RTK
174.9
D3-1
1959

STATE OF NEW JERSEY

DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

DIVISION OF WATER POLICY AND SUPPLY

SPECIAL REPORT 14

SURFACE WATER SUPPLY OF NEW JERSEY

STREAMFLOW RECORDS

October 1945 to September 1950

Prepared in cooperation with
United States Department of the Interior
Geological Survey

1959

STATE OF NEW JERSEY

DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

DIVISION OF WATER POLICY AND SUPPLY

SPECIAL REPORT 14

SURFACE WATER SUPPLY OF NEW JERSEY

STREAMFLOW RECORDS

October 1, 1945 to September 30, 1950

By

DONALD F. DOUGHERTY, District Engineer

ALEXANDER C. LENDO, Hydraulic Engineer

Prepared in cooperation with
United States Department of the Interior
Geological Survey

1959

STATE OF NEW JERSEY

DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

Salvatore A. Bontempo, *Commissioner*

DIVISION OF WATER POLICY AND SUPPLY

George R. Shanklin, *Chief Engineer and Acting Director*

WATER POLICY AND SUPPLY COUNCIL

Dr. Thurlow C. Nelson, Chairman ..... Cape May Court House
William G. Bank ..... Colts Neck
I. Ralph Fox ..... Rumson
Max Grossman ..... Atlantic City
Thomas J. Mullen ..... Flemington
Kenneth H. Murray ..... Califon
August C. Schultes ..... Woodbury
Lillian M. Schwartz ..... Highland Park
Vinton N. Thompson ..... Vincentown

John Wyack, Secretary

LETTER OF TRANSMITTAL

Hon. Salvatore A. Bontempo, Commissioner
Department of Conservation and Economic Development
State House Annex
Trenton, New Jersey

Dear Sir:

I am transmitting herewith a report on surface water supply of New Jersey prepared by Mr. D. F. Dougherty, District Engineer, and Mr. A. C. Lendo, Hydraulic Engineer, U. S. Geological Survey. The report covers the five-year period from October 1, 1945 to September 30, 1950. Similar records for earlier years are available in Special Report 12 (1952) published by the Division of Water Policy and Supply, Special Report 9 (1944) and Special Report 5 (1936) published by the State Water Policy Commission, and Bulletin 33 (1929) published by the New Jersey Department of Conservation and Development.

The investigational work on the flow of streams in the State has been done under cooperative agreements with the Survey made from year to year, under which each party contributes funds for the work and may publish the results. This report contains records of 90 gaging stations in New Jersey, 76 of which record the streamflow and 14 record the elevation of the water. The Survey publishes some of the records annually in their Water Supply Papers together with records of streams in other states of the North Atlantic Slope Basin.

The present report assembles the records of New Jersey streams for the five-year period and makes a convenient reference for those who are in need of accurate information on the flow of streams in connection with problems on water works, dams, reservoirs, bridges, flood control works, drainage works and other projects.

I therefore recommend that this report on the Surface Water Supply of New Jersey be published as Special Report 14 of the Division of Water Policy and Supply in order that information contained therein may be made available to the people of the State.

Respectfully submitted,

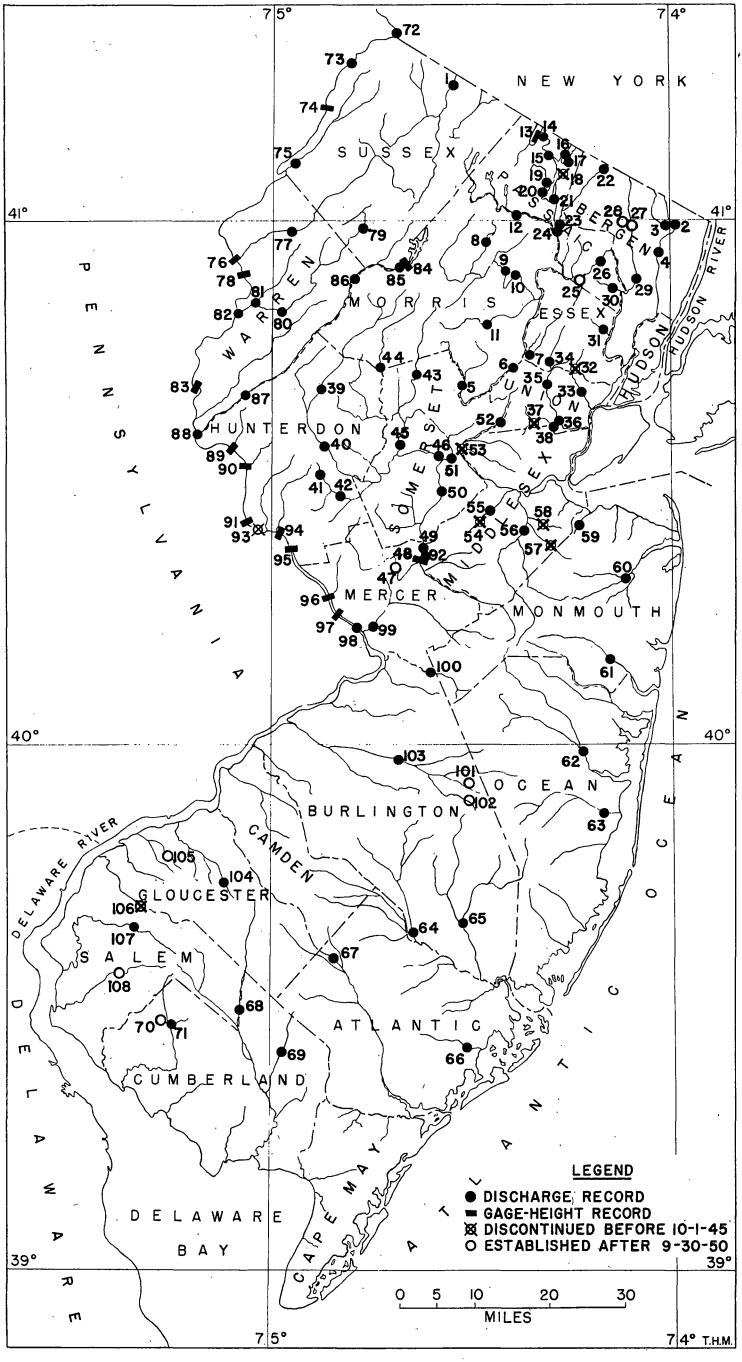
George R. Shanklin
Chief Engineer and
Acting Director

February 3, 1959

INDEX OF GAGING STATIONS SHOWN ON MAP ON OPPOSITE PAGE

1 Wallkill River near Unionville, N. Y.
2 Hackensack River at Rivervale
3 Pescack Brook at Westwood
4 Hackensack River at New Milford
5 Passaic River near Millington
6 Passaic River near Chatham
7 Canoe Brook near Summit
8 Beaver Brook at outlet of Splitrock Reservoir
9 Rockaway River above reservoir, at Boonton
10 Rockaway River below reservoir, at Boonton
11 Whippany River at Morristown
12 Pequannock River at Macopin intake dam
13 Greenwood Lake at Awosting
14 Wanaque River at Awosting
15 Wanaque River at Monks
16 Ringwood Creek near Wanaque
17 Cupsaw Brook near Wanaque
18 *Erskine Brook near Wanaque
19 West Brook near Wanaque
20 Blue Mine Brook near Wanaque
21 Wanaque River at Wanaque
22 Ramapo River near Mahwah
23 Ramapo River at Pompton Lakes
24 Pompton River at Pompton Plains
25 †Passaic River at Little Falls
26 Passaic River at Paterson
27 †Saddle River at Ridgewood
28 †Hohokus Brook at Ho-Ho-Kus
29 Saddle River at Lodi
30 Weasel Brook at Clifton
31 Second River at Belleville
32 *Elizabeth River at Irvington
33 Elizabeth River at Elizabeth
34 West Branch Rahway River at Millburn
35 Rahway River near Springfield
36 Rahway River at Rahway
37 *Robinsons Branch Rahway River at Goodmans
38 Robinsons Branch Rahway River at Rahway
39 South Branch Raritan River near High Bridge
40 South Branch Raritan River at Stanton
41 Walnut Brook near Flemington
42 Neshanic River at Reaville
43 North Branch Raritan River near Far Hills
44 Lamington (Black) River near Pottersville
45 North Branch Raritan River near Raritan
46 Raritan River at Manville
47 †Stony Brook at Princeton
48 Lake Carnegie at Princeton
49 Millstone River near Kingston
50 Millstone River at Blackwells Mills
51 Raritan River at Bound Brook
52 Green Brook at Plainfield
53 *Green Brook at Bound Brook
54 *Lawrence Brook at Patricks Corner
55 Lawrence Brook at Farrington Dam
56 South River at Old Bridge
57 *Deep Run at Browntown
58 *Tennent Brook near Browntown
59 Matawan Creek at Matawan
60 Swimming River near Red Bank
61 Manasquan River at Squankum
62 Toms River near Toms River
63 Cedar Creek at Lanoka Harbor
64 Batsto River at Batsto
65 East Branch Wading River at Harrisville
66 Absecon Creek at Absecon
67 Great Egg Harbor River at Folsom
68 Maurice River at Norma
69 Manantico Creek near Millville
70 †West Branch Cohansey River at Seeley
71 Loper Run near Bridgeton
72 Delaware River at Port Jervis, N. Y.
73 Delaware River at Montague
74 Delaware River at Dingmans Ferry, Pa.
75 Flat Brook near Flatbrookville
76 Delaware River at Portland, Pa.
77 Paulins Kill at Blairstown
78 Delaware River at Delaware
79 Pequest River at Huntsville
80 Pequest River at Pequest
81 Beaver Brook near Belvidere
82 Delaware River at Belvidere
83 Delaware River at Easton, Pa.
84 Lake Hopatcong at Landing
85 Musconetcong River at outlet of Lake Hopatcong
86 Musconetcong River near Hackettstown
87 Musconetcong River near Bloomsbury
88 Delaware River at Riegelsville
89 Delaware River at Milford
90 Delaware River at Frenchtown
91 Delaware River at Point Pleasant, Pa.
92 Delaware & Raritan Canal at Kingston
93 *Delaware River at Lumberville, Pa.
94 Delaware River at Stockton
95 Delaware River at Lambertville
96 Delaware River at Washington Crossing
97 Delaware River at Yardley, Pa.
98 Delaware River at Trenton
99 Assumpink Creek at Trenton
100 Crosswicks Creek at Extonville
101 †Middle Branch Mount Misery Brook in Lebanon State Forest
102 †McDonalds Branch Mount Misery Brook in Lebanon State Forest
103 North Branch Rancocas Creek at Pemberton
104 Mantua Creek at Pitman
105 †Still Run near Mickleton
106 *Oldmans Creek near Woodstown
107 Salem River at Woodstown
108 †Alloway Creek at Alloway

* Station discontinued prior to period of this report.
† Station established subsequent to period of this report.



LOCATION OF GAGING STATIONS

CONTENTS

	Page
Map showing location of gaging stations	V
Introduction	1
Stream gaging	2
Definition of terms and abbreviations	2
Explanation of data	2
Acknowledgments	4
Gaging-station records	6
Hudson River basin	
Hudson River:	
Rondout Creek:	
Wallkill River near Unionville, N. Y.	6
Hackensack River basin	
Hackensack River at Rivervale	16
Pascack Brook at Westwood	20
Hackensack River at New Milford	24
Passaic River basin	
Passaic River near Millington	28
Passaic River near Chatham	32
Canoe Brook near Summit	36
Rockaway River:	
Beaver Brook at outlet of Splitrock Reservoir	39
Rockaway River above reservoir, at Boonton	41
Rockaway River below reservoir, at Boonton	45
Whippany River at Morristown	49
Pequannock River at Macopin intake dam	53
Greenwood Lake at Awosting	57
Wanaque River at Awosting	60
Wanaque River at Monks	64
Ringwood Creek near Wanaque	68
Cupsaw Brook near Wanaque	72
West Brook near Wanaque	76
Blue Mine Brook near Wanaque	80
Wanaque River at Wanaque	84
Ramapo River near Mahwah	88
Ramapo River at Pompton Lakes	92
Pompton River at Pompton Plains	96
Passaic River at Paterson	100
Saddle River at Lodi	104
Weasel Brook at Clifton	108
Second River at Belleville	112
Elizabeth River basin	
Elizabeth River at Elizabeth	116
Rahway River basin	
Rahway River:	
West Branch Rahway River at Millburn	120
Rahway River near Springfield	124
Rahway River at Rahway	128
Robinsons Branch Rahway River at Rahway	132
Raritan River basin	
South Branch Raritan River near High Bridge	136
South Branch Raritan River at Stanton	140
Neshanic River:	
Walnut Brook near Flemington	144
Neshanic River at Reaville	148
North Branch Raritan River near Far Hills	152
Lamington (Black) River near Pottersville	156
North Branch Raritan River near Raritan	160
Raritan River at Manville	164
Lake Carnegie at Princeton	168
Millstone River near Kingston	171
Millstone River at Blackwells Mills	175
Raritan River at Bound Brook	179
Green Brook at Plainfield	183
Lawrence Brook at Farrington Dam	187
South River at Old Bridge	191

Gaging-station records--Continued

	Page
Matawan Creek basin	
Matawan Creek at Matawan	195
Navesink River basin	
Swimming River near Red Bank	199
Manasquan River basin	
Manasquan River at Squankum	203
Toms River basin	
Toms River near Toms River	207
Cedar Creek basin	
Cedar Creek at Lanoka Harbor	211
Mullica River basin	
Mullica River:	
Batsto River at Batsto	215
Wading River:	
East Branch Wading River at Harrisville	219
Absecon Creek basin	
Absecon Creek at Absecon	223
Great Egg Harbor River basin	
Great Egg Harbor River at Folsom	227
Maurice River basin	
Maurice River at Norma	231
Manantico Creek near Millville	235
Cohansey River basin	
Cohansey River:	
Loper Run near Bridgeton	239
Delaware River basin	
Delaware River at Port Jervis, N. Y.	243
Delaware River at Montague	247
Delaware River at Dingmans Ferry, Pa.	251
Flat Brook near Flatbrookville	253
Delaware River at Portland, Pa.	257
Paulins Kill at Blairstown	260
Delaware River at Delaware	264
Pequest River at Huntsville	267
Pequest River at Pequest	271
Beaver Brook near Belvidere	275
Delaware River at Belvidere	279
Delaware River at Easton, Pa.	283
Lake Hopatcong at Landing	286
Musconetcong River at outlet of Lake Hopatcong	289
Musconetcong River near Hackettstown	293
Musconetcong River near Bloomsbury	297
Delaware River at Riegelsville	301
Delaware River at Milford	305
Delaware River at Frenchtown	308
Delaware River at Point Pleasant, Pa.	311
Delaware & Raritan Canal at Kingston	314
Delaware River at Stockton	318
Delaware River at Lambertville	321
Delaware River at Washington Crossing	324
Delaware River at Yardley, Pa.	327
Delaware River at Trenton	330
Assunpink Creek at Trenton	334
Crosswicks Creek at Extonville	338
Rancocas Creek:	
North Branch Rancocas Creek at Pemberton	342
Mantua Creek at Pitman	346
Salem River at Woodstown	350
Miscellaneous discharge measurements	354
Period of records at gaging stations	358
Index	360

SURFACE WATER SUPPLY OF NEW JERSEY

STREAMFLOW RECORDS

OCTOBER 1, 1945, to SEPTEMBER 30, 1950

By Donald F. Dougherty, District Engineer
and Alexander C. Lendo, Hydraulic Engineer

INTRODUCTION

Streamflow records for the period of this report were collected in New Jersey by the United States Geological Survey under cooperative agreements with the State Department of Conservation, Division of Water Policy and Supply to June 30, 1947, and with the State Department of Conservation and Economic Development, Division of Water Policy and Supply, thereafter. Prior to the period of this report the records were collected by the United States Geological Survey under cooperative agreements with the State Department of Conservation and Development from July 1921 to June 1929 and with the State Water Policy Commission to June 30, 1945. Many other Federal and State departments and commissions, municipalities, water companies, power companies, industries, and private parties have also furnished data or rendered valuable assistance.

The purpose of this report is to present in one volume the records of streamflow for streams in New Jersey for the period October 1, 1945, to September 30, 1950. Also included in this report are records for Wallkill River near Unionville, N. Y., beginning in 1937, not previously published in these reports and some records that are revisions of those previously published. Records to September 30, 1928, are published in Bulletin 33 of the State Department of Conservation and Development and those for October 1, 1928, to September 30, 1940, are published in Special Reports 5 and 9 of the State Water Policy Commission. Records for October 1, 1940, to September 30, 1945, are published in Special Report 12 of the Division of Water Policy and Supply.

This series of State reports contains the customary records of discharge collected during the systematic operation of gaging stations. Detailed information on stage and discharge of many streams in New Jersey during major floods has been included in special reports on these floods published by the United States Geological Survey. The more recent of these special reports also contain other pertinent hydrologic information and analyses and compilation of data relative to earlier noteworthy floods. The following list gives the number and title of these reports:

Water-Supply Paper	Title
88	The Passaic flood of 1902.
92	The Passaic flood of 1903.
162	Destructive floods in the United States in 1905.
799	The floods of March 1936, Part 2, Hudson River to Susquehanna River region.
867	Hurricane floods of September 1938.
966	Minor floods of 1938 in the North Atlantic States.

STREAM GAGING

The records for 90 stations are presented in this report. Eighty-eight stations were in operation on October 1, 1945. During the period of this report, two stations were established or reestablished and three stations were discontinued. On September 30, 1950, the end of the period covered by this report, 89 stations were being operated.

Records of discharge are presented for 76 stations; all of these stations were equipped with water-stage recorders. For the remaining 14 stations, records of gage heights are presented; 2 of these stations were equipped with water-stage recorders, 11 with wire-weight gages, and 1 with a staff gage.

DEFINITION OF TERMS AND ABBREVIATIONS

The units in which streamflow data are presented in this report and other terms used herein are defined as follows:

"Cubic foot per second" (cfs) is the rate of discharge of a stream whose channel is 1 square foot in cross-sectional area and whose average velocity is 1 foot per second. It is equivalent to a discharge of 646,317 gallons per day.

"Cubic feet per second per square mile", (cfsm) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

"Runoff in inches" is the depth to which an area would be covered if all the water draining from it in a given period were uniformly distributed on its surface. The term is used for comparing runoff with rainfall, which is also usually expressed in inches.

"Cfs-day" is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet or 646,317 gallons and represents a runoff of 0.0372 inch from 1 square mile.

"Stage-discharge relation" is the relation between gage height and the amount of water flowing in a channel, expressed as volume per unit of time.

"Control" designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, a long reach of the channel, or an artificial structure.

EXPLANATION OF DATA

Streamflow data are given in many reports by water years ending September 30. At the beginning of January much of the precipitation in the preceding three months has been stored in the form of snow or ice, in ponds, lakes, and swamps, or as ground water, and this stored water reaches the streams some time later, much of it during the spring break-up. At the end of September, on the other hand, the only stored water available for runoff is possibly a small quantity in the ground; therefore the runoff for the year beginning October 1 is practically all derived from precipitation within that year. In this report the annual discharge and runoff figures are given for the water year, ending September 30, and the calendar year, ending December 31.

The base data collected at most of the gaging stations consist of records of stage, measurements of discharge, and general information used to supplement the records of

stage and discharge measurements in determining the daily flow. The records of stage are obtained either from direct readings on a staff or wire-weight gage or from a water-stage recorder that gives a continuous record of the fluctuations. Measurements of discharge are made with a current meter by the general methods which have been developed by the United States Geological Survey and are outlined in standard textbooks on the measurement of river discharge.

Rating tables giving the discharge for any stage are prepared from stage-discharge relation curves defined by discharge measurements. The application of the daily mean gage height to those rating tables gives the daily mean discharge, from which the monthly and the yearly mean discharge are computed. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the "shifting-control" method. In this method, correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating table. At times the stage-discharge relation for a station may be temporarily changed by the presence of aquatic growth or debris on the control. For such times the daily mean discharge is computed by what is essentially the "shifting-control" method described above.

At many gaging stations in New Jersey the stage-discharge relation is affected by ice during the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and engineers, and comparable records of discharge for stations in the same or nearby basins. For those stations at which the stage-discharge relation is affected by ice, the days included in the periods of ice effect are indicated in the tables by symbols referring to a footnote that states this fact or are given in a general note after the table.

For most of the gaging stations the data presented comprise a description of the station, tables showing the daily discharge of the stream, and a table of monthly and annual discharge and runoff. For some of the stations the data comprise only a station description and tables showing the daily gage heights of the stream.

The description of the gaging station gives the location, drainage area, records available, type and history of gages, average discharge, extremes, peak gage heights and discharge, general remarks, and cooperation. The location of the station and the drainage area are obtained from the most accurate maps available. Under "Average discharge" is given the average discharge for the number of years indicated. It is not given for stations having less than 5 complete years of record. Under "Extremes" are given for the period indicated the maximum discharge and gage height; the minimum discharge and gage height (unless it is of no importance); and the minimum daily discharge if there is extensive regulation. Unless otherwise qualified, the maximum discharge corresponds to the crest stage, obtained by use of a water-stage recorder or a nonrecording gage read at the time of the crest. Likewise, the minimum discharge and gage height represent the lowest stage, unless otherwise qualified. Peak discharges, for the period of this report, and their corresponding gage heights at the times they occurred

are listed for most stations. All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year will be listed. Peak discharges are not published for any stream for which the peaks are subject to substantial control by man (unless they may be important for flood-control or similar studies). For most stations for which the peak discharges are not published, the maximum discharge for each water year during the period of this report with its corresponding gage height and the time it occurred or the maximum daily discharge with the date it occurred are listed. For those stations for which only gage heights are published, the maximum gage height for each water year and the time it occurred are listed. Information pertaining to conditions which affect the natural flow at the gaging station is given under "Remarks". Under "Cooperation" is acknowledged the assistance (other than financial) furnished by any cooperating party.

The table of daily discharge gives the discharge corresponding to the daily mean gage height, except for periods of sudden or rapid fluctuation. For the periods of such fluctuation, the daily mean gage height may not indicate the true daily mean discharge, which must be obtained by averaging the discharge for parts of the day or by using the discharge integrator. The discharge integrator is an instrument for obtaining the daily mean discharge from a continuous gage-height graph. It contains as an essential element a curve representing the stage-discharge relation at the station.

In the table of monthly and annual discharge the column headed "Cfs-days" gives the sum for each month of the figures given in the table of daily discharge. The column headed "Maximum" gives the maximum daily discharge, not the momentary discharge when the water surface was at crest stage. Likewise, in the column headed "Minimum" the quantity given is the minimum daily discharge. The column headed "Mean" gives the average flow in cubic feet per second during the month. Computations recorded in the remaining columns are based on this average flow. In special tables the columns headed "Observed" give the quantities as explained above; the columns headed "Adjusted" give the discharge adjusted for diversion and the effect of storage above the station.

The monthly mean for any station may represent with a high degree of accuracy the quantity of water flowing past the gage, but the figures showing the discharge per square mile and runoff in inches may be subject to errors caused by the inclusion of noncontributing areas in the measured drainage area, by lack of information concerning water diverted, by inability to interpret the effect of artificial regulation of the flow, by increase or decrease in evaporation due to artificial causes, or other factors.

ACKNOWLEDGMENTS

Valuable assistance was rendered or records were furnished by the United States Geological Survey, Albany, N. Y.; United States Weather Bureau; Corps of Engineers, United States Army; North Jersey District Water Supply Commission; Delaware River Joint Toll Bridge Commission; Morris Canal & Banking Co.; Second River Joint Meeting; municipalities of Jersey City, Newark, New Brunswick, and Princeton; Calco Division, American Cyanamid Co.; Commonwealth Water Co.; E. I. du Pont de Nemours & Co.; Hackensack Water Co; Jersey Central Power & Light Co.; Monmouth Consolidated Water Co.; Princeton University; Taylor-Wharton Iron & Steel Co.; and The City of Paterson, Plant Management Commission.

During the period of this report Howard T. Critchlow, Director and Chief Engineer, Division of Water Policy and Supply of the State Department of Conservation and Economic Development, cooperated heartily in the establishment and maintenance of the gaging stations. His successor, George R. Shanklin, Chief Engineer and Acting Director of the Division of Water Policy and Supply has aided materially in the preparation and printing of this report.

The field investigations during the period of this report and preparation of records for publication in annual Water-Supply Papers of the U. S. Geological Survey were performed under the supervision of Oliver W. Hartwell, then District Engineer. The work of assembling material for this report was performed under the direction of Donald F. Dougherty, District Engineer succeeding Mr. Hartwell, and under the immediate supervision of Alexander C. Lendo, Hydraulic Engineer. John E. McCall, District Engineer succeeding Mr. Dougherty, assisted in the final review and editing of this report. Richard H. Tice and Jerome M. Ludlow helped greatly in the technical preparation of the material. Special mention should be made of Mrs. Dorothy W. Kozak, who, with the able assistance of Miss Janet M. Cranmer, did all the laborious and exacting work of assembling and typing both the original manuscript and the final copy for printing by the photo-offset method.

HUDSON RIVER BASIN

Wallkill River near Unionville, N. Y.

Location.--Lat 41°15'35", long 74°32'55", on right bank at downstream side of highway bridge on the Quarryville-Milton road, 1 mile upstream from small tributary, 2 miles south of the New York-New Jersey State line, and 3 miles south of Unionville, Orange County.

Drainage area.--144 sq mi.

Records available.--September 1937 to September 1950.

Gage.--Water-stage recorder. Altitude of gage is 390 ft (from topographic map). Prior to Nov. 16, 1949, wire-weight gage at same site and datum.

Average discharge.--13 years, 211 cfs.

Extremes.--1937-50: Maximum discharge, 5,000 cfs Dec. 31, 1948, from rating curve extended above 500 cfs by logarithmic plotting; maximum gage height, 11.4 ft Dec. 31, 1948 to Jan. 1, 1949; minimum discharge, 6.4 cfs Sept. 30, 1941; minimum gage height observed, 3.63 ft Sept. 5, 13, 1949.

Annual maximum discharge (water years).--
1938: Sept. 22, 3,120 cfs (11.2 ft).
1939: Dec. 7, 1,960 cfs (10.55 ft).
1940: Apr. 1, 1,550 cfs.
1941: Nov. 16, 1,040 cfs (daily).
1942: Aug. 18, 1,300 cfs (daily); peak stage, 10.0 ft.
1943: Nov. 26, 1,860 cfs (daily); peak stage, 10.0 ft.
1944: Nov. 10, 1,240 cfs (daily); peak stage, 9.2 ft.
1945: July 20, 3,000 cfs (10.8 ft).
1946: Jan. 9, 1,300 cfs (9.1 ft).
1947: Mar. 15, 2,180 cfs (9.4 ft).
1948: Mar. 18, 2,000 cfs (9.7 ft).
1949: Dec. 31, 5,000 cfs (11.4 ft).
1950: Mar. 10, 1,160 cfs (8.62 ft).

Daily discharge, in cubic feet per second, 1937-50

1937

Sept. 3	59	Sept. 10	59	Sept. 17	104	Sept. 24	58
4	59	11	55	18	84	25	56
5	58	12	52	19	64	26	55
6	69	13	84	20	64	27	48
7	64	14	185	21	59	28	51
8	59	15	197	22	58	29	49
9	64	16	134	23	58	30	50

1937-38

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	156	248	156	460	168	195	130	79	774	625	52
2	46	129	209	175	420	156	188	118	71	710	565	61
3	45	109	173	175	350	149	165	112	75	650	546	46
4	40	104	144	148	380	125	144	106	84	598	491	41
5	40	94	144	137	370	137	124	101	79	502	440	52
6	41	94	150	125	335	257	118	90	71	418	408	40
7	46	89	209	167	492	299	124	90	71	296	392	37
8	48	84	197	356	605	227	144	85	79	178	261	35
9	44	79	160	335	545	175	356	80	92	130	302	34
10	44	74	114	299	517	156	570	80	84	110	261	33
11	46	74	92	214	468	120	650	85	75	102	316	32
12	46	74	82	188	358	120	620	80	84	150	361	31
13	44	132	62	168	299	137	570	75	106	190	331	33
14	44	382	58	155	398	188	498	70	130	162	261	42
15	39	509	56	135	398	240	416	161	140	135	173	69
16	35	565	78	114	268	254	342	336	106	110	156	104
17	35	527	155	112	227	353	272	301	84	106	124	84
18	35	474	437	102	214	463	240	190	79	97	147	74
19	42	424	645	100	227	509	324	135	97	106	244	94
20	80	346	710	94	268	509	360	115	79	120	197	467
21	124	302	640	92	254	476	378	102	71	242	124	950
22	109	248	517	90	227	416	378	110	67	521	89	2,500
23	109	197	415	88	214	378	360	125	75	765	78	2,970
24	233	173	299	114	268	324	288	140	75	984	70	2,400
25	288	156	240	655	268	288	240	178	75	1,030	61	1,850
26	210	144	214	1,540	201	240	210	145	71	960	56	1,430
27	134	139	214	1,400	188	225	180	130	149	864	55	1,140
28	154	173	188	1,060	175	210	165	140	487	794	50	926
29	261	274	168	840	-------	188	144	120	727	728	49	752
30	261	302	156	720	-------	172	137	97	818	686	46	640
31	209	-------	156	540	-------	180	-------	88	-------	645	45	-------

Wallkill River near Unionville, N. Y.--Continued

Daily discharge, in cubic feet per second, 1937-50

1938-39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	517	149	239	151	291	730	590	395	68	56	27	25
2	393	137	239	146	291	860	620	323	62	58	23	24
3	283	131	251	156	307	810	770	277	59	46	20	21
4	214	125	332	146	420	690	770	239	55	42	21	21
5	175	125	574	136	480	655	690	227	57	32	29	22
6	162	131	1,230	357	460	655	620	205	50	33	31	22
7	175	175	1,890	560	420	620	655	183	46	34	24	19
8	188	175	1,550	655	380	530	730	166	44	34	20	19
9	175	162	1,220	560	360	505	690	156	42	33	21	26
10	149	175	1,080	505	340	455	620	235	45	32	20	27
11	137	149	960	435	340	415	560	262	49	33	20	25
12	125	137	860	375	360	323	530	208	57	30	18	22
13	114	125	730	251	400	280	560	164	53	26	17	19
14	109	125	655	205	420	300	505	148	77	24	19	18
15	104	125	560	227	508	323	455	140	125	23	22	18
16	104	114	455	216	738	357	395	125	102	22	18	16
17	104	112	415	205	1,020	480	339	116	67	22	19	16
18	100	131	357	183	960	505	339	110	55	22	18	17
19	100	152	323	183	810	455	435	102	48	21	18	15
20	100	256	291	183	770	435	620	96	48	19	34	14
21	199	291	239	172	730	415	770	93	49	17	42	18
22	268	251	216	156	730	395	730	125	44	19	33	19
23	240	205	190	151	560	395	655	208	40	20	24	17
24	227	205	216	146	480	395	620	190	40	20	27	16
25	348	161	194	151	415	415	560	140	39	20	65	16
26	353	183	183	121	339	435	480	113	35	21	72	16
27	283	183	183	116	384	415	435	96	34	23	41	19
28	240	205	200	108	560	455	435	88	34	37	33	19
29	214	227	220	108	-------	560	455	93	33	57	28	19
30	188	239	190	126	-------	590	435	89	36	42	26	21
31	168	-------	161	291	-------	590	-------	77	-------	34	25	-------

1939-40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	97	203	39	47	27	66	1,450	270	386	191	78	379
2	92	188	40	43	26	*60	1,110	246	440	136	57	635
3	74	117	62	40	26	56	840	235	460	108	45	835
4	88	79	84	37	25	110	720	246	480	108	37	910
5	64	89	68	34	25	190	670	270	440	160	33	790
6	46	363	59	32	27	240	595	224	402	140	29	596
7	39	489	52	30	34	250	530	180	342	104	33	350
8	33	439	50	29	41	240	480	155	270	82	35	222
9	28	283	49	28	50	220	630	150	191	70	29	187
10	27	175	46	27	54	190	840	155	180	69	27	194
11	24	127	71	26	160	175	780	131	180	64	25	204
12	23	102	84	26	260	165	670	126	160	138	23	166
13	19	88	68	27	200	155	670	122	145	288	25	134
14	21	79	60	33	135	150	720	113	122	195	36	116
15	21	68	56	130	72	500	670	104	104	106	33	98
16	19	64	64	170	74	920	595	107	118	73	25	93
17	17	64	*64	145	78	1,040	530	236	113	66	22	81
18	18	60	80	100	84	940	505	270	95	59	23	68
19	16	57	90	*76	94	930	480	202	86	53	24	63
20	16	56	95	62	102	*1,040	505	155	86	48	33	61
21	18	*54	212	54	96	1,230	670	244	78	45	33	56
22	51	49	192	47	86	1,230	970	294	69	42	27	61
23	70	47	136	42	80	1,040	900	270	64	38	25	54
24	48	46	126	39	84	880	780	246	94	37	31	45
25	38	44	90	36	78	710	630	224	170	37	28	89
26	33	43	81	34	74	545	560	224	160	33	36	298
27	33	42	65	32	72	463	505	224	191	43	50	228
28	43	41	54	30	74	507	a420	271	160	47	128	134
29	65	41	50	29	70	780	a360	356	205	78	280	93
30	54	40	52	28	-------	835	a310	370	258	68	200	76
31	71	-------	50	27	-------	1,100	-------	356	-------	94	107	-------

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for Pochuck Creek at Newport, near Pine Island.

Note.--Stage-discharge relation affected by ice Dec. 14, 15, Dec. 28 to Mar. 18. Shifting-control method used Dec. 5-13, Mar. 30, 31, Apr. 1, July 12, Aug. 21 to Sept. 3.

Wallkill River near Unionville, N. Y.--Continued

Daily discharge, in cubic feet per second, 1937-50

1940-41

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	66	230	213	805	*1130	150	395	73	46	23	53	32
2	60	330	244	684	130	195	410	73	63	23	51	27
3	90	580	203	*488	124	182	410	66	51	27	39	20
4	135	560	143	424	117	305	380	65	50	32	33	18
5	102	440	160	380	100	318	375	63	188	39	26	20
6	78	300	155	334	105	256	561	78	267	37	23	20
7	66	225	146	302	166	210	684	71	131	29	20	18
8	62	190	185	238	717	143	618	69	73	162	20	16
9	66	160	204	220	920	210	470	73	58	256	17	17
10	78	140	172	210	920	229	380	80	46	98	18	16
11	66	130	160	200	805	210	324	77	39	58	17	18
12	58	145	169	177	603	200	302	63	37	88	13	20
13	52	340	206	b150	438	186	262	58	39	219	16	17
14	47	480	*253	b120	392	*191	246	55	58	128	13	13
15	43	980	180	b130	b580	231	238	53	58	65	14	13
16	42	1,040	238	137	b620	357	210	51	66	51	76	13
17	41	900	481	143	*b440	536	200	53	66	73	95	11
18	38	760	553	172	b330	456	200	55	66	214	48	10
19	36	640	410	200	b280	365	182	48	80	127	38	13
20	37	520	328	150	b250	291	166	46	62	73	39	11
21	38	400	320	b140	b235	337	147	45	48	52	34	12
22	39	330	312	b130	220	424	117	44	42	44	27	11
23	38	280	296	b124	210	530	105	44	37	39	23	12
24	36	260	247	b120	210	596	155	60	34	37	23	11
25	35	250	213	b130	198	596	177	44	26	34	23	11
26	35	220	213	b160	195	508	137	38	27	29	40	9
27	36	200	272	b140	177	508	124	34	23	29	55	9
28	36	*222	441	b124	b165	508	105	42	20	30	54	10
29	35	204	728	b140	-------	508	88	51	18	45	42	9
30	54	204	880	b120	-------	454	78	44	20	42	33	7
31	240	-------	890	b140	-------	395	-------	37	-------	47	26	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Oct. 2 to Nov. 27; discharge computed on basis of weather records and records for other stations in the Wallkill River Basin.

1941-42

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	27	24	92	409	b82	269	73	104	34	422	98
2	13	86	27	140	400	b86	221	70	174	79	460	88
3	17	64	36	219	191	153	185	66	141	151	271	78
4	22	37	42	147	111	*365	174	64	121	129	143	72
5	24	27	36	134	96	502	167	60	164	155	108	70
6	19	24	39	103	99	520	161	55	123	106	88	64
7	16	56	41	88	b165	596	153	109	94	258	72	58
8	13	96	28	79	b390	636	155	170	146	185	60	58
9	12	58	24	66	b400	699	153	116	145	101	215	118
10	12	42	23	66	b270	863	209	98	98	77	520	215
11	13	34	22	58	163	883	281	77	81	70	600	140
12	17	30	19	51	107	708	346	64	79	84	520	102
13	13	27	23	b49	b98	504	346	77	75	58	340	90
14	16	23	233	b49	101	437	269	86	73	47	245	76
15	13	23	431	b50	88	556	221	66	96	d42	330	64
16	18	22	270	b54	86	536	197	60	70	37	470	56
17	20	21	149	*b50	*441	648	174	109	55	30	1,100	202
18	17	20	125	b49	665	763	174	151	58	96	1,300	206
19	20	18	112	83	502	791	163	88	56	153	1,100	134
20	16	20	111	b370	207	656	153	111	58	128	940	166
21	14	18	82	b390	156	484	145	109	75	96	820	209
22	12	22	70	b290	107	636	132	155	55	58	740	138
23	14	30	62	196	b100	716	121	261	143	42	640	107
24	12	39	138	153	b92	696	116	334	208	34	470	92
25	10	34	357	149	b88	502	107	218	109	30	300	81
26	12	30	282	139	b84	366	98	153	75	31	195	77
27	12	24	*185	128	b82	325	92	128	62	54	150	238
28	23	23	155	*129	b78	269	84	107	62	368	135	683
29	23	24	b125	114	-------	245	77	92	45	452	125	840
30	18	22	b106	88	-------	221	75	84	37	208	130	700
31	14	-------	94	99	-------	257	-------	75	-------	187	116	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
d Doubtful gage-height record; discharge interpolated.
Note.--Backwater from weeds, debris, or overbank storage Oct. 1 to Dec. 13, Aug. 5 to Sept. 16, Sept. 29, 30. Shifting-control method used Mar. 20 to May 21.

Wallkill River near Unionville, N. Y.--Continued

Daily discharge, in cubic feet per second, 1937-50

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	660	344	840	*1,400	180	402	235	165	232	61	24	18
2	450	408	820	1,140	*175	*338	225	136	394	48	22	17
3	273	421	860	880	155	254	215	134	296	37	20	16
4	194	500	820	680	155	210	190	145	194	36	19	16
5	179	429	720	*450	170	235	181	125	159	56	18	16
6	215	354	483	400	220	215	172	109	125	172	18	16
7	215	306	386	330	360	308	136	104	132	116	17	16
8	170	272	338	260	410	370	150	100	215	72	17	21
9	145	254	306	210	350	289	154	127	176	62	25	22
10	134	235	263	175	290	244	138	113	174	59	25	18
11	127	312	254	170	290	365	129	127	159	59	21	15
12	118	280	254	165	440	690	118	152	132	98	19	15
13	106	225	254	150	410	821	183	187	109	85	17	14
14	102	204	220	140	330	678	194	136	106	70	28	14
15	104	165	240	140	220	474	170	106	87	49	32	17
16	111	168	225	145	165	450	134	95	74	42	22	23
17	149	172	194	185	185	500	126	93	62	36	19	18
18	342	181	*204	200	*180	557	150	91	112	33	18	15
19	300	*187	185	340	175	500	157	146	143	31	17	12
20	186	163	127	360	190	500	306	225	91	27	16	12
21	157	154	118	290	560	483	322	235	74	28	15	13
22	291	150	135	230	860	386	338	280	72	31	15	14
23	274	138	150	*155	1,080	322	280	215	66	37	14	11
24	194	172	160	140	1,140	*289	215	168	56	30	14	10
25	163	572	165	145	1,040	263	194	143	49	28	13	9.8
26	202	*1,850	185	185	840	244	181	242	43	27	12	8.0
27	562	*1,550	159	170	640	235	159	589	42	26	15	7.4
28	649	1,250	253	140	489	225	150	637	42	25	49	7.4
29	526	1,020	680	130	-------	194	143	438	49	33	38	7.0
30	370	940	1,030	160	-------	185	132	259	72	38	25	7.0
31	306	-------	1,800	180	-------	257	-------	204	-------	31	21	-------

* Winter discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Dec. 14, 15, 22-26, Jan. 7 to Feb. 21, Mar. 4. Backwater from ice or overbank storage Dec. 31 to Jan. 6, Feb. 22-27. Backwater from overbank storage Oct. 1, 2, Nov. 26 to Dec. 5.

1943-44

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.8	161	101	37	170	228	396	390	58	52	16	13
2	26	137	99	35	*120	170	349	324	56	47	16	12
3	28	184	97	33	102	157	310	278	54	37	16	12
4	16	188	94	32	92	137	267	256	50	35	17	12
5	14	147	92	36	84	112	267	232	44	50	16	14
6	12	125	86	42	78	119	267	205	42	42	15	15
7	11	111	86	50	74	250	367	198	50	34	121	14
8	11	112	84	64	70	747	570	274	54	27	98	12
9	10	597	80	62	66	637	636	232	42	24	53	13
10	9.4	1,240	76	60	62	276	572	185	52	21	29	13
11	9.0	1,040	64	58	54	167	478	162	130	19	24	13
12	9.8	660	50	*56	48	161	435	150	89	20	18	14
13	11	480	48	52	52	490	419	138	50	59	17	26
14	14	360	36	49	58	*857	338	128	39	60	16	137
15	13	280	33	45	68	797	289	110	41	30	15	232
16	31	230	*31	41	140	483	438	132	47	25	14	163
17	102	203	29	33	210	427	585	138	39	33	14	81
18	91	176	29	37	270	537	504	115	29	27	18	52
19	48	163	31	35	270	442	388	87	45	21	20	42
20	32	157	32	33	190	301	330	74	240	19	16	42
21	27	145	32	35	155	229	289	69	292	54	14	41
22	24	212	29	37	*175	*267	367	62	219	44	13	39
23	24	223	27	40	270	256	358	65	124	29	13	35
24	24	171	26	44	420	550	534	78	101	24	13	27
25	23	145	25	48	410	922	1,020	120	219	19	14	26
26	46	133	25	52	340	880	1,240	115	193	19	13	24
27	316	125	31	70	221	720	980	106	103	17	12	24
28	450	121	42	320	203	580	740	214	74	20	12	24
29	450	109	74	400	311	460	560	134	56	20	12	28
30	370	101	48	330	-------	446	460	83	56	18	12	33
31	235	-------	41	240	-------	467	-------	67	-------	16	13	-------

* Winter discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Dec. 11-17, 19-21, 24, 25, Dec. 27 to Jan. 3, Jan. 5 to Feb. 26, Mar. 2, 5, 7. Backwater from weeds Oct. 1-17. Backwater from overbank storage Nov. 10-15, Apr. 26 to May 1.

Wallkill River near Unionville, N. Y.--Continued

Daily discharge, in cubic feet per second, 1937-50

1944-45

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	18	591	190	86	1,080	236	163	170	117	638	147
2	26	19	525	540	84	1,140	225	362	159	138	603	264
3	23	19	360	560	82	1,250	312	362	247	258	508	266
4	20	19	215	450	80	1,520	280	399	290	225	416	180
5	20	19	160	360	84	1,450	382	463	362	156	301	145
6	21	19	150	300	82	1,350	570	416	381	200	306	127
7	21	19	150	250	80	*1,350	538	342	290	381	603	112
8	20	18	185	210	*80	1,250	416	280	214	285	675	103
9	20	18	423	195	86	*1,100	322	362	180	161	638	98
10	20	19	529	*185	88	960	269	322	161	166	492	112
11	19	32	470	175	92	820	236	554	159	258	342	189
12	19	35	489	165	96	720	214	603	150	175	258	175
13	18	28	549	160	100	660	205	523	131	117	214	131
14	18	25	459	150	106	620	191	478	122	93	196	124
15	18	23	349	140	120	570	175	399	110	813	182	537
16	17	32	267	135	135	554	159	322	96	554	170	675
17	17	64	232	125	160	586	161	342	207	538	150	656
18	17	60	210	120	180	586	205	381	212	508	138	554
19	17	42	175	116	170	538	189	416	236	990	124	856
20	17	35	170	112	165	508	152	448	373	2,600	110	741
21	30	93	*165	108	160	493	140	416	538	2,200	103	717
22	53	326	140	106	180	554	d129	362	554	1,500	93	603
23	44	335	122	106	280	538	127	301	508	1,140	84	448
24	32	214	112	100	350	463	115	258	399	920	201	342
25	28	145	122	88	450	381	127	212	247	780	586	290
26	25	115	185	96	520	312	342	186	214	700	717	258
27	22	118	190	96	700	280	322	177	225	660	717	247
28	21	354	140	94	960	269	225	214	177	640	559	212
29	20	470	135	92	-------	236	173	322	143	656	218	196
30	19	509	130	90	-------	214	152	322	140	675	205	182
31	18	-------	130	88	-------	200	-------	236	-------	638	168	-------

* Winter discharge measurement made on this day.
d Doubtful gage-height record; discharge computed on basis of records for adjacent days, weather records, and records for other stations in Wallkill River Basin.
Note.--Stage-discharge relation affected by ice Dec. 3-6, Dec. 18 to Mar. 3. Backwater from overbank storage Mar. 5-13, July 20-28. Shifting-control method used Oct. 1 to Nov. 21.

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	159	81	638	480	135	209	175	d81	300	44	44	38
2	175	79	586	400	114	301	d175	d68	460	84	45	31
3	205	86	478	370	96	362	d183	d61	801	102	43	d28
4	162	86	416	340	84	542	d170	d58	891	d61	44	d26
5	143	79	381	330	76	583	d155	d54	801	d47	48	d24
6	136	74	362	406	84	502	d140	60	550	39	45	23
7	225	74	467	705	190	422	d130	60	342	42	50	22
8	258	74	620	1,110	160	522	d124	63	248	38	73	d25
9	258	72	656	1,250	130	648	d150	68	202	d35	67	d40
10	301	74	603	*1,040	110	720	d155	65	171	34	55	d32
11	214	122	500	860	96	482	d125	55	133	32	53	d34
12	173	214	380	720	94	*342	d116	66	217	30	66	d33
13	163	200	*310	600	98	301	d108	106	228	30	d58	d28
14	147	177	260	420	220	290	d100	92	162	d29	73	d24
15	145	239	250	340	280	362	d102	106	152	29	56	d24
16	136	236	220	250	140	522	d108	120	d114	28	45	d22
17	127	175	160	200	140	422	d100	96	94	28	64	d21
18	117	156	185	210	*120	322	d88	174	112	28	125	d20
19	108	150	170	180	88	280	d82	280	d116	21	161	d19
20	103	329	160	145	79	238	d78	194	88	20	83	d19
21	98	342	150	155	76	217	d76	154	73	35	64	d23
22	93	349	140	150	78	205	d74	139	75	90	d55	d35
23	93	523	135	145	82	196	d72	d122	70	215	d50	32
24	105	508	130	140	82	177	"1	d104	65	322	d46	30
25	122	432	130	140	76	198	\	d92	d63	282	44	58
26	134	342	340	145	72	218	d82	162	d58	144	43	49
27	129	280	620	125	86	362	d94	573	d56	93	40	35
28	110	258	*660	118	129	342	d108	898	d54	71	38	28
29	96	493	540	*114	-------	238	d102	1,040	50	59	d37	28
30	88	638	460	112	-------	209	d94	900	45	52	d48	24
31	86	-------	470	114	-------	190	-------	620	-------	44	48	-------

* Winter discharge measurement made on this day.
d Doubtful gage-height record; discharge computed on basis of records for adjacent days, weather records, notes by engineers, and records for other stations in Wallkill River Basin.
Note.--Stage-discharge relation affected by ice Dec. 11 to Jan. 5, Jan. 16 to Feb. 16, Feb. 21-27. Backwater from overbank storage Jan. 9-15, May 30 to June 1. Shifting-control method used Jan. 9.

Wallkill River near Unionville, N. Y.--Continued

Daily discharge, in cubic feet per second, 1937-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35	38	33	37	500	60	185	468	280	118	76	51
2	32	37	31	30	292	62	203	669	233	275	59	72
3	28	36	28	44	170	104	424	640	221	218	50	125
4	25	36	25	46	145	125	358	578	209	126	50	72
5	28	36	24	43	118	150	555	622	173	95	46	65
6	22	34	24	41	112	145	1,620	778	150	80	41	75
7	21	32	24	40	110	145	2,000	860	150	69	38	65
8	20	35	26	48	106	145	1,240	720	256	193	45	57
9	19	40	29	43	84	140	780	560	358	290	98	51
10	19	43	32	36	100	*157	600	440	278	174	474	45
11	23	42	34	38	98	175	490	336	197	130	540	44
12	27	42	29	38	96	227	424	292	150	107	269	44
13	50	42	32	40	94	314	402	248	120	85	147	39
14	53	41	31	44	*92	818	314	292	186	83	114	37
15	40	40	27	45	102	*1,840	270	490	446	135	101	37
16	35	40	23	*87	112	1,650	259	424	380	120	92	41
17	37	39	22	133	106	*920	336	314	197	225	104	48
18	40	39	*22	119	96	680	270	292	162	221	101	40
19	44	38	17	104	88	*540	238	336	162	255	88	36
20	50	36	13	155	64	430	227	336	122	336	124	35
21	45	35	25	490	34	336	270	358	135	209	216	34
22	40	36	62	500	54	292	358	446	124	267	129	51
23	38	38	82	336	66	270	259	490	101	253	95	99
24	37	36	69	175	72	259	216	380	89	162	79	64
25	36	35	59	196	*78	314	206	358	120	120	67	49
26	38	35	45	238	72	380	292	743	115	97	60	42
27	60	39	35	314	68	270	248	940	122	83	86	39
28	62	39	37	*292	64	238	216	820	97	149	88	36
29	54	36	40	227	--------	216	185	560	89	174	70	35
30	43	33	*46	185	--------	216	183	500	150	103	62	35
31	39	--------	37	402	--------	*185	--------	402	--------	82	57	--------

* Winter discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Dec. 2, 3, 18-23, Dec. 26 to Jan. 1, Jan. 5, 6, 9-13, Feb. 3-14, Feb. 17 to Mar. 9. Backwater from overbank storage Jan. 22, Feb. 1, Mar. 16-20, Apr. 7-11, May 3, 7-10, 27-30, Aug. 11. Doubtful gage-height record Oct. 1 to Nov. 29; discharge computed on basis of discharge measurements, weather records, notes by engineers, and records for other stations in Wallkill River Basin.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	102	122	98	76	512	437	190	289	202	48	33
2	31	70	112	96	*78	471	589	166	215	178	47	29
3	30	51	124	92	80	450	540	152	166	148	44	27
4	29	104	141	88	78	383	430	150	150	126	44	28
5	29	424	133	90	76	337	360	181	137	110	47	28
6	28	390	133	98	74	289	337	315	135	108	135	28
7	27	223	139	106	74	289	327	285	142	148	98	28
8	27	293	168	116	72	313	289	512	289	128	58	28
9	29	719	*185	118	70	337	277	435	215	98	49	28
10	29	860	133	*112	70	*415	240	277	178	82	42	27
11	28	660	122	98	70	512	228	228	150	74	40	26
12	27	660	108	96	72	406	470	214	132	67	66	26
13	28	778	96	100	78	313	630	486	186	110	124	26
14	29	640	88	98	100	289	675	745	202	395	98	25
15	28	450	84	92	150	313	852	860	139	286	64	24
16	27	320	155	94	220	652	960	740	120	140	48	23
17	25	259	227	98	330	1,630	780	600	110	98	42	22
18	26	227	157	96	440	*1,900	600	500	100	89	39	23
19	28	196	123	88	620	*1,400	470	430	147	102	40	23
20	29	185	110	92	860	1,300	388	370	340	148	46	24
21	27	175	94	94	1,200	1,220	360	313	384	116	114	25
22	25	165	92	92	1,220	1,160	313	313	228	106	104	25
23	25	175	88	88	1,000	1,080	277	277	259	106	170	24
24	25	196	84	84	800	980	252	240	383	95	113	24
25	23	314	76	80	680	840	265	228	360	81	70	23
26	23	259	72	80	680	*680	240	215	289	71	58	23
27	27	206	74	82	620	560	215	190	277	65	48	23
28	29	175	82	86	600	589	190	178	407	62	42	23
29	44	161	96	90	560	550	190	159	470	57	40	24
30	70	147	100	88	--------	450	202	292	300	49	39	24
31	95	--------	100	84	--------	383	--------	383	--------	49	37	--------

* Winter discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Dec. 1-3, 11-15, Dec. 20 to Feb. 21. Backwater from overbank storage Nov. 6, 10-12, 14-16, Feb. 22-29, Mar. 18-27, Apr. 3, 4, 16-19, May 15-20, June 29,30.

Wallkill River near Unionville, N. Y.--Continued

Daily discharge, in cubic feet per second, 1937-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	26	93	*2,900	383	265	157	152	98	26	35	25
2	40	28	84	2,200	360	252	145	178	85	26	31	21
3	31	26	74	1,450	313	265	124	293	76	26	30	d20
4	d26	37	71	900	289	228	116	318	67	28	81	18
5	26	55	67	*760	289	265	106	215	63	40	74	17
6	26	41	65	880	252	360	134	190	60	40	50	21
7	24	66	71	1,450	265	337	190	299	55	55	38	30
8	25	96	67	1,300	337	240	157	277	49	47	32	23
9	28	54	60	900	337	228	145	202	44	31	29	20
10	30	49	54	700	383	228	122	190	43	27	25	20
11	28	105	49	600	289	240	108	215	42	31	22	18
12	26	81	48	520	215	265	100	166	42	31	23	17
13	24	61	54	430	240	215	100	142	43	31	25	18
14	23	58	55	360	337	190	246	128	39	35	25	23
15	23	49	52	289	450	178	250	141	37	32	25	45
16	22	46	53	265	531	150	178	118	35	109	72	53
17	21	44	82	265	471	139	145	106	33	96	78	33
18	24	44	98	240	360	148	135	97	34	150	45	28
19	34	47	73	240	313	130	364	89	37	166	38	27
20	32	169	73	240	394	130	428	151	35	92	33	30
21	28	223	*88	202	*434	154	313	428	33	119	26	26
22	27	124	78	322	360	215	240	298	32	113	24	23
23	26	141	76	471	450	228	383	368	32	84	23	25
24	26	124	71	471	450	*240	450	311	30	51	22	26
25	26	97	b58	531	360	190	360	241	27	41	22	24
26	27	78	b50	430	360	166	265	186	29	38	20	22
27	26	73	b44	*337	289	d166	240	227	31	34	d20	21
28	26	82	b45	428	289	157	228	172	28	37	19	20
29	25	82	54	608	-------	135	178	140	26	84	23	23
30	25	106	728	560	-------	122	161	123	26	53	35	57
31	25	-------	3,600	420	-------	122	-------	107	-------	41	30	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
d Doubtful gage-height record; discharge computed on basis of record for adjacent days.
Note.--Backwater from overbank storage Jan. 1-13, 26, 30, 31.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	58	68	42	100	129	b135	519	268	300	63	55	63
2	36	51	41	96	136	b130	439	297	452	56	66	55
3	28	39	41	*105	199	b100	386	234	430	61	75	57
4	25	36	b38	125	175	b102	414	195	546	86	68	65
5	25	37	b35	125	150	103	389	208	580	93	61	61
6	27	37	b34	125	134	*147	354	214	443	224	55	51
7	28	33	b32	244	136	147	291	188	307	219	51	44
8	29	32	b31	216	100	244	251	152	234	137	47	40
9	28	31	b26	117	147	854	222	130	188	86	41	38
10	26	29	b25	137	424	d1,120	203	130	168	80	39	98
11	25	27	b26	291	445	860	192	136	264	170	40	185
12	22	27	30	213	417	800	185	120	225	401	40	116
13	23	29	125	164	370	760	175	113	158	355	40	87
14	23	47	247	184	*b260	640	165	105	149	468	37	105
15	23	70	*131	199	b320	566	168	97	251	449	34	104
16	22	51	77	157	419	494	154	100	222	356	32	81
17	22	42	61	138	441	423	143	102	178	274	36	66
18	23	*38	56	128	413	406	136	199	143	219	38	57
19	25	38	70	129	373	332	134	354	120	222	48	51
20	26	40	89	94	b290	312	221	308	118	182	326	54
21	26	41	79	84	b220	361	373	228	118	168	353	54
22	25	39	73	84	227	*475	279	170	107	132	221	55
23	26	b32	81	*92	213	642	203	143	90	105	109	60
24	24	30	111	111	213	837	198	280	84	92	75	56
25	22	b32	83	152	b205	920	208	412	174	113	65	48
26	34	b32	70	152	188	860	217	319	198	105	56	42
27	49	b30	194	152	143	777	234	268	120	84	50	41
28	40	26	318	134	132	727	211	211	87	72	43	40
29	32	29	235	132	-------	727	206	277	74	75	44	38
30	32	36	152	191	-------	722	192	458	70	67	62	37
31	46	-------	111	157	-------	639	-------	365	-------	58	68	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
d Doubtful gage-height record; discharge computed from reconstructed gage-height graph.
Note.--Backwater from overbank storage Mar. 11-14 (doubtful gage-height record Mar. 11).

Wallkill River near Unionville, N. Y.--Continued

Monthly and annual discharge, in cubic feet per second, 1937-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1937	2,977	288	35	96.0	0.667	0.77
November	6,627	565	74	221	1.53	1.71
December	7,330	710	56	236	1.64	1.89
Calendar year 1937						
January 1938	10,589	1,540	88	342	2.38	2.74
February	9,374	605	175	335	2.33	2.43
March	7,839	509	120	253	1.76	2.03
April	8,900	650	118	297	2.06	2.30
May	3,915	336	70	126	.875	1.01
June	4,380	818	67	146	1.01	1.13
July	13,858	1,030	97	447	3.10	3.57
August	7,424	625	45	239	1.66	1.91
September	17,019	2,970	81	567	3.94	4.40
Water year 1937-38	100,232	2,970	31	275	1.91	25.89
October 1938	6,256	517	100	202	1.40	1.61
November	5,061	291	112	169	1.17	1.30
December	16,403	1,890	161	529	3.67	4.23
Calendar year 1938	111,018	2,970	31	304	2.11	28.66
January 1939	7,481	655	108	241	1.67	1.92
February	14,273	1,020	291	510	3.54	3.69
March	15,443	860	280	498	3.46	3.99
April	17,068	770	339	569	3.95	4.41
May	5,189	395	77	167	1.16	1.34
June	1,593	125	33	53.1	.369	.41
July	952	58	17	30.7	.213	.25
August	855	72	17	27.6	.192	.22
September	586	27	14	19.5	.135	.15
Water year 1938-39	91,160	1,890	14	250	1.74	23.52
October 1939	1,306	97	16	42.1	.292	.34
November	3,637	489	40	121	.840	.94
December	2,389	212	39	77.1	.535	.62
Calendar year 1939	70,772	1,020	14	194	1.35	18.28
January 1940	1,540	170	26	49.7	.345	.40
February	2,308	260	25	79.6	.553	.60
March	16,957	1,230	56	547	3.80	4.38
April	20,095	1,450	310	670	4.65	5.19
May	6,776	370	104	219	1.52	1.75
June	6,249	480	64	208	1.44	1.61
July	2,820	288	33	91.0	.632	.73
August	1,617	280	22	52.2	.362	.42
September	7,316	910	45	244	1.69	1.89
Water year 1939-40	73,010	1,450	16	199	1.38	18.87
October 1940	1,885	240	35	60.8	.422	.49
November	11,660	1,040	130	389	2.70	3.01
December	9,615	890	143	310	2.15	2.48
Calendar year 1940	88,838	1,450	22	243	1.69	22.95
January 1941	7,132	805	120	230	1.60	1.84
February	9,777	920	100	349	2.42	2.52
March	10,585	596	143	341	2.37	2.73
April	8,256	684	78	275	1.91	2.13
May	1,753	80	34	56.5	.392	.45
June	1,839	267	18	61.3	.426	.48
July	2,250	256	23	72.6	.504	.58
August	1,049	95	13	33.8	.235	.27
September	444	32	7	14.8	.103	.11
Water year 1940-41	66,245	1,040	7	181	1.26	17.09
October 1941	485	24	10	15.6	.108	.12
November	1,021	96	18	34.0	.236	.26
December	3,471	481	19	112	.778	.90
Calendar year 1941	48,062	920	7	182	.917	12.39
January 1942	3,867	390	49	125	.868	1.00
February	5,776	665	78	206	1.43	1.49
March	15,701	863	82	506	3.51	4.05
April	5,218	346	75	174	1.21	1.35
May	3,481	334	55	112	.778	.90
June	2,882	208	37	96.1	.667	.74
July	3,670	452	30	118	.819	.94
August	13,125	1,300	60	423	2.94	3.39
September	5,320	840	56	177	1.23	1.37
Water year 1941-42	64,017	1,300	10	175	1.22	16.51

Wallkill River near Unionville, N. Y.--Continued

Monthly and annual discharge, in cubic feet per second, 1937-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1942	7,974	660	102	257	1.78	2.06
November	13,376	1,850	138	446	3.10	3.45
December	12,828	1,800	118	414	2.88	3.31
Calendar year 1942	93,218	1,850	30	255	1.77	24.05
January 1943	9,845	1,400	130	318	2.21	2.54
February	11,699	1,140	155	418	2.90	3.02
March	11,483	821	185	370	2.57	2.97
April	5,587	338	118	186	1.29	1.44
May	6,027	637	91	194	1.35	1.56
June	3,738	394	42	125	.868	.97
July	1,583	172	25	51.1	.355	.41
August	645	49	12	20.8	.144	.17
September	425.6	23	7.0	14.2	.099	.11
Water year 1942-43	85,210.6	1,850	7.0	233	1.62	22.01
October 1943	2,497.0	450	9.0	80.5	.559	.64
November	8,236	1,240	101	275	1.91	2.13
December	1,678	101	25	54.1	.376	.43
Calendar year 1943	63,443.6	1,400	7.0	174	1.21	16.39
January 1944	2,506	400	32	80.8	.561	.65
February	4,783	420	48	165	1.15	1.24
March	13,272	922	112	428	2.97	3.43
April	14,753	1,240	267	492	3.42	3.81
May	4,922	390	63	159	1.10	1.27
June	2,688	292	29	89.6	.622	.69
July	962	60	16	31.0	.215	.25
August	710	121	12	22.9	.159	.18
September	1,233	232	12	41.1	.285	.32
Water year 1943-44	58,240.0	1,240	9.0	159	1.10	15.04
October 1944	706	53	17	22.8	.158	.18
November	3,238	509	18	108	.750	.84
December	8,229	591	112	265	1.84	2.13
Calendar year 1944	58,002	1,240	12	158	1.10	14.99
January 1945	5,702	560	88	184	1.28	1.47
February	5,756	960	80	206	1.43	1.49
March	22,552	1,520	200	727	5.05	5.82
April	7,289	570	115	243	1.69	1.88
May	10,943	603	163	353	2.45	2.83
June	7,395	554	96	246	1.71	1.91
July	18,742	2,600	93	605	4.20	4.84
August	10,816	717	84	349	2.42	2.79
September	9,482	741	93	316	2.19	2.45
Water year 1944-45	110,850	2,600	17	304	2.11	28.63
October 1945	4,610	301	86	149	1.03	1.19
November	6,942	638	72	231	1.60	1.79
December	11,577	660	130	373	2.59	2.99
Calendar year 1945	121,806	2,600	72	334	2.32	31.45
January 1946	11,814	1,250	112	381	2.65	3.05
February	3,215	280	72	115	.799	.83
March	10,920	720	177	352	2.44	2.82
April	3,407	183	70	114	.792	.88
May	6,731	1,040	54	217	1.51	1.74
June	6,791	891	45	226	1.57	1.75
July	2,146	322	20	69.2	.481	.55
August	1,811	161	37	58.4	.406	.47
September	870	58	19	29.0	.201	.22
Water year 1945-46	70,834	1,250	19	194	1.35	18.28
October 1946	1,135	62	19	36.6	.254	.29
November	1,128	43	32	37.6	.261	.29
December	1,058	82	13	34.1	.237	.27
Calendar year 1946	51,026	1,250	13	140	.972	13.16
January 1947	4,566	500	30	147	1.02	1.18
February	3,193	500	34	114	.792	.82
March	11,803	1,840	60	381	2.65	3.05
April	13,628	2,000	183	454	3.15	3.52
May	15,692	940	248	506	3.51	4.05
June	5,572	446	89	186	1.29	1.44
July	5,034	336	69	162	1.12	1.30
August	3,666	540	38	118	.819	.95
September	1,563	125	34	52.1	.362	.40
Water year 1946-47	68,038	2,000	13	186	1.29	17.56

Wallkill River near Unionville, N. Y.--Continued

Monthly and annual discharge, in cubic feet per second, 1937-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1947	980	95	23	31.6	0.219	0.25
November	9,584	860	51	319	2.22	2.48
December	3,618	227	72	117	.812	.93
Calendar year 1947	78,894	2,000	23	216	1.50	20.37
January 1948	2,914	118	80	94.0	.653	.75
February	11,068	1,220	70	382	2.65	2.86
March	21,003	1,900	289	678	4.71	5.42
April	12,388	960	190	413	2.87	3.20
May	10,624	860	150	343	2.38	2.74
June	6,899	470	100	230	1.60	1.78
July	3,694	395	49	119	.826	.95
August	2,054	170	37	66.3	.460	.53
September	764	33	22	25.5	.177	.20
Water year 1947-48	85,585	1,900	22	234	1.62	22.09
October 1948	823	40	21	26.9	.187	.22
November	2,312	223	26	77.1	.535	.60
December	6,235	3,600	44	201	1.40	1.61
Calendar year 1948	80,788	3,600	21	221	1.53	20.86
January 1949	21,669	2,900	202	699	4.85	5.60
February	9,800	531	215	350	2.43	2.53
March	6,348	360	122	205	1.42	1.64
April	6,268	450	100	209	1.45	1.62
May	6,269	428	89	202	1.40	1.62
June	1,511	98	26	43.7	.303	.34
July	1,809	166	22	58.4	.406	.47
August	1,077	81	19	34.7	.241	.28
September	772	57	17	25.7	.178	.20
Water year 1948-49	64,703	3,600	17	177	1.23	16.73
October 1949	902	58	22	29.1	.202	.23
November	1,129	70	26	37.6	.261	.29
December	2,764	318	25	89.2	.619	.71
Calendar year 1949	60,118	2,900	17	165	1.15	15.53
January 1950	4,523	291	84	146	1.01	1.17
February	7,019	445	100	251	1.74	1.81
March	16,362	1,120	100	528	3.67	4.23
April	7,462	519	134	249	1.73	1.93
May	6,781	458	97	219	1.52	1.75
June	6,598	580	70	220	1.53	1.70
July	5,272	468	56	170	1.18	1.36
August	2,375	353	32	76.6	.532	.61
September	1,949	185	37	65.0	.451	.50
Water year 1949-50	63,136	1,120	22	173	1.20	16.29

Hackensack River at Rivervale

Location.--Lat 40°59'55", long 73°59'27", on right bank at Leslie Avenue, Rivervale, Bergen County, 1½ miles upstream from Pascack Brook, 4.6 miles upstream from Oradell Dam, and 27.2 miles upstream from mouth.

Drainage area.--58.0 sq mi.

Records available.--October 1941 to September 1950.

Gage.--Water-stage recorder and concrete control. Datum of gage is 22.51 ft above mean sea level, datum of 1929.

Average discharge.--9 years, 94.7 cfs (adjusted for diversion).

Extremes.--1941-50: Maximum discharge, 1,250 cfs July 19, 20, 23, 1945; maximum gage height, 5.28 ft July 19, 20, 1945; minimum discharge, 7.0 cfs Aug. 14, 31, Sept. 1, 1944 (gage height, 1.38 ft).

Peak discharge (base, 500 cfs).--
1946: Dec. 28 (4 to 9 p.m.) 514 cfs (3.31 ft); May 28 (4 to 6 a.m.) 644 cfs (3.61 ft); June 3 (3 to 5 a.m.) 560 cfs (3.41 ft); July 23 (11 to 12 p.m.) 772 cfs (3.92 ft); Aug. 14 (4 to 5:30 a.m.) 624 cfs (3.56 ft).
1947: Apr. 6 (3:30 to 5:30 a.m.) 595 cfs (3.48 ft).
1948: Nov. 12 (7:30 p.m.) 501 cfs (3.28 ft); Mar. 18 (6 a.m. to 7:30 p.m.) 546 cfs (3.38 ft); Apr. 1 (11:30 p.m.) 514 cfs (3.31 ft); May 15 (5 a.m. to 2 p.m.) 519 cfs (3.32 ft).
1949: Jan. 1 (7 to 10 p.m.) 737 cfs (3.83 ft); Jan. 8 (3 to 7 p.m.) 501 cfs (3.28 ft).
1950: July 12 (7 to 9 a.m.) 334 cfs (2.93 ft), (annual maximum below base).

Remarks.--Diversion at West Nyack, N. Y., for municipal water supply.

Cooperation.--Gage-height record collected in cooperation with Hackensack Water Co. and record of diversion furnished by village of Nyack, N. Y.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a56	53	190	328	85	109	101	53	223	43	60	43
2	55	51	180	245	75	121	95	48	312	64	52	41
3	55	50	162	223	63	133	101	43	487	65	47	39
4	52	48	146	187	61	168	93	40	370	a57	44	37
5	51	47	135	162	55	196	89	41	344	h55	43	34
6	52	45	146	157	56	193	85	41	286	a50	41	31
7	85	44	202	213	99	190	78	39	216	a45	50	31
8	80	45	206	268	85	196	73	50	162	40	48	30
9	71	43	199	277	85	206	76	48	128	38	40	29
10	73	43	190	318	87	206	74	45	103	36	38	28
11	74	51	162	281	78	180	70	44	89	a33	38	27
12	71	71	123	249	73	154	66	70	118	31	36	25
13	68	71	121	219	73	130	63	128	a105	30	166	24
14	62	93	105	165	96	116	62	78	h84	26	518	23
15	60	101	97	162	116	149	57	173	a76	24	328	23
16	57	89	71	110	88	219	56	130	a66	23	245	22
17	55	82	85	112	95	196	53	136	a60	21	190	22
18	a51	76	84	105	84	183	50	344	a60	19.7	143	21
19	h48	74	74	85	68	148	46	304	a61	17.6	177	19.7
20	a46	143	73	68	61	126	45	252	a65	17.6	187	19.0
21	a45	121	73	82	62	108	43	216	h63	24	135	23
22	a44	158	73	76	63	95	40	241	a63	65	116	33
23	a44	213	71	68	66	87	40	171	a55	472	103	27
24	h44	190	71	68	63	80	39	130	50	605	97	54
25	a57	183	76	68	62	97	38	103	44	510	85	186
26	60	160	309	70	60	105	56	84	39	483	73	108
27	63	126	501	68	63	206	60	242	36	354	60	101
28	62	108	496	66	95	187	62	568	34	237	52	91
29	59	186	442	65	-------	171	59	456	36	160	51	73
30	56	213	304	65	-------	151	57	433	41	110	56	148
31	55	-------	290	78	-------	121	-------	318	-------	78	47	-------

a No gage-height record; discharge computed on basis of recorded range in stage and records for other stations in Hackensack River Basin.
h Computed from hook-gage readings.

Hackensack River at Rivervale--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	199	39	40	50	110	61	85	249	143	82	34	22
2	162	38	37	45	97	68	93	245	123	105	32	35
3	171	38	32	47	82	151	180	260	103	85	31	28
4	151	37	32	51	85	146	171	264	89	74	31	24
5	114	36	30	46	110	157	253	268	76	68	28	24
6	85	34	29	48	93	187	209	290	70	60	27	24
7	68	34	30	42	101	213	496	286	65	52	26	24
8	57	36	30	46	82	213	411	245	130	85	26	24
9	50	38	31	44	66	183	260	193	304	97	28	23
10	46	37	31	39	80	180	196	154	233	99	52	22
11	46	36	33	39	71	174	162	128	219	99	34	21
12	50	43	33	40	66	174	143	112	183	93	30	19.7
13	70	44	35	42	62	174	130	101	128	80	28	19.0
14	63	41	35	45	a58	272	116	139	103	66	27	18.3
15	60	40	34	60	a64	447	110	168	140	65	27	18.3
16	56	39	31	99	a70	465	105	121	112	63	26	21
17	52	38	31	95	a76	375	126	108	99	63	85	21
18	50	38	31	89	a72	245	114	103	93	62	53	19.7
19	52	37	30	76	a66	183	110	114	89	65	53	18.3
20	48	38	26	109	a58	151	105	163	80	65	51	21
21	46	37	60	154	a50	135	101	190	193	63	48	19.0
22	44	50	99	96	56	126	101	213	183	119	45	24
23	43	59	80	128	57	114	93	241	209	99	39	27
24	41	50	80	110	60	110	87	209	206	80	36	24
25	39	48	76	85	62	126	85	190	206	76	33	24
26	41	47	66	78	62	135	108	290	160	73	31	21
27	47	47	47	95	62	126	99	272	133	62	30	19.7
28	45	46	51	97	63	116	95	256	116	53	29	19.0
29	43	43	50	91	-------	105	87	219	101	47	27	17.6
30	41	41	57	85	-------	99	85	213	103	41	25	16.9
31	40	-------	47	101	-------	89	-------	171	-------	37	24	-------

a No gage-height record; discharge computed on basis of recorded range in stage and records for Pascack Brook at Westwood.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16.2	36	52	51	51	190	298	82	187	80	40	22
2	16.9	31	50	55	51	206	478	76	165	66	40	21
3	14.3	28	50	56	50	219	460	73	135	59	38	19.7
4	14.3	42	47	55	47	202	365	a70	112	52	36	19.7
5	14.3	60	46	56	47	168	249	a78	97	47	34	19.0
6	14.3	55	47	57	45	154	193	103	87	45	39	19.0
7	14.3	48	47	59	45	146	165	102	82	51	36	19.0
8	14.3	108	62	60	44	146	146	160	146	51	34	17.6
9	13.7	238	73	60	41	154	133	140	138	46	33	15.6
10	12.6	162	66	62	43	196	121	130	146	45	32	14.3
11	13.2	160	60	59	44	237	110	110	143	43	31	14.9
12	13.2	370	53	62	45	206	148	89	121	39	89	14.9
13	13.7	405	51	65	44	196	177	228	130	41	95	14.9
14	14.3	328	44	68	54	187	202	469	128	150	91	14.3
15	15.6	260	45	63	76	190	313	510	110	213	82	13.2
16	13.7	180	101	63	71	269	328	429	97	339	73	11.5
17	13.2	128	105	60	79	496	295	370	87	339	57	11.5
18	13.7	99	101	57	121	541	216	290	73	245	47	11.5
19	15.6	80	80	55	154	483	165	241	98	183	40	11.0
20	16.2	66	67	62	190	395	143	193	172	130	35	11.5
21	14.3	57	68	62	199	309	126	160	157	99	33	12.0
22	14.3	52	59	65	233	328	116	146	143	80	32	12.6
23	14.9	62	55	62	199	286	105	128	148	68	41	12.0
24	13.2	71	47	60	171	344	99	114	171	63	35	12.0
25	13.2	103	40	63	174	216	99	137	223	56	31	11.5
26	13.2	95	36	55	157	180	99	223	174	51	30	11.0
27	13.7	87	43	56	157	177	95	177	146	51	28	11.0
28	13.7	80	44	52	183	281	91	154	133	48	27	11.0
29	22	71	44	52	187	260	85	130	114	45	26	11.0
30	24	60	47	52	-------	213	82	182	93	43	24	11.5
31	28	-------	50	53	-------	174	-------	216	-------	40	24	-------

a No gage-height record; discharge computed on basis of records for Pascack Brook at Westwood.

Hackensack River at Rivervale--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15.6	16.9	46	709	183	123	78	76	53	13.2	13.7	16.2
2	15.6	16.9	41	667	165	121	76	76	48	13.2	14.3	16.2
3	15.6	16.2	38	475	162	123	70	155	43	12.6	14.3	14.9
4	16.2	22	36	290	146	116	65	157	39	12.0	15.6	13.7
5	15.6	27	33	223	130	118	62	151	36	12.6	28	13.2
6	14.3	26	31	408	110	143	133	138	33	13.7	29	13.2
7	13.7	29	31	487	126	140	168	148	30	24	25	13.2
8	17.7	30	31	483	143	128	140	121	27	19.0	23	12.0
9	22	29	30	365	148	116	140	105	25	16.9	19.7	12.6
10	20	31	28	249	157	105	116	101	23	14.9	16.9	11.0
11	19.7	43	26	190	135	103	89	99	22	17.6	14.9	11.0
12	19.0	38	25	151	113	112	76	89	21	17.6	13.2	10.5
13	18.3	38	25	130	118	103	71	80	20	20	12.6	11.0
14	17.6	36	26	116	123	95	129	74	19.7	21	14.3	14.3
15	16.9	33	26	103	135	89	133	73	19.0	18.3	13.2	15.6
16	16.2	31	28	95	140	82	128	68	17.6	18.2	13.2	14.9
17	16.2	28	35	91	140	76	118	63	16.9	19.0	12.6	14.3
18	16.2	25	43	87	133	73	103	60	16.9	29	12.6	16.3
19	17.6	24	35	89	123	70	184	56	16.9	32	12.0	25
20	17.6	41	41	93	135	70	190	55	16.9	28	11.5	16.9
21	17.6	45	39	87	140	73	180	66	16.2	24	11.0	14.3
22	17.6	44	39	196	130	84	165	71	15.6	23	10.5	13.2
23	17.6	47	39	223	209	132	196	138	14.3	19.7	10.5	16.2
24	18.3	46	36	235	190	162	187	128	12.6	16.9	9.5	16.9
25	19.0	44	32	252	168	143	171	123	12.6	16.2	9.1	15.6
26	20	38	30	213	157	135	151	112	12.6	16.2	8.6	14.3
27	20	36	26	168	138	121	126	101	13.2	15.7	8.2	14.3
28	20	35	25	199	128	108	105	84	13.7	13.7	7.8	13.7
29	19.0	41	28	264	-------	93	91	68	13.7	12.6	13.6	13.2
30	17.6	50	135	249	-------	82	84	63	13.2	12.0	18.3	20
31	16.9	-------	566	209	-------	76	-------	57	-------	12.6	16.2	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18.9	26	19.7	48	50	51	121	95	97	26	31	27
2	17.4	24	19.7	43	56	45	110	108	112	24	30	25
3	16.8	24	21	41	74	39	97	101	93	24	35	24
4	16.8	23	20	41	68	39	97	89	91	28	43	24
5	14.2	21	18.9	40	63	38	99	87	99	28	36	24
6	12.5	19.7	18.9	36	60	46	103	89	84	36	33	21
7	11.5	18.1	17.4	44	57	47	103	85	71	32	32	19.7
8	11.0	16.8	16.8	43	40	56	93	76	62	30	30	18.9
9	11.0	15.4	15.4	34	58	116	85	68	52	28	28	18.9
10	11.5	14.8	14.8	40	95	108	78	62	44	58	28	18.1
11	11.0	14.8	14.8	55	97	114	73	60	39	199	26	20
12	10.5	14.8	16.1	45	93	128	68	55	35	290	25	20
13	10.0	14.8	36	46	87	126	65	48	32	206	24	21
14	10.0	16.1	41	47	76	118	63	45	30	216	23	30
15	10.0	18.1	35	47	95	112	62	41	38	249	22	27
16	10.0	18.9	30	46	146	105	60	39	46	226	20	25
17	10.0	18.9	28	43	160	91	57	37	45	226	19.7	23
18	10.0	18.9	27	39	165	84	56	43	45	199	16.8	22
19	9.5	18.9	27	39	160	78	53	71	45	154	27	22
20	9.5	18.1	28	33	121	73	53	85	45	118	80	19.7
21	9.5	17.4	27	32	116	91	68	84	44	97	63	18.9
22	9.5	16.8	26	30	82	148	68	68	41	82	52	18.1
23	9.5	15.4	26	30	71	198	65	60	36	71	57	18.1
24	9.5	14.8	32	31	62	286	65	80	34	60	57	16.8
25	9.5	14.2	30	35	63	290	66	91	34	55	50	16.1
26	16.2	13.6	27	36	59	268	66	84	32	48	40	14.8
27	19.7	14.2	76	37	52	219	71	87	31	43	35	14.2
28	18.1	14.2	84	38	52	187	84	78	30	39	31	14.2
29	17.4	14.8	70	41	-------	174	93	85	29	37	29	14.2
30	17.4	19.7	63	48	-------	160	91	118	28	34	31	14.2
31	21	-------	51	50	-------	138	-------	99	-------	30	30	-------

Hackensack River at Rivervale--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	1,811	85	44	58.4	59.6	1.03	1.18
November.....	2,978	213	43	99.3	100	1.72	1.93
December.....	5,457	501	71	176	177	3.05	3.52
Calendar year 1945	52,329.0	1,110	35	143	145	2.50	33.82
January 1946	4,708	328	65	152	153	2.64	3.04
February.....	2,117	116	55	75.6	76.8	1.32	1.38
March.....	4,727	219	80	152	154	2.66	3.05
April.....	1,927	101	38	64.2	65.4	1.13	1.26
May.....	5,069	568	39	164	165	2.84	3.28
June.....	3,876	487	34	129	130	2.24	2.51
July.....	3,833.9	605	17.6	124	125	2.16	2.49
August.....	3,366	518	36	109	110	1.90	2.18
September.....	1,412.7	186	19.0	47.1	48.3	.833	.93
Water year 1945-46	41,282.6	605	17.6	113	114	1.97	26.75
October 1946	2,120	199	39	68.4	69.6	1.20	1.38
November.....	1,229	59	34	41.0	42.2	.728	.81
December.....	1,354	99	26	43.7	44.8	.772	.89
Calendar year 1946	35,739.6	605	17.6	97.9	99.1	1.71	23.20
January 1947	2,272	154	39	73.3	74.5	1.28	1.48
February.....	2,041	110	50	72.9	74.1	1.28	1.33
March.....	5,500	465	61	177	179	3.09	3.55
April.....	4,516	496	85	151	152	2.62	2.92
May.....	6,175	290	101	199	200	3.45	3.98
June.....	4,192	304	65	140	141	2.43	2.71
July.....	2,278	119	37	73.5	74.8	1.29	1.49
August.....	1,096	85	24	35.4	36.7	.633	.73
September.....	659.5	35	16.9	22.0	23.4	.403	.45
Water year 1946-47	33,432.5	496	16.9	91.6	92.8	1.60	21.72
October 1947	472.1	28	12.6	15.2	16.6	.286	.33
November.....	3,622	405	28	121	122	2.10	2.35
December.....	1,780	105	36	57.4	58.6	1.01	1.16
Calendar year 1947	34,603.6	496	12.6	94.8	96.1	1.66	22.48
January 1948	1,817	68	51	58.6	59.9	1.03	1.19
February.....	3,002	233	41	104	105	1.81	1.95
March.....	7,749	541	146	250	251	4.33	4.99
April.....	5,702	478	82	190	191	3.29	3.68
May.....	5,710	510	70	184	185	3.19	3.69
June.....	3,956	223	73	132	133	2.29	2.56
July.....	2,908	339	39	93.8	95.3	1.64	1.89
August.....	1,333	95	24	43.0	44.4	.766	.88
September.....	431.7	22	11.0	14.4	15.9	.274	.31
Water year 1947-48	38,482.8	541	11.0	105	106	1.83	24.98
October 1948	545.2	22	13.7	17.6	18.9	.326	.37
November.....	1,007.0	50	16.2	33.6	34.8	.600	.67
December.....	1,650	566	25	53.2	54.7	.943	1.09
Calendar year 1948	35,810.9	566	11.0	97.8	99.2	1.71	23.27
January 1949	7,794	709	87	251	253	4.36	5.02
February.....	4,025	209	110	144	145	2.50	2.60
March.....	6,315	162	70	107	108	1.86	2.15
April.....	6,725	196	62	124	125	2.16	2.41
May.....	2,956	157	55	95.4	96.7	1.67	1.92
June.....	681.6	53	12.6	22.7	24.3	.419	.47
July.....	549.4	32	12.0	17.7	19.4	.334	.38
August.....	452.9	29	7.8	14.6	16.2	.279	.32
September.....	437.7	25	10.5	14.6	16.0	.276	.31
Water year 1948-49	27,138.8	709	7.8	74.4	75.7	1.31	17.71
October 1949	399.4	21	9.5	12.9	14.3	.247	.28
November.....	530.2	26	13.6	17.7	19.0	.328	.37
December.....	977.5	84	14.8	31.5	32.8	.566	.65
Calendar year 1949	25,843.7	709	7.8	70.8	72.2	1.24	16.88
January 1950	1,258	55	30	40.6	41.9	.722	.83
February.....	2,378	165	40	84.9	86.1	1.48	1.55
March.....	3,773	290	38	122	123	2.12	2.44
April.....	2,333	121	53	77.8	79.0	1.36	1.52
May.....	2,318	118	37	74.8	76.1	1.31	1.51
June.....	1,544	112	28	51.5	52.9	.912	1.02
July.....	2,995	290	24	96.6	98.1	1.69	1.95
August.....	1,084.5	80	16.8	35.0	36.5	.629	.73
September.....	609.9	31	14.2	20.3	21.9	.378	.42
Water year 1949-50	20,200.5	290	9.5	55.3	56.7	.978	13.27

* Adjusted for diversion at West Nyack, N. Y.

Pascack Brook at Westwood

Location.--Lat 40°59'33", long 74°01'19", on right bank 75 ft upstream from Harrington Avenue in Westwood, Bergen County, 500 ft downstream from Musquapsink Creek, and 2.3 miles upstream from mouth.

Drainage area.--29.6 sq mi.

Records available.--September 1934 to September 1950.

Gage.--Water-stage recorder and concrete control. Datum of gage is 28.62 ft above mean sea level, datum of 1929.

Average discharge.--16 years, 48.8 cfs (adjusted).

Extremes.--1934-50: Maximum discharge, 1,610 cfs July 23, 1945 (gage height, 6.76 ft); minimum, 5.8 cfs Oct. 21, 1949 (gage height, 1.31 ft).

Peak discharge (base, 325 cfs).--
1946: Dec. 26 (7 to 9 p.m.) 462 cfs (3.88 ft); May 18 (10 a.m.) 361 cfs (3.49 ft); May 28 (4 a.m.) 693 cfs (4.63 ft); June 3 (3 a.m.) 482 cfs (3.95 ft); July 23 (11:30 p.m.) 813 cfs (4.98 ft); Aug. 14 (2:30 a.m.) 327 cfs (3.34 ft).
1947: Mar. 15 (1 a.m.) 338 cfs (3.39 ft); Apr. 6 (4 to 6 a.m.) 451 cfs (3.84 ft).
1948: Nov. 12 (4:30 p.m.) 354 cfs (3.46 ft); Apr. 2 (12:30 a.m.) 368 cfs (3.52 ft); May 14 (2 a.m.) 338 cfs (3.39 ft).
1949: Jan. 6 (4 p.m.) 405 cfs (3.67 ft).
1950: Mar. 23 (12 p.m.) 266 cfs (3.03 ft), (annual maximum below base).

Remarks.--Flow regulated by Woodcliff Lake (capacity, 112,000,000 cubic feet), 3 miles above station.

Cooperation.--Gage-height record collected in cooperation with and storage record furnished by Hackensack Water Co.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	31	98	173	61	63	43	33	71	33	32	35
2	39	29	74	107	52	62	47	31	246	38	31	33
3	39	27	65	83	42	65	63	28	373	33	31	32
4	34	27	63	74	34	87	57	27	162	30	31	31
5	33	25	63	a75	33	91	50	33	115	27	31	30
6	40	a26	82	a90	40	87	46	36	111	26	31	29
7	77	28	136	a120	74	79	42	34	95	26	41	29
8	74	27	115	164	58	82	40	40	82	25	41	29
9	58	27	80	115	48	95	45	37	71	25	36	29
10	49	27	71	126	47	88	41	32	61	25	33	29
11	41	35	65	107	43	65	38	29	63	25	32	29
12	38	49	54	93	40	57	38	59	102	28	31	28
13	37	50	48	87	39	53	38	97	90	25	130	28
14	36	59	50	75	53	52	37	67	62	24	260	27
15	35	57	52	68	68	91	36	109	53	24	104	27
16	34	47	52	58	45	140	36	83	49	24	58	27
17	33	39	46	54	40	88	33	89	47	27	58	27
18	32	35	43	52	37	68	33	306	52	30	61	27
19	31	43	47	53	35	57	32	168	65	30	103	27
20	30	93	50	43	41	50	32	97	54	30	122	27
21	29	80	49	47	38	48	29	80	48	42	72	34
22	28	132	49	52	35	46	27	77	46	59	52	33
23	30	150	47	48	37	43	27	62	41	476	46	33
24	36	81	46	46	37	38	28	52	37	492	41	63
25	42	59	56	48	37	57	31	47	33	144	37	120
26	45	52	350	49	35	78	50	45	31	80	35	86
27	43	46	283	47	36	147	53	275	30	68	33	47
28	36	49	128	41	58	103	45	522	28	62	33	37
29	33	152	107	41	------	68	37	190	30	51	40	34
30	32	169	109	45	------	59	36	113	32	33	46	173
31	32	------	153	58	------	48	------	91	------	32	40	------

a No gage-height record; discharge computed on basis of recorded range in stage and records for Hackensack River at Rivervale and Saddle River at Lodi.

Pascack Brook at Westwood--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	155	29	24	27	50	29	43	187	66	57	23	15.5
2	72	29	24	27	40	44	58	133	61	85	21	32
3	49	29	17.9	27	33	111	122	100	58	66	20	29
4	41	29	18.5	28	40	90	88	119	57	46	19.8	24
5	37	28	19.8	27	59	68	195	134	50	37	20	22
6	34	28	20	27	45	61	353	132	45	34	20	21
7	33	28	21	26	38	72	150	97	48	32	20	19.8
8	33	30	20	25	37	74	97	80	a149	69	22	18.5
9	32	30	21	25	33	62	85	69	a250	90	26	17.9
10	31	30	23	23	33	61	88	62	127	62	55	17.3
11	31	29	23	22	32	63	85	57	74	50	43	16.7
12	34	32	21	23	31	68	79	55	53	45	33	16.1
13	50	31	23	24	29	72	72	54	42	37	27	15.5
14	49	34	21	27	29	217	66	101	a70	34	25	15.5
15	40	37	19.8	37	31	247	65	120	a100	35	23	15.5
16	34	33	19.1	57	34	119	68	77	a90	43	23	17.3
17	33	31	19.1	53	39	90	80	62	a65	47	89	16.7
18	33	29	19.8	41	37	79	69	63	a55	42	54	15.0
19	34	20	19.8	34	35	68	61	71	52	41	36	13.9
20	33	23	19.1	66	30	65	58	124	71	38	30	18.5
21	32	24	51	107	33	63	57	136	201	33	26	16.1
22	32	36	71	60	35	a61	61	134	113	100	23	19.8
23	31	41	52	37	32	a58	57	126	65	93	22	23
24	31	33	38	32	31	a58	53	87	61	53	20	19.8
25	29	29	32	32	31	a77	54	97	91	38	19.1	19.8
26	32	27	27	34	31	83	68	229	80	a34	19.1	21
27	33	28	23	45	32	62	62	138	61	a33	18.5	19.8
28	33	27	24	47	30	54	54	87	49	a31	17.3	16.1
29	32	25	27	41	-------	50	49	79	55	a30	17.3	15.0
30	30	24	33	37	-------	48	57	107	68	a28	16.7	16.1
31	29	-------	30	48	-------	43	-------	88	-------	a26	16.1	-------

a No gage-height record; discharge computed on basis of recorded range in stage, adjacent recorder graph, and records for Hackensack River at Rivervale and stations on other nearby streams.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14.4	35	27	31	a24	80	225	57	87	45	24	16.1
2	13.9	33	27	43	a24	82	268	52	71	37	23	14.4
3	13.9	33	27	39	24	97	136	49	58	33	23	13.9
4	13.3	40	27	34	25	88	97	49	52	31	22	13.9
5	13.3	41	27	33	27	71	88	60	49	29	25	13.9
6	13.3	39	27	33	25	62	87	85	50	30	39	13.9
7	13.3	36	27	a32	26	62	83	83	57	41	33	13.9
8	13.3	81	37	a32	25	69	77	109	130	38	27	15.5
9	13.9	90	41	32	24	75	74	80	95	32	23	15.5
10	13.9	83	34	33	a23	98	68	59	71	28	21	15.0
11	13.9	54	31	30	a23	128	66	52	59	27	20	15.5
12	14.4	283	28	29	a28	95	104	49	54	25	78	15.0
13	13.9	179	27	36	a35	83	120	234	78	34	95	13.9
14	15.0	78	24	40	a50	80	126	276	75	153	66	14.4
15	16.1	52	23	34	a48	83	223	143	57	82	39	12.3
16	15.0	42	71	31	a50	a150	137	106	50	43	29	11.8
17	14.4	38	78	31	a60	a300	100	140	47	34	25	11.8
18	15.0	34	49	31	77	a250	82	117	38	31	23	11.8
19	18.1	33	36	27	93	a170	75	88	67	38	22	11.8
20	19.1	32	29	27	97	138	72	72	134	36	22	11.3
21	25	29	27	31	88	122	72	68	102	31	23	13.9
22	33	29	26	34	74	149	66	71	61	29	23	13.3
23	33	40	27	31	59	122	53	62	65	34	32	12.8
24	32	49	27	28	54	107	45	58	100	38	32	12.8
25	32	63	25	32	53	87	62	109	140	33	26	11.8
26	32	53	b21	30	53	77	68	158	86	27	23	11.3
27	31	40	b30	28	58	98	62	100	59	26	21	15.1
28	31	33	33	27	77	180	57	66	61	26	19.1	33
29	35	31	30	26	82	113	55	53	58	23	17.3	33
30	33	29	27	a25	-------	87	54	144	50	22	17.3	37
31	36	-------	27	a25	-------	79	-------	132	-------	22	16.7	-------

a No gage-height record; discharge computed on basis of occasional staff-gage readings, recorded range in stage, weather records, and records for Hackensack River at Rivervale and stations on other nearby streams.

b Stage-discharge relation affected by ice.

Pascack Brook at Westwood--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	33	15.0	205	77	68	47	46	27	36	27	25
2	35	33	13.9	106	71	62	46	53	27	35	26	23
3	34	33	12.8	66	61	58	45	130	29	35	26	23
4	34	37	12.3	52	62	57	47	98	29	36	27	23
5	34	35	12.3	73	62	61	41	54	27	36	27	24
6	34	34	13.3	334	59	77	125	27	27	44	27	25
7	33	35	13.9	214	68	72	119	76	26	41	26	24
8	38	34	12.8	107	82	59	79	71	23	37	26	24
9	35	33	11.8	77	77	53	61	59	22	36	25	23
10	34	37	11.8	66	79	53	47	62	21	37	25	22
11	33	38	12.3	62	69	61	42	65	21	37	24	23
12	32	34	12.3	55	57	61	40	55	20	37	24	22
13	33	33	12.8	52	55	53	44	47	20	40	24	24
14	33	33	12.3	50	63	47	106	46	20	37	24	25
15	33	33	12.8	45	74	46	80	47	20	35	24	24
16	33	32	14.4	39	74	41	59	42	19.8	35	24	23
17	33	33	16.7	40	69	41	48	50	20	43	24	23
18	33	33	15.0	40	57	43	51	58	21	46	24	29
19	33	36	13.9	48	53	41	165	50	19.8	42	23	27
20	33	42	15.0	48	75	39	115	50	19.1	38	23	25
21	33	37	14.4	42	74	42	74	52	18.5	36	23	23
22	32	35	14.4	142	69	52	69	57	18.5	36	23	23
23	32	37	13.9	130	132	96	138	88	17.9	35	23	24
24	33	27	13.3	104	95	100	106	70	16.7	34	22	23
25	34	15.0	12.8	97	79	66	79	62	16.7	36	22	23
26	33	13.3	12.3	77	74	55	63	61	16.1	33	21	23
27	27	12.8	12.8	69	63	53	59	49	15.5	29	21	22
28	11.3	12.8	13.9	125	65	49	54	39	26	30	21	22
29	10.8	18.2	23	153	-------	43	47	29	37	27	35	25
30	19.2	16.7	68	97	-------	41	47	28	36	28	27	27
31	33	-------	131	77	-------	42	-------	27	-------	30	26	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	9.2	21	29	12.6	12.6	48	43	50	15.5	18.5	16.6
2	23	9.2	22	29	16.6	13.1	47	25	53	15.5	24	17.9
3	22	8.4	22	29	17.2	11.6	46	22	44	17.9	34	17.9
4	21	7.2	21	29	14.9	11.1	53	27	46	21	35	18.5
5	21	7.2	19.9	29	12.6	11.6	58	48	46	22	31	17.9
6	21	6.8	21	29	11.6	13.1	54	54	36	31	27	16.0
7	19.9	6.8	30	34	11.1	13.1	46	44	32	25	21	14.9
8	19.9	6.8	29	30	10.6	15.5	38	31	27	19.9	18.5	14.9
9	19.9	6.4	31	22	18.5	23	38	28	21	17.9	17.9	14.3
10	19.2	6.1	40	15.2	19.9	19.9	36	30	21	79	17.2	18.5
11	19.2	6.1	41	16.6	17.9	16.6	35	32	19.2	183	17.9	22
12	19.2	6.4	45	13.7	16.0	16.0	35	31	17.2	141	19.9	21
13	19.2	6.4	52	12.1	14.3	23	36	32	14.3	79	24	22
14	19.2	8.0	49	12.1	14.9	40	36	31	13.1	174	17.9	31
15	19.9	8.8	46	11.6	28	40	35	29	16.6	86	16.6	26
16	19.2	9.2	41	10.6	32	42	34	30	16.6	49	12.1	21
17	15.4	8.8	40	10.1	29	37	33	29	17.9	41	12.6	17.9
18	8.4	8.0	39	10.6	24	35	32	41	21	36	13.1	15.5
19	7.2	8.4	39	11.1	21	33	32	62	34	32	36	15.5
20	6.4	8.0	39	9.6	17.9	30	38	70	25	32	102	16.0
21	6.1	8.0	38	9.6	13.7	55	52	48	15.5	28	81	15.5
22	6.1	7.6	38	9.6	13.7	88	45	36	15.5	25	49	16.0
23	6.1	7.6	35	9.6	14.9	178	38	46	16.0	22	44	16.0
24	6.1	7.6	29	10.6	15.5	186	37	82	17.9	21	41	15.5
25	6.1	9.9	27	11.6	16.0	91	37	70	21	21	40	13.7
26	11.2	19.9	27	11.1	14.9	71	41	56	21	21	40	13.1
27	9.2	19.9	48	10.6	13.1	71	46	49	19.9	19.9	39	13.1
28	8.0	19.9	42	9.6	11.6	77	57	49	17.2	18.5	28	13.7
29	7.6	21	37	12.1	-------	80	52	61	16.0	22	17.4	13.7
30	7.2	21	32	12.6	-------	70	46	71	15.5	19.2	17.2	13.7
31	10.1	-------	29	12.6	-------	56	-------	56	-------	17.2	17.2	-------

Pascack Brook at Westwood--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	1,215	77	28	39.2	39.2	1.32	1.53
November	1,751	169	25	58.4	58.9	1.99	2.22
December	2,731	350	43	88.1	87.8	2.97	3.42
Calendar year 1945	28,321	940	21	77.6	77.6	2.62	35.58
January 1946	2,339	173	41	75.5	75.5	2.55	2.94
February	1,243	74	33	44.4	44.4	1.50	1.56
March	2,255	147	38	72.7	72.7	2.46	2.83
April	1,190	63	27	39.7	39.7	1.34	1.50
May	2,989	522	27	96.4	96.7	3.27	3.77
June	2,380	373	28	79.3	78.8	2.66	2.97
July	2,094	492	24	67.5	68.1	2.30	2.65
August	1,772	260	31	57.2	58.8	1.99	2.29
September	1,240	173	27	41.3	42.8	1.45	1.61
Water year 1945-46	23,199	522	24	63.6	63.9	2.16	29.29
October 1946	1,232	155	29	39.7	38.0	1.28	1.48
November	883	41	20	29.4	27.2	.919	1.03
December	821.9	71	17.9	26.5	26.8	.905	1.04
Calendar year 1946	20,438.9	522	17.9	56.0	56.0	1.89	25.67
January 1947	1,166	107	22	37.6	37.9	1.28	1.48
February	990	59	29	35.4	35.0	1.18	1.23
March	2,417	247	29	78.0	78.3	2.65	3.05
April	2,549	353	43	85.0	86.4	2.92	3.26
May	3,205	229	54	103	102	3.45	3.97
June	2,429	250	42	81.0	81.0	2.74	3.05
July	1,489	100	26	48.0	47.5	1.60	1.85
August	844.9	89	16.1	27.3	27.3	.922	1.06
September	564.2	32	13.9	18.8	18.8	.635	.71
Water year 1946-47	18,591.0	353	13.9	50.9	50.6	1.71	23.21
October 1947	644.4	36	13.3	20.8	16.3	.551	.64
November	1,732	283	29	57.7	62.6	2.11	2.36
December	997	78	21	32.2	32.2	1.09	1.25
Calendar year 1947	19,027.5	353	13.3	52.1	52.1	1.76	23.91
January 1948	975	43	25	31.5	31.5	1.06	1.23
February	1,406	97	23	48.5	48.5	1.64	1.77
March	3,482	300	62	112	113	3.82	4.40
April	2,902	268	45	96.7	96.7	3.27	3.65
May	2,981	276	49	96.2	96.2	3.25	3.75
June	2,161	140	38	72.0	71.8	2.43	2.71
July	1,158	153	22	37.4	37.4	1.26	1.45
August	929.4	95	16.7	30.0	29.4	.993	1.15
September	469.6	37	11.3	15.7	13.5	.456	.51
Water year 1947-48	19,837.4	300	11.3	54.2	54.0	1.82	24.87
October 1948	975.3	38	10.8	31.5	16.4	.554	.64
November	916.8	42	12.8	30.6	26.2	.885	.99
December	597.2	131	11.8	19.3	42.2	1.43	1.64
Calendar year 1948	18,953.3	300	10.8	51.8	51.9	1.75	23.89
January 1949	2,892	334	39	93.3	92.4	3.12	3.60
February	1,995	132	53	71.2	71.2	2.41	2.51
March	1,732	100	39	55.9	55.9	1.89	2.18
April	2,148	165	40	71.4	71.2	2.41	2.68
May	1,748	130	27	56.4	58.3	1.97	2.27
June	677.6	37	15.5	22.6	18.4	.622	.69
July	1,117	46	27	36.0	20.0	.676	.78
August	764	35	21	24.6	17.2	.581	.67
September	716	29	22	23.9	17.5	.591	.66
Water year 1948-49	16,273.9	334	10.8	44.6	42.1	1.42	19.31
October 1949	448.0	24	6.1	14.5	15.2	.514	.59
November	294.6	21	6.1	9.82	14.2	.480	.53
December	1,069.9	52	19.9	34.5	23.9	.807	.93
Calendar year 1949	15,597.1	334	6.1	42.7	39.5	1.33	18.09
January 1950	512.9	34	9.6	16.5	24.7	.834	.96
February	474.0	32	10.6	16.9	39.2	1.32	1.38
March	1,480.2	186	11.1	47.7	56.9	1.92	2.22
April	1,261	58	32	42.0	42.0	1.42	1.58
May	1,363	82	22	44.0	44.2	1.49	1.72
June	746.4	53	13.1	24.9	26.3	.889	.99
July	1,352.5	188	15.5	43.6	42.9	1.48	1.71
August	930.0	102	12.1	30.0	27.6	.932	1.07
September	519.3	31	13.1	17.3	17.1	.578	.64
Water year 1949-50	10,451.8	186	6.1	28.6	31.3	1.06	14.32

* Adjusted for change in contents in Woodcliff Lake.

Hackensack River at New Milford

Location.--Lat 40°56'52", long 74°01'34", on right bank upstream from 2 masonry dams and 2 lift gates at pumping plant of Hackensack Water Co., New Milford, Bergen County, 4 miles downstream from Pascack Brook and 21.8 miles upstream from mouth.

Drainage area.--113 sq mi.

Records available.--October 1921 to September 1950.

Gage.--Water-stage recorder above south dam. Datum of gage is 6.25 ft above mean sea level, datum of 1929. Prior to Nov. 23, 1923, staff gage and Nov. 23, 1923, to Sept. 25, 1934, water-stage recorder, at same site at datum 0.05 ft lower.

Average discharge.--29 years, 179 cfs (adjusted).

Extremes.--1921-50: Maximum discharge, 2,800 cfs Mar. 12, 13, 1936 (gage height, 5.08 ft).

Peak discharge (base, 1,100 cfs).--
1946: Dec. 26 (5 p.m.) 1,340 cfs (3.32 ft); May 17, 18 (11:30 p.m. to 3 a.m.) 1,480 cfs (3.49 ft); May 28 (9 to 10 a.m.) 2,170 cfs (4.30 ft); June 2 (2 to 3 p.m.) 1,720 cfs (3.77 ft); June 12 (10:30 a.m. to 12 m.) 1,260 cfs (3.23 ft); July 23 (4 to 7 p.m.) 2,660 cfs (4.90 ft).
1947: Apr. 5 (4 to 6 p.m.) 1,430 cfs (3.42 ft).
1948: Nov. 12 (5 a.m.) 1,120 cfs (3.06 ft); Apr. 2 (2 to 3 a.m.) 1,240 cfs (3.20 ft); Aug. 12 (2 a.m.) 1,600 cfs (3.63 ft).
1949: Dec. 31 (1 p.m.) 1,480 cfs (3.49 ft); Jan. 6 (1 a.m.) 1,320 cfs (3.30 ft).
1950: July 11 (12 p.m.) 874 cfs (2.74 ft), (annual maximum below base).

Remarks.--Figures of peak and daily discharge represent only flow over waste weirs. Flow regulated by Oradell Reservoir (capacity, 381,000,000 cubic feet), 1 mile above station, and Woodcliff Lake (capacity, 112,000,000 cubic feet), 9 miles above station. Water diverted at New Milford, N. J., and at West Nyack, N. Y., for municipal supply.

Cooperation.--Gage-height record collected in cooperation with and records of diversion at New Milford and storage in Oradell Reservoir and Woodcliff Lake furnished by Hackensack Water Co. Record of diversion at West Nyack, N. Y., furnished by village of Nyack, N. Y.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60	33	248	600	129	181	124	53	384	29	59	31
2	52	29	238	310	108	219	124	48	1,100	69	28	33
3	54	38	233	300	74	195	199	31	1,130	76	28	33
4	41	53	190	258	56	309	129	13.3	546	43	33	33
5	32	38	214	248	53	349	120	51	456	41	31	26
6	23	248	263	258	66	305	112	37	431	38	28	31
7	141	175	424	431	207	279	100	36	322	33	239	28
8	110	0	338	500	103	284	75	50	288	33	45	26
9	133	0	279	444	137	332	96	56	102	36	1.2	16.6
10	81	.7	238	494	112	344	81	38	24	41	0	10.0
11	68	0	204	369	85	214	88	33	435	31	0	15.5
12	68	20	112	327	91	204	56	227	648	33	0	133
13	62	45	100	316	62	145	71	370	28	13.8	427	349
14	56	115	158	165	163	163	74	105	23	2.9	841	165
15	47	181	137	199	186	387	48	498	.8	5.4	289	14.4
16	68	120	81	134	84	453	66	233	0	1.1	253	0
17	54	96	71	98	116	300	31	517	0	0	258	0
18	23	59	103	137	74	253	29	1,180	7.4	0	186	0
19	24	343	150	124	85	176	28	570	31	.7	459	0
20	33	283	91	68	105	163	28	407	98	2.0	361	0
21	38	195	53	124	56	124	28	401	149	4.9	120	0
22	23	372	62	59	88	116	33	484	33	14.6	68	0
23	33	438	85	85	85	104	29	190	31	1,840	71	0
24	76	263	108	78	68	86	11.9	129	29	1,510	74	2.4
25	81	228	141	120	62	195	.8	78	36	496	88	28
26	108	129	1,050	96	59	175	24	122	36	121	62	95
27	80	42	939	68	71	481	141	992	33	128	50	81
28	65	33	500	41	214	289	74	1,840	36	274	31	48
29	50	481	607	61		238	59	573	31	154	95	33
30	26	533	469	146	-------	199	59	272	33	89	133	261
31	29	-------	628	137	-------	158	-------	481	-------	40	33	-------

Hackensack River at New Milford--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	394	41	33	38	150	56	66	600	352	94	21	0
2	199	38	29	42	112	127	190	444	180	225	0	1.7
3	176	38	29	33	71	395	392	327	0	112	0	0
4	163	33	29	38	114	374	176	413	0	85	0	0
5	100	31	107	36	214	221	761	475	0	59	0	0
6	59	33	0	33	59	474	1,260	456	1.2	36	0	.1
7	48	33	.6	33	92	469	620	384	7.1	38	0	.1
8	29	33	.3	33	141	332	462	305	353	209	0	.3
9	31	31	1.5	36	78	233	332	233	711	154	0	0
10	33	36	0	36	53	228	214	190	226	129	0	0
11	36	33	.2	36	53	243	145	154	219	112	0	.1
12	34	33	.3	36	53	204	176	129	219	88	0	0
13	88	33	.3	33	65	209	167	112	87	56	0	.2
14	68	31	0	36	45	684	124	282	166	38	.2	.2
15	38	31	.7	45	65	794	145	296	289	45	0	.1
16	41	33	.6	133	65	560	175	273	163	66	0	.1
17	36	36	.8	141	88	431	214	469	92	69	42	.3
18	36	33	0	104	85	180	112	256	108	59	69	0
19	38	29	.1	88	74	59	133	80	108	103	33	0
20	43	29	2.0	182	78	42	167	38	102	64	33	0
21	33	29	6.6	289	104	36	133	372	392	33	31	.2
22	33	31	199	160	59	82	150	438	300	271	36	.9
23	33	33	51	43	56	141	120	438	214	179	33	.2
24	31	33	71	101	53	133	100	316	274	88	24	0
25	31	31	74	108	76	223	126	310	302	38	31	0
26	33	29	53	94	53	176	190	628	195	36	14.0	0
27	41	29	33	141	53	176	124	411	158	36	0	.1
28	31	31	30	112	53	176	108	344	108	33	.6	.2
29	31	33	29	100	-------	141	100	301	141	31	0	0
30	28	31	29	71	-------	100	142	399	137	28	0	.3
31	36	-------	36	124	-------	92	-------	447	-------	28	.1	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	0	22	73	29	284	728	65	238	0	0	0
2	0	0	28	308	29	404	990	85	158	0	0	0
3	0	0	33	78	33	407	670	96	124	.1	0	.3
4	0	0	33	53	36	316	431	71	104	.2	0	0
5	0	0	29	48	31	214	215	157	124	0	0	0
6	0	.1	28	50	33	199	186	176	104	.5	0	0
7	.1	0	30	50	43	238	176	231	164	.2	.1	0
8	.4	112	55	50	41	238	176	274	414	.4	0	0
9	.3	322	96	53	41	248	195	199	186	0	.2	0
10	0	49	77	53	41	390	158	145	195	0	0	0
11	0	70	43	53	29	469	163	133	176	0	0	0
12	0	1,010	41	53	130	295	326	112	154	0	561	0
13	.6	610	41	86	107	305	338	593	248	0	71	0
14	.3	305	33	108	194	274	354	887	195	106	29	0
15	0	295	28	88	295	274	621	628	120	238	36	0
16	0	204	151	48	107	540	560	533	120	319	29	0
17	0	136	209	48	149	871	384	573	88	295	29	0
18	0	78	108	50	274	750	241	435	78	233	31	0
19	0	49	59	38	366	614	233	298	227	209	31	0
20	0	29	56	26	384	546	190	190	317	104	31	0
21	0	29	41	67	378	360	199	176	269	68	28	.2
22	0	29	28	100	378	407	239	176	258	58	28	0
23	0	50	29	43	258	481	322	141	243	72	28	0
24	0	112	29	43	238	390	233	129	349	56	29	.2
25	0	158	31	62	238	234	124	422	550	33	29	0
26	0	99	156	62	243	54	.3	422	426	31	26	0
27	0	78	97	32	233	183	0	214	253	33	21	0
28	0	71	29	31	354	560	0	163	281	31	0	0
29	0	52	28	29	310	366	5.6	96	186	31	0	0
30	0	40	24	33	-------	279	38	669	0	29	.2	0
31	0	-------	27	31	-------	219	-------	430	-------	20	0	-------

Hackensack River at New Milford--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	765	284	204	120	104	31	0	0	0
2	0	0	0	444	199	158	92	116	38	0	0	0
3	0	0	0	469	145	163	68	306	29	0	.1	0
4	0	0	0	310	278	163	68	284	31	0	0	.2
5	0	0	0	683	154	158	65	284	31	0	0	0
6	0	0	0	1,090	116	163	392	253	13.3	.3	0	0
7	0	0	0	459	213	235	318	354	0	0	0	.1
8	0	0	0	413	224	163	204	219	0	0	0	0
9	0	0	0	413	258	137	172	166	0	0	0	0
10	0	0	0	284	300	141	154	225	0	0	0	0
11	0	0	0	199	202	163	78	0	0	0	.1	0
12	0	0	0	186	120	163	78	0	0	0	0	0
13	0	0	0	96	100	163	113	0	0	.3	0	0
14	0	0	0	43	163	116	253	0	0	.2	0	0
15	0	0	.2	59	224	88	195	65	0	0	0	0
16	0	0	0	88	305	85	141	62	0	0	0	0
17	0	0	0	100	202	71	120	59	0	0	0	0
18	0	0	0	78	137	101	187	78	0	0	0	0
19	0	0	0	100	137	69	488	71	0	0	0	.3
20	0	0	0	115	243	48	342	109	0	0	0	0
21	0	0	0	109	253	48	209	49	0	0	.1	0
22	0	0	0	540	222	118	295	143	.5	0	0	0
23	0	0	0	360	258	317	384	269	0	0	0	0
24	0	0	0	366	349	316	322	186	0	0	0	0
25	.4	0	0	372	289	224	253	167	0	0	0	0
26	0	0	0	305	167	181	176	141	.1	0	0	0
27	0	.1	0	248	167	116	172	104	.7	1.7	0	0
28	0	0	0	427	244	112	94	65	.1	0	0	0
29	0	0	1.2	500	-------	85	92	68	0	0	.6	0
30	0	0	.2	338	-------	71	78	47	.1	0	0	0
31	0	-------	882	372	-------	100	-------	29	-------	0	0	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	0	32	145	132	128	0	0	0
2	0	0	0	0	0	0	90	132	216	0	0	0
3	0	0	0	0	0	0	105	103	297	0	.1	0
4	0	0	0	0	0	0	128	73	389	0	5.6	0
5	0	0	0	0	0	0	163	162	81	0	9.2	0
6	0	0	0	0	0	0	145	128	.4	0	1.8	0
7	0	0	0	0	0	16.5	124	88	.4	0	0	0
8	0	0	0	0	0	34	52	72	0	0	0	0
9	0	0	0	0	0	128	52	43	0	0	0	0
10	0	.3	0	0	0	154	50	65	0	63	0	76
11	0	0	0	.1	0	46	34	51	0	232	0	192
12	0	0	0	0	0	60	41	45	0	540	0	119
13	0	.2	0	0	0	154	43	26	.1	194	0	0
14	0	0	0	0	0	124	61	28	0	302	0	0
15	0	0	0	0	0	137	66	33	0	281	0	7.3
16	0	.1	0	0	.4	137	42	28	0	222	0	0
17	0	0	0	0	50	91	35	35	0	210	0	0
18	0	0	0	0	115	66	46	56	0	168	.1	0
19	0	0	0	0	128	66	43	145	0	120	.2	.1
20	0	0	0	0	128	49	40	141	0	84	157	0
21	0	0	0	0	120	154	50	103	0	38	67	0
22	0	0	0	0	107	313	73	70	0	30	0	0
23	0	0	0	0	103	469	73	60	0	30	0	0
24	0	0	0	.2	76	569	73	168	0	26	0	0
25	0	0	0	0	41	389	63	141	0	7.0	0	0
26	0	0	0	0	41	308	78	120	0	0	0	0
27	0	0	.4	0	36	325	95	95	0	0	0	0
28	0	0	0	0	49	276	172	91	0	.2	0	0
29	0	0	0	0	-------	270	124	159	0	0	0	0
30	0	0	0	0	-------	234	124	205	0	0	0	0
31	0	-------	0	0	-------	168	-------	128	-------	0	0	-------

Hackensack River at New Milford--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	1,839	141	23	59.3	125	1.11	1.28
November	4,590.7	533	0	153	215	1.90	2.12
December	8,514	1,050	53	275	336	2.97	3.43
Calendar year 1945	79,013.6	2,500	0	216	280	2.48	33.66
January 1946	6,795	600	41	219	292	2.58	2.98
February	2,799	214	53	100	163	1.44	1.50
March	7,420	481	86	239	302	2.67	3.09
April	2,138.7	199	.8	71.3	142	1.26	1.40
May	10,065.3	1,840	13.3	325	385	3.41	3.93
June	6,451.2	1,130	0	215	285	2.52	2.81
July	5,195.4	1,840	0	168	238	2.11	2.43
August	4,391.2	841	0	142	208	1.84	2.13
September	1,487.9	349	0	49.6	121	1.07	1.19
Water year 1945-46	61,687.4	1,840	0	169	235	2.08	28.29
October 1946	2,051	394	28	66.2	128	1.13	1.30
November	978	41	29	32.6	89.9	.796	.89
December	846.0	199	0	273	99.7	.882	1.02
Calendar year 1946	50,618.7	1,840	0	139	205	1.81	24.67
January 1947	2,535	289	33	81.8	152	1.35	1.55
February	2,262	214	45	80.8	143	1.27	1.32
March	7,791	794	36	251	319	2.82	3.26
April	7,324	1,260	66	244	315	2.79	3.11
May	10,320	628	38	333	384	3.40	3.92
June	5,604.3	711	0	187	272	2.41	2.69
July	2,592	271	28	83.6	148	1.32	1.52
August	367.9	69	0	11.9	77.6	.687	.79
September	5.1	1.7	0	.17	55.1	.488	.54
Water year 1946-47	42,676.3	1,260	0	117	182	1.61	21.91
October 1947	1.8	.6	0	.06	48.4	.428	.49
November	3,988.1	1,010	0	133	249	2.20	2.46
December	1,719	209	22	55.5	122	1.08	1.25
Calendar year 1947	44,510.2	1,260	0	122	191	1.69	22.90
January 1948	1,947	308	26	62.8	127	1.12	1.29
February	5,022	384	29	173	218	1.93	2.08
March	11,409	871	54	368	458	4.05	4.68
April	8,495.9	990	0	283	359	3.18	3.55
May	8,919	887	65	288	354	3.13	3.61
June	6,349	550	0	212	269	2.38	2.66
July	1,967.4	319	0	63.5	148	1.31	1.51
August	1,037.5	561	0	33.5	87.0	.770	.89
September	0.7	.3	0	.02	37.9	.335	.37
Water year 1947-48	50,856.4	1,010	0	139	206	1.82	24.84
October 1948	.4	.4	0	.01	43.0	.381	.44
November	.1	.1	0	0	78.7	.696	.78
December	883.6	882	0	28.5	136	1.20	1.39
Calendar year 1948	46,031.6	990	0	126	193	1.71	23.25
January 1949	10,331	1,090	43	333	423	3.74	4.31
February	5,953	349	100	213	279	2.47	2.57
March	4,440	317	48	143	217	1.92	2.22
April	5,803	488	65	193	263	2.33	2.60
May	4,023	354	0	130	201	1.78	2.05
June	174.8	38	0	5.83	55.2	.488	.54
July	2.5	1.7	0	.08	54.1	.479	.55
August	.9	.6	0	.03	41.7	.369	.43
September	.6	.3	0	.02	44.6	.395	.44
Water year 1948-49	31,612.9	1,090	0	86.6	152	1.35	18.32
October 1949	0	0	0	0	40.1	.355	.41
November	.6	.3	0	.02	44.6	.395	.44
December	.4	.4	0	.01	78.1	.691	.80
Calendar year 1949	30,729.8	1,090	0	84.2	144	1.27	17.36
January 1950	.3	.2	0	.01	90.2	.798	.92
February	944.4	128	0	35.5	161	1.42	1.48
March	4,769.5	569	0	154	227	2.01	2.32
April	2,430	172	34	81.0	147	1.30	1.45
May	2,927	205	26	94.4	158	1.40	1.61
June	1,111.9	389	0	37.1	99.1	.877	.98
July	2,547.2	540	0	82.2	157	1.39	1.61
August	241.0	157	0	7.77	76.3	.675	.78
September	394.4	192	0	13.1	49.6	.439	.49
Water year 1949-50	15,416.7	569	0	42.2	111	.982	13.29

* Adjusted for change in contents in Oradell Reservoir and Woodcliff Lake and for diversions at New Milford, N. J., and West Nyack, N. Y.

Passaic River near Millington

Location.--Lat 40°40'48", long 74°31'40", on right bank 200 ft downstream from Davis Bridge, in Somerset County, 1 mile upstream from Millington, Morris County, and 1½ miles downstream from Black Brook.

Drainage area.--55.4 sq mi.

Records available.--November 1903 to July 1906 (published as "at Millington"), November 1921 to September 1950.

Gage.--Water-stage recorder and concrete control. Datum of gage is 215.60 ft above mean sea level (New Jersey Geological Survey bench mark). Nov. 25, 1903, to July 15, 1906, chain gage at bridge three-quarters of a mile downstream at different datum. Nov. 10, 1921, to Sept. 1, 1923, staff gage at site 200 ft downstream at present datum. Oct. 31, 1923, to July 3, 1925, staff gage and concrete control at present site and datum.

Average discharge.--29 years (1921-50), 86.8 cfs.

Extremes.--1903-6, 1921-50: Maximum discharge, 2,000 cfs Mar. 8, 1904 (gage height, 7.50 ft, site and datum then in use); minimum, 0.9 cfs on several days in August 1932.

Peak discharge (base, 500 cfs)

1946: Nov. 30 (2 to 8 a.m.) 588 cfs (6.67)ft); May 18 (1 to 4 p.m.) 748 cfs (7.11 ft); June 3 (5 to 8:30 a.m.) 800 cfs (7.25 ft); July 24 (6 to 9 a.m.) 577 cfs (6.64 ft).

1947: Mar. 15 (2 to 7 a.m.) 508 cfs (6.44 ft); Apr. 6 (5 to 9 a.m.) 549 cfs (6.56 ft).

1948: Nov. 9 (4 to 8 a.m.) 762 cfs (7.15 ft); Nov. 12 (2 to 6 p.m.) 718 cfs (7.03 ft); Feb. 20 about 600 cfs (time and gage height unknown); Mar. 17 (1 to 7 p.m.) 528 cfs (6.88 ft); Apr. 2 (2 to 9 a.m.) 549 cfs (6.83 ft); May 14 (5 to 11 a.m.) 722 cfs (7.37 ft).

1949: Dec. 31 (5 to 7 p.m.) 1,300 cfs (8.71 ft); Jan. 6 (about 5 p.m.) 715 cfs (7.17 ft).

1950: Mar. 24 (6 a.m.) 395 cfs (6.20 ft), (annual maximum below base).

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	33	504	414	84	86	104	31	78	78	31	33
2	32	31	398	356	66	122	96	28	401	147	25	31
3	32	30	300	266	45	146	101	24	755	237	23	23
4	29	30	228	190	*37	190	95	22	620	174	24	21
5	27	29	174	157	32	217	86	24	514	132	23	18.2
6	28	27	168	164	37	221	76	26	395	83	28	17.1
7	66	27	192	252	86	205	68	24	284	50	41	15.9
8	95	26	184	298	78	201	60	23	190	37	78	14.2
9	98	23	157	289	63	237	63	23	128	31	52	13.6
10	94	23	134	303	58	235	60	20	95	29	32	13.6
11	78	32	116	279	51	188	56	18.8	80	26	26	13.1
12	65	58	89	242	46	137	52	43	110	26	21	11.5
13	56	63	*74	212	46	113	49	196	118	24	22	11.1
14	a48	78	66	166	69	101	47	165	101	18.2	66	10.2
15	a41	94	62	132	92	139	46	292	82	17.1	51	10.2
16	a36	92	52	100	87	219	44	292	66	17.1	33	10.2
17	a33	78	47	80	63	186	43	288	56	14.2	51	9.7
18	a30	71	45	74	55	184	40	671	54	14.2	194	9.3
19	a29	79	45	66	41	262	37	638	49	11.5	228	9.7
20	28	214	44	50	32	217	33	535	45	11.1	192	9.7
21	27	237	44	45	40	157	30	404	44	21	151	15.0
22	26	315	42	47	36	124	30	319	40	70	93	33
23	25	420	42	43	37	106	29	230	35	353	58	19.5
24	30	362	a43	40	37	89	28	157	30	552	43	50
25	44	300	a50	42	37	96	28	114	26	451	31	c155
26	51	228	a200	45	33	116	39	94	23	377	28	c164
27	51	155	420	40	37	306	43	128	21	295	26	c149
28	47	146	401	33	59	284	38	201	25	188	22	c125
29	45	454	359	35	-------	217	34	174	50	92	24	c76
30	40	574	328	42	-------	159	34	134	88	54	49	c64
31	36	-------	351	82	-------	124	-------	101	-------	38	43	-------

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of recorded range in stage, weather records, and records for stations near Chatham and on nearby streams.

c Backwater from trees in channels; discharge computed on basis of 3 discharge measurements.

Note.--Stage-discharge relation affected by ice Dec. 17-23, Jan. 16, 17, 20-25, Feb. 3-5, 16, 21, 22.

Passaic River near Millington--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	62	20	35	36	130	25	54	316	141	a33	15.3	13.1
2	49	20	30	30	108	31	89	356	113	49	13.6	17.6
3	39	20	19.5	34	80	b60	240	300	95	42	11.5	17.6
4	32	21	21	43	70	82	217	287	82	32	11.5	15.3
5	27	21	18.8	44	b56	100	307	362	70	26	11.5	21
6	24	19.5	24	43	46	130	525	374	60	23	11.1	20
7	21	18.8	25	37	40	188	439	317	62	23	11.1	18.2
8	19.5	23	21	40	36	228	328	242	133	50	10.6	15.9
9	22	29	18.2	36	31	210	226	182	252	55	15.8	14.2
10	18.2	27	18.2	30	30	199	174	139	221	89	29	14.2
11	19.5	26	*19.5	29	29	192	141	113	180	110	22	14.2
12	28	39	15.9	34	26	194	122	98	131	85	18.2	13.1
13	38	36	27	39	26	199	106	86	88	52	14.8	11.1
14	32	29	32	43	27	350	92	78	87	42	12.0	10.2
15	27	25	25	97	30	491	86	77	155	35	12.0	17.6
16	22	22	17.1	182	37	417	84	72	148	38	12.6	18.2
17	18.8	22	19.5	*197	*43	322	104	66	116	37	101	12.6
18	19.5	30	20	174	43	219	100	a70	92	32	144	10.6
19	26	30	17.6	130	43	157	84	92	95	34	120	9.7
20	23	28	13.1	204	29	130	74	174	80	27	74	8.8
21	22	28	71	351	19.5	119	71	230	84	32	65	8.4
22	21	34	155	b269	24	104	90	264	74	66	60	12.5
23	18.8	46	151	b238	a28	84	84	295	59	89	45	20
24	18.2	45	125	134	a29	80	74	240	50	78	34	13.6
25	18.2	42	96	114	a32	115	68	223	49	45	28	14.8
26	22	39	b64	112	a31	134	80	439	44	30	20	14.8
27	30	45	b44	160	a30	107	76	404	40	28	19.5	11.5
28	29	47	43	166	a28	90	66	328	36	21	18.8	9.3
29	28	45	47	137	-------	77	56	259	a34	19.5	17.6	8.8
30	27	37	62	112	-------	66	57	230	a33	17.1	15.3	8.4
31	27	-------	b47	124	-------	60	-------	184	-------	16.5	14.2	-------

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for station near Chatham.
b Stage-discharge relation affected by ice.
Note.--Backwater from trees or leaves in channel Oct. 1-14, Nov. 3 to Dec. 21, Sept. 23-30.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.3	59	45	27	43	350	317	54	328	155	27	22
2	6.6	49	39	45	45	330	528	49	257	111	30	19.3
3	6.6	35	*39	51	45	400	439	50	182	86	36	18.0
4	6.3	110	41	51	38	400	325	56	128	69	43	14.9
5	5.6	254	41	54	38	b320	233	62	97	58	49	14.4
6	5.6	264	41	61	40	b240	176	78	78	55	100	14.4
7	5.6	254	41	66	33	197	147	112	68	53	81	13.3
8	5.2	415	47	70	35	214	124	221	136	48	53	12.8
9	5.2	733	53	74	32	*247	111	176	149	43	38	12.8
10	4.9	645	45	84	30	333	92	133	166	35	28	16.7
11	4.9	538	42	b82	32	445	86	95	172	31	24	18.6
12	5.2	674	36	b76	40	b420	162	75	131	28	40	16.1
13	5.6	612	30	81	b40	b360	221	391	151	34	69	13.8
14	5.6	487	24	87	b60	b270	233	711	157	100	55	12.3
15	5.6	380	22	b82	92	233	348	623	128	80	38	10.4
16	5.6	274	92	b80	92	327	317	491	102	49	29	9.1
17	5.9	192	121	78	166	518	249	420	78	34	24	9.1
18	6.6	133	103	74	292	478	184	365	65	32	21	9.1
19	8.0	100	b76	60	471	395	142	279	124	36	19.3	10.4
20	13.1	81	b44	50	550	362	118	203	224	32	27	10.8
21	12.5	69	34	52	500	298	103	153	226	34	151	10.8
22	9.7	59	30	*56	400	247	90	123	201	205	201	10.0
23	9.3	78	30	58	350	210	80	100	199	289	201	9.1
24	11.1	100	28	52	300	197	72	86	234	289	203	9.1
25	13.1	144	23	47	280	172	76	90	414	210	170	7.9
26	11.1	142	21	50	270	137	78	119	429	126	116	7.1
27	9.7	118	21	60	270	144	74	118	351	75	72	7.1
28	9.7	94	26	54	320	249	65	98	336	55	49	7.1
29	31	75	26	50	370	228	62	82	289	43	39	7.1
30	46	56	24	45	-------	176	58	286	217	35	31	9.6
31	52	-------	25	40	-------	140	-------	401	-------	30	27	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Backwater from leaves or trees Oct. 1 to Nov. 4, Mar. 5 to June 22. No gage-height record Jan. 19 to Feb. 12, Feb. 20 to Mar. 4; discharge computed on basis of 1 discharge measurement, weather records, and records for stations near Chatham and on other nearby streams.

Passaic River near Millington--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17.2	7.4	75	1,220	190	122	66	55	30	6.3	4.2	4.2
2	12.6	7.4	57	976	192	120	68	58	27	6.6	3.4	3.7
3	9.4	7.8	45	648	151	113	62	113	24	6.0	2.8	2.4
4	7.4	21	43	a397	120	106	55	127	22	5.7	7.6	1.9
5	7.0	31	42	a321	124	113	49	99	20	6.3	8.6	1.7
6	7.4	19.0	38	a632	116	131	135	73	19.0	10.0	7.0	3.0
7	7.8	24	39	644	127	125	198	106	16.0	11.2	3.9	3.7
8	7.8	28	36	532	169	106	167	99	13.2	8.6	3.7	2.4
9	11.2	21	32	397	179	91	133	68	12.1	7.0	3.4	2.2
10	11.2	21	26	288	190	80	96	62	12.1	6.3	2.6	1.7
11	9.8	34	22	211	158	86	75	63	12.6	9.4	1.9	1.3
12	9.4	31	21	162	138	100	64	55	12.1	9.8	1.7	1.2
13	9.0	26	23	133	122	94	57	48	11.6	18.9	5.9	6.5
14	8.6	23	24	109	138	82	73	44	11.2	16.1	6.6	7.5
15	8.6	18.4	19.0	89	145	72	82	53	10.7	9.4	5.0	10
16	8.2	16.6	23	78	147	62	76	48	10.2	8.2	13.2	8
17	a7.6	14.8	70	72	156	58	64	42	10.2	9.6	12.1	5.5
18	a8.0	16.0	111	68	140	57	68	38	11.6	22	7.4	4.2
19	a8.4	14.8	74	71	118	53	202	34	12.1	14.9	6.6	3.7
20	9.4	38	49	73	160	53	211	37	11.6	10.2	4.5	2.8
21	9.4	53	53	67	186	58	162	53	10.7	8.6	3.2	2.5
22	9.4	45	49	244	181	69	133	48	9.4	7.4	2.6	2.5
23	8.6	45	53	324	293	166	230	107	8.2	6.3	2.2	6
24	10.2	42	49	329	280	232	220	115	6.6	4.5	2.2	5.0
25	16.6	35	39	334	234	186	173	97	6.6	3.7	2.2	3.2
26	16.0	30	31	278	192	151	127	82	7.0	3.7	1.9	2.6
27	12.1	28	22	243	152	120	97	71	6.8	3.0	1.7	3.0
28	10.2	30	18.4	321	131	97	79	57	6.6	3.2	1.6	2.2
29	9.4	51	43	400	-------	78	66	44	6.6	3.0	3.7	4.7
30	9.0	85	492	332	-------	66	58	39	6.0	2.2	6.3	21
31	8.2	-------	1,240	230	-------	60	-------	34	-------	3.0	3.9	-------

a No gage-height record; discharge computed on basis of recorded range in stage, weather records, and records for Passaic River near Chatham and Saddle River at Lodi.

Note.--Backwater from leaves and debris Oct. 29 to Nov. 4, Nov. 11-23, June 26, 27, July 20 to Sept. 30 (no gage-height record Sept. 13-23; discharge computed as explained in footnote a).

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11.6	20	8.8	72	90	38	109	96	147	13.7	11.2	57
2	5.4	12	7.6	59	128	37	94	107	308	12.6	12.1	37
3	4.0	8	7.6	57	*185	25	83	97	316	13.7	23	34
4	3.5	6	6.8	62	158	21	82	83	316	17.2	37	42
5	3.3	5	6.1	*56	121	23	79	116	303	22	23	32
6	3.0	4.5	4.8	50	92	32	75	116	220	37	19.7	22
7	3.0	4.2	4.7	62	88	29	65	88	147	26	25	16.6
8	3.5	4.0	4.5	61	65	*36	56	64	88	17.2	16.6	13.2
9	4.0	4.3	4.2	40	91	95	50	49	60	14.2	13.7	11.6
10	4.3	4.5	3.5	57	174	b88	44	44	47	52	14.2	12.6
11	3.5	4.3	3.3	106	178	76	37	41	38	147	14.2	16.6
12	3.3	4.0	*11.6	88	158	70	40	34	32	205	13.7	16.0
13	3.5	5.1	40	79	128	89	37	29	28	181	11.6	16.6
14	3.3	10.1	50	80	124	109	34	28	25	138	10.7	31
15	4.3	15.6	40	72	224	98	34	26	35	89	9.8	26
16	3.8	10.6	30	61	330	82	33	30	38	63	9.4	19.7
17	3.0	7.2	16	51	335	68	30	29	47	48	9.4	15.4
18	3.0	6.5	20	49	295	64	30	44	37	37	9.0	11.6
19	2.8	8.8	35	52	241	56	25	79	29	26	6.6	10.2
20	2.4	12.1	30	36	172	50	31	89	30	19.0	39	10.2
21	2.0	11.1	28	33	b109	88	45	73	30	16.0	48	10.2
22	2.0	8.4	27	30	86	162	43	53	26	14.2	18.4	10.7
23	1.5	5.8	29	34	72	298	38	43	21	11.6	12.1	11.6
24	1.5	4.8	34	38	68	383	42	51	19.7	9.8	10.2	11.2
25	1.7	5.8	30	41	b77	335	45	54	58	12.6	8.6	9.4
26	8.4	8.0	40	42	b65	272	46	47	44	13.2	7.8	8.6
27	15.0	6.5	170	43	b42	234	48	42	28	12.1	7.4	8.2
28	6.1	4.5	200	38	35	218	74	35	20	16.0	6.6	8.2
29	4.3	4.8	190	50	-------	202	86	66	16.0	17.8	11.6	8.6
30	4.0	8.4	150	70	-------	176	76	118	14.8	14.2	45	8.2
31	10.1	-------	98	82	-------	139	-------	94	-------	11.6	60	-------

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Note.--No gage-height record Nov. 2-7, Dec. 7-10, 13-31; discharge computed on basis of recorded range in stage, weather records, and records for station near Chatham and stations on other nearby streams.

Passaic River near Millington--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	1,403	98	25	45.3	0.818	0.94
November	4,329	574	28	144	2.60	2.91
December	5,359	504	42	173	3.12	3.60
Calendar year 1945	44,116.1	704	13.1	121	2.18	29.58
January 1946	4,584	414	33	148	2.67	3.08
February	1,484	92	32	53.0	.957	1.00
March	5,384	306	86	174	3.14	3.61
April	1,589	104	28	53.0	.957	1.07
May	5,429.8	671	18.8	175	3.16	3.65
June	4,603	755	21	153	2.76	3.09
July	3,668.4	552	11.1	118	2.13	2.46
August	1,809	228	21	58.4	1.05	1.21
September	1,155.8	164	9.3	38.5	.695	.78
Water year 1945-46	40,808.0	755	9.3	112	2.02	27.40
October 1946	828.7	62	18.2	26.7	.482	.56
November	914.3	47	18.8	30.5	.551	.61
December	1,342.4	155	13.1	43.3	.782	.90
Calendar year 1946	32,802.4	755	9.3	89.9	1.62	22.02
January 1947	3,419	351	29	110	1.99	2.30
February	1,181.5	130	19.5	42.2	.762	.79
March	4,960	491	25	160	2.89	3.33
April	4,314	525	54	144	2.60	2.90
May	6,897	439	66	222	4.01	4.63
June	2,904	252	33	96.8	1.75	1.95
July	1,361.1	110	16.5	43.9	.792	.91
August	1,009.0	144	10.6	32.5	.587	.68
September	416.3	21	8.4	13.9	.251	.28
Water year 1946-47	29,547.3	525	8.4	81.0	1.46	19.84
October 1947	340.2	52	4.9	11.0	.199	.23
November	7,224	733	35	241	4.35	4.85
December	1,310	121	21	42.3	.764	.88
Calendar year 1947	35,336.1	733	4.9	96.8	1.75	23.73
January 1948	1,897	87	27	61.2	1.10	1.27
February	5,274	550	80	182	3.29	3.54
March	9,037	518	137	292	5.27	6.07
April	5,310	528	58	177	3.19	3.56
May	6,300	711	49	203	3.66	4.23
June	5,817	429	65	194	3.50	3.90
July	2,560	289	28	82.6	1.49	1.72
August	2,091.3	203	19.3	67.5	1.22	1.40
September	363.2	22	7.1	12.1	.218	.24
Water year 1947-48	47,528.7	733	4.9	130	2.35	31.90
October 1948	305.1	17.2	7.0	9.84	.178	.20
November	864.2	85	7.4	28.8	.520	.58
December	2,958.4	1,240	18.4	95.4	1.72	1.99
Calendar year 1948	42,777.2	1,240	7.0	117	2.11	28.70
January 1949	10,223	1,220	67	330	5.96	6.86
February	4,629	293	116	165	2.98	3.11
March	3,107	232	53	100	1.81	2.09
April	3,346	230	49	112	2.02	2.25
May	2,069	127	34	66.7	1.20	1.38
June	382.8	30	6.0	12.8	.231	.26
July	251.1	22	2.2	8.10	.146	.17
August	143.6	13.2	1.6	4.63	.084	.10
September	130.3	21	1.2	4.34	.078	.09
Water year 1948-49	28,410.5	1,240	1.2	77.8	1.40	19.09
October 1949	135.1	15.0	1.5	4.36	.079	.09
November	224.9	20	4.0	7.50	.135	.15
December	1,330.5	200	8.3	42.9	.774	.89
Calendar year 1949	25,973.3	1,220	1.2	71.2	1.29	17.45
January 1950	1,751	106	30	56.5	1.02	1.18
February	3,921	335	35	140	2.53	2.64
March	3,693	383	21	119	2.15	2.48
April	1,611	109	25	53.7	.969	1.08
May	1,965	118	26	63.4	1.14	1.32
June	2,568.5	316	14.8	85.6	1.55	1.72
July	1,327.7	205	9.8	42.8	.773	.89
August	564.6	60	6.6	18.2	.329	.38
September	546.2	57	8.2	18.2	.329	.37
Water year 1949-50	19,648.5	383	1.5	53.8	.971	13.19

Passaic River near Chatham

Location.--Lat 40°43'31", long 74°23'23", on left bank 150 ft downstream from Stanley Avenue Bridge in Chatham, Morris County, and 3 miles upstream from Canoe Brook.

Drainage area.--100 sq mi.

Records available.--February 1903 to December 1911, December 1937 to September 1950.

Gage.--Water-stage recorder. Concrete control since Sept. 19, 1938. Datum of gage is 193.51 ft above mean sea level, datum of 1929. Prior to 1912, chain gage at bridge 150 ft upstream at different datum.

Average discharge.--12 years (1938-50), 164 cfs.

Extremes.--1903-11, 1937-50: Maximum discharge observed, about 3,000 cfs Jan. 9, 1905 (gage height, 8.3 ft, datum then in use); minimum, 2 cfs on many days in May and June 1903, August and October 1905, September and October 1906, and Sept. 11, 1944.

Peak discharge (base, 800 cfs).--
1946: Dec. 1 (1 a.m.) 841 cfs (5.43 ft); June 4 (1 to 5 a.m.) 1,040 cfs (5.71 ft); July 23 (3:30 p.m.) 895 cfs (5.51 ft).
1947: Apr. 5 (4:30 p.m.) 869 cfs (5.47 ft); May 4 (5 p.m.) 862 cfs (5.46 ft).
1948: Nov. 8 (5:30 p.m.) 1,220 cfs (6.05 ft); Nov. 12 (5:30 a.m.) 1,410 cfs (6.35 ft); Feb. 20 (5 a.m.) 1,100 cfs (6.30 ft, ice jam); Feb. 24 (12:30 p.m.) discharge below base (6.65 ft, ice jam); Mar. 1 (12 m.) 801 cfs (5.37 ft); May 15 (6 to 11 a.m.) 950 cfs (5.60 ft); June 25 (12:30 a.m.) 849 cfs (5.44 ft).
1949: Jan. 1 (1 p.m.) 1,710 cfs (6.78 ft); Jan. 28 (11:30 a.m.) 821 cfs (5.40 ft).
1950: Mar. 23 (8 a.m.) 670 cfs (5.17 ft), (annual maximum below base).

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	61	52	821	c762	155	204	185	56	121	104	51	51
2	55	48	737	c718	124	267	166	48	680	186	43	41
3	54	48	630	c636	86	300	214	43	957	279	37	36
4	48	48	524	490	62	363	194	38	1,020	259	36	32
5	42	48	392	340	55	382	160	40	902	175	37	28
6	50	44	354	344	59	368	133	43	769	128	37	24
7	146	42	368	442	121	344	114	41	624	86	59	23
8	214	41	331	457	146	344	102	38	474	61	98	22
9	185	40	275	447	116	382	106	37	274	48	92	20
10	160	37	232	474	104	392	102	34	158	43	62	20
11	131	47	204	457	94	377	87	31	128	40	44	19.7
12	106	87	145	421	87	252	80	108	232	37	36	18.2
13	92	106	b130	368	80	194	76	275	218	36	34	16.0
14	80	124	114	288	*108	169	71	315	169	32	51	14.7
15	71	178	112	218	172	246	66	594	131	26	77	14.7
16	65	155	b90	149	108	392	65	524	104	25	58	16.0
17	58	126	b75	b130	119	358	61	512	84	24	64	14.7
18	55	112	b70	121	92	313	58	588	77	20	158	14.7
19	51	153	74	b100	65	427	54	756	76	19.7	240	13.5
20	45	416	76	b80	54	474	49	762	68	17.5	218	14.1
21	a43	416	b70	77	71	344	47	680	65	28	182	28
22	a42	529	b66	80	70	240	43	588	62	83	138	35
23	a41	547	b64	72	66	188	42	484	56	589	91	42
24	52	553	b70	65	65	155	42	322	48	692	65	168
25	78	496	121	66	64	188	43	191	43	730	51	313
26	104	406	595	70	61	214	64	141	37	642	41	240
27	92	279	661	b56	65	570	80	209	34	529	37	200
28	80	252	711	55	124	564	71	322	34	392	35	166
29	70	698	673	56	-------	479	61	292	52	200	40	126
30	65	795	661	68	-------	340	59	218	86	102	54	133
31	58	-------	743	121	-------	244	-------	166	-------	66	62	-------

* Winter discharge measurement made on this day.
a No gage-height measurement made on this day.
b Stage-discharge relation affected by ice.
c Backwater from log on control.

Passaic River near Chatnam--Continued

Daily discharge in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	98	30	42	b70	228	55	89	584	262	57	22	23
2	80	30	37	60	187	68	168	670	184	68	20	41
3	65	30	30	80	146	165	484	646	146	68	18.8	36
4	54	32	28	100	128	200	495	677	120	52	17.5	27
5	45	32	25	96	113	200	627	683	98	42	17.5	38
6	39	30	25	89	b90	235	774	708	85	35	16.8	42
7	35	29	25	76	b80	340	814	670	89	31	16.8	33
8	32	38	27	76	b65	b400	702	562	256	57	16.8	27
9	29	48	27	71	b50	b410	568	421	416	103	26	24
10	30	45	28	60	b58	416	421	273	396	151	104	22
11	27	42	*29	56	b56	416	273	200	294	128	113	21
12	32	60	30	68	56	387	210	162	210	120	57	20
13	40	55	36	b80	55	377	181	138	140	87	34	18.8
14	48	48	45	b90	55	598	151	122	134	62	26	16.8
15	44	40	46	206	62	670	138	115	294	51	21	18.8
16	38	35	35	377	74	689	148	109	281	50	23	28
17	33	35	33	432	94	615	210	100	194	57	151	25
18	30	50	33	354	94	506	184	111	154	55	265	20
19	35	50	32	254	90	336	146	140	154	47	232	16.8
20	40	45	27	401	70	224	125	294	130	52	162	15.6
21	35	45	170	545	38	184	120	377	132	50	122	13.8
22	32	60	332	522	56	168	151	447	125	136	96	22
23	30	70	294	421	60	146	143	468	96	138	76	26
24	28	70	221	281	60	130	122	462	78	107	59	28
25	28	51	168	207	66	222	111	432	71	78	45	24
26	33	48	122	194	62	265	122	603	65	51	40	24
27	45	56	78	302	60	197	125	664	57	38	33	23
28	44	57	87	302	57	154	109	615	51	33	32	18.8
29	42	54	90	243	-------	130	96	522	60	30	30	16.8
30	41	46	125	194	-------	113	99	473	55	26	26	15.6
31	40	-------	b100	210	-------	98	-------	392	-------	24	24	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Oct. 18 to Nov. 24; discharge computed on basis of recorded range in stage, and records for station near Millington and stations on other nearby streams.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14.4	122	85	56	75	734	563	89	696	336	45	36
2	13.8	94	85	131	80	715	685	81	627	210	45	31
3	13.2	70	73	187	75	741	722	83	517	135	57	27
4	13.2	346	*68	171	70	741	633	104	392	104	90	25
5	12.6	511	68	151	65	658	528	122	243	85	90	24
6	13.2	500	68	146	65	586	421	168	154	81	154	23
7	12.6	442	70	140	59	517	302	227	120	80	181	22
8	13.2	743	80	135	60	473	224	372	128	70	115	20
9	12.0	938	94	132	54	457	187	382	190	62	73	22
10	12.0	990	85	151	50	*522	157	294	187	54	55	32
11	11.0	932	71	140	53	568	148	194	204	46	44	34
12	10.5	1,200	65	128	60	598	277	146	200	42	70	31
13	11.0	1,100	55	140	62	562	354	589	228	61	92	24
14	10.5	1,000	50	171	130	506	406	821	243	81	92	20
15	9.0	856	44	162	250	457	468	944	210	113	70	18.8
16	8.6	689	172	138	220	495	484	876	168	87	50	16.8
17	8.6	522	243	118	300	511	457	828	130	60	40	16.2
18	8.6	318	190	109	450	568	392	741	100	48	37	15.6
19	9.0	184	143	98	620	562	285	646	234	62	33	15.6
20	11.0	132	98	92	1,000	534	210	534	382	71	98	16.8
21	12.6	109	85	90	850	489	178	421	401	64	273	17.5
22	13.8	96	65	98	700	442	154	285	392	289	306	16.8
23	13.8	130	60	98	600	387	132	184	363	340	298	15.6
24	11.0	190	57	92	540	358	118	143	423	368	250	14.4
25	9.5	281	51	80	*500	318	132	290	609	345	218	13.2
26	9.0	254	39	85	473	258	148	318	627	258	174	13.8
27	10.0	197	50	98	462	273	132	246	639	146	118	13.8
28	12.0	160	59	95	580	406	115	190	568	94	81	13.2
29	42	130	56	85	658	406	104	148	479	70	60	12.6
30	65	109	52	75	-------	363	96	428	411	56	48	17.5
31	94	-------	52	70	-------	281	-------	609	-------	47	42	-------

* Winter discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Jan. 28-31, Feb. 1-5, 10-12, 14-25.

Passaic River near Chatham--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	14.4	128	1,680	500	232	115	96	50	11.0	7.7	15.0
2	28	13.8	104	1,590	401	221	130	94	44	11.5	6.5	10.0
3	23	15.0	81	1,420	310	204	120	164	40	11.0	7.7	8.6
4	17.5	24	80	1,200	277	194	104	232	37	11.0	16.0	7.3
5	15.6	32	80	1,060	265	218	90	190	34	11.5	13.8	6.1
6	15.0	39	73	1,130	243	285	339	143	32	18.1	14.4	9.0
7	14.4	42	71	1,100	269	269	382	204	30	17.5	11.0	8.1
8	18.8	42	66	1,040	336	207	354	221	26	16.8	9.5	9.5
9	17.5	40	59	926	358	171	277	146	22	14.4	7.7	8.6
10	18.1	39	50	774	363	146	200	113	20	13.8	6.9	7.3
11	18.8	47	44	609	340	171	148	113	21	13.2	6.5	6.5
12	17.5	48	39	468	254	218	120	100	20	14.4	6.9	5.7
13	16.2	43	38	328	228	181	107	85	19.6	29	7.7	17.8
14	15.6	38	40	214	250	148	146	80	18.8	26	7.7	19.7
15	15.0	34	40	162	262	130	151	83	18.8	22	10.5	28
16	14.4	31	50	135	265	115	146	83	18.1	16.2	12.4	23
17	13.8	29	129	128	310	100	122	71	17.5	30	19.6	15.0
18	15.0	28	184	120	285	96	123	63	16.8	29	15.6	11.5
19	15.0	28	142	122	228	92	368	56	17.5	27	12.6	8.6
20	16.2	55	107	128	314	87	392	56	18.1	21	10.0	7.7
21	16.8	85	113	125	368	96	363	74	16.8	15.6	8.6	6.9
22	16.8	73	104	531	392	132	296	92	16.2	13.8	6.9	6.9
23	16.8	70	100	551	540	336	426	243	14.4	11.5	6.1	11.5
24	19.6	66	98	639	540	406	452	246	13.2	10.0	5.7	8.6
25	26	57	85	627	517	401	416	207	12.0	8.6	5.7	9.5
26	25	48	68	603	447	336	323	165	11.5	7.7	5.7	8.6
27	23	46	59	580	358	250	218	132	11.5	7.7	5.0	7.3
28	20	46	54	728	265	194	160	109	11.0	7.3	4.6	6.5
29	17.5	80	112	734	-------	151	125	81	11.5	6.9	13.8	24
30	16.2	146	796	722	-------	122	107	66	11.0	6.5	8.6	41
31	15.0	-------	1,510	609	-------	109	-------	56	-------	9.5	11.5	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	19.6	13.8	130	194	65	228	224	225	22	13.8	83
2	20	27	15.6	96	293	64	181	235	432	20	13.2	65
3	13.8	21	16.2	89	382	53	154	210	432	18.8	33	47
4	10.5	17.5	13.8	94	372	48	146	187	484	30	48	46
5	9.5	15.0	13.2	90	298	39	140	197	479	32	47	50
6	8.6	13.8	12.6	81	207	44	135	228	452	39	30	36
7	8.1	12.6	12.6	94	181	45	115	194	372	48	26	27
8	7.7	12.0	12.6	104	143	56	102	140	221	35	29	22
9	7.3	11.5	12.0	76	184	140	87	104	125	25	21	18.1
10	6.9	10.5	11.0	95	314	151	78	85	85	145	16.8	16.8
11	7.3	10.0	11.5	184	349	188	70	80	65	305	19.7	20
12	6.9	9.0	16.4	187	328	122	65	70	55	336	20	25
13	5.7	9.5	74	146	262	170	65	60	47	327	16.8	28
14	6.1	12.0	113	146	285	228	62	51	42	269	13.2	36
15	6.5	10.5	89	135	511	197	60	48	48	178	12.0	44
16	6.5	13.8	b45	111	598	160	56	50	59	113	11.0	35
17	6.5	15.0	b35	90	639	130	54	54	68	87	11.0	26
18	6.5	14.4	30	85	609	115	50	61	71	66	10.5	21
19	6.5	13.8	41	94	545	104	45	146	52	51	20	18.1
20	6.5	12.6	59	73	457	90	55	184	44	38	33	16.8
21	6.5	13.8	59	62	302	156	80	148	45	31	58	16.8
22	6.5	14.4	51	55	210	294	75	109	43	26	54	18.8
23	6.1	13.2	48	*55	151	587	65	81	36	23	28	19
24	5.3	12.0	59	59	140	615	70	89	34	19.6	18.8	18
25	5.3	12.6	59	63	144	633	75	90	71	18.1	16.2	16
26	17.7	12.0	48	66	135	574	80	83	92	19.6	14.4	15.0
27	15.6	12.0	274	68	107	534	85	71	58	18.8	13.2	14.4
28	20	12.0	354	68	85	462	130	60	37	15.6	12.0	13.8
29	15.6	13.2	363	78	------	447	160	114	29	16.2	18.9	13.8
30	13.8	13.2	310	122	-------	392	140	224	24	16.8	26	13.2
31	20	-------	202	160	-------	314	-------	200	-------	15.6	68	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.---No gage-height record Apr. 14-30, Sept. 23-25; discharge computed on basis of available recorded range in stage, precipitation records, and records for station near Millington and stations on other nearby streams.

Passaic River near Chatham--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	2,494	214	41	80.5	0.805	0.93
November	6,923	795	37	231	2.31	2.57
December	10,189	821	64	329	3.29	3.79
Calendar year 1945	80,093.5	1,150	17.5	219	2.19	29.78
January 1946	8,228	762	55	265	2.65	3.06
February	2,593	172	54	92.6	.926	.96
March	10,084	570	155	325	3.25	3.75
April	2,695	214	42	89.8	.898	1.00
May	8,496	762	31	274	2.74	3.16
June	7,783	1,020	34	259	2.59	2.89
July	56,694.2	730	17.5	184	1.84	2.12
August	2,328	240	34	75.1	.751	.87
September	1,904.3	313	13.5	63.5	.635	.71
Water year 1945-46	69,411.5	1,020	13.5	190	1.90	25.81
October 1946	1,272	98	27	41.0	.410	.47
November	1,361	70	29	45.4	.454	.51
December	2,427	332	25	78.3	.783	.90
Calendar year 1946	54,865.5	1,020	13.5	150	1.50	20.40
January 1947	6,517	545	56	210	2.10	2.42
February	2,310	228	38	82.5	.825	.86
March	9,114	689	55	294	2.94	3.39
April	8,106	814	89	270	2.70	3.01
May	12,840	708	100	414	4.14	4.78
June	4,827	416	51	161	1.61	1.80
July	2,084	151	24	67.2	.672	.78
August	1,943.2	265	16.8	62.7	.627	.72
September	725.8	42	13.8	24.2	.242	.27
Water year 1946-47	53,527.0	814	13.8	147	1.47	19.91
October 1947	520.7	94	8.6	16.8	.168	.19
November	13,345	1,200	70	445	4.45	4.96
December	2,533	243	39	81.7	.817	.94
Calendar year 1947	64,865.7	1,200	8.6	178	1.78	24.12
January 1948	3,662	187	56	118	1.18	1.36
February	9,161	1,000	50	316	3.16	3.41
March	15,486	741	258	500	5.00	5.76
April	9,210	722	96	307	3.07	3.43
May	11,503	944	81	371	3.71	4.28
June	10,265	696	100	342	3.42	3.82
July	3,965	368	42	128	1.28	1.47
August	3,399	306	33	110	1.10	1.26
September	619.2	36	12.6	20.6	.206	.23
Water year 1947-48	83,668.9	1,200	8.6	229	2.29	31.12
October 1948	561.1	28	13.8	18.1	.181	.21
November	1,399.2	146	13.8	46.6	.466	.52
December	4,704	1,510	38	152	1.52	1.75
Calendar year 1948	73,934.5	1,510	12.6	202	2.02	27.50
January 1949	20,778	1,680	120	670	6.70	7.73
February	9,485	540	228	339	3.39	3.53
March	6,018	406	87	194	1.94	2.24
April	6,820	452	90	227	2.27	2.54
May	3,864	246	56	125	1.25	1.44
June	650.3	50	11.0	21.7	.217	.24
July	469.5	30	6.5	15.1	.151	.17
August	292.9	19.6	4.6	9.45	.094	.11
September	363.8	41	5.7	12.1	.121	.14
Water year 1948-49	55,405.8	1,680	4.6	152	1.52	20.61
October 1949	320.8	31	5.3	10.3	.103	.12
November	409.5	27	9.0	13.6	.136	.15
December	2,474.3	363	11.0	79.8	.798	.92
Calendar year 1949	51,946.1	1,680	4.6	142	1.42	19.33
January 1950	3,056	187	55	98.6	.986	1.14
February	8,420	639	85	301	3.01	3.13
March	7,167	633	39	231	2.31	2.67
April	2,908	228	45	96.9	.969	1.08
May	3,877	235	48	125	1.25	1.44
June	4,327	484	24	144	1.44	1.61
July	2,405.1	336	15.6	77.6	.776	.89
August	767.5	63	10.5	24.8	.248	.29
September	839.6	83	13.2	28.0	.280	.31
Water year 1949-50	36,971.8	639	5.3	101	1.01	13.75

Canoe Brook near Summit

Location.--Lat 40°44'40", long 74°21'20", just downstream from intake to pumping plant of Commonwealth Water Co., Essex County, half a mile upstream from mouth, and 2 miles north of Summit, Union County.

Drainage area.--11 sq mi.

Records available.--February 1930 to September 1950.

Gage.--Water-stage recorder and concrete control.

Remarks.--Figures of discharge represent flow over control only. Water for municipal supply diverted from brook just above control by Commonwealth Water Co. Water pumped from wells in the basin may also affect the flow in the stream.

Cooperation.--Water-stage recorder inspected by employee of Commonwealth Water Co.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.8	4.2	b	b	1.6	5.9	7.9	0.2	1.1	0.1	0.8	1.2
2	3.0	5.0	b	b	3.1	3.8	5.0	.5	b	b	.8	.9
3	3.1	3.2	b	b	4.8	b	12	.7	b	b	.8	1.0
4	2.6	3.2	b	b	4.1	b	5.0	.5	b	3.9	1.2	.8
5	1.0	3.1	b	b	3.4	b	3.1	1.5	b	2.8	1.2	2.0
6	2.7	2.9	b	b	4.9	4.9	1.8	1.7		2.1	2.4	.9
7	22	2.1	b	b	11	10	.9	.6	5.6	1.9	3.5	.8
8	8.4	1.3	b	b	1.8	12	1.5	.3	.8	1.3	1.0	.7
9	9.7	.4	5.7	b	3.8	26	2.5	.7	2.3	1.2	2.1	.6
10	7.4	.5	2.9	b	.8	16	.7	.3	.3	1.3	1.5	.6
11	5.2	4.1	4.0	b	4.9	7.2	3.5	.4	3.0	1.3	1.3	.2
12	4.7	8.8	9.3	b	6.3	2.6	2.8	b	7.6	1.3	.8	.7
13	4.3	3.2	8.0	b	6.4	1.9	2.4	b	3.7	1.3	1.4	.6
14	3.4	8.0	8.7	14	7.8	1.1	4.1	b	4.5	1.2	2.6	.6
15	3.0	11	8.7	11	2.6	b	3.0	b	1.0	1.0	1.3	.6
16	2.8	2.1	7.5	8.0	6.4	b	3.0	b	2.5	.8	.9	.6
17	2.6	2.0	a	7.1	7.0	7.7	3.0	b	2.3	.6	3.0	.7
18	2.4	1.3	a	8.4	6.2	b	2.3	b	2.9	.6	3.1	.6
19	2.1	b	a	6.3	4.4	b	2.1	b	2.9	.6	3.9	.6
20	2.1	b	a	4.0	5.5	7.4	2.9	b	2.2	.6	3.5	.5
21	1.7	b	a	5.0	5.2	5.2	2.3	b	2.1	1.2	2.3	2.4
22	1.6	b	a	4.3	4.4	2.8	2.3	b	1.8	6.8	1.5	1.8
23	1.7	b	a	3.6	5.2	.9	2.6	4.0	1.4	b	1.2	1.5
24	3.6	b	a	2.4	6.0	2.2	2.7	1.5	1.2	b	.9	48
25	8.5	6.4	a	3.5	5.8	17	.9	1.3	1.2	4.2	.8	14
26	9.3	1.8	a	4.6	5.0	b	3.8	.8	1.2	1.4	.7	2.0
27	6.7	1.0	a	4.2	5.8	b	3.0	b	1.0	2.1	.7	2.3
28	4.8	38	b	3.3	9.0	b	.4	b	5.6	2.1	.8	3.0
29	3.9	b	b	3.1	-------	12	.4	11	4.8	1.6	2.0	1.7
30	3.4	b	b	7.3	-------	17	.2	5.4	5.9	1.2	1.2	16.1
31	3.1	-------	b	13	-------	13	-------	9	-------	1.0	1.8	-------

a No gage-height record.
b No discharge record; backwater from Passaic River.

Canoe Brook near Summit--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.6	1.1	2.3	0.7	0.7	0.5	0.2	b	2.6	1.2	0.6	0.6
2	2.5	.9	1.8	.6	.6	5.1	39	b	1.1	1.3	.4	3.4
3	2.1	.9	.9	1.3	1.2	20	56	b	.6	1.4	.3	2.4
4	1.6	.9	1.2	1.7	10	21	6.5	b	2.0	.8	.7	1.1
5	1.5	.8	1.3	1.9	4.2	5.7	b	b	1.9	.6	.8	2.0
6	1.7	.7	1.3	.4	1.6	12	b	b	2.5	.5	.6	2.9
7	2.0	.7	1.4	.9	.3	16	b	b	3.9	.5	.3	1.5
8	1.9	1.4	1.4	1.1	.4	1.6	b	b	b	10	1.0	1.0
9	1.4	2.3	1.4	.5	2.7	1.6	b	9.4	b	2.1	5.1	.9
10	1.0	1.5	1.4	.2	2.9	9.3	9.8	6.9	2.5	3.0	4.5	.6
11	.5	1.4	1.5	1.3	3.4	19	6.9	4.7	1.9	2.1	2.9	.5
12	1.6	2.0	1.4	1.3	1.5	18	6.2	5.1	1.0	1.7	1.4	.4
13	2.6	2.0	3.6	2.2	1.1	18	3.2	2.1	1.4	1.2	1.2	.4
14	2.8	1.5	2.8	2.1	1.4	b	1.9	8.1	5.1	1.0	.8	.6
15	2.1	1.3	2.1	14	3.1	b	1.4	11	4.7	.9	.6	.8
16	1.5	1.2	.8	6.9	5.7	b	9.8	1.9	1.2	1.1	.8	1.4
17	1.3	1.2	.3	4.0	3.4	b	17	.5	.3	1.5	6.5	.9
18	1.4	2.3	.1	1.4	1.5	16	5.2	16	3.4	1.5	1.1	.5
19	1.6	1.8	.2	1.1	1.0	12	1.7	20	1.9	2.7	2.5	.7
20	1.4	1.4	.1	b	.9	12	.1	b	1.3	2.9	2.0	1.4
21	1.3	1.4	b	b	.7	10	3.6	b	2.5	1.2	3.2	.9
22	1.2	5.0	6.3	2.1	2.0	10	8.2	b	4.0	b	2.0	3.1
23	1.2	3.4	1.6	3.0	1.7	8.5	1.8	b	3.2	b	1.8	2.4
24	1.1	.3	.7	4.0	1.0	8.5	.3	b	2.8	.7	2.4	.8
25	1.2	3.5	.7	2.9	.8	44	3.4	b	2.9	.8	.8	1.2
26	1.3	3.0	.3	3.8	1.1	23	15	b	2.7	2.7	2.4	1.0
27	2.0	4.8	1.1	8.5	.7	13	4.7	b	1.9	1.9	1.9	.4
28	1.0	3.9	1.4	2.2	.4	10	1.8	b	1.1	1.7	1.3	.3
29	1.1	2.9	1.5	.6	-------	9.0	.5	b	1.1	1.0	.9	.3
30	1.5	2.3	2.3	1.0	-------	8.1	8.2	b	1.2	.8	.7	.3
31	1.3	-------	1.5	7.0	-------	4.4	-------	6.2	-------	.7	.7	-------

b No discharge record; backwater from Passaic River.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.2	1.7	5.0	4.9	a	b	b	4.3	b	2.8	1.4	1.2
2	.2	1.9	4.7	12.3	a	b	b	3.4	15	3.8	.2	.7
3	.2	1.9	5.2	15	a	b	b	3.4	3.7	4.3	2.3	.7
4	.3	b	5.2	8.4	0.1	b	19	.9	1.5	3.3	1.2	.5
5	.5	b	4.4	6.4	.1	b	13	3.3	4.2	2.5	11	.4
6	.4	3.6	5.2	5.9	0	b	8.0	3.4	6.0	4.2	7.6	.4
7	.3	.9	4.5	4.8	0	b	5.9	22	12	5.8	3.5	.5
8	.3	b	4.8	2.6	.3	b	4.3	4.9	33	3.2	2.7	.4
9	.7	b	4.3	3.2	.4	b	3.8	1.2	2.8	2.2	1.7	.4
10	.8	b	4.0	5.1	.2	b	2.0	4.3	.8	1.8	1.2	.5
11	.7	b	4.4	4.4	1.2	b	9.8	7.7	3.9	1.0	1.0	.9
12	.3	b	3.7	3.1	1.8	b	b	8.3	6.1	.8	b	.6
13	.5	b	3.0	8.7	4.0	b	b	b	29	5.4	3.0	.5
14	.4	b	2.3	8.4	31	b	b	b	6.9	7.1	3.5	.5
15	.4	22	2.4	9.6	b	b	b	b	4.5	3.7	3.2	.3
16	.5	6.4	b	7.0	b	b	b	b	5.2	2.2	1.9	c
17	.6	2.8	1.9	1.7	b	b	b	b	4.2	1.7	1.5	c
18	.5	.6	4.9	3.7	b	b	5.3	b	3.0	1.6	1.2	.4
19	.4	.3	1.8	a	b	b	3.6	b	b	1.4	1.1	.8
20	.7	1.6	2.7	a	b	b	3.0	b	b	1.7	8.4	.7
21	.6	1.3	4.2	a	b	11	2.4	5.3	4.0	3.1	2.7	.6
22	.7	2.1	4.3	a	b	14	.4	2.1	2.3	b	b	.6
23	.7	6.1	4.8	a	b	12	4.4	.8	27	8.2	9.3	.3
24	.6	17	4.8	a	b	17	6.2	4.2	b	4.2	1.6	.3
25	.7	13	3.1	a	b	7.6	6.0	b	b	5.0	5.0	.3
26	.7	1.9	4.6	a	b	4.8	1.2	b	b	3.3	3.4	.4
27	.7	1.7	5.1	a	b	b	2.8	b	b	2.6	2.0	c
28	.7	.9	5.1	a	b	b	5.0	16	b	2.0	1.5	c
29	2.1	4.9	4.6	a	b	b	5.2	6.4	b	1.5	1.2	c
30	1.9	6.4	4.2	0	-------	11	5.0	b	3.4	1.1	.9	c
31	3.7	-------	4.4	.3	-------	4.8	-------	b	-------	.9	.8	-------

a No gage-height record.
b No discharge record; backwater from Passaic River.
c Drain through control open.

Canoe Brook near Summit--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	0.5	0.7	b	7.7	6.2	6.0	6.8	1.8	0.1	0.1	0
2	.6	.7	0	b	3.8	3.3	6.7	4.3	1.6	.1	0	0
3	.6	.8	.3	b	a	2.0	1.4	a	1.3	.1	0	0
4	.5	2.2	.1	b	a	2.7	1.6	.7	1.0	.1	.2	0
5	.4	1.8	.2	b	5.0	16	2.1	5.1	.9	.1	.2	0
6	.3	1.3	.6	b	2.5	25	b	7.1	.7	.2	.2	0
7	.3	2.1	.8	b	11	8.5	b	37	1.0	.1	.1	0
8	.6	.8	1.1	b	2.5	1.8	25	2.6	.8	.1	.1	0
9	1.3	1.8	2.0	b	6.4	.7	18	5.3	.2	.1	.1	0
10	1.1	c	1.1	b	3.4	.2	13	4.0	.2	.1	0	0
11	.7	1.8	.6	b	1.4	13	10	2.0	.2	.1	0	0
12	.6	2.7	.7	3.2	4.9	11	4.0	1.6	.3	.2	0	0
13	.6	2.1	.5	1.0	4.9	1.4	2.3	1.5	.4	.3	0	0
14	.4	1.5	.7	1.3	6.6	.7	14	4.7	.4	.1	0	2.0
15	.4	1.2	.2	1.3	4.4	.4	4.7	1.5	.3	.1	0	1.9
16	.4	1.0	1.7	2.1	3.4	1.8	5.5	5.4	.3	.2	0	.2
17	.4	1.0	1.9	1.9	14	1.8	.8	4.0	.4	.9	0	.1
18	.6	1.0	.4	.5	1.9	2.2	b	3.0	.4	.9	0	0
19	.8	.9	1.1	2.1	.6	1.4	b	2.5	.5	.5	0	0
20	.8	3.8	.7	1.4	b	1.0	b	3.9	.5	.2	0	0
21	.8	1.6	.4	3.0	b	5.3	b	3.2	.3	.1	0	0
22	.6	2.2	.6	b	b	9.0	b	6.8	.3	.2	0	0
23	.5	2.0	.4	8.0	b	b	b	7.8	.3	.2	0	0
24	1.3	1.9	.3	22	b	15	b	2.3	.3	.2	0	0
25	2.3	1.6	a	5.6	b	6.6	b	4.0	.3	.1	0	0
26	1.4	1.0	a	8.5	8.2	10	8.7	5.5	.4	.1	0	0
27	.6	.3	a	5.2	3.4	16	7.0	3.8	.4	.1	0	0
28	.5	.2	a	b	4.3	12	2.5	4.2	.4	.1	0	0
29	.6	2.5	b	8.2	-------	8.1	2.8	3.3	.3	.1	0	1.9
30	.6	1.4	b	4.8	-------	8.4	6.9	3.0	.2	.1	0	1.3
31	.6	-------	b	5.3	-------	4.4	-------	2.1	-------	.1	0	-------

a No gage-height record.
b No discharge record; backwater from Passaic River.
c Drain through control open.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.7	1.4	0.2	1.2	0.3	0.5	1.3	3.4	1.4	0.1	0.2	1.9
2	.2	.8	.2	.9	4.9	.6	.5	2.3	1.0	.1	.2	.9
3	.2	.7	.2	.8	1.8	.2	.8	.4	1.2	.1	1.6	.8
4	.2	.6	.2	1.3	1.4	.1	.8	1.2	29	.9	1.1	1.4
5	.2	.4	d	1.3	1.0	0	1.7	1.5	2.7	2.2	.7	.7
6	.1	.3	d	.8	.2	.2	2.3	1.2	2.2	3.0	.3	.4
7	.1	.2	d	1.5	1.1	.2	2.5	.2	1.7	1.5	.8	.4
8	.1	.2	d	1.3	.7	2.9	3.0	1.9	1.9	.8	.2	.3
9	.1	.2	d	.6	14	3.9	1.4	.6	1.1	.5	.2	.3
10	.1	.1	d	.8	1.5	1.5	.9	1.2	.8	b	.2	1.1
11	.1	.1	d	.4	2.3	.8	1.4	1.2	.9	34	.2	2.0
12	.1	.1	d	.7	.8	.8	1.3	1.3	.4	11	.3	2.5
13	.1	.1	d	1.1	.7	2.6	1.0	.6	.3	3.1	.4	2.6
14	.1	.2	d	.5	2.1	2.6	1.8	.8	.8	3.8	.4	3.6
15	.1	.2	d	1.1	b	4.2	1.5	.4	1.5	1.3	.4	2.2
16	.1	.2	d	1.1	8.3	1.3	1.3	.7	2.0	2.9	.3	1.0
17	.1	.2	d	.2	.6	.8	1.1	.4	1.9	2.1	.3	.6
18	.1	.2	d	1.0	1.0	0	1.1	.9	1.9	1.2	.3	.4
19	.2	.3	d	.5	1.7	2.4	.8	3.0	.5	.6	1.8	.4
20	.2	.3	d	.3	1.1	2.9	2.0	2.1	.5	.7	4.5	.4
21	.2	.2	d	.1	1.2	27	.8	.5	.5	.4	1.5	.4
22	.2	.2	d	.4	.4	1.1	.2	.8	.2	.3	.6	.4
23	.2	.4	d	.7	.4	b	.6	.8	.3	.2	.4	.5
24	.2	.2	d	.4	3.2	11	.6	3.1	2.2	.2	.3	.4
25	.2	.2	.3	.4	.9	.5	.6	1.3	3.1	.2	.2	.3
26	.6	.2	.2	.3	.6	2.0	.5	.6	.6	.2	.2	.3
27	.5	.2	35	.3	.5	2.0	.4	.7	1.3	.2	.3	.3
28	.3	.2	1.8	.4	.2	2.6	7.4	.9	.4	.2	.2	.3
29	.4	.2	0	.6	-------	5.8	1.4	2.1	.2	.2	3.4	.3
30	.4	.2	.5	.6	-------	3.9	.9	1.7	.2	.2	1.9	.2
31	1.7	-------	.5	1.4	-------	2.2	-------	.9	-------	.2	3.3	-------

b No discharge record; backwater from Passaic River.
d Board in notch of control.

Beaver Brook at outlet of Splitrock Reservoir

Location.--Lat 40°57'38", long 74°27'43", 50 ft downstream from Splitrock Dam, 2 miles northeast of Hibernia, Morris County, and 3½ miles upstream from Hibernia Brook.

Drainage area.--5.50 sq mi.

Records available.--October 1925 to October 1946 (discontinued).

Gage.--Water-stage recorder and wooden weir.

Average discharge.--21 years, 9.99 cfs (unadjusted).

Extremes.--1925-46: Maximum discharge, 126 cfs Mar. 12, 1936 (gage height, 2.70 ft, estimated); no flow on many days.

Maximum discharge during water year 1945-46: 56 cfs July 24 (1.87 ft).

Remarks.--Flow regulated by sluice gates in Splitrock Reservoir Dam.

Cooperation.--Gage-height record furnished by Department of Streets and Public Improvements, Bureau of Water, Jersey City.

Daily discharge, in cubic feet per second, 1945-46

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.8	0.96	26	g17.6	4.3	5.5	14.4	5.2	17.6	0.96	4.6	1.81
2	2.5	.89	23	g16.8	4.3	5.5	13.0	4.8	27	2.5	3.6	1.48
3	2.2	.83	18.6	g15.2	3.9	5.7	14.0	4.1	45	3.0	3.0	1.40
4	1.89	.70	16.0	g13.7	3.4	6.2	14.0	3.7	37	2.5	2.8	1.18
5	1.64	.58	14.4	g13.7	3.1	8.2	12.7	3.7	28	2.1	2.5	.96
6	1.72	.52	13.7	g13.0	3.4	13.0	11.7	3.4	22	1.72	2.1	.70
7	3.2	.47	14.4	g15.6	5.1	16.0	10.6	3.5	18.1	1.48	2.4	.64
8	4.0	.41	14.4	g19.0	5.6	18.6	9.7	4.1	14.8	1.18	3.1	.58
9	4.3	.41	13.7	18.6	7.4	19.4	9.7	4.0	12.0	1.03	2.7	.52
10	4.4	.41	13.0	18.1	7.1	21	9.1	3.9	9.7	.89	1.89	.47
11	4.2	.83	12.4	16.8	6.8	19.0	8.4	3.7	8.4	.76	1.64	.36
12	3.9	1.64	11.1	15.2	6.4	16.4	7.8	4.8	10.9	.64	1.64	.36
13	3.6	1.98	10.6	13.7	6.2	14.8	7.1	7.3	11.4	.58	1.81	.30
14	3.2	2.4	10.2	12.4	7.1	14.0	6.6	8.0	10.2	.47	2.3	.15
15	2.9	2.5	9.8	11.4	8.0	16.4	5.8	11.1	9.0	.41	2.2	.11
16	2.6	2.6	9.4	10.2	7.5	18.6	5.6	12.0	7.5	.27	1.98	.15
17	2.4	2.7	8.8	9.3	7.0	18.6	5.2	13.7	6.2	.18	4.2	.15
18	2.1	2.6	8.0	8.5	6.6	16.8	4.6	30	5.6	.11	9.8	.11
19	1.89	2.9	8.4	8.1	6.6	14.8	4.4	36	4.8	.05	10.2	.06
20	1.64	6.0	8.7	6.9	8.8	12.7	4.1	31	4.0	.03	9.3	0
21	1.40	7.3	7.8	6.5	7.7	11.1	3.7	26	3.5	.94	8.0	.83
22	1.32	14.8	7.5	6.2	7.0	10.6	3.5	22	3.1	8.1	6.6	.96
23	1.25	24	7.3	5.6	6.6	10.0	3.3	17.6	2.8	35	5.7	1.40
24	1.32	17.6	7.0	5.2	6.4	9.1	3.1	14.8	2.3	52	4.6	9.2
25	1.40	14.4	9.0	4.6	6.0	11.1	3.0	12.4	1.98	37	3.7	30
26	1.48	9.8	23	4.5	5.5	12.7	4.0	11.1	1.56	24	3.2	26
27	1.48	8.8	27	4.1	5.5	22	4.8	26	1.25	17.2	3.3	21
28	1.18	8.2	23	4.1	5.6	24	5.1	47	1.10	12.7	2.7	19.9
29	1.10	12.0	21	3.6	-------	22	5.3	40	1.10	9.5	2.3	21
30	1.03	19.9	g17.6	3.4	-------	19.9	5.3	29	1.03	7.4	2.5	23
31	.96	-------	g17.6	4.1	-------	16.4	-------	22	-------	6.0	2.2	-------

g Computed from graph based on gage readings.

October 1946

Oct. 1	19.0	Oct. 9	3.7	Oct. 17	4.4	Oct. 25	3.3
2	15.2	10	3.2	18	4.5	26	3.5
3	12.4	11	2.9	19	5.5	27	4.0
4	9.8	12	4.6	20	5.5	28	4.2
5	8.2	13	6.5	21	5.0	29	4.8
6	6.6	14	6.4	22	4.5	30	5.1
7	5.5	15	5.7	23	5.1	31	4.5
8	4.5	16	5.0	24	3.6		

Beaver Brook at outlet of Splitrock Reservoir--Continued

Monthly and annual discharge, in cubic feet per second, 1945-46

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	71.00	4.4	0.96	2.29		
November	169.13	24	.41	5.64		
December	432.4	27	7.0	13.9		
Calendar year 1945	4,313.22	63	.28	11.8		
January 1946	325.7	19.0	3.4	10.5		
February	168.9	8.8	3.1	6.03		
March	450.1	24	5.5	14.5		
April	219.6	14.4	3.0	7.32		
May	465.9	47	3.4	15.0		
June	328.92	45	1.03	11.0		
July	230.70	52	.03	7.44		
August	118.56	10.2	1.64	3.82		
September	164.78	30	0	5.49		
Water year 1945-46	3,145.69	52	0	8.62		
October 1946	185.7	19.0	2.9	5.99		

Rockaway River above reservoir, at Boonton

Location.--Lat 40°54'06", long 74°24'40", on right bank at Morris Avenue, Boonton, Morris County, 1.8 miles upstream from Boonton Reservoir Dam.

Drainage area.--116 sq mi.

Records available.--October 1937 to September 1950.

Gage.--Water-stage recorder and concrete control. Datum of gage is 364.47 ft above mean sea level (New Jersey Geological Survey bench mark).

Average discharge.--12 years (1938-50), 219 cfs (adjusted).

Extremes.--1937-50: Maximum discharge, 2,860 cfs Dec. 31, 1948 (gage height, 6.30 ft), from rating curve extended above 2,100 cfs; minimum, 1.5 cfs Mar. 1, 1938 (gage height, 1.26 ft).

Peak discharge (base, 950 cfs).--
1946: Nov. 23 (4 a.m.) 1,070 cfs (4.07 ft); Dec. 26 (11 p.m.) 1,150 cfs (4.19 ft); June 3 (5 a.m.) 1,120 cfs (4.14 ft); July 24 (4:15 a.m.) 1,440 cfs (4.56 ft).
1947: Mar. 15 (2 to 3 a.m.) 1,470 cfs (4.60 ft); Apr. 6 (7:30 to 8:30 a.m.) 1,360 cfs (4.46 ft); May 26 (1:30 to 2:30 p.m.) 1,220 cfs (4.28 ft).
1948: Nov. 9 (7 a.m.) 1,790 cfs (5.01 ft); Nov. 12 (6 to 8 p.m.) 1,290 cfs (4.37 ft); Mar. 17 (10 a.m. to 1 p.m.) 1,290 cfs (4.37 ft); Apr. 2 (1 a.m.) 1,120 cfs (4.15 ft); May 14 (6 a.m.) 1,030 cfs (4.02 ft).
1949: Dec. 31 (12 m.) 2,860 cfs (6.30 ft); Jan. 6 (6 p.m.) 1,720 cfs (4.93 ft).
1950: Mar. 23 (8:30 p.m.) 991 cfs (3.96 ft).

Remarks.--Town of Boonton diverts water for municipal supply from Stony Brook Reservoir (capacity, 75,000,000 gallons) and from wells in vicinity of Boonton. Flow regulated by Splitrock Reservoir (capacity, 442,000,000 cubic feet), 14½ miles above station.

Cooperation.--Gage-height record collected in cooperation with and records of storage in Splitrock Reservoir and diversion furnished by Jersey City.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	144	103	705	634	217	156	247	138	278	105	96	57
2	173	113	577	417	180	159	247	121	578	195	89	62
3	180	103	469	400	139	202	273	98	1,020	176	91	60
4	156	100	428	406	116	273	269	96	679	110	135	56
5	141	93	417	357	138	321	242	103	504	85	103	52
6	138	93	440	384	147	307	217	105	417	74	93	50
7	242	91	486	540	273	283	206	98	347	67	139	51
8	238	98	440	640	202	321	190	129	297	60	163	50
9	210	103	400	577	176	347	206	121	251	54	110	51
10	183	100	373	596	163	316	190	103	206	52	100	50
11	173	134	357	546	150	278	173	96	198	57	91	48
12	156	210	264	486	141	251	166	168	384	60	80	45
13	153	180	273	457	135	233	159	368	342	57	89	41
14	132	173	287	395	*180	229	150	238	251	52	129	39
15	126	198	283	352	206	283	144	326	206	48	105	39
16	132	180	b250	278	138	357	150	269	176	45	96	38
17	123	147	b240	292	159	297	135	251	156	43	133	37
18	116	141	b250	269	141	273	126	451	156	40	297	35
19	110	149	b260	242	126	297	123	486	150	39	251	34
20	100	373	b270	180	116	255	121	412	132	39	198	38
21	96	321	b260	233	141	225	113	363	135	117	135	69
22	93	557	b250	233	135	210	108	331	129	378	105	132
23	105	959	b250	190	144	190	108	269	110	990	108	78
24	121	698	b260	194	135	176	108	217	103	1,250	103	218
25	129	577	b350	202	132	238	105	190	89	725	87	659
26	138	469	672	190	121	264	153	190	87	406	80	347
27	135	406	974	173	126	565	180	446	54	264	78	206
28	123	384	685	150	153	457	173	881	90	183	74	147
29	113	754	552	159	-------	342	147	589	126	144	73	118
30	118	874	510	163	-------	311	147	440	147	118	96	232
31	113	-------	552	229	-------	273	-------	352	-------	105	69	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Rockaway River above reservoir, at Boonton--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	217	89	64	85	287	98	217	578	384	180	76	44
2	156	85	56	86	247	143	247	589	337	242	69	50
3	128	82	48	105	213	260	395	469	307	198	74	51
4	110	87	54	110	210	255	331	451	273	153	80	56
5	98	80	54	97	163	213	554	522	238	129	76	91
6	91	73	64	103	173	202	1,250	608	206	113	71	93
7	82	71	64	86	180	217	916	516	213	100	67	87
8	76	78	64	96	173	210	731	457	440	231	81	78
9	69	85	67	85	118	194	608	428	826	233	105	73
10	73	76	69	74	141	202	504	363	528	190	138	76
11	76	74	65	85	156	206	434	321	368	153	123	74
12	153	93	60	87	141	213	384	297	307	135	89	73
13	221	93	71	89	129	247	337	**260**	**247**	**118**	76	73
14	163	85	67	96	126	836	302	316	287	113	67	67
15	129	80	58	128	138	1,280	292	522	679	156	64	71
16	116	100	55	213	147	895	287	434	540	202	60	105
17	103	96	58	213	150	712	316	368	384	242	189	78
18	108	91	60	180	141	558	283	357	331	242	126	69
19	138	87	56	159	129	445	251	412	321	202	89	58
20	110	98	50	307	98	384	229	589	283	190	93	69
21	96	78	161	504	71	357	225	666	273	156	118	60
22	121	80	255	261	113	337	242	672	238	243	87	69
23	103	87	190	242	141	316	217	666	198	242	71	82
24	87	74	153	269	121	297	194	528	187	180	58	76
25	80	71	132	242	118	368	190	534	198	147	58	62
26	91	69	116	229	116	384	242	1,060	188	121	51	52
27	113	76	91	302	113	311	221	867	173	108	52	46
28	103	73	100	229	103	278	210	640	147	100	57	43
29	103	67	103	242	-------	260	187	528	173	93	51	40
30	96	62	110	221	-------	238	180	583	260	87	48	38
31	91	-------	86	287	-------	225	-------	474	-------	80	46	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35	105	163	170	b85	378	756	229	373	183	57	74
2	34	78	159	225	b90	368	974	221	292	156	60	67
3	35	56	159	225	82	428	692	213	233	135	56	64
4	34	212	163	198	93	390	565	217	202	118	54	58
5	31	516	156	190	98	297	486	225	187	113	78	57
6	32	357	156	180	98	264	445	278	173	150	173	58
7	37	283	156	173	87	307	417	309	170	187	108	60
8	33	582	170	163	96	321	363	457	229	150	78	57
9	34	1,570	180	163	80	321	337	347	213	126	65	56
10	33	860	147	166	b80	373	311	283	210	113	58	56
11	33	583	144	130	b80	469	297	238	183	110	54	57
12	30	1,040	138	150	b85	400	440	221	173	82	112	52
13	34	952	150	156	93	357	486	611	247	107	238	50
14	34	627	116	163	172	352	504	944	233	264	170	45
15	33	504	108	116	302	363	860	685	180	173	100	43
16	32	440	328	132	269	621	685	558	153	116	78	39
17	34	378	357	126	316	1,240	565	602	138	116	67	39
18	32	337	260	129	422	1,100	480	640	126	78	60	40
19	34	297	194	82	498	952	434	528	182	100	57	45
20	39	247	146	103	614	937	400	445	269	217	83	48
21	35	194	156	108	540	846	368	378	238	141	415	45
22	41	198	147	135	457	798	342	337	206	156	518	39
23	43	242	147	126	406	751	316	302	238	156	874	35
24	40	255	141	78	331	698	297	273	302	147	522	34
25	37	373	121	b95	337	634	297	287	534	110	331	33
26	40	316	105	b100	368	510	273	297	342	89	229	33
27	41	251	118	b120	363	498	251	260	283	78	163	34
28	40	213	173	b100	412	778	242	225	368	74	126	40
29	87	198	144	b110	417	608	233	221	292	67	105	41
30	80	180	123	b100	-------	486	238	443	225	62	89	45
31	135	-------	141	b90	-------	445	-------	504	-------	56	78	-------

b Stage-discharge relation affected by ice.

Rockaway River above reservoir, at Boonton--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a76	39	129	2,150	471	245	202	241	101	36	23	28
2	a67	39	110	1,450	418	233	198	249	94	36	19.8	23
3	a57	39	93	954	348	217	180	488	91	35	24	22
4	48	132	89	685	358	205	167	429	89	33	50	21
5	52	135	85	610	348	202	157	320	83	32	43	21
6	52	93	82	1,490	324	279	379	275	76	34	36	28
7	48	121	82	1,410	324	315	377	382	68	35	28	26
8	54	91	78	1,010	382	275	279	315	63	35	28	24
9	73	67	73	757	353	253	241	241	60	30	24	23
10	74	87	73	610	367	241	209	245	56	31	23	21
11	69	129	67	527	333	262	187	266	58	37	21	33
12	74	98	65	466	275	279	180	233	60	33	20	29
13	69	85	74	429	258	241	177	198	60	40	31	38
14	69	74	71	392	283	217	313	173	61	39	30	111
15	67	65	69	338	320	213	275	157	60	36	34	131
16	60	65	89	315	333	195	217	141	69	38	38	108
17	48	60	156	297	306	191	187	141	53	40	37	89
18	50	60	150	262	275	191	237	138	68	51	32	87
19	69	62	105	292	237	184	715	127	65	51	29	137
20	73	208	115	288	266	177	586	152	61	48	24	111
21	67	210	138	253	315	184	429	198	65	43	23	94
22	62	132	121	500	266	213	382	180	41	39	21	85
23	57	147	110	562	367	376	616	315	44	33	20	104
24	56	123	100	504	392	413	539	237	38	31	19.8	89
25	60	98	87	510	343	297	423	191	38	30	18.4	82
26	64	85	b65	434	315	258	362	157	47	29	17.7	76
27	58	91	b65	403	270	245	333	167	36	28	17.0	72
28	51	100	b70	527	245	225	301	147	36	27	17.7	72
29	46	139	86	730	-------	198	275	133	35	25	32	97
30	44	170	980	568	-------	184	249	124	36	24	29	156
31	43	-------	2,730	450	-------	180	-------	111	-------	24	27	-------

a No gage-height record; discharge computed on basis of records for stations on nearby streams.
b Stage-discharge relation affected by ice.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	111	108	66	119	137	146	374	263	360	87	58	82
2	91	91	62	114	186	143	342	263	580	53	58	64
3	82	82	58	119	250	107	327	224	462	64	78	62
4	76	85	50	125	185	116	363	204	456	111	94	76
5	72	82	50	116	150	116	353	193	420	108	70	59
6	72	72	43	111	134	137	327	204	316	146	62	50
7	69	69	42	156	134	125	277	185	259	116	67	44
8	69	66	48	143	118	171	237	160	224	96	52	40
9	70	64	b29	106	219	632	212	140	181	83	47	38
10	64	64	b26	142	369	456	204	134	156	137	46	41
11	61	62	30	224	306	363	200	131	137	259	48	48
12	58	62	48	167	282	327	204	119	122	297	62	48
13	55	66	160	181	*254	369	185	119	111	216	53	50
14	53	104	*172	185	259	353	174	111	111	456	48	67
15	50	101	108	164	347	306	174	104	153	397	42	59
16	46	101	b82	146	438	*277	160	114	164	273	40	53
17	43	82	b74	116	392	250	153	118	181	216	39	47
18	40	82	70	116	321	242	150	216	143	170	38	42
19	40	85	87	116	292	224	146	297	114	134	57	39
20	38	89	89	*94	210	200	181	263	108	116	174	39
21	35	91	80	98	218	296	237	200	108	101	134	38
22	38	80	74	94	220	444	185	156	96	87	91	37
23	51	70	76	96	212	691	181	134	83	78	76	39
24	55	69	87	101	200	826	188	215	97	76	64	38
25	56	72	76	116	212	574	197	224	621	96	55	35
26	95	67	72	114	178	480	224	212	357	91	50	35
27	89	61	310	114	141	480	233	197	181	80	44	39
28	80	61	392	114	146	555	250	167	119	70	41	44
29	76	67	254	125	-------	536	233	258	94	76	f48	37
30	72	72	178	143	-------	492	216	342	82	76	f122	36
31	96	-------	128	146	-------	432	-------	254	-------	64	104	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
f Computed on basis of partly estimated gage-height record.

Rockaway River above reservoir, at Boonton--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	4,410	242	93	142	148	1.28	1.47
November	8,881	959	91	296	302	2.60	2.90
December	12,784	974	240	412	419	3.61	4.17
Calendar year 1945	112,435	1,410	72	308	314	2.71	36.81
January 1946	10,564	640	150	341	348	3.00	3.46
February	4,330	273	116	155	161	1.39	1.44
March	8,689	565	156	280	287	2.47	2.85
April	5,076	273	105	169	175	1.51	1.69
May	8,445	881	96	272	279	2.41	2.77
June	7,798	1,020	54	260	267	2.30	2.57
July	6,138	1,250	39	198	204	1.76	2.03
August	3,596	297	69	116	122	1.05	1.21
September	3,139	659	34	105	110	.948	1.06
Water year 1945-46	83,850	1,250	34	230	236	2.03	26.62
October 1946	3,496	221	69	113	118	1.02	1.18
November	2,440	100	62	81.3	86.6	.747	.83
December	2,701	255	48	87.1	92.3	.796	.92
Calendar year 1946	66,412	1,250	34	182	188	1.62	22.01
January 1947	5,512	504	74	178	183	1.58	1.82
February	4,156	287	71	148	154	1.33	1.38
March	11,141	1,280	98	359	366	3.16	3.65
April	10,976	1,250	180	366	373	3.22	3.59
May	16,075	1,060	260	519	526	4.53	5.23
June	9,524	826	147	317	325	2.80	3.12
July	5,079	243	80	164	170	1.47	1.69
August	2,510	189	46	81.0	86.6	.747	.86
September	2,004	105	38	66.8	72.2	.622	.69
Water year 1946-47	75,614	1,280	38	207	213	1.84	24.95
October 1947	1,292	135	30	41.7	46.7	.403	.46
November	12,394	1,570	56	413	420	3.62	4.04
December	5,066	357	105	163	169	1.46	1.68
Calendar year 1947	85,729	1,570	30	235	241	2.08	28.20
January 1948	4,302	225	78	139	144	1.24	1.44
February	7,271	614	80	254	261	2.25	2.43
March	17,290	1,240	264	558	568	4.90	5.64
April	13,349	974	233	445	455	3.92	4.37
May	11,778	944	213	380	388	3.34	3.86
June	7,194	534	126	240	247	2.13	2.37
July	3,930	264	56	127	133	1.15	1.32
August	5,256	874	54	170	176	1.52	1.75
September	1,444	74	33	48.1	53.6	.462	.52
Water year 1947-48	90,666	1,570	30	248	255	2.20	29.88
October 1948	1,857	76	43	59.9	65.0	.560	.65
November	3,044	210	39	101	107	.922	1.03
December	6,407	2,730	65	207	224	1.93	2.22
Calendar year 1948	83,222	2,730	33	227	235	2.03	27.60
January 1949	20,173	2,150	253	651	699	6.03	6.95
February	9,092	471	237	325	347	2.99	3.11
March	7,388	413	177	238	256	2.21	2.54
April	9,372	715	157	312	334	2.88	3.21
May	6,871	488	111	222	237	2.04	2.35
June	1,812	101	35	60.4	65.0	.560	.62
July	1,083	51	24	34.9	40.1	.346	.40
August	827.4	50	17.0	27.0	32.1	.277	.32
September	2,038	156	21	67.9	44.5	.384	.43
Water year 1948-49	69,974.4	2,730	17.0	192	204	1.76	23.84
October 1949	2,003	111	35	64.6	38.6	.333	.38
November	2,327	108	61	77.6	50.2	.433	.48
December	3,121	392	26	101	105	.905	1.05
Calendar year 1949	66,117.4	2,150	17.0	181	187	1.61	21.85
January 1950	4,021	224	94	130	145	1.25	1.45
February	6,510	438	118	232	257	2.22	2.31
March	10,866	826	107	351	379	3.27	3.76
April	6,888	374	146	230	246	2.12	2.36
May	5,921	342	104	191	208	1.79	2.07
June	6,596	621	82	220	235	2.03	2.26
July	4,430	456	53	143	155	1.34	1.54
August	2,062	174	38	66.5	73.3	.632	.73
September	1,426	82	35	47.5	52.1	.449	.50
Water year 1949-50	56,171	826	26	154	161	1.39	18.89

* Adjusted for diversions for municipal supply measured at outlet of trunk sewer below station and for change in contents in Splitrock Reservoir.

Rockaway River below reservoir, at Boonton

Location.--Lat 40°53'47", long 74°23'36", on right bank 2,000 ft downstream from dam of Boonton Reservoir, Boonton, Morris County.

Drainage area.--119 sq mi.

Records available.--March 1903 to February 1904, January 1906 to September 1950. Published as "near Boonton" 1903-4 and as "at Boonton" 1906-7.

Gage.--Water-stage recorder. Concrete control since Nov. 5, 1936. Datum of gage is 195.68 ft above mean sea level (New Jersey Geological Survey bench mark). Mar. 15, 1903, to Feb. 2, 1904, staff gage at site 2,000 ft downstream at different datum. Jan. 1, 1906, to Mar. 3, 1918, reference-point gage on Boonton Dam 2,000 ft upstream at datum 109.57 ft higher than present datum.

Average discharge.--42 years (1906-11, 1913-50), 219 cfs (adjusted).

Extremes.--1906-50: Maximum discharge, 3,770 cfs Mar. 12, 1936 (gage height, 8.03 ft), from rating curve extended above 1,200 cfs by logarithmic plotting and by computation of discharge over Boonton Dam; practically no flow for many days.

Maximum daily discharge recorded, 7,560 cfs Oct. 10, 1903.

Peak discharge (base, 800 cfs).--
1946: Nov. 23 (1:30 p.m.) 840 cfs (4.24 ft); Dec. 27 (6 a.m.) 929 cfs (4.42 ft); Feb. 14 (2 p.m.) 967 cfs (flashboards removed) (4.50 ft); June 3 (12 m.) 909 cfs (4.38 ft); July 24 (11 a.m. to 1:30 p.m.) 1,120 cfs (4.78 ft).
1947: Mar. 15 (9 a.m.) 1,150 cfs (4.83 ft); Apr. 6 (2 p.m.) 1,120 cfs (4.78 ft); May 26 (10:30 to 11:30 p.m.) 969 cfs (4.48 ft).
1948: Nov. 13 (3 a.m.) 1,010 cfs (4.56 ft); Mar. 17 (11:30 p.m.) 1,090 cfs (4.73 ft); Apr. 2 (7:30 a.m. and noon) 939 cfs (4.41 ft); May 14 (2 p.m.) 849 cfs (4.23 ft).
1949: Dec. 31 (about 10 p.m.) 2,370 cfs (6.76 ft); Jan. 6 (11 p.m.) 1,400 cfs (5.26 ft).
1950: Mar. 24 (6 a.m.) 766 cfs (4.08 ft), (annual maximum below base).

Remarks.--Figures of daily and extreme discharge include effluent from sewage-disposal plant. Flow regulated by Boonton Reservoir (capacity, 870,000,000 cubic feet) and by Splitrock Reservoir (capacity, 442,000,000 cubic feet), 16½ miles above station. Water diverted from Boonton Reservoir for municipal supply of Jersey City.

Cooperation.--Gage-height records for station and reservoirs and record of sewage-disposal plant effluent furnished by Jersey City.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60	20	604	517	138	66	183	9.4	218	47	14.9	7.9
2	88	24	490	366	112	78	178	9.4	417	75	10.0	6.2
3	78	28	388	326	76	97	182	9.2	874	119	17.9	6.2
4	72	19.0	341	326	55	163	195	9.1	648	65	48	7.4
5	63	14.5	318	284	54	214	178	9.1	486	29	37	9.1
6	58	13.0	333	290	60	234	150	12.7	361	14.3	19.4	9.0
7	138	10.9	376	413	138	216	132	10.4	298	7.0	42	9.2
8	166	11.6	348	526	142	237	121	11.1	241	6.6	83	9.2
9	138	21	307	504	112	262	126	15.1	192	7.1	52	9.0
10	108	14.5	276	504	97	250	119	11.8	146	6.7	31	9.3
11	97	40	269	463	83	217	102	12.8	134	6.8	17.8	9.4
12	88	99	200	413	72	188	91	21	256	6.4	9.5	9.0
13	78	108	188	384	174	168	86	197	284	6.7	9.8	9.2
14	62	86	208	327	455	152	83	208	206	6.5	24	9.1
15	47	97	214	283	246	185	88	284	149	6.1	32	9.1
16	48	96	188	209	91	269	62	218	116	6.5	23	8.9
17	39	70	104	209	89	243	54	194	91	6.1	37	9.1
18	36	62	117	195	70	212	65	322	79	6.1	158	9.3
19	34	71	140	178	54	215	38	412	72	6.2	188	9.3
20	24	214	135	111	58	195	42	352	58	6.1	142	9.3
21	20	236	125	142	53	161	34	304	60	7.1	82	10.4
22	18.8	379	128	155	55	142	13.9	259	59	9.3	39	10.0
23	14.3	776	123	116	63	124	7.4	214	42	378	26	9.7
24	28	603	117	112	60	115	6.6	160	30	1,060	22	30
25	51	480	134	120	53	145	6.5	128	19.7	738	13.4	18.1
26	64	387	540	110	39	192	6.7	117	26	384	8.5	41
27	55	322	864	104	39	379	7.0	315	12.7	228	7.3	119
28	44	306	599	84	54	425	6.6	732	8.6	141	7.8	86
29	40	554	493	81	-------	308	27	526	10.1	88	9.2	58
30	30	749	429	83	-------	246	33	392	34	51	7.8	126
31	43	-------	455	123	-------	215	-------	307	-------	29	6.7	-------

Rockaway River below reservoir, at Boonton--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	149	11.1	10.9	12.2	205	17.7	140	350	368	124	9.1	25
2	146	11.1	11.1	11.8	182	57	160	512	291	133	9.0	25
3	290	11.2	11.4	11.9	152	158	276	429	244	124	8.8	26
4	312	11.3	10.8	12.5	140	174	276	403	210	83	8.4	26
5	127	11.4	11.0	12.6	123	148	382	462	180	66	11.0	26
6	48	10.7	11.3	12.0	70	121	961	499	146	47	13.8	26
7	25	10.4	11.3	12.1	115	130	866	459	178	28	14.0	25
8	14.9	10.3	11.6	11.9	109	135	673	395	293	86	14.4	25
9	12.5	10.6	11.1	12.1	78	128	550	360	625	158	15.3	26
10	11.3	11.4	10.7	12.1	68	126	469	304	546	121	13.0	26
11	11.3	10.8	10.0	12.0	68	128	393	263	365	89	13.0	26
12	16.1	10.7	10.0	12.0	59	126	338	234	269	65	14.1	27
13	64	10.7	10.4	11.9	48	148	284	203	168	40	13.2	24
14	93	10.6	10.8	12.6	42	487	246	200	74	37	13.6	24
15	65	10.7	10.9	14.2	45	1,080	224	371	67	53	13.4	24
16	50	10.7	11.5	14.4	60	850	218	391	417	100	12.6	24
17	34	11.0	11.3	13.7	66	651	245	322	338	122	13.5	24
18	32	10.8	11.6	13.2	58	505	227	297	267	159	18.1	24
19	34	11.6	11.1	12.9	50	404	186	318	240	133	25	24
20	38	11.4	11.6	20	42	342	169	427	212	106	26	24
21	27	11.8	13.4	194	36	298	158	559	197	82	25	24
22	22	12.0	13.9	380	31	276	160	584	178	157	25	24
23	29	12.0	12.8	559	46	258	152	590	133	187	25	25
24	20	12.1	12.1	197	44	254	185	498	111	110	24	25
25	15.7	11.7	12.0	181	36	311	121	494	118	72	24	24
26	12.5	11.1	11.8	168	31	305	158	821	100	50	24	24
27	28	11.0	11.6	199	28	249	174	852	92	42	24	24
28	28	10.8	11.5	199	21	208	142	615	75	26	25	24
29	30	10.5	11.4	171	-------	202	130	508	67	16.0	25	24
30	24	10.7	12.0	149	-------	180	126	505	145	12.0	25	24
31	16.0	-------	12.5	177	-------	158	-------	459	-------	15.1	25	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	24	93	91	10.3	323	540	16.8	337	99	8.8	12.9
2	24	24	78	160	9.7	312	895	20	215	68	8.9	11.7
3	23	24	70	157	9.8	350	671	30	164	53	9.1	11.6
4	23	32	63	130	9.5	343	521	45	131	46	9.1	14.0
5	23	29	69	115	9.5	264	440	56	109	42	15.4	14.9
6	23	28	70	106	9.4	207	383	120	101	52	21	14.0
7	23	27	72	97	9.4	219	351	185	94	71	23	12.3
8	23	49	81	75	9.1	232	313	349	133	75	22	11.7
9	23	39	87	72	80	232	270	290	127	51	17.3	12.0
10	23	46	66	83	166	267	239	218	127	36	13.4	13.8
11	23	361	60	54	162	372	228	167	111	34	14.9	12.4
12	23	775	55	67	162	353	302	151	92	18.8	21	11.4
13	23	900	57	89	162	298	399	393	138	12.3	17.8	10.4
14	23	580	57	86	166	284	419	808	158	80	19.9	10.8
15	23	450	37	45	170	284	646	661	111	107	15.1	11.8
16	24	388	152	33	169	414	650	512	76	50	14.4	11.7
17	24	307	263	52	169	966	504	501	59	25	13.9	10.7
18	24	259	208	57	173	1,030	429	541	47	18.4	12.8	10.6
19	24	224	140	36	176	902	370	466	80	16.4	11.6	10.8
20	24	182	88	15.9	182	859	335	385	167	74	12.7	10.9
21	24	128	78	21	381	784	302	330	164	73	23	11.3
22	24	112	65	46	413	719	270	260	124	57	165	9.5
23	24	155	58	46	357	669	244	232	140	70	652	9.5
24	24	179	54	28	269	622	225	192	211	69	511	9.3
25	25	250	44	20	253	562	218	206	368	46	297	9.5
26	23	240	70	16.2	267	470	209	218	308	33	157	9.0
27	23	189	64	16.5	283	448	187	195	224	14.1	84	8.9
28	24	150	84	15.6	318	599	175	164	267	16.2	46	9.3
29	24	126	81	13.3	345	587	101	143	220	17.4	19.9	9.4
30	24	112	67	12.3	-------	445	17.7	266	154	13.6	13.3	9.3
31	25	-------	66	10.1	-------	386	-------	425	-------	10.0	13.7	-------

Rockaway River below reservoir, at Boonton--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.4	9.5	12.2	f2,060	367	231	106	152	26	10.1	13.7	6.0
2	7.2	9.4	12.1	1,380	329	198	117	219	18.6	10.5	12.3	6.2
3	7.1	9.7	12.9	907	269	186	106	304	13.0	10.2	11.6	6.5
4	7.0	10.7	13.0	634	266	178	90	289	13.0	10.7	11.3	7.1
5	7.0	10.8	12.6	510	260	179	76	142	18.6	10.2	11.2	7.6
6	6.8	10.4	12.1	1,040	244	241	202	32	14.0	11.3	10.3	8.1
7	6.9	11.0	12.2	1,320	244	262	302	33	16.1	13.0	9.9	8.5
8	7.3	11.3	12.4	928	294	216	230	160	16.7	12.9	9.7	7.4
9	7.0	11.5	12.4	710	277	177	174	171	16.5	12.9	9.7	5.5
10	6.8	11.7	12.5	546	284	160	141	155	16.6	12.3	9.4	5.4
11	7.2	12.1	12.0	454	266	173	118	189	16.5	12.9	9.3	5.4
12	8.1	11.7	12.1	391	212	194	99	149	15.6	13.1	9.3	5.5
13	8.0	11.9	12.5	347	197	167	97	129	16.0	12.8	9.2	6.4
14	8.0	11.5	12.0	309	216	140	169	106	15.8	12.6	9.0	6.5
15	8.1	11.2	12.0	268	256	123	205	85	15.9	12.6	14.1	6.0
16	8.1	11.2	12.0	234	284	116	154	69	16.1	12.6	9.8	5.8
17	8.2	11.1	14.1	217	256	102	112	62	15.4	12.9	9.2	5.6
18	8.2	11.0	13.8	180	224	102	113	65	15.9	13.2	8.8	6.3
19	8.7	10.9	13.1	191	195	102	398	56	15.2	13.4	8.6	13.7
20	9.1	13.2	12.6	196	227	91	512	48	15.8	13.3	8.4	5.8
21	9.7	12.5	13.0	177	265	90	365	97	14.7	12.9	8.1	5.6
22	9.9	12.0	13.2	315	243	106	298	96	11.7	13.0	7.7	5.5
23	9.2	12.6	13.0	449	338	212	418	193	11.3	13.3	7.9	6.1
24	9.5	12.4	12.9	422	361	330	455	181	12.2	13.0	7.4	5.8
25	9.6	12.2	13.1	416	308	250	357	122	11.6	12.9	6.9	5.6
26	10.2	11.4	11.9	370	277	167	280	86	11.5	13.4	6.8	5.4
27	10.0	12.2	12.0	322	237	168	248	78	11.3	13.7	6.0	5.4
28	10.0	12.4	11.6	376	231	149	212	67	11.4	14.2	6.0	5.4
29	9.7	13.1	12.7	570	-------	114	184	56	10.9	14.2	6.2	6.8
30	9.7	13.0	39	512	-------	100	166	48	10.3	14.5	6.1	6.4
31	9.8	-------	f1,050	402	-------	94	-------	34	-------	14.2	5.9	-------

f Computed on basis of partly estimated gage-height record.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.0	5.6	5.3	8.8	9.6	76	315	166	245	10.6	7.4	7.8
2	6.1	5.4	5.3	8.1	11.9	78	279	185	441	13.1	7.1	7.1
3	5.9	5.4	5.3	8.6	11.6	48	246	158	420	9.9	8.4	7.0
4	6.1	5.4	5.2	8.5	11.0	38	275	130	375	15.8	7.6	7.1
5	5.8	5.4	5.0	8.9	10.4	40	273	117	367	22	7.1	6.9
6	5.7	5.2	5.2	8.2	9.9	52	253	126	273	52	6.7	7.0
7	5.9	5.2	5.2	9.5	9.9	41	212	114	206	53	6.7	6.6
8	6.0	5.3	5.2	8.8	9.6	56	178	75	164	35	6.7	6.6
9	5.8	5.3	4.9	8.7	14.0	343	142	62	123	22	6.8	6.5
10	5.8	5.3	5.1	10.3	13.1	385	123	55	102	55	6.3	6.6
11	6.1	5.4	5.1	10.5	11.7	300	118	37	60	164	6.7	6.4
12	6.0	5.4	5.4	8.8	11.5	242	119	35	49	234	6.5	6.4
13	5.9	5.4	6.8	9.2	11.4	273	106	36	43	166	6.8	6.8
14	5.7	5.8	6.6	9.8	10.7	270	95	29	32	272	6.3	6.4
15	5.7	5.6	6.4	9.4	15.6	223	87	28	60	344	6.5	6.7
16	5.7	5.4	6.3	9.2	16.4	185	82	21	86	242	6.4	6.5
17	5.6	5.6	6.1	9.5	14.8	163	76	15.8	110	174	6.5	6.2
18	5.8	5.7	6.1	9.5	14.3	155	69	11.1	89	115	6.6	6.2
19	5.6	5.7	6.0	9.5	98	138	65	12.9	55	66	8.2	6.2
20	6.1	5.7	6.6	8.9	171	112	84	12.9	42	47	8.7	6.3
21	5.8	5.8	6.8	9.2	109	156	135	11.9	37	33	7.4	6.3
22	5.8	5.9	6.9	8.7	150	310	119	14.6	28	28	7.2	6.4
23	5.6	6.0	7.1	8.7	152	483	106	38	26	16.3	6.8	6.3
24	5.3	6.9	7.5	9.2	140	725	108	105	21	9.5	6.6	6.6
25	5.2	7.2	7.5	8.8	142	526	108	152	328	16.3	6.8	6.3
26	6.4	7.8	7.3	9.1	126	417	123	145	355	14.0	6.7	6.0
27	6.0	7.5	14.0	9.3	76	391	150	132	158	9.7	6.7	6.2
28	5.4	7.6	12.2	9.1	70	437	163	106	67	9.4	6.3	6.2
29	5.4	7.0	10.5	9.3	-------	442	158	152	38	9.2	7.5	6.5
30	5.4	5.3	9.6	9.6	-------	400	145	262	16.8	9.0	7.9	6.3
31	5.8	-------	8.7	9.5	-------	361	-------	205	-------	8.1	7.5	-------

Rockaway River below reservoir, at Boonton--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	1,920.1	166	14.3	61.9	153	1.23	1.48
November	5,911.5	776	10.9	197	297	2.50	2.78
December	9,561	864	104	308	395	3.32	3.82
Calendar year 1945	81,118.4	1,220	5.8	222	314	2.64	35.83
January 1946	8,058	526	81	260	347	2.92	3.36
February	2,792	455	39	99.7	167	1.40	1.46
March	6,300	425	66	203	297	2.50	2.87
April	2,430.7	195	6.5	81.0	182	1.54	1.71
May	5,742.1	732	9.1	185	287	2.41	2.78
June	5,597.1	874	8.6	187	270	2.27	2.53
July	3,553.6	1,060	6.1	115	199	1.67	1.92
August	1,226.0	188	6.7	39.5	127	1.07	1.23
September	682.4	126	6.2	22.7	118	.992	1.11
Water year 1945-46	53,774.5	1,060	6.1	147	237	1.99	27.05
October 1946	1,820.3	312	11.3	58.7	122	1.03	1.19
November	332.2	12.1	10.3	11.1	87.3	.734	.82
December	355.1	13.9	10.0	11.5	97.4	.818	.94
Calendar year 1946	38,889.5	1,060	6.1	107	192	1.61	21.92
January 1947	2,612.1	380	11.8	84.3	205	1.72	1.99
February	2,053	205	21	73.3	165	1.39	1.45
March	8,584.7	1,080	17.7	277	375	3.15	3.63
April	8,727	961	121	291	387	3.25	3.63
May	13,665	852	200	441	535	4.50	5.18
June	6,714	625	67	224	336	2.82	3.15
July	2,635.1	167	12.0	85.0	177	1.49	1.71
August	550.3	26	9.4	17.8	91.9	.722	.89
September	743	27	24	24.8	77.0	.647	.72
Water year 1946-47	48,801.8	1,080	8.4	134	222	1.87	25.30
October 1947	729	25	23	23.5	56.9	.478	.55
November	6,389	900	24	213	437	3.67	4.10
December	2,598	263	37	83.8	184	1.55	1.79
Calendar year 1947	56,010.2	1,080	8.4	153	252	2.12	28.79
January 1948	1,865.9	160	10.1	60.2	164	1.38	1.59
February	4,877.7	413	9.1	168	277	2.33	2.51
March	14,802	1,030	207	477	581	4.86	5.63
April	10,853.7	895	17.7	362	458	3.85	4.30
May	8,545.8	808	16.8	276	398	3.30	3.80
June	4,753	368	43	158	253	2.13	2.37
July	1,447.2	107	10.0	46.7	133	1.12	1.29
August	2,285.0	652	8.8	73.7	177	1.49	1.72
September	336.0	14.9	8.9	11.2	57.9	.487	.54
Water year 1947-48	59,482.3	1,030	8.8	163	264	2.22	30.19
October 1948	260.6	10.2	6.8	8.41	67.4	.566	.65
November	345.6	13.2	9.4	11.5	117	.983	1.09
December	1,458.0	1,050	11.6	46.9	244	2.05	2.36
Calendar year 1948	51,825.5	1,050	6.8	142	244	2.05	27.85
January 1949	17,149	2,060	177	553	674	5.66	6.53
February	7,427	367	195	265	376	3.16	3.29
March	5,138	330	90	166	274	2.30	2.65
April	6,499	512	76	217	327	2.75	3.07
May	3,654	304	32	118	243	2.04	2.36
June	444.2	26	10.3	14.8	66.7	.561	.63
July	393.5	14.5	10.1	12.7	42.1	.354	.41
August	279.3	14.1	5.9	9.01	41.6	.350	.40
September	198.3	15.7	5.4	6.44	60.9	.512	.57
Water year 1948-49	43,236.5	2,060	5.4	118	210	1.76	24.01
October 1949	179.4	6.4	5.2	5.79	58.0	.487	.56
November	176.2	7.8	5.2	5.87	55.7	.468	.52
December	211.2	14.0	4.9	6.81	121	1.02	1.17
Calendar year 1949	41,744.1	2,060	4.9	114	194	1.63	22.16
January 1950	283.3	10.5	8.1	9.14	167	1.40	1.62
February	1,451.4	171	9.6	51.8	277	2.33	2.43
March	7,866	725	38	254	386	3.24	3.74
April	4,513	315	65	150	257	2.16	2.41
May	2,746.2	262	11.1	88.6	225	1.89	2.18
June	4,416.8	441	16.8	147	245	2.06	2.29
July	2,269.9	344	8.1	73.2	165	1.39	1.59
August	217.5	8.7	6.3	7.02	79.2	.666	.77
September	196.4	7.8	6.0	6.55	53.7	.451	.50
Water year 1949-50	24,527.3	725	4.9	67.2	173	1.45	19.78

*** Adjusted for diversion from Boonton Reservoir and for change in contents in Boonton and Splitrock Reservoirs.**

Whippany River at Morristown

Location.--Lat 40°48'21", long 74°27'22", on left bank at Morristown sewage-disposal plant, three-quarters of a mile downstream from Morristown, Morris County, and 9 miles upstream from mouth.

Drainage area.--29.4 sq mi.

Records available.--August 1921 to September 1950.

Gage.--Water-stage recorder. Concrete control since July 1, 1936. Datum of gage is 260.01 ft above mean sea level (New Jersey Geological Survey bench mark). Prior to July 16, 1930, staff gage at same site and datum.

Average discharge.--29 years, 48.6 cfs.

Extremes.--1921-50: Maximum discharge, 1,500 cfs Aug. 26, 1928, Mar. 12, 1936, Mar. 15, 1940, from rating curve extended above 430 cfs on basis of slope-area determination and computation of flow over dam at gage height 6.29 ft; maximum gage height, 7.30 ft Aug. 26, 1928; minimum discharge, 2.8 cfs Aug. 27, 1932 (gage height, 0.73 ft).

Peak discharge (base, 450 cfs).--
1946: May 13 (2 a.m.) 1,020 cfs (5.30 ft); May 17 (10 p.m.) 508 cfs (4.04 ft); June 2 (7 to 8 and 9:30 p.m.) 533 cfs (4.11 ft); July 23 (11:30 a.m.) 606 cfs (4.31 ft).
1947: Mar. 14 (2 p.m.) 484 cfs (3.97 ft); Apr. 5 (9:15 p.m.) 470 cfs (3.93 ft); May 26 (1:30 a.m.) 591 cfs (4.27 ft).
1948: Nov. 8 (3:30 p.m.) 829 cfs (4.87 ft); Nov. 12 (12:30 p.m.) 467 cfs (3.92 ft); Apr. 1 (5 p.m.) 453 cfs (3.88 ft); May 12 (4 p.m.) 536 cfs (4.12 ft); June 7 (8 p.m.) 470 cfs (3.93 ft); Aug. 20 (7 p.m.) 480 cfs (3.96 ft).
1949: Dec. 31 (12:30 a.m.) 1,350 cfs (6.00 ft); Jan. 6 (7:30 a.m.) 834 cfs (4.88 ft).
1950: Mar. 23 (2 p.m.) 375 cfs (3.63 ft), (annual maximum below base).

Remarks.--Flow occasionally regulated by operation of gates in Pocahontas Dam, 2.5 miles above station.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	22	89	138	56	52	53	32	48	40	29	26
2	27	21	72	86	44	52	58	31	345	134	29	26
3	28	22	66	72	40	95	75	29	251	54	28	29
4	18.7	21	66	69	35	94	56	28	123	36	35	22
5	19.9	19.9	62	72	34	86	53	32	119	34	29	19.9
6	28	19.9	93	91	50	66	52	31	93	30	27	21
7	60	21	80	168	65	66	50	29	80	27	77	22
8	35	21	62	131	45	86	44	32	72	25	46	21
9	38	21	56	103	44	86	48	28	64	26	31	21
10	32	19.9	54	141	43	61	44	26	54	26	28	21
11	29	36	51	93	40	51	40	26	63	25	26	19.3
12	29	45	45	95	37	46	39	263	86	27	24	18.2
13	27	32	42	84	37	46	39	413	68	26	50	17.6
14	26	34	46	72	53	45	38	98	56	23	50	17.0
15	25	42	43	69	48	111	37	193	51	23	30	17.0
16	25	31	40	61	36	82	37	93	44	23	27	17.0
17	23	27	38	56	36	58	36	160	43	21	89	16.4
18	23	27	39	57	35	72	34	252	45	19.9	132	15.8
19	23	50	42	56	32	87	35	149	43	19.9	51	15.8
20	23	136	43	44	35	58	34	101	41	21	39	15.8
21	21	50	41	53	36	53	32	103	41	56	32	39
22	21	192	40	53	32	51	32	93	39	161	29	35
23	23	113	39	46	36	47	32	71	34	397	27	21
24	30	57	41	45	36	47	31	65	32	173	26	153
25	33	48	59	47	34	74	32	61	32	63	23	68
26	31	44	*309	46	32	72	44	56	28	46	24	37
27	26	41	155	43	35	175	43	162	27	38	26	28
28	24	69	82	39	52	80	36	145	48	34	23	23
29	24	276	89	41	-------	66	34	79	56	32	50	22
30	23	148	95	55	-------	65	36	62	72	32	71	79
31	23	-------	164	77	-------	58	-------	53	-------	30	32	-------

* Winter discharge measurement made on this day.

Whippany River at Morristown--Continued

Daily discharge, in cubic feet per second, 1946-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	18.7	21	21	42	26	41	224	79	44	21	17.0
2	28	18.7	19.0	21	36	46	77	95	77	61	19.9	26
3	24	19.9	16.4	25	32	105	118	84	69	38	19.8	19.8
4	23	21	17.6	27	36	54	58	127	61	32	19.9	17.6
5	22	18.2	18.2	22	38	45	268	137	57	32	21	21
6	21	17.6	18.7	23	31	51	220	130	54	30	21	19.9
7	21	18.2	18.7	21	32	64	108	89	68	29	19.8	19.8
8	21	25	18.2	22	32	57	86	79	206	81	28	18.2
9	19.9	23	19.8	21	30	47	87	71	184	58	33	17.0
10	21	18.7	19.9	18.7	32	52	80	66	77	50	28	17.0
11	21	19.9	18.7	21	29	56	72	61	64	39	23	16.4
12	46	32	16.2	23	27	62	69	62	56	35	21	15.8
13	38	23	22	23	29	69	62	59	50	31	19.8	14.7
14	26	21	18.7	27	30	336	61	78	116	43	18.7	14.7
15	23	19.9	17.0	47	32	194	61	80	197	36	18.2	18.2
16	21	18.2	16.4	66	34	105	66	62	77	35	26	22
17	21	19.9	17.6	54	33	87	71	57	61	34	64	18.2
18	26	21	17.6	39	30	75	57	71	69	32	28	15.3
19	26	19.8	16.4	33	29	65	54	77	62	40	23	18.1
20	22	18.7	16.4	150	25	64	56	168	56	47	32	21
21	21	18.2	69	108	22	61	57	126	62	31	31	15.8
22	21	27	56	44	33	59	58	136	50	80	24	24
23	19.9	24	32	34	32	54	48	102	46	43	26	22
24	19.8	21	29	35	28	54	47	77	43	30	22	17.0
25	19.8	21	26	37	26	101	51	203	46	26	18.7	19.8
26	26	21	23	39	27	65	61	380	43	25	18.7	17.0
27	25	23	19.7	74	27	52	50	149	41	23	19.9	15.8
28	23	21	23	46	26	48	46	114	88	25	19.8	14.7
29	23	19.9	26	39	-------	48	43	109	54	23	18.7	14.7
30	21	19.8	27	36	-------	46	60	140	46	21	17.6	14.1
31	21	-------	21	56	-------	42	-------	89	-------	21	18.2	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13.6	32	32	32	22	99	302	53	68	52	27	19.8
2	13.6	22	32	54	23	104	207	50	57	45	26	18.7
3	14.1	19.8	32	42	22	133	136	58	51	42	27	19.8
4	14.1	132	32	37	25	97	111	57	48	41	26	19.8
5	14.1	116	32	36	26	75	105	61	47	40	59	19.8
6	13.6	45	33	36	27	68	93	62	44	44	74	19.8
7	14.1	32	37	36	23	79	91	108	102	44	32	22
8	14.1	432	38	33	26	89	89	124	144	39	26	21
9	14.1	244	35	34	22	*89	84	64	62	37	23	19.8
10	13.6	62	30	40	22	141	74	54	59	35	23	23
11	14.1	52	30	30	21	144	85	50	57	32	23	21
12	13.6	367	30	27	23	95	168	63	54	32	84	18.7
13	13.6	118	27	38	25	91	120	390	82	44	42	17.6
14	13.6	66	26	45	45	87	157	244	58	70	28	17.0
15	12.6	57	27	29	89	103	196	146	48	38	24	16.4
16	13.1	51	103	32	62	256	116	121	45	32	22	16.4
17	14.1	45	50	32	81	254	97	160	42	31	22	16.4
18	14.1	41	38	31	123	183	87	152	38	32	21	17.0
19	18.2	39	34	24	126	173	84	103	98	35	21	17.0
20	19.9	37	30	28	152	191	80	87	91	32	89	17.6
21	15.8	35	29	32	103	141	79	82	54	33	183	17.0
22	14.1	34	29	33	84	128	72	74	56	51	73	15.8
23	13.6	56	30	29	68	116	68	68	71	51	83	15.3
24	13.1	54	30	23	61	119	68	65	120	42	39	15.3
25	12.6	102	27	27	65	95	75	92	231	31	32	15.3
26	13.6	50	31	28	82	86	66	77	86	27	26	15.3
27	14.7	41	32	33	80	137	61	64	83	27	24	15.3
28	18.4	37	33	27	131	192	58	58	97	26	23	15.3
29	47	36	32	29	116	105	58	53	66	24	22	14.7
30	38	33	32	25	-------	91	56	150	57	23	21	23
31	45	-------	31	23	-------	84	-------	98	-------	23	21	-------

* Winter discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Jan. 11, 12, 15, 16, 19, 20, 24-31, Feb. 1-14.

Whippany River at Morristown--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	15.3	26	213	99	74	56	56	32	17.0	15.3	15.8
2	17.6	15.8	22	119	87	66	54	62	31	17.6	12.6	12.6
3	16.4	16.4	21	89	73	62	46	f173	30	16.4	18.2	12.1
4	15.3	42	21	74	80	62	45	80	29	17.0	21	11.6
5	15.3	26	19.3	156	80	72	43	62	28	19.3	17.0	13.6
6	16.4	19.9	21	576	74	89	f160	58	27	21	14.7	22
7	15.8	31	19.9	201	84	71	87	101	26	19.9	18.2	13.6
8	22	23	18.7	141	103	58	66	62	25	18.2	14.1	13.1
9	19.9	18.7	17.6	114	95	57	61	53	25	17.6	13.1	12.1
10	17.6	26	17.0	97	99	54	52	58	24	17.6	12.1	11.2
11	17.0	28	16.4	87	77	71	50	57	23	19.9	11.6	10.8
12	16.4	21	17.6	79	64	68	46	52	23	11.5	28	10.8
13	15.8	21	16.7	72	66	54	49	46	22	30	21	28
14	15.8	18.2	17.6	68	82	50	75	51	22	29	17.6	30
15	15.3	17.6	18.2	61	79	50	59	51	21	19.0	26	17.6
16	15.3	17.0	26	58	74	46	54	43	21	11.2	27	14.1
17	15.3	18.7	43	57	75	47	50	41	22	21	19.3	12.6
18	19.3	19.9	33	54	62	48	52	39	23	50	17.0	13.8
19	17.6	24	25	64	59	46	f196	38	22	21	15.8	19.3
20	16.4	54	25	54	103	44	95	54	22	17.0	14.1	13.6
21	16.4	29	24	54	75	48	71	62	19.9	18.2	12.6	12.1
22	15.8	25	23	212	84	57	70	57	18.7	15.8	12.1	14.0
23	16.4	27	23	116	170	f191	f186	102	18.2	14.1	12.6	21
24	17.6	23	21	138	91	107	99	59	17.0	13.1	12.6	13.6
25	18.2	21	19.3	105	80	68	77	59	17.0	14.1	11.6	12.1
26	17.0	18.7	18.2	82	77	64	71	44	18.7	14.7	11.6	11.2
27	15.8	23	19.9	86	66	61	69	45	18.2	13.1	12.1	11.6
28	15.8	21	23	209	71	58	64	38	18.2	13.1	11.2	12.1
29	15.8	44	41	171	-------	52	58	34	17.0	12.6	25	29
30	15.3	36	638	99	-------	50	57	35	17.0	16.0	15.8	32
31	15.3	-------	866	93	-------	50	-------	33	-------	12.6	14.1	-------

f Computed on basis of partly estimated gage-height record.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16.4	19.9	14.1	19.9	27	29	59	57	76	21	15.8	23
2	13.6	18.2	14.7	19.3	54	29	58	54	108	19.3	16.4	21
3	13.1	15.3	14.1	23	58	23	58	46	59	26	47	30
4	12.6	14.7	12.6	23	33	22	65	42	61	37	28	29
5	13.6	13.1	13.1	21	27	24	62	41	62	31	18.7	21
6	13.1	12.6	12.6	19.9	27	29	57	42	53	52	23	18.7
7	13.1	13.1	12.6	33	26	27	48	37	45	32	22	15.8
8	13.1	14.7	12.1	23	23	44	46	32	39	25	17.0	15.3
9	12.6	14.1	11.2	18.2	79	127	44	32	34	21	16.4	15.8
10	12.1	13.6	10.4	38	86	44	44	32	32	64	16.4	18.7
11	11.6	13.6	13.1	45	52	37	44	33	32	96	15.8	19.3
12	12.6	12.6	22	26	42	41	43	31	25	74	15.3	18.7
13	12.1	14.1	63	25	40	58	41	30	11.9	38	14.1	27
14	12.1	23	40	27	44	48	40	29	28	43	14.1	24
15	11.6	16.4	23	23	101	43	37	28	39	30	14.1	19.3
16	11.6	14.7	17.0	21	99	39	35	32	35	29	14.1	17.0
17	11.2	14.1	15.8	18.7	69	37	34	32	60	29	14.1	15.8
18	11.6	18.8	16.4	22	59	37	35	46	36	25	14.7	14.1
19	11.6	19.9	25	a20	53	33	34	68	29	22	51	14.7
20	11.6	18.2	21	a18	43	32	45	59	32	21	133	15.3
21	11.6	15.3	18.2	a17	34	84	48	46	33	21	38	15.3
22	12.6	14.1	17.0	a18	36	79	39	35	26	19.3	23	17.0
23	12.6	13.1	19.3	a19	38	236	37	34	23	18.7	21	a17
24	11.6	12.6	21	19.9	35	146	41	43	21	20	19.3	a15
25	12.1	14.7	16.4	19.9	41	80	43	39	126	27	17.6	a14
26	35	13.1	16.4	19.9	33	69	48	34	46	18.7	17.0	13.6
27	18.2	12.1	156	21	27	89	44	30	29	18.2	16.4	13.6
28	15.3	12.1	93	18.7	28	99	57	27	25	16.4	15.3	14.1
29	15.3	15.3	41	30	-------	91	46	52	21	18.7	25	15.3
30	14.1	15.3	27	31	-------	79	43	66	21	17.0	27	15.8
31	28	-------	19.9	28	-------	62	-------	48	-------	15.8	44	-------

a No gage-height record; discharge computed on basis of recorded range in stage and records for stations on nearby streams.

Whippany River at Morristown--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	831.6	60	18.7	26.8	0.912	1.05
November	1,701.7	276	19.9	56.7	1.93	2.15
December	2,243	309	38	72.4	2.46	2.84
Calendar year 1945	21,418.6	340	17.0	58.7	2.00	27.10
January 1946	2,298	168	39	74.1	2.52	2.91
February	1,138	65	32	40.6	1.38	1.44
March	2,188	175	45	70.6	2.40	2.77
April	1,254	75	31	41.8	1.42	1.59
May	2,996	413	26	96.6	3.29	3.79
June	2,198	345	27	73.3	2.49	2.78
July	1,722.8	397	19.9	55.6	1.89	2.18
August	1,240	132	23	40.0	1.36	1.57
September	903.8	153	15.8	30.1	1.02	1.14
Water year 1945-46	20,714.9	413	15.8	56.8	1.93	26.21
October 1946	747.4	46	19.3	24.1	.820	.95
November	627.3	32	17.6	20.9	.711	.79
December	717.7	69	16.4	23.2	.789	.91
Calendar year 1946	18,031.0	413	15.8	49.4	1.68	22.82
January 1947	1,252.7	150	18.7	40.4	1.37	1.58
February	860.0	42	22	30.7	1.04	1.09
March	2,290	326	26	73.9	2.51	2.90
April	2,283	263	41	76.1	2.59	2.89
May	3,503	380	57	113	3.84	4.43
June	2,259	206	41	75.3	2.56	2.86
July	1,176	81	21	37.9	1.29	1.49
August	737.7	64	17.6	23.8	.810	.93
September	540.1	26	14.1	18.0	.612	.68
Water year 1946-47	16,993.9	380	14.1	46.6	1.59	21.50
October 1947	531.8	47	12.6	17.2	.585	.67
November	2,482.3	432	19.3	82.7	2.81	3.14
December	1,064	103	26	34.3	1.17	1.35
Calendar year 1947	18,979.6	432	12.6	52.0	1.77	24.01
January 1948	1,005	54	23	32.4	1.10	1.27
February	1,775	152	21	61.2	2.08	2.25
March	3,845	256	68	124	4.22	4.86
April	3,143	302	56	105	3.57	3.98
May	3,088	390	50	99.6	3.39	3.91
June	2,216	231	38	73.9	2.51	2.80
July	1,155	70	23	37.3	1.27	1.46
August	1,266	183	21	40.8	1.39	1.60
September	537.9	23	14.7	17.9	.609	.68
Water year 1947-48	22,109.0	432	12.6	60.4	2.05	27.97
October 1948	522.9	23	15.3	16.9	.575	.66
November	741.2	54	15.3	24.7	.840	.94
December	2,160.4	866	16.4	69.7	2.37	2.73
Calendar year 1948	21,455.4	866	14.7	58.6	1.99	27.14
January 1949	3,799	576	54	123	4.18	4.81
February	2,329	170	59	83.2	2.83	2.95
March	1,995	191	44	64.4	2.19	2.52
April	2,218	196	43	73.9	2.51	2.81
May	1,806	173	33	58.3	1.98	2.28
June	677.9	32	17.0	22.6	.769	.86
July	568.6	50	11.2	18.3	.622	.72
August	505.0	28	11.2	16.3	.554	.64
September	477.0	32	10.8	15.9	.541	.60
Water year 1948-49	17,800.0	866	10.8	48.8	1.66	22.52
October 1949	437.3	35	11.2	14.1	.480	.55
November	452.4	23	12.1	15.1	.514	.57
December	829.0	156	10.4	26.7	.908	1.05
Calendar year 1949	16,094.2	576	10.4	44.1	1.50	20.36
January 1950	726.4	45	17	23.4	.796	.92
February	1,314	101	23	46.9	1.60	1.66
March	1,917	256	22	61.8	2.10	2.42
April	1,375	65	34	45.8	1.56	1.74
May	1,257	68	27	40.5	1.38	1.59
June	1,267.9	126	11.9	42.3	1.44	1.60
July	946.1	96	15.8	30.5	1.04	1.20
August	784.6	133	14.1	25.3	.861	.99
September	544.2	30	13.6	18.1	.616	.69
Water year 1949-50	11,850.9	256	10.4	32.5	1.11	14.98

Pequannock River at Macopin intake dam

Location.--Lat 41°01'00", long 74°23'47", at Macopin intake dam of Newark waterworks, 3 miles upstream from Butler, Morris County.

Drainage area.--63.7 sq mi.

Records available.--January 1892 to September 1950.

Gage.--Recorder above dam. Datum of gage is 583.55 ft above mean sea level (New Jersey Geological Survey bench mark).

Average discharge.--58 years, 125 cfs (adjusted).

Extremes.--1892-50: Maximum discharge recorded, about 6,100 cfs over intake dam Oct. 10, 1903 (gage height, 3.85 ft); no flow over dam during several months of most years.

Annual maximum discharge (water years).--
1946: May 28 (6 p.m.) 605 cfs (0.85 ft).
1947: Apr. 5, 6 (6 p.m. to 6 p.m.) 773 cfs (1.00 ft).
1948: Mar. 22 (2 a.m.) 659 cfs (0.90 ft).
1949: Dec. 30 (6 p.m.) 773 cfs (1.00 ft).
1950: June 3 (4:30 p.m.) 231 cfs (0.45 ft).

Remarks.--Extremes and figures of daily discharge represent flow over intake dam only. Water diverted above intake dam for municipal supply of Newark. Flow regulated by Oak Ridge, Canistear, Clinton, and Echo Lake Reservoirs (combined usable capacity, 1,549,000,000 cubic feet).

Cooperation.--Station operated and base data furnished by Department of Public Affairs, Division of Water, Newark.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	11.1	373	262	36	11.1	68	0	160	0	0	0
2	14.1	14.1	270	194	28	1.1	68	0	320	0	0	0
3	14.1	14.1	238	128	24	14.1	105	0	486	10.1	0	0
4	8.0	11.1	194	116	14.1	36	105	0	364	0	0	0
5	8.0	11.1	167	128	14.1	45	73	0	246	0	0	0
6	17.3	11.1	194	173	32	21	45	0	201	0	0	0
7	28	11.1	231	320	45	14.1	24	0	160	0	0	0
8	32	11.1	231	416	24	17.3	11.1	0	105	0	0	0
9	36	11.1	216	456	11.1	17.3	11.1	0	61	0	0	0
10	32	11.1	201	410	11.1	32	14.1	0	49	0	0	0
11	28	28	180	311	11.1	73	14.1	0	58	0	0	0
12	28	45	160	238	11.1	78	11.1	0	128	0	0	0
13	17.5	32	141	223	14.1	68	8.2	21	128	0	0	0
14	11.1	32	134	187	32	68	11.1	0	73	0	0	0
15	11.1	28	128	141	36	123	14.1	28	45	0	0	0
16	11.1	14.1	128	105	24	160	14.1	28	17.5	0	0	0
17	11.1	11.1	111	94	17.3	123	14.1	68	5.6	0	0	0
18	14.1	3.2	141	99	15.0	99	14.1	194	1.1	0	0	0
19	11.1	28	134	99	3.9	83	14.1	231	0	0	21	0
20	11.1	58	78	99	0	73	11.1	160	0	0	0	0
21	17.5	73	49	83	0	68	11.1	123	0	0	0	0
22	17.5	134	40	73	49	58	0	99	0	141	0	0
23	24	160	24	52	36	45	0	83	0	391	0	0
24	28	173	24	24	28	28	0	54	0	419	0	0
25	28	209	49	14.1	28	58	0	36	0	209	0	123
26	27	187	238	11.1	28	111	0	45	0	93	0	40
27	14.1	153	410	11.1	28	167	0	238	0	36	0	0
28	14.1	187	346	11.1	28	153	0	540	0	0	0	0
29	14.1	355	275	11.1	-------	123	0	441	0	0	0	0
30	14.1	487	238	17.3	-------	111	0	269	0	0	0	0
31	11.1	-------	246	36	-------	99	-------	187	-------	0	0	-------

Pequannock River at Macopin intake dam--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	58	0	0	17.5	1.1	57	194	88	0	0	0
2	0	32	0	0	0	5.6	128	303	80	0	0	0
3	0	32	0	0	0	8.2	186	238	63	0	0	0
4	0	24	0	0	0	5.6	167	201	49	0	0	0
5	0	17.5	0	0	0	3.2	276	246	17.5	0	0	0
6	0	0	0	0	0	3.2	725	246	11.1	0	0	0
7	0	0	0	0	0	1.1	540	205	36	0	0	0
8	0	0	0	0	0	1.1	329	147	153	0	0	0
9	0	0	0	0	0	0	238	99	246	0	0	0
10	0	0	0	0	0	0	209	93	134	0	0	0
11	0	0	0	0	0	0	194	99	83	0	0	0
12	0	0	0	0	0	1.1	187	83	40	0	0	0
13	0	0	0	0	0	21	140	73	28	0	0	0
14	0	0	0	0	0	173	134	128	93	0	0	0
15	0	0	0	0	0	278	128	180	209	0	0	0
16	24	0	0	0	0	187	134	141	173	0	0	0
17	54	0	0	0	0	209	128	105	99	0	0	0
18	111	0	0	0	0	239	57	105	78	36	0	0
19	153	0	0	0	0	180	0	111	49	28	0	0
20	160	0	0	0	0	160	0	128	32	13.1	0	0
21	160	0	0	33	0	141	0	180	28	0	0	0
22	201	0	0	54	4.2	111	0	209	17.3	18.9	0	0
23	167	0	0	17.3	5.6	83	0	167	0	58	0	0
24	160	0	0	14.1	5.6	68	0	123	0	21	0	0
25	160	0	0	5.1	3.2	134	32	201	0	28	0	0
26	160	0	0	0	0	153	54	320	21	21	0	0
27	141	0	0	0	0	99	49	246	11.1	0	0	0
28	160	0	0	5.6	0	123	40	180	0	0	0	0
29	167	0	0	4.6	-------	111	17.3	173	3.2	0	0	0
30	123	0	0	0	-------	99	49	173	36	0	0	0
31	83	-------	0	17.3	-------	78	-------	134	-------	0	0	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	11.1	1.1	0	303	54	238	32	0	0
2	0	0	0	5.6	1.1	0	391	36	153	5.6	0	0
3	0	0	0	8.0	1.1	8.0	329	49	99	0	0	0
4	0	9.4	0	11.1	1.1	11.1	238	73	78	0	0	0
5	0	49	0	8.0	1.1	3.2	173	73	78	0	0	0
6	0	14.2	0	2.2	1.1	0	160	116	63	0	0	0
7	0	0	0	0	3.2	0	160	167	78	3.4	0	0
8	0	139	0	3.2	5.6	0	147	201	123	17.5	0	0
9	0	278	0	3.2	3.2	1.1	129	141	111	1.1	0	0
10	0	99	0	3.2	1.1	5.6	88	83	99	0	0	0
11	0	105	0	3.2	1.1	24	88	63	78	0	0	0
12	0	167	0	3.2	1.1	12.5	153	73	68	0	0	0
13	0	111	0	3.2	1.1	8.2	194	312	73	0	0	0
14	0	45	0	3.2	28	5.6	270	486	78	0	0	0
15	0	86	0	3.2	73	24	391	401	54	0	0	0
16	0	28	0	3.2	73	153	564	208	32	0	0	0
17	0	14.1	0	3.2	83	254	270	355	26	0	0	0
18	0	0	0	0	83	201	201	326	0	0	0	0
19	0	0	0	0	68	286	167	270	0	0	0	0
20	0	0	0	0	54	391	160	200	24	0	0	0
21	0	0	0	1.1	36	466	160	160	123	0	0	0
22	0	0	0	1.1	24	594	134	141	68	0	0	0
23	0	0	0	1.1	14.1	551	116	133	83	0	0	0
24	0	0	0	3.2	8.2	486	128	111	128	0	0	0
25	0	0	0	5.6	3.2	391	128	99	134	0	0	0
26	0	0	0	1.1	1.1	303	123	99	99	0	0	0
27	0	0	0	1.1	1.1	303	111	94	83	0	0	0
28	0	0	8.2	1.1	1.1	337	73	78	123	0	0	0
29	0	0	8.2	1.1	1.1	286	58	123	128	0	0	0
30	0	0	5.6	1.1	-------	224	63	270	73	0	0	0
31	0	-------	8.2	1.1	-------	187	-------	329	-------	0	0	-------

Pequannock River at Macopin intake dam--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	160	144	94	32	66	0	0	0	0
2	0	0	0	54	141	105	17.5	134	0	0	0	0
3	0	0	0	21	173	99	8.2	167	0	0	0	0
4	0	0	0	3.4	194	88	1.1	167	0	0	0	0
5	0	0	0	63	160	83	0	123	0	0	0	0
6	0	0	0	262	115	160	9.3	134	0	0	0	0
7	0	0	0	194	128	167	49	141	0	0	0	0
8	0	0	0	111	153	153	49	111	0	0	0	0
9	0	0	0	73	160	128	32	78	0	0	0	0
10	0	0	0	40	160	128	28	99	0	0	0	0
11	0	0	0	30	153	128	18.9	105	0	0	0	0
12	0	0	0	2.5	134	111	5.6	73	0	0	0	0
13	0	0	0	0	134	94	17.3	49	0	0	0	0
14	0	0	0	0	173	78	63	45	0	0	0	1.1
15	0	0	0	0	187	83	78	45	0	0	0	11.1
16	0	0	0	0	147	66	58	36	0	0	0	1.7
17	0	0	0	0	134	15.5	32	28	0	0	0	0
18	0	0	0	0	123	0	99	8.2	0	0	0	0
19	0	0	0	0	110	0	246	0	0	0	0	0
20	0	0	0	0	128	0	262	28	0	0	0	0
21	0	0	0	0	141	0	201	111	0	0	0	0
22	0	0	0	0	141	28	223	111	0	0	0	0
23	0	0	0	3.2	167	54	246	123	0	0	0	0
24	0	0	0	14.7	153	88	238	111	0	0	0	0
25	0	0	0	99	128	36	187	110	0	0	0	0
26	0	0	0	83	105	36	141	58	0	0	0	0
27	0	0	0	83	78	28	128	58	0	0	0	0
28	0	0	0	128	78	21	111	49	0	0	0	0
29	0	0	0	160	-------	17.3	83	32	0	0	0	0
30	0	0	24	123	-------	14.1	66	21	0	0	0	0
31	0	-------	456	111	-------	24	-------	11.1	-------	0	0	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	0	0	0	0	160	0	0	0
2	0	0	0	0	0	0	0	0	223	0	0	0
3	0	0	0	0	0	0	0	0	194	0	0	0
4	0	0	0	0	0	0	0	0	141	0	0	0
5	0	0	0	0	0	0	0	0	105	0	0	0
6	0	0	0	0	0	0	0	0	54	0	0	0
7	0	0	0	0	0	0	0	0	8.8	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	43	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	28	0	0
15	0	0	0	0	0	0	0	0	0	49	0	0
16	0	0	0	0	0	0	0	0	0	14.1	0	0
17	0	0	0	0	0	0	0	0	0	.8	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	56	0	0	0	0	0	0
24	0	0	0	0	0	83	0	0	0	0	0	0
25	0	0	0	0	0	40	0	0	0	0	0	0
26	0	0	0	0	0	3.2	0	0	0	0	0	0
27	0	0	0	0	0	28	0	0	0	0	0	0
28	0	0	0	0	0	17.6	0	0	0	0	0	0
29	0	0	0	0	0	3.8	0	4.5	0	0	0	0
30	0	0	0	0	-------	9.1	0	111	0	0	0	0
31	0	-------	0	0	-------	0	-------	83	-------	0	0	-------

Pequannock River at Macopin intake dam--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	577.2	36	8.0	18.6	83.5	1.31	1.51
November	2,514.4	487	3.2	83.8	200	3.14	3.50
December	5,589	510	24	180	263	4.13	4.75
Calendar year 1945	31,534.3	1,410	0	86.4	189	2.97	40.21
January 1946	4,542.8	456	11.1	147	226	3.55	4.09
February	628.9	49	0	22.5	81.8	1.28	1.34
March	2,178.0	167	1.1	70.3	185	2.90	3.35
April	661.5	105	0	22.0	96.8	1.52	1.70
May	2,845	540	0	91.8	191	3.00	3.45
June	2,608.2	486	0	86.9	145	2.28	2.58
July	1,299.1	419	0	41.9	102	1.60	1.85
August	21	21	0	.7	41.8	.656	.76
September	163	123	0	5.4	44.6	.700	.78
Water year 1945-46	23,628.1	540	0	64.7	139	2.18	29.61
October 1946	2,184	201	0	70.5	60.8	.954	1.10
November	163.5	58	0	5.45	37.9	.595	.66
December	0	0	0	0	45.3	.711	.82
Calendar year 1946	17,295.0	540	0	47.4	105	1.65	22.43
January 1947	151.0	54	0	4.87	121	1.90	2.18
February	86.1	17.5	0	1.29	94.1	1.48	1.54
March	2,677.2	278	0	86.4	242	3.80	4.37
April	4,198.3	725	0	140	265	4.16	4.65
May	5,251	320	73	169	296	4.65	5.35
June	1,878.2	246	0	62.6	148	2.32	2.59
July	224.0	58	0	7.23	87.0	1.37	1.57
August	0	0	0	0	41.8	.656	.76
September	0	0	0	0	12.3	.193	.22
Water year 1946-47	16,743.3	725	0	45.9	121	1.90	25.81
October 1947	0	0	0	0	9.93	.156	.18
November	1,094.7	278	0	36.5	202	3.17	3.54
December	30.2	8.2	0	.97	81.4	1.28	1.47
Calendar year 1947	15,520.7	725	0	42.5	133	2.09	28.42
January 1948	96.7	11.1	0	3.12	62.9	.987	1.14
February	574.9	83	1.1	19.8	138	2.17	2.34
March	5,516.3	594	0	178	351	5.51	6.36
April	5,470	391	58	182	258	4.05	4.51
May	5,334	486	36	172	247	3.88	4.46
June	2,595	238	0	86.5	165	2.59	2.89
July	59.6	32	0	1.92	55.4	.870	1.00
August	0	0	0	0	35.0	.549	.63
September	0	0	0	0	7.56	.119	.13
Water year 1947-48	20,771.4	594	0	56.8	134	2.10	28.65
October 1948	0	0	0	0	10.3	.162	.19
November	0	0	0	0	52.2	.835	.93
December	480	456	0	15.5	165	2.59	2.98
Calendar year 1948	20,126.5	594	0	55.0	129	2.03	27.56
January 1949	1,818.8	262	0	58.7	328	5.15	5.94
February	3,942	194	78	141	234	3.67	3.83
March	2,121.9	167	0	68.4	161	2.53	2.91
April	2,724.9	262	0	90.8	178	2.79	3.11
May	2,432.3	167	0	78.5	155	2.43	2.81
June	0	0	0	0	27.6	.433	.48
July	0	0	0	0	25.4	.399	.46
August	0	0	0	0	3.62	.057	.07
September	13.9	11.1	0	.46	19.3	.303	.34
Water year 1948-49	13,533.8	456	0	37.1	113	1.77	24.05
October 1949	0	0	0	0	16.5	.259	.30
November	0	0	0	0	29.6	.465	.52
December	0	0	0	0	67.6	1.06	1.22
Calendar year 1949	13,053.8	262	0	35.8	103	1.62	21.99
January 1950	0	0	0	0	91.6	1.44	1.66
February	0	0	0	0	135	2.12	2.21
March	283.7	83	0	9.15	274	4.30	4.96
April	0	0	0	0	150	2.35	2.62
May	198.5	111	0	6.40	147	2.31	2.66
June	858.8	223	0	29.5	137	2.15	2.41
July	91.9	49	0	2.96	97.6	1.53	1.77
August	0	0	0	0	26.4	.414	.48
September	0	0	0	0	21.8	.342	.38
Water year 1949-50	1,459.9	223	0	4.00	99.4	1.56	21.19

* Adjusted for diversion above Macopin intake dam and for change in contents in Osk Ridge, Canistear, Clinton, and Echo Lake Reservoirs.

Greenwood Lake at Awosting

Location.--Lat 41°09'36", long 74°20'03", in gatehouse near right end of Greenwood Lake Dam on Wanaque River at Awosting, Passaic County.

Drainage area.--27.1 sq mi.

Records available.--June 1898 to November 1903, June 1907 to September 1950.

Gage.--Water-stage recorder. Datum of gage is 608.86 ft above mean sea level, (New Jersey Geological Survey bench mark). Prior to Oct. 1, 1931, staff gage on former railroad bridge at site 100 ft upstream at datum 89.75 ft lower.

Extremes.--1898-1903, 1907-50: Maximum gage height, about 14.25 ft, present datum, Oct. 9-14, 1903; minimum, 3.50 ft, present datum, on several days in November 1900.

Annual maximum gage height (water years).--
1946: May 28 (1 to 6 p.m.) 10.91 ft.
1947: Mar. 15 (estimated) 10.90 ft.
1948: Mar. 20 (10 a.m.) 10.90 ft.
1949: Jan. 1 (estimated) 11.60 ft.
1950: Mar. 24 (estimated) 10.80 ft.

Remarks.--Lake used for recreation. Usable capacity, 6,860,000,000 gal between gage heights -4.00 ft (sill of gate) and 10.00 ft (crest of spillway). Dead storage, 14,000,000,000 gal.

Cooperation.--Records collected in cooperation with Morris Canal & Banking Co.

Daily mean gage height, in feet, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10.20	e10.12	10.50	e10.68	e10.26	-	10.23	10.13	10.53	10.04	10.16	9.97
2	10.20	10.08	-	10.66	10.26	-	10.23	10.12	10.62	10.13	10.14	9.95
3	10.20	-	-	-	-	-	10.25	10.10	10.76	10.12	10.10	9.95
4	10.18	10.06	-	-	-	-	10.23	10.09	10.70	10.10	10.09	9.92
5	10.14	-	10.48	10.56	10.22	-	10.23	10.06	10.62	10.07	10.07	9.91
6	10.14	-	-	-	-	-	10.21	10.06	10.53	10.06	10.06	9.90
7	10.18	-	-	-	10.24	-	10.20	10.07	10.46	10.05	10.10	9.89
8	10.20	-	-	10.56	-	-	10.16	10.09	10.41	10.03	10.09	9.89
9	10.22	-	10.48	-	-	-	10.17	10.09	10.37	10.00	10.07	9.89
10	10.23	-	-	-	-	-	10.18	10.08	10.30	9.99	10.05	9.86
11	-	-	-	10.56	-	-	10.15	10.07	10.26	9.99	10.05	9.86
12	-	10.18	-	-	-	-	10.15	10.10	10.30	9.98	10.05	9.85
13	-	-	10.36	-	-	-	10.14	10.14	10.30	9.97	10.05	9.84
14	-	-	-	10.48	-	-	10.13	10.14	10.26	9.94	10.05	9.82
15	10.16	-	-	-	-	-	10.11	10.21	10.24	9.92	10.05	9.80
16	-	10.18	10.28	-	-	-	10.14	10.22	10.20	9.90	10.03	9.79
17	-	-	-	-	-	-	10.11	10.24	10.16	9.89	10.05	9.76
18	10.14	-	10.40	10.40	-	-	10.10	10.37	10.16	9.86	10.06	9.75
19	-	10.24	-	-	-	10.35	10.09	10.44	10.15	9.84	10.07	9.74
20	-	10.40	-	10.36	-	10.34	10.10	10.43	10.11	9.82	10.08	9.74
21	-	-	10.22	-	-	10.30	10.07	10.42	10.10	9.90	-	9.77
22	10.12	-	-	-	-	10.28	10.07	10.40	10.10	10.12	-	9.87
23	-	10.76	-	-	-	10.27	10.06	10.36	10.08	10.44	-	9.88
24	-	-	-	10.24	-	10.23	10.06	10.32	10.06	10.66	-	9.95
25	10.10	-	-	-	-	10.25	10.05	10.29	10.06	10.61	-	10.13
26	-	-	10.78	-	-	10.25	10.10	10.28	10.04	10.50	-	10.15
27	-	10.50	-	-	-	10.31	10.13	10.50	10.04	10.40	9.98	10.15
28	-	-	-	10.16	-	10.30	10.14	10.88	10.04	10.33	9.98	10.14
29	10.10	-	10.72	-	-	10.28	10.13	10.83	10.04	10.26	9.97	10.12
30	-	-	-	-	-------	10.29	10.13	10.71	10.05	10.23	10.01	10.30
31	-	-------	-	-	-------	10.26	-------	10.60	-------	10.20	9.98	-------

e Estimated.
Note.--Staff gage read twice a week Oct. 15 to Feb. 7.

Greenwood Lake at Awosting

Daily mean gage height, in feet, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10.32	10.15	10.00	10.16	10.34	-	-	10.49	10.35	10.19	10.15	9.89
2	10.28	10.13	-	-	10.34	10.16	10.23	10.56	10.30	10.21	10.11	9.89
3	10.24	10.11	10.00	10.16	-	10.32	10.29	10.58	10.29	10.18	10.08	9.90
4	10.23	10.12	-	-	10.32	-	10.27	10.58	10.26	-	10.07	9.90
5	10.20	10.10	9.98	10.16	-	10.30	10.47	10.64	10.21	-	10.05	9.90
6	10.17	10.07	-	-	-	-	10.87	10.65	10.19	-	10.05	9.91
7	10.15	10.07	9.98	10.16	10.26	-	10.83	10.63	10.19	-	10.05	9.91
8	10.14	10.08	9.98	-	-	10.28	10.73	10.55	10.27	-	10.03	9.90
9	10.12	10.10	-	10.16	10.22	-	10.64	10.46	10.25	-	10.08	9.89
10	10.10	10.10	9.98	-	-	-	10.57	10.42	10.25	10.12	10.15	9.87
11	10.09	10.10	-	10.16	-	-	10.50	10.36	10.32	10.12	10.15	9.85
12	10.16	10.13	10.00	-	10.20	-	10.48	10.33	10.30	10.10	10.14	9.82
13	10.26	10.12	-	10.16	-	-	10.44	10.29	10.25	10.07	10.13	9.81
14	10.26	10.12	10.00	-	10.18	-	10.38	10.23	10.27	10.07	10.11	9.81
15	10.24	10.12	10.00	10.16	-	-	10.35	10.36	10.41	10.07	10.09	9.81
16	10.20	-	-	-	10.16	-	10.32	a10.35	10.42	10.13	10.09	9.82
17	10.17	10.16	-	-	-	-	10.32	10.34	10.38	10.28	10.08	9.81
18	a10.18	-	10.00	10.20	10.16	-	10.30	10.33	10.35	10.33	10.08	9.78
19	10.18	-	-	10.20	-	-	10.26	10.34	10.32	10.34	10.07	9.77
20	10.18	10.16	-	-	10.16	-	10.25	10.36	10.30	10.33	10.06	9.79
21	10.16	-	10.16	10.32	-	-	10.26	10.40	10.31	10.26	10.06	9.77
22	10.15	10.14	-	10.46	-	-	10.25	10.44	10.28	10.40	10.05	9.79
23	10.14	-	10.16	-	10.16	-	10.25	10.45	10.25	10.44	10.03	a9.78
24	10.13	10.12	-	10.42	-	-	10.21	10.42	10.24	10.41	10.02	9.74
25	10.10	-	10.16	10.40	10.16	-	10.21	10.43	10.26	10.36	9.99	9.74
26	10.15	-	-	-	10.14	-	10.23	10.63	10.27	10.30	9.99	9.72
27	10.15	10.08	10.16	10.36	-	-	10.24	10.64	10.28	10.24	9.98	9.69
28	10.15	-	-	-	10.14	-	10.23	10.57	10.25	10.21	9.97	9.67
29	10.15	10.04	10.16	10.36	-	-	10.21	10.52	10.23	10.21	9.95	9.62
30	10.15	-	-	-	-------	-	10.22	10.52	10.20	10.19	9.92	9.60
31	10.15	-------	10.16	-	-------	-	-------	10.44	-------	10.17	9.91	-------

a Estimated

Note.--Occasional staff-gage readings Nov. 17 to Mar. 8.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.56	9.44	10.24	e10.16	10.16	e10.41	10.50	10.19	10.45	10.30	9.94	9.70
2	9.55	9.43	-	-	-	-	-	10.17	10.40	10.27	9.91	9.67
3	9.54	9.40	10.22	10.16	-	10.40	10.38	10.16	10.35	10.22	9.90	9.65
4	9.53	9.52	-	-	-	-	-	10.15	10.31	10.19	9.90	9.64
5	9.52	9.56	10.20	-	10.16	-	-	10.18	10.29	10.16	9.91	9.62
6	9.52	9.58	-	-	-	10.38	10.36	10.21	10.23	10.14	9.96	9.60
7	9.52	-	10.16	10.16	-	-	-	10.23	10.22	10.17	9.95	9.58
8	9.52	10	-	-	-	-	-	10.26	10.24	10.16	9.92	9.58
9	9.53	10.46	10.16	-	10.16	-	-	10.25	10.25	10.14	9.91	-
10	9.51	-	-	10.16	-	10.34	10.34	10.24	10.25	10.10	9.90	-
11	9.49	10.40	-	-	-	-	-	10.23	10.24	10.08	9.88	-
12	9.48	-	10.16	-	-	-	10.36	10.24	10.20	10.06	9.89	-
13	9.47	-	-	-	10.18	-	-	10.38	10.21	10.11	9.91	-
14	9.47	-	10.14	-	-	10.32	-	10.57	10.20	10.23	9.91	-
15	9.47	-	-	-	-	-	10.66	10.59	10.19	10.20	9.90	9.48
16	9.47	-	10.14	10.16	10.44	10.72	-	10.55	10.18	10.17	9.90	9.43
17	9.45	-	-	-	-	10.80	-	10.58	10.15	10.14	9.87	9.39
18	9.43	10.28	-	-	-	-	10.52	10.60	10.14	10.12	9.86	9.38
19	9.44	10.26	-	10.16	-	-	-	10.56	10.15	10.11	9.84	9.39
20	9.45	-	10.16	-	10.50	10.90	-	10.50	10.29	-	9.84	-
21	9.43	10.24	-	-	-	-	-	10.44	10.30	10.08	9.85	9.37
22	9.41	10.24	-	-	10.52	10.80	-	e10.39	e10.30	10.10	9.85	9.36
23	9.41	10.24	-	10.16	-	-	-	10.31	10.29	10.09	9.85	9.30
24	9.40	-	-	-	-	-	10.36	10.29	10.31	10.06	9.83	9.31
25	9.36	-	-	-	10.42	10.60	-	10.27	10.35	10.04	9.82	-
26	9.35	10.30	-	-	-	-	10.26	10.27	10.34	10.00	9.82	-
27	9.35	10.26	-	-	-	10.50	10.24	10.26	10.30	9.99	9.81	9.24
28	9.35	-	-	10.16	-	-	10.22	10.24	10.29	10.00	9.80	9.22
29	9.40	10.26	-	-	-	-	10.21	10.23	10.32	9.99	9.78	9.21
30	9.43	-	-	-	-------	-	10.19	10.42	10.34	9.98	9.76	9.20
31	9.47	-------	-	-	-------	10.36	-------	10.47	-------	9.95	9.74	-------

e Estimated.

Note.--Occasional staff readings Nov. 4 to Apr. 26.

Greenwood Lake at Awosting

Daily mean gage height, in feet, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.24	9.01	9.68	e11.60	10.46	10.80	e10.20	10.25	10.16	9.85	e9.85	9.51
2	9.23	9.01	9.69	-	-	-	-	10.26	10.14	9.85	-	9.50
3	9.22	9.06	9.70	10.90	10.38	10.28	-	10.34	10.13	9.83	-	9.45
4	9.20	9.08	9.72	-	-	-	10.15	10.35	10.11	9.82	-	9.45
5	9.18	9.08	9.72	10.60	10.28	10.24	10.14	10.32	10.10	9.84	9.84	9.43
6	9.17	9.09	9.73	10.98	-	-	10.21	10.30	10.10	9.83	9.83	9.44
7	9.14	9.14	9.74	-	10.30	10.24	10.23	10.33	10.09	9.88	9.81	9.44
8	9.17	9.14	-	10.84	-	-	10.24	10.30	10.06	9.87	9.78	9.44
9	9.20	9.14	9.84	10.80	-	-	10.23	-	10.05	9.84	9.76	9.43
10	9.19	9.17	-	-	10.28	10.28	10.20	10.25	10.02	9.80	9.73	9.39
11	9.17	9.20	9.82	-	-	-	10.18	10.25	10.00	9 81	9.71	9.38
12	9.17	9.20	-	10.46	10.28	-	10.18	10.22	10.00	9.82	9.71	9.36
13	9.15	9.20	9.82	-	-	10.26	10.18	10.19	-	9.88	9.71	9.36
14	9.14	-	-	-	-	-	10.26	10.17	9.99	9.88	9.70	9.41
15	9.14	9.20	9.89	10.32	10.30	-	10.27	10.17	9.99	9.88	9.68	9.47
16	9.11	9.21	-	-	-	10.24	10.26	10.16	9.98	9.87	9.66	9.45
17	9.08	9.22	-	10.26	10.30	-	10.25	10.15	9.99	9.88	9.66	9.44
18	9.13	9.23	9.94	-	-	10.20	10.25	-	10.00	9.94	-	9.43
19	9.12	9.24	-	-	10.40	-	10.47	-	10.00	9.96	9.63	9.45
20	9.11	9.39	9.94	10.22	-	10.20	10.54	10.25	10.00	9.95	9.60	9.44
21	9.10	9.44	-	-	10.38	-	10.50	10.25	9.99	9.95	9.59	9.43
22	9.09	9.45	10.14	10.30	-	-	10.47	10.32	9.99	9.95	9.56	9.42
23	9.08	9.52	-	-	10.40	10.22	10.53	10.31	9.96	9.94	9.55	9.43
24	9.11	9.56	-	10.38	-	10.22	10.55	10.31	9.94	9.92	9.54	e9.40
25	-	9.58	10.14	-	10.40	10.21	10.48	10.27	9.92	9.89	9.52	9.38
26	-	9.59	-	-	-	10.21	10.42	10.26	9.93	9.89	9.48	9.38
27	-	9.62	10.20	10.42	10.36	10.20	10.41	-	9.92	9.87	9.46	9.37
28	-	9.63	-	-	-	10.20	10.36	-	9.91	-	9.45	9.37
29	9.03	9.68	10.22	10.50	-	10.19	10.31	10.20	9.89	-	9.52	9.42
30	9.02	9.68	-	-	-------	10.18	10.26	10.19	9.87	-	9.52	9.47
31	9.01	-------	11.40	-	-------	10.19	-------	10.18	-------	-	9.52	-------

e Estimated

Note.--Occasional staff readings Dec. 7 to Mar. 24.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.47	9.42	9.50	a10.18	a10.22	10.22	10.50	10.24	10.47	10.06	10.06	10.00
2	9.46	9.41	-	-	10.24	10.22	10.45	10.25	10.57	10.04	10.05	10.01
3	9.44	9.41	9.52	10.18	-	-	10.42	10.23	10.54	10.05	10.06	10.01
4	9.43	9.42	-	10.18	-	10.20	10.40	10.22	10.54	10.06	10.06	10.01
5	9.45	9.41	9.54	-	10.22	-	10.40	10.24	10.47	10.07	10.05	9.99
6	9.45	9.40	-	-	-	10.18	10.38	10.24	10.40	10.14	10.03	9.96
7	9.44	9.39	9.56	10.24	-	-	10.33	10.25	10.35	10.12	10.01	9.95
8	9.44	9.36	-	-	10.18	10.16	10.28	10.20	10.29	10.10	10.00	9.94
9	9.45	-	9.58	-	-	-	10.27	10.16	10.26	10.08	9.98	9.93
10	9.45	9.38	-	10.26	--	-	10.24	10.16	10.23	10.09	9.98	9.95
11	9.44	-	-	-	10.22	10.46	10.21	10.15	10.24	10.14	9.98	9.99
12	9.44	-	9.60	-	-	-	10.21	10.14	10.19	10.22	9.97	9.98
13	9.47	-	9.68	10.28	10.32	-	10.21	10.13	10.16	10.25	9.95	9.97
14	9.45	9.42	-	10.26	-	10.44	10.22	10.12	10.17	10.39	9.93	9.99
15	9.45	-	-	-	-	-	10.21	10.11	10.19	10.37	9.92	9.99
16	9.43	-	9.74	-	10.48	-	10.21	10.10	10.19	10.34	9.91	9.99
17	9.40	-	-	-	-	-	10.21	10.11	10.21	10.30	9.91	9.97
18	9.39	9.42	9.78	10.26	-	-	10.20	10.15	10.17	10.29	9.90	9.96
19	9.37	-	-	-	10.40	-	10.19	10.23	10.15	10.27	9.92	9.94
20	9.36	-	-	-	-	-	10.23	10.27	10.14	10.25	10.03	9.95
21	9.35	9.44	9.80	10.22	-	-	10.25	10.28	10.13	10.22	10.02	9.94
22	9.33	-	-	-	10.32	-	10.24	10.26	10.12	10.19	10.02	9.95
23	9.32	9.44	-	-	-	-	10.22	10.25	10.11	10.16	10.01	9.94
24	9.30	-	9.96	10.18	-	-	10.21	10.37	10.14	10.14	10.01	9.93
25	9.29	9.48	-	-	10.28	-	10.20	10.45	10.20	10.14	10.00	9.91
26	9.35	-	-	10.20	-	-	10.21	10.48	10.17	10.12	10.00	9.90
27	9.36	9.48	-	-	-	-	10.20	10.45	10.14	10.10	9.99	9.90
28	9.35	-	10.16	-	10.24	10.65	10.22	10.40	10.12	10.09	9.98	9.89
29	9.35	9.50	-	10.18	-	10.68	10.24	10.43	10.08	10.09	9.99	9.88
30	9.35	-	10.18	-	-------	10.67	10.23	10.45	10.07	10.08	10.00	9.88
31	9.40	-------	-	10.20	-------	10.58	-------	10.42	-------	10.06	10.01	-------

a Interpolated.

Note.--Occasional staff-gage readings from Nov. 10 to Mar. 14.

Wanaque River at Awosting

Location.--Lat 41°09'31", long 74°20'00", on right bank 700 ft downstream from dam at outlet of Greenwood Lake at Awosting, Passaic County.

Drainage area.--27.1 sq mi.

Records available.--May 1919 to September 1950.

Gage.--Water-stage recorder. Concrete control since Oct. 13, 1938. Datum of gage is 601.32 ft above mean sea level (New Jersey Geological Survey bench mark). Prior to Apr. 1, 1926, staff gage and Apr. 1, 1926, to Oct. 31, 1938, water-stage recorder, at site 100 ft upstream at same datum.

Average discharge.--31 years, 49.5 cfs (adjusted for storage since 1935).

Extremes.--1919-50: Maximum discharge, 914 cfs Mar. 12, 1936 (gage height, 4.82 ft), by computation of flow over Greenwood Lake Dam; no flow at times when gates at Greenwood Lake were closed and no water passed over spillway.

Peak discharge (base, 200 cfs).--
1946: Nov. 23 (12 m.) 290 cfs (3.48 ft); Nov. 30 (2 a.m.) 245 cfs (3.32 ft); Dec. 27 (2 p.m.) 207 cfs (3.17 ft); May 28 (5:30 p.m.) 314 cfs (3.56 ft); June 3 (10 a.m.) 237 cfs (3.29 ft); July 24 (10 a.m.) 204 cfs (3.16 ft).
1947: Mar. 15 (6 to 10 a.m.) 314 cfs (3.56 ft); Apr. 6 (9 a.m.) 305 cfs (3.53 ft).
1948: Nov. 12 (11:30 a.m.) 214 cfs (3.20 ft); Mar. 18 (7 a.m. to 9 p.m.) 314 cfs (3.56 ft).
1949: Dec. 31 (6:30 p.m.) 709 cfs (4.70 ft); Jan. 6 (11:30 p.m.) 405 cfs (3.85 ft).
1950: Mar. 24 (time unknown) 280 cfs (3.37 ft).

Remarks.--Flow regulated by Greenwood Lake (see records for Greenwood Lake at Awosting).

Cooperation.--Water-stage graph furnished by North Jersey District Water Supply Commission.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	13.7	190	144	28	27	41	22	136	10.8	30	7.5
2	35	10.0	163	129	27	27	42	22	169	21	26	7.5
3	34	12.2	138	111	25	30	48	18.6	230	22	21	7.5
4	25	12.7	123	96	22	35	39	14.7	202	16.8	18.6	7.1
5	21	10.4	111	87	*20	48	42	15.2	167	13.2	17.4	7.1
6	22	9.2	109	87	22	59	37	15.2	133	11.2	15.2	7.1
7	35	8.9	120	131	31	70	34	16.8	109	10.8	21	6.8
8	37	8.9	133	188	30	87	30	22	91	8.2	17.4	6.8
9	44	8.9	125	185	28	98	33	19.2	80	7.5	14.7	6.5
10	42	9.2	122	181	27	98	32	18.0	59	7.5	12.7	5.9
11	38	10.8	113	159	25	91	27	16.3	50	7.1	14.2	4.8
12	33	14.2	98	138	23	80	26	23	62	7.1	11.7	4.1
13	33	18.6	83	122	22	73	22	32	59	7.1	11.2	4.1
14	28	40	80	106	29	69	21	30	49	6.8	13.2	3.9
15	26	74	73	93	34	83	18.0	45	40	7.5	11.2	3.9
16	22	67	66	79	30	101	26	29	32	6.8	10.0	4.1
17	19.8	63	57	69	28	98	18.6	53	27	6.5	12.7	4.3
18	18.6	61	51	62	27	90	15.7	93	28	6.5	14.2	4.6
19	17.4	59	52	55	25	79	16.8	111	25	6.5	18.6	5.9
20	15.2	101	55	47	41	70	18.3	111	19.8	6.5	19.8	6.5
21	12.7	98	50	45	37	61	13.2	106	17.4	7.5	16.3	6.8
22	12.2	188	45	42	31	56	11.7	101	16.8	24	15.2	6.8
23	16.3	276	42	38	30	51	11.2	85	14.7	117	13.7	6.8
24	22	240	36	35	28	41	12.2	73	12.7	200	10.0	8.2
25	22	197	40	33	27	48	10.8	63	11.2	169	8.2	20
26	24	161	149	30	25	49	19.2	63	9.2	122	7.8	25
27	22	133	202	28	25	66	24	131	8.9	93	7.8	22
28	15.2	127	188	26	27	59	25	293	8.9	69	7.5	19.2
29	12.2	178	178	25	-------	56	28	267	10.4	53	7.5	16.8
30	12.2	222	159	25	-------	59	22	212	12.2	43	7.5	67
31	11.7	-------	148	28	-------	49	-------	165	-------	35	7.5	-------

* Winter discharge measurement made on this day.

Wanaque River at Awosting--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	74	25	10.8	29	87	26	45	129	87	32	26	6.8
2	61	20	18.3	34	80	37	52	154	74	f39	18.6	6.8
3	51	20	7.5	33	71	69	71	156	71	a32	13.7	6.8
4	43	20	7.1	32	71	69	64	159	58	a26	12.2	6.8
5	37	21	7.1	31	82	66	135	178	47	a23	11.2	6.5
6	33	13.7	7.1	33	71	61	293	185	41	a21	10.8	a6.5
7	28	12.7	7.1	31	64	59	273	169	41	a19	10.4	a6.5
8	25	16.8	7.1	30	66	59	219	148	58	34	11.2	a6.5
9	19.8	19.2	7.1	28	57	58	181	125	82	30	20	6.5
10	17.4	19.2	7.1	26	51	57	150	107	76	29	32	6.5
11	16.3	20	7.8	25	47	57	125	93	67	26	28	6.5
12	32	27	7.1	23	42	58	118	80	62	23	25	6.5
13	53	25	10.4	22	39	62	106	71	45	19.8	f22	6.5
14	50	25	8.9	25	36	160	90	83	53	18.0	a19	6.5
15	44	22	8.2	27	35	299	80	95	93	20	a17	6.5
16	37	19.2	8.2	35	34	293	71	87	95	32	a15	6.5
17	34	23	8.2	39	34	245	70	79	80	70	a14	6.5
18	34	29	8.2	40	32	197	61	77	70	85	a12	6.5
19	40	27	8.2	41	31	161	57	77	62	87	f11.2	6.5
20	34	27	8.5	70	32	135	55	90	55	80	f10.4	6.5
21	30	23	18.6	118	55	116	53	98	61	66	a9.6	6.5
22	27	22	26	120	48	101	51	109	53	111	a9.0	6.2
23	25	20	25	107	40	88	43	111	45	125	a8.4	6.2
24	22	16.3	25	96	36	80	42	103	43	107	a8.0	5.9
25	19.8	14.7	25	88	34	87	42	107	51	90	f7.8	5.9
26	27	14.2	23	82	31	93	49	172	51	71	f7.8	5.9
27	31	16.1	21	87	29	83	45	174	52	57	8.5	5.9
28	31	14.1	22	82	27	74	45	148	44	48	7.1	5.9
29	30	12.2	27	76	-------	63	39	133	39	42	7.1	5.9
30	29	10.0	32	69	-------	62	44	135	35	35	7.1	5.9
31	30	-------	29	85	-------	55	-------	109	-------	30	7.1	-------

a No gage-height record; discharge computed on basis of records for Greenwood Lake and for station at Monks.
f Computed on basis of partly estimated gage-height record.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.6	2.7	53	40	25	83	114	38	111	61	6.5	6.2
2	5.3	2.9	51	57	23	87	138	34	96	49	6.5	6.2
3	5.3	3.3	49	53	25	91	133	31	82	39	6.2	6.2
4	5.3	3.7	49	45	24	83	114	29	69	34	6.2	6.2
5	5.3	3.9	40	40	24	76	98	38	62	29	6.5	6.2
6	5.3	3.9	37	38	25	67	91	42	50	28	6.8	6.2
7	5.3	4.3	32	37	22	64	83	47	49	35	6.8	6.2
8	5.3	17.3	36	35	22	64	74	58	56	30	6.8	6.2
9	5.1	109	40	32	21	61	73	55	53	25	6.8	6.2
10	5.1	116	30	32	21	61	59	52	53	19.8	6.5	6.2
11	4.8	98	30	30	20	67	50	50	47	15.7	6.2	6.2
12	4.6	178	27	28	21	71	80	52	42	13.2	6.5	6.2
13	4.1	181	25	36	21	69	88	96	44	23	6.5	6.2
14	3.9	152	22	39	22	64	115	159	40	49	6.5	6.2
15	3.7	122	20	35	36	61	188	169	36	39	6.5	6.2
16	3.5	101	42	33	40	94	181	185	34	31	6.5	6.2
17	3.3	87	49	32	47	248	167	178	28	25	6.5	6.2
18	3.3	77	47	35	66	314	138	169	22	22	6.5	6.2
19	3.3	69	45	32	85	296	113	150	31	20	6.5	6.2
20	3.1	63	41	30	114	299	98	125	66	19.8	6.5	6.2
21	2.9	55	35	33	135	299	95	109	67	17.4	6.5	6.2
22	2.9	45	34	34	138	296	79	98	59	19.8	6.5	6.2
23	2.9	50	35	32	129	262	69	80	64	15.7	6.2	6.2
24	2.8	52	36	35	113	232	62	71	74	14.7	6.2	6.2
25	3.1	61	34	40	101	190	61	67	87	11.2	6.2	6.2
26	3.7	61	52	35	96	156	55	63	79	8.2	6.2	6.2
27	4.1	59	79	33	91	136	49	56	69	7.8	6.2	6.2
28	4.6	58	64	30	90	138	43	50	77	7.5	6.2	6.2
29	4.8	58	55	28	87	111	40	47	80	6.8	6.2	6.2
30	4.8	57	44	27	-------	96	37	109	70	6.5	6.2	6.2
31	3.8	-------	39	26	-------	85	-------	123	-------	6.5	6.2	-------

Wanaque River at Awosting--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.2	3.2	2.8	627	127	96	40	59	25	4.7	5.3	5.0
2	5.9	3.2	2.8	453	111	77	37	61	22	4.7	5.0	5.0
3	5.9	3.0	2.8	320	96	64	34	85	19.2	5.0	5.0	3.7
4	5.9	3.2	2.8	235	87	57	35	83	16.8	5.0	5.0	3.7
5	5.9	3.2	2.8	204	80	53	29	76	15.7	5.0	5.0	3.7
6	5.9	3.2	2.8	367	71	62	43	73	15.2	5.0	5.0	3.4
7	5.9	3.2	2.8	379	67	73	50	82	14.2	5.0	5.0	3.4
8	6.2	3.2	2.8	311	64	64	53	69	9.6	5.3	5.0	3.4
9	6.2	3.2	2.8	243	62	59	51	59	6.9	6.2	5.0	3.4
10	6.2	3.2	2.8	192	63	57	44	62	5.6	6.2	5.0	3.4
11	6.2	3.0	2.8	154	63	62	40	57	5.6	6.2	5.0	3.4
12	6.2	3.0	2.8	125	57	59	36	49	5.6	5.6	5.0	3.4
13	6.2	3.0	2.8	106	55	56	35	42	5.6	5.3	5.0	3.7
14	6.2	2.8	3.0	91	58	48	61	38	5.3	5.3	5.0	3.7
15	6.2	2.8	3.0	77	69	48	63	37	5.3	5.3	5.0	3.7
16	6.2	2.8	3.2	66	83	39	59	32	5.3	5.3	5.0	3.7
17	6.2	2.8	3.4	59	90	36	53	30	5.3	5.3	5.0	3.7
18	6.2	2.8	3.7	56	83	41	57	27	5.9	5.3	5.0	3.7
19	5.9	2.8	5.0	53	77	57	129	25	5.9	5.3	5.0	3.7
20	5.9	3.0	8.2	51	87	35	148	42	5.6	5.3	5.0	3.4
21	5.9	3.0	9.6	47	88	30	135	56	5.6	5.3	5.0	3.4
22	5.9	3.0	10.4	77	85	32	123	53	5.6	5.3	5.0	3.4
23	5.9	3.0	11.2	87	103	47	154	70	5.3	5.3	5.0	3.4
24	5.6	3.0	12.2	91	103	52	178	67	5.0	5.3	5.0	3.4
25	3.9	3.2	12.2	99	99	48	127	66	5.0	5.3	5.0	3.4
26	3.4	3.2	12.7	101	101	49	107	53	5.0	5.0	5.0	3.4
27	3.2	3.2	11.2	101	85	45	104	50	5.0	5.0	5.0	3.4
28	3.2	3.2	11.2	116	83	47	93	41	4.7	5.0	5.0	3.4
29	3.2	3.0	15.9	136	-------	41	78	36	4.7	5.3	5.0	3.7
30	3.2	3.0	166	131	-------	39	63	32	4.7	5.3	5.0	3.7
31	3.2	-------	623	131	-------	41	-------	28	-------	5.3	5.0	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.5	3.1	2.4	30	40	38	148	54	137	13.5	9.8	4.5
2	3.5	3.1	2.4	30	46	36	128	53	179	9.5	9.5	4.7
3	3.5	3.1	2.4	32	49	33	112	49	162	12.5	9.8	4.7
4	3.3	3.1	2.4	35	43	30	106	46	160	13.5	10.6	5.1
5	3.1	3.1	2.4	39	41	28	106	50	132	14.8	8.3	4.5
6	3.1	3.1	2.6	44	39	28	99	49	108	28	7.8	3.1
7	3.1	3.1	2.6	55	40	26	85	52	92	25	5.0	2.9
8	3.1	2.9	2.6	50	36	35	68	45	74	20	3.7	2.7
9	3.1	2.9	2.6	39	40	113	64	35	61	16.5	3.3	2.7
10	3.1	2.9	2.6	44	53	137	53	35	52	19.1	2.9	2.9
11	3.3	2.9	2.6	55	59	128	47	37	58	29	3.1	4.9
12	3.3	2.9	2.6	50	64	122	45	33	42	47	3.5	4.2
13	3.3	2.9	2.6	49	71	130	46	30	33	55	3.1	3.1
14	3.3	2.9	2.7	47	104	124	48	28	33	92	2.9	3.7
15	3.3	2.9	2.7	52	124	108	48	26	41	85	2.7	4.0
16	3.3	2.9	2.7	50	126	101	45	27	39	74	2.7	4.5
17	3.3	2.9	2.7	46	118	90	43	26	45	64	2.7	3.3
18	3.3	2.9	2.7	47	106	87	39	34	36	59	2.7	2.9
19	3.3	2.9	2.7	44	95	77	38	53	29	54	2.7	2.9
20	3.3	2.9	2.7	40	88	70	48	70	26	49	7.0	3.1
21	3.3	2.9	2.7	38	70	87	53	68	27	40	6.3	2.7
22	3.3	2.7	2.9	36	70	101	48	61	24	34	5.0	2.9
23	3.3	2.7	2.7	34	71	184	43	59	20	27	4.2	3.1
24	3.3	2.6	2.7	35	64	274	42	95	30	23	4.0	3.3
25	3.1	2.6	2.7	37	58	261	40	124	42	23	3.5	2.9
26	3.1	2.6	2.7	35	52	225	42	139	36	19.8	3.7	2.9
27	3.1	2.6	6.4	39	47	222	41	130	29	16.0	3.5	2.9
28	3.1	2.6	20	33	40	211	48	112	24	15.5	3.1	2.7
29	3.1	2.4	34	33	-------	225	49	122	17.2	16.0	3.3	2.7
30	3.1	2.4	35	38	-------	220	47	182	15.0	13.5	4.2	2.7
31	3.1	-------	32	41	-------	182	-------	118	-------	10.6	4.2	-------

Wanaque River at Awosting--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	764.5	44	11.7	24.7	20.6	0.760	0.88
November	2,432.7	276	8.9	81.1	93.2	3.44	3.84
December	3,299	202	36	106	112	4.13	4.76
Calendar year 1945	25,997.9	463	8.9	71.2	72.5	2.68	36.28
January 1946	2,624	188	25	84.6	71.7	2.65	3.05
February	774	41	20	27.6	27.3	1.01	1.05
March	2,008	101	27	64.8	64.8	2.39	2.76
April	759.7	48	10.8	25.3	20.8	.768	.86
May	2,284	293	14.7	73.7	87.6	3.23	3.73
June	1,890.2	230	8.9	63.0	46.7	1.72	1.92
July	1,130.9	200	6.5	36.5	41.1	1.52	1.75
August	439.8	30	7.5	14.2	7.39	.273	.31
September	314.6	67	3.9	10.5	22.3	.823	.92
Water year 1945-46	18,721.4	293	3.9	51.3	51.6	1.90	25.83
October 1946	1,065.3	74	16.3	34.4	28.2	1.04	1.20
November	594.4	29	10.0	19.8	15.0	.554	.62
December	443.6	32	7.1	14.3	19.3	.712	.82
Calendar year 1946	14,328.5	293	3.9	39.3	37.9	1.40	18.99
January 1947	1,664	120	22	53.7	59.2	2.18	2.52
February	1,362	87	27	48.6	42.1	1.55	1.62
March	3,130	299	26	101	103	3.80	4.36
April	2,769	293	39	92.3	97.7	3.61	4.02
May	3,741	185	71	121	121	4.46	5.16
June	1,791	95	35	59.7	53.6	1.98	2.21
July	1,527.8	125	18.0	49.3	48.0	1.77	2.04
August	427.2	32	7.1	13.8	6.09	.225	.26
September	191.4	6.8	5.9	6.38	-3.37	-.124	-.14
Water year 1946-47	18,706.7	299	5.9	51.3	49.3	1.82	24.69
October 1947	130.4	5.6	2.3	4.21	-.36	-.013	-.02
November	1,951.0	181	2.7	65.0	90.0	3.32	3.71
December	1,272	79	20	41.0	38.6	1.42	1.64
Calendar year 1947	19,956.8	299	2.3	54.7	54.7	2.02	27.38
January 1948	1,092	57	26	35.2	35.2	1.30	1.50
February	1,684	138	20	58.1	66.3	2.45	2.64
March	4,321	314	61	139	142	5.24	6.05
April	2,780	188	37	92.7	83.4	3.08	3.43
May	2,630	185	29	84.8	92.9	3.43	3.95
June	1,797	111	22	59.9	55.1	2.03	2.27
July	729.6	61	6.5	23.5	11.8	.435	.50
August	199.1	6.8	6.2	6.42	-.27	-.010	-.01
September	186.0	6.2	6.2	6.20	-8.90	-.328	-.37
Water year 1947-48	18,772.1	314	2.3	51.3	50.4	1.86	25.29
October 1948	168.2	6.2	3.2	5.43	-1.57	-.058	-.07
November	91.4	3.2	2.8	3.05	24.4	.900	1.01
December	961.5	623	2.8	31.0	90.3	3.33	3.84
Calendar year 1948	16,639.8	623	2.8	45.4	49.3	1.82	24.74
January 1949	5,283	627	47	170	135	4.98	5.74
February	2,297	127	55	82.0	76.6	2.83	2.94
March	1,614	96	30	52.1	49.0	1.81	2.08
April	2,254	178	29	75.1	76.7	2.83	3.16
May	1,640	85	25	52.9	50.4	1.86	2.15
June	256.2	25	4.7	8.54	-.98	-.036	-.04
July	163.7	6.2	4.7	5.28	4.67	.172	.20
August	155.3	5.3	5.0	5.01	-5.04	-.186	-.21
September	108.8	5.0	3.4	3.63	2.05	.076	.08
Water year 1948-49	14,993.1	627	2.8	41.1	41.7	1.54	20.88
October 1949	100.3	3.5	3.1	3.24	1.71	.063	.07
November	85.5	3.1	2.4	2.85	5.37	.198	.22
December	195.5	35	2.4	6.31	27.1	1.00	1.15
Calendar year 1949	14,153.3	627	2.4	38.8	35.0	1.29	17.54
January 1950	1,277	55	30	41.2	42.4	1.56	1.81
February	1,854	126	36	66.2	66.2	2.44	2.54
March	3,733	274	26	120	131	4.83	5.56
April	1,869	148	38	62.3	51.8	1.91	2.13
May	1,992	139	26	64.3	69.8	2.58	2.97
June	1,803.2	179	15.0	60.1	49.6	1.83	2.04
July	1,018.8	92	9.5	32.9	32.6	1.20	1.38
August	148.8	10.6	2.7	4.80	3.25	.120	.14
September	103.2	5.1	2.7	3.44	-.65	-.024	-.03
Water year 1949-50	14,180.3	274	2.4	38.9	39.9	1.47	19.98

* Adjusted for change in contents in Greenwood Lake. Negative figures indicate that evaporation and seepage from Greenwood Lake exceeded inflow.

Wanaque River at Monks

Location.--Lat 41°07'14", long 74°17'41", on left bank just upstream from Wanaque Reservoir, at Monks, Passaic County.

Drainage area.--40.4 sq mi.

Records available.--January 1935 to September 1950.

Gage.--Water-stage recorder and concrete dam. Datum of gage is 303.17 ft above mean sea level (New Jersey Geological Survey bench mark).

Average discharge.--15 years, 77.9 cfs (adjusted).

Extremes.--1935-50: Maximum discharge, 2,330 cfs Sept. 21, 1938 (gage height, 3.50 ft, from floodmark), from rating curve extended above 800 cfs; no flow part of Sept. 3, 9, 1948, July 20, 1949, Aug. 15, 1950, when waste gate was closed and water was below intake to ports.

Peak discharge (base, 400 cfs).--
1946: Nov. 22 (12:15 p.m.) 925 cfs (2.13 ft); Dec. 26 (3 a.m.) discharge below base (1.87 ft, ice jam); May 27 (8 p.m.) 648 cfs (1.79 ft); June 2 (5 to 6 p.m.) 540 cfs (1.64 ft); July 23 (2:30 p.m.) 764 cfs (1.94 ft).
1947: Mar. 14 (1 p.m.) 717 cfs (1.88 ft); Apr. 5 (6:45 p.m.) 969 cfs (2.18 ft); May 1 (1 a.m.) 480 cfs (1.55 ft); July 22 (7 to 8 a.m.) 417 cfs (1.45 ft).
1948: Nov. 8 (5:30 p.m.) 589 cfs (1.71 ft); Nov. 12 (10 a.m.) 486 cfs (1.56 ft); Mar. 17 (6:30 p.m.) 648 cfs (1.79 ft); May 30 (6:30 a.m.) 417 cfs (1.45 ft).
1949: Dec. 30 or 31 (time unknown) 1,950 cfs (3.16 ft); Jan. 6 (5 a.m.) 1,000 cfs (2.22 ft).
1950: Mar. 23 (10:30 a.m.) 582 cfs (1.70 ft).

Remarks.--Figures of discharge include flow over spillway, through ports in dam, and down fish ladder. Flow regulated by Greenwood Lake (see records for Greenwood Lake at Awosting).

Cooperation.--Water-stage recorder graph furnished by North Jersey District Water Supply Commission.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	58	c23	287	221	42	38	67	32	190	f22	38	8.9
2	54	c21	243	181	38	38	67	32	370	f43	37	8.9
3	49	c19.4	207	151	32	47	76	29	386	35	29	8.9
4	40	c21	185	134	28	67	64	24	302	25	27	8.3
5	35	c19.4	163	124	27	97	64	25	238	22	24	8.3
6	35	c17.4	170	137	31	106	58	25	185	17.4	22	8.3
7	69	c16.5	211	258	54	117	54	27	154	16.5	31	8.3
8	64	15.6	221	302	43	137	47	38	128	13.1	27	7.8
9	71	15.6	194	277	38	154	54	31	108	11.6	21	7.8
10	67	15.6	181	277	37	144	50	29	83	10.9	21	7.3
11	62	23	166	229	34	131	43	27	71	10.9	24	6.9
12	56	35	130	207	32	114	40	44	91	10.9	17.4	5.6
13	52	38	110	178	*31	106	37	62	80	10.2	15.6	5.2
14	47	48	111	147	49	100	35	50	67	9.5	19.4	5.2
15	43	120	103	131	45	145	31	100	56	9.5	15.6	5.2
16	38	100	90	108	40	163	38	83	45	9.5	13.9	4.8
17	35	91	85	91	37	144	32	98	38	8.9	21	5.2
18	34	85	80	88	37	131	27	194	40	8.9	23	5.2
19	32	93	85	76	32	114	28	194	37	8.9	29	5.6
20	31	185	90	65	65	103	28	170	28	8.3	29	6.9
21	28	151	80	60	45	91	25	170	28	52	23	11.8
22	27	521	75	58	40	80	22	154	25	104	21	14.0
23	27	473	70	50	40	76	21	128	23	384	18.4	9.5
24	34	363	65	48	42	64	21	108	18.4	329	14.7	47
25	37	292	80	47	57	83	21	91	18.4	243	10.9	49
26	38	234	140	45	33	79	33	85	16.5	174	9.5	34
27	38	189	329	38	32	127	42	360	13.9	128	9.5	29
28	34	182	282	36	38	100	38	512	13.9	94	10.2	25
29	c27	363	258	35	-------	88	35	399	35	73	10.2	23
30	c25	358	225	35	-------	88	35	302	35	58	11.6	139
31	c23	-------	234	42	-------	78	-------	234	-------	47	9.5	-------

* Winter discharge measurement made on this day.
c Backwater from moss.
f Computed on basis of partly estimated gage-height record.
Note.--Stage-discharge relation affected by ice Dec. 12, 13, 16-26, Jan. 20-24, 27, 28, Feb. 3-5, 15, 16, 20-23, 25, 26.

Wanaque River at Monks--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	102	37	17.4	42	124	37	66	330	121	40	38	8.9
2	78	32	23	40	111	47	89	252	102	50	31	8.9
3	64	32	19.0	50	97	102	121	243	94	42	24	8.9
4	54	32	18.1	47	105	95	97	267	81	34	22	10.4
5	45	34	18.2	45	120	88	438	292	66	29	18.4	11.6
6	40	25	18.1	47	100	83	611	287	58	27	17.4	10.2
7	35	22	18.2	43	91	85	473	253	60	23	16.5	9.5
8	32	27	18.1	41	88	83	352	216	114	43	21	8.9
9	27	29	18.1	38	76	81	287	178	127	45	33	8.3
10	24	31	18.1	35	70	78	a230	151	102	40	52	7.8
11	23	31	18.1	38	64	81	182	131	88	37	40	7.8
12	51	38	18.1	37	62	85	166	108	81	32	34	7.8
13	88	37	17.4	35	58	97	144	97	62	28	31	7.8
14	69	34	16.5	35	56	496	121	142	90	27	29	7.8
15	60	32	14.7	47	54	519	108	140	162	31	25	7.8
16	52	29	13.3	69	54	435	97	121	131	38	23	7.3
17	43	28	13.1	74	52	346	97	108	105	85	23	7.3
18	43	37	13.1	69	50	272	81	108	94	111	21	7.3
19	60	35	11.3	66	47	216	81	108	85	111	18.4	7.3
20	47	35	11.9	157	45	178	76	140	78	100	17.4	7.3
21	42	32	40	220	88	151	76	151	94	81	16.5	7.3
22	37	31	54	174	102	131	74	170	76	256	13.9	9.1
23	34	32	43	151	88	114	64	166	64	190	12.3	8.3
24	32	27	40	137	74	102	58	144	62	147	11.6	7.3
25	31	24	40	131	60	140	60	202	83	117	10.9	7.3
26	42	23	35	117	45	137	74	319	74	94	9.5	7.3
27	50	25	32	131	40	114	64	262	71	76	10.9	6.9
28	45	23	37	117	38	102	66	216	62	64	10.2	6.9
29	43	21	42	105	-------	88	56	190	56	58	9.5	6.9
30	42	18.4	50	97	-------	85	81	203	47	50	9.5	6.9
31	42	-------	43	140	-------	76	-------	155	-------	42	9.5	-------

a No gage-height record; discharge computed on basis of records for station at Awosting.
Note.--Backwater from leaves or moss Oct. 1-10, Aug. 5 to Sept. 15. Stage-discharge relation affected by ice Dec. 27, 30, 31, Jan. 1, 2, 5, 7-10, 13, Feb. 5, 6, 8-14, 20, 26-28, Mar. 1, 4 (no gage-height record Feb. 26).

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.4	6.4	66	52	35	114	211	52	162	78	8.9	a6.4
2	6.4	5.6	62	71	32	114	211	45	137	64	8.3	a6.4
3	6.4	5.2	60	69	31	124	185	42	111	52	8.3	a6.4
4	6.4	16.6	60	b60	29	111	159	38	91	45	7.8	6.4
5	6.0	17.6	52	56	34	102	137	58	83	38	11.9	6.4
6	6.0	10.9	52	50	32	b91	124	62	69	38	16.9	6.4
7	6.0	8.9	43	50	27	85	114	75	78	54	10.2	6.4
8	6.0	211	54	45	29	88	100	85	85	42	8.9	6.0
9	6.0	185	56	43	28	83	94	76	76	35	8.3	6.0
10	6.0	155	45	38	26	94	81	71	78	29	8.3	6.0
11	5.6	127	42	b37	27	105	69	66	66	24	7.8	6.0
12	5.6	365	42	b35	29	105	131	89	56	21	10.0	6.0
13	5.2	276	b38	b45	27	97	124	252	58	36	9.5	6.0
14	5.2	220	b38	b50	51	91	213	308	56	71	8.9	6.0
15	4.8	170	b40	b56	66	88	329	267	50	54	8.3	5.6
16	4.8	144	11.7	b50	66	304	272	238	47	42	7.8	5.6
17	4.8	124	88	45	78	589	234	248	40	34	7.3	5.6
18	5.2	105	78	47	114	526	182	238	34	29	7.3	5.6
19	5.6	88	b71	b45	147	467	155	211	50	31	7.3	5.6
20	5.6	81	b62	b42	b198	526	134	174	129	28	7.3	6.0
21	5.6	71	b58	47	203	480	124	151	91	24	7.3	6.4
22	5.6	62	54	47	194	467	105	134	76	27	7.3	6.0
23	5.6	69	52	42	b170	386	91	108	94	24	6.9	6.0
24	5.6	74	54	37	b151	341	81	94	114	23	a6.9	6.0
25	5.6	94	b52	62	134	272	78	91	127	17.4	a6.9	6.0
26	6.0	83	b71	54	134	220	74	88	105	13.9	a6.9	6.0
27	6.4	78	b131	47	124	198	66	76	91	11.6	a6.9	5.6
28	7.3	76	b94	40	124	207	60	69	111	10.9	a6.9	5.6
29	8.9	74	b81	37	121	159	54	64	117	10.2	a6.9	5.6
30	7.3	71	b64	32	-------	131	52	260	94	9.5	a6.9	6.0
31	7.8	-------	b56	34	-------	117	-------	194	-------	8.9	a6.4	-------

a No gage-height record; discharge computed on basis of records for station at Awosting.
b Stage-discharge relation affected by ice.

Wanaque River at Monks--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.8	4.1	7.8	942	185	124	60	81	32	5.6	5.6	5.6
2	6.4	4.1	7.3	655	155	102	54	85	29	5.6	5.2	5.2
3	6.0	4.1	7.3	435	b131	91	50	134	25	5.6	5.2	4.8
4	6.0	6.3	7.3	314	121	81	47	114	23	6.0	6.9	4.1
5	5.6	5.6	6.9	336	111	81	42	102	21	6.4	6.0	4.1
6	5.6	4.8	6.9	856	97	100	77	91	19.4	6.8	6.0	4.4
7	5.6	5.2	6.9	582	94	102	76	108	17.4	9.9	5.6	4.1
8	7.4	6.4	6.9	435	91	91	74	88	13.9	6.4	5.6	4.1
9	7.3	4.4	6.4	341	88	83	69	76	10.2	6.0	5.2	4.1
10	6.4	5.2	6.4	267	94	78	62	83	8.3	5.6	5.2	4.1
11	6.4	6.4	6.0	216	85	83	58	78	8.3	6.0	5.2	4.1
12	6.0	5.2	6.0	178	b78	83	52	64	7.8	6.9	5.2	4.1
13	6.0	5.2	6.0	144	78	76	50	58	7.8	10.2	6.2	4.7
14	6.0	4.8	6.4	121	100	66	100	50	7.3	7.8	6.0	7.0
15	6.0	4.8	6.9	102	121	62	88	50	7.3	6.4	5.6	6.9
16	6.4	4.4	7.2	88	134	55	81	42	6.9	6.9	5.6	5.2
17	6.0	4.4	9.5	81	134	51	74	38	7.3	6.9	6.0	4.8
18	6.4	4.1	9.5	71	117	53	84	35	7.8	10.2	5.6	4.4
19	6.4	5.0	6.4	71	111	b51	242	32	7.8	8.9	5.6	4.8
20	6.0	18.4	13.2	69	137	b49	216	62	7.8	a7.3	5.2	4.4
21	6.0	10.0	17.4	62	127	47	185	78	7.3	a6.0	5.2	4.1
22	6.0	7.3	b16.5	159	121	49	180	69	7.3	6.0	5.2	4.1
23	6.0	9.5	16.5	137	174	84	243	100	6.9	6.0	5.2	5.2
24	6.0	7.8	16.5	144	147	81	220	85	6.4	5.6	5.2	4.4
25	5.6	7.3	b15.6	159	140	71	182	81	6.0	5.6	5.2	4.4
26	4.4	6.4	b13.9	147	137	71	151	66	6.4	5.6	5.2	4.4
27	4.1	6.4	b13.9	144	117	69	144	64	6.4	5.6	5.2	4.1
28	4.1	6.4	b13.9	216	111	66	127	54	6.0	5.6	5.2	4.1
29	4.1	8.3	22	238	-------	60	102	45	5.6	6.0	7.5	6.4
30	4.1	8.3	b960	198	-------	56	88	42	5.6	5.6	6.0	7.5
31	4.1	-------	a1,410	185	-------	56	-------	35	-------	5.6	5.6	-------

a No gage-height record; discharge computed on basis of records for station at Awosting.
b Stage-discharge relation affected by ice.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.2	6.5	5.6	b60	58	58	198	91	216	16.5	11.6	6.4
2	4.8	5.6	5.6	42	71	54	174	85	257	13.1	12.3	6.0
3	4.8	5.6	5.2	43	78	b45	155	81	220	14.7	12.3	6.4
4	4.8	5.6	4.8	45	69	b40	159	74	216	16.5	13.9	6.9
5	4.4	5.2	5.2	47	60	b40	147	85	178	16.5	11.6	6.4
6	4.4	5.2	4.6	56	58	42	137	83	144	37	10.9	5.6
7	4.4	4.8	4.8	81	58	40	117	78	117	32	7.8	4.8
8	4.4	4.8	4.7	b60	b50	72	94	71	97	27	6.0	4.4
9	4.4	4.8	b4.4	b55	b70	253	88	58	81	22	5.6	4.4
10	4.4	4.8	b4.3	f66	94	203	78	58	69	27	5.2	4.8
11	4.4	4.8	5.2	f85	94	182	71	60	76	40	5.2	4.8
12	4.8	4.8	5.7	*74	100	182	66	54	58	56	4.8	7.8
13	4.8	5.4	17.0	71	105	190	64	50	45	86	4.8	5.6
14	4.8	8.9	15.0	69	134	174	66	45	47	151	e4.6	6.9
15	5.6	6.4	9.3	71	190	155	69	40	64	108	e4.3	6.4
16	5.4	6.0	b7	66	194	144	64	40	58	94	4.1	6.0
17	4.8	5.6	b8	62	178	134	60	40	62	81	4.8	5.6
18	4.4	5.2	7.8	62	155	127	54	62	50	74	4.4	4.8
19	4.4	5.2	8.3	60	140	114	52	94	42	69	5.1	4.8
20	4.4	5.2	8.3	b50	b120	105	74	108	37	62	11.6	4.8
21	4.4	5.2	7.8	b52	b110	151	83	102	35	54	10.9	4.8
22	4.4	4.8	7.3	50	105	166	71	88	32	43	7.3	4.8
23	4.8	4.4	8.2	47	100	445	62	83	28	35	6.9	4.8
24	4.1	4.8	10.9	52	91	447	62	182	32	29	6.0	4.8
25	4.1	4.8	8.5	58	85	398	60	207	56	29	5.6	4.4
26	7.4	4.8	8.3	52	b75	346	69	224	47	27	5.6	4.4
27	5.6	4.1	35	56	b65	329	64	190	37	22	5.2	4.4
28	5.2	4.4	50	50	b60	319	74	159	32	18.4	4.8	4.4
29	5.3	5.2	54	52	-------	324	74	207	23	19.4	5.6	4.4
30	5.2	6.0	b45	56	-------	298	71	198	18.4	16.5	7.9	4.9
31	7.0	-------	b40	58	-------	243	-------	170	-------	13.9	6.9	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
e Waste gate open; discharge interpolated.
f Fragmentary gage-height record; discharge computed from gage heights.

Wanaque River at Monks--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	1,310	71	23	42.3	38.2	0.946	1.09
November	4,128.5	521	15.6	138	150	3.71	4.14
December	4,950	329	65	160	165	4.08	4.72
Calendar year 1945	41,719.3	740	14.7	114	116	2.87	38.81
January 1946	3,871	302	35	125	112	2.77	3.19
February	1,079	65	27	38.5	38.2	.946	.98
March	3,150	163	38	102	102	2.52	2.90
April	1,233	76	21	41.1	36.6	.906	1.01
May	3,852	512	24	124	138	3.42	3.94
June	2,924.1	386	13.9	97.5	81.2	2.01	2.24
July	1,998.0	384	8.3	64.5	69.1	1.71	1.97
August	633.4	38	9.5	20.4	13.6	.337	.39
September	519.9	139	4.8	17.3	29.2	.723	.81
Water year 1945-46	29,648.9	521	4.8	81.2	81.5	2.02	27.38
October 1946	1,477	102	23	47.6	41.5	1.03	1.18
November	893.4	38	18.4	29.8	25.0	.619	.69
December	744.8	54	11.3	24.0	29.0	.718	.83
Calendar year 1946	22,375.6	512	4.8	61.3	59.9	1.48	20.13
January 1947	2,575	220	35	83.1	88.6	2.19	2.53
February	2,059	124	38	73.5	67.0	1.66	1.73
March	4,744	519	37	153	155	3.84	4.41
April	4,590	611	56	153	158	3.91	4.38
May	5,851	330	97	189	189	4.68	5.40
June	2,590	162	47	86.3	80.3	1.99	2.22
July	2,148	256	23	69.3	68.1	1.69	1.94
August	659.4	52	9.5	21.3	13.6	.337	.39
September	243.1	11.6	6.9	8.10	-1.65	-.041	-.05
Water year 1946-47	28,574.7	611	6.9	78.3	76.3	1.89	25.65
October 1947	185.7	8.9	4.8	5.99	1.42	.035	.04
November	3,074.2	365	5.2	102	127	3.14	3.52
December	1,827.7	131	11.7	59.0	56.5	1.40	1.61
Calendar year 1947	30,547.1	611	4.8	83.7	83.7	2.07	28.12
January 1948	1,465	71	32	47.3	47.3	1.17	1.35
February	2,461	203	26	84.9	93.1	2.30	2.49
March	6,882	589	83	222	225	5.57	6.41
April	4,044	329	52	135	126	3.12	3.47
May	4,024	308	38	130	138	3.42	3.93
June	2,576	162	34	85.9	81.1	2.01	2.24
July	1,025.4	78	8.9	33.1	21.4	.530	.61
August	255.5	16.9	6.4	8.24	1.55	.038	.04
September	180.0	6.4	5.6	6.0	-9.10	-.225	-.25
Water year 1947-48	28,000.5	589	4.8	76.5	75.6	1.87	25.46
October 1948	180.2	7.8	4.1	5.81	-1.19	-.029	-.03
November	190.6	18.4	4.1	6.35	27.7	.686	.77
December	2,663.4	1,410	6.0	85.9	145	3.59	4.14
Calendar year 1948	25,947.1	1,410	4.1	70.9	74.7	1.85	25.17
January 1949	8,093	942	62	261	225	5.57	6.43
February	3,336	185	78	119	114	2.82	2.93
March	2,272	124	47	73.3	70.2	1.74	2.00
April	3,279	243	42	109	111	2.75	3.06
May	2,190	134	32	70.6	68.2	1.69	1.95
June	339.2	32	5.6	11.3	1.78	.044	.05
July	204.6	10.2	5.6	6.60	5.99	.148	.17
August	173.4	7.5	5.2	5.59	-4.45	-1.10	-.13
September	143.7	7.5	4.1	4.79	3.22	.080	.09
Water year 1948-49	23,065.1	1,410	4.1	63.2	63.8	1.58	21.43
October 1949	151.3	7.4	4.1	4.88	3.36	.083	.10
November	158.9	8.9	4.1	5.30	7.81	.193	.22
December	415.8	54	4.3	13.4	34.2	.847	.98
Calendar year 1949	20,756.9	942	4.1	56.9	53.1	1.31	17.85
January 1950	1,788	85	40	57.7	58.9	1.46	1.68
February	2,767	194	50	98.8	98.8	2.45	2.55
March	5,820	447	40	188	198	4.90	5.65
April	2,677	198	52	89.2	78.7	1.95	2.17
May	3,167	224	40	102	108	2.67	3.07
June	2,474.4	257	18.4	82.5	71.9	1.78	1.99
July	1,350.5	151	13.1	43.6	43.3	1.07	1.23
August	223.1	13.9	4.1	7.20	5.65	.140	.16
September	159.7	7.8	4.4	5.32	1.23	.030	.03
Water year 1949-50	21,152.7	447	4.1	58.0	59.0	1.46	19.83

* Adjusted for change in contents in Greenwood Lake. Negative figures indicate that evaporation and seepage from Greenwood Lake exceeded inflow.

Ringwood Creek near Wanaque

Location.--Lat 41°07'36", long 74°15'52", on right bank 500 ft upstream from Wanaque Reservoir and 6½ miles north of Wanaque, Passaic County.

Drainage area.--19.1 sq mi.

Records available.--December 1934 to September 1950.

Gage.--Water-stage recorder and concrete control. Datum of gage is 302.67 ft above mean sea level (New Jersey Geological Survey bench mark).

Average discharge.--15 years (1935-50), 31.4 cfs.

Extremes.--1934-50: Maximum discharge, 897 cfs July 19, 1945, from rating curve extended above 250 cfs on basis of laboratory rating and approximate determination of discharge at gage height 3.18 ft; maximum gage height, 3.40 ft, from floodmarks, Mar. 12, 1936, July 19, 1945; no flow part of a day in most years just after waste gate was closed and water was below intake to ports.

Peak discharge (base, 225 cfs).--
1946: Nov. 22 (4 p.m.) 265 cfs (1.79 ft); Nov. 29 (10 a.m.) 246 cfs (1.72 ft); Dec. 26 (6:30 a.m.) 265 cfs (1.79 ft); May 27 (8 p.m.) 310 cfs (1.94 ft); June 2 (5 to 6 p.m.) 280 cfs (1.84 ft); July 23 (4:30 p.m.) 416 cfs (2.26 ft).
1947: Mar. 14 (12 m.) 419 cfs (2.27 ft); Apr. 5 (6 p.m.) 470 cfs (2.41 ft).
1948: Mar. 16 (9:30 p.m.) 371 cfs (2.13 ft); Mar. 20 (8:30 p.m.) 271 cfs (1.81 ft.
1949: Dec. 31 (1 a.m.) 710 cfs (3.00 ft); Jan. 6 (8 a.m., from graph) 488 cfs (2.46 ft, from graph).
1950: Mar. 23 (10 a.m.) 298 cfs (1.90 ft).

Remarks.--Flow slightly regulated by Ringwood Lake.

Cooperation.--Water-stage recorder graph furnished by North Jersey District Water Supply Commission.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	12.5	115	88	24	18.3	34	13.1	69	16.6	16.6	5.5
2	27	12.5	97	69	20	18.2	36	11.9	168	34	17.4	5.0
3	25	13.7	86	62	b15	24	38	10.7	157	20	15.8	4.7
4	21	12.5	81	59	b13	35	33	10.7	107	13.1	14.4	4.5
5	18.2	11.9	72	56	b12	43	32	11.3	88	10.7	13.1	4.0
6	18.2	11.3	79	64	b16	46	29	11.9	76	10.1	11.9	3.7
7	45	10.7	101	115	34	47	27	11.3	66	9.6	18.0	3.7
8	38	10.1	95	132	21	52	25	17.4	56	8.7	17.4	3.7
9	36	10.1	86	109	19.0	58	28	15.8	47	8.3	12.5	3.5
10	30	10.7	79	115	18.2	52	26	13.1	39	8.3	f13.1	3.5
11	26	17.0	71	95	16.6	46	23	11.9	37	7.7	f13.7	3.3
12	25	28	61	90	15.8	41	21	19.1	43	7.2	10.1	3.0
13	24	25	53	79	15.8	41	20	41	36	6.6	10.7	2.8
14	22	22	52	71	30	39	19.0	26	29	6.1	12.5	2.6
15	19.0	39	49	62	24	54	18.2	47	26	5.5	10.1	2.5
16	18.2	32	42	50	16.8	64	18.2	38	22	5.0	9.1	2.5
17	16.6	27	39	46	16.6	53	15.8	38	19.0	4.7	11.9	2.1
18	15.1	26	36	46	15.8	49	13.7	78	20	4.5	10.7	2.1
19	15.1	32	34	41	13.7	43	13.1	69	19.0	4.2	15.0	2.1
20	13.7	69	38	b30	b25	42	11.9	58	16.6	4.2	15.1	2.1
21	13.7	49	41	b33	16.6	38	11.3	55	15.1	28	10.1	5.5
22	13.7	181	36	b32	15.1	36	10.7	55	15.1	92	9.1	9.5
23	13.7	136	30	b27	15.1	33	10.1	45	13.1	249	8.3	5.3
24	15.1	107	33	b24	15.1	29	10.1	38	11.9	139	7.5	32
25	17.4	92	39	b25	14.4	43	9.6	33	10.1	76	6.5	47
26	17.4	79	203	b25	13.6	42	15.0	32	9.6	52	6.5	16.5
27	16.6	69	119	b18	14.4	66	18.2	145	8.7	39	6.1	10.7
28	14.4	67	92	b18	16.6	49	18.2	190	8.7	30	5.5	9.1
29	13.7	199	85	b19	-------	45	14.4	123	21	25	6.0	7.5
30	13.7	156	79	19.0	-------	42	14.4	97	37	21	8.7	76
31	12.5	-------	95	24	-------	38	-------	81	-------	18.2	6.5	-------

b Stage-discharge relation affected by ice.
f Computed on basis of partly estimated gage-height record.

Ringwood Creek near Wanaque--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	10.8	7.9	12.6	48	18.3	31	84	52	18.3	17.5	4.6
2	27	10.2	6.7	12.6	42	b28	46	100	47	22	15.3	5.1
3	21	10.2	5.7	13.9	36	63	65	96	42	16.0	13.9	4.9
4	16.7	10.8	5.7	15.3	45	b45	48	93	36	13.9	13.2	4.4
5	13.2	9.7	6.0	13.9	50	38	228	104	31	12.6	12.0	7.8
6	11.4	8.8	6.0	13.9	b40	40	235	108	28	11.4	10.8	6.7
7	10.8	8.8	6.0	b13.2	39	44	133	a90	28	10.2	10.8	5.4
8	9.7	10.8	6.0	13.2	39	42	104	a80	65	32	17.5	3.9
9	8.8	10.8	6.4	12.6	b36	38	93	a70	64	27	33	3.3
10	9.2	9.7	7.1	12.0	36	39	84	a60	43	18.3	35	3.5
11	9.7	9.2	7.5	12.0	31	42	73	a55	35	16.0	18.3	3.3
12	18.2	12.0	7.1	12.6	29	47	66	a50	29	13.9	13.9	2.9
13	28	10.8	8.8	13.2	b27	52	58	a45	24	14.6	12.0	2.7
14	17.5	9.7	8.3	13.2	b26	293	52	a75	47	17.5	10.8	2.6
15	13.2	9.2	7.1	20	27	218	50	a80	88	14.6	10.8	2.6
16	12.0	8.8	6.0	33	28	140	45	a60	52	17.5	10.8	2.9
17	10.8	8.8	5.7	29	28	112	47	a45	43	26	11.4	2.6
18	12.0	8.8	6.0	25	26	93	42	a48	39	39	10.8	2.4
19	17.5	8.3	5.4	23	24	80	38	a55	35	42	9.7	2.4
20	13.2	8.3	5.2	59	18.3	73	36	a65	36	29	9.2	3.7
21	12.0	8.3	18.4	77	b14.6	66	35	a80	48	22	9.7	2.9
22	10.8	9.7	25	46	23	60	35	80	33	144	9.2	5.4
23	10.2	9.7	16.7	b40	25	54	31	68	27	100	7.9	5.2
24	9.7	8.8	14.6	43	24	51	28	58	29	68	7.1	3.3
25	9.7	8.8	13.2	42	20	66	27	92	45	52	6.7	2.9
26	13.5	8.8	11.8	40	19.1	60	35	136	30	43	6.0	2.6
27	15.3	8.8	9.6	51	18.3	50	31	94	28	55	5.7	2.3
28	13.9	8.3	10.8	43	17.5	47	29	80	23	30	5.7	2.1
29	12.6	7.9	13.9	38	-------	43	27	73	21	27	5.7	2.1
30	12.0	7.5	17.5	35	-------	40	26	84	19.1	22	5.1	1.9
31	11.4	-------	13.2	59	-------	36	-------	63	-------	20	6.1	-------

a No gage-height record; discharge computed on basis of records for Wanaque River at Monks and Cupsaw Brook near Wanaque.
b Stage-discharge relation affected by ice.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.7	5.1	14.6	23	13.9	47	121	28	73	30	4.9	1.7
2	1.7	3.7	14.6	25	13.2	48	100	24	60	25	5.1	1.7
3	1.7	2.9	14.6	25	13.2	51	84	22	51	21	4.9	1.7
4	1.7	10.1	14.6	23	13.2	44	73	21	45	18.3	f4.6	1.7
5	1.6	15.3	13.9	23	13.2	38	66	34	40	16.7	f7.6	1.7
6	1.6	8.8	15.3	21	12.6	b38	62	38	36	17.5	15.9	1.7
7	1.6	6.0	14.6	21	12.6	38	56	39	38	21	8.3	1.6
8	1.6	29	22	20	12.0	40	50	47	52	16.0	5.7	1.6
9	1.7	63	21	20	12.0	39	45	36	38	13.9	4.9	1.6
10	1.7	43	20	18.3	12.0	51	42	33	39	12.0	4.4	1.5
11	1.7	28	20	20	12.0	56	40	29	31	10.8	4.1	1.5
12	1.7	145	18.3	19.1	12.0	45	77	46	27	10.2	7.3	1.4
13	1.8	78	16.0	20	12.0	43	62	124	28	30	7.5	1.3
14	1.9	52	15.3	19.1	24	40	104	118	28	57	5.1	1.0
15	2.1	42	14.6	17.5	35	44	142	93	22	25	4.1	1.0
16	1.8	35	69	19.1	b28	170	106	87	20	18.3	3.7	1.1
17	1.7	29	45	17.5	b33	335	91	93	17.5	15.3	3.3	1.1
18	2.2	25	39	16.7	b54	213	77	82	15.3	14.6	3.1	1.1
19	2.3	21	30	b17.5	65	170	68	70	26	16.0	3.1	1.2
20	2.1	19.1	26	b17.5	78	221	62	60	74	13.2	2.9	1.4
21	1.9	19.1	25	17.5	73	210	57	57	38	11.4	3.7	1.0
22	1.7	16.7	25	18.3	68	216	51	54	28	11.4	3.5	1.0
23	1.8	23	25	16.7	60	165	45	45	44	10.8	3.3	1.0
24	1.8	24	b23	16.7	b52	145	43	40	50	9.7	2.9	.9
25	1.7	35	b21	19.1	51	118	43	42	48	8.3	2.7	.7
26	1.7	25	23	18.3	42	102	38	43	35	7.9	2.4	.7
27	1.7	20	29	16.7	51	96	33	36	31	7.1	2.3	.7
28	1.6	19.1	28	16.0	56	102	31	30	54	6.7	2.2	.6
29	5.3	17.5	27	15.3	51	82	29	30	54	6.0	2.2	.6
30	4.4	16.0	25	14.6	-------	72	28	148	39	5.4	2.1	1.0
31	4.9	-------	24	15.3	-------	65	-------	94	-------	5.1	1.9	-------

b Stage-discharge relation affected by ice.
f Computed on basis of partly estimated gage-height record.

Ringwood Creek near Wanaque--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0	1.3	6.0	f230	68	50	29	42	15.3	2.6	1.8	1.7
2	1.3	1.4	5.1	f127	56	44	26	45	13.9	2.4	1.9	1.4
3	1.4	1.5	4.9	f98	50	42	24	72	12.0	2.3	1.7	1.2
4	1.3	4.2	4.6	f84	48	38	22	52	11.4	2.3	2.2	1.0
5	1.1	4.6	4.4	f94	45	43	21	44	10.8	2.4	2.7	1.0
6	1.0	3.1	4.4	f368	42	52	52	40	9.7	3.1	2.3	1.2
7	.8	3.5	4.6	f187	43	48	43	48	8.8	7.3	2.1	1.0
8	1.9	3.3	4.6	f138	42	42	36	40	7.9	3.9	1.8	1.0
9	3.7	2.6	3.9	f110	42	39	31	36	7.1	2.9	1.6	1.0
10	2.4	3.4	3.7	f98	43	38	28	42	6.4	2.7	1.4	2.0
11	1.9	5.4	3.7	f85	38	40	26	39	6.0	2.9	1.3	.8
12	1.6	3.9	3.5	f75	33	39	25	31	5.7	3.1	1.3	.5
13	1.4	3.3	3.9	f66	35	38	25	28	5.4	5.4	1.7	1.0
14	1.4	2.7	3.7	58	47	30	60	26	5.1	4.6	1.8	2.2
15	1.4	2.4	b3.5	51	58	28	45	26	4.6	3.7	1.4	5.6
16	1.3	2.2	4.9	47	60	25	38	23	4.6	3.5	1.0	2.6
17	1.3	2.2	7.5	44	54	25	33	21	5.4	3.5	.9	1.9
18	1.7	2.3	9.2	39	47	24	44	19.1	6.0	5.4	1.0	1.8
19	2.1	2.9	6.7	40	45	23	127	17.5	5.7	5.7	1.0	1.8
20	1.8	19.0	7.1	36	63	21	87	33	5.4	a3.5	.7	1.6
21	1.8	11.1	6.0	30	54	23	73	45	4.9	a2.7	.6	1.4
22	1.5	7.1	6.0	86	52	27	73	31	4.4	2.6	.5	1.4
23	1.5	6.8	6.0	66	78	50	110	47	3.9	2.4	.5	1.8
24	1.6	7.1	5.7	66	62	42	89	35	3.5	2.2	.6	1.7
25	1.7	5.7	b4.4	68	60	38	73	29	3.3	2.2	.8	1.6
26	1.4	4.6	b4.1	60	57	35	65	26	3.1	2.2	a.4	1.4
27	1.4	4.9	b3.5	57	51	33	62	27	2.9	2.1	a.4	1.2
28	1.5	5.4	b3.5	96	50	30	54	23	2.7	2.1	a.4	1.2
29	1.4	7.2	7.7	93	-------	27	48	20	2.7	1.9	2.7	2.6
30	1.4	7.5	f364	71	-------	26	44	19.1	2.7	1.8	2.3	4.4
31	1.3	-------	f615	65	-------	27	-------	16.7	-------	1.8	1.9	-------

a No gage-height record; computed on basis of record for West Brook near Wanaque.
b Stage-discharge relation affected by ice.
f Computed on basis of partly estimated gage-height record.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.7	4.2	3.0	10.0	17.7	b22	84	47	85	12.2	5.7	3.7
2	2.0	3.4	2.8	10.0	24	22	77	43	98	11.0	5.7	3.4
3	1.9	2.8	3.2	10.5	29	21	72	39	82	10.5	7.6	3.5
4	1.8	2.5	2.5	10.5	22	18.5	77	35	75	10.0	8.6	5.3
5	2.0	2.2	2.2	10.0	19.3	18.5	68	45	66	a11	6.6	3.1
6	1.8	2.1	2.1	11.6	18.5	20	60	43	57	a17	5.4	2.5
7	1.9	2.0	2.0	19.3	17.7	18.6	52	36	47	a11	5.6	2.4
8	1.9	1.9	1.9	15.2	15.1	38	45	32	39	9.0	5.0	2.2
9	1.9	1.8	1.9	12.8	27	112	40	28	33	8.2	4.4	2.2
10	1.9	1.8	1.8	19.0	37	73	37	28	29	11.3	4.2	4.1
11	1.8	1.7	1.8	26	36	61	34	27	28	16.9	4.0	4.7
12	1.6	1.7	2.2	19.3	36	68	33	25	26	16.1	4.0	4.4
13	1.8	1.8	9.3	19.3	36	73	30	23	22	28	3.7	4.6
14	1.6	3.0	10.0	21	34	61	29	21	20	65	3.2	8.2
15	1.7	3.2	7.2	18.5	54	57	30	19.3	21	28	a3.2	5.6
16	1.6	2.7	5.0	19.4	66	55	26	19.3	24	22	a3.2	4.0
17	1.4	2.5	3.8	17.5	65	50	24	19.3	24	20	3.7	3.2
18	1.4	2.1	3.5	16.1	58	52	22	29	24	19.3	3.5	2.8
19	1.3	2.1	4.4	15.4	53	44	22	50	19.3	18.5	4.6	2.7
20	1.2	2.0	4.7	12.2	41	45	34	47	17.7	15.4	13.0	2.8
21	1.1	2.1	4.2	11.6	b34	75	40	37	16.9	14.7	8.2	2.7
22	1.2	2.0	4.2	11.6	36	73	30	33	16.1	12.2	5.2	2.8
23	1.4	1.8	5.5	12.2	36	214	28	29	13.4	10.5	4.4	2.8
24	1.5	1.8	7.0	15.2	35	161	28	66	12.2	10.0	3.7	2.5
25	1.2	1.8	6.2	19.3	35	131	27	72	14.0	10.5	3.5	2.2
26	3.8	1.9	5.6	17.7	b28	114	35	91	15.4	9.5	a3.0	2.2
27	3.2	1.9	17.5	16.9	b24	116	34	80	16.1	9.0	a2.5	2.1
28	2.5	1.8	24	16.1	b22	118	35	66	16.1	8.2	a2.4	2.1
29	2.2	2.1	18.5	17.7	-------	125	33	80	14.7	8.2	a3.2	2.1
30	2.1	3.4	14.0	18.5	-------	110	33	85	13.4	7.4	a5.0	2.0
31	4.9	-------	10.9	18.5	-------	94	-------	70	-------	6.6	4.0	-------

a No gage-height record; discharge computed on basis of recorded range in stage when available and records for other stations in Wanaque River Basin.
b Stage-discharge relation affected by ice.

Ringwood Creek near Wanaque--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	643.0	45	12.5	20.7	1.08	1.25
November	1,568.0	199	10.1	52.3	2.74	3.05
December	2,218	203	30	71.5	3.74	4.32
Calendar year 1945	18,135.4	515	6.8	49.7	2.60	35.32
January 1946	1,743.0	132	18	56.2	2.94	3.39
February	503.2	34	12	18.0	.942	.98
March	1,326.5	66	18.2	42.8	2.24	2.58
April	613.9	38	9.6	20.5	1.07	1.20
May	1,447.2	190	10.7	46.7	2.45	2.82
June	1,290.9	168	8.7	43.0	2.25	2.51
July	964.3	249	4.2	31.1	1.63	1.88
August	349.9	18.0	5.5	11.3	.592	.68
September	286.0	76	2.1	9.53	.499	.56
Water year 1945-46	12,953.9	249	2.1	35.5	1.86	25.22
October 1946	456.0	45	8.8	14.7	.770	.89
November	281.1	12.0	7.5	9.37	.491	.55
December	295.3	25	5.2	9.53	.499	.57
Calendar year 1946	9,557.3	249	2.1	26.2	1.37	18.61
January 1947	887.2	77	12.0	28.6	1.50	1.73
February	836.8	50	14.6	29.9	1.57	1.63
March	2,118.3	293	18.3	68.3	3.58	4.12
April	1,878	235	26	62.6	3.28	3.66
May	2,371	136	45	76.5	4.01	4.62
June	1,167.1	88	19.1	38.9	2.04	2.27
July	974.8	144	10.2	31.4	1.64	1.90
August	371.6	35	5.1	12.0	.628	.72
September	108.4	7.8	1.9	3.61	.189	.21
Water year 1946-47	11,745.6	293	1.9	32.2	1.69	22.87
October 1947	64.4	5.3	1.6	2.08	.109	.13
November	876.4	145	2.9	29.2	1.53	1.71
December	733.4	69	13.9	23.7	1.24	1.43
Calendar year 1947	12,387.4	293	1.6	33.9	1.77	24.13
January 1948	587.8	25	14.6	19.0	.995	1.14
February	984.9	78	12.0	34.0	1.78	1.92
March	3,144	335	38	101	5.29	6.12
April	1,926	142	28	64.2	3.36	3.75
May	1,743	148	21	56.2	2.94	3.39
June	1,181.8	74	15.3	39.4	2.06	2.30
July	491.6	57	5.1	15.9	.832	.96
August	139.7	15.9	1.9	4.51	.236	.27
September	36.8	1.7	.6	1.23	.064	.07
Water year 1947-48	11,909.8	335	.6	32.5	1.70	23.19
October 1948	48.3	3.7	.8	1.56	.082	.09
November	144.6	19.0	1.3	4.82	.252	.28
December	1,125.8	615	3.5	36.3	1.90	2.19
Calendar year 1948	11,554.3	615	.6	31.6	1.65	22.48
January 1949	2,833	368	30	91.4	4.79	5.52
February	1,423	78	33	50.8	2.66	2.77
March	1,077	52	21	34.7	1.82	2.10
April	1,513	127	21	50.4	2.64	2.95
May	1,043.4	72	16.7	33.7	1.76	2.03
June	191.3	15.3	2.7	6.38	.334	.37
July	97.2	7.3	1.8	3.14	.164	.19
August	42.7	2.7	.4	1.38	.072	.08
September	51.0	5.6	.5	1.70	.089	.10
Water year 1948-49	9,590.3	615	.4	26.3	1.38	18.67
October 1949	60.3	4.9	1.1	1.95	.102	.12
November	68.1	4.2	1.7	2.27	.119	.13
December	192.9	24	1.8	6.22	.326	.38
Calendar year 1949	8,592.9	368	.4	23.5	1.23	16.74
January 1950	488.9	26	10.0	15.8	.827	.95
February	956.3	66	15.1	34.2	1.79	1.86
March	2,260.6	214	18.5	72.9	3.82	4.40
April	1,219.0	84	22	40.6	2.13	2.37
May	1,364.9	91	19.3	44.0	2.30	2.66
June	985.3	98	12.2	32.8	1.72	1.92
July	467.2	65	6.6	15.1	.791	.91
August	150.0	13.0	2.4	4.84	.253	.29
September	98.9	8.2	2.0	3.30	.173	.19
Water year 1949-50	8,312.4	214	1.1	22.8	1.19	16.18

Cupsaw Brook near Wanaque

Location.--Lat 41°06'32", long 74°15'16", on left bank just upstream from Wanaque Reservoir, 5 miles north of Wanaque, Passaic County.

Drainage area.--4.38 sq mi.

Records available.--December 1934 to September 1950.

Gage.--Water-stage recorder and concrete control. Datum of gage is 304.52 ft above mean sea level (New Jersey Geological Survey bench mark).

Average discharge.--15 years (1935-50), 7.57 cfs.

Extremes.--1934-50: Maximum discharge, 536 cfs Mar. 11, 1936 (gage height, 2.94 ft), from rating curve extended above 200 cfs; no flow for some days during most years.

Peak discharge (base, 70 cfs).--
1946: Oct. 1, 2 (1 p.m. to 6 a.m.) 82 cfs, regulated (0.87 ft); Nov. 16 (11 a.m. to 5 p.m.) 81 cfs, regulated (0.86 ft); Nov. 19 (8 to 10 p.m.) 74 cfs, regulated (0.82 ft); May 27 (7 p.m.) 115 cfs (1.06 ft); June 2 (5 p.m.) 87 cfs (0.90 ft); July 23 (3 p.m.) 94 cfs (0.94 ft); Sept. 24 (7:30 p.m.) 144 cfs (1.21 ft).
1947: Mar. 14 (2 p.m.) 130 cfs (1.14 ft); Apr. 5 (5 to 6 p.m.) 142 cfs (1.20 ft); May 26 (2:30 a.m.) 99 cfs (0.97 ft); July 22 (7 a.m.) 104 cfs (1.00 ft).
1948: Mar. 16 (11 p.m.) 120 cfs (1.09 ft); Apr. 14 (11 p.m.) 70 cfs (0.79 ft); May 13 (8 p.m.) 85 cfs (0.89 ft).
1949: Dec. 30 (3 p.m.) 218 cfs (1.55 ft); Jan. 6 (4:30 a.m.) 138 cfs (1.18 ft).
1950: Mar. 23 (10 to 11:30 a.m.) 118 cfs (1.09 ft).

Remarks.--Flow slightly regulated by Cupsaw Lake.

Cooperation.--Water-stage recorder graph furnished by North Jersey District Water Supply Commission.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43	0.1	0.8	25	6.5	5.0	6.5	3.2	10.8	2.3	1.2	0.4
2	81	.1	.8	16.8	4.5	5.0	7.1	2.4	51	9.4	1.0	.4
3	77	.1	30	13.1	3.6	7.2	8.9	2.1	43	5.2	.8	.4
4	34	.1	40	11.5	2.8	11.8	7.1	1.5	22	2.1	.8	.3
5	.2	.1	42	10.8	2.4	16.4	6.5	2.1	16.4	1.5	.8	.3
6	.3	.1	66	15.5	3.6	15.6	6.0	2.4	13.5	1.1	.6	.2
7	.8	.1	48	37	10.8	14.2	5.0	2.8	11.5	1.1	2.8	.2
8	.4	.1	18.6	30	6.0	14.9	4.5	5.0	9.5	.7	2.0	.2
9	.5	.1	12.0	22	4.5	16.4	6.0	3.6	7.7	.6	.9	.2
10	.3	.1	24	25	4.0	12.1	5.5	2.8	5.0	.7	2.8	.2
11	.2	.4	32	18.0	3.6	10.1	4.0	2.4	5.2	.3	4.1	.3
12	.2	.4	22	16.4	3.2	8.2	4.0	6.6	10.8	.3	1.4	.5
13	.2	.2	.4	14.9	3.6	8.2	3.6	13.2	7.1	.7	1.4	.3
14	.2	.2	.3	12.1	7.7	7.7	3.6	7.4	4.5	.3	2.3	.3
15	.2	.3	.3	10.8	7.7	16.3	3.2	16.4	3.6	1.0	1.2	.3
16	.1	23	.3	8.2	4.0	18.4	3.6	10.8	2.8	.3	1.0	.3
17	.1	.2	.3	7.1	3.6	12.8	2.4	10.1	2.4	.3	1.7	.2
18	.1	.2	.3	7.1	3.2	10.1	2.4	22	3.2	.3	1.7	.2
19	.1	39	.3	6.5	3.2	8.9	2.4	17.2	3.6	.3	4.0	.2
20	.1	68	.3	5.0	6.5	7.7	2.8	12.1	2.4	.3	3.5	.2
21	.1	37	.3	5.5	5.0	7.1	1.8	10.8	2.4	10.2	1.7	.5
22	9.9	1.6	.3	6.0	4.0	6.5	1.8	10.8	2.1	37	1.2	.5
23	12.7	.8	.3	5.5	3.6	6.0	1.8	7.7	1.8	69	.8	.5
24	.1	29	.3	5.0	3.6	5.0	2.1	6.0	1.5	32	.8	41
25	.2	58	1.1	4.5	3.6	10.1	2.1	5.0	1.2	13.7	.6	36
26	.1	41	2.2	4.5	3.2	11.2	5.0	5.0	1.0	7.7	.6	9.0
27	.1	.5	.9	4.5	3.2	25	5.5	58	1.0	5.0	.5	4.6
28	.1	.5	.9	3.6	4.5	14.9	5.0	57	1.4	3.2	.4	2.5
29	.1	2.0	14.9	3.2		10.8	3.6	27	3.5	2.1	.4	2.2
30	.1	1.0	18.4	4.0		9.5	3.2	18.0	3.9	1.6	1.2	22
31	.1		25	6.0		7.1		13.5		1.2	.6	

Cupsaw Brook near Wanaque--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13.1	2.3	1.6	3.2	10.9	3.4	6.1	50	10.9	3.0	2.1	0.6
2	7.1	1.4	2.9	4.0	8.3	10.5	11.5	24	9.6	5.6	1.5	.8
3	5.0	1.2	.2	4.0	6.6	31	20	21	8.3	3.4	1.5	.6
4	3.7	2.3	.2	4.0	9.4	17.2	12.9	28	7.2	2.1	1.3	.8
5	2.9	2.6	.7	3.6	15.0	12.2	70	31	5.6	1.3	1.1	1.0
6	2.6	1.4	.9	3.6	9.6	10.2	62	32	6.1	1.8	1.1	1.0
7	2.3	1.2	1.1	3.2	7.8	11.6	32	23	7.8	1.5	1.1	1.0
8	2.0	2.0	1.1	3.2	7.8	11.6	23	18.9	24	9.6	1.3	1.0
9	1.7	2.0	1.3	2.8	7.2	9.6	19.7	15.7	26	8.3	4.4	1.0
10	1.7	2.0	1.3	2.5	6.1	9.0	17.3	13.6	13.6	5.1	16.6	.8
11	1.7	1.7	1.6	2.5	5.1	9.6	14.3	12.2	9.6	3.4	8.1	.4
12	7.0	2.9	1.1	2.5	5.1	11.6	13.6	10.9	7.8	2.7	4.2	.4
13	12.1	2.3	2.2	2.8	4.6	14.1	12.2	10.2	5.1	2.4	3.0	.4
14	6.5	2.0	1.9	3.2	4.6	89	10.9	17.3	13.4	2.7	2.4	.4
15	4.1	2.0	1.6	5.9	4.6	60	10.2	17.8	30	3.0	1.8	.2
16	3.3	1.4	1.1	11.4	5.1	35	10.2	12.9	14.0	3.8	1.5	.4
17	2.3	1.7	1.1	10.0	6.1	24	11.6	10.9	9.0	6.6	2.7	.2
18	2.9	2.3	1.3	7.6	5.6	19.7	9.6	12.2	7.8	16.6	2.7	.4
19	5.0	1.2	1.3	6.4	5.1	15.7	8.3	13.6	7.2	10.2	2.1	.6
20	3.3	1.3	1.6	23	4.6	14.3	8.3	20	7.7	6.6	1.5	.6
21	2.6	1.4	9.1	26	7.2	12.9	8.3	24	13.6	3.8	1.5	.6
22	2.3	2.3	12.0	13.4	6.6	11.6	9.0	29	8.3	61	1.8	.8
23	2.0	2.5	7.0	8.8	5.6	10.2	7.2	22	6.1	26	1.8	.8
24	2.0	1.9	4.9	7.6	4.6	10.2	6.6	17.3	7.0	13.6	1.1	.6
25	1.7	1.9	4.0	7.6	4.2	16.3	7.2	24	11.6	9.0	.9	.8
26	2.0	1.9	3.6	8.1	3.8	14.3	10.9	60	9.0	6.1	.9	.8
27	2.6	2.2	2.8	11.9	3.8	10.9	8.3	28	6.6	4.6	.3	.6
28	2.9	1.9	2.8	9.6	3.4	9.0	7.8	20	4.6	4.2	.2	.6
29	2.6	1.6	4.0	8.3	-------	8.3	6.1	18.3	4.2	3.4	.4	.6
30	2.6	1.3	5.4	7.2	-------	7.8	10.4	23	3.4	2.4	.6	1.0
31	3.7	-------	4.0	12.2	-------	6.6	-------	14.3	-------	2.1	.6	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12.9	0.8	0.2	5.6	b3.3	12.1	39	6.6	11.6	7.2	0.6	0.2
2	38	.6	.4	10.4	b3.3	14.2	31	5.6	8.3	4.6	.6	.2
3	38	.6	.4	7.8	3.3	16.4	21	5.1	6.1	3.4	.6	.2
4	36	1.0	.4	6.7	3.3	12.8	16.5	5.1	5.1	2.7	.6	.2
5	36	11.5	b.4	5.5	3.7	10.1	14.3	10.5	5.1	2.4	1.7	.2
6	24	9.2	b.4	5.5	3.3	8.9	13.6	12.2	4.2	7.2	4.3	.2
7	.4	2.5	b.4	5.5	3.3	9.5	12.2	12.8	4.7	9.6	1.6	.2
8	.4	4.9	b.6	5.1	3.3	11.5	10.9	15.7	9.0	4.6	.7	.2
9	.4	2.8	b.4	5.1	3.3	10.9	10.2	10.9	7.2	3.0	a.3	.2
10	.4	2.5	b.4	5.5	2.9	14.6	8.3	9.0	9.0	2.1	a.2	.2
11	.4	2.5	.4	5.5	2.9	18.1	8.3	7.8	5.6	1.8	a.2	.2
12	.4	19.1	.4	5.1	3.3	13.6	18.6	17.4	5.1	1.5	.2	.2
13	.4	27	.4	6.9	3.3	11.6	16.5	70	5.1	11.0	.2	.2
14	.6	27	.4	6.5	10.2	10.9	32	51	5.1	18.7	.2	.2
15	.6	27	.4	5.5	16.4	12.2	45	30	3.8	6.6	.1	.2
16	.6	27	1.3	5.0	10.1	60	25	25	3.4	3.4	.1	a.2
17	.6	26	.6	4.5	11.9	92	18.9	29	2.7	2.4	.1	a.2
18	.6	26	.6	5.0	18.8	55	15.0	26	2.4	2.4	.2	a.1
19	.6	25	.6	4.5	21	44	13.6	18.1	8.0	2.4	.2	a.1
20	.6	25	.6	4.1	29	53	12.2	14.3	23	2.1	.1	a.1
21	.6	24	.6	5.0	21	42	12.2	14.3	10.4	1.8	.1	a.1
22	6.4	14.0	.6	5.5	18.0	43	9.6	13.6	6.1	1.8	.2	a0
23	3.3	6.4	.6	5.0	14.2	29	9.0	10.9	9.8	1.5	.2	a0
24	3.3	6.0	.6	5.0	11.5	24	8.3	9.0	13.6	1.5	.2	a0
25	3.3	6.1	.6	6.0	11.5	19.7	9.6	10.2	12.9	1.1	.2	a0
26	3.3	6.1	.6	5.0	13.5	16.5	8.3	12.2	7.8	.9	.2	a0
27	1.6	6.1	.6	4.5	12.8	18.6	7.2	9.6	6.1	.4	.2	a0
28	.3	4.3	.6	4.1	14.9	25	6.6	7.8	14.4	.6	.2	.1
29	.8	.2	.6	3.7	13.5	17.3	6.1	6.6	22	.6	.2	.1
30	.6	.2	.6	3.7	-------	14.3	6.1	23	10.9	.6	.2	.1
31	.8	-------	1.0	b3.3	-------	12.2	-------	17.3	-------	.6	.2	-------

a No gage-height record; discharge computed on basis of records for nearby stations.
b Stage-discharge relation affected by ice.

Cupsaw Brook near Wanaque--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.2	0.6	1.1	56	15.5	11.6	3.8	4.2	1.1	0.2	0.4	0.2
2	.2	.6	.9	30	12.0	9.0	3.8	6.7	1.1	.2	.2	.2
3	.2	.6	.7	19.2	9.4	7.8	3.4	24	.7	.2	.2	.2
4	.2	1.0	.6	14.5	10.0	7.2	3.0	12.8	.5	.2	.4	.2
5	.2	1.0	.2	28	9.4	9.0	2.7	8.3	.5	.2	.2	.2
6	.2	.8	.4	98	8.1	12.9	13.1	7.2	.5	.2	.1	.2
7	.2	1.0	.6	38	3.4	7.8	9.6	12.2	.5	.2	.1	.2
8	.4	.8	.6	25	11.4	5.6	6.6	7.8	.4	.2	.2	.2
9	.4	.8	.6	18.7	10.0	5.1	5.1	5.6	.1	.2	.2	.2
10	.4	.8	.6	15.5	11.4	4.6	4.2	6.6	.2	.2	.4	.2
11	.4	.8	.6	13.4	9.4	5.1	3.8	6.6	.1	.2	.4	.2
12	.4	.8	.4	11.4	7.6	5.6	3.4	4.6	.1	.4	.2	.2
13	.2	.6	.4	10.0	7.6	4.6	3.4	3.8	.2	.4	.2	.4
14	.2	.6	.8	8.8	11.4	3.8	10.9	3.4	.2	.4	.2	.2
15	.2	.6	.6	7.6	15.6	3.4	7.2	3.4	.2	.4	.2	.5
16	.2	.6	1.0	7.0	14.3	2.7	5.6	2.7	.2	.2	.2	.2
17	.2	.6	1.0	6.4	12.2	2.7	4.2	2.4	.4	.4	.2	.2
18	.2	.6	1.0	5.4	10.2	3.0	7.4	2.1	.6	f1.2	.1	.2
19	.2	.6	1.3	6.4	9.6	3.0	39	1.8	.6	1.3	.1	.2
20	.2	1.0	1.6	6.4	15.2	2.7	17.3	5.5	.4	.6	.1	.2
21	.2	1.3	.8	5.8	13.6	2.7	11.6	7.6	.2	.4	.1	.2
22	.4	1.3	.8	29	11.6	3.8	11.1	4.2	.2	.4	.1	.2
23	.4	2.2	.6	20	21	9.6	26	8.3	.2	.4	.1	.4
24	.4	2.9	.6	17.1	15.0	7.8	16.5	5.1	.2	.2	.1	.4
25	.4	1.9	.6	17.9	12.9	5.1	10.2	3.4	.2	.2	.1	.4
26	.4	.8	.6	14.1	12.2	5.1	8.3	2.7	.2	.2	.1	.4
27	.4	1.0	.4	12.7	10.2	4.6	7.8	2.7	.2	.2	.2	.4
28	.4	.7	.6	30	11.6	4.2	6.6	2.4	.2	.2	.2	.4
29	.6	1.6	3.5	30	-------	3.4	5.1	2.1	.2	.2	.4	.6
30	.6	1.6	120	17.9	-------	3.4	4.6	1.8	.2	.4	.2	.6
31	.6	-------	152	15.5	-------	3.4	-------	1.5	-------	.4	.2	-------

f Computed on basis of partly estimated gage-height record.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.4	0.6	0.8	2.2	5.3	4.4	14.4	12.9	11.7	0.2	0.6	0.8
2	.4	.6	1.0	2.2	7.6	4.4	13.0	13.1	13.9	.4	.4	.6
3	.2	.4	1.0	2.5	10.2	3.6	13.0	10.3	8.0	.4	.6	.6
4	.2	.6	.6	2.5	7.3	3.2	17.5	9.1	8.0	.6	.8	.8
5	.1	.6	.6	2.5	5.8	3.2	15.9	10.3	6.4	.6	.6	.8
6	.1	.6	.6	3.2	4.8	4.0	13.0	10.3	4.5	1.6	.6	.6
7	.1	.4	.6	6.8	4.8	4.0	10.3	8.5	3.7	1.0	.6	.6
8	.1	.2	.8	4.4	4.0	10.8	7.9	6.4	2.9	.6	.4	.4
9	.1	.2	.6	2.8	8.8	37	7.9	5.4	2.3	.6	.4	.4
10	.1	.2	.6	5.5	14.4	17.1	7.3	5.9	2.0	1.3	.4	.4
11	.2	.2	.6	8.4	13.0	12.3	7.3	5.9	2.3	2.7	.4	.4
12	.3	.2	1.0	5.3	12.3	13.0	6.8	5.4	1.4	2.0	.4	.4
13	.2	.2	2.8	4.8	11.6	17.5	6.8	4.9	1.2	9.3	.4	.6
14	.4	.4	2.5	5.3	15.2	14.4	6.3	4.1	1.4	18.7	.2	1.0
15	.4	.4	1.6	4.4	22	12.3	6.8	3.7	3.7	4.4	.2	.6
16	.4	.2	1.1	4.0	28	11.6	5.8	4.1	3.7	2.6	e.4	.4
17	.4	.6	.9	3.2	16.7	10.2	4.8	3.8	2.9	2.0	.4	.2
18	.4	.8	.7	4.0	13.7	10.9	4.8	6.9	2.0	1.7	.4	.2
19	.4	.6	.9	4.0	12.3	9.0	4.8	13.1	1.4	1.7	.4	.2
20	.4	.6	.9	3.2	10.2	8.4	9.8	11.7	1.4	1.4	2.7	.2
21	.4	.6	.9	2.8	7.3	22	13.1	8.5	1.4	1.0	1.3	.2
22	.2	.9	.9	2.8	7.9	26	8.5	5.9	1.2	.8	.2	.2
23	.2	.4	1.3	2.8	8.4	86	6.9	4.9	1.0	.3	.1	.2
24	.2	.4	1.6	3.6	7.9	49	6.9	11.7	1.2	.3	.2	.4
25	.2	.6	1.3	4.4	7.9	34	6.9	9.1	1.4	1.0	.2	.4
26	.6	1.0	.9	4.4	6.3	27	11.8	8.5	1.0	1.0	.2	.4
27	.4	.6	6.5	4.4	5.3	28	11.0	6.4	.5	.8	.2	.2
28	.4	.6	6.3	4.0	4.8	28	9.7	4.5	.4	.6	.2	.2
29	.4	.6	4.8	4.4	-------	26	9.1	9.6	.1	.9	1.0	.2
30	.4	.6	3.2	5.3	-------	21	8.0	9.7	.1	1.3	1.3	.2
31	.6	-------	2.5	5.8	-------	16.7	-------	6.4	-------	.8	1.0	-------

e Waste gate open; discharge computed from partly estimated gage-height graph.

Cupsaw Brook near Wanaque--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	262.6	81	0.1	8.47	1.93	2.23
November	304.3	68	.1	10.1	2.31	2.58
December	403.3	66	.3	13.0	2.97	3.42
Calendar year 1945	4,463.7	250	.1	12.2	2.79	37.89
January 1946	365.1	37	3.2	11.8	2.69	3.10
February	125.7	10.8	2.4	4.49	1.03	1.07
March	340.2	25	5.0	11.0	2.51	2.89
April	127.0	8.9	1.8	4.23	.966	1.08
May	364.9	58	1.5	11.8	2.69	3.10
June	255.8	51	1.0	8.53	1.95	2.17
July	211.5	69	.3	6.82	1.56	1.80
August	44.8	4.1	.4	1.45	.331	.38
September	124.4	41	.2	4.15	.947	1.06
Water year 1945-46	2,929.6	81	.1	8.03	1.83	24.88
October 1946	117.3	13.1	1.7	3.78	.863	1.00
November	56.1	2.9	1.2	1.87	.427	.48
December	85.7	12.0	.2	2.76	.630	.73
Calendar year 1946	2,218.5	69	.2	6.08	1.39	18.86
January 1947	230.1	26	2.5	7.42	1.69	1.95
February	178.4	15.0	3.4	6.37	1.45	1.51
March	537.4	89	3.4	17.3	3.95	4.56
April	465.5	70	6.1	15.5	3.54	3.95
May	675.1	60	10.2	21.8	4.98	5.73
June	305.1	30	3.4	10.2	2.33	2.59
July	235.9	61	1.3	7.61	1.74	2.00
August	72.1	16.6	.2	2.33	.532	.61
September	19.8	1.0	.2	.66	.151	.17
Water year 1946-47	2,978.5	89	.2	8.16	1.86	25.28
October 1947	216.2	38	.3	6.97	1.59	1.84
November	341.4	27	.2	11.4	2.60	2.90
December	16.7	1.3	.2	.54	.123	.14
Calendar year 1947	3,293.7	89	.2	9.02	2.06	27.95
January 1948	166.1	10.4	3.3	5.36	1.22	1.41
February	290.8	29	2.9	10.0	2.28	2.47
March	753.0	92	8.9	24.3	5.55	6.39
April	465.1	45	6.1	15.5	3.54	3.95
May	516.6	70	5.1	16.7	3.81	4.39
June	246.5	23	2.4	8.22	1.88	2.09
July	110.5	18.7	.4	3.56	.813	.94
August	14.9	4.3	.1	.48	.110	.13
September	4.1	.2	0	.14	.032	.03
Water year 1947-48	3,141.9	92	0	8.58	1.96	26.68
October 1948	9.8	.6	.2	.32	.073	.08
November	30.1	2.9	.6	1.00	.228	.26
December	295.5	152	.2	9.53	2.18	2.51
Calendar year 1948	2,903.0	92	0	7.93	1.81	24.65
January 1949	635.7	98	5.4	20.5	4.68	5.40
February	327.8	21	7.6	11.7	2.67	2.78
March	170.3	12.9	2.7	5.49	1.25	1.45
April	265.3	39	2.7	8.84	2.02	2.25
May	173.5	24	1.5	5.60	1.28	1.47
June	10.6	1.1	.1	.35	.080	.09
July	10.7	1.3	.2	.35	.080	.09
August	6.1	.4	.1	.20	.046	.05
September	8.5	.6	.2	.28	.064	.07
Water year 1948-49	1,943.9	152	.1	5.33	1.22	16.50
October 1949	9.2	.6	.1	.30	.068	.08
November	14.9	1.0	.2	.50	.114	.13
December	50.4	6.5	.6	1.63	.372	.43
Calendar year 1949	1,683.0	98	.1	4.61	1.05	14.29
January 1950	125.9	8.4	2.2	4.06	.927	1.07
February	278.8	23	4.0	10.0	2.28	2.37
March	575.0	86	3.2	18.5	4.22	4.88
April	276.1	17.5	4.8	9.20	2.10	2.34
May	241.0	13.1	3.7	7.77	1.77	2.05
June	93.1	13.9	.1	3.10	.708	.79
July	62.6	18.7	.2	2.02	.461	.53
August	17.2	2.7	.1	.55	.126	.15
September	12.8	1.0	.2	.43	.098	.11
Water year 1949-50	1,757.0	86	.1	4.81	1.10	14.93

West Brook near Wanaque

Location.--Lat 41°04'16", long 74°18'45", on right bank just upstream from Wanaque Reservoir, 2½ miles northwest of Wanaque, Passaic County.

Drainage area.--11.8 sq mi.

Records available.--January 1935 to September 1950.

Gage.--Water-stage recorder and concrete control. Datum of gage is 326.79 ft above mean sea level (New Jersey Geological Survey bench mark).

Average discharge.--15 years, 22.7 cfs.

Extremes.--1935-50: Maximum discharge, 1,450 cfs Mar. 11, 1936 (gage height, 5.80 ft, from floodmark), from rating curve extended above 700 cfs; no flow Aug. 10, 1936, Sept. 14, 1948, July 29, 1949, and Aug. 19, 1950.

Peak discharge (base, 400 cfs).--
1946: Nov. 22 (10 a.m.) 573 cfs (3.36 ft); May 27 (3:30 & 4:30 p.m.) 505 cfs (3.06 ft).
1947: Mar. 14 (12 m.) 449 cfs (2.8 ft, from partly estimated graph); Apr. 5 (4 p.m.) 587 cfs (3.42 ft).
1948: Nov. 8 (3 p.m.) 838 cfs (4.43 ft); Nov. 12 (4:30 a.m.) 438 cfs (2.75 ft); Mar. 16 (7 p.m.) 406 cfs (2.59 ft).
1949: Dec. 30-31 (6 p.m. to 2 a.m.) 388 cfs (2.50 ft), (annual maximum below base).
1950: Mar. 23 (9:30 a.m.) 386 cfs (2.49 ft), (annual maximum below base).

Remarks.--Flow slightly regulated by several lakes above station.

Cooperation.--Water-stage recorder graph furnished by North Jersey District Water Supply Commission.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10.4	7.5	75	65	14.4	11.4	21	10.3	30	8.8	6.5	4.2
2	9.9	7.0	63	48	b11	11.4	21	9.3	158	29	6.5	3.6
3	9.4	7.0	52	39	b8	17.6	29	8.3	111	13.7	6.0	3.3
4	8.9	7.0	50	35	b7	28	23	7.4	64	8.8	5.6	3.3
5	8.4	6.6	43	32	b7	46	22	8.3	46	6.5	5.3	3.3
6	9.4	6.1	52	54	9.9	51	18.6	10.3	36	6.0	4.9	3.0
7	34	5.8	66	118	23	47	17.1	11.6	29	5.3	8.2	3.0
8	21	5.6	57	f86	12.5	47	16.4	13.7	24	4.9	8.3	3.0
9	19.5	5.6	44	f68	11.4	51	18.6	10.3	19.4	4.2	6.0	3.6
10	16.5	5.6	39	70	10.8	38	16.4	8.8	15.7	3.9	14.2	3.3
11	14.5	10.8	34	50	9.8	31	13.7	8.3	16.9	3.6	18.1	3.6
12	13.2	17.1	28	44	8.8	26	13.7	21	27	3.6	9.8	3.3
13	12.0	16.4	23	39	9.3	24	13.1	29	18.6	3.6	9.3	3.3
14	10.9	14.4	23	30	23	23	12.5	24	14.4	3.6	10.8	3.0
15	9.9	23	22	26	18.5	49	11.4	62	13.1	3.3	7.8	3.0
16	9.9	18.6	19.4	21	12.5	50	11.4	39	10.3	3.0	6.9	2.7
17	9.9	16.4	17.1	18.6	11.9	36	10.3	40	9.3	3.0	13.1	2.4
18	10.4	15.7	17.1	17.8	10.3	30	9.8	116	8.8	2.7	15.7	2.4
19	10.4	24	17.1	15.0	8.3	27	8.8	79	8.3	2.4	26	1.9
20	10.4	69	16.4	10.3	9.8	23	8.3	51	7.4	2.4	f17.8	1.9
21	9.9	42	16.4	10.8	9.8	21	7.8	48	6.9	21	f12.5	7.4
22	9.4	291	16.4	12.5	9.3	19.4	7.8	43	6.9	66	9.8	11.9
23	8.9	125	17.1	13.1	8.8	17.1	7.4	30	6.0	f210	8.8	6.9
24	8.9	73	17.1	13.1	8.8	15.7	7.4	23	4.9	f105	7.4	103
25	9.9	57	f19.4	13.1	8.8	27	7.4	21	4.6	42	6.5	77
26	10.9	52	f167	13.1	8.3	32	15.2	18.6	4.2	26	5.3	26
27	9.9	43	*105	12.5	8.3	78	15.7	249	84	17.1	4.6	15.7
28	8.4	37	71	12.5	10.8	46	13.7	164	5.6	13.1	4.2	13.1
29	8.4	180	60	12.5	-------	34	11.4	78	f14.4	10.3	3.9	11.4
30	7.9	115	52	11.9	-------	27	11.4	54	f13.7	8.3	5.3	81
31	7.5	-------	71	14.4	-------	23	-------	38	-------	6.9	4.6	-------

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of recorded range in stage and adjacent gage-height record.
b Stage-discharge relation affected by ice.
f Computed on basis of partly estimated gage-height record.

West Brook near Wanaque--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	10.2	6.5	12.6	37	10.8	18.4	121	33	12.1	5.2	2.2
2	28	a9.5	5.6	12.0	28	17.5	34	73	29	16.9	4.4	3.4
3	21	a9	4.8	13.3	23	46	50	66	24	11.5	4.0	2.7
4	18.4	a8.5	5.2	15.4	30	34	36	84	21	9.7	4.0	2.4
5	15.4	a8	7.0	b14.5	b32	28	247	101	17.6	8.6	3.7	4.4
6	12.0	7.5	9.6	14.0	b24	31	a176	88	16.1	7.6	3.4	3.4
7	10.2	7.5	9.0	12.6	23	34	86	67	21	6.1	3.4	3.0
8	8.5	9.0	6.5	13.3	22	32	64	53	79	19.3	5.7	2.7
9	8.0	9.0	6.5	12.0	19.1	28	54	43	60	16.9	8.0	2.2
10	8.0	8.5	8.0	10.8	19.9	30	44	37	40	12.7	12.0	2.2
11	8.5	8.5	6.0	11.4	18.4	34	38	32	29	10.3	7.5	2.2
12	a34	10.8	5.6	12.0	16.8	36	35	27	22	9.1	5.6	2.2
13	a45	9.6	7.0	b12.5	16.1	45	30	24	17.6	7.6	4.8	1.9
14	a28	9.0	6.5	12.0	15.4	a250	25	48	a41	7.6	4.0	1.9
15	22	8.0	6.0	20	16.1	a164	24	48	a82	8.1	5.2	a1.6
16	19.1	8.0	5.2	32	19.1	101	a23	35	a36	9.1	4.0	a1.5
17	16.1	8.0	4.8	36	17.6	70	a26	30	29	15.5	4.8	1.4
18	17.6	10.2	5.2	30	16.1	a49	21	38	24	18.5	4.8	1.4
19	21	9.6	4.8	25	b15	40	19.9	38	22	17.7	4.0	1.4
20	18.1	8.0	4.4	a70	b13	39	19.1	64	21	12.1	4.8	1.9
21	14.0	7.5	21	a97	b12	35	19.1	65	26	9.1	6.0	1.6
22	12.6	8.0	24	b48	b13	32	21	72	19.2	a71	4.8	3.0
23	12.0	9.0	19.9	b34	b12	29	19.9	60	16.2	43	4.0	3.0
24	11.4	8.0	18.4	34	b12	27	18.4	44	17.7	24	3.4	2.2
25	10.8	7.5	16.1	33	12.0	a44	17.6	96	25	18.5	3.0	a2.2
26	14.7	7.5	b13	31	12.0	a36	25	148	19.2	13.4	2.7	3.7
27	15.4	7.5	b10	40	11.4	30	19.9	74	15.5	10.3	2.4	3.7
28	13.3	7.0	13.3	33	10.8	27	19.1	58	12.7	9.1	2.4	3.7
29	13.3	7.0	16.9	28	-------	25	17.6	a54	12.7	8.6	2.4	4.0
30	12.0	6.5	17.6	26	-------	24	19.0	a60	14.8	6.5	2.4	3.7
31	10.8	-------	b14	47	-------	19.9	-------	39	-------	5.6	2.4	-------

a Fragmentary or no recorder graph; discharge computed on basis of available fragments of gage-height graph, occasional tape-or staff-gage readings, and records for Blue Mine Brook near Wanaque.
b Stage-discharge relation affected by ice.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.7	4.4	13.3	14.0	b9.0	34	94	13.3	35	16.2	2.3	1.4
2	2.7	3.4	12.0	16.1	b9.0	35	77	12.0	25	12.7	2.3	1.2
3	2.2	2.7	12.0	16.1	8.5	37	54	11.4	19.9	10.9	2.0	1.2
4	2.2	18.9	12.0	14.7	8.5	32	44	10.8	16.8	9.1	2.0	1.2
5	1.9	21	12.0	14.7	8.5	b25	39	16.9	14.7	8.1	4.4	1.2
6	1.9	12.0	14.7	14.0	8.5	b27	34	21	13.3	8.6	8.3	1.2
7	1.6	8.5	14.7	14.0	8.5	27	30	27	16.1	16.9	4.9	1.2
8	1.6	291	19.1	14.7	8.0	29	29	31	26	10.9	3.5	1.2
9	1.6	119	16.1	13.3	7.5	30	25	22	22	7.6	2.8	1.2
10	1.6	44	13.3	b14.7	7.0	45	21	18.4	23	6.6	2.3	1.4
11	1.6	29	12.6	b14.0	7.0	44	21	16.1	17.6	5.7	1.9	1.4
12	1.6	226	12.0	13.3	7.0	38	43	27	15.4	4.9	a5.2	1.4
13	1.6	82	10.2	13.3	6.5	35	37	195	14.7	9.6	6.0	1.4
14	1.6	51	9.0	13.3	21	33	92	132	15.4	18.0	5.6	a1.4
15	1.4	38	8.5	13.3	38	35	131	76	13.3	9.1	3.4	a1.2
16	1.4	32	72	12.6	31	212	69	63	12.0	6.1	a2.4	1.2
17	1.9	28	45	12.0	40	266	50	71	10.2	4.9	2.2	1.2
18	2.4	22	32	12.0	67	143	40	63	8.5	4.9	2.2	1.2
19	2.2	22	24	11.4	71	114	35	45	16.8	4.9	2.2	1.2
20	2.4	19.1	21	10.8	96	134	32	36	64	6.6	2.2	a1.2
21	2.7	16.8	18.4	10.2	72	116	29	32	30	5.3	2.4	1.0
22	2.7	15.4	17.6	10.8	57	126	25	30	19.9	4.9	2.4	0.8
23	2.7	21	16.1	10.8	b45	78	22	24	32	4.5	2.4	1.9
24	2.7	24	14.7	10.2	b38	68	21	21	40	a3.8	2.2	2.2
25	2.7	35	12.0	10.8	35	53	19.9	19.1	55	3.5	1.9	2.2
26	3.0	25	a11.4	10.8	40	45	17.6	19.9	32	3.1	1.9	2.2
27	2.7	21	a15.4	9.6	37	49	16.1	17.6	27	2.8	1.6	2.2
28	1.6	19.1	16.8	9.0	40	61	14.7	15.4	38	2.5	1.6	2.4
29	6.0	17.6	b14.7	9.0	38	43	14.0	14.0	27	2.5	1.6	2.7
30	3.4	15.4	b14.0	9.0	-------	36	14.0	89	20	2.5	1.6	2.7
31	4.0	-------	13.3	b9.0	-------	33	-------	52	-------	2.5	1.6	-------

a No gage-height record; discharge computed on basis of recorded range in stage and records for adjacent stations.
b Stage-discharge relation affected by ice.

West Brook near Wanaque--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.4	10.2	4.4	158	44	29	21	21	8.2	1.6	1.4	1.6
2	1.6	8.5	4.4	74	35	26	17.6	25	7.7	1.6	1.2	1.4
3	1.4	5.6	4.4	53	32	24	16.1	50	6.7	1.6	1.0	1.2
4	1.2	7.5	4.0	46	30	22	15.4	34	6.2	1.6	2.4	1.2
5	1.0	6.0	3.7	61	28	28	14.7	25	5.8	2.2	2.7	1.2
6	.8	2.5	3.7	264	25	38	42	22	5.4	2.4	1.9	2.2
7	3.0	2.2	3.7	124	28	34	31	29	4.6	4.4	1.6	1.6
8	8.4	1.6	3.4	80	28	26	27	21	4.2	2.4	1.4	1.6
9	5.3	1.4	3.4	60	29	25	23	17.8	3.9	2.2	1.2	1.4
10	3.4	1.8	3.0	56	30	24	19.9	24	3.9	1.9	1.9	1.2
11	3.4	3.4	2.7	51	25	26	18.4	20	3.4	2.2	3.5	1.2
12	2.7	2.2	2.7	45	22	26	17.6	17.0	3.4	3.0	4.7	1.0
13	1.9	2.3	3.0	39	24	21	17.5	14.9	3.0	5.6	1.0	2.5
14	1.6	4.5	2.7	34	36	19.1	50	13.5	2.7	3.4	1.0	7.1
15	1.4	1.6	2.7	21	45	18.4	33	13.5	2.7	2.7	3.3	9.5
16	1.2	1.6	3.4	19.1	44	16.1	27	12.2	2.7	2.4	3.7	5.2
17	1.6	1.6	7.0	19.1	37	16.8	23	11.0	2.7	2.7	2.7	3.4
18	2.2	1.6	7.5	17.6	31	16.1	38	9.8	3.0	6.0	3.0	2.4
19	1.9	2.2	5.6	19.9	29	15.4	153	8.7	3.4	5.2	3.2	2.4
20	1.6	15.3	6.5	18.4	42	16.1	69	28	3.0	2.7	1.6	2.2
21	1.6	7.5	5.6	16.5	36	16.1	50	23	2.7	2.4	1.4	2.2
22	1.6	5.2	5.6	72	35	19.1	54	19.3	2.2	2.3	1.2	3.0
23	1.9	8.5	5.6	50	61	44	88	34	1.9	2.2	1.2	4.0
24	1.9	5.6	5.6	53	43	34	70	20	1.9	2.2	1.2	3.0
25	1.9	4.0	5.6	56	39	27	66	17.8	1.9	2.2	1.2	2.7
26	1.6	3.4	b4.8	44	36	25	44	15.6	2.2	2.4	1.2	2.4
27	1.4	3.7	b4.0	38	30	24	34	16.3	2.4	2.7	1.2	2.2
28	1.4	4.4	b4.4	92	30	21	29	13.5	1.9	2.7	1.0	2.2
29	1.2	4.4	b17.5	84	-------	19.1	24	11.6	1.6	2.7	3.0	7.5
30	3.8	5.2	b292	53	-------	17.6	22	10.4	1.6	1.9	2.4	10.8
31	9.6	-------	336	44	-------	18.4	-------	9.2	-------	1.6	1.9	-------

b Stage-discharge relation affected by ice.

Note.--No gage-height record Jan. 1-17, July 22-28; discharge computed on basis of records for nearby stations.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.6	5.2	6.0	16.1	18.4	15.4	42	34	73	3.7	2.4	3.0
2	4.4	4.0	5.6	16.1	28	14.7	37	32	74	3.4	2.4	2.7
3	3.4	3.7	5.6	16.8	33	12.0	35	27	46	3.4	3.4	2.4
4	2.7	3.4	4.4	21	24	11.4	43	25	46	4.0	4.0	2.7
5	2.7	3.0	4.8	19.9	19.9	12.6	37	29	32	4.3	3.4	2.4
6	4.0	3.0	4.4	19.1	17.6	14.0	33	28	26	8.0	3.4	2.2
7	4.4	3.0	4.0	27	17.6	14.0	28	26	22	4.8	3.0	2.4
8	4.8	3.0	4.0	17.6	b13.3	45	25	22	19.1	4.0	2.7	2.4
9	5.6	3.0	3.7	14.7	36	119	23	19.1	16.1	3.4	2.4	2.7
10	5.2	3.0	3.4	29	46	66	21	19.1	14.0	8.9	2.2	2.4
11	4.8	3.0	3.7	34	43	48	19.1	19.1	12.6	12.6	2.2	2.4
12	4.8	3.0	6.6	24	42	51	18.4	16.8	10.8	11.4	2.2	3.7
13	4.0	3.6	22	25	38	58	18.4	14.7	9.6	36	2.2	3.7
14	3.4	10.8	18.4	26	37	46	18.4	13.3	11.4	60	1.9	5.6
15	3.0	8.0	13.3	22	62	42	16.8	13.3	19.9	24	1.6	4.0
16	3.0	7.0	9.6	21	60	39	15.4	12.6	18.4	18.4	1.6	3.0
17	2.7	5.2	8.0	16.8	51	36	14.0	12.6	15.4	15.4	1.9	2.7
18	2.4	4.4	8.5	17.6	45	36	13.3	18.4	12.0	9.6	f1.9	2.4
19	2.4	4.4	9.6	16.8	40	32	12.6	32	10.8	8.0	a2.7	1.9
20	2.4	4.0	9.0	13.3	29	28	21	35	10.2	7.0	a5.6	1.9
21	2.4	4.0	8.5	12.6	b25	54	25	26	9.6	7.0	f4.4	1.9
22	2.4	3.7	*8.0	12.6	25	53	19.1	19.9	8.0	5.2	2.7	1.9
23	2.4	3.7	9.6	13.3	25	258	16.8	18.7	7.5	4.4	2.4	2.2
24	2.7	3.7	11.4	16.1	22	172	16.1	60	7.0	4.0	1.9	4.0
25	2.7	8.5	9.0	19.9	24	113	16.1	46	7.0	5.6	1.9	3.0
26	8.5	10.2	f8.5	18.4	19.9	86	26	45	5.6	4.8	1.9	1.9
27	4.0	8.0	f40	17.6	b18.8	79	24	37	4.8	4.0	1.9	1.6
28	3.4	5.2	f36	15.4	b15.4	80	25	31	4.4	3.4	1.9	1.6
29	3.0	6.5	f27	18.4	-------	73	23	58	4.0	3.4	3.5	1.6
30	3.4	7.5	f19.1	19.9	-------	63	22	53	4.0	3.0	4.4	1.6
31	8.5	-------	f18.4	19.1	-------	49	-------	39	-------	2.7	3.7	-------

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for other stations in Wanaque River Basin.

b Stage-discharge relation affected by ice.

f Computed on basis of partly estimated gage-height record.

West Brook near Wanaque--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	358.9	34	7.5	11.6	0.983	1.13
November	1,304.2	291	5.6	43.5	3.69	4.11
December	1,370.5	167	16.4	44.2	3.75	4.32
Calendar year 1945	12,319.0	356	5.0	33.8	2.86	38.82
January 1946	1,026.2	118	10.3	33.1	2.81	3.23
February	310.1	23	7	11.1	.941	.98
March	1,007.6	78	11.4	32.5	2.75	3.18
April	421.3	29	7.4	14.0	1.19	1.33
May	1,334.2	249	7.4	43.0	3.64	4.20
June	738.4	158	4	24.6	2.08	2.33
July	649.0	210	2.4	20.9	1.77	2.05
August	279.7	26	3.9	9.02	.764	.88
September	414.5	103	1.9	13.8	1.17	1.31
Water year 1945-46	9,214.6	291	1.9	25.2	2.14	29.05
October 1946	537.2	45	8.0	17.3	1.47	1.69
November	251.9	10.8	6.5	8.40	.712	.79
December	308.3	24	4.4	9.95	.843	.97
Calendar year 1946	7,278.4	249	1.9	19.9	1.69	22.94
January 1947	842.4	97	10.8	27.2	2.31	2.65
February	516.8	37	10.8	18.5	1.57	1.63
March	1,448.2	250	10.8	46.7	3.96	4.56
April	1,267.0	247	17.6	42.2	3.58	3.99
May	1,887	148	24	60.9	5.16	5.95
June	863.3	82	12.7	28.8	2.44	2.72
July	456.1	43	5.6	14.7	1.25	1.44
August	139.2	12.0	2.4	4.49	.381	.44
September	76.8	4.4	1.4	2.56	.217	.24
Water year 1946-47	8,594.2	250	1.4	23.5	1.99	27.07
October 1947	73.3	6.0	1.4	2.36	.200	.23
November	1,284.3	291	2.7	42.8	3.63	4.05
December	549.9	72	8.5	17.7	1.50	1.73
Calendar year 1947	9,404.3	291	1.4	25.8	2.19	29.63
January 1948	381.5	16.1	9.0	12.3	1.04	1.20
February	869.5	96	6.5	30.0	2.54	2.74
March	2,083	266	25	67.2	5.69	6.56
April	1,190.3	131	14.0	39.7	3.36	3.75
May	1,241.9	195	10.8	40.1	3.40	3.91
June	720.6	64	8.5	24.0	2.03	2.27
July	220.2	18.0	2.5	7.10	.602	.69
August	89.3	8.3	1.6	2.88	.244	.28
September	45.5	2.7	.8	1.52	.129	.14
Water year 1947-48	8,749.3	291	.8	23.9	2.03	27.55
October 1948	75.9	9.6	.8	2.45	.208	.24
November	135.5	15.3	1.4	4.52	.383	.43
December	768.6	336	2.7	24.8	2.10	2.42
Calendar year 1948	7,821.8	336	.8	21.4	1.81	24.63
January 1949	1,862.6	264	16.5	60.1	5.09	5.87
February	954	61	22	34.1	2.89	3.01
March	732.3	44	15.4	23.6	2.00	2.31
April	1,155.2	153	14.7	38.5	3.26	3.64
May	603.1	50	8.7	19.5	1.65	1.90
June	106.9	8.2	1.6	3.56	.302	.34
July	83.1	6.0	1.6	2.68	.227	.26
August	61.3	4.7	1.0	1.98	.168	.19
September	91.5	10.8	1.0	3.05	.258	.29
Water year 1948-49	6,630.0	336	.8	18.2	1.54	20.90
October 1949	119.1	8.5	2.4	3.84	.325	.38
November	148.7	10.8	3.0	4.96	.420	.47
December	350.1	40	3.4	11.3	.958	1.10
Calendar year 1949	6,267.9	264	1.0	17.2	1.46	19.76
January 1950	597.1	34	12.6	19.3	1.64	1.88
February	873.9	62	13.3	31.2	2.64	2.75
March	1,820.1	258	11.4	58.7	4.97	5.74
April	704.5	43	12.6	23.5	1.99	2.22
May	882.6	60	12.6	28.5	2.42	2.78
June	561.2	74	4.0	18.7	1.58	1.77
July	297.8	60	2.7	9.61	.814	.94
August	83.7	5.6	1.6	2.70	.229	.26
September	77.9	5.6	1.6	2.60	.220	.25
Water year 1949-50	6,516.7	258	1.6	17.9	1.52	20.54

Blue Mine Brook near Wanaque

Location.--Lat 41°03'04", long 74°19'10", on left bank just upstream from Wanaque Reservoir, 1¾ miles northwest of Wanaque, Passaic County.

Drainage area.--1.71 sq mi.

Records available.--December 1934 to September 1950.

Gage.--Water-stage recorder and concrete control. Datum of gage is 319.94 ft above mean sea level (New Jersey Geological Survey bench mark).

Average discharge.--15 years (1935-50), 2.21 cfs.

Extremes.--1934-50: Maximum discharge, 229 cfs Sept. 21, 1938 (gage height, 1.66 ft), from rating curve extended above 60 cfs; no flow for many days.

Peak discharge (base, 60 cfs).--
1946: Nov. 22 (9 a.m.) 85 cfs (1.06 ft); Dec. 26 (12:30 a.m.) 94 cfs (1.11 ft); May 27 (4 p.m.) 71 cfs (0.98 ft); Sept. 24 (5 p.m.) 131 cfs (1.28 ft).
1947: Mar. 14 (11 a.m.) 69 cfs (0.97 ft); Apr. 5 (4 p.m.) 111 cfs (1.19 ft).
1948: Nov. 8 (2 p.m.) 141 cfs (1.32 ft); Nov. 12 (4 a.m.) 74 cfs (1.00 ft).
1949: Dec. 30 (1:30 p.m.) 131 cfs (1.28 ft); Jan. 6 (2:30 a.m.) 63 cfs (0.93 ft).
1950: Mar. 23 (8 a.m.) 50 cfs (0.84 ft), (annual maximum below base).

Cooperation.--Water-stage recorder graph furnished by North Jersey District Water Supply Commission.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.9	0.7	6.4	6.0	1.2	1.0	2.2	1.0	2.9	0.5	0.2	0.1
2	1.0	.7	4.9	b3.5	1.0	1.0	2.2	.9	19.2	3.1	.2	.1
3	1.0	.7	4.0	b2.4	.9	1.8	3.1	.8	10.5	.9	.2	.1
4	.9	.7	3.7	b2.6	.8	3.3	2.2	.8	5.6	.6	.2	.1
5	.9	.7	3.2	2.8	.8	4.3	2.0	.8	4.3	.4	.1	0
6	1.0	.7	4.6	3.8	1.2	4.0	1.8	1.0	3.2	.2	.1	0
7	4.0	.5	5.6	11.7	2.0	3.7	1.6	.9	2.6	.1	.4	0
8	1.8	.4	4.3	8.0	1.1	4.0	1.4	.8	2.0	.1	.4	0
9	1.8	.5	3.7	6.0	1.0	4.9	1.6	.8	1.6	.1	.2	0
10	1.4	.5	3.2	6.4	1.0	3.7	1.4	.9	1.2	.1	.8	0
11	1.1	1.2	2.6	4.3	.9	2.9	1.2	.9	1.6	.1	.7	0
12	1.1	1.6	b2.0	4.0	.9	2.6	1.2	2.9	2.5	.1	.3	0
13	1.1	1.4	1.8	3.4	1.0	2.4	1.1	3.5	1.4	.1	.4	0
14	1.1	1.2	2.0	2.6	1.8	2.4	1.1	2.6	1.1	.1	.5	0
15	1.0	2.3	1.8	2.3	1.2	5.6	1.0	8.6	1.0	0	.3	0
16	1.0	1.8	1.4	1.8	b1.0	4.8	1.0	4.6	.9	0	.3	0
17	.9	1.4	b1.2	1.8	1.0	3.4	1.0	4.9	.9	0	1.6	0
18	.8	1.4	b1.1	1.8	1.0	2.9	1.0	10.1	.9	0	1.3	0
19	.8	3.2	b1.1	1.4	.9	2.6	1.0	7.2	.8	0	3.3	0
20	.8	7.2	1.4	b1.2	1.1	2.2	1.0	4.6	.7	0	1.6	0
21	.9	3.7	1.2	1.4	1.0	2.2	.9	4.6	.7	1.8	.9	.4
22	.8	31	1.2	1.2	1.0	2.0	.8	3.7	.7	3.0	.8	.6
23	.9	10.3	1.1	1.1	.9	3.4	.8	2.6	.5	13.0	.7	.2
24	1.1	6.0	1.1	1.1	.9	1.6	.8	2.2	.4	4.7	.6	25
25	1.4	4.3	8.8	1.1	.9	3.2	.8	1.8	.2	2.0	.4	8.3
26	1.1	3.4	30	1.1	.9	3.6	1.7	1.8	.1	1.1	.4	2.6
27	1.0	2.9	*9.3	1.0	.9	8.2	1.4	29	.1	.9	.2	1.6
28	1.0	3.4	6.0	.9	1.1	4.3	1.1	14.9	.8	.7	.1	1.4
29	.9	19.8	5.3	.9	-------	3.4	1.0	7.6	1.0	.6	.1	1.3
30	.8	9.8	4.3	.9	-------	2.9	1.0	4.9	1.2	.5	.2	14.8
31	.8	-------	6.8	1.2	-------	2.4	-------	3.4	-------	.3	.2	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Blue Mine Brook near Wanaque--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.8	0.9	0.5	1.1	2.6	0.9	1.5	13.5	2.4	1.1	0.3	0
2	3.2	1.0	.6	1.1	2.1	2.2	3.9	7.4	1.9	1.8	.8	.1
3	2.1	.9	.5	1.1	1.9	6.2	4.4	5.8	1.7	1.0	.2	.1
4	1.5	.9	.4	1.2	3.5	3.2	2.9	9.7	1.4	.7	.2	0
5	1.2	.9	.4	1.1	3.5	2.4	35	10.6	1.2	.4	.2	0
6	1.1	.9	.4	1.1	2.4	a2.6	17.0	8.3	1.6	.4	.2	0
7	1.0	1.9	.4	1.0	2.1	2.9	8.7	6.2	2.1	0	.1	0
8	.8	.2	.4	1.1	1.9	2.9	6.2	4.8	14.7	2.4	.4	0
9	.7	.2	.4	1.0	1.7	2.4	4.8	3.8	9.4	1.2	.5	0
10	.8	.3	.4	1.0	1.5	2.4	3.8	3.2	4.4	.9	.5	0
11	.6	.8	.4	1.0	1.4	2.9	3.2	2.6	3.2	.8	.4	0
12	4.9	.4	.4	1.1	1.4	3.2	2.9	2.1	2.1	.6	.2	0
13	4.3	.4	.5	1.1	1.4	4.1	2.4	1.9	1.7	.1	.2	0
14	2.1	.9	.5	1.1	1.2	35	2.1	4.2	6.0	.4	.1	0
15	1.6	.3	.5	2.4	1.4	16.2	1.9	2.9	8.9	.8	.1	0
16	1.3	.3	.5	4.1	1.5	9.2	2.2	2.4	4.1	.7	0	0
17	1.3	.4	.5	3.8	1.5	6.2	2.1	2.1	2.9	1.3	.5	0
18	1.6	1.3	.5	2.9	1.2	4.4	1.7	3.2	2.6	1.0	.3	0
19	1.4	.3	.4	2.4	1.1	3.5	1.5	2.6	2.1	.8	.2	0
20	1.1	.2	.4	12.1	1.0	3.2	1.5	6.2	4.2	.6	.5	0
21	1.0	.2	3.4	9.6	b1.0	2.6	1.5	6.9	3.9	.4	.5	0
22	.9	.5	2.6	4.8	b1.0	2.4	1.5	7.8	2.1	7.8	.3	.1
23	.9	.6	1.7	3.5	b1.0	3.3	1.4	6.2	1.7	2.8	.2	.2
24	.9	.5	1.5	2.9	1.0	2.1	1.2	3.5	2.3	1.4	.1	.1
25	1.0	.5	1.4	2.6	1.0	5.2	1.4	10.8	2.6	1.0	0	0
26	2.7	.5	1.2	2.4	1.0	3.5	1.9	14.4	1.7	.7	0	0
27	1.3	.5	1.0	3.5	1.0	2.6	1.5	7.0	1.4	.6	0	0
28	.6	.5	1.1	2.4	1.0	2.4	1.5	5.1	1.1	.5	0	0
29	.5	.5	1.5	2.1	-------	2.1	1.2	4.7	1.8	.4	0	0
30	.5	.5	1.5	1.9	-------	1.9	3.7	5.0	1.5	.2	0	0
31	.9	-------	1.2	3.7	-------	1.5	-------	2.9	-------	.3	0	-------

a No gage-height record; discharge by interpolation.
b Stage-discharge relation affected by ice.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.3	1.1	1.3	b0.9	3.7	13.2	1.1	1.4	1.3	0	
2	0	.2	1.1	1.4	.9	4.3	8.6	1.1	1.1	1.0	0	
3	0	0	1.1	1.3	.8	4.0	5.7	1.1	1.0	.9	0	
4	0	2.1	1.1	1.1	.8	3.4	4.3	1.0	1.0	.7	0	
5	0	1.2	1.1	1.1	.7	2.7	4.0	2.1	.9	.5	.2	
6	0	.5	1.3	1.1	.7	2.8	3.4	1.9	.9	.6	.5	
7	0	.4	1.1	1.1	.7	2.8	2.8	3.6	1.0	1.1	.1	
8	0	33	1.9	1.1	.7	3.1	2.5	3.6	1.4	.6	0	
9	0	7.4	1.4	1.3	.7	3.1	2.3	2.5	2.3	.3	0	
10	0	2.4	1.4	1.3	.7	5.5	1.8	2.0	2.1	.3	0	
11	0	1.6	1.3	1.1	.7	5.7	2.2	1.8	1.3	.2	0	
12	0	30	1.1	1.1	.7	4.3	4.7	3.6	1.1	.2	.3	
13	0	7.3	1.0	1.1	.8	4.0	3.4	28	1.3	.3	.3	
14	0	4.0	.9	1.1	5.4	3.7	11.6	15.1	1.3	.6	.2	
15	0	2.8	1.0	1.1	4.7	4.3	12.5	7.7	1.0	.3	0	
16	0	2.3	11.9	1.1	2.8	30	6.9	7.3	.9	.2	0	
17	0	1.8	5.4	1.1	5.7	28	5.0	6.6	.8	.2	0	
18	0	1.6	3.7	1.0	8.2	13.8	4.0	6.3	.7	.1	0	
19	0	1.4	2.8	1.0	7.7	11.0	3.4	2.9	1.6	.2	0	
20	0	1.3	2.3	1.0	12.0	15.0	2.8	2.6	5.8	.4	0	
21	0	1.1	2.3	1.1	7.3	12.2	2.8	2.8	1.9	.2	0	
22	0	1.1	2.0	1.1	5.4	11.7	2.3	3.3	1.4	.2	0	
23	0	2.0	1.6	b1.0	4.1	7.3	2.0	1.8	3.1	.2	0	
24	0	2.9	1.4	b.9	3.5	6.1	1.8	1.6	5.3	.2	0	
25	0	3.7	1.3	.6	3.7	4.7	1.8	2.5	6.3	.1	0	
26	0	2.3	1.4	a.7	4.3	5.6	1.6	1.1	3.1	0	0	
27	0	1.8	1.6	.8	4.0	4.8	1.4	1.3	3.2	0	0	
28	0	1.6	1.4	.9	4.3	5.3	1.3	1.3	4.3	0	0	
29	.3	1.4	1.3	.9	4.0	5.0	1.3	1.1	2.5	0	0	
30	0	1.3	1.1	.9	-------	4.7	1.3	3.7	1.5	0	0	
31	.1	-------	1.1	b.9	-------	3.4	-------	2.0	-------	0	0	-------

a No gage-height record; discharge interpolated.
b Stage-discharge relation affected by ice.
Note.--Backwater from moss May 15 to June 8.

Blue Mine Brook near Wanaque--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	0.4	11.9	3.8	2.3	1.8	1.8	0.5	0	0	0
2		0	.3	6.5	2.8	1.8	1.4	2.3	.5	0	0	0
3		0	.3	4.4	2.4	1.6	1.3	5.2	.5	0	0	0
4		0	.2	2.9	2.3	1.6	1.3	3.1	.4	0	0	0
5		0	.2	13.0	2.1	2.4	1.1	2.3	.3	0	0	0
6		0	.2	31	1.8	3.4	5.0	2.2	.3	0	0	0
7		0	.2	10.3	2.1	2.5	2.9	3.0	.2	.2	0	0
8		0	.2	6.1	2.1	2.0	2.5	2.0	.2	0	0	0
9		0	.2	4.5	2.3	1.8	2.0	1.6	.1	0	0	0
10		0	.2	3.5	2.7	1.8	1.8	2.4	.1	0	0	0
11		.1	.2	2.9	2.0	2.0	1.6	1.8	.1	0	0	0
12		0	.2	2.3	1.8	2.0	1.4	1.4	0	.1	0	0
13		0	.2	2.1	2.1	1.6	1.9	1.3	0	.5	0	0
14		0	.2	1.8	4.1	1.4	6.1	1.1	0	.1	0	.2
15		0	.2	1.4	4.7	1.3	3.4	1.1	0	0	.2	.6
16		0	.3	1.2	3.7	1.3	2.8	1.0	0	0	.1	.1
17		0	.5	1.2	3.1	1.3	2.3	.9	0	0	0	0
18		0	.5	1.1	2.5	1.1	5.3	.9	0	1.0	0	0
19		0	.5	1.6	2.3	1.1	15.7	.8	.1	.6	0	0
20		1.5	.4	1.2	4.0	1.0	6.9	1.4	.1	.2	0	0
21		.6	.3	1.3	4.4	1.3	5.0	1.3	0	.1	0	0
22		.4	.3	9.8	3.4	1.4	6.7	1.4	0	0	0	0
23		.6	.3	5.2	6.9	5.1	7.1	2.9	0	0	0	0
24		.5	.3	6.3	4.3	3.1	6.1	1.3	0	0	0	0
25		.4	.3	5.9	3.7	2.3	4.3	1.0	0	0	0	0
26		.3	.2	4.5	3.1	2.3	3.7	.9	0	0	0	0
27		.3	b.2	3.5	2.5	2.0	3.4	.9	0	0	0	0
28		.4	.3	12.1	2.3	1.8	2.5	.9	0	0	0	0
29		.5	2.5	3.3	-------	1.4	2.3	.8	0	0	0	.3
30		.4	72	5.5	-------	1.4	2.0	.7	0	0	0	.4
31		-------	50	4.8	-------	1.6	-------	.6	-------	0	0	-------

b Stage-discharge relation affected by ice.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.1	0.5	1.4	1.2	1.2	3.2	3.8	7.3	0	0	0.4
2	0	.3	.5	1.4	f2.6	1.1	2.9	3.4	6.6	0	0	.3
3	0	.3	.5	1.4	f2.9	b.9	2.9	2.9	4.3	0	.2	.3
4	0	.3	.4	1.4	f2.2	b.9	3.4	2.6	4.3	.2	.3	.3
5	0	.3	.4	f1.2	f1.6	1.1	2.6	2.9	2.9	.2	.2	.3
6	0	.3	.4	f1.4	1.6	1.1	2.4	2.6	2.2	.7	0	.3
7	0	.2	.4	f2.4	1.4	1.0	2.2	2.4	1.8	.3	.1	.3
8	0	.2	.5	1.8	f1.8	4.2	2.0	2.0	1.4	.2	0	.3
9	0	.1	.4	1.4	f4.3	10.0	1.8	1.6	1.2	0	0	.2
10	0	.2	.4	3.3	f4.6	4.7	1.6	1.8	1.1	1.0	0	.2
11	0	.2	.4	3.6	4.3	3.6	1.6	1.6	1.0	1.0	0	.2
12	0	.2	.9	2.4	3.7	4.6	1.4	1.4	.9	.7	0	.2
13	0	.3	3.1	2.6	3.4	5.3	1.4	1.4	.9	6.1	0	.2
14	0	1.2	2.1	2.6	f3.2	4.0	1.4	1.4	1.0	6.5	0	.6
15	0	.6	1.4	2.0	f6.8	3.7	1.2	1.2	1.4	2.0	0	.6
16	0	.5	1.0	1.8	6.0	3.2	1.2	.9	1.2	1.4	0	.4
17	0	.5	.9	1.4	4.3	2.9	2.8	1.1	1.1	1.1	0	.3
18	0	.5	.9	1.8	3.7	2.9	1.2	1.8	.9	.9	0	.2
19	0	.5	1.0	1.6	3.4	2.4	1.1	3.2	.8	.6	0	.1
20	0	.5	.9	1.2	b2.3	2.2	2.1	3.5	.8	.5	0	.1
21	0	.5	.9	1.1	b2.0	5.8	2.2	2.0	.7	.5	0	.1
22	0	.5	.8	1.1	2.2	4.3	1.6	1.6	.5	.3	.1	.2
23	0	.4	.9	1.1	2.2	28	1.4	1.5	.4	.3	.1	.3
24	0	.4	1.1	1.4	2.0	12.6	1.4	6.6	.4	.2	.1	.2
25	0	.5	.9	1.4	1.8	9.3	1.4	4.9	.4	.6	.1	.1
26	.6	.5	.9	1.2	b1.1	7.6	3.2	5.9	.4	.4	.1	.1
27	.4	.5	7.5	1.2	b1.1	7.6	2.6	4.3	.2	.3	.1	.1
28	.3	.5	5.2	1.1	b1.1	7.6	2.6	3.2	.1	.2	.1	.1
29	.2	.6	3.2	1.6	-------	6.4	2.2	7.0	0	.1	.3	.1
30	.2	.7	2.2	1.6	-------	4.9	2.2	5.3	0	.1	.6	.1
31	1.0	-------	1.6	1.6	-------	4.0	-------	4.0	-------	0	.5	-------

b Stage-discharge relation affected by ice.
f Computed on basis of partly estimated gage-height record.
Note.--No gage-height record Aug. 22-31, Sept. 1-13, 18-30; discharge computed on basis of precipitation records and records for other stations in Wanaque Basin.

Blue Mine Brook near Wanaque--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	35.1	4.0	0.8	1.13	0.661	0.76
November	123.4	31	.4	4.11	2.40	2.68
December	135.1	30	1.1	4.36	2.55	2.94
Calendar year 1945	1,225.1	40	.1	3.36	1.96	26.65
January 1946	89.7	11.7	.9	2.89	1.69	1.95
February	29.4	2.0	.8	1.05	.614	.64
March	100.7	8.2	1.0	3.25	1.90	2.19
April	40.4	3.1	.8	1.35	.789	.88
May	135.1	29	.8	4.36	2.55	2.94
June	70.6	19.2	.1	2.35	1.37	1.54
July	35.1	13.0	0	1.13	.661	.76
August	17.7	3.3	.1	.57	.333	.38
September	56.6	25	0	1.89	1.11	1.23
Water year 1945-46	868.9	31	0	2.38	1.39	18.89
October 1946	49.6	5.8	.5	1.60	.936	1.08
November	18.2	1.9	.2	.61	.357	.40
December	27.1	3.4	.4	.87	.509	.59
Calendar year 1946	670.2	29	0	1.84	1.08	14.58
January 1947	82.2	12.1	1.0	2.65	1.55	1.79
February	44.3	3.5	1.0	1.58	.924	.96
March	145.6	35	.9	4.70	2.75	3.17
April	126.5	35	1.2	4.22	2.47	2.75
May	177.8	14.4	1.9	5.74	3.36	3.87
June	98.7	14.7	1.1	3.29	1.92	2.15
July	33.1	7.8	0	1.07	.626	.72
August	6.5	.5	0	.21	.123	.14
September	.6	.2	0	.02	.012	.01
Water year 1946-47	810.2	35	0	2.22	1.30	17.63
October 1947	0.4	.3	0	.01	.006	.01
November	120.8	33	0	4.03	2.36	2.62
December	60.5	11.9	.9	1.95	1.14	1.32
Calendar year 1947	897.0	35	0	2.46	1.44	19.51
January 1948	32.6	1.4	.6	1.05	.614	.71
February	96.9	12.0	.7	3.34	1.95	2.11
March	226.0	30	2.7	7.29	4.26	4.91
April	122.7	13.2	1.3	4.09	2.39	2.67
May	123.4	28	1.0	3.98	2.33	2.68
June	61.5	6.3	.7	2.05	1.20	1.34
July	10.9	1.3	0	.35	.205	.24
August	1.6	.5	0	.05	.030	.03
September	0	0	0	0	0	0
Water year 1947-48	857.3	33	0	2.34	1.37	18.65
October 1948	0	0	0	0	0	0
November	6.0	1.5	0	.20	.117	.13
December	132.3	72	.2	4.27	2.50	2.88
Calendar year 1948	813.9	72	0	2.22	1.29	17.70
January 1949	179.1	31	1.1	5.78	3.38	3.90
February	85.3	6.9	1.8	3.05	1.78	1.86
March	59.0	5.1	1.0	1.90	1.11	1.28
April	111.6	15.7	1.1	3.72	2.18	2.42
May	50.3	5.2	.6	1.62	.947	1.09
June	3.4	.5	0	.11	.064	.07
July	2.8	1.0	0	.09	.053	.06
August	0.3	.2	0	.01	.058	.01
September	1.6	.6	.0	.05	.029	.03
Water year 1948-49	631.7	72	0	1.73	1.01	13.74
October 1949	2.7	1.0	0	.09	.053	.06
November	12.4	1.2	.1	.41	.240	.27
December	42.2	7.5	.4	1.36	.795	.92
Calendar year 1949	550.7	31	0	1.51	.883	11.97
January 1950	52.5	3.6	1.1	1.69	.988	1.14
February	78.8	6.8	1.1	2.81	1.64	1.71
March	159.7	28	.9	5.15	3.01	3.47
April	61.2	3.4	1.1	2.04	1.19	1.33
May	89.8	7.0	.9	2.90	1.70	1.95
June	46.2	7.3	0	1.54	.901	1.00
July	26.4	6.5	0	.85	.497	.57
August	2.9	.6	0	.09	.053	.06
September	7.2	.6	.1	.24	.140	.16
Water year 1949-50	582.0	28	0	1.59	.930	12.64

Wanaque River at Wanaque

Location.--Lat 41°02'33", long 74°17'36", on left bank just downstream from Wanaque Reservoir in Wanaque, Passaic County, 50 ft upstream from highway bridge.

Drainage area.--90.4 sq mi (considered as 94 sq mi Oct. 1, 1928, to Sept. 30, 1934, when flow diverted from Post Brook was included in all records).

Records available.--December 1903 to December 1905 (gage heights only), September 1912 to April 1915, May 1919 to September 1950.

Gage.--Water-stage recorder and concrete control. Datum of gage is 210.00 ft above mean sea level (New Jersey Geological Survey bench mark). Dec. 16, 1903, to Dec. 31, 1905, chain gage on highway bridge at site 50 ft downstream at different datum. Sept. 15, 1912, to Apr. 1, 1922, staff gage at site 200 ft downstream from present concrete control at different datum. Apr. 1, 1922, to Mar. 14, 1931, water-stage recorder at site 400 ft downstream from present concrete control at present datum.

Average discharge.--31 years (1919-50), 160 cfs (adjusted for storage and diversion since October 1929).

Extremes.--1912-15, 1919-50: Maximum discharge, 5,050 cfs Apr. 7, 1924 (gage height, 8.01 ft, site then in use); minimum daily, 0.5 cfs Dec. 11, 12, 14-23, 1949.

Annual maximum discharge (water years).--
1946: June 3 (2 a.m.) 898 cfs (4.41 ft).
1947: May 30 (7 a.m.) 415 cfs (2.97 ft).
1948: May 14 (8 a.m.) 665 cfs (3.60 ft).
1949: July 30 (6 p.m.) 38 cfs (1.58 ft).
1950: June 27 (7:30 p.m.) 37 cfs (1.57 ft).

Remarks.--Water diverted from Post Brook into Wanaque Reservoir is included in records of daily discharge and observed monthly discharge. Records of diversion from Post Brook obtained by use of water-stage recorder and concrete control. Flow regulated by Greenwood Lake, 11 miles above station, and since 1928 by Wanaque Reservoir (capacity, 3,476,000,000 cubic feet) from which water is diverted for municipal supply.

Cooperation.--Water-stage recorder graphs and records of diversion from and change in contents in Wanaque Reservoir furnished by North Jersey District Water Supply Com-

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	16.9	522	415	28	15.7	38	17.5	282	18.8	16.9	33
2	38	16.9	390	296	27	15.7	40	17.5	580	21	16.9	33
3	a61	16.8	322	216	26	15.7	69	16.8	792	18.8	16.9	33
4	45	15.7	318	172	25	16.9	39	15.7	592	18.2	16.8	34
5	34	16.8	258	149	25	16.9	59	15.7	410	18.2	16.8	34
6	33	16.9	283	152	26	16.8	45	15.7	287	17.5	16.8	34
7	37	16.9	330	308	26	17.5	43	16.8	212	16.9	16.8	34
8	35	16.9	308	499	25	18.8	36	16.9	162	16.9	16.8	34
9	39	16.9	275	454	25	21	41	16.8	146	17.5	16.8	34
10	33	16.9	266	468	24	22	41	16.8	74	18.2	16.9	34
11	32	17.5	254	348	24	22	33	16.8	50	17.5	16.8	35
12	31	17.5	176	304	24	22	31	17.5	52	15.7	16.8	34
13	31	17.5	112	287	23	22	28	19.6	55	16.8	17.5	34
14	28	17.5	103	204	21	22	26	19.6	49	16.9	16.9	34
15	27	18.2	86	186	19.6	24	26	18.2	42	16.9	16.9	33
16	24	17.5	82	118	18.8	24	36	17.5	41	17.5	16.8	33
17	23	17.5	66	88	18.2	24	27	18.2	39	17.5	16.9	34
18	22	17.5	43	71	18.2	26	27	18.2	39	17.5	16.8	34
19	22	18.2	66	64	18.2	27	26	18.8	36	16.9	16.9	27
20	21	18.2	54	44	18.2	28	30	19.6	31	16.9	16.9	20
21	19.6	18.2	43	43	18.2	29	25	22	30	19.6	16.8	27
22	18.2	20	38	43	18.2	30	24	24	28	18.2	16.8	25
23	17.5	24	62	40	17.5	38	26	23	27	20	25	25
24	18.8	30	36	38	17.5	30	22	23	25	18.2	32	35
25	18.8	39	36	38	16.9	31	21	23	24	16.9	33	27
26	18.2	93	399	37	16.8	31	20	24	22	16.8	33	27
27	18.2	155	622	35	15.7	41	20	34	22	16.8	33	26
28	18.2	188	458	34	15.7	36	19.6	353	22	15.7	27	26
29	18.2	522	458	32	-------	35	18.8	610	21	16.8	27	25
30	17.5	729	376	31	-------	50	18.2	517	19.6	16.8	33	26
31	17.5	-------	395	31	-------	44	-------	372	-------	16.9	33	-------

a No gage-height record; discharge computed on basis of recorded range in stage.

Wanaque River at Wanaque--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19.7	16.6	16.0	16.6	16.6	16.6	17.8	19.1	180	17.4	19.7	16.6
2	19.7	16.6	16.6	16.6	16.6	17.8	17.8	18.5	138	25	19.1	16.6
3	19.7	17.2	16.0	16.6	16.6	17.2	17.8	18.5	126	19.7	19.1	16.6
4	19.7	17.2	16.0	16.6	17.2	16.6	17.8	19.1	71	16.6	19.1	16.0
5	19.7	17.2	15.3	16.6	17.2	17.2	28	19.7	50	16.6	19.1	17.2
6	19.1	17.8	15.3	16.6	17.2	17.2	19.7	19.1	49	16.6	22	16.6
7	19.7	17.8	15.3	16.6	16.6	17.2	18.5	19.1	47	a16.6	27	16.0
8	22	17.8	15.3	16.6	16.6	16.6	18.5	19.1	90	16.6	22	16.0
9	22	17.8	15.3	16.6	16.6	17.2	18.5	19.1	225	16.6	17.8	16.0
10	22	17.2	16.0	16.6	16.6	17.2	17.8	18.5	171	15.3	16.6	16.0
11	22	17.2	16.6	16.6	17.2	17.2	17.2	18.5	122	16.0	16.6	16.6
12	22	17.8	17.2	16.6	16.6	17.2	17.8	18.5	97	16.0	16.6	16.6
13	22	17.8	17.2	16.6	16.6	17.2	17.2	19.1	54	17.2	17.2	16.8
14	22	17.8	17.2	16.6	16.6	21	17.2	19.7	58	17.8	16.6	17.2
15	22	20	17.2	16.6	16.6	18.5	17.2	19.1	188	17.8	16.6	17.2
16	22	21	17.2	16.6	16.6	18.5	17.8	19.1	194	17.8	16.6	16.6
17	22	20	16.6	16.6	16.6	17.8	17.8	19.1	130	17.2	17.2	17.2
18	19.3	20	16.6	16.6	16.6	17.8	17.2	19.1	97	16.0	17.8	17.2
19	16.6	20	16.6	16.6	16.6	17.8	17.2	18.5	85	16.0	17.2	17.2
20	16.6	19.7	16.6	17.8	16.6	17.8	17.2	18.5	57	16.0	16.6	16.6
21	16.6	19.7	17.2	17.2	16.6	17.8	17.2	18.5	71	16.6	16.0	16.0
22	16.6	19.7	17.2	16.6	17.2	17.8	17.2	19.1	70	19.5	16.0	16.6
23	16.6	17.8	17.2	16.6	16.6	17.8	17.2	18.5	51	17.8	16.0	16.6
24	16.6	16.6	17.2	16.6	16.6	17.2	17.8	17.8	47	17.2	16.0	16.6
25	16.6	16.6	17.2	16.6	16.6	17.8	17.8	22	47	17.2	16.6	16.6
26	16.6	16.0	17.2	16.6	17.2	17.8	17.8	31	37	17.2	16.6	16.6
27	16.6	16.0	17.2	16.6	16.6	17.8	17.8	87	36	17.2	17.8	16.6
28	16.6	16.0	16.6	16.6	16.6	17.2	17.8	184	38	17.2	16.6	16.6
29	16.6	16.0	16.6	16.6	-------	17.2	17.2	228	34	17.8	16.0	17.2
30	16.0	16.0	16.6	16.6	-------	17.8	19.1	331	16.6	21	16.0	17.2
31	16.6	-------	16.6	17.2	-------	17.8	-------	248	-------	22	16.6	-------

a No gage-height record; discharge interpolated.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16.6	16.0	16.0	16.6	16.0	16.6	19.1	28	243	42	16.6	14.7
2	16.6	16.0	16.0	16.6	16.0	16.6	18.5	23	165	39	14.7	14.1
3	16.6	16.6	16.0	16.6	16.0	16.6	19.1	22	108	28	14.7	14.7
4	16.6	19.7	16.0	16.0	16.0	16.6	19.1	23	68	28	14.7	14.7
5	16.6	18.5	16.0	16.0	16.0	16.6	18.5	26	68	24	16.0	14.7
6	16.6	17.8	16.6	16.0	16.0	16.6	17.8	22	34	26	15.3	14.7
7	16.6	17.2	16.6	16.0	16.0	16.6	17.8	22	27	26	14.7	14.7
8	16.6	20	16.6	16.0	16.0	16.6	17.8	23	39	22	14.7	14.7
9	16.6	16.6	16.6	16.0	16.0	16.6	23	22	34	22	14.7	14.7
10	16.6	16.6	16.6	16.6	16.0	16.6	26	22	34	24	15.3	14.7
11	16.0	16.6	16.6	16.0	16.0	17.2	21	22	26	23	18.5	14.7
12	16.6	21	16.6	16.0	16.0	16.6	21	24	23	23	17.8	14.7
13	16.6	17.2	16.6	16.6	16.0	16.6	17.8	156	23	23	15.3	14.7
14	16.6	16.6	16.6	16.6	16.6	16.6	19.1	628	22	23	14.1	14.7
15	16.6	16.6	16.6	16.6	16.6	16.6	82	568	22	23	14.1	14.7
16	16.6	16.6	17.8	16.6	16.0	18.5	271	436	23	22	14.1	14.7
17	17.2	16.6	16.6	16.6	16.6	19.1	370	447	22	22	14.1	14.1
18	16.6	16.6	16.6	16.6	16.6	17.8	263	395	22	22	16.0	14.1
19	16.0	16.6	16.6	16.6	16.6	17.8	225	305	22	23	15.3	14.1
20	16.6	16.6	16.6	16.6	16.6	17.8	174	210	22	22	14.1	14.1
21	16.6	16.6	16.6	16.6	16.6	18.6	167	180	22	22	14.1	14.1
22	16.6	16.6	16.6	16.6	16.6	17.8	105	166	22	19.7	14.1	14.1
23	16.6	16.6	16.6	16.6	16.6	17.8	75	115	22	17.8	14.1	14.7
24	16.6	16.6	16.6	16.6	16.6	17.2	58	86	25	17.2	14.1	14.1
25	16.6	16.6	16.6	16.0	16.6	17.2	56	74	40	17.2	15.3	14.1
26	16.6	16.6	16.6	16.0	16.6	17.2	44	70	44	16.6	14.1	14.1
27	16.6	16.6	16.6	16.0	16.6	17.8	32	47	48	17.2	14.1	14.1
28	18.1	16.0	16.6	16.0	16.6	17.8	23	31	79	17.8	14.1	14.1
29	17.2	16.0	17.2	16.0	16.6	17.2	23	25	91	17.8	14.1	14.1
30	16.6	16.0	16.6	16.0	-------	17.2	28	185	62	17.8	14.1	14.1
31	16.0	-------	16.6	16.0	-------	17.2	-------	309	-------	17.8	13.5	-------

Wanaque River at Wanaque--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12.9	12.4	12.9	17.8	16.6	17.2	17.8	16.0	17.2	16.6	16.6	17.2
2	12.9	12.4	12.9	17.8	16.6	17.2	17.8	17.2	17.2	16.6	16.6	16.0
3	12.9	12.4	12.9	17.8	16.6	17.2	17.8	17.8	17.2	16.6	16.6	16.0
4	12.9	13.2	12.9	17.8	16.6	17.2	17.8	17.2	17.2	17.2	16.6	16.0
5	12.9	12.9	12.9	19.1	16.6	16.0	17.8	17.2	17.2	16.8	16.6	16.6
6	12.9	12.9	12.9	21	16.6	16.6	18.5	17.2	17.2	16.6	16.6	16.6
7	12.9	12.9	12.9	19.1	16.6	17.2	17.8	17.8	17.2	16.0	16.0	16.0
8	13.5	12.4	13.5	18.5	16.6	17.2	17.8	17.2	17.8	16.6	16.0	16.0
9	13.5	12.4	14.1	17.8	16.6	17.2	17.2	16.6	17.2	16.6	16.6	16.0
10	13.5	12.9	14.1	17.8	16.6	17.2	17.2	17.2	16.6	16.6	17.2	16.0
11	12.9	12.4	14.1	17.8	16.6	17.2	17.2	17.2	16.6	16.6	16.6	16.0
12	13.5	12.4	14.1	17.8	16.6	17.2	17.8	17.2	16.6	16.6	16.6	16.0
13	13.5	12.4	14.7	17.8	16.6	17.8	19.1	16.6	16.6	16.6	16.6	16.6
14	13.5	12.4	14.1	17.2	16.6	17.8	17.8	16.6	16.6	16.0	16.6	16.0
15	13.5	12.4	14.1	17.2	16.6	17.8	16.0	16.6	16.6	16.0	16.6	16.6
16	13.5	12.4	13.3	17.2	16.6	17.8	16.0	16.6	16.6	16.0	16.6	16.0
17	13.5	12.4	16.6	17.2	16.6	17.8	16.0	16.6	16.6	16.0	16.6	16.0
18	13.5	12.4	16.6	16.6	16.6	17.2	16.6	16.6	16.6	16.0	16.6	16.0
19	13.5	14.8	16.0	16.0	16.6	17.2	17.8	16.6	16.6	16.0	16.6	16.0
20	13.5	15.6	16.0	16.0	16.6	17.2	18.6	17.2	16.0	16.0	16.6	16.0
21	13.5	12.9	16.0	16.0	16.6	17.2	16.0	17.2	16.6	16.0	16.0	16.0
22	13.5	12.9	16.0	17.2	16.6	17.2	17.2	17.2	16.6	16.0	16.0	16.6
23	13.5	12.9	16.0	16.6	17.2	17.8	16.6	17.2	16.6	16.6	16.0	16.0
24	13.5	12.9	16.0	16.6	17.2	17.8	16.0	17.2	16.0	16.6	17.2	16.0
25	13.5	12.9	16.0	16.6	17.2	17.8	16.0	17.2	16.0	16.6	16.6	16.0
26	13.5	12.9	16.0	16.6	17.2	17.8	16.0	17.2	16.6	16.6	16.0	16.0
27	13.5	12.9	16.0	16.6	17.2	17.8	16.0	16.6	16.6	17.2	16.0	16.0
28	13.5	12.9	16.0	16.6	17.2	17.8	16.0	16.6	16.6	16.0	16.0	16.0
29	12.9	12.9	16.6	16.6	-------	17.8	16.0	16.6	16.6	16.0	16.0	16.6
30	12.9	12.9	22	16.6	-------	17.8	16.0	17.2	17.2	16.6	16.0	16.0
31	12.4	-------	22	16.6	-------	17.8	-------	17.2	-------	16.0	16.6	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14.6	16.4	14.6	0.7	0.7	3.4	3.0	3.4	4.6	15.2	16.4	17.1
2	14.6	17.1	9.6	.7	.9	3.4	3.0	3.4	3.8	15.2	17.1	17.1
3	14.6	16.4	1.5	.7	.9	3.4	3.0	3.4	3.4	15.2	16.4	17.1
4	14.6	17.1	.7	.7	.9	3.0	3.0	3.4	3.8	15.2	16.4	17.1
5	14.6	16.4	.7	.7	.9	3.0	3.0	3.8	3.8	15.8	16.4	17.1
6	14.6	16.4	.9	.7	.9	3.4	3.0	3.4	3.8	15.2	16.4	17.1
7	14.6	16.4	.9	.9	.9	3.4	3.0	3.4	3.8	15.2	16.4	17.1
8	14.6	16.4	.9	.9	.9	3.9	3.0	3.4	3.8	15.2	16.4	17.1
9	14.6	16.4	.9	.7	1.7	3.8	3.0	3.4	3.8	16.4	17.1	17.1
10	14.6	16.4	.9	1.1	1.4	3.4	3.0	3.4	3.8	16.4	16.4	17.1
11	14.6	16.4	.5	.9	1.4	3.0	3.0	3.4	3.8	15.2	16.4	17.1
12	14.6	16.4	.5	.9	1.1	3.0	3.0	3.4	11.1	16.4	16.4	17.1
13	14.6	17.1	.7	.9	1.1	3.0	3.0	3.4	16.4	16.8	16.4	17.1
14	14.6	17.1	.5	.7	2.0	3.0	3.0	3.4	14.6	15.8	16.4	17.1
15	15.2	16.4	.5	.7	3.4	3.0	3.0	3.4	15.2	15.8	16.4	17.1
16	15.2	16.4	.5	.7	3.4	3.0	3.0	3.4	15.2	15.2	17.1	17.1
17	14.6	17.1	.5	.7	3.4	3.4	3.0	3.4	14.6	15.2	16.4	17.1
18	14.6	16.4	.5	.7	3.4	3.4	3.0	3.8	14.6	15.2	16.4	17.1
19	14.6	16.4	.5	.7	3.4	3.0	3.0	3.8	14.6	15.2	16.4	17.1
20	15.2	16.4	.5	.7	3.4	3.0	3.4	3.8	14.6	15.2	18.0	17.1
21	15.8	16.4	.5	.7	3.4	4.3	3.4	3.4	15.2	15.2	17.1	17.1
22	16.4	16.4	.5	.7	3.4	3.8	3.4	3.4	15.2	15.8	16.4	17.1
23	16.4	16.4	.5	.7	3.4	7.3	3.0	3.8	16.4	15.2	17.1	17.1
24	16.4	16.4	.7	.9	3.4	4.3	3.0	4.3	16.4	15.2	16.4	17.1
25	15.8	17.1	.9	.9	3.4	3.8	3.0	3.8	16.4	15.2	16.4	17.1
26	16.4	16.4	1.1	.9	3.4	3.4	3.4	3.8	16.4	15.2	16.4	17.1
27	16.4	16.4	1.4	.7	3.4	2.6	3.8	3.4	17.3	15.8	16.4	17.1
28	15.8	15.8	.9	.7	3.4	3.0	3.8	3.4	15.2	16.4	16.4	17.1
29	15.8	16.4	.9	.7	-------	3.0	3.4	3.4	15.2	16.4	18.1	17.1
30	15.8	15.8	.9	.7	-------	3.0	3.4	3.4	15.2	16.4	17.7	17.1
31	15.8	-------	.9	.7	-------	3.0	-------	3.4	-------	16.4	17.1	-------

Wanaque River at Wanaque--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	853.7	61	17.5	27.5	87.9	0.972	1.12
November	2,161.9	729	15.7	72.1	294	3.25	3.63
December	7,232	622	36	233	364	4.03	4.64
Calendar year 1945	23,460.7	1,450	4.5	64.2	249	2.75	37.34
January 1946	5,245	499	31	169	248	2.74	3.16
February	596.2	28	15.7	21.3	89.9	.994	1.04
March	812.5	50	15.7	26.2	219	2.42	2.80
April	955.6	69	18.2	31.9	91.8	1.02	1.13
May	2,372.7	610	15.7	76.5	231	2.22	3.71
June	4,212.6	792	19.6	140	192	2.12	2.37
July	542.3	21	15.7	17.5	151	1.67	1.93
August	641.2	33	16.3	20.7	44.5	.492	.57
September	924	35	20	30.8	90.6	1.00	1.12
Water year 1945-46	26,549.7	792	15.7	72.7	181	2.00	27.22
October 1946	591.8	22	16.0	19.1	93.5	1.02	1.19
November	534.9	21	16.0	17.8	49.0	.542	.60
December	512.9	17.2	15.3	16.5	64.7	.716	.82
Calendar year 1946	17,941.7	792	15.3	49.2	136	1.50	20.45
January 1947	517.0	17.8	16.6	16.7	183	2.02	2.34
February	468.4	17.2	16.6	16.7	140	1.55	1.62
March	545.6	21	16.6	17.6	347	3.84	4.42
April	537.9	23	17.2	17.9	327	3.62	4.04
May	1,578.9	331	17.3	50.9	417	4.61	5.32
June	2,676.6	225	16.6	89.2	198	2.13	2.38
July	545.5	25	15.3	17.6	135	1.49	1.73
August	550.7	27	16.0	17.8	26.4	.292	.34
September	501.2	18.0	16.0	16.7	2.26	.025	.03
Water year 1946-47	9,561.4	331	15.3	26.2	165	1.83	24.84
October 1947	515.5	18.1	16.0	16.6	15.4	.170	.20
November	510.2	21	16.0	17.0	264	2.92	3.26
December	513.4	17.8	16.0	16.6	124	1.37	1.59
Calendar year 1947	9,460.9	331	15.3	25.9	181	2.00	27.27
January 1948	505.6	16.6	16.0	16.3	107	1.18	1.37
February	473.0	16.6	16.0	16.3	209	2.31	2.49
March	533.6	19.1	16.6	17.2	491	5.43	6.26
April	2,267.6	370	17.8	75.6	290	3.21	3.58
May	4,707	628	22	152	318	3.52	4.05
June	1,502	243	22	50.1	187	2.07	2.31
July	695.9	42	16.6	22.4	48.9	.541	.62
August	460.5	18.5	13.5	14.9	8.92	.099	.11
September	432.6	14.7	14.1	14.4	-13.4	-.148	-.17
Water year 1947-48	12,116.9	628	13.5	33.8	171	1.89	25.67
October 1948	411.4	13.5	12.4	13.3	7.54	.083	.10
November	385.4	15.6	12.4	12.8	54.1	.598	.67
December	472.2	22	12.9	15.2	268	2.96	3.42
Calendar year 1948	12,846.8	628	12.4	35.1	165	1.83	24.81
January 1949	527.9	21	16.0	17.4	436	4.82	5.56
February	468.4	17.2	16.6	16.7	255	2.82	2.94
March	539.8	17.8	16.0	17.4	162	1.79	2.07
April	510.2	19.1	16.0	17.0	252	2.79	3.11
May	526.6	17.8	16.0	17.0	153	1.69	1.95
June	502.8	17.8	16.0	16.8	7.42	.082	.09
July	509.2	17.8	16.0	16.4	21.7	.240	.28
August	509.8	17.2	16.0	16.4	-2.10	-.023	-.03
September	484.8	17.2	16.0	16.2	15.9	.176	.20
Water year 1948-49	5,858.5	22	12.4	16.1	136	1.50	20.36
October 1949	470.6	16.4	14.6	15.2	15.9	.176	.20
November	495.0	17.1	15.8	16.5	27.6	.305	.34
December	46.0	14.6	.5	1.48	76.3	.844	.97
Calendar year 1949	5,601.1	21	.5	15.3	118	1.31	17.68
January 1950	23.7	1.1	.7	.76	120	1.33	1.53
February	63.3	3.4	.7	2.26	210	2.32	2.42
March	106.4	7.3	2.6	3.43	403	4.46	5.13
April	94.0	5.8	3.0	3.13	180	1.99	2.22
May	109.1	4.3	3.4	3.52	221	2.44	2.82
June	332.0	17.3	3.4	11.1	132	1.46	1.63
July	483.7	16.4	15.2	15.6	81.8	.905	1.04
August	517.2	18.1	16.4	16.7	20.7	.229	.26
September	513.0	17.1	17.1	17.1	6.47	.072	.08
Water year 1949-50	3,254.0	18.1	.5	8.92	124	1.37	18.64

* Adjusted for diversion from Wanaque Reservoir, for diversion from Post Brook into reservoir, and for change in contents in Wanaque Reservoir and Greenwood Lake. Negative figures indicate that evaporation and seepage from lakes exceeded inflow.

Ramapo River near Mahwah

Location.--Lat 41°05'51", long 74°09'43", on left bank 350 ft downstream from State Highway 17, three-quarters of a mile downstream from Mahwah River and 1 mile west of Mahwah, Bergen County.

Drainage area.--118 sq mi.

Records available.--February 1903 to December 1906, September 1922 to September 1950.

Gage.--Water-stage recorder. Datum of gage is 253.10 ft above mean sea level, datum of 1929. Prior to Dec. 31, 1906, chain gage on former bridge at site 250 ft downstream at different datum. Sept. 1, 1922, to Dec. 23, 1936, water-stage recorder just below former bridge at present datum.

Average discharge.--28 years (1922-50), 208 cfs.

Extremes.--1903-6, 1922-50: Maximum discharge, about 12,400 cfs Oct. 9, 1903 (gage height, 9.8 ft, site and datum then in use); maximum gage height, 10.4 ft (present datum), Sept. 22, 1938; minimum discharge, 7 cfs Dec. 16, 1930, Sept. 12, 1932; minimum daily, 8 cfs Aug. 25, 1929, Sept. 5, 12, 1932.

Peak discharge (base, 1,400 cfs).--
1946: Nov. 30 (1:30 a.m.) 1,510 cfs (6.98 ft); Dec. 26 (3 to 4 p.m.) 1,560 cfs (7.07 ft); May 28 (7 a.m.) 1,920 cfs (7.52 ft).
1947: Mar. 15 (2 to 4 a.m.) 2,050 cfs (7.65 ft); Apr. 6 (3 to 4 a.m.) 1,760 cfs (7.34 ft).
1948: Mar. 17 (10 p.m.) 1,830 cfs (7.42 ft).
1949: Dec. 31 (10:30 a.m.) 4,200 cfs (9.18 ft); Jan. 6 (1:30 p.m.) 2,260 cfs (7.85 ft).
1950: Mar. 23 (12 p.m.) 1,290 cfs (6.54 ft), (annual maximum below base).

Remarks.--Diurnal fluctuation at low flow caused by powerplants above station.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	188	95	934	668	161	*135	204	102	375	75	88	40
2	178	86	692	496	139	146	208	95	792	183	82	40
3	180	79	569	419	118	178	222	89	1,220	125	75	42
4	155	88	496	370	b95	271	198	72	811	74	76	37
5	132	88	446	352	*96	340	188	86	563	70	71	34
6	135	74	465	419	110	360	170	83	468	60	65	29
7	278	82	766	*914	229	368	163	85	380	52	83	31
8	285	79	910	1,220	168	414	151	115	313	54	94	36
9	239	78	748	902	135	446	166	114	256	50	82	32
10	229	71	610	837	123	401	155	98	210	47	68	34
11	190	104	516	668	117	318	141	89	186	44	71	35
12	172	170	*411	569	112	269	130	116	239	47	70	26
13	161	176	358	504	112	248	125	237	218	43	73	32
14	144	164	342	401	168	243	120	190	180	39	110	34
15	139	263	320	352	212	321	115	301	163	42	75	35
16	135	267	294	287	132	454	114	269	146	39	65	41
17	125	216	b237	254	122	362	106	246	127	37	62	38
18	118	198	b233	241	112	315	101	454	128	38	83	40
19	112	212	224	229	100	278	98	427	150	40	107	34
20	106	479	239	b186	b103	250	95	342	120	39	127	30
21	100	432	224	186	b102	231	90	303	114	90	95	40
22	96	806	212	192	b100	214	81	301	106	360	74	55
23	92	1,110	194	172	b102	198	83	237	95	963	62	55
24	107	727	b193	163	104	182	81	200	90	962	56	280
25	127	530	190	164	98	243	78	180	76	470	48	523
26	134	427	1,360	161	92	256	107	164	71	274	54	214
27	134	358	1,230	150	98	435	127	829	66	194	44	128
28	115	335	770	130	123	345	137	1,790	61	141	44	94
29	109	1,150	619	128	-------	283	122	1,190	75	118	41	75
30	101	1,360	545	127	-------	254	109	698	89	102	48	404
31	96	-------	632	150	-------	227	-------	488	-------	85	42	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Ramapo River near Mahwah--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	513	79	58	100	365	114	212	917	335	161	117	40
2	271	78	60	110	283	164	272	891	287	198	98	46
3	190	63	51	109	235	380	504	723	256	176	92	66
4	151	67	56	104	248	313	398	720	231	137	81	58
5	127	62	51	101	325	256	647	985	198	114	81	65
6	112	66	52	110	265	241	1,590	938	178	98	75	65
7	104	61	47	96	233	265	1,040	709	174	90	72	68
8	86	70	50	98	222	263	713	584	358	202	72	64
9	78	65	57	90	b190	241	578	460	539	258	94	63
10	75	67	52	83	b200	237	499	385	328	188	241	61
11	72	71	54	81	176	243	417	335	248	151	128	63
12	94	75	56	89	164	267	388	296	206	128	98	58
13	184	81	63	100	157	303	362	267	166	112	123	54
14	146	70	58	98	148	1,270	306	313	206	101	125	58
15	122	67	57	128	153	1,470	280	342	460	117	84	63
16	109	56	58	214	164	1,220	265	269	350	161	90	75
17	88	61	52	222	172	841	271	239	252	200	166	61
18	89	67	*50	202	159	619	239	252	218	315	108	66
19	104	62	48	180	150	499	216	265	202	283	84	68
20	104	62	46	317	130	427	214	358	202	358	75	72
21	100	62	98	584	*128	378	218	414	340	260	78	92
22	85	70	174	393	155	338	239	510	241	846	72	106
23	78	79	141	283	b145	301	204	488	194	1,060	57	106
24	74	63	123	248	132	287	186	383	196	586	58	101
25	72	71	104	243	132	398	188	448	290	362	63	101
26	78	63	104	250	128	440	233	1,190	246	265	52	94
27	100	72	79	315	125	325	206	803	250	212	45	94
28	96	60	78	294	115	283	192	548	216	184	53	94
29	92	68	102	248	-------	258	170	460	222	178	50	94
30	85	55	144	216	-------	254	189	569	194	148	45	90
31	79	-------	117	328	-------	231	-------	424	-------	130	44	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	88	65	135	a120	b80	306	764	157	404	208	46	30
2	87	60	128	a140	b80	311	837	141	325	170	47	28
3	86	55	128	a140	95	313	572	127	265	137	44	28
4	53	79	130	a135	95	274	465	123	235	116	42	31
5	47	95	128	a130	95	237	388	175	204	105	53	28
6	42	84	134	128	92	218	350	252	184	133	89	28
7	46	64	132	134	b86	235	315	216	197	159	76	36
8	45	447	174	127	b82	252	283	285	404	123	56	35
9	41	902	206	127	b80	250	256	216	278	101	50	34
10	44	393	*151	127	b78	303	222	186	254	92	45	33
11	52	210	148	120	b80	360	210	164	208	78	42	31
12	82	991	141	128	87	296	372	227	196	68	58	30
13	79	794	132	132	86	267	388	690	252	182	66	29
14	79	422	120	127	138	252	514	811	276	621	59	28
15	81	306	118	102	212	265	934	594	231	264	48	27
16	82	267	310	101	202	681	709	479	164	159	42	27
17	74	265	299	108	256	1,680	545	542	135	122	39	25
18	40	246	218	99	411	1,520	422	530	118	106	37	26
19	40	220	192	b90	513	1,230	365	449	175	112	37	24
20	36	206	164	94	709	1,250	330	370	424	104	40	27
21	41	196	146	102	727	1,240	301	355	278	97	38	25
22	38	188	151	108	557	1,310	269	345	192	86	43	26
23	38	218	150	104	446	1,120	241	301	248	87	44	25
24	35	202	148	88	372	930	216	250	332	81	41	25
25	36	258	a140	102	340	741	229	252	325	73	38	26
26	38	214	a110	b110	368	610	220	299	243	69	38	22
27	27	182	a130	110	348	575	202	237	196	58	34	25
28	34	164	a150	105	370	629	172	200	243	58	34	24
29	61	157	a140	95	338	468	159	178	342	55	31	25
30	57	148	a130	b88	-------	417	151	511	256	51	30	25
31	63	-------	a120	b82	-------	391	-------	551	-------	49	33	-------

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of recorded range in stage and records for station at Pompton Lakes.
b Stage-discharge relation affected by ice.

Ramapo River near Mahwah--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	19	68	1,980	411	299	178	215	114	28	22	25
2	27	21	61	1,040	350	260	168	293	102	29	21	22
3	24	28	59	672	294	239	151	632	100	27	26	21
4	29	40	57	496	287	223	143	474	89	26	42	20
5	36	40	55	586	278	233	138	348	86	32	47	20
6	24	33	54	2,020	250	318	256	323	90	32	32	21
7	23	39	55	1,450	256	311	292	499	81	46	30	19.3
8	28	42	53	899	278	256	231	422	70	39	25	21
9	32	46	54	632	263	231	203	318	64	31	25	19.3
10	27	44	54	502	283	227	178	325	62	32	25	18.6
11	30	49	51	422	254	248	160	306	59	33	22	18.6
12	30	45	50	355	213	265	151	246	57	32	22	18.6
13	26	45	48	306	211	227	151	217	56	38	22	55
14	23	39	48	274	271	203	292	199	54	38	24	82
15	23	34	48	239	350	187	263	197	53	32	24	95
16	23	36	50	217	385	167	213	176	50	31	24	79
17	19	34	59	215	352	160	182	156	49	32	24	72
18	24	31	70	201	292	156	195	141	48	39	22	73
19	42	36	70	211	269	153	746	131	50	41	23	73
20	47	79	75	201	358	148	616	186	48	32	23	69
21	48	84	75	178	362	151	432	401	47	30	21	67
22	46	87	70	422	313	180	378	276	37	27	18.6	68
23	38	78	69	446	462	297	619	352	28	24	20	76
24	31	77	63	391	398	318	551	280	22	22	20	69
25	25	64	59	427	352	235	422	231	25	23	19.3	68
26	31	59	57	380	340	223	355	193	35	22	19.3	64
27	29	58	51	345	292	211	325	205	32	22	18.6	65
28	23	57	50	545	283	199	292	172	32	20	18.6	67
29	23	63	63	723	-------	174	250	153	33	22	40	74
30	23	73	1,380	519	-------	162	227	136	30	22	32	93
31	23	-------	3,690	424	-------	168	-------	124	-------	25	28	-------

Note.--Backwater from moss and leaves July 1 to Sept. 30.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	72	42	31	95	146	155	427	260	332	52	55	57
2	63	36	31	89	166	150	383	287	417	47	54	49
3	67	35	30	93	193	b130	370	246	335	49	59	48
4	63	30	26	96	167	b120	440	219	338	53	64	48
5	59	25	32	89	151	125	391	246	292	56	55	42
6	64	21	30	93	146	141	340	256	229	89	50	38
7	58	22	28	141	139	139	283	227	187	81	47	36
8	58	24	28	130	127	195	254	187	160	63	42	33
9	57	22	26	104	177	869	235	167	131	53	39	32
10	55	24	25	125	278	610	225	160	118	81	37	44
11	55	22	26	*176	267	422	209	171	122	155	28	63
12	48	21	32	146	258	375	195	150	112	158	26	64
13	38	25	74	135	250	428	182	146	97	199	25	69
14	35	42	90	138	260	368	184	131	92	596	25	112
15	34	37	81	131	330	330	199	125	155	302	25	99
16	28	33	54	127	393	*315	184	114	178	199	25	78
17	32	30	50	112	355	283	167	116	160	167	29	76
18	31	27	50	110	313	285	156	150	143	150	27	78
19	29	25	52	112	285	250	148	294	104	144	32	68
20	30	26	53	95	237	239	186	306	93	120	112	72
21	29	25	50	82	b200	361	280	250	100	120	92	72
22	30	25	48	85	209	443	225	201	82	106	65	70
23	32	24	*53	92	211	930	189	172	77	88	57	63
24	30	23	65	92	201	1,160	187	316	85	76	48	65
25	33	24	58	119	199	922	182	443	153	78	44	72
26	57	23	57	113	182	734	223	391	114	72	40	62
27	36	22	162	120	b160	692	229	365	86	64	38	56
28	29	*22	225	103	b150	724	229	285	70	59	36	62
29	27	27	176	116	-------	822	219	348	61	65	39	63
30	25	32	128	136	-------	668	203	454	59	67	65	62
31	46	-------	104	150	-------	510	-------	345	-------	59	65	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Backwater from leaves and grass Oct. 1 to Dec. 27, June 8 to July 13.

Ramapo River near Mahwah--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	4,612	285	92	149	1.26	1.45
November	10,304	1,360	71	343	2.91	3.25
December	15,979	1,360	190	515	4.36	5.04
Calendar year 1945	124,344	3,050	49	341	2.89	39.19
January 1946	12,011	1,220	127	387	3.28	3.79
February	3,483	229	92	124	1.05	1.10
March	8,985	454	135	290	2.46	2.83
April	3,985	222	78	133	1.13	1.26
May	9,990	1,790	72	322	2.73	3.15
June	7,888	1,220	61	263	2.23	2.49
July	4,957	963	37	160	1.36	1.56
August	2,235	127	41	72.1	.611	.70
September	2,568	523	26	85.6	.725	.81
Water year 1945-46	86,997	1,790	26	238	2.02	27.43
October 1946	3,758	513	72	121	1.03	1.18
November	2,013	81	55	67.1	.569	.63
December	2,340	174	46	75.5	.640	.74
Calendar year 1946	64,213	1,790	26	176	1.49	20.24
January 1947	6,034	584	81	195	1.65	1.90
February	5,199	365	115	186	1.58	1.64
March	13,126	1,470	114	423	3.58	4.14
April	11,438	1,590	170	381	3.23	3.60
May	16,485	1,190	239	523	4.51	5.20
June	7,783	539	166	259	2.19	2.45
July	7,779	1,060	90	251	2.13	2.45
August	2,721	241	44	87.8	.744	.86
September	2,206	106	40	73.5	.623	.70
Water year 1946-47	80,882	1,590	40	222	1.88	25.49
October 1947	1,692	88	27	54.6	.463	.53
November	8,098	991	55	270	2.29	2.55
December	4,803	310	110	155	1.31	1.51
Calendar year 1947	87,364	1,590	27	239	2.03	27.53
January 1948	3,503	140	82	113	.958	1.10
February	7,423	727	78	256	2.17	2.34
March	18,931	1,680	218	611	5.18	5.97
April	11,401	934	151	380	3.22	3.59
May	10,213	811	123	329	2.79	3.22
June	7,584	424	118	253	2.14	2.39
July	3,924	621	49	127	1.08	1.24
August	1,420	89	30	45.8	.388	.45
September	833	36	22	27.8	.236	.26
Water year 1947-48	79,825	1,680	22	218	1.85	25.15
October 1948	903	48	19	29.1	.247	.28
November	1,475	87	19	49.2	.417	.46
December	6,766	3,690	48	218	1.85	2.13
Calendar year 1948	74,376	3,690	19	203	1.72	23.43
January 1949	17,718	2,020	178	572	4.85	5.58
February	8,707	462	211	311	2.64	2.74
March	6,824	318	148	220	1.86	2.15
April	8,753	746	138	292	2.47	2.76
May	8,327	632	124	269	2.28	2.62
June	1,698	114	22	56.6	.480	.54
July	929	46	20	30.0	.254	.29
August	780.4	47	18.6	25.2	.214	.25
September	1,553.4	95	18.6	51.8	.439	.49
Water year 1948-49	64,433.8	3,690	18.6	177	1.50	20.29
October 1949	1,350	72	25	43.5	.369	.43
November	816	42	21	27.2	.231	.26
December	1,975	225	25	63.7	.540	.62
Calendar year 1949	59,430.8	2,020	18.6	163	1.38	18.73
January 1950	3,545	176	82	114	.966	1.12
February	6,150	393	127	220	1.86	1.94
March	13,905	1,160	120	449	3.81	4.38
April	7,324	440	148	244	2.07	2.31
May	7,528	454	114	243	2.06	2.37
June	4,682	417	59	156	1.32	1.48
July	3,668	596	47	118	1.00	1.16
August	1,445	112	25	46.6	.395	.46
September	1,853	112	32	61.8	.524	.58
Water year 1949-50	54,241	1,160	21	149	1.26	17.11

Ramapo River at Pompton Lakes

Location.--Lat 40°59'20", long 74°16'48", on right end of dam at pumping station in borough of Pompton Lakes, Passaic County, 1½ miles upstream from mouth.

Drainage area.--160 sq mi.

Records available.--October 1921 to September 1950.

Gage.--Water-stage recorder and concrete dam. Datum of gage is 201.08 ft above mean sea level, datum of 1929.

Average discharge.--29 years, 284 cfs

Extremes.--1921-50: Maximum discharge, 12,300 cfs Mar. 12, 1936 (gage height, 3.56 ft), from rating curve extended above 2,000 cfs by computation of flow over dam; practically no flow for several days in October, November 1922, August, September 1923, July 1927, and on Oct. 20, 1933.

Peak discharge (base, 1,600 cfs).--
1946: Nov. 30 (10 p.m.) 1,860 cfs (1.36 ft); May 28 (8 a.m. to 12 m.) 2,520 cfs (1.64 ft); June 3 (1 to 8 a.m.) 1,810 cfs (1.34 ft).
1947: Mar. 15 (6 to 10 a.m.) 2,540 cfs (1.65 ft); Apr. 6 (5 a.m.) 2,420 cfs (1.61 ft); May 26 (12 m.) 1,760 cfs (1.33 ft).
1948: Nov. 12 (1 p.m.) 1,690 cfs (1.29 ft); Mar. 18 (1 to 5 a.m.) 2,360 cfs (1.58 ft).
1949: Dec. 31 (2 p.m.) 5,520 cfs (2.65 ft); Jan. 6 (7 to 9 p.m.) 2,980 cfs (1.82 ft).
1950: Mar. 24 (2 to 4 a.m.) 1,780 cfs (1.32 ft).

Remarks.--Figures of discharge include flow over spillway and through head gates. Powerplant not operated since 1939. Slight regulation by Pompton Lakes.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	247	131	1,270	904	221	186	289	158	541	119	119	61
2	211	131	921	667	203	203	289	144	1,040	270	119	52
3	220	125	742	568	172	221	321	131	1,700	221	113	56
4	202	125	637	501	147	353	289	125	1,200	131	107	52
5	180	125	581	462	144	462	267	119	805	107	101	48
6	187	119	581	501	158	501	248	131	667	101	90	45
7	329	113	838	965	267	501	230	131	541	96	115	42
8	397	113	1,030	1,490	248	541	221	158	450	80	137	42
9	319	113	a880	1,210	203	595	230	165	364	80	113	42
10	308	113	a720	1,100	179	568	230	151	300	80	101	42
11	256	131	a620	904	172	462	203	131	267	75	101	42
12	229	203	a515	772	165	376	194	157	332	75	96	39
13	220	239	a460	682	158	343	186	300	321	75	111	30
14	202	230	425	555	203	332	179	267	267	65	165	32
15	187	289	413	475	289	413	172	425	230	61	125	37
16	187	343	364	389	194	622	172	401	212	61	101	39
17	180	289	289	343	179	514	158	364	186	61	108	45
18	173	257	289	321	165	438	158	712	179	56	165	45
19	166	257	278	311	158	376	151	667	203	52	181	45
20	159	541	289	248	165	343	144	514	186	56	212	42
21	152	568	289	248	169	311	137	438	158	91	151	55
22	145	826	a280	248	156	300	131	438	158	306	119	75
23	145	1,330	a265	*230	165	267	125	364	151	1,100	101	70
24	152	973	a280	221	158	248	125	300	137	1,290	90	448
25	173	697	a260	221	151	321	119	267	125	687	85	959
26	187	555	a1,800	212	144	353	158	257	113	389	75	400
27	179	462	1,720	203	144	652	186	1,140	107	267	75	230
28	165	425	1,080	194	172	527	186	2,420	113	212	70	165
29	151	1,170	838	186	-------	425	179	1,770	119	158	65	137
30	144	1,770	742	179	-------	364	165	1,030	131	144	65	472
31	131	-------	805	221	-------	321	-------	697	-------	125	65	-------

a No gage-height record; discharge computed on basis of recorded range in stage, weather records, and records for station near Mahwah.
* Winter discharge measurement made on this day.

Ramapo River at Pompton Lakes--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	715	122	87	148	472	155	275	942	472	218	162	55
2	428	128	87	141	386	217	323	1,130	410	245	141	55
3	281	116	77	148	318	606	634	934	361	236	122	59
4	233	110	82	155	318	511	552	868	329	191	116	83
5	197	110	82	141	422	410	1,110	1,130	286	162	104	83
6	175	99	77	148	361	373	2,290	1,220	254	141	93	88
7	154	104	77	134	318	398	1,540	952	254	122	93	88
8	134	110	72	134	297	410	988	769	511	210	93	83
9	122	116	77	134	254	361	786	619	884	318	104	78
10	116	110	82	122	264	361	679	524	552	254	218	73
11	116	110	82	122	245	361	565	447	386	209	183	73
12	134	122	82	122	227	386	511	386	318	176	128	73
13	242	122	87	128	209	447	484	350	264	155	110	73
14	224	116	93	134	209	1,500	410	422	275	141	162	73
15	175	110	82	162	200	2,440	373	511	634	134	116	73
16	161	98	77	275	209	1,690	350	398	538	176	104	88
17	134	93	82	308	227	1,150	373	350	386	236	176	83
18	128	98	77	286	218	852	340	350	318	373	155	73
19	147	98	77	254	200	664	297	386	308	340	110	78
20	147	93	72	410	183	578	286	552	264	350	116	83
21	140	93	125	769	162	511	286	606	410	350	110	93
22	128	104	236	565	209	459	297	739	350	892	98	110
23	122	116	209	410	191	410	286	724	275	1,340	87	122
24	116	116	176	350	176	373	254	578	245	835	77	116
25	110	98	162	329	176	472	245	621	373	498	62	110
26	122	98	141	329	176	565	297	1,650	350	361	67	110
27	134	104	128	386	176	435	286	1,220	297	286	62	110
28	140	104	122	398	169	373	254	818	286	245	58	110
29	134	98	134	340	-------	340	227	649	264	218	58	104
30	134	98	176	297	-------	318	227	754	254	200	53	110
31	128	-------	162	373	-------	297	-------	619	-------	169	53	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	100	84	177	177	130	473	963	246	579	319	68	42
2	105	84	163	201	140	460	1,220	228	473	255	68	42
3	100	79	156	201	160	499	853	210	387	219	63	42
4	89	109	156	192	160	460	680	210	351	184	59	42
5	65	162	156	177	150	387	566	246	309	170	70	41
6	60	129	163	170	140	362	512	374	287	170	129	41
7	60	105	163	177	135	362	460	330	295	237	111	41
8	60	481	184	170	130	362	423	436	755	201	94	40
9	56	1,160	246	170	130	374	387	362	485	163	78	40
10	52	613	201	177	130	448	341	298	460	142	68	39
11	56	319	177	156	135	579	309	276	374	129	63	38
12	74	1,330	177	163	150	499	473	305	319	117	99	38
13	89	1,120	170	184	170	448	579	1,030	374	111	117	37
14	94	620	156	184	228	436	653	1,300	411	634	99	37
15	94	448	149	156	298	436	1,260	935	374	399	78	36
16	89	362	325	149	298	864	1,040	725	298	287	68	36
17	94	341	411	156	298	2,160	787	787	287	177	63	35
18	79	287	298	149	512	2,160	620	755	210	156	54	35
19	60	265	255	130	665	1,660	539	635	246	163	54	34
20	52	255	210	150	819	1,560	485	539	590	163	54	34
21	46	228	192	160	935	1,600	448	499	473	142	54	34
22	49	228	184	160	770	1,640	399	485	330	135	59	33
23	49	255	184	140	607	1,500	362	436	341	123	78	33
24	46	255	184	120	499	1,200	330	374	499	123	63	32
25	43	341	177	130	460	989	319	374	579	105	55	32
26	46	298	156	140	473	819	330	448	411	94	52	32
27	46	246	156	150	473	770	309	374	330	88	49	31
28	50	219	210	140	512	885	276	319	374	83	47	31
29	94	201	192	135	499	680	246	287	460	78	48	31
30	89	192	177	130	-------	593	237	536	387	73	44	31
31	79	-------	177	125	-------	553	-------	770	-------	68	43	-------

Ramapo River at Pompton Lakes--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	32	105	3,280	579	411	246	298	170	28	25	39
2	30	30	88	1,530	499	362	237	361	156	26	25	39
3	30	28	83	935	411	330	219	953	149	25	25	39
4	30	49	83	680	399	309	210	770	142	25	36	38
5	29	59	78	704	374	309	201	553	129	26	55	38
6	29	50	78	2,580	351	411	355	460	129	32	62	38
7	29	50	73	2,240	341	423	448	607	123	50	53	38
8	28	50	78	1,280	374	485	351	607	105	50	46	37
9	30	50	73	885	374	319	309	460	99	43	46	37
10	38	59	73	695	399	309	265	436	94	40	45	37
11	38	63	68	579	374	330	237	448	94	43	45	37
12	40	59	68	499	319	362	228	362	88	40	45	37
13	39	59	63	423	298	319	219	319	83	46	44	36
14	37	54	63	374	341	276	387	287	83	46	44	36
15	32	54	63	330	448	255	399	276	78	46	44	75
16	30	46	73	298	485	237	330	255	73	43	43	105
17	27	46	78	287	473	219	276	228	73	46	43	99
18	27	46	88	276	411	219	287	210	73	50	43	93
19	28	46	99	287	362	210	928	192	73	54	43	98
20	44	97	94	287	448	201	953	201	68	43	42	88
21	51	117	94	265	499	210	665	460	63	37	42	83
22	51	111	94	578	436	237	539	399	59	32	42	88
23	51	123	88	665	635	399	853	473	43	28	41	103
24	47	111	88	566	579	473	836	423	32	25	41	97
25	36	94	78	593	499	374	650	330	26	25	41	87
26	31	83	68	553	473	319	512	276	28	25	41	87
27	45	83	68	485	423	309	473	276	35	25	40	82
28	74	83	63	697	399	287	423	255	32	25	40	87
29	40	94	79	1,010	-------	255	351	219	30	25	40	107
30	35	99	1,190	755	-------	228	319	201	30	25	40	150
31	32	-------	4,770	607	-------	228	-------	177	-------	25	39	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	113	81	50	149	202	202	563	340	483	93	78	83
2	102	71	50	142	229	194	509	409	603	78	74	74
3	91	66	50	142	286	166	483	361	509	78	83	69
4	91	66	50	149	256	166	549	319	509	88	93	65
5	90	52	47	142	229	166	522	340	458	86	78	58
6	90	46	50	136	211	180	458	361	351	109	74	52
7	90	43	50	184	194	180	384	329	286	126	69	50
8	90	43	47	191	173	221	340	275	247	103	65	47
9	85	40	44	156	238	883	319	247	211	88	61	43
10	85	37	47	177	397	797	297	238	180	110	58	51
11	79	39	44	253	409	563	286	238	166	207	55	93
12	79	37	47	226	384	470	275	229	166	225	43	109
13	69	37	103	199	361	563	256	211	145	209	40	109
14	60	61	146	199	384	495	247	194	139	710	40	144
15	60	70	127	199	470	446	256	180	187	488	40	135
16	49	61	98	184	589	421	247	180	247	280	40	117
17	43	56	82	163	522	397	229	166	220	234	40	105
18	45	52	82	163	470	384	211	194	202	192	40	99
19	45	48	82	163	421	351	202	372	166	185	40	99
20	48	45	87	142	361	329	238	446	145	164	111	99
21	48	45	82	130	263	451	372	372	139	157	150	105
22	48	39	82	130	297	645	340	297	133	144	98	99
23	48	39	82	130	286	1,380	275	256	121	126	83	94
24	48	39	92	136	275	1,620	265	383	121	114	74	88
25	44	42	92	156	275	1,240	256	576	159	114	65	88
26	83	37	87	163	247	999	286	522	159	109	58	94
27	87	37	221	163	202	929	319	509	127	98	55	83
28	63	37	355	156	202	912	329	409	109	93	52	83
29	54	39	280	163	-------	1,020	319	458	93	71	52	83
30	50	45	205	184	-------	879	297	617	88	83	61	83
31	63	-------	160	199	-------	690	-------	522	-------	83	88	-------

Ramapo River at Pompton Lakes--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	6,283	397	131	203	1.27	1.46
November	12,763	1,770	113	425	2.66	2.97
December	20,501	1,800	260	661	4.13	4.77
Calendar year 1945	169,714	5,880	87	465	2.91	39.45
January 1946	15,731	1,490	179	507	3.17	3.66
February	5,049	289	144	180	1.12	1.17
March	12,439	652	186	401	2.51	2.89
April	5,842	321	119	195	1.22	1.36
May	14,472	2,420	119	467	2.92	3.36
June	11,303	1,700	107	377	2.36	2.63
July	6,691	1,290	52	216	1.35	1.56
August	3,441	212	65	111	.694	.80
September	3,889	959	30	130	.812	.90
Water year 1945-46	118,404	2,420	30	324	2.02	27.53
October 1946	5,571	715	110	180	1.12	1.29
November	3,214	128	93	107	.669	.75
December	3,382	236	72	109	.681	.79
Calendar year 1946	91,024	2,420	30	249	1.56	21.16
January 1947	8,152	769	122	263	1.64	1.89
February	6,972	472	162	249	1.56	1.62
March	18,423	2,440	155	594	3.71	4.28
April	15,825	2,290	227	528	3.30	3.68
May	22,218	1,650	350	717	4.48	5.16
June	11,108	884	245	370	2.31	2.58
July	9,781	1,340	122	316	1.98	2.27
August	3,391	218	53	109	.681	.79
September	2,610	122	55	87.0	.544	.61
Water year 1946-47	110,647	2,440	53	303	1.89	25.71
October 1947	2,165	105	43	69.8	.436	.50
November	10,816	1,330	79	361	2.26	2.51
December	6,082	411	149	196	1.22	1.41
Calendar year 1947	117,543	2,440	43	322	2.01	27.30
January 1948	4,919	201	120	159	.994	1.14
February	10,206	935	130	352	2.20	2.37
March	26,218	2,160	362	846	5.29	6.09
April	16,406	1,260	237	547	3.42	3.81
May	15,129	1,300	210	488	3.05	3.52
June	11,998	755	210	400	2.50	2.79
July	5,458	634	68	176	1.10	1.27
August	2,149	129	43	69.3	.433	.50
September	1,090	42	31	36.3	.227	.25
Water year 1947-48	112,636	2,160	31	308	1.92	26.16
October 1948	1,138	74	27	36.7	.229	.26
November	2,025	123	28	67.5	.422	.47
December	8,249	4,770	63	266	1.66	1.92
Calendar year 1948	104,985	4,770	27	287	1.79	24.39
January 1949	25,223	3,280	265	814	5.09	5.86
February	12,003	635	298	429	2.68	2.79
March	9,615	485	201	310	1.94	2.23
April	12,706	958	201	424	2.65	2.95
May	11,772	958	177	380	2.38	2.74
June	2,460	170	26	82.0	.512	.57
July	1,099	54	25	35.5	.222	.26
August	1,301	62	25	42.0	.262	.30
September	2,055	150	36	68.5	.428	.48
Water year 1948-49	89,646	4,770	25	246	1.54	20.83
October 1949	2,140	113	43	69.0	.431	.50
November	1,451	81	37	48.4	.302	.34
December	3,121	355	44	101	.631	.73
Calendar year 1949	84,946	3,280	25	233	1.46	19.75
January 1950	5,169	253	130	167	1.04	1.20
February	8,633	589	173	315	1.97	2.05
March	18,339	1,620	166	592	3.70	4.26
April	9,929	563	202	331	2.07	2.31
May	10,550	617	166	340	2.12	2.45
June	6,869	603	88	229	1.43	1.60
July	4,995	710	71	161	1.01	1.16
August	2,058	150	40	66.4	.415	.48
September	2,601	144	43	86.7	.542	.60
Water year 1949-50	76,055	1,620	37	208	1.30	17.68

Pompton River at Pompton Plains

Location.--Lat 40°58'13", long 74°16'53", at confluence of Pequannock and Ramapo Rivers, 2,000 ft upstream from Jackson Avenue Bridge and three-quarters of a mile east of Pompton Plains, Morris County.

Drainage area.--355 sq mi.

Records available.--March 1903 to December 1904 (fragmentary), May 1940 to September 1950.

Gage.--Two water-stage recorders, each above a concrete dam. Datum of gages is 174.46 ft above mean sea level, datum of 1929. Third water-stage recorder at Pequannock, 9,300 ft downstream from other recorders, used during high stages. Datum of gage is 160.00 ft above mean sea level, datum of 1929. Mar. 7, 1903, to Dec. 31, 1904, staff gage at main spillway at different datum.

Average discharge.--10 years (1940-50), 642 cfs (adjusted).

Extremes.--1940-50: Maximum discharge, 12,000 cfs July 23, 1945 (gage height, 16.29 ft, at Pequannock), from rating curve extended above 6,000 cfs on basis of peak discharge for tributaries and drainage area ratio; minimum daily, 41 cfs Oct. 9, 13-15, 1941.

Peak discharge (base, 2,200 cfs).--
1946: Nov. 30 (12 m.) 3,360 cfs (10.50 ft); Dec. 27 (4 a.m.) 3,300 cfs (10.40 ft); Jan. 8 (3 to 5 p.m.) 2,560 cfs (8.96 ft); May 28 (1 to 5 p.m.) 3,580 cfs (10.85 ft); June 3 (8 a.m.) 3,500 cfs (10.71 ft); July 23 (12 p.m.) 2,400 cfs (8.61 ft); Sept. 25 (1 a.m.) 2,690 cfs (9.24 ft).
1947: Mar. 15 (6 a.m.) 3,290 cfs (10.38 ft); Apr. 6 (4 a.m.) 3,750 cfs (11.0 ft); May 26 (12 m.) 2,670 cfs (9.21 ft).
1948: Nov. 8 (8 p.m.) 2,250 cfs (8.28 ft); Nov. 12 (11:30 a.m.) 2,490 cfs (8.76 ft); Mar. 12 (10 p.m. to 2 a.m.) 3,100 cfs (10.02 ft); May 14 (10 a.m.) 2,690 cfs (9.34 ft).
1949: Dec. 31 (4:30 p.m.) 6,780 cfs (14.14 ft); Jan. 6 (8 p.m.) 3,800 cfs (11.18 ft).
1950: Mar. 23 (about 10 p.m.) 2,480 cfs (8.65 ft).

Remarks.--Water diverted from reservoirs on Pequannock and Wanaque Rivers for municipal supply. Flow regulated by Oak Ridge, Canistear, Clinton, and Echo Lake Reservoirs on Pequannock River and by Greenwood Lake and Wanaque Reservoir on Wanaque River which have a combined capacity of 5,944,000,000 cubic feet (see descriptions of stations on these tributaries). Some diurnal fluctuation at low flow caused by powerplant on Wanaque River.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	378	188	2,380	1,820	377	280	461	212	1,130	197	181	119
2	339	188	1,790	1,390	328	280	461	195	c1,980	427	181	119
3	339	197	1,450	1,110	280	318	633	173	c3,350	358	150	134
4	320	197	1,300	946	238	494	507	164	2,460	196	144	120
5	301	197	1,140	877	238	642	484	157	1,720	173	159	113
6	271	189	1,180	943	263	677	440	196	1,340	158	151	113
7	462	188	1,560	1,780	451	651	387	181	1,070	144	190	94
8	576	188	1,750	c2,470	376	699	356	238	864	138	223	107
9	472	188	1,580	c2,240	318	780	365	238	721	137	181	115
10	451	181	1,340	c2,080	289	742	376	180	532	138	144	108
11	388	214	1,250	1,780	271	657	328	172	430	132	151	114
12	358	329	968	1,510	254	551	290	209	636	132	175	114
13	310	348	787	1,360	254	494	271	418	601	111	199	108
14	290	329	733	1,090	327	483	263	387	473	98	274	75
15	271	420	691	914	428	637	254	638	387	112	198	96
16	272	462	621	743	289	927	254	574	338	112	166	122
17	282	388	496	604	271	763	238	531	300	111	158	122
18	263	357	451	552	254	645	221	1,200	271	112	294	122
19	246	367	462	518	263	574	221	1,120	290	105	313	108
20	238	800	484	502	254	506	221	880	262	86	340	108
21	230	790	451	419	246	471	221	755	238	158	239	123
22	213	1,400	430	408	238	429	196	751	220	544	198	153
23	221	1,930	409	366	254	430	164	564	212	1,920	175	154
24	230	1,460	388	346	254	356	164	451	204	2,080	157	897
25	264	1,180	425	346	287	483	164	376	181	1,140	131	1,790
26	290	1,020	c2,380	337	229	558	229	377	173	631	148	699
27	281	934	c3,040	318	229	1,150	263	1,790	157	398	146	402
28	255	902	2,110	290	271	901	254	c3,530	165	310	139	284
29	237	c2,210	1,760	289	-------	716	237	c3,080	157	247	133	258
30	221	c3,280	1,550	290	-------	636	221	2,060	228	214	139	711
31	204	-------	1,650	338	-------	552	-------	1,460	-------	197	118	-------

c Stage-discharge relations of spillways affected by backwater, discharge and time are for site at Pequannock.

Pompton River at Pompton Plains--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	939	251	117	180	582	204	412	1,430	895	317	223	88
2	609	191	117	222	472	201	478	1,630	742	355	173	113
3	413	191	107	243	421	797	934	1,340	645	326	151	120
4	343	201	117	200	421	672	790	1,280	534	287	168	112
5	290	175	117	190	548	537	1,760	1,580	432	197	160	139
6	273	177	129	245	461	495	3,510	1,690	372	181	132	118
7	248	169	111	222	411	527	2,410	1,330	393	191	146	112
8	215	184	111	222	370	504	1,550	1,050	926	316	161	127
9	198	160	139	180	323	473	1,220	849	1,660	423	152	105
10	192	145	153	165	342	484	1,040	712	1,060	336	280	126
11	183	145	118	165	334	484	889	640	736	281	263	100
12	216	199	117	165	278	516	796	571	578	230	198	100
13	395	198	125	205	297	571	746	505	444	214	151	100
14	344	191	131	222	288	2,150	647	690	518	198	205	94
15	272	176	117	262	260	3,130	588	859	1,300	198	174	101
16	248	144	139	370	278	2,190	560	655	1,060	239	152	139
17	234	132	145	401	324	1,560	600	538	726	298	254	133
18	289	168	145	370	306	1,280	517	568	592	453	231	112
19	325	168	139	341	289	1,000	391	641	548	433	167	112
20	345	138	106	602	271	861	380	901	445	412	207	112
21	355	138	180	1,020	221	755	391	999	615	412	191	118
22	376	176	296	711	270	673	410	1,180	529	1,080	144	174
23	367	166	286	526	252	597	380	1,150	423	1,550	132	181
24	363	159	222	451	271	561	342	889	382	986	118	144
25	352	160	201	410	262	740	351	1,030	538	590	119	167
26	327	141	222	421	261	854	421	2,470	518	443	127	137
27	343	149	212	540	220	662	411	1,810	432	334	134	131
28	351	149	180	526	212	550	391	1,380	392	317	133	137
29	362	139	180	442	-------	484	333	1,210	404	290	101	160
30	286	128	244	402	-------	473	335	1,500	405	262	94	144
31	251	-------	223	523	-------	451	-------	1,180	-------	230	88	-------

Note.--No gage-height record for main spillway Nov. 25 to Dec. 6, Dec. 19 to Jan. 5 and for upper spillway Nov. 27 to Dec. 5, Apr. 28-30; discharge at respective sites was computed on basis of recorded range in stage, records for other site, and records for stations on tributaries.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	125	118	278	261	180	629	1,520	350	1,090	431	100	70
2	160	111	253	316	214	618	1,890	323	824	362	124	65
3	138	105	253	315	222	692	1,360	334	630	296	94	65
4	125	197	253	288	189	605	1,060	362	527	245	94	70
5	100	338	228	297	189	515	889	362	452	228	117	70
6	113	223	228	279	212	420	808	560	412	253	223	70
7	88	181	228	271	180	450	742	518	451	342	144	95
8	120	970	288	261	189	516	670	693	1,010	289	125	76
9	94	1,670	350	236	207	504	628	560	687	237	105	70
10	88	868	296	245	180	601	527	473	623	189	100	70
11	88	451	236	228	188	761	462	402	516	173	94	70
12	106	1,960	261	261	189	645	780	402	431	181	202	70
13	160	1,540	212	270	208	558	926	1,540	516	174	174	70
14	138	894	195	288	335	516	1,080	2,580	560	678	138	88
15	153	611	213	246	563	559	2,070	2,080	494	441	112	60
16	125	505	480	196	533	1,220	1,880	1,610	392	306	126	56
17	152	473	571	212	578	2,970	1,620	1,700	333	228	94	56
18	105	412	412	204	843	2,780	1,240	1,620	252	204	94	56
19	88	381	332	188	965	2,230	1,060	1,380	288	229	87	56
20	106	362	287	188	1,180	2,280	927	1,080	782	238	88	60
21	71	333	261	246	1,190	2,340	865	920	709	180	100	56
22	71	306	279	228	997	2,650	735	895	462	205	106	56
23	100	352	278	246	801	2,360	619	746	485	166	145	56
24	71	392	279	251	674	1,920	550	630	722	166	100	56
25	66	495	236	196	617	1,560	550	614	890	144	93	60
26	66	431	212	237	647	1,280	539	686	649	167	87	60
27	97	352	237	228	629	1,190	483	560	518	131	82	88
28	106	334	297	213	667	1,450	432	473	645	118	77	60
29	192	278	316	222	656	1,140	381	401	734	112	77	56
30	131	270	289	214	-------	939	371	1,050	584	105	70	60
31	153	-------	288	173	-------	843	-------	1,430	-------	100	70	-------

Note.--No gage-height record for upper spillway Nov. 19-28, Jan. 19-26, 31, Feb. 1, 2, 7-12; discharge computed on basis of records for main spillway and stations on nearby streams. Stage-discharge relation for upper spillway was affected by ice Jan. 29, 30, Feb. 3.

Pompton River at Pompton Plains--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	65	60	137	c4,140	793	668	411	461	221	71	82	82
2	60	65	144	1,970	708	571	360	540	204	83	82	70
3	60	65	117	1,260	635	483	340	1,320	204	83	104	70
4	55	120	111	913	609	461	332	1,100	196	83	100	65
5	86	93	111	945	582	450	305	794	188	82	100	70
6	56	76	131	3,510	527	640	589	696	180	77	105	93
7	55	82	111	2,910	538	701	683	864	165	82	93	70
8	65	103	105	1,700	596	559	537	840	151	76	93	82
9	65	76	131	1,180	571	484	473	635	143	70	81	65
10	65	87	105	948	609	461	420	613	137	65	81	65
11	89	105	99	789	571	494	380	640	124	70	76	65
12	76	117	99	661	461	548	341	516	117	70	76	65
13	76	87	118	570	441	483	323	431	131	83	76	76
14	70	82	99	504	562	431	640	379	131	82	76	105
15	65	76	98	431	717	390	640	380	131	82	139	140
16	65	76	111	401	786	361	516	361	125	82	123	150
17	70	77	137	411	770	323	431	315	105	82	87	130
18	89	105	131	390	639	323	440	287	111	94	100	130
19	65	82	137	411	559	295	1,590	269	111	105	81	143
20	76	166	143	401	707	287	1,460	278	118	87	76	130
21	82	173	159	371	785	305	1,050	572	105	82	70	124
22	82	180	131	796	668	361	897	536	93	82	70	130
23	82	165	151	916	1,020	652	1,390	689	94	77	70	172
24	82	165	125	815	914	748	1,300	585	71	76	82	157
25	104	124	111	861	786	548	1,080	473	65	77	82	137
26	65	111	99	772	766	472	825	380	65	76	65	157
27	76	111	125	677	648	461	754	371	65	76	65	157
28	128	111	100	984	624	441	671	334	83	76	65	142
29	70	151	151	1,370	-------	390	548	288	70	76	87	199
30	65	137	c1,810	1,040	-------	350	494	261	70	77	70	252
31	60	-------	d5,980	849	-------	350	-------	245	-------	87	70	-------

c Stage-discharge relations of spillways affected by backwater; discharge and time are for site at Pequannock.

Note.--No gage-height record for main spillway June 4, 5 or for upper spillway May 28 to June 5, July 17-20; discharge was computed by interpolation for main spillway and, for upper spillway, on basis of recorded range in stage and records for main spillway.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	164	123	79	196	255	289	728	449	780	122	110	123
2	143	110	79	188	300	280	671	504	1,130	116	104	111
3	122	98	74	188	387	245	620	448	858	116	130	105
4	116	98	69	188	328	236	700	406	829	122	137	105
5	110	86	69	180	290	245	673	448	697	129	117	98
6	110	79	68	173	272	261	597	459	494	172	104	86
7	110	79	68	230	255	262	515	417	386	172	98	80
8	104	74	63	246	230	313	449	337	309	136	98	80
9	104	79	63	188	328	1,180	417	290	263	122	92	79
10	98	74	58	221	561	1,020	396	280	229	183	92	75
11	117	74	58	337	561	732	386	289	212	309	92	105
12	117	74	69	290	526	632	375	271	195	327	85	123
13	98	79	150	263	493	754	345	254	187	312	79	123
14	86	117	188	271	550	676	327	237	180	986	79	173
15	86	117	165	255	705	596	327	220	246	630	74	173
16	85	98	136	238	837	560	317	220	309	407	74	150
17	69	91	117	212	747	515	298	196	290	327	74	123
18	74	91	111	204	648	515	280	237	262	270	74	111
19	92	105	117	212	573	469	270	459	212	245	92	111
20	69	99	123	180	504	438	317	549	187	220	182	117
21	64	86	117	164	376	601	448	439	180	203	188	123
22	64	73	110	164	417	840	406	355	179	186	131	123
23	64	63	117	165	407	1,850	345	308	164	172	111	117
24	69	63	123	173	396	2,130	335	482	164	156	104	111
25	69	63	123	196	406	1,610	317	689	237	150	92	104
26	138	69	117	205	364	1,350	364	621	228	143	86	111
27	123	63	329	204	299	1,200	406	596	179	130	80	111
28	98	58	482	196	280	1,170	416	470	149	123	74	111
29	86	69	376	205	-------	1,240	406	569	129	104	99	111
30	86	74	272	238	-------	1,100	385	855	122	110	131	111
31	104	-------	221	255	-------	865	-------	669	-------	110	131	-------

Note.--No gage-height record for main spillway Mar. 28-28 and for upper spillway Jan. 21 to Feb. 2, Mar. 26-28; discharge at respective sites was computed on basis of recorded range in stage, records for other sites, and records for Ramapo River at Pompton Lakes.

Pompton River at Pompton Plains--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	9,473	576	204	306	432	1.22	1.40
November	20,971	3,230	181	699	1,042	2.94	3.27
December	37,006	3,040	388	1,194	1,414	3.98	4.59
Calendar year 1945	269,558	8,180	117	739	1,031	2.90	39.42
January 1946	28,956	2,470	289	934	1,098	3.09	3.57
February	7,981	451	229	285	414	1.17	1.21
March	18,482	1,150	280	596	908	2.56	2.95
April	9,144	633	164	305	441	1.24	1.39
May	26,257	3,530	157	750	1,071	3.02	3.48
June	21,085	3,350	157	703	815	2.30	2.56
July	11,016	2,080	86	355	551	1.55	1.79
August	5,675	340	118	183	248	.699	.81
September	7,702	1,790	75	257	360	1.01	1.13
Water year 1945-46	200,748	3,530	75	550	736	2.07	28.15
October 1946	10,314	939	183	333	399	1.12	1.30
November	5,008	251	128	167	231	.651	.73
December	4,946	296	106	160	254	.715	.82
Calendar year 1946	153,566	3,530	75	421	568	1.60	21.74
January 1947	11,144	1,020	165	359	644	1.81	2.09
February	9,245	582	212	330	549	1.55	1.61
March	25,436	3,130	201	821	1,311	3.69	4.26
April	23,983	3,510	333	799	1,240	3.49	3.90
May	34,257	2,470	505	1,105	1,605	4.52	5.21
June	19,244	1,660	272	641	835	2.35	2.63
July	12,329	1,550	181	398	597	1.68	1.94
August	5,129	280	88	165	216	.608	.70
September	3,756	181	88	125	123	.346	.39
Water year 1946-47	164,791	3,510	88	451	669	1.88	25.58
October 1947	3,496	192	66	113	122	.344	.39
November	15,913	1,960	105	530	949	2.67	2.98
December	8,826	571	195	285	475	1.34	1.54
Calendar year 1947	172,758	3,510	66	473	723	2.04	27.64
January 1948	7,404	316	151	239	392	1.10	1.27
February	14,422	1,190	180	497	814	2.29	2.47
March	37,741	2,970	420	1,217	1,874	5.28	6.09
April	27,664	2,070	371	922	1,218	3.43	3.83
May	27,334	2,580	323	882	1,128	3.18	3.66
June	17,666	1,090	252	589	807	2.27	2.53
July	7,318	678	100	236	316	.890	1.03
August	3,442	223	70	111	140	.394	.46
September	1,971	95	56	65.7	45.4	.128	.14
Water year 1947-48	173,199	2,970	56	473	689	1.94	26.39
October 1948	2,269	128	55	73.2	77.8	.219	.25
November	3,228	180	60	108	202	.569	.64
December	11,312	5,980	93	365	774	2.18	2.51
Calendar year 1948	161,773	5,980	55	442	649	1.83	24.88
January 1949	33,896	4,140	371	1,093	1,788	5.04	5.81
February	18,592	1,020	441	664	999	2.81	2.93
March	14,491	748	287	467	707	1.99	2.30
April	20,170	1,590	305	672	1,000	2.82	3.14
May	16,453	1,320	245	531	745	2.10	2.42
June	3,774	221	65	126	144	.406	.45
July	2,471	105	65	79.7	110	.310	.36
August	2,627	139	65	84.7	69.8	.197	.23
September	3,493	252	65	116	135	.380	.42
Water year 1948-49	132,776	5,980	55	364	561	1.58	21.46
October 1949	3,039	164	64	98.0	115	.324	.37
November	2,526	123	58	84.2	126	.355	.40
December	4,311	482	58	139	284	.800	.92
Calendar year 1949	125,843	4,140	58	345	517	1.46	19.75
January 1950	6,625	337	164	214	428	1.21	1.39
February	12,295	837	230	439	787	2.22	2.31
March	24,174	2,130	236	780	1,453	4.09	4.72
April	12,836	728	270	428	757	2.13	2.38
May	13,023	855	196	420	783	2.21	2.54
June	9,986	1,130	122	333	565	1.59	1.77
July	7,010	986	104	226	388	1.09	1.26
August	3,214	188	74	104	134	.377	.44
September	3,384	173	75	113	124	.349	.39
Water year 1949-50	102,423	2,130	58	281	494	1.39	18.89

* Adjusted for diversions from Pequannock and Wanaque Rivers and for change in contents in Oak Ridge, Caninstear, Clinton, and Echo Lake Reservoirs on Pequannock River, and in Greenwood Lake and Wanaque Reservoir on Wanaque River.

Passaic River at Paterson

Location.--Lat 40°54'50", long 74°10'51", on right bank in Paterson, Passaic County, just upstream from dam at hydroelectric plant of Plant Management Commission.

Drainage area.--785 sq mi.

Records available.--October 1897 to September 1950 in reports of Geological Survey. August 1897 to September 1928 (including daily discharge) in Bulletin 33 of the New Jersey Department of Conservation and Development.

Gage.--Water-stage recorder above dam. Datum of gage is at mean sea level (New Jersey Geological Survey bench mark). Prior to Jan. 8, 1933, staff gage at site 20 ft downstream at same datum.

Average discharge.--52 years (1898-1950), 1,459 cfs (adjusted).

Extremes.--1898-50: Maximum daily discharge, 28,000 cfs Oct. 10, 1903; no flow July 3-5, 1904, July 16, 23, 1905.

Peak discharge (base, 4,500 cfs).--
1946: Nov. 30 (10 p.m.) 5,080 cfs (117.85 ft); Dec. 27 (1 p.m.) 7,090 cfs (117.99 ft); May 29 (8 a.m.) 5,490 cfs (117.94 ft); June 3 (4 p.m.) 5,180 cfs (117.85 ft).
1947: Mar. 15 (12 m.) 4,600 cfs (117.67 ft); Apr. 6 (2 p.m.) 5,490 cfs (117.90 ft).
1948: Nov. 8 (5 p.m.) 5,220 cfs (118.08 ft); Nov. 13 (1 a.m.) 5,030 cfs (117.87 ft); Mar. 22 (3:30 to 6 p.m.) 4,780 cfs (117.11 ft); May 17 (2 p.m.) 4,920 cfs (117.58 ft).
1949: Jan. 1 (3:30 p.m.) 8,960 cfs (118.97 ft); Jan. 7 (12 m.) 7,570 cfs (118.53 ft).
1950: Mar. 24 (1:30 a.m.) 4,320 cfs (117.32 ft), (annual maximum below base).

Remarks.--Daily discharge is sum of flow over dam, through powerplant, and in raceway and represents total flow just above Great Falls. Water for municipal supply is diverted by city of East Orange from wells; by Commonwealth Water Co. from Canoe Brook and from wells in Canoe Brook area; from Passaic River at Little Falls; and from Rockaway, Pequannock, and Wanaque Rivers. Flow regulated by reservoirs in Rockaway, Pequannock, and Wanaque River Basins and by Greenwood Lake, which have a combined capacity of 7,256,000,000 cubic feet.

Cooperation.--Records collected in cooperation with city of Paterson, Plant Management Commission.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	716	358	4,900	4,280	923	796	1,700	476	2,760	484	567	462
2	667	352	4,400	3,870	852	899	1,530	424	3,760	802	395	346
3	652	328	3,870	3,400	662	1,090	1,530	348	5,040	1,260	321	292
4	507	337	3,540	3,000	463	1,510	1,450	322	4,910	1,010	503	279
5	556	332	3,210	2,780	440	1,850	1,340	315	4,400	792	383	209
6	595	308	3,060	2,690	454	1,940	1,260	351	3,920	603	377	182
7	912	290	3,180	3,150	802	1,940	1,070	301	3,510	453	476	181
8	1,320	308	3,230	4,060	897	1,980	944	393	3,050	334	749	172
9	1,310	277	3,070	4,180	808	2,120	948	420	2,640	252	656	174
10	1,190	281	2,800	4,080	715	2,090	973	372	2,260	230	542	178
11	1,020	370	2,500	3,780	617	1,940	855	288	1,900	216	411	140
12	863	606	2,130	3,440	538	1,740	711	662	1,900	196	334	114
13	792	842	1,720	3,160	503	1,560	678	1,560	1,740	220	421	139
14	691	902	1,480	2,770	699	1,340	657	1,660	1,540	196	663	127
15	561	1,060	1,400	2,430	1,160	1,430	603	2,130	1,330	171	580	96
16	557	1,140	1,280	2,080	974	1,950	623	2,090	1,000	148	463	135
17	540	957	947	1,650	724	1,910	544	2,340	780	151	432	141
18	487	831	944	1,320	600	1,780	503	3,340	669	145	736	149
19	436	875	792	1,130	493	1,670	476	3,130	630	107	1,130	111
20	464	1,500	901	932	356	1,580	454	2,850	592	104	1,290	111
21	440	1,740	931	782	447	1,520	454	2,680	507	221	1,020	212
22	350	2,460	883	812	454	1,460	405	2,630	526	638	778	360
23	342	3,260	809	739	465	1,340	345	2,380	489	2,330	558	336
24	345	3,010	764	683	478	1,120	305	2,130	410	3,320	445	815
25	458	2,820	848	605	433	1,170	281	1,880	338	2,760	297	3,240
26	566	2,690	a3,000	641	392	1,390	417	1,640	286	2,290	276	2,460
27	590	2,520	a5,000	604	402	2,180	581	2,960	269	2,110	231	1,750
28	579	2,420	4,280	535	562	2,260	578	5,040	323	1,980	237	1,570
29	511	3,790	3,880	497	-------	2,080	502	5,020	348	1,800	320	1,230
30	440	4,900	3,860	502	-------	2,030	480	4,210	477	1,580	651	1,580
31	423	-------	4,080	738	-------	1,890	-------	3,370	-------	1,210	634	-------

a Discharge over spillway computed on basis of records for other stations in basin.

Passaic River at Paterson--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,870	394	270	496	1,500	373	1,010	2,430	2,960	736	271	182
2	1,560	320	228	374	1,410	572	1,030	2,990	2,560	816	257	231
3	948	312	194	499	1,200	1,410	1,820	2,860	2,240	807	197	231
4	976	299	212	554	1,080	1,650	1,900	3,130	1,940	641	209	232
5	884	264	208	490	1,230	1,510	3,000	3,590	1,540	500	239	188
6	733	200	214	458	1,000	1,450	5,300	3,790	1,130	447	223	261
7	506	216	203	454	904	1,600	5,050	3,570	955	340	204	213
8	369	247	179	411	788	1,680	4,290	3,250	1,680	562	233	215
9	367	276	178	395	623	1,650	3,880	2,910	3,030	916	334	170
10	309	263	214	316	655	1,640	3,480	2,560	2,580	978	537	173
11	276	277	223	327	746	1,670	3,100	2,350	2,160	883	648	184
12	416	280	163	361	597	1,710	2,710	2,060	1,990	724	493	148
13	605	327	211	381	554	1,750	2,420	1,740	1,780	596	351	138
14	697	280	218	478	568	3,000	2,100	1,690	1,560	438	266	134
15	594	282	245	685	544	4,500	1,800	1,940	2,090	464	276	144
16	560	291	172	1,190	614	4,230	1,590	1,780	2,110	555	285	186
17	511	243	202	1,350	655	3,760	1,590	1,620	1,820	656	628	203
18	461	204	190	1,360	679	3,540	1,520	1,580	1,640	780	761	205
19	588	230	225	1,180	648	3,170	1,380	1,660	1,550	943	651	161
20	621	246	187	1,450	605	2,850	1,210	2,080	1,360	835	679	168
21	563	193	444	2,180	321	2,490	1,080	2,360	1,340	810	770	186
22	598	313	1,010	1,980	502	2,180	1,150	2,700	1,320	1,470	587	243
23	559	374	1,100	1,590	543	1,940	1,120	2,800	1,110	2,400	456	295
24	542	384	1,000	1,650	509	1,690	987	2,560	904	2,020	371	268
25	504	302	851	1,550	523	1,700	925	2,780	992	1,400	268	267
26	532	323	704	1,480	492	1,840	1,120	4,280	1,010	957	240	267
27	605	342	490	1,500	462	1,720	1,080	4,170	839	673	235	223
28	489	342	451	1,510	414	1,590	1,100	3,700	797	547	238	207
29	557	283	473	1,440	-------	1,420	917	3,550	761	470	209	205
30	516	302	588	1,340	-------	1,310	887	3,780	831	406	174	211
31	389	-------	582	1,250	-------	1,170	-------	3,420	-------	327	173	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	161	602	674	605	319	2,460	3,040	742	2,680	1,750	211	176
2	170	496	615	747	295	2,530	3,670	698	2,410	1,580	221	159
3	191	357	591	925	308	2,760	3,400	637	2,180	1,340	230	153
4	182	692	595	988	292	2,720	3,240	735	2,050	1,040	224	161
5	163	1,550	592	983	248	2,430	2,960	764	1,870	680	264	147
6	120	1,430	568	909	281	2,330	2,710	993	1,710	629	471	145
7	128	1,390	585	857	282	2,300	2,470	1,210	1,490	598	603	92
8	152	2,700	596	825	287	2,220	2,180	1,530	2,530	695	529	147
9	165	3,940	918	827	253	2,130	1,960	1,560	2,240	648	385	98
10	103	3,240	712	765	268	2,350	1,720	1,470	1,930	538	261	75
11	118	2,870	619	752	354	2,510	1,560	1,380	1,680	442	175	116
12	143	4,580	550	668	438	2,410	1,720	1,260	1,430	380	590	134
13	176	4,880	552	813	474	2,290	1,930	2,580	1,580	407	1,010	113
14	189	4,340	454	873	740	2,230	2,180	4,270	1,620	841	660	73
15	168	3,930	439	795	1,230	2,180	3,180	4,230	1,510	1,070	456	124
16	184	3,480	969	728	1,360	2,650	3,330	4,090	1,220	775	340	34
17	178	3,040	1,460	673	1,500	4,110	3,200	4,290	945	598	272	44
18	179	2,660	1,390	648	2,090	4,640	2,890	4,280	744	451	197	71
19	187	2,350	1,190	465	2,570	4,480	2,560	3,990	787	449	192	73
20	155	1,980	883	565	2,560	4,560	2,340	3,520	1,510	576	188	90
21	152	1,720	716	543	2,590	4,600	2,170	3,170	1,700	543	572	35
22	114	1,370	630	588	2,500	4,730	1,950	2,910	1,400	596	873	40
23	108	1,130	595	569	2,300	4,560	1,730	2,580	1,400	854	1,370	35
24	137	1,200	561	394	2,190	4,040	1,510	2,230	1,700	921	1,340	42
25	95	1,530	520	401	2,380	3,480	1,380	2,160	2,330	879	1,300	46
26	117	1,520	311	553	2,400	3,010	1,350	2,080	1,970	771	1,190	63
27	104	1,420	309	524	2,360	2,840	1,240	1,930	1,890	682	1,070	43
28	124	1,260	642	460	2,500	3,100	1,130	1,760	1,990	509	838	92
29	347	1,040	663	408	2,500	2,730	1,000	1,530	2,050	309	560	36
30	454	859	669	398	-------	2,450	864	2,200	1,950	262	286	53
31	459	-------	593	342	-------	2,300	-------	2,880	-------	282	252	-------

Passaic River at Paterson--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	101	103	548	8,640	2,730	1,790	996	1,190	448	86	73	76
2	132	115	474	8,440	2,560	1,650	987	1,140	372	117	38	87
3	112	120	488	7,200	2,280	1,480	952	1,970	343	136	41	103
4	74	158	358	5,760	2,090	1,310	841	2,060	267	110	124	89
5	80	233	360	5,040	1,920	1,290	735	1,760	313	162	107	105
6	104	211	377	6,760	1,780	1,440	1,590	1,570	275	170	139	102
7	45	234	358	7,390	1,710	1,550	1,940	1,650	239	193	108	86
8	117	208	281	6,480	1,750	1,310	1,800	1,660	252	182	85	84
9	181	203	270	5,350	1,760	1,360	1,700	1,470	207	170	74	74
10	146	247	300	4,310	1,780	1,270	1,630	1,370	163	167	29	81
11	109	240	244	3,580	1,720	1,260	1,400	1,370	206	192	40	56
12	119	232	259	3,050	1,590	1,380	1,090	1,220	191	169	24	46
13	119	249	239	2,580	1,330	1,360	891	1,040	172	187	64	79
14	100	213	234	2,230	1,500	1,260	1,280	902	153	172	103	200
15	103	166	240	1,830	1,590	1,050	1,450	899	181	159	58	197
16	70	164	250	1,630	1,660	954	1,390	807	167	142	219	227
17	118	143	385	1,390	1,670	845	1,190	695	168	176	146	184
18	98	143	603	1,160	1,480	823	1,070	611	142	207	97	185
19	139	178	621	1,050	1,540	795	2,450	561	154	233	90	206
20	92	389	391	1,010	1,500	764	2,700	557	129	112	93	154
21	107	533	496	1,000	1,760	731	2,400	899	136	92	80	121
22	97	465	490	1,810	1,710	863	2,810	1,070	143	81	40	103
23	127	486	440	2,190	2,140	1,410	2,790	1,380	60	77	16	193
24	152	412	432	2,160	2,130	1,760	2,720	1,480	55	85	42	213
25	149	358	350	2,220	2,010	1,750	2,500	1,400	37	57	72	162
26	174	311	260	2,230	1,980	1,670	2,260	1,200	84	29	62	92
27	129	291	270	2,200	1,920	1,660	2,090	990	32	14	43	129
28	144	280	265	2,750	1,850	1,500	1,880	861	37	29	57	134
29	157	383	327	3,150	-------	1,310	1,590	735	69	29	134	189
30	128	549	1,890	2,890	-------	1,020	1,350	652	55	24	120	438
31	138	-------	7,190	2,800	-------	922	-------	543	-------	96	74	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	457	221	130	730	669	636	2,390	1,170	1,450	200	143	282
2	228	187	136	563	860	596	2,180	1,300	1,840	216	127	268
3	186	165	137	482	1,250	476	2,010	1,280	1,800	218	239	263
4	135	163	122	495	1,260	377	1,820	1,130	1,850	300	333	238
5	150	174	111	474	1,060	388	1,630	1,110	1,850	324	234	195
6	117	119	105	410	879	426	1,490	1,130	1,700	432	210	155
7	111	90	119	516	729	443	1,350	1,070	1,590	477	176	111
8	144	92	120	628	615	467	1,150	920	1,470	404	148	94
9	150	82	110	481	798	1,320	1,030	700	1,280	323	125	86
10	125	99	131	469	1,460	1,680	860	587	845	586	124	139
11	81	64	78	795	1,460	1,510	730	549	585	1,230	125	153
12	147	92	108	816	1,400	1,380	703	487	436	1,530	134	182
13	132	80	333	712	1,300	1,430	683	484	365	1,470	107	211
14	67	147	560	707	1,280	1,460	614	404	303	1,840	106	305
15	107	147	535	683	1,560	1,400	614	322	394	1,810	78	316
16	105	141	367	590	1,820	1,320	576	327	542	1,450	73	294
17	61	101	259	508	1,660	1,220	533	285	625	1,160	69	212
18	70	119	242	442	1,780	1,140	475	278	651	855	68	182
19	63	158	224	462	1,740	1,060	455	760	526	597	127	155
20	77	168	282	404	1,670	910	579	1,140	413	456	445	155
21	43	155	277	381	1,360	1,110	847	1,000	346	361	583	148
22	56	107	252	325	1,470	1,650	929	728	300	298	306	147
23	80	80	250	298	1,330	3,390	743	558	292	248	205	172
24	58	83	313	311	1,110	4,100	701	797	244	211	151	168
25	40	115	319	368	1,070	3,590	687	1,220	381	200	110	149
26	154	111	294	383	1,000	3,330	766	1,230	733	199	90	139
27	214	111	863	385	741	3,320	877	1,120	846	176	98	149
28	143	93	1,680	382	600	3,240	1,050	922	613	191	74	127
29	133	110	1,340	440	-------	3,200	985	978	324	206	90	125
30	143	128	1,180	555	-------	3,000	1,020	1,490	222	126	209	149
31	137	-------	934	610	-------	2,710	-------	1,450	-------	150	258	-------

Passaic River at Paterson--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	19,880	1,320	342	641	914	1.16	1.34
November	41,864	4,900	277	1,395	1,903	2.42	2.70
December	77,689	5,000	764	2,506	2,874	3.66	4.22
Calendar year 1945	622,225	12,500	157	1,705	2,149	2.74	37.14
January 1946	65,320	4,280	497	2,107	2,414	3.08	3.55
February	17,313	1,160	356	618	868	1.11	1.15
March	51,555	2,260	796	1,663	2,133	2.72	3.13
April	23,197	1,700	281	773	1,070	1.36	1.52
May	57,662	5,040	288	1,860	2,344	2.99	3.44
June	52,304	5,040	269	1,743	1,998	2.55	2.84
July	28,113	3,320	104	907	1,243	1.58	1.83
August	16,876	1,290	251	544	751	.957	1.10
September	17,286	3,240	96	576	833	1.06	1.18
Water year 1945-46	469,059	5,040	96	1,285	1,620	2.06	28.00
October 1946	19,705	1,870	276	636	828	1.05	1.22
November	8,609	394	193	287	487	.620	.69
December	11,829	1,100	163	382	625	.796	.92
Calendar year 1946	369,769	5,040	96	1,013	1,305	1.66	22.57
January 1947	30,679	2,180	316	990	1,471	1.87	2.16
February	20,376	1,500	331	728	1,107	1.41	1.47
March	62,765	4,500	373	2,025	2,681	3.42	3.94
April	60,546	5,300	887	2,018	2,623	3.34	3.73
May	85,680	4,280	1,580	2,764	3,417	4.35	5.02
June	48,569	3,030	761	1,619	1,981	2.52	2.82
July	25,097	2,400	327	810	1,154	1.47	1.69
August	11,473	770	173	370	562	.716	.83
September	6,139	295	134	205	324	.413	.46
Water year 1946-47	391,467	5,300	134	1,073	1,442	1.84	24.95
October 1947	5,423	459	95	175	285	.363	.42
November	63,556	4,880	357	2,119	2,835	3.61	4.03
December	21,161	1,460	309	683	1,038	1.32	1.52
Calendar year 1947	441,464	5,300	95	1,209	1,624	2.07	28.09
January 1948	20,536	988	342	662	987	1.26	1.45
February	37,869	2,590	248	1,306	1,812	2.31	2.49
March	94,130	4,730	2,130	3,036	3,866	4.92	5.68
April	66,564	3,670	864	2,219	2,677	3.41	3.80
May	69,659	4,290	637	2,247	2,678	3.41	3.93
June	52,496	2,680	744	1,750	2,127	2.71	3.02
July	22,095	1,750	262	713	942	1.20	1.38
August	17,130	1,370	175	553	762	.971	1.12
September	2,710	176	34	90.3	197	.251	.28
Water year 1947-48	473,329	4,880	34	1,293	1,680	2.14	29.12
October 1948	3,661	181	45	118	249	.317	.37
November	8,017	549	103	267	534	.680	.76
December	19,640	7,190	234	634	1,313	1.67	1.93
Calendar year 1948	414,507	7,190	34	1,133	1,512	1.93	26.21
January 1949	110,280	8,640	1,000	3,557	4,470	5.69	6.56
February	51,410	2,730	1,330	1,836	2,357	3.00	3.13
March	39,517	1,790	731	1,275	1,692	2.16	2.49
April	49,972	2,790	735	1,666	2,169	2.76	3.08
May	35,732	2,060	543	1,153	1,560	1.99	2.29
June	5,245	443	32	175	325	.414	.46
July	3,735	233	14	120	241	.307	.35
August	2,492	219	16	80.4	183	.233	.27
September	4,195	438	46	140	297	.378	.42
Water year 1948-49	333,896	8,640	14	915	1,279	1.63	22.11
October 1949	3,914	457	40	126	279	.355	.41
November	3,702	221	64	123	303	.386	.43
December	11,611	1,380	78	375	727	.926	1.07
Calendar year 1949	321,805	8,640	14	882	1,212	1.54	20.96
January 1950	15,800	816	293	510	985	1.25	1.45
February	34,131	1,860	600	1,219	1,923	2.45	2.55
March	52,279	4,100	377	1,686	2,615	3.33	3.84
April	30,477	2,390	455	1,016	1,558	1.98	2.21
May	27,026	1,490	285	872	1,486	1.89	2.18
June	24,816	1,850	222	827	1,245	1.59	1.77
July	18,239	1,840	126	588	893	1.14	1.31
August	5,360	582	68	173	360	.459	.53
September	5,464	316	86	182	317	.404	.45
Water year 1949-50	232,819	4,100	40	638	1,053	1.34	18.20

* Adjusted for change in contents in reservoirs in Rockaway, Pequannock, and Wanaque River Basins and in Greenwood Lake, and for diversions for municipal supply.

Saddle River at Lodi

Location.--Lat 40°53'25", long 74°04'51", on left bank 560 ft upstream from Outwater Lane Bridge in Lodi, Bergen County, and 3¼ miles upstream from mouth.

Drainage area.--54.6 sq mi.

Records available.--September 1923 to September 1950.

Gage.--Water-stage recorder. Concrete control since Nov. 2, 1938. Datum of gage is 25.00 ft above mean sea level, datum of 1929. Prior to Nov. 2, 1938, at site 560 ft downstream at datum 2.54 ft lower.

Average discharge.--27 years, 92.0 cfs.

Extremes.--1923-50: Maximum discharge, 3,500 cfs July 23, 1945 (gage height, 10.00 ft, from floodmark in gage house), by slope-area method; minimum, 1 cfs May 25, 1935 (gage height, 1.03 ft, site and datum then in use); minimum daily, 6 cfs Aug. 4, 1930, Aug. 23, 1934.

Peak discharge (base, 600 cfs).--
1946: Dec. 26 (11 p.m.) 891 cfs (4.16 ft); May 18 (6 to 7 p.m.) 608 cfs (3.63 ft); May 28 (8 a.m.) 1,100 cfs (4.54 ft); June 3 (8:30 a.m.) 924 cfs (4.22 ft); July 24 (8 a.m.) 1,010 cfs (4.37 ft).
1947: Mar. 15 (9 to 11 a.m.) 603 cfs (3.62 ft); Apr. 6 (8 to 9 a.m.) 1,010 cfs (4.36 ft).
1948: Nov. 9 (1 p.m.) 830 cfs (4.05 ft); Nov. 13 (2:30 a.m.) 722 cfs (3.85 ft); Apr. 2 (5 a.m.) 691 cfs (3.79 ft); May 14 (7 to 10 a.m.) 608 cfs (3.63 ft).
1949: Dec. 31 (3 to 5 p.m.) 1,030 cfs (4.41 ft); Jan. 6 (10 p.m.) 771 cfs (3.94 ft).
1950: Mar. 24 (8 a.m.) 452 cfs (3.31 ft), (annual maximum below base).

Remarks.--Occasional regulation at low flow by mills above station.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a90	61	260	344	128	136	87	60	128	91	55	60
2	85	58	167	241	102	128	95	58	320	127	54	55
3	87	58	136	167	80	128	144	54	766	141	53	57
4	80	58	128	147	66	167	120	52	379	80	55	52
5	76	55	128	150	*68	180	100	54	245	66	52	49
6	80	54	141	170	76	167	87	60	206	57	45	53
7	141	53	206	230	147	150	82	54	176	55	101	50
8	a170	54	212	303	118	158	74	71	144	54	113	48
9	a100	53	153	245	91	176	91	69	128	49	64	48
10	a105	53	128	234	89	192	85	55	111	46	53	46
11	a100	64	123	226	84	131	74	53	111	45	54	45
12	80	118	106	183	80	106	71	101	192	45	52	39
13	82	106	95	178	76	104	71	245	186	45	98	36
14	78	108	100	147	104	93	69	111	128	42	304	36
15	76	104	102	133	147	135	66	226	104	41	247	36
16	74	89	95	118	84	245	66	180	95	34	91	35
17	71	72	73	104	82	183	61	166	91	34	98	35
18	68	68	89	102	76	125	60	518	91	35	156	35
19	68	76	85	106	71	106	57	372	106	38	230	34
20	68	180	93	80	67	95	55	196	95	38	344	33
21	66	183	91	100	70	91	54	144	87	58	182	45
22	63	180	89	102	68	85	54	153	85	144	100	93
23	63	319	82	91	78	84	54	115	80	476	84	a55
24	80	206	89	87	76	76	54	95	69	847	76	a150
25	93	120	100	93	74	113	53	84	68	330	68	a330
26	102	104	467	95	71	131	84	84	66	122	64	a180
27	89	91	631	93	72	237	97	93	63	87	60	a85
28	78	91	311	80	128	252	85	893	126	78	58	a58
29	71	243	216	80	-------	136	69	415	155	68	72	a50
30	68	392	223	87	-------	111	63	216	102	61	121	a450
31	66	-------	267	123	-------	95	-------	153	-------	54	69	-------

a No gage-height record; discharge computed on basis of recorded range in stage, weather records, and records for Pascack Brook at Westwood.
* Winter discharge measurement made on this day.

Saddle River at Lodi--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	250	50	44	50	104	60	89	273	133	103	45	32
2	120	49	42	49	78	82	106	323	118	161	41	68
3	90	50	36	50	64	216	209	192	113	131	41	44
4	72	52	39	52	76	241	186	220	104	85	44	36
5	66	52	39	49	120	164	265	264	91	76	42	37
6	63	48	38	50	82	150	795	267	89	69	39	35
7	60	46	39	47	78	170	361	223	95	66	38	35
8	57	52	38	45	71	161	220	167	182	132	40	34
9	55	58	40	45	58	128	180	133	452	209	48	35
10	54	50	44	43	71	125	167	115	304	120	78	33
11	54	46	42	40	66	128	144	104	150	91	58	30
12	68	54	39	42	64	131	141	100	118	80	46	28
13	120	58	43	45	63	136	128	95	92	71	42	27
14	97	52	39	52	62	224	120	142	111	68	41	27
15	71	48	37	70	64	499	118	267	212	63	38	30
16	61	45	36	110	72	279	118	158	183	90	39	32
17	55	45	36	100	80	170	156	113	106	131	122	29
18	55	50	37	80	71	138	131	113	104	91	101	28
19	69	50	37	65	68	123	113	150	115	84	58	26
20	61	46	36	120	56	118	108	189	111	74	48	27
21	55	45	100	210	29	118	113	287	319	64	49	27
22	54	66	130	135	60	113	123	271	238	123	44	36
23	53	76	90	71	66	106	106	271	120	199	41	36
24	50	58	70	71	55	106	93	176	108	95	39	32
25	50	52	60	71	63	138	95	164	176	66	35	34
26	55	53	48	72	71	186	133	362	156	58	35	29
27	71	53	41	100	68	123	118	366	111	54	37	26
28	63	50	43	97	61	102	102	186	97	53	35	25
29	57	48	50	80	-------	95	93	158	147	52	34	24
30	55	44	60	71	-------	93	96	223	197	48	34	23
31	54	-------	56	93	-------	91	-------	192	-------	48	33	-------

Note.--No gage-height record Oct. 1-3, Dec. 5 to Jan. 21; discharge computed on basis of recorded range in stage, weather records, and records for Pascack Brook at Westwood.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	52	57	63	45	183	298	95	189	87	38	23
2	24	40	54	84	45	173	543	91	131	76	40	23
3	23	35	54	85	46	220	303	87	108	68	39	22
4	23	63	55	74	48	209	206	89	93	63	39	21
5	24	113	55	76	52	150	176	95	91	60	41	21
6	23	71	60	72	52	120	164	164	89	58	64	20
7	22	52	61	72	50	138	156	153	112	72	52	20
8	22	160	71	66	47	164	147	196	287	69	42	20
9	22	628	85	64	45	170	144	150	315	55	39	22
10	21	293	64	71	43	206	133	111	153	52	34	28
11	22	106	58	61	45	252	128	104	123	49	32	27
12	22	345	55	62	50	212	176	84	106	46	135	24
13	22	535	52	76	65	167	245	220	147	48	166	23
14	23	203	50	84	100	158	223	548	161	95	84	22
15	25	113	49	64	118	164	370	315	111	77	55	21
16	22	100	125	66	133	216	307	189	97	55	46	20
17	22	89	170	64	147	442	202	202	89	50	40	20
18	22	76	95	60	202	370	164	223	80	54	36	19
19	33	69	72	40	256	260	144	161	125	88	37	21
20	30	66	58	49	283	248	133	123	202	76	38	20
21	24	64	54	53	230	245	128	111	237	55	37	23
22	26	63	53	71	170	271	123	120	115	55	45	22
23	25	87	55	63	133	283	113	111	113	63	60	21
24	22	108	57	42	111	223	108	91	170	66	48	21
25	24	156	50	50	118	192	115	157	283	57	39	20
26	23	111	36	60	144	170	120	283	248	48	34	20
27	23	82	44	56	156	176	106	216	120	41	31	19
28	23	71	69	53	196	315	100	128	128	42	29	19
29	44	66	66	50	202	275	95	108	153	41	27	19
30	45	61	60	47	-------	186	95	219	106	37	25	19
31	45	-------	60	45	-------	158	-------	311	-------	37	24	-------

Note.--No gage-height record Jan. 25 to Feb. 14, Aug. 22 to Sept. 8, Sept. 11-30; discharge computed on basis of recorded range in stage when available, weather records, and records for Pascack Brook at Westwood and Ramapo River near Mahwah.

Saddle River at Lodi--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a25	26	52	651	147	136	95	87	53	22	27	27
2	a21	25	45	278	136	128	87	102	49	22	22	22
3	a20	23	39	150	115	120	80	185	48	23	21	19.7
4	a19	34	37	115	118	118	76	267	46	22	36	19.7
5	18.4	49	36	132	125	141	72	141	45	23	61	19.0
6	19.0	37	35	469	118	176	199	111	44	26	41	29
7	19.7	38	36	513	136	156	295	189	38	45	32	25
8	29	41	36	245	176	120	158	156	36	33	28	22
9	39	34	34	158	156	108	115	104	35	27	25	29
10	29	34	32	128	158	104	95	100	34	24	22	22
11	26	50	31	115	138	118	87	120	34	30	21	21
12	24	46	30	108	111	136	82	95	34	27	22	19.0
13	22	41	33	104	111	113	80	84	34	36	22	20
14	22	35	32	97	128	97	158	78	34	34	24	36
15	22	31	31	91	147	93	176	84	31	27	23	33
16	22	30	35	85	141	87	113	80	31	27	23	25
17	22	29	50	87	138	84	93	74	32	48	21	22
18	23	33	54	85	115	85	89	68	33	60	22	22
19	24	31	42	93	106	87	253	68	34	52	26	42
20	27	66	45	102	144	85	344	74	33	34	22	28
21	25	78	41	87	158	93	167	111	30	30	16.5	22
22	24	54	39	229	128	106	128	97	28	28	15.3	21
23	24	52	40	323	245	164	226	170	27	26	15.9	32
24	26	48	38	220	245	220	267	173	25	24	16.5	31
25	29	45	33	192	156	131	156	118	24	27	15.9	25
26	28	39	b31	153	147	100	120	89	27	26	14.7	22
27	32	37	a30	131	128	106	111	84	26	34	14.7	21
28	27	38	h30	202	120	95	104	72	25	66	15.9	20
29	25	52	a34	332	-------	82	93	64	24	30	43	24
30	24	63	176	176	-------	74	91	58	23	26	51	48
31	23	-------	826	141	-------	78	-------	55	-------	33	27	-------

a No gage-height record; discharge computed on basis of weather records and records for Pascack Brook at Westwood and Ramapo River near Mahwah.
b Stage-discharge relation affected by ice.
h Computed from staff-gage readings.
Note.--Backwater from log or moss Mar. 24-30, May 25 to June 9, June 20 to July 29.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	38	26	41	54	55	93	108	78	25	29	38
2	28	33	27	40	68	57	93	123	91	24	31	34
3	26	29	25	41	97	46	87	95	84	28	50	33
4	24	27	24	42	74	46	100	80	78	41	74	34
5	23	24	25	41	58	49	108	95	97	41	44	37
6	22	23	26	39	52	58	100	102	74	48	42	32
7	22	24	25	55	50	58	85	91	54	42	39	27
8	25	23	26	54	44	60	76	74	48	33	30	25
9	22	22	23	39	67	134	72	63	42	28	28	24
10	21	22	22	47	123	147	69	61	39	84	27	35
11	20	21	23	80	104	87	69	66	37	199	27	48
12	17.8	22	29	60	89	76	69	58	36	248	27	44
13	17.8	22	53	50	74	100	69	55	34	158	26	41
14	17.1	32	69	53	78	115	69	55	34	147	24	57
15	17.8	38	45	50	142	95	68	52	45	283	22	49
16	19.7	28	34	45	202	87	64	49	66	102	21	38
17	18.4	27	28	40	188	78	61	48	63	78	22	31
18	19.0	25	28	42	136	74	61	61	53	61	25	29
19	17.1	24	31	45	108	66	61	100	46	52	32	27
20	18.4	24	32	39	86	63	68	136	42	46	138	27
21	19.7	26	30	36	66	98	111	93	45	45	170	26
22	19.0	25	28	37	72	170	89	64	42	41	66	26
23	19.7	24	32	38	69	220	72	57	37	38	44	29
24	19.0	23	38	39	72	388	74	93	38	37	38	26
25	18.4	26	35	44	80	240	74	118	39	36	40	25
26	32	24	32	44	68	150	78	89	37	35	33	27
27	42	23	98	44	51	141	93	74	32	33	31	24
28	27	22	150	45	51	153	113	64	27	37	29	25
29	25	25	98	49	-------	147	104	74	27	39	50	24
30	24	30	58	58	-------	125	91	118	26	32	43	24
31	33	-------	45	57	-------	104	-------	104	-------	29	44	-------

Note.--No gage-height record Nov. 22 to Dec. 5, Jan. 17-23, Aug. 29, 30; discharge computed on basis of recorded range in stage, precipitation records, and records for Pascack Brook at Westwood and Whippany River at Morristown.

Saddle River at Lodi--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	2,618	170	63	84.5	1.55	1.78
November	3,471	392	53	116	2.12	2.36
December	5,186	631	78	167	3.06	3.53
Calendar year 1945	57,022	2,330	42	156	2.86	38.83
January 1946	4,634	344	80	149	2.73	3.16
February	2,473	147	66	88.3	1.62	1.68
March	4,316	252	76	139	2.55	2.94
April	2,282	144	53	76.1	1.39	1.55
May	5,200	893	52	168	3.08	3.54
June	4,703	766	63	157	2.88	3.20
July	3,473	847	33	112	2.05	2.37
August	3,263	344	45	105	1.92	2.22
September	2,378	450	33	79.3	1.45	1.62
Water year 1945-46	43,997	893	33	121	2.22	29.95
October 1946	2,215	250	50	71.5	1.31	1.51
November	1,546	76	44	51.5	.943	1.05
December	1,529	130	36	49.3	.903	1.04
Calendar year 1946	38,012	893	33	104	1.90	25.88
January 1947	2,275	210	40	73.4	1.34	1.55
February	1,942	120	29	69.4	1.27	1.32
March	4,714	499	60	152	2.78	3.21
April	4,927	795	89	164	3.00	3.36
May	6,264	366	95	202	3.70	4.27
June	4,652	452	89	155	2.84	3.17
July	2,855	209	48	92.1	1.69	1.94
August	1,465	122	33	47.3	.866	1.00
September	965	68	28	32.2	.590	.66
Water year 1946-47	35,349	795	28	96.8	1.77	24.08
October 1947	793	45	21	25.6	.469	.54
November	4,078	628	35	136	2.49	2.78
December	2,004	170	36	64.6	1.18	1.36
Calendar year 1947	36,934	795	21	101	1.85	25.16
January 1948	1,943	85	40	62.7	1.15	1.32
February	3,332	283	43	115	2.11	2.27
March	6,716	442	120	217	3.97	4.57
April	5,465	543	95	182	3.33	3.72
May	5,255	548	84	170	3.11	3.58
June	4,482	315	80	149	2.73	3.05
July	1,840	95	37	59.4	1.09	1.25
August	1,496	166	24	48.3	.885	1.02
September	640	28	19	21.3	.390	.44
Water year 1947-48	38,044	628	19	104	1.90	25.90
October 1948	760.1	39	18.4	24.5	.449	.52
November	1,239	78	28	41.3	.756	.84
December	2,083	826	30	67.2	1.23	1.42
Calendar year 1948	35,251.1	826	18.4	96.3	1.76	24.00
January 1949	5,992	651	85	193	3.53	4.08
February	3,991	245	106	143	2.62	2.72
March	3,541	220	74	114	2.09	2.41
April	4,210	344	72	140	2.56	2.87
May	3,358	267	55	108	1.98	2.29
June	1,017	53	28	33.9	.621	.69
July	992	66	22	32.0	.586	.68
August	787.4	61	14.7	25.4	.465	.54
September	768.4	48	19.0	25.6	.469	.52
Water year 1948-49	28,738.9	826	14.7	78.7	1.44	19.58
October 1949	711.9	42	17.1	23.0	.421	.48
November	776	38	21	25.9	.474	.53
December	1,265	150	22	40.8	.747	.86
Calendar year 1949	27,409.7	651	14.7	75.1	1.38	18.67
January 1950	1,434	80	36	46.3	.848	.98
February	2,418	202	44	86.4	1.58	1.65
March	3,487	388	46	112	2.05	2.38
April	2,441	113	61	81.4	1.49	1.66
May	2,520	136	48	81.3	1.49	1.72
June	1,491	97	26	49.7	.910	1.02
July	2,170	283	24	70.0	1.28	1.48
August	1,346	170	21	43.4	.795	.92
September	966	57	24	32.2	.590	.66
Water year 1949-50	21,025.9	388	17.1	57.6	1.05	14.34

Weasel Brook at Clifton

Location.--Lat 40°52'12", long 74°08'47", at right end of masonry dam at Jewett Street in Clifton, Passaic County.

Drainage area.--4.45 sq mi.

Records available.--March 1937 to September 1950.

Gage.--Water-stage recorder above masonry dam. Datum of gage is 68.52 ft above mean sea level, datum of 1929.

Average discharge.--10 years (1937-44, 1947-50), 4.66 cfs.

Extremes.--1937-50: Maximum discharge, 438 cfs July 23, 1945 (gage height, 3.36 ft), from rating curve extended above 120 cfs by logarithmic plotting; no flow for many days when water was below spillway and waste gate was closed.

Peak discharge (base, 140 cfs (revised).--
1946: Dec. 25 (11 p.m.) 162 cfs (2.40 ft); May 17 (11:15 p.m.) 275 cfs (2.84 ft); May 27 (8 a.m.) 151 cfs (2.35 ft); June 2 (12 m.) 149 cfs (2.34 ft); June 11 (9:30 p.m.) 140 cfs (2.30 ft); July 23 (4 a.m.) 253 cfs (2.76 ft); Aug. 3 (9:30 p.m.) 172 cfs (2.44 ft); Sept. 24 (6:30 p.m.) 211 cfs (2.60 ft).
1947: Apr. 5 (2:15 p.m.) 162 cfs (2.44 ft).
1948: Nov. 8 (2 p.m.) 335 cfs (3.08 ft); Nov. 12 (2 a.m.) 206 cfs (2.62 ft); Apr. 1 (7:30 a.m.) 156 cfs (2.39 ft); May 30 (7 a.m.) 165 cfs (2.43 ft); June 7 (8 p.m.). 255 cfs (2.78 ft); June 24 (8 p.m.) 190 cfs (2.53 ft); Aug. 12 (10:30 a.m.) 143 cfs (2.33 ft).
1949: Apr. 6 (5 a.m.) 168 cfs (2.44 ft).
1950: July 10 (2:30 p.m.) 230 cfs (2.69 ft).

Remarks.--Occasional regulation by mill above station.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	2.0	f12.2	16.2	4.8	10.4	3.0	1.4	10.0	-	f8.3	-
2	-	2.0	10.0	11.6	4.8	6.8	3.0	1.1	78	-	3.6	-
3	-	2.7	8.5	9.5	4.0	8.6	4.2	.92	25	-	17.6	4.1
4	-	2.7	8.0	9.5	3.1	5.7	2.7	1.4	19.6	-	13.9	2.3
5	-	1.9	6.1	12.8	2.3	5.1	2.5	2.7	17.0	-	4.6	2.0
6	-	1.7	13.2	16.2	6.7	4.3	2.7	1.7	14.8	-	3.3	1.8
7	-	f2.0	10.0	17.8	7.6	4.5	3.1	.90	13.4	-	19.3	2.5
8	-	-	7.6	13.4	3.6	4.8	2.8	1.4	12.2	-	6.6	f2.9
9	-	-	7.6	15.1	4.5	6.9	2.6	.78	10.5	-	4.0	f2.0
10	-	f2.0	6.8	15.3	4.5	4.8	2.0	.81	8.0	-	5.1	1.1
11	-	5.1	5.1	11.0	3.6	3.6	2.0	1.7	22	3.1	4.5	1.2
12	-	3.9	4.0	12.8	2.7	2.7	2.2	17.0	15.9	4.5	3.1	1.4
13	-	f2.5	4.6	10.5	2.9	2.7	2.5	5.2	9.5	f3.0	5.1	1.1
14	-	-	4.5	7.2	6.2	2.5	2.9	8.1	7.2	-	4.0	1.6
15	-	-	5.1	6.4	3.4	10.9	2.3	16.1	7.2	-	2.9	2.3
16	-	-	5.1	5.1	3.3	4.8	1.7	5.1	7.2	1.8	2.6	1.3
17	-	-	4.0	5.1	3.8	4.5	1.4	47	6.1	-	9.8	.78
18	-	-	3.3	5.4	3.1	3.4	1.4	49	5.7	-	6.0	.78
19	-	-	3.3	5.7	2.3	2.7	1.5	16.2	4.8	-	31	.53
20	-	-	3.6	5.4	2.7	2.5	2.3	11.0	3.9	2.1	7.8	.53
21	-	-	b3.4	5.7	2.5	2.3	2.5	10.8	4.0	f18.5	5.1	9.9
22	2.3	-	b3.2	4.5	2.3	2.2	1.8	7.2	4.0	17.7	4.5	4.5
23	2.4	-	b3.2	4.5	3.7	3.1	1.1	5.4	4.3	104	4.0	2.0
24	4.2	-	b3.3	4.3	3.8	4.1	1.1	4.8	3.6	18.7	4.3	39
25	4.6	-	17.5	4.8	3.0	5.2	1.6	4.5	3.1	12.2	4.3	12.2
26	3.1	-	49	5.1	2.3	8.3	3.5	10.4	2.7	8.5	3.2	4.4
27	3.1	-	14.1	5.1	4.8	8.8	3.0	66	2.5	7.6	f3.1	4.0
28	3.3	-	11.0	4.0	20	3.6	2.9	19.2	16.0	7.2	f2.7	4.5
29	f2.7	-	14.1	3.6	-------	3.1	2.0	13.4	7.6	5.4	13.6	4.0
30	f2.2	-	14.8	10.6	-------	4.0	1.7	13.4	10.6	4.0	8.1	18.5
31	2.2	-------	26	11.3	-------	4.0	-------	10.7	-------	3.8	f4.3	-------

b Stage-discharge relation affected by ice.
f Computed on basis of partly estimated gage-height record.
Note.--Waste gage open Oct. 1-21, Nov. 8, 9, 14-30, July 1-10, 14, 15, 17-19, Sept. 1, 2; discharge not determined.

Weasel Brook at Clifton--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				-	3.0	2.1	2.4	17.4	5.2	4.2	0.29	2.3
2				-	2.2	8.2	9.0	4.9	3.5	4.6	.81	12.3
3				-	1.5	10.6	5.2	9.0	3.1	2.8	1.5	2.1
4				-	6.2	4.6	3.1	17.5	2.6	2.8	.84	3.5
5				-	2.8	4.6	50	12.1	2.4	2.6	.40	2.6
6				-	1.3	7.8	14.6	8.0	2.4	2.4	.29	2.6
7				-	1.4	6.8	9.1	6.0	4.5	2.8	.40	2.8
8				-	2.1	5.7	7.0	4.9	33	9.2	.51	2.1
9				-	2.3	5.4	7.3	4.2	8.2	3.8	1.3	1.4
10				-	1.8	4.4	5.7	4.4	4.9	3.0	2.1	1.3
11				-	1.8	3.5	5.2	4.6	4.2	2.9	.85	1.0
12				-	1.4	3.3	5.7	3.7	3.7	2.4	.29	1.0
13				-	1,4	4.2	5.4	3.2	3.0	2.1	.40	1.6
14				-	1.6	17.3	4.4	7.9	12.3	2.1	.51	2.3
15				-	2.2	7.3	3.7	4.4	12.6	.75	.51	3.1
16				-	3.1	6.3	6.8	3.3	4.6	1.8	9.9	1.2
17				-	1.9	4.6	4.7	3.7	3.5	1.5	11.3	.87
18				-	1.4	3.5	3.5	5.4	4.6	1.0	2.8	.87
19				2.3	1.1	3.3	4.0	4.6	3.3	2.1	1.8	1.0
20				12.9	.75	3.1	4.2	11.6	4.0	2.1	7.7	2.0
21				3.6	.40	3.1	4.9	7.6	4.4	1.3	2.6	2.1
22				1.6	1.5	3.5	3.5	10.0	3.7	6.9	1.9	4.1
23				1.4	2.4	4.0	2.8	5.7	2.8	1.6	2.3	1.5
24				1.6	1.8	3.3	2.6	5.4	5.0	.75	2.6	1.1
25				2.5	1.4	8.6	3.1	12.4	3.4	.75	1.9	a2.0
26				3.8	1.8	3.1	5.1	10.9	2.4	1.8	1.3	1.3
27				4.0	1.5	2.6	3.7	4.9	2.1	1.9	1.4	2.0
28				2.1	1.4	2.4	2.6	4.2	2.4	1.3	1.4	2.3
29				1.5	-------	3.4	2.1	10.7	3.1	.63	1.4	1.8
30				1.5	-------	3.7	5.3	9.0	3.1	.51	2.0	1.0
31		-------		3.3	-------	2.6	-------	5.7	-------	.40	2.3	-------

a No gage-height record; discharge computed on basis of recorded range in stage and records for Second River at Belleville.

Note.--Waste gate open Oct. 1 to Jan. 18; discharge not determined.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.1	2.2	2.8	3.6	1.3	9.0	39	3.4	9.8	5.5	3.0	0.29
2	1.5	1.6	2.4	6.4	1.6	14.0	11.7	3.6	7.1	4.4	1.8	.52
3	2.0	.88	2.4	4.7	1.8	13.9	9.0	3.7	6.1	4.7	3.0	.92
4	2.3	15.4	2.0	4.1	1.4	11.2	7.8	2.4	5.5	4.9	1.2	a.40
5	2.1	5.4	2.2	3.1	1.2	7.8	7.1	7.4	6.4	4.9	e7.0	a.23
6	1.6	2.2	2.8	2.6	1.2	8.7	5.8	3.4	6.1	11.2	e2.7	a.17
7	1.0	1.4	a2.5	2.4	1.2	14.9	5.2	10.5	44	7.0	.84	a.13
8	1.0	76	a3.5	2.2	1.2	12.7	4.9	5.5	19.9	3.9	2.4	.10
9	.87	14.9	a2.5	2.8	1.1	10.4	4.7	4.4	10.2	3.2	e4.1	.10
10	.87	7.3	1.8	3.4	1.1	13.3	4.1	3.0	8.2	3.4	e2.7	.10
11	1.5	9.4	2.2	3.4	1.2	10.7	8.1	2.2	6.8	3.6	e1.9	1.4
12	2.1	50	2.0	2.6	1.6	9.4	11.6	3.0	7.8	2.8	50	1.8
13	1.5	10.0	1.9	4.3	1.5	8.6	5.5	35	12.7	13.0	8.4	.60
14	.87	7.0	1.8	3.7	15.2	9.4	18.6	10.0	6.5	6.1	4.4	0
15	.75	6.0	1.9	2.6	11.9	8.2	9.8	7.8	4.7	3.2	3.9	0
16	.63	5.7	15.5	2.4	8.8	11.3	6.4	8.8	4.1	2.8	e5.7	0
17	.51	4.2	3.2	2.5	22	7.5	5.8	8.5	3.9	3.6	e3.0	0
18	1.2	3.3	2.8	2.2	28	5.8	5.5	6.3	3.4	3.9	e2.0	0
19	6.9	3.0	2.4	1.8	24	7.4	4.7	4.4	17.2	17.2	.68	1.1
20	1.9	2.8	2.1	2.0	26	7.5	4.1	3.6	14.2	9.7	2.8	.48
21	.72	2.6	1.9	3.0	13.9	8.0	3.9	3.9	5.2	5.1	2.8	0
22	.40	3.5	1.8	3.0	12.2	7.1	3.4	4.4	4.7	5.8	4.9	0
23	.29	6.4	1.8	2.0	10.7	6.3	3.2	4.4	8.8	10.8	2.6	0
24	.10	11.6	2.1	1.6	8.6	5.8	3.9	3.0	32	4.9	1.4	0
25	.78	5.0	1.7	1.5	12.1	4.4	5.2	33	15.7	3.9	1.1	0
26	1.6	e5	2.2	1.6	11.7	4.4	3.6	8.4	8.2	3.4	1.1	.97
27	.90	e3	2.5	1.7	11.2	17.4	3.0	5.8	12.3	3.4	1.7	.41
28	.52	e3	2.2	1.7	17.6	11.2	2.8	4.9	18.9	3.2	2.4	0
29	5.5	e3	1.8	1.5	12.7	6.4	3.2	5.2	10.1	3.0	2.4	0
30	1.3	.77	1.7	1.5	-------	4.9	3.2	42	6.1	e3.4	1.3	1.2
31	3.7	-------	1.7	1.4	-------	4.7	-------	13.9	-------	1.4	.57	-------

a No gage-height record; discharge computed on basis of recorded range in stage and records for stations on nearby streams.

e Waste gate open; discharge computed on basis of records for stations on nearby streams.

Note.--Stage-discharge relation affected by ice Dec. 13-15, 20-22, 25-29, Jan. 17-19, 24-26, 31, Feb. 1, 2, 7-10.

Weasel Brook at Clifton--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.83	0.66	0.67	17.0	10.2	7.1	3.6	5.5	2.2	0.35	0.3	1.3
2	.85	.22	.37	12.7	8.2	6.1	3.6	5.7	1.8	.25	.5	.40
3	1.2	.29	1.3	9.0	7.1	5.8	4.1	17.1	2.0	.78	1.5	.10
4	.48	3.1	2.0	6.8	9.8	6.1	3.2	4.7	2.8	1.2	5.0	.92
5	0	1.7	1.8	30	9.4	9.3	2.6	3.9	2.8	.92	1.5	1.6
6	0	1.5	1.0	44	7.8	8.2	40	9.5	1.8	.52	1.2	2.6
7	0	4.0	.19	15.3	15.3	5.5	6.4	13.1	1.4	.19	.6	.40
8	3.2	1.1	.24	12.7	9.4	4.4	4.9	5.5	1.6	.52	.9	.46
9	1.7	.28	.10	11.2	8.6	4.4	5.2	4.1	1.7	10	1.1	.19
10	1.5	3.0	.10	9.8	7.1	4.1	5.2	5.2	1.7	.96	1.1	.29
11	.66	1.7	1.1	7.8	6.4	7.6	3.6	3.6	2.0	.75	1.1	1.1
12	0	1.7	1.9	7.1	5.8	5.5	3.0	3.4	2.0	.96	10.0	.65
13	0	1.8	1.7	6.4	7.5	5.2	9.4	3.6	1.7	4.0	2.0	4.5
14	.24	1.7	1.5	5.8	5.8	3.9	10.3	4.1	.92	.94	.2	1.9
15	.10	1.0	1.5	5.8	5.5	3.2	4.4	3.9	.92	.19	.51	.78
16	.67	.28	3.7	6.1	5.8	3.0	4.7	3.6	.78	1.1	1.9	.29
17	1.4	.23	5.5	5.8	6.0	3.2	4.7	3.4	.78	12.9	.78	.52
18	1.2	.30	2.5	5.2	4.1	3.4	12.9	3.4	1.2	4.1	.40	3.8
19	.37	2.7	2.2	7.8	5.2	4.1	30	3.4	1.7	3.1	.19	1.9
20	.50	7.5	1.3	5.2	12.8	4.7	7.1	6.7	.89	1.6	.19	.29
21	.10	2.4	.52	8.4	5.2	4.7	5.5	4.1	.69	1.5	.78	.19
22	.19	1.2	.85	35	15.9	3.6	16.1	11.5	.50	2.3	.65	.72
23	.54	.94	.96	10.7	16.5	16.3	11.0	9.4	.42	1.1	.19	1.7
24	1.6	.43	1.2	15.8	7.1	4.4	7.8	4.7	.40	.6	.29	.29
25	1.8	1.4	1.8	9.0	7.1	3.6	5.2	7.9	.65	2.5	.10	1.2
26	.10	.69	1.8	7.5	7.1	4.1	4.7	4.4	1.1	.4	.29	.65
27	.04	1.9	1.1	8.6	6.8	4.9	4.4	3.6	1.1	.7	.04	.29
28	.10	1.8	.10	35	6.8	3.6	3.9	3.4	.6	1.3	.19	.29
29	.28	6.8	8.6	13.9	-------	3.0	4.1	3.4	.4	.7	14.1	6.4
30	.44	1.4	59	10.7	-------	2.8	4.9	3.4	.4	1.0	.92	2.4
31	1.2	-------	59	9.8	-------	4.1	-------	2.6	-------	.6	.80	-------

Note.--Waste gate open June 28 to July 2, July 19 to Aug. 14; discharge computed on basis of weather records and records for Saddle River at Lodi, Second River at Belleville, and Elizabeth River at Elizabeth.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.85	0.38	0.28	1.1	1.3	2.3	3.7	6.8	4.3	1.3	2.7	3.8
2	1.1	.91	.77	1.3	8.6	2.1	4.2	2.6	2.2	1.0	2.8	2.4
3	.72	.18	.33	1.5	3.4	1.9	3.7	2.1	4.1	3.3	14.8	5.6
4	.28	.18	.72	.60	2.3	2.3	3.2	1.9	9.1	7.9	4.0	3.1
5	.28	.29	.56	.38	2.3	2.7	3.9	5.5	2.3	5.1	3.1	1.7
6	.28	.72	.16	.62	1.8	2.4	2.9	3.7	1.4	2.1	3.3	.93
7	.18	.49	.34	3.7	1.2	1.4	3.2	2.9	1.3	.59	f2	.94
8	.51	.10	.18	1.3	.85	2.7	3.2	2.3	1.1	.93	f1.6	.88
9	1.1	.28	.04	1.3	10.8	4.1	2.9	1.4	1.7	1.2	1.3	1.2
10	.68	.38	0	5.6	3.8	1.9	2.7	1.3	1.9	47	1.4	3.3
11	.28	.04	.73	2.5	3.4	2.7	2.1	.98	1.7	12.8	1.2	2.3
12	.18	0	2.2	1.6	2.9	2.9	1.7	.98	1.0	6.5	.97	1.3
13	.28	.80	4.3	2.3	2.9	7.1	1.6	1.8	.62	3.3	1.6	4.5
14	.18	1.5	.84	1.9	3.1	2.9	1.9	1.9	.60	2.4	1.2	2.1
15	.28	.18	.28	1.6	20	2.5	2.3	1.7	2.9	2.4	.86	1.2
16	.60	.10	.10	1.3	11.2	1.9	2.5	1.7	1.1	3.4	.90	1.6
17	.38	.18	.03	.38	8.9	2.7	2.0	2.6	3.4	2.6	.69	2.0
18	.18	.38	.66	1.1	7.1	2.9	1.4	4.4	1.9	1.7	.65	1.3
19	.10	.22	1.3	.28	6.5	2.5	1.3	7.7	1.0	1.5	17.4	.60
20	.28	.72	.49	.16	4.0	1.9	5.2	3.9	.82	1.6	13.5	.42
21	.38	.46	.34	.98	2.5	11.8	2.7	2.5	.80	1.5	2.5	.63
22	.28	.10	.07	1.3	2.7	3.8	2.5	1.9	.60	1.8	1.6	.69
23	.16	.28	.73	.88	4.3	32	2.9	1.6	.68	2.3	1.9	1.4
24	.38	.51	.85	.62	6.1	7.9	3.2	7.0	2.7	2.6	1.3	1.9
25	.28	.74	.85	.48	4.4	5.6	2.9	2.1	2.3	2.8	.98	1.1
26	5.2	.02	1.3	.48	3.7	6.9	3.8	1.9	.92	2.5	1.4	.44
27	.31	.60	18.6	.58	2.5	7.8	2.7	2.1	.72	2.3	1.9	.45
28	.18	.43	2.6	.78	1.6	7.0	10.6	2.3	.46	8.8	1.3	.63
29	.11	.28	.98	3.1	-------	5.6	3.4	10.3	.75	3.9	3.4	.55
30	.98	.10	.85	1.6	-------	3.9	3.8	3.4	.68	2.8	1.3	1.1
31	3.8	-------	1.1	1.3	-------	3.2	-------	2.3	-------	2.6	4.4	-------

f Waste gate open; discharge computed on basis of partly estimated gage-height record.

Weasel Brook at Clifton--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	-	-	-	-	-	-
November	-	-	-	-	-	-
December	292.2	49	3.2	9.43	2.12	2.44
Calendar year 1945	-	-	-	-	-	-
January 1946	275.5	17.8	3.6	8.89	2.00	2.30
February	122.3	20	2.3	4.37	.982	1.02
March	150.9	10.9	2.2	4.87	1.09	1.26
April	70.0	4.2	1.1	2.33	.524	.59
May	355.31	66	.78	11.5	2.58	2.97
June	356.4	78	2.5	11.9	2.67	2.98
July	-	-	-	-	-	-
August	215.3	31	2.6	6.95	1.56	1.80
September	-	-	-	-	-	-
Water year 1945-46	-	-	-	-	-	-
October						
November						
December						
Calendar year						
January 1947	-	-	-	-	-	-
February	53.45	6.2	.40	1.91	.429	.45
March	156.9	17.3	2.1	5.06	1.14	1.31
April	196.7	50	2.1	6.56	1.47	1.64
May	227.3	17.5	3.2	7.33	1.65	1.90
June	158.0	33	2.1	5.27	1.18	1.32
July	74.79	9.2	.40	2.41	.542	.63
August	65.60	11.3	.29	2.12	.476	.55
September	67.14	12.3	.87	2.24	.503	.56
Water year	-	-	-	-	-	-
October 1947	48.01	6.9	.10	1.55	.348	.40
November	272.55	76	.77	9.08	2.04	2.28
December	82.1	15.5	1.7	2.65	.596	.69
Calendar year	-	-	-	-	-	-
January 1948	83.3	6.4	1.4	2.69	.604	.70
February	264.0	28	1.1	9.10	2.04	2.21
March	282.3	17.4	4.4	9.11	2.05	2.36
April	214.8	39	2.8	7.16	1.61	1.80
May	265.8	42	2.2	8.57	1.93	2.22
June	326.6	44	3.4	10.9	2.45	2.73
July	167.3	17.2	1.4	5.40	1.21	1.40
August	133.79	50	.57	4.32	.971	1.12
September	10.92	1.8	0	.364	.082	.09
Water year 1947-48	2,151.47	76	0	5.88	1.32	18.00
October 1948	21.29	3.2	0	.687	.154	.18
November	53.72	7.5	.22	1.79	.402	.45
December	165.70	59	.10	5.35	1.20	1.38
Calendar year 1948	1,989.52	59	0	5.44	1.22	16.64
January 1949	395.9	44	5.2	12.8	2.88	3.31
February	230.3	16.5	4.1	8.22	1.85	1.92
March	159.9	16.3	2.8	5.16	1.16	1.34
April	236.5	40	2.6	7.88	1.77	1.98
May	171.8	17.1	2.6	5.54	1.24	1.44
June	38.95	2.8	.40	1.30	.292	.33
July	48.13	12.9	.10	1.55	.348	.40
August	49.32	14.1	.04	1.59	.357	.41
September	38.12	6.4	.10	1.27	.285	.32
Water year 1948-49	1,609.63	59	0	4.41	.991	13.46
October 1949	20.78	5.2	.10	.670	.151	.17
November	11.55	1.5	0	.385	.087	.10
December	42.58	18.6	0	1.37	.308	.36
Calendar year 1949	1,448.83	44	0	3.96	.890	12.08
January 1950	42.62	5.6	.16	1.37	.308	.36
February	134.15	20	.85	4.79	1.08	1.12
March	149.3	32	1.4	4.82	1.08	1.25
April	94.1	10.6	1.3	3.14	.706	.79
May	95.56	10.3	.98	3.08	.692	.80
June	55.05	9.1	.46	1.84	.413	.46
July	142.52	47	.59	4.60	1.03	1.19
August	97.95	17.4	.65	3.16	.710	.82
September	50.06	5.6	.42	1.67	.375	.42
Water year 1949-50	936.22	47	0	2.56	.575	7.84

Second River at Belleville

Location.--Lat 40°47'17", long 74°10'19", on right bank at Belleville, Essex County, 300 ft downstream from Hendricks Brook, 360 ft downstream from Franklin Avenue, and 1.4 miles upstream from mouth.

Drainage area.--11.6 sq mi.

Records available.--May 1937 to September 1950.

Gage.--Water-stage recorder and concrete control. Datum of gage is 62.6 ft above mean sea level, datum of 1929.

Average discharge.--13 years, 18.0 cfs.

Extremes.--1937-50: Maximum discharge, 3,300 cfs July 23, 1938 (gage height, 7.05 ft), by contracted-opening method and critical-depth study; minimum, 0.8 cfs July 29, 1941 (gage height, 1.12 ft).

Peak discharge (base, 950 cfs).--
1946: Dec. 25 (11 p.m.) 1,100 cfs (4.27 ft); July 2 (6 a.m.) 1,030 cfs (4.15 ft); Sept. 24 (5:15 p.m.) 1,320 cfs (4.62 ft).
1947: July 22 (2 a.m.) 952 cfs (4.02 ft); Aug. 16 (11:30 p.m.) 1,150 cfs (4.36 ft).
1948: Apr. 1 (7 a.m.) 958 cfs (4.03 ft); June 19 (5:30 a.m.) 1,020 cfs (4.14 ft); June 24 (8 p.m.) 2,010 cfs (5.55 ft); June 27 (4 p.m.) 1,440 cfs (4.78 ft); July 13 (4 p.m.) 1,360 cfs (4.67 ft); July 21 (11 p.m.) 1,420 cfs (4.76 ft).
1949: Aug. 29 (7 a.m.) 1,340 cfs (4.64 ft).
1950: July 10 (1 p.m.) 1,130 cfs (4.32 ft); Aug. 19 (12 m.) 1,340 cfs (4.65 ft); Aug. 29 (4 p.m.) 2,500 cfs (6.15 ft).

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10.9	8.5	26	30	13.7	18.7	12.0	8.0	18.3	12.0	11.4	7.2
2	15.9	8.9	19.1	24	11.4	15.0	13.1	8.5	302	136	10.9	12.8
3	10.4	8.5	17.7	21	9.9	21	30	8.0	44	16.4	13.4	14.5
4	10.4	7.2	17.7	19.8	10.4	17.6	12.5	7.6	33	10.4	14.2	8.5
5	9.9	7.6	17.1	21	10.9	15.6	12.0	11.4	27	10.4	10.4	8.0
6	67	8.0	41	21	28	13.7	11.4	8.0	22	10.9	10.9	7.6
7	47	8.5	22	27	22	13.7	9.9	8.7	19.8	9.9	40	7.6
8	12.5	8.5	a17	19.8	12.0	14.9	14.8	10.4	19.1	10.9	13.2	6.5
9	17.5	8.5	a16	32	14.7	19.1	13.2	8.0	17.0	11.4	12.8	7.4
10	10.9	8.0	a15	23	10.9	11.4	10.9	7.6	17.0	9.9	10.4	8.5
11	9.9	32	15.0	19.1	10.9	11.4	9.9	8.0	46	10.4	8.0	8.0
12	11.8	13.8	13.7	24	10.9	12.0	10.9	91	18.7	9.9	8.9	6.9
13	9.4	9.9	13.1	17.0	11.6	11.4	9.9	14.6	18.9	9.4	19.0	6.5
14	8.5	38	13.7	16.3	16.3	11.4	10.4	98	13.1	8.0	13.8	6.5
15	8.9	15.2	12.5	16.3	12.0	51	10.9	42	12.5	9.7	9.7	5.5
16	9.4	9.9	10.9	15.6	10.4	13.7	10.9	23	12.0	8.9	9.4	6.6
17	9.4	9.4	10.9	15.0	9.9	12.0	10.9	122	12.5	8.5	28	7.6
18	8.9	8.5	11.4	15.0	9.4	14.9	10.4	54	16.5	9.4	9.1	7.6
19	8.9	92	12.0	13.7	9.9	12.5	9.4	21	12.5	10.0	64	7.2
20	8.9	29	12.0	13.1	12.5	12.0	8.9	15.6	12.0	9.8	10.9	8.0
21	7.6	15.0	10.9	16.4	10.4	11.4	8.0	59	12.5	95	9.4	89
22	14.1	110	10.9	14.3	9.4	10.9	8.5	15.6	10.9	84	9.4	8.8
23	15.0	21	9.9	13.7	14.1	10.9	8.9	13.7	9.4	193	8.9	7.6
24	22	17.0	10.4	13.1	10.9	13.7	9.9	12.5	10.9	33	7.6	155
25	28	13.7	121	15.7	11.0	25	12.4	12.0	11.4	21	7.2	19.0
26	13.6	13.1	117	12.5	9.4	59	22	36	10.9	15.6	8.2	10.9
27	8.9	13.1	30	11.4	26	37	12.8	246	10.9	13.7	12.5	9.4
28	7.6	63	22	11.4	36	15.0	7.6	36	76	12.0	8.5	9.4
29	8.0	116	34	12.0	-------	14.3	9.4	23	31	12.5	63	8.5
30	8.5	31	39	64	-------	17.0	8.5	18.4	19.0	13.1	17.3	61
31	8.9	-------	71	29	-------	11.4	-------	17.0	-------	12.0	8.0	-------

a No gage-height record; discharge computed on basis of records for Rahway River near Springfield.

Second River at Belleville--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10.9	6.5	4.9	4.3	7.6	6.1	8.9	72	13.1	19.2	7.2	4.9
2	9.9	6.5	4.8	6.1	6.1	57	68	17.7	13.7	16.5	6.5	29
3	8.5	5.2	5.8	16.9	6.1	29	18.4	25	14.3	9.4	5.5	9.4
4	9.4	5.5	5.8	8.0	30	12.0	12.0	77	13.1	8.0	7.6	8.9
5	8.0	5.8	5.5	5.2	8.5	14.3	194	34	12.5	8.0	8.5	44
6	6.9	5.8	5.2	6.9	7.6	21	31	21	14.8	8.0	8.0	7.2
7	7.6	5.8	4.9	6.1	8.5	17.0	21	19.3	34	9.4	9.2	5.8
8	10.2	16.3	4.6	6.9	8.0	13.1	17.7	16.3	83	66	10.3	7.2
9	9.6	6.1	5.2	5.5	5.8	12.0	21	15.0	16.3	10.4	30	6.9
10	10.9	4.9	5.8	5.5	6.9	13.1	15.0	14.3	13.7	9.4	9.9	7.2
11	10.6	6.1	5.5	6.1	7.2	13.1	14.3	12.5	13.1	11.2	6.9	6.9
12	36	10.9	6.4	5.8	7.2	13.1	13.7	13.1	12.5	9.4	7.6	7.2
13	11.7	6.5	12.7	5.2	7.2	16.4	11.4	13.7	11.4	12.5	7.6	6.9
14	7.6	5.8	4.9	16.1	7.2	90	12.5	38	75	8.9	7.6	4.9
15	8.9	5.5	4.3	27	7.2	22	12.0	13.7	30	9.4	7.6	44
16	8.9	5.8	4.6	11.4	6.9	15.6	45	12.5	13.1	12.0	84	11.4
17	8.5	8.0	5.5	8.9	6.9	14.3	13.1	12.0	12.0	27	76	7.2
18	15.7	6.1	5.2	7.2	6.9	12.5	11.4	42	25	9.4	9.4	6.9
19	7.6	5.8	4.6	6.1	6.5	12.0	10.9	14.4	12.0	42	8.0	10.6
20	5.8	5.8	5.2	78	5.5	11.4	9.9	66	21	7.2	29	8.5
21	6.5	5.2	91	13.7	7.2	10.9	26	40	11.6	7.6	7.2	6.1
22	7.2	35	8.9	9.4	7.6	10.4	11.4	59	9.4	97	7.6	31
23	7.6	6.5	6.9	8.5	5.8	8.9	10.4	18.4	12.0	14.7	7.2	8.0
24	6.9	4.9	6.5	8.0	6.1	10.9	10.9	15.6	21	8.5	5.5	7.2
25	7.6	5.5	5.2	7.6	7.2	48	21	46	12.5	8.5	7.2	12.6
26	14.7	10.1	5.5	28	8.0	12.0	16.0	28	11.4	8.0	28	6.1
27	5.8	11.3	5.8	10.7	6.9	9.4	9.9	15.6	11.4	6.9	7.2	6.1
28	7.9	5.2	8.6	7.6	6.9	9.4	9.9	16.3	11.4	8.5	6.9	5.2
29	8.0	5.5	21	7.6	-------	9.4	10.4	83	9.4	8.5	6.9	5.2
30	7.6	5.8	9.0	7.2	-------	8.0	76	21	10.9	8.5	6.1	5.5
31	6.5	-------	6.5	17.3	-------	8.0	-------	13.7	-------	7.6	5.2	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.2	7.5	7.2	10.9	6.5	19.8	165	10.9	28	22	17.5	7.6
2	5.2	4.6	7.6	27	7.2	46	31	9.4	19.8	15.0	9.9	7.2
3	4.9	4.3	6.9	12.5	7.6	31	21	21	18.4	13.7	46	7.6
4	4.9	133	6.5	9.4	6.9	22	18.4	10.9	17.0	12.5	10.9	7.2
5	5.8	14.7	7.2	10.4	7.2	17.7	19.1	46	17.0	13.0	51	6.5
6	4.9	8.0	6.9	9.4	6.9	17.7	18.4	12.5	14.3	49	15.2	6.9
7	5.2	6.1	6.1	8.9	6.9	35	16.3	58	45	28	10.9	7.6
8	6.5	271	12.7	8.0	6.9	22	15.6	13.7	19.5	12.5	7.6	8.0
9	7.2	27	6.5	11.8	6.1	28	14.3	10.9	29	12.5	8.0	9.0
10	6.9	13.1	6.9	10.4	6.1	35	13.7	11.4	14.3	12.0	8.9	16.8
11	6.1	27	8.0	8.0	6.1	29	40	10.9	13.9	10.4	11.5	7.2
12	5.5	148	6.9	8.0	7.6	28	32	26	29	12.5	68	6.1
13	4.9	19.8	6.1	26	7.2	17.7	17.4	171	47	117	16.8	6.9
14	5.5	14.3	5.8	15.1	52	16.3	73	29	13.7	20	9.9	6.9
15	5.2	12.0	7.0	9.9	17.0	17.7	27	19.8	13.7	12.0	8.5	6.5
16	5.5	9.4	63	8.9	15.0	39	19.1	45	12.5	11.4	9.4	6.1
17	5.2	8.9	8.5	8.0	52	22	17.0	62	11.4	9.9	9.4	6.1
18	5.2	8.5	7.2	8.0	45	17.7	15.0	24	11.4	8.9	9.4	5.8
19	8.6	8.0	6.9	7.6	42	29	15.0	18.4	86	26	12.2	5.8
20	5.2	7.6	6.1	7.6	49	19.1	15.0	16.3	42	13.9	27	7.2
21	4.9	7.6	6.1	13.9	26	18.4	14.3	17.3	13.1	98	19.1	6.5
22	4.9	7.4	6.1	10.4	19.8	15.6	13.1	14.3	20	44	29	6.1
23	4.3	29	8.0	8.0	17.7	21	12.5	12.5	34	56	13.1	6.9
24	4.3	40	6.9	6.1	15.0	16.3	12.0	12.5	170	13.1	9.9	6.9
25	4.0	12.6	5.8	8.0	21	13.7	14.4	220	46	9.9	9.9	5.8
26	3.5	8.9	7.5	7.6	19.1	13.1	12.0	32	21	10.9	9.9	5.2
27	4.0	7.6	9.9	8.0	19.1	49	12.0	22	81	12.5	9.9	5.8
28	10.7	8.0	7.6	7.2	55	18.4	11.4	18.4	26	11.4	9.4	6.5
29	39	7.6	7.2	6.9	25	14.3	11.4	16.3	21	10.4	7.6	6.1
30	9.3	7.2	6.9	6.9	-------	14.3	11.4	159	19.5	10.4	8.9	27
31	43	-------	7.2	6.5	-------	13.7	-------	30	-------	9.9	8.5	-------

Second River at Belleville--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.0	4.6	5.5	27	24	a30	12.9	16.4	8.9	6.9	6.1	28
2	6.1	4.6	5.2	17.7	16.3	a19	10.9	19.6	8.9	6.1	6.5	5.5
3	5.5	13.4	5.2	15.6	15.0	a15	16.9	40	8.5	5.5	7.2	4.6
4	5.2	15.8	9.4	12.5	30	14.3	9.4	12.5	8.5	5.8	30	4.0
5	5.5	5.8	4.6	129	18.4	18.8	9.9	12.0	7.6	8.2	7.6	19.6
6	6.5	4.9	8.9	115	13.7	15.6	153	25	8.9	20	6.4	30
7	7.4	26	4.9	28	40	15.9	19.8	f43	8.9	8.7	4.6	5.2
8	41	4.9	6.1	18.4	18.4	13.1	15.6	11.4	8.0	6.9	5.8	7.7
9	8.4	5.2	5.2	15.0	18.4	12.5	13.1	14.3	7.6	6.1	6.5	4.9
10	6.4	29	4.9	14.3	15.6	17.8	10.9	20	7.2	8.6	6.5	4.6
11	5.5	6.9	4.3	12.5	16.7	30	11.4	10.4	7.6	6.9	6.5	4.0
12	7.8	5.2	4.6	12.0	13.1	13.1	11.4	10.9	6.9	10.4	62	4.6
13	7.0	5.5	5.2	11.4	12.5	10.9	f19.6	10.4	7.6	f52	8.9	60
14	6.8	3.8	5.2	10.4	13.1	13.9	f21	21	8.5	7.6	5.2	12.8
15	5.8	4.6	5.2	9.4	14.3	15.3	16.1	9.4	8.5	36	5.2	8.5
16	5.2	4.6	28	8.9	19.2	10.9	10.9	10.4	8.0	6.1	72	5.5
17	5.2	6.1	22	9.4	17.7	10.9	9.4	10.9	8.5	81	9.4	4.9
18	14.5	4.9	6.9	9.4	15.0	13.1	38	10.4	8.0	9.8	5.2	3.8
19	5.5	12.8	5.2	18.3	12.0	15.1	87	10.4	6.5	7.6	5.5	6.1
20	7.3	35	6.5	8.5	43	10.9	17.0	29	8.0	7.6	4.9	4.9
21	6.5	4.6	6.5	55	13.1	12.0	15.0	9.4	7.6	7.2	4.0	4.9
22	5.8	8.4	8.3	106	78	11.4	f100	59	7.6	8.0	4.6	13.7
23	5.5	8.0	7.6	17.5	35	70	25	22	7.2	6.5	5.5	15.4
24	17.5	6.1	5.2	42	18.4	13.7	16.3	12.2	7.2	5.2	6.5	5.2
25	16.6	4.6	4.0	19.2	19.6	12.5	15.6	23	7.2	12.1	4.9	3.8
26	5.8	4.9	4.0	22	15.0	12.5	15.0	13.4	5.8	7.2	5.5	3.8
27	5.5	9.7	4.6	24	13.7	10.9	14.3	9.9	7.6	7.6	5.5	5.5
28	5.5	4.3	5.2	129	17.7	11.4	13.1	8.9	7.2	9.3	4.9	5.5
29	5.2	38	50	30	-------	10.9	12.0	8.5	7.2	8.5	113	61
30	4.6	6.5	227	18.4	-------	10.9	11.4	8.5	7.2	9.9	9.4	9.4
31	4.6	-------	170	22	-------	14.9	-------	9.4	-------	8.5	12.8	-------

a No gage-height record; discharge computed on basis of recorded range in stage and records for Elizabeth River at Elizabeth.
f Computed on basis of partly estimated gage-height record.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.9	12.4	3.1	2.9	9.4	6.9	9.4	29	32	5.8	8.2	8.5
2	4.0	7.8	9.2	3.1	41	5.5	10.3	9.4	8.5	5.5	6.9	7.6
3	4.3	4.3	4.0	7.6	a7.6	4.9	8.9	11.1	16.9	11.2	76	18.9
4	4.9	4.0	3.1	4.6	5.5	5.2	9.4	8.9	62	36	8.5	6.1
5	7.7	3.5	3.8	4.0	4.9	5.5	14.7	12.9	12.5	70	5.8	5.5
6	6.9	3.1	3.3	4.6	9.0	5.2	8.5	9.9	9.9	14.7	18.5	5.8
7	7.0	3.3	6.9	17.8	5.2	5.2	8.0	7.2	9.4	8.5	6.5	6.5
8	7.0	3.5	3.8	3.3	4.3	13.4	8.0	6.9	8.5	6.5	6.5	6.5
9	5.4	3.5	3.3	3.3	52	15.8	7.2	7.2	9.4	5.8	6.5	6.1
10	4.3	3.8	3.1	14.0	8.5	5.5	7.2	8.0	8.5	211	7.9	26
11	6.9	3.8	4.8	7.2	8.0	7.2	8.0	7.6	6.9	61	8.0	15.5
12	5.8	3.1	16.0	4.3	5.5	6.6	7.2	7.2	7.6	21	5.2	7.6
13	7.4	4.5	32	6.1	9.7	27	7.2	6.5	7.6	12.0	4.6	35
14	4.9	12.7	4.6	5.8	25	7.6	9.1	6.5	8.5	9.4	5.5	8.0
15	3.8	3.3	3.5	4.0	76	6.5	8.0	6.5	24	7.6	6.1	6.5
16	2.9	3.3	3.1	3.5	28	6.1	7.2	7.6	9.2	9.7	5.5	6.1
17	3.8	3.3	2.9	3.5	17.0	5.8	7.6	12.1	28	8.9	5.8	4.9
18	4.0	7.7	2.9	9.3	12.0	7.2	8.9	24	6.5	8.5	5.5	5.2
19	4.6	4.0	8.4	5.2	10.4	5.2	6.9	25	7.2	6.0	121	5.8
20	4.3	2.9	3.1	4.0	8.6	5.2	38	8.2	7.2	6.0	47	5.8
21	4.9	3.1	3.1	3.8	8.0	63	8.0	6.5	9.6	7.2	6.9	6.1
22	4.6	3.1	2.9	3.5	7.2	9.9	6.5	6.5	7.2	6.5	6.5	10.4
23	3.1	3.1	11.7	3.1	14.7	173	10.0	18.4	7.6	5.2	9.6	6.5
24	3.8	2.9	3.9	6.0	16.3	21	10.7	26	24	7.6	6.9	5.2
25	22	9.0	2.5	5.2	7.7	15.0	7.2	6.9	8.9	7.2	6.5	5.2
26	33	3.3	11.3	4.0	5.6	23	14.3	8.2	7.6	6.5	6.5	6.5
27	4.0	3.1	77	4.9	5.6	20	6.9	6.5	7.6	6.9	5.2	6.5
28	4.0	2.7	12.2	3.5	5.5	25	47	6.1	6.9	7.3	6.5	6.1
29	4.3	9.3	4.6	8.3	-------	17.0	8.0	45	6.9	9.8	152	6.5
30	5.6	3.8	3.8	7.8	-------	12.0	13.6	7.2	6.9	5.5	15.7	6.1
31	28	-------	3.5	18.0	-------	9.9	-------	6.9	-------	6.9	54	-------

a No gage-height record; discharge computed on basis of records for stations on nearby streams.

Second River at Belleville--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	448.6	67	7.6	14.5	1.25	1.44
November	752.8	116	7.2	25.1	2.16	2.41
December	809.9	121	9.9	26.1	2.25	2.60
Calendar year 1945	8,760.8	291	5.8	24.0	2.07	28.07
January 1946	617.2	64	11.4	19.9	1.72	1.98
February	384.9	36	9.4	13.7	1.18	1.23
March	548.6	59	10.9	17.7	1.53	1.76
April	350.3	30	7.6	11.7	1.01	1.12
May	1,064.6	246	7.6	34.3	2.96	3.41
June	896.8	302	9.4	29.9	2.58	2.88
July	837.1	193	8.0	27.0	2.33	2.68
August	488.4	64	7.2	15.8	1.36	1.57
September	537.6	155	5.5	17.9	1.54	1.72
Water year 1945-46	7,736.8	302	5.5	21.2	1.83	24.80
October 1946	299.5	36	5.8	9.66	.833	.96
November	229.7	35	4.9	7.66	.660	.74
December	286.3	91	4.3	9.24	.797	.92
Calendar year 1946	6,541.0	302	4.3	17.9	1.54	20.97
January 1947	365.8	78	4.3	11.8	1.02	1.17
February	219.5	30	5.5	7.84	.676	.70
March	560.3	90	6.1	18.1	1.56	1.80
April	763.1	194	8.9	25.4	2.19	2.45
May	906.1	83	12.0	29.2	2.52	2.90
June	574.6	83	9.4	19.2	1.66	1.84
July	497.6	97	6.9	16.1	1.39	1.60
August	436.4	84	5.2	14.1	1.22	1.40
September	338.0	44	4.9	11.3	.974	1.08
Water year 1946-47	5,476.9	194	4.3	15.0	1.29	17.56
October 1947	245.5	43	3.5	7.92	.683	.79
November	888.7	271	4.3	29.6	2.55	2.85
December	279.2	63	5.8	9.01	.777	.90
Calendar year 1947	6,074.8	271	3.5	16.6	1.43	19.48
January 1948	315.3	27	6.1	10.2	.879	1.01
February	578.9	55	6.1	20.0	1.72	1.86
March	707.5	49	13.1	22.8	1.97	2.27
April	727.8	165	11.4	24.3	2.09	2.33
May	1,181.4	220	9.4	38.1	3.28	3.79
June	949.5	170	11.4	31.6	2.72	3.04
July	708.7	117	8.8	22.9	1.97	2.27
August	503.2	68	7.6	16.2	1.40	1.61
September	231.8	27	5.2	7.73	.666	.74
Water year 1947-48	7,317.5	271	3.5	20.0	1.72	23.46
October 1948	254.7	41	4.6	8.22	.709	.82
November	298.7	38	3.8	9.96	.859	.96
December	645.4	227	4.6	20.8	1.79	2.07
Calendar year 1948	7,102.9	227	3.8	19.4	1.67	22.77
January 1949	987.8	129	8.5	31.9	2.75	3.17
February	596.9	78	12.0	21.3	1.84	1.91
March	507.2	70	10.9	16.4	1.41	1.63
April	751.9	153	9.4	25.1	2.16	2.41
May	531.6	59	8.5	17.1	1.47	1.70
June	232.9	8.9	5.8	7.76	.669	.75
July	397.8	81	5.2	12.8	1.10	1.28
August	448.6	113	4.0	14.5	1.25	1.44
September	357.4	61	3.8	11.9	1.03	1.15
Water year 1948-49	6,010.9	227	3.8	16.5	1.42	19.29
October 1949	222.1	33	2.9	7.16	.617	.71
November	141.2	12.7	2.7	4.71	.406	.45
December	261.4	77	2.5	8.43	.727	.84
Calendar year 1949	5,436.8	153	2.5	14.9	1.28	17.44
January 1950	186.2	18.0	2.9	6.01	.518	.60
February	418.2	76	4.3	14.9	1.28	1.34
March	546.3	173	4.9	17.6	1.52	1.75
April	329.9	47	6.5	11.0	.948	1.06
May	365.9	45	6.1	11.8	1.02	1.17
June	383.5	62	6.5	12.8	1.10	1.23
July	605.7	211	5.2	19.5	1.68	1.94
August	641.8	152	4.6	20.7	1.78	2.06
September	263.0	35	4.9	8.77	.756	.84
Water year 1949-50	4,365.2	211	2.5	12.0	1.03	13.99

Elizabeth River at Elizabeth

Location.--Lat 40°40'03", long 74°13'09", on left bank 85 ft upstream from Westfield Avenue Bridge in Elizabeth, Union County, and 3¼ miles upstream from mouth.

Drainage area.--18.0 sq mi.

Records available.--October 1921 to September 1950.

Gage.--Water-stage recorder and concrete control. Datum of gage is 5.23 ft above mean sea level, datum of 1929. Prior to Oct. 1, 1922, hook gage at same site at datum 4.14 ft higher and Oct. 1, 1922, to May 18, 1923, at present datum.

Average discharge.--29 years, 27.7 cfs (adjusted).

Extremes.--1921-50: Maximum discharge, 2,720 cfs July 23, 1938, Sept. 14, 1944, by contracted-opening method; maximum gage height, 13.05 ft July 23, 1938, from flood-mark in recorder shelter; no flow many times.

Peak discharge (base, 700 cfs).--
1946: Dec. 26 (2:30 a.m.) 776 cfs (5.94 ft); May 15 (1:15 a.m.) 740 cfs (5.85 ft); May 21 (6:30 p.m.) 720 cfs (5.80 cfs); June 2 (1:45 p.m.) 1,040 cfs (6.70 ft).
1947: Apr. 5 (4 p.m.) 645 cfs (5.62 ft), (annual maximum below base).
1948: Nov. 8 (3 p.m.) 2,470 cfs (11.98 ft); Nov. 12 (4 a.m.) 1,200 cfs (7.23 ft); May 25 (12:30 p.m.) 910 cfs (6.30 ft); June 24 (11:30 p.m.) 1,200 cfs (7.22 ft); July 13 (7:15 p.m.) 1,150 cfs (7.06 ft); July 22 (1:15 a.m.) 2,010 cfs (10.17 ft).
1949: Jan. 5 (12 p.m.) 700 cfs (5.75 ft).
1950: July 11 (6 p.m.) 910 cfs (6.5 ft, from partly estimated stage graph).

Remarks.--Diversion by pumpage from Hammock well field, in Union, for municipal supply by Elizabethtown Water Co. Flow occasionally regulated at Ursino Lake dam.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10.5	9.5	37	55	15.0	25	12.3	8.6	15.7	13.8	9.6	8.3
2	15.3	9.5	27	46	13.8	20	16.1	8.9	465	92	2.3	8.3
3	10.2	10.8	22	28	11.6	19.1	29	8.0	81	19.6	2.1	18.0
4	9.5	9.0	19.1	21	10.5	16.3	13.8	7.7	52	11.2	2.3	8.4
5	9.5	7.7	16.3	20	10.9	15.9	12.6	12.6	46	8.9	14.7	8.0
6	107	8.0	61	21	18.8	14.6	11.9	7.7	28	8.9	13.1	7.7
7	108	8.0	26	26	28	15.5	10.2	8.0	21	8.0	f128	7.5
8	24	9.8	19.1	20	11.6	17.8	13.0	12.4	16.7	7.7	21	7.0
9	28	10.9	13.6	39	18.2	31	16.4	7.7	13.8	8.9	14.6	7.2
10	16.7	8.9	3.1	32	13.4	13.0	11.6	7.7	12.6	9.2	11.9	8.0
11	15.0	39	5.0	19.5	10.9	11.9	10.9	7.5	50	8.9	6.8	7.7
12	16.1	17.2	12.3	31	11.2	11.6	10.2	83	63	8.9	1.3	7.7
13	36	11.2	11.9	17.1	12.4	11.6	9.8	21	28	8.0	28	7.5
14	10.9	64	12.6	15.5	23	11.6	8.9	63	15.9	7.2	40	7.0
15	10.2	24	12.3	15.5	12.5	45	9.2	144	14.2	7.7	19.6	6.2
16	10.5	12.6	10.9	13.8	9.8	16.7	9.2	24	11.6	7.7	9.0	6.5
17	9.8	10.9	9.8	13.4	9.8	12.6	8.9	87	11.2	8.3	50	7.7
18	9.5	10.2	10.2	13.0	11.1	27	9.5	62	23	8.3	18.3	7.0
19	9.5	123	11.6	11.6	10.5	15.9	8.9	26	15.5	8.9	68	7.2
20	9.5	66	11.6	9.5	14.6	13.4	8.9	16.7	12.6	14.3	15.5	7.2
21	8.9	22	10.9	13.2	11.8	12.3	7.2	141	12.3	f122	11.9	78
22	17.3	153	9.8	13.2	10.5	11.9	7.7	41	11.6	f93	11.2	15.2
23	18.4	32	8.9	11.2	17.2	10.2	8.6	24	9.8	a350	10.5	9.5
24	f47	22	8.9	10.9	13.0	11.8	8.6	18.1	9.8	69	9.5	211
25	47	16.3	43	16.4	13.0	38	9.8	14.2	10.9	45	8.3	48
26	20	13.4	245	11.6	11.9	61	33	45	10.9	29	10.0	20
27	12.3	13.0	45	9.8	26	121	15.1	131	10.2	19.5	11.7	15.5
28	9.5	82	29	9.5	65	27	8.3	57	36	26	9.5	10.2
29	9.2	209	f68	10.2	-------	21	8.9	29	32	16.1	39	8.6
30	9.8	54	60	71	-------	22	8.9	19.1	20	12.6	26	54
31	9.8	-------	126	33	-------	13.4	-------	15.0	-------	12.3	10.2	-------

a No gage-height record; discharge computed on basis of records for Second River at Belleville and for stations on other nearby streams.
f Computed on basis of partly estimated gage-height record.

Elizabeth River at Elizabeth--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13.5	9.2	7.2	6.9	11.9	9.8	11.2	109	14.3	9.5	10.2	7.4
2	11.2	8.6	6.4	8.0	10.2	61	94	25	13.9	14.6	9.5	50
3	10.2	6.6	6.7	30	9.5	72	49	27	17.2	9.5	8.0	14.7
4	10.2	1.3	7.2	17.0	52	25	19.8	68	13.5	8.0	7.7	12.7
5	9.5	1.0	6.9	9.5	17.2	25	220	45	13.1	6.9	8.6	45
6	8.3	11.5	7.2	11.6	11.9	42	54	35	17.9	6.7	8.6	17.2
7	8.6	8.6	6.9	9.8	13.6	37	30	23	37	8.0	10.5	10.8
8	9.8	21	6.4	10.5	12.3	26	22	17.9	75	74	14.0	10.2
9	9.5	8.9	6.4	9.2	9.2	19.3	27	16.0	33	12.7	45	10.8
10	12.9	7.7	7.2	8.3	9.2	18.4	18.8	14.3	20	9.8	33	10.8
11	9.8	8.0	7.2	8.9	11.1	18.8	17.4	12.3	16.9	10.5	11.9	10.2
12	23	12.1	9.3	9.5	11.4	18.4	16.0	12.7	15.1	10.8	12.3	10.2
13	22	8.6	12.7	8.6	11.2	17.6	13.5	13.9	13.5	8.0	12.3	8.6
14	18.4	8.6	6.7	40	10.8	75	14.7	49	33	7.2	11.6	7.2
15	15.1	8.3	5.9	45	10.8	25	15.5	21	54	8.0	10.8	38
16	10.8	8.0	5.9	27	10.2	18.4	55	13.9	18.8	13.7	20	19.9
17	9.5	18.4	7.2	17.5	10.2	15.1	20	13.0	15.5	48	131	12.3
18	10.8	12.0	7.2	13.5	10.5	14.3	16.4	39	25	22	22	10.5
19	13.1	8.6	6.9	10.5	9.8	13.5	14.3	21	16.0	33	16.4	12.3
20	14.8	8.6	7.7	141	9.7	13.1	11.9	65	20	17.7	19.9	20.0
21	8.1	8.3	140	30	9.8	13.1	24	51	22	10.8	16.2	8.0
22	8.6	63	19.0	16.0	9.5	11.9	16.2	99	11.9	102	12.7	33
23	8.6	12.6	13.1	16.0	8.9	10.8	13.5	44	10.8	27	11.2	12.6
24	8.6	1.6	10.8	13.9	8.9	13.2	13.1	28	22	16.4	9.5	10.5
25	8.6	1.2	8.3	11.6	10.8	44	15.1	37	14.7	13.1	8.9	20
26	9.2	1.2	8.3	33	11.9	13.9	23	54	12.7	11.9	24	9.8
27	9.2	18.6	7.4	27	10.8	11.6	11.9	21	12.3	9.8	15.4	6.4
28	8.6	8.9	15.6	14.3	10.8	11.9	11.9	17.4	24	10.2	11.2	2.2
29	8.6	7.2	33	13.5	-------	11.6	11.6	48	10.2	11.2	10.8	2.5
30	8.6	7.2	13.6	11.9	-------	10.0	15.0	51	9.2	10.8	10.2	1.6
31	19.5	-------	8.6	30	-------	10.2	-------	17.9	-------	10.5	8.0	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.9	18.3	11.6	17.0	9.8	29	230	13.5	63	36	34	14.7
2	3.1	8.3	13.1	68	11.6	85	86	11.2	40	30	16.9	13.9
3	9.5	8.0	13.1	31	13.5	78	46	d61	28	11.4	55	13.9
4	6.9	198	13.1	19.3	12.7	51	30	15.5	21	7.2	29	13.1
5	5.7	60	13.5	20	12.7	32	23	74	18.4	8.9	119	11.6
6	6.4	32	12.4	19.8	12.3	24	21	24	15.5	34	44	10.2
7	8.6	19.3	9.5	19.3	11.2	50	18.8	39	24	31	23	16.4
8	9.8	595	21	16.9	10.5	33	17.9	36	27	16.4	17.4	13.9
9	8.9	73	11.6	23	10.5	28	16.9	17.4	34	15.5	16.4	18.9
10	9.2	39	11.2	22	11.6	52	15.1	15.5	37	14.3	16.4	55
11	7.7	60	13.9	15.1	12.3	40	22	16.4	22	13.1	16.4	15.4
12	6.4	374	11.2	14.3	15.1	30	49	39	21	13.9	194	11.2
13	6.7	49	10.2	62	14.3	22	24	242	109	304	36	11.6
14	8.3	34	9.2	36	89	19.3	70	77	44	104	23	13.1
15	8.6	28	9.5	20	33	19.3	62	44	30	24	18.4	11.9
16	8.6	21	58	16.9	32	46	35	64	22	15.5	17.4	12.3
17	8.9	16.9	17.2	14.7	98	26	27	121	17.9	15.5	17.4	11.9
18	8.0	15.1	13.5	14.3	93	21	19.8	73	15.5	15.5	16.9	13.2
19	7.8	14.3	12.3	13.1	92	36	16.9	37	140	15.1	56	11.8
20	8.0	13.9	10.2	13.9	81	28	16.0	23	d100	14.7	51	10.8
21	8.6	13.5	9.2	29	39	18.8	15.5	24	d39	59	34	11.9
22	8.9	12.8	9.8	21	29	19.3	15.1	18.4	37	378	75	11.2
23	9.2	50	13.5	15.1	24	35	14.7	15.1	66	98	38	11.2
24	8.6	64	11.6	12.3	22	26	14.3	15.5	128	41	22	10.8
25	7.7	31	8.3	11.9	30	19.3	24	344	130	29	19.3	9.8
26	6.4	17.4	10.5	12.3	34	17.9	16.0	91	39	23	17.9	9.2
27	7.4	13.5	10.2	13.5	31	54	17.7	54	115	26	17.4	8.9
28	20	12.3	10.2	12.7	115	43	14.7	35	71	19.8	15.1	10.5
29	61	12.3	9.8	12.7	42	21	15.5	24	35	18.4	13.5	10.5
30	14.4	10.8	10.5	11.9	-------	19.3	14.7	196	24	18.4	14.3	29
31	68	-------	10.8	10.8	-------	17.9	-------	110	-------	16.9	15.1	-------

d Doubtful gage-height record; discharge computed on basis of partly reconstructed gage-height graph.

Elizabeth River at Elizabeth--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14.3	7.7	11.6	66	29	48	21	25	13.1	10.5	7.3	45
2	10.2	7.7	10.5	44	22	30	15.5	17.9	12.7	8.8	8.6	9.8
3	8.9	23	10.2	34	19.3	24	12.3	67	12.7	7.1	25	7.7
4	8.6	26	25	21	56	22	12.7	17.9	11.2	6.2	48	5.5
5	8.9	9.8	9.2	183	31	27	13.9	16.4	9.5	9.6	10.8	12.8
6	17.5	8.9	16.7	275	21	23	189	16.4	11.2	39	8.3	48
7	11.2	41	10.2	46	62	20	30	42	11.2	16.0	6.7	8.6
8	60	8.3	9.5	34	30	19.3	26	11.6	11.2	8.3	7.2	15.2
9	12.4	8.6	9.2	32	25	17.9	21	12.3	11.2	7.4	8.9	8.3
10	8.9	53	9.2	25	21	16.9	15.1	24	10.8	14.7	9.5	6.4
11	8.9	13.4	8.3	14.5	22	57	13.9	14.3	9.8	8.0	9.5	4.8
12	11.2	9.5	7.4	2.0	16.4	18.8	15.1	14.3	8.3	12.4	22	6.3
13	10.5	11.4	8.6	8.7	16.0	15.1	16.9	13.5	9.5	67	8.5	77
14	11.2	7.7	8.6	15.1	16.9	15.1	53	57	10.8	10.2	5.7	17.4
15	10.5	7.7	10.2	12.7	17.9	16.0	16.0	15.6	11.6	29	7.2	16.2
16	9.5	8.9	69	11.9	32	14.7	a14	13.1	10.8	8.3	14.1	11.3
17	8.6	15.2	44	13.1	35	15.1	a13	14.3	10.5	102	16.0	7.2
18	20	10.2	14.4	13.1	18.8	19.2	a50	13.9	8.9	23	9.2	5.7
19	10.5	18.7	10.8	25	16.0	22	a120	14.3	7.7	11.9	8.9	8.2
20	13.4	49	10.8	13.1	77	15.1	23	63	9.2	11.6	6.7	8.6
21	9.8	9.8	12.3	88	22	16.8	21	15.5	10.2	10.8	5.2	8.6
22	9.8	13.7	17.9	200	106	16.4	107	88	10.2	10.2	6.1	17.4
23	10.2	17.2	17.4	40	90	101	64	74	9.8	7.6	8.0	34
24	33	10.2	11.6	78	34	24	26	22	9.8	5.5	8.6	6.1
25	26	8.6	8.0	34	35	21	21	40	8.9	7.8	8.0	4.4
26	10.5	7.7	6.9	58	19.8	19.8	19.8	27	7.2	9.2	8.0	5.9
27	9.8	28	7.2	41	17.9	15.5	19.3	16.0	10.6	9.2	6.7	7.7
28	9.8	8.9	8.6	243	30	15.1	16.4	12.7	9.5	8.6	4.8	8.6
29	9.5	74	63	48	-------	15.1	15.1	10.5	9.8	8.9	106	80
30	8.6	14.9	266	32	-------	15.1	13.9	9.8	9.8	24	12.7	21
31	8.0	-------	329	11.7	-------	19.4	-------	11.2	-------	13.3	28	-------

a No gage-height record; discharge computed on basis of weather records and records for stations on nearby streams.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.3	9.2	6.9	5.0	23	9.8	10.8	26	45	4.8	10.2	19.1
2	5.5	28	12.6	4.8	84	9.2	9.8	16.3	15	4.6	8.3	10.4
3	6.4	8.9	8.5	12.6	22	8.6	10.2	13.9	12	6	51	19.3
4	8.0	8.3	4.4	7.4	11.6	7.4	11.9	11.9	80	35	15.4	7.0
5	9.4	6.9	5.7	7.2	7.7	6.4	19.4	25	20	30	8.0	10.8
6	8.0	5.0	6.1	8.0	15.0	6.9	11.2	12.4	15	10	10.5	9.5
7	8.3	5.5	13.1	28	10.6	8.9	9.5	8.0	11	8.3	7.5	8.0
8	6.9	6.7	9.2	5.5	8.6	14.8	9.6	8.2	9	7.4	8.0	8.0
9	5.5	6.4	6.4	5.7	55	29	6.9	9.8	8	5.9	7.5	7.2
10	6.3	7.4	5.7	45	16.8	9.2	7.7	11.8	7.5	f240	11.4	53
11	7.4	7.4	9.0	13.8	13.6	9.4	10.2	9.8	7	f260	29	29
12	8.0	6.7	18.2	8.6	8.0	11.6	10.2	10.7	7.4	50	9.0	15.1
13	9.1	5.5	55	17.1	18.1	44	10.2	8.3	9.2	20	5.8	59
14	7.4	19.2	12.2	9.4	89	18.0	11.1	6.4	11.2	15	6.0	15.7
15	5.9	7.4	7.7	5.9	172	11.6	9.6	8.8	46	12	7.7	10.5
16	4.4	7.4	6.9	6.4	59	9.8	6.7	12.8	12.6	18	8.0	7.0
17	5.3	7.2	6.1	7.4	34	9.2	6.9	21	22	14	8.3	5.6
18	6.9	11.0	5.5	27	19.3	11.1	8.9	49	7.0	11.9	7.5	6.4
19	6.9	9.1	19.0	8.6	14.3	6.1	9.5	57	8.2	11.2	156	8.3
20	7.4	5.7	7.7	7.4	10.6	6.8	38	14.8	10.9	10.9	63	8.0
21	7.7	5.5	7.2	6.4	10.8	76	15.7	7.7	22	9.2	19.1	7.7
22	6.4	6.9	7.2	5.5	11.2	23	9.2	9.3	9.5	7.5	11.6	24
23	5.0	6.9	16.8	6.0	22	217	12.1	18.6	9.5	6.0	15.4	6.7
24	5.2	5.7	9.0	10.8	21	45	11.5	53	23	8.0	9.2	4.9
25	6.8	16.2	4.8	8.0	13.7	26	12.9	16.3	23	9.5	8.6	5.4
26	f71	6.0	4.7	7.7	8.6	18.0	18.0	11.2	9.2	8.6	7.0	7.0
27	8.3	4.6	93	11.5	7.2	36	10.5	9.6	7	8.3	5.4	7.0
28	7.4	5.0	22	6.4	8.3	33	25	7.4	6	8.3	6.3	7.2
29	8.5	15.9	11.2	26	-------	22	12.8	67	5.5	11.6	98	6.7
30	6.7	8.8	7.7	16.7	-------	16.6	12.4	11.6	5	5.6	24	6.0
31	43	-------	6.1	52	-------	13.5	-------	8.3	-------	5.8	112	-------

f Computed on basis of partly estimated gage-height record.

Note.--No gage-height record June 1-11, 27-30, July 1-6, 12-17; discharge computed on basis of precipitation records and records for Rahway River near Springfield and Second River at Belleville.

Elizabeth River at Elizabeth--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	684.9	108	8.9	22.1	26.8	1.49	1.72
November	1,086.9	209	7.7	36.2	41.1	2.28	2.55
December	1,006.9	245	3.1	32.5	37.3	2.07	2.39
Calendar year 1945	10,626.5	466	.9	29.1	34.1	1.89	25.68
January 1946	672.9	71	9.5	21.7	26.6	1.48	1.70
February	446.0	65	9.8	15.9	21.3	1.18	1.28
March	715.1	121	10.2	23.1	28.0	1.56	1.79
April	357.4	33	7.2	11.9	17.0	.944	1.05
May	1,157.9	144	7.5	37.4	42.3	2.35	2.71
June	1,160.3	465	9.8	38.7	43.6	2.42	2.70
July	1,070.9	350	7.2	34.5	39.2	2.18	2.51
August	634.9	128	1.3	20.5	25.1	1.39	1.60
September	630.1	211	6.2	21.0	25.7	1.43	1.59
Water year 1945-46	9,624.2	465	1.3	26.4	31.2	1.73	23.54
October 1946	357.2	23	8.1	11.5	16.0	.889	1.03
November	315.4	63	1.0	10.5	15.3	.850	.95
December	422.9	140	5.9	13.6	18.5	1.03	1.19
Calendar year 1946	7,941.0	465	1.0	21.8	26.6	1.48	20.05
January 1947	659.5	141	6.9	21.3	26.2	1.46	1.68
February	344.1	52	8.9	12.3	17.8	.989	1.03
March	726.9	75	10.0	23.4	28.6	1.59	1.83
April	895.8	220	11.2	29.9	35.2	1.96	2.18
May	1,109.3	109	12.3	35.8	40.9	2.27	2.62
June	632.5	75	9.2	21.1	26.3	1.46	1.63
July	567.3	102	6.7	18.3	23.3	1.29	1.49
August	561.4	131	7.7	18.1	23.4	1.30	1.50
September	445.4	50	1.6	14.8	20.2	1.12	1.25
Water year 1946-47	7,037.7	220	1.0	19.3	24.4	1.36	18.38
October 1947	368.2	68	.9	11.9	17.1	.950	1.10
November	1,914.2	595	8.0	63.8	69.0	3.83	4.28
December	409.7	58	8.3	13.2	18.1	1.01	1.16
Calendar year 1947	8,634.3	595	.9	23.7	28.8	1.60	21.75
January 1948	639.8	68	10.8	20.6	25.6	1.42	1.64
February	1,042.1	115	9.8	35.9	41.1	2.28	2.46
March	1,041.1	85	17.9	33.6	38.4	2.13	2.46
April	1,008.6	230	14.3	33.6	38.4	2.13	2.38
May	1,940.5	344	11.2	62.6	67.3	3.74	4.31
June	1,513.3	140	15.5	50.4	55.4	3.08	3.44
July	1,467.5	378	7.2	47.3	52.0	2.89	3.33
August	1,099.2	194	13.5	35.5	40.1	2.23	2.57
September	427.8	55	8.9	14.3	19.2	1.07	1.19
Water year 1947-48	12,872.0	595	.9	35.2	40.1	2.23	30.32
October 1948	420.2	60	8.0	13.6	18.5	1.03	1.18
November	588.7	74	7.7	18.0	23.1	1.28	1.43
December	1,061.3	329	6.9	34.2	39.2	2.18	2.51
Calendar year 1948	12,200.1	378	6.9	33.3	38.2	2.12	28.90
January 1949	1,762.9	275	2.0	56.9	61.8	3.43	3.96
February	939.0	106	16.0	33.5	38.8	2.16	2.24
March	735.4	101	14.7	23.7	28.4	1.58	1.82
April	1,014.9	189	12.3	33.8	38.6	2.14	2.39
May	810.5	88	9.8	26.1	30.7	1.71	1.97
June	307.7	13.1	7.2	10.3	15.2	.844	.94
July	526.1	102	5.5	17.0	21.9	1.22	1.40
August	450.2	106	4.8	14.5	19.6	1.09	1.26
September	523.7	80	4.4	17.5	22.7	1.26	1.41
Water year 1948-49	9,090.6	329	2.0	24.9	29.9	1.66	22.51
October 1949	317.3	71	4.4	10.2	15.4	.856	.99
November	260.4	28	4.6	8.68	14.0	.778	.87
December	415.6	93	4.4	13.4	18.2	1.01	1.17
Calendar year 1949	8,063.7	275	2.0	22.1	27.1	1.51	20.42
January 1950	397.8	52	4.8	12.8	17.6	.978	1.13
February	795.0	172	7.2	28.4	33.5	1.86	1.94
March	773.9	217	6.1	25.0	29.6	1.64	1.89
April	368.4	38	6.7	12.3	16.9	.939	1.05
May	561.9	67	6.4	18.1	22.6	1.26	1.45
June	483.7	80	5	16.1	20.8	1.16	1.29
July	863.4	260	4.6	27.9	32.3	1.79	2.07
August	754.7	156	5.4	24.3	28.8	1.60	1.84
September	399.5	59	4.9	13.3	17.9	.994	1.11
Water year 1949-50	6,391.6	260	4.4	17.5	22.3	1.24	16.80

* Adjusted for diversion from Hammock well field of Elizabethtown Water Co.

West Branch Rahway River at Millburn

Location.--Lat 40°43'51", long 74°18'26", on left bank just upstream from Diamond Mill Pond Dam, 1,000 ft upstream from Glen Avenue in Millburn, Essex County, and 1.9 miles upstream from confluence with East Branch.

Drainage area.--7.1 sq mi.

Records available.--October 1939 to September 1950 (discontinued).

Gage.--Water-stage recorder above dam. Datum of gage is 173.04 ft above mean sea level, datum of 1929.

Average discharge.--11 years, 11.9 cfs (adjusted).

Extremes.--1939-50: Maximum discharge, 1,090 cfs July 23, 1945 (gage height, 3.19 ft), from rating curve extended above 100 cfs on basis of laboratory rating; no flow Dec. 8, 22, 1939, Dec. 7, 8, 1941, Dec. 2, 3, 1946, for many days during November and December 1949, and Jan. 8, 1950.

Peak discharge (base, 200 cfs).--
1946: Nov. 29 (3 to 4 a.m.) 215 cfs (1.87 ft); Dec. 26 (4 to 5 a.m.) 268 cfs (1.98 ft); June 2 (1:45 p.m.) 422 cfs (2.26 ft); July 23 (11:30 a.m.) 342 cfs (2.12 ft).
1947: Apr. 5 (12 m.) 294 cfs (2.03 ft); July 22 (3:30 a.m.) 215 cfs (1.87 ft); July 22 (9 p.m.) 244 cfs (1.93 ft).
1948: Nov. 8 (1 p.m.) 820 cfs (2.85 ft); Nov. 12 (2 a.m.) 459 cfs (2.32 ft); Apr. 1 (9 a.m.) 304 cfs (2.05 ft); May 13 (5 p.m.) 244 cfs (1.93 ft); May 25 (2 p.m.) 326 cfs (2.09 ft); June 24 (8:30 p.m.) 558 cfs (2.48 ft).
1949: Dec. 31 (9:30 a.m.) 326 cfs (2.09 ft); Jan. 6 (3 a.m.) 320 cfs (2.08 ft).
1950: Mar. 23 (9:30 a.m.) 136 cfs (1.68 ft), (annual maximum below base).

Remarks.--Diversions from river and wells by city of Orange for municipal supply. Flow regulated by several small reservoirs above station.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.05	2.2	18.4	42	7.4	4.7	4.0	1.36	3.3	2.2	1.74	0.57
2	1.36	2.2	13.6	16.7	4.0	5.5	4.0	1.05	228	40	1.74	.57
3	1.05	2.2	10.9	10.9	2.2	21	5.5	.79	62	10.0	1.74	.79
4	.79	1.74	10.9	8.4	1.74	29	4.6	.79	20	2.7	1.74	.79
5	1.05	1.74	9.6	8.4	1.74	27	3.3	.79	15.1	2.7	2.0	.57
6	2.4	1.74	29	18.6	2.7	16.7	2.7	.79	10.9	2.2	2.2	.57
7	18.5	1.36	25	30	4.7	12.2	2.2	.79	7.4	1.74	3.2	.79
8	12.1	1.05	13.6	20	2.7	12.2	2.2	.79	5.5	1.74	2.7	.57
9	5.5	1.05	9.6	15.2	2.7	15.1	2.7	1.05	3.3	1.74	2.2	.57
10	4.0	.79	8.4	25	2.7	9.6	2.7	.79	2.7	1.74	1.74	.57
11	2.7	1.05	6.4	13.6	2.7	5.5	2.2	.79	2.9	1.74	1.74	.57
12	2.2	1.36	4.7	13.6	2.2	4.0	1.74	2.5	7.2	1.74	1.74	.57
13	1.74	1.36	3.3	10.9	2.2	3.3	1.74	4.7	4.7	1.74	1.83	.57
14	1.36	6.9	4.0	7.4	4.0	3.3	1.74	9.6	3.3	1.74	1.74	.57
15	1.36	5.9	3.3	6.4	3.3	15.8	1.74	29	2.7	1.74	1.36	.39
16	1.36	3.3	2.7	4.7	2.2	15.1	1.05	12.2	2.2	1.74	1.36	.57
17	1.36	2.7	2.2	4.0	2.7	7.4	1.36	26	2.2	1.36	1.74	.57
18	1.36	2.2	1.74	4.0	2.2	7.4	1.36	59	2.2	1.36	2.2	1.05
19	1.74	15.6	2.2	2.7	2.2	7.4	1.05	20	2.2	1.36	2.9	1.05
20	2.2	52	2.7	2.2	2.7	5.5	1.05	9.6	2.2	1.36	1.74	2.2
21	1.74	14.1	2.2	2.7	1.74	4.0	1.05	12.0	2.2	1.87	1.36	2.7
22	3.6	87	2.2	2.2	1.74	3.3	1.05	9.6	1.74	2.7	1.36	1.36
23	5.1	31	1.74	2.2	1.74	2.7	1.36	4.0	1.74	151	1.36	1.36
24	10.9	12.2	1.74	2.2	1.74	2.7	1.36	2.7	1.74	41	1.36	1.74
25	15.1	8.4	22	2.2	1.74	5.5	1.36	2.2	1.74	9.7	1.05	1.05
26	11.7	6.4	178	2.2	1.74	11.0	1.36	1.74	1.74	4.1	1.05	1.05
27	3.9	4.7	39	2.2	1.86	59	1.36	90	1.36	2.7	1.05	1.36
28	2.2	14.2	20	1.74	5.5	15.1	1.05	46	1.74	2.7	1.05	1.05
29	3.3	149	22	1.74	------	8.4	1.36	13.6	2.1	2.7	1.37	1.05
30	3.3	27	27	3.5	-------	7.4	1.36	7.4	2.7	2.2	.79	.79
31	3.3	-------	73	7.4	-------	4.7	-------	4.7	-------	2.2	.57	-------

West Branch Rahway River at Millburn--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.57	0.57	0.03	0.39	0.79	0.39	1.74	84	4.0	1.74	1.05	0.79
2	.57	.79	0	.39	.57	.78	28	22	3.3	1.36	1.05	1.54
3	.57	.79	0	.39	.57	1.36	37	15.1	2.7	1.36	1.05	1.05
4	.57	.57	.01	.39	.79	1.36	10.9	48	2.2	1.36	1.05	.79
5	.79	.07	.03	.39	.79	1.36	136	4.0	2.2	1.05	1.05	1.36
6	1.05	.07	.03	.39	.79	1.36	51	25	1.74	1.05	1.05	1.05
7	1.36	.14	.03	.25	.79	1.74	16.7	15.1	2.2	1.36	1.05	1.05
8	1.74	.25	.03	.14	.79	2.2	9.6	9.6	18.3	2.7	1.36	1.05
9	2.2	.14	.03	.14	.57	2.2	9.6	6.4	20	1.36	1.83	1.05
10	3.3	.14	.03	.07	.57	2.2	7.4	4.7	6.4	1.36	1.74	1.05
11	3.3	.14	.03	.07	.57	2.7	5.5	4.0	4.0	1.36	1.74	.79
12	4.0	.14	.07	.14	.57	6.1	4.7	3.3	2.7	1.05	1.36	.79
13	2.2	.07	.07	.14	.57	13.2	3.3	2.7	2.2	1.05	1.36	.79
14	2.2	.07	.07	.25	.57	126	2.7	7.0	6.0	1.05	1.05	.57
15	2.7	.07	.07	.57	.57	41	2.7	7.4	19.7	1.05	1.05	3.5
16	2.7	.07	.07	1.05	.57	16.7	6.0	4.0	6.4	1.05	1.42	.79
17	2.7	.14	.07	1.05	.57	9.6	9.6	2.7	3.3	1.36	3.4	.57
18	2.2	.07	.07	1.05	.57	6.4	4.7	8.5	3.3	1.05	2.2	.57
19	.39	.07	.07	1.05	.57	4.0	3.3	13.6	2.7	1.05	2.2	.79
20	.79	.07	.14	11.3	.57	3.3	2.7	37	3.0	1.05	1.74	.57
21	1.05	.07	1.05	5.2	.57	2.7	3.5	22	4.0	1.05	1.74	.57
22	1.05	.44	.57	1.74	.57	2.7	4.7	33	2.7	47	1.36	.79
23	1.05	.25	.57	1.36	.39	2.2	3.3	20	2.2	41	1.36	.57
24	1.05	.14	.39	1.05	.39	2.2	2.7	9.6	2.2	6.3	1.05	.57
25	1.05	.14	.39	.79	.39	18.5	2.2	a12	2.2	2.7	1.05	.57
26	1.36	.14	.39	.79	.39	9.6	5.5	40	1.74	1.74	1.41	.57
27	1.05	.14	.25	1.36	.39	4.0	3.3	13.6	1.74	1.74	1.36	.57
28	1.36	.07	.39	1.36	.39	2.7	2.7	7.4	1.74	1.36	1.05	.57
29	1.05	.07	.39	1.05	-------	2.2	1.74	8.0	1.74	1.36	1.05	.39
30	.57	.07	.39	1.05	-------	1.74	6.7	16.3	1.74	1.36	1.05	.25
31	.57	-------	.39	1.05	-------	1.74	-------	6.4	-------	1.05	.79	-------

a No gage-height record; discharge computed on basis of recorded range in stage and adjoining gage-height graph.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.25	0.39	2.7	1.36	1.36	25	143	2.2	20	6.4	1.74	1.36
2	.25	.39	2.7	2.7	1.36	32	49	2.2	12.2	4.7	1.74	1.36
3	.39	.39	2.2	4.7	1.05	38	19.5	2.7	8.4	4.0	2.2	1.36
4	.39	28	1.74	4.0	1.05	23	12.2	2.7	6.4	4.0	2.2	1.36
5	.57	12.0	1.74	3.3	1.05	12.9	9.6	6.4	5.5	3.3	6.5	1.36
6	.57	7.4	1.74	3.3	1.05	9.7	8.4	4.7	4.0	3.3	4.8	1.36
7	.57	7.4	1.36	3.3	1.05	14.5	7.4	14.4	4.0	2.7	2.2	1.36
8	.79	148	1.74	3.3	1.05	23	6.4	16.7	6.4	2.7	2.2	1.36
9	1.05	87	1.36	2.7	1.05	27	4.7	8.4	4.7	2.2	1.74	1.36
10	1.05	9.6	1.36	3.3	1.05	59	4.0	5.5	4.0	2.2	1.74	1.36
11	1.05	4.7	1.36	2.7	1.05	43	7.1	4.0	3.3	1.74	1.74	1.36
12	1.05	201	1.36	2.7	.79	22	23	3.3	4.2	1.74	15.1	1.05
13	.79	30	1.36	4.0	.79	16.7	18.4	120	16.8	13.7	13.2	1.05
14	.57	10.9	1.36	4.7	9.9	13.6	40	65	7.4	7.4	3.3	1.05
15	.57	7.4	1.36	3.3	8.6	17.1	47	22	4.7	2.7	2.2	.79
16	.57	7.4	3.3	2.7	6.8	58	20	15.4	4.0	2.2	1.74	.79
17	.57	6.4	2.7	2.7	50	38	12.2	57	3.3	1.74	1.74	.79
18	.57	4.7	2.2	2.7	66	18.4	8.4	39	2.7	1.74	1.74	1.05
19	.57	2.2	2.2	2.7	62	17.0	5.5	16.8	22	1.74	1.74	1.05
20	.57	2.2	2.2	2.2	95	20	6.4	9.6	28	1.74	2.2	1.36
21	.79	2.2	2.2	2.2	38	13.6	5.5	7.4	9.8	5.2	2.7	1.05
22	.79	2.2	1.74	2.2	22	10.9	4.7	5.5	5.5	20	12.3	1.05
23	.57	4.0	1.74	2.2	13.6	9.6	4.0	4.7	11.4	21	24	1.05
24	.39	11.5	1.74	2.2	9.2	10.9	4.0	4.0	73	12.5	6.4	.79
25	.79	25	1.74	1.74	9.6	7.4	4.0	132	116	4.0	2.7	.79
26	1.05	9.6	2.2	1.74	16.7	6.4	3.3	53	17.9	2.7	2.2	.79
27	.57	4.7	1.74	1.74	23	15.5	2.7	18.4	25	2.2	1.74	.79
28	.39	3.3	1.36	1.36	62	28	2.7	10.9	36	1.74	1.74	.79
29	1.05	3.3	1.05	1.36	43	10.9	2.7	8.4	14.1	1.74	1.74	.79
30	.57	2.7	1.05	1.36	-------	7.4	2.2	94	7.4	1.74	1.36	1.36
31	.57	-------	1.05	1.36	-------	6.4	-------	40	-------	1.74	1.36	-------

West Branch Rahway River at Millburn--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.74	1.74	0.39	52	12.2	7.4	3.3	2.2	1.36	0.57	0.39	0.70
2	1.36	1.36	.39	22	6.4	4.7	3.3	2.7	1.36	.57	.39	.25
3	1.74	1.05	.39	12.2	4.0	4.0	2.7	21	1.05	.57	.25	.25
4	1.36	1.74	.39	4.4	6.7	4.0	2.2	9.0	1.05	.57	.84	.25
5	1.36	1.74	.25	53	9.6	7.1	1.74	4.0	1.05	.57	.57	.25
6	1.05	1.05	.25	180	7.4	20	68	2.2	1.05	.57	.39	.65
7	1.36	.57	.25	37	15.2	11.6	27	14.7	1.05	.57	.39	.25
8	2.7	.39	.25	18.4	21	5.5	12.2	5.7	.79	.57	.25	.25
9	2.2	.39	.14	10.4	16.7	4.0	8.4	2.7	.79	.57	.25	.14
10	1.74	.57	.14	6.4	15.1	4.0	4.0	2.7	.79	.57	.14	.07
11	1.36	.39	.14	4.9	9.4	7.2	3.3	2.7	.79	.57	.14	.07
12	1.36	.39	.14	4.0	5.5	9.6	3.3	1.74	.79	.57	.25	.07
13	1.05	.39	.14	4.0	5.5	4.7	2.7	1.74	.79	.79	.25	2.1
14	1.05	.25	.07	4.0	6.4	3.3	7.4	2.4	.79	.39	.25	1.34
15	1.36	.14	.14	4.0	6.4	2.7	6.4	2.7	.79	.57	.25	1.36
16	1.74	.14	.25	3.0	5.5	2.2	4.7	1.74	.79	.57	.34	a.3
17	1.36	.25	.39	2.2	9.6	2.2	3.3	1.74	.79	1.3	.52	a.1
18	1.36	.14	.39	1.74	4.7	2.2	5.9	1.74	.79	1.36	.25	a.03
19	1.05	.25	.39	2.2	4.0	2.2	73	1.36	.79	.79	.25	a.03
20	1.05	.57	.57	1.74	18.9	2.2	18.1	1.36	.79	.79	.14	a.03
21	.79	.25	.57	3.1	10.9	2.2	9.6	1.36	.79	.57	.14	.03
22	1.05	.25	.57	92	19.8	4.0	24	2.7	.79	.57	.14	.03
23	1.36	.25	.57	28	70	45	57	8.6	.57	.39	.14	.14
24	2.2	.25	.57	36	20	21	18.4	2.2	.57	.39	.14	.07
25	.57	.25	.39	30	13.6	9.6	9.6	2.7	.57	.39	.14	.07
26	.39	.25	.25	16.7	9.6	7.4	7.4	1.74	.57	.39	.14	.07
27	.79	.39	.25	13.6	6.4	7.4	6.4	1.74	.57	.39	.14	.07
28	1.36	.25	.25	111	7.4	4.7	4.0	1.36	.57	.39	.14	.07
29	1.36	.57	1.19	41	-------	3.3	2.7	1.36	.57	.39	1.37	.80
30	1.36	.57	97	14.5	-------	3.3	2.2	1.36	.57	.39	.39	.25
31	1.36	-------	191	12.2	-------	2.7	-------	1.36	-------	.39	.25	-------

a No gage-height record; discharge computed on basis of records for stations on nearby streams.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.14	0.39	0	0.07	0.25	0.57	2.7	8.4	6.4	1.36	1.05	1.74
2	.14	.25	0	.07	*1.05	.39	2.2	5.5	6.4	1.36	1.05	1.36
3	.25	.14	0	.07	1.05	.39	2.2	4.7	5.5	1.36	1.74	1.74
4	.25	.01	0	.07	.57	.25	1.36	4.0	9.6	1.74	1.74	1.36
5	.25	.03	0	.07	.57	.25	1.36	4.7	6.4	1.74	1.36	1.05
6	.25	.01	0	.07	.57	.25	1.36	4.7	5.5	1.74	1.74	1.05
7	.25	.01	0	.01	.57	.25	.79	3.3	4.7	1.36	1.36	1.05
8	.25	.01	0	0	.57	.39	.79	2.7	3.3	1.36	1.36	1.05
9	.25	.01	0	.01	.79	.39	.79	2.7	2.7	1.05	1.05	1.05
10	.25	.01	0	.25	1.05	.39	.79	2.7	2.7	17.0	1.05	1.36
11	.14	.01	0	.14	1.05	.57	.79	2.7	2.2	19.6	1.36	1.36
12	.14	.01	0	.03	.79	.57	.79	2.5	1.74	9.6	1.36	1.36
13	.07	.01	.14	.03	.79	.79	.79	2.2	1.74	3.3	1.36	1.36
14	.07	.07	.07	.03	1.05	.79	.79	2.1	1.74	2.2	1.05	1.36
15	.07	.03	.01	.07	7.5	.79	.79	2.0	2.2	1.74	1.05	1.36
16	.07	.03	0	.07	8.6	.57	.79	2.1	2.2	1.74	1.05	1.05
17	.03	.01	0	.03	4.6	.57	.79	2.2	2.2	2.2	1.05	1.05
18	.03	.01	0	.07	3.3	.57	.79	3.3	1.74	1.74	1.05	1.05
19	.03	.03	.03	.03	2.7	.25	1.36	7.4	1.74	1.74	3.4	1.05
20	.01	.03	.03	.03	b1.0	.39	1.74	5.5	1.74	1.36	2.7	1.05
21	.01	.03	.03	.03	b.8	1.05	1.74	3.3	2.2	1.05	1.74	1.05
22	.01	.01	.03	.03	b.9	1.74	1.74	2.7	2.2	1.05	1.36	1.36
23	.01	0	.03	.03	1.05	43	1.74	3.3	1.74	1.05	1.36	1.36
24	.01	0	.01	.07	1.05	34	1.74	5.5	2.8	1.05	1.36	1.05
25	.01	0	.01	.07	.79	15.8	2.2	3.5	3.5	1.05	1.36	.79
26	.49	0	.01	.07	.79	6.4	2.2	3.0	2.2	1.05	1.05	.79
27	.14	0	1.18	.03	.57	17.8	2.2	2.7	1.74	1.05	1.05	.79
28	.14	0	.25	.03	.57	20	8.4	2.7	1.36	1.05	1.05	.79
29	.14	0	.03	.14	-------	15.1	4.7	7.4	1.36	1.05	9.6	1.05
30	.14	0	.07	.07	-------	7.4	4.7	6.4	1.36	1.05	3.0	1.05
31	.79	-------	.07	.14	-------	4.0	-------	4.0	-------	1.05	5.9	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Doubtful gage-height record (partly obstructed intake) for all or part of Nov. 1, Dec. 14-17, 20, 28-31, Jan. 1, 2, 11-14, Feb. 2, 3, Apr. 23-26, 30, May 2-4, 9, 10, 12-16, 20, 21, 25-27, 30, 31; discharge computed from reconstructed gage-height graph on basis of adjacent days and records for Rahway River near Springfield.

West Branch Rahway River at Millburn--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	129.32	18.5	0.79	4.17	8.35	1.18	1.36
November	462.44	149	.79	15.4	20.2	2.85	3.17
December	571.12	178	1.74	18.4	23.1	3.25	3.76
Calendar year 1945	4,789.95	414	.39	13.1	17.7	2.49	33.80
January 1946	294.98	42	1.74	9.52	15.5	2.18	2.52
February	76.78	7.4	1.74	2.74	8.80	1.24	1.29
March	351.5	59	2.7	11.3	16.7	2.35	2.71
April	61.60	5.5	1.05	2.05	7.12	1.00	1.12
May	376.32	90	.79	12.1	16.9	2.38	2.75
June	408.80	228	1.36	13.6	18.5	2.61	2.91
July	305.51	151	1.36	9.86	14.6	2.06	2.37
August	51.72	3.2	.57	1.67	6.24	.879	1.01
September	27.98	2.7	.39	.933	5.62	.792	.88
Water year 1945-46	3,118.07	228	.39	8.54	13.5	1.90	25.85
October 1946	47.11	4.0	.39	1.52	6.03	.849	.98
November	5.97	.79	.07	.199	5.21	.734	.82
December	6.12	1.05	0	.197	5.25	.739	.85
Calendar year 1946	2,014.39	228	0	5.52	10.6	1.49	20.21
January 1947	36.41	11.3	.07	1.17	6.51	.917	1.06
February	16.20	.79	.39	.579	5.99	.844	.88
March	294.23	126	.39	9.49	14.6	2.06	2.36
April	384.48	136	1.74	12.8	17.9	2.52	2.81
May	512.4	84	2.7	16.5	21.5	3.03	3.50
June	138.34	20	1.74	4.61	9.87	1.39	1.55
July	132.48	47	1.05	4.27	9.38	1.32	1.52
August	43.07	3.4	.79	1.39	7.07	.996	1.15
September	25.93	3.5	.25	.864	6.30	.887	.99
Water year 1946-47	1,642.74	136	0	4.50	9.66	1.36	18.47
October 1947	20.29	1.05	.25	.655	6.26	.882	1.02
November	645.97	201	.39	21.5	27.1	3.82	4.26
December	55.65	3.3	1.05	1.80	7.20	1.01	1.17
Calendar year 1947	2,305.45	201	.07	6.32	11.6	1.63	22.27
January 1948	81.82	4.7	1.36	2.64	8.27	1.16	1.34
February	550.15	95	.79	19.0	24.6	3.46	3.74
March	654.9	59	6.4	21.1	26.6	3.75	4.32
April	488.0	143	2.2	16.3	22.4	3.15	3.52
May	796.3	132	2.2	25.7	31.5	4.44	5.12
June	488.1	116	2.7	16.3	22.5	3.17	3.53
July	146.50	21	1.74	4.73	9.76	1.37	1.59
August	130.00	24	1.36	4.19	9.09	1.28	1.48
September	33.19	1.36	.79	1.11	5.76	.811	.90
Water year 1947-48	4,090.87	201	.25	11.2	16.7	2.35	31.99
October 1948	41.94	2.7	.39	1.35	6.68	.941	1.09
November	16.79	1.74	.14	.560	6.34	.893	1.00
December	298.07	191	.07	9.62	15.5	2.18	2.52
Calendar year 1948	3,725.76	191	.07	10.2	15.7	2.21	30.15
January 1949	825.68	180	1.74	26.6	32.6	4.59	5.29
February	346.9	70	4.0	12.4	18.8	2.65	2.75
March	221.4	45	2.2	7.14	13.0	1.83	2.12
April	402.24	73	1.74	13.4	19.4	2.73	3.05
May	112.60	21	1.36	3.63	9.61	1.35	1.56
June	24.38	1.36	.57	.813	7.14	1.01	1.12
July	18.05	1.36	.39	.582	6.39	.900	1.04
August	9.63	1.37	.14	.311	6.40	.901	1.04
September	10.09	2.1	.03	.336	6.36	.896	1.00
Water year 1948-49	2,327.77	191	.03	6.38	12.3	1.73	23.58
October 1949	4.83	.25	.01	.156	5.89	.830	.96
November	1.15	.39	0	.038	4.97	.700	.78
December	2.00	1.18	0	.065	4.63	.652	.75
Calendar year 1949	1,978.95	180	0	5.42	11.2	1.58	21.46
January 1950	1.93	.25	0	.062	4.97	.700	.81
February	44.94	8.6	.25	1.60	6.95	.979	1.02
March	175.67	43	.25	5.67	10.7	1.51	1.73
April	55.12	8.4	.79	1.84	7.19	1.01	1.13
May	119.9	8.4	2.0	3.87	8.95	1.26	1.45
June	92.90	9.6	1.36	3.10	8.36	1.18	1.31
July	86.84	19.6	1.05	2.80	7.98	1.12	1.30
August	57.76	9.6	1.05	1.86	6.77	.954	1.10
September	34.94	1.74	.79	1.16	5.51	.776	.87
Water year 1949-50	677.98	43	0	1.86	6.91	.973	13.21

* Adjusted for diversion by city of Orange.

Rahway River near Springfield

Location.--Lat 40°41'11", long 74°18'44", on left bank 50 ft downstream from bridge on U. S. Highway 22, 100 ft downstream from Pope Brook, and 1½ miles south of Springfield, Union County.

Drainage area.--25.5 sq mi.

Records available.--July 1938 to September 1950.

Gage.--Water-stage recorder and concrete control. Datum of gage is 66.17 ft above mean sea level, datum of 1929.

Average discharge.--12 years, 42.4 cfs (adjusted).

Extremes.--1938-50: Maximum discharge, 1,940 cfs July 23, 1938 (gage height, 7.41 ft), by contracted-opening method; minimum, 0.9 cfs Sept. 7-9, 11, 12, 1944 (gage height, 1.18 ft).

Peak discharge (base, 500 cfs).--
1946: Dec. 26 (7:30 a.m.) 672 cfs (4.23 ft); June 2 (4 to 4:30 p.m.) 975 cfs (5.16 ft); July 23 (3 p.m.) 789 cfs (4.61 ft).
1947: Apr. 5 (6 p.m.) 646 cfs (4.14 ft).
1948: Nov. 4 (5:30 p.m.) 678 cfs (4.25 ft); Nov. 8 (6 p.m.) 1,280 cfs (5.98 ft); Nov. 12 (7 a.m.) 905 cfs (4.96 ft); Apr. 1 (12:30 p.m.) 684 cfs (4.27 ft); May 13 (8 p.m.) 532 cfs (3.73 ft); May 25 (6 p.m.) 933 cfs (5.04 ft); June 25 (1 a.m.) 805 cfs (4.66 ft); July 13 (6 p.m.) 511 cfs (3.65 ft); July 22 (2:30 a.m.) 726 cfs (4.41 ft).
1949: Dec. 31 (12 m.) 812 cfs (4.68 ft); Jan. 6 (5 a.m.) 834 cfs (4.75 ft); Jan. 28 (1:30 p.m.) 508 cfs (3.64 ft).
1950: Mar. 23 (9 a.m.) 501 cfs (3.61 ft).

Remarks.--Water for municipal supply diverted from river by city of Orange. The flow past this station is affected by diversions by pumpage from wells by Orange, South Orange, Short Hills Water Co., and Springfield station of Elizabethtown Water Co.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.3	7.2	63	128	23	32	17.0	6.8	15.0	8.4	7.2	5.8
2	12.3	7.2	46	54	14.7	27	17.9	7.6	576	126	6.8	5.2
3	8.8	7.2	37	37	10.7	49	27	6.4	268	33	6.4	17.0
4	8.0	8.0	35	31	10.3	53	17.0	6.4	74	11.2	9.6	5.2
5	8.0	7.2	31	31	9.3	49	14.7	8.8	57	8.4	15.8	4.9
6	33	7.2	77	46	15.6	35	13.3	6.8	37	7.6	9.3	4.6
7	83	6.8	59	67	34	29	11.7	6.1	28	7.2	58	4.6
8	36	6.8	39	46	12.7	30	11.7	8.0	22	6.4	16.3	4.7
9	23	6.8	29	44	14.6	38	15.5	6.4	17.9	6.8	8.4	4.0
10	14.0	6.8	27	70	14.7	25	10.7	5.8	15.8	5.8	7.2	3.5
11	11.7	20	24	39	11.7	18.7	10.3	6.1	40	5.8	6.8	3.4
12	11.2	15.2	17.9	43	10.7	14.7	9.8	69	43	6.1	6.1	3.1
13	9.8	9.8	14.7	33	10.7	14.0	9.3	29	19.9	6.1	21	3.4
14	8.8	40	16.2	27	23	13.3	8.8	38	13.3	6.1	15.4	3.5
15	8.8	30	15.4	23	16.3	51	9.3	151	12.2	5.5	6.8	3.3
16	8.4	14.0	13.3	18.7	10.3	34	8.4	35	11.2	5.2	6.8	2.5
17	8.0	11.7	11.7	17.9	11.2	21	8.0	f80	10.7	5.2	31	2.4
18	8.0	11.2	11.2	17.0	10.7	28	7.6	f167	13.4	5.2	24	2.3
19	7.6	52	11.2	15.1	8.8	26	8.0	54	9.3	4.6	31	2.5
20	7.6	146	13.3	12.8	12.6	17.9	7.6	30	9.3	4.6	11.5	2.5
21	7.2	39	11.7	16.2	9.8	14.7	6.8	64	9.3	32	8.0	20
22	11.6	228	11.2	15.4	8.8	13.3	7.2	51	9.3	74	6.8	15.0
23	9.0	88	10.7	12.7	11.2	12.2	6.8	21	8.4	577	6.4	5.0
24	21	41	10.7	12.2	11.7	12.2	6.8	14.0	7.6	172	6.1	70
25	25	29	36	14.0	10.3	32	6.8	12.2	7.2	36	5.8	50
26	14.5	23	502	12.7	9.3	48	16.2	11.7	6.8	17.9	5.5	15.0
27	10.3	18.7	124	11.2	13.8	180	11.5	f194	6.8	12.2	6.0	8.0
28	8.8	52	55	10.3	62	46	8.0	f128	28	10.7	6.8	6.0
29	8.4	395	70	10.3	-------	29	8.4	39	25	9.3	23	5.6
30	8.0	132	80	41	-------	31	8.0	25	19.9	8.4	22	15.0
31	7.6	-------	200	43	-------	20	-------	17.9	-------	7.6	6.4	-------

f Computed on basis of partly estimated gage-height record.
Note.--No gage-height record Sept. 8-30; discharge computed on basis of records for station at Rahway.

Rahway River near Springfield--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a9	3.7	4.0	4.6	8.8	6.1	7.6	222	16.2	6.1	5.2	4.3
2	a5.5	3.7	3.7	5.2	8.0	26	70	54	13.3	15.6	4.9	57
3	a5	3.7	4.0	11.0	7.2	53	99	44	12.2	6.1	5.2	10.5
4	a5	4.0	4.3	8.9	26	21	30	135	10.7	5.8	4.9	6.1
5	a6	4.0	4.3	5.5	13.2	19.9	312	108	9.3	5.8	4.9	30
6	a5	3.4	4.3	5.8	8.4	35	196	68	9.8	5.8	4.6	8.4
7	a4.5	3.7	3.4	5.5	8.4	38	54	42	21	5.2	4.9	5.8
8	a4	8.9	3.1	5.2	8.0	28	33	30	91	77	8.4	5.2
9	a4	4.0	3.1	4.6	6.8	22	33	24	54	12.5	31	4.9
10	a5	3.7	2.7	4.3	6.8	22	26	20	19.6	7.2	39	4.6
11	4.3	3.7	3.1	4.6	6.4	22	20	16.2	12.7	9.9	8.4	4.6
12	15.4	5.6	3.6	5.5	6.8	23	18.7	14.7	10.3	6.4	5.5	4.3
13	7.5	4.0	7.4	5.2	6.8	29	15.4	13.3	8.8	5.8	5.2	4.0
14	4.0	3.7	3.1	15.1	6.8	216	13.3	34	47	6.1	4.6	4.0
15	4.0	4.0	2.4	29	7.2	92	12.7	27	78	5.5	4.0	36
16	4.0	3.7	2.4	24	8.4	44	35	15.4	21	7.2	7.8	14.6
17	3.7	4.4	2.4	15.2	8.0	26	29	13.7	12.2	26	146	6.4
18	7.2	6.3	2.4	9.8	8.0	21	17.0	36	22	9.4	18.5	9.8
19	5.1	4.0	2.4	8.0	6.8	16.2	13.3	34	12.2	24	8.8	6.8
20	3.7	4.0	3.1	101	5.2	14.7	12.2	96	18.1	8.4	8.0	13.6
21	3.7	3.7	71	40	4.7	13.3	23	58	17.0	6.4	8.0	4.6
22	3.7	31	19.5	13.4	8.0	12.2	18.2	92	9.3	214	6.1	24
23	3.7	7.8	8.0	10.3	8.0	10.7	12.7	55	8.8	129	5.5	6.4
24	3.7	4.9	5.8	9.3	7.2	11.7	11.7	30	10.4	21	5.5	4.6
25	3.7	4.3	4.9	8.8	6.8	55	12.2	53	9.3	10.7	4.6	8.3
26	8.2	4.6	4.6	18.0	6.4	24	24	94	8.0	8.4	22	4.6
27	4.3	9.9	4.6	27	6.4	14.0	12.7	31	7.2	7.6	11.1	4.0
28	5.1	4.6	6.1	11.7	6.1	12.2	11.2	22	6.8	7.6	5.8	4.0
29	5.9	4.3	14.7	9.3	-------	11.2	9.3	38	7.2	6.1	4.9	4.0
30	4.0	4.0	10.5	8.4	-------	10.8	29	67	6.8	5.5	4.6	4.3
31	3.7	-------	5.2	18.2	-------	9.3	-------	22	-------	5.5	4.9	-------

a No gage-height record; discharge computed on basis of records for station at Rahway.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.4	14.4	11.2	10.0	6.5	63	394	12.8	55	33	19.2	6.6
2	3.7	5.2	8.7	47	7	90	146	12.2	39	22	11.6	7.0
3	3.7	4.9	8.2	30	7	120	60	23	30	18.3	40	6.6
4	4.0	275	8.7	21	6	73	40	14.0	25	16.8	16.8	6.3
5	3.7	81	8.7	18.3	6	43	31	39	23	17.4	50	6.6
6	3.7	23	9.1	17.5	6.5	34	29	23	21	24	39	5.9
7	3.4	12.8	8.2	16.0	6	54	26	71	23	22	15.3	6.3
8	3.7	519	13.4	14.6	7	64	23	49	24	13.4	12.2	6.3
9	3.7	301	7.4	16.6	6	58	21	25	23	12.2	10.6	6.6
10	3.4	44	7.0	18.6	5.5	105	18.3	19.1	18.3	11.6	10.1	23
11	3.4	31	8.2	14.6	5.5	87	34	16.0	15.3	11.1	10.1	9.1
12	3.4	550	7.4	12.8	6.5	53	67	17.9	19.1	10.6	125	6.3
13	3.7	91	7.0	35	8	43	43	300	102	170	44	5.9
14	3.7	36	6.6	33	65	36	97	211	31	116	18.3	6.3
15	3.4	24	6.6	18.3	51	37	105	66	21	23	13.4	5.9
16	3.2	18.3	53	14.6	31	95	47	68	16.8	15.3	11.1	5.2
17	3.2	18.2	19.9	14.0	122	72	35	148	14.6	12.8	9.6	4.9
18	3.2	14.0	11.6	12.8	172	36	27	128	13.4	12.2	9.6	5.6
19	3.4	11.1	9.6	b10	169	44	25	52	127	11.6	10.1	6.6
20	4.4	10.1	8.2	b9	230	46	19.9	34	96	11.1	31	5.2
21	2.9	10.1	8.2	b14	101	34	19.9	31	33	48	22	5.2
22	2.7	9.6	8.7	16.0	60	31	17.5	24	28	310	57	4.9
23	2.7	31	9.6	11.6	42	34	16.0	21	49	99	68	4.9
24	2.7	39	8.2	b9	29	34	15.3	18.3	128	44	21	4.9
25	2.7	51	7.4	b10	36	23	23	449	438	23	12.8	5.2
26	2.9	25	7.0	b9	53	21	16.0	252	64	16.0	10.1	4.9
27	3.2	15.3	10.4	8	57	53	15.3	65	83	15.3	9.1	4.3
28	5.6	12.8	9.6	7.5	170	72	14.6	42	95	12.8	9.1	5.2
29	42	11.1	b7.5	7	111	30	14.0	33	40	11.6	8.2	4.9
30	7.8	10.6	b6.5	6.5	-------	25	13.4	233	29	10.6	7.4	13.8
31	36	-------	b7	6	-------	22	-------	119	-------	10.6	7.0	-------

b Stage-discharge relation affected by ice.

Note.--No gage-height record Jan. 27 to Feb. 13; discharge computed on basis of weather records and records for other stations in this basin.

Rahway River near Springfield--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.3	4.9	6.3	156	44	40	16.0	17.4	7.8	4.0	2.4	18.8
2	5.2	4.6	5.6	55	30	27	14.0	15.5	7.8	3.7	2.2	3.7
3	4.6	6.8	5.2	35	23	24	12.2	73	7.4	3.7	2.4	4.9
4	4.6	12.1	9.0	23	43	23	11.6	24	7.0	3.2	17.7	4.6
5	5.2	5.2	4.9	159	57	30	11.1	19.7	7.0	4.0	4.3	3.2
6	7.0	4.3	7.3	570	28	43	209	16.0	8.3	10.4	3.2	18.6
7	4.9	16.9	5.9	104	73	29	59	47	6.3	7.7	2.7	2.7
8	19.5	4.9	4.9	47	55	22	35	18.3	6.6	3.7	2.2	3.2
9	7.2	4.6	4.3	33	44	19.1	26	13.4	6.3	3.7	2.4	2.4
10	4.9	15.8	4.3	25	40	18.3	19.1	19.4	5.9	5.4	2.2	1.8
11	5.6	10.3	4.0	21	33	39	16.8	12.8	5.9	4.7	2.0	1.8
12	5.9	4.9	4.0	17.5	23	28	15.3	11.1	5.6	4.0	9.4	2.0
13	5.2	4.9	4.3	15.3	23	21	18.7	10.1	5.2	23	4.9	37
14	4.9	4.6	4.0	14.0	24	17.5	38	30	5.6	4.6	2.7	11.2
15	4.3	4.3	4.0	12.2	23	16.8	22	23	5.6	10.4	2.4	8.3
16	4.3	4.9	19.3	11.6	23	14.6	18.6	10.6	5.2	7.0	4.1	3.7
17	4.6	4.9	28	11.6	39	14.0	14.0	10.6	5.2	38	9.9	2.9
18	9.8	4.6	9.9	11.1	22	15.3	31	10.1	5.2	25	2.7	2.7
19	4.9	5.7	5.6	16.7	18.3	16.0	168	9.6	4.9	7.4	2.4	2.4
20	5.9	27	7.0	10.6	75	13.4	47	23	4.9	4.6	2.2	3.2
21	5.2	6.3	6.6	24	32	14.6	29	12.8	4.9	3.7	1.8	3.2
22	4.3	5.5	7.0	314	67	16.0	82	33	4.3	3.4	1.6	3.7
23	4.6	8.9	8.7	78	205	122	160	69	4.0	3.4	1.8	16.2
24	11.5	5.2	6.3	99	55	47	51	17.5	3.7	2.9	1.8	2.4
25	16.6	5.2	4.6	62	46	27	33	26	4.0	2.7	1.8	2.7
26	5.6	4.3	4.0	49	34	23	25	14.0	4.3	2.9	1.8	2.4
27	4.9	8.9	4.0	59	26	22	23	12.2	3.7	2.4	1.8	2.9
28	4.6	5.6	4.0	344	30	19.1	17.5	9.6	4.0	2.4	1.8	3.7
29	4.6	31	6.2	130	-------	15.3	14.6	8.7	3.7	2.2	40	47
30	4.3	8.7	372	49	-------	14.6	13.4	8.2	4.0	2.3	4.3	16.0
31	3.7	-------	678	42	-------	15.3	-------	8.2	-------	4.5	4.5	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.7	3.4	2.0	a3.0	9.6	6.3	12.8	39	32	2.9	3.4	12.4
2	2.7	8.8	3.1	a3.6	54	5.9	12.2	17.5	17.3	2.4	3.7	7.4
3	2.0	2.9	3.3	a5.5	16.6	5.2	10.6	15.3	10.1	3.4	49	11.5
4	2.0	2.0	1.8	a4.0	7.8	4.9	10.1	12.2	56	22	8.8	6.8
5	2.2	1.8	1.6	a2.5	5.9	5.6	13.8	18.8	16.8	15.8	5.9	4.3
6	2.4	2.0	1.4	a6.0	7.1	4.9	9.6	14.0	10.1	13.3	36	4.3
7	2.2	1.8	2.4	a15	6.9	5.2	7.8	10.6	7.8	4.3	10.4	4.0
8	2.2	1.6	2.8	a4.0	4.3	7.1	8.2	9.7	6.6	3.4	4.6	3.7
9	2.2	1.6	1.4	a3.5	44	21	7.4	7.0	5.6	3.2	4.6	3.7
10	2.0	1.6	1.4	a35	15.1	6.6	7.0	8.2	5.2	188	4.3	26
11	1.6	2.0	3.0	8.2	11.1	5.9	7.0	8.2	5.2	145	14.0	11.5
12	1.8	2.0	11.0	4.0	7.4	8.7	6.6	7.4	4.6	67	5.4	12.2
13	2.2	1.8	25	5.7	8.3	28	6.2	7.0	4.6	15.3	3.4	21
14	2.4	7.7	4.6	4.9	38	12.2	7.4	6.3	5.2	10.1	2.9	11.9
15	1.8	2.4	2.7	3.2	138	8.2	6.3	6.3	18.6	8.2	3.2	5.2
16	1.6	2.0	2.4	2.7	70	7.0	5.6	8.2	8.8	12.1	2.9	4.3
17	1.4	2.0	2.4	2.7	38	6.6	5.6	8.7	15.8	8.2	2.9	3.4
18	1.6	3.9	2.4	9.4	25	7.4	7.0	19.1	5.2	5.9	2.9	3.4
19	2.4	3.9	7.0	3.7	19.9	5.6	5.9	34	4.6	5.2	88	4.0
20	2.9	2.0	2.7	2.7	12.6	5.6	37	18.6	4.9	5.2	57	4.3
21	3.2	1.6	2.4	2.7	9.6	53	11.0	9.1	6.9	4.6	9.9	4.3
22	3.2	1.4	2.2	2.7	9.6	18.8	7.4	7.4	4.6	4.0	5.6	7.5
23	2.4	1.6	6.6	2.4	13.7	294	9.5	7.0	4.3	4.0	5.9	4.3
24	2.0	2.2	3.2	3.6	15.6	78	9.7	33	12.5	4.0	4.3	3.2
25	1.8	5.0	1.8	3.5	11.0	35	9.3	9.6	27	5.2	4.0	2.9
26	29	2.4	a5.5	2.7	7.1	25	12.5	8.7	5.6	3.7	3.7	3.7
27	3.7	1.8	48	3.9	5.9	52	7.4	7.4	3.7	3.4	3.4	3.7
28	2.7	1.6	8.5	2.7	5.6	50	39	6.3	3.4	3.4	2.9	3.7
29	3.2	4.1	4.3	11.1	-------	36	12.8	45	4.0	52	79	3.4
30	2.7	3.0	3.2	7.4	-------	25	15.1	15.6	3.4	3.4	60	3.2
31	18.6	-------	a2.2	22	-------	15.3	-------	9.6	-------	2.7	65	-------

a No gage-height record; discharge computed on basis of recorded range in stage and records for station at Rahway.

Rahway River near Springfield--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	456.7	83	7.2	14.7	30.0	1.18	1.36
November	1,466.8	395	6.8	48.9	64.9	2.55	2.84
December	1,703.2	502	10.7	54.9	70.6	2.77	3.19
Calendar year 1945	14,435.2	940	5.2	39.5	55.2	2.16	29.89
January 1946	999.5	128	10.3	32.2	49.4	1.94	2.23
February	422.5	62	8.8	15.1	33.3	1.31	1.36
March	1,044.0	180	12.2	33.7	50.1	1.96	2.26
April	330.1	27	6.8	11.0	27.7	1.09	1.21
May	1,306.0	194	5.8	42.1	58.5	2.29	2.65
June	1,421.3	576	6.8	47.4	64.3	2.52	2.81
July	1,232.3	577	4.6	39.8	56.1	2.20	2.53
August	408.2	58	5.5	13.2	29.3	1.15	1.32
September	298.0	70	2.3	9.93	26.4	1.04	1.16
Water year 1945-46	11,088.6	577	2.3	30.4	46.8	1.84	24.92
October 1946	161.6	15.4	3.7	5.21	21.1	.827	.95
November	165.3	31	3.4	5.51	22.0	.863	.96
December	224.1	71	2.4	7.23	23.2	.910	1.05
Calendar year 1946	8,012.9	577	2.3	22.0	38.5	1.51	20.49
January 1947	452.4	101	4.3	14.6	30.8	1.21	1.39
February	225.6	26	4.7	8.06	25.6	1.00	1.04
March	959.2	216	6.1	30.9	47.0	1.84	2.13
April	1,211.2	312	7.6	40.4	56.4	2.21	2.47
May	1,609.3	222	13.3	51.9	67.8	2.66	3.06
June	585.2	91	6.8	19.5	36.2	1.42	1.59
July	677.6	214	5.2	21.9	38.2	1.50	1.73
August	412.8	146	4.0	13.3	30.5	1.20	1.38
September	309.7	57	4.0	10.3	27.6	1.08	1.21
Water year 1946-47	6,994.0	312	2.4	19.2	35.6	1.40	18.96
October 1947	182.6	42	2.7	5.89	23.4	.918	1.06
November	2,299.5	550	4.9	76.6	94.6	3.71	4.14
December	318.8	53	6.5	10.3	27.8	1.09	1.26
Calendar year 1947	9,243.9	550	2.7	25.3	42.2	1.65	22.46
January 1948	488.3	47	6	15.8	33.5	1.31	1.52
February	1,582.5	230	5.5	54.6	73.2	2.87	3.10
March	1,632	120	21	52.6	70.4	2.76	3.18
April	1,453.2	394	13.4	48.4	67.2	2.64	2.94
May	2,616.3	449	12.2	84.4	103	4.04	4.63
June	1,724.5	438	13.4	57.5	76.4	3.00	3.34
July	1,185.3	310	10.6	38.2	55.7	2.18	2.52
August	788.7	125	7.0	23.8	41.3	1.62	1.87
September	200.4	23	4.3	6.68	24.4	.957	1.07
Water year 1947-48	14,422.1	550	2.7	39.4	57.4	2.25	30.63
October 1948	196.7	19.5	3.7	6.35	24.3	.953	1.10
November	245.8	31	4.3	8.19	26.9	1.05	1.18
December	1,249.2	678	4.0	40.3	58.5	2.29	2.64
Calendar year 1948	13,312.9	678	3.7	36.4	54.5	2.14	29.09
January 1949	2,598.6	570	10.6	83.8	102	4.00	4.59
February	1,216.3	205	18.3	43.4	62.2	2.44	2.54
March	806.9	122	13.4	26.0	43.0	1.69	1.95
April	1,250.9	209	11.1	41.7	59.3	2.33	2.59
May	633.8	73	8.2	20.4	37.8	1.48	1.71
June	164.3	8.3	3.7	5.48	23.8	.933	1.04
July	211.0	38	2.2	6.81	24.7	.969	1.11
August	147.4	40	1.6	4.75	23.5	.922	1.06
September	259.3	47	1.8	7.98	26.9	1.05	1.18
Water year 1948-49	8,960.2	678	1.6	24.5	42.6	1.67	22.69
October 1949	115.8	29	1.4	3.74	21.9	.859	.99
November	81.9	8.8	1.4	2.73	20.5	.804	.90
December	172.3	48	1.4	5.56	22.3	.875	1.01
Calendar year 1949	7,638.5	570	1.4	20.9	38.8	1.52	20.67
January 1950	194.0	35	2.4	6.26	23.0	.902	1.04
February	617.7	138	4.3	22.1	40.2	1.58	1.64
March	850.0	294	4.9	27.4	44.3	1.74	2.00
April	327.9	89	5.6	10.9	28.6	1.12	1.25
May	434.8	45	6.3	14.0	31.1	1.22	1.40
June	320.4	56	3.4	10.7	28.4	1.11	1.24
July	632.3	188	2.4	20.4	37.9	1.49	1.71
August	557.0	88	2.9	18.0	35.5	1.39	1.61
September	205.2	26	2.9	6.84	24.2	.949	1.06
Water year 1949-50	4,509.3	294	1.4	12.4	29.8	1.17	15.85

* Adjusted for diversions by Orange, South Orange, Short Hills Water Co., and Springfield station of Elizabethtown Water Co.

Rahway River at Rahway

Location.--Lat 40°37'05", long 74°17'00", on left bank 100 ft upstream from St. George Avenue Bridge in Rahway, Union County, and 1 mile upstream from Robinsons Branch.

Drainage area.--40.9 sq mi.

Records available.--July 1908 to April 1915 (gage heights only), October 1921 to September 1950.

Gage.--Water-stage recorder and concrete control. Datum of gage is 8.77 ft above mean sea level, datum of 1929. Prior to Aug. 25, 1934, staff gage at site 40 ft downstream from Church Street and 2,000 ft downstream from present site at datum 2.77 ft lower.

Average discharge.--29 years (1921-50), 65.2 cfs (adjusted).

Extremes.--1921-50: Maximum discharge, 3,140 cfs July 24, 1938 (gage height, 6.35 ft), from rating curve extended above 900 cfs by logarithmic plotting; minimum, 0.7 cfs Aug. 25, 26, 27, 28, 1949 (gage height, 1.10 ft).

Peak discharge (base, 600 cfs).--
1946: Dec. 26 (9 p.m.) 742 cfs (3.47 ft); June 3 (3 a.m.) 1,100 cfs (4.05 ft); July 23 (7 to 8 a.m.) 1,140 cfs (4.10 ft).
1947: Apr. 5 (4 p.m.) 622 cfs (3.25 ft).
1948: Nov. 4 (4 p.m.) 841 cfs (3.64 ft); Nov. 9 (4:30 a.m.) 1,350 cfs (4.40 ft); Nov. 12 (7:30 p.m.) 902 cfs (3.74 ft); Apr. 2 (1 a.m.) 643 cfs (3.29 ft); May 26 (4 to 5 a.m.) 945 cfs (3.81 ft); May 30 (11 a.m.) 643 cfs (3.29 ft); June 25 (4 to 5 p.m.) 648 cfs (3.30 ft).
1949: Dec. 31 (10:45 a.m.) 1,350 cfs (4.40 ft); Jan. 6 (3 p.m.) 877 cfs (3.70 ft).
1950: Mar. 23 (8:30 a.m.) 510 cfs (3.03 ft), (annual maximum below base).

Remarks.--Water for municipal supply diverted from river by cities of Rahway and Orange. The flow past this station is affected by diversions by pumpage from wells by Orange, South Orange, Short Hills Water Co., and Springfield station of Elizabethtown Water Co.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16.5	12.8	120	269	52	70	28	11.5	26	16.8	11.1	11.7
2	18.7	12.2	78	96	31	55	30	11.6	681	123	11.1	11.5
3	19.8	15.2	60	60	28	53	65	10.2	800	89	12.3	10.0
4	13.5	16.2	54	49	17.0	75	35	11.3	183	26	13.6	9.7
5	14.0	12.7	50	47	16.9	72	29	15.1	96	15.0	11.8	8.7
6	37	11.8	91	60	19.5	56	26	13.8	63	13.2	22	8.2
7	121	10.9	100	97	53	45	24	10.6	46	13.0	67	8.7
8	73	11.2	62	78	26	48	21	10.9	37	10.7	46	8.9
9	39	13.2	48	59	24	62	26	9.7	30	10.4	16.3	7.0
10	29	12.4	41	107	31	47	21	9.1	24	9.5	13.6	6.3
11	21	23	39	66	23	32	18.1	10.7	37	8.7	13.2	6.3
12	19.3	39	29	67	19.7	26	17.4	65	108	9.5	11.0	5.4
13	18.9	21	24	57	19.6	24	18.6	81	44	10.4	26	5.7
14	17.1	59	27	43	27	24	18.4	45	28	10.1	49	6.4
15	15.7	61	27	37	41	61	16.6	296	25	8.8	15.1	6.3
16	15.2	30	26	30	19.6	72	15.9	84	21	7.9	12.6	4.4
17	13.5	23	18.8	27	20	40	13.3	98	18.5	7.0	27	4.3
18	13.1	22	18.5	27	16.9	39	13.4	258	21	6.9	83	4.0
19	12.6	47	21	27	16.8	58	12.7	121	24	6.2	35	4.1
20	12.3	218	23	21	23	34	13.5	53	17.2	7.1	26	4.2
21	13.2	83	21	25	20	27	13.0	86	18.0	25	13.9	18.5
22	14.3	229	21	27	18.4	24	11.8	122	18.7	121	11.7	47
23	22	229	21	21	19.7	23	11.7	42	16.6	853	10.9	9.5
24	39	73	20	21	24	22	11.4	27	13.9	637	12.6	109
25	41	50	33	24	19.6	51	11.6	23	12.8	109	12.2	150
26	37	38	517	24	18.0	41	30	23	12.7	37	9.9	28
27	28	31	420	21	22	288	23	163	11.7	24	9.6	12.4
28	19.8	48	104	16.4	103	104	18.2	269	25	20	9.7	9.8
29	16.2	479	117	16.6	-------	53	13.1	78	66	15.6	15.3	9.8
30	15.9	358	147	31	-------	48	13.2	43	35	14.1	45	26
31	16.5	-------	276	90	-------	38	-------	31	-------	12.3	14.2	-------

Rahway River at Rahway--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14.6	5.4	8.0	11.0	24	12.0	13.7	295	32	11.1	10.4	9.0
2	8.0	6.9	5.8	10.3	17.9	31	69	141	25	24	10.5	77
3	6.8	7.7	2.9	13.2	12.9	108	205	75	25	10.8	10.8	28
4	6.7	5.8	2.7	26	28	54	63	177	22	11.2	8.2	10.5
5	7.9	5.5	3.7	15.0	44	41	284	228	18.2	10.2	7.4	68
6	8.2	4.6	3.9	11.8	18.2	69	479	129	19.0	10.9	6.3	32
7	6.6	4.6	5.5	10.5	15.3	86	123	80	27	8.9	6.0	14.8
8	5.7	7.5	5.9	9.5	18.8	68	57	52	147	96	6.9	9.3
9	5.3	11.3	4.6	9.8	15.4	44	52	40	133	36	30	7.3
10	6.3	6.5	3.9	7.6	12.8	42	47	35	42	17.2	108	6.1
11	8.0	5.0	3.4	9.8	11.4	43	36	31	28	17.6	18.9	6.6
12	17.5	5.3	3.6	13.5	12.4	39	33	26	21	19.1	11.3	5.6
13	20	6.6	8.2	12.9	12.7	40	29	24	16.2	12.2	8.6	7.1
14	8.4	4.4	10.4	30	12.8	165	25	29	39	9.8	8.2	8.0
15	5.7	3.9	5.9	48	16.3	195	25	47	150	9.5	7.5	34
16	5.5	5.5	3.6	71	18.3	73	39	26	45	9.0	9.4	49
17	5.2	6.6	3.5	41	18.7	43	71	24	25	42	220	11.6
18	5.8	9.9	3.7	26	16.2	32	33	47	20	27	59	9.0
19	12.1	6.7	3.0	20	13.6	26	27	57	32	34	21	9.2
20	8.5	4.6	3.2	149	10.9	24	25	119	21	25	14.0	19.1
21	5.7	4.4	107	117	10.8	24	26	101	39	12.3	15.3	11.1
22	5.0	40	76	33	13.6	23	44	130	22	218	12.1	24
23	5.3	32	22	21	13.9	21	25	120	15.4	244	10.6	27
24	6.4	11.9	13.1	18.0	11.3	20	23	54	14.9	55	10.4	7.1
25	5.4	7.1	11.5	19.0	10.8	67	22	54	18.6	23	7.6	9.0
26	7.1	6.8	9.0	23	12.1	48	42	148	13.8	16.2	7.0	10.1
27	13.8	16.2	6.5	68	12.0	25	28	61	12.6	14.5	30	7.2
28	7.5	12.0	11.5	30	11.1	21	22	37	15.3	12.9	9.8	7.6
29	9.8	8.3	18.7	21	-------	21	18.3	41	14.8	17.3	9.3	5.7
30	7.9	7.8	32	17.7	-------	20	17.9	129	12.5	11.8	8.3	5.3
31	6.0	-------	11.5	31	-------	15.4	-------	49	-------	11.0	9.2	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.6	46	17.5	20	13.7	112	343	24	108	55	29	9.8
2	4.5	13.9	19.1	83	12.6	132	446	24	65	35	25	8.7
3	4.2	8.0	15.5	83	13.2	233	121	31	49	31	96	9.6
4	6.1	355	14.6	54	13.1	140	70	34	43	30	58	10.4
5	6.7	411	12.1	41	13.0	80	53	54	39	29	100	10.4
6	5.2	68	14.8	37	13.2	55	45	64	37	37	128	10.9
7	4.8	33	16.8	35	13.4	70	42	82	36	32	36	9.3
8	4.6	533	24	31	14.7	104	37	130	39	25	26	7.9
9	3.7	987	18.8	30	12.2	88	35	51	32	20	20	9.3
10	3.6	161	10.2	42	11.4	135	31	35	34	20	18.2	27
11	5.0	52	13.5	29	11.5	138	40	29	27	19.3	16.5	27
12	5.5	733	14.0	26	13.0	93	106	41	31	16.8	142	11.2
13	3.2	377	13.8	60	14.5	70	79	262	139	67	126	7.8
14	2.5	75	13.5	78	66	56	114	448	62	285	37	6.3
15	2.8	46	11.4	42	122	51	180	151	38	60	25	6.8
16	3.5	37	90	29	67	98	86	99	30	28	19.1	8.6
17	3.7	31	40	27	155	115	59	212	26	23	17.3	5.4
18	5.4	25	24	27	307	65	45	209	23	23	16.1	6.7
19	5.0	23	18.5	19.3	319	52	38	98	171	19.4	15.0	9.6
20	3.2	17.8	16.0	19.0	389	82	38	56	275	17.4	25	7.6
21	3.2	19.1	16.3	27	218	56	32	48	77	26	58	6.2
22	2.8	20	14.0	38	108	48	30	43	46	399	32	6.1
23	2.8	48	14.9	25	74	48	28	37	74	207	116	5.5
24	2.9	41	16.6	18.1	54	67	28	30	114	94	38	4.7
25	3.7	96	14.8	22	52	44	40	300	524	42	22	5.0
26	5.0	46	16.8	18.4	86	36	31	695	243	28	15.8	5.9
27	2.9	33	19.8	16.8	84	58	26	162	94	24	14.0	5.2
28	2.3	24	21	15.4	216	120	25	72	171	22	14.4	10.9
29	63	23	15.3	14.4	228	60	25	55	79	18.6	14.5	6.0
30	17.3	22	13.6	13.1	-------	42	25	379	47	16.4	11.5	6.9
31	52	-------	15.2	12.5	-------	34	-------	308	-------	17.5	10.5	-------

Rahway River at Rahway--Continued

Daily discharge,[1] in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	6.8	12.7	536	72	65	30	27	12.9	5.7	4.6	15.6
2	8.9	8.0	9.6	127	56	60	29	32	12.8	5.2	4.0	8.5
3	7.4	6.0	8.1	67	41	46	25	96	12.2	5.0	4.8	4.5
4	5.8	10.5	13.5	49	60	44	21	56	13.4	5.1	11.2	4.8
5	7.6	16.1	13.6	144	78	55	19.4	32	13.2	4.3	18.2	4.6
6	14.0	9.8	9.8	771	58	79	216	39	11.0	3.9	7.2	12.6
7	4.2	16.9	13.9	350	85	58	163	77	13.4	15.0	7.6	9.2
8	16.5	21	8.5	95	105	38	60	41	9.0	7.6	5.6	8.4
9	27	7.7	5.9	58	69	34	49	26	8.3	6.7	4.6	2.9
10	7.2	10.3	5.6	44	66	31	36	29	9.2	7.8	3.0	4.0
11	5.3	23	6.6	36	51	55	29	30	10.1	5.8	2.3	4.4
12	6.6	9.6	7.2	31	41	57	26	22	10.2	6.3	6.3	2.6
13	6.8	9.2	6.2	28	37	40	27	18.6	8.0	33	16.9	6.1
14	5.6	9.8	5.7	26	41	29	68	26	7.4	14.8	6.5	46
15	11.7	6.5	6.0	23	38	27	39	56	7.4	6.6	2.7	12.3
16	8.0	5.8	23	22	39	24	37	23	7.5	11.5	1.9	6.1
17	6.9	6.7	62	22	72	23	27	19.0	6.6	45	10.7	5.6
18	5.8	7.3	22	21	41	26	82	16.9	7.9	70	6.4	4.3
19	14.0	10.3	17.1	23	35	29	227	16.2	8.1	17.7	3.2	2.8
20	8.6	29	14.6	24	116	32	105	33	6.3	6.3	2.6	2.2
21	7.2	25	12.6	28	70	33	50	41	6.2	6.0	2.7	2.2
22	7.0	10.4	11.7	412	82	38	65	42	6.6	5.6	1.7	2.0
23	8.0	10.0	15.5	222	328	147	276	158	6.6	6.6	1.3	12.5
24	11.8	11.1	14.0	148	125	105	107	45	5.3	6.7	1.1	8.0
25	24	5.8	11.2	117	72	49	56	58	6.0	4.7	1.3	4.1
26	16.6	6.0	8.8	84	63	43	42	28	6.0	3.6	1.2	2.7
27	11.8	12.7	a8	110	46	38	36	26	4.8	3.0	1.1	2.1
28	6.9	15.2	a8	360	47	32	31	19.8	6.0	2.2	1.0	2.0
29	6.7	43	28	332	-------	27	27	17.9	5.5	1.7	39	19.1
30	7.8	33	354	97	-------	23	26	16.8	5.2	1.8	19.4	79
31	7.7	------	1,110	61	-------	24	-------	14.3	-------	4.8	4.1	-------

a No gage-height record; discharge computed on basis of records for station near Springfield.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11.0	17.5	3.3	4.8	28	8.0	20	53	25	1.5	4.5	37
2	5.5	9.7	3.4	5.4	90	9.0	20	36	46	1.7	6.7	10.2
3	3.2	8.8	3.4	5.7	55	6.6	17.1	29	17.2	1.8	54	17.4
4	2.2	3.6	3.4	6.9	19.9	7.0	15.7	24	120	22	40	17.5
5	1.9	3.0	2.4	5.0	12.5	8.0	16.5	35	48	12.2	7.4	6.5
6	1.7	3.2	1.8	4.1	9.8	5.7	22	28	16.8	29	19.1	3.4
7	1.5	2.2	1.9	15.7	14.7	4.2	13.2	21	11.2	4.7	40	2.8
8	1.8	1.6	3.4	12.6	8.2	7.3	12.6	12.8	9.5	2.2	7.5	2.5
9	3.1	1.7	2.9	4.1	38	33	12.8	11.4	6.5	3.2	4.6	2.6
10	2.2	1.4	2.1	16.5	46	13.0	9.7	10.6	6.0	194	4.6	10.6
11	1.5	1.6	3.4	35	24	14.3	10.1	10.2	6.4	276	26	28
12	1.5	2.2	5.9	9.5	17.1	15.6	10.7	8.3	3.8	175	27	19.7
13	2.1	2.7	43	7.7	14.4	43	9.6	8.6	2.7	37	8.6	21
14	1.3	4.0	25	10.5	92	37	9.7	8.6	5.2	16.9	3.2	41
15	1.3	6.7	9.0	8.8	281	18.7	11.3	7.4	18.6	13.0	2.0	7.1
16	1.3	2.2	3.0	5.8	156	14.0	10.1	10.1	18.4	18.3	2.7	6.4
17	1.2	1.7	3.1	4.2	86	11.9	7.6	7.0	22	11.9	1.8	7.9
18	1.1	2.1	4.3	7.8	49	11.3	7.6	19.2	14.9	10.9	1.4	2.7
19	1.3	2.4	9.4	11.3	36	11.2	7.2	65	6.6	7.7	102	3.0
20	1.3	6.5	9.0	5.2	26	5.7	40	40	6.5	4.5	164	3.4
21	1.2	2.5	4.0	4.2	13.1	48	32	19.1	11.2	3.7	25	3.8
22	1.4	1.8	4.0	5.2	17.1	55	12.7	11.0	8.4	3.5	10.5	6.1
23	1.5	1.3	4.1	3.5	18.1	356	12.4	9.2	3.4	3.8	10.8	9.2
24	1.3	1.7	9.6	3.1	22	220	16.0	45	4.2	2.8	8.4	4.6
25	1.1	2.5	8.0	4.2	29	70	17.2	19.1	57	2.9	4.6	2.8
26	34	4.1	6.9	3.4	15.2	43	16.4	12.4	9.2	2.8	3.9	1.7
27	12.5	4.8	f85	3.7	9.4	79	13.2	10.9	3.2	2.1	2.5	1.8
28	4.3	2.0	41	5.7	6.7	83	54	10.3	1.7	1.7	2.0	2.2
29	4.1	1.3	15.0	15.8	-------	66	26	51	1.4	9.9	2.6	2.9
30	4.8	2.9	7.6	13.6	-------	44	21	42	1.5	5.4	113	2.7
31	17.0	------	3.5	29	-------	27	-------	17.4	-------	3.8	120	-------

f Computed on basis of partly estimated gage-height record.

Rahway River at Rahway--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	803.1	121	12.3	25.9	46.9	1.15	1.32
November	2,289.6	479	10.9	76.3	98.2	2.40	2.68
December	2,654.3	517	18.5	85.6	108	2.64	3.03
Calendar year 1945	22,827.8	1,360	8.5	62.5	84.8	2.07	28.14
January 1946	1,641.0	269	16.4	52.9	76.5	1.87	2.16
February	764.7	103	16.8	27.3	52.0	1.27	1.32
March	1,712	288	22	55.2	78.0	1.91	2.20
April	619.9	65	11.4	20.7	44.0	1.08	1.20
May	2,132.5	296	9.1	68.8	91.9	2.25	2.59
June	2,560.1	800	11.7	85.3	109	2.67	2.98
July	2,277.2	853	6.2	73.5	97.3	2.38	2.74
August	687.7	83	9.6	22.2	45.0	1.10	1.27
September	561.8	150	4.0	18.7	42.6	1.04	1.16
Water year 1945-46	18,703.9	853	4.0	51.2	74.3	1.82	24.65
October 1946	252.7	20	5.0	8.15	31.2	.763	.88
November	270.8	40	3.9	9.03	32.2	.787	.88
December	414.2	107	2.7	13.4	36.1	.883	1.02
Calendar year 1946	13,894.6	853	2.7	38.1	61.5	1.50	20.40
January 1947	944.6	149	7.6	30.5	53.7	1.31	1.51
February	446.2	44	10.8	15.9	40.7	.995	1.04
March	1,540.4	195	12.0	49.7	73.0	1.78	2.06
April	2,008.9	479	13.7	66.8	89.8	2.20	2.45
May	2,607	295	24	84.1	107	2.62	3.01
June	1,077.3	150	12.5	35.9	59.7	1.46	1.63
July	1,077.5	244	8.9	34.8	58.6	1.43	1.65
August	712.0	220	6.0	23.0	46.7	1.14	1.32
September	530.3	77	5.3	17.7	42.1	1.03	1.15
Water year 1946-47	11,876.9	479	2.7	32.5	56.0	1.37	18.60
October 1947	245.7	63	2.3	7.93	32.2	.787	.91
November	4,404.8	987	8.0	147	171	4.18	4.67
December	596.4	90	10.2	19.2	43.2	1.06	1.22
Calendar year 1947	16,186.1	987	2.3	44.3	68.1	1.67	22.62
January 1948	1,033.0	85	12.5	33.3	58.6	1.43	1.65
February	2,664.5	339	11.4	91.9	118	2.89	3.10
March	2,582	233	34	83.3	108	2.64	3.04
April	2,298	446	25	76.6	102	2.49	2.78
May	4,368	695	24	141	165	4.03	4.66
June	2,773	524	23	92.4	118	2.89	3.23
July	1,767.4	399	16.4	57.0	81.9	2.00	2.31
August	1,332.9	142	10.5	42.7	67.4	1.65	1.90
September	272.7	27	4.7	9.09	34.4	.841	.94
Water year 1947-48	24,329.4	987	2.3	66.5	91.4	2.23	30.41
October 1948	315.4	27	4.2	10.2	35.3	.863	.99
November	402.5	43	5.8	13.4	39.2	.958	1.07
December	1,853.4	1,110	3.5	59.8	85.2	2.08	2.40
Calendar year 1948	21,647.8	1,110	3.5	59.1	84.4	2.06	28.07
January 1949	4,469	771	21	144	169	4.13	4.76
February	2,080	323	35	72.5	98.3	2.40	2.50
March	1,411	147	23	45.5	69.5	1.70	1.96
April	1,981.4	276	19.4	66.0	90.4	2.21	2.46
May	1,180.5	158	14.3	38.1	62.2	1.52	1.75
June	253.1	13.4	4.8	8.44	33.7	.824	.92
July	325.0	70	1.7	10.8	35.9	.878	1.01
August	204.3	39	1.0	6.59	32.0	.782	.90
September	296.2	79	2.0	9.87	35.4	.866	.97
Water year 1948-49	14,731.8	1,110	1.0	40.4	65.4	1.60	21.69
October 1949	131.2	34	1.1	4.23	28.3	.692	.80
November	109.7	17.5	1.3	3.66	27.2	.665	.74
December	331.8	85	1.8	10.7	32.9	.804	.93
Calendar year 1949	12,733.2	771	1.0	34.9	59.4	1.45	19.70
January 1950	278.0	35	3.1	8.97	31.2	.763	.88
February	1,235.2	281	6.7	44.1	67.9	1.66	1.73
March	1,385.5	356	4.2	44.7	67.6	1.65	1.91
April	504.4	54	7.2	16.8	40.6	.993	1.11
May	602.6	65	7.0	22.3	46.0	1.12	1.30
June	512.5	120	1.4	17.1	42.3	1.03	1.15
July	885.9	276	1.5	28.6	53.7	1.31	1.51
August	830.4	164	1.4	26.8	51.5	1.27	1.46
September	288.6	41	1.7	9.62	34.4	.841	.94
Water year 1949-50	7,185.8	356	1.1	19.7	43.8	1.06	14.46

* Adjusted for diversions by Orange, Rahway, South Orange, Short Hills Water Co., and Springfield station of Elizabethtown Water Co.

Robinsons Branch Rahway River at Rahway

Location.--Lat 40°36'20", long 74°17'57", on right bank of Milton Lake 2,000 ft upstream from Madison Avenue in Rahway, Union County, and 1¾ miles upstream from mouth.

Drainage area.--21.6 sq mi.

Records available.--September 1939 to September 1950.

Gage.--Water-stage recorder above Milton Lake Dam. Datum of gage is 19.99 ft above mean sea level (New Jersey Geological Survey bench mark).

Average discharge.--11 years, 29.3 cfs (adjusted).

Extremes.--1939-50: Maximum discharge, 1,240 cfs Aug. 9, 1942 (gage height, 5.25 ft), from rating curve extended above 750 cfs on basis of laboratory rating; no flow Jan. 9, 1942, and for many days in October 1947, September and October 1948.

Peak discharge (base, 450 cfs).--
1946: June 2 (3 p.m.) 932 cfs (5.01 ft); July 23 (8 to 8:30 a.m.) 830 cfs (4.93 ft).
1947: Apr. 5 (5 to 6 p.m.) 535 cfs (4.69 ft).
1948: Nov. 4 (5 p.m.) 885 cfs (4.98 ft); Nov. 8 (4 p.m.) 1,070 cfs (5.11 ft); Nov. 12 (7 a.m.) 654 cfs (4.80 ft); Apr. 1 (time unknown) 472 cfs (4.64 ft); May 13 (6 to 8 p.m.) 537 cfs (4.70 ft); May 25 (time unknown) 619 cfs (4.77 ft).
1949: Dec. 31 (9:30 a.m.) 899 cfs (4.99 ft); Jan. 6 (4 a.m.) 584 cfs (4.74 ft); Jan. 22 (7:30 a.m.) 450 cfs (4.62 ft).
1950: Mar. 23 (9 to 11 a.m.) 512 cfs (4.67 ft).

Remarks.--Water for municipal supply diverted by Middlesex Water Co. from reservoir, 3,500 ft above station.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11.2	6.5	96	186	31	76	15.6	9.0	10.2	0.6	4.7	1.8
2	9.4	6.5	46	60	18.0	51	15.6	9.0	525	11.8	4.7	1.2
3	7.8	4.4	33	27	13.3	36	36	8.0	418	10.5	4.7	1.5
4	9.4	2.8	33	18.0	11.2	33	22	8.0	134	3.3	4.7	1.2
5	7.8	2.8	24	18.0	11.2	30	19.0	11.0	64	2.2	5.3	1.0
6	25	2.8	58	30	20	30	17.0	9.0	35	2.2	4.2	.9
7	30	3.5	68	55	40	27	15.0	8.0	25	2.2	8.3	.9
8	35	3.5	39	39	15.0	30	15.0	9.0	17.3	1.8	9.3	.8
9	13.0	2.8	26	30	17.0	47	20	8.0	15.1	1.5	3.9	.8
10	13.3	2.8	24	64	17.0	33	14.0	7.5	13.2	1.2	2.2	.8
11	9.4	4.4	20	36	14.0	20	13.0	8.0	15.7	1.0	2.0	1.0
12	7.8	13.6	13.3	33	12.0	15.6	12.0	80	83	1.0	1.4	1.5
13	7.8	11.3	9.3	30	12.0	15.6	12.0	35	35	.8	3.5	1.4
14	7.8	28	11.2	18.0	27	15.6	11.0	45	19.6	.7	14.6	1.2
15	7.8	34	11.2	15.6	20	37	11.0	234	17.3	.8	5.0	.9
16	6.4	11.3	11.2	9.4	12.0	64	11.0	68	17.3	.7	2.4	.8
17	6.4	6.6	9.3	9.4	13.0	30	10.0	88	15.1	1.0	12.8	.8
18	6.4	4.4	7.8	9.4	12.0	30	10.0	138	13.2	1.5	54	.7
19	7.8	18.4	7.8	9.4	11.0	59	10.0	50	11.6	1.6	15.7	.7
20	6.4	107	7.8	9.4	14.0	30	9.0	35	10.1	1.9	8.3	.8
21	7.8	44	9.3	9.4	12.0	20	9.0	70	7.0	2.6	3.8	1.4
22	7.8	149	9.3	9.4	11.0	18.0	9.0	60	1.9	52	2.6	1.9
23	9.4	115	9.3	9.4	13.0	15.6	9.0	30	1.3	649	2.1	1.2
24	7.8	37	9.3	7.8	13.0	15.6	9.0	20	1.2	341	1.6	47
25	25	20	14.5	7.8	12.0	20	9.0	15.0	1.1	97	1.2	173
26	33	15.6	350	6.4	11.0	35	21	13.0	.9	22	1.1	32
27	15.6	11.2	232	6.4	15.0	204	16.0	131	.8	12.1	1.1	6.8
28	7.9	28	81	6.4	76	69	10.0	100	.7	8.3	1.2	3.8
29	6.5	349	86	6.4	-------	30	10.0	30	.5	6.5	1.2	3.5
30	4.3	236	138	40	-------	27	10.0	17.4	.5	5.3	9.2	7.1
31	4.3	-------	219	45	-------	20	-------	11.7	-------	5.3	4.2	-------

Note.--No gage-height record Oct. 6-8, Jan. 30, 31, Feb. 6-27, Apr. 4-30, May 1-14, 19-27; discharge computed on basis of range in stage when available and records for stations on nearby streams, especially Rahway River near Springfield.

Robinsons Branch Rahway River at Rahway--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.5	1.0	4.2	8.1	17.9	8.3	5.3	226	15.7	1.4	0.8	0.2
2	2.3	.9	5.8	8.1	12.1	21	54	83	10.6	1.8	.6	21
3	1.9	1.0	3.2	9.2	8.3	106	210	48	9.3	1.3	.6	9.9
4	1.6	1.3	3.2	20	19.8	75	45	185	6.5	.8	.7	2.2
5	1.5	1.8	2.9	15.6	29	52	252	212	5.3	.8	.7	27
6	1.6	1.7	2.4	13.6	12.1	87	260	146	5.3	.7	.7	24
7	1.4	1.5	2.2	10.5	8.3	126	54	48	5.9	.8	.7	8.1
8	1.4	1.8	2.1	9.2	9.3	80	23	29	109	1.9	.7	3.9
9	1.4	2.5	2.1	10.5	8.3	41	25	20	91	2.7	1.5	2.4
10	1.9	2.7	2.2	7.2	6.5	41	25	15.7	25	2.6	17.5	1.8
11	2.1	2.7	2.0	5.3	6.5	41	20	13.8	13.8	2.0	5.5	1.4
12	1.9	2.6	1.7	13.8	6.5	35	15.7	10.7	8.3	1.7	2.6	1.3
13	2.7	2.4	1.5	17.9	7.3	32	13.8	9.4	3.2	1.6	2.2	1.2
14	1.9	2.5	1.2	30	7.3	109	10.6	8.4	13.2	1.6	2.0	1.1
15	1.3	3.0	1.2	64	12.1	66	13.8	9.4	98	1.5	1.8	1.3
16	1.3	2.3	1.3	95	17.9	32	26	8.4	22	1.6	1.6	12.9
17	1.2	2.0	1.8	48	20	20	51	7.5	8.6	1.6	87	3.6
18	1.2	2.2	1.6	23	15.7	15.7	23	41	10.5	1.8	20	1.8
19	2.2	2.2	1.3	15.7	12.1	10.6	15.7	41	14.9	1.8	6.4	1.6
20	1.4	2.1	1.2	154	8.3	9.3	12.1	113	6.4	1.9	4.3	1.4
21	1.1	2.1	62	115	9.3	9.3	14.8	85	12.0	1.7	10.8	1.2
22	1.0	3.4	79	22	6.5	9.3	29	131	7.2	15.7	4.8	1.5
23	.9	9.2	23	12.1	6.5	7.3	17.9	110	4.4	40	2.5	3.3
24	.9	8.1	13.6	8.3	7.3	8.3	13.8	35	2.5	5.5	2.0	2.3
25	.9	5.8	10.5	10.6	6.5	35	10.6	30	3.3	2.4	1.6	1.8
26	1.0	4.6	7.2	15.4	7.3	17.1	17.9	73	2.5	1.8	1.4	2.0
27	1.1	8.1	4.6	62	8.3	8.3	13.8	29	1.9	1.4	.8	1.7
28	1.0	6.4	5.7	29	8.3	9.3	8.3	17.9	1.6	1.3	.5	8.3
29	1.0	5.1	15.6	17.9	-------	8.3	7.3	23	1.5	1.5	.4	8.4
30	1.1	3.6	28	13.8	-------	6.5	7.3	117	1.4	1.3	.3	2.8
31	1.1	-------	12.0	23	-------	5.3	-------	28	-------	1.1	.2	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.5	26	6.1	9.0	10.8	54	300	9.0	45	20	2.5	0.6
2	.9	12.9	6.1	71	10.8	98	400	7.5	28	12.9	2.2	.8
3	.7	7.5	6.1	97	9.0	234	80	9.0	22	10.8	99	1.1
4	.2	328	7.6	67	9.0	113	30	15.1	19	10.8	130	1.3
5	0	300	6.1	50	9.0	46	23	48	17	9.0	114	.6
6	0	82	6.1	42	9.0	26	20	56	16	7.5	188	.9
7	0	29	4.9	35	7.5	40	18	86	16	7.5	40	1.1
8	0	402	9.0	29	7.5	62	17	124	16	7.5	12.9	.8
9	0	393	9.0	26	7.5	46	16	35	15	7.5	7.5	.6
10	0	122	4.9	35	7.5	114	14	20	15	6.1	4.9	2.2
11	0	32	4.9	26	7.5	67	20	12.9	12	6.1	3.2	1.6
12	0	420	4.9	20	7.5	42	100	25	15	6.1	68	.8
13	0	180	4.9	60	7.5	29	50	399	100	14.0	40	1.1
14	0	39	4.9	86	25	23	100	283	25	86	11.5	.8
15	0	26	4.9	42	97	23	170	75	17	20	6.1	.5
16	0	20	65	26	68	43	50	62	13	10.8	4.0	.1
17	0	17.5	31	20	148	38	27	188	11	9.0	2.5	.1
18	0	10.8	15.1	20	259	26	20	116	10	9.0	2.0	.1
19	0	9.0	9.0	20	294	23	17	50	150	9.0	2.0	.1
20	0	9.0	6.1	17.5	303	38	16	25	200	9.0	14.7	.1
21	2.1	7.5	4.9	19.8	118	26	15	21	40	11.5	51	.1
22	1.5	7.5	4.9	38	54	22	14	19	32	9.0	23	.1
23	1.5	24	4.9	26	35	22	13	16	62	51	28	.1
24	2.0	29	6.1	20	23	30	13	13	94	28	10.6	0
25	3.2	47	6.1	17.5	30	20	18	250	320	12.9	4.9	0
26	4.9	20	7.5	15.1	73	16	16	500	100	10.8	3.2	0
27	6.1	15.1	7.5	15.1	58	25	15.1	60	37	9.0	2.0	0
28	6.5	10.8	7.5	12.9	175	60	10.8	30	50	9.0	2.0	0
29	4.3	9.0	7.5	12.9	138	25	10.8	24	32	7.5	1.2	0
30	3.5	7.5	7.5	12.9	-------	19	10.8	300	17.5	3.5	.8	0
31	5.1	-------	9.0	10.8	-------	15	-------	200	-------	1.1	1.3	-------

Note.--No gage-height record Mar. 22 to Apr. 26, May 19 to June 21; discharge computed on basis of recorded range in stage, precipitation record, and records for other stations in this basin.

Robinsons Branch Rahway River at Rahway--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	1.5	9.0	333	32	32	15.1	7.5	6.1	0.3	0.4	0.4
2	0	1.1	4.9	89	26	32	20	9.0	4.9	.3	.4	.4
3	0	.4	4.0	35	17.5	29	15.1	46	4.9	.4	.4	.4
4	0	.6	7.5	23	33	29	12.9	27	4.0	.8	.4	.4
5	0	.4	9.0	111	54	54	9.0	15.1	3.2	1.5	.4	.4
6	0	1.0	7.5	440	38	66	175	16.4	3.2	3.1	.4	.4
7	0	.9	4.9	170	60	32	77	60	2.0	1.7	.4	.4
8	0	.6	4.0	42	66	17.5	29	22	5.2	.8	.4	.6
9	0	1.4	3.2	26	46	15.1	23	12.9	3.6	.8	.4	.5
10	0	1.5	3.2	20	38	15.1	15.1	14.8	1.6	.6	.4	.4
11	0	.8	3.2	17.5	26	38	12.9	17.5	.9	.7	.4	.7
12	0	1.1	3.3	15.1	17.5	34	10.8	12.9	.6	.6	1.2	.4
13	.1	1.1	2.5	12.9	20	17.5	11.8	10.8	.6	1.1	1.3	.6
14	.7	.3	2.0	12.9	26	12.9	29	9.0	.5	.4	1.0	.5
15	1.5	1.0	2.5	10.8	23	12.9	20	9.0	.5	.4	.6	.4
16	1.5	.8	5.3	10.8	21	9.0	15.1	9.0	.5	.5	.5	.6
17	1.5	1.0	50	9.0	60	7.5	10.8	9.0	.7	1.1	.5	.4
18	2.8	1.0	31	9.0	26	9.0	13.9	9.0	.3	.5	.7	.5
19	1.5	1.1	17.5	7.5	20	10.8	134	7.5	.3	.4	.5	.4
20	1.1	1.1	10.8	9.0	116	9.0	39	9.0	.3	.4	.5	.4
21	2.0	1.0	9.0	16.8	52	12.9	20	12.9	.3	.4	.4	.4
22	1.1	1.9	9.0	354	72	26	38	24	.3	.4	.4	.4
23	1.5	2.5	10.8	140	241	114	172	145	.3	.4	.4	.6
24	2.1	2.5	10.8	107	68	55	50	31	.3	.4	.4	.4
25	1.0	2.5	7.5	80	35	26	23	62	.3	.4	.4	.6
26	.6	a3	4.9	62	26	23	17.5	20	.3	.4	.4	.4
27	.7	a5	4.0	119	20	20	15.1	15.1	.3	.4	.4	.5
28	1.2	a7	4.0	279	23	15.1	12.9	10.8	.3	.4	.3	.6
29	.8	a20	15.7	153	-------	10.8	9.0	9.0	.3	.4	.4	1.2
30	1.4	17.5	394	38	-------	10.8	7.5	7.5	.3	.4	.4	.9
31	2.1	-------	752	26	-------	9.0	-------	7.5	-------	.4	.4	-------

a No gage-height record; discharge computed on basis of weather records and records for other stations in basin.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.4	1.1	1.2	2.4	21	9.3	14.2	34	17.0	1.7	1.1	23
2	.5	1.4	1.5	2.6	77	8.0	12.3	27	34	1.4	1.1	9.1
3	.4	.8	1.1	2.4	58	7.0	10.7	24	13.0	1.0	1.7	5.9
4	.6	.5	.9	2.4	15.7	6.1	10.7	21	97	1.3	2.5	9.9
5	.8	.4	.7	2.4	11.0	4.7	10.7	19.1	42	1.4	2.2	4.1
6	.6	1.3	.7	2.4	9.2	3.6	12.3	17.2	13.0	1.8	1.6	3.0
7	.6	1.3	1.5	1.7	12.3	2.5	9.2	13.0	6.6	1.3	1.2	2.3
8	.8	.7	.7	1.5	6.0	2.7	7.9	7.5	5.8	1.2	1.2	2.1
9	1.3	.5	.8	1.9	19.2	2.4	6.9	5.8	5.2	1.2	1.2	2.1
10	1.0	1.2	1.0	3.7	33	4.1	6.9	5.2	4.6	55	1.4	2.3
11	.6	.7	1.2	8.0	24	6.1	6.9	4.6	4.0	157	1.2	2.3
12	.6	1.1	1.3	5.3	14.2	7.0	6.0	4.6	3.3	88	1.3	2.1
13	.7	1.5	2.2	5.3	12.3	24	6.0	4.6	2.8	19.7	1.1	1.9
14	1.0	1.0	1.4	6.5	100	41	5.2	3.7	2.9	8.1	1.0	2.5
15	1.4	.6	.8	5.3	309	21	6.9	3.7	3.8	4.1	1.0	2.7
16	.5	.5	.9	3.6	205	14.3	6.0	3.7	4.4	4.3	1.0	2.9
17	.4	.7	1.1	2.4	66	12.4	5.2	3.7	3.4	7.5	1.0	3.0
18	.8	1.0	1.2	2.9	30	9.3	4.6	3.9	2.9	5.2	1.0	2.1
19	.9	.9	1.3	3.6	18.9	8.0	4.6	22	2.1	4.1	12.8	1.9
20	.6	.8	1.0	2.9	13.3	9.3	6.0	34	2.1	2.6	83	1.7
21	.8	.5	.9	3.6	6.1	17.1	6.9	14.9	1.9	2.1	21	1.5
22	1.2	.4	.8	2.9	4.7	37	6.9	7.5	1.7	2.1	4.3	1.5
23	1.1	.4	.7	2.4	5.3	347	6.0	5.8	1.7	1.8	2.7	1.5
24	.9	1.0	.8	2.4	9.3	211	6.9	16.8	1.8	1.5	2.3	1.7
25	1.1	1.1	1.0	2.4	10.8	53	9.2	13.0	2.2	1.5	2.0	2.0
26	2.2	.5	1.4	2.4	8.0	30	14.2	8.6	1.8	1.4	1.8	2.3
27	1.2	.7	3.3	2.4	5.3	65	14.2	7.5	1.5	1.3	1.7	2.5
28	1.4	.9	2.4	2.4	7.0	74	38	6.6	1.5	1.3	1.5	2.5
29	1.5	.7	3.7	2.9	-------	56	24	21	1.3	1.3	1.7	2.7
30	.9	.7	2.4	3.6	-------	29	18.9	30	1.3	1.2	1.7	2.7
31	1.3	-------	2.4	14.0	-------	18.7	-------	13.0	-------	1.0	27	-------

Robinsons Branch Rahway River at Rahway--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	420.3	80	4.3	13.6	18.1	0.838	0.96
November	1,282.2	349	2.8	42.7	47.3	2.19	2.44
December	1,713.6	350	7.8	55.3	59.9	2.77	3.20
Calendar year 1945	11,796.3	528	1.1	32.3	37.0	1.71	23.25
January 1946	861.0	186	6.4	27.8	32.8	1.52	1.75
February	503.7	76	11.0	18.0	22.6	1.05	1.09
March	1,184.0	204	15.6	38.2	42.7	1.98	2.28
April	410.2	36	9.0	13.7	17.7	.819	.92
May	1,365.6	234	7.5	44.1	48.0	2.22	2.56
June	1,510.6	525	.5	50.4	53.1	2.46	2.74
July	1,249.4	649	.6	40.3	44.0	2.04	2.35
August	201.0	54	1.1	6.48	10.0	.463	.54
September	298.4	173	.7	9.95	13.8	.639	.71
Water year 1945-46	11,000.0	649	.5	30.1	34.3	1.59	21.54
October 1946	46.8	3.5	.9	1.51	5.36	.248	.29
November	96.6	9.2	.9	3.22	7.15	.331	.37
December	306.3	79	1.2	9.88	13.8	.639	.73
Calendar year 1946	8,033.6	649	.5	22.0	26.0	1.20	16.33
January 1947	907.8	154	5.3	29.3	33.4	1.55	1.78
February	305.3	29	6.5	10.9	15.2	.704	.73
March	1,131.9	126	5.3	36.5	40.7	1.88	2.17
April	1,295.7	260	5.3	43.2	47.3	2.19	2.44
May	1,954.2	226	7.5	63.0	67.1	3.11	3.58
June	520.6	109	1.4	17.4	21.7	1.00	1.12
July	105.6	40	.7	3.41	8.22	.381	.44
August	183.3	87	.3	5.91	10.5	.486	.56
September	161.4	27	.2	5.38	9.92	.459	.51
Water year 1946-47	7,015.5	260	.2	19.2	23.4	1.08	14.72
October 1947	44.0	6.5	0	1.42	5.65	.262	.30
November	2,643.1	420	7.5	88.1	92.3	4.27	4.77
December	290.0	65	4.9	9.35	14.1	.653	.75
Calendar year 1947	9,542.9	420	0	26.1	30.5	1.41	19.15
January 1948	999.5	97	9.0	32.2	37.2	1.72	1.98
February	2,008.1	303	7.5	69.2	74.4	3.44	3.72
March	1,465	234	15	47.3	52.1	2.41	2.78
April	1,624.5	400	10.8	54.2	58.8	2.72	3.04
May	3,078.5	500	7.5	99.3	104	4.81	5.53
June	1,546.5	320	10	51.6	56.5	2.62	2.92
July	519.9	97	1.1	16.8	20.8	.963	1.11
August	883.0	188	.8	28.5	33.5	1.55	1.79
September	15.6	2.2	0	.520	5.27	.244	.27
Water year 1947-48	15,117.7	500	0	41.3	46.0	2.13	28.96
October 1948	25.2	2.8	0	.81	5.31	.246	.28
November	81.6	20	.3	2.72	7.22	.334	.37
December	1,407.0	752	2.0	45.4	50.3	2.33	2.68
Calendar year 1948	13,654.4	752	0	37.3	42.0	1.94	26.47
January 1949	2,778.3	440	7.5	89.6	94.6	4.38	5.05
February	1,303.0	241	17.5	46.5	51.3	2.38	2.47
March	804.9	114	7.5	26.0	30.5	1.41	1.63
April	1,053.5	175	7.5	35.1	40.1	1.86	2.07
May	678.2	145	7.5	21.9	26.9	1.25	1.44
June	46.9	6.1	.3	1.56	7.00	.324	.36
July	20.8	3.1	.3	.67	3.59	.166	.19
August	15.5	1.3	.3	.50	4.08	.189	.22
September	15.2	1.2	.4	.51	3.78	.175	.20
Water year 1948-49	8,230.1	752	0	22.5	27.0	1.25	16.96
October 1949	28.1	2.2	.4	.91	4.20	.194	.22
November	24.9	1.5	.4	.83	4.77	.221	.25
December	42.3	3.7	.7	1.36	5.28	.244	.28
Calendar year 1949	6,811.6	440	.3	18.7	22.9	1.02	14.38
January 1950	110.6	14.0	1.5	3.57	7.43	.344	.40
February	1,111.6	309	4.7	39.7	43.8	2.03	2.11
March	1,140.6	347	2.4	36.8	41.2	1.91	2.20
April	304.4	38	4.6	10.1	15.0	.694	.78
May	407.0	34	3.7	13.1	18.0	.833	.96
June	286.6	97	1.3	9.55	14.8	.685	.76
July	384.4	157	1.0	12.4	16.3	.755	.87
August	187.3	83	1.0	6.04	11.5	.532	.61
September	107.8	23	1.5	3.59	8.92	.413	.46
Water year 1949-50	4,135.6	347	.4	11.3	15.8	.731	9.90

* Adjusted for diversion from reservoir of Middlesex Water Co.

South Branch Raritan River near High Bridge

Location.--Lat 40°40'40", long 74°52'51", on left bank 1 mile upstream from High Bridge, Hunterdon County, and 4 miles upstream from Spruce Run.

Drainage area.--65.3 sq mi.

Records available.--February 1919 to September 1950.

Gage.--Water-stage recorder. Concrete control since Sept. 28, 1930. Datum of gage is 282.10 ft above mean sea level (New Jersey Geological Survey bench mark). Prior to Sept. 30, 1921, reference point at same site and datum.

Average discharge.--30 years (1920-50), 114 cfs.

Extremes.--1919-50: Maximum discharge, 5,160 cfs Mar. 15, 1940 (gage height, 11.78 ft), from rating curve extended above 1,600 cfs by logarithmic plotting; minimum, 6.6 cfs Oct. 11, 1930; minimum daily, 17 cfs Jan. 8, 1940.

Peak discharge (base, 1,000 cfs).--
1946: Nov. 22 (4 to 5 p.m.) 1,590 cfs (9.18 ft); Dec. 25 (10:30 p.m.) discharge below base (9.75 ft, ice jam); June 2 (7 p.m.) 1,240 cfs (8.77 ft); July 23 (6 p.m. to 6:30 p.m.) 1,180 cfs (8.70 ft).
1947: Mar. 14 (5 to 7:30 p.m.) 1,200 cfs (8.72 ft); May 1 (6 to 7 a.m.) 1,090 cfs (8.58 ft); May 5 (8:30 to 9:30 p.m.) 1,110 cfs (8.61 ft); May 25 (11:30 p.m.) 1,040 cfs (8.52 ft).
1948: Nov. 8 (10:30 p.m.) 1,450 cfs (9.02 ft); Apr. 1 (3 p.m.) 1,120 cfs (8.62 ft); May 13 (4 p.m.) 1,480 cfs (9.06 ft).
1949: Dec. 30 (6:30 p.m.) 2,230 cfs (9.80 ft); Jan. 6 (7 a.m.) 1,850 cfs (9.44 ft);
1950: Mar. 23 (11:30 a.m.) 976 cfs (8.42 ft), (annual maximum below base).

Remarks.--Slight diurnal fluctuation caused by small powerplant above station.

Cooperation.--Water-stage recorder inspected by employee of Taylor-Wharton Iron & Steel Co.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	82	59	211	324	123	152	138	73	104	75	52	41
2	87	59	182	206	102	154	140	68	773	286	52	40
3	87	60	172	180	86	208	158	65	454	104	52	39
4	76	60	172	176	77	203	136	64	234	73	53	38
5	75	58	158	182	83	211	127	66	206	66	52	37
6	80	56	200	275	108	172	117	68	182	64	50	37
7	104	54	231	369	224	170	112	65	163	60	103	37
8	94	53	172	289	114	228	106	76	147	58	84	38
9	119	54	152	245	104	251	114	70	129	56	56	36
10	104	54	149	302	102	170	104	64	112	56	50	38
11	83	83	138	219	94	136	96	62	110	54	50	36
12	80	125	114	219	91	119	94	179	149	54	48	34
13	78	89	119	208	89	117	91	211	132	54	50	32
14	73	82	123	175	137	117	89	108	119	50	68	32
15	71	136	117	165	132	213	87	175	106	49	54	33
16	68	94	106	138	81	188	91	112	94	49	50	31
17	66	78	83	138	93	143	83	114	82	46	65	32
18	65	75	b80	138	85	188	80	248	82	44	89	32
19	64	103	b80	134	75	244	76	222	82	44	70	31
20	62	293	b80	106	80	158	78	140	76	43	58	31
21	60	136	b80	127	80	140	75	125	80	80	50	38
22	60	953	b85	127	78	132	73	114	76	110	48	50
23	60	377	b90	110	83	123	71	94	68	725	45	39
24	68	228	b100	110	82	119	70	85	64	288	44	54
25	76	192	b150	114	78	195	70	82	60	134	43	91
26	78	165	b700	112	73	163	89	85	59	100	41	46
27	71	149	321	104	78	394	89	309	56	78	40	38
28	65	197	217	96	127	195	82	301	97	65	40	34
29	64	494	219	96	-------	168	76	168	143	60	49	34
30	60	305	228	106	-------	170	78	132	130	58	67	38
31	60	-------	388	143	-------	152	-------	110	-------	54	46	-------

b Stage-discharge relation affected by ice.

South Branch Raritan River near High Bridge--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	39	36	39	104	50	98	624	161	93	64	48
2	39	38	33	40	82	64	148	254	147	136	58	77
3	45	38	b30	a45	68	94	222	203	140	93	58	60
4	45	38	33	a50	71	78	132	198	129	76	56	49
5	45	38	32	a42	56	71	496	537	119	68	56	50
6	41	36	32	43	64	76	409	411	114	64	53	66
7	40	36	33	39	68	85	281	266	129	71	52	60
8	38	39	33	41	65	89	190	231	374	198	53	56
9	38	38	34	39	b60	80	188	200	326	119	83	50
10	40	37	33	36	b65	80	170	192	170	104	229	48
11	40	36	33	37	b65	91	152	170	138	89	94	49
12	62	43	33	39	b60	110	149	158	128	85	73	46
13	91	41	37	40	60	140	136	152	108	71	65	44
14	54	38	37	45	64	830	127	147	174	68	60	41
15	46	37	34	75	66	442	127	152	367	78	58	69
16	44	34	32	152	62	251	132	138	168	145	58	83
17	40	37	32	140	64	195	163	132	134	156	210	54
18	44	37	33	89	59	163	125	145	138	119	96	48
19	54	38	34	73	58	147	112	168	134	104	73	44
20	46	36	31	405	45	138	108	367	114	214	73	44
21	41	36	a120	306	31	134	114	254	160	112	70	43
22	40	36	a120	102	b65	132	134	279	138	423	60	58
23	39	39	a70	89	b65	127	106	225	117	180	56	68
24	38	38	a60	94	b55	125	98	175	106	123	53	a50
25	38	36	a50	83	b60	257	98	385	108	98	49	a48
26	43	37	a45	85	b60	168	136	518	100	93	50	43
27	56	41	38	134	b60	127	108	245	94	85	60	43
28	46	41	44	100	56	121	108	214	87	80	54	40
29	44	38	48	83	-------	114	93	203	87	78	52	39
30	43	38	a48	76	-------	110	127	260	129	73	49	40
31	40	-------	37	135	-------	98	-------	180	-------	68	50	-------

a No gage-height record; discharge computed on basis of recorded range in stage, weather records, records for adjacent days, and records for other stations in Raritan River Basin.
b Stage-discharge relation affected by ice.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	76	80	70	a45	225	685	125	168	112	60	38
2	40	56	80	175	a45	231	396	121	140	102	62	39
3	46	49	83	112	a50	276	292	147	125	85	59	38
4	44	160	83	98	a50	228	251	145	121	80	60	37
5	44	182	82	93	a48	180	234	191	114	76	64	36
6	43	112	85	87	a48	165	219	190	104	96	85	38
7	40	85	85	85	a50	182	208	281	112	89	62	38
8	40	572	94	83	a50	195	192	301	145	78	54	38
9	40	477	89	85	47	200	185	182	108	71	54	40
10	39	170	76	93	45	284	170	152	102	65	52	53
11	38	129	76	78	46	290	185	143	94	62	52	45
12	38	526	71	70	50	200	361	140	94	60	102	41
13	39	206	66	93	60	192	257	1,030	165	128	73	40
14	38	154	64	87	200	188	376	584	127	160	60	38
15	37	134	65	65	300	217	523	396	102	85	53	37
16	37	127	278	75	250	624	302	346	94	70	50	36
17	37	114	135	80	430	597	257	404	85	66	50	34
18	37	104	100	75	400	361	225	305	82	82	48	36
19	39	98	88	50	292	329	211	251	223	123	48	38
20	40	93	54	55	424	329	200	219	192	88	53	37
21	39	87	60	65	282	292	192	217	123	76	85	36
22	37	85	64	70	214	298	178	a195	106	205	70	34
23	36	132	64	55	185	263	168	a172	136	136	59	33
24	34	157	54	43	161	289	161	a160	154	121	53	33
25	34	232	40	50	170	222	190	a160	396	89	49	32
26	33	125	35	55	217	200	168	a150	175	76	46	31
27	34	104	56	60	206	258	152	145	161	75	46	32
28	37	96	60	50	295	432	147	140	188	71	45	32
29	78	91	54	50	260	251	140	136	170	66	43	31
30	78	85	45	45	-------	222	134	358	125	60	41	36
31	129	-------	60	a45	-------	203	-------	214	-------	59	39	-------

a No gage-height record; discharge computed on basis of weather records and records for stations on nearby streams.
Note.--Stage-discharge relation affected by ice Dec. 20-31, Jan. 1, 12, 15-30, Feb. 9-18.

South Branch Raritan River near High Bridge--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	37	64	458	222	172	136	114	70	37	33	31
2	44	37	58	315	200	163	134	128	66	39	31	29
3	37	36	53	254	175	156	114	253	65	40	31	27
4	34	55	52	217	*185	149	106	156	62	37	37	26
5	34	58	49	482	190	170	98	127	59	44	40	27
6	38	45	48	1,320	170	236	256	119	59	45	37	30
7	37	75	48	503	211	185	170	247	56	45	33	31
8	37	56	45	377	222	147	148	147	52	41	31	30
9	37	46	43	312	206	140	136	125	52	37	30	28
10	36	46	40	276	228	136	121	136	52	38	28	27
11	36	71	39	248	178	156	112	134	52	43	28	25
12	34	52	39	228	149	165	106	114	50	41	30	25
13	33	46	43	211	163	138	106	104	50	52	48	29
14	32	45	43	192	206	125	148	100	49	46	41	37
15	32	41	43	168	211	123	121	102	48	49	36	48
16	32	39	48	163	211	112	108	93	48	50	36	39
17	32	40	93	161	192	114	100	91	46	46	33	32
18	37	39	80	149	161	114	130	85	48	52	32	28
19	40	40	58	156	154	108	362	83	50	49	36	46
20	37	142	54	145	264	104	175	108	49	41	30	38
21	34	89	59	136	198	114	145	121	46	39	28	30
22	33	62	56	459	201	140	166	104	43	39	28	27
23	39	71	54	257	387	312	322	194	39	38	28	30
24	40	62	50	322	239	192	206	117	39	34	27	29
25	41	53	44	260	211	147	168	117	39	34	26	25
26	43	49	b40	214	198	140	154	98	40	33	25	25
27	40	49	b40	228	172	136	149	114	40	31	26	25
28	39	58	b45	493	175	127	129	91	39	32	24	24
29	40	71	b60	336	-------	117	117	80	38	30	42	31
30	38	85	b1,440	234	-------	112	112	80	36	31	46	69
31	37	-------	1,390	211	-------	112	-------	76	-------	40	33	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	54	33	62	76	87	170	170	176	48	37	a70
2	a30	41	32	59	160	83	163	143	236	46	38	53
3	30	37	30	62	170	71	163	127	132	49	54	60
4	28	34	29	65	102	77	195	117	201	68	60	66
5	28	36	30	58	85	76	165	127	154	62	44	53
6	27	34	29	54	80	93	156	125	125	65	39	46
7	28	33	29	86	83	78	134	112	106	56	38	44
8	30	31	28	68	70	145	127	96	87	48	37	41
9	34	30	30	50	200	459	121	85	80	44	36	40
10	34	29	28	91	226	145	114	85	76	86	36	44
11	32	29	33	141	149	123	112	85	75	160	37	46
12	31	28	41	76	136	127	110	80	70	162	44	45
13	31	29	177	71	123	158	106	78	66	91	40	45
14	31	38	109	80	161	136	104	76	75	206	34	50
15	31	41	58	71	346	123	104	78	98	94	33	46
16	30	36	45	64	282	112	98	85	85	82	32	41
17	30	33	46	58	206	106	94	85	82	80	32	39
18	28	31	43	60	178	106	91	168	73	70	32	37
19	27	30	60	65	165	94	89	195	68	58	34	34
20	27	31	58	52	134	93	198	127	71	50	95	36
21	26	32	48	52	102	183	172	102	71	49	64	36
22	25	30	44	52	119	195	121	85	64	45	46	36
23	27	29	44	54	114	658	110	82	58	43	43	37
24	26	28	52	56	112	292	121	136	53	44	40	36
25	30	30	44	62	121	214	128	108	118	48	39	33
26	38	30	43	58	96	192	147	94	71	46	a38	32
27	41	28	379	64	76	268	127	91	58	42	a36	31
28	32	28	238	59	84	322	158	82	52	40	a34	32
29	29	30	117	65	-------	270	127	200	49	43	a38	32
30	30	33	82	80	-------	236	132	167	49	41	a60	31
31	47	-------	62	78	-------	188	-------	114	-------	38	a95	-------

a No gage-height record; discharge computed on basis of recorded range in stage and records for station at Stanton.

South Branch Raritan River near High Bridge--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	2,340	119	60	75.5	1.16	1.33
November	4,921	953	53	164	2.51	2.80
December	5,417	700	80	175	2.68	3.09
Calendar year 1945	58,231	1,020	53	160	2.45	33.17
January 1946	5,435	369	96	175	2.68	3.10
February	2,759	224	73	98.5	1.51	1.57
March	5,493	394	117	177	2.71	3.13
April	2,890	158	70	96.3	1.47	1.65
May	3,855	309	62	124	1.90	2.20
June	4,369	773	56	146	2.24	2.49
July	3,137	725	43	101	1.55	1.79
August	1,719	103	40	55.5	.850	.98
September	1,167	91	31	38.9	.596	.66
Water year 1945-46	43,502	953	31	119	1.82	24.79
October 1946	1,398	91	38	45.1	.691	.80
November	1,134	45	34	37.8	.579	.65
December	1,845	120	30	43.4	.665	.77
Calendar year 1946	34,701	773	30	95.1	1.46	19.79
January 1947	2,796	405	36	90.2	1.38	1.59
February	1,758	104	31	62.8	.962	1.00
March	4,787	830	50	154	2.36	2.73
April	4,737	496	93	158	2.42	2.70
May	7,783	624	132	251	3.84	4.43
June	4,533	374	87	151	2.31	2.58
July	3,570	429	64	115	1.76	2.03
August	2,225	229	49	71.8	1.10	1.27
September	1,558	83	39	51.9	.795	.89
Water year 1946-47	37,624	830	30	103	1.58	21.44
October 1947	1,363	129	33	44.0	.674	.78
November	4,818	572	49	161	2.47	2.74
December	2,421	278	35	78.1	1.20	1.38
Calendar year 1947	42,349	830	31	116	1.78	24.12
January 1948	2,297	175	43	74.1	1.13	1.31
February	4,920	430	45	170	2.60	2.80
March	8,423	624	165	272	4.17	4.80
April	7,359	685	134	245	3.75	4.19
May	7,700	1,030	121	248	3.80	4.39
June	4,231	396	82	141	2.16	2.41
July	2,807	205	59	90.5	1.39	1.60
August	1,777	102	39	57.3	.877	1.01
September	1,105	53	31	36.8	.564	.63
Water year 1947-48	49,221	1,030	31	134	2.05	28.04
October 1948	1,157	54	32	37.3	.571	.66
November	1,695	142	36	56.5	.865	.97
December	4,318	1,440	39	139	2.13	2.46
Calendar year 1948	47,789	1,440	31	131	2.01	27.23
January 1949	9,485	1,320	136	306	4.69	5.40
February	5,679	387	149	203	3.11	3.23
March	4,562	312	104	147	2.25	2.60
April	4,546	362	98	152	2.33	2.59
May	3,753	253	76	121	1.85	2.14
June	1,483	70	36	49.4	.757	.84
July	1,253	52	30	40.4	.619	.71
August	1,015	48	24	32.7	.501	.58
September	948	69	24	31.6	.484	.54
Water year 1948-49	39,894	1,440	24	109	1.67	22.72
October 1949	958	47	25	30.9	.473	.55
November	983	54	28	32.8	.502	.56
December	2,121	379	28	68.4	1.05	1.21
Calendar year 1949	36,786	1,320	24	101	1.55	20.95
January 1950	2,073	141	50	66.9	1.02	1.18
February	3,956	346	70	141	2.16	2.25
March	5,505	658	71	178	2.73	3.14
April	3,947	195	89	132	2.02	2.25
May	3,505	200	76	113	1.73	2.00
June	2,774	236	49	92.5	1.42	1.58
July	2,105	206	38	67.9	1.04	1.20
August	1,365	95	32	44.0	.674	.78
September	1,272	70	31	42.4	.649	.72
Water year 1949-50	30,564	658	25	83.7	1.28	17.42

South Branch Raritan River at Stanton

Location.--Lat 40°34'21", long 74°52'10", on right bank at downstream side of highway bridge near Stanton railroad station, Readington Township, Hunterdon County, half a mile upstream from Prescott Brook.

Drainage area.--147 sq mi.

Records available.--July 1903 to December 1906, July 1919 to September 1950.

Gage.--Water-stage recorder. Datum of gage is 125.01 ft above mean sea level, datum of 1929. Prior to Aug. 17, 1925, chain gage on downstream side of highway bridge at same site and datum.

Average discharge.--30 years (1920-50), 237 cfs.

Extremes.--1903-6, 1919-50: Maximum discharge, 10,900 cfs Mar. 15, 1940, July 19, 1945 (gage height, 12.2 ft), from rating curve extended above 2,500 cfs on basis of slope-area determinations and computations of flow over dam at gage heights 9.37 and 10.72 ft; minimum, 9 cfs (regulated) Nov. 7, 1931; minimum daily, 20 cfs Sept. 22, 1939.

Peak discharge (base, 2,600 cfs).--
1946: Nov. 22 (12:30 p.m.) 3,110 cfs (7.21 ft); Dec. 26 (3 a.m.) discharge below base (9.06 ft, ice jam); June 2 (3 p.m.) 5,320 cfs (9.03 ft); July 23 (3 p.m.) 4,740 cfs (8.61 ft).
1947: May 5 (6 to 6:30 p.m.) 2,180 cfs (6.11 ft), (annual maximum below base).
1948: Feb. 19 (3 p.m.) discharge below base (8.54 ft, ice jam); May 13 (8:30 p.m.) 4,810 cfs (8.66 ft); June 28 (10 p.m.) 3,620 cfs (7.70 ft).
1949: Dec. 30 (3 p.m.) 6,580 cfs (9.85 ft); Jan. 6 (3 a.m.) 4,650 cfs (8.54 ft).
1950: Mar. 23 (7 a.m.) 2,320 cfs (6.30 ft), (annual maximum below base).

Remarks.--Slight diurnal fluctuation caused by small powerplants above station and occasional regulation at low flow by ponds above station.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	148	109	487	798	249	467	302	143	221	161	118	95
2	155	105	417	516	210	391	298	138	2,880	831	118	88
3	155	107	383	444	180	463	331	131	1,240	249	114	88
4	138	112	374	417	160	417	298	131	684	163	107	82
5	134	105	343	435	180	412	288	138	547	143	109	79
6	140	103	491	578	202	350	258	136	458	138	112	77
7	204	101	506	725	511	328	227	131	408	136	404	80
8	174	99	387	600	233	435	230	134	350	120	234	77
9	224	101	339	521	210	511	258	134	305	120	145	74
10	198	99	327	650	201	343	233	127	265	118	118	76
11	150	134	313	472	190	284	195	127	271	114	122	71
12	145	230	260	472	182	255	201	532	379	116	112	68
13	140	174	260	440	176	249	212	467	350	116	116	66
14	134	158	274	370	259	242	192	236	288	105	150	64
15	129	236	268	350	280	385	198	400	249	99	120	64
16	124	193	240	310	160	383	184	255	224	101	109	62
17	120	158	190	300	174	284	179	554	210	97	152	60
18	116	145	180	290	*176	410	174	804	207	93	244	62
19	114	187	180	288	161	545	161	787	190	90	266	60
20	114	575	180	230	165	350	174	417	195	76	174	58
21	112	274	180	274	165	309	179	358	198	131	131	80
22	112	1,660	190	281	130	291	145	295	179	210	120	109
23	114	767	200	240	170	274	131	255	163	1,790	114	79
24	134	444	220	240	170	255	150	242	150	680	107	127
25	143	374	300	239	158	404	148	190	136	288	103	201
26	134	323	1,500	236	155	343	187	210	134	218	99	101
27	143	288	900	224	163	904	201	579	127	161	93	82
28	118	440	521	215	448	430	161	575	127	148	80	69
29	101	1,240	*547	212	-------	366	150	327	230	138	97	63
30	112	684	568	*212	-------	374	145	261	319	129	212	72
31	109	-------	1,050	298	-------	327	-------	227	-------	122	112	-------

* Winter discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 12, 13, 16-27, Jan. 16-18, 20, 23, 24, Feb. 3-5, 16, 20-24.

South Branch Raritan River at Stanton--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	79	74	85	221	120	210	1,360	320	187	127	97
2	71	76	66	90	176	180	819	511	298	f298	118	167
3	72	74	60	105	145	250	506	417	281	190	120	129
4	74	76	62	116	150	220	309	435	258	159	124	103
5	74	74	66	100	130	200	970	1,090	236	128	122	99
6	72	72	70	*103	140	210	913	1,030	242	131	122	122
7	88	72	69	a90	150	230	496	600	296	145	118	125
8	68	84	66	a95	140	252	417	511	1,050	383	122	158
9	66	82	68	a90	130	221	422	435	767	255	145	109
10	88	77	71	a85	140	221	379	400	395	233	365	101
11	84	77	69	a90	140	252	339	354	323	207	171	103
12	105	103	68	a100	130	281	328	327	284	174	134	99
13	193	90	76	109	130	316	288	309	246	242	124	92
14	107	80	74	122	140	1,380	278	295	492	249	118	86
15	90	77	70	226	140	897	274	298	c900	192	114	93
16	82	74	*56	339	140	501	291	274	c383	249	112	167
17	77	76	66	298	140	400	339	261	c309	315	738	118
18	82	82	69	215	134	339	265	284	c305	259	198	95
19	107	77	67	163	127	302	242	331	c298	212	143	88
20	88	76	65	802	110	281	224	790	c265	346	235	88
21	80	74	261	635	100	274	252	496	c448	207	183	88
22	77	79	268	268	140	274	291	627	c288	574	136	123
23	76	86	153	195	140	274	239	487	c234	308	118	140
24	77	79	124	204	120	a270	198	370	218	212	109	103
25	74	74	112	198	140	a550	218	637	227	171	101	99
26	95	77	101	195	140	362	258	1,160	212	161	101	92
27	114	95	85	291	*140	*274	224	511	204	150	124	84
28	93	88	95	218	130	249	221	435	174	148	112	80
29	90	79	101	184	-------	242	201	453	179	143	105	80
30	86	76	122	171	-------	230	245	575	212	138	99	82
31	82	-------	80	254	-------	215	-------	370	-------	134	105	-------

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of recorded range in stage, adjoining gage-height graph, and records for other stations in Raritan River Basin.
c Backwater from tree.
f Computed on basis of partly estimated gage-height record.
Note.--Stage-discharge relation affected by ice Dec. 2-6, 15, 16, 19, 20, 27, 28, 31, Jan. 1, 2, 5, Feb. 4-17, 20-28, Mar. 1-7.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	77	164	166	170	100	568	1,280	249	354	320	136	80
2	77	105	*161	450	100	636	872	236	302	274	138	79
3	84	103	161	320	*100	779	600	284	271	239	136	79
4	84	175	163	240	105	622	501	291	252	215	140	79
5	82	308	161	210	110	448	472	417	242	201	143	79
6	82	187	163	200	115	422	440	428	224	242	174	79
7	79	145	155	180	115	462	422	678	227	236	131	80
8	77	1,070	182	180	110	477	391	663	309	195	116	97
9	77	886	174	184	105	458	370	391	280	176	109	95
10	76	309	145	184	*95	563	335	335	212	163	105	134
11	74	242	150	170	96	627	370	298	193	158	105	109
12	72	1,150	143	160	105	430	755	299	198	145	396	90
13	95	412	136	210	115	408	521	3,060	350	343	185	82
14	85	305	138	200	200	391	879	1,650	268	402	138	77
15	69	268	153	150	700	422	1,130	1,050	221	193	116	74
16	68	252	500	160	600	890	639	951	204	166	103	72
17	63	230	276	180	700	956	547	1,070	190	155	101	71
18	44	212	204	160	1,100	605	472	755	174	144	99	74
19	58	187	158	120	900	589	440	616	576	290	103	77
20	77	184	140	130	1,140	702	417	521	624	174	128	76
21	72	179	150	150	699	511	391	501	309	153	462	74
22	68	166	150	160	568	521	354	448	265	398	212	71
23	66	246	153	140	458	477	335	400	309	367	168	71
24	64	292	140	100	400	537	320	366	552	249	136	71
25	64	490	110	110	440	*422	350	358	736	182	122	69
26	64	255	90	130	584	374	327	346	374	153	112	69
27	68	212	150	140	537	423	298	320	378	150	101	69
28	72	201	160	120	924	872	278	302	1,010	145	97	72
29	204	187	150	120	684	467	271	291	674	138	92	74
30	171	179	120	110	-------	422	261	830	374	117	88	95
31	201	-------	150	100	-------	391	-------	458	-------	122	86	-------

* Winter discharge measurement made on this day.
Note.--Backwater from aquatic vegetation Oct. 14-28, June 30 to Sept. 30. Stage-discharge relation affected by ice Dec. 20-22, Dec. 24 to Jan. 8, Jan. 11 to Feb. 19.

South Branch Raritan River at Stanton--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	135	68	143	1,090	491	383	284	215	138	76	44	57
2	92	68	127	719	430	350	281	227	134	76	42	50
3	74	68	116	552	391	346	233	437	127	79	47	46
4	69	104	114	453	391	331	218	288	122	71	66	44
5	71	112	109	1,170	408	366	207	230	118	80	69	47
6	79	88	103	3,020	366	453	487	212	116	80	56	88
7	74	156	103	1,090	542	366	339	497	109	84	48	52
8	72	124	101	779	*496	309	284	271	103	77	48	48
9	79	95	97	629	448	295	274	236	101	71	50	44
10	74	82	99	*552	477	284	242	239	101	69	50	41
11	72	116	97	487	383	331	230	249	101	82	47	39
12	72	97	97	440	327	331	224	210	95	76	51	38
13	68	86	88	404	346	278	221	193	93	105	76	43
14	68	82	76	370	395	*252	284	193	93	84	76	66
15	68	79	99	327	395	242	236	193	92	71	54	77
16	66	74	120	313	408	227	212	176	92	88	62	68
17	66	77	227	309	387	224	198	166	90	79	64	50
18	72	77	195	288	320	230	240	161	93	93	54	43
19	80	79	140	295	309	218	683	155	101	90	62	52
20	79	239	b120	281	600	215	335	236	109	66	50	62
21	69	184	b130	264	412	227	274	249	95	58	43	46
22	68	127	b120	1,110	438	261	314	221	77	56	42	44
23	69	145	b120	532	888	659	634	352	92	54	42	54
24	77	136	b110	707	496	379	400	227	69	46	41	50
25	76	127	b100	547	453	291	316	246	80	44	38	44
26	76	93	b90	496	422	278	288	204	82	43	36	42
27	72	90	b90	547	370	268	274	221	79	43	37	41
28	69	118	*b110	1,200	379	252	246	184	80	43	36	42
29	71	180	b140	749	-------	230	227	163	77	43	58	56
30	71	195	b4,000	516	-------	221	221	155	76	38	74	112
31	68	-------	3,480	487	-------	221	-------	150	-------	44	62	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71	89	*52	115	171	*177	362	333	272	81	65	107
2	52	62	52	111	374	177	341	293	455	78	68	81
3	49	56	50	111	*372	b150	333	263	246	87	111	89
4	47	53	50	*117	219	156	393	239	396	104	122	109
5	46	53	47	109	183	169	329	249	286	104	80	80
6	44	50	49	100	171	163	297	249	225	109	71	68
7	45	47	50	148	177	146	260	216	197	90	68	65
8	46	46	49	131	153	176	239	183	171	78	66	63
9	50	45	b50	98	375	780	232	188	153	71	63	62
10	50	44	b50	181	478	267	219	177	140	169	65	78
11	49	42	59	289	313	219	219	158	146	232	71	83
12	47	42	70	158	274	225	213	153	136	282	83	78
13	49	42	293	138	249	313	206	148	126	156	73	80
14	49	50	221	153	470	278	197	146	133	278	63	104
15	49	62	115	136	1,080	246	191	158	180	138	63	83
16	49	53	b80	122	783	194	180	150	160	117	62	71
17	45	*49	b80	111	553	200	171	153	153	124	63	65
18	44	49	78	117	456	203	169	278	133	102	68	62
19	44	47	109	131	406	183	163	367	126	92	74	60
20	42	47	111	109	333	177	479	242	131	80	163	60
21	42	46	89	100	263	365	354	183	136	74	120	78
22	42	45	81	96	278	406	236	150	122	73	78	56
23	42	45	80	100	260	1,500	222	150	111	71	73	60
24	41	45	96	100	256	682	246	246	94	73	73	62
25	45	45	85	109	263	475	253	203	152	81	71	57
26	62	46	76	107	225	415	286	183	124	78	70	57
27	66	45	710	115	198	599	256	159	100	73	66	73
28	53	b45	484	111	174	697	293	140	89	68	63	57
29	47	47	219	122	-------	558	249	404	85	70	68	57
30	49	52	153	146	-------	494	260	340	85	70	107	62
31	74	-------	129	171	-------	397	-------	239	-------	65	200	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

South Branch Raritan River at Stanton--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	4,288	224	101	138	0.939	1.08
November	9,723	1,660	99	324	2.20	2.46
December	12,575	1,500	180	406	2.76	3.18
Calendar year 1945	123,991	5,650	97	340	2.31	31.37
January 1946	11,877	798	212	383	2.61	3.00
February	5,848	511	155	209	1.42	1.48
March	11,776	904	242	380	2.59	2.98
April	6,189	321	131	206	1.40	1.57
May	9,441	804	127	305	2.07	2.39
June	11,684	2,880	127	389	2.65	2.96
July	7,201	1,790	76	232	1.58	1.82
August	4,412	404	80	142	.966	1.12
September	2,434	201	58	81.1	.552	.62
Water year 1945-46	97,448	2,880	58	267	1.82	24.66
October 1946	2,712	193	66	87.5	.595	.69
November	2,385	103	72	79.5	.541	.60
December	2,854	268	56	92.1	.627	.72
Calendar year 1946	78,813	2,880	56	216	1.47	19.95
January 1947	6,236	802	85	201	1.37	1.58
February	3,903	221	100	139	.946	.99
March	10,267	1,380	120	331	2.25	2.60
April	10,151	970	198	338	2.30	2.57
May	16,433	1,360	261	530	3.61	4.16
June	10,344	1,050	174	345	2.35	2.62
July	6,901	574	128	223	1.52	1.75
August	4,863	738	99	157	1.07	1.23
September	3,210	167	80	107	.728	.81
Water year 1946-47	80,259	1,380	56	220	1.50	20.32
October 1947	2,614	204	44	84.3	.573	.66
November	9,301	1,150	103	310	2.11	2.35
December	5,152	500	90	166	1.13	1.30
Calendar year 1947	89,375	1,380	44	245	1.67	22.62
January 1948	5,338	450	100	172	1.17	1.35
February	12,005	1,140	95	414	2.82	3.04
March	16,873	956	374	544	3.70	4.27
April	15,038	1,280	261	501	3.41	3.80
May	18,862	3,060	226	608	4.14	4.77
June	10,602	1,010	174	353	2.40	2.68
July	6,600	402	117	213	1.45	1.67
August	4,478	462	86	144	.980	1.13
September	2,418	184	69	80.6	.548	.61
Water year 1947-48	109,281	3,060	44	299	2.03	27.63
October 1948	2,316	135	66	74.7	.508	.59
November	3,366	289	68	112	.762	.85
December	10,861	4,000	76	350	2.38	2.75
Calendar year 1948	108,757	4,000	66	297	2.02	27.51
January 1949	20,733	3,020	264	669	4.55	5.25
February	12,168	888	309	435	2.96	3.08
March	9,318	659	215	301	2.05	2.36
April	8,906	682	198	297	2.02	2.25
May	7,156	497	150	231	1.57	1.81
June	2,935	138	69	97.8	.665	.74
July	2,109	105	38	68.0	.463	.53
August	1,625	76	36	52.4	.356	.41
September	1,586	112	38	52.9	.360	.40
Water year 1948-49	83,079	4,000	36	228	1.55	21.02
October 1949	1,530	74	41	49.4	.336	.39
November	1,489	89	42	49.6	.337	.38
December	3,917	710	47	126	.857	.98
Calendar year 1949	73,472	3,020	36	201	1.37	18.58
January 1950	3,962	289	96	128	.871	1.00
February	9,507	1,080	153	340	2.31	2.41
March	11,187	1,500	146	361	2.46	2.83
April	7,848	479	163	262	1.78	1.99
May	6,740	404	140	217	1.48	1.71
June	5,063	455	88	169	1.15	1.28
July	3,368	282	65	109	.741	.85
August	2,551	200	62	82.3	.560	.65
September	2,167	109	56	72.2	.491	.55
Water year 1949-50	59,329	1,500	41	163	1.11	15.03

Walnut Brook near Flemington

Location.--Lat 40°30'57", long 74°53'00", on right bank 1¼ miles northwest of Flemington, Hunterdon County, and 3 miles upstream from mouth.

Drainage area.--2.24 sq mi.

Records available.--April 1936 to September 1950.

Gage.--Water-stage recorder and concrete control. Datum of gage is 267.33 ft above mean sea level, unadjusted.

Average discharge.--14 years, 3.11 cfs.

Extremes.--1936-50: Maximum discharge, 645 cfs July 18, 1945 (gage height, 3.30 ft), from rating curve extended above 120 cfs on basis of logarithmic plotting; no flow at times.

Peak discharge (base, 100 cfs).--
1946: Nov. 29 (3 a.m.) 100 cfs (2.25 ft); June 2 (6 a.m.) 124 cfs (2.35 ft).
1947: May 1 (1:30 a.m.) 109 cfs (2.29 ft); May 5 (12:30 p.m.) 141 cfs (2.41 ft).
1948: Apr. 1 (5:30 a.m.) 109 cfs (2.29 ft); May 13 (1 p.m.) 114 cfs (2.31 ft); June 28 (7 p.m.) 127 cfs (2.36 ft).
1949: Dec. 30 (11 a.m.) 124 cfs (2.35 ft).
1950: Mar. 23 (3 a.m.) 88 cfs (2.20 ft), (annual maximum below base).

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0	0.46	8.3	12.2	1.5	7.4	2.9	0.60	1.8	0.46	0.40	0.46
2	1.0	.40	6.1	6.8	1.1	4.9	2.7	.60	73	4.5	.40	.40
3	1.0	.40	5.2	5.2	.92	5.8	2.9	.53	17.8	.92	.40	.46
4	.92	.40	5.2	4.4	b.84	*4.6	2.5	.53	8.7	.60	.34	.34
5	.74	.34	4.4	4.4	.83	5.2	2.3	.60	7.2	.46	.34	.28
6	.74	.34	14.2	13.9	1.9	4.9	2.0	.53	5.2	.46	.34	.28
7	d1.2	.40	11.3	11.3	2.9	4.9	1.8	.46	4.1	.40	.95	.28
8	d1.2	.40	6.1	7.2	1.3	5.2	1.7	.46	3.1	.34	.54	.28
9	d1.5	.40	5.2	8.1	1.3	6.1	1.7	.40	2.3	.28	.39	.28
10	.83	.40	4.6	8.4	1.1	4.1	1.5	.40	1.8	.28	.34	.23
11	.67	.46	3.8	5.5	1.0	3.4	1.4	.34	2.7	.23	.28	.23
12	.67	.60	3.1	6.1	.92	2.7	1.3	1.3	4.9	.23	.23	.19
13	.67	.60	a2.5	4.6	.92	2.7	1.3	1.2	3.1	.23	.36	.19
14	.60	.60	a2.5	3.6	1.9	2.5	1.1	2.1	2.3	.19	.34	.16
15	.60	1.4	a2.3	b2.8	1.4	7.7	1.0	4.6	2.3	.16	.23	.16
16	.60	1.1	a1.6	b2.2	1.1	4.9	1.0	2.3	1.7	.16	.23	.13
17	.53	1.0	a1.0	b1.9	1.1	3.8	.92	16.3	1.5	.13	5.7	.10
18	.53	.92	a.8	b1.6	.92	13.8	.83	27	1.4	.13	2.6	.10
19	.53	6.1	a.9	b1.4	.83	8.4	.83	14.2	1.1	.13	2.4	.10
20	.46	7.7	a.9	b1.1	1.1	5.8	.74	6.8	1.3	.10	1.4	.08
21	.46	4.1	a.8	b1.3	1.0	4.6	.74	6.1	1.3	.26	1.1	.16
22	.40	33	a.8	b1.3	b.8	3.8	.67	4.6	1.0	2.8	.92	.23
23	.40	8.6	a.9	b1.1	a.9	3.4	.67	3.4	.83	14.7	.74	.19
24	d.7	5.5	a1.1	b1.1	a.9	3.1	.67	2.7	.67	3.0	.67	1.5
25	d.8	4.4	a1.8	b1.1	a.8	3.8	.67	2.3	.60	2.0	.53	.60
26	d.8	3.4	a50	b1.1	.74	8.8	.92	1.8	.53	1.4	.46	.34
27	.60	2.9	13.2	.92	1.8	13.2	.83	7.2	.46	.92	.46	.28
28	.53	16.6	7.9	.83	10.8	6.1	.74	4.8	.40	.74	.34	.23
29	.53	51	*11.4	.83	-------	4.9	.67	3.1	.46	.67	1.1	.23
30	.46	13.1	14.1	2.1	-------	4.4	.67	2.5	.53	.53	1.2	.48
31	.46	-------	30	2.3	-------	3.4	-------	2.0	-------	.46	.60	-------

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of weather records and records for Neshanic River at Reaville.
b Stage-discharge relation affected by ice.
d Doubtful gage-height record; discharge computed on basis of weather records and records for Neshanic River at Reaville.

Walnut Brook near Flemington--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.34	0.34	0.28	1.0	3.8	1.0	2.2	27	2.3	0.58	0.74	0.16
2	.28	.34	.28	1.0	3.4	2.6	15.0	8.3	2.0	.67	.67	.97
3	.28	.34	.28	1.1	2.7	4.9	10.9	6.1	1.7	.46	.60	.28
4	.23	.40	.23	1.4	2.7	3.1	6.1	11.9	1.4	.40	.53	.23
5	.19	.34	.23	1.1	2.5	2.7	28	34	1.3	.34	.46	.23
6	.19	.28	.23	1.0	2.3	4.7	12.7	16.8	1.4	.34	.46	.23
7	.16	.28	.22	1.0	2.0	7.7	7.5	10.1	3.7	.48	.40	.33
8	.16	.28	.23	1.0	1.8	6.5	5.5	6.8	18.6	1.9	.40	.34
9	.16	.28	.23	.92	b1.6	6.8	5.5	5.2	7.2	3.1	.68	.28
10	.33	.34	.23	.92	b1.6	7.3	4.4	4.1	4.4	1.7	.67	.23
11	.28	.34	.23	1.0	1.4	7.9	3.8	3.6	3.1	1.3	.46	.23
12	.49	.40	.23	2.7	1.3	8.3	3.6	2.9	2.5	.92	.34	.16
13	1.1	.34	.28	1.9	1.1	10.8	2.9	2.5	2.0	2.5	.34	.16
14	.67	.28	.23	2.8	1.3	37	2.7	2.5	8.8	1.7	.28	.13
15	.60	.28	.23	10.8	1.7	11.5	2.3	2.3	5.7	9.9	.23	.16
16	.53	.28	.23	10.6	2.2	7.5	4.5	2.0	3.4	3.8	.28	.16
17	.46	.28	.19	7.0	2.0	5.5	3.8	1.8	2.5	2.5	.85	.16
18	.46	.28	.19	4.9	1.7	4.4	2.9	3.1	2.9	2.0	.46	.13
19	.46	.28	.19	3.8	1.5	3.6	2.7	2.7	2.3	2.0	.34	.13
20	.40	.28	.23	28	1.1	3.1	2.3	12.9	2.0	2.0	1.0	.13
21	.34	.28	5.7	10.2	b1.1	2.9	2.7	11.9	2.0	1.4	.74	.13
22	.34	.28	2.8	4.6	b1.5	3.1	2.7	22	1.5	12.6	.53	.23
23	.34	.28	2.0	3.6	b1.5	2.9	2.3	9.6	1.3	3.6	.40	.19
24	.34	.28	1.7	3.1	1.3	3.1	2.2	6.5	1.1	2.5	.28	.16
25	.28	.28	1.4	2.9	1.1	10.6	2.0	11.0	1.0	1.8	.23	.19
26	.50	.28	1.1	5.4	1.1	4.4	2.2	10.6	.92	1.7	.23	.16
27	.46	.34	.92	7.6	1.1	3.6	2.0	5.5	.88	1.3	.23	.13
28	.46	.28	.92	4.6	1.0	3.1	1.8	4.6	.74	1.8	.23	.13
29	.40	.28	1.2	3.8	-------	2.9	1.5	3.8	.67	1.3	.19	.10
30	.40	.28	2.0	3.4	-------	2.5	7.3	3.6	.60	.92	.19	.10
31	.40	-------	1.1	7.8	-------	2.3	-------	2.7	-------	.88	.19	-------

b Stage-discharge relation affected by ice.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.10	0.23	1.3	2.3	b0.7	7.9	27	1.3	4.6	4.6	0.28	0.40
2	.08	.19	1.1	8.7	b.7	15.4	11.5	1.1	3.4	3.4	.28	.34
3	.08	.19	1.1	5.5	b.7	17.7	7.5	2.0	2.7	2.7	6.6	.34
4	.08	1.1	1.1	4.4	b.6	10.1	5.8	1.7	2.3	2.2	2.2	.28
5	.08	.74	1.1	3.6	b.7	6.1	4.9	11.5	2.0	1.8	1.7	.28
6	.10	.60	1.1	3.4	b.8	4.9	4.4	6.3	1.5	1.7	1.5	.28
7	.10	.46	1.1	3.1	b.8	6.7	3.8	25	1.4	1.5	1.0	.34
8	.08	17.0	1.4	2.7	b.8	6.1	3.4	10.9	1.4	1.3	.83	.34
9	.10	4.4	1.3	2.9	b.8	6.0	2.9	6.5	1.3	1.0	.67	.28
10	.10	2.7	1.1	3.1	b.8	11.5	2.5	4.9	1.0	.88	.60	.40
11	.10	2.7	1.1	2.5	b.3	7.5	3.4	3.8	.88	.74	.53	.34
12	.10	27	1.0	2.3	.06	5.8	9.3	3.6	.88	.67	.92	.23
13	.10	5.8	.92	3.8	.04	4.9	4.6	73	1.0	1.1	.74	.19
14	.10	3.8	.92	4.1	2.6	4.4	13.8	21	.88	.92	.53	.16
15	.10	3.1	.88	2.7	2.0	4.4	10.6	14.6	.92	.74	.46	.13
16	.10	2.7	10.7	2.3	1.0	9.9	6.8	19.4	.88	.53	.40	.13
17	.10	2.2	3.4	2.3	8.8	6.1	5.2	15.5	.67	.53	.40	.13
18	.10	1.7	2.7	2.0	a16	4.6	4.1	9.6	.60	.46	.34	.13
19	.08	1.5	2.2	1.8	a18	6.6	3.6	6.8	3.3	.46	.34	.13
20	.04	1.3	1.8	1.8	a12	6.5	3.4	4.9	31	.40	.87	.10
21	.04	1.1	1.7	2.2	a8	4.9	2.9	4.4	6.5	.34	11.6	.10
22	.02	1.1	1.5	2.3	a6	4.4	2.5	3.4	4.6	.60	3.6	.10
23	.02	2.3	1.4	1.7	a5	6.0	2.3	2.7	5.8	1.4	2.7	.08
24	.02	5.0	1.3	b1.5	a4.5	6.1	2.2	2.3	8.3	.67	1.8	.08
25	.02	4.1	1.3	b1.0	a5.5	4.4	2.0	2.3	9.9	.46	1.4	.08
26	.04	2.5	1.1	.67	12.1	4.1	1.8	2.2	5.2	.40	1.1	.06
27	.02	2.2	1.4	.67	10.5	8.7	1.7	1.8	5.7	.34	.83	.06
28	.13	2.0	1.3	.67	31	7.2	1.7	1.5	25	.28	.74	.06
29	.59	1.7	1.0	.53	13.2	4.9	1.5	1.4	17.5	.23	.60	.06
30	.23	1.5	1.0	.23	-------	4.4	1.4	13.7	6.8	.23	.53	.13
31	.19	-------	1.0	.74	-------	3.8	-------	7.8	-------	.19	.46	-------

a No gage-height record; discharge computed on basis of recorded range in stage, weather records, and records for North Branch Raritan River near Far Hills.
b Stage-discharge relation affected by ice.
Note.--Backwater from leaves Oct. 2-28.

Walnut Brook near Flemington--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.19	0.10	1.1	12.2	5.2	3.8	6.5	1.8	1.7	0.06	0.01	0.10
2	.13	.13	.92	7.9	4.1	3.4	5.2	2.9	1.4	.06	.01	.08
3	.10	.13	.83	5.8	3.4	3.4	3.6	8.0	1.1	.04	1.9	.08
4	.08	4.9	1.4	4.6	4.1	3.6	3.1	3.4	.92	.02	.54	.08
5	.08	.23	1.0	34	4.9	6.3	2.9	2.7	.83	.01	.19	4.8
6	.10	.19	.92	38	4.1	5.5	15.1	3.5	.74	.01	.16	4.0
7	.10	5.4	.83	11.1	13.6	3.8	6.1	6.2	.67	.01	.10	.53
8	.10	.28	.83	7.2	8.3	3.1	4.9	3.1	.60	.01	.10	.34
9	.10	.19	.74	5.5	8.8	2.9	4.1	2.5	.53	.01	.08	.23
10	.10	.19	.67	4.4	6.8	2.7	3.4	2.7	.46	.01	.06	.16
11	.10	.23	.60	3.8	5.2	4.6	2.9	2.3	.46	.01	.08	.16
12	.10	.23	.60	3.4	4.1	3.6	2.5	2.0	.40	.02	.10	.16
13	.08	.23	.60	2.9	5.5	2.7	3.0	1.7	.34	.13	.10	.16
14	.08	.19	.53	2.5	5.5	2.5	4.0	1.8	.34	.08	.08	.23
15	.08	.19	.53	2.2	5.8	2.3	2.9	1.7	.28	.06	.06	.23
16	.08	.19	.77	2.0	6.9	2.0	2.7	1.4	.28	.06	.06	.19
17	.08	.19	2.6	*2.0	7.5	1.8	2.2	1.3	.23	.28	.06	.16
18	.10	.19	2.0	1.8	4.6	1.8	5.3	1.1	.23	.31	.10	.16
19	.13	.19	1.5	1.8	4.4	1.5	11.2	.92	.28	.18	.08	.16
20	.10	.62	1.5	1.7	13.5	1.5	4.6	2.3	.23	.10	.06	.13
21	.10	.46	1.4	4.6	6.1	2.1	3.8	1.7	.19	.08	.04	.13
22	.10	.46	1.3	28	16.6	2.3	8.4	2.6	.16	.08	.04	.16
23	.08	.46	1.3	8.5	14.9	21	8.0	6.3	.13	.06	.06	.23
24	.10	.46	1.3	17.7	7.9	7.2	5.2	6.5	.10	.06	.06	.16
25	.16	.40	b1.0	8.7	6.8	5.2	3.8	9.4	.10	.06	.04	.13
26	.10	.40	b1.1	10.9	5.2	4.4	3.4	6.6	.10	.04	.04	.13
27	.10	.40	b1.9	11.2	4.4	3.8	3.1	5.2	.08	.04	.02	.10
28	.10	.40	b2.0	34	4.1	3.1	2.5	3.6	.08	.04	.04	.13
29	.10	2.0	10.9	10.6	-------	2.7	2.2	2.9	.06	.02	.14	.31
30	.10	1.5	92	6.5	-------	2.3	2.0	2.3	.06	.02	.06	.28
31	.10	-------	45	5.8	-------	3.0	-------	2.0	-------	.02	.15	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.19	0.19	0.13	2.0	5.5	1.5	4.6	7.0	4.1	0.13	0.02	0.16
2	.16	.19	.13	1.8	19.3	1.1	4.1	5.2	3.4	.13	.02	.10
3	.13	.16	.13	1.8	10.2	1.1	3.8	5.2	2.7	.10	.70	.13
4	.16	.16	.13	1.8	5.8	.92	3.6	4.4	8.8	.13	.20	.10
5	.16	.16	.13	1.5	4.4	.92	3.4	4.4	4.1	.16	.13	.08
6	.16	.13	.13	1.5	5.2	.92	2.9	4.1	3.1	.16	.10	.06
7	.16	.13	.13	2.6	4.9	.83	2.5	3.4	2.3	.13	.10	.04
8	.16	.13	.13	1.7	3.4	3.5	2.3	2.7	2.0	.10	.10	.04
9	.16	.13	.16	1.5	15.3	4.5	2.2	2.3	1.5	.10	.08	.04
10	.16	.13	.16	7.4	9.2	2.0	1.7	2.2	1.4	1.1	.44	.11
11	.16	.13	.16	4.8	7.9	1.7	1.5	2.0	1.1	.58	.16	.13
12	.16	.13	.25	3.1	5.8	2.2	1.5	1.8	1.0	.40	.13	.10
13	.16	.13	3.2	3.1	5.4	7.6	1.4	1.5	.92	.28	.08	.33
14	.16	.13	1.7	3.6	24	4.1	1.3	1.4	.83	.28	.08	.28
15	.16	.13	1.0	2.7	42	3.4	1.3	1.4	.92	.23	.06	.19
16	.16	.10	.74	2.5	18.0	2.9	1.1	1.5	.92	.48	.04	.13
17	.16	.10	.67	2.2	11.1	2.7	1.1	1.3	.74	.34	.04	.10
18	.16	.10	.60	2.7	7.9	2.7	1.1	2.6	.53	.19	.04	.08
19	.16	.10	1.5	2.3	6.5	2.2	1.0	4.4	.46	.16	.09	.08
20	.16	.10	1.1	1.8	4.1	2.0	5.6	2.7	.46	.13	.13	.08
21	.13	.10	.92	1.7	3.4	9.0	3.4	2.2	.46	.10	.08	.08
22	.13	.10	.83	1.7	3.1	6.0	2.3	1.8	.40	.08	.06	.13
23	.10	.10	1.5	1.7	2.9	41	2.2	1.8	.40	.08	.06	.13
24	.10	.10	1.5	1.7	2.7	13.0	3.2	2.3	.28	.08	.06	.13
25	.10	.10	1.1	1.7	2.3	8.7	3.4	1.8	.28	.08	.04	.13
26	.19	.10	1.7	1.7	1.8	9.5	3.6	1.7	.23	.08	.04	.13
27	.16	.10	25	1.8	1.5	13.4	2.9	1.5	.19	.06	.02	.13
28	.13	.10	7.0	1.7	1.4	12.6	5.7	1.4	.16	.05	.02	.13
29	.13	.13	4.1	4.0	-------	8.7	3.6	9.8	.16	.06	.15	.13
30	.13	.13	2.9	4.1	-------	6.8	4.5	4.9	.16	.04	.13	.13
31	.19	-------	2.3	6.8	-------	5.2	-------	3.6	-------	.02	.44	-------

Walnut Brook near Flemington--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	22.13	1.5	0.40	0.714	0.319	0.37
November	167.02	51	.34	5.57	2.49	2.77
December	222.0	50	.8	7.16	3.20	3.69
Calendar year 1945	1,521.02	51	.13	4.17	1.86	25.27
January 1946	126.68	13.9	.83	4.09	1.83	2.10
February	42.62	10.8	.74	1.52	.679	.71
March	168.3	13.8	2.5	5.43	2.42	2.79
April	89.67	2.9	.67	1.32	.589	.66
May	121.75	27	.34	3.93	1.75	2.02
June	154.08	73	.40	5.14	2.29	2.56
July	37.87	14.7	.10	1.22	.545	.63
August	26.33	5.7	.23	.849	.379	.44
September	8.87	1.5	.08	.296	.132	.15
Water year 1945-46	1,137.32	73	.08	3.12	1.39	18.89
October 1946	11.98	1.1	.16	.386	.172	.20
November	9.12	.40	.28	.304	.136	.15
December	25.42	5.7	.19	.820	.366	.42
Calendar year 1946	772.69	73	.08	2.12	.946	12.83
January 1947	140.94	28	.92	4.55	2.03	2.34
February	49.4	3.8	1.0	1.76	.786	.82
March	187.8	37	1.0	6.06	2.71	3.12
April	156.0	28	1.5	5.20	2.32	2.59
May	258.4	34	2.9	8.34	3.72	4.29
June	89.86	18.6	.60	3.00	1.34	1.49
July	68.34	12.6	.34	2.20	.982	1.13
August	13.63	1.0	.19	.440	.196	.23
September	6.35	.97	.10	.212	.095	.11
Water year 1946-47	1,017.24	37	.10	2.79	1.25	16.89
October 1947	3.14	.59	.02	.101	.045	.05
November	102.91	27	.19	3.43	1.53	1.71
December	51.27	10.7	.83	1.65	.737	.85
Calendar year 1947	1,128.04	37	.02	3.09	1.38	18.73
January 1948	77.51	8.7	.23	2.50	1.12	1.29
February	164.00	31	.04	5.66	2.53	2.72
March	212.0	17.7	3.8	6.84	3.05	3.52
April	158.5	27	1.4	5.28	2.36	2.63
May	286.9	73	1.1	9.25	4.13	4.76
June	157.71	31	.60	5.26	2.35	2.62
July	32.72	4.6	.19	1.06	.473	.54
August	46.55	11.6	.28	1.50	.670	.77
September	5.76	.40	.06	.192	.086	.10
Water year 1947-48	1,298.97	73	.02	3.55	1.58	21.56
October 1948	3.15	.19	.08	.102	.046	.05
November	21.13	5.4	.10	.704	.314	.35
December	179.67	92	.53	5.80	2.59	2.98
Calendar year 1948	1,345.60	92	.04	3.68	1.64	22.33
January 1949	301.3	38	1.7	9.72	4.34	5.00
February	92.3	16.6	3.4	6.87	3.07	3.19
March	119.9	21	1.5	3.87	1.73	1.99
April	138.6	15.1	2.0	4.62	2.06	2.30
May	102.42	9.4	.92	3.30	1.47	1.70
June	13.08	1.7	.06	.436	.195	.22
July	1.99	.31	.01	.064	.029	.03
August	4.62	1.9	.01	.149	.067	.08
September	13.90	4.8	.08	.463	.207	.23
Water year 1948-49	1,092.06	92	.01	2.99	1.33	18.12
October 1949	4.69	.19	.10	.151	.067	.08
November	3.72	.19	.10	.124	.055	.06
December	61.13	25	.15	1.97	.879	1.01
Calendar year 1949	957.65	38	.01	2.62	1.17	15.89
January 1950	81.0	7.4	1.5	2.61	1.17	1.34
February	235.0	42	1.4	8.39	3.75	3.90
March	182.69	41	.83	5.89	2.63	3.03
April	82.8	5.7	1.0	2.76	1.23	1.37
May	94.3	9.8	1.3	3.04	1.36	1.57
June	44.00	8.8	.16	1.47	.656	.73
July	6.04	1.1	.02	.195	.087	.10
August	3.84	.70	.02	.124	.055	.06
September	3.61	.33	.04	.120	.054	.06
Water year 1949-50	802.82	42	.02	2.20	.982	13.31

Neshanic River at Reaville

Location.--Lat 40°28'18", long 74°49'42", on left bank 50 ft downstream from highway bridge, half a mile southwest of Reaville, Hunterdon County, 1½ miles downstream from Walnut Brook, and 2 miles upstream from Back Brook.

Drainage area.--25.7 sq mi.

Records available.--June 1930 to September 1950.

Gage.--Water-stage recorder. Concrete control since Sept. 26, 1935. Datum of gage is 109.46 ft above mean sea level, unadjusted.

Average discharge.--20 years, 34.2 cfs.

Extremes.--1930-50: Maximum discharge, 5,940 cfs July 18, 1945 (gage height, 12.33 ft, from floodmark in recorder shelter), from rating curve extended above 1,700 cfs by logarithmic plotting; minimum, 0.2 cfs Feb. 2, 1931, Aug. 27-30, 1934, June 26, 1935, Feb. 15, 1940.

Peak discharge (base, 1,600 cfs).--
1946: Nov. 29 (4 a.m.) 1,680 cfs (7.20 ft); June 2 (10:30 a.m.) 3,670 cfs (10.03 ft); July 22 (3 p.m.) 1,760 cfs (7.34 ft); July 23 (11:30 a.m.) 2,360 cfs (8.28 ft).
1947: May 5 (3 p.m.) 1,240 cfs (6.43 ft), (annual maximum below base).
1948: Nov. 8 (3 p.m.) 2,200 cfs (8.05 ft); Nov. 12 (5 a.m.) 1,920 cfs (7.60 ft); Feb. 18 or 19 (time unknown) 2,370 cfs (8.30 ft); June 20 (4 a.m.) 2,730 cfs (8.82 ft); June 28 (9 p.m.) 2,280 cfs (8.16 ft).
1949: Dec. 30 (5:30 p.m.) 2,310 cfs (8.22 ft); Jan. 5 (11 p.m.) 2,020 cfs (7.76 ft).
1950: Mar. 23 (4:30 a.m.) 2,020 cfs (7.77 ft).

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.7	5.7	95	147	18.4	76	33	6.0	15.2	8.2	7.5	11.4
2	10.1	5.4	70	73	11.9	46	31	5.7	1,760	103	6.3	9.3
3	10.1	5.4	61	53	b9	52	32	4.9	194	14.1	6.0	10.5
4	7.8	5.7	55	43	b8	*41	26	4.9	97	9.3	5.7	7.5
5	7.5	5.2	44	45	7.2	46	23	6.3	71	7.2	4.9	5.7
6	7.5	4.9	161	108	14.4	46	19.8	5.7	55	6.3	4.9	4.9
7	15.2	4.6	117	108	64	46	17.3	4.9	43	6.0	9.9	4.6
8	14.6	4.6	68	70	16.4	44	15.5	4.6	33	4.9	7.7	4.1
9	19.9	4.6	55	73	14.4	54	17.3	4.4	25	4.6	5.2	3.6
10	11.8	4.6	49	87	13.9	36	13.9	4.1	19.2	4.4	4.9	3.0
11	10.1	6.4	41	54	11.7	31	12.3	4.1	26	3.8	4.6	2.7
12	8.9	9.3	30	66	10.2	24	11.8	11.6	66	3.8	4.1	2.4
13	8.5	7.8	27	48	10.1	24	11.4	16.3	32	4.1	5.1	2.3
14	7.8	21	27	36	28	22	10.5	9.0	23	3.6	7.9	2.1
15	7.2	38	26	31	16.6	92	9.7	53	30	3.6	4.1	2.3
16	6.9	20	18.0	b24	14.6	56	9.3	17.3	17.9	3.0	4.1	2.6
17	6.6	16.7	b11	b21	13.3	44	8.2	135	15.5	2.4	35	2.6
18	6.3	16.1	a9	b17	11.1	181	7.8	304	15.0	2.4	36	2.6
19	5.7	113	a10	b16	7.8	111	7.5	164	12.3	2.3	21	2.6
20	5.4	120	a10	b11	12.1	67	7.2	64	13.3	2.1	11.8	2.4
21	5.2	55	a9	15.5	10.7	50	6.6	55	13.3	28	7.8	3.2
22	4.9	389	a9	16.1	b8	42	6.6	42	11.4	417	7.2	4.4
23	5.2	98	a10	11.8	10.1	34	6.3	28	8.9	536	6.6	3.4
24	9.7	60	a12	11.8	10.1	31	6.3	22	7.8	84	5.7	4.6
25	10.9	48	a20	13.3	9.5	49	6.3	18.5	7.2	46	4.6	7.1
26	10.1	38	597	12.8	9.3	134	12.1	16.1	6.6	29	6.8	3.0
27	7.8	31	166	9.9	40	275	9.3	65	5.7	19.8	5.4	2.3
28	6.9	225	90	9.0	230	84	7.2	48	15.4	14.4	3.8	2.0
29	6.6	682	140	9.3	-------	60	6.6	27	18.1	11.4	37	2.0
30	6.6	159	169	28	-------	53	6.6	21	15.3	9.7	45	6.7
31	6.3	-------	420	38	-------	40	-------	16.7	-------	7.8	16.1	-------

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of weather records and records for stations on nearby streams.
b Stage-discharge relation affected by ice.

Neshanic River at Reaville--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.8	2.7	2.0	6.6	44	8.5	16.7	195	18.5	6.3	7.8	4.9
2	2.6	2.7	1.5	7.5	37	12.6	141	61	16.1	8.5	6.6	60
3	2.3	2.6	1.4	10.1	28	54	148	47	14.4	5.7	6.3	12.8
4	2.0	2.6	1.5	13.2	28	53	66	82	11.8	4.9	6.0	6.0
5	2.0	2.4	1.7	10.9	22	41	280	281	10.1	4.4	5.4	11.0
6	1.8	2.3	3.0	9.7	21	68	129	169	41	4.1	4.9	10.1
7	1.7	2.3	2.1	9.3	19.2	126	76	88	41	8.6	4.6	9.6
8	1.8	2.6	2.0	10.1	16.7	92	54	60	261	46	8.6	17.5
9	1.7	2.7	2.0	9.1	b15	72	58	46	88	56	6.0	8.9
10	5.0	2.4	2.1	7.6	b15	77	44	37	52	38	7.2	8.2
11	4.6	2.3	1.8	8.9	12.8	77	36	30	37	27	5.7	7.2
12	4.8	2.7	1.8	27	11.4	71	33	25	27	17.9	4.9	6.6
13	9.9	2.6	2.3	22	11.4	69	26	21	20	46	4.1	5.7
14	5.2	2.3	2.0	31	12.8	295	25	22	88	44	3.6	5.2
15	4.1	2.1	1.9	90	17.3	109	25	20	72	51	3.4	6.3
16	3.4	2.0	1.7	98	19.8	70	40	17.3	35	35	4.5	8.3
17	3.2	2.1	1.7	77	19.8	53	38	15.5	27	53	19.6	5.2
18	3.2	2.6	1.8	50	17.3	40	26	17.3	27	35	7.5	4.4
19	3.6	2.4	1.6	37	15.2	33	22	17.3	23	37	5.7	3.8
20	3.0	2.3	1.5	330	9.1	31	19.8	51	17.3	27	193	4.1
21	2.7	2.3	43	115	4.5	28	27	62	17.9	19.8	45	4.1
22	2.6	2.6	27	53	11.8	29	30	163	13.3	130	25	10.0
23	2.4	3.0	15.0	37	b14	25	20	76	11.4	39	16.7	7.2
24	2.4	2.4	12.3	34	b12	28	18.5	50	10.5	27	12.3	5.2
25	2.3	2.3	9.7	33	b11	80	17.9	58	10.5	20	9.7	6.0
26	3.4	2.4	7.8	54	b11	38	19.8	79	9.3	16.7	7.8	5.2
27	4.6	2.4	7.2	99	b11	28	16.1	41	8.5	13.9	7.8	4.1
28	3.2	2.3	7.2	53	9.7	27	13.9	33	7.8	17.6	7.2	3.8
29	3.0	2.1	9.4	43	-------	24	12.8	32	8.5	12.3	6.6	3.4
30	3.0	2.1	15.6	37	-------	21	13.0	46	7.2	10.1	6.0	3.4
31	3.0	-------	8.9	86	-------	17.3	-------	23	-------	8.5	6.6	-------

b Stage-discharge relation affected by ice.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.0	9.7	14.9	13.4	8.0	80	271	12.6	50	49	6.3	3.5
2	3.0	6.6	13.9	170	10.0	220	123	11.7	37	36	5.6	2.9
3	3.0	6.0	13.3	105	10.0	203	78	21	30	28	24	2.7
4	2.7	53	13.3	66	9.0	118	58	17.7	26	23	27	2.5
5	2.7	38	12.3	50	10.0	65	49	94	22	18.9	14.1	2.5
6	2.6	27	12.8	44	11.0	55	43	66	18.3	18.9	15.6	2.3
7	2.6	20	10.9	38	9.0	80	39	236	17.0	17.0	9.1	2.3
8	2.6	455	15.0	31	11.0	69	34	114	21	14.7	8.0	2.5
9	2.6	106	12.5	33	8.0	57	29	67	15.9	11.7	6.9	2.7
10	2.4	58	9.7	37	7.0	127	24	50	13.6	10.4	6.2	4.5
11	2.4	46	10.5	34	7.0	89	31	38	11.7	9.5	5.0	5.6
12	2.3	489	9.7	26	8.0	69	84	32	10.4	8.7	8.8	3.1
13	2.3	82	8.8	53	8.0	52	47	762	21	10.4	7.1	2.7
14	2.4	55	7.7	58	26	44	101	198	13.1	15.2	5.3	2.3
15	2.4	43	7.2	36	20	43	116	146	17.9	9.5	4.5	2.2
16	2.3	37	79	30	10.0	98	70	178	15.3	7.6	3.8	2.0
17	2.3	28	33	27	90	77	53	178	13.6	7.2	3.8	2.0
18	4.1	22	28	21	200	56	41	109	10.4	7.2	3.5	2.0
19	3.0	20	22	20	220	67	36	73	61	6.6	3.5	2.0
20	2.6	17.9	16.5	19.2	160	78	33	55	754	5.9	10.0	2.0
21	2.3	16.1	16.1	24	100	55	29	48	93	5.6	95	2.3
22	2.0	15.0	14.4	26	70	49	25	37	67	11.2	22	2.0
23	2.0	40	14.4	17.3	60	67	21	31	76	21	20	2.0
24	2.0	54	11.9	12.8	55	75	20	25	79	11.2	13.1	2.0
25	1.8	54	10.8	b10.0	65	51	21	30	84	6.9	10.8	1.8
26	1.8	34	7.8	b10.0	*127	44	18.9	25	42	5.6	10.4	1.7
27	2.0	28	10.1	b10.0	107	100	17.0	21	166	5.6	8.7	1.7
28	2.6	25	12.8	b9.5	342	96	15.9	19.5	366	5.0	6.8	1.7
29	40	21	10.5	8.5	136	59	15.3	17.0	151	4.5	5.6	1.7
30	8.9	17.9	10.5	7.0	-------	50	14.1	120	69	4.0	5.3	2.2
31	8.2	-------	10.5	7.0	-------	41	-------	76	-------	4.0	5.0	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Jan. 29 to Feb. 25; discharge computed on basis of floodmark in gage house, weather records, and records for Walnut Brook near Flemington.

Neshanic River at Reaville--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.1	1.7	14.7	136	61	48	72	17.0	13.1	1.7	1.0	1.6
2	2.2	1.8	11.2	90	46	44	60	89	11.2	1.8	1.2	1.2
3	1.8	1.8	10.4	67	38	43	39	236	10.0	1.7	1.3	.9
4	1.7	11.5	23	51	49	47	34	80	9.1	1.6	6.2	.8
5	1.6	4.5	16.4	438	58	63	29	53	8.0	1.6	2.5	23
6	2.2	2.7	14.7	548	50	57	130	40	8.0	1.6	2.1	148
7	2.2	12.0	12.6	121	*166	41	61	94	6.6	1.4	1.5	10.5
8	1.8	5.8	11.2	80	100	35	52	40	5.6	1.6	1.2	6.6
9	2.0	3.3	9.1	62	92	33	42	31	5.0	1.3	1.2	4.5
10	2.0	3.2	8.3	51	74	30	34	35	4.8	1.3	1.2	3.1
11	1.8	4.5	6.9	43	59	52	29	29	4.8	1.8	1.0	2.5
12	2.0	3.3	6.9	38	46	38	26	24	4.2	1.8	1.1	2.2
13	1.7	3.1	7.2	34	61	29	25	18.9	4.0	6.3	1.3	2.6
14	1.7	3.1	6.6	30	61	26	36	18.3	3.8	2.7	1.2	4.2
15	1.6	2.9	5.8	24	56	25	25	18.9	3.5	2.3	1.3	3.3
16	1.6	2.5	11.4	23	72	21	23	15.3	3.3	4.1	1.2	4.2
17	1.6	2.5	41	24	100	21	18.9	13.1	3.1	6.2	1.1	3.8
18	1.7	2.5	34	20	57	21	25	12.1	3.3	13.0	1.3	2.7
19	2.5	2.3	21	22	51	18.6	101	10.8	3.5	4.6	1.3	2.5
20	2.2	8.1	b23	18.9	145	17.4	39	35	3.5	3.0	1.2	2.2
21	2.0	5.6	b21	32	71	24	31	26	3.1	2.5	.9	1.7
22	1.8	4.5	b19.0	352	170	27	55	21	2.7	2.2	.8	1.7
23	1.8	5.9	b17.0	97	183	261	78	82	2.5	1.9	.8	4.0
24	2.3	5.0	b15.0	201	89	86	50	33	2.2	1.6	.8	2.6
25	2.5	4.2	b15.0	102	74	62	37	66	2.2	1.6	.7	1.7
26	2.3	3.8	b12.0	152	58	52	32	38	2.2	1.5	.8	1.6
27	2.0	5.1	b13.1	136	47	46	29	36	2.3	1.6	.6	1.6
28	1.8	5.6	b12.6	389	48	36	23	25	2.4	1.6	.7	1.6
29	1.8	30	57	122	-------	29	20	21	2.0	1.3	2.5	5.0
30	1.8	22	1,390	71	-------	26	18.3	17.7	1.8	1.2	2.8	12.1
31	1.8	-------	627	65	-------	27	-------	14.7	-------	1.1	1.6	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.3	4.5	2.0	23	64	15.2	43	48	57	2.3	1.5	5.4
2	4.0	4.0	1.8	22	204	11.8	38	39	42	2.0	1.8	3.8
3	3.3	3.5	1.7	26	116	10.3	34	40	27	2.0	11.8	3.6
4	3.1	2.9	1.8	23	67	9.5	33	34	68	2.3	5.1	4.4
5	2.9	2.5	1.7	18.5	50	10.6	29	30	34	2.3	2.4	2.7
6	2.8	2.3	1.7	17.3	54	10.3	25	29	25	2.4	2.3	2.3
7	2.8	2.2	1.7	29	55	8.8	19.8	23	18.5	2.1	2.3	2.0
8	2.8	2.2	1.8	17.5	35	18.3	18.5	17.9	15.0	1.8	2.0	1.8
9	2.8	2.0	1.6	14.8	139	73	16.7	15.5	12.3	1.7	1.7	1.7
10	2.8	2.0	1.3	62	105	25	15.5	15.0	10.9	26	3.9	2.3
11	2.8	1.8	1.6	56	88	19.8	15.5	13.9	9.3	12.0	2.6	5.8
12	2.8	2.0	2.8	33	60	27	15.0	11.8	7.8	8.7	3.6	3.0
13	2.8	1.8	28	*36	57	94	13.3	11.4	7.2	6.0	2.0	5.8
14	2.8	2.2	24	38	357	52	12.3	10.1	7.2	6.2	1.5	13.5
15	2.8	2.2	14.2	26	526	40	11.8	9.7	8.9	4.1	1.5	6.9
16	2.8	2.0	9.5	23	161	34	10.5	13.9	12.4	6.0	1.3	5.2
17	2.7	1.8	7.6	18.5	98	31	10.1	10.1	11.2	7.9	1.3	3.8
18	2.7	1.8	7.6	25	73	31	9.7	12.2	6.9	5.4	1.4	3.2
19	2.7	1.8	24	21	61	22	9.3	40	6.3	4.4	1.7	3.2
20	2.7	1.8	18.3	14.6	b33	21	33	19.2	6.9	3.6	16.2	4.4
21	2.5	1.7	14.7	13.3	b36	84	26	14.4	6.6	3.2	3.6	3.4
22	2.5	1.6	13.6	14.4	33	64	15.5	11.4	5.4	2.6	2.4	3.4
23	2.2	1.4	17.6	15.0	33	665	15.0	10.5	4.6	2.3	2.4	3.6
24	2.2	1.4	26	14.4	31	144	17.5	15.5	3.8	2.1	2.4	2.7
25	2.2	1.7	15.9	14.4	26	89	24	11.8	3.8	2.6	2.1	2.4
26	3.5	1.8	15.6	14.4	16.5	76	23	10.1	3.2	2.1	2.0	2.3
27	3.2	1.6	231	15.5	16.1	148	19.2	9.3	2.6	2.0	1.8	2.1
28	2.6	1.6	96	12.8	14.8	116	32	8.2	2.4	1.8	1.7	2.1
29	2.5	1.8	54	29	-------	86	23	58	2.3	1.5	2.2	2.1
30	2.5	2.2	35	33	-------	68	25	36	2.3	1.5	4.1	2.3
31	4.0	-------	26	69	-------	50	-------	25	-------	1.5	f21	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
f Computed on basis of partly estimated gage-height record.
Note.--No gage-height record Oct. 6 to Nov. 1; discharge computed on basis of weather records and records for other stations in Raritan River Basin.

Neshanic River at Reaville--Continued

Monthly and annual discharge in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	267.8	19.9	4.9	8.64	0.336	0.39
November	2,202.0	682	4.6	73.4	2.86	3.19
December	2,626.0	597	9	84.7	3.30	3.80
Calendar year 1945	18,298.4	1,250	2.8	50.1	1.95	26.50
January 1946	1,306.5	147	9.0	42.1	1.64	1.89
February	640.8	230	7.2	22.9	.891	.93
March	1,991	275	22	64.2	2.50	2.88
April	398.4	33	6.3	13.3	.518	.58
May	1,189.1	304	4.1	38.4	1.49	1.72
June	2,673.1	1,760	5.7	89.1	3.47	3.87
July	1,402.2	536	2.1	45.2	1.76	2.03
August	342.7	45	3.8	11.1	.432	.50
September	127.9	11.4	2.0	4.26	.166	.19
Water year 1945-46	15,167.5	1,760	2.0	41.6	1.62	21.97
October 1946	102.3	9.9	1.7	3.30	.128	.15
November	72.6	3.0	2.0	2.42	.094	.11
December	200.5	43	1.4	6.47	.252	.29
Calendar year 1946	10,447.1	1,760	1.4	28.6	1.11	15.14
January 1947	1,509.1	330	6.6	48.7	1.89	2.18
February	477.8	44	4.5	17.1	.665	.69
March	1,797.4	295	8.5	58.0	2.26	2.60
April	1,492.5	280	12.8	49.8	1.94	2.16
May	1,965.4	281	15.5	63.4	2.47	2.84
June	1,082.1	261	7.2	34.4	1.34	1.49
July	870.3	130	4.1	28.1	1.09	1.26
August	466.1	193	3.4	15.0	.584	.67
September	258.2	60	3.4	8.61	.335	.37
Water year 1946-47	10,244.3	330	1.4	28.1	1.09	14.81
October 1947	126.9	40	1.8	4.09	.159	.18
November	1,925.2	489	6.0	64.2	2.50	2.79
December	480.1	79	7.2	15.5	.603	.69
Calendar year 1947	12,401.1	489	1.8	34.0	1.32	17.92
January 1948	1,053.7	170	7.0	34.0	1.32	1.52
February	1,904.0	342	7.0	65.7	2.56	2.76
March	2,434	220	41	78.5	3.05	3.52
April	1,557.2	271	14.1	51.9	2.02	2.25
May	2,908.5	762	11.7	93.8	3.65	4.21
June	2,372.2	754	10.4	79.1	3.08	3.43
July	400.0	49	4.0	12.9	.502	.58
August	380.4	95	3.3	12.3	.479	.55
September	73.4	5.6	1.7	2.45	.095	.11
Water year 1947-48	15,615.6	762	1.7	42.7	1.66	22.59
October 1948	60.9	3.1	1.6	1.96	.076	.09
November	174.9	30	1.7	5.83	.227	.25
December	2,494.1	1,390	5.8	80.5	3.13	3.61
Calendar year 1948	15,813.3	1,390	1.6	43.2	1.68	22.88
January 1949	3,689.9	548	18.9	117	4.55	5.27
February	2,182	183	38	77.9	3.03	3.16
March	1,386.0	261	17.4	44.7	1.74	2.01
April	1,274.2	130	18.3	42.5	1.65	1.84
May	1,290.8	236	10.8	41.6	1.62	1.87
June	141.8	13.1	1.8	4.73	.184	.21
July	79.5	13.0	1.1	2.56	.100	.12
August	44.9	6.2	.6	1.45	.056	.06
September	264.0	148	.8	8.80	.342	.38
Water year 1948-49	13,033.0	1,390	.6	35.7	1.39	18.87
October 1949	90.1	5.3	2.2	2.91	.113	.13
November	64.1	4.5	1.4	2.14	.083	.09
December	700.1	231	1.3	22.6	.879	1.01
Calendar year 1949	11,157.4	548	.6	30.6	1.19	16.15
January 1950	789.4	69	12.8	25.5	.992	1.14
February	2,609.4	526	14.8	93.2	3.63	3.78
March	2,154.6	665	8.8	69.5	2.70	3.12
April	633.2	43	9.3	21.1	.821	.92
May	653.9	58	8.2	21.1	.821	.95
June	430.8	68	2.3	14.4	.560	.62
July	132.4	26	1.5	4.27	.166	.19
August	113.6	21	1.3	3.66	.142	.16
September	111.2	13.5	1.7	3.71	.144	.16
Water year 1949-50	8,482.8	665	1.3	23.2	.903	12.27

North Branch Raritan River near Far Hills

Location.--Lat 40°42'27", long 74°38'20", on left bank 75 ft upstream from Ravine Lake Dam, 2 miles north of Far Hills, Somerset County, and 2 miles upstream from Peapack Brook.

Drainage area.--26.2 sq mi.

Records available.--February 1922 to September 1950.

Gage.--Water-stage recorder above masonry dam. Datum of gage is 224.49 ft above mean sea level (New Jersey Geological Survey bench mark). Prior to June 18, 1925, hook gage in stilling box at left end of dam at same datum.

Average discharge.--28 years, 46.8 cfs.

Extremes.--1922-50: Maximum discharge, 3,410 cfs Mar. 15, 1940 (gage height, 5.85 ft), from rating curve extended above 500 cfs by weir formula; no flow at times when Ravine Lake was filling.
Stage of 7.6 ft, from floodmark, occurred July 23, 1919 (discharge, about 7,000 cfs).

Peak discharge (base, 700 cfs).--
1946: Dec. 26 (4:30 a.m.) 720 cfs (3.45 ft); May 12 (7:30 p.m.) 1,430 cfs (4.23 ft); June 2 (2 p.m.) 854 cfs (3.61 ft); July 23 (1 p.m.) 1,170 cfs (3.97 ft).
1947: Mar. 14 (11:30 a.m. to 12 m.) 753 cfs (3.49 ft).
1948: Nov. 8 (3:30 p.m.) 1,420 cfs (4.21 ft); Nov. 12 (5 a.m.) 869 cfs (3.62 ft); Apr. 1 (9:30 a.m.) 852 cfs (3.60 ft).
1949: Dec. 30 (3 p.m.) 1,520 cfs (4.31 ft); Jan. 6 (1 a.m.) 1,120 cfs (3.90 ft).
1950: Mar. 23 (6:30 a.m.) 448 cfs (3.08 ft), (annual maximum below base).

Remarks.--Figures of discharge include 2 cfs diverted by small turbine at dam.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	19.4	86	122	52	57	60	42	55	32	26	20
2	24	19.4	79	90	45	60	60	50	403	123	26	18.7
3	24	19.4	72	79	36	106	69	88	172	40	25	18.0
4	22	18.7	72	75	31	89	63	27	131	32	28	16.7
5	22	17.4	66	75	33	83	57	25	122	28	29	16.1
6	28	17.4	86	102	46	69	52	25	102	25	29	15.5
7	58	16.7	83	158	91	66	50	24	90	24	86	16.1
8	34	16.7	66	113	45	90	47	25	79	23	47	16.1
9	35	17.4	60	102	42	90	52	23	69	23	32	15.5
10	33	17.4	57	131	40	63	45	20	63	22	28	15.5
11	27	24	55	94	38	55	40	19.4	60	21	28	15.5
12	24	42	47	98	35	50	40	259	83	22	25	14.3
13	26	30	45	86	35	47	38	172	69	22	30	13.1
14	24	28	47	75	52	47	38	77	57	20	48	12.5
15	23	36	47	72	47	120	38	173	55	18.7	30	13.1
16	22	29	42	60	31	94	36	98	50	18.0	27	13.1
17	21	24	33	60	35	69	33	164	47	16.7	40	12.5
18	20	24	b33	60	52	98	33	242	50	16.1	72	12.5
19	20	44	b36	55	28	124	33	149	45	15.5	33	12.5
20	20	103	b36	45	34	83	32	109	42	15.5	29	12.5
21	18.7	47	b34	57	32	72	30	102	42	27	24	15.9
22	18.7	208	b36	55	30	66	30	90	40	186	23	29
23	18.7	94	b38	45	33	55	30	75	35	427	22	22
24	23	66	b43	47	32	57	29	69	32	101	21	82
25	27	57	b68	50	31	90	29	63	36	79	19.4	65
26	28	50	360	47	28	83	40	60	29	72	19.4	24
27	24	47	109	42	30	162	38	195	25	69	20	18.7
28	21	69	79	38	52	83	32	111	32	60	18.7	16.1
29	21	270	90	42	-------	75	30	72	42	55	23	15.5
30	20	117	94	51	-------	72	32	63	42	50	49	40
31	19.4	-------	173	72	-------	68	-------	57	-------	39	24	-------

b Stage-discharge relation affected by ice.

North Branch Raritan River near Far Hills--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	16.7	16.7	16.7	40	21	52	238	72	38	16.7	12.5
2	18.7	15.5	14.3	16.1	33	41	100	94	66	a50	15.5	14.3
3	16.7	14.9	12.0	18.0	29	87	100	86	63	a38	15.5	14.3
4	16.1	15.5	13.7	21	30	45	57	122	57	a34	16.7	13.1
5	15.5	14.3	13.7	16.1	28	33	269	172	52	a30	18.0	20
6	14.9	13.7	13.7	19.4	25	a40	155	150	52	a28	14.3	18.7
7	14.3	13.7	13.7	14.3	29	a50	c105	113	57	26	13.7	16.1
8	13.7	17.4	13.7	18.0	29	a48	c86	98	193	39	14.9	14.3
9	13.7	16.7	13.7	15.5	24	a42	c90	90	109	45	21	13.1
10	14.9	15.5	13.7	13.7	27	a46	c79	83	66	47	26	12.5
11	15.5	16.1	14.3	15.5	27	50	72	75	57	35	20	12.0
12	34	24	13.7	16.1	25	55	69	69	50	30	17.4	11.4
13	47	21	16.7	16.1	24	70	63	66	47	28	16.1	11.4
14	25	17.4	15.5	19.4	25	342	60	66	107	28	14.9	11.4
15	19.4	15.5	13.7	31	27	153	63	69	172	30	14.3	19.4
16	16.7	15.5	12.0	63	29	109	66	63	72	35	14.3	30
17	15.5	16.1	12.5	52	28	90	72	57	60	36	70	19.4
18	16.7	19.4	13.1	33	27	75	57	66	63	32	27	24
19	24	17.4	12.5	29	25	69	52	72	60	37	20	23
20	19.4	16.7	12.0	152	20	66	52	144	88	57	21	22
21	17.4	16.7	51	83	18.7	63	55	105	93	29	30	21
22	16.7	19.4	48	55	27	60	60	128	60	44	21	19.4
23	16.1	24	28	32	26	57	50	90	52	32	17.4	17.4
24	15.5	19.4	23	36	23	57	47	75	50	24	15.5	13.1
25	15.5	18.0	21	33	24	111	47	134	52	21	14.3	13.1
26	18.0	18.0	18.7	35	24	63	60	285	47	20	14.3	12.0
27	24	21	13.7	66	24	55	50	109	45	19.4	18.7	10.4
28	18.7	20	17.4	40	22	55	50	86	40	19.4	16.7	9.4
29	18.0	18.0	20	35	-------	55	45	83	38	19.4	15.5	9.4
30	17.4	16.7	21	33	-------	55	56	112	47	17.4	14.3	9.4
31	17.4	-------	14.9	51	-------	52	-------	79	-------	16.7	14.3	-------

a No gage-height record; discharge computed on basis of recorded range in stage, weather records, and records for other stations in Raritan River Basin.
c Backwater from debris.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.4	28	33	35	24	95	339	55	80	50	28	13.7
2	10.1	19.0	28	80	24	107	168	50	67	42	29	13.7
3	11.3	15.6	29	45	24	118	127	61	61	40	28	14.9
4	10.7	106	40	34	23	99	114	55	61	38	28	14.9
5	10.7	67	36	34	26	80	110	61	55	36	35	14.9
6	10.7	40	34	33	27	73	107	61	52	45	51	14.3
7	10.1	29	33	33	27	80	99	120	70	38	30	14.3
8	9.5	373	38	30	26	88	91	89	84	35	25	15.6
9	9.5	104	35	32	23	91	80	61	52	32	23	16.3
10	9.0	64	30	33	23	148	73	55	50	29	22	20
11	9.0	58	31	28	23	127	94	55	47	29	21	19.7
12	9.0	318	29	27	26	95	173	61	47	28	71	15.6
13	9.0	84	28	36	26	91	99	365	67	75	39	13.7
14	9.0	70	25	36	150	91	178	178	52	69	28	12.5
15	9.5	64	26	20	140	114	168	140	45	36	24	11.3
16	10.1	58	107	23	45	311	114	132	40	32	22	10.7
17	11.3	52	45	26	78	225	99	158	38	30	21	10.7
18	11.9	55	35	25	116	*163	91	127	35	32	20	11.3
19	12.5	58	32	21	*114	168	91	103	94	35	20	12.5
20	16.3	45	26	25	130	163	88	91	88	30	23	12.5
21	10.1	36	29	33	88	132	80	88	50	31	73	12.5
22	8.4	34	30	*30	73	132	73	80	50	78	47	12.5
23	9.0	74	29	23	64	118	73	76	67	63	40	11.3
24	7.4	78	29	19	58	118	73	70	130	50	30	10.1
25	6.9	80	24	24	61	95	84	80	184	38	26	9.5
26	7.4	45	28	23	76	88	70	76	80	34	23	9.5
27	8.4	42	29	26	76	144	67	67	80	33	20	10.1
28	9.5	42	35	25	122	166	70	61	80	31	19.0	10.7
29	43	40	30	26	107	99	52	58	64	28	18.3	10.1
30	42	35	28	25	-------	91	55	229	55	26	15.6	12.9
31	58	-------	30	24	-------	88	-------	99	-------	26	14.9	-------

* Winter discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Jan. 15-31, Feb. 1-6, 14-20.

North Branch Raritan River near Far Hills--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19.7	10.1	24	194	95	73	55	52	31	11.3	6.0	14.3
2	16.3	10.1	20	132	84	67	52	84	24	11.9	6.0	9.5
3	13.1	10.7	19.0	107	76	64	47	164	23	11.3	8.0	6.9
4	11.3	48	19.0	91	80	61	42	84	22	10.7	20	6.0
5	10.7	27	17.6	269	76	73	42	70	21	11.9	14.9	5.6
6	11.3	17.0	17.0	514	70	95	121	64	23	14.9	10.7	7.4
7	10.7	27	17.0	204	76	67	64	103	19.0	16.3	8.4	6.9
8	11.3	23	16.3	158	80	58	55	64	18.3	13.7	7.4	6.9
9	13.7	17.0	14.9	136	88	58	52	58	17.6	11.3	6.4	6.0
10	13.1	16.8	14.3	122	88	55	47	67	17.0	11.3	6.0	5.2
11	12.5	28	13.7	110	70	70	45	61	19.7	13.7	5.2	4.8
12	11.3	19.0	13.7	99	61	64	45	55	19.7	13.1	5.2	6.0
13	10.7	16.3	15.6	88	67	52	45	50	18.3	23	12.5	7.9
14	10.7	15.6	14.9	80	80	52	61	50	18.3	18.3	12.5	20
15	13.4	13.7	14.3	76	73	47	47	52	18.3	13.1	9.5	17.0
16	24	12.5	19.0	73	73	45	42	45	17.6	12.5	9.5	12.5
17	19.7	13.1	36	67	73	45	38	40	17.6	13.1	9.0	8.4
18	13.7	13.7	32	64	61	45	56	38	17.6	19.0	7.9	6.9
19	13.7	12.5	26	70	61	42	157	36	17.6	15.6	8.4	11.8
20	12.5	44	22	58	104	40	70	52	18.3	12.5	6.9	10.7
21	14.5	29	21	58	92	45	64	50	17.0	11.3	6.0	6.9
22	23	19.7	19.0	202	87	52	91	44	15.6	10.7	5.6	6.4
23	13.7	24	20	91	160	150	135	96	14.3	9.5	5.2	10.7
24	11.9	22	18.3	140	95	73	84	47	13.1	8.4	5.2	10.1
25	10.7	17.0	14.9	99	91	58	73	45	12.5	7.9	4.8	7.9
26	11.9	14.9	14.9	84	80	61	67	38	13.1	7.4	4.4	6.4
27	10.7	16.3	13.7	91	70	58	61	45	13.1	7.4	4.4	5.6
28	10.1	18.3	14.3	225	73	52	50	33	12.5	6.9	4.4	6.0
29	9.5	30	36	127	-------	47	50	29	11.9	6.9	8.0	8.9
30	9.5	33	774	95	-------	45	52	28	11.3	6.4	10.7	26
31	10.1	-------	540	99	-------	47	-------	30	-------	6.0	10.1	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13.7	18.3	11.9	19.0	27	34	70	67	110	18.3	11.9	25
2	9.0	a14.0	10.7	18.3	53	34	70	52	100	16.3	11.9	20
3	7.4	a12.0	8.4	19.7	57	26	70	47	55	18.3	26	22
4	7.4	a11.0	6.4	23	34	27	84	42	89	c25	28	29
5	6.9	a11.0	7.4	20	30	28	76	50	58	c28	17.0	19.0
6	6.9	a10.0	6.9	18.3	28	35	67	47	47	c28	14.3	15.6
7	6.4	a9.4	6.9	30	28	31	55	40	42	23	15.6	14.3
8	6.4	a9.0	6.9	24	25	68	55	34	36	18.3	14.3	13.7
9	7.9	a8.4	6.4	15.6	87	136	52	33	35	17.0	12.5	12.5
10	8.4	a8.4	6.4	53	74	44	52	34	34	45	12.5	14.3
11	9.5	a8.4	7.9	45	52	38	58	34	31	57	12.5	17.0
12	8.4	a8.4	14.6	28	45	42	64	31	30	53	11.9	15.6
13	8.4	a8.4	85	24	42	55	55	30	28	30	10.7	15.6
14	6.9	a11.0	41	27	52	47	47	29	30	38	10.1	19.7
15	6.9	14.3	22	25	112	42	42	29	40	26	10.1	17.0
16	6.9	11.3	13.7	22	84	40	38	31	39	23	9.5	14.3
17	7.4	9.5	12.5	19.7	67	38	36	34	47	23	9.5	12.5
18	10.7	9.0	12.5	21	61	36	36	55	30	21	9.5	11.3
19	6.4	10.1	22	24	58	34	35	73	27	17.6	24	11.3
20	5.6	10.1	22	17.0	46	34	45	45	29	16.3	84	11.9
21	5.6	10.1	17.0	17.6	37	98	52	35	30	15.6	26	13.1
22	6.0	9.0	14.9	17.6	42	79	38	31	27	14.3	17.0	12.5
23	6.4	6.9	15.6	18.3	42	236	38	32	23	13.7	14.9	13.1
24	6.0	7.9	19.0	19.0	40	99	45	55	24	14.3	13.7	11.9
25	5.6	9.0	15.6	20	45	76	47	38	84	19.0	13.1	10.7
26	17.8	16.7	14.3	19.7	35	73	55	35	31	16.3	12.5	10.7
27	16.3	17.6	165	22	29	99	47	34	23	14.3	11.3	10.7
28	10.1	8.4	81	22	31	120	66	30	20	13.1	11.3	10.7
29	9.0	8.4	34	25	-------	114	47	75	19.0	17.6	25	10.7
30	9.0	11.3	26	28	-------	102	47	58	19.0	14.9	33	10.7
31	17.8	-------	18.8	28	-------	73	-------	40	-------	12.5	35	-------

a No gage-height record; discharge computed on basis of recorded range in stage, weather records, and records for other stations in Raritan River Basin.
c Backwater from log on control.

North Branch Raritan River near Far Hills--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	768.5	58	18.7	24.8	0.947	1.09
November	1,588.9	270	16.7	53.0	2.02	2.26
December	2,272	360	33	73.3	2.80	3.23
Calendar year 1945	21,701.3	374	14.7	59.5	2.27	30.82
January 1946	2,298	158	38	74.1	2.83	3.26
February	1,096	91	28	39.1	1.49	1.56
March	2,438	162	47	78.6	3.00	3.46
April	1,236	69	29	41.2	1.57	1.75
May	2,718.4	259	19.4	87.7	3.35	3.86
June	2,199	403	25	73.3	2.80	3.12
July	1,722.5	427	15.5	55.6	2.12	2.45
August	981.5	86	18.7	31.7	1.21	1.39
September	628.0	82	12.5	20.9	.798	.89
Water year 1945-46	19,946.8	427	12.5	54.6	2.08	28.32
October 1946	592.4	47	13.7	19.1	.729	.84
November	524.2	24	13.7	17.5	.668	.74
December	551.6	51	12.0	17.8	.679	.78
Calendar year 1946	16,985.6	427	12.0	46.5	1.77	24.10
January 1947	1,094.9	152	13.7	35.3	1.35	1.55
February	739.7	40	18.7	26.4	1.01	1.05
March	2,215	342	21	71.5	2.73	3.14
April	2,239	269	45	74.6	2.85	3.18
May	3,279	285	57	106	4.05	4.65
June	2,087	193	38	69.6	2.66	2.96
July	985.3	57	16.7	31.8	1.21	1.40
August	599.3	70	13.7	19.3	.737	.85
September	467.5	30	9.4	15.6	.595	.66
Water year 1946-47	15,374.9	342	9.4	42.1	1.61	21.80
October 1947	416.7	58	6.9	13.4	.511	.59
November	2,213.6	373	15.6	73.8	2.82	3.14
December	1,041	107	24	33.6	1.28	1.48
Calendar year 1947	17,378.0	373	6.9	47.6	1.82	24.65
January 1948	934	80	19	30.1	1.15	1.33
February	1,820	150	23	62.8	2.40	2.58
March	3,798	311	73	123	4.69	5.39
April	3,200	339	52	107	4.08	4.54
May	3,062	365	50	98.8	3.77	4.35
June	2,025	184	35	67.5	2.58	2.87
July	1,219	78	26	39.3	1.50	1.73
August	914.8	73	14.9	29.5	1.13	1.30
September	392.3	20	9.5	13.1	.500	.56
Water year 1947-48	21,036.4	373	6.9	57.5	2.19	29.86
October 1948	409.0	24	9.5	13.2	.504	.58
November	619.3	48	10.1	20.6	.786	.88
December	1,869.4	774	13.7	60.3	2.30	2.65
Calendar year 1948	20,262.8	774	9.5	55.4	2.11	28.76
January 1949	4,023	514	58	130	4.96	5.71
February	2,284	160	61	81.6	3.11	3.24
March	1,861	150	40	60.0	2.29	2.64
April	1,910	157	38	63.7	2.43	2.71
May	1,774	164	28	57.2	2.18	2.52
June	528.3	31	11.3	17.8	.679	.76
July	367.3	23	6.0	11.8	.450	.52
August	249.2	20	4.4	8.04	.307	.35
September	275.6	26	4.8	9.19	.351	.39
Water year 1948-49	16,175.1	774	4.4	44.3	1.69	22.95
October 1949	267.1	17.8	5.6	8.62	.329	.38
November	317.3	18.3	6.9	10.6	.405	.45
December	752.7	165	6.4	24.3	.927	1.07
Calendar year 1949	14,614.5	514	4.4	40.0	1.53	20.74
January 1950	710.8	45	15.6	22.9	.874	1.01
February	1,363	112	25	48.7	1.86	1.93
March	2,033	236	26	65.6	2.50	2.89
April	1,589	84	35	53.0	2.02	2.26
May	1,300	75	29	41.9	1.60	1.85
June	1,237.0	110	19.0	41.2	1.57	1.76
July	707.7	57	12.5	22.8	.870	1.00
August	568.6	84	9.5	18.3	.698	.81
September	446.4	29	10.7	14.9	.569	.63
Water year 1949-50	11,292.6	236	5.6	30.9	1.18	16.04

Lamington (Black) River near Pottersville

Location.--Lat 40°43'39", long 74°43'50", on right bank 1 mile upstream from highway bridge in Pottersville, Somerset County, and 8 miles upstream from Rockaway Creek.

Drainage area.--32.8 sq mi.

Records available.--November 1921 to September 1950. Prior to October 1945, published as Black River near Pottersville.

Gage.--Water-stage recorder. Concrete control since July 1, 1937. Datum of gage is 284.14 ft above mean sea level (New Jersey Geological Survey bench mark). Prior to June 27, 1922, chain gage on downstream side of highway bridge at Pottersville, 1 mile downstream at different datum.

Average discharge.--29 years, 54.9 cfs.

Extremes.--1921-50: Maximum discharge, 1,600 cfs Nov. 17, 1927, from rating curve extended above 800 cfs; maximum gage height, 5.34 ft Mar. 15, 1940; minimum discharge, 1.3 cfs Oct. 4, 1930.

Peak discharge (base, 375 cfs).--
1946: Nov. 22 (9 a.m.) 493 cfs (3.34 ft); Dec. 25 (11 p.m.) about 450 cfs (3.66 ft, ice jam); May 12 (5 p.m.) 761 cfs (3.86 ft); July 23 (10 a.m.) 650 cfs (3.66 ft).
1947: May 5 (1:45 p.m.) 410 cfs (3.15 ft); July 22 (2:15 a.m.) 493 cfs (3.34 ft).
1948: Nov. 8 (12:30 p.m.) 594 cfs (3.55 ft); Nov. 12 (2 a.m.) 385 cfs (3.09 ft); Apr. 1 (6 a.m.) 521 cfs (3.40 ft).
1949: Dec. 30 (11 a.m.) 618 cfs (3.60 ft); Jan. 5 (9:30 p.m.) 518 cfs (3.40 ft).
1950: June 1 (3 p.m.) 242 cfs (2.72 ft), (annual maximum below base).

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	34	124	145	64	74	81	41	75	37	37	27
2	40	34	122	127	61	74	77	38	224	124	34	27
3	37	34	112	115	52	92	75	36	169	64	32	28
4	36	34	108	105	b45	90	70	35	142	53	31	27
5	36	34	92	101	46	92	66	34	137	49	30	24
6	37	34	92	115	65	94	62	33	124	46	29	24
7	45	33	92	139	84	108	61	32	108	42	76	22
8	42	32	85	137	61	117	59	33	85	37	52	21
9	49	32	81	147	61	112	61	33	74	34	40	20
10	45	30	79	161	61	96	58	32	64	32	37	19.5
11	42	42	77	142	58	90	53	31	62	30	37	19.5
12	43	50	66	134	56	81	52	134	72	30	36	18.1
13	43	42	*61	122	55	75	50	112	66	28	37	17.4
14	43	41	59	105	70	70	49	81	61	26	40	17.4
15	42	50	58	96	64	104	47	107	58	24	34	17.4
16	41	49	53	79	54	90	46	87	56	24	33	16.7
17	40	46	49	75	58	77	45	115	55	24	38	16.0
18	37	46	b45	72	55	92	43	143	55	23	43	16.0
19	36	69	b45	68	49	107	42	119	52	22	40	15.4
20	36	96	b45	56	45	87	40	98	49	21	37	16.0
21	34	66	b45	59	39	81	37	94	47	32	37	20
22	34	214	b45	58	40	75	38	88	46	41	38	20
23	33	147	b45	52	46	72	37	72	42	196	37	18.8
24	35	129	b55	53	45	68	36	61	38	134	35	35
25	38	122	b85	53	45	83	35	55	37	129	32	30
26	36	107	217	53	43	82	42	50	35	129	30	28
27	36	90	139	52	46	119	41	107	33	112	28	26
28	35	98	145	50	66	94	40	96	76	85	26	30
29	34	161	145	50	-------	94	40	87	54	64	41	34
30	34	132	134	59	-------	98	41	94	38	52	45	36
31	34	-------	158	70	-------	90	-------	87	-------	43	32	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Lamington (Black) River near Pottersville--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	26	21	18.1	53	26	53	174	83	46	32	24
2	29	25	b19	16.7	50	32	69	124	79	55	29	30
3	28	24	b17	21	45	42	85	119	74	55	28	27
4	27	24	16.7	24	42	37	72	119	68	55	27	25
5	25	22	16.0	22	30	36	166	183	61	52	26	26
6	24	21	15.4	20	30	41	158	163	56	49	25	26
7	23	21	16.0	20	28	47	137	134	59	45	24	28
8	21	22	16.0	22	27	52	129	124	140	74	25	30
9	20	22	16.0	19.5	27	50	119	110	124	56	27	33
10	20	22	17.4	18.1	31	52	101	96	107	55	35	33
11	19.5	22	19.5	20	33	56	87	87	103	53	32	30
12	31	27	20	20	33	62	79	79	87	52	33	28
13	36	25	23	21	32	72	74	74	72	47	36	25
14	30	24	22	23	33	205	70	72	93	45	37	23
15	30	25	18.8	44	32	175	68	68	148	79	35	28
16	33	24	b16	59	32	172	72	66	103	77	43	30
17	34	23	16.0	58	33	152	74	66	101	70	87	28
18	37	23	17.4	49	32	122	68	72	101	56	49	28
19	34	23	b17	45	31	96	66	75	87	52	46	30
20	30	22	14.8	131	32	83	64	147	75	53	52	30
21	28	21	44	105	b21	74	68	129	83	52	50	30
22	26	24	45	58	22	68	66	145	83	137	43	34
23	26	26	37	b64	25	a64	61	134	79	101	38	29
24	25	25	37	64	31	62	58	117	72	77	35	28
25	23	25	38	58	34	100	56	136	66	64	32	27
26	27	24	34	55	32	81	64	150	59	55	37	27
27	26	26	24	64	29	72	59	119	53	49	38	26
28	25	25	24	56	27	72	59	110	49	45	32	24
29	26	24	23	56	-------	68	58	107	47	40	28	23
30	26	22	25	55	-------	62	90	115	46	35	26	22
31	26	-------	20	59	-------	56	-------	92	-------	33	26	-------

a No gage-height record; discharge computed on basis of records for adjacent days.
b Stage-discharge relation affected by ice.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	56	50	45	b40	112	253	72	124	66	30	18.8
2	20	53	45	59	b40	122	203	68	117	59	28	16.6
3	19.5	50	45	53	b40	129	186	77	98	53	27	17.3
4	18.8	95	45	52	b38	117	163	75	83	49	26	16.6
5	18.1	83	45	49	b40	98	145	83	75	45	30	16.6
6	17.4	66	45	47	b41	96	129	87	66	50	33	16.6
7	17.4	66	45	47	b41	94	119	128	72	43	29	15.9
8	16.7	209	49	47	a41	98	112	127	77	40	28	15.9
9	16.7	169	47	a47	a40	101	105	107	66	38	28	16.8
10	16.7	142	45	a50	a38	127	98	101	64	36	28	24
11	16.0	139	46	a42	a37	132	112	87	61	35	28	18.8
12	16.0	228	43	a42	a37	115	150	100	59	34	52	16.6
13	16.0	147	40	50	a41	107	132	297	70	61	38	16.6
14	16.7	129	36	45	a105	105	181	221	62	53	a33	15.9
15	16.0	115	35	37	a82	115	192	209	61	40	a28	15.3
16	16.0	96	110	45	a60	206	166	198	59	37	27	14.7
17	16.0	81	64	47	a85	212	152	192	58	36	26	14.7
18	16.7	70	62	40	a120	206	134	163	55	44	25	14.7
19	21	62	64	36	a115	200	119	147	91	49	25	15.3
20	18.8	58	58	45	134	189	107	134	79	42	25	14.7
21	18.8	53	52	52	127	166	101	122	68	49	28	14.1
22	18.8	52	46	47	122	161	94	107	74	80	26	14.1
23	18.1	68	43	41	105	145	90	96	83	58	29	13.5
24	18.8	78	40	37	94	115	87	90	96	50	35	12.4
25	17.4	92	37	45	90	124	96	85	103	44	36	12.9
26	17.4	77	36	42	98	112	90	83	85	41	33	12.9
27	17.4	74	35	43	98	139	85	79	92	40	28	12.4
28	20	70	35	41	127	158	83	72	98	38	25	12.4
29	40	62	32	b40	119	129	79	72	90	34	23	11.8
30	48	55	34	b40	-------	124	75	162	75	31	21	17.1
31	64	-------	38	b40	-------	117	-------	124	-------	29	21	-------

a No gage-height record; discharge computed on basis of range in stage, weather records, and records for stations on nearby streams.
b Stage-discharge relation affected by ice.

Lamington (Black) River near Pottersville--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18.6	14.1	41	296	105	78	61	58	34	14.7	10.0	12.9
2	16.6	14.1	40	228	98	73	61	62	32	14.7	9.1	11.2
3	16.6	14.1	36	176	92	75	60	94	31	13.5	12.3	10.0
4	16.6	36	31	144	96	76	56	80	30	12.4	14.1	9.5
5	17.3	30	28	227	96	84	54	78	29	14.7	15.9	8.6
6	17.3	30	26	331	90	96	104	78	29	17.3	15.3	9.5
7	16.6	45	24	252	*102	88	82	92	27	18.8	12.4	10.0
8	17.3	41	24	218	102	82	80	73	25	16.6	10.0	10.0
9	16.6	36	23	182	102	80	80	70	24	14.7	8.6	10.0
10	16.6	40	22	154	105	75	71	71	23	14.7	8.1	9.5
11	16.6	39	21	139	92	78	64	66	23	16.6	8.1	8.6
12	16.6	34	21	125	78	75	58	60	22	15.9	11.6	8.1
13	16.6	34	22	113	86	70	56	55	21	24	15.9	10.2
14	16.6	30	23	105	94	68	66	50	21	21	18.0	16.6
15	15.9	25	23	92	92	66	58	50	21	18.0	15.3	19.7
16	15.9	23	25	88	94	61	58	48	21	18.0	12.4	18.8
17	15.3	21	40	86	96	58	55	44	21	18.8	11.8	15.3
18	17.3	21	42	80	88	58	71	41	21	21	14.1	12.4
19	17.3	25	38	82	82	53	113	40	21	18.8	14.1	19.7
20	17.3	65	30	80	107	55	64	52	21	16.6	11.8	19.6
21	16.6	50	b27	78	90	58	a60	55	18.8	15.3	10.0	14.1
22	16.6	50	b25	154	96	63	a70	59	18.0	14.7	8.6	12.0
23	16.6	58	b24	118	130	125	a110	82	17.3	14.1	8.1	17.3
24	16.6	52	b24	144	107	98	a80	70	15.9	12.4	8.1	16.6
25	18.0	44	b20	134	102	92	a74	70	15.9	11.2	8.1	13.5
26	18.5	36	19.7	125	98	90	a68	64	15.9	10.6	7.7	11.8
27	16.6	32	24	122	88	80	a62	60	15.3	10.6	7.7	10.6
28	16.6	31	30	173	84	71	a55	52	14.7	10.0	7.3	10.6
29	15.9	40	54	144	-------	64	a55	48	14.1	10.0	16.4	18.7
30	15.9	42	380	127	-------	60	a55	42	14.7	9.5	15.3	31
31	14.7	-------	396	116	-------	58	-------	38	-------	10.6	13.5	-------

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of recorded range in stage, weather records, and records for stations on nearby streams.
b Stage-discharge relation affected by ice.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	29	16.0	34	35	40	80	68	110	23	14.6	18.1
2	23	23	14.6	27	57	34	73	64	109	20	14.6	18.1
3	15.3	18.1	14.0	29	64	27	70	61	80	21	24	24
4	12.8	19.6	12.8	32	52	35	73	56	101	29	24	25
5	12.2	18.8	12.8	31	42	38	71	63	78	32	21	19.6
6	12.2	16.7	12.2	28	33	36	71	56	66	34	19.6	18.1
7	12.8	14.6	11.6	35	32	b32	66	50	55	30	18.8	16.7
8	12.8	13.4	12.2	34	28	51	63	44	44	24	17.4	13.4
9	12.2	13.4	10.0	29	63	102	56	38	38	20	16.8	13.4
10	11.6	13.4	11.0	38	*80	73	52	36	35	40	16.1	14.0
11	10.5	13.4	12.2	54	75	76	49	36	33	70	12.8	15.3
12	10.0	13.4	23	44	71	86	48	36	30	68	14.0	15.3
13	11.6	14.0	71	39	64	82	46	35	29	56	14.0	17.4
14	11.6	24	60	38	61	68	45	33	33	61	14.6	19.6
15	12.2	23	b45	36	94	*60	45	32	44	55	13.4	18.8
16	11.6	18.1	b30	30	94	54	44	34	45	50	12.2	17.4
17	11.1	16.7	b20	26	84	48	42	42	45	46	12.2	16.7
18	10.5	16.0	20	26	78	46	41	66	40	41	12.2	16.0
19	11.1	16.0	30	30	75	42	40	80	38	36	14.0	14.0
20	11.1	16.7	32	23	58	40	52	70	35	29	21	14.0
21	11.1	17.4	26	22	45	62	60	64	35	22	18.2	13.4
22	11.1	16.0	22	21	41	73	55	56	32	20	16.7	13.4
23	11.6	13.4	23	21	42	148	55	46	29	18.8	16.7	14.0
24	11.1	13.4	27	24	42	122	55	56	29	18.8	15.3	13.4
25	11.2	14.0	21	29	48	111	54	52	52	19.6	13.4	12.8
26	24	14.6	18.8	30	b42	102	63	49	44	18.8	12.2	12.8
27	24	12.2	114	32	b36	107	60	44	41	17.4	11.1	12.2
28	18.1	11.6	96	30	39	111	70	39	35	16.7	10.5	11.6
29	16.0	13.4	78	32	-------	102	63	72	28	19.6	15.7	11.6
30	15.3	17.4	68	39	-------	96	63	70	23	17.4	14.0	11.6
31	26	-------	56	38	-------	88	-------	63	-------	16.0	21	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Lamington (Black) River near Pottersville--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	1,191	49	33	38.4	1.17	1.35
November	2,128	214	30	70.9	2.16	2.41
December	2,753	217	45	88.8	2.71	3.12
Calendar year 1945	26,518	290	27	72.7	2.22	30.07
January 1946	2,850	161	50	91.9	2.80	3.23
February	1,534	84	39	54.8	1.67	1.74
March	2,773	119	68	89.5	2.73	3.14
April	1,524	81	35	50.8	1.55	1.73
May	2,260	143	31	72.9	2.22	2.56
June	2,229	224	33	74.3	2.27	2.53
July	1,787	196	21	57.6	1.76	2.03
August	1,154	76	26	37.2	1.13	1.31
September	687.2	36	15.4	22.9	.698	.78
Water year 1945-46	22,870.2	224	15.4	62.7	1.91	25.93
October 1946	846.5	37	19.5	27.3	.832	.96
November	709	27	21	23.6	.720	.80
December	706.0	45	14.8	22.8	.695	.80
Calendar year 1946	19,059.7	224	14.8	52.2	1.59	21.61
January 1947	1,365.4	131	16.7	44.0	1.34	1.55
February	907	53	21	32.4	.988	1.03
March	2,389	205	26	77.1	2.35	2.71
April	2,450	116	53	81.7	2.49	2.78
May	3,506	186	66	113	3.45	3.98
June	2,458	148	46	81.9	2.50	2.79
July	1,864	187	33	60.1	1.83	2.11
August	1,113	87	24	35.9	1.09	1.26
September	832	34	22	27.7	.845	.94
Water year 1946-47	19,145.9	205	14.8	52.5	1.60	21.71
October 1947	650.2	64	16.0	21.0	.640	.74
November	2,795	228	50	93.2	2.84	3.17
December	1,447	110	32	46.7	1.42	1.64
Calendar year 1947	21,776.6	228	16.0	59.7	1.82	24.70
January 1948	1,393	59	36	44.9	1.37	1.58
February	2,195	134	37	75.7	2.31	2.49
March	4,171	212	94	135	4.12	4.73
April	3,838	253	75	128	3.90	4.35
May	3,765	297	68	121	3.69	4.27
June	2,361	124	55	78.7	2.40	2.68
July	1,404	80	29	45.3	1.38	1.59
August	899	52	21	29.0	.884	1.02
September	466.0	24	11.8	15.5	.473	.53
Water year 1947-48	25,384.2	297	11.8	69.4	2.12	28.79
October 1948	518.1	18.6	14.7	16.7	.509	.59
November	1,052.3	65	14.1	35.1	1.07	1.19
December	1,603.7	396	19.7	51.7	1.58	1.82
Calendar year 1948	23,666.1	396	11.8	64.7	1.97	26.84
January 1949	4,633	331	78	149	4.54	5.25
February	2,692	130	78	96.1	2.93	3.05
March	2,308	125	53	74.5	2.27	2.62
April	2,061	113	54	68.7	2.09	2.34
May	1,902	94	38	61.4	1.87	2.16
June	657.6	34	14.1	21.9	.668	.75
July	469.8	24	9.5	15.2	.463	.53
August	359.7	18.0	7.3	11.6	.354	.41
September	406.4	31	8.1	13.5	.412	.46
Water year 1948-49	18,663.6	396	7.3	51.1	1.56	21.17
October 1949	443.7	28	10.0	14.3	.436	.50
November	494.7	29	11.6	16.5	.503	.56
December	1,020.2	114	10.0	32.9	1.00	1.16
Calendar year 1949	17,448.1	331	7.3	47.8	1.46	19.79
January 1950	981	54	21	31.6	.963	1.11
February	1,575	94	28	56.2	1.71	1.79
March	2,187	143	27	70.5	2.15	2.48
April	1,725	80	40	57.5	1.75	1.96
May	1,611	80	32	52.0	1.59	1.83
June	1,434	110	23	47.8	1.46	1.63
July	990.1	70	16.0	31.9	.973	1.12
August	492.1	24	10.5	15.9	.485	.56
September	471.7	25	11.6	15.7	.479	.53
Water year 1949-50	13,425.5	143	10.0	36.8	1.12	15.23

North Branch Raritan River near Raritan

Location.--Lat 40°34'10", long 74°40'45", on right bank 400 ft upstream from U. S. Highway 202, 1½ miles upstream from confluence with South Branch, and 2 miles west of Raritan, Somerset County.

Drainage area.--190 sq mi.

Records available.--June 1923 to September 1950. Prior to October 1943, published as "at Milltown."

Gage.--Water-stage recorder. Concrete control since Sept. 1, 1936. Datum of gage is 50.43 ft above mean sea level, datum of 1929. Prior to Oct. 17, 1936, staff gage at same site 30 ft downstream at same datum.

Average discharge.--27 years, 292 cfs.

Extremes.--1923-50: Maximum discharge, 16,500 cfs Sept. 21, 1938 (gage height, 12.16 ft), by slope-area method; minimum observed, about 3 cfs Nov. 28, 1930 (gage height, 1.72 ft).

Peak discharge (base, 5,000 cfs).--
1946: Dec. 26 (8:30 a.m.) 5,700 cfs (7.87 ft); May 18 (3 a.m.) 5,920 cfs (7.98 ft); June 2 (5 p.m.) 11,000 cfs (10.18 ft); July 23 (7 p.m.) 8,290 cfs (9.09 ft).
1947: Apr. 5 (6 p.m.) 5,680 cfs (7.86 ft).
1948: Nov. 8 (8 p.m.) 7,810 cfs (8.88 ft); Nov. 12 (8 a.m.) 6,980 cfs (8.50 ft); Feb. 20 (1:30 a.m.) discharge below base (9.39 ft, ice jam); May 13 (10:30 p.m.) 6,730 cfs (8.38 ft).
1949: Dec. 30 (6 p.m.) 14,000 cfs (11.25 ft); Jan. 6 (6:30 a.m.) 7,080 cfs (8.55 ft).
1950: Mar. 23 (8:30 a.m.) 3,660 cfs (6.56 ft), (annual maximum below base).

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	147	128	610	991	278	658	342	165	266	175	143	109
2	156	124	510	600	225	484	342	180	6,220	1,300	139	99
3	156	128	455	495	169	659	392	161	1,520	332	132	106
4	136	128	423	439	148	511	328	152	805	221	132	93
5	132	120	376	423	180	500	308	147	690	184	128	90
6	143	117	530	555	216	439	278	147	560	165	128	83
7	264	117	530	870	657	431	260	136	475	156	505	87
8	199	113	399	660	272	550	248	139	399	136	284	83
9	216	113	342	616	248	580	272	128	335	128	165	80
10	194	109	335	895	237	407	237	124	290	128	143	80
11	165	136	308	560	210	342	221	128	308	117	139	77
12	165	216	264	590	199	302	216	768	484	120	128	72
13	165	170	255	500	194	290	210	998	362	120	141	67
14	156	199	272	415	298	278	205	349	278	103	225	64
15	152	254	254	376	292	764	194	941	260	96	139	64
16	147	194	b240	296	182	550	194	407	226	96	132	64
17	143	170	b200	322	226	384	184	1,050	216	90	184	62
18	139	165	b200	322	*b200	836	175	2,380	232	87	318	62
19	136	421	b220	284	b160	960	170	1,040	210	87	189	62
20	132	990	b220	210	b190	500	170	610	199	83	161	59
21	128	342	b210	b300	b190	415	156	640	205	159	136	69
22	124	2,000	b220	b280	b180	369	161	500	194	757	132	117
23	128	725	b230	b200	b200	328	161	369	170	4,100	128	80
24	152	485	b260	b250	b190	308	156	322	156	897	120	186
25	175	399	b400	b270	180	481	156	290	147	439	109	341
26	180	349	3,430	248	170	440	210	266	139	349	103	117
27	152	296	1,020	216	205	1,560	194	829	128	290	120	96
28	136	486	660	180	787	560	175	610	260	237	99	90
29	132	2,260	837	221	-------	465	161	376	302	205	106	90
30	132	923	874	249	-------	465	175	328	311	180	274	152
31	128	-------	1,740	439	-------	384	-------	296	-------	156	132	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

North Branch Raritan River near Raritan--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	128	83	77	93	254	106	205	2,090	342	175	99	77
2	96	80	b60	95	210	147	626	640	308	241	93	103
3	90	77	62	113	180	540	952	520	296	180	90	93
4	87	77	69	139	175	356	384	1,010	266	165	93	77
5	83	77	64	108	b130	302	2,260	1,540	243	152	93	80
6	80	69	67	117	147	477	1,090	1,140	226	147	87	96
7	77	67	67	87	165	590	650	715	266	139	83	90
8	72	80	67	124	152	439	520	570	1,170	311	87	90
9	67	83	67	96	117	322	520	475	755	221	163	87
10	77	74	69	77	147	328	429	415	384	216	248	83
11	77	72	69	99	139	328	376	369	335	199	120	80
12	107	113	72	128	128	335	362	342	290	170	103	74
13	175	99	93	132	128	362	315	315	248	152	99	69
14	113	83	83	175	136	2,010	290	302	441	152	93	67
15	93	77	69	468	147	880	290	290	855	181	90	67
16	87	77	62	565	165	610	318	278	362	243	93	103
17	87	77	69	407	165	495	376	266	308	216	672	90
18	93	87	67	272	152	399	284	296	349	180	189	77
19	117	77	57	216	136	342	260	335	315	165	143	80
20	96	77	48	1,570	81	308	248	989	535	210	565	80
21	87	74	423	724	60	284	272	730	559	152	214	80
22	83	77	359	243	139	272	315	1,090	308	662	147	93
23	83	96	184	b250	147	254	248	660	272	272	120	103
24	80	83	156	b300	132	254	232	465	248	194	103	74
25	77	80	139	248	128	571	226	979	243	161	96	77
26	87	80	120	237	128	342	290	1,840	221	147	93	74
27	113	99	b70	486	128	272	257	650	199	136	136	69
28	93	93	113	284	120	266	226	500	184	132	106	64
29	93	83	117	237	-------	254	216	479	175	124	93	64
30	90	80	170	221	-------	243	265	703	180	109	83	62
31	87	-------	92	352	-------	216	-------	399	-------	103	87	-------

b Stage-discharge relation affected by ice.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	59	170	175	175	120	745	2,200	272	550	308	147	83
2	57	132	164	560	120	1,080	1,160	254	431	260	152	80
3	59	117	165	392	120	1,360	840	308	362	232	185	80
4	62	705	170	290	120	880	680	315	328	221	175	80
5	59	455	170	284	130	570	600	408	296	199	208	80
6	59	278	170	260	135	495	540	434	272	221	290	77
7	59	205	161	248	135	600	485	1,120	260	199	170	77
8	59	2,180	194	216	130	650	439	765	369	184	143	80
9	59	952	184	226	120	610	415	447	266	165	128	80
10	57	439	152	248	117	990	362	376	248	152	124	117
11	57	362	156	202	117	830	424	335	282	143	117	113
12	57	3,090	147	175	124	600	1,100	322	221	139	305	87
13	54	630	129	266	132	530	650	4,560	527	281	216	80
14	57	439	118	328	301	465	1,180	1,970	284	478	156	72
15	57	362	124	180	860	510	1,330	1,080	243	194	132	67
16	54	328	697	221	392	1,220	765	1,050	226	161	124	64
17	54	278	313	226	b600	1,030	650	1,580	221	147	113	64
18	62	248	232	221	b1,400	775	530	1,020	199	163	113	64
19	62	226	205	147	b2,200	795	475	725	818	411	109	69
20	72	205	161	b170	b2,500	880	447	590	1,190	189	167	67
21	59	189	b170	b190	b1,200	640	423	540	376	165	426	64
22	54	180	b170	199	b600	630	376	465	322	625	350	62
23	52	310	165	156	520	590	356	407	431	618	300	59
24	50	586	152	130	431	680	342	369	776	342	184	57
25	52	575	119	140	579	485	284	431	1,470	243	165	54
26	52	296	91	170	895	431	342	376	475	205	143	54
27	52	254	148	180	892	677	322	335	556	194	128	54
28	57	237	180	160	1,790	1,180	308	308	631	180	113	52
29	201	221	147	140	1,080	590	290	284	742	161	106	52
30	184	194	152	140	-------	510	284	1,880	369	147	96	62
31	260	-------	170	120	-------	465	-------	850	-------	159	90	-------

b Stage-discharge relation affected by ice.

Note.--No gage-height record Jan. 24 to Feb. 9; discharge computed on basis of weather records and records for other stations in Raritan River Basin.

North Branch Raritan River near Raritan--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	113	59	156	1,330	550	439	302	243	143	57	32	54
2	77	59	136	905	465	392	308	331	132	57	32	48
3	67	57	128	700	410	376	260	1,190	124	54	32	37
4	64	207	143	550	447	384	243	447	117	54	73	33
5	62	146	124	1,510	485	455	221	349	113	57	64	35
6	67	99	113	*4,100	423	530	806	315	113	62	54	50
7	62	165	*109	*1,160	873	399	431	622	103	74	44	42
8	62	136	103	895	667	335	349	335	93	64	40	37
9	69	109	93	735	580	328	328	284	90	54	35	35
10	67	102	90	620	560	308	290	302	90	54	29	35
11	64	147	87	540	447	376	266	284	90	69	30	30
12	64	109	83	475	382	356	248	243	90	64	35	30
13	62	103	93	431	399	290	248	221	87	108	48	33
14	59	96	90	392	465	272	315	210	87	90	59	63
15	57	87	96	342	421	266	254	221	83	67	52	72
16	64	80	139	328	439	248	232	194	80	77	48	62
17	69	77	326	328	500	237	210	180	80	74	50	52
18	67	83	272	296	362	248	247	170	83	99	48	44
19	74	77	168	322	349	226	1,000	161	87	83	52	42
20	67	246	217	290	928	221	399	228	83	67	42	52
21	64	184	156	281	520	237	342	262	77	57	37	44
22	69	139	153	1,290	692	266	457	214	72	52	32	37
23	69	165	152	670	1,480	1,200	977	540	67	48	32	48
24	67	147	128	1,110	620	510	530	260	62	44	30	54
25	72	128	96	735	560	384	407	326	59	40	30	44
26	69	106	a95	674	495	369	362	232	62	40	29	38
27	64	109	a90	795	407	342	335	260	59	37	27	37
28	62	113	a95	*2,010	423	308	290	199	59	38	29	35
29	59	276	b200	895	-------	272	266	175	57	38	52	47
30	59	227	b7,000	620	-------	260	254	165	57	37	66	117
31	59	-------	5,370	570	-------	248	-------	152	-------	32	50	-------

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for other stations in Raritan River Basin.

b Stage-discharge relation affected by ice.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	74	96	50	134	284	170	335	342	745	74	45	116
2	55	68	47	118	788	147	315	290	586	68	45	86
3	47	55	43	118	512	90	296	272	322	74	105	97
4	41	50	33	130	284	f98	335	243	615	100	126	146
5	39	52	41	114	226	134	302	272	346	103	71	93
6	38	47	36	103	199	147	278	260	266	122	62	71
7	36	43	36	165	210	123	243	221	221	100	68	65
8	38	41	38	142	165	150	226	189	189	80	55	60
9	39	39	32	82	564	560	216	175	165	68	50	55
10	38	39	35	255	559	226	199	170	156	190	50	57
11	36	39	45	372	399	208	199	165	147	275	50	74
12	36	39	62	194	315	232	199	151	126	248	60	65
13	34	39	280	175	290	420	189	147	122	151	45	65
14	36	50	227	189	940	316	175	138	126	151	41	96
15	36	68	129	151	1,910	243	170	130	175	126	39	77
16	36	55	72	134	953	216	160	147	168	118	38	65
17	34	47	70	114	610	199	151	138	216	122	36	57
18	34	45	74	118	475	199	151	221	147	103	36	52
19	34	45	103	134	407	170	147	413	126	86	39	52
20	33	45	114	86	290	165	180	254	134	77	290	52
21	31	47	86	100	205	430	232	205	134	68	104	52
22	31	45	77	96	272	443	180	175	118	60	62	55
23	31	36	74	96	260	1,980	170	160	103	55	57	57
24	31	41	93	100	237	735	189	221	96	52	52	50
25	31	41	80	103	248	500	199	189	202	65	47	47
26	61	45	74	103	194	415	216	165	126	60	45	45
27	80	47	f1,200	114	139	715	210	156	107	55	41	45
28	55	40	603	111	155	715	288	138	93	50	39	47
29	47	45	272	169	-------	560	237	431	83	55	126	45
30	47	47	194	199	-------	500	232	332	77	55	198	45
31	68	-------	146	297	-------	369	-------	226	-------	47	233	-------

f Computed on basis of partly estimated gage-height record.

North Branch Raritan River near Raritan--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	4,810	264	124	155	0.816	0.94
November	12,377	2,260	109	413	2.17	2.42
December	16,824	3,430	200	543	2.86	3.29
Calendar year 1945	136,820	3,430	93	375	1.97	26.77
January 1946	13,272	991	180	428	2.25	2.60
February	6,883	787	148	246	1.29	1.35
March	16,150	1,560	278	521	2.74	3.16
April	6,651	392	156	222	1.17	1.30
May	14,971	2,380	124	483	2.54	2.93
June	16,347	6,220	128	545	2.87	3.20
July	11,693	4,100	83	377	1.98	2.29
August	5,114	505	99	165	.868	1.00
September	2,901	341	59	96.7	.509	.57
Water year 1945-46	127,993	6,220	59	351	1.85	25.05
October 1946	2,875	175	67	92.7	.488	.56
November	2,451	113	67	81.7	.430	.48
December	3,301	423	48	106	.558	.65
Calendar year 1946	102,609	6,220	48	281	1.48	20.09
January 1947	8,663	1,570	77	279	1.47	1.70
February	4,036	254	60	144	.758	.79
March	12,904	2,010	106	416	2.19	2.53
April	13,292	2,260	205	443	2.33	2.60
May	21,392	2,090	266	690	3.63	4.19
June	10,883	1,170	175	363	1.91	2.13
July	6,007	662	103	194	1.02	1.18
August	4,521	672	83	146	.768	.88
September	2,423	103	62	80.8	.425	.47
Water year 1946-47	92,748	2,260	48	254	1.34	18.16
October 1947	2,248	260	50	72.5	.382	.44
November	15,643	3,180	117	521	2.74	3.06
December	5,651	697	91	182	.958	1.11
Calendar year 1947	107,663	3,180	50	295	1.55	21.08
January 1948	6,760	560	120	218	1.15	1.32
February	17,860	2,500	117	616	3.24	3.50
March	22,493	1,360	431	726	3.82	4.40
April	18,699	2,200	284	623	3.28	3.66
May	24,176	4,560	254	780	4.11	4.73
June	13,691	1,470	199	456	2.40	2.68
July	7,466	625	139	241	1.27	1.46
August	5,375	426	90	173	.911	1.05
September	2,151	117	52	71.7	.377	.42
Water year 1947-48	142,213	4,560	50	389	2.05	27.83
October 1948	2,070	113	57	66.8	.352	.41
November	3,839	276	57	128	.674	.75
December	16,301	7,000	83	526	2.77	3.19
Calendar year 1948	140,881	7,000	52	385	2.03	27.57
January 1949	26,599	4,100	281	858	4.52	5.21
February	15,319	1,460	349	547	2.88	3.00
March	11,072	1,200	221	357	1.88	2.17
April	11,172	1,000	210	372	1.96	2.19
May	9,315	1,190	152	300	1.58	1.82
June	2,599	143	57	86.6	.456	.51
July	1,848	108	32	59.6	.314	.36
August	1,313	73	27	42.4	.223	.26
September	1,387	117	30	46.2	.243	.27
Water year 1948-49	102,834	7,000	27	282	1.48	20.14
October 1949	1,307	80	31	42.2	.222	.26
November	1,436	96	36	47.9	.252	.28
December	4,466	1,200	32	144	.758	.87
Calendar year 1949	87,833	4,100	27	241	1.27	17.20
January 1950	4,516	372	82	146	.768	.88
February	12,090	1,910	139	432	2.27	2.37
March	11,575	1,980	90	373	1.96	2.27
April	6,619	335	147	221	1.16	1.30
May	6,736	431	130	217	1.14	1.32
June	6,237	745	77	208	1.09	1.22
July	3,058	275	47	98.6	.519	.60
August	2,355	290	36	76.0	.400	.46
September	1,989	146	45	66.3	.349	.39
Water year 1949-50	62,384	1,980	31	171	.900	12.22

Raritan River at Manville

Location.--Lat 40°33'18", long 74°35'02", on left bank at downstream side of highway bridge at Manville, Somerset County, 1¼ miles upstream from Millstone River.

Drainage area.--490 sq mi.

Records available.--June 1903 to March 1907 (published as "at Finderne"), August 1908 to April 1915 (gage heights only), published in Water-Supply Paper 521 of the United State Geological Survey, August 1921 to September 1950.

Gage.--Water-stage recorder. Datum of gage is 20.61 ft above mean sea level, datum of 1929. Prior to Aug. 15, 1923, chain gage on downstream side of highway bridge at same site and datum.

Average discharge.--29 years (1921-50), 742 cfs, adjusted for diversion since Oct. 1, 1940.

Extremes.--1903-7, 1921-50: Maximum discharge, 36,100 cfs Sept. 22, 1938 (gage height, 20.42 ft, from floodmark in gage house), by slope-area method; minimum, about 15 cfs Sept. 12, 1932 (does not include water diverted to Johns-Manville plant).

Peak discharge (base, 10,000 cfs).--
1946: June 2 (11 p.m.) 17,000 cfs (17.76 ft); July 24 (12:30 a.m.) 10,500 cfs (13.60 ft).
1947: Apr. 5 (10 to 11 p.m.) 8,700 cfs (10.89 ft), (annual maximum below base).
1948: Nov. 9 (12:30 a.m.) 10,500 cfs (13.57 ft); Nov. 12 (1 p.m.) 10,000 cfs (13.23 ft); May 14 (3:30 a.m.) 10,200 cfs (13.42 ft).
1949: Dec. 31 (4 a.m.) 22,100 cfs (19.8 ft); Jan. 6 (12 m.) 12,600 cfs (14.30 ft).
1950: Mar. 23 (1 p.m.) 10,100 cfs (11.59 ft).

Remarks.--Figures of discharge include diversion to Johns-Manville plant, 1,500 ft above station, much of which may not be returned to river in immediate vicinity of station. Slight diurnal fluctuation at low flow.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	364	280	1,940	3,520	840	1,610	841	320	621	493	328	298
2	371	269	1,470	1,800	609	1,360	821	332	8,390	2,490	316	258
3	383	269	1,250	1,390	430	1,310	910	302	9,430	1,000	304	269
4	333	280	1,180	1,230	360	1,290	812	284	2,890	563	298	248
5	321	269	1,050	*1,140	420	1,170	727	302	1,890	427	275	211
6	327	258	1,550	1,400	455	1,070	665	314	1,510	379	275	192
7	582	247	1,810	2,150	1,320	988	613	284	1,280	379	720	192
8	547	247	1,330	1,800	830	1,210	562	278	1,080	327	823	201
9	501	252	1,090	1,510	583	1,380	613	278	920	291	420	197
10	579	252	*1,010	2,080	541	1,060	571	273	765	279	322	197
11	437	269	921	1,490	502	830	492	251	736	274	316	192
12	396	465	734	1,470	455	715	469	441	1,370	268	269	159
13	390	443	688	1,360	433	688	476	2,220	1,040	279	264	155
14	371	437	725	1,080	541	653	454	736	812	274	435	151
15	346	539	700	988	810	1,310	433	1,770	755	225	360	168
16	327	555	500	750	441	1,410	418	910	638	220	298	144
17	321	437	400	740	525	953	391	1,310	571	205	360	147
18	315	397	500	780	478	1,440	384	5,280	579	196	702	144
19	309	509	520	720	*346	2,570	364	2,850	554	186	517	141
20	286	2,350	520	500	350	1,390	345	1,650	507	176	449	141
21	292	1,090	500	660	430	1,100	364	1,430	531	298	353	147
22	269	4,370	450	680	400	953	345	1,280	499	1,580	328	248
23	263	2,700	450	520	450	841	308	900	462	5,990	292	219
24	333	1,460	500	520	430	765	314	783	404	5,020	264	231
25	371	1,130	520	600	400	1,020	308	682	378	1,340	258	703
26	410	959	7,580	560	363	953	397	630	358	881	231	335
27	364	796	4,410	520	438	3,590	433	1,390	326	648	280	242
28	333	888	2,010	420	*1,840	1,650	384	1,830	360	539	237	202
29	309	7,300	2,040	480	-------	1,230	332	1,030	638	463	286	191
30	275	3,510	2,400	*480	-------	1,150	332	831	821	398	804	231
31	280	-------	4,290	954	-------	987	-------	709	-------	346	393	-------

* Winter discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 15-25, Jan. 16-30, Feb. 3-5, 20-25. Backwater from moss July 25 to Aug. 13, and from sand bags Aug. 14 to Sept. 12.

Raritan River at Manville--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	283	176	163	276	894	300	536	4,180	854	444	256	215
2	200	167	140	205	729	366	867	1,810	758	555	227	455
3	179	171	89	319	581	1,090	2,740	1,340	712	467	227	383
4	179	171	168	378	581	1,000	1,230	2,100	631	392	222	254
5	174	158	112	300	400	800	3,720	2,960	580	336	216	290
6	179	129	137	350	410	1,060	3,880	3,860	547	317	216	277
7	157	142	143	250	420	1,560	1,860	1,950	748	291	171	271
8	149	158	151	326	410	1,400	1,410	1,570	2,510	607	176	315
9	145	181	147	257	370	1,010	1,340	1,270	2,380	658	277	266
10	170	176	143	*230	400	*985	1,220	1,180	1,160	615	633	226
11	212	162	147	245	390	1,010	1,010	1,010	915	555	379	220
12	195	186	143	319	350	995	954	898	767	429	262	210
13	435	226	163	400	350	1,030	841	819	657	385	222	180
14	346	181	172	448	*330	3,950	763	734	912	600	211	175
15	235	162	155	837	298	2,870	763	743	2,220	490	196	166
16	200	150	133	1,740	435	1,750	763	688	1,050	685	216	215
17	189	171	143	1,380	440	1,870	1,090	644	806	640	1,330	249
18	184	181	137	945	410	1,120	782	734	758	658	564	185
19	246	176	124	737	380	953	672	829	796	522	344	170
20	246	162	*106	2,780	250	870	628	1,900	774	649	1,440	166
21	200	150	545	2,980	179	800	637	1,570	1,450	531	899	180
22	179	176	1,140	1,010	400	762	871	2,310	844	1,190	460	195
23	174	186	539	750	400	762	654	1,910	684	979	344	290
24	174	186	426	882	340	706	569	1,250	571	580	299	215
25	170	162	377	794	*320	1,330	561	1,660	580	459	262	195
26	174	150	311	682	340	1,150	645	3,740	547	406	239	190
27	283	181	244	*1,380	330	781	628	1,640	506	385	279	162
28	240	203	281	955	320	706	569	1,250	460	343	250	157
29	206	186	305	774	-------	671	528	1,140	429	336	227	149
30	189	167	412	691	-------	644	497	1,730	429	304	211	149
31	179	-------	311	1,010	-------	568	-------	1,030	-------	278	216	-------

* Winter discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Jan. 5-7, 10, 13, 23, Feb. 5-14, 17-20, 22-28, Mar 1, 4, 5.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	147	477	447	a430	300	a2,200	4,520	600	1,320	1,000	295	197
2	134	320	424	a1,600	310	a2,200	3,480	575	1,060	813	325	188
3	139	264	*439	1,520	310	*3,360	2,160	652	891	711	583	175
4	147	1,260	439	1,010	*290	2,560	1,640	772	794	633	650	171
5	155	1,500	432	900	300	1,660	1,440	913	758	566	539	179
6	143	829	455	772	290	1,340	1,300	1,460	676	582	738	175
7	130	618	422	707	290	1,500	1,220	2,060	624	591	489	166
8	126	3,740	455	660	290	1,700	1,080	2,580	813	496	383	162
9	126	5,100	477	635	290	1,500	1,020	1,340	658	430	313	179
10	119	1,400	388	734	280	2,200	900	1,060	582	396	295	240
11	119	1,020	388	560	270	2,140	889	900	535	376	267	289
12	134	6,620	374	600	281	1,600	2,080	801	504	338	504	230
13	109	2,240	339	716	301	1,380	1,640	5,900	963	344	710	192
14	139	1,160	290	940	447	1,200	1,980	6,940	756	1,200	416	162
15	123	920	290	700	1,660	1,180	3,200	3,180	582	527	325	149
16	109	839	1,320	560	1,120	2,020	1,940	2,560	558	396	273	138
17	112	716	958	542	1,400	2,560	1,620	3,940	519	363	251	130
18	119	626	643	566	3,940	1,800	1,320	2,700	467	376	245	134
19	112	575	542	420	5,800	1,620	1,180	1,920	1,360	741	235	153
20	112	517	431	430	6,400	2,100	1,100	1,580	4,860	452	297	149
21	143	493	450	439	3,800	1,560	1,040	1,400	1,560	363	1,340	138
22	123	462	440	525	2,000	1,500	930	1,260	1,010	941	676	130
23	112	652	439	*480	1,500	1,380	839	1,120	1,140	1,140	828	119
24	109	707	370	450	1,200	1,740	810	982	1,220	775	481	115
25	112	1,440	310	470	1,300	1,320	849	1,120	3,220	551	410	111
26	116	820	288	420	2,400	1,140	839	1,010	1,340	423	350	111
27	116	670	320	400	2,000	1,320	734	871	1,320	383	301	111
28	119	609	439	380	4,200	2,680	697	813	1,800	363	262	111
29	485	566	a410	360	3,200	1,580	661	747	3,320	325	262	115
30	462	509	a370	340	-------	1,320	643	3,020	1,320	301	280	134
31	477	-------	a400	320	-------	1,160	-------	2,120	-------	267	211	-------

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records, recorded range in stage, and records for stations at Bound Brook and on nearby streams.

Note.--Stage-discharge relation affected by ice Dec. 14, 15, 21, 22, 24, 25, Jan. 8, 11, 12, 15, 16, 19, 20, 23-31, Feb. 1-11. Backwater from moss Oct. 1 to Nov. 4.

Raritan River at Manville--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	234	134	445	*5,500	1,480	1,140	a900	610	396	123	a85	141
2	230	126	356	2,640	1,260	*1,040	a1,000	626	362	120	69	120
3	183	122	*319	1,900	1,040	1,000	721	3,100	329	120	71	104
4	149	273	403	1,520	1,120	983	669	1,480	304	117	98	113
5	141	365	396	2,060	1,240	1,100	602	1,000	292	117	152	120
6	141	240	344	*9,820	1,160	1,380	1,760	849	279	117	141	802
7	141	301	313	3,360	1,720	1,160	1,320	1,460	256	117	120	223
8	141	403	295	2,320	2,060	934	964	974	234	123	98	129
9	145	245	267	1,820	*1,560	877	896	757	212	126	85	104
10	149	216	257	1,560	1,580	830	830	748	207	126	78	98
11	149	251	245	1,360	1,280	944	775	757	207	a130	69	90
12	138	257	240	1,220	1,040	1,040	721	635	207	a140	80	90
13	134	221	245	1,140	1,060	830	687	553	202	a140	104	80
14	126	202	226	1,040	1,260	748	849	530	193	a270	126	137
15	122	183	216	925	1,220	721	775	586	188	a180	145	183
16	126	171	284	867	1,240	661	695	499	188	a200	110	178
17	138	158	707	849	1,480	635	652	461	183	a200	107	152
18	149	162	881	793	1,120	644	661	425	178	267	133	120
19	149	162	556	784	1,020	610	2,180	410	183	234	117	104
20	149	359	481	775	2,140	586	1,260	494	193	197	123	104
21	145	543	b520	739	1,560	619	993	830	188	156	107	113
22	130	325	b470	4,780	1,540	721	969	578	178	133	98	101
23	145	307	512	2,260	3,700	2,580	2,300	1,880	152	126	80	107
24	149	332	b400	2,720	1,840	1,640	1,400	830	137	113	71	133
25	171	289	b350	2,140	1,500	1,080	1,020	1,120	137	110	71	120
26	158	251	b400	1,720	1,340	974	905	730	129	107	73	101
27	149	221	b320	2,420	1,120	a900	830	721	129	104	80	96
28	141	245	332	*4,800	1,100	a800	739	594	129	101	90	76
29	130	469	353	2,960	-------	a700	652	507	129	98	113	129
30	138	676	8,880	1,740	-------	a600	635	469	126	98	188	362
31	141	-------	*18,200	1,480	-------	a600	-------	425	-------	a95	173	-------

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for other stations in Raritan River Basin.
b Stage-discharge relation affected by ice.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	250	215	138	406	891	471	988	855	973	166	132	398
2	159	176	134	358	1,890	398	920	836	1,540	171	125	209
3	116	127	123	351	1,870	b320	834	745	836	166	212	190
4	103	108	114	385	976	b350	920	692	1,330	221	402	312
5	97	105	107	345	752	b370	834	701	1,020	271	211	225
6	95	108	90	312	656	384	752	701	727	271	163	151
7	89	99	98	414	699	318	656	632	591	254	159	122
8	95	96	93	443	540	364	614	488	512	195	132	112
9	100	91	77	272	1,170	1,380	573	458	436	162	125	103
10	103	91	80	479	1,670	655	533	466	407	392	128	119
11	100	91	130	1,110	1,210	548	510	415	373	728	132	166
12	100	91	161	623	959	589	517	393	339	702	159	158
13	97	99	616	541	853	921	479	380	301	452	159	154
14	92	105	848	582	2,480	939	464	366	295	372	128	230
15	95	127	429	487	*5,590	690	449	346	400	408	119	209
16	103	135	*236	*421	3,380	605	434	422	429	308	103	154
17	97	111	b200	351	1,910	*556	391	346	550	302	100	131
18	95	102	231	372	1,400	564	378	530	373	271	100	115
19	87	105	313	406	1,180	479	371	1,020	307	215	106	109
20	79	111	380	279	920	456	570	745	301	195	642	115
21	89	108	295	288	605	822	788	583	313	162	453	122
22	68	102	259	281	734	1,290	548	429	276	154	211	147
23	87	99	248	288	725	6,460	471	400	236	150	155	128
24	82	99	359	281	707	2,980	517	527	220	139	128	125
25	72	108	307	288	699	1,590	573	550	311	150	116	122
26	116	108	264	288	510	1,250	573	458	339	158	103	106
27	177	118	2,780	*300	449	2,020	622	422	225	143	100	103
28	132	105	1,770	319	*b450	1,950	690	359	190	131	95	122
29	106	*118	893	392	-------	1,690	673	834	170	135	87	106
30	103	121	*607	534	-------	1,440	605	1,130	165	150	402	106
31	132	-------	436	735	-------	1,100	-------	684	-------	143	560	-------

*** Winter discharge measurement made on this day.**
b Stage-discharge relation affected by ice.

Raritan River at Manville--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	11,305	582	263	365	0.745	0.86
November	33,227	7,300	247	1,108	2.26	2.52
December	45,038	7,580	400	1,453	2.97	3.42
Calendar year 1945	367,719	9,110	200	1,007	2.06	27.92
January 1946	34,292	3,520	420	1,106	2.26	2.60
February	16,020	1,840	346	572	1.17	1.22
March	38,646	3,590	653	1,247	2.54	2.93
April	14,878	910	308	496	1.01	1.13
May	31,880	5,280	251	1,028	2.10	2.42
June	41,115	9,430	326	1,370	2.80	3.12
July	26,434	5,990	176	853	1.74	2.01
August	11,777	823	251	380	.776	.89
September	6,549	703	141	218	.445	.50
Water year 1945-46	311,161	9,430	141	852	1.74	23.62
October 1946	6,471	435	145	209	.427	.49
November	5,133	226	129	171	.349	.39
December	7,707	1,140	89	249	.508	.58
Calendar year 1946	240,902	9,430	89	660	1.35	18.28
January 1947	24,630	2,980	205	795	1.62	1.87
February	11,552	894	179	413	.843	.88
March	34,369	3,950	300	1,109	2.26	2.61
April	33,228	3,880	497	1,108	2.26	2.52
May	50,399	4,180	644	1,626	3.32	3.83
June	27,036	2,510	429	901	1.84	2.05
July	16,086	1,190	278	519	1.06	1.22
August	11,471	1,440	171	370	.755	.87
September	6,770	455	149	226	.461	.51
Water year 1946-47	234,852	4,180	89	643	1.31	17.82
October 1947	4,928	485	109	159	.324	.37
November	37,669	6,620	264	1,256	2.56	2.86
December	14,199	1,320	288	458	.935	1.08
Calendar year 1947	272,337	6,620	109	746	1.52	20.67
January 1948	19,586	1,600	320	632	1.29	1.49
February	46,169	6,400	270	1,592	3.25	3.50
March	54,520	3,360	1,140	1,759	3.59	4.14
April	43,751	4,520	643	1,458	2.98	3.32
May	56,896	6,940	575	1,835	3.74	4.32
June	36,510	4,860	467	1,217	2.48	2.77
July	17,163	1,200	267	554	1.13	1.30
August	13,484	1,340	211	435	.888	1.02
September	4,753	289	111	158	.322	.36
Water year 1947-48	349,628	6,940	109	955	1.95	26.53
October 1948	4,631	234	122	149	.304	.35
November	8,209	676	122	274	.559	.62
December	38,013	18,200	216	1,226	2.50	2.89
Calendar year 1948	343,685	18,200	111	939	1.92	26.08
January 1949	70,012	9,820	739	2,258	4.61	5.31
February	40,780	3,700	1,020	1,456	2.97	3.10
March	29,077	2,580	586	938	1.91	2.21
April	29,360	2,300	602	979	2.00	2.23
May	25,138	3,100	410	811	1.66	1.91
June	6,227	396	126	208	.424	.47
July	4,405	270	95	142	.290	.33
August	3,255	188	69	105	.214	.25
September	4,530	802	76	151	.308	.34
Water year 1948-49	263,637	18,200	69	722	1.47	20.01
October 1949	3,316	250	68	107	.218	.25
November	3,379	215	91	113	.231	.26
December	12,816	2,780	77	413	.843	.97
Calendar year 1949	232,295	9,820	68	636	1.30	17.63
January 1950	12,931	1,110	272	417	.851	.98
February	35,877	5,590	449	1,281	2.61	2.72
March	33,949	6,460	318	1,095	2.23	2.58
April	18,247	988	371	608	1.24	1.38
May	17,913	1,150	346	578	1.18	1.36
June	14,485	1,540	165	483	.986	1.10
July	7,837	728	131	253	.516	.59
August	5,947	642	87	192	.392	.45
September	4,669	398	103	156	.318	.35
Water year 1949-50	171,366	6,460	68	469	.957	12.99

Lake Carnegie at Princeton

Location.--Lat 40°22'10", long 74°37'20", at Kingston Dam on Millstone River, 2 miles northeast of Princeton, Mercer County.

Drainage area.--159 sq mi.

Records available.--October and November 1924, May 1925, and January 1926 to September 1950.

Gage.--Staff gage above dam. Datum of gage is 52.56 ft (revised) above mean sea level (United States Coast and Geodetic Survey bench mark).

Extremes.--1924-50: Maximum stage, 4.20 ft Sept. 21, 1938, from floodmarks on dam.

Maximum gage height (water years).--
1946: June 3, 1.60 ft.
1947: May 6, 0.96 ft.
1948: Feb. 18, 1.18 ft.
1949: Dec. 31, 2.00 ft.
1950: Jan. 15, 1.16 ft.

Remarks.--Elevation of crest of lower spillway is zero gage height. Gage read once a day usually about 8 a.m.

Cooperation.--Records furnished by Princeton University.

Daily gage height at 8 a.m., in feet, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.30	0.28	0.98	0.80	0.48	0.70	0.40	0.26	0.36	0.30	0.28	0.30
2	.30	.28	.76	.76	.48	.60	.46	.26	1.09	.30	.26	.26
3	.18	.28	.60	.60	.48	.54	.44	.26	1.60	.32	.26	.24
4	.16	.26	.58	.54	.48	.52	.44	.26	1.12	.28	.26	.24
5	.16	.20	.56	.50	.36	.48	.44	.28	.80	.28	.26	.24
6	.14	.18	.56	.50	.30	.46	.40	.28	.66	.26	.24	.24
7	.36	.12	.60	.56	.30	.46	.34	.28	.56	.24	.30	.20
8	.40	.12	.66	.56	.30	.38	.32	.24	.48	.20	.30	.20
9	.30	.12	.50	.52	.30	.40	.32	.24	.46	.20	.30	.20
10	.34	.12	.48	.62	.28	.40	.34	.22	.40	.20	.30	.20
11	.28	.14	.48	.54	.30	.38	.30	.22	.38	.20	.24	.20
12	.28	.18	.43	.54	.30	.38	.30	.26	.38	.20	.24	.20
13	.24	.20	.40	.48	.28	.36	.28	.30	.46	.20	.24	.20
14	.20	.26	.36	.46	.28	.30	.24	.34	.46	.18	.24	.20
15	.20	.36	.34	.40	.30	.42	.24	1.01	.56	.18	.24	.20
16	.20	.34	.28	.36	.30	.66	.20	.64	.50	.16	.24	.20
17	.18	.26	.28	.34	.30	.56	.20	.89	.46	.16	.24	.20
18	.18	.26	.28	.34	.28	.60	.20	1.08	.36	.16	.64	.20
19	.16	.20	.30	.34	.28	.80	.18	.86	.38	.16	.64	.20
20	.12	.66	.30	.32	.30	.64	.16	.66	.40	.14	.60	.18
21	.09	.36	.30	.28	.30	.58	.16	.58	.40	.20	.46	.20
22	.08	.56	.28	.28	.36	.50	.16	.50	.38	.50	.40	.18
23	.08	.56	.30	.26	.40	.44	.16	.50	.36	1.20	.34	.18
24	.26	.54	.30	.24	.38	.42	.16	.46	.36	1.32	.30	.20
25	.32	.36	.30	.24	.38	.50	.14	.40	.34	1.04	.30	.38
26	.38	.38	1.36	.20	.38	.50	.24	.40	.28	.76	.26	.36
27	.36	.34	1.08	.20	.36	1.36	.30	.50	.30	.56	.24	.36
28	.36	.40	.86	.20	1.01	.76	.28	.52	.24	.50	.24	.34
29	.34	1.50	.68	.20	-------	.56	.26	.48	.50	.46	.46	.30
30	.28	1.20	.60	.30	-------	.58	.26	.46	.38	.38	.40	.26
31	.28	-------	1.14	.46	-------	.56	-------	.40	-------	.30	.34	-------

Lake Carnegie at Princeton--Continued

Daily gage height at 8 a.m., in feet, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.24	0.20	0.22	0.36	0.44	0.30	0.30	0.94	0.42	0.18	0.18	0.20
2	.20	.20	.20	.38	.40	.34	.34	.72	.44	.18	.18	.40
3	.20	.20	.20	.38	.40	.42	.78	.70	.40	.18	.14	.40
4	.20	.20	.20	.38	.40	.68	.66	.64	.38	.18	.14	.30
5	.20	.20	.20	.40	.42	.64	.70	.82	.34	.16	.14	.30
6	.18	.20	.18	.38	.42	.60	.70	.96	.30	.14	.12	.24
7	.18	.20	.18	.38	.40	.70	.68	.82	.34	.14	.09	.20
8	.16	.20	.18	.36	.40	.68	.64	.68	.50	.20	.09	.20
9	.16	.20	.18	.36	.38	.58	.56	.62	.66	.20	.12	.20
10	.20	.20	.18	.36	.34	.56	.56	.54	.48	.20	.22	.20
11	.24	.20	.18	.34	.32	.52	.56	.40	.44	.26	.20	.18
12	.26	.20	.18	.34	.32	.54	.54	.40	.36	.24	.20	.18
13	.26	.20	.18	.34	.28	.60	.50	.40	.36	.20	.18	.16
14	.20	.20	.18	.36	.26	.60	.44	.40	.34	.22	.18	.14
15	.20	.20	.18	.46	.26	.64	.44	.38	.86	.22	.14	.14
16	.20	.20	.18	.60	.26	.58	.42	.38	.46	.20	.09	.30
17	.20	.20	.18	.60	.26	.54	.64	.34	.40	.20	.38	.20
18	.20	.20	.18	.50	.40	.48	.62	.34	.30	.20	.38	.18
19	.20	.20	.16	.50	.40	.42	.54	.58	.28	.24	.24	.18
20	.20	.20	.16	.54	.38	.40	.46	.60	.28	.26	.24	.16
21	.20	.20	.50	.70	.38	.38	.46	.58	.74	.26	.70	.16
22	.20	.20	.58	.54	.36	.34	.48	.78	.42	.44	.40	.18
23	.20	.30	.60	.50	.32	.34	.46	.80	.34	.44	.28	.20
24	.20	.30	.60	.48	.32	.34	.44	.80	.28	.40	.24	.18
25	.20	.30	.50	.34	.32	.50	.40	.66	.30	.30	.24	.18
26	.20	.30	.42	.74	.30	.46	.40	.78	.28	.28	.20	.18
27	.20	.28	.38	.58	.30	.38	.40	.56	.26	.20	.28	.18
28	.20	.28	.36	.54	.30	.38	.38	.54	.26	.20	.30	.18
29	.20	.22	.36	.50	-------	.38	.38	.50	.20	.18	.28	.16
30	.20	.22	.36	.48	-------	.30	.38	.48	.20	.18	.28	.16
31	.20	-------	.36	.44	-------	.30	-------	.48	-------	.18	.20	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.16	0.36	0.36	0.28	0.38	0.64	0.70	0.30	0.56	0.52	0.36	0.28
2	.14	.30	.34	.70	.38	.68	1.00	.30	.54	.50	.36	.28
3	.14	.30	.32	.70	.28	.98	.94	.30	.50	.42	.36	.24
4	.14	.40	.32	.70	.28	.86	.68	.40	.46	.38	.48	.22
5	.14	.60	.32	.68	.28	.76	.66	.40	.42	.36	.60	.20
6	.14	.56	.32	.66	.28	.68	.58	.80	.40	.34	.80	.20
7	.14	.56	.30	.60	.28	.60	.50	.64	.38	.30	.84	.20
8	.14	.60	.30	.60	.30	.68	.50	.62	.40	.28	.76	.20
9	.12	.82	.30	.58	.30	.68	.54	.60	.40	.36	.56	.20
10	.12	.80	.30	.58	.30	.80	.52	.60	.38	.34	.50	.20
11	.14	.68	.30	.48	.30	.74	.50	.50	.36	.30	.42	.30
12	.14	1.02	.30	.48	.30	.70	.64	.48	.30	.28	.40	.40
13	.14	.92	.28	.48	.30	.64	.58	.62	.50	.24	.40	.32
14	.14	.62	.28	.50	.42	.60	.58	.84	.52	.30	.40	.30
15	.14	.62	.28	.50	.58	.54	.76	.80	.64	.36	.36	.30
16	.14	.56	.74	.52	.80	.58	.68	.70	.60	.46	.34	.30
17	.14	.48	.56	.54	.80	.60	.60	1.08	.56	.42	.34	.26
18	.14	.46	.52	.54	1.18	.56	.54	.80	.54	.36	.34	.24
19	.14	.46	.50	.52	1.12	.56	.54	.70	.58	.30	.30	.24
20	.14	.46	.42	.52	1.09	.66	.52	.64	.92	.30	.32	.22
21	.14	.44	.38	.52	.78	.60	.50	.56	.76	.28	.60	.20
22	.14	.44	.36	.52	.70	.60	.48	.50	.68	.26	.50	.20
23	.14	.44	.32	.48	.68	.56	.44	.50	.66	.30	.60	.20
24	.14	.44	.30	.48	.56	.81	.42	.50	.64	.46	.68	.20
25	.14	.58	.28	.40	.64	.66	.38	.50	.54	.70	.56	.18
26	.14	.52	.28	.40	.64	.60	.38	.54	.50	.80	.40	.18
27	.14	.50	.30	.38	-	.66	.34	.50	.48	.54	.36	.18
28	.14	.38	.28	.38	.92	.68	.34	.54	.70	.54	.32	.18
29	.52	.38	.28	.38	.80	.66	.30	.50	.56	.54	.30	.18
30	.50	.38	.28	.38	-------	.62	.30	.50	.52	.54	.30	.18
31	.30	-------	.28	.38	-------	.60	-------	.70	-------	.40	.28	-------

Note.--No reading Feb. 27.

Lake Carnegie at Princeton--Continued

Daily gage height at 8 a.m., in feet, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.20	0.20	0.48	1.30	0.62	0.60	0.54	0.38	-	0.12	0.16	0.18
2	.20	.20	.42	.86	.62	.52	.68	.46	-	.12	.16	.18
3	.20	.20	.38	.60	.62	.52	.62	.82	-	.12	.16	.18
4	.20	.30	.46	.60	.62	.52	.59	.60	-	.12	.20	.18
5	.20	.26	.44	.58	.64	.56	.54	.54	-	.12	.18	.18
6	.20	.24	.44	1.30	.64	.66	.66	.54	-	.12	.18	.22
7	.20	.28	.44	.90	.68	.62	.68	.50	-	.12	.18	.20
8	.20	.28	.38	.76	.68	.60	.68	.50	-	.12	.18	.30
9	.20	.28	.36	.66	.66	.56	.60	.48	-	.12	.18	.30
10	.20	.28	.34	.60	.66	.50	.58	.46	-	.12	.18	.30
11	.20	.26	.30	.56	.60	.56	.52	.46	-	.14	.18	.30
12	.20	.26	.30	.50	.56	.72	.50	.46	-	.14	.16	.20
13	.20	.30	.28	.48	.56	.68	.48	.46	-	.54	.16	.20
14	.20	.26	.28	.46	.56	.60	.50	.46	-	.42	.16	.24
15	.20	.26	.28	.40	.72	.56	.50	.46	-	.36	.16	.26
16	.20	.26	.34	.40	.60	.52	.48	.42	-	.34	.16	.30
17	.20	.26	.58	.40	.56	.50	.50	.42	-	.32	.16	.30
18	.20	.24	.60	.38	.66	.54	.42	.38	-	.58	.16	.30
19	.20	.24	.58	.38	.56	.50	.76	.36	-	.40	.16	.20
20	.20	.24	.56	.38	.66	.48	.59	.34	-	.32	.16	-
21	.20	.24	.56	.34	.72	.54	.56	.50	-	.30	.16	.10
22	.20	.26	.50	1.09	.68	.58	.54	.50	-	.26	.16	.10
23	.20	.26	.40	.80	1.00	.68	.70	.81	-	.24	.16	.18
24	.20	.26	.30	.90	.76	.78	.68	.64	-	.20	.16	.18
25	.30	.24	.30	.78	.68	.70	.64	.62	-	.20	.16	.14
26	.28	.24	.30	.70	.66	.66	.56	.60	-	.20	.14	.16
27	.26	.30	.30	.86	.56	.60	.50	.50	-	.18	.14	.12
28	.26	.30	.30	1.08	.50	.54	.48	.46	-	.16	.14	.09
29	.26	.26	.34	.90	-------	.52	.46	.42	-	.16	.16	.18
30	.24	.48	1.00	.78	-------	.50	.44	.36	-	.16	.18	.32
31	.24	-------	2.00	.66	-------	.46	-------	.36	-------	.16	.18	-------

Note.--No readings available June 1-30, Sept. 20; gate reported open Sept. 20-28.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.30	0.32	0.20	0.34	0.56	0.34	0.60	0.48	0.42	0.12	-	0.50
2	.30	.36	.20	.30	.60	.36	.46	.48	.52	.12	-	.42
3	.30	.36	.18	.30	.74	.28	.40	.48	.50	.10	1.09	.50
4	.24	.34	.18	.30	.60	.28	.38	.44	.46	.10	.86	.50
5	.24	.26	.18	.30	.56	.28	.36	.42	.50	.10	.84	.42
6	.20	.24	.18	.30	.52	.28	.36	.40	.48	-	.64	.38
7	.20	.24	.18	.28	.46	.28	.34	.38	.46	-	.50	.36
8	.20	.20	.18	.28	.46	.34	.34	.38	.40	-	.40	.34
9	.20	.20	.18	.28	.42	.58	.34	.36	.32	-	-	.30
10	.20	.20	.18	.32	.62	.44	.34	.30	.28	.82	-	.28
11	.20	.20	.18	.50	.58	.38	.34	.30	.26	.78	-	.28
12	.18	.20	.20	.38	.50	.34	.32	.30	.26	1.00	-	.30
13	.16	.20	.28	.36	.48	.44	.32	.26	.18	.72	-	.30
14	.16	.20	.48	.36	.82	.62	.32	.26	.18	.70	-	.52
15	.16	.20	.38	.36	1.16	.54	.32	.24	.22	.50	-	.46
16	.16	.20	.30	.36	.90	.50	.30	.34	.24	.50	.12	.46
17	.16	.20	.28	.34	.82	.48	.30	.34	.26	.64	.16	.44
18	.16	.18	.22	.34	.68	.42	.30	.34	.22	.62	.18	.44
19	.16	.18	.30	.34	.60	.42	.30	.42	.22	.60	.18	.40
20	.16	.18	.38	.30	.50	.42	.30	.50	.22	.48	.26	.36
21	.16	.18	.30	.30	.48	.36	.38	.50	.26	.38	.28	.30
22	.16	.16	.30	.28	.48	.59	.38	.44	.26	.30	.28	.30
23	.16	.16	.30	.28	.48	1.09	.38	.44	.26	.20	.46	.32
24	.16	.16	.38	.30	.38	.80	.38	.44	.26	.09	.40	.32
25	.16	.18	.32	.30	.34	.64	.38	.44	.20	.06	.36	.32
26	.36	.18	.30	.30	.34	.64	.38	.30	.18	.04	.30	.28
27	.24	.18	.64	.30	.34	.76	.38	.30	.17	.04	.28	.28
28	-	.16	.62	.30	.34	.70	.46	.28	.17	.02	.24	.28
29	.24	.20	.52	.30	-------	.74	.48	.34	.17	0	.24	.26
30	.24	.20	.40	.36	-------	.70	.48	.50	.12	0	.30	.28
31	.30	-------	.36	.40	-------	.62	-------	.42	-------	0	.80	-------

Note.--Water below crest of dam July 6-9, Aug. 1, 2, 9-15; gate reported open June 10 to Aug. 15.

Millstone River near Kingston

Location.--Lat 40°23'05", long 74°37'29", at Princeton sewage-disposal plant, 1 mile north of Kingston, Middlesex County, and 1 mile downstream from Heathcote Brook.

Drainage area.--171 sq mi.

Records available.--May 1933 to September 1949 (discontinued).

Gage.--Water-stage recorder. Datum of gage is 38.00 ft above mean sea level (New Jersey Geological Survey bench mark).

Average discharge.--16 years, 239 cfs.

Extremes.--1933-49: Maximum discharge, 9,820 cfs Sept. 21, 1938 (gage height, 14.12 ft, from floodmark in recorder shelter), from rating curve extended above 4,100 cfs by logarithmic plotting; minimum daily, about 2 cfs Aug. 21, 23, Sept. 5, 7, 1944.

Peak discharge (base, 2,000 cfs).--
1946: Nov. 29 (1:30 p.m.) 3,140 cfs (9.02 ft); Dec. 26 (2:30 p.m.) 2,500 cfs (8.17 ft); Mar. 27 (10:30 a.m.) 2,490 cfs (8.16 ft); June 2 (8:30 p.m.) 7,080 cfs (12.79 ft); July 23 (12 p.m.) 3,230 cfs (9.14 ft).
1947: Apr. 5 (10:30 p.m.) 1,320 cfs (6.25 ft), (annual maximum below base).
1948: Nov. 9 (1 a.m.) 2,580 cfs (8.38 ft); Nov. 12 (1:30 p.m.) 3,230 cfs (9.09 ft); Apr. 1 (6:30 p.m.) 2,660 cfs (8.35 ft).
1949: Dec. 30 (12 p.m.) 7,230 cfs (12.86 ft); Jan. 6 (12 m.) 2,130 cfs (7.57 ft).

Remarks.--Water was probably interchanged between river and Delaware & Raritan Canal above station. Flow slightly regulated by Lake Carnegie, 2 miles above station, and at low flow, by grist mill.

Cooperation.--Water-stage recorder inspected by employee of borough of Princeton.

Daily discharge, in cubic feet per second, 1945-49

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	76	91	1,160	1,330	268	525	261	76	186	110	97	89
2	72	106	663	685	268	407	233	95	3,680	120	86	79
3	59	106	446	468	209	303	203	81	3,520	118	82	71
4	53	100	389	340	166	258	202	77	1,420	88	79	65
5	49	91	328	283	106	227	188	84	686	95	74	63
6	49	91	542	285	84	213	169	97	434	79	72	60
7	164	82	632	374	164	211	129	97	328	58	106	57
8	188	60	431	332	142	189	120	81	251	55	138	54
9	159	29	334	267	145	222	131	76	200	52	120	53
10	147	a24	288	361	152	206	125	59	159	49	108	54
11	112	a24	256	320	129	187	116	62	153	48	91	49
12	91	a26	213	330	110	164	99	99	324	52	82	44
13	74	41	192	307	100	129	88	166	288	49	84	43
14	55	125	184	249	118	114	77	205	292	47	91	40
15	44	192	152	201	166	344	76	644	376	46	82	41
16	46	182	129	156	125	454	51	456	227	44	72	41
17	35	129	100	161	125	308	51	697	176	43	90	39
18	32	99	99	138	102	a450	55	1,110	128	42	368	43
19	35	112	99	102	88	a800	42	767	127	44	539	45
20	30	359	97	68	145	a400	52	442	127	45	334	41
21	25	229	97	76	180	a300	51	308	142	110	217	54
22	27	606	91	95	180	a240	47	272	136	436	171	71
23	46	483	89	112	196	a200	43	253	116	2,110	125	66
24	142	312	84	89	184	a180	a40	197	100	2,230	100	102
25	166	260	104	62	179	a250	45	140	89	1,200	84	213
26	184	214	1,680	79	161	262	114	95	79	628	76	213
27	164	184	1,520	95	189	1,570	147	176	66	352	66	201
28	136	197	824	77	712	707	129	263	88	240	69	174
29	127	2,290	697	53	-------	469	97	227	194	190	77	129
30	106	1,950	976	84	-------	357	86	212	161	147	183	97
31	89	-------	1,650	228	-------	305	-------	164	-------	116	120	-------

a No gage-height record; discharge computed on basis of recorded range in stage and records for station at Blackwells Mills.

Millstone River near Kingston--Continued

Daily discharge, in cubic feet per second, 1945-49

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	84	65	71	141	240	121	120	827	192	65	46	60
2	81	66	58	119	203	168	200	527	168	60	42	293
3	79	72	60	115	186	366	700	456	133	52	35	186
4	71	74	54	168	181	460	443	593	115	45	32	117
5	60	66	52	204	182	476	718	780	97	45	h29	84
6	54	65	49	212	170	460	828	1,000	94	46	29	76
7	58	53	48	163	188	532	516	636	170	h40	h28	68
8	60	60	45	154	186	516	368	438	406	48	30	65
9	55	58	47	133	137	381	300	312	383	57	35	61
10	84	58	54	114	143	355	286	251	282	65	94	53
11	106	65	49	104	135	325	248	217	223	89	108	h48
12	116	55	53	127	123	298	221	194	175	102	84	45
13	102	53	59	156	114	291	199	176	133	73	64	40
14	97	51	39	182	114	690	188	165	131	65	50	35
15	86	57	35	254	133	527	199	172	450	70	h45	56
16	76	53	39	426	170	361	230	163	187	79	42	100
17	60	63	52	353	197	294	376	150	135	73	152	70
18	63	76	54	279	201	242	276	188	115	70	184	50
19	54	82	47	242	194	212	233	127	115	84	131	45
20	54	84	42	540	154	187	199	303	108	106	248	40
21	59	76	227	587	114	163	190	284	365	121	451	40
22	54	127	402	340	117	163	224	516	177	179	175	45
23	55	136	398	260	117	165	204	680	143	159	139	65
24	54	131	345	229	114	161	186	521	117	152	104	60
25	58	123	250	209	114	228	172	361	112	133	84	58
26	58	110	197	204	117	222	177	478	94	112	84	50
27	58	95	181	497	129	190	175	282	84	82	167	50
28	60	85	110	303	131	161	150	231	71	57	154	45
29	68	77	110	276	-------	150	145	209	62	52	141	48
30	66	72	163	240	-------	121	125	368	61	48	108	40
31	63	-------	147	250	-------	114	-------	223	-------	48	85	-------

h Computed from staff-gage reading.

Note.--No recorder graph Nov. 26-28, Dec. 15, Jan. 22, 23, Apr. 1-3, July 29-31, Aug. 1-4, 6, 8, 9, 14, 16, Sept. 12-14, 16-24, 27, 28, 30; discharge computed on basis of recorded range in stage, interpolation, and records for station at Blackwells Mills.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a30	154	152	138	90	586	1,310	106	326	267	183	84
2	a24	135	133	621	85	681	1,280	112	285	215	186	77
3	a22	110	125	709	77	1,160	907	131	248	189	191	74
4	a21	383	123	574	68	852	552	191	212	172	250	70
5	a20	474	127	526	68	f552	393	433	182	152	474	65
6	a40	335	131	457	70	a400	328	693	158	133	738	64
7	a22	325	127	384	82	a500	298	697	165	123	748	62
8	a26	794	135	311	85	552	285	884	205	112	518	67
9	a24	1,260	135	292	77	f444	262	439	190	101	326	70
10	a23	692	127	309	57	772	237	332	165	90	230	112
11	a22	478	127	250	48	661	244	258	147	87	189	152
12	a22	1,920	121	287	76	f603	444	217	129	76	198	135
13	a22	980	110	437	74	f465	369	765	262	84	218	139
14	a21	709	102	568	209	400	378	833	348	137	192	127
15	a21	452	96	436	654	346	603	680	473	182	179	104
16	a21	326	424	378	766	398	470	588	387	213	169	84
17	21	255	354	324	1,190	416	384	1,060	313	183	137	77
18	26	232	300	274	1,820	369	322	674	243	147	150	68
19	33	204	265	216	1,660	346	270	504	404	112	117	64
20	38	156	210	193	1,440	422	243	365	995	94	152	65
21	29	152	178	220	775	346	213	288	644	102	265	60
22	28	141	150	252	538	324	205	237	452	127	204	61
23	24	207	143	246	a424	322	193	211	412	159	344	60
24	a20	249	139	222	a346	518	163	182	340	286	398	57
25	a16	375	121	207	f326	405	239	256	286	455	230	58
26	15.6	300	129	182	486	348	238	309	248	334	184	56
27	19.0	269	121	158	444	367	172	250	302	277	156	60
28	21	240	119	135	884	609	129	285	527	217	133	60
29	251	207	112	104	812	457	121	243	317	230	117	61
30	229	172	112	101	-------	361	117	343	274	226	102	67
31	119	-------	112	101	-------	276	-------	540	-------	186	92	-------

a No gage-height record; discharge computed on basis of discharge measurement and records for station at Blackwells Mills.

f Computed on basis of partly-estimated gage-height record.

Millstone River near Kingston--Continued

Daily discharge, in cubic feet per second, 1945-49

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	68	54	230	1,990	444	330	344	175	125	26	33	99
2	67	58	224	910	400	338	429	211	112	30	37	84
3	67	97	182	560	346	338	350	570	99	32	42	82
4	65	150	260	373	367	338	298	341	92	33	50	76
5	64	70	250	440	452	373	252	254	84	32	57	83
6	68	90	230	1,690	478	434	656	215	79	30	84	154
7	70	99	215	949	538	405	486	256	68	33	97	133
8	82	108	165	642	591	365	414	220	58	31	79	106
9	79	114	131	465	473	305	324	182	56	28	50	133
10	71	125	110	365	444	264	265	191	55	28	42	84
11	68	117	92	313	365	425	230	206	54	30	39	46
12	63	94	87	281	309	526	208	199	46	35	37	38
13	60	104	77	255	301	462	197	191	49	324	37	49
14	52	89	73	237	342	373	217	179	53	205	39	77
15	47	82	76	220	317	296	216	184	53	129	40	84
16	49	74	129	201	320	257	197	165	47	139	37	104
17	50	74	314	190	460	234	180	147	48	212	35	102
18	41	64	369	185	354	232	178	133	46	368	38	99
19	52	64	317	188	318	230	391	119	45	166	40	150
20	58	84	246	180	608	217	296	152	55	119	35	101
21	58	73	226	188	546	230	257	236	56	102	32	25
22	54	85	198	1,270	529	315	240	200	50	84	31	44
23	57	101	207	802	1,050	305	391	740	46	56	31	73
24	65	87	185	873	627	642	358	428	44	50	42	74
25	84	77	156	690	499	483	344	376	42	45	36	81
26	96	76	125	603	393	382	272	313	39	42	30	77
27	85	97	115	823	320	322	225	243	36	39	25	65
28	94	104	101	1,300	324	283	199	201	33	36	22	54
29	85	193	125	1,040	-------	250	185	177	29	33	70	62
30	65	254	2,610	674	-------	222	156	156	26	32	81	163
31	58	-------	5,040	478	-------	215	-------	137	-------	82	87	-------

Note.--No gage-height record June 18, 19, 28-30, July 1-12, 26-31, Aug. 1-4, 9-28, Sept. 21; discharge computed on basis of 2 discharge measurements, occasional staff-gage readings, and records for Millstone River at Blackwells Mills and Assunpink Creek at Trenton.

Monthly and annual discharge, in cubic feet per second, 1945-49

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	2,782	188	25	89.7		
November	8,794	2,290	24	293		
December	14,558	1,680	84	470		
Calendar year 1945	94,493	2,340	8	259		
January 1946	7,807	1,330	53	252		
February	4,893	712	84	175		
March	10,951	1,570	114	353		
April	3,267	261	40	109		
May	7,778	1,110	59	251		
June	14,263	3,680	66	475		
July	9,043	2,230	42	292		
August	4,083	539	66	132		
September	2,391	213	39	79.7		
Water year 1945-46	90,610	3,680	24	248		
October 1946	2,153	116	54	69.5		
November	2,308	136	51	76.9		
December	3,487	402	35	112		
Calendar year 1946	72,424	3,680	35	198		
January 1947	7,581	587	104	245		
February	4,304	240	114	154		
March	9,100	690	114	294		
April	8,596	828	120	287		
May	11,828	1,000	127	382		
June	5,099	450	61	170		
July	2,477	179	40	79.9		
August	3,200	451	28	103		
September	2,093	293	35	69.8		
Water year 1946-47	62,226	1,000	28	170		

Millstone River near Kingston--Continued

Monthly and annual discharge, in cubic feet per second, 1945-49

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1947	1,290.6	251	15.6	41.6		
November	12,686	1,920	110	423		
December	4,860	424	96	157		
Calendar year 1947	73,114.6	1,920	15.6	200		
January 1948	9,562	709	101	308		
February	13,731	1,820	48	473		
March	15,258	1,160	276	492		
April	11,369	1,310	117	379		
May	13,056	1,060	106	421		
June	9,639	995	129	321		
July	5,468	455	76	176		
August	7,770	748	92	251		
September	2,361	152	56	78.7		
Water year 1947-48	107,050.6	1,920	15.6	292		
October 1948	2,037	96	41	65.7		
November	2,958	254	54	98.6		
December	12,865	5,040	73	415		
Calendar year 1948	106,074	5,040	41	290		
January 1949	19,375	1,990	180	625		
February	12,525	1,050	301	447		
March	10,891	805	215	351		
April	8,755	656	156	292		
May	7,497	740	119	242		
June	1,725	125	26	57.5		
July	2,581	368	26	83.3		
August	1,435	97	22	46.3		
September	2,602	163	25	86.7		
Water year 1948-49	85,246	5,040	22	234		

Millstone River at Blackwells Mills

Location.--Lat 40°28'30", long 74°34'34", on left bank just downstream from highway bridge at Blackwells Mills, Somerset County, a quarter of a mile downstream from Middlebrush Brook.

Drainage area.--258 sq mi.

Records available.--June 1903 to December 1904 (gage heights only), August 1921 to September 1950. Published as "at Millstone" 1903-4.

Gage.--Water-stage recorder. Concrete control since Nov. 18, 1933. Datum of gage is 26.97 ft above mean sea level, datum of 1929. June 1903 to December 1904 staff gage at bridge 1¼ miles downstream at different datum. Aug. 4, 1921, to Aug. 16, 1928, staff gage at present site and datum.

Average discharge.--28 years (1922-50), 366 cfs.

Extremes.--1921-50: Maximum discharge, 18,300 cfs Sept. 21, 1938 (gage height, 15.29 ft, from floodmark), by slope-area method; minimum, about 5 cfs Sept. 16, 1923.

Peak discharge (base, 3,000 cfs).--
1946: Nov. 29 (8 to 9 p.m.) 4,790 cfs (8.91 ft); Dec. 26 (10 to 11 p.m.) 4,520 cfs (8.68 ft); Jan. 1 (2 to 3 a.m.) 3,050 cfs (7.17 ft); Mar. 27 (3 p.m.) 3,090 cfs (7.22 ft); June 3 (2 a.m.) 10,500 cfs (12.37 ft); July 24 (7 to 8 a.m.) 3,950 cfs (8.15 ft).
1947: Apr. 6 (4 to 5 a.m.) 2,130 cfs (5.79 ft), (annual maximum below base).
1948: Nov. 9 (5 a.m.) 3,730 cfs (7.93 ft); Nov. 12 (7 p.m.) 3,970 cfs (8.17 ft); Feb. 18 (11:30 p.m.) 3,100 cfs (8.38 ft, ice jam); Apr. 2 (2 to 3 a.m.) 3,330 cfs (7.51 ft); June 20 (4:30 p.m.) 3,090 cfs (7.23 ft).
1949: Dec. 31 (6:30 a.m.) 14,000 cfs (13.84 ft); Jan. 6 (5 p.m.) 3,680 cfs (7.88 ft).
1950: Feb. 15 (4:30 p.m.) 3,500 cfs (7.70 ft); Mar. 23 (10 p.m.) 3,430 cfs (7.62 ft).

Remarks.--Water was probably interchanged between river and Delaware & Raritan Canal.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	122	122	2,260	2,700	388	839	415	116	205	160	138	145
2	122	132	1,150	1,290	347	642	378	128	4,420	235	128	125
3	106	128	753	777	278	523	352	119	8,050	183	119	112
4	98	122	656	587	222	457	322	109	3,340	138	112	101
5	96	116	554	505	164	415	292	122	1,380	128	106	90
6	93	116	870	535	132	388	258	128	690	125	106	85
7	262	106	1,080	676	245	367	213	135	511	103	145	85
8	297	96	747	568	200	327	196	116	388	93	175	80
9	231	73	554	481	192	394	213	109	302	103	156	78
10	213	60	481	670	204	347	200	93	245	119	138	78
11	175	58	427	529	179	292	183	96	226	103	128	73
12	153	78	342	542	156	258	164	122	535	85	112	67
13	132	88	292	505	153	222	153	249	399	83	116	65
14	116	188	288	404	182	204	138	217	357	80	125	62
15	96	273	245	337	258	640	138	1,160	505	78	119	62
16	96	245	b220	245	183	795	112	628	327	78	106	62
17	85	183	b195	235	183	511	103	1,190	245	73	115	60
18	80	156	168	226	160	726	103	1,980	213	69	505	58
19	80	185	164	179	138	1,440	90	1,360	192	69	718	58
20	76	837	168	b145	204	735	88	753	183	65	501	58
21	69	427	160	138	240	529	80	511	196	99	312	65
22	69	1,130	156	153	222	421	80	439	192	556	226	93
23	73	1,040	153	160	240	337	76	378	164	2,570	175	78
24	176	542	138	153	226	297	76	297	142	3,570	149	168
25	204	433	170	122	213	451	78	231	125	2,200	128	373
26	240	352	3,120	132	200	468	158	188	112	919	119	249
27	209	292	3,310	142	312	2,840	192	375	101	487	109	231
28	179	384	1,510	132	*1,300	1,620	171	457	97	337	103	171
29	160	3,540	1,210	106	-------	771	142	352	231	254	154	142
30	153	3,610	1,620	131	-------	614	132	307	196	196	390	116
31	128	-------	2,410	378	-------	511	-------	254	-------	164	204	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Millstone River at Blackwells Mills--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	119	76	83	196	399	164	168	1,560	278	90	58	71
2	109	76	71	183	312	226	273	1,070	226	85	52	390
3	88	80	71	192	273	771	1,290	716	196	73	44	283
4	83	83	71	249	268	702	690	1,030	171	67	41	142
5	76	80	69	254	268	690	1,120	1,430	149	62	38	98
6	71	78	69	268	240	765	1,790	1,720	138	62	36	93
7	67	73	67	226	245	902	877	1,080	254	60	34	85
8	69	73	67	222	245	828	580	728	723	71	38	78
9	65	78	67	209	200	594	499	511	664	85	41	76
10	84	73	71	182	200	561	469	404	421	101	100	71
11	116	76	71	179	192	542	388	342	332	96	96	65
12	116	78	69	231	175	505	342	297	249	116	76	60
13	119	73	80	258	168	481	302	258	188	96	62	52
14	106	73	71	288	171	1,210	273	235	231	85	50	46
15	98	73	48	481	196	1,090	297	245	897	109	46	55
16	93	73	52	817	240	607	373	226	317	138	43	138
17	80	73	62	635	288	481	635	200	209	98	158	93
18	76	88	67	457	288	388	427	245	171	93	204	62
19	73	90	62	378	278	337	342	204	175	93	128	60
20	71	93	60	1,060	209	292	297	580	171	112	245	52
21	73	85	405	1,180	156	258	278	475	736	119	645	50
22	73	135	656	548	188	245	367	856	288	250	245	58
23	73	156	469	399	183	245	302	1,100	200	188	149	85
24	73	135	439	357	168	240	268	771	164	153	112	78
25	71	132	327	317	164	362	235	568	156	138	93	73
26	76	122	245	315	168	347	249	867	135	116	76	71
27	80	106	179	747	179	273	245	468	125	93	159	62
28	78	96	164	505	175	281	204	362	106	73	149	58
29	80	88	171	427	-------	222	196	317	98	65	128	60
30	78	83	258	357	-------	188	179	658	93	60	109	52
31	78	-------	217	463	-------	171	-------	352	-------	60	90	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	41	292	204	162	138	897	1,850	231	728	394	196	96
2	39	204	183	1,080	138	1,100	2,840	231	535	312	213	93
3	38	179	179	1,230	135	*2,190	1,670	263	427	263	245	88
4	38	969	171	844	125	1,530	900	332	352	226	322	85
5	44	1,130	168	716	128	931	621	637	292	200	499	85
6	48	552	171	621	128	642	505	1,280	249	175	907	83
7	43	481	164	529	132	676	439	1,170	249	160	876	83
8	39	1,520	179	445	138	902	404	1,730	327	153	635	85
9	38	3,160	179	427	128	696	373	861	278	138	404	85
10	38	1,260	156	469	116	1,340	322	587	240	125	288	109
11	36	777	156	378	102	1,140	327	404	217	116	222	179
12	38	3,130	149	332	109	976	740	332	196	106	240	138
13	38	2,470	135	645	128	735	587	688	390	106	283	142
14	38	1,110	125	881	516	580	563	2,060	433	179	231	135
15	34	702	119	621	b1,400	505	1,040	1,180	568	183	196	122
16	36	511	693	b530	b1,200	614	722	973	542	240	188	103
17	38	399	560	445	b1,800	642	554	1,930	439	209	160	96
18	39	373	415	373	*b2,700	529	451	1,170	332	171	156	88
19	43	327	360	292	b2,500	487	383	795	647	138	142	85
20	43	273	283	268	b2,200	649	342	574	2,580	119	158	85
21	46	245	231	297	b1,200	511	302	463	1,730	109	499	83
22	48	217	200	367	b850	463	273	373	812	149	273	80
23	46	325	188	332	b650	480	258	322	759	196	333	80
24	39	382	183	254	487	822	226	268	587	307	487	80
25	38	607	156	288	561	587	268	503	475	469	288	80
26	39	421	142	263	855	487	352	535	378	415	213	78
27	41	362	171	231	747	543	327	394	476	317	171	78
28	49	322	164	204	1,430	1,040	283	383	916	263	145	80
29	369	278	145	168	1,650	696	255	347	614	254	128	80
30	362	235	142	160	-------	535	231	1,170	410	263	112	83
31	278	-------	145	149	-------	421	-------	1,480	-------	209	101	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Millstone River at Blackwells Mills--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	85	78	245	4,780	702	499	450	213	164	39	46	71
2	85	76	231	1,910	587	499	600	278	149	44	46	65
3	80	78	204	890	493	500	500	690	135	46	52	60
4	78	149	318	580	554	500	400	504	122	48	69	58
5	76	101	322	794	728	550	350	342	116	46	71	58
6	73	93	263	3,120	741	650	900	288	109	46	78	366
7	78	112	240	*2,240	851	600	700	367	101	48	93	183
8	80	112	209	1,080	1,040	550	550	317	90	46	85	138
9	85	109	175	728	789	450	450	281	88	44	69	132
10	80	116	156	554	728	400	350	254	88	42	60	122
11	80	125	138	457	580	650	300	288	88	44	56	83
12	80	109	125	404	475	800	300	254	83	48	52	69
13	78	109	122	367	481	700	300	240	80	369	52	69
14	73	106	119	337	548	600	300	213	80	257	56	101
15	67	98	119	307	499	450	300	245	76	149	56	135
16	67	93	164	288	493	400	250	213	73	156	54	138
17	67	93	452	278	819	350	250	183	71	188	52	138
18	62	88	529	263	574	350	250	168	69	553	56	116
19	69	85	399	268	487	350	550	156	69	222	58	128
20	73	109	337	254	1,050	350	400	216	71	153	50	139
21	76	101	297	260	912	350	350	388	73	128	50	38
22	76	98	268	2,300	817	450	350	278	69	112	50	46
23	73	112	268	1,770	1,920	1,100	550	1,210	67	88	48	101
24	78	109	254	1,520	1,090	900	500	658	65	76	48	93
25	90	98	222	1,260	789	700	450	523	62	71	54	88
26	103	96	b200	1,020	621	550	404	433	58	67	50	85
27	98	106	168	1,500	499	450	337	352	54	60	43	76
28	98	125	160	*2,110	475	400	292	288	50	54	39	71
29	101	208	265	2,120	-------	350	249	235	44	50	52	77
30	93	302	4,260	1,100	-------	300	213	204	39	48	58	317
31	85	-------	11,800	753	-------	300	-------	179	-------	46	60	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Mar. 3 to Apr. 25; discharge computed on basis of records for station near Kingston and stations on other nearby streams.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	175	179	88	226	587	192	548	373	414	41	101	332
2	138	200	88	209	1,100	183	404	347	528	38	65	222
3	125	192	85	217	1,270	b140	347	347	388	39	548	245
4	103	168	83	222	676	142	362	327	476	36	1,480	302
5	85	142	80	196	517	128	317	292	427	44	932	204
6	80	122	80	183	433	138	292	273	347	192	621	171
7	78	109	80	222	427	128	268	245	283	168	394	160
8	78	101	83	213	342	164	254	204	217	88	297	142
9	71	93	80	179	492	491	222	200	164	76	235	122
10	67	88	78	257	753	322	213	171	138	722	183	112
11	69	85	78	451	594	273	200	153	112	1,340	168	116
12	60	85	93	307	475	283	196	145	98	1,430	168	119
13	50	83	283	273	415	645	188	138	93	812	156	138
14	48	93	399	297	1,460	746	183	125	88	709	67	292
15	48	88	268	249	3,100	505	179	122	96	415	48	240
16	46	85	200	231	*2,480	427	171	196	103	529	54	217
17	48	83	153	200	1,180	378	160	179	112	663	71	217
18	48	80	135	204	777	322	153	160	96	511	71	188
19	48	80	230	217	580	268	149	426	88	433	88	156
20	52	78	273	188	421	245	156	410	85	327	135	153
21	54	71	231	168	b300	492	204	322	96	245	164	138
22	54	69	217	160	307	784	196	249	96	183	116	128
23	56	73	200	160	297	*2,440	183	231	88	142	192	125
24	56	67	288	164	292	2,390	188	183	78	122	204	112
25	56	73	222	168	312	995	226	168	71	112	156	106
26	145	76	196	171	268	735	235	160	65	101	122	103
27	142	80	1,010	168	b210	1,110	240	168	60	93	103	101
28	112	80	791	175	188	1,260	360	153	52	85	93	98
29	109	83	451	226	-------	1,280	352	278	46	69	88	98
30	106	90	342	268	-------	876	327	404	44	71	101	98
31	149	-------	273	284	-------	635	-------	278	-------	128	529	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Backwater from moss Oct. 1-18, June 12 to Sept. 30.

Millstone River at Blackwells Mills--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	4,389	297	69	142	0.550	0.63
November	15,112	3,610	58	504	1.95	2.18
December	25,571	3,310	138	825	3.20	3.69
Calendar year 1945	158,754	3,610	39	435	1.69	22.88
January 1946	13,883	2,700	106	448	1.74	2.00
February	7,121	1,300	132	254	.984	1.03
March	19,381	2,840	204	625	2.42	2.79
April	5,296	415	76	177	.686	.76
May	12,719	1,980	93	410	1.59	1.83
June	24,269	8,050	97	809	3.14	3.50
July	13,522	3,570	65	436	1.69	1.95
August	5,937	718	103	192	.744	.86
September	3,290	373	58	110	.426	.47
Water year 1945-46	150,490	8,050	58	412	1.60	21.69
October 1946	2,612	119	65	84.3	.327	.38
November	2,698	156	73	89.9	.348	.39
December	4,878	656	48	157	.609	.70
Calendar year 1946	115,606	8,050	48	317	1.23	16.66
January 1947	12,581	1,180	179	406	1.57	1.81
February	6,236	399	156	223	.864	.90
March	14,918	1,210	164	481	1.86	2.15
April	13,955	1,790	168	465	1.80	2.01
May	19,870	1,720	200	641	2.48	2.86
June	8,261	897	93	275	1.07	1.19
July	3,107	250	60	100	.388	.45
August	3,553	645	34	115	.446	.51
September	2,717	390	46	90.6	.351	.39
Water year 1946-47	95,386	1,790	34	261	1.01	13.74
October 1947	2,144	369	34	69.2	.268	.31
November	23,213	3,160	179	774	3.00	3.35
December	6,616	693	119	213	.826	.95
Calendar year 1947	117,171	3,160	34	321	1.24	16.88
January 1948	14,001	1,230	149	452	1.75	2.02
February	22,392	2,700	103	772	2.99	3.23
March	24,346	2,190	421	785	3.04	3.51
April	18,388	2,840	226	613	2.38	2.65
May	23,866	2,060	231	763	2.96	3.41
June	17,178	2,580	196	573	2.22	2.48
July	6,664	469	108	215	.833	.96
August	9,306	907	101	300	1.16	1.34
September	2,867	179	78	95.6	.371	.41
Water year 1947-48	170,781	3,160	34	467	1.81	24.62
October 1948	2,487	103	62	80.2	.311	.36
November	3,394	302	76	113	.438	.49
December	23,029	11,800	119	743	2.88	3.32
Calendar year 1948	164,246	11,800	62	449	1.74	23.68
January 1949	35,592	4,780	254	1,148	4.45	5.13
February	20,342	1,920	475	726	2.81	2.93
March	16,048	1,100	300	518	2.01	2.31
April	12,145	900	213	405	1.57	1.75
May	10,408	1,210	156	336	1.30	1.50
June	2,503	164	39	83.4	.323	.36
July	3,389	553	39	109	.422	.49
August	1,763	93	39	56.9	.221	.25
September	3,361	366	38	112	.434	.48
Water year 1948-49	134,461	11,800	38	368	1.43	19.37
October 1949	2,556	175	46	82.5	.320	.37
November	2,996	200	67	99.9	.387	.43
December	7,158	1,010	78	231	.895	1.03
Calendar year 1949	118,261	4,780	38	324	1.26	17.03
January 1950	6,853	451	160	221	.857	.99
February	20,253	3,100	188	723	2.80	2.92
March	19,127	2,440	188	617	2.39	2.76
April	7,473	548	149	249	.965	1.08
May	7,427	426	122	240	.930	1.07
June	5,049	528	44	168	.651	.73
July	9,964	1,430	36	321	1.24	1.44
August	7,750	1,480	48	250	.969	1.12
September	4,955	332	98	165	.640	.71
Water year 1949-50	101,561	3,100	36	278	1.08	14.65

Raritan River at Bound Brook

Location.--Lat 40°33'00", long 74°33'05", on left bank 120 ft upstream from Calco Dam and Cuckold Brook, half a mile southwest of borough of Bound Brook, Somerset County, and 1 mile downstream from Millstone River.

Drainage area.--779 sq mi.

Records available.--September 1903 to March 1909, January 1945 to September 1950.

Gage.--Water-stage recorder and concrete control. Datum of gage is 18.06 ft above mean sea level, datum of 1929. September 1903 to March 1909, staff and chain gages at highway bridge 1.4 miles downstream at different datum.

Average discharge.--5 years (1945-50), 1,144 cfs (adjusted for diversion).

Extremes.--1903-9, 1945-50: Maximum discharge, 39,800 cfs Dec. 31, 1948 (gage height, 16.14 ft), from rating curve extended above 17,000 cfs; minimum, 79 cfs Aug. 28, 1949 (gage height, 0.46 ft).
A stage of 16.3 ft (from floodmark, present site and datum) occurred Sept. 22, 1938 (discharge, about 61,000 cfs).

Peak discharge (base, 12,000 cfs).--
1946: Nov. 29 (1 p.m.) 12,100 cfs (8.02 ft); Dec. 26 (10:30 p.m.) 12,500 cfs (8.20 ft); June 3 (1:30 a.m.) 28,600 cfs (13.55 ft); July 24 (1:30 a.m.) 14,900 cfs (9.18 ft).
1947: Apr. 5 (12 p.m.) 10,700 cfs (7.40 ft), (annual maximum below base).
1948: Nov. 9 (2:30 a.m.) 15,000 cfs (9.20 ft); Nov. 12 (2:30 p.m.) 14,600 cfs (9.06 ft); May 14 (5 a.m.) 14,100 cfs (8.84 ft).
1949: Dec. 31 (5 a.m.) 39,800 cfs (16.14 ft); Jan. 6 (3 p.m.) 17,600 cfs (10.14 ft).
1950: Mar. 23 (3:30 p.m.) 11,600 cfs (7.8 ft), (annual maximum below base).

Remarks.--Figures of discharge include water diverted 150 ft above dam to Calco plant and returned to river just below dam. Water diverted a mile above station by Elizabethtown Water Co. for municipal supply. Slight diurnal fluctuation at low flow.

Cooperation.--Water-stage recorder graph and record of diversion to plant furnished by Calco Chemical Division, American Cyanamid Co.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	509	406	4,590	6,750	1,150	2,620	1,260	436	791	594	476	405
2	512	408	2,840	5,320	891	2,040	1,210	452	11,900	2,960	452	354
3	511	410	2,070	2,130	691	1,840	1,280	428	19,300	1,150	435	349
4	443	405	1,890	1,790	580	1,710	1,100	394	6,660	684	416	315
5	426	376	1,660	1,630	579	1,560	1,010	423	3,720	514	404	270
6	436	358	2,480	1,840	598	1,480	903	444	2,200	466	399	253
7	886	345	3,080	2,950	1,540	1,370	802	420	1,750	440	818	259
8	889	330	2,150	2,420	915	1,560	743	405	1,450	381	1,050	258
9	725	309	1,650	1,980	771	1,780	804	397	1,190	369	577	253
10	809	296	1,520	2,840	749	1,440	753	368	963	376	464	251
11	612	327	1,380	2,010	670	1,120	663	361	922	354	437	241
12	552	549	1,080	1,990	624	972	625	586	1,820	320	394	204
13	527	531	949	1,840	596	903	616	2,740	1,420	326	373	196
14	474	603	1,050	1,480	695	850	591	964	1,130	306	532	190
15	437	819	948	1,310	1,120	2,010	560	3,250	1,220	275	454	199
16	430	809	768	1,000	593	2,280	534	1,590	942	274	387	186
17	409	613	576	972	697	1,510	484	2,680	800	253	457	180
18	384	557	b660	1,020	624	2,320	476	7,760	760	241	1,210	173
19	378	642	b700	915	515	4,480	444	4,740	699	224	1,250	172
20	358	3,590	b700	623	519	2,170	424	2,430	659	218	995	171
21	346	1,590	b660	804	672	1,630	430	1,910	689	343	652	202
22	335	5,420	b620	848	618	1,380	410	1,690	669	2,140	533	321
23	341	4,430	b620	692	694	1,190	374	1,260	581	9,540	468	274
24	493	2,060	656	692	662	1,060	379	1,060	513	9,300	420	377
25	569	1,620	706	733	606	1,480	379	887	459	3,780	387	1,120
26	666	1,320	9,670	692	561	1,370	549	786	427	1,890	354	554
27	580	1,120	8,270	662	759	6,890	634	1,710	398	1,190	379	444
28	513	1,190	3,950	561	3,610	3,610	550	2,360	400	905	317	383
29	461	10,400	3,370	597	-------	2,020	474	1,350	792	727	338	324
30	440	7,440	4,450	616	-------	1,770	467	1,120	935	613	1,170	335
31	432	-------	6,960	1,350	-------	1,510	-------	920	-------	525	574	-------

b Stage-discharge relation affected by ice.

Raritan River at Bound Brook--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	386	238	248	465	1,300	469	670	6,230	1,160	522	299	274
2	316	231	228	410	1,000	598	1,090	3,220	1,020	650	278	792
3	259	232	148	508	826	1,950	4,600	2,140	921	523	258	688
4	260	238	237	625	804	1,810	1,960	3,410	831	433	248	396
5	247	221	173	551	679	1,520	4,900	4,790	748	385	244	403
6	238	197	191	618	673	1,890	6,460	6,430	687	357	237	367
7	219	206	188	454	691	2,650	2,810	3,330	986	343	211	350
8	216	220	192	545	680	2,350	1,990	2,400	3,560	676	211	380
9	214	248	196	470	590	1,650	1,810	1,850	3,650	748	283	337
10	255	230	198	397	624	1,600	1,690	1,550	1,690	688	804	291
11	339	229	203	427	606	1,590	1,410	1,340	1,300	630	482	272
12	333	255	198	552	545	1,550	1,290	1,190	1,060	581	332	261
13	539	278	236	669	536	1,560	1,120	1,060	854	484	268	236
14	435	248	228	743	520	5,520	1,020	976	1,090	658	240	225
15	317	220	200	1,290	603	4,610	1,060	986	3,570	575	222	a225
16	285	219	158	2,620	684	2,400	1,080	906	1,480	802	233	a350
17	274	224	204	2,040	754	1,850	1,770	838	1,060	709	1,490	a340
18	269	260	197	1,410	735	1,510	1,220	946	978	708	764	a250
19	327	268	171	1,100	694	1,260	1,030	1,030	1,010	567	465	a230
20	311	258	152	4,230	485	1,120	925	2,630	946	717	1,630	a220
21	267	248	870	4,480	519	1,030	916	2,090	2,310	582	1,890	a230
22	257	307	1,840	1,510	608	976	1,240	3,480	1,130	1,360	749	a250
23	252	369	1,010	1,080	606	971	974	3,370	861	1,160	512	a375
24	254	324	856	1,200	520	920	851	2,070	727	688	411	296
25	238	308	702	1,110	495	1,630	807	2,450	718	567	346	270
26	252	296	559	968	521	1,520	892	5,360	640	497	313	268
27	327	303	382	2,100	521	1,020	856	2,250	603	440	403	232
28	306	309	435	1,480	510	908	752	1,660	539	403	403	218
29	274	289	465	1,200	-------	858	705	1,490	510	390	358	204
30	263	255	663	1,030	-------	798	666	2,560	505	346	313	196
31	252	-------	454	1,450	-------	699	-------	1,440	-------	325	294	-------

a No gage-height record; discharge computed on basis of records for Raritan River at Manville and Millstone River at Blackwells Mills

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	182	826	650	598	447	3,170	6,060	827	2,170	1,450	507	305
2	167	539	615	2,700	456	3,410	6,900	770	1,650	1,150	556	292
3	164	450	621	3,110	453	6,240	4,180	857	1,350	958	873	285
4	176	2,370	614	1,950	429	4,560	2,590	1,070	1,160	850	1,100	284
5	182	2,900	605	1,720	437	2,640	2,070	1,420	1,020	744	1,010	282
6	172	1,390	614	1,510	420	1,980	1,790	2,830	913	760	1,650	282
7	168	1,080	582	1,320	425	2,090	1,630	3,300	873	761	1,340	273
8	169	5,600	631	1,120	428	2,640	1,460	4,710	1,130	661	1,040	251
9	163	9,580	669	1,160	424	2,150	1,380	2,230	935	586	754	262
10	159	2,860	549	1,240	393	3,690	1,210	1,670	812	533	598	330
11	152	1,790	557	906	370	3,550	1,160	1,330	737	504	509	426
12	172	10,700	523	947	399	2,640	2,830	1,120	698	467	721	324
13	146	5,330	458	1,390	410	2,090	2,350	8,220	1,290	490	971	f270
14	169	2,480	419	1,960	738	1,780	2,550	10,600	1,170	1,410	629	f284
15	160	1,730	415	1,280	3,200	1,890	4,920	4,780	1,120	720	524	260
16	148	1,420	2,070	1,190	2,400	2,620	2,690	3,460	1,110	652	466	232
17	153	1,170	1,650	1,070	3,340	3,530	2,140	6,330	958	596	436	210
18	158	1,030	1,120	957	7,090	2,310	1,740	4,540	790	566	424	206
19	154	916	936	707	8,580	2,040	1,530	2,770	2,000	878	402	218
20	153	816	709	742	9,130	2,770	1,410	2,100	7,830	586	477	214
21	177	742	693	771	5,050	2,060	1,300	1,830	3,690	491	1,890	211
22	160	682	648	972	3,070	1,890	1,160	1,590	1,890	1,100	958	214
23	149	994	650	846	2,220	1,730	1,060	1,370	1,960	1,330	1,130	205
24	146	1,120	562	b700	1,710	2,550	999	1,210	1,790	1,080	f971	213
25	140	2,220	473	b760	1,860	1,910	1,060	1,560	f4,390	986	f722	221
26	147	1,300	b450	690	3,330	1,590	1,170	1,530	1,790	856	f569	227
27	138	1,050	b500	644	2,860	1,770	1,050	1,250	1,730	720	f481	225
28	158	946	b600	596	5,930	4,100	974	1,150	2,790	642	f417	221
29	776	856	564	533	5,020	2,260	883	1,060	4,800	586	400	231
30	876	756	524	516	-------	1,850	847	4,740	1,840	577	339	272
31	789	-------	551	471	-------	1,590	-------	4,190	-------	506	319	-------

b Stage-discharge relation affected by ice.
f Computed on basis of partly estimated gage-height record.

Raritan River at Bound Brook--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	362	205	671	11,800	2,230	1,700	1,410	815	567	149	123	187
2	330	196	586	4,950	1,900	1,590	1,680	928	507	150	104	161
3	258	196	525	2,880	1,550	1,560	1,290	4,420	457	155	112	135
4	240	402	690	2,120	1,730	1,610	1,130	2,060	425	157	170	124
5	193	432	719	3,130	2,030	1,790	997	1,370	413	154	226	128
6	204	309	605	14,600	1,960	2,220	3,250	1,150	402	150	212	1,090
7	206	384	551	7,130	2,660	1,790	2,460	1,930	366	167	209	420
8	204	458	490	3,670	3,440	1,450	1,690	1,340	322	149	182	270
9	222	342	435	2,640	2,410	1,310	1,480	999	309	158	148	241
10	208	323	395	2,140	2,360	1,210	1,230	1,000	299	156	134	216
11	197	365	360	1,840	1,910	1,530	1,070	1,060	299	157	120	165
12	189	353	346	1,600	1,540	1,880	964	907	309	171	129	136
13	184	318	361	1,450	1,530	1,450	905	803	277	489	148	136
14	188	295	337	1,310	1,840	1,260	1,130	749	262	547	171	222
15	179	271	324	1,160	1,730	1,120	1,030	835	254	311	181	328
16	182	253	434	1,070	1,740	997	883	721	251	336	150	320
17	192	257	1,080	1,050	2,350	939	802	644	249	359	142	301
18	205	255	1,350	972	1,720	930	805	592	255	837	172	251
19	205	249	926	980	1,520	896	3,010	568	268	467	157	227
20	216	444	781	969	3,410	853	1,670	716	268	339	151	264
21	215	623	772	877	2,600	903	1,260	1,250	267	274	134	163
22	205	419	691	7,500	2,380	1,170	1,200	873	244	244	128	142
23	213	428	732	4,430	6,340	4,190	3,120	2,750	212	205	117	222
24	219	434	616	4,710	3,200	2,950	1,980	1,610	213	180	104	240
25	248	395	541	3,810	2,390	1,870	1,550	1,840	200	168	103	224
26	264	344	566	3,000	2,050	1,600	1,330	1,260	199	147	108	190
27	251	324	457	4,380	1,660	1,440	1,190	1,190	173	146	109	172
28	222	372	458	7,500	1,630	1,260	1,030	928	170	136	109	157
29	237	657	602	5,620	-------	1,080	897	776	162	132	117	210
30	221	962	14,100	3,060	-------	973	847	678	158	141	185	707
31	210	-------	33,800	2,280	-------	928	-------	623	-------	126	192	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	462	432	202	668	1,580	740	1,610	1,250	1,180	197	237	748
2	332	416	201	619	3,250	641	1,400	1,220	2,290	185	181	448
3	268	362	196	621	3,620	472	1,230	1,110	1,250	176	529	420
4	237	311	180	644	1,830	546	1,320	1,030	1,820	230	1,830	588
5	209	282	173	574	1,370	545	1,210	991	1,490	277	1,160	446
6	192	259	160	522	1,180	602	1,110	979	1,060	411	841	342
7	178	224	160	665	1,240	522	968	884	871	418	604	303
8	182	217	169	692	961	584	896	719	724	295	458	285
9	186	197	145	489	1,580	2,030	828	670	599	242	388	253
10	171	183	141	730	2,880	1,120	768	653	543	879	325	249
11	172	183	191	1,710	2,000	909	742	596	488	a1,900	311	290
12	160	177	227	1,000	1,590	945	752	551	435	a2,000	330	290
13	149	189	718	856	1,380	1,620	700	529	405	1,200	323	274
14	142	201	1,160	933	4,280	1,910	668	504	384	1,080	212	490
15	132	214	670	788	9,610	1,340	636	482	485	849	160	481
16	147	223	439	699	6,760	1,150	610	616	526	791	157	406
17	139	196	352	594	3,590	1,020	567	553	641	1,010	172	382
18	139	180	365	604	2,390	978	541	671	446	837	177	335
19	131	180	512	662	1,940	831	516	1,420	374	711	191	297
20	128	188	651	510	1,510	771	694	1,180	383	577	591	290
21	141	171	548	490	908	1,320	1,010	899	397	458	540	284
22	124	161	488	482	1,160	2,370	748	691	376	380	322	296
23	139	154	452	477	1,120	8,520	644	625	326	328	342	279
24	135	156	652	461	1,060	6,220	697	672	304	296	349	252
25	127	171	549	477	1,090	2,910	792	703	360	292	289	241
26	264	165	460	477	892	2,170	793	624	363	292	241	225
27	341	179	3,930	486	670	3,460	868	612	284	272	216	219
28	263	168	2,930	510	669	3,480	1,050	553	242	244	188	238
29	235	178	1,510	626	-------	3,370	1,050	1,050	214	224	183	216
30	232	198	1,030	823	-------	2,510	931	1,650	204	227	437	207
31	300	-------	762	1,170	-------	1,840	-------	1,000	-------	271	900	-------

a No gage-height record; discharge computed on basis of records for Raritan River at Manville and Millstone River at Blackwells Mills.

Raritan River at Bound Brook--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	15,883	889	335	512	528	0.678	0.78
November	49,271	10,400	296	1,642	1,659	2.13	2.38
December	72,675	9,670	576	2,344	2,362	3.03	3.50
Calendar year 1945	541,733	11,600	296	1,484	1,500	1.93	26.14
January 1946	49,057	6,750	561	1,582	1,600	2.05	2.37
February	23,299	3,610	515	832	850	1.09	1.14
March	59,925	6,890	850	1,933	1,951	2.50	2.89
April	19,928	1,280	374	664	682	.875	.98
May	46,831	7,760	361	1,495	1,513	1.94	2.24
June	66,159	19,300	398	2,205	2,222	2.85	3.18
July	41,628	9,540	218	1,343	1,362	1.75	2.02
August	17,572	1,250	317	567	586	.752	.87
September	9,213	1,120	171	307	325	.417	.47
Water year 1945-46	470,939	19,300	171	1,290	1,308	1.68	22.82
October 1946	8,981	539	214	290	307	.394	.46
November	7,713	369	197	257	275	.353	.39
December	12,177	1,840	148	393	412	.529	.61
Calendar year 1946	361,983	19,300	148	992	1,010	1.30	17.62
January 1947	37,752	4,480	397	1,217	1,235	1.59	1.83
February	18,529	1,300	485	655	673	.864	.90
March	50,787	5,520	469	1,638	1,656	2.13	2.45
April	48,564	6,460	666	1,619	1,635	2.10	2.34
May	75,472	6,460	838	2,425	2,451	3.15	3.62
June	37,145	3,650	506	1,238	1,255	1.61	1.80
July	18,444	1,360	325	595	611	.784	.90
August	15,191	1,890	211	490	507	.651	.75
September	9,426	792	196	314	331	.425	.47
Water year 1946-47	339,961	6,460	148	931	949	1.22	16.53
October 1947	6,923	876	138	223	241	.309	.36
November	65,643	10,700	450	2,188	2,204	2.83	3.16
December	21,222	2,070	415	685	701	.900	1.04
Calendar year 1947	404,878	10,700	138	1,109	1,126	1.45	19.63
January 1948	35,076	3,110	471	1,131	1,149	1.47	1.70
February	71,019	9,130	370	2,449	2,467	3.17	3.42
March	80,890	6,240	1,590	2,609	2,627	3.37	3.89
April	63,093	6,900	847	2,103	2,120	2.72	3.04
May	86,414	10,600	770	2,788	2,805	3.60	4.15
June	56,386	7,880	698	1,880	1,898	2.44	2.72
July	24,196	1,450	467	781	799	1.03	1.18
August	23,193	1,890	319	748	766	.983	1.13
September	7,750	426	205	258	277	.356	.40
Water year 1947-48	541,785	10,700	138	1,480	1,498	1.92	26.19
October 1948	6,879	362	178	222	242	.311	.36
November	11,265	962	196	376	394	.506	.56
December	65,301	33,800	324	2,106	2,126	2.73	3.15
Calendar year 1948	531,442	33,800	179	1,452	1,470	1.89	25.70
January 1949	114,628	14,600	877	3,698	3,717	4.77	5.50
February	63,810	6,340	1,520	2,279	2,298	2.95	3.07
March	46,449	4,190	853	1,498	1,517	1.95	2.25
April	42,290	3,250	802	1,443	1,461	1.88	2.09
May	37,385	4,420	568	1,206	1,224	1.57	1.81
June	8,757	567	158	292	313	.402	.45
July	7,452	837	126	240	259	.332	.38
August	4,547	226	103	147	165	.212	.24
September	7,749	1,090	124	258	277	.356	.40
Water year 1948-49	417,512	33,800	103	1,144	1,163	1.49	20.26
October 1949	6,157	462	124	199	218	.280	.32
November	6,515	432	154	217	236	.303	.34
December	20,328	3,930	141	656	674	.865	1.00
Calendar year 1949	367,062	14,600	103	1,006	1,024	1.31	17.85
January 1950	21,059	1,710	461	679	693	.880	1.03
February	62,110	9,610	669	2,218	2,233	2.87	2.98
March	57,446	8,520	472	1,853	1,868	2.40	2.76
April	26,359	1,610	516	879	893	1.15	1.28
May	25,687	1,650	482	829	845	1.08	1.25
June	19,464	2,290	204	649	664	.852	.95
July	17,549	2,000	176	566	584	.750	.86
August	13,184	1,830	157	425	444	.570	.66
September	10,074	748	207	336	353	.453	.51
Water year 1949-50	285,927	9,610	124	783	800	1.03	15.94

* Adjusted for diversion from river 1 mile above station by Elizabethtown Water Co.

Green Brook at Plainfield

Location.--Lat 40°36'50", long 74°25'55", on left bank 20 ft downstream from Sycamore Avenue Bridge in Plainfield, Union County, and 1 mile upstream from Stony Brook.

Drainage area.--9.75 sq mi.

Records available.--May 1938 to September 1950.

Gage.--Water-stage recorder and concrete control. Datum of gage is 70.37 ft above mean sea level, datum of 1929.

Average discharge.--12 years, 14.2 cfs (adjusted).

Extremes.--1938-50: Maximum discharge, 2,890 cfs July 23, 1938 (gage height, 5.82 ft), by contracted-opening method; no flow for many days during November and December 1941, September, October, November, and December 1949.

Peak discharge (base, 375 cfs).--
1946: Dec. 26 (12:30 a.m.) 529 cfs (3.05 ft); May 15 (12:45 a.m.) 520 cfs (3.03 ft); June 2 (2 p.m.) 542 cfs (3.08 ft); July 23 (2 p.m.) 437 cfs (2.83 ft).
1947: Apr. 5 (1:45 to 3 p.m.) 410 cfs (2.76 ft).
1948: Nov. 8 (4 p.m.) 955 cfs (3.87 ft); Nov. 12 (5 p.m.) 625 cfs (3.26 ft); Apr. 1 (9 a.m.) 616 cfs (3.24 ft); Aug. 20 (7 p.m.) 421 cfs (2.79 ft).
1949: Dec. 30 (2 p.m.) 698 cfs (3.41 ft).
1950: Mar. 23 (5:30 a.m.) 305 cfs (2.47 ft), (annual maximum below base).

Remarks.--Water for municipal supply diverted from Baltusrol well field of Commonwealth Water Co.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.0	4.3	32	52	10.3	15.7	12.0	3.8	6.6	5.3	2.4	1.9
2	4.8	4.0	24	26	6.6	13.8	14.3	3.3	277	21	2.5	1.6
3	4.3	4.3	19.9	19.2	4.7	21	29	3.1	70	3.2	2.0	2.9
4	3.5	4.5	19.2	17.8	3.9	24	14.1	2.9	36	2.6	2.0	1.2
5	3.3	4.3	17.1	17.1	3.8	25	12.0	4.3	29	2.2	2.0	1.0
6	15.7	3.8	37	31	6.6	18.5	10.4	3.5	21	2.0	2.2	.8
7	38	3.5	26	43	12.6	17.1	9.1	3.1	15.8	2.0	9.4	.8
8	15.4	3.5	17.8	26	6.1	19.2	8.7	3.1	12.5	1.7	4.3	.8
9	11.1	3.3	14.6	24	6.4	24	10.0	2.9	9.5	1.7	2.6	1.4
10	8.3	3.3	14.1	36	6.7	15.2	8.3	2.6	7.9	1.7	2.2	1.1
11	7.1	5.9	12.5	19.9	5.6	12.0	7.1	2.4	21	1.7	2.2	.7
12	6.7	7.9	9.1	24	5.0	10.0	6.4	45	31	1.7	1.9	.6
13	6.0	6.0	8.7	19.2	5.1	9.5	6.0	25	13.0	1.7	5.6	.5
14	5.4	18.2	9.1	14.6	9.5	9.1	5.7	52	9.5	1.6	4.7	.6
15	5.1	17.7	8.7	13.5	9.6	33	5.4	129	6.4	1.6	2.4	.5
16	4.5	9.5	6.9	9.5	5.2	19.7	5.1	34	6.0	1.6	2.8	.4
17	4.3	7.5	6.2	8.7	5.4	13.0	4.5	60	5.4	1.5	21	.4
18	4.0	7.1	5.1	8.3	5.1	13.2	4.5	62	6.4	1.5	14.7	.5
19	3.5	32	4.8	7.6	4.1	23	4.3	32	5.7	1.5	4.3	.8
20	3.3	44	6.0	5.5	6.4	18.5	4.0	19.9	5.1	1.7	3.5	.5
21	3.1	15.2	6.0	7.1	5.3	11.4	3.8	22	4.8	6.4	2.6	7.3
22	3.2	80	5.7	7.1	4.5	10.0	3.5	16.4	4.5	37	2.2	3.2
23	4.9	28	5.1	5.5	5.4	9.5	3.5	11.4	4.0	134	2.0	1.0
24	7.5	17.8	4.8	5.1	5.4	9.4	3.5	9.1	3.8	23	1.9	74
25	11.1	14.6	22	6.4	4.8	16.8	3.9	7.9	3.5	9.3	1.7	17.4
26	8.7	12.0	192	5.7	4.7	24	8.2	7.1	3.5	5.7	1.7	4.0
27	6.4	10.4	46	4.8	7.8	92	6.4	34	3.3	4.3	1.9	2.4
28	4.8	36	26	4.2	21	25	4.5	19.9	2.1	3.5	1.7	1.9
29	4.5	168	40	4.3	-------	17.8	3.8	10.9	4.6	3.1	5.9	1.7
30	4.3	59	40	11.2	-------	17.1	4.3	8.3	6.8	2.9	6.3	5.9
31	4.3	-------	98	15.8	-------	13.5	-------	6.4	-------	2.6	2.4	-------

Green Brook at Plainfield--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.8	1.2	1.7	3.5	9.1	3.5	6.0	112	7.9	3.6	1.0	0.5
2	1.7	1.0	1.2	4.2	7.5	15.8	50	31	7.1	6.0	.8	13.2
3	1.5	1.0	.8	8.4	5.7	37	51	26	7.0	2.9	.7	2.2
4	1.3	1.0	1.2	8.6	9.9	14.4	17.8	96	5.7	2.4	.8	1.1
5	1.2	.8	1.3	5.3	10.2	12.3	147	66	4.8	2.0	.8	15.6
6	1.2	.7	1.3	5.4	6.9	18.9	66	45	5.4	1.7	.9	5.5
7	1.2	.7	1.5	4.2	5.7	22	30	28	10.0	2.3	.8	2.0
8	1.0	1.6	1.3	4.8	5.7	18.1	21	21	55	1.7	.8	1.3
9	1.0	1.3	1.3	3.6	4.8	14.1	21	16.4	21	4.6	6.1	1.3
10	3.8	1.0	1.3	2.7	4.8	16.0	17.1	14.1	9.8	3.8	9.8	1.2
11	1.6	1.0	1.3	3.3	4.8	19.2	14.1	12.0	7.1	2.6	2.0	1.0
12	2.9	1.7	1.5	4.9	4.8	21	13.0	10.4	6.8	2.2	1.5	.7
13	2.4	1.2	2.0	5.3	4.3	24	10.9	9.5	5.1	1.7	1.2	.6
14	1.5	1.0	1.6	10.0	4.5	107	10.0	9.1	42	1.9	1.2	.5
15	1.2	.8	1.2	27	5.1	37	10.0	8.7	38	5.9	1.2	4.2
16	1.1	.8	1.1	28	6.4	22	20.0	7.5	12.0	1.6	2.9	2.2
17	1.0	1.9	1.1	19.7	7.1	17.1	17.7	6.7	8.3	4.5	21	.8
18	1.8	2.0	1.1	11.4	6.0	14.1	11.4	13.2	11.6	2.0	3.4	.5
19	2.0	1.5	1.0	8.7	5.7	12.0	10.0	12.4	8.7	5.2	2.0	.5
20	1.3	1.2	1.2	71	3.7	10.9	9.1	31	8.6	2.8	6.4	.5
21	1.0	1.2	58	28	4.6	10.4	12.3	20	8.1	1.6	4.2	.4
22	1.0	17.5	18.4	10.8	10.0	9.5	11.4	43	5.4	10.5	2.2	5.1
23	1.0	5.6	8.7	8.2	5.4	8.7	8.3	23	4.5	6.3	1.6	2.3
24	1.0	3.1	6.4	8.3	4.3	9.5	7.5	13.5	4.5	2.2	1.2	.7
25	1.0	2.6	5.1	8.3	4.3	24	7.7	26	4.5	1.6	12.7	1.6
26	2.0	2.9	4.0	10.6	4.5	11.4	10.0	40	4.0	1.6	2.7	1.0
27	1.7	5.9	3.0	24	4.5	8.7	7.5	15.2	3.8	1.3	1.7	.5
28	2.0	2.9	5.2	10.4	4.0	7.9	6.4	11.4	3.3	1.2	1.2	.4
29	2.3	2.0	7.9	8.7	-------	7.1	5.7	17.9	2.9	1.6	1.1	.7
30	1.5	1.7	9.8	7.9	-------	6.7	11.1	26	2.6	1.1	.8	.8
31	1.2	-------	4.4	15.3	-------	6.0	-------	10.4	-------	1.0	1.0	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.4	5.9	4.3	6.4	4.5	32	182	6.0	27	12.0	5.5	2.6
2	.4	1.9	4.1	32	5	64	59	5.7	19.2	8.3	3.5	2.4
3	.4	1.2	4.0	17.5	5.5	56	31	9.5	15.2	6.7	25	2.3
4	.4	107	3.8	11.4	5	35	22	7.5	13.0	6.0	7.0	2.3
5	.4	19.6	3.5	10.4	5	23	19.2	20	12.0	5.4	14.6	2.2
6	.4	9.6	3.8	9.5	5	18.1	17.1	14.2	10.0	7.4	11.9	2.1
7	.4	5.4	3.5	8.7	4.5	27	14.6	47	9.8	6.7	4.8	4.4
8	.4	214	5.9	7.4	4.5	29	13.0	29	9.5	4.8	3.8	3.9
9	.4	50	4.4	8.0	4	28	12.0	15.2	7.5	4.0	3.3	5.1
10	.4	16.3	3.3	9.1	4	63	10.0	12.5	7.9	3.5	2.6	7.9
11	.4	11.4	3.5	7.2	4.5	44	20	10.0	6.4	3.3	2.4	4.1
12	.4	182	3.2	6.3	5	28	42	11.4	12.2	3.3	35	2.2
13	.4	32	2.6	17.9	5	21	21	179	21	16.2	9.8	1.9
14	.4	16.7	2.2	15.2	20	19.2	48	72	8.7	10.4	5.4	1.8
15	.4	12.0	2.6	10.0	40	22	46	35	7.3	4.5	4.0	1.6
16	.4	10.0	29	8.9	30	61	23	48	6.0	3.8	3.3	1.3
17	.4	8.3	9.0	7.5	50	38	18.5	55	5.4	3.3	3.1	1.5
18	.4	6.7	6.4	6.8	70	21	14.6	32	4.5	7.8	2.9	1.7
19	.4	6.0	4.8	7.1	44	22	13.0	21	80	4.9	2.6	1.5
20	.4	5.4	3.7	6.4	89	24	12.5	16.4	32	3.3	74	1.6
21	.3	5.1	3.8	10.5	43	16.4	11.4	15.8	23	18.9	36	1.6
22	.3	4.8	4.0	9.7	30	15.2	10.0	13.0	16.4	37	26	1.5
23	.3	14.6	4.3	6.4	23	17.7	8.7	10.9	25	19.0	20	1.4
24	.3	17.4	3.8	5.5	16	18.5	9.0	9.5	59	11.4	9.5	1.3
25	.3	18.6	2.8	.5	19.2	13.0	17.4	162	79	5.4	7.5	1.3
26	.3	9.5	2.2	5.5	30	11.4	10.4	51	20	4.3	5.7	1.2
27	.3	7.5	5.0	6.5	31	28	8.3	26	25	4.5	4.8	1.3
28	5.1	6.4	4.5	6	91	34	7.9	17.8	26	3.8	4.3	1.3
29	12.7	5.7	4.1	6	50	16.4	7.1	14.6	16.0	3.1	3.8	1.3
30	3.2	4.8	3.3	5.5	-------	13.5	6.7	100	12.3	2.6	3.3	4.8
31	6.7	-------	3.3	5	-------	12.0	-------	49	-------	2.4	2.9	-------

Note.--No gage-height record Jan. 24 to Feb. 18, Feb. 24, June 18-21, Sept. 3-9; discharge computed on basis of recorded range in stage when available, precipitation records, and records for stations on nearby streams especially Elizabeth River at Elizabeth and Rahway River near Springfield.

Green Brook at Plainfield--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.6	0.6	4.3	60	22	18.5	10.9	8.7	3.1	0.8	1.0	2.6
2	6.7	.6	3.1	30	16.4	13.5	9.5	9.3	2.9	1.1	1.0	.4
3	5.7	1.1	2.6	21	13.1	12.0	7.5	18.5	2.6	1.1	1.1	.3
4	.8	6.6	6.4	15.8	22	11.4	6.7	10.9	2.2	1.1	5.0	.2
5	1.4	2.3	4.0	8.7	19.2	10.8	6.0	8.3	2.0	1.2	1.7	1.2
6	1.9	1.5	3.6	174	14.1	21	95	11.3	1.9	6.4	1.1	2.2
7	1.1	6.6	*3.5	46	31	14.6	24	20	1.6	2.9	1.0	.3
8	2.9	2.4	2.9	27	22	10.9	16.4	9.5	1.5	1.6	1.0	.3
9	2.4	1.5	2.0	19.2	22	10.4	14.1	7.1	1.6	1.3	1.0	.2
10	1.0	4.6	1.7	15.8	21	9.1	11.4	8.3	1.5	1.7	1.0	.2
11	.8	4.9	1.6	13.5	15.8	17.5	10.0	7.1	1.5	1.6	.8	.2
12	.8	1.9	1.5	12.0	12.2	14.9	9.1	6.0	1.3	1.2	3.2	.2
13	.8	1.9	1.7	10.4	13.5	10.4	11.5	5.1	1.3	8.2	1.4	5.4
14	.6	1.5	1.6	9.5	15.2	9.1	19.6	6.1	1.5	2.0	1.0	3.3
15	.8	1.2	1.4	7.9	13.0	8.3	10.9	6.0	1.5	1.6	1.0	1.6
16	.6	1.1	9.7	7.1	15.8	6.7	9.1	4.5	1.5	1.5	1.0	1.0
17	.6	1.5	17.8	7.1	24	6.7	7.5	4.0	1.5	15.5	1.1	.3
18	2.1	1.4	9.4	6.4	12.5	7.5	14.7	3.5	1.6	6.9	1.1	.4
19	1.2	1.3	4.4	7.8	11.6	7.2	70	3.3	1.3	2.0	1.0	.2
20	.9	7.6	5.7	6.4	42	5.6	21	9.3	1.2	1.6	.8	.2
21	.8	3.7	4.8	21	17.8	7.7	14.1	5.1	1.1	1.3	.8	.2
22	.6	2.4	5.0	135	51	10.4	57	f15.1	1.0	1.1	.8	1.4
23	1.0	3.3	4.3	31	86	70	68	f24	.7	1.0	.8	2.7
24	4.3	2.4	4.2	48	29	23	28	9.6	.6	1.0	.8	.3
25	4.8	1.7	b3.3	29	23	13.5	17.8	13.1	.6	1.0	.8	.2
26	2.0	1.5	b3.1	28	19.2	13.0	14.6	6.0	.7	1.0	.8	.2
27	1.2	3.9	2.9	33	15.2	12.5	13.5	5.7	.6	1.0	.8	.2
28	.9	2.5	2.9	137	17.1	10.4	10.9	4.5	.6	1.0	.8	.2
29	.8	15.2	11.6	49	-------	8.7	9.1	3.8	.6	1.0	6.8	11.6
30	.9	8.2	335	26	-------	8.3	8.3	3.5	.5	1.4	1.1	8.6
31	1.0	-------	260	23	-------	8.5	-------	3.1	-------	1.1	1.1	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
f Fragmentary gage-height record; discharge computed on basis of partly estimated gage-height graph.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0	1.4	0.1	1.1	8.5	4.5	10.3	20	26	1.1	2.7	3.4
2	.3	2.2	0	1.2	42	5.1	9.7	13.0	15.7	1.0	1.0	1.6
3	.1	.6	0	2.1	23	a3.0	8.8	13.1	9.4	1.0	16.1	3.9
4	.1	.2	0	1.7	10.2	a3.5	8.8	10.5	65	3.6	3.2	2.2
5	.1	0	0	1.3	7.2	a3.5	9.3	16.2	15.7	2.0	1.2	1.1
6	.1	0	0	1.3	7.0	2.5	8.3	13.7	10.2	2.4	3.0	.7
7	.1	0	.5	5.1	7.2	2.2	6.7	10.1	7.6	1.4	1.3	.7
8	.1	0	.1	2.1	5.0	7.0	6.0	7.9	6.0	1.2	.7	.6
9	.2	0	0	1.1	22	15.7	5.4	7.0	5.1	1.1	.4	.5
10	.2	0	0	9.8	15.4	5.0	4.8	6.7	4.5	83	.6	.4
11	.1	0	.7	8.8	11.4	4.7	4.8	5.9	4.0	16.6	4.0	1.4
12	.1	0	3.6	3.5	7.8	5.8	4.5	5.1	3.3	9.3	2.2	1.5
13	0	0	12.6	3.7	9.4	17.6	4.5	4.9	3.0	5.0	.5	5.7
14	0	.6	4.3	4.4	33	10.8	4.8	4.3	4.1	3.5	.3	3.2
15	.1	.1	1.6	3.1	*86	7.5	4.5	4.3	7.4	2.4	.4	1.4
16	0	0	.6	2.8	40	6.3	4.0	4.7	4.9	2.6	.4	1.0
17	0	0	.4	1.8	28	5.8	4.0	4.8	6.1	2.2	.4	.6
18	.1	0	.8	3.7	21	5.7	3.8	9.5	3.3	2.3	.4	.4
19	.1	0	3.6	3.1	16.2	4.4	3.3	17.2	2.6	1.9	11.1	.3
20	.1	0	2.1	1.5	10.0	4.2	13.1	10.6	2.9	1.3	6.6	.4
21	.1	0	1.2	1.4	b7.0	24	9.7	6.6	4.7	1.3	1.9	.4
22	0	0	.8	1.5	6.6	15.1	5.8	5.0	2.4	.9	1.0	1.6
23	0	0	1.6	1.9	8.5	132	6.1	6.1	2.0	.4	1.2	.8
24	0	0	1.8	1.9	9.1	35	7.4	13.3	9.8	.5	.9	.4
25	0	.2	1.0	2.0	b10.5	21	7.1	7.5	10.9	.8	.7	.3
26	7.0	.1	2.4	2.0	b6.6	18.4	8.1	6.0	2.6	.6	.5	.3
27	.6	0	40	*2.1	b5.0	31	7.0	5.2	1.6	.7	.4	.3
28	.1	0	8.6	1.5	4.0	31	18.5	4.4	1.4	.5	.3	.5
29	.1	.3	3.9	5.1	-------	22	9.6	26	1.1	4.5	4.6	.4
30	.1	.2	2.0	*5.8	-------	16.5	10.5	12.0	1.2	.6	2.4	.4
31	4.9	-------	1.6	11.8	-------	11.9	-------	7.8	-------	.9	17.1	-------

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of adjacent recorder graph and records for stations on nearby streams.
b Stage-discharge relation affected by ice.

Green Brook at Plainfield--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	221.1	38	3.1	7.13	9.53	0.977	1.13
November	635.6	168	3.3	21.2	23.7	2.43	2.71
December	784.4	192	4.8	25.3	27.7	2.84	3.28
Calendar year 1945	5,664.7	192	1.6	15.5	17.9	1.84	24.95
January 1946	500.1	42	4.2	16.1	18.6	1.91	2.20
February	187.6	21	3.8	6.70	9.41	.965	1.00
March	596.0	92	9.1	19.2	21.7	2.23	2.57
April	226.3	29	3.5	7.54	10.1	1.04	1.16
May	643.3	129	2.4	20.9	23.4	2.40	2.77
June	635.7	277	2.1	21.2	23.8	2.44	2.72
July	291.3	134	1.5	9.40	11.8	1.21	1.40
August	125.0	21	1.7	4.03	6.47	.664	.77
September	137.8	74	.4	4.59	7.07	.725	.81
Water year 1945-46	4,989.2	277	.4	13.7	16.2	1.66	22.52
October 1946	49.0	3.8	1.0	1.58	3.94	.404	.47
November	68.8	17.5	.7	2.29	4.64	.476	.53
December	156.9	58	.8	5.06	7.27	.746	.86
Calendar year 1946	3,622.8	277	.4	9.93	12.4	1.27	17.26
January 1947	380.5	71	2.7	12.3	14.4	1.48	1.71
February	164.3	10.2	3.7	5.87	8.23	.844	.88
March	566.3	107	3.5	18.3	20.5	2.10	2.42
April	641.0	147	5.7	21.4	23.7	2.43	2.72
May	822.4	112	6.7	26.5	28.8	2.95	3.41
June	325.5	55	2.6	10.8	13.3	1.36	1.53
July	101.4	11.7	1.0	3.27	5.69	.584	.67
August	95.7	21	.7	3.09	5.52	.566	.65
September	68.9	15.6	.4	2.30	4.78	.490	.55
Water year 1946-47	3,440.7	147	.4	9.43	11.8	1.21	16.40
October 1947	37.8	12.7	.3	1.22	3.60	.369	.43
November	815.8	214	1.2	27.2	29.7	3.05	3.40
December	148.7	29	2.2	4.80	7.22	.741	.85
Calendar year 1947	4,168.3	214	.3	11.4	13.8	1.42	19.22
January 1948	285.3	32	5	9.20	11.6	1.19	1.38
February	787.7	91	4	25.4	28.0	2.87	3.10
March	871.4	64	11.4	28.1	30.6	3.14	3.62
April	735.4	182	6.7	24.5	27.1	2.78	3.10
May	1,118.0	179	5.7	36.0	38.5	3.95	4.55
June	616.3	80	4.5	20.5	23.2	2.38	2.66
July	238.0	37	2.4	7.68	10.4	1.07	1.23
August	348.3	74	2.4	11.2	14.1	1.45	1.67
September	71.4	7.9	1.2	2.38	5.36	.550	.61
Water year 1947-48	6,022.1	214	.3	16.5	19.1	1.96	26.60
October 1948	55.0	6.7	.6	1.77	4.64	.476	.55
November	97.2	15.2	.6	3.24	6.26	.642	.72
December	726.5	335	1.4	23.4	26.3	2.70	3.11
Calendar year 1948	5,898.5	335	.6	16.1	18.8	1.93	26.30
January 1949	1,143.9	174	6.4	36.9	39.7	4.07	4.69
February	636.7	86	11.6	22.7	25.8	2.65	2.76
March	412.1	70	5.6	13.3	16.1	1.65	1.91
April	626.2	95	6.0	20.9	23.8	2.44	2.73
May	260.3	24	3.1	8.40	11.3	1.16	1.34
June	42.1	3.1	.5	1.40	4.46	.457	.51
July	73.2	15.5	.8	2.36	5.25	.538	.62
August	42.7	6.8	.8	1.38	4.19	.430	.50
September	44.3	11.6	.2	1.48	4.19	.430	.48
Water year 1948-49	4,160.2	335	.2	11.4	14.3	1.47	19.92
October 1949	15.8	7.0	0	0.51	3.05	0.313	.36
November	5.9	2.2	0	.20	2.72	.279	.31
December	95.9	40	0	3.09	5.38	.552	.64
Calendar year 1949	3,399.1	174	0	9.31	12.1	1.24	16.85
January 1950	100.2	11.8	1.1	3.23	5.46	.560	.65
February	467.6	86	4.0	16.7	19.1	1.96	2.04
March	482.7	132	2.2	15.6	17.7	1.82	2.09
April	219.2	18.5	3.3	7.31	9.41	.965	1.08
May	289.4	26	4.3	9.34	11.4	1.17	1.35
June	244.5	65	1.1	8.15	10.4	1.07	1.19
July	156.6	83	.4	5.05	7.16	.736	.85
August	87.5	17.1	.3	2.82	4.99	.512	.59
September	36.4	5.7	.3	1.21	3.46	.356	.40
Water year 1949-50	2,201.7	132	0	6.03	8.29	.850	11.55

* Adjusted for diversion from Baltusrol well field.

Lawrence Brook at Farrington Dam

Location.--Lat 40°27'00", long 74°27'05", on left bank 300 ft upstream from Farrington Dam, half a mile southwest of Milltown, Middlesex County, and 5½ miles upstream from mouth.

Drainage area.--34.4 sq mi.

Records available.--May 1927 to September 1950.

Gage.--Water-stage recorder above concrete dam. Datum of gage is 25.73 ft above mean sea level, datum of 1929.

Average discharge.--22 years (1928-50), 37.3 cfs (adjusted).

Extremes.--1927-50: Maximum discharge, 2,660 cfs Sept. 21, 1938 (gage height, 26.18 ft), from rating curve extended above 400 cfs on basis of weir formula; no flow at times when gates in dam were closed and there was no flow over spillway.

Peak discharge (base, 450 cfs).--
1946: Nov. 29 (10 a.m.) 702 cfs (25.37 ft); Dec. 26 (10 a.m.) 492 cfs (25.23 ft); Mar. 27 (5 a.m.) 783 cfs (25.42 ft); June 2 (4 p.m.) 1,280 cfs (25.69 ft); July 23 (10 a.m.) 1,050 cfs (25.57 ft).
1947: May 4 (6 p.m.) 457 cfs (25.20 ft).
1948: Nov. 12 (9:30 a.m.) 664 cfs (25.34 ft); Apr. 1 (3:30 p.m.) 500 cfs (25.23 ft).
1949: Dec. 31 (2 to 5 a.m.) 944 cfs (25.51 ft); Jan. 6 (6:30 a.m.) 486 cfs (25.22 ft); Jan. 22 (7 a.m.) 500 cfs (25.23 ft).
1950: Feb. 15 (7 a.m.) 457 cfs (25.20 ft); July 10 (6 p.m.) 884 cfs (25.48 ft).

Remarks.--Figures of discharge include flow over dam and through blow-off gates. Flow regulated by Farrington Reservoir (capacity, 87,600,000,000 cubic feet).

Cooperation.--Water-stage recorder inspected and records of openings of blow-off gates furnished by employee of city of New Brunswick.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16.8	22	150	195	88	95	47	22	22	12.1	18.0	18.0
2	16.8	19.3	102	102	58	74	41	22	709	19.3	18.0	14.0
3	16.8	19.3	81	67	47	67	58	19.3	335	19.3	15.6	13.5
4	14.5	19.3	74	53	32	53	41	19.3	116	14.5	14.0	13.2
5	14.5	19.3	67	47	28	53	36	22	81	12.1	14.0	12.6
6	19.3	19.3	81	53	28	47	28	22	47	10.5	13.5	12.3
7	53	16.8	102	60	41	47	28	19.3	41	10.5	15.6	12.3
8	41	19.3	74	60	41	41	28	22	28	9.7	18.0	12.3
9	32	16.8	53	53	36	60	32	19.3	22	9.4	13.5	12.0
10	28	16.8	47	95	41	53	32	16.8	19.3	9.4	12.3	12.0
11	25	16.8	47	67	36	41	28	16.8	19.3	8.8	12.0	11.8
12	22	19.3	36	67	36	28	28	36	32	8.8	12.0	11.2
13	22	19.3	32	60	36	28	25	67	25	9.1	12.3	10.3
14	19.3	28	32	47	41	28	25	51	22	8.8	15.6	10.0
15	19.3	47	32	41	47	79	25	284	28	8.3	15.6	9.8
16	19.3	28	32	36	32	81	22	88	22	8.0	14.0	9.5
17	16.8	25	28	32	28	47	22	132	16.8	8.0	21	8.8
18	19.3	25	25	28	28	57	19.3	168	16.8	7.7	35	8.5
19	19.3	30	28	28	28	109	19.3	95	14.5	7.7	23	8.5
20	16.8	88	28	28	47	60	19.3	53	14.5	7.4	18.0	8.3
21	16.8	47	28	28	53	47	19.3	47	16.8	8.8	13.5	9.0
22	19.3	127	25	28	41	36	19.3	53	16.8	88	12.9	11.8
23	22	95	25	25	36	32	19.3	36	16.8	724	12.6	12.0
24	41	53	25	25	36	28	19.3	25	16.8	239	12.3	77
25	36	41	34	25	36	60	19.3	22	16.8	109	12.3	149
26	41	36	384	28	36	75	32	19.3	12.1	67	12.0	33
27	28	32	186	28	41	438	32	42	10.5	41	11.8	23
28	25	67	102	25	150	123	28	53	10.0	28	11.5	18.0
29	25	608	153	25	-------	81	25	36	10.5	25	28	15.6
30	22	267	204	32	-------	74	25	28	12.1	22	63	15.6
31	22	-------	289	81	-------	67	-------	22	-------	16.8	25	-------

Note.--Blow-off gate open Aug. 1 to Sept. 30.

Lawrence Brook at Farrington Dam--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14.0	14.5	12.1	24	28	21	18.8	269	28	12.1	7.9	14.9
2	11.8	12.1	10.5	24	24	48	79	95	21	18.8	7.6	16.1
3	9.7	12.1	9.7	24	21	128	201	64	21	13.9	7.3	16.9
4	9.7	12.1	9.7	35	26	84	73	221	18.8	10.9	16.4	16.9
5	9.7	12.1	10.0	31	31	64	179	175	18.8	9.6	19.5	16.8
6	9.7	10.5	10.0	28	21	81	151	143	16.2	9.3	16.7	16.8
7	9.7	10.5	10.0	24	21	105	73	84	25	8.5	15.2	16.4
8	9.4	10.5	10.0	24	24	77	46	70	103	12.2	14.8	15.5
9	9.4	12.1	10.5	24	18.8	52	52	46	92	33	14.6	14.7
10	19.2	10.5	10.5	21	16.2	46	52	40	46	35	14.6	14.1
11	25	10.5	12.1	18.8	16.2	46	40	35	28	27	14.4	13.5
12	22	10.5	12.1	28	16.2	46	31	28	24	24	14.2	13.0
13	19.3	10.5	14.5	28	16.2	40	28	28	18.8	22	14.0	12.5
14	14.5	10.5	12.1	31	16.2	108	28	24	23	20	13.7	12.1
15	14.5	10.5	10.5	62	18.8	92	31	24	28	21	16.0	11.7
16	14.5	10.5	10.0	91	24	52	58	24	21	54	16.8	11.3
17	14.5	12.1	10.0	56	31	35	90	24	16.2	35	17.4	10.8
18	14.5	16.8	10.0	40	28	28	46	24	13.9	25	13.9	10.4
19	14.5	16.8	10.0	28	28	28	31	24	16.2	24	11.8	13.2
20	14.5	14.5	10.0	111	24	24	28	97	16.2	25	11.8	15.1
21	12.1	12.1	112	96	21	24	29	77	16.2	24	12.0	14.9
22	12.1	30	102	36	18.8	24	46	130	16.2	25	12.1	16.1
23	10.5	28	46	24	16.2	21	35	123	13.9	35	12.1	17.8
24	10.5	19.3	35	24	16.2	21	28	64	13.9	30	12.0	17.7
25	10.0	14.5	31	24	18.8	40	28	54	13.9	28	15.7	17.7
26	10.0	14.5	21	29	21	28	31	103	12.1	27	17.5	17.7
27	10.0	14.5	21	77	24	24	24	51	12.1	26	17.3	17.6
28	10.0	14.5	18.8	46	24	24	24	35	12.1	17.8	17.0	17.6
29	10.5	14.5	26	35	-------	21	21	31	12.1	8.7	16.6	17.6
30	12.1	12.1	46	28	-------	21	19.9	85	12.1	8.5	16.1	17.6
31	14.5	-------	28	28	-------	18.8	-------	40	-------	8.2	15.6	-------

Note.--Blow-off gates open Oct. 1, 2, July 9-28, Aug. 4 to Sept. 30.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17.5	0	31	31	12.1	77	268	18.8	64	46	13.9	10.1
2	17.5	0	28	164	10.9	137	174	21	46	31	18.8	9.6
3	17.4	2.6	28	152	9.3	223	93	27	28	28	21	9.6
4	47	4.5	28	98	13.9	120	58	35	28	24	28	9.3
5	57	1.6	28	70	12.1	77	46	77	28	18.8	72	9.3
6	18.6	0	31	70	10.1	58	40	114	24	16.2	130	9.0
7	17.3	0	28	64	10.9	70	35	102	28	16.2	58	9.0
8	17.3	84	31	46	10.9	98	31	114	31	16.2	40	9.0
9	17.3	219	28	46	9.3	77	31	64	24	16.2	31	9.3
10	17.3	105	21	64	10.9	142	28	40	24	13.9	28	16.2
11	17.3	77	21	40	10.9	98	37	31	21	13.9	24	24
12	17.3	417	21	35	10.1	84	94	31	21	10.9	41	18.8
13	25	161	21	113	9.6	58	69	173	64	15.2	35	13.9
14	31	98	21	120	46	46	65	164	52	40	24	12.1
15	31	77	18.8	70	98	40	112	105	35	31	21	10.1
16	31	64	108	46	58	62	70	99	35	21	18.8	9.3
17	31	52	70	40	162	70	52	189	35	16.2	18.8	9.0
18	31	46	40	40	197	46	40	89	28	16.2	16.2	9.0
19	31	46	35	35	152	46	35	58	69	13.9	16.2	9.3
20	18.5	40	31	31	152	64	31	46	320	13.9	18.8	9.3
21	10.0	35	24	36	84	52	28	35	112	13.9	83	9.3
22	10.0	31	21	58	58	40	28	31	64	16.2	68	9.3
23	10.0	52	21	46	46	42	28	28	64	35	31	8.7
24	10.0	64	21	31	40	88	28	24	52	46	28	8.5
25	10.0	91	21	31	46	56	24	62	40	28	21	8.5
26	10.0	58	28	24	70	40	28	99	31	18.8	18.8	8.2
27	10.0	46	28	21	64	42	24	58	55	18.8	18.8	8.2
28	10.0	40	21	21	156	84	21	40	98	24	16.2	8.2
29	10.0	35	21	18.8	130	52	21	35	52	18.8	16.2	8.2
30	10.0	35	21	16.2	-------	35	21	52	31	16.2	12.1	8.2
31	5.8	-------	21	12.1	-------	34	-------	115	-------	13.9	10.9	-------

Note.--Blow-off gates open Oct. 1-31, Nov. 3-5. No recorder graph Oct. 5 to Nov. 4; discharge computed on basis of 2 discharge measurements, records of gate openings, and occasional staff-gage reading.

Lawrence Brook at Farrington Dam--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.7	10.2	0	201	84	70	77	56	21	8.5	5.2	9.6
2	9.3	10.2	0	112	70	64	84	102	21	0	5.0	15.3
3	9.3	26	0	77	52	58	52	136	18.8	0	4.8	15.2
4	8.7	36	0	58	61	58	46	94	18.8	0	11.7	15.1
5	14.4	35	0	81	91	80	35	58	16.2	20	15.4	15.0
6	16.7	35	0	364	77	105	174	40	16.2	31	14.1	5.5
7	18.5	35	0	133	93	70	91	61	13.9	20	12.0	0
8	31	35	0	84	101	52	58	58	12.1	12.2	16.4	0
9	37	24	0	64	77	46	52	40	10.9	9.8	13.4	0
10	36	15.8	.2	46	70	35	46	49	10.9	8.6	17.9	0
11	21	15.8	1.2	40	58	90	40	52	10.1	10.5	18.4	0
12	10.3	15.8	2.8	35	46	91	28	40	10.1	10.0	18.3	12.0
13	10.3	15.7	17.0	31	46	52	28	35	9.6	5.7	18.2	18.5
14	10.3	15.7	24	31	52	40	35	31	9.3	.2	18.2	18.5
15	10.3	15.7	22	28	46	35	34	46	9.0	1.4	18.1	18.5
16	10.3	15.6	22	24	52	35	28	40	9.0	6.1	18.1	18.5
17	10.3	15.6	23	21	91	31	24	28	8.7	13.6	18.0	18.4
18	10.3	15.6	25	21	58	35	26	28	8.7	50	18.0	18.4
19	10.3	15.6	25	24	46	35	90	24	8.7	24	18.0	18.4
20	10.3	15.6	12.4	24	130	35	52	45	8.7	13.9	17.9	18.3
21	10.3	15.6	6.2	32	95	40	40	73	9.0	12.1	17.9	18.2
22	10.3	12.2	10.1	382	89	70	47	54	8.7	10.1	17.8	18.2
23	10.3	9.8	24	152	217	166	112	195	8.2	9.3	16.4	18.2
24	10.3	9.8	28	161	99	105	70	80	7.6	8.7	15.5	18.1
25	10.3	9.8	28	120	70	70	52	58	7.3	7.9	15.4	18.1
26	10.3	9.8	24	114	64	58	35	40	7.0	7.6	15.3	18.0
27	10.3	9.8	18.8	152	52	40	35	40	21	7.3	15.2	16.2
28	10.3	9.8	16.2	276	58	40	31	31	22	6.8	15.0	14.8
29	10.3	4.1	36	152	-------	35	31	28	13.8	6.5	5.5	14.8
30	10.3	0	506	91	-------	31	24	24	13.6	6.2	0	6.1
31	10.2	-------	677	77	-------	31	-------	24	-------	5.7	0	-------

Note.--Blow-off gates open Oct. 5 to Nov. 29, Dec. 13-20, June 27-30, July 1, 5-13, 16-18, Aug. 4-29, Sept. 1-6, 12-30.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	h8.2	h17.0	1.4	70	24	46	52	153	6.3	8.0	36
2	0	h14.4	h15.5	3.6	154	28	35	46	154	6.0	8.3	28
3	0	14.4	13.2	6.0	121	21	31	40	53	6.0	142	25
4	9.2	14.4	13.3	9.0	70	18.8	31	40	107	5.8	184	25
5	15.1	14.3	h13.3	10.9	52	18.8	31	31	74	7.9	95	22
6	17.0	14.3	13.3	13.9	40	21	31	31	36	41	53	16.8
7	18.0	h14.3	13.3	24	46	21	28	28	28	22	36	16.8
8	18.0	14.3	13.3	24	35	32	28	24	22	14.5	28	14.5
9	17.9	14.2	h9.5	16.8	45	70	24	24	19.3	10.5	22	14.5
10	17.9	14.2	3.8	32	84	40	24	21	14.5	384	19.3	12.1
11	17.8	14.1	3.8	52	64	31	24	21	12.1	298	16.8	14.5
12	17.8	14.1	h3.8	28	52	46	24	21	10.0	132	14.5	19.3
13	17.7	14.0	3.9	24	46	103	24	21	9.7	81	12.1	28
14	17.6	h14.0	h1.6	28	242	98	24	18.8	9.1	67	10.5	53
15	17.6	13.9	0	24	367	58	24	16.2	10.0	47	10.0	36
16	17.5	13.9	0	21	161	46	21	28	14.5	47	9.4	25
17	17.4	13.8	0	18.8	98	40	21	24	14.5	60	9.1	22
18	17.4	13.8	0	21	70	31	21	24	12.1	36	9.1	18.8
19	17.3	13.7	h8.9	24	52	28	21	91	10.0	28	9.7	25
20	17.3	13.7	14.5	21	40	28	28	64	9.7	22	19.3	14.5
21	17.2	h15.8	14.6	18.8	31	73	31	46	14.5	19.3	22	14.5
22	17.1	17.3	14.6	18.8	28	77	28	28	16.8	16.8	14.5	16.8
23	17.1	17.3	5.6	18.8	31	f318	24	24	10.5	14.5	12.1	16.8
24	h17.0	17.2	0	21	31	f219	28	24	9.7	12.1	12.1	16.8
25	17.0	17.2	0	21	40	112	40	24	9.4	12.1	12.1	14.5
26	h14.5	17.2	0	24	35	64	35	21	9.1	10.5	10.5	12.1
27	h5.5	17.1	0	28	28	112	35	21	8.5	9.7	10.0	12.1
28	0	h17.1	0	28	21	98	88	18.8	7.4	9.1	9.7	12.1
29	0	17.1	0	35	-------	145	64	38	6.8	8.8	9.7	10.5
30	0	17.0	0	40	-------	84	46	52	6.5	8.5	12.1	10.5
31	0	-------	.1	64	-------	64	-------	28	-------	8.3	47	-------

f Computed on basis of partly estimated gage-height record.
h Based on staff-gage reading.
Note.--Blow-off gate open Oct. 4-27, Nov. 1 to Dec. 14, Dec. 19-23. No recorder graph Oct. 11 to Dec. 20; discharge computed on basis of occasional staff-gage reading and by interpolation.

Lawrence Brook at Farrington Dam--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	749.9	53	14.5	24.2	24.2	0.703	0.81
November	1,897.6	608	16.3	63.3	64.2	1.87	2.08
December	2,608	384	25	84.1	84.5	2.46	2.83
Calendar year 1945	18,942.2	608	7.4	51.9	52.0	1.51	20.51
January 1946	1,569	195	25	50.6	49.9	1.45	1.67
February	1,223	150	28	43.7	43.8	1.27	1.32
March	2,209	428	28	71.3	70.9	2.06	2.38
April	837.4	53	19.3	27.9	27.7	.805	.90
May	1,578.1	284	16.8	50.9	50.9	1.48	1.70
June	1,770.4	709	10.0	59.0	58.9	1.71	1.91
July	1,578.0	724	7.4	50.9	51.0	1.48	1.71
August	545.9	68	11.5	17.6	17.6	.512	.59
September	592.9	149	8.3	19.8	19.7	.573	.64
Water year 1945-46	17,157.2	724	7.4	47.0	47.0	1.37	18.54
October 1946	402.4	25	9.4	13.0	13.0	.376	.44
November	414.2	30	10.5	13.8	13.8	.401	.45
December	701.1	112	9.7	22.6	22.8	.663	.76
Calendar year 1946	13,421.4	724	7.4	36.8	36.7	1.07	14.47
January 1947	1,201.8	111	18.8	38.8	38.8	1.13	1.30
February	609.6	31	16.2	21.8	21.7	.631	.66
March	1,471.8	128	18.8	47.5	47.4	1.38	1.59
April	1,621.7	201	18.8	54.1	54.3	1.58	1.76
May	2,342	269	24	75.5	75.4	2.19	2.53
June	729.7	103	12.1	24.3	24.1	.701	.78
July	678.5	54	8.2	21.9	21.6	.628	.72
August	442.6	19.5	7.3	14.3	10.5	.305	.35
September	455.0	17.8	10.4	15.2	10.7	.311	.35
Water year 1946-47	11,070.4	269	7.3	30.3	29.6	.860	11.69
October 1947	614.1	57	5.8	19.8	13.6	.395	.45
November	1,981.7	417	0	66.1	81.5	2.37	2.64
December	916.8	106	18.8	29.6	29.4	.855	.99
Calendar year 1947	13,065.3	417	0	35.8	35.8	1.04	14.12
January 1948	1,690.1	164	12.1	54.5	54.4	1.58	1.82
February	1,700.0	197	9.3	58.6	59.3	1.72	1.86
March	2,258	228	34	72.8	72.5	2.11	2.43
April	1,660	268	21	55.3	55.2	1.60	1.79
May	2,176.8	189	18.8	70.2	70.7	2.06	2.37
June	1,604	320	21	53.5	53.2	1.55	1.72
July	668.3	46	10.9	21.6	21.3	.619	.71
August	998.5	130	10.9	32.2	32.1	.933	1.08
September	310.5	24	8.2	10.4	10.2	.297	.33
Water year 1947-48	16,578.8	417	0	45.3	46.0	1.34	18.19
October 1948	416.5	37	8.7	13.4	8.96	.260	.30
November	509.6	36	0	17.0	13.9	.404	.45
December	1,548.9	677	0	50.0	59.1	1.72	1.98
Calendar year 1948	15,541.2	677	0	42.5	42.6	1.24	16.84
January 1949	3,208	382	21	103	103	2.99	3.44
February	2,145	217	46	76.6	76.6	2.23	2.32
March	1,803	166	31	58.2	58.1	1.69	1.95
April	1,577	174	24	52.6	52.4	1.52	1.70
May	1,710	195	24	55.2	55.2	1.60	1.85
June	369.9	22	7.0	12.3	9.98	.290	.32
July	333.7	50	0	10.8	12.2	.355	.41
August	432.1	18.4	0	13.9	6.46	.186	.22
September	395.9	18.5	0	13.2	12.0	.349	.39
Water year 1948-49	14,449.6	677	0	39.6	38.8	1.13	15.23
October 1949	393.9	18.0	0	12.7	10.9	.317	.37
November	446.3	17.3	8.2	14.9	10.8	.314	.35
December	196.9	17.0	0	6.35	19.9	.578	.67
Calendar year 1949	13,011.7	382	0	35.6	35.4	1.03	13.99
January 1950	722.8	64	1.4	23.3	25.5	.741	.85
February	2,154	367	21	76.9	76.4	2.22	2.31
March	2,169.6	318	18.8	70.0	70.3	2.04	2.36
April	960	88	21	32.0	31.9	.927	1.03
May	990.8	91	16.2	32.0	31.8	.924	1.07
June	871.7	154	6.5	29.1	28.3	.823	.92
July	1,446.7	384	5.8	46.7	46.9	1.36	1.57
August	887.9	184	8.0	28.6	29.2	.849	.98
September	601.5	53	10.5	20.0	19.7	.573	.64
Water year 1949-50	11,842.1	384	0	32.4	33.2	.965	13.12

* Adjusted for change in contents in Farrington Reservoir.

South River at Old Bridge

Location.--Lat 40°24'09", long 74°21'58", on right abutment of Duhernal Dam, 1,500 ft downstream from Iresick Brook and 0.6 mile south of Old Bridge, Middlesex County.

Drainage area.--94.6 sq mi.

Records available.--August 1939 to September 1950.

Gage.--Water-stage recorder above concrete dam. Datum of gage is at mean sea level, datum of 1929.

Average discharge.--11 years, 161 cfs (adjusted).

Extremes.--1939-50: Maximum discharge, 4,250 cfs Sept. 15, 1944 (gage height, 11.71 ft), from rating curve extended above 770 cfs on basis of laboratory rating; minimum, 4 cfs Jan. 3, 1949.

Peak discharge (base, 700 cfs).--
1946: Nov. 30 (3 to 6 a.m.) 1,890 cfs (11.01 ft); Dec. 27 (6 to 11 a.m.) 1,240 cfs (10.75 ft); Dec. 30-31 (6 p.m. to 1 a.m.) 1,040 cfs (10.66 ft); June 3 (2 to 4 a.m.) 2,320 cfs (11.04 ft); July 23 (7 p.m.) 2,430 cfs (11.08 ft).
1947: Dec. 22 (9 p.m.) 628 cfs (10.44 ft); May 5 (4:15 p.m.) 809 cfs, includes flow through gate (10.37 ft), (annual unregulated maximum below base).
1948: Nov. 13 (2 to 5 p.m.) 745 cfs (10.51 ft); Feb. 18 (2:30 to 5:30 p.m.) 895 cfs (10.59 ft); Apr. 2 (10 to 11 p.m.) 956 cfs (10.62 ft); July 24 (1 p.m.) 1,060 cfs (10.67 ft); Aug. 6 (2 to 4 p.m.) 764 cfs (10.52 ft); Aug. 21 (2:30 p.m.) 3,030 cfs (11.29 ft).
1949: Dec. 31 (7:30 p.m.) 2,060 cfs (10.91 ft); Jan. 6 (5:30 to 7:30 p.m.) 764 cfs (10.52 ft); Jan. 29 (4 to 5 a.m.) 726 cfs (10.50 ft).
1950: Feb. 16 (3 to 10 a.m.) 745 cfs (10.51 ft); July 17 (8:30 p.m.) 876 cfs (10.58 ft); Aug. 4 (2 p.m.) 745 cfs (10.51 ft).

Remarks.--Records given herein include flow over spillway and direct diversion from pond to sewer which is returned to river just below dam. The flow past this station is affected by pumpage from well fields for industrial use by Duhernal Water Co. and Peter J. Schweitzer Co.

Cooperation.--Water-stage recorder inspected and record of diversion to sewer furnished by Duhernal Water Co.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	95	95	786	693	356	294	170	100	102	98	79	64
2	88	95	394	419	248	204	148	92	891	90	74	57
3	88	92	294	259	170	177	162	85	1,980	109	74	57
4	85	92	248	215	114	163	169	81	774	109	72	62
5	81	95	237	185	117	163	140	88	356	79	70	57
6	83	92	271	215	120	155	119	100	226	64	68	53
7	148	90	344	237	177	123	119	92	185	62	81	52
8	163	88	283	215	163	141	113	85	148	57	128	50
9	141	85	226	194	148	148	133	77	120	53	100	50
10	120	83	194	271	163	177	141	74	106	53	81	48
11	112	85	194	248	163	128	120	70	92	52	85	46
12	103	90	170	226	141	120	112	97	209	52	85	43
13	98	95	141	215	134	112	109	215	237	50	79	42
14	92	98	155	185	134	109	103	177	170	48	85	40
15	90	163	155	170	194	166	92	394	141	45	83	40
16	88	177	155	148	128	271	92	356	123	43	74	39
17	85	134	123	114	123	194	92	394	106	45	72	37
18	83	117	120	128	134	163	85	562	100	43	141	37
19	83	114	123	134	120	248	85	382	100	39	155	37
20	81	194	128	106	204	248	85	237	100	43	120	36
21	79	204	128	117	319	177	85	185	98	293	99	40
22	81	215	134	141	226	155	85	215	98	356	83	60
23	90	319	128	112	177	141	83	163	88	1,390	77	64
24	148	237	120	112	170	123	81	117	79	1,630	77	62
25	185	170	131	117	141	163	81	103	72	818	72	136
26	194	148	676	148	141	185	148	95	66	319	66	128
27	155	128	1,100	155	141	476	170	136	58	170	60	90
28	134	134	492	117	271	419	128	259	55	128	58	68
29	117	906	436	112	-------	226	112	204	76	109	58	60
30	109	1,700	935	117	-------	185	109	155	109	92	66	62
31	100	-------	839	271	-------	204	-------	114	-------	85	77	-------

South River at Old Bridge--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	98	62	64	114	128	98	83	276	103	48	40	39
2	83	60	60	134	117	168	118	433	88	45	39	40
3	66	58	57	177	109	490	406	294	81	42	37	46
4	58	57	55	194	109	462	306	271	79	39	36	43
5	55	55	57	163	204	283	263	493	74	36	33	39
6	53	55	57	141	163	248	490	475	68	34	29	52
7	52	53	57	123	141	283	294	356	81	33	29	57
8	50	57	58	123	128	248	177	237	202	62	32	52
9	46	64	62	123	103	170	163	185	271	92	40	46
10	70	64	64	112	112	163	194	163	170	79	79	42
11	141	60	64	103	106	155	148	141	114	79	92	40
12	106	58	62	114	98	148	123	123	92	85	62	37
13	92	58	64	123	95	141	134	114	79	66	50	34
14	83	58	70	128	98	177	123	112	74	55	43	33
15	72	57	66	215	109	248	141	114	88	97	39	33
16	66	55	60	271	120	185	155	112	85	112	36	32
17	62	57	58	237	134	134	215	106	72	102	57	30
18	60	70	60	163	128	120	163	103	64	163	66	29
19	60	77	60	141	123	112	134	112	74	141	62	28
20	60	70	57	217	109	106	117	199	79	177	52	27
21	58	66	236	356	85	106	114	237	72	117	64	28
22	57	81	578	215	81	103	155	331	66	114	68	33
23	57	141	407	117	95	98	120	548	58	141	60	45
24	55	117	194	123	98	98	109	306	55	106	50	43
25	55	92	148	123	92	100	106	177	57	79	42	42
26	53	81	114	128	98	100	114	177	57	64	37	46
27	55	77	106	194	109	95	103	177	55	55	45	46
28	62	74	98	194	109	92	100	117	53	48	57	40
29	70	70	114	155	-------	85	90	103	53	50	52	39
30	68	66	163	120	-------	83	81	141	55	42	46	36
31	64	-------	134	109	-------	83	-------	141	-------	43	42	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	128	98	95	88	319	335	98	332	155	118	83
2	32	106	92	296	88	283	876	95	237	134	215	79
3	32	81	90	476	88	611	629	112	170	109	177	77
4	32	117	90	369	90	505	319	177	148	95	356	74
5	32	406	92	271	88	319	215	196	123	85	406	72
6	32	294	95	226	a86	215	194	369	117	81	692	72
7	32	163	95	204	a84	215	177	306	112	81	440	72
8	30	235	95	169	a82	306	177	344	123	79	237	70
9	32	595	98	123	a80	271	155	237	128	72	177	72
10	32	448	92	163	a79	332	148	163	117	66	141	93
11	32	226	90	141	77	344	134	134	106	62	112	185
12	32	461	88	123	83	344	194	120	100	60	127	141
13	30	710	85	255	90	259	204	243	235	65	177	106
14	30	398	74	369	234	204	194	476	306	324	123	88
15	30	204	74	259	533	185	306	356	226	271	103	77
16	30	163	178	185	693	148	283	271	204	170	90	70
17	30	134	259	170	628	271	204	382	194	95	83	66
18	32	117	177	148	820	259	177	356	155	97	79	64
19	42	112	141	112	628	194	148	237	198	110	74	66
20	50	106	112	120	533	194	128	170	444	50	86	66
21	43	100	95	142	369	185	123	141	390	55	1,740	64
22	42	95	92	248	237	170	120	128	248	72	1,990	62
23	37	112	90	215	194	163	114	113	204	164	898	58
24	34	155	95	163	163	259	112	106	226	878	680	57
25	33	226	83	141	170	237	114	121	194	371	271	57
26	32	204	88	128	237	177	114	399	148	155	177	57
27	33	155	77	123	237	177	109	519	159	207	141	55
28	34	123	81	117	301	356	103	271	332	306	123	55
29	55	112	88	106	462	283	100	177	226	204	109	55
30	74	106	85	103	-------	177	98	155	148	134	98	57
31	98	-------	85	92	-------	148	-------	306	-------	79	88	-------

a No gage-height record; discharge interpolated.
Note.--Floodgates open Aug. 21-24.

South River at Old Bridge--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60	68	237	1,340	369	271	237	136	92	30	24	53
2	62	66	134	532	306	294	306	271	88	32	23	57
3	60	66	123	207	226	248	226	306	83	32	24	45
4	57	79	170	215	226	237	194	306	79	30	52	39
5	55	95	215	237	394	259	170	194	74	29	118	39
6	57	83	163	607	332	448	310	155	70	30	86	95
7	60	93	128	595	283	406	419	170	64	28	57	110
8	62	125	120	344	319	271	259	170	62	28	45	85
9	64	106	114	237	283	204	237	134	53	27	39	72
10	66	98	106	204	248	194	181	159	55	27	33	58
11	62	129	100	185	204	292	128	248	55	29	29	48
12	60	123	95	177	194	476	155	177	55	32	27	42
13	58	106	95	170	185	306	148	148	53	100	27	43
14	58	103	92	163	204	226	194	120	50	185	30	57
15	58	95	92	155	194	194	182	141	48	108	30	82
16	57	88	177	141	264	170	170	141	46	74	28	90
17	55	83	356	141	271	163	148	117	45	66	33	79
18	58	83	306	141	248	170	141	106	46	104	32	66
19	66	81	148	128	194	204	262	98	48	104	36	57
20	68	90	141	141	339	134	226	105	46	70	40	50
21	70	134	155	134	448	177	177	155	43	57	34	45
22	68	114	163	505	294	294	170	134	40	50	30	42
23	66	106	155	578	476	406	339	360	39	46	27	57
24	70	100	148	419	448	462	344	394	36	43	24	77
25	112	95	120	406	271	294	226	226	34	39	26	62
26	134	88	114	319	259	226	170	177	33	34	26	52
27	109	100	a112	448	226	215	163	155	33	32	24	46
28	90	163	a109	533	215	194	155	128	33	29	24	45
29	79	199	118	644	--------	170	128	114	32	27	42	50
30	72	294	601	356	--------	163	120	106	32	24	66	98
31	68	-------	1,760	248	-------	163	-------	100	--------	23	52	-------

a No gage-height record; discharge computed on basis of recorded range in stage.
Note.--Floodgates open Dec. 30 to Jan. 3.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	102	128	68	79	170	90	148	141	112	21	26	114
2	72	120	64	77	226	92	123	141	134	20	28	86
3	60	128	60	79	332	77	117	128	110	19.3	173	68
4	55	100	58	79	185	74	106	128	128	19.3	693	74
5	52	81	57	77	141	74	106	120	204	26	384	77
6	50	72	55	74	117	79	112	112	131	40	152	60
7	48	66	55	74	114	81	106	103	94	39	114	52
8	46	62	58	83	106	85	100	92	72	33	88	46
9	46	60	57	72	100	114	92	83	60	28	68	45
10	45	58	48	72	155	120	90	74	53	132	58	42
11	42	58	52	98	155	103	90	74	48	462	53	46
12	39	57	60	98	134	111	90	74	45	221	48	62
13	37	57	88	88	123	170	88	72	42	181	46	78
14	37	60	123	100	337	271	88	68	39	190	45	215
15	37	66	103	100	644	194	88	66	50	107	40	185
16	39	62	81	88	682	155	88	86	58	228	37	113
17	39	55	62	79	341	128	83	103	53	745	33	85
18	37	55	62	79	194	106	81	88	50	430	30	68
19	37	55	82	95	163	106	123	142	45	140	36	60
20	39	53	120	83	a130	98	81	177	43	97	134	62
21	39	52	103	74	112	136	88	138	52	81	382	66
22	39	50	83	72	112	306	90	106	55	68	173	66
23	39	48	74	72	117	422	92	90	46	58	103	66
24	39	46	81	72	123	566	98	85	37	52	81	60
25	39	53	81	79	134	289	109	95	33	48	68	53
26	62	70	74	79	120	204	114	100	30	45	60	50
27	90	68	110	79	94	271	114	88	28	40	53	50
28	72	62	185	77	85	306	176	79	23	36	48	48
29	66	62	128	77	--------	406	226	92	22	33	46	48
30	72	70	106	83	--------	266	163	177	21	30	65	48
31	93	-------	88	99	-------	170	-------	134	--------	27	110	-------

a No gage-height record; discharge computed on basis of adjacent recorder graph and records for stations on nearby streams.

South River at Old Bridge--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	3,399	194	79	110	128	1.35	1.56
November	6,335	1,700	83	211	220	2.43	2.71
December	9,860	1,100	120	318	337	3.56	4.10
Calendar year 1945	71,146	3,030	40	195	214	2.26	30.67
January 1946	6,096	693	106	197	215	2.27	2.63
February	4,837	356	114	173	194	2.05	2.13
March	5,958	476	109	192	212	2.24	2.58
April	3,471	170	81	116	136	1.44	1.61
May	5,504	562	70	178	197	2.08	2.40
June	7,065	1,980	55	236	256	2.71	3.02
July	6,624	1,630	39	214	234	2.47	2.85
August	2,598	155	58	83.8	104	1.10	1.27
September	1,717	136	36	57.2	78.4	.829	.92
Water year 1945-46	63,464	1,980	36	174	194	2.05	27.78
October 1946	2,087	141	46	67.3	88.1	.931	1.07
November	2,070	141	53	69.0	91.1	.963	1.07
December	3,504	578	55	113	135	1.43	1.64
Calendar year 1946	51,531	1,980	36	141	162	1.71	23.19
January 1947	4,950	356	103	160	182	1.92	2.21
February	3,201	204	81	114	139	1.47	1.53
March	5,182	490	83	167	189	2.00	2.31
April	5,039	490	81	168	191	2.02	2.25
May	6,874	548	103	222	244	2.58	2.97
June	2,619	271	53	87.3	110	1.16	1.29
July	2,446	177	33	78.9	100	1.06	1.22
August	1,516	92	29	48.9	69.8	.738	.85
September	1,177	57	27	39.2	69.4	.638	.71
Water year 1946-47	40,665	578	27	111	133	1.41	19.12
October 1947	1,172	98	30	37.8	58.0	.613	.71
November	6,592	710	81	220	240	2.54	2.84
December	3,174	259	74	102	123	1.30	1.49
Calendar year 1947	43,942	710	27	120	142	1.50	20.38
January 1948	5,852	476	92	189	209	2.21	2.55
February	7,542	820	77	260	282	2.98	3.22
March	8,110	611	148	262	283	2.99	3.45
April	6,304	876	98	210	232	2.45	2.74
May	7,278	519	95	235	256	2.71	3.12
June	6,050	444	100	202	224	2.37	2.64
July	4,886	878	50	158	180	1.90	2.19
August	10,329	1,990	74	333	356	3.76	4.34
September	2,270	185	55	75.7	99.7	1.05	1.18
Water year 1947-48	69,559	1,990	30	190	212	2.24	30.47
October 1948	2,141	134	55	69.1	92.7	.980	1.13
November	3,251	294	66	108	133	1.41	1.57
December	6,667	1,760	92	215	239	2.53	2.92
Calendar year 1948	70,680	1,990	50	193	216	2.28	31.05
January 1949	10,650	1,340	128	344	368	3.89	4.48
February	7,860	476	185	281	306	3.23	3.37
March	7,931	476	134	256	279	2.95	3.40
April	6,285	419	120	210	233	2.46	2.75
May	5,451	394	98	176	198	2.09	2.42
June	1,567	92	32	52.2	75.2	.795	.89
July	1,569	185	23	50.6	72.7	.768	.89
August	1,188	118	23	38.3	61.0	.645	.74
September	1,841	110	39	61.4	84.2	.890	.99
Water year 1948-49	56,401	1,760	23	155	178	1.88	25.55
October 1949	1,609	102	37	51.9	74.1	.783	.90
November	2,034	128	46	67.8	90.8	.960	1.07
December	2,526	185	48	81.5	104	1.10	1.27
Calendar year 1949	50,511	1,340	23	138	161	1.70	23.17
January 1950	2,537	100	72	81.8	104	1.10	1.27
February	5,446	682	85	194	219	2.32	2.41
March	5,670	566	74	183	205	2.17	2.50
April	3,270	226	81	109	132	1.40	1.56
May	3,256	177	66	105	128	1.35	1.56
June	1,918	204	21	63.9	88.0	.930	1.04
July	3,646.6	745	19.3	118	142	1.50	1.73
August	3,475	693	26	112	137	1.45	1.67
September	2,193	215	42	73.1	99.7	1.05	1.18
Water year 1949-50	37,580.6	745	19.3	103	126	1.33	18.16

* Adjusted for water diverted through wells by Duhernal Water Co. and Peter J. Schweitzer Co. for industrial use.

Matawan Creek at Matawan

Location.--Lat 40°24'53", long 74°14'00", on right bank of Lake Lefferts, Ravine Drive, in Matawan, Monmouth County.

Drainage area.--6.11 sq mi.

Records available.--August 1932 to September 1950.

Gage.--Water-stage recorder above concrete dam. Datum of gage is 13.98 ft above mean sea level (New Jersey Geological Survey bench mark).

Average discharge.--17 years (1932-47, 1948-50), 9.96 cfs (adjusted).

Extremes.--1932-50: Maximum discharge, 1,390 cfs Sept. 21, 1938 (gage height, 4.34 ft), by computation of flow over dam, over road, and through waste gates; no flow for many days when water was below spillway and waste gates were closed.

Annual maximum discharge (water years).--
1946: July 23 (4:30 a.m.) 503 cfs (2.75 ft).
1947: Dec. 21 (9:15 a.m.) 181 cfs (1.51 ft).
1948: July 23 (5:30 p.m.) 474 cfs (2.86 ft), (maximum recorded; may have been higher Aug. 22).
1949: Dec. 31 (10 a.m.) 285 cfs (2.00 ft).
1950: Aug. 3 (3 p.m.) 357 cfs (2.09 ft).

Remarks.--Figures of discharge represent flow over dam and through waste gates. Flow regulated by Lake Lefferts and occasionally by operation of waste gates in dam.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.8	5.4	0	39	23	18.7	13.4	5.6	6.4	2.7	4.1	3.3
2	5.8	5.4	0	19.7	13.7	14.7	12.7	5.6	232	4.2	4.1	3.0
3	5.1	5.4	0	13.7	9.1	12.7	12.7	4.9	54	5.3	3.8	3.9
4	4.4	5.1	1.8	10.0	6.4	11.8	12.7	4.6	.2	4.2	3.5	3.3
5	4.1	4.8	7.9	10.0	6.0	10.9	12.1	5.3	13.4	3.6	3.5	2.7
6	6.4	4.8	81	10.0	6.4	10.0	11.3	6.0	17.7	3.3	3.3	2.7
7	11.7	4.8	41	11.8	9.1	10.0	11.2	5.3	13.7	2.7	10.0	2.7
8	10.1	4.8	0	11.8	8.2	10.0	4.0	5.3	10.0	2.5	10.8	2.5
9	7.6	4.8	0	11.8	7.4	12.7	1.1	4.9	7.4	2.2	6.8	2.5
10	6.3	4.4	.4	21	8.2	10.9	3.6	3.9	5.6	2.0	6.1	2.2
11	5.8	4.4	4.0	14.7	7.4	9.1	4.6	3.9	5.3	2.0	10.8	2.0
12	5.4	4.4	6.4	13.7	6.8	8.2	5.3	7.8	8.2	2.0	6.8	1.7
13	5.1	4.8	6.8	11.8	6.8	7.4	5.3	15.7	8.2	2.0	7.3	1.5
14	4.8	5.4	8.2	9.1	8.2	6.8	5.6	11.1	6.4	1.7	10.9	1.5
15	4.4	12.6	8.2	8.2	10.9	9.8	5.6	41	6.0	1.7	6.8	1.5
16	4.4	10.1	8.2	6.8	6.8	16.7	5.3	19.8	5.6	1.5	5.3	1.5
17	4.4	6.3	6.8	6.4	6.8	13.7	4.9	22	5.3	1.3	5.3	1.5
18	4.1	5.8	6.4	6.4	6.4	10.9	4.9	27	5.6	1.3	6.0	1.5
19	4.1	6.4	7.4	6.0	6.4	11.8	4.6	21	6.8	1.3	6.0	1.5
20	4.1	15.5	9.1	5.6	19.6	12.7	4.6	13.7	6.4	2.0	5.3	1.7
21	4.1	10.9	8.2	5.6	18.5	10.9	4.2	13.7	6.0	7.3	4.6	4.1
22	4.1	22	a7.7	5.6	11.8	9.1	4.2	13.7	5.6	94	4.2	7.4
23	5.0	21	a7.3	5.6	10.0	7.4	4.2	10.0	4.9	280	3.9	6.8
24	14.5	12.6	6.8	5.6	10.0	7.4	4.2	8.2	4.2	54	3.3	6.5
25	12.6	10.1	11.1	5.6	10.0	10.9	4.6	6.4	3.9	.8	3.0	11.8
26	12.6	6.9	169	6.0	9.1	14.1	10.9	5.6	3.6	1.1	3.0	7.4
27	9.2	6.9	20	6.0	10.0	92	10.9	16.6	3.3	3.0	3.3	5.3
28	7.6	56	21	5.6	29	29	7.4	25	2.7	4.1	3.6	3.9
29	6.3	232	149	5.3	------	18.0	6.0	13.7	2.7	4.7	3.6	3.6
30	6.3	91	67	8.0	-------	16.5	6.0	10.0	2.7	4.7	4.2	5.6
31	5.8	-------	31	29	-------	14.8	-------	7.4	-------	4.4	3.9	-------

a No gage-height record; discharge interpolated.
Note.--Waste gates open or leaking Nov. 28-30, Dec. 6, 7, 26, 29, 30, Mar. 27 to Apr. 8, June 2, 3, July 22 to Aug. 13.

Matawan Creek at Matawan--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.3	3.3	3.9	6.4	6.0	6.0	3.6	37	4.6	2.2	1.5	1.5
2	4.2	3.3	3.3	8.2	6.4	35	14.2	23	3.6	2.0	1.3	3.3
3	7.4	3.3	3.0	10.9	6.4	70	46	17.7	3.3	1.5	1.1	3.3
4	3.3	3.3	3.3	13.7	11.4	24	18.7	30	3.0	1.3	1.1	3.6
5	3.3	3.0	3.9	11.8	22	14.7	74	45	3.0	1.1	1.1	4.6
6	3.0	2.7	4.2	10.0	11.8	18.7	36	20	3.3	1.1	.9	4.9
7	2.7	2.7	a4.1	8.2	a10.9	23	.9	9.1	4.2	1.1	1.1	3.9
8	2.7	3.0	a4.0	8.2	10.0	18.7	4.6	14.7	14.7	2.5	1.3	3.3
9	2.7	3.3	3.9	7.4	8.2	12.7	8.2	10.9	13.7	2.7	2.5	2.7
10	5.9	3.3	3.9	6.8	6.8	10.9	10.9	8.2	7.4	2.7	8.2	2.5
11	9.1	3.3	3.6	6.4	6.4	10.0	10.0	6.8	5.6	3.0	5.6	2.5
12	6.8	3.3	3.6	7.4	6.4	9.1	8.2	6.4	4.6	2.7	4.2	2.2
13	5.6	3.3	3.9	8.2	6.0	9.1	6.8	6.0	3.6	2.2	3.6	2.2
14	4.9	3.3	3.6	16.1	6.4	19.4	6.4	6.0	3.6	2.5	3.0	2.2
15	4.2	3.0	3.3	81	6.8	19.8	7.4	6.4	3.9	3.3	2.5	2.2
16	3.9	3.0	3.0	3.9	8.2	12.7	8.2	6.8	3.3	3.9	2.0	2.2
17	3.9	3.3	2.7	.4	10.0	9.1	12.7	6.0	3.0	5.6	3.0	2.0
18	3.9	3.9	3.0	4.2	9.1	7.4	10.0	6.0	2.7	6.8	3.0	2.0
19	3.6	4.2	3.0	6.4	8.2	6.4	6.8	6.4	3.0	6.8	3.0	2.0
20	3.6	4.2	3.3	33	6.8	6.0	6.0	17.8	3.0	7.4	2.5	2.2
21	3.6	4.2	72	33	7.4	6.0	6.0	15.7	2.7	5.3	2.5	2.5
22	3.6	6.8	28	15.7	6.4	5.6	7.4	76	2.5	10.0	2.5	2.7
23	3.6	10.0	1.2	10.0	6.4	5.6	6.8	36	2.0	7.4	2.5	3.0
24	3.6	6.8	4.2	9.1	6.0	5.3	6.4	.2	2.2	4.9	2.0	2.7
25	3.6	6.0	5.3	9.1	5.6	6.0	5.6	3.4	2.5	3.6	1.7	3.0
26	3.9	5.6	5.3	9.1	5.6	4.6	6.4	7.4	2.5	2.7	1.7	3.0
27	3.9	5.3	4.9	51	6.0	3.9	6.0	8.2	2.7	2.2	2.2	2.5
28	3.9	4.6	4.9	0	6.0	3.9	4.9	6.4	2.7	1.7	2.0	2.0
29	4.2	4.2	6.0	0	-------	4.2	4.9	5.6	2.7	1.7	2.0	2.0
30	3.9	3.9	10.9	0	-------	3.9	4.9	6.4	2.5	1.7	2.0	1.7
31	3.6	-------	7.4	3.6	-------	3.6	-------	5.6	-------	1.7	1.7	-------

a No gage-height record; discharge interpolated.

Note.--One or both of waste gates were open Dec. 21, 22, Jan. 15, 16, Jan. 27, Apr. 5, 6, May 5, 6, May 22, 23.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a1.8						-	5.3	15.0	8.2	10.6	3.3
2	a1.9						-	5.3	11.2	7.0	16.0	3.0
3	a2.0						-	6.0	8.2	5.6	14.0	3.0
4	a2.0						-	8.2	7.6	4.6	20	3.0
5	a2.1						-	66	7.0	4.2	97	3.0
6	2.2						-	34	6.0	4.2	88	3.0
7	2.5	*10.6					-	.1	6.5	5.3	5.6	2.7
8	2.7					*27	-	8.7	7.6	4.9	8.8	2.7
9	2.7						-	12.1	7.6	4.2	8.8	3.0
10	2.7						-	10.4	7.0	3.6	7.6	32
11	2.7						-	8.8	5.6	3.3	6.5	24
12	2.7						-	8.2	5.3	2.7	17.0	0
13	3.0						-	85	11.2	11.4	21	0
14	3.3						-	41	10.4	44	10.4	0
15	3.3						-	0	8.2	8.8	7.0	0
16	3.6						-	3.3	8.2	6.5	5.6	.1
17	3.9						12.1	33	8.2	5.3	5.3	.7
18	5.6						12.1	22	7.0	4.9	4.9	1.3
19	7.6						9.6	15.	15.6	4.2	4.6	2.2
20	7.6						8.8	10.4	124	3.9	7	2.7
21	4.2						8.2	8.8	34	3.6	a50	3.3
22	3.3						7.0	7.6	0	3.3	a45	3.3
23	3.0						7.0	6.5	0	137	94	3.3
24	3.0						6.5	5.6	2.8	88	3.7	3.0
25	2.7						7.6	30	11.2	0	7.6	2.7
26	2.5						7.0	32	8.8	0	7.6	2.5
27	2.5						7.0	8.2	7.6	15.2	7.6	2.2
28	2.7						6.5	11.2	8.8	44	6.5	2.7
29	-						6.0	10.4	7.6	4.3	5.6	3.6
30	-				-------		5.6	9.6	6.5	5.6	4.6	3.6
31	-	-------			-------		-------	16.0	-------	6.0	3.9	-------

* Result of discharge measurement.

a No gage-height record; discharge computed on basis of precipitation records and records for stations on nearby streams.

Note.--Waste gates open Oct. 29 to Apr. 16, May 5, 6, 13, 14, 17, 25, 26, June 20, 21, July 14, 23, Apr. 16; discharge not determined.

Matawan Creek at Matawan--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.9	6.0	12.1	22	13.0	21	14.0	9.8	4.2	0.4	0.9	3.6
2	3.6	5.3	8.8	19.0	16.0	19.0	17.0	19.0	3.9	.5	.9	2.7
3	3.3	4.9	8.2	15.0	12.1	16.0	13.0	31	3.6	.9	3.3	2.5
4	2.7	7.0	16.8	12.1	17.0	15.0	10.4	22	3.3	1.1	8.8	2.2
5	2.5	7.6	17.0	19.4	26	27	8.8	13.0	3.3	1.5	6.5	3.1
6	2.7	7.0	11.2	e99	20	35	e57	9.6	2.7	1.7	4.6	14.0
7	3.0	7.6	8.8	4.0	21	19.0	5.6	e16.8	2.5	1.5	3.3	8.2
8	3.9	7.6	7.6	11.2	23	15.0	11.2	6.0	2.0	1.3	2.5	6.0
9	4.6	6.5	6.5	11.2	18.0	10.4	11.2	6.5	1.7	1.1	2.2	5.3
10	3.9	7.0	6.0	10.4	15.0	9.6	10.4	9.6	1.5	.9	2.0	3.6
11	3.3	12.1	5.6	9.6	13.0	24	10.4	12.1	1.5	.9	1.7	3.0
12	3.3	9.6	5.6	10.4	11.2	25	9.6	8.2	1.5	.9	1.5	2.2
13	3.3	7.6	5.6	9.6	10.4	13.0	10.4	7.0	1.3	12.6	1.5	e85
14	3.6	6.0	5.3	8.8	11.2	10.4	14.0	6.0	1.1	8.8	1.3	e26
15	3.6	5.3	5.6	7.6	11.2	8.8	12.1	7.6	1.1	5.3	1.1	0
16	3.3	5.3	27	7.6	10.4	8.2	11.2	6.5	1.1	3.3	1.1	0
17	3.0	4.9	36	7.6	20	8.2	9.6	6.0	1.1	3.0	.9	0
18	3.6	4.9	17.0	7.6	14.0	8.8	9.6	5.6	.9	4.6	.9	0
19	4.6	4.6	14.0	7.6	11.2	9.6	21	4.9	.9	3.9	.9	0
20	5.6	7.0	13.0	7.6	e62	8.2	17.0	6.0	.9	2.7	.7	.1
21	6.5	7.6	11.2	e23	e25	10.4	12.1	9.6	.9	2.2	.7	.4
22	6.5	6.5	10.4	e48	0	18.0	10.4	9.2	.7	2.0	.5	.9
23	7.6	6.0	9.6	20	7.2	e35	21	34	.5	1.5	.5	2.7
24	9.6	6.0	9.6	e44	17.0	18.0	25	16.0	.5	1.1	.7	2.7
25	12.1	5.6	8.8	8.5	15.0	15.0	14.0	11.2	.4	.9	.7	2.5
26	11.2	4.9	8.2	e52	13.0	13.0	10.4	8.2	.4	.7	.9	2.5
27	9.6	7.0	7.0	e38	11.2	12.1	8.8	7.6	.4	.7	.9	3.0
28	9.6	8.2	6.5	e97	15.0	10.4	7.6	6.5	.4	.7	1.3	3.0
29	9.6	20	25	e44	-------	8.2	6.5	5.6	.4	.7	4.2	3.3
30	8.8	20	e158	0	-------	7.0	6.0	4.9	.4	.9	4.2	5.3
31	8.8	-------	e159	.6	-------	7.6	-------	4.6	-------	.9	3.3	-------

e Waste gates open.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.9	11.2	3.6	4.9	16.0	5.6	10.4	10.4	7.0	2.2	2.2	8.2
2	3.9	13.0	3.6	4.9	43	6.0	8.8	10.4	7.6	2.0	3.0	6.0
3	3.6	10.4	3.6	4.9	28	5.3	8.2	9.6	6.5	2.2	e122	4.6
4	3.3	7.0	3.6	4.9	14.0	4.9	7.6	9.6	14.0	2.5	e35	4.2
5	3.3	5.3	3.6	4.6	9.6	4.9	7.0	10.4	13.0	2.7	0	3.3
6	3.0	3.9	3.3	4.2	8.2	5.3	6.5	10.4	8.2	3.6	.9	2.7
7	3.0	3.6	3.6	4.9	7.6	5.3	6.0	8.2	6.5	3.0	2.5	2.2
8	3.0	3.6	3.3	4.6	7.0	5.6	5.6	6.0	5.6	2.7	3.0	2.2
9	3.0	3.5	3.3	4.6	9.6	8.8	5.3	4.6	4.2	2.2	3.6	2.2
10	3.0	3.5	3.0	4.9	14.0	7.0	4.9	5.6	3.6	13.1	3.9	2.2
11	3.0	3.5	3.0	7.0	13.0	6.5	4.9	5.3	3.0	19.0	3.9	2.5
12	3.0	3.5	3.6	6.0	10.4	7.6	4.9	4.9	2.7	18.0	3.6	3.6
13	2.5	3.5	5.6	6.0	e16.4	19.0	4.9	4.6	2.7	19.6	3.0	7.7
14	2.5	4.5	7.0	7.0	e115	22	4.6	4.2	2.7	30	2.7	18.0
15	2.5	4.5	6.0	6.0	e100	14.0	4.9	3.9	3.9	11.2	2.5	10.4
16	2.5	3.9	4.9	5.6	e26	11.2	4.9	5.6	4.6	26	2.5	6.5
17	2.5	3.3	3.9	4.6	2.5	10.4	4.6	5.6	3.9	28	2.5	5.3
18	2.5	3.0	3.6	5.6	7.6	8.2	4.6	6.0	3.0	16.0	2.5	4.2
19	2.5	3.0	5.3	6.0	9.6	6.5	4.6	13.0	2.7	8.8	3.0	3.9
20	2.5	2.7	6.5	5.6	8.2	6.5	5.3	12.1	3.0	5.6	17.9	3.9
21	2.5	2.5	6.5	5.3	6.5	e46	6.0	8.8	4.9	4.9	16.0	3.9
22	2.5	2.2	5.6	4.9	6.5	e26	5.6	6.5	4.9	3.9	9.6	4.6
23	2.5	2.2	5.3	4.9	7.6	e178	5.3	6.0	4.6	3.0	6.5	4.6
24	2.5	2.0	5.3	4.9	8.2	e29	5.6	6.0	3.9	2.7	4.9	3.6
25	2.5	3.0	4.9	4.9	8.8	0	7.6	5.6	3.6	2.5	3.9	3.0
26	5.4	3.3	4.9	5.3	7.6	1.2	7.6	5.6	3.0	2.5	3.6	3.0
27	5.6	3.3	14.1	5.3	6.0	18.0	7.6	5.6	2.7	2.5	3.6	3.0
28	4.9	2.7	14.0	5.3	5.3	42	19.0	5.6	2.5	2.4	3.3	2.7
29	4.6	3.3	8.2	6.0	-------	32	17.0	7.6	2.2	2.4	3.9	2.7
30	4.6	3.6	6.0	6.0	-------	18.0	11.2	11.2	2.2	2.2	4.2	2.7
31	10.6	-------	5.6	11.2	-------	13.0	-------	8.2	-------	2.2	8.8	-------

e Waste gates open.
Note.--Backwater from grass Oct. 12-24, Nov. 9-15, July 28-31, Aug. 1, 2, 16-19.

Matawan Creek at Matawan--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	202.0	14.5	4.1	6.52	6.50	1.06	1.23
November	594.8	232	4.4	19.8	17.3	2.83	3.16
December	701.7	169	0	22.6	25.7	4.21	4.84
Calendar year 1945	4,728.2	297	0	13.0	13.0	2.13	28.88
January 1946	335.4	39	5.3	10.8	10.6	1.73	2.00
February	292.0	29	6.0	10.4	10.3	1.69	1.75
March	459.6	92	6.8	14.8	14.4	2.36	2.72
April	208.1	13.4	1.1	6.94	7.08	1.16	1.29
May	364.7	41	3.9	11.8	11.8	1.93	2.23
June	463.8	232	.2	15.5	15.3	2.50	2.79
July	507.6	280	.8	16.4	16.4	2.68	3.10
August	167.1	10.9	3.0	5.39	5.41	.885	1.02
September	107.1	11.8	1.5	3.57	3.67	.601	.67
Water year 1945-46	4,403.9	280	0	12.1	12.1	1.98	26.80
October 1946	131.4	9.1	2.7	4.24	4.14	.678	.78
November	122.4	10.0	2.7	4.11	4.13	.676	.75
December	220.6	72	1.2	7.12	7.23	1.18	1.36
Calendar year 1946	3,380.8	280	.2	9.26	9.21	1.51	20.46
January 1947	399.2	81	0	12.9	12.8	2.09	2.42
February	223.6	22	5.6	7.99	8.00	1.31	1.36
March	395.3	70	3.6	12.8	12.7	2.08	2.39
April	358.9	74	.9	12.0	12.1	1.98	2.21
May	461.1	76	.2	14.9	14.8	2.42	2.80
June	122.1	14.7	2.0	4.07	3.92	.642	.72
July	105.3	10.0	1.1	3.40	3.35	.548	.63
August	75.3	8.2	.9	2.43	2.45	.401	.46
September	80.4	4.9	1.5	2.68	2.66	.435	.49
Water year 1946-47	2,696.6	81	0	7.39	7.37	1.21	16.37
October							
November							
December							
Calendar year							
January							
February							
March							
April							
May	528.7	85	0	17.1	17.3	2.83	3.26
June	374.7	124	0	12.5	12.3	2.01	2.25
July	453.8	137	0	14.6	14.6	2.39	2.75
August	601.8	97	3.7	19.4	19.3	3.16	3.65
September	119.9	32	0	4.00	4.01	.656	.73
Water year							
October 1948	171.2	12.1	2.5	5.52	5.64	.923	1.06
November	225.6	20	4.6	7.52	7.65	1.25	1.40
December	651.0	159	5.3	21.0	21.0	3.44	3.96
Calendar year							
January 1949	682.4	99	0	22.0	21.8	3.57	4.12
February	457.1	62	0	16.3	16.7	2.73	2.84
March	465.9	35	7.0	15.0	14.9	2.44	2.81
April	405.3	57	5.6	13.5	13.4	2.19	2.45
May	330.6	34	4.6	10.7	10.6	1.73	2.00
June	45.1	4.2	.4	1.50	1.26	.206	.23
July	69.2	12.6	.4	2.23	2.27	.372	.43
August	64.5	8.8	.5	2.08	2.23	.365	.42
September	191.8	83	0	6.39	6.48	1.06	1.18
Water year 1948-49	3,759.7	159	0	10.3	10.3	1.69	22.90
October 1949	108.2	10.6	2.5	3.49	3.66	.599	.69
November	128.5	13.0	2.0	4.28	4.02	.658	.73
December	164.3	14.1	3.0	5.30	5.37	.879	1.01
Calendar year 1949	3,112.9	99	0	8.53	8.51	1.39	18.91
January 1950	170.8	11.2	4.2	5.51	5.72	.936	1.08
February	522.2	115	2.5	18.6	18.4	3.01	3.14
March	573.8	178	0	18.5	18.7	3.06	3.52
April	211.0	19.0	4.6	7.03	7.03	1.15	1.28
May	228.1	13.0	3.9	7.36	7.29	1.19	1.37
June	142.9	14.0	2.2	4.76	4.55	.745	.83
July	249.6	30	2.0	8.05	8.11	1.33	1.53
August	288.5	122	0	9.31	9.52	1.56	1.80
September	137.6	18.0	2.2	4.59	4.34	.710	.79
Water year 1949-50	2,925.5	178	0	8.02	8.00	1.31	17.77

* Adjusted for change in contents in Lake Lefferts.

Swimming River near Red Bank

Location.--Lat 40°19'03", long 74°06'57", on right bank of Swimming River Reservoir (revised), 4 miles upstream from mouth and 4 miles upstream from Red Bank, Monmouth County.

Drainage area.--48.5 sq mi.

Records available.--July 1922 to September 1950.

Gage.--Water-stage recorder above dam. Datum of gage is 12.33 ft above mean sea level, datum of 1929.

Average discharge.--28 years, 76.1 cfs.

Extremes.--1922-50: Maximum discharge, 8,910 cfs Oct. 27, 1943 (gage height, 8.96 ft), from rating curve extended above 600 cfs on basis of weir formula; no flow Apr. 29, 1925, when water was below spillway, waste gates were closed, and no water diverted. A flood in July 1919 reached a stage of 7.84 ft, from floodmark (discharge about 11,800 cfs).

Peak discharge (base, 600 cfs).--
1946: Nov. 29 (9 a.m.) 1,160 cfs (4.59 ft); Dec. 26 (11 a.m.) 832 cfs (4.25 ft); Dec. 29-30 (11 p.m. to 12:30 a.m.) 719 cfs (4.12 ft); June 2 (6 to 7 p.m.) 1,150 cfs (4.58 ft); July 24 (12:15 to 1:30 a.m.) 850 cfs (4.27 ft).
1947: Dec. 21 (11 p.m.) 414 cfs (3.70 ft), (annual maximum below base).
1948: Nov. 4 (10:30 p.m.) 1,040 cfs (4.47 ft); Nov. 9 (12:30 a.m.) 848 cfs (4.27 ft); Nov. 12 (1:30 p.m.) 806 cfs (4.22 ft); Apr. 1 (8 p.m.) 632 cfs (4.01 ft); May 26 (4 a.m.) 858 cfs (4.28 ft); Aug. 23 (6:30 a.m.) 673 cfs (4.06 ft).
1949: Dec. 31 (1:30 p.m.) 711 cfs (4.11 ft).
1950: July 16 (about 8 p.m.) 788 cfs (4.20 ft).

Remarks.--Figures of discharge include water diverted above station for municipal supply.

Cooperation.--Water-stage recorder inspected and record of diversion furnished by Monmouth Consolidated Water Co.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	50	174	251	170	114	78	54	67	77	63	53
2	51	48	144	150	104	94	77	51	650	79	63	50
3	47	50	125	129	87	94	88	50	422	94	62	58
4	44	54	121	122	68	87	80	50	165	66	62	55
5	44	59	117	125	80	87	76	59	146	58	61	49
6	66	53	156	130	87	85	70	58	136	56	60	45
7	107	50	174	131	110	82	68	52	110	54	152	47
8	70	50	130	125	90	81	68	51	96	49	132	47
9	61	48	110	117	84	87	85	45	88	49	78	47
10	59	47	107	149	98	80	70	46	78	50	64	44
11	55	50	107	125	87	75	66	47	81	46	81	40
12	53	52	92	125	80	70	64	67	161	49	63	39
13	51	53	85	121	80	73	63	91	122	50	67	38
14	50	57	95	104	90	70	64	67	93	44	70	38
15	50	99	92	101	101	90	59	167	91	42	63	38
16	48	73	87	87	68	112	61	102	83	46	59	38
17	48	58	66	87	82	81	57	232	78	41	59	38
18	48	58	73	90	80	80	55	174	82	40	98	37
19	47	59	85	92	75	95	56	121	80	38	125	37
20	46	119	87	73	208	85	56	86	76	44	103	36
21	44	82	85	104	158	77	53	85	78	282	72	43
22	44	118	82	114	98	73	53	91	76	109	66	70
23	53	155	80	78	98	70	52	74	69	608	69	49
24	87	87	77	82	97	69	52	67	66	470	70	52
25	77	75	88	104	90	87	53	63	62	151	61	100
26	77	70	489	114	80	82	90	62	58	116	58	63
27	64	66	218	95	85	185	74	104	55	94	57	49
28	57	79	136	77	149	115	61	150	55	84	58	44
29	55	777	320	82	-------	87	57	96	84	76	55	43
30	54	337	375	89	-------	86	58	79	80	69	75	93
31	52	-------	270	201	-------	86	-------	68	-------	67	63	-------

Swimming River near Red Bank--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	109	44	43	53	65	56	50	186	59	40	30	26
2	58	42	41	85	57	120	77	139	58	37	29	31
3	52	43	33	95	55	269	150	107	54	36	29	34
4	47	45	41	98	69	125	87	117	53	30	28	28
5	45	42	41	76	104	95	98	170	52	31	28	44
6	45	41	42	73	68	95	174	171	49	30	28	59
7	44	41	44	66	68	114	92	117	58	30	28	41
8	42	48	42	66	70	97	75	98	110	43	28	36
9	42	50	44	64	50	82	80	87	110	44	30	32
10	71	46	44	54	61	80	87	83	71	42	108	31
11	98	44	42	57	61	77	73	80	58	66	67	30
12	64	46	42	61	58	75	73	76	52	47	43	29
13	61	44	48	57	57	73	70	74	47	38	38	25
14	51	42	44	78	58	96	66	73	49	38	32	24
15	49	41	42	107	68	114	77	74	56	53	30	26
16	47	41	38	114	68	82	80	67	50	71	28	30
17	47	44	41	89	70	70	107	67	47	73	33	27
18	48	55	42	75	66	66	77	68	49	65	38	24
19	48	50	39	68	61	59	68	71	62	90	36	22
20	46	46	40	84	53	61	66	109	51	122	32	22
21	45	44	233	139	34	64	68	111	47	59	35	24
22	44	60	232	69	46	61	82	129	43	67	35	27
23	45	83	90	59	70	60	68	156	43	60	30	34
24	45	55	72	68	61	61	64	91	42	46	28	30
25	44	50	63	73	59	66	64	80	47	40	28	34
26	46	48	57	69	64	57	70	96	42	36	32	37
27	51	50	51	92	66	51	64	81	44	35	61	31
28	51	48	56	77	59	53	59	67	41	36	41	27
29	52	44	65	66	-------	51	55	63	46	47	36	28
30	47	42	82	63	-------	51	56	93	44	41	28	28
31	46	-------	55	63	-------	50	-------	75	-------	34	29	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	123	60	70	62	122	287	71	198	90	80	49
2	27	60	62	238	64	133	286	70	151	80	120	49
3	26	47	65	214	64	302	167	86	130	73	87	49
4	24	294	62	122	67	164	129	102	118	71	133	47
5	24	408	60	108	58	127	122	111	112	68	112	48
6	25	118	65	102	68	105	115	188	106	64	152	49
7	26	86	60	91	62	130	115	117	103	68	98	47
8	27	212	65	81	69	159	111	146	116	67	79	49
9	28	386	62	81	60	126	107	102	106	62	72	49
10	27	116	56	88	62	167	96	87	98	59	69	56
11	26	88	60	69	64	150	93	82	92	56	61	100
12	25	420	58	74	70	163	122	77	92	56	73	62
13	26	190	53	166	72	122	104	188	204	60	92	53
14	27	108	51	175	220	111	121	192	144	239	69	50
15	28	93	51	93	367	112	163	136	109	110	59	46
16	26	86	132	78	156	129	126	114	109	73	58	43
17	29	79	112	91	318	150	105	202	120	64	56	42
18	33	75	74	86	288	129	95	208	95	64	58	44
19	47	70	64	60	208	111	92	123	128	63	56	46
20	37	67	56	71	208	118	88	102	238	58	71	45
21	31	67	54	100	144	107	88	97	162	57	142	45
22	29	67	56	150	118	102	86	91	111	58	122	42
23	28	90	58	108	109	105	81	83	130	93	380	41
24	26	96	60	63	92	167	82	79	128	306	123	40
25	24	136	48	71	109	122	87	120	106	91	85	41
26	25	88	48	84	137	105	87	486	92	67	74	41
27	27	75	35	78	123	126	81	164	92	141	67	41
28	26	71	61	70	162	149	81	129	128	160	64	41
29	70	67	69	66	183	115	78	115	93	85	59	40
30	83	65	62	70	-------	105	76	125	78	68	55	41
31	95	-------	62	61	-------	99	-------	423	-------	64	51	-------

Note.--Backwater from moss on dam Apr. 4 to May 20.

Swimming River near Red Bank--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	47	75	234	192	150	136	76	58	30	25	108
2	44	46	65	140	132	140	140	91	56	32	23	56
3	40	45	61	118	108	125	111	102	53	30	38	37
4	40	54	81	105	139	121	102	100	52	27	155	31
5	39	54	82	107	183	131	96	79	52	34	178	32
6	45	48	66	281	136	221	239	72	50	30	67	68
7	44	53	62	175	129	170	173	88	46	30	45	57
8	43	58	58	126	143	125	125	84	51	31	40	47
9	52	50	55	108	122	121	115	70	38	27	38	51
10	45	53	51	102	115	117	102	80	35	24	33	39
11	40	80	51	96	110	177	99	99	41	30	30	33
12	42	61	51	93	99	197	95	78	60	28	27	59
13	40	56	54	88	107	131	96	66	37	124	30	38
14	39	58	51	85	115	118	122	66	27	129	32	31
15	40	52	53	78	105	111	102	76	36	55	31	53
16	40	48	111	76	107	104	93	68	37	45	30	49
17	40	48	166	a75	140	104	87	63	37	44	26	48
18	42	48	92	a75	114	107	88	60	38	167	27	38
19	47	46	75	a75	101	110	126	61	37	58	34	35
20	47	68	54	a75	190	101	105	61	42	43	30	32
21	49	77	a74	75	158	115	93	79	38	38	26	30
22	44	58	a80	264	129	154	88	74	35	37	26	30
23	44	56	a75	158	260	176	125	256	38	32	24	45
24	55	54	66	149	154	172	121	128	32	30	26	47
25	95	50	51	150	132	125	96	89	31	29	24	35
26	72	48	a50	128	129	128	87	77	30	30	23	31
27	54	62	a50	188	115	122	86	72	29	29	23	29
28	51	80	a50	274	129	111	82	67	27	28	22	31
29	48	101	a70	202	-------	101	76	64	30	26	33	a35
30	48	222	a280	128	-------	99	74	61	28	25	44	58
31	46	-------	a560	132	-------	98	-------	60	-------	22	45	-------

a No gage-height record; discharge computed on basis of recorded range in stage when available, weather records, and records for South River at Old Bridge and Manasquan River at Squankum.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	70	40	35	75	57	68	69	54	21	24	70
2	38	70	36	38	95	56	68	68	54	22	43	50
3	34	66	35	40	118	36	64	65	46	22	127	45
4	34	45	33	39	66	41	64	61	57	30	304	56
5	33	40	36	39	55	46	64	56	68	33	82	44
6	31	37	32	37	50	50	66	60	49	41	52	40
7	31	37	33	40	51	44	54	53	43	37	47	35
8	32	34	35	38	44	51	55	48	39	30	41	35
9	31	34	28	32	50	70	55	45	36	25	38	34
10	31	34	27	40	70	51	53	42	34	41	36	37
11	30	34	34	52	61	50	52	40	33	114	34	39
12	30	36	39	42	54	59	51	42	32	79	34	55
13	29	36	48	44	53	82	52	44	31	52	31	61
14	29	41	52	55	153	104	52	40	31	48	30	209
15	33	41	42	46	290	73	53	40	49	42	29	94
16	32	36	33	42	187	61	50	62	52	272	28	61
17	31	34	29	38	104	57	49	55	46	274	27	52
18	31	34	35	42	82	53	47	49	36	100	28	46
19	31	33	46	48	72	48	46	86	33	65	36	43
20	30	33	56	39	62	48	50	80	35	50	247	49
21	30	32	42	36	41	77	57	60	37	44	257	52
22	29	30	38	38	64	125	52	50	38	40	78	51
23	28	30	38	40	68	221	49	46	32	38	56	50
24	30	32	39	39	66	170	55	47	29	36	48	45
25	28	40	35	44	66	101	59	47	30	34	42	41
26	49	47	36	40	55	82	55	47	29	31	39	40
27	57	38	53	39	42	110	56	47	25	30	37	39
28	39	35	67	36	45	107	85	42	24	27	35	37
29	38	37	49	39	-------	114	87	59	22	27	38	39
30	42	45	39	41	-------	85	64	88	24	25	60	39
31	54	-------	36	53	-------	73	-------	58	-------	24	110	-------

Note.--No gage-height record July 17-24, Aug. 23 to Sept. 4; discharge over spillway computed on basis of recorded range in stage when available and records for Manasquan River at Squankum.

Swimming River near Red Bank--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	1,759	107	44	56.7	1.17	1.35
November	3,033	777	47	101	2.08	2.33
December	4,447	489	66	143	2.95	3.41
Calendar year 1945	31,977	777	30	87.6	1.81	24.54
January 1946	3,574	251	73	115	2.37	2.74
February	2,784	208	68	99.4	2.05	2.13
March	2,739	185	69	88.4	1.82	2.10
April	1,964	90	52	65.5	1.35	1.51
May	2,609	232	45	84.2	1.74	2.00
June	3,588	650	55	120	2.47	2.75
July	3,198	608	38	103	2.12	2.45
August	2,284	152	55	73.7	1.52	1.75
September	1,480	100	36	49.3	1.02	1.13
Water year 1945-46	33,459	777	36	91.7	1.89	25.65
October 1946	1,630	109	42	52.6	1.08	1.25
November	1,419	83	41	47.3	.975	1.09
December	1,889	233	33	60.9	1.26	1.45
Calendar year 1946	29,158	650	33	79.9	1.65	22.35
January 1947	2,358	139	53	76.1	1.57	1.81
February	1,748	104	34	62.4	1.29	1.34
March	2,551	269	50	81.6	1.68	1.94
April	2,377	174	50	79.2	1.63	1.82
May	3,076	186	63	99.2	2.05	2.36
June	1,635	110	41	54.5	1.12	1.25
July	1,527	122	30	49.3	1.02	1.17
August	1,126	108	28	36.3	.748	.86
September	921	59	22	30.7	.633	.71
Water year 1946-47	22,237	269	22	60.9	1.26	17.05
October 1947	1,027	95	24	33.1	.682	.79
November	3,948	420	47	132	2.72	3.03
December	1,941	132	35	62.6	1.29	1.49
Calendar year 1947	24,215	420	22	66.3	1.37	18.57
January 1948	3,079	238	60	99.3	2.05	2.36
February	3,784	367	58	130	2.68	2.90
March	4,132	302	99	133	2.74	3.17
April	3,471	287	76	116	2.39	2.66
May	4,416	486	70	142	2.93	3.39
June	3,689	238	78	123	2.47	2.83
July	2,735	306	56	88.2	1.82	2.10
August	2,877	380	51	92.8	1.91	2.21
September	1,436	100	40	47.9	.988	1.10
Water year 1947-48	36,535	486	24	99.8	2.06	28.03
October 1948	1,459	95	39	47.1	.971	1.12
November	1,881	222	45	62.7	1.29	1.44
December	2,790	530	50	90.0	1.86	2.14
Calendar year 1948	35,749	530	39	97.7	2.01	27.42
January 1949	4,160	281	75	134	2.76	3.19
February	3,793	260	99	135	2.78	2.91
March	4,082	221	98	132	2.72	3.13
April	3,280	239	74	109	2.25	2.52
May	2,567	256	60	82.8	1.71	1.97
June	1,197	60	27	39.9	.823	.92
July	1,344	167	22	43.4	.895	1.03
August	1,255	178	22	40.5	.835	.96
September	1,313	108	29	43.8	.903	1.01
Water year 1948-49	29,121	530	22	79.8	1.65	22.34
October 1949	1,071	57	28	34.5	.711	.82
November	1,191	70	30	39.7	.819	.91
December	1,221	67	27	39.4	.812	.94
Calendar year 1949	26,474	281	22	72.5	1.49	20.31
January 1950	1,271	55	32	41.0	.845	.97
February	2,239	290	41	80.0	1.65	1.72
March	2,402	221	36	77.5	1.60	1.84
April	1,732	87	46	57.7	1.19	1.33
May	1,696	88	40	54.7	1.13	1.30
June	1,148	68	22	38.3	.790	.88
July	1,755	274	21	56.6	1.17	1.35
August	2,118	304	24	68.3	1.41	1.62
September	1,588	209	34	52.9	1.09	1.22
Water year 1949-50	19,432	304	21	53.2	1.10	14.90

Manasquan River at Squankum

Location.--Lat 40°09'47", long 74°09'21", on right bank just downstream from Farmingdale-Lakewood highway bridge in Squankum, Monmouth County, half a mile downstream from Marshbog Brook.

Drainage area.--43.4 sq mi.

Records available.--July 1931 to September 1950.

Gage.--Water-stage recorder and concrete control. Datum of gage is 18.82 ft above mean sea level, datum of 1929. Prior to Aug. 13, 1940, water-stage recorder at site 80 ft upstream at same datum and concrete control 50 ft upstream 1 ft lower than present control.

Average discharge.--19 years, 72.3 cfs.

Extremes.--1931-50: Maximum discharge, 2,940 cfs Sept. 21, 1938 (gage height, 12.45 ft, from floodmark, site then in use), by contracted-opening method; minimum 12.9 cfs Sept. 10, 1932.

Peak discharge (base, 600 cfs).--
1946: Nov. 29 (1:30 to 2:30 p.m.) 1,390 cfs (7.99 ft); Dec. 26 (2 to 3 p.m.) 864 cfs (6.51 ft); Dec. 30 (1:30 to 2:30 a.m.) 864 cfs (6.51 ft); June 2 (time unknown) 991 cfs (6.9 ft); July 24 (time unknown) 890 cfs (6.6 ft).
1947: Dec. 21 (10:30 p.m.) 382 cfs (4.55 ft), (annual maximum below base).
1948: Nov. 4 (8 p.m.) 688 cfs (6.44 ft); Nov. 9 (5 a.m.) 683 cfs (6.42 ft); Nov. 12 (7 p.m.) 799 cfs (6.87 ft); Feb. 15 (1 a.m.) 907 cfs (7.26 ft); May 26 (7 a.m.) 815 cfs (6.93 ft); May 31 (12 m.) 746 cfs (6.67 ft); Aug. 21 (9:30 p.m.) 647 cfs (6.27 ft).
1949: Dec. 31 (3 p.m.) 829 cfs (6.98 ft).
1950: Aug. 21 (3 a.m.) 428 cfs (5.22 ft), (annual maximum below base).

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	49	43	203	278	144	108	74	49	58	72	52	48
2	49	43	146	162	97	93	70	47	f569	208	51	46
3	48	42	126	130	81	89	89	46	f500	149	49	54
4	44	46	114	119	69	79	74	46	166	77	48	48
5	44	48	106	114	65	76	69	52	126	61	48	44
6	62	48	178	121	69	72	64	51	106	55	47	42
7	83	43	166	117	91	72	59	54	93	54	266	42
8	62	42	128	110	74	70	58	52	79	48	127	42
9	56	43	108	103	72	77	72	44	69	47	72	41
10	55	42	101	142	83	70	62	42	61	44	59	40
11	48	41	93	112	74	64	56	41	61	43	83	38
12	47	44	83	117	69	61	55	55	196	44	58	36
13	46	44	76	108	67	61	55	91	114	43	67	36
14	43	51	77	91	77	59	54	74	83	40	64	36
15	43	99	77	87	85	88	52	208	83	38	55	35
16	42	67	74	79	62	89	51	121	67	38	51	34
17	42	56	67	76	67	72	49	204	62	36	58	34
18	41	54	62	74	65	74	48	139	65	35	101	34
19	40	58	69	74	62	117	48	103	65	34	257	33
20	38	140	72	67	318	87	49	77	64	36	132	33
21	38	85	70	93	152	74	47	81	65	139	79	40
22	37	197	69	97	101	69	47	93	61	177	67	48
23	40	155	67	74	91	65	48	65	54	420	67	40
24	70	91	65	69	85	62	47	56	49	f581	62	42
25	56	76	74	85	81	88	48	54	48	154	55	84
26	64	67	605	93	72	79	85	49	44	106	54	48
27	54	62	229	76	77	136	67	150	42	81	58	41
28	51	88	137	67	152	95	56	149	46	69	54	38
29	47	988	408	65	-------	79	52	106	173	61	52	37
30	47	498	508	76	-------	87	54	77	76	56	74	108
31	44	-------	328	179	-------	87	-------	64	-------	52	55	-------

f Computed on basis of partly estimated gage-height record.

Manasquan River at Squankum--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	35	36	47	64	54	47	218	58	36	36	30
2	52	35	34	94	59	167	80	135	54	34	35	35
3	46	36	32	103	55	278	126	123	55	32	33	32
4	43	36	34	110	80	135	77	169	52	32	33	29
5	41	36	34	77	108	108	125	205	46	30	32	32
6	40	37	34	74	72	108	146	195	46	29	30	36
7	38	35	34	67	67	112	91	135	55	30	32	34
8	36	40	33	69	69	95	74	121	126	44	112	32
9	37	38	33	65	63	79	81	93	99	36	84	30
10	64	36	33	56	59	76	79	79	70	130	82	30
11	62	36	32	55	56	74	70	76	58	112	49	29
12	51	38	33	58	55	70	70	70	51	54	42	28
13	49	36	37	54	55	70	65	65	47	42	37	26
14	43	35	34	79	56	99	62	69	48	37	35	25
15	41	34	32	106	62	95	74	70	52	52	33	34
16	40	33	30	119	65	76	78	72	46	64	32	37
17	40	34	32	93	65	69	103	61	43	67	38	27
18	40	42	33	74	61	62	76	59	54	48	38	25
19	40	36	32	65	58	59	67	59	65	156	37	25
20	38	34	34	151	51	58	62	100	46	93	35	25
21	38	33	260	132	42	56	62	127	42	169	40	25
22	37	46	188	76	55	55	70	164	38	93	37	30
23	37	54	85	64	54	54	61	155	36	58	33	33
24	36	40	67	65	52	55	56	91	35	48	30	29
25	36	37	58	67	51	59	55	76	37	43	29	30
26	36	36	52	65	56	52	59	93	36	38	32	30
27	36	37	48	95	61	49	55	70	37	37	48	28
28	36	36	51	74	56	49	52	62	40	43	36	27
29	36	36	54	65	-------	49	49	58	48	52	35	27
30	36	36	62	62	-------	49	49	87	37	41	33	a27
31	36	-------	48	69	-------	48	-------	69	-------	37	32	-------

a No gage-height record; discharge computed on basis of precipitation records and records for stations on nearby streams.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	92	58	65	55	110	315	65	228	205	101	51
2	28	55	56	302	55	154	292	60	152	106	98	49
3	26	47	56	201	55	249	164	70	121	77	154	48
4	25	350	56	132	55	149	123	83	110	70	172	48
5	25	387	55	128	56	119	108	120	103	65	166	49
6	26	137	56	112	55	101	97	230	91	64	162	48
7	27	87	51	97	55	126	95	132	87	62	106	46
8	28	250	58	85	55	152	89	154	95	58	91	46
9	29	401	58	85	54	114	87	101	103	52	74	46
10	28	137	59	99	52	169	79	91	87	51	65	57
11	27	101	56	85	52	135	77	87	77	48	61	69
12	26	551	55	74	61	139	97	77	70	47	77	52
13	27	221	52	235	62	108	92	245	261	65	72	47
14	28	128	49	201	354	95	150	232	152	201	62	44
15	29	103	49	123	466	93	200	156	112	91	56	43
16	28	93	156	95	177	112	120	126	106	65	54	42
17	31	83	95	87	290	123	100	249	114	58	52	41
18	35	76	74	85	226	103	89	242	85	58	52	41
19	49	72	64	76	177	93	82	137	157	54	51	41
20	40	69	55	74	169	95	78	103	241	51	92	42
21	33	65	54	112	121	85	76	93	139	49	377	42
22	31	64	52	144	101	83	76	89	106	55	265	41
23	29	89	55	106	93	89	73	79	144	136	282	40
24	27	94	54	81	85	137	72	77	126	101	121	38
25	25	144	48	76	93	99	72	121	95	64	95	38
26	28	91	51	70	117	87	76	454	77	54	79	40
27	27	76	48	67	103	112	76	159	104	172	70	38
28	30	70	54	64	168	121	70	121	217	100	65	38
29	70	65	52	61	154	91	70	101	103	65	61	37
30	120	62	51	59	-------	81	67	128	95	56	56	37
31	93	-------	51	55	-------	76	-------	520	-------	52	55	-------

Note.--No gage-height record Oct. 1-30, Apr. 13 to May 6; discharge computed on basis of recorded range in stage, precipitation records, and records for Swimming River near Red Bank and for stations on nearby streams.

Manasquan River at Squankum--Continued

Daily discharge in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	37	79	270	232	146	132	64	48	27	24	180
2	37	37	65	152	146	139	139	83	47	28	24	62
3	36	36	61	128	119	126	106	103	44	25	32	40
4	39	41	89	110	166	119	95	89	43	24	66	35
5	36	42	79	117	182	163	87	70	43	26	71	33
6	44	41	65	318	135	238	263	74	42	24	42	119
7	37	51	61	176	144	164	169	91	40	27	35	59
8	38	48	58	130	139	128	128	81	37	26	33	52
9	41	42	54	114	121	114	112	65	36	24	30	48
10	38	52	51	103	110	108	97	85	36	24	27	40
11	36	72	48	97	103	210	89	79	37	26	25	35
12	41	52	51	91	93	198	85	67	36	27	25	34
13	37	52	52	87	101	152	83	61	35	160	26	36
14	37	51	48	83	108	112	119	56	34	87	27	47
15	36	44	51	77	97	108	95	70	34	46	25	51
16	35	43	154	76	95	95	83	58	33	38	25	66
17	34	44	172	76	139	93	76	58	33	48	25	59
18	34	43	93	74	110	95	74	55	33	77	28	42
19	35	43	74	74	97	97	108	51	33	42	34	38
20	35	82	72	70	242	89	87	58	32	36	27	36
21	36	69	72	70	156	108	77	69	30	33	24	34
22	36	54	74	269	140	132	77	75	29	32	24	33
23	37	54	74	152	337	205	114	246	28	30	24	38
24	51	51	67	156	169	152	97	110	27	28	25	36
25	103	49	61	149	139	119	79	89	26	29	24	33
26	61	46	55	140	132	123	74	70	26	28	24	32
27	48	72	52	213	112	110	70	65	25	27	24	32
28	43	72	52	330	128	99	65	58	26	25	23	32
29	41	167	70	212	-------	89	62	55	27	24	39	36
30	38	126	347	137	-------	85	61	54	26	24	34	49
31	38	-------	739	160	-------	85	-------	51	-------	24	82	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	58	37	38	72	54	70	70	52	20	24	58
2	33	87	36	38	128	52	67	62	52	21	27	44
3	32	61	36	40	106	46	64	69	44	21	86	48
4	32	47	34	40	69	43	64	70	51	24	125	59
5	32	42	35	40	56	46	62	61	48	26	46	42
6	30	38	34	38	51	49	62	69	42	34	37	38
7	30	37	35	41	52	46	58	59	38	29	34	36
8	30	36	35	37	47	51	56	51	36	26	30	35
9	29	36	33	36	55	65	55	48	34	25	29	35
10	29	35	32	41	69	49	51	51	34	41	28	35
11	30	36	37	49	65	47	52	47	34	56	27	40
12	28	36	41	41	56	61	51	43	32	44	26	52
13	27	36	52	54	58	106	51	43	30	34	25	90
14	27	42	52	56	192	95	51	43	32	34	24	210
15	32	40	42	46	336	72	51	42	36	28	24	91
16	30	36	37	43	193	64	48	65	35	84	24	62
17	28	35	35	41	117	59	48	52	34	92	24	51
18	29	34	36	46	93	56	47	55	30	56	23	46
19	30	34	49	46	81	51	47	106	29	40	28	47
20	27	34	49	41	72	49	48	81	29	35	190	49
21	27	33	42	40	60	94	52	62	32	34	149	46
22	26	32	41	40	64	99	48	52	28	30	59	47
23	26	32	40	40	72	250	47	48	26	28	48	48
24	26	32	41	40	69	151	48	47	27	27	42	41
25	26	43	37	40	64	106	54	49	32	28	38	38
26	45	42	37	40	58	85	51	47	26	27	36	40
27	40	36	62	38	52	117	48	46	24	26	34	38
28	33	34	61	38	49	119	94	42	22	25	32	38
29	40	38	47	41	-------	117	72	56	21	24	37	38
30	38	42	42	41	-------	87	61	65	21	24	58	38
31	62	-------	38	67	-------	76	-------	54	-------	24	102	-------

Manasquan River at Squankum--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	1,530	83	37	49.4	1.14	1.31
November	3,401	988	41	113	2.60	2.91
December	4,686	605	62	151	3.48	4.02
Calendar year 1945	32,675	1,030	29	89.5	2.06	28.02
January 1946	3,255	278	65	105	2.42	2.79
February	2,602	318	62	92.9	2.14	2.23
March	2,499	136	59	80.6	1.86	2.14
April	1,759	89	47	58.6	1.35	1.51
May	2,540	208	41	81.9	1.89	2.18
June	3,345	569	42	112	2.58	2.87
July	3,098	581	34	99.9	2.30	2.65
August	2,422	266	47	78.1	1.80	2.08
September	1,322	108	33	44.1	1.02	1.13
Water year 1945-46	32,459	988	33	88.9	2.05	27.82
October 1946	1,321	80	36	42.6	.982	1.13
November	1,113	54	33	37.1	.855	.95
December	1,639	260	30	52.9	1.22	1.40
Calendar year 1946	26,915	581	30	73.7	1.70	23.06
January 1947	2,450	151	47	79.0	1.82	2.10
February	1,707	108	42	61.0	1.41	1.46
March	2,519	278	48	81.3	1.87	2.16
April	2,221	146	47	74.0	1.71	1.90
May	3,226	218	58	104	2.40	2.76
June	1,557	126	35	51.9	1.20	1.33
July	1,867	169	29	60.2	1.39	1.60
August	1,271	112	29	41.0	.945	1.09
September	887	37	25	29.6	.682	.76
Water year 1946-47	21,778	278	25	59.7	1.38	18.64
October 1947	1,101	120	25	35.5	.818	.94
November	4,260	551	47	142	3.27	3.65
December	1,838	156	48	59.3	1.37	1.58
Calendar year 1947	24,904	551	25	68.2	1.57	21.33
January 1948	3,336	302	55	108	2.49	2.86
February	3,616	466	52	125	2.88	3.10
March	3,600	249	76	116	2.67	3.08
April	3,262	315	67	109	2.51	2.80
May	4,702	520	60	152	3.50	4.03
June	3,758	261	70	125	2.88	3.22
July	2,452	205	47	79.1	1.82	2.10
August	3,344	377	51	108	2.49	2.87
September	1,339	69	37	44.6	1.03	1.15
Water year 1947-48	36,608	551	25	100	2.30	31.38
October 1948	1,276	103	34	41.2	.949	1.09
November	1,713	167	36	57.1	1.32	1.47
December	3,140	739	48	101	2.33	2.69
Calendar year 1948	35,538	739	34	97.1	2.24	30.46
January 1949	4,411	330	70	142	3.27	3.78
February	3,992	337	93	143	3.29	3.42
March	3,981	238	85	128	2.95	3.41
April	3,003	263	61	100	2.30	2.57
May	2,360	246	51	76.1	1.75	2.02
June	1,026	48	25	34.2	.788	.88
July	1,146	160	24	37.0	.853	.98
August	998	82	23	32.2	.742	.86
September	1,467	180	32	48.9	1.13	1.26
Water year 1948-49	28,513	739	23	78.1	1.80	24.43
October 1949	991	62	26	32.0	.737	.85
November	1,204	87	32	40.1	.924	1.03
December	1,265	62	32	40.8	.940	1.08
Calendar year 1949	25,844	337	23	70.8	1.63	22.14
January 1950	1,317	67	36	42.5	.979	1.13
February	2,456	336	47	87.7	2.02	2.10
March	2,462	250	43	79.4	1.83	2.11
April	1,678	94	47	55.9	1.29	1.44
May	1,755	106	42	56.6	1.30	1.50
June	1,011	52	21	33.7	.776	.87
July	1,067	92	20	34.4	.793	.91
August	1,516	190	25	48.9	1.13	1.30
September	1,580	210	35	52.7	1.21	1.35
Water year 1949-50	18,302	336	20	50.1	1.15	15.67

Toms River near Toms River

Location.--Lat 39°59'10", long 74°13'29", on left bank 1 mile downstream from Union Branch and 2½ miles northwest of village of Toms River, Ocean County.

Drainage area.--124 sq mi.

Records available.--December 1928 to September 1950.

Gage.--Water-stage recorder. Datum of gage is 8.10 ft above mean sea level, datum of 1929.

Average discharge.--21 years (1929-50), 203 cfs.

Extremes.--1928-50: Maximum discharge, 1,540 cfs Sept. 23, 1938 (gage height, 12.50 ft, from floodmark), from rating curve extended above 650 cfs by logarithmic plotting; minimum, 56 cfs July 5, 1944 (gage height, 2.96 ft).

Peak discharge (base, 450 cfs).--
1946: Dec. 1 (9:30 a.m.) 873 cfs (8.82 ft); Dec. 31 (8 p.m.) 763 cfs (8.17 ft); June 5 (2 a.m.) 628 cfs (7.34 ft); July 26 (3 to 4 a.m.) 568 cfs (6.95 ft).
1947: May 24 (9:30 to 11 p.m.) 484 cfs (6.39 ft).
1948: Nov. 14 (3 to 5 p.m.) 563 cfs (6.92 ft); Jan. 5 (11 a.m.) 455 cfs (6.20 ft); Feb. 17 (11 p.m.) 484 cfs (6.39 ft); Apr. 4 (9 a.m.) 552 cfs (6.85 ft); May 8 (7 to 8 a.m.) 518 cfs (6.62 ft); May 14 (time unknown) 602 cfs (7.17 ft); June 2 (5 a.m.) 742 cfs (8.05 ft); Aug. 6 (2 to 4 p.m.) 506 cfs (6.54 ft); Aug. 23 (11:30 p.m.) 510 cfs (6.57 ft).
1949: Jan. 2 (2:30 a.m.) 816 cfs (8.48 ft); Jan. 30 (3 p.m.) 554 cfs (6.86 ft); Feb. 25 (6 to 7 a.m.) 551 cfs (6.84 ft); Apr. 9 (1 a.m.) 461 cfs (6.24 ft).
1950: Feb. 17 (11 p.m.) 411 cfs (5.90 ft), (annual maximum below base).

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	139	135	839	708	264	252	247	192	263	222	140	172
2	133	131	681	633	278	273	245	184	284	241	137	156
3	127	147	534	542	281	275	241	185	339	268	133	150
4	122	157	432	472	247	259	233	174	466	270	133	158
5	122	147	355	403	243	246	226	170	588	268	132	153
6	141	140	338	356	231	235	217	173	448	236	127	144
7	150	134	352	333	239	228	210	170	357	196	194	137
8	156	120	359	317	236	222	203	168	307	175	236	132
9	158	113	360	307	239	221	204	164	248	162	243	127
10	150	108	336	312	252	219	204	162	214	155	228	125
11	147	115	309	305	247	215	200	167	193	149	190	120
12	140	123	283	312	235	208	194	176	247	144	163	114
13	134	126	260	310	229	202	191	208	290	140	148	110
14	128	133	248	299	225	196	190	229	325	135	158	110
15	126	160	237	288	226	209	185	265	359	128	181	108
16	126	172	231	270	222	220	181	310	340	126	192	105
17	122	175	219	254	219	233	176	393	279	122	186	103
18	119	174	209	243	212	241	173	389	253	117	180	102
19	117	168	211	237	208	248	168	330	258	114	317	101
20	116	194	209	229	249	254	166	298	261	110	391	99
21	114	202	209	242	265	261	162	282	263	126	391	105
22	113	235	209	252	292	254	161	261	246	121	322	123
23	113	272	208	241	317	241	158	254	226	170	243	132
24	138	270	204	236	303	229	157	242	209	278	206	133
25	152	260	206	249	272	226	158	178	188	401	185	174
26	164	236	299	247	251	222	182	192	174	527	169	194
27	169	209	359	241	239	231	200	212	162	390	161	199
28	164	202	478	230	247	235	210	264	154	269	155	185
29	157	343	575	228	-------	241	206	317	175	200	147	157
30	149	516	627	225	-------	252	198	343	206	168	166	170
31	141	-------	718	241	-------	249	-------	300	-------	148	179	-------

Toms River near Toms River--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	210	127	127	172	205	166	162	225	243	133	108	103
2	243	125	123	191	206	198	168	301	243	126	103	103
3	245	123	117	208	197	258	185	340	216	117	99	103
4	206	126	117	224	202	298	199	403	197	113	98	97
5	185	125	117	233	222	350	216	428	181	111	96	94
6	161	121	117	235	216	366	225	452	181	110	93	97
7	148	120	120	221	226	324	231	479	187	107	97	102
8	143	126	121	210	222	284	231	462	219	134	133	101
9	133	132	121	198	202	266	221	389	245	155	137	97
10	138	135	120	187	197	249	209	307	272	166	160	95
11	156	135	117	179	192	233	206	260	263	182	176	93
12	163	134	117	174	184	221	204	236	224	184	148	97
13	164	132	127	170	178	211	200	246	186	169	128	92
14	161	127	123	186	175	216	194	235	170	146	115	87
15	154	126	116	204	176	229	185	255	174	140	108	87
16	147	121	117	226	181	236	146	274	176	143	102	101
17	139	122	119	240	186	235	214	251	168	145	135	111
18	133	133	120	239	188	234	231	222	167	153	174	96
19	132	139	121	224	186	212	226	225	206	176	161	89
20	131	127	121	233	182	200	209	233	230	191	149	86
21	129	132	194	251	176	191	205	248	226	200	158	85
22	133	135	243	260	174	179	188	312	194	212	175	88
23	133	147	270	248	176	178	181	403	170	216	172	105
24	129	154	317	231	169	176	179	470	157	221	144	110
25	126	156	301	214	169	180	176	454	158	197	123	109
26	123	146	240	204	173	181	182	386	161	160	113	108
27	123	144	198	212	172	178	170	310	157	135	117	104
28	153	139	180	214	170	173	163	272	148	123	122	98
29	155	134	174	216	-------	170	156	248	143	129	117	97
30	138	129	174	210	-------	168	154	236	139	125	113	93
31	131	-------	173	208	-------	166	-------	230	-------	115	108	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	87	211	196	172	194	299	282	204	490	266	155	144
2	86	208	188	255	188	314	351	202	699	286	193	143
3	88	198	182	294	186	338	438	229	558	316	230	143
4	87	253	182	353	186	352	540	243	460	288	313	139
5	89	330	178	448	186	386	462	301	370	245	389	139
6	86	361	172	401	186	356	384	368	317	217	494	143
7	84	432	168	336	186	331	333	462	294	202	464	140
8	83	407	170	288	187	310	294	509	288	190	410	138
9	85	412	168	261	182	305	275	455	278	179	338	138
10	86	390	162	246	181	330	254	414	265	168	265	144
11	84	421	164	231	181	339	245	366	260	158	220	170
12	84	444	163	214	190	347	248	327	246	153	209	187
13	83	470	160	258	198	342	254	a440	247	148	229	181
14	83	545	155	299	253	318	303	a590	265	168	224	158
15	83	504	153	303	330	291	339	a550	298	193	202	155
16	83	411	190	347	368	274	355	a500	321	197	178	150
17	84	325	211	352	448	472	369	a530	326	186	166	141
18	89	269	237	300	480	268	342	a520	304	164	158	134
19	98	241	247	254	462	261	305	a490	308	156	155	129
20	113	224	229	248	434	255	287	448	334	149	161	127
21	120	210	205	255	400	247	263	394	365	145	303	125
22	111	202	192	274	365	242	243	372	408	143	333	131
23	99	206	184	288	326	240	235	304	401	164	421	132
24	94	214	181	294	281	253	226	292	343	224	470	137
25	92	242	175	279	265	258	226	278	303	212	379	125
26	92	252	173	255	261	259	220	272	273	179	286	119
27	90	255	166	247	263	259	219	299	243	166	222	116
28	89	245	172	225	286	254	215	348	230	182	192	117
29	98	224	173	214	298	252	211	360	228	188	172	115
30	144	206	164	205	-------	245	209	331	224	175	160	115
31	200	-------	164	204	-------	231	-------	364	-------	150	150	-------

a No gage-height record; discharge computed on basis of recorded range in stage, precipitation records, and records for Crosswicks Creek at Extonville and North Branch Rancocas Creek at Pemberton.

Toms River near Toms River--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	122	141	294	602	509	369	286	211	212	110	93	281
2	126	128	300	763	470	365	307	209	199	122	92	335
3	128	135	265	604	426	366	331	231	182	145	111	365
4	128	135	249	484	418	361	369	241	175	121	167	288
5	119	139	237	394	396	353	342	241	176	110	194	214
6	126	143	229	379	379	356	365	234	161	108	187	181
7	135	153	220	389	397	370	384	231	156	105	179	178
8	134	160	210	425	400	391	424	221	152	102	145	188
9	131	162	196	428	389	380	442	219	146	97	121	176
10	129	170	186	383	376	350	389	230	144	94	104	153
11	127	182	176	330	353	352	350	246	146	99	97	135
12	126	182	164	294	334	379	327	263	144	103	92	123
13	123	184	161	273	320	415	304	290	139	140	88	125
14	122	178	162	257	307	444	294	251	135	176	88	149
15	121	172	163	245	300	408	275	233	134	191	87	175
16	119	162	200	235	300	355	252	226	132	186	85	182
17	119	154	237	226	309	320	260	214	129	152	82	175
18	122	150	259	219	305	313	251	196	128	141	84	164
19	123	146	279	222	310	322	255	186	129	149	103	148
20	127	166	259	220	350	317	260	170	129	149	94	131
21	129	185	249	219	377	313	261	186	127	132	84	120
22	128	191	245	274	414	307	241	231	121	139	79	111
23	129	187	236	303	478	326	261	287	115	125	77	109
24	150	175	228	362	509	350	266	334	111	108	78	113
25	198	168	211	414	542	366	269	421	119	101	79	113
26	217	158	192	401	485	376	261	418	114	96	77	107
27	216	164	182	400	419	356	249	344	108	93	75	104
28	204	176	175	436	382	329	231	291	105	90	74	103
29	180	231	178	502	-------	307	206	253	107	87	92	103
30	160	275	236	545	-------	290	204	230	107	88	132	119
31	148	-------	356	530	-------	275	-------	217	-------	99	158	-------

Note.--Backwater from tree Oct. 5-26.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	147	204	146	156	181	182	243	246	203	95	72	111
2	166	240	141	150	214	180	225	239	176	92	81	120
3	156	255	138	149	230	162	211	241	156	89	97	110
4	138	252	128	148	240	164	203	241	179	88	145	108
5	134	234	125	147	235	167	208	237	209	94	167	109
6	120	205	126	144	210	164	205	226	215	105	172	102
7	113	182	126	144	194	161	197	212	203	a105	144	89
8	110	168	126	143	181	162	188	198	188	a100	111	82
9	107	156	126	139	175	176	182	190	164	a95	97	79
10	103	149	122	138	181	184	182	179	146	a100	87	79
11	103	145	125	145	190	184	180	176	140	a130	82	85
12	101	141	133	148	190	187	176	184	129	158	78	107
13	98	138	152	154	187	214	176	174	125	170	76	134
14	97	150	164	164	220	241	174	168	123	141	73	216
15	98	158	166	166	273	258	173	163	134	126	72	248
16	102	156	158	161	327	260	170	212	148	143	70	248
17	102	150	147	153	391	240	168	236	146	168	69	217
18	105	144	143	152	391	219	164	229	137	174	68	162
19	111	139	153	153	333	200	162	241	126	164	67	133
20	111	135	166	150	270	186	161	270	123	133	112	121
21	109	133	169	144	222	209	166	317	122	113	158	114
22	105	132	164	141	214	240	170	331	119	102	200	115
23	104	127	157	140	215	292	168	279	115	95	235	117
24	102	125	155	139	211	343	167	237	111	89	196	114
25	101	137	153	138	210	380	174	231	127	87	141	107
26	111	150	148	137	204	380	178	209	143	84	116	102
27	132	147	156	135	192	342	179	188	134	82	102	98
28	143	145	175	134	182	308	204	179	114	79	93	97
29	157	144	185	138	-------	300	226	179	102	76	87	95
30	169	148	179	141	-------	287	242	193	97	75	82	94
31	191	-------	167	157	-------	268	-------	204	-------	73	101	-------

a No gage-height record; discharge computed on basis of recorded range in stage, weather records, and records for stations on nearby streams.

Toms River near Toms River--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	4,247	169	113	137	1.10	1.27
November	5,617	516	108	187	1.51	1.68
December	11,094	839	204	358	2.89	3.33
Calendar year 1945	84,581	839	108	232	1.87	25.35
January 1946	9,762	708	225	315	2.54	2.93
February	6,968	317	208	249	2.01	2.09
March	7,297	275	196	235	1.90	2.19
April	5,846	247	157	195	1.57	1.75
May	7,347	393	162	237	1.91	2.20
June	8,322	588	154	277	2.23	2.50
July	6,276	527	110	202	1.63	1.88
August	6,133	391	127	198	1.60	1.84
September	4,098	199	99	137	1.10	1.23
Water year 1945-46	83,007	839	99	227	1.83	24.89
October 1946	4,765	245	123	154	1.24	1.43
November	3,982	156	120	133	1.07	1.19
December	4,862	317	116	157	1.27	1.46
Calendar year 1946	75,658	708	99	207	1.67	22.69
January 1947	6,622	260	170	214	1.73	1.99
February	5,302	226	169	189	1.52	1.59
March	6,926	366	166	223	1.80	2.08
April	5,816	231	146	194	1.56	1.74
May	9,792	479	222	316	2.55	2.94
June	5,801	272	139	193	1.56	1.74
July	4,734	221	107	153	1.23	1.42
August	3,982	176	93	128	1.03	1.19
September	2,928	111	85	97.6	.787	.88
Water year 1946-47	65,512	479	85	179	1.44	19.65
October 1947	2,974	200	83	95.9	.773	.89
November	9,312	545	198	310	2.50	2.79
December	5,624	247	153	181	1.46	1.69
Calendar year 1947	69,813	545	83	191	1.54	20.94
January 1948	8,600	448	172	277	2.23	2.58
February	7,951	480	181	274	2.21	2.38
March	9,028	386	231	291	2.35	2.71
April	8,927	540	209	298	2.40	2.68
May	11,762	590	202	379	3.06	3.53
June	9,945	699	224	331	2.67	2.98
July	5,957	316	143	192	1.55	1.79
August	8,241	494	150	266	2.15	2.47
September	4,175	187	115	139	1.12	1.25
Water year 1947-48	92,496	699	83	253	2.04	27.74
October 1948	4,361	217	119	141	1.14	1.31
November	5,062	275	135	169	1.36	1.52
December	6,934	356	161	224	1.81	2.08
Calendar year 1948	90,943	699	115	248	2.00	27.28
January 1949	11,758	763	219	379	3.06	3.53
February	10,964	542	300	392	3.16	3.29
March	10,881	444	275	351	2.83	3.26
April	8,916	442	204	297	2.40	2.67
May	7,755	421	170	250	2.02	2.33
June	4,182	212	105	139	1.12	1.25
July	3,758	191	87	121	.976	1.13
August	3,298	194	74	106	.855	.99
September	4,968	365	103	166	1.34	1.49
Water year 1948-49	82,837	763	74	227	1.83	24.85
October 1949	3,746	191	97	121	.976	1.12
November	4,889	255	125	163	1.31	1.47
December	4,619	185	122	149	1.20	1.39
Calendar year 1949	79,734	763	74	218	1.76	23.92
January 1950	4,548	166	134	147	1.19	1.36
February	6,463	391	175	231	1.86	1.94
March	7,240	380	161	234	1.89	2.17
April	5,622	243	161	187	1.51	1.69
May	6,809	331	163	220	1.77	2.04
June	4,354	215	97	145	1.17	1.31
July	3,425	174	73	110	.887	1.03
August	3,451	235	67	111	.895	1.04
September	3,714	248	79	124	1.00	1.11
Water year 1949-50	58,880	391	67	161	1.30	17.67

Cedar Creek at Lanoka Harbor

Location.--Lat 39°52'05", long 74°10'06", on right bank 20 ft upstream from bridge on U. S. Highway 9 at village of Lanoka Harbor, Ocean County.

Drainage area.--56.0 sq mi.

Records available.--July 1932 to September 1950.

Gage.--Water-stage recorder and concrete control. Datum of gage is at mean sea level, datum of 1929. Prior to Oct. 13, 1933, water-stage recorder at site 70 ft downstream at same datum.

Average discharge.--18 years, 108 cfs.

Extremes.--1932-50: Maximum discharge, 1,050 cfs Oct. 28, 1943 (gage height, 4.50 ft), from rating curve extended above 300 cfs; maximum gage height, 6.45 ft Feb. 16, 1936 (backwater from ice and tide); minimum discharge, 12.9 cfs Oct. 2, 1947 (gage height, 2.13 ft).

Annual maximum discharge (water years).--
1946: June 13 (7 a.m.) 496 cfs (3.47 ft).
1947: Aug. 21 (11:30 p.m.) 491 cfs (3.46 ft).
1948: May 11 (3 a.m.) 590 cfs (3.64 ft).
1949: May 14 (2 a.m.) 340 cfs (3.15 ft).
1950: Apr. 30 (3 a.m.) 354 cfs (3.18 ft).

Remarks.--Flow occasionally regulated by cranberry bogs.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	67	69	c255	a290	132	125	125	108	144	92	84	75
2	53	145	c305	a250	132	125	125	99	144	108	84	67
3	39	72	c210	a210	132	125	129	99	158	136	82	72
4	15.3	67	173	a180	115	122	173	92	52	129	81	72
5	71	67	144	169	112	118	155	92	210	118	75	75
6	134	67	c155	166	115	115	34	92	151	105	72	72
7	75	67	c170	158	122	112	84	92	132	95	108	70
8	56	64	166	155	122	108	95	89	118	92	118	70
9	71	64	162	118	118	108	105	22	108	89	112	67
10	41	64	158	136	118	112	108	81	65	86	102	67
11	72	64	151	144	118	112	108	147	16.5	84	89	64
12	49	64	136	144	115	108	105	92	118	84	84	61
13	16.5	64	106	144	115	105	105	125	320	78	81	61
14	14.1	70	89	140	112	112	102	132	118	75	81	61
15	53	86	105	136	118	147	102	198	155	75	81	61
16	75	81	105	132	115	99	105	214	155	75	78	61
17	17.8	78	105	a127	112	118	99	188	140	75	86	61
18	37	72	102	122	108	129	95	162	122	75	84	58
19	143	75	102	118	108	144	92	147	115	75	92	58
20	112	99	105	115	132	147	86	132	108	75	105	58
21	55	89	a100	a125	147	147	86	122	108	75	95	53
22	53	130	a95	132	151	140	86	78	105	75	76	44
23	56	151	a90	a130	147	129	75	82	95	115	53	61
24	78	129	a90	a125	140	122	86	133	92	177	75	81
25	81	115	a120	125	132	129	84	112	92	177	75	99
26	81	102	a160	125	125	132	155	95	89	169	48	89
27	46	92	a200	125	122	129	147	121	86	132	15.3	84
28	67	98	a180	122	129	122	112	158	89	112	83	78
29	61	c320	a250	118	-------	122	115	128	108	92	169	72
30	49	c275	a310	115	-------	122	213	108	95	86	78	86
31	51	-------	a300	122	-------	125	-------	192	-------	86	44	-------

a No gage-height record; discharge computed on basis of recorded range in stage, precipitation records, and records for stations on nearby streams.
c Backwater from tide.
Note.--Backwater from rocks July 18 to Aug. 6.

Cedar Creek at Lanoka Harbor--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	64	45	66	44	60	86	81	118	92	112	64	75
2	63	46	64	95	33	188	81	118	108	92	62	70
3	106	53	60	99	67	173	67	122	92	85	60	64
4	76	58	58	96	78	147	46	129	89	80	60	61
5	67	88	60	50	92	140	78	144	75	76	60	58
6	64	148	64	81	95	125	84	151	92	80	53	58
7	64	67	64	81	99	92	84	147	122	100	53	67
8	64	64	60	84	99	105	81	51	140	110	61	64
9	64	67	58	84	95	108	84	36	132	105	75	64
10	56	64	58	81	92	105	92	58	105	100	78	61
11	c56	64	56	78	89	102	92	70	33	95	72	61
12	c75	64	56	75	84	99	95	128	102	90	62	64
13	78	64	58	75	84	95	200	256	140	85	39	64
14	74	64	58	86	84	64	99	122	105	80	53	61
15	69	62	56	92	84	86	95	115	147	78	53	58
16	53	60	54	102	84	99	102	79	95	76	53	32
17	70	60	54	115	84	99	115	118	89	74	70	49
18	67	70	56	102	84	99	112	99	89	74	56	49
19	67	70	56	92	84	92	105	95	102	76	16.5	40
20	64	70	58	102	84	92	95	115	99	85	15.3	49
21	64	68	131	118	84	89	95	122	95	85	167	67
22	47	74	140	115	84	89	147	132	89	100	207	61
23	30	76	129	105	81	89	89	147	86	95	81	46
24	44	70	115	99	81	86	86	144	81	90	72	54
25	42	66	99	92	81	86	86	132	84	80	67	82
26	46	62	86	89	81	78	92	129	89	74	72	43
27	53	64	81	99	81	75	92	122	115	70	136	15.3
28	56	64	75	99	81	78	75	115	115	70	115	14.1
29	50	62	75	95	-------	78	67	108	108	74	102	137
30	74	62	78	92	-------	78	81	105	102	72	89	84
31	56	-------	68	89	-------	81	-------	80	-------	68	81	-------

c Backwater from tide.

Note.--No gage-height record Nov. 14 to Dec. 18, July 3 to Aug. 5; discharge computed on basis of range in stage and records for stations on nearby streams, especially East Branch Wading River at Harrisville.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15.3	95	95	89	102	136	140	115	368	118	120	95
2	22	84	92	162	100	140	166	115	336	136	170	92
3	115	75	92	105	98	155	177	118	236	129	240	95
4	61	310	89	136	96	158	184	129	229	122	270	105
5	53	336	89	173	94	162	180	147	203	112	280	95
6	56	229	89	192	94	155	169	195	184	105	290	95
7	49	199	89	158	92	151	158	203	173	105	270	92
8	16.5	236	89	140	92	151	151	206	173	108	230	89
9	16.5	218	89	140	92	151	151	102	173	115	160	92
10	32	195	86	136	92	158	125	206	166	112	130	92
11	42	177	86	115	96	162	122	341	158	99	118	78
12	44	199	86	105	108	162	125	147	151	95	118	67
13	75	192	86	129	112	162	129	158	147	95	122	84
14	120	180	84	155	147	155	144	203	118	105	118	84
15	58	166	66	158	195	144	186	210	40	105	112	67
16	56	147	46	155	195	140	258	206	49	102	102	53
17	56	132	89	147	195	136	178	221	180	97	99	73
18	56	118	112	140	195	132	158	214	305	94	99	108
19	64	112	112	129	184	132	144	188	162	90	95	86
20	67	105	105	122	114	129	136	113	158	88	118	81
21	53	102	99	129	89	125	129	214	162	86	173	81
22	30	99	95	140	63	125	122	151	158	88	221	68
23	38	105	92	144	115	122	118	112	151	100	260	27
24	42	115	92	144	118	125	118	166	144	150	192	105
25	35	129	89	140	116	129	118	136	136	140	162	102
26	25	115	89	136	118	129	118	140	129	120	140	45
27	44	95	89	b130	118	132	122	140	122	110	122	122
28	42	99	89	b125	125	140	129	140	118	120	112	78
29	137	102	86	b120	132	136	125	140	112	110	105	78
30	84	99	84	115	-------	132	118	147	102	105	99	78
31	99	-------	84	105	-------	129	-------	225	-------	100	95	-------

b Stage-discharge relation affected by ice.

Note.--No gage-height record Feb. 1-11, July 13 to Aug. 10; discharge computed on basis of recorded range in stage and records for stations on nearby streams.

Cedar Creek at Lanoka Harbor--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	75	81	169	236	244	199	221	125	107	72	58	173
2	75	78	144	221	229	192	203	125	42	72	61	177
3	75	78	115	214	221	188	166	144	92	72	84	162
4	61	84	151	195	210	180	173	151	166	72	155	136
5	70	84	169	169	206	177	102	144	102	70	184	105
6	99	81	158	177	199	177	162	129	99	70	166	89
7	86	86	144	184	195	173	195	125	95	67	136	81
8	86	86	132	180	199	169	206	125	74	70	105	86
9	86	84	122	173	195	166	203	95	41	67	89	92
10	84	105	115	166	192	158	188	158	105	70	78	84
11	81	144	108	155	184	169	173	104	70	70	72	47
12	81	126	105	147	177	180	162	64	81	70	67	103
13	78	125	105	140	169	180	158	145	84	89	70	67
14	75	118	102	136	169	180	162	205	86	95	78	72
15	75	105	99	129	166	177	169	125	84	89	70	84
16	77	99	129	67	155	173	158	118	54	84	67	86
17	70	95	155	89	158	158	155	118	24	81	64	81
18	72	92	155	105	162	158	147	115	116	81	64	75
19	74	89	147	108	162	166	147	112	123	78	70	72
20	80	102	166	108	166	158	147	108	75	75	67	70
21	81	115	162	108	173	162	147	112	75	75	64	67
22	53	108	155	147	180	162	177	90	78	75	61	67
23	40	105	147	162	203	169	166	169	75	72	58	70
24	84	99	140	169	206	173	158	173	75	70	56	67
25	108	99	129	173	199	173	155	124	75	67	56	64
26	118	99	105	177	188	180	166	77	75	67	56	66
27	84	105	115	188	173	260	221	170	72	67	56	58
28	75	115	105	221	177	173	151	114	72	64	56	56
29	74	147	66	232	-------	169	132	35	72	64	64	58
30	86	177	49	244	-------	136	129	136	72	61	67	70
31	81	-------	155	229	-------	136	-------	132	-------	58	74	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	112	78	70	95	95	108	129	89	58	56	87
2	70	132	53	70	112	92	105	129	89	58	61	163
3	67	140	61	70	115	67	102	151	86	56	95	61
4	67	129	67	70	108	89	102	136	92	56	115	61
5	64	112	70	70	99	86	151	105	99	58	81	43
6	64	102	70	67	92	84	114	99	92	64	70	19.1
7	61	92	70	58	84	81	44	86	84	64	75	30
8	61	86	70	56	81	81	70	17.8	75	64	70	44
9	61	81	67	56	81	86	108	14.1	72	64	61	44
10	61	78	67	51	84	86	102	91	70	67	53	44
11	61	78	70	61	86	81	92	168	70	61	53	49
12	61	75	72	64	86	86	89	99	67	61	53	64
13	61	75	59	67	86	99	86	86	67	67	53	89
14	61	86	30	70	105	112	84	56	67	64	51	115
15	61	86	64	70	147	115	84	53	70	78	49	115
16	61	84	70	70	166	112	84	78	72	81	49	78
17	51	81	70	67	158	102	81	89	72	84	49	67
18	72	78	70	67	144	99	81	86	70	67	46	81
19	75	75	78	67	129	92	d82	95	70	25	46	89
20	70	75	81	70	115	86	d84	102	70	61	53	64
21	72	72	81	67	74	108	d90	99	70	93	81	61
22	70	72	81	67	108	125	h86	92	95	51	92	61
23	64	70	81	67	108	147	d84	86	56	51	72	61
24	61	70	53	67	108	155	d84	81	46	51	61	49
25	58	84	61	67	105	155	86	81	58	51	46	16.5
26	58	89	67	67	99	147	86	78	58	51	19.1	81
27	58	84	75	67	89	136	86	78	58	49	32	99
28	58	81	78	67	78	129	108	75	56	49	42	42
29	78	78	78	67	-------	129	151	78	56	49	36	46
30	81	81	78	67	-------	125	231	86	58	34	15.3	49
31	102	-------	75	84	-------	115	-------	86	-------	27	15.3	-------

d Doubtful gage-height record; discharge computed on basis of gage-height record and records for stations on nearby streams.
h Computed from staff-gage reading.

Cedar Creek at Lanoka Harbor--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	1,889.7	143	14.1	61.0	1.09	1.25
November	3,000	320	64	100	1.79	1.99
December	4,899	310	89	158	2.82	3.25
Calendar year 1945	39,252.5	320	14.1	108	1.93	26.06
January 1946	4,518	290	115	146	2.61	3.00
February	3,464	151	108	124	2.21	2.30
March	3,810	147	99	123	2.20	2.53
April	3,291	213	34	110	1.96	2.19
May	3,732	214	22	120	2.14	2.48
June	3,608.5	320	16.5	120	2.14	2.40
July	3,117	177	75	101	1.80	2.07
August	2,592.3	169	15.3	83.6	1.49	1.72
September	2,058	99	44	68.6	1.22	1.37
Water year 1945-46	39,979.5	320	14.1	110	1.96	26.55
October 1946	1,923	106	30	62.0	1.11	1.28
November	2,016	148	45	67.2	1.20	1.34
December	2,251	140	54	72.6	1.30	1.49
Calendar year 1946	36,380.8	320	15.3	99.7	1.78	24.17
January 1947	2,806	118	44	90.5	1.62	1.86
February	2,309	99	33	82.5	1.47	1.53
March	3,103	188	64	100	1.79	2.06
April	2,798	200	46	93.3	1.67	1.86
May	3,607	256	36	116	2.07	2.40
June	3,012	147	33	100	1.79	2.00
July	2,631	112	68	84.9	1.52	1.75
August	2,304.8	207	15.3	74.3	1.33	1.53
September	1,772.4	137	14.1	59.1	1.06	1.18
Water year 1946-47	30,533.2	256	14.1	83.7	1.49	20.28
October 1947	1,703.3	137	15.3	54.9	.980	1.13
November	4,565	336	75	152	2.71	3.03
December	2,759	112	46	89.0	1.59	1.83
Calendar year 1947	33,370.5	336	14.1	91.4	1.63	22.16
January 1948	4,214	192	89	136	2.43	2.80
February	3,489	185	63	120	2.14	2.32
March	4,395	162	122	142	2.54	2.92
April	4,393	258	118	146	2.61	2.92
May	5,248	341	102	169	3.02	3.49
June	5,043	368	40	168	3.00	3.35
July	3,361	150	86	108	1.93	2.23
August	4,942	290	95	159	2.84	3.28
September	2,507	122	27	83.6	1.49	1.66
Water year 1947-48	46,619.3	368	15.3	127	2.27	30.96
October 1948	2,444	118	40	78.8	1.41	1.62
November	3,121	177	78	104	1.86	2.07
December	4,038	169	49	130	2.32	2.68
Calendar year 1948	47,195	368	27	129	2.30	31.34
January 1949	5,149	244	67	166	2.96	3.42
February	5,257	244	155	188	3.36	3.49
March	5,571	260	136	178	3.09	3.57
April	4,999	221	102	167	2.98	3.32
May	3,867	205	35	125	2.23	2.57
June	2,461	166	24	82.0	1.46	1.63
July	2,254	95	58	72.7	1.30	1.50
August	2,473	184	56	79.8	1.42	1.64
September	2,585	177	47	86.2	1.54	1.72
Water year 1948-49	44,019	260	24	121	2.16	29.23
October 1949	2,040	102	51	65.8	1.18	1.35
November	2,638	140	70	87.9	1.57	1.75
December	2,145	81	30	69.2	1.24	1.42
Calendar year 1949	41,239	260	24	113	2.02	27.38
January 1950	2,065	84	51	66.6	1.19	1.37
February	2,942	166	74	105	1.88	1.95
March	3,302	155	67	107	1.91	2.19
April	2,945	231	44	98.2	1.75	1.96
May	2,789.9	168	14.1	90.0	1.61	1.85
June	2,154	99	46	71.8	1.28	1.43
July	1,814	93	25	58.5	1.04	1.20
August	1,750.7	115	15.3	56.5	1.01	1.16
September	1,972.6	163	16.5	65.8	1.18	1.31
Water year 1949-50	28,558.2	231	14.1	78.2	1.40	18.94

Batsto River at Batsto

Location.--Lat 39°38'33", long 74°39'00", on right bank 30 ft downstream from highway bridge at Batsto, Burlington County, and 1 mile upstream from mouth.

Drainage area.--70.5 sq mi.

Records available.--October 1927 to March 1939, October 1939 to September 1950.

Gage.--Water-stage recorder. Concrete control since Oct. 12, 1939; prior to Mar. 24, 1939, wooden control at site 50 ft downstream. Datum of gage is 1.4 ft above mean sea level, datum of 1929.

Average discharge.--23 years (1927-50), 127 cfs.

Extremes.--1927-50: Maximum discharge, 2,300 cfs Aug. 19 or 20, 1939 (gage height, 8.7 ft from floodmark), from rating curve extended above 930 cfs; minimum daily, 15 cfs Aug. 3, 1933.

Annual maximum daily discharge (water years).--
1946: Dec. 31, 644 cfs.
1947: May 7, 382 cfs.
1948: Aug. 24, 833 cfs.
1949: Jan. 2, 563 cfs.
1950: Mar. 25, 233 cfs.

Remarks.--Records include diversion around station by old grist mill. Flow occasionally regulated by sluice gates and sawmill at pond 300 ft upstream (capacity, about 90 cfs-days).

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71	94	506	615	125	142	135	102	137	112	102	81
2	71	98	330	528	149	173	187	100	149	149	94	85
3	72	90	283	390	159	127	126	96	175	125	90	92
4	72	87	229	328	152	135	136	94	307	204	90	81
5	72	87	183	215	140	135	131	94	262	236	77	77
6	71	87	292	217	137	126	124	94	215	200	81	74
7	74	85	212	210	181	121	121	113	145	97	150	69
8	79	83	155	202	105	119	117	155	142	124	72	64
9	83	83	207	194	135	119	124	181	128	106	100	67
10	85	83	210	194	142	119	124	152	115	92	100	67
11	85	81	194	191	145	117	121	124	102	89	94	67
12	83	81	170	191	140	113	115	117	170	89	87	67
13	81	81	152	186	137	111	111	128	178	90	83	65
14	81	81	145	145	135	104	109	140	272	87	98	65
15	90	87	137	198	131	119	106	217	340	85	87	65
16	92	94	133	139	128	126	102	241	317	79	98	64
17	94	102	124	169	126	137	98	296	307	77	115	64
18	92	100	117	126	121	199	92	260	215	70	94	62
19	85	98	117	133	119	175	94	234	199	65	96	62
20	a84	104	117	131	137	270	94	241	167	72	109	62
21	a82	109	115	135	147	262	92	236	149	76	111	69
22	81	145	113	137	165	190	87	212	115	79	100	65
23	81	145	113	135	170	197	79	183	131	129	85	62
24	89	204	111	133	165	175	85	124	124	172	90	65
25	94	189	113	135	159	167	89	142	113	287	85	77
26	94	170	152	133	149	152	115	128	104	411	90	80
27	98	152	191	133	142	155	109	165	92	288	81	78
28	92	140	260	131	142	157	106	159	89	242	74	77
29	90	178	457	128	-------	157	104	175	87	153	87	75
30	90	285	404	126	-------	203	102	194	94	137	94	77
31	89	-------	644	165	-------	153	-------	194	-------	117	77	------

a No gage-height record; discharge interpolated.

Batsto River at Batsto--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	72	65	69	90	132	101	98	117	174	93	76	88
2	74	65	69	101	132	122	96	121	161	90	72	80
3	74	63	65	107	127	148	100	130	142	86	69	77
4	72	63	65	114	124	184	102	151	128	80	69	73
5	67	65	65	118	126	213	102	185	117	77	70	72
6	64	65	65	120	126	236	104	243	111	73	68	72
7	62	65	65	120	128	177	104	382	111	73	66	72
8	62	66	66	120	133	208	102	295	135	90	73	72
9	64	68	66	120	128	187	102	247	151	88	95	70
10	73	68	66	120	124	171	104	204	164	86	136	70
11	78	70	66	117	119	160	106	164	161	88	141	68
12	80	70	66	106	117	150	117	149	144	90	116	66
13	82	70	66	102	113	121	119	164	126	82	116	66
14	84	70	66	109	111	137	117	191	115	78	91	65
15	90	70	63	113	109	145	115	227	121	75	77	63
16	107	66	60	124	111	152	111	255	121	73	75	63
17	101	66	60	135	111	157	120	214	119	75	77	62
18	95	70	60	137	111	152	129	164	113	78	80	62
19	95	72	60	136	111	142	134	137	117	80	80	60
20	82	72	58	148	111	134	127	167	115	84	78	60
21	77	72	77	148	113	125	120	180	104	88	84	60
22	73	72	105	153	106	122	118	231	92	107	84	62
23	72	72	110	156	106	120	120	243	96	120	80	65
24	72	72	105	146	106	120	122	222	93	129	75	65
25	70	73	97	138	104	118	112	236	91	132	72	67
26	70	73	95	132	102	116	112	238	90	136	72	69
27	68	72	95	126	102	111	111	229	90	100	82	66
28	66	69	93	138	102	109	111	229	95	77	90	63
29	66	76	93	143	-------	106	106	169	101	76	107	61
30	66	71	93	138	-------	109	100	169	97	77	116	59
31	66	-------	91	136	-------	102	-------	169	-------	77	105	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55	71	102	89	113	171	160	99	728	146	90	129
2	55	67	96	157	113	203	226	143	733	195	146	120
3	55	65	90	159	113	211	406	136	532	216	143	114
4	55	96	90	197	111	228	398	132	434	200	184	112
5	53	106	90	255	111	239	279	153	275	168	318	107
6	a55	98	87	229	111	228	261	190	284	146	318	105
7	a57	98	83	186	111	213	191	270	239	136	289	101
8	a59	147	85	172	109	176	184	286	228	129	286	101
9	61	85	85	157	106	226	173	251	200	120	242	99
10	62	98	85	140	104	235	158	258	200	116	203	103
11	61	115	87	117	102	226	146	254	158	102	160	114
12	57	128	87	139	102	192	148	273	160	96	136	120
13	57	131	87	147	106	249	148	352	153	98	129	120
14	61	147	83	167	159	203	221	426	146	98	143	116
15	67	159	81	207	152	187	208	543	138	98	176	107
16	69	152	100	229	248	173	195	504	138	98	192	101
17	65	133	111	220	341	166	257	450	150	96	168	97
18	62	117	124	199	346	158	203	400	153	94	141	95
19	59	106	121	170	289	150	195	366	173	91	122	97
20	57	100	96	149	263	146	173	302	211	93	166	103
21	56	96	89	149	230	136	158	289	246	88	681	103
22	56	a96	79	154	213	127	134	343	254	80	765	99
23	56	115	77	170	166	134	125	192	230	84	774	95
24	55	117	77	170	158	138	127	349	192	95	833	91
25	51	124	79	167	153	143	127	187	168	95	566	88
26	51	128	81	152	148	146	129	200	153	93	406	86
27	53	133	81	149	143	166	127	198	148	91	327	84
28	53	124	83	142	150	160	125	205	146	90	210	84
29	56	119	85	135	160	158	118	192	143	88	184	84
30	61	109	83	116	------	153	93	192	134	84	160	84
31	65	------	81	111	------	143	------	296	------	84	143	------

a No gage-height record; discharge at control computed on basis of recorded range in stage and records for stations on nearby streams.

Batsto River at Batsto--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	88	94	364	499	368	265	160	171	112	62	49	72
2	90	92	310	563	434	262	192	146	108	60	49	83
3	90	92	256	474	a360	259	217	155	106	60	49	94
4	88	90	263	339	a320	246	227	192	100	60	51	102
5	88	92	281	273	a350	233	209	245	98	59	57	92
6	103	92	305	262	334	228	217	245	96	59	60	74
7	96	96	273	238	367	226	230	215	92	59	59	65
8	94	104	239	284	296	223	264	192	85	59	55	64
9	94	129	190	334	293	210	293	171	81	59	54	69
10	92	132	192	268	287	198	232	160	81	59	51	71
11	92	125	167	223	268	203	205	160	79	58	49	65
12	90	122	137	193	244	218	147	162	79	37	47	60
13	90	120	131	158	216	241	169	144	79	57	47	62
14	90	120	135	163	208	249	171	157	79	69	53	65
15	89	118	133	165	220	236	173	169	77	69	65	69
16	89	114	149	143	223	210	173	169	74	65	65	70
17	87	110	175	134	244	190	167	155	72	64	59	66
18	87	97	212	138	223	188	157	144	72	62	55	63
19	85	95	210	143	218	202	153	135	71	62	54	61
20	83	127	210	134	226	217	151	131	71	60	53	60
21	83	118	194	132	262	190	148	153	71	59	51	56
22	83	129	189	172	298	205	146	173	71	57	49	55
23	83	134	186	193	364	260	146	217	71	55	49	56
24	85	129	179	223	316	202	153	180	69	54	49	52
25	100	129	171	287	352	243	162	227	67	53	49	52
26	109	125	165	287	307	243	164	169	65	53	49	54
27	113	127	128	301	251	235	157	169	64	51	48	54
28	111	134	125	416	236	225	146	155	64	49	48	52
29	104	254	127	543	-------	207	162	140	64	49	53	50
30	100	249	143	518	-------	192	190	131	62	49	59	61
31	96	-------	297	485	-------	178	-------	123	-------	49	60	-------

a No gage-height record; discharge at control computed on basis of records for stations on nearby streams.

Note.--Backwater from moss on control May 19 to June 14.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	72	105	75	79	92	100	147	146	116	48	48	55
2	77	121	75	79	110	101	136	131	110	48	48	69
3	75	126	77	79	120	97	128	127	104	48	49	72
4	72	130	77	79	127	91	121	125	104	49	49	60
5	68	126	75	72	127	82	102	131	104	49	53	53
6	66	115	73	74	123	79	124	123	108	71	54	53
7	63	105	73	85	116	84	110	129	106	74	55	53
8	63	97	73	81	108	84	102	127	100	54	54	53
9	61	89	72	74	104	105	98	123	90	55	54	53
10	61	80	70	72	102	99	83	120	79	59	53	53
11	60	77	70	78	104	95	87	144	74	92	51	53
12	60	84	73	76	102	95	87	176	78	87	51	54
13	58	80	80	74	100	103	87	146	76	79	49	67
14	58	82	86	78	112	115	88	131	74	76	49	87
15	56	88	88	78	146	124	88	116	74	76	48	88
16	56	91	86	78	171	134	88	110	76	69	48	88
17	56	89	79	76	157	132	a85	129	74	64	48	76
18	56	86	72	76	171	117	a85	144	71	65	48	59
19	61	84	75	85	167	111	a85	148	67	67	48	59
20	65	80	79	83	151	105	a90	185	65	67	55	60
21	65	79	79	76	133	113	a95	190	65	64	78	60
22	63	77	73	69	116	124	a95	171	65	60	94	86
23	60	75	72	62	116	174	92	153	65	57	71	79
24	60	75	72	69	116	193	92	135	64	55	62	74
25	58	77	70	71	116	233	90	108	64	55	62	69
26	58	80	72	71	112	226	90	83	65	54	60	64
27	58	82	75	71	108	198	90	94	60	51	57	54
28	60	82	77	71	102	189	116	94	53	49	55	53
29	83	80	79	81	-------	161	110	94	48	49	54	55
30	86	79	82	83	-------	165	114	98	49	49	57	57
31	99	-------	80	81	-------	158	-------	129	-------	48	54	-------

a No gage-height record; discharge at control computed on basis of records for stations on nearby streams.

Note.--Backwater from moss on control Dec. 17 to Jan. 10, June 2-21.

Batsto River at Batsto--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	2,597	98	71	83.8	1.19	1.37
November	3,503	285	81	117	1.66	1.85
December	6,686	644	111	216	3.06	3.53
Calendar year 1945	51,454	644	67	141	2.00	27.17
January 1946	6,193	615	126	200	2.84	3.27
February	3,983	181	105	142	2.01	2.10
March	4,755	270	104	153	2.17	2.51
April	3,335	187	79	111	1.57	1.76
May	5,091	296	94	164	2.33	2.69
June	5,140	340	87	171	2.43	2.71
July	4,339	411	65	140	1.99	2.29
August	2,891	150	72	93.3	1.32	1.53
September	2,125	92	62	70.8	1.00	1.12
Water year 1945-46	50,638	644	62	139	1.97	26.73
October 1946	2,344	107	62	75.6	1.07	1.24
November	2,071	76	63	69.0	.979	1.09
December	2,340	110	58	75.5	1.07	1.23
Calendar year 1946	44,607	615	58	122	1.73	23.54
January 1947	3,916	156	90	126	1.79	2.07
February	3,245	133	102	116	1.65	1.71
March	4,455	236	101	144	2.04	2.35
April	3,341	134	96	111	1.57	1.76
May	6,222	382	117	201	2.85	3.28
June	3,595	174	90	120	1.70	1.90
July	2,758	136	73	89.0	1.26	1.45
August	2,692	141	66	86.8	1.23	1.42
September	2,018	88	59	67.3	.955	1.06
Water year 1946-47	38,997	382	58	107	1.52	20.56
October 1947	1,795	69	51	57.9	.821	.95
November	3,380	159	65	113	1.60	1.78
December	2,765	124	77	89.2	1.27	1.46
Calendar year 1947	40,182	382	51	110	1.56	21.19
January 1948	5,099	255	89	164	2.33	2.69
February	4,731	346	102	163	2.31	2.50
March	5,584	249	127	180	2.55	2.95
April	5,593	406	93	186	2.64	2.95
May	8,451	543	99	272	3.86	4.45
June	7,247	733	134	242	3.43	3.82
July	3,508	216	80	113	1.60	1.85
August	8,751	833	90	282	4.00	4.62
September	3,059	129	84	102	1.45	1.61
Water year 1947-48	59,943	833	51	164	2.33	31.63
October 1948	2,872	113	83	92.6	1.31	1.52
November	3,689	254	90	123	1.74	1.95
December	6,236	364	125	201	2.85	3.29
Calendar year 1948	64,800	833	80	177	2.51	34.20
January 1949	8,685	563	132	280	3.97	4.58
February	8,085	434	208	289	4.10	4.26
March	6,884	285	178	222	3.15	3.63
April	5,481	293	146	183	2.60	2.89
May	5,255	245	128	170	2.41	2.77
June	2,380	112	62	79.3	1.12	1.26
July	1,777	69	37	57.3	.813	.94
August	1,645	65	47	53.1	.753	.87
September	1,969	102	50	65.6	.930	1.04
Water year 1948-49	54,958	563	37	151	2.14	29.00
October 1949	2,014	99	56	65.0	.922	1.06
November	2,721	130	75	90.7	1.29	1.44
December	2,359	88	70	76.1	1.08	1.24
Calendar year 1949	49,255	563	37	135	1.91	25.98
January 1950	2,361	85	62	76.2	1.08	1.25
February	3,429	171	92	122	1.73	1.81
March	3,987	233	79	129	1.83	2.10
April	3,005	147	83	100	1.42	1.59
May	4,060	190	83	131	1.86	2.14
June	2,348	116	48	78.3	1.11	1.24
July	1,888	92	48	60.9	.864	1.00
August	1.716	94	48	55.4	.786	.91
September	1,916	88	53	63.9	.906	1.01
Water year 1949-50	31,804	233	48	87.1	1.24	16.79

East Branch Wading River at Harrisville

Location.--Lat 39°39'47", long 74°31'26", 50 ft downstream from highway bridge at Harrisville, Burlington County, and half a mile upstream from confluence with West Branch.

Drainage area.--64.0 sq mi.

Records available.--January 1931 to September 1938, June 1939 to September 1950.

Gage.--Water-stage recorder. Concrete control since June 23, 1939. Datum of gage is 4.62 ft above mean sea level, datum of 1929.

Average discharge.--18 years (1931-38, 1939-50), 86.5 cfs.

Extremes.--1931-50: Maximum discharge, 1,390 cfs Aug. 20, 1939 (gage height, 9.54 ft, from floodmark in recorder shelter) from rating curve extended above 640 cfs by logarithmic plotting; practically no flow for several hours on Oct. 26, 1932, while pond above station was filling.

Peak discharge (base, 225 cfs).--
1946: Nov. 30 (time unknown) 252 cfs (3.81 ft); Dec. 30 (6 to 10 p.m.) 315 cfs (4.25 ft); July 24 (2 p.m.) 264 cfs (3.89 ft).
1947: May 5-6 (9 p.m. to 1 a.m.) 239 cfs (3.75 ft); May 23 (11 a.m. to 12:30 p.m.) 230 cfs (3.71 ft).
1948: Feb. 15 (11:30 p.m.) 267 cfs (3.91 ft); Apr. 2 (11 p.m.) 252 cfs (3.81 ft); Apr. 15 (11 p.m.) 254 cfs (3.82 ft); May 7 (1 a.m.) 237 cfs (3.74 ft); May 14 (5 p.m.) 374 cfs (4.63 ft); May 22 (8 a.m.) 251 cfs (3.80 ft); May 25 (10:30 p.m.) 321 cfs (4.29 ft); June 1 (12 p.m.) 258 cfs (3.85 ft); Aug. 6 (5 a.m.) 320 cfs (4.28 ft); Aug. 21 (10:30 p.m.) 519 cfs (5.47 ft).
1949: Nov. 30 (6 p.m.) 270 cfs (3.93 ft); Dec. 5 (8 a.m.) 237 cfs (3.74 ft); Jan. 1 (9 a.m.) 283 cfs (4.02 ft); Jan. 29 (11 a.m.) 312 cfs (4.23 ft); Mar. 2 (2:30 a.m.) 246 cfs (3.78 ft); Apr. 7 (7 p.m.) 244 cfs (3.77 ft).
1950: Mar. 24 (1 p.m.) 187 cfs (3.57 ft), (annual maximum below base).

Remarks.--Flow regulated occasionally by pond 200 ft above station (capacity, 50 cfs-days) and by ponds and cranberry bogs 5 to 10 miles upstream.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	36	180	288	124	96	105	69	91	51	60	42
2	39	36	160	257	119	91	96	75	116	96	58	42
3	40	35	180	206	109	85	96	60	136	119	55	42
4	39	35	140	166	87	83	91	55	129	96	64	42
5	42	36	110	144	98	81	83	57	119	83	62	40
6	50	35	125	134	96	77	79	55	105	71	60	39
7	60	35	140	129	107	75	75	55	91	64	87	37
8	51	35	145	126	102	77	75	58	83	60	96	37
9	48	35	150	116	96	81	87	53	71	57	87	39
10	45	36	140	126	100	79	83	55	64	57	75	39
11	45	35	125	126	100	83	79	75	58	55	66	39
12	48	33	105	129	93	75	85	64	124	55	60	39
13	43	33	93	119	87	69	75	87	126	55	62	37
14	37	57	87	112	91	67	69	83	119	51	71	36
15	36	67	85	102	100	96	75	131	147	50	73	36
16	37	71	81	93	93	114	69	129	163	48	55	35
17	37	62	73	91	87	105	62	105	124	47	51	33
18	36	50	67	89	87	129	58	93	102	45	51	31
19	35	47	64	89	85	172	57	91	89	45	57	29
20	35	64	64	85	124	155	55	85	87	48	73	29
21	33	55	62	96	126	131	53	81	87	66	75	31
22	33	91	62	100	112	112	53	79	85	60	66	35
23	36	100	66	98	105	98	66	71	77	138	62	35
24	69	87	67	91	100	93	96	66	75	246	60	37
25	62	71	72	96	98	102	87	64	71	228	64	53
26	58	65	166	100	93	105	89	57	64	152	51	48
27	55	60	193	98	89	109	105	89	57	119	48	42
28	50	70	166	93	100	129	93	119	53	100	45	39
29	45	210	282	89	-------	105	71	114	53	85	50	37
30	40	240	307	89	-------	100	64	102	51	71	50	47
31	36	-------	304	107	-------	109	-------	93	-------	62	45	-------

Note.--No gage-height record Nov. 26 to Dec. 12; discharge computed on basis of occasional hook-gage readings, recorded range in stage, and records for stations on nearby streams.

East Branch Wading River at Harrisville--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	35	45	57	83	71	60	121	102	50	39	40
2	47	35	43	83	81	112	60	181	91	48	37	37
3	43	36	39	87	79	129	67	147	83	47	40	33
4	40	37	36	87	87	126	64	169	79	43	43	32
5	39	39	37	77	109	131	60	228	73	42	45	39
6	39	37	43	77	73	124	58	225	81	47	36	37
7	37	39	43	75	112	119	55	181	85	77	37	37
8	37	42	39	75	96	114	51	142	121	83	39	37
9	37	43	37	71	89	105	62	112	112	64	37	36
10	51	42	36	64	85	98	67	85	100	57	42	33
11	53	40	36	60	83	93	62	112	87	51	39	33
12	50	43	35	60	79	91	81	112	81	50	36	36
13	48	42	37	57	79	87	98	142	69	45	35	35
14	45	40	36	69	77	96	96	130	66	43	33	33
15	42	40	35	81	79	109	91	187	67	42	33	33
16	42	39	33	93	81	105	91	142	67	40	32	33
17	40	39	35	91	79	96	105	107	66	40	37	32
18	39	47	36	83	77	87	93	96	77	42	43	32
19	40	47	36	75	75	83	102	87	98	43	45	32
20	39	47	36	93	73	81	96	139	91	50	42	32
21	37	43	93	114	77	79	91	147	79	47	a42	32
22	37	48	105	109	75	81	96	158	67	60	a47	32
23	36	50	89	91	75	79	96	228	62	58	a51	35
24	36	47	73	85	73	79	96	202	57	51	a47	33
25	35	42	62	85	71	75	98	144	53	47	a44	40
26	35	40	57	83	73	87	102	172	50	43	a41	40
27	35	42	53	102	73	87	102	150	55	40	a41	37
28	35	42	53	100	73	73	105	121	55	42	a41	36
29	35	40	57	93	-------	66	91	105	53	43	a37	36
30	35	40	60	85	-------	66	105	121	51	42	a38	47
31	35	-------	60	89	-------	62	-------	114	-------	40	40	-------

a No gage-height record; discharge computed on basis of records for stations on nearby streams.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	60	66	75	83	124	136	87	254	109	102	77
2	35	53	64	178	79	114	225	85	252	105	131	71
3	35	50	62	187	77	139	228	98	225	87	134	66
4	35	75	60	166	81	147	163	107	202	75	175	64
5	42	87	57	150	85	139	129	144	181	69	290	64
6	35	77	57	139	79	124	131	202	155	77	318	62
7	33	67	55	129	77	134	121	222	131	85	294	62
8	33	86	57	107	73	147	105	199	129	75	242	62
9	35	109	57	100	77	144	96	178	116	67	178	60
10	35	98	57	100	77	169	89	134	109	64	134	62
11	35	83	64	96	81	190	87	155	105	62	100	66
12	33	126	62	89	105	163	96	142	93	60	85	66
13	33	124	55	134	107	126	98	228	89	57	79	64
14	33	134	50	184	158	116	161	353	85	62	75	64
15	33	112	48	161	254	112	237	314	89	64	73	62
16	33	93	91	131	246	105	242	260	102	60	69	60
17	33	81	89	119	193	105	181	267	126	57	67	60
18	35	77	81	114	144	100	155	272	116	57	67	60
19	39	83	77	105	124	96	136	228	139	55	69	69
20	37	87	77	100	119	96	119	161	172	53	252	67
21	36	85	69	114	109	96	102	150	181	51	428	64
22	35	75	69	136	96	96	114	237	142	53	465	64
23	35	83	69	139	91	93	112	184	121	60	413	60
24	35	89	67	116	96	100	107	161	107	77	350	58
25	35	93	66	121	100	96	89	224	105	75	257	57
26	35	89	66	114	105	91	85	266	105	67	169	57
27	35	81	67	105	102	102	98	237	100	64	129	55
28	35	77	66	96	114	107	96	193	107	67	107	55
29	40	73	64	96	131	98	93	158	107	62	93	53
30	51	69	60	87	-------	91	93	152	102	58	87	55
31	55	-------	60	85	-------	91	-------	218	-------	69	83	-------

East Branch Wading River at Harrisville--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	58	64	244	274	298	235	136	73	a86	37	40	144
2	58	62	190	249	286	239	166	81	a78	37	40	150
3	58	60	161	212	244	206	166	121	a72	37	53	187
4	57	62	199	172	230	187	142	119	a66	36	77	152
5	62	62	237	150	237	169	131	98	a61	35	116	98
6	77	60	215	199	215	158	202	93	57	36	102	75
7	75	66	187	212	206	147	235	93	55	37	77	64
8	73	67	150	199	215	134	225	96	55	37	69	66
9	71	66	126	166	202	129	209	89	60	36	66	77
10	69	75	116	136	181	121	184	98	58	36	64	69
11	66	109	107	126	172	150	158	112	55	40	57	55
12	66	116	98	121	161	172	136	105	62	45	53	50
13	69	119	96	119	155	163	126	112	55	60	58	53
14	69	126	93	116	155	144	139	98	51	60	83	60
15	66	109	96	114	147	136	134	89	48	53	77	62
16	62	98	121	112	144	119	116	83	45	48	67	64
17	60	96	144	109	150	112	102	79	43	47	60	64
18	62	93	142	107	147	136	96	75	43	45	57	58
19	60	91	136	102	136	169	100	67	47	43	57	57
20	64	121	147	93	166	163	100	64	47	42	55	53
21	79	131	144	96	181	147	96	66	43	42	50	50
22	77	114	147	158	172	136	100	83	42	39	48	47
23	67	102	147	169	199	163	134	131	40	36	43	50
24	67	98	134	169	202	178	142	126	39	33	43	50
25	93	100	114	166	181	166	124	124	39	43	42	48
26	87	100	114	178	161	169	107	109	37	36	39	47
27	79	114	107	218	150	155	96	107	36	35	37	47
28	75	131	100	279	178	139	87	91	36	39	36	47
29	71	218	96	308	-------	131	81	114	43	40	80	50
30	69	263	134	276	-------	119	75	105	37	39	73	64
31	67	-------	252	261	-------	109	-------	96	-------	45	71	-------

a No gage-height record; discharge computed on basis of records for stations on nearby streams.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60	119	67	60	96	73	87	81	60	35	29	73
2	55	161	66	62	116	67	85	85	60	32	31	58
3	51	155	64	66	116	57	83	93	55	32	42	53
4	50	142	62	66	105	66	79	89	60	32	58	60
5	50	114	62	66	93	64	77	81	66	37	48	48
6	50	100	60	64	87	64	77	93	60	53	42	42
7	48	89	60	64	83	62	73	73	53	51	42	37
8	48	85	62	60	75	62	69	62	50	43	35	35
9	48	77	58	57	73	67	67	58	47	36	32	33
10	48	69	58	57	77	64	66	62	43	37	31	33
11	64	66	69	58	77	60	64	77	48	39	29	35
12	51	62	75	57	75	66	62	64	45	37	29	40
13	48	62	81	66	69	83	62	50	42	37	29	60
14	48	102	79	66	91	102	60	48	42	42	28	96
15	48	116	79	64	126	105	60	47	45	40	28	85
16	47	91	73	60	142	98	60	55	47	40	27	64
17	47	75	66	58	126	89	58	55	45	40	27	50
18	55	69	64	58	109	81	58	53	42	39	27	43
19	62	66	81	60	100	75	66	67	39	35	27	40
20	62	66	87	58	91	69	71	73	40	35	51	42
21	62	64	79	57	64	100	62	67	40	35	66	43
22	50	62	71	57	96	119	58	79	40	32	48	58
23	50	60	67	57	102	172	57	79	39	31	40	53
24	48	58	67	57	100	184	57	60	37	31	37	50
25	47	71	67	57	91	166	66	62	36	31	35	45
26	48	75	66	57	85	139	83	57	35	31	33	40
27	58	71	73	57	79	124	89	51	32	29	32	40
28	50	67	75	55	73	126	114	50	32	29	31	39
29	73	67	75	58	-------	126	119	53	32	28	29	37
30	73	69	69	62	-------	107	96	62	47	28	29	37
31	107	-------	64	79	-------	93	-------	62	-------	27	79	-------

East Branch Wading River at Harrisville--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	1,357	69	33	43.8	0.684	0.79
November	1,922	240	33	64.1	1.00	1.12
December	4,011	307	62	129	2.02	2.33
Calendar year 1945	28,764	307	33	78.8	1.23	16.71
January 1946	3,784	288	85	122	1.91	2.20
February	2,808	126	85	100	1.56	1.63
March	3,083	172	67	99.5	1.55	1.79
April	2,331	105	53	77.7	1.21	1.35
May	2,470	131	53	79.7	1.25	1.44
June	2,817	163	51	93.9	1.47	1.64
July	2,580	246	45	83.2	1.30	1.50
August	1,939	96	45	62.5	.977	1.13
September	1,147	53	29	38.2	.597	.67
Water year 1945-46	30,249	307	29	82.9	1.30	17.59
October 1946	1,249	53	35	40.3	.630	.73
November	1,243	50	35	41.4	.647	.72
December	1,515	105	33	48.9	.764	.88
Calendar year 1946	26,966	288	29	73.9	1.15	15.68
January 1947	2,551	114	57	82.3	1.29	1.48
February	2,266	112	71	80.9	1.26	1.32
March	2,891	131	62	93.3	1.46	1.68
April	2,501	105	51	83.4	1.30	1.45
May	4,507	228	85	145	2.27	2.62
June	2,278	121	50	75.9	1.19	1.32
July	1,517	83	40	48.9	.764	.88
August	1,239	51	32	40.0	.625	.72
September	1,060	47	32	35.3	.552	.62
Water year 1946-47	24,817	228	32	68.0	1.06	14.42
October 1947	1,125	55	33	36.3	.567	.65
November	2,576	134	50	85.9	1.34	1.50
December	2,009	91	48	64.8	1.01	1.17
Calendar year 1947	26,520	228	32	72.7	1.14	15.41
January 1948	3,773	187	75	122	1.91	2.19
February	3,263	254	73	113	1.77	1.90
March	3,651	190	91	118	1.84	2.12
April	3,924	242	85	131	2.05	2.28
May	6,016	353	85	194	3.03	3.50
June	4,047	254	85	135	2.11	2.35
July	2,103	109	51	67.8	1.06	1.22
August	5,515	465	67	178	2.78	3.20
September	1,866	77	53	62.2	.972	1.08
Water year 1947-48	39,868	465	33	109	1.70	23.16
October 1948	2,133	93	57	68.8	1.08	1.24
November	3,093	263	60	103	1.61	1.80
December	4,494	252	93	145	2.27	2.61
Calendar year 1948	43,878	465	51	120	1.88	25.49
January 1949	5,366	308	93	173	2.70	3.12
February	5,271	298	136	188	2.94	3.06
March	4,801	239	109	155	2.42	2.79
April	4,045	235	75	135	2.11	2.35
May	2,997	131	64	96.7	1.51	1.74
June	1,536	86	36	51.2	.800	.89
July	1,274	60	33	41.1	.642	.74
August	1,890	116	36	61.0	.953	1.10
September	2,158	187	47	71.9	1.12	1.25
Water year 1948-49	39,058	308	33	107	1.67	22.69
October 1949	1,706	107	47	55.0	.859	.99
November	2,550	161	58	85.0	1.33	1.48
December	2,146	87	58	69.2	1.08	1.25
Calendar year 1949	35,740	308	33	97.9	1.53	20.76
January 1950	1,880	79	55	60.6	.947	1.09
February	2,617	142	64	93.5	1.46	1.52
March	2,930	184	57	94.5	1.48	1.70
April	2,185	119	57	72.8	1.14	1.27
May	2,048	93	47	66.1	1.03	1.19
June	1,359	66	32	45.3	.708	.79
July	1,104	53	27	35.6	.556	.64
August	1,151	79	27	37.1	.580	.67
September	1,469	96	33	49.0	.766	.85
Water year 1949-50	23,145	184	27	63.4	.991	13.44

Absecon Creek at Absecon

Location.--Lat 39°25'45", long 74°31'16", on right bank 30 ft downstream from Doughty Pond of Atlantic City Water Department, 1 mile west of Absecon, Atlantic County, and 3 miles upstream from mouth.

Drainage area.--16.6 sq mi.

Records available.--December 1923 to April 1929, June 1933 to December 1938, May 1946 to September 1950.

Gage.--Water-stage recorder and concrete control. Datum of gage is at mean sea level, datum of 1929. Prior to May 1946, water-stage recorder and wooden control at same site at datum 0.16 ft lower.

Average discharge.--13 years (1924-28, 1933-38, 1946-50), 28.0 cfs (adjusted for diversion).

Extremes.--1923-29, 1933-38, 1946-50: Maximum daily discharge, 307 cfs Sept. 6, 1935; no flow July 5-18, 1949.

Remarks.--Records given herein represent only flow at gage. Diversion from Doughty Pond for municipal supply of Atlantic City. Flow regulated by Doughty Pond, 30 ft above station and by Kuehnle Reservoir, 1½ miles above station.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1									23	9.5	6.6	4.6
2									28	20	4.0	3.5
3									28	33	3.5	4.4
4									28	19.7	2.9	4.6
5									27	13.8	3.5	3.6
6									23	12.9	4.0	2.9
7									18.7	12.9	10.0	4.3
8									16.7	9.5	7.2	4.6
9									15.7	12.0	4.6	4.6
10									10.3	11.1	4.0	4.6
11									12.8	10.3	5.4	4.7
12									43	9.5	1.2	2.9
13									41	9.5	2.2	2.8
14									27	7.2	6.1	2.7
15									24	7.2	3.5	1.3
16									19.7	6.5	2.4	1.6
17									17.7	5.8	5.8	2.0
18									19.7	5.8	9.8	2.0
19									17.7	4.6	28	3.1
20									21	4.0	21	2.1
21									22	4.0	12.0	3.8
22									23	2.9	8.0	7.2
23									17.7	20	6.5	5.8
24									13.8	41	6.7	6.1
25								0.9	11.1	31	3.7	10.3
26								9.2	10.3	16.6	5.7	6.1
27								49	9.5	9.5	14.7	3.7
28								75	11.1	7.2	8.7	2.0
29								54	10.3	5.2	7.2	2.0
30								35	10.3	4.6	11.7	13.2
31								24		4.0	8.8	

Absecon Creek at Absecon--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.9	4.0	5.8	0.9	11.6	a6.5	0.7	a10.0	5.8	1.6	0.9	1.6
2	3.1	3.5	3.7	7.0	14.5	a12.0	.7	15.7	6.5	2.6	.9	.9
3	1.1	5.8	4.0	18.3	4.7	a16.0	.7	14.7	13.3	4.4	.9	.9
4	1.6	9.5	5.2	18.8	17.0	a11.0	.7	20	2.7	3.4	.9	1.6
5	2.4	9.0	4.6	11.1	a9.0	a10.0	.5	28	3.5	2.7	.9	2.0
6	3.6	4.0	4.4	16.7	a6.0	5.9	.5	24	6.1	5.2	1.2	1.3
7	2.9	2.1	.7	12.9	a3.5	6.9	1.8	18.9	16.4	3.5	.9	.7
8	3.7	8.9	.7	14.0	a6.0	7.2	.5	13.1	23	1.4	.9	a.7
9	3.2	10.1	.7	13.6	a9.0	6.5	.9	3.9	17.7	2.9	.9	a.7
10	12.2	1.6	.7	5.0	a4.5	4.8	.5	1.5	10.3	3.5	.9	.7
11	12.9	3.1	.7	6.5	a4.2	4.6	.5	2.9	8.0	3.5	.7	.7
12	12.8	11.9	.7	8.4	4.0	5.2	.6	4.7	6.7	2.9	.7	.7
13	11.0	5.1	.7	4.0	2.9	5.2	1.1	7.2	2.6	2.9	1.2	.7
14	4.6	5.9	.5	15.0	2.9	13.1	1.2	9.5	2.1	2.2	1.2	.7
15	3.5	2.9	.5	14.1	2.9	14.6	4.8	9.5	3.7	.9	1.2	.7
16	3.5	27	.5	17.4	4.0	10.4	10.7	8.7	5.5	.7	1.2	.7
17	3.5	41	.5	10.6	3.8	7.8	19.3	9.5	1.9	.7	.7	.7
18	4.9	39	.7	4.6	2.9	7.7	13.8	13.8	2.1	.7	.7	.7
19	8.1	38	.7	2.0	3.0	1.2	11.0	12.9	6.2	.7	.5	.7
20	2.0	36	.9	12.0	3.9	2.3	8.0	13.8	2.4	.7	.5	.7
21	3.5	41	.7	31	12.9	2.9	8.7	15.7	2.6	.7	.5	.7
22	3.5	42	.7	11.9	6.5	9.9	7.3	17.8	1.9	.7	.5	.6
23	3.4	41	.5	2.9	2.1	6.5	6.5	21	.9	.7	.5	.2
24	2.9	38	.5	4.0	.6	8.0	7.9	17.7	1.0	.7	.7	.4
25	2.9	25	.9	4.7	1.1	16.1	7.4	16.1	1.1	.7	.9	.6
26	4.0	6.5	.7	5.6	2.2	14.5	15.7	24	1.4	.7	1.2	.5
27	4.6	6.5	.7	12.3	3.3	2.2	12.3	17.2	2.1	.7	12.7	.5
28	5.2	6.5	.7	8.7	a4.0	4.2	5.2	12.9	1.9	.9	17.5	.5
29	6.0	6.5	.7	6.5	-------	.7	4.6	11.1	2.4	.9	2.4	.5
30	5.8	5.8	4.4	8.0	-------	4.4	4.6	14.8	1.6	.9	.9	.4
31	5.6	-------	.7	15.0	-------	.7	-------	8.8	-------	.9	1.5	-------

a No gage-height record; discharge computed on basis of precipitation records and records for stations on nearby streams.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.5	0.7	8.7	2.9	11.1	17.7	43	16.0	70	36	40	28
2	.5	.7	8.0	3.5	11.1	25	47	13.8	52	34	55	31
3	.7	.7	8.0	3.5	12.0	33	34	26	48	25	54	33
4	.9	.7	8.0	4.6	14.4	34	19.5	28	55	19.7	94	30
5	.9	.7	8.0	5.2	18.7	24	19.7	42	52	18.7	118	29
6	.9	.7	8.0	5.2	14.7	17.7	22	42	41	26	80	29
7	1.2	.7	8.0	3.6	13.8	28	19.7	39	41	36	52	30
8	1.2	a.7	8.0	2.4	12.9	32	19.7	39	43	31	42	31
9	1.2	a.6	7.2	2.4	12.0	22	30	27	39	25	36	29
10	1.6	a.6	7.2	1.6	12.0	36	14.1	25	36	22	34	33
11	1.6	a.4	6.1	1.2	13.8	34	12.6	23	36	19.7	33	36
12	1.6	a.3	4.0	1.2	21	25	22	22	35	18.7	41	35
13	1.2	.3	4.0	16.5	22	21	23	66	34	19.7	42	30
14	1.2	.8	4.0	43	36	18.7	28	82	30	31	34	29
15	1.2	29	4.0	30	48	19.7	42	58	25	29	28	24
16	1.2	49	4.0	19.7	36	23	36	43	35	24	28	25
17	1.2	46	4.0	17.7	30	24	32	62	46	24	28	25
18	1.2	49	4.0	23	25	16.7	16.7	61	41	28	28	25
19	1.2	52	4.0	16.7	22	17.7	19.7	43	42	23	25	25
20	.9	19.9	4.0	14.7	18.7	21	19.7	34	48	19.7	130	25
21	.7	4.6	4.0	28	15.7	17.7	24	33	41	18.7	162	25
22	.9	4.6	4.0	34	22	18.8	16.7	33	34	17.0	102	24
23	.9	5.2	4.0	29	16.7	13.8	17.7	27	33	26	66	22
24	.9	5.2	4.0	24	15.7	21	17.7	29	33	33	54	21
25	.7	5.2	3.5	21	14.7	17.7	18.7	35	29	23	48	23
26	.7	6.5	2.9	12.9	17.7	18.7	19.7	55	25	17.7	43	24
27	.7	8.7	2.9	12.9	21	26	19.7	52	38	20	38	24
28	.7	8.7	2.9	12.0	30	30	21	42	39	25	36	24
29	.7	8.7	2.9	12.0	31	13.8	21	36	31	19.7	34	24
30	.7	8.7	2.9	12.0	-------	16.7	21	42	28	16.7	31	27
31	.7	-------	2.9	11.1	-------	16.7	-------	72	-------	19.2	34	-------

a No gage-height record; discharge computed on basis of precipitation records and records for stations on nearby streams.

Note.--Backwater from moss July 8-13, Aug. 27 to Sept. 26.

Absecon Creek at Absecon--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	16.7	30	41	74	49	42	38	49	0.5	2.7	46
2	27	15.7	33	41	64	56	42	36	52	.7	1.6	34
3	23	16.7	37	41	72	60	42	35	52	.5	1.4	19.7
4	19.7	19.7	74	41	80	58	42	42	38	.3	5.1	12.0
5	19.7	29	75	41	96	56	39	35	25	0	61	8.0
6	44	36	56	60	91	55	45	33	22	0	77	10.0
7	48	36	45	74	87	52	61	30	22	0	42	10.2
8	36	36	46	74	84	50	66	30	21	0	21	14.4
9	30	38	48	72	80	49	50	34	21	0	12.9	15.1
10	25	38	48	69	78	38	45	36	21	0	8.0	3.8
11	23	39	45	62	75	31	43	38	28	0	6.0	3.5
12	23	38	45	58	72	41	43	38	35	0	2.4	6.9
13	22	38	45	37	61	46	42	39	35	0	4.0	9.8
14	23	38	45	27	41	46	43	38	22	0	10.3	12.0
15	20	36	45	28	35	46	43	35	15.7	0	8.0	16.5
16	18.7	36	45	29	42	46	43	33	17.7	0	5.8	16.7
17	18.7	38	45	30	50	45	33	30	15.7	0	5.2	14.7
18	25	36	46	30	50	45	29	25	13.8	0	7.4	12.0
19	14.7	36	45	31	49	56	33	24	14.7	.2	10.4	12.0
20	21	36	45	33	50	61	33	24	16.7	.5	6.3	11.1
21	15.0	36	45	35	52	58	33	25	17.7	.5	5.8	5.6
22	14.7	36	45	38	52	50	29	25	15.7	.7	5.2	6.3
23	16.7	19.6	45	49	62	45	27	24	5.1	.3	5.2	11.4
24	38	11.1	45	55	62	46	28	17.7	.7	.4	8.0	9.6
25	25	12.0	45	64	45	46	36	15.7	.7	1.1	8.7	6.6
26	24	12.0	43	32	48	46	42	17.7	.9	2.8	7.2	6.5
27	16.7	12.0	43	2.9	50	45	41	24	.6	2.9	5.8	7.2
28	16.7	12.0	43	2.9	50	43	39	28	.5	1.0	4.6	9.5
29	17.7	12.9	43	2.9	-------	43	39	20	.5	1.2	15.9	14.1
30	16.7	20	43	2.9	-------	42	39	18.0	.5	.8	14.7	17.8
31	16.7	-------	42	31	-------	42	-------	36	-------	1.5	18.6	-------

Note.--Backwater from moss Oct. 24 to Nov. 15, Feb. 25 to Mar. 21.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11.1	49	30	2.4	25	11.2	13.5	16.5	14.9	0.1	2.5	1.9
2	9.5	61	33	8.0	29	19.5	15.6	14.2	11.5	.2	5.3	3.4
3	10.3	49	33	12.0	25	1.4	13.1	21	9.9	.1	14.1	8.0
4	9.5	35	30	12.9	16.5	4.6	12.8	20	15.3	.4	21	8.0
5	9.5	23	29	12.9	13.4	9.2	17.2	17.1	14.3	6.1	12.6	6.9
6	9.5	19.2	29	12.0	13.8	11.4	22	17.6	11.1	18.4	7.9	4.5
7	11.1	17.7	29	21	13.9	9.5	13.9	18.6	8.9	13.2	6.8	2.5
8	12.9	17.7	29	8.6	12.3	12.4	9.5	12.5	5.6	8.2	5.7	4.6
9	11.1	15.7	29	3.5	14.3	24	13.2	2.7	1.9	5.5	4.8	4.0
10	10.3	15.7	28	8.3	15.9	8.9	2.9	6.8	2.7	5.2	4.3	3.5
11	9.5	17.7	28	15.4	15.3	4.7	10.1	9.0	18.7	5.6	3.8	12.6
12	8.0	15.7	28	3.7	13.4	13.7	12.4	7.3	8.8	4.8	4.5	8.3
13	8.7	16.7	28	16.0	13.7	19.5	16.1	9.9	6.6	4.9	3.9	24
14	8.0	25	28	19.0	24	24	16.9	8.1	4.7	7.4	3.2	36
15	8.0	19.7	28	11.1	41	13.6	8.7	11.6	5.7	7.0	3.1	23
16	7.2	18.7	28	14.7	36	13.1	7.5	19.5	6.2	7.7	2.4	14.5
17	5.2	16.7	27	7.3	24	12.3	8.0	15.8	12.3	7.4	3.1	6.2
18	21	15.7	27	12.2	17.1	19.8	10.2	14.0	1.9	5.5	2.5	4.1
19	19.7	13.8	a9	12.1	18.3	8.2	10.2	26	5.2	3.1	2.2	33
20	13.8	14.6	a1	12.1	23	3.5	16.8	22	11.3	4.4	5.6	45
21	11.1	14.6	a1	7.2	1.2	27	16.0	19.1	14.0	3.4	4.5	43
22	10.3	17.0	a1	8.7	8.9	28	13.0	15.3	5.7	3.0	3.0	43
23	8.2	3.8	a1	10.3	20	41	12.4	13.7	3.0	2.4	4.2	42
24	7.2	9.2	a1	10.3	14.0	32	14.1	14.9	1.7	2.2	4.3	41
25	7.2	23	a1	10.3	14.2	22	16.0	14.4	5.0	4.0	4.1	40
26	10.6	21	a1	10.3	17.0	16.0	16.8	12.9	2.6	2.1	3.0	39
27	8.0	7.6	a1	12.9	14.5	16.5	13.3	11.1	.8	3.4	2.1	37
28	7.2	11.9	a3	7.8	1.5	26	19.9	9.5	2.8	2.9	1.8	34
29	17.7	15.4	a5	12.2	-------	32	19.2	12.9	.1	2.6	2.2	28
30	18.7	17.6	a10	14.0	-------	24	16.2	13.8	.2	2.6	3.0	22
31	47	-------	a5	21	-------	12.4	-------	12.5	-------	1.7	2.6	-------

a Water bypassed control; discharge estimated from study of recorder graph, precipitation records, and records for Great Egg Harbor River at Folsom.

Absecon Creek at Absecon--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October							
November							
December							
Calendar year							
January							
February							
March							
April							
May							
June	601.1	43	9.5	20.0	31.2	1.88	2.09
July	370.8	41	2.9	12.0	24.8	1.49	1.72
August	229.4	28	1.2	7.40	19.4	1.17	1.35
September	127.1	13.2	1.3	4.24	15.8	.952	1.06
Water year							
October 1946	151.9	12.9	1.1	4.90	14.1	.849	.98
November	487.2	42	1.6	16.2	24.2	1.46	1.62
December	48.1	5.8	.5	1.55	9.41	.567	.65
Calendar year							
January 1947	323.5	31	.9	10.4	18.6	1.12	1.29
February	153.0	17.0	.6	5.46	16.4	.988	1.03
March	229.0	16.1	.7	7.39	18.4	1.11	1.28
April	158.7	19.3	.5	5.29	16.7	1.01	1.12
May	419.4	28	1.5	13.5	25.3	1.52	1.76
June	163.4	23	.9	5.45	19.5	1.17	1.31
July	55.6	5.2	.7	1.79	22.1	1.33	1.54
August	57.2	17.5	.5	1.85	22.3	1.34	1.55
September	23.0	2.0	.2	.767	14.2	.855	.95
Water year 1946-47	2,270.0	42	.2	6.22	18.4	1.11	15.08
October 1947	30.4	1.6	.5	.981	9.82	.592	.68
November	319.6	52	.3	10.7	19.4	1.17	1.30
December	158.1	8.7	2.9	5.10	11.8	.711	.82
Calendar year 1947	2,090.9	52	.2	5.73	17.9	1.08	14.63
January 1948	427.5	43	1.2	13.8	21.2	1.28	1.48
February	589.7	48	11.1	20.3	26.9	1.62	1.75
March	701.1	36	13.8	22.6	29.3	1.77	2.03
April	717.6	47	12.6	23.9	30.5	1.84	2.05
May	1,247.8	82	13.8	40.3	48.2	2.90	3.35
June	1,180	55	25	39.3	47.2	2.84	3.17
July	746.2	36	16.7	24.1	32.5	1.96	2.26
August	1,670	162	25	53.9	62.1	3.74	4.31
September	820	36	21	27.3	33.0	1.99	2.22
Water year 1947-48	8,608.0	162	.3	23.5	31.0	1.87	25.42
October 1948	729.4	48	14.7	23.5	30.0	1.81	2.08
November	836.4	89	11.1	27.9	35.1	2.11	2.36
December	1,425	75	30	46.0	53.3	3.21	3.70
Calendar year 1948	11,090.7	162	1.2	30.3	37.5	2.26	30.76
January 1949	1,234.6	74	2.9	39.8	46.8	2.82	3.25
February	1,752	96	35	62.6	69.4	4.18	4.35
March	1,492	61	31	48.1	54.0	3.25	3.75
April	1,212	66	27	40.4	46.6	2.81	3.13
May	924.1	42	15.7	29.8	36.1	2.17	2.51
June	580.2	52	.5	19.3	27.6	1.66	1.85
July	15.9	2.9	0	.513	11.3	.681	.78
August	398.2	77	1.4	12.8	21.5	1.30	1.49
September	383.0	46	3.5	12.8	18.6	1.12	1.25
Water year 1948-49	10,982.8	96	0	30.1	37.3	2.25	30.50
October 1949	367.1	47	5.2	11.8	16.7	1.01	1.16
November	618.4	61	3.8	20.6	25.9	1.56	1.74
December	561	33	1	18.1	21.2	1.28	1.48
Calendar year 1949	9,538.5	96	0	26.1	32.7	1.97	26.74
January 1950	350.2	21	2.4	11.3	15.5	.934	1.08
February	496.2	41	1.2	17.7	23.3	1.40	1.46
March	521.4	41	1.4	16.8	24.0	1.45	1.67
April	407.5	22	2.9	13.6	21.7	1.31	1.46
May	440.3	26	2.7	14.2	24.3	1.46	1.69
June	213.4	18.7	.1	7.11	19.5	1.17	1.31
July	145.5	18.4	.1	4.69	13.0	.783	.90
August	154.1	21	1.8	4.97	10.8	.651	.75
September	623.0	45	1.9	20.8	25.8	1.55	1.73
Water year 1949-50	4,898.1	61	.1	13.4	20.1	1.21	16.43

* Adjusted for diversion from Doughty Pond.

Great Egg Harbor River at Folsom

Location.--Lat 39°35'42", long 74°51'06", on left bank 25 ft upstream from bridge on State Highway 54, 1 mile south of Folsom, Atlantic County, and 2 miles upstream from Pennypot Stream.

Drainage area.--56.3 sq mi.

Records available.--September 1925 to September 1950. Prior to October 1947 published as Great Egg River at Folsom.

Gage.--Water-stage recorder. Concrete control since Nov. 26, 1934. Datum of gage is 53.32 ft above mean sea level, datum of 1929. Prior to Mar. 6, 1941, water-stage recorder at site 100 ft downstream at same datum. Mar. 6 to Oct. 5, 1941, staff gage at site 145 ft downstream at datum 0.25 ft higher.

Average discharge.--25 years (1925-50), 83.3 cfs.

Extremes.--1925-50: Maximum discharge, 1,440 cfs Sept. 3, 1940 (gage height, 9.09 ft); minimum, 19 cfs Aug. 5, 1931.

Peak discharge (base, 200 cfs).--
1946: Dec. 2 (10 a.m.) 233 cfs (4.78 ft); Jan. 1 (6 a.m.) 346 cfs (5.44 ft); May 19 (8 p.m.) 215 cfs (4.67 ft); May 30 (6 a.m.) 233 cfs (4.78 ft); June 16 (9 a.m.) 215 cfs (4.67 ft); July 25-26 (9:30 p.m. to 2:30 a.m.) 392 cfs (5.68 ft).
1947: May 26-27 (3 p.m. to 1 a.m.) 184 cfs (4.49 ft), (annual maximum below base).
1948: Jan. 5 (6 a.m. to 6 p.m.) 200 cfs (4.58 ft); Feb. 18 (10 a.m. to 4 p.m.) 215 cfs (4.67 ft); Apr. 4 (5 to 10 a.m.) 241 cfs (4.83 ft); May 16 (4:30 to 6 p.m.) 239 cfs (4.82 ft); June 1 (2 to 6 p.m.) 392 cfs (5.68 ft); Aug. 5-6 (4 p.m. to 7 a.m.) 223 cfs (4.72 ft).
1949: Jan. 2 (4 to 11 a.m.) 327 cfs (5.34 ft); Jan. 29 (3 to 11 p.m.) 270 cfs (5.01 ft); May 4-5 (10 p.m. to 2 a.m.) 258 cfs (4.94 ft).
1950: Mar. 25-26 (12 m. to 1 a.m.) 203 cfs (4.60 ft).

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	63	61	203	342	110	103	128	82	161	80	75	72
2	58	61	230	309	122	110	122	79	136	84	72	67
3	55	60	208	257	126	108	112	74	143	114	72	63
4	50	58	173	220	116	103	110	69	172	159	72	61
5	48	58	146	188	107	96	108	69	181	181	69	60
6	49	56	146	164	96	91	103	71	164	154	67	56
7	56	56	159	150	96	89	98	71	137	112	77	54
8	56	55	170	141	99	86	91	71	116	87	84	52
9	56	55	168	136	103	86	92	71	98	77	87	50
10	54	54	159	134	103	86	96	69	86	72	82	49
11	54	54	145	132	103	86	98	66	77	69	74	48
12	50	54	130	132	105	84	94	64	96	64	66	46
13	49	54	114	130	101	80	91	75	132	63	64	45
14	48	55	105	126	99	79	87	86	166	61	66	46
15	46	64	98	122	98	84	86	112	194	58	74	48
16	46	69	94	114	96	99	82	159	210	54	77	45
17	46	71	87	108	89	107	80	186	191	52	75	42
18	45	69	82	101	91	128	77	191	170	46	80	40
19	43	67	79	94	87	152	77	208	154	46	98	40
20	43	75	77	92	94	179	75	203	136	46	108	42
21	43	82	77	91	112	182	74	181	126	63	118	42
22	42	92	77	94	132	170	72	157	122	79	132	50
23	42	101	77	98	141	146	72	137	116	112	128	54
24	56	112	77	94	132	126	71	124	103	268	107	55
25	67	110	77	94	120	114	69	107	91	382	89	69
26	74	105	101	94	108	112	82	92	80	365	77	74
27	80	94	143	94	103	112	92	92	74	271	80	77
28	82	86	179	94	99	114	99	152	69	194	80	75
29	79	99	228	94	-------	116	98	217	67	145	72	66
30	74	145	294	92	-------	116	91	228	75	107	69	64
31	66	-------	322	98	-------	122	-------	200	-------	86	71	-------

Note.--Backwater from moss Oct. 1-19, May 1-9, Sept. 1-17.

Great Egg Harbor River at Folsom--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	72	48	64	77	103	74	69	86	141	63	41	72
2	71	46	61	84	101	86	69	96	128	56	40	63
3	63	46	55	94	96	103	75	103	107	52	37	56
4	58	48	54	105	91	130	82	120	94	49	37	52
5	54	48	54	112	92	152	86	137	80	46	37	50
6	52	48	54	116	96	152	87	159	77	46	34	50
7	50	48	54	112	98	145	84	179	80	45	37	52
8	49	50	54	107	94	136	75	173	98	52	41	52
9	48	54	52	99	89	130	75	154	118	52	38	49
10	52	54	52	94	86	124	82	132	139	54	41	46
11	55	54	52	91	82	116	87	110	148	52	40	43
12	58	54	50	86	79	112	89	96	128	50	40	41
13	61	54	54	82	77	107	91	87	99	49	37	40
14	61	54	54	86	75	108	89	86	86	46	36	38
15	58	52	52	96	77	118	89	91	96	45	36	37
16	55	50	50	112	79	132	92	94	103	43	33	37
17	54	50	50	128	84	137	105	91	98	43	37	36
18	52	58	50	134	84	128	116	84	87	45	42	36
19	52	61	49	126	84	112	120	82	87	49	42	36
20	50	61	50	122	80	98	112	94	87	64	45	36
21	50	58	74	124	77	91	99	108	80	74	64	36
22	50	58	92	130	77	89	91	116	75	77	72	37
23	49	67	118	124	75	92	87	145	69	74	75	42
24	48	72	145	116	74	94	84	168	66	67	64	43
25	46	79	145	105	74	94	80	170	64	56	52	46
26	46	75	130	98	75	94	84	182	61	50	50	45
27	46	71	110	99	77	96	87	177	66	46	77	43
28	46	69	94	108	75	94	86	154	71	45	91	42
29	48	71	84	114	-	87	79	130	67	45	94	40
30	48	69	80	114	-	84	75	122	61	46	99	40
31	48	-	80	108	-	80	-	132	-	46	96	-

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	49	67	61	79	126	110	84	366	105	69	49
2	38	48	64	98	74	132	175	80	348	114	110	48
3	37	46	61	145	71	139	231	84	282	114	155	48
4	37	60	61	184	69	148	238	94	231	105	194	49
5	37	69	60	200	67	155	215	108	196	91	220	48
6	36	74	60	188	69	145	182	139	166	82	220	45
7	36	79	58	166	69	136	154	172	146	84	201	43
8	36	80	58	143	69	137	132	193	134	79	166	45
9	37	84	61	126	69	148	116	189	126	74	130	43
10	37	86	60	110	67	152	107	172	116	69	98	45
11	36	87	61	98	67	150	101	152	107	67	80	54
12	36	94	64	89	71	145	99	132	99	64	77	58
13	34	98	63	96	74	132	101	132	94	63	77	52
14	33	105	60	130	91	120	120	181	89	61	74	48
15	33	108	58	163	116	110	145	231	86	63	69	45
16	33	107	74	168	150	103	164	236	89	63	64	43
17	33	98	87	157	194	101	173	231	101	60	61	42
18	33	86	96	141	212	99	166	213	110	60	61	41
19	34	74	99	a130	203	96	148	194	128	58	61	41
20	34	69	96	a115	186	94	128	179	159	56	92	41
21	34	64	82	a105	164	91	112	159	186	55	99	41
22	33	61	72	a100	146	86	103	146	193	54	94	41
23	33	66	67	101	128	89	96	159	172	63	99	41
24	33	75	66	103	112	96	91	163	141	89	91	40
25	33	87	64	110	103	103	89	150	118	92	79	40
26	32	94	63	110	99	107	89	132	103	79	71	37
27	33	96	61	110	103	108	89	126	94	64	63	36
28	33	91	61	105	110	110	89	122	94	61	60	36
29	37	82	60	96	118	112	86	112	94	58	56	36
30	52	74	58	89	-	108	86	107	94	54	54	37
31	50	-	58	82	-	99	-	173	-	52	52	-

a No gage-height record; discharge computed on basis of recorded range in stage and records for stations on nearby streams.

Great Egg Harbor River at Folsom--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	42	48	179	306	250	157	132	89	79	42	36	82
2	42	48	175	324	238	161	139	89	75	43	33	99
3	41	48	161	288	a203	161	148	107	75	42	34	101
4	40	52	157	259	a191	155	150	220	69	42	36	71
5	41	56	179	198	193	152	137	249	66	41	40	55
6	48	56	194	191	194	150	141	217	67	40	40	48
7	46	64	186	203	194	154	163	179	60	40	37	45
8	46	72	164	201	196	154	175	150	60	40	33	48
9	46	74	141	191	193	145	170	120	58	40	32	49
10	45	74	120	173	186	134	154	110	55	37	31	46
11	46	72	105	154	173	137	139	105	56	37	29	42
12	45	71	94	136	164	159	124	107	60	38	28	42
13	43	67	89	124	159	184	116	105	54	48	30	45
14	42	67	87	114	152	186	116	99	48	52	41	55
15	42	66	86	108	154	172	116	91	49	49	43	55
16	42	63	96	103	157	152	114	80	49	46	42	52
17	42	61	118	98	161	136	110	80	49	43	37	49
18	43	61	139	96	163	132	105	80	50	43	34	45
19	43	63	146	94	161	143	103	79	52	42	38	41
20	43	66	141	92	170	161	105	77	55	43	37	40
21	43	72	128	92	182	166	112	75	50	40	33	40
22	43	74	118	108	186	159	114	79	48	37	32	40
23	43	74	108	143	191	155	112	101	46	37	31	43
24	46	74	105	177	193	164	112	120	45	36	32	46
25	58	75	99	189	189	175	114	137	43	34	30	50
26	61	75	a94	184	179	177	116	136	43	34	29	43
27	61	79	a84	193	163	175	108	126	46	33	29	41
28	58	87	79	228	155	170	101	112	46	32	29	40
29	56	108	77	265	-	157	94	105	45	31	37	42
30	54	148	96	263	-	143	91	91	43	31	46	54
31	50	-	196	255	-	134	-	84	-	33	43	-

a No gage-height record; discharge computed on basis of recorded range in stage and records for stations on nearby streams.
Note.--Backwater from moss July 1-28.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	82	60	67	80	67	105	108	107	38	34	33
2	50	92	58	63	94	66	94	107	99	38	33	32
3	46	103	55	64	108	63	89	98	92	37	37	38
4	43	110	a55	64	118	60	84	96	86	36	55	38
5	42	107	a55	64	116	60	79	98	87	38	56	33
6	42	96	a54	63	101	60	77	98	94	52	50	32
7	41	84	a54	61	87	58	75	94	89	61	46	30
8	42	72	54	58	79	60	72	91	71	55	41	29
9	42	64	52	56	74	69	71	80	61	48	37	28
10	41	61	50	56	77	77	69	74	56	54	36	29
11	40	60	54	56	79	79	67	69	56	75	34	32
12	40	58	60	55	80	79	67	67	55	86	33	37
13	38	56	64	58	77	84	67	64	52	98	33	43
14	38	63	71	61	82	96	69	61	50	103	31	64
15	38	67	72	61	98	107	67	61	54	94	30	71
16	38	67	69	60	118	112	66	72	56	79	30	69
17	38	63	63	58	139	105	64	86	56	69	29	54
18	40	60	60	56	143	94	63	99	50	69	29	43
19	46	56	67	58	126	84	63	112	48	64	29	41
20	48	55	74	56	107	72	64	108	49	56	43	40
21	45	54	75	55	89	77	67	110	52	52	50	40
22	43	54	72	56	79	94	69	110	49	46	40	52
23	42	52	69	56	79	130	67	96	48	41	37	56
24	41	a54	69	56	82	175	66	80	43	40	34	54
25	40	a56	71	56	84	201	69	74	46	36	33	48
26	42	58	69	55	79	196	71	72	46	36	32	43
27	48	58	72	55	72	172	69	69	43	36	31	42
28	48	55	80	55	67	159	74	66	40	34	30	41
29	55	55	86	56	-	136	86	71	40	33	29	40
30	63	58	86	60	-	120	98	87	38	36	29	40
31	74	-	75	67	-	112	-	99	-	38	36	-

a No gage-height record; discharge computed by interpolation.
Note.--Backwater from moss May 30 to June 20, Aug. 14 to Sept. 8, Sept. 17-30.

Great Egg Harbor River at Folsom--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	1,720	82	42	55.5	0.986	1.14
November	2,232	145	54	74.4	1.32	1.47
December	4,425	322	77	143	2.54	2.92
Calendar year 1945	30,189	322	39	82.7	1.47	19.95
January 1946	4,229	342	91	136	2.42	2.79
February	2,988	141	87	107	1.90	1.97
March	3,466	182	79	112	1.99	2.29
April	2,727	128	69	90.9	1.61	1.80
May	3,763	228	64	121	2.15	2.49
June	3,843	210	67	128	2.27	2.54
July	3,751	382	46	121	2.15	2.48
August	2,562	132	64	82.6	1.47	1.69
September	1,652	77	40	55.1	.979	1.09
Water year 1945-46	37,358	382	40	102	1.81	24.67
October 1946	1,650	72	46	53.2	.945	1.09
November	1,727	79	46	57.6	1.02	1.14
December	2,217	145	49	71.5	1.27	1.46
Calendar year 1946	34,575	382	40	94.7	1.68	22.83
January 1947	3,303	134	77	107	1.90	2.18
February	2,351	103	74	84.0	1.49	1.55
March	3,395	152	74	110	1.95	2.24
April	2,626	120	69	87.5	1.55	1.73
May	3,858	182	82	124	2.20	2.55
June	2,761	148	61	92.0	1.63	1.82
July	1,627	77	43	52.5	.933	1.07
August	1,605	99	33	51.8	.920	1.06
September	1,336	72	36	44.5	.790	.88
Water year 1946-47	28,456	182	33	78.0	1.39	18.77
October 1947	1,111	52	32	35.8	.636	.73
November	2,391	108	46	79.7	1.42	1.58
December	2,080	99	58	67.1	1.19	1.37
Calendar year 1947	28,444	182	32	77.9	1.38	18.76
January 1948	3,819	200	61	123	2.18	2.52
February	3,150	212	67	109	1.94	2.08
March	3,677	155	86	119	2.11	2.43
April	3,935	238	86	131	2.33	2.60
May	4,745	236	80	153	2.72	3.13
June	4,462	366	86	149	2.65	2.95
July	2,253	114	52	72.7	1.29	1.49
August	3,097	220	52	99.9	1.77	2.05
September	1,313	58	36	43.8	.778	.87
Water year 1947-48	36,033	366	32	98.5	1.75	23.80
October 1948	1,441	61	40	46.5	.826	.95
November	2,115	148	48	70.5	1.25	1.40
December	3,941	196	77	127	2.26	2.60
Calendar year 1948	37,948	366	36	104	1.85	25.07
January 1949	5,530	324	92	178	3.16	3.65
February	5,085	250	152	182	3.23	3.36
March	4,860	186	132	157	2.79	3.21
April	3,731	175	91	124	2.20	2.46
May	3,599	249	75	116	2.06	2.38
June	1,641	79	43	54.7	.972	1.08
July	1,226	52	31	39.5	.702	.81
August	1,082	46	28	34.9	.620	.71
September	1,549	101	40	51.6	.917	1.02
Water year 1948-49	35,800	324	28	98.1	1.74	23.63
October 1949	1,390	74	38	44.8	.796	.92
November	2,030	110	52	67.7	1.20	1.34
December	2,025	86	50	65.3	1.16	1.34
Calendar year 1949	33,748	324	28	92.5	1.64	22.28
January 1950	1,822	67	55	58.8	1.04	1.20
February	2,614	143	67	93.4	1.66	1.73
March	3,124	201	58	101	1.79	2.06
April	2,208	105	68	73.6	1.31	1.46
May	2,677	112	61	86.4	1.53	1.77
June	1,813	107	38	60.4	1.07	1.20
July	1,678	103	33	54.1	.961	1.11
August	1,127	56	29	36.4	.647	.74
September	1,272	71	28	42.4	.753	.84
Water year 1949-50	23,780	201	28	65.2	1.16	15.71

Maurice River at Norma

Location.--Lat 39°29'42", long 75°04'38", on right bank just upstream from Almond Road Bridge at Norma, Salem County, three-quarters of a mile downstream from Blackwater Branch.

Drainage area.--113 sq mi.

Records available.--June 1932 to September 1950.

Gage.--Water-stage recorder. Datum of gage is 46.94 ft above mean sea level, datum of 1929.

Average discharge.--18 years (1932-1950), 174 cfs.

Extremes.--1932-50: Maximum discharge, 7,360 cfs Sept. 2, 1940 (gage height, 8.72 ft), from rating curve, extended above 3,000 cfs by logarithmic plotting; minimum daily, 27 cfs Sept, 25, 1932.

Peak discharge (base, 375 cfs).--
1946: Dec. 31 (3 p.m.) 680 cfs (3.96 ft); May 29 (2 a.m.) 425 cfs (3.50 ft); July 26 (7 a.m.) 599 cfs (3.82 ft).
1947: May 26 (2 to 8 a.m.) 311 cfs (3.26 ft), (annual maximum below base).
1948: May 14 (8 to 9 a.m.) 537 cfs (3.71 ft); May 17 (3 p.m.) 420 cfs (3.49 ft); June 3 (8 a.m.) 542 cfs (3.72 ft); June 22 (2 to 6 p.m.) 386 cfs (3.42 ft); Aug. 4 (6 a.m.) 645 cfs (3.90 ft).
1949: Jan. 4 (1 to 4 a.m.) 482 cfs (3.61 ft); Feb. 1 (3 a.m.) 599 cfs (3.82 ft); May 6 (about 6 a.m.) 451 cfs (3.55 ft).
1950: Sept. 12 (7 to 10 a.m.) 415 cfs (3.48 ft).

Remarks.--Occasional regulation by powerplant above station.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	145	119	269	593	233	229	225	174	325	158	161	101
2	139	117	294	542	236	225	229	171	303	178	152	104
3	128	111	307	472	240	217	240	165	307	192	145	106
4	119	111	303	405	233	214	236	152	307	206	145	106
5	111	111	285	303	221	206	225	152	307	233	136	104
6	114	109	298	311	214	199	217	152	311	260	161	101
7	122	106	285	289	217	192	210	152	285	264	256	99
8	119	106	273	277	217	188	202	155	248	236	221	97
9	119	104	264	285	214	188	206	145	233	199	188	97
10	117	104	260	289	214	185	202	131	199	161	171	94
11	114	101	256	281	217	178	199	125	171	125	165	92
12	111	101	244	277	217	174	196	133	217	133	152	89
13	104	101	229	277	214	171	192	165	252	133	139	87
14	104	104	214	269	217	171	188	174	260	128	133	87
15	101	119	202	264	217	192	185	233	269	125	125	85
16	99	122	192	244	210	206	182	252	248	122	119	85
17	99	131	182	244	210	206	178	277	244	119	125	81
18	99	125	171	236	196	233	174	316	240	117	145	81
19	97	122	a165	225	188	260	171	316	236	109	185	79
20	94	139	a160	214	225	264	168	303	236	106	199	79
21	92	139	a160	214	233	269	161	277	244	101	185	83
22	92	165	a160	217	236	273	158	269	244	104	168	89
23	106	174	a155	214	240	264	152	260	236	221	155	87
24	145	171	a155	206	240	260	149	248	221	316	142	94
25	142	168	a180	206	233	273	149	229	206	362	133	122
26	152	158	a260	206	225	244	171	210	188	548	128	128
27	149	152	a250	206	221	233	174	236	171	391	122	152
28	142	155	277	206	229	225	178	371	155	329	117	125
29	133	217	352	202	-	217	178	400	152	244	111	114
30	128	240	410	202	-	229	182	376	155	214	114	122
31	125	-	587	214	-	233	-	352	-	185	111	-

a No gage-height record; discharge computed on basis of recorded range in stage, weather records and records for stations on nearby streams.

Maurice River at Norma--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	125	87	101	128	174	125	139	210	214	119	67	89
2	117	87	99	149	168	168	139	217	214	117	60	97
3	109	85	89	158	168	196	155	221	210	109	64	104
4	101	85	87	168	168	202	152	229	196	101	71	97
5	99	85	87	171	155	214	155	229	178	94	77	89
6	97	83	85	171	168	214	161	233	168	92	62	87
7	92	83	85	168	158	214	155	240	182	94	62	81
8	89	87	87	165	149	214	152	248	206	104	62	77
9	89	89	87	158	142	a212	165	248	214	97	64	81
10	104	92	87	149	139	a210	171	236	214	101	67	99
11	104	89	89	142	139	a200	165	221	214	99	67	119
12	104	92	89	139	136	a200	178	202	202	97	69	71
13	106	92	92	133	133	a200	185	182	192	92	69	69
14	104	97	89	161	131	a210	174	174	185	87	69	67
15	101	104	94	168	136	217	178	192	206	87	69	65
16	99	99	101	182	139	214	182	192	199	87	83	67
17	99	94	104	182	142	210	206	185	188	83	145	65
18	97	106	99	185	139	206	202	174	174	69	149	64
19	94	104	92	185	139	199	199	168	171	77	117	62
20	92	101	94	202	142	188	199	206	165	92	97	58
21	92	99	165	214	145	178	196	206	161	101	106	60
22	92	106	182	202	145	182	188	229	155	117	117	65
23	92	109	188	188	139	178	174	273	145	122	101	71
24	89	109	192	185	136	178	171	260	136	114	99	69
25	87	109	192	178	133	174	178	260	131	104	89	85
26	85	109	185	174	131	171	202	307	128	97	87	81
27	87	111	171	192	131	168	210	285	128	87	128	71
28	89	111	155	188	128	165	199	264	122	83	125	69
29	99	111	133	185	-	158	171	248	119	85	171	71
30	92	106	133	182	-	149	161	236	117	87	182	77
31	89	-	131	182	-	142	-	221	-	71	139	-

a No gage-height record; discharge computed on basis of recorded range in stage and records for Great Egg River at Folsom.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71	83	114	116	142	221	244	178	410	244	174	117
2	71	79	109	199	139	225	298	178	467	252	264	109
3	69	83	106	217	136	244	307	196	520	256	376	101
4	69	125	104	225	133	248	320	202	446	233	616	104
5	67	133	101	240	136	252	338	240	386	214	488	106
6	67	125	99	252	133	244	311	273	294	192	400	106
7	67	117	99	252	133	248	289	298	294	192	376	109
8	69	122	94	236	133	256	269	329	289	188	334	109
9	71	131	92	214	131	252	248	348	256	188	294	106
10	65	131	94	196	131	260	229	325	233	185	188	111
11	60	131	101	182	128	281	210	303	214	178	161	119
12	60	161	101	171	133	277	206	281	199	165	171	122
13	62	161	101	214	142	269	210	334	202	155	178	125
14	62	155	99	240	182	252	252	477	214	158	171	128
15	62	155	99	240	229	240	289	338	188	152	161	119
16	62	155	133	244	252	229	298	357	199	89	152	117
17	62	152	133	244	289	221	303	405	217	106	128	111
18	62	139	149	236	307	210	298	410	221	133	131	106
19	62	128	152	221	311	199	285	391	269	142	139	104
20	60	133	158	202	303	192	273	367	294	139	188	99
21	60	136	139	202	285	192	252	352	307	122	240	69
22	58	119	128	210	273	192	233	343	357	122	244	87
23	58	125	119	206	256	192	206	311	307	154	225	114
24	58	128	117	196	233	199	196	294	264	240	199	104
25	57	145	111	188	221	199	188	289	233	178	168	85
26	57	142	109	178	221	199	182	307	233	155	158	69
27	57	139	106	171	217	214	168	294	225	139	142	75
28	55	133	104	165	225	221	182	281	206	125	128	77
29	85	125	104	158	233	214	178	264	185	131	125	79
30	99	119	99	152	-	206	174	248	185	114	122	83
31	87	-	94	145	-	199	-	338	-	139	119	-

Maurice River at Norma--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	89	97	316	334	559	338	307	165	182	99	67	136
2	89	94	273	376	461	348	316	145	171	97	79	92
3	83	94	264	420	420	343	311	260	168	94	81	87
4	83	94	307	451	410	338	307	298	165	92	f94	85
5	89	94	316	386	405	329	311	362	158	89	f73	83
6	109	94	303	386	386	320	325	f430	152	133	f104	79
7	117	114	294	362	391	320	334	f405	149	158	87	73
8	128	119	285	357	396	316	329	367	139	174	73	65
9	122	119	273	352	386	303	325	303	136	139	73	67
10	117	122	252	343	376	289	311	281	128	117	75	71
11	106	125	225	329	371	325	298	269	111	122	67	77
12	94	122	206	307	357	338	298	260	117	106	67	71
13	92	122	196	289	348	334	273	240	125	128	67	98
14	92	119	182	225	343	338	269	214	125	125	67	131
15	92	117	182	236	329	343	264	214	125	131	67	125
16	89	114	210	240	325	329	248	210	122	114	65	114
17	89	117	225	244	338	311	236	202	122	122	64	84
18	92	128	229	236	338	316	229	196	122	111	65	67
19	92	119	233	229	329	329	236	161	125	99	67	99
20	92	122	236	225	357	316	244	168	131	97	67	79
21	89	125	240	225	362	320	236	168	117	92	65	69
22	89	125	233	277	357	325	233	188	114	89	64	65
23	89	131	225	285	367	348	248	252	122	85	62	83
24	94	131	214	298	362	352	256	248	119	83	62	83
25	114	136	199	320	357	348	244	307	114	81	60	81
26	111	139	192	338	348	352	236	298	111	77	58	77
27	109	168	178	352	329	352	252	252	106	50	60	75
28	106	188	171	405	285	343	248	210	104	52	58	79
29	104	285	171	425	-	329	233	225	101	57	77	97
30	101	334	221	435	-	316	206	214	99	60	77	136
31	99	-	307	472	-	307	-	199	-	65	83	-

f Computed on basis of partly estimated gage-height record.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	114	161	99	125	136	131	210	168	178	75	58	62
2	106	185	99	122	168	128	196	128	185	73	58	69
3	101	188	94	119	185	99	188	168	182	69	69	85
4	a95	192	a93	117	178	128	182	202	182	65	73	87
5	a90	178	a92	114	171	122	174	174	168	65	77	89
6	a85	161	a91	114	165	119	168	171	161	77	85	85
7	81	149	a90	111	158	117	165	168	152	85	109	79
8	79	128	89	109	145	117	155	158	136	109	79	75
9	77	109	89	106	142	142	155	155	131	139	87	71
10	75	111	89	104	145	142	155	152	122	117	69	79
11	52	111	97	101	142	142	152	142	114	128	67	182
12	58	106	101	99	139	155	149	99	106	165	60	334
13	71	104	109	106	139	168	145	104	89	202	57	153
14	69	117	114	106	155	182	145	109	101	206	48	233
15	67	114	114	106	185	182	149	117	109	178	45	240
16	65	111	111	104	199	178	145	131	106	210	47	244
17	58	106	109	104	196	174	139	149	101	182	48	233
18	77	104	106	101	192	165	133	168	92	145	48	192
19	83	101	122	101	188	158	133	196	87	122	48	152
20	79	99	125	101	178	152	136	192	109	99	86	136
21	77	97	122	101	137	182	133	185	111	97	128	128
22	73	94	119	101	168	192	131	171	99	97	92	161
23	71	89	117	101	165	252	131	168	a94	92	62	161
24	69	87	119	101	158	281	125	161	a90	73	57	149
25	67	92	117	99	155	298	139	149	a86	75	64	139
26	75	97	114	99	149	316	145	133	97	77	71	131
27	77	94	128	99	142	303	161	125	92	71	75	122
28	77	92	145	97	133	294	171	87	85	57	71	117
29	99	94	152	99	-	273	168	161	83	60	65	114
30	111	97	142	99	-	248	206	168	77	62	62	109
31	155	-	131	117	-	229	-	171	-	62	60	-

a No gage-height record; discharge computed by interpolation or (June 23-25) on basis of recorded range in stage, typical weekly regulation pattern, and records for Great Egg Harbor River at Folsom.

Maurice River at Norma--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	3,661	152	92	118	1.04	1.20
November	4,002	240	101	133	1.18	1.32
December	7,799	587	155	252	2.23	2.57
Calendar year 1945	60,699	587	71	166	1.47	19.95
January 1946	8,590	593	202	277	2.45	2.83
February	6,207	240	188	222	1.96	2.04
March	6,818	273	171	220	1.95	2.24
April	5,677	240	149	189	1.67	1.87
May	7,071	400	125	228	2.02	2.33
June	7,170	325	152	239	2.12	2.36
July	6,319	548	101	204	1.81	2.08
August	4,709	256	111	152	1.35	1.55
September	2,970	152	79	99.0	.876	.98
Water year 1945-46	70,993	593	79	195	1.73	23.37
October 1946	3,015	125	85	97.3	.861	.99
November	2,921	111	83	97.4	.862	.96
December	3,664	192	85	118	1.04	1.21
Calendar year 1946	65,181	593	79	178	1.58	21.44
January 1947	5,334	214	128	172	1.52	1.76
February	4,053	174	128	145	1.28	1.33
March	5,856	217	125	189	1.67	1.93
April	5,262	210	139	175	1.54	1.73
May	6,996	307	168	226	2.00	2.30
June	5,234	214	117	174	1.54	1.72
July	2,966	122	69	95.7	.847	.98
August	2,934	182	60	94.6	.837	.97
September	2,327	119	58	77.6	.687	.77
Water year 1946-47	50,562	307	58	139	1.23	16.65
October 1947	2,031	99	55	65.5	.580	.67
November	3,910	161	79	130	1.15	1.29
December	3,468	158	92	112	.991	1.14
Calendar year 1947	50,371	307	55	138	1.22	16.59
January 1948	6,312	252	116	204	1.81	2.08
February	5,787	311	128	200	1.77	1.90
March	7,047	261	192	227	2.01	2.32
April	7,436	338	174	248	2.19	2.45
May	9,551	477	178	308	2.73	3.14
June	8,314	520	185	277	2.45	2.74
July	5,180	256	89	167	1.48	1.70
August	6,960	616	119	225	1.99	2.29
September	3,070	128	69	102	.903	1.01
Water year 1947-48	69,066	616	55	189	1.67	22.73
October 1948	3,061	128	83	98.7	.873	1.01
November	4,008	334	94	134	1.19	1.32
December	7,358	316	171	237	2.10	2.42
Calendar year 1948	74,084	616	69	202	1.79	24.38
January 1949	10,159	472	225	328	2.90	3.34
February	10,392	559	285	371	3.28	3.42
March	10,215	352	289	330	2.92	3.36
April	8,163	334	206	272	2.41	2.69
May	7,711	430	145	249	2.20	2.54
June	3,880	182	99	129	1.14	1.28
July	3,138	174	50	101	.894	1.03
August	2,195	104	58	70.8	.627	.72
September	2,628	136	65	87.6	.775	.86
Water year 1948-49	72,908	559	50	200	1.77	23.99
October 1949	2,533	155	52	81.7	.723	.83
November	3,568	192	87	119	1.05	1.17
December	3,439	152	89	111	.982	1.13
Calendar year 1949	68,021	559	50	186	1.65	22.37
January 1950	3,283	125	97	106	.938	1.08
February	4,513	199	133	161	1.42	1.49
March	5,769	316	99	186	1.65	1.90
April	4,684	210	125	156	1.38	1.54
May	4,730	202	87	153	1.35	1.56
June	3,525	185	77	118	1.04	1.16
July	3,334	210	57	108	.956	1.10
August	2,125	128	45	68.5	.606	.70
September	4,211	334	62	140	1.24	1.39
Water year 1949-50	45,714	334	45	125	1.11	15.05

Manantico Creek near Millville

Location.--Lat 39°25'12", long 74°58'00", on right bank at upstream side of Millville-Milmay highway bridge, 4 miles northeast of Millville, Cumberland County, and 7 miles upstream from mouth.

Drainage area.--22.3 sq mi.

Records available.--June 1931 to September 1950.

Gage.--Water-stage recorder and concrete control. Datum of gage is 36.63 ft above mean sea level, datum of 1929.

Average discharge.--19 years (1931-50), 38.3 cfs.

Extremes.--1931-50: Maximum discharge, 1,050 cfs Aug. 20, 1939 (gage height, 6.21 ft), from rating curve extended above 300 cfs by logarithmic plotting; minimum, 1.4 cfs Aug. 16-18, 1936.

Peak discharge (base, 125 cfs).--
1946: Nov. 30 (about 3 to 5 a.m.) 155 cfs (2.66 ft); Dec. 26 (10 p.m.) 128 cfs (2.46 ft); Dec. 30 (2 to 9 p.m.) 144 cfs (2.58 ft); July 24 (6 p.m.) 150 cfs (2.62 ft); Aug. 19 (5:30 p.m.) 143 cfs (2.57 ft).
1947: May 23 (12 m. to 1 p.m.) 115 cfs (2.36 ft), (annual maximum below base).
1948: Jan. 2 (3 p.m.) 125 cfs (2.44 ft); Jan. 28 (10 p.m.) 135 cfs (2.44 ft); Feb. 15 (3 p.m.) 206 cfs (2.99 ft); May 15 (10:30 a.m.) 143 cfs (2.57 ft); May 18 (1 a.m.) 147 cfs (2.60 ft); May 31 (4-8 p.m.) 128 cfs (2.46 ft); Aug. 21 (4 a.m.) 545 cfs (4.58 ft).
1949: Nov. 30 (8 a.m.) 139 cfs (2.54 ft); Dec. 5 (12 m.) 125 cfs (2.44 ft); Jan. 1 (2 a.m.) 151 cfs (2.63 ft); Jan. 28 (10:30 p.m.) 129 cfs (2.47 ft).
1950: Aug. 10 (3:30 p.m.) 125 cfs (2.44 ft).

Remarks.--Diurnal fluctuation caused by small powerplant above station.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35	24	f100	108	72	53	57	38	46	49	28	30
2	32	24	62	92	63	49	51	37	52	52	27	28
3	29	24	52	74	56	46	55	35	66	106	28	27
4	26	26	49	65	49	43	52	34	58	86	28	26
5	25	27	49	62	45	43	49	36	51	49	27	26
6	25	25	78	61	45	41	44	36	45	41	27	25
7	29	24	95	62	55	41	43	47	41	40	45	25
8	28	24	81	63	54	43	44	41	38	36	50	25
9	27	24	62	62	51	44	54	33	37	33	38	24
10	26	24	60	63	52	43	51	29	33	33	32	24
11	26	23	61	61	53	37	46	26	33	31	29	24
12	24	23	55	62	50	37	43	27	45	29	26	24
13	24	24	48	63	49	38	41	46	57	29	26	22
14	23	30	46	57	56	37	39	54	55	27	25	22
15	23	31	45	54	63	55	39	95	46	27	24	21
16	22	28	44	50	55	71	39	96	41	26	24	21
17	22	25	41	49	50	60	37	71	31	26	26	21
18	22	23	39	48	49	74	37	61	28	24	49	21
19	22	24	40	48	48	93	38	55	51	23	130	21
20	22	36	40	47	70	80	37	49	51	23	113	21
21	22	33	40	49	74	63	35	62	49	22	84	25
22	21	49	40	54	61	55	34	50	45	a23	55	29
23	25	61	39	50	55	51	34	41	39	64	43	29
24	45	48	38	46	52	48	34	38	36	139	39	35
25	42	39	41	48	51	51	37	36	32	106	39	71
26	37	33	96	49	48	51	52	34	29	60	29	57
27	33	a31	108	49	47	52	52	61	28	41	29	38
28	29	a38	84	47	55	60	44	109	27	37	31	30
29	27	f108	101	45	-------	53	40	95	27	33	33	29
30	26	f143	137	47	-------	54	39	68	42	31	37	33
31	25	-------	128	62	-------	62	-------	53	-------	29	34	-------

a No gage-height record; discharge computed on basis of recorded range in stage and records of adjacent days.
f Computed from partly estimated gage-height record.

Manantico Creek near Millville--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	22	19.4	28	33	31	35	a100	43	40	a23	22
2	29	22	21	42	34	55	35	a70	39	29	a22	21
3	a27	22	18.2	48	52	72	35	a62	39	41	a21	21
4	a26	22	19.4	48	37	64	33	a75	35	66	19.6	20
5	a25	23	20	40	38	53	32	104	34	63	19.0	20
6	a24	22	21	40	38	50	32	98	35	62	27	22
7	23	22	21	37	39	50	32	89	58	41	63	23
8	23	23	21	36	39	49	29	60	70	25	21	23
9	23	25	21	37	36	45	37	43	60	24	19.6	21
10	26	24	21	34	34	43	42	39	48	23	19.6	21
11	29	23	21	31	33	42	37	42	41	23	19.0	20
12	29	23	21	31	32	41	43	43	38	23	17.2	19.6
13	29	22	21	31	32	40	48	42	34	23	28	19.0
14	27	22	21	40	31	46	42	39	35	25	23	18.4
15	26	22	21	45	33	49	43	44	50	40	21	18.4
16	24	22	21	49	35	44	47	43	43	49	23	18.4
17	24	22	21	43	36	40	57	41	37	25	50	18.4
18	23	27	21	39	34	37	50	43	38	24	48	17.8
19	23	26	21	35	33	35	43	41	45	26	33	17.2
20	23	25	22	46	32	35	39	50	39	26	30	17.8
21	23	24	55	59	34	34	37	52	35	26	34	17.8
22	23	23	69	46	31	41	36	76	32	26	30	19.0
23	22	24	49	39	31	43	35	107	31	26	26	21
24	22	23	39	32	31	41	34	77	29	26	23	21
25	22	22	34	35	30	39	35	56	29	25	22	a23
26	22	22	30	36	31	36	46	59	36	24	21	a21
27	23	22	28	47	31	33	44	55	56	24	28	a20
28	23	22	28	44	31	33	39	49	44	24	30	20
29	23	21	28	39	-------	31	35	44	38	24	27	20
30	23	20	28	33	-------	32	a32	57	39	23	24	19.6
31	23	-------	27	37	-------	31	-------	50	-------	23	23	-------

a No gage-height record; discharge computed on basis of recorded range in stage, weather records and records for stations on nearby streams.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19.0	a21	23	11.3	12.9	48	68	39	115	42	36	31
2	19.0	a23	23	83	11.9	50	107	39	86	43	54	44
3	19.0	a27	23	82	11.9	72	97	49	77	39	56	54
4	19.0	a30	21	55	11.9	76	74	54	64	36	61	20
5	18.4	a29	21	51	15.6	64	59	72	49	32	72	25
6	18.4	26	21	49	40	52	53	82	58	31	71	15.9
7	18.4	24	21	33	38	55	50	76	54	34	53	17.8
8	19.6	34	22	26	34	66	48	68	62	34	43	17.1
9	20	49	23	31	31	62	46	45	53	31	37	8.2
10	19.6	34	22	33	31	67	43	45	47	29	35	11.4
11	19.0	29	25	33	36	67	43	44	44	30	33	35
12	19.0	52	25	32	42	60	45	41	50	28	35	37
13	18.4	46	23	52	40	53	50	79	45	29	44	31
14	18.4	34	21	82	88	49	63	126	42	28	38	28
15	18.4	29	22	73	186	56	87	126	42	31	30	26
16	18.4	28	42	53	144	46	85	87	50	31	31	24
17	18.4	26	36	44	98	44	69	116	61	30	31	26
18	18.4	26	30	42	78	45	56	133	60	29	32	26
19	18.4	25	27	39	65	43	50	95	52	30	31	26
20	18.4	24	20	37	57	43	48	65	57	26	204	26
21	17.8	23	6.6	44	50	43	48	56	52	16.1	414	26
22	17.8	24	6.2	56	47	43	44	59	44	29	172	14.3
23	17.2	34	6.2	56	45	50	44	56	37	28	72	7.0
24	17.2	33	8.6	50	43	55	43	50	37	44	58	22
25	17.2	35	14.5	44	32	49	43	48	39	43	58	27
26	17.2	28	21	40	37	28	41	53	37	37	46	18.0
27	17.2	26	27	39	41	41	42	60	36	32	42	10.0
28	17.2	26	29	60	73	54	42	55	39	33	54	25
29	19.0	25	26	87	71	49	40	50	37	33	43	29
30	19.6	24	25	54	-------	39	40	68	35	32	35	28
31	22	-------	18.8	25	-------	36	-------	119	-------	31	31	-------

a No gage-height record; discharge computed on basis of recorded range in stage and records for stations on nearby streams.

Manantico Creek near Millville--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	26	97	140	100	94	61	42	37	13.8	26	12.6
2	26	26	69	93	102	93	67	42	35	11.4	17.8	5.1
3	26	25	57	74	85	81	64	50	35	16.6	17.8	7.6
4	23	25	100	66	82	73	64	59	33	17.2	25	14.9
5	16.5	26	123	63	93	67	61	50	31	18.0	36	20
6	40	26	97	82	89	65	76	46	31	26	35	17.2
7	26	33	73	95	87	63	87	53	20	25	23	15.0
8	36	39	63	89	115	59	75	43	9.5	24	20	15.6
9	39	35	56	75	100	57	66	35	21	22	19.0	15.0
10	31	33	53	66	84	57	59	38	25	20	17.8	12.4
11	28	34	48	61	77	75	55	41	26	21	15.6	13.4
12	28	32	47	57	74	90	52	45	27	21	15.6	14.0
13	16.5	31	47	52	72	82	52	43	26	24	15.6	22
14	16.4	31	46	68	75	69	55	41	25	24	17.2	35
15	27	29	48	62	74	63	54	39	24	21	17.2	33
16	24	28	65	50	72	60	52	38	24	19.6	16.6	34
17	23	28	80	49	74	58	49	37	24	19.6	16.1	31
18	23	28	70	41	73	66	48	35	26	19.0	16.1	18.8
19	23	27	61	51	69	82	53	34	28	18.4	17.2	11.4
20	29	34	60	54	72	77	58	37	28	17.2	16.1	23
21	35	43	58	52	80	67	50	34	33	16.1	15.6	28
22	28	39	57	82	81	63	48	40	28	15.6	15.6	19.8
23	26	39	56	96	78	78	53	68	28	14.5	15.0	6.6
24	27	37	54	86	74	78	55	78	28	14.0	9.4	7.4
25	32	40	50	77	69	70	51	77	17.2	14.0	8.9	12.9
26	35	41	48	74	66	68	48	68	7.8	14.0	8.6	25
27	33	47	44	83	62	65	47	58	12.4	14.0	8.6	30
28	30	61	42	109	73	64	44	50	16.6	14.0	8.6	28
29	28	107	35	121	-------	59	43	44	27	12.4	5.8	19.8
30	27	132	62	97	-------	56	42	41	29	54	10.5	23
31	26	-------	134	87	-------	54	-------	39	-------	67	19.6	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	54	23	12.9	35	30	37	30	33	19.3	17.7	17.2
2	28	57	22	17.8	43	25	28	31	30	9.0	17.1	31
3	29	51	21	20	52	19.4	34	31	26	21	20	39
4	20	46	21	21	39	26	31	35	25	16.2	19.4	28
5	6.2	34	21	22	31	19.0	31	32	35	18.6	18.9	23
6	5.8	17.2	21	22	33	27	31	28	29	21	11.9	21
7	10.7	17.2	21	22	33	22	26	21	26	22	16.1	20
8	15.0	19.0	21	21	15.4	26	28	31	24	21	14.0	19.0
9	16.6	20	19.6	19.6	20	25	24	23	22	12.4	12.9	19.0
10	16.6	21	19.6	20	24	31	29	23	23	26	66	19.0
11	17.2	22	21	21	29	26	27	32	12.4	23	68	53
12	25	22	23	20	25	30	28	21	24	21	24	50
13	31	22	26	22	26	34	21	27	20	20	16.1	38
14	26	27	26	23	24	40	26	19.6	21	21	17.8	9.5
15	5.8	28	23	23	51	34	26	29	19.5	20	15.6	36
16	5.8	26	22	22	69	46	25	28	20	11.9	14.0	41
17	10.0	24	21	21	48	25	30	28	18.9	26	14.0	23
18	18.1	23	21	21	35	21	24	26	10.5	20	14.0	10.7
19	31	23	28	26	33	19.6	18.1	37	26	22	14.0	20
20	35	21	31	23	28	27	23	40	31	17.9	44	23
21	30	19.6	28	21	18.0	40	29	26	50	17.7	88	32
22	22	19.6	26	19.6	26	43	24	33	32	7.4	93	46
23	6.2	19.0	26	19.0	35	70	19.0	25	19.0	8.6	71	50
24	6.6	19.6	26	19.0	36	68	32	27	19.6	11.4	47	33
25	11.4	22	25	18.4	30	56	29	43	21	13.4	24	37
26	28	24	23	19.0	18.4	40	29	35	20	13.4	22	30
27	28	22	29	18.4	27	41	26	35	25	22	20	27
28	7.0	21	43	16.1	21	41	37	22	20	16.5	19.6	26
29	17.2	22	38	16.6	-------	48	36	38	20	19.0	17.8	27
30	24	23	27	18.4	-------	42	24	42	19.5	9.0	16.6	24
31	58	-------	10.0	25	-------	31	-------	38	-------	18.9	17.2	-------

Manantico Creek near Millville--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	844	45	21	27.2	1.22	1.41
November	1,096	148	23	36.5	1.64	1.83
December	1,999	137	38	64.5	2.89	3.33
Calendar year 1945	13,572.8	148	12.3	37.2	1.67	22.63
January 1946	1,797	108	45	58.0	2.60	3.00
February	1,528	74	45	54.6	2.45	2.55
March	1,628	96	37	52.5	2.35	2.72
April	1,297	57	34	43.2	1.94	2.16
May	1,593	109	26	51.4	2.30	2.66
June	1,259	66	27	42.0	1.88	2.10
July	1,375	139	22	44.4	1.99	2.29
August	1,255	130	24	40.5	1.82	2.09
September	854	71	21	28.5	1.28	1.42
Water year 1945-46	16,525	148	21	45.3	2.03	27.56
October 1946	765	38	22	24.7	1.11	1.28
November	684	27	20	22.8	1.02	1.14
December	829.0	69	18.2	26.7	1.20	1.38
Calendar year 1946	14,864.0	139	18.2	40.7	1.83	24.79
January 1947	1,227	59	28	39.6	1.78	2.05
February	941	39	30	33.6	1.51	1.57
March	1,315	72	31	42.4	1.90	2.19
April	1,164	50	29	38.8	1.74	1.94
May	1,850	107	39	59.7	2.68	3.09
June	1,230	70	29	41.0	1.84	2.05
July	969	66	23	31.3	1.40	1.62
August	835.0	65	17.2	26.9	1.21	1.39
September	601.4	23	17.2	20.0	.897	1.00
Water year 1946-47	12,410.4	107	17.2	34.0	1.52	20.70
October 1947	575.0	22	17.2	18.5	.830	.96
November	894	52	21	29.8	1.34	1.49
December	679.9	42	6.2	21.9	.982	1.13
Calendar year 1947	12,281.3	107	6.2	33.6	1.51	20.48
January 1948	1,496.3	87	11.3	48.3	2.17	2.50
February	1,511.2	186	11.9	52.1	2.34	2.52
March	1,605	76	28	51.8	2.32	2.68
April	1,668	107	40	55.6	2.49	2.78
May	2,155	135	39	69.5	3.12	3.59
June	1,561	115	35	52.0	2.33	2.60
July	1,001.1	44	16.1	32.3	1.45	1.67
August	2,052	414	30	66.2	2.97	3.42
September	735.7	54	7.0	24.5	1.10	1.23
Water year 1947-48	15,934.2	414	6.2	43.5	1.95	26.57
October 1948	856.4	40	16.4	27.6	1.24	1.43
November	1,182	132	25	39.4	1.77	1.97
December	2,000	134	35	64.5	2.89	3.34
Calendar year 1948	17,828.7	414	7.0	48.7	2.18	29.73
January 1949	2,332	140	37	75.2	3.37	3.89
February	2,252	115	62	80.4	3.61	3.76
March	2,153	94	54	69.5	3.12	3.59
April	1,684	87	42	56.1	2.52	2.81
May	1,445	78	34	46.6	2.09	2.41
June	762.5	37	7.8	25.4	1.14	1.27
July	648.4	67	11.4	20.9	.937	1.08
August	506.9	36	3.6	16.4	.735	.85
September	571.5	35	5.1	19.0	.852	.95
Water year 1948-49	16,393.7	140	3.6	44.9	2.01	27.35
October 1949	621.2	58	5.8	20.0	.897	1.04
November	786.2	57	17.2	26.2	1.17	1.31
December	753.2	43	10.0	24.3	1.09	1.26
Calendar year 1949	14,515.9	140	3.6	39.8	1.78	24.22
January 1950	630.8	26	12.9	20.3	.910	1.05
February	904.8	69	15.4	32.3	1.45	1.51
March	1,073.0	70	19.0	34.6	1.55	1.79
April	832.1	37	18.1	27.7	1.24	1.39
May	936.6	45	19.6	30.2	1.35	1.56
June	722.4	50	10.5	24.1	1.08	1.20
July	546.6	26	7.4	17.6	.789	.91
August	891.7	93	11.9	28.8	1.29	1.49
September	872.4	55	9.5	29.1	1.30	1.45
Water year 1949-50	9,571.0	93	5.8	26.2	1.17	15.96

Loper Run near Bridgeton

Location.--Lat 39°28'20", long 75°14'55", on right bank of Silver Lake, 0.4 mile upstream from mouth and 4 miles northwest of Bridgeton, Cumberland County.

Drainage area.--2.34 sq mi.

Records available.--August 1937 to September 1950.

Gage.--Water-stage recorder above dam with concrete siphon spillway. Datum of gage is 47.10 ft above mean sea level, datum of 1929.

Average discharge.--12 years (1937-46, 1947-50), 1.33 cfs.

Extremes.--1937-50: Maximum daily discharge, 94 cfs Sept. 1, 1940; no flow for many days.

Remarks.--Some regulation by Silver Lake.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.03	0.56	0.83	0.56	1.60	1.36	1.25	1.14	0.93	1.48	0.47	0.56
2	.93	.56	.83	1.03	1.36	1.25	1.25	1.14	1.25	8.59	.47	.56
3	.83	.56	.83	1.03	1.14	1.25	1.60	1.03	1.36	1.03	.47	.56
4	.73	.56	.73	1.03	1.14	1.25	1.36	1.03	1.03	1.03	.47	.56
5	.73	.56	.83	1.14	1.03	1.14	1.14	1.03	1.03	.83	.47	.47
6	.73	.56	4.38	1.14	1.14	1.14	1.14	1.03	.93	.73	.70	.47
7	1.03	.56	.83	1.14	1.48	1.14	1.14	1.03	.93	.73	8.06	.47
8	.93	.56	.83	1.25	1.25	1.14	1.36	1.14	.83	.64	.93	.47
9	.83	.56	.83	1.25	1.25	1.14	1.60	1.03	.83	.64	.73	.47
10	.83	.56	.83	1.36	1.36	1.14	1.25	.93	.64	.56	.64	.47
11	.73	.56	.83	1.25	1.48	1.03	1.14	.93	.64	.56	.56	.39
12	.64	.56	.73	1.48	1.25	1.03	1.14	1.03	1.36	.56	.47	.56
13	.64	.56	.64	1.36	1.25	1.03	1.14	1.48	1.14	.64	.47	.73
14	.64	.73	.73	1.25	1.48	1.03	1.14	4.76	.93	.56	.47	.47
15	.64	.93	.73	1.25	1.25	1.86	1.14	4.36	.83	.56	.39	.47
16	.64	.83	.73	1.14	1.14	1.48	1.14	1.60	.73	.47	.39	.39
17	.64	.73	.64	1.14	1.14	1.25	1.03	1.36	.73	.47	.56	.39
18	.64	.64	.64	1.14	1.14	4.74	1.03	1.25	.73	a.44	12.2	.39
19	.64	.83	.83	1.14	1.25	1.86	1.03	1.25	.73	a.42	.85	.32
20	.64	1.48	.73	1.03	4.26	1.48	1.03	1.14	.73	a.41	5.71	.32
21	.64	1.03	.73	1.25	.93	1.36	1.03	1.03	.83	a.40	1.14	.73
22	.64	1.25	.73	1.36	1.03	1.25	1.03	1.03	.83	a.42	.83	.83
23	12.6	1.14	.64	1.14	1.14	1.25	1.03	.93	.73	11.3	.73	.64
24	0	.83	.64	1.03	1.14	1.25	1.03	.93	.73	1.73	.64	.73
25	0	.73	5.04	1.14	1.14	1.48	1.25	.93	.64	1.03	.64	1.25
26	.05	.64	7.00	1.25	1.14	1.36	2.00	.93	.64	.73	.56	.73
27	.32	.64	1.25	1.25	1.25	1.36	1.36	4.72	.56	.64	.56	.56
28	.47	4.62	1.03	1.14	1.86	1.36	1.14	4.32	.56	.56	.47	.47
29	.47	4.25	11.8	1.14	-------	1.25	1.14	1.48	.56	.47	.47	.47
30	.47	.73	3.75	4.79	-------	1.36	1.14	1.14	1.36	.47	.64	1.14
31	.56	-------	4.57	.74	-------	1.48	-------	1.03	-------	.47	.64	-------

a No gage-height record (waste gate open); discharge computed on basis of records for Manantico Creek near Millville.

Loper Run near Bridgeton--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.83	0.39	0.32	0.32	0.47	0.25	0.13	8.56	0.47	0.39	0.05	
2	.64	.32	.25	.73	.39	.93	.19	.64	.39	.32	.02	
3	.56	.32	.19	.73	.39	1.03	.39	.47	.39	.25	.02	
4	.56	.32	.19	.64	.47	.56	.32	.47	.32	.25	0	
5	.56	.32	.25	.47	.47	.47	.25	.64	.32	.19	0	
6	.47	.25	.25	.56	.39	.39	.25	.64	.32	.19	0	
7	.47	.25	.25	.47	.32	.47	.19	.39	.56	.19	0	
8	.47	.32	.25	.47	.39	.47	.09	.25	4.00	.32	0	
9	.47	.39	.25	.39	.39	.39	.39	.19	.64	.32	0	
10	.83	.39	.25	.39	.32	.39	.47	.19	.64	.32	.02	
11	.73	.32	.25	.32	.25	.39	.32	.19	.47	.32	.02	
12	.73	.39	.25	.32	.25	.39	.32	.13	.39	.32	0	
13	.64	.47	.32	.32	.25	.39	.25	.13	.32	.32	-	
14	.56	.39	.32	.83	.25	.64	.19	.19	6.48	.25	-	
15	.47	.32	.32	.83	.25	.64	.25	.25	5.80	.19	-	
16	.47	.32	.25	.93	.25	.47	.64	.25	.73	.19	-	
17	.47	.39	.25	.64	.32	.32	1.03	.25	.56	.19	-	
18	.47	.83	.25	.47	.32	.25	.47	.32	.56	.19	-	
19	.47	.64	.25	.39	.25	.25	.32	3.30	.47	.25	-	
20	.47	.56	.42	.83	.32	.25	.25	12.5	.47	.32	-	
21	a.47	.47	4.54	.83	.56	.25	.19	.03	.39	.32	-	
22	a.47	.64	.83	.47	.47	.39	.13	4.63	.39	.25	-	
23	.47	.73	.56	.39	.39	.32	.13	.39	.32	.25	-	
24	.47	.56	a.43	.39	.32	.32	.13	.56	.32	.19	-	
25	.47	.47	a.31	.39	.25	.32	.13	3.91	.32	.13	-	
26	.47	.47	.19	.56	.25	.25	.47	14.1	.47	.13	-	
27	.47	.39	.19	1.03	.25	.19	.32	1.25	.73	.09	-	
28	.47	.39	.19	.73	.25	.19	.19	.64	.56	.09	-	
29	.47	.32	.19	.56	-------	.19	.13	.56	.56	.09	-	
30	.47	.32	.25	.47	-------	.19	.09	.93	.47	.09	-	
31	.39	-------	.25	.56	-------	.19	-------	.64	-------	.05	-	-------

a No gage-height record; discharge interpolated.
Note.--Waste gate in dam open Aug. 13 to Sept. 30; discharge not determined.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				0	0	0.09	0.72	0	1.25	13.5	14.4	0.93
2				0	0	.13	.83	0	1.14	1.48	.62	.93
3				0	0	.39	.32	.25	1.03	1.14	23	.93
4				0	0	.32	.13	.32	1.03	1.03	9.51	1.03
5				0	0	.13	.09	4.12	1.03	1.03	6.44	1.03
6				0	0	.05	.05	.56	.93	1.03	4.73	1.03
7				0	0	.19	.02	.83	.93	1.03	.83	1.03
8				0	0	.32	0	.83	1.14	a1.03	1.14	1.03
9				0	0	.25	0	.47	1.03	a.93	1.25	1.03
10				0	0	.39	0	.32	1.03	a.83	1.25	1.03
11				0	0	.32	0	.25	.93	a.73	5.28	1.73
12				0	0	.25	0	.19	.93	.73	1.11	1.48
13				.07	0	.13	.02	4.51	.93	.73	1.60	1.14
14				.47	52	.09	.64	1.48	.92	.83	1.36	1.03
15				.05	.69	.09	1.03	.83	.93	.83	1.25	1.03
16				0	.83	.09	.47	.73	4.47	.83	1.14	a1.03
17				0	.64	.09	.19	4.48	.93	.73	1.14	a1.03
18				0	.47	.05	.13	.56	1.03	.83	1.14	a.93
19				0	.25	.02	.09	.64	8.81	.83	1.86	a.93
20				0	.19	.02	.05	.56	.42	.83	5.67	a.93
21				0	.02	0	.02	.56	.93	.83	1.73	.93
22				0	.05	0	0	.64	.93	.83	1.48	.93
23				0	.02	0	0	.56	.93	20	1.25	.93
24				0	0	.02	0	.56	1.03	1.83	1.25	.93
25				0	0	0	0	.64	1.03	1.25	1.14	.93
26				0	0	0	0	.83	.93	.93	1.14	.93
27				0	.02	0	0	.83	1.14	.83	1.03	.93
28				0	.19	.02	0	.73	1.03	1.03	1.03	.93
29				0	.25	0	0	.64	.93	.83	1.03	.93
30				0	-------	0	0	4.59	4.54	.73	.93	1.03
31		-------		0	-------	0	-------	8.28	-------	.73	.93	-------

a No gage-height record; discharge computed on basis of weather records.

Loper Run near Bridgeton--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.25	0.93	1.48	1.73	2.14	1.89	8.57	2.28	2.14	1.60	1.25	0.62
2	1.14	.93	1.25	1.60	2.14	2.44	1.19	6.17	2.14	1.60	1.14	.93
3	1.03	.93	1.25	1.48	2.14	5.00	4.96	13.6	2.00	1.60	1.14	.83
4	.93	1.14	8.88	1.48	5.31	1.55	5.09	5.00	2.00	1.60	1.14	.83
5	1.24	1.25	1.36	6.07	2.14	5.27	5.05	5.01	2.00	5.35	1.36	.73
6	1.48	1.25	1.48	.85	2.14	1.15	4.85	1.65	2.00	8.28	1.36	.73
7	1.14	2.00	1.36	1.60	5.40	2.28	5.28	4.67	1.86	2.00	1.14	.64
8	1.14	1.48	1.25	1.60	1.73	2.28	4.95	4.67	1.73	2.00	1.03	.83
9	1.03	1.03	1.25	1.60	2.14	2.28	4.49	1.40	1.73	1.73	1.03	a.90
10	1.03	1.03	1.14	1.60	5.23	5.52	5.70	4.53	1.73	1.60	.93	a.85
11	1.03	1.03	1.14	1.48	1.19	9.07	1.17	4.88	2.00	1.60	.93	a.65
12	.93	.93	1.14	1.48	2.00	1.17	4.96	1.04	2.14	1.73	.93	a.80
13	.93	1.03	1.03	1.48	2.28	5.00	4.54	2.14	1.86	6.15	.93	a.90
14	.93	1.03	1.03	1.48	2.28	1.54	5.41	2.28	1.86	1.36	.83	a.95
15	.93	.93	5.10	1.48	2.28	4.55	1.64	4.58	1.86	1.48	.83	a.70
16	.93	.83	.90	1.48	5.64	1.75	4.88	1.31	2.00	1.48	.83	a.70
17	.93	1.03	1.60	1.48	1.44	4.65	1.63	2.28	2.00	1.48	.83	a.66
18	1.03	1.03	1.36	1.48	2.14	5.46	4.68	2.28	1.86	1.48	.93	a.63
19	1.03	1.03	1.48	1.48	5.78	4.26	4.93	2.28	2.14	1.36	.93	a.60
20	1.03	1.25	1.73	1.48	4.76	2.00	4.91	5.06	2.14	1.36	.83	a.60
21	.93	1.25	1.36	5.68	1.44	5.22	1.48	.78	2.00	1.25	.73	a.58
22	.93	1.14	1.86	4.39	5.11	1.47	4.48	9.66	1.86	1.25	.73	.56
23	.93	1.14	1.25	1.14	1.64	8.24	5.96	5.33	1.86	1.14	.73	1.73
24	1.03	1.14	1.25	1.86	2.28	1.58	1.86	6.78	1.73	1.14	.73	1.03
25	1.60	1.25	1.14	1.86	2.28	4.77	4.34	4.61	1.73	1.36	.73	.73
26	1.14	1.14	1.03	5.61	2.28	8.86	2.14	1.32	1.73	1.73	.73	.64
27	1.03	1.73	1.03	1.20	2.28	8.89	4.89	4.40	1.73	1.36	.64	.64
28	.93	5.03	.93	9.09	8.81	4.27	1.86	1.66	1.60	1.14	.73	1.48
29	.93	8.86	1.14	1.13	-------	1.03	2.28	2.14	1.60	1.03	3.37	1.60
30	.93	1.48	9.10	1.73	-------	4.65	2.28	2.14	1.60	1.03	.32	1.48
31	.93	-------	1.56	4.99	-------	5.68	-------	2.14	-------	1.36	9.36	-------

a No gage-height record; discharge computed on basis of weather records.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.93	1.03	0.64	0.64	0.93	0.39	0.47	0.50	0.32	0	0	0
2	.73	4.58	.64	.64	1.14	.39	.47	.50	.25	0	0	0
3	.73	.83	.56	.64	.73	.39	.47	.65	.19	0	0	0
4	.64	.83	.56	.64	.56	.32	.47	.60	.25	0	0	0
5	.64	.83	.56	.64	.47	.32	.47	.50	.25	0	0	0
6	.64	.73	.56	.56	.39	.32	.47	.40	.19	0	0	0
7	.73	.64	.64	.56	.39	.32	.47	.30	.13	0	0	0
8	.83	.64	.64	.47	.39	.47	.47	.25	.05	0	0	0
9	.73	.64	.56	.47	.39	.93	.47	.25	.02	0	0	0
10	.64	.64	.56	.47	.47	.47	.39	.25	0	.22	0	0
11	.64	.64	.64	.47	.47	.39	.47	.25	0	.39	0	58
12	.56	.64	.73	.47	.39	.56	.47	.19	0	.13	0	.31
13	.56	.64	.83	.64	.39	.73	.47	.19	0	.05	0	4.77
14	.47	.93	.83	.64	.64	.64	.47	.19	0	0	0	1.86
15	.47	.83	.64	.56	.73	.47	.47	.39	0	0	0	.73
16	.47	.73	.56	.56	.64	.39	.47	.73	.13	0	0	.25
17	.47	.64	.56	.47	.56	.32	.56	.39	.13	0	0	.13
18	.64	.64	.56	.47	.47	.32	.47	.39	.02	.02	0	.09
19	.93	.56	1.03	.47	.47	.32	.45	.73	.05	.09	0	.09
20	.73	.56	.93	.47	.39	.32	.50	.47	.68	.02	0	.05
21	.64	.56	.73	.47	.32	1.03	.45	.32	1.25	0	0	.19
22	.64	.47	.64	.39	.39	.93	.40	.25	.47	0	0	1.60
23	.56	.47	.64	.39	.64	.55	.40	.25	.19	0	0	.93
24	.56	.47	.64	.39	.64	.39	.40	.25	.13	0	0	.39
25	.56	.64	.56	.39	.47	.56	.45	.25	.05	0	0	.32
26	.83	.64	.56	.39	.39	.56	.45	.25	.02	0	0	.25
27	.73	.56	1.03	.39	.32	.56	.45	.39	0	0	0	.25
28	.64	.64	1.36	.39	.32	.64	.80	.25	0	0	0	.25
29	1.25	.73	.93	.39	-------	.73	.60	.83	0	0	0	.25
30	1.03	.73	.64	.39	-------	.56	.55	.83	0	0	0	.25
31	5.05	-------	.64	.73	-------	.47	-------	.47	-------	0	0	-------

Note.--No gage-height record Apr. 19 to May 10; discharge computed on basis of precipitation records and records for stations on nearby streams.

Loper Run near Bridgeton--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	31.81	12.6	0	1.01	0.432	0.50
November	29.81	4.62	.56	.977	.418	.47
December	56.16	11.8	.64	1.81	.774	.89
Calendar year 1945	524.81	29	0	1.44	.615	8.35
January 1946	39.34	4.79	.56	1.27	.543	.63
February	38.02	4.26	.93	1.36	.581	.60
March	43.50	4.74	1.03	1.40	.598	.69
April	36.20	2.00	1.03	1.21	.517	.58
May	48.16	4.76	.93	1.55	.662	.77
June	25.75	1.36	.56	.858	.367	.41
July	39.57	11.3	.40	1.28	.547	.63
August	42.80	12.2	.39	1.38	.590	.68
September	17.04	1.25	.32	.568	.243	.27
Water year 1945-46	447.16	12.6	0	1.23	.526	7.12
October 1946	16.43	.83	.39	.530	.226	.26
November	12.66	.83	.25	.422	.180	.20
December	13.26	4.54	.19	.428	.183	.21
Calendar year 1946	372.73	12.2	.19	1.02	.436	5.93
January 1947	17.43	1.03	.32	.562	.240	.28
February	9.45	.56	.25	.338	.144	.15
March	12.14	1.03	.19	.392	.168	.19
April	8.62	1.03	.09	.287	.123	.14
May	57.59	14.1	.03	1.86	.795	.92
June	28.83	6.48	.32	.961	.411	.46
July	6.96	.39	.05	.225	.096	.11
August	0	0	0	0	0	0
September	0	0	0	0	0	0
Water year 1946-47	0	0	0	0	0	0
October 1947	0	0	0	0	0	0
November	0	0	0	0	0	0
December	0	0	0	0	0	0
Calendar year 1947	141.15	14.1	0	.387	.165	2.25
January 1948	.59	.47	0	.019	.0081	.009
February	55.62	52	0	1.92	.821	.88
March	3.45	.39	0	.111	.047	.05
April	4.80	1.03	0	.160	.068	.08
May	40.79	8.28	0	1.32	.564	.65
June	44.27	8.81	.42	1.48	.632	.70
July	60.75	20	.73	1.96	.838	.97
August	97.76	25	.62	3.15	1.35	1.55
September	30.66	1.73	93	1.02	.436	.49
Water year 1947-48	338.69	52	0	.925	.395	5.38
October 1948	32.42	1.60	.93	1.05	.449	.52
November	46.25	8.86	.83	1.54	.658	.74
December	58.36	9.10	.90	1.88	.803	.93
Calendar year 1948	475.72	52	0	1.30	.556	7.57
January 1949	73.09	9.09	.85	2.36	1.01	1.16
February	86.42	8.81	1.19	3.09	1.32	1.37
March	123.77	9.07	1.03	3.99	1.71	1.97
April	120.45	8.57	1.17	4.01	1.71	1.91
May	118.07	13.6	.78	3.81	1.63	1.88
June	56.63	2.14	1.60	1.89	.808	.90
July	60.63	8.28	1.03	1.96	.838	.96
August	39.12	9.36	.32	1.26	.538	.62
September	25.55	1.73	.56	.852	.364	.41
Water year 1948-49	840.76	13.6	.32	2.30	.983	13.37
October 1949	25.67	5.05	.47	.828	.354	.41
November	24.11	4.58	.47	.804	.344	.38
December	21.60	1.36	.56	.697	.298	.34
Calendar year 1949	775.11	13.6	.32	2.12	.906	12.31
January 1950	15.66	.73	.39	.505	.216	.25
February	14.50	1.14	.32	.518	.221	.23
March	15.76	1.03	.32	.508	.217	.25
April	14.37	.80	.39	.479	.205	.23
May	12.46	.83	.19	.402	.172	.20
June	4.77	1.25	0	.159	.068	.08
July	.92	.39	0	.030	.013	.01
August	0	0	0	0	0	0
September	70.96	58	0	2.37	1.01	1.13
Water year 1949-50	220.78	58	0	.605	.259	3.51

Delaware River at Port Jervis, N. Y.

Location.--Lat 41°22'20", long 74°41'50", on right bank 250 ft downstream from bridge on U. S. Highways 6 and 209 at Port Jervis, Orange County, 1½ miles upstream from Neversink River, and 6.5 miles downstream from Mongaup River.

Drainage area.--3,076 sq mi.

Records available.--October 1904 to September 1950.

Gage.--Water-stage recorder. Datum of gage is 415.35 ft above mean sea level, datum of 1929. Prior to June 20, 1914, chain gage at highway bridge 250 ft upstream at same datum operated by U. S. Weather Bureau. June 20, 1914, to Aug. 13, 1928, staff or chain gages at highway bridge 250 ft upstream at present datum.

Average discharge.--46 years, 5,532 cfs.

Extremes.--1904-50: Maximum discharge, 140,000 cfs May 23, 1942 (gage height, 17.76 ft), from rating curve extended above 89,000 cfs by logarithmic plotting; minimum, 175 cfs Sept. 23, 1908 (gage height, 0.6 ft); minimum daily, 175 cfs Sept. 23, 1908. Maximum discharge known, 205,000 cfs Oct. 10, 1903 (gage height, 23.1 ft, reported by U. S. Weather Bureau), from rating curve extended above 70,000 cfs by logarithmic plotting and velocity-area studies; maximum stage known, 25.5 ft Mar. 8, 1904 (ice jam).

Peak discharge (base, 41,000 cfs).--
1946: Mar. 9 (12 p.m.) 43,700 cfs; May 28 (6 p.m.) 49,200 cfs.
1947: Apr. 6 (5:15 a.m.) 66,500 cfs.
1948: Mar. 22 (9 p.m.) 96,100 cfs; Apr. 15 (11:30 a.m.) 41,900 cfs.
1949: Dec. 31 (6:30 a.m.) 87,800 cfs; Jan. 6 (10 p.m.) 56,800 cfs.
1950: Mar. 9 (8 p.m.) 49,500 cfs; Mar. 29 (10 a.m.) 53,000 cfs; Apr. 5 (3 p.m.) 62,000 cfs.

Remarks.--Large diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack and by Toronto, Cliff Lake, and Swinging Bridge Reservoirs (combined capacity, 12,300,000,000 cubic feet).

Cooperation.--Records of storage furnished by Pennsylvania Power & Light Co. for Lake Wallenpaupack and by Rockland Light & Power Co. for Toronto, Cliff Lake, and Swinging Bridge Reservoirs.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,170	4,180	8,050	4,800	3,200	5,760	4,190	3,320	11,400	3,450	3,540	1,220
2	4,580	3,910	6,560	4,700	3,100	8,180	4,420	3,190	14,300	4,760	2,240	669
3	9,130	5,500	6,510	4,700	2,500	7,180	4,750	2,920	24,700	6,180	2,750	847
4	f9,090	14,200	6,550	4,200	2,400	7,980	4,520	2,530	17,500	4,410	1,890	1,550
5	f7,190	12,000	6,330	4,000	2,600	*9,690	4,190	2,320	13,700	3,280	1,900	1,580
6	5,800	9,420	6,020	4,900	2,600	15,400	4,030	2,880	11,400	2,620	2,000	1,550
7	5,730	8,040	*6,540	18,800	2,800	28,400	3,460	3,370	9,440	2,290	2,630	1,430
8	f8,620	7,030	7,850	23,000	3,000	34,000	3,380	3,610	7,880	2,130	5,430	1,140
9	f10,100	6,280	7,330	18,600	3,000	32,900	3,800	4,200	6,880	2,300	3,600	1,170
10	f18,200	6,030	7,120	*16,700	2,500	34,500	3,970	4,070	6,810	2,180	2,770	1,610
11	f14,000	6,770	6,720	15,000	2,500	*20,300	3,900	3,330	5,920	2,520	1,910	1,620
12	11,100	10,400	5,650	11,600	2,600	14,300	3,730	3,310	6,140	2,240	2,470	1,600
13	9,140	11,100	4,780	10,100	*2,600	11,300	3,020	4,580	7,190	2,010	2,670	1,580
14	f7,720	10,900	4,500	8,640	3,390	10,200	2,750	4,890	6,110	1,490	2,390	1,210
15	f7,370	13,100	4,200	7,880	6,620	10,700	3,090	5,700	4,540	1,640	2,120	622
16	f7,330	11,500	3,600	6,400	6,410	16,900	3,710	6,720	3,440	1,710	1,840	727
17	f6,670	9,310	3,300	5,660	4,020	13,400	4,280	6,390	3,670	1,760	1,950	1,570
18	5,920	8,720	*3,400	*5,320	3,400	11,800	4,020	7,520	3,970	1,580	1,670	1,520
19	5,470	9,000	3,400	4,600	3,500	10,400	3,310	11,100	4,740	1,590	1,840	1,450
20	4,790	11,100	3,500	3,500	3,200	9,050	3,080	11,900	4,370	1,510	1,980	1,420
21	4,380	12,400	3,400	3,000	2,800	7,960	2,710	13,600	3,780	1,220	1,980	1,560
22	4,280	12,000	3,100	3,500	2,350	7,170	3,020	25,600	3,020	1,570	1,910	2,230
23	4,420	16,700	2,600	3,800	2,050	6,230	3,040	16,900	2,470	3,330	1,750	2,180
24	4,730	13,200	2,350	3,700	1,850	5,330	2,950	11,600	2,730	6,490	1,380	2,960
25	5,020	10,400	2,200	3,700	2,250	5,580	2,820	9,090	2,660	5,040	1,010	6,010
26	5,310	9,500	4,000	3,800	*2,700	5,700	3,310	9,110	2,470	3,240	1,090	5,460
27	5,050	8,490	*6,600	2,700	3,000	6,750	3,220	16,800	2,470	2,410	1,480	3,120
28	4,820	7,820	7,200	2,800	3,250	6,220	2,840	41,700	2,890	1,570	1,440	2,110
29	4,610	9,190	6,200	*3,300	-------	5,640	3,230	37,500	2,880	1,610	1,940	1,650
30	4,410	9,960	5,200	3,300	-------	5,000	3,610	21,900	3,860	1,620	1,970	2,130
31	4,270	-------	5,000	3,200	-------	4,130	-------	14,800	-------	1,780	1,590	-------

* Winter discharge measurement made on this day.
f Computed on basis of partly estimated gage-height record.
Note.--Stage-discharge relation affected by ice Dec. 14 to Jan. 6, Jan. 19 to Feb. 13, Feb. 18-27.

Delaware River at Port Jervis, N. Y.--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,750	2,260	1,850	2,500	20,700	2,050	6,890	11,400	7,440	2,480	5,720	1,370
2	3,070	2,000	2,050	*2,250	13,900	1,750	7,790	15,100	7,150	2,740	5,080	1,580
3	2,840	1,800	2,100	3,340	10,500	2,150	13,700	14,300	7,010	2,880	3,330	3,580
4	2,640	2,020	1,750	3,370	9,000	2,700	14,500	12,100	7,120	2,320	2,360	4,180
5	2,060	2,350	1,790	4,400	7,600	2,800	26,100	12,100	6,560	1,870	3,530	3,210
6	1,690	2,140	1,880	4,270	5,800	2,500	58,900	21,100	5,720	1,620	3,360	2,490
7	1,680	2,220	1,820	4,100	5,000	2,450	41,900	22,500	a5,200	1,880	3,410	1,780
8	2,390	2,400	1,580	3,900	4,700	2,100	27,500	21,800	a4,800	16,600	3,250	1,980
9	2,320	2,180	1,830	3,600	4,300	1,900	18,900	18,100	a5,400	24,600	3,190	2,520
10	2,250	1,750	1,760	3,400	4,000	2,150	15,400	13,800	a5,400	13,700	6,620	2,180
11	2,000	1,850	1,780	2,800	*3,900	2,300	12,600	11,000	4,700	9,280	5,460	2,140
12	2,080	2,530	1,920	2,500	3,600	2,250	11,000	9,540	4,280	6,950	3,660	2,190
13	1,800	2,680	1,980	3,100	3,500	*2,280	12,400	8,420	3,580	5,360	4,490	1,890
14	2,490	2,710	1,990	3,500	3,600	5,010	11,200	8,120	3,060	4,940	3,680	1,170
15	2,620	2,160	2,390	3,430	3,300	32,200	9,420	10,400	4,140	4,920	3,810	1,500
16	2,090	1,870	*2,220	4,150	2,900	27,600	8,590	8,570	10,400	5,160	3,400	2,150
17	2,050	1,530	*2,100	7,890	3,200	18,100	8,190	6,840	7,200	14,700	12,500	1,790
18	2,150	1,590	2,110	6,980	3,200	12,600	7,330	6,450	5,920	14,700	11,100	1,940
19	2,430	2,210	1,700	5,660	3,100	9,720	6,400	7,840	5,460	10,100	6,820	1,880
20	2,770	1,700	1,950	5,900	3,000	8,440	5,880	9,520	4,700	8,760	5,550	1,810
21	2,730	1,750	1,650	14,600	2,450	7,920	6,800	8,020	3,840	7,410	4,680	1,040
22	2,650	2,060	1,600	16,600	1,800	8,420	10,100	17,700	3,470	21,300	4,080	1,470
23	2,090	1,590	3,000	8,990	1,700	8,060	8,750	25,100	3,430	25,000	3,130	2,150
24	1,920	1,510	3,110	*7,670	2,350	8,510	8,000	16,500	3,550	14,800	2,340	2,150
25	1,870	1,680	2,540	7,760	*2,900	17,900	7,480	13,400	3,570	10,700	2,680	1,880
26	1,850	f1,750	2,400	10,100	3,000	27,100	f7,400	20,000	3,650	8,660	2,870	1,650
27	2,550	f1,770	2,000	*9,970	3,000	17,400	f7,400	16,600	3,960	6,400	2,890	1,170
28	3,260	2,080	2,100	10,100	2,700	12,600	7,760	12,800	3,070	8,270	2,620	924
29	2,910	2,460	1,800	9,270	-------	10,100	7,790	10,300	2,420	9,330	2,600	972
30	2,600	2,100	2,500	8,180	-------	8,680	6,970	10,100	2,430	6,680	2,040	1,600
31	2,600	-------	3,200	15,600	-------	7,860	-------	9,390	-------	5,690	1,500	-------

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for upstream stations.
f Computed on basis of partly estimated gage-height record.
Note.--Stage-discharge relation affected by ice Dec. 2-4, 19-23, 26-28, Dec. 30 to Jan. 2, Jan. 5, 7, 9-14, Feb. 4 to Mar. 12.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,330	2,360	2,900	2,350	1,220	4,400	11,000	5,370	6,610	5,530	940	1,410
2	1,360	1,990	2,600	2,100	1,400	4,200	15,100	5,040	5,910	4,550	1,180	1,340
3	1,450	2,040	*2,810	2,100	*1,700	3,900	13,100	5,030	5,180	3,800	1,740	1,350
4	1,280	2,310	3,480	2,050	1,800	3,800	10,700	4,780	4,510	2,780	1,650	1,150
5	838	2,440	3,730	2,350	1,700	3,400	9,190	4,610	3,470	2,570	1,980	648
6	786	2,570	3,360	*2,900	1,750	2,700	8,640	5,560	3,120	2,570	3,450	562
7	1,210	2,670	2,880	2,800	1,450	2,600	7,970	5,660	4,630	3,180	2,840	770
8	1,640	4,020	3,290	2,700	1,350	2,900	7,960	7,220	5,450	3,910	2,650	1,470
9	1,630	15,800	4,310	2,700	1,500	3,100	6,920	6,740	5,980	3,340	2,030	1,600
10	1,590	11,800	*4,680	2,100	1,700	*3,300	6,340	6,020	4,970	2,380	1,790	1,540
11	1,360	7,450	4,230	1,900	1,650	3,500	5,830	5,340	4,630	2,060	1,700	1,340
12	620	10,900	3,660	2,100	1,550	3,100	9,630	5,150	3,860	2,170	2,060	648
13	784	*18,000	2,900	2,450	1,750	2,300	16,400	5,560	3,660	2,980	2,070	726
14	1,450	11,500	2,400	2,500	1,650	2,200	19,300	7,320	4,240	3,480	1,580	1,490
15	1,260	8,510	2,670	2,500	2,100	2,800	39,200	8,870	4,620	3,260	1,240	1,430
16	1,370	6,830	3,900	2,450	5,200	4,600	27,600	8,940	3,860	2,600	1,250	1,380
17	1,580	6,080	6,220	1,900	7,200	32,000	19,900	13,900	3,250	1,970	1,640	1,430
18	1,350	5,230	5,450	1,650	7,600	*34,100	15,700	16,300	3,090	1,560	1,620	1,050
19	750	4,500	4,300	2,050	8,800	26,000	12,800	14,300	3,190	1,840	1,480	750
20	747	3,930	3,000	2,300	11,600	36,400	11,200	11,800	3,810	2,250	1,500	796
21	1,370	f3,500	2,400	2,200	*13,500	51,200	11,300	9,620	3,580	1,960	1,450	1,570
22	1,290	f3,200	2,900	2,000	11,600	72,700	12,100	8,760	3,170	2,190	1,070	1,590
23	1,340	3,080	3,700	1,950	8,600	*69,900	9,660	7,390	3,730	2,140	1,400	1,490
24	1,430	3,610	3,300	1,750	7,000	38,600	8,000	9,560	4,660	2,000	1,770	1,390
25	f1,350	5,130	2,450	1,450	6,200	*28,500	7,820	19,000	7,010	2,690	1,780	1,390
26	f540	f5,800	2,000	1,600	5,800	20,300	8,970	15,700	a8,000	2,290	1,690	654
27	672	f4,800	1,950	1,850	5,600	16,000	7,790	12,000	a6,400	2,280	1,480	610
28	1,270	4,020	2,250	1,900	5,000	17,400	6,940	9,780	a7,600	2,150	1,250	1,340
29	1,740	3,590	2,900	1,850	4,500	16,400	6,390	8,140	a8,200	1,860	1,160	1,420
30	1,730	3,000	*3,200	1,850	-------	12,600	6,200	7,620	a7,000	1,740	937	1,540
31	2,280	-------	2,800	1,550	-------	10,300	-------	7,150	-------	1,610	1,600	-------

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for station at Montague, N. J.
f Fragmentary gage-height record; discharge computed on basis of reconstructed gage-height graph and records for station at Montague, N. J.
Note.--Stage-discharge relation affected by ice Nov. 30 to Dec. 2, Dec. 13, 14, Dec. 19 to Mar. 17.

Delaware River at Port Jervis, N. Y.--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,500	642	3,300	*41,700	b5,000	7,940	5,290	4,970	4,700	1,200	882	1,990
2	1,410	945	3,020	22,100	b5,000	6,980	4,510	5,500	4,470	800	1,500	1,230
3	640	1,050	3,070	15,100	b4,700	6,530	3,890	6,110	3,930	674	1,510	968
4	721	1,600	2,700	11,200	b4,300	5,390	3,990	7,730	3,530	720	1,510	776
5	1,590	1,400	2,290	10,900	b4,400	5,150	3,620	7,180	3,160	1,120	1,190	635
6	1,590	1,510	2,650	40,000	b4,000	6,490	4,050	6,430	3,100	1,380	880	667
7	1,510	1,610	3,760	42,700	b4,100	10,900	5,510	10,200	2,910	1,510	521	832
8	1,590	6,110	4,190	24,700	b4,400	8,960	5,990	8,700	2,500	1,240	d480	1,230
9	1,290	4,820	3,590	17,100	b4,000	7,170	5,970	7,300	2,300	796	1,170	800
10	654	3,670	3,250	13,900	b4,200	7,230	5,420	6,510	2,280	791	1,140	d430
11	826	3,010	2,790	12,000	b3,900	*7,160	5,350	5,760	1,900	972	1,160	d400
12	1,540	2,610	2,520	10,400	b3,100	6,720	4,700	5,010	1,520	1,340	1,150	d410
13	1,540	2,240	2,690	8,920	b2,600	6,090	4,450	4,470	1,750	1,460	802	981
14	1,520	1,780	3,150	8,030	*3,700	5,760	3,510	3,740	2,340	1,040	d520	1,180
15	1,440	1,820	3,660	6,630	7,920	5,970	6,700	3,390	2,060	900	676	1,010
16	843	1,820	3,530	5,470	27,900	5,760	5,980	3,610	2,090	976	1,270	992
17	619	1,750	3,300	5,510	22,300	5,130	4,710	3,590	1,890	538	892	d795
18	857	1,600	3,280	*5,900	14,400	4,660	4,720	3,380	1,880	870	856	d420
19	1,600	1,590	3,140	6,070	11,500	3,730	11,500	3,280	1,300	1,320	956	d460
20	2,060	2,330	2,780	6,850	11,100	2,970	11,700	5,420	1,330	1,250	d470	975
21	1,900	5,230	2,750	6,770	12,200	3,320	9,080	13,500	1,950	1,140	d440	853
22	1,220	5,730	*2,590	6,060	10,500	3,840	7,610	9,760	1,880	1,230	d460	d750
23	1,010	4,740	b2,900	5,490	10,600	*4,270	8,620	9,550	1,550	1,220	d680	1,390
24	854	5,090	b2,600	6,090	10,200	6,120	12,700	9,290	1,590	948	852	786
25	963	4,180	b1,800	7,020	9,410	6,980	11,400	9,760	1,410	696	1,040	794
26	1,520	3,490	b1,500	7,720	11,000	6,470	9,320	9,770	1,240	1,390	d740	894
27	1,380	3,140	1,550	6,760	9,060	5,740	8,320	8,230	1,350	1,420	d720	970
28	1,220	3,210	2,310	6,480	*8,190	5,960	7,900	7,120	1,410	1,430	d400	1,540
29	1,050	3,910	2,660	b7,000	-------	5,910	6,420	6,040	1,490	1,260	d380	1,220
30	807	3,630	24,900	b6,600	-------	5,080	5,400	5,240	1,500	788	1,730	1,630
31	756	-------	78,300	b5,800	-------	5,080	-------	5,110	-------	840	2,600	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
d Doubtful gage-height record; discharge computed on basis of records for station at Montague, N. J.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,730	1,430	2,530	5,840	*5,350	b3,500	21,400	7,940	6,730	2,810	3,020	2,080
2	1,650	1,700	2,780	5,540	4,960	b3,200	18,500	9,860	6,410	2,250	4,040	3,240
3	1,410	1,570	2,490	*5,520	4,800	b2,700	21,100	8,650	5,400	2,310	3,920	4,580
4	1,150	1,720	b2,000	5,810	4,300	b2,300	37,200	7,530	5,890	2,130	3,790	3,200
5	1,220	2,060	b1,700	6,200	3,910	b2,350	58,900	8,330	8,530	2,420	3,480	2,800
6	1,300	2,110	b2,100	6,880	3,990	b2,900	45,200	9,440	7,110	3,190	2,670	2,410
7	1,340	1,930	2,150	14,800	4,320	*b3,200	27,000	7,800	5,660	3,340	2,630	2,070
8	1,060	1,820	1,690	b16,000	3,780	b3,500	18,600	7,060	4,910	2,610	2,620	1,780
9	870	1,610	b1,500	b11,000	3,590	b17,000	14,700	6,310	4,390	2,110	2,540	1,790
10	882	1,590	b1,250	11,100	4,670	24,200	12,600	5,970	3,640	2,210	2,440	1,600
11	1,370	1,490	b1,300	17,500	7,050	14,700	10,900	6,650	3,730	2,910	2,350	2,510
12	1,300	1,400	b1,700	13,800	5,830	11,700	10,200	6,090	4,910	4,050	1,940	3,500
13	1,050	1,340	b18,000	10,300	5,700	10,800	9,770	4,490	4,030	4,860	1,220	3,180
14	844	2,820	28,100	10,100	5,720	*9,060	8,750	4,000	4,050	4,960	1,460	3,130
15	748	5,240	*15,500	9,890	5,370	7,260	7,640	4,750	5,200	4,270	1,890	2,950
16	648	4,560	b9,600	8,180	*5,930	6,510	6,820	4,730	4,930	3,170	1,670	2,550
17	826	3,690	b7,000	7,750	5,560	5,870	6,690	4,540	3,800	3,170	1,770	1,860
18	1,180	*3,470	5,960	6,920	5,690	5,500	6,630	4,830	4,410	3,190	1,870	2,040
19	1,070	3,090	6,180	6,170	4,730	4,730	6,460	8,170	5,450	3,270	2,210	2,240
20	798	2,730	*6,810	b4,800	b4,500	4,710	7,740	8,920	4,760	3,000	2,740	2,180
21	738	2,970	6,140	3,860	b3,700	5,660	14,200	8,440	4,560	4,260	6,220	1,990
22	703	3,370	5,410	3,570	b3,000	*6,160	12,000	f7,150	4,520	3,330	4,210	2,100
23	625	3,000	5,660	*4,220	b4,200	7,830	9,460	f6,400	3,950	2,500	2,990	1,940
24	668	2,400	9,330	4,740	b4,100	*10,300	9,130	6,800	3,290	2,650	2,770	1,430
25	731	2,120	7,800	5,600	b3,500	8,720	8,860	7,680	4,040	3,630	2,380	1,550
26	1,040	2,480	6,140	6,270	b3,100	7,760	7,760	6,980	6,130	4,590	1,940	2,270
27	1,120	2,450	8,560	6,700	b3,000	8,480	7,930	5,630	4,910	3,640	1,430	2,030
28	1,170	b2,250	12,800	b5,800	b3,100	15,200	7,050	4,830	4,160	3,120	1,700	1,720
29	1,200	2,690	11,000	4,760	-------	*49,100	6,010	5,750	3,700	3,700	2,280	1,340
30	988	2,450	8,640	5,570	-------	*38,500	5,840	6,460	3,700	2,300	2,160	1,340
31	1,050	-------	6,450	6,440	-------	26,100	-------	6,080	-------	2,620	1,950	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
f Computed on basis of partly estimated gage-height record.

Delaware River at Port Jervis, N. Y.--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	215,420	18,200	4,170	6,885	6,617	2.15	2.48
November	288,150	16,700	3,910	9,605	9,689	3.15	3.51
December	159,760	8,050	2,200	5,154	4,852	1.58	1.82
Calendar year 1945	2,877,390	48,200	1,650	7,883	7,998	2.60	35.52
January 1946	219,400	23,000	2,700	7,077	6,747	2.19	2.52
February	86,190	6,620	1,850	3,078	2,284	.743	.77
March	373,050	34,500	4,130	12,030	12,628	4.11	4.74
April	106,350	4,750	2,710	3,545	3,138	1.02	1.14
May	316,650	41,700	2,320	10,210	11,080	3.60	4.15
June	202,830	24,700	2,470	6,761	6,944	2.26	2.52
July	81,530	6,490	1,220	2,630	2,459	.799	.92
August	68,080	5,430	1,010	2,196	1,778	.578	.67
September	55,495	6,010	622	1,850	1,321	.429	.48
Water year 1945-46	2,170,905	41,700	622	5,948	5,830	1.90	25.72
October 1946	73,180	3,260	1,680	2,361	2,060	.670	.77
November	60,700	2,710	1,510	2,023	1,552	.505	.56
December	64,470	3,200	1,580	2,080	1,827	.594	.68
Calendar year 1946	1,707,925	41,700	622	4,679	4,517	1.47	19.92
January 1947	199,380	16,600	2,250	6,432	6,640	2.16	2.49
February	138,700	20,700	1,700	4,954	4,712	1.53	1.59
March	277,700	32,200	1,750	8,958	9,462	3.08	3.55
April	403,040	58,900	5,380	13,430	14,841	4.82	5.38
May	409,930	25,100	6,450	13,220	14,009	4.55	5.25
June	148,730	10,400	2,420	4,958	4,656	1.51	1.68
July	279,800	25,000	1,620	9,026	9,252	3.01	3.47
August	132,710	12,500	1,500	4,281	3,656	1.19	1.37
September	58,386	4,180	924	1,945	1,289	.419	.47
Water year 1946-47	2,246,676	58,900	924	6,155	6,181	2.01	27.26
October 1947	39,397	2,280	540	1,271	543	.177	.20
November	170,660	18,000	1,990	5,689	6,296	2.05	2.29
December	102,620	6,220	1,950	3,310	2,664	.866	1.00
Calendar year 1947	2,361,003	58,900	540	6,469	6,514	2.12	28.74
January 1948	65,900	2,900	1,450	2,126	1,592	.518	.60
February	132,470	13,500	1,220	4,568	4,477	1.46	1.58
March	535,200	72,700	2,200	17,260	18,638	6.06	6.39
April	359,650	39,200	5,820	11,990	12,574	4.09	4.56
May	268,330	19,000	4,610	8,656	9,204	2.99	3.45
June	147,090	8,200	3,090	4,903	5,079	1.65	1.84
July	81,170	5,520	1,560	2,618	2,388	.776	.89
August	52,007	3,450	940	1,678	1,127	.366	.42
September	35,874	1,600	562	1,196	309	.100	.11
Water year 1947-48	1,990,368	72,700	540	5,438	5,406	1.76	23.93
October 1948	38,020	2,060	619	1,226	524	.170	.20
November	86,257	6,110	642	2,875	2,665	.866	.97
December	186,520	78,300	1,500	6,017	6,389	2.08	2.40
Calendar year 1948	1,988,488	78,300	562	5,433	5,414	1.76	24.01
January 1949	386,970	42,700	5,470	12,480	13,192	4.29	4.95
February	223,680	27,900	2,600	8,846	8,639	2.81	2.93
March	185,460	10,900	2,970	5,983	5,843	1.90	2.19
April	200,130	12,700	3,620	6,671	7,258	2.36	2.63
May	205,650	13,500	3,280	6,634	6,873	2.23	2.57
June	66,320	4,700	1,240	2,211	1,695	.551	.61
July	33,259	1,510	538	1,073	684	.222	.26
August	29,577	2,600	380	954	570	.185	.21
September	28,008	1,990	400	934	641	.208	.23
Water year 1948-49	1,679,851	78,300	380	4,602	4,564	1.48	20.15
October 1949	32,479	1,730	625	1,048	873	.284	.33
November	73,550	5,240	1,340	2,452	2,384	.775	.86
December	208,270	28,100	1,250	6,718	6,995	2.27	2.62
Calendar year 1949	1,683,353	42,700	380	4,612	4,622	1.50	20.39
January 1950	241,630	17,500	3,570	7,795	8,269	2.69	3.10
February	128,450	7,050	3,000	4,588	4,483	1.46	1.52
March	329,500	49,100	2,300	10,630	11,583	3.77	4.35
April	445,040	48,900	5,840	14,830	15,271	4.96	5.53
May	208,270	9,860	4,000	6,718	6,719	2.18	2.51
June	146,880	8,550	3,290	4,896	4,821	1.57	1.75
July	97,390	4,960	2,110	3,142	2,735	.889	1.02
August	80,500	6,220	1,220	2,597	2,068	.672	.77
September	69,400	4,580	1,340	2,313	1,908	.620	.69
Water year 1949-50	2,061,359	58,900	625	5,648	5,682	1.85	25.05

*** Adjusted for change in contents in Lake Wallenpaupack and in Toronto, Cliff Lake, and Swinging Bridge Reservoirs.**

Delaware River at Montague

Location.--Lat 41°18'30", long 74°47'50", on right bank at downstream side of old bridge pier and 0.4 mile upstream from toll bridge at Montague, Sussex County, three-quarters of a mile downstream from Saw Kill.

Drainage area.--3,480 sq mi.

Records available.--March 1936 to September 1939 (gage heights only), February 1940 to September 1950. Published as "at Milford, Pa." 1936-39.

Gage.--Water-stage recorder. Datum of gage is 369.93 ft above mean sea level, datum of 1929. Prior to Feb. 9, 1940, wire-weight gage on upstream side of left span of bridge at datum 70 ft lower.

Average discharge.--10 years (1940-50), 6,402 cfs (adjusted).

Extremes.--1940-50: Maximum discharge, 136,500 cfs May 23, 1942 (gage height, 25.70 ft), from rating curve extended above 90,000 cfs; minimum, 385 cfs Aug. 28, 29, 1949 (gage height, 3.76 ft); minimum daily, 428 cfs Sept. 27, 1943.

Maximum stage known, 35.5 ft (present datum) Oct. 10, 1903, from floodmark. Gage height of 28.45 ft (present datum) was observed Mar. 18, 1936 (discharge, 164,500 cfs, from rating curve extended above 90,000 cfs).

Peak discharge (base, 34,000 cfs).--
1946: Dec. 27 (6:45 p.m.) discharge unknown, probably below base (14.70 ft, ice jam); Jan. 7 (11:30 a.m.) 34,600 cfs (13.31 ft); Mar. 8 (5:30 a.m.) 40,700 cfs (14.32 ft); Mar. 10 (1:30 a.m.) 50,500 cfs (15.79 ft); May 28 (7:30 p.m.) 55,600 cfs (16.51 ft).
1947: Jan. 22 (1:30 a.m.) 34,000 cfs (13.22 ft); Mar. 15 (10 a.m.) 50,000 cfs (15.72 ft); Apr. 6 (6:30 a.m.) 76,200 cfs (19.14 ft); July 22 (4:30 p.m.) 38,700 cfs (14.00 ft).
1948: Feb. 21 (12:30 a.m.) discharge unknown, probably below base (17.88 ft, ice jam); Mar. 17 (7 p.m.) 53,500 cfs (16.22 ft); Mar. 22 (11 p.m.) 109,500 cfs (22.90 ft); Apr. 15 (10:30 a.m.) 45,600 cfs (15.07 ft).
1949: Dec. 31 (9 a.m.) 98,800 cfs (21.75 ft); Jan. 6 (11:30 p.m.) 64,000 cfs (17.63 ft).
1950: Dec. 13 (11:30 p.m.) 36,500 cfs (13.63 ft); Mar. 9 (9 p.m.) 44,600 cfs (14.91 ft); Mar. 29 (12 m.) 55,200 cfs (16.46 ft); Apr. 5 (4:30 p.m.) 65,500 cfs (17.81 ft).

Remarks.--Diurnal fluctuation at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack and by Toronto, Cliff Lake, and Swinging Bridge Reservoirs (combined capacity, 12,300,000,000 cubic feet).

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,730	4,950	10,100	7,600	4,200	6,020	4,840	4,050	13,700	3,900	3,480	1,450
2	5,450	4,650	8,270	7,200	3,900	9,280	5,340	3,730	14,800	5,100	3,680	895
3	9,800	5,660	7,930	6,800	3,300	8,180	5,710	3,470	28,000	7,120	3,280	824
4	10,300	15,200	8,180	6,400	3,000	8,950	5,400	3,260	21,000	5,260	2,300	1,740
5	8,270	13,400	7,840	6,400	4,000	10,900	5,060	2,730	16,100	3,850	2,090	1,830
6	6,910	10,700	7,360	8,000	4,500	16,400	5,030	3,060	13,300	3,100	2,300	1,830
7	7,000	9,210	8,210	22,100	4,200	28,900	4,200	3,780	11,200	2,710	2,470	1,750
8	10,300	8,120	10,200	26,800	4,100	37,300	4,000	4,100	9,580	2,400	6,010	1,390
9	11,400	7,300	9,510	21,600	3,900	36,900	4,380	4,760	8,340	2,620	4,120	1,100
10	19,800	7,030	8,980	*19,300	3,500	39,800	4,680	4,760	7,900	2,560	3,260	1,850
11	15,800	7,840	8,530	17,700	3,300	28,400	4,630	4,230	7,060	2,840	2,380	1,780
12	12,800	11,700	7,360	14,000	3,600	16,800	4,440	3,760	7,270	2,620	2,500	1,780
13	10,800	12,900	6,310	12,300	3,700	13,400	3,950	5,090	8,430	2,380	3,010	1,680
14	9,180	12,200	6,250	10,400	4,150	12,100	3,330	5,710	7,240	1,820	2,770	1,500
15	8,590	14,900	5,980	10,100	7,720	12,400	3,440	6,340	5,660	1,780	2,500	694
16	8,470	13,300	5,510	8,430	7,780	19,000	4,310	7,840	4,250	1,920	2,110	714
17	7,870	11,000	4,300	7,330	5,230	15,700	4,900	7,390	4,200	2,000	2,300	1,620
18	7,060	10,200	4,100	6,640	3,920	13,600	4,840	8,820	4,650	1,780	2,000	1,730
19	6,460	10,300	4,200	6,550	3,200	12,200	3,980	12,200	5,480	1,780	1,960	1,550
20	5,860	12,600	4,400	5,510	3,600	10,700	3,780	13,900	5,200	1,700	2,340	1,510
21	5,290	14,300	4,600	4,000	3,400	9,510	3,260	13,300	4,460	1,360	2,190	1,670
22	5,030	14,000	4,800	4,700	3,500	8,590	3,350	26,700	3,850	1,710	2,210	2,340
23	5,570	19,600	4,500	5,200	3,330	7,600	3,490	19,000	3,040	3,320	2,070	2,420
24	5,540	15,700	4,200	5,200	3,060	6,520	3,470	13,900	3,010	7,750	1,730	3,300
25	6,040	12,700	4,000	5,400	3,040	6,520	3,280	10,500	3,150	5,980	1,150	6,910
26	6,400	11,300	7,000	4,700	3,700	6,790	3,780	10,400	2,880	3,950	1,270	6,400
27	6,100	10,400	10,500	4,200	4,000	8,020	3,830	17,800	2,840	2,950	1,700	3,730
28	5,770	9,440	9,500	4,000	4,020	7,600	3,490	45,700	3,150	1,940	1,710	2,600
29	5,450	11,000	8,800	4,400	-------	6,910	3,490	43,100	3,300	1,780	1,960	1,940
30	5,230	12,000	8,000	4,500	-------	6,220	4,280	26,400	3,760	1,850	2,420	2,240
31	5,150	-------	7,800	4,500	-------	5,120	-------	18,200	-------	2,020	2,000	-------

* Winter discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 17 to Jan. 6, Jan. 22 to Feb. 13, Feb. 19-22, 26, 27.

Delaware River at Montague--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,190	2,810	2,110	3,000	23,600	3,000	8,270	12,300	9,180	3,030	6,520	1,730
2	3,480	2,320	2,000	2,500	16,000	2,500	8,850	17,300	8,500	3,360	5,890	1,910
3	3,260	2,150	2,000	3,300	12,400	2,500	15,300	16,300	8,400	3,590	4,050	3,830
4	2,990	2,240	2,000	3,500	10,900	3,200	16,500	14,200	8,550	2,930	3,780	5,030
5	2,550	2,720	2,040	4,200	10,000	3,600	27,000	13,500	7,880	2,320	4,100	3,850
6	1,980	2,470	2,150	3,800	7,920	3,700	68,000	22,800	6,840	2,060	4,050	3,180
7	1,850	2,460	2,120	3,500	7,120	3,500	47,900	24,800	6,400	2,180	3,990	2,250
8	2,550	2,740	1,770	4,000	6,300	3,260	31,400	24,000	6,300	15,900	3,790	2,280
9	2,620	2,700	1,830	3,500	5,800	2,670	21,600	20,400	6,990	26,400	3,730	3,000
10	2,560	1,970	2,110	3,300	6,000	2,820	17,600	15,800	6,610	15,100	6,880	2,670
11	2,250	2,030	2,000	3,100	5,600	2,850	14,900	12,700	5,790	10,500	6,620	2,580
12	2,450	2,830	2,160	3,000	5,200	2,830	13,300	11,300	5,290	8,000	4,420	2,640
13	2,170	3,080	2,370	2,800	5,000	2,730	14,700	9,900	4,430	6,520	5,000	2,480
14	3,120	3,110	2,270	3,000	5,000	5,920	13,100	9,500	4,060	5,100	4,260	1,540
15	3,210	2,510	2,710	4,000	4,770	34,600	11,500	12,000	5,400	5,620	4,330	1,590
16	2,740	2,250	2,390	5,000	4,060	31,000	10,000	10,200	12,000	5,560	3,940	2,630
17	2,400	1,700	2,340	6,500	4,340	20,600	10,000	8,100	8,590	15,700	12,100	2,240
18	2,570	*1,680	2,390	7,500	4,180	14,700	9,030	7,700	7,020	16,600	12,800	2,170
19	3,090	2,370	1,700	6,000	4,160	11,500	7,910	9,100	6,510	12,700	8,020	2,260
20	3,340	2,030	1,900	*6,000	3,000	10,100	7,290	11,000	5,610	10,700	6,490	2,360
21	3,180	1,860	2,200	15,300	3,200	9,290	7,850	10,700	4,830	8,830	5,500	1,360
22	3,120	2,320	2,310	19,800	2,700	10,000	11,600	17,900	4,240	20,600	4,900	1,640
23	2,630	1,950	3,580	11,700	2,600	9,550	a10,000	27,100	3,950	26,900	3,860	2,630
24	2,260	1,700	3,680	9,900	3,000	9,730	a9,000	18,600	4,270	16,400	3,000	2,520
25	2,230	1,780	2,980	8,990	3,800	18,800	a8,500	15,100	4,400	12,000	2,960	2,240
26	2,170	1,950	2,500	11,400	4,000	30,200	a9,000	24,000	4,490	9,730	3,440	2,000
27	2,800	1,980	2,200	11,600	4,200	19,800	a8,500	20,100	4,840	7,410	3,470	1,550
28	3,560	2,360	2,500	11,900	3,800	14,600	a8,500	15,500	3,950	8,970	3,200	1,160
29	3,380	2,800	2,300	10,900	--------	11,900	9,170	12,700	3,060	10,800	3,110	1,150
30	2,990	2,500	2,400	9,750	--------	10,300	8,250	12,300	2,870	7,830	2,680	1,760
31	3,000	--------	2,500	17,200	--------	9,300	--------	11,300	--------	6,610	2,000	--------

*Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of recorded range in stage and records for stations at Port Jervis and at Belvidere.
Note.--Stage-discharge relation affected by ice Dec. 3, 4, 19-21, 26-31, Jan. 1-20, Feb. 9-14, 20-28, Mar. 1-7.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,590	2,870	3,620	3,000	1,800	5,800	12,800	6,660	8,050	6,920	1,400	1,820
2	1,590	2,380	3,210	2,900	*1,900	5,500	17,600	6,150	7,250	5,870	1,480	1,730
3	1,640	2,140	3,490	2,800	2,100	5,200	15,200	5,980	6,350	4,630	2,220	1,750
4	1,610	2,710	4,290	2,700	2,400	4,900	12,600	5,890	5,630	3,870	2,270	1,530
5	1,070	3,260	4,230	3,000	2,300	4,600	10,900	5,540	4,620	3,480	2,310	800
6	955	3,180	4,300	3,700	2,350	4,300	10,200	6,780	4,120	3,420	4,340	800
7	1,420	3,160	3,480	3,400	2,200	3,480	9,540	6,810	5,450	4,020	4,030	810
8	1,780	5,410	3,820	3,200	2,000	3,810	9,310	9,340	6,960	4,950	3,520	1,670
9	1,840	19,600	5,150	3,100	2,100	4,160	8,320	8,530	7,230	4,320	2,680	1,860
10	1,840	14,500	5,380	3,000	2,300	4,280	7,450	7,560	6,330	3,340	2,440	1,840
11	1,610	9,370	5,020	2,900	2,200	*4,590	6,880	6,700	5,870	2,790	2,220	1,750
12	843	13,800	4,360	2,900	2,150	4,280	11,100	6,550	5,210	2,720	2,740	834
13	913	21,300	3,730	3,100	2,400	3,810	18,400	6,870	4,870	4,230	3,040	747
14	1,640	13,800	3,200	3,400	2,300	3,000	20,500	9,110	5,470	4,780	2,510	1,600
15	1,380	10,400	4,200	3,500	2,900	3,600	42,300	10,700	5,770	4,320	1,810	1,690
16	1,510	8,520	5,000	3,300	5,600	5,620	30,200	10,800	4,990	3,560	1,720	1,600
17	1,640	7,370	7,240	2,900	7,800	38,600	22,000	15,000	4,440	2,990	2,220	1,710
18	1,640	6,530	6,660	2,300	8,800	39,800	17,900	19,000	4,100	2,200	2,240	1,430
19	954	*5,640	5,340	2,400	11,000	30,400	14,700	16,800	4,330	2,280	2,030	870
20	817	4,970	4,040	3,200	13,000	44,000	13,000	13,800	5,150	3,000	2,050	943
21	1,460	4,510	3,160	3,100	16,000	60,700	12,800	11,600	4,720	2,670	2,100	1,790
22	1,370	3,970	*3,520	2,800	13,000	81,600	14,000	10,400	4,270	2,790	1,530	1,900
23	1,450	3,940	4,640	2,500	11,000	83,300	11,600	8,950	4,450	2,790	1,810	1,820
24	1,480	4,360	4,000	2,300	9,200	42,900	9,750	11,000	5,970	2,750	2,390	1,770
25	1,470	6,450	3,000	2,100	8,300	31,700	9,170	20,800	8,400	3,380	2,370	1,770
26	740	7,120	2,700	2,150	7,700	23,200	10,300	17,800	9,340	2,840	2,230	789
27	689	5,990	2,600	2,300	7,500	18,600	9,240	13,900	7,840	3,070	2,030	768
28	1,310	5,010	2,800	2,500	7,000	20,200	8,330	11,500	9,030	2,790	1,730	1,580
29	1,790	4,550	3,400	2,450	6,400	19,300	7,660	9,560	10,000	2,510	1,570	1,730
30	1,870	3,860	4,000	2,400	--------	15,100	7,410	9,150	8,670	2,370	1,230	1,790
31	2,510	--------	3,200	2,200	--------	12,500	--------	8,720	--------	2,200	1,960	--------

* Winter discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 14-16, Dec. 24 to Mar. 6, Mar. 14. Backwater from moss Aug. 24 to Sept. 30.

Delaware River at Montague--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,920	780	4,160	49,800	6,400	9,470	6,400	6,100	5,580	1,560	940	2,490
2	1,820	1,130	3,840	29,600	6,000	8,410	5,640	6,630	5,360	1,000	1,730	1,590
3	846	1,120	3,640	20,600	5,600	7,960	4,840	7,490	4,830	920	1,750	1,190
4	824	1,970	3,550	15,600	5,500	6,790	4,700	9,380	4,420	860	1,800	956
5	1,790	1,710	2,890	13,300	5,400	6,460	4,550	8,800	3,920	1,180	1,530	800
6	1,980	2,090	3,110	39,200	5,200	7,470	4,780	7,950	3,680	1,640	1,090	789
7	1,840	1,700	4,310	49,200	5,150	12,200	6,300	12,400	3,520	1,870	660	930
8	1,960	6,620	5,010	29,400	5,750	10,600	7,000	11,200	3,140	1,450	600	1,320
9	1,770	5,740	4,350	20,800	5,300	8,630	7,020	9,220	2,860	1,060	1,170	1,070
10	834	4,500	3,940	16,700	5,400	8,420	6,430	8,100	2,880	920	1,300	591
11	948	4,030	3,530	14,600	5,470	8,500	6,180	7,910	2,610	1,070	1,250	535
12	1,960	3,310	3,150	12,600	4,440	8,220	5,660	7,110	2,060	1,410	1,310	528
13	1,910	3,020	3,230	11,000	3,850	7,350	5,160	6,410	1,890	1,920	940	983
14	1,920	2,320	3,770	9,850	4,460	6,760	6,190	5,840	2,820	1,270	670	1,380
15	1,830	2,150	4,140	8,430	8,470	6,890	8,020	5,190	2,580	1,180	747	1,210
16	1,160	2,430	4,410	6,940	26,800	6,850	7,210	4,840	2,520	1,210	1,470	1,320
17	785	2,110	4,110	6,810	25,000	6,300	6,020	4,920	2,390	690	a1,420	1,040
18	962	2,170	4,000	7,070	16,700	5,560	5,500	4,680	2,480	950	a1,140	615
19	1,800	1,890	3,900	7,390	13,500	4,830	11,800	4,480	1,660	1,570	a1,210	624
20	2,430	3,460	3,400	8,260	12,900	3,910	14,500	4,900	1,570	1,540	740	1,110
21	2,520	7,030	3,550	7,940	*14,400	4,000	11,400	14,500	2,250	1,250	660	1,160
22	1,580	7,090	3,700	a7,800	12,500	4,710	9,520	11,800	2,250	1,600	559	839
23	1,340	5,950	3,800	a7,700	12,400	5,260	10,300	10,700	2,060	1,460	777	1,630
24	1,050	6,160	3,300	*a7,500	12,300	7,510	14,400	11,000	1,860	1,170	893	1,100
25	1,090	5,340	2,300	8,450	11,000	8,140	13,900	10,100	1,850	810	1,150	956
26	1,840	4,430	1,800	9,160	12,900	7,830	11,300	11,100	1,680	1,490	944	1,060
27	1,750	4,040	2,000	8,540	11,000	7,040	9,930	9,850	1,430	1,710	780	1,140
28	1,510	4,000	2,500	8,040	9,780	7,150	9,490	8,510	1,830	1,620	511	1,810
29	1,360	4,590	3,300	8,900	-------	7,280	7,930	7,200	1,750	1,500	463	1,450
30	1,030	4,540	21,000	8,100	-------	6,290	6,670	6,460	1,790	970	1,250	1,970
31	910	-------	90,100	7,200	-------	5,980	-------	6,040	-------	930	3,150	-------

*Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for stations on nearby streams.
Note.--Stage-discharge relation affected by ice Dec. 18-30, Jan. 30 to Feb. 6. Backwater from moss Oct. 1-10.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,980	1,530	2,910	6,820	6,300	b4,600	24,100	8,850	8,370	3,700	3,600	2,660
2	2,050	2,050	3,130	6,410	5,880	b4,000	21,000	11,200	9,020	2,850	4,620	3,430
3	1,710	1,900	3,000	6,350	5,660	b3,600	23,100	10,100	7,570	2,890	4,490	5,420
4	1,410	2,010	2,490	6,730	5,150	b3,300	37,100	8,820	7,900	2,720	4,540	3,950
5	1,440	2,250	2,030	7,150	4,540	b3,400	61,000	9,510	10,400	3,020	4,240	3,350
6	1,530	2,490	2,370	7,600	4,790	b3,800	49,000	11,200	8,880	3,670	3,330	3,090
7	1,660	*2,210	2,680	15,800	5,000	b4,200	29,500	9,280	7,300	4,050	3,090	2,660
8	1,280	2,170	2,120	18,300	4,590	4,540	21,200	8,210	6,190	3,280	3,220	2,250
9	1,070	1,860	b1,800	12,400	4,120	18,600	16,600	7,600	5,550	2,640	3,150	2,270
10	1,010	1,820	b1,400	12,000	5,580	32,400	14,300	7,090	4,870	2,530	2,950	2,090
11	1,520	1,730	1,500	18,800	8,060	20,200	12,500	7,870	4,920	3,380	2,870	2,630
12	1,700	1,670	1,880	15,800	6,940	15,700	11,700	7,360	5,850	5,050	2,680	4,120
13	1,230	1,530	16,800	11,800	6,530	13,700	11,200	5,800	5,020	5,720	1,600	3,860
14	1,010	2,480	29,700	11,400	6,580	10,700	10,200	5,000	4,840	5,850	1,640	3,860
15	846	5,910	17,300	11,400	6,210	8,470	8,950	5,440	6,640	5,260	2,310	3,660
16	810	5,360	11,200	*9,410	6,700	7,600	7,960	5,630	6,270	4,000	2,110	3,420
17	846	4,290	8,590	8,880	7,480	6,970	7,570	5,500	5,310	3,580	2,070	2,450
18	1,360	3,880	6,940	8,120	6,670	6,560	7,660	5,690	5,740	3,860	2,270	2,410
19	1,200	3,760	7,000	7,210	5,580	5,660	7,570	9,510	6,440	3,860	2,640	2,830
20	930	3,260	7,630	5,910	5,360	*5,550	8,620	10,500	5,960	3,630	3,090	2,760
21	858	3,240	7,120	4,760	4,760	6,610	15,500	9,850	5,580	4,970	6,470	2,570
22	834	3,860	6,350	4,420	3,800	7,240	13,600	8,620	5,580	4,270	5,130	2,600
23	758	3,560	6,440	5,000	b5,200	9,080	10,700	7,510	4,870	3,170	3,740	2,570
24	726	2,950	10,500	5,500	b5,400	12,300	9,990	8,180	4,290	3,000	3,810	1,860
25	768	2,430	9,050	6,440	b4,800	10,500	9,960	9,380	4,840	4,100	2,910	1,800
26	1,220	2,680	7,120	7,360	b4,000	9,480	8,850	8,560	7,000	5,440	2,680	2,780
27	1,220	2,870	9,370	a7,600	b4,000	10,100	9,210	7,480	5,930	4,390	1,860	2,550
28	1,430	2,600	14,300	a7,400	b4,200	15,500	8,270	6,240	5,020	3,810	1,880	2,290
29	1,430	3,090	12,500	a6,500	-------	49,800	7,390	7,000	4,360	3,240	2,780	1,790
30	1,220	3,000	9,750	a6,000	-------	41,900	7,030	8,210	4,390	2,760	2,700	1,800
31	1,190	-------	7,420	7,300	-------	29,100	-------	7,390	-------	3,040	2,430	-------

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of recorded range in stage and records for station at Belvidere.
b Stage-discharge relation affected by ice.

Delaware River at Montague--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	248,420	19,800	4,730	8,014	7,745	2.23	2.57
November	333,600	19,600	4,650	11,120	11,200	3.22	3.59
December	217,220	10,500	4,000	7,007	6,705	1.93	2.22
Calendar year 1945	3,472,990	56,000	2,270	9,515	9,630	2.77	37.56
January 1946	281,960	26,800	4,000	9,095	8,765	2.52	2.90
February	112,850	7,780	3,000	4,030	3,236	.930	.97
March	426,330	39,800	5,120	13,750	14,350	4.12	4.75
April	125,960	5,710	3,260	4,199	3,792	1.09	1.22
May	357,980	45,700	2,730	11,550	12,420	3.57	4.11
June	236,800	28,000	2,840	7,893	8,076	2.32	2.59
July	92,850	7,750	1,360	3,027	2,857	.821	.95
August	77,270	6,010	1,150	2,493	2,074	.596	.69
September	62,777	6,910	694	2,093	1,564	.449	.50
Water year 1945-46	2,575,017	45,700	694	7,055	6,937	1.99	27.06
October 1946	85,690	3,560	1,850	2,764	2,463	.708	.82
November	69,320	3,110	1,680	2,311	1,840	.529	.59
December	71,510	3,680	1,700	2,307	2,054	.590	.68
Calendar year 1946	2,002,297	45,700	694	5,486	5,324	1.53	20.77
January 1947	219,940	19,800	2,500	7,095	7,303	2.10	2.42
February	178,650	23,600	2,600	6,380	6,139	1.76	1.84
March	320,850	34,600	2,500	10,350	10,850	3.12	3.60
April	464,520	68,000	7,290	15,840	16,890	4.85	5.42
May	468,200	27,100	7,700	15,100	15,890	4.57	5.26
June	181,250	12,000	2,870	6,042	5,739	1.65	1.84
July	309,950	26,900	2,060	9,998	10,220	2.94	3.39
August	152,880	12,800	2,000	4,932	4,307	1.24	1.43
September	70,180	5,030	1,150	2,339	1,684	.484	.54
Water year 1946-47	2,592,940	68,000	1,150	7,104	7,130	2.05	27.83
October 1947	44,421	2,510	689	1,433	705	.203	.23
November	210,670	21,300	2,140	7,022	7,629	2.19	2.45
December	126,780	7,240	2,600	4,090	3,444	.990	1.14
Calendar year 1947	2,748,291	68,000	689	7,530	7,575	2.18	29.56
January 1948	87,500	3,700	2,100	2,823	2,289	.658	.76
February	165,700	16,000	1,800	5,714	5,622	1.62	1.74
March	632,330	83,300	3,000	20,400	21,780	6.26	7.21
April	411,160	42,300	6,880	13,710	14,290	4.11	4.58
May	317,950	20,800	5,540	10,260	10,800	3.10	3.58
June	184,880	10,000	4,100	6,163	6,338	1.82	2.03
July	107,850	6,920	2,200	3,479	3,249	.934	1.08
August	70,320	4,340	1,230	2,268	1,718	.494	.57
September	43,491	1,900	747	1,450	563	.162	.18
Water year 1947-48	2,403,052	83,300	689	6,566	6,533	1.88	25.55
October 1948	47,279	2,520	785	1,525	824	.237	.27
November	107,420	7,090	780	3,581	3,371	.969	1.08
December	213,790	90,100	1,800	6,896	7,269	2.09	2.41
Calendar year 1948	2,389,670	90,100	747	6,529	6,518	1.87	25.49
January 1949	466,580	49,800	6,810	15,050	15,760	4.53	5.22
February	273,570	26,800	3,850	9,770	10,060	2.89	3.01
March	222,770	12,200	3,910	7,186	7,046	2.02	2.33
April	238,740	14,500	4,550	7,958	8,545	2.46	2.74
May	250,810	14,500	4,480	8,091	8,329	2.39	2.76
June	81,520	5,580	1,430	2,717	2,201	.632	.71
July	39,780	1,920	890	1,283	894	.257	.30
August	34,604	3,150	463	1,116	732	.210	.24
September	34,186	2,490	528	1,140	847	.243	.27
Water year 1948-49	2,011,049	90,100	463	5,510	5,472	1.57	21.34
October 1949	38,246	2,050	726	1,234	1,059	.304	.35
November	84,440	5,910	1,530	2,815	2,746	.789	.88
December	232,400	29,700	1,400	7,497	7,773	2.23	2.58
Calendar year 1949	1,997,646	49,800	463	5,473	5,483	1.58	21.39
January 1950	276,570	18,800	4,420	8,922	9,396	2.70	3.11
February	152,880	8,060	3,800	5,496	5,391	1.55	1.61
March	385,160	49,800	3,300	12,420	13,380	3.84	4.43
April	491,330	61,000	7,030	16,380	16,820	4.83	5.39
May	248,580	11,200	5,000	8,019	8,020	2.30	2.66
June	184,900	10,400	4,290	6,163	6,088	1.75	1.95
July	117,730	5,850	2,530	3,798	3,391	.974	1.12
August	96,400	6,470	1,600	3,110	2,581	.742	.86
September	85,780	5,420	1,790	2,859	2,454	.705	.79
Water year 1949-50	2,895,416	61,000	726	6,563	6,596	1.90	25.73

* Adjusted for change in contents in Lake Wallenpaupack and Toronto, Cliff Lake, and Swinging Bridge Reservoirs.

Delaware River at Dingmans Ferry, Pa.

Location.--Lat 41°13'12", long 74°51'40", on bridge at Dingmans Ferry, Pike County.

Records available.--November 1936 to March 1948 (discontinued), (gage heights only).

Gage.--Wire-weight gage. Datum of gage is 286.06 ft above mean sea level, datum of 1929.

Extremes.--1936-48: Maximum gage height observed, 89.45 ft (4 p.m.) May 23, 1942; minimum observed, 68.00 ft Oct. 20, 1941.
Maximum stage known, 98.3 ft Oct. 10, 1903, from floodmark.

Maximum gage height observed (water years).--
1946: May 29 (8 p.m.) 81.65 ft.
1947: Apr. 6 (6 to 10 a.m.) 84.00 ft.
1948: Mar. 22 (8 to 11 p.m.) 87.00 ft.

Remarks.--Gage read twice daily except during periods of gage heights above 75.0 ft, when it was read hourly between 7 a.m. and 9 p.m. In tables, the readings at 8 a.m. are shown.

Cooperation.--Records furnished by Delaware River Joint Toll Bridge Commission.

Daily gage height at 8 a.m., in feet, 1945-48

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71.85	72.25	74.05	73.50	72.25	72.20	71.90	71.85	75.00	71.95	70.90	69.80
2	72.40	71.95	73.50	73.45	72.35	73.45	72.30	71.60	74.50	72.00	72.20	69.80
3	72.95	72.10	73.15	73.95	71.75	73.40	72.55	71.50	73.05	72.00	71.90	69.50
4	74.20	70.00	73.40	73.80	71.10	73.35	72.05	71.60	76.80	72.80	71.10	70.30
5	73.50	74.80	73.40	73.85	72.05	73.35	72.00	71.00	75.50	71.95	70.80	70.45
6	73.00	74.15	73.15	72.95	71.80	76.10	72.45	71.15	74.30	71.55	71.15	70.55
7	72.80	73.50	73.20	74.55	72.00	77.35	71.75	71.80	74.10	71.35	71.15	70.50
8	73.65	73.20	73.90	77.55	72.20	79.60	71.60	72.00	73.80	71.05	72.95	70.30
9	73.70	72.90	74.00	76.85	72.10	78.35	71.55	71.95	73.65	71.30	71.35	69.45
10	75.95	72.85	73.10	76.05	71.50	80.45	71.85	72.00	73.35	71.35	71.55	70.65
11	75.50	73.00	73.60	76.00	71.45	71.20	71.80	71.85	73.10	71.45	71.05	70.35
12	74.60	73.75	73.25	75.20	72.00	76.75	71.80	71.50	72.85	71.40	70.45	70.70
13	74.15	74.60	73.00	74.65	71.55	74.90	71.75	71.90	72.85	71.20	71.35	70.49
14	73.75	74.10	72.90	74.05	71.70	74.45	71.35	72.30	73.25	70.95	71.15	70.45
15	73.25	74.80	72.15	74.05	73.35	74.35	71.25	72.25	72.85	70.40	71.00	69.35
16	73.35	74.70	72.65	73.80	73.60	76.20	71.80	72.95	72.05	70.90	70.80	69.20
17	73.20	74.10	72.65	73.20	72.35	75.55	72.00	72.80	71.80	70.90	70.90	69.90
18	72.95	73.90	72.85	73.00	72.00	74.75	72.05	73.15	72.25	70.80	70.60	70.50
19	72.55	73.70	72.70	72.95	72.10	74.45	71.90	74.05	72.20	70.75	70.25	71.00
20	72.45	73.95	72.35	72.65	71.80	74.00	71.50	74.30	72.65	70.80	70.90	69.99
21	72.35	75.00	72.65	71.55	72.00	73.75	71.40	74.40	73.30	70.40	70.75	70.10
22	71.95	74.70	72.80	72.40	71.80	73.50	71.40	77.85	73.30	70.40	70.80	70.35
23	73.40	76.25	72.50	72.75	71.10	73.00	71.55	76.35	71.50	71.20	70.65	71.10
24	72.45	75.45	72.45	72.90	71.40	72.75	71.50	75.00	71.25	73.65	70.45	71.60
25	72.05	74.65	72.25	72.30	71.20	72.50	71.50	74.15	71.80	72.90	69.70	72.45
26	72.70	74.15	72.35	72.40	72.05	72.70	71.50	73.70	71.75	72.20	69.85	73.15
27	72.65	74.10	74.90	72.15	72.05	73.25	72.00	75.05	71.75	71.65	70.05	71.85
28	72.45	73.70	74.10	71.75	71.65	73.05	71.55	79.85	71.85	71.00	70.20	71.20
29	72.10	74.00	74.10	72.30	-------	72.80	71.35	80.95	72.05	70.50	70.00	70.65
30	72.10	74.60	73.55	72.20	-------	72.65	71.90	77.30	71.80	70.90	71.00	72.70
31	72.15	-------	73.25	71.95	-------	72.10	-------	76.15	-------	70.90	70.80	-------

Delaware River at Dingmans Ferry, Pa.--Continued

Daily gage height at 8 a.m., in feet, 1945-48

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71.40	71.15	70.45	72.00	77.85	72.20	72.20	73.60	73.60	71.45	72.75	70.25
2	71.55	70.70	70.80	71.20	75.55	71.60	72.15	75.80	73.10	71.55	72.80	70.45
3	71.65	70.65	71.25	71.40	74.55	71.00	71.70	75.50	73.20	71.88	71.75	71.05
4	71.70	70.50	71.05	72.05	74.15	71.95	75.50	75.10	72.45	71.45	71.45	72.35
5	71.20	71.00	70.90	71.80	74.00	71.60	75.25	74.55	73.15	70.85	71.85	71.80
6	70.70	71.05	70.80	72.20	73.15	71.60	84.00	76.90	72.90	73.60	71.85	71.70
7	70.50	70.90	70.70	72.00	72.75	71.45	81.30	77.30	73.00	70.30	71.15	70.75
8	71.25	71.20	70.40	72.20	72.85	71.80	78.75	77.00	72.45	71.95	71.55	70.45
9	71.40	71.10	70.35	71.65	73.00	71.35	77.75	76.60	72.35	73.50	71.85	71.25
10	71.35	70.45	70.70	71.80	72.75	71.00	75.90	75.70	72.60	75.55	71.53	71.20
11	71.30	70.40	70.40	71.60	72.55	71.25	75.20	74.80	72.55	74.20	73.10	71.20
12	-	71.20	70.45	71.30	72.80	71.25	74.70	74.15	72.40	73.25	71.90	71.15
13	-	71.23	70.85	71.40	72.15	71.10	75.55	73.80	72.10	72.65	71.85	71.20
14	-	71.30	70.50	72.20	72.30	71.75	74.80	73.35	71.85	72.15	72.00	70.70
15	-	71.10	70.35	71.95	72.20	77.00	74.16	74.20	71.85	72.50	71.85	69.85
16	-	71.00	71.10	72.15	71.85	73.00	73.75	74.60	74.45	72.25	71.95	71.20
17	-	70.80	71.05	72.60	72.00	76.75	73.70	73.35	73.45	75.35	71.90	71.00
18	-	70.20	70.65	73.40	72.05	75.25	73.40	72.70	72.85	76.25	75.15	70.75
19	-	70.65	70.70	73.75	72.10	74.40	73.15	73.30	72.10	74.75	73.35	70.70
20	-	70.70	70.10	73.75	71.30	73.80	72.90	73.65	72.45	74.20	72.65	71.15
21	-	70.40	70.80	73.75	71.45	73.55	72.70	74.00	72.10	73.60	72.15	70.15
22	-	70.85	70.60	76.50	71.00	73.70	74.00	74.05	71.80	73.15	72.00	71.10
23	-	70.80	70.65	74.45	71.00	73.75	74.00	77.95	71.60	73.40	71.90	71.05
24	70.65	70.35	71.65	74.00	71.35	73.30	73.40	75.45	72.00	75.95	71.15	71.05
25	70.70	70.05	71.35	73.70	72.30	74.25	73.25	75.25	71.90	74.65	71.05	71.10
26	70.70	70.70	70.80	74.05	72.25	73.55	73.20	76.95	71.95	73.90	71.60	71.00
27	70.70	70.70	70.35	74.15	72.20	76.35	73.50	76.80	72.15	73.40	71.65	70.55
28	71.25	70.90	70.95	74.30	72.30	75.25	73.40	75.55	71.85	72.65	71.50	69.70
29	71.55	71.00	70.50	74.00	-------	74.40	73.45	74.85	71.40	74.25	71.35	69.55
30	71.05	70.80	71.00	73.15	-------	73.90	73.05	74.55	71.15	72.45	71.25	70.45
31	71.20	-------	71.60	73.85	-------	73.55	-------	74.40	-------	72.85	70.70	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70.50	71.20	71.40	71.55	71.25	72.15						
2	70.50	70.80	71.35	71.00	71.20	72.15						
3	70.50	70.50	71.30	71.25	71.20	72.20						
4	70.40	70.90	71.75	71.55	71.20	71.95						
5	69.45	71.35	71.60	71.30	71.55	71.80						
6	69.30	71.25	72.10	72.00	71.30	71.50						
7	70.00	71.30	71.40	72.00	71.70	71.40						
8	70.40	71.15	71.45	72.25	70.80	71.55						
9	60.60	75.70	72.00	71.95	71.35	71.60						
10	70.50	75.40	72.20	71.80	71.65	71.50						
11	70.35	73.85	72.25	70.85	71.45	71.65						
12	69.40	73.75	72.00	71.75	71.55	72.00						
13	69.10	77.30	71.65	71.60	71.60	71.15						
14	70.00	75.10	71.15	71.75	71.50	71.05						
15	70.00	74.05	71.25	71.90	71.20	71.30						
16	70.30	73.60	72.15	72.15	71.50	71.60						
17	70.30	72.90	73.35	71.95	73.55	77.35						
18	70.65	72.85	72.90	70.85	73.70	80.45						
19	69.45	72.40	72.55	70.80	73.85	78.25						
20	69.20	72.05	72.20	72.10	74.55	78.80						
21	70.10	71.90	71.25	71.80	76.85	82.35						
22	69.90	71.65	71.00	71.75	74.65	82.75						
23	70.00	71.05	71.00	71.80	74.00	86.55						
24	70.00	71.45	72.10	71.65	73.25	80.65						
25	70.20	72.50	71.20	71.75	72.95	78.85						
26	69.35	72.85	70.50	71.20	72.85	77.25						
27	68.90	72.15	70.60	71.45	72.75	76.10						
28	69.85	71.95	71.25	71.95	72.65	76.20						
29	70.10	70.95	71.60	71.90	72.35	76.35						
30	70.70	71.70	72.20	71.85	-------	75.20						
31	71.00	-------	72.00	71.80	-------	-	-------		-------			-------

Flat Brook near Flatbrookville

Location.--Lat 41°06'24", long 75°57'09", on right bank 1 mile upstream from Flatbrookville, Sussex County, and 1½ miles upstream from mouth.

Drainage area.--65.1 sq mi.

Records available.--July 1923 to September 1950.

Gage.--Water-stage recorder. Concrete control since Aug. 19, 1929. Datum of gage is 347.73 ft above mean sea level, datum of 1929. Prior to Jan. 6, 1926, staff gage at same site and datum.

Average discharge.--27 years (1923-50), 108 cfs.

Extremes.--1923-50: Maximum discharge, 3,040 cfs (revised) Apr. 7, 1924, Feb. 11, 1925 (gage height, 7.1 ft, from floodmarks) from rating curve extended above 1,400 cfs on basis of slope-area determinations at gage heights 6.5 ft, and 12.58 ft; minimum daily, 5 cfs, Sept. 1, 2, 7, 1923.

Peak discharge (base, 650 cfs).--
1946: Jan. 8 (1 a.m.) 860 cfs (4.12 ft); May 28 (3:30 a.m.) 1,240 cfs (4.75 ft); June 3 (3 a.m.) 805 cfs (4.01 ft).
1947: Mar. 15 (2 to 3 a.m.) 1,450 cfs (5.06 ft); Apr. 6 (2 to 3:30 a.m.) 2,050 cfs (5.78 ft); May 6 (4 to 5 a.m.) 740 cfs (3.85 ft); May 26 (11 a.m.) 1,270 cfs (4.80 ft).
1948: Nov. 9 (4 a.m.) 1,130 cfs (4.58 ft); Nov. 12 (4:30 p.m.) 714 cfs (3.79 ft); Feb. 21 (2 a.m.) about 800 cfs (4.50 ft, ice jam); Mar. 17 (5:30 a.m.) 1,420 cfs (5.02 ft); Mar. 20 (1:30 p.m.) 845 cfs (4.09 ft); Apr. 15 (8 a.m.) 815 cfs (4.03 ft); May 14 (3 a.m.) 792 cfs (3.98 ft).
1949: Dec. 31 (3:30 a.m.) 2,900 cfs (6.94 ft); Jan. 6 (1:30 p.m.) 1,290 cfs (4.83 ft).
1950: Mar. 9 (12 m.) 1,050 cfs (4.45 ft); Mar. 29 (6 a.m.) 900 cfs (4.20 ft); June 2 (3:30 a.m.) 1,160 cfs (4.63 ft).

Remarks.--Diurnal fluctuation at low flow by mills above station prior to about 1935.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	78	54	208	290	84	85	93	50	194	38	19.9	14.8
2	86	53	180	197	76	95	93	47	437	61	21	14.8
3	90	58	164	167	60	113	102	44	651	48	19.9	14.0
4	76	58	161	161	58	*139	93	43	348	38	19.9	12.6
5	70	54	154	158	60	184	88	44	257	35	19.0	12.6
6	70	51	148	232	66	249	82	45	204	33	22	12.6
7	110	50	196	604	105	249	78	44	180	36	28	12.6
8	139	48	257	692	76	302	76	51	154	31	33	11.9
9	151	47	226	417	70	371	82	50	136	30	26	11.9
10	154	47	194	352	66	320	76	44	115	29	21	13.3
11	117	69	173	290	61	230	70	43	107	28	19.0	14.0
12	100	102	120	252	60	180	66	47	134	28	18.1	14.8
13	90	98	110	230	60	167	65	63	117	28	18.1	13.3
14	84	86	110	187	106	158	63	53	102	26	21	11.9
15	82	116	110	173	123	180	61	100	98	25	22	11.2
16	78	107	90	120	64	215	61	86	84	24	19.0	10.5
17	76	88	80	110	76	170	58	78	74	23	25	10.5
18	72	82	75	110	65	154	54	107	70	22	27	10.5
19	68	82	80	100	50	145	53	173	66	21	25	9.8
20	65	196	80	90	48	131	51	134	61	19.9	24	9.8
21	63	151	75	95	45	120	50	120	61	22	21	22
22	61	321	75	95	45	115	48	123	60	45	18.1	46
23	63	445	75	84	52	107	47	98	54	139	17.2	23
24	70	261	75	86	50	100	47	80	51	104	16.4	39
25	72	201	80	90	50	102	45	70	47	53	15.6	86
26	72	170	300	90	52	102	53	165	44	37	15.6	40
27	68	164	330	70	61	180	60	821	41	30	22	27
28	63	142	277	70	78	142	58	1,020	40	26	17.2	22
29	60	258	234	74	-------	117	51	566	41	25	15.6	19.0
30	58	261	204	78	-------	112	54	329	40	23	15.6	52
31	54	-------	245	82	-------	102	-------	237	-------	19.9	15.6	-------

* Winter discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 12-27, Jan. 16-29, Feb. 3-5, 19-26.

Flat Brook near Flatbrookville--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	25	16.4	26	269	47	115	330	197	48	74	30
2	35	24	15.6	25	184	45	126	261	173	145	65	81
3	28	24	14.0	26	139	70	230	215	161	80	60	89
4	25	23	14.8	28	128	72	167	190	151	58	56	51
5	23	22	15.6	26	102	65	482	275	131	48	53	51
6	21	21	15.6	30	95	60	1,330	599	117	44	50	44
7	19.0	21	15.6	25	95	56	560	343	120	49	47	38
8	17.2	22	16.4	29	88	54	357	281	186	341	50	35
9	16.4	24	15.6	26	78	53	294	230	234	241	50	31
10	17.2	23	15.6	25	82	53	253	197	154	161	70	28
11	17.2	22	16.4	29	74	51	215	177	126	123	63	29
12	21	25	16.4	27	70	58	204	161	107	98	50	30
13	52	26	16.4	26	63	70	177	145	90	80	45	26
14	40	27	17.2	27	63	616	158	210	124	70	44	24
15	31	23	16.4	29	60	1,070	151	338	219	68	41	24
16	26	21	14.0	47	60	591	154	211	142	72	37	30
17	24	21	14.0	60	58	362	197	180	112	163	37	30
18	23	19.9	14.8	51	54	257	158	180	105	170	38	26
19	33	19.9	b14	47	54	204	139	194	100	204	38	24
20	30	19.0	b13	101	b37	180	139	187	88	338	38	23
21	27	19.0	23	273	b45	170	187	204	80	190	51	21
22	25	19.0	54	142	b50	164	237	311	74	190	44	30
23	23	19.0	40	105	b54	158	177	285	68	173	37	50
24	22	19.0	33	95	b52	158	154	222	63	128	33	33
25	19.9	18.1	31	100	b50	265	148	269	68	107	31	28
26	24	18.1	b25	117	b49	273	201	1,000	66	88	31	26
27	44	18.1	b23	184	48	194	167	578	63	78	47	23
28	36	18.1	24	167	47	167	148	348	56	145	43	22
29	30	17.2	27	139	-------	151	131	281	53	139	36	21
30	28	17.2	28	120	-------	142	131	320	48	95	32	19.9
31	26	-------	24	335	-------	126	-------	234	-------	80	31	-------

b Stage-discharge relation affected by ice.
Note.--Backwater from moss on control Oct. 20 to Nov. 18.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18.1	53	68	48	46	151	404	110	115	123	28	18.1
2	18.1	38	68	52	47	148	396	100	98	120	27	17.2
3	18.1	31	68	49	48	136	277	95	84	93	26	17.2
4	18.1	47	70	48	47	128	226	90	78	80	26	16.4
5	18.1	215	66	46	46	100	201	138	72	70	37	16.4
6	17.2	145	68	46	45	96	187	222	70	66	93	15.6
7	17.2	105	68	46	43	117	187	217	76	74	54	15.6
8	16.4	291	74	48	44	128	167	381	145	74	38	15.6
9	16.4	808	78	52	43	123	154	234	95	65	31	16.4
10	16.4	311	65	48	43	142	139	187	86	60	28	16.4
11	15.6	204	63	45	42	160	136	158	78	48	27	16.4
12	16.4	541	56	47	43	125	369	156	72	44	59	15.6
13	15.6	374	51	44	44	110	386	610	88	59	70	14.0
14	15.6	241	48	40	60	105	456	674	95	237	51	13.3
15	15.6	187	51	37	130	120	732	438	78	126	36	12.6
16	15.6	161	164	40	125	382	438	343	74	78	30	12.6
17	15.6	139	151	42	125	1,180	329	362	65	60	27	14.0
18	15.6	120	110	38	160	776	261	281	54	58	26	11.2
19	19.0	107	84	36	300	578	222	237	74	54	25	16.4
20	19.9	95	69	41	750	776	204	197	170	78	27	17.2
21	17.2	88	76	47	700	679	201	187	112	58	44	15.6
22	16.4	84	76	54	350	610	177	170	88	56	41	15.6
23	16.4	90	74	51	170	438	161	154	126	51	99	14.8
24	15.6	98	70	49	130	376	148	151	190	51	61	14.0
25	14.8	170	56	48	135	294	151	142	154	44	41	14.0
26	14.8	126	58	46	154	245	142	131	117	40	32	11.9
27	15.6	102	60	49	148	234	126	117	134	37	27	14.0
28	16.4	88	54	*47	167	258	117	110	257	35	25	13.3
29	34	84	49	46	161	208	115	100	204	32	23	14.0
30	44	78	46	45	-------	184	112	145	148	30	21	14.0
31	61	-------	47	44	-------	167	-------	139	-------	29	190	-------

* Winter discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 26 to Feb. 25, Mar. 5, 6, 11-14.

Flat Brook near Flatbrookville--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	11.2	40	733	140	139	88	115	82	20	22	16.1
2	19.9	11.9	37	362	120	126	80	139	74	19.4	20	13.9
3	15.6	11.9	35	253	105	120	72	262	68	18.6	19.4	12.4
4	19.9	17.8	33	194	120	110	70	234	63	18.6	26	11.7
5	22	28	32	239	134	117	65	177	60	39	31	11.7
6	21	21	32	1,040	115	154	90	161	56	24	28	12.4
7	18.1	62	35	676	128	151	105	286	51	36	23	11.7
8	16.4	47	32	386	142	120	95	219	46	26	19.4	11.1
9	19.0	31	31	290	131	115	90	167	44	21	17.8	11.7
10	17.2	26	29	234	134	110	80	161	42	20	16.1	11.1
11	13.3	50	28	204	117	115	74	151	42	23	15.3	10.5
12	11.9	37	27	177	95	126	68	128	40	22	16.1	10.5
13	11.2	31	29	161	107	107	66	115	39	25	16.9	10.5
14	11.2	28	31	145	131	98	197	107	38	22	16.1	11.7
15	11.2	24	30	126	222	93	161	110	35	21	16.1	11.7
16	11.2	22	31	120	253	84	131	98	34	116	23	13.9
17	11.2	21	41	117	204	84	112	88	34	53	21	11.7
18	12.6	21	43	110	164	82	116	80	34	98	17.8	10.5
19	21	21	34	110	151	76	440	76	32	67	17.8	11.1
20	17.2	84	43	107	190	73	294	152	31	42	15.3	11.7
21	14.8	84	37	95	187	80	208	314	30	52	13.9	11.1
22	14.0	56	34	152	161	102	177	177	28	227	13.1	11.1
23	13.3	61	31	167	222	117	261	234	25	76	12.4	11.7
24	12.6	54	28	167	190	117	249	184	24	48	12.4	13.1
25	12.6	45	25	211	177	100	194	184	23	38	11.7	11.1
26	12.6	40	24	180	173	93	164	148	26	34	13.1	10.5
27	11.9	37	23	154	145	90	158	145	25	29	13.9	11.1
28	11.9	38	24	218	142	88	145	126	23	31	13.1	11.1
29	11.9	38	43	302	-------	78	126	110	22	32	29	12.4
30	11.9	45	880	190	-------	74	117	100	21	28	32	23
31	11.2	-------	2,430	155	-------	74	-------	90	-------	24	18.6	-------

Note.--Stage-discharge relation affected by ice Dec. 22-30, Jan. 30 to Feb. 4.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18.6	31	20	a47	63	74	302	139	335	44	26	18.6
2	14.6	22	20	a45	66	b66	261	148	824	40	42	17.8
3	14.6	*18.6	20	a48	82	b62	257	126	396	48	35	17.8
4	14.6	22	17.8	a52	64	b62	249	112	554	72	30	20
5	15.3	25	19.4	a54	64	63	222	126	366	70	26	16.9
6	15.3	21	19.4	a56	60	70	201	123	269	82	24	16.1
7	14.6	19.4	18.6	a90	60	66	201	110	215	65	22	15.3
8	16.1	18.6	18.6	a85	45	136	151	93	173	50	21	14.6
9	15.3	17.8	16.1	a60	87	813	139	86	148	44	20	13.9
10	19.4	16.1	15.3	86	194	402	128	88	136	46	19.4	56
11	18.9	16.1	16.9	131	161	269	123	88	170	116	19.4	65
12	13.9	15.3	17.8	93	154	245	117	82	128	168	18.6	39
13	13.1	14.6	91	84	142	*253	110	78	110	95	17.8	32
14	14.6	20	105	86	131	211	105	74	110	110	16.9	35
15	16.9	28	59	78	142	187	105	70	145	82	16.1	32
16	13.1	22	b40	70	161	170	100	72	128	68	15.3	28
17	12.4	19.4	44	63	148	158	93	76	112	65	16.9	23
18	12.4	18.6	38	61	134	167	88	178	95	60	17.8	20
19	11.7	20	45	61	123	139	84	257	88	54	23	19.4
20	11.1	19.4	44	45	100	*136	140	194	88	50	95	19.4
21	11.1	23	39	51	b90	179	184	151	88	50	50	19.4
22	11.1	18.6	36	50	93	230	128	126	84	44	32	20
23	11.1	16.9	38	51	98	421	110	117	72	39	25	22
24	10.5	17.8	48	54	90	477	107	227	65	36	22	19.4
25	10.5	17.8	38	61	100	357	112	245	100	42	20	17.8
26	16.3	17.8	39	60	76	315	120	194	72	38	19.4	17.8
27	24	16.9	90	60	81	366	126	180	60	34	17.8	16.9
28	17.8	16.1	112	58	74	556	112	148	51	31	17.8	16.9
29	15.3	16.9	a85	65	-------	810	102	263	48	30	16.9	16.9
30	15.3	20	a65	80	-------	572	105	290	46	28	20	17.8
31	19.2	-------	a50	70	-------	376	-------	208	-------	26	19.4	-------

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of weather records and records for Paulins Kill at Blairstown.

Flat Brook near Flatbrookville--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	2,560	154	54	82.6	1.27	1.46
November	3,920	445	47	131	2.01	2.24
December	4,886	330	75	158	2.43	2.79
Calendar year 1945	60,362	685	47	165	2.53	34.49
January 1946	5,847	692	70	189	2.90	3.34
February	1,867	123	45	66.7	1.02	1.07
March	5,136	371	85	166	2.55	2.93
April	1,978	102	45	65.9	1.01	1.13
May	4,975	1,020	43	160	2.46	2.84
June	4,068	651	40	136	2.09	2.32
July	1,147.8	139	19.9	37.0	.568	.66
August	637.8	33	15.6	20.6	.316	.36
September	623.4	86	9.8	20.8	.320	.36
Water year 1945-46	37,646.0	1,020	9.8	103	1.58	21.50
October 1946	857.9	54	16.4	27.7	.425	.49
November	635.6	27	17.2	21.2	.326	.36
December	639.8	54	13	20.6	.316	.37
Calendar year 1946	28,413.3	1,020	9.8	77.8	1.20	16.23
January 1947	2,487	335	25	80.2	1.23	1.42
February	2,248	269	37	80.3	1.23	1.28
March	6,002	1,070	45	194	2.98	3.43
April	7,287	1,330	115	243	3.73	4.16
May	8,956	1,000	145	289	4.44	5.12
June	3,476	234	48	116	1.78	1.99
July	4,014	341	44	129	1.98	2.29
August	1,422	74	31	45.9	.705	.81
September	1,017.9	89	19.9	33.9	.521	.58
Water year 1946-47	39,043.2	1,330	13	107	1.64	22.30
October 1947	604.8	61	14.8	19.5	.300	.35
November	5,221	808	31	174	2.67	2.98
December	2,206	164	46	71.2	1.09	1.26
Calendar year 1947	44,941.7	1,330	14.8	123	1.89	25.67
January 1948	1,419	54	36	45.8	.704	.81
February	4,346	750	42	150	2.30	2.48
March	9,269	1,180	96	299	4.59	5.30
April	7,321	732	112	244	3.75	4.18
May	6,776	674	90	219	3.36	3.87
June	3,297	257	54	110	1.69	1.88
July	2,130	237	29	68.7	1.06	1.22
August	1,199.0	99	19.0	38.7	.594	.68
September	449.4	18.1	11.2	15.0	.230	.26
Water year 1947-48	44,238.2	1,180	11.2	121	1.86	25.27
October 1948	465.8	26	11.2	15.0	.230	.27
November	1,104.8	84	11.2	36.8	.565	.63
December	4,252	2,430	23	137	2.10	2.43
Calendar year 1948	42,029.0	2,430	11.2	115	1.77	24.01
January 1949	7,775	1,040	95	251	3.86	4.44
February	4,300	253	95	154	2.37	2.46
March	3,213	154	73	104	1.60	1.84
April	4,293	440	65	143	2.20	2.45
May	4,838	314	76	156	2.40	2.76
June	1,192	82	21	39.7	.610	.68
July	1,350.6	227	18.6	43.6	.670	.77
August	581.3	32	11.7	18.8	.289	.33
September	363.8	23	10.5	12.1	.186	.21
Water year 1948-49	33,729.3	2,430	10.5	92.4	1.42	19.27
October 1949	458.7	24	10.5	14.8	.227	.26
November	586.7	31	14.6	19.6	.301	.34
December	1,325.9	112	15.3	42.8	.657	.76
Calendar year 1949	30,278.0	1,040	10.5	83.0	1.27	17.30
January 1950	2,055	131	45	66.3	1.02	1.17
February	2,883	194	45	103	1.58	1.65
March	8,408	813	62	271	4.16	4.80
April	4,362	302	84	145	2.23	2.49
May	4,469	290	70	144	2.21	2.55
June	5,276	824	46	176	2.70	3.01
July	1,827	168	26	58.9	.905	1.04
August	782.5	95	15.3	25.2	.387	.45
September	704.7	65	13.9	23.5	.361	.40
Water year 1949-50	33,138.5	824	10.5	90.8	1.39	18.92

Delaware River at Portland, Pa.

Location.--Lat 40°55'30", long 75°05'55", on highway bridge at Portland, Northampton County.

Records available.--March 1936 to September 1950 (gage heights only).

Gage.--Wire-weight gage. Datum of gage is 199.53 ft above mean sea level, datum of 1929.

Extremes.--1936-50: Maximum stage observed, 92.90 ft (2 a.m.) Mar. 19, 1936; minimum observed, 69.08 ft Aug. 5, 1940.

Maximum gage height observed (water years).--
1946: May 29 (5 a.m.) 80.62 ft.
1947: Apr. 6 (4 p.m.) 82.60 ft.
1948: Mar. 23 (8 a.m.) 86.38 ft.
1949: Dec. 31 (4 p.m.) 85.80 ft.
1950: Apr. 5 (9 p.m.) 81.66 ft.

Remarks.--Gage read twice daily except during periods of gage heights above 74.6 ft, when it was read hourly. In tables, the readings at 8 a.m. are shown.

Cooperation.--Records furnished by Delaware River Joint Toll Bridge Commission.

Daily gage height at 8 a.m., in feet, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71.37	71.46	73.65	72.77	71.33	71.20	71.59	71.18	74.37	71.05	70.25	70.00
2	71.61	71.37	73.00	72.48	71.28	72.50	71.76	71.05	74.05	71.35	71.14	70.00
3	71.70	71.37	72.52	72.30	71.40	72.75	71.79	70.95	76.70	72.25	70.77	69.67
4	73.46	72.38	72.75	72.18	71.12	72.55	71.84	70.80	76.26	72.50	70.63	69.60
5	72.77	73.95	72.66	71.94	70.92	73.02	71.71	70.77	75.25	71.25	70.35	70.07
6	72.41	72.38	72.54	72.05	70.97	72.57	71.51	70.74	74.37	71.00	70.33	70.40
7	72.20	72.03	72.60	72.85	71.15	74.58	71.35	70.82	73.85	70.10	70.38	70.10
8	72.64	72.68	73.05	76.65	71.25	77.00	71.30	70.91	72.45	70.58	70.56	70.08
9	73.18	72.42	73.06	76.20	70.95	77.60	71.35	71.08	72.85	70.35	71.48	69.90
10	74.40	72.20	72.80	75.36	70.97	79.30	71.45	71.45	72.50	70.40	71.05	69.66
11	74.80	72.26	72.87	75.35	71.02	76.50	71.50	71.24	72.55	70.35	70.64	70.10
12	73.96	72.59	72.64	74.55	70.85	75.10	71.41	71.00	72.35	70.50	70.32	70.13
13	73.57	72.65	72.02	73.88	70.75	74.17	71.21	71.20	72.61	70.15	70.60	70.10
14	73.00	73.40	72.17	73.48	70.89	73.72	70.98	71.75	72.66	70.35	70.58	70.05
15	72.63	73.90	72.62	73.10	71.30	73.60	70.95	71.87	72.23	70.15	70.45	69.92
16	72.71	73.98	71.97	72.95	72.20	74.65	71.05	72.40	71.60	70.15	70.39	69.59
17	72.59	73.46	71.55	72.30	72.06	74.74	71.27	72.36	71.27	70.15	70.05	69.50
18	72.40	73.00	71.52	72.16	71.52	74.02	71.45	72.49	71.42	70.20	70.36	70.08
19	72.18	72.88	71.52	72.08	71.36	74.08	71.33	73.14	71.40	70.10	70.27	70.10
20	72.05	73.59	71.48	71.80	70.37	73.65	71.05	74.02	71.75	70.10	70.25	70.06
21	71.73	74.16	71.48	71.54	71.27	73.31	70.92	73.53	71.45	70.28	70.34	70.05
22	71.51	73.95	71.68	71.43	71.02	73.03	70.80	75.37	71.28	70.10	70.26	70.60
23	71.60	75.13	71.83	71.38	70.98	72.75	70.90	75.47	71.02	70.65	70.32	70.61
24	71.55	75.00	71.72	71.57	71.05	72.32	70.85	74.21	70.78	71.55	70.23	70.73
25	71.70	74.11	71.61	71.54	70.76	72.10	70.80	73.37	70.79	72.15	70.06	71.14
26	71.86	73.52	72.10	71.56	70.82	72.35	70.78	73.13	70.75	71.60	69.87	72.00
27	72.00	73.47	72.54	71.57	70.86	72.70	70.88	74.26	70.57	70.90	69.89	71.59
28	71.80	73.16	73.15	71.40	71.15	72.78	70.81	78.15	70.56	70.57	70.11	70.90
29	71.58	73.42	73.10	71.27	-------	72.52	70.85	80.35	70.62	70.25	70.07	70.47
30	71.70	73.90	72.70	71.35	-------	72.30	71.03	77.37	70.83	70.20	70.28	70.55
31	71.52	-------	72.45	71.17	-------	71.90	-------	75.52	-------	70.15	70.27	-------

Delaware River at Portland, Pa.--Continued

Daily gage height at 8 a.m., in feet, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70.69	70.58	70.40	70.80	76.87	71.13	72.77	73.25	73.23	70.72	72.05	70.25
2	70.81	70.53	70.30	70.35	75.10	70.75	72.52	74.73	72.79	71.05	72.05	70.20
3	70.87	70.45	70.20	70.45	74.02	70.54	73.44	74.58	72.85	70.31	71.53	70.40
4	70.72	70.34	70.20	70.62	73.48	70.65	74.53	74.32	72.82	70.35	71.10	71.30
5	70.62	72.32	70.15	70.87	73.23	76.08	74.27	73.82	72.77	70.30	71.11	71.13
6	70.41	70.45	70.17	71.40	72.55	70.97	81.95	75.10	72.43	70.50	71.02	70.92
7	70.30	70.37	70.25	71.16	72.40	70.80	80.55	76.07	72.16	70.35	70.95	70.64
8	70.25	70.43	70.22	71.16	72.15	70.90	78.12	75.85	72.20	71.58	70.89	70.40
9	70.38	70.47	70.12	71.05	72.12	71.00	76.03	75.73	72.41	77.10	70.82	70.38
10	70.35	70.45	70.17	70.97	71.85	70.55	75.20	74.80	72.55	75.51	70.77	70.58
11	70.36	70.33	70.20	70.85	71.77	70.62	74.49	74.03	72.13	73.80	72.11	70.45
12	70.28	70.34	70.25	70.81	71.83	70.70	74.00	73.48	71.84	73.95	71.53	70.43
13	70.60	70.47	70.27	70.86	71.82	70.75	73.85	73.23	71.65	72.45	71.18	70.44
14	70.49	70.50	70.35	70.52	71.64	71.85	73.55	73.03	71.38	71.35	71.47	70.37
15	70.71	70.55	70.35	70.88	71.45	75.55	73.95	73.45	71.84	79.95	71.05	70.06
16	70.66	70.40	70.45	71.03	71.33	78.28	73.15	73.58	72.28	71.90	71.13	70.10
17	70.50	70.33	70.45	71.27	71.61	76.15	73.32	73.04	73.33	73.00	70.82	70.40
18	70.55	70.20	70.32	72.32	71.63	74.80	73.05	72.55	72.61	74.65	74.70	70.26
19	70.50	70.15	70.40	72.10	71.56	73.92	72.75	72.63	72.35	74.15	72.87	70.22
20	70.68	70.45	70.09	71.85	71.36	73.37	72.35	73.22	72.05	73.80	72.10	70.17
21	70.83	70.21	70.15	73.10	70.81	73.07	72.28	73.56	71.81	73.08	71.88	70.30
22	70.70	70.21	70.47	75.65	71.03	72.96	73.17	73.91	71.43	73.65	71.56	70.05
23	70.60	70.37	70.35	73.65	70.84	73.10	73.45	76.70	71.28	77.35	71.27	70.10
24	70.50	70.18	71.02	72.80	70.72	72.81	73.00	75.78	71.19	75.25	70.88	70.47
25	70.43	70.20	70.88	72.85	70.88	73.60	72.88	74.48	71.22	73.60	70.62	70.40
26	70.45	70.26	70.59	73.35	71.09	76.84	73.02	75.81	71.26	73.30	71.70	70.22
27	70.53	70.16	70.40	73.60	71.23	75.79	72.78	76.32	71.32	72.65	70.78	70.13
28	70.78	70.18	70.41	73.58	71.24	74.50	72.71	75.03	71.30	72.14	70.75	69.95
29	71.00	70.32	70.40	73.42	-------	73.72	72.85	74.26	71.10	73.60	70.62	69.90
30	70.70	70.56	70.35	73.17	-------	73.30	72.75	73.98	70.77	72.95	70.60	69.87
31	70.63	-------	70.63	73.67	-------	72.95	-------	73.69	-------	72.25	70.52	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70.17	70.60	71.10	70.97	71.25	71.30	73.87	72.30	72.55	72.72	70.19	70.13
2	70.03	70.65	71.02	70.75	70.87	71.80	74.85	71.90	72.52	72.15	70.05	70.00
3	70.03	70.50	70.96	70.88	70.83	71.80	74.71	71.74	72.23	71.75	69.93	70.02
4	70.06	70.52	71.05	70.97	71.16	71.65	74.08	71.89	71.95	71.25	70.28	70.05
5	70.11	70.76	71.20	70.80	71.10	71.65	73.53	71.77	71.60	71.10	70.25	69.95
6	69.79	70.85	71.40	70.77	71.15	71.60	73.25	72.05	71.29	70.85	70.90	69.66
7	69.72	70.81	71.00	70.98	71.18	71.20	73.21	72.24	71.18	70.85	71.37	69.65
8	69.95	70.85	71.03	71.21	71.23	71.10	72.93	72.80	72.07	71.09	70.65	69.64
9	70.18	74.25	71.25	70.99	70.95	71.30	72.95	72.87	72.25	71.25	70.55	70.05
10	70.16	75.20	71.65	71.02	70.95	71.55	72.52	72.50	72.23	71.00	70.50	70.13
11	70.18	73.63	71.55	71.25	70.92	71.60	72.21	72.40	71.86	70.55	70.26	70.10
12	70.11	73.87	71.34	70.71	71.22	71.40	72.53	72.18	71.82	70.45	70.25	70.05
13	69.96	75.90	71.12	70.42	71.18	71.41	74.60	72.73	71.40	70.45	70.70	69.67
14	69.65	74.78	70.75	71.03	71.04	71.30	74.84	73.53	71.47	71.40	70.65	69.65
15	69.65	73.73	70.80	70.87	71.40	71.10	78.00	73.82	76.67	71.35	70.50	70.00
16	69.95	73.13	71.12	70.90	71.04	71.75	78.15	73.66	71.75	71.07	70.14	70.05
17	70.04	72.55	71.69	71.05	71.48	74.90	76.10	73.87	71.31	70.75	70.04	70.04
18	70.05	72.50	72.52	76.05	72.48	79.85	75.28	75.11	71.07	70.52	70.23	70.02
19	70.05	72.05	72.02	70.76	72.60	77.55	74.37	75.05	71.07	70.35	70.23	69.95
20	69.75	71.78	71.50	70.76	72.77	77.60	74.00	74.39	71.74	70.42	70.10	69.65
21	69.62	71.56	71.08	71.17	74.75	82.20	73.64	73.84	71.65	70.55	70.25	69.68
22	70.02	71.41	70.87	71.32	74.06	80.45	74.10	73.49	71.40	70.55	70.27	70.08
23	70.00	71.24	71.30	71.10	73.46	86.38	73.70	73.05	71.34	70.64	70.23	70.10
24	70.05	71.25	71.50	71.30	73.02	80.25	73.23	72.81	71.67	70.44	70.27	70.05
25	70.08	71.94	71.05	71.05	72.49	77.79	72.80	74.19	72.30	70.32	70.27	70.30
26	70.05	72.40	70.75	70.94	72.40	76.28	72.82	75.13	72.67	70.72	70.20	70.08
27	69.69	72.24	70.77	71.25	72.41	75.25	73.08	74.30	72.72	70.50	70.20	69.63
28	69.53	71.74	70.92	71.10	72.33	74.95	72.75	73.63	72.65	70.50	70.26	69.60
29	70.04	71.60	71.10	71.25	72.20	75.41	72.50	73.23	73.52	70.32	70.20	70.03
30	70.43	71.37	71.03	71.30	-------	74.40	72.37	72.77	73.18	70.25	70.15	70.13
31	70.65	-------	71.26	71.25	-------	73.90	-------	72.75	-------	70.25	69.90	-------

Delaware River at Portland, Pa.--Continued

Daily gage height at 8 a.m., in feet, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70.18	69.63	71.10	82.50	72.53	73.10	72.03	72.11	71.95	70.05	69.70	70.44
2	70.05	69.56	71.00	77.68	72.22	72.95	72.10	72.08	71.75	70.03	69.77	70.25
3	70.13	69.76	70.90	75.60	72.16	72.73	71.56	72.22	71.67	69.76	69.84	69.95
4	69.65	69.82	70.83	74.50	72.20	72.50	71.35	73.08	71.35	69.74	70.10	69.80
5	69.57	70.22	70.65	73.85	72.13	72.15	71.48	73.20	71.15	69.65	70.20	69.69
6	70.15	70.10	70.58	76.00	71.95	72.10	71.36	72.80	71.03	69.75	70.08	69.72
7	70.17	70.38	70.75	81.95	71.70	72.90	71.85	73.58	70.87	70.05	70.09	69.55
8	70.13	70.28	71.72	77.90	72.00	73.57	72.18	74.08	70.75	70.10	69.95	69.70
9	70.19	72.18	71.28	71.02	71.92	72.95	72.22	73.28	70.55	70.05	69.16	69.95
10	70.12	71.37	71.07	74.90	71.72	72.55	72.10	72.98	70.45	70.25	69.80	69.77
11	69.60	70.94	70.92	74.41	71.89	72.80	71.89	72.80	70.50	69.95	69.92	69.46
12	69.82	70.75	70.70	74.05	71.42	72.68	71.86	72.47	70.35	69.70	69.78	69.33
13	70.17	70.70	70.64	73.10	71.30	72.37	71.70	72.20	70.26	69.65	69.90	69.40
14	70.00	70.43	70.75	73.20	71.18	72.15	71.86	71.89	70.25	69.95	69.74	69.58
15	70.05	70.32	70.95	72.00	71.98	72.18	72.50	71.57	70.30	69.90	69.57	69.97
16	70.10	70.26	71.20	72.43	74.13	72.32	72.38	71.59	70.38	70.10	69.41	69.87
17	69.82	70.90	71.12	72.20	76.65	72.10	72.15	71.44	70.40	70.10	69.93	69.95
18	69.60	70.15	71.07	72.37	75.10	71.82	71.76	71.29	73.46	69.95	69.86	69.70
19	69.60	70.25	71.07	72.42	74.00	71.90	73.32	71.18	70.31	70.10	69.75	69.48
20	70.10	70.35	70.88	72.43	73.70	71.22	74.79	71.14	70.09	70.15	69.86	69.50
21	70.27	71.15	73.80	72.59	74.10	71.10	74.00	73.20	70.00	70.12	69.52	69.80
22	70.25	72.35	70.80	72.65	73.85	71.37	73.88	74.00	70.30	70.10	69.42	69.87
23	69.95	72.14	70.78	72.33	73.66	71.58	73.25	73.31	70.27	70.12	69.54	69.63
24	69.65	71.97	71.10	72.32	73.80	71.88	73.95	73.63	70.10	69.95	69.51	70.18
25	69.75	71.80	70.75	72.76	73.40	72.67	74.25	73.36	70.08	69.92	69.72	69.85
26	69.65	71.25	70.49	73.05	73.50	72.53	73.73	73.32	70.02	69.60	69.81	69.60
27	70.10	71.26	70.20	73.06	73.65	72.18	73.24	73.39	70.09	69.90	69.75	69.77
28	70.07	71.05	70.50	72.79	73.05	72.05	73.28	72.99	70.00	70.00	69.44	69.77
29	69.95	71.05	70.78	73.08	-------	72.42	72.97	72.46	70.08	69.98	69.58	70.10
30	69.90	71.25	72.03	73.02	-------	72.23	72.40	72.16	70.07	69.97	69.53	70.95
31	69.68	-------	84.28	72.60	-------	71.80	-------	71.91	-------	69.80	69.69	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70.10	69.90	70.47	72.05	72.37	71.18	72.37	72.28	72.64	71.04	70.50	70.19
2	70.65	69.97	70.55	72.04	71.90	71.17	75.68	73.28	73.38	70.75	70.70	70.30
3	70.05	70.18	70.60	71.92	71.92	70.85	75.45	73.33	73.02	70.60	71.20	70.70
4	70.05	70.23	70.40	72.04	71.88	70.80	78.28	72.92	72.80	70.70	72.20	71.19
5	69.60	70.28	70.35	72.12	71.60	70.71	79.75	72.75	73.07	70.60	71.98	70.79
6	69.85	70.35	70.36	72.08	71.30	70.72	81.05	73.40	73.29	71.05	70.90	70.58
7	70.05	70.38	70.26	72.23	71.62	70.84	77.84	72.95	72.82	71.15	70.60	70.50
8	70.02	70.28	70.15	75.18	71.40	71.23	75.95	72.60	72.37	71.05	70.57	70.40
9	69.90	70.27	70.14	74.05	71.20	73.40	74.79	72.55	72.02	70.69	70.50	70.19
10	69.80	70.20	70.20	73.50	71.80	76.65	74.15	72.30	71.80	70.43	70.43	70.30
11	69.90	70.14	70.17	74.02	72.32	75.36	74.05	72.26	71.57	70.69	70.40	70.70
12	69.95	70.17	70.05	74.97	72.52	74.30	73.56	72.37	71.60	71.36	70.28	70.50
13	70.05	70.10	70.35	74.32	72.30	74.00	73.48	72.15	71.93	71.75	70.30	70.86
14	69.70	70.40	77.75	73.38	72.48	73.75	73.30	71.57	71.52	72.10	70.00	70.79
15	69.75	70.87	75.27	73.28	72.48	73.25	73.00	71.43	71.84	71.98	69.95	70.75
16	69.50	71.76	73.70	73.05	72.59	72.87	72.52	71.78	72.35	71.50	70.17	70.70
17	69.64	71.29	72.56	72.77	72.47	72.57	72.32	71.76	72.03	71.10	70.07	70.62
18	69.65	71.04	72.05	72.56	72.58	72.40	72.55	71.80	71.57	71.05	70.05	70.28
19	69.75	70.90	72.08	72.33	72.47	72.22	72.46	72.32	71.95	70.90	70.05	70.30
20	69.90	70.75	72.20	72.12	72.34	71.88	72.40	73.34	72.05	70.90	70.93	70.33
21	69.67	70.68	72.28	71.71	71.70	72.20	73.30	73.17	71.80	70.78	70.62	70.30
22	69.65	70.74	72.08	71.30	71.64	72.88	74.22	72.79	71.79	71.37	71.71	70.25
23	69.65	70.90	71.78	71.27	70.85	73.18	73.25	72.55	71.68	71.90	71.05	70.30
24	69.60	70.63	72.22	71.65	71.30	74.27	72.98	72.88	71.30	70.65	70.62	70.20
25	69.52	70.47	73.08	71.89	71.88	73.98	73.11	73.17	71.15	70.64	70.45	70.10
26	69.68	70.38	72.25	72.30	71.80	73.55	72.90	73.10	71.56	70.78	70.32	70.07
27	69.90	70.47	72.30	72.25	71.28	73.48	72.85	72.77	72.03	71.38	70.30	70.40
28	69.93	70.48	73.88	72.45	71.19	73.97	72.78	72.47	71.48	70.88	70.00	-
29	69.93	70.48	73.90	72.00	-------	78.30	72.44	72.14	71.25	70.70	69.96	-
30	69.95	70.56	73.28	71.75	-------	80.18	72.10	72.48	71.19	71.09	70.24	-
31	69.98	-------	72.60	72.37	-------	77.80	-------	72.81	-------	70.50	70.28	-------

Paulins Kill at Blairstown

Location.--Lat 40°58'44", long 74°57'15", on right bank 1,200 ft upstream from bridge on State Highway 94 in Blairstown, Warren County, 1,400 ft upstream from Blairs Creek, and 10 miles upstream from mouth.

Drainage area.--126 sq mi. At site used prior to Aug. 1, 1931, 128 sq mi.

Records available.--October 1921 to September 1950.

Gage.--Water-stage recorder and concrete control (Aug. 1, 1931, to Aug. 3, 1941, concrete control at site 280 ft downstream). Datum of gage is 335.86 ft above mean sea level, datum of 1929. Prior to May 24, 1922, chain gage, and May 24, 1922, to July 31, 1931, water-stage recorder, at site 1,300 ft downstream at different datum. Aug. 1, 1931, to July 28, 1939, water-stage recorder, at site 100 ft downstream at present datum.

Average discharge.--29 years (1921-50), 188 cfs.

Extremes.--1921-50: Maximum discharge, 4,480 cfs Sept. 22, 1938 (gage height, 7.56 ft), from rating curve extended above 1,600 cfs on basis of weir formula and slope-area determination at gage height 6.92 ft; minimum, about 2.8 cfs Nov. 1, 1922; minimum daily, 5 cfs Aug. 13, 14, 1930.

Peak discharge (base, 1,000 cfs).--
1946: Jan. 8 (1 a.m.) 1,470 cfs (4.92 ft); May 28 (4 to 5:30 a.m.) 1,160 cfs (4.31 ft); June 3 (3 a.m.) 1,120 cfs (4.23 ft).
1947: Mar. 14 (10 p.m.) 2,380 cfs (6.16 ft); Apr. 6 (4 a.m.) 1,800 cfs (5.48 ft); May 1 (5 to 6 p.m.) 1,000 cfs (3.96 ft); May 6 (6:30 a.m.) 1,060 cfs (4.08 ft); May 26 (12 m.) 1,820 cfs (5.52 ft).
1948: Mar. 17 (7:30 a.m.) 1,970 cfs (5.71 ft); May 14 (7 a.m.) 1,030 cfs (4.02 ft).
1949: Dec. 31 (6 a.m.) 2,970 cfs (7.02 ft); Jan. 6 (1:30 p.m.) 2,260 cfs (6.04 ft).
1950: Mar. 9 (11 a.m.) 1,840 cfs (5.55 ft); Mar. 23 (10 to 11:30 p.m.) 1,170 cfs (4.32 ft); June 2 (4:30 a.m.) 1,140 cfs (4.25 ft).

Remarks.--Diurnal fluctuation caused by powerplant above station and flow regulated slightly by Swartswood Lake.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	166	92	437	473	142	206	193	91	320	60	48	46
2	177	88	376	a400	92	244	188	79	648	137	46	42
3	186	93	328	a330	86	275	222	82	970	110	49	40
4	158	93	312	a300	81	381	209	72	658	81	60	36
5	147	87	303	a290	81	390	202	76	481	69	49	34
6	148	84	286	a400	101	366	183	65	386	65	47	31
7	206	80	356	828	191	356	165	71	331	65	60	28
8	216	81	442	1,220	183	442	153	86	281	57	64	31
9	243	79	402	841	155	616	161	82	243	56	53	34
10	251	84	356	742	140	569	151	77	206	53	50	37
11	209	121	314	610	133	432	138	76	188	50	52	44
12	188	186	273	527	125	356	129	86	245	49	48	42
13	a170	177	244	473	123	320	122	108	237	50	45	37
14	a155	165	244	392	214	299	116	98	210	46	45	34
15	a145	218	238	356	277	351	110	162	188	42	46	33
16	a135	200	b210	277	152	409	123	147	162	39	45	34
17	127	163	b190	273	156	351	109	134	147	37	61	36
18	119	150	b180	249	137	331	100	221	148	37	66	34
19	115	153	b190	229	121	320	100	306	135	37	65	33
20	110	305	b190	203	110	274	95	243	116	34	57	31
21	104	269	b180	203	b100	249	89	200	99	57	51	42
22	101	372	b180	202	b95	228	85	191	96	107	47	55
23	101	492	*b180	191	119	217	84	162	89	185	44	45
24	103	404	b180	183	118	191	85	131	68	223	42	69
25	115	331	b200	184	110	220	82	116	80	160	40	90
26	119	296	336	180	106	232	99	178	74	103	39	61
27	115	253	290	173	111	261	103	708	70	76	37	50
28	108	275	400	169	154	328	102	1,070	69	63	36	47
29	100	420	376	163	-------	266	95	718	67	55	37	44
30	98	498	334	162	-------	250	96	487	68	52	69	69
31	92	-------	378	164	-------	216	-------	371	-------	50	54	-------

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of recorded range in stage and records for stations on nearby streams.
b Stage-discharge relation affected by ice.
Note.--Backwater from moss June 19 to July 29.

Paulins Kill at Blairstown--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	65	48	34	28	423	76	199	868	367	155	91	52
2	57	40	40	39	309	89	236	772	331	338	80	62
3	51	40	37	39	238	131	361	569	316	251	76	70
4	47	42	37	37	214	128	292	464	288	167	72	59
5	36	40	28	37	182	120	691	579	246	136	68	94
6	37	36	33	42	166	116	1,540	960	226	120	66	95
7	40	40	33	34	161	124	989	702	245	120	58	74
8	39	40	39	42	153	127	670	554	369	349	60	64
9	36	44	37	37	125	122	536	450	420	336	66	58
10	34	42	42	37	128	124	460	390	323	246	262	54
11	37	42	34	33	123	134	395	341	261	202	179	71
12	40	47	39	31	117	175	395	303	217	172	109	62
13	69	47	37	42	108	232	366	275	186	151	86	53
14	66	44	36	42	106	1,430	314	325	315	145	76	50
15	a58	40	34	39	108	1,740	292	419	610	163	69	47
16	a50	40	42	66	109	1,100	303	346	468	152	67	61
17	a46	37	37	90	108	738	361	292	332	167	76	59
18	a44	44	26	90	105	540	303	292	277	173	69	50
19	a60	42	34	83	101	428	270	331	276	224	63	44
20	a58	42	31	190	84	376	255	395	232	220	68	47
21	a52	45	47	450	89	341	270	419	223	176	84	46
22	a48	42	68	266	96	316	309	434	198	190	72	57
23	a44	42	63	210	98	295	255	466	174	187	62	82
24	42	42	52	178	92	283	229	388	159	154	56	60
25	42	42	48	193	83	371	234	546	162	131	48	51
26	48	40	42	215	84	395	292	1,670	161	113	56	45
27	74	42	37	281	82	509	255	1,140	156	108	82	42
28	63	37	34	264	78	276	234	738	139	141	75	39
29	55	37	40	226	-------	250	206	576	132	129	65	40
30	52	36	44	199	-------	237	230	606	134	106	60	37
31	48	-------	40	455	-------	215	-------	442	-------	96	56	-------

a No gage-height record; discharge computed on basis of records for Flat Brook near Flatbrookville.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	131	127	110	69	422	587	189	268	243	47	45
2	36	94	119	130	73	422	646	172	209	205	51	42
3	41	79	119	120	80	395	503	170	180	179	52	44
4	37	101	123	114	79	366	413	162	162	160	59	44
5	40	270	121	111	78	306	371	191	152	146	59	40
6	44	229	123	108	76	289	347	240	140	154	105	39
7	42	172	121	109	74	299	335	277	141	149	85	40
8	42	291	133	94	74	323	306	450	214	132	63	40
9	43	614	132	94	73	330	285	317	179	116	56	39
10	48	399	102	89	73	393	260	252	162	105	50	39
11	48	282	94	84	*72	458	250	222	142	96	72	40
12	49	496	89	90	72	386	477	205	137	90	134	35
13	49	459	82	106	70	346	517	743	149	89	127	32
14	48	344	73	101	90	317	622	955	152	139	93	42
15	46	283	70	76	140	323	987	702	133	111	75	41
16	53	245	134	90	190	775	726	a520	126	86	65	35
17	61	212	172	97	220	1,800	582	a560	120	79	58	38
18	53	134	152	94	310	1,420	453	a490	103	81	47	36
19	52	176	128	78	*400	1,090	386	a430	138	118	49	40
20	52	162	103	88	565	1,150	364	a380	402	112	69	40
21	52	152	105	96	507	987	342	327	318	99	173	39
22	44	144	104	90	455	996	311	297	231	109	127	37
23	51	157	106	80	394	828	281	260	276	98	138	35
24	45	174	103	72	332	726	261	238	366	92	93	32
25	41	266	92	75	321	598	265	222	410	82	74	33
26	45	221	89	80	348	541	243	209	323	71	68	36
27	48	180	103	84	343	536	226	192	290	68	58	37
28	50	160	112	78	417	438	209	177	454	64	54	35
29	81	150	105	78	434	472	199	168	362	61	53	34
30	94	139	100	74	-------	410	193	363	283	46	50	35
31	157	-------	94	68	-------	370	-------	367	-------	54	47	-------

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for stations on nearby streams.
Note.--Stage-discharge relation affected by ice Dec. 30 to Jan. 3, Jan. 16 to Feb. 19.

Paulins Kill at Blairstown--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	31	74	1,740	362	288	160	178	130	35	41	33
2	66	29	71	1,200	336	265	153	203	117	32	38	27
3	71	26	70	754	296	252	140	378	109	34	34	20
4	61	34	62	536	299	231	133	356	98	34	100	22
5	55	46	54	623	292	237	123	268	93	36	81	26
6	55	41	47	1,980	267	285	149	252	89	43	63	31
7	47	63	47	1,620	277	273	163	319	82	40	51	35
8	46	75	45	1,140	319	226	157	270	74	40	44	31
9	46	53	45	807	310	208	150	218	69	33	39	24
10	44	54	44	618	329	206	135	212	66	28	32	26
11	43	80	44	503	289	220	123	202	63	36	35	23
12	40	63	44	425	240	241	114	177	63	35	32	24
13	39	52	45	380	236	204	112	158	60	36	30	23
14	36	48	43	344	278	188	219	146	58	38	28	27
15	37	43	44	300	359	177	209	150	55	38	34	33
16	29	40	47	273	421	162	174	136	51	96	29	38
17	31	83	50	264	382	156	150	128	63	79	36	32
18	39	85	49	247	320	161	151	119	41	146	32	28
19	43	86	40	245	299	151	321	113	45	140	31	33
20	39	114	53	235	371	145	299	207	58	96	29	31
21	38	104	48	212	378	150	227	370	39	82	31	29
22	33	103	48	347	337	173	208	256	47	115	26	29
23	30	105	b40	399	429	203	383	414	44	97	26	29
24	32	100	b34	406	387	222	398	316	42	69	25	29
25	35	96	b31	448	362	183	318	266	38	54	26	29
26	31	93	b28	389	346	170	269	224	43	51	27	31
27	31	92	b27	340	298	164	256	227	38	46	25	27
28	28	70	b26	440	294	159	228	196	38	45	21	26
29	28	77	b28	594	-------	147	194	168	36	50	38	28
30	26	77	1,100	446	-------	140	177	154	34	49	45	37
31	27	-------	2,910	381	-------	138	-------	139	-------	44	36	-------

b Stage-discharge relation affected by ice.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	52	34	90	137	b140	418	238	490	80	74	51
2	33	45	32	85	149	149	378	251	933	72	101	48
3	32	39	35	90	176	b110	361	218	569	81	109	49
4	28	35	30	99	159	b110	384	197	847	87	91	49
5	30	33	35	101	146	b115	360	206	639	111	78	46
6	29	31	30	104	137	149	334	201	471	256	72	40
7	28	33	32	169	132	152	287	183	363	209	62	31
8	25	28	28	156	112	382	254	161	303	135	46	35
9	24	29	27	108	191	1,650	235	144	257	104	63	33
10	26	26	27	135	412	976	217	140	228	118	52	119
11	27	29	25	215	329	664	206	141	348	216	38	146
12	25	27	32	167	330	528	199	130	260	396	48	102
13	26	31	79	144	313	582	191	122	206	320	46	84
14	25	38	135	148	305	481	181	116	203	545	43	90
15	22	46	82	152	351	434	175	109	238	438	42	84
16	22	40	53	137	428	396	162	109	215	295	39	71
17	31	38	45	120	409	358	151	112	202	240	41	62
18	23	36	44	117	366	357	148	176	174	207	43	52
19	23	29	49	120	337	309	142	247	155	195	43	50
20	23	34	55	101	280	289	205	216	150	172	119	54
21	24	38	52	99	220	355	277	174	148	160	107	51
22	22	35	50	99	251	456	211	147	134	137	85	52
23	19.2	28	55	99	224	902	181	136	117	120	68	52
24	26	25	69	107	215	992	179	309	120	112	59	47
25	23	34	61	120	218	762	180	467	203	124	55	43
26	27	27	54	120	189	634	188	352	159	112	52	39
27	46	28	167	128	b150	634	194	309	119	100	46	39
28	39	34	229	117	b140	666	198	256	103	92	39	38
29	30	27	167	125	-------	698	189	348	89	90	43	39
30	32	29	125	154	-------	606	185	419	86	82	51	35
31	42	-------	94	149	-------	483	-------	320	-------	74	53	-------

b Stage-discharge relation affected by ice.

Paulins Kill at Blairstown--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	4,527	251	92	146	1.16	1.34
November	6,309	498	79	210	1.67	1.86
December	8,905	442	180	287	2.28	2.63
Calendar year 1945	111,722	2,190	79	306	2.43	32.98
January 1946	11,387	1,220	162	367	2.91	3.36
February	3,713	277	81	133	1.06	1.10
March	10,046	616	191	324	2.57	2.97
April	3,889	222	82	130	1.03	1.15
May	6,694	1,070	65	216	1.71	1.98
June	7,080	970	67	236	1.87	2.09
July	2,305	223	34	74.4	.590	.68
August	1,552	69	36	50.1	.398	.46
September	1,289	90	28	43.0	.341	.38
Water year 1945-46	67,696	1,220	28	185	1.47	20.00
October 1946	1,538	74	34	49.6	.394	.45
November	1,242	48	36	41.4	.329	.37
December	1,225	68	26	39.5	.313	.36
Calendar year 1946	51,960	1,220	26	142	1.13	15.35
January 1947	4,015	455	28	130	1.03	1.19
February	3,870	423	78	138	1.10	1.14
March	11,338	1,740	76	366	2.90	3.35
April	11,742	1,540	199	391	3.10	3.47
May	17,104	1,670	275	552	4.38	5.05
June	7,943	610	132	265	2.10	2.34
July	5,515	349	96	178	1.41	1.63
August	2,467	262	43	79.6	.632	.73
September	1,725	95	37	57.5	.456	.51
Water year 1946-47	69,722	1,740	26	191	1.52	20.59
October 1947	1,629	157	36	52.5	.417	.48
November	6,976	614	79	233	1.85	2.06
December	3,430	172	70	111	.881	1.01
Calendar year 1947	77,752	1,740	28	213	1.69	22.96
January 1948	2,858	130	68	92.2	.732	.84
February	6,429	565	69	222	1.76	1.90
March	18,512	1,800	289	597	4.74	5.46
April	11,897	937	193	397	3.15	3.51
May	10,447	955	162	337	2.67	3.08
June	6,722	454	103	224	1.78	1.98
July	3,434	243	46	111	.881	1.01
August	2,343	173	47	75.6	.600	.69
September	1,144	45	32	38.1	.302	.34
Water year 1947-48	75,821	1,800	32	207	1.64	22.36
October 1948	1,260	71	26	40.6	.322	.37
November	2,063	114	26	68.8	.546	.61
December	5,338	2,910	26	172	1.37	1.58
Calendar year 1948	72,447	2,910	26	198	1.57	21.37
January 1949	18,636	1,980	212	601	4.77	5.50
February	9,113	429	236	325	2.58	2.69
March	6,125	288	138	198	1.57	1.81
April	5,993	398	112	200	1.59	1.77
May	6,920	414	113	223	1.77	2.04
June	1,883	130	34	62.8	.498	.56
July	1,797	146	28	58.0	.460	.53
August	1,165	100	21	37.6	.298	.34
September	861	38	20	28.7	.228	.25
Water year 1948-49	61,154	2,910	20	168	1.33	18.05
October 1949	876.2	46	19.2	28.3	.225	.26
November	1,004	52	25	33.5	.266	.30
December	2,032	229	25	65.5	.520	.60
Calendar year 1949	56,405.2	1,980	19.2	155	1.23	16.65
January 1950	3,875	215	85	125	.992	1.14
February	6,786	428	112	242	1.92	2.00
March	15,519	1,650	110	501	3.98	4.58
April	6,970	418	142	232	1.84	2.06
May	6,654	467	109	215	1.71	1.96
June	8,529	933	86	284	2.25	2.52
July	5,480	545	72	177	1.40	1.62
August	1,908	119	38	61.5	.488	.56
September	1,781	146	31	57.7	.458	.51
Water year 1949-50	61,364.2	1,650	19.2	168	1.33	18.11

Delaware River at Delaware

Location.--Lat 40°53'55", long 75°04'40", on highway bridge at Delaware, Warren County.

Records available.--March 1936 to September 1950 (gage heights only).

Gage.--Wire-weight gage. Datum of gage is 200.00 ft above mean sea level (Pennsylvania Railroad bench mark).

Extremes.--1936-50: Maximum gage height observed, 82.61 ft (2 and 6 a.m.) Mar. 19, 1936; minimum observed, 58.20 ft Sept. 27, 1943, Sept. 6, 1944.

Maximum gage height observed (water years).--
1946: May 29 (3 a.m.) 69.81 ft.
1947: Apr. 6 (2 p.m.) 72.73 ft.
1948: Mar. 23 (7 a.m.) 76.33 ft.
1949: Dec. 31 (6 p.m.) 76.14 ft.
1950: Apr. 5 (11 p.m.) 71.95 ft.

Remarks.--Gage read twice daily except during periods of gage heights above 64.5 ft, when it was read hourly. In tables, the readings at 8 a.m. are shown.

Cooperation.--Records furnished by Delaware River Joint Toll Bridge Commission.

Daily gage height at 8 a.m., in feet, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60.09	60.04	61.94	61.29	59.90	59.85	60.25	59.89	62.68	59.80	59.25	59.24
2	60.22	60.04	61.45	60.82	59.86	60.75	60.37	59.80	62.38	60.12	59.88	59.09
3	60.35	60.04	61.05	60.80	60.05	61.22	60.42	59.73	65.15	60.75	59.65	58.83
4	61.78	60.71	61.20	60.60	59.68	61.08	60.44	59.63	64.78	60.60	59.56	58.76
5	61.20	62.21	61.12	60.53	59.56	61.45	60.40	59.62	63.28	60.00	59.34	59.14
6	60.89	61.69	61.06	60.63	59.76	61.92	60.24	59.59	62.69	59.80	59.32	59.17
7	60.74	61.37	61.07	61.33	59.96	62.82	60.12	59.65	62.18	59.63	59.36	59.17
8	61.09	61.08	61.45	65.26	59.84	65.42	60.02	59.71	61.81	59.52	59.50	59.15
9	61.59	60.89	61.59	64.76	59.78	66.25	60.06	59.80	61.30	59.42	60.17	59.02
10	62.65	60.69	61.29	63.75	59.79	68.35	60.20	60.06	60.98	59.47	59.80	58.80
11	63.06	60.73	61.34	63.60	59.69	64.98	60.18	59.93	61.02	59.46	59.53	59.20
12	62.25	61.05	61.19	62.88	59.50	63.41	60.07	59.75	60.89	59.55	59.28	59.14
13	61.91	61.94	61.09	62.27	59.63	62.52	59.96	59.94	61.08	59.45	59.46	59.15
14	61.40	61.74	60.72	61.90	59.66	62.05	59.79	60.28	61.13	59.36	59.46	59.13
15	61.09	62.18	60.45	61.55	60.04	62.00	59.78	60.40	60.74	59.17	59.37	59.05
16	61.10	62.24	60.38	61.49	60.57	62.86	59.89	60.88	60.24	59.24	59.37	58.74
17	61.05	61.78	60.08	60.63	60.48	63.00	60.96	60.83	60.00	59.24	59.25	58.68
18	60.88	61.43	59.89	60.45	60.12	61.34	60.12	60.96	60.07	59.27	58.38	59.13
19	60.70	61.25	60.00	60.49	59.88	62.37	60.07	61.56	60.06	59.20	59.30	59.16
20	60.55	61.79	59.89	60.10	59.48	61.97	59.83	62.30	60.38	59.20	59.24	59.12
21	60.30	62.44	60.13	60.02	59.87	61.68	59.74	61.92	60.08	59.30	59.35	59.12
22	60.17	62.25	60.25	60.09	59.68	61.43	59.67	63.52	59.97	59.20	59.30	59.54
23	60.43	62.43	60.27	60.14	59.78	61.18	59.74	63.72	59.79	59.63	60.33	59.53
24	60.45	63.28	60.20	60.25	59.75	60.82	59.71	62.41	59.64	60.23	59.25	59.35
25	60.34	62.45	60.37	60.15	59.52	60.64	59.65	61.71	59.63	60.72	59.15	59.96
26	60.42	61.89	60.66	60.14	59.53	60.87	59.67	61.49	59.63	60.25	58.46	60.58
27	60.53	61.85	61.05	60.00	59.70	61.17	59.75	62.56	59.50	59.75	58.97	60.24
28	60.35	61.58	61.57	59.94	59.90	61.25	59.68	66.90	59.50	59.49	59.17	59.77
29	60.33	61.85	61.50	59.88	-------	61.02	59.69	69.63	59.54	59.29	59.10	59.45
30	60.28	62.45	61.15	60.85	-------	60.82	59.80	65.96	59.70	59.24	59.30	59.52
31	60.15	-------	60.98	60.00	-------	60.48	-------	63.85	-------	59.28	59.30	-------

Delaware River at Delaware--Continued

Daily gage height at 8 a.m., in feet, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	59.60	59.50	59.36	59.58	64.69	59.88	61.21	61.78	61.65	59.51	60.43	59.21
2	59.67	59.42	59.26	59.32	62.42	59.59	60.98	63.09	61.25	59.89	60.46	59.22
3	59.75	59.39	59.17	59.45	62.35	59.44	61.80	62.92	61.31	59.72	60.06	59.29
4	59.64	59.31	59.22	59.60	61.85	59.47	62.78	62.65	61.27	59.71	59.77	59.84
5	59.56	59.27	59.12	59.59	61.46	59.79	62.57	62.19	61.22	59.49	59.72	59.83
6	59.40	59.39	59.18	60.00	60.94	59.78	71.78	63.44	60.98	59.35	59.68	59.86
7	59.31	59.33	59.23	59.76	60.87	59.62	69.67	64.43	60.72	59.25	59.67	59.45
8	59.28	59.29	59.23	59.92	60.66	59.67	66.92	64.20	60.71	60.18	59.63	59.28
9	59.40	59.46	59.14	59.80	60.46	59.56	64.36	64.08	61.00	65.45	59.60	59.28
10	59.38	59.44	59.17	59.66	60.28	59.47	63.50	63.07	61.05	63.20	59.57	59.44
11	59.40	59.36	59.20	59.60	62.39	59.54	62.81	62.34	60.69	62.03	60.55	59.34
12	59.34	59.35	59.23	59.66	60.38	59.59	62.39	61.82	60.36	61.30	60.08	59.33
13	59.57	59.47	59.29	59.56	60.33	59.64	62.31	61.64	60.19	60.82	59.84	59.35
14	59.48	59.49	59.31	59.44	60.17	60.55	62.24	61.44	60.03	60.28	60.04	59.29
15	59.61	59.47	59.33	59.73	60.11	62.58	62.00	61.81	60.50	60.34	59.71	59.05
16	59.59	59.35	59.39	59.83	60.04	67.07	61.57	61.98	60.63	60.35	59.77	59.04
17	59.49	59.35	59.37	60.03	60.07	64.58	61.73	61.46	61.63	61.19	59.58	59.36
18	59.44	59.25	59.29	60.84	60.06	63.15	61.49	61.03	61.02	62.85	62.82	59.46
19	59.52	59.40	59.35	60.66	60.02	62.25	61.23	61.14	60.79	62.32	61.20	59.16
20	59.50	59.39	59.08	60.45	59.89	61.79	60.88	61.65	60.51	62.00	60.55	59.11
21	59.71	59.18	59.20	61.63	59.55	61.59	60.83	61.96	60.29	61.42	60.34	59.22
22	59.63	59.19	59.53	64.10	59.63	61.36	61.58	62.28	60.04	61.21	60.10	58.93
23	59.60	59.36	59.32	62.05	59.51	61.48	61.86	65.17	60.03	65.75	59.88	59.08
24	59.47	59.22	59.81	61.19	59.41	61.22	61.45	64.12	59.84	63.40	59.57	59.31
25	59.39	59.25	59.71	61.33	59.60	61.86	61.32	62.78	59.88	62.10	59.47	59.30
26	59.40	59.30	59.47	61.74	59.84	65.21	61.48	64.42	59.89	61.48	59.52	59.18
27	59.52	59.25	59.65	61.93	59.98	64.04	61.30	64.94	59.95	61.05	59.53	59.10
28	59.68	59.18	59.36	61.95	59.97	62.76	61.19	63.40	59.91	60.56	59.56	58.98
29	59.78	59.33	59.37	61.81	-------	62.03	61.32	62.63	59.79	61.84	59.47	58.89
30	59.63	59.50	59.28	61.60	-------	61.64	61.23	62.40	59.57	61.20	59.45	58.88
31	59.53	-------	59.44	62.10	-------	61.34	-------	62.07	-------	60.66	59.31	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	59.14	59.50	59.50	59.69	60.02	60.50	62.17	60.72	61.00	61.12	59.15	59.08
2	59.00	59.45	59.69	59.56	59.70	60.43	63.12	60.42	60.95	60.63	58.87	59.00
3	59.00	59.35	59.69	59.59	59.72	60.39	63.00	60.31	60.61	60.32	58.88	58.95
4	59.02	59.27	59.78	59.54	60.04	60.28	62.37	60.40	60.45	59.95	59.20	58.99
5	59.06	59.55	59.88	59.57	59.95	60.44	61.86	60.30	60.17	59.79	59.18	58.95
6	58.79	59.65	59.99	59.55	60.08	60.10	61.60	60.56	59.95	59.70	59.66	58.69
7	58.75	59.59	59.73	59.75	60.04	59.97	61.57	60.66	59.85	59.70	59.96	58.71
8	58.95	59.59	59.74	59.88	60.10	59.87	61.35	61.23	60.56	59.78	59.66	58.57
9	59.12	62.43	59.32	59.69	59.72	60.01	61.26	61.28	60.73	59.96	59.59	59.05
10	59.12	63.39	60.20	59.64	59.59	60.19	60.98	60.96	60.69	59.79	59.37	59.07
11	59.12	61.91	60.18	59.65	59.85	60.28	60.70	60.86	60.38	59.48	59.29	59.08
12	59.03	62.13	60.05	59.52	59.84	60.23	61.00	60.66	60.33	59.40	59.26	59.06
13	58.68	64.09	59.77	59.40	59.89	59.97	63.14	61.18	60.15	59.40	59.57	58.69
14	58.73	62.93	59.50	59.78	59.74	59.84	63.10	61.92	60.08	60.02	59.48	58.64
15	59.08	61.97	59.42	59.56	60.23	59.85	66.60	62.17	60.20	59.98	59.23	59.02
16	58.93	61.47	59.78	59.67	60.05	60.48	67.00	62.60	60.27	59.76	59.10	58.97
17	58.95	60.93	60.20	59.79	60.51	63.13	64.40	62.19	59.91	59.56	59.00	58.93
18	59.00	60.92	60.88	59.77	61.25	69.25	63.52	63.35	59.77	59.37	59.14	58.98
19	59.02	60.53	60.38	59.47	61.54	66.05	62.68	62.26	59.78	59.26	59.14	58.96
20	58.65	60.30	60.01	59.86	61.20	66.17	62.24	62.66	60.28	59.32	59.10	58.61
21	58.52	60.14	59.68	59.30	63.09	71.56	62.00	62.12	60.29	59.41	59.27	58.66
22	58.95	60.00	59.54	59.94	62.40	69.59	62.32	61.82	60.05	59.40	59.25	59.00
23	58.93	59.90	59.89	59.74	61.74	76.27	62.00	61.41	59.98	59.47	59.09	59.00
24	59.00	59.91	59.96	59.68	61.22	69.39	61.58	61.19	60.23	59.46	59.10	58.94
25	58.96	60.47	59.64	59.60	60.92	66.27	61.19	62.37	60.76	59.27	59.22	58.93
26	58.95	60.82	59.54	59.66	60.88	64.64	61.22	63.34	61.07	59.52	59.26	59.00
27	58.65	60.68	59.62	59.73	60.87	63.43	61.44	62.52	61.12	59.35	59.10	58.66
28	58.50	60.27	59.60	60.00	60.83	63.14	61.13	61.90	61.08	59.34	59.07	58.54
29	59.97	60.15	59.47	59.47	60.76	63.61	60.92	61.55	61.81	59.27	59.02	58.98
30	59.30	60.00	59.48	60.03	-------	62.63	60.87	61.22	61.51	59.14	58.97	59.00
31	59.48	-------	59.85	60.00	-------	62.14	-------	61.19	-------	59.17	58.80	-------

Delaware River at Delaware--Continued

Daily gage height at 8 a.m., in feet, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	59.14	58.56	59.80	72.52	60.89	62.55	60.56	60.62	60.49	59.07	58.65	59.40
2	59.12	58.52	59.62	66.24	60.63	61.31	60.50	60.51	60.34	59.02	58.82	59.30
3	59.12	58.67	59.64	63.88	60.53	61.13	60.22	61.19	60.23	58.78	59.01	58.90
4	58.67	58.79	59.58	62.80	60.58	60.93	60.05	61.45	60.03	58.85	59.05	58.90
5	58.60	59.12	59.47	60.08	60.52	60.65	60.12	61.57	59.90	58.73	59.21	58.68
6	59.90	59.04	59.42	69.42	60.49	60.60	60.06	61.22	59.61	58.86	59.03	58.78
7	59.12	59.25	59.56	71.12	60.28	61.20	60.42	61.91	59.71	59.00	58.89	58.64
8	59.07	59.18	59.97	66.29	60.47	61.88	60.70	62.32	59.69	59.12	58.56	58.57
9	59.10	60.56	59.91	64.26	60.39	61.60	60.72	61.59	59.48	58.90	58.47	59.00
10	59.08	60.02	59.78	63.23	60.31	61.00	60.68	61.64	59.37	58.78	58.91	58.78
11	58.64	59.66	59.67	62.70	60.41	61.18	60.45	61.18	59.42	58.78	58.92	58.48
12	58.60	59.55	59.48	62.35	60.03	61.10	60.55	60.94	59.35	58.77	58.90	58.51
13	59.07	59.48	59.47	61.93	60.00	60.84	60.27	60.69	59.25	59.00	58.91	58.45
14	59.07	59.36	59.57	61.60	59.92	60.64	60.43	60.44	59.15	59.05	58.60	58.78
15	59.05	59.18	59.68	61.40	60.45	60.62	60.95	60.20	59.41	58.96	58.58	59.00
16	59.05	59.15	59.74	60.88	62.30	60.66	60.89	60.08	59.31	59.11	58.59	58.86
17	58.73	59.20	59.79	60.68	65.17	60.49	60.66	60.08	59.20	59.14	58.64	58.88
18	58.60	59.14	59.76	60.54	63.30	60.33	60.34	60.02	59.30	59.00	58.92	58.86
19	58.57	59.14	59.77	60.92	62.25	60.34	61.59	59.98	59.27	59.12	58.75	58.84
20	59.04	59.40	59.58	60.90	61.95	59.92	63.06	59.90	59.10	59.18	58.92	58.45
21	59.16	59.81	59.47	61.00	62.25	59.82	62.28	61.43	59.04	59.14	58.55	58.70
22	59.14	60.77	59.45	61.08	62.14	60.10	61.90	62.22	59.24	59.12	58.57	58.80
23	58.87	60.57	59.57	60.85	62.00	60.14	61.77	61.78	59.20	59.15	58.35	58.65
24	58.79	60.24	59.58	60.83	62.05	60.34	62.23	62.02	59.10	59.00	58.25	59.07
25	58.68	60.25	59.38	61.20	61.76	61.00	62.63	61.75	59.05	58.95	58.72	58.88
26	59.49	59.95	59.31	61.44	61.87	60.95	62.06	61.68	59.05	58.55	58.82	58.65
27	58.82	59.82	59.00	61.43	61.94	60.65	61.73	61.73	59.09	58.82	58.78	58.73
28	58.80	59.70	59.14	61.23	61.45	60.57	61.58	61.40	59.04	58.93	58.47	58.80
29	58.90	59.77	59.47	61.52	-------	60.87	61.51	60.95	59.06	59.00	58.65	59.08
30	58.82	59.96	60.52	61.44	-------	60.71	60.89	60.68	59.01	58.95	58.67	58.90
31	58.59	-------	74.11	61.00	-------	60.39	-------	60.48	-------	58.84	58.80	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	59.14	58.93	59.42	60.55	60.85	60.00	64.75	60.75	61.10	59.78	59.46	59.20
2	58.96	58.97	59.44	60.55	60.45	59.90	64.00	61.60	61.88	59.65	59.58	59.15
3	59.10	59.17	59.52	60.47	60.55	59.75	63.75	61.65	61.54	59.54	60.02	59.25
4	59.08	59.18	59.37	60.56	60.65	59.59	64.82	61.33	61.40	59.55	59.92	59.85
5	58.90	59.20	59.44	60.64	60.25	59.55	68.78	61.17	61.60	59.53	59.75	59.52
6	59.00	59.10	59.19	60.69	60.46	59.60	70.50	61.70	61.73	59.91	59.70	59.45
7	59.00	59.27	59.14	60.48	60.25	59.70	66.81	61.35	61.30	59.95	59.55	59.35
8	59.10	59.15	59.29	63.35	60.10	60.10	64.25	61.05	60.90	59.86	59.50	59.25
9	59.04	59.20	59.20	62.29	60.12	62.05	63.05	61.00	60.61	59.60	59.47	59.15
10	58.78	59.21	59.00	61.66	60.40	65.35	62.46	60.73	60.38	59.43	59.42	59.20
11	58.78	59.08	59.17	62.25	60.85	63.65	62.20	60.70	60.20	59.63	59.35	59.53
12	59.00	59.04	59.06	63.20	61.04	63.61	61.96	60.82	60.28	60.18	59.25	59.55
13	59.12	59.06	59.32	62.10	60.82	62.35	61.84	60.62	60.52	60.40	59.18	59.70
14	58.92	59.35	66.30	61.68	60.83	62.18	61.70	60.20	60.17	60.78	59.05	59.68
15	58.80	59.90	63.50	61.78	60.88	61.65	61.40	60.10	60.42	60.63	59.02	59.55
16	58.65	60.34	62.05	61.45	61.10	61.27	61.78	60.37	60.85	60.20	59.15	59.55
17	58.73	60.27	61.00	61.15	61.18	61.06	60.82	60.38	60.50	59.85	59.13	59.55
18	58.63	59.85	60.55	61.16	61.10	60.95	60.95	60.40	60.40	59.80	59.08	59.30
19	58.95	59.69	60.55	60.80	60.72	60.77	60.94	60.80	60.47	59.78	59.15	59.25
20	58.90	59.60	60.65	60.83	60.54	60.50	60.88	61.70	60.55	59.71	59.78	59.37
21	58.73	59.59	60.75	60.19	60.25	60.65	61.61	61.55	60.35	59.65	59.52	59.34
22	58.70	59.64	60.52	60.97	60.40	61.20	62.50	61.22	60.35	60.05	60.34	59.30
23	58.53	59.64	60.48	60.00	59.73	61.55	61.73	61.04	60.27	59.73	59.86	59.25
24	58.55	59.65	60.60	60.25	60.10	62.10	61.24	61.29	60.02	59.55	59.56	59.20
25	58.56	59.45	61.28	60.29	60.45	62.40	61.48	61.65	59.92	59.55	59.45	59.12
26	58.70	59.41	60.70	60.80	60.05	62.00	61.32	61.52	60.24	59.65	59.35	59.13
27	58.75	59.44	60.75	60.75	59.70	61.86	61.26	61.40	60.58	60.05	59.28	59.25
28	58.90	59.28	62.15	60.90	59.75	62.25	61.22	60.80	60.12	59.75	59.12	59.27
29	58.84	59.40	62.05	60.50	-------	66.10	60.93	60.67	60.00	59.54	59.09	59.20
30	58.98	59.58	61.55	60.40	-------	69.35	60.64	61.50	59.85	59.51	59.39	59.11
31	58.98	-------	61.00	60.83	-------	66.48	-------	61.13	-------	59.41	59.34	-------

Pequest River at Huntsville

Location.--Lat 40°58'49", long 74°46'36", on right bank 20 ft upstream from highway bridge in Huntsville, Sussex County, and three-eighths of a mile downstream from East Branch.

Drainage area.--31.4 sq mi.

Records available.--November 1939 to September 1950.

Gage.--Water-stage recorder and concrete control. Datum of gage is 553.81 ft above mean sea level, datum of 1929.

Average discharge.--11 years (1939-50), 43.1 cfs.

Extremes.--1939-50: Maximum discharge, 486 cfs (revised) July 20, 1945 (gage height, 4.68 ft); minimum, 1.6 cfs Aug. 23, 1949 (gage height, 2.18 ft).

Peak discharge (base, 125 cfs).--
1946: Dec. 26 (7 p.m.) 145 cfs (3.32 ft); Jan. 1 (7 a.m.) 133 cfs (3.27 ft); Jan. 8 (11 a.m.) 147 cfs (3.33 ft); Mar. 10 (1 a.m.) 131 cfs (3.26 ft); May 28 (11 a.m.) 135 cfs (3.28 ft); June 3 (12 m. to 3 p.m.) 172 cfs (3.43 ft).
1947: Mar. 15 (2 to 4 p.m.) 220 cfs (3.57 ft); Apr. 6 (2 to 7 p.m.) 220 cfs (3.57 ft); May 2 (1 a.m.) 201 cfs (3.51 ft); May 6 (1 p.m.) 258 cfs (3.53 ft); May 26 (4 p.m.) 129 cfs (3.25 ft).
1948: Mar. 18 (3 to 10 a.m.) 254 cfs (3.67 ft); Mar. 28 (3 p.m.) 163 cfs (3.38 ft); Apr. 2 (3 to 8 a.m.) 157 cfs (3.36 ft); Apr. 15 (12 m. to 5 p.m.) 163 cfs (3.38 ft); May 14 (8 a.m. to 1 p.m.) 129 cfs (3.25 ft).
1949: Dec. 31 (5:30 p.m.) 368 cfs (4.13 ft); Jan. 6-7 (10 p.m. to 2 a.m.) 287 cfs (3.76 ft); Jan. 29 (12 m. to 5 p.m.) 127 cfs (3.24 ft).
1950: Mar. 9 (3 to 6 p.m.) 168 cfs (3.40 ft); Mar. 24 (3 to 7 a.m.) 154 cfs (3.35 ft); July 14 (12 m. to 5 p.m.) 134 cfs (3.27 ft).

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	51	29	98	117	48	41	69	26	67	19.2	18.4	17.0
2	51	28	88	90	42	44	67	24	110	42	17.0	14.3
3	51	28	82	80	36	54	72	23	169	36	19.2	13.7
4	48	26	78	76	30	62	72	21	145	26	40	13.1
5	47	24	74	74	31	69	67	22	122	22	27	12.5
6	45	22	72	102	35	74	62	22	102	20	21	11.9
7	51	21	86	133	65	78	58	23	90	18.4	26	11.9
8	55	21	98	*147	51	92	54	28	80	17.0	27	11.4
9	63	20	94	140	45	113	52	24	71	15.6	22	11.4
10	65	14.9	88	140	41	113	51	21	62	14.9	19.2	10.8
11	58	26	82	133	38	98	48	21	58	14.3	23	12.5
12	54	33	65	124	36	82	44	25	82	14.3	21	11.9
13	54	32	60	117	36	76	c40	30	76	13.7	19.2	11.4
14	57	30	63	100	55	72	c39	25	63	12.5	20	12.5
15	55	33	62	94	55	80	c37	35	62	11.9	17.0	13.7
16	54	30	50	74	42	92	c38	30	55	11.4	15.6	13.7
17	51	29	46	70	40	84	c35	32	47	10.8	25	10.8
18	47	28	45	71	36	80	c32	74	45	9.8	50	9.3
19	45	30	45	65	31	86	c31	86	41	9.8	37	8.4
20	41	45	46	51	30	98	c30	69	38	10.8	27	6.9
21	38	39	43	50	28	71	c29	48	38	27	23	7.9
22	37	62	42	50	26	65	c27	44	36	42	21	10.3
23	36	74	42	46	28	62	c28	42	32	74	20	9.3
24	37	71	43	45	27	57	c27	37	30	88	18.4	10.3
25	38	71	46	47	27	71	25	33	28	54	16.3	15.6
26	38	69	115	48	26	74	30	36	23	37	15.6	11.9
27	37	62	122	42	27	113	31	88	22	30	15.6	10.3
28	36	62	106	40	38	106	30	133	22	25	14.3	9.3
29	35	94	98	41	-------	86	28	111	22	21	18.4	9.3
30	32	109	96	41	-------	80	28	92	20	19.2	30	11.4
31	30	-------	109	47	-------	74	-------	76	-------	20	22	-------

* Winter discharge measurement made on this day.
c Backwater from moss.
Note.--Stage-discharge relation affected by ice Dec. 12, 13, 16-25, Jan. 2-5, 16, 17, 21-25, 27, 28, Feb. 4-6, 20-27. Aquatic vegetation above control July 2 to Sept. 30; discharge computed by shifting-control method based on 6 discharge measurements and drop in gage height each time control was cleaned.

Pequest River at Huntsville--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.3	9.8	a5.5	6.5	71	20	52	168	78	54	22	8.4
2	7.9	6.5	a4.4	3.4	58	23	60	183	69	69	19.2	10.3
3	7.4	6.5	a5.0	7.0	47	31	84	154	67	60	17.7	9.8
4	13.7	6.5	a5.4	8.9	45	31	74	139	63	50	17.0	8.9
5	23	6.0	a5.4	8.4	39	29	112	149	57	42	16.3	12.5
6	22	6.0	a5.4	8.9	35	30	214	204	51	38	14.3	14.3
7	20	6.0	a5.6	8.9	34	30	192	183	55	35	14.9	11.9
8	19.2	7.9	a5.6	8.9	32	30	157	163	84	62	15.6	10.3
9	20	7.9	a5.6	7.9	31	29	136	139	113	62	17.0	9.8
10	22	7.4	a5.6	8.4	31	30	124	124	92	55	20	9.8
11	22	7.4	a5.6	8.9	30	32	111	113	74	48	21	15.6
12	17.7	8.4	*5.2	8.9	29	38	106	102	65	44	17.0	11.4
13	22	7.9	7.0	8.9	28	47	100	94	57	38	14.9	10.3
14	17.0	7.4	5.6	9.8	27	130	90	100	71	35	13.7	10.3
15	13.7	7.0	4.4	12.5	28	211	86	122	113	37	13.1	11.9
16	14.9	6.5	4.8	19.2	28	186	82	106	106	41	15.6	14.3
17	8.9	6.5	5.2	22	28	146	92	94	90	45	17.0	11.4
18	6.5	6.5	5.2	20	27	119	82	92	80	40	15.6	10.3
19	8.4	6.0	4.1	18.4	*26	102	69	104	72	41	13.7	9.8
20	6.5	6.0	4.1	46	18.4	92	67	109	65	38	13.7	10.3
21	6.5	6.0	11.8	69	21	84	65	109	72	33	13.7	10.3
22	6.0	6.5	14.3	42	23	80	67	113	62	40	12.5	14.6
23	7.0	7.0	11.9	47	25	74	62	113	54	39	11.4	17.7
24	9.8	6.0	11.4	*36	24	*72	57	98	48	31	10.8	13.1
25	6.5	6.0	10.8	38	23	84	57	98	48	29	9.8	11.4
26	10.1	6.5	8.9	40	23	90	69	124	52	27	9.8	10.3
27	10.8	6.5	8.9	55	22	74	62	109	50	24	11.4	9.3
28	10.8	6.5	8.9	51	21	69	57	96	42	27	10.8	8.9
29	9.8	6.5	8.9	45	-------	63	52	90	55	26	9.3	12.1
30	10.8	6.0	8.9	42	-------	60	62	100	69	22	8.9	17.7
31	13.7	-------	8.4	67	-------	55	-------	92	-------	22	8.9	-------

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of recorded range in stage, hook-gage readings Dec. 2, 9, and records for station at Pequest.
Note.---Backwater from moss Oc. 1-8, May 24 to June 12, June 19 to July 7, July 11-24, 29-31, Aug. 1-3. Stage-discharge relation affected by ice Feb. 6-8, 10, 11, 22-24.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10.8	21	29	23	18	98	134	58	80	69	13.1	9.3
2	10.3	15.6	28	28	19	102	154	55	67	57	13.1	8.8
3	15.0	13.1	29	25	19	109	136	54	55	44	13.1	7.9
4	25	26	30	b21	h18	104	119	54	51	41	13.7	7.9
5	26	39	30	23	19	86	109	57	47	40	16.3	7.5
6	24	31	30	22	h19	86	102	62	44	50	29	7.0
7	6.6	27	30	22	18	90	98	69	57	60	22	6.6
8	6.6	57	32	22	19	92	92	92	80	48	17.0	6.6
9	6.2	100	32	22	h18	92	88	78	57	41	14.9	6.6
10	6.2	78	29	19.3	h18	98	80	65	51	36	13.1	7.0
11	6.2	57	28	b19	b18	106	76	58	44	32	12.5	7.5
12	6.2	86	25	b19	b19	96	102	52	42	30	32	7.0
13	5.8	88	23	24	h20	96	111	90	44	30	39	6.2
14	6.2	65	21	23	h32	92	117	127	41	32	24	6.2
15	6.2	55	20	b20	37	96	157	113	38	28	20	5.4
16	6.2	52	40	21	39	127	149	102	37	25	17.0	5.4
17	8.4	45	36	22	47	224	134	115	35	23	15.6	5.4
18	6.6	41	29	21	62	248	119	106	30	24	14.3	5.4
19	7.5	39	24	18	74	220	111	98	42	26	13.7	6.2
20	7.5	37	22	19	98	211	102	86	78	26	14.3	5.8
21	6.2	35	21	22	104	192	98	78	63	24	33	6.2
22	5.8	33	20	21	102	186	92	72	60	33	30	11.4
23	5.8	39	21	20	98	174	84	67	69	28	26	7.9
24	5.4	44	b18	17	88	163	80	62	74	25	21	6.2
25	5.4	60	b15	18	86	146	80	58	88	22	18.4	5.8
26	5.4	50	b16	19	90	127	76	55	72	19.2	16.3	6.2
27	5.4	41	b18	20	92	127	71	52	67	17.7	14.9	8.8
28	4.7	39	23	20	98	160	67	48	100	17.0	13.7	10.8
29	10.8	36	b21	20	102	141	63	47	88	15.6	12.5	10.8
30	12.7	33	b20	19	-------	127	62	97	76	14.3	11.4	12.8
31	30	-------	b21	18	-------	117	-------	102	-------	13.7	10.8	-------

b Stage-discharge relation affected by ice.
h Computed on basis of daily staff-gage reading.
Note.--No gage-height record Jan. 16 to Feb. 3, Feb. 5, 7, 8; discharge computed on basis of weather records and records for station at Pequest and stations on nearby streams.

Pequest River at Huntsville--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	a5.6	13.7	322	98	78	44	44	27	7.5	5.1	4.0
2	14.3	a5.4	12.5	230	96	74	41	47	25	6.6	4.0	3.4
3	12.5	5.1	11.9	177	*82	72	39	71	23	6.2	3.7	3.2
4	11.4	7.9	11.4	141	88	67	a36	69	22	6.2	4.7	2.9
5	10.3	7.9	10.3	141	86	69	a46	55	21	7.0	14.4	2.9
6	9.8	6.6	10.8	244	78	76	a49	52	19.2	7.0	8.4	4.4
7	7.9	15.4	10.8	269	82	74	a46	65	17.7	7.9	6.2	6.2
8	7.5	10.3	9.8	*224	88	65	a44	58	17.0	6.6	4.7	7.4
9	7.9	8.8	9.3	192	86	62	a40	48	16.3	5.8	3.7	10.2
10	7.5	9.8	8.8	165	84	58	a36	52	14.9	5.8	3.4	4.4
11	6.6	11.9	8.4	146	78	63	a34	50	14.3	6.6	2.9	4.4
12	6.6	9.8	8.4	131	69	67	a32	40	14.3	5.8	3.2	4.4
13	6.2	9.3	9.8	119	69	60	a37	33	13.1	7.9	3.4	4.7
14	6.2	8.4	9.8	109	72	55	47	33	10.8	6.6	3.4	5.4
15	5.8	7.9	8.4	98	82	52	44	33	11.9	6.2	2.9	11.4
16	5.8	7.5	11.9	92	94	48	39	33	12.5	9.8	2.7	7.5
17	7.9	7.5	15.6	88	92	45	36	36	9.8	8.4	2.4	6.2
18	13.1	7.0	17.0	84	82	45	40	30	12.5	23	2.7	a5.5
19	13.1	7.0	12.2	82	76	44	76	28	11.9	19.2	3.2	a8.0
20	11.9	19.1	17.7	76	88	44	67	43	11.4	13.1	2.4	a6.0
21	15.0	14.9	14.9	71	90	45	55	60	10.3	10.8	2.4	4.7
22	21	12.5	13.7	98	86	51	52	47	13.1	9.3	2.2	4.7
23	20	15.6	12.5	109	98	60	78	57	13.1	8.4	2.2	5.1
24	19.2	13.7	11.0	106	96	60	80	48	10.3	7.0	2.0	4.4
25	18.4	11.9	b10.0	109	88	52	69	44	9.3	a6.5	2.0	5.4
26	19.2	10.8	a9.4	98	88	50	60	40	10.8	a6.2	2.0	4.4
27	30	11.4	a9.0	92	80	48	57	42	10.3	a5.7	2.0	4.0
28	22	11.4	a8.8	109	78	45	52	38	8.4	5.4	2.2	3.7
29	7.0	13.7	a15	127	-------	41	47	33	7.9	6.2	6.6	7.1
30	a6.6	14.3	131	113	-------	40	45	30	7.9	5.8	4.7	10.3
31	a6.0	-------	†335	98	-------	39	-------	29	-------	7.0	3.7	-------

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of recorded range in stage, hook gage reading Sept. 19, and records for station at Pequest and stations on nearby streams.
b Stage-discharge relation affected by ice.
† Revised.
Note.--Backwater from moss Nov. 7-17, Apr. 22 to May 19, June 15 to July 24, Aug. 2 to Sept. 6.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.9	9.8	5.8	19.2	28	37	98	58	69	20	23	15.6
2	6.2	7.5	5.8	18.4	30	36	94	58	80	17.7	22	14.3
3	5.8	6.2	5.4	19.2	35	31	90	54	69	21	24	15.6
4	5.1	6.6	5.1	21	32	30	96	52	78	23	25	17.0
5	4.7	6.2	5.4	21	30	30	96	52	76	29	22	14.9
6	4.7	5.8	5.1	21	28	35	90	50	65	74	21	13.1
7	4.7	5.4	5.1	29	28	35	80	47	57	62	19.2	11.9
8	4.4	5.4	5.1	25	25	55	74	41	52	42	17.0	11.4
9	4.4	5.1	4.4	21	36	149	71	39	44	36	15.6	10.8
10	5.5	5.1	4.0	26	51	127	65	38	40	38	17.0	12.5
11	8.4	5.1	4.4	37	52	122	60	37	41	58	17.0	17.0
12	6.6	5.1	5.8	30	52	111	58	36	38	115	19.2	16.3
13	5.8	7.5	22	28	52	109	57	33	36	96	17.0	16.3
14	5.1	12.5	24	29	55	102	55	31	35	127	14.3	20
15	5.1	11.4	14.3	28	62	92	54	30	39	106	13.7	18.4
16	4.7	8.4	9.8	27	71	84	52	30	39	88	13.7	16.3
17	4.0	7.0	7.9	25	69	78	50	31	38	78	13.1	14.3
18	3.7	6.6	7.9	24	69	76	48	41	35	67	12.5	13.1
19	3.7	6.6	10.8	24	67	69	47	50	32	57	13.1	12.5
20	3.4	6.6	10.8	21	60	65	63	45	31	51	41	13.1
21	3.4	6.6	10.3	20	54	74	74	39	30	47	37	11.9
22	3.2	5.4	10.3	19.2	51	90	65	36	28	40	27	12.5
23	3.2	4.4	11.9	19.2	50	124	58	32	25	37	18.4	12.5
24	3.2	4.7	14.3	22	48	149	55	69	28	35	16.3	11.4
25	3.2	6.2	11.4	26	50	134	54	84	63	39	14.3	10.8
26	6.8	5.1	10.8	26	44	122	54	74	45	36	13.7	10.8
27	6.2	4.4	34	26	38	119	52	67	33	32	13.1	10.3
28	5.4	4.4	40	25	36	a127	55	58	28	30	12.5	9.8
29	5.1	5.4	31	26	-------	a122	54	71	24	30	13.1	9.3
30	5.4	5.8	25	29	-------	a113	52	80	22	29	16.3	8.8
31	9.7	-------	21	29	-------	106	-------	69	-------	26	17.7	-------

a No gage-height record; discharge comruted on basis of recorded range in stage and records for station at Pequest.

Pequest River at Huntsville--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	1,437	65	30	46.4	1.48	1.70
November	1,262.9	109	14.9	42.1	1.34	1.50
December	2,284	122	42	73.7	2.35	2.71
Calendar year 1945	†26,945.9	†462	14.9	†73.8	†2.35	†31.90
January 1946	2,495	147	40	80.5	2.56	2.96
February	1,050	65	26	37.5	1.19	1.24
March	2,447	113	41	78.9	2.51	2.90
April	1,276	72	23	42.5	1.35	1.51
May	1,401	133	21	45.2	1.44	1.66
June	1,858	169	20	61.9	1.97	2.20
July	787.6	88	9.8	25.4	.809	.93
August	706.2	50	14.3	22.8	.726	.84
September	344.7	17.0	6.9	11.5	.366	.41
Water year 1945-46	17,349.4	169	6.9	47.5	1.51	20.56
October 1946	403.9	23	6.0	13.0	.414	.48
November	203.6	9.8	6.0	6.79	.216	.24
December	217.8	14.3	4.1	7.03	.224	.26
Calendar year 1946	13,190.8	169	4.1	36.1	1.15	15.63
January 1947	783.8	69	3.4	25.3	.806	.93
February	874.4	71	18.4	31.2	.994	1.04
March	2,191	211	20	70.7	2.25	2.60
April	2,700	214	52	90.0	2.87	3.20
May	3,784	204	90	122	3.89	4.48
June	2,074	113	42	69.1	2.20	2.46
July	1,254	69	22	40.5	1.29	1.49
August	446.6	22	8.9	14.4	.459	.53
September	347.0	17.7	8.4	11.6	.369	.41
Water year 1946-47	15,280.1	214	3.4	41.9	1.33	18.12
October 1947	301.1	30	4.7	9.71	.309	.36
November	1,382.7	100	13.1	46.1	1.47	1.64
December	781	40	15	25.2	.803	.93
Calendar year 1947	16,919.6	214	3.4	46.4	1.48	20.07
January 1948	647.3	28	17	20.9	.666	.77
February	1,491	104	18	51.4	1.64	1.77
March	4,133	248	86	133	4.24	4.90
April	3,063	157	62	102	3.25	3.63
May	2,329	127	47	75.1	2.39	2.76
June	1,777	100	30	59.2	1.89	2.10
July	991.5	69	13.7	32.0	1.02	1.17
August	575.7	39	10.8	18.6	.592	.68
September	222.6	12.8	5.4	7.42	.236	.26
Water year 1947-48	17,694.9	248	4.7	48.3	1.54	20.97
October 1948	378.7	30	5.8	12.2	.389	.45
November	308.4	19.1	5.1	10.3	.328	.37
December	†798.8	†335	†8.4	†25.8	†.822	†.95
Calendar year 1948	†16,716.0	†335	5.1	†45.7	1.46	†19.81
January 1949	†4,236	†298	71	137	4.36	†5.02
February	2,374	98	69	84.8	2.70	2.81
March	1,749	78	39	56.4	1.80	2.07
April	1,488	80	32	48.9	1.56	1.74
May	1,388	71	28	44.8	1.43	1.64
June	427.0	27	7.9	14.2	.452	.51
July	251.5	23	5.4	8.11	.258	.30
August	119.5	14.4	2.0	3.85	.123	.14
September	166.3	11.4	2.9	5.54	.176	.20
Water year 1948-49	†13,665.2	†335	2.0	†37.4	†1.19	†16.20
October 1949	158.7	9.7	3.2	5.12	.163	.19
November	192.3	12.5	4.4	6.41	.204	.23
December	388.9	40	4.0	12.5	.398	.46
Calendar year 1949	†12,919.2	†298	2.0	†35.4	1.13	†15.31
January 1950	761.2	37	18.4	24.6	.783	.90
February	1,303	71	25	46.5	1.48	1.54
March	2,753	149	30	88.8	2.83	3.26
April	1,971	98	47	65.7	2.09	2.33
May	1,532	84	30	49.4	1.57	1.81
June	1,320	80	22	44.0	1.40	1.56
July	1,586.7	127	17.7	51.2	1.63	1.88
August	579.8	41	12.5	18.7	.596	.69
September	402.5	20	8.8	13.4	.427	.48
Water year 1949-50	12,949.1	149	3.2	35.5	1.13	15.33

† Revised.

Pequest River at Pequest

Location.--Lat 40°49'43", long 74°58'45", on right bank at Pequest Warren County, 100 ft upstream from Lehigh and Hudson River Railway bridge and 300 ft downstream from Furnace Brook.

Drainage area.--108 sq mi.

Records available.--November 1921 to September 1950.

Gage.--Water-stage recorder. Concrete control since Sept. 29, 1929. Datum of gage is 398.78 ft above mean sea level, datum of 1929. Prior to June 22, 1926, staff gage at site 10 ft upstream at same datum.

Average discharge.--29 years (1921-50), 148 cfs.

Extremes.--1921-50: Maximum discharge, 1,810 cfs Mar. 14, 1936 (gage height, 4.97 ft), from rating curve extended above 1,200 cfs; minimum, 15.0 cfs Sept. 11, 1944 (gage height, 1.04 ft).

Peak discharge (base, 500 cfs).--
1946: May 28 (1 to 6 p.m.) 523 cfs (2.87 ft); June 2-3 (11 p.m. to 5:30 a.m.) 587 cfs (3.00 ft).
1947: Mar. 14-15 (11:30 p.m. to 4 a.m.) 592 (3.01 ft); Apr. 6 (2:30 a.m.) 557 cfs (2.94 ft); May 1 (2 p.m.) 542 cfs (2.91 ft); May 6 (1 to 4 a.m.) 547 cfs (2.92 ft); June 15 (10 a.m.) 532 cfs (2.89 ft).
1948: Mar. 21 (8:30 p.m.) 542 cfs (2.91 ft); Apr. 1 (6:30 a.m.) 527 cfs (2.88 ft); Apr. 15 (9 a.m.) 572 cfs (2.97 ft); May 14 (3:30 a.m.) 690 cfs (3.19 ft).
1949: Dec. 31 (8 a.m.) 854 cfs (3.47 ft); Jan. 6 (7 a.m.) 872 cfs (3.50 ft).
1950: Mar. 23-24 (6 p.m. to 2 a.m.) 457 cfs (2.73 ft), (annual maximum below base).

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	141	99	302	434	164	183	226	101	207	a80	66	65
2	141	95	270	313	148	216	219	95	389	a150	65	58
3	146	99	242	284	115	239	226	89	557	a140	63	55
4	138	99	235	276	101	270	219	86	471	a120	65	52
5	131	95	226	259	120	262	210	89	395	a100	80	50
6	131	91	223	341	141	248	195	89	321	a92	70	50
7	154	87	270	434	242	256	186	87	280	a86	75	48
8	154	87	273	439	180	317	175	97	245	a80	86	48
9	178	86	252	412	159	425	172	93	219	a75	73	47
10	133	86	242	412	146	353	161	86	192	a71	70	47
11	170	103	226	382	135	291	154	82	178	a68	91	47
12	154	146	190	365	129	252	148	97	189	66	76	47
13	144	136	183	341	129	229	141	118	207	66	80	45
14	136	129	192	291	178	216	136	105	201	61	111	44
15	136	146	133	273	195	256	134	156	189	58	84	44
16	134	134	167	204	127	276	136	129	170	56	71	44
17	129	118	154	226	151	248	129	133	154	55	82	44
18	124	113	137	216	131	273	124	317	146	54	151	43
19	122	115	148	195	115	333	120	357	138	52	154	40
20	120	195	141	141	94	262	115	248	129	67	118	37
21	118	172	146	154	101	229	111	207	127	91	91	47
22	113	308	146	183	111	210	107	186	122	150	80	55
23	111	310	144	156	127	195	103	156	113	290	73	50
24	113	239	141	159	119	183	99	136	105	287	68	50
25	118	213	153	172	111	226	99	124	99	198	66	55
26	122	201	385	164	109	239	113	124	91	136	61	54
27	120	192	417	148	109	443	118	386	86	105	56	47
28	111	195	374	141	148	345	115	499	86	89	55	44
29	109	313	325	144	-------	291	107	395	a85	82	54	42
30	107	333	291	144	-------	266	105	298	a82	75	82	48
31	103	-------	386	164	-------	242	-------	245	-------	70	78	-------

a No gage-height record; discharge computed on basis of recorded range in stage and records for station at Huntsville and for stations on nearby streams.
Note.--Backwater from moss Apr. 23 to May 16, Aug. 1-24.

Pequest River at Pequest--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	51	44	34	47	216	71	151	501	256	186	86	54
2	47	43	31	36	175	76	185	471	226	252	80	73
3	42	39	26	45	144	89	276	439	210	204	76	68
4	40	37	31	50	131	93	219	399	198	164	75	58
5	43	36	31	44	97	97	354	425	183	144	75	58
6	50	35	31	47	93	101	537	527	172	131	73	71
7	50	34	32	42	118	107	484	489	178	127	71	66
8	45	37	32	45	103	122	443	457	266	232	71	66
9	48	39	33	43	76	122	399	403	341	239	78	58
10	50	39	33	42	93	131	341	345	284	195	109	55
11	52	37	33	44	99	146	295	302	232	170	87	59
12	58	42	33	44	91	170	276	273	192	151	78	61
13	73	42	35	43	89	207	256	252	172	138	71	55
14	68	40	36	51	91	495	235	239	254	159	68	51
15	55	37	34	61	93	572	226	256	508	173	63	59
16	48	36	30	101	97	513	223	262	378	154	61	78
17	45	36	37	122	95	452	242	242	291	151	103	68
18	44	36	34	107	93	370	226	248	259	144	87	58
19	44	36	31	95	89	291	207	273	239	161	75	52
20	43	35	28	234	63	252	186	306	216	183	70	50
21	40	35	66	365	38	232	186	317	226	138	68	50
22	37	36	95	157	66	216	195	391	207	167	66	61
23	37	37	76	107	75	204	178	357	183	161	63	78
24	36	37	65	136	73	198	167	306	167	131	56	66
25	39	36	61	134	73	280	164	365	164	113	55	58
26	47	36	51	129	76	256	198	471	159	103	63	54
27	61	36	37	175	76	213	183	374	156	97	63	51
28	55	37	51	164	75	195	172	317	166	99	59	48
29	51	37	48	144	-------	180	159	295	161	101	55	47
30	47	35	52	131	-------	172	166	349	204	95	58	47
31	44	-------	37	241	-------	159	-------	291	-------	87	59	-------

Note.--Backwater from moss Oct. 1-8, Oct. 15 to Nov. 29, July 10 to Aug. 4.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	122	107	80	68	345	443	192	266	178	65	48
2	45	84	101	86	66	321	499	180	216	161	65	47
3	44	68	101	89	66	361	443	189	189	144	61	45
4	47	94	103	89	68	341	378	192	175	127	61	44
5	55	189	103	89	66	270	337	192	159	120	68	44
6	56	146	101	89	66	256	313	216	151	134	86	43
7	56	113	103	89	66	273	298	252	154	136	84	44
8	43	238	109	87	68	302	280	357	195	136	71	45
9	40	408	113	89	66	321	270	273	189	122	66	45
10	39	270	103	89	66	353	248	229	167	111	61	47
11	39	204	99	73	65	365	245	198	148	103	59	47
12	39	365	95	86	65	295	353	189	146	97	76	45
13	37	295	87	86	65	284	361	515	156	97	109	43
14	40	232	78	87	84	273	421	662	148	122	93	40
15	43	192	78	82	131	287	562	552	136	105	75	39
16	39	173	144	78	151	412	499	425	131	91	68	37
17	34	161	144	78	178	508	430	448	124	86	61	36
18	36	146	115	78	245	494	365	391	115	91	59	36
19	40	134	97	73	325	508	333	333	159	101	59	36
20	39	124	76	71	403	537	313	291	192	97	63	36
21	39	118	86	71	408	532	298	273	183	93	87	36
22	37	113	86	71	374	527	276	248	167	146	93	35
23	36	127	84	71	310	499	259	232	178	127	87	36
24	34	154	80	70	266	480	245	213	235	118	78	37
25	33	242	61	68	276	439	256	201	337	95	70	35
26	34	183	71	66	313	370	245	195	235	86	65	36
27	37	151	61	68	310	361	229	186	195	78	59	37
28	43	134	91	68	378	480	213	175	213	75	56	35
29	89	124	76	68	378	430	207	167	232	71	54	36
30	78	118	75	68	-------	378	201	291	204	68	51	43
31	136	-------	78	68	-------	337	-------	306	-------	65	50	-------

Pequest River at Pequest--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	33	76	729	298	242	148	141	97	42	39	30
2	56	32	70	695	284	239	154	144	91	40	36	28
3	48	34	65	668	256	229	138	210	87	39	34	27
4	42	40	59	624	262	219	135	207	82	37	35	27
5	40	44	56	624	266	226	127	175	78	40	43	29
6	44	42	55	829	248	256	154	167	78	47	52	32
7	42	52	55	741	276	242	156	262	73	44	42	33
8	39	59	54	*712	310	213	148	207	70	42	36	31
9	39	51	51	684	298	201	144	170	66	37	34	31
10	39	48	50	*635	295	192	131	164	65	37	32	32
11	39	56	48	577	259	210	127	167	63	40	32	30
12	37	52	47	494	229	226	118	148	63	39	35	27
13	36	50	50	386	223	201	115	131	59	42	55	27
14	35	47	51	321	248	183	136	122	58	40	48	29
15	35	45	50	280	266	175	141	120	55	43	39	34
16	34	44	52	259	284	a165	129	113	54	50	34	37
17	34	44	80	248	276	a160	120	111	55	52	33	33
18	39	44	86	235	248	a155	124	109	54	107	33	34
19	44	44	62	229	235	a150	229	101	54	95	34	39
20	43	73	54	219	298	a155	204	132	55	68	32	35
21	42	86	75	204	291	159	172	189	52	81	30	31
22	40	68	63	365	276	167	164	161	50	147	29	29
23	45	76	63	357	345	210	266	226	48	76	28	29
24	50	73	54	374	298	204	256	178	48	56	28	29
25	45	63	50	357	280	175	213	159	47	48	27	28
26	45	58	48	302	273	164	186	136	52	44	26	27
27	44	56	47	284	248	161	175	141	50	42	26	26
28	55	59	47	399	245	151	161	131	47	37	25	26
29	52	70	73	430	-------	141	151	118	43	37	32	29
30	39	86	546	349	-------	134	144	111	42	37	35	37
31	34	-------	835	302	-------	134	-------	103	-------	39	33	-------

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for station at Huntsville.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	47	33	76	101	a130	284	213	242	76	82	59
2	34	42	32	70	122	a125	266	213	302	71	82	56
3	31	37	31	71	164	a110	256	189	242	76	84	55
4	30	39	29	75	131	a105	273	172	252	86	86	59
5	29	37	33	73	113	a105	266	172	242	87	80	56
6	28	35	29	70	103	122	252	170	210	168	75	51
7	28	34	30	97	103	115	229	156	180	183	71	48
8	28	32	29	89	84	173	210	141	161	144	66	47
9	32	32	27	61	176	403	195	131	148	111	63	43
10	30	31	28	97	273	357	186	129	136	115	66	66
11	27	30	29	151	226	341	178	127	134	194	70	75
12	28	30	33	113	204	317	172	122	129	349	68	68
13	30	30	84	95	186	310	167	118	120	337	65	65
14	30	39	99	97	189	295	161	115	120	374	59	71
15	29	43	66	99	266	256	159	109	129	337	56	70
16	28	43	40	91	310	229	151	111	129	284	54	63
17	27	36	44	82	295	210	146	118	127	232	52	56
18	27	34	43	80	266	201	141	138	115	198	52	52
19	26	33	54	80	252	183	138	167	109	170	52	50
20	26	33	59	65	204	172	189	156	109	148	78	50
21	26	32	55	70	134	219	239	141	107	138	91	48
22	26	31	52	68	172	280	198	122	99	124	80	48
23	26	29	55	68	164	425	172	115	93	115	65	50
24	26	29	66	76	164	448	170	257	89	109	59	50
25	25	30	56	91	172	425	172	306	151	124	55	47
26	35	32	52	91	a150	386	180	252	151	118	52	45
27	37	29	166	91	a135	382	175	213	118	107	51	44
28	33	27	175	89	a130	386	178	183	95	97	50	42
29	31	30	124	91	-------	374	172	238	86	97	50	42
30	31	33	93	111	-------	349	178	273	82	95	56	42
31	43	-------	66	107	-------	313	-------	232	-------	87	63	-------

a No gage-height record; discharge computed on basis of weather records and records for station at Huntsville.

Pequest River at Pequest--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	4,111	183	103	133	1.23	1.42
November	4,735	333	86	158	1.46	1.63
December	7,154	417	137	231	2.14	2.46
Calendar year 1945	86,394	1,310	71	237	2.19	29.74
January 1946	7,967	439	141	257	2.38	2.74
February	3,838	242	94	137	1.27	1.32
March	8,274	443	133	267	2.47	2.85
April	4,403	226	99	147	1.36	1.52
May	5,410	499	82	175	1.62	1.86
June	5,973	557	82	199	1.84	2.06
July	3,170	290	52	102	.944	1.09
August	2,495	154	54	80.5	.745	.86
September	1,447	65	37	48.2	.446	.50
Water year 1945-46	58,977	557	37	162	1.50	20.31
October 1946	1,490	73	36	48.1	.445	.51
November	1,122	44	34	37.4	.346	.39
December	1,284	95	26	41.4	.383	.44
Calendar year 1946	46,873	557	26	128	1.19	16.14
January 1947	3,226	355	36	104	.963	1.11
February	2,698	216	38	96.4	.893	.93
March	6,782	572	71	219	2.03	2.34
April	7,529	537	151	251	2.32	2.59
May	10,942	527	239	353	3.27	3.77
June	6,848	508	156	228	2.11	2.36
July	4,755	252	87	153	1.42	1.64
August	2,222	109	55	71.7	.664	.77
September	1,778	78	47	59.3	.549	.61
Water year 1946-47	50,676	572	26	139	1.29	17.46
October 1947	1,459	136	33	47.1	.436	.50
November	5,227	408	68	174	1.61	1.80
December	2,906	144	61	93.7	.868	1.00
Calendar year 1947	56,372	572	33	154	1.43	19.42
January 1948	2,425	89	66	78.2	.724	.84
February	5,391	408	65	186	1.72	1.86
March	11,939	537	256	385	3.56	4.11
April	9,820	562	201	327	3.03	3.38
May	8,763	662	167	283	2.62	3.02
June	5,495	337	115	183	1.69	1.89
July	3,381	178	65	109	1.01	1.16
August	2,160	109	50	69.7	.645	.74
September	1,213	48	35	40.4	.374	.42
Water year 1947-48	60,179	662	33	164	1.52	20.72
October 1948	1,312	56	34	42.3	.392	.45
November	1,629	86	32	54.3	.503	.56
December	3,072	835	47	99.1	.918	1.06
Calendar year 1948	56,600	835	32	155	1.44	19.49
January 1949	13,912	829	204	449	4.16	4.79
February	7,615	345	223	272	2.52	2.62
March	5,839	256	134	188	1.74	2.01
April	4,765	266	115	159	1.47	1.64
May	4,754	282	101	153	1.42	1.64
June	1,836	97	42	61.2	.567	.63
July	1,625	147	37	52.4	.485	.56
August	1,077	55	25	34.7	.321	.37
September	916	39	26	30.5	.282	.32
Water year 1948-49	48,352	835	25	132	1.22	16.65
October 1949	927	43	25	29.9	.277	.32
November	1,019	47	27	34.0	.315	.35
December	1,812	175	27	58.5	.542	.62
Calendar year 1949	46,097	829	25	126	1.17	15.87
January 1950	2,685	151	61	86.6	.802	.92
February	4,989	310	84	178	1.65	1.72
March	8,246	448	105	266	2.46	2.84
April	5,853	284	138	195	1.81	2.02
May	5,299	306	109	171	1.58	1.82
June	4,407	302	82	147	1.36	1.52
July	4,951	374	71	160	1.48	1.70
August	2,033	91	50	65.6	.607	.70
September	1,618	75	42	53.9	.499	.56
Water year 1949-50	43,839	448	25	120	1.11	15.09

Beaver Brook near Belvidere

Location.--Lat 40°50'40", long 75°02'48", on right bank 2,000 ft upstream from mouth and 2 miles east of Belvidere, Warren County.

Drainage area.--36.2 sq mi.

Records available.--May 1922 to September 1950.

Gage.--Water-stage recorder. Datum of gage is 303.36 ft above mean sea level, datum of 1929.

Average discharge.--28 years (1922-50), 51.5 cfs.

Extremes.--1922-50: Maximum discharge, 1,510 cfs Mar. 12, 1936 (gage height, 5.76 ft), from rating curve extended above 450 cfs on basis of slope-area and contracted-opening determinations of peak flow; minimum daily, 1.2 cfs Sept. 7, 8, 11, 1944.

Peak discharge (base, 225 cfs).--
1946: Dec. 26 (11 a.m. to 3:30 p.m.) discharge unknown (4.00 ft, ice jam); June 3 (2 p.m.) 271 cfs (3.20 ft).
1947: Mar. 15 (4:30 to 7 a.m.) 373 cfs (3.53 ft); Apr. 6 (10:30 a.m. to 1:30 p.m.) 274 cfs (3.21 ft); May 1 (9 to 12 p.m.) 240 cfs (3.09 ft); May 6 (10 a.m. to 2 p.m.) 240 cfs (3.09 ft); May 26 (9 to 12 p.m.) 233 cfs (3.06 ft).
1948: Mar. 17 (1 to 5 p.m.) 306 cfs (3.32 ft); Apr. 2 (2 to 6 a.m.) 233 cfs (3.06 ft); June 14 (12 m. to 2 p.m.) 246 cfs (3.11 ft).
1949: Dec. 31 (1:30 p.m.) 661 cfs (4.26 ft); Jan. 6 (3 p.m.) 594 cfs (4.11 ft).
1950: Mar. 9 (6:30 p.m.) 316 cfs (3.35 ft); Mar. 24 (2 to 4 a.m.) 238 cfs (3.08 ft).

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	26	106	154	47	57	96	25	92	28	16.5	17.5
2	48	25	96	b130	42	73	90	23	154	71	15.9	15.4
3	53	26	90	b110	b35	85	92	21	254	40	15.4	13.4
4	45	26	88	b100	b33	103	80	19.7	222	29	13.9	11.1
5	42	25	84	101	b33	100	76	20	180	25	12.9	11.1
6	41	24	82	119	35	90	68	21	144	23	12.5	10.7
7	56	23	95	156	88	88	62	20	119	21	17.7	10.2
8	59	23	92	173	53	108	59	24	103	19.7	23	9.7
9	63	23	82	171	47	126	56	22	87	18.6	17.0	10.2
10	67	21	78	173	44	121	53	19.7	72	17.5	16.5	8.8
11	56	31	74	160	40	104	48	20	65	16.5	17.0	8.4
12	52	48	b60	148	*38	92	45	23	78	15.4	13.9	8.4
13	50	40	b56	137	37	85	43	30	72	15.4	12.9	8.0
14	45	38	57	*116	55	*80	40	24	69	13.9	13.4	7.6
15	43	46	56	104	b50	95	40	48	74	12.9	12.9	7.2
16	40	42	b50	b80	b43	101	40	34	60	12.5	12.5	6.8
17	39	38	b45	b74	39	85	35	39	53	11.6	14.4	6.8
18	37	36	b42	73	34	98	34	103	50	10.2	27	6.5
19	35	37	43	70	b31	124	32	109	48	9.3	33	6.2
20	33	66	46	b54	b29	104	31	82	43	10.6	31	5.9
21	32	54	b45	b52	b28	96	29	73	41	26	21	11.8
22	32	89	b42	b52	b28	90	29	67	38	41	17.5	22
23	32	109	b41	b50	b30	80	29	53	34	84	15.4	13.9
24	32	93	b42	b48	29	74	26	45	32	88	13.9	13.4
25	34	85	b48	48	b28	93	26	40	29	52	12.5	35
26	35	79	b150	48	b27	90	30	47	26	38	12.0	24
27	33	70	160	b40	29	152	32	117	25	29	11.1	21
28	31	74	131	b37	43	142	29	184	25	23	10.7	17.0
29	30	111	121	39	-------	126	28	178	28	20	12.2	15.4
30	29	117	112	40	-------	119	27	140	34	18.0	46	21
31	29	-------	135	51	-------	106	-------	111	-------	17.5	24	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Beaver Brook near Belvidere--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	14.9	11.6	12	119	26	57	198	109	60	23	9.3
2	17.0	14.4	9.5	14	103	28	70	215	92	115	21	12.5
3	14.9	14.4	8	17.0	87	39	103	188	85	78	18.6	14.4
4	14.4	13.9	9	17.5	84	40	77	166	74	62	18.0	11.6
5	12.9	12.5	8.5	15	70	40	130	173	63	50	16.5	12.9
6	12.5	11.1	8.8	17	55	35	251	227	57	43	16.5	22
7	11.6	12.5	8.8	15	60	37	225	208	62	45	15.9	16.5
8	10.7	14.9	8.8	16	55	38	190	181	97	98	16.5	14.4
9	12.0	16.5	8.8	15	45	37	170	158	124	83	17.5	12.5
10	10.7	14.9	8.8	14	45	40	154	137	81	71	14.9	11.6
11	13.4	14.9	8.8	14.4	48	46	130	117	65	59	14.4	12.5
12	16.0	17.0	8.8	13.4	42	54	124	103	56	49	13.9	12.5
13	26	18.6	9.3	13	38	72	109	92	48	48	13.4	10.7
14	21	17.5	8.8	16	40	202	95	86	93	59	12.9	8.8
15	17.5	16.5	7.6	23	41	347	90	88	165	60	10.7	8.8
16	15.9	14.9	7.0	35	41	271	88	78	148	51	11.6	14.4
17	14.4	14.4	*6.8	40	40	210	105	70	113	48	20	13.4
18	14.4	14.4	6.8	39	*39	172	85	80	97	47	18.6	10.7
19	15.4	14.4	6.5	38	36	141	75	90	88	48	16.5	9.3
20	13.9	14.9	6	86	24	122	70	105	72	58	17.0	8.8
21	12.9	14.9	17	165	25	109	71	101	70	45	19.2	8.4
22	13.9	16.5	33	90	28	99	72	135	57	49	16.5	12.0
23	12.9	17.5	27	80	32	92	62	119	51	50	14.9	16.5
24	11.1	14.9	25	70	28	88	57	101	48	40	12.5	12.9
25	11.1	14.9	23	70	29	111	56	148	47	35	11.1	11.6
26	18.4	15.9	21	80	30	103	71	210	45	32	11.6	10.2
27	24	16.5	15	90	30	85	59	203	41	30	12.5	8.8
28	18.6	15.4	17.0	90	28	77	56	177	41	40	12.5	8.0
29	17.5	14.4	16.5	80	-------	71	50	156	61	35	11.1	7.6
30	16.5	12.9	17	75	-------	68	59	168	84	26	11.1	7.6
31	14.4	-------	13	130	-------	60	-------	139	-------	24	11.1	-------

* Winter discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Dec. 2-5, 16, 19-21, 27, 30, 31, Jan. 1, 2, 5-10, 13, 14, Feb. 20 to Mar. 1. No gage-height record Jan. 21-31, Feb. 5-15, July 27-29; discharge computed on basis of recorded range in stage and records for Flat Brook near Flatbrookville and Paulins Kill at Blairstown. Backwater from log May 27 to June 11. Backwater from moss July 25 to Sept. 11.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.8	30	39	27	17	173	184	49	80	35	14.9	6.2
2	6.5	20	38	33	18	175	217	47	62	31	9.7	5.9
3	6.2	16.5	39	33	19	175	188	51	52	27	10.7	5.7
4	5.9	22	40	31	17	*166	165	52	49	23	9.7	5.7
5	5.9	41	39	32	16	139	148	54	45	23	17.6	5.4
6	5.7	31	39	32	16	135	133	59	43	28	36	5.2
7	5.7	25	39	31	15	128	122	76	44	29	21	4.9
8	5.7	62	42	27	15	137	109	107	56	23	15.4	6.8
9	5.7	119	41	25	15	137	97	75	45	21	13.4	6.5
10	5.7	74	36	24	14	152	83	63	41	19.2	12.5	6.5
11	5.4	57	36	23	*14	170	81	56	38	15.9	10.2	6.5
12	5.4	118	a33	23	15	154	133	52	37	16.5	13.4	5.9
13	4.9	115	a31	25	17	143	130	156	38	17.0	21	5.4
14	5.4	88	a28	25	45	135	145	235	38	32	16.5	5.4
15	5.2	72	a38	21	100	141	194	220	34	25	12.0	4.9
16	5.2	64	a81	23	95	175	186	186	33	18.0	11.6	4.5
17	5.2	57	a52	25	90	291	172	186	30	17.0	12.0	4.5
18	5.2	48	40	24	103	274	150	168	25	16.5	9.7	4.5
19	5.7	45	34	19	125	246	130	143	43	21	10.7	4.3
20	5.4	41	37	21	145	243	117	117	49	19.2	10.7	4.1
21	5.4	38	43	24	170	215	107	107	41	16.5	22	4.7
22	5.2	36	27	25	160	192	95	95	34	34	19.2	4.3
23	4.9	42	26	24	160	175	85	85	40	26	15.9	4.1
24	4.9	49	27	19	145	172	78	74	56	25	12.9	3.9
25	4.7	81	26	20	135	154	83	68	86	18.0	12.0	3.9
26	4.7	62	28	19	133	130	77	64	50	17.0	9.7	3.7
27	4.3	52	30	21	130	139	67	58	45	14.9	9.3	3.5
28	5.4	48	28	20	154	192	60	53	52	13.9	8.4	3.7
29	19.7	46	26	20	173	175	57	49	47	12.5	6.8	3.7
30	15.9	41	24	19	-------	158	53	129	39	11.6	6.5	4.4
31	34	-------	24	18	-------	141	-------	124	-------	11.1	6.8	-------

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for station on nearby streams.

Note.--Stage-discharge relation affected by ice Dec. 25-27, Dec. 29 to Jan. 8, Jan. 11 to Feb. 20 (no gage-height record Jan. 4-8).

Beaver Brook near Belvidere--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.5	4.1	19.2	428	128	88	43	43	35	8.8	9.3	5.4
2	6.5	4.1	16.5	319	122	81	42	51	34	8.4	8.8	4.9
3	5.2	4.1	13.9	225	109	77	37	85	30	7.6	8.8	4.5
4	4.3	5.7	12.9	177	101	71	37	70	28	7.2	9.3	4.1
5	4.9	7.2	11.6	182	101	72	34	57	25	7.2	14.4	4.3
6	5.4	6.5	10.2	482	88	72	42	51	26	10.8	12.0	5.4
7	4.9	10.3	12.9	458	97	68	41	85	24	9.3	9.3	5.4
8	5.2	11.1	12.0	337	105	58	38	64	21	8.0	8.0	4.9
9	4.9	8.8	8.8	254	97	57	37	56	19.2	7.2	7.6	4.5
10	4.5	8.4	8.0	201	97	54	32	57	18.6	6.8	6.5	4.3
11	4.5	14.9	7.6	172	86	63	33	53	18.0	7.6	6.2	4.1
12	4.5	12.0	7.2	148	75	63	31	47	17.0	7.2	6.8	3.9
13	4.5	10.7	8.8	128	75	53	29	43	15.9	8.0	10.2	3.7
14	4.5	9.7	9.7	111	85	50	39	40	16.5	8.0	9.3	4.1
15	4.3	7.2	9.3	93	90	48	37	37	14.4	7.2	7.6	5.2
16	4.3	7.6	11.1	86	95	44	34	37	13.9	9.7	6.8	5.4
17	4.1	8.0	19.2	81	90	43	29	34	13.4	11.1	7.2	4.9
18	4.3	7.6	21	74	80	42	36	31	13.4	10	7.2	4.7
19	4.9	8.0	13.9	71	77	42	75	31	13.4	31	7.2	6.5
20	4.7	15.0	b14	67	105	39	56	52	13.4	13.6	6.5	5.7
21	4.7	17.0	b18	60	99	44	48	74	12.0	38	5.9	4.7
22	4.5	12.9	b15	120	93	47	47	51	11.1	97	5.4	4.3
23	4.3	20	b14	117	126	58	88	103	10.2	39	5.2	4.7
24	4.3	17.5	b13	126	107	54	80	72	9.3	24	5.2	4.9
25	3.9	14.4	b12	133	103	45	68	67	13.4	19.2	4.7	4.7
26	4.5	12.5	b11	115	101	44	62	57	18.0	15.9	4.5	4.1
27	4.5	12.9	b10	111	88	42	58	59	12.9	13.9	4.5	4.3
28	4.3	12.5	b10	152	90	43	51	51	11.6	13.4	4.3	4.1
29	4.3	17.3	b11	168	-------	39	48	44	9.7	12.5	5.9	4.5
30	4.3	25	b80	145	-------	37	44	45	9.3	11.1	6.2	6.2
31	4.3	-------	609	126	-------	37	-------	39	-------	11.1	5.4	-------

b Stage-discharge relation affected by ice.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.2	13.9	*5.9	b25	41	56	128	57	108	18.2	19.7	8.7
2	5.0	10.1	5.9	b24	54	56	119	56	175	16.7	19.7	8.2
3	4.3	8.2	5.6	b25	68	b48	113	50	177	20	20	8.7
4	4.3	8.7	b5.2	b27	57	b43	122	48	175	25	22	10.1
5	4.1	8.7	5.0	b29	53	43	107	48	172	25	19.2	9.2
6	4.3	7.4	b5.0	*30	51	56	95	47	137	60	17.7	8.2
7	4.1	6.2	b5.0	44	51	50	81	43	109	43	16.3	7.4
8	4.3	6.6	b4.8	37	b40	79	75	39	88	33	14.8	7.0
9	4.3	5.9	4.5	30	74	242	68	37	75	26	13.9	6.6
10	4.1	5.3	4.3	45	115	208	64	36	67	32	15.8	24
11	3.9	5.0	4.6	70	103	173	62	36	64	71	15.8	25
12	3.7	4.8	5.3	50	103	152	59	33	54	135	14.8	19.7
13	3.9	4.8	25	45	101	*150	56	32	49	119	13.9	16.7
14	3.9	6.2	30	48	103	139	52	29	53	145	12.6	17.7
15	4.1	10.1	20	43	143	115	49	29	62	137	12.6	16.3
16	4.1	8.2	b16	40	177	103	46	32	53	95	11.8	13.9
17	4.1	6.6	b14	35	175	92	45	30	48	80	11.3	12.2
18	3.9	6.2	11.8	36	163	86	44	36	42	65	10.9	10.9
19	3.7	5.9	16.7	33	152	72	42	48	39	54	10.9	10.1
20	3.7	5.6	*19.7	28	130	70	52	40	40	48	12.6	9.7
21	3.5	5.0	17.7	31	b119	105	54	34	38	44	13.5	9.7
22	3.5	5.2	15.8	29	93	130	47	32	34	38	11.8	9.7
23	3.5	4.8	17.2	30	90	181	41	31	29	34	10.9	9.7
24	3.5	4.8	22	34	88	222	44	103	29	32	10.5	9.7
25	3.4	5.0	17.0	37	92	190	46	115	42	41	10.1	8.7
26	6.3	5.3	14.4	*36	b70	173	48	83	32	34	9.7	8.2
27	9.2	b5.0	72	35	b60	170	45	75	27	31	9.2	7.8
28	6.2	4.6	75	35	b58	172	46	64	23	27	8.2	7.8
29	5.3	5.1	53	34	-------	168	43	97	21	25	8.2	7.8
30	5.3	6.0	43	44	-------	160	45	105	21	22	8.2	7.4
31	9.3	-------	b30	41	-------	141	-------	85	-------	20	8.2	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Nov. 22-25, 28-30, Dec. 9-15, Jan. 9-29; discharge computed on basis of recorded range in stage, weather records, and records for Pequest River at Pequest and stations on other nearby streams.

Beaver Brook near Belvidere--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	1,299	67	29	41.9	1.16	1.33
November	1,545	117	21	51.5	1.42	1.59
December	2,449	160	41	79.0	2.18	2.52
Calendar year 1945	31,390	715	21	86.0	2.38	32.26
January 1946	2,908	173	37	93.8	2.59	2.99
February	1,095	88	27	39.1	1.08	1.12
March	3,087	152	57	99.6	2.75	3.17
April	1,405	96	26	46.8	1.29	1.44
May	1,782.4	184	19.7	57.5	1.59	1.83
June	2,351	254	25	78.4	2.17	2.42
July	857.6	88	9.3	27.7	.765	.88
August	545.6	46	10.7	17.6	.486	.56
September	384.4	35	5.9	12.8	.354	.39
Water year 1945-46	19,709.0	254	5.9	54.0	1.49	20.24
October 1946	478.9	26	10.7	15.4	.425	.49
November	451.3	18.6	11.1	15.0	.414	.46
December	391.5	33	6	12.6	.348	.40
Calendar year 1946	15,737.7	254	5.9	43.1	1.19	16.15
January 1947	1,490.3	165	12	48.1	1.33	1.53
February	1,342	119	24	47.9	1.32	1.38
March	2,960	347	26	95.5	2.64	3.04
April	3,011	251	50	100	2.76	3.09
May	4,417	227	70	142	3.92	4.54
June	2,334	165	41	77.8	2.15	2.40
July	1,628	115	24	52.8	1.46	1.68
August	471.5	23	10.7	15.2	.420	.48
September	351.2	22	7.6	11.7	.323	.36
Water year 1946-47	19,336.7	347	6	53.0	1.46	19.85
October 1947	221.9	34	4.3	7.16	.198	.23
November	1,640.5	119	16.5	54.7	1.51	1.69
December	1,111	81	24	35.8	.989	1.14
Calendar year 1947	20,988.4	347	4.3	57.5	1.59	21.56
January 1948	753	33	18	24.3	.671	.77
February	2,271	173	14	78.3	2.16	2.33
March	5,332	291	128	172	4.75	5.48
April	3,646	217	53	122	3.37	3.75
May	3,058	235	47	98.6	2.72	3.14
June	1,372	86	25	45.7	1.26	1.41
July	657.8	35	11.1	21.2	.586	.68
August	418.2	36	6.5	13.5	.373	.43
September	148.7	6.8	3.5	4.96	.137	.15
Water year 1947-48	20,630.1	291	3.5	56.4	1.56	21.20
October 1948	144.8	6.5	3.9	4.67	.129	.15
November	333.0	25	4.1	11.1	.307	.34
December	1,050.8	609	7.2	33.9	.936	1.08
Calendar year 1948	19,185.3	609	3.5	52.4	1.45	19.71
January 1949	5,467	482	60	176	4.86	5.62
February	2,710	128	75	96.8	2.67	2.78
March	1,675	88	37	54.0	1.49	1.72
April	1,376	88	29	45.9	1.27	1.41
May	1,686	103	31	54.4	1.50	1.73
June	527.6	35	9.3	17.6	.486	.54
July	524.8	97	6.8	16.9	.467	.54
August	226.2	14.4	4.3	7.30	.202	.23
September	142.4	6.5	3.7	4.75	.131	.15
Water year 1948-49	15,863.6	609	3.7	43.5	1.20	16.29
October 1949	143.0	9.3	3.4	4.61	.127	.15
November	195.2	13.9	4.6	6.51	.180	.20
December	591.4	75	4.3	19.1	.528	.61
Calendar year 1949	15,264.6	482	3.4	41.8	1.15	15.68
January 1950	1,130	70	24	36.5	1.01	1.16
February	2,624	177	40	93.7	2.59	2.70
March	3,845	242	48	124	3.43	3.95
April	1,938	128	41	64.6	1.78	1.99
May	1,650	115	29	52.6	1.45	1.67
June	2,083	177	21	69.4	1.92	2.14
July	1,595.9	145	16.7	51.5	1.42	1.64
August	414.8	22	8.2	13.4	.370	.43
September	336.8	25	6.6	11.2	.309	.35
Water year 1949-50	16,527.1	242	3.4	45.3	1.25	16.99

Delaware River at Belvidere

Location.--Lat 40°49'36", long 75°05'02", on left bank at Belvidere, Warren County, 500 ft downstream from Pequest River.

Drainage area.--4,535 sq mi.

Records available.--October 1922 to September 1950.

Gage.--Water-stage recorder. Datum of gage is 226.43 ft above mean sea level, datum of 1929. Prior to Jan. 1, 1929, staff gage at site 200 ft upstream at same datum.

Average discharge.--28 years (1922-50), 8,121 cfs (adjusted).

Extremes.--1922-50: Maximum discharge, 179,000 cfs Mar. 19, 1936 (gage height, 25.0 ft); minimum, 609 cfs Sept. 28, 29, 1943 (gage height, 2.11 ft).

Maximum discharge known, 220,000 cfs Oct. 10, 1903 (gage height, 28.6 ft, from floodmark), from rating curve extended above 170,000 cfs.

Peak discharge (base, 40,000 cfs).--
1946: Mar. 10 (9 a.m.) 57,800 cfs (13.45 ft); May 29 (4:30 a.m.) 68,500 cfs (14.62 ft).
1947: Mar. 15 (7 p.m.) 56,200 cfs (13.27 ft); Apr. 6 (3 p.m.) 91,200 cfs (16.93 ft); July 23 (4 a.m.) 40,900 cfs (11.42 ft).
1948: Mar. 18 (3 a.m.) 67,700 cfs (14.54 ft); Mar. 23 (7:30 a.m.) 119,800 cfs (19.68 ft); Apr. 15 (6:30 a.m.) 56,800 cfs (13.35 ft).
1949: Dec. 31 (6:30 p.m.) 117,700 cfs (19.48 ft); Jan. 7 (8 a.m.) 78,500 cfs (15.66 ft).
1950: Mar. 10 (5 a.m.) 42,100 cfs (11.58 ft); Mar. 29 (9 p.m.) 70,200 cfs (14.80 ft); Apr. 5 (11 p.m.) 76,300 cfs (15.43 ft).

Remarks.--Flow regulated by Lake Wallenpaupack and by Toronto, Cliff Lake, and Swinging Bridge Reservoirs (combined capacity, 12,300,000,000 cubic feet).

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,100	6,070	14,200	11,600	5,950	5,890	7,050	5,290	19,000	4,820	2,640	2,300
2	6,570	5,770	12,000	9,660	5,510	9,540	7,380	4,820	19,600	6,010	4,470	1,860
3	7,760	5,800	10,500	9,050	5,060	11,200	7,720	4,600	34,800	7,550	4,170	1,400
4	12,500	11,000	10,700	8,750	4,300	11,200	7,480	4,300	31,100	7,580	3,520	1,240
5	10,300	15,600	10,300	8,790	3,970	12,900	7,380	3,920	22,600	5,450	2,860	2,000
6	8,830	12,600	10,100	9,240	5,230	17,800	7,020	3,750	18,600	4,520	2,840	2,130
7	8,610	10,500	10,400	17,400	5,950	24,200	6,190	4,420	15,400	3,920	3,160	2,130
8	10,300	9,460	12,200	35,700	5,480	39,400	5,800	4,920	13,600	3,470	4,630	2,040
9	12,600	8,470	12,700	31,400	5,480	42,300	5,920	5,060	11,400	3,340	5,740	1,750
10	18,900	7,960	11,600	25,900	4,150	42,200	6,220	5,680	10,000	3,470	4,470	1,520
11	20,400	8,430	11,200	*24,400	4,580	32,100	6,260	5,310	9,580	3,340	3,630	2,230
12	15,800	10,600	9,880	20,100	4,820	22,700	5,980	4,750	9,160	3,590	2,820	2,180
13	13,700	14,200	8,320	17,260	4,710	17,800	5,740	5,340	10,000	3,360	3,360	2,130
14	11,600	13,200	8,070	14,400	5,290	15,400	4,900	6,540	10,100	3,080	3,590	2,060
15	10,100	15,600	7,900	12,800	7,050	15,200	4,730	7,150	8,570	2,450	3,270	1,820
16	10,000	16,000	7,150	11,700	8,430	20,600	5,310	8,540	6,700	2,490	3,010	1,180
17	9,540	13,300	5,800	9,430	7,690	20,800	5,800	8,830	5,660	2,540	2,800	1,060
18	8,790	11,700	5,830	9,050	6,220	17,600	6,100	9,930	6,040	2,560	3,090	1,870
19	8,000	11,200	5,800	8,650	5,120	17,000	5,540	13,200	6,290	2,360	2,880	2,030
20	7,580	13,400	5,680	7,410	4,120	14,400	5,030	16,600	6,760	2,410	2,860	1,900
21	6,830	16,600	6,040	5,980	4,730	12,900	4,650	14,900	6,130	2,800	2,880	2,160
22	6,190	18,200	6,220	6,470	4,870	11,700	4,420	25,700	5,630	2,640	2,780	3,430
23	6,570	23,900	5,830	6,410	4,500	10,600	4,650	24,800	4,650	4,870	2,720	3,400
24	6,570	22,100	5,740	6,830	4,420	9,270	4,630	17,400	4,100	8,390	2,500	3,750
25	6,990	17,400	5,510	7,020	4,000	8,680	4,450	13,400	4,240	8,470	2,140	6,410
26	7,310	14,500	9,050	7,050	4,040	9,200	4,600	12,300	4,100	6,410	1,720	8,320
27	7,450	13,600	12,400	6,350	4,820	10,800	5,010	21,100	3,820	4,650	1,760	6,160
28	6,990	12,300	13,000	5,510	5,740	10,800	4,680	50,100	3,820	3,610	2,110	4,300
29	6,510	14,100	12,800	5,370	-------	9,770	4,550	62,200	4,220	2,740	2,140	3,290
30	6,510	16,100	11,200	5,800	-------	9,200	5,120	38,400	4,520	2,620	2,700	3,560
31	6,220	-------	10,700	5,950	-------	7,900	-------	25,300	-------	2,580	2,700	-------

* Winter discharge measurement made on this day.

Delaware River at Belvidere--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,150	3,760	2,880	3,980	30,400	4,750	10,600	14,800	13,300	4,510	7,790	2,590
2	4,360	3,340	2,630	3,130	22,900	4,120	10,300	22,200	11,200	5,770	7,720	3,070
3	4,440	3,110	2,570	3,480	16,600	3,760	15,000	21,400	11,200	5,280	6,130	3,500
4	4,050	2,900	2,710	4,670	14,000	3,880	19,500	19,200	11,100	4,830	4,940	5,460
5	3,710	3,130	2,610	4,310	13,000	4,590	23,100	18,000	10,600	3,900	5,190	5,420
6	3,070	3,290	2,570	5,600	9,200	4,890	79,100	26,900	9,500	3,450	5,110	4,780
7	2,630	3,110	2,610	4,940	8,360	4,460	66,400	31,500	8,940	3,320	4,860	3,680
8	2,650	3,380	2,590	5,250	8,250	4,330	44,800	30,000	9,460	8,390	4,780	3,090
9	3,250	3,500	2,260	4,940	7,450	3,920	29,800	27,400	10,200	33,500	4,720	3,180
10	3,180	3,130	2,490	4,360	6,950	3,830	23,800	21,600	9,930	21,300	5,360	3,570
11	3,160	2,790	2,510	4,180	7,180	4,050	19,700	17,300	8,570	14,600	8,420	3,290
12	3,050	3,050	2,510	4,100	6,950	4,330	17,200	14,400	7,650	10,900	6,190	3,200
13	3,610	3,590	2,710	a3,700	6,410	4,570	17,300	13,100	6,830	8,980	5,420	3,180
14	3,450	3,730	2,790	a3,600	6,100	12,200	16,200	12,000	7,080	7,280	5,860	2,730
15	4,050	3,610	2,900	a4,500	6,470	35,700	14,600	14,200	8,900	7,720	5,250	2,110
16	3,900	3,110	3,130	5,280	5,980	46,500	12,800	14,200	12,100	7,480	5,250	2,590
17	3,290	2,750	2,980	6,350	5,450	30,400	15,200	11,900	12,800	16,600	5,610	3,160
18	3,220	2,870	2,880	9,200	5,630	21,900	12,000	10,500	10,000	22,300	17,000	2,710
19	3,640	2,410	2,850	8,360	5,680	16,600	10,700	11,200	9,240	17,900	10,400	2,770
20	3,900	3,000	2,240	8,680	5,080	13,800	9,660	13,100	8,180	15,400	7,960	2,730
21	4,150	2,530	2,710	14,300	3,730	12,600	9,460	14,600	7,880	12,400	6,990	2,550
22	4,000	2,590	3,710	23,800	4,200	12,200	12,800	17,900	6,850	13,400	6,100	2,050
23	3,760	2,940	3,360	13,600	3,800	12,400	18,700	33,500	5,800	26,800	5,450	2,690
24	3,200	2,450	4,620	11,100	3,640	11,400	12,000	26,700	5,770	22,900	4,180	3,200
25	2,980	2,310	4,360	12,200	4,330	17,100	11,100	21,400	5,860	15,800	3,640	3,070
26	3,200	2,550	3,590	13,500	4,970	34,500	11,600	32,900	5,950	12,500	4,150	2,750
27	3,480	2,830	2,920	15,100	5,220	26,500	11,200	31,700	6,100	10,500	4,440	2,430
28	4,020	2,620	3,000	14,900	5,020	19,300	10,800	23,300	6,040	8,860	4,360	1,950
29	4,670	2,980	3,200	14,000	-------	15,300	11,200	18,600	5,220	13,000	3,900	1,650
30	4,100	3,290	2,980	12,600	-------	13,300	10,600	17,400	4,490	10,900	3,850	1,620
31	3,900	-------	3,110	16,400	-------	11,700	-------	15,900	-------	8,500	3,180	-------

a No gage-height record; discharge computed on basis of records for station at Riegelsville.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,220	4,310	5,140	4,830	2,800	8,830	17,600	8,750	10,300	9,970	2,430	2,160
2	2,020	3,830	4,890	4,150	2,900	8,390	22,600	7,820	9,540	8,180	1,880	2,040
3	2,020	3,250	4,830	3,980	2,810	8,110	21,500	7,380	8,500	6,860	1,900	2,000
4	2,110	3,380	5,160	3,760	3,000	7,860	17,900	7,480	7,760	5,570	2,550	1,970
5	2,020	4,640	5,510	4,080	3,000	7,380	14,800	7,220	6,670	4,890	2,750	1,810
6	1,510	4,780	6,040	4,440	3,100	6,410	13,500	8,320	5,680	4,670	4,910	1,220
7	1,390	4,670	5,110	4,970	3,000	6,190	12,800	8,980	5,710	4,800	5,660	1,140
8	1,830	6,900	5,020	4,750	3,100	6,220	12,100	11,600	8,290	5,390	4,410	1,090
9	2,220	20,400	5,800	4,940	2,800	6,730	11,400	11,600	8,650	5,740	3,900	1,950
10	2,260	22,700	6,510	4,620	2,700	7,180	10,300	10,100	8,320	4,830	3,220	2,200
11	2,240	14,500	6,540	4,200	2,900	7,690	9,390	9,010	7,250	3,800	2,810	2,160
12	2,000	16,300	5,860	3,500	3,250	7,380	11,300	8,500	6,990	3,450	3,340	2,020
13	1,300	27,100	5,190	3,660	3,270	6,470	22,000	12,300	6,260	3,780	4,180	1,720
14	1,230	20,800	4,180	4,540	3,430	5,830	28,800	15,600	6,350	6,190	3,800	1,090
15	2,000	15,200	3,730	3,700	4,590	5,950	46,500	17,000	6,630	6,040	2,880	1,800
16	1,830	12,400	6,020	3,500	4,050	8,870	45,300	16,400	6,630	5,160	2,390	1,980
17	1,970	10,300	7,960	4,000	5,980	38,400	30,900	18,600	5,740	4,280	2,200	1,860
18	2,110	9,460	8,340	4,080	9,580	60,000	24,700	24,300	5,110	3,430	2,570	1,970
19	2,000	8,180	7,380	3,050	10,900	42,700	19,300	22,500	5,160	3,070	2,610	1,690
20	1,360	7,150	6,040	2,650	13,700	47,100	17,000	18,900	7,120	3,480	2,510	1,140
21	1,180	6,540	4,780	4,180	18,000	77,900	15,300	15,800	7,120	3,710	3,070	1,220
22	1,850	6,010	4,620	4,200	17,500	77,800	16,800	14,100	6,220	3,800	2,980	1,980
23	1,780	5,800	5,480	3,710	13,900	110,000	15,000	12,300	6,290	3,900	2,570	2,090
24	1,830	5,830	6,160	3,000	11,300	62,700	12,800	11,600	7,280	3,730	2,690	1,980
25	1,860	8,070	4,720	2,700	10,200	42,300	11,400	19,400	9,810	3,380	2,900	1,920
26	1,850	9,050	3,590	3,000	10,000	31,580	11,700	22,400	10,800	3,800	2,810	1,850
27	1,160	8,750	3,340	2,900	10,000	24,900	11,800	17,700	10,700	3,590	2,570	1,090
28	976	7,150	4,000	2,900	10,100	24,100	10,500	14,200	10,900	3,450	2,330	966
29	2,070	6,600	4,230	3,300	9,660	25,100	9,620	12,300	12,900	3,200	2,040	1,610
30	2,960	5,950	4,230	3,200	-------	19,600	9,160	11,800	11,800	2,790	1,860	1,830
31	3,900	-------	5,140	3,000	-------	16,400	-------	11,400	-------	2,710	1,560	-------

Note.--Stage-discharge relation affected by ice Jan. 15-17, Jan. 24 to Feb. 1, Feb. 4-11.

Delaware River at Belvidere--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,160	1,090	5,050	82,400	9,970	12,500	7,960	8,540	7,410	2,090	1,140	3,020
2	2,090	976	4,640	41,800	9,270	11,300	7,650	8,500	6,860	1,900	1,320	2,450
3	1,980	1,210	4,330	27,100	8,650	10,500	6,730	10,700	6,350	1,360	1,850	1,720
4	1,170	1,450	4,360	20,300	8,470	9,540	6,040	12,000	5,800	1,350	2,040	1,360
5	1,040	2,240	3,780	17,700	8,470	7,790	6,070	12,200	5,160	1,220	2,240	1,190
6	1,920	2,070	3,450	41,500	7,960	7,900	6,220	10,700	4,780	1,670	1,920	1,090
7	2,140	2,810	3,880	71,400	7,280	12,300	7,410	15,100	4,620	2,000	1,450	987
8	2,020	3,410	5,220	42,800	8,000	14,100	8,680	16,500	4,310	2,140	1,020	1,090
9	2,110	7,280	5,250	30,000	7,790	11,400	8,860	13,100	3,800	1,810	858	1,450
10	1,950	5,710	4,670	23,000	7,650	10,200	8,540	11,400	3,590	1,400	1,330	1,230
11	1,140	4,780	4,250	19,600	7,860	10,700	7,650	10,500	3,500	1,300	1,480	858
12	1,120	3,980	3,830	17,400	6,510	10,600	7,520	9,810	3,090	1,400	1,510	777
13	2,020	3,710	3,590	15,100	6,010	9,620	6,790	8,210	2,650	1,970	1,510	727
14	2,040	3,200	3,880	13,200	5,920	8,750	7,520	7,450	2,830	2,070	1,210	1,090
15	2,000	2,630	4,310	11,900	8,430	8,570	9,660	6,570	3,320	1,750	976	1,650
16	1,950	2,570	5,050	9,810	23,500	8,680	9,620	6,010	3,070	2,200	956	1,460
17	1,380	2,630	4,970	9,050	32,600	8,110	8,290	6,100	3,020	2,160	1,510	1,480
18	1,080	2,510	4,850	9,160	22,800	7,550	7,480	5,800	2,920	2,140	1,480	1,230
19	1,190	2,450	4,720	9,540	17,200	7,050	14,600	5,570	2,770	2,450	1,220	999
20	2,070	3,680	4,100	9,700	15,800	5,770	21,100	6,350	2,240	2,450	1,390	821
21	2,630	5,890	3,780	10,100	17,000	5,220	16,500	15,200	2,180	2,330	896	1,200
22	2,470	8,360	3,980	10,700	16,400	5,890	13,600	16,100	2,710	2,410	812	1,330
23	1,800	7,650	4,120	9,970	15,600	6,790	13,900	13,900	2,650	2,290	702	1,060
24	1,570	6,830	4,410	9,810	15,900	7,760	17,400	14,400	2,290	1,980	867	1,690
25	1,300	6,730	3,660	11,100	14,400	9,850	18,500	13,100	2,350	1,620	1,060	1,360
26	1,320	5,540	b2,600	12,200	15,100	9,810	15,200	13,300	2,240	1,280	1,220	1,080
27	1,970	5,000	b1,900	12,100	15,000	8,790	13,200	12,900	2,160	1,810	1,130	1,210
28	1,880	4,540	2,180	11,700	12,600	8,470	12,200	11,400	2,000	2,000	906	1,350
29	1,690	4,890	3,020	13,100	-------	8,860	10,900	9,700	2,140	1,880	1,020	1,980
30	1,540	5,510	14,300	12,600	-------	8,320	9,270	8,540	2,040	1,860	966	1,810
31	1,230	-------	99,300	10,700	-------	7,380	-------	7,620	-------	1,390	1,800	-------

b Stage-discharge relation affected by ice.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,140	1,690	3,220	8,110	8,540	5,920	32,400	9,540	10,700	4,970	3,660	2,710
2	2,220	1,980	3,430	7,820	7,580	5,860	27,600	12,600	13,600	3,950	4,280	2,770
3	2,110	2,330	3,610	7,450	7,720	4,700	27,100	12,600	12,000	3,590	5,280	4,350
4	1,920	2,330	3,110	7,720	7,220	4,720	36,600	10,900	12,100	3,780	5,250	4,890
5	1,610	2,390	2,770	8,140	6,410	4,510	64,000	10,300	13,400	3,710	4,860	3,730
6	1,670	2,710	2,410	8,290	5,800	4,780	67,200	13,000	12,900	4,890	4,380	3,410
7	1,720	2,730	2,900	12,600	6,190	5,050	41,800	11,700	10,700	5,220	3,570	2,980
8	1,850	2,470	2,570	21,900	6,190	6,130	28,400	10,100	9,010	4,860	3,570	2,650
9	1,540	2,370	2,200	16,100	5,950	17,200	21,900	9,460	8,000	3,850	3,540	2,350
10	1,330	2,180	1,970	13,500	7,620	36,000	18,200	8,610	7,220	3,480	3,380	2,750
11	1,260	2,050	2,200	18,400	9,620	25,600	15,900	8,900	6,890	5,050	3,250	3,500
12	1,670	2,000	2,050	20,600	10,200	18,600	14,500	9,010	7,050	7,180	3,070	2,950
13	1,930	f1,980	4,840	15,000	9,200	17,200	13,800	7,960	7,350	7,620	2,570	4,590
14	1,480	f2,350	34,700	13,100	9,540	15,400	12,800	6,600	6,510	8,860	1,880	4,460
15	1,320	4,540	23,100	13,600	9,660	13,000	11,700	6,130	7,690	8,000	1,970	4,250
16	1,080	6,630	14,200	11,700	10,200	11,400	10,200	6,990	8,570	6,570	2,430	3,920
17	1,080	5,450	9,930	10,700	10,700	10,300	9,270	6,790	7,720	5,390	2,280	3,430
18	999	4,670	8,040	9,930	10,400	9,930	9,430	7,380	6,700	5,360	2,310	2,650
19	1,540	4,460	7,720	9,090	8,940	9,050	9,240	9,890	7,410	5,140	2,530	2,770
20	1,440	3,880	8,210	7,690	8,000	8,110	9,310	13,000	7,690	5,000	4,360	3,000
21	1,210	3,640	8,210	6,470	7,250	9,220	13,600	12,400	6,950	4,940	4,620	2,900
22	1,070	3,900	7,450	5,740	6,380	11,300	17,400	10,900	6,950	5,890	6,540	2,690
23	1,020	4,180	6,950	5,660	5,480	14,000	13,300	9,620	6,440	4,590	4,890	2,850
24	999	3,660	9,160	6,410	6,830	18,800	11,700	10,900	5,770	3,830	3,760	2,610
25	886	3,160	11,000	7,080	7,250	17,600	12,000	12,500	5,360	4,280	3,430	2,050
26	1,210	2,830	8,720	8,430	6,220	15,300	10,900	11,900	6,860	5,300	3,000	2,110
27	1,540	3,200	9,010	8,750	5,140	15,000	10,900	11,100	7,720	5,830	2,570	2,810
28	1,510	2,960	15,300	8,980	5,280	18,900	10,600	9,200	6,220	4,800	2,020	2,590
29	1,730	3,050	15,400	7,690	-------	52,800	9,500	9,310	5,510	4,230	2,200	2,330
30	1,670	3,450	12,600	7,180	-------	60,500	8,570	11,800	5,220	3,450	2,980	1,930
31	1,690	-------	9,810	8,610	-------	41,400	-------	10,500	-------	3,320	2,880	-------

f Based on partly estimated gage-height record.

Delaware River at Belvidere--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	292,120	20,400	6,100	9,423	9,155	2.02	2.33
November	389,660	23,900	5,770	12,990	13,070	2.88	3.22
December	288,830	14,200	5,510	9,317	9,015	1.99	2.29
Calendar year 1945	4,503,800	62,700	3,500	12,340	12,450	2.75	37.29
January 1946	371,370	35,700	5,370	11,980	11,650	2.57	2.96
February	146,230	8,430	3,970	5,222	4,428	.976	1.02
March	531,150	52,200	5,890	17,130	17,730	3.91	4.51
April	170,310	7,720	4,420	5,677	5,270	1.16	1.30
May	438,530	62,200	3,750	14,150	15,020	3.31	3.82
June	320,190	34,800	3,820	10,670	10,860	2.39	2.67
July	128,040	8,470	2,860	4,130	3,959	.873	1.01
August	95,960	5,740	1,720	3,095	2,677	.590	.68
September	81,610	8,320	1,060	2,720	2,192	.483	.54
Water year 1945-46	3,254,000	62,200	1,060	8,915	8,797	1.94	26.35
October 1946	112,220	4,670	2,630	3,620	3,319	.732	.84
November	89,940	3,760	2,310	2,998	2,527	.557	.62
December	90,980	4,620	2,240	2,935	2,682	.591	.68
Calendar year 1946	2,576,530	62,200	1,060	7,059	6,897	1.52	20.65
January 1947	264,110	23,800	3,130	8,520	8,728	1.92	2.22
February	232,950	30,400	3,640	8,320	8,078	1.78	1.85
March	418,880	46,500	3,760	13,510	14,020	3.09	3.56
April	580,220	79,100	9,460	19,340	20,750	4.58	5.11
May	618,800	33,500	10,500	19,960	20,750	4.58	5.28
June	255,740	13,300	4,490	8,525	8,222	1.81	2.02
July	388,470	36,300	3,320	12,530	12,760	2.81	3.24
August	184,210	17,000	3,180	5,942	5,318	1.17	1.35
September	90,770	5,460	1,620	3,026	2,370	.523	.58
Water year 1946-47	3,327,290	79,100	1,620	9,116	9,142	2.02	27.35
October 1947	59,056	3,900	976	1,905	1,177	.260	.30
November	290,000	27,100	3,250	9,667	10,270	2.26	2.52
December	166,140	8,940	3,340	5,359	4,714	1.04	1.20
Calendar year 1947	3,549,346	79,100	976	9,724	9,770	2.15	29.24
January 1948	117,490	4,970	2,650	3,790	3,256	.718	.83
February	201,520	18,000	2,700	6,949	6,858	1.51	1.63
March	810,990	110,000	5,830	26,160	27,540	6.07	7.00
April	528,770	46,500	9,160	17,620	18,210	4.02	4.48
May	415,360	24,300	7,220	13,400	13,950	3.08	3.55
June	236,480	12,900	5,110	7,883	8,058	1.78	1.98
July	141,640	9,970	2,710	4,569	4,339	.957	1.10
August	90,230	5,660	1,560	2,911	2,360	.520	.60
September	51,056	2,200	966	1,702	815	.180	.20
Water year 1947-48	3,108,732	110,000	966	8,494	8,461	1.87	25.40
October 1948	53,970	2,630	1,040	1,741	1,039	.229	.26
November	121,326	8,360	976	4,044	3,835	.846	.94
December	281,410	99,300	1,900	7,465	7,887	1.73	1.99
Calendar year 1948	3,000,242	110,000	966	8,197	8,186	1.81	24.56
January 1949	647,540	82,400	9,050	20,890	21,600	4.76	5.49
February	352,140	33,600	5,920	12,610	12,900	2.84	2.96
March	281,870	14,100	5,220	9,093	8,953	1.97	2.28
April	315,160	21,100	6,040	10,510	11,090	2.45	2.73
May	326,770	16,500	5,570	10,540	10,780	2.38	2.74
June	104,850	7,410	2,000	3,495	2,979	.657	.73
July	57,680	2,450	1,220	1,861	1,472	.325	.37
August	39,769	2,240	702	1,283	899	.198	.23
September	40,649	3,020	727	1,355	1,062	.234	.26
Water year 1948-49	2,574,134	99,300	702	7,052	7,015	1.55	20.98
October 1949	46,444	2,220	886	1,498	1,324	.292	.34
November	95,220	6,630	1,690	3,174	3,106	.685	.76
December	256,790	34,700	1,970	8,284	8,560	1.89	2.18
Calendar year 1949	2,565,882	82,400	702	7,030	7,040	1.55	21.07
January 1950	322,440	21,900	5,660	10,400	10,880	2.40	2.76
February	215,510	10,700	5,140	7,697	7,592	1.67	1.74
March	508,360	60,500	4,510	16,400	17,350	3.83	4.41
April	599,820	67,200	8,570	19,990	20,440	4.51	5.03
May	311,590	13,000	6,130	10,050	10,050	2.22	2.56
June	246,210	13,600	5,220	8,207	8,132	1.79	2.00
July	156,930	8,860	3,320	5,062	4,655	1.03	1.18
August	107,310	6,540	1,880	3,462	2,933	.647	.75
September	93,980	4,890	1,930	3,133	2,728	.602	.67
Water year 1949-50	2,960,604	67,200	886	8,111	8,145	1.80	24.38

* Adjusted for change in contents in Lake Wallenpaupack and in Toronto, Cliff Lake, and Swinging Bridge Reservoirs.

Delaware River at Easton, Pa.

Location.--Lat 40°41'30", long 75°12'15", on lower highway bridge at Easton, Northampton County.

Records available.--March 1936 to September 1950 (gage heights only). August 1904 to September 1936 (gage heights only), at site a quarter of a mile downstream from highway bridge, in reports of United States Weather Bureau (published as "Delaware River at Phillipsburg, N. J.").

Gage.--Wire-weight gage. Datum of gage is 100.21 ft above mean sea level, datum of 1929.

Extremes.--1936-50: Maximum gage height observed, 87.95 ft (7 a.m.) Mar. 19, 1936; minimum observed, 54.51 ft Oct. 22, 1941.
Maximum stage known, 93.3 ft (present datum) Oct. 10, 1903, from floodmark.

Maximum gage height observed (water years).--
1946: May 29 (4 to 7 a.m.) 72.35 ft.
1947: Apr. 6 (4 to 6 p.m.) 74.03 ft.
1948: Mar. 23 (12 m.) 77.60 ft.
1949: Dec. 31 (5 p.m.) 79.10 ft.
1950: Apr. 6 (1 to 4 a.m.) 72.00 ft.

Remarks.--Gage read twice daily except during periods of gage heights above 60.2 ft, when it was read hourly. In tables, the readings at 8 a.m. are shown.

Cooperation.--Records furnished by Delaware River Joint Toll Bridge Commission.

Daily gage height at 8 a.m., in feet, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	58.33	57.87	61.77	60.68	58.10	58.70	58.75	57.34	62.82	57.40	56.54	56.26
2	58.20	57.80	60.87	59.85	57.93	59.05	58.55	57.25	62.34	59.14	56.73	55.76
3	58.55	57.80	60.30	59.25	57.50	60.05	58.60	57.05	66.21	58.33	57.00	55.67
4	60.35	58.12	60.12	59.40	57.02	60.29	58.65	56.95	66.23	58.80	56.95	55.45
5	59.50	61.07	59.90	59.20	56.90	60.43	58.55	56.95	63.90	58.00	56.55	55.71
6	58.97	60.30	59.85	59.25	57.52	61.05	58.30	56.87	62.75	57.43	56.10	55.98
7	59.12	59.62	60.32	60.65	58.27	62.22	58.20	56.81	61.90	57.10	56.60	55.98
8	59.35	59.78	60.52	66.25	57.73	64.90	58.05	57.20	61.17	56.87	57.05	55.95
9	60.57	58.80	60.35	65.62	57.73	66.87	57.95	57.25	60.30	56.79	56.95	55.73
10	61.85	58.55	60.43	64.30	57.77	68.75	57.95	57.43	59.82	56.84	57.17	55.56
11	64.07	58.45	60.22	63.83	57.55	65.66	57.95	57.40	59.52	56.74	56.85	56.10
12	61.76	59.30	59.77	62.90	57.17	63.40	57.87	57.30	59.37	56.80	56.58	56.05
13	61.60	60.72	58.95	62.07	57.34	61.95	57.82	57.35	59.65	56.80	56.30	56.02
14	60.26	60.58	58.85	61.37	57.44	61.30	57.63	57.92	59.87	56.70	56.60	55.94
15	59.80	60.80	58.82	60.75	58.25	61.17	57.45	58.35	59.48	56.45	56.73	55.90
16	59.53	61.35	58.82	59.83	58.15	62.03	57.40	58.50	58.73	56.15	56.58	55.72
17	59.55	60.68	58.82	59.27	58.57	62.80	57.67	58.95	58.20	56.43	56.45	55.50
18	59.20	59.95	57.65	59.08	58.20	61.80	57.80	59.30	58.04	56.30	57.37	55.38
19	58.93	59.80	57.65	58.90	57.42	62.30	57.67	60.95	58.05	56.23	57.71	55.38
20	58.68	60.55	58.15	58.18	57.05	61.55	57.35	61.95	58.20	56.20	56.99	55.55
21	58.49	61.40	58.25	58.10	57.10	60.95	-	61.50	58.15	57.15	56.83	55.55
22	58.30	61.55	58.15	58.28	57.45	60.40	57.22	62.70	57.85	56.46	56.60	57.17
23	58.15	62.75	57.93	58.06	57.30	59.95	57.16	64.20	57.60	57.45	56.55	56.58
24	58.10	63.75	57.95	58.33	57.29	59.60	57.13	62.30	57.60	60.88	56.40	56.65
25	58.25	62.30	57.93	58.50	57.10	59.40	57.11	61.05	57.15	60.05	56.25	58.40
26	58.38	61.40	59.35	58.54	56.88	59.28	57.06	60.45	57.15	58.87	55.90	59.02
27	58.43	61.00	60.70	58.19	57.35	60.38	57.40	62.40	57.15	57.90	55.86	58.35
28	58.37	60.50	60.75	57.75	58.15	60.30	57.45	69.80	56.80	57.38	55.93	57.30
29	58.30	61.65	60.60	57.58	-------	59.85	57.34	72.20	56.95	56.85	55.97	56.80
30	58.10	62.40	60.25	58.10	-------	59.53	57.22	67.85	57.22	56.53	56.33	56.65
31	57.98	-------	60.13	58.05	-------	59.16	-------	64.60	-------	56.62	56.50	-------

Delaware River at Easton, Pa.--Continued

Daily gage height at 8 a.m., in feet, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	57.45	57.00	56.45	56.82	65.15	57.35	59.80	61.65	61.35	57.40	58.80	56.57
2	57.42	56.95	56.28	56.57	63.68	57.25	59.55	63.15	60.60	57.72	58.75	56.60
3	57.32	56.78	56.11	56.40	61.98	57.00	60.42	63.20	60.30	57.85	58.42	57.06
4	57.12	56.65	56.47	57.25	61.07	56.75	62.20	62.65	60.12	57.67	57.93	56.90
5	56.95	56.40	56.43	57.12	60.52	57.11	61.82	62.05	59.97	57.45	57.66	57.55
6	56.74	56.80	56.34	57.50	59.40	57.54	71.50	63.92	59.55	57.10	57.74	57.40
7	56.40	56.68	56.27	57.20	59.40	57.32	71.45	65.50	59.37	56.95	57.54	57.09
8	56.28	56.75	56.29	57.40	59.05	57.31	68.20	65.05	60.13	58.70	57.76	56.65
9	56.72	56.90	56.12	57.38	59.15	57.24	65.00	64.57	60.95	67.25	57.75	56.45
10	56.70	56.80	56.08	57.00	57.75	57.22	63.65	63.18	60.28	64.45	57.80	56.77
11	56.70	-	56.23	57.04	58.08	57.10	62.68	61.92	59.65	62.10	59.05	56.64
12	56.55	-	56.18	57.05	58.25	57.26	61.85	61.10	59.20	60.70	58.42	56.62
13	57.15	56.86	56.15	56.61	58.07	57.50	-	60.66	58.80	59.80	57.93	56.60
14	57.05	56.85	56.44	56.65	57.90	59.32	-	60.22	58.70	59.40	58.20	56.53
15	57.00	56.75	56.34	57.40	58.10	65.00	-	60.57	60.30	59.30	57.90	56.07
16	57.02	56.65	56.60	57.83	58.05	68.65	60.53	61.10	59.80	60.15	57.70	56.07
17	56.80	56.52	56.30	58.25	57.63	65.40	60.87	60.20	61.00	61.47	57.70	56.65
18	56.60	56.20	56.28	59.09	57.67	63.43	60.41	59.75	59.94	64.74	62.05	56.54
19	56.82	56.12	56.27	59.04	57.70	62.00	59.87	60.10	59.55	63.42	59.85	56.25
20	57.11	56.40	56.12	58.70	57.40	61.00	59.53	60.87	59.15	62.74	58.65	56.20
21	57.13	56.35	56.07	61.95	57.12	60.55	59.30	62.50	58.72	61.50	58.35	56.40
22	56.90	56.30	57.49	63.75	56.77	60.30	60.20	61.65	58.50	61.61	57.90	56.65
23	56.91	56.50	56.90	60.80	56.55	60.40	60.96	66.47	58.25	66.53	57.70	56.15
24	56.67	56.33	57.10	60.07	56.60	60.05	60.35	65.21	58.00	63.84	57.40	56.72
25	56.53	56.15	57.10	60.16	56.85	60.75	60.08	63.60	58.05	61.86	56.95	56.53
26	56.59	56.05	56.92	60.25	57.60	64.80	60.08	67.55	58.05	60.80	56.80	56.40
27	57.45	56.35	56.70	61.15	57.48	64.35	60.09	67.10	58.00	60.15	57.20	56.25
28	57.22	56.35	56.70	60.98	57.30	62.50	59.85	64.55	58.00	59.28	57.30	55.65
29	57.35	56.47	57.05	60.80	-------	61.30	59.98	63.08	57.85	60.80	57.15	55.55
30	57.32	56.50	56.45	60.40	-------	60.60	59.83	59.83	57.65	60.35	56.80	55.36
31	57.12	-------	56.55	61.34	-------	60.10	-------	62.10	-------	59.25	57.00	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55.90	57.25	57.77	57.55	56.00	59.67	61.70	58.87	60.00	59.65	56.52	56.02
2	56.00	57.00	57.50	57.60	56.55	59.35	64.00	58.70	59.52	58.85	55.77	56.12
3	55.95	56.90	57.47	57.30	56.00	59.20	63.00	58.65	59.08	58.36	55.60	55.87
4	55.95	56.60	57.48	57.00	56.55	59.27	62.50	58.75	58.72	57.84	56.35	55.97
5	55.95	57.47	57.78	57.20	55.60	58.70	61.55	58.47	58.47	57.60	56.41	55.87
6	55.55	57.60	57.68	57.25	56.30	58.30	61.05	59.32	58.12	57.46	58.00	55.64
7	55.50	57.35	57.70	57.63	56.30	58.35	60.75	59.27	57.91	57.45	58.03	55.42
8	55.70	57.37	57.53	57.33	56.28	58.50	60.50	60.64	58.85	57.51	57.45	55.38
9	55.90	62.55	57.58	57.60	56.20	58.55	60.20	60.80	58.95	57.77	57.26	55.65
10	56.00	63.95	57.82	57.47	56.05	58.72	59.85	60.18	59.00	57.45	56.50	56.22
11	56.00	61.40	57.86	56.75	56.08	58.87	59.42	59.66	58.52	57.08	56.68	56.23
12	55.45	61.85	57.70	56.50	56.27	58.53	60.10	59.25	58.30	56.85	56.60	56.10
13	55.55	63.87	57.45	56.80	56.33	58.40	62.95	60.85	58.26	56.71	57.35	56.60
14	55.35	63.08	57.17	57.30	56.43	58.05	63.33	62.55	58.15	58.20	57.08	55.39
15	55.65	61.40	56.79	56.85	57.06	58.01	67.35	62.80	58.18	58.21	56.75	55.40
16	55.70	60.55	57.25	56.60	57.27	58.25	68.83	62.45	58.25	57.80	56.40	55.40
17	55.81	59.90	58.54	57.08	57.30	63.73	65.55	62.80	57.80	57.30	56.20	55.81
18	55.85	59.42	58.75	57.20	59.40	70.98	63.95	63.80	57.52	57.07	56.45	55.82
19	56.00	58.95	58.30	56.14	60.53	67.27	62.65	63.70	57.62	56.70	56.55	55.80
20	55.52	58.55	57.52	55.98	61.75	67.30	62.05	62.70	58.20	56.73	56.56	55.60
21	55.37	58.20	57.43	56.85	61.45	72.54	61.45	61.90	58.92	57.00	57.40	55.60
22	55.64	58.00	57.40	57.05	62.77	60.90	61.65	61.35	58.23	57.34	57.10	55.60
23	55.63	57.85	57.31	56.90	60.85	77.28	61.30	60.70	58.00	57.51	57.40	55.85
24	55.65	57.90	57.31	56.48	60.00	71.48	60.60	60.20	58.25	57.30	57.00	a55.92
25	55.67	59.13	57.31	55.87	59.60	67.25	60.12	61.10	59.10	57.15	56.95	56.05
26	55.73	59.25	57.65	56.19	59.65	65.14	60.02	63.25	59.79	57.09	56.80	-
27	55.47	59.25	56.20	56.30	59.85	63.50	60.18	62.10	59.80	56.85	56.65	55.95
28	55.10	58.68	56.85	56.05	59.95	63.33	59.60	61.25	59.75	56.95	56.45	55.58
29	55.76	58.38	56.37	56.32	60.26	63.67	59.34	60.45	60.55	56.85	56.25	55.30
30	56.64	58.08	56.20	56.20	-------	62.55	59.07	60.60	60.20	56.70	56.00	55.53
31	56.70	-------	57.57	56.18	-------	61.65	-------	60.55	-------	56.55	55.85	-------

a Reading at 4 p.m.

Delaware River at Easton, Pa.--Continued

Daily gage height at 8 a.m., in feet, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55.83	55.38	57.60	76.70	60.15	60.45	58.45	59.10	58.70	56.15	55.79	56.70
2	56.02	56.38	57.44	68.35	60.10	60.10	58.55	59.27	58.29	56.02	55.60	56.43
3	55.75	55.15	57.37	64.80	59.28	59.71	58.35	59.90	58.20	55.74	55.80	56.03
4	55.47	55.45	57.22	63.25	59.28	59.47	58.05	60.20	57.96	56.58	56.15	55.66
5	55.20	56.04	57.22	61.95	59.20	59.19	57.90	60.45	59.85	55.50	56.40	55.48
6	55.48	56.07	56.85	67.80	59.10	59.15	58.00	60.10	57.65	55.60	56.10	56.20
7	55.90	56.65	57.02	73.85	59.10	-	58.65	60.80	57.51	56.05	55.75	55.60
8	55.82	57.03	57.30	68.65	59.00	60.94	59.10	62.75	57.22	56.05	55.35	55.49
9	55.85	58.46	57.65	65.68	58.85	60.10	59.30	61.30	57.10	55.90	55.35	55.50
10	55.84	57.70	57.37	63.85	58.85	-	59.20	60.56	57.00	55.76	55.35	55.59
11	55.45	57.45	57.15	63.05	58.18	-	58.85	60.14	56.96	55.50	55.55	55.30
12	55.25	57.13	57.02	62.30	58.56	-	58.70	59.60	56.89	55.59	55.55	55.10
13	55.74	56.80	56.94	61.65	58.28	-	58.50	59.20	56.68	55.93	55.75	55.05
14	55.84	56.70	56.88	61.00	58.15	-	58.55	56.87	56.42	56.35	55.75	55.15
15	55.84	56.40	57.11	60.55	58.15	-	59.45	58.57	56.82	55.89	55.75	55.15
16	55.73	56.10	57.15	59.88	60.90	59.05	59.62	58.35	56.75	57.78	55.73	65.70
17	55.55	56.25	57.50	59.64	65.60	58.50	59.17	58.14	56.80	56.22	55.55	66.78
18	55.35	56.20	57.58	59.48	63.26	58.40	58.68	58.09	56.65	56.70	55.78	55.56
19	55.36	56.20	57.45	59.48	61.65	58.25	61.46	57.92	56.80	57.40	55.78	55.50
20	55.75	56.65	57.15	59.53	61.30	57.90	62.68	58.00	56.37	56.86	55.79	55.30
21	56.28	58.10	57.95	59.70	61.70	57.75	62.18	59.95	56.20	56.52	55.50	55.20
22	56.34	59.00	56.95	59.95	61.65	57.75	61.15	61.75	56.50	56.23	55.25	55.30
23	55.80	58.75	57.00	59.97	61.70	58.15	61.62	61.40	56.40	56.42	55.23	55.30
24	55.71	58.30	57.00	59.75	61.75	58.45	61.98	61.60	56.40	56.17	55.10	55.40
25	55.40	58.35	57.00	60.70	61.30	59.30	62.46	61.05	56.10	55.88	55.25	55.50
26	55.38	57.95	55.75	60.40	61.20	59.14	61.65	60.70	56.65	55.60	56.25	55.34
27	55.73	57.65	56.00	60.70	61.35	58.90	60.97	60.85	56.48	55.80	55.40	55.35
28	55.80	57.55	56.00	60.65	60.55	58.85	60.48	60.25	56.48	56.02	55.20	55.50
29	55.60	57.50	56.10	61.48	-------	58.80	60.14	59.72	56.37	55.92	55.55	55.50
30	55.50	57.85	59.74	61.21	-------	58.65	59.61	59.30	56.05	56.00	56.40	55.75
31	55.38	-------	76.90	60.60	-------	58.40	-------	58.95	-------	55.70	56.63	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56.51	55.90	56.80	59.15	59.10	58.22	65.45	59.20	59.91	57.35	56.70	56.46
2	56.15	55.90	56.78	58.95	58.80	58.10	64.35	59.20	60.90	57.12	57.20	56.43
3	56.20	56.25	56.82	58.85	59.30	57.17	63.75	60.52	60.45	57.00	57.35	56.35
4	56.05	56.35	56.75	58.85	59.10	57.55	64.95	59.90	60.36	57.12	57.15	57.46
5	55.90	56.20	56.45	58.95	58.75	57.60	68.90	59.80	60.90	56.95	57.30	56.88
6	55.80	56.20	56.32	59.05	58.40	57.70	71.80	59.80	61.00	57.94	57.20	56.52
7	55.85	56.55	56.43	59.80	58.25	57.60	67.50	60.05	60.16	57.80	56.80	56.43
8	55.89	56.35	56.58	62.90	58.15	57.77	64.50	59.60	59.50	57.67	56.55	56.29
9	55.87	56.30	56.18	61.80	58.05	62.15	62.97	59.20	59.05	57.23	56.65	56.40
10	55.70	56.15	55.90	60.70	59.10	66.35	61.95	58.87	58.63	56.95	56.75	56.60
11	55.60	56.10	56.12	61.80	59.40	64.18	61.50	58.76	58.43	57.10	56.65	57.25
12	55.65	56.10	55.97	62.95	60.00	62.30	61.05	58.90	58.60	58.80	56.55	56.86
13	56.00	56.05	56.50	61.45	59.60	61.78	60.75	58.73	58.70	58.60	56.35	57.20
14	55.70	56.20	55.60	60.80	59.77	61.74	60.40	58.30	58.18	59.60	56.00	57.30
15	55.60	56.55	63.43	60.75	60.30	60.87	60.05	58.00	58.63	58.90	56.00	57.25
16	55.46	58.15	61.05	60.38	60.95	60.18	59.63	58.20	59.05	58.56	56.25	57.25
17	55.40	57.80	59.33	59.87	60.84	59.80	59.38	58.20	58.83	58.09	56.25	56.75
18	55.30	57.40	58.90	59.60	60.55	59.70	59.25	58.20	58.26	57.70	56.15	56.44
19	55.55	57.20	58.73	59.35	60.00	59.40	59.05	59.15	58.35	57.59	56.30	56.44
20	55.55	57.15	58.80	58.97	59.55	59.00	59.06	60.50	58.60	57.51	57.15	56.47
21	55.45	56.95	58.85	58.35	58.60	59.00	59.94	60.30	58.30	57.32	57.00	56.47
22	55.35	56.80	58.55	58.06	58.65	61.30	61.67	59.90	58.30	57.75	58.07	56.50
23	55.30	57.10	58.40	57.97	58.30	62.07	60.55	59.42	58.15	57.51	57.35	56.35
24	55.23	57.00	58.75	58.15	58.55	63.38	60.01	59.95	57.80	57.08	56.83	56.55
25	55.19	56.82	59.80	58.49	58.75	62.85	59.98	60.58	57.65	57.05	56.75	56.30
26	55.60	56.50	59.12	58.75	58.40	61.98	59.80	60.63	57.98	57.35	56.60	55.90
27	55.82	56.68	59.65	59.04	57.55	61.95	59.74	60.18	58.45	57.70	56.45	56.45
28	55.70	56.65	61.75	59.12	57.30	62.35	59.64	59.58	57.90	57.28	56.00	56.40
29	55.92	56.50	61.82	58.77	-------	67.17	59.28	59.55	57.55	57.11	55.85	56.10
30	55.87	56.75	60.90	58.59	-------	71.15	58.98	60.45	57.30	56.95	56.45	55.80
31	56.00	-------	59.95	58.85	-------	67.75	-------	60.25	-------	56.85	56.60	-------

Lake Hopatcong at Landing

Location.--Lat 40°55'00", long 74°39'50", in gate house of Lake Hopatcong Dam at Landing, Morris County.

Drainage area.--25.6 sq mi.

Records available.--February 1887 to September 1950 (gage heights only).

Gage.--Water-stage recorder. Datum of gage is 914.57 above mean sea level, (New Jersey Geological Survey bench mark).

Extremes.--1887-1950: Maximum gage height, 10.21 ft (8 p.m.) May 3, 1945; minimum observed, 1.78 ft Nov. 23, 1909.

Maximum gage height (water years).--
1946: June 3, 4, 9.58 ft.
1947: May 26 (8 to 11 a.m.) 9.66 ft.
1948: Apr. 17 (2 to 10 a.m.) 9.61 ft.
1949: Apr. 24 (8 to 10 p.m.) 9.43 ft.
1950: June 4 (6 a.m. to 1 p.m.) 9.54 ft.

Remarks.--In tables, the gage heights at 8 a.m. are shown. For discharge from lake, see records for Musconetcong River at outlet of Lake Hopatcong.

Cooperation.--Record collected in cooperation with Morris Canal & Banking Co.

Daily gage height at 8 a.m., in feet, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.16	8.70	9.50	8.62	7.51	7.22	8.54	8.86	9.41	9.03	9.13	8.98
2	9.11	8.69	9.49	8.60	7.47	7.19	8.56	8.87	9.46	9.14	9.09	8.95
3	9.13	8.68	9.47	8.58	7.44	7.19	8.64	8.87	9.58	9.15	9.04	8.94
4	9.09	8.63	9.45	8.50	7.42	7.18	8.64	8.86	8.86	9.12	9.04	8.89
5	9.05	8.61	9.41	8.46	7.40	7.22	8.68	8.83	9.55	9.10	9.02	8.85
6	9.01	8.58	9.40	8.43	7.37	7.23	8.66	8.82	9.49	9.06	9.01	8.81
7	9.05	8.56	9.38	8.43	7.40	7.27	8.70	8.82	9.43	9.07	9.06	8.79
8	9.07	8.53	9.34	8.48	7.39	7.33	8.72	8.86	9.42	9.05	9.04	8.70
9	9.08	8.51	9.33	8.50	7.39	7.40	8.72	8.86	9.38	9.03	9.02	8.66
10	9.09	8.50	9.27	8.53	7.35	7.42	8.75	8.85	9.33	9.01	9.02	8.65
11	9.08	8.48	9.24	8.53	7.35	7.44	8.75	8.85	9.28	8.99	9.08	8.61
12	9.04	8.49	9.19	8.50	7.32	7.47	8.76	8.87	9.37	8.98	9.07	8.60
13	9.02	8.51	9.15	8.48	7.29	7.52	8.76	8.95	9.39	8.97	9.04	8.56
14	8.94	8.53	9.11	8.45	7.30	7.55	8.78	8.97	9.35	8.97	9.08	8.51
15	8.94	8.60	9.06	8.42	7.31	7.64	8.79	9.02	9.32	8.95	9.07	8.47
16	8.90	8.59	9.00	8.35	7.31	7.72	8.82	9.02	9.31	8.92	9.05	8.42
17	8.94	8.60	8.93	8.30	7.32	7.75	8.81	9.07	9.24	8.90	9.05	8.40
18	8.89	8.60	8.87	8.28	7.29	7.80	8.80	9.24	9.22	8.86	9.17	8.39
19	8.92	8.60	8.83	8.12	7.28	7.88	8.80	9.21	9.21	8.85	9.17	8.36
20	8.90	8.72	8.80	8.08	7.32	7.88	8.78	9.34	9.18	8.80	9.15	8.35
21	8.87	8.73	8.74	8.02	7.28	7.93	8.79	9.34	9.16	8.85	9.12	8.32
22	8.85	8.93	8.65	7.97	7.27	7.95	8.79	9.40	9.14	8.92	9.10	8.37
23	8.82	9.10	8.60	7.89	7.29	7.98	8.79	9.40	9.16	8.99	9.09	8.36
24	8.82	9.20	8.52	7.82	7.29	7.98	8.80	9.27	9.15	9.30	9.08	8.34
25	8.81	9.22	8.45	7.77	7.26	8.05	8.80	9.30	9.11	9.33	9.05	8.43
26	8.80	9.25	8.55	7.71	7.25	8.08	8.84	9.30	9.08	9.32	9.04	8.41
27	8.78	9.27	8.60	7.65	7.23	8.28	8.81	9.45	9.05	9.26	9.02	8.40
28	8.74	9.27	8.62	7.63	7.23	8.34	8.85	9.55	9.04	9.25	8.90	8.34
29	8.74	9.45	8.62	7.56	-------	8.38	8.85	9.52	9.05	9.20	8.98	8.19
30	8.74	9.50	8.60	7.53	-------	8.50	8.87	9.47	9.04	9.17	9.02	8.20
31	8.71	-------	8.60	7.52	-------	8.52	-------	9.46	-------	9.16	9.02	-------

Lake Hopatcong at Landing--Continued

Daily gage height at 8 a.m., in feet, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.15	7.68	6.84	6.43	7.25	7.28	8.17	9.39	9.48	9.27	9.08	8.73
2	8.11	7.65	6.84	6.43	7.28	7.28	8.20	9.45	9.44	9.27	9.03	8.70
3	8.07	7.62	6.79	6.47	7.31	7.43	8.27	9.44	9.40	9.32	9.01	8.68
4	8.05	7.59	6.79	6.47	7.32	7.41	8.39	9.45	9.37	9.29	8.99	8.66
5	8.10	7.57	6.75	6.51	7.39	7.39	8.52	9.48	9.32	9.26	8.98	8.77
6	8.10	7.50	6.71	6.51	7.40	7.37	8.88	9.58	9.28	9.20	8.97	8.78
7	8.07	7.47	6.69	6.53	7.41	7.35	9.07	9.58	9.27	9.17	8.97	8.77
8	8.06	7.45	6.65	6.63	7.46	7.34	9.16	9.56	9.32	9.24	8.96	8.74
9	8.03	7.38	6.62	6.55	7.45	7.32	9.22	9.53	9.42	9.22	8.97	8.71
10	7.98	7.38	6.60	6.54	7.43	7.28	9.25	9.44	9.42	9.23	9.02	8.68
11	7.97	7.37	6.57	6.48	7.43	7.27	9.27	9.44	9.38	9.19	8.99	8.65
12	7.98	7.35	6.55	6.55	7.43	7.25	9.34	9.40	9.37	9.14	8.98	8.60
13	8.03	7.33	6.55	6.45	7.42	7.25	9.38	9.38	9.34	9.14	8.97	8.57
14	8.02	7.28	6.50	6.52	7.42	7.40	9.32	9.39	9.33	9.12	8.97	8.54
15	7.99	7.25	6.49	6.54	7.41	7.70	9.22	9.42	9.38	9.14	8.96	8.52
16	7.96	7.20	6.45	6.57	7.40	7.89	9.30	9.40	9.37	9.17	8.93	8.52
17	7.92	7.18	6.42	6.57	7.38	8.01	9.31	9.40	9.33	9.22	7.95	8.47
18	7.92	7.19	6.40	6.56	7.38	8.08	9.29	9.39	9.32	9.21	8.93	8.43
19	7.92	7.17	6.38	6.57	7.37	8.12	9.30	9.41	9.30	9.23	8.92	8.38
20	7.91	7.14	6.35	6.63	7.37	8.13	9.28	9.46	9.27	9.21	7.92	8.42
21	7.88	7.12	6.42	6.77	7.43	8.13	9.27	9.51	9.35	9.18	8.92	8.37
22	7.83	7.07	6.42	6.82	7.45	8.14	9.26	9.52	9.34	9.31	8.88	8.37
23	7.80	7.02	6.42	6.85	7.44	8.14	9.22	9.55	9.30	9.30	8.89	8.37
24	7.80	6.99	6.40	6.87	7.40	8.14	9.20	9.50	9.24	9.27	8.86	8.32
25	7.75	6.94	6.40	6.92	7.38	8.18	9.22	9.51	9.22	9.24	8.84	8.30
26	7.79	6.94	6.39	6.95	7.36	8.21	9.25	9.66	9.22	9.18	8.83	8.26
27	7.78	6.93	6.39	7.02	7.34	8.20	9.20	9.64	9.21	9.16	8.84	8.22
28	7.76	6.90	6.39	7.05	7.31	8.21	9.23	9.60	9.20	9.15	8.80	8.16
29	7.73	6.87	6.42	7.09	-------	8.18	9.19	9.56	9.20	9.14	8.80	8.11
30	7.72	6.86	6.45	7.12	-------	8.15	9.18	9.62	9.29	9.10	8.74	8.10
31	7.69	-------	6.44	7.21	-------	8.16	-------	9.54	-------	9.10	8.73	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.03	7.35	8.50	8.50	7.47	6.92	9.04	9.21	9.36	9.41	9.01	8.55
2	7.98	7.33	8.51	8.58	7.35	6.90	9.20	9.20	9.33	9.35	8.98	8.51
3	7.96	7.20	8.48	8.57	7.32	6.96	9.28	9.21	9.31	9.29	8.97	8.49
4	7.92	e7.33	8.48	8.51	7.26	6.94	9.31	9.18	9.28	9.26	8.95	8.48
5	7.89	7.44	8.46	8.45	7.25	6.92	9.30	9.20	9.25	9.22	8.92	8.47
6	7.86	7.47	8.47	8.43	7.20	6.91	9.33	9.22	9.24	9.23	8.94	8.45
7	7.83	7.50	8.45	8.41	7.14	6.88	9.36	9.22	9.24	9.27	8.91	8.44
8	7.80	7.55	8.44	8.35	7.10	6.87	9.35	9.27	9.26	9.23	8.87	8.40
9	7.78	7.93	8.46	8.30	7.06	6.86	9.35	9.27	9.26	9.22	8.83	8.27
10	7.75	8.00	8.44	8.27	7.01	6.86	9.33	9.25	9.28	9.19	8.80	8.12
11	7.73	e8.04	8.43	8.22	6.95	6.85	9.32	9.26	9.24	9.16	8.73	7.95
12	7.69	8.23	8.42	8.18	6.90	6.84	9.35	9.25	9.23	9.14	8.77	7.76
13	7.65	8.29	8.42	8.17	6.86	6.83	9.42	9.37	9.25	9.12	8.96	7.61
14	7.62	e8.35	8.40	8.16	6.89	6.82	9.46	9.51	9.25	9.23	8.94	7.42
15	7.58	8.39	8.35	8.11	6.87	6.80	9.55	9.53	9.22	9.22	8.87	7.19
16	7.57	8.39	8.46	8.08	6.86	6.82	9.58	9.50	9.24	9.18	8.80	7.00
17	7.54	8.43	8.48	8.02	6.84	7.07	9.61	9.52	9.21	9.15	8.75	6.80
18	7.52	8.45	8.48	8.00	6.83	7.29	9.52	9.52	9.19	9.11	8.67	6.58
19	7.50	8.44	8.48	7.97	6.84	7.45	9.50	9.52	9.22	9.12	8.62	6.39
20	7.49	8.44	8.47	7.90	6.89	7.66	9.47	9.47	9.28	9.15	8.58	6.20
21	7.45	8.41	8.45	7.89	6.90	7.85	9.44	9.46	9.30	9.13	8.66	6.01
22	7.42	8.43	8.44	7.86	6.92	8.00	9.43	9.44	9.29	9.22	8.65	5.78
23	7.37	8.42	8.44	7.84	6.94	8.15	9.40	9.39	e9.31	9.19	8.65	5.48
24	7.35	8.44	8.45	7.79	6.94	8.28	9.37	9.36	9.32	9.18	8.68	5.26
25	7.29	8.49	8.44	7.76	6.92	8.36	9.36	9.35	9.38	9.16	8.67	5.04
26	7.27	8.52	e8.52	7.76	6.92	8.41	9.33	9.34	9.39	9.12	8.67	4.82
27	7.25	8.52	e8.63	7.65	6.91	8.48	9.32	9.32	9.38	9.10	8.67	4.54
28	7.21	8.52	e8.61	7.62	6.94	8.71	9.28	9.31	9.42	9.09	8.65	4.30
29	7.25	8.52	e8.58	7.58	6.93	8.75	9.26	9.26	9.44	9.08	8.63	4.15
30	7.28	8.51	e8.55	7.47	-------	8.81	9.26	9.36	9.42	9.07	8.61	3.88
31	7.36	-------	8.54	7.47	-------	8.88	-------	9.38	-------	9.03	8.59	-------

e Estimated gage height

Lake Hopatcong at Landing--Continued

Daily gage height at 8 a.m., in feet, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.75	1.25	1.08	3.27	e6.89	8.36	9.14	9.28	9.11	8.64	8.25	7.69
2	3.44	1.21	1.08	3.62	7.00	8.40	9.12	9.27	9.09	8.63	8.21	7.67
3	3.17	1.17	1.04	3.67	6.99	8.38	9.03	9.23	9.08	8.61	8.19	7.65
4	2.92	1.23	1.06	4.00	7.03	8.40	8.89	9.33	9.09	8.58	8.19	7.63
5	2.42	1.21	1.04	4.16	7.08	8.42	8.72	9.30	9.09	8.60	8.20	7.58
6	2.10	1.17	1.00	4.60	7.11	8.43	8.72	9.28	9.04	8.58	8.18	7.65
7	1.71	1.21	.94	4.92	7.16	8.49	8.74	9.32	9.02	8.57	8.16	7.60
8	1.87	1.23	.94	5.16	7.16	8.49	8.77	9.31	9.00	8.56	8.14	7.56
9	2.10	1.21	.92	5.30	7.22	8.49	8.80	9.30	8.98	8.50	8.10	7.54
10	2.08	1.19	.90	5.38	7.27	8.53	8.80	9.29	8.94	8.44	8.08	7.47
11	2.06	1.21	.84	5.48	7.36	8.66	8.81	9.30	8.92	8.48	8.05	7.44
12	2.02	1.19	.77	5.54	7.38	8.68	8.82	9.28	8.91	8.47	8.04	7.40
13	1.98	1.15	.79	5.60	7.40	8.70	8.82	9.20	8.90	8.47	8.06	7.38
14	1.96	1.13	.79	5.66	7.44	8.72	8.91	9.16	8.88	8.45	8.06	7.42
15	1.92	1.11	.73	5.68	7.50	8.75	8.92	9.17	8.87	8.46	8.02	7.42
16	1.79	1.08	.84	5.72	7.58	8.75	8.92	9.13	8.87	8.45	8.02	7.38
17	1.75	1.02	.84	5.74	7.65	8.76	8.93	9.11	8.86	8.44	8.01	7.38
18	1.75	1.00	-	5.78	7.68	8.78	8.95	9.09	8.90	8.45	7.98	7.33
19	1.75	.96	-	5.80	7.71	8.82	9.12	9.08	8.89	8.49	7.96	7.34
20	1.68	1.04	-	5.85	7.78	8.82	9.19	9.10	8.88	8.47	7.92	7.33
21	1.71	1.08	-	5.85	7.84	8.82	9.22	9.12	8.87	8.46	7.87	7.28
22	1.67	1.11	-	6.04	7.85	8.83	9.26	9.09	8.85	8.46	7.85	7.24
23	1.63	1.15	-	6.10	8.00	8.93	9.36	9.15	8.83	8.43	7.82	7.24
24	1.63	1.17	-	6.18	8.02	8.99	9.41	9.17	8.76	8.40	7.78	7.18
25	1.62	1.15	.77	6.28	8.10	8.98	9.41	9.18	8.76	8.37	7.77	7.15
26	1.54	1.11	.77	6.30	8.15	9.01	9.38	9.12	8.75	8.36	7.73	7.15
27	1.46	1.08	.75	6.38	8.18	9.04	9.40	9.14	8.74	8.33	7.72	7.07
28	1.42	1.08	.75	6.56	8.22	9.06	9.39	9.14	8.72	8.33	7.70	7.05
29	1.38	1.19	.77	e6.64	-------	9.10	9.34	9.13	8.69	8.32	7.72	7.03
30	1.34	1.13	1.62	e6.73	-------	9.12	9.30	9.13	8.67	8.30	7.74	7.10
31	1.28	-------	2.54	e6.81	-------	9.13	-------	1.12	-------	8.27	7.71	-------

e Estimated gage height

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.08	6.40	6.18	6.43	7.00	8.20	9.40	9.30	9.38	9.22	9.12	9.03
2	7.05	6.40	6.18	6.42	7.04	8.18	9.40	9.29	9.49	9.20	9.10	9.04
3	7.02	6.40	6.19	6.42	7.08	8.19	9.38	9.30	9.48	9.18	9.09	9.03
4	6.97	6.42	6.16	6.42	7.10	8.20	9.41	9.28	9.54	9.20	9.12	9.04
5	6.94	6.38	6.18	6.48	7.12	8.20	9.42	9.28	9.51	9.20	9.10	9.02
6	6.93	6.36	6.16	6.48	7.14	8.21	9.43	9.28	9.49	9.23	9.08	8.99
7	6.88	6.34	6.12	6.52	7.18	8.20	9.41	9.27	9.45	9.22	9.06	8.95
8	6.89	6.34	6.13	6.52	7.18	8.22	9.36	9.25	9.40	9.20	9.03	8.93
9	6.87	6.34	6.10	6.52	7.22	8.48	9.34	9.25	9.37	9.18	9.01	8.91
10	6.85	6.30	6.10	6.56	7.32	8.56	9.32	9.22	9.32	9.17	9.02	8.91
11	6.83	6.28	6.10	6.60	7.38	8.58	9.32	9.25	9.32	9.21	9.02	8.93
12	6.74	6.26	6.10	6.62	7.44	8.64	9.30	9.23	9.27	9.28	9.06	8.92
13	6.74	6.28	6.18	6.64	7.52	8.70	9.28	9.21	9.22	9.28	9.03	8.92
14	6.74	6.34	6.20	6.63	7.60	8.72	9.25	9.19	9.20	9.43	9.01	8.92
15	6.70	6.33	6.20	6.68	7.76	8.74	9.24	9.18	9.22	9.43	8.99	8.84
16	6.63	6.30	6.19	6.70	7.84	8.72	9.23	9.19	9.20	9.39	8.96	8.82
17	6.62	6.30	6.18	6.70	7.90	8.70	9.21	9.17	9.20	9.36	8.95	8.79
18	6.57	6.28	6.17	6.74	7.94	8.68	9.20	9.26	9.20	9.33	8.93	8.76
19	6.51	6.27	6.18	6.76	7.98	8.67	9.19	9.30	9.17	9.31	8.92	8.71
20	6.51	6.26	6.18	6.74	8.00	8.65	9.24	9.33	9.15	9.27	9.12	8.71
21	6.50	6.24	6.17	6.75	8.02	8.69	9.27	9.30	9.15	9.23	9.14	8.70
22	6.48	6.24	6.18	6.76	8.06	8.73	9.27	9.29	9.14	9.21	9.12	8.69
23	6.44	6.18	6.18	6.76	8.12	8.85	9.26	9.26	9.13	9.18	9.11	8.67
24	6.42	6.20	6.21	6.78	8.13	8.98	9.26	9.32	9.12	9.15	9.07	8.63
25	6.42	6.20	6.20	6.80	8.16	8.98	9.27	9.34	9.41	9.18	9.05	8.58
26	6.40	6.22	6.20	6.80	8.16	9.13	9.28	9.34	9.41	9.17	9.04	8.56
27	6.38	6.18	6.32	6.86	8.18	9.21	9.27	9.33	9.36	9.15	9.02	8.53
28	6.38	6.18	6.36	6.86	8.20	9.29	9.28	9.32	9.33	9.13	9.00	8.51
29	6.38	6.18	6.39	6.88	-------	9.36	9.29	9.35	9.29	9.16	8.98	8.48
30	6.38	6.18	6.40	6.92	-------	9.42	9.28	9.40	9.26	9.16	9.04	8.46
31	6.40	-------	6.38	6.93	-------	9.38	-------	9.39	-------	9.14	9.05	-------

Musconetcong River at outlet of Lake Hopatcong

Location.--Lat 40°55'00", long 74°39'55", on left bank at highway bridge 300 ft downstream from Lake Hopatcong Dam in Landing, Morris County.

Drainage area.--25.6 sq mi.

Records available.--July 1928 to September 1950.

Gage.--Water-stage recorder and concrete control. Datum of gage is 904.99 ft above mean sea level (New Jersey Geological Survey benchmark).

Average discharge.--22 years (1928-50), 43.3 cfs (adjusted).

Extremes.--1928-50: Maximum discharge, 534 cfs Mar. 19, 1936 (gage height, 3.17 ft), from rating curve extended above 340 cfs on basis of computation of peak flow over dam; minimum daily, 0.1 cfs on many days during March 1940.

Annual maximum discharge (water years).--
1946: June 2 (2:30 p.m.) 169 cfs (1.89 ft).
1947: May 26 (6 to 7:30 a.m.) 190 cfs (1.95 ft).
1948: Sept. 24 (6 p.m.) 308 cfs (2.64 ft).
1949: Oct. 4 (6 p.m.) 263 cfs (2.46 ft).
1950: June 4 (4 a.m.) 123 cfs (1.76 ft).

Remarks.--Flow regulated by Lake Hopatcong (usable capacity, 800,000,000 cubic feet).

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	33	144	127	61	37	12.0	12.0	86	12.9	24	21
2	41	33	133	127	58	37	12.0	12.0	137	23	19.7	21
3	41	33	123	127	51	37	12.5	12.5	159	22	16.9	29
4	37	33	117	127	49	33	12.2	12.5	153	18.8	16.9	36
5	33	33	114	125	47	30	12.0	12.0	140	15.5	16.9	36
6	32	33	117	125	45	29	12.5	12.0	119	13.7	16.4	35
7	36	33	121	125	43	29	13.7	12.0	105	14.2	20	35
8	36	33	129	125	43	30	13.7	12.0	94	12.0	17.3	32
9	40	33	127	125	43	30	12.5	12.0	85	12.0	16.0	29
10	39	32	137	125	43	22	12.0	12.0	68	12.9	15.5	32
11	38	32	129	125	43	19.2	12.0	12.0	60	11.6	17.3	33
12	36	32	129	125	43	19.2	12.0	12.0	82	11.2	16.0	33
13	35	32	125	125	40	16.9	11.6	12.0	81	11.6	16.9	32
14	34	32	121	125	38	12.5	11.6	13.3	74	11.6	18.8	32
15	33	32	114	125	38	11.3	11.6	12.5	63	11.6	16.9	32
16	33	32	116	125	38	11.6	12.0	13.7	50	11.2	16.0	a32
17	33	33	119	123	38	11.6	12.0	19.8	42	11.2	19.7	a32
18	34	33	121	123	38	11.2	12.0	53	40	13.3	32	32
19	34	33	125	123	38	11.6	12.0	68	36	14.6	32	32
20	34	33	125	123	38	11.6	11.6	77	29	13.3	28	32
21	34	33	127	123	38	12.5	11.6	79	27	12.5	25	32
22	34	34	127	121	38	12.5	11.6	81	25	12.5	24	32
23	34	46	127	114	38	12.0	12.0	73	23	34	22	32
24	35	60	127	103	38	11.6	12.0	65	21	65	19.7	32
25	34	70	127	97	37	11.6	11.6	59	19.2	68	17.8	32
26	34	77	127	94	37	12.0	12.0	61	16.0	58	16.4	32
27	34	77	127	89	37	12.0	12.0	106	14.6	46	15.1	30
28	34	91	127	81	37	12.0	12.0	137	14.6	38	14.6	30
29	34	133	127	68	-------	12.0	12.0	121	14.6	30	15.1	30
30	33	148	127	61	-------	12.0	12.0	103	13.7	27	15.5	31
31	33	-------	127	61	-------	12.0	-------	91	-------	25	19.5	-------

a No gage-height record; discharge interpolated.

Musconetcong River at outlet of Lake Hopatcong--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	35	33	13.3	14.2	46	15.1	100	110	52	22	15.1
2	32	35	33	12.8	14.2	46	16.0	118	97	72	19.2	27
3	32	35	33	12.8	14.2	47	16.0	114	92	63	17.8	31
4	32	35	33	12.8	14.2	50	16.0	118	82	53	16.4	33
5	32	35	33	12.8	14.2	50	15.5	135	67	44	16.4	34
6	32	35	33	12.8	16.0	50	15.5	154	61	37	16.4	34
7	32	35	33	12.8	20	50	23	154	67	34	16.0	34
8	32	35	33	12.8	25	50	37	139	88	46	15.5	34
9	33	35	33	12.8	28	50	51	125	107	43	16.4	34
10	33	35	33	12.8	34	50	57	114	100	41	19.2	34
11	33	34	34	12.8	34	50	60	104	89	36	16.9	34
12	33	34	34	12.8	34	50	67	90	75	33	16.4	34
13	33	34	34	12.8	34	44	71	82	68	31	16.0	34
14	32	34	34	12.8	34	34	66	94	69	30	16.0	33
15	32	34	34	12.8	34	34	65	100	83	35	15.5	33
16	32	34	34	12.8	34	34	66	92	79	39	15.1	33
17	35	33	33	12.8	34	36	66	86	70	46	16.4	33
18	36	33	33	12.8	34	57	59	92	65	45	15.5	33
19	35	33	33	12.8	34	76	59	98	60	46	15.1	33
20	35	33	33	12.8	34	82	59	114	60	44	15.1	35
21	35	33	33	12.8	34	79	60	127	73	38	15.5	36
22	35	33	33	12.8	37	74	53	139	68	65	15.1	34
23	35	33	33	13.3	39	72	46	139	60	64	15.1	33
24	35	33	25	13.3	39	72	38	133	50	56	15.1	33
25	33	33	19.3	14.2	46	72	35	146	44	49	14.6	33
26	30	33	15.1	14.2	46	72	40	184	44	42	14.6	32
27	33	33	12.8	14.2	46	72	42	179	41	36	15.1	33
28	33	33	12.8	14.2	46	72	48	159	38	32	15.1	33
29	33	33	13.3	14.2	-------	71	41	148	43	31	14.6	34
30	33	33	13.3	14.2	-------	36	46	139	54	27	14.6	34
31	33	-------	13.3	14.2	-------	14.2	-------	135	-------	24	14.6	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	32	35	56	75	a81	19.8	46	74	70	16.0	14.2
2	34	32	35	70	74	a81	42	41	68	60	17.8	14.2
3	34	32	35	78	75	a81	54	43	60	50	21	14.2
4	34	29	35	78	75	a81	60	39	49	46	25	14.2
5	34	32	35	78	74	81	62	46	46	41	32	14.2
6	34	34	35	78	73	81	68	43	39	46	37	14.2
7	34	34	35	79	73	81	73	52	39	50	38	38
8	34	35	35	79	72	81	69	59	44	43	38	115
9	33	35	35	79	73	81	69	55	44	36	38	164
10	32	35	35	79	72	83	62	53	44	30	38	185
11	32	35	35	79	72	83	56	52	39	25	37	208
12	32	35	35	78	72	83	77	52	39	22	39	213
13	32	35	35	78	72	83	86	100	45	24	50	213
14	32	35	35	78	78	83	107	123	41	40	64	222
15	32	35	35	78	83	83	134	128	37	34	71	228
16	32	35	35	78	81	88	140	126	36	27	a71	226
17	32	35	35	77	81	90	140	132	30	22	a70	224
18	32	35	35	77	81	90	119	130	25	22	70	226
19	34	35	35	75	81	69	107	123	35	22	40	228
20	33	35	35	75	81	35	98	107	55	27	25	225
21	33	35	36	77	81	18.3	98	96	52	26	25	226
22	32	35	35	77	81	15.1	84	89	52	37	22	251
23	32	35	35	77	81	14.6	72	77	56	35	17.8	266
24	32	35	35	75	81	14.6	68	74	59	32	16.4	251
25	32	35	35	75	81	14.6	66	70	75	27	16.4	235
26	32	35	35	77	81	13.7	69	64	77	21	16.4	251
27	32	35	41	75	81	13.3	66	59	77	19.2	16.4	247
28	32	35	51	75	81	12.9	59	54	89	18.8	16.4	235
29	32	35	51	77	81	13.3	52	49	84	16.9	15.5	240
30	32	35	51	77	-------	13.3	46	79	75	14.2	14.2	244
31	32	-------	51	75	-------	12.9	-------	80	-------	13.7	14.2	-------

a No gage-height record; discharge computed on basis of records for stations on nearby streams.

Musconetcong River at outlet of Lake Hopatcong--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	249	30	30	11.1	10.7	10.7	34	70	14.2	12.0	12.0	12.0
2	251	30	30	10.4	11.4	10.7	93	70	13.1	12.0	12.0	11.6
3	251	30	30	10.4	11.7	10.7	198	85	12.4	12.0	12.0	11.6
4	256	30	30	10.4	12.8	11.1	219	81	12.0	12.0	11.6	11.6
5	256	30	30	8.6	12.8	11.4	214	74	11.6	12.4	11.6	11.6
6	247	30	30	6.2	13.5	11.4	21	70	11.6	12.0	11.6	25
7	204	30	30	9.4	13.5	11.1	19.4	79	11.3	12.0	11.6	31
8	105	30	30	10.0	14.0	11.1	18.9	66	10.2	12.0	11.6	31
9	41	30	30	10.0	13.1	11.1	18.3	58	12.7	11.6	11.6	30
10	37	30	30	10.0	12.1	11.1	18.3	64	14.2	11.6	11.6	30
11	34	30	29	10.0	11.7	11.1	18.3	60	13.1	10.9	12.0	30
12	34	31	29	10.0	11.7	10.7	18.3	52	11.3	10.9	12.0	30
13	34	31	30	9.7	11.7	10.7	18.3	46	11.3	10.9	12.0	30
14	34	30	30	10.0	11.7	11.1	18.3	41	11.6	10.9	11.6	29
15	34	30	30	10.0	11.4	11.4	18.3	41	11.6	10.6	11.6	29
16	34	30	30	10.4	11.1	11.7	18.3	36	11.6	10.6	11.6	29
17	34	30	30	11.1	11.1	11.7	16.0	34	12.0	10.6	11.6	28
18	34	30	30	10.7	11.4	12.1	15.2	31	12.7	10.2	12.0	28
19	34	31	30	10.4	11.4	12.1	21	30	12.7	10.6	13.1	28
20	33	31	30	10.4	11.4	12.1	31	36	12.4	10.6	13.1	29
21	33	31	29	10.7	11.1	12.1	38	35	12.4	10.6	13.1	29
22	33	31	29	11.1	11.1	12.1	46	34	12.4	10.6	12.7	29
23	33	31	29	11.1	10.7	12.1	66	43	12.4	10.6	12.4	29
24	33	31	28	10.4	10.7	13.1	76	42	12.0	11.3	12.4	29
25	32	31	11.7	9.7	10.7	12.8	79	42	12.0	12.0	12.4	29
26	32	31	11.7	9.7	10.7	12.8	72	37	12.4	12.0	12.4	29
27	31	31	11.7	9.7	10.7	14.4	75	28	12.4	12.0	12.4	29
28	31	31	11.4	9.7	10.7	17.4	71	21	12.4	12.0	12.4	29
29	31	31	11.4	10.0	-------	17.9	58	17.8	12.4	12.0	12.4	29
30	31	30	12.1	10.4	-------	34	60	16.0	12.0	11.6	12.4	29
31	30	-------	11.7	10.4	-------	38	-------	15.2	-------	12.0	12.0	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	12.0	10.9	11.3	10.9	15.6	81	56	90	33	17.4	17.0
2	29	10.9	10.9	11.3	10.9	16.0	78	55	112	24	15.6	17.4
3	29	10.6	10.9	11.3	10.9	16.0	80	54	104	26	17.0	17.8
4	28	10.6	10.9	11.3	10.9	16.0	83	f53	116	28	16.5	17.0
5	28	10.6	10.9	11.3	10.9	16.0	90	f54	107	27	13.8	24
6	28	10.6	10.9	11.3	10.9	16.0	90	f49	98	35	13.4	27
7	28	10.6	10.9	11.3	10.9	16.0	80	f47	94	31	12.4	27
8	27	10.6	10.9	11.3	10.9	21	69	f37	80	26	12.0	29
9	28	10.6	10.9	11.3	10.9	44	65	f27	69	22	12.7	30
10	28	10.6	10.9	11.3	10.9	48	57	30	59	28	13.4	30
11	29	10.9	10.9	11.3	10.9	52	53	35	56	34	15.2	31
12	29	11.6	12.0	11.3	10.9	52	49	32	43	47	16.5	32
13	29	11.3	14.7	11.3	10.9	57	46	28	36	61	14.7	31
14	29	10.9	14.7	11.3	10.9	70	43	26	36	104	13.4	30
15	29	10.9	14.7	11.3	10.9	75	39	25	39	101	13.1	30
16	28	10.9	14.2	11.3	10.9	76	36	25	34	91	12.7	30
17	28	10.9	13.4	11.3	10.9	76	33	28	38	80	12.7	30
18	28	10.9	13.1	11.6	10.9	76	31	44	30	69	12.7	30
19	28	10.9	13.1	11.6	10.9	65	30	53	27	61	12.7	30
20	28	10.9	13.1	11.3	11.3	56	41	55	24	53	28	30
21	29	10.9	12.7	11.3	11.3	55	47	51	23	44	26	30
22	29	10.9	12.7	11.3	11.3	56	45	47	21	35	24	30
23	29	10.9	12.7	11.3	12.0	50	44	44	17.8	29	23	30
24	29	10.9	12.7	11.6	13.1	40	45	56	31	24	22	30
25	29	10.6	12.4	11.6	13.8	31	44	63	87	30	19.4	30
26	29	10.2	12.0	11.6	14.7	30	49	65	81	26	17.8	29
27	29	10.2	11.6	11.3	14.7	41	48	63	66	23	17.0	29
28	21	10.2	11.6	11.3	15.2	56	51	57	55	22	15.6	29
29	12.7	10.6	11.3	11.3	-------	72	52	71	44	25	16.0	29
30	12.7	10.9	11.3	11.3	-------	84	54	80	38	23	17.4	29
31	12.4	-------	11.3	10.9	-------	85	-------	79	-------	19.4	17.8	-------

f Computed on basis of partly estimated gage-height record.

Musconetcong River at outlet of Lake Hopatcong--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	1,098	46	32	35.4	18.5	.723	0.83
November	1,422	148	32	47.4	79.0	3.09	3.45
December	3,883	144	114	125	90.4	3.53	4.07
Calendar year 1945	24,275.5	227	11.6	66.5	68.1	2.66	36.13
January 1946	3,512	127	61	113	71.3	2.79	3.21
February	1,175	61	37	42.0	29.6	1.16	1.20
March	5,829	37	11.2	18.8	68.5	2.68	3.08
April	362.3	13.7	11.6	12.1	24.5	.957	1.07
May	1,390.3	137	12.0	44.8	67.2	2.62	3.03
June	1,891.7	159	13.7	63.1	47.7	1.86	2.08
July	694.2	68	11.2	22.4	26.4	1.03	1.19
August	597.9	32	14.6	19.3	13.3	.520	.60
September	941	36	21	31.4	-.71	-.028	-.03
Water year 1945-46	17,550.3	159	11.2	48.1	44.8	1.75	23.78
October 1946	1,025	36	30	33.1	14.5	.566	.65
November	1,016	35	33	33.9	2.09	.082	.09
December	889.9	34	12.8	28.7	13.3	.520	.60
Calendar year 1946	14,078.2	159	11.2	38.6	31.6	1.23	16.77
January 1947	408.1	14.2	12.8	13.2	42.9	1.68	1.93
February	867.0	46	14.2	31.0	32.6	1.27	1.33
March	1,692.2	82	14.2	54.6	88.1	3.44	3.97
April	1,349.1	71	15.1	45.0	92.4	3.61	4.03
May	3,851	184	82	124	131	5.12	5.88
June	2,104	110	38	70.1	60.6	2.37	2.64
July	1,334	72	24	43.0	35.4	1.38	1.59
August	497.3	22	14.6	16.0	1.93	.075	.09
September	980.1	36	15.1	32.7	5.41	.211	.24
Water year 1946-47	16,013.7	184	12.8	43.9	43.4	1.70	23.04
October 1947	1,013	34	32	32.7	7.60	.297	.34
November	1,030	35	29	34.3	78.7	3.07	3.43
December	1,156	51	35	37.3	37.7	1.47	1.70
Calendar year 1947	16,281.8	184	12.8	44.6	51.2	2.00	27.17
January 1948	2,364	79	56	76.3	34.4	1.34	1.55
February	2,247	83	72	77.5	56.1	2.19	2.37
March	1,755.6	90	12.9	56.6	130	5.08	5.87
April	2,322.8	140	19.8	77.4	88.8	3.47	3.87
May	2,341	132	59	75.5	88.0	3.44	3.96
June	1,585	89	25	52.8	54.5	2.13	2.38
July	997.8	70	13.7	32.2	16.5	.645	.74
August	1,028.5	71	14.2	33.2	13.7	.535	.62
September	5,246.2	266	14.2	175	-1.69	-.066	-.07
Water year 1947-48	23,086.9	266	12.9	63.1	50.3	1.96	26.76
October 1948	2,586	256	30	83.4	9.96	.389	.45
November	913	31	30	30.4	25.5	.996	1.11
December	789.7	30	11.4	25.5	83.0	3.24	3.74
Calendar year 1948	24,176.6	266	11.4	66.1	50.0	1.95	26.59
January 1949	312.1	11.1	6.2	10.1	138	5.39	6.20
February	326.6	14.0	10.7	11.7	71.0	2.77	2.89
March	421.8	38	10.7	13.6	46.4	1.81	2.09
April	1,687.9	219	15.2	56.3	62.1	2.42	2.71
May	1,455.0	85	15.2	46.9	40.1	1.57	1.81
June	366.4	14.2	10.2	12.2	-6.41	-.250	-.28
July	353.1	12.4	10.2	11.4	-5.68	-.222	-.26
August	374.8	13.1	11.6	12.1	-7.26	-.284	-.33
September	785.4	31	11.6	26.2	2.28	.089	.10
Water year 1948-49	10,371.8	256	6.2	28.4	38.1	1.49	20.23
October 1949	828.8	29	12.4	26.7	2.26	.088	.10
November	324.1	12.0	10.2	10.8	2.66	.104	.12
December	375.2	14.7	10.9	12.1	21.1	.824	.95
Calendar year 1949	7,611.2	219	6.2	20.9	30.3	1.18	16.10
January 1950	351.4	11.6	10.9	11.3	31.8	1.24	1.43
February	324.5	15.2	10.9	11.6	61.5	2.40	2.50
March	1,479.6	85	15.6	47.7	94.9	3.71	4.27
April	1,653	90	30	55.1	50.9	1.99	2.22
May	1,489	80	25	48.0	51.3	2.00	2.31
June	1,755.8	116	17.8	58.5	52.3	2.04	2.28
July	1,281.4	104	19.4	41.3	36.9	1.44	1.66
August	511.9	28	12.0	16.5	13.7	.535	.62
September	835.2	32	17.0	27.8	3.30	.129	.14
Water year 1949-50	11,209.9	116	10.2	30.7	35.1	1.37	18.60

* Adjusted for change in contents in Lake Hopatcong. Negative figures indicate that evaporation and seepage from lake exceeded inflow.

Musconetcong River near Hackettstown

Location.--Lat 40°53'10", long 74°48'00", on right bank 75 ft upstream from Saxton Falls Dam, half a mile upstream from Delaware, Lackawanna and Western Railroad bridge, and 3 miles northeast of Hackettstown, Warren County.

Drainage area.--70.0 sq mi.

Records available.--September 1921 to September 1950.

Gage.--Water-stage recorder above concrete dam. Datum of gage is 630.93 ft above mean sea level (New Jersey Geological Survey benchmark). Prior to Aug. 21, 1923, staff gage, and Aug. 21, 1923, to July 19, 1938, water-stage recorder, at site 2,00 ft downstream at datum 26.97 ft lower.

Average discharge.--29 years (1921-50), 116 cfs (adjusted).

Extremes.--1921-50: Maximum discharge, 1,430 cfs Mar. 12, 1936 (gage height, 5.88 ft, from floodmark, site and datum then in use), from rating curve extended above 1,000 cfs; minimum, 2 cfs July 8, 1927 (gage height, 1.02 ft, site and datum then in use).

Peak discharge (base, 350 cfs).--
1946: Nov. 23 (6:30 a.m.) 351 cfs (1.91 ft); Dec. 1 (10 p.m.) 351 cfs (1.89 ft); Dec. 26 (12 p.m.) 464 cfs (2.07 ft); Jan. 8 (5 a.m.) 363 cfs (1.91 ft); May 28 (9 a.m.) 416 cfs (2.01 ft); June 3 (4:30 to 10 a.m.) 494 cfs (2.13 ft).
1947: Mar. 15 (9 p.m.) 506 cfs (2.13 ft); Apr. 6 (7 a.m.) 493 cfs (2.11 ft); May 6 (3 to 11 a.m.) 513 cfs (2.14 ft); May 26 (2 p.m.) 421 cfs (2.00 ft).
1948: Nov. 9 (7 a.m.) 391 cfs (1.95 ft); Mar. 18 (12:30 a.m.) 584 cfs (2.25 ft); Apr. 15 (1 p.m.) 440 cfs (2.03 ft); May 14 (3:30 a.m.) 472 cfs (2.08 ft).
1949: Dec. 31 (5 p.m.) 1,080 cfs (2.86 ft); Jan. 6 (4 p.m.) 638 cfs (2.32 ft).
1950: Mar. 10 (1:30 p.m.) 361 cfs (1.90 ft).

Remarks.--Records include flow bypassed through swimming pool. Flow regulated by Lake Hopatcong (usable capacity, 800,000,000 cubic feet).

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	82	64	345	340	130	104	136	50	208	47	a53	19.4
2	75	64	340	294	118	121	127	47	298	65	a42	21
3	71	61	316	283	105	129	137	44	474	93	39	23
4	71	61	294	272	97	129	128	41	404	68	36	27
5	64	55	256	261	93	138	120	41	338	50	34	39
6	64	55	250	272	105	142	111	41	298	39	34	42
7	75	58	272	334	152	146	103	47	264	39	42	44
8	75	61	272	357	134	179	99	53	228	39	50	44
9	89	61	267	334	118	208	99	53	184	34	47	44
10	97	64	261	345	109	229	95	47	156	29	44	42
11	87	75	236	328	104	184	87	44	138	39	53	39
12	83	82	220	311	96	129	84	59	174	39	47	39
13	83	89	210	299	96	121	76	80	198	32	44	39
14	90	89	205	277	112	112	66	66	184	21	47	39
15	90	101	205	256	117	138	69	78	150	25	47	39
16	83	105	205	225	96	155	76	74	134	27	36	39
17	78	101	195	219	92	142	69	82	116	25	42	42
18	75	101	190	214	85	138	62	192	104	25	75	42
19	68	109	195	209	85	160	59	286	96	23	90	44
20	68	147	210	199	96	146	56	228	82	23	72	44
21	64	139	205	199	88	133	56	228	74	32	62	50
22	68	219	200	199	81	129	50	228	68	53	47	60
23	71	340	195	185	81	120	47	198	64	143	53	57
24	75	305	195	166	81	110	44	160	58	281	53	63
25	71	288	215	156	81	131	44	138	52	223	34	83
26	68	277	388	156	77	144	53	134	46	165	29	66
27	64	267	438	147	81	232	62	244	42	117	27	54
28	64	256	376	143	100	222	59	404	38	109	25	48
29	64	311	317	126	-------	227	56	342	64	97	32	48
30	64	345	306	122	-------	206	56	270	50	79	27	63
31	64	-------	317	130	-------	162	-------	234	-------	68	9.9	-------

a No gage-height record; discharge computed from estimated gage-height graph.

Musconetcong River near Hackettstown--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	65	59	50	29	103	80	97	337	236	130	54	28
2	58	59	48	29	91	91	114	390	210	161	48	35
3	61	56	57	29	80	116	136	337	199	147	45	41
4	61	53	42	31	80	116	165	308	189	121	43	46
5	58	50	48	31	76	112	272	372	165	100	40	65
6	55	50	48	31	73	112	473	506	146	84	40	79
7	47	53	48	31	69	107	384	447	157	77	37	71
8	47	53	45	29	63	103	302	390	232	130	37	64
9	45	50	44	29	69	99	252	325	321	128	45	61
10	42	50	44	27	66	99	236	291	260	107	187	54
11	43	48	44	27	73	103	215	258	217	95	118	57
12	57	54	47	29	80	112	210	226	181	83	71	48
13	80	51	47	34	76	120	199	199	147	68	54	48
14	59	49	44	36	76	282	185	194	157	69	48	48
15	50	48	47	42	73	500	171	236	248	83	43	54
16	44	45	36	53	73	466	171	226	211	117	40	67
17	47	48	41	56	69	384	185	210	171	147	45	64
18	56	48	47	56	69	302	165	226	157	161	48	54
19	59	48	47	50	69	264	156	258	161	147	42	49
20	56	48	47	81	66	252	151	286	142	152	43	46
21	56	45	65	147	63	231	160	296	216	108	40	49
22	53	45	85	125	83	215	151	314	185	171	40	61
23	53	45	58	112	83	187	130	325	157	211	37	74
24	48	45	55	91	80	180	113	296	134	161	37	61
25	48	45	58	91	80	169	108	202	121	134	34	57
26	62	48	54	87	80	188	130	415	117	118	34	54
27	63	48	43	99	80	174	121	378	108	96	34	48
28	57	45	36	99	80	193	125	337	96	81	34	45
29	54	45	34	95	-------	164	113	325	100	77	33	45
30	50	45	34	83	-------	164	113	331	152	74	30	45
31	53	-------	29	103	-------	123	-------	274	-------	65	28	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	41	100	107	102	105	219	258	124	209	159	33	19.3
2	41	88	107	132	110	219	319	116	188	136	33	17.5
3	44	81	103	132	110	251	280	116	155	119	33	17.5
4	41	95	99	132	105	230	246	112	128	102	33	17.5
5	44	129	94	128	110	198	230	120	106	86	41	17.5
6	45	125	90	128	105	188	223	129	98	98	65	17.5
7	45	121	89	128	110	198	226	151	94	106	58	23
8	45	195	81	128	105	204	210	220	119	98	55	86
9	45	355	75	128	105	198	199	209	119	86	52	159
10	42	270	69	123	110	214	184	174	115	75	49	169
11	39	211	69	119	105	241	175	155	106	65	49	198
12	36	259	66	119	105	219	231	150	98	59	75	214
13	39	243	66	128	105	209	264	324	119	59	106	219
14	42	206	66	128	164	204	291	459	119	83	90	219
15	45	182	65	115	188	209	421	427	102	80	90	235
16	47	162	106	119	183	316	390	389	94	66	90	235
17	45	148	98	119	193	562	360	414	86	55	86	235
18	45	140	94	119	225	548	337	365	75	55	82	235
19	45	136	90	111	251	467	296	330	98	58	82	241
20	47	127	82	115	307	434	264	295	155	55	68	241
21	47	122	79	123	307	354	247	251	164	55	86	235
22	45	126	79	123	290	308	226	225	164	98	75	235
23	47	130	82	119	268	280	184	204	174	102	62	251
24	47	134	82	111	260	263	165	183	174	94	49	257
25	45	156	75	111	225	230	170	174	209	68	38	257
26	42	142	75	115	225	199	160	169	193	55	33	251
27	42	133	102	119	219	193	151	155	173	49	28	225
28	42	124	102	119	235	220	146	141	209	44	26	230
29	63	120	96	128	235	204	133	90	209	41	23	263
30	74	116	94	115	-------	183	129	128	188	38	23	268
31	108	-------	94	110	-------	169	-------	193	-------	33	21	-------

Note.--Stage-discharge relation affected by ice Jan. 30 to Feb. 13.

Musconetcong River near Hackettstown--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	285	52	74	833	187	128	89	155	57	22	26	26
2	268	49	71	552	169	123	85	164	54	22	26	24
3	263	51	71	416	145	119	81	225	48	20	28	22
4	263	61	71	329	150	115	81	230	43	20	32	22
5	268	57	67	317	145	115	81	204	43	27	58	22
6	268	54	64	588	136	132	131	183	40	27	55	26
7	263	74	67	545	141	132	131	209	37	25	44	30
8	133	67	64	445	150	119	118	198	34	20	43	41
9	62	61	61	358	145	111	106	159	29	18.3	54	44
10	49	64	57	306	145	106	93	158	29	20	34	44
11	49	67	54	272	136	115	85	168	29	25	22	46
12	49	64	54	218	132	123	84	144	32	25	27	46
13	49	61	57	178	115	115	90	131	32	29	37	52
14	52	61	57	154	115	111	132	118	29	29	43	68
15	52	57	57	135	128	102	128	114	27	27	32	72
16	49	54	64	105	145	98	115	105	25	25	28	62
17	49	54	71	105	141	94	106	97	25	27	36	49
18	62	54	67	97	128	98	122	105	27	42	36	49
19	55	54	64	89	119	90	219	85	29	42	31	62
20	49	89	61	85	136	90	198	101	29	37	26	52
21	49	85	67	81	141	94	179	131	29	40	26	41
22	48	78	64	140	136	139	174	114	29	37	26	38
23	46	81	61	162	169	246	257	149	27	32	24	44
24	46	78	57	173	164	230	257	135	22	30	24	38
25	49	71	54	187	150	122	241	118	22	28	24	38
26	46	67	54	173	145	101	241	105	25	26	24	38
27	44	71	51	163	132	97	204	110	25	22	24	35
28	44	71	51	197	128	85	188	93	25	25	24	35
29	44	81	61	240	-------	77	159	78	22	25	39	44
30	52	81	379	205	-------	74	145	71	22	26	59	75
31	52	-------	1,010	178	-------	77	-------	64	-------	26	28	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55	39	36	66	70	74	236	151	215	73	45	56
2	46	34	36	69	77	70	214	160	291	53	42	50
3	41	34	36	73	92	64	209	146	264	59	45	47
4	38	34	36	80	88	64	230	137	274	59	47	50
5	41	34	34	80	84	64	225	133	269	66	42	45
6	42	34	34	80	81	67	220	129	226	69	39	45
7	38	34	34	83	81	64	202	120	199	76	34	47
8	38	34	34	77	70	81	184	107	175	69	31	47
9	35	34	34	67	92	248	170	95	156	56	29	47
10	38	34	31	77	138	248	160	87	127	63	34	53
11	44	34	34	100	138	237	151	83	133	103	36	66
12	41	34	36	86	134	221	137	80	120	151	36	63
13	44	34	59	81	138	227	137	76	105	194	34	59
14	41	45	53	77	134	237	133	73	95	325	31	66
15	41	42	47	74	166	216	124	73	95	274	29	63
16	38	39	42	67	181	206	112	73	99	215	27	59
17	38	39	39	64	171	200	99	73	95	184	29	56
18	35	39	42	64	157	191	91	95	91	156	31	53
19	35	39	47	57	152	178	83	146	87	124	36	50
20	33	38	47	51	147	169	91	156	80	107	146	56
21	35	35	45	57	121	188	124	137	73	91	156	53
22	38	35	42	54	117	204	120	112	66	76	116	50
23	35	33	45	54	108	268	113	102	59	65	91	50
24	38	35	45	60	104	290	113	142	59	58	73	47
25	38	35	42	64	100	252	117	180	112	68	56	45
26	49	35	42	64	92	225	121	180	180	65	47	42
27	52	33	81	64	81	220	117	170	156	58	42	42
28	41	33	100	60	77	199	113	151	124	49	39	45
29	38	35	88	64	-------	204	129	180	107	52	42	45
30	36	39	74	70	-------	199	133	221	87	52	59	45
31	42	-------	66	70	-------	236	-------	210	-------	47	63	-------

Musconetcong River near Hackettstown--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	2,305	97	64	74.4	74.4	.820	0.95
November	4,350	345	55	145	177	2.53	2.82
December	8,096	438	190	261	226	3.23	3.73
Calendar year 1945	62,011.0	558	30	170	172	2.46	33.27
January 1946	7,358	357	122	237	195	2.79	3.22
February	2,810	152	77	100	88.0	1.26	1.31
March	4,767	232	104	154	203	2.90	3.35
April	2,386	157	44	79.5	92.0	1.31	1.47
May	4,235	404	41	137	159	2.27	2.62
June	4,794	474	38	160	144	2.06	2.30
July	2,149	281	21	69.3	73.4	1.05	1.21
August	1,378.9	90	9.9	44.5	38.5	.550	.63
September	1,343.4	83	19.4	44.8	12.7	.181	.20
Water year 1945-46	45,972.3	474	9.9	126	123	1.76	23.81
October 1946	1,687	80	42	54.4	35.9	.513	.59
November	1,476	59	45	49.2	17.4	.249	.28
December	1,432	65	29	46.2	30.8	.440	.51
Calendar year 1946	35,816.3	474	9.9	98.1	91.2	1.30	17.69
January 1947	1,892	147	27	61.0	90.8	1.30	1.50
February	2,129	103	62	76.0	77.7	1.11	1.16
March	5,708	500	80	184	218	3.11	3.58
April	5,553	473	97	185	233	3.33	3.71
May	9,615	506	194	310	317	4.53	5.21
June	5,294	321	96	176	167	2.39	2.66
July	3,600	211	65	116	108	1.54	1.79
August	1,510	187	28	48.7	34.6	.494	.57
September	1,618	79	28	53.9	26.7	.381	.43
Water year 1946-47	41,514	506	27	114	113	1.61	21.99
October 1947	1,465	108	36	47.3	22.2	.317	.37
November	4,676	355	81	156	200	2.86	3.19
December	2,678	107	65	86.4	86.8	1.24	1.43
Calendar year 1947	45,738	506	27	125	132	1.89	25.60
January 1948	3,746	132	102	121	79.0	1.13	1.30
February	5,135	307	105	177	156	2.23	2.40
March	8,141	562	169	263	336	4.80	5.54
April	7,115	421	129	237	249	3.56	3.96
May	6,692	459	90	216	226	3.26	3.76
June	4,246	209	75	142	143	2.04	2.28
July	2,377	159	33	76.7	61.0	.871	1.00
August	1,734	106	21	55.9	36.4	.520	.60
September	5,287.8	268	17.5	176	-.31	-.0044	-.005
Water year 1947-48	53,292.8	562	17.5	146	133	1.90	25.82
October 1948	3,205	285	44	103	29.9	.427	.49
November	1,969	89	49	65.6	60.7	.867	.97
December	3,182	1,010	51	103	160	2.29	2.64
Calendar year 1948	52,829.8	1,010	17.5	144	128	1.83	24.94
January 1949	8,022	833	81	259	386	5.51	6.36
February	3,973	187	115	142	201	2.87	2.99
March	3,579	246	74	115	148	2.11	2.44
April	4,816	257	81	144	150	2.14	2.39
May	4,221	230	64	136	129	1.84	2.13
June	946	57	22	31.5	12.9	.184	.21
July	848.3	43	18.3	27.4	10.3	.147	.17
August	1,021	58	22	32.9	13.6	.194	.22
September	1,285	75	22	42.8	18.9	.270	.30
Water year 1948-49	36,567.3	1,010	18.3	100	110	1.57	21.31
October 1949	1,244	55	33	40.1	15.7	.224	.26
November	1,076	45	33	35.9	27.7	.396	.44
December	1,467	100	31	47.3	56.3	.804	.93
Calendar year 1949	31,398.3	833	18.3	87.7	97.2	1.39	18.84
January 1950	2,156	100	51	69.5	90.0	1.29	1.48
February	3,191	181	70	114	164	2.34	2.44
March	5,601	290	64	181	228	3.26	3.75
April	4,408	236	82	147	143	2.04	2.28
May	3,989	231	72	129	132	1.89	2.17
June	4,227	291	59	141	135	1.93	2.15
July	3,157	325	47	102	97.4	1.39	1.60
August	1,607	156	27	51.8	49.0	.700	.81
September	1,542	66	42	51.4	26.9	.384	.43
Water year 1949-50	33,665	325	27	92.2	96.6	1.38	18.74

* Adjusted for change in contents in Lake Hopatcong. Negative figures indicate that evaporation and seepage from Lake Hopatcong and area between Lake Hopatcong and station exceeded inflow.

Musconetcong River near Bloomsbury

Location.--Lat 40°40'20", long 75°03'40", just downstream from highway bridge 1½ miles upstream from Bloomsbury, Hunterdon County, and 9½ miles upstream from mouth.

Drainage area.--143 sq mi.

Records available.--July 1903 to March 1907, July 1921 to September 1950.

Gage.--Water-stage recorder. Concrete control since Sept. 29, 1932. Datum of gage is 274.83 ft above mean sea level, datum of 1929. Prior to Apr. 12, 1904, staff gage and Apr. 12, 1904, to Mar. 31, 1907, chain gage, at bridge 15 ft upstream at different datum. July 26 to Sept. 21, 1921, staff gage at bridge at present datum.

Average discharge.--29 years (1921-50), 224 cfs (adjusted).

Extremes.--1903-07, 1921-50: Maximum discharge, 6,960 cfs Oct. 10, 1903 (gage height, 8.00 ft, datum then in use, from graph based on gage readings), from rating curve extended above 1,800 cfs on basis of slope-area determination at gage height 6.95 ft; minimum, 13 cfs Aug. 26, 1932; minimum daily, 38 cfs July 24, 1932.

Peak discharge (base, 1,000 cfs).--
1946: June 2 (2 p.m.) 1,190 cfs (3.93 ft).
1947: Aug. 17 (3:30 a.m.) 1,720 cfs (4.83 ft).
1948: May 13 (4 p.m.) 1,390 cfs (4.29 ft).
1949: Dec. 31 (8:30 a.m.) 1,600 cfs (4.64 ft); Jan. 6 (3:30 a.m.) 1,550 cfs. (4.55 ft).
1950: Mar. 23 (9:30 a.m.) 887 cfs (3.36 ft), (annual maximum below base).

Remarks.--Flow regulated by Lake Hopatcong (usable capacity, 800,000,000 cubic feet). Diurnal fluctuation caused by small powerplants above station.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	207	153	467	588	265	366	291	160	329	168	144	83
2	197	148	483	516	239	304	279	146	777	327	130	82
3	191	146	464	472	b210	322	283	145	746	209	124	93
4	185	144	440	457	b190	313	278	134	660	186	116	92
5	178	147	397	445	b185	308	257	128	567	161	116	91
6	181	134	414	505	231	292	269	140	501	150	117	101
7	194	138	426	567	264	287	232	143	452	142	154	95
8	194	137	406	580	265	344	231	142	414	137	148	110
9	227	142	397	554	236	412	230	148	358	133	128	109
10	216	135	396	588	228	387	218	138	306	124	120	101
11	200	167	373	541	228	367	207	131	282	121	121	100
12	194	191	365	528	215	285	201	217	309	130	130	98
13	188	177	332	510	218	266	186	280	344	127	129	94
14	192	174	329	480	250	258	180	189	324	109	146	92
15	197	197	319	437	256	218	189	225	302	111	120	91
16	187	190	b300	385	206	316	191	192	265	108	124	95
17	180	186	b290	378	211	287	184	187	247	107	130	97
18	177	180	*b290	371	200	324	174	361	228	102	180	91
19	174	199	297	364	188	356	166	496	217	94	199	93
20	159	288	321	331	198	315	161	400	210	92	172	94
21	146	242	312	351	207	282	158	366	194	133	146	111
22	159	521	299	348	190	277	160	364	186	150	137	128
23	160	518	297	330	192	261	152	325	176	430	124	128
24	170	461	297	305	186	256	154	286	175	293	135	145
25	170	427	329	300	190	308	158	254	157	336	118	184
26	168	397	767	291	181	301	163	250	154	277	112	144
27	162	377	668	275	184	494	171	436	148	212	102	121
28	156	398	580	266	390	414	169	571	144	179	96	110
29	160	546	533	252	-------	401	172	581	172	180	111	103
30	150	503	508	251	-------	383	164	420	226	164	128	133
31	148	-------	622	277	-------	381	-------	575	-------	154	98	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Musconetcong River near Bloomsbury--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	128	102	89	78	178	128	190	624	375	248	141	102
2	114	108	93	72	160	146	216	547	346	286	134	151
3	112	134	92	83	154	185	291	485	330	258	127	116
4	115	109	84	82	141	179	258	458	310	228	132	116
5	98	90	85	71	128	171	447	592	286	200	120	125
6	104	93	93	84	147	174	638	702	270	181	118	148
7	107	92	95	70	138	178	599	648	276	190	114	141
8	96	99	94	83	132	175	496	570	452	266	119	147
9	100	99	90	70	115	166	421	488	488	257	160	130
10	99	95	87	68	b140	174	394	438	330	238	290	125
11	95	98	85	72	139	178	366	395	348	210	237	137
12	108	104	85	74	140	195	353	359	307	190	172	126
13	152	102	90	72	135	212	382	334	266	225	145	115
14	131	99	86	91	132	540	316	318	342	201	134	116
15	109	98	83	118	127	658	288	289	507	200	121	138
16	99	97	82	146	128	613	283	342	384	208	140	161
17	97	97	80	144	131	517	296	327	325	251	435	138
18	103	99	76	129	127	410	275	327	314	261	165	127
19	120	96	82	119	122	358	254	376	305	295	141	116
20	106	94	77	288	110	329	244	498	287	346	338	130
21	107	92	153	276	b120	303	285	420	339	254	148	114
22	102	94	145	207	b140	292	265	468	372	271	134	144
23	103	93	120	b185	b150	249	256	460	285	219	130	148
24	101	98	106	b175	b145	215	216	418	262	273	117	139
25	102	94	101	171	b140	312	208	565	250	243	121	125
26	111	92	106	163	136	284	230	667	235	212	121	118
27	127	101	92	194	131	261	221	571	218	194	121	114
28	120	90	93	176	133	276	221	508	211	190	120	106
29	110	92	83	162	-------	256	209	489	208	171	112	114
30	106	90	88	153	-------	245	240	528	287	165	110	106
31	100	-------	69	191	-------	230	-------	427	-------	161	109	-------

b Stage-discharge relation affected by ice.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	105	170	189	186	170	411	599	271	376	285	126	88
2	103	149	186	240	176	423	584	264	354	257	132	89
3	102	141	183	231	176	472	518	285	321	234	124	94
4	101	176	176	208	170	431	464	271	292	214	124	84
5	102	211	176	224	180	365	435	299	264	202	124	84
6	113	198	170	218	172	354	419	303	250	218	144	84
7	98	186	164	214	176	369	407	376	257	218	144	86
8	99	462	170	205	170	384	392	403	274	211	138	80
9	99	476	158	202	170	376	376	373	264	192	138	184
10	98	376	149	208	186	415	550	542	254	180	132	284
11	94	321	146	195	170	435	665	310	244	152	135	257
12	95	508	149	195	170	399	476	326	234	158	167	260
13	98	376	141	218	170	384	455	1,120	278	243	183	264
14	100	321	141	208	234	373	594	944	268	221	176	264
15	103	285	141	172	282	384	752	806	240	192	161	271
16	104	264	231	186	257	567	662	752	224	173	167	274
17	108	247	208	202	292	767	598	777	214	161	164	274
18	109	231	173	189	385	777	549	681	198	170	161	274
19	105	218	170	161	455	709	510	602	285	198	155	282
20	103	208	154	180	580	676	472	549	274	170	158	282
21	101	202	167	195	510	567	443	506	282	161	160	278
22	98	202	167	202	472	523	411	455	282	282	187	278
23	95	218	161	180	455	480	380	423	299	240	155	285
24	93	247	158	b170	376	464	354	395	299	218	138	296
25	89	285	148	b170	380	411	369	376	411	192	126	292
26	97	240	135	b175	399	376	343	361	321	180	110	292
27	95	221	149	b190	395	395	324	346	310	158	107	274
28	97	214	192	192	455	476	310	324	384	149	94	264
29	132	202	180	198	443	403	299	292	373	138	96	278
30	134	195	180	182	-------	369	288	365	317	127	96	317
31	171	-------	180	180	-------	343	-------	350	-------	129	96	-------

b Stage-discharge relation affected by ice.

Musconetcong River near Bloomsbury--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	332	102	129	1,350	388	299	218	260	152	77	64	72
2	310	107	124	871	361	288	221	274	144	77	64	61
3	299	102	121	621	328	282	202	339	135	77	66	55
4	299	115	118	493	328	268	205	343	126	77	64	55
5	299	118	115	648	321	282	195	314	124	79	78	55
6	310	110	115	1,310	306	292	257	292	128	84	76	70
7	303	146	118	960	350	288	268	346	114	88	77	64
8	271	135	112	752	*350	271	247	303	111	82	75	66
9	186	121	110	607	335	257	227	278	115	77	70	66
10	118	115	107	581	332	250	224	271	107	72	64	68
11	117	129	104	468	314	274	211	282	103	84	72	70
12	107	115	102	423	282	268	202	257	99	77	82	77
13	110	115	110	369	278	257	198	234	102	86	89	72
14	107	110	107	332	292	250	221	224	102	86	86	92
15	99	110	110	296	288	234	244	218	104	86	81	102
16	99	110	124	274	308	227	227	214	99	89	74	96
17	99	102	146	260	310	227	214	202	92	89	67	92
18	110	104	132	244	282	234	234	195	94	118	56	89
19	112	102	118	240	268	224	643	198	96	106	80	110
20	107	155	b110	224	332	211	328	202	106	94	59	a100
21	102	149	b115	218	306	227	288	287	96	89	59	a90
22	99	135	b105	399	317	244	288	224	96	89	61	a80
23	99	141	b100	325	395	388	395	274	92	84	59	a86
24	92	132	b94	380	346	388	384	247	89	79	59	82
25	96	118	b88	365	332	288	354	257	84	75	52	79
26	99	115	b86	354	321	257	343	218	86	68	58	82
27	94	121	b84	*354	303	281	332	218	94	72	55	82
28	93	121	b83	492	306	224	296	202	82	64	54	77
29	92	144	b100	468	-------	208	274	170	84	66	70	82
30	94	144	998	419	-------	198	264	170	82	66	79	119
31	99	-------	1,540	399	-------	195	-------	164	-------	64	72	-------

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for stations on nearby streams.
b Stage-discharge relation affected by ice.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	115	94	67	118	126	164	374	285	346	143	103	115
2	92	82	66	112	170	158	358	281	390	126	100	102
3	84	78	66	118	180	b145	354	266	370	123	115	100
4	84	72	64	118	161	b140	378	255	402	145	107	102
5	74	71	64	118	149	141	362	255	382	137	100	92
6	77	68	66	115	149	146	346	248	335	154	95	88
7	77	75	64	135	144	138	322	227	298	137	95	86
8	77	72	64	124	129	169	304	216	270	137	74	83
9	77	67	60	110	198	373	285	200	248	128	81	81
10	77	73	b60	138	281	321	274	197	213	151	81	109
11	77	64	68	167	227	335	259	187	207	208	86	110
12	82	66	70	146	218	310	252	178	197	230	86	107
13	82	66	135	135	221	328	248	172	181	255	82	102
14	82	72	124	129	257	321	241	169	181	414	79	115
15	75	77	96	124	350	306	280	172	181	382	76	110
16	77	77	79	121	343	292	216	169	175	308	79	100
17	73	72	77	110	317	274	212	166	175	274	72	92
18	75	76	79	110	292	271	197	213	166	238	76	92
19	76	60	92	112	274	257	184	255	166	202	76	88
20	66	74	89	96	260	247	280	252	163	184	200	90
21	67	72	77	96	240	310	255	284	158	169	208	90
22	68	67	79	96	231	321	228	216	148	145	169	95
23	75	57	75	99	218	641	220	197	137	134	142	94
24	75	64	86	*98	208	484	220	234	128	129	128	79
25	77	68	79	107	208	414	230	266	166	131	115	84
26	88	61	79	104	192	374	248	278	218	131	100	81
27	96	64	224	110	176	406	238	259	227	126	90	81
28	89	61	205	107	b170	a400	248	238	194	115	90	81
29	82	65	162	110	-------	a350	234	327	175	110	90	81
30	84	66	138	118	-------	a330	248	335	157	107	110	79
31	94	-------	115	126	-------	362	-------	315	-------	109	131	-------

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of recorded range in stage and records for station near Hackettstown.
b Stage-discharge relation affected by ice.

Musconetcong River near Bloomsbury--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	5,567	227	146	180	163	1.14	1.31
November	7,763	546	134	259	290	2.03	2.27
December	12,688	767	290	409	374	2.62	3.02
Calendar year 1945	121,277	1,820	128	332	334	2.34	31.70
January 1946	12,843	588	251	414	372	2.60	3.00
February	6,298	390	181	225	213	1.49	1.55
March	10,121	494	253	326	376	2.63	3.03
April	5,999	291	152	200	212	1.48	1.66
May	8,450	575	131	273	295	2.06	2.38
June	9,578	777	144	319	304	2.13	2.37
July	5,446	430	92	176	180	1.26	1.45
August	4,046	199	96	131	125	.874	1.00
September	3,204	184	82	107	74.7	.522	.58
Water year 1945-46	92,003	777	82	252	249	1.74	23.62
October 1946	3,377	152	95	109	90.4	.632	.73
November	2,906	109	90	96.9	65.1	.455	.51
December	2,884	156	69	93.0	77.6	.543	.62
Calendar year 1946	75,152	777	69	206	199	1.39	18.89
January 1947	4,062	288	68	131	161	1.13	1.30
February	3,819	178	110	136	138	.965	1.01
March	8,585	633	128	277	310	2.17	2.50
April	9,270	628	190	309	356	2.49	2.78
May	14,693	702	313	474	480	3.36	3.87
June	9,480	507	208	316	306	2.14	2.39
July	7,179	346	161	232	224	1.57	1.81
August	4,713	435	109	152	138	.965	1.11
September	3,813	161	102	127	99.8	.698	.78
Water year 1946-47	74,781	702	68	205	204	1.43	19.42
October 1947	3,241	171	89	105	79.5	.556	.64
November	7,751	508	141	258	303	2.12	2.36
December	5,192	231	135	167	168	1.17	1.35
Calendar year 1947	81,798	702	68	224	231	1.62	21.90
January 1948	6,077	240	181	196	154	1.06	1.24
February	8,610	580	170	297	276	1.93	2.08
March	14,278	777	343	461	534	3.73	4.31
April	13,498	752	288	450	461	3.22	3.60
May	14,248	1,120	264	460	472	3.30	3.81
June	8,642	411	198	288	290	2.03	2.26
July	6,003	285	127	194	178	1.24	1.43
August	4,318	183	94	139	120	.839	.97
September	6,638	317	80	221	44.7	.313	.35
Water year 1947-48	98,497	1,120	80	269	256	1.79	24.40
October 1948	4,853	332	92	157	83.1	.581	.67
November	3,643	155	102	121	116	.811	.91
December	5,725	1,540	83	185	242	1.69	1.95
Calendar year 1948	96,534	1,540	80	264	248	1.73	23.58
January 1949	15,452	1,350	218	498	626	4.38	5.05
February	8,977	395	268	321	380	2.66	2.77
March	8,011	388	195	258	291	2.03	2.35
April	7,914	395	195	264	270	1.89	2.10
May	7,607	346	164	245	239	1.67	1.92
June	3,131	152	82	104	85.7	.599	.67
July	2,519	118	64	81.3	64.2	.449	.52
August	2,122	89	52	68.5	49.1	.343	.40
September	2,392	119	55	79.7	55.8	.390	.44
Water year 1948-49	72,346	1,540	52	198	208	1.45	19.75
October 1949	2,494	115	66	80.5	56.0	.392	.45
November	2,096	94	57	69.9	61.7	.431	.48
December	2,869	224	60	92.5	102	.713	.82
Calendar year 1949	65,584	1,350	52	180	189	1.32	17.97
January 1950	3,627	167	96	117	137	.958	1.11
February	6,039	350	126	216	266	1.86	1.93
March	9,228	641	138	298	345	2.41	2.78
April	8,077	378	184	269	265	1.85	2.07
May	7,259	335	166	234	237	1.66	1.91
June	6,729	402	123	224	218	1.52	1.70
July	5,473	414	107	177	172	1.20	1.39
August	3,228	203	72	104	101	.706	.82
September	2,809	115	79	93.6	69.1	.483	.54
Water year 1949-50	59,928	641	57	164	169	1.18	16.00

* Adjusted for change in contents in Lake Hopatcong.

Delaware River at Riegelsville

Location.--Lat 40°35'36", long 75°11'17", on left bank 20 ft upstream from suspension bridge at Riegelsville, Warren County, and 600 ft upstream from Musconetcong River. Records include flow of Musconetcong River.

Drainage area.--6,328 sq mi (includes that of Musconetcong River).

Records available.--July 1906 to September 1950 (after September 1931, flow of Musconetcong River included).

Gage.--Water-stage recorder. Datum of gage is 125.12 ft above mean sea level, datum of 1929. Prior to Feb. 27, 1924, chain gage and/or staff gage at bridge 20 ft downstream at same datum.

Average discharge.--44 years (1906-50), 11,120 cfs, including flow of Musconetcong River after Sept. 30, 1931 (adjusted).

Extremes.--1906-50: Maximum discharge, 237,000 cfs (revised) Mar. 19, 1936 (gage height, 32.45 ft); minimum, not including flow in canal, 870 cfs Sept. 20, 1908 (gage height, 1.55 ft).

Maximum stage known, 35.9 ft Oct. 10, 1903, from floodmarks (discharge, 275,000 cfs).

Peak discharge (base, 48,000 cfs).--
1946: Mar. 10 (1 p.m.) 59,400 cfs (15.04 ft); May 29 (6 a.m.) 81,600 cfs (18.25 ft); June 3 (4:30 p.m.) 50,200 cfs (13.55 ft).
1947: Mar. 15 (12 p.m.) 62,100 cfs (15.45 ft); Apr. 6 (6:30 p.m.) 95,100 cfs (20.05 ft); May 26 (7 to 10 p.m.) 53,300 cfs (14.07 ft).
1948: Mar. 18 (7:30 a.m.) 73,800 cfs (17.17 ft); Mar. 23 (1 p.m.) 121,300 cfs (23.28 ft); Apr. 15 (11:30 p.m.) 66,100 cfs (16.05 ft).
1949: Dec. 31 (9 p.m.) 131,900 cfs (24.50 ft); Jan. 7 (9:30 a.m.) 92,600 cfs (19.73 ft).
1950: Mar. 30 (1 a.m.) 77,700 cfs (17.71 ft); Apr. 6 (3:30 a.m.) 80,100 cfs (18.04 ft).

Remarks.--Figures of daily discharge do not include diversion above station to Delaware Division Canal. Flow regulated by Lakes Hopatcong and Wallenpaupack, and by Toronto, Cliff Lake, Swinging Bridge Reservoirs (combined capacity, 13,100,000,000 cubic feet).

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9,300	8,010	21,800	18,100	8,810	11,200	11,600	7,060	27,000	6,960	4,520	3,780
2	9,340	7,860	18,600	15,300	8,090	13,600	11,400	6,680	30,000	12,000	5,700	3,160
3	10,500	7,790	16,400	13,500	7,130	15,600	11,700	6,320	46,200	11,400	5,980	2,850
4	15,200	11,200	16,000	13,400	6,100	16,100	11,700	5,880	42,700	10,900	5,490	2,460
5	13,600	18,400	15,300	13,300	5,520	17,000	11,200	5,730	31,900	8,320	4,710	2,920
6	12,000	15,600	15,700	13,900	6,710	21,000	10,500	5,430	26,400	6,780	4,310	3,270
7	12,300	13,500	17,000	21,400	9,490	27,000	9,830	5,610	22,500	6,010	5,380	3,270
8	13,700	12,100	17,900	43,600	8,050	43,200	9,080	6,390	19,700	5,610	6,100	3,250
9	17,200	11,000	18,500	39,600	7,900	47,000	9,000	6,710	16,900	5,290	8,130	2,980
10	23,100	10,200	17,100	33,900	7,600	55,000	9,190	7,200	14,800	5,260	6,290	2,630
11	26,000	10,500	16,400	31,600	6,850	40,300	9,000	6,990	14,000	5,090	5,430	3,270
12	21,200	13,000	14,600	27,400	6,070	29,200	8,620	6,750	14,200	5,170	4,600	3,270
13	18,400	17,000	12,700	23,800	6,750	23,200	8,280	7,600	15,100	5,120	4,490	3,320
14	16,000	16,500	12,300	20,600	7,420	20,200	7,490	8,890	15,100	4,840	5,200	3,130
15	14,400	17,900	12,000	18,300	9,830	20,300	6,990	10,400	13,800	4,230	4,900	3,020
16	13,800	19,400	10,800	16,100	10,000	25,900	7,310	11,200	11,100	3,850	4,540	2,420
17	13,400	16,900	8,240	13,900	10,700	27,000	8,050	11,700	9,500	4,020	4,410	3,140
18	12,300	14,900	7,860	13,200	8,920	28,800	8,470	14,200	9,190	3,950	6,990	2,530
19	11,300	14,200	8,620	12,900	7,130	24,600	7,900	19,900	9,300	3,800	7,560	3,000
20	10,600	17,000	8,510	10,300	5,980	21,600	7,100	22,800	9,860	3,710	5,700	2,850
21	9,760	19,700	8,620	9,190	6,450	19,100	6,650	21,800	9,300	5,380	5,230	3,610
22	9,110	23,700	8,470	9,610	6,130	17,300	6,260	30,800	8,470	5,010	4,710	5,460
23	8,920	31,800	7,790	9,300	6,230	15,900	6,390	32,400	7,420	10,100	4,570	4,870
24	9,080	29,800	7,600	9,680	6,350	14,300	6,450	23,700	6,550	16,100	4,200	5,230
25	9,570	24,000	7,860	10,200	5,880	13,800	6,190	18,800	6,290	14,800	3,830	9,380
26	10,000	20,200	15,200	10,300	5,550	13,700	6,290	18,700	6,190	11,100	3,360	11,400
27	10,100	18,500	19,100	9,150	6,390	17,600	6,920	31,100	5,760	8,130	3,200	9,080
28	9,490	17,300	19,000	7,970	9,830	17,200	6,780	66,400	5,760	6,550	3,380	6,350
29	9,000	22,200	18,600	7,600	-------	15,600	6,450	76,300	6,480	5,350	3,500	5,060
30	8,700	24,700	16,800	8,660	-------	14,500	6,750	51,200	6,650	4,730	4,230	5,820
31	8,510	-------	16,800	8,730	-------	13,100	-------	35,100	-------	4,650	4,200	-------

Delaware River at Riegelsville--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,990	5,730	4,310	5,230	37,100	6,520	15,000	22,600	20,400	6,710	11,600	4,540
2	6,750	5,460	3,900	4,760	30,600	6,260	14,500	29,200	17,600	8,390	11,200	4,900
3	6,420	5,010	3,590	4,760	23,000	5,910	18,800	29,000	16,800	8,240	9,830	5,640
4	5,940	4,760	3,850	5,880	19,500	5,610	24,300	26,800	16,300	7,490	7,940	6,450
5	5,460	4,630	3,830	5,940	17,500	6,320	26,000	26,000	15,600	6,580	7,490	7,200
6	4,920	5,030	3,780	6,850	13,600	6,960	76,100	35,400	14,300	5,760	7,490	6,650
7	4,310	4,730	3,830	6,260	12,400	6,680	75,700	40,500	13,800	5,580	7,060	5,760
8	4,000	4,950	3,850	6,680	12,200	6,680	54,300	38,000	16,900	18,500	7,350	4,840
9	4,460	5,260	3,590	6,580	9,900	6,350	38,000	34,800	18,500	42,400	7,310	4,490
10	4,630	5,090	3,520	5,580	8,960	6,190	31,000	28,700	16,700	33,100	7,600	5,060
11	4,600	4,460	3,800	5,700	9,680	6,290	26,300	23,700	14,500	23,200	11,500	4,790
12	4,490	4,490	3,760	5,700	9,860	6,820	23,200	20,300	12,800	17,700	9,490	4,710
13	5,850	5,120	3,800	5,090	9,300	7,450	22,200	18,300	11,200	15,600	7,970	4,600
14	5,850	5,200	4,200	5,010	8,620	19,700	21,600	17,000	11,900	13,200	8,510	4,410
15	5,910	5,170	4,020	6,680	9,110	43,900	19,600	18,600	16,700	15,200	7,750	4,000
16	5,850	4,710	4,280	8,200	8,810	56,100	17,500	19,300	16,700	16,400	7,380	4,100
17	5,260	4,410	4,020	9,610	7,940	40,400	18,500	16,700	18,700	24,500	8,090	4,900
18	4,900	3,900	4,050	12,200	7,790	30,200	16,800	15,000	15,400	34,800	19,100	4,460
19	5,350	3,730	4,000	12,000	7,790	23,600	15,200	16,200	14,100	29,600	14,800	4,180
20	5,880	4,200	3,590	18,300	7,100	19,700	13,900	18,900	12,800	26,300	11,300	4,230
21	5,880	4,080	3,980	23,500	5,790	18,100	13,600	21,000	11,500	21,100	10,000	4,310
22	5,640	3,900	6,390	29,700	5,350	17,300	17,000	26,600	10,200	21,100	8,730	3,830
23	5,460	4,280	5,380	18,800	5,350	17,300	18,500	41,700	9,270	39,100	7,680	4,230
24	4,950	3,980	6,100	16,300	5,230	16,300	16,400	37,600	8,810	31,000	6,480	4,840
25	4,520	3,680	6,230	16,500	5,400	20,700	15,600	31,300	8,960	22,400	5,550	4,600
26	4,900	3,660	5,430	17,600	6,850	36,900	16,100	48,700	8,890	18,100	5,490	4,280
27	6,580	4,000	4,250	20,000	6,990	34,300	15,800	47,100	8,890	15,500	6,230	3,950
28	6,390	4,020	4,410	19,300	6,680	25,700	15,200	35,400	8,810	13,600	6,260	3,500
29	6,880	4,200	5,010	18,400	-------	21,100	15,300	28,600	8,090	17,500	5,760	3,130
30	6,520	4,540	4,600	16,900	-------	18,400	14,900	26,800	7,200	16,100	5,580	2,920
31	5,980	-------	4,230	22,200	-------	16,500	-------	23,800	-------	12,900	5,580	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,290	6,190	8,130	6,920	4,360	15,100	25,800	a12,600	16,100	14,400	4,950	3,590
2	3,860	5,760	7,350	7,350	4,280	14,300	33,200	a11,700	14,600	12,300	4,650	3,780
3	3,220	4,900	7,310	6,850	4,050	14,000	31,400	11,200	13,200	10,500	4,250	3,520
4	3,270	4,630	7,380	6,160	4,250	13,600	28,400	11,500	12,000	8,470	4,490	3,480
5	3,290	6,420	7,970	6,350	4,460	12,200	22,600	11,700	10,700	7,530	5,320	3,380
6	2,830	6,780	8,160	6,580	4,600	10,800	20,500	13,800	9,420	7,270	8,580	2,960
7	2,690	6,260	7,860	7,200	4,410	10,800	19,100	14,500	9,190	7,380	†8,300	2,790
8	2,830	9,540	7,350	6,750	4,540	11,000	17,700	18,700	12,500	7,820	†7,400	2,670
9	3,160	27,100	7,940	6,960	4,120	11,300	16,900	18,600	13,300	8,160	†6,000	3,270
10	3,360	29,900	8,850	6,850	4,020	12,000	15,200	16,300	13,200	7,170	†4,300	4,100
11	3,320	20,900	8,960	5,670	4,180	12,800	14,400	14,600	12,300	6,070	6,040	4,080
12	3,180	23,800	8,280	4,920	4,520	12,000	17,000	13,400	11,200	5,520	†7,400	3,800
13	2,630	32,400	7,310	5,320	4,650	11,100	27,300	22,100	10,900	5,730	†6,600	3,200
14	2,340	28,400	6,320	6,260	4,840	10,100	31,200	27,600	10,700	9,530	†5,900	2,900
15	2,790	21,500	5,460	5,380	6,260	10,000	52,400	28,200	10,800	10,100	5,260	3,070
16	2,940	17,900	7,780	4,980	6,710	12,800	58,000	27,000	10,700	8,890	4,490	3,500
17	2,960	15,300	11,000	5,730	7,380	36,000	41,600	28,700	9,570	7,130	4,100	3,480
18	3,090	14,000	12,100	5,940	13,800	68,200	33,600	33,000	8,010	6,130	4,710	3,480
19	3,250	12,200	10,500	4,200	18,200	51,900	27,400	31,300	8,450	5,460	5,010	3,320
20	2,710	10,900	8,280	3,800	21,800	55,000	24,100	27,200	11,200	5,730	5,350	2,790
21	2,400	9,790	7,060	5,220	24,000	83,600	21,500	23,700	11,800	6,040	6,780	2,730
22	2,650	9,000	6,680	5,850	24,300	80,000	21,900	21,200	9,900	7,060	†8,000	3,090
23	2,830	8,660	7,270	5,380	19,800	113,800	20,600	18,800	9,610	7,790	†6,600	3,500
24	2,850	9,000	7,790	4,230	16,500	75,500	17,900	17,500	10,500	7,270	†5,900	3,480
25	2,850	12,600	6,650	3,830	15,000	51,500	16,400	23,200	13,700	6,710	†5,600	3,410
26	2,880	13,400	5,880	4,280	15,400	40,000	16,200	29,000	15,100	6,550	†5,100	3,410
27	2,570	13,000	4,820	4,490	15,800	32,400	16,300	24,400	14,900	6,450	†4,600	2,730
28	2,150	11,200	5,520	4,410	16,700	31,200	14,800	20,600	15,400	6,520	†4,200	2,480
29	3,160	10,000	5,260	4,790	16,800	31,800	a13,900	18,000	18,300	6,260	†3,700	2,630
30	4,540	9,190	5,230	4,710	-------	26,600	a13,100	18,600	16,600	5,580	†3,500	3,320
31	5,010	-------	6,780	4,440	-------	22,600	-------	17,900	-------	5,460	†3,200	-------

a No gage-height record; discharge computed on basis of records for stations on nearby streams.
† Revised.

Delaware River at Riegelsville--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,680	2,190	7,560	102,900	16,300	17,500	10,900	12,800	11,000	3,410	3,000	4,360
2	3,660	2,140	6,960	55,900	14,600	16,300	11,200	13,000	10,100	3,200	2,650	3,920
3	3,360	2,060	6,550	37,100	13,700	15,100	10,000	15,700	9,460	2,810	2,920	3,130
4	2,830	2,630	6,350	28,300	13,400	14,200	9,080	16,900	8,510	2,550	3,520	2,590
5	2,460	3,320	6,130	25,000	13,100	13,000	8,770	16,900	7,750	2,480	4,000	2,480
6	2,920	3,540	5,490	57,400	12,600	13,000	9,420	15,500	7,200	2,590	3,450	3,730
7	3,540	4,500	6,040	86,400	11,700	15,600	11,300	21,800	6,780	3,160	2,960	2,610
8	3,380	5,820	7,240	58,900	12,700	18,600	12,500	25,600	6,350	3,320	2,340	2,340
9	3,340	9,300	7,600	41,500	12,400	15,800	13,000	20,000	5,820	3,050	2,140	2,510
10	3,250	7,820	6,820	32,500	12,100	14,300	12,500	17,500	5,430	2,790	2,150	2,550
11	2,650	6,620	6,230	27,800	12,100	14,700	11,400	15,900	5,380	2,510	2,670	2,190
12	2,300	5,880	5,760	24,400	10,600	14,500	11,000	14,200	5,120	2,610	2,980	1,920
13	2,850	5,150	5,610	21,600	9,680	13,500	10,100	12,800	4,630	3,050	3,180	1,860
14	3,160	4,760	5,670	19,000	9,610	12,500	11,000	11,500	4,250	3,500	2,830	2,080
15	3,130	4,080	6,230	17,200	11,800	11,900	13,700	10,400	4,950	3,050	2,590	2,810
16	3,000	3,800	6,920	14,900	23,700	11,900	13,800	9,490	4,760	4,560	2,120	2,830
17	2,710	3,950	7,710	13,600	39,300	11,300	12,400	9,300	4,680	3,900	2,730	2,750
18	2,440	3,760	7,490	13,400	29,000	10,700	11,100	8,890	4,490	4,980	3,090	2,630
19	2,460	3,830	7,170	13,600	22,500	10,000	20,700	8,430	4,710	5,980	3,090	2,790
20	2,980	5,650	6,890	13,800	21,600	8,770	29,200	9,530	4,020	4,820	3,000	2,420
21	3,610	9,530	5,940	14,100	22,700	7,940	24,000	19,200	3,780	4,200	2,510	2,150
22	3,730	11,600	5,820	15,800	22,400	8,470	20,100	21,800	4,080	3,950	2,100	2,590
23	3,050	11,400	6,260	15,100	22,600	10,000	21,200	20,800	4,020	3,920	1,920	2,340
24	2,810	10,100	6,040	14,800	22,400	11,200	23,600	20,600	3,850	3,450	1,840	2,710
25	2,530	9,720	5,350	16,400	21,000	13,100	24,900	19,100	3,480	3,070	2,100	2,710
26	2,400	8,320	3,950	17,300	20,800	13,100	21,400	18,300	4,310	2,620	2,190	2,340
27	2,790	7,420	3,590	18,000	20,700	12,200	18,800	18,200	4,000	2,940	2,270	2,300
28	2,980	6,990	3,640	19,100	18,100	11,600	17,300	16,000	3,450	3,270	1,980	2,420
29	2,750	7,270	4,520	21,400	-------	11,700	15,800	14,200	3,710	3,320	2,550	3,020
30	2,650	8,280	24,400	20,100	-------	11,200	13,800	12,800	3,340	3,250	3,270	3,450
31	2,380	-------	108,100	17,700	-------	10,200	-------	11,600	-------	3,200	2,790	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,050	3,380	4,870	12,400	12,100	9,000	41,000	13,100	15,800	6,710	4,790	4,020
2	a3,700	3,260	4,760	11,800	11,500	8,890	35,200	16,500	19,000	5,880	5,580	3,980
3	a3,500	3,730	4,870	11,200	12,900	6,880	33,300	17,000	17,100	5,320	6,750	4,600
4	a3,300	3,850	4,600	11,300	12,100	7,020	41,100	15,100	17,400	5,580	6,620	6,230
5	a3,000	4,150	4,100	11,600	10,800	6,990	65,200	13,600	19,400	5,430	6,290	5,060
6	a3,000	4,020	3,780	11,800	9,830	7,350	73,900	16,100	18,700	8,130	5,880	4,410
7	a3,100	4,330	3,880	16,100	9,830	7,380	49,900	15,400	16,000	8,090	5,090	4,120
8	a3,200	4,020	4,080	26,600	9,420	8,540	34,900	13,700	13,600	7,240	4,710	3,780
9	a3,100	3,950	3,570	22,000	9,790	23,100	27,800	12,700	12,200	5,940	4,680	3,450
10	a2,800	3,610	3,090	18,500	12,600	40,200	23,500	11,700	10,900	5,700	4,630	4,410
11	2,610	3,480	3,360	23,200	13,900	33,400	21,000	11,600	10,300	7,350	4,490	6,010
12	2,710	3,360	3,500	27,000	15,200	24,800	19,100	11,900	10,500	11,600	4,280	5,430
13	3,180	3,290	5,130	21,100	14,200	23,000	18,100	11,000	10,700	11,100	4,120	6,260
14	2,880	4,250	34,800	18,400	15,200	21,500	17,000	9,270	9,830	13,700	3,200	6,390
15	2,610	5,920	29,000	18,100	17,300	18,500	15,800	8,470	11,100	12,300	2,960	6,160
16	2,380	8,620	19,000	16,600	19,100	16,500	14,200	9,610	12,400	10,300	3,480	5,640
17	2,320	7,560	13,600	14,700	18,500	15,100	13,100	9,610	11,300	8,660	3,450	5,150
18	2,150	6,450	11,500	13,900	17,400	14,200	12,900	10,100	9,760	7,860	3,290	4,250
19	2,440	5,980	10,900	13,000	15,300	13,300	12,500	13,500	10,000	7,450	3,500	3,950
20	2,610	5,670	11,100	11,400	13,600	12,000	12,800	17,000	10,600	7,060	5,810	4,200
21	2,380	5,260	11,200	9,570	11,100	13,600	17,000	16,400	9,760	6,710	5,790	4,250
22	2,210	5,120	10,300	8,540	11,100	19,500	21,100	14,900	9,720	7,790	8,240	4,050
23	2,100	5,640	9,650	8,320	9,830	24,800	17,300	13,500	9,150	6,620	6,420	3,950
24	2,060	5,150	11,600	9,040	10,700	29,600	15,400	16,000	8,130	5,670	5,150	4,080
25	1,980	4,790	14,600	10,000	11,200	27,100	15,500	17,500	7,450	5,880	4,730	3,360
26	2,400	4,250	12,200	11,200	10,000	23,400	14,800	17,300	8,540	6,960	4,360	3,130
27	2,960	4,440	14,900	11,800	7,750	23,400	14,500	15,900	10,000	7,750	3,980	3,780
28	2,940	4,440	21,600	12,000	7,490	26,600	14,300	13,600	8,350	6,480	3,320	3,760
29	3,000	4,280	22,000	10,900	-------	55,900	13,000	14,600	7,310	5,820	3,090	3,430
30	2,940	4,820	18,400	10,300	-------	71,200	12,000	17,400	6,710	5,320	3,950	3,180
31	3,200	-------	14,700	11,500	-------	52,200	-------	16,100	-------	4,680	4,330	-------

a No gage-height record; discharge computed on basis of recorded range in stage and records for station at Trenton.

Delaware River at Riegelsville--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	395,880	26,000	8,510	12,770	12,480	1.97	2.27
November	504,960	31,800	7,790	16,830	16,950	2.68	2.99
December	432,170	21,800	7,600	13,940	13,600	2.15	2.48
Calendar year 1945	6,091,900	74,600	4,900	16,690	16,800	2.65	36.04
January 1946	514,490	42,600	7,600	16,600	16,220	2.56	2.96
February	207,860	10,700	5,520	7,424	6,617	1.05	1.09
March	694,900	55,000	11,200	22,420	23,060	3.64	4.20
April	249,540	11,700	6,190	8,318	7,931	1.25	1.40
May	589,440	76,000	5,430	19,010	19,930	3.15	3.63
June	467,920	46,200	5,760	15,600	15,790	2.50	2.78
July	214,210	16,100	3,710	6,910	6,768	1.07	1.23
August	154,840	8,130	3,200	4,995	4,591	.726	.84
September	125,780	11,400	2,140	4,193	3,652	.577	.64
Water year 1945-46	4,551,990	76,000	2,140	12,470	12,360	1.95	26.51
October 1946	171,520	6,990	4,000	5,533	5,233	.827	.95
November	136,380	5,730	3,660	4,546	4,063	.642	.72
December	138,580	6,390	3,520	4,309	4,061	.642	.74
Calendar year 1946	3,660,460	76,000	2,140	10,030	9,875	1.56	21.18
January 1947	366,210	29,700	4,760	11,810	12,060	1.91	2.20
February	318,400	37,100	5,230	11,370	11,130	1.76	1.83
March	560,240	56,100	5,610	18,070	18,610	2.94	3.39
April	726,900	76,100	13,600	24,230	25,740	4.07	4.54
May	863,600	48,700	15,000	27,860	28,680	4.53	5.23
June	402,320	20,400	7,200	13,410	13,100	2.07	2.31
July	587,650	42,400	5,580	18,960	19,180	3.03	3.49
August	264,100	19,100	5,490	8,519	7,906	1.25	1.44
September	139,500	7,200	2,920	4,650	4,017	.635	.71
Water year 1946-47	4,670,400	76,100	2,920	12,800	12,840	2.03	27.55
October 1947	94,400	5,010	2,150	3,045	2,342	.370	.43
November	410,620	32,400	4,630	13,690	14,340	2.27	2.53
December	238,230	12,100	4,820	7,524	6,878	1.09	1.25
Calendar year 1947	4,967,170	76,100	2,150	13,610	13,680	2.16	29.35
January 1948	171,810	7,350	3,800	5,542	4,967	.785	.90
February	299,730	24,300	4,020	10,340	10,220	1.62	1.74
March	944,600	113,800	10,000	32,080	33,540	5.30	6.11
April	729,400	58,000	13,100	24,310	24,960	3.94	4.40
May	626,600	33,000	11,200	20,210	20,820	3.29	3.79
June	368,830	18,300	8,010	12,130	12,350	1.95	2.18
July	232,980	14,400	5,460	7,515	7,320	1.16	1.33
August	170,280	8,580	3,200	5,493	5,488	.859	.99
September	97,940	4,100	2,480	3,265	2,251	.356	.40
Water year 1947-48	4,425,420	113,800	2,150	12,090	12,110	1.91	26.05
October 1948	91,780	3,730	2,300	2,961	2,236	.353	.41
November	181,430	11,600	2,060	6,048	5,875	.928	1.04
December	309,530	108,100	3,590	9,985	10,410	1.65	1.90
Calendar year 1948	4,269,910	113,800	2,060	11,670	11,710	1.85	25.19
January 1949	895,000	102,900	13,400	28,870	29,710	4.70	5.41
February	493,190	39,300	9,610	17,610	17,970	2.84	2.96
March	393,880	18,600	7,940	12,710	12,600	1.99	2.30
April	453,970	29,200	8,770	15,130	15,760	2.49	2.78
May	478,740	25,600	8,430	15,440	15,680	2.48	2.86
June	163,410	11,000	3,340	5,447	4,912	.776	.87
July	105,520	5,980	2,480	3,404	2,998	.474	.55
August	82,930	4,000	1,840	2,675	2,272	.359	.41
September	80,530	4,360	1,860	2,684	2,368	.374	.42
Water year 1948-49	3,729,910	108,100	1,840	10,220	10,200	1.61	21.91
October 1949	86,810	4,050	1,980	2,800	2,601	.411	.47
November	141,170	8,620	3,290	4,706	4,629	.732	.82
December	344,640	34,800	3,090	11,120	11,400	1.80	2.08
Calendar year 1949	3,719,790	102,900	1,840	10,190	10,210	1.61	21.93
January 1950	443,870	27,000	8,320	14,320	14,810	2.34	2.70
February	349,740	19,100	7,490	12,490	12,440	1.97	2.05
March	684,950	71,200	6,880	22,100	23,100	3.65	4.21
April	737,200	73,900	12,000	24,570	25,010	3.95	4.41
May	430,160	17,500	8,470	13,880	13,880	2.19	2.53
June	351,710	19,400	6,710	11,720	11,640	1.84	2.05
July	231,080	13,700	4,680	7,454	7,043	1.11	1.28
August	146,960	8,240	2,980	4,741	4,209	.665	.77
September	134,470	6,390	3,150	4,482	4,053	.640	.71
Water year 1949-50	4,082,760	73,900	1,980	11,190	11,220	1.77	24.08

* Adjusted for diversion to Delaware Division Canal and for change in contents in Lakes Hopatcong and Wallenpaupack, and in Toronto, Cliff Lake, and Swinging Bridge Reservoirs.

Delaware River at Milford

Location.--Lat 40°34'00", long 75°05'55", on upstream side of bridge 120 ft from New Jersey end, at Milford, Hunterdon County.

Records available.--March 1936 to September 1950 (gage heights only).

Gage. Wire-weight gage. Datum of gage is 99.83 ft above mean sea level, datum of 1929.

Extremes.--1936-50: Maximum gage height observed, 32.57 ft (9 to 11 a.m.) Mar. 19, 1936; minimum observed, 8.55 ft Sept. 22, 29, 1943.
Maximum stage known, 35.8 ft Oct. 10, 1903, from floodmark.

Maximum gage height observed (water years).--
1946: May 29 (8 a.m.) 22.04 ft.
1947: Apr. 6 (8 p.m.) 23.42 ft.
1948: Mar. 23 (1 p.m.) 25.93 ft.
1949: Dec. 31 (9 p.m.) 26.86 ft.
1950: Apr. 6 (5 to 6 a.m.) 21.91 ft.

Remarks.--Gage read twice daily except during periods of gage heights above 13.9 ft, when it was read hourly. In tables, the readings at 8 a.m. are shown.

Cooperation.--Records furnished by Delaware River Joint Toll Bridge Commission.

Daily gage height at 8 a.m., in feet, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11.64	11.07	14.38	13.66	11.59	12.20	12.14	10.94	15.36	10.96	10.14	9.86
2	11.40	11.13	13.72	13.12	11.51	12.33	11.93	10.84	15.14	11.87	10.15	9.64
3	11.74	11.04	13.26	12.55	11.10	13.04	12.07	10.66	17.55	11.81	10.68	9.62
4	12.85	11.27	13.08	12.55	11.14	13.31	12.08	10.63	18.01	11.95	10.61	9.40
5	12.53	13.71	12.93	12.58	10.71	13.29	12.03	10.60	16.21	11.48	10.29	9.37
6	12.12	13.05	12.95	12.58	10.95	13.81	11.77	10.44	15.26	10.96	10.05	9.61
7	12.15	12.47	13.30	13.42	11.78	14.81	11.77	10.41	14.52	10.68	10.22	9.61
8	12.31	12.13	13.31	18.04	11.42	16.57	11.44	10.75	13.92	10.52	10.68	9.60
9	13.20	11.82	13.63	17.40	11.40	18.36	11.35	10.81	13.37	10.48	11.37	9.55
10	13.90	11.60	13.40	16.45	11.32	19.33	11.40	10.90	12.93	10.45	10.77	9.47
11	15.32	11.54	13.14	16.03	11.10	17.66	11.38	10.93	12.66	10.42	10.56	9.52
12	14.28	12.17	12.84	15.40	10.82	15.78	11.35	10.87	12.58	10.39	10.30	9.63
13	13.67	13.25	12.25	14.70	11.02	15.59	11.30	11.00	12.78	10.40	10.02	9.43
14	13.19	13.27	12.28	14.18	10.95	14.01	11.16	11.28	12.92	10.33	10.46	9.58
15	12.98	13.30	12.24	13.64	11.58	13.83	10.95	11.74	12.71	10.14	10.39	9.51
16	12.56	13.84	11.90	13.00	11.67	14.47	11.11	11.75	12.11	9.86	10.22	9.42
17	12.46	13.35	11.82	12.60	12.06	15.30	11.15	12.09	11.64	9.96	10.11	9.25
18	12.22	12.82	11.44	12.52	11.72	14.57	11.28	12.40	14.44	9.90	10.58	9.20
19	12.00	12.70	11.48	12.40	11.12	14.89	11.23	13.69	11.48	9.87	11.60	9.49
20	11.80	13.20	11.42	12.18	10.92	14.22	10.93	14.59	11.61	9.78	10.70	9.48
21	11.65	13.78	11.47	11.62	10.92	13.75	10.88	14.18	11.59	10.57	10.50	9.32
22	11.55	14.10	11.63	11.70	10.80	13.36	10.73	14.80	11.33	10.20	10.26	10.37
23	11.30	15.81	11.57	11.57	10.78	13.00	10.71	16.45	11.16	10.65	10.19	10.20
24	11.42	15.95	11.44	12.00	10.88	12.73	10.77	14.91	10.89	13.70	10.04	10.35
25	11.50	14.80	11.14	11.93	10.80	12.60	10.72	13.92	10.72	13.06	9.93	11.30
26	11.59	14.10	12.49	11.97	10.66	12.47	10.72	13.29	10.74	12.20	9.75	12.30
27	11.62	13.68	13.73	11.72	10.88	13.28	11.03	14.44	10.68	11.43	9.61	11.73
28	11.54	13.29	13.72	11.40	11.58	13.27	11.03	19.65	10.64	10.91	9.62	10.88
29	11.50	14.09	13.65	11.15	-------	12.92	10.81	22.04	10.85	10.54	9.72	10.41
30	11.29	14.73	13.37	11.59	-------	12.72	10.71	19.28	10.84	10.23	10.10	10.15
31	11.22	-------	13.28	11.45	-------	12.46	-------	16.71	-------	10.24	10.08	-------

Delaware River at Milford--Continued

Daily gage height at 8 a.m., in feet, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10.68	10.62	10.13	10.34	16.74	10.95	12.98	14.14	14.12	10.82	12.06	10.27
2	10.97	10.57	10.24	10.28	16.04	10.89	12.70	15.36	13.50	11.22	11.98	10.11
3	10.81	10.34	9.86	10.22	14.67	10.76	13.27	15.57	13.15	11.40	11.82	10.69
4	10.70	10.27	9.89	10.60	13.85	10.59	14.77	15.23	13.02	11.11	11.28	10.53
5	10.53	10.18	9.95	10.50	13.40	10.58	14.57	14.79	12.92	10.90	11.03	11.11
6	10.40	10.31	9.98	10.80	12.95	11.05	20.38	15.95	12.65	10.55	11.12	10.95
7	10.07	10.30	9.93	10.84	12.58	11.01	21.92	17.30	12.53	10.43	11.02	10.78
8	9.91	10.31	9.96	10.82	12.28	10.97	19.54	17.07	13.00	11.05	11.13	10.32
9	10.12	10.51	9.94	11.12	12.05	10.97	17.16	16.68	13.79	17.94	11.12	10.17
10	10.27	10.46	9.78	10.62	11.64	10.90	15.19	15.67	13.25	16.64	11.27	10.39
11	10.23	10.08	9.89	10.62	11.87	10.75	15.22	14.74	12.80	14.63	12.26	10.37
12	10.19	10.10	9.88	10.60	11.73	10.94	14.53	14.06	12.40	13.50	11.77	10.28
13	10.57	10.45	9.56	10.44	11.65	11.11	14.23	13.64	12.09	a12.80	11.30	10.21
14	10.62	10.48	10.10	10.30	11.44	12.01	14.35	13.27	11.81	a12.33	11.23	10.15
15	10.58	10.46	9.93	10.98	11.57	16.84	13.87	13.40	13.43	12.28	11.20	9.83
16	10.63	10.30	10.03	11.29	11.54	19.66	13.52	13.90	12.94	13.13	11.12	10.00
17	10.46	10.16	9.92	11.64	11.33	17.58	13.70	13.28	13.82	13.50	11.46	10.34
18	10.24	9.92	10.00	12.10	11.16	15.93	13.37	12.32	12.95	16.87	13.10	10.20
19	10.25	9.87	9.98	12.30	11.27	14.72	12.98	13.05	12.59	15.78	13.05	10.02
20	10.66	9.98	9.87	12.03	11.16	13.90	12.74	13.55	12.31	15.25	12.05	10.21
21	10.56	10.15	9.95	14.81	10.85	13.56	12.52	14.19	12.03	14.22	11.80	10.14
22	10.50	9.94	10.85	16.12	10.68	13.38	13.09	14.55	11.79	13.98	11.41	9.84
23	10.52	10.09	10.54	13.71	10.59	13.43	13.78	17.51	11.55	17.70	11.16	9.93
24	10.36	10.05	10.59	13.18	10.56	13.16	13.27	17.15	11.36	16.22	11.00	10.34
25	10.14	9.80	10.72	13.17	10.46	13.55	13.05	15.79	11.41	14.56	10.56	10.21
26	10.06	9.76	10.62	13.28	11.07	16.25	13.00	18.23	11.44	13.67	10.40	10.17
27	10.92	10.03	10.16	13.93	11.02	16.65	13.10	18.54	11.23	13.11	10.84	10.02
28	11.67	10.04	10.13	13.82	10.95	15.11	12.94	16.65	11.39	12.50	10.87	9.77
29	10.83	9.99	10.33	13.69	-------	14.20	12.96	15.48	11.25	12.94	10.74	9.62
30	10.88	10.14	10.12	13.37	-------	13.62	12.87	15.10	11.07	13.28	10.54	9.53
31	10.67	-------	10.13	13.43	-------	13.25	-------	14.68	-------	12.42	10.72	-------

a Reading at 4 p.m.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.52	10.84	11.32	11.04	10.17	12.95	14.35	12.27	13.18	12.81	10.14	9.65
2	9.68	10.72	11.06	11.20	10.19	12.66	16.00	12.12	12.78	12.20	9.88	9.78
3	9.58	10.38	11.05	11.04	9.94	12.68	16.12	12.04	12.45	11.80	9.74	9.71
4	9.59	10.05	11.02	10.82	10.09	12.61	15.13	12.06	12.14	11.43	9.92	9.71
5	9.63	10.13	11.28	10.81	10.40	12.15	14.41	11.88	11.93	11.16	9.98	9.67
6	9.55	11.02	11.16	10.88	10.10	11.86	13.95	12.60	11.64	11.03	11.33	9.60
7	9.48	11.77	11.32	11.13	10.10	11.87	13.72	12.53	11.42	11.05	11.53	9.43
8	9.40	11.55	11.04	11.03	10.09	12.10	13.78	13.58	12.07	11.11	11.16	9.43
9	9.50	14.75	11.10	11.09	10.07	12.03	13.24	13.80	12.28	11.25	10.79	9.46
10	9.65	16.20	11.36	11.14	9.90	12.11	13.00	13.29	12.24	11.08	10.44	9.86
11	9.64	14.27	11.42	10.60	9.90	12.27	12.70	12.82	11.92	10.80	10.37	9.91
12	9.60	14.15	11.32	10.26	10.05	12.10	13.07	12.50	11.69	10.51	10.65	9.77
13	9.48	15.94	11.09	11.48	10.06	12.05	15.06	13.92	11.70	10.42	11.08	9.73
14	9.33	15.70	10.94	10.85	10.11	11.72	15.75	15.30	11.60	11.02	10.85	9.48
15	9.35	14.34	10.51	10.48	10.59	11.60	18.23	15.30	11.63	11.77	10.62	9.40
16	9.50	13.53	10.90	10.34	10.33	11.62	20.05	15.19	11.62	11.39	10.15	9.67
17	9.54	13.07	12.00	10.48	10.80	15.55	17.61	15.40	11.34	11.00	10.01	9.67
18	9.55	12.60	12.05	10.54	12.61	21.28	16.28	16.07	11.16	10.80	10.05	9.66
19	9.65	12.23	11.85	10.35	13.51	18.77	15.31	16.00	11.27	10.40	10.18	9.65
20	9.50	11.92	11.28	10.15	14.33	18.62	14.74	15.30	12.13	10.38	10.21	9.51
21	9.26	11.67	11.17	10.18	14.28	21.99	14.23	14.61	12.40	10.75	10.94	9.45
22	9.25	11.49	10.95	10.55	14.97	21.34	14.20	14.15	11.72	11.07	10.71	9.42
23	9.45	11.40	10.93	10.43	13.94	25.43	14.10	13.74	11.56	11.25	10.90	9.71
24	9.47	11.44	11.18	10.05	13.25	22.25	13.51	13.27	11.63	11.07	10.66	9.72
25	9.47	12.28	11.03	10.40	12.83	18.81	13.22	13.67	12.40	10.88	10.60	9.68
26	9.47	12.43	10.72	10.43	12.88	17.27	13.13	15.71	12.97	10.70	10.40	9.50
27	9.46	12.51	10.25	10.45	13.03	15.97	13.20	14.80	12.96	10.56	10.27	9.55
28	9.25	12.08	10.70	10.36	13.17	15.82	12.84	14.01	12.72	10.68	10.11	9.38
29	9.44	11.75	10.34	10.20	13.38	16.03	12.58	13.46	13.52	10.52	9.94	9.30
30	10.09	11.56	10.20	10.30	-------	15.21	12.38	13.74	13.25	10.41	9.80	9.58
31	10.20	-------	10.78	10.30	-------	14.45	-------	13.82	-------	10.22	9.75	-------

Delaware River at Milford--Continued

Daily gage height at 8 a.m., in feet, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.81	9.29	11.15	25.50	13.20	13.55	-	12.37	11.93	9.68	9.62	10.22
2	9.83	9.25	11.00	19.70	12.77	13.20	-	12.41	11.69	9.67	9.44	10.02
3	9.68	9.21	10.90	16.98	12.61	12.90	-	12.80	11.52	9.60	9.41	9.70
4	9.58	9.42	10.80	15.60	12.56	12.71	-	13.20	11.31	9.40	9.73	9.45
5	9.36	9.50	10.86	14.56	12.42	12.50	-	13.26	11.24	9.40	10.05	9.34
6	9.40	9.78	10.50	18.56	12.40	12.41	-	12.98	11.07	9.38	9.72	10.24
7	9.72	9.85	10.52	23.10	12.15	12.77	-	13.41	10.92	9.55	9.60	9.48
8	9.69	10.71	10.78	20.16	12.35	13.76	-	15.25	10.78	9.58	9.37	9.31
9	9.66	11.59	11.14	17.60	12.33	13.13	-	14.08	10.71	9.70	9.20	9.32
10	9.63	11.22	10.92	16.18	12.23	12.77	-	13.47	10.61	9.56	9.15	9.44
11	9.55	10.88	10.75	15.44	12.22	12.72	-	13.14	10.59	9.37	9.21	9.30
12	9.33	10.79	10.60	14.82	12.03	-	11.90	12.68	10.49	9.42	9.50	9.14
13	9.30	10.41	10.54	14.28	11.73	-	11.72	12.35	10.30	9.48	9.64	9.07
14	9.58	10.31	10.49	13.78	11.63	-	11.73	12.05	10.02	9.68	9.65	9.19
15	9.53	10.04	10.67	13.39	11.83	-	12.38	11.86	10.40	9.58	9.45	9.45
16	9.52	9.74	10.77	12.92	13.36	-	12.79	11.67	10.35	9.70	9.27	9.55
17	9.51	10.02	11.10	12.65	17.45	-	12.35	11.50	10.30	9.92	9.38	9.45
18	9.54	9.90	11.12	12.49	15.77	-	11.93	11.43	10.22	10.19	9.53	9.44
19	9.30	9.95	11.03	12.45	14.47	-	13.36	11.32	10.27	10.94	9.63	9.57
20	9.42	10.07	10.84	12.55	14.17	-	15.85	11.45	10.00	10.28	9.65	9.44
21	9.40	11.62	10.70	12.69	14.37	-	14.75	12.84	9.89	9.98	9.53	9.19
22	9.90	11.87	10.67	13.01	14.41	-	13.95	14.37	9.90	9.93	9.25	9.39
23	9.50	11.96	10.87	13.04	14.39	-	14.13	14.05	9.98	9.90	9.14	9.37
24	9.55	11.73	10.14	12.80	14.44	-	14.42	14.10	10.00	9.72	9.08	9.30
25	9.39	11.73	10.13	13.11	14.18	-	14.95	13.75	9.75	9.61	9.26	9.47
26	9.30	11.41	10.44	13.30	14.05	-	14.32	13.48	9.93	9.49	9.25	9.25
27	9.33	11.13	10.45	13.58	14.19	-	13.77	13.62	9.95	9.42	9.31	9.38
28	9.53	11.05	10.02	13.66	13.62	-	13.37	13.11	9.68	9.62	9.25	9.30
29	9.46	10.98	9.97	14.12	-------	-	13.09	12.80	9.83	9.69	9.27	9.28
30	9.47	11.24	12.55	14.10	-------	-	12.70	12.43	9.69	9.68	9.62	9.57
31	9.33	-------	24.08	13.64	-------	-	-------	12.18	-------	9.60	9.53	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.68	9.69	10.30	12.33	12.19	11.56	17.31	12.30	12.86	10.86	10.20	10.04
2	9.75	9.68	10.18	12.13	12.00	11.35	16.47	12.92	13.54	10.74	10.40	10.00
3	9.80	9.78	10.22	12.02	12.38	11.31	15.93	13.28	13.38	10.42	10.58	9.90
4	9.70	9.70	10.25	11.93	12.22	11.20	16.67	12.90	13.16	10.45	10.68	10.82
5	9.61	9.95	9.96	12.03	11.92	11.13	19.36	12.65	13.70	10.44	10.78	10.37
6	9.48	9.87	9.88	12.12	11.71	11.11	21.90	12.77	13.75	10.80	10.66	10.10
7	9.52	10.05	9.85	12.55	11.59	11.05	19.05	13.10	13.16	11.28	10.38	10.05
8	9.57	9.87	10.15	15.05	11.58	11.15	16.61	12.67	12.62	11.05	10.15	9.92
9	9.62	9.92	9.87	14.51	11.40	13.85	15.45	12.29	12.21	10.75	10.25	9.78
10	9.52	9.77	9.60	13.47	12.29	17.55	14.60	12.08	11.88	10.43	10.27	9.90
11	9.43	9.72	9.66	14.25	12.40	16.83	14.13	11.94	11.68	10.52	10.16	10.50
12	9.32	9.67	9.72	15.33	13.02	14.85	13.70	12.11	11.84	12.11	10.17	10.44
13	9.58	9.68	9.75	14.20	12.65	14.46	13.48	11.95	11.84	11.82	10.09	10.68
14	9.55	9.79	16.73	13.60	12.82	14.31	13.30	11.58	11.52	12.39	9.88	10.73
15	9.44	10.35	15.91	13.52	13.25	13.67	13.00	11.33	11.81	12.18	9.53	10.79
16	9.32	11.29	13.90	13.30	13.70	13.15	12.72	11.41	12.15	11.82	9.68	10.60
17	9.25	11.17	12.65	13.33	13.60	12.85	12.51	11.52	12.00	11.42	9.73	10.44
18	9.25	10.80	12.19	12.62	13.45	12.81	12.29	11.45	11.76	11.10	9.63	10.06
19	9.23	10.66	11.87	12.45	13.02	12.48	12.20	12.15	11.56	11.08	9.75	9.86
20	9.41	10.63	11.93	12.17	12.60	12.19	12.15	13.15	11.77	10.90	10.03	10.04
21	9.19	10.38	11.99	11.65	11.80	12.07	12.77	13.17	11.58	10.83	10.67	10.10
22	9.26	10.28	11.73	11.38	12.08	13.94	14.17	12.98	11.50	11.05	11.31	10.04
23	9.17	10.52	11.60	11.27	11.76	14.39	13.47	12.50	11.47	10.93	10.82	9.90
24	9.15	10.48	11.77	11.36	11.89	15.52	13.03	12.79	11.25	10.55	10.42	10.00
25	9.18	10.28	12.85	11.61	12.07	15.28	12.89	13.20	11.08	10.42	10.31	9.65
26	9.20	10.10	12.29	11.85	11.93	14.60	12.79	13.38	11.15	10.84	10.25	9.59
27	9.47	10.05	12.51	12.12	11.20	14.49	12.65	13.05	11.71	11.03	10.02	9.75
28	9.30	10.14	13.98	12.16	11.33	14.68	12.67	12.66	11.33	10.82	9.68	9.85
29	9.52	10.00	14.39	11.95	-------	17.67	12.40	12.53	11.99	10.66	9.57	9.73
30	9.53	10.25	13.71	11.78	-------	21.38	12.20	13.25	10.75	10.52	9.90	9.64
31	9.58	-------	12.94	11.87	-------	19.07	-------	13.25	-------	10.17	10.19	-------

Delaware River at Frenchtown

Location.--Lat 40°31'40", long 75°04'00", on upstream side of bridge in third span from New Jersey end, at Frenchtown, Hunterdon County.

Records available.--March 1936 to September 1950 (gage heights only).

Gage.--Wire-weight gage. Datum of gage is 99.88 ft above mean sea level, datum of 1929.

Extremes.--1936-50: Maximum gage height observed, 21.93 ft (10 to 11 a.m.) Mar. 19, 1936; minimum observed, 0.53 ft Sept. 18, 20, 1939.
Maximum stage known, 24.4 ft Oct. 10, 1903, from floodmark.

Maximum gage height observed (water years).--
1946: May 29 (8 to 10 a.m.) 12.34 ft.
1947: Apr. 6 (9 to 10 p.m.) 13.53 ft.
1948: Mar. 23 (2 to 4 p.m.) 15.67 ft.
1949: Dec. 31 (11 p.m.) 16.68 ft.
1950: Apr. 6 (8 a.m.) 12.23 ft.

Remarks.--Gage read twice daily except during periods of gage heights above 5.80 ft, when it was read hourly. In tables, the readings at 8 a.m. are shown.

Cooperation.--Records furnished by Delaware River Joint Toll Bridge Commission.

Daily gage height at 8 a.m., in feet, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.10	2.60	5.58	4.96	3.08	3.62	3.56	2.38	6.48	2.44	1.65	1.37
2	2.88	2.60	5.02	4.49	2.96	3.70	3.33	2.35	6.38	3.19	1.70	1.15
3	3.18	2.55	4.58	3.95	2.65	4.36	3.45	2.19	3.40	3.27	2.23	1.15
4	4.10	2.65	4.40	3.98	2.60	4.60	3.50	2.14	8.84	3.34	2.16	.97
5	3.91	4.01	4.28	3.98	2.24	4.57	3.38	2.12	7.25	2.94	1.82	.92
6	3.54	4.39	4.27	3.96	2.36	5.04	3.22	1.93	6.33	2.45	1.60	1.10
7	3.55	3.85	4.62	4.68	3.23	5.96	3.20	1.91	5.70	2.20	1.62	1.13
8	3.70	3.54	4.61	8.86	2.94	7.50	2.93	2.23	5.15	2.05	2.19	1.15
9	4.50	3.24	4.91	8.32	2.85	9.13	2.79	2.34	4.68	1.92	2.84	1.10
10	5.12	3.05	4.70	7.45	2.78	9.90	2.88	2.34	4.27	1.95	2.32	1.03
11	6.42	2.97	4.48	7.06	2.58	8.52	2.85	2.57	4.00	1.93	2.10	.99
12	5.49	3.51	4.20	6.48	2.30	6.84	2.79	2.20	3.95	1.88	1.85	1.15
13	4.93	4.55	3.78	5.86	2.50	5.75	2.75	2.52	4.12	1.91	1.55	1.16
14	4.51	4.57	3.66	5.43	2.51	5.23	2.65	2.72	4.24	1.83	1.98	1.12
15	4.11	4.50	3.68	4.91	3.14	5.07	2.48	3.16	4.05	1.65	1.91	1.15
16	3.93	5.13	3.46	4.30	3.18	5.63	2.38	3.17	3.53	1.87	1.73	.98
17	3.83	4.62	3.38	4.16	3.51	6.46	2.60	3.47	3.09	1.45	1.63	.86
18	3.62	4.17	2.82	3.95	3.15	5.76	2.73	3.82	2.89	1.39	2.11	.80
19	3.41	4.05	2.77	3.79	2.62	6.04	2.75	4.96	2.94	1.37	3.08	1.04
20	3.22	4.40	3.04	3.60	2.45	5.43	2.45	5.72	3.05	1.27	2.24	1.02
21	3.08	5.00	3.07	3.18	2.75	5.06	2.38	5.40	3.04	1.93	2.04	1.05
22	3.00	5.37	3.14	3.08	2.48	4.67	2.23	5.92	2.80	1.14	1.79	1.91
23	2.75	6.88	3.17	3.05	2.25	4.40	2.23	7.50	2.66	2.12	1.72	1.75
24	2.89	6.99	2.93	3.39	2.35	4.10	2.22	6.04	2.38	5.40	1.57	1.86
25	2.96	5.97	2.58	3.32	2.25	3.99	2.23	5.16	2.20	4.40	1.43	2.73
26	3.04	5.35	3.94	3.38	2.16	3.84	2.25	4.59	2.28	3.60	1.30	3.68
27	3.06	4.93	5.05	3.17	2.26	4.57	2.48	5.55	2.21	2.92	1.17	3.20
28	2.99	4.59	5.03	2.88	2.98	4.62	2.55	10.12	2.18	2.50	1.16	2.40
29	2.91	5.40	4.94	2.65	-------	4.29	2.30	12.34	2.35	2.08	1.27	1.95
30	2.74	5.93	4.68	2.03	-------	4.06	2.20	9.98	2.36	1.78	1.66	1.67
31	2.70	-------	4.63	2.85	-------	3.85	-------	7.74	-------	1.77	1.39	-------

Delaware River at Frenchtown--Continued

Daily gage height at 8 a.m., in feet, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.49	2.15	1.69	1.97	7.64	2.45	4.23	5.40	5.52	2.34	3.45	1.74
2	2.46	2.10	1.57	1.98	7.07	2.35	4.04	6.39	4.75	2.67	3.34	1.55
3	2.31	1.85	1.40	1.73	5.86	2.25	4.52	6.62	4.42	2.81	3.21	2.15
4	2.23	1.79	1.35	2.09	5.15	2.12	5.86	6.32	4.32	2.58	2.73	1.97
5	2.07	1.71	1.45	2.37	4.70	2.30	5.73	5.92	4.22	2.37	2.48	2.55
6	1.92	1.97	1.41	2.25	4.32	2.57	10.58	6.96	3.94	2.09	2.56	2.40
7	1.60	1.83	1.44	2.39	3.79	2.50	12.31	8.19	3.90	1.92	2.46	2.29
8	1.49	1.81	1.39	2.54	3.68	2.50	10.16	7.97	4.27	2.44	2.58	1.80
9	1.57	1.94	1.35	2.47	3.57	2.47	8.11	7.62	5.04	8.58	2.58	1.65
10	1.78	1.97	1.30	2.18	3.09	2.35	7.02	6.70	4.54	7.60	2.67	1.85
11	1.72	1.61	1.45	2.15	3.42	2.27	6.30	5.87	4.10	5.80	3.60	1.85
12	1.74	1.62	1.35	2.05	3.21	2.47	5.67	5.27	3.77	4.76	3.17	1.75
13	2.00	1.95	1.40	1.98	3.10	2.60	5.42	4.88	3.45	4.10	2.70	1.65
14	2.14	1.97	1.53	1.62	2.90	3.32	5.51	4.55	3.22	3.95	2.74	1.60
15	2.07	1.93	1.58	2.46	3.02	7.78	5.08	4.62	4.70	3.63	2.64	1.35
16	2.15	1.85	1.54	2.75	3.03	10.30	4.68	5.11	4.23	4.37	2.57	1.51
17	1.98	1.68	1.44	3.05	2.77	8.37	4.88	4.55	5.03	4.68	2.82	1.80
18	1.75	1.42	1.56	3.50	2.69	7.00	4.60	4.21	4.25	7.75	4.86	1.69
19	1.87	1.42	1.54	3.70	2.75	5.87	4.25	4.32	3.95	6.83	4.39	1.50
20	2.15	1.48	1.42	3.47	2.67	5.14	4.02	4.83	3.69	6.34	3.46	1.68
21	2.05	1.65	1.26	5.80	2.42	4.85	3.82	5.33	3.40	5.40	3.22	1.67
22	2.07	1.46	2.35	7.10	2.20	4.67	4.32	5.60	3.22	5.15	2.77	1.51
23	2.05	1.57	2.08	5.15	2.43	4.72	4.98	8.28	3.03	8.38	2.62	1.42
24	1.90	1.55	2.08	4.50	2.07	4.40	4.54	8.05	2.80	7.21	2.46	1.80
25	1.65	1.30	2.27	4.47	1.96	4.73	4.32	6.80	2.86	5.70	2.04	1.67
26	1.75	1.38	2.09	4.60	2.48	-	4.25	8.94	2.86	4.85	1.90	1.63
27	2.40	1.53	1.78	5.17	2.51	-	4.30	9.27	2.80	4.40	2.31	1.50
28	2.17	1.55	1.71	5.05	2.45	-	4.28	7.60	2.82	3.85	2.34	1.30
29	2.38	1.58	1.80	4.98	-------	-	4.24	6.58	2.74	4.20	2.22	1.12
30	2.42	1.65	1.68	4.68	-------	-	4.17	6.18	2.52	4.52	2.08	1.00
31	2.20	-------	1.68	4.67	-------	4.43	-------	5.82	-------	3.78	2.20	-------

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.03	2.28	2.77	2.44	1.68	4.24	5.51	3.62	4.40	4.09	1.62	1.11
2	1.15	2.18	2.56	2.51	1.78	3.97	6.99	3.45	4.05	3.54	1.36	1.25
3	1.08	1.86	2.52	2.61	1.47	3.92	7.04	3.35	3.75	3.16	1.23	1.18
4	1.05	1.68	2.46	2.25	1.34	3.95	6.23	3.39	3.45	2.84	1.25	1.21
5	1.11	2.15	2.70	2.05	1.77	3.77	5.56	3.24	3.30	2.59	1.40	1.16
6	1.06	2.45	2.61	2.35	1.57	3.28	5.18	4.87	3.00	2.45	2.70	1.10
7	1.00	2.26	2.78	2.35	1.49	3.24	4.91	4.83	2.62	2.46	2.91	.94
8	.94	2.26	2.49	2.49	1.60	3.35	4.70	4.80	3.36	2.57	2.61	.94
9	1.02	5.80	2.50	2.50	1.51	3.42	4.64	5.00	3.60	2.65	2.26	.96
10	1.13	7.25	2.81	2.55	1.50	3.47	4.24	4.54	3.55	2.51	1.92	1.34
11	1.12	5.46	2.88	2.15	1.41	3.60	3.99	4.11	3.25	2.20	1.83	1.38
12	1.09	5.28	2.78	1.78	1.58	3.50	4.31	3.85	3.05	1.98	2.14	1.25
13	1.01	6.89	2.56	1.70	1.56	3.45	6.07	5.16	3.05	1.89	2.50	1.15
14	.88	6.80	2.41	1.90	1.62	3.14	6.68	6.41	3.96	2.45	2.30	.97
15	.89	5.50	2.00	1.80	2.07	3.00	8.88	6.25	2.98	3.15	2.05	.92
16	1.05	4.76	2.33	1.90	2.45	3.14	10.55	6.23	2.97	2.75	1.62	1.11
17	1.03	4.34	3.35	1.95	2.32	6.46	8.40	6.44	2.73	2.45	1.47	1.15
18	1.05	3.92	3.41	2.24	4.94	11.59	7.25	7.02	2.59	2.23	1.50	1.14
19	1.10	3.57	3.28	2.20	4.79	9.46	6.28	6.98	2.54	1.87	1.62	1.14
20	1.03	3.32	2.77	1.60	5.37	9.27	5.80	6.34	3.57	1.85	1.67	1.03
21	.87	3.13	2.64	1.60	5.45	12.20	5.38	5.72	3.71	2.20	2.39	.95
22	.82	2.92	2.42	2.07	6.04	11.70	5.31	5.30	3.12	2.45	2.16	.95
23	.98	2.83	2.38	1.88	5.14	15.13	5.25	4.94	2.95	2.67	2.30	1.13
24	.98	2.85	2.58	1.84	4.50	12.63	4.70	4.51	3.01	2.50	2.15	1.17
25	.98	3.57	2.47	1.60	4.12	9.50	4.45	4.85	2.68	2.34	2.04	1.16
26	.98	3.76	2.18	1.50	4.18	8.16	4.37	6.72	4.23	2.12	1.88	1.14
27	.98	3.82	2.10	1.65	4.32	7.03	4.42	5.87	4.20	2.00	1.73	1.06
28	.83	3.46	1.94	1.75	4.43	6.80	4.10	5.17	4.01	2.14	1.58	.91
29	.95	3.14	2.00	2.00	4.66	6.99	3.90	4.68	4.77	1.97	1.50	.83
30	1.52	2.98	2.01	1.75	-------	6.29	3.70	4.94	4.50	1.88	1.28	1.09
31	1.60	-------	2.33	1.77	-------	5.57	-------	4.84	-------	1.65	1.23	-------

Delaware River at Frenchtown--Continued

Daily gage height at 8 a.m., in feet, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.29	0.83	2.58	15.45	4.46	4.67	3.14	3.71	3.30	1.15	1.20	1.60
2	1.27	0.80	2.44	10.27	4.05	4.38	3.32	3.70	3.07	1.15	0.94	1.45
3	1.13	0.80	2.35	7.92	3.93	4.15	3.15	4.07	2.93	1.10	0.90	1.18
4	1.08	0.93	2.21	6.62	3.85	4.00	2.93	4.43	2.73	0.89	1.20	0.96
5	0.90	0.96	2.14	5.65	3.75	3.75	2.74	4.48	2.65	0.92	1.48	0.86
6	.90	1.18	1.96	9.21	3.73	3.70	2.82	4.28	2.49	.89	1.26	1.85
7	1.19	1.34	1.95	13.20	3.46	3.96	3.29	4.60	2.32	1.10	1.06	1.02
8	1.16	2.20	2.20	10.76	3.65	4.90	3.54	6.33	2.25	1.13	.91	.85
9	1.14	2.91	2.54	8.42	3.67	4.87	3.81	5.26	2.20	1.19	.80	.85
10	1.13	2.64	2.33	7.16	3.53	4.03	3.64	4.70	2.05	1.06	.73	.90
11	1.10	2.36	2.20	6.47	3.54	3.90	3.45	4.38	2.05	.89	.94	.84
12	.85	2.26	2.05	5.89	3.42	4.05	3.25	4.00	1.96	.93	1.02	.72
13	.83	1.86	2.00	5.42	3.12	4.05	3.10	3.70	1.70	.97	1.07	.73
14	1.07	1.76	1.97	4.96	3.02	3.68	3.13	3.41	1.53	1.14	1.13	.76
15	1.05	1.43	2.12	4.63	3.17	3.48	3.67	3.23	1.70	1.08	.93	.90
16	1.00	1.38	2.20	4.20	4.50	3.44	3.95	3.06	1.82	1.15	.73	1.05
17	1.00	1.48	2.53	5.92	8.29	3.33	3.65	2.87	1.77	1.35	.80	.93
18	.98	1.38	2.53	8.77	6.81	3.24	3.28	2.84	1.66	1.65	1.04	.94
19	.85	1.33	2.45	8.72	5.63	3.31	4.50	2.76	1.70	2.35	1.12	1.06
20	.92	1.51	2.33	8.80	5.36	2.94	6.85	2.85	1.50	1.75	1.18	.93
21	1.15	2.98	2.17	8.95	5.53	2.68	5.87	4.08	1.38	1.20	1.02	.82
22	1.33	3.20	2.07	4.32	5.55	2.63	5.14	5.51	1.34	1.43	.78	.93
23	1.14	3.35	2.30	4.40	5.54	3.09	5.25	5.24	1.45	1.40	.76	.90
24	.98	3.15	2.16	4.10	5.54	3.30	5.50	5.24	1.45	1.22	.65	.81
25	1.00	3.10	1.95	4.35	5.35	3.64	6.00	4.95	1.22	1.05	.75	1.02
26	.85	2.84	1.76	4.50	5.18	3.70	5.45	4.69	1.55	.98	.80	.86
27	.85	2.56	1.54	4.75	5.10	3.60	4.95	4.84	1.44	.90	.85	.66
28	1.00	2.48	1.50	4.90	4.88	3.45	4.60	4.35	1.29	1.10	.79	.84
29	.97	2.35	1.40	5.24	-------	3.40	4.34	4.10	1.34	1.15	.79	.91
30	.95	2.66	4.02	5.25	-------	3.39	3.98	3.76	1.19	1.16	1.07	1.06
31	.90	-------	13.91	4.98	-------	3.15	-------	3.53	-------	1.10	1.04	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.38	1.15	1.80	3.71	3.55	2.64	8.20	3.60	4.15	2.37	1.70	1.50
2	1.25	1.17	1.66	3.50	3.38	2.90	7.44	4.19	4.75	2.19	1.96	1.45
3	1.20	1.33	1.65	3.45	3.73	2.80	6.97	4.53	4.60	1.92	2.18	1.40
4	1.19	1.35	1.75	3.30	3.60	2.70	7.56	4.25	4.40	1.93	2.22	2.30
5	1.10	1.39	1.45	3.39	3.34	2.60	9.92	4.04	4.90	1.94	2.31	1.90
6	1.02	1.36	1.35	3.45	3.10	2.50	12.33	4.02	4.95	2.18	2.14	1.60
7	1.05	1.55	1.34	3.85	2.96	2.52	9.75	4.38	4.44	2.68	1.91	1.57
8	1.18	1.42	1.60	6.12	2.98	2.50	7.65	3.95	3.96	2.54	1.56	1.40
9	1.13	1.40	1.40	5.69	2.90	4.70	6.49	3.66	3.56	2.24	1.76	1.28
10	1.01	1.28	1.15	4.74	3.65	7.95	5.78	3.48	3.25	1.97	1.80	1.30
11	.95	1.21	1.13	5.42	3.74	7.75	5.31	3.34	3.10	2.05	1.67	2.00
12	.86	1.18	1.23	6.41	4.32	5.95	4.93	3.50	3.24	3.51	1.68	1.95
13	1.05	1.16	1.39	5.44	3.90	5.57	4.72	3.36	3.24	3.26	1.61	2.20
14	1.11	1.26	7.35	4.85	4.12	5.49	4.62	3.05	3.45	3.71	1.18	2.24
15	.97	1.85	6.97	4.75	4.60	4.90	4.30	2.79	3.20	3.57	1.04	2.28
16	.85	2.69	5.15	4.57	4.95	4.40	4.05	2.84	3.50	3.25	1.15	2.11
17	.80	2.64	4.05	4.15	4.85	4.16	3.85	2.99	3.39	2.85	1.20	1.93
18	.81	2.29	3.58	3.90	4.70	4.14	3.65	2.90	3.11	2.58	1.11	1.62
19	.79	2.14	3.27	3.75	4.34	3.86	3.58	3.50	2.97	2.60	1.18	1.36
20	.84	2.14	3.30	3.55	4.28	3.56	3.55	4.42	3.17	2.50	1.48	1.55
21	.81	1.88	3.35	3.05	3.30	3.55	4.05	4.45	3.03	2.35	2.18	1.63
22	.81	1.75	3.15	2.82	3.43	5.16	5.36	4.27	2.91	2.44	2.73	1.53
23	.75	2.03	3.00	2.65	3.20	5.57	4.70	3.85	2.90	2.42	2.33	1.39
24	.75	1.96	3.11	2.75	3.25	6.57	4.30	4.06	2.72	2.05	2.28	1.52
25	.72	1.78	4.15	3.00	3.30	6.38	4.48	4.47	2.54	1.95	1.83	1.20
26	.76	1.72	3.68	3.20	3.34	5.77	4.10	4.65	2.58	2.30	1.74	1.11
27	.95	1.65	3.89	3.45	2.58	5.66	3.95	4.33	3.10	2.50	1.52	1.17
28	1.10	1.63	5.13	3.52	2.25	5.80	4.00	3.98	2.80	2.33	1.19	1.35
29	1.04	1.58	5.59	3.34	-------	8.39	3.78	3.83	2.50	2.17	1.09	1.23
30	1.01	1.74	4.96	3.15	-------	11.85	3.55	4.52	2.30	2.05	1.33	1.16
31	1.07	-------	4.27	3.25	-------	9.75	-------	4.53	-------	1.67	1.63	-------

Delaware River at Point Pleasant, Pa.

Location.--Lat 40°25'25", long 75°03'50", on bridge at Point Pleasant, Bucks County.

Records available.--March 1936 to September 1950.

Gage.--Wire-weight gage. Datum of gage is 0.48 ft below mean sea level, datum of 1929.

Extremes.--1936-50: Maximum gage height observed, 98.64 ft (3 p.m.) Mar. 19, 1936; minimum observed, 69.70 ft Aug. 24, 1949.

Maximum gage height observed (water years).--
1946: May 29 (6 a.m.) 86.81 ft.
1947: Apr. 6 (10 p.m.) 87.91 ft.
1948: Mar. 23 (3 to 4 p.m.) 90.75 ft.
1949: Dec. 31 (10 p.m.) 91.80 ft.
1950: Apr. 6 (6 a.m.) 85.91 ft.

Remarks.--Gage read twice daily except during periods of gage heights above 79.7 ft, when it was read hourly from 6 a.m. to 10 p.m. In tables, the readings at 8 a.m. are shown.

Cooperation.--Records furnished by Delaware River Joint Toll Bridge Commission.

Daily gage height at 8 a.m., in feet, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	74.65	74.05	78.19	77.75	74.30	75.55	75.30	73.75	79.50	73.70	72.45	72.25
2	74.60	74.10	77.45	76.70	74.50	75.57	75.00	73.74	81.33	74.95	73.67	72.15
3	74.65	75.75	76.78	75.45	73.80	75.55	75.25	73.50	82.00	75.00	73.45	71.80
4	76.95	74.15	76.35	75.00	73.40	76.85	75.30	73.32	82.52	75.00	73.45	71.40
5	75.75	77.30	76.38	75.85	73.10	76.75	75.12	73.35	80.52	74.45	72.85	a71.30
6	75.27	75.75	76.70	75.95	73.26	77.55	74.80	73.00	-	73.70	72.52	71.80
7	75.33	75.77	77.10	77.10	74.85	78.80	74.77	72.95	-	73.71	72.35	71.75
8	75.45	75.26	76.85	82.40	74.80	80.85	74.40	73.43	-	73.10	73.35	71.40
9	75.65	74.86	77.25	81.86	74.30	82.90	74.20	73.43	-	73.15	74.27	71.75
10	77.65	74.67	77.00	80.77	74.17	83.70	74.30	73.70	-	72.95	73.10	71.55
11	79.35	74.50	76.75	80.25	73.80	82.00	74.30	73.70	-	72.97	73.15	71.30
12	78.90	75.25	76.25	79.00	73.50	80.00	74.23	73.92	-	72.75	72.90	71.77
13	77.25	76.35	75.80	78.85	73.75	78.54	74.20	72.95	76.10	72.90	72.45	71.70
14	76.30	76.75	75.45	77.90	73.80	-	74.05	74.30	76.20	72.75	73.05	71.71
15	76.35	76.50	75.11	77.20	74.20	-	73.70	74.90	76.10	72.55	72.92	71.61
16	76.17	77.19	75.12	77.08	74.39	-	73.61	75.12	75.30	72.53	72.62	71.46
17	75.56	77.57	74.96	76.71	74.45	-	73.50	75.06	74.65	72.25	72.53	70.98
18	-	76.87	74.77	76.46	74.73	-	74.15	76.55	74.23	72.15	73.45	a70.80
19	-	76.05	a74.45	75.46	74.00	-	74.05	77.75	74.35	72.15	75.95	-
20	-	77.25	74.41	75.19	73.80	-	73.78	78.44	74.54	72.12	74.29	-
21	-	77.43	74.38	74.60	73.69	77.44	73.38	78.54	74.53	72.97	72.93	-
22	-	78.90	74.20	74.57	73.65	76.95	73.46	78.57	74.25	72.97	72.78	-
23	-	79.69	74.37	74.58	73.45	76.98	73.43	80.82	73.95	74.90	72.76	-
24	-	-	74.46	74.65	73.36	76.04	73.28	79.88	73.61	77.68	72.57	-
25	-	-	73.85	74.93	73.05	75.90	73.45	78.45	73.37	76.75	72.35	-
26	74.58	78.88	76.38	74.94	73.08	75.76	73.52	76.77	73.51	75.66	72.18	75.39
27	74.42	77.68	77.70	74.70	73.57	77.04	73.78	76.86	73.36	74.42	71.85	74.73
28	74.48	76.78	77.21	74.53	74.63	77.54	73.88	84.00	73.32	74.31	71.81	73.70
29	74.38	77.89	77.40	74.95	-------	77.47	73.86	86.75	75.66	73.21	72.04	73.49
30	74.12	78.83	77.09	74.69	-------	76.32	73.67	84.43	73.66	72.80	72.68	73.52
31	74.11	-------	77.03	74.81	-------	75.78	-------	81.05	-------	72.70	72.40	-------

a Reading at 4 p.m.

Delaware River at Point Pleasant, Pa.--Continued

Daily gage height at 8 a.m., in feet, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	73.60	73.30	72.56	72.95	80.70	73.45	a75.77	77.35	77.30	72.88	74.75	75.15
2	73.75	73.20	72.50	73.50	81.05	73.55	75.75	78.75	76.55	72.80	74.40	72.91
3	73.55	72.85	72.47	72.80	78.55	73.61	76.95	78.85	76.20	73.26	74.30	72.75
4	73.40	72.73	72.40	73.15	77.55	73.26	78.00	78.56	76.25	73.37	73.97	72.35
5	73.15	73.72	72.39	73.46	77.22	73.50	78.22	78.20	75.80	73.38	73.25	a73.14
6	72.90	73.87	72.41	73.57	76.00	73.75	83.72	79.58	75.60	72.55	73.10	73.20
7	72.46	72.12	72.15	73.75	75.70	73.80	86.45	81.08	75.35	72.45	73.30	73.86
8	72.20	72.65	72.25	73.60	75.50	73.95	82.60	80.84	76.00	71.80	73.30	72.25
9	72.30	72.74	72.10	73.75	74.70	73.75	81.12	80.20	77.15	81.25	73.30	72.05
10	72.60	73.05	71.95	73.30	74.25	73.62	79.00	79.05	76.30	80.50	73.35	72.05
11	72.72	72.45	72.20	73.35	a74.64	73.60	78.45	78.73	75.75	78.75	74.30	72.30
12	72.50	72.50	72.15	73.10	74.75	73.90	77.78	77.27	75.45	76.45	74.80	72.00
13	72.95	a72.80	72.15	73.15	74.80	74.05	77.40	76.70	74.75	75.60	a75.44	71.95
14	73.20	72.95	72.50	73.25	74.35	75.50	77.53	76.25	75.30	75.45	73.50	a72.00
15	73.15	73.98	72.25	74.30	74.20	80.20	76.95	76.15	76.60	74.80	73.50	71.65
16	73.14	73.81	72.28	74.49	74.18	84.45	76.81	76.03	75.85	a75.45	73.47	71.81
17	75.15	72.83	72.27	74.55	74.10	82.83	76.78	75.92	75.51	a77.25	73.87	72.11
18	72.70	72.25	72.25	75.27	73.75	80.90	76.30	76.20	76.73	a79.55	74.97	72.01
19	73.90	72.14	72.38	75.55	74.15	78.55	75.80	75.13	75.35	79.35	a75.60	71.80
20	73.81	72.27	72.42	75.69	73.94	77.58	76.24	76.82	76.53	a78.40	74.68	71.76
21	73.15	72.53	72.18	76.96	73.70	77.15	75.37	77.82	74.63	77.70	74.35	72.96
22	73.11	72.29	72.47	78.87	73.49	77.35	75.49	77.79	74.32	77.01	73.78	71.62
23	73.12	72.21	72.45	77.19	73.42	77.42	75.63	80.98	74.30	81.10	73.38	71.62
24	73.94	72.18	72.87	76.65	73.17	76.67	76.19	81.02	73.69	79.85	73.20	72.18
25	72.52	72.00	73.33	76.45	72.90	76.25	76.20	79.30	73.50	78.00	73.16	72.35
26	72.92	71.98	73.15	76.10	72.88	80.35	75.94	82.90	73.75	76.72	72.37	72.99
27	72.53	71.61	73.29	76.98	72.86	80.81	76.39	82.49	73.52	76.61	73.00	72.21
28	73.40	71.29	72.70	77.46	73.73	78.99	75.90	80.45	73.75	75.27	73.00	71.46
29	73.52	71.42	72.63	77.27	-------	-	75.68	79.00	73.69	74.96	72.82	71.18
30	73.59	72.45	72.29	77.87	-------	-	75.91	78.44	75.29	76.12	72.55	71.00
31	72.37	-------	73.48	76.90	-------	-	-------	78.46	-------	75.05	72.49	-------

a Reading at 4 p.m.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70.90	72.10	73.72	74.00	72.15	75.80	77.95	74.80	-	75.30	71.60	71.09
2	71.30	a72.68	73.20	a74.15	72.00	75.45	79.55	74.68	-	74.54	71.37	71.21
3	71.15	72.30	a73.22	73.75	71.80	75.76	79.60	74.50	-	73.95	71.10	71.18
4	71.15	72.10	73.20	72.95	71.68	75.50	78.79	74.55	-	73.55	71.30	71.03
5	71.15	72.75	73.10	72.85	72.20	75.15	79.60	74.52	-	73.16	71.50	71.03
6	71.22	73.20	73.41	73.10	72.00	74.40	77.10	75.60	-	72.95	73.05	70.88
7	70.90	72.90	73.37	73.33	72.10	74.30	76.75	75.27	-	73.01	72.64	70.49
8	70.75	73.30	73.15	73.10	71.85	74.60	a76.20	76.75	-	73.10	73.65	70.60
9	71.00	78.35	73.15	73.20	71.82	74.60	a76.17	76.90	-	73.28	72.65	70.65
10	a69.97	79.80	73.70	73.30	72.15	74.61	-	76.25	74.50	73.10	72.20	71.30
11	71.25	79.83	73.80	72.55	72.45	74.50	-	75.65	74.00	72.75	72.05	71.45
12	71.20	77.57	73.79	72.30	72.10	74.65	76.12	75.20	73.80	72.26	72.52	71.24
13	70.94	79.45	73.35	72.45	71.95	74.55	78.60	77.50	73.75	72.10	73.05	71.15
14	70.65	69.20	73.03	72.75	72.05	74.42	79.18	79.10	73.60	73.65	72.72	70.70
15	70.35	77.50	72.55	72.55	72.20	74.00	82.02	78.75	73.68	73.95	72.25	70.50
16	-	77.21	72.49	72.49	73.30	74.98	b84.90	78.92	73.61	73.50	71.70	70.49
17	-	76.43	73.38	72.29	73.28	79.25	81.32	79.00	73.62	73.16	71.67	71.04
18	-	76.09	74.12	72.58	74.05	85.40	79.85	79.47	73.16	72.70	71.51	70.97
19	-	74.80	74.07	71.95	76.85	82.78	78.64	79.47	73.24	72.08	71.58	71.04
20	-	74.39	73.60	71.88	77.09	82.46	79.93	78.97	76.04	72.02	71.89	70.75
21	-	74.28	73.62	71.84	76.80	86.10	77.69	77.84	74.84	72.08	72.79	70.50
22	-	74.03	73.11	72.54	78.28	85.62	77.33	77.66	74.94	72.04	72.76	70.51
23	71.31	74.09	73.16	72.24	78.05	89.86	77.17	76.78	74.86	73.70	72.47	71.05
24	71.90	73.69	73.57	72.52	76.71	87.09	77.19	76.46	73.14	73.10	72.57	71.07
25	71.58	73.50	73.48	71.55	75.60	82.80	77.07	75.55	74.74	72.80	72.26	71.03
26	70.86	75.09	72.85	71.51	76.74	81.04	77.04	77.10	74.68	72.40	72.49	70.83
27	70.96	75.83	72.08	72.09	75.96	79.50	76.85	78.17	75.47	72.02	72.85	a70.65
28	70.40	75.57	72.40	72.07	76.17	79.79	76.12	77.09	75.20	72.44	71.77	70.61
29	70.69	74.55	72.42	72.04	76.98	79.48	76.01	76.42	76.34	72.30	71.52	70.20
30	71.80	73.88	72.43	72.08	-------	78.59	75.96	76.38	76.91	72.07	71.44	70.91
31	72.00	-------	73.04	72.15	-------	78.20	-------	76.77	-------	71.88	71.12	-------

a Reading at 4 p.m.
b Reading at 9 a.m.

Delaware River at Point Pleasant, Pa.--Continued

Daily gage height at 8 a.m., in feet, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71.33	70.88	73.05	90.45	75.85	76.00	74.00	74.75	74.10	70.99	71.20	70.90
2	71.28	b70.05	73.00	83.72	75.31	75.80	74.38	74.75	74.87	71.05	70.54	71.53
3	71.10	69.95	b72.71	80.40	75.25	75.35	74.00	75.10	73.60	70.90	70.55	71.10
4	71.05	69.93	b72.55	78.80	74.95	75.20	73.60	75.75	73.45	70.67	70.00	70.60
5	70.38	70.53	72.70	77.50	74.80	74.80	73.40	75.80	73.25	70.45	71.55	70.35
6	70.39	71.25	72.25	82.55	74.75	74.75	73.60	75.60	72.95	70.40	71.60	72.55
7	71.13	b71.72	72.29	87.15	74.45	75.14	74.20	75.80	72.80	70.70	70.94	71.09
8	71.10	72.60	72.74	84.14	74.80	76.45	74.50	78.30	72.65	70.90	70.55	70.45
9	71.08	72.95	73.15	81.10	74.75	75.70	74.70	76.95	72.65	71.10	70.20	70.30
10	a71.00	73.30	72.85	79.50	74.55	75.20	74.60	76.10	72.40	70.70	69.90	70.70
11	70.95	73.35	72.65	76.58	74.60	75.10	74.30	75.75	72.30	70.45	70.55	70.30
12	70.30	b72.44	72.47	78.81	74.21	75.20	74.10	75.19	72.14	70.49	70.65	70.04
13	70.15	72.05	72.34	77.15	73.85	75.12	73.90	74.75	71.85	70.50	b70.67	69.95
14	71.85	71.95	72.25	76.54	73.80	74.70	73.95	74.25	71.55	70.80	b70.88	69.90
15	71.80	71.55	72.48	76.05	73.90	74.40	74.70	74.10	71.85	70.90	b70.78	70.45
16	70.72	71.47	72.62	76.00	74.20	74.31	74.91	73.96	71.80	70.85	70.76	70.84
17	70.80	71.27	b73.10	75.31	80.50	74.32	75.09	73.66	71.75	71.57	70.20	70.55
18	70.32	71.56	73.27	74.97	79.04	74.17	74.58	73.41	71.58	71.45	70.76	b70.40
19	70.30	71.29	73.04	74.75	77.43	73.83	75.63	73.45	71.63	72.55	71.02	70.63
20	70.12	71.49	73.00	75.68	77.25	73.70	79.00	73.16	71.52	73.57	70.97	70.60
21	70.35	72.21	72.75	74.81	77.28	73.61	77.82	73.31	71.43	71.50	70.76	70.00
22	71.43	73.62	72.41	76.07	77.48	73.19	76.80	73.48	71.27	71.58	70.04	70.30
23	71.45	74.20	72.54	76.41	77.57	74.50	77.99	77.93	71.45	71.40	69.98	70.40
24	71.84	74.42	72.59	75.52	77.43	74.32	77.18	76.86	71.35	71.37	69.70	70.05
25	70.47	74.88	72.65	75.74	77.08	74.62	77.58	76.53	71.10	70.92	69.80	70.08
26	70.37	73.76	72.16	75.98	76.90	74.79	77.85	75.90	70.98	70.70	69.91	70.30
27	70.22	73.30	71.82	76.40	76.81	74.68	76.62	76.35	71.41	70.45	70.23	70.05
28	70.75	73.56	71.97	76.95	76.37	76.40	76.09	75.70	71.24	70.46	70.10	70.10
29	70.74	72.86	71.30	77.09	-------	74.21	71.06	75.25	71.15	70.80	69.99	70.35
30	70.57	72.98	-	77.26	-------	74.42	75.57	74.78	71.11	70.79	70.62	70.34
31	70.41	-------	-	76.38	-------	73.93	-------	74.46	-------	70.95	70.97	-------

a Reading at 9 a.m.
b Reading at 4 p.m.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71.25	70.86	72.06	74.75	74.65	73.72	80.90	74.55	75.45	72.90	71.70	71.40
2	71.10	71.10	71.77	74.51	74.50	73.78	79.96	75.41	76.19	72.82	72.17	71.27
3	a71.15	71.20	74.50	74.50	75.00	73.25	79.24	76.00	76.15	72.10	72.55	71.50
4	71.00	71.30	71.95	74.15	74.65	73.00	79.90	75.55	75.75	72.05	72.50	72.70
5	70.95	71.45	71.45	74.25	74.25	73.15	83.01	75.15	76.55	72.20	72.75	72.15
6	70.60	71.35	71.25	74.40	73.95	73.05	85.90	75.10	76.55	72.35	72.50	71.75
7	a70.59	71.63	-	74.50	73.92	73.06	83.00	75.83	75.83	73.33	72.23	71.64
8	70.70	71.50	71.50	78.07	73.80	73.15	80.10	75.20	75.15	73.09	71.80	71.50
9	71.00	71.35	71.30	77.60	74.75	76.55	78.65	74.70	74.55	72.60	71.95	71.15
10	70.70	71.20	69.96	77.15	74.90	80.35	77.60	74.40	74.20	72.40	71.78	71.10
11	70.40	71.15	69.80	77.20	74.95	80.50	77.00	74.20	73.95	72.35	71.70	72.50
12	a70.31	71.05	71.00	78.51	75.78	78.06	76.47	74.54	74.10	74.61	71.68	72.35
13	70.50	70.95	71.80	77.30	75.25	77.40	76.15	74.30	74.05	74.05	71.50	72.70
14	70.90	71.05	79.50	76.40	75.50	77.30	75.95	73.70	73.55	74.78	71.05	72.70
15	70.53	72.05	79.45	76.25	76.70	76.50	75.65	73.70	74.00	74.60	70.80	72.75
16	70.37	73.23	77.90	76.07	77.86	75.86	75.32	73.40	74.21	74.11	71.05	72.54
17	70.09	73.25	75.33	75.40	76.71	75.40	75.01	73.60	74.30	73.51	71.04	72.28
18	70.01	73.09	75.14	75.14	76.23	75.35	74.64	73.42	74.21	73.08	71.82	71.70
19	69.95	72.49	74.15	75.93	75.85	75.18	74.63	74.44	73.73	71.96	70.98	71.48
20	70.51	72.50	74.11	74.71	75.48	74.45	74.53	74.87	73.62	73.10	71.28	71.56
21	70.30	72.10	74.17	73.85	74.09	74.41	75.27	76.85	73.75	73.29	72.56	71.72
22	70.22	72.12	74.25	73.58	74.33	77.94	76.97	75.87	73.60	73.98	73.18	71.50
23	69.87	72.69	73.75	73.34	74.15	78.91	77.27	75.28	73.54	72.86	72.78	71.33
24	69.89	72.54	74.75	73.18	74.20	79.87	75.69	75.28	73.29	72.38	72.67	71.53
25	70.05	71.98	74.60	73.72	74.43	78.52	75.43	75.83	73.10	72.22	71.93	71.13
26	69.93	71.88	74.67	74.05	74.32	77.67	75.38	76.14	a73.20	72.17	71.85	70.80
27	70.61	71.51	75.69	74.42	73.71	77.63	75.15	76.08	73.90	73.06	71.46	70.59
28	70.90	71.71	75.82	74.27	73.60	77.85	75.27	75.84	73.40	72.81	61.12	71.23
29	70.73	71.21	77.45	74.47	-------	80.50	75.95	75.10	73.88	72.65	70.86	71.05
30	70.78	71.62	76.55	74.46	-------	85.49	74.66	76.00	72.87	72.35	70.70	71.04
31	70.74	-------	75.57	74.09	-------	83.65	-------	76.00	-------	71.78	71.61	-------

a Reading at 4 p.m.

Delaware & Raritan Canal at Kingston

Location.--Lat 40°22'24", long 74°37'08", on right bank at canal lock at Kingston, Middlesex County, 160 ft south of State Highway 27.

Records available.--March 1947 to September 1950.

Gage.--Two water-stage recorders and concrete control. Datum of gage is 40.00 ft above mean sea level, datum of 1929.

Remarks.--Records include flow in lock and in bypass channel. The canal diverts water from Delaware River at Raven Rock and discharges into Raritan River at New Brunswick.

Daily discharge, in cubic feet per second, 1947-50

1947

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	47	20	30	66	7	7
2						-	32	16	66	66	7	7
3						-	16	35	40	61	7	7
4						-	31	36	31	59	7	15
5						-	28	8	41	61	7	20
6						-	17	7	49	63	7	19
7						-	31	23	52	63	7	19
8						-	35	75	48	55	18	19
9						-	42	46	43	60	12	19
10						-	43	36	48	21	16	20
11						-	42	42	50	52	20	20
12						-	46	36	51	72	21	20
13						23	47	29	51	72	13	20
14						24	43	30	53	72	7	12
15						24	39	29	56	63	7	13
16						16	40	38	45	46	7	34
17						8	35	44	35	40	7	33
18						7	36	50	25	41	32	12
19						18	39	65	25	41	37	19
20						30	39	40	38	42	23	21
21						34	38	29	66	42	39	21
22						38	38	29	77	43	44	21
23						35	38	42	52	43	26	21
24						30	38	49	58	47	12	21
25						29	38	49	49	56	10	21
26						30	37	50	42	56	14	21
27						37	37	49	42	49	34	15
28						43	37	40	41	44	36	7
29						43	37	35	41	40	7	15
30					-------	39	40	36	50	20	7	22
31		-------			-------	35	-------	27	-------	7	7	-------

Delaware & Raritan Canal at Kingston--Continued

Daily discharge, in cubic feet per second, 1947-50

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	30	2	2	5	2	20	87	22	35	26	61
2	22	20	2	2	5	2	2	86	22	34	40	56
3	14	20	2	2	14	2	12	90	30	30	27	46
4	7	24	2	2	21	2	18	98	29	15	38	65
5	7	24	2	2	21	2	18	93	22	42	37	50
6	7	21	2	2	11	2	17	93	49	26	35	63
7	7	20	2	2	5	2	7	105	31	39	23	50
8	7	15	2	2	5	2	2	131	13	25	41	58
9	7	8	2	2	5	2	2	107	27	44	33	48
10	7	8	2	2	15	2	12	90	36	18	32	52
11	7	10	2	2	21	2	18	2	30	63	36	42
12	7	14	2	2	21	2	9	4	28	47	40	56
13	7	8	2	2	10	2	2	12	28	34	24	50
14	7	23	2	2	2	2	2	12	32	37	42	42
15	7	35	2	2	2	2	2	22	18	16	30	35
16	7	35	2	2	2	2	2	34	32	26	30	44
17	7	23	2	2	2	2	2	20	32	46	35	54
18	7	7	2	2	2	2	2	12	25	52	20	26
19	7	10	2	2	2	2	2	20	28	18	30	102
20	7	10	2	2	2	2	2	40	16	53	34	47
21	7	2	2	2	2	2	2	36	14	50	46	42
22	7	2	2	2	2	2	2	30	25	41	14	41
23	7	2	2	2	18	2	2	34	33	20	47	46
24	7	2	2	2	12	2	2	38	31	43	20	45
25	7	2	2	2	2	2	2	23	24	31	43	45
26	7	2	2	2	2	2	58	18	39	34	67	45
27	7	2	2	2	2	2	78	23	36	29	56	45
28	7	2	2	16	2	2	78	40	20	44	50	51
29	48	2	2	22	2	2	87	34	28	39	62	49
30	61	2	2	12	-------	21	90	26	35	26	49	48
31	49	-------	2	5	-------	46	-------	27	-------	41	55	-------

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	58	38	33	16	18	14	5	21	46	32	30	30
2	45	13	36	54	18	14	5	9	15	17	38	29
3	43	37	36	23	32	9	22	6	20	18	27	27
4	58	36	37	23	21	4	5	10	43	16	41	27
5	50	34	41	30	6	13	5	22	12	16	30	29
6	55	34	41	12	17	19	5	20	39	16	26	27
7	42	34	37	13	25	16	5	7	20	18	31	26
8	39	35	35	16	13	8	5	22	28	21	35	26
9	41	35	34	25	6	9	5	19	42	50	30	26
10	41	35	33	31	6	19	5	7	86	3	29	30
11	41	36	33	36	38	19	5	39	72	30	28	31
12	41	34	36	33	22	11	5	14	71	40	27	31
13	41	27	38	33	6	e 5	5	22	30	24	27	30
14	41	35	37	31	7	5	5	58	12	16	27	29
15	41	40	36	29	22	5	20	7	6	12	34	27
16	41	44	37	24	19	5	6	9	59	13	38	27
17	36	44	38	23	13	5	6	21	23	17	31	29
18	35	44	36	22	12	5	42	18	43	16	24	29
19	43	44	35	21	12	10	6	13	53	13	22	30
20	48	18	35	21	12	14	9	30	29	25	23	29
21	47	10	35	21	12	12	16	28	20	36	27	29
22	46	58	35	21	12	10	15	33	87	38	27	29
23	46	46	35	13	12	7	6	8	41	39	25	28
24	15	42	29	6	8	5	6	8	16	37	25	27
25	25	18	24	6	5	5	17	8	24	31	24	28
26	37	34	21	23	8	5	6	9	48	35	16	31
27	37	59	26	23	16	5	11	18	17	36	3	31
28	37	35	30	12	14	5	17	9	35	32	3	31
29	37	37	30	6	-------	5	17	9	31	31	47	30
30	37	36	e11	6	-------	5	26	22	31	50	22	30
31	38	-------	0	12	-------	5	-------	41	-------	36	27	-------

e Flow through lock only. Millstone River was at flood stage and overflowed banks into canal by-pass.

Delaware & Raritan Canal at Kingston--Continued

Daily discharge, in cubic feet per second, 1947-50

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	32	35	27	29	31	29	28	24	37	28	51
2	28	32	35	27	22	30	33	30	13	27	29	29
3	27	32	34	27	15	29	32	31	25	41	31	69
4	26	32	33	29	27	29	25	33	27	46	14	32
5	26	36	32	27	36	48	23	32	27	49	27	57
6	26	41	41	31	34	34	22	31	31	49	43	34
7	27	38	41	29	33	31	27	32	35	48	37	54
8	31	35	33	24	29	33	32	34	31	46	48	44
9	33	33	29	28	27	35	58	31	39	46	82	48
10	32	32	29	22	26	32	36	30	37	20	33	47
11	26	34	30	23	26	31	30	30	31	24	40	49
12	17	34	31	29	26	31	23	30	33	28	43	40
13	7	34	31	29	28	27	24	31	39	34	49	50
14	8	37	30	29	16	24	26	32	39	39	39	47
15	12	37	29	28	3	28	30	32	35	33	26	39
16	32	37	29	25	2	33	32	32	32	37	41	50
17	34	37	31	25	2	37	31	32	32	29	51	52
18	19	34	31	32	8	36	30	32	32	46	43	48
19	17	33	31	27	23	36	29	26	33	46	36	43
20	19	33	31	35	21	32	29	24	37	46	38	31
21	28	36	30	32	21	26	29	26	40	49	41	31
22	38	37	30	32	45	17	29	32	39	48	42	30
23	26	36	30	32	26	10	29	39	39	48	51	22
24	19	34	30	31	21	21	28	33	38	47	39	17
25	23	33	30	32	24	29	27	35	30	52	54	21
26	33	32	31	33	30	27	27	26	26	57	46	32
27	36	30	30	33	33	15	36	27	26	80	43	39
28	35	33	29	33	32	11	30	42	27	69	59	41
29	32	35	29	32	-------	5	27	21	34	55	33	32
30	32	35	28	31	-------	16	26	35	41	52	53	73
31	32	-------	28	30	-------	24	-------	37	-------	68	35	-------

Monthly and annual discharge, in cubic feet per second, 1947-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October						
November						
December						
Calendar year						
January	-	-	-	-		
February	-	-	-	-		
March 13-31, 1947	543	48	7	28.6		
April	1,106	47	16	36.9		
May	1,141	75	7	36.8		
June	1,415	77	30	47.2		
July	1,563	72	7	50.4		
August	505	44	7	16.3		
September	541	34	7	18.0		
Water year	-	-	-	-		
October 1947	391	61	7	12.6		
November	385	35	2	12.8		
December	62	2	2	2.0		
Calendar year	-	-	-	-		
January 1948	108	22	2	3.5		
February	218	21	2	7.5		
March	125	46	2	4.0		
April	554	90	2	18.5		
May	1,487	131	2	48.0		
June	835	49	13	27.8		
July	1,098	63	15	35.4		
August	1,162	67	14	37.5		
September	1,505	102	26	50.2		
Water year 1947-48	7,930	131	2	21.7		

Delaware & Raritan Canal at Kingston--Continued

Monthly and annual discharge, in cubic feet per second, 1947-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1948	1,282	58	15	41.4		
November	1,072	59	10	35.7		
December	1,000	41	0	32.3		
Calendar year 1948	10,446	131	0	28.5		
January 1949	665	54	6	21.5		
February	412	38	5	14.7		
March	278	19	4	9.0		
April	313	42	5	10.4		
May	567	58	6	18.3		
June	1,099	87	6	36.6		
July	814	50	3	26.3		
August	844	47	3	27.2		
September	863	31	26	28.8		
Water year 1948-49	9,209	87	0	25.2		
October 1949	808	38	7	26.1		
November	1,034	41	30	34.5		
December	971	41	28	31.3		
Calendar year 1949	8,668	87	3	23.7		
January 1950	914	37	22	29.5		
February	665	45	2	23.8		
March	848	48	5	27.4		
April	869	38	22	29.0		
May	966	42	21	31.2		
June	972	41	13	32.4		
July	1,396	80	20	45.0		
August	1,284	82	14	41.4		
September	1,252	73	17	41.7		
Water year 1949-50	11,979	82	2	32.8		

Delaware River at Stockton

Location.--Lat 40°24'10", long 74°58'50", on upstream side of bridge in third span from New Jersey end, at Stockton, Hunterdon County.

Records available.--April 1936 to September 1950 (gage heights only).

Gage.--Wire-weight gage. Datum of gage is 0.04 ft above mean sea level, datum of 1929.

Extremes.--1936-50: Maximum gage height observed, 74.80 ft (6 a.m.) May 24, 1942; minimum observed, 52.03 ft Sept. 19, 1939.
Maximum stage known, 81.7 ft Oct. 11, 1903, from floodmark.

Maximum gage height observed (water years).--
1946: May 29 (8 a.m.) 67.32 ft.
1947: Apr. 6 (10 to 11 p.m.) 68.80 ft.
1948: Mar. 23 (7 p.m.) 71.30 ft.
1949: Jan. 1 (2 a.m.) 72.50 ft.
1950: Apr. 6 (8 a.m.) 67.05 ft.

Remarks.--Gage read twice daily except during periods of gage heights above 59.0 ft, when it was read hourly. In tables, the readings at 8 a.m. are shown.

Cooperation.--Records furnished by Delaware River Joint Toll Bridge Commission.

Daily gage height at 8 a.m., in feet, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55.95	55.60	59.10	58.55	55.90	56.90	56.55	55.35	60.15	55.20	54.30	54.10
2	55.63	55.55	58.40	57.76	55.85	56.80	56.15	55.25	61.35	55.27	54.33	53.95
3	55.90	55.46	57.80	57.05	55.45	57.60	56.45	55.05	62.90	56.40	55.10	53.80
4	56.65	55.48	57.55	56.95	54.87	57.75	56.55	54.88	63.20	56.25	54.84	53.50
5	56.95	58.20	57.45	56.90	54.80	57.60	56.20	54.95	61.10	55.80	54.50	53.85
6	56.52	57.55	57.60	56.80	54.60	58.25	56.10	54.65	59.90	55.30	54.25	52.75
7	56.28	56.95	57.95	57.90	56.00	59.35	56.00	54.60	59.00	54.95	54.35	53.75
8	56.65	56.50	57.85	62.85	55.85	61.14	55.70	55.00	58.40	54.80	54.85	53.75
9	57.41	56.20	58.15	62.36	55.55	62.45	55.50	55.20	57.90	54.79	55.65	53.70
10	58.23	56.00	57.95	61.35	55.55	62.95	55.70	55.20	57.35	54.55	55.20	53.55
11	59.90	55.90	57.60	60.70	55.30	62.95	55.60	55.30	57.00	54.55	54.90	53.35
12	58.75	56.65	57.40	60.00	54.85	60.50	55.65	55.20	57.00	54.40	54.51	53.80
13	58.10	57.45	56.95	59.95	55.20	59.20	55.55	55.20	57.15	54.55	54.20	53.80
14	57.60	57.70	56.50	58.75	55.25	58.45	55.50	55.60	57.28	54.45	54.60	53.73
15	57.20	57.45	56.70	58.05	55.95	58.20	55.20	55.60	57.25	54.30	54.55	53.65
16	56.90	58.20	56.60	57.65	56.00	59.00	55.15	56.15	56.70	54.00	54.35	53.40
17	56.75	57.75	55.90	57.30	56.50	60.10	55.50	56.47	56.05	54.05	54.28	53.20
18	56.60	57.20	55.55	57.00	55.90	59.20	55.60	58.10	55.75	54.00	54.90	53.10
19	56.35	57.05	55.80	56.80	55.49	59.55	55.55	58.80	55.77	54.00	56.30	53.67
20	56.15	57.70	55.50	56.35	55.25	58.90	55.35	58.90	55.95	53.90	55.30	53.55
21	56.00	57.95	55.60	55.90	55.05	58.30	55.20	58.70	56.00	54.80	54.70	53.40
22	55.81	59.40	55.55	58.68	55.10	57.90	54.92	59.20	55.70	54.70	54.50	54.45
23	55.55	60.65	55.40	56.05	54.75	57.50	54.90	61.40	55.60	55.25	54.35	54.40
24	55.80	60.70	55.20	55.80	54.87	57.25	55.10	59.50	55.15	58.75	54.22	54.45
25	55.90	59.50	55.25	56.10	55.00	57.05	55.00	58.45	54.95	57.70	54.15	55.40
26	56.00	58.70	57.80	56.25	54.78	56.85	55.05	57.70	55.10	56.65	53.95	56.40
27	55.90	58.05	58.70	56.20	54.85	58.00	55.20	58.40	54.90	55.85	53.80	56.12
28	55.90	57.70	58.70	55.60	55.80	57.95	55.30	64.30	54.90	55.30	53.75	55.25
29	55.85	59.90	58.40	55.28	-------	57.50	54.90	67.32	55.10	54.90	53.90	54.68
30	55.60	59.55	58.23	55.75	-------	57.20	54.95	64.75	55.25	54.45	54.30	54.40
31	55.55	-------	58.25	55.65	-------	57.05	-------	61.70	-------	54.35	54.25	-------

Delaware River at Stockton--Continued

Daily gage height at 8 a.m., in feet, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55.25	54.85	54.35	54.30	61.15	55.00	57.25	59.10	58.75	55.05	56.45	54.50
2	55.20	54.65	54.15	54.15	61.00	54.85	56.75	59.75	57.95	55.38	56.25	c54.50
3	54.95	54.55	53.95	54.60	59.35	54.85	57.90	60.35	57.55	55.70	56.20	54.80
4	54.90	54.30	53.85	54.55	58.33	54.90	59.20	59.90	57.45	55.30	55.50	54.55
5	54.70	54.32	53.85	55.10	57.90	54.90	a59.25	59.60	57.35	55.00	55.25	54.85
6	54.60	54.45	53.85	54.80	57.25	55.10	64.00	61.00	57.05	54.70	55.45	55.15
7	54.20	54.35	53.85	55.25	56.45	55.25	67.60	62.25	56.80	54.55	55.35	55.10
8	54.12	54.35	53.95	55.05	56.60	55.45	65.00	62.00	57.60	54.80	55.35	54.50
9	53.95	54.50	53.90	55.15	56.05	55.35	62.25	61.45	58.65	61.74	55.35	54.35
10	54.30	54.50	53.80	54.90	55.65	55.05	60.75	60.40	57.80	61.60	55.30	54.35
11	54.25	54.30	53.95	54.75	55.70	55.15	59.54	59.40	57.25	59.30	55.80	54.45
12	54.20	54.25	53.95	54.70	55.97	55.45	b59.00	58.61	56.85	58.10	56.16	54.35
13	54.35	54.43	54.00	54.75	56.05	55.65	58.70	58.20	56.45	57.20	55.55	54.20
14	54.65	54.52	54.00	54.50	55.65	56.59	58.90	57.75	56.25	57.15	55.50	54.10
15	54.75	54.55	54.05	55.30	55.75	61.85	58.30	57.70	58.15	56.50	55.49	54.00
16	55.00	54.45	54.05	55.80	55.85	64.90	57.85	58.35	57.50	57.70	55.40	54.20
17	54.70	54.38	54.05	56.15	55.54	62.65	58.00	57.63	58.35	57.50	55.55	54.20
18	54.40	54.15	54.15	56.35	55.35	60.70	57.75	57.25	57.38	60.65	56.65	54.30
19	54.45	53.97	54.10	56.85	55.45	59.27	57.35	57.35	56.98	60.65	57.60	54.10
20	54.80	54.00	54.05	56.50	55.30	58.50	57.00	58.30	56.75	59.95	56.55	54.15
21	54.75	54.20	53.85	59.50	55.60	58.05	56.85	58.45	56.50	58.85	56.20	54.00
22	54.70	54.10	55.15	60.15	54.80	57.80	57.24	58.80	56.25	58.17	55.80	53.95
23	54.75	53.95	55.90	58.35	54.60	57.25	58.15	61.80	55.85	60.80	55.50	53.95
24	54.60	54.10	54.75	57.65	54.64	57.65	57.65	62.17	55.70	61.20	55.25	54.15
25	54.30	54.00	55.15	57.45	54.50	57.80	57.45	60.55	55.80	59.20	54.75	54.25
26	54.25	53.90	54.90	57.70	54.95	60.45	57.20	62.80	55.80	58.15	54.45	54.15
27	54.95	54.05	54.43	58.45	55.05	61.64	57.50	63.80	55.66	57.50	55.00	54.05
28	54.90	54.05	54.30	58.30	55.15	59.75	57.35	61.50	55.75	56.95	54.95	53.85
29	55.00	54.05	54.30	58.14	-------	58.85	57.30	60.30	55.65	56.12	54.90	53.75
30	55.25	54.15	54.40	57.86	-------	58.15	57.15	59.70	55.35	57.75	54.60	53.65
31	54.90	-------	54.37	57.60	-------	57.70	-------	59.25	-------	56.90	54.80	-------

a Reading at 11 a.m.
b Reading at 7 a.m.
c Reading at 4 p.m.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	53.55	54.85	55.60	55.00	54.70	57.65	59.40	56.60	57.65	57.20	54.15	53.60
2	53.80	54.85	55.30	55.45	57.30	57.20	60.80	56.45	57.20	56.57	54.00	53.95
3	53.65	54.55	55.30	55.45	57.15	57.50	60.90	56.25	56.80	56.15	53.85	53.75
4	53.65	54.26	55.30	55.20	56.80	57.35	59.70	56.22	56.50	55.80	53.95	53.65
5	53.65	54.75	55.40	54.95	59.30	56.85	59.05	56.25	56.30	55.45	54.10	53.75
6	53.65	55.29	55.35	55.20	58.35	56.40	58.50	57.50	55.95	55.20	53.25	53.70
7	53.45	55.00	55.35	55.15	57.85	56.05	58.25	56.95	55.60	55.10	55.80	53.35
8	53.45	55.10	55.20	55.25	57.95	56.40	57.85	58.35	56.10	55.35	55.60	53.45
9	53.57	59.40	55.35	55.05	57.35	56.40	57.80	58.40	56.70	55.47	55.00	53.45
10	53.70	61.00	55.60	55.25	56.95	56.65	57.35	57.75	56.45	55.40	54.75	53.90
11	53.70	58.95	55.75	55.20	56.75	56.75	57.15	57.30	56.20	55.05	54.50	54.05
12	53.70	59.25	55.65	54.65	57.53	56.70	57.50	56.70	55.95	54.65	54.90	53.95
13	53.60	60.30	55.40	54.30	57.15	56.55	59.25	58.70	56.00	54.50	55.25	53.60
14	53.40	60.60	55.14	54.85	56.00	56.05	60.40	60.70	55.80	55.20	55.05	53.50
15	53.20	58.95	54.70	54.89	55.10	56.02	62.90	60.05	55.85	56.10	54.80	53.40
16	53.65	57.95	55.40	54.45	55.50	56.25	65.45	59.90	55.90	55.75	54.20	53.75
17	53.55	57.31	56.50	54.60	55.30	59.65	62.65	60.32	55.80	55.30	54.10	53.75
18	53.60	56.90	56.60	54.80	57.25	66.35	61.10	60.80	55.55	55.00	54.00	a53.50
19	53.65	56.50	56.30	54.40	58.60	63.88	60.10	60.65	55.50	54.55	54.10	53.70
20	53.60	56.25	56.00	54.20	59.40	63.75	59.25	60.00	59.55	54.50	54.25	53.55
21	53.39	56.00	55.60	54.25	59.15	66.70	58.75	59.15	57.20	54.80	55.10	53.40
22	53.12	55.70	55.10	54.65	59.60	66.80	58.43	58.95	56.20	54.80	54.85	53.30
23	53.55	55.65	55.20	54.60	58.60	70.25	58.60	58.20	56.00	55.69	54.95	53.75
24	53.50	55.70	55.55	54.35	57.73	68.30	57.95	57.68	56.00	55.40	54.85	53.80
25	53.50	56.55	55.45	53.95	57.25	64.10	57.65	57.90	56.90	55.05	54.75	53.70
26	53.50	56.75	55.00	54.25	57.60	62.40	57.45	60.35	57.40	54.65	54.50	53.70
27	53.50	56.60	55.20	54.35	57.60	60.80	57.55	59.35	57.23	54.80	54.30	53.65
28	a53.20	56.45	54.55	54.30	57.70	60.80	57.25	58.55	57.20	54.80	54.20	53.30
29	53.36	56.00	54.65	54.38	58.30	60.70	57.05	57.90	a58.25	54.54	54.05	53.20
30	54.00	55.85	54.65	54.45	-------	60.00	56.75	57.95	57.75	54.40	53.90	53.65
31	54.30	-------	54.85	54.30	-------	59.00	-------	58.25	-------	54.15	53.75	-------

a Reading at 4 p.m.

Delaware River at Stockton--Continued

Daily gage height at 8 a.m., in feet, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	53.95	53.20	55.50	71.70	57.60	57.80	58.10	56.70	56.20	53.65	53.90	53.50
2	53.90	53.10	55.20	65.35	57.20	57.55	58.50	56.60	56.00	53.67	53.40	54.05
3	53.80	53.10	55.15	62.00	57.15	57.20	58.15	56.90	55.85	53.65	53.38	53.80
4	53.75	53.25	55.00	60.20	56.80	57.05	55.90	57.40	55.65	53.35	53.75	53.40
5	53.50	53.40	55.15	59.15	56.85	56.30	55.60	57.65	55.50	55.20	54.00	53.25
6	53.30	53.95	54.70	64.10	56.85	56.75	55.90	57.40	55.20	53.25	53.90	55.25
7	53.80	53.80	54.63	68.25	56.45	56.85	56.35	57.50	55.00	53.20	53.70	53.83
8	53.75	55.00	55.10	65.70	56.90	58.00	58.45	59.85	55.10	53.55	53.45	53.25
9	53.76	55.05	55.40	62.71	56.75	57.50	56.64	58.65	55.00	53.75	53.20	53.25
10	53.75	55.55	55.15	61.20	56.60	57.05	56.60	57.95	54.75	53.40	53.05	53.45
11	53.60	55.30	50.00	60.10	56.60	56.90	56.45	57.55	54.60	53.35	53.30	53.25
12	53.45	55.00	54.85	59.30	56.35	57.05	56.20	57.00	54.50	52.10	53.42	53.05
13	53.20	54.55	54.95	58.80	56.00	56.90	56.00	56.75	54.30	53.40	53.80	52.95
14	53.60	54.40	54.68	58.25	56.00	56.65	56.15	56.45	54.15	53.62	53.80	52.97
15	53.60	54.15	54.85	57.85	56.15	56.40	56.65	56.20	54.15	53.69	53.30	53.30
16	53.60	54.00	55.05	57.40	51.30	56.40	57.00	55.90	a54.20	53.55	53.25	53.65
17	53.60	53.93	55.70	57.00	62.30	56.40	56.65	55.70	54.20	54.15	53.10	53.45
18	53.35	54.05	55.65	56.80	60.80	56.28	56.25	55.65	54.10	54.00	52.55	53.40
19	53.25	53.95	55.25	56.75	59.05	55.90	57.50	55.65	54.15	54.75	53.72	53.40
20	53.35	54.10	55.25	56.90	58.95	55.80	60.40	55.60	54.10	54.45	53.65	53.40
21	53.65	55.70	55.10	57.00	58.90	55.45	59.00	56.90	53.95	54.10	53.55	53.45
22	53.75	56.05	54.90	58.35	58.90	55.40	58.48	58.90	53.80	53.95	52.15	53.15
23	53.75	56.30	55.05	57.70	59.25	57.20	58.55	58.50	54.00	54.00	53.08	52.35
24	53.50	56.10	55.00	57.55	58.90	56.50	a59.10	58.40	52.96	53.85	52.95	53.15
25	53.35	56.00	a54.90	57.65	58.75	56.60	59.45	58.30	53.76	53.65	53.97	53.55
26	53.30	55.75	54.25	57.65	58.35	56.75	58.85	57.80	53.80	53.55	53.08	53.35
27	53.20	55.35	54.20	58.30	58.60	56.60	58.20	58.05	52.95	53.35	53.20	53.10
28	53.60	55.20	53.85	59.10	58.40	56.40	57.80	57.50	53.90	52.65	53.17	53.15
29	53.50	55.20	54.10	58.65	-------	56.30	57.40	57.20	53.70	53.74	53.00	53.30
30	53.45	55.25	58.50	58.60	-------	56.20	57.00	56.76	53.75	53.70	53.40	53.70
31	53.35	-------	68.60	58.05	-------	56.05	-------	56.45	-------	53.60	53.65	-------

a Reading at 4 p.m.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	53.94	53.75	54.45	56.70	56.60	55.30	62.20	56.60	57.20	55.20	54.25	54.10
2	53.80	53.75	54.25	56.42	56.55	55.80	61.30	57.20	57.80	55.07	54.50	53.81
3	53.90	53.78	54.35	56.33	57.15	55.50	60.70	57.70	57.90	54.50	54.80	53.85
4	53.73	53.85	54.35	56.20	56.65	55.15	61.25	57.32	57.45	54.50	55.10	55.00
5	53.71	53.95	54.05	56.30	56.45	55.29	64.15	57.00	58.20	54.65	55.20	54.60
6	53.50	53.95	54.00	56.35	56.00	55.20	67.05	56.95	58.25	54.65	54.90	54.25
7	53.58	54.12	53.78	56.45	56.00	55.20	64.40	57.65	57.50	55.60	54.60	54.07
8	53.60	54.12	54.00	59.25	55.95	55.45	61.55	57.00	57.00	55.25	54.35	53.90
9	52.70	53.95	53.80	59.13	55.95	57.20	60.10	56.60	56.55	54.95	54.30	53.80
10	53.55	53.85	53.65	58.65	57.00	61.20	59.20	56.40	56.25	54.70	54.20	53.65
11	53.39	53.80	53.55	58.60	56.95	61.90	58.55	56.20	56.00	54.75	54.10	54.90
12	53.35	a53.71	53.75	59.90	57.40	59.55	58.60	56.42	56.05	56.50	54.10	54.00
13	53.52	53.65	54.00	58.90	57.15	58.95	57.85	a56.28	56.00	56.30	54.00	55.00
14	53.73	53.70	59.52	58.25	57.60	58.81	57.65	55.90	a55.65	56.40	53.85	55.00
15	53.44	54.70	60.90	57.85	58.95	58.20	57.40	55.55	56.00	56.65	53.60	55.10
16	53.30	55.44	58.55	57.85	58.60	57.65	57.20	55.50	56.40	56.25	53.40	54.90
17	53.15	55.45	57.20	57.20	58.08	57.25	56.85	55.85	56.35	58.75	53.63	54.60
18	53.15	55.05	56.65	56.95	58.00	57.00	56.50	55.80	56.00	55.40	53.65	54.30
19	53.05	54.85	56.12	56.80	57.65	56.82	56.55	56.40	55.80	55.50	53.55	53.90
20	53.40	54.83	56.20	56.50	57.10	56.55	56.55	57.50	56.00	55.30	53.85	54.00
21	53.30	54.54	56.25	a55.80	56.60	56.50	57.10	57.55	56.00	55.20	54.90	54.10
22	53.18	54.43	56.10	55.65	56.40	56.55	56.50	57.35	55.80	a55.00	54.75	53.90
23	53.10	54.65	55.90	55.55	56.23	60.05	58.00	56.90	55.80	54.80	55.70	53.90
24	53.05	54.60	56.00	55.55	56.07	60.40	57.70	57.00	55.70	54.80	54.50	53.95
25	53.05	54.38	57.15	55.80	56.40	60.05	57.20	57.60	55.40	54.60	54.40	54.00
26	53.00	54.20	56.75	56.60	56.30	59.25	57.20	57.80	a58.30	55.00	54.20	53.65
27	53.40	54.03	58.15	56.40	55.55	59.20	57.00	57.75	55.92	55.40	54.15	53.63
28	53.60	54.13	58.30	56.48	55.30	59.25	57.10	57.05	55.70	55.25	53.95	53.80
29	53.45	54.00	59.00	56.32		61.95	56.76	56.80	55.35	54.95	53.60	53.75
30	53.60	54.27	58.30	56.10	-------	66.75	56.55	57.80	55.15	54.70	53.85	53.70
31	53.60	-------	57.45	56.10	-------	64.35	-------	57.70	-------	54.30	54.05	-------

a Reading at 4 p.m.

Delaware River at Lambertville

Location.--Lat 40°21'50", long 74°56'55", on upstream side of bridge in fifth span from New Jersey end, at Lambertville, Hunterdon County.

Drainage area.--6,680 sq mi.

Records available.--July 1897 to December 1902 (gage heights and monthly discharge), January 1903 to March 1908 and March 1936 to September 1950 (gage heights only).

Gage.--Wire-weight gage. Datum of gage is 0.11 ft above mean sea level, datum of 1929.

Extremes.--1897-1908, 1936-50: Maximum gage height observed, 70.0 ft (present datum) Oct. 11, 1903; minimum observed, 46.70 ft Sept. 29, 30, 1943.

Maximum gage height observed (water years).--
1946: May 29 (11 a.m.) 57.76 ft.
1947: Apr. 6 (10 p.m.) 58.80 ft.
1948: Mar. 23 (6 p.m.) 60.48 ft.
1949: Jan. 1 (1 to 2 a.m.) 61.39 ft.
1950: Apr. 5 (11 p.m.) 57.90 ft.

Remarks.--Gage read twice daily except during periods of gage heights above 50.9 ft, when it was read hourly. In tables, the readings at 8 a.m. are shown.

Cooperation.--Records furnished by Delaware River Joint Toll Bridge Commission.

Daily gage height at 8 a.m., in feet, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50.74	50.37	52.51	52.10	50.57	50.98	51.16	50.25	53.20	50.22	49.41	49.33
2	50.43	50.43	52.14	52.11	50.54	51.13	50.84	50.20	53.96	50.10	49.44	49.25
3	50.71	50.36	51.80	51.35	50.40	51.62	50.90	50.08	54.94	50.85	50.00	49.03
4	50.96	50.42	51.61	51.18	50.45	51.71	50.80	49.98	55.10	50.58	49.95	48.40
5	51.33	51.93	51.56	51.12	50.15	51.62	50.82	49.90	53.79	50.75	49.70	48.13
6	51.05	51.55	51.60	51.23	49.76	51.98	50.74	49.80	53.04	50.39	49.30	48.76
7	50.87	51.21	51.97	51.82	50.54	52.71	50.60	49.70	52.53	50.01	49.40	48.81
8	51.14	50.97	51.76	54.83	50.53	53.70	50.54	49.95	52.10	48.97	49.87	48.75
9	51.46	50.82	52.00	54.55	50.34	55.25	50.38	50.10	51.82	49.96	50.25	48.92
10	51.63	50.70	51.86	53.95	50.26	55.51	50.49	50.15	51.51	49.72	50.47	48.57
11	52.95	50.67	51.70	53.53	50.22	54.96	50.49	50.25	51.28	49.60	49.95	48.24
12	52.80	50.95	51.54	53.20	49.97	53.45	50.38	50.26	51.27	49.63	49.95	48.84
13	52.28	51.45	51.27	53.27	49.92	52.58	50.30	50.34	51.35	49.67	49.30	48.90
14	51.90	51.66	51.17	52.39	50.15	52.16	50.40	50.43	51.45	49.57	49.65	48.75
15	51.44	51.55	51.13	51.98	50.60	52.01	50.20	50.80	51.43	49.45	49.60	48.97
16	51.20	52.02	50.90	51.64	50.59	52.44	50.10	50.82	51.10	49.12	49.51	48.85
17	51.17	52.15	50.85	51.64	50.19	53.17	50.26	50.85	50.73	49.15	49.26	47.95
18	51.05	51.45	50.60	51.37	50.67	52.15	50.41	51.93	50.50	49.11	49.72	47.90
19	50.93	51.34	50.63	51.26	50.48	52.72	50.41	51.75	50.53	49.15	50.80	48.70
20	50.78	51.28	50.60	51.44	50.39	52.58	50.29	52.41	50.47	49.04	50.13	48.75
21	50.74	51.87	50.81	50.76	50.67	51.98	50.24	52.59	50.64	49.33	49.80	48.61
22	50.62	52.49	50.70	51.28	50.19	51.78	50.06	52.29	50.56	49.95	49.64	49.83
23	50.42	53.52	50.65	51.20	50.04	51.60	49.95	53.44	50.48	49.90	49.48	49.85
24	50.63	53.47	50.55	50.76	49.96	51.50	50.10	52.87	52.27	52.25	49.41	49.50
25	50.70	53.33	50.56	50.74	50.05	51.30	50.10	52.20	50.00	51.75	49.30	49.68
26	50.71	52.26	51.90	50.82	49.75	51.18	50.07	51.62	50.10	51.05	49.15	50.78
27	50.73	52.10	52.35	50.81	49.81	51.95	50.17	52.60	49.00	50.60	49.00	50.80
28	50.72	51.93	52.34	50.73	50.47	51.76	50.24	55.30	49.83	50.24	48.72	50.18
29	50.62	52.88	52.10	50.72	-------	51.56	50.10	57.71	50.13	49.90	48.77	49.95
30	50.45	53.02	-	50.48	-------	51.42	49.98	56.42	50.15	49.62	49.29	49.86
31	50.47	-------	52.05	50.48	-------	51.36	-------	54.21	-------	49.52	49.58	-------

Delaware River at Lambertville--Continued

Daily gage height at 8 a.m., in feet, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	49.91	49.95	49.55	49.56	52.70	a50.15	51.42	52.48	a52.68	49.90	50.67	49.54
2	49.94	49.85	49.62	49.78	52.75	50.02	51.27	a52.38	52.66	49.63	50.60	49.47
3	50.06	49.82	49.18	49.48	52.70	50.06	51.76	52.26	52.42	a50.07	50.52	49.60
4	50.09	49.70	49.03	49.75	52.10	50.01	52.54	a52.13	52.36	50.00	50.22	49.45
5	49.91	49.55	49.16	49.88	51.85	49.97	52.55	a52.50	52.31	49.86	49.94	50.10
6	49.80	49.45	49.12	50.02	51.47	50.12	55.96	52.70	51.15	49.77	50.06	49.93
7	49.65	49.50	49.08	50.16	51.10	50.26	53.01	54.45	51.09	49.55	50.00	49.74
8	49.82	49.55	49.17	49.95	51.02	50.25	56.18	54.32	51.40	49.54	49.95	49.46
9	49.21	49.65	49.33	49.97	50.95	50.29	54.50	53.97	52.05	52.27	50.00	49.28
10	49.35	49.75	49.01	49.96	50.63	50.15	53.54	52.34	51.51	b52.94	50.02	49.25
11	49.25	49.63	49.06	49.85	50.38	50.19	53.00	52.75	51.14	52.35	50.14	49.37
12	49.50	49.50	49.11	49.86	50.80	50.37	52.53	52.33	50.90	52.05	50.51	49.26
13	49.69	49.50	49.18	49.90	50.67	50.45	52.31	51.88	50.68	a51.03	50.13	49.21
14	50.04	49.65	49.21	49.79	50.45	51.02	52.39	51.70	50.54	50.90	50.08	49.18
15	49.96	49.65	49.42	49.85	50.43	54.22	52.05	51.65	51.66	50.66	50.02	49.13
16	49.95	49.69	49.38	50.53	50.40	56.15	51.75	51.79	51.26	51.45	50.05	49.13
17	49.87	49.63	49.36	50.79	50.39	54.74	51.90	52.09	51.80	51.31	50.02	49.18
18	49.63	49.43	49.32	50.87	50.25	53.54	51.75	51.41	51.48	53.98	50.10	49.20
19	49.62	49.20	49.25	51.20	50.32	52.67	51.70	51.48	51.00	52.18	51.38	49.09
20	49.92	49.10	49.25	50.99	50.28	52.15	51.52	51.91	50.84	52.66	50.90	49.17
21	49.91	49.25	49.40	52.76	50.27	a51.84	51.15	52.31	50.74	52.08	50.57	48.90
22	49.88	49.29	49.77	52.97	50.19	51.72	51.45	52.47	50.55	51.67	50.25	49.05
23	49.86	49.28	50.11	52.55	50.06	51.70	51.91	53.95	50.35	52.66	50.02	48.92
24	49.77	49.48	49.87	52.09	50.19	51.71	51.65	54.30	50.18	53.54	49.83	49.10
25	49.57	49.35	50.23	51.58	50.12	51.64	51.62	53.85	50.27	52.32	49.70	49.41
26	49.51	49.15	50.10	51.73	50.10	53.15	51.45	54.48	50.25	51.69	49.49	49.14
27	50.02	49.03	49.75	52.12	50.28	54.15	51.55	55.51	50.22	51.31	49.45	48.98
28	50.03	49.42	49.54	52.05	50.29	52.90	51.45	54.90	50.25	51.00	49.80	48.78
29	50.14	49.44	-	51.98	-------	52.15	51.40	a53.87	50.06	51.04	49.69	48.79
30	50.26	49.35	49.95	51.75	-------	51.96	51.37	53.74	50.00	51.39	49.59	48.38
31	50.02	-------	49.60	51.59	-------	51.70	-------	53.50	-------	50.93	49.56	-------

a Reading at 4 p.m.
b Reading at 6 a.m.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48.60	a49.76	-	49.98	50.72	51.25	52.24	50.77	51.40	51.05	49.12	48.25
2	48.77	49.55	-	50.11	50.57	51.10	52.38	50.65	51.11	50.77	49.05	48.88
3	48.45	-	49.98	50.34	50.25	51.30	53.40	50.61	50.91	50.51	48.45	48.73
4	48.50	-	-	50.12	50.17	51.20	53.08	50.56	50.72	50.32	48.85	48.52
5	48.43	-	-	49.88	50.21	50.87	52.27	50.62	50.60	50.08	48.85	48.74
6	48.43	-	-	49.84	50.60	50.66	51.52	51.31	50.40	49.95	49.85	48.66
7	48.38	-	-	49.96	50.20	50.55	51.72	50.97	50.20	49.98	50.21	48.17
8	48.35	-	-	50.01	50.24	50.68	51.61	51.81	a50.65	50.05	50.20	47.95
9	48.45	-	-	49.91	50.23	50.65	51.40	51.80	50.82	50.13	49.80	48.06
10	48.47	-	a50.17	50.00	49.70	50.77	51.36	51.78	50.70	50.07	49.55	48.76
11	48.75	-	50.28	49.94	49.53	50.85	51.05	51.15	50.55	49.87	49.36	49.01
12	48.59	-	50.28	49.60	50.14	50.81	51.22	50.90	50.39	49.65	49.32	48.95
13	48.43	-	50.11	49.47	50.05	50.73	a52.93	51.55	50.45	49.46	49.86	48.80
14	48.19	-	49.96	49.79	50.08	50.51	53.04	53.30	50.35	49.87	49.93	48.09
15	48.00	-	49.67	49.83	50.35	50.43	54.70	52.85	50.36	50.67	49.60	47.94
16	48.56	-	49.60	49.67	50.33	50.52	56.23	52.79	50.25	50.14	49.47	48.45
17	48.44	-	50.73	49.61	50.23	52.37	54.47	53.08	50.30	49.97	49.07	48.50
18	48.52	-	50.80	49.75	51.05	56.80	53.51	53.25	50.17	49.77	48.75	48.45
19	48.59	-	50.70	49.85	51.82	55.37	52.88	53.45	50.10	49.48	48.80	48.70
20	48.68	a50.50	50.44	49.42	52.50	55.12	52.36	52.87	52.75	49.36	48.79	48.55
21	48.18	50.41	50.18	49.40	52.47	56.95	52.04	52.51	51.15	49.54	49.51	47.95
22	-	50.50	49.90	49.75	52.34	57.24	51.86	52.12	50.52	49.58	49.85	47.90
23	-	-	49.81	49.70	52.42	59.33	51.95	51.98	50.40	50.08	49.92	48.50
24	-	50.28	50.05	49.75	51.48	58.30	51.58	51.44	50.43	49.98	49.80	48.55
25	48.34	50.77	50.20	49.65	51.20	55.40	51.38	51.55	50.97	49.80	49.45	48.47
26	48.38	50.92	50.15	49.60	51.30	54.28	51.30	52.95	51.10	49.50	49.33	48.55
27	48.57	-	49.85	49.65	51.28	53.35	51.33	52.45	51.12	49.60	49.32	48.70
28	47.89	50.65	49.90	49.59	51.59	52.30	51.13	52.25	51.14	49.54	49.17	47.80
29	48.07	-	49.76	49.84	51.81	53.23	50.97	51.57	51.10	49.37	48.97	47.75
30	49.06	-	49.85	49.79	-------	52.80	50.82	51.61	51.45	49.25	48.88	48.30
31	49.32	-------	49.70	49.66	-------	52.20	-------	51.76	-------	49.20	48.61	-------

a Reading at 4 p.m.

Delaware River at Lambertville--Continued

Daily gage height at 8 a.m., in feet, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48.48	47.90	50.12	60.88	51.37	a51.55	50.39	50.85	50.53	48.64	48.72	47.95
2	48.81	47.50	49.97	56.26	51.15	51.38	50.56	50.60	50.43	48.58	47.94	48.95
3	48.85	47.45	49.84	54.15	50.08	51.16	50.61	51.00	50.37	48.50	47.90	48.87
4	48.47	47.70	49.75	53.61	50.86	51.08	50.40	51.34	50.28	48.22	48.62	48.42
5	48.15	48.15	49.88	52.58	50.96	50.89	50.24	51.33	50.19	48.04	48.78	58.05
6	47.78	48.85	49.57	a55.40	50.94	50.93	50.24	51.26	49.95	48.01	48.95	48.30
7	48.50	48.92	49.53	58.06	50.89	50.92	50.50	51.25	49.85	48.24	48.64	a48.40
8	48.56	49.80	49.52	56.58	50.96	51.64	50.71	52.75	49.76	48.45	48.15	48.05
9	48.40	49.60	50.04	54.50	50.88	51.33	50.74	52.00	49.73	48.52	47.59	47.60
10	48.47	50.17	49.89	53.86	50.81	51.05	50.82	51.57	49.55	48.51	47.44	a48.25
11	48.65	50.00	49.77	52.85	50.73	50.99	50.68	51.32	49.50	48.19	47.80	a47.90
12	48.05	49.70	49.75	52.57	50.50	51.11	50.57	51.05	49.44	48.09	48.25	47.72
13	47.57	49.52	49.63	52.30	50.45	51.04	50.49	50.85	49.35	48.79	48.65	47.81
14	47.69	49.45	49.53	51.91	50.45	50.83	50.39	50.57	49.10	48.39	48.82	47.37
15	48.36	49.20	49.64	51.60	50.49	50.68	50.41	50.60	49.00	48.53	48.10	47.82
16	48.56	48.85	49.60	51.20	50.98	50.60	51.00	50.45	49.15	48.46	47.80	48.12
17	48.52	48.97	49.65	50.97	a54.28	50.52	50.85	50.27	48.95	49.19	47.49	48.30
18	48.43	48.86	49.69	50.85	53.21	50.48	50.58	50.30	48.90	48.97	48.15	48.37
19	47.80	48.77	49.92	50.84	52.31	50.39	51.26	50.25	49.10	49.46	48.29	48.20
20	47.90	48.99	49.96	50.93	51.99	50.26	53.04	50.03	49.10	49.37	48.48	48.06
21	48.45	49.47	49.79	50.97	52.22	50.14	52.53	a50.18	48.80	49.10	48.49	47.65
22	48.68	50.39	49.63	51.86	52.19	50.02	51.90	51.87	48.65	48.86	47.94	47.53
23	48.77	50.55	49.80	51.40	52.36	51.18	51.95	51.97	48.80	48.95	47.29	48.05
24	48.39	50.40	49.79	51.34	52.19	50.72	52.04	51.88	48.75	48.89	57.30	47.80
25	48.19	50.24	49.79	51.36	52.17	50.79	52.49	51.80	48.65	48.57	47.25	48.50
26	47.82	50.25	49.47	b51.38	51.85	50.94	52.14	51.51	48.58	48.23	47.45	48.25
27	47.76	50.04	49.60	51.76	51.95	50.77	51.78	51.56	48.54	47.88	47.74	47.75
28	48.32	49.89	48.75	52.33	51.76	50.67	51.47	51.49	48.95	48.37	47.74	47.85
29	48.30	50.11	49.10	52.06	-------	50.80	51.29	51.11	48.65	48.69	47.59	47.95
30	48.19	50.00	51.70	52.01	-------	50.64	51.07	50.90	48.77	48.68	48.00	48.75
31	48.19	-------	48.10	51.67	-------	50.48	-------	50.61	-------	48.62	48.17	-------

a Reading at 4 p.m.
b Ice

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48.41	-	49.30	51.02	50.90	50.40	54.35	51.20	51.17	49.70	49.10	49.10
2	-	-	49.17	50.80	50.90	50.20	53.81	51.26	51.55	49.91	49.30	48.75
3	-	-	49.23	50.70	51.15	50.30	53.32	51.46	51.62	49.53	49.66	48.92
4	-	-	49.32	50.66	51.02	50.10	53.60	51.30	51.32	49.49	50.00	49.64
5	-	-	49.08	50.66	50.72	50.10	55.44	51.18	51.78	49.61	49.95	49.60
6	-	-	48.96	50.71	50.54	49.95	57.37	51.02	51.81	49.81	49.75	49.21
7	-	-	48.73	50.90	50.50	49.86	55.78	51.40	51.42	49.98	49.55	49.04
8	-	-	48.84	52.65	50.47	49.95	53.82	51.26	51.10	50.01	49.28	48.88
9	-	-	48.65	52.41	50.52	51.80	53.29	51.15	50.81	49.87	-	48.64
10	-	-	48.41	51.89	50.06	53.80	52.51	50.94	50.65	49.67	49.32	48.70
11	-	-	48.46	52.10	51.00	55.96	52.05	50.60	50.52	49.63	49.10	49.80
12	-	-	48.73	52.64	51.20	52.60	51.88	50.48	50.64	49.98	49.17	49.64
13	-	-	48.87	52.54	51.15	52.19	51.69	50.67	50.48	50.65	48.95	49.78
14	-	-	51.44	51.96	51.28	52.20	51.68	50.32	50.40	50.20	48.96	49.85
15	-	-	53.38	51.68	52.30	51.80	51.39	50.15	50.49	50.43	48.55	49.85
16	-	-	52.00	51.56	51.95	51.70	51.20	50.20	50.70	50.62	48.35	49.68
17	-	-	51.42	51.21	51.90	51.28	51.00	50.29	50.55	50.33	48.41	49.60
18	-	a49.71	50.80	51.10	51.68	51.17	50.81	50.30	50.52	50.07	48.62	49.40
19	-	49.67	50.54	50.98	51.44	50.96	50.82	50.59	50.37	50.14	48.51	49.05
20	-	49.58	50.62	50.79	51.22	50.80	50.65	50.68	50.47	50.02	58.82	59.00
21	-	49.44	50.70	50.51	50.81	50.66	51.10	51.47	50.43	49.92	49.42	49.00
22	-	49.33	50.56	50.36	50.59	51.10	51.98	51.27	50.37	49.94	49.72	49.25
23	-	49.45	50.45	50.22	50.50	52.05	51.70	51.11	50.37	50.00	49.91	49.05
24	-	49.54	50.45	50.25	50.51	52.15	51.33	51.15	50.18	49.66	49.55	48.90
25	-	49.33	51.42	50.38	50.59	53.20	51.21	51.38	50.15	49.51	49.34	49.95
26	-	49.00	50.92	50.51	50.70	52.45	51.23	51.53	49.90	49.81	49.18	48.88
27	-	49.11	51.83	50.73	50.47	52.45	51.05	51.42	49.90	50.08	49.11	48.59
28	-	49.13	51.87	50.76	50.64	52.42	51.15	51.21	50.25	49.98	48.91	48.90
29	-	48.95	52.30	50.70	-------	52.80	51.01	51.22	50.00	49.98	48.63	48.81
30	-	49.17	51.80	50.54	-------	57.20	50.86	51.48	49.95	49.60	48.55	48.73
31	-	-------	51.39	50.59	-------	55.64	-------	51.61	-------	49.39	49.17	-------

a Reading at 4 p.m.

Delaware River at Washington Crossing

Location.--Lat 40°17'40", long 74°52'10", on upstream side of bridge on fourth span from New Jersey end, at Washington Crossing, Mercer County.

Records available.--March 1936 to September 1950 (gage heights only).

Gage.--Wire-weight gage. Datum of gage is 0.14 ft above mean sea level, datum of 1929.

Extremes.--1936-50: Maximum gage height observed, 47.30 ft (4 p.m.) Mar. 19, 1936; minimum observed, 22.80 ft Oct. 13, 1943.
Maximum stage known, 51.9 ft Oct. 11, 1903, at site 0.4 mile above bridge, from floodmark.

Maximum gage height observed (water years).--
1946: May 29 (11 to 12 a.m.) 36.40 ft
1947: Apr. 7 (1 a.m.) 37.70 ft.
1948: Mar. 23 (10 a.m.) 39.29 ft.
1949: Dec. 31 (10 p.m.) 40.97 ft.
1950: Apr. 6 (9 a.m.) 36.25 ft.

Remarks.--Gage read twice daily except during periods of gage heights above 29.0 ft, when it was read hourly. In tables, the readings at 8 a.m. are shown.

Cooperation.--Records furnished by Delaware River Joint Toll Bridge Commission.

Daily gage height at 8 a.m., in feet, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26.77	26.40	29.56	29.08	26.55	27.06	27.15	26.00	30.37	25.86	24.97	24.82
2	26.45	26.33	28.87	28.86	26.45	27.30	a26.90	26.00	a35.25	26.00	24.95	a24.64
3	26.77	a26.10	28.42	27.86	26.95	27.66	26.86	25.80	32.74	27.38	25.89	24.23
4	27.16	26.20	28.15	27.80	a26.32	28.22	27.30	25.60	33.00	a26.95	25.52	24.03
5	27.68	28.50	28.09	27.71	25.73	28.10	27.10	25.61	31.25	26.75	25.28	23.78
6	27.33	28.11	28.15	27.70	25.45	28.55	26.95	25.35	a29.85	26.07	25.00	24.20
7	27.17	27.58	28.60	28.39	26.38	29.70	26.90	25.32	a29.40	25.79	a25.15	24.30
8	27.38	27.20	28.45	32.48	26.55	30.90	26.45	25.58	28.84	25.55	25.65	24.30
9	27.92	26.95	28.67	32.19	26.12	33.01	26.35	25.85	28.46	25.50	25.63	a24.17
10	28.67	26.76	28.53	a30.93	26.20	33.07	26.24	25.95	28.04	25.26	26.09	24.12
11	30.11	26.70	28.30	30.80	25.25	32.97	26.55	26.10	27.69	25.26	25.69	23.82
12	29.23	27.05	28.05	30.30	25.18	30.65	26.53	a25.84	-	a25.15	25.28	24.36
13	28.62	27.87	27.65	29.68	25.68	29.54	26.40	26.22	27.77	25.28	24.87	24.36
14	28.20	28.21	a27.20	29.22	25.87	28.95	26.33	26.33	a27.85	25.31	a25.74	24.31
15	27.85	27.95	27.45	28.67	26.60	28.70	25.97	a27.15	27.90	25.00	25.17	24.30
16	27.53	28.68	27.26	28.30	26.93	29.25	25.95	a27.20	27.42	24.78	25.01	24.15
17	27.47	28.36	27.21	28.05	27.14	30.25	26.26	a27.26	26.81	a24.65	24.98	23.68
18	27.31	27.87	26.51	27.75	26.70	29.45	26.35	a28.17	26.50	24.66	25.13	23.57
19	27.10	27.70	26.40	27.68	26.25	29.80	26.35	-	a26.40	24.68	a26.85	23.89
20	26.87	28.15	26.50	27.52	26.23	29.25	26.17	29.26	26.12	24.57	26.07	24.21
21	26.75	28.47	26.69	26.95	26.19	28.80	26.00	-	26.81	a26.65	25.51	24.07
22	26.60	29.66	27.40	26.69	a26.18	28.42	25.70	29.40	26.58	25.78	25.28	25.20
23	26.39	30.77	30.34	27.52	a26.12	28.33	25.60	31.37	a26.50	26.17	25.07	25.32
24	26.62	30.80	31.56	26.70	25.81	27.85	25.83	30.34	25.95	a28.30	24.95	25.30
25	26.70	a29.75	31.70	26.80	a25.65	27.75	25.70	28.89	25.72	28.45	24.76	25.81
26	26.76	29.13	29.00	26.90	a25.54	27.55	25.75	28.24	25.81	27.49	24.58	26.78
27	26.78	28.65	29.55	26.85	a25.75	28.75	25.90	-	25.67	26.78	a24.47	26.84
28	26.72	28.35	29.45	26.50	a26.85	28.58	25.75	33.43	25.40	26.07	24.31	26.07
29	26.58	30.44	29.07	26.31	-------	28.12	25.60	36.30	a25.70	25.65	24.40	25.46
30	26.40	29.92	28.77	26.39	-------	28.06	25.55	34.43	25.81	25.27	24.76	25.17
31	26.43	-------	28.82	26.44	-------	27.70	-------	31.76	-------	25.06	25.00	-------

a Reading at 4 p.m.

Delaware River at Washington Crossing--Continued

Daily gage height at 8 a.m., in feet, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26.05	25.51	24.97	24.82	30.88	25.72	27.90	29.47	-	25.82	27.20	25.17
2	25.92	25.40	24.62	25.35	31.00	25.59	27.64	29.95	28.50	25.75	27.05	25.45
3	25.78	25.20	24.55	24.96	29.70	25.73	28.42	30.47	28.15	26.46	26.92	25.38
4	25.63	25.07	24.40	25.20	28.85	25.63	29.48	30.17	-	26.15	26.45	25.28
5	25.45	24.95	a28.90	25.77	28.45	25.57	29.48	29.92	27.95	25.85	26.05	26.30
6	25.25	24.90	24.55	25.48	28.25	a26.85	32.78	30.95	27.75	a25.72	26.23	26.00
7	25.00	24.97	24.35	26.05	27.27	26.02	37.02	32.05	27.48	25.30	26.12	a25.87
8	24.81	24.94	24.47	25.68	27.25	a26.60	34.55	31.83	28.17	25.46	26.06	25.27
9	24.65	25.07	24.53	25.80	27.15	a26.52	32.25	31.35	29.07	30.65	26.05	25.06
10	24.90	25.11	24.45	25.66	26.62	a26.44	30.83	30.55	28.35	31.73	26.12	24.95
11	24.85	25.03	24.43	25.41	27.07	a26.35	30.10	29.75	27.92	29.70	26.20	25.18
12	24.93	25.01	24.50	25.42	26.80	-	29.47	29.10	27.54	28.55	27.00	25.00
13	24.92	24.96	24.57	25.52	26.74	26.33	29.14	28.63	27.24	27.80	26.32	24.96
14	25.60	25.07	24.55	25.36	26.42	26.47	29.28	28.27	26.95	27.85	26.22	24.90
15	25.41	25.10	24.68	25.68	26.41	21.67	28.80	28.20	28.50	28.15	26.26	24.82
16	25.69	25.05	24.66	26.51	26.58	24.42	28.42	a28.30	28.05	28.32	26.18	24.91
17	25.42	a25.15	24.74	26.81	26.37	22.54	28.50	28.21	25.82	28.05	26.18	24.80
18	25.15	24.82	24.75	26.91	26.12	30.99	28.32	a27.90	28.00	31.77	26.28	25.05
19	25.10	24.64	24.60	27.45	26.24	29.70	27.98	a27.85	27.70	30.75	28.25	24.93
20	25.35	24.53	24.63	27.22	26.15	28.93	27.69	a28.50	27.43	30.13	27.25	24.73
21	25.43	24.85	24.50	29.72	26.00	28.50	27.52	a29.10	27.30	29.25	27.05	24.60
22	25.47	24.75	25.79	29.43	25.52	b28.37	27.70	-	26.93	28.90	26.58	24.74
23	25.43	24.62	25.75	-	26.00	28.26	28.60	a31.90	26.63	30.10	26.26	24.63
24	25.25	a24.70	25.36	-	25.55	28.17	28.25	a31.40	26.43	31.25	-	24.83
25	25.05	24.59	25.85	-	26.47	26.10	27.97	-	26.56	29.60	25.50	25.00
26	a24.90	24.58	25.63	-	25.75	30.22	27.81	b31.65	26.52	28.68	25.39	24.93
27	25.48	24.65	25.60	-	25.83	31.65	27.05	33.40	26.40	28.10	25.68	24.85
28	25.65	24.59	24.73	-	25.88	a29.87	27.92	-	26.52	27.70	25.65	24.45
29	25.81	24.62	24.93	-	-------	a28.60	27.81	-	26.42	27.65	25.55	24.31
30	26.06	24.75	25.15	28.34	-------	28.57	27.79	-	26.10	28.27	25.30	24.21
31	25.64	-------	25.06	28.15	-------	28.22	-------	-	-------	27.60	25.55	-------

a Reading at 4 p.m.
b Reading at 10 a.m.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24.00	25.40	26.40	25.80	27.45	28.19	29.95	27.28	28.25	27.90	25.10	24.10
2	24.41	25.53	26.11	26.25	27.40	27.83	30.95	27.12	27.85	27.60	24.50	24.00
3	24.27	25.28	26.08	26.40	27.15	28.15	31.00	27.00	27.55	26.90	24.70	24.35
4	a24.17	25.15	26.08	26.07	27.08	28.00	30.10	26.94	27.29	26.55	24.35	24.35
5	24.25	25.29	26.16	25.75	27.40	27.50	29.41	27.02	27.10	26.20	24.60	24.20
6	24.26	25.97	26.13	25.89	27.61	27.15	28.93	28.14	26.80	26.00	24.80	24.20
7	23.92	25.77	26.45	25.90	27.47	27.20	28.65	27.67	26.25	26.05	26.35	23.90
8	23.85	25.88	26.00	25.89	27.45	27.14	28.38	28.85	26.77	26.10	26.45	23.95
9	a23.90	29.61	26.14	25.75	27.45	27.12	28.20	28.82	27.35	26.25	26.23	23.80
10	24.28	30.97	26.39	25.95	27.00	27.37	27.88	28.35	27.20	26.20	25.50	23.90
11	24.33	29.36	26.49	25.65	26.90	27.45	27.74	27.88	27.00	25.85	25.40	24.70
12	24.32	30.20	26.48	25.52	26.95	27.24	28.00	27.48	26.75	25.35	25.45	24.50
13	24.23	30.28	26.22	25.45	26.95	27.26	29.37	28.50	26.70	25.25	25.45	24.10
14	23.83	30.72	25.90	25.45	27.10	26.80	30.51	30.80	26.63	25.85	25.70	23.90
15	23.65	29.36	25.42	25.78	27.87	26.72	32.32	30.26	26.67	26.85	25.40	23.80
16	24.13	28.52	25.90	25.50	28.33	26.90	34.90	30.15	26.70	26.50	25.42	24.05
17	24.07	28.15	27.18	25.49	28.10	29.55	32.43	30.56	26.60	26.20	24.70	24.25
18	24.14	27.55	27.33	25.56	28.37	-	31.20	30.83	26.39	25.65	24.65	24.20
19	24.21	27.30	27.15	25.80	28.97	b28.35	30.32	30.77	26.55	25.27	24.70	24.15
20	24.23	27.60	26.98	24.95	29.81	33.20	29.59	30.22	30.05	25.15	24.75	24.15
21	23.95	26.72	26.40	24.85	29.55	35.49	29.15	29.58	27.95	25.25	25.65	24.10
22	a23.75	26.51	25.83	25.65	29.86	36.25	28.83	29.15	27.05	25.45	25.65	23.60
23	24.05	26.45	25.89	25.64	29.83	38.78	29.03	28.90	26.78	26.15	26.10	24.15
24	23.98	26.40	26.32	25.80	28.80	37.85	28.51	28.20	26.78	26.05	25.92	24.15
25	24.02	27.13	26.33	25.05	27.88	33.70	28.20	28.15	27.50	25.85	25.30	24.10
26	24.05	27.53	25.68	27.00	28.13	32.24	28.06	30.40	27.88	25.85	25.20	24.15
27	24.08	27.45	25.35	28.47	28.21	30.95	28.13	29.70	27.83	25.52	25.07	24.00
28	23.78	27.23	25.46	28.02	28.50	30.86	27.86	30.00	27.82	25.27	25.02	23.83
29	a23.92	26.80	25.76	28.00	28.75	30.77	27.64	28.45	28.90	25.15	24.70	23.50
30	24.65	26.61	25.62	28.10	-------	30.20	27.41	28.35	28.30	25.27	24.50	23.80
31	25.05	-------	25.53	27.67	-------	29.27	-------	28.85	-------	24.85	24.35	-------

a Reading at 4 p.m.
b Reading at 12 a.m.

Delaware River at Washington Crossing--Continued

Daily gage height at 8 a.m., in feet, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24.40	23.58	26.30	40.60	28.20	28.60	26.90	27.45	26.95	24.27	24.08	23.90
2	24.45	23.50	26.05	35.05	27.90	28.22	27.00	27.33	26.85	24.25	23.98	24.60
3	24.25	23.40	25.80	32.05	27.80	27.85	27.00	27.75	26.60	24.20	23.80	24.50
4	24.25	23.50	25.70	30.55	27.55	27.80	26.90	28.20	26.60	23.94	24.40	24.05
5	23.85	23.80	25.70	29.53	27.55	27.57	26.45	28.15	26.38	23.80	24.70	23.80
6	23.65	24.40	25.65	33.45	27.57	27.52	26.50	28.05	26.03	23.65	24.65	25.73
7	24.00	24.35	25.32	37.05	27.24	27.57	27.06	28.04	25.90	23.85	24.36	24.74
8	24.40	25.23	25.70	35.37	27.60	28.52	27.05	30.07	25.80	24.05	24.00	23.90
9	24.30	25.40	25.70	32.55	27.35	28.15	26.95	29.15	25.60	24.10	23.70	23.70
10	24.25	26.35	25.95	31.10	27.35	27.75	27.30	29.05	25.35	24.10	23.50	23.65
11	24.20	26.05	25.70	30.20	27.30	27.65	27.15	28.75	25.10	23.95	23.45	23.55
12	23.95	25.65	25.55	29.65	27.20	27.85	27.00	27.85	25.12	23.90	23.80	23.55
13	23.55	25.45	25.30	29.17	26.70	27.70	26.85	27.47	25.00	24.98	24.05	23.40
14	24.10	25.05	25.34	28.70	26.74	27.42	26.89	27.22	25.05	23.28	24.42	23.20
15	24.15	24.80	25.45	28.30	26.85	27.33	26.90	27.05	24.73	24.40	23.95	23.50
16	24.10	24.55	25.70	28.00	27.85	27.15	27.70	26.70	25.00	24.08	23.85	24.10
17	24.05	24.45	25.85	27.55	32.20	27.05	27.30	26.52	24.85	24.90	23.50	24.00
18	24.00	24.45	26.25	27.35	30.80	26.90	27.00	26.25	24.80	24.75	23.50	23.95
19	23.70	24.40	26.10	27.37	29.55	26.90	28.00	26.45	24.75	25.50	24.20	24.00
20	23.70	24.60	25.80	27.50	29.40	26.67	30.40	26.40	24.85	25.30	24.05	23.92
21	24.10	25.85	25.65	27.55	29.40	26.25	29.90	27.30	24.58	25.15	23.95	23.65
22	24.20	26.72	25.60	28.90	29.36	26.22	29.08	27.21	24.44	24.72	23.78	23.50
23	24.00	26.85	25.45	28.35	29.73	27.65	29.10	29.05	24.68	24.60	23.65	23.85
24	24.00	26.85	25.45	28.20	29.40	27.20	29.15	28.93	24.60	24.55	23.40	23.60
25	23.95	26.65	25.45	28.15	29.35	27.30	29.40	28.80	24.50	24.35	23.30	22.60
26	23.70	26.60	25.40	28.20	29.20	27.50	29.30	28.40	24.50	24.15	23.45	23.62
27	23.60	26.12	25.05	28.20	29.05	27.47	28.75	28.60	24.45	23.85	23.40	23.55
28	24.05	25.90	24.00	29.50	28.95	27.30	28.35	28.18	24.45	24.20	23.30	23.62
29	23.95	25.80	24.20	29.20	-------	27.05	28.30	27.89	24.30	24.24	23.34	23.61
30	23.90	26.20	28.20	29.05	-------	27.05	27.75	27.47	24.42	24.15	23.90	24.35
31	23.75	-------	26.95	28.80	-------	26.85	-------	27.72	-------	24.10	24.00	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24.40	24.07	25.05	27.45	27.35	26.50	32.15	27.05	27.75	25.85	24.85	24.85
2	24.30	24.25	24.90	27.15	27.40	-	31.37	27.70	28.25	25.75	24.90	24.65
3	24.30	24.25	24.95	27.00	27.70	-	30.75	29.10	28.40	25.15	25.05	24.70
4	24.30	24.50	24.95	26.95	27.44	25.70	31.00	28.00	28.00	25.15	26.00	25.65
5	24.20	24.55	24.70	26.90	27.15	-	33.55	27.55	28.60	25.30	25.95	25.50
6	24.05	24.65	24.50	27.10	26.85	-	36.23	27.40	28.65	25.20	25.45	25.15
7	24.03	24.54	24.45	27.30	26.75	-	34.18	28.10	28.15	26.25	25.25	24.85
8	24.05	24.50	24.40	29.35	26.60	-	31.55	27.65	27.55	26.05	24.90	24.70
9	24.02	24.55	24.35	29.50	26.60	30.27	30.25	27.15	27.20	25.55	24.80	24.45
10	24.05	24.65	24.20	28.45	27.60	30.30	29.35	27.05	26.95	25.35	24.85	24.45
11	24.00	24.30	23.90	29.10	27.60	31.75	28.95	26.90	26.35	25.50	24.60	26.00
12	23.86	24.34	24.35	30.18	28.05	29.85	28.58	27.05	26.75	26.90	24.80	25.80
13	23.90	24.24	24.35	29.50	27.80	29.30	28.15	26.40	26.65	26.90	24.60	25.65
14	23.84	24.37	27.35	28.60	28.10	29.30	27.95	26.35	26.55	27.00	24.45	26.10
15	23.90	24.45	31.05	28.35	29.45	28.60	27.75	26.25	26.55	27.30	24.00	26.00
16	23.72	25.05	29.10	28.30	29.10	28.10	27.60	26.20	26.80	27.25	23.80	25.70
17	23.60	26.35	27.90	27.75	28.75	27.85	27.40	26.55	27.00	26.50	24.20	25.40
18	23.55	25.65	27.25	27.65	28.50	27.65	27.05	26.45	26.84	26.15	24.20	25.20
19	23.40	25.60	29.90	27.50	28.45	27.47	27.14	26.13	26.55	26.10	24.20	24.90
20	23.70	25.50	26.85	27.45	28.10	27.20	27.20	27.95	26.65	25.85	24.50	24.75
21	23.75	25.47	27.00	26.75	27.55	27.20	27.55	28.10	26.65	25.85	25.65	24.85
22	23.74	25.45	26.80	26.60	27.00	28.70	28.80	27.90	26.50	25.90	25.45	24.85
23	23.70	25.25	26.70	26.25	27.05	30.55	28.35	27.45	26.50	26.15	26.25	24.75
24	23.65	25.30	26.70	26.25	26.70	30.50	27.90	27.60	26.30	25.45	25.70	24.55
25	23.42	25.00	27.75	26.55	27.00	30.20	27.65	28.05	26.15	25.25	25.20	24.50
26	23.50	24.60	27.40	26.85	27.00	29.55	27.80	28.25	25.95	25.60	24.95	24.30
27	23.90	24.64	29.10	27.10	26.70	29.60	27.58	27.95	26.05	26.15	24.80	24.28
28	24.05	24.75	29.00	27.05	26.65	29.65	27.65	27.75	26.20	26.00	24.60	24.30
29	24.06	24.70	29.40	27.10	-------	31.35	27.45	27.55	26.10	25.60	24.30	24.55
30	24.07	24.80	28.70	27.00	-------	36.10	27.20	28.35	25.95	25.20	24.35	24.35
31	24.10	-------	28.05	26.85	-------	34.00	-------	28.10	-------	24.95	25.70	-------

Delaware River at Yardley, Pa.

Location.--Lat 40°14'45", long 74°50'10", on upstream side of bridge at Yardley, Bucks County.

Records available.--March 1936 to September 1950 (gage heights only).

Gage.--Wire-weight gage. Datum of gage is at mean sea level, datum of 1929.

Extremes.--1936-50: Maximum gage height, 35.90 ft (2 to 3 p.m.) Mar. 19, 1936, from graph based on gage readings; minimum observed, 13.00 ft (8 a.m.) Sept. 27, 1950. Maximum stage known, 39.1 ft Oct. 11, 1903, from floodmark.

Maximum gage height observed (water years).--
1946: May 29 (12 m. to 1 p.m.) 26.34 ft.
1947: Apr. 7 (12 to 1 a.m.) 27.45 ft.
1948: Mar. 23 (7 to 8 p.m.) 29.65 ft.
1949: Jan. 1 (2 a.m.) 30.55 ft.
1950: Apr. 6 (9 a.m.) 26.85 ft.

Remarks.--Gage read twice daily except during periods of gage heights above 20.0 ft, when it was read hourly. In tables, the readings at 8 a.m. are shown.

Cooperation.--Records furnished by Delaware River Joint Toll Bridge Commission.

Daily gage height at 8 a.m., in feet, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16.39	16.02	19.10	18.57	16.88	17.17	-	16.38	20.50	-	-	15.30
2	16.08	15.98	18.50	18.09	16.44	17.00	17.24	16.35	21.35	16.33	-	15.28
3	16.42	15.85	18.88	17.47	-	17.68	17.43	-	23.93	17.53	-	15.02
4	16.20	15.84	17.70	17.34	15.85	17.80	17.50	16.14	22.14	17.25	-	14.90
5	17.25	17.71	17.70	17.31	15.58	17.65	17.35	16.03	21.50	16.97	-	14.75
6	16.91	17.67	17.45	17.26	15.53	18.07	17.22	15.84	-	16.37	-	-
7	16.80	17.14	18.33	17.90	16.15	19.22	17.19	15.72	19.63	16.12	-	15.07
8	16.92	16.82	18.00	21.78	16.26	20.40	-	16.02	19.00	-	-	15.07
9	17.51	16.54	18.25	21.67	16.08	22.60	16.69	16.03	18.63	15.93	-	15.04
10	18.19	16.32	18.04	20.87	15.98	22.54	16.61	16.26	18.20	15.72	-	14.94
11	19.65	16.23	17.88	20.31	15.85	22.52	16.83	-	17.85	15.72	-	14.78
12	18.82	16.66	17.65	19.85	15.63	20.23	16.80	16.21	17.85	15.65	-	15.05
13	18.20	17.54	17.15	19.27	15.42	19.14	16.70	16.50	-	15.72	-	-
14	17.75	17.74	17.00	18.79	15.44	18.45	16.61	16.63	18.10	15.69	-	15.05
15	17.43	17.70	17.03	18.24	16.20	18.30	16.22	17.15	18.05	15.54	-	14.95
16	17.13	18.22	16.77	17.85	16.42	18.80	16.20	-	17.50	15.33	-	15.00
17	17.03	17.88	16.87	17.60	16.78	-	16.47	17.24	17.08	15.25	15.52	14.75
18	-	17.48	16.90	17.25	16.21	-	16.60	19.08	-	15.30	15.65	-
19	-	17.28	16.62	17.30	15.98	-	16.63	19.44	16.90	15.30	17.18	14.87
20	-	17.65	18.64	17.18	15.80	-	16.47	-	16.94	15.22	16.35	15.00
21	16.37	18.00	19.87	16.75	15.17	-	16.23	19.24	17.03	-	15.93	14.95
22	16.21	18.79	23.73	16.10	15.70	-	16.21	19.50	16.76	16.09	15.75	15.44
23	16.02	20.30	23.87	16.45	15.47	-	16.00	-	16.59	16.48	-	15.78
24	16.23	20.38	23.20	16.22	15.46	-	16.14	20.03	16.29	19.25	15.51	15.75
25	16.28	19.40	22.71	16.90	15.47	-	16.12	19.03	16.10	18.56	15.37	16.12
26	16.39	18.66	18.78	16.48	15.29	-	16.09	18.39	-	17.65	15.25	-
27	16.41	18.29	18.84	16.47	15.26	18.85	16.08	19.30	15.98	17.00	15.11	17.08
28	16.25	17.97	18.52	16.20	16.12	18.58	-	23.50	15.92	-	15.05	16.45
29	16.18	20.10	18.38	15.65	-------	18.24	16.09	26.23	16.21	16.00	15.11	15.85
30	16.05	19.64	18.50	16.00	-------	17.96	16.05	24.55	16.28	15.70	15.36	15.60
31	16.10	-------	-	16.05	-------	17.78	-------	21.93	-------	15.56	15.52	-------

Delaware River at Yardley, Pa.--Continued

Daily gage height at 8 a.m., in feet, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15.80	15.94	15.50	-	20.82	26.00	-	19.70	19.22	-	17.29	15.66
2	16.45	15.86	15.58	15.85	21.06	26.08	17.87	20.17	18.60	16.08	17.09	15.85
3	16.10	-	15.17	15.54	-	25.88	18.57	-	18.26	16.56	-	15.70
4	16.05	15.62	15.15	15.69	19.08	25.60	19.52	20.34	18.21	16.32	-	15.71
5	15.90	15.54	15.25	16.00	18.80	25.70	19.56	19.97	18.08	16.18	-	16.53
6	15.65	15.57	15.17	15.89	18.37	-	22.52	21.13	-	15.86	-	-
7	15.50	15.56	15.21	16.36	17.70	16.60	26.85	22.18	17.80	15.70	-	16.05
8	15.40	15.55	15.20	-	17.54	16.35	24.59	21.94	18.30	-	-	15.70
9	15.15	15.61	15.21	16.17	17.40	16.35	22.28	21.37	19.17	20.85	-	15.55
10	-	15.67	15.18	16.06	17.18	16.40	20.94	20.67	18.45	21.83	-	15.43
11	-	-	15.13	15.80	-	16.30	20.18	-	18.07	19.78	-	15.65
12	-	15.51	15.19	15.74	17.61	16.50	19.55	19.21	-	18.72	-	15.49
13	15.47	15.43	15.22	15.95	17.19	-	19.23	18.77	-	17.00	-	-
14	15.98	15.51	15.12	15.80	16.74	-	19.35	18.37	-	18.14	-	15.45
15	15.84	15.63	15.19	15.96	16.69	-	18.80	18.39	-	17.53	-	15.38
16	15.47	-	15.31	16.15	-	-	-	-	-	18.55	-	15.26
17	15.80	15.44	15.35	17.03	16.62	-	15.55	18.42	-	18.20	16.45	15.50
18	15.66	15.45	-	17.13	16.45	-	18.46	18.03	-	21.85	16.42	-
19	15.55	15.30	15.33	17.67	16.55	-	18.10	18.01	17.86	20.84	18.45	15.37
20	15.75	15.23	15.30	17.48	16.45	18.96	17.85	18.55	17.60	20.15	17.45	15.33
21	-	15.44	15.25	17.80	16.30	18.67	-	19.03	17.30	-	17.21	15.26
22	15.87	15.34	15.89	19.20	16.30	18.52	17.87	19.58	17.09	18.75	16.84	15.28
23	15.77	-	16.11	-	16.20	18.42	18.67	22.60	16.85	19.42	-	15.27
24	15.70	15.44	15.82	18.47	16.25	18.31	18.25	22.19	16.65	21.48	16.35	15.41
25	15.55	15.28	16.11	18.31	16.35	18.51	18.10	20.97	16.56	19.72	15.98	15.49
26	15.46	15.21	-	18.48	16.70	a21.65	17.94	22.14	-	18.82	15.72	-
27	15.64	15.29	15.81	18.95	26.24	21.56	18.18	23.50	16.73	18.22	15.92	15.34
28	-	15.27	15.49	-	25.92	20.04	-	21.70	16.61	-	15.92	15.19
29	16.14	15.29	15.34	18.82	-------	19.30	17.93	20.60	16.49	17.80	15.91	15.07
30	16.30	15.37	15.47	18.52	-------	18.80	17.90	20.08	16.35	18.40	15.74	14.97
31	15.96	-------	15.61	18.32	-------	18.42	-------	19.75	-------	17.80	15.84	-------

a Reading at 4 p.m.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	15.96	16.60	16.10	17.98	18.30	19.90	17.44	18.40	18.15	15.44	15.00
2	15.04	15.90	16.37	16.62	17.86	18.00	21.09	17.34	17.98	17.56	15.32	15.14
3	15.02	-	16.32	16.65	17.45	18.20	21.09	17.19	17.70	17.20	15.14	15.12
4	15.02	15.68	16.31	16.35	17.61	18.10	20.26	17.18	17.48	16.90	15.28	15.05
5	15.02	15.68	16.37	16.09	17.61	17.87	19.56	17.27	17.30	16.47	15.38	15.04
6	15.01	16.22	16.40	16.18	17.80	17.35	19.06	18.31	16.70	16.25	16.05	15.00
7	14.80	16.10	16.68	16.18	17.62	17.00	18.81	17.81	16.63	16.35	16.62	14.83
8	-	16.38	16.23	16.20	17.66	17.20	18.50	18.96	17.00	16.35	16.70	-
9	14.88	19.60	16.35	16.08	17.56	17.25	18.38	18.93	17.61	16.52	16.05	14.75
10	15.01	21.02	16.60	16.21	17.14	17.55	18.09	18.48	17.42	16.47	15.90	15.05
11	15.05	-	16.69	15.98	17.10	17.60	17.89	18.02	17.25	16.15	15.64	15.35
12	-	20.08	16.70	15.88	17.51	17.74	18.08	17.70	17.00	15.80	15.73	15.20
13	-	a20.30	16.45	15.82	17.32	17.45	19.25	17.67	-	15.14	16.20	15.20
14	-	20.86	16.18	15.86	17.59	17.10	20.62	20.95	16.85	16.10	16.04	14.90
15	-	19.53	15.80	16.02	18.05	16.95	22.23	20.39	16.83	17.05	15.80	14.72
16	14.90	18.75	15.91	15.97	18.60	17.10	24.90	20.20	17.00	16.72	15.50	14.65
17	14.88	18.24	17.00	15.82	-	19.45	22.60	20.65	16.87	16.37	15.37	15.05
18	14.92	17.74	17.50	15.87	19.59	25.24	21.25	20.87	16.65	15.95	15.33	15.05
19	14.98	17.52	17.18	16.05	19.04	a28.70	20.40	20.91	16.40	15.72	15.33	15.00
20	14.97	17.22	16.72	15.50	19.92	28.34	19.70	20.32	20.00	15.60	15.32	15.00
21	-	16.96	16.45	15.35	19.63	25.40	19.30	19.78	18.10	15.08	16.00	14.75
22	14.66	16.78	16.21	15.98	19.87	26.42	18.97	19.25	17.24	15.83	16.00	14.77
23	14.82	16.65	16.15	15.96	19.25	28.23	19.16	18.81	17.05	16.36	16.60	14.95
24	14.81	16.12	16.23	15.97	18.53	27.70	18.67	18.44	17.04	16.35	16.01	15.08
25	14.82	17.24	16.41	18.05	18.01	28.74	18.37	18.55	17.70	16.02	15.77	15.04
26	14.86	17.15	15.90	17.67	18.27	22.40	18.19	20.49	18.04	15.72	15.70	-
27	14.55	17.65	15.78	18.25	18.34	21.07	18.25	19.85	17.95	15.95	15.57	-
28	-	17.43	15.69	18.32	18.47	20.77	18.04	19.12	17.95	15.70	15.45	14.75
29	14.77	17.04	15.77	18.20	19.02	20.63	17.80	18.57	18.63	15.65	15.31	14.60
30	15.25	16.82	15.84	18.40	-------	20.33	17.60	18.50	18.46	15.46	15.20	14.55
31	15.51	-------	15.97	18.15	-------	19.56	-------	18.97	-------	15.42	15.10	-------

a Reading at 9 a.m.

Delaware River at Yardley, Pa.--Continued

Daily gage height at 8 a.m., in feet, 1948-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15.05	14.64	16.68	30.20	18.40	18.45	17.10	18.22	17.80	15.70	15.55	15.48
2	15.15	14.55	16.37	25.10	18.15	18.25	17.55	18.15	17.70	15.70	15.50	16.00
3	15.00	14.55	16.18	22.15	18.00	18.05	17.22	18.50	17.60	15.65	15.40	15.90
4	15.05	14.60	16.12	20.85	17.78	17.92	16.87	18.95	17.45	15.47	15.75	15.60
5	14.70	14.77	16.08	19.65	17.75	17.70	16.67	18.92	17.25	15.42	15.82	15.40
6	14.60	15.10	15.84	28.49	17.80	17.68	17.03	18.87	16.95	15.35	15.96	16.24
7	14.90	15.15	15.80	26.82	17.45	17.75	17.25	18.80	16.82	15.40	15.75	16.85
8	15.10	-	16.10	25.45	17.80	18.60	17.37	20.60	16.72	15.65	15.55	15.50
9	15.00	15.70	16.50	22.70	17.72	18.27	17.55	19.65	16.60	15.67	15.35	15.40
10	15.00	16.66	16.30	21.26	17.64	17.88	17.50	19.51	16.42	15.55	15.25	15.30
11	15.00	16.28	16.10	20.37	17.58	17.78	17.35	18.90	16.25	15.55	15.18	15.40
12	-	16.03	15.97	19.80	17.50	17.95	17.15	18.55	16.25	15.37	15.40	15.25
13	-	15.70	15.34	19.34	17.00	17.90	17.09	18.37	16.20	16.14	15.51	15.24
14	14.90	15.60	15.75	18.87	17.04	17.53	17.04	17.95	16.10	15.65	15.80	15.15
15	14.95	15.44	15.68	18.52	17.05	17.24	17.49	17.85	16.00	15.80	15.50	15.25
16	14.95	15.25	16.05	18.20	17.97	17.27	17.82	17.60	16.18	15.57	15.45	15.55
17	14.88	15.17	16.65	17.72	22.25	17.38	17.55	17.40	16.05	16.15	15.20	15.50
18	14.89	15.20	16.68	17.62	20.90	17.20	17.14	17.50	16.10	16.05	15.50	15.50
19	14.68	15.18	16.46	17.60	19.60	17.00	18.07	17.35	16.05	16.40	15.60	15.40
20	14.67	15.24	16.35	17.75	19.40	16.85	20.25	17.30	16.10	16.40	15.55	15.50
21	14.90	15.30	16.08	17.79	19.52	16.55	19.94	18.04	15.90	16.22	15.52	15.34
22	15.15	17.00	15.90	19.10	19.40	16.45	19.10	19.74	15.83	16.00	15.37	15.20
23	15.16	17.25	15.90	18.55	19.80	17.67	19.05	19.84	15.95	15.90	15.22	15.40
24	14.90	17.15	15.97	18.40	19.48	17.45	19.17	19.65	15.88	15.90	15.15	15.25
25	15.10	16.90	16.00	18.87	19.40	17.47	19.45	19.55	15.84	15.75	15.10	15.45
26	14.65	16.72	15.92	18.32	19.00	17.70	20.00	19.15	15.70	15.60	15.20	15.45
27	14.65	16.44	15.20	18.95	19.15	17.65	19.45	19.30	16.05	15.45	15.20	15.30
28	14.65	16.28	17.52	19.68	18.85	17.35	19.15	18.97	15.90	15.64	15.23	15.30
29	14.89	16.24	17.98	19.35	-------	17.20	18.90	18.65	15.70	15.65	15.17	15.25
30	14.60	16.55	19.20	19.25	-------	17.20	18.55	18.20	15.80	15.70	15.47	15.90
31	14.73	-------	26.70	18.85	-------	17.05	-------	18.05	-------	15.67	15.72	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15.80	15.65	16.00	18.60	18.25	17.25	22.95	17.95	18.70	16.85	16.15	13.50
2	15.85	15.65	16.10	18.05	18.00	17.15	22.15	18.50	19.05	16.75	16.15	13.30
3	15.81	15.65	16.15	17.85	18.65	17.35	21.55	19.00	19.35	16.45	16.40	13.15
4	15.79	15.71	16.26	17.80	18.25	16.80	21.95	18.85	18.95	16.35	17.00	14.15
5	15.85	15.85	16.10	17.90	17.95	16.75	24.20	18.60	19.40	16.45	16.95	13.90
6	15.57	15.82	16.04	17.95	17.67	16.80	26.84	18.40	19.50	16.40	16.65	13.60
7	15.59	15.95	15.96	18.00	17.65	16.90	24.80	18.35	19.00	17.25	16.45	13.45
8	15.58	16.00	15.75	19.80	17.70	17.00	22.38	18.50	18.55	17.05	16.20	13.30
9	15.48	15.87	15.70	20.40	17.65	18.05	21.10	18.15	18.20	16.75	16.05	13.20
10	-	15.85	15.60	19.30	18.45	21.30	20.40	18.00	17.95	16.85	16.00	13.10
11	-	15.75	15.64	19.75	18.50	22.50	19.85	17.90	17.75	16.65	15.80	14.30
12	15.45	15.70	15.48	20.65	18.85	20.65	19.35	18.05	17.70	17.75	15.90	14.13
13	15.43	15.68	15.52	20.10	18.55	20.10	19.22	17.55	17.60	17.95	15.75	13.90
14	15.65	15.67	17.40	19.75	19.00	20.05	19.12	17.60	17.60	18.00	15.70	14.30
15	15.50	16.17	21.92	19.20	20.10	19.45	18.85	17.30	17.65	18.30	15.20	14.20
16	15.35	16.90	19.85	19.35	19.95	19.00	18.65	17.35	18.00	18.15	15.05	14.00
17	15.30	17.20	18.70	18.60	19.55	18.70	18.35	17.30	18.00	17.55	13.50	13.70
18	15.27	16.82	18.20	18.30	19.30	18.55	18.10	17.55	17.75	17.15	13.10	13.60
19	15.20	16.63	17.75	18.30	19.05	18.45	18.15	18.00	17.50	17.15	13.07	13.40
20	15.35	16.55	17.75	18.05	18.75	18.10	18.20	18.70	17.65	16.95	13.50	13.30
21	15.36	16.52	17.90	17.70	18.20	17.95	18.45	18.95	17.70	16.85	14.05	13.40
22	15.20	16.56	17.75	17.40	18.00	19.50	19.65	18.70	17.50	16.80	13.75	13.40
23	15.25	16.30	17.60	17.20	18.00	21.40	19.35	18.40	17.55	17.10	14.45	13.30
24	15.18	16.28	17.55	17.20	17.60	21.32	19.00	18.35	17.35	16.60	14.00	13.25
25	15.15	16.20	18.50	17.40	17.90	21.00	18.65	18.90	17.15	16.40	13.60	17.25
26	15.26	16.13	18.30	17.55	17.85	20.35	18.70	19.10	16.95	16.60	13.45	13.05
27	15.35	15.88	19.85	17.90	17.70	20.45	18.45	18.60	17.40	17.00	13.35	13.00
28	15.46	15.86	19.61	17.97	17.25	20.45	18.50	18.55	17.45	17.05	13.25	13.28
29	15.50	15.82	20.10	17.90	-------	22.15	18.40	18.40	17.10	16.65	13.05	13.25
30	15.60	16.05	19.55	17.75	-------	26.65	18.10	19.15	16.90	16.40	13.05	13.10
31	15.58	-------	18.90	17.80	-------	24.75	-------	19.10	-------	16.25	14.15	-------

Delaware River at Trenton

Location.--Lat 40°13'18", long 74°46'38", on left bank 450 ft upstream from Calhoun Street Bridge at Trenton, Mercer County, and 0.5 mile upstream from Assunpink Creek.

Drainage area.--6,780 sq mi.

Records available.--February 1913 to September 1950.

Gage.--Water-stage recorder. Datum of gage is 7.77 ft above mean sea level, datum of 1929. Prior to Oct. 2, 1928, chain gage on downstream side of highway bridge at site 500 ft downstream at same datum.

Average discharge.--37 years (1913-50), 11,770 cfs (adjusted).

Extremes.--1913-50: Maximum discharge, 227,000 cfs Mar. 19, 1936 (gage height, 16.66 ft); minimum, 1,220 cfs Sept. 18, 1932. Flow in Trenton Power Race and Delaware & Raritan Canal not included.

Flood of Oct. 11, 1903, reached a stage of about 20.7 ft (discharge estimated, 295,000 cfs).

Maximum stage known, 22.8 ft Mar. 8, 1904, from floodmark (ice jam).

Peak discharge (base, 50,000 cfs).--
1946: Dec. 20 (3:45 a.m.) discharge unknown, probably below base (8.67 ft, ice jam); Dec. 26 (4:15 a.m.) discharge unknown, probably below base (11.01 ft, ice jam); Mar. 10 (7 p.m.) 61,400 cfs (7.19 ft); May 29 (1 p.m.) 82,300 cfs (8.74 ft); June 2 (4 p.m.) 69,900 cfs (7.84 ft).
1947: Feb. 10 (6:15 p.m.) discharge unknown, probably below base (7.90 ft, ice jam); Mar. 16 (6 to 7 a.m.) 63,700 cfs (7.37 ft); Apr. 7 (2:30 a.m.) 98,500 cfs (9.60 ft); May 26 (9 to 11:30 p.m.) 58,900 cfs (6.80 ft); July 9 (5 p.m.) 53,000 cfs (6.35 ft).
1948: Mar. 18 (12:30 p.m.) 77,700 cfs (8.18 ft); Mar. 23 (7 p.m.) 125,600 cfs (11.29 ft); Apr. 16 (7:30 a.m.) 70,900 cfs (7.69 ft).
1949: Jan. 1 (2 a.m.) 139,100 cfs (12.06 ft); Jan. 7 (3 p.m.) 96,800 cfs (9.49).
1950: Mar. 30 (5 to 8 a.m.) 77,600 cfs (8.45 ft); Apr. 6 (9 a.m.) 79,800 cfs (8.60 ft).

Remarks.--Figures of daily discharge do not include diversion above station to Delaware & Raritan Canal. Flow regulated by Lakes Hopatcong and Wallenpaupack and by Toronto, Cliff Lake, and Swinging Bridge Reservoirs (combined capacity, 13,100,000,000 cubic feet). Records of chemical analyses and water temperatures for the water year 1950 are given in Water-Supply Paper 1186 of the United States Geological Survey.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10,400	8,570	25,700	19,000	9,660	12,400	12,700	7,420	30,200	7,220	4,860	4,370
2	9,220	8,310	21,600	16,000	9,110	12,300	11,500	7,420	50,100	9,820	4,860	3,880
3	10,300	8,060	18,600	14,000	7,400	16,800	12,000	6,840	51,100	12,100	6,700	3,350
4	12,600	8,420	17,000	14,000	6,400	17,400	12,300	6,520	48,500	11,700	6,160	2,920
5	14,800	17,900	16,800	14,200	5,800	17,600	11,700	6,250	36,000	9,890	5,470	2,580
6	12,800	16,900	18,100	14,600	6,800	20,100	11,100	5,810	29,400	7,710	4,750	3,130
7	12,500	14,300	19,700	19,000	9,220	26,500	10,800	5,720	25,100	6,800	5,220	3,310
8	13,300	12,600	18,900	42,600	9,610	37,700	9,660	6,470	21,600	6,110	6,570	3,350
9	16,700	11,400	20,100	43,700	8,470	50,600	9,220	6,890	18,700	5,940	7,760	3,310
10	21,700	10,600	19,000	37,800	8,310	55,000	9,380	7,220	16,200	5,560	7,510	3,010
11	28,300	10,300	17,700	34,200	7,810	47,600	9,490	7,660	14,800	5,510	6,470	2,690
12	25,800	12,000	16,200	30,700	6,980	32,900	9,380	7,560	14,800	5,270	5,470	3,380
13	20,100	16,200	15,800	26,600	6,940	25,800	9,050	8,160	15,400	5,470	4,680	3,410
14	17,500	17,700	*13,000	23,300	7,370	22,100	8,570	8,950	16,200	5,220	5,220	3,280
15	15,300	17,300	12,700	20,100	9,330	21,500	7,660	11,200	15,200	4,820	5,430	3,100
16	14,100	20,400	12,000	17,600	10,300	25,100	7,510	11,600	13,000	4,160	4,940	3,010
17	13,800	18,200	10,000	16,000	11,100	29,600	8,160	13,200	10,600	4,050	4,790	2,420
18	13,000	15,700	8,600	14,100	10,100	27,100	8,680	19,900	9,490	4,080	6,160	2,220
19	12,000	14,900	9,000	13,800	8,370	27,700	8,680	23,800	9,770	4,050	10,700	2,720
20	11,100	17,900	9,400	11,000	7,710	24,300	7,910	24,500	9,940	3,940	7,560	3,100
21	10,500	20,400	9,400	9,600	6,200	21,100	7,420	23,200	10,200	5,940	6,160	2,980
22	9,770	27,100	9,200	10,500	6,800	18,900	6,890	27,600	9,220	7,270	5,430	4,800
23	9,050	33,700	8,400	10,000	6,610	17,000	6,660	35,800	8,520	16,400	5,020	5,560
24	9,440	33,400	8,200	10,500	6,940	15,500	6,890	26,800	7,420	20,600	4,670	5,510
25	9,550	27,200	8,600	11,000	6,750	14,700	6,840	20,900	6,800	17,300	4,300	7,710
26	10,000	22,800	17,000	11,000	6,200	14,100	6,840	18,300	6,800	13,000	3,980	11,000
27	10,100	20,100	20,000	9,800	*6,520	20,900	7,130	26,500	6,520	9,890	3,540	10,500
28	10,100	19,000	20,000	8,600	9,890	19,500	7,370	61,000	6,200	7,810	3,380	7,710
29	9,490	30,400	19,000	8,200	-------	17,200	6,940	79,200	6,610	6,780	3,600	6,070
30	8,890	28,500	18,000	8,950	-------	15,800	6,800	58,700	7,030	5,390	4,560	5,140
31	8,480	-------	18,500	9,270	-------	14,600	-------	39,200	-------	5,020	4,790	-------

* Winter discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 17 to Jan. 4, Jan. 20-25, 27-29, Feb. 3-6, 21, 22.

Delaware River at Trenton--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,270	6,290	4,750	4,900	35,200	7,400	15,900	24,700	22,500	7,080	12,100	5,410
2	7,320	5,890	4,260	5,980	34,800	7,000	15,100	29,900	19,100	7,810	11,500	5,490
3	6,890	5,430	3,910	4,980	26,000	7,460	19,900	31,700	17,300	8,800	10,900	6,000
4	6,660	5,060	3,770	5,720	21,800	6,890	25,000	30,600	16,800	7,810	8,970	5,790
5	6,030	4,820	4,080	6,700	18,000	6,980	27,600	30,900	16,400	7,130	7,810	7,810
6	5,510	4,980	3,980	6,470	14,000	7,860	62,600	38,100	15,000	6,170	7,960	7,420
7	4,790	5,020	3,910	7,510	13,000	8,310	86,600	44,900	14,300	5,790	7,710	6,840
8	4,330	4,940	3,910	6,800	13,000	8,870	62,300	42,100	13,700	10,200	7,710	5,620
9	4,220	5,310	3,940	7,220	11,000	7,960	44,200	38,200	22,000	42,800	7,860	5,010
10	4,860	5,430	3,740	6,570	10,000	7,510	34,500	31,600	18,500	38,900	8,490	4,970
11	4,820	4,940	3,810	5,980	10,000	7,710	28,900	26,300	15,700	25,600	9,680	5,330
12	4,820	4,630	3,910	6,070	11,000	8,210	25,000	22,500	13,600	19,300	10,900	4,970
13	5,180	4,900	3,910	6,200	10,000	8,780	23,200	19,900	12,100	15,500	8,750	4,860
14	6,380	5,310	4,020	5,680	9,000	16,500	23,400	18,200	11,800	15,200	8,480	4,710
15	6,030	5,390	4,190	7,320	9,500	40,400	21,100	18,500	18,500	13,600	8,540	4,530
16	6,290	5,180	4,190	9,830	9,500	59,600	19,200	20,600	16,400	18,500	8,020	4,450
17	5,810	4,750	*4,330	10,800	8,500	*45,500	19,600	18,100	20,200	20,900	8,700	4,710
18	5,180	4,440	4,330	11,700	8,000	33,600	18,500	16,000	16,500	28,700	15,100	5,050
19	5,140	4,020	4,190	13,200	8,000	26,200	16,500	16,400	14,700	32,900	17,200	4,530
20	5,850	3,940	4,120	15,000	*7,000	21,700	15,000	20,500	13,400	28,300	13,000	4,490
21	6,030	4,480	4,080	24,700	6,000	19,300	14,100	23,200	12,300	23,100	11,700	4,380
22	6,030	4,190	7,130	23,600	5,500	18,100	16,200	27,500	11,100	21,200	9,680	4,380
23	5,850	4,160	6,980	23,200	5,500	18,100	19,900	43,700	9,850	36,500	8,640	4,140
24	5,470	4,440	6,070	18,100	5,500	17,300	18,000	42,800	9,130	36,000	7,710	4,750
25	4,900	4,020	6,940	16,900	6,000	19,200	16,500	34,000	9,240	24,800	6,300	4,970
26	4,750	3,810	6,380	17,800	7,000	33,500	16,200	50,300	9,130	19,700	5,830	4,750
27	6,070	3,980	5,350	21,200	7,500	38,600	16,900	54,000	9,020	16,600	6,520	4,310
28	6,660	4,120	4,520	21,100	7,500	28,300	16,100	39,800	9,020	14,100	6,750	3,940
29	6,980	4,190	4,940	20,000	-------	23,000	15,800	31,400	8,700	16,100	6,520	3,590
30	7,370	4,440	5,430	*18,400	-------	19,700	15,600	28,600	7,810	17,700	5,910	3,240
31	6,520	-------	5,020	20,100	-------	17,600	-------	25,800	-------	14,000	6,260	-------

* Winter discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Feb. 5 to Mar 2.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,040	6,040	9,020	7,560	4,600	17,300	28,000	13,000	17,500	15,800	4,670	3,290
2	3,470	6,340	8,020	*9,350	4,500	16,500	36,300	12,100	15,300	13,100	4,310	3,650
3	3,380	5,660	7,810	9,020	4,300	17,300	34,800	11,600	13,800	11,400	3,840	3,590
4	3,350	5,450	7,710	7,860	4,500	16,200	29,000	11,700	12,500	9,790	4,170	3,530
5	3,350	6,000	8,170	7,170	4,700	15,700	24,600	13,300	11,500	8,380	4,530	3,470
6	3,350	7,370	8,220	7,460	4,900	12,100	21,900	16,500	10,200	7,780	7,430	3,320
7	2,940	6,890	8,800	7,710	4,700	11,600	20,400	17,600	9,240	7,760	9,240	2,960
8	2,800	10,100	7,710	7,660	4,800	12,200	18,900	21,100	11,100	7,910	8,590	2,800
9	3,020	24,000	7,960	7,460	4,400	12,000	17,800	20,700	13,100	8,330	6,940	2,800
10	3,350	34,100	*8,750	7,810	4,300	12,200	16,200	18,000	12,600	8,020	6,040	3,750
11	3,470	24,200	9,180	6,700	4,400	13,700	15,000	15,600	11,500	7,020	5,370	4,280
12	3,440	27,900	8,910	5,910	4,800	13,300	17,300	14,100	10,500	6,000	6,660	3,910
13	3,290	32,800	8,070	6,080	4,900	12,400	26,300	26,100	10,800	5,700	7,510	3,750
14	2,770	33,000	7,220	6,660	5,050	10,900	33,100	34,000	9,900	7,620	6,890	3,070
15	2,520	24,000	6,040	5,800	6,700	10,300	52,400	30,500	10,100	10,500	6,080	2,750
16	3,020	19,400	7,610	5,300	7,100	*11,700	66,000	29,800	10,200	9,070	4,970	3,150
17	3,100	16,700	11,500	5,800	7,800	30,100	47,200	32,600	9,570	7,660	4,450	3,440
18	3,150	14,300	12,200	6,200	15,000	71,300	36,700	34,800	8,590	6,660	4,170	3,380
19	3,270	13,000	11,700	4,400	20,000	59,200	30,100	34,200	9,180	5,740	4,530	3,380
20	3,320	11,500	9,740	4,000	23,000	56,800	25,800	29,400	19,200	5,410	4,970	3,240
21	2,770	10,300	8,270	5,600	26,400	80,500	23,200	25,400	15,000	5,910	6,890	2,830
22	2,520	9,630	7,220	6,100	27,500	83,600	22,400	22,600	11,400	6,700	6,800	2,750
23	2,850	9,290	7,220	5,600	22,300	111,800	22,500	20,100	10,800	8,540	8,270	3,240
24	2,940	9,510	8,170	4,500	18,500	92,700	19,500	18,000	11,100	7,960	6,750	3,500
25	2,940	12,500	7,960	4,000	16,200	57,900	17,400	20,500	14,200	6,890	6,000	3,440
26	2,940	14,200	6,400	4,500	17,300	44,700	16,700	30,600	16,200	6,080	5,620	3,380
27	3,020	13,800	5,200	4,800	*17,700	35,300	17,000	26,400	16,500	6,260	5,170	3,380
28	2,700	12,300	5,700	4,700	20,900	34,400	15,700	21,900	16,500	5,910	4,710	2,770
29	2,910	10,800	6,500	5,100	20,800	33,500	14,500	18,800	21,100	5,620	4,310	2,520
30	3,970	9,960	5,600	4,900	-------	29,300	13,600	19,900	18,500	5,290	3,970	2,850
31	4,970	-------	6,340	4,700	-------	24,400	-------	20,500	-------	4,750	3,650	-------

* Winter discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 26-30, Jan. 15 to Feb. 20 (no gage-height record Jan. 28 to Feb. 2, Feb. 9-12).

Delaware River at Trenton--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,650	2,520	8,590	121,000	17,600	18,500	11,400	13,400	11,200	3,380	3,350	3,020
2	3,810	2,320	7,760	*67,300	15,800	17,600	12,800	13,400	10,600	3,470	2,940	4,040
3	3,650	2,280	7,220	42,800	14,800	15,400	11,500	15,900	9,960	3,240	2,700	3,530
4	3,470	2,440	7,030	31,600	14,100	15,200	10,200	17,500	9,180	2,850	3,470	2,880
5	2,880	2,800	7,030	27,200	14,200	14,200	9,400	17,600	8,540	2,700	4,040	2,520
6	2,620	3,620	6,170	60,400	14,100	13,800	10,800	16,500	7,710	2,590	4,040	5,310
7	3,180	3,910	6,000	90,600	13,600	14,800	11,800	19,200	7,220	2,850	3,470	3,810
8	3,820	5,830	6,800	70,600	14,600	19,200	12,800	27,700	6,800	3,380	2,960	2,670
9	3,470	7,270	8,120	47,600	14,000	17,400	13,400	22,200	6,340	3,560	2,440	2,370
10	3,380	9,020	7,460	36,100	13,500	15,200	13,200	18,900	5,830	3,210	2,160	2,470
11	3,320	7,560	6,840	30,000	13,100	15,100	12,300	17,000	5,530	3,020	2,230	2,440
12	2,700	6,660	6,390	26,300	12,400	15,600	11,400	15,000	5,330	2,800	2,620	2,140
13	2,420	5,660	6,040	23,300	10,700	14,600	11,000	13,400	4,900	4,100	3,020	1,940
14	3,040	5,740	5,830	20,500	10,700	13,300	11,200	12,100	4,450	3,530	3,290	1,960
15	3,210	4,750	6,300	18,500	11,200	12,300	13,300	11,300	4,530	3,710	2,720	2,300
16	3,180	4,210	6,940	16,400	18,400	12,100	14,700	10,200	4,940	3,660	2,440	2,940
17	3,100	4,070	8,640	14,500	42,600	12,000	13,200	9,460	4,710	5,410	2,120	2,750
18	2,830	4,110	8,860	13,700	33,300	11,500	11,800	9,460	4,600	4,900	2,700	2,720
19	2,570	3,970	8,170	13,800	24,900	10,600	13,900	8,970	4,600	6,440	2,990	2,670
20	2,590	4,310	7,560	14,100	24,100	10,000	30,400	9,130	4,530	5,870	2,940	2,670
21	3,180	7,870	6,800	14,600	24,400	8,800	26,600	14,400	3,970	4,970	2,830	2,280
22	3,810	10,600	6,440	20,000	24,400	8,700	21,900	23,700	3,810	4,490	2,400	2,140
23	3,750	11,700	6,700	18,100	26,400	13,300	22,600	22,300	4,140	4,210	2,050	2,540
24	3,150	11,000	6,620	17,500	24,400	12,800	23,900	21,800	4,040	4,000	1,900	2,230
25	2,960	10,200	6,440	17,900	23,000	13,400	26,300	20,400	3,780	3,560	1,840	2,620
26	2,640	9,350	b5,400	19,100	21,600	14,000	23,600	18,900	3,750	3,180	1,990	2,590
27	2,520	8,270	b4,300	21,200	22,200	13,400	20,500	19,300	4,310	2,830	2,090	2,230
28	2,960	7,710	b4,000	24,300	19,900	12,400	18,500	17,100	3,940	3,290	2,160	2,210
29	3,070	7,660	b4,400	23,900	-------	12,000	17,000	15,100	3,560	3,410	2,120	2,440
30	2,830	8,640	b35,000	22,500	-------	12,100	15,000	13,400	3,650	3,410	2,570	3,130
31	2,750	-------	103,900	20,000	-------	11,200	-------	12,300	-------	3,320	3,130	-------

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Backwater from temporary cofferdam July 9 to Sept. 30.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,590	3,340	4,970	12,700	12,800	8,570	42,000	12,300	15,000	6,820	4,710	4,460
2	3,940	3,430	4,750	11,400	13,200	8,770	35,700	14,900	17,700	6,510	5,090	4,040
3	3,680	3,460	4,860	11,100	14,300	8,220	32,300	17,000	17,600	5,590	7,820	4,140
4	3,520	3,750	4,900	10,800	12,700	7,220	28,600	15,600	16,500	5,430	7,220	5,840
5	3,280	3,910	4,360	11,100	11,400	7,400	57,000	14,100	18,500	5,630	6,860	5,800
6	2,960	4,110	4,040	11,300	10,300	7,080	78,600	14,500	18,900	6,130	6,290	4,860
7	2,930	4,220	3,780	13,000	9,990	7,260	55,000	15,900	16,200	8,320	5,630	4,360
8	3,020	4,280	4,040	23,200	9,880	7,690	36,700	13,800	14,000	7,690	4,900	4,010
9	3,160	3,940	3,850	22,900	10,600	16,700	28,400	12,500	12,200	6,680	4,780	3,720
10	3,040	3,810	3,370	18,200	13,600	34,700	25,700	11,700	11,000	6,770	4,750	3,700
11	2,790	3,590	3,070	21,300	13,900	35,700	20,900	11,000	10,200	6,770	4,600	7,180
12	2,630	3,400	3,490	26,300	15,300	25,300	18,900	11,600	10,200	10,700	4,680	6,340
13	2,760	3,310	4,250	21,800	14,400	23,200	17,700	11,000	10,200	11,000	4,320	6,290
14	3,160	3,400	23,900	18,200	17,200	22,200	16,800	9,820	9,710	12,200	3,880	6,900
15	2,740	4,710	31,900	17,400	23,100	18,700	15,600	8,720	10,200	12,500	3,160	6,770
16	2,520	7,130	20,100	16,700	21,300	16,200	14,400	8,770	11,700	11,600	2,960	6,170
17	2,290	8,120	14,300	14,500	19,300	14,800	13,100	9,560	11,400	9,560	3,430	5,590
18	2,220	6,900	11,900	13,600	17,900	14,000	12,300	9,500	10,200	8,220	3,340	4,930
19	2,090	6,290	10,600	12,800	16,000	13,100	12,300	11,900	9,450	7,880	3,340	4,280
20	2,390	6,040	10,600	11,600	14,100	12,000	12,500	15,700	10,200	7,360	4,390	4,180
21	2,500	5,430	11,000	9,820	11,700	12,700	14,300	16,100	9,990	7,000	6,460	4,390
22	2,320	5,120	10,300	8,820	11,200	19,200	20,200	14,900	9,400	7,130	6,640	4,280
23	2,140	5,430	9,710	8,270	10,400	28,800	18,100	13,300	9,290	7,500	7,360	4,040
24	2,020	5,550	9,990	8,420	10,100	31,200	15,500	14,600	8,520	6,250	5,960	4,080
25	2,020	5,090	13,600	9,290	10,900	28,100	15,000	16,700	7,780	5,710	5,010	3,850
26	2,190	4,530	12,600	10,200	10,600	24,000	15,000	17,200	7,690	6,420	4,680	3,810
27	2,440	4,220	17,300	11,200	8,770	24,200	14,200	15,700	9,290	7,310	4,140	3,220
28	2,960	4,460	20,900	11,400	7,930	25,700	14,400	14,100	8,930	7,180	3,780	3,850
29	2,930	4,320	22,400	11,100	-------	45,200	13,300	14,000	7,640	6,290	3,280	3,650
30	2,990	4,530	18,900	10,400	-------	74,100	12,300	17,200	6,950	5,710	3,460	3,400
31	3,100	-------	15,300	11,100	-------	55,700	-------	16,600	-------	4,930	5,430	-------

Delaware River at Trenton--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1945	410,050	28,300	8,840	13,230	12,940	1.91	2.20
November	540,260	33,700	8,060	18,010	18,120	2.67	2.98
December	474,200	25,700	8,200	15,300	14,960	2.21	2.54
Calendar year 1945	6,271,680	75,600	4,900	17,180	17,300	2.55	34.62
January 1946	549,720	43,700	8,200	17,730	17,360	2.56	2.95
February	222,700	11,100	5,800	7,954	7,147	1.05	1.10
March	741,400	55,000	13,300	23,920	24,560	3.62	4.18
April	265,230	12,700	6,660	8,841	8,446	1.25	1.39
May	620,290	79,200	5,720	20,010	20,940	3.09	3.56
June	531,520	51,100	6,200	17,720	17,920	2.64	2.95
July	244,420	20,600	3,940	7,885	7,758	1.14	1.32
August	170,660	10,700	3,380	5,505	5,131	.757	.87
September	129,520	11,000	2,220	4,317	3,816	.563	.63
Water year 1945-46	4,899,970	79,200	2,220	13,420	13,320	1.96	26.67
October 1946	180,010	7,370	4,220	5,807	5,547	.818	.94
November	142,500	6,290	3,810	4,750	4,307	.635	.71
December	144,090	7,130	3,740	4,648	4,409	.650	.75
Calendar year 1946	3,942,060	79,200	2,220	10,800	10,660	1.57	21.35
January 1947	385,730	29,600	4,900	12,440	12,680	1.87	2.16
February	327,300	35,200	5,500	12,050	11,820	1.74	1.82
March	596,640	59,600	6,890	19,250	19,820	2.92	3.37
April	771,400	86,600	14,100	25,710	27,190	4.01	4.47
May	940,800	54,000	16,000	30,350	31,180	4.60	5.30
June	428,600	22,500	7,810	14,290	14,030	2.07	2.31
July	611,690	43,800	5,790	19,730	19,990	2.95	3.40
August	281,290	17,300	5,830	9,074	8,435	1.24	1.43
September	150,440	7,810	3,240	5,015	4,332	.639	.71
Water year 1946-47	4,970,490	86,600	3,240	13,620	13,670	2.02	27.37
October 1947	97,920	4,970	2,520	3,159	2,406	.355	.41
November	441,040	34,100	5,450	14,700	15,350	2.26	2.53
December	248,920	12,200	5,200	8,030	7,384	1.09	1.26
Calendar year 1947	5,291,780	86,600	2,520	14,500	14,570	2.15	29.17
January 1948	190,410	9,350	4,000	6,142	5,567	.821	.95
February	332,000	27,500	4,300	11,450	11,340	1.67	1.80
March	1,059,400	111,800	10,300	34,170	35,650	5.26	6.06
April	780,300	66,000	13,600	26,010	26,650	3.93	4.39
May	681,400	34,800	11,600	21,980	22,590	3.33	3.84
June	387,680	21,100	8,590	12,920	13,120	1.94	2.16
July	239,550	15,800	4,750	7,727	7,552	1.11	1.28
August	177,500	9,240	3,650	5,726	5,226	.771	.89
September	98,170	4,280	2,520	3,272	2,264	.334	.37
Water year 1947-48	4,734,300	111,800	2,520	12,940	12,920	1.91	25.94
October 1948	96,310	3,810	2,420	3,107	2,387	.352	.41
November	186,050	11,700	2,280	6,202	6,042	.891	.99
December	333,750	103,900	4,000	10,770	11,230	1.66	1.91
Calendar year 1948	4,562,520	111,800	2,280	12,470	12,480	1.84	25.05
January 1949	1,005,400	121,000	13,700	32,430	33,310	4.91	5.66
February	534,000	42,600	10,700	19,070	19,420	2.86	2.96
March	420,500	19,200	8,700	13,560	13,460	1.99	2.29
April	481,400	30,400	9,400	16,050	16,650	2.46	2.74
May	497,020	27,700	8,970	16,030	16,280	2.40	2.77
June	170,450	11,200	3,560	5,682	5,192	.766	.85
July	115,340	6,440	2,590	3,721	3,359	.495	.57
August	83,720	4,040	1,840	2,701	2,307	.340	.39
September	81,560	5,310	1,940	2,719	2,412	.356	.40
Water year 1948-49	4,005,500	121,000	1,840	10,970	10,970	1.62	21.96
October 1949	86,320	3,940	2,020	2,785	2,625	.387	.45
November	139,820	8,120	3,310	4,661	4,624	.682	.76
December	339,030	31,900	3,070	10,940	11,260	1.66	1.92
Calendar year 1949	3,954,560	121,000	1,840	10,820	10,880	1.60	21.78
January 1950	429,920	26,300	8,270	13,870	14,390	2.12	2.45
February	372,870	23,100	7,980	13,320	13,280	1.96	2.04
March	677,710	74,100	7,080	21,860	22,890	3.38	3.89
April	730,800	76,600	12,300	24,360	24,840	3.66	4.09
May	420,270	17,200	8,720	13,560	13,600	2.01	2.31
June	346,540	18,900	6,950	11,550	11,510	1.70	1.89
July	224,790	12,500	4,930	7,574	7,213	1.06	1.22
August	152,350	7,820	2,960	4,915	4,418	.652	.75
September	141,630	7,180	3,220	4,721	4,292	.633	.71
Water year 1949-50	4,072,050	76,600	2,020	11,160	11,230	1.66	22.49

* Adjusted for diversion to Delaware & Raritan Canal and for change in contents in Lakes Hopatcong and Wallenpaupack and in Toronto, Cliff Lake, and Swinging Bridge Reservoirs.

Assunpink Creek at Trenton

Location.--Lat 40°13'27", long 74°44'58", on left bank at Chambers Street Bridge in Trenton, Mercer County, 1½ miles upstream from mouth.

Drainage area.--89.4 sq.mi.

Records available.--July 1923 to September 1950.

Gage.--Water-stage recorder. Concrete control since July 10, 1932. Datum of gage is 24.76 ft. above mean sea level (New Jersey Geological Survey benchmark).

Average discharge.--27 years (1923-50), 116 cfs.

Extremes.--1923-50: Maximum discharge, 3,320 cfs Sept. 22, 1938 (gage height, 10.74 ft), from rating curve extended above 1,300 cfs by logarithmic plotting; minimum, 1.0 cfs Aug. 21, Oct. 22, 1931 (gage height, 0.25 ft); minimum daily, 4 cfs July 21, Aug. 8, Sept. 2, 1929.

Peak discharge (base, 800 cfs).--
1946: Nov. 29 (11 a.m.) 937 cfs (5.69 ft); Dec. 31 (10 p.m.) 804 cfs (5.31 ft); June 2 (5:30 p.m.) 1,820 cfs (7.91 ft); July 24-25 (11 p.m. to 2 a.m.) 849 cfs (5.44 ft).
1947: May 4 (10 p.m.) 767 cfs (5.20 ft), (annual maximum below base).
1948: Nov. 12 (1 p.m.) 923 cfs (5.65 ft); Apr. 1 (5 p.m.) 1,010 cfs (5.89 ft); June 13 (9:30 a.m.) 856 cfs (5.46 ft).
1949: Dec. 30 (11 p.m.) 2,200 cfs (8.71 ft); Jan. 28 (3 p.m.) 808 cfs (5.32 ft); July 17 (4 p.m.) 856 cfs (5.46 ft).
1950: July 10 (10 p.m.) 803 cfs (5.52 ft); Aug. 3 (8:30 p.m.) 1,850 cfs (8.12 ft).

Remarks.--Some regulation from mills above station.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	59	659	587	177	207	137	68	141	53	50	57
2	55	55	382	353	161	179	128	61	1,300	54	48	50
3	52	53	260	253	129	157	119	56	1,420	53	44	49
4	48	49	211	202	102	133	110	52	920	52	43	43
5	45	48	175	175	91	124	102	54	486	56	45	45
6	57	46	243	169	86	116	94	56	284	47	45	41
7	104	48	258	171	116	112	88	54	207	41	91	36
8	83	49	214	155	102	116	85	50	161	38	84	34
9	82	52	181	153	102	109	90	47	126	37	72	34
10	77	56	165	211	110	109	85	44	102	35	63	33
11	69	44	152	179	102	107	80	43	114	34	57	32
12	65	52	126	185	96	99	78	75	209	33	53	29
13	58	58	112	171	91	96	73	93	277	32	49	27
14	58	72	109	146	97	93	70	126	280	29	47	26
15	50	86	107	131	116	217	68	335	239	29	43	25
16	48	74	99	109	99	214	66	329	148	28	44	25
17	45	65	90	97	96	171	59	472	107	27	55	25
18	44	65	84	94	93	299	57	478	97	26	119	24
19	43	77	79	90	85	348	56	353	85	25	218	24
20	42	136	79	75	117	246	54	220	91	27	175	24
21	37	96	79	78	134	194	50	157	96	42	146	33
22	42	184	80	82	135	153	49	144	91	155	107	37
23	53	168	79	75	165	126	49	162	82	696	78	37
24	80	152	78	75	155	116	49	128	72	804	62	79
25	85	134	112	78	131	140	54	97	63	744	53	93
26	105	114	569	82	119	136	86	78	56	461	49	105
27	95	95	584	84	125	391	84	116	50	248	45	157
28	86	123	478	75	277	255	82	142	48	133	48	148
29	83	733	416	75	-------	194	76	138	52	90	47	94
30	75	801	486	84	-------	175	70	131	54	70	50	63
31	68	-------	718	159	-------	155	-------	107	-------	58	52	-------

Assunpink Creek at Trenton--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	49	38	41	75	102	69	59	338	101	47	32	43
2	45	37	39	72	91	112	127	300	88	39	28	74
3	43	37	35	80	84	202	284	297	77	37	26	62
4	39	38	34	96	86	200	216	430	67	32	27	47
5	36	37	35	105	84	248	304	432	62	31	26	43
6	34	36	36	112	79	277	317	495	66	29	24	43
7	34	37	37	94	85	265	234	372	83	30	25	44
8	33	41	37	91	86	227	179	267	183	39	29	42
9	32	41	38	88	73	175	158	189	183	43	36	39
10	47	39	39	76	76	155	137	142	146	48	52	37
11	50	37	39	a84	72	133	121	120	128	62	56	37
12	61	38	42	a86	69	121	112	108	95	63	49	35
13	62	37	45	a90	66	116	99	100	70	51	39	30
14	54	38	41	a120	69	222	96	101	72	43	34	29
15	49	37	37	a180	78	198	102	100	98	43	30	36
16	44	35	36	a170	88	161	138	90	74	52	58	53
17	41	43	35	a160	94	138	189	84	66	59	84	36
18	41	50	36	a137	96	112	146	84	59	55	74	31
19	38	50	38	a150	94	96	121	90	59	68	70	28
20	36	49	46	a200	78	88	101	174	79	73	105	28
21	37	45	158	a190	52	84	97	164	344	74	144	26
22	36	93	185	a177	61	80	107	315	97	135	146	43
23	35	85	207	151	62	78	97	343	69	156	101	48
24	35	76	220	119	62	79	88	310	59	158	67	43
25	34	75	153	102	66	107	84	259	56	116	51	43
26	37	69	104	110	72	102	86	259	52	80	69	39
27	38	59	78	183	75	91	80	166	49	52	84	37
28	42	50	66	148	75	82	75	132	44	42	88	31
29	42	47	73	137	-------	73	69	136	49	38	82	29
30	42	43	84	119	-------	68	72	258	51	38	62	28
31	41	-------	79	114	-------	62	-------	123	-------	38	52	-------

a No gage-height record; discharge computed on basis of recorder graph for available fragments of record and records for Millstone River near Kingston and Crosswicks Creek at Extonville.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	79	84	99	65	276	538	80	156	187	131	47
2	26	73	79	338	62	216	548	77	152	132	126	43
3	25	72	76	307	63	489	466	101	137	108	150	40
4	24	157	74	286	66	402	300	118	118	95	245	39
5	23	185	73	310	66	276	219	314	101	83	314	38
6	24	152	74	265	67	200	176	370	89	80	422	38
7	24	166	73	204	66	230	158	405	97	79	475	43
8	25	306	79	162	67	259	142	393	111	73	410	44
9	26	364	79	154	66	232	137	245	97	66	276	58
10	26	292	74	160	66	351	120	187	94	60	168	112
11	24	286	76	123	65	312	120	146	90	56	121	125
12	23	591	73	125	67	304	162	127	141	55	132	108
13	24	391	66	270	70	241	146	320	563	66	118	95
14	24	367	62	272	222	198	179	410	364	97	98	77
15	24	259	62	226	351	172	254	370	380	106	86	59
16	24	183	206	200	432	191	217	339	302	109	77	49
17	25	139	166	176	711	217	181	545	215	88	73	46
18	24	116	160	144	663	187	146	397	150	70	67	43
19	24	103	146	113	581	181	128	300	259	62	65	40
20	26	94	108	108	469	193	118	221	317	58	107	43
21	26	88	90	125	307	164	111	170	265	56	156	42
22	25	82	80	144	226	156	101	139	254	63	113	40
23	24	108	77	135	189	166	95	118	241	144	103	39
24	23	130	76	116	150	223	92	108	189	142	94	38
25	22	185	67	114	166	185	98	227	158	162	83	37
26	22	154	65	109	215	168	98	212	133	139	73	37
27	23	144	65	98	200	189	95	162	133	207	66	38
28	42	130	66	90	339	265	90	164	158	170	60	38
29	208	108	66	84	342	208	88	148	148	183	55	38
30	106	94	67	79	-------	174	84	137	170	162	52	39
31	84	-------	67	70	-------	148	-------	183	-------	128	49	-------

Assunpink Creek at Trenton--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	46	150	1,310	272	206	202	119	72	25	24	34
2	39	44	142	635	241	204	234	135	67	24	24	31
3	38	44	128	345	204	200	202	262	63	25	24	27
4	38	60	176	245	245	200	179	179	59	31	28	23
5	40	56	146	262	279	208	148	150	58	30	43	50
6	40	52	144	628	281	210	318	125	56	27	46	97
7	40	78	160	498	314	204	252	128	52	28	57	58
8	42	70	111	378	290	191	230	106	48	27	52	59
9	42	69	95	272	256	168	187	94	46	24	36	50
10	40	76	84	215	230	148	150	130	46	26	27	36
11	42	73	74	187	204	262	132	130	43	29	25	31
12	45	66	72	168	174	267	123	123	42	32	24	28
13	42	65	72	154	176	254	128	111	42	179	23	26
14	40	60	69	144	188	210	144	105	40	100	25	37
15	39	58	80	132	174	168	132	98	39	89	26	39
16	38	56	141	125	179	142	130	88	38	94	24	48
17	37	56	212	123	221	138	116	83	38	209	22	45
18	43	55	202	120	185	135	123	79	37	361	21	42
19	44	53	176	121	179	133	228	78	37	118	21	42
20	46	66	133	118	327	128	172	95	38	89	18.3	36
21	46	63	137	142	288	141	158	109	36	85	17.3	32
22	44	65	128	526	292	181	150	120	32	64	17.3	33
23	44	67	128	394	410	390	219	304	30	47	15.5	45
24	56	63	120	436	314	327	208	226	28	40	16.4	40
25	66	59	108	348	276	263	189	270	27	36	14.7	40
26	62	56	89	330	223	217	156	204	26	35	16.4	40
27	60	82	82	427	181	181	132	148	26	35	14.7	36
28	62	82	76	622	193	160	116	109	26	32	14.7	33
29	58	155	109	524	-------	142	108	94	26	30	46	55
30	49	158	1,080	388	-------	132	95	83	26	25	33	68
31	46	-------	2,030	279	-------	132	-------	76	-------	24	26	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	86	50	71	151	80	154	121	150	20	37	105
2	52	95	47	65	265	80	127	105	200	19	41	96
3	53	90	45	68	251	65	114	111	140	18	766	140
4	47	84	42	68	196	60	108	102	170	20	683	146
5	40	77	42	66	168	62	104	94	150	30	464	106
6	39	69	42	64	142	65	98	90	130	130	364	98
7	37	58	44	69	126	65	88	81	110	120	252	99
8	34	51	45	64	105	85	81	70	85	60	168	90
9	34	47	43	64	134	168	75	64	70	50	126	72
10	35	46	39	70	178	119	72	60	60	380	98	64
11	34	45	44	90	160	108	72	57	50	487	89	64
12	32	43	56	80	144	114	72	56	47	512	73	62
13	30	43	95	75	154	182	73	53	44	275	62	109
14	28	47	102	80	410	198	73	50	42	289	56	150
15	30	48	87	75	572	170	68	59	46	167	51	118
16	28	46	78	72	464	150	65	78	55	266	49	108
17	32	45	68	70	350	124	64	75	60	303	46	111
18	30	42	59	70	244	105	64	60	50	190	45	102
19	30	39	78	75	184	88	62	160	46	152	55	81
20	30	38	81	66	140	81	72	150	44	131	197	70
21	32	38	78	64	108	161	81	120	50	106	101	64
22	30	37	77	62	103	210	78	90	49	85	70	61
23	30	36	77	60	108	549	77	80	40	65	73	58
24	32	36	73	65	110	382	78	70	36	55	77	52
25	33	42	66	62	111	278	90	60	33	50	66	51
26	116	42	64	60	102	226	93	55	32	48	55	52
27	76	42	157	63	84	250	90	60	30	45	48	50
28	64	42	147	62	74	307	162	55	26	46	45	49
29	66	48	121	70	-------	289	132	100	22	40	58	50
30	60	50	106	74	-------	247	126	150	21	34	70	46
31	95	-------	86	128	-------	192	-------	110	-------	34	124	-------

Note.--No gage-height record Jan. 9-25, May 17 to June 21, July 2-10, 22-25; discharge computed on basis of recorded range in stage when available, precipitation records, and records for Millstone River at Blackwells Mills, Crosswicks Creek at Extonville, and stations on other nearby streams.

Assunpink Creek at Trenton--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	1,981	105	37	63.9	0.715	0.82
November	3,830	801	44	128	1.43	1.59
December	7,465	718	78	241	2.70	3.11
Calendar year 1945	48,653	801	21	133	1.49	20.24
January 1946	4,653	587	75	150	1.68	1.94
February	3,409	277	85	122	1.36	1.42
March	5,287	391	93	171	1.91	2.20
April	2,348	137	49	78.3	.876	.98
May	4,467	478	43	144	1.61	1.86
June	7,458	1,420	48	249	2.79	3.10
July	4,167	804	25	134	1.50	1.73
August	2,183	218	43	70.4	.787	.91
September	1,529	157	24	51.0	.570	.64
Water year 1945-46	48,777	1,420	24	134	1.50	20.30
October 1946	1,287	62	32	41.5	.464	.54
November	1,437	93	35	47.9	.536	.60
December	2,169	220	34	70.0	.783	.90
Calendar year 1946	40,394	1,420	24	111	1.24	16.82
January 1947	3,796	200	72	122	1.36	1.58
February	2,175	102	52	77.7	.869	.90
March	4,219	277	62	136	1.52	1.76
April	4,090	317	59	136	1.52	1.70
May	6,778	495	84	219	2.45	2.82
June	2,726	344	44	90.9	1.02	1.13
July	1,871	158	29	60.4	.676	.78
August	1,850	146	24	59.7	.668	.77
September	1,184	74	26	39.5	.442	.49
Water year 1946-47	33,582	495	24	92.0	1.03	13.97
October 1947	1,096	208	22	35.4	.396	.46
November	5,598	591	72	187	2.09	2.33
December	2,676	206	62	86.3	.965	1.11
Calendar year 1947	38,059	591	22	104	1.16	15.83
January 1948	5,206	338	70	168	1.88	2.17
February	6,420	711	62	221	2.47	2.67
March	7,273	489	148	235	2.63	3.03
April	5,407	548	84	180	2.01	2.25
May	7,233	545	77	233	2.61	3.01
June	5,782	563	89	193	2.16	2.41
July	3,286	207	55	106	1.19	1.37
August	4,565	475	49	147	1.64	1.90
September	1,573	125	37	52.4	.586	.65
Water year 1947-48	56,115	711	22	153	1.71	23.36
October 1948	1,406	66	37	45.4	.508	.58
November	2,053	158	44	68.4	.765	.85
December	6,614	2,030	69	213	2.38	2.75
Calendar year 1948	56,818	2,030	37	155	1.73	23.64
January 1949	10,586	1,310	118	341	3.81	4.40
February	6,791	410	174	243	2.72	2.83
March	6,037	390	128	195	2.18	2.51
April	5,052	318	95	168	1.88	2.10
May	4,156	304	73	134	1.50	1.73
June	1,244	72	26	41.5	.464	.52
July	2,020	361	24	65.2	.729	.84
August	842.3	57	14.7	27.2	.304	.35
September	1,271	97	23	42.4	.474	.53
Water year 1948-49	48,072.3	2,030	14.7	132	1.48	19.99
October 1949	1,361	116	28	43.9	.491	.57
November	1,552	95	36	51.7	.578	.65
December	2,237	157	39	72.2	.808	.93
Calendar year 1949	43,149.3	1,310	14.7	118	1.32	17.96
January 1950	2,192	128	60	70.7	.791	.91
February	5,329	572	74	190	2.13	2.22
March	5,260	549	60	170	1.90	2.19
April	2,713	162	62	90.4	1.01	1.13
May	2,646	160	50	85.4	.955	1.10
June	2,088	200	21	69.6	.779	.87
July	4,227	512	18	136	1.52	1.76
August	4,504	766	37	145	1.62	1.87
September	2,520	150	46	84.0	.940	1.05
Water year 1949-50	36,629	766	18	100	1.12	15.25

Crosswicks Creek at Extonville

Location.--Lat 40°08'15", long 74°36'02", on right bank upstream from highway bridge at Extonville, Mercer County, half a mile upstream from Pleasant Run and 0.7 mile downstream from Mercer-Monmouth county line.

Drainage area.--83.6 sq mi.

Records available.--August 1940 to September 1950.

Gage.--Water-stage recorder and concrete control. Datum of gage is 24.94 ft above mean sea level, datum of 1929.

Average discharge.--10 years (1940-50), 123 cfs.

Extremes.--1940-50: Maximum discharge, 3,360 cfs Sept. 1, 1940 (gage height, 12.05 ft); minimum, 13.1 cfs Feb. 14, 1942 (gage height, 2.24 ft), result of freezeup.

Flood of Sept. 22, 1938, reached a stage of 13.0 ft (discharge, 4,100 cfs) from information by local residents.

Peak discharge (base, 650 cfs).--
1946: Nov. 29 (7:30 p.m.) 1,430 cfs (9.20 ft); Dec. 26 (5 to 6 p.m.) 1,180 cfs (8.51 ft); Dec. 30 (6 a.m.) 1,080 cfs (7.98 ft); June 3 (about 5 a.m.) 955 cfs (7.41 ft); July 24 (12:45 a.m.) 1,370 cfs (9.10 ft).
1947: Aug. 9 (2 a.m.) 737 cfs (6.31 ft).
1948: Nov. 9 (2 p.m.) 784 cfs (6.56 ft); Nov. 13 (12:30 a.m.) 972 cfs (7.49 ft); Jan. 3 (3:30 p m.) 792 cfs (6.60 ft); Jan. 14 (11 a.m.) 653 cfs (5.84 ft); Feb. 14 (12 p.m.) 2,360 cfs (10.77 ft); Apr. 2 (7 a.m.) 907 cfs (7.18 ft); May 31 (3 p.m.) 1,190 cfs (8.52 ft).
1949: Dec. 31 (5:30 p.m.) 1,300 cfs (8.95 ft); Jan. 7 (10 a.m.) 681 cfs (6.00 ft); Jan. 29 (3 a.m.) 831 cfs (6.80 ft); Feb. 23 (9:30 p.m.) 786 cfs (6.57 ft).
1950: Mar. 24 (4 to 5 a.m.) 530 cfs (5.10 ft), (annual maximum below base).

Remarks.--Flow regulated occasionally by draining and filling of lake about 10 miles upstream.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	73	478	566	268	208	136	86	250	102	72	57
2	82	71	287	310	162	162	123	82	700	195	68	50
3	72	70	223	212	133	150	123	78	850	219	66	64
4	67	75	184	181	113	130	123	76	368	125	72	66
5	64	70	156	168	108	123	115	86	241	96	70	53
6	82	66	253	178	110	117	107	89	184	80	64	51
7	110	64	326	188	139	115	102	86	153	78	190	50
8	95	63	244	172	125	112	93	84	123	66	229	48
9	85	62	184	153	125	125	107	78	100	62	120	46
10	78	62	159	236	148	123	100	72	84	62	91	46
11	70	66	153	194	133	112	93	68	90	59	80	44
12	66	68	98	191	115	105	89	89	507	57	68	41
13	62	70	105	184	115	102	86	142	368	57	64	41
14	58	75	112	150	125	98	80	117	236	53	76	41
15	58	181	115	123	139	115	78	356	219	50	66	41
16	58	130	107	117	117	184	78	323	165	51	60	40
17	59	98	89	107	107	128	76	288	142	50	72	41
18	60	89	90	105	107	175	74	230	142	46	123	40
19	62	91	100	102	100	319	70	226	156	44	107	40
20	59	153	107	86	279	223	68	156	125	44	98	41
21	57	145	105	110	364	142	66	135	123	88	78	46
22	59	174	105	136	233	100	66	140	112	198	72	68
23	72	247	93	101	156	112	66	120	96	984	70	55
24	110	160	93	98	142	102	66	100	82	1,120	70	104
25	115	93	102	112	139	145	68	90	76	519	60	313
26	135	107	866	117	123	139	120	85	70	250	57	187
27	115	98	684	110	123	181	125	220	62	159	55	78
28	100	113	297	98	233	168	100	200	62	112	51	68
29	90	1,010	493	93	-------	150	91	150	134	89	50	62
30	82	976	856	100	-------	123	91	125	125	78	70	78
31	77	-------	600	216	-------	168	-------	110	-------	74	74	-------

Note.--No gage-height record Oct. 1-16, Oct. 24 to Nov. 10, May 21 to June 3; discharge computed on basis of recorded range in stage, shape of typical high-water gage-height graph, and records for stations on nearby streams. Backwater from moss Oct. 17-22, Nov.11-13, Mar. 7 to Apr. 8, Apr. 12 to May 8, July 28 to Aug.4, Aug. 12 to Sept. 13.

Crosswicks Creek at Extonville--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	98	57	64	84	142	86	82	390	115	51	55	50
2	72	60	60	149	117	208	124	481	98	48	51	51
3	66	55	51	212	105	538	252	208	89	44	50	53
4	62	59	55	223	122	380	120	272	82	41	48	48
5	60	57	55	148	216	247	159	502	76	46	48	48
6	57	55	57	130	156	230	216	478	74	41	43	53
7	55	55	59	120	125	178	148	a350	107	38	41	60
8	51	60	60	123	125	188	115	a150	233	64	190	59
9	51	66	60	120	106	150	125	156	212	76	661	53
10	70	64	60	100	115	136	150	136	136	98	355	48
11	84	59	60	93	102	128	125	117	105	76	117	46
12	68	60	62	96	96	123	123	110	89	80	51	44
13	74	60	76	89	96	115	123	102	76	62	68	43
14	66	59	51	124	96	200	107	120	78	123	64	41
15	60	59	38	184	110	163	125	172	120	290	60	40
16	57	57	48	223	120	145	133	123	98	69	57	53
17	55	59	57	184	120	123	208	107	78	149	82	46
18	55	80	60	142	112	107	148	102	102	181	91	43
19	57	74	60	117	105	100	122	100	234	137	78	40
20	55	66	57	221	86	96	107	243	66	201	121	40
21	53	64	260	319	64	100	100	317	93	112	150	41
22	53	95	570	168	102	98	115	493	82	316	107	46
23	53	148	272	117	100	96	105	540	70	268	80	70
24	51	91	156	107	102	98	96	301	64	98	66	53
25	48	80	114	107	100	162	91	145	66	91	59	53
26	51	78	55	110	96	75	93	201	64	74	57	62
27	46	76	80	181	98	84	89	156	62	64	80	50
28	70	76	84	153	93	89	82	128	60	60	62	44
29	66	70	96	125	-------	86	78	110	68	78	60	43
30	60	66	120	115	-------	86	80	232	57	62	57	41
31	59	-------	96	128	-------	84	-------	172	-------	59	53	-------

Note.--Backwater from moss Oct. 12-22, June 1-16, July 26 to Aug. 6, Sept. 5-30.
a No gage-height record; discharge computed on basis of records for Assunpink Creek at Trenton.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	156	98	101	73	167	355	89	699	208	94	53
2	44	105	86	486	69	194	794	86	273	159	175	51
3	44	91	86	624	69	498	382	125	198	117	162	51
4	44	264	89	286	71	295	216	181	172	98	434	51
5	43	499	86	238	73	178	181	228	148	f89	354	51
6	43	222	86	216	74	162	153	410	125	f84	424	51
7	43	150	84	175	74	205	145	267	117	f98	281	50
8	44	297	91	145	74	284	136	295	142	96	175	51
9	46	735	93	136	73	198	128	201	156	86	133	55
10	46	339	82	142	73	285	110	150	123	80	107	74
11	44	123	86	115	72	271	107	130	105	76	91	159
12	44	674	91	102	75	241	139	115	98	72	93	50
13	44	720	82	319	79	181	139	228	294	72	102	53
14	44	213	76	583	859	153	234	420	235	150	91	59
15	44	175	72	267	1,670	145	375	248	175	100	80	55
16	41	148	268	188	734	162	258	184	201	76	70	51
17	40	128	299	150	593	184	188	271	233	68	66	50
18	40	115	142	136	348	150	156	313	156	66	68	50
19	71	105	125	105	267	133	130	219	275	64	66	48
20	66	98	102	117	236	142	120	156	512	60	140	48
21	55	93	91	177	175	130	115	133	370	59	255	48
22	51	91	86	332	145	123	107	120	201	60	156	48
23	48	125	86	222	133	128	100	107	184	72	221	43
24	46	153	89	105	120	225	100	98	162	82	178	44
25	44	269	78	111	136	123	112	175	133	66	80	46
26	44	185	72	112	188	128	112	448	112	57	93	46
27	44	93	91	110	168	150	105	226	105	144	80	46
28	44	115	86	110	251	165	98	153	120	115	72	44
29	135	105	77	93	329	128	93	125	98	72	64	44
30	246	98	78	85	-------	117	91	158	86	62	59	44
31	120	-------	86	75	-------	120	-------	927	-------	59	57	-------

Note.--Stage-discharge relation affected by ice Jan. 25 to Feb. 13.
f Computed on basis of partly estimated gage-height graph.

Crosswicks Creek at Extonville--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	53	57	159	1,020	394	283	188	112	80	34	33	143
2	53	57	133	295	303	236	273	150	74	33	33	100
3	50	57	117	231	187	212	205	168	70	34	33	70
4	46	72	145	198	217	205	178	172	66	40	114	60
5	46	78	165	168	370	266	156	139	64	39	125	51
6	72	70	125	333	260	341	319	128	62	35	76	98
7	51	108	112	607	260	258	410	125	59	36	59	66
8	48	120	102	278	297	191	201	107	55	36	48	55
9	53	84	96	216	226	168	181	92	51	33	87	55
10	51	80	89	175	194	156	153	148	51	35	26	48
11	48	110	82	156	181	312	136	188	53	40	21	44
12	50	89	82	148	165	459	130	130	53	72	20	41
13	50	84	84	139	168	257	128	112	48	120	27	46
14	50	89	80	128	194	194	175	100	46	150	35	76
15	51	80	85	123	172	168	153	96	44	110	35	107
16	50	74	269	115	162	148	128	89	44	140	33	84
17	50	72	302	115	252	142	115	84	44	200	33	80
18	50	72	165	112	201	148	112	80	43	150	32	60
19	59	70	139	110	165	198	201	78	45	82	35	55
20	53	101	139	110	330	168	168	80	44	57	33	50
21	51	128	136	107	378	178	133	128	43	59	30	46
22	50	91	133	387	253	194	133	117	40	100	30	44
23	50	89	129	393	616	289	238	364	39	57	27	66
24	55	89	128	257	489	340	181	359	37	44	30	66
25	130	86	110	284	255	216	145	165	36	41	30	50
26	93	78	96	258	223	216	128	150	35	40	30	70
27	72	112	96	408	181	194	120	128	35	38	30	70
28	66	148	105	548	181	172	112	110	35	36	30	32
29	62	259	126	671	-------	150	105	98	35	35	62	40
30	60	342	530	296	-------	130	100	91	35	33	70	142
31	59	-------	1,160	250	-------	125	-------	84	-------	33	46	-------

Note.--No gage-height record June 17 to July 18; discharge computed on basis of hook-gage reading July 11, recorded range in stage, and records for Assunpink Creek at Trenton.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	93	148	64	76	159	84	120	142	120	36	20	130
2	70	168	60	76	248	86	110	145	172	33	29	72
3	62	150	60	78	242	74	100	156	112	32	127	74
4	57	107	57	82	148	70	98	168	150	35	223	102
5	55	89	55	80	117	72	96	133	283	41	86	70
6	51	76	55	78	102	76	98	120	128	53	66	55
7	50	70	55	78	100	74	86	110	98	53	64	48
8	50	66	59	76	89	80	82	91	80	41	58	46
9	48	64	55	118	102	125	78	84	70	35	46	43
10	46	60	48	50	136	100	76	82	64	165	41	41
11	44	60	59	80	125	66	76	89	60	346	40	44
12	43	60	74	84	110	112	76	84	55	143	38	60
13	41	59	110	93	107	202	84	82	51	86	35	85
14	41	70	125	105	309	282	86	76	50	84	33	250
15	41	76	96	91	438	172	84	74	59	64	32	148
16	43	68	80	84	410	133	80	193	64	169	32	100
17	41	66	68	78	212	115	76	153	62	228	30	78
18	41	64	70	84	159	102	76	115	51	110	30	64
19	50	60	102	89	136	86	72	275	48	74	32	57
20	46	59	117	76	112	84	86	293	51	60	109	57
21	43	57	91	74	91	172	120	175	55	57	238	55
22	41	55	82	74	96	304	98	128	a70	50	91	59
23	41	51	80	76	112	380	89	107	a50	44	68	64
24	40	51	91	72	117	454	89	100	a45	40	59	53
25	40	68	78	70	107	250	112	93	a45	40	53	48
26	79	78	74	68	96	175	110	89	a43	38	48	48
27	91	62	125	68	82	198	110	82	a39	38	43	46
28	60	59	148	68	78	230	207	74	a36	35	40	46
29	74	60	107	74	-------	262	247	112	a35	33	41	46
30	84	72	91	78	-------	172	150	165	33	30	89	46
31	121	-------	80	121	-------	136	-------	115	-------	82	192	-------

a No gage-height record; discharge computed on basis of recorded range in stage and records for stations on nearby streams.

Crosswicks Creek at Extonville--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	2,429	135	57	78.4	.938	1.08
November	4,820	1,010	62	161	1.93	2.14
December	7,864	866	89	254	3.04	3.50
Calendar year 1945	55,451.0	1,130	46	152	1.82	24.66
January 1946	5,024	566	86	162	1.94	2.23
February	4,281	364	100	153	1.83	1.90
March	4,456	319	98	144	1.72	1.98
April	2,780	136	66	92.7	1.11	1.24
May	4,287	356	68	138	1.65	1.91
June	6,145	850	62	205	2.45	2.73
July	5,267	1,120	44	170	2.03	2.34
August	2,563	229	50	82.7	.989	1.14
September	2,000	313	40	66.7	.798	.89
Water year 1945-46	51,916	1,120	40	142	1.70	23.08
October 1946	1,883	98	46	60.7	.726	.84
November	2,065	148	55	68.8	.823	.92
December	3,053	570	38	98.5	1.18	1.36
Calendar year 1946	43,804	1,120	38	120	1.44	19.48
January 1947	4,512	319	84	146	1.75	2.01
February	3,127	216	64	112	1.34	1.39
March	4,699	538	75	152	1.82	2.09
April	3,742	252	78	125	1.50	1.66
May	7,215	540	100	233	2.79	3.21
June	2,954	234	57	98.5	1.18	1.31
July	3,197	316	38	103	1.23	1.42
August	3,162	661	41	102	1.22	1.41
September	1,462	70	40	48.7	.583	.65
Water year 1946-47	41,071	661	38	113	1.35	18.27
October 1947	1,796	246	40	57.9	.693	.80
November	6,684	735	91	223	2.67	2.97
December	3,144	299	72	101	1.21	1.40
Calendar year 1947	45,694	735	38	125	1.50	20.32
January 1948	6,153	624	75	198	2.37	2.74
February	7,301	1,670	69	252	3.01	3.25
March	5,765	498	117	186	2.22	2.56
April	5,479	794	91	183	2.19	2.44
May	6,986	927	86	225	2.69	3.11
June	6,008	699	86	200	2.39	2.67
July	2,767	208	57	89.3	1.07	1.23
August	4,471	434	57	144	1.72	1.99
September	1,614	159	43	53.8	.644	.72
Water year 1947-48	58,168	1,670	40	159	1.90	25.88
October 1948	1,782	130	46	57.5	.688	.79
November	3,046	342	57	102	1.22	1.36
December	5,429	1,160	80	175	2.09	2.42
Calendar year 1948	56,801	1,670	43	155	1.85	25.28
January 1949	8,636	1,020	107	279	3.34	3.84
February	7,274	616	162	260	3.11	3.24
March	6,664	459	125	215	2.57	2.96
April	5,105	410	100	170	2.03	2.27
May	4,173	364	78	135	1.61	1.86
June	1,466	80	35	48.9	.585	.65
July	1,994	200	33	64.3	.769	.89
August	1,353	125	20	43.6	.522	.60
September	2,015	143	32	67.2	.804	.90
Water year 1948-49	48,937	1,160	20	134	1.60	21.78
October 1949	1,727	121	40	55.7	.666	.77
November	2,253	168	51	75.1	.898	1.00
December	2,516	148	48	81.2	.971	1.12
Calendar year 1949	45,176	1,020	20	124	1.48	20.10
January 1950	2,499	121	50	80.6	.964	1.11
February	4,335	438	78	155	1.85	1.93
March	4,948	454	70	160	1.91	2.20
April	3,072	247	72	102	1.22	1.37
May	3,905	293	74	126	1.51	1.74
June	2,229	233	33	74.3	.889	.99
July	2,375	346	30	76.6	.916	1.06
August	2,128	238	20	68.6	.821	.95
September	2,133	250	41	71.1	.850	.95
Water year 1949-50	34,120	454	20	93.5	1.12	15.19

North Branch Rancocas Creek at Pemberton

Location.--Lat 39°58'13", long 74°41'51", 600 ft downstream from highway bridge at Pemberton, Burlington County, and 12 miles upstream from confluence with South Branch.

Drainage area.--111 sq mi.

Records available.--September 1921 to September 1950.

Gage.--Water-stage recorder. Datum of gage is 24.65 ft above mean sea level, datum of 1929. Prior to June 9, 1923, staff gage at same site and datum.

Average discharge.--29 years (1921-50), 163 cfs.

Extremes.--1921-50: Maximum discharge, 1,730 cfs Aug. 21, 1939 (gage height, 10.77 ft, from floodmark in recorder shelter), from rating curve extended above 1,300 cfs; minimum daily, 9 cfs Sept. 29, 1932.

Peak discharge (base, 600 cfs).--
1946: Nov. 30 (6 p.m.) 773 cfs (7.00 ft); Dec. 31 (6 to 9 p.m.) 746 cfs (6.90 ft); July 24 (3 a.m.) 855 cfs (7.29 ft).
1947: May 22 (10:30 to 12 p.m.) 496 cfs (5.25 ft), (annual maximum below base).
1948: Feb. 14 (4 p.m.) 656 cfs (6.34 ft); Apr. 2 (10 to 11 p.m.) 611 cfs (6.03 ft); May 15 (6 a.m.) 610 cfs (6.02 ft); June 1 (5 to 8 p.m.) 743 cfs (6.84 ft).
1949: Dec. 31 (10 p.m.) 694 cfs (7.04 ft); Jan. 28 (1 p.m.) 648 cfs (6.55 ft).
1950: Mar. 24 (5 to 7 a.m.) 416 cfs (4.86 ft), (annual maximum below base).

Remarks.--Diurnal fluctuation caused by grist mill just above station prior to 1942. Flow regulated occasionally by operation of gate in dam 500 ft above station thereafter.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	103	81	638	685	213	246	174	154	210	158	109	98
2	97	82	506	606	217	233	198	144	357	191	106	92
3	99	76	247	491	200	217	246	123	456	210	105	87
4	94	79	264	391	178	202	275	111	452	190	106	81
5	90	101	268	365	159	201	204	117	431	158	108	78
6	109	87	321	342	162	191	186	130	350	135	105	76
7	135	81	385	323	184	176	169	135	295	123	141	79
8	123	110	404	302	185	172	158	118	219	112	203	80
9	108	78	351	210	185	182	169	109	179	95	191	79
10	102	46	312	239	196	184	161	134	150	95	157	77
11	99	46	217	264	193	157	155	169	126	92	142	76
12	98	49	200	275	186	138	149	160	263	87	121	79
13	87	50	210	268	178	132	141	156	269	92	106	77
14	79	58	208	251	179	126	136	172	272	90	103	70
15	76	95	204	236	179	155	130	313	258	82	104	70
16	78	92	190	220	170	183	128	315	257	81	102	66
17	82	81	186	207	163	181	113	337	237	75	116	65
18	73	72	186	198	156	242	132	360	212	72	124	66
19	68	75	172	192	157	309	116	310	188	70	142	62
20	68	114	168	184	261	266	116	250	171	72	146	65
21	111	122	163	193	275	217	124	220	159	76	126	69
22	73	192	162	200	266	210	123	218	153	153	112	84
23	65	221	162	196	241	192	109	204	141	519	108	82
24	113	213	162	184	232	178	106	188	126	712	107	156
25	141	198	176	187	227	190	112	178	120	369	101	191
26	300	178	334	190	217	192	152	166	112	246	92	173
27	246	163	416	186	208	230	164	185	106	204	87	123
28	173	170	385	174	243	243	147	235	179	170	87	91
29	87	551	489	171	-------	244	121	292	286	136	85	79
30	78	726	562	176	-------	225	145	231	214	127	94	151
31	76	-------	698	212	-------	197	-------	230	-------	117	104	-------

North Branch Rancocas Creek at Pemberton--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	246	70	81	106	176	126	123	285	220	94	79	90
2	242	70	75	143	177	212	128	318	200	96	76	86
3	180	70	68	176	166	304	160	304	190	95	72	81
4	166	73	71	180	164	322	162	257	151	83	71	81
5	150	72	73	160	195	314	164	305	130	81	68	87
6	109	68	70	123	190	287	161	428	137	84	66	100
7	90	66	74	122	183	272	150	341	157	95	68	100
8	64	74	77	139	180	271	141	300	228	115	135	92
9	52	80	76	135	196	232	142	205	243	140	177	80
10	60	77	73	128	226	204	145	166	228	141	189	79
11	75	72	72	126	199	189	145	149	204	110	177	75
12	79	82	69	126	180	180	169	231	181	101	143	70
13	85	119	72	120	157	124	166	312	153	90	118	70
14	108	92	76	145	144	142	146	258	142	85	102	66
15	97	77	74	170	145	164	149	192	157	101	95	68
16	103	72	70	196	154	164	157	165	147	100	81	76
17	75	72	68	195	160	158	182	162	130	104	121	75
18	82	89	70	176	149	149	172	145	130	152	172	82
19	76	87	70	162	156	140	154	144	150	204	182	70
20	65	80	71	202	191	135	152	173	152	221	158	68
21	60	75	219	222	175	130	154	250	146	179	164	73
22	68	92	276	206	174	132	156	364	126	279	165	85
23	72	114	283	185	170	131	135	429	111	228	163	96
24	76	103	180	172	141	130	142	330	104	205	157	84
25	98	93	148	167	135	138	186	294	101	165	135	79
26	105	88	133	161	137	140	153	261	101	126	113	a90
27	84	94	125	192	135	140	121	240	103	107	109	a80
28	89	96	107	182	130	140	112	219	89	98	116	a74
29	81	89	114	176	-------	133	108	194	90	96	107	a70
30	75	83	123	168	-------	119	107	252	93	91	100	109
31	72	-------	116	179	-------	116	-------	236	-------	84	98	-------

a No gage-height record; discharge computed on basis of recorded range in stage and records for stations on nearby streams.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	64	78	154	156	150	254	395	159	729	297	185	89
2	54	68	142	413	160	282	586	165	662	292	218	83
3	126	66	136	461	160	348	552	196	555	278	244	75
4	235	118	131	364	150	330	425	156	383	241	332	75
5	189	198	123	326	150	315	312	281	250	204	376	80
6	127	260	123	262	160	282	274	359	271	189	373	83
7	77	185	116	249	150	280	274	401	269	202	340	81
8	62	315	117	223	150	299	257	421	264	200	305	79
9	54	403	118	219	150	293	239	314	238	185	251	81
10	58	310	116	215	150	340	216	306	216	165	210	98
11	58	284	116	200	160	336	205	312	202	147	153	123
12	a57	415	115	188	170	342	216	347	196	130	136	114
13	a58	434	112	325	188	318	234	375	198	131	139	98
14	a59	355	106	372	465	289	339	496	193	154	171	86
15	a59	310	*104	310	495	268	460	575	196	149	159	78
16	62	269	195	290	529	254	365	462	210	131	173	75
17	62	236	221	260	395	247	365	435	224	127	141	73
18	64	212	214	230	356	238	318	421	216	127	112	74
19	107	191	157	190	315	232	276	401	247	119	97	78
20	84	173	114	200	*303	244	242	328	320	112	130	77
21	80	163	131	270	240	246	220	264	328	110	210	75
22	81	158	136	300	210	220	203	287	312	110	280	74
23	76	170	137	250	202	212	185	299	270	110	339	70
24	91	183	128	200	192	228	181	257	244	119	260	72
25	92	217	134	210	194	227	187	248	256	110	195	69
26	83	219	132	220	206	219	187	247	185	96	163	71
27	66	207	137	220	210	208	183	246	175	105	141	68
28	74	192	137	210	256	203	177	250	169	111	122	68
29	87	180	135	*200	276	199	170	231	158	110	113	69
30	102	170	132	180	-------	193	167	261	169	108	108	68
31	95	-------	129	160	-------	196	-------	589	-------	161	99	-------

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of recorded range in stage and records for stations on nearby streams.

Note.--Stage-discharge relation affected by ice Jan. 15 to Feb. 12 (no gage-height record Jan. 15-29, 31, Feb. 1-5, 9-11).

North Branch Rancocas Creek at Pemberton--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	72	89	287	570	499	319	233	181	215	72	71	244
2	76	87	247	434	407	264	217	211	162	78	62	260
3	78	83	200	295	374	297	263	290	127	81	62	190
4	69	94	221	273	391	297	254	265	122	72	115	126
5	71	94	212	269	405	303	249	236	122	66	152	97
6	87	92	217	409	376	309	355	210	119	62	135	84
7	85	132	193	430	377	306	376	181	113	64	106	74
8	77	136	166	320	366	287	359	168	108	72	89	79
9	80	111	156	305	343	266	308	161	110	60	83	83
10	79	102	144	274	325	249	287	185	118	61	72	75
11	74	117	132	246	310	326	263	202	131	65	68	68
12	73	112	121	228	310	308	246	197	118	66	62	63
13	70	113	116	210	222	366	232	191	108	116	58	66
14	75	116	111	198	246	367	240	177	103	120	57	83
15	71	107	120	182	256	314	241	227	98	96	58	86
16	68	98	204	173	261	224	247	202	101	83	56	89
17	71	97	225	168	307	219	227	161	113	83	53	83
18	76	100	203	163	313	260	200	145	112	81	53	75
19	75	97	184	161	279	297	210	144	105	73	55	70
20	81	121	179	159	349	294	209	158	97	68	54	64
21	107	139	174	161	333	279	201	198	95	104	52	60
22	84	139	192	278	361	264	208	212	91	113	50	58
23	80	136	210	270	519	351	283	359	86	93	50	70
24	92	118	201	356	481	340	278	373	83	75	52	70
25	129	112	186	330	425	321	247	395	79	64	52	66
26	121	108	165	340	364	322	204	335	73	61	50	58
27	101	141	180	387	324	304	184	301	76	60	50	61
28	97	153	102	551	314	214	200	268	77	60	50	75
29	117	279	139	567	-------	188	194	254	77	57	75	78
30	122	284	341	509	-------	214	170	222	79	57	90	132
31	93	-------	623	417	-------	215	-------	241	-------	77	125	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	137	125	106	102	152	146	236	214	200	70	52	105
2	101	136	98	101	196	137	204	200	201	78	54	84
3	80	130	95	106	191	127	177	217	179	93	70	81
4	86	127	89	108	178	120	157	207	209	93	106	97
5	81	103	85	107	152	115	151	193	210	84	97	86
6	73	85	82	106	135	115	147	178	190	99	74	69
7	70	78	81	106	126	112	140	158	163	104	66	62
8	72	75	79	103	116	115	132	140	134	86	59	62
9	75	83	60	98	120	140	126	129	118	70	55	60
10	72	90	52	101	135	135	120	130	107	127	53	57
11	68	92	65	104	142	130	118	176	102	159	52	61
12	65	91	87	101	135	142	117	158	95	134	52	68
13	75	90	116	105	133	204	118	152	91	102	52	93
14	186	109	122	111	210	228	118	149	94	106	48	162
15	238	117	108	108	305	217	118	172	113	94	46	186
16	164	107	95	103	262	204	116	241	116	105	45	157
17	87	100	85	98	277	191	122	215	108	119	44	108
18	74	99	83	103	246	179	124	192	95	102	47	89
19	79	91	98	106	207	164	126	334	94	87	49	87
20	75	87	109	103	188	151	143	345	100	77	96	97
21	75	84	107	100	164	211	144	301	95	73	167	84
22	72	81	102	100	150	247	150	269	93	68	165	90
23	72	78	99	100	157	373	137	224	88	65	108	91
24	67	77	103	100	162	402	131	205	85	63	77	84
25	72	91	96	98	160	330	145	174	89	62	66	72
26	96	104	92	95	154	309	145	153	85	60	62	76
27	76	102	124	95	169	279	141	146	78	62	62	72
28	63	93	143	93	157	268	224	135	68	60	52	75
29	73	97	136	98	-------	269	219	165	68	59	57	74
30	101	107	120	99	-------	265	208	189	70	56	98	72
31	154	-------	107	130	-------	250	-------	185	-------	54	132	-------

North Branch Rancocas Creek at Pemberton--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	3,331	300	65	107	0.964	1.12
November	4,287	726	46	143	1.29	1.44
December	9,346	698	162	301	2.71	3.13
Calendar year 1945	68,917	867	46	189	1.70	23.10
January 1946	8,318	685	171	268	2.41	2.79
February	5,610	275	156	200	1.80	1.88
March	6,211	309	126	200	1.80	2.08
April	4,559	275	106	152	1.37	1.53
May	6,164	360	109	199	1.79	2.07
June	6,948	456	106	232	2.09	2.33
July	5,109	712	70	165	1.49	1.71
August	3,640	203	85	117	1.05	1.22
September	2,722	191	62	90.7	.817	.91
Water year 1945-46	66,245	726	46	181	1.63	22.21
October 1946	3,084	246	52	99.5	.896	1.03
November	2,489	119	66	83.0	.748	.83
December	3,274	283	68	106	.955	1.10
Calendar year 1946	58,128	712	52	159	1.43	19.48
January 1947	5,040	222	106	163	1.47	1.69
February	4,685	226	130	167	1.50	1.57
March	5,538	322	116	179	1.61	1.86
April	4,442	186	107	148	1.33	1.49
May	7,909	429	144	255	2.30	2.65
June	4,494	243	89	150	1.35	1.51
July	3,950	279	81	127	1.14	1.32
August	3,777	189	66	122	1.10	1.27
September	2,436	109	66	81.2	.732	.82
Water year 1946-47	51,118	429	52	140	1.26	17.14
October 1947	2,643	235	54	85.3	.768	.89
November	6,739	434	66	225	2.03	2.26
December	4,188	221	104	135	1.22	1.40
Calendar year 1947	55,841	434	54	153	1.38	18.73
January 1948	7,873	461	156	254	2.29	2.64
February	6,892	529	150	238	2.14	2.31
March	8,142	348	193	263	2.37	2.73
April	8,410	586	167	280	2.52	2.82
May	10,089	589	159	325	2.93	3.38
June	8,305	729	158	277	2.50	2.78
July	4,830	297	96	156	1.41	1.62
August	6,275	376	97	202	1.82	2.10
September	2,404	123	68	80.1	.722	.81
Water year 1947-48	76,790	729	54	210	1.89	25.74
October 1948	2,646	129	68	85.4	.769	.89
November	3,707	284	83	124	1.12	1.24
December	6,111	633	102	197	1.77	2.05
Calendar year 1948	75,684	729	68	207	1.86	25.37
January 1949	9,633	570	159	311	2.80	3.23
February	9,837	519	222	351	3.16	3.30
March	8,884	367	188	287	2.59	2.98
April	7,385	376	170	246	2.22	2.47
May	7,050	395	144	227	2.05	2.36
June	3,218	215	73	107	.964	1.08
July	2,360	120	57	76.1	.686	.79
August	2,212	152	50	71.4	.643	.74
September	2,787	260	58	92.9	.837	.93
Water year 1948-49	65,830	633	50	180	1.62	22.06
October 1949	2,879	238	63	92.9	.837	.96
November	2,929	136	75	97.6	.879	.98
December	3,024	143	52	97.5	.878	1.01
Calendar year 1949	62,198	570	50	170	1.53	20.83
January 1950	3,188	130	93	103	.928	1.07
February	4,874	305	116	174	1.57	1.63
March	6,275	402	112	202	1.82	2.10
April	4,454	236	116	148	1.33	1.49
May	6,046	345	129	195	1.76	2.03
June	3,536	210	68	118	1.06	1.18
July	2,671	159	54	86.2	.777	.89
August	2,263	167	44	73.0	.658	.76
September	2,661	186	57	88.7	.799	.89
Water year 1949-50	44,800	402	44	123	1.11	14.99

Mantua Creek at Pitman

Location.--Lat 39°44'14", long 75°06'53", on left abutment of Wadsworth Dam, 0.9 mile east of Pitman, Gloucester County, and 2 miles upstream from Porch Branch.

Drainage area.--6.75 sq mi.

Records available.--April to August 1940, May 1941 to September 1950.

Gage.--Water-stage recorder above concrete dam. Datum of gage is 68.51 ft above mean sea level, datum of 1929.

Average discharge.--9 years (1941-50), 11.6 cfs.

Extremes.--1940-50: Maximum discharge, 4,200 cfs Sept. 1, 1940 (gage height, 6.64 ft), by computation of peak flow over dam and earth dike; minimum, 3.2 cfs July 24, 25, 1944 (gage height, 0.95 ft).

Peak discharge (base 50 cfs).--
1946: Nov. 29 (12:30 a.m.) 72 cfs (1.51 ft); Dec. 26 (1 a.m.) 56 cfs (1.42 ft); Dec. 29 (3 p.m.) 59 cfs (1.44 ft); June 12 (6:30 a.m.) 63 cfs (1.46 ft); July 3 (4:30 p.m.) 76 cfs (1.53 ft); July 22 (9 p.m.) 114 cfs (1.70 ft).
1947: July 19 (10 to 11 a.m.) 59 cfs (1.44 ft).
1948: Feb. 14 (2:30 p.m.) 104 cfs (1.66 ft).
1949: May 3 (7 to 9 a.m.) 47 cfs (1.37 ft), (annual maximum below base).
1950: July 6 (2 a.m.) 61 cfs (1.45 ft); July 10 (12 m.) 194 cfs (1.98 ft); Aug. 30 (12 p.m.) 93 cfs (1.61 ft); Sept. 13 (8 p.m.) 89 cfs (1.59 ft).

Remarks.--Slight regulation by ponds above station.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11.0	11.0	14.6	22	17.7	12.8	14.6	11.0	12.8	17.8	12.8	11.9
2	11.0	11.0	13.7	17.7	14.6	12.8	14.6	11.0	26	42	12.8	11.0
3	10.2	11.0	13.7	16.6	13.7	11.9	14.6	10.2	19.3	24	13.7	11.0
4	10.2	11.0	12.8	15.6	12.8	11.9	12.8	11.9	15.6	14.6	13.7	11.0
5	10.2	11.0	12.8	15.6	11.9	11.9	11.9	12.8	14.6	13.7	13.7	10.2
6	10.2	11.0	24	15.6	12.8	11.9	11.9	11.9	13.7	12.8	13.7	10.2
7	11.9	11.0	17.7	16.6	14.6	11.9	11.9	11.0	12.8	12.8	20	10.2
8	11.0	11.0	14.6	16.6	13.7	11.9	13.7	11.9	12.8	11.9	15.6	10.2
9	11.0	11.0	13.7	15.6	13.7	13.7	14.6	11.9	11.9	11.9	13.7	10.2
10	11.0	11.0	12.8	16.6	13.7	12.8	11.9	11.0	11.0	11.9	13.7	10.2
11	10.2	11.0	12.8	15.6	12.8	11.9	11.0	11.0	13.4	11.9	12.8	10.2
12	10.2	11.0	11.9	17.7	12.8	11.9	12.8	11.4	48	13.7	12.8	10.2
13	10.2	11.0	11.9	15.6	12.8	11.9	11.9	14.6	20	14.6	12.8	10.2
14	10.2	11.0	11.9	14.6	12.8	11.0	11.0	17.3	17.9	12.8	11.9	10.2
15	10.2	11.0	11.9	13.7	a12.3	18.2	10.2	27	28	11.9	11.0	10.2
16	9.5	10.2	11.9	13.7	a11.9	14.6	10.2	15.6	15.6	11.9	11.9	10.2
17	9.5	10.2	11.0	13.7	a11.4	12.8	10.2	14.2	12.8	11.9	14.6	9.5
18	9.5	10.2	11.0	12.8	11.0	25	10.2	25	15.1	11.9	16.6	9.5
19	10.2	11.7	11.9	12.8	11.8	23	11.0	19.0	16.6	11.9	16.6	9.5
20	10.2	13.7	11.9	12.8	24	15.6	10.2	13.7	17.7	11.9	12.8	9.5
21	10.2	11.0	11.9	13.7	15.6	14.6	10.2	14.8	15.6	14.6	11.9	12.1
22	11.0	15.8	11.9	14.6	13.7	13.7	10.2	15.6	14.6	53	11.9	12.8
23	14.5	13.7	11.0	13.7	12.8	12.8	10.2	12.8	13.7	70	13.7	11.9
24	20	11.0	11.0	12.8	12.8	12.8	10.2	11.9	11.9	33	13.7	21
25	14.6	11.0	16.5	13.7	12.8	14.6	11.8	11.0	11.9	20	12.8	25
26	13.7	10.2	42	13.7	12.8	13.7	16.6	11.0	11.0	16.6	11.9	12.8
27	12.8	10.2	18.8	13.7	12.8	14.6	12.8	28	11.0	14.6	11.9	11.9
28	11.9	21	14.6	12.8	14.6	13.7	11.0	24	11.0	13.7	11.9	11.0
29	11.0	52	43	11.9	-------	13.7	11.9	18.8	11.9	12.8	11.4	11.0
30	11.0	20	27	13.7	-------	17.8	11.9	15.6	14.4	12.8	17.7	13.7
31	11.0	-------	28	20	-------	15.6	-------	13.7	-------	12.8	12.8	-------

a No gage-height record; discharge interpolated.

Mantua Creek at Pitman--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12.8	10.2	10.2	10.2	11.0	9.5	8.7	32	10.2	9.5	6.7	8.7
2	11.0	11.0	8.7	13.7	11.0	15.5	10.2	13.7	11.0	7.3	6.7	8.7
3	11.0	11.9	8.7	13.7	11.9	15.6	11.0	11.9	10.2	6.7	7.3	8.7
4	11.0	11.9	8.7	12.8	11.9	11.9	10.2	15.6	9.5	6.7	7.3	a8
5	10.2	11.0	8.7	11.9	12.8	11.0	10.2	17.7	8.0	6.7	7.3	a7.5
6	10.2	11.0	8.7	11.9	11.0	11.9	10.2	18.8	8.0	6.1	7.3	a8
7	11.0	11.0	8.7	11.0	11.0	11.9	9.5	13.7	10.5	6.1	7.3	a8
8	11.0	12.8	8.7	11.0	11.9	11.0	8.7	11.9	22	9.5	8.0	8.7
9	11.0	11.9	8.7	11.0	11.0	11.0	11.0	11.0	13.7	8.7	8.0	8.0
10	13.7	11.0	9.5	10.2	10.2	11.0	11.0	11.0	10.2	8.0	8.0	6.7
11	11.9	11.0	9.5	10.2	10.2	10.2	9.5	11.0	10.2	8.0	8.0	6.7
12	11.9	11.0	10.2	10.2	10.2	10.2	9.5	10.2	9.5	8.0	8.0	6.7
13	11.9	11.0	9.5	10.2	10.2	10.2	9.5	10.2	8.7	7.3	8.0	6.1
14	11.0	11.0	8.7	15.6	10.2	14.6	9.5	11.9	10.0	7.3	8.0	6.1
15	11.0	10.2	8.7	14.6	10.2	14.6	11.0	11.0	12.8	7.3	8.0	6.1
16	10.2	10.2	8.7	15.6	10.2	11.9	13.8	10.2	9.5	6.7	7.3	6.1
17	10.2	11.6	8.7	12.8	10.2	11.0	13.7	10.2	9.5	13.5	12.8	5.5
18	10.2	12.8	8.7	11.9	10.2	10.2	11.0	10.2	9.5	11.0	11.0	5.5
19	10.2	11.0	8.7	11.9	9.5	10.2	10.2	11.0	10.2	32	10.2	5.5
20	11.9	10.2	11.2	17.5	10.2	9.5	10.2	11.9	9.5	15.8	10.2	6.1
21	10.2	10.2	32	14.6	10.2	9.5	10.2	20	8.7	11.0	12.8	6.1
22	10.2	17.1	18.2	11.0	10.2	11.0	10.2	18.8	8.7	10.2	11.0	7.6
23	10.2	12.8	11.9	10.2	10.2	11.0	9.5	16.6	8.7	10.2	9.5	7.3
24	10.2	10.2	11.0	10.2	9.5	10.2	9.5	12.8	8.0	10.2	8.7	6.7
25	10.2	9.5	10.2	11.0	9.5	11.9	9.5	11.9	8.0	9.5	8.0	8.7
26	9.5	9.5	10.2	12.6	9.5	10.2	10.2	14.6	8.7	8.7	10.2	7.3
27	10.2	12.8	9.5	16.8	9.5	10.2	9.5	10.2	8.7	6.7	20	6.7
28	11.0	11.0	9.5	12.8	9.5	9.5	9.5	9.5	8.7	6.1	11.0	6.7
29	11.0	10.2	10.2	11.9	-------	9.5	8.0	10.7	8.7	6.1	10.2	6.7
30	11.0	10.2	11.0	11.0	-------	9.5	8.7	17.7	8.0	6.1	9.5	6.1
31	10.2	-------	10.2	11.9	-------	9.5	-------	11.9	-------	6.1	8.7	-------

a No gage-height record; discharge computed on basis of recorded range in stage and records for stations on nearby streams.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.1	8.6	8.6	15.2	10.2	11.8	31	11.0	16.3	15.6	23	9.5
2	6.1	7.9	8.6	32	10.2	15.4	22	11.0	14.4	12.8	17.8	9.5
3	6.1	8.3	7.9	14.4	9.4	16.3	20	16.0	14.4	11.9	11.9	9.5
4	6.1	16.3	7.9	11.8	10.2	13.5	14.4	13.5	15.3	11.0	16.6	9.5
5	6.7	11.0	7.9	13.5	10.2	12.6	15.3	29	14.4	8.0	23	9.5
6	6.7	9.4	7.9	12.6	10.2	11.8	13.0	19.8	12.6	8.0	16.1	9.5
7	6.7	8.6	7.9	11.0	10.2	14.4	11.0	21	11.0	9.5	11.9	9.5
8	6.7	15.8	9.4	11.0	9.4	14.4	11.0	15.3	12.8	9.5	10.2	10.2
9	6.7	13.2	8.6	11.0	9.4	12.6	11.0	13.5	11.0	9.5	10.2	11.9
10	6.7	9.4	8.6	10.2	9.4	15.3	11.0	11.8	11.9	8.7	9.5	16.6
11	6.7	8.6	10.2	10.2	9.4	13.5	11.8	11.8	11.0	8.7	9.5	14.6
12	6.7	22	9.4	9.4	10.2	12.6	13.5	11.0	11.0	8.7	9.5	11.0
13	6.7	11.8	8.6	28	10.2	11.8	12.6	29	10.2	8.7	10.2	10.2
14	6.7	9.4	8.6	18.6	58	11.8	20	22	10.2	11.0	9.5	10.2
15	7.3	9.4	8.6	12.6	27	11.0	18.3	16.3	11.0	10.2	9.5	9.5
16	7.3	9.4	16.3	11.0	14.4	11.0	14.4	15.3	14.6	8.7	8.7	9.5
17	7.9	8.6	11.0	11.0	15.3	11.0	12.6	26	14.6	8.7	8.7	9.5
18	7.9	8.6	9.4	11.8	14.4	11.0	12.6	19.4	11.9	9.5	8.7	9.5
19	7.9	9.4	9.4	11.0	13.5	11.0	11.8	15.3	31	9.5	10.2	9.5
20	7.9	9.4	8.6	11.0	12.6	10.2	11.0	14.4	19.8	9.5	14.4	9.5
21	7.3	9.4	8.6	12.6	11.8	11.0	11.0	15.8	13.7	8.7	11.0	9.5
22	6.7	9.4	8.6	13.5	11.0	11.0	11.0	22	11.9	8.7	10.2	8.7
23	6.7	11.0	7.9	11.8	11.0	11.8	11.0	15.3	12.8	8.7	9.5	8.0
24	6.7	11.0	8.6	11.0	11.0	14.4	11.0	11.8	11.9	8.7	9.5	8.0
25	6.7	11.8	7.9	11.0	11.8	12.6	11.8	12.6	9.5	8.7	8.7	8.0
26	6.7	10.2	8.6	11.0	11.8	11.8	11.0	12.6	10.2	8.0	8.7	8.0
27	6.7	9.4	8.6	10.2	11.8	13.5	11.0	12.6	12.8	8.0	8.7	8.0
28	7.3	9.4	8.6	10.2	15.3	12.6	11.0	12.6	11.9	8.7	9.5	8.0
29	25	9.4	7.9	10.2	13.5	11.0	11.8	11.8	11.0	8.7	9.5	8.0
30	11.4	8.6	7.3	10.2	-------	11.0	11.0	19.6	11.4	8.0	10.2	8.7
31	8.6	-------	7.3	9.4	-------	10.2	-------	30	-------	8.0	10.2	-------

Mantua Creek at Pitman--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.7	9.4	12.6	17.3	22	18.3	19.4	12.6	10.2	8.0	7.3	11.8
2	8.7	9.4	11.8	15.3	17.3	17.3	17.3	14.1	9.5	9.5	6.7	7.3
3	8.7	9.4	11.8	14.4	15.3	16.3	15.3	37	9.5	8.0	6.7	6.7
4	8.0	11.8	20	13.5	20	16.3	14.4	17.3	9.5	7.3	9.8	6.7
5	8.7	10.2	15.3	15.3	20	16.3	14.4	14.4	9.5	6.7	11.0	6.7
6	8.7	9.4	12.6	26	17.3	16.3	23	12.8	9.5	7.3	8.7	6.1
7	8.0	13.7	11.8	17.3	20	15.3	19.4	12.8	9.5	8.7	8.0	6.8
8	8.0	11.0	11.8	15.3	19.4	14.4	22	12.8	8.7	8.7	6.7	9.5
9	8.0	10.2	11.8	14.4	17.3	15.3	15.3	12.8	8.7	8.0	6.1	7.3
10	8.0	10.2	11.8	14.4	16.3	15.3	11.8	13.7	8.7	7.3	6.1	6.7
11	8.0	10.2	11.0	13.5	16.3	28	10.2	13.7	8.7	8.0	6.1	6.7
12	8.0	10.2	11.0	13.5	15.3	17.3	10.2	12.8	8.7	8.8	5.5	6.1
13	8.0	10.2	11.0	13.5	16.3	14.4	12.6	12.8	8.0	15.6	6.1	10.7
14	8.7	10.2	10.2	12.6	17.3	14.4	14.4	11.9	8.0	10.2	6.1	9.5
15	8.7	9.4	13.0	12.6	15.3	14.4	13.5	11.9	7.3	8.7	6.1	8.0
16	8.7	8.6	18.3	12.6	17.3	14.4	13.5	11.9	7.3	8.0	6.1	7.3
17	8.0	9.4	15.3	12.6	20	13.5	12.6	11.0	7.3	8.7	6.1	7.3
18	8.7	9.4	12.6	12.6	16.3	22	14.4	11.0	8.0	8.0	8.6	6.7
19	9.4	9.4	12.6	12.6	15.3	19.4	17.3	10.2	8.7	7.3	10.2	6.7
20	8.8	10.2	12.6	11.8	22	16.3	14.4	9.5	8.7	7.3	8.0	6.7
21	8.6	9.4	12.6	14.0	17.3	14.4	12.6	10.2	8.0	6.7	7.3	6.1
22	8.5	9.4	12.6	24	18.3	13.5	13.5	11.9	8.0	6.7	7.3	6.1
23	8.6	10.2	11.8	16.3	28	22	16.3	17.7	8.0	6.7	6.7	13.0
24	10.0	10.2	11.8	16.3	17.3	18.3	14.4	11.9	6.7	6.1	6.7	8.0
25	11.8	11.0	11.8	15.3	16.3	16.3	13.5	13.7	6.7	6.1	6.7	7.3
26	9.4	10.2	11.0	19.4	15.3	19.4	13.5	11.0	7.3	6.1	6.1	7.3
27	9.4	14.1	11.0	22	15.3	16.3	13.5	11.0	8.7	6.1	6.1	7.3
28	9.4	12.7	10.2	38	17.3	15.3	12.6	11.0	8.0	6.1	6.1	8.0
29	8.6	24	11.8	20	-------	15.3	12.6	10.2	8.0	6.7	11.7	12.3
30	8.6	15.3	32	16.3	-------	14.4	12.6	10.2	8.0	6.1	7.3	12.7
31	8.6	-------	31	20	-------	15.3	-------	10.2	-------	8.7	8.9	-------

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.7	12.3	9.4	9.4	14.4	a9.0	11.0	11.0	10.2	6.7	8.0	11.0
2	8.0	16.3	8.6	9.4	16.3	a9.4	11.0	11.0	10.2	6.1	8.0	17.2
3	8.0	11.8	8.6	9.4	12.6	a9.0	10.2	12.8	9.5	6.7	18.6	17.4
4	7.3	10.2	8.6	9.4	11.0	a8.8	9.5	11.0	14.2	6.7	13.9	11.0
5	7.3	10.2	8.6	9.4	10.2	a8.6	9.5	11.0	11.0	12.3	9.5	8.7
6	7.3	9.4	7.9	9.4	10.2	a8.6	9.5	11.9	9.5	31	8.7	9.9
7	8.7	9.4	8.6	9.4	10.2	8.6	9.5	10.2	8.7	10.4	8.7	9.4
8	10.2	9.4	8.6	8.6	9.4	9.9	10.2	9.5	8.0	8.7	8.7	8.0
9	8.7	9.4	7.9	7.9	10.2	13.5	9.5	8.7	8.0	7.3	8.0	8.0
10	8.7	9.4	7.9	7.9	11.0	10.2	9.5	8.7	7.3	92	7.3	15.6
11	8.0	9.4	11.0	8.6	11.0	9.4	8.7	8.7	8.7	32	7.3	18.5
12	8.0	9.4	11.0	8.6	10.2	11.8	8.7	8.7	8.0	14.6	7.3	11.8
13	8.0	9.4	11.0	9.4	10.2	15.3	9.5	8.7	7.3	13.0	7.3	39
14	8.0	11.8	10.2	9.4	14.4	13.5	8.7	8.7	8.0	14.6	7.3	33
15	8.0	10.2	9.4	9.4	19.4	11.0	8.7	11.5	9.5	11.0	7.3	14.6
16	8.0	10.2	8.6	8.6	13.5	10.2	8.7	14.7	9.5	23	7.3	12.8
17	8.0	9.4	8.6	8.6	11.8	10.2	8.7	11.0	8.7	14.6	8.0	11.0
18	8.7	9.4	8.6	9.4	11.0	8.6	8.7	11.4	7.3	11.9	8.0	11.0
19	9.5	9.4	11.0	9.4	11.0	8.6	8.7	17.7	8.0	11.0	8.0	10.2
20	8.7	8.6	10.2	8.6	9.4	9.4	9.5	12.8	8.0	9.5	8.7	10.2
21	8.0	8.6	9.4	8.6	8.6	16.9	10.2	10.2	8.0	8.7	7.3	12.4
22	7.3	7.9	9.4	8.6	9.4	13.5	9.5	9.5	8.0	8.0	7.3	18.8
23	7.3	7.9	10.2	8.6	11.8	34	9.5	8.7	7.3	8.0	7.3	13.7
24	7.3	7.9	10.2	8.6	11.0	16.3	9.5	8.7	7.3	7.3	6.7	11.0
25	8.0	9.4	9.4	8.6	10.2	13.5	10.2	10.2	8.7	8.0	7.3	10.2
26	12.8	9.4	9.4	8.6	9.4	12.6	10.2	9.5	7.3	8.0	7.3	9.5
27	9.5	8.6	13.8	8.6	9.4	12.6	10.2	9.5	6.7	8.0	6.7	10.2
28	8.7	8.6	11.0	8.6	8.6	12.6	20	8.7	6.1	8.7	6.7	10.2
29	13.7	10.2	10.2	9.4	-------	12.6	12.8	17.2	6.1	8.7	26	9.5
30	10.2	10.2	9.4	9.4	-------	11.8	11.0	12.8	6.1	8.7	21	9.5
31	18.1	-------	9.4	14.3	-------	11.0	-------	10.2	-------	8.0	38	-------

a No gage-height record; discharge computed on basis of recorded range in stage, precipitation records, and records for stations on nearby streams.

Mantua Creek at Pitman--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	349.3	20	9.5	11.3	1.67	1.92
November	396.9	52	10.2	13.2	1.96	2.19
December	504.2	43	11.0	16.3	2.41	2.78
Calendar year 1945	4,855.7	67	7.3	13.3	1.97	26.73
January 1946	465.8	22	11.9	15.0	2.22	2.57
February	380.7	24	11.0	13.6	2.01	2.10
March	437.0	25	11.0	14.1	2.09	2.41
April	358.0	16.6	10.2	11.9	1.76	1.97
May	460.6	28	10.2	14.9	2.21	2.54
June	482.6	48	11.0	16.1	2.39	2.66
July	571.7	70	11.9	18.4	2.73	3.15
August	418.8	20	11.0	13.5	2.00	2.31
September	348.5	25	9.5	11.6	1.72	1.92
Water year 1945-46	5,174.1	70	9.5	14.2	2.10	28.52
October 1946	337.2	13.7	9.5	10.9	1.61	1.86
November	337.2	17.1	9.5	11.2	1.66	1.86
December	326.8	33	8.7	10.5	1.56	1.80
Calendar year 1946	4,924.9	70	8.7	13.5	2.00	27.15
January 1947	381.7	17.5	10.2	12.3	1.82	2.10
February	293.1	12.8	9.5	10.5	1.56	1.61
March	344.9	15.6	9.5	11.1	1.64	1.90
April	303.4	13.8	8.0	10.1	1.50	1.67
May	419.8	32	9.5	13.5	2.00	2.31
June	297.6	22	8.0	9.92	1.47	1.64
July	283.1	32	6.1	9.13	1.35	1.56
August	285.0	20	6.7	9.19	1.36	1.57
September	211.3	8.7	5.5	7.04	1.04	1.16
Water year 1946-47	3,821.1	33	5.5	10.5	1.56	21.04
October 1947	237.4	25	6.1	7.66	1.13	1.31
November	314.7	22	7.9	10.5	1.56	1.73
December	273.3	16.3	7.3	8.82	1.31	1.51
Calendar year 1947	3,645.3	32	5.5	9.99	1.48	20.07
January 1948	398.4	32	9.4	12.9	1.91	2.20
February	392.8	58	9.4	13.5	2.00	2.16
March	383.9	16.3	10.2	12.4	1.84	2.12
April	409.9	31	11.0	13.7	2.03	2.26
May	519.1	30	11.0	16.7	2.47	2.86
June	396.5	31	9.5	13.2	1.96	2.18
July	290.6	15.6	8.0	9.37	1.39	1.60
August	354.8	23	8.7	11.4	1.69	1.95
September	291.1	16.6	8.0	9.70	1.44	1.60
Water year 1947-48	4,262.5	58	6.1	11.6	1.72	23.48
October 1948	269.9	11.8	8.0	8.71	1.29	1.49
November	328.4	24	8.8	10.9	1.61	1.81
December	426.5	32	10.2	13.8	2.04	2.35
Calendar year 1948	4,461.9	58	8.0	12.2	1.81	24.58
January 1949	507.7	33	11.8	16.4	2.43	2.80
February	496.4	23	15.3	17.7	2.62	2.73
March	515.7	28	13.5	16.6	2.46	2.84
April	440.5	23	10.2	14.7	2.18	2.43
May	406.0	37	9.5	13.1	1.94	2.24
June	251.4	10.2	6.7	8.38	1.24	1.39
July	242.2	15.6	6.1	7.81	1.16	1.33
August	226.9	11.7	5.5	7.32	1.08	1.25
September	289.4	13.0	6.1	7.98	1.18	1.32
Water year 1948-49	4,351.0	37	5.5	11.9	1.76	23.98
October 1949	276.7	18.1	7.3	8.93	1.32	1.52
November	293.7	16.3	7.9	9.79	1.45	1.62
December	296.1	13.8	7.9	9.55	1.41	1.63
Calendar year 1949	4,192.7	37	5.5	11.5	1.70	23.10
January 1950	282.1	14.3	7.9	9.10	1.35	1.55
February	315.8	19.4	8.6	11.3	1.67	1.74
March	371.0	34	8.6	12.0	1.78	2.04
April	301.1	20	8.7	10.0	1.48	1.66
May	334.9	17.7	8.7	10.8	1.60	1.85
June	251.2	14.2	6.1	8.37	1.24	1.38
July	433.2	92	6.1	14.0	2.07	2.39
August	317.5	38	6.7	10.2	1.51	1.75
September	403.3	39	8.0	13.4	1.99	2.22
Water year 1949-50	3,876.6	92	6.1	10.6	1.57	21.35

Salem River at Woodstown

Location.--Lat 39°38'36", long 75°19'52", on right end of Memorial Lake Dam at Woodstown, Salem County, a quarter of a mile upstream from small brook and 0.3 mile downstream from Pennsylvania-Reading Seashore Lines bridge.

Drainage area.--14.6 sq mi.

Records available.--December 1941 to September 1950.

Gage.--Water-stage recorder above concrete dam. Datum of gage is 29.49 ft above mean sea level, datum of 1929.

Average discharge.--8 years (1942-50), 20.1 cfs.

Extremes.--1941-50: Maximum discharge, 1,340 cfs Sept. 11, 1950 (gage height, 2.76 ft), from rating curve extended above 220 cfs on basis of laboratory rating curve; no flow for short periods during many years just after waste gate was closed and lake level was below spillway.

Maximum discharge known, 22,000 cfs Sept. 1, 1940 (gage height, 7.98 ft, from floodmark in gage house), based on slope-area determination at site half a mile downstream.

Peak discharge (base, 350 cfs).--
1946: Nov. 29 (2:30 to 3:30 a.m.) 458 cfs (1.96 ft); Dec. 26 (5 to 6 a.m.) 508 cfs (2.02 ft); Dec. 29 (5 to 6 p.m.) 442 cfs (1.94 ft); July 2 (5:30 p.m.) 434 cfs (1.93 ft); July 22 (11 p.m.) 640 cfs (2.16 ft); Sept. 24 (9:30 p.m.) 590 cfs (2.11 ft).
1947: Dec. 21 (time unknown) 287 cfs (1.74 ft), (annual maximum below base).
1948: Jan. 1 (11 p.m.) 442 cfs (1.94 ft); Jan. 13 (4 p.m.) 378 cfs (1.86 ft); Feb. 14 (12 m.) 1,020 cfs (2.47 ft); June 19 (8:30 p.m.) 380 cfs (1.86 ft); Aug. 4 (1:30 a.m.) 362 cfs (1.84 ft).
1949: Dec. 30 (7:30 p.m.) 620 cfs (2.16 ft); Jan. 28 (9 a.m.) 362 cfs (1.85 ft).
1950: July 6 (2 a.m.) 912 cfs (2.42 ft); Sept. 11 (1 p.m.) 1,340 cfs (2.76 ft).

Remarks.--Occasional regulation by Memorial Lake and by mills above station. Figures of discharge represent flow over dam and through waste gate.

Daily discharge, in cubic feet per second, 1945-50

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.0	8.3	16.0	57	44	19.9	22	16.0	12.7	107	10.6	10.6
2	14.1	14.1	30	19.9	24	17.9	19.9	14.1	53	169	10.6	10.6
3	2.3	10.6	24	40	19.9	16.0	24	12.3	54	89	10.6	10.6
4	2.3	7.4	22	31	16.0	16.0	19.9	12.3	24	10.6	9.0	10.6
5	7.8	5.9	22	19.9	16.0	16.9	16.0	14.1	19.9	10.6	9.0	9.0
6	17.5	2.3	86	19.9	17.9	17.9	16.0	14.1	16.0	10.6	11.2	9.0
7	28	3.1	36	29	33	17.9	14.1	14.1	16.0	10.6	47	9.0
8	4.4	5.9	16.0	31	24	19.9	16.0	16.0	12.3	10.6	17.9	9.0
9	3.1	7.4	27	30	22	24	22	12.3	10.6	10.6	14.1	9.0
10	3.1	10.6	28	40	28	22	17.9	10.6	7.4	10.6	12.3	9.0
11	3.1	21	24	15.7	24	17.9	16.0	10.6	5.1	10.6	10.6	7.4
12	4.4	16.4	16.0	49	19.9	17.9	16.0	10.6	52	10.6	10.6	7.4
13	14.1	4.4	12.3	28	19.9	17.9	16.0	16.0	23	10.6	10.6	5.9
14	12.3	12.4	16.0	22	22	17.9	16.0	26	10.6	9.0	10.6	5.9
15	7.4	22	a15	22	19.9	40	14.1	83	10.6	7.4	9.0	7.4
16	2.3	12.3	a14	17.9	16.0	30	14.1	16.0	9.0	7.4	9.0	7.4
17	2.3	18.4	14.1	17.9	16.0	22	12.3	19.2	7.4	7.4	12.3	7.4
18	2.7	16.0	14.1	17.9	16.0	83	12.3	46	7.4	7.4	16.1	7.4
19	a7.5	17.0	14.1	17.9	17.2	90	12.3	54	14.4	7.4	22	7.4
20	a12	26	14.1	14.1	76	10.6	12.3	22	30	7.4	10.6	7.4
21	a14	19.6	14.1	16.0	31	16.6	12.3	22	22	7.4	12.3	10.6
22	a10	23	14.1	17.9	19.9	19.9	12.3	22	7.4	134	12.3	12.3
23	a20	30	14.1	16.0	17.9	19.9	12.3	16.0	9.0	236	12.3	12.3
24	a60	17.7	14.1	16.0	17.9	19.9	12.3	14.1	10.6	108	10.6	122
25	a30	10.6	53	17.9	17.9	31	14.1	10.6	10.6	14.3	10.6	126
26	a15	10.6	272	22	16.0	26	28	10.1	9.0	16.0	10.6	9.2
27	7.4	12.3	43	19.9	16.0	30	19.9	67	9.0	14.1	10.6	7.4
28	9.0	57	35	16.0	24	19.9	16.0	88	7.4	14.1	9.0	7.4
29	9.6	262	179	16.0	-------	17.9	16.0	30	7.4	12.3	10.6	7.4
30	5.9	55	100	20	-------	22	16.0	7.4	42	12.3	14.1	13.2
31	5.9	-------	95	46	-------	26	-------	10.6	-------	10.6	12.3	-------

a No gage-height record; discharge computed on basis of recorded range in stage, precipitation records, and records for stations on nearby streams.
Note.--Backwater from moss Oct. 1 to Nov. 14, Feb. 21 to Mar. 5.

Salem River at Woodstown--Continued

Daily discharge, in cubic feet per second, 1945-50

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.0	16.0	12.3	16	22	17.9	12.3	112	9.0	4.4	4.4	5.9
2	12.4	14.1	10.6	22	19.9	24	14.1	38	14.1	3.1	4.4	5.9
3	14.1	14.1	10.6	33	17.9	38	19.9	30	10.6	3.1	4.4	5.9
4	14.1	16.0	10.6	40	19.9	35	17.9	11.4	10.6	3.1	4.4	5.9
5	14.1	14.1	10.6	24	19.9	33	16.0	11.7	9.0	3.1	4.4	5.9
6	14.1	14.1	10.6	20	19.9	30	16.0	24	9.0	3.1	4.4	5.9
7	16.0	16.0	12.3	18	17.9	33	12.3	17.9	22	10.8	3.1	5.9
8	16.0	10.6	12.3	22	19.9	33	10.6	12.3	54	53	3.1	4.4
9	11.7	10.6	12.3	18	19.9	28	16.0	10.6	24	5.9	3.1	4.4
10	23	9.0	14.1	17	17.9	28	19.9	10.6	16.0	4.4	3.1	4.4
11	10.6	10.6	14.1	17	17.9	22	17.9	10.6	12.3	3.1	3.1	4.4
12	12.3	12.3	14.1	17.9	17.9	22	14.1	9.0	7.4	3.1	3.1	4.4
13	17.9	12.5	19.9	16.0	17.9	19.9	12.3	9.0	7.4	2.3	3.1	4.4
14	14.1	12.5	9.0	36	17.9	30	12.3	8.2	12.1	2.3	3.1	4.4
15	12.3	12.5	7.4	46	17.9	41	14.1	4.4	14.9	2.3	3.1	3.1
16	12.3	12	9.0	52	19.9	41	22	4.4	7.4	2.3	5.9	3.1
17	12.3	13	9.0	49	19.9	33	38	9.0	7.4	43	9.0	3.1
18	12.3	14	10.6	33	17.9	22	35	23	9.0	28	7.4	3.1
19	12.3	13	10.6	24	17.9	17.9	28	12.2	7.4	75	7.4	3.1
20	12.3	12.3	20	40	16.0	17.9	17.9	14.1	5.9	40	7.4	3.1
21	12.3	12.3	100	52	16.0	17.9	12.3	17.9	4.4	9.0	7.4	3.1
22	12.3	37	70	41	16.0	17.9	14.1	31	2.3	7.4	7.4	5.9
23	12.3	31	35	24	17.9	17.9	12.3	31	2.3	7.4	7.4	4.4
24	12.3	17.9	25	19.9	17.9	17.9	12.3	17.9	2.3	7.4	7.4	4.4
25	14.1	16.0	18	19.9	16.0	22	12.3	15.1	2.3	5.9	5.9	4.4
26	14.1	16.0	16	22	17.9	19.9	14.1	24	3.1	5.9	7.4	4.4
27	16.0	16.0	15	38	17.9	16.0	12.3	16.0	5.9	5.9	7.4	4.4
28	19.9	14.1	15	35	17.9	14.1	10.6	14.1	12.3	5.9	7.4	4.4
29	19.9	12.3	18	26	-------	14.1	10.6	16.2	14.1	5.9	7.4	4.4
30	17.9	12.3	22	22	-------	14.1	10.8	53	7.4	4.4	7.4	4.4
31	17.9	-------	18	22	-------	14.1	-------	18.2	-------	4.4	5.9	-------

Note.--Backwater from moss or debris on control Oct. 11 to Nov. 7, May 2-13, July 20 to Sept. 9, Sept. 15-31. No gage-height record Nov. 13-19, Dec. 20-31, Jan. 1, 4-11, Sept. 24-27; discharge computed on basis of recorded range in stage, precipitation records, and records for stations on nearby streams.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.4	7.4	10.6	45	12.3	19.9	120	15	35	53	100	2.3
2	4.4	5.9	10.6	269	12.3	42	55	15	30	17.6	41	1.7
3	4.4	7.4	10.6	42	12.3	45	45	30	24	13.9	57	1.7
4	4.4	100	9.0	9.0	12.3	33	35	35	36	13.9	145	2.3
5	4.4	49	9.0	21	12.3	28	25	50	32	12.2	36	2.3
6	4.4	4.4	9.0	28	12.3	22	20	48	24	13.9	26	2.3
7	5.9	3.1	9.0	22	12.3	42	19	45	31	17.6	17.9	11.2
8	7.4	55	10.6	17.9	12.3	42	18	40	46	13.9	14.1	25
9	5.9	44	12.3	17.9	12.3	26	18	35	37	12.2	12.3	10.6
10	5.9	16.0	10.6	16.0	12.3	54	18	30	32	10.6	12.3	9.0
11	5.9	14.1	14.1	14.1	12.3	33	18	20	26	10.6	12.0	12.3
12	5.9	96	16.0	14.1	12.3	28	20	13	26	9.0	27	10.6
13	4.4	26	12.3	185	23	24	35	50	28	9.0	10.6	9.0
14	4.4	16.0	10.6	64	455	22	50	50	28	15.7	9.0	7.4
15	4.4	14.1	10.6	16.0	82	19.9	48	48	30	10.6	10.6	7.4
16	5.9	12.3	94	17.9	25	40	45	48	18.4	9.0	7.4	5.9
17	5.9	10.6	24	16.0	41	25	40	50	26	9.0	5.9	5.9
18	5.9	9.0	16.0	17.9	34	20	30	50	15.7	9.0	9.0	5.9
19	4.4	7.4	14.1	16.0	26	19	20	48	167	10.6	10.3	5.9
20	4.4	7.4	12.3	16.0	24	18	16	45	76	10.6	155	5.9
21	4.4	9.0	10.6	23	17.9	19	15	40	10.6	9.0	46	7.4
22	4.4	9.0	10.6	38	16.0	20	15	11.0	9.0	9.0	17.9	7.4
23	5.9	21	10.6	26	16.0	25	15	17.6	9.0	6.0	14.1	5.9
24	5.9	36	10.6	17.9	16.0	35	15	15.7	11.7	6.0	12.3	5.9
25	4.4	48	10.6	16.0	19.9	26	16	15.7	10.4	6.0	10.6	5.9
26	4.4	5.9	10.6	14.1	28	20	15	17.6	10.6	6.0	10.6	5.9
27	5.9	5.9	10.6	14.1	24	32	15	20	14.8	7.7	9.0	5.9
28	12.3	9.0	10.6	14.1	59	25	16	32	9.2	13.9	7.4	5.9
29	100	10.6	10.6	12.3	34	20	16	30	12.2	7.5	7.4	5.9
30	22	10.6	10.6	12.3	-------	19	15	26	14.4	6.0	5.9	7.4
31	10.6	-------	10.6	12.3	-------	18	-------	46	-------	4.7	5.9	-------

Note.--Backwater from moss or debris Oct. 1-7, Oct. 13 to Nov. 20. No gage-height record Mar. 17 to May 21; discharge computed on basis of 3 discharge measurements, precipitation records, and records for Manantico Creek near Millville, Mantua Creek at Pitman, and stations on other nearby streams. Leakage through waste gate May 22 to Aug. 1; discharge includes leakage computed on basis of 2 discharge measurements.

Salem River at Woodstown--Continued

Daily discharge, in cubic feet per second, 1945-50

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.4	7.4	24	38	65	44	44	12.3	12.3	3.1	3.1	41
2	7.4	7.4	19.9	28	35	35	35	17.9	10.6	9.4	3.1	12.3
3	7.4	5.9	22	24	28	30	26	156	10.6	7.4	2.1	9.0
4	5.9	7.4	145	22	92	28	22	33	10.6	5.9	6.0	7.4
5	7.4	7.4	65	20	62	26	22	22	10.6	4.4	14.0	7.4
6	10.6	9.0	28	117	38	24	65	17.9	9.0	118	10.6	7.4
7	9.0	16.0	24	35	66	22	30	19.9	9.0	78	9.0	7.4
8	7.4	12.3	19.9	26	47	19.9	24	17.9	7.4	5.9	9.0	10.6
9	7.4	4.4	17.9	24	35	19.9	19.9	16.0	7.4	4.4	9.0	9.0
10	7.4	4.4	16.0	22	38	19.9	17.9	16.0	7.4	11.7	9.0	7.4
11	5.9	5.9	16.0	22	30	108	17.9	16.0	7.4	12.4	7.4	7.4
12	4.4	9.0	16.0	22	28	41	19.9	16.0	7.4	12.2	5.9	5.9
13	4.4	9.0	16.0	19.9	41	26	19.9	14.1	7.4	33	7.4	13.0
14	5.9	9.0	14.1	17.9	46	24	19.9	12.3	2.6	19.9	5.9	19.9
15	5.9	9.0	26	17.9	38	22	17.9	12.3	1.7	15.4	5.9	12.3
16	5.9	7.4	76	16.0	37	19.9	16.0	12.3	1.7	32	4.4	10.6
17	5.9	7.4	55	16.0	66	19.9	16.0	10.6	1.7	14.1	4.4	9.0
18	5.9	9.0	28	17.9	33	58	16.0	10.6	1.7	27	5.9	9.0
19	5.9	9.0	24	17.9	30	44	26	10.6	2.3	12	4.4	7.4
20	5.9	12.3	24	17.9	74	26	19.9	10.6	2.3	8	4.4	7.4
21	5.9	12.3	24	22	38	24	17.9	9.0	2.3	0	4.4	5.9
22	3.1	10.6	24	117	53	22	17.9	12.3	2.3	0	16.5	8.2
23	a1.7	14.1	26	38	79	69	22	28	1.7	0	22	26
24	a2.3	14.1	22	28	28	35	19.9	17.9	1.7	.4	13.4	14.1
25	9.0	14.1	19.9	41	30	28	17.9	37	2.3	3.1	13.4	9.0
26	7.4	12.3	16.0	76	28	38	16.0	19.9	5.7	4.4	3.2	9.0
27	7.4	28	16.0	73	26	28	16.0	16.0	5.9	3.1	2.3	7.4
28	7.4	30	16.0	208	38	26	14.1	16.0	7.1	3.1	3.4	27
29	7.4	145	24	52	-------	24	12.3	14.1	15.6	3.1	25	27
30	7.4	46	265	30	-------	22	12.3	12.3	4.4	3.1	12.4	31
31	7.4	-------	145	49	-------	22	-------	12.3	-------	4.4	42	-------

a No gage-height record; discharge computed on basis of recorded range in stage and records for Mantua Creek at Pitman.

1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12.3	28	12.3	16.0	44	16.0	17.9	16.0	16.0	4.4	3.1	5.9
2	9.0	58	10.6	14.1	64	14.1	16.0	16.0	14.1	2.3	3.1	13.9
3	7.4	22	10.6	16.0	32	12.3	16.0	26	12.3	2.3	16.2	19.0
4	7.4	14.1	10.6	16.0	26	12.3	16.0	24	26	3.1	14.3	9.8
5	7.4	12.3	10.6	14.1	22	12.3	16.0	17.9	23	42	4.4	5.9
6	7.4	10.6	10.6	14.1	17.9	12.3	16.0	16.0	14.1	218	4.4	5.9
7	7.4	10.6	10.6	12.3	17.9	12.3	16.0	14.1	10.6	7.4	5.9	5.9
8	9.0	10.6	10.6	12.3	14.1	17.9	14.1	10.6	7.4	5.9	3.1	5.9
9	9.0	9.0	10.6	12.3	19.9	33	14.1	10.6	7.4	4.4	3.1	5.9
10	9.0	9.0	10.6	12.3	26	17.8	14.1	10.6	5.9	48	3.1	11.5
11	7.4	10.6	12.3	10.6	24	17.9	14.1	10.6	9.0	29	3.1	e473
12	7.4	9.0	16.0	10.6	22	28	14.1	10.6	7.4	7.4	5.9	e30
13	7.4	9.0	30	12.3	19.9	39	14.1	10.6	5.9	5.9	6.0	e56
14	7.4	14.1	24	12.3	42	40	14.1	10.6	5.9	5.9	18.4	65
15	7.4	14.1	16.0	12.3	72	22	14.1	15.8	7.4	9.0	15.1	16.0
16	7.4	10.6	14.1	10.6	35	19.9	14.1	28	7.4	16.3	31	9.0
17	7.4	10.6	12.3	10.6	24	17.9	12.3	14.1	2.4	9.0	9.7	5.9
18	7.4	10.6	10.6	10.6	22	16.0	12.3	15.7	1.7	5.9	5.9	5.9
19	9.0	9.0	22	12.3	19.9	14.1	10.6	42	2.3	5.9	5.9	5.9
20	9.0	9.0	22	12.3	17.9	14.1	10.6	22	2.3	5.9	5.9	4.4
21	9.0	9.0	17.9	12.3	16.0	48	12.3	16.0	2.3	10.6	5.9	5.9
22	7.4	7.4	14.1	10.6	16.0	34	12.3	12.3	2.3	9.0	5.9	30
23	7.4	7.4	16.0	10.6	22	112	10.6	10.6	2.3	5.9	5.9	16.0
24	7.4	7.4	22	10.6	16.0	35	12.3	10.6	2.3	4.4	5.9	9.0
25	7.4	10.6	16.0	12.3	14.1	28	14.1	10.6	2.3	3.1	5.9	5.9
26	22	10.6	14.1	10.6	14.1	24	14.1	10.6	1.7	3.1	5.9	5.9
27	16.0	10.6	51	12.3	12.3	22	12.3	12.3	1.7	3.1	5.9	5.9
28	10.6	9.0	28	12.3	12.3	26	31	12.3	1.2	3.1	4.4	5.9
29	28	14.1	19.9	12.3	-------	26	22	25	1.7	3.1	10.0	5.9
30	22	17.9	16.0	12.3	-------	24	16.0	27	3.1	3.1	7.4	5.9
31	65	-------	16.0	38	-------	22	-------	16.0	-------	3.1	5.9	-------

e Waste gate open.

Note.--Fragmentary gage-height record Jan. 11-14, 17-24, 29-31, Feb. 1-5, 9, 14, 15, 17-20, 25-28, Mar. 1-3, 9, 13, 16-19, 23, 30, Apr. 5-8, 12-17; discharge based on partly estimated gage-height graph that was computed on basis of recorded range in stage, precipitation records, and records for Mantua Creek at Pitman.

Salem River at Woodstown--Continued

Monthly and annual discharge, in cubic feet per second, 1945-50

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1945	344.5	60	2.3	11.1	0.760	0.88
November	739.3	262	2.3	24.6	1.68	1.88
December	1,294.1	272	12.3	41.7	2.86	3.30
Calendar year 1945	7,652.9	272	2.3	21.0	1.44	19.50
January 1946	763.8	57	14.1	24.6	1.68	1.95
February	652.3	76	16.0	23.3	1.60	1.66
March	784.7	90	10.6	25.3	1.73	2.00
April	488.4	28	12.3	16.3	1.12	1.24
May	737.1	88	7.4	23.8	1.63	1.88
June	531.8	54	5.1	17.7	1.21	1.35
July	1,105.5	236	7.4	35.6	2.44	2.81
August	399.0	47	9.0	12.9	.884	1.02
September	506.2	126	5.9	16.9	1.16	1.29
Water year 1945-46	8,344.7	272	2.3	22.9	1.57	21.26
October 1946	442.2	23	9.0	14.3	.979	1.13
November	444.2	37	9.0	14.8	1.01	1.13
December	592.0	100	7.4	19.1	1.31	1.51
Calendar year 1946	7,445.2	236	5.1	20.4	1.40	18.97
January 1947	882.7	52	16	28.5	1.95	2.25
February	513.7	22	16.0	18.3	1.25	1.31
March	752.5	41	14.1	24.3	1.66	1.92
April	488.3	38	10.6	16.3	1.12	1.24
May	636.8	112	4.4	20.5	1.40	1.62
June	325.9	54	2.3	10.9	.747	.83
July	364.9	75	2.3	11.8	.808	.93
August	169.8	9.0	3.1	5.48	.375	.43
September	134.9	5.9	3.1	4.50	.308	.34
Water year 1946-47	5,747.9	112	2.3	15.7	1.08	14.64
October 1947	283.2	100	4.4	9.14	.626	.72
November	670.1	100	3.1	22.3	1.53	1.71
December	441.9	94	9.0	14.3	.979	1.13
Calendar year 1947	5,664.7	112	2.3	15.5	1.06	14.43
January 1948	1,064.9	269	9.0	34.4	2.36	2.71
February	1,088.4	455	12.3	37.5	2.57	2.77
March	861.8	54	18	27.8	1.90	2.20
April	848	120	15	28.3	1.94	2.16
May	1,036.6	50	11.0	33.4	2.29	2.64
June	880.0	167	9.0	29.3	2.01	2.24
July	362.7	53	4.7	11.7	.801	.92
August	865.5	155	5.9	27.9	1.91	2.20
September	208.1	25	1.7	6.94	.475	.53
Water year 1947-48	8,612.2	455	1.7	23.5	1.61	21.94
October 1948	199.7	10.6	1.7	6.44	.441	.51
November	495.1	145	4.4	16.5	1.13	1.26
December	1,274.7	265	14.1	41.1	2.82	3.25
Calendar year 1948	9,186.5	455	1.7	25.1	1.72	23.40
January 1949	1,295.4	208	16.0	41.8	2.86	3.30
February	1,250	92	26	44.6	3.05	3.18
March	995.5	108	19.9	32.1	2.20	2.54
April	661.5	65	12.3	22.0	1.51	1.69
May	649.1	156	9.0	20.9	1.43	1.65
June	180.1	15.6	1.7	6.00	.411	.46
July	453.9	118	0	14.6	1.00	1.16
August	289.9	42	2.3	9.35	.640	.74
September	385.4	41	5.9	12.8	.877	.98
Water year 1948-49	8,180.3	265	0	22.3	1.53	20.72
October 1949	364.7	65	7.4	11.8	.808	.93
November	394.8	58	7.4	13.2	.904	1.01
December	518.0	51	10.6	16.7	1.14	1.32
Calendar year 1949	7,488.3	208	0	20.4	1.40	18.96
January 1950	408.2	38	10.6	13.2	.904	1.04
February	705.3	72	12.3	25.2	1.73	1.80
March	790.2	112	12.3	25.5	1.75	2.01
April	443.6	31	10.6	14.8	1.01	1.13
May	505.1	42	10.6	16.3	1.12	1.29
June	209.4	26	1.2	6.98	.478	.53
July	489.6	218	2.3	15.8	1.08	1.25
August	236.6	31	3.1	7.63	.523	.60
September	857.0	473	4.4	28.6	1.96	2.18
Water year 1949-50	5,922.5	473	1.2	16.2	1.11	15.09

In addition to the records of streamflow obtained at gaging stations, measurements of flow were made at points indicated in the following tables.

Miscellaneous discharge measurements during period October 1945 to September 1950

Passaic River basin

Date	Stream	Tributary to or diverting from-	Locality	Drainage area (sq mi)	Discharge (cfs)
1946					
Nov. 1	Beaver Brook.	Rockaway River.	At site of former gaging station at outlet of Splitrock Reservoir	5.50	4.41
6	....do.....	....do.....	....do.....		3.05
Dec. 10	....do.....	....do.....	....do.....		1.52
1947					
Jan. 29	....do.....	....do.....	....do.....		11.2
Feb. 27	....do.....	....do.....	....do.....		5.43
1949					
Oct. 18	....do.....	....do.....	....do.....		16.2
Nov. 15	....do.....	....do.....	....do.....		34.1
1946					
Apr. 30	Rockaway River	Passaic River..	At Bergen St. Bridge in Dover.....	-	79.6
Oct. 18	....do.....	....do.....	100 ft above Indian Brook in Denville	87.9	74.6
Oct. 10	Erskine Brook	Wanaque River..	At mouth, 3⅛ miles north of Wanaque	1.14	9.08
1950					
Mar. 27	....do.....	....do.....	....do.....		4.08
1947					
Nov. 17	Passaic River	Newark Bay.....	At Lackawanna Ave. Bridge, 1.2 miles below Beatties Dam in Little Falls.	-	2,870
1948					
Feb. 27	....do.....	....do.....	....do.....		2,230
Mar. 10	....do.....	....do.....	....do.....		2,080
Apr. 5	....do.....	....do.....	....do.....		2,930
7	....do.....	....do.....	....do.....		2,370
13	....do.....	....do.....	....do.....		1,840
May 11	....do.....	....do.....	....do.....		1,280
17	....do.....	....do.....	....do.....		3,910
Aug. 3	....do.....	....do.....	....do.....		226
3	....do.....	....do.....	....do.....		225
1950					
July 11	....do.....	....do.....	....do.....		1,150
12	....do.....	....do.....	....do.....		1,460

Elizabeth River basin

1946					
Sept. 18	Elizabeth River	Arthur Kill....	At site of former gaging station at Valley St., Irvington	2.91	1.90
1947					
June 17	....do.....	....do.....	....do.....		3.90
1948					
Apr. 8	....do.....	....do.....	....do.....		4.72
1949					
Mar. 11	....do.....	....do.....	....do.....		6.82
1950					
Mar. 22	....do.....	....do.....	....do.....		2.07

Rahway River basin

1949					
May 31	South Branch Rahway River	Rahway River...	400 ft below Greene St. Bridge in Iselin	-	4.41
June 16	....do.....	....do.....	....do.....		2.37
Aug. 24	....do.....	....do.....	....do.....		1.10
Oct. 17	....do.....	....do.....	....do.....		1.43
Nov. 4	....do.....	....do.....	....do.....		2.75

Raritan River basin

1946					
Mar. 29	Green Brook..	Raritan River..	At Seeley Mills, 3/4 mile north of Scotch Plains	6.28	14.0
May 27	....do.....	....do.....	....do.....		44.6
1947					
Mar. 31	....do.....	....do.....	....do.....		6.07
July 7	....do.....	....do.....	....do.....		1.92
1948					
Apr. 22	....do.....	....do.....	....do.....		7.77

Miscellaneous discharge measurements during period October 1945 to September 1950--Continued

Raritan River basin--Continued

Date	Stream	Tributary to or diverting from-	Locality	Drainage area (sq mi)	Discharge (cfs)
1948					
Sept. 9	Green Brook..	Raritan River..	At Seeley Mills, 3/4 mile north of Scotch Plains	6.28	1.96
1949					
Mar. 23	....do.....	....do.....	....do.....		41.4
May 10	....do.....	....do.....	....do.....		6.83
Aug. 31	....do.....	....do.....	....do.....		.82
1950					
Apr. 25	....do.....	....do.....	....do.....		6.62
June 20	....do.....	....do.....	....do.....		1.68
1947					
Oct. 24	Unnamed.....	Ireland Brook..	At Dallenback sandpits 500 ft east of Helmetta-Patricks Corner Rd. and 1 mile east of Fresh Ponds	-	.18
Dec. 12	....do.....	....do.....	....do.....		.39
1948					
Jan. 28	....do.....	....do.....	....do.....		.61
Oct. 14	....do.....	....do.....	....do.....		.44
Dec. 13	....do.....	....do.....	....do.....		.59
1949					
Jan. 27	....do.....	....do.....	....do.....		1.01
Feb. 14	....do.....	....do.....	....do.....		1.02
Mar. 30	....do.....	....do.....	....do.....		1.00
1947					
Oct. 24	Ireland Brook	Lawrence Brook.	At Helmetta-Patricks Corner Rd, 1 mile east of Fresh Ponds	-	.28
Dec. 12	....do.....	....do.....	....do.....		.94
1948					
Jan. 28	....do.....	....do.....	....do.....		1.47
Oct. 14	....do.....	....do.....	....do.....		.94
Dec. 13	....do.....	....do.....	....do.....		1.02
1949					
Jan. 27	....do.....	....do.....	....do.....		5.30
Feb. 14	....do.....	....do.....	....do.....		3.42
Mar. 30	....do.....	....do.....	....do.....		2.71
Aug. 18	Cedar Brook..	Manalapan Brook	50 ft above mouth in Spotswood....	-	2.65
22	....do.....	....do.....	....do.....		2.85
Dec. 5	....do.....	....do.....	....do.....		4.21
1946					
Nov. 19	Manalapan Brook	South River....	At George St. Bridge, 1/4 mile below DeVoe Lake Dam in Spotswood	-	41.4
19	....do.....	....do.....	....do.....		39.7
1949					
Aug. 18	....do.....	....do.....	....do.....		20.0
22	....do.....	....do.....	....do.....		28.2
Dec. 5	....do.....	....do.....	....do.....		30.5
1946					
Nov. 19	Matchaponix Brook	Manalapan Brook	100 ft below Skinners Dam in Spotswood.	-	33.4
19	....do.....	....do.....	....do.....		30.1
1949					
Aug. 18	....do.....	....do.....	....do.....		10.1
22	....do.....	....do.....	....do.....		11.2[e]
Dec. 5	....do.....	....do.....	....do.....		22.8
1946					
Nov. 19	Iresick Brook	South River....	At Old Bridge-Englishtown Rd, 1 mile east of Spotswood.	-	.57
19	....do.....	....do.....	....do.....		.45

Delaware River basin

1948					
Nov. 3	Swartswood Lake outlet	Trout Brook....	Just below dam, 2 miles southwest of Swartswood.	-	3.16
5	....do.....	....do.....	....do.....		4.52
8	....do.....	....do.....	....do.....		6.56
1946					
Jan. 11	Pequest River	Delaware River.	At Prospect St. Bridge in Belvidere.	158	599
June 6	....do.....	....do.....	....do.....		503
Oct. 8	....do.....	....do.....	....do.....		61.7
1948					
Mar. 23	....do.....	....do.....	....do.....		633
1950					
Feb. 6	....do.....	....do.....	....do.....		137
Mar. 6	....do.....	....do.....	....do.....		191
Aug. 17	....do.....	....do.....	....do.....		68.9
1946					
Apr. 23	Delaware Division Canal	Lehigh River...	At Riegelsville, Pa.....	-	15.3
May 7	....do.....	....do.....	....do.....		24.4
20	....do.....	....do.....	....do.....		25.4
June 18	....do.....	....do.....	....do.....		26.5
July 2	....do.....	....do.....	....do.....		30.5
16	....do.....	....do.....	....do.....		28.3
Aug. 1	....do.....	....do.....	....do.....		21.4

Miscellaneous discharge measurements during period October 1945 to September 1950--Continued

Delaware River basin--Continued

Date	Stream	Tributary to or diverting from-	Locality	Drainage area (sq mi)	Discharge (cfs)
1947					
Jan. 11	Delaware Division Canal	Lehigh River...	At Durham Aqueduct, 1 mile south of Riegelsville, Pa.	-	21.8
1948					
July 13	....do.....	....do.....	....do.....		47.0
1949					
Apr. 25	....do.....	....do.....	....do.....		41.9
1948					
May 19	Stanley Spring	Musconetcong River	2½ miles southwest of Asbury.....	-	4.06
June 1	....do.....	....do.....	....do.....		4.82
July 22	....do.....	....do.....	....do.....		3.86
Sept. 15	....do.....	....do.....	....do.....		1.87
Oct. 21	....do.....	....do.....	....do.....		1.90
Nov. 18	....do.....	....do.....	....do.....		1.64
1949					
Jan. 27	....do.....	....do.....	....do.....		3.11
Feb. 8	....do.....	....do.....	....do.....		2.94
Apr. 4	....do.....	....do.....	....do.....		2.54
June 10	....do.....	....do.....	....do.....		1.95
Aug. 8	....do.....	....do.....	....do.....		1.44
Sept. 9	....do.....	....do.....	....do.....		1.01
Oct. 5	....do.....	....do.....	....do.....		.56
Nov. 17	....do.....	....do.....	....do.....		.68
Dec. 6	....do.....	....do.....	....do.....		.56
1950					
Feb. 14	....do.....	....do.....	....do.....		.81
Mar. 20	....do.....	....do.....	....do.....		1.41
Apr. 24	....do.....	....do.....	....do.....		2.10
May 18	....do.....	....do.....	....do.....		2.18
June 28	....do.....	....do.....	....do.....		1.33
July 26	....do.....	....do.....	....do.....		1.39
Aug. 18	....do.....	....do.....	....do.....		1.16
1946					
Feb. 11	Musconetcong River	Delaware River.	At mouth in Riegelsville.....	156	238
Apr. 23	....do.....	....do.....	....do.....		148
May 20	....do.....	....do.....	....do.....		413
30	....do.....	....do.....	....do.....		447
June 18	....do.....	....do.....	....do.....		226
July 2	....do.....	....do.....	....do.....		611
15	....do.....	....do.....	....do.....		124
Aug. 1	....do.....	....do.....	....do.....		154
Sept. 27	....do.....	....do.....	....do.....		142
Dec. 16	....do.....	....do.....	....do.....		105
1947					
Jan. 11	....do.....	....do.....	....do.....		70.0
Feb. 17	....do.....	....do.....	....do.....		142
Mar. 17	....do.....	....do.....	....do.....		499
June 4	....do.....	....do.....	....do.....		327
July 3	....do.....	....do.....	....do.....		263
Oct. 30	....do.....	....do.....	....do.....		108
1948					
July 13	....do.....	....do.....	....do.....		125
1949					
Mar. 22	....do.....	....do.....	....do.....		173
June 24	....do.....	....do.....	....do.....		97.4
Oct. 13	....do.....	....do.....	....do.....		86.3
1950					
Jan. 24	....do.....	....do.....	....do.....		100
Aug. 23	....do.....	....do.....	....do.....		156
1949					
Aug. 3	Delaware & Raritan Canal	Delaware River.	200 ft above gate at Raven Rock...	-	230
3	....do.....	....do.....	At Bridge St. Bridge in Lambertville.	-	62.8
1946					
Jan. 11	....do.....	....do.....	At Calhoun St. Bridge in Trenton..	-	0
Apr. 11	....do.....	....do.....	....do.....		0
June 10	....do.....	....do.....	....do.....		34.4
July 19	....do.....	....do.....	....do.....		34.0
Aug. 23	....do.....	....do.....	....do.....		53.6
Sept. 16	....do.....	....do.....	....do.....		58.8
Oct. 17	....do.....	....do.....	....do.....		65.0
Nov. 29	....do.....	....do.....	....do.....		60.0
Dec. 24	....do.....	....do.....	....do.....		6.10
1947					
Feb. 18	....do.....	....do.....	....do.....		29.1
Mar. 27	....do.....	....do.....	....do.....		37.6
Apr. 17	....do.....	....do.....	....do.....		21.8
May 22	....do.....	....do.....	....do.....		36.2
June 19	....do.....	....do.....	....do.....		62.5
July 23	....do.....	....do.....	....do.....		45.9
Aug. 19	....do.....	....do.....	....do.....		0
Sept. 30	....do.....	....do.....	....do.....		0
1948					
Mar. 31	....do.....	....do.....	....do.....		21.9
Apr. 26	....do.....	....do.....	....do.....		67.1
May 6	....do.....	....do.....	....do.....		44.7

Miscellaneous discharge measurements during period October 1945 to September 1950--Continued

Delaware River basin--Continued

Date	Stream	Tributary to or diverting from-	Locality	Drainage area (sq mi)	Discharge (cfs)
1948					
June 25	Delaware & Raritan Canal	Delaware River.	At Calhoun St. Bridge in Trenton..	-	14.8
July 21	....do.....	....do.....	....do.....		71.7
Aug. 24	....do.....	....do.....	....do.....		66.0
Oct. 12	....do.....	....do.....	....do.....		55.7
Nov. 17	....do.....	....do.....	....do.....		54.5
Dec. 8	....do.....	....do.....	....do.....		34.0
1949					
Jan. 14	....do.....	....do.....	....do.....		34.0
Feb. 18	....do.....	....do.....	....do.....		0
Apr. 26	....do.....	....do.....	....do.....		17.6
June 13	....do.....	....do.....	....do.....		48.1
May 27	....do.....	....do.....	....do.....		21.0
July 22	....do.....	....do.....	....do.....		36.7
Aug. 3	....do.....	....do.....	....do.....		45.0
26	....do.....	....do.....	....do.....		10.5
Oct. 3	....do.....	....do.....	....do.....		37.5
Nov. 4	....do.....	....do.....	....do.....		42.3
Dec. 2	....do.....	....do.....	....do.....		36.4
1950					
Jan. 26	....do.....	....do.....	....do.....		28.6
Feb. 1	....do.....	....do.....	....do.....		0
Mar. 16	....do.....	....do.....	....do.....		26.6
Apr. 19	....do.....	....do.....	....do.....		36.8
June 22	....do.....	....do.....	....do.....		36.9
July 26	....do.....	....do.....	....do.....		49.7
Aug. 11	....do.....	....do.....	....do.....		60.2
Sept. 22	....do.....	....do.....	....do.....		3.3
1945					
Oct. 29	....do.....	....do.....	At lock in Kingston	-	25.5
Nov. 8	....do.....	....do.....	....do.....		30.6
1946					
Jan. 3	....do.....	....do.....	....do.....		9.6
14	....do.....	....do.....	....do.....		26.7
Mar. 7	....do.....	....do.....	....do.....		42.2
Apr. 10	....do.....	....do.....	....do.....		35.5
June 10	....do.....	....do.....	....do.....		50.0
July 19	....do.....	....do.....	....do.....		46.2
Aug. 23	....do.....	....do.....	....do.....		68.5
1949					
Apr. 8	Unnamed.....	Jacobs Creek...	150 ft above Pennington-Ackors Corner Rd., 2 miles west of Pennington.	-	.18

Period of records of gaging stations

Explanation

The table lists the streamflow and reservoir stations in New Jersey for which records have been published for periods prior to Sept. 30, 1950. The stations are listed in downstream order. Tributary streams are indicated by indention.

Station names are given in their most recently published forms. Parentheses around part of a station name indicate that the enclosed word or words were used in an earlier published name of the station or in a name under which records were published by some agency other than an agency of the State of New Jersey.

The drainage areas, in square miles, are the latest figures published or otherwise available at this time.

Under "period of record" breaks of less than a 12-month period are not shown. A dash not followed immediately by a closing date shows that the station was in operation on September 30, 1950. The years given are calendar years. Periods of records published by agencies other than those of the State of New Jersey are listed in parentheses.

Records of both gage height and discharge are listed for streamflow stations. Records of gage heights only are designated by symbols and footnotes. For early years published gage heights and a published rating table were considered to be equivalent to daily discharges.

In the INDEX the stations are listed alphabetically.

	Drainage area (square miles)	Period of Record
HUDSON RIVER BASIN		
Hudson River:		
Rondout Creek:		
Wallkill River near Unionville, N. Y.	144	1937-
HACKENSACK RIVER BASIN		
Hackensack River at Rivervale	58.0	1941-
Pescack Brook at Westwood	29.6	1934-
Hackensack River at Oradell	-	(1908-13*a/).
Hackensack River at New Milford	113	1921-
PASSAIC RIVER BASIN		
Passaic River near (at) Millington	55.4	1903-6; 1921-
Passaic River near Chatham	100	1907-11; 1937-
Canoe Brook near Summit	11	1930-b/
Rockaway River:		
Beaver Brook at outlet of Splitrock Pond	5.50	1925-
Rockaway River above reservoir, at Boonton	116	1937-
Rockaway River (at and near Boonton) below reservoir, at Boonton	119	(1903-4a/); 1906-
Whippany River at Morristown	29.4	1921-
Passaic River at Two Bridges (Mountain View)	-	(1901-3a/).
Pequannock River (head of Pompton River) at Macopin intake dam	63.7	1892-
Greenwood Lake at Awosting (The Glens)	27.1	1898-1903*; 1907-*
Wanaque River at Awosting (Greenwood Lake)	27.1	1919-
Wanaque River at Monks	40.4	1935-
Ringwood Creek near Wanaque	19.1	1934-
Cupsaw Brook near Wanaque	4.38	1934-
Erskine Brook near Wanaque	1.14	1934-38.
West Brook near Wanaque	11.8	1935-
Blue Mine Brook near Wanaque	1.71	1934-
Wanaque River at Wanaque	90.4	(1903-5*a/); 1912-15; 1919-
Ramapo River near Mahwah	118	1903-6; (1908a/c/); 1922-
Ramapo River at Pompton Lakes	160	1921-
Pompton River at Pompton Plains	355	1903; (1904*a/); 1940-
Pompton River at Two Bridges (Mountain View)	-	(1901-3a/).
Passaic River at Paterson	785	1897-
Saddle River at Lodi	54.6	1923-
Weasel Brook at Clifton	4.45	1937-
Second River at Belleville	11.6	1937-
ELIZABETH RIVER BASIN		
Elizabeth River at Irvington	2.91	1930-38.
Elizabeth River at Elizabeth	18.0	1921-
RAHWAY RIVER BASIN		
Rahway River:		
West Branch Rahway River at Millburn	7.1	1939-
Rahway River near Springfield	25.5	1938-
Rahway River at Rahway	40.9	(1908-15*a/); 1921-
Robinsons Branch Rahway River at Goodmens	12.7	1921-24.
Robinsons Branch Rahway River at Rahway	21.6	1939-
RARITAN RIVER BASIN		
South Branch Raritan River near High Bridge	65.3	1919-
South Branch Raritan River at Stanton	147	(1903-4*a/); 1904-6; 1919-
Neshanic River:		
Walnut Brook near Flemington	2.24	1936-
Neshanic River at Reaville	25.7	1930-
North Branch Raritan River near Far Hills	26.2	1922-
North Branch Raritan River near Pluckemin (Far Hills)	52	(1903-6a/).

* Gage heights or gage heights and discharge measurements only.
a/In Water-Supply Papers of the United States Geological Survey.
b/Fragmentary record of daily discharge only.
c/Discharge measurements only.

Period of records of gaging stations--Continued

	Drainage area (square miles)	Period of record
RARITAN RIVER BASIN		
North Branch Raritan River--Continued		
Black River (head of Lamington River) near Pottersville	32.8	1921-
North Branch Raritan River near Raritan (at Milltown)	190	1923-
Raritan River at Manville (Finderne)	490	(1903-4*a/); 1904-7; (1908-15*a/); 1921-
Lake Carnegie at Princeton	159	1924-*
Millstone River near Kingston	171	1933-
Millstone River at Blackwells Mills	258	1921-
Millstone River at Millstone	-	(1903-4*a/).
Raritan River at Bound Brook	779	(1903-5a/); 1906-9; 1945-
Green Brook at Plainfield	9.75	1938-
Green Brook at Bound Brook	49	1923-31.
Lawrence Brook at Patricks Corner	29	1922-26.
Lawrence Brook at Farrington Dam	34.4	1927-
South River at Old Bridge	94.6	1939-
Deep Run near Browntown	8.07	1932-40.
Tennent Brook near Browntown	5.25	1932-41.
MATAWAN CREEK BASIN		
Matawan Creek at Matawan	6.11	1932-
NAVESINK RIVER BASIN		
Swimming River (head of Navesink River) near Red Bank	48.5	1922-
MANASQUAN RIVER BASIN		
Manasquan River at Squankum	43.4	1931-
TOMS RIVER BASIN		
Toms River near Toms River	124	1928-
CEDAR CREEK BASIN		
Cedar Creek at Lanoka Harbor	56.0	1932-
MULLICA RIVER BASIN		
Mullica River:		
Batsto River at Batsto	70.5	1927-
Wading River:		
East Branch Wading River at Harrisville	64.0	1931-
ABSECON CREEK BASIN		
Absecon Creek at Absecon	16.6	1923-29; 1932-38. 1946-
GREAT EGG HARBOR RIVER BASIN		
Great Egg Harbor (Great Egg) River at Folsom	56.3	1925-
MAURICE RIVER BASIN		
Maurice River at Norma	113	1932-
Manantico Creek near Millville	22.3	1931-
COHANSEY RIVER BASIN		
Cohansey River:		
Loper Run near Bridgeton	2.34	1937-
DELAWARE RIVER BASIN		
Delaware River at Port Jervis, N. Y.	3,076	1904-
Delaware River at Montague (Milford, Pa.)	3,480	1936-40*; 1940-
Delaware River at Dingmans Ferry, Pa.	3,542	1936-*
Flat Brook near Flatbrookville	65.1	1928-
Delaware River at Portland, Pa.	4,165	1936-*
Paulins Kill at Blairstown	126	1921-
Paulins Kill at Columbia	179	(1908-9a/).
Delaware River at Delaware	4,351	1936-*
Pequest River at Huntsville	31.4	1939-
Pequest River at Pequest	108	1921-
Beaver Brook near Belvidere	36.2	1922-
Delaware River at Belvidere (at Phillipsburg)	4,535	1922-
Delaware River at Easton, Pa.	4,717	1936-*
Lake Hopatcong at Landing	25.6	1887-*
Musconetcong River at outlet of Lake Hopatcong	25.6	1928-
Musconetcong River near Hackettstown	70.0	1921-
Musconetcong River at Asbury	-	(1903*a/).
Musconetcong River near Bloomsbury	143	1906-7; 1921-
Delaware River at Riegelsville	6,528	1906-
Delaware River at Milford	6,381	1936-*
Delaware River at Frenchtown	6,420	1936-*
Delaware River at Point Pleasant, Pa.	6,473	1936-*
Delaware & Raritan Canal at Kingston	-	1947-
Delaware River at Lumberville, Pa.	6,598	1936-45*.
Delaware River at Stockton	6,656	1936-*
Delaware River at Lambertville	6,680	1897-1902; 1903-8*; 1936-*
Delaware River at Washington Crossing	6,735	1936-*
Delaware River at Yardley, Pa.	6,772	1936-*
Delaware River at Trenton	6,780	1913-
Assunpink Creek at Trenton	89.4	1923-
Crosswicks Creek at Extonville	83.6	1940-
Rancocas Creek:		
North Branch Rancocas Creek at Pemberton	111	1921-
Mantua Creek at Pitman	6.75	1940-
Oldmans Creek near Woodstown	19.3	1931-40.
Salem Creek at Woodstown	14.6	1941-

* Gage heights or gage heights and discharge measurements only.
a/In Water-Supply Papers of United States Geological Survey.

INDEX

Page

Absecon Creek at Absecon.....223-226
Acknowledgments..... 4
American Cyanamid Co., Calco Chemical Division, cooperation with, and diversion by..... 179
Assunpink Creek at Trenton.....334-337
Average discharge, explanation of..... 3
Awosting, Greenwood Lake at..... 57-49
Wanaque River at..... 60-63

Batsto River at Batsto.....215-218
Beaver Brook (Delaware River Basin) near Belvidere.....275-278
Beaver Brook (Passaic River Basin) at outlet of Splitrock Reservoir..... 39-40
discharge measurements of..... 354
Belleville, Second River at.....112-115
Belvidere, Beaver Brook near.....275-278
Delaware River at.....279-282
Blackwells Mills, Millstone River at.....175-178
Blairstown, Paulins Kill at.....260-263
Bloomsbury, Musconetcong River near..297-300
Blue Mine Brook near Wanaque..... 80-83
Boonton Reservoir (Jersey City), capacity of..... 45
Boonton, Rockaway River above reservoir, at..... 41-44
Rockaway River below reservoir, at.. 45-48
Bound Brook, Raritan River at.....179-182
Bridgeton, Loper Run near.....239-242

Calco Chemical Division, American Cyanamid Co., cooperation with, and diversion by..... 179
Canistear Reservoir, regulation by.... 53,96
Canoe Brook near Summit..... 36-38
Carnegie, Lake, at Princeton.....168-170
Cedar Brook, discharge measurements of..... 355
Cedar Creek at Lanoka Harbor.....211-214
Chatham, Passaic River near..... 32-35
Cliff Lake Reservoir, regulation by..243,247 279,301,330
Clifton, Weasel Brook at.....108-111
Clinton Reservoir, regulation by..... 53,96
Cohansey River basin, gaging-station record in.....239-242
Commonwealth Water Co., cooperation with..... 36
diversion from Baltusrol well field by..... 183
diversion from Canoe Brook and Canoe Brook well field by.....36,100
Control, definition of..... 2
Crosswicks Creek at Extonville.....338-341
Cubic feet per second-day, definition of..... 2
Cubic feet per second per square mile, definition of..... 2
Cubic foot per second, definition of.. 2
Cupsaw Brook near Wanaque..... 72-75
Cupsaw Lake, regulation by..... 72

Daily discharge, table of, explanation of..... 4
Data, explanation of..... 2-4
Definition of terms..... 2
Delaware & Raritan Canal at Kingston.314-317
discharge measurements of.....356-357
diversion from..... 330
Delaware, Delaware River at.....264-266
Delaware Division Canal, discharge measurements of.....355-356
diversion from..... 301

Page

Delaware River at Belvidere.....279-282
at Delaware.....264-266
at Dingmans Ferry, Pa.....251-252
at Easton, Pa.....283-285
at Frenchtown.....308-310
at Lambertville.....321-323
at Milford.....305-307
at Montague.....247-250
at Point Pleasant, Pa.....311-313
at Port Jervis, N. Y.....243-246
at Portland, Pa.....257-259
at Riegelsville.....301-304
at Stockton.....318-320
at Trenton.....330-333
at Washington Crossing.....324-326
at Yardley, Pa.....327-329
Delaware River basin, discharge measurements of.....355-357
gaging-station records in.....243-353
Delaware River Joint Toll Bridge Commission, cooperation with....251,257 264,283,305,308,311,318,321,324,327
Dingmans Ferry, Pa., Delaware River at.....251-252
Discharge measurements, miscellaneous.....355-357
Duhernal Water Co., cooperation with, and diversion by..... 191

Easton, Pa., Delaware River at.....283-285
East Orange, diversion by..... 100
Echo Lake Reservoir, regulation by..... 53,96
Elizabeth River at Elizabeth.....116-119
discharge measurements of..... 354
Elizabeth River basin, discharge measurements of..... 354
gaging-station record in.....116-119
Elizabethtown Water Co., diversion from Hammock well field by..... 116
diversion from Springfield station by.....124,128
diversion from Raritan River by..... 179
Erskine Brook, discharge measurements of..... 354
Explanation of data..... 2
Extonville, Crosswicks Creek at.....338-341

Far Hills, North Branch Raritan River near.....152-155
Farrington Dam, Lawrence Brook at.....187-190
Farrington Reservoir, capacity of..... 187
Flat Brook near Flatbrookville.....253-256
Flemington, Walnut Brook near.....144-147
Floods, special reports on..... 1
Folsom, Great Egg Harbor River at.....227-230
Frenchtown, Delaware River at.....308-310

Gaging stations, period of records at.....358-359
Geological Survey, United States, cooperation with..... 1
Great Egg Harbor River at Folsom.....227-230
Green Brook at Plainfield.....183-186
discharge measurements of.....354-355
Greenwood Lake at Awosting..... 57-59
capacity of..... 57
regulation by..... 60,64 84,96,100

Hackensack River at New Milford..... 24-27
at Rivervale..... 16-19
Hackensack River basin, gaging-station records in..... 16-27
Hackensack Water Co., cooperation with.....16,20,24

Page
Hackettstown, Musconetcong River near....293-296
Harrisville, East Branch Wading River at....219-222
High Bridge, South Branch Raritan River near....136-139
Hudson River basin, gaging-station records in.... 6-15
Huntsville, Pequest River at....267-270

Ireland Brook, discharge measurements of.... 355
Iresick Brook, discharge measurements of.... 355

Jersey City, Department of Streets and Public Improvements, cooperation with....39,41,45
Johns-Manville plant, diversion by... 164

Kingston, Delaware & Raritan Canal at....314-317
Kingston, Millstone River near....171-174

Lake Carnegie at Princeton....168-170
regulation by.... 171
Lake Hopatcong at Landing....286-288
capacity of.... 289
Musconetcong River at outlet of....289-292
regulation by....289,293,297,301,330
Lake Lefferts at Matawan, regulation by.... 195
Lake Wallenpaupack, regulation by....247,279 301,330
Lambertville, Delaware River at....321-323
Lamington (Black) River near Pottersville....156-159
Landing, Lake Hopatcong at....286-288
Lanoka Harbor, Cedar Creek at....211-214
Lawrence Brook at Farrington Dam....187-190
Lodi, Saddle River at....104-107
Loper Run near Bridgeton....239-242

Macopin intake dam, Pequannock River at.... 53-56
Mahwah, Ramapo River near.... 88-91
Manalapan Brook, discharge measurements of.... 355
Manantico Creek near Millville....235-238
Manasquan River at Squankum....203-206
Mantua Creek at Pitman....346-349
Manville, Raritan River at....164-167
Matawan Creek at Matawan....195-198
Matchaponix Brook, discharge measurements of.... 355
Maurice River at Norma....231-234
Maurice River basin, gaging-station records in....231-238
Middlesex Water Co., diversion by.... 132
Milford, Delaware River at....305-307
Millburn, West Branch Rahway River at....120-123
Millington, Passaic River near.... 28-31
Millstone River at Blackwells Mills..175-178
near Kingston....171-174
Millville, Manantico Creek near....235-238
Miscellaneous discharge measurements.354-356
Monks, Wanaque at.... 64-67
Monmouth Consolidated Water Co., cooperation with.... 199
Montague, Delaware River at....247-250
Morris Canal & Banking Co., cooperation with....57,286
Morristown, Whippany River at.... 49-52
Mullica River basin, gaging-station records in....215-222
Musconetcong River at outlet of Lake Hopatcong....289-292
discharge measurements of.... 356
near Bloomsbury....297-300
near Hackettstown....293-296

Navesink River basin, gaging-station record in....199-202
Neshanic River at Reaville....148-151

Page
Newark, Department of Public Affairs, Division of Water, cooperation with.... 53
New Brunswick, cooperation with.... 187
New Milford, Hackensack River at.... 24-27
Norma, Maurice River at....231-234
North Jersey District Water Supply Commission, cooperation with..... 60,64 68,72,76,80,84

Oak Ridge Reservoir, regulation by..... 53,96
Old Bridge, South River at....191-194
Oradell Reservoir, capacity of.... 24
Orange, city of, diversions by....120,124 128

Pascack Brook at Westwood.... 20-23
Passaic River at Little Falls, diversion from.... 100
at Paterson....100-103
near Chatham.... 32-35
near Millington.... 28-31
Passaic River basin, discharge measurements of.... 354
gaging-station records in....28-115
Paterson, city of, cooperation with.... 100
Paterson, Passaic River at....100-103
Paulins Kill at Blairstown....260-263
Peak discharge, explanation of..... 3-4
Pemberton, North Branch Rancocas Creek at....342-345
Pennsylvania Power & Light Co., records furnished by.... 243
Pequannock, recorder on Pompton River at.... 96
Pequannock River at Macopin intake dam.... 53-56
Pequest, Pequest River at....271-274
Pequest River at Huntsville....267-270
at Pequest....271-274
discharge measurements of.... 355
Period of records of gaging stations..358-359
Pitman, Mantua Creek at....183-186
Pocahontas Dam, Morristown, operation of gates in.... 49
Point Pleasant, Pa., Delaware River at....311-313
Pompton Lakes, Ramapo River at..... 92-95
regulation by.... 92
Pompton Plains, Pompton River at..... 96-99
Pompton River at Pompton Plains..... 96-99
Port Jervis, N. Y., Delaware River at....243-246
Portland, Pa., Delaware River at....257-259
Post Brook, diversion from, into Wanaque Reservoir.... 84
Pottersville, Lamington (Black) River near....156-159
Princeton, Borough of, cooperation with.... 171
Lake Carnegie at....168-170
Princeton University, record furnished by....168,171

Rahway, city of, diversion by..... 128
Rahway River at....128-131
Robinsons Branch Rahway River at....132-135
Rahway River at Rahway....128-131
near Springfield....124-127
Robinsons Branch, at Rahway....132-135
South Branch, discharge measurements of.... 354
West Branch, at Millburn....120-123
Rahway River basin, discharge measurements of.... 354
gaging-station records in....120-135
Ramapo River at Pompton Lakes..... 92-95
near Mahwah.... 88-91
Rancocas Creek, North Branch, at Pemberton....342-345
Raritan, North Branch Raritan River near....160-163
Raritan River at Bound Brook....179-182
at Manville....164-167
North Branch, near Far Hills....152-155

Page

Raritan, South Branch Raritan River
at Stanton.....140-143
near High Bridge.....136-139
Raritan River basin, discharge
measurements of.....354-355
gaging-station records in.....136-194
Rating tables, explanation of..... 3
Reaville, Neshanic River at.....148-151
Records of gaging stations, period
of.....358-359
Red Bank, Swimming River near.....199-202
Riegelsville, Delaware River at.....301-304
Ringwood Creek near Wanaque..... 68-71
Ringwood Lake, regulation by..... 68
Rivervale, Hackensack River at..... 16-19
Robinsons Branch Rahway River at
Rahway.....132-135
Rockaway River above reservoir,
at Boonton..... 41-44
below reservoir, at Boonton..... 45-48
discharge measurements of..... 354
Rockland Light & Power Co., records
furnished by..... 243
Runoff in inches, definition of..... 2

Saddle River at Lodi.....104-107
Salem River at Woodstown.....350-353
Schweitzer Co., Peter J., diversion
by..... 191
Second River at Belleville.....112-115
Shifting-control method, explanation
of..... 3
Short Hills Water Co., diversion by..124,128
South Orange, diversion by.....124,128
South River at Old Bridge.....191-194
Splitrock Reservoir, Beaver Brook
at outlet of..... 39-40
regulation by..... 41
Springfield, Rahway River near.....124-127
Squankum, Manasquan River at.....203-206
Stage-discharge relation, definition
of..... 2
Stanley Spring, discharge measure-
ments of..... 356
Stanton, South Branch Raritan River
at.....140-143

Page

Stockton, Delaware River at.....318-320
Stony Brook Reservoir, capacity of..... 41
Stream gaging, general information..... 2
Summit, Canoe Brook near..... 36-38
Swartswood Lake outlet, discharge
measurement of..... 355
Swimming River near Red Bank.....199-202
Swinging Bridge Reservoir, regula-
tion by.....247,279,301,330

Taylor-Wharton Iron & Steel Co., co-
operation with..... 136
Terms, definition of..... 2
Toms River near Toms River.....207-210
Toronto Reservoir, regulation by.....247,279
301,330
Trenton, Assunpink Creek at.....334-337
Delaware River at.....330-333

Unionville, N. Y., Wallkill River at... 6-15
United States Geological Survey, co-
operation with..... 1

Wading River, East Branch, at
Harrisville.....219-222
Wallkill River near Unionville, N. Y... 6-15
Walnut Brook near Flemington.....144-147
Wanaque, Blue Mine Brook near..... 80-83
Cupsaw Brook near..... 72-75
Ringwood Creek near..... 68-71
Wanaque River at..... 84-87
West Brook near..... 76-79
Wanaque Reservoir, capacity of..... 84
regulation by..... 84,96
Wanaque River at Awosting..... 60-63
at Monks..... 64-67
at Wanaque..... 84-87
Washington Crossing, Delaware River at..324-326
Weasel Brook at Clifton.....108-111
West Brook near Wanaque..... 76-79
Westwood, Pascack Brook at..... 20-23
Whippany River at Morristown..... 49-52
Woodcliff Lake, capacity of..... 20,24
Woodstown, Salem River at.....350-353

Yardley, Pa., Delaware River at.....327-329

