH.--70 ft (21.3 m).

MEAN DEPTH.--33 ft (10.0 m).

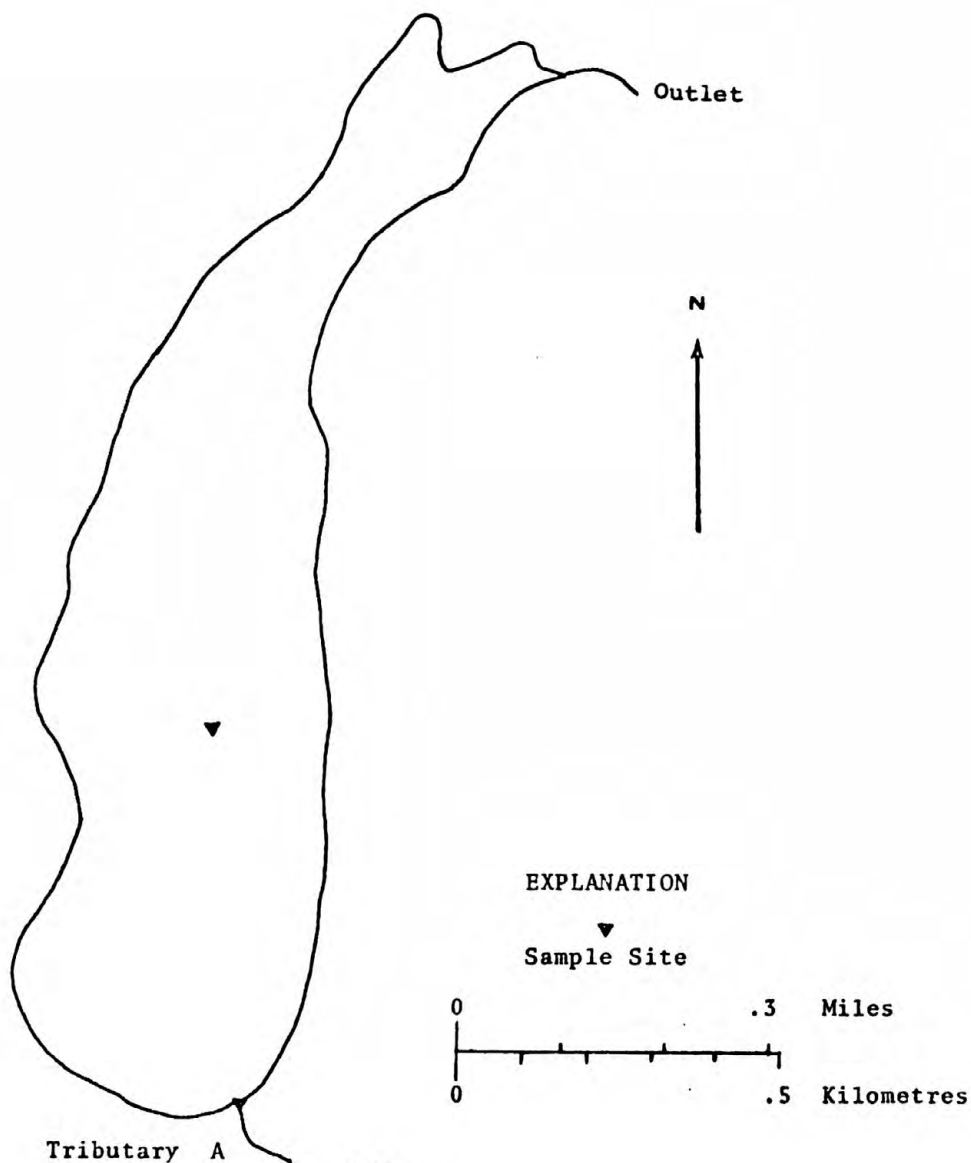
EPILIMNION DEPTH.--20 ft (6.1 m).

EPILIMNION VOLUME.--2,400 acre-ft (2.96 hm³).

LENGTH OF SHORELINE.--12,000 ft (3,600 m).

U.S.G.S. QUADRANGLES.--Gray and Sebago Lake 15-minute.

STATE OF MAINE MIDAS NUMBER.--3390.



PRESUMPCOT RIVER BASIN

01060200 Coffee Pond at Crescent Lake, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼-SAMPLE SITE LOCATION.--Lat 43°58'33", long 70°29'57".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
MAR.							
12...	1100	.6	.5	1.0	12.8	.013	.6
APR.							
30...	1430	.6	15.5	6.0	10.1	.006	1.6
JUNE							
05...	1200	.3	19.0	18.2	9.1	.005	1.8
17...	1300	.3	25.5	20.0	9.0	.007	1.4
JULY							
07...	1235	.3	20.5	23.5	8.4	.006	.9
21...	1230	.3	27.0	26.0	7.1	.005	1.5
AUG.							
05...	1315	.3	31.0	27.5	8.2	.006	1.2
18...	1245	.3	27.5	25.2	7.5	.007	1.4
SEP.							
03...	1230	.3	17.5	19.5	7.6	.009	1.8
15...	1315	.3	19.0	18.5	7.6	.004	2.2
OCT.							
02...	1300	.3	17.0	18.0	9.1	.009	3.8
14...	1305	.3	19.0	16.0	7.9	.006	3.9
NOV.							
03...	1245	.3	19.0	11.8	6.8	.008	3.8

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
MAR.										
12...	1100	.6	.5	1.0	12.8	14.0	37	6.5	4	3
12...	1115	9.1	--	4.0	--	9.2	34	6.1	4	8
12...	1130	18.3	--	4.5	--	4.8	44	6.0	6	13
APR.										
30...	1430	.6	15.5	6.0	10.1	--	--	--	--	--
30...	1440	9.1	--	--	--	--	--	--	--	--
30...	1450	18.3	--	--	--	--	--	--	--	--

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
MAR.										
12...	.6	.001	.013	.07	.01	.21	.22	.11	.18	.40
12...	--	.000	.007	.07	.00	.06	.06	.10	.17	.23
12...	--	.001	.016	.21	.00	.13	.13	.22	.43	.56
APR.										
30...	1.6	.001	.006	.06	--	--	.04	.08	.14	.18
30...	--	.001	.006	.06	--	--	.04	.04	.10	.14
30...	--	.001	.006	.06	--	--	.04	.06	.12	.16

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
MAR.										
12...	1.8	5.3	4.6	1.0	60	0	--	--	--	--
12...	1.0	5.9	4.3	5.4	80	10	--	--	--	--
12...	2.5	7.6	3.9	6.9	320	200	--	--	--	--
APR.										
30...	.80	--	--	--	--	--	--	--	--	--
30...	.60	--	--	--	--	--	--	--	--	--
30...	.70	--	--	--	--	--	--	--	--	--

PRESUMPCOT RIVER BASIN

01060200 Coffee Pond at Crescent Lake, Maine--Continued

▲ -TRIBUTARY A SAMPLE SITE LOCATION.--Lat 43°58'15", long 70°29'58".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	MAR. 12...	1200	.3	--	23	.022	0	0

BIOLOGICAL ANALYSES

The following is a benthic macroinvertebrate analysis of a bottom sample taken 12 March 1975 at the lake sample site.

Total Wet Weight (g/m²) = 1.13

Taxa	Number/m ²
NEMATODA	9
ARTHROPODA	
Insecta	
Diptera	
Culicidae	
<u>Chaoborus punctipennis</u>	210
Chironomidae	
<u>Chironomus spp.</u>	100
<u>Tanytarsus sp.</u>	9
<u>Brillia sp.</u>	9
TOTAL	340

PRESUMPCOT RIVER BASIN

01060250 Raymond Pond near East Raymond, Maine

LOCATION.--Lat 43°57'54", long 70°26'08", Cumberland County, 2.5 mi (4.0 km) north of East Raymond.

DRAINAGE AREA.--5.2 mi² (13.5 km²).

SURFACE AREA.--346 acres (1.40 km²).

SURFACE ELEVATION.--305 ft (93.0 m).

VOLUME.--5,600 acre-ft (6.90 hm³).

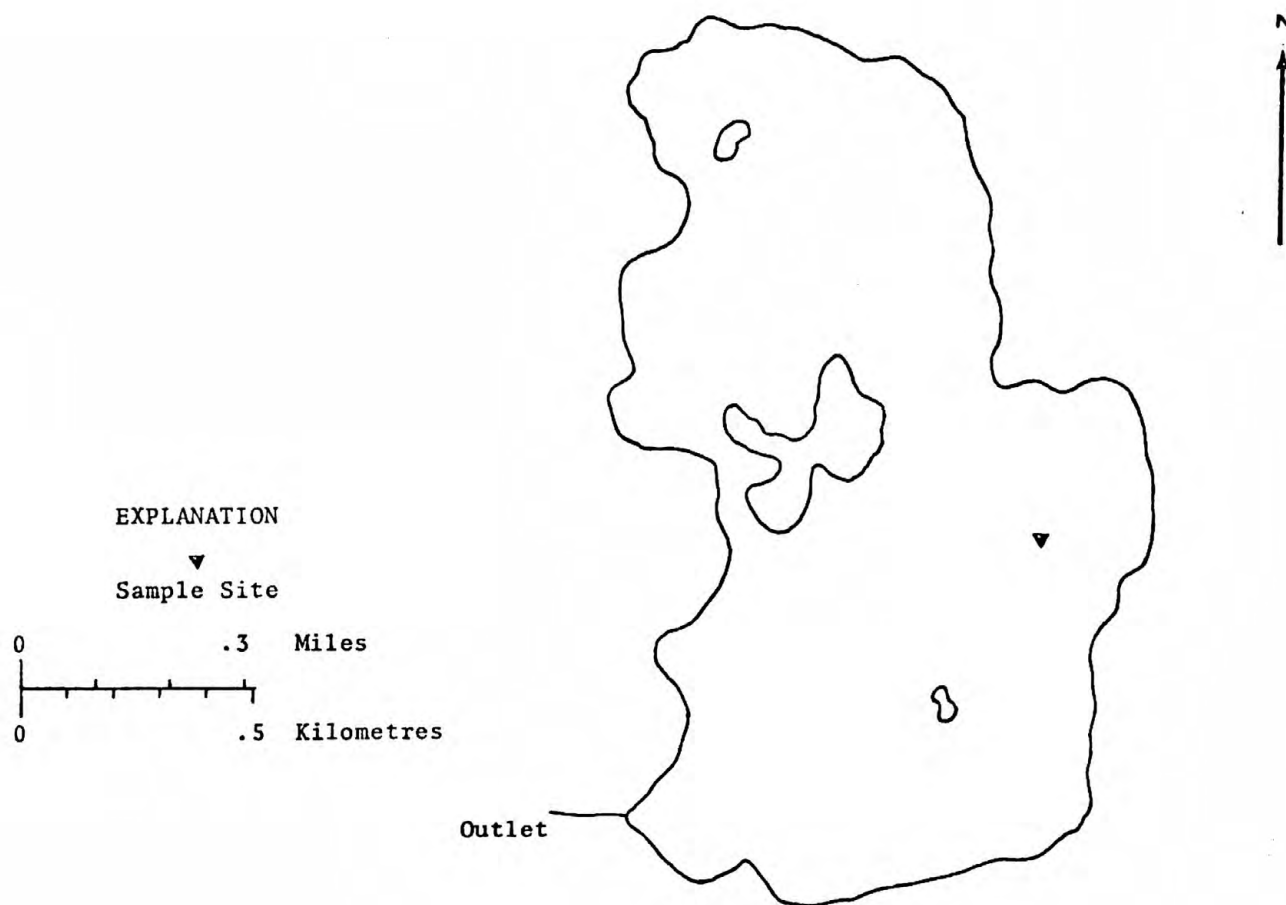
MAXIMUM DEPTH.--42 ft (12.8 m).

MEAN DEPTH.--16 ft (4.9 m).

LENGTH OF SHORELINE.--22,000 ft (6,700 m).

U.S.G.S. QUADRANGLES.--Gray 15-minute.

STATE OF MAINE MIDAS NUMBER.--3690.



PRESUMPCOT RIVER BASIN

01060250 Raymond Pond near East Raymond, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼ - SAMPLE SITE LOCATION.--Lat 43°58'10", long 70°25'28".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
APR.							
30...	1530	.6	15.0	7.0	6.0	.007	7.3
JUNE							
05...	1300	.3	21.0	19.2	6.0	.008	6.6
17...	1410	.3	26.0	20.5	5.8	.006	3.4
JULY							
07...	1340	.3	21.0	24.0	6.2	.005	3.0
21...	1330	.3	28.0	27.0	7.7	.006	3.1
AUG.							
05...	1430	.3	31.0	29.5	7.3	.007	8.2
18...	1400	.3	26.0	25.8	6.1	.006	8.5
SEP.							
03...	1400	.3	17.5	19.5	6.6	.009	5.3
15...	1430	.3	18.5	18.5	6.1	.006	4.8
OCT.							
02...	1410	.3	17.0	18.0	6.1	.008	4.8
14...	1410	.3	19.0	15.0	7.0	.013	2.1
NOV.							
03...	1400	.3	18.0	11.5	6.7	.007	3.5

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)
APR.							
30...	1530	0.6	15.0	7.0	6.0	7.30	.001
30...	1540	6.1	--	--	--	--	.001
30...	1550	10.7	--	--	--	--	.002

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)
APR.							
30...	.007	.01	.00	.16	.17	.17	.80
30...	.011	.01	.00	.37	.38	.38	1.7
30...	.007	.11	.00	.04	.15	.15	.70

PRESUMPCOT RIVER BASIN

01060300 Crescent Lake near East Raymond, Maine

LOCATION.--Lat 43°57'06", long 70°27'41", Cumberland County, 2.0 mi (3.2 km) northwest of East Raymond.

DRAINAGE AREA.--14.0 mi² (36.3 km²).

SURFACE AREA.--716 acres (2.90 km²).

SURFACE ELEVATION.--277 ft (84.4 m).

VOLUME.--13,000 acre-ft (16.0 hm³).

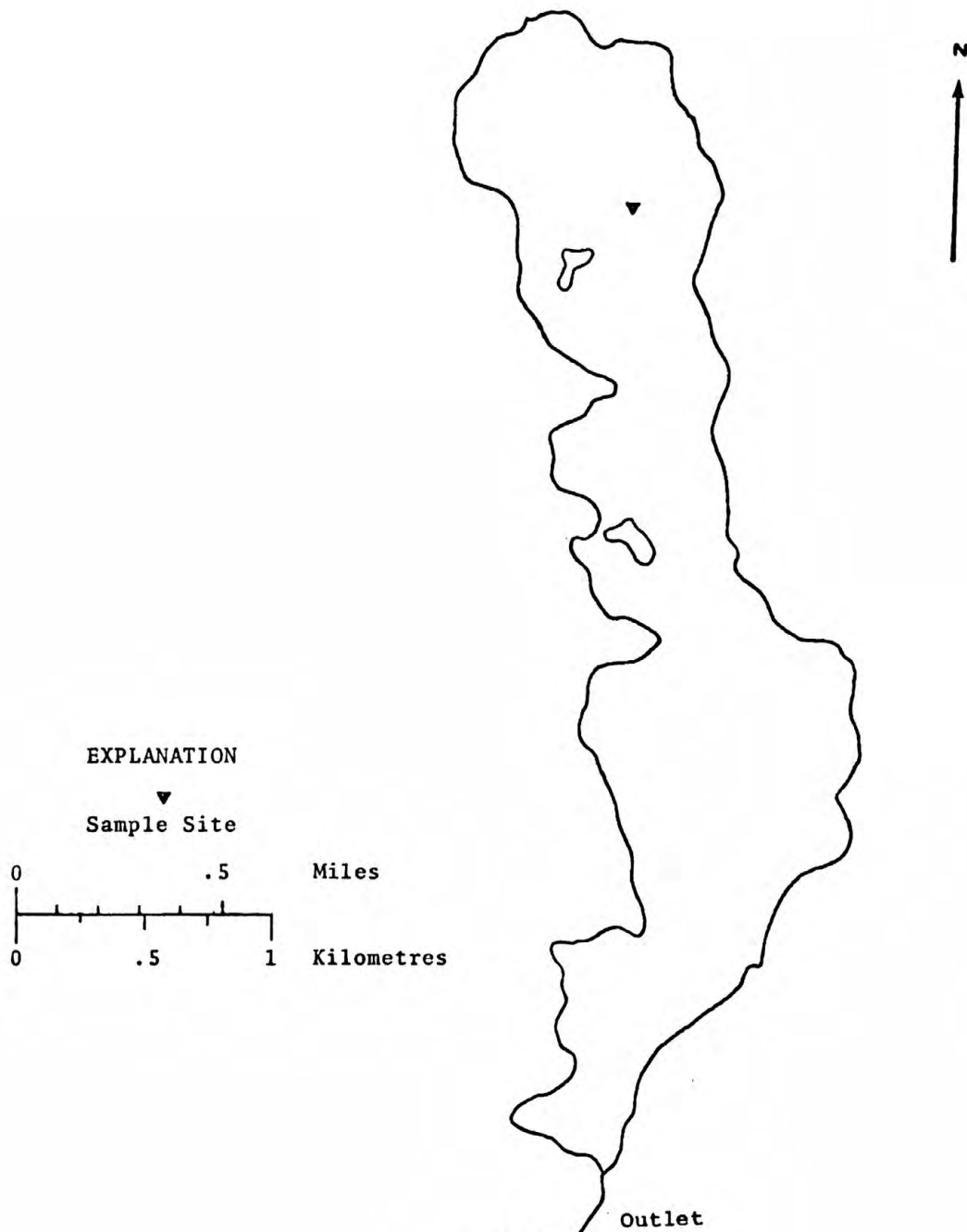
MAXIMUM DEPTH.--54 ft (16.4 m).

MEAN DEPTH.--18 ft (5.5 m).

LENGTH OF SHORELINE.--39,000 ft (12,000 m).

U.S.G.S. QUADRANGLES.--Gray 15-minute.

STATE OF MAINE MIDAS NUMBER.--3696.



PRESUMPCOT RIVER BASIN

01060300 Crescent Lake near East Raymond, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼—SAMPLE SITE LOCATION.--Lat 43°59'05", long 70°27'34".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
APR.							
30...	1445	.6	13.0	6.5	7.9	.007	1.2
JUNE							
05...	1230	.3	21.0	19.0	6.2	.007	5.1
17...	1335	.3	26.0	20.0	7.2	.007	2.1
JULY							
07...	1305	.3	21.0	24.5	5.8	.005	4.0
21...	1300	.3	26.0	27.0	6.4	.006	2.6
AUG.							
05...	1400	.3	30.5	28.5	8.1	.006	2.8
18...	1330	.3	28.0	25.5	6.1	.007	3.8
SEP.							
03...	1330	.3	18.5	19.8	6.9	.009	2.3
15...	1400	.3	17.5	19.0	6.4	.007	2.0
OCT.							
02...	1340	.3	17.5	18.0	6.7	.006	2.8
14...	1340	.3	19.0	15.0	5.5	.009	2.4
NOV.							
03...	1315	.3	18.5	11.8	6.5	.008	2.2

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)
APR.							
30...	1445	0.6	13.0	6.5	7.9	1.20	.001
30...	1455	6.1	--	--	--	--	.001
30...	1500	12.2	--	--	--	--	.001

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)
APR.							
30...	.007	.00	.08	.14	.14	.22	1.0
30...	.008	.00	.08	.13	.13	.21	.90
30...	.007	.00	.08	.10	.10	.18	.80

PRESUMPCOT RIVER BASIN

01060400 Nubble Pond near East Raymond, Maine

LOCATION.--Lat 43°57'04", long 70°28'34", Cumberland County, 2.3 mi (3.7 km) northwest of East Raymond.

DRAINAGE AREA.--0.7 mi² (1.8 km²).

SURFACE AREA.--23 acres (93,000 m²).

SURFACE ELEVATION.--334 ft (101.8 m).

VOLUME.--400 acre-ft (493,000 hm³).

MAXIMUM DEPTH.--37 ft (11.3 m).

MEAN DEPTH.--17 ft (5.2 m).

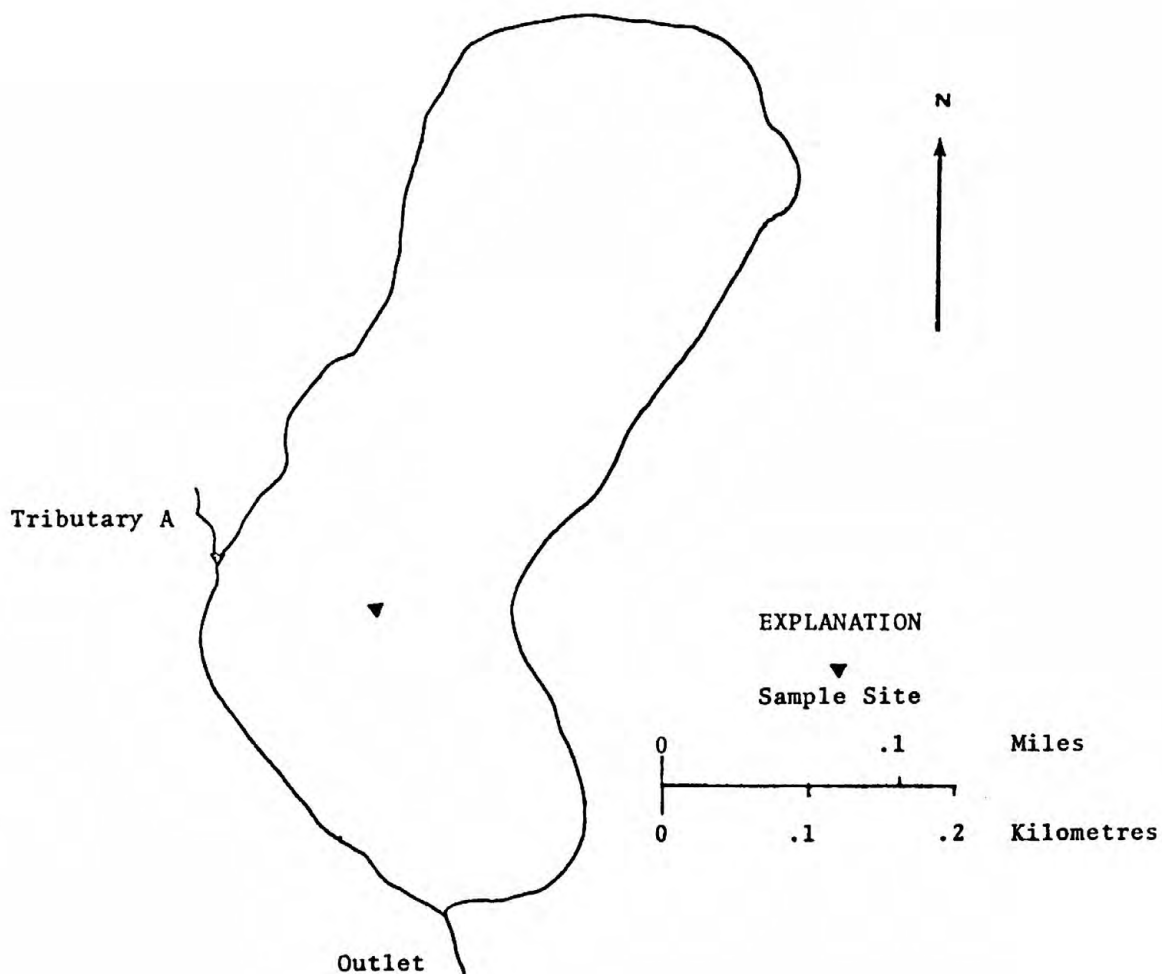
EPILIMNION DEPTH.--5 ft (1.5 m).

EPILIMNION VOLUME.--100 acre-ft (123,000 hm³).

LENGTH OF SHORELINE.--5,000 ft (1,500 m).

U.S.G.S. QUADRANGLES.--Gray 15-minute.

STATE OF MAINE MIDAS NUMBER.--3692.



01060400 Nubble Pond near East Raymond, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼-SAMPLE SITE LOCATION.--Lat 43°57'08", long 70°28'37".

DATE	TIME	DEPTH (M)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	TRANSPAR-ENCY (SECCHI DISK) (M)	TOTAL PHOSPHORUS (P) (MG/L)	CHLORO-PHYLL A (UG/L)
MAR. 12...	1400	.6	.0	.5	1.2	.040	1.6
APR. 30...	1300	.6	14.0	6.0	2.4	.012	3.4
JUNE 05...	1100	.3	20.5	19.0	2.6	.011	6.9
17...	1200	.3	26.0	20.5	2.2	.008	6.0
JULY 07...	1140	.3	24.5	20.5	2.0	.009	8.0
21...	1145	.3	27.0	27.5	1.7	.013	9.5
AUG. 05...	1200	.3	30.0	27.0	2.8	.012	9.1
18...	1245	.3	27.0	25.0	1.8	.011	12
SEP. 03...	1200	.3	16.0	18.5	2.9	.015	11
15...	1210	.3	21.0	18.5	2.1	.017	14
OCT. 02...	1210	.3	17.5	18.0	2.3	.014	13
14...	1215	.3	19.0	15.0	1.9	.017	12
NOV. 03...	1200	.3	21.0	10.9	2.2	.016	10

DATE	TIME	DEPTH (M)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	TRANSPAR-ENCY (SECCHI DISK) (M)	DIS-SOLVED OXYGEN (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	ALKA-LINITY AS CAC03 (MG/L)	COLOR (PLAT-INUM-COBALT UNITS)
MAR. 12...	1400	.6	.0	.5	1.20	9.3	32	6.0	10	45
12...	1415	6.1	--	4.2	--	2.0	29	6.0	12	70
12...	1430	9.1	--	4.6	--	.2	60	6.2	35	110
APR. 30...	1300	.6	14.0	6.0	2.40	--	--	--	--	--
30...	1310	6.1	--	--	--	--	--	--	--	--
30...	1320	9.1	--	--	--	--	--	--	--	--

DATE	CHLORO-PHYLL A (UG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)
MAR. 12...	1.6	.002	.040	.33	.01	.11	.12	.40	.73	.85
12...	--	.005	.060	.95	.03	.19	.22	.55	1.5	1.7
12...	--	.006	.063	1.1	.03	.03	.06	.40	1.5	1.6
APR. 30...	3.4	.002	.012	.15	--	--	.07	.15	.30	.37
30...	--	.003	.013	.26	--	--	.09	.13	.39	.48
30...	--	.010	.048	1.5	--	--	.00	--	1.5	1.5

DATE	TOTAL NITRO-GEN (N03) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SULFATE (S04) (MG/L)	DIS-SOLVED SILICA (S102) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL CAL-CIUM (CA) (MG/L)	TOTAL MAG-NE-SIUM (MG) (MG/L)	TOTAL PO-TAS-SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
MAR. 12...	3.8	1.7	3.9	6.8	130	20	--	--	--	--
12...	7.6	--	8.3	8.3	200	100	--	--	--	--
12...	6.9	2.7	3.7	8.4	1900	830	--	--	--	--
APR. 30...	1.6	--	--	--	--	--	--	--	--	--
30...	2.1	--	--	--	--	--	--	--	--	--
30...	6.6	--	--	--	--	--	--	--	--	--

PRESUMPCOT RIVER BASIN

01060400 Nubble Pond near East Raymond, Maine--Continued

▼-TRIBUTARY A SAMPLE SITE LOCATION.--Lat 43°57'10", long 70°28'40".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	MAR. 12...	1615	.3	--	27	.035	0	0

BIOLOGICAL ANALYSES

The following is a benthic macroinvertebrate analysis of a bottom sample taken 12 March 1975 at the lake sample site.

Total Wet Weight (g/m²) = 0.17

Taxa	Number/m ²
ARTHROPODA	
Insecta	
Diptera	
Culicidae	
<u>Chaoborus punctipennis</u>	160
TOTAL	160

PRESUMPCOT RIVER BASIN

01060500 Panther Pond near Raymond, Maine

LOCATION.--Lat 43°54'03", long 70°27'58", Cumberland County, 0.5 mi (0.8 km) northeast of Raymond.

DRAINAGE AREA.--30.1 mi² (78.0 km²).

SURFACE AREA.--1,439 acres (5.82 km²).

SURFACE ELEVATION.--277 ft (84.4 m).

VOLUME.--34,000 acre-ft (41.9 hm³).

MAXIMUM DEPTH.--68 ft (20.7 m).

MEAN DEPTH.--24 ft (7.3 m).

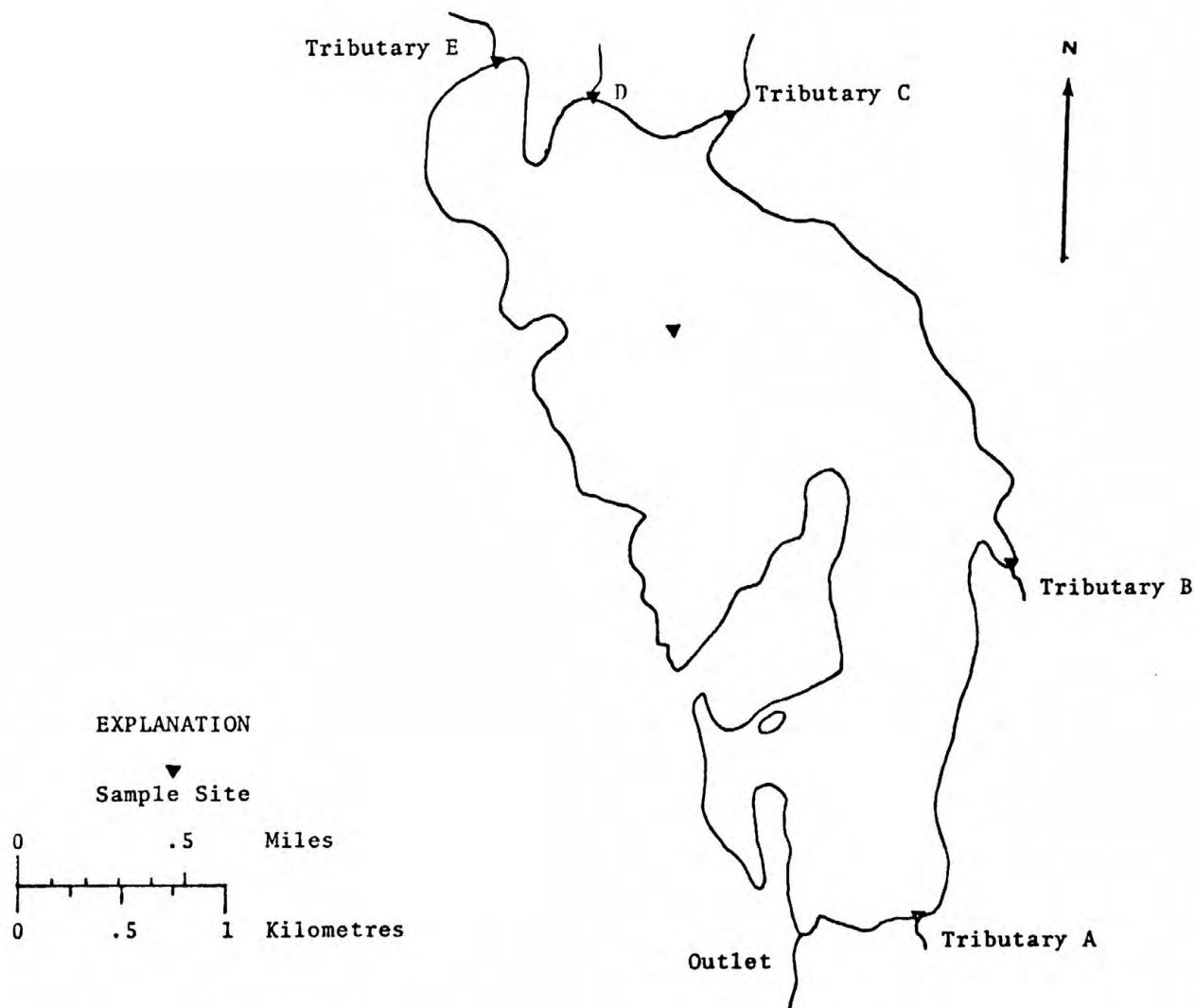
EPILIMNION DEPTH.--20 ft (6.1 m).

EPILIMNION VOLUME.--23,000 acre-ft (28.4 hm³).

LENGTH OF SHORELINE.--62,000 ft (19,000 m).

U.S.G.S. QUADRANGLES.--Gray 15-minute.

STATE OF MAINE MIDAS NUMBER.--3694.



PRESUMPCOT RIVER BASIN

01060500 Panther Pond near Raymond, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼ - SAMPLE SITE LOCATION.--Lat 43°56'00", long 70°28'38".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
MAR.							
19...	1000	.6	7.5	1.5	9.2	.004	.6
APR.							
30...	1115	.6	14.5	6.0	8.2	.006	1.6
JUNE							
05...	1000	.3	17.5	18.5	5.6	.006	2.1
17...	1100	.3	24.0	19.0	8.4	.007	1.8
JULY							
07...	1105	.3	21.0	24.5	7.0	.005	2.8
21...	1115	.3	27.0	26.5	6.7	.007	2.6
AUG.							
05...	1135	.3	26.0	26.5	7.1	.006	3.1
18...	1030	.3	25.5	25.0	7.1	.007	3.4
SEP.							
03...	1100	.3	16.5	19.5	8.3	.008	2.7
15...	1140	.3	12.0	19.0	7.6	.002	2.1
OCT.							
02...	1140	.3	17.5	18.0	9.3	.013	1.5
14...	1150	.3	20.5	15.0	8.2	.007	2.0
NOV.							
03...	1130	.3	19.0	12.0	7.5	.008	2.1

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
MAR.										
19...	1000	.6	7.5	1.5	9.2	13.6	25	6.7	8	10
19...	1015	7.6	--	3.0	--	11.4	38	6.7	8	10
19...	1030	16.8	--	3.9	--	8.5	40	6.3	9	15
APR.										
30...	1115	.6	14.5	6.0	8.2	--	--	--	--	--
30...	1125	9.1	--	--	--	--	--	--	--	--
30...	1135	16.8	--	--	--	--	--	--	--	--

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
MAR.										
19...	.6	.001	.004	.02	.00	.02	.02	.10	.12	.14
19...	--	.001	.005	.03	.00	.03	.03	.03	.06	.09
19...	--	.002	.007	.01	.00	.05	.05	.00	.01	.06
APR.										
30...	1.6	.001	.006	.07	--	--	.05	.03	.10	.15
30...	--	.001	.006	.06	--	--	.04	.12	.18	.22
30...	--	.001	.007	.07	--	--	.05	.07	.14	.19

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
MAR.										
19...	.62	5.1	4.6	2.4	60	0	--	--	--	--
19...	.40	5.4	4.4	2.1	70	0	--	--	--	--
19...	.27	5.3	4.0	3.0	60	10	--	--	--	--
APR.										
30...	.70	--	--	--	--	--	--	--	--	--
30...	1.0	--	--	--	--	--	--	--	--	--
30...	.80	--	--	--	--	--	--	--	--	--

PRESUMPCOT RIVER BASIN

01060500 Panther Pond near Raymond, Maine--Continued

- ▼-TRIBUTARY A SAMPLE SITE LOCATION.--Lat 43°54'20", long 70°27'31".
 ▼-TRIBUTARY B SAMPLE SITE LOCATION.--Lat 43°55'17", long 70°27'13".
 ▼-TRIBUTARY C SAMPLE SITE LOCATION.--Lat 43°56'24", long 70°28'12".
 ▼-TRIBUTARY D SAMPLE SITE LOCATION.--Lat 43°56'27", long 70°28'32".
 ▼-TRIBUTARY E SAMPLE SITE LOCATION.--Lat 43°56'40", long 70°29'07".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	MAR. 19...	1100	.3	1.5	49	.008	B2	0
Tributary B	MAR. 19...	1110	.3	1.2	51	.004	0	B2
Tributary C	MAR. 19...	1120	.3	2.8	42	.005	0	0
Tributary D	MAR. 19...	1130	.3	.9	34	.007	0	0
Tributary E	MAR. 19...	1140	.3	3.2	38	.004	32	0

BIOLOGICAL ANALYSES

The following is a benthic macroinvertebrate analysis of a bottom sample taken 19 March 1975 at the lake sample site.

Total Wet Weight (g/m²) = 7.53

Taxa	Number/m ²
NEMATODA	52
ANNELIDA	
Oligochaeta	
Tubificidae	
Limnodrilus spp.	100
Tubifex sp.	17
ARTHIROPODA	
Arachnoidea	
Hydracarina	9
Diptera	
Culicidae	
Chaoborus punctipennis	2100
Chironomidae	
Procladius sp.	360
Pentaneurini	9
Chironomus sp.	78
Tanytarsus sp.	2300
MOLLUSCA	
Pelecypoda	
Sphaeriidae	
Pisidium sp.	320

TOTAL 5300

PRESUMPCOT RIVER BASIN

01064120 Highland Lake at Highland Lake, Maine

LOCATION.--Lat 43°44'43", long 70°21'08", Cumberland County, 0.5 mi (0.8 km) north of Highland Lake.

DRAINAGE AREA.--8.7 mi² (22.5 km²).

SURFACE AREA.--640 acres (2.59 km²).

SURFACE ELEVATION.--190 ft (57.9 m).

VOLUME.--14,000 acre-ft (17.3 hm³).

MAXIMUM DEPTH.--67 ft (20.4 m).

MEAN DEPTH.--22 ft (6.7 m).

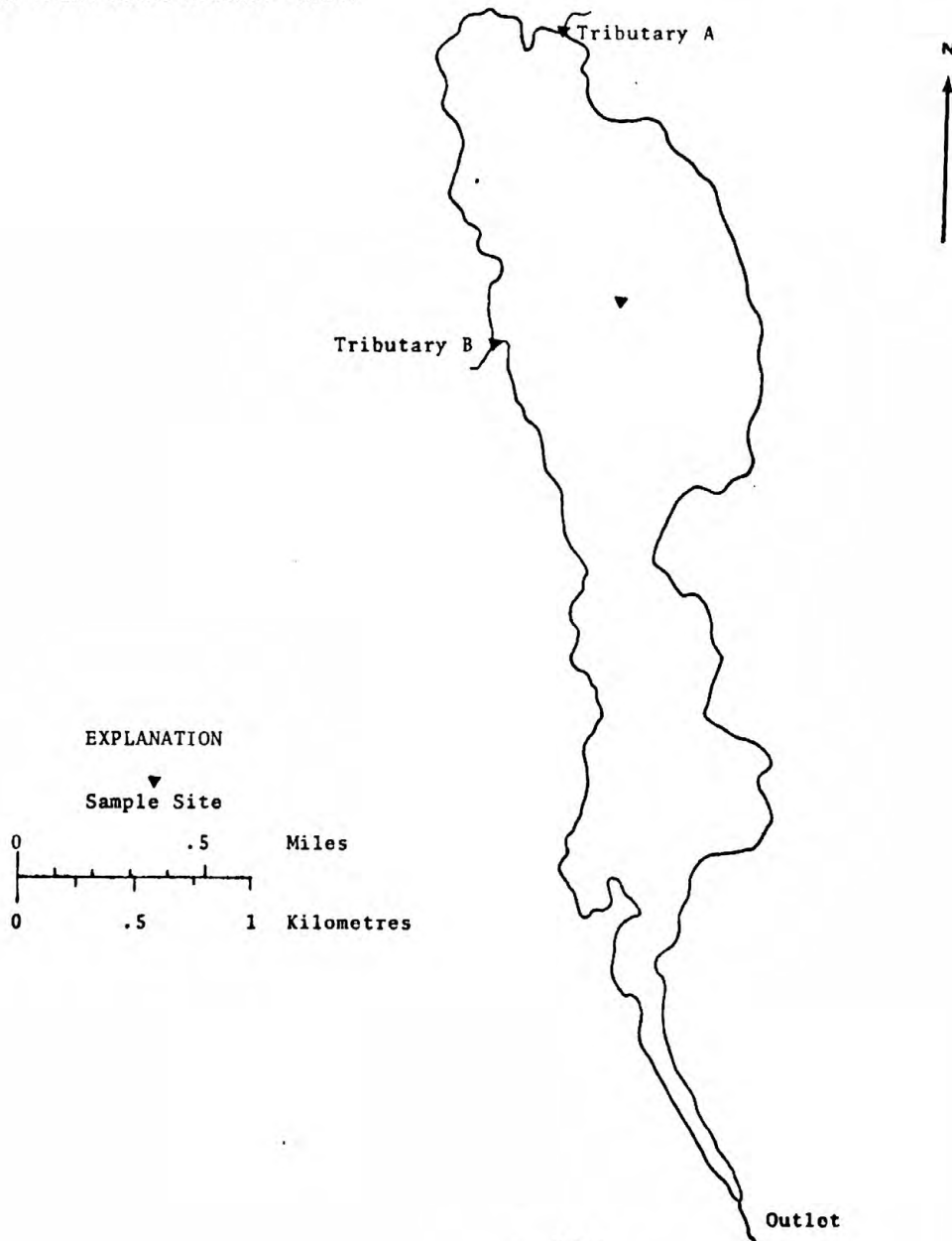
EPILIMNION DEPTH.--33 ft (10.0 m).

EPILIMNION VOLUME.--12,000 acre-ft (14.8 hm³).

LENGTH OF SHORELINE.--43,000 ft (13,000 m).

U.S.G.S. QUADRANGLES.--Cumberland Center and Portland West 7 1/2-minute, Gray and Portland 15-minute.

STATE OF MAINE MIDAS NUMBER.--3734.



PRESUMPSCOT RIVER BASIN

01064120 Highland Lake at Highland Lake, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼--SAMPLE SITE LOCATION.--Lat 43°46'54", long 70°21'38".

DATE	TIME	DEPTH (M)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	TRANSPAR-ENCY (SECCHI DISK) (M)	TOTAL PHOSPHORUS (P) (MG/L)	CHLORO-PHYLL A (UG/L)
APR. 30...	1030	.6	13.0	7.0	4.9	.009	2.0
JUNE 05...	0900	.3	18.0	19.0	4.8	.007	2.6
17...	1010	.3	23.5	19.0	6.0	.007	2.1
JULY 07...	1015	.3	19.0	24.0	5.8	.005	2.6
21...	1000	.3	26.0	26.2	6.2	.007	2.0
AUG. 05...	1045	.3	25.5	26.5	7.7	.006	2.1
18...	0915	.3	21.0	25.0	6.7	.007	3.3
SEP. 03...	1015	.3	15.0	18.5	8.1	.011	2.3
15...	1045	.3	11.5	19.0	6.7	.006	1.9
22...	1615	.6	23.0	18.2	8.0	.010	--
OCT. 02...	1100	.3	17.0	18.0	7.6	.005	2.4
14...	1050	.3	19.0	15.5	6.4	.008	4.4
NOV. 03...	1045	.3	19.0	11.1	5.3	.007	4.1

DATE	TIME	DEPTH (M)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	TRANSPAR-ENCY (SECCHI DISK) (M)	DIS-SOLVED OXYGEN (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	ALKALINITY AS CaCO3 (MG/L)	COLOR (PLATINUM-COBALT UNITS)
APR. 30...	1030	.6	13.0	7.0	4.9	--	--	--	--	--
30...	1040	7.6	--	--	--	--	--	--	--	--
30...	1050	16.8	--	--	--	--	--	--	--	--
SEP. 22...	1615	.6	23.0	18.2	8.0	9.3	43	6.8	6	5
22...	1630	12.0	--	10.5	--	3.4	41	6.0	5	21
22...	1645	18.0	--	8.1	--	2.0	48	6.0	5	45

DATE	CHLORO-PHYLL A (UG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)
APR. 30...	2.0	.001	.009	.07	--	--	.08	.02	.09	.17
30...	--	.002	.011	.07	--	--	.08	.08	.15	.23
30...	--	.001	.009	.07	--	--	.08	.04	.11	.19
SEP. 22...	--	.002	.010	.00	.01	.02	.03	.18	.18	.21
22...	--	.001	.010	.00	.00	.10	.10	.12	.12	.22
22...	--	.001	.013	.00	.00	.15	.15	.13	.13	.28

DATE	TOTAL NITROGEN (NO3) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
APR. 30...	.80	--	--	--	--	--	--	--	--	--
30...	1.0	--	--	--	--	--	--	--	--	--
30...	.80	--	--	--	--	--	--	--	--	--
SEP. 22...	.93	4.3	4.8	.7	70	10	11	.4	.6	3.6
22...	.97	4.1	4.5	3.4	160	50	3.0	.3	.6	3.2
22...	1.2	4.1	4.2	3.8	270	170	6.5	.4	.6	3.2

PRESUMPSCOT RIVER BASIN

01064120 Highland Lake at Highland Lake, Maine--Continued

▼-TRIBUTARY A SAMPLE SITE LOCATION.--Lat 43°47'18", long 70°21'40".

▼-TRIBUTARY B SAMPLE SITE LOCATION.--Lat 43°46'48", long 70°21'54".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	SEP. 22....	1700	.3	21.0	58	.012	B320	170
Tributary B	SEP. 22....	1730	.3	14.5	78	.012	34	B480

PRESUMPSCOT RIVER BASIN

01064145 Forest Lake near South Gray, Maine

LOCATION.--Lat 43°49'51", long 70°19'33", Cumberland County, 1.5 mi (2.4 km) south of South Gray.

DRAINAGE AREA.--3.3 mi² (8.5 km²).

SURFACE AREA.--198 acres (801,000 m²).

SURFACE ELEVATION.--276 ft (84.1 m).

VOLUME.--2,600 acre-ft (3.20 hm³).

MAXIMUM DEPTH.--38 ft (11.6 m).

MEAN DEPTH.--13 ft (4.0 m).

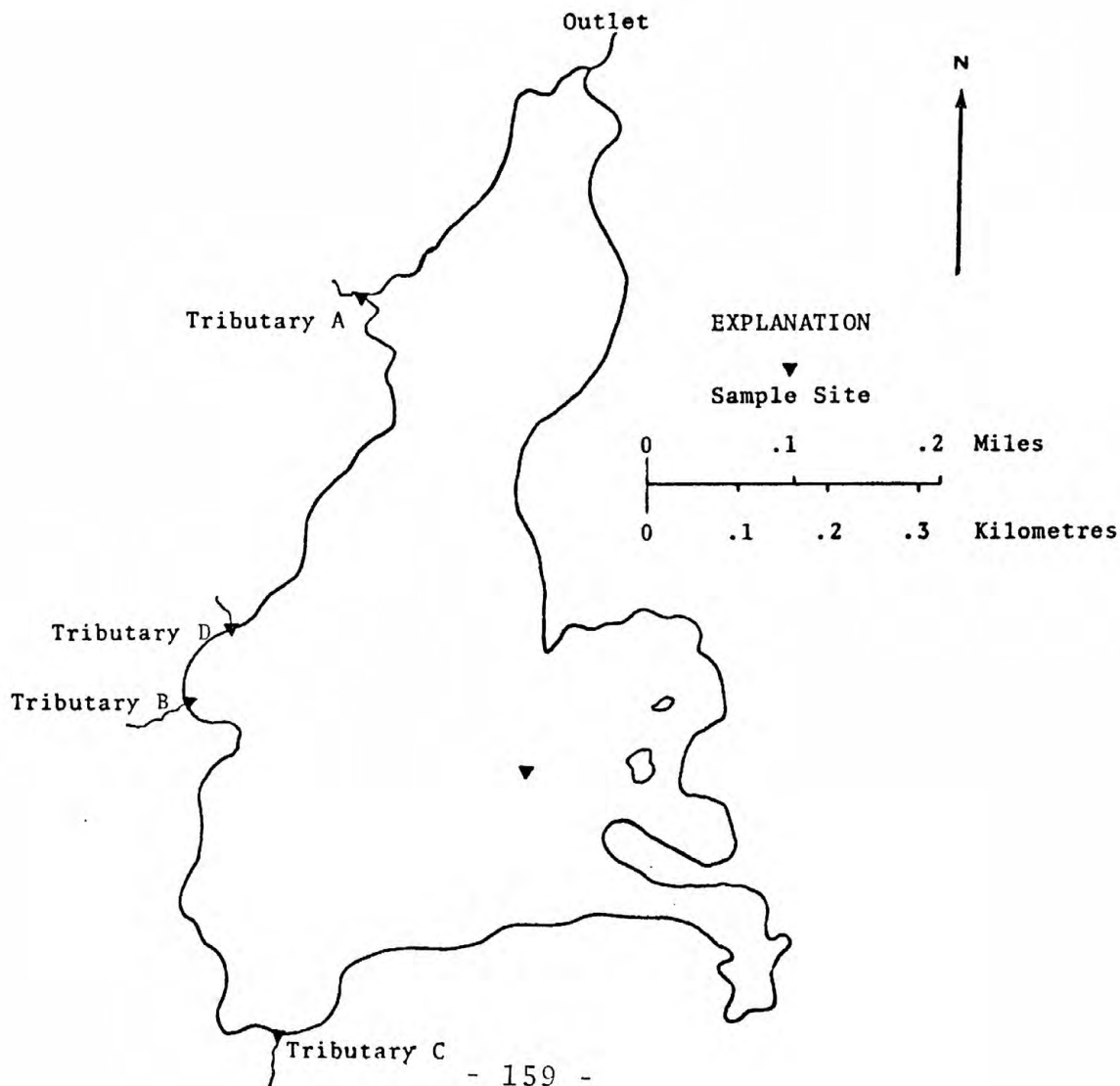
EPILIMNION DEPTH.--26 ft (8.0 m).

EPILIMNION VOLUME.--2,500 acre-ft (3.1 hm³).

LENGTH OF SHORELINE.--19,000 ft (5,800 m).

U.S.G.S. QUADRANGLES.--Gray 15-minute.

STATE OF MAINE MIDAS NUMBER.--3712



PRESUMPSCOT RIVER BASIN

01064145 Forest Lake near South Gray, Maine--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼ - SAMPLE SITE LOCATION.--Lat 43°49'11", long 70°19'43".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TOTAL PHOS- PHORUS (P) (MG/L)	CHLORO- PHYLL A (UG/L)
MAR.							
10...	1500	.6	1.0	1.0	5.2	.047	1.2
APR.							
30...	0930	.6	12.0	8.0	3.4	.012	8.8
JUNE							
05...	0830	.3	17.0	19.0	5.8	.009	4.3
17...	0930	.3	19.5	18.0	5.0	.009	4.6
JULY							
07...	0940	.3	18.5	24.0	5.6	.005	7.2
21...	0930	.3	22.4	26.0	6.2	.007	6.5
AUG.							
05...	1000	.3	22.0	26.0	5.3	.006	13
18...	0830	.3	22.0	24.8	5.9	.007	26
SEP.							
03...	0930	.3	14.0	19.0	5.5	.009	36
15...	1000	.3	12.0	19.0	5.8	.010	18
23...	1000	.6	14.8	17.1	5.9	.013	--
OCT.							
02...	1000	.3	18.0	18.0	6.6	.006	22
14...	1015	.3	19.0	14.0	4.7	.010	4.7
NOV.							
03...	1000	.3	16.2	10.5	5.2	.008	3.7

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
MAR.										
10...	1500	.6	1.0	1.0	5.2	14.2	32	5.2	5	45
10...	1515	4.6	--	4.0	--	7.0	30	5.2	5	40
10...	1530	9.1	--	3.5	--	4.8	31	5.2	6	60
APR.										
30...	0930	.6	12.0	8.0	3.4	--	--	--	--	--
30...	0940	4.6	--	--	--	--	--	--	--	--
30...	0950	9.1	--	--	--	--	--	--	--	--
SEP.										
23...	1000	.6	14.8	17.1	5.9	9.4	59	5.9	2	7
23...	1015	8.0	--	16.2	--	6.8	58	5.9	2	17
23...	1030	11.0	--	10.0	--	.2	87	5.9	18	145

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
MAR.										
10...	1.2	.018	.047	.25	.01	.03	.04	.28	.53	.57
10...	--	.001	.013	.08	.01	.04	.05	.12	.20	.25
10...	--	.002	.024	.06	.01	.04	.05	.20	.26	.31
APR.										
30...	8.8	.003	.012	.09	--	--	.01	.11	.20	.21
30...	--	.002	.011	.08	--	--	.01	.09	.17	.18
30...	--	.002	.009	.08	--	--	.01	.09	.17	.18
SEP.										
23...	--	.002	.013	.00	.00	.00	.00	.24	.24	.24
23...	--	.002	.014	.00	.00	.01	.01	.17	.17	.18
23...	--	.005	.043	.09	.01	.00	.01	.41	.50	.51

FRESHSPOT RIVER BASIN

01064145 Forest Lake near South Gray, Maine--Continued

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG) (MG/L)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
MAR.										
10...	2.5	72	4.9	3.9	1000	300	--	--	--	--
10...	1.1	7.8	3.3	2.1	100	30	--	--	--	--
10...	1.4	3.8	4.4	4.0	90	20	--	--	--	--
APR.										
30...	.90	--	--	--	--	--	--	--	--	--
30...	.80	--	--	--	--	--	--	--	--	--
30...	.80	--	--	--	--	--	--	--	--	--
SEP.										
23...	1.1	10	2.9	.3	140	20	5.0	.1	.3	5.8
23...	.80	10	3.0	.7	250	20	7.5	.1	.3	5.8
23...	2.3	11	6.4	4.5	7400	360	7.0	.1	.4	6.2

▼-TRIBUTARY A SAMPLE SITE LOCATION.--Lat 43°49'39", long 70°19'52".

▼-TRIBUTARY B SAMPLE SITE LOCATION.--Lat 43°49'17", long 70°20'07".

▼-TRIBUTARY C SAMPLE SITE LOCATION.--Lat 43°48'57", long 70°20'02".

▼-TRIBUTARY D SAMPLE SITE LOCATION.--Lat 43°49'20", long 70°20'06".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	MAR.							
	10...	1715	.3	--	21	.022	--	0
	SEP.							
	23...	0900	.3	13.5	55	.028	B150	130
Tributary B	MAR.							
	10...	1730	.3	--	21	.020	--	0
	SEP.							
	23...	0915	.3	13.9	43	.016	B170	43
Tributary C	MAR.							
	10...	1745	.3	--	30	.026	--	0
	SEP.							
	23...	0930	.3	13.0	32	.012	B88	40
Tributary D	SEP.							
	23...	0945	.3	13.8	80	.079	B150	B280

BIOLOGICAL ANALYSES

The following is a phytoplankton analysis of a depth integrated sample taken 30 April 1975 from the top 10 metres (33 feet) of the water column at the lake sample site.

Taxa	Cells per ml.	Colonies per ml.	Volume Counted (ml.)
Chlorophyta			
Chlamydomonas sp.	30	sol	.1
Caryophyta			
Asterionella formosa	170	30	.1
Cyclotella stelligera	80	sol	.1
Cyclotella bodanica	.2	sol	.5
Cyclotella sp.	1.2	.2	.5
Tabellaria fenestrata	7.2	1.2	.5
U.K. Pennate	10	sol	.1
Caryophyte statospore	100	sol	.1
Dinobryon divergens	10	sol	.1
Mallomonas akrokomos	10	sol	.1
Mallomonas caudata	10	sol	.1
Mallomonas elongata	.2	sol	.5
Kephyrion ovale	40	sol	.1
Ocaromonas sp.	9300	sol	.1
Pyrrophyta			
Cryptomonas sp.	10	sol	.1
Rhodomonas minuta v. nanoplanktica	20	sol	.1
Peridinium lineatum	.4	sol	.5

PRESUMPTSCOT RIVER BASIN

01064145 Forest Lake near South Gray, Maine--Continued

The following is a phytoplankton analysis of a depth integrated sample taken 17 June 1975 from the top 10 metres (33 feet) of the water column at the lake sample site.

Taxa	Cells per ml.	Colonies per ml.	Volume Counted (ml.)
Calorophyta			
Closterium sp.	.2	sol	.5
Calanymononas sp.	4	sol	.5
Elakatothrix gelatmosa	6	4	.5
Oocystis parva	4	2	.5
Scaevodera sp.	2	sol	.5
Sphaerocystis schroeteri	18	4	.5
Staurostrum cingulum	.2	sol	.5
Chrysophyta			
Asterionella formosa	310	56	.5
Cyclotella stelligera or glomerata	30	sol	.5
Melosira distans	1.2	.2	.5
Tabellaria fenestrata	600	134	.5
U.K. Pennate	2	sol	.5
Chromulina sp.	130	sol	.5
Bicoeca sp.	240	sol	.5
Caryosphaerella longispina	8	.6	.5
Kephyrion ovale	4	sol	.5
Mallomonas acaroides	66	sol	.5
Mallomonas sp.	6	sol	.5
Ochromonas sp.	14	sol	.5
Salpingoeca frequentissima	16	sol	.5
Euglenophyta			
Trachelomonas sp.	2	sol	.5
Pyrrophyta			
Cryptomonas sp.	24	sol	.5
Rhodomonas minuta v. nannoplanktica	14	sol	.5
U.K. cryptomonad	2	sol	.5
Peridinium limbatum	6	sol	.5

The following is a phytoplankton analysis of a depth integrated sample taken 21 July 1975 from the top 10 metres (33 feet) of the water column at the lake sample site.

Taxa	Cells per ml.	Colonies per ml.	Volume Counted (ml.)
Calorophyta			
Artarodesmus subulatus	.2	sol	.5
Carteria sp.	45	sol	.2
Crucigenia irregularis	260	20	.2
Gloeocystis vesiculosa	460	40	.2
Oocystis parva	20	5	.2
Staurostrum cingulum	.6	sol	.5
Staurostrum aracane	.8	sol	.5
Chrysophyta			
Asterionella formosa	10	5	.2
Cyclotella stelligera or glomerata	65	sol	.2
Tabellaria fenestrata	16	2.6	.5
U.K. Pennate	25	sol	.2
Chromulina sp.	60	sol	.2
Kephyrion ovale	5	sol	.2
Mallomonas caudata	50	sol	.2
Mallomonas sp.	5	sol	.2
Cyanophyta			
Aphanocapsa delicatissima	2400	30	.2
Laubachia flos-aquae	50	.2	.5
Dactylococcopsis acicularis	5	sol	.2
Croococcus limneticus	70	5	.2
Merismopedia punctata	120	10	.2
Merismopedia tenuissima	2500	65	.2
Oscillatoria planktonica	85	5	.2
Euglenophyta			
Euglena sp.	1.8	sol	.5
Trachelomonas volvocina	5	sol	.2
Pyrrophyta			
Cryptomonas sp.	5	sol	.2
Rhodomonas minuta v. nannoplanktica	10	sol	.2
U.K. cryptomonad	55	sol	.2
Peridinium limbatum	20	sol	.2
Calorobacteria			
Calorocarpum aggregatum v. minor - colonies	2000	180	.2
Calorocarpum aggregatum v. minor - Solitary or in pairs	1600	sol	.2

Notes: Extreme number of golden, semi-colonial bodies around 3-5µ in diameter. Identity unknown. Maybe an alga, bacteria, or spore of some other plant.

PRESUMPSCOT RIVER BASIN

01064145 Forest Lake near South Gray, Maine--Continued

The following is a phytoplankton analysis of a depth integrated sample taken 3 September 1975 from the top 10 metres (33 feet) of the water column at the lake site.

Taxa	Cells per ml.	Colonies per ml.	Volume Counted (ml.)
Chlorophyta			
Akistrodesmus falcatus	5	sol	.2
Artaredesmus incus	.8	sol	.5
Chlamydomonas sp.	10	sol	.2
Golenfinia radiata	10	sol	.2
Sphaerocystis Schroeteri	190	30	.2
Staurastrum arachne	.2	sol	.5
Chrysophyta			
Asterionella formosa	13	1.8	.5
Cyclotella stelligera or glomerata	15	sol	.2
Rhizosolenia eriensis	5	sol	.2
Tabellaria fenestrata	9.8	2.0	.5
U.K. Pennate	10	sol	.2
Dinobryon bavaricum	5	sol	.2
Kephyrion ovale	10	sol	.2
Mallomonas caudata	25	sol	.2
Mallomonas sp.	30	sol	.2
Ochromonas sp.	10	sol	.2
Cyanophyta			
Croococcus limneticus	10	5	.2
Merismopedia tenuissima	2500	25	.2
Oscillatoria planktonica	180	15	.2
Euglenophyta			
Euglena sp.	20	sol	.2
Trachelomonas sp.	5	sol	.2
U.K. Euglenophyte	95	sol	.2
Pyrrophyta			
Peridinium limbatum	.4	sol	.5
Chlorobacteria			
Chlorochromatium aggregatum v. minor - colonies	42000	3500	.2
Chlorochromatium aggregatum v. minor - solitary or paired	1400	sol	.2

Note: Extreme number of golden, semi-colonial bodies around 3-5u in diameter. Identity unknown. Maybe an alga, bacteria, or spore of some other plant.

The following is a phytoplankton analysis of a depth integrated sample taken 2 October 1975 from the top 10 metres (33 feet) of the water column at the lake sample site.

Taxa	Cells per ml.	Colonies per ml.	Volume Counted (ml.)
Chlorophyta			
Artaredesmus incus	.6	sol	.5
Cosmarium sp.	10	sol	.1
Chlamydomonas sp.	10	sol	.1
Sphaerocystis Schroeteri	90	20	.1
Staurastrum arachne	.2	sol	.5
Chrysophyta			
Asterionella formosa	340	45.2	.5
Cyclotella stelligera or glomerata	120	sol	.1
Rhizosolenia eriensis	150	sol	.1
Tabellaria fenestrata	265	46.4	.5
U.K. Pennate	60	sol	.1
Ochromonas sp.	120	sol	.1
Chrysophyte statospore	20	sol	.1
Ochromonas sp.	50	sol	.1
Pseudokephyrion sp. or Dinobryon sp.	10	sol	.1
Salpingoeca frequentissima	10	sol	.1
Cyanophyta			
Croococcus limneticus	20	10	.1
Merismopedia glauca	5.6	.2	.5
Merismopedia tenuissima	4100	70	.1
Euglenophyta			
Euglena sp.	20	sol	.1
Trachelomonas sp.	90	sol	.1
Trachelomonas sp.	.2	sol	.5
Pyrrophyta			
Cryptomonas sp.	110	sol	.1
Peridinium sp.	10	sol	.1
Chlorobacteria			
Chlorochromatium aggregatum v. minor - colonial	25000	1650	.1
Chlorochromatium aggregatum v. minor - solitary or in pairs	180	sol	.1

Note: Extreme number of golden, semi-colonial bodies around 3-5u in diameter. Identity unknown. Maybe an alga, bacteria, or spore of some other plant.

PRESUMPSCOT RIVER BASIN

01064145 Forest Lake near South Gray, Maine--Continued

The following is a phytoplankton analysis of a depth integrated sample taken 14 October 1975 from the top 10 metres (33 feet) of the water column at the lake site.

Taxa	Cells per ml.	Colonies per ml.	Volume Counted (ml.)
Chlorophyta			
Cosmarium subreniforme	.2	sol	5
Cosmarium sp.	10	sol	.1
Crucigenia quadrata	160	10	.1
Elakatothrix gelatinosa	20	10	.1
Sphaerocystis Schroeteri	520	60	.1
Staurastrum arachne	.2	sol	5
Chrysophyta			
Asterionella formosa	510	72.2	5
Cyclotella stelligera or glomerata	80	sol	.1
Rhizosolenia eriensis	180	sol	.1
Tabellaria fenestrata	570	127	5
UNK Pennate	30	sol	.1
Bicoeca lacustris	10	sol	.1
Chromulina sp.	550	sol	.1
Chrysophyte statospore	40	sol	.1
Chrysomacella longispina	8.0	.2	5
Dinobryon bavaricum	170	sol	.1
Kephyrion ovale	100	sol	.1
Mallomonas globosa	10	sol	.1
Ochromonas sp.	220	sol	.1
Salpingoeca frequentissima	80	sol	.1
Stipitococcus sp.	10	sol	.1
Cyanophyta			
Chroococcus limneticus	6.4	.8	5
Merismopedia elagens	8.8	.2	5
Merismopedia tenuissima	2300	70	.1
Microcystis aureginosa	84	.6	5
Oscillatoria planktonica	300	10	.1
Euglenophyta			
UNK Euglenophyte	.2	sol	5
Pyrrophyta			
Cryptomonas sp.	90	sol	.1
Rhodomonas sp.	10	sol	.1
Peridinium limbatum	10	sol	.1
Chlorobacteria			
Chlorochromatium aggregatum v. minor - solitary or in pairs	70	sol	.1

PRESUMPSCOT RIVER BASIN

01064145 Forest Lake near South Gray, Maine--Continued

The following is a benthic macroinvertebrate analysis of a bottom sample taken 10 March 1975 at the lake sample site.

Total Wet Weight (g/m²) = 12.73

Taxa	Number/m ²
COELENTERATA	
Hydrilidae	
<u>Hydra americana</u>	43
PLATYHELMINTHES	
Turbellaria	
Planariidae	
<u>Curtisia foremani</u>	200
NEMATODA	17
ANNELIDA	
Oligochaeta	
Lumbriculidae	
<u>Lumbriculus sp.</u>	140
Tubificidae	
<u>Limnodrilus spp.</u>	78
<u>Tubifex sp.</u>	87
Naididae	
<u>Nais spp.</u>	420
ARTHIROPODA	
Crustacea	
Amphipoda	
<u>Hyalloela azteca</u>	2400
Arachnoidea	
Hydracarina	17
Insecta	
Odonata	
<u>Epicordulia princeps</u>	9
Trichoptera	
Psychomiidae	
<u>Psychomiid Genus A (Ross)</u>	9
Hydroptilidae	
<u>Agraylea multipunctata</u>	26
<u>Oxyethira sp.</u>	9
Diptera	
Culicidae	
<u>Chaoborus punctipennis</u>	1200
Chironomidae	
<u>Procladius sp.</u>	17
<u>Ablabesmyia sp.</u>	95
<u>Tanytus sp.</u>	26
<u>Chironomus spp.</u>	410
<u>Cryptochironomus sp.</u>	9
<u>Phaenopsectra-Tribelos</u>	9
<u>Dicrotendipes sp.</u>	310
<u>Pseudochironomus sp.</u>	26
<u>Micropsectra sp.</u>	2000
<u>Tanytarsus sp.</u>	26
<u>Metriocnemus sp.</u>	69
<u>Psectrocladius sp.</u>	1000
<u>Brillia sp.</u>	400
Unknown 1	26
Unknown 2	9
MOLLUSCA	
Pelecypoda	
Sphaeriidae	
<u>Pisidium sp.</u>	170

TOTAL 9300

PISCATAQUA RIVER BASIN

01070000 Great East Lake near Milton Mills, New Hampshire

LOCATION.--Lat 43°34'10", long 70°58'25", York County, 6 mi (10 km) north of Milton Mills.

DRAINAGE AREA.--16.3 mi² (42.2 km²).

SURFACE AREA.--1,768 acres (7.16 km²).

SURFACE ELEVATION.--574 ft (175.0 m).

VOLUME.--60,000 acre-ft (74.0 hm³).

MAXIMUM DEPTH.--102 ft (31.1 m).

MEAN DEPTH.--34 ft (10.4 m).

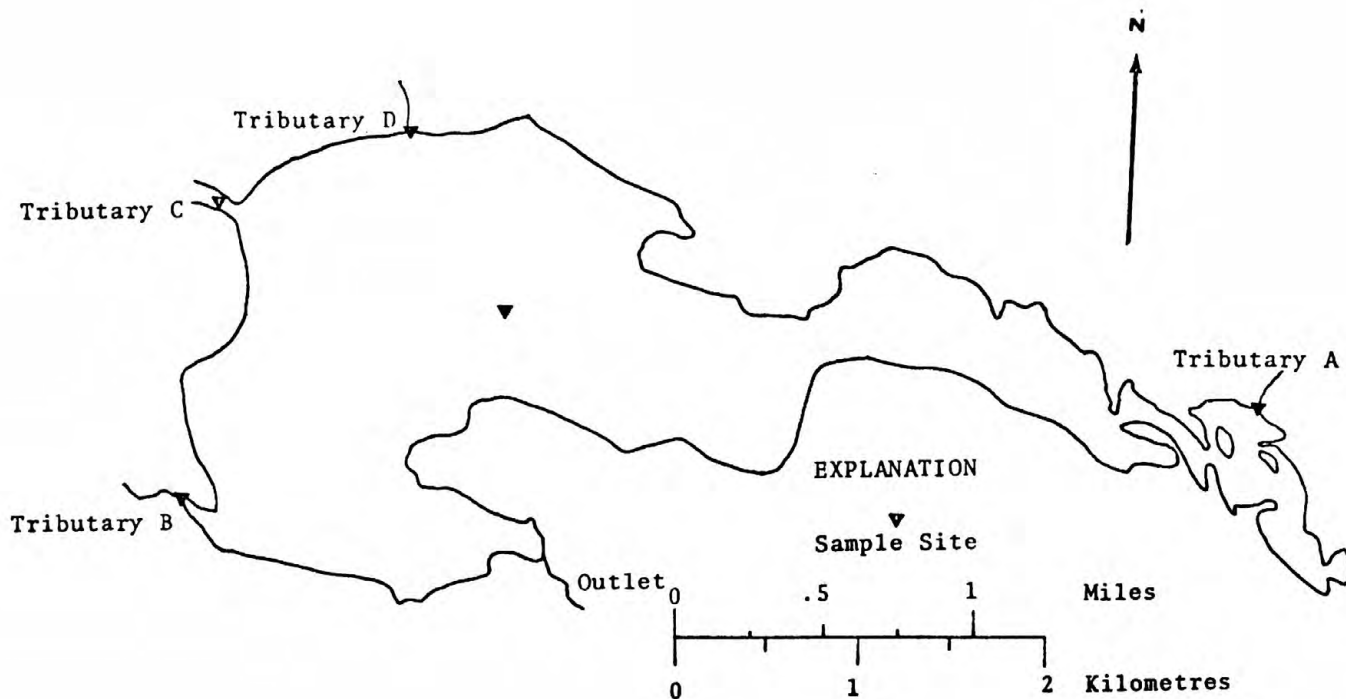
EPILIMNION DEPTH.--30 ft (9.1 m).

EPILIMNION VOLUME.--41,000 acre-ft (50.6 hm³).

LENGTH OF SHORELINE.--56,000 ft (17,000 m).

U.S.G.S. QUADRANGLES.--Newfield, Me. and Wolfboro, N.H. 15-minute.

STATE OF MAINE MIDAS NUMBER.--3922.



PISCATAQUA RIVER BASIN

01070000 Great East Lake near Milton Mills, New Hampshire

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1975 TO DECEMBER 1975

▼-SAMPLE SITE LOCATION.--Lat 43°35'00", long 70°58'27".

DATE	TIME	DEPTH (M)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
MAR.										
05...	1200	.6	-1.0	1.9	7.7	13.5	66	6.8	5	0
05...	1230	15.2	--	2.2	--	12.4	73	6.8	5	--
05...	1300	29.0	--	3.0	--	6.2	44	6.1	9	40
SEP.										
22...	1100	.6	20.0	17.0	10.9	9.7	36	6.9	7	3
22...	1115	9.0	--	16.5	--	9.5	44	6.8	7	3
22...	1130	16.0	--	7.3	--	7.5	44	6.2	7	8
22...	1145	30.0	--	6.2	--	4.5	54	6.3	7	8

DATE	CHLORO- PHYLL A (UG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
MAR.										
05...	1.5	.001	.004	.01	.00	.02	.02	.11	.12	.14
05...	--	.000	.005	.04	.00	.02	.02	.00	.04	.06
05...	--	.002	.007	.10	.00	.05	.05	.00	.10	.15
SEP.										
22...	--	.000	.009	.00	.00	.00	.00	.12	.12	.12
22...	--	.001	.011	.00	.00	.00	.00	.06	.06	.06
22...	--	.001	.012	.00	.00	.01	.01	.04	.04	.05
22...	--	.001	.012	.00	.00	.06	.06	.15	.15	.21

DATE	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG) (MG/L)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL SODIUM (NA) (MG/L)
MAR.										
05...	.62	5.8	4.0	2.3	30	60	--	--	--	--
05...	.27	5.4	3.9	2.6	30	70	--	--	--	--
05...	.66	4.9	3.3	5.1	140	470	--	--	--	--
SEP.										
22...	.53	3.9	3.8	1.7	70	10	9.0	.2	.3	2.9
22...	.27	3.6	3.2	1.6	60	20	12	.1	.3	3.0
22...	.22	4.1	3.5	2.1	80	40	5.5	.1	.3	2.9
22...	.93	3.0	3.1	3.3	110	200	3.9	.1	.3	3.0

PISCATAQUA RIVER BASIN

01070000 Great East Lake near Milton Mills, New Hampshire

▼-TRIBUTARY A SAMPLE SITE LOCATION.--Lat 43°34'48", long 70°55'33".

▼-TRIBUTARY B SAMPLE SITE LOCATION.--Lat 43°34'25", long 70°59'54".

▼-TRIBUTARY C SAMPLE SITE LOCATION.--Lat 43°35'18", long 70°59'46".

▼-TRIBUTARY D SAMPLE SITE LOCATION.--Lat 43°35'32", long 70°59'03".

	DATE	TIME	DEPTH (M)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MIOS)	TOTAL PHOS- PHORUS (P) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
Tributary A	MAR. 05...	1315	.3	2.0	26	.064	0	0
	SEP. 22...	1200	.3	19.0	46	.060	B150	0
Tributary B	MAR. 05...	1330	.3	.0	72	.007	0	0
	SEP. 22...	1215	.3	17.5	45	.014	B3	0
Tributary C	MAR. 05...	1345	.3	.0	52	.004	0	0
	SEP. 22...	1230	.3	18.0	42	.012	B3	0
Tributary D	MAR. 05...	1400	.3	.0	36	.004	0	0
	SEP. 22...	1245	.3	16.0	22	.017	B6	B6

BIOLOGICAL ANALYSES

The following is a benthic macroinvertebrate analysis of a bottom sample taken 5 March 1975 at the lake sample site.

Total Wet Weight (g/m²) = 15.33

Taxa	Number/m
ANNELIDA	
Oligochaeta	
Tubificidae	
Limaodrilus sp.	52
Tubifex sp.	52
ARTHROPODA	
Crustacea	
Ostracoda	17
Arachnoidea	
Hydracarina	9
Insecta	
Diptera	
Culicidae	
Chaoborus punctipennis	5700
Chironomidae	
Procladius sp.	400
Endochironomus sp.	190
Tanytarsus sp.	280
Micropsectra sp.	17
MOLLUSCA	
Pelecypoda	
Sphaeriidae	
Pisidium sp.	9

TOTAL 6700



31.10