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SUMMARY OF WATER QUALITY DATA COLLECTED FROM 1973 THROUGH 1976 IN SCHOHARIE RESERVOIR, ITS TRIBUTARIES, BLENHEIM-GILBOA RESERVOIRS, SCHOHARIE CREEK, AND ESOPUS CREEK

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INTRODUCTION

Twenty-five physical and chemical parameters important to raw water supply and aquatic life were measured by Ichthyological Associates, Inc. (IA), from samples collected at seven stations on Schoharie Reservoir, six stations on Esopus Creek, four stations on tributaries of Schoharie Reservoir, three stations on Schoharie Creek, three stations on Lower B-G, and two stations on Upper B-G.

Analysis of water samples was first begun by IA in April 1973 at one station each on Lower and Upper B-G; subsequently, stations were added and sampling frequency was increased to more precisely establish present water quality conditions (Table 1). Water quality data routinely collected by IA from 1 January through 30 September 1976 and additional water quality data collected by the New York City Board of Water Supply (NYCBWS) and the United States Geological Survey (USGS) are presented in this report. Results of all water quality analyses conducted by IA prior to January 1976 are contained in Culp 1974a, 1974b, 1975, 1976a, and 1976b and Culp et al. 1976 and 1977.

MATERIALS AND METHODS

Location and description of stations 1 through 30 are contained in Culp 1975 and 1976a and Culp et al. 1976 and 1977. Stations 31 through 36 are described and shown in Table 2 and Fig. 1.

Methods of collection and analysis, except for collection of air temperature and water temperature at stations 19, 20, 34, and 36 and

turbidity and water temperature at stations 32, 33, and 34 and analysis of alkalinity, total hardness, calcium hardness, air temperature, and water temperature at all stations, are presented in Culp 1976a and 1976b and Culp et al. 1976 and 1977. Since 11 August 1976 at station 19, 15 June at stations 20 and 35, and 25 June at station 36, air temperature and water temperature have been collected continuously using spring wound seven-day recording thermometers (Partlow Corporation). Turbidity samples and water temperature data were collected at stations 32 and 33 one meter below the surface by a 1.5-kilogram, 46-centimeter by 4-centimeter end-capped galvanized metal pipe and at station 34 by a 1.2-liter Kemmerer bottle. Since 2 June 1976 analysis of alkalinity, total hardness, and calcium hardness has been performed by EPA (1974) approved titrations. Since 24 May 1976 field thermometers for air temperature and water temperature have been calibrated against a National Bureau of Standards certified thermometer (Fisher 75A-446 NBS 76).

RESULTS AND DISCUSSION

I. Present Water Quality

Results of water quality analysis from 6 January through 30 September 1976 at seven stations on Schoharie Reservoir, six stations on Esopus Creek, four stations on tributaries of Schoharie Reservoir, three stations on Schoharie Creek, three stations on Lower B-G, and two stations on Upper B-G are presented in Tables 3 through 32. Mean concentrations of all parameters for which standards have been set, except for iron (Fe) at stations 23, 24, and 25, fall within "limits that support a good fish fauna" and, except for iron (Fe) at stations 23, 24, 25, and 4 and manganese (Mn) at stations 30,

20, 23, 24, 25, and 4, fall within "permissible criteria" for public water supplies (McKee and Wolf 1971 and FWPCA 1972) (Tables 33 and 34).

II. Factors Affecting Present Water Quality

Schoharie Reservoir

Schoharie Reservoir at full pool (elevation 1130 feet) has a surface area of 1145 acres and is 5.8 miles long and 0.7 miles in maximum width. The 314-square-mile drainage area is located on the northern slopes of the Catskill Mountains in the counties of Schoharie, Delaware, and Greene. The original storage capacity was 20.8 billion gallons (63,821 acre-feet), of which 18.8 billion gallons (57,840 acre-feet) were available for New York City water supply.

Flushing of Schoharie Reservoir is very rapid (55 days at elevation 1130 feet and average inflows) and generally occurs through the Shandaken Tunnel from late spring through early fall and primarily over Gilboa Dam during the remainder of the year (Tables 35 and 36).

Schoharie Reservoir stratifies thermally (temperature) and chemically (dissolved oxygen) (Tables 10 and 11). In the hypolimnion, water temperature is low and dissolved oxygen concentration high. As the elevation decreases, epilimnic volume remains approximately the same and the hypolimnic volume decreases. Since maximum depth when full (1130 feet) is 150 feet, there would still be a depth of 70 feet and a substantial volume of hypolimnic water would remain at the northern end if maximum drawdown were to occur (1050 feet). Except in 1964 when Schoharie Reservoir was drained to remove silt from the channel leading to the Shandaken Tunnel intake chamber, minimum elevation rarely drops below 1060 feet (Table 37).

When Schoharie Reservoir is stratified, oxygen levels decrease with depth until the thermocline, then increase. Ruttner (1968) defines this type of oxygen stratification as oxygen "minima" in the thermocline (heterograde oxygen curve) caused by accumulation of oxidizable materials (respiring and decomposing plankton) in and above the thermocline and the presence of the thermocline below the depth of effective photosynthesis. The greater density of the cold hypolimnic waters acts as a thermal barrier and restricts oxidizable materials, which are able to settle through the warmer and less dense epilimnion, from entering.

Extreme fluctuations in turbidity are common in Schoharie Reservoir (Figs. 2 and 3). Turbidity is generally greatest at the southern end of the reservoir (station 26), where Schoharie Creek and the Bear Kill enter (Tables 3 and 4). As turbidity enters it moves northward in discrete density currents depending on water temperatures in Schoharie Reservoir. When Schoharie Reservoir is stratified and large volumes of turbid water enter, suspended particles settle to the thermocline and concentrate above the colder, denser hypolimnion. Consequently, turbidity will increase with depth until the thermocline, then decrease. During a 24-hour period beginning at 9 a.m. on 9 August 1976, tropical storm Belle dropped 5.69 inches of rain on the upper watershed of Schoharie Reservoir at Windham, New York, with subsequent large volumes of turbid water entering Schoharie Reservoir. Temperature and turbidity profiles recorded on 21 August 1976 at stations 27 (southern end of Schoharie Reservoir in front of the Shandaken Tunnel intake structure) and 30 (northern end of Schoharie Reservoir) depict the presence of turbidity in discrete density dependent layers (Table 38).

Sources of turbidity that enter Schoharie Reservoir were determined by Moore and Ferris (1951). They calculated that 94.2% of the sediment reaching the reservoir was derived from sheet erosion, 3.7% from streambank erosion, 1.5% from roadside erosion, and 0.6% from shorebank erosion. Severe erosion was occurring on about 0.5% of the watershed area and moderate erosion on about 46% of the area. Nearly all of the severe erosion was occurring on soils derived from lacustrine silts and clays lying on moderate to steep slopes immediately adjacent to the reservoir.

During 1926 through 1951 Moore and Ferris estimated that 1119 acre-feet of sediment had accumulated in Schoharie Reservoir, 112 acre-feet had passed out through the Shandaken Tunnel, and 56 acre-feet had been carried out of the reservoir over Gilboa Dam. The greatest sediment accumulation occurred behind a 1000-foot long dam (maximum height 12 feet) located just north of the Shandaken Tunnel intake structure, which was built to direct water from Schoharie Creek into the Shandaken Tunnel before Gilboa Dam was completed. The small dam was breached when it was no longer needed, but the opening filled with sediments and an eight-foot bar of sediments accumulated behind the dam a short distance out from the Shandaken Tunnel entrance.

Esopus Creek

From its headwaters to Ashokan Reservoir, Esopus Creek drains 257 square miles in the south central portion of the Catskill Mountains in the counties of Greene and Ulster. Present water quality in 11.9 miles of Esopus Creek from the portal to Ashokan Reservoir varies with flow through the Shandaken Tunnel. Mean monthly flow data were recorded during the last 12 years from the portal (NYCBWS) and in Esopus Creek (USGS) one mile above Ashokan Reservoir (Coldbrook) and just above the portal (Shandaken)

(Tables 39 through 41 and Fig. 4). During August 1966 water released from Schoharie Reservoir through the Shandaken Tunnel contributed 97.4% of the flow in Esopus Creek at Allaben, New York (Table 42). Consequently, water quality in Esopus Creek below the portal is similar to that in Schoharie Reservoir when large volumes of water are released through the Shandaken Tunnel. As the flow from tributaries entering below the portal increases, the effect of portal releases on water quality in Esopus Creek is rapidly diminished. During February 1968 tributaries entering Esopus Creek between the portal and Ashokan Reservoir contributed 77.7% of the flow at Coldbrook (Tables 43 and 44).

The seasonal drawdown of Schoharie Reservoir for water supply and location of the Shandaken Tunnel intake at the southern end of Schoharie Reservoir (between elevation 1050 feet and 1065 feet) affect the quality of water entering Esopus Creek. Turbidity is generally increased as water enters via the Shandaken Tunnel (Fig. 5). Suspended particles (turbidity) that enter Schoharie Reservoir via Schoharie Creek and the Bear Kill during periods of heavy runoff have very little area in which to settle out before entering the Shandaken Tunnel. As the elevation of Schoharie Reservoir drops below 1070 feet, sediments near the Shandaken Tunnel intake are drawn into the Shandaken Tunnel (Ed Proper, personal communication). Even during periods when Schoharie Reservoir is at or near maximum elevation, large amounts of turbid water entering Schoharie Reservoir can cause highly turbid water to be discharged into Esopus Creek, even though surface water in Schoharie Reservoir contains very little turbidity (Table 38).

The temperature of water entering the Shandaken Tunnel varies with the elevation of Schoharie Reservoir. During the spring and early summer,

water entering the Shandaken Tunnel is drawn off the cold bottom waters of Schoharie Reservoir (hypolimnion); as the elevation drops in the late summer and early fall, the hypolimnic layer in front of the intake disappears, and water entering the Shandaken Tunnel is drawn off the lower, warmer layers of the epilimnion (Fig. 6).

The 18.1-mile Shandaken Tunnel, buried between 350 and 1000 feet below the surface, affects water quality as it flows from Schoharie Reservoir to Esopus Creek. A maximum of 650 million gallons per day (MGD) (650 MGD = 1005 cfs) can pass through the tunnel and regardless of Schoharie Reservoir elevation or volume discharged, water takes approximately 3 hours and 40 minutes to pass through the tunnel (Jerry Mestyanek, personal communication).

Water is generally cooled as it passes through the tunnel; the magnitude is inversely related to flow through the tunnel (Table 22 and Fig. 7). Turbidity is also generally reduced (Table 17 and Fig. 8).

Tributaries of Schoharie Reservoir

The Bear Kill (station 24) and Manor Kill (station 25) are a major source of nutrients to Schoharie Reservoir (Tables 32 and 33). Both flow through agricultural land; in addition, the Bear Kill receives discharge from the Grand Gorge Sewage Treatment Plant. Turbidity in all tributaries of Schoharie Reservoir increases during periods of heavy runoff, with the Batavia Kill (station 23) showing the greatest increase (Table 25).

Schoharie Creek

Water quality in Schoharie Creek at the Prattsville iron bridge (station 1) differs from that at the Gilboa iron bridge (station 2) and the USGS gauging station approximately 3/4 mile below Lower B-G (station 4)

because flow is continuous throughout the year at station 1 and decreases drastically at stations 2 and 4 when flow over Gilboa Dam ceases. Consequently, stagnation and evaporation occur at stations 2 and 4, resulting in increased ionic concentrations.

Lower and Upper B-G

Because of pumped storage operation the surface area of Lower B-G varies between 220 acres at minimum elevation 859.0 feet and 430 acres at maximum elevation 900.0 feet, and Upper B-G between 264 acres at minimum elevation 1966.0 feet and 396 acres at maximum elevation 2003.0 feet. The drainage area of the B-G reservoirs is 354 square miles when water is flowing over Gilboa Dam and the Shandaken Tunnel is closed. During this time the flushing rate of the B-G reservoirs is extremely rapid. When water ceases to flow over Gilboa Dam, the drainage area is reduced to 40 square miles and little, if any, flushing occurs. Maximum storage capacity of Lower B-G is 15,500 acre-feet at elevation 900.0 feet, and this is reduced to 3000 acre-feet at elevation 859.0 feet. Storage capacity in Upper B-G varies between 18,400 acre-feet at elevation 2003.0 feet and 5900 acre-feet at elevation 1966.0 feet. Average daily and weekly fluctuations in both Lower and Upper B-G have been recorded since June 1973 (Figs. 9 and 10). Weekly reservoir fluctuations are greatest during the period when indigenous fishes reproduce and maximum growth occurs.

Turbidity in Lower B-G increased with the initiation of pumped storage operations in June 1973 and has generally declined since, even though use of the B-G pumped storage facility has increased (Figs. 10 and 11).

Pumped storage operations tend to increase turbidity, especially in the area most affected by pumped storage operations (station 14 in Lower

B-G), during periods of little surface runoff when turbidity is generally lowest and prolong turbidity during periods of heavy runoff when turbidity is generally highest (Table 36 and Figs. 12 through 15).

Pumped storage operations prevented thermal and chemical stratification in both Lower and Upper B-G during 1976 (Tables 10 and 11). During 1975, when use of the B-G project was less, partial thermal and chemical stratification occurred for a short time (mid-July through early August) in deep areas furthest away from pumped storage operations. During 1976 oxygen levels throughout Lower B-G tended to be at or near saturation and water temperatures at or near those that would normally occur at the surface (Table 11 and Figs. 16 and 17).

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Table 1. Dates sampling initiated at 25 water quality stations sampled from May 1973 through September 1976.

Station	Location	Date Sampling Initiated
26	Schoharie Reservoir	24 Jul 1975
27	Schoharie Reservoir	24 Jul 1975
32	Schoharie Reservoir	10 Mar 1976
33	Schoharie Reservoir	12 Apr 1976
28	Schoharie Reservoir	24 Jul 1975
29	Schoharie Reservoir	24 Jul 1975
30	Schoharie Reservoir	14 Aug 1975
31	Esopus Creek	6 Jan 1976
19	Esopus Creek	19 Jun 1975
36	Esopus Creek	25 Jun 1976
20	Esopus Creek	19 Jun 1975
35	Esopus Creek	15 Jun 1976
21	Esopus Creek	19 Jun 1975
22	Tributary of Schoharie Reservoir	19 Jun 1975
23	Tributary of Schoharie Reservoir	19 Jun 1975
24	Tributary of Schoharie Reservoir	19 Jun 1975
25	Tributary of Schoharie Reservoir	19 Jun 1975
1	Schoharie Creek	4 Apr 1974
2	Schoharie Creek	4 Apr 1974
4	Schoharie Creek	4 Apr 1974
13	Lower B-G	3 May 1973
14	Lower B-G	15 Apr 1974
34	Lower B-G	10 Mar 1976
16	Upper B-G	16 Aug 1973
17	Upper B-G	15 Apr 1974

Table 2. Site descriptions of water quality stations on Esopus Creek, Schoharie Reservoir, and Lower B-G.

Station		Description
31	Esopus Creek (run)	Located 7.6 miles downstream from the Shandaken Tunnel outlet at Mt. Pleasant, New York. The south bank is steep with boulders. The north bank is flat and has hardwoods and shrubs. The bottom is boulders and gravel. Elevation is 700 feet.
35	Esopus Creek (run)	From 15 June through 3 August 1976, located 5 feet upstream from the Shandaken Tunnel outlet (elevation 980 feet) and from 4 August through 30 September 1976, located 1.0 miles upstream from the Shandaken Tunnel outlet (elevation 1020 feet) (Partlow seven-day water temperature recorder). The south bank is gradual with mature deciduous trees. The north bank is steep with boulders. The bottom is gravel.
36	Esopus Creek (run)	Located 118 feet downstream from the Shandaken Tunnel outlet (Partlow seven-day water temperature recorder). The south bank is gradual with mature deciduous trees. The north bank is steep with boulders. The bottom is boulders and gravel. Elevation is 980 feet.
32	Schoharie Reservoir	Shandaken Tunnel intake chamber
33	Schoharie Reservoir	Surface site off middle of deck at Shandaken Tunnel intake building
34	Lower B-G	Surface site off middle of deck at B-G pump-generator house

Table 3. Summary of turbidity data (nephelometer turbidity units) taken from 6 January through 28 September 1976 from Schoharie Reservoir and Lower and Upper B-G.

Date	Stations								
	Schoharie Reservoir					Lower B-G		Upper B-G	
	26	27	28	29	30	13	14	16	17
6 Jan	ice*	ice	ice	ice	ice	ice	ice	ice	ice
19 Jan	ice	ice	ice	ice	ice	ice	ice	ice	ice
$\bar{x}$	-	-	-	-	-	-	-	-	-
10 Feb	ice	ice	ice	ice	ice	ice	ice	ice	ice
17 Feb	ice	ice	ice	ice	ice	ice	ice	ice	ice
$\bar{x}$	-	-	-	-	-	-	-	-	-
10 Mar	ice	ice	ice	ice	ice	ice	16	ice	ice
26 Mar	6.0	10	11	FGD**	11	17	17	18	17
30 Mar	6.0	9.1	7.9	FGD	9.0	12	13	20	16
$\bar{x}$	6.0	9.6	9.5	-	10	15	15	19	17
6 Apr	4.3	11	11	FGD	9.4	13	14	13	14
13 Apr	2.8	4.8	8.2	FGD	7.6	12	13	12	12
20 Apr	5.0	4.9	5.5	FGD	6.8	10	10	8.8	8.9
27 Apr	6.6	4.4	5.7	FGD	5.7	14	12	13	12
$\bar{x}$	4.7	6.3	7.6	-	7.4	12	12	12	12
4 May	6.8	5.3	5.2	FGD	3.7	5.8	8.5	6.6	5.4
12 May	11	2.5	2.7	FGD	2.7	5.7	5.0	4.1	4.5
18 May	7.9	4.5	4.3	FGD	3.6	3.8	4.5	4.8	3.6
25 May	4.1	3.7	3.6	FGD	3.2	3.7	4.3	3.4	4.1
$\bar{x}$	7.5	4.0	4.0	-	3.3	4.8	5.6	4.7	4.4

* ice = no samples taken because of ice cover
** FGD = station 29 not sampled because of flow over Gilboa Dam
*** LWL = samples not taken because of low water levels

Table 3 - (Continued).

Date	Stations								
	Schoharie Reservoir					Lower B-G		Upper B-G	
	26	27	28	29	30	13	14	16	17
2 Jun	4.7	3.2	3.3	FGD	2.3	2.6	3.4	2.3	2.3
8 Jun	4.2	2.8	1.7	1.8	1.4	2.3	3.1	2.3	2.7
15 Jun	2.8	1.7	1.6	1.5	1.3	2.7	3.7	2.6	2.6
22 Jun	3.2	1.5	2.3	2.3	2.1	3.4	3.9	3.4	3.4
29 Jun	2.7	1.3	1.2	1.3	1.6	2.9	3.7	3.0	3.1
$\bar{x}$	3.5	2.1	2.0	1.7	1.7	2.8	3.6	2.7	2.8
7 Jul	4.6	1.4	1.2	FGD	2.3	2.9	3.7	3.1	3.3
13 Jul	2.4	0.78	0.70	FGD	0.88	2.4	3.5	2.3	2.8
20 Jul	6.2	1.0	1.1	1.2	0.86	1.7	2.3	2.4	2.5
27 Jul	2.5	1.3	1.1	1.2	1.2	1.9	3.2	2.6	2.5
$\bar{x}$	3.9	1.1	1.0	1.2	1.3	2.2	3.2	2.6	2.8
3 Aug	2.4	0.78	0.76	1.2	1.2	2.1	3.2	2.3	2.5
10 Aug	432	2.2	1.8	3.1	2.0	2.5	3.2	2.8	3.2
17 Aug	4.4	3.5	3.3	6.8	7.3	1.8	2.6	2.0	2.3
24 Aug	3.7	4.2	2.7	2.4	3.7	1.8	2.2	3.0	2.2
30 Aug	4.6	3.6	4.3	4.5	4.4	3.2	3.5	2.8	3.2
$\bar{x}$	89	2.9	2.6	3.6	3.7	2.3	2.9	2.6	2.7
7 Sep	5.0	6.3	5.9	8.5	7.3	3.7	3.3	2.7	2.9
14 Sep	4.8	4.8	4.8	5.7	4.6	3.3	3.5	3.1	2.9
22 Sep	6.7	7.5	4.8	LWL***	4.6	4.7	3.2	4.5	3.6
28 Sep	5.8	5.3	6.3	LWL	8.7	5.1	4.5	4.3	4.6
$\bar{x}$	5.6	6.0	5.5	7.1	6.3	4.2	3.6	3.7	3.5
Grand $\bar{x}$	20	4.1	4.1	3.2	4.3	5.3	6.1	5.5	5.4
Minimum	2.4	0.78	0.70	1.2	0.86	1.7	2.2	2.0	2.2
Maximum	432	11	11	8.5	11	17	17	20	17
Standard Deviation	80.7	2.76	2.89	2.43	2.98	4.36	4.56	4.99	4.48

Table 4. Summary of Secchi disc transparency (inches) taken from 6 January through 28 September 1976 from Schoharie Reservoir and Lower and Upper B-G.

Date	Stations								
	Schoharie Reservoir					Lower B-G		Upper B-G	
	26	27	28	29	30	13	14	16	17
6 Jan	ice*	ice	ice	ice	ice	ice	ice	ice	ice
19 Jan	ice	ice	ice	ice	ice	ice	ice	ice	ice
$\bar{x}$	-	-	-	-	-	-	-	-	-
10 Feb	ice	ice	ice	ice	ice	ice	ice	ice	ice
17 Feb	ice	ice	ice	ice	ice	ice	ice	ice	ice
$\bar{x}$	-	-	-	-	-	-	-	-	-
10 Mar	ice	ice	ice	ice	ice	ice	20	ice	ice
26 Mar	45	29	30	FGD**	37	19	19	7	16
30 Mar	56	31	37	FGD	31	24	28	23	22
$\bar{x}$	51	30	34	-	34	22	22	15	19
6 Apr	67	29	25	FGD	31	22	21	20	24
13 Apr	98	55	41	FGD	34	26	27	-#	-
20 Apr	54	53	39	FGD	38	29	33	34	33
27 Apr	63	62	45	FGD	60	24	30	35	36
$\bar{x}$	71	50	38	-	41	25	28	30	31
4 May	28	43	60	FGD	80	52	39	48	60
12 May	12	91	100	FGD	89	58	50	77	72
18 May	46	101	98	FGD	108	72	62	64	72
25 May	65	60	72	FGD	70	55	52	65	59
$\bar{x}$	38	74	83	-	87	59	51	64	66

* ice = no samples taken because of ice cover
** FGD = station 29 not sampled because of flow over Gilboa Dam
\# data not taken because of inclement weather
LWL = samples not taken because of low water levels

Table 4 - (Continued).

Date	Stations								
	Schoharie Reservoir					Lower B-G		Upper B-G	
	26	27	28	29	30	13	14	16	17
2 Jun	37	91	120	FGD	148	72	57	82	84
8 Jun	61	160	180	156	216	86	62	97	77
15 Jun	87	115	123	156	150	78	60	66	61
22 Jun	75	154	159	113	147	81	64	76	65
29 Jun	56	168	256	248	252	69	62	68	56
$\bar{x}$	63	138	168	168	183	77	61	78	69
7 Jul	48	154	168	FGD	144	66	60	72	60
13 Jul	73	216	290	FGD	241	118	64	88	85
20 Jul	44	156	240	228	204	104	73	60	62
27 Jul	104	176	213	194	208	84	65	60	69
$\bar{x}$	67	176	228	211	199	93	66	70	69
3 Aug	53	270	288	192	180	108	77	72	72
10 Aug	1	97	126	76	128	94	64	81	81
17 Aug	72	78	72	40	48	89	57	76	62
24 Aug	95	70	144	146	138	80	77	95	105
30 Aug	48	100	65	84	96	84	72	92	130
$\bar{x}$	54	123	139	108	118	91	69	83	90
6 Sep	66	42	42	36	35	59	60	71	72
14 Sep	75	69	79	50	65	60	63	74	62
22 Sep	48	48	82	LWL##	73	52	61	74	57
28 Sep	67	67	71	LWL	75	54	60	72	72
$\bar{x}$	64	57	69	43	62	56	61	73	66
Grand $\bar{x}$	59	99	117	132	112	65	53	65	64
Minimum	1	29	25	36	31	19	19	7	16
Maximum	104	270	290	248	252	118	77	97	130
Standard Deviation	23.4	61.0	79.9	71.7	68.6	27.4	17.7	23.1	24.3

Table 5. Summary of alkalinity data (mg/l) taken from 6 January through 14 September 1976 from Schoharie Reservoir and Lower and Upper B-G.

Stations		Dates									Grand			
		6 Jan	10 Feb	10 Mar	6 Apr	12 May	2 Jun	13 Jul	10 Aug	14 Sep	$\bar{x}$	Min.	Max.	S.D.
26	Surface	ice*	ice	ice	-**	10	16.1	18.2	8.3	22.9	15.1	8.3	22.9	5.99
	Mid-depth	-	-	-	-	10	13.7	21.1	8.8	24.2	15.6	8.8	24.2	6.81
	Bottom	-	-	-	-	10	13.7	14.4	10.7	23.4	14.4	10	23.4	5.35
27	Surface	ice	ice	ice	-	10	17.6	19.2	21.5	20.0	17.7	10	21.5	4.51
	Mid-depth	-	-	-	10	10	11.2	17.5	14.4	19.3	13.7	10	19.3	4.00
	Bottom	-	-	-	-	10	14.2	18.2	11.5	16.4	14.1	10	18.2	3.38
28	Surface	ice	ice	ice	-	10	14.2	14.4	21.0	19.5	15.8	10	21.0	4.44
	Mid-depth	-	-	-	-	10	13.2	14.9	21.2	19.5	15.8	10	21.2	4.58
	Bottom	-	-	-	-	10	12.7	17.5	15.6	15.9	14.3	10	17.5	2.98
29	Surface	ice	ice	ice	FGD#	FGD	FGD	FGD	21.0	22.0	21.5	21.0	22.0	0.71
	Mid-depth	-	-	-	-	-	-	-	21.2	19.5	20.4	19.5	21.2	1.20
	Bottom	-	-	-	-	-	-	-	22.7	14.9	18.8	14.9	22.7	5.52
30	Surface	ice	ice	ice	-	10	13.7	17.5	20.2	19.5	16.2	10	20.2	4.28
	Mid-depth	-	-	-	10	10	14.6	13.0	15.9	12.7	12.7	10	15.9	2.39
	Bottom	-	-	-	-	10	13.2	14.2	14.9	15.9	13.6	10	15.9	2.26
13	Surface	ice	ice	ice	-	15	16.6	19.9	26.6	48.8	25.4	15	48.8	13.83
	Mid-depth	-	-	-	-	20	17.6	24.0	27.3	33.9	24.6	17.6	33.9	6.41
	Bottom	-	-	-	-	20	17.1	20.6	27.3	29.3	22.9	17.1	29.3	5.19

* ice = no samples taken because of ice cover
** 6 April data from complete water quality analysis only
\# FGD = station 29 not sampled because of flow over Gilboa Dam

Table 5 - (Continued).

Stations		Dates									Grand			
		6 Jan	10 Feb	10 Mar	6 Apr	12 May	2 Jun	13 Jul	10 Aug	14 Sep	$\bar{x}$	Min.	Max.	S.D.
14	Surface	ice	ice	15	-	20	22.0	22.8	27.8	32.2	23.3	15	32.2	6.02
	Mid-depth	-	-	15	15	20	18.1	23.5	26.6	33.7	21.7	15	33.7	6.79
	Bottom	-	-	15	-	20	16.8	24.2	26.4	31.2	22.3	15	31.2	6.14
16	Surface	ice	ice	ice	-	20	17.6	22.3	26.8	25.6	22.5	17.6	26.8	3.82
	Mid-depth	-	-	-	15	20	17.6	24.7	26.4	31.2	22.5	15	31.2	6.04
	Bottom	-	-	-	-	20	18.5	17.8	26.4	31.0	22.7	17.8	31.0	5.73
17	Surface	ice	ice	ice	-	20	17.6	24.5	27.3	29.8	23.8	17.6	29.8	5.04
	Mid-depth	-	-	-	-	20	17.6	23.0	27.1	31.2	23.8	17.6	31.2	5.46
	Bottom	-	-	-	-	20	16.6	22.8	26.6	31.0	23.4	16.6	31.0	5.62

Table 6. Summary of total hardness data (mg/1) taken from 6 January through 14 September 1976 from Schoharie Reservoir and Lower and Upper B-G.

Stations		Dates									Grand			
		6 Jan	10 Feb	10 Mar	6 Apr	12 May	2 Jun	13 Jul	10 Aug	14 Sep	$\bar{x}$	Min.	Max.	S.D.
26	Surface	ice*	ice	ice	-**	15	35.7	22.7	34.9	44.6	30.6	15	44.6	11.69
	Mid-depth	-	-	-	-	15	40.0	21.3	19.4	41.1	27.4	15	41.1	12.26
	Bottom	-	-	-	-	15	22.5	21.0	18.2	39.2	23.2	15	39.2	9.40
27	Surface	ice	ice	ice	-	15	26.0	23.7	22.9	40.7	25.7	15	40.7	9.37
	Mid-depth	-	-	-	15	15	26.4	20.6	20.6	37.3	22.5	15	37.3	8.41
	Bottom	-	-	-	-	15	32.2	20.6	15.1	33.8	23.3	15	33.8	9.12
28	Surface	ice	ice	ice	-	15	25.6	22.9	23.9	34.1	24.3	15	34.1	6.83
	Mid-depth	-	-	-	-	15	25.6	19.4	24.4	35.3	23.9	15	35.3	7.62
	Bottom	-	-	-	-	15	33.4	20.2	21.7	34.7	25.0	15	34.7	8.64
29	Surface	ice	ice	ice	FGD#	FGD	FGD	FGD	25.2	41.9	33.6	25.2	41.9	11.81
	Mid-depth	-	-	-	-	-	-	-	24.2	37.3	30.8	24.2	37.3	9.26
	Bottom	-	-	-	-	-	-	-	28.3	37.3	32.8	28.3	37.3	6.36
30	Surface	ice	ice	ice	-	15	24.1	23.3	24.8	36.9	24.8	15	36.9	7.83
	Mid-depth	-	-	-	15	15	26.0	20.2	21.0	31.8	21.5	15	31.8	6.52
	Bottom	-	-	-	-	15	32.6	20.6	21.0	35.6	25.0	15	35.6	8.74
13	Surface	ice	ice	ice	-	20	21.7	27.9	28.7	45.9	28.8	20	45.9	10.26
	Mid-depth	-	-	-	-	20	22.9	26.4	30.6	41.9	28.4	20	41.9	8.54
	Bottom	-	-	-	-	15	25.2	28.6	29.1	46.2	28.8	15	46.2	11.25

* ice = no samples taken because of ice cover
** 6 April data from complete water quality analysis only
\# FGD = station 29 not sampled because of flow over Gilboa Dam

Table 6 - (Continued).

Stations		Dates									Grand			
		6 Jan	10 Feb	10 Mar	6 Apr	12 May	2 Jun	13 Jul	10 Aug	14 Sep	$\bar{x}$	Min.	Max.	S.D.
14	Surface	ice	ice	20	-	15	27.2	28.3	28.7	53.5	28.8	15	53.5	13.27
	Mid-depth	-	-	20	20	15	48.5	27.5	29.5	43.7	29.2	15	48.5	12.63
	Bottom	-	-	20	-	15	31.2	24.8	29.1	48.3	28.1	15	48.3	11.55
16	Surface	ice	ice	ice	-	15	29.1	27.2	29.1	32.2	26.5	15	32.2	6.68
	Mid-depth	-	-	-	20	15	24.1	27.5	29.3	32.6	24.8	15	32.6	6.45
	Bottom	-	-	-	-	15	22.1	26.0	28.9	39.4	26.3	15	39.4	9.00
17	Surface	ice	ice	ice	-	15	24.1	27.5	29.5	33.8	26.0	15	33.8	7.07
	Mid-depth	-	-	-	-	15	23.3	28.3	29.1	32.4	25.6	15	32.4	6.77
	Bottom	-	-	-	-	15	23.3	27.9	30.3	33.4	26.0	15	33.4	7.16

Table 7. Summary of calcium hardness data (mg/l) taken from 6 January through 14 September 1976 from Schoharie Reservoir and Lower and Upper B-G.

Stations		Dates									Grand			
		6 Jan	10 Feb	10 Mar	6 Apr	12 May	2 Jun	13 Jul	10 Aug	14 Sep	$\bar{x}$	Min.	Max.	S.D.
26	Surface	ice*	ice	ice	-**	10	14.7	20.6	12.8	23.3	16.3	10	23.3	5.52
	Mid-depth	-	-	-	-	10	15.1	19.8	11.6	21.7	15.6	10	21.7	5.06
	Bottom	-	-	-	-	10	14.7	16.1	12.4	23.3	15.3	10	23.3	5.04
27	Surface	ice	ice	ice	-	10	16.3	17.3	16.7	19.8	16.0	10	19.8	3.63
	Mid-depth	-	-	-	15	10	15.5	15.9	15.1	21.0	15.4	10	21.0	3.49
	Bottom	-	-	-	-	10	14.7	15.9	12.8	20.2	14.7	10	20.2	3.79
28	Surface	ice	ice	ice	-	10	16.5	17.3	17.1	19.0	16.0	10	19.0	3.47
	Mid-depth	-	-	-	-	10	16.1	16.1	17.8	21.3	16.3	10	21.3	4.09
	Bottom	-	-	-	-	10	17.7	18.0	15.3	17.1	15.6	10	18.0	3.31
29	Surface	ice	ice	ice	FGD#	FGD	FGD	FGD	19.4	19.8	19.6	19.4	19.8	0.28
	Mid-depth	-	-	-	-	-	-	-	19.4	20.2	19.8	19.4	20.2	0.57
	Bottom	-	-	-	-	-	-	-	21.0	22.1	21.6	21.0	22.1	0.78
30	Surface	ice	ice	ice	-	10	15.2	18.0	19.4	19.8	16.5	10	19.8	4.05
	Mid-depth	-	-	-	15	10	16.3	16.3	16.3	19.4	15.6	10	19.4	3.09
	Bottom	-	-	-	-	10	14.6	16.7	16.3	17.5	15.0	10	17.5	3.00
13	Surface	ice	ice	ice	-	15	19.8	19.2	24.1	25.6	20.7	15	25.6	4.22
	Mid-depth	-	-	-	-	15	18.0	21.9	24.8	26.8	21.3	15	26.8	4.83
	Bottom	-	-	-	-	15	17.9	22.3	25.0	25.2	21.1	15	25.2	4.50

* ice = no samples taken because of ice cover
** 6 April data from complete water quality analysis only
\# FGD = station 29 not sampled because of flow over Gilboa Dam

Table 7 - (Continued).

Stations		Dates									Grand			
		6 Jan	10 Feb	10 Mar	6 Apr	12 May	2 Jun	13 Jul	10 Aug	14 Sep	$\bar{x}$	Min.	Max.	S.D.
14	Surface	ice	ice	20	-	15	23.3	21.3	24.4	29.7	22.3	15	29.7	4.89
	Mid-depth	-	-	15	15	10	26.8	23.9	23.5	25.6	20.0	10	26.8	6.52
	Bottom	-	-	15	-	15	19.0	22.1	25.8	30.7	21.3	15	30.7	6.23
16	Surface	ice	ice	ice	-	10	15.5	22.1	25.2	28.7	20.3	10	28.7	7.53
	Mid-depth	-	-	-	20	15	16.3	25.8	25.2	29.1	21.9	15	29.1	5.67
	Bottom	-	-	-	-	15	17.5	22.1	23.7	28.7	21.4	15	28.7	5.37
17	Surface	ice	ice	ice	-	15	19.0	23.9	24.4	30.7	22.6	15	30.7	5.94
	Mid-depth	-	-	-	-	15	19.0	21.5	23.7	26.0	21.0	15	26.0	4.26
	Bottom	-	-	-	-	10	18.2	20.4	23.9	29.1	20.3	10	29.1	7.09

Table 8. Summary of hydrogen ion data (pH) taken from 6 January through 14 September 1976 from Schoharie Reservoir and Lower and Upper B-G.

Stations		Dates									Grand			
		6 Jan	10 Feb	10 Mar	6 Apr	12 May	2 Jun	13 Jul	10 Aug	14 Sep	$\bar{x}$	Min.	Max.	S.D.
26	Surface	ice*	ice	ice	-**	7.5	7.2	6.8	6.3	7.2	7.0	6.3	7.5	0.46
	Mid-depth	-	-	-	-	7.2	6.8	7.2	6.4	7.1	6.9	6.4	7.2	0.34
	Bottom	-	-	-	-	6.9	7.1	6.8	6.4	7.2	6.9	6.4	7.2	0.31
27	Surface	ice	ice	ice	-	7.5	7.2	7.2	6.8	7.1	7.2	6.8	7.5	0.25
	Mid-depth	-	-	-	6.9	7.5	7.0	7.0	6.6	7.0	7.0	6.6	7.5	0.29
	Bottom	-	-	-	-	7.4	6.8	6.8	6.5	6.7	6.8	6.5	7.4	0.34
28	Surface	ice	ice	ice	-	7.3	6.8	7.3	6.8	7.3	7.1	6.8	7.3	0.27
	Mid-depth	-	-	-	-	7.4	7.0	7.0	7.1	7.4	7.2	7.0	7.4	0.20
	Bottom	-	-	-	-	7.0	6.8	6.7	6.7	6.7	6.8	6.7	7.0	0.13
29	Surface	ice	ice	ice	FGD#	FGD	FGD	FGD	6.9	7.1	7.0	6.9	7.1	0.14
	Mid-depth	-	-	-	-	-	-	-	6.9	7.2	7.1	6.9	7.2	0.21
	Bottom	-	-	-	-	-	-	-	6.4	7.2	6.8	6.4	7.2	0.57
30	Surface	ice	ice	ice	-	7.5	7.1	7.2	6.6	7.2	7.1	6.6	7.5	0.33
	Mid-depth	-	-	-	6.9	7.5	7.0	6.8	6.9	7.2	7.1	6.8	7.5	0.26
	Bottom	-	-	-	-	7.5	6.8	6.7	6.9	6.6	6.9	6.6	7.5	0.35
13	Surface	ice	ice	ice	-	7.6	6.8	7.2	7.2	7.6	7.3	6.8	7.6	0.33
	Mid-depth	-	-	-	-	7.4	7.2	7.4	7.2	7.3	7.3	7.2	7.4	0.10
	Bottom	-	-	-	-	7.3	7.2	7.2	6.8	7.4	7.2	6.8	7.4	0.23

* ice = no samples taken because of ice cover
** 6 April data from complete water quality analysis only
\# FGD = station 29 not sampled because of flow over Gilboa Dam

Table 8 - (Continued).

Stations		Dates									Grand			
		6 Jan	10 Feb	10 Mar	6 Apr	12 May	2 Jun	13 Jul	10 Aug	14 Sep	$\bar{x}$	Min.	Max.	S.D.
14	Surface	ice	ice	6.7	-	7.6	7.4	7.2	7.2	7.5	7.3	6.7	7.6	0.32
	Mid-depth	-	-	6.8	7.1	7.5	7.2	7.2	7.1	7.4	7.2	6.8	7.5	0.23
	Bottom	-	-	6.8	-	7.4	7.2	7.3	7.0	7.5	7.2	6.8	7.5	0.26
16	Surface	ice	ice	ice	-	7.5	7.2	7.2	7.2	7.0	7.2	7.0	7.5	0.18
	Mid-depth	-	-	-	7.2	7.4	7.2	7.3	7.1	7.5	7.3	7.1	7.5	0.15
	Bottom	-	-	-	-	7.2	7.2	7.0	6.9	7.3	7.1	6.9	7.3	0.16
17	Surface	ice	ice	ice	-	7.6	7.2	7.3	7.2	7.5	7.4	7.2	7.6	0.18
	Mid-depth	-	-	-	-	7.5	7.2	7.2	7.2	7.4	7.3	7.2	7.5	0.14
	Bottom	-	-	-	-	7.3	7.2	7.3	7.0	7.4	7.2	7.0	7.4	0.15

Table 9. Summary of air temperature data (C) taken from 6 January through 28 September 1976 from Schoharie Reservoir and Lower and Upper B-G.

Date	Stations								
	Schoharie Reservoir					Lower B-G		Upper B-G	
	26	27	28	29	30	13	14	16	17
6 Jan	ice*	ice	ice	ice	ice	ice	ice	ice	ice
19 Jan	ice	ice	ice	ice	ice	ice	ice	ice	ice
10 Feb	ice	ice	ice	ice	ice	ice	ice	ice	ice
17 Feb	ice	ice	ice	ice	ice	ice	ice	ice	ice
10 Mar	ice	ice	ice	ice	ice	ice	-2	ice	ice
26 Mar	11	11	8	FGD**	8	15	15	10	10
30 Mar	10	10	10	FGD	10	16	16	12	12
6 Apr	11	11	11	FGD	11	13	13	8	8
13 Apr	7	5	6	FGD	5	11	10	7	7
20 Apr	24	24	20	FGD	20	22	22	19	19
27 Apr	4	5	5	FGD	5	5	5	4	4
4 May	6	5	5	FGD	7	6	6	3	3
12 May	10	9	9	FGD	9	8	8	5	6
18 May	9	9	9	FGD	9	10	10	17	17
25 May	12	12	12	FGD	14	14	13	10	11
2 Jun	16	16	14	FGD	16	16	16	12	12
8 Jun	25	25	27	27	27	26	26	21	21
15 Jun	24	25	25	28	26	32	32	27	27
22 Jun	25	23	23	25	25	23	23	25	25
29 Jun	27	27	27	29	27	24	24	21	21

* ice = no samples taken because of ice cover
** FGD = station 29 not sampled because of flow over Gilboa Dam
# LWL = samples not taken because of low water levels

Table 9 - (Continued).

Date	Stations								
	Schoharie Reservoir					Lower B-G		Upper B-G	
	26	27	28	29	30	13	14	16	17
7 Jul	23	24	23	FGD	23	25	23	24	24
13 Jul	15	15	15	FGD	15	18	18	13	13
20 Jul	25	26	26	30	28	28	28	24	24
27 Jul	24	22	21	23	25	29	28	24	24
3 Aug	21	21	21	23	23	26	26	24	24
10 Aug	17	18	17	18	18	19	19	16	16
17 Aug	20	18	19	21	20	21	22	21	21
24 Aug	20	22	23	23	25	24	24	22	22
30 Aug	13	12	13	13	13	16	14	13	13
7 Sep	17	17	16	17	17	19	18	18	18
14 Sep	20	20	21	21	21	22	22	24	24
22 Sep	15	15	15	LWL#	15	15	15	10	10
28 Sep	11	11	10	LWL	10	13	11	11	11

Table 10. Summary of water temperature data (C) taken from 6 January through 28 September 1976 from Schoharie Reservoir and Lower and Upper B-G.

Station & Date	Surface	Depth (m) 2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
26																		
6 Jan	ice*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Mar	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 Mar	7	-	-	-	7	-	-	-	7	-	-	-	-	-	-	-	-	-
30 Mar	7	-	-	-	7	-	-	-	7	-	-	-	-	-	-	-	-	-
6 Apr	4	-	-	-	4	-	-	-	4(15)**	-	-	-	-	-	-	-	-	-
13 Apr	2.5	2.3	2.3	2.5	2.6	2.8	2.8	3.0	3.1	-	-	-	-	-	-	-	-	-
20 Apr	16.2	14.0	9.0	7.9	7.0	6.5	6.2	5.8	-	-	-	-	-	-	-	-	-	-
27 Apr	10.0	10.0	10.0	9.5	7.0	6.5	6.2	6.0	6.0(15)	-	-	-	-	-	-	-	-	-
4 May	9.5	9.5	9.2	8.5	7.5	7.2	7.0	7.0	6.8(15)	-	-	-	-	-	-	-	-	-
12 May	11.0	11.0	10.8	9.5	8.2	7.5	7.2	6.8	6.8(15)	-	-	-	-	-	-	-	-	-
18 May	14.3	14.3	14.3	12.8	12.2	12.0	11.5	11.2	-	-	-	-	-	-	-	-	-	-
25 May	12.0	11.8	10.8	10.2	10.0	8.8	8.0	7.8	7.5	-	-	-	-	-	-	-	-	-
2 Jun	15.0	14.2	13.3	12.2	9.0	8.5	8.2	8.0	7.9	-	-	-	-	-	-	-	-	-
8 Jun	20.1	17.8	17.0	16.0	14.2	11.2	10.5	8.5	8.2	-	-	-	-	-	-	-	-	-
15 Jun	18.2	18.2	17.0	17.0	12.5	9.8	9.2	8.8	-	-	-	-	-	-	-	-	-	-
22 Jun	23.0	22.0	21.8	19.8	17.2	13.8	10.5	10.0(13)	-	-	-	-	-	-	-	-	-	-
29 Jun	25.2	23.8	23.2	22.5	19.2	12.2	10.2	9.8(13)	-	-	-	-	-	-	-	-	-	-

* ice = no samples taken because of ice cover
** depth in parentheses
\# FGD = station 29 not sampled because of flow over Gilboa Dam
\#\# LWL = samples not taken because of low water levels

Table 10 - (Continued).

Station & Date	Surface	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
		Depth (m)																
7 Jul	23.8	22.2	21.5	20.0	17.5	15.0	11.2	9.8	-	-	-	-	-	-	-	-	-	-
13 Jul	20.8	20.8	20.2	19.5	15.5	13.0	11.0	9.2	-	-	-	-	-	-	-	-	-	-
20 Jul	24.0	22.0	21.2	19.5	17.8	16.5	12.0	10.8(13)	-	-	-	-	-	-	-	-	-	-
27 Jul	21.8	21.5	21.2	21.0	20.5	18.5	11.8	-	-	-	-	-	-	-	-	-	-	-
3 Aug	22.2	22.0	22.0	20.8	20.2	14.2	10.8(11)	-	-	-	-	-	-	-	-	-	-	-
10 Aug	16.5	16.5	16.2	16.2	16.2	16.2	16.2	16.2	16.2	-	-	-	-	-	-	-	-	-
17 Aug	21.0	20.8	20.8	20.8	19.2	18.2	17.8	17.0(13)	-	-	-	-	-	-	-	-	-	-
24 Aug	23.0	21.0	20.5	19.8	18.8	18.2	-	-	-	-	-	-	-	-	-	-	-	-
30 Aug	22.0	22.0	22.0	21.8	21.0	20.2	-	-	-	-	-	-	-	-	-	-	-	-
7 Sep	18.8	18.8	18.5	18.0	17.5	-	-	-	-	-	-	-	-	-	-	-	-	-
14 Sep	18.2	18.0	18.0	17.8(5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22 Sep	17.0	16.5	15.8(3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28 Sep	13.2	12.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27																		
6 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Mar	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 Mar	3	-	-	-	3(7)	-	-	3	-	-	-	-	-	-	-	-	-	-
30 Mar	6	-	-	-	7	-	-	-	7	-	-	-	-	-	-	-	-	-
6 Apr	5	-	-	-	-	5(9)	-	-	-	5(17)	-	-	-	-	-	-	-	-
13 Apr	5.5	5.2	5.1	5.1	5.1	5.0	5.0	4.9	4.9	-	-	-	-	-	-	-	-	-
20 Apr	16.2	12.3	8.8	7.2	6.8	6.0	6.0	5.8	5.2	5.0	-	-	-	-	-	-	-	-
27 Apr	10.0	10.0	10.0	10.0	9.5	7.5	7.2	6.5	5.8	-	-	-	-	-	-	-	-	-

Table 10 - (Continued).

Station & Date	Surface	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
		Depth (m)																
4 May	9.5	9.5	9.5	9.2	9.2	7.8	7.5	5.8	5.5	5.5	-	-	-	-	-	-	-	-
12 May	10.5	10.2	9.8	9.8	9.6	9.2	9.2	8.8	7.5	-	-	-	-	-	-	-	-	-
18 May	13.1	13.1	13.0	12.9	12.2	11.5	10.7	9.2	9.0	7.2	-	-	-	-	-	-	-	-
25 May	11.8	11.5	11.2	10.5	8.8	8.5	8.1	7.8	7.2	7.0(17)	-	-	-	-	-	-	-	-
2 Jun	15.7	14.7	14.5	12.2	10.2	9.7	9.0	8.2	7.8	7.5	-	-	-	-	-	-	-	-
8 Jun	19.8	17.0	16.9	14.0	12.8	11.8	10.9	9.5	8.8	8.2(17)	-	-	-	-	-	-	-	-
15 Jun	18.2	17.5	17.5	15.2	12.0	10.0	9.2	8.2	7.5	7.2(17)	-	-	-	-	-	-	-	-
22 Jun	22.2	22.2	22.0	20.5	15.2	12.0	10.2	9.2	8.5	8.0(17)	-	-	-	-	-	-	-	-
29 Jun	24.5	23.8	23.2	22.0	19.5	13.0	10.8	9.8	8.5	8.0(17)	-	-	-	-	-	-	-	-
7 Jul	22.2	22.2	20.2	18.8	17.2	15.8	12.0	9.8	8.2	8.0(17)	-	-	-	-	-	-	-	-
13 Jul	21.8	21.8	21.8	19.5	17.5	15.2	11.8	10.0	8.8	8.2(17)	-	-	-	-	-	-	-	-
20 Jul	22.5	22.2	21.5	20.2	18.5	16.8	13.5	10.8	8.8	8.2(17)	-	-	-	-	-	-	-	-
27 Jul	21.8	21.8	21.5	21.5	20.5	18.0	13.2	10.2	8.5	-	-	-	-	-	-	-	-	-
3 Aug	23.0	23.2	23.0	22.5	21.2	17.8	15.0	10.5	-	-	-	-	-	-	-	-	-	-
10 Aug	20.8	20.8	20.2	19.5	19.0	17.8	17.2	17.2	17.0	-	-	-	-	-	-	-	-	-
17 Aug	21.0	21.0	20.8	20.8	18.8	18.2	17.5	16.5	16.0(15)	-	-	-	-	-	-	-	-	-
24 Aug	23.2	23.0	21.0	20.2	19.2	18.2	17.5	16.5	-	-	-	-	-	-	-	-	-	-
30 Aug	22.0	22.0	22.0	22.0	19.5	17.8	16.2	-	-	-	-	-	-	-	-	-	-	-
7 Sep	18.8	18.8	18.8	18.8	18.8	16.0	-	-	-	-	-	-	-	-	-	-	-	-
14 Sep	18.8	18.5	18.2	18.0	17.0	-	-	-	-	-	-	-	-	-	-	-	-	-
22 Sep	17.5	17.5	17.5	17.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28 Sep	14.5	14.8	14.9	14.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28																		
6 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 10 - (Continued).

Station & Date	Surface	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
		Depth (m)																
10 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Mar	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 Mar	3	-	-	-	-	-	3(11)	-	-	-	-	3	-	-	-	-	-	-
30 Mar	4	-	-	-	-	-	5	-	-	-	-	-	5(23)	-	-	-	-	-
6 Apr	5	-	-	-	-	-	5(11)	-	-	-	-	5	-	-	-	-	-	-
13 Apr	5.2	5.2	5.0	4.9	4.8	4.8	4.7	4.7	4.7	4.6	4.7	4.7	-	-	-	-	-	-
20 Apr	15.9	13.7	10.5	10.5	6.5	6.0	5.8	5.5	5.5	5.2	5.0	4.9	-	-	-	-	-	-
27 Apr	9.5	9.5	9.5	9.5	7.8	7.5	6.1	5.8	5.7	5.5	5.2	5.1(21)	-	-	-	-	-	-
4 May	9.4	9.5	9.2	9.2	9.1	8.5	6.8	6.1	6.0	5.8	5.3	5.2	-	-	-	-	-	-
12 May	10.8	10.8	10.7	9.5	9.2	9.0	8.8	8.7	7.2	6.8	6.2	5.8	-	-	-	-	-	-
18 May	12.8	12.9	12.9	12.8	12.2	9.5	8.2	8.2	7.5	7.2	7.0	6.8	-	-	-	-	-	-
25 May	11.3	11.3	11.2	10.9	9.8	9.0	8.2	7.9	7.2	7.0	6.5	6.2	-	-	-	-	-	-
2 Jun	15.2	14.5	14.0	12.5	10.9	10.2	9.9	9.2	8.8	8.2	7.8	7.5(21)	-	-	-	-	-	-
8 Jun	19.5	17.8	16.5	14.2	12.1	11.0	9.8	9.2	8.8	8.2	7.8	7.2(21)	-	-	-	-	-	-
15 Jun	21.0	20.2	19.8	17.5	12.8	11.5	10.2	9.8	9.2	8.5	7.8	7.5	-	-	-	-	-	-
22 Jun	22.2	22.2	21.8	19.8	14.5	11.5	10.5	9.2	8.5	8.2	7.8	7.2	-	-	-	-	-	-
29 Jun	23.8	23.5	23.2	21.8	17.2	12.8	11.5	10.0	9.2	8.2	7.5	7.5	-	-	-	-	-	-
7 Jul	23.0	22.8	22.2	20.2	18.0	15.8	12.8	10.5	9.8	9.0	8.0	7.5	-	-	-	-	-	-
13 Jul	21.3	21.5	21.5	19.2	17.5	15.8	12.0	10.0	8.5	7.8	7.2	7.0	-	-	-	-	-	-
20 Jul	22.0	21.8	21.2	21.0	19.2	16.0	12.5	11.0	9.0	8.2	7.5	7.2	-	-	-	-	-	-
27 Jul	21.2	21.2	21.2	21.2	20.2	17.2	13.5	10.5	8.8	7.5	7.0	-	-	-	-	-	-	-

Table 10 - (Continued).

Station & Date	Surface	Depth (m) 2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
3 Aug	22.0	21.5	21.5	21.2	20.8	19.2	14.0	11.2	8.8	7.5	-	-	-	-	-	-	-	-
10 Aug	20.8	20.8	20.8	20.8	20.8	19.9	15.2	12.8	12.0	8.0	-	-	-	-	-	-	-	-
17 Aug	21.0	20.8	20.8	20.5	19.0	18.2	17.5	17.0	15.5	10.8	8.0	-	-	-	-	-	-	-
24 Aug	23.0	22.8	21.5	20.2	19.0	18.0	17.5	16.0	12.8	9.0	8.2(19)	-	-	-	-	-	-	-
30 Aug	21.8	21.8	21.8	21.8	19.8	18.5	17.2	14.8	9.0	-	-	-	-	-	-	-	-	-
7 Sep	18.8	18.8	18.8	18.8	18.5	16.5	13.8	11.0	-	-	-	-	-	-	-	-	-	-
14 Sep	18.5	18.5	18.2	18.2	17.5	14.5	10.2	-	-	-	-	-	-	-	-	-	-	-
22 Sep	17.5	17.5	17.5	17.5	16.5(7)	-	-	-	-	-	-	-	-	-	-	-	-	-
28 Sep	15.0	15.0	15.0	15.0	15.0	-	-	-	-	-	-	-	-	-	-	-	-	-
29																		
6 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Mar	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 Mar	FGD #	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30 Mar	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6 Apr	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 Apr	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20 Apr	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27 Apr	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4 May	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 May	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18 May	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25 May	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 10 - (Continued).

Station & Date	Surface	Depth (m) 2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
2 Jun	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8 Jun	18.8	17.1	15.8	13.5	11.8	10.0	9.2	-	-	-	-	-	-	-	-	-	-	-
15 Jun	21.8	21.2	21.0	19.0	13.8	12.2	10.2	9.8(13)	-	-	-	-	-	-	-	-	-	-
22 Jun	23.0	23.0	22.8	19.8	15.2	11.8	10.2	-	-	-	-	-	-	-	-	-	-	-
29 Jun	24.2	23.8	23.5	20.8	17.0	13.0	10.8	9.7(13)	-	-	-	-	-	-	-	-	-	-
7 Jul	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 Jul	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20 Jul	22.2	22.0	21.1	21.2	21.0	17.2	12.8	13.6	-	-	-	-	-	-	-	-	-	-
27 Jul	22.0	22.0	22.0	21.0	20.5	-	-	-	-	-	-	-	-	-	-	-	-	-
3 Aug	21.2	21.0	20.8	20.5	20.5	20.5	-	-	-	-	-	-	-	-	-	-	-	-
10 Aug	20.2	20.2	20.0	19.8	19.5	19.2	-	-	-	-	-	-	-	-	-	-	-	-
17 Aug	20.2	19.5	19.5	19.2	19.2	18.5	17.5	-	-	-	-	-	-	-	-	-	-	-
24 Aug	22.0	21.8	21.5	21.5	20.2	19.2	-	-	-	-	-	-	-	-	-	-	-	-
30 Aug	20.0	20.0	19.8	19.2	18.2	-	-	-	-	-	-	-	-	-	-	-	-	-
7 Sep	18.5	18.2	18.0	18.0(5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14 Sep	18.8	18.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22 Sep	LWL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28 Sep	LWL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30																		
6 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 10 - (Continued).

Station & Date	Surface	Depth (m) 2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
10 Mar	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 Mar	3	-	-	-	-	-	-	-	-	3(17)	-	-	-	-	-	-	-	3
30 Mar	3	-	-	-	-	-	-	-	-	3(17)	-	-	-	-	-	-	-	3
6 Apr	4	-	-	-	-	-	-	-	-	4(17)	-	-	-	-	-	-	-	4
13 Apr	4.3	4.3	4.2	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	-
20 Apr	15.2	14.5	10.9	7.9	6.5	6.2	5.9	5.7	5.2	5.2	5.1	5.0	5.0	5.0	4.9	4.8	4.8	-
27 Apr	6.8	6.8	7.0	7.0	7.0	7.0	6.8	6.5	5.8	5.5	5.5	5.2	5.2	5.0	5.0	4.9	4.8	-
4 May	8.0	8.0	8.0	8.0	7.8	7.5	6.9	6.5	6.0	5.9	5.8	5.2	5.2	5.2	5.1	5.0	5.0	5.0
12 May	10.0	10.0	9.8	9.0	8.5	8.2	7.9	7.1	7.0	6.8	6.5	6.2	6.0	5.6	5.5	5.5	5.6	-
18 May	12.5	12.5	12.5	11.8	10.2	9.2	8.8	8.2	7.5	7.2	7.1	6.9	6.7	6.5	6.0	6.5	6.2	-
25 May	11.2	11.0	10.8	10.8	10.0	9.5	9.2	8.8	8.5	8.0	7.5	7.0	6.8	6.5	6.2	6.0	5.8	-
2 Jun	15.2	14.7	13.8	12.8	11.8	10.0	9.2	8.8	8.5	8.0	7.2	7.0	6.8	6.8	6.8	6.8	6.5	-
8 Jun	18.5	17.2	16.5	14.5	11.2	9.5	8.8	8.2	8.0	7.5	7.5	7.2	7.2	6.8	6.5	6.5	6.5	6.2
15 Jun	21.5	21.0	20.5	17.5	14.0	12.5	10.5	9.2	8.8	8.2	8.0	7.8	7.5	7.0	7.0	6.8	6.8	6.8
22 Jun	23.0	22.8	22.5	19.8	13.8	12.2	11.0	9.8	8.8	8.2	8.0	7.8	7.2	7.0	6.8	6.5	6.5	6.2
29 Jun	24.5	24.2	23.8	22.2	17.5	13.2	11.0	9.5	8.5	7.8	7.2	7.0	6.8	6.8	6.5	6.2	6.2	6.2
7 Jul	22.5	22.5	22.5	20.0	18.5	16.2	12.0	10.0	9.0	8.5	8.0	7.8	7.2	7.0	7.0	6.8	6.5	6.2
13 Jul	21.2	21.2	21.2	20.0	17.8	14.5	11.8	10.2	8.5	8.0	7.5	7.2	6.8	6.5	6.5	6.2	6.2	6.2
20 Jul	22.2	22.0	22.0	21.5	19.8	16.8	13.8	10.0	9.0	8.2	7.5	7.0	6.8	6.5	6.5	6.2	6.2	6.0
27 Jul	21.8	21.8	21.8	21.2	20.2	17.5	15.2	10.8	8.5	8.0	7.2	7.0	6.8	6.5	6.5	6.2	6.2	6.2(33)
3 Aug	21.5	21.2	21.0	21.0	20.8	20.8	14.5	9.2	8.5	8.0	7.5	7.2	7.0	6.8	6.5	6.5	6.2(31)	-
10 Aug	20.5	20.5	20.5	20.5	20.2	19.5	17.8	14.8	9.0	8.2	7.5	7.0	6.8	6.5	6.2	6.2	-	-
17 Aug	20.2	19.8	19.8	19.8	19.0	18.5	17.8	16.5	14.5	10.2	8.0	7.5	7.0	6.8	6.5	6.2	6.2	6.0(33)
24 Aug	22.5	22.2	22.2	21.1	20.2	18.8	17.5	14.2	11.0	8.2	7.8	7.5	7.2	7.0	6.8	6.8	-	-
30 Aug	20.0	20.2	20.2	20.0	19.0	16.0	14.5	11.2	8.8	8.5	7.2	6.8	6.8	6.8	6.6	5.7	-	-

Table 10 - (Continued).

Station & Date	Surface	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
		Depth (m)																
7 Sep	18.5	18.5	18.5	18.5	18.5	18.2	12.8	8.5	7.8	7.2	7.0	6.8	6.5	6.5	6.2(27)	-	-	-
14 Sep	18.8	18.5	18.2	18.2	18.2	18.5	10.0	7.8	7.2	6.8	6.5	6.5	6.2	6.2	-	-	-	-
22 Sep	17.5	17.5	17.5	17.5	16.8	9.5	7.8	7.2	7.0	6.8	6.5	6.5	6.2	-	-	-	-	-
28 Sep	14.8	14.9	15.0	15.0	13.5	9.5	7.6	7.0	6.7	6.4	6.4	6.2	6.1(23)	-	-	-	-	-
13																		
6 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Mar	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 Mar	3	-	-	-	-	3(9)	-	-	-	3(17)	-	-	-	-	-	-	-	-
30 Mar	5	-	-	-	5	-	-	-	5	-	-	-	-	-	-	-	-	-
6 Apr	5	-	-	5	-	-	5	-	-	-	-	-	-	-	-	-	-	-
13 Apr	5.5	4.8	4.5	4.5	4.5	4.5	4.5	-	-	-	-	-	-	-	-	-	-	-
20 Apr	9.5	8.7	8.2	8.0	7.5	7.5	7.2	-	-	-	-	-	-	-	-	-	-	-
27 Apr	9.2	9.1	9.0	8.8	8.5	8.2	8.2(11)	-	-	-	-	-	-	-	-	-	-	-
4 May	8.8	8.8	8.8	8.7	8.5	-	-	-	-	-	-	-	-	-	-	-	-	-
12 May	9.9	9.9	9.8	9.8	9.8	9.8	-	-	-	-	-	-	-	-	-	-	-	-
18 May	13.8	13.2	12.8	12.5	12.1	11.2	-	-	-	-	-	-	-	-	-	-	-	-
25 May	11.0	10.9	10.8	10.5	10.2	-	-	-	-	-	-	-	-	-	-	-	-	-
2 Jun	14.9	14.2	13.8	13.5	13.2	12.0	-	-	-	-	-	-	-	-	-	-	-	-
8 Jun	17.0	15.8	15.5	14.5	14.2	14.1	14.0(11)	-	-	-	-	-	-	-	-	-	-	-
15 Jun	22.2	20.2	18.9	18.5	18.2	18.2	17.5	-	-	-	-	-	-	-	-	-	-	-
22 Jun	21.5	21.2	20.8	20.5	19.5	19.2	-	-	-	-	-	-	-	-	-	-	-	-
29 Jun	22.2	22.0	21.8	21.8	21.0	20.8	20.2(11)	-	-	-	-	-	-	-	-	-	-	-

Table 10 - (Continued).

Station & Date	Surface	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
		Depth (m)																
7 Jul	22.5	22.5	22.5	22.0	21.9	21.8	-	-	-	-	-	-	-	-	-	-	-	-
13 Jul	22.0	22.2	22.2	22.2	22.2	22.2	22.0(11)	-	-	-	-	-	-	-	-	-	-	-
20 Jul	23.0	22.8	22.8	22.2	22.0	-	-	-	-	-	-	-	-	-	-	-	-	-
27 Jul	22.5	22.2	22.0	21.8	21.5	21.5	-	-	-	-	-	-	-	-	-	-	-	-
3 Aug	23.5	23.0	21.8	21.7	21.5	21.5	21.5(11)	-	-	-	-	-	-	-	-	-	-	-
10 Aug	20.0	21.2	21.2	21.2	21.2	21.2(9)	-	-	-	-	-	-	-	-	-	-	-	-
17 Aug	22.0	21.8	21.8	21.5	21.5	21.5	-	-	-	-	-	-	-	-	-	-	-	-
24 Aug	22.8	22.8	22.5	22.5	22.2	22.0	21.5(11)	-	-	-	-	-	-	-	-	-	-	-
30 Aug	22.0	22.0	22.0	22.0	22.0	21.8(9)	-	-	-	-	-	-	-	-	-	-	-	-
7 Sep	20.5	20.5	20.5	20.2	20.2	20.2(9)	-	-	-	-	-	-	-	-	-	-	-	-
14 Sep	22.2	20.8	20.0	19.8	19.8	19.8	-	-	-	-	-	-	-	-	-	-	-	-
22 Sep	19.0	19.0	19.0	19.0	19.0	19.0	19.0(11)	-	-	-	-	-	-	-	-	-	-	-
28 Sep	17.0	17.0	17.0	17.0	17.0	17.0	17.1(11)	-	-	-	-	-	-	-	-	-	-	-
14																		
6 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Mar	2	-	-	2(5)	-	2	-	-	-	-	-	-	-	-	-	-	-	-
26 Mar	3	-	3(3)	-	3(7)	-	-	-	-	-	-	-	-	-	-	-	-	-
30 Mar	5	-	5	-	5(7)	-	-	-	-	-	-	-	-	-	-	-	-	-
6 Apr	5	-	5(3)	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 Apr	4.8	4.7	4.7	4.6	4.5	-	-	-	-	-	-	-	-	-	-	-	-	-
20 Apr	8.0	7.9	7.8	7.8	7.8(7)	-	-	-	-	-	-	-	-	-	-	-	-	-
27 Apr	8.1	8.1	8.2	8.0	8.2(7)	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 10 - (Continued)

Station & Date	Surface	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
4 May	8.1	8.0	8.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 May	10.0	9.9	9.9	9.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18 May	12.7	12.2	12.5	12.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25 May	10.8	10.8	10.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2 Jun	13.8	13.8	13.7	13.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8 Jun	15.5	15.2	15.2	15.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 Jun	18.7	18.5	18.5	18.5	18.5	18.5	-	-	-	-	-	-	-	-	-	-	-	-
22 Jun	20.0	20.0	19.8	19.8	20.0	19.8	-	-	-	-	-	-	-	-	-	-	-	-
29 Jun	21.2	21.2	21.2	21.2	21.2(7)	-	-	-	-	-	-	-	-	-	-	-	-	-
7 Jul	21.8	21.8	21.8	21.5	21.5	-	-	-	-	-	-	-	-	-	-	-	-	-
13 Jul	22.0	22.0	22.1	22.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20 Jul	22.0	22.0	22.0	21.8(5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27 Jul	22.2	22.2	22.0	22.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3 Aug	22.0	22.0	22.0	22.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Aug	21.0	21.0	21.0	21.0(5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Aug	21.5	21.5	21.5	21.5	21.5(7)	-	-	-	-	-	-	-	-	-	-	-	-	-
24 Aug	22.5	22.5	22.5	22.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30 Aug	22.0	22.0	22.0	22.0(5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7 Sep	20.2	20.0	20.0	20.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14 Sep	20.5	20.0	19.8	19.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22 Sep	19.0	19.0	19.0	19.0	19.0(7)	-	-	-	-	-	-	-	-	-	-	-	-	-
28 Sep	16.7	16.7	16.8	16.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16																		
6 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 10 - (Continued).

Station & Date	Surface	Depth (m) 2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
10 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Mar	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 Mar	3	-	-	-	-	3(9)	-	-	-	3(17)	-	-	-	-	-	-	-	-
30 Mar	5	-	-	-	-	5(9)	-	-	-	5	-	-	-	-	-	-	-	-
6 Apr	4	-	-	-	-	4(9)	-	-	-	5	-	-	-	-	-	-	-	-
13 Apr	4.3	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	-	-	-	-	-	-	-	-	-
20 Apr	10.5	10.2	9.7	8.7	8.2	7.8	6.8	6.0	5.7	5.5	-	-	-	-	-	-	-	-
27 Apr	9.0	9.0	9.0	9.0	9.0	9.0	8.9	8.8	8.5	7.0(17)	-	-	-	-	-	-	-	-
4 May	8.0	8.2	8.2	8.2	8.2	8.0	8.0	8.0	8.0	8.0	7.8	-	-	-	-	-	-	-
12 May	10.0	10.0	10.0	10.1	10.0	9.9	9.2	9.0	8.9	8.8	-	-	-	-	-	-	-	-
18 May	13.0	13.2	13.3	13.3	13.2	13.2	13.2	13.2	13.2	-	-	-	-	-	-	-	-	-
25 May	11.0	11.0	10.9	10.9	10.8	10.7	10.5	10.2	10.2	10.0	-	-	-	-	-	-	-	-
2 Jun	14.2	14.2	14.0	13.8	13.6	13.5	13.0	12.8	11.5	11.2	-	-	-	-	-	-	-	-
8 Jun	13.5	13.0	12.5	12.5	12.2	12.2	12.0	11.5	11.0	10.0	-	-	-	-	-	-	-	-
15 Jun	20.0	19.3	18.5	18.2	18.2	18.0	17.8	17.5	17.2	13.8	-	-	-	-	-	-	-	-
22 Jun	21.2	21.0	20.5	20.2	20.0	19.8	19.5	19.5	18.0	14.5(17)	-	-	-	-	-	-	-	-
29 Jun	21.2	21.5	21.5	21.5	21.5	21.0	21.0	20.8	20.5	14.8	-	-	-	-	-	-	-	-
7 Jul	22.5	22.5	22.2	22.0	22.0	21.5	21.5	21.2	20.8	18.8(17)	-	-	-	-	-	-	-	-
13 Jul	21.5	21.5	21.5	21.5	21.8	21.8	21.8	21.5	21.2	19.0	-	-	-	-	-	-	-	-
20 Jul	22.0	21.8	21.5	21.5	21.5	21.2	21.5	21.2	21.0	20.8	20.2(19)	-	-	-	-	-	-	-
27 Jul	20.2	20.2	21.2	21.2	21.2	21.0	21.0	21.0	20.8	20.5	-	-	-	-	-	-	-	-
3 Aug	22.5	22.0	21.8	21.8	21.5	21.5	21.5	21.5	21.5	21.2(17)	-	-	-	-	-	-	-	-
10 Aug	21.2	21.2	21.2	21.2	21.2	21.2	21.0	20.8	20.8	20.5	-	-	-	-	-	-	-	-
17 Aug	21.5	21.5	21.5	21.5	21.2	21.0	21.0	21.0	21.0	20.8	-	-	-	-	-	-	-	-
24 Aug	22.8	22.5	22.2	22.2	22.2	22.2	22.2	21.8	21.5	-	-	-	-	-	-	-	-	-
30 Aug	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	21.5	-	-	-	-	-	-	-	-

Table 10 - (Continued).

Station & Date	Surface	Depth (m) 2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
7 Sep	20.0	20.0	20.0	20.0	19.8	19.8	19.8	19.8	19.5	19.5	-	-	-	-	-	-	-	-
14 Sep	20.8	20.0	19.8	19.8	19.5	19.5	19.5	19.2	19.0	19.0	-	-	-	-	-	-	-	-
22 Sep	18.5	18.5	18.5	18.8	18.8	18.8	18.8	18.8	18.8	-	-	-	-	-	-	-	-	-
28 Sep	16.6	16.5	16.8	16.8	17.0	17.0	17.0	16.9	16.8	16.8(17)	-	-	-	-	-	-	-	-
17																		
6 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Mar	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 Mar	3	-	-	-	-	3	-	-	-	-	3(19)	-	-	-	-	-	-	-
30 Mar	5	-	-	-	-	5(9)	-	-	-	5	-	-	-	-	-	-	-	-
6 Apr	4	-	-	-	-	4(9)	-	-	-	4	-	-	-	-	-	-	-	-
13 Apr	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	-	-	-	-	-	-	-	-
20 Apr	9.8	9.2	8.2	8.1	8.0	8.0	7.8	6.5	5.8	5.5	-	-	-	-	-	-	-	-
27 Apr	8.8	8.9	9.0	9.0	9.0	9.0	9.0	9.0	-	-	-	-	-	-	-	-	-	-
4 May	8.5	8.5	8.5	8.8	8.8	8.8	8.2	8.2	8.1	8.1	-	-	-	-	-	-	-	-
12 May	10.1	10.1	10.1	10.1	10.2	10.2	10.2	9.3	9.1	8.8	-	-	-	-	-	-	-	-
18 May	13.2	12.9	12.8	12.8	12.5	12.0	11.8	11.5	-	-	-	-	-	-	-	-	-	-
25 May	10.8	10.8	10.8	10.8	10.8	10.7	10.5	10.5	10.2	-	-	-	-	-	-	-	-	-
2 Jun	14.0	14.0	14.0	13.9	13.8	12.9	12.5	12.2	12.0	-	-	-	-	-	-	-	-	-
8 Jun	13.0	12.9	12.5	12.2	12.1	12.0	12.0	11.5	11.2	10.8	10.8(19)	-	-	-	-	-	-	-
15 Jun	19.0	18.5	18.2	18.2	18.0	18.0	17.8	17.5	16.8	13.5(17)	-	-	-	-	-	-	-	-
22 Jun	20.5	20.2	20.0	19.8	19.8	19.8	19.5	19.2	18.5(15)	-	-	-	-	-	-	-	-	-
29 Jun	21.2	21.2	21.0	21.0	21.0	21.0	21.0	20.8	20.5	15.5	-	-	-	-	-	-	-	-

Table 10 - (Continued).

Station & Date	Surface	Depth (m) 2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
7 Jul	21.9	21.9	21.8	21.8	21.5	21.2	21.2	21.0	20.8	16.2	-	-	-	-	-	-	-	-
13 Jul	21.8	21.8	22.0	22.0	22.0	22.0	22.0	22.0	21.8	-	-	-	-	-	-	-	-	-
20 Jul	22.0	21.8	21.8	21.8	21.8	21.8	21.8	21.5	21.2	-	-	-	-	-	-	-	-	-
27 Jul	21.8	21.5	21.5	21.5	21.5	21.5	21.5	21.3	21.3	-	-	-	-	-	-	-	-	-
3 Aug	22.5	22.5	21.8	21.8	21.8	21.7	21.5	21.5	(13)-	-	-	-	-	-	-	-	-	-
10 Aug	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	-	-	-	-	-	-	-	-	-
17 Aug	21.5	21.5	21.5	21.5	21.5	21.5	21.2	-	-	-	-	-	-	-	-	-	-	-
24 Aug	22.5	22.5	22.2	22.2	22.2	22.0	22.0	21.5	-	-	-	-	-	-	-	-	-	-
30 Aug	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	21.2	-	-	-	-	-	-	-	-
7 Sep	20.0	20.0	20.0	20.0	20.0	20.0	20.0	19.8	(13)-	-	-	-	-	-	-	-	-	-
14 Sep	20.5	19.8	19.8	19.5	19.5	19.5	19.2	19.2	(13)-	-	-	-	-	-	-	-	-	-
22 Sep	17.2	18.5	18.5	18.5	18.5	18.5	18.5	-	-	-	-	-	-	-	-	-	-	-
28 Sep	16.8	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	-	-	-	-	-	-	-	-	-

Table 11. Summary of dissolved oxygen data (ppm) taken from 6 January through 28 September 1976 from Schoharie Reservoir and Lower and Upper B-G.

Station & Date	Surface	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
		Depth (m)																
26																		
6 Jan	ice*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Mar	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 Mar	12.1	-	-	-	12.6	-	-	-	12.0	-	-	-	-	-	-	-	-	-
30 Mar	12.6	-	-	-	12.1	-	-	-	12.6	-	-	-	-	-	-	-	-	-
6 Apr	14.1	-	-	-	12.2	-	-	-	12.4(15)**		-	-	-	-	-	-	-	-
13 Apr	13.6	13.6	13.8	13.8	13.9	13.9	13.6	13.8	13.3	-	-	-	-	-	-	-	-	-
20 Apr	9.0	9.3	10.5	10.8	11.1	11.3	11.3	11.2	-	-	-	-	-	-	-	-	-	-
27 Apr	12.3	12.2	12.2	12.1	12.6	12.6	12.7	12.8	12.7(15)-		-	-	-	-	-	-	-	-
4 May	10.9	11.0	10.8	10.9	11.0	11.2	11.3	11.4	11.3(15)-		-	-	-	-	-	-	-	-
12 May	11.2	10.9	10.8	10.8	10.8	10.8	10.7	10.5	10.2(15)-		-	-	-	-	-	-	-	-
18 May	9.7	9.8	9.9	9.9	9.9	10.0	10.0	10.0	-	-	-	-	-	-	-	-	-	-
25 May	11.1	11.3	11.2	11.2	11.2	11.0	10.8	10.7	10.2	-	-	-	-	-	-	-	-	-
2 Jun	10.1	10.4	10.2	9.8	9.1	9.2	9.2	9.6	9.6	-	-	-	-	-	-	-	-	-
8 Jun	9.2	8.7	8.6	8.5	8.5	8.5	8.5	7.4	7.5	-	-	-	-	-	-	-	-	-
15 Jun	9.5	10.5	10.5	9.4	9.0	8.2	7.9	7.8	-	-	-	-	-	-	-	-	-	-
22 Jun	9.4	10.6	10.6	10.6	10.3	9.7	8.0	7.8	-	-	-	-	-	-	-	-	-	-
29 Jun	8.9	8.8	8.0	7.5	7.5	7.1	5.3	4.4(13)-		-	-	-	-	-	-	-	-	-

* ice = no samples taken because of ice cover
** depth in parentheses
\# FCD = station 29 not sampled because of flow over Gilboa Dam
LWL = samples not taken because of low water levels

Table 11 - (Continued).

Station & Date	Surface	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
		Depth (m)																
7 Jul	9.2	9.6	9.5	8.2	8.1	7.7	7.0	5.6	-	-	-	-	-	-	-	-	-	-
13 Jul	11.4	11.1	11.2	10.5	9.6	9.1	8.9	6.4	-	-	-	-	-	-	-	-	-	-
20 Jul	9.2	9.2	7.2	7.0	6.5	6.1	6.2	5.3(13)	-	-	-	-	-	-	-	-	-	-
27 Jul	10.4	10.5	10.4	9.6	9.1	7.2	4.6	-	-	-	-	-	-	-	-	-	-	-
3 Aug	8.5	8.4	8.4	7.4	7.4	6.6	3.9(11)	-	-	-	-	-	-	-	-	-	-	-
10 Aug	10.8	10.6	10.6	10.6	10.6	10.8	10.7	-	-	-	-	-	-	-	-	-	-	-
17 Aug	8.6	8.6	8.6	8.5	8.4	8.4	8.2	7.1(13)	-	-	-	-	-	-	-	-	-	-
24 Aug	10.2	8.9	8.8	7.7	7.0	7.1	-	-	-	-	-	-	-	-	-	-	-	-
30 Aug	9.6	9.6	9.6	9.6	9.5	9.5	-	-	-	-	-	-	-	-	-	-	-	-
7 Sep	9.5	9.6	9.5	9.6	9.6	-	-	-	-	-	-	-	-	-	-	-	-	-
14 Sep	8.6	8.6	9.0	8.6(5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22 Sep	8.9	8.9	9.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28 Sep	10.5	11.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27																		
6 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Mar	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 Mar	12.6	-	-	-	12.8(7)	-	-	13.0	-	-	-	-	-	-	-	-	-	-
30 Mar	12.1	-	-	-	12.1	-	-	-	12.1	-	-	-	-	-	-	-	-	-
6 Apr	12.3	-	-	-	-	12.3	-	-	-	12.6(17)	-	-	-	-	-	-	-	-
13 Apr	12.8	12.8	12.7	12.9	12.6	12.8	12.6	12.5	12.4	-	-	-	-	-	-	-	-	-
20 Apr	10.0	10.8	11.1	11.3	11.3	11.4	11.4	11.4	11.4	11.2	-	-	-	-	-	-	-	-
27 Apr	12.1	12.1	12.0	11.9	11.9	12.2	12.2	12.2	12.0	-	-	-	-	-	-	-	-	-

Table 11 - (Continued).

Station & Date	Surface	Depth (m) 2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
4 May	11.3	11.2	11.1	11.0	10.9	10.8	10.8	10.7	10.6	10.7	-	-	-	-	-	-	-	-
12 May	11.8	11.7	11.7	11.7	11.7	11.6	11.6	11.5	11.3	-	-	-	-	-	-	-	-	-
18 May	10.3	10.2	10.2	10.1	10.2	10.1	10.1	9.9	9.7	9.7	-	-	-	-	-	-	-	-
25 May	11.6	11.6	11.6	11.4	11.4	11.3	11.2	11.1	10.9	10.4(17)	-	-	-	-	-	-	-	-
2 Jun	10.0	10.2	10.2	10.6	10.7	10.6	10.5	10.4	10.3	9.9	-	-	-	-	-	-	-	-
8 Jun	9.4	9.4	9.5	9.4	9.4	9.3	9.3	9.2	8.4	8.2(17)	-	-	-	-	-	-	-	-
15 Jun	10.4	10.6	10.5	10.2	10.6	10.2	9.6	9.5	9.1	8.5(17)	-	-	-	-	-	-	-	-
22 Jun	10.6	10.5	10.5	10.5	11.1	10.1	9.8	9.5	9.2	8.5	-	-	-	-	-	-	-	-
29 Jun	8.4	8.4	8.4	8.1	7.7	8.3	8.1	8.0	6.6	6.6(17)	-	-	-	-	-	-	-	-
7 Jul	9.8	9.8	8.9	8.6	8.4	8.6	8.9	8.2	7.6	6.8(17)	-	-	-	-	-	-	-	-
13 Jul	11.7	11.7	11.6	9.2	9.8	10.8	10.6	10.3	8.6	8.1(17)	-	-	-	-	-	-	-	-
20 Jul	9.2	9.2	8.9	7.4	6.8	6.9	8.1	8.0	5.8	5.5(17)	-	-	-	-	-	-	-	-
27 Jul	10.8	10.5	10.8	10.5	9.4	7.8	8.8	8.6	7.0	-	-	-	-	-	-	-	-	-
3 Aug	8.2	8.2	8.2	8.2	6.0	5.6	6.4	4.8	-	-	-	-	-	-	-	-	-	-
10 Aug	9.8	9.6	9.7	9.7	10.1	10.2	10.4	10.4	10.5	-	-	-	-	-	-	-	-	-
17 Aug	8.8	8.6	8.6	8.7	8.0	7.9	7.9	7.4	6.0(15)	-	-	-	-	-	-	-	-	-
24 Aug	10.2	10.3	10.0	8.5	8.1	7.8	7.8	7.4	-	-	-	-	-	-	-	-	-	-
30 Aug	9.8	10.0	9.8	9.8	6.7	6.5	4.2	-	-	-	-	-	-	-	-	-	-	-
7 Sep	9.5	9.5	9.5	9.5	9.4	5.3	-	-	-	-	-	-	-	-	-	-	-	-
14 Sep	9.1	8.7	8.7	8.2	6.4	-	-	-	-	-	-	-	-	-	-	-	-	-
22 Sep	8.5	8.4	8.4	8.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28 Sep	9.6	8.6	9.5	9.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 11 - (Continued).

Station & Date	Surface	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
		Depth (m)																
28																		
6 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Mar	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 Mar	13.0	-	-	-	-	-	12.9(11)	-	-	-	-	13.2	-	-	-	-	-	-
30 Mar	12.8	-	-	-	-	-	12.6	-	-	-	-	-	12.8(23)	-	-	-	-	-
6 Apr	12.0	-	-	-	-	-	12.9(11)	-	-	-	-	12.0	-	-	-	-	-	-
13 Apr	12.7	12.8	12.8	12.8	12.7	12.8	12.8	12.9	12.9	12.7	12.7	12.7	-	-	-	-	-	-
20 Apr	9.6	11.2	11.2	11.2	11.3	11.4	11.4	11.5	11.5	11.6	11.5	11.5	-	-	-	-	-	-
27 Apr	12.2	12.2	12.2	12.2	12.1	12.1	12.5	12.6	12.7	12.8	12.8	12.4(21)	-	-	-	-	-	-
4 May	11.3	11.3	11.3	11.3	11.2	10.9	10.9	10.9	10.8	10.8	10.8	10.7	-	-	-	-	-	-
12 May	11.7	11.8	11.8	11.6	11.6	11.6	11.6	11.5	11.4	11.3	11.1	11.1	-	-	-	-	-	-
18 May	10.5	10.5	10.5	10.5	10.4	10.2	10.1	10.0	10.0	9.8	9.8	9.9	-	-	-	-	-	-
25 May	11.5	11.4	11.5	11.4	11.3	11.3	11.2	10.9	10.9	10.9	10.7	10.5	-	-	-	-	-	-
2 Jun	11.1	11.0	11.0	10.8	10.7	10.8	10.8	10.7	10.6	10.6	10.5	10.1(21)	-	-	-	-	-	-
8 Jun	9.7	9.7	9.8	9.4	9.5	9.5	9.4	9.5	9.3	8.9	8.8	8.4(21)	-	-	-	-	-	-
15 Jun	10.3	10.6	10.6	10.8	10.6	10.2	10.2	10.1	10.2	9.1	9.0	9.0	-	-	-	-	-	-
22 Jun	10.4	10.6	10.7	10.7	11.3	10.5	10.4	10.2	9.5	9.2	9.0	8.7	-	-	-	-	-	-
29 Jun	8.4	8.2	8.2	8.1	8.8	8.7	8.7	8.5	8.5	7.4	7.2	5.8	-	-	-	-	-	-
7 Jul	9.5	9.6	9.6	8.3	8.4	9.4	9.7	9.6	9.6	8.2	7.6	7.5	-	-	-	-	-	-
13 Jul	11.6	11.7	11.7	9.6	9.9	10.4	11.9	11.6	10.8	9.5	9.2	7.6	-	-	-	-	-	-
20 Jul	8.9	9.0	9.0	8.8	7.0	7.6	8.4	8.5	6.8	6.6	6.5	5.5	-	-	-	-	-	-
27 Jul	11.1	11.1	11.1	11.0	9.4	8.2	9.5	10.2	10.3	7.9	7.8	-	-	-	-	-	-	-

Table 11 - (Continued).

Station & Date	Surface	Depth (m) 2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
3 Aug	8.2	8.1	8.3	8.2	7.3	5.8	6.9	7.4	7.8	5.4	-	-	-	-	-	-	-	-
10 Aug	9.7	9.5	9.6	9.6	9.5	9.0	7.6	7.8	8.2	7.2	-	-	-	-	-	-	-	-
17 Aug	8.9	8.8	8.8	8.8	7.3	7.3	7.3	7.2	7.0	6.4	5.2	-	-	-	-	-	-	-
24 Aug	10.2	10.6	10.4	8.7	7.6	7.5	7.6	7.4	6.1	5.9	4.6(19)	-	-	-	-	-	-	-
30 Aug	10.1	9.9	9.9	9.9	7.5	7.1	6.8	6.4	5.6	-	-	-	-	-	-	-	-	-
7 Sep	9.4	9.6	9.6	9.4	9.3	6.2	5.7	5.7	-	-	-	-	-	-	-	-	-	-
14 Sep	8.8	8.9	8.8	8.7	7.3	4.6	5.1	-	-	-	-	-	-	-	-	-	-	-
22 Sep	9.0	8.9	8.9	8.7	6.5(7)	-	-	-	-	-	-	-	-	-	-	-	-	-
28 Sep	9.6	9.6	9.5	9.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29																		
6 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Mar	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 Mar	FGD#	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30 Mar	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6 Apr	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 Apr	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20 Apr	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27 Apr	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4 May	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 May	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18 May	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25 May	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 11 - (Continued).

Station & Date	Surface	Depth (m) 2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
2 Jun	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8 Jun	9.7	9.7	9.9	9.8	9.6	9.4	9.4	-	-	-	-	-	-	-	-	-	-	-
15 Jun	10.1	10.4	10.4	10.4	10.8	10.7	10.2	10.0(13)	-	-	-	-	-	-	-	-	-	-
22 Jun	10.5	10.6	10.5	10.9	11.7	10.8	9.3	-	-	-	-	-	-	-	-	-	-	-
29 Jun	8.4	8.4	8.4	8.2	9.2	9.0	8.9	8.8(13)	-	-	-	-	-	-	-	-	-	-
7 Jul	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 Jul	FGD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20 Jul	9.1	9.1	9.1	9.0	8.9	7.2	8.6	8.6	-	-	-	-	-	-	-	-	-	-
27 Jul	11.1	10.9	11.0	10.9	10.7	-	-	-	-	-	-	-	-	-	-	-	-	-
3 Aug	8.4	8.3	8.2	8.2	8.0	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Aug	9.0	8.7	8.3	7.4	6.8	6.9	-	-	-	-	-	-	-	-	-	-	-	-
17 Aug	8.1	8.0	7.8	7.3	7.2	6.3	6.2	-	-	-	-	-	-	-	-	-	-	-
24 Aug	10.6	10.6	10.6	10.5	9.4	7.8	-	-	-	-	-	-	-	-	-	-	-	-
30 Aug	9.4	9.2	9.2	7.5	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-
7 Sep	8.8	8.8	8.6	8.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14 Sep	9.1	9.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22 Sep	LWL##	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28 Sep	LWL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30																		
6 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 11 - (Continued).

Station & Date	Surface	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
		Depth (m)																
10 Mar	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 Mar	12.8	-	-	-	-	-	-	-	-	13.4(17)-		-	-	-	-	-	-	12.3
30 Mar	12.3	-	-	-	-	-	-	-	-	12.3(17)-		-	-	-	-	-	-	12.5
6 Apr	12.2	-	-	-	-	-	-	-	-	12.1(17)-		-	-	-	-	-	-	12.0
13 Apr	12.8	13.0	12.9	12.9	12.9	13.0	13.0	12.8	12.9	12.9	12.9	13.0	12.7	12.0	12.0	12.0	12.0	-
20 Apr	11.1	11.2	11.0	11.1	11.4	11.6	11.5	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	-
27 Apr	12.7	12.7	12.6	12.7	12.5	12.6	12.6	12.6	12.8	12.7	12.8	12.8	12.7	12.6	12.6	12.6	12.6	-
4 May	11.4	11.4	11.3	11.3	11.3	11.3	11.2	11.1	11.1	11.2	11.1	11.1	11.2	11.2	11.2	11.1	11.1	11.0
12 May	11.3	11.3	11.2	11.2	11.2	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.0	11.0	11.1	11.0	11.0	-
18 May	10.3	10.3	10.3	10.3	10.3	10.2	10.2	10.1	10.1	10.2	10.2	10.2	10.3	10.3	10.2	10.4	10.2	-
25 May	11.4	11.4	11.4	11.4	11.3	11.2	11.3	11.3	11.2	11.1	10.9	10.9	11.0	11.0	10.9	10.8	10.5	-
2 Jun	11.1	11.2	11.2	11.0	10.9	10.7	10.7	10.7	10.7	10.7	10.4	10.5	10.5	10.6	10.5	10.6	10.5	-
8 Jun	9.6	9.8	9.8	9.8	9.6	9.4	9.3	9.4	9.4	9.3	9.4	9.2	9.2	9.2	9.1	9.1	9.0	9.0
15 Jun	10.4	10.4	10.4	10.8	10.8	10.6	10.3	10.2	10.1	10.0	9.8	9.8	9.8	9.6	9.6	9.6	9.6	9.6
22 Jun	10.2	10.3	10.1	10.6	10.6	10.7	10.6	10.4	10.3	10.2	10.1	10.1	10.0	10.0	10.0	9.9	9.8	9.6
29 Jun	8.2	8.3	8.2	8.2	8.9	9.3	9.0	8.7	8.7	8.8	8.8	8.8	8.7	8.8	8.7	8.6	8.6	8.4
7 Jul	9.5	9.7	9.7	8.6	8.2	9.4	9.6	9.6	9.6	9.6	9.6	9.6	9.5	9.4	9.2	9.0	8.6	8.5
13 Jul	11.6	11.6	11.6	10.1	10.0	11.7	12.0	12.1	12.1	12.1	12.1	11.9	11.9	11.6	11.4	10.8	10.8	10.5
20 Jul	9.0	9.1	9.1	9.0	7.5	7.8	9.0	8.8	8.9	9.0	8.8	8.5	8.5	8.7	8.7	8.5	8.6	6.7
27 Jul	10.9	10.8	11.2	11.0	10.0	8.0	9.2	10.4	10.7	10.7	9.9	10.0	10.2	10.3	10.3	9.8	9.5	9.1
3 Aug	8.3	8.2	8.4	8.3	8.2	8.2	6.8	7.6	7.7	7.8	7.6	7.4	6.5	6.5	6.5	6.1	5.0(31)-	
10 Aug	9.5	9.5	9.1	9.4	9.1	8.1	6.6	8.8	8.8	8.9	9.2	8.7	8.6	8.6	8.6	8.6	-	-
17 Aug	8.2	8.2	8.0	8.0	6.9	6.6	6.6	6.6	6.6	7.4	7.3	7.2	7.3	6.1	6.0	5.9	5.8	5.2(33)
24 Aug	10.6	10.6	10.6	9.6	9.0	7.6	7.2	7.1	7.9	7.9	7.9	7.8	7.3	7.0	6.2	5.9	-	-
30 Aug	9.4	9.4	9.2	8.6	7.0	6.5	6.5	6.3	6.4	6.5	7.6	7.9	7.4	7.0	6.6	5.7	-	-

Table 11 - (Continued).

Station & Date	Surface	Depth (m) 2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
7 Sep	9.2	9.2	9.0	9.1	9.0	9.0	6.0	6.9	7.0	7.1	6.2	6.1	5.5	5.2	4.3(27)	-	-	-
14 Sep	9.1	9.0	8.9	8.8	8.7	5.3	6.0	6.1	7.0	6.6	6.0	5.4	4.8	4.5	-	-	-	-
22 Sep	9.2	9.1	9.1	9.0	6.2	5.6	6.4	5.4	5.2	5.4	4.8	4.2	3.7	-	-	-	-	-
28 Sep	9.5	9.6	9.6	9.5	6.0	5.0	6.3	6.6	6.4	5.2	4.1	3.4	3.2(23)	-	-	-	-	-
13																		
6 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Mar	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 Mar	13.2	-	-	-	-	13.2(9)	-	-	-	13.4(17)	-	-	-	-	-	-	-	-
30 Mar	12.8	-	-	-	12.3	-	-	-	12.4	-	-	-	-	-	-	-	-	-
6 Apr	12.5	-	-	12.0	-	-	12.9	-	-	-	-	-	-	-	-	-	-	-
13 Apr	12.4	12.5	12.5	12.5	12.4	12.4	12.2	-	-	-	-	-	-	-	-	-	-	-
20 Apr	11.6	11.7	11.7	11.7	11.6	11.8	11.8(11)	-	-	-	-	-	-	-	-	-	-	-
27 Apr	11.8	11.8	11.7	11.8	11.8	11.9	12.0	-	-	-	-	-	-	-	-	-	-	-
4 May	11.4	11.4	11.3	11.2	11.0	-	-	-	-	-	-	-	-	-	-	-	-	-
12 May	11.1	11.0	11.0	10.9	10.9	10.9	-	-	-	-	-	-	-	-	-	-	-	-
18 May	11.0	11.1	10.9	10.9	10.8	10.7	-	-	-	-	-	-	-	-	-	-	-	-
25 May	11.1	11.1	11.1	11.1	11.1	-	-	-	-	-	-	-	-	-	-	-	-	-
2 Jun	11.7	11.6	11.5	11.4	11.3	11.3	-	-	-	-	-	-	-	-	-	-	-	-
8 Jun	10.6	10.7	10.9	10.3	10.4	10.4	10.2(11)	-	-	-	-	-	-	-	-	-	-	-
15 Jun	9.5	9.5	9.4	9.3	9.2	9.3	9.2	-	-	-	-	-	-	-	-	-	-	-
22 Jun	9.6	9.4	9.3	9.2	8.6	8.5	-	-	-	-	-	-	-	-	-	-	-	-
29 Jun	9.1	9.2	9.2	9.2	8.7	8.4	7.4(11)	-	-	-	-	-	-	-	-	-	-	-

Table 11 - (Continued).

Station & Date	Surface	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
		Depth (m)																
7 Jul	9.8	9.6	9.9	9.4	8.8	8.6	-	-	-	-	-	-	-	-	-	-	-	-
13 Jul	8.6	8.6	8.6	8.6	8.6	8.5	7.1(11)	-	-	-	-	-	-	-	-	-	-	-
20 Jul	9.6	9.7	9.6	9.5	9.0	-	-	-	-	-	-	-	-	-	-	-	-	-
27 Jul	11.4	11.4	11.2	10.8	10.5	9.9	-	-	-	-	-	-	-	-	-	-	-	-
3 Aug	9.0	8.8	9.2	8.9	8.7	8.6	8.4(11)	-	-	-	-	-	-	-	-	-	-	-
10 Aug	12.1	12.1	12.1	12.1	11.9	10.9(9)	-	-	-	-	-	-	-	-	-	-	-	-
17 Aug	7.7	7.7	7.7	7.3	7.2	6.3	-	-	-	-	-	-	-	-	-	-	-	-
24 Aug	11.1	11.0	11.2	11.2	10.6	10.3	9.0(11)	-	-	-	-	-	-	-	-	-	-	-
30 Aug	9.4	9.4	9.2	9.1	8.9	7.8(9)	-	-	-	-	-	-	-	-	-	-	-	-
7 Sep	9.6	9.7	9.6	9.4	9.3	9.2	-	-	-	-	-	-	-	-	-	-	-	-
14 Sep	9.1	9.1	8.8	8.8	8.7	8.6	-	-	-	-	-	-	-	-	-	-	-	-
22 Sep	7.9	8.0	8.0	7.8	7.9	7.9	7.7(11)	-	-	-	-	-	-	-	-	-	-	-
28 Sep	8.5	8.3	8.3	8.3	8.3	8.2	8.1(11)	-	-	-	-	-	-	-	-	-	-	-
14																		
6 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Mar	13.0	-	-	14.0(5)	-	13.5	-	-	-	-	-	-	-	-	-	-	-	-
26 Mar	12.8	-	12.8	-	13.1(7)	-	-	-	-	-	-	-	-	-	-	-	-	-
30 Mar	12.8	-	12.8	-	12.8(7)	-	-	-	-	-	-	-	-	-	-	-	-	-
6 Apr	12.7	-	12.5(3)	12.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 Apr	12.3	12.4	12.4	12.4	12.3	-	-	-	-	-	-	-	-	-	-	-	-	-
20 Apr	11.6	11.8	11.7	11.7	11.7	-	-	-	-	-	-	-	-	-	-	-	-	-
27 Apr	12.2	12.1	12.1	12.2	12.1	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 11 - (Continued).

Station & Date	Surface	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
		Depth (m)																
4 May	11.4	11.4	11.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 May	10.9	11.0	10.9	10.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18 May	10.8	10.8	10.7	10.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25 May	11.0	11.0	11.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2 Jun	11.6	11.7	11.7	11.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8 Jun	10.5	10.5	10.6	10.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 Jun	9.4	9.4	9.4	9.4	9.4	9.2	-	-	-	-	-	-	-	-	-	-	-	-
22 Jun	9.1	8.8	8.6	8.5	8.8	8.6	-	-	-	-	-	-	-	-	-	-	-	-
29 Jun	8.7	8.7	8.7	8.4	8.6	-	-	-	-	-	-	-	-	-	-	-	-	-
7 Jul	8.8	8.7	8.6	8.4	8.4	-	-	-	-	-	-	-	-	-	-	-	-	-
13 Jul	8.5	8.5	8.4	8.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20 Jul	9.0	8.9	8.9	8.9(5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27 Jul	10.6	10.8	10.6	10.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3 Aug	8.6	8.6	8.6	8.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Aug	11.6	11.7	11.6	11.7(5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Aug	7.4	7.4	7.4	7.4	7.4(7)	-	-	-	-	-	-	-	-	-	-	-	-	-
24 Aug	10.7	10.7	10.8	10.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30 Aug	9.2	9.2	9.1	9.1(5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7 Sep	10.0	9.9	9.8	9.8	9.8	-	-	-	-	-	-	-	-	-	-	-	-	-
14 Sep	8.9	8.8	8.8	8.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22 Sep	8.2	8.2	8.2	8.2	8.2(7)	-	-	-	-	-	-	-	-	-	-	-	-	-
28 Sep	8.3	8.5	8.5	8.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 11 - (Continued).

Station & Date	Surface	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
		Depth (m)																
16																		
6 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Mar	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 Mar	13.9	-	-	-	-	13.0(9)	-	-	-	13.1(17)	-	-	-	-	-	-	-	-
30 Mar	12.5	-	-	-	-	12.3(9)	-	-	-	12.7	-	-	-	-	-	-	-	-
6 Apr	12.4	-	-	-	-	12.6(9)	-	-	-	12.4	-	-	-	-	-	-	-	-
13 Apr	11.8	11.8	11.9	11.9	11.9	11.9	11.9	11.9	11.9	-	-	-	-	-	-	-	-	-
20 Apr	10.7	10.7	10.7	10.9	11.0	11.0	11.0	11.2	11.2	11.0	-	-	-	-	-	-	-	-
27 Apr	10.8	10.8	10.8	10.8	10.8	10.8	10.9	11.0	11.1	10.8(17)	-	-	-	-	-	-	-	-
4 May	11.2	11.1	11.2	11.1	11.1	11.2	11.3	11.4	11.4	11.2	11.2	-	-	-	-	-	-	-
12 May	10.8	10.7	10.7	10.7	10.7	10.6	10.6	10.4	10.5	10.5	-	-	-	-	-	-	-	-
18 May	9.8	9.9	9.8	9.9	9.8	9.9	9.9	9.9	9.9	-	-	-	-	-	-	-	-	-
25 May	12.5	12.7	12.7	12.7	12.7	12.9	12.7	12.6	12.7	12.7	-	-	-	-	-	-	-	-
2 Jun	10.3	10.2	10.2	10.1	10.0	10.1	9.9	10.1	9.8	9.5	-	-	-	-	-	-	-	-
8 Jun	10.0	9.9	9.8	9.8	9.6	9.7	9.6	9.5	9.4	9.1	-	-	-	-	-	-	-	-
15 Jun	9.7	9.7	9.6	9.5	9.5	9.5	9.5	9.5	9.4	8.2	-	-	-	-	-	-	-	-
22 Jun	9.4	9.2	8.8	9.3	8.9	8.8	8.8	8.9	8.9	8.2	-	-	-	-	-	-	-	-
29 Jun	9.0	9.1	8.9	8.8	8.8	8.8	8.7	8.6	8.3	6.4	-	-	-	-	-	-	-	-

Table 11 - (Continued).

Station & Date	Surface	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
		Depth (m)																
7 Jul	8.4	8.4	8.4	8.3	8.2	7.8	7.6	7.6	7.4	5.2(17)	-	-	-	-	-	-	-	-
13 Jul	9.4	9.3	9.3	9.3	9.2	9.2	9.2	9.1	8.9	5.3	-	-	-	-	-	-	-	-
20 Jul	9.4	9.3	9.4	9.4	9.3	9.4	9.0	9.1	8.8	8.6	7.5(19)	-	-	-	-	-	-	-
27 Jul	9.4	9.4	9.2	9.1	9.2	9.1	8.9	9.1	8.8	8.2	-	-	-	-	-	-	-	-
3 Aug	8.7	8.7	8.7	8.4	8.3	8.2	8.4	8.4	8.2	7.3(17)	-	-	-	-	-	-	-	-
10 Aug	9.4	9.6	9.4	9.5	9.4	9.4	8.8	8.9	8.5	8.4	-	-	-	-	-	-	-	-
17 Aug	8.6	8.6	8.7	8.6	8.5	8.5	8.4	8.2	8.0	8.1	-	-	-	-	-	-	-	-
24 Aug	10.4	10.5	10.5	10.4	10.3	10.2	10.2	9.9	9.4	-	-	-	-	-	-	-	-	-
30 Aug	9.2	9.2	9.1	9.2	9.2	9.1	9.1	9.0	8.9	7.4	-	-	-	-	-	-	-	-
7 Sep	10.0	10.1	10.1	10.0	9.9	9.8	9.9	9.9	9.9	9.8	-	-	-	-	-	-	-	-
14 Sep	8.2	8.2	8.1	8.1	8.2	8.2	7.8	7.7	7.6	7.6	-	-	-	-	-	-	-	-
22 Sep	8.2	8.6	8.2	8.2	8.2	7.9	8.1	8.1	8.1	-	-	-	-	-	-	-	-	-
28 Sep	8.5	8.8	8.5	8.6	8.5	8.5	8.5	8.5	8.5	8.4(17)	-	-	-	-	-	-	-	-
17																		
6 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 Jan	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Feb	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Mar	ice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 Mar	12.8	-	-	-	-	13.2	-	-	-	-	13.2(19)	-	-	-	-	-	-	-
30 Mar	12.7	-	-	-	-	12.8(9)	-	-	-	12.7	-	-	-	-	-	-	-	-
6 Apr	12.5	-	-	-	-	12.9(9)	-	-	-	12.3	-	-	-	-	-	-	-	-
13 Apr	12.0	11.8	11.9	11.9	12.0	12.0	12.0	12.0	11.9	11.9	-	-	-	-	-	-	-	-
20 Apr	11.2	11.2	11.0	11.3	11.2	11.2	11.2	11.2	11.2	11.2	-	-	-	-	-	-	-	-
27 Apr	11.0	10.9	10.8	10.7	10.6	10.9	10.8	10.9	-	-	-	-	-	-	-	-	-	-

Table 11 - (Continued).

Station & Date	Surface	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
		Depth (m)																
4 May	11.0	10.8	10.8	10.9	10.9	10.9	10.9	11.0	11.0	11.1	-	-	-	-	-	-	-	-
12 May	10.7	10.7	10.7	10.7	10.6	10.6	10.6	10.6	10.6	10.5	-	-	-	-	-	-	-	-
18 May	9.7	9.9	9.9	9.9	9.9	9.5	9.5	10.0	-	-	-	-	-	-	-	-	-	-
25 May	12.8	12.7	12.7	12.8	12.8	12.8	12.7	12.6	12.7	-	-	-	-	-	-	-	-	-
2 Jun	10.3	10.4	10.4	10.4	10.2	10.1	10.0	9.8	9.8	-	-	-	-	-	-	-	-	-
8 Jun	9.7	9.6	9.6	9.6	9.6	9.6	9.5	9.4	9.2	8.8	8.2(19)	-	-	-	-	-	-	-
15 Jun	9.8	9.6	9.7	9.7	9.6	9.6	9.6	9.5	9.4	8.4(17)	-	-	-	-	-	-	-	-
22 Jun	9.4	9.4	9.2	9.0	8.9	8.9	8.8	8.7	8.6(15)	-	-	-	-	-	-	-	-	-
29 Jun	8.8	8.8	8.7	8.6	8.6	8.6	8.5	8.4	8.1	6.0	-	-	-	-	-	-	-	-
7 Jul	8.0	8.1	8.0	7.9	7.8	7.6	7.6	7.5	7.1	6.6	-	-	-	-	-	-	-	-
13 Jul	9.3	9.2	9.2	9.2	9.1	9.1	9.0	8.9	-	-	-	-	-	-	-	-	-	-
20 Jul	9.4	9.3	9.3	9.2	9.2	9.2	9.2	9.1	8.8	-	-	-	-	-	-	-	-	-
27 Jul	9.4	9.2	8.9	9.1	9.2	8.8	9.1	8.9	8.8	-	-	-	-	-	-	-	-	-
3 Aug	8.7	8.6	8.6	8.4	8.3	8.3	8.0	7.8	-	-	-	-	-	-	-	-	-	-
10 Aug	9.3	9.6	9.5	9.5	9.6	9.6	9.6	9.6	9.4	-	-	-	-	-	-	-	-	-
17 Aug	8.6	8.6	8.7	8.6	8.6	8.5	8.3	-	-	-	-	-	-	-	-	-	-	-
24 Aug	10.4	10.5	10.6	10.4	10.2	10.2	10.0	9.0	-	-	-	-	-	-	-	-	-	-
30 Aug	9.2	9.3	9.3	9.3	9.2	9.2	9.2	9.2	9.2	7.0	-	-	-	-	-	-	-	-
7 Sep	10.0	10.2	10.3	10.2	10.2	10.2	10.2	9.9(13)	-	-	-	-	-	-	-	-	-	-
14 Sep	8.2	8.2	8.0	8.0	8.0	8.0	7.9	7.8(13)	-	-	-	-	-	-	-	-	-	-
22 Sep	8.4	8.2	8.2	8.2	8.1	8.1	8.0	-	-	-	-	-	-	-	-	-	-	-
28 Sep	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	-	-	-	-	-	-	-	-	-

Table 12. Summary of turbidity data (nephelometer turbidity units) taken from 10 March through 30 September 1976 from Schoharie Reservoir (SR) and Lower B-G.

Date	Stations	
	SR	Lower B-G
	33	34
10 Mar	-*	16
26 Mar	-	17
30 Mar	-	13
$\bar{x}$	-	15
1 Apr	-	27
2 Apr	-	15
3 Apr	-	12
4 Apr	-	11
5 Apr	-	14
6 Apr	-	14
9 Apr	-	12
12 Apr	1.3	10
13 Apr	7.7	18
14 Apr	7.5	13
16 Apr	8.2	16
17 Apr	12	12
19 Apr	11	12
20 Apr	4.7	12
22 Apr	8.1	13
23 Apr	6.7	13
25 Apr	7.2	14
26 Apr	5.9	14
27 Apr	8.0	-#
29 Apr	5.4	9.7
30 Apr	5.6	10
$\bar{x}$	7.1	14
2 May	8.7	6.3
3 May	8.3	5.8
4 May	5.9	9.2
6 May	11	-
7 May	4.8	5.8
10 May	10	-
11 May	6.8	4.5
13 May	9.6	6.1
14 May	6.0	-
18 May	3.3	4.7
19 May	5.9	-
20 May	4.6	-

* station 33 first sampled 12 April 1976
\# data not recorded

Table 12 - (Continued).

Date	Stations	
	SR	Lower B-G
	33	34
21 May	5.7	11
24 May	4.9	4.6
25 May	3.7	4.2
26 May	6.7	4.5
27 May	4.5	-
28 May	4.6	6.6
31 May	2.5	12
$\bar{x}$	6.2	6.6
1 Jun	7.9	3.4
2 Jun	6.5	-
5 Jun	12	5.8
6 Jun	4.8	4.8
7 Jun	3.3	3.9
8 Jun	4.5	3.0
11 Jun	5.2	-
13 Jun	4.4	-
14 Jun	2.5	3.2
15 Jun	2.3	3.8
16 Jun	3.0	4.6
17 Jun	2.9	5.0
21 Jun	3.1	4.7
22 Jun	2.9	4.3
23 Jun	4.2	4.5
25 Jun	2.6	4.4
28 Jun	2.3	4.5
29 Jun	3.6	3.7
$\bar{x}$	4.3	4.2
1 Jul	1.8	4.5
2 Jul	3.2	5.7
6 Jul	2.0	4.2
7 Jul	2.4	3.5
9 Jul	1.7	3.5
12 Jul	1.8	2.3
13 Jul	1.6	4.6
15 Jul	1.5	2.8
16 Jul	1.5	3.5
19 Jul	1.6	2.4
20 Jul	2.5	4.2
22 Jul	2.2	3.4
23 Jul	3.6	3.5
26 Jul	2.6	3.3

Table 12 - (Continued).

Date	Stations	
	SR	Lower B-G
	33	34
27 Jul	4.0	2.4
29 Jul	2.0	3.1
30 Jul	2.7	2.8
$\bar{x}$	2.3	3.5
3 Aug	1.7	3.2
4 Aug	2.6	2.8
5 Aug	2.7	2.6
6 Aug	2.3	2.8
9 Aug	1.8	3.2
10 Aug	4.0	4.0
12 Aug	29	3.4
13 Aug	4.1	3.1
16 Aug	4.1	2.8
17 Aug	6.2	2.8
19 Aug	5.5	3.2
20 Aug	5.9	3.1
23 Aug	4.8	9.0
24 Aug	4.1	2.8
26 Aug	3.3	2.6
27 Aug	3.8	2.8
30 Aug	7.0	3.7
$\bar{x}$	5.5	3.4
1 Sep	5.9	3.6
2 Sep	5.2	3.8
3 Sep	6.2	3.8
7 Sep	7.8	3.4
9 Sep	7.3	3.2
10 Sep	13	3.5
13 Sep	7.4	3.7
14 Sep	6.6	3.7
16 Sep	5.0	3.5
17 Sep	4.7	3.2
21 Sep	5.8	4.0
22 Sep	8.4	3.8
28 Sep	5.7	4.4
29 Sep	8.1	4.5
30 Sep	7.9	4.0
$\bar{x}$	7.0	3.7
Grand $\bar{x}$	5.4	6.4
Minimum	1.3	2.3
Maximum	29	27
Standard Deviation	3.59	4.67

Table 13. Summary of air temperature data (C) taken from 10 March through 30 September 1976 from Schoharie Reservoir (SR) and Lower B-G.

Date	Stations	
	SR	Lower B-G
	33	34
10 Mar	-*	-2
26 Mar	-	15
30 Mar	-	16
1 Apr	-	7
2 Apr	-	6
3 Apr	-	5
4 Apr	-	6
5 Apr	-	9
6 Apr	-	13
9 Apr	-	9
12 Apr	1	-3
13 Apr	8	10
14 Apr	17	10
16 Apr	16	22
17 Apr	22	24
19 Apr	26	31
20 Apr	24	23
22 Apr	18	19
23 Apr	15	14
25 Apr	10	7
26 Apr	6	8
27 Apr	3	-#
29 Apr	10	12
30 Apr	16	17
2 May	15	20
3 May	10	5
4 May	5	6
6 May	23	-
7 May	13	19
10 May	18	-
11 May	20	19
13 May	33	13
14 May	23	-
18 May	7	17
19 May	4	-
20 May	9	-
21 May	18	17
24 May	17	15

* station 33 first sampled 12 April 1976
\# data not recorded

Table 13 - (Continued).

Date	Stations	
	SR	Lower B-G
	33	34
25 May	12	14
26 May	12	13
27 May	17	-
28 May	20	24
31 May	18	22
1 Jun	15	16
2 Jun	15	-
5 Jun	24	22
6 Jun	18	21
7 Jun	15	18
8 Jun	25	26
11 Jun	28	-
13 Jun	25	-
14 Jun	23	24
15 Jun	21	32
16 Jun	24	27
17 Jun	21	19
21 Jun	23	23
22 Jun	24	23
23 Jun	23	26
25 Jun	22	28
28 Jun	20	23
29 Jun	30	24
1 Jul	23	23
2 Jul	19	25
6 Jul	25	27
7 Jul	22	23
9 Jul	22	23
12 Jul	21	23
13 Jul	15	18
15 Jul	19	22
16 Jul	21	24
19 Jul	23	23
20 Jul	28	28
22 Jul	22	20
23 Jul	20	20
26 Jul	17	23
27 Jul	24	28
29 Jul	17	17
30 Jul	22	23

Table 13 - (Continued).

Date	Stations	
	SR	Lower B-G
	33	34
3 Aug	19	26
4 Aug	24	23
5 Aug	22	22
6 Aug	22	22
9 Aug	19	22
10 Aug	18	19
12 Aug	22	22
13 Aug	24	24
16 Aug	18	22
17 Aug	19	22
19 Aug	22	21
20 Aug	26	26
23 Aug	25	26
24 Aug	18	24
26 Aug	24	28
27 Aug	23	23
30 Aug	12	14
1 Sep	20	20
2 Sep	15	16
3 Sep	17	18
7 Sep	19	19
9 Sep	26	20
10 Sep	17	17
13 Sep	27	30
14 Sep	24	22
16 Sep	19	19
17 Sep	20	21
21 Sep	15	16
22 Sep	14	15
28 Sep	14	14
29 Sep	15	17
30 Sep	16	15

Table 14. Summary of water temperature data (C) taken from 10 March through 30 September 1976 from Schoharie Reservoir (SR) and Lower B-G.

Date	Stations	
	SR	Lower B-G
	33	34
10 Mar	-*	2
26 Mar	-	3
30 Mar	-	5
$\bar{x}$	-	3
1 Apr	-	6
2 Apr	-	5
3 Apr	-	4
4 Apr	-	5
5 Apr	-	4
6 Apr	-	5
9 Apr	-	7
12 Apr	6	4
13 Apr	9	5
14 Apr	10	5
16 Apr	9	11
17 Apr	14	14
19 Apr	16	11
20 Apr	12	9
22 Apr	13	12
23 Apr	13	12
25 Apr	12	10
26 Apr	11	11
27 Apr	10	-#
29 Apr	11	10
30 Apr	12	11
$\bar{x}$	11	8
2 May	12	11
3 May	12	10
4 May	11	8
6 May	11	-
7 May	11	11
10 May	12	-
11 May	12	10
13 May	14	12
14 May	15	-
18 May	13	14
19 May	10	-
20 May	12	-

* station 33 first sampled 12 April 1976
\# data not recorded

Table 14 - (Continued).

Date	Stations	
	SR	Lower B-G
	33	34
21 May	13	13
24 May	14	11
25 May	13	12
26 May	12	12
27 May	14	-
28 May	16	14
31 May	15	17
$\bar{x}$	13	12
1 Jun	15	13
2 Jun	15	-
5 Jun	18	16
6 Jun	16	17
7 Jun	15	15
8 Jun	20	15
11 Jun	22	-
13 Jun	18	-
14 Jun	20	18
15 Jun	20	18
16 Jun	19	18
17 Jun	20	18
21 Jun	22	21
22 Jun	22	20
23 Jun	23	21
25 Jun	23	21
28 Jun	23	21
29 Jun	24	22
$\bar{x}$	20	16
1 Jul	23	22
2 Jul	21	22
6 Jul	27	23
7 Jul	23	22
9 Jul	23	23
12 Jul	22	22
13 Jul	20	21
15 Jul	20	22
16 Jul	22	22
19 Jul	22	22
20 Jul	22	22
22 Jul	22	22
23 Jul	21	22
26 Jul	21	22

Table 14 - (Continued).

Date	Stations	
	SR	Lower B-G
	33	34
27 Jul	21	22
29 Jul	21	21
30 Jul	21	22
$\bar{x}$	22	22
3 Aug	20	21
4 Aug	21	22
5 Aug	21	22
6 Aug	21	22
9 Aug	21	22
10 Aug	20	21
12 Aug	20	21
13 Aug	22	22
16 Aug	21	20
17 Aug	20	21
19 Aug	21	22
20 Aug	24	22
23 Aug	24	22
24 Aug	23	23
26 Aug	22	23
27 Aug	22	22
30 Aug	22	22
$\bar{x}$	21	22
1 Sep	21	21
2 Sep	19	20
3 Sep	20	21
7 Sep	20	20
9 Sep	21	21
10 Sep	18	20
13 Sep	21	20
14 Sep	20	20
16 Sep	19	20
17 Sep	20	20
21 Sep	19	20
22 Sep	12	19
28 Sep	15	18
29 Sep	16	18
30 Sep	16	17
$\bar{x}$	18	20
Grand $\bar{x}$	18	16
Minimum	6	2
Maximum	27	23
Standard Deviation	4.6	6.2

Table 15. Summary of mean daily water level fluctuation (feet) taken from June 1973 through September 1976 in Lower and Upper B-G.

Date	Lower B-G						Upper B-G					
	Days Level Changed		Amount of Fluctuation (feet)				Days Level Changed		Amount of Fluctuation (feet)			
	Did Occur	Did Not Occur	Min. Fluc*	Max. Fluc**	Ave. Daily Fluc.	Standard Deviation	Did Occur	Did Not Occur	Min. Fluc.	Max. Fluc.	Ave. Daily Fluc.	Standard Deviation
Jun 73#	8	0	1.5	4.9	3.26	2.29	9	0	1.8	6.0	5.23	4.67
Jul 73#	23	0	0.7	11.7	5.50	2.18	23	0	0.2	14.2	6.86	2.90
Aug 73#	27	0	3.9	17.3	10.44	3.07	27	0	3.4	17.6	10.24	3.21
Sep 73#	28	0	3.7	19.7	10.37	3.29	28	0	3.8	17.1	9.26	3.00
Oct 73#	29	0	0.7	18.6	11.59	4.17	29	0	0.6	15.3	9.44	2.87
Nov 73	30	0	4.8	19.3	12.35	4.16	30	0	3.2	14.6	9.27	3.10
Dec 73	31	0	0.4	22.4	13.44	6.54	29	2	0.0	18.6	10.94	5.61
Jan 74	31	0	0.7	25.7	16.71	5.79	29	2	0.0	18.6	14.45	2.98
Feb 74	28	0	2.3	22.1	13.92	4.63	28	0	1.8	21.9	11.97	3.91
Mar 74	31	0	3.4	20.8	13.95	4.92	31	0	4.3	14.1	11.36	3.32
Apr 74	30	0	7.5	19.5	14.51	3.58	30	0	4.3	15.3	11.48	2.58
May 74	31	0	4.7	22.3	13.36	3.86	31	0	5.1	24.3	12.05	3.40
Jun 74	30	0	4.0	27.1	13.12	4.50	30	0	4.6	22.0	11.04	3.49
Jul 74	31	0	4.6	26.9	14.43	7.41	31	0	3.6	22.4	11.08	4.38
Aug 74	31	0	0.8	17.2	12.48	4.55	30	1	0.0	13.6	9.78	3.43
Sep 74	30	0	4.4	19.7	14.13	4.91	30	0	4.6	14.3	11.01	3.38
Oct 74	31	0	4.8	19.9	15.86	4.79	31	0	3.9	15.0	11.81	3.46
Nov 74	30	0	4.0	20.2	14.75	5.67	30	0	3.3	15.9	11.47	4.11
Dec 74	31	0	6.1	24.5	15.76	4.54	31	0	5.2	18.1	12.45	3.49
Jan 75	31	0	5.9	29.1	18.02	5.26	31	0	4.9	22.7	13.72	3.93
Feb 75	28	0	6.1	23.4	17.56	5.61	28	0	5.2	17.9	13.30	4.29

* The least change in water level on any day during the month.
** The greatest change in water level on any day during the month.
\# Complete data unavailable.

Table 15 - (Continued).

Date	Lower B-G						Upper B-G					
	Days Level Changed		Amount of Fluctuation (feet)				Days Level Changed		Amount of Fluctuation (feet)			
	Did Occur	Did Not Occur	Min. Fluc.	Max. Fluc.	Ave. Daily Fluc.	Standard Deviation	Did Occur	Did Not Occur	Min. Fluc.	Max. Fluc.	Ave. Daily Fluc.	Standard Deviation
Mar 75	31	0	8.4	28.2	15.84	4.84	31	0	5.7	21.1	12.81	3.52
Apr 75	30	0	5.1	21.7	17.43	4.44	30	0	4.7	15.3	12.28	3.60
May 75	31	0	4.5	36.8	13.81	6.20	31	0	4.9	35.3	11.88	5.41
Jun 75	30	0	4.7	24.3	12.06	5.04	30	0	4.2	19.1	10.85	4.52
Jul 75	31	0	6.3	17.5	11.55	3.13	31	0	4.7	16.8	10.35	3.14
Aug 75	31	0	4.9	39.8	15.13	6.78	31	0	5.4	38.1	13.19	5.86
Sep 75	30	0	5.2	18.5	11.65	3.48	30	0	4.7	15.5	9.35	2.59
Oct 75	31	0	5.2	21.6	12.47	3.55	31	0	4.9	18.9	10.17	2.91
Nov 75	30	0	6.6	29.6	15.40	5.59	30	0	5.2	24.0	13.26	4.87
Dec 75	31	0	6.7	23.4	15.73	5.04	31	0	5.8	18.9	13.32	3.95
Jan 76	31	0	5.8	27.8	15.74	4.80	31	0	4.9	22.3	13.02	3.41
Feb 76	29	0	6.5	22.3	15.20	4.44	29	0	4.9	16.8	10.85	3.11
Mar 76	31	0	6.2	23.5	13.55	4.11	31	0	5.0	15.8	10.27	3.17
Apr 76	30	0	4.0	21.8	12.44	4.31	30	0	4.3	16.3	9.05	2.95
May 76	31	0	1.3	32.0	13.22	6.04	31	0	1.7	27.0	9.55	4.92
Jun 76	30	0	3.6	24.4	16.59	4.47	30	0	5.2	18.9	14.47	3.31
Jul 76	31	0	6.7	21.7	16.06	3.41	31	0	4.2	19.2	14.42	2.83
Aug 76	31	0	9.5	22.5	16.10	2.76	31	0	7.5	18.3	14.01	2.20
Sep 76	30	0	5.0	20.8	14.40	3.58	30	0	6.0	18.0	12.63	2.56

Table 16. Summary of weekly fluctuation data (feet) taken from 1 June 1973 through 30 September 1976 in Lower and Upper B-G.

Date	Lower B-G			Upper B-G		
	Maximum Elevation	Minimum Elevation	Difference	Maximum Elevation	Minimum Elevation	Difference
1-2 Jun 73	890.3	879.2	11.1	1963.2	1941.7	21.5
3-9 Jun 73	890.0	888.0	2.0	1973.0	1964.5	8.5
10-16 Jun 73*	-	-	-	-	-	-
17-23 Jun 73	897.0	889.9	7.1	1969.4	1963.5	5.9
24-30 Jun 73	897.3	890.4	6.9	1975.4	1963.8	11.6
1-7 Jul 73	897.2	890.0	7.2	1975.5	1965.1	10.4
8-14 Jul 73	896.0	888.5	7.5	1977.0	1968.1	8.9
15-21 Jul 73	897.0	889.5	7.5	1977.1	1967.9	9.2
22-28 Jul 73	896.1	888.1	8.0	1979.2	1969.2	10.0
29 Jul-4 Aug 73	898.0	886.0	12.0	1981.9	1966.8	15.1
5-11 Aug 73	896.1	881.8	14.3	1986.0	1970.0	16.0
12-18 Aug 73	895.0	876.8	18.2	1990.3	1971.3	19.0
19-25 Aug 73	889.1	877.3	11.8	1990.0	1979.9	10.1
26 Aug-1 Sep 73	897.0	871.5	25.5	1994.4	1969.3	25.1
2-8 Sep 73	892.3	870.8	21.5	1995.1	1971.9	23.2
9-15 Sep 73	891.8	870.8	21.0	1995.3	1983.0	12.3
16-22 Sep 73	890.0	870.3	19.7	1996.2	1987.1	9.1
23-29 Sep 73	890.0	873.4	16.6	1995.2	1980.2	15.0
30 Sep-6 Oct 73	886.9	869.2	17.7	1998.3	1983.3	15.0
7-13 Oct 73	885.5	866.7	18.8	2000.3	1984.9	15.4
14-20 Oct 73	886.7	867.0	19.7	2000.1	1983.9	16.2
21-27 Oct 73	886.7	867.0	19.7	2000.2	1983.9	16.3
28 Oct-3 Nov 73	883.7	862.6	21.1	2003.0	1987.2	15.8
4-10 Nov 73	883.0	865.0	18.0	2003.0	1989.5	13.5
11-17 Nov 73	879.0	861.3	17.7	2004.8	1990.7	14.1
18-24 Nov 73	885.3	861.5	23.8	2002.7	1984.4	18.3
25 Nov-1 Dec 73	880.0	861.8	18.2	2002.9	1989.0	13.9
2-8 Dec 73	889.5	861.9	27.6	2002.8	1979.6	23.2
9-15 Dec 73	887.5	863.5	24.0	2002.5	1983.0	19.5
16-22 Dec 73	891.0	860.2	30.8	2002.2	1981.0	21.2
23-29 Dec 73	890.6	860.2	30.4	2003.1	1980.7	22.4
30 Dec 73-5 Jan 74	889.2	859.2	30.0	2002.6	1979.5	23.1
6-12 Jan 74	889.0	860.9	28.1	2003.0	1980.0	23.0
13-19 Jan 74	893.3	859.5	33.8	2002.8	1971.0	31.8
20-26 Jan 74	888.3	860.7	27.6	2003.0	1979.4	23.6
27 Jan-2 Feb 74	887.4	862.5	24.9	2002.0	1981.2	20.8
3-9 Feb 74	885.5	859.9	25.6	2003.0	1981.7	21.3
10-16 Feb 74	885.0	859.4	25.6	2003.2	1982.3	20.9
17-23 Feb 74	891.8	859.2	32.6	2003.5	1981.1	22.4
24 Feb-2 Mar 74	888.1	862.1	26.0	2003.0	1981.9	21.1

* Data not available

Table 16 - (Continued).

Date	Lower B-G			Upper B-G		
	Maximum Elevation	Minimum Elevation	Difference	Maximum Elevation	Minimum Elevation	Difference
3-9 Mar 74	884.9	860.6	24.3	2003.6	1983.3	20.3
10-16 Mar 74	885.1	859.2	25.9	2003.7	1983.7	20.0
17-23 Mar 74	883.8	860.1	23.7	2002.2	1982.2	20.0
24-30 Mar 74	884.3	859.8	24.5	2002.4	1981.9	20.5
31 Mar-6 Apr 74	884.9	861.3	23.6	2002.0	1983.9	18.1
7-13 Apr 74	882.0	859.8	22.2	2003.0	1986.1	16.9
14-20 Mar 74	887.0	863.3	23.7	2002.8	1980.7	22.1
21-27 Mar 74	886.8	861.7	25.1	2002.2	1982.4	19.8
28 Apr-4 May 74	888.9	861.7	27.2	2002.3	1977.6	24.7
5-11 May 74	900.1	859.9	40.2	2003.5	1965.9	37.6
12-18 May 74	894.7	863.8	30.9	2003.1	1973.1	30.0
19-25 May 74	890.7	859.7	31.0	2003.4	1978.0	25.4
26 May-1 Jun 74	892.2	861.2	31.0	2003.3	1976.5	26.8
2-8 Jun 74	890.6	861.4	29.2	2003.2	1979.1	24.1
9-15 Jun 74	888.6	861.5	27.1	2003.5	1981.5	22.0
16-22 Jun 74	886.9	862.9	24.0	2003.4	1983.8	19.6
23-29 Jun 74	883.5	861.3	22.2	2003.6	1986.9	16.7
30 Jun-6 Jul 74	893.8	861.8	32.0	2003.0	1976.7	26.3
7-13 Jul 74	888.6	860.7	27.9	2003.0	1980.2	22.8
14-20 Jul 74	889.7	862.0	27.7	2002.8	1980.0	22.8
21-27 Jul 74	883.0	862.8	20.2	2002.7	1987.9	14.8
28 Jul-3 Aug 74	885.7	862.4	23.3	2003.7	1984.6	19.1
4-10 Aug 74	885.1	861.9	23.2	2003.0	1985.0	18.0
11-17 Aug 74	888.1	862.1	26.0	2002.8	1981.5	21.3
18-24 Aug 74	881.4	861.3	20.1	2002.9	1986.5	16.4
24-31 Aug 74	884.1	862.4	21.7	2002.7	1986.6	16.1
1-7 Sep 74	884.9	861.2	23.7	2003.0	1984.7	18.3
8-14 Sep 74	888.4	861.4	27.0	2003.1	1981.0	22.1
15-21 Sep 74	886.5	861.7	24.8	2002.6	1982.6	20.0
22-28 Sep 74	881.9	860.6	21.3	2002.7	1987.2	15.5
29 Sep-5 Oct 74	883.0	860.8	22.2	2002.6	1986.2	16.4
6-12 Oct 74	882.0	860.4	21.6	2002.6	1987.3	15.3
13-19 Oct 74	882.3	860.8	21.5	2002.7	1987.3	15.4
20-26 Oct 74	882.1	860.3	21.8	2002.7	1987.5	15.2
27 Oct-2 Nov 74	885.4	860.7	24.7	2003.0	1984.0	19.0
3-9 Nov 74	884.0	860.5	23.5	2003.0	1986.1	16.9
10-16 Nov 74	882.0	860.9	21.1	2003.1	1987.0	16.1
17-23 Nov 74	882.8	859.7	23.1	2003.0	1985.8	17.2
24-30 Nov 74	886.5	864.9	21.6	2003.2	1982.1	21.1
1-7 Dec 74	883.7	860.5	23.2	2003.1	1985.1	18.0
8-14 Dec 74	883.9	863.3	20.6	2003.3	1985.3	18.0
15-21 Dec 74	883.0	859.0	24.0	2003.2	1986.0	17.2
22-28 Dec 74	885.3	860.6	24.7	2002.7	1983.8	18.9

Table 16 - (Continued).

Date	Lower B-G			Upper B-G		
	Maximum Elevation	Minimum Elevation	Difference	Maximum Elevation	Minimum Elevation	Difference
29 Dec 74-4 Jan 75	885.1	860.3	24.8	2002.5	1984.4	18.1
5-11 Jan 75	883.2	860.9	22.3	2002.4	1986.7	15.7
12-18 Jan 75	889.7	860.6	29.1	2002.9	1979.5	23.4
19-25 Jan 75	882.6	860.0	22.6	2003.0	1986.2	16.8
26 Jan-1 Feb 75	883.4	859.4	24.0	2003.2	1985.4	17.8
2-8 Feb 75	887.3	859.3	28.0	2003.1	1981.5	21.6
9-15 Feb 75	882.8	859.2	23.6	2003.0	1986.0	17.0
16-22 Feb 75	882.3	858.9	23.4	2003.1	1986.4	16.7
23 Feb-1 Mar 75	885.7	860.0	25.7	2003.0	1983.5	19.5
2-8 Mar 75	886.1	860.3	25.8	2003.2	1982.9	20.3
9-15 Mar 75	886.7	860.1	26.6	2003.3	1982.7	20.6
16-22 Mar 75	886.5	859.7	26.8	2003.1	1982.3	20.8
23-29 Mar 75	888.2	870.1	18.1	2003.1	1981.9	21.2
30 Mar-5 Apr 75	883.0	860.0	23.0	2002.5	1986.5	16.0
6-12 Apr 75	883.3	859.2	24.1	2003.0	1985.7	17.3
13-19 Apr 75	883.2	859.1	24.1	2003.4	1985.7	17.7
20-26 Apr 75	882.3	859.6	22.7	2003.4	1987.2	16.2
27 Apr-3 May 75	882.4	859.7	22.7	2003.1	1986.3	16.8
4-10 May 75	899.2	859.8	39.4	2002.9	1966.7	36.2
11-17 May 75	892.1	860.0	32.1	2003.3	1976.3	27.0
18-24 May 75	894.4	859.7	34.1	2003.0	1973.6	29.4
25-31 May 75	894.6	867.1	27.5	2003.0	1972.7	30.3
1-7 Jun 75	895.6	860.1	35.5	2003.0	1972.1	30.9
8-14 Jun 75	897.2	860.8	36.4	2003.1	1971.6	31.5
15-21 Jun 75	896.3	861.1	35.2	2003.2	1972.4	30.8
22-28 Jun 75	895.5	860.8	34.7	2003.1	1972.1	31.0
29 Jun-5 Jul 75	895.2	868.2	27.0	2003.2	1972.7	30.5
6-12 Jul 75	892.4	860.5	31.9	2003.1	1975.9	27.2
13-19 Jul 75	895.0	860.3	34.7	2003.1	1972.4	30.7
20-26 Jul 75	891.5	861.6	29.9	2003.0	1977.8	25.2
27 Jul-2 Aug 75	892.5	861.5	31.0	2003.0	1976.4	26.6
3-9 Aug 75	891.1	861.0	30.1	2003.0	1977.8	25.2
10-16 Aug 75	899.7	859.9	39.8	2003.1	1965.0	38.1
17-23 Aug 75	890.5	860.0	30.5	2003.0	1977.3	25.7
24-30 Aug 75	890.1	859.3	30.8	2003.0	1977.6	25.4
31 Aug-6 Sep 75	890.9	859.7	31.2	2002.8	1976.8	26.0
7-13 Sep 75	885.4	860.0	25.4	2002.5	1982.7	19.8
14-20 Sep 75	886.2	860.0	26.2	2002.4	1981.5	20.9
21-27 Sep 75	886.8	859.9	26.9	2002.3	1982.3	20.0
28 Sep-4 Oct 75	890.7	860.0	30.7	2003.0	1978.1	24.9
5-11 Oct 75	888.8	860.7	28.1	2003.0	1981.8	21.2
12-18 Oct 75	891.7	860.0	31.7	2003.1	1976.7	26.4
19-25 Oct 75	885.6	860.3	25.3	2003.2	1983.3	19.8

Table 16 - (Continued).

Date	Lower B-G			Upper B-G		
	Maximum Elevation	Minimum Elevation	Difference	Maximum Elevation	Minimum Elevation	Difference
26 Oct-1 Nov 75	883.7	860.6	23.1	2002.9	1985.3	17.6
2-8 Nov 75	889.0	859.8	29.2	2003.2	1979.9	23.3
9-15 Nov 75	893.7	860.1	33.6	2003.2	1974.5	28.7
16-22 Nov 75	889.6	860.0	29.6	2003.3	1978.0	25.3
23-29 Nov 75	893.5	860.0	33.5	2003.3	1975.0	28.3
30 Nov-6 Dec 75	891.6	860.3	31.3	2003.2	1977.1	26.1
7-13 Dec 75	890.4	860.6	29.8	2003.1	1978.6	24.5
14-20 Dec	889.1	860.7	28.4	2002.9	1979.6	23.3
21-27 Dec 75	895.7	860.3	35.4	2003.0	1971.6	31.4
28 Dec 75-3 Jan 76	895.9	860.7	35.2	2003.1	1971.5	31.6
4-10 Jan 76	890.0	859.8	30.2	2003.0	1978.8	24.2
11-17 Jan 76	888.2	860.2	28.0	2003.1	1980.8	22.3
18-24 Jan 76	889.5	860.4	29.1	2003.0	1979.2	23.8
25-31 Jan 76	882.6	859.8	22.8	2003.0	1987.2	15.8
1-7 Feb 76	883.5	861.1	22.4	2003.0	1986.2	16.8
8-14 Feb 76	879.9	860.0	19.9	2003.0	1989.3	13.7
15-21 Feb 76	884.4	860.7	23.7	2002.8	1985.0	17.8
22-28 Feb 76	880.2	860.4	19.8	2003.0	1988.8	14.2
29 Feb-6 Mar 76	884.2	860.8	23.4	2002.9	1985.3	17.6
7-13 Mar 76	881.7	861.1	20.6	2002.9	1987.1	15.8
14-20 Mar 76	885.0	860.1	24.9	2002.8	1984.0	18.8
21-27 Mar 76	882.0	860.2	21.8	2002.9	1986.8	16.1
28 Mar-3 Apr 76	878.5	860.2	18.3	2003.0	1990.2	12.8
4-10 Apr 76	879.8	860.4	19.4	2003.0	1989.2	13.8
11-17 Apr 76	882.2	860.4	21.8	2003.0	1986.7	16.3
18-24 Apr 76	880.0	860.0	20.0	2002.9	1989.0	13.9
25 Apr-1 May 76	877.9	860.5	17.4	2003.0	1990.5	12.5
2-8 May 76	876.0	860.3	15.7	2002.9	1992.4	10.5
9-15 May 76	877.8	860.1	17.7	2002.9	1990.2	12.7
16-22 May 76	880.0	860.4	19.6	2002.9	1988.3	14.6
23-29 May 76	892.5	860.0	32.5	2003.0	1975.5	27.5
30 May-5 Jun 76	893.2	860.3	32.9	2003.0	1974.4	28.6
6-12 Jun 76	892.7	860.6	32.1	2002.7	1976.5	26.2
13-19 Jun 76	892.3	860.8	31.5	2003.1	1976.8	26.3
20-26 Jun 76	893.1	861.4	31.7	2003.0	1975.7	27.3
27 Jun-3 Jul 76	894.4	860.9	33.5	2002.7	1972.7	30.0
4-10 Jul 76	895.2	861.3	33.9	2002.9	1972.5	30.4
11-17 Jul 76	893.3	861.5	31.8	2003.0	1975.3	27.7
18-24 Jul 76	894.6	860.7	33.9	2003.1	1973.4	29.7
25-31 Jul 76	894.4	860.3	34.1	2003.0	1973.4	29.6
1-7 Aug 76	894.5	860.7	33.8	2003.1	1973.3	29.8
8-14 Aug 76	895.1	861.0	34.1	2003.0	1973.1	29.9
15-21 Aug 76	892.5	861.1	31.4	2003.0	1976.5	26.5
22-28 Aug 76	893.5	861.1	32.4	2003.0	1975.4	27.6
29 Aug - 4 Sep 76	894.3	860.8	33.5	2003.2	1973.9	29.3
5-11 Sep 76	894.3	860.1	34.2	2003.3	1973.6	29.7
12-18 Sep 76	894.4	858.9	35.5	2003.2	1973.5	29.7
19-25 Sep 76	893.5	860.2	33.3	2003.1	1974.4	28.7
26-30 Sep 76	892.3	859.7	32.6	2002.9	1975.4	27.5

Table 17. Summary of turbidity data (nephelometer turbidity units) taken from 6 January through 30 September 1976 from Esopus Creek (EC) and the Shandaken Tunnel intake (STI).

Date	Stations				
	Esopus Creek			STI	EC
	31	19	20	32	21
6 Jan	ice*	7.1	TC**	-***	ice
19 Jan	ice	ice	TC	-	ice
$\bar{x}$	-	7.1	-	-	-
10 Feb	ice	ice	TC	-	ice
17 Feb	24	13	TC	-	12
$\bar{x}$	24	13	-	-	12
10 Mar	2.8	2.0	TC	TC	3.3
26 Mar	-#	6.3	15	19	2.0
30 Mar	6.6	5.5	4.3	15	2.7
$\bar{x}$	4.7	4.6	9.7	17	2.7
1 Apr	44	22	TC	TC	35
2 Apr	6.8	5.9	TC	TC	5.0
3 Apr	5.5	3.1	TC	TC	3.8
4 Apr	3.0	2.5	TC	TC	3.0
5 Apr	2.0	1.6	TC	TC	2.2
6 Apr	4.4	3.5	TC	TC	3.0
9 Apr	3.3	1.6	TC	TC	3.3
12 Apr	2.2	1.4	TC	TC	1.8
13 Apr	2.1	1.6	TC	TC	1.7
14 Apr	2.0	1.3	TC	TC	1.2
16 Apr	9.2	5.5	7.4	18	3.9
17 Apr	6.1	5.6	5.6	14	2.3
19 Apr	5.2	5.0	5.9	18	2.1
20 Apr	5.0	4.0	6.0	12	3.0
22 Apr	4.1	3.6	5.7	16	1.9
23 Apr	4.0	3.3	4.9	13	1.7
25 Apr	5.2	3.6	4.2	7.7	2.3
26 Apr	6.7	7.0	5.5	12	4.6
27 Apr	6.2	3.8	8.9	18	5.7
29 Apr	3.0	1.6	TC	TC	1.4
30 Apr	3.7	1.7	TC	TC	1.9
$\bar{x}$	6.4	4.3	6.0	14	4.3

* ice = no samples taken because of ice cover
** TC = Shandaken Tunnel closed
*** Station 32 first sampled 10 March 1976.
\# Data not recorded
TNO = Shandaken Tunnel not open at time of sampling

Table 17 - (Continued).

Date	Stations				
	Esopus Creek			STI	EC
	31	19	20	32	21
2 May	9.3	8.2	TC	TC	6.5
3 May	4.8	4.5	TC	TC	4.3
4 May	5.2	2.5	TC	TC	3.2
6 May	4.2	1.9	TC	TC	2.3
7 May	3.7	2.2	TC	TC	1.7
10 May	3.1	2.3	TC	TC	1.6
11 May	3.1	1.6	TC	TC	1.6
13 May	2.8	1.4	TC	TC	1.4
14 May	2.7	1.4	TC	TC	1.5
18 May	7.1	2.6	TC	TC	2.8
19 May	11	3.6	TC	TC	4.0
20 May	7.0	2.8	TC	TC	4.0
21 May	6.0	2.9	TC	TC	3.9
24 May	3.8	1.8	TC	TC	1.8
25 May	2.9	-	TC	TC	1.4
26 May	2.8	1.7	TC	TC	1.3
27 May	2.7	1.6	TC	TC	1.6
28 May	2.5	1.2	TC	TC	1.1
31 May	2.5	1.3	TC	TC	1.3
$\bar{x}$	4.6	2.5	-	-	2.5
1 Jun	3.3	2.5	TC	TC	1.4
2 Jun	4.8	1.6	TC	TC	1.8
5 Jun	2.5	2.1	2.8	9.2	1.0
6 Jun	2.5	2.0	2.7	23	1.4
7 Jun	3.2	2.8	5.1	18	1.9
8 Jun	5.0	2.0	3.2	6.1	2.5
11 Jun	1.6	1.6	TNO##	TNO	1.4
13 Jun	1.8	2.2	2.1	24	1.0
14 Jun	2.7	2.0	2.6	8.2	1.4
15 Jun	2.5	2.0	1.4	8.7	1.8
16 Jun	2.1	1.5	1.9	3.4	1.4
17 Jun	2.3	1.5	2.3	5.9	1.3
21 Jun	9.3	2.3	2.2	21	1.4
22 Jun	4.9	1.6	2.0	3.5	1.7
23 Jun	3.0	1.3	1.7	5.5	1.2
25 Jun	2.6	1.6	1.8	7.6	1.1
28 Jun	1.9	1.5	3.6	6.9	1.1
29 Jun	2.5	2.0	2.1	5.3	1.1
$\bar{x}$	3.3	1.0	2.5	10	1.4

Table 17 - (Continued).

Date	Stations				
	Esopus Creek			STI	EC
	31	19	20	32	21
1 Jul	7.7	2.7	3.3	4.9	1.8
2 Jul	4.3	2.2	2.5	8.9	1.3
6 Jul	2.4	1.4	TC	TC	1.1
7 Jul	3.0	1.2	TC	TC	0.70
9 Jul	2.1	0.90	TC	TC	0.70
12 Jul	2.0	1.2	TC	TC	1.1
13 Jul	1.7	1.0	TC	TC	0.60
15 Jul	2.4	1.8	2.6	4.3	1.1
16 Jul	2.0	1.7	2.7	5.1	0.68
19 Jul	2.0	1.7	2.4	6.8	0.78
20 Jul	4.5	1.9	2.6	4.4	1.0
22 Jul	2.3	1.9	2.6	4.8	1.0
23 Jul	3.3	2.8	3.7	14	1.3
26 Jul	2.1	1.9	2.8	6.9	0.80
27 Jul	2.4	2.3	2.8	13	0.64
29 Jul	2.7	2.5	3.0	3.2	0.73
30 Jul	2.2	1.8	2.7	4.2	0.85
$\bar{x}$	2.9	1.8	2.8	6.7	0.95
3 Aug	2.0	2.0	2.6	4.4	0.75
4 Aug	2.4	2.5	3.2	5.6	0.73
5 Aug	2.2	2.1	2.5	3.2	0.73
6 Aug	3.4	2.7	3.4	4.8	0.70
9 Aug	3.3	2.5	3.3	4.5	0.73
10 Aug	23	7.8	4.6	112	4.3
12 Aug	70	90	120	105	1.5
13 Aug.	55	61	75	78	1.3
16 Aug	30	34	37	40	1.2
17 Aug	24	30	33	33	2.8
19 Aug	30	33	37	46	1.1
20 Aug	24	28	31	33	1.0
23 Aug	22	23	25	37	1.3
24 Aug	19	21	22	26	1.1
26 Aug	17	18	18	26	1.0
27 Aug	15	17	19	23	2.2
30 Aug	16	14	16	18	1.1
$\bar{x}$	21	23	27	35	1.4

Table 17 - (Continued).

Date	Stations				
	Esopus Creek			STI	EC
	31	19	20	32	21
1 Sep	13	14	14	23	1.2
2 Sep	10	12	13	32	2.3
3 Sep	12	12	14	16	1.3
7 Sep	8.4	11	12	15	1.3
9 Sep	8.3	8.9	12	14	1.3
10 Sep	8.9	10	12	14	1.7
13 Sep	7.6	8.6	11	13	1.1
14 Sep	6.9	7.4	9.5	12	1.6
16 Sep	6.1	7.1	9.3	11	0.75
17 Sep	7.4	6.7	7.7	13	1.4
21 Sep	6.7	6.3	9.3	14	1.0
22 Sep	2.3	1.8	TC	TC	0.82
28 Sep	4.9	5.1	6.4	8.0	1.4
29 Sep	4.8	5.2	7.6	13	1.0
30 Sep	5.0	5.3	6.5	8.8	1.4
$\bar{x}$	7.5	8.1	10	15	1.3
Grand $\bar{x}$	7.6	6.7	11	18	2.2
Minimum	1.6	0.90	1.4	3.2	0.60
Maximum	70	90	120	112	35
Standard Deviation	10.35	11.72	17.7	20.0	3.48

Table 18. Summary of alkalinity data (mg/l) taken from 6 January through 14 September 1976 from Esopus Creek.

Date	Stations			
	31	19	20	21
6 Jan	ice*	10	TC**	ice
10 Feb	ice	ice	TC	ice
10 Mar	10	10	TC	10
6 Apr	10	10	TC	10
11 May	10	10	TC	10
2 Jun	12.2	11.7	TC	11.2
13 Jul	16.1	18.5	TC	19.2
10 Aug	14.2	17.8	18.5	14.6
14 Sep	19.0	18.5	20.3	17.1
Grand $\bar{x}$	13.1	13.3	19.4	13.2
Minimum	10	10	18.5	10
Maximum	19.0	18.5	20.3	19.2
Standard Deviation	3.53	4.15	1.27	3.83

* ice = no samples taken because of ice cover
** TC = Shandaken Tunnel closed

Table 19. Summary of total hardness and calcium hardness data (mg/l) taken from 6 January through 14 September 1976 from Esopus Creek.

Date Date	Stations							
	31		19		20		21	
	Total Hardness	Calcium Hardness	Total Hardness	Calcium Hardness	Total Hardness	Calcium Hardness	Total Hardness	Calcium Hardness
6 Jan	ice*	ice	15	10	TC**	TC	ice	ice
10 Feb	ice	ice	ice	ice	TC	TC	ice	ice
10 Mar	15	10	15	10	TC	TC	15	10
6 Apr	15	15	15	10	TC	TC	15	10
11 May	15	10	15	10	TC	TC	15	10
2 Jun	27.6	24.4	30.3	14.0	TC	TC	28.3	13.2
13 Jul	42.7	17.1	31.8	17.1	TC	TC	28.3	14.6
10 Aug	19.0	17.5	23.3	16.9	21.7	16.7	19.4	15.7
14 Sep	21.9	18.6	22.5	18.4	23.9	17.9	21.3	17.5
Grand $\bar{x}$	22.3	16.1	21.0	13.3	22.8	17.3	20.3	13.0
Minimum	15	10	15	10	21.7	16.7	15	10
Maximum	42.7	24.4	31.8	18.4	23.9	17.9	28.3	17.5
Standard Deviation	10.13	5.06	7.12	3.73	1.56	0.85	5.97	3.09

* ice = no samples taken because of ice cover
** TC = Shandaken Tunnel closed

Table 20. Summary of hydrogen ion data (pH) taken from 6 January through 14 September 1976 from Esopus Creek.

Date	Stations			
	31	19	20	21
6 Jan	ice*	8.0	TC**	ice
10 Feb	ice	ice	TC	ice
10 Mar	6.8	7.0	TC	7.1
6 Apr	7.1	7.1	TC	7.1
11 May	7.4	7.4	TC	7.4
2 Jun	7.2	7.2	TC	7.1
13 Jul	7.4	7.6	TC	7.6
10 Aug	6.7	7.0	6.1	6.9
14 Sep	7.4	7.4	7.4	8.1
Grand $\bar{x}$	7.1	7.3	6.8	7.3
Minimum	6.7	7.0	6.1	6.9
Maximum	7.4	8.0	7.4	8.1
Standard Deviation	0.29	0.34	0.92	0.41

* ice = no samples taken because of ice cover
** TC = Shandaken Tunnel closed

Table 21. Summary of air temperature data (C) taken from 6 January through 30 September 1976 from Esopus Creek.

Date	Stations			
	31	19	20	21
6 Jan	ice*	-9	TC**	ice
19 Jan	ice	ice	TC	ice
10 Feb	ice	ice	TC	ice
17 Feb	5	10	TC	10
10 Mar	0	0	TC	0
26 Mar	15	15	15	15
30 Mar	16	18	17	17
1 Apr	8	8	TC	8
2 Apr	11	12	TC	11
3 Apr	11	11	TC	11
4 Apr	10	10	TC	10
5 Apr	13	13	TC	14
6 Apr	16	14	TC	15
9 Apr	9	9	TC	10
12 Apr	-1	1	TC	3
13 Apr	12	14	TC	13
14 Apr	18	17	TC	17
16 Apr	18	24	24	25
17 Apr	23	24	24	24
19 Apr	29	31	31	31
20 Apr	26	26	27	26
22 Apr	15	14	16	16
23 Apr	16	18	16	16
25 Apr	10	9	10	10
26 Apr	8	8	8	7
27 Apr	6	6	5	5
29 Apr	14	14	TC	14
30 Apr	18	19	TC	17
2 May	20	19	TC	19
3 May	8	9	TC	10
4 May	11	12	TC	9
6 May	24	24	TC	25
7 May	12	16	TC	15
10 May	20	20	TC	19

* ice = no samples taken because of ice cover
** TC = Shandaken Tunnel closed
\# TNO = Shandaken Tunnel not open at time of sampling

Table 21 - (Continued).

Date	Stations			
	31	19	20	21
11 May	21	19	TC	21
13 May	17	19	TC	15
14 May	24	25	TC	25
18 May	13	10	TC	10
19 May	5	6	TC	6
20 May	12	10	TC	9
21 May	18	17	TC	14
24 May	18	19	TC	21
25 May	11	13	TC	12
26 May	16	18	TC	18
27 May	20	21	TC	20
28 May	18	24	TC	19
31 May	25	25	TC	25
1 Jun	20	20	TC	20
2 Jun	17	18	TC	18
5 Jun	19	20	20	20
6 Jun	22	22	22	22
7 Jun	18	19	19	18
8 Jun	25	25	24	23
11 Jun	27	28	TNO#	28
13 Jun	22	23	23	23
14 Jun	20	22	20	22
15 Jun	27	27	26	28
16 Jun	26	28	28	26
17 Jun	25	25	23	23
21 Jun	21	20	20	20
22 Jun	26	24	24	23
23 Jun	22	23	23	27
25 Jun	24	25	27	25
28 Jun	26	26	29	26
29 Jun	25	25	28	27
1 Jul	23	22	24	22
2 Jul	19	19	21	21
6 Jul	25	25	TC	26
7 Jul	20	20	TC	21
9 Jul	21	21	TC	21
12 Jul	21	20	TC	21
13 Jul	17	16	TC	17
15 Jul	19	20	21	22
16 Jul	23	22	22	22

Table 21 - (Continued).

Date	Stations			
	31	19	20	21
19 Jul	25	24	25	26
20 Jul	26	26	26	27
22 Jul	23	23	23	24
23 Jul	20	16	18	17
26 Jul	21	22	23	23
27 Jul	23	23	22	23
29 Jul	17	17	17	17
30 Jul	20	20	22	22
3 Aug	19	18	19	20
4 Aug	20	20	20	20
5 Aug	22	22	22	22
6 Aug	22	22	23	23
9 Aug	20	21	21	21
10 Aug	21	21	21	19
12 Aug	23	22	22	22
13 Aug	25	26	26	26
16 Aug	19	19	19	19
17 Aug	21	22	24	22
19 Aug	20	21	23	22
20 Aug	26	26	26	26
23 Aug	28	25	20	25
24 Aug	20	21	24	25
26 Aug	22	22	27	25
27 Aug	20	20	22	21
30 Aug	16	16	15	16
1 Sep	22	22	22	22
2 Sep	18	17	16	15
3 Sep	18	18	20	18
7 Sep	20	21	19	19
9 Sep	21	22	24	22
10 Sep	18	18	18	17
13 Sep	27	28	28	27
14 Sep	22	22	25	23
16 Sep	19	19	19	19
17 Sep	22	22	22	22
21 Sep	16	16	15	15
22 Sep	15	15	TC	13
28 Sep	11	11	12	13
29 Sep	16	16	17	16
30 Sep	15	15	16	15

Table 22. Summary of water temperature data (C) taken from 6 January through 30 September 1976 from Esopus Creek (EC) and the Shandaken Tunnel intake (STI).

STO

Date	Stations				
	Esopus Creek			STI	EC
	31	19	20	32	21
6 Jan	ice*	1	TC**	-***	ice
19 Jan	ice	ice	TC	-	ice
$\bar{x}$	-	1	-	-	-
10 Feb	ice	ice	TC	-	ice
17 Feb	3	3	TC	-	3
$\bar{x}$	3	3	-	-	3
10 Mar	0	0	TC	TC	2
26 Mar	6	7	7	4	7
30 Mar	9	9	9	6	11
$\bar{x}$	5	5	8	5	7
1 Apr	7	6	TC	TC	6
2 Apr	5	5	TC	TC	5
3 Apr	5	5	TC	TC	5
4 Apr	5	5	TC	TC	5
5 Apr	6	6	TC	TC	6
6 Apr	6	7	TC	TC	8
9 Apr	8	8	TC	TC	8
12 Apr	3	5	TC	TC	5
13 Apr	6	8	TC	TC	9
14 Apr	10	9	TC	TC	9
16 Apr	10	10	7	8	12
17 Apr	11	8	6	8	13
19 Apr	11	11	8	8	16
20 Apr	13	12	7	9	16
22 Apr	11	10	7	8	12
23 Apr	11	13	7	8	15
25 Apr	7	7	6	8	8
26 Apr	12	13	7	8	8
27 Apr	7	7	6	8	6
29 Apr	8	8	TC	TC	8
30 Apr	9	11	TC	TC	10
$\bar{x}$	8	8	7	8	9

* ice = no samples taken because of ice cover
** TC = Shandaken Tunnel closed
*** Station 32 first sampled 10 March 1976
\# TNO = Shandaken Tunnel not open at time of sampling

Table 22 - (Continued).

Date	Stations				
	Esopus Creek			STI	EC
	31	19	20	32	21
2 May	10	10	TC	TC	10
3 May	8	8	TC	TC	8
4 May	8	9	TC	TC	9
6 May	10	12	TC	TC	12
7 May	10	11	TC	TC	11
10 May	11	12	TC	TC	13
11 May	13	13	TC	TC	13
13 May	11	12	TC	TC	11
14 May	13	15	TC	TC	15
18 May	15	13	TC	TC	12
19 May	7	7	TC	TC	8
20 May	8	8	TC	TC	8
21 May	10	10	TC	TC	10
24 May	11	12	TC	TC	12
25 May	9	10	TC	TC	9
26 May	10	10	TC	TC	10
27 May	12	12	TC	TC	13
28 May	12	13	TC	TC	14
31 May	15	15	TC	TC	15
$\bar{x}$	11	11	-	-	11
1 Jun	13	13	TC	TC	12
2 Jun	14	14	TC	TC	16
5 Jun	13	11	9	11	14
6 Jun	12	11	9	11	13
7 Jun	11	10	9	9	14
8 Jun	14	14	9	9	16
11 Jun	19	18	TNO#	TNO	18
13 Jun	14	13	9	12	17
14 Jun	15	13	9	10	18
15 Jun	17	15	9	11	23
16 Jun	21	16	9	9	18
17 Jun	15	13	9	10	20
21 Jun	14	14	9	10	18
22 Jun	17	14	9	10	20
23 Jun	16	15	9	10	18
25 Jun	15	13	8	11	20
28 Jun	16	15	9	11	22
29 Jun	16	15	9	10	22
$\bar{x}$	15			10	

Table 22 - (Continued).

Date	Stations				
	Esopus Creek			STI	EC
	31	19	20	32	21
1 Jul	17	17	9	11	21
2 Jul	14	15	9	9	19
6 Jul	17	19	TC	TC	21
7 Jul	18	18	TC	TC	18
9 Jul	18	19	TC	TC	21
12 Jul	19	21	TC	TC	20
13 Jul	16	17	TC	TC	16
15 Jul	14	14	8	10	20
16 Jul	15	14	8	10	18
19 Jul	15	15	9	10	22
20 Jul	15	14	10	10	22
22 Jul	16	15	9	11	22
23 Jul	12	11	10	11	19
26 Jul	14	13	11	12	20
27 Jul	13	12	11	12	19
29 Jul	12	12	12	12	16
30 Jul	14	13	12	13	19
$\bar{x}$	15	15	10	11	20
3 Aug	14	14	13	13	20
4 Aug	17	16	14	15	22
5 Aug	16	15	14	15	21
6 Aug	16	15	15	15	20
9 Aug	17	16	15	16	18
10 Aug	17	18	17	16	18
12 Aug	17	17	16	17	17
13 Aug	18	18	17	18	22
16 Aug	17	17	16	18	18
17 Aug	19	18	17	17	19
19 Aug	18	18	17	17	18
20 Aug	18	18	17	17	21
23 Aug	19	19	17	18	22
24 Aug	18	18	17	18	22
26 Aug	17	18	17	18	21
27 Aug	18	18	17	18	19
30 Aug	18	19	18	19	19
$\bar{x}$	17	17	16	17	20

Table 22 - (Continued).

Date	Stations				
	Esopus Creek			STI	EC
	31	19	20	32	21
1 Sep	18	18	19	18	17
2 Sep	18	18	17	18	16
3 Sep	18	19	18	18	18
7 Sep	19	19	17	18	16
9 Sep	20	19	18	18	20
10 Sep	18	17	17	18	16
13 Sep	20	19	18	18	19
14 Sep	19	20	18	18	19
16 Sep	18	18	18	18	17
17 Sep	18	18	18	18	18
21 Sep	18	19	17	18	17
22 Sep	14	15	TC	TC	14
28 Sep	15	16	16	15	13
29 Sep	16	17	15	15	13
30 Sep	15	15	15	15	13
$\bar{x}$	18	18	17	17	16
Grand $\bar{x}$	13	13	12	13	15
Minimum	0	0	6	4	2
Maximum	21	21	19	19	23
Standard Deviation	4.5	4.5	4.2	4.0	5.2

Table 23. Summary of mean daily water temperature (WT) and air temperature (AT) data (C) taken by Partlow seven-day recording thermometers from 15 June through 30 September 1976 at Esopus Creek (EC) and the Shandaken Tunnel outlet (STO).

Date		Stations				
		EC 19	EC 36	STO 20		EC 35
		WT	WT	WT	AT	WT
15 Jun	Mean	-*	-**	8.6	24.1	19.1
	Minimum	-	-	8.5	19.0	15.0
	Maximum	-	-	9.0	28.5	21.5
16 Jun	Mean	-	-	8.5	25.3	18.5
	Minimum	-	-	8.5	17.0	15.5
	Maximum	-	-	8.5	27.5	21.5
17 Jun	Mean	-	-	8.5	19.6	17.2
	Minimum	-	-	8.5	15.0	16.0
	Maximum	-	-	8.5	24.0	19.5
18 Jun	Mean	-	-	8.6	18.3	17.6
	Minimum	-	-	8.5	12.0	14.0
	Maximum	-	-	9.0	21.0	21.0
19 Jun	Mean	-	-	8.9	19.8	17.7
	Minimum	-	-	8.5	18.0	16.5
	Maximum	-	-	9.0	24.0	19.0
20 Jun	Mean	-	-	8.5	19.1	16.8
	Minimum	-	-	8.5	18.0	16.0
	Maximum	-	-	8.5	20.5	18.0
21 Jun	Mean	-	-	8.5	18.9	16.6
	Minimum	-	-	8.5	18.0	15.5
	Maximum	-	-	8.5	23.9	17.8
22 Jun	Mean	-	-	8.9	19.5	17.2
	Minimum	-	-	8.5	17.8	15.7
	Maximum	-	-	9.0	24.5	19.0
23 Jun	Mean	-	-	9.0	19.6	17.4
	Minimum	-	-	9.0	17.0	15.5
	Maximum	-	-	9.0	26.5	19.0

* station 19 not sampled until 11 August
** station 36 not sampled until 25 June
*** location of station 35 moved 1 mile upstream because of tunnel backwash
\# RM = recorder malfunction

Table 23 - (Continued).

Date		Stations				
		EC	EC	STO		EC
		19	36	20		35
		WT	WT	WT	AT	WT
24 Jun	Mean	-	-	9.0	20.4	18.6
	Minimum	-	-	9.0	16.0	15.5
	Maximum	-	-	9.0	28.0	22.0
25 Jun	Mean	-	9.5	9.0	20.3	19.4
	Minimum	-	9.5	9.0	18.0	16.5
	Maximum	-	9.5	9.0	27.0	25.0
26 Jun	Mean	-	9.6	9.0	20.3	19.3
	Minimum	-	9.5	9.0	17.0	16.5
	Maximum	-	10.0	9.5	30.0	23.0
27 Jun	Mean	-	9.6	9.0	19.7	18.6
	Minimum	-	9.0	9.0	14.5	15.5
	Maximum	-	10.0	9.0	29.5	22.5
28 Jun	Mean	-	9.5	9.1	18.4	17.8
	Minimum	-	9.0	9.0	12.0	13.5
	Maximum	-	10.0	9.5	28.5	21.5
29 Jun	Mean	-	9.6	9.2	20.1	19.3
	Minimum	-	9.5	9.0	15.5	16.0
	Maximum	-	10.0	9.5	28.0	23.0
30 Jun	Mean	-	9.6	9.1	19.2	17.5
	Minimum	-	9.5	9.0	15.0	16.5
	Maximum	-	10.0	9.5	20.0	18.5
1 Jul	Mean	-	9.7	9.0	19.9	18.2
	Minimum	-	9.5	9.0	14.5	15.5
	Maximum	-	10.5	9.0	27.0	20.0
2 Jul	Mean	-	9.8	9.1	20.5	16.7
	Minimum	-	9.5	9.0	12.5	14.5
	Maximum	-	10.0	9.5	24.5	19.5
3 Jul	Mean	-	9.7	9.0	16.7	17.0
	Minimum	-	9.5	9.0	10.0	13.5
	Maximum	-	10.0	9.5	26.0	19.5
4 Jul	Mean	-	9.2	9.2	17.2	16.9
	Minimum	-	9.0	9.0	12.5	14.5
	Maximum	-	10.0	9.5	25.0	20.0

Table 23 - (Continued).

Date		Stations				
		EC 19	EC 36	STO 20		EC 35
		WT	WT	WT	AT	WT
5 Jul	Mean	-	14.1	9.3	18.9	17.9
	Minimum	-	12.0	9.0	12.0	14.0
	Maximum	-	29.0	9.5	29.0	22.5
6 Jul	Mean	-	18.6	11.0	19.3	18.6
	Minimum	-	15.0	9.5	13.5	15.0
	Maximum	-	22.5	18.5	28.0	22.5
7 Jul	Mean	-	16.9	11.0	17.7	16.9
	Minimum	-	15.0	10.0	15.0	16.0
	Maximum	-	22.0	13.0	22.0	18.5
8 Jul	Mean	-	17.0	11.7	18.2	17.0
	Minimum	-	14.5	10.0	14.5	15.0
	Maximum	-	18.5	13.5	24.0	18.5
9 Jul	Mean	-	18.1	12.0	19.1	18.1
	Minimum	-	15.0	10.0	13.5	15.0
	Maximum	-	22.0	18.0	27.5	22.0
10 Jul	Mean	-	18.2	12.1	18.5	18.2
	Minimum	-	10.5	9.5	10.5	14.0
	Maximum	-	22.5	20.0	30.0	22.5
11 Jul	Mean	-	18.7	12.2	20.3	18.7
	Minimum	-	15.5	10.0	13.5	15.5
	Maximum	-	22.5	19.0	29.5	22.5
12 Jul	Mean	-	17.9	12.0	17.2	17.7
	Minimum	-	14.5	10.5	14.5	16.0
	Maximum	-	21.0	13.0	21.0	18.5
13 Jul	Mean	-	15.3	10.9	14.8	15.4
	Minimum	-	14.5	10.0	12.5	14.5
	Maximum	-	16.0	13.5	18.0	16.5
14 Jul	Mean	-	15.5	11.5	17.1	15.9
	Minimum	-	9.5	9.0	14.5	15.0
	Maximum	-	18.0	13.5	22.0	17.5
15 Jul	Mean	-	9.3	9.0	18.0	18.2
	Minimum	-	9.0	9.0	12.5	14.5
	Maximum	-	9.5	9.0	25.5	23.0

Table 23 - (Continued).

Date		Stations				
		EC	EC	STO		EC
		19	36	20		35
		WT	WT	WT	AT	WT
16 Jul	Mean	-	9.0	9.0	16.5	16.5
	Minimum	-	9.0	9.0	12.5	15.5
	Maximum	-	9.5	9.0	20.5	17.5
17 Jul	Mean	-	9.3	9.3	18.0	18.3
	Minimum	-	9.0	9.0	13.0	15.5
	Maximum	-	9.5	9.5	24.5	22.0
18 Jul	Mean	-	9.3	9.2	18.1	17.1
	Minimum	-	9.0	9.0	9.5	14.0
	Maximum	-	9.5	9.5	25.0	20.5
19 Jul	Mean	-	9.3	9.2	18.4	18.7
	Minimum	-	9.0	9.0	12.0	14.5
	Maximum	-	9.5	9.5	30.0	23.0
20 Jul	Mean	-	9.4	9.4	15.3	17.5
	Minimum	-	9.0	9.0	13.5	16.0
	Maximum	-	9.5	9.5	18.5	20.0
21 Jul	Mean	-	9.4	9.2	18.5	19.2
	Minimum	-	9.0	9.0	16.5	18.0
	Maximum	-	9.5	9.5	20.5	19.5
22 Jul	Mean	-	9.7	9.7	18.4	19.4
	Minimum	-	9.0	9.0	12.5	15.5
	Maximum	-	10.0	10.0	26.5	23.5
23 Jul	Mean	-	9.8	9.9	14.6	16.4
	Minimum	-	9.5	9.5	12.0	16.0
	Maximum	-	10.0	10.5	16.0	18.0
24 Jul	Mean	-	10.2	10.3	20.9	18.6
	Minimum	-	10.0	10.0	15.5	16.0
	Maximum	-	10.5	11.0	27.5	22.0
25 Jul	Mean	-	10.4	10.7	16.4	18.0
	Minimum	-	9.5	10.0	12.5	14.5
	Maximum	-	11.0	11.0	24.5	21.5
26 Jul	Mean	-	10.4	10.6	16.5	17.6
	Minimum	-	9.5	9.5	7.5	13.5
	Maximum	-	11.5	12.0	29.0	22.5

Table 23 - (Continued).

Date		Stations				
		EC 19	EC 36	STO 20		EC 35
		WT	WT	WT	AT	WT
27 Jul	Mean	-	11.0	11.3	18.2	18.0
	Minimum	-	10.5	11.0	12.0	15.0
	Maximum	-	11.5	12.0	28.0	20.0
28 Jul	Mean	-	11.6	12.0	20.3	18.3
	Minimum	-	11.0	11.5	13.5	15.5
	Maximum	-	12.0	12.5	29.5	21.0
29 Jul	Mean	-	11.3	11.9	15.6	15.5
	Minimum	-	11.0	11.0	14.0	16.0
	Maximum	-	11.5	12.5	16.5	17.5
30 Jul	Mean	-	11.3	11.6	18.2	17.8
	Minimum	-	11.0	11.0	16.5	16.0
	Maximum	-	11.5	12.0	20.5	18.0
31 Jul	Mean	-	12.2	12.6	20.2	18.9
	Minimum	-	11.5	12.0	16.5	16.5
	Maximum	-	12.5	13.0	26.0	21.5
1 Aug	Mean	-	11.7	12.0	17.3	17.8
	Minimum	-	11.0	11.5	15.0	16.5
	Maximum	-	12.0	12.5	20.5	19.0
2 Aug	Mean	-	12.4	12.6	15.4	16.8
	Minimum	-	11.5	11.5	9.0	13.5
	Maximum	-	13.5	14.0	23.5	20.0
3 Aug	Mean	-	12.8	13.2	15.5	16.4
	Minimum	-	11.0	11.5	8.0	13.0
	Maximum	-	14.5	15.0	27.5	19.0
4 Aug	Mean	-	13.8	14.1	17.2	17.7***
	Minimum	-	13.5	13.5	9.5	13.5
	Maximum	-	14.5	15.0	27.5	28.5
5 Aug	Mean	-	13.9	14.4	18.4	RM#
	Minimum	-	13.5	14.0	11.0	-
	Maximum	-	14.5	15.0	28.0	-
6 Aug	Mean	-	14.6	15.1	18.9	RM
	Minimum	-	14.0	14.5	17.0	-
	Maximum	-	15.5	16.0	23.5	-

Table 23 - (Continued).

Date		Stations				
		EC 19	EC 36	STO 20		EC 35
		WT	WT	WT	AT	WT
7 Aug	Mean	-	14.6	15.1	15.2	13.7
	Minimum	-	14.0	14.5	14.5	13.5
	Maximum	-	15.0	15.5	16.5	15.0
8 Aug	Mean	-	14.8	15.1	16.5	14.2
	Minimum	-	14.5	14.5	15.5	13.5
	Maximum	-	15.0	15.5	17.5	15.0
9 Aug	Mean	-	15.5	15.6	18.1	14.9
	Minimum	-	15.0	15.0	17.0	14.0
	Maximum	-	16.0	16.0	20.0	16.0
10 Aug	Mean	-	16.2	17.3	18.4	15.0
	Minimum	-	15.0	15.0	16.0	14.0
	Maximum	-	18.0	18.5	20.0	16.0
11 Aug	Mean	15.6	14.2	16.8	21.0	15.8
	Minimum	14.5	13.5	15.5	15.0	14.0
	Maximum	16.5	15.0	17.5	30.5	18.0
12 Aug	Mean	15.7	14.5	16.4	20.3	15.8
	Minimum	15.0	14.0	15.5	15.0	15.0
	Maximum	16.0	15.5	17.5	28.0	17.0
13 Aug	Mean	16.1	14.8	16.8	21.6	16.7
	Minimum	15.5	14.5	16.5	18.0	15.5
	Maximum	17.0	15.0	17.0	31.5	19.0
14 Aug	Mean	16.3	15.0	RM	21.1	16.6
	Minimum	16.0	15.0	-	17.5	15.5
	Maximum	17.0	15.0	-	28.5	18.0
15 Aug	Mean	16.4	15.0	RM	21.4	16.8
	Minimum	16.0	14.5	-	19.0	16.0
	Maximum	17.0	15.5	-	28.0	18.0
16 Aug	Mean	16.5	15.1	RM	17.9	15.2
	Minimum	16.5	15.0	-	15.5	14.5
	Maximum	17.0	15.5	-	22.0	16.0
17 Aug	Mean	16.7	15.4	RM	19.6	15.1
	Minimum	16.5	15.0	-	15.5	13.5
	Maximum	17.0	16.0	-	27.5	17.0

Table 23 - (Continued).

Date		Stations				
		EC 19	EC 36	STO 20		EC 35
		WT	WT	WT	AT	WT
18 Aug	Mean	16.1	16.1	RM	18.7	15.4
	Minimum	15.0	14.0	-	12.0	13.5
	Maximum	17.0	17.5	-	27.0	18.0
19 Aug	Mean	15.9	RM	RM	18.2	15.0
	Minimum	14.5	-	-	11.0	13.0
	Maximum	17.0	-	-	29.0	18.0
20 Aug	Mean	16.1	RM	RM	20.4	15.5
	Minimum	15.0	-	-	12.5	13.0
	Maximum	17.0	-	-	34.0	18.5
21 Aug	Mean	16.5	RM	RM	24.0	17.0
	Minimum	15.5	-	-	18.0	15.0
	Maximum	17.5	-	-	34.5	20.5
22 Aug	Mean	16.7	RM	RM	24.7	18.3
	Minimum	15.5	-	-	19.5	16.0
	Maximum	18.0	-	-	33.0	21.5
23 Aug	Mean	16.5	RM	RM	23.0	17.9
	Minimum	15.5	-	-	18.5	16.0
	Maximum	17.0	-	-	31.0	20.5
24 Aug	Mean	16.5	RM	RM	18.8	16.9
	Minimum	15.0	-	-	15.5	15.5
	Maximum	17.5	-	-	27.5	21.5
25 Aug	Mean	16.5	RM	RM	18.2	17.1
	Minimum	15.0	-	-	10.0	13.5
	Maximum	18.0	-	-	31.5	22.0
26 Aug	Mean	16.4	RM	RM	17.7	RM
	Minimum	15.0	-	-	11.5	-
	Maximum	17.0	-	-	25.5	-
27 Aug	Mean	16.4	RM	RM	19.0	RM
	Minimum	16.0	-	-	16.5	-
	Maximum	17.0	-	-	22.5	-
28 Aug	Mean	16.7	RM	RM	19.8	RM
	Minimum	16.5	-	-	16.5	-
	Maximum	17.0	-	-	26.5	-

Table 23 - (Continued).

Date		Stations				
		EC 19	EC 36	STO 20		EC 35
		WT	WT	WT	AT	WT
29 Aug	Mean	16.9	RM	RM	18.5	RM
	Minimum	16.0	-	-	16.5	-
	Maximum	18.0	-	-	25.0	-
30 Aug	Mean	16.5	RM	RM	13.1	15.8
	Minimum	15.0	-	-	8.0	11.5
	Maximum	17.5	-	-	19.5	19.5
31 Aug	Mean	16.4	RM	RM	13.9	14.0
	Minimum	15.0	-	-	9.5	10.5
	Maximum	17.5	-	-	24.5	19.0
1 Sep	Mean	16.5	RM	RM	15.1	15.0
	Minimum	15.5	-	-	7.0	11.0
	Maximum	17.0	-	-	24.5	19.0
2 Sep	Mean	16.8	RM	RM	13.5	14.8
	Minimum	16.5	-	-	9.0	13.0
	Maximum	17.5	-	-	16.5	16.0
3 Sep	Mean	16.7	RM	RM	12.5	14.2
	Minimum	16.0	-	-	7.0	11.0
	Maximum	17.5	-	-	21.0	19.5
4 Sep	Mean	16.4	RM	RM	12.8	13.8
	Minimum	16.0	-	-	6.5	10.5
	Maximum	16.5	-	-	22.0	19.0
5 Sep	Mean	17.3	RM	RM	15.8	15.7
	Minimum	16.5	-	-	13.5	14.0
	Maximum	18.0	-	-	20.5	19.0
6 Sep	Mean	17.0	RM	RM	12.9	14.0
	Minimum	16.5	-	-	8.0	10.5
	Maximum	17.5	-	-	20.0	19.0
7 Sep	Mean	17.0	RM	RM	14.6	14.2
	Minimum	16.5	-	-	9.5	10.0
	Maximum	17.5	-	-	23.0	20.0
8 Sep	Mean	17.4	RM	RM	18.6	16.8
	Minimum	17.0	-	-	12.5	13.0
	Maximum	18.0	-	-	28.5	22.5

Table 23 - (Continued).

Date		Stations				
		EC 19	EC 36	STO 20		EC 35
		WT	WT	WT	AT	WT
9 Sep	Mean	17.1	RM	RM	15.8	16.3
	Minimum	16.5	-	-	10.0	12.5
	Maximum	17.5	-	-	25.0	22.0
10 Sep	Mean	16.6	RM	RM	13.1	14.5
	Minimum	16.5	-	-	11.5	13.5
	Maximum	17.0	-	-	16.5	16.0
11 Sep	Mean	16.5	RM	RM	10.4	12.6
	Minimum	16.0	-	-	6.5	10.5
	Maximum	17.5	-	-	15.0	15.0
12 Sep	Mean	16.8	RM	RM	14.3	14.2
	Minimum	16.0	-	-	8.5	10.5
	Maximum	17.5	-	-	24.5	20.5
13 Sep	Mean	16.9	RM	RM	16.5	15.5
	Minimum	16.5	-	-	9.5	11.5
	Maximum	17.5	-	-	28.0	22.0
14 Sep	Mean	16.9	RM	RM	15.9	16.0
	Minimum	16.5	-	-	10.5	12.0
	Maximum	17.5	-	-	27.0	21.5
15 Sep	Mean	16.8	RM	RM	16.3	16.3
	Minimum	16.5	-	-	11.5	13.5
	Maximum	17.0	-	-	24.5	20.5
16 Sep	Mean	16.6	RM	RM	15.3	15.8
	Minimum	16.5	-	-	14.0	15.0
	Maximum	17.0	-	-	17.0	17.0
17 Sep	Mean	16.7	RM	RM	15.9	15.5
	Minimum	16.5	-	-	15.5	15.0
	Maximum	17.0	-	-	16.5	16.0
18 Sep	Mean	16.8	RM	RM	14.8	15.2
	Minimum	16.5	-	-	14.0	15.0
	Maximum	17.0	-	-	16.0	15.5
19 Sep	Mean	17.1	RM	RM	16.4	16.0
	Minimum	16.5	-	-	13.5	14.0
	Maximum	18.0	-	-	23.0	19.0

Table 23 - (Continued).

Date		Stations				
		EC 19	EC 36	STO 20		EC 35
		WT	WT	WT	AT	WT
20 Sep	Mean	16.5	RM	RM	13.5	14.3
	Minimum	16.0	-	-	9.5	12.5
	Maximum	17.0	-	-	18.5	16.5
21 Sep	Mean	15.5	RM	RM	12.4	14.1
	Minimum	13.5	-	-	5.5	10.5
	Maximum	17.0	-	-	19.0	17.5
22 Sep	Mean	12.7	RM	RM	7.9	10.9
	Minimum	11.0	-	-	3.5	8.5
	Maximum	15.5	-	-	13.5	14.0
23 Sep	Mean	12.0	RM	RM	8.1	11.3
	Minimum	9.0	-	-	1.5	6.5
	Maximum	14.5	-	-	18.5	16.0
24 Sep	Mean	13.2	RM	RM	8.0	11.6
	Minimum	10.5	-	-	1.0	8.0
	Maximum	15.5	-	-	20.0	17.5
25 Sep	Mean	14.6	RM	RM	8.5	9.7
	Minimum	14.5	-	-	2.0	5.5
	Maximum	15.0	-	-	20.0	17.0
26 Sep	Mean	14.4	RM	RM	7.0	8.4
	Minimum	14.0	-	-	2.0	6.0
	Maximum	14.5	-	-	12.5	10.0
27 Sep	Mean	14.5	RM	RM	12.9	10.8
	Minimum	14.5	-	-	12.0	10.0
	Maximum	14.5	-	-	14.5	11.5
28 Sep	Mean	13.9	RM	RM	8.8	10.6
	Minimum	13.5	-	-	3.0	9.0
	Maximum	14.5	-	-	13.5	11.5
29 Sep	Mean	13.2	RM	RM	7.7	8.8
	Minimum	13.0	-	-	0.5	7.5
	Maximum	13.5	-	-	19.5	10.5
30 Sep	Mean	13.1	RM	RM	7.9	8.9
	Minimum	13.0	-	-	4.5	8.0
	Maximum	13.5	-	-	12.5	10.0

Table 24. Summary of dissolved oxygen data (ppm) taken from 6 January through 28 September 1976 from Esopus Creek.

Date	Stations			
	31	19	20	21
6 Jan	ice*	14.3	TC**	ice
19 Jan	ice	ice	TC	ice
10 Feb	ice	ice	TC	ice
17 Feb	14.0	13.9	TC	13.6
10 Mar	14.6	14.5	TC	13.8
26 Mar	12.9	12.8	15.8	12.9
30 Mar	12.5	12.9	12.3	12.0
6 Apr	13.2	13.0	TC	12.3
13 Apr	13.9	13.1	TC	12.3
20 Apr	11.6	12.4	16.0	10.6
27 Apr	13.0	13.2	14.3	13.3
4 May	12.9	12.8	TC	12.0
11 May	13.0	11.6	TC	11.5
18 May	10.7	10.6	TC	10.6
25 May	11.8	12.0	TC	11.8
2 Jun	12.0	11.5	TC	10.8
8 Jun	11.7	12.0	14.0	11.0
15 Jun	10.5	11.0	13.0	9.0
22 Jun	10.7	11.7	13.3	9.7
29 Jun	10.8	11.6	12.9	9.2
7 Jul	10.1	10.1	TC	9.9
13 Jul	10.0	10.0	TC	10.1
20 Jul	10.7	10.9	13.0	9.2
27 Jul	10.9	11.5	14.2	9.8
3 Aug	11.4	11.8	13.5	9.9
10 Aug	9.8	9.9	12.6	9.8
17 Aug	9.5	9.5	9.0	10.3
24 Aug	9.8	10.3	13.1	9.6
30 Aug	8.8	9.1	12.7	10.1

* ice = no samples taken because of ice cover
** TC = Shandaken Tunnel closed

Table 24 - (Continued).

Date	Stations			
	31	19	20	21
7 Sep	9.8	10.8	11.6	10.6
14 Sep	9.9	10.8	13.4	10.6
22 Sep	10.9	10.7	TC	11.0
28 Sep	10.4	10.1	12.1	10.8
Grand $\bar{x}$	11.4	11.6	13.2	10.9
Minimum	8.8	9.1	9.0	9.0
Maximum	14.6	14.5	16.0	13.8
Standard Deviation	1.51	1.41	1.54	1.34

Table 25. Summary of turbidity data (nephelometer turbidity units) taken from 6 January through 28 September 1976 from tributaries of Schoharie Reservoir and Schoharie Creek.

Date	Stations						
	22	23	1	24	25	2	4
6 Jan	ice*	ice	ice	ice	ice	-**	ice
19 Jan	ice	ice	ice	ice	ice	-	ice
$\bar{x}$	-	-	-	-	-	-	-
10 Feb	ice	ice	ice	ice	ice	-	ice
17 Feb	ice	130	ice	73	68	-	55
$\bar{x}$	-	130	-	73	68	-	55
10 Mar	ice	14	3.5	3.0	2.5	-	18
26 Mar	2.1	12	5.0	3.5	1.5	12	16
30 Mar	3.5	12	4.7	3.4	2.3	13	21
$\bar{x}$	2.8	13	4.4	3.3	2.1	13	18
6 Apr	4.3	7.2	3.3	2.8	2.1	11	15
13 Apr	1.4	6.8	2.4	2.5	1.0	8.9	12
20 Apr	4.0	9.0	4.0	6.0	2.0	7.0	12
27 Apr	2.4	15	7.6	7.8	3.0	5.6	16
$\bar{x}$	3.0	9.5	4.3	4.8	2.0	8.1	14
4 May	2.6	14	4.9	4.4	1.8	4.4	8.5
11 May	1.4	10	3.6	2.0	1.1	2.7	4.6
18 May	5.6	9.1	12	4.7	22	2.8	4.9
25 May	1.5	8.1	3.7	3.0	1.0	3.0	5.3
$\bar{x}$	2.8	10	6.1	3.5	6.5	3.2	5.8
2 Jun	1.8	9.3	5.5	3.3	1.4	2.5	3.5
8 Jun	3.1	8.5	4.7	4.4	1.1	1.4	2.0
15 Jun	1.5	5.1	3.3	5.4	2.0	1.6	9.2
22 Jun	2.3	7.3	3.8	5.2	1.2	1.8	6.3
29 Jun	6.7	16	11	12	2.0	2.7	2.8
$\bar{x}$	3.1	9.2	5.7	6.1	1.5	1.8	4.7
7 Jul	1.7	7.6	3.6	4.6	1.1	1.3	6.0
13 Jul	1.4	2.6	2.7	3.6	0.90	1.1	7.5
20 Jul	1.6	3.9	2.7	3.1	1.0	1.4	4.9
27 Jul	1.6	4.4	2.2	2.7	1.0	1.9	3.5
$\bar{x}$	1.6	4.6	2.8	3.5	1.0	1.4	5.5

* ice = no samples taken because of ice cover
** not sampled from 6 January to 26 March 1976 because of sampling change

Table 25 - (Continued).

Date	Stations						
	22	23	1	24	25	2	4
3 Aug	1.4	3.1	2.4	2.4	0.73	1.1	3.2
10 Aug	350	550	600	21	18	1.8	6.6
17 Aug	3.4	18	7.0	2.3	1.5	1.2	2.8
24 Aug	1.3	7.5	3.4	1.0	0.91	1.4	2.8
30 Aug	1.6	6.2	2.6	0.74	0.77	1.6	2.4
$\bar{x}$	72	117	123	5.5	4.4	1.4	3.6
7 Sep	1.6	4.5	2.4	0.97	1.2	2.5	3.1
14 Sep	1.4	6.8	1.8	0.96	1.3	1.7	2.5
22 Sep	1.2	4.7	2.0	0.74	1.3	1.9	2.0
28 Sep	2.7	5.4	2.6	2.9	1.1	1.8	2.3
$\bar{x}$	1.7	5.4	2.2	1.4	1.2	2.0	2.5
Grand $\bar{x}$	15	31	25	6.4	4.9	3.6	8.7
Minimum	1.2	2.6	1.8	0.74	0.73	1.1	2.0
Maximum	350	550	600	73	68	13	55
Standard Deviation	65.7	100.7	110.7	13.16	12.84	3.49	10.26

Table 26. Summary of alkalinity data (mg/l) taken from 6 January through 14 September 1976 from tributaries of Schoharie Reservoir and Schoharie Creek.

Date	Stations						
	22	23	1	24	25	2	4
6 Jan	ice*	ice	ice	ice	ice	-**	ice
10 Feb	ice	ice	ice	ice	ice	-	ice
10 Mar	ice	10	10	15	20	-	20
6 Apr	10	10	10	15	15	-	20
11 May	10	10	10	15	15	10	20
2 Jun	12.2	15.1	16.1	25.4	21.5	12.2	42.0
13 Jul	18.8	22.5	22.9	37.6	25.4	22.1	25.7
10 Aug	7.1	15.9	9.8	15.4	15.9	113.5	29.3
14 Sep	24.5	24.9	25.6	58.6	42.5	148.4	102.2
Grand $\bar{x}$	13.8	15.5	14.9	26.0	22.2	61.2	37.0
Minimum	7.1	10	9.8	15	15	10	20
Maximum	24.5	24.9	25.6	58.6	42.5	148.4	102.2
Standard Deviation	6.57	6.17	6.81	16.70	9.76	64.98	29.80

* ice = no samples taken because of ice cover
** not sampled from 6 January to 11 May 1976 because of sampling change

Table 27. Summary of total hardness (TH) and calcium hardness (CH) data (mg/l) taken from 6 January through 14 September 1976 from tributaries of Schoharie Reservoir and Schoharie Creek.

Date	Stations													
	22		23		1		24		25		2		4	
	TH	CH	TH	CH	TH	CH	TH	CH	TH	CH	TH	CH	TH	CH
6 Jan	ice*	ice	ice	ice	ice	ice	ice	ice	ice	ice	-**	-	ice	ice
10 Feb	ice	ice	ice	ice	ice	ice	ice	ice	ice	ice	-	-	ice	ice
10 Mar	ice	ice	15	15	15	15	20	20	20	15	-	-	25	20
6 Apr	15	15	20	15	15	15	25	20	20	15	-	-	25	20
11 May	15	10	20	10	20	10	25	15	15	15	20	10	30	20
2 Jun	27.9	14.4	31.0	11.3	27.9	15.3	37.6	23.3	33.0	19.2	29.9	15.9	56.3	35.7
13 Jul	35.7	18.8	43.5	19.6	43.8	21.3	60.1	30.7	44.2	27.0	38.8	18.6	41.9	25.6
10 Aug	23.9	21.2	20.0	18.8	20.2	18.4	20.2	18.4	22.1	16.7	93.5	72.6	33.0	29.3
14 Sep	26.0	22.1	31.6	22.7	29.3	22.2	62.5	42.9	43.3	36.9	113.9	90.8	104.4	74.1
Grand $\bar{x}$	23.9	16.9	25.9	16.1	24.5	16.7	35.8	24.3	28.2	20.7	59.2	41.6	45.1	32.1
Minimum	15	10	15	10	15	10	20	15	15	15	20	10	25	20
Maximum	35.7	22.1	43.5	22.7	43.8	22.2	62.5	42.9	44.2	36.9	113.9	90.8	104.4	74.1
Standard Deviation	7.98	4.62	9.93	4.58	10.22	4.22	18.41	9.54	11.92	8.35	41.77	37.32	28.39	19.43

* ice = no samples taken because of ice cover

** not sampled from 6 January to 11 May 1976 because of sampling change

Table 28. Summary of hydrogen ion data (pH) taken from 6 January through 14 September 1976 from tributaries of Schoharie Reservoir and Schoharie Creek.

Date	Stations						
	22	23	1	24	25	2	4
6 Jan	ice*	ice	ice	ice	ice	-**	ice
10 Feb	ice	ice	ice	ice	ice	-	ice
10 Mar	ice	7.1	7.0	6.6	6.8	-	6.8
6 Apr	7.1	7.1	7.1	7.2	7.2	-	7.3
11 May	7.5	7.5	7.8	7.7	7.4	7.2	7.3
2 Jun	7.0	7.1	7.2	7.3	7.2	7.2	7.4
13 Jul	7.6	7.6	7.5	7.6	7.7	7.5	7.5
10 Aug	6.3	6.8	6.5	3.3	6.8	7.9	7.2
14 Sep	7.2	7.5	7.5	7.4	7.8	8.1	7.6
Grand $\bar{x}$	7.1	7.2	7.2	6.7	7.3	7.6	7.3
Minimum	6.3	6.8	6.5	3.3	6.8	7.2	6.8
Maximum	7.6	7.6	7.8	7.6	7.8	8.1	7.6
Standard Deviation	0.46	0.29	0.42	1.55	0.39	0.41	0.26

* ice = no samples taken because of ice cover
** not sampled from 6 January to 11 May 1976 because of sampling change

Table 29. Summary of air temperature data (C) taken from 6 January through 28 September 1976 from tributaries of Schoharie Reservoir and Schoharie Creek.

Date	Stations						
	22	23	1	24	25	2	4
6 Jan	ice*	ice	ice	ice	ice	-**	ice
19 Jan	ice	ice	ice	ice	ice	-	ice
10 Feb	ice	ice	ice	ice	ice	-	ice
17 Feb	ice	10	ice	9	9	-	10
10 Mar	ice	7	-1	-1	3	-	5
26 Mar	8	9	11	11	16	16	17
30 Mar	14	16	17	18	15	16	18
6 Apr	14	13	13	13	13	18	14
13 Apr	10	13	10	10	14	15	14
20 Apr	23	24	23	23	21	26	23
27 Apr	2	4	3	4	4	4	4
4 May	9	9	8	8	11	9	8
11 May	19	21	19	19	19	20	20
18 May	14	18	18	19	10	9	9
25 May	11	11	12	11	12	12	12
2 Jun	15	15	15	15	18	21	20
8 Jun	22	22	22	19	21	21	19
15 Jun	26	28	26	26	28	26	27
22 Jun	23	23	23	22	21	22	24
29 Jun	22	23	22	20	26	26	25
7 Jul	21	21	21	21	20	21	20
13 Jul	15	15	15	14	16	16	17
20 Jul	23	23	22	21	27	28	27
27 Jul	22	24	23	22	27	27	27
3 Aug	16	16	15	14	20	20	20
10 Aug	18	19	19	18	18	19	21
17 Aug	19	19	19	19	21	22	21
24 Aug	19	18	19	19	23	24	21
30 Aug	11	11	12	11	15	16	15
7 Sep	18	18	18	17	20	20	20
14 Sep	17	16	16	16	25	24	24
22 Sep	12	10	10	9	13	13	15
28 Sep	10	10	10	10	12	12	12

* ice = no samples taken because of ice cover
** not sampled from 6 January to 26 March 1976 because of sampling change

Table 30. Summary of water temperature data (C) taken from 6 January through 28 September 1976 from tributaries of Schoharie Reservoir and Schoharie Creek.

Date	Stations						
	22	23	1	24	25	2	4
6 Jan	ice*	ice	ice	ice	ice	-**	ice
19 Jan	ice	ice	ice	ice	ice	-	ice
$\bar{x}$	-	-	-	-	-	-	-
10 Feb	ice	ice	ice	ice	ice	-	ice
17 Feb	ice	2	ice	1	2	-	1
$\bar{x}$	-	2	-	1	2	-	1
10 Mar	ice	0	-1	-1	0	-	1
26 Mar	5	5	6	3	7	5	9
30 Mar	7	7	7	7	11	6	7
$\bar{x}$	6	6	4	3	6	6	6
6 Apr	5	5	5	5	8	5	6
13 Apr	5	5	4	2	9	6	8
20 Apr	15	15	15	15	16	13	9
27 Apr	5	5	5	5	5	5	9
$\bar{x}$	8	8	7	7	9	7	8
4 May	7	8	7	8	8	9	10
11 May	13	13	13	13	14	14	14
18 May	13	14	14	15	12	12	12
25 May	10	10	10	10	10	10	10
$\bar{x}$	11	11	11	12	11	11	12
2 Jun	13	13	13	13	16	16	18
8 Jun	16	16	16	15	14	16	18
15 Jun	22	22	22	20	22	23	18
22 Jun	20	21	21	20	21	23	19
29 Jun	21	21	22	19	24	26	25
$\bar{x}$	18	19	19	17	19	21	20
7 Jul	19	20	20	19	19	23	22
13 Jul	17	17	17	16	16	20	21
20 Jul	21	20	21	18	23	24	28
27 Jul	19	19	19	18	20	22	26
$\bar{x}$	19	19	19	18	20	22	24

* ice = no samples taken because of ice cover
** not sampled from 6 January to 26 March 1976 because of sampling change

Table 30 - (Continued).

Date	Stations						
	22	23	1	24	25	2	4
3 Aug	18	17	18	15	21	22	27
10 Aug	16	17	16	17	17	20	22
17 Aug	16	16	16	16	21	21	25
24 Aug	20	19	20	17	23	24	28
30 Aug	16	16	16	14	19	21	22
$\bar{x}$	17	17	17	16	20	22	25
7 Sep	15	15	15	13	18	18	20
14 Sep	16	15	16	13	19	19	25
22 Sep	13	13	13	11	15	17	19
28 Sep	12	12	13	12	13	15	16
$\bar{x}$	14	14	14	12	16	17	20
Grand $\bar{x}$	14	13	14	12	15	16	17
Minimum	5	0	-1	-1	9	5	1
Maximum	22	22	22	20	24	26	28
Standard Deviation	5.4	6.1	6.1	6.0	6.4	6.7	8.0

Table 31. Summary of dissolved oxygen data (ppm) taken from 6 January through 28 September 1976 from tributaries of Schoharie Reservoir and Schoharie Creek.

Date	Stations						
	22	23	1	24	25	2	4
6 Jan	ice*	ice	ice	ice	ice	-**	ice
19 Jan	ice	ice	ice	ice	ice	-	ice
10 Feb	ice	ice	ice	ice	ice	-	ice
17 Feb	ice	13.8	ice	13.4	13.9	-	16.5
10 Mar	ice	14.4	14.4	14.3	13.2	-	15.2
26 Mar	13.2	12.3	12.9	12.8	12.7	12.9	12.1
30 Mar	12.9	12.3	13.2	12.5	11.5	13.1	14.5
6 Apr	13.1	12.8	13.5	13.1	11.7	13.3	14.8
13 Apr	13.9	13.5	14.2	14.4	12.2	13.2	14.4
20 Apr	-#	11.2	11.3	11.0	10.1	13.6	13.4
27 Apr	13.1	13.2	12.8	12.5	12.8	13.3	14.2
4 May	12.9	13.1	13.0	12.5	12.3	12.5	13.9
11 May	11.7	11.2	11.5	11.5	10.9	11.1	12.0
18 May	10.3	10.0	10.3	10.2	9.9	11.1	12.5
25 May	11.7	11.7	11.7	11.5	11.4	11.1	12.9
2 Jun	11.5	11.2	11.2	11.0	10.7	10.6	12.1
8 Jun	11.1	10.4	10.4	10.1	11.6	10.3	11.0
15 Jun	9.9	9.4	9.3	9.0	8.9	10.5	9.9
22 Jun	9.5	9.2	8.9	9.1	9.4	9.2	10.5
29 Jun	9.7	9.1	9.3	9.3	8.8	9.7	11.3
7 Jul	10.3	9.6	9.8	9.5	9.7	8.9	9.4
13 Jul	10.2	9.7	9.8	9.6	10.0	9.3	9.3
20 Jul	9.4	9.6	9.5	9.3	8.9	9.3	10.1
27 Jul	10.2	10.0	9.4	9.1	9.3	12.9	10.2

* ice = no samples taken because of ice cover
** not sampled from 6 January to 26 March 1976 because of sampling change
\# data not recorded

Table 31 - (Continued).

Date	Stations						
	22	23	1	24	25	2	4
3 Aug	10.6	10.2	10.1	10.3	9.2	9.0	10.2
10 Aug	9.5	9.6	9.2	9.1	9.1	9.8	9.5
17 Aug	10.2	9.7	10.0	9.8	9.5	9.5	10.7
24 Aug	10.5	9.7	9.7	9.6	9.0	9.1	9.9
30 Aug	10.6	10.1	10.3	10.0	9.5	9.0	9.8
7 Sep	11.0	10.5	10.7	10.5	9.7	9.1	10.4
14 Sep	10.2	10.4	10.1	10.0	9.7	10.0	11.3
22 Sep	10.5	10.8	10.6	10.7	10.3	8.7	6.2
28 Sep	10.4	10.6	10.3	9.7	10.8	9.0	10.4
Grand $\bar{x}$	11.0	11.0	10.9	10.9	10.6	10.7	11.6
Minimum	9.4	9.1	8.9	9.0	8.8	8.7	6.2
Maximum	13.9	14.4	14.4	14.4	13.9	13.6	16.5
Standard Deviation	1.32	1.52	1.60	1.63	1.45	1.70	2.25

Table 32. Results of monthly water quality analysis from February through September 1976 of samples taken at two stations on Schoharie Reservoir, four stations on Esopus Creek, four stations on tributaries of Schoharie Reservoir, two stations on Schoharie Creek, and two stations on Lower and Upper B-G as measured by Eric McClellan, Muddy Run IA water quality lab, and James Reisinger, Limerick IA water quality lab. All values expressed as ppm unless otherwise stated.

Station	27*	30*	31	19	20**	21	22*	23	24	25	1*	4	14*	16*
Parameter					February									
pH (Lab)	-	-	6.82	6.82	-	6.80	-	7.47	6.96	6.91	-	7.38	-	-
Specific Conductance (umhos) @ 20 C	-	-	57	61	-	60	-	60	65	47	-	73	-	-
Carbonate (CO_3)	-	-	0.00	0.00	-	0.00	-	0.00	0.00	0.00	-	0.00	-	-
Bicarbonate (HCO_3)	-	-	9.60	9.60	-	9.12	-	14.40	15.36	10.32	-	22.80	-	-
Sodium (Na)	-	-	3.12	3.38	-	3.51	-	2.19	2.19	1.66	-	2.45	-	-
Potassium (K)	-	-	0.64	0.57	-	0.64	-	1.66	2.32	1.47	-	1.30	-	-
Total Hardness ($CaCO_3$)	-	-	17.8	18.6	-	18.6	-	23.6	23.8	16.6	-	29.9	-	-
Calcium Hardness ($CaCO_3$)	-	-	14.1	17.0	-	16.2	-	18.2	18.2	12.9	-	23.0	-	-
Sulfate (SO_4)	-	-	8.28	7.59	-	8.28	-	11.78	17.49	10.71	-	13.25	-	-
Chloride (Cl)	-	-	7.80	7.98	-	8.15	-	4.78	5.50	3.90	-	4.61	-	-
Nitrate (NO_3)	-	-	2.24	2.20	-	2.35	-	2.98	2.83	2.39	-	2.46	-	-
Nitrite (NO_2)	-	-	0.01	0.01	-	0.01	-	0.02	0.02	0.01	-	0.01	-	-
Silica, Reactive (SiO_3-Si)	-	-	1.25	1.25	-	1.20	-	1.45	1.38	1.38	-	1.37	-	-
Phosphate, Total (PO_4)	-	-	0.07	0.07	-	0.04	-	0.82	1.10	0.60	-	0.26	-	-
Iron (Fe)	-	-	0.49	0.29	-	0.26	-	5.70	3.13	3.53	-	2.03	-	-
Manganese (Mn)	-	-	0.027	0.013	-	0.040	-	0.262	0.192	0.230	-	0.076	-	-
Carbon Dioxide (CO_2)***	-	-	2	2	-	2	-	2	2	2	-	2	-	-
Magnesium Hardness ($CaCO_3$)	-	-	3.7	1.6	-	2.4	-	5.4	5.6	3.7	-	6.9	-	-
5-Day BOD @ 20 C	-	-	0.4	1.0	-	0 9	-	2.0	4.1	2.1	-	0.9	-	-

* stations not sampled because of ice cover
** Shandaken Tunnel closed
*** measured by Terry Culp, Stamford IA
\# nitric acid contamination suspected in sample

Table 32 - Continued.

Station	27	30	31	19	20	21	22	23	24	25	1	4	14	16
Parameter						April for March								
pH	6.88	6.93	7.08	7.10	-	7.05	7.08	7.10	7.24	7.16	7.14	7.28	7.14	7.22
Specific Conductance (umhos) @ 20 C	49	52	44	46	-	44	46	53	62	59	50	65	59	58
Carbonate (CO_3)	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bicarbonate (HCO_3)	10.08	12.00	8.64	9.12	-	8.16	8.88	11.04	15.36	15.36	9.12	17.76	14.40	14.64
Sodium (Na)	2.00	2.26	1.44	2.00	-	1.44	1.72	2.67	2.81	2.40	2.26	2.40	2.26	2.40
Potassium (K)	0.47	0.50	0.20	0.22	-	0.24	0.27	0.44	0.82	0.47	0.32	0.65	0.64	0.65
Total Hardness ($CaCO_3$)	16.8	18.6	15.4	15.8	-	15.2	15.4	17.6	23.8	21.0	16.8	23.2	20.4	20.8
Calcium Hardness ($CaCO_3$)	13.2	15.0	12.6	12.0	-	11.2	12.6	14.0	17.8	16.4	13.2	20.2	17.0	17.6
Sulfate (SO_4)	9.60	9.60	8.44	8.04	-	8.44	7.62	10.33	11.04	9.60	8.44	10.68	10.68	11.04
Chloride (Cl)	4.25	4.96	4.25	4.79	-	4.25	3.72	5.32	4.79	4.25	4.61	5.32	5.32	5.32
Nitrate (NO_3)	2.40	2.44	1.82	1.64	-	1.92	2.13	1.64	3.17	1.57	1.89	1.99	1.98	1.98
Nitrite (NO_2)	0.01	0.01	0.01	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02
Silica, Reactive (SiO_3-Si)	1.22	1.32	1.06	1.00	-	0.99	1.20	1.49	1.36	1.59	1.22	1.40	1.36	1.37
Phosphate, Total (PO_4)	0.12	0.13	0.05	0.06	-	0.05	0.04	0.16	0.09	0.11	0.05	0.15	0.12	0.16
Iron (Fe)	0.37	0.33	0.16	0.09	-	0.19	0.09	0.40	0.19	0.09	0.16	0.65	0.58	0.65
Manganese (Mn)	0.024	0.036	0.016	0.008	-	0.012	0.044	0.022	0.013	0.010	0.007	0.090	0.032	0.030
Carbon Dioxide (CO_2)	2	2	2	2	-	2	2	2	2	2	2	2	2	2
Magnesium Hardness ($CaCO_3$)	3.6	3.6	2.8	3.8	-	4.0	2.8	3.6	6.0	4.6	3.6	3.0	3.4	3.2
5-Day BOD @ 20 C	1.1	1.0	1.8	0.7	-	0.7	1.6	0.7	1.0	1.3	1.2	1.4	0.9	1.0
						April								
pH	7.02	6.60	7.12	7.03	6.95	7.01	6.98	7.05	7.16	7.07	7.03	7.28	7.04	6.96
Specific Conductance (umhos) @ 20 C	123	74	51	52	55	45	46	49	65	54	48	68	66	66
Carbonate (CO_3)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bicarbonate (HCO_3)	14.64	11.04	10.32	10.80	12.72	9.12	8.64	11.04	18.00	14.40	10.08	19.68	15.36	15.12
Sodium (Na)	2.21	2.21	1.73	1.73	1.85	1.61	1.73	2.09	2.33	2.09	1.73	2.21	2.21	2.21
Potassium (K)	13.09	3.17	0.44	0.39	0.50	0.34	0.27	0.50	0.83	0.56	0.39	0.65	5.50	3.09
Total Hardness ($CaCO_3$)	20.4	19.2	17.5	18.0	18.2	16.1	14.9	16.7	25.7	19.6	16.1	25.3	23.2	23.5
Calcium Hardness ($CaCO_3$)	16.9	15.9	15.9	15.7	15.9	13.5	13.9	15.1	22.2	18.0	13.5	21.8	20.4	20.4
Sulfate (SO_4)	9.58	9.06	9.06	8.52	9.58	9.06	8.52	10.58	11.99	10.58	9.06	11.06	11.06	10.09
Chloride (Cl)	3.51	3.37	3.01	3.30	3.30	3.08	2.62	2.87	3.16	2.41	2.48	3.44	3.51	3.44
Nitrate (NO_3)	2.23	2.18	1.98	1.86	1.89	1.90	1.86	1.47	2.81	1.51	1.89	1.85	2.06	2.06
Nitrite (NO_2)	0.02	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.01	0.01
Silica, Reactive (SiO_3-Si)	1.16	1.28	1.12	1.15	1.24	1.06	1.16	1.54	1.50	1.63	1.25	1.31	1.29	1.28
Phosphate, Total (PO_4)	0.50	0.25	0.12	0.12	0.15	0.12	0.08	0.22	0.20	0.14	0.20	0.18	0.23	0.26
Iron (Fe)	0.33	0.27	0.24	0.17	0.33	0.14	0.14	1.00	0.43	0.20	0.33	0.88	0.62	0.56
Manganese (Mn)	0.022	0.038	0.035	0.020	0.042	0.007	0.014	0.040	0.028	0.021	0.036	0.032	0.030	0.026
Carbon Dioxide (CO_2)	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Magnesium Hardness ($CaCO_3$)	3.5	3.3	1.6	2.3	2.3	2.6	1.0	1.6	3.5	1.6	2.6	3.5	2.8	3.1
5-Day BOD @ 20 C	0.4	0.6	0.6	0.6	0.8	0.4	0.8	0.4	1.0	0.9	0.8	0.8	0.8	0.7

Table 32 - (Continued).

Station	27	30	31	19	20	21	22	23	24	25	1	4	14	16
Parameter														
May														
pH	6.93	6.69	7.12	7.01	-	7.04	6.82	7.15	7.69	7.02	6.96	7.14	7.04	6.97
Specific Conductance (umhos) @ 20 C	51	53	44	49	-	44	42	55	78	56	43	60	59	59
Carbonate (CO_3)	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bicarbonate (HCO_3)	12.96	12.24	10.56	11.52	-	10.08	8.64	14.88	26.40	18.96	9.84	16.80	15.84	15.36
Sodium (Na)	2.10	2.10	1.56	2.10	-	1.70	1.56	2.90	3.03	2.10	1.56	2.23	2.23	2.50
Potassium (K)	0.59	0.49	0.44	0.36	-	0.39	0.42	0.79	0.95	1.12	0.48	0.55	1.06	3.72
Total Hardness ($CaCO_3$)	19.6	19.2	18.6	20.0	-	18.4	16.4	19.6	30.2	20.4	16.8	22.6	22.0	21.8
Calcium Hardness ($CaCO_3$)	18.0	16.0	15.8	15.4	-	14.4	14.0	15.6	24.4	18.4	12.2	20.2	20.0	19.0
Sulfate (SO_4)	9.77	9.31	8.83	9.31	-	8.33	9.31	10.66	13.45	12.31	10.66	12.31	10.66	10.66
Chloride (Cl)	2.52	2.80	2.30	3.12	-	2.45	2.02	2.98	2.94	2.02	2.02	2.69	2.98	3.12
Nitrate (NO_3)	1.63	2.09	1.59	1.43	-	1.47	1.63	0.75	1.71	1.25	1.63	1.68	1.76	1.76
Nitrite (NO_2)	0.01	0.01	0.01	0.01	-	0.01	0.01	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Silica, Reactive (SiO_3-Si)	1.02	1.18	1.01	1.06	-	1.00	0.82	0.51	1.14	1.29	0.57	1.14	1.16	1.13
Phosphate, Total (PO_4)	0.06	0.14	0.08	0.09	-	0.05	0.13	0.14	0.16	0.67	0.15	0.07	0.08	0.09
Iron (Fe)	0.06	0.06	0.10	0.04	-	0.06	0.13	0.24	0.10	0.79	0.17	0.09	0.07	0.09
Manganese (Mn)	0.019	0.044	0.019	0.018	-	0.008	0.023	0.029	0.108	0.128	0.035	0.035	0.018	0.021
Carbon Dioxide (CO_2)	2	2	2	2	-	2	2	2	2	2	2	2	2	2
Magnesium Hardness ($CaCO_3$)	1.6	3.2	2.4	4.6	-	4.0	2.4	4.0	5.8	2.0	4.6	2.4	2.0	1.8
5-Day BOD @ 20 C	2.0	1.7	1.1	0.5	-	0.7	1.6	1.5	1.3	2.3	1.2	1.0	0.9	0.6
June														
pH	7.06	6.71	7.43	7.25	6.82	7.61	7.90	7.45	7.66	7.93	7.27	8.30	7.23	7.21
Specific Conductance (umhos) @ 20 C	59	50	50	51	51	48	52	65	96	75	63	120	64	63
Carbonate (CO_3)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bicarbonate (HCO_3)	19.44	13.68	14.40	14.64	14.16	13.44	16.80	19.20	38.88	31.68	18.72	52.80	22.08	22.32
Sodium (Na)	2.81	2.28	2.28	2.55	2.37	2.28	2.55	3.62	4.42	3.44	3.35	4.24	2.37	2.46
Potassium (K)	0.71	0.57	0.53	0.61	0.61	0.49	0.63	1.00	1.50	1.06	0.81	0.92	0.63	0.74
Total Hardness ($CaCO_3$)	22.0	18.8	19.8	20.4	17.6	17.8	20.8	23.2	39.0	30.4	25.8	51.2	24.8	25.2
Calcium Hardness ($CaCO_3$)	18.0	15.8	16.4	16.4	15.6	15.4	17.6	20.4	29.4	26.8	20.6	42.0	22.0	22.2
Sulfate (SO_4)	8.28	8.28	8.28	8.94	8.94	6.91	8.28	10.19	11.39	9.57	10.79	17.29	8.94	8.94
Chloride (Cl)	4.79	4.08	4.43	4.43	4.08	4.79	4.61	6.02	7.44	4.79	4.96	6.02	3.90	3.90
Nitrate (NO_3)	1.57	2.14	1.65	1.76	2.00	1.04	1.69	1.81	3.38	1.15	1.84	1.15	1.61	1.57
Nitrite (NO_2)	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.02	0.01	0.01	0.01	0.00	0.00
Silica, Reactive (SiO_3-Si)	0.41	1.13	1.10	1.14	1.12	1.17	0.72	1.13	1.44	1.69	0.80	1.14	0.88	0.87
Phosphate, Total (PO_4)	0.09	0.08	0.12	0.10	0.05	0.05	0.06	0.34	0.42	0.12	0.18	0.06	0.09	0.10
Iron (Fe)	0.14	0.05	0.11	0.08	0.17	0.14	0.19	0.86	0.89	0.11	0.56	0.30	0.19	0.19
Manganese (Mn)	0.045	0.048	0.024	0.070	0.054	0.010	0.028	0.086	0.167	0.039	0.054	0.091	0.025	0.024
Carbon Dioxide (CO_2)	2	4	2	2	2	2	2	2	4	2	2	2	2	2
Magnesium Hardness ($CaCO_3$)	4.0	3.0	3.4	4.0	2.0	2.4	3.2	2.8	9.6	3.6	5.2	9.2	2.8	3.0
5-Day BOD @ 20 C	0.6	1.0	1.2	0.5	0.8	0.9	1.1	1.0	1.2	0.9	1.4	1.3	0.4	1.2

Table 32 - (Continued).

Station	27	30#	31	19	20	21	22	23	24	25	1	4	14	16
Parameter						July								
pH	6.73	2.98	7.46	7.06	6.72	8.51	7.91	8.07	7.83	8.50	7.49	8.80	7.07	7.40
Specific Conductance (umhos) @ 20 C	54	212	52	54	54	52	61	71	111	92	72	103	72	67
Carbonate (CO_3)	0.00	0.00	0.00	0.00	0.00	0.96	0.00	0.00	0.00	1.92	0.00	4.32	0.00	0.00
Bicarbonate (HCO_3)	15.84	0.00	14.88	14.88	14.64	13.44	19.44	23.52	45.84	37.20	24.48	38.88	22.08	24.00
Sodium (Na)	2.10	1.93	2.27	2.36	2.44	2.44	2.86	4.21	5.31	3.37	3.28	4.04	2.44	2.44
Potassium (K)	0.63	0.52	0.56	0.62	0.76	0.53	0.58	0.93	1.55	1.01	0.76	0.92	0.68	0.66
Total Hardness ($CaCO_3$)	20.6	19.0	19.2	19.6	20.0	19.0	21.0	25.0	46.2	38.2	27.6	43.2	26.8	26.4
Calcium Hardness ($CaCO_3$)	18.0	16.0	16.2	17.4	17.2	16.6	15.8	20.6	38.8	32.0	22.1	38.4	24.2	23.8
Sulfate (SO_4)	4.92	5.90	5.90	5.90	4.92	5.90	5.90	4.92	8.62	7.74	5.90	11.96	4.92	7.74
Chloride (Cl)	4.25	3.90	4.79	4.61	4.25	5.32	5.50	7.80	8.86	5.85	6.20	6.03	4.43	4.43
Nitrate (NO_3)	2.18	56.94	1.87	1.87	2.03	0.95	1.30	0.95	3.33	0.84	1.84	1.26	4.56	1.53
Nitrite (NO_2)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Silica, Reactive (SiO_3-Si)	0.72	1.18	1.18	1.18	1.17	1.22	0.80	0.90	0.98	1.56	0.67	0.94	0.61	0.60
Phosphate, Total (PO_4)	0.05	0.05	0.09	0.05	0.05	0.06	0.05	0.06	0.25	0.06	0.08	0.10	0.06	0.07
Iron (Fe)	0.02	0.02	0.27	0.24	0.12	0.15	0.02	0.09	0.96	0.72	0.06	0.66	0.03	0.15
Manganese (Mn)	0.001	0.000	0.044	0.097	0.186	0.016	0.032	0.025	0.100	0.116	0.020	0.072	0.002	0.002
Carbon Dioxide (CO_2)	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Magnesium Hardness (Ca CO_3)	2.6	3.0	3.0	2.2	2.8	2.4	5.2	4.4	7.4	6.2	5.5	4.8	2.6	2.6
5-Day BOD @ 20 C	0.0	0.6	1.0	0.1	0.3	0.5	1.2	0.6	0.8	0.8	0.6	1.2	0.5	0.0
						August								
pH	7.28	6.57	7.33	7.22	6.87	8.37	7.37	7.76	7.82	7.97	7.55	7.95	7.47	7.42
Specific Conductance (umhos) @ 20 C	62	54	55	59	57	58	63	70	157	95	70	129	80	77
Carbonate (CO_3)	0.00	0.00	0.00	0.00	0.00	0.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bicarbonate (HCO_3)	20.16	14.88	16.08	17.04	16.80	15.84	19.92	22.56	59.04	41.04	22.08	60.00	29.76	29.76
Sodium (Na)	1.96	1.82	2.26	2.26	2.11	2.70	2.85	4.03	11.25	3.44	3.29	5.21	2.70	2.70
Potassium (K)	0.78	0.65	0.80	0.97	0.99	0.52	0.57	0.95	2.27	0.95	0.78	1.01	0.78	0.76
Total Hardness ($CaCO_3$)	23.8	22.2	20.8	21.4	20.8	20.4	22.6	24.9	57.0	40.4	25.5	59.6	32.7	32.9
Calcium Hardness ($CaCO_3$)	18.2	16.4	17.2	16.6	17.0	16.2	17.8	19.4	44.2	32.5	19.4	45.9	25.5	25.5
Sulfate (SO_4)	8.58	9.48	10.62	9.78	11.16	7.60	8.26	9.19	10.62	9.78	7.94	13.66	9.48	9.48
Chloride (Cl)	5.32	4.79	4.61	3.90	3.72	5.67	5.32	7.44	21.27	6.56	4.43	6.20	4.25	4.25
Nitrate (NO_3)	1.21	2.23	1.64	1.56	1.74	1.04	0.87	0.75	3.33	0.54	0.83	1.06	1.04	0.95
Nitrite (NO_2)	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
Silica, Reactive (SiO_3-Si)	0.26	1.10	0.88	0.82	0.80	1.08	0.54	0.73	0.68	1.34	0.44	0.94	0.02	0.01
Phosphate, Total (PO_4)	0.06	0.14	0.11	0.10	0.11	0.04	0.04	0.06	0.44	0.05	0.05	0.09	0.09	0.06
Iron (Fe)	0.19	0.23	0.54	0.44	0.54	0.12	0.09	0.19	0.12	0.19	0.12	0.12	0.23	0.19
Manganese (Mn)	0.033	0.120	0.058	0.058	0.082	0.004	0.017	0.006	0.005	0.012	0.006	0.084	0.026	0.017
Carbon Dioxide (CO_2)	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Magnesium Hardness ($CaCO_3$)	5.6	5.8	3.6	4.8	3.8	4.2	4.8	5.5	12.8	7.9	6.1	13.7	7.2	7.4
5-Day BOD @ 20 C	0.7	0.3	0.6	0.5	0.5	0.4	1.2	0.6	0.6	0.4	0.9	0.6	0.7	0.3

Table 32 - (Continued).

Station	27	30	31	19	20	21	22	23	24	25	1	4	14	16
Parameter														
pH	6.94	6.56	7.60	7.27	-	7.73	7.11	7.53	7.64	8.05	7.45	7.62	7.34	7.37
Specific Conductance (umhos) @ 20 C	64	57	62	66	-	60	63	76	160	100	70	188	82	82
Carbonate (CO_3)	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bicarbonate (HCO_3)	22.08	15.84	20.64	19.92	-	17.52	20.40	23.04	59.04	43.44	22.56	93.36	33.12	32.64
Sodium (Na)	2.76	2.35	2.89	3.83	-	3.03	3.16	4.64	10.55	3.83	3.43	7.19	2.89	2.89
Potassium (K)	0.81	0.62	0.52	0.56	-	0.44	0.51	0.84	0.54	0.86	0.65	0.97	0.72	0.73
Total Hardness ($CaCO_3$)	24.6	22.0	23.8	24.6	-	24.0	23.8	27.7	59.0	42.4	26.1	89.7	34.4	34.8
Calcium Hardness ($CaCO_3$)	19.4	17.8	18.2	18.6	-	17.4	19.4	22.6	47.1	38.2	19.8	69.9	27.9	28.1
Sulfate (SO_4)	9.88	10.27	9.09	9.88	-	8.66	9.09	10.64	12.66	10.99	9.49	19.39	10.99	10.64
Chloride (Cl)	4.43	3.72	4.79	6.56	-	6.20	5.32	8.15	15.78	6.03	5.67	7.27	4.43	4.43
Nitrate (NO_3)	0.95	2.11	1.11	0.87	-	0.52	1.19	0.98	3.12	0.52	1.19	0.44	0.82	0.86
Nitrite (NO_2)	0.00	0.01	0.01	0.00	-	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Silica, Reactive (SiO_3-Si)	0.39	1.29	0.73	0.88	-	1.01	0.53	0.75	0.68	1.22	0.48	1.05	0.06	0.05
Phosphate, Total (PO_4)	0.09	0.08	0.04	0.04	-	0.03	0.03	0.04	0.42	0.05	0.03	0.04	0.07	0.06
Iron (Fe)	0.37	0.16	0.20	0.16	-	0.16	0.20	0.24	0.16	0.12	0.08	0.24	0.20	0.16
Manganese (Mn)	0.143	0.127	0.022	0.013	-	0.002	0.013	0.009	0.018	0.007	0.015	0.051	0.045	0.038
Carbon Dioxide (CO_2)	2	2	2	2	-	2	2	2	2	2	2	2	2	2
Magnesium Hardness ($CaCO_3$)	5.3	4.2	5.6	6.0	-	6.6	4.4	5.1	12.9	4.2	6.3	19.8	6.5	6.7
5-Day BOD @ 20 C	0.1	0.1	0.2	0.1	-	0.4	0.5	0.3	0.2	0.6	0.6	0.6	0.2	0.4

Table 33. Mean results of monthly water quality analysis from February through September 1976 of samples taken at two stations on Schoharie Reservoir, four stations on Esopus Creek, four stations on tributaries of Schoharie Reservoir, two stations on Schoharie Creek, and two stations on Lower and Upper B-G as measured by Eric McClellan, Muddy Run IA water quality lab, and James Reisinger, Limerick IA water quality lab. All values expressed as ppm unless otherwise stated.

Station		27	30	31	19	20	21	22	23	24	25	1	4	14	16
Parameter															
pH	Mean	6.97	6.68	7.24	7.10	6.84	7.52	7.30	7.45	7.50	7.58	7.27	7.72	7.19	7.22
	Minimum	6.73	6.56	6.82	6.82	6.72	6.80	6.82	7.05	6.96	6.91	6.96	7.14	7.04	6.96
	Maximum	7.28	6.93	7.46	7.27	6.95	8.51	7.91	8.07	7.83	8.50	7.55	7.95	7.47	7.42
Specific Conductance (umhos) @ 20 C	Mean	66	57	52	55	54	52	53	63	100	72	59	101	69	68
	Minimum	49	50	44	51	51	44	42	49	62	47	43	60	59	58
	Maximum	123	74	62	66	57	60	63	76	160	100	72	188	82	82
Carbonate (CO_3)	Mean	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.24	0.00	0.54	0.00	0.00
	Minimum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Maximum	0.00	0.00	0.00	0.00	0.00	0.96	0.00	0.00	0.00	1.92	0.00	4.32	0.00	0.00
Bicarbonate (HCO_3)	Mean	16.46	13.13	13.14	13.44	14.58	12.09	14.67	17.46	34.74	26.55	16.70	40.26	21.80	21.98
	Minimum	10.08	11.08	8.64	9.12	12.72	8.16	8.64	11.04	15.36	10.32	9.12	16.80	14.40	14.64
	Maximum	22.08	15.84	20.64	19.92	16.80	17.52	20.40	23.52	59.04	43.44	22.56	93.36	33.12	32.64
Sodium (Na)	Mean	2.27	2.14	2.20	2.52	2.19	2.32	2.34	3.30	5.24	2.79	2.70	3.75	2.44	2.51
	Minimum	1.96	1.82	1.44	1.73	1.85	1.85	1.56	2.09	2.19	1.66	1.73	2.21	2.21	2.21
	Maximum	2.81	2.35	3.12	3.83	2.44	2.44	3.16	4.64	11.25	3.83	3.43	7.19	2.89	2.89
Potassium (K)	Mean	2.44	0.93	0.52	0.54	0.71	0.45	0.46	0.89	1.35	0.94	0.60	0.87	1.43	1.48
	Minimum	3.47	0.49	0.20	0.22	0.50	0.24	0.50	0.44	0.82	0.47	0.32	0.55	0.63	0.65
	Maximum	13.09	3.17	0.80	0.97	0.99	0.64	0.76	1.66	2.32	1.47	0.81	1.30	5.50	3.72
Total Hardness ($CaCO_3$)	Mean	21.1	19.9	19.2	19.8	19.2	18.7	9.3	21.7	38.1	28.7	22.1	43.1	26.3	26.5
	Minimum	16.8	18.6	15.4	15.8	17.6	15.2	14.9	16.7	23.8	16.6	16.1	22.6	20.4	20.8
	Maximum	24.6	22.2	23.8	24.6	20.8	24.0	23.8	27.7	59.0	42.4	27.6	89.7	34.4	34.8
Calcium Hardness ($CaCO_3$)	Mean	17.4	16.1	15.8	16.2	16.1	15.2	15.9	18.2	27.3	24.4	17.2	35.2	22.4	20.7
	Minimum	13.2	15.0	12.6	12.0	15.6	11.2	12.6	14.0	17.8	12.9	12.2	20.2	17.0	16.4
	Maximum	19.4	17.8	18.2	18.6	17.2	17.4	19.4	22.6	47.1	38.2	22.1	69.9	27.9	28.1
Sulfate (SO_4)	Mean	8.66	8.84	8.56	8.50	8.65	7.90	8.14	9.78	12.16	10.16	8.90	13.70	9.53	9.80
	Minimum	4.92	5.90	5.90	5.90	4.92	5.90	5.90	4.92	8.62	7.74	5.90	10.68	4.92	7.74
	Maximum	9.88	10.27	10.62	9.78	11.16	9.06	9.31	11.78	17.49	12.31	10.79	19.39	11.06	11.04

Table 33 - (Continued).

Station		27	30	31	19	20	21	22	23	24	25	1	4	14	16
Parameter															
Chloride	Mean	4.15	3.94	4.50	4.84	3.84	4.99	4.16	5.67	8.72	4.48	4.34	5.20	4.12	4.13
(Cl)	Minimum	2.52	2.80	2.30	3.12	3.30	2.45	2.02	2.87	2.94	2.02	2.02	2.69	2.98	3.12
	Maximum	5.32	4.96	7.80	7.98	4.25	8.15	5.50	8.15	21.27	6.56	6.20	7.27	5.32	5.32
Nitrate	Mean	1.74	2.20	1.74	1.65	1.91	1.40	1.52	1.42	2.96	1.22	1.59	1.49	1.97	1.53
(NO_3)	Minimum	0.95	2.09	1.11	0.87	1.94	0.52	0.87	0.75	1.71	0.52	0.83	0.44	0.82	0.86
	Maximum	2.40	2.44	2.24	2.20	2.03	2.35	2.13	2.98	3.38	2.39	1.89	2.46	4.56	2.06
Nitrite	Mean	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
(NO_2)	Minimum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
	Maximum	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.01	0.01	0.01	0.02
Silica, Reactive	Mean	0.74	1.21	1.04	1.06	1.09	1.09	0.82	1.06	1.15	1.46	0.77	1.16	0.77	0.76
(SiO_3-Si)	Minimum	0.26	1.10	0.73	0.82	0.80	0.99	0.53	0.51	0.68	1.22	0.44	0.94	0.02	0.01
	Maximum	1.22	1.32	1.25	1.25	1.24	1.22	1.20	1.54	1.50	1.69	1.25	1.40	1.36	1.37
Phosphate, Total	Mean	0.14	0.11	0.09	0.08	0.09	0.05	0.06	0.23	0.39	0.22	0.10	0.12	0.11	0.12
(PO_4)	Minimum	0.05	0.05	0.04	0.04	0.05	0.03	0.03	0.04	0.09	0.05	0.03	0.04	0.06	0.06
	Maximum	0.50	0.25	0.12	0.12	0.15	0.12	0.13	0.82	1.10	0.67	0.20	0.26	0.23	0.26
Iron	Mean	0.21	0.16	0.27	0.25	0.29	0.16	0.11	1.09	0.75	0.96	0.21	0.62	0.28	0.29
(Fe)	Minimum	0.02	0.02	0.10	0.04	0.12	0.06	0.02	0.09	0.10	0.09	0.06	0.09	0.03	0.09
	Maximum	0.37	0.33	0.54	0.44	0.54	0.26	0.20	5.70	3.13	3.53	0.56	2.03	0.62	0.65
Manganese	Mean	0.041	0.059	0.031	0.037	0.091	0.013	0.024	0.060	0.079	0.071	0.024	0.066	0.025	0.023
(Mn)	Minimum	0.001	0.000	0.016	0.008	0.042	0.002	0.013	0.006	0.005	0.007	0.006	0.032	0.002	0.002
	Maximum	0.143	0.127	0.058	0.097	0.186	0.040	0.044	0.262	0.192	0.230	0.054	0.091	0.045	0.038
Carbon Dioxide	Mean	2	2	2	2	2	2	2	2	2	2	2	2	2	2
(CO_2)	Minimum	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	Maximum	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Magnesium Hardness	Mean	3.8	3.7	3.3	3.7	2.8	3.6	3.4	4.0	7.9	4.2	4.8	7.9	3.9	3.7
($CaCO_3$)	Minimum	1.6	3.0	1.6	1.6	2.0	2.4	1.0	1.6	3.5	1.6	2.6	2.4	2.0	1.2
	Maximum	5.6	5.8	5.6	6.0	3.8	6.6	5.2	5.5	12.9	7.9	6.3	19.8	7.2	7.4
5-Day BOD	Mean	0.7	0.8	0.9	0.5	0.6	0.6	1.4	0.9	1.3	1.2	0.9	1.0	0.6	0.6
@ 20 C	Minimum	0.0	0.6	0.2	0.1	0.3	0.4	0.5	0.3	0.2	0.4	0.6	0.6	0.2	0.0
	Maximum	2.0	1.7	1.8	1.0	0.8	0.9	1.6	2.0	4.1	2.3	1.4	1.4	0.9	1.2

Table 34. Concentrations of water quality parameters measured by IA that fall within "permissible criteria" for public water supply and "limits that support a good fish fauna" (FWPCA 1972 and McKee and Wolf 1971).

Parameter	"Permissible Criteria" for Public Water Supply	"Limits That Support a Good Fish Fauna"
Water Temperature	<15 C[2]	Stream: no increase above ambient >5 F[1] Lake: no increase above ambient >3 F[1]
pH	6.8-8.5[1]	6.0-9.0[1]
Specific Conductance	No set limits	<1100 umhos[2]
Carbonate (CO_3)	<20 mg/l[2]	No set limits
Bicarbonate (HCO_3)	<150 mg/l[2]	<180 mg/l[2]
Sodium (Na)	≤10 mg/l[2]	<85 mg/l[2]
Potassium (K)	<1000 mg/l[2]	<50 mg/l[2]
Total Hardness ($CaCO_3$)	<300 mg/l[1]	No set limits
Calcium Hardness ($CaCO_3$)	<300 mg/l[1]	No set limits
Sulfate (SO_4)	<250 mg/l[1]	<90 mg/l[2]
Chloride (Cl)	<250 mg/l[1]	<170 mg/l[2]

[1]FWPCA 1972
[2]McKee and Wolf 1971

Table 34 - (Continued).

Parameter	"Permissible Criteria" for Public Water Supply	"Limits That Support a Good Fish Fauna"
Nitrate (NO_3)	<45 mg/l[2]	<4.2 mg/l[2]
Nitrite (NO_2)	<2 mg/l[2]	No set limits
Silica, Reactive (SiO_3-Si)	Any naturally occurring value[2]	No set limits
Phosphate, Total (PO_4)	No set limits	No set limits
Iron (Fe)	<0.3 mg/l[1]	<0.7 mg/l[2]
Manganese (Mn)	<0.05 mg/l[1]	<1.0 mg/l[2]
Carbon Dioxide (CO_2)	Any naturally occurring value[2]	<5.0 mg/l[2]
Magnesium Hardness ($CaCO_3$)	<300 mg/l[1]	No set limits
Dissolved Oxygen	≥4 mg/l (monthly mean)[1] ≥3 mg/l (individual sample)[1]	Warm water biota: >5 mg/l[1] Cold water biota: >6 mg/l[1]
5-day B.O.D. @ 20 C	≤4 mg/l (monthly mean)[1] ≤3 mg/l (individual sample)[1]	Warm water biota: <5 mg/l[1] Cold water biota: <6 mg/l[1]
Turbidity	Any increase over ambient[1] <5 JTU (recommended by USPHS)[2]	Streams: Warm water biota: <50 JTU[1] Cold water biota: <10 JTU[1] Lakes: Warm water biota: <25 JTU[1] Cold water biota: <10 JTU[1]
Secchi Reading (inches)	No set limits	No set limits

Table 35. Dates when the Shandaken Tunnel was open from January 1965 through September 1976.

Year	Month												# Days/ Year
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1965	6-31	1-4 15-28	1-5 8-12 16-18 29-31	1 5-8 12-22 26-30	3-31	1-30	1-31	1-31	1-30	1-31	1-30	1-31	324
1966	1-31	1-28	1-31	1-30	1-2 17-31	1-30	1-31	1-31	1-30	1-3 7-31	1-3 8-30	1-31	344
1967	1-31	1-28	1-31	1-14 26-30	1-5 27-31	1-20 27-30	1-31	1-31	1-30	1-31	1-30	1-4	310
1968	10-12	-	6-21	10-24	-	19-26	8-31	1-31	1-30	17-31	1-30	1-31	213
1969	1-24	5-28	1-31	1-3	-	3-19 24-30	1-28	11-31	1-30	6-31	1-30	1-10 30-31	253
1970	1-31	1-3 24-28	1-31	1-2	14-31	1-30	1-31	1-20	1-2 30	20-23 30-31	1-30	1-31	241
1971	1-13 15-18 21-25 29-31	1-28	1-31	1-15	-	2-30	1-31	1-31	1-29	14-31	1-7 12-14 17-30	1-15	274
1972	7-11 28-31	1-4 7-29	1-3	11-17	30-31	15-21	14-31	1-31	1-30	1-31	1-30	1-15	211
1973	23-29	-	-	-	-	20-29	16-31	1-31	1-30	1-28	2	4-9 18-31	143
1974	1-2	-	-	30	1-7 28-31	1-17 19-30	1-31	1-31	1-30	1-29	1-6 8-15	6-8	181
1975	-	-	-	28-30	1-5 27-31	1-10 23-30	1-31	1-31	1-30	1-31	1-30	1-31	215
1976	-	-	20-30	16-27	-	3-8 11-30	1-4 14-31	1-31	1-21 24-30	-	-	-	130

Table 36. Dates when Schoharie Reservoir elevation exceeded 1130 feet and flow occurred over Gilboa Dam from January 1973 through September 1976.

Year	Dates
1973	1 Jan-21 Jun, 30 Jun-16 Jul, 22 Dec-31 Dec
1974	1 Jan-30 May, 9 Dec-31 Dec
1975	1 Jan-28 May, 7 Jun-23 Jun
1976	1 Feb-4 Jun, 10 Jun-12 Jun, 1 Jul-15 Jul

Table 37. Minimum elevation each year from 1953 through 1976 in Schoharie Reservoir.

Year	Elevation	Date
1976	1072.85	26 Jan
1975	1086.85	25 Sep
1974	1075.38	29 Oct
1973	1062.88	29 Oct
1972	1101.40	7 Oct
1971	1063.00	20-27 Aug
1970	1062.00	20 Aug
1969	1075.21	3 Nov
1968	1068.74	30 Sep
1967	1071.84	6 Mar
1966*	1059.75	21 Sep
1965**	1060.32	30 Jun
1964	1003.00	27-30 Nov, 1 Dec
1963	1064.07	31 Oct
1962	1070.67	25 Sep
1961	1072.91	26 Nov
1960	1097.26	11 Sep
1959	1065.37	30 Sep
1958	1062.71	17 Sep
1957	1062.98	1 Oct
1956	1062.60	7 Oct
1955	1072.45	6 Feb
1954	1060.69	30 Aug
1953	1060.08	5 Sep

* Data missing for October through December
** Data missing for April, May, July through December

Table 38. Summary of water temperature data (C) and turbidity data (nephelometer turbidity units) taken by depth on 21 August 1976 from Schoharie Reservoir (elevation 1122 feet) after 5.69 inches of rainfall on 9 and 10 August 1976 on the upper watershed of Schoharie Reservoir at Windham, New York.

Depth (m)	Stations 27		30		33		Shandaken Tunnel Intake 32	
	Water Temperature	Turbidity	Water Temperature	Turbidity	Water Temperature	Turbidity	Water Temperature	Turbidity
0	24.0	3.7	24.0	3.6	24.0	4.6	17.0	32
2	22.1	4.3	22.1	3.9	-	-		
4	21.5	4.3	21.8	4.0	-	-		
6	21.0	4.6	21.0	4.1	-	-		
8	20.2	8.1	19.6	10	-	-		
10	19.0	11	12.5	16	-	-		
12	18.0	22	12.5	24	-	-		
14	16.2	36	11.8	32	-	-		
16	16.3(15)*	42	8.6	36	-	-		
18	-	-	6.2	13	17.0(17)	30		
20	-	-	5.9	6.4	-	-		
22	-	-	5.2	5.2	-	-		
24	-	-	5.0	4.3	-	-		
26	-	-	4.9	4.9	-	-		
28	-	-	4.9	6.4	-	-		
30	-	-	4.9	6.2	-	-		
32	-	-	4.2	5.0	-	-		

* Depth in parentheses

Table 39. Summary of mean monthly flow data (cfs) taken from February 1965 through December 1976 from the Shandaken Tunnel at Allaben, New York.

Year		Month												Yearly Mean and Range
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1965	Mean	-*	634	438	683	651	176	21	134	298	439	197	307	384
	Minimum	-	139	217	255	364	46	8	8	85	162	116	209	8
	Maximum	-	797	750	843	820	348	48	549	735	735	433	402	843
1966	Mean	244	482	816	821	141	189	437	304	88	99	331	291	352
	Minimum	124	101	340	526	0	80	175	127	31	0	0	70	0
	Maximum	487	774	908	904	551	376	608	450	183	341	535	452	908
1967	Mean	393	546	490	235	91	324	178	230	300	377	370	20	294
	Minimum	246	391	67	0	0	0	122	119	241	273	195	0	0
	Maximum	789	786	704	815	504	619	456	305	458	450	446	201	815
1968	Mean	15	0	288	115	0	87	311	434	339	8	293	803	226
	Minimum	0	0	0	0	0	0	0	339	20	0	37	682	0
	Maximum	160	0	628	317	0	387	424	537	605	37	673	843	843
1969	Mean	312	236	372	48	0	305	254	296	466	238	706	255	290
	Minimum	0	0	265	0	0	0	0	0	14	0	158	0	0
	Maximum	791	322	698	699	0	467	309	622	607	379	950	939	950
1970	Mean	412	110	446	17	217	444	440	300	15	64	541	390	285
	Minimum	158	0	429	0	0	421	374	0	30	0	309	138	0
	Maximum	464	467	463	463	702	466	684	661	378	486	613	535	702
1971	Mean	307	453	898	345	0	577	407	276	435	171	272	295	369
	Minimum	0	0	860	0	0	0	308	37	0	0	0	0	0
	Maximum	650	852	934	948	0	874	464	784	772	339	608	870	948

* data not available

Table 39 - (Continued).

Year		Month												Yearly Mean and Range
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1972	Mean	49	212	21	32	6	61	272	195	126	117	149	76	109
	Minimum	0	0	0	0	0	0	0	139	114	110	42	0	0
	Maximum	227	309	328	161	159	309	617	463	136	122	167	169	617
1973	Mean	173	0	0	0	0	147	230	426	439	64	0	452	162
	Minimum	0	0	0	0	0	0	0	227	214	0	0	0	0
	Maximum	167	0	0	0	0	467	467	692	651	209	2	942	692
1974	Mean	34	0	0	1	100	376	592	326	519	413	62	11	204
	Minimum	0	0	0	0	0	0	376	156	186	0	0	0	0
	Maximum	928	0	0	34	704	805	808	455	772	668	190	155	928
1975	Mean	0	0	0	12	67	265	526	426	292	495	893	851	321
	Minimum	0	0	0	0	0	0	0	190	153	170	880	817	0
	Maximum	0	0	0	158	387	622	622	622	427	942	930	880	942
1976	Mean	434	0	39	123	0	192	210	657	413	311	202	204	233
	Minimum	0	0	0	0	0	0	0	518	0	0	156	201	0
	Maximum	814	0	309	562	0	501	537	928	562	421	204	207	928
1965-1976	Mean	216	223	317	203	106	262	323	334	311	233	335	330	269
	Minimum	0	0	0	0	0	0	0	0	0	0	0	0	0
	Maximum	928	852	934	948	820	874	808	928	772	942	950	942	950

Table 40. Summary of mean monthly flow data (cfs) taken from January 1965 through September 1976 from the USGS gauging station at Coldbrook near Boiceville, New York.

Year		Month												Yearly Mean and Range
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1965	Mean	393	1146	707	1380	947	276	52	197	382	780	381	646	603
	Minimum	210	180	370	430	473	106	28	27	129	326	247	440	27
	Maximum	800	2780	1160	2130	1510	503	90	545	1030	1730	849	809	2780
1966	Mean	461	809	1953	1349	528	396	487	320	157	217	988	610	688
	Minimum	220	170	1400	1170	340	247	390	151	63	129	154	430	63
	Maximum	833	1890	3640	1730	1260	789	654	490	370	497	3720	889	3720
1967	Mean	833	933	988	1251	574	495	326	315	358	570	850	675	678
	Minimum	390	637	250	551	331	224	239	253	285	430	497	299	224
	Maximum	2260	1540	2150	3560	962	901	565	374	827	1260	1880	1810	3560
1968	Mean	189	305	1166	786	810	625	494	487	367	52	645	1309	605
	Minimum	110	96	78	391	342	295	267	381	229	23	93	920	23
	Maximum	340	1200	3080	4000	4850	1510	687	594	642	106	2120	2190	4850
1969	Mean	655	454	768	1327	446	553	768	574	549	241	1492	864	724
	Minimum	390	360	310	550	252	206	315	332	309	47	180	150	47
	Maximum	1350	574	2870	4120	1320	1120	5480	960	707	395	3250	4130	5480
1970	Mean	541	814	743	1660	623	522	450	348	67	461	995	579	647
	Minimum	220	200	591	924	326	420	353	41	40	52	436	340	40
	Maximum	700	3700	1410	3290	1050	645	813	792	286	5290	1640	884	5290
1971	Mean	489	1010	1704	1684	764	660	439	437	1000	400	537	1065	846
	Minimum	130	290	1320	721	273	257	370	69	181	103	235	380	69
	Maximum	988	2160	3100	3290	1840	964	542	2010	5420	767	980	2980	5420

* data not available from USGS

Table 40 - (Continued).

Year		Month												Yearly Mean and Range
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1972	Mean	415	431	961	1142	738	1216	704	320	196	239	1490	1188	752
	Minimum	230	220	361	361	305	257	357	217	184	172	263	390	172
	Maximum	734	972	3200	3950	1340	6420	2450	940	214	432	5870	3640	6420
1973	Mean	834	694	840	1082	1023	1068	681	516	506	173	162	2083	807
	Minimum	260	120	130	385	315	232	216	296	282	105	107	241	105
	Maximum	5270	5240	3580	3110	2750	7700	3530	834	691	378	335	14100	14100
1974	Mean	659	589	657	1121	701	607	736	406	711	606	571	1090	705
	Minimum	225	200	347	342	253	264	495	214	315	135	129	268	129
	Maximum	1830	2560	1030	3530	2920	1140	966	525	1390	850	2380	8490	8490
1975	Mean	544	638	848	743	758	701	700	512	516	1001	1369	1262	800
	Minimum	203	155	236	375	366	278	352	338	266	338	1080	950	155
	Maximum	1960	3480	6240	2350	1460	1380	1090	704	1500	2680	2040	2020	6240
1976	Mean	1406	997	763	773	768	394	365	635	440	-*	-	-	729
	Minimum	410	368	356	326	331	210	156	512	93	-	-	-	93
	Maximum	11920	2503	1228	3882	3897	2892	2023	3375	643	-	-	-	11920
1965 - 1976	Mean	618	735	1008	1192	723	626	517	472	437	431	862	1034	716
	Minimum	110	96	78	326	252	106	28	27	40	23	93	241	23
	Maximum	11920	5240	6240	4120	4850	7700	5480	3375	5420	5290	5870	14100	14100

Table 41. Summary of mean monthly flow data (cfs) taken from January 1965 through September 1975 from the USGS gauging station at Shandaken, New York.

Year		Month												Yearly Mean and Range
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1965	Mean	58	139	74	230	99	19	9	15	25	74	38	79	72
	Minimum	19	22	45	41	28	10	5	5	9	34	30	46	5
	Maximum	145	500	117	405	239	39	14	120	80	160	81	120	500
1966	Mean	57	78	327	143	117	62	17	8	14	27	126	87	89
	Minimum	27	18	100	78	66	26	9	5	6	15	19	52	5
	Maximum	96	270	792	265	164	141	32	10	50	57	368	122	792
1967	Mean	131	112	119	338	176	52	37	19	11	43	121	196	113
	Minimum	30	54	42	132	92	34	20	7	7	14	70	82	7
	Maximum	548	245	410	1080	302	84	73	33	26	139	316	578	1080
1968	Mean	70	68	369	225	260	172	68	19	12	11	116	140	128
	Minimum	37	35	33	80	130	68	24	10	7	6	16	46	6
	Maximum	110	240	2200	1050	1330	570	210	25	26	26	560	330	2200
1969	Mean	91	73	109	427	167	90	195	86	18	14	189	135	133
	Minimum	46	37	27	172	93	46	36	23	10	11	11	45	10
	Maximum	200	170	462	1230	455	199	1850	335	29	23	470	520	1850
1970	Mean	54	251	70	578	154	40	28	22	23	146	123	81	129
	Minimum	37	50	46	119	74	22	20	11	14	24	56	52	11
	Maximum	80	1060	165	1210	322	70	58	40	38	1390	202	123	1390
1971	Mean	63	134	223	421	254	40	16	43	114	61	81	299	146
	Minimum	37	37	107	111	85	21	10	10	44	38	54	62	10
	Maximum	107	520	682	1110	664	80	29	311	528	93	123	764	1110

* data not available from USGS

Table 41 - (Continued).

Year		Month												Yearly Mean and Range
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1972	Mean	163	79	282	378	215	350	208	34	12	29	346	329	202
	Minimum	72	58	100	111	78	60	60	21	9	9	34	126	9
	Maximum	296	170	858	1330	438	1980	890	130	23	85	1830	1150	1980
1973	Mean	236	217	238	303	323	363	155	35	17	19	57	496	205
	Minimum	82	50	50	135	105	56	27	18	11	9	34	88	9
	Maximum	1650	1240	848	788	916	2430	1050	90	25	166	112	3370	3370
1974	Mean	180	153	193	370	215	88	54	34	93	83	137	297	158
	Minimum	76	64	130	149	94	60	23	13	25	53	51	65	13
	Maximum	442	340	300	1130	568	137	125	210	252	213	256	2080	2080
1975	Mean	179	200	258	266	218	119	82	47	81	-*	-	-	161
	Minimum	62	60	102	130	80	49	38	25	26	-	-	-	25
	Maximum	535	1120	1160	778	419	219	204	80	372	-	-	-	1160
1976	Mean	-	-	-	-	-	-	-	-	-	-	-	-	-
	Minimum	-	-	-	-	-	-	-	-	-	-	-	-	-
	Maximum	-	-	-	-	-	-	-	-	-	-	-	-	-
1965-1975	Mean	117	136	206	334	200	127	79	33	38	51	133	214	139
	Minimum	19	18	27	41	28	10	5	5	6	6	11	45	5
	Maximum	1650	1240	2200	1330	1330	2430	1050	335	1390	1390	1830	3370	3370

* data not available from USGS

Table 42. Percent of mean monthly contribution of the Shandaken Tunnel to flow in Esopus Creek at Allaben, New York, from February 1965 through September 1975.

Year	Month												Yearly Mean
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1965	-*	82.0	85.5	74.8	86.8	90.3	70.0	89.9	92.3	85.6	83.8	79.5	84.2
1966	81.1	86.1	71.4	85.2	54.7	75.3	96.3	97.4	86.3	78.6	72.4	77.0	79.8
1967	75.0	83.0	80.5	41.0	34.1	86.2	82.3	92.4	96.5	89.8	75.4	9.3	72.2
1968	17.6	0.0	43.8	33.8	0.0	33.6	82.1	95.8	96.6	42.1	71.6	85.2	63.8
1969	77.4	76.4	77.3	10.1	0.0	77.2	56.6	77.5	96.3	94.4	78.9	65.4	68.6
1970	88.4	30.5	86.4	2.9	58.5	91.7	94.0	93.2	39.5	30.5	81.5	60.5	68.6
1971	83.0	77.2	80.1	45.0	0.0	93.5	96.2	86.5	79.2	73.7	77.1	49.7	71.6
1972	23.1	72.9	6.9	7.8	2.7	14.8	56.7	85.2	91.3	80.1	30.1	18.8	35.0
1973	42.3	0.0	0.0	0.0	0.0	28.8	59.7	92.4	96.3	77.1	0.0	47.7	44.1
1974	15.9	0.0	0.0	0.3	31.7	81.0	91.6	90.6	84.8	83.3	31.2	3.6	56.4
1975	0.0	0.0	0.0	4.3	23.5	69.0	86.5	90.1	78.3	-*	-	-	52.2
1976	-	-	-	-	-	-	-	-	-	-	-	-	-
1965-1975	62.4	62.0	62.5	38.6	34.0	67.8	80.9	90.2	88.8	79.6	68.7	57.5	64.7

* data not available

Table 43. Summary of mean monthly flow data (cfs) taken from February 1965 through September 1975 from all tributaries of Esopus Creek between the Shandaken Tunnel outlet at Allaben, New York, and the USGS gauging station at Coldbrook, New York.

Year	Month												Yearly Mean
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1965	-*	373	195	467	197	81	22	48	59	267	146	260	190
1966	160	249	810	385	270	145	33	8	55	91	531	232	169
1967	309	275	379	678	307	265	111	66	47	150	359	459	271
1968	104	237	509	446	550	366	115	34	16	33	236	366	251
1969	252	145	287	852	279	158	319	192	65	11	597	474	301
1970	75	453	227	1065	252	38	18	24	29	251	331	108	233
1971	119	423	583	918	510	43	16	118	451	168	184	471	331
1972	203	140	658	732	517	805	224	91	58	93	995	783	441
1973	425	477	602	779	700	558	296	55	50	90	105	1135	440
1974	445	436	464	750	386	372	90	46	99	110	372	782	343
1975	365	438	590	465	473	317	92	39	143	-*	-	-	326
1976	-	-	-	-	-	-	-	-	-	-	-	-	-
1965-1975	236	351	481	686	416	252	118	66	97	125	386	507	309

* data not available

Table 44. Percent of mean monthly contribution to flow in Esopus Creek at Coldbrook of all tributaries between the Shandaken Tunnel outlet at Allaben, New York, and the USGS gauging station at Coldbrook near Boiceville, New York, from February 1965 through September 1975.

Year	Month												Yearly Mean
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1965	-*	32.5	27.6	33.8	20.8	29.3	42.3	24.4	15.4	34.2	38.3	40.2	31.5
1966	34.7	30.8	41.5	28.5	51.1	36.6	6.8	2.5	35.0	41.9	53.7	38.0	24.6
1967	37.1	29.5	38.4	54.2	53.5	53.5	34.0	21.0	13.1	26.3	42.2	68.0	40.0
1968	55.0	77.7	43.7	56.7	67.9	58.6	23.3	7.0	4.4	63.5	36.6	28.0	41.5
1969	38.5	31.9	37.4	64.2	62.6	28.6	41.5	33.4	11.8	4.6	40.0	54.9	41.6
1970	13.9	55.7	30.6	64.2	40.4	7.3	4.0	6.9	43.3	54.4	33.3	18.7	36.0
1971	24.3	41.9	34.2	54.5	66.8	6.5	3.6	27.0	45.1	42.0	34.3	44.2	39.1
1972	48.9	32.5	68.5	64.1	70.1	66.2	31.8	28.4	29.6	38.9	66.8	65.9	58.6
1973	51.0	68.7	71.7	72.0	68.4	52.2	43.5	10.6	9.9	52.0	64.8	54.5	54.5
1974	67.5	74.0	70.6	66.9	55.1	61.3	12.2	11.3	13.9	18.2	65.1	71.7	48.7
1975	67.1	68.7	69.6	62.3	62.4	45.2	13.1	7.6	27.7	-*	-	-	49.2
1976	-	-	-	-	-	-	-	-	-	-	-	-	-
1965-1975	43.1	49.5	46.7	55.8	57.9	38.9	22.2	16.4	22.2	33.3	47.6	50.1	44.0

* data not available

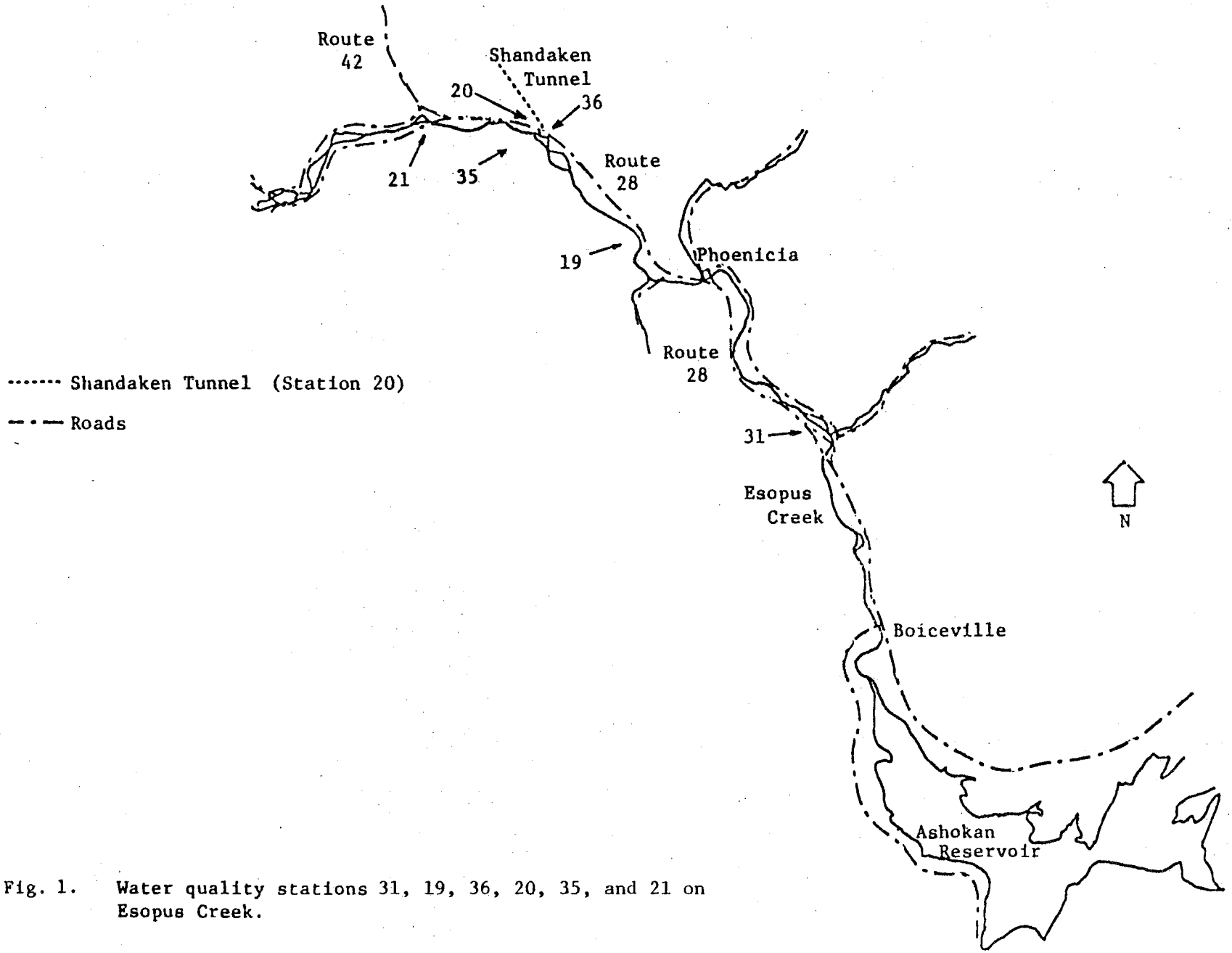

Fig. 1. Water quality stations 31, 19, 36, 20, 35, and 21 on Esopus Creek.

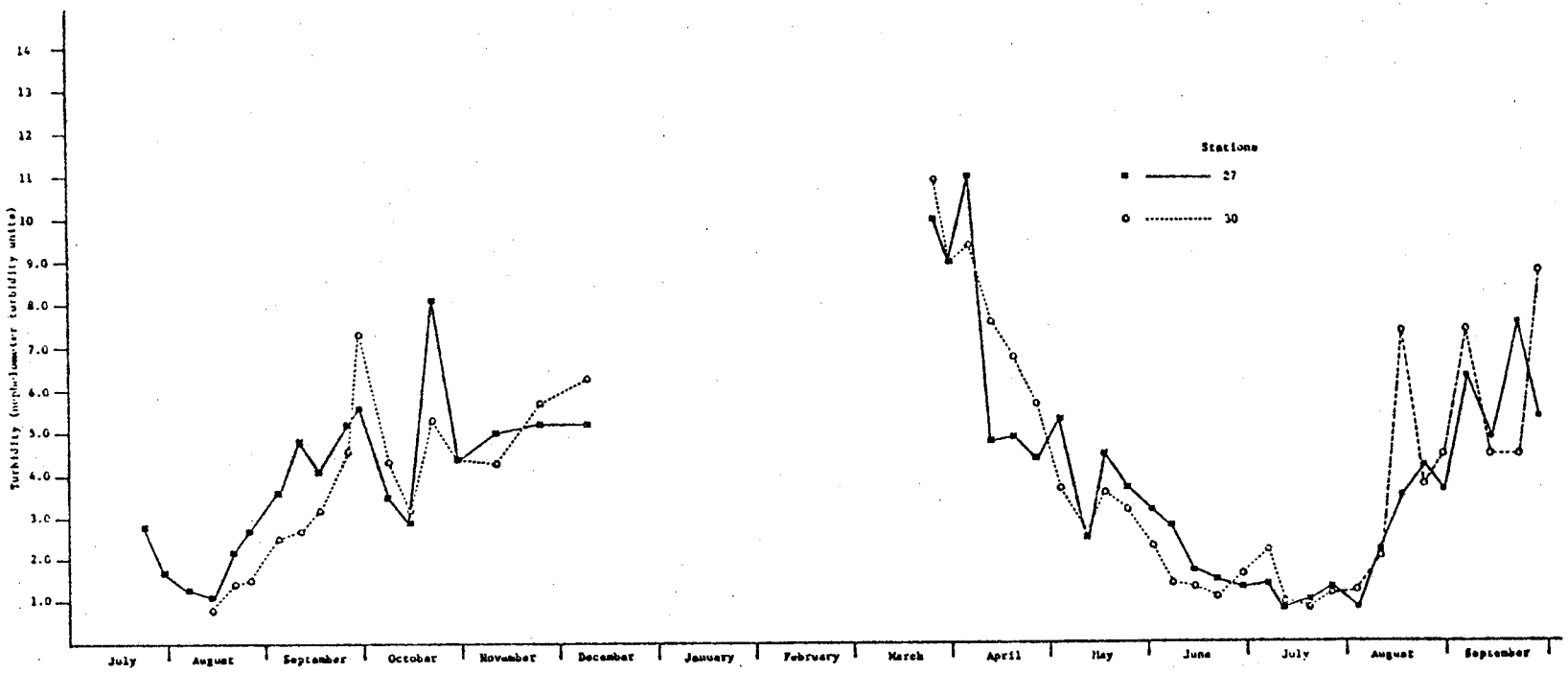

Fig. 2. Summary of turbidity data (nephelometer turbidity units) taken from 24 July 1975 through 28 September 1976 from Schoharie Reservoir.

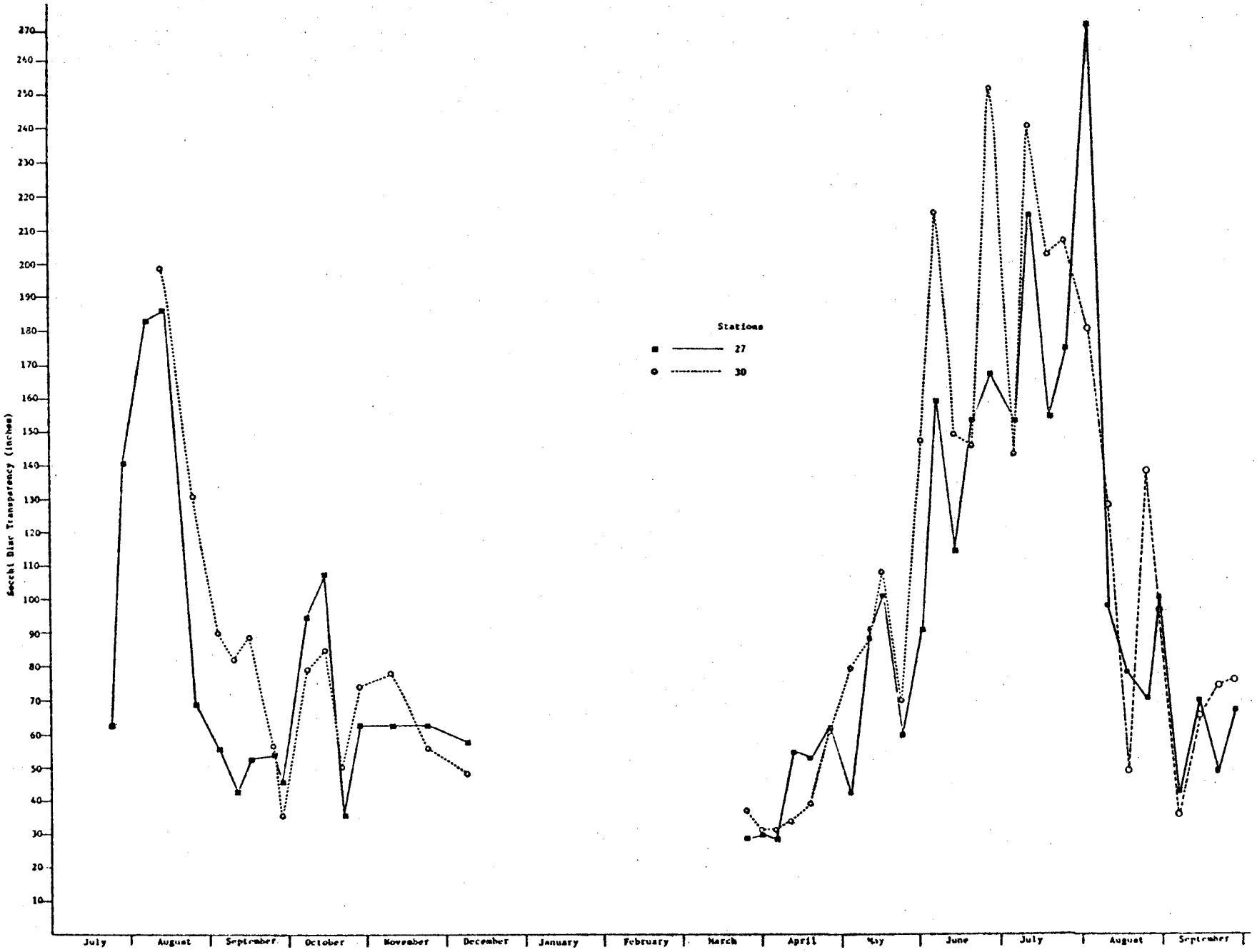

Fig. 3. Summary of Secchi disc transparency data (inches) taken from 24 July 1975 through 28 September 1976 from Schoharie Reservoir.

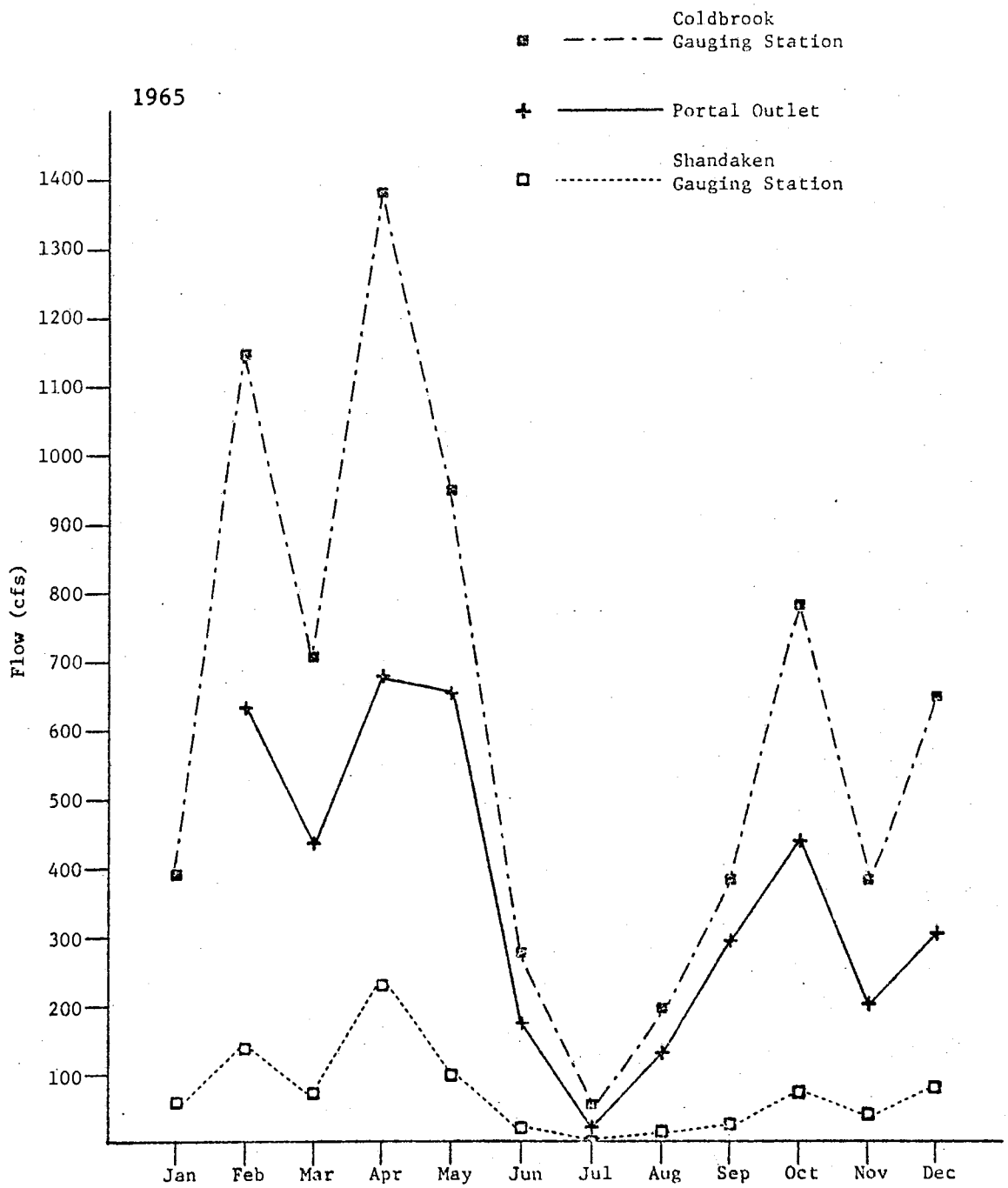

Fig. 4. Summary of yearly flow data (cfs) taken from 1965 through 1976 from the Coldbrook gauging station, the Shandaken Tunnel outlet, and the Shandaken gauging station on Esopus Creek.

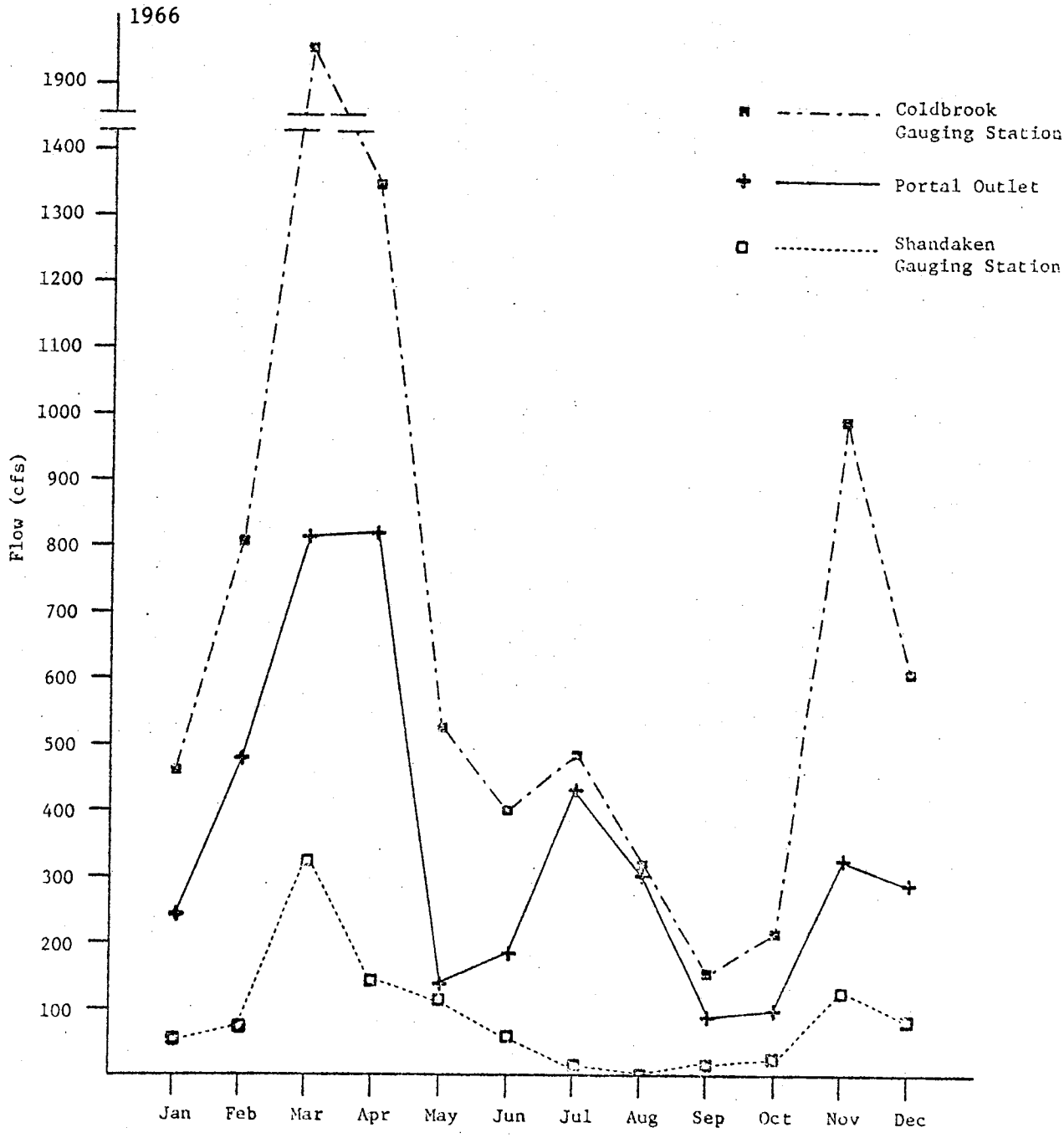

Fig. 4 - (Continued).

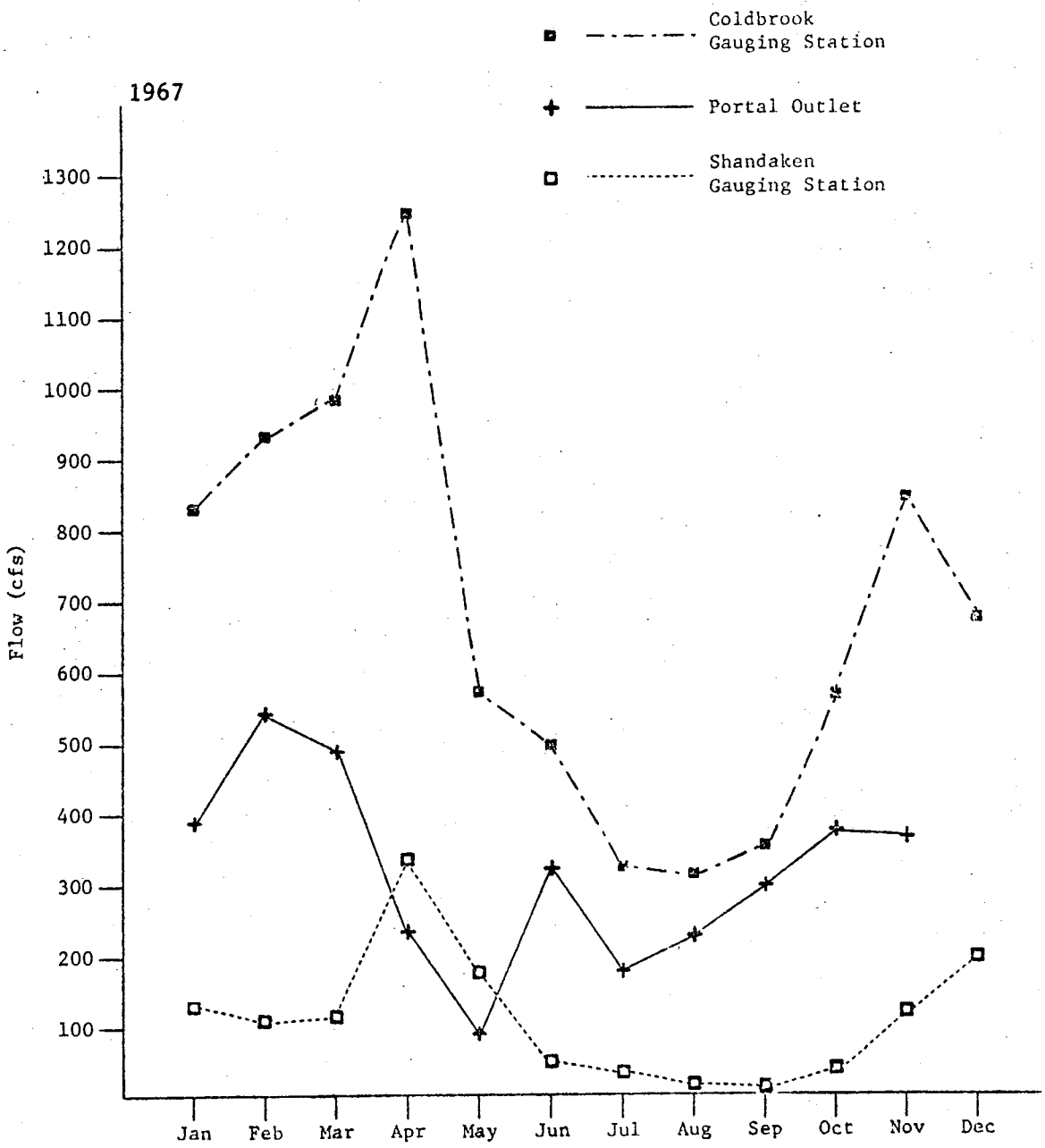

Fig. 4 - (Continued).

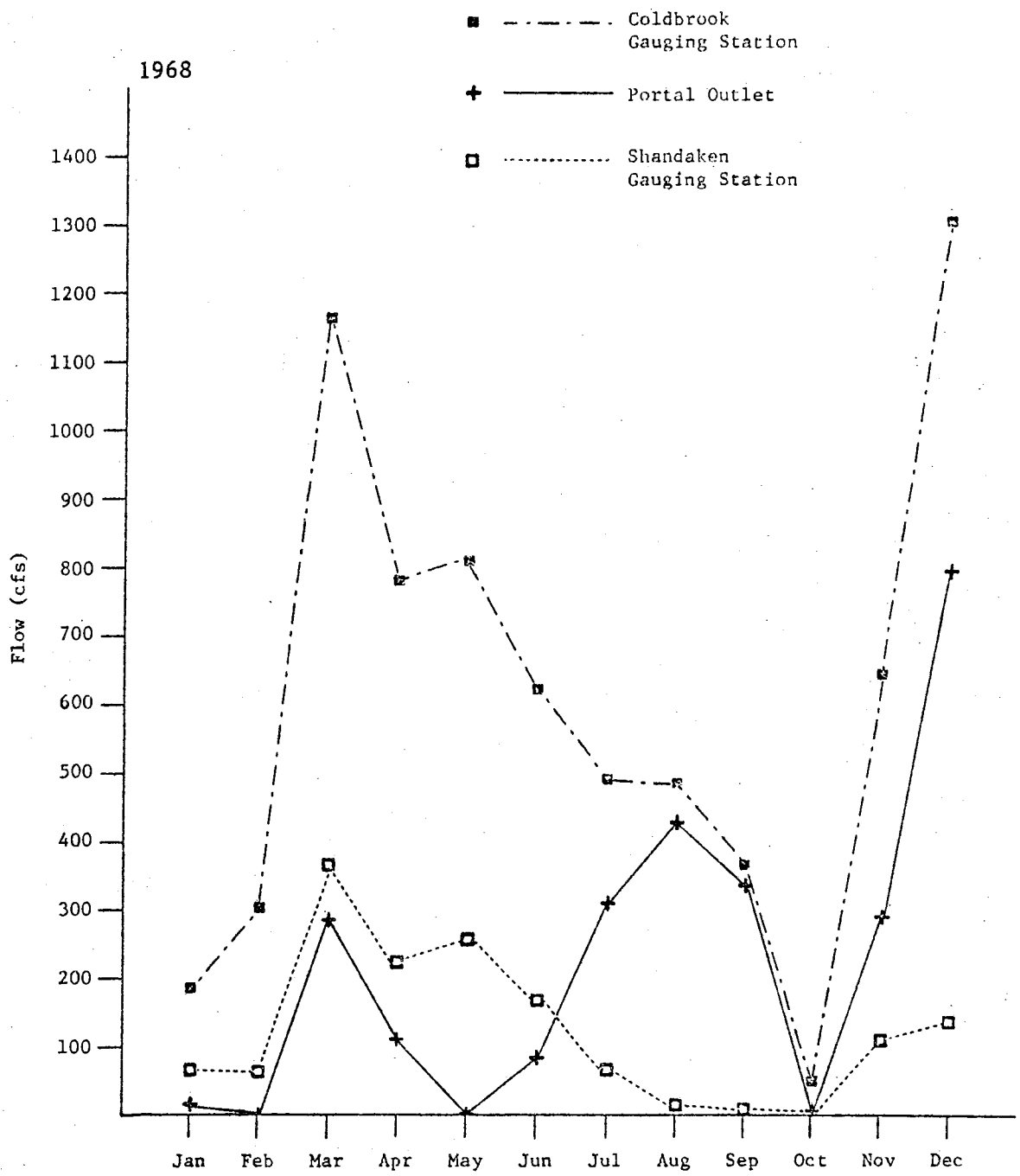

Fig. 4 - (Continued).

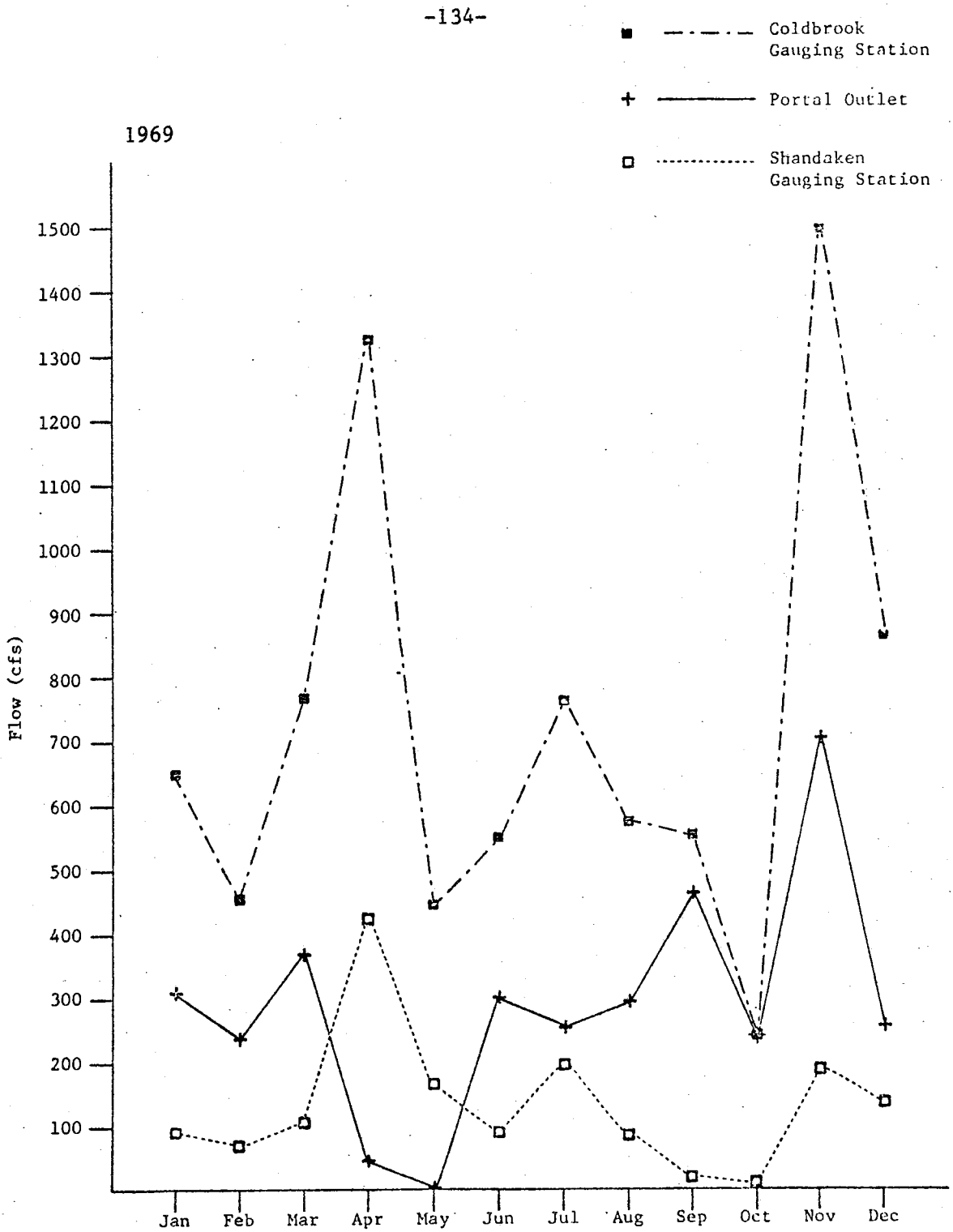

Fig. 4 - (Continued).

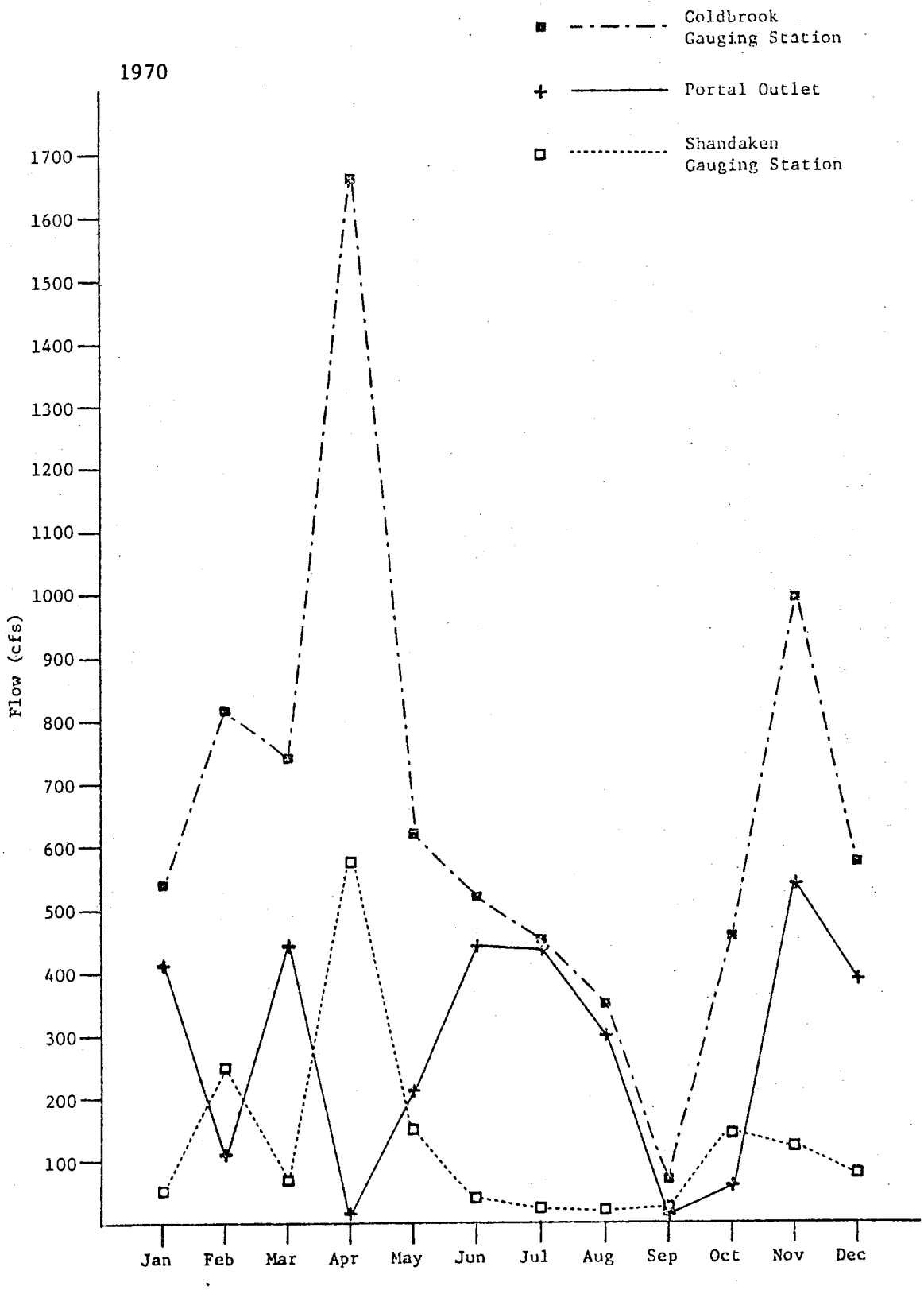

Fig. 4 - (Continued).

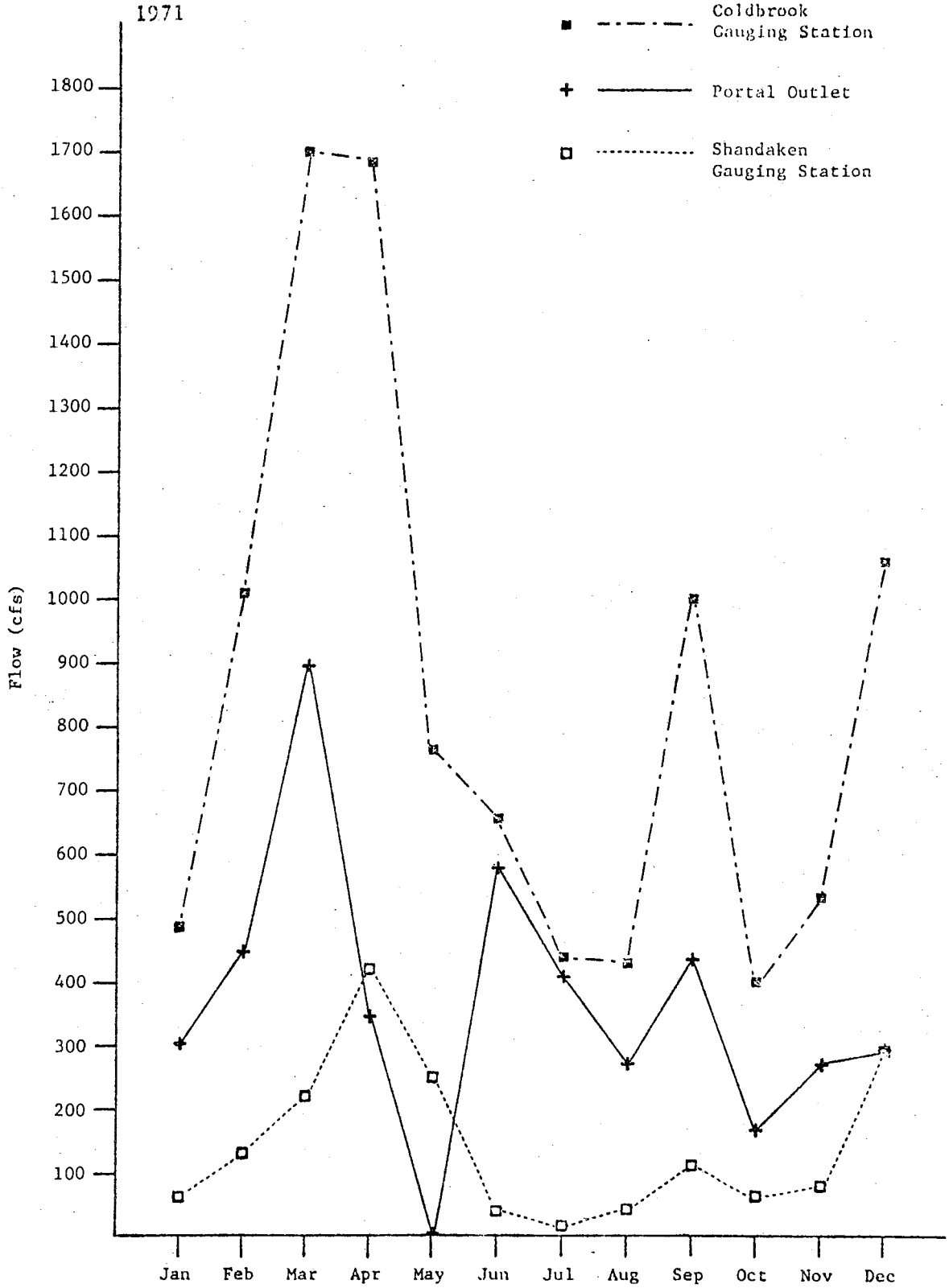

Fig. 4 - (Continued).

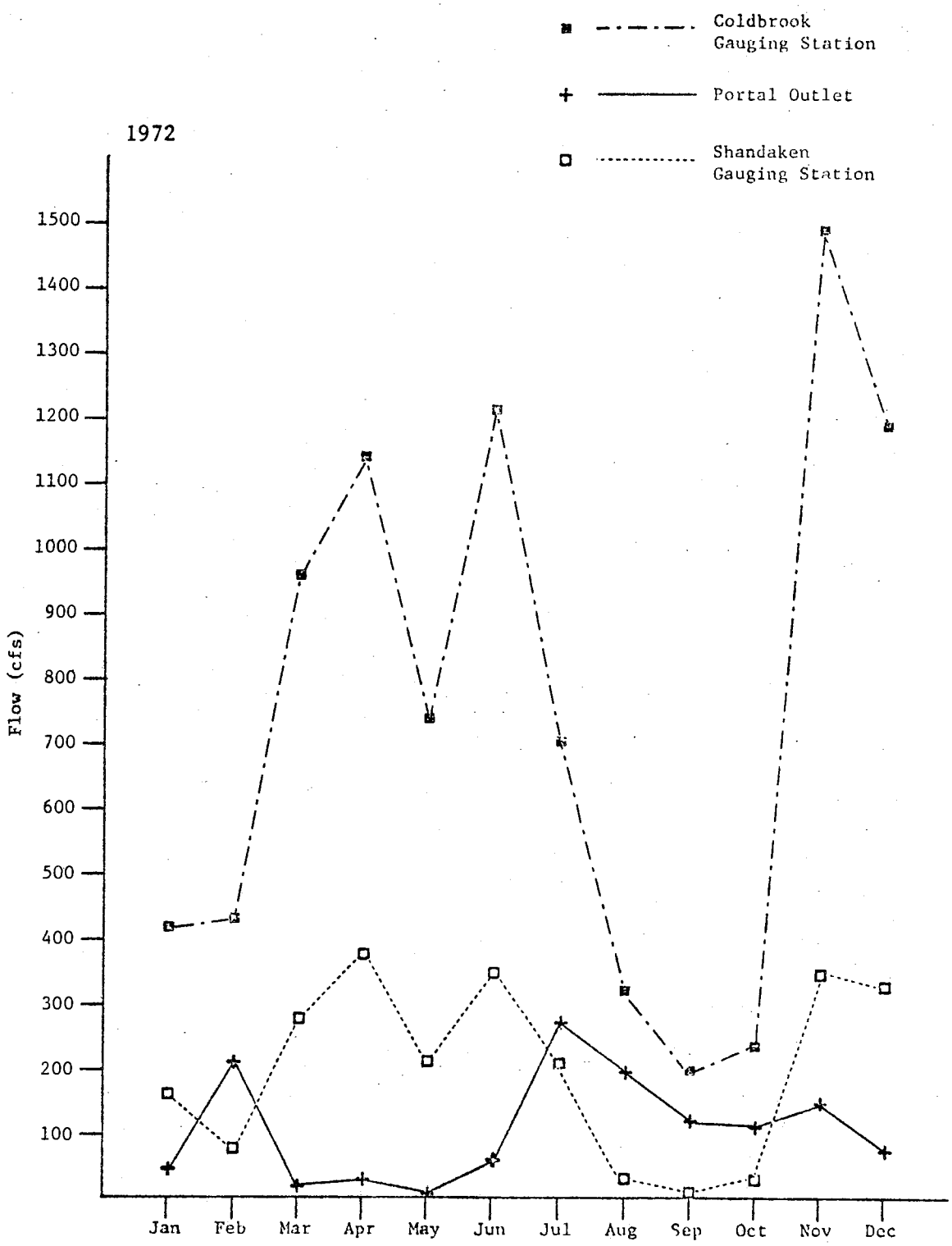

Fig. 4 - (Continued).

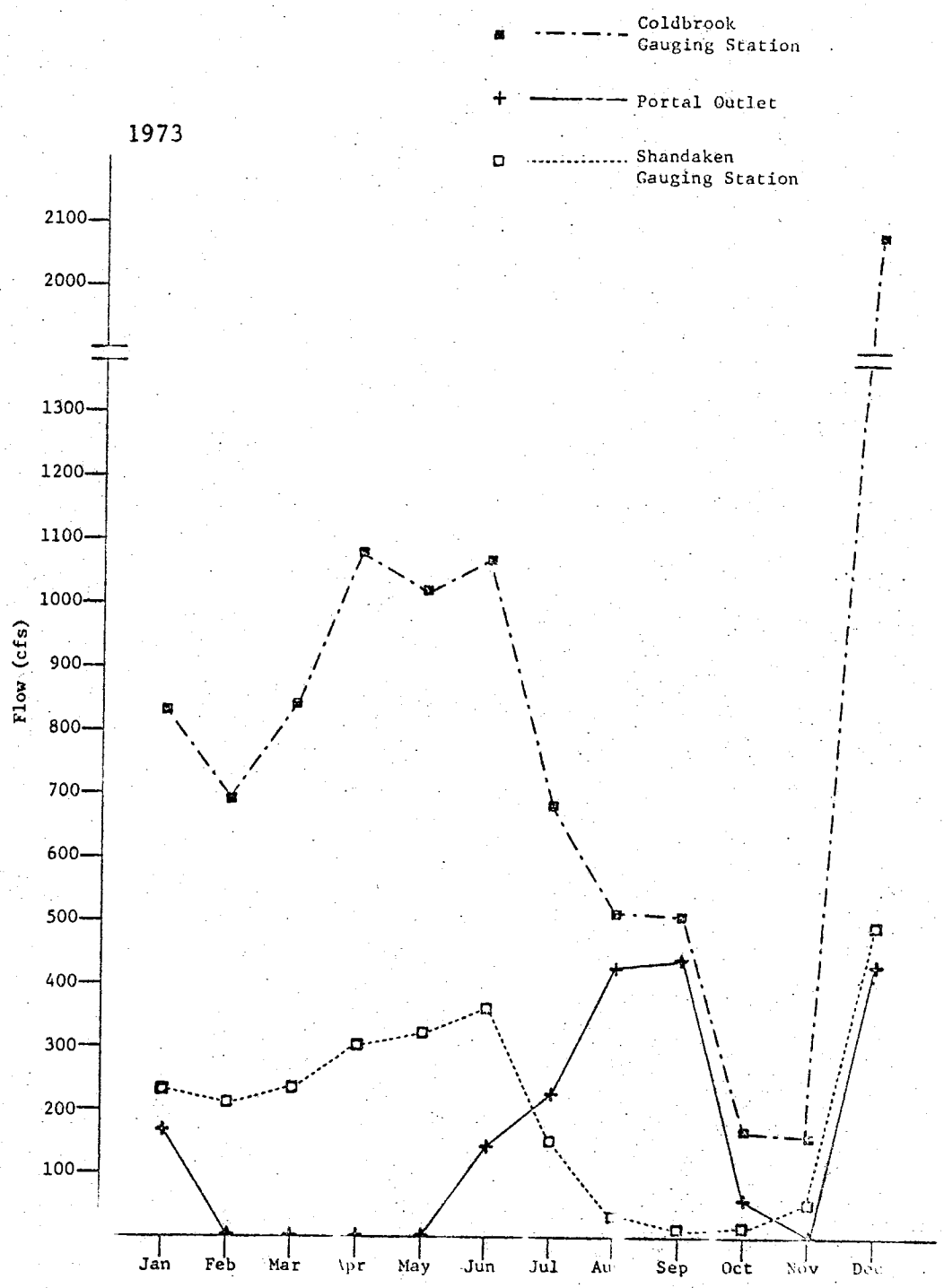

Fig. 4 - (Continued).

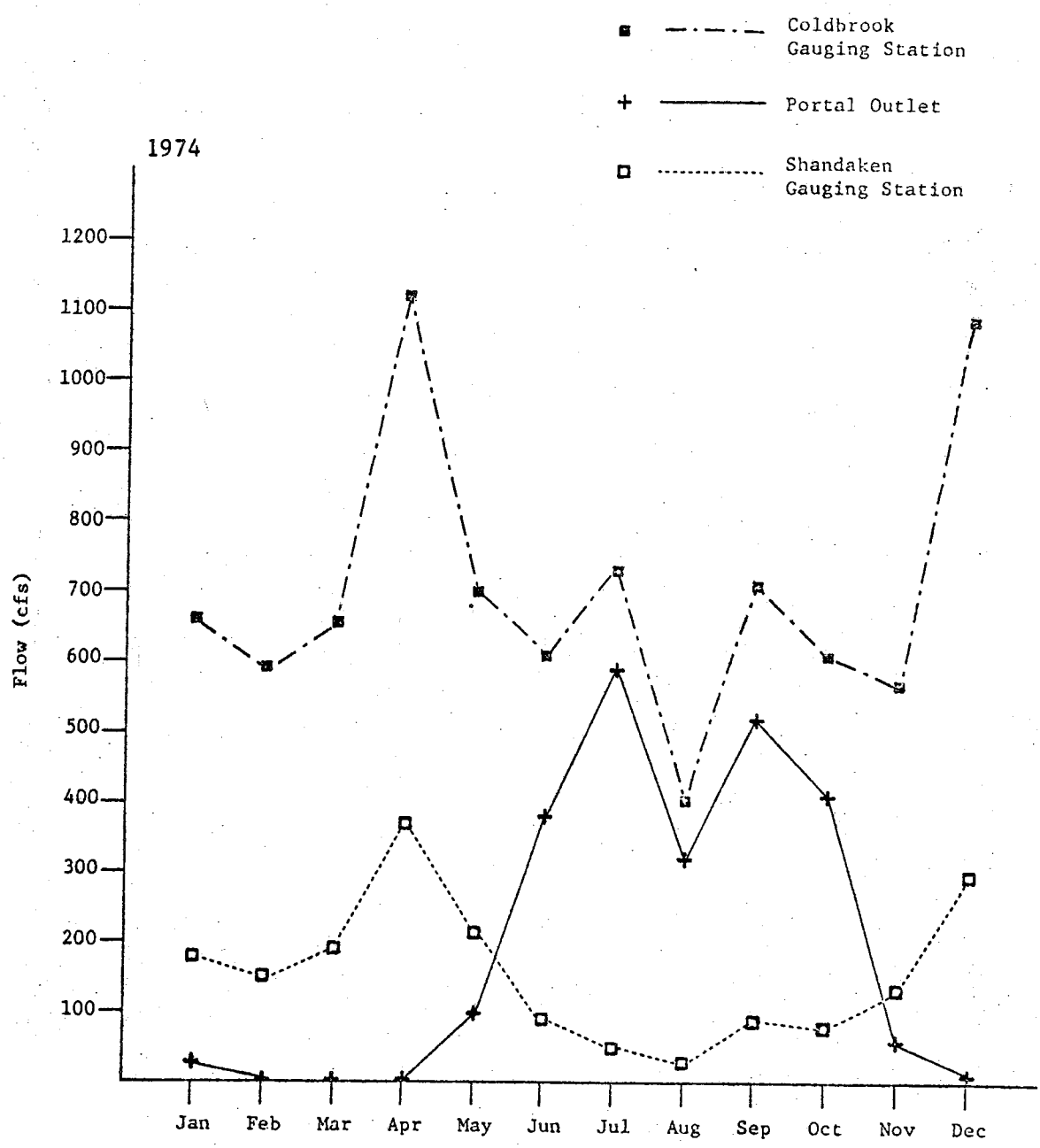

Fig. 4 - (Continued).

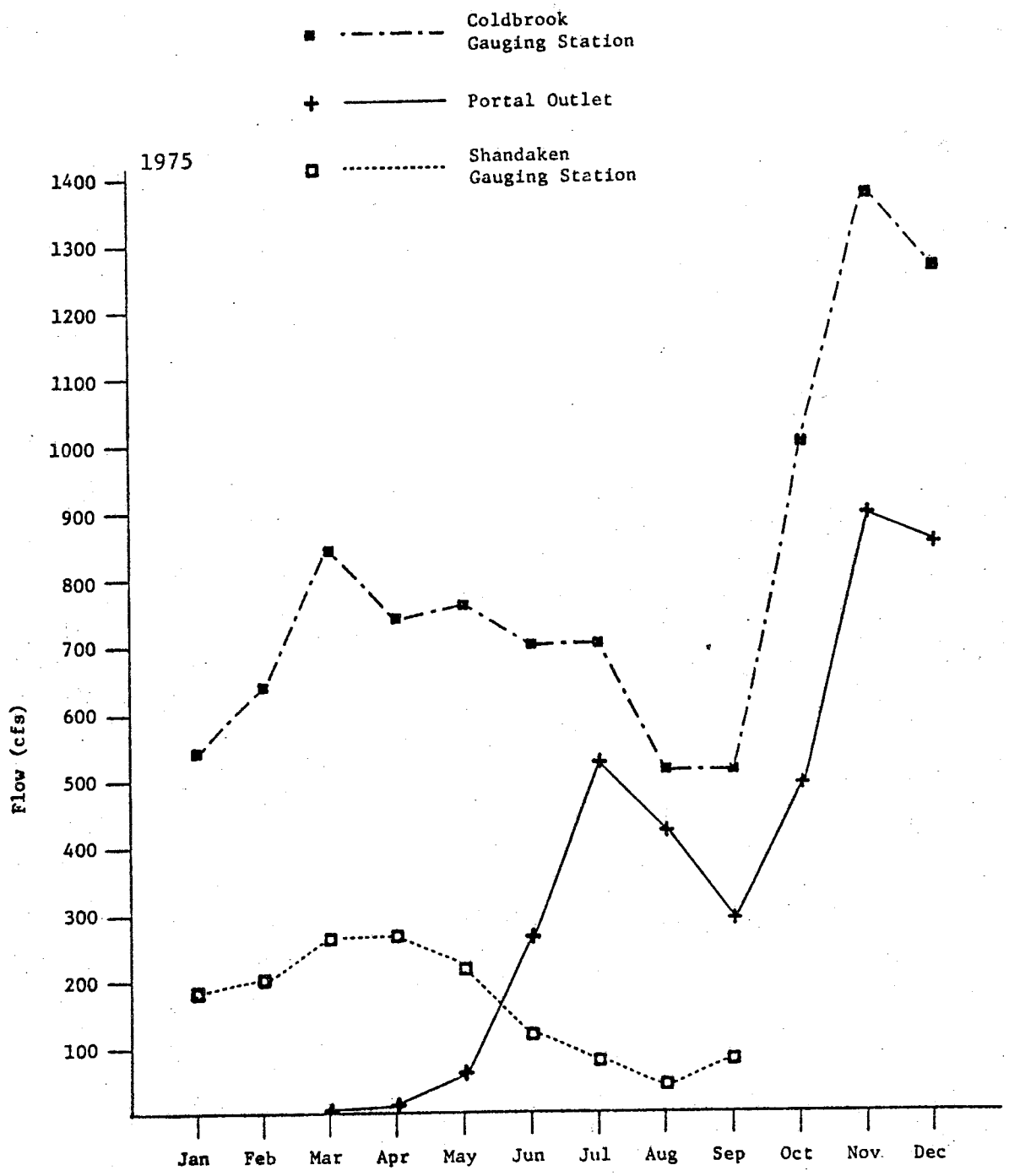

Fig. 4 - (Continued).

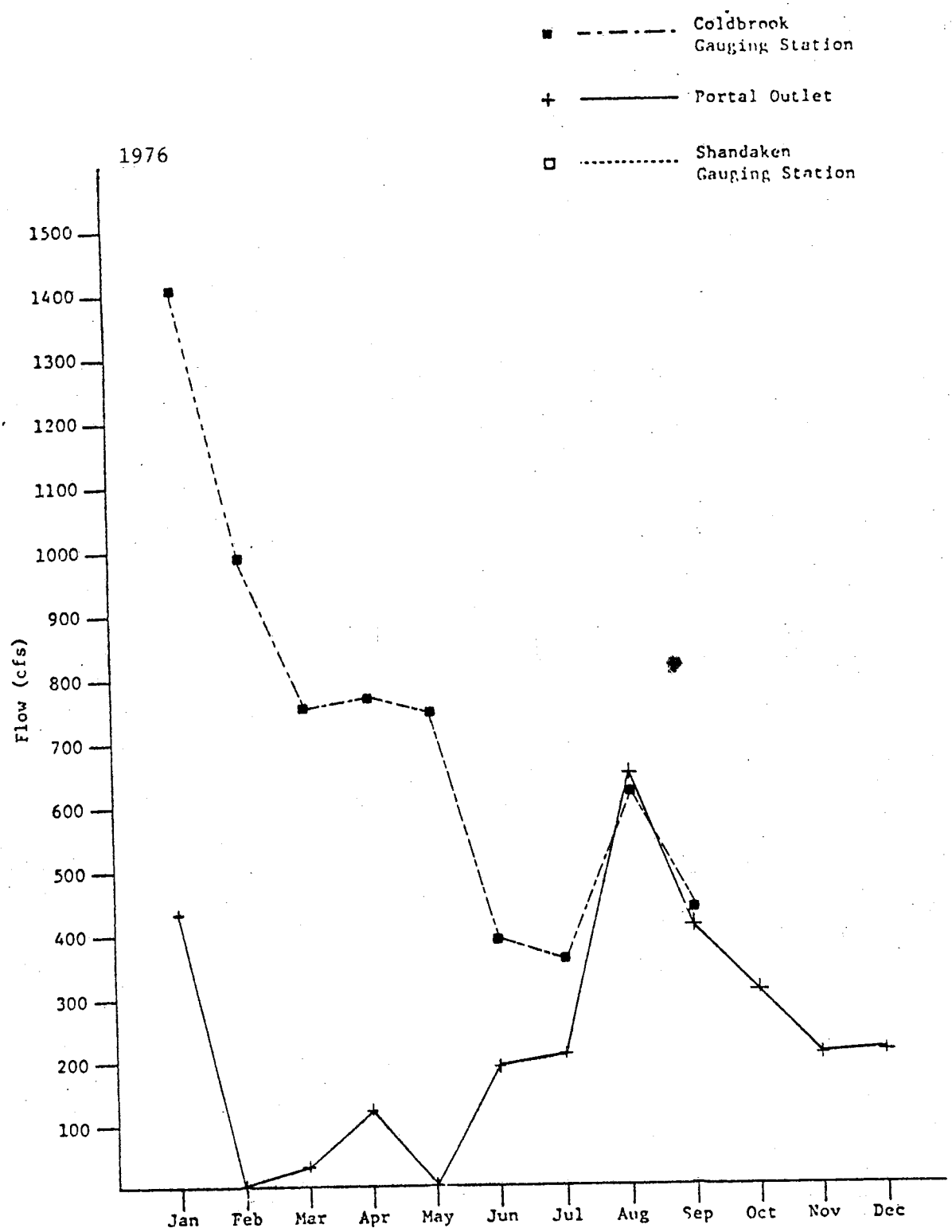

Fig. 4 - (Continued)

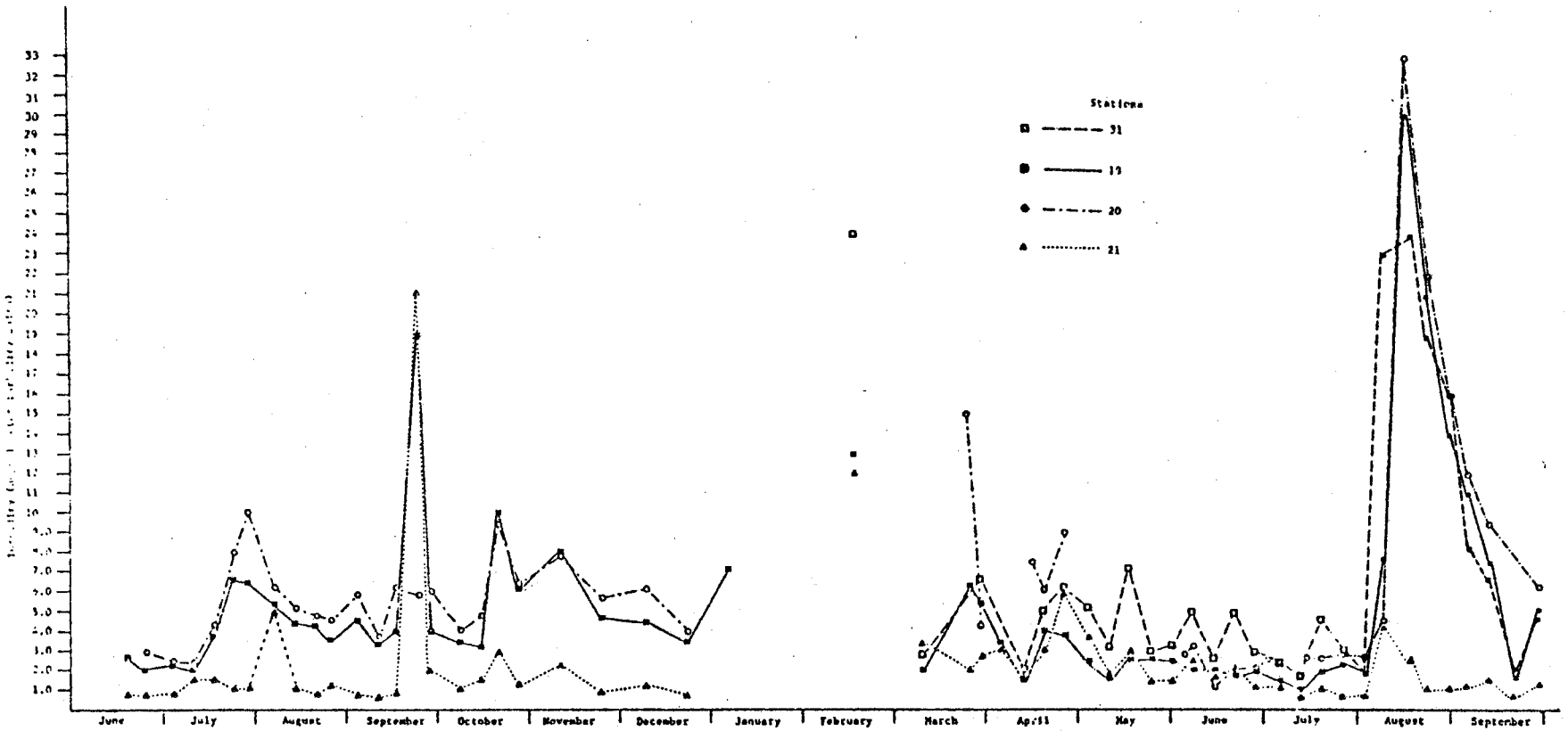

Fig. 5. Summary of turbidity data (nephelometer turbidity units) taken from 19 June 1975 through 28 September 1976 from Esopus Creek.

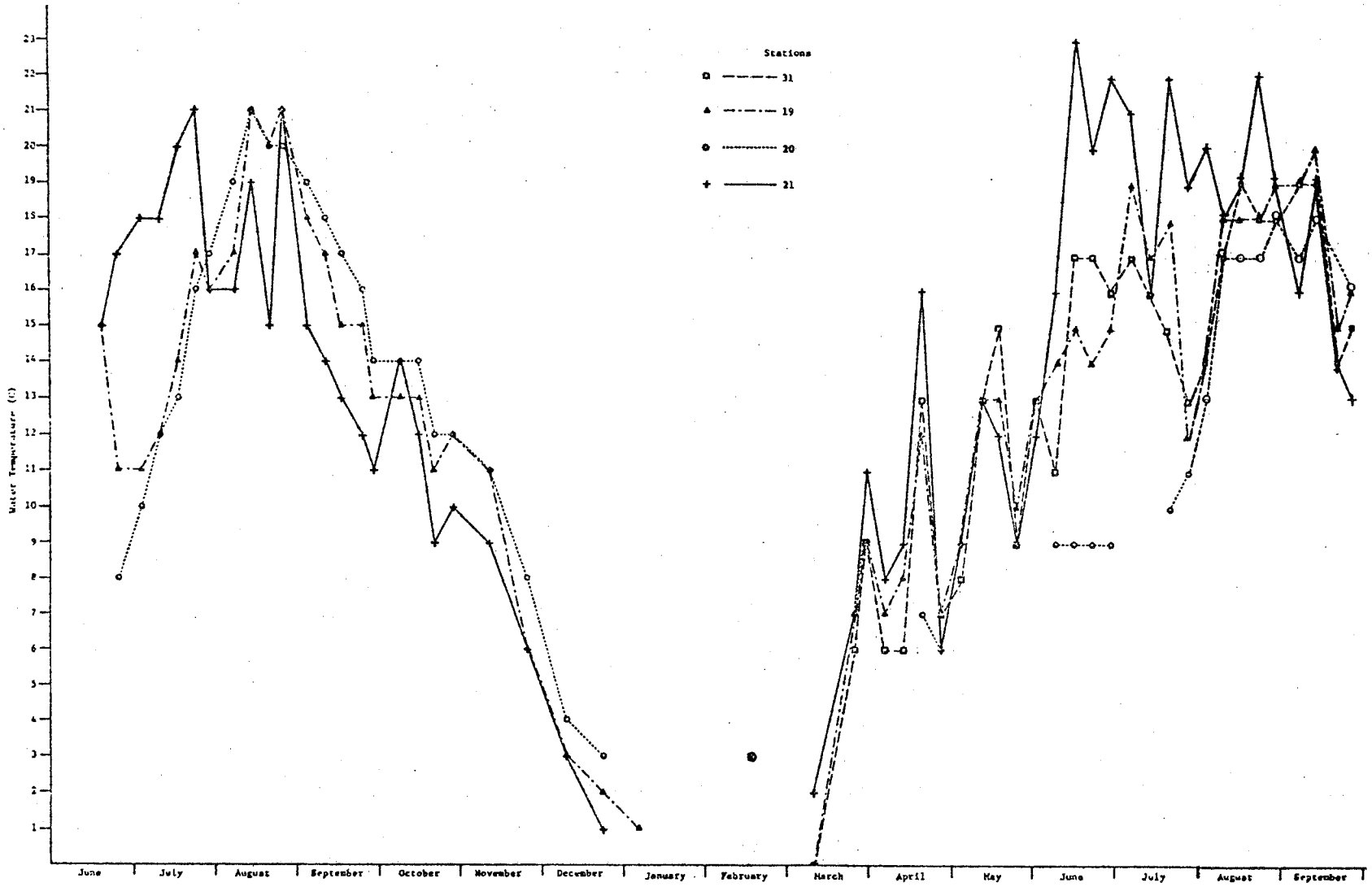

Fig. 6. Summary of water temperature data (C) taken from 19 June 1975 through 28 September 1976 from Esopus Creek.

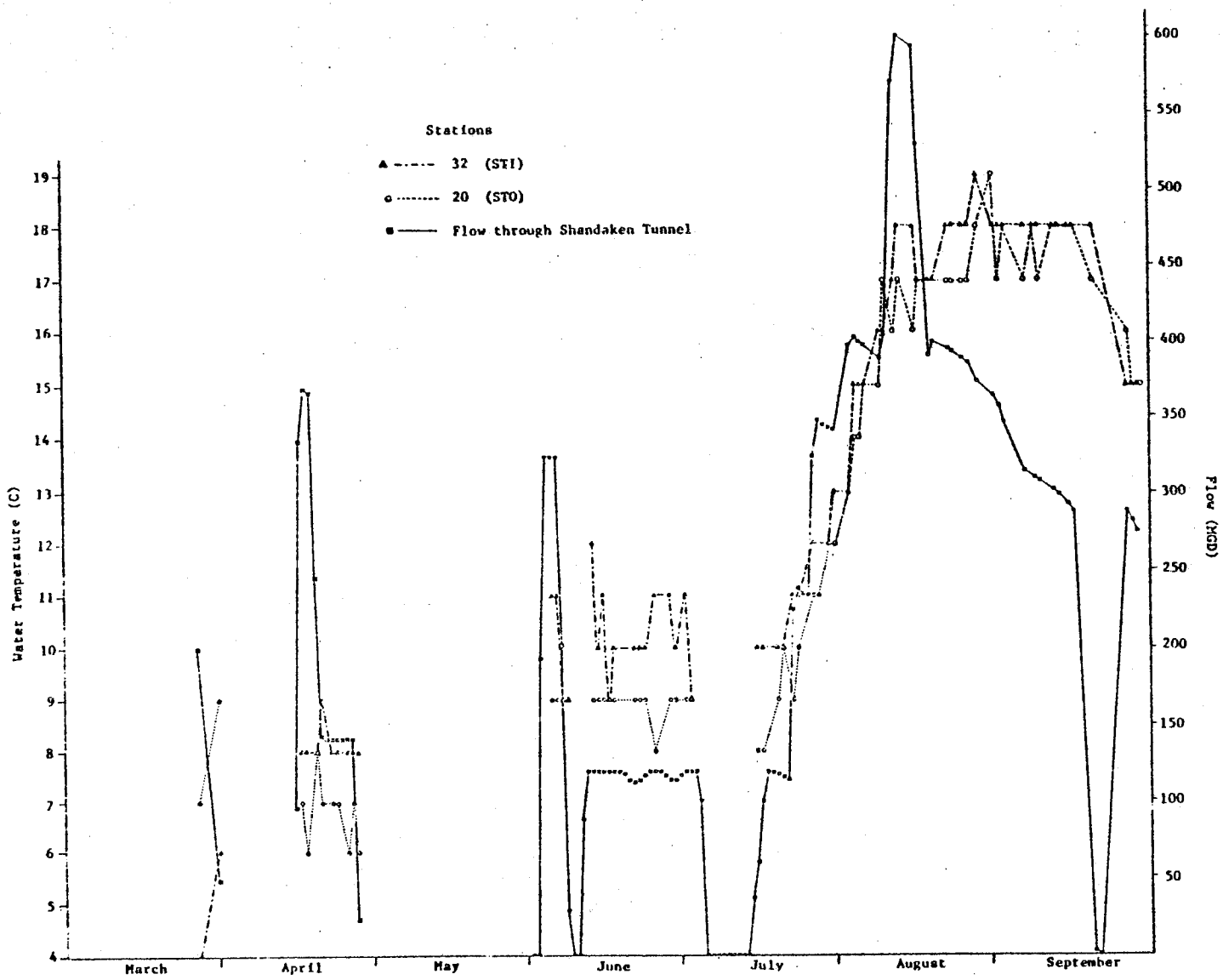

Fig. 7. Summary of water temperature data (C) taken from 26 March through 30 September 1976 from the Shandaken Tunnel intake and the Shandaken Tunnel outlet and flow data (MGD) through the Shandaken Tunnel from 26 March through 30 September 1976.

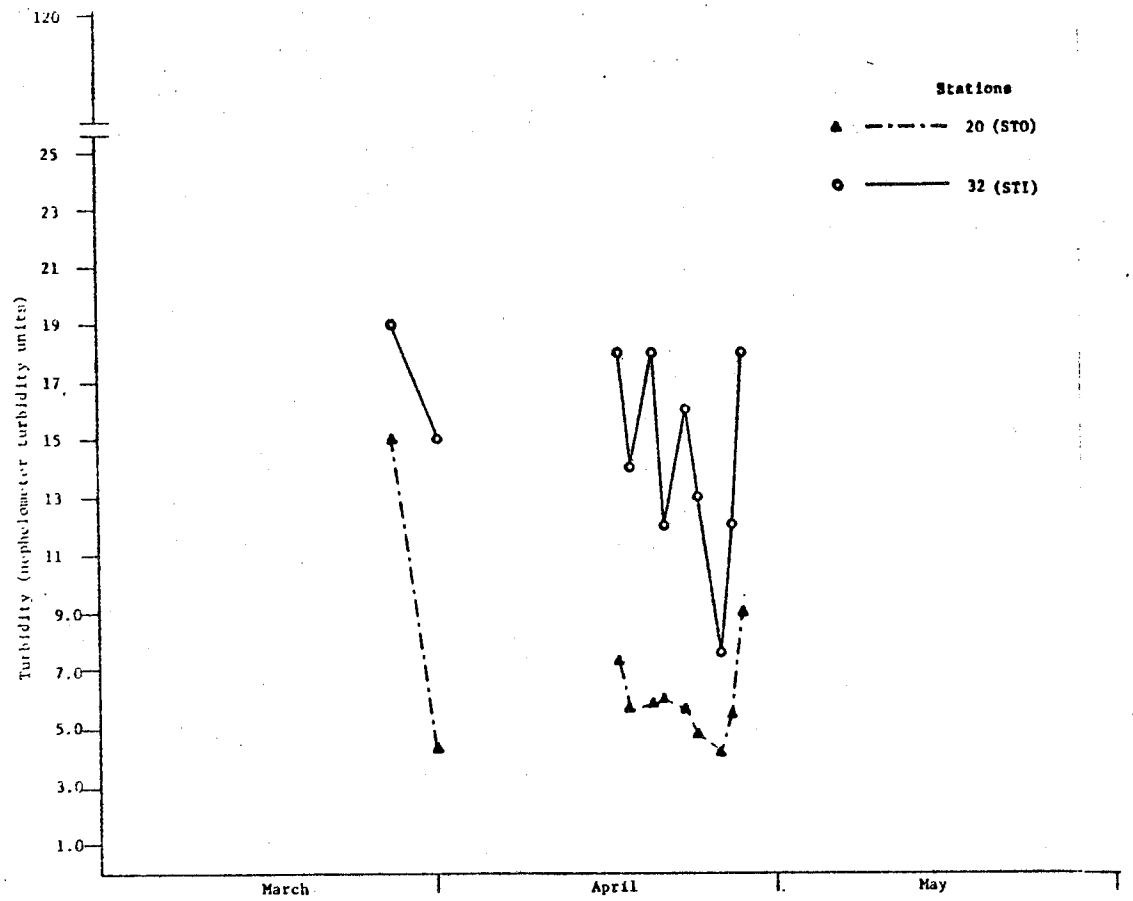

Fig. 8. Summary of turbidity data (nephelometer turbidity units) taken from 26 March through 30 September 1976 from the Shandaken Tunnel outlet and the Shandaken Tunnel intake.

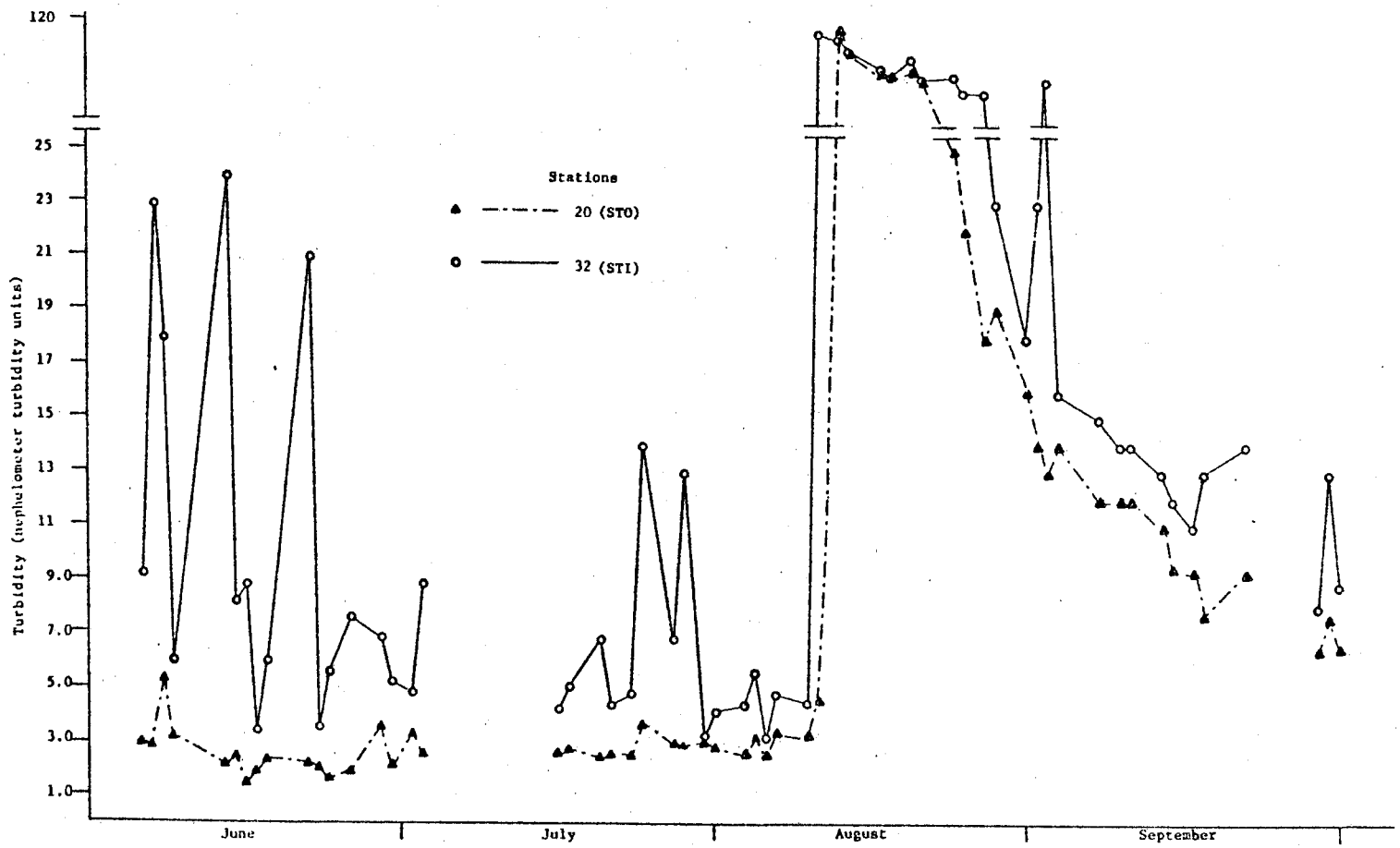

Fig. 8 - (Continued).

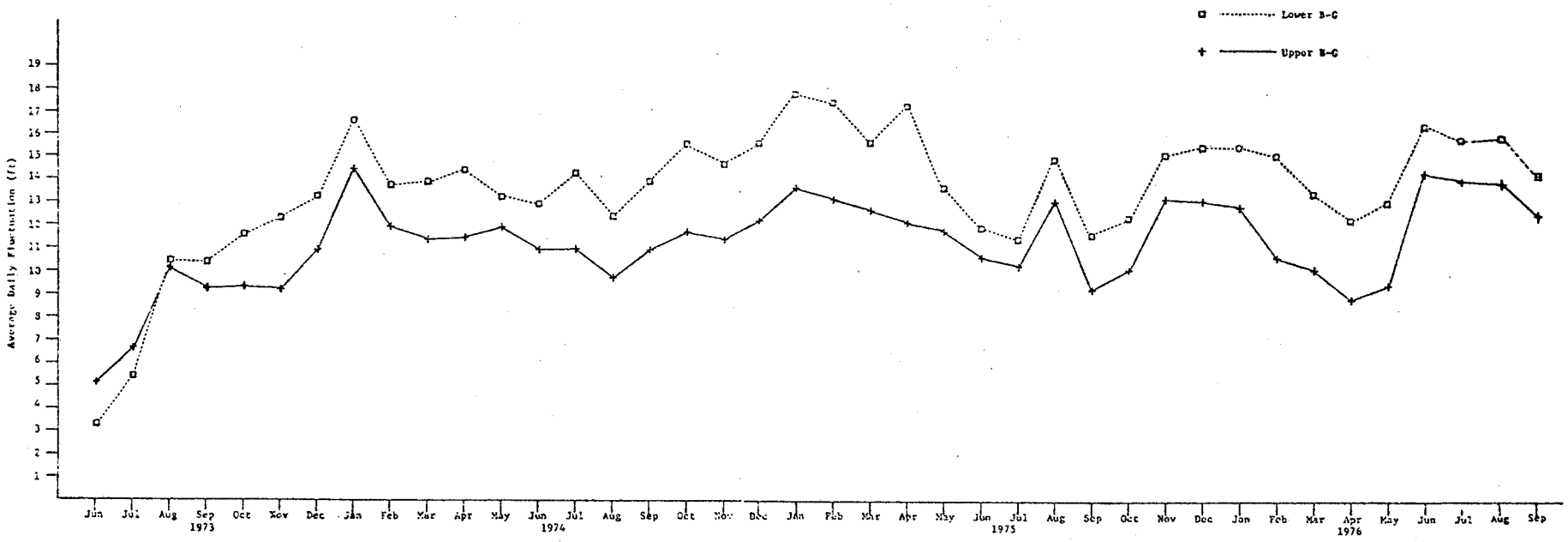

Fig. 9. Summary of average daily fluctuation data (feet) taken from 1 June 1973 through 30 September 1976 from Lower and Upper B-G.

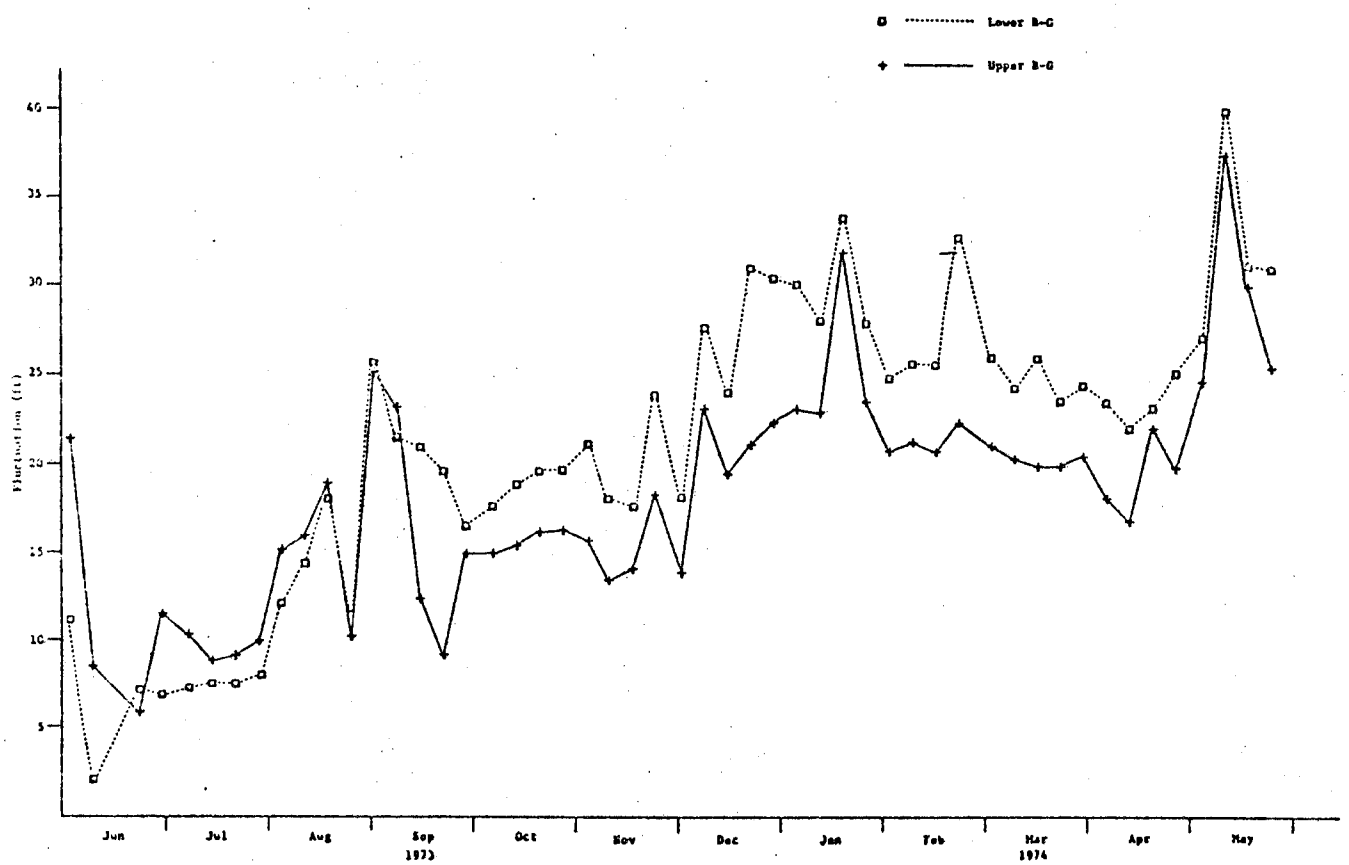

Fig. 10. Summary of weekly fluctuation data (feet) taken from 1 June 1973 through 30 September 1976 in Lower and Upper B-G.

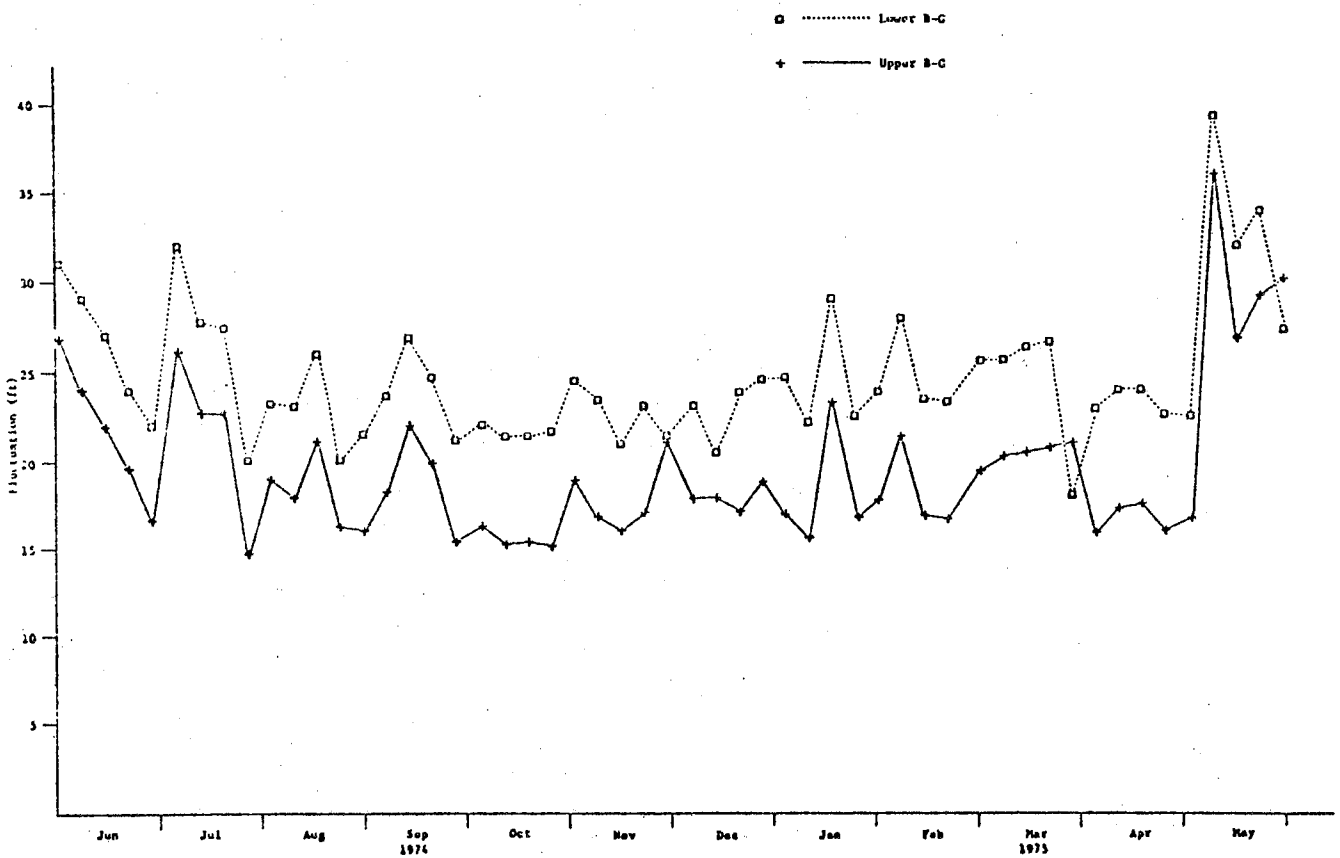

Fig. 10 - (Continued).

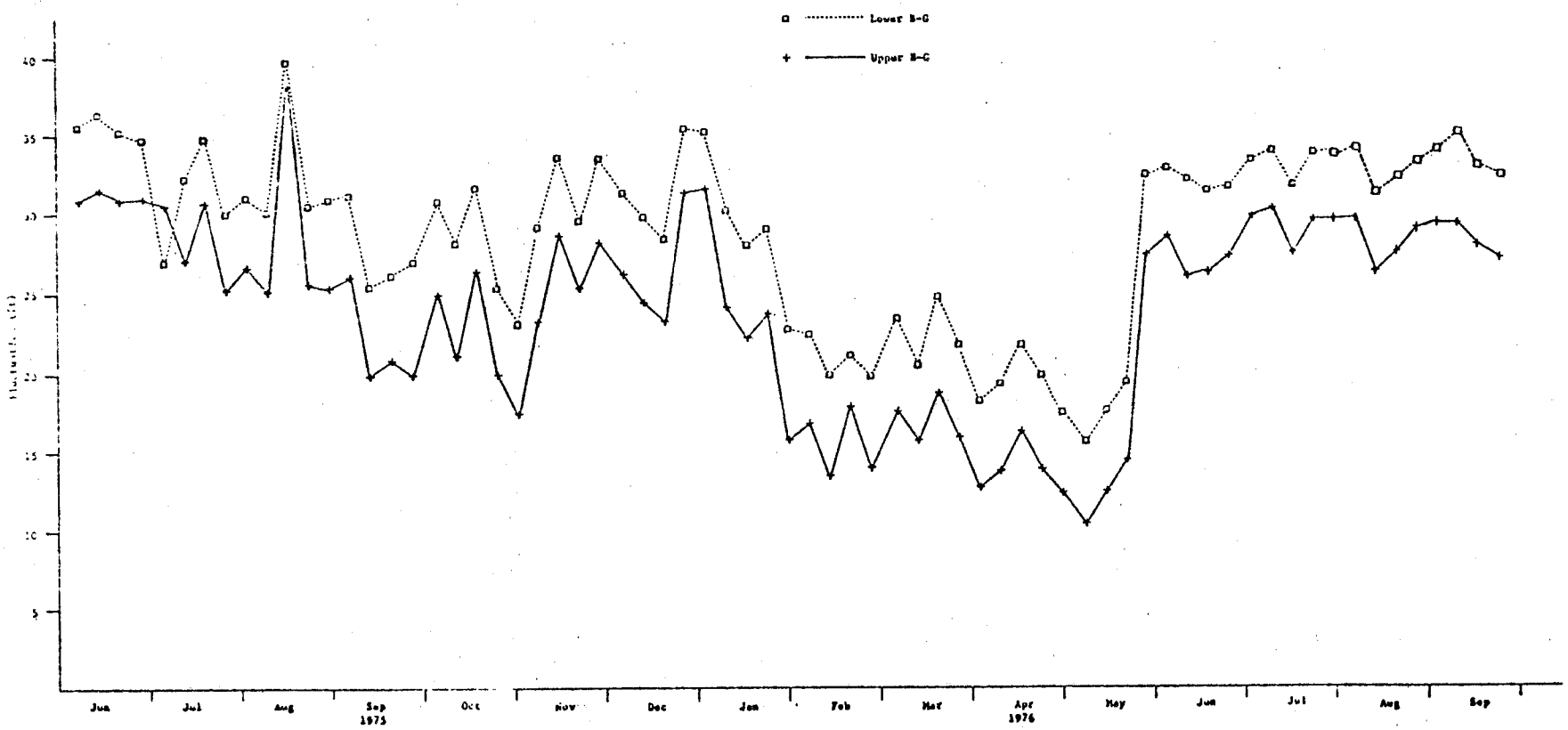

Fig. 10 - (Continued).

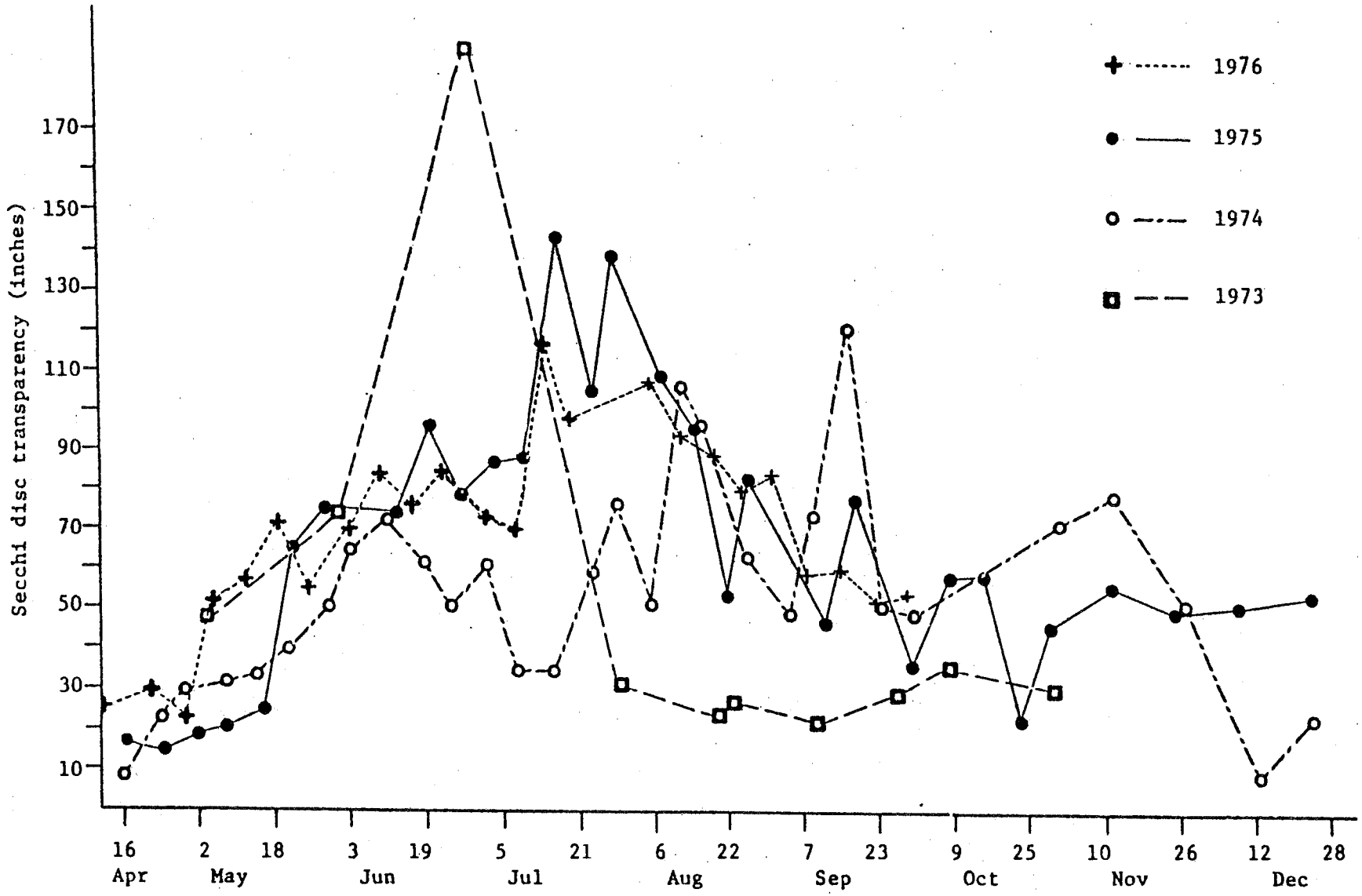

Fig. 11. Summary of Secchi disc transparency (inches) taken from May through October 1973, from April through December 1974 and 1975, and from April through September 1976 from station 13 on Lower B-G.

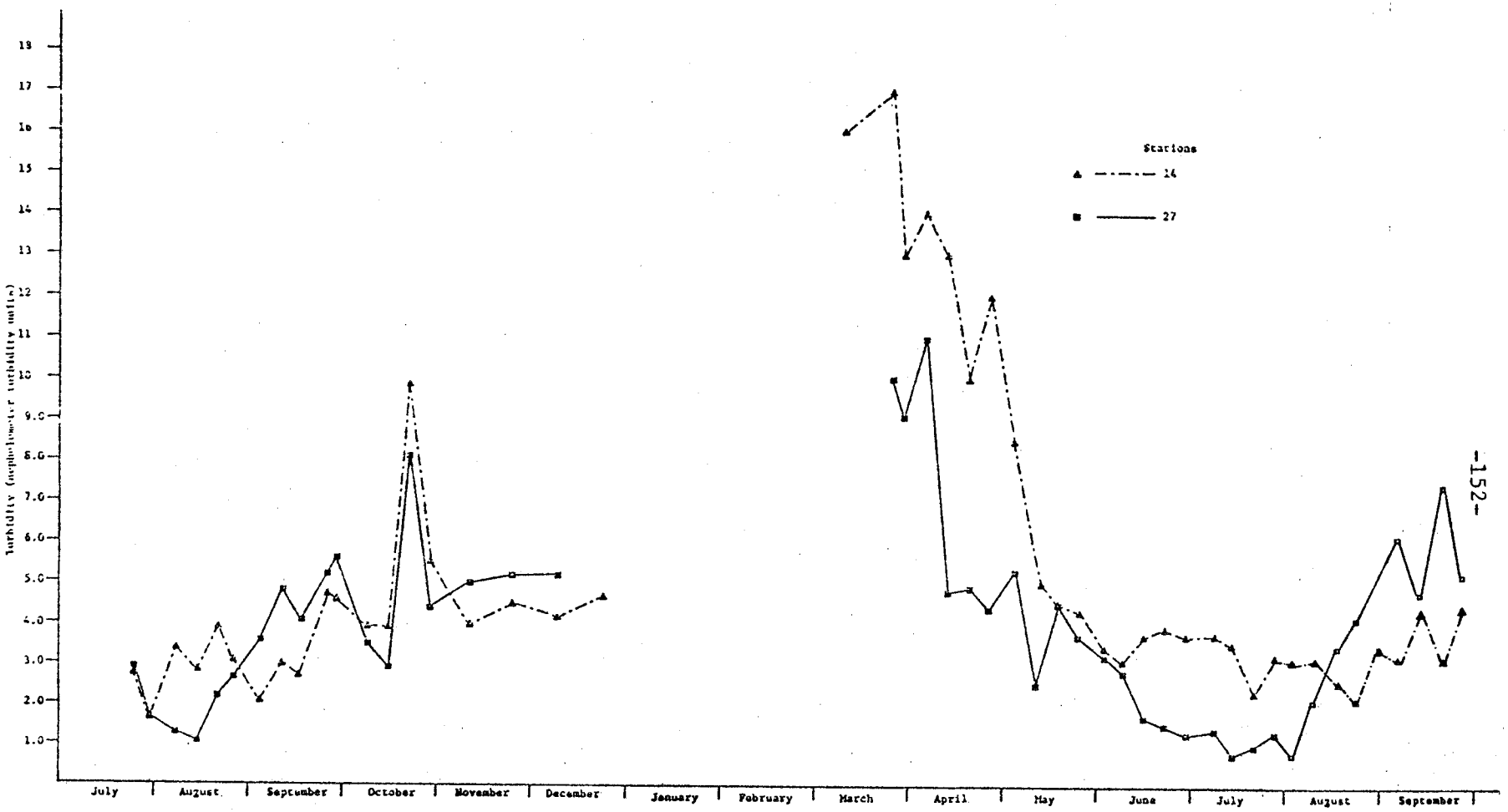

Fig. 12. Summary of turbidity data (nephelometer turbidity units) taken from 24 July 1975 through 28 September 1976 from Lower B-G and Schoharie Reservoir.

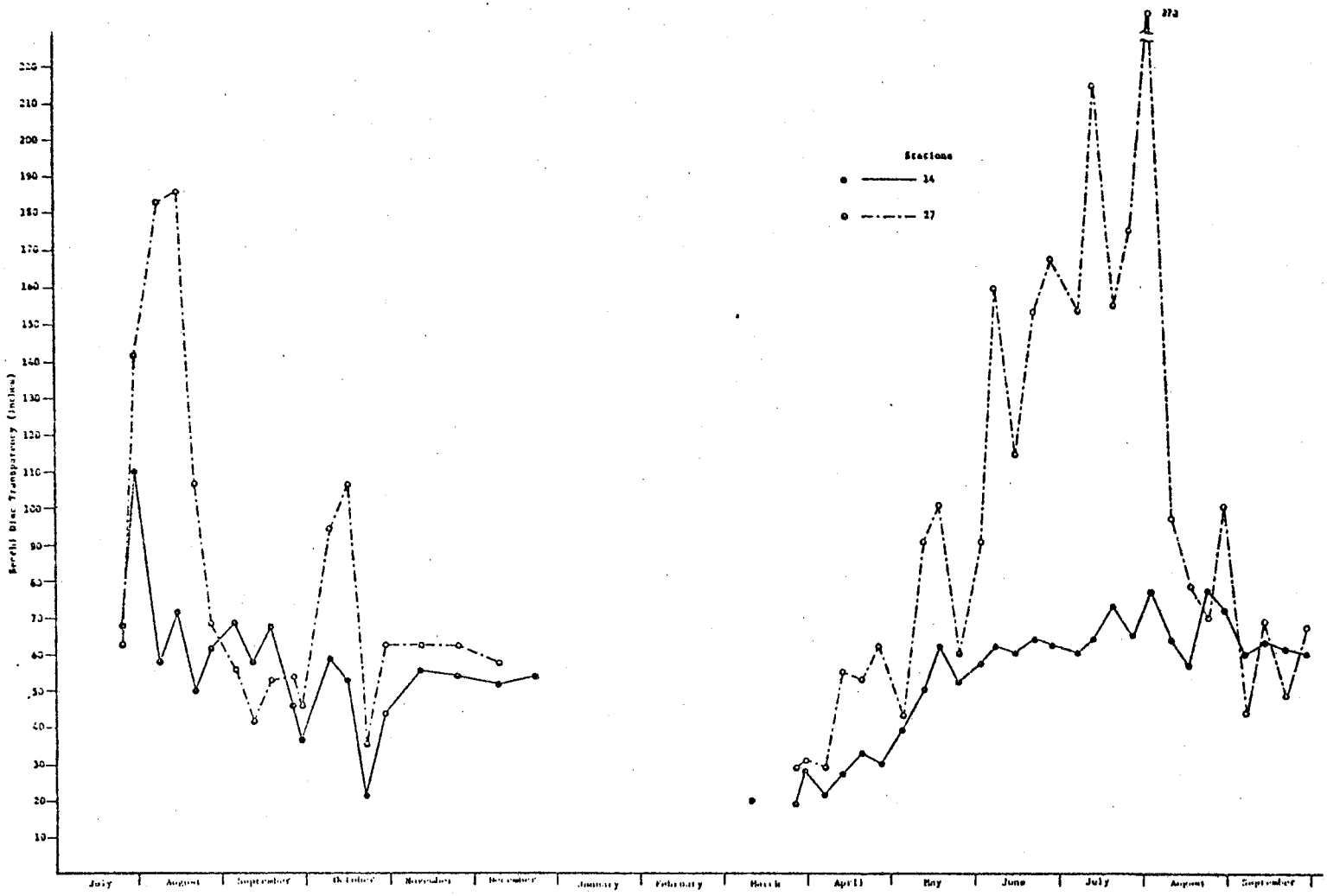

Fig. 13. Summary of Secchi disc transparency (inches) taken from 24 July 1975 through 28 September 1976 from Lower B-G and Schoharie Reservoir.

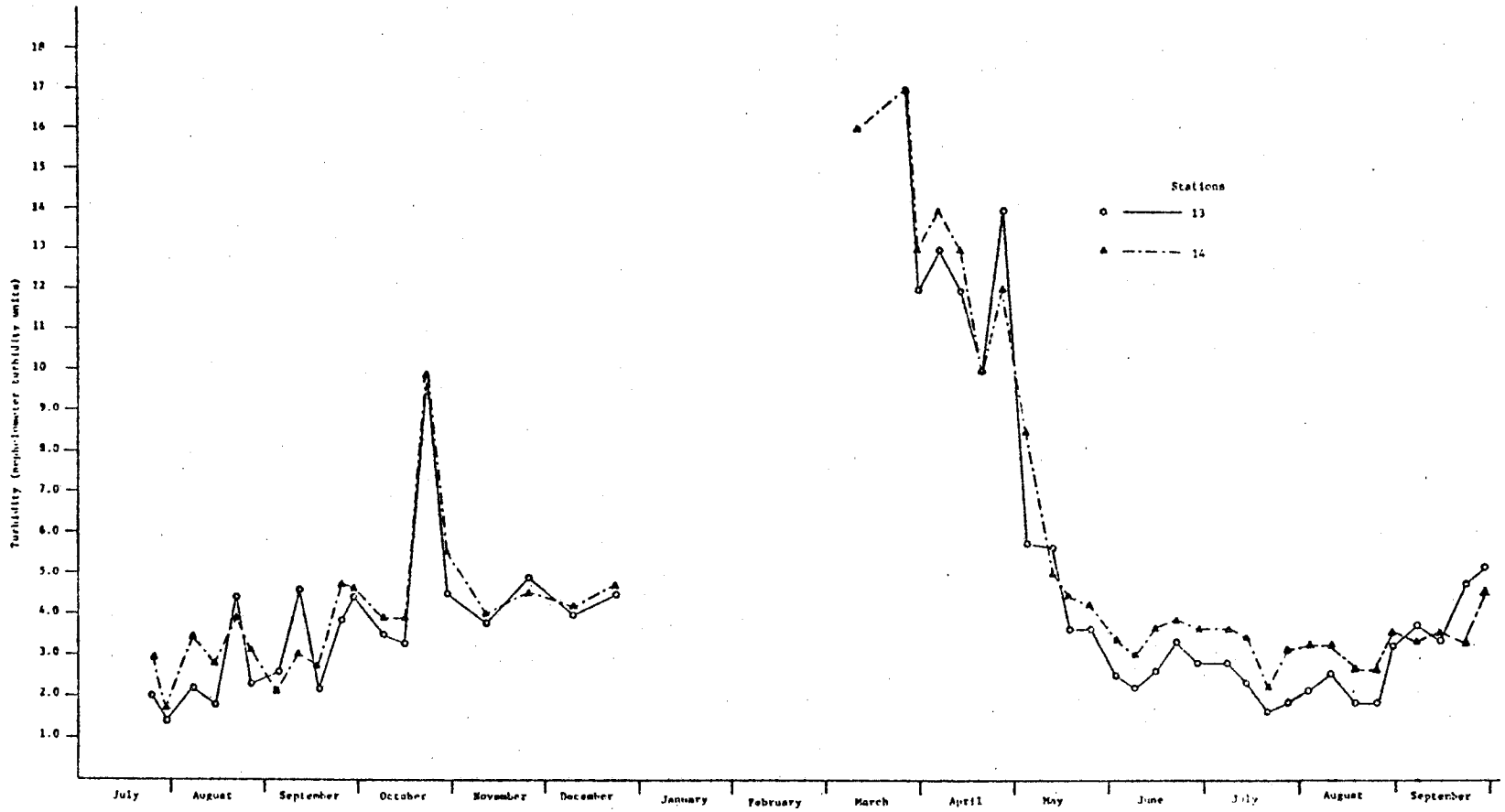

Fig. 14. Summary of turbidity data (nephelometer turbidity units) taken from 24 July 1975 through 28 September 1976 from Lower B-G.

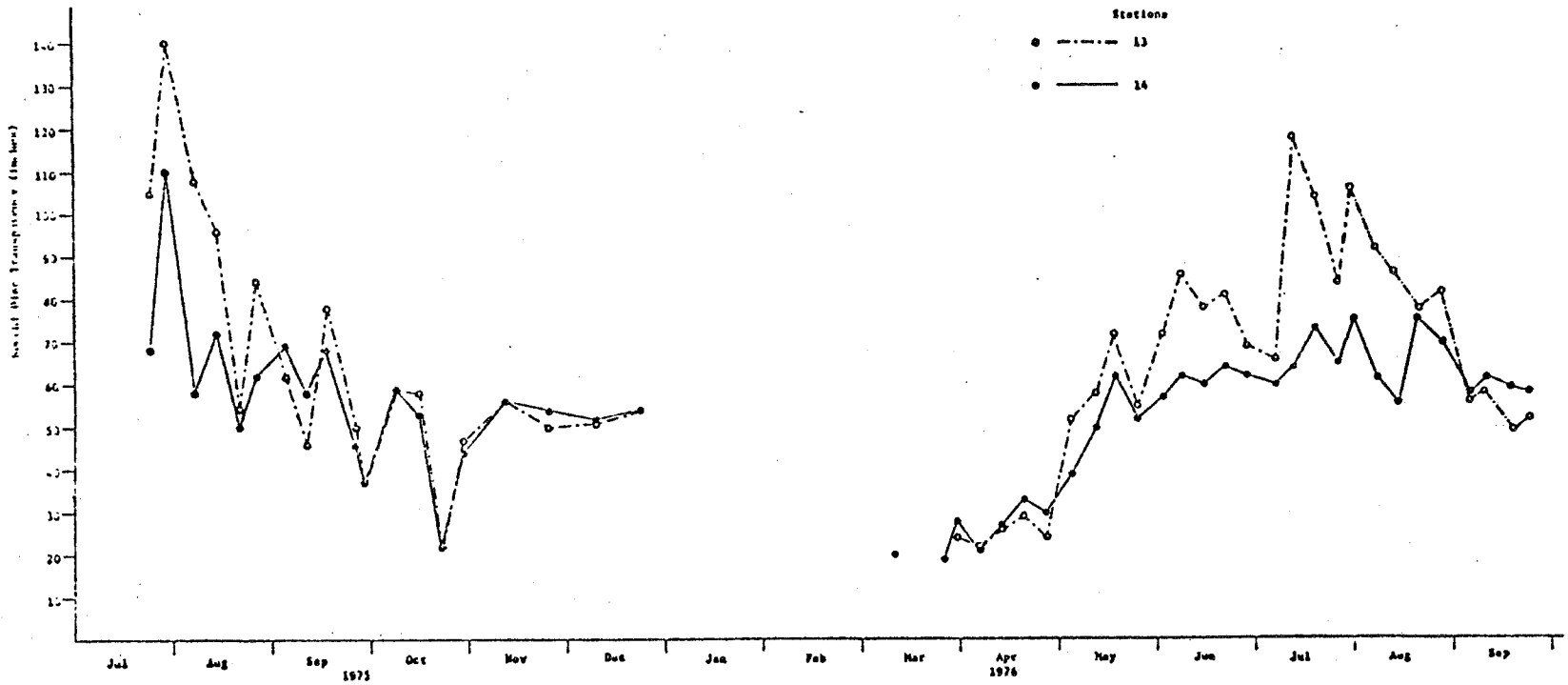

Fig. 15. Summary of Secchi disc transparency (inches) taken from 24 July 1975 through 28 September 1976 from Lower B-G.

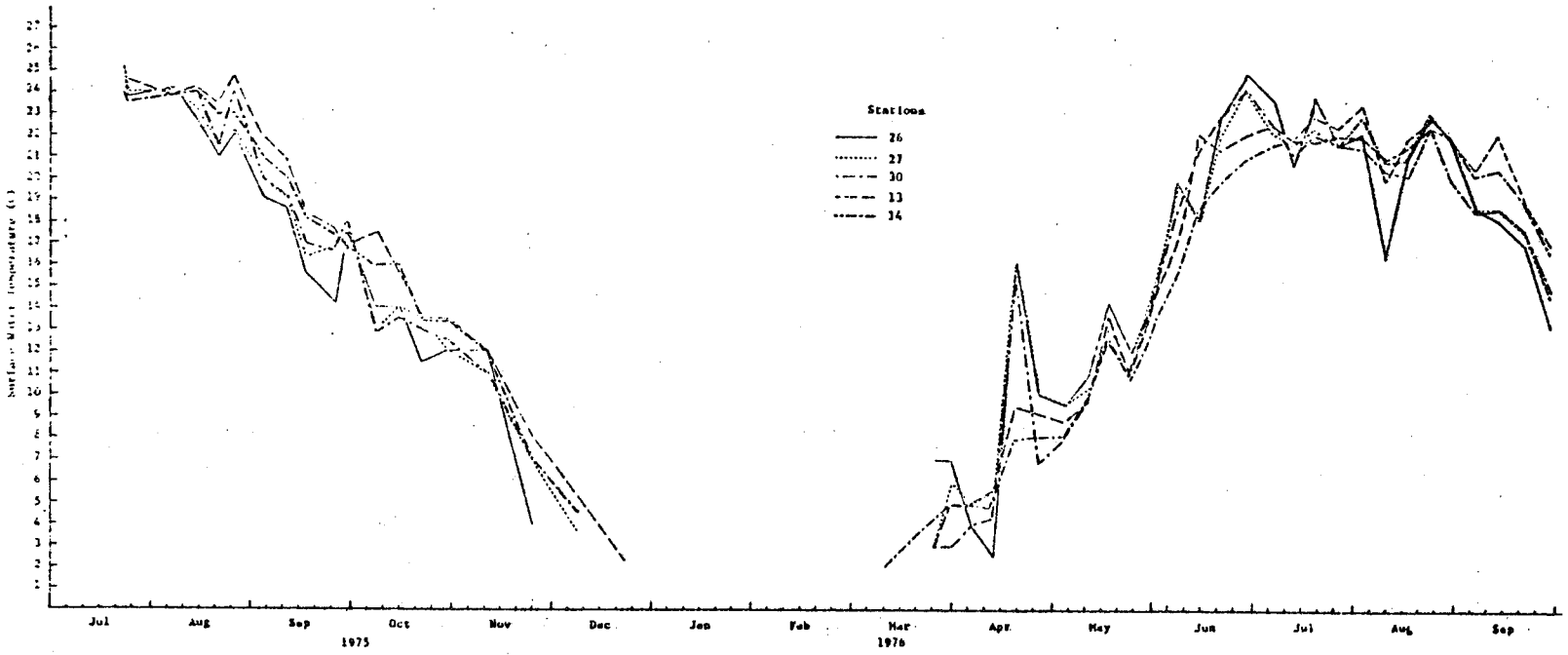

Fig. 16. Surface water temperature data (C) taken from 24 July 1975 through 28 September 1976 from Schoharie Reservoir and Lower B-G.

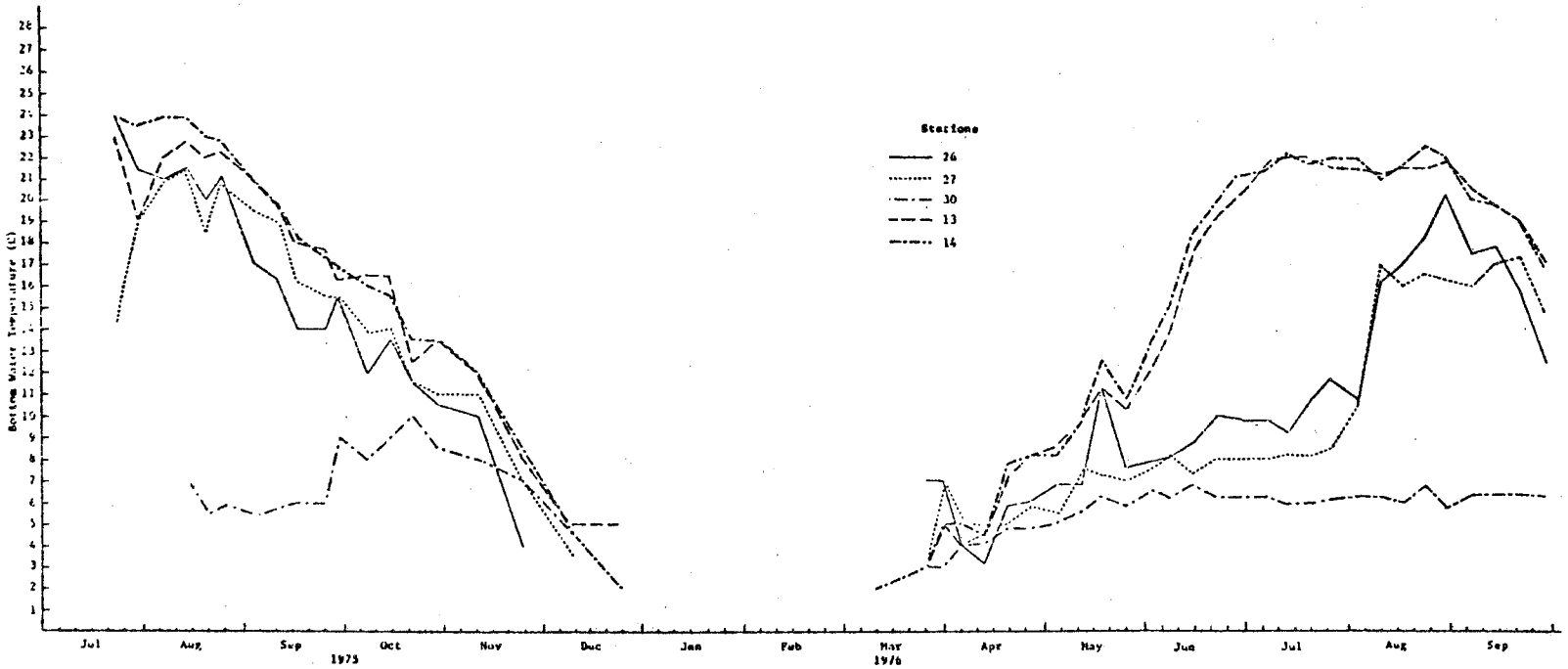

Fig. 17. Bottom water temperature data (C) taken from 24 July 1975 through 28 September 1976 from Schoharie Reservoir and Lower B-G.