

STUDIES OF THE AQUATIC ECOLOGY
OF THE BLENHEIM-GILBOA PUMPED STORAGE RESERVOIRS
AND OF SCHOHARIE CREEK IN THE VICINITY OF A PROPOSED
PUMPED STORAGE FACILITY NEAR BREAKABEEN, NEW YORK

Progress Report for the Period 1972 and 1973

by

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TABLE OF CONTENTS

	Page
INTRODUCTION	
FISHES COLLECTED IN SCHOHARIE CREEK.....	1
FISHES COLLECTED IN B-G RESERVOIRS.....	3
Lower B-G Reservoir.....	3
Upper B-G Reservoir.....	5
FISHES COLLECTED IN TRIBUTARIES OF SCHOHARIE CREEK.....	6
DISCUSSION OF FISHES FOUND.....	7
FISH FEEDING STUDIES.....	9
STUDIES OF BOTTOM ORGANISMS.....	10
PHYSICOCHEMICAL FACTORS IN B-G RESERVOIRS.....	11
CREEL CENSUS.....	13
SUMMARY.....	16
LITERATURE CITED.....	21
ACKNOWLEDGEMENTS.....	21
TABLES.....	22
FIGURES.....	66
APPENDIX - MATERIALS AND METHODS.....	77

LIST OF TABLES

Table	Page
1. Common and scientific names of fishes collected.....	22
2. Fishes collected in 1973 in Schoharie Creek between Schoharie Reservoir and Lower B-G Reservoir.....	23
3. Fishes collected in 1973 in Schoharie Creek between Lower B-G Reservoir and the iron bridge north of Breakabeen.....	24
4. Dead fishes observed by three people in three hours on 19 and 20 June 1973 on the Lower B-G Reservoir.....	25
5. Fishes collected by seine and electrofishing in Lower B-G Reservoir.....	26
6. Number and biomass of fishes collected on 17 August 1973 by block net in Mine Kill Cove of Lower B-G Reservoir.....	27
7. Fishes collected from April to October 1973 by experimental gill net at ten stations in Lower B-G.....	27

8.	Fishes collected from April to October 1973 by experimental gill net in Lower B-G Reservoir in 1920 hours (192 hours at each of ten stations).....	28
9.	Fishes collected from April to October 1973 by trap net, gill net, block net, seine, and electrofishing in B-G Reservoirs..	29
10.	Fishes collected by trap net in 1973 in Lower B-G.....	30
11.	Fishes collected in 1973 with an experimental gill net in Upper B-G Reservoir.....	31
12.	Fishes collected in 1973 by trap net in Upper B-G Reservoir....	31
13.	Fishes collected in 1973 by electrofishing in the Platter Kill (Trib 108) and Trib 105 of Schoharie Creek.....	32
14.	Fishes collected in 1973 by electrofishing in the Mine Kill (Trib 106 of Schoharie Creek).....	32
15.	Fishes collected in 1973 by electrofishing in the West Kill (Trib 104 of Schoharie Creek).....	33
16.	Fishes collected in 1973 by electrofishing in Tribs 103, 101 and 100 of Schoharie Creek.....	33
17.	Fishes collected in 1973 by electrofishing in Cole Hollow Creek (Trib 99 of Schoharie Creek).....	34
18.	Fishes collected in 1973 by electrofishing in Trib 98A and the Keyser Kill (Trib 97 of Schoharie Creek).....	34
19.	Fishes collected in 1973 by electrofishing in Panther Creek (Trib 95 of Schoharie Creek).....	35
20.	Summary of fishes collected in 1973 by electrofishing in tributaries of Schoharie Creek.....	35
21.	Mean total length by month of each age group of rainbow trout and brook trout collected in May through July 1973 in Cole Hollow Creek (Trib 99 of Schoharie Creek).....	36
22.	Total number of fish collected in 1973 in B-G Reservoirs, Schoharie Creek, and its tributaries.....	37
23.	Mean total length (mm) of each age group of largemouth bass collected by month in 1973 in Lower B-G Reservoir (L R) and Schoharie Creek (S C).....	38

24.	Mean total length (mm) collected by month in 1973 of each age group of smallmouth bass in Lower B-G Reservoir (L R) and Schoharie Creek (S C).....	38
25.	Mean total length (mm) of each age group of walleye collected by month in Lower B-G Reservoir (L R) and Schoharie Creek (S C).....	39
26.	Mean total length (mm) of each age group of yellow perch collected by month in 1973 in Lower B-G Reservoir (L R) and Schoharie Creek (S C).	39
27.	Mean total length (mm) of each age group of pumpkinseed collected by month in 1973 in Lower B-G Reservoir (L R) and Schoharie Creek (S C).	40
28.	Mean total length (mm) of each age group of rock bass collected by month in 1973 in Lower B-G Reservoir (L R) and Schoharie Creek (S C).	41
29.	Length frequency distribution of largemouth bass collected in 1973 in Lower B-G Reservoir.....	42
30.	Length frequency distribution of smallmouth bass collected in 1973 in Lower B-G Reservoir.....	42
31.	Length frequency distribution of yellow perch collected in 1973 in Lower B-G Reservoir.....	43
32.	Length frequency distribution of pumpkinseed collected in 1973 in Lower B-G Reservoir.....	44
33.	Length frequency distribution of rock bass collected in 1973 in Lower B-G Reservoir.....	44
34.	Length frequency distribution of pumpkinseed collected in 1973 in Schoharie Creek.....	45
35.	Length frequency distribution of rock bass collected in 1973 in Schoharie Creek.....	46
36.	The average total length of pumpkinseed in the second growing season collected from 30 April to 30 May 1973 in Lower B-G Reservoir.....	47
37.	Stomach contents of largemouth bass collected in 1973 in Lower B-G Reservoir (L R), Upper B-G Reservoir (U R), and Schoharie Creek (S C).	48
38.	Stomach contents of smallmouth bass collected in 1973 in Lower B-G Reservoir and Schoharie Creek.....	49
39.	Stomach contents of walleye collected in 1973 in Lower B-G Reservoir and Schoharie Creek.....	49

40.	Stomach contents of chain pickerel collected in 1973 in Lower B-G Reservoir and Schoharie Creek.....	50
41.	Stomach contents of yellow perch collected in 1973 in Lower B-G Reservoir, Upper B-G Reservoir, and Schoharie Creek.....	50
42.	Stomach contents of pumpkinseed collected in 1973 in Lower B-G Reservoir, and Schoharie Creek.....	51
43.	Stomach contents of rock bass collected in 1973 in Lower B-G Reservoir, Upper B-G Reservoir, and Schoharie Creek.....	51
44.	Bottom organisms collected in 1973 by "Surber" sample at nine locations in Schoharie Creek.....	52
45.	Bottom organisms collected in 1973 by "Surber" sample taken at 28 locations in tributaries of Schoharie Creek.....	53
46.	Temperature data collected in 1973 in B-G Reservoirs.....	55
47.	Temperature data collected in 1973 in Lower B-G Reservoir.....	55
48.	Turbidity data for 1973 from B-G Reservoirs, using an eight inch Secchi disc.....	56
49.	Summary of daily fluctuatuions in water level from June through November 1973 in B-G Reservoirs.....	57
50.	Hydrogenion (pH) data for 1973 from B-G Reservoirs.....	57
51.	Dissolved oxygen data for 1973 from B-G Reservoirs.....	58
52.	Dissolved oxygen data for 1973 from Lower B-G Reservoir.....	58
53.	Carbon dioxide data for 1973 from B-G Reservoirs.....	59
54.	Alkalinity data for 1973 from B-G Reservoirs.....	59
55.	Total hardness data for 1973 from B-G Reservoirs.....	60
56.	Hardness (calcium) data for 1973 from B-G Reservoirs.....	60
57.	Creel census data for August and September 1973 from Lower B-G Reservoir.....	61
58.	Creel census data for July through September 1973 from Schoharie Creek between Schoharie Reservoir and Lower B-G Reservoir.....	62

59.	Creel census data for July through September 1973 from Schoharie Creek between Lower B-G Reservoir and the iron bridge north of Breakabeen (the area to be inundated by the proposed Breakabeen project).....	63
60.	Creel census data for July through September 1973 from Schoharie Creek between Lower B-G Reservoir and the iron bridge north of Breakabeen (the area which will not be inundated by the proposed Breakabeen project).....	64
61.	Creel census data for 1973 from Fishing Access Pools in Schoharie Creek.....	65

LIST OF FIGURES

Figure	Page
1. Schoharie Creek and its tributaries in the area of the Blenheim-Gilboa pumped storage facility and the proposed Breakabeen pumped storage facility.	66
2. Schoharie Creek and its tributaries in the area of the proposed Breakabeen pumped storage facility	67
3. Fishing access pools of Schoharie Creek in the area of the Blenheim-Gilboa pumped storage facility and the proposed Breakabeen pumped storage facility	68
4. Fishing access pools at Schoharie Creek in the area of the proposed Breakabeen pumped storage facility	69
5. Gill net stations (1-10) and water chemistry stations in Lower B-G Reservoir	70
6. Condition factor (K) versus length for largemouth bass collected in May through October 1973 in Lower B-G Reservoir and Schoharie Creek.....	71
7. Condition factor (K) versus length for smallmouth bass collected in April through October 1973 in Lower B-G Reservoir and Schoharie Creek.....	72
8. Condition factor (K) versus length for walleye collected in April through October 1973 in Lower B-G Reservoir and Schoharie Creek.....	73
9. Condition factor (K) versus length for rock bass collected in April through October 1973 in Lower B-G Reservoir and Schoharie Creek.....	74
10. Condition factor (K) versus length for pumpkinseed collected in April through October 1973 in Lower B-G Reservoir and Schoharie Creek.....	75
11. Water chemistry station in Upper B-G Reservoir.....	76

The aquatic ecology of the Schoharie Valley between North Blenheim and Breakabeen has been studied by Ichthyological Associates, Inc. since October 1972. Field studies were conducted by Terry R. Culp (B.S., Cornell University and M.S., Michigan State University) and Charles M. McCormack (B.S., Franklin Pierce College). The research was designed to acquire data with which to determine the environmental impact of the Breakabeen Pumped Storage Facility which has been proposed by the Power Authority of the State of New York (PASNY).

In April 1973 the studies were enlarged to include the Blenheim-Gilboa Pumped Storage Facility which is located between Gilboa and North Blenheim and 2½ miles upstream from the proposed Breakabeen project.

FISHES IN SCHOHARIE CREEK

Approximately 10 miles of Schoharie Creek were studied. Included was the 2 miles between Schoharie Reservoir and the upstream end of the Lower Blenheim-Gilboa (B-G) Reservoir and the 8-mile reach between Lower B-G Reservoir and the iron bridge north of Breakabeen (Figures 1 and 2). The Lower B-G Reservoir flooded approximately 3.2 miles of Schoharie Creek and the proposed Breakabeen Reservoir would flood approximately 4.4 miles.

Trap net, gill net, and electrofishing gear were used. Fishing Access Pools (FAPs) 11, 10, and 10A were sampled between Schoharie Reservoir and Lower B-G Reservoir (Figure 3). Between Lower B-G Reservoir and the iron bridge north of Breakabeen, the spillway pool, FAPs 1, 2, 8 and 9, and a section (1000 ft south of FAP 4A) of a riffle habitat were sampled (Figures 3 and 4). FAP 6 was not sampled because it was inaccessible.

FAPs 3, 4, 4A, 5, and 7 were not sampled; they are shallow and generally contain poor fish habitat, especially for game fishes such as walleye, largemouth bass, and smallmouth bass. Common and scientific names of fishes collected are given in Table 1 .

Fourteen fishes were collected in Schoharie Creek between the Schoharie Reservoir and Lower B-G Reservoir with trap net, gill net, and electrofishing gear (Table 2). Twenty-eight fishes were collected in Schoharie Creek between Lower B-G Reservoir and the iron bridge north of Breakabeen with trap net and electrofishing gear (Table 3). Pumpkinseed and rock bass were common in each location. Game fishes found included walleye, smallmouth bass and largemouth bass.

In the southern part of the study area, largemouth bass were more abundant than smallmouth bass; north of FAP 2 the reverse was true. In October 1973 many young smallmouth bass were observed while sampling at FAP 8 and 31 bass from 4-10 in. total length were observed on 10 October while rowing the length (approximately 1000 ft) of FAP 9; no largemouth bass were observed. Observations and collections in the spillway pool and FAPs 1 and 2 below Lower B-G Reservoir indicated largemouth bass were slightly more abundant. Greene and Senning (1935) reported that smallmouth bass were found in Schoharie Creek.

Pools in the northern part of the study area contained more forage fishes such as fallfish, bluntnose minnow and rosyface shiner.

FISHES IN BLENHEIM-GILBOA RESERVOIRS

The spillway gates of B-G Dam were closed in October 1971 and water levels in Lower B-G Reservoir generally were at or below 840 ft elevation until the 1972 spring runoff, when levels reached or were above the spillway crest elevation of 855 ft. The low level outlet valves in B-G Dam were closed on 21 June 1972 and the spillway gates were closed on 6 July. Water levels in B-G Reservoir rose from 865 ft on 11 July to slightly more than 870 ft on 2 August 1972. The water level reached 890 ft in 1973 before pumping and generating began.

Sampling was begun in Lower B-G Reservoir in April 1973 and in Upper B-G Reservoir in May 1973. Pumping started on 1 June and the first generation occurred on 18 June. In May 1973 sampling by seine and observation of the water present in the Upper B-G Reservoir revealed no fish. On 2 and 3 June observations were made on the Upper B-G Reservoir and no dead or dying fish were seen by four persons in a total of two hours. On 19 and 20 June observation of Lower B-G Reservoir by three persons for a total of three hours indicated nothing unusual. A few dead fish were seen but no cut or pieces of fish were found (Table 4).

Lower B-G Reservoir

Trap net, gill net, block net, seine, and electrofishing gear were used. Seine and electrofishing gear captured all sizes of fish in shallow shoreline habitats. The golden shiner, bluntnose minnow, and pumpkinseed were common among the 19 fishes collected in April and May 1973 (Table 5).

On 17 August a block net was set in Mine Kill Cove in a 3/4-acre section with a maximum depth of 8 ft. All fish except those able to escape through the 5/8-in mesh net were captured. The number and biomass of the 18 fishes collected are listed in Table 6 . Pumpkinseed was by far the most abundant; carp comprised the greatest biomass. The 5557 fish weighed 141.5 kg; based on this single sample the Cove contained 188.7 kg or 416.0 lb of fish per surface acre. Seventy-two smallmouth bass and 55 largemouth bass were captured.

An experimental gill net (75 ft each of 1, 2, 3, 4-in mesh) was set monthly, April through October 1973, at each of 10 locations in Lower B-G Reservoir (Figure 5). The sampling period was 24 hours, except in July when the net was set for 48 hours at each station. Small fish usually swim through the smallest mesh and generally only those more than 4 inches are caught (Tables 7 and 8). Carp, pumpkinseed, brown bullhead and stonecat were most abundant. Brown bullhead and stonecat were abundant in April through July but few were caught in the last three months. Many more largemouth bass (46) than smallmouth bass (4) were captured. One 16-in brown trout which had had its left pelvic fin clipped was captured at Station 3 in July. Russell Fieldhouse, Regional Fish Manager for the New York State Department of Environmental Conservation (DECON), Stamford, New York, reported that brown trout stocked by DECON in Schoharie Creek above Schoharie Reservoir were marked by such a fin clip (personal communication). The trout may have moved downstream.

Trap nets (3/4-in mesh) were set in Lower B-G Reservoir for a total of 590.35 hours in June through September. These nets, which usually capture fish that dwell near and at the bottom, were set in water less than 8 ft deep.

Pumpkinseed, brown bullhead and carp were most abundant (Table 9). Largemouth bass (7) was more abundant than was smallmouth bass (3).

A total of 28 fishes was collected in Lower B-G Reservoir using all methods (Table 10). Forage species such as the golden shiner, bluntnose minnow, and common shiner were abundant. Game species such as the walleye, chain pickerel, largemouth bass, and smallmouth bass were well established. Abundant "pan fishes" such as the pumpkinseed, rock bass, and yellow perch provided a viable fishery. Development of a brown trout fishery is a possibility which deserves future consideration.

Upper B-G Reservoir

All fish which were present had been pumped up from Lower B-G Reservoir.

From June through October 1973 Upper B-G Reservoir was sampled by experimental gill net and by trap net (Tables 11 and 12). Gill net catch per unit effort for the period June through August was .039 fish per hour; for September and October it was .147 fish per hour which is almost a four-fold increase. The catch rate in trap nets for June through August was .024 fish per hour; that for September and October was .448 fish per hour which is almost 19 times greater. This increase indicates that fish were continually pumped from Lower B-G Reservoir since this is their only means of entry to Upper B-G Reservoir.

Thirteen fishes were collected in 1973 in Upper B-G Reservoir (Table 9). Yellow perch, pumpkinseed, brown bullhead, and redbreast sunfish were common. Yellow perch and redbreast sunfish are proportionately less common in Lower B-G Reservoir.

FISH IN TRIBUTARIES OF SCHOHARIE CREEK

The Platter Kill (Trib 108) and the Mine Kill (Trib 106) which enter Schoharie Creek between Schoharie Reservoir and Lower B-G Reservoir were sampled by electrofishing (Figure 1, Tables 13 and 14).

Between Lower B-G Reservoir and Panther Creek (Trib 95), 17 tributaries enter Schoharie Creek (Figures 1 and 2). Seven of these (103A, 102A', 102, 98, 96A, 96A' and 96) dried up during summer of 1973. No fish were found in Trib 102A which dried up near its mouth in summer. Fish were collected in the other nine tributaries (Tables 19 and 20).

Fishes collected in all tributaries of Schoharie Creek within the study area are listed in Table 20. Those typical of small streams, such as black-nose dace, creek chub, white sucker and common shiner, were abundant. Eight tributaries (108, 106, 104, 101, 99, 98A, 97 and 95) held trout. The Platter Kill (Trib 108), the Mine Kill (Trib 106) and Panther Creek (Trib 95) contained brook trout in the colder headwaters only. The West Kill (Trib 104) had brown trout above a natural barrier dam which is located approximately 0.6 miles from its mouth. Below this dam fishes typical of Schoharie Creek were found. In Mill Creek (Trib 1 of the West Kill) brook trout were collected. One brown trout and one rainbow trout were collected in Trib 101. Cole Hollow Creek (Trib 99) had both brook trout and rainbow trout. One brook trout was captured in Trib 98A, and the Keyser Kill (Trib 97) held brook trout and brown trout.

Cole Hollow Creek is the only tributary that contained trout throughout most of its length. Except for approximately 3000 ft at its mouth which

dries up in summer, it contained populations of naturally spawned brook trout and rainbow trout. Below the natural barrier dam, which is located approximately 1.5 miles above its mouth, 48 rainbow trout and 4 brook trout were collected. Above the dam only the brook trout was found.

Age and growth of brook trout and rainbow trout from Cole Hollow Creek were determined. Some were in their fourth growing season. No young-of-the-year were collected but they were observed in August and September. The mean total length of trout collected in May through July is given in Table 21. Large numbers of fish in their second and third growing seasons were collected in June; rainbow trout were larger than brook trout of equal age. The relatively poor growth rate and small maximum size of both trout are typical of small streams where natural reproduction is good and competition for a limited food supply is keen.

ABUNDANCE, CONDITION, AGE AND GROWTH OF FISHES

Throughout the study area 19,403 fish representing 37 species of eight families were collected in 1973 (Table 22). The pumpkinseed was by far the most common and was especially so in Lower B-G Reservoir. The spottail shiner, bluegill and green sunfish were scarce. Warm water game fishes, in decreasing order of abundance, were the largemouth bass, smallmouth bass, walleye and chain pickerel. The pumpkinseed, rock bass, and yellow perch were abundant "pan fishes". Trout were found in the major tributaries of Schoharie Creek.

Condition factor ("K") was determined for the most abundant warm water game and pan fishes. This factor, which is a measure of relative plumpness,

correlates surface (length) with volume (weight) as follows:

$$K = \frac{100 \times \text{weight (g)}}{\text{total length}^3 (\text{cm})}$$

A plump fish has a higher "K" value than a thin individual of the same length.

Condition factor was calculated and plotted (linear regression) against length for largemouth bass, smallmouth bass, walleye, rock bass, and pumpkinseed collected in Lower B-G Reservoir and in Schoharie Creek (Figures 6-10). Approximately equal numbers of fish were used from each length category; "K" increased as length increased except for smallmouth bass collected in Schoharie Creek, where it decreased. For all fishes the rate of increase in "K" value with increase in length was greater for fish collected in Lower B-G Reservoir than for those collected in Schoharie Creek.

The mean length for each age group was calculated by month for largemouth bass, smallmouth bass, walleye, yellow perch, pumpkinseed, and rock bass collected in Lower B-G Reservoir and Schoharie Creek in 1973 (Tables 23-28). Largemouth bass and smallmouth bass taken in Lower B-G Reservoir were larger than those of the same age in Schoharie Creek. Length differences for other fishes were less pronounced. Pumpkinseed in its second growing season was abundant and grew very rapidly during May and June in Lower B-G Reservoir.

Length-frequency data were compiled for largemouth bass, smallmouth bass, yellow perch, pumpkinseed and rock bass collected in Lower B-G Reservoir and for pumpkinseed and rock bass collected in Schoharie Creek (Tables 29-35).

These data roughly reflect growth of a given age group during the growing season. The growth rate for a given species varied with location in Lower B-G Reservoir. A difference of 16.4 mm exists between mean length of pumpkinseed of approximately equal age in their second growing season collected at two locations in the Lower B-G Reservoir in May (Table 36). Calculations of mean length in this study used fish from various locations within each section of the study area.

FOOD OF FISH

The food of largemouth bass, smallmouth bass, walleye, chain pickerel, yellow perch, pumpkinseed and rock bass was analyzed by dividing stomach contents into ten categories; the data are summarized by month and location in Tables 37-43.

A greater percentage of fish from Lower B-G Reservoir contained food organisms than did those from Schoharie Creek except for pumpkinseed in which approximately 25% of those from the Reservoir and 50% of those from Schoharie Creek contained food in the period July through October. This may reflect the abundant population of pumpkinseed in Lower B-G Reservoir and the resultant competition for the food supply.

Walleye and chain pickerel fed on smaller fish in all localities. Other fishes fed on aquatic insects more frequently in Schoharie Creek than did those in Lower B-G Reservoir. Smaller fish comprised a greater percentage of the diet of fishes in Lower B-G Reservoir than in those in Schoharie Creek.

In Upper B-G Reservoir, yellow perch fed on Daphnia and fish. The pumpkinseed fed on fish and miscellaneous materials. However, crayfish and aquatic insects were absent from their diets; both were abundant in stomachs of the yellow perch and pumpkinseed which were collected in Lower B-G Reservoir and Schoharie Creek. Apparently Daphnia and small fish moved to the Upper Reservoirs but development of populations of crayfish and aquatic insects requires more than one half year.

BOTTOM ORGANISMS

In August and September 1973, 18 collections were made using a "Surber" sampler at two habitat types at nine locations in Schoharie Creek between the iron bridge at Gilboa and the iron bridge north of Breakabeen (Table 44). Caddis fly and mayfly larvae were common. A greater variety and abundance of organisms were collected in the northern part of the study area. Only five specimens were collected below B-G Dam.

In July and August, 55 "Surber" samples were taken in two habitat types at 28 locations on the six major tributaries of Schoharie Creek which contained trout (Table 45). Those sampled were the West Kill (including tributaries Mill Creek and Betty Brook), Trib 101, Cole Hollow Creek, Trib 98A, the Keyser Kill, and Panther Creek (including tributary House Creek). The most abundant organisms found were the larvae of the mayfly, caddis fly, stonefly, aquatic beetles, and aquatic diptera (flies, midges and mosquitoes). All are typical organisms of trout streams. The streams had a diverse fauna which reflects a more stable environment (ie. less yearly fluctuation in flow, temperature and turbidity).

PHYSICOCHEMICAL STUDIES OF BLENHEIM-GILBOA RESERVOIRS

From May through October 1973 physicochemical factors measured were temperature, turbidity, pH, oxygen, carbon dioxide, alkalinity and hardness (total and calcium) in Lower B-G Reservoir at a point one-fourth mile south of the spillway and approximately 1000 ft from the western shore, and in Upper B-G Reservoir at a point approximately 400 ft from the southwestern corner (Figures 5 and 11).

Surface and bottom temperatures in Lower B-G Reservoir varied little (Table 46). The maximum difference of 11 degrees F occurred on 30 July, when the surface temperature was 80 F and the bottom temperature was 69 F. Data indicate that no thermal stratification occurred during summer 1973. More homogeneity is expected when all four units are operating in the summer.

Temperatures at three stations in Lower B-G Reservoir were nearly uniform between the surface and a depth of 20 ft from August to October (Figure 5, Table 47). For each month sampled, temperatures at Station 2 (midway between the boat ramp and the pump house) were the same at the surface and at 20 ft. Temperatures at this station were lower than those at either of the other stations located at the upper and lower ends of the Reservoir. These differences indicate that pumping and generating are effective in mixing water at Station 2.

Surface and bottom temperatures in Upper B-G Reservoir were practically the same (Table 46). On 10 September a difference of 14 degrees between surface and bottom temperatures was recorded. This anomaly was observed on a Monday following a warm weekend when no pumping or generating occurred.

High Secchi disc (8-in diameter) readings (clearer water) in Lower B-G Reservoir in May and June and low readings in July through October reflect an increase in turbidity which is correlated with the fluctuations of water level in the Reservoir (Tables 48 and 49). The latter is primarily an indication of the amount of pumping and generating which first began with two units in July but may also be influenced by weather conditions and run off from bare ground. In both Reservoirs, turbidity decreased from July through October even though the amount of fluctuation in water level increased. Probably settling out occurred in less turbulent parts of the Reservoirs.

In both Reservoirs pH was approximately neutral (7.0) and varied slightly with climatic conditions (Table 50).

Dissolved oxygen content in B-G Reservoirs was generally at or about saturation in both surface and bottom waters except in August and September when some depletion of oxygen occurred in bottom waters (Table 51). Oxygen content at three stations in Lower B-G Reservoir in September and October was practically the same between the surface and a depth of 20 ft on the two dates sampled (Table 52).

Carbon dioxide was low in B-G Reservoirs (Table 53). Newly formed lakes in regions of weakly soluble rocks typically contain little carbon dioxide (Reid, 1961).

Alkalinity and hardness (total and calcium) were low (Tables 54-56) which is a situation typical of Catskill waters (personal communication, Russell Fieldhouse, DECON). Alkalinity and hardness data are important in assessing the fisheries potential of a given body of water because they are indicators of the fertility and capacity to support aquatic life. Lopinot (1971)

described waters (such as B-G Reservoirs) with less than 50 ppm total alkalinity as follows: "Water is very soft. Usually little plankton is present. Low productivity and sparse growth of submersed aquatic plants. Deep lakes will often support trout."

CREEL CENSUS

A creel census was conducted on Lower B-G Reservoir in August and September 1973 and on Schoharie Creek in July through September 1973. The purposes of this study were: (1) to determine fisherman use and success at the various locations, including the proposed Fishing Access Pools (FAPs) to which PASNY seeks to acquire right of way; and (2) to collect scales and data for age and growth studies.

Schoharie Creek was surveyed in three zones:

1. Area between Schoharie and Lower B-G Reservoirs (2 miles);
2. Area between Lower B-G Reservoir and the iron bridge north of Breakabeen to be inundated by the proposed Breakabeen project (4.4 miles);
3. Area between Lower B-G Reservoir and the iron bridge north of Breakabeen which is not to be inundated by the proposed Breakabeen project (3.6 miles).

Lower B-G Reservoir and Schoharie Creek were observed for 12 hours on one weekday and one weekend day each week. Sampling days were chosen at random, with the restriction that each weekday be sampled only once per month and each weekend day be sampled at least twice per month. At the Lower B-G Reservoir one person surveyed fishermen at the boat ramp. Schoharie Creek was surveyed by one person who drove to all likely fishing sites.

Data collected on Lower B-G Reservoir in August and September are summarized in Table 57. Of the 88 fishermen counted, 95% were non-residents (viz. not residing in or around Gilboa, North Blenheim or Breakabeen). In contrast to the usual situation, smallmouth bass were taken but largemouth bass were not caught in August; in September the reverse occurred. These bass comprised the largest percentage of the catch in both August and September. The brown bullhead and pumpkinseed also represented a large part of the catch. Fishermen were more numerous and more successful in August than in September.

Data collected from the three zones of Schoharie Creek are summarized in Tables 58-60. Most of the fishermen surveyed were non-residents. Fishing success was greatest during July which was the first month of the survey. Fishermen success was about equal in the zone between the Reservoirs and the zone to be inundated by the proposed Breakabeen project; approximately one fish was caught per hour. Fishermen in the zone which is not to be inundated were the least successful; the catch was 0.34 fish per hour. This is probably a result of fishermen being unable to fish the better pools of this zone, namely the spillway pool and FAPs 1 and 2. These pools are on PASNY land and were not open to the public in summer 1973.

The greatest number of fishermen (122) was observed between Schoharie Reservoir and Lower B-G Reservoir, which is the shortest of the three zones surveyed (2 miles). Only 95 fishermen were counted in the area to be inundated by the proposed Breakabeen project although this zone is more than twice as long (4.4 miles).

Between Schoharie Reservoir and the Lower B-G Reservoir, catches were mainly pumpkinseed, rock bass and smallmouth bass. Between Lower B-G Reservoir and the iron bridge north of Breakabeen, smallmouth bass and rock bass were mostly caught. Pumpkinseed comprised a much smaller proportion of the catches in the area below Lower B-G Reservoir than from that above. Walleye comprised a small percentage of the catches in all zones of Schoharie Creek; no walleye were recorded by the census in Lower B-G Reservoir.

Fishermen were observed at eight of the 14 FAPs in the study area (Table 61). FAPs 11, 10, 6 and 8 were used most. FAPs 11 and 10 are above Lower B-G Reservoir and will not be affected by the proposed Breakabeen project. FAPs 6 and 8 will be inundated by the project. Fishermen success was greatest (1.15 fish per hour) at FAP 11 which is located at the Gilboa iron bridge.

SUMMARY

1. In 1973 twenty-eight fishes were found in Lower Blenheim-Gilboa Reservoir. Pumpkinseed, golden shiner, bluntnose minnow and carp were most abundant.
2. Largemouth bass, smallmouth bass, walleye, chain pickerel, yellow perch, rock bass and pumpkinseed provided a fishery.
3. Thirteen fishes, all of which occurred in Lower B-G Reservoir, were collected in Upper B-G Reservoir.
4. Yellow perch and pumpkinseed were abundant.
5. The catch per unit effort in the Upper B-G Reservoir increased substantially between June and October. This indicated an increase in the number of fish present as pumping continued.
6. Twenty-eight fishes were collected in Schoharie Creek.
7. Pumpkinseed, rock bass, and fallfish were common.
8. Fallfish were more abundant in the Creek below than in Lower B-G Reservoir.
9. In the southern (upper) part of the Creek, largemouth bass were more abundant than smallmouth bass; north of Fishing Access Pool (FAP) 2, smallmouth bass were much more abundant than largemouth bass.
10. Walleye, yellow perch and chain pickerel were collected in Schoharie Creek.

11. The major tributaries of Schoharie Creek contained trout.
12. Fishes collected in the warmer lower stretches of the tributaries were those typical of Schoharie Creek.
13. The headwaters of the Platter Kill, Mine Kill and Panther Creek contained brook trout.
14. Brown trout were found in the West Kill above a natural barrier dam which is located approximately 0.6 miles from its mouth.
15. Mill Creek (a tributary of the West Kill) had a large population of brook trout.
16. Rainbow trout were common in Cole Hollow Creek below a natural barrier dam (1.5 miles from the mouth). Only brook trout were collected above the dam.
17. The Keyser Kill contained brook trout and brown trout.
18. One brook trout was collected in a 1000-ft section of Trib 98A. One rainbow trout and one brown trout were collected in a 500-ft section of Trib 101.
19. Small maximum size and poor growth rate were established for brook trout and rainbow trout collected in Cole Hollow Creek. Rainbow trout were larger than brook trout of the same age.

20. The condition factor "K" was determined for largemouth bass, smallmouth bass, walleye, rock bass, and pumpkinseed collected in Lower B-G Reservoir and Schoharie Creek.
21. The "K" factor increased as the length of the fish increased except for smallmouth bass collected in Schoharie Creek. The latter experienced a decrease in "K" as they grew longer.
22. The rate of increase in "K" was greater for fish collected in Lower B-G Reservoir; they had a greater weight at a given length than fish collected in Schoharie Creek.
23. Limited data indicate that both largemouth and smallmouth bass were longer at a given age in Lower B-G Reservoir than in Schoharie Creek.
24. Walleye, pumpkinseed, rock bass, and yellow perch grew at the same rate in the same two locations.
25. Stomach contents of largemouth bass, smallmouth bass, walleye, chain pickerel, yellow perch, pumpkinseed, and rock bass were determined.
26. For all fishes except pumpkinseed, a greater percentage of fish collected in Lower B-G Reservoir contained food organisms than did those species collected in Schoharie Creek in the same time period.
27. Walleye and chain pickerel fed almost exclusively on smaller fish in both Lower B-G Reservoir and Schoharie Creek.
28. The other fishes examined from Schoharie Creek fed more on aquatic insects than on fish. The reverse was true in Lower B-G Reservoir.

29. Bottom organisms were generally abundant in Schoharie Creek and its tributaries except in the area below B-G Dam.
30. Schoharie Creek contained many individuals in relatively few orders while the tributaries contained many individuals in many orders (systematic).
31. The tributaries were a more stable environment and contained bottom organisms typical of trout streams.
32. Fish populations were present in Lower B-G Reservoir for approximately one and a half growing seasons.
33. When pumping and generating started in B-G Reservoirs in June, increased fluctuation in water level and turbidity occurred. The fishes in the Lower B-G Reservoir had already spawned at this time.
34. The dissolved oxygen content was generally good in B-G Reservoirs in the summer of 1973. Some reduction of oxygen in bottom waters occurred in August and September.
35. No thermal stratification was recorded during the summer when up to two (of four) units were operating.
36. Carbon dioxide, alkalinity, and hardness (total and calcium) values were low; this indicates low fertility and a limited capacity to support aquatic life.

37. A creel census was conducted on Lower B-G Reservoir in August and September and on Schoharie Creek in July through September.
38. Fisherman success in all areas was greatest in the first month of the survey.
39. Most of the fishermen surveyed were non-residents.
40. Eighty-eight fishermen using Lower B-G Reservoir caught an average of 0.46 fish per hour. The brown bullhead, largemouth bass, smallmouth bass, and pumpkinseed comprised the greatest proportion of the catch.
41. On Schoharie Creek the best catches were in the zone between Schoharie and Lower B-G Reservoirs and in the zone below Lower B-G Reservoir which is to be inundated by the proposed Breakabeen project . At each location fishermen caught an average of almost one fish per hour in the three months sampled.
42. The largest number of fishermen was counted in the shortest zone surveyed, viz. Schoharie Creek between Schoharie and Lower B-G Reservoirs.
43. Fishermen were observed at eight of the 11 FAPs 11, 10, 6, and 8. FAPs 11 and 10 are above Lower B-G Reservoir and will not be affected by the proposed Breakabeen project. FAPs 6 and 8 will be inundated by the proposed reservoir.

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Table 1. Common and scientific names of fishes collected.

Common Name	Scientific Name
	<u>Trouts - Salmonidae</u>
Rainbow trout	Salmo gairdneri
Brown trout	Salmo trutta
Brook trout	Salvelinus fontinalis
	<u>Pikes - Esocidae</u>
Chain pickerel	Esox niger
	<u>Minnnows - Cyprinidae</u>
Stoneroller	Campostoma anomalum
Redside dace	Clinostomus elongatus
Carp	Cyprinus carpio
Cutlips minnow	Exoglossum maxillingua
Golden shiner	Notemigonus crysoleucas
Satinfin shiner	Notropis analostanus
Common shiner	Notropis cornutus
Spottail shiner	Notropis hudsonius
Rosyface shiner	Notropis rubellus
Bluntnose minnow	Pimephales notatus
Blacknose dace	Rhinichthys atratulus
Longnose dace	Rhinichthys cataractae
Creek chub	Semotilus atromaculatus
Fallfish	Semotilus corporalis
	<u>Suckers - Catostomidae</u>
White sucker	Catostomus commersoni
Northern hog sucker	Hypentelium nigricans
Northern redhorse	Moxostoma macrolepidotum
	<u>Catfishes - Ictaluridae</u>
Brown bullhead	Ictalurus nebulosus
Stonecat	Noturus flavus
	<u>Sunfishes - Centrarchidae</u>
Rock bass	Ambloplites rupestris
Redbreast sunfish	Lepomis auritus
Green sunfish	Lepomis cyanellus
Pumpkinseed	Lepomis gibbosus
Bluegill	Lepomis macrochirus
Smallmouth bass	Micropterus dolomieu
Largemouth bass	Micropterus salmoides
	<u>Perches - Percidae</u>
Greenside darter	Etheostoma blennioides
Fantail darter	Etheostoma flabellare
Johnny darter	Etheostoma nigrum
Yellow perch	Perca flavescens
Logperch	Percina caprodes
Walleye	Stizostedion vitreum vitreum
	<u>Sculpins - Cottidae</u>
Slimy sculpin	Cottus cognatus

Table 2. Fishes collected in 1973 in Schoharie Creek between Schoharie Reservoir and Lower Blenheim
Gilboa Reservoir.

Date	18 Jul	19 Jul	19 Jul	13 Aug	13 Aug				
Hours	21½	22	22	24½	24½	24	24	49	49
Fishing Access Point	10	10	10	11	11	11	10	10A	10A
Col. No.	70	71	72	73	74	75	76	97	103
Gear*	G	T	T	T	T	T	T	T	T
Area (sq ft)	-	-	-	-	-	-	-	-	-
Pumpkinseed	-	9	5	3	13	1	19	2	10
Rock bass	2	2	1	-	3	1	-	-	2
Brown bullhead	-	1	-	-	-	-	-	-	-
White sucker	1	-	-	-	1	-	-	-	-
Cutlips minnow	-	-	-	-	-	-	-	-	-
Fallfish	4	-	-	-	-	-	-	-	-
Walleye	-	-	-	-	-	-	-	-	-
Smallmouth bass	-	-	-	-	-	-	-	-	-
Yellow perch	-	1	-	-	3	-	-	-	-
N. hog sucker	1	-	-	-	-	-	-	-	-
Redbreast sunfish	-	-	-	-	1	-	-	-	-
Logperch	-	-	-	-	-	-	-	-	-
Johnny darter	-	-	-	-	-	-	-	-	-
Golden shiner	-	-	-	-	-	-	-	-	-
Number	8	13	6	3	21	2	19	2	12
Species	4	4	2	1	5	2	1	1	2

Date	15 Aug	15 Aug	16 Aug	14 Sept	14 Sept				
Hours	48	48	24	-	-				
FAP	10A	10A	10A	10	10				
Col. No.	103	104	105	121	122				
Gear	T	T	G	E	E	total	total	total	total
Area (sq ft)	-	-	-	2500	2500	G	T	E	all gear
Pumpkinseed	14	4	-	99	226	-	80	325	405
Rock bass	5	-	1	22	36	3	14	58	75
Brown bullhead	6	-	1	2	2	1	7	4	12
White sucker	6	-	-	-	3	1	7	3	11
Cutlips minnow	-	-	-	-	11	-	-	11	11
Fallfish	2	-	1	-	2	5	2	2	9
Walleye	7	-	1	-	-	1	7	-	8
Smallmouth bass	-	-	-	1	5	-	-	6	6
Yellow perch	2	-	-	-	-	-	6	-	6
N. hog sucker	1	-	-	-	1	1	1	1	3
Redbreast sunfish	-	-	-	-	1	-	1	1	2
Logperch	-	-	-	2	-	-	-	2	2
Johnny darter	-	-	-	-	2	-	-	2	2
Golden shiner	-	-	-	1	-	-	-	1	1
Number	43	4	4	127	289	12	125	416	553
Species	8	1	4	6	10	6	9	12	14

G = gill net; T = trap net; E = electrofishing.

Table 3. Fishes collected in 1973 in Schoharie Creek between Lower Blenheim-Gilboa Reservoir and the iron bridge north of Breakabeen.

Date	19 Jun	6 Aug	13 Aug	13 Aug	19 Sept	19 Sept					
Hours	-	24	22	42½	65	48	66	52½	53	-	-
FAP	**	1	Sp***	Sp	Sp	1	1	2	2	Sp	2
Col. No.	42	84	85	88	89	90	91	99	100	123	124
Gear*	E	T	T	T	T	T	T	T	T	E	E
Area(sq. ft.)	5000	-	-	-	-	-	-	-	-	4500	2500
Pumpkinseed	-	-	1	1	3	-	-	16	18	17	27
Fallfish	-	-	-	-	-	-	-	-	-	-	3
Rock bass	5	-	1	-	1	-	-	-	-	7	2
Bluntnose minnow	-	-	-	-	-	-	-	1	-	1	-
White sucker	-	3	1	1	-	2	1	-	-	4	1
Rosyface shiner	1	-	-	-	-	-	-	-	-	-	-
Walleye	-	-	-	3	5	1	1	1	2	1	1
Fantail darter	7	-	-	-	-	-	-	-	-	1	1
Cutlips minnow	15	-	-	-	-	-	-	-	-	-	-
Satinfin shiner	-	-	-	-	-	-	-	-	-	-	-
Brown bullhead	-	-	-	-	1	1	1	4	2	1	-
Redbreast sunfish	-	-	-	-	-	-	-	-	-	-	-
Common shiner	-	-	-	-	-	-	-	-	-	-	-
Greenside darter	-	-	-	-	-	-	-	-	-	-	-
Largemouth bass	-	-	-	-	-	-	-	2	1	-	4
N. hog sucker	-	-	-	-	-	-	-	-	-	-	-
Yellow perch	-	-	2	4	-	1	-	-	-	-	-
Logperch	-	-	-	-	-	-	-	-	-	3	3
Johnny darter	-	-	-	-	-	-	-	-	-	1	2
N. redbhorse	-	4	-	-	-	-	1	-	-	-	-
Smallmouth bass	-	-	-	-	-	-	-	-	-	-	-
Carp	-	-	-	-	-	-	-	-	-	2	1
Golden shiner	-	1	-	-	-	-	-	-	-	1	-
Longnose dace	-	-	-	-	-	-	-	-	-	-	-
Chain pickerel	-	-	-	-	-	-	-	1	1	-	-
Bluegill	-	-	-	-	1	-	-	1	-	-	-
Blacknose dace	-	-	-	-	-	-	-	-	-	-	-
Creek chub	-	-	-	-	-	-	-	-	-	-	-
Number	28	8	5	9	11	5	4	26	24	39	45
Species	4	3	4	4	5	4	4	7	5	11	10

Date	10 Oct	10 Oct	10 Oct	10 Oct	12 Oct	12 Oct	total		total		total
Hours	45½	46½	46½	46	-	-	E	E	E	E	all gear
FAP	8	8	9	9	8	8	-	-	-	-	-
Col. No.	143	144	145	146	147	148	-	-	-	-	-
Gear	T	T	T	T	E	E	-	-	-	-	-
Area (sq. ft.)	-	-	-	-	800	800	-	-	-	-	-
Pumpkinseed	2	2	-	1	7	32	83	44	127	-	-
Fallfish	-	1	-	-	99	1	103	1	104	-	-
Rock bass	1	3	5	19	-	21	35	31	66	-	-
Bluntnose minnow	-	-	-	-	40	8	49	-	49	-	-
White sucker	4	3	4	6	5	-	10	25	35	-	-
Rosyface shiner	-	-	-	-	23	1	25	-	25	-	-
Walleye	-	1	-	-	-	-	2	14	16	-	-
Fantail darter	-	-	-	-	1	5	15	-	15	-	-
Cutlips minnow	-	-	-	-	-	-	15	-	15	-	-
Satinfin shiner	-	-	-	-	14	1	15	-	15	-	-
Brown bullhead	-	3	-	-	-	-	1	12	13	-	-
Redbreast sunfish	-	-	-	4	-	8	8	4	12	-	-
Common shiner	-	-	-	-	12	-	12	-	12	-	-
Greenside darter	-	-	-	-	10	-	10	-	10	-	-
Largemouth bass	-	-	-	-	-	1	5	3	8	-	-
N. hog sucker	1	1	-	-	4	1	5	2	7	-	-
Yellow perch	-	-	-	-	-	-	-	7	7	-	-
Logperch	-	-	-	-	-	-	6	-	6	-	-
Johnny darter	-	-	-	-	2	-	5	-	5	-	-
N. redbhorse	-	-	-	-	-	-	-	5	5	-	-
Smallmouth bass	-	-	-	-	-	4	4	-	4	-	-
Carp	-	-	-	-	-	-	3	-	3	-	-
Golden shiner	-	-	-	-	-	-	1	1	2	-	-
Longnose dace	-	-	-	-	2	-	2	-	2	-	-
Chain pickerel	-	-	-	-	-	-	-	2	2	-	-
Bluegill	-	-	-	-	-	-	-	2	2	-	-
Blacknose dace	-	-	-	-	1	-	1	-	1	-	-
Creek chub	-	-	-	-	1	-	1	-	1	-	-
Number	8	14	9	30	221	83	416	153	569	-	-
Species	4	7	2	4	14	11	24	14	28	-	-

E = electrofishing; T = trap net. **Location = riffle located 1000 ft south of FAP 4A. ***Sp = spillway pool.

Table 4. Dead fishes observed by three people in three hours on 19 and 20 June 1973 on the Lower Blenheim-Gilboa Reservoir.

Species	Length (mm)	Condition
Brown bullhead	252	fungus on left gill
Brown bullhead	243	decaying
Brown bullhead	239	fungus on fins
Brown bullhead	238	normal
Brown bullhead	234	decaying, covered with fungus
Brown bullhead	233	broken dorsal spine
Brown bullhead	233	normal, bruise on side
Brown bullhead	231	normal
Brown bullhead	230	black blotches on body
Brown bullhead	224	normal;
Brown bullhead	222	decaying
Brown bullhead	206	decaying
Brown bullhead	200	decaying
Pumpkinseed	71	normal
Pumpkinseed	61	normal
Pumpkinseed	60	thin
Carp	76	decaying

Table 5. Fishes collected by seine and electrofishing in Lower Blenheim-Gilboa Reservoir.

Date Col. No.	26 Apr	30 Apr	21 May	22 May	22 May	24 May	24 May	30 May	Total
	14	15	16	18	19	23	24	31	
Golden shiner	1	1107	3	58	703	48	-	-	1920
Bluntnose minnow	65	97	1300	128	18	83	2	8	1701
Pumpkinseed	4	38	36	-	20	722	-	21	841
Common shiner	97	108	30	3	200	35	10	-	483
Creek chub	54	45	28	3	212	35	-	-	377
Rosyface shiner	-	20	3	5	73	41	7	-	149
Satinfin shiner	13	2	35	35	8	35	-	-	128
Blacknose dace	4	22	15	7	1	30	20	-	99
Carp	-	37	-	1	-	-	-	-	38
White sucker	-	6	6	-	-	1	5	8	26
Longnose dace	-	-	1	-	-	-	23	-	24
Cutlips minnow	-	6	7	-	1	5	1	3	23
Fallfish	-	-	2	-	17	-	-	-	19
Rock bass	-	1	-	-	-	-	-	15	16
Smallmouth bass	1	-	1	-	-	-	-	8	10
Fantail darter	-	2	4	-	-	-	-	-	6
Stoneroller	1	2	-	-	-	2	-	-	5
Spottail shiner	-	3	-	-	-	-	-	-	3
Largemouth bass	-	1	-	-	1	-	-	-	2
Number	240	1497	1471	240	1254	1037	68	63	5870
Species	9	16	14	8	11	11	7	6	19

Table 6 Number and biomass of fishes collected on 17 August 1973 by block net in Mine Kill Cove of Lower Blenheim-Gilboa Reservoir.

Species	Abundance	Biomass (lb)
Pumpkinseed	4400	71.09
Carp	393	119.91
White sucker	186	42.35
Golden shiner	184	5.72
Smallmouth bass	72	10.94
Fallfish	69	13.88
Brown bullhead	57	19.39
Largemouth bass	55	11.03
Rock bass	49	3.55
N. hog sucker	30	12.16
Bluntnose minnow	23	0.08
Logperch	12	0.19
Walleye	7	0.36
Common shiner	7	0.14
Yellow perch	6	0.65
Redbreast sunfish	3	0.39
Creek chub	3	0.13
Cutlips minnow	1	0.06
	5557	312.02

Table 7. Fishes collected from April to October 1973 by experimental gill net at ten stations in Lower Blenheim-Gilboa

Station	1	2	3	4	5	6	7	8	9	10	Total
Carp	39	81	24	19	13	43	39	4	21	12	295
Pumpkinseed	15	13	8	1	15	10	17	27	14	39	159
Brown bullhead	-	5	1	-	3	38	25	1	11	5	89
Stonecat	9	6	25	5	10	1	5	1	3	9	74
White sucker	-	12	8	2	1	7	15	5	7	1	58
Yellow perch	10	3	1	2	11	3	2	5	4	9	50
Largemouth bass	5	8	2	-	9	10	7	2	2	1	46
Fallfish	1	11	3	8	5	8	1	3	2	1	43
Chain pickerel	4	4	3	-	1	4	2	-	2	-	20
Walleye	1	1	2	1	2	5	-	1	3	-	16
Golden shiner	2	3	-	1	2	4	1	-	1	-	14
Rock bass	3	-	1	1	-	1	3	-	-	1	10
N. hog sucker	-	1	4	-	-	2	-	1	-	-	8
Smallmouth bass	-	1	-	-	1	2	-	-	-	-	4
Brown trout	-	-	1	-	-	-	-	-	-	-	1
Number	89	149	83	40	73	138	117	50	70	78	887
Species	10	13	13	9	12	14	11	10	11	9	15

* July - nets set for 48 hours; all other months - nets set for 24 hours.

Table 8. Fishes collected from April to October 1973 by experimental gill net in Lower Blenheim-Gilboa Reservoir in 1920 hours (192 hours at each of ten stations).

Month	Apr	May	Jun	Jul	Aug	Sept	Oct	Total
Carp	1	7	51	143	70	17	6	295
Pumpkinseed	13	13	14	12	9	89	9	159
Brown bullhead	50	29	7	3	-	-	-	89
Stonecat	36	5	15	16	1	1	-	74
White sucker	25	13	2	8	4	3	3	58
Yellow perch	1	-	2	5	7	12	23	50
Largemouth bass	-	2	6	13	5	15	5	46
Fallfish	13	4	15	7	1	1	2	43
Chain pickerel	6	3	7	3	-	1	-	20
Walleye	4	2	6	2	1	1	-	16
Golden shiner	-	2	3	7	1	-	1	14
Rock bass	3	-	4	-	3	-	1	10
N. hog sucker	4	-	1	-	-	2	1	8
Smallmouth bass	-	-	1	1	2	-	-	4
Brown trout	-	-	-	1	-	-	-	1
Number	156	80	134	221	104	142	50	887
Species	11	10	14	14	11	11	8	15

* In July nets were set for 48 hours. In other months they were set for 24 hours.

Table 9. Fishes collected from April to October 1973 by trap net, gill net, block net, seine, and electrofishing in Blenheim-Gilboa Reservoirs.

	Lower Reservoir		Upper Reservoir	
	number	percent	number	percent
Pumpkinseed	6890	47.51	88	26.43
Golden shiner	2124	14.65	1	0.30
Bluntnose minnow	1726	11.90	-	-
Carp	1008	6.95	19	5.71
Common shiner	490	3.38	1	0.30
Brown bullhead	433	2.99	42	12.61
Creek chub	381	2.63	-	-
White sucker	276	1.90	4	1.20
Rosyface shiner	149	1.03	-	-
Fallfish	135	0.93	1	0.30
Satinfin shiner	128	0.88	-	-
Rock bass	126	0.87	1	0.30
Largemouth bass	110	0.75	2	0.60
Yellow perch	104	0.72	135	40.54
Blacknose dace	99	0.68	-	-
Smallmouth bass	89	0.61	-	-
Stonecat	75	0.52	5	1.50
N. hog sucker	38	0.26	-	-
Cutlips minnow	24	0.17	-	-
Longnose dace	24	0.17	-	-
Walleye	23	0.16	-	-
Chain pickerel	21	0.14	-	-
Lóg perch	12	0.08	-	-
Fantail darter	6	0.04	-	-
Stoneroller	5	0.03	-	-
Spottail shiner	3	0.02	-	-
Redbreast sunfish	3	0.02	-	-
Brown trout	1	0.01	33	9.91
N. redbhorse	-	-	1	0.30
Number	14503		333	
Species	28		13	

Table 10. Fishes collected by trap net in 1973 in Lower Blenheim-Gilboa Reservoir.

Date	21	21	22	22	25	5	5	5	6	6	6	6	18	18	18
	Jun	Jun	Jun	Jun	Jun	Jul	Jul	Jul	Jul	Jul	Jul	Jul	Sept	Sept	Sept
Hours	48	48	48	48	21.9	22.5	20.5	21.25	71.5	73	74	74	47	47	47
Col. No.	44	45	46	47	50	58	59	60	61	62	63	63	129	130	130
															Total
Pumpkinseed	147	6	336	416	87	51	2	26	5	70	146	30	168	1490	
Brown bullhead	51	13	25	82	1	-	4	22	-	3	84	-	2	287	
Carp	6	43	2	150	25	-	4	17	1	3	30	1	-	282	
Rock bass	2	1	-	1	4	2	-	2	-	4	32	-	3	51	
Yellow perch	3	25	-	7	1	-	-	-	3	2	4	-	3	48	
Largemouth bass	-	1	-	-	2	-	-	1	-	-	1	1	1	7	30
Golden shiner	-	-	-	-	1	1	2	-	-	-	1	-	1	6	
White sucker	1	-	-	-	-	-	1	2	-	-	-	1	1	6	
Fallfish	-	-	-	1	3	-	-	-	-	-	-	-	-	4	
Smallmouth bass	-	-	-	-	3	-	-	-	-	-	-	-	-	3	
Bluntnose minnow	1	-	-	1	-	-	-	-	-	-	-	-	-	2	
Chain pickerel	-	-	-	-	-	-	-	-	-	-	-	-	1	1	
Stonecat	-	-	-	-	-	1	-	-	-	-	-	-	-	1	
Creek chub	-	-	-	-	-	1	-	-	-	-	-	-	-	1	
Number	211	89	363	658	127	56	13	70	9	82	298	34	179	2189	
Species	7	6	3	7	9	5	5	6	3	5	7	5	7	14	

Table 11. Fishes collected in 1973 with an experimental gill net in Upper Blenheim-Gilboa Reservoir.

Date	19 Jun	19 Jun	21 Jun	21 Jun	11 Jul	11 Jul	13 Aug	13 Aug	13 Aug	27 Sept	28 Sept	15 Oct	15 Oct	Total
Hours	24	24	23.5	24	24	23.5	45	46.5	24	17.5	24	23.5	23.5	
Col. No.	43	43	none	none	69	none	96	none	101	139	140	153	none	
Carp	-	-	-	-	1	-	3	-	2	-	-	-	-	6
White sucker	-	-	-	-	-	-	-	-	-	-	-	1	3	4
Stonecat	1	1	-	-	-	-	1	-	-	-	1	-	-	4
Brown bullhead	-	-	-	-	-	-	-	-	-	1	2	-	-	3
Yellow perch	-	-	-	-	-	-	-	-	-	1	-	-	1	2
Largemouth bass	-	-	-	-	-	-	-	-	-	-	-	2	-	2
N. redbhorse	-	-	-	-	-	-	-	-	1	-	-	-	-	1
Fallfish	-	-	-	-	-	-	-	-	-	-	1	-	-	1
Number	1	1	0	0	1	0	4	0	3	2	4	3	4	23
Species	1	1	0	0	1	0	2	0	2	2	3	2	2	8

Table 12. Fishes collected in 1973 by trap net in Upper Blenheim-Gilboa Reservoir.

Date	20 Jun	20 Jun	9 Jul	9 Jul	9 Jul	24 Sept	24 Sept	24 Sept	24 Sept	15 Oct	15 Oct	15 Oct	15 Oct	17 Oct	17 Oct	Total
Hours	48	48	48	78.5	72	72	72	72	97	97	97	47	47	50	49.75	
Co. No.	none	43	none	66	none	135	136	137	138	149	150	151	158	156	157	
Yellow perch	-	-	-	-	-	62	4	3	14	8	22	1	-	-	19	133
Pumpkinseed	-	-	-	2	-	41	8	1	10	14	1	1	-	1	9	88
Brown bullhead	-	-	-	-	-	15	-	-	-	-	6	-	17	-	1	39
Redbreast sunfish	-	-	-	-	-	33	-	-	-	-	-	-	-	-	-	33
Carp	-	-	-	3	-	3	-	-	-	-	6	-	-	1	-	13
Stonecat	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Rock bass	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1
Common shiner	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Golden shiner	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Number	0	1	0	6	0	154	12	4	24	24	35	2	17	2	29	310
Species	0	1	0	3	0	5	2	2	2	4	4	2	1	2	3	9

Table 13. Fishes collected in 1973 by electrofishing in the Platter Kill (Trib 108) and Trib 105 of Schoharie Creek.

Tributary	108			Total	105
	28 Aug	28 Aug	28 Aug		2 May
Date	28 Aug	28 Aug	28 Aug		2 May
Station*	1	2	3		1
Col. No.	112	110	111		none
Length (ft)	250	250	250		500
Creek chub	125	-	-	125	-
Slimy sculpin	1	59	22	82	-
Brook trout	-	-	6	6	-
Pumpkinseed	-	2	-	2	-
Blacknose dace	-	-	-	-	2
Number	126	61	28	215	2
Species	2	2	2	4	1

* Trib 108: 1. at road crossing $\frac{1}{2}$ mile east of Flat Creek; 2. at first road crossing near mouth; 3. at road crossing at Trib 2. Trib 105: 1. at road between Rt. 30 and Blenheim-Gilboa Dam.

Table 14. Fishes collected in 1973 by electrofishing in the Mine Kill (Trib 106 of Schoharie Creek).

Date	14 Aug	14 Aug	23 Aug	23 Aug	Total
	Station*	2	3	4	
Station*	1	2	3	4	
Col. No.	93	92	109	108	
Length (ft)	250	500	500	250	
Blacknose dace	184	120	492	96	892
Creek chub	165	15	213	99	492
White sucker	146	1	151	6	304
Common shiner	37	-	81	1	119
Redside dace	4	-	4	-	8
Brook trout	-	-	-	3	3
Largemouth bass	-	-	1	-	1
Number	536	136	942	205	1819
Species	5	3	6	5	7

* 1. at Decker Road crossing; 2. at Rt. 30 crossing; 3. at Shew Hollow Road crossing; 4. at N. Blenheim Road crossing

Table 15. Fishes collected in 1973 by electrofishing in the West Kill (Trib 104 of Schoharie Creek).

Date	10 Jul	11 Jul	12 Jul	12 Jul	
Station*	1	2	3	4	
Col. No.	64	65	none	none	
Length (ft)	500	500	250	250	Total
White sucker	46	58	-	-	104
Blacknose dace	20	18	2	15	55
Creek chub	17	16	-	2	35
Longnose dace	18	13	-	-	31
Common shiner	9	19	-	-	28
Brown trout	3	10	-	-	13
Brook trout	-	-	9	1	10
Brown bullhead	3	6	-	-	9
Pumpkinseed	-	-	2	3	5
Golden shiner	2	1	-	-	3
Slimy sculpin	-	3	-	-	3
Number	118	144	13	21	296
Species	8	9	3	4	11

* 1. midway between Tribs 4 and 5; 2. midway between Tribs 5 and 6; 3. at third bridge from mouth in Mill Creek (Trib 1); 4. at first bridge above mouth in Mill Creek.

Table 16. Fishes collected in 1973 by electrofishing in Tribs 103, 101, and 100 of Schoharie Creek.

Trib	103		101		100
Date	17 Apr	8 Jun	28 Mar	16 Apr	
Station*	1	2	1	1	
Col. No.	4	35	1	3	
Length (ft)	500	250	500	750	Total
Creek chub	44	14	58	11	1
Blacknose dace	4	5	9	2	3
White sucker	8	-	8	2	3
Common shiner	4	-	4	-	64
Stoneroller	1	-	1	-	-
Brown trout	-	-	-	1	-
Rainbow trout	-	-	-	1	-
Bluntnose minnow	-	-	-	-	-
Fantail darter	-	-	-	-	38
Satinfin shiner	-	-	-	-	8
Fallfish	-	-	-	-	5
Rock bass	-	-	-	-	4
Brown bullhead	-	-	-	-	2
Numbers	61	19	80	17	129
Species	5	2	5	5	11

* Trib 103: 1. at road near mouth; 2. 3000 ft. above road near mouth.; Trib 101: 1. at Rt. 30 bridge; Trib 100: 1. at mouth.

Table 17. Fishes collected in 1973 by electrofishing in Cole Hollow Creek (Trib 99 of Schoharie Creek).

Date	23 Mar	27 Mar	13 Apr	16 May	6 Jun	13 Jun	26 Jun	
Station*	1	2	3	4	5	4	6	
Col. No.	none	none	none	none	none	none	none	
Length (ft)	430	250	-**	300	500	250	500	Total
Rainbow trout	-	-	-	6	-	3	39	48
Brook trout	10	5	-	-	28	-	4	47
Blacknose dace	-	-	-	1	-	-	12	13
Chain pickerel	-	-	3	-	-	-	-	3
Number	10	5	3	7	28	3	55	111
Species	1	1	1	2	1	1	3	4

* 1. above first bridge below Trib 2A.; 2. below first bridge below Trib 2A.; 3. 1/4 mile above entrance to Schoharie Creek.; 4. above Bear Ladder Road crossing.; 5. 1/8 mile above Trib 3.; 6. below Bear Ladder Road crossing.

** Angling

Table 18. Fishes collected in 1973 by electrofishing in Trib 98A and the Keyser Kill (Trib 97 of Schoharie Creek).

Trib	98A		97		
Date	9 Apr		7 Jun		12 Jun
Station*	1		1		2
Col. No.	2		34		37
Length (ft)	1000		600		500
					Total
Fallfish	41	-	-	-	-
White sucker	12	-	-	-	-
Rosyface shiner	8	-	-	-	-
Common shiner	8	2	-	-	2
Golden shiner	7	-	-	-	-
Bluntnose minnow	4	17	-	-	17
Creek chub	3	5	5	-	10
Brook trout	1	-	1	-	1
Fantail darter	1	9	-	-	9
Blacknose dace	1	-	25	-	25
Longnose dace	-	5	-	-	5
Pumpkinseed	-	1	1	-	2
N. hog sucker	-	1	-	-	1
Green sunfish	-	1	-	-	1
Brown trout	-	-	1	-	1
Number	86	41	33		74
Species	10	8	5		10

* Trib 98A. 1. at entrance to Schoharie Creek ; Trib 97. 1. at Rt. 30 bridge ; 2. at Guinea Road bridge.

Table 19. Fishes collected in 1973 by electrofishing in Panther Creek (Trib 95 of Schoharie Creek).

Date	6 Jun	8 Jun	14 Jun	14 Jun	15 Jun	15 Jun	6 Jul	
Station*	1	2	3	4	5	6	7	
Col. No.	33	36	38	39	40	none	none	
Length (ft)	250	500	500	500	500	500	250	Total
Blacknose dace	138	41	91	61	145	-	2	478
Creek chub	-	20	18	16	17	-	1	72
Brook trout	-	-	1	2	18	12	-	33
Fantail darter	-	10	-	-	-	-	2	12
Longnose dace	-	8	-	-	-	-	3	11
Common shiner	-	2	4	-	-	-	-	6
Smallmouth bass	-	1	-	-	-	-	1	2
White sucker	-	1	-	-	-	-	-	1
Pumpkinseed	-	-	1	-	-	-	-	1
Number	138	83	115	79	180	12	9	616
Species	1	7	5	3	3	1	5	9

- * 1. at Boucks Falls Road crossing in Trib 1.; 2. at Rt. 30 bridge.; 3. between Tribs 2 and 3 ;
 4. at first bridge above Trib 2 in House Creek (Trib 3).; 5. at first bridge on Trib 6 ;
 6. between Tribs 4 and 5 ; 7. at first road crossing creek above Rt. 30.

Table 20. Summary of fishes collected in 1973 by electrofishing in tributaries of Schoharie Creek.

Trib	108	106	105	104	103	101	100	99	98A	97	95	Total
Blacknose dace	-	892	2	55	9	2	3	13	1	42	478	1497
Creek chub	125	492	-	35	58	11	1	-	3	10	72	807
White sucker	-	304	-	104	8	2	3	-	12	-	1	434
Common shiner	-	119	-	28	4	-	64	-	8	2	6	231
Brook trout	6	3	-	10	-	-	-	47	1	1	33	101
Slimy sculpin	82	-	-	3	-	-	-	-	-	-	-	85
Rainbow trout	-	-	-	-	-	1	-	48	-	-	-	49
Longnose dace	-	-	-	31	-	-	-	-	-	5	11	47
Fallfish	-	-	-	-	-	-	4	-	41	-	-	45
Bluntnose minnow	-	-	-	-	-	-	38	-	4	-	-	42
Fantail darter	-	-	-	-	-	-	8	-	1	9	12	30
Brown trout	-	-	-	13	-	1	-	-	-	1	-	15
Pumpkinseed	2	-	-	5	-	-	-	-	-	2	1	10
Golden shiner	-	-	-	3	-	-	-	-	7	-	-	10
Brown bullhead	-	-	-	9	-	-	1	-	-	-	-	10
Rosyface shiner	-	-	-	-	-	-	-	-	8	-	-	8
Redside dace	-	8	-	-	-	-	-	-	-	-	-	8
Satinfish shiner	-	-	-	-	-	-	5	-	-	-	-	5
Chain pickerel	-	-	-	-	-	-	-	3	-	-	-	3
Smallmouth bass	-	-	-	-	-	-	-	-	-	-	2	2
Rock bass	-	-	-	-	-	-	2	-	-	-	-	2
N. hog sucker	-	-	-	-	-	-	-	-	-	1	-	1
Stoneroller	-	-	-	-	1	-	-	-	-	-	-	1
Green sunfish	-	-	-	-	-	-	-	-	-	1	-	1
Largemouth bass	-	1	-	-	-	-	-	-	-	-	-	1
Number	215	1819	2	296	80	17	129	111	86	74	616	3445
Species	4	7	1	11	5	5	10	4	10	10	9	25

Table 21. Mean total length by month of each age group of rainbow trout and brook trout collected in May through July 1973 in Cole Hollow Creek (Trib 99 of Schoharie Creek).

Age Group ¹	Fish	1+		2+		3+	
		Rainbow	Brook	Rainbow	Brook	Rainbow	Brook
May	M L ²	105.75	-	167.50	-	-	-
	S D ³	25.13	-	21.92	-	-	-
	R ⁴	88-143	-	152.83	-	-	-
	N ⁵	4	-	2	-	-	-
Jun	M L	121.59	119.73	157.57	145.33	190.00	192.00
	S D	11.71	25.31	13.87	23.03	7.21	-
	R	97-145	91-195	138-194	122-189	182-196	-
	N	17	15	21	9	3	1
Jul	M L	-	-	164.00	-	225.00	-
	S D	-	-	-	-	-	-
	R	-	-	-	-	-	-
	N	-	-	2	-	1	-

1. 1+ represents fish in second growing season, 2+ represents fish in third growing season, etc.
 2. M L = mean length (mm). 3. S D = standard deviation. 4. R = range (mm). 5. N = number of fish.

Table 22. Total number of fish collected in 1973 in Blenheim-Gilboa Reservoirs, Schoharie Creek, and its tributaries.

	B-G Reservoirs	Schoharie Creek	Tributaries	Total
Pumpkinseed	6978	532	10	7520
Golden shiner	2125	3	10	2138
Bluntnose minnow	1726	49	42	1817
Blacknose dace	99	1	1497	1597
Creek chub	381	1	807	1189
Carp	1027	3	-	1030
White sucker	280	46	434	760
Common shiner	491	12	231	734
Brown bullhead	475	25	10	510
Fallfish	136	113	45	294
Rock bass	127	141	2	270
Yellow perch	239	13	-	252
Rosyface shiner	149	25	8	182
Satinfin shiner	128	15	5	148
Largemouth bass	112	8	1	121
Smallmouth bass	89	10	2	101
Brook trout	-	-	101	101
Slimy sculpin	-	-	85	85
Stonecat	80	-	-	80
Longnose dace	24	2	47	73
Fantail darter	6	15	30	51
Cutlips minnow	24	26	-	50
Redbreast sunfish	36	14	-	50
N. hog sucker	38	10	1	49
Rainbow trout	-	-	49	49
Walleye	23	24	-	47
Chain pickerel	21	2	3	26
Logperch	12	8	-	20
Brown trout	1	-	15	16
Greenside darter	-	10	-	10
Redside dace	-	-	8	8
Johnny darter	-	7	-	7
N. redhorse	1	5	-	6
Stoneroller	5	-	1	6
Spottail shiner	3	-	-	3
Bluegill	-	2	-	2
Green sunfish	-	-	1	1
Number	14836	1122	3445	19403

Table 23. Mean total length (mm) of each age group of largemouth bass collected by month in 1973 in Lower Blenheim-Gilboa Reservoir (L R) and Schoharie Creek (S C).

Age Group ¹	Location	0+		1+		2+		3+		4+	
		L R	S C	L R	S C	L R	S C	L R	S C	L R	S C
May	M L ²	-	-	-	-	-	-	236.00	-	-	-
	S D ³	-	-	-	-	-	-	73.54	-	-	-
	R ⁴	-	-	-	-	-	-	184-288	-	-	-
	N ⁵	-	-	-	-	-	-	2	-	-	-
Jun	M L	-	-	-	-	-	-	215.00	-	-	-
	S D	-	-	-	-	-	-	-	-	-	-
	R	-	-	-	-	-	-	-	-	-	-
	N	-	-	-	-	-	-	1	-	-	-
Jul	M L	-	-	141.00	-	166.40	152.00	-	-	-	-
	S D	-	-	-	-	23.91	18.38	-	-	-	-
	R	-	-	-	-	135-195	139-165	-	-	-	-
	N	-	-	1	-	5	2	-	-	-	-
Aug	M L	60.00	-	142.65	78.00	182.13	-	300.00	229.67	322.50	-
	S D	-	-	14.35	-	22.94	-	28.79	37.63	22.16	-
	R	-	-	96-162	-	138-240	-	299-335	200-272	300-347	-
	N	1	-	23	1	32	-	5	3	4	-
Sept	M L	-	-	77.00	-	217.81	-	245.14	-	-	-
	S D	-	-	-	-	36.32	-	32.70	-	-	-
	R	-	-	-	-	173-285	-	192-280	-	-	-
	N	-	-	1	-	16	-	7	-	-	-
Oct	M L	-	-	-	76.17	208.75	-	339.00	-	-	-
	S D	-	-	-	10.57	36.67	-	-	-	-	-
	R	-	-	-	56-84	178-261	-	-	-	-	-
	N	-	-	-	6	4	-	1	-	-	-

Table 24. Mean total length (mm) collected by month in 1973 of each age group of smallmouth bass in Lower Blenheim-Gilboa Reservoir (L R) and Schoharie Creek (S C).

Age Group ¹	Location	0+		1+		2+		3+		4+	
		L R	S C	L R	S C	L R	S C	L R	S C	L R	S C
May	M L ²	57.33	-	77.50	-	-	-	-	-	-	-
	S D ³	4.04	-	3.54	-	-	-	-	-	-	-
	R ⁴	55-62	-	75-80	-	-	-	-	-	-	-
	N ⁵	3	-	2	-	-	-	-	-	-	-
Jun	M L	-	-	-	-	-	-	250.00	-	327.00	-
	S D	-	-	-	-	-	-	-	-	-	-
	R	-	-	-	-	-	-	-	-	-	-
	N	-	-	-	-	-	-	1	-	1	-
Jul	M L	-	-	-	-	250.40	230.88	302.00	272.50	-	-
	S D	-	-	-	-	55.97	18.74	-	18.19	-	-
	R	-	-	-	-	181-315	195-247	-	247-290	-	-
	N	-	-	-	-	5	8	1	4	-	-
Aug	M L	-	-	137.00	-	211.62	184.33	243.83	265.83	328.25	-
	S D	-	-	24.55	-	37.51	42.36	43.23	18.99	2.87	-
	R	-	-	100-248	-	155-290	136-215	196-310	234-286	324-330	-
	N	-	-	54	-	37	3	6	6	4	-
Sept	M L	-	62.00	-	114.50	212.33	180.33	251.00	-	-	-
	S D	-	-	-	28.99	31.37	34.85	-	-	-	-
	R	-	-	-	94-135	189-248	143-212	-	-	-	-
	N	-	1	-	2	3	3	1	-	-	-
Oct	M L	-	82.75	-	-	-	-	-	-	-	-
	S D	-	6.60	-	-	-	-	-	-	-	-
	R	-	74-90	-	-	-	-	-	-	-	-
	N	-	4	-	-	-	-	-	-	-	-

1. 0+ represents a fish in first growing season; 1+ in its second growing season, etc.; 2. M L = mean length (mm); 3. S D = standard deviation.; 4. R = range (mm). 5. N = number of fish.

Table 25. Mean total length (mm) of each age group of walleye collected by month in 1973 in Lower Blenheim-Gilboa Reservoir (L R) and Schoharie Creek (S C).

Age Group ¹ Location	0+		1+		2+		3+		4+	
	L R	S C	L R	S C	L R	S C	L R	S C	L R	S C
Apr M L ² S ₄ D ³ R ₄ N ⁵	-	-	233.33	-	285.00	-	-	-	-	-
	-	-	11.02	-	-	-	-	-	-	-
	-	-	224-244	-	-	-	-	-	-	-
	-	-	3	-	1	-	-	-	-	-
May M L S D R N	-	-	232.00	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-
	-	-	1	-	-	-	-	-	-	-
Jun M L S D R N	-	-	264.50	-	-	-	-	417.00	-	-
	-	-	6.36	-	-	-	-	21.38	-	-
	-	-	260-269	-	-	-	-	400-441	-	-
	-	-	2	-	-	-	-	3	-	-
Jul M L S D R N	-	-	262.67	-	319.00	321.00	-	410.00	-	-
	-	-	19.22	-	-	-	-	-	-	-
	-	-	242-280	-	-	-	-	-	-	-
	-	-	3	-	1	1	-	1	-	-
Aug M L S D R N	140.29	127.00	-	287.50	260.00	319.93	414.00	424.00	-	-
	9.67	-	-	53.03	5.66	43.23	-	124.45	-	-
	129-152	-	-	250-325	256-264	279-431	-	336-512	-	-
	7	1	-	2	2	15	1	2	-	-
Sept M L S D R N	-	156.50	-	-	-	-	430.00	-	-	-
	-	27.58	-	-	-	-	-	-	-	-
	-	137-176	-	-	-	-	-	-	-	-
	-	2	-	-	-	-	1	-	-	-
Oct M L S D R N	-	-	-	-	-	-	-	-	-	565.00
	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	1

Table 26. Mean total length (mm) of each age group of yellow perch collected by month in 1973 in Lower Blenheim-Gilboa Reservoir (L R) and Schoharie Creek (S C).

Age Group ¹ Location	1+		2+		3+	
	L R	S C	L R	S C	L R	S C
Jun M L ² S ₄ D ³ R ₄ N ⁵	89.00	-	182.00	-	231.00	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	1	-	1	-	1	-
Jul M L S D R N	142.00	-	165.33	170.00	-	235.00
	47.62	-	10.33	-	-	-
	88-178	-	142-183	-	-	-
	3	-	21	1	-	1
Aug M L S D R N	119.00	161.00	182.12	166.80	-	199.80
	-	-	13.61	23.38	-	16.10
	-	-	152-200	140-204	-	184-235
	1	1	17	5	-	5
Sept M L S D R N	-	-	86.07	-	197.00	-
	-	-	14.54	-	-	-
	-	-	146-199	-	-	-
	-	-	14	-	1	-
Oct M L S D R N	193.00	-	195.90	-	270.00	-
	-	-	6.27	-	-	-
	-	-	186-208	-	-	-
	1	-	20	-	1	-

1. 1+ represents fish in second growing season, 2+ represents fish in third growing season, ect.;
2. N L = mean length (mm); 3. S D = standard deviation.; 4. R = range (mm); 5. N = number of fish.

Table 27. Mean total length (mm) of each age group of pumpkinseed collected by month in 1973 in Lower Blenheim-Gilboa Reservoir (L R) and Schoharie Creek (S C).

Age Group ¹	Location	0+		1+		2+		3+		4+		5+	
		L R	S C	L R	S C	L R	S C	L R	S C	L R	S C	L R	S C
Apr	M L ²	-	-	52.33	-	117.00	-	134.25	-	133.00	-	-	-
	S D ³	-	-	8.03	-	-	-	7.29	-	3.00	-	-	-
	R ⁴	-	-	35-66	-	-	-	123-146	-	130-136	-	-	-
	N ⁵	-	-	42	-	1	-	8	-	3	-	-	-
May	M L	-	-	43.40	-	114.67	-	127.33	-	-	-	-	-
	S D	-	-	6.22	-	8.50	-	4.62	-	-	-	-	-
	R	-	-	32-97	-	105-121	-	122-130	-	-	-	-	-
	N	-	-	687	-	3	-	3	-	-	-	-	-
Jun	M L	-	-	69.04	-	-	-	128.67	-	140.67	-	-	-
	S D	-	-	13.61	-	-	-	10.78	-	13.80	-	-	-
	R	-	-	38-99	-	-	-	114-141	-	125-151	-	-	-
	N	-	-	834	-	-	-	6	-	3	-	-	-
Jul	M L	-	-	76.33	80.40	144.56	-	150.31	-	151.47	-	159.00	-
	S D	-	-	12.02	10.84	9.06	-	6.31	-	13.69	-	-	-
	R	-	-	54-105	59-105	126-157	-	140-166	-	121-169	-	-	-
	N	-	-	215	49	16	-	26	-	15	-	1	-
Aug	M L	-	-	80.77	78.21	138.65	109.33	143.35	153.75	135.67	156.00	-	154.00
	S D	-	-	17.62	14.43	16.99	12.06	13.37	8.66	9.95	-	-	-
	R	-	-	32-131	62-107	75-166	98-122	105-171	144-165	122-147	-	-	-
	N	-	-	352	29	49	3	20	4	9	1	-	1
Sept	M L	-	41.00	81.43	80.48	123.49	102.00	134.13	-	150.00	-	-	-
	S D	-	7.07	18.93	8.76	8.82	4.47	13.42	-	9.90	-	-	-
	R	-	36-46	54-127	56-107	106-143	95-108	120-157	-	143-157	-	-	-
	N	-	2	138	323	43	6	8	-	2	-	-	-
Oct	M L	-	42.10	-	80.88	-	-	-	157.50	-	-	-	-
	S D	-	6.44	-	16.71	-	-	-	8.96	-	-	-	-
	R	-	30-50	-	53-117	-	-	-	146-166	-	-	-	-
	N	-	10	-	26	-	-	-	4	-	-	-	-

1. 1+ represents fish in second growing season, 2+ represents fish in third growing season, etc.;
 2. M L = mean length (mm); 3. S D = standard deviation; 4. R = range (mm); 5. N = number of fish.

Table 28. Mean total length (mm) of each age group of rock bass collected by month in 1973 in Lower Blenheim-Gilboa Reservoir (L R) and Schoharie Creek (S C).

Age Group ¹	Location	1+		2+		3+		4+		5+		6+		7+	
		L R	S C	L R	S C	L R	S C	L R	S C	L R	S C	L R	S C	L R	S C
Apr	M L ²	45	-	137.50	-	-	-	-	-	-	-	254.00	-	-	-
	S D ³	-	-	2.12	-	-	-	-	-	-	-	-	-	-	-
	R ⁴	-	-	136-139	-	-	-	-	-	-	-	-	-	-	-
	N ⁵	1	-	2	-	-	-	-	-	-	-	1	-	-	-
May	M L	44.36	-	96.00	-	-	-	-	-	-	-	-	-	-	-
	S D	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	N	1	-	1	-	-	-	-	-	-	-	-	-	-	-
Jun	M L	-	50.00	-	117.00	141.00	-	148.00	-	-	189.00	-	230.00	-	-
	S D	-	-	-	-	-	-	-	-	-	5.66	-	-	-	-
	R	-	-	-	-	-	-	-	-	-	185-193	-	-	-	-
	N	-	1	-	1	1	-	1	-	-	2	-	1	-	-
Jul	M L	60.67	68.00	132.94	123.60	149.14	149.88	171.50	181.50	213.00	193.00	-	202.00	-	-
	S D	4.72	-	8.80	14.94	12.90	20.88	6.95	15.16	23.31	14.14	-	-	-	-
	R	52-68	-	116-145	100-137	133-175	124-177	163-180	165-201	179-235	183-203	-	-	-	-
	N	21	1	16	5	14	8	4	6	5	2	-	1	-	-
Aug	M L	61.16	69.00	142.43	136.00	162.80	173.00	-	183.33	-	206.40	-	223.50	-	-
	S D	8.02	-	7.55	9.85	15.09	19.16	-	31.02	-	16.13	-	6.36	-	-
	R	46-76	-	125-154	128-147	149-188	160-195	-	153-215	-	190-229	-	219-228	-	-
	N	25	1	14	3	5	3	-	3	-	5	-	2	-	-
Sept	M L	60.00	71.70	165.00	123.46	-	140.42	-	163.00	-	208.00	-	-	-	-
	S D	5.66	10.15	-	10.33	-	14.21	-	-	-	1.41	-	-	-	-
	R	56-64	62-110	-	102-146	-	117-167	-	-	-	207-209	-	-	-	-
	N	2	23	1	28	-	12	-	1	-	2	-	-	-	-
Oct	M L	-	75.20	-	124.25	-	153.69	-	183.33	-	190.40	-	-	-	230.00
	S D	-	5.37	-	10.05	-	9.78	-	18.34	-	17.85	-	-	-	-
	R	-	68-86	-	113-135	-	140-177	-	169-204	-	168-220	-	-	-	-
	N	-	10	-	4	-	13	-	3	-	10	-	-	-	1

1. 1+ represents fish in second growing season, 2+ represents fish in third growing season, etc.;
 2. M L = mean length (mm) ; 3. S D = standard deviation ; 4. R = range (mm) ; 5. N = number of fish.

Table 29. Length frequency distribution of largemouth bass collected in 1973 in Lower Blenheim-Gilboa Reservoir.

Total length (mm)	Frequency						
	Apr	May	Jun	Jul	Aug	Sept	Oct
40-49					1		
50-59							
60-69					2		
70-79	1	1					
80-89							
90-99		1	1	1	1		
100-109							
110-119			1				
120-129		1	1		2		
130-139				1	4		
140-149				1	10		
150-159					8		
160-169			1	1	9		
170-179			2		7	2	1
180-189		1	1		6	3	
190-199				3	5	3	1
200-209					1	4	1
210-219			1		3	1	
220-229					1	1	
230-239					1	1	
240-249					1	1	
250-259					1	1	
260-269		1			1		1
270-279							
280-289		1			1		
290-299					1		
300-309				1	3		
310-319							
320-329							
330-339					1		1
Number	1	6	8	8	69	17	5

Table 30. Length frequency distribution of smallmouth bass collected in 1973 in Lower Blenheim-Gilboa Reservoir.

Total length (mm)	Frequency				
	Apr	May	Jun	Jul	Aug
50-59	1	1			
60-69		1			
70-79		1			1
80-89		2	1		
90-99		2			
100-109					
110-119			1		4
120-129			1		6
130-139		1			9
140-149		1			13
150-159					8
160-169					1
170-179		1			9
180-189					3
190-199					2
200-209					
210-219					4
220-229					7
230-239					
240-249					
250-259					
260-269					2
270-279					1
280-289					
290-299					2
300-309					
310-319					
320-329			1		1
330-339					1
Number	1	10	4	0	74

Table 31. Length frequency distribution of yellow perch collected in 1973 in Lower Blenheim-Gilboa Reservoir.

Total length (mm)	Frequency					
	Apr	May	Jun	Jul	Aug	Sept
114-117			1			
118-121						
122-125					1	
126-129						
130-133			1	1		
134-137			6			
138-141			6	1		
142-145			4	1		
146-149			3			
150-153				1		
154-157			1			
158-161		1	1	2	1	
162-165			1			
166-169				1		1
170-173			1		1	
174-177					1	
178-181	1		1			1
182-185	1		1			
186-189						1
190-193					2	5
194-197					6	1
198-201					1	5
					1	2
Number	2	1	27	7	14	16

Table 32. Length frequency distribution of pumpkinseed collected in 1973 in Lower Blenheim-Gilboa Reservoir.

Total length (mm)	Frequency					
	Apr	May	Jun	Jul	Aug	Sept
28-31		6				
32-35		49				
36-39	1	239				
40-43	4	457			12	
44-47	4	273	1		66	
48-51	6	176	7	1	176	
52-55	11	55	58	5	309	6
56-59	7	26	119	25	321	4
60-63	4	10	126	38	405	15
64-67	2	2	103	61	314	13
68-71		1	85	58	333	12
72-75		1	95	64	324	16
76-79			91	56	177	9
80-83			57	46	158	14
84-87			47	45	109	5
88-91			19	34	68	9
92-95			6	28	49	5
96-99			4	7	36	4
100-103				11	30	6
104-107		1		1	22	5
108-111				1	15	6
112-115			1	2	10	6
116-119		1			6	14
120-123	2	4	3	1	9	31
124-127	1	1	2	2	5	30
128-131	1	5	2	4	5	14
132-135	4		3	1	3	2
136-139	3	1	5	1	7	
140-143			7	5	14	4
144-147	1	1	3	5	17	
148-151			1	2	12	
152-155			2		8	3
156-159	1					
160-163					1	
164-167					1	
Number	52	1309	847	504	3022	233

Table 33. Length frequency distribution of rock bass collected in 1973 in Lower Blenheim-Gilboa Reservoir.

Total length (mm)	Frequency					
	Apr	May	Jun	Jul	Aug	Sept
34-37		1				
38-41		2				1
42-45	1	5				
46-49		2				
50-53		2		2		2
54-57		1		3		7
58-61				9		6
62-65				2		3
66-69				4		
70-73				2		
74-77				2		1
78-81						1
82-85						
86-89						
90-93						
94-97		1				
98-101			1			
102-105			2			
106-109			2			
110-113						
114-117			1			
118-121				1		
122-125			1	2		1
126-129				1		
130-133				3		
134-137	1			3		3
138-141	1			1		4
142-145			3	1		2
146-149			1	1		7
150-153						4
154-157						2
158-161				4		3
162-165		1			1	1
Number	3	15	11	41	48	2

Table 34. Length frequency distribution of pumpkinseed collected in 1973 in Schoharie Creek.

Total length (mm)	Frequency			
	Jul	Aug	Sept	Oct
30-33			3	2
34-37			1	
38-41			1	1
42-45			1	3
46-49				3
50-53				3
54-57		1	6	
58-61	2		16	
62-65	3	5	51	3
66-69	5	5	37	1
70-73	4	2	58	5
74-77	5	4	40	5
78-81	6	1	21	2
82-85	8	3	19	3
86-89	6	2	18	1
90-93	6	8	24	1
94-97	2	6	32	1
98-101	2	8	24	1
102-105	1	5	16	1
106-109		7	1	
110-113		1		1
114-117				2
118-121				1
122-125		1		
126-129				
130-133				
134-137				
138-141				
142-145		1		
146-149				1
150-153		1		
154-157		3		1
158-161				
162-165		1		1
166-169				1
Number	50	65	369	44

Table 35. Length frequency distribution of rock bass collected in 1973 in Schoharie Creek.

Total length (mm)	Frequency				
	Jun	Jul	Aug	Sept	Oct
30-37					1
38-45		1			2
46-53	1	1			
54-61					
62-69		1	2	14	2
70-77				5	5
78-85				2	2
86-93				1	1
94-101					
102-109		1		2	
110-117	1	2		9	1
118-125		3	4	6	1
126-133				11	1
134-141				8	2
142-149	1		1	3	3
150-157			1	1	5
158-165			2	1	3
166-173				2	3
174-181					4
182-189	1		1		2
190-197	1		1		1
198-205			1	1	1
206-213				1	2
214-221			1		1
222-229					
230-237					1
238-245					
Number	5	9	14	67	44

Table 36. The average total length of pumpkinseed in the second growing season collected from 30 April to 30 May 1973 in Lower Blenheim-Gilboa Reservoir.

Location	Date	Mean Length(mm)	Standard Deviation	Number	Range(mm)
A point 2000 ft. north of boat launching ramp on west shore	30 April	53.26	7.34	38	38-66
Head of Mine Kill Cove	21 May	41.38	5.33	34	32-51
Head of Mine Kill Cove	24 May	42.98	5.68	623	31-66
At shore near boat launching ramp	30 May	57.76	6.47	21	47-73

Table 37. Stomach contents of largemouth bass collected in 1973 in Lower Blenheim-Gilboa Reservoir (L R) Upper Blenheim-Gilboa Reservoir (U R), and Schoharie Creek (S C).

Month Location	Apr		May		June		July		Aug			Sept			Oct			Total	Total	Total
	L R		L R		L R		L R		L R	S C	L R	S C	L R	U R	S C	L R	U R	S C		
Number examined	1		5		8		7		71	3	17	5	3	2	1	112	2		9	
Number with food	1		4		7		5		45	1	8	3	2	-	-	72	-		4	
Percent with food	100		80		88		71		63	33	47	60	67	-	-	64	-		44	
Ave. amount weight in grams of stomach contents	0.01		2.68		2.20		0.51		1.49	2.36	0.55	2.86	0.33	-	-	1.37	-		2.74	
Number containing:																				
Fish	-		3		5		1		1	1	-	1	-	-	-	10	-		2	
Fish remains	-		1		-		4		28	-	8	-	2	-	-	43	-		-	
Veg. matter	-		-		3		-		9	-	-	-	-	-	-	12	-		-	
Crayfish	-		-		-		-		1	-	-	-	-	-	-	1	-		-	
Aquatic insects	-		-		-		-		1	-	-	2	-	-	-	1	-		2	
Miscellaneous	1		-		-		-		2	-	-	-	-	-	-	3	-		-	

Table 38. Stomach contents of smallmouth bass collected in 1973 in Lower Blenheim-Gilboa Reservoir and Schoharie Creek.

Month Location	Apr		May			Jun		Aug		Sept		Oct		Total		Total	
	L	R	L	R	S	C	L	R	L	R	S	C	L	R	S	C	
Number examined	1		10		-		2		74		6		4		87		10
Number with *	-		7		-		1		48		3		3		56		6
%	-		70		-		50		65		50		75		64		60
Number amount (g) of contents	-		2.24		-		0.10		2.04		0.51		1.97		1.75		0.67
Number of fish containing:																	
Fish	-		2		-		1		37		2		-		40		2
Fish matter	-		1		-		-		-		-		2		1		1
Veg. matter	-		1		-		-		2		-		-		3		0
Crayfish	-		-		-		-		6		1		-		6		1
Fly larvae	-		2		-		-		1		1		1		3		2
Other aquatic insects	-		2		-		-		1		1		1		3		2
Miscellaneous	-		1		-		-		1		-		-		2		-

Table 39. Stomach contents of walleye collected in 1973 in Lower Blenheim-Gilboa Reservoir and Schoharie Creek.

Month Location	Apr		May			June		July		Aug			Sept		Oct		Total		Total	
	L	R	L	R	S	C	L	R	L	R	S	C	L	R	S	C	L	R	S	C
Number examined	4		2				6		1		9	11	1	2	1		23		14	
Number with *	1		-				2		-		6	5	1	2	-		10		7	
%	25		-				33		-		67	45	100	100	-		52		50	
Av. amount (g) of contents	-		-				1.58		-		2.63	2.01	0.46	1.33	-		1.62		1.82	
Number of fish containing:																				
Fish	-		-				-		-		6	4	1	2	-		7		6	
Fish matter	1		-				2		-		1	-	-	-			3		1	
Aquatic insects	-		-				-		-		1	-	-	-			1		-	

* Number with food; % Percent with food

Table 40. Stomach contents of chain pickerel collected in 1973 in Lower Blenheim-Gilboa Reservoir and Schoharie Creek.

Month Location	Apr		May		June		July		Aug		Sept		Total		Total	
	L	R	L	R	L	R	L	R	L	R	L	R	L	R	S	C
Number examined	6		4		6		1		3	2		2		22		2
Number with *	5		4		2		1		3	1		2		17		1
%	83		100		33		100		100	50		100		77		50
Av. amount (g) of contents	1.13		0.85		0.18	0.03			0.98	1.20		3.19		1.10		1.20
Number of fish containing:																
Fish	5		3		2		-		-	-		1		11		0
Fish matter	1		1		-		-		3	1		1		6		1
Veg. matter	1		-		-		-		-	-		-		1		-

Table 41. Stomach contents of yellow perch collected in 1973 in Lower Blenheim-Gilboa Reservoir, Upper Blenheim-Gilboa Reservoir, and Schoharie Creek.

Month Location	Apr		June		July		Aug			Sept		Oct		Total		Total		Total		
	L	R	L	R	L	R	L	R	S	C	L	U	R	U	L	R	U	R	S	C
Number examined	1		7		20	3	12	9	15		20	22	20		77		40		12	
Number with *	-		-		3	2	7	-	8		4	9	4		27		8		2	
%	-		-		15	67	58	-	33		20	41	20		35		20		17	
Av. amount (g) of contents	-		-		1.08	0.28	1.63	-	1.64		0.62	0.99	0.24		1.36		0.43		0.27	
Number of fish containing:																				
Fish	-		-		-		-		2		-	3		5		-		-		
Fish matter	-		-		3	1	4	-	1		2	3		11		2		1		
Veg. matter	-		-		-		1	-	-		-	-		1		-		-		
Crayfish	-		-		-		3	-	3		-	2		8		-		-		
Daphnia	-		-		-		-		3		2	1	3	4		5		-		
Fly larvae	-		-		-	1	-		-		-	-		-		-		1		
Other aquatic insects	-		-		-		-		-		-	-	1	-		1		-		

* Number with food; % Percent with food

Table 42. Stomach contents of pumpkinseed collected in 1973 in Lower Blenheim-Gilboa Reservoir, and Schoharie Creek.

Month Location	Apr		May		June		July			Aug		Sept			Oct			Total	Total	Total			
	L	R	L	R	L	R	L	R	U	R	S	C	L	R	U	R	S	C	L	R	U	S	C
Number examined	8		12		9		20	14		20	40		19	20	12		8	11		9	96	31	75
Number with *	8		11		6		6	11		5	15		6	9	10		1	5		4	43	14	40
%	100		92		67		30	79		25	37		32	45	83		12	45		44	45	45	43
Av. amount (g) of contents	1.38		0.66		1.00		0.52	0.84		0.71	0.34		0.77	0.13	0.32		0.53	2.12		0.19	0.84	0.84	0.46
Number of fish containing:																							
Fish matter	3		-		3		2	-		1	-		2	5	-		-	-		1	12	5	1
Veg. matter	1		2		2		-	-		-	-		2	1	-		-	-		-	7	1	-
Crayfish	-		-		-		-	-		1	-		-	-	-		-	-		-	1	-	-
Daphnia	-		-		-		-	-		2	8		3	-	-		-	-		-	5	-	8
Earthworms	-		-		1		-	-		-	-		-	-	-		-	-		-	1	-	-
Aquatic sow bugs	-		-		-		-	2		-	-		-	-	6		-	-		-	-	-	8
Fly larvae	-		-		-		-	-		-	-		-	-	1		-	-		-	-	-	1
Other aquatic insects	6		9		2		3	10		-	-		-	1	6		-	-		3	21	1	19
Miscellaneous	1		4		-		-	7		1	9		-	2	2		1	5		1	6	7	19

Table 43. Stomach contents of rock bass collected in 1973 in Lower Blenheim-Gilboa Reservoir, Upper Blenheim-Gilboa Reservoir, and Schoharie Creek.

Month Location	Apr		May		June		July			Aug		Sept		Oct		Total	Total	Total		
	L	R	L	R	L	R	L	R	U	R	S	C	L	R	L	R	U	S	C	
Number examined	3		2		5	3	22	1		7	19	6	1	71	14		52	1		101
Number with *	1		1		3	3	10	1		3	11	1	1	20	6		27	1		33
%	33		50		60	100	45	100		43	58	17	100	28	43		52	100		100
Av. amount (g) of contents	0.06		1.01		0.55	1.78	1.10	1.06		1.01	3.42	1.57	3.31	0.62	1.06		2.02	1.06		0.87
Number of fish containing:																				
Fish	-		-		-		-	-		8	-		-	-			8	-		-
Fish matter	1		-		1		3	-		-	-		1	-			6	-		-
Veg. matter	-		-		2		-	-		4	-		-	6			6	-		6
Crayfish	-		1		-	2	6	-		4	1		-	6	5		11	-		14
Aquatic sow bugs	-		-		-		-	-		3	-		-	-			-	-		3
Other aquatic insects	1		-		-	3	1	1		2	1		-	8	1		3	1		14
Miscellaneous	-		-		-		-	-		-	-		-	5			-	-		5

* Number with food; % Percent with food

Table 45. Bottom organisms collected in 1973 by "Surber" sample taken at 28 locations* in Tributaries of Schoharie Creek.

Station**	1		2		3		4		5		6		7		8	
Date	26 Jul		26 Jul		7 Aug		7 Aug		26 Jul		26 Jul		26 Jul		8 Aug	
Habitat	rubble	gravel														
Beetles (aquatic)	11	8	8	10	5	6	18	4	-	-	-	-	1	-	9	19
Crayfish, shrimp	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Flies, midges, mosquitoes	1	4	32	2	10	5	9	6	-	-	1	7	-	1	2	5
Fingernail clams, seed shells	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mayflies	10	9	60	5	8	22	8	4	2	-	1	4	3	2	6	8
Bugs (aquatic)	-	-	-	-	-	-	-	-	-	1	-	19	2	7	-	-
Dragonflies, damselflies	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Worms (aquatic)	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Stoneflies	6	7	1	1	37	9	19	2	5	-	-	-	-	2	5	7
Caddis flies	1	4	10	5	38	25	10	4	2	-	5	3	3	7	6	3
Fish, amphibians	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-
Miscellaneous	1	1	1	1	1	-	-	1	1	-	1	1	-	-	-	-
Organisms	30	34	112	24	100	67	64	22	10	6	16	34	9	20	28	42
Orders	6	7	6	6	7	5	5	7	4	2	7	5	4	6	5	5

Station**	9		10		11	12		13		14		15		16	
Date	8 Aug		8 Aug		8 Aug	10 Aug		8 Aug		8 Aug		8 Aug		8 Aug	
Habitat	rubble	gravel	rubble	gravel	silt	rubble	silt	rubble	gravel	rubble	gravel	rubble	gravel	rubble	gravel
Beetles (aquatic)	3	-	1	9	-	11	11	-	-	1	-	-	-	4	2
Crayfish, shrimp	-	-	1	-	1	-	1	-	-	-	-	-	-	-	-
Flies, midges, mosquitoes	-	1	1	3	2	9	-	1	2	-	2	4	3	1	8
Fingernail clams, seed shells	-	-	-	-	2	1	1	-	-	-	-	-	-	-	-
Mayflies	3	-	1	5	-	10	1	4	5	6	6	16	9	33	19
Bugs (aquatic)	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
Dragonflies, damselflies	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-
Worms (aquatic)	-	-	5	-	25	2	-	-	-	-	1	-	-	2	7
Stoneflies	7	1	1	5	-	6	1	2	3	1	4	-	10	-	-
Caddis flies	3	14	1	14	-	39	1	1	8	-	-	3	1	1	8
Fish, amphibians	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	1	1	1	-	5	1	-	-	-	-	-	-	-
Organisms	16	16	12	37	32	78	23	9	18	8	14	24	24	41	44
Orders	4	3	8	6	6	7	8	5	4	3	5	4	5	5	5

* Two habitat types sampled at all locations except Station 11, where only silt habitat was sampled
 ** Station: 1. West Kill at crossing of dirt road 1100 ft. above Rt. 30.; 2. West Kill 2000 ft. above Trib 3.; 3. West Kill between Tribs 4 and 5.; 4. West Kill midway between Tribs 7 and 8.; 5. Betty Brook 700 ft. north of West Kill at dirt road.; 6. Betty Brook at first "y" in road running N-S along brook.; 7. Betty Brook 1000 ft. south of end of dirt road.; 8. Mill Creek at third bridge from mouth.; 9. Mill Creek 2200 ft. west of Trib 2.; 10. Mill Creek 600 ft. west of Trib 4.; 11. Mill Creek 50 ft. east of Trib 6.; 12. Trib 101 at crossing of Rt. 30.; 13. Cole Hollow Creek at crossing of Cole Hollow Road.; 14. Cole Hollow Creek 5000 ft. above Bear Ladder Road.; 15. Cole Hollow Creek at first bridge below Trib 2A.; 16. Cole Hollow Creek 1/8 mile above Trib 5.

Table 45 - (Continued).

Station**	17		18		19		20		21		22		23		24	
	Date	10 Aug	10 Aug	10 Aug	9 Aug	9 Aug	9 Aug	9 Aug	10 Aug	9 Aug	9 Aug	9 Aug	9 Aug	9 Aug	9 Aug	9 Aug
Habitat	rubble	gravel														
Beetles (aquatic)	5	3	15	11	2	18	9	2	1	2	4	8	-	22	36	17
Crayfish, abrimp	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Flies, midges, mosquitoes	1	3	10	10	7	2	5	4	4	2	2	5	-	10	18	17
Fingernail clams, seed shells	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mayflies	7	7	5	31	15	6	51	135	4	7	13	15	1	1	21	7
Bugs (aquatic)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Dragonflies, damselflies	-	-	-	-	-	-	1	-	-	-	-	-	-	1	1	-
Worms (aquatic)	1	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-
Stoneflies	4	4	14	4	4	15	24	18	6	3	-	10	-	7	30	21
Caddis flies	1	1	10	5	5	34	18	7	13	5	20	14	-	7	44	22
Fish, amphibians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	1	-	-	-	1	-	1	-	-	-	-	2	1	2
Organisms	19	18	55	61	33	75	109	166	29	19	39	53	1	50	154	87
Orders	6	5	6	5	5	5	7	5	6	5	4	6	1	7	10	7

Station**	25		26		27		28		Total	
	Date	9 Aug	no.	percent						
Habitat	rubble	gravel	rubble	gravel	rubble	gravel	rubble	gravel		
Beetles (aquatic)	28	8	3	10	5	1	5	1	357	15.0
Crayfish, shrimp	-	-	-	1	-	-	-	-	7	0.3
Flies, midges, mosquitoes	13	5	-	4	11	5	1	4	265	11.1
Fingernail clams, seed shells	-	-	-	-	-	-	-	-	4	0.2
Mayflies	1	-	17	3	9	12	6	4	648	27.1
Bugs (aquatic)	1	-	-	-	-	-	-	-	33	1.4
Dragonflies, damselflies	-	-	-	1	-	-	-	-	9	0.4
Worms (aquatic)	-	4	1	-	-	-	-	-	51	2.1
Stoneflies	15	9	1	14	3	3	10	10	382	16.0
Caddis flies	43	16	7	27	32	5	21	12	589	24.7
Fish, amphibians	-	-	-	1	-	-	-	-	4	0.2
Miscellaneous	3	-	1	1	3	1	3	-	38	1.6
Organisms	104	42	30	62	63	27	46	31	2387	
Orders	7	5	6	9	6	6	6	5		

** Station: 17. Trib 98A 1200 ft. above Bear Ladder Road.; 18. Keyser Kill at Rt. 30 bridge in Breakabeen.; 19. Keyser Kill at Guinea Road bridge.; 20. Keyser Kill 10 ft. east of Trib 4.; 21. Keyser Kill 1000 ft. north of entrance of Black Brook.; 22. Panther Creek at road crossing south of Boucks Falls Falls.; 23. Panther Creek at road crossing 2000 ft. east of West Fulton.; 24. Panther Creek at Looking Glass Road Bridge.; 25. Panther Creek 100 ft. north of Trib 8.; 26. House Creek near road, 3000 ft. north of West Fulton.; 27. House Creek at first road crossing north of West Fulton.; 28. House Creek 10 ft. below entrance of Heather Creek.

Table 46. Temperature data collected in 1973 in Blenheim-Gilboa Reservoirs.

Date (Day)	Lower Reservoir			Upper Reservoir		
	Air	Surface	Bottom	Air	Surface	Bottom
3 May (Thurs)	60 F	55 F	48 F (35')	-	-	-
29 May (Tues)	75 F	58 F	50 F (50')	-	-	-
28 June (Thurs)	80 F	75 F	65 F (60')	-	-	-
30 July (Mon)	85 F	80 F	69 F (60')	-	-	-
16 Aug (Thurs)	-	-	-	74 F	74 F	71 F (50')
20 Aug (Mon)	78 F	76 F	68 F (54')	-	-	-
22 Aug (Wed)	74 F	74 F	73 F (46')	-	-	-
10 Sept (Mon)	75 F	74 F	64 F (56')	53 F	72 F	58 F (68')
27 Sept (Thurs)	75 F	69 F	65 F (60')	66 F	65 F	65 F (50')
8 Oct (Mon)	65 F	63 F	62 F (50')	56 F	62 F	62 F (60')
29 Oct (Mon)	-	-	-	38 F	55 F	54 F (60')
30 Oct (Tues)	52 F	55 F	55 F (50')	-	-	-

Table 47. Temperature data collected in 1973 in Lower Blenheim-Gilboa Reservoir.

Date (Day)	Station #1 ^a		Station #2 ^b		Station #3 ^c	
	Depth	Temp	Depth	Temp	Depth	Temp
20 Aug (Mon)	Surface	76 F	Surface	74 F	Surface	79 F
	10'	76 F	10'	74 F	10'	75 F
	20'	75 F	20'	74 F	20'	73 F
10 Sept (Mon)	Surface	74 F	Surface	73 F	Surface	75 F
	10'	73 F	10'	73 F	10'	73 F
	20'	73 F	20'	73 F	19'*	70 F
8 Oct (Mon)	Surface	63 F	Surface	62 F	Surface	64 F
	10'	63 F	10'	62 F	10'	64 F
	20'	63 F	20'	62 F	-	-

a. Station no. 1= ¼ mile from spillway, 1000 ft. from western shore.; b. Station no. 2= midway between boat ramp and pump house.; c. Station no. 3= middle of reservoir under transmission lines at south end of reservoir.

* Bottom.

Table 48. Turbidity data for 1973 from Blenheim-Gilboa Reservoirs, using an eight inch Secchi disc.

Date (Day)	Lower Reservoir	Upper Reservoir
3 May (Thurs)	48"	-
29 May (Tues)	75"	-
28 June (Thurs)	188" ^{478 cm}	-
30 July (Mon)	32"	-
16 Aug (Thurs)	-	21"
20 Aug (Mon)	25"	-
22 Aug (Wed)	27"	-
10 Sept (Mon)	23"	32"
27 Sept (Thurs)	30"	25"
8 Oct (Mon)	36"	48"
29 Oct (Mon)	-	42"
30 Oct (Tues)	32"	-

Table 49. Summary of daily fluctuations in water level from June through November 1973 in Blenheim-Gilboa Reservoirs.

Month	Lower Reservoir						Upper Reservoir					
	Days level changed		Amount of Fluctuation (feet)				Days level changed		Amount of Fluctuation (feet)			
	Did Occur	Did Not Occur	Min. Fluc.*	Max. Fluc.**	Average Daily Fluc.	Standard Deviation	Did Occur	Did Not Occur	Min. Fluc.*	Max. Fluc.**	Average Daily Fluc.	Standard Deviation
June	28	2	0.2	8.5	1.6	2.0	21	9	0.1	17.1	2.0	3.5
July	28	3	0.2	6.9	4.4	2.9	24	7	0.1	9.0	4.8	3.4
Aug.	27	4	3.9	17.0	9.1	4.5	27	4	3.4	17.6	8.8	4.4
Sept.	28	3	3.3	19.7	9.7	4.2	28	2	3.3	17.1	8.4	3.6
Oct.	29	2	0.7	18.5	11.7	4.6	29	2	0.6	13.3	7.8	3.3
Nov.	29	1	1.8	19.3	11.1	5.2	29	1	1.8	14.6	8.8	3.9

* The least change in water level on any day during the month.

** The greatest change in water level on any day during the month.

Table 50. Hydrogenion (pH) data for 1973 from Blenheim-Gilboa Reservoirs.

Date (Day)	Lower Reservoir		Upper Reservoir	
	Surface	Depth	Surface	Depth
3 May (Thurs)	7.3	7.2 (30')	-	-
29 May (Tues)	7.9	7.3 (30')	-	-
28 June (Thurs)	7.7	7.1 (30')	-	-
30 July (Mon)	7.5	6.9 (50')	-	-
16 Aug (Thurs)	-	-	6.8	6.7 (50')*
20 Aug (Mon)	6.7	6.6 (50')	-	-
10 Sept (Mon)	7.6	7.4 (56')*	8.0	7.3 (68')*
27 Sept (Thurs)	7.3	7.2 (60')*	7.7	7.7 (50')*
8 Oct (Mon)	8.0	7.6 (50')*	7.8	8.3 (60')*
29 Oct (Mon)	-	-	7.6	6.8 (60')*
30 Oct (Tues)	8.2	7.9 (50')*	-	-

Table 51. Dissolved oxygen data for 1973 from Blenheim-Gilboa Reservoirs.

Date (Day)	Lower Reservoir		Upper Reservoir	
	Surface	Depth	Surface	Depth
3 May (Thurs)	14 mg/l	15 mg/l (30')	-	-
29 May (Tues)	13 mg/l	14 mg/l (30')	-	-
28 June (Thurs)	12 mg/l	10 mg/l (30')	-	-
30 July (Mon)	13 mg/l	10 mg/l (50')	-	-
16 Aug (Thurs)	-	-	11 mg/l	3 mg/l (50')*
20 Aug (Mon)	10 mg/l	3 mg/l (50')	-	-
22 Aug (Wed)	11 mg/l	9 mg/l (46')	-	-
10 Sept (Mon)	13 mg/l	1 mg/l (56')*	12 mg/l	0 mg/l (68')*
27 Sept (Thurs)	16 mg/l	8 mg/l (60')*	17 mg/l	16 mg/l (50')*
8 Oct (Mon)	20 mg/l	19 mg/l (50')*	20 mg/l	18 mg/l (60')*
29 Oct (Mon)	-	-	10 mg/l	10 mg/l (60')*
30 Oct (Tues)	11 mg/l	11 mg/l (50')*	-	-

Table 52. Dissolved oxygen data for 1973 from Lower Blenheim-Gilboa Reservoir.

Date (Day)	Station #1 ^a		Station #2 ^b		Station #3 ^c	
	Depth	O ₂	Depth	O ₂	Depth	O ₂
10 Sept (Mon)	Surface	13 mg/l	Surface	13 mg/l	Surface	14 mg/l
	10'	13 mg/l	10'	13 mg/l	10'	14 mg/l
	20'	13 mg/l	20'	13 mg/l	19'*	13 mg/l
8 Oct (Mon)	Surface	20 mg/l	Surface	20 mg/l	Surface	19 mg/l
	10'	20 mg/l	10'	20 mg/l	10'	17 mg/l
	20'	20 mg/l	20'	19 mg/l	-	-

a. Station #1 = ¼ mile from spillway, 1000 ft. from western shore. b. Station #2 = midway between boat ramp and pump house. c. Station #3 = middle of reservoir under transmission lines at south end of reservoir. * Bottom.

Table 53. Carbon dioxide data for 1973 from Blenheim-Gilboa Reservoirs.

Date (Day)	Lower Reservoir		Upper Reservoir	
	Surface	Depth	Surface	Depth
3 May (Thurs)	4 mg/l	4 mg/l (30')	-	-
29 May (Tues)	4 mg/l	5 mg/l (30')	-	-
28 June (Thurs)	2 mg/l	4 mg/l (30')	-	-
30 July (Mon)	2 mg/l	3 mg/l (50')	-	-
16 Aug (Thurs)	-	-	2 mg/l	4 mg/l (50')*
20 Aug (Mon)	2 mg/l	2 mg/l (50')	-	-
10 Sept (Mon)	2 mg/l	2 mg/l (56')*	2 mg/l	2 mg/l (68')*
8 Oct (Mon)	2 mg/l	2 mg/l (50')*	2 mg/l	2 mg/l (60')*
29 Oct (Mon)	-	-	2 mg/l	2 mg/l (60')*
30 Oct (Tues)	2 mg/l	2 mg/l (50')*	-	-

* Bottom.

Table 54. Alkalinity data for 1973 from Blenheim-Gilboa Reservoirs.

Date (Day)	Lower Reservoir		Upper Reservoir	
	Surface	Depth	Surface	Depth
3 May (Thurs)	20 mg/l	20 mg/l (30')	-	-
29 May (Tues)	15 mg/l	15 mg/l (30')	-	-
28 June (Thurs)	13 mg/l	13 mg/l (30')	-	-
30 July (Mon)	20 mg/l	20 mg/l (50')	-	-
16 Aug (Thurs)	-	-	25 mg/l	25 mg/l (50')*
20 Aug (Mon)	20 mg/l	30 mg/l (50')	-	-
10 Sept (Mon)	20 mg/l	50 mg/l (56')*	28 mg/l	30 mg/l (68')*
8 Oct (Mon)	30 mg/l	40 mg/l (50')*	30 mg/l	30 mg/l (60')*
29 Oct (Mon)	-	-	25 mg/l	30 mg/l (60')*
30 Oct (Tues)	40 mg/l	40 mg/l (50')*	-	-

* Bottom.

Table 55. Total hardness data for 1973 from Blenheim-Gilboa Reservoirs.

Date (Day)	Lower Reservoir		Upper Reservoir	
	Surface	Depth	Surface	Depth
3 May (Thurs)	20 mg/l	20 mg/l (30')	-	-
29 May (Tues)	19 mg/l	18 mg/l (30')	-	-
28 June (Thurs)	21 mg/l	25 mg/l (30')	-	-
30 July (Mon)	25 mg/l	25 mg/l (50')	-	-
16 Aug (Thurs)	-	-	27 mg/l	30 mg/l (50')*
20 Aug (Mon)	31 mg/l	35 mg/l (50')	-	-
10 Sept (Mon)	35 mg/l	60 mg/l (56')*	30 mg/l	35 mg/l (68')*
8 Oct (Mon)	35 mg/l	45 mg/l (50')*	35 mg/l	40 mg/l (60')*
29 Oct (Mon)	-	-	35 mg/l	40 mg/l (60')*
30 Oct (Tues)	35 mg/l	40 mg/l (50')*	-	-

* Bottom.

Table 56 Hardness (calcium) data for 1973 from Blenheim-Gilboa Reservoirs.

Date (Day)	Lower Reservoir		Upper Reservoir	
	Surface	Depth	Surface	Depth
3 May (Thurs)	15 mg/l	15 mg/l (30')	-	-
29 May (Tues)	12 mg/l	12 mg/l (30')	-	-
28 June (Thurs)	0 mg/l	18 mg/l (30')	-	-
30 July (Mon)	20 mg/l	20 mg/l (50')	-	-
16 Aug (Thurs)	-	-	20 mg/l	21 mg/l (50')*
20 Aug (Mon)	25 mg/l	28 mg/l (50')	-	-
10 Sept (Mon)	25 mg/l	35 mg/l (56')*	30 mg/l	25 mg/l (68')*
8 Oct (Mon)	30 mg/l	30 mg/l (50')*	30 mg/l	30 mg/l (60')*
29 Oct (Mon)	-	-	25 mg/l	30 mg/l (60')*
30 Oct (Tues)	30 mg/l	35 mg/l (50')	-	-

* Bottom.

Table 57. Creel census data for August and September 1973 from Lower Blenheim-Gilboa Reservoir.

	August	September	Total
Number of Days of census	8	5	13
Fishermen Counted	66	22	88
Fish Caught			
Brown bullhead	20 (28%)	6 (38%)	26 (30%)
Smallmouth bass	25 (35%)	0	25 (29%)
Pumpkinseed	21 (29%)	0	21 (24%)
Largemouth bass	0	10 (62%)	10 (11%)
Fallfish	2 (3%)	0	2 (2%)
Carp	2 (3%)	0	2 (1%)
Rock bass	1 (1%)	0	1 (1%)
Redbreast sunfish	1 (1%)	0	1 (1%)
Total	72	16	88
Hours Fished			
Party	127.57	64.50	192.07
Per Fisherman	1.93	2.93	2.18
Hours Expected to Fish			
Party	35	10	45
Per Fisherman	0.53	0.45	0.51
Fish Caught per hour			
Per fisherman	0.56	0.25	0.46

Table 58. Creel census data for July through September 1973 from Schoharie Creek between Schoharie Reservoir and Lower Blenheim-Gilboa Reservoir.

	July	August	September	Total
Number of Days of Census	8	9	9	26
Fishermen Counted				
Resident	3 (6%)	7 (16%)	0 (0%)	10 (8%)
Non-resident	<u>45 (94%)</u>	<u>37 (84%)</u>	<u>30 (100%)</u>	<u>112 (92%)</u>
Total	48	44	30	122
Fish Caught				
Pumpkinseed	8 (16%)	18 (36%)	11 (58%)	37 (31%)
Rock bass	28 (56%)	3 (6%)	3 (16%)	34 (29%)
Smallmouth bass	5 (10%)	17 (34%)	4 (21%)	26 (22%)
Largemouth bass	5 (10%)	0	1 (5%)	6 (5%)
Yellow perch	2 (4%)	4 (8%)	0	6 (5%)
Redbreast sunfish	0	4 (8%)	0	4 (3%)
Bass sp.	0	3 (6%)	0	3 (3%)
Brown bullhead	1 (2%)	1 (2%)	0	2 (2%)
Logperch	<u>1 (2%)</u>	<u>0</u>	<u>0</u>	<u>1 (1%)</u>
Total	50	50	19	119
Hours Fished				
Party	34.74	54.14	39.71	128.59
Per Fisherman	0.72	1.23	1.32	1.05
Hours Expected to Fish				
Party	58.83	63.35	35.28	157.46
Per Fisherman	1.23	1.44	1.18	1.29
Fish Caught Per Hour Per fisherman	1.44	0.92	0.48	0.93

Table 59. Creel census data for July through September 1973 from Schoharie Creek between Lower Blenheim-Gilboa Reservoir and the iron bridge north of Breakabeen (the area to be inundated by the proposed Breakabeen project).

	July	August	September	Total
Number of Days of Census	8	9	9	26
Fishermen Counted				
Resident	9 (27%)	7 (12%)	0 (0%)	16 (17%)
Non-resident	<u>24</u> (73%)	<u>53</u> (88%)	<u>2</u> (100%)	<u>79</u> (83%)
Total	33	60	2	95
Fish Caught				
Rock bass	11 (20%)	18 (50%)	1 (100%)	30 (33%)
Smallmouth bass	16 (29%)	11 (30%)	0	27 (29%)
Carp	8 (14%)	1 (3%)	0	9 (10%)
Fallfish	6 (11%)	1 (3%)	0	7 (8%)
Pumpkinseed	4 (7%)	1 (3%)	0	5 (5%)
Chain pickerel	2 (4%)	0	0	2 (2%)
Walleye	2 (4%)	0	0	2 (2%)
N. redbhorse	2 (4%)	0	0	2 (2%)
White sucker	1 (2%)	1 (3%)	0	2 (2%)
Bass sp.	0	1 (3%)	0	1 (1%)
Brown bullhead	0	1 (3%)	0	1 (1%)
Largemouth bass	0	1 (3%)	0	1 (1%)
Yellow perch	1 (2%)	0	0	1 (1%)
Redbreast sunfish	1 (2%)	0	0	1 (1%)
Bluegill	<u>1</u> (2%)	<u>0</u>	<u>0</u>	<u>1</u> (1%)
Total	55	36	1	92
Hours Fished				
Party	47.58	59.21	2	108.79
Per Fisherman	1.44	0.09	1	1.15
Hours Expected to Fish				
Party	41.50	84.60	4	130.10
Per Fisherman	1.26	1.41	2	1.37
Fish Caught Per Hour Per Fisherman	1.16	0.60	0.50	0.97

Table 60. Creel census data for July through September 1973 from Schoharie Creek between Lower Blenheim-Gilboa Reservoir and the iron bridge north of Breakabeen (the area which will not be inundated by the proposed Breakabeen project).

	July	August	September	Total
Number of Days of Census	8	9	9	26
Fishermen Counted				
Resident	2 (11%)	3 (21%)	0 (0%)	5 (15%)
Non-resident	<u>16</u> (89%)	<u>11</u> (79%)	<u>1</u> (100%)	<u>28</u> (85%)
Total	<u>18</u>	<u>14</u>	<u>1</u>	<u>33</u>
Fish Caught				
Smallmouth bass	8 (57%)	1 (33%)	0	9 (53%)
Fallfish	3 (21%)	0	0	3 (18%)
Chain pickerel	2 (14%)	1 (33%)	0	3 (18%)
Walleye	1 (7%)	0	0	1 (6%)
Rock bass	<u>0</u>	<u>1</u> (33%)	<u>0</u>	<u>1</u> (6%)
Total	<u>14</u>	<u>3</u>	<u>0</u>	<u>17</u>
Hours Fished				
Party	31.56	17.74	0.50	49.80
Per Fisherman	1.75	1.27	0.50	1.51
Hours Expected to Fish				
Party	37	21.43	0.50	58.73
Per Fisherman	2.06	1.53	0.50	1.79
Fish Caught Per Hour Per Fisherman	0.44	0.17	0	0.34

Table 61. Creel census data for 1973 from Fishing Access Pools in Schoharie Creek.

	July	August	September
FAP 11 - Total Hours Fished	13.06	28.26	9.99
Total Fish Caught	23	28	8
Fish Caught Per Hour	1.76	0.99	0.80
FAP 10 - Total Hours Fished	14.99	16.41	24.51
Total Fish Caught	14	2	11
Fish Caught Per Hour	0.93	0.12	0.45
FAP 4 - Total Hours Fished	-	1.68	-
Total Fish Caught	-	0	-
Fish Caught Per Hour	-	0.00	-
FAP 4a - Total Hours Fished	-	4.34	-
Total Fish Caught	-	3	-
Fish Caught Per Hour	-	0.69	-
FAP 6 - Total Hours Fished	13.91	11.25	2.00
Total Fish Caught	13	4	1
Fish Caught Per Hour	0.93	0.36	0.50
FAP 7 - Total Hours Fished	-	5.84	-
Total Fish Caught	-	3	-
Fish Caught Per Hour	-	0.51	-
FAP 8 - Total Hours Fished	20.56	33.42	-
Total Fish Caught	19	19	-
Fish Caught Per Hour	0.92	0.57	-
FAP 9 - Total Hours Fished	6.25	-	-
Total Fish Caught	6	-	-
Fish Caught Per Hour	0.92	-	-

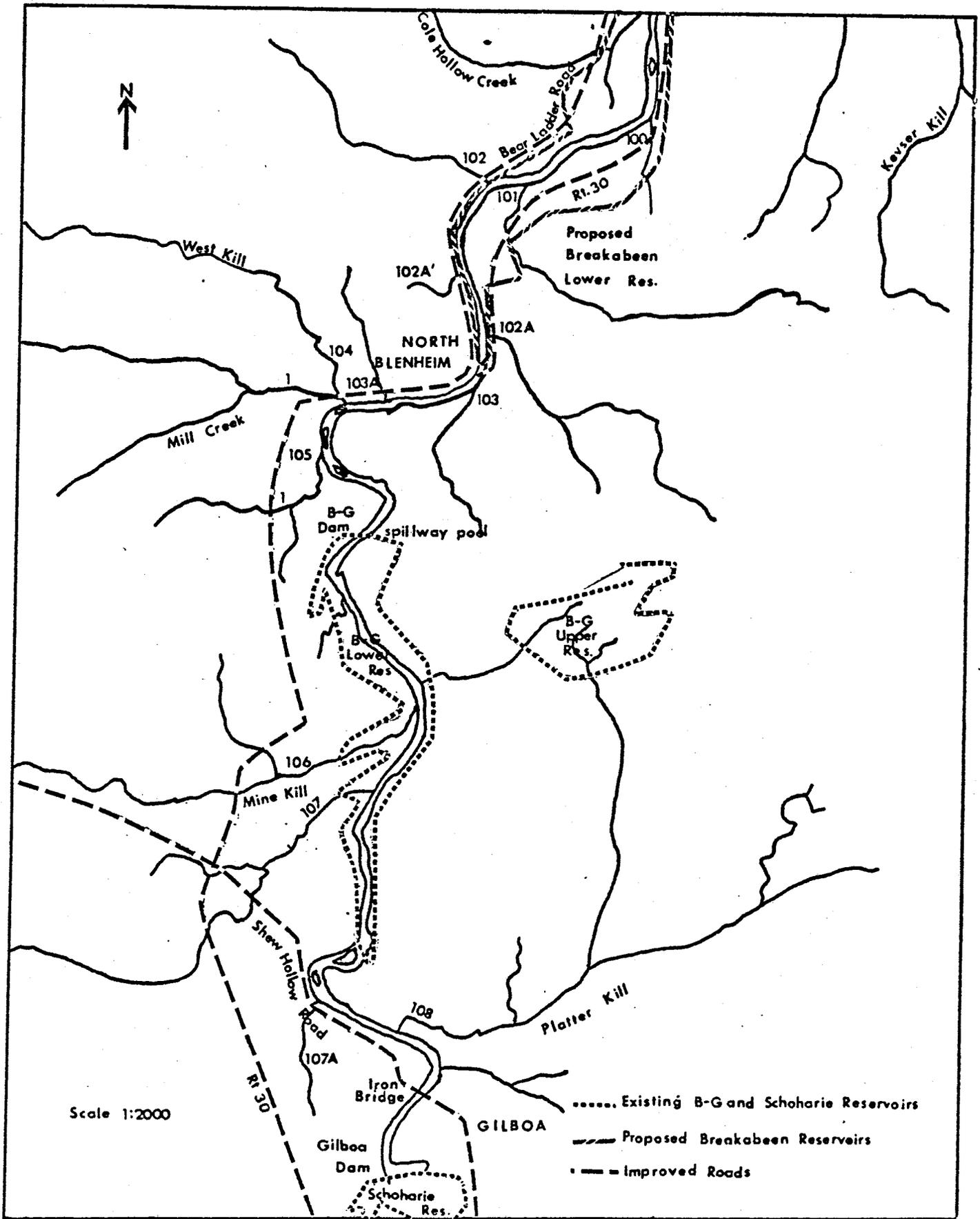


Figure 1. Fishing Access Pools of Schoharie Creek and its tributaries in the area of the Blenheim-Gilboa pumped storage facility and the proposed Breakabeen pumped storage facility.

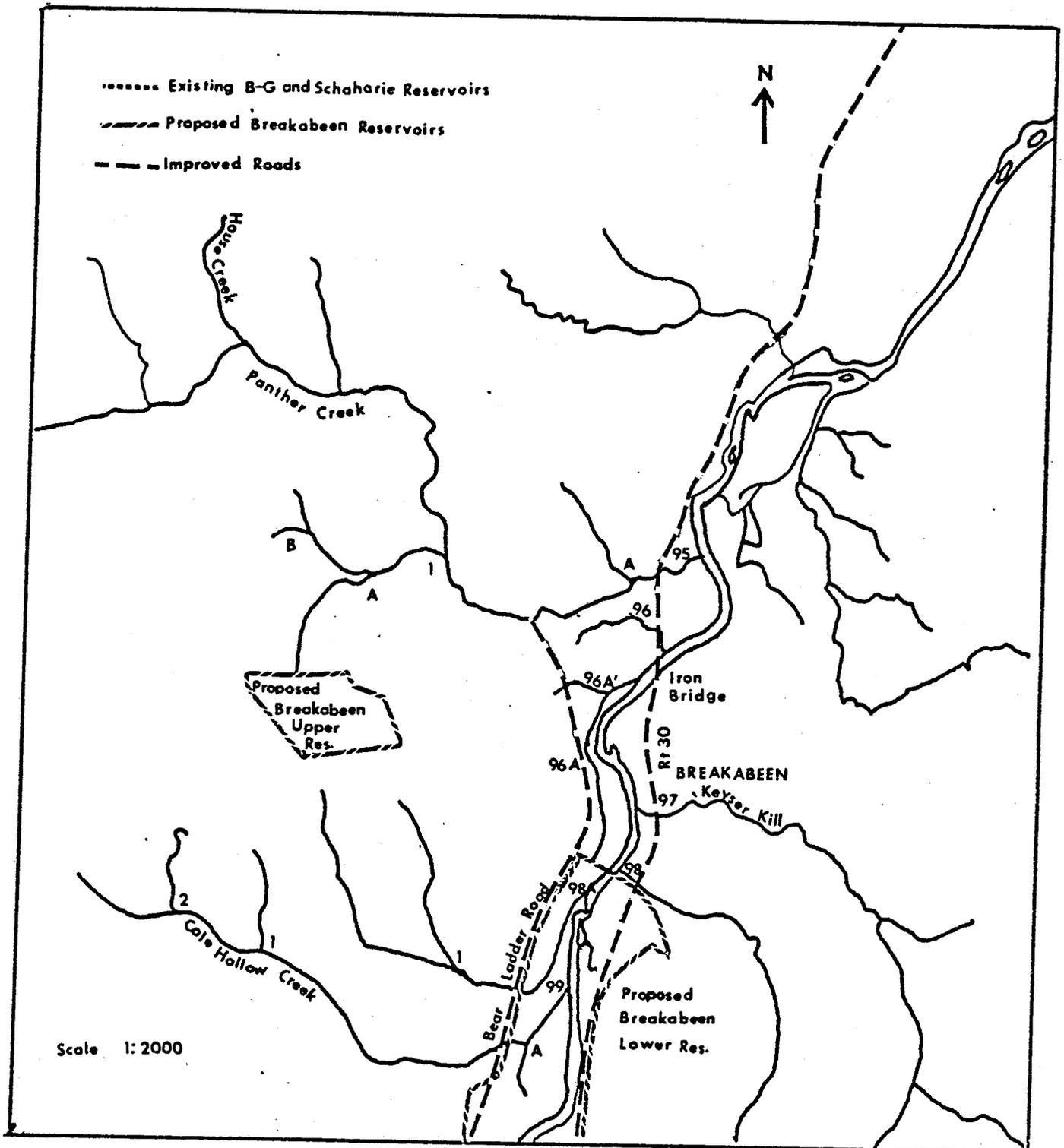


Figure 2. Fishing Access Pools of Schoharie Creek and its tributaries in the area of the proposed Breakabeen pumped storage facility.

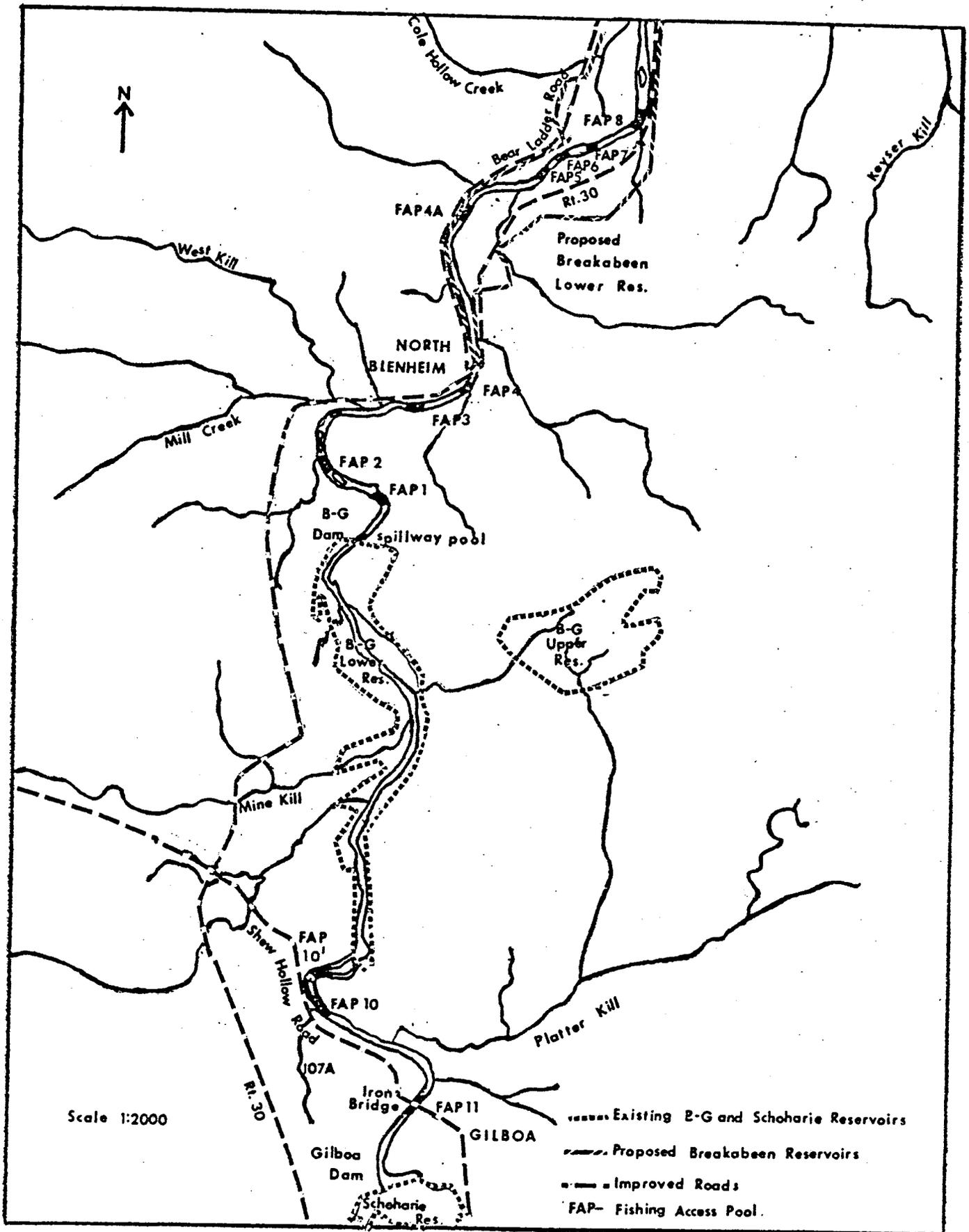


Figure 3. Fishing Access Pools of Schoharie Creek and its tributaries in the area of the Blenheim-Gilboa pumped storage facility and the proposed Breakabeen pumped storage facility.

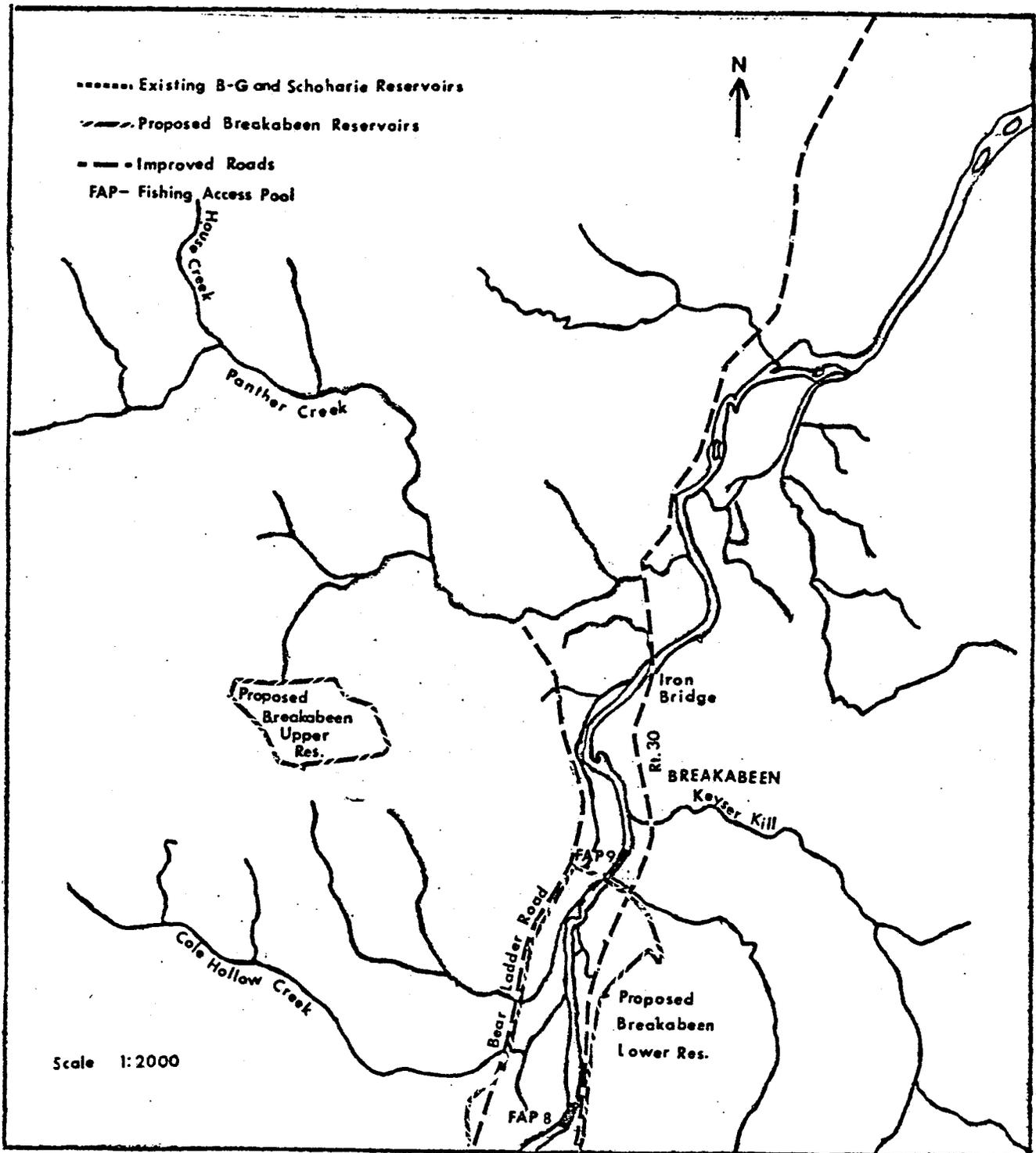


Figure 4. Fishing Access Pools of Schoharie Creek in the area of the proposed Breakabeen pumped storage facility.

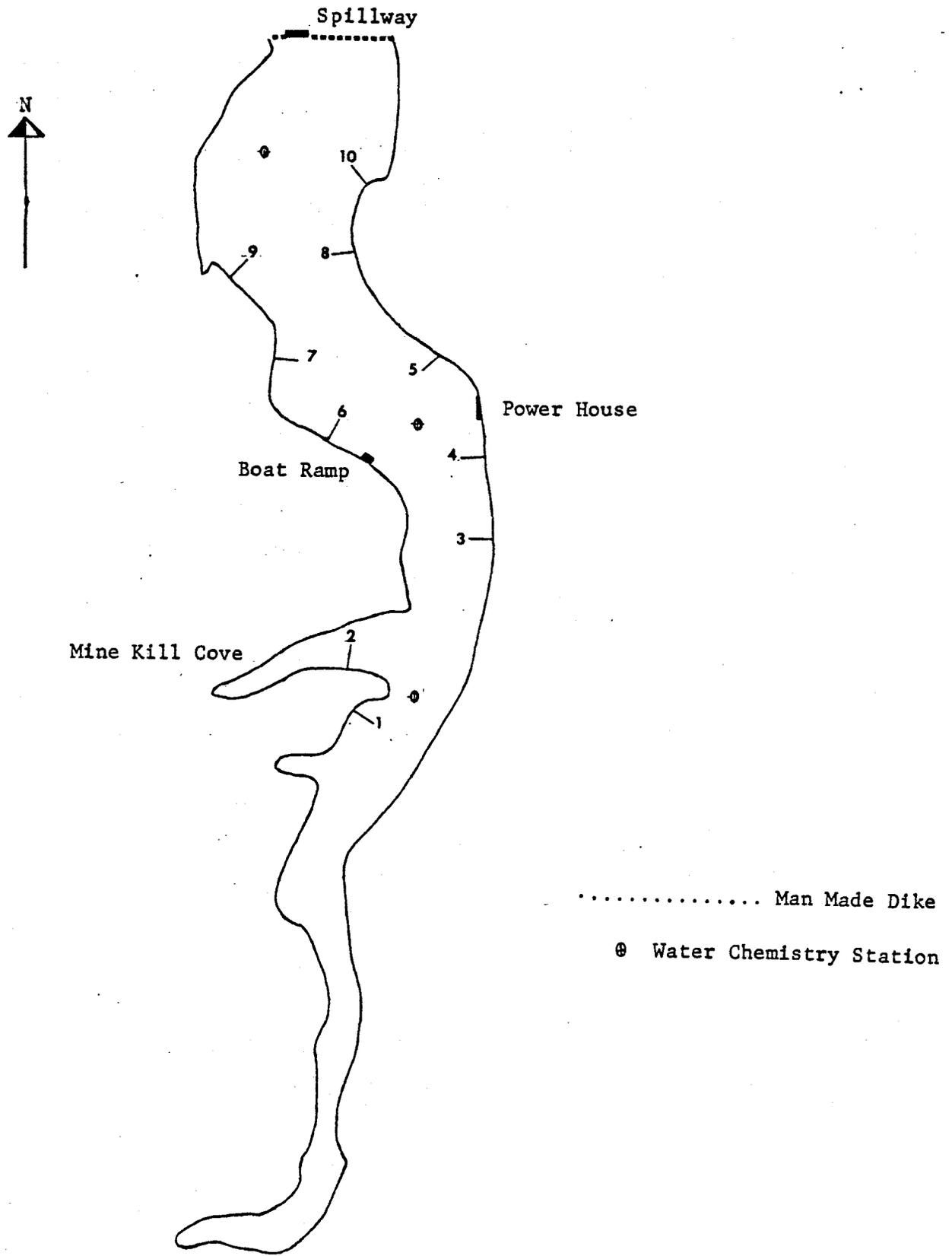


Figure 5. Gill net stations (1-10) and water chemistry stations in Lower B-G Reservoir.

Lower B-G Reservoir	y =	.0034(x) + .8671
	r =	.6626
	s.e. =	.2209
	n =	92
	range(mm) =	48 - 217

Schoharie Creek	y =	.0004(x) + 1.3157
	r =	.2692
	s.e. =	.2870
	n =	9
	range(mm) =	55 - 217

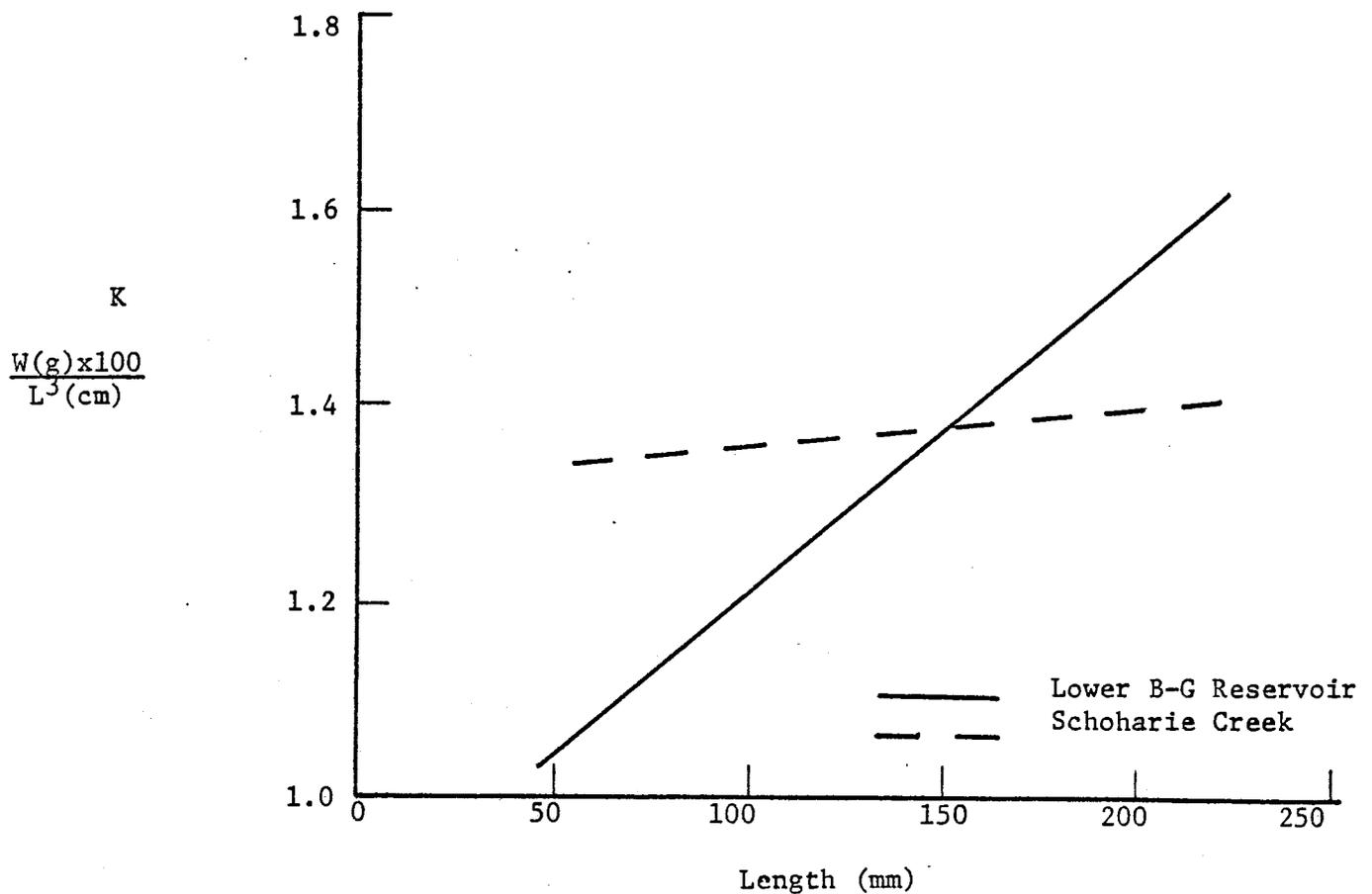


Figure 6. Condition factor (K) versus length for largemouth bass collected in May through October 1973 in Lower B-G Reservoir and Schoharie Creek.

Lower B-G Reservoir $y = .0004(x) + 1.2084$
 $r = .1107$
 $s.e. = .1252$
 $n = 74$
 $range(mm) = 53 - 212$

Schoharie Creek $y = -.0009(x) + 1.4807$
 $r = -.0128$
 $s.e. = .1081$
 $n = 10$
 $range(mm) = 62 - 212$

K
 $\frac{W(g) \cdot 100}{L^3(cm)}$

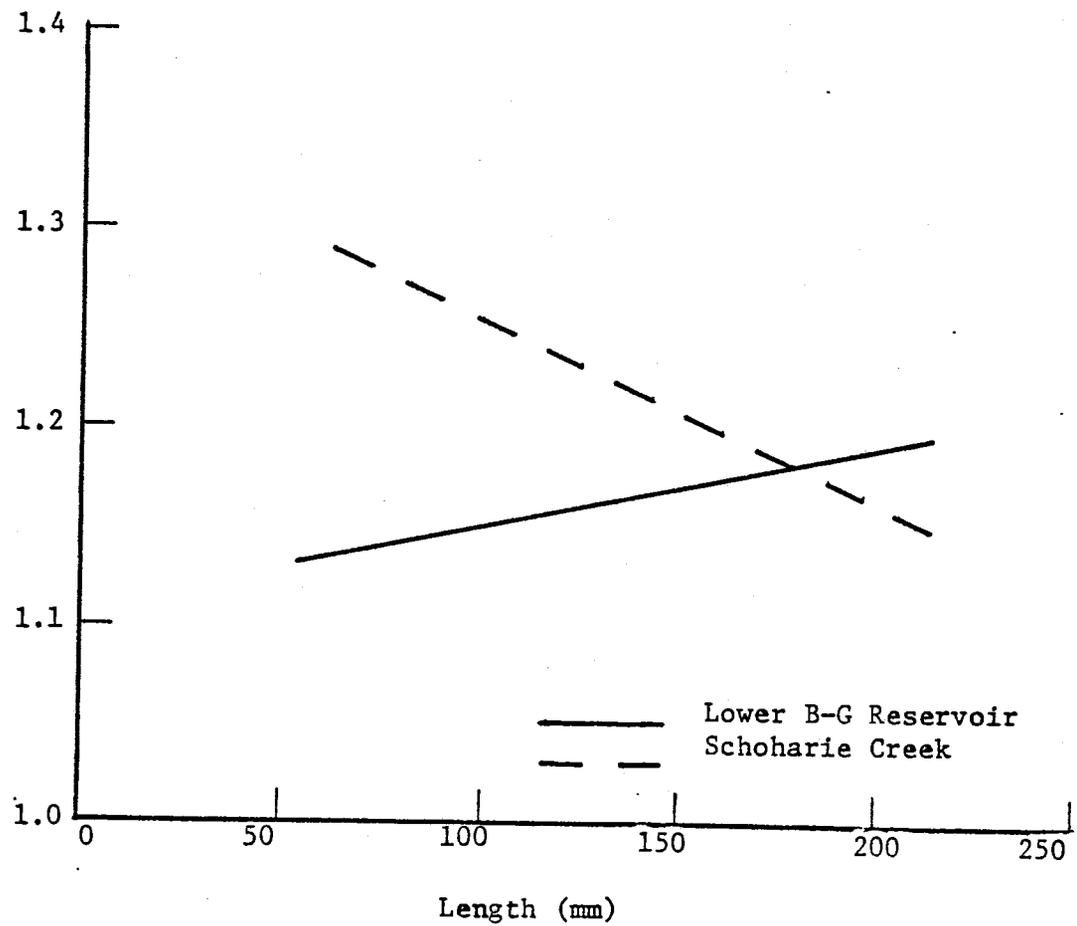


Figure 7. Condition factor (K) versus length for smallmouth bass collected in April through October 1973 in Lower B-G Reservoir and Schoharie Creek.

Lower B-G Reservoir $y = .00138(x) + .58516$
 $r = .7996$
 $s.e. = .1835$
 $n = 24$
 $range(mm) = 129 - 430$

Schoharie Creek $y = .00005(x) + .79667$
 $r = .0582$
 $s.e. = .1000$
 $n = 24$
 $range(mm) = 127 - 609$

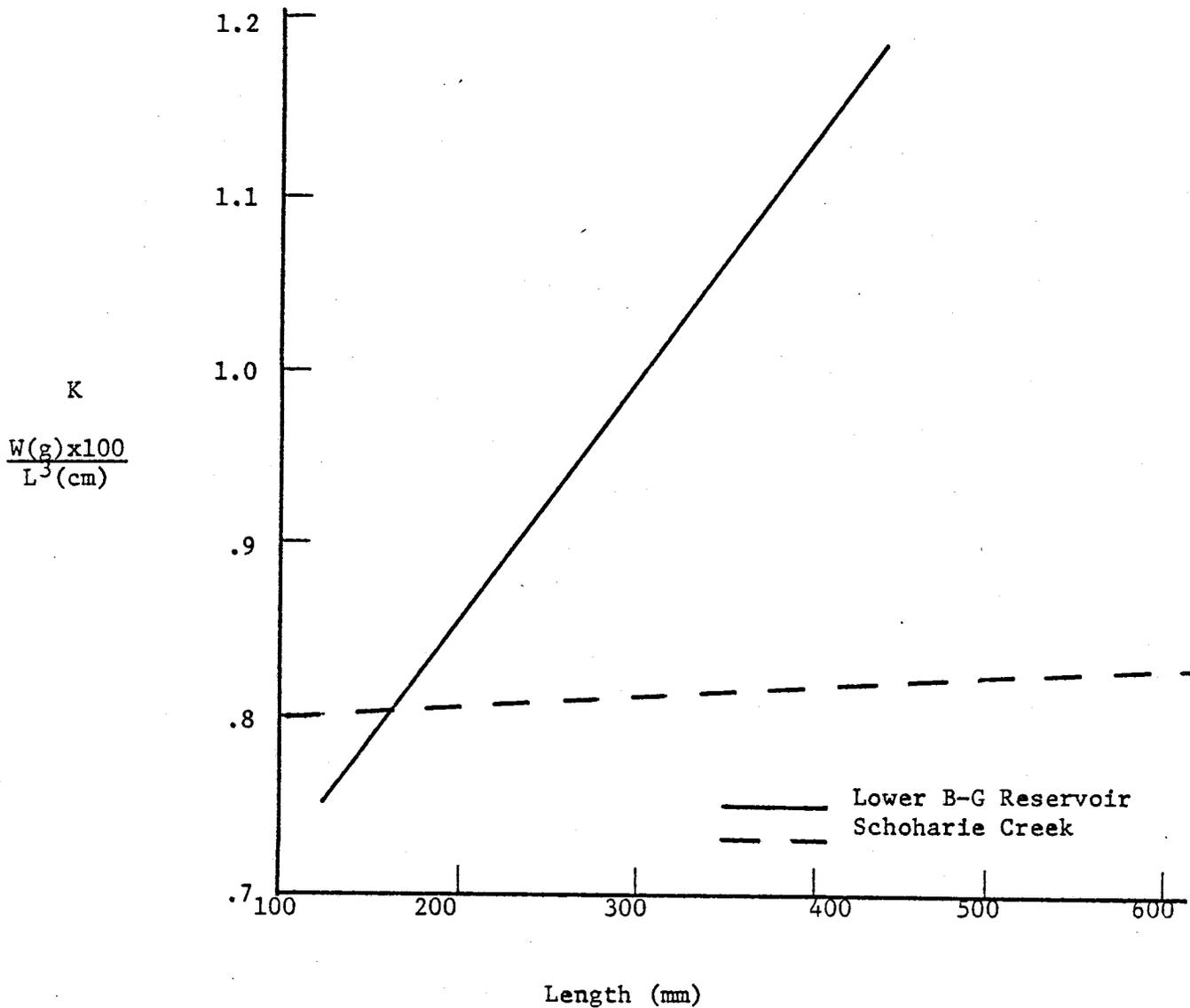


Figure 8. Condition factor (K) versus length for walleye collected in April through October 1973 in Lower B-G Reservoir and Schoharie Creek.

Lower B-G Reservoir $y = .0011(x) + 1.8599$
 $r = .2145$
 $s.e. = .2837$
 $n = 90$
 $range(mm) = 37 - 247$

Schoharie Creek $y = .0002(x) + 1.9220$
 $r = .1397$
 $s.e. = .2302$
 $n = 137$
 $range(mm) = 35 - 230$

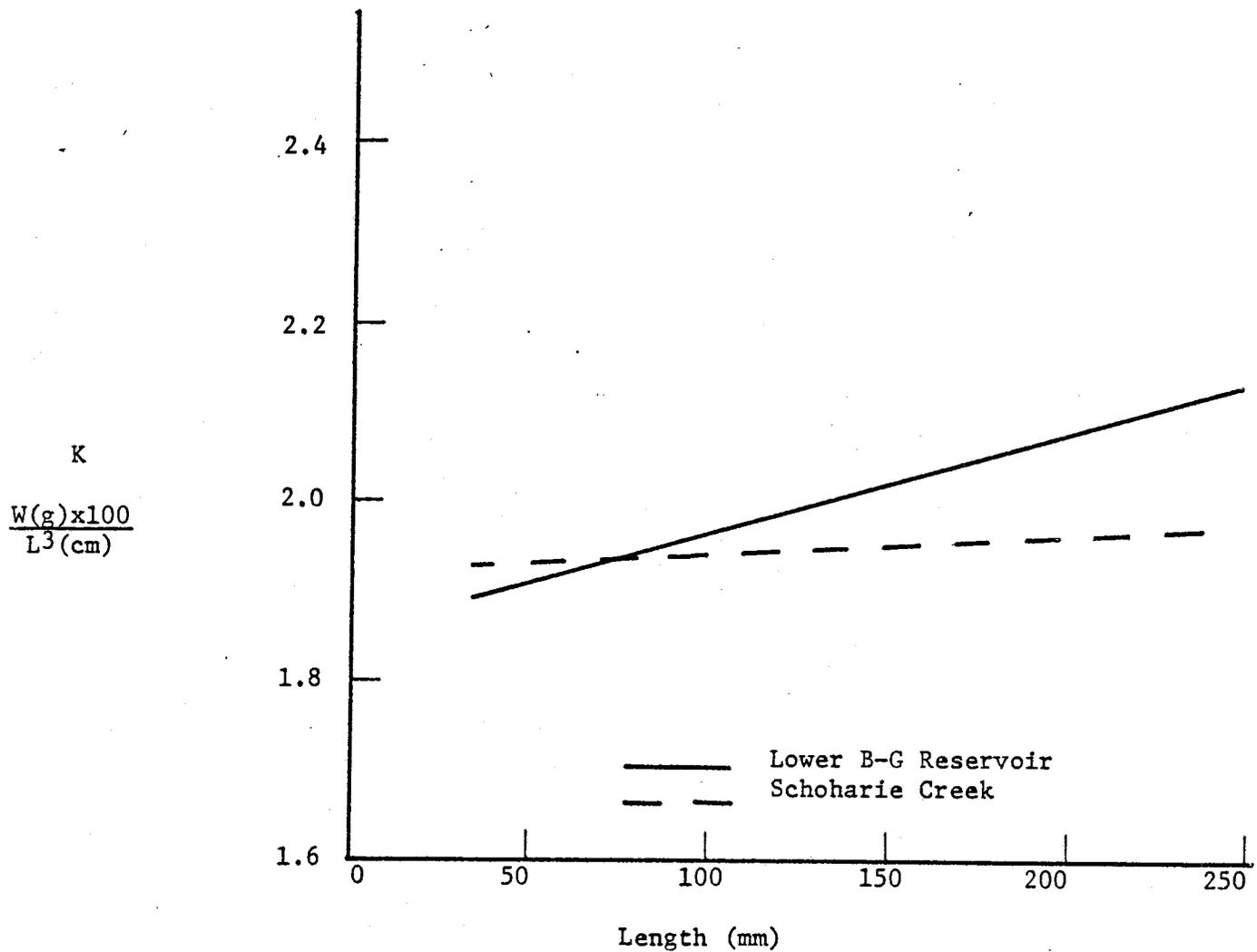


Figure 9. Condition factor (K) versus length for rock bass collected in April through October 1973 in Lower B-G Reservoir and Schoharie Creek.

Lower B-G Reservoir	$y =$	$.0069(x) + 1.1203$
	$r =$	$.6891$
	$s.e. =$	$.3272$
	$n =$	243
	range(mm)	$60 - 150$

Schoharie Creek	$y =$	$.0037(x) + 1.3549$
	$r =$	$.3657$
	$s.e. =$	$.2029$
	$n =$	87
	range(mm) =	$57 - 150$

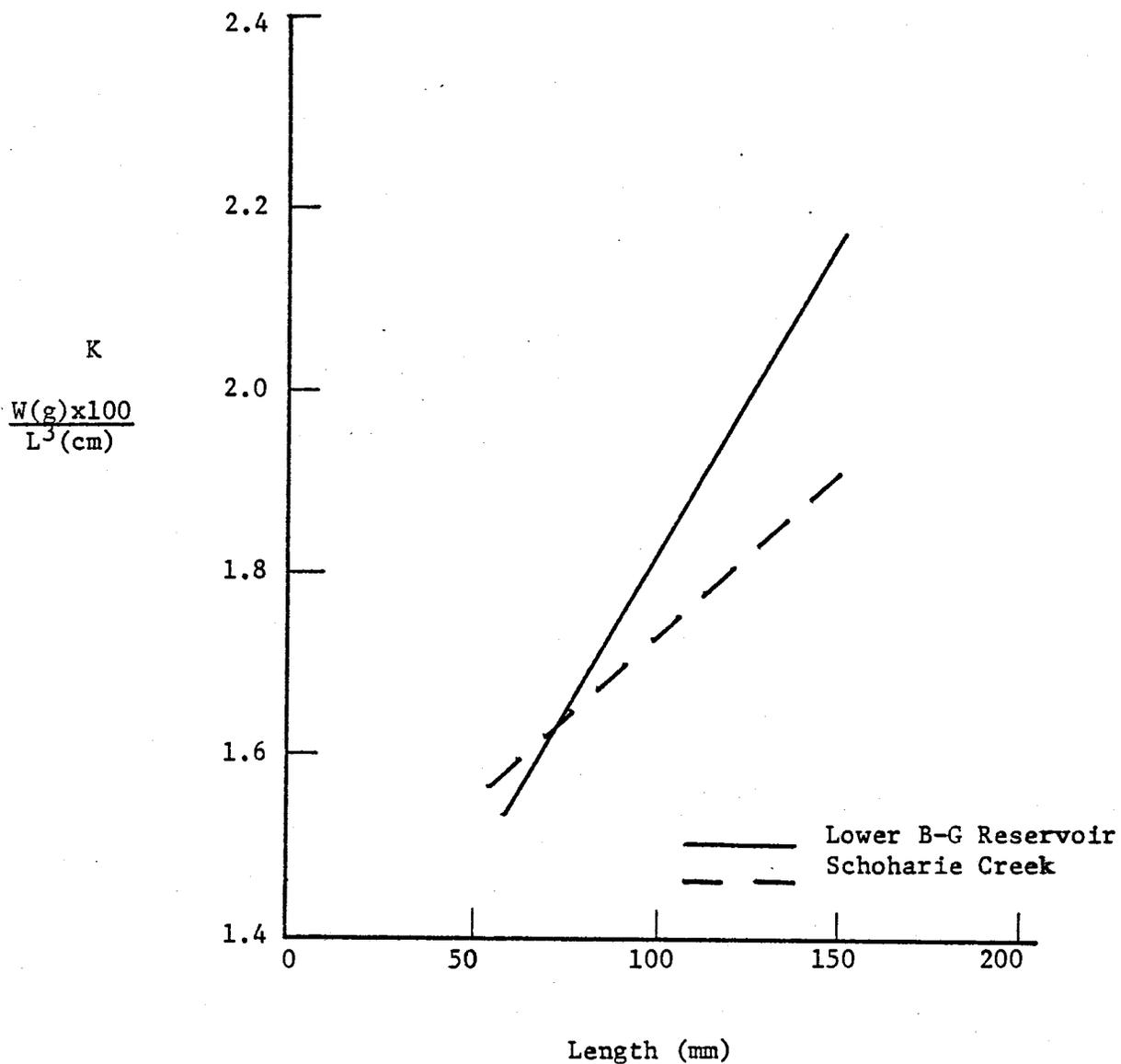


Figure 10. Condition factor (K) versus length for pumpkinseed collected in April through October 1973 in Lower B-G Reservoir and Schoharie Creek.

..... Man Made Dike

⊕ Water Chemistry Station

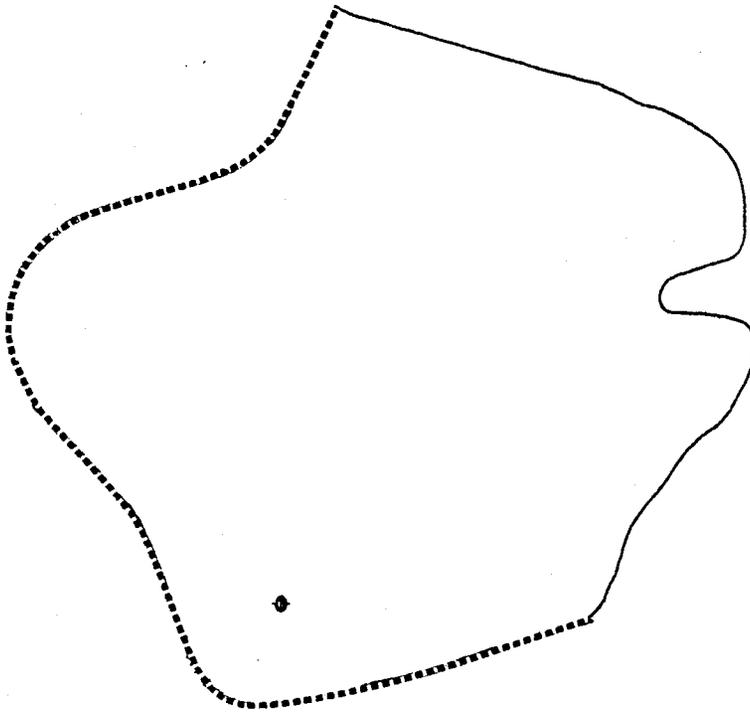


Figure 11. Water chemistry station in Upper B-G Reservoir.

Appendix

Materials and Methods

Fish Collections

Experimental gill net, trap net, block net, seine, and electrofishing gear were used to collect fish throughout the study area. All fish collected (except trout) were placed in half gallon or gallon jars and preserved in 10% formalin for two weeks and then washed with water and placed in a solution of 40% isopropyl alcohol for permanent preservation.

Experimental gill net:

Nylon experimental gill nets used are 300 ft long and 8 ft high, with 75 ft each of mesh sizes 1-in, 2-in, 3-in, and 4-in. These nets have lead core weights on the bottom lines and floats on the top lines to keep them upright; they remain stationary throughout the time period set. These nets were set perpendicular to the shore in the B-G Reservoirs and lengthwise in the pools of Schoharie Creek.

Trap net:

Trap nets used are made of 3/4-in cotton mesh (treated with tar for preservation) and are composed of a rectangular box (6-ft length, 3-ft depth, 3-ft width) with a funnel-shaped entrance. Two wings (30 ft x 3 ft) and a main leader (45 ft x 3 ft) that bisects the angle of the wings direct fish to the funnel-shaped opening of the rectangular box. Extending behind the box is a 6-ft by 2-ft-diameter tube in which fish are trapped. The end of this tube is tied with a slip cord to facilitate fish removal. Both the rectangular box and the tube are held open by metal frames. The wings and leaders are equipped with floats on the top lines and lead weights on the bottom lines so that they remain upright. Trap nets were set on the bottom perpendicular to the shore between depths of 3 ft and 8 ft.

Block net:

The nylon block net used is 450 ft long and 40 ft high; the mesh size is 5/8-in. When the water level is low this net is set on the bottom, blocking off a given area. The bottom of the net is weighted with a lead core line and rocks to prevent the escape of fish underneath. When the water level rises, the top line of the net is lifted from the bottom and floats are secured to it. As the water recedes, all fish that are unable to escape through the 5/8-in mesh are blocked behind the net. This method of sampling is very effective in pumped storage reservoirs where water levels fluctuate greatly over a short period of time.

Seine:

A 50-ft by 4-ft nylon seine with 3/16-in mesh was used. Sometimes seines were hauled parallel to the shore and at other times they were pulled from deeper waters to the beach or bank.

Electrofishing:

A 115-volt, 60-cycle, 1500-watt Dayton alternator with a 4-h.p. Briggs & Stratton engine (15-amp rating) was used to provide an electrical current. A rectifier was used to create a direct pulsating electrical current (DC) that creates a resistance in the water different from the resistance experienced by the fish. The difference in the resistance of the water and of the fish to pulsating DC stimulates the swimming muscles of fish for short periods of time, causing the fish to orient toward and be attracted to the positive electrode. An electrical field of sufficient magnitude to immobilize the fish is present near the positive electrode. The positive electrode is a metal ring (14-in diameter) to which a net is sewn. The ring is at the end of a 7-ft wooden pole; also connected to this wooden pole at the end of a 10-ft wire is a 3-ft metal pipe which acts as the negative electrode. As the fish are stunned at the

positive electrode, they are scooped from the water and placed in a bucket of water to be revived. They are returned after processing (trout) or preserved in 10% formalin.

Age and Growth

The mean total length for each age group was calculated by month for largemouth bass, smallmouth bass, walleye, yellow perch, pumpkinseed, and rock bass collected in Lower B-G Reservoir and Schoharie Creek (Tables 23 through 28). The age of each fish was determined by counting the number of annuli present on its scales. To better observe the spacing of circuli and the formation of annuli, an impression of each scale analyzed was pressed onto a plastic slide and magnified by a Bausch & Lomb Tri-Simplex Microprojector.

Fish Feeding Studies

Stomach contents of all largemouth bass, smallmouth bass, walleye, and chain pickerel and of a representative sample of yellow perch, pumpkinseed, and rock bass collected in B-G Reservoirs and in Schoharie Creek between Schoharie Reservoir and the iron bridge north of Breakabeen were analyzed. This involved the dissection of 766 fish. Fish analyzed were collected between 1 April and 31 October 1973 and were preserved in 40% isopropyl alcohol until analysis in December 1973. Fish were blotted dry and weighed to the nearest 0.01 g. Stomachs were removed by opening the abdominal cavity and cutting with scissors at the esophagus and at the pylorus. Each stomach was slit lengthwise; the contents were removed, weighed to the nearest 0.01 g, and identified according to ten different categories. Results are summarized by month and location in Tables 37 through 43.

