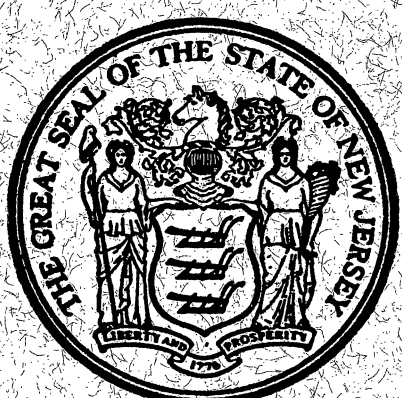
STATE OF NEW JERSEY

DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

DIVISION OF WATER POLICY AND SUPPLY



FROM

SPECIAL REPORT 16

SURFACE WATER SUPPLY OF NEW JERSEY

STREAMFLOW RECORDS

October 1950 to September 1955

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

1960

STATE OF NEW JERSEY

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SPECIAL REPORT 16

SURFACE WATER SUPPLY OF NEW JERSEY

STREAMFLOW RECORDS

October 1, 1950 to September 30, 1955

By

JOHN E. McCALL, District Engineer

ALEXANDER C. LENDO, Hydraulic Engineer

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

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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*

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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. J. E. McCall, District Engineer, and Mr. A. C. Lendo, Hydraulic Engineer, U. S. Geological Survey. The report covers the five-year period from October 1, 1950 to September 30, 1955. Similar records for earlier years are available in Special Report 14 (1959) and 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 the discharge records for 77 stations, records of gage height for 13 stations, month-end elevation and contents for 18 reservoirs and lakes, and monthly records of diversion for 11 stations. 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 16 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

April 15, 1960

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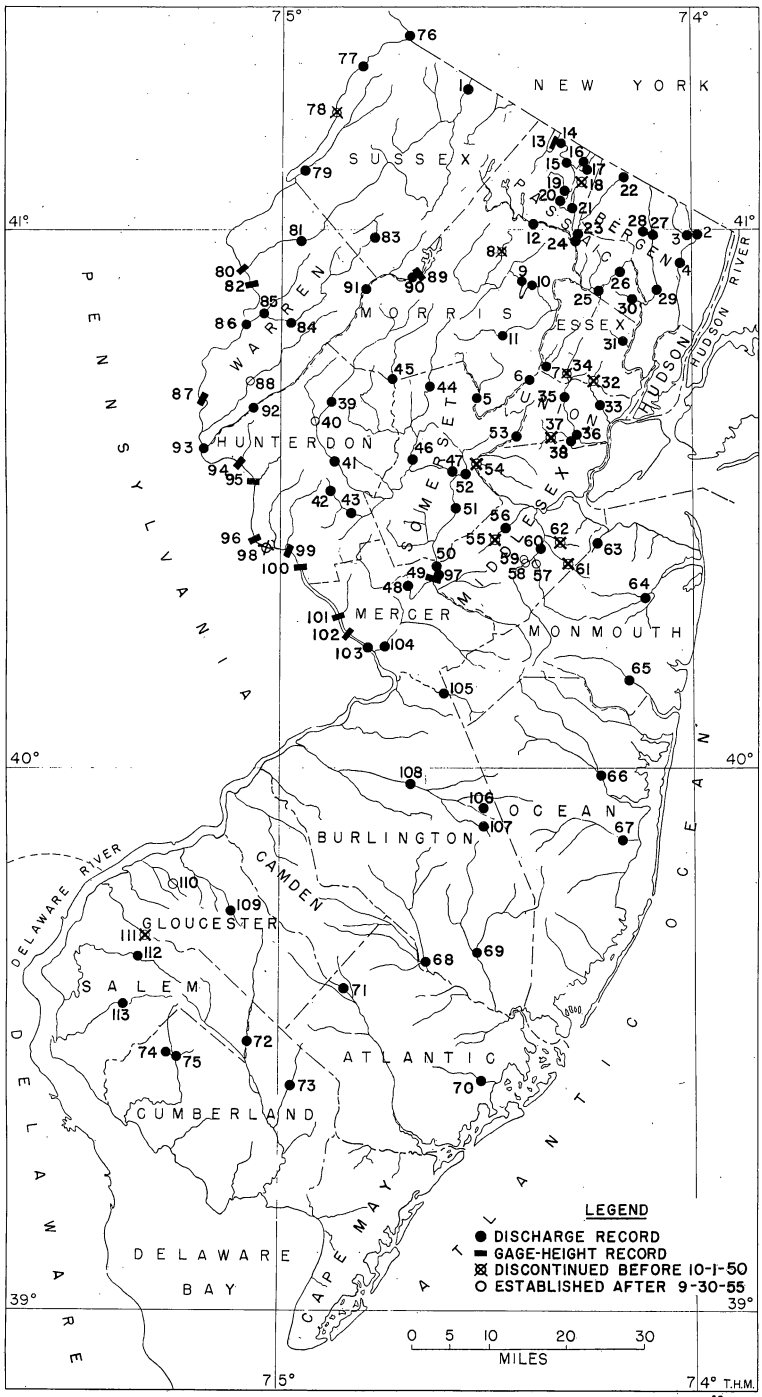
‡ Station established subsequent to period of this report.



LOCATION OF GAGING STATIONS

CONTENTS

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SURFACE WATER SUPPLY OF NEW JERSEY

STREAMFLOW RECORDS

OCTOBER 1, 1950, to SEPTEMBER 30, 1955

By John E. McCall, 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 and Economic Development, Division of Water Policy and Supply. The stream-gaging work by the Survey in cooperation with the State of New Jersey began in July 1921 and cooperative agreements were made from year to year, thereafter. 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 in New Jersey for the period October 1, 1950, to September 30, 1955. Also included in this report are revisions of surface-water records for many stations that were previously published in State reports. These revisions were based on a review of the analyses and computations originally made for all records collected up to September 30, 1950 and the additional base data that was obtained subsequently. The monthly and yearly summaries of streamflow and reservoir and diversion data collected up to September 30, 1950 will be presented in United States Geological Survey Water-Supply Paper 1302. 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, 1950, are published in Special Reports 12 and 14 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. These 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 North Atlantic States.
1420	Floods of August-October 1955 New England to North Carolina.

STREAM GAGING

The discharge records for 77 stations, all equipped with water-stage recorders, and records of gage heights for 13 stations, of which three were equipped with water-stage recorders and 10 with wire-weight gages, are presented in this report. Under Reservoirs in and Diversions from the Hackensack, Passaic, and Delaware River basins, the month-end elevation and contents for 18 reservoirs and lakes and monthly records of diversion for 11 stations are presented. Also, the discharge measurements that were made during the period of this report at many points other than regular gaging stations are published at the end of this report. The records of discharge for two stations and gage-height records for three stations were discontinued during the period of this report. Also, the records for four of the six stations that were established during this period are published in this report. The records of discharge for two new stations were not available for publication in this report because the high-water rating curves were not defined or that further study was required.

DEFINITION OF TERMS AND ABBREVIATIONS

The units in which streamflow 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.

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 (In.) 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.

Contents is the volume of water in a reservoir. The volume is computed on basis of a level pool and does not include bank storage.

The drainage area of a stream at a specified location is that area, measured in a horizontal plane, which is so enclosed by a topographic divide that direct surface runoff from precipitation normally would drain by gravity into the river above the specified point.

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 non-recording 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. Runoff at some stations, as indicated by the monthly mean, may vary widely from natural runoff, owing to diversion from surface or ground water, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, values of cubic feet per second per square mile and runoff in inches are not published unless the adjustments for changes in reservoir contents and diversion from surface water give results that are thought to represent runoff within reasonable limits. Whenever adjustments for change in reservoir contents are made, the evaporation from a reservoir is not included and is considered to be small in comparison with the observed mean.

For some stations where adjustments for storage and diversion are made, large errors in computed runoff may occur when relatively large negative adjustments are made (adjusted figures of runoff may be negative), when evaporation is large, or due to the uncertainty in the method used for adjustment for diversion by pumping from wells. Thus, for some stations, the previously published figures of adjusted runoff may be considerably in error, and the observed monthly mean only is given in this report. For each of these stations, the known regulation by reservoirs or lakes and diversion above the station is given under Remarks of the manuscript with reference to the monthly records under Reservoirs in and Diversions from the Hackensack, Passaic, and Delaware River basins.

HYDROLOGIC CONDITIONS

During the period of this report, noteworthy drought and flood conditions occurred. Streamflow during the 1952-53 water years averaged well above normal. In sharp contrast, streamflow during the 1954 water year was deficient and this condition continued into the 1955 year when record-low flows for the month occurred at the gaging station on Great Egg Harbor River at Folsom in May; at South Branch Raritan River near High Bridge in April, June, and July. The drought conditions were broken by the heavy rains of August 12 and 13 that accompanied the passage of hurricane Connie. On August 18 and 19, the heavy rainfall associated with the Diane storm caused record-breaking floods.

The principal areas of flooding in New Jersey were the main Delaware River and its northern tributaries and parts of the Passaic and Raritan River basins. Flood damages along the Delaware were the greatest in history. The flood contributed indirectly to six deaths in New Jersey. There was a considerable amount of damage in the village of Branchville as a result of the destruction of two dams upstream.

In the Passaic River basin, a new record peak discharge occurred at only one gaging station, that on Wanaque River at Monks.

In the Raritan River basin, new peaks occurred at South Branch Raritan River at Stanton, Neshanic River at Reaville, and North Branch Raritan River near Raritan. The peak discharge of 18,000 cfs on August 19, 1955 at the Stanton station (1903-6, 1919-55) was about 1.7 times the previous maximum discharge of March 15, 1940 and

July 19, 1945, and 2.0 times that for October 9, 1903.

New peaks also occurred at stations on Delaware River tributaries at Flat Brook near Flatbrookville, Paulins Kill at Blairstown, and the Musconetcong River stations at outlet to Lake Hopatcong and near Hackettstown.

The most notable feature of the August floods in New Jersey was the great flood on the Delaware River. At all five gaging stations between Port Jervis, N. Y. and Trenton, N. J., new record peaks occurred, which exceeded even the historical flood of 1903. Four bridges across the Delaware River were destroyed and it is noteworthy that the old covered bridge between Portland, Pa. and Columbia, N. J., which was started in 1831 and completed in 1869, withstood all floods until the disaster in August 1955. The memories of old residents and the historical records indicate that the discharge during the 1955 flood was the greatest on the Delaware River since the country was first settled.

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 John E. McCall, District Engineer, and under the immediate supervision of Alexander C. Lendo, Hydraulic Engineer. Acknowledgment is made to Mrs. Dorothy W. Kozak, who, with the able assistance of Mrs. Janet C. Wood, did most of the laborious and exacting work of assembling and typing both the original manuscript and the final copy for printing by 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 1955.

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.--18 years, 221 cfs.

Extremes.--1937-55: Maximum discharge, 6,880 cfs Aug. 19, 1955 (gage height, 13.35 ft); minimum, 6.4 cfs Sept. 30, 1941; minimum gage height, 2.855 ft Aug. 5, 6, 1955.

Peak discharge (base, 1,200 cfs).--
1950-51: Nov. 26 (11:30 p.m.) 2,210 cfs (10.20 ft); July 30 (10:30 a.m.) 1,200 cfs (8.72 ft).
1951-52: Mar. 13 (10:30 a.m.) 1,220 cfs (8.77 ft); Apr. 6 (10 p.m.) 1,640 cfs (9.49 ft); June 2 (7:15 p.m.) 2,250 cfs (10.24 ft); Sept. 3 (12:30 p.m.) 1,610 cfs (9.44 ft).
1952-53: Jan. 25 (5:30 p.m.) 1,890 cfs (9.83 ft).
1953-54: Dec. 9 (12:15 a.m.) 1,200 cfs (8.28 ft).
1954-55: Aug. 19 (9 p.m.) 6,880 cfs (13.35 ft).

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	50	c560	b180	224	352	c1,060	147	136	128	c620	62
2	37	50	c480	b165	522	331	c960	*136	111	126	c390	66
3	34	50	414	b170	592	331	*c840	122	100	90	192	81
4	32	55	463	396	517	321	c800	113	100	75	156	75
5	*30	195	778	603	408	391	c740	111	165	96	122	65
6	30	192	1,000	554	331	475	c660	105	170	100	104	60
7	29	109	1,040	408	471	503	c580	102	116	70	93	*70
8	29	82	c980	b330	d700	489	c480	97	87	57	97	71
9	31	71	c900	b300	d860	*421	402	93	76	50	98	65
10	34	67	c820	*b270	d720	334	361	87	74	44	88	56
11	40	60	c740	245	605	288	368	90	74	43	102	52
12	41	57	c660	226	437	300	342	126	68	42	114	50
13	49	54	*c600	222	530	286	490	120	65	47	532	49
14	48	*51	c500	195	*660	382	539	95	136	48	463	48
15	41	49	414	374	b600	553	436	84	257	42	284	109
16	38	49	380	584	b420	510	346	78	222	38	265	134
17	36	52	354	580	375	408	346	71	161	38	497	82
18	35	54	318	441	562	342	316	70	107	39	533	63
19	*34	51	b290	429	594	302	280	67	84	52	401	55
20	32	50	b240	497	548	487	257	67	74	71	251	51
21	37	74	b220	484	*592	629	228	68	67	60	188	47
22	38	97	b200	367	774	571	208	68	63	47	163	44
23	52	74	b200	277	c820	460	301	72	96	133	134	42
24	95	63	b195	445	c660	393	320	177	192	111	115	42
25	74	311	b175	643	c540	366	248	211	115	*66	109	41
26	60	1,570	b140	629	475	308	225	124	78	51	102	43
27	52	c1,900	b135	482	433	266	200	98	*75	78	92	41
28	49	c1,400	b145	b380	400	248	175	*128	98	616	82	43
29	50	c1,020	b165	b350	-------	266	170	173	f82	979	75	51
30	50	c740	b200	311	-------	483	165	271	f118	c1,160	71	46
31	50	-------	b205	b215	-------	791	-------	214	-------	c940	66	-------

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
c Backwater from overbank storage.
d Doubtful gage-height record; discharge computed on basis of weather records and records for other stations in the Wallkill River basin.
f Fragmentary gage-height record; discharge computed on basis of partially estimated gage heights.

Wallkill River near Unionville, N. Y.

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	206	188	402	d440	203	268	c940	796	107	*62	357
2	46	439	195	549	466	b155	446	c760	1,930	82	55	1,110
3	43	522	190	655	504	b150	482	c600	*c2,000	71	56	c1,550
4	43	664	180	651	581	b150	346	c440	c1,550	65	56	c1,400
5	42	679	276	548	752	236	616	366	c1,200	66	51	c1,160
6	38	534	449	447	812	288	1,350	329	c900	63	60	c880
7	38	521	404	361	706	217	c1,500	308	c700	57	80	c640
8	143	c780	329	b290	544	198	c1,240	277	c540	56	70	c370
9	137	c880	286	277	445	203	c1,020	245	364	151	62	242
10	80	c840	257	b260	384	242	c780	222	324	499	90	200
11	88	c700	225	b240	359	523	c620	248	297	594	119	175
12	279	c500	208	b220	356	951	c460	467	236	464	84	154
13	204	c380	b180	b200	b270	c1,180	382	600	198	210	173	139
14	116	329	b140	b280	b250	c1,080	612	503	172	132	131	124
15	87	402	b116	456	b215	c880	848	334	154	104	81	126
16	75	406	b112	537	b180	c680	1,050	294	141	88	176	149
17	*67	453	b108	482	b160	c490	c1,060	228	134	81	627	136
18	62	400	b135	489	b180	397	c840	268	214	78	764	115
19	58	324	b170	515	b170	380	c680	283	172	72	742	288
20	55	268	*b200	447	b160	439	c520	260	141	68	473	453
21	51	b220	407	458	b155	*539	395	*375	115	68	231	321
22	50	211	b740	308	b150	549	331	305	124	87	308	190
23	49	217	b860	494	b140	566	*302	219	143	76	222	*168
24	53	271	b880	611	b135	637	280	182	154	63	145	175
25	218	286	b780	b470	b130	645	350	393	141	54	111	141
26	188	260	b640	b520	b125	566	660	722	*115	47	93	120
27	111	331	b500	795	b155	464	823	851	97	51	86	109
28	100	245	349	*974	178	389	957	780	87	145	87	97
29	*120	*203	318	980	*198	342	1,080	550	84	105	90	92
30	102	182	b310	d740	-------	308	c1,080	447	111	100	87	88
31	88	-------	b360	d580	-------	280	-------	414	-------	72	81	-------

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
c Backwater from overbank storage.
d Doubtful gage-height record; discharge computed on basis of weather records, and records for other stations in the basin.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	86	58	b240	b135	526	b210	313	345	134	46	20	16
2	82	56	b225	b135	b420	b180	334	400	111	42	20	16
3	148	55	b210	195	b330	b185	313	326	95	51	22	14
4	123	56	b200	b250	305	410	271	280	86	48	23	12
5	93	55	236	b175	260	601	308	291	80	40	24	12
6	84	55	513	b145	248	518	271	349	76	37	25	28
7	76	55	603	136	316	349	469	288	136	37	23	27
8	75	55	522	b130	423	b270	c840	286	143	36	21	21
9	71	54	390	b125	b330	b235	c960	344	97	50	24	18
10	71	56	329	b200	b250	b230	c920	342	76	46	269	16
11	70	58	463	305	211	b195	c820	274	*63	34	153	16
12	70	61	c740	339	222	203	c700	228	57	31	60	16
13	68	55	c860	283	239	*430	647	217	62	31	42	31
14	71	54	c800	234	239	664	*710	257	82	32	35	28
15	68	55	c640	228	275	c680	727	*231	78	30	31	21
16	66	87	c460	268	427	c780	637	222	68	27	28	19
17	*62	95	366	b310	*412	c860	609	217	61	27	26	17
18	58	76	321	b370	277	c840	564	416	56	25	25	17
19	57	70	288	562	248	c760	577	294	54	24	23	16
20	57	77	242	555	257	c700	573	200	54	23	22	16
21	56	448	234	*464	370	c620	497	168	52	25	20	17
22	57	c760	319	404	551	c480	419	149	52	26	20	17
23	56	c1,060	329	382	468	395	356	193	54	42	20	17
24	55	*c1,100	*321	662	329	396	316	175	49	78	21	16
25	52	c980	294	1,650	302	c540	297	134	42	46	21	*15
26	50	c840	251	1,660	280	c600	302	134	42	32	19	16
27	51	c620	b215	c1,300	266	c600	458	182	91	27	17	16
28	56	c400	b170	c1,060	239	c540	455	149	90	27	16	16
29	65	308	b140	c920	-------	c640	329	118	60	25	15	16
30	66	266	139	c760	-------	393	274	115	51	23	14	15
31	63	-------	143	c560	-------	349	-------	147	-------	*23	16	-------

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice (no gage-height record Dec. 1-3).
c Backwater from overbank storage.

Wallkill River near Unionville, N. Y.

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	80	71	106	120	233	145	171	127	29	13	202
2	14	58	67	114	125	520	140	183	109	28	11	100
3	13	47	62	106	110	*652	135	220	98	26	*12	*52
4	13	*39	56	109	120	*c740	114	c660	90	36	24	38
5	13	34	115	92	130	c680	114	c700	84	55	23	31
6	16	*33	132	96	120	c520	120	c560	74	*47	20	27
7	20	41	676	94	110	c430	147	c520	*69	40	17	24
8	21	58	*1,100	*92	96	380	142	c490	62	45	16	23
9	19	73	c800	80	104	320	124	547	57	42	18	27
10	18	90	*c680	78	115	296	109	524	55	34	32	25
11	18	89	c700	58	112	250	103	*545	60	30	34	46
12	19	89	c660	62	92	220	122	432	66	27	24	96
13	18	89	650	58	72	213	116	336	77	25	*21	58
14	17	80	708	56	76	314	103	274	*81	23	19	42
15	17	75	870	70	82	*408	*102	234	60	26	18	38
16	16	72	943	74	129	292	115	205	56	29	20	81
17	16	*64	777	76	*284	225	300	184	55	24	19	122
18	16	56	436	62	424	195	464	169	50	23	16	90
19	16	51	270	70	292	184	341	152	45	22	13	91
20	15	46	220	74	213	342	231	143	40	*24	24	137
21	16	44	210	*140	209	444	191	271	*36	24	32	103
22	16	42	227	296	339	306	172	444	*34	20	24	93
23	15	76	*245	240	291	247	168	338	32	17	20	88
24	15	148	180	190	216	223	256	225	36	15	16	64
25	16	104	150	190	222	213	193	188	*34	15	16	52
26	23	147	135	210	229	254	164	177	32	15	17	48
27	33	112	132	300	294	213	189	147	34	16	20	51
28	*40	89	129	360	241	181	*302	137	31	15	18	51
29	98	79	148	290	-------	167	272	134	27	14	16	44
30	306	72	152	220	-------	160	202	229	28	16	16	*40
31	147	-------	140	145	-------	148	-------	184	-------	16	88	-------

* Discharge measurement made on this day.
c Backwater from overbank storage.
Note.--Stage-discharge relation affected by ice Nov. 6, 7, Dec. 19-21, 24-26, Jan. 1, 5, 6, 8, 9, Jan. 11 to Feb. 9, Feb. 11-14, Mar. 8, 9, 11, 12, 17, 18, Apr. 1-5 (no gage-height record Jan. 23-30). Backwater from unknown cause Oct. 10-25, Aug. 19-30.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	67	410	616	52	297	205	160	40	40	*9.2	196
2	40	62	*294	460	52	462	188	135	40	38	8.2	167
3	38	198	236	422	46	357	176	121	36	34	8.2	147
4	36	296	195	340	50	386	174	112	34	31	8.2	132
5	36	253	175	270	52	494	160	106	44	28	7.7	120
6	34	189	150	260	58	450	150	97	46	27	11	134
7	32	148	135	287	435	380	167	87	38	26	26	132
8	30	124	118	240	672	320	157	84	32	24	42	108
9	29	114	112	190	508	304	135	88	32	24	30	94
10	30	100	143	171	205	321	127	80	*34	24	18	87
11	31	90	143	145	205	312	118	77	36	31	16	84
12	30	81	120	130	283	300	116	71	58	29	20	90
13	29	74	112	124	180	270	172	65	75	20	370	*82
14	28	67	146	135	*162	240	159	60	60	17	839	74
15	28	67	403	118	140	207	155	57	45	16	*c1,140	71
16	36	64	430	118	122	*241	145	54	36	16	c1,080	74
17	47	62	300	100	199	310	122	52	30	15	*c760	69
18	42	65	310	88	404	229	115	51	26	15	c1,000	66
19	38	65	556	94	308	216	108	48	24	14	4,400	66
20	36	97	549	*78	215	215	124	45	76	*13	*5,240	73
21	38	487	350	71	180	227	122	42	129	12	3,010	71
22	40	926	250	82	169	450	147	40	122	11	c2,100	61
23	36	1,140	*198	81	260	*725	155	38	109	10	c1,550	56
24	36	c1,000	186	78	400	804	126	40	81	11	c1,160	112
25	36	c760	170	70	250	675	200	42	91	15	c880	324
26	36	c560	135	70	195	488	227	42	90	15	c660	288
27	36	c380	130	72	188	420	*220	42	67	13	c500	150
28	36	283	138	55	195	320	184	36	57	12	c380	143
29	*40	397	195	62	-------	270	179	36	49	11	c280	182
30	86	510	460	52	-------	251	202	38	42	11	222	*132
31	88	-------	657	50	-------	225	-------	38	-------	10	202	-------

* Discharge measurement made on this day.
c Backwater from overbank storage.
Note.--Stage-discharge relation affected by ice Dec. 4-7, 12, 13, 17, 18, 21, 22, 25-27, Jan. 5, 6, 8, 9, 12-14, 16, 17, 19, 20, 22, 25-27, Feb. 3-5, 10, 11, 13, 16, 20, 21, 25, 26, Mar. 6-8, 12, 13, 20, 27-29. Backwater from leaves Oct. 29, 30.

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

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	1,324	95	29	42.7	0.297	0.34
November	8,697	1,900	49	290	2.01	2.25
December	13,911	1,040	135	449	3.12	3.59
Calendar year 1950	82,273	1,900	29	225	1.56	21.24
January 1951	11,762	643	165	379	2.63	3.04
February	15,370	860	224	549	3.81	3.97
March	12,587	791	248	406	2.82	3.25
April	12,843	1,060	165	428	2.97	3.32
May	3,585	271	67	116	.806	.93
June	3,367	257	63	112	.778	.87
July	5,537	1,160	38	179	1.24	1.43
August	6,599	620	66	213	1.48	1.70
September	1,804	134	41	60.1	.417	.47
Water year 1950-51	97,386	1,900	29	267	1.85	25.16
October 1951	2,875	279	38	92.7	.644	.74
November	12,653	880	182	422	2.93	3.27
December	10,492	880	108	338	2.35	2.71
Calendar year 1951	99,474	1,160	38	273	1.90	25.70
January 1952	15,226	980	200	491	3.41	3.93
February	9,300	812	125	321	2.23	2.40
March	14,327	1,180	150	462	3.21	3.70
April	21,378	1,500	268	713	4.95	5.52
May	13,210	940	182	426	2.96	3.41
June	13,334	2,000	84	444	3.08	3.44
July	3,976	594	47	128	.889	1.03
August	5,553	764	51	179	1.24	1.43
September	11,269	1,550	88	376	2.61	2.91
Water year 1951-52	133,593	2,000	38	365	2.53	34.49
October 1952	2,183	148	50	70.4	.489	.56
November	8,025	1,100	54	268	1.86	2.07
December	11,203	860	139	361	2.51	2.89
Calendar year 1952	128,984	2,000	47	352	2.44	33.29
January 1953	14,902	1,660	125	481	3.34	3.85
February	9,020	551	211	322	2.24	2.33
March	14,673	860	180	473	3.28	3.79
April	15,266	960	271	509	3.53	3.94
May	7,471	416	115	241	1.67	1.93
June	2,252	143	42	75.1	.522	.58
July	1,091	78	23	35.2	.244	.28
August	1,115	269	14	36.0	.250	.29
September	538	31	12	17.9	.124	.14
Water year 1952-53	87,739	1,660	12	240	1.67	22.65
October 1953	1,054	306	13	34.0	.236	.27
November	2,177	148	33	72.6	.504	.56
December	11,841	1,100	56	382	2.65	3.06
Calendar year 1953	81,400	1,660	12	223	1.55	21.02
January 1954	4,208	360	56	136	.944	1.09
February	4,967	424	72	177	1.23	1.28
March	9,970	740	148	322	2.24	2.57
April	5,396	464	102	180	1.25	1.39
May	9,723	700	134	314	2.18	2.51
June	1,739	127	27	58.0	.403	.45
July	818	55	14	26.4	.183	.21
August	677	88	11	21.8	.151	.17
September	1,984	202	23	66.1	.459	.51
Water year 1953-54	54,554	1,100	11	149	1.03	14.07
October 1954	1,198	88	28	38.6	.268	.31
November	8,726	1,140	62	291	2.02	2.25
December	7,906	657	112	255	1.77	2.04
Calendar year 1954	57,312	1,140	11	157	1.09	14.78
January 1955	5,129	616	50	165	1.15	1.32
February	6,185	672	46	221	1.53	1.60
March	11,166	804	207	360	2.50	2.88
April	4,735	227	108	158	1.10	1.22
May	2,084	160	36	67.2	.467	.54
June	1,679	129	24	56.0	.389	.43
July	613	40	10	19.8	.138	.16
August	25,977.5	5,240	7.7	838	5.82	6.71
September	3,585	324	56	120	.833	.93
Water year 1954-55	78,983.5	5,240	7.7	216	1.50	20.39

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 1955.

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

Average discharge.--14 years, 102 cfs (adjusted for diversion).

Extremes.--1941-55: Maximum discharge, 1,350 cfs Apr. 1, 1951 (gage height, 5.70 ft); minimum, 5.5 cfs Aug. 30, Sept. 2, 1953 (gage height, 1.35 ft).

Peak discharge (base, 500 cfs).--
1950-51: Feb. 22 (12 m. to 4 p.m.) 609 cfs (3.49 ft); Apr. 1 (10 a.m.) 1,350 cfs (5.70 ft).
1951-52: Nov. 8 (3 a.m.) 569 cfs (3.40 ft); Dec. 21 (4:30 p.m.) 681 cfs (3.67 ft); Mar. 13 (8 p.m.) 507 cfs (3.27 ft); Apr. 7 (2 p.m.) 811 cfs (4.02 ft); Apr. 28 (10 p.m.) 689 cfs (3.69 ft); June 2 (2 a.m.) 1,060 cfs (4.75 ft).
1952-53: Jan. 25 (4 to 8 a.m.) 550 cfs (3.36 ft); Mar. 13 (10 p.m.) 1,120 cfs (4.95 ft); Mar. 26 (10 a.m. to 4 p.m.) 746 cfs (3.84 ft); Apr. 9 (11 a.m. to 8 p.m.) 595 cfs (3.46 ft).
1953-54: Sept. 11 (10 p.m.) 746 cfs (3.84 ft).
1954-55: Aug. 13 (10 p.m.) 708 cfs (3.73 ft); Aug. 19 (7 p.m.) 903 cfs (4.28 ft).

Remarks.--Diversion at West Nyack, N. Y., for municipal water supply (also see p. 24).

Cooperation.--Gage-height record collected in cooperation with Hackensack Water Co.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13.6	17.4	130	146	91	148	*1,330	80	84	42	45	26
2	13.6	16.8	101	130	130	143	1,110	73	70	42	39	25
3	13.1	16.1	87	112	112	143	811	68	60	39	36	24
4	14.2	22	90	121	126	151	646	63	57	37	34	26
5	13.1	86	193	151	112	184	527	60	126	38	31	24
6	11.5	62	193	143	99	187	398	57	112	39	28	22
7	11.5	55	196	138	134	180	288	55	97	35	25	24
8	11.5	52	262	130	292	168	230	52	84	33	25	24
9	11.0	50	325	b100	274	151	199	50	71	33	24	21
10	13.1	44	274	90	297	133	177	47	57	31	*40	21
11	14.8	38	250	80	216	118	165	57	51	29	123	20
12	18.9	34	216	73	160	110	148	133	46	27	101	20
13	21	31	177	68	146	103	177	112	43	25	332	19.7
14	19.7	29	140	62	162	114	177	97	70	24	328	18.1
15	18.9	27	121	145	148	143	171	84	87	22	193	18.9
16	18.1	25	157	202	138	128	160	70	76	21	193	23
17	17.4	24	177	180	135	121	148	60	71	20	279	22
18	16.1	22	151	177	227	114	133	52	63	20	210	21
19	14.8	22	135	151	234	103	121	47	55	23	146	21
20	14.2	21	130	140	250	269	112	46	47	30	118	20
21	14.2	63	108	130	270	311	101	45	40	24	101	18.9
22	13.6	60	82	96	563	274	95	44	40	22	87	18.1
23	14.8	56	76	118	564	230	132	45	43	59	73	17.4
24	*17.4	55	73	141	463	187	140	104	47	40	59	16.8
25	17.4	87	66	202	288	162	128	101	43	33	48	16.8
26	16.8	246	55	187	216	138	118	89	38	29	44	17.4
27	16.8	242	56	168	184	123	108	82	36	25	39	18.7
28	17.4	254	62	146	162	112	95	87	36	74	36	68
29	18.1	234	74	126	-------	112	91	108	40	122	33	39
30	18.1	180	128	114	-------	494	89	160	45	70	31	34
31	18.1	-------	140	b70	-------	1,300	-------	114	-------	55	28	-------

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

Hackensack River at Rivervale--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	102	108	143	b170	93	112	394	593	45	21	110
2	27	140	103	151	160	86	108	250	972	43	21	239
3	26	240	97	180	168	91	103	180	931	42	23	154
4	25	330	93	187	204	91	95	151	742	39	21	165
5	24	274	113	180	270	151	326	133	522	38	22	160
6	23	242	160	187	288	174	731	121	453	36	39	135
7	27	314	138	162	254	162	793	116	372	35	57	108
8	149	502	130	b145	193	160	650	103	297	29	47	87
9	99	413	130	130	162	148	398	95	238	47	48	71
10	82	362	123	121	143	135	254	89	210	150	86	60
11	103	279	112	102	138	229	202	89	165	103	77	51
12	190	213	101	110	140	433	174	236	130	93	71	47
13	138	168	93	99	b115	483	157	220	112	99	124	44
14	114	146	78	116	b95	435	256	206	95	93	76	42
15	99	171	89	*135	b80	274	297	193	84	76	66	38
16	86	174	78	133	b80	202	302	157	74	59	107	39
17	70	196	80	121	126	171	266	123	70	52	220	37
18	59	190	89	162	160	151	210	118	100	46	157	35
19	51	177	165	157	148	146	171	116	76	43	171	79
20	45	162	128	151	140	190	151	114	70	38	180	96
21	42	143	477	151	143	174	133	140	63	40	162	74
22	39	118	569	133	140	168	121	126	62	44	187	71
23	36	110	536	291	133	193	112	114	60	37	121	68
24	35	108	473	292	123	250	103	106	60	33	91	63
25	55	103	308	246	112	246	110	204	57	29	76	56
26	51	134	224	286	103	220	187	413	51	27	66	52
27	47	146	199	392	99	187	245	315	46	27	57	50
28	48	126	171	392	95	160	530	302	45	31	51	46
29	51	118	151	377	93	143	*629	250	45	31	45	44
30	48	112	138	250	-------	130	550	202	45	26	42	39
31	47	-------	140	b200	-------	118	-------	177	-------	24	38	-------

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

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	21	70	63	174	91	199	135	60	21	31	5.8
2	36	21	63	59	146	86	184	148	56	21	29	6.2
3	44	21	60	118	130	80	168	151	52	23	26	6.9
4	39	21	60	130	116	184	151	151	50	19.7	22	6.5
5	36	21	94	108	105	210	146	154	45	19.7	20	6.2
6	34	21	306	b108	101	187	135	171	42	20	18.1	8.1
7	33	20	262	106	108	165	274	177	37	24	14.8	8.6
8	32	20	266	97	121	140	569	199	37	22	13.6	8.6
9	30	20	210	110	114	123	587	180	37	20	14.2	8.6
10	30	20	157	214	108	110	517	165	35	18.9	21	9.5
11	29	21	200	283	99	97	433	160	33	17.4	16.8	6.9
12	29	21	433	306	97	91	325	138	33	16.8	15.4	6.5
13	29	21	423	292	99	627	341	116	38	16.8	14.8	9.5
14	28	21	382	234	97	*1,000	398	114	46	16.1	14.2	7.7
15	28	23	250	210	120	969	362	121	38	15.4	19.7	7.3
16	26	45	177	174	193	948	346	126	35	14.2	15.4	12.1
17	25	43	148	143	177	731	356	121	31	13.1	13.6	11.0
18	24	42	133	165	160	591	297	133	28	12.0	13.1	8.6
19	24	39	118	187	135	448	325	116	25	11.0	12.0	8.1
20	24	42	103	174	121	382	297	106	24	14.3	11.0	7.7
21	24	112	103	168	141	325	250	93	21	23	10.0	8.1
22	24	199	148	174	177	266	210	84	60	14.2	9.5	8.6
23	24	315	146	177	151	224	*174	87	84	134	9.0	8.1
24	22	279	138	248	135	281	154	78	44	197	8.6	7.7
25	23	234	126	541	126	560	140	70	35	118	8.1	7.3
26	23	174	116	546	114	727	146	68	29	110	7.7	7.3
27	26	133	106	453	106	674	146	76	*26	91	6.9	7.3
28	24	108	81	311	99	536	130	73	24	70	6.9	7.3
29	24	87	82	*250	-------	382	118	65	28	55	6.9	7.3
30	23	76	73	199	-------	274	108	59	24	45	6.5	6.9
31	22	-------	68	187	-------	227	-------	60	-------	36	6.2	-------

* Discharge measurement made on this day.

Hackensack River at Rivervale--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.9	40	31	38	49	73	63	89	55	15	7.3	138
2	6.2	36	31	42	46	146	60	87	52	14	7.3	99
3	6.2	32	28	39	46	143	59	103	43	13	25	97
4	6.9	28	25	38	66	*227	54	190	39	17	26	91
5	8.1	24	44	36	70	213	52	190	38	21	*19	74
6	6.2	*20	48	40	70	190	50	171	35	18	16	55
7	12	36	109	37	66	160	54	151	33	15	16	40
8	12	52	106	32	57	130	54	183	31	15	16	36
9	9.5	46	95	35	57	110	54	320	28	14	31	29
10	10	40	144	32	55	97	51	367	27	13	44	24
11	10	37	157	22	52	86	48	473	26	12	29	391
12	9.5	33	135	29	36	78	51	403	24	12	25	511
13	7.7	30	140	29	41	71	48	341	31	12	22	418
14	7.7	27	209	28	39	90	46	242	27	10	20	443
15	8.6	25	297	28	37	108	44	180	24	10	20	336
16	7.7	23	279	27	44	97	47	143	22	9.5	20	262
17	8.1	21	246	28	86	87	103	123	22	9.0	17	227
18	7.7	20	b185	28	112	76	206	110	20	9.0	15	180
19	7.3	18	b145	30	99	70	184	97	19	9.5	13	177
20	6.9	17	99	30	89	114	180	89	18	12	22	193
21	6.9	16	82	36	82	128	146	116	17	9.5	20	165
22	6.5	15	78	48	91	123	114	133	16	8.1	19	157
23	6.2	29	76	43	91	118	98	126	16	7.3	17	146
24	5.8	38	65	43	84	106	130	118	19	6.5	15	133
25	7.3	38	70	42	80	93	99	106	21	6.5	14	126
26	12	43	57	45	76	97	91	91	24	13	13	114
27	12	39	54	73	76	91	101	80	18	12	12	106
28	33	38	47	95	73	84	108	71	16	12	12	91
29	46	34	48	78	-------	78	108	66	15	9.5	11	80
30	67	32	48	70	-------	71	99	63	15	8.6	14	70
31	50	-------	47	59	-------	66	-------	59	-------	8.1	133	-------

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

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	62	51	190	216	32	121	103	135	89	33	11	57
2	56	75	174	213	31	138	95	121	70	30	12	52
3	54	242	154	193	30	135	91	103	56	27	10	57
4	51	238	135	165	32	160	103	89	50	24	7.7	66
5	48	274	121	148	27	177	106	80	45	23	7.7	51
6	45	270	108	140	29	184	101	70	38	25	7.7	48
7	39	210	99	130	165	227	101	62	36	183	7.3	40
8	37	154	86	b105	148	*187	95	57	35	123	12	37
9	37	118	82	b110	135	168	91	52	34	87	9.5	35
10	36	99	108	b105	128	148	86	48	33	57	8.1	34
11	34	84	103	b80	120	130	78	46	31	55	8.1	34
12	33	70	93	*b72	190	121	73	44	60	39	59	33
13	32	62	95	76	160	114	86	40	130	33	430	30
14	30	56	118	52	116	103	87	38	84	31	523	28
15	28	55	250	66	106	97	89	36	70	30	325	27
16	33	52	230	62	a100	112	89	34	57	31	292	26
17	33	51	220	55	169	126	80	33	46	32	240	25
18	33	51	216	55	190	110	76	32	38	26	201	24
19	30	51	292	54	162	108	71	30	33	24	664	24
20	29	94	258	49	146	108	70	28	52	20	671	27
21	29	317	224	58	133	103	70	27	47	17	543	27
22	27	408	196	55	116	171	80	25	43	15	522	27
23	27	418	180	48	135	*283	84	25	39	14	418	27
24	27	377	138	48	151	266	76	30	46	16	302	56
25	26	320	118	47	138	234	80	35	78	17	224	94
26	26	250	b110	46	135	193	111	48	62	17	160	60
27	26	202	b100	43	123	190	126	56	52	14	121	52
28	27	174	99	40	116	168	112	51	44	13	95	70
29	38	206	103	38	-------	148	130	47	38	13	78	63
30	52	216	205	34	-------	130	157	98	33	13	68	52
31	52	-------	230	32	-------	114	-------	86	-------	12	62	-------

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

Hackensack River at Rivervale--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1950	482.8	21	11.0	15.6	17.0	0.293	0.34
November	2,171.3	254	16.1	72.4	73.7	1.27	1.42
December	4,425	325	55	143	144	2.48	2.86
Calendar year 1950	25,372.5	325	11.0	69.5	70.9	1.22	16.59
January 1951	4,037	202	62	130	131	2.26	2.62
February	6,193	564	91	221	222	3.83	4.00
March	6,354	1,300	103	205	206	3.55	4.10
April	8,325	1,330	89	278	280	4.83	5.37
May	2,342	160	44	75.5	77.0	1.33	1.53
June	1,835	126	36	61.2	62.7	1.08	1.21
July	1,163	122	20	37.5	39.1	.674	.78
August	2,929	332	24	94.5	96.1	1.66	1.91
September	705.8	68	16.8	23.5	25.0	.431	.48
Water year 1950-51	40,962.9	1,330	11.0	112	113	1.95	26.62
October 1951	1,966	190	23	63.4	64.8	1.12	1.29
November	6,013	502	102	200	201	3.47	3.88
December	5,594	569	78	180	181	3.12	3.61
Calendar year 1951	47,456.8	1,330	16.8	130	131	2.26	30.78
January 1952	5,882	392	99	190	191	3.29	3.80
February	4,275	288	80	147	148	2.55	2.77
March	5,994	483	86	193	194	3.34	3.87
April	8,476	793	95	283	284	4.90	5.46
May	5,553	413	89	179	181	3.12	3.59
June	6,840	972	45	228	230	3.97	4.42
July	1,555	150	24	50.2	52.1	.898	1.03
August	2,570	220	21	82.9	84.6	1.46	1.68
September	2,360	239	35	78.7	80.3	1.38	1.54
Water year 1951-52	57,078	972	21	156	158	2.72	36.94
October 1952	877	44	22	28.3	29.8	.514	.59
November	2,241	315	20	74.7	76.1	1.31	1.46
December	5,102	433	60	165	166	2.86	3.30
Calendar year 1952	51,725	972	20	141	143	2.47	33.51
January 1953	6,535	546	59	211	212	3.66	4.22
February	3,570	193	97	128	129	2.22	2.31
March	11,736	1,000	80	379	380	6.55	7.55
April	7,986	587	108	266	268	4.62	5.15
May	3,695	199	59	119	121	2.09	2.40
June	1,157	84	21	38.6	40.2	.693	.77
July	1,249.6	197	11.0	40.3	42.1	.726	.84
August	442.0	31	6.2	14.3	16.0	.276	.32
September	236.3	12.1	5.8	7.88	9.56	.165	.18
Water year 1952-53	44,826.9	1,000	5.8	122	124	2.14	29.09
October 1953	417.9	67	5.8	13.5	15.0	.259	.30
November	927	52	15	30.9	32.3	.557	.62
December	3,225	297	25	104	105	1.81	2.10
Calendar year 1953	41,176.8	1,000	5.8	113	114	1.97	26.76
January 1954	1,280	95	22	41.3	42.8	.738	.85
February	1,870	112	36	66.8	68.3	1.18	1.23
March	3,421	227	66	110	112	1.93	2.22
April	2,602	206	44	86.7	88.2	1.52	1.70
May	5,081	473	59	164	166	2.86	3.29
June	791	55	15	26.4	28.2	.486	.54
July	361.1	21	6.5	11.6	13.6	.234	.27
August	690.6	133	7.3	22.3	24.2	.417	.48
September	5,009	511	24	167	169	2.91	3.25
Water year 1953-54	25,675.6	511	5.8	70.3	71.9	1.24	16.85
October 1954	1,137	62	26	36.7	38.5	.664	.77
November	5,245	418	51	175	177	3.05	3.40
December	4,835	292	82	156	158	2.72	3.14
Calendar year 1954	32,322.7	511	6.5	88.6	90.2	1.56	21.14
January 1955	2,635	216	32	85.0	86.8	1.50	1.73
February	3,263	190	27	117	119	2.05	2.14
March	4,774	288	97	154	156	2.69	3.10
April	2,797	157	70	93.2	94.9	1.64	1.83
May	1,706	135	25	55.0	56.9	.981	1.13
June	1,569	130	31	52.3	54.1	.933	1.04
July	1,094	183	12	35.3	37.6	.648	.75
August	6,099.1	671	7.3	197	199	3.43	3.95
September	1,283	94	24	42.8	44.7	.771	.86
Water year 1954-55	36,437.1	671	7.3	99.8	102	1.76	23.84

* 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 1955.

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

Average discharge.--21 years, 52.4 cfs (unadjusted).

Extremes.--1934-55: Maximum discharge, 1,610 cfs July 23, 1945 (gage height, 6.76 ft); minimum, 5.8 cfs Oct. 21, 1949; minimum daily, 6.1 cfs Oct. 21-25, Nov. 10, 11, 1949.

Peak discharge (base, 325 cfs).--
1950-51: Feb. 8 (6 a.m.) 363 cfs (3.50 ft); Feb. 22 (11 a.m.) 421 cfs (3.73 ft); Mar. 20 (9 a.m.) 325 cfs (3.33 ft); Mar. 31 (5:30 a.m.) 1,470 cfs (6.50 ft); Apr. 3 (8:30 p.m.) 448 cfs (3.83 ft); Aug. 13 (11:30 a.m.) 509 cfs (4.04 ft).
1951-52: Nov. 3 (8:30 p.m.) 340 cfs (3.40 ft); Nov. 8 (2 a.m.) 446 cfs (3.82 ft); Dec. 21 (6 p.m.) 575 cfs (4.26 ft); Jan. 23 (2 p.m.) 327 cfs (3.34 ft); Mar. 12 (3 a.m.) 556 cfs (4.20 ft); Apr. 6 (1 a.m.) 743 cfs (4.78 ft); Apr. 28 (8 p.m.) 451 cfs (3.84 ft); May 26 (4 a.m.) 457 cfs (3.86 ft); June 1 (11 p.m.) 1,120 cfs (5.75 ft); Sept. 2 (6 a.m.) 377 cfs (3.56 ft).
1952-53: Dec. 6 (11 a.m.) 437 cfs (3.79 ft); Dec. 12 (6 a.m.) 440 cfs (3.80 ft); Jan. 25 (6 a.m.) 506 cfs (4.03 ft); Mar. 13 (10 p.m.) 1,180 cfs (5.90 ft); Mar. 25 (2 a.m.) 640 cfs (4.47 ft); Apr. 8 (2:30 a.m.) 640 cfs (4.47 ft); July 23 (2 p.m.) 392 cfs (3.62 ft).
1953-54: Sept. 12 (3 a.m.) 535 cfs (4.15 ft).
1954-55: Nov. 21 (5 p.m.) 455 cfs (4.10 ft); Aug. 13 (10 p.m.) 998 cfs (5.62 ft); Aug. 19 (5 to 8 p.m.) 1,190 cfs (6.06 ft).

Remarks.--Flow regulated by Woodcliff Lake 3 miles above station (see p. 23).

Cooperation.--Gage-height record collected in cooperation with Hackensack Water Co.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14.3	32	35	66	59	76	388	54	59	27	30	23
2	13.7	32	33	53	87	80	259	50	42	23	24	22
3	13.1	31	33	49	68	80	373	46	36	19.9	21	22
4	13.1	44	60	67	56	97	322	46	47	19.2	19.9	22
5	12.6	56	166	91	49	117	205	44	146	33	18.5	21
6	12.1	46	92	65	47	109	162	44	94	33	17.2	21
7	12.6	39	58	59	122	91	145	44	58	26	17.9	25
8	12.6	35	180	62	300	83	130	41	41	22	24	23
9	12.6	34	200	52	115	74	119	38	36	19.9	*23	19.9
10	24	34	91	45	70	62	113	37	35	19.2	49	18.5
11	24	33	79	44	58	58	106	57	35	18.5	107	24
12	30	33	72	42	58	57	101	122	34	18.5	67	31
13	28	33	61	a40	70	57	175	82	36	19.2	372	30
14	21	33	52	a40	88	80	134	53	77	19.2	128	29
15	18.5	32	49	a90	72	102	100	46	87	17.9	65	32
16	16.6	32	109	a150	59	80	88	40	64	16.6	112	31
17	18.5	32	106	a100	67	65	90	38	47	17.2	214	30
18	22	32	74	a70	170	57	82	34	36	17.2	108	29
19	18.5	32	57	61	*117	54	77	32	33	32	59	29
20	16.0	36	47	a70	102	260	72	34	30	39	46	28
21	14.9	46	42	a60	152	204	66	35	29	28	41	28
22	13.7	40	40	38	372	107	62	35	29	27	37	28
23	19.2	a34	41	37	185	88	110	47	37	71	34	27
24	*21	34	42	110	104	77	106	104	39	44	31	28
25	19.2	65	45	155	88	77	79	87	33	29	29	29
26	16.6	67	39	79	85	70	72	52	25	22	29	29
27	23	54	36	57	83	58	65	51	21	21	28	36
28	33	41	34	50	79	57	59	71	16.6	103	27	43
29	33	46	58	50	-------	73	59	107	29	128	27	36
30	33	41	93	52	-------	553	61	160	29	66	25	33
31	33	-------	83	46	-------	1,110	-------	106	-------	39	24	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Hackensack River at Rivervale and Saddle River at Lodi.

Pascack Brook at Westwood--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	95	54	83	82	58	64	115	616	33	19.2	160
2	30	107	53	85	87	56	64	100	700	30	19.9	294
3	30	262	52	115	104	54	*64	90	275	25	21	128
4	25	229	50	102	164	57	59	83	171	25	21	76
5	14.9	105	81	88	217	111	344	76	239	25	23	50
6	14.3	72	122	88	128	*117	516	74	170	24	50	41
7	33	249	87	72	97	87	210	74	124	24	61	36
8	154	336	68	59	85	74	130	66	100	26	44	32
9	88	145	61	58	80	66	115	61	95	62	34	31
10	46	97	56	64	76	64	100	58	100	266	67	30
11	90	83	53	66	79	251	93	72	82	150	61	28
12	138	72	48	58	82	407	85	269	76	61	58	25
13	74	66	47	54	66	164	83	166	64	39	85	25
14	46	72	44	72	57	122	224	91	56	33	57	24
15	37	124	59	90	53	100	205	74	56	30	34	25
16	34	124	57	82	52	90	132	70	54	27	113	29
17	33	132	46	70	90	82	100	58	60	25	274	27
18	34	91	74	100	124	77	88	70	117	25	100	25
19	32	71	130	91	95	92	77	66	83	24	48	75
20	29	62	94	77	76	136	72	74	61	21	36	70
21	27	56	459	76	*71	126	68	98	53	23	42	42
22	27	56	343	81	72	100	65	74	52	35	83	34
23	26	56	147	294	68	145	65	56	50	29	54	31
24	28	58	106	171	64	175	64	48	52	22	35	28
25	46	59	95	90	59	128	83	215	48	18.5	30	27
26	39	99	104	182	58	100	169	350	42	17.9	26	25
27	33	98	104	248	57	87	219	144	38	21	24	24
28	34	68	79	205	56	77	382	88	37	25	24	22
29	33	59	71	162	54	70	297	76	35	32	24	21
30	31	56	74	106	-------	66	158	93	35	25	24	22
31	29	-------	82	87	-------	65	-------	104	-------	21	24	-------

* Discharge measurement made on this day.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	*19.8	27	37	74	48	115	125	42	21	16.1	35
2	25	18.5	27	37	75	46	113	136	37	23	17.3	34
3	35	18.5	32	90	71	46	104	97	33	23	17.3	34
4	27	19.8	29	95	69	88	93	82	31	17.9	16.7	34
5	24	19.1	86	59	63	164	97	102	30	16.1	17.3	36
6	23	32	376	47	59	82	90	117	31	18.5	16.7	36
7	23	42	147	43	68	62	334	119	34	27	16.1	34
8	22	42	68	43	77	54	491	134	45	21	15.5	33
9	22	43	53	76	68	53	224	128	34	19.8	17.3	33
10	23	42	49	156	59	53	196	95	30	17.9	19.1	33
11	22	42	174	205	53	49	240	75	27	17.3	16.1	32
12	19.1	42	345	153	58	56	178	62	24	16.7	15.5	32
13	19.8	41	135	98	62	685	244	*61	35	16.1	16.1	37
14	19.8	41	83	77	59	*581	273	79	47	16.1	18.6	33
15	19.8	45	66	72	95	282	169	87	33	16.1	19.8	32
16	22	52	61	69	153	457	220	83	29	22	16.7	33
17	21	46	55	68	90	273	258	75	27	37	16.1	*33
18	19.1	42	53	92	65	187	166	87	26	37	16.1	32
19	19.1	41	50	109	57	225	240	74	24	36	27	32
20	19.8	54	48	80	55	223	187	59	23	56	37	32
21	19.8	68	60	72	94	158	147	53	21	55	37	33
22	18.5	130	98	82	115	130	124	48	55	42	37	32
23	18.5	102	83	82	72	117	107	65	71	160	37	32
24	18.5	53	65	216	61	292	98	49	35	126	36	32
25	19.1	31	55	419	58	476	95	42	27	62	36	31
26	17.3	35	50	187	55	361	106	45	23	45	36	31
27	17.9	36	47	109	53	252	104	59	22	33	36	31
28	19.1	33	38	113	50	191	87	58	19.8	18.5	35	31
29	20	29	37	122	-------	158	77	42	30	17.9	34	30
30	19.1	27	36	97	-------	138	72	38	24	17.3	34	30
31	19.1	-------	35	80	-------	126	-------	42	-------	16.7	34	-------

* Discharge measurement made on this day.

Pascack Brook at Westwood--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	26	22	10	9.4	38	31	41	31	19	25	64
2	30	24	22	9.9	9.4	c83	29	37	35	18	28	38
3	30	23	a21	9.9	12	*c90	33	59	32	18	52	30
4	29	23	21	9.9	*15	c130	29	c142	28	22	41	29
5	28	22	34	9.9	13	c78	28	*c102	24	21	36	29
6	30	22	30	9.9	12	51	28	66	20	20	35	28
7	31	39	50	9.9	11	42	37	49	19	18	33	31
8	29	34	39	8.9	11	38	37	c128	20	18	32	29
9	28	28	30	8.9	11	37	35	c223	18	17	62	*26
10	28	25	48	8.9	11	41	29	c229	18	17	56	27
11	28	24	30	9.4	11	37	28	c195	20	17	42	303
12	28	23	22	9.9	9.9	32	32	c109	20	17	34	376
13	28	22	26	9.4	8.9	31	27	c83	27	*19	33	105
14	28	22	71	8.9	8.9	52	25	c69	24	18	31	55
15	28	22	54	9.4	9.4	59	26	59	*22	20	33	47
16	26	22	31	9.9	10	39	32	51	21	17	33	72
17	26	21	21	9.9	27	34	c101	55	20	17	32	102
18	26	21	17	9.4	24	30	c146	53	18	17	31	73
19	26	21	16	9.4	15	29	c88	49	17	22	31	98
20	25	20	a15	9.4	13	69	56	50	15	25	32	109
21	25	20	a15	16	15	70	38	c80	15	24	31	76
22	25	21	a15	15	19	47	39	c88	15	24	31	74
23	24	33	16	12	17	39	54	67	22	24	30	62
24	24	28	a15	10	30	36	67	49	28	24	28	47
25	27	28	a14	10	26	38	51	46	20	29	25	41
26	25	27	a13	13	18	47	44	43	17	34	25	38
27	24	23	a12	18	32	39	58	40	16	29	24	39
28	43	22	a12	17	32	34	60	37	15	27	24	38
29	51	22	a11	12	-------	34	54	37	17	26	24	35
30	42	22	12	11	-------	34	50	40	17	26	31	34
31	30	-------	11	10	-------	32	-------	34	-------	24	85	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for Hackensack River at Rivervale and Ramapo River near Mahwah.
c Backwater from tree below control.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	31	76	87	a30	55	43	55	54	20	14	38
2	34	58	64	81	a30	70	41	46	35	19	14	37
3	35	190	56	81	a25	55	46	41	28	17	13	34
4	36	110	54	71	a30	74	62	39	24	16	13	33
5	34	77	51	62	a30	83	67	38	24	16	13	34
6	33	58	49	63	a40	85	55	36	22	26	12	40
7	32	47	42	63	157	98	54	33	21	108	13	36
8	32	40	40	53	98	71	41	32	21	58	15	33
9	32	38	48	50	a55	59	35	32	22	18	14	29
10	33	35	66	49	a45	56	37	25	20	30	15	28
11	33	34	60	48	a70	54	38	20	22	47	17	28
12	32	33	51	*44	106	51	42	22	54	37	*57	46
13	32	30	46	43	63	49	54	24	66	27	624	61
14	31	30	84	42	46	46	55	24	41	21	515	41
15	32	30	197	41	41	43	56	24	31	18	115	32
16	32	30	116	41	39	60	51	23	25	20	65	29
17	30	31	84	40	94	64	43	26	22	22	51	26
18	29	30	110	38	93	55	39	23	20	17	69	24
19	28	30	166	37	66	51	39	22	18	17	787	25
20	28	60	98	36	51	49	39	22	38	16	*460	36
21	28	420	77	34	46	50	39	20	35	15	130	34
22	31	256	62	35	42	127	50	20	39	15	174	27
23	33	109	55	36	60	*174	53	21	31	14	100	25
24	33	93	55	36	78	*96	48	28	36	17	70	57
25	34	107	54	36	62	66	46	35	48	17	53	87
26	32	87	50	35	50	77	50	34	36	17	46	50
27	31	73	48	35	48	88	39	25	29	16	54	34
28	29	64	48	32	48	74	36	23	24	15	64	55
29	39	119	59	29	-------	69	50	34	22	15	59	54
30	37	102	166	28	-------	63	70	62	20	14	56	39
31	34	-------	134	28	-------	56	-------	50	-------	14	45	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Saddle River at Lodi.

Pascack Brook at Westwood--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	613.4	33	12.1	19.8		
November	1,179	67	31	39.3		
December	2,207	200	33	71.2		
Calendar year 1950	12,638.7	200	9.6	34.6		
January 1951	2,050	155	37	66.1		
February	2,982	372	47	106		
March	4,213	1,110	54	136		
April	3,980	388	59	133		
May	1,837	160	32	59.3		
June	1,360.6	146	16.6	45.4		
July	1,035.5	128	16.6	33.4		
August	1,854.5	372	17.2	59.8		
September	827.4	43	18.5	27.6		
Water year 1950-51	24,139.4	1,110	12.1	66.1		
October 1951	1,366.2	154	14.3	44.1		
November	3,259	336	56	109		
December	3,000	459	44	96.8		
Calendar year 1951	27,765.2	1,110	14.3	76.1		
January 1952	3,276	294	54	106		
February	2,453	217	52	84.6		
March	3,404	407	54	110		
April	4,395	516	59	146		
May	3,153	350	48	102		
June	3,741	700	35	125		
July	1,244.4	266	17.9	40.1		
August	1,616.1	274	19.2	52.1		
September	1,507	294	21	50.2		
Water year 1951-52	32,414.7	700	14.3	88.6		
October 1952	654.4	35	17.3	21.1		
November	1,286.7	130	18.5	42.9		
December	2,568	376	27	82.8		
Calendar year 1952	29,298.6	700	17.3	80.1		
January 1953	3,285	419	37	106		
February	1,988	153	50	71.0		
March	6,113	685	46	197		
April	5,049	491	72	168		
May	2,418	136	38	78.0		
June	969.8	71	19.8	32.3		
July	1,068.9	160	16.1	34.5		
August	760.4	37	15.5	24.5		
September	983	37	30	32.8		
Water year 1952-53	27,144.2	685	15.5	74.4		
October 1953	902	51	24	29.1		
November	730	39	20	24.3		
December	766	71	11	24.7		
Calendar year 1953	25,033.1	685	11	68.6		
January 1954	335.1	18	8.9	10.8		
February	440.9	32	8.9	15.7		
March	1,490	130	29	48.1		
April	1,392	146	25	46.4		
May	2,410	229	34	77.7		
June	631	35	15	21.0		
July	668	34	17	21.5		
August	1,090	85	24	35.2		
September	2,155	376	26	71.8		
Water year 1953-54	13,010.0	376	8.9	35.6		
October 1954	1,002	39	28	32.3		
November	2,452	420	30	81.7		
December	2,366	197	40	76.3		
Calendar year 1954	16,432	420	8.9	45.0		
January 1955	1,434	87	28	46.3		
February	1,643	157	25	58.7		
March	2,168	174	43	69.9		
April	1,418	70	35	47.3		
May	959	62	20	30.9		
June	928	66	18	30.9		
July	739	108	14	23.8		
August	3,747	787	12	121		
September	1,152	87	24	38.4		
Water year 1954-55	20,008	787	12	54.8		

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 1955.

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.--34 years, 127 cfs (unadjusted).

Extremes.--1921-55: Maximum discharge, 3,660 cfs Mar. 31, 1951 (gage height, 6.14 ft).

Maximum discharge.--
1950-51: Mar. 31 (9 a.m.) 3,660 cfs (6.14 ft).
1951-52: June 1 (6 p.m.) 2,390 cfs (4.94 ft).
1952-53: Mar. 13 (12 m.) 2,740 cfs (5.00 ft).
1953-54: Sept. 11 (12 p.m.) 1,490 cfs (3.48 ft).
1954-55: Aug. 19 (1 p.m.) 2,260 cfs (4.40 ft).

Remarks.--Records given herein represent flow over waste weirs only. Flow regulated by Oradell Reservoir, 1 mile above station, and Woodcliff Lake, 9 miles above station (see p. 23). Water diverted at New Milford, N. J. and at West Nyack, N. Y. for municipal supply (see p. 24).

Cooperation.--Gage-height record collected in cooperation with Hackensack Water Co.

Revisions (water years).--Special Report 5: 1927(M).

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	124	224	135	224	2,630	96	115	0	21	27
2	0	0	137	150	276	239	1,690	95	54	0	13.2	22
3	0	0	128	132	170	210	1,320	62	57	0	0	19.2
4	0	.8	179	161	172	271	1,130	65	117	0	0	7.8
5	0	2.4	457	259	128	346	660	57	286	0	0	.1
6	0	0	267	131	120	297	455	60	182	0	.1	0
7	0	0	224	87	323	265	352	34	138	.2	0	6.1
8	0	0	563	186	745	249	290	28	94	0	0	32
9	0	0	675	101	357	200	323	16.5	73	0	0	28
10	.2	0	389	97	313	154	297	26	52	0	95	13.2
11	0	0	561	90	260	128	270	116	33	0	180	0
12	0	0	359	80	186	128	265	291	10.3	0	148	.1
13	0	0	0	60	205	128	412	186	35	0	709	0
14	0	0	0	94	260	204	426	86	168	0	458	0
15	0	0	44	370	205	270	450	76	177	0	228	0
16	0	0	407	404	184	182	282	60	102	0	308	0
17	0	0	371	250	206	177	0	46	66	0	495	0
18	0	0	215	205	482	137	0	42	46	0	268	0
19	0	0	128	210	374	117	45	34	27	0	145	0
20	0	0	111	172	360	738	136	32	32	0	86	0
21	0	.1	103	168	570	642	141	30	22	0	73	0
22	0	0	52	106	1,260	386	132	29	22	0	48	0
23	0	0	51	389	831	335	294	58	34	0	23	0
24	0	0	80	349	522	254	246	389	97	0	25	0
25	0	4.5	84	431	338	234	200	83	101	0	26	0
26	0	.4	43	281	229	191	182	104	0	0	29	0
27	0	97	34	205	182	159	145	107	0	0	26	.1
28	0	286	66	191	176	163	117	115	.1	89	28	0
29	0	254	135	165	-------	215	119	322	0	266	26	0
30	0	193	244	124	-------	1,560	130	366	0	64	24	0
31	0	-------	260	115	-------	3,280	-------	196	-------	32	22	-------

Hackensack River at New Milford--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	338	27	220	205	115	45	457	1,850	0.1	0	488
2	0	299	26	244	265	111	143	342	2,170	.4	0	571
3	0	711	25	359	297	132	123	249	922	0	0	245
4	0	614	26	286	457	90	122	215	977	.6	.1	196
5	0	358	25	276	535	348	1,050	163	569	0	0	140
6	0	302	151	319	582	336	1,560	168	327	0	23	58
7	.8	1,050	200	188	569	276	1,020	150	440	0	37	29
8	0	*1,060	172	150	203	200	593	137	325	0	.4	119
9	0	445	172	150	33	205	412	114	415	.4	0	79
10	0	332	132	177	104	195	264	103	217	443	172	24
11	148	353	120	139	220	841	259	216	208	159	54	19.0
12	338	281	111	120	220	875	240	657	158	55	58	18.1
13	154	210	99	132	334	617	217	359	103	65	224	15.7
14	91	210	81	182	306	589	729	297	95	41	48	22
15	73	334	156	254	86	336	606	254	70	23	37	24
16	45	401	172	177	31	313	505	210	62	20	444	22
17	43	355	107	177	61	220	387	154	143	12.7	351	0
18	26	244	223	319	313	220	512	186	226	1.1	47	0
19	29	210	413	237	249	284	452	154	6.9	.1	122	0
20	27	191	235	224	281	365	320	270	64	.1	146	145
21	31	154	1,540	215	234	313	0	200	62	0	202	149
22	27	145	1,120	256	191	270	0	172	82	0	194	.4
23	29	243	576	772	191	395	0	128	171	0	92	0
24	14.4	450	489	358	172	522	0	120	92	0	42	0
25	38	197	413	208	141	350	0	784	0	0	31	0
26	34	145	328	651	141	319	249	897	.6	0	22	0
27	32	950	308	734	115	270	848	383	0	0	23	0
28	58	25	191	726	111	210	1,300	361	0	0	30	0
29	29	24	215	555	132	191	1,000	314	0	0	24	0
30	33	25	200	330	-------	168	459	264	0	0	25	.1
31	26	-------	224	270	-------	112	-------	319	-------	0	27	-------

* Discharge measurement made on this day.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	44	249	99	308	0.1	49	0	0	0
2	0	0	.3	46	159	57	270	115	51	0	0	0
3	0	0	.3	261	194	60	308	234	30	0	0	0
4	0	.1	.8	172	106	576	306	206	20	0	0	0
5	0	0	139	91	132	415	371	479	0	0	0	0
6	0	0	858	91	124	163	84	145	0	.5	0	0
7	12	0	601	111	182	*172	790	308	10	0	0	0
8	0	0	201	91	172	154	1,360	353	57	0	0	0
9	.1	0	0	295	163	128	850	302	19	0	0	0
10	0	0	.5	742	230	124	734	286	0	0	.1	0
11	0	.1	240	569	30	111	689	200	0	0	0	0
12	0	.1	1,220	336	116	138	589	172	0	0	0	0
13	0	0	850	220	128	2,090	675	186	18	0	0	0
14	0	0	764	260	*128	2,060	689	206	29	0	0	0
15	.1	0	232	249	412	1,620	541	137	.2	0	0	0
16	0	0	0	205	327	1,720	646	163	0	0	0	0
17	0	.3	0	159	229	898	667	224	0	.1	0	0
18	0	.1	0	319	120	795	469	151	0	0	0	0
19	0	.1	.4	281	160	689	682	141	0	0	0	0
20	0	.2	65	224	124	617	463	91	0	2.1	0	0
21	0	.1	104	244	359	476	407	95	0	0	0	0
22	0	439	276	276	207	359	330	70	.2	0	0	0
23	0	834	186	249	128	330	286	170	116	1.2	0	0
24	0	507	154	791	111	892	254	49	25	0	0	0
25	0	3.1	141	1,140	253	987	220	43	0	64	0	0
26	0	0	115	596	103	1,150	281	76	0	62	0	0
27	0	0	76	495	99	953	385	99	0	51	0	.2
28	0	0	73	425	107	719	88	88	48	20	0	0
29	0	0	38	348	-------	515	.1	49	0	0	0	0
30	.2	.1	1.0	276	-------	395	.3	51	0	0	0	0
31	0	-------	2.1	224	-------	348	-------	54	-------	0	0	-------

* Discharge measurement made on this day.

Hackensack River at New Milford--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0.1	1.1	8.8	104	0.1	84	15	0	0	0
2	0	.1	0	.8	.4	220	0	60	9.4	0	0	0
3	0	0	0	1.3	17	224	0	257	16	0	0	0
4	.1	0	0	.1	52	167	.2	325	10	0	0	0
5	0	0	.2	.1	29	184	10	*191	2.5	0	0	0
6	0	0	.2	.9	36	316	64	195	0	0	0	0
7	0	0	.6	0	12	229	28	137	.2	0	0	0
8	0	.3	0	.5	29	115	28	625	0	0	0	0
9	0	.1	0	0	21	99	25	347	0	0	.4	0
10	0	0	.4	0	18	76	49	703	0	0	0	0
11	0	0	0	.8	19	80	42	501	0	0	0	430
12	.2	.1	0	.2	1.3	44	0	476	0	0	0	625
13	0	.2	0	.4	.7	63	0	354	0	0	0	124
14	0	0	1.0	.6	.5	208	0	244	0	0	0	407
15	0	0	0	0	.1	139	.2	197	0	0	0	324
16	0	0	6.2	0	0	84	35	145	0	0	0	333
17	0	0	246	0	54	57	559	111	0	0	0	419
18	0	0	239	0	141	54	179	99	0	0	0	210
19	0	0	220	31	120	48	100	116	0	0	0	301
20	0	0	145	.1	30	249	137	95	0	0	0	265
21	0	0	77	0	103	163	137	357	0	0	0	191
22	0	0	39	.1	117	117	99	111	0	0	0	200
23	0	.1	31	0	84	110	296	128	.1	0	0	313
24	0	.1	22	0	57	82	95	111	0	0	0	297
25	0	0	11	0	70	91	53	88	0	0	0	195
26	0	0	2.2	29	45	54	81	84	0	0	0	145
27	0	0	21	9.0	69	22	219	57	0	0	0	91
28	.8	0	9.5	91	96	28	86	36	0	0	0	0
29	.6	0	28	38	-------	28	74	48	0	0	0	79
30	0	0	20	33	-------	30	83	66	0	0	0	78
31	0	-------	11	4.6	-------	16	-------	35	-------	0	0	-------

* Discharge measurement made on this day.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	220	286	7.9	205	111	186	88	0	0	19
2	0	179	191	291	7.5	191	103	103	74	0	0	16
3	.1	563	162	255	5.2	182	107	95	13	0	0	21
4	0	308	111	220	3.3	296	150	58	8.5	0	0	24
5	2.2	325	111	159	2.0	302	124	38	13	0	0	30
6	0	265	95	168	30	382	145	22	6.6	.4	0	53
7	0	186	38	154	469	*342	128	14	0	33	0	9.2
8	0	125	95	105	257	254	26	0	0	17	0	15
9	0	100	80	103	*163	191	30	0	0	32	0	5.3
10	0	67	172	111	145	215	34	0	0	59	0	3.5
11	0	43	79	85	212	154	25	0	0	17	0	.8
12	0	46	98	46	325	150	97	0	168	2.7	3.5	0
13	0	31	.3	73	220	150	119	0	141	0	885	.1
14	0	22	0	52	115	111	89	0	74	0	875	0
15	0	28	189	40	115	111	137	0	31	0	.7	0
16	0	24	1,020	58	82	111	103	0	4.6	0	374	0
17	0	24	382	35	383	111	159	0	.1	0	180	0
18	0	38	438	30	325	111	78	.2	0	0	186	0
19	0	33	484	28	195	168	0	0	0	0	1,880	356
20	0	157	371	37	191	132	0	0	38	0	754	44
21	0	940	270	31	172	199	0	0	.8	0	402	0
22	0	563	152	30	132	562	0	0	0	0	160	0
23	0	515	177	30	236	589	0	0	0	0	254	0
24	0	450	154	32	229	383	23	0	51	.1	270	0
25	0	419	141	28	191	325	30	0	51	0	224	0
26	0	306	84	30	172	325	277	0	54	0	84	0
27	0	239	107	20	159	286	120	0	14	0	105	0
28	0	182	103	6.8	132	239	47	0	3.0	0	124	0
29	.1	388	154	5.2	-------	195	303	.3	0	0	28	0
30	0	307	460	8.6	-------	177	213	0	0	0	11	43
31	0	-------	409	11	-------	145	-------	69	-------	0	12	-------

* Discharge measurement made on this day.

Hackensack River at New Milford--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	0.2	0.2	0	0.01		
November	838.2	286	0	27.9		
December	6,491	675	0	209		
Calendar year 1950	22,745.1	675	0	62.3		
January 1951	5,987	431	60	193		
February	9,569	1,260	120	342		
March	12,083	3,280	117	390		
April	13,089	2,630	0	436		
May	3,307.5	389	16.5	107		
June	2,140.4	286	0	71.3		
July	451.2	266	0	14.6		
August	3,504.3	709	0	113		
September	155.6	32	0	5.19		
Water year 1950-51	57.616.4	3,280	0	158		
October 1951	1,326.2	338	0	42.8		
November	10,656	1,060	24	355		
December	8,277	1,540	25	267		
Calendar year 1951	70,546.2	3,280	0	193		
January 1952	9,405	772	120	303		
February	6,779	582	31	234		
March	9,788	875	90	316		
April	13,415	1,560	0	447		
May	8,797	897	103	284		
June	9,755.5	2,170	0	325		
July	821.5	443	0	26.5		
August	2,475.5	444	0	79.9		
September	2,364.3	571	0	78.8		
Water year 1951-52	83,860.0	2,170	0	229		
October 1952	12.4	12	0	.40		
November	1,784.3	834	0	59.5		
December	6,338.4	1,220	0	204		
Calendar year 1952	71,735.9	2,170	0	196		
January 1953	9,830	1,140	44	317		
February	4,854	412	30	173		
March	19,810	2,090	57	639		
April	13,742.4	1,360	.1	458		
May	4,943.1	479	.1	159		
June	472.4	116	0	15.7		
July	200.9	64	0	6.48		
August	0.1	0.1	0	0		
September	0.2	0.2	0	.01		
Water year 1952-53	61,988.2	2,090	0	170		
October 1953	1.7	.8	0	.05		
November	1.0	.3	0	.03		
December	1,130.4	246	0	36.5		
Calendar year 1953	54,986.2	2,090	0	151		
January 1954	242.6	91	0	7.83		
February	1,230.8	141	0	44.0		
March	3,501	316	16	113		
April	2,479.5	559	0	82.6		
May	6,383	703	35	206		
June	53.2	16	0	1.77		
July	0	0	0	0		
August	0.4	.4	0	.01		
September	5,027	625	0	168		
Water year 1953-54	20,050.6	703	0	54.9		
October 1954	2.4	2.2	0	.08		
November	6,873	940	0	229		
December	6,547.3	1,020	0	211		
Calendar year 1954	32,340.2	1,020	0	88.6		
January 1955	2,568.6	291	5.2	82.9		
February	4,675.9	469	2.0	167		
March	7,294	589	111	235		
April	2,778	303	0	92.6		
May	585.5	186	0	18.9		
June	833.6	168	0	27.8		
July	161.2	59	0	5.20		
August	6,812.2	1,880	0	220		
September	639.9	356	0	21.3		
Water year 1954-55	39,771.6	1,880	0	109		

Reservoirs in Hackensack River basin

Woodcliff Lake.--Lat 41°01', long 74°03', at dam on Pascack Brook three-quarters of a mile north of Hillsdale, Bergen County. Drainage area 19.4 sq mi. Records available, October 1950 to September 1955 in this report. September 1934 to September 1950 in files of Trenton district office, United States Geological Survey. Water-stage recorder. Datum of gage is at mean sea level, datum of 1929.

Reservoir is formed by earth-fill dam, completed about 1905. Capacity at spillway level (elevation, 94.33 ft), 835,000,000 gal. Water is released for diversion at New Milford by Hackensack Water Co. for municipal supply. Gage readings to 0.1 foot above or below spillway level and capacity table furnished by Hackensack Water Co.

Oradell Reservoir.--Lat 40°57', long 74°02', at dam on Hackensack River at Oradell, Bergen County. Drainage area, 113 sq mi. Records available, October 1950 to September 1955 in this report. January 1923 to September 1950 in files of Trenton district office, United States Geological Survey. Water-stage recorder. Datum of gage is at mean sea level, datum of 1929.

Reservoir is formed by hollow concrete dam, completed in 1922. Capacity at spillway level (elevation, 22.66 ft), 2,850,000,000 gal. Water is released for diversion by Hackensack Water Co. 1 mile downstream from dam for municipal supply. Elevation record and capacity table furnished by Hackensack Water Co.

Month-end elevation and contents, October 1950 to September 1955

Date	Woodcliff Lake			Oradell Reservoir		
	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in cfs)	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in cfs)
September 30, 1950	94.33	835	-	19.07	2,119	-
October 31	93.53	793	-2.1	16.55	1,683	-21.8
November 30	94.53	845	+2.7	21.92	2,692	+52.0
December 31	94.73	856	+.5	21.67	2,640	-2.6
Calendar year 1950	-	-	+3.2	-	-	+5.5
January 31, 1951	94.63	851	-.2	22.09	2,728	+4.4
February 28	94.73	856	+.3	22.48	2,811	+4.6
March 31	95.33	889	+1.6	22.73	2,865	+2.7
April 30	94.73	856	-1.7	22.49	2,814	-2.6
May 31	94.73	856	0	22.61	2,861	+2.3
June 30	95.03	873	+.9	22.39	2,793	-3.5
July 31	95.53	899	+1.3	22.68	2,855	+3.1
August 31	95.53	899	0	21.99	2,706	-7.4
September 30	94.03	819	-4.1	20.47	2,395	-16.0
Water year 1950-51	-	-	-.1	-	-	+1.2
October 31, 1951	94.63	851	+1.6	22.44	2,803	+20.4
November 30	94.73	856	+.3	20.50	2,401	-20.7
December 31	94.73	856	0	21.59	2,624	+11.1
Calendar year 1951	-	-	0	-	-	-.1
January 31, 1952	94.73	856	0	21.75	2,657	+1.6
February 29	94.63	851	-.3	21.66	2,638	-1.0
March 31	94.73	856	+.2	21.89	2,685	+2.3
April 30	94.83	862	+.3	22.59	2,835	+7.7
May 31	95.53	899	+1.8	22.49	2,814	-1.0
June 30	94.53	845	-2.8	22.52	2,820	+.3
July 31	94.53	845	0	22.10	2,730	-4.5
August 31	94.53	845	0	22.16	2,743	+.6
September 30	94.53	845	0	21.13	2,530	-11.0
Water year 1951-52	-	-	+.1	-	-	+.6
October 31, 1952	94.53	845	0	19.20	2,145	-19.2
November 30	94.53	845	0	20.77	2,456	+16.0
December 31	94.63	851	+.3	22.10	2,730	+13.7
Calendar year 1952	-	-	+.2	-	-	+.4
January 31, 1953	94.73	856	+.2	22.15	2,741	+.5
February 28	94.73	856	0	22.12	2,734	-.4
March 31	94.83	862	+.3	21.49	2,603	-6.5
April 30	94.83	862	0	21.67	2,640	+1.9
May 31	94.63	851	-.5	22.57	2,831	+9.5
June 30	94.53	845	-.3	21.99	2,706	-6.4
July 31	94.13	824	-1.0	22.41	2,797	+4.5
August 31	90.73	647	-8.8	18.98	2,102	-34.7
September 30	82.03	271	-19.4	15.16	1,453	-33.5
Water year 1952-53	-	-	-2.4	-	-	-4.6

† Elevation at 8 a.m. on first day of following month.

Reservoirs in Hackensack River basin--Continued

Month-end elevation and contents, October 1950 to September 1955

Date	Woodcliff Lake			Oradell Reservoir		
	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in cfs)	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in cfs)
October 31, 1953	74.73	82	-9.4	13.10	1,118	-16.7
November 30	73.13	57	-1.3	14.26	1,306	+9.7
December 31	87.03	465	+20.4	21.55	2,616	+65.4
Calendar year 1953	-	-	-1.6	-	-	-.5
January 31, 1954	91.53	688	+11.1	21.55	2,616	0
February 28	95.53	899	+11.6	21.56	2,618	+.1
March 31	95.53	899	0	22.65	2,848	+11.5
April 30	95.63	905	+.3	23.65	3,078	+11.9
May 31	95.63	905	0	23.63	3,073	-.2
June 30	95.43	894	-.6	20.97	2,497	-29.7
July 31	93.03	766	-6.4	16.16	1,618	-43.9
August 31	92.53	740	-1.3	16.90	1,742	+6.2
September 30	95.33	889	+7.7	21.12	2,528	+40.5
Water year 1953-54	-	-	+2.6	-	-	+4.6
October 31, 1954	94.23	830	-2.9	21.33	2,571	+2.1
November 30	94.63	851	+1.1	21.53	2,612	+2.1
December 31	94.73	856	+.2	21.55	2,616	+.2
Calendar year 1954	-	-	+16.6	-	-	0
January 31, 1955	94.33	835	-1.0	21.51	2,608	-.4
February 28	94.43	840	+.3	21.59	2,624	+.9
March 31	94.43	840	0	21.55	2,616	-.4
April 30	95.43	894	+2.8	23.19	2,972	+18.4
May 31	95.53	899	+.2	23.62	3,071	+4.9
June 30	95.33	889	-.5	23.47	3,036	-1.8
July 31	95.13	878	-.5	20.70	2,442	-29.6
August 31	95.43	894	+.8	23.10	2,951	+25.4
September 30	94.43	840	-2.8	22.64	2,846	-5.4
Water year 1954-55	-	-	-.2	-	-	+1.3

† Elevation at 8 a.m. on first day of following month.

Diversions from Hackensack River basin

City of Nyack, N. Y. diverts water from Hackensack River at West Nyack, N. Y., for municipal supply. Records furnished by Board of Water Commissioners of Nyack, N. Y.

Hackensack Water Co. diverts water from Hackensack River about 50 ft above gaging station on Hackensack River at New Milford, N. J. for municipal supply. Records furnished by Hackensack Water Co.

Diversion, in cubic feet per second, October 1950 to September 1955

Month	West Nyack, N. Y.	Hackensack Water Co.
October 1950	1.35	70.7
November	1.34	69.9
December	1.36	69.9
Calendar year 1950	1.37	64.8
January 1951	1.39	70.6
February	1.40	70.9
March	1.25	70.3
April	1.55	70.6
May	1.47	72.6
June	1.53	74.6
July	1.63	74.9
August	1.57	74.6
September	1.53	75.6
Water year 1950-51	1.45	72.1
October 1951	1.40	72.3
November	1.36	71.3
December	1.36	71.1
Calendar year 1951	1.45	72.5
January 1952	1.39	70.7
February	1.44	71.1
March	1.45	70.0
April	1.41	71.9
May	1.51	70.2
June	1.80	77.5
July	1.92	81.7
August	1.65	75.9
September	1.57	79.8
Water year 1951-52	1.52	73.6

Diversions in Hackensack River basin--Continued

Diversion, in cubic feet per second, October 1950 to September 1955

Month	West Nyack, N. Y.	Hackensack Water Co.
October 1952	1.54	77.2
November	1.40	75.9
December	1.39	76.3
Calendar year 1952	1.54	74.8
January 1953	1.42	74.2
February	1.43	72.3
March	1.40	73.6
April	1.43	70.6
May	1.50	80.9
June	1.64	89.2
July	1.82	91.8
August	1.70	88.7
September	1.69	84.3
Water year 1952-53	1.53	80.1
October 1953	1.51	74.6
November	1.42	66.6
December	1.44	69.7
Calendar year 1953	1.53	78.5
January 1954	1.52	72.3
February	1.47	73.7
March	1.48	75.9
April	1.47	77.2
May	1.52	75.3
June	1.78	89.5
July	1.98	89.2
August	1.87	76.2
September	1.73	75.3
Water year 1953-54	1.60	76.3
October 1954	1.83	82.7
November	1.60	79.5
December	1.54	79.9
Calendar year 1954	1.65	78.9
January 1955	1.79	78.5
February	1.72	78.8
March	1.75	79.0
April	1.72	79.1
May	1.90	85.6
June	1.81	80.6
July	2.23	96.2
August	2.26	88.5
September	1.90	81.7
Water year 1954-55	1.84	82.6

Passaic River near Millington

Location (revised).--Lat 40°40'48", long 74°31'45", on right bank 200 ft downstream from Davis Bridge, in Somerset County, 0.7 mile northwest of Millington, Morris County, and 1.8 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 1955.

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.--34 years (1921-55), 87.9 cfs.

Extremes.--1903-6, 1921-55: Maximum discharge (revised), 2,000 cfs Jan. 9, 1905 (gage height, 7.8 ft, from graph based on gage readings, site and datum then in use), from rating curve extended above 1400 cfs on basis of velocity-area study, minimum, 0.9 cfs on several days in August 1932.

Flood of Mar. 8, 1904, reached a stage of 7.6 ft, from graph based on gage readings, site and datum then in use (discharge, 1,920 cfs, revised, from rating curve extended above 1400 cfs on basis of velocity-area study).

Peak discharge (base, 500 cfs).--
1950-51: Nov. 26 (3 p.m.) 549 cfs (6.69 ft); Dec. 9 (4 a.m.) 569 cfs (6.75 ft); Feb. 22 (4:30 p.m.) 583 cfs (6.79 ft); Mar. 31 (1 p.m.) 740 cfs (7.24 ft).
1951-52: Nov. 8 (6 a.m.) 549 cfs (6.69 ft); Dec. 21 (11:30 p.m.) 648 cfs (6.98 ft); Mar. 12 (6:30 a.m.) 655 cfs (7.00 ft); June 2 (10 a.m.) 813 cfs (7.44 ft).
1952-53: Nov. 23 (1 a.m.) 585 cfs (6.80 ft); Jan. 25 (8 a.m.) 616 cfs (6.89 ft); Mar. 16 (12 m.) 728 cfs (7.21 ft); Apr. 8 (4 a.m.) 676 cfs (7.06 ft).
1953-54: Dec. 15 (8 a.m.) 335 cfs (5.95 ft), (maximum below base).
1954-55: Nov. 22 (7 a.m.) 548 cfs (6.68 ft); Aug. 14 (9 a.m.) 620 cfs (6.90 ft); Aug. 19 (2 to 5 p.m.) 977 cfs (7.88 ft).

Revisions.--Special Report 9: Drainage area.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.8	7.8	188	66	b65	143	658	85	78	72	134	13.2
2	6.6	7.4	134	60	113	149	539	82	59	75	80	13.2
3	5.7	7.4	111	62	125	143	490	69	51	52	47	17.2
4	5.3	10.7	153	99	96	179	444	62	45	39	36	16.6
5	5.0	42	316	*138	80	234	350	55	58	48	26	13.2
6	5.0	47	308	124	69	227	278	51	57	44	20	12.1
7	5.3	32	258	109	129	207	214	46	47	34	18.4	23
8	8.6	28	398	104	275	186	171	44	37	27	32	21
9	10.2	23	539	b76	236	156	142	41	33	25	28	13.7
10	14.2	18.4	462	62	160	127	122	38	32	15.4	40	11.6
11	17.8	16.0	386	52	116	106	116	43	34	16.6	166	11.2
12	18.4	14.2	306	47	*89	96	111	82	28	15.4	162	*11.6
13	19.0	12.1	*232	43	96	86	190	89	26	16.6	142	11.2
14	14.2	11.2	171	40	122	132	194	71	69	14.8	120	10.2
15	10.2	10.2	131	197	116	211	166	54	111	12.6	67	21
16	8.2	10.2	147	295	b95	194	*136	44	94	11.6	64	31
17	6.6	11.2	156	251	104	167	122	37	71	*12.6	72	16.6
18	6.3	10.7	129	214	220	136	107	33	*49	17.8	55	12.6
19	6.6	9.8	106	156	239	111	94	31	37	19.6	42	11.2
20	6.3	10.2	79	127	223	*236	86	25	30	36	38	10.2
21	6.0	38	59	115	263	288	78	32	26	21	36	9.4
22	5.3	47	49	b88	532	253	72	32	46	14.2	29	9.0
23	14.8	41	48	b68	519	214	119	32	47	18.4	24	9.0
24	25	34	48	132	406	169	145	96	47	16.6	20	9.0
25	19.7	179	45	196	306	154	122	124	37	12.6	19.7	9.8
26	15.4	497	30	171	236	133	107	94	27	12.6	22	12.1
27	*12.1	472	36	138	183	107	89	75	26	8.1	23	10.2
28	10.7	*406	32	120	156	94	79	79	34	101	19.0	9.4
29	11.2	334	34	102	-------	102	73	89	36	241	15.4	8.6
30	10.7	253	45	96	-------	263	83	116	47	214	14.8	7.4
31	9.0	-------	62	b60	-------	690	-------	100	-------	169	13.7	-------

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Backwater from leaves and debris Oct. 1 to Nov. 22; discharge computed by shifting-control method based on 1 discharge measurement, the drop in stage which occurred when the control was cleaned (Oct. 27), recorder graph, record of the wind velocity, and records for station near Chatham.

Passaic River near Millington--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.8	182	85	149	188	59	88	290	432	18.1	8.0	110
2	9.0	220	80	183	164	57	85	207	798	16.8	7.6	311
3	20	282	72	239	160	62	80	149	780	14.4	14.4	349
4	18.4	332	68	243	262	64	73	115	366	13.8	11.1	349
5	13.7	308	120	209	403	140	108	91	503	13.8	9.6	290
6	11.2	260	*147	203	361	188	216	79	358	12.1	35	222
7	26	*366	129	*173	300	171	194	72	248	11.1	156	144
8	115	522	111	130	234	151	169	63	164	16.4	150	79
9	113	426	96	113	188	129	*134	*57	114	71	94	52
10	60	358	82	102	156	111	107	53	124	207	124	40
11	115	295	71	100	140	302	91	66	114	236	176	33
12	145	232	63	90	*134	627	79	167	90	180	126	28
13	102	175	57	83	105	*559	73	196	70	129	80	23
14	69	156	44	86	90	462	188	162	56	72	54	20
15	a55	171	63	106	75	345	243	133	46	43	36	22
16	a45	205	78	125	72	246	234	100	42	28	33	27
17	a35	227	68	116	85	177	196	75	38	27	59	22
18	*30	203	72	160	122	142	149	75	35	*24	44	19.5
19	27	171	92	175	129	147	116	79	33	20	30	50
20	24	145	111	162	115	248	96	86	30	17.4	22	69
21	20	118	466	151	107	243	80	120	27	23	22	60
22	19.0	97	617	130	99	216	69	109	a27	62	75	44
23	18.4	88	569	288	89	230	66	85	a28	34	60	38
24	19.0	85	459	300	80	282	60	66	a33	21	33	35
25	69	82	337	248	75	265	67	176	a31	15.0	23	30
26	76	164	255	311	68	230	139	426	28	11.6	18.1	26
27	59	167	220	478	66	188	239	383	22	10.1	15.0	23
28	76	133	155	484	63	152	417	332	18.8	11.1	13.8	19.5
29	72	113	129	444	62	127	447	270	19.5	11.1	13.8	18.1
30	60	96	122	329	-------	109	377	218	21	10.6	13.2	17.4
31	51	-------	134	246	-------	96	-------	186	-------	8.8	12.6	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, precipitation records, and records for station near Chatham.
Note.--Backwater from leaves and debris Oct. 8-14, 18-31.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	11	49	36	158	33	123	128	64	17	6.9	1.8
2	17	10	40	35	128	55	115	190	54	16	8.4	1.8
3	35	11	37	85	112	52	106	175	43	20	11	1.8
4	25	11	40	143	98	246	96	134	*37	14	8.8	*1.7
5	19	*10	*152	120	85	358	103	117	34	12	8.4	2.1
6	17	10	463	93	78	303	*98	121	30	21	8.4	3.4
7	15	9.5	433	65	84	247	332	127	28	63	6.9	4.7
8	14	9.0	370	57	93	177	641	156	30	41	6.6	6.2
9	13	9.0	288	109	87	132	538	142	27	*30	7.8	5.0
10	14	9.0	205	254	73	108	451	117	24	19	31	3.9
11	14	9.0	203	350	*59	90	412	93	21	15	17	3.7
12	13	9.0	284	393	63	88	329	74	20	13	9.6	3.7
13	14	9.0	229	338	82	*398	326	72	25	12	8.0	5.3
14	*13	9.0	187	261	74	564	369	96	44	14	7.6	6.2
15	11	10	141	203	119	530	315	95	29	12	13	5.9
16	10	30	104	168	226	700	308	90	24	11	10	8.0
17	10	25	83	133	203	596	352	91	20	9.2	8.4	6.0
18	9.5	18	71	151	160	466	291	138	19	8.0	9.6	5.5
19	9.0	17	61	194	121	410	308	119	18	8.0	7.3	4.5
20	9.0	23	49	*170	101	375	296	85	17	8.0	6.2	4.5
21	9.0	116	62	155	152	303	254	66	17	11	5.3	4.5
22	9.0	418	149	183	229	240	212	56	19	11	5.3	5.5
23	9.5	544	168	187	190	190	173	170	45	25	5.0	6.0
24	10	469	145	307	154	250	144	188	27	44	4.7	4.5
25	10	375	122	602	123	399	123	138	21	21	3.9	4.0
26	10	274	99	541	101	370	117	121	18	16	3.4	4.0
27	9.5	183	77	420	85	329	117	136	15	12	3.2	4.0
28	9.0	116	56	323	73	266	101	108	13	10	*3.0	4.5
29	9.5	80	41	266	-------	215	88	74	22	8.4	2.7	3.5
30	10	62	36	210	-------	175	78	63	25	8.8	2.3	2.5
31	11	-------	36	173	-------	146	-------	70	-------	9.6	2.1	-------

* Discharge measurement made on this day.
Note.--Indefinite stage-discharge relation Oct. 15-31, Nov. 1-4, 6-16, Sept. 17-30; discharge computed on basis of weather records and records for station near Chatham.

Passaic River near Millington--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.4	15	13	20	*30	113	44	36	26	6.2	1.8	76
2	2.2	11	12	20	27	200	41	37	23	7.3	1.5	29
3	2.0	9	12	18	32	224	39	48	*20	7.3	6.7	15
4	1.7	7.5	*10	19	40	306	34	219	19	6.6	15	10
5	1.7	6	35	17	43	*276	*30	249	19	8.8	6.3	7.7
6	2.0	5.5	46	*24	41	217	31	217	17	8.4	4.1	6.3
7	3.9	15	116	24	37	160	36	*162	16	6.9	3.4	5.6
8	4.4	25	131	17	29	125	35	179	13	7.6	2.8	5.3
9	2.8	c22	93	13	28	98	32	259	12	*6.9	12	5.9
10	2.2	*c15	143	13	29	84	29	226	12	5.3	27	5.3
11	2.2	12	172	8.8	32	67	28	194	13	4.7	*11	75
12	2.4	10	137	12	26	56	39	152	14	4.4	5.9	124
13	a2.3	9.7	143	12	17	56	37	114	18	3.7	5.0	*99
14	*2.2	8.0	228	11	14	101	31	84	18	3.4	4.5	89
15	2.4	7.7	320	12	18	138	30	64	14	6.2	4.0	68
16	2.2	7.7	274	13	33	112	31	52	14	6.9	3.8	61
17	2.0	7.3	217	14	110	85	110	45	13	4.4	3.5	104
18	2.1	7.0	139	12	168	67	219	41	11	3.7	3.2	99
19	2.2	6.6	83	12	147	57	190	36	10	3.4	3.0	89
20	2.4	6.3	50	12	118	126	142	34	9.2	3.7	9.7	118
21	2.5	6.3	42	26	101	168	95	97	8.0	3.2	20	102
22	2.4	6.6	46	46	120	136	67	183	7.3	2.5	20	85
23	2.3	12	52	37	109	103	52	150	8.8	2.0	9.7	64
24	2.3	27	39	32	88	80	49	115	14	1.5	5.9	44
25	3.0	26	29	31	86	74	43	79	9.2	1.5	5.0	33
26	5.0	32	27	39	93	101	38	59	8.0	2.3	4.1	27
27	5.0	27	24	80	120	90	37	45	7.3	3.2	3.9	24
28	15	20	22	116	109	70	51	40	5.9	2.7	3.6	19
29	30	17	27	96	-------	60	54	36	5.9	2.3	3.6	16
30	35	14	28	67	-------	52	42	36	6.2	2.0	3.9	14
31	20	-------	27	44	-------	45	-------	30	-------	2.3	47	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for station near Chatham.
c Backwater from leaves.
Note.--Stage-discharge relation indefinite Oct. 15 to Nov. 8, Aug. 13-17; discharge estimated on basis of weather records for station near Chatham.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	25	139	232	12	126	*78	78	20	*14	1.7	37
2	12	*30	118	212	12	159	76	64	15	12	1.7	34
3	12	106	*93	196	13	*141	67	52	13	11	1.4	31
4	11	127	71	*159	15	191	64	46	12	8.4	1.2	29
5	12	111	61	129	20	227	57	*38	19	7.0	*1.2	26
6	11	97	48	120	30	227	53	34	*22	6.3	1.8	25
7	11	78	38	118	246	271	55	29	15	5.6	5.0	23
8	8.8	62	30	102	308	227	52	27	12	5.6	12	19
9	8.4	50	34	86	268	189	46	26	15	5.0	7.7	17
10	8.4	39	76	71	220	155	42	23	15	5.6	4.7	16
11	9.2	33	83	57	183	129	39	21	14	18	4.7	15
12	9.2	29	65	42	205	111	41	20	30	9.2	82	15
13	*8.8	27	55	42	239	104	65	18	26	5.9	447	14
14	8.0	24	86	36	172	96	68	18	18	4.4	582	13
15	9.7	22	210	37	108	78	70	17	14	4.1	519	12
16	9	19	227	34	*82	83	68	15	12	3.6	470	12
17	8	20	208	29	122	82	55	14	9.2	3.2	391	12
18	9	21	215	27	176	74	49	13	8.0	3.0	425	11
19	8.5	22	256	27	159	72	48	13	8.0	3.0	884	11
20	8	53	234	24	126	72	71	11	30	3.0	800	14
21	7.5	310	176	20	108	72	67	12	25	2.6	636	14
22	7.5	530	133	24	99	194	68	12	77	2.2	524	9.2
23	7	508	89	23	137	355	62	12	93	2.0	422	9.2
24	6.5	448	76	22	183	326	52	19	74	2.0	329	24
25	6.5	362	65	19	159	266	48	18	64	2.0	251	41
26	7	278	50	19	135	212	53	17	50	2.0	183	26
27	7	200	44	20	118	198	61	13	38	1.8	120	18
28	8	141	44	14	108	170	55	11	28	1.7	74	*29
29	25	157	74	14	-------	137	58	12	21	1.7	53	41
30	35	168	200	13	-------	111	83	14	16	1.7	46	28
31	40	-------	261	12	-------	91	-------	15	-------	1.7	40	-------

* Discharge measurement made on this day.
Note.--No gage-height record Oct. 16 to Nov. 2, Jan. 29 to Feb. 6; discharge estimated on basis of records for station near Chatham.

Passaic River near Millington--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	327.2	25	5.0	10.6	0.191	0.22
November	2,640.5	497	7.4	88.0	1.59	1.77
December	5,198	539	30	168	3.03	3.49
Calendar year 1950	26,123.7	539	5.0	71.6	1.29	17.54
January 1951	3,608	295	40	116	2.09	2.42
February	5,369	532	65	192	3.47	3.60
March	5,693	690	86	184	3.32	3.82
April	5,697	658	72	190	3.43	3.82
May	1,951	124	25	62.9	1.14	1.31
June	1,419	111	26	47.3	.854	.95
July	1,433.5	241	8.1	46.2	.834	.96
August	1,626.0	166	13.7	52.5	.948	1.09
September	395.5	31	7.4	13.2	.238	.27
Water year 1950-51	35,357.7	690	5.0	96.9	1.75	23.72
October 1951	1,580.5	145	7.8	51.0	.921	1.06
November	6,379	522	82	213	3.84	4.28
December	5,172	617	44	167	3.01	3.47
Calendar year 1951	40,323.5	690	7.4	110	1.99	27.05
January 1952	6,356	484	83	205	3.70	4.27
February	4,192	403	62	145	2.62	2.81
March	6,523	627	57	210	3.79	4.38
April	4,660	447	60	156	2.82	3.14
May	4,686	426	53	151	2.73	3.15
June	4,998.3	798	18.8	167	3.01	3.35
July	1,389.2	236	8.8	44.8	.809	.93
August	1,569.2	176	7.6	50.6	.913	1.05
September	2,570.5	349	17.4	85.7	1.55	1.73
Water year 1951-52	50,095.7	798	7.6	137	2.47	33.62
October 1952	403.0	35	9.0	13.0	.235	.27
November	2,895.5	544	9.0	96.5	1.74	1.94
December	4,480	463	36	145	2.62	3.01
Calendar year 1952	44,742.7	798	7.6	122	2.20	30.03
January 1953	6,725	602	35	217	3.92	4.51
February	3,311	229	59	118	2.13	2.22
March	8,841	700	52	285	5.14	5.93
April	7,315	641	78	244	4.40	4.91
May	3,550	190	56	115	2.08	2.38
June	830	64	13	27.7	.500	.56
July	540.0	63	8.0	17.4	.314	.36
August	241.8	31	2.1	7.80	.141	.16
September	128.7	8.0	1.7	4.29	.077	.09
Water year 1952-53	39,261.0	700	1.7	108	1.95	26.34
October 1953	170.2	35	1.7	5.49	.099	.11
November	401.2	32	5.5	13.4	.242	.27
December	2,737	320	10	88.3	1.59	1.84
Calendar year 1953	34,790.9	700	1.7	95.3	1.72	23.34
January 1954	917.8	116	8.8	29.6	.534	.62
February	1,845	168	14	65.9	1.19	1.24
March	3,647	306	45	118	2.13	2.45
April	1,736	219	28	57.9	1.05	1.17
May	3,318	259	30	107	1.93	2.23
June	391.8	26	5.9	13.1	.236	.26
July	141.3	8.8	1.5	4.56	.082	.09
August	260.9	47	1.5	8.42	.152	.18
September	1,520.1	124	5.3	50.7	.915	1.02
Water year 1953-54	17,086.3	320	1.5	46.8	.845	11.48
October 1954	352.0	40	6.5	11.4	.206	.24
November	4,097	530	19	137	2.47	2.75
December	3,559	261	30	115	2.08	2.39
Calendar year 1954	21,785.9	530	1.5	59.7	1.08	14.63
January 1955	1,980	232	12	63.9	1.15	1.33
February	3,763	308	12	134	2.42	2.53
March	4,946	355	72	160	2.89	3.32
April	1,771	83	39	59.0	1.06	1.19
May	732	78	11	23.6	.426	.49
June	813.2	93	8.0	27.1	.489	.55
July	159.3	18	1.7	5.14	.093	.11
August	7,321.1	884	1.2	236	4.26	4.91
September	625.4	41	9.2	20.8	.375	.42
Water year 1954-55	30,119.0	884	1.2	82.5	1.49	20.22

Passaic River near Chatham

Location.--Lat 40°43'31", long 74°23'23", on left bank 150 feet 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 1955.

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.--17 years (1938-55), 167 cfs.

Extremes.--1903-11, 1937-55: 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).--
1950-51: Dec. 8 (8:30 a.m.) 1,010 cfs (5.71 ft); Feb. 22 (3 a.m.) 862 cfs (5.46 ft); Mar. 30 (11 p.m.) 1,010 cfs (5.71 ft); Apr. 1 (11 a.m.) 1,010 cfs (5.71 ft); Apr. 3 (8:30 to 10 a.m.) 1,010 cfs (5.72 ft).
1951-52: Nov. 7 (2 p.m.) 944 cfs (5.59 ft); Dec. 23 (4 a.m.) 1,020 cfs (5.73 ft); Jan. 28 (4 p.m.) 821 cfs (5.40 ft); Mar. 13 (7 a.m.) 960 cfs (5.62 ft); May 25 (4 p.m.) 849 cfs (5.44 ft); June 1 (10 a.m.) 1,290 cfs (6.17 ft).
1952-53: Jan. 26 (time unknown) 938 cfs (5.58 ft); Mar. 16 (1 a.m.) 1,150 cfs (5.95 ft); Apr. 9 (1 a.m.) 1,040 cfs (5.77 ft).
1953-54: Dec. 14 (12:30 p.m.) 651 cfs (5.13 ft), (maximum below base).
1954-55: Nov. 23 (2 to 10 a.m.) 884 cfs (5.49 ft); Aug. 14 (12 m. to 5 p.m.) 1,380 cfs (6.30 ft); Aug. 19 (6 a.m.) 1,390 cfs (6.31 ft).

Revisions.--Special Report 9: Drainage area.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13.2	15.6	447	130	130	285	995	120	171	97	310	21
2	12.6	15.0	363	120	224	277	950	113	118	130	187	20
3	11.5	14.4	277	130	281	265	970	104	92	107	102	20
4	10.5	19.1	265	200	224	349	896	90	83	74	66	23
5	9.5	52	*452	260	184	421	781	81	96	76	52	23
6	9.0	78	517	250	151	426	627	71	98	85	42	21
7	8.6	60	506	220	248	392	495	66	83	65	35	33
8	9.0	44	848	200	411	349	382	60	68	50	42	28
9	10.0	38	849	150	462	306	294	55	57	38	42	28
10	18.1	34	835	120	411	246	228	51	52	32	46	23
11	15.6	30	741	100	306	197	207	60	51	25	110	18.8
12	31	27	633	85	218	171	190	118	50	23	239	16.8
13	26	25	517	80	174	154	277	132	46	23	254	16.8
14	24	23	421	75	197	256	345	118	97	23	221	16.8
15	20	22	336	270	218	345	318	94	178	21	160	19.6
16	*17.5	21	314	450	187	354	258	74	184	18.1	102	25
17	15.6	21	298	500	204	318	221	60	135	18.1	118	33
18	14.4	20	273	432	345	265	*190	51	96	*21	118	25
19	13.8	19.6	220	372	382	210	162	45	70	40	85	20
20	12.0	21	160	298	382	452	146	43	55	46	65	17.5
21	10.5	37	120	239	509	495	128	40	47	55	62	16.2
22	10.5	59	100	197	814	495	113	42	43	43	55	15.6
23	16.4	55	100	b130	842	437	235	52	52	35	46	14.4
24	24	44	95	228	781	377	265	219	57	32	38	13.8
25	31	261	85	314	658	310	232	235	56	28	35	16.2
26	25	562	65	332	528	246	187	184	48	23	31	15.6
27	22	702	70	285	432	200	157	154	42	19.6	31	16.8
28	18.1	702	60	224	345	168	132	154	46	269	32	16.2
29	16.8	621	70	207	-------	171	128	160	60	416	29	14.4
30	17.5	534	90	190	-------	551	130	254	63	452	25	13.8
31	16.2	-------	130	b120	-------	908	-------	250	-------	411	23	-------

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Dec. 4, Dec. 19 to Jan. 17; discharge estimated on basis of recorded range in stage, precipitation records, and records for station near Millington.

Passaic River near Chatham--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13.2	248	132	254	421	100	143	592	1,040	31	19.6	315
2	14.2	363	122	294	340	90	138	473	1,130	30	22	500
3	19.6	580	113	382	306	96	130	332	1,190	28	23	551
4	23	580	104	401	511	107	115	207	1,100	27	26	545
5	23	586	175	396	603	308	214	151	985	27	24	*517
6	18.8	522	262	372	639	387	340	122	835	25	48	452
7	37	734	262	318	580	368	345	107	664	23	114	345
8	125	801	214	224	484	306	285	94	495	37	221	192
9	200	869	181	218	387	254	235	83	312	216	187	102
10	171	774	151	187	294	210	184	76	197	457	184	71
11	135	646	128	187	239	619	151	84	174	406	224	57
12	197	522	113	151	218	*856	128	291	143	358	224	48
13	221	416	104	151	181	938	115	349	111	243	154	40
14	168	327	81	148	126	856	361	302	89	154	102	36
15	118	323	b120	178	125	728	426	228	73	89	71	34
16	89	372	b140	207	118	574	416	171	63	59	65	36
17	70	392	b130	197	168	442	363	130	56	56	98	37
18	56	382	b140	285	232	298	285	120	52	43	92	33
19	48	332	b170	314	235	314	214	130	48	38	63	48
20	43	258	b220	294	194	452	165	154	47	34	47	115
21	39	200	849	262	178	457	135	224	44	37	40	102
22	35	160	920	259	174	416	113	204	43	60	122	74
23	33	138	965	500	156	452	102	154	47	78	148	59
24	35	135	862	500	135	489	94	115	55	50	96	54
25	68	135	748	462	122	506	107	483	56	35	56	47
26	120	227	646	568	113	462	250	728	47	28	43	42
27	111	265	540	670	109	382	457	781	39	25	36	35
28	94	239	437	814	104	294	722	683	35	23	32	33
29	109	184	302	801	100	224	767	568	32	23	30	30
30	100	154	228	677	-------	184	715	468	32	23	30	27
31	87	-------	239	540	-------	160	-------	437	-------	23	29	-------

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Backwater from moss and debris Mar. 27 to May 9, Sept. 8-30.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	19	96	68	250	100	197	225	111	40	14	5.3
2	28	18	80	66	190	90	178	289	98	30	17	5.3
3	34	19	70	170	*174	85	160	273	76	30	15	5.0
4	45	20	74	285	150	400	148	228	62	27	16	5.0
5	36	19	364	b260	140	550	165	204	54	22	16	7.2
6	28	18	689	b190	130	500	157	200	47	48	15	12
7	24	17	761	138	140	400	*618	232	45	83	14	8.1
8	23	17	689	111	150	300	970	265	43	81	12	6.1
9	23	17	574	218	140	250	1,010	262	42	55	12	6.5
10	23	17	468	406	110	200	950	214	36	39	20	6.9
11	23	17	442	580	100	160	849	165	33	28	34	5.7
12	23	17	457	646	110	135	741	130	30	23	25	5.0
13	23	17	473	600	130	597	689	115	43	20	16	10
14	21	17	396	500	130	876	664	140	54	20	18	6.1
15	19	20	289	400	200	950	615	154	57	21	20	6.7
16	18	35	200	300	360	1,100	652	143	42	19	18	16
17	17	46	154	240	350	1,080	615	160	34	17	16	11
18	16	38	130	300	250	975	580	218	30	16	14	9.5
19	16	31	113	350	200	890	562	200	28	14	13	7.7
20	16	40	94	300	170	781	534	148	26	13	13	6.9
21	16	182	110	300	250	652	479	113	24	14	11	7.3
22	15	550	276	350	350	522	406	94	52	18	9.5	7.7
23	16	658	318	350	350	406	310	314	80	73	9.0	6.9
24	17	722	273	500	270	492	235	349	59	68	8.6	7.3
25	18	646	221	800	220	598	190	269	39	52	8.6	7.3
26	18	551	178	900	180	646	181	214	30	29	8.1	6.9
27	18	437	146	800	150	598	187	243	25	22	7.7	6.1
28	16	289	b85	600	120	522	162	197	26	18	7.3	6.1
29	17	162	b95	500	-------	432	138	138	30	16	6.9	5.7
30	19	115	b70	400	-------	327	120	107	57	16	5.7	5.7
31	19	-------	66	350	-------	243	-------	113	-------	14	5.3	-------

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Oct. 8-14, Jan. 13-31, Feb. 1, 2, 4-28, Mar. 1, 2, 4-9; discharge estimated on basis of weather records, recorded range in stage, and records for station near Millington.

Passaic River near Chatham--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.2	33	22	42	71	217	81	74	48	9.8	4.0	98
2	4.9	24	21	38	59	382	76	66	39	9.8	4.0	100
3	4.3	18	19	36	62	468	71	79	34	9.3	25	52
4	3.7	15	18	33	80	523	63	457	31	14	14	27
5	4.0	12	a60	31	89	517	56	442	29	12	19	18
6	a5	11	83	36	81	457	54	*382	27	12	12	13
7	a7	32	273	44	81	349	57	302	24	13	8.1	11
8	a8	25	250	41	63	243	63	372	22	12	6.5	12
9	a6	32	194	37	57	184	62	457	20	11	36	11
10	a5	35	279	28	56	154	56	473	18	10	39	11
11	5.5	31	318	18	63	128	51	406	18	8.5	36	343
12	6.1	24	281	23	b55	104	65	306	20	7.3	21	294
13	5.8	21	254	b24	47	104	74	221	31	6.5	12	235
14	5.5	18	489	b24	35	228	65	165	31	7.7	8.9	148
15	*5.8	16	a600	b24	33	310	57	128	29	16	7.7	113
16	5.5	15	576	b26	46	243	59	104	24	8.5	7.3	107
17	5.8	14	484	b26	169	174	224	89	21	9.8	6.9	128
18	5.5	13	372	b27	285	135	426	76	21	8.1	6.5	140
19	5.2	12	214	b25	273	111	406	68	18	7.3	9.3	146
20	5.5	12	135	b24	207	266	306	60	16	6.9	17	160
21	5.8	12	90	b50	178	323	200	218	14	6.5	22	174
22	6.1	12	83	b90	210	265	140	340	13	6.5	29	143
23	5.8	28	90	b80	204	197	109	306	14	6.1	25	115
24	5.8	32	85	b65	165	154	98	210	14	4.9	16	87
25	7.7	40	57	b60	162	140	89	154	18	4.6	12	65
26	8.5	42	b50	89	178	194	76	115	15	4.9	8.9	51
27	6.9	39	b45	165	221	181	71	89	13	5.2	7.7	44
28	31	33	43	254	214	140	94	74	11	5.5	7.3	37
29	47	27	45	221	-------	115	113	66	9.8	6.9	6.5	32
30	54	24	50	148	-------	100	94	63	8.9	6.5	7.9	26
31	46	-------	50	102	-------	89	-------	57	-------	4.9	90	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for station near Millington.
b Stage-discharge relation affected by ice.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	65	289	442	21	218	140	138	30	24	4.3	57
2	23	64	221	411	21	289	125	115	26	21	4.0	52
3	21	162	174	368	24	265	113	96	22	18	3.7	47
4	18	228	138	310	25	354	104	*80	21	16	3.7	44
5	17	218	113	239	35	411	98	70	25	13	3.5	39
6	21	178	107	218	50	462	89	60	26	11	4.0	36
7	21	146	80	239	450	*523	89	51	30	9.8	12	34
8	18	115	71	181	600	500	87	46	24	9.8	96	31
9	a18	94	73	154	450	421	76	43	23	9.3	102	27
10	a17	80	143	140	350	332	70	40	24	9.3	68	24
11	a16	65	171	120	330	254	63	37	26	10	46	23
12	a15	56	157	104	400	207	68	35	45	17	237	22
13	*14	50	113	92	350	178	109	33	46	16	1,090	22
14	14	45	177	96	250	162	122	30	40	11	1,310	21
15	15	42	363	70	200	140	132	28	30	8.5	1,260	21
16	15	38	392	63	170	143	125	26	22	7.7	1,080	20
17	14	36	368	57	220	148	102	24	18	7.3	919	20
18	17	35	401	52	290	132	83	22	15	6.9	877	19
19	16	36	442	50	260	125	78	21	12	6.5	1,280	18
20	15	101	437	46	232	130	157	20	43	5.8	1,300	21
21	13	612	368	42	190	140	171	18	64	5.5	1,240	20
22	13	806	262	39	171	422	165	18	118	5.5	1,090	21
23	12	872	232	42	235	582	143	18	107	5.2	938	17
24	11	806	148	40	332	618	113	22	107	4.6	794	40
25	11	700	132	35	302	546	98	26	100	4.3	644	47
26	11	588	120	32	243	489	109	26	92	4.3	511	55
27	13	473	100	31	200	426	113	24	70	4.3	372	39
28	13	345	85	29	184	345	102	19	52	4.3	194	49
29	39	336	110	25	-------	258	109	18	39	4.3	104	52
30	60	345	372	22	-------	204	138	21	30	4.3	76	57
31	80	-------	447	21	-------	165	-------	29	-------	4.3	66	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage, and records for station near Millington.
Note.--Stage-discharge relation affected by ice Jan. 25 to Feb. 1, Feb. 4-19.

Passaic River near Chatham--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	509.9	31	8.6	16.4	0.164	0.19
November	4,176.7	702	14.4	139	1.39	1.55
December	10,257	849	60	331	3.31	3.81
Calendar year 1950	48,710.8	849	8.6	133	1.33	18.11
January 1951	6,908	500	75	223	2.23	2.57
February	10,248	842	130	366	3.66	3.81
March	10,396	908	154	335	3.35	3.87
April	10,638	995	113	355	3.55	3.96
May	3,350	254	40	108	1.08	1.25
June	2,394	184	42	79.8	.798	.89
July	2,795.8	452	18.1	90.2	.902	1.04
August	2,803	310	23	90.4	.904	1.04
September	602.3	33	13.8	20.1	.201	.22
Water year 1950-51	65,079.7	995	8.6	178	1.78	24.20
October 1951	2,611.8	221	13.2	84.3	.843	.97
November	11,864	869	135	395	3.95	4.41
December	9,798	965	81	316	3.16	3.64
Calendar year 1951	74,409.9	995	13.2	204	2.04	27.67
January 1952	11,211	814	148	362	3.62	4.17
February	7,592	639	100	262	2.62	2.82
March	12,329	938	90	398	3.98	4.59
April	8,215	767	94	274	2.74	3.06
May	9,041	781	76	292	2.92	3.36
June	9,234	1,190	32	308	3.08	3.43
July	2,786	457	23	89.9	.899	1.04
August	2,670.6	224	19.6	86.1	.861	.99
September	4,577	551	27	153	1.53	1.70
Water year 1951-52	91,929.4	1,190	13.2	251	2.51	34.18
October 1952	670	45	15	21.6	.216	.25
November	4,771	722	17	159	1.59	1.77
December	8,451	761	66	273	2.73	3.14
Calendar year 1952	81,547.6	1,190	15	223	2.23	30.32
January 1953	11,978	900	66	386	3.86	4.45
February	5,464	360	100	195	1.95	2.03
March	15,857	1,100	85	512	5.12	5.90
April	13,462	1,010	120	449	4.49	5.01
May	6,116	349	94	197	1.97	2.27
June	1,413	111	24	47.1	.471	.53
July	986	83	13	31.8	.318	.37
August	425.7	34	5.3	13.7	.137	.16
September	219.0	16	5.0	7.30	.073	.08
Water year 1952-53	69,812.7	1,100	5.0	191	1.91	25.96
October 1953	333.9	54	3.7	10.8	.108	.12
November	702	42	11	23.4	.234	.26
December	5,630	600	18	182	1.82	2.09
Calendar year 1953	62,586.6	1,100	3.7	171	1.71	23.27
January 1954	1,931	254	18	62.3	.623	.72
February	3,444	285	33	123	1.23	1.28
March	7,195	523	89	232	2.32	2.68
April	3,456	426	51	115	1.15	1.29
May	6,419	473	57	207	2.07	2.39
June	651.7	48	8.9	21.7	.217	.24
July	262.0	16	4.6	8.45	.084	.10
August	532.5	90	4.0	17.2	.172	.20
September	2,941	343	11	98.0	.980	1.09
Water year 1953-54	33,498.1	600	3.7	91.8	.918	12.46
October 1954	624	80	11	20.1	.201	.23
November	7,737	872	35	258	2.58	2.88
December	6,806	447	71	220	2.20	2.53
Calendar year 1954	41,999.2	872	4.0	115	1.15	15.63
January 1955	3,810	442	21	123	1.23	1.42
February	6,585	600	21	235	2.35	2.45
March	9,589	618	125	309	3.09	3.57
April	3,291	171	63	110	1.10	1.22
May	1,254	138	18	40.5	.405	.47
June	1,327	118	12	44.2	.442	.49
July	288.8	24	4.3	9.32	.093	.11
August	15,729.2	1,310	3.5	507	5.07	5.85
September	995	57	17	33.2	.332	.37
Water year 1954-55	58,036.0	1,310	3.5	159	1.59	21.59

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 1955.

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

Remarks.--Records given herein 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, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.2	0.8	1.5	a	12	1.9	b	5.4	6.0	2.5	a	0.5
2	.2	.8	.4	a	36	5.2	b	2.6	3.1	2.6	a	.4
3	.2	.9	1.2	a	1.8	2.2	b	.9	1.8	1.2	.6	.4
4	.2	1.1	b	a	7.2	40	b	.1	1.4	.6	.6	.4
5	.2	11	b	a	9.7	40	b	.6	6.8	2.3	.4	.3
6	.2	1.6	1.7	2.2	7.8	19	b	1.8	3.1	1.8	.3	.3
7	.3	2.1	4.6	6.1	b	6.2	13	.5	2.8	.7	.3	1.2
8	.4	1.8	b	11	b	12	5.7	1.4	2.4	.4	1.8	.8
9	.6	1.2	14	1.9	5.4	11	3.9	.5	2.5	.2	1.3	.3
10	.8	1.0	12	4.7	a	a	2.7	1.8	2.3	a	1.1	.2
11	.4	.8	12	8.7	a	a	1.6	6.0	2.4	a	2.3	.2
12	1.2	.6	4.9	6.0	a	a	2.6	20	1.5	a	1.3	.2
13	1.1	.5	.8	a	15	a	31	.6	1.8	a	3.6	.2
14	.4	.4	1.0	a	10	a	7.9	1.3	12	a	1.0	.3
15	.3	.3	.5	a	3.5	29	3.3	1.7	6.9	a	.5	.4
16	.3	.3	a	27	2.8	12	2.1	1.7	4.1	a	1.0	.3
17	.4	.3	a	8.4	47	6.8	5.2	2.2	3.9	a	1.6	.3
18	.4	.3	a	5.8	37	3.5	.8	1.7	3.0	a	1.4	.2
19	.7	.2	a	3.9	7.0	1.9	.3	1.4	2.6	a	.6	.2
20	.8	.3	a	2.7	15	a	.5	2.0	1.9	a	.4	.2
21	.9	a	a	5.3	b	42	.8	2.1	1.4	a	.3	.3
22	1.0	a	a	6.3	b	27	.6	2.0	1.3	a	.3	.4
23	.4	2.2	a	5.8	b	18	b	4.0	1.8	a	.2	.5
24	1.3	1.8	a	b	b	20	12	b	1.8	a	.2	.7
25	.8	b	a	20	b	15	6.3	.9	1.0	a	.6	.6
26	.6	b	a	8.0	7.4	11	4.7	.3	.4	a	1.8	.4
27	.4	b	a	3.2	3.3	9.3	2.1	16	.7	a	.5	.4
28	.4	b	a	1.4	2.1	4.8	1.1	7.1	1.9	a	.3	.4
29	.4	1.3	a	4.8	-------	10	7.2	62	1.7	a	.3	.4
30	.7	4.0	a	2.3	-------	b	21	62	3.9	a	.3	.4
31	.8	-------	a	5.5	-------	b	-------	15	-------	a	.3	-------

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, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.4	b	0.2	9.0	4.0	5.9	0.2	b	b	1.6	0.3	b
2	.4	8.1	.1	7.8	17	5.1	.4	5.3	b	1.7	.5	6.9
3	.5	b	2.2	38	12	5.0	2.9	2.2	b	1.4	.9	3.7
4	.4	31	2.4	2.8	b	5.6	6.6	.4	b	1.4	.5	3.1
5	.2	12	16	13	b	b	b	1.9	b	1.4	.3	2.8
6	.2	9.0	6.2	9.2	16	9.5	52	5.4	b	1.4	2.8	2.2
7	1.7	b	2.4	5.6	8.1	20	23	5.0	b	1.4	.6	1.4
8	6.1	b	2.2	6.8	7.6	22	16	3.6	4.5	.4	.9	.8
9	.6	b	.5	7.4	17	16	13	2.9	7.3	2.5	1.5	.7
10	.6	b	0	4.3	14	17	11	3.9	4.8	12.2	15	.5
11	2.6	2.7	1.7	2.0	14	b	9.3	4.8	3.8	2.1	.9	.5
12	2.1	4.2	4.2	2.7	14	b	8.0	54	b	1.9	2.3	.5
13	1.3	7.3	4.9	5.8	7.2	6.7	8.1	4.2	b	1.3	1.5	.5
14	1.2	9.9	3.5	5.8	1.9	12	b	2.2	2.0	.7	1.9	.5
15	.9	8.3	18	3.4	5.2	7.8	47	3.9	1.5	.5	.8	.8
16	.7	36	3.0	1.8	5.0	3.3	24	3.0	1.3	.4	2.0	1.2
17	.5	8.5	.3	4.0	31	.5	14	3.4	1.0	.7	1.7	.8
18	.4	6.4	b	32	29	.9	14	5.6	1.0	.5	2.2	.7
19	.5	1.7	b	6.9	12	b	5.6	3.3	1.4	.4	1.3	2.9
20	.4	4.0	b	7.9	10	22	6.6	14.6	1.5	.3	.8	3.5
21	.4	6.6	b	2.2	9.6	1.9	4.1	8.7	.7	1.7	.6	1.2
22	.4	5.9	b	b	10	2.3	2.4	2.4	.9	3.5	2.7	.7
23	.4	5.9	b	b	8.7	b	3.3	3.5	1.7	1.0	2.1	.7
24	1.0	2.6	17	3.4	5.1	17	1.9	4.2	2.1	.5	.8	.7
25	1.9	.6	9.8	3.7	7.8	19	5.4	b	1.3	.2	.5	.5
26	1.2	25	25	b	8.3	6.4	b	b	.8	.2	.3	.5
27	1.2	6.6	5.0	b	8.5	5.0	b	b	.6	.2	.2	.4
28	1.9	1.5	5.5	b	7.8	5.1	b	7.3	.5	.2	.2	.5
29	2.3	1.6	3.9	b	6.9	1.2	b	3.0	.5	.3	.2	.7
30	1.6	.8	8.2	11	-------	1.1	b	1.3	4.5	.2	.3	.8
31	1.1	-------	10	5.2	-------	.3	-------	b	-------	.3	.8	-------

b No discharge record; backwater from Passaic River.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0	0.1	1.7	3.4	7.0	4.2	6.6	28	3.6	0.8	0.2	0
2	1.5	.2	1.5	3.0	5.3	4.3	8.3	6.0	2.6	.5	.2	0
3	2.5	.1	1.3	6.6	2.7	4.8	4.4	3.1	1.8	.8	.1	0
4	2.7	.1	1.0	1.1	2.8	b	3.1	2.0	1.2	.2	.2	0
5	2.1	.1	b	2.5	3.8	b	4.4	15	1.0	.1	.5	.5
6	.7	0	b	3.1	5.2	7.4	2.1	8.5	.7	5.3	.2	.3
7	.4	0	9.2	5.7	4.5	2.4	b	14	.9	4.7	.1	.2
8	.3	0	3.2	4.6	2.6	1.4	b	12	1.1	1.4	.1	.1
9	.3	0	.4	b	.9	1.4	b	14	.6	.7	.3	0
10	.4	0	2.8	b	4.0	1.6	b	8.4	.5	.3	.3	0
11	1.2	0	56	b	4.1	1.1	b	1.5	.5	.2	.1	0
12	.7	0	4.2	5.5	3.1	4.7	b	3.9	.5	.1	.1	.1
13	.6	0	2.2	7.2	1.5	b	b	3.4	4.4	.2	.1	.3
14	.5	0	3.0	2.9	3.0	b	b	8.6	1.9	.2	.2	.1
15	.4	.2	.7	7.5	b	b	b	2.2	1.7	.1	1.0	.2
16	.6	.3	.9	5.0	b	b	b	1.3	.9	.1	.2	.3
17	.9	.2	1.3	2.5	2.7	b	b	9.2	.8	.1	.2	.1
18	.7	.1	1.2	b	3.7	b	b	22	.8	.1	.3	.1
19	.7	.2	1.8	1.3	1.3	b	b	1.9	.4	.1	.1	.1
20	.8	1.1	2.9	6.0	.7	b	b	1.5	.3	.2	.1	0
21	4.5	9.1	4.6	7.1	b	b	26	1.9	.5	.3	.1	.1
22	1.0	b	10	9.5	1.9	b	18	2.0	5.7	.2	.1	.1
23	.2	17	1.3	1.2	5.4	b	15	b	5.6	20	.1	0
24	.2	5.8	.8	b	4.2	b	6.2	4.5	2.6	2.4	.1	0
25	.2	2.3	3.6	b	2.2	b	7.6	1.1	2.2	1.7	0	0
26	.1	2.4	1.2	b	.9	b	9.2	2.3	1.3	.7	0	0
27	.1	2.7	1.7	b	1.9	b	3.0	3.2	.9	.3	0	0
28	.1	2.2	3.6	b	4.7	28	5.4	5.4	2.2	.2	0	0
29	.1	2.4	3.8	9.0	-------	23	1.4	3.6	1.8	.2	0	0
30	.1	2.1	3.5	3.2	-------	18	.6	4.0	.5	.3	0	0
31	.1	-------	3.9	5.0	-------	12	-------	5.0	-------	.4	0	-------

b No discharge record; backwater from Passaic River.

Canoe Brook near Summit--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.2	0.1	0.3	0.2	b	0.7	0.3	0.2	0	0	0.4
2	0	.1	.3	.5	.5	b	.5	.2	.1	0	0	.4
3	0	0	.1	.3	.6	b	1.0	.6	.2	0	.1	.4
4	0	0	.1	.6	.9	b	.7	1.2	.1	.3	0	.2
5	0	0	1.8	.4	1.1	0	.4	0	.1	0	0	0
6	.1	0	1.4	.5	.5	1.8	.5	.3	.1	0	0	0
7	.1	.7	b	.8	.8	1.4	.6	.3	0	.1	0	0
8	0	1.0	2.4	.3	.6	.7	.5	b	0	0	0	.1
9	0	.6	.5	.3	.6	1.0	.8	b	0	0	.2	0
10	0	.7	b	.6	.5	4.9	.6	b	0	0	.3	0
11	0	.7	.1	1.1	.6	3.4	1.2	.2	0	0	.2	b
12	0	.1	.9	1.1	.7	2.9	1.7	0	0	0	.1	3.5
13	0	.3	1.2	a	.4	.8	.6	0	1.0	0	.2	.8
14	0	.3	b	a	.8	2.6	.7	.7	.5	.6	0	1.2
15	0	.3	b	a	1.0	.2	.3	.7	.2	.2	0	.9
16	0	.2	.4	a	.3	.3	.4	.4	.2	0	0	1.2
17	0	.2	.2	a	1.4	.2	b	.5	.2	0	0	1.7
18	0	.2	1.0	a	.5	.6	b	.1	.1	0	0	.7
19	0	.2	.8	a	.4	.6	1.7	.3	.1	0	.2	2.3
20	0	.2	1.7	a	.5	b	.2	.4	0	0	.1	.8
21	0	.2	1.2	.4	.4	0	.8	14	0	0	.1	.7
22	0	.2	2.2	.4	0	.7	.2	0	.1	0	0	.8
23	0	1.9	.9	1.9	.4	.3	.1	.1	.2	0	0	.8
24	0	.4	1.5	.8	.4	.4	.4	1.1	0	0	.2	.6
25	.1	.5	.9	.5	.6	.5	.7	.4	0	.2	.8	.3
26	.1	1.4	1.0	.9	.2	.9	.2	.3	0	.9	.4	.3
27	.1	.6	.7	1.1	0	.2	.5	.5	0	0	.4	.3
28	1.6	.6	.6	1.4	0	.7	.4	.5	.1	0	0	.5
29	2.6	.2	.8	1.1	-------	1.3	.7	.5	0	0	0	.4
30	.8	.2	1.0	.7	-------	.8	.2	.4	0	0	.2	.4
31	.2	-------	.8	.4	-------	.8	-------	.1	-------	0	3.0	-------

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

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.5	0.8	0.2	0	0.1	5.3	8.0	1.4	2.5	0.1	0	1.0
2	.5	6.2	.1	2.1	.2	.8	6.9	.9	1.4	.2	0	1.4
3	.4	12	1.3	.2	a	.8	6.6	.2	.7	.2	0	1.1
4	.7	0	1.4	1.3	a	32	5.2	.6	.9	.1	0	.5
5	.7	0	.7	1.2	a	1.2	3.3	2.2	2.9	0	0	.4
6	.4	.4	1.2	.9	13	31	3.0	2.9	.9	0	0	1.4
7	.1	1.3	1.1	.3	b	18	7.3	.9	.3	0	.4	1.1
8	.1	1.0	1.8	5.3	2.3	14	4.8	2.7	.2	0	.6	.7
9	.1	2.0	3.1	6.3	4.8	15	3.6	1.7	.4	0	.4	.4
10	.1	2.2	.9	4.4	4.7	14	3.3	1.4	.4	.1	.6	.3
11	.1	1.9	.6	.8	42	11	2.9	1.3	.5	.2	1.0	.3
12	.1	1.3	1.6	1.1	16	9.0	3.6	2.0	1.6	.2	b	.3
13	.1	.8	1.1	1.2	1.6	8.4	2.5	2.6	2.8	0	b	.3
14	.1	.8	b	1.3	4.6	6.6	3.4	2.8	1.3	0	b	.1
15	.3	.9	b	1.5	1.9	6.2	4.4	1.9	.9	0	b	.1
16	.3	.6	.6	2.1	.4	9.5	4.0	1.2	.4	0	b	.1
17	.2	.7	0	1.0	14	7.6	4.5	.4	.1	0	.9	.1
18	.1	.4	b	1.0	.5	6.6	5.0	.2	.1	0	b	.1
19	0	.6	b	1.0	1.8	6.9	7.6	.2	0	0	b	0
20	0	4.9	0	.7	1.3	8.0	1.6	.2	3.2	0	b	.1
21	0	b	0	a	.1	13	3.9	.1	5.2	0	b	0
22	0	b	.9	a	.2	b	0	.2	12	0	b	0
23	0	2.9	1.1	a	7.2	b	3.6	.4	1.6	0	b	0
24	0	1.5	1.2	a	.2	6.7	7.2	1.1	.9	0	b	2.1
25	0	.8	1.4	a	0	3.4	6.8	.7	.9	0	13	1.0
26	0	0	1.4	a	.6	20	13	.5	1.7	0	3.8	.7
27	.1	1.5	1.4	a	1.9	8.6	13	.2	.7	0	2.0	.4
28	0	.6	.4	a	2.5	.1	4.4	.1	.4	0	1.0	1.9
29	1.1	15	2.2	a	-------	0	4.9	.6	.2	0	.6	1.4
30	.9	1.5	b	a	-------	2.5	0.5	4.9	.1	0	.5	.5
31	.7	-------	.6	a	-------	8.2	-------	3.4	-------	0	.8	-------

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

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 1955.

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.--17 years (1938-55), 227 cfs (unadjusted).

Extremes.--1937-55: Maximum discharge, 3,250 cfs June 2, 1952 (gage height, 6.62 ft, from rating curve extended above 2,400 cfs; minimum, 1.5 cfs Mar. 1, 1938 (gage height, 1.26 ft).

Peak discharge (base, 950 cfs).--
1950-51: Nov. 26 (10 a.m.) 1,990 cfs (5.07 ft); Dec. 5 (12 m. to 2 p.m.) 1,130 cfs (4.02 ft); Dec. 8 (11:30 p.m.) 1,980 cfs (5.06 ft); Feb. 8 (12:30 a.m.) 984 cfs (3.83 ft); Mar. 20 (6 to 7 p.m.) 1,060 cfs (3.92 ft); Mar. 31 (9:30 a.m.) 2,460 cfs (5.59 ft); July 29 (7 a.m.) 1,100 cfs (3.97 ft).
1951-52: Nov. 8 (6 a.m.) 1,700 cfs (4.73 ft); Dec. 21 (11 p.m.) 1,990 cfs (5.07 ft); Jan. 23 (2 p.m.) 1,060 cfs (4.02 ft); Jan. 27 (4 a.m.) 1,120 cfs (4.10 ft); Feb. 5 (5 p.m.) 988 cfs (3.93 ft); Mar. 12 (3:30 a.m.) 2,540 cfs (5.83 ft); Apr. 6 (7 a.m.) 1,380 cfs (4.45 ft); Apr. 28 (8 p.m.) 1,180 cfs (4.18 ft); May 26 (3 a.m.) 1,160 cfs (4.15 ft); June 2 (2 a.m.) 3,250 cfs (6.62 ft); July 10 (5 p.m.) 1,480 cfs (4.58 ft); Sept. 2 (5 a.m.) 1,710 cfs (4.86 ft).
1952-53: Nov. 22 (10 p.m.) 2,050 cfs (5.28 ft); Dec. 6 (8 a.m.) 1,300 cfs (4.37 ft); Dec. 12 (3 a.m.) 996 cfs (3.98 ft); Jan. 25 (7 a.m.) 1,890 cfs (5.10 ft); Mar. 13 (11 p.m.) 1,240 cfs (4.30 ft); Mar. 16 (2 p.m.) 1,110 cfs (4.13 ft); Mar. 25 (4 a.m.) 1,030 cfs (4.02 ft); Apr. 8 (6 a.m.) 1,660 cfs (4.83 ft); Apr. 17 (2 a.m.) 989 cfs (3.97 ft).
1953-54: Mar. 4 (8 a.m.) 705 cfs (3.55 ft), (maximum below base).
1954-55: Nov. 22 (3 p.m.) 1,420 cfs (4.52 ft); Aug. 13 (10 p.m.) 1,510 cfs (4.64 ft); Aug. 19 (8 p.m.) 2,190 cfs (5.43 ft).

Remarks.--Flow regulated by Splitrock Reservoir 14½ miles above station (see p.120). Town of Boonton diverts water for municipal supply from Taylortown Reservoir on Stony Brook (capacity, 75,000,000 gal and by pumping from wells in vicinity of Boonton. Rockaway Valley trunk sewer bypasses station (see Remarks paragraph for station at Rockaway River below reservoir).

Cooperation.--Gage-height record collected in cooperation with Jersey City.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	28	408	209	263	376	1,800	294	184	141	142	47
2	34	29	331	184	603	382	1,330	233	149	136	108	50
3	32	30	312	188	440	389	1,310	197	136	104	91	57
4	39	51	484	306	376	428	1,280	180	144	87	82	52
5	41	223	1,070	389	325	494	984	168	500	204	71	49
6	34	131	841	312	275	*507	782	158	428	134	65	50
7	33	83	673	288	466	473	666	152	288	95	62	80
8	38	70	1,390	300	760	434	596	142	193	80	82	63
9	38	64	1,760	209	534	382	527	131	158	68	78	53
10	53	58	1,230	201	527	325	480	122	152	63	82	49
11	55	52	960	184	395	294	494	126	155	59	119	45
12	59	50	796	*172	369	275	447	275	134	57	112	45
13	61	47	624	162	402	257	818	188	119	60	281	44
14	50	*46	534	155	480	464	731	149	315	54	197	43
15	42	44	460	532	395	666	582	131	408	52	155	135
16	40	44	548	638	325	507	507	119	281	48	188	122
17	41	46	527	408	337	421	494	106	188	45	337	84
18	47	43	414	319	582	363	408	91	152	47	269	70
19	44	41	344	300	473	331	369	91	126	107	162	59
20	39	45	281	294	440	833	337	95	108	275	126	53
21	35	128	227	281	514	841	306	104	102	106	112	48
22	33	104	227	233	848	631	288	106	93	75	102	38
23	41	82	215	201	688	534	500	149	122	89	87	37
24	50	72	209	543	527	487	500	406	139	86	78	41
25	46	424	205	767	447	460	395	369	112	73	71	42
26	42	1,830	139	541	421	395	350	188	93	63	67	43
27	38	1,350	b135	414	414	350	300	162	82	59	65	58
28	35	968	b140	369	389	325	269	221	78	427	60	269
29	34	659	233	344	-------	344	251	263	86	960	*56	152
30	33	500	337	319	-------	872	389	389	106	460	53	82
31	30	-------	275	165	-------	*2,290	-------	294	-------	239	49	-------

* 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, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	297	209	400	486	205	313	678	1,750	146	89	665
2	60	434	193	406	480	205	317	547	2,770	120	76	1,590
3	65	555	188	474	469	201	303	474	1,920	102	78	1,380
4	73	680	180	463	658	201	284	417	1,410	93	75	1,040
5	63	507	328	395	928	303	707	373	1,330	89	69	644
6	56	395	527	378	706	298	1,290	358	988	84	121	451
7	78	834	428	337	566	249	906	348	699	75	158	348
8	428	1,590	357	291	498	224	747	298	504	91	120	275
9	273	1,130	319	298	440	224	605	284	469	347	120	245
10	149	855	288	298	378	228	523	249	516	1,210	261	205
11	197	666	257	289	390	*997	469	259	406	928	268	186
12	389	527	257	258	378	2,270	406	585	332	480	182	165
13	257	440	251	245	327	1,520	384	535	289	313	241	146
14	162	428	172	274	268	1,160	685	395	266	209	212	137
15	139	575	292	337	278	854	726	337	224	152	149	146
16	152	555	263	327	262	665	624	308	193	134	228	176
17	119	582	180	284	308	547	529	266	193	123	573	155
18	108	494	220	378	348	480	451	298	271	115	457	143
19	117	408	428	348	313	457	400	303	232	107	348	224
20	108	325	376	317	289	547	363	342	205	98	280	284
21	87	281	1,360	308	284	631	332	434	176	100	212	232
22	82	275	1,590	294	280	585	303	348	186	115	303	190
23	82	269	1,050	884	258	644	271	284	201	105	249	176
24	82	275	847	706	249	782	266	245	212	91	179	165
25	197	269	658	486	236	685	308	562	193	78	140	149
26	155	376	598	708	216	579	560	1,030	165	69	118	134
27	122	*414	541	1,040	209	504	699	719	146	67	105	125
28	134	312	400	973	205	451	1,030	516	134	87	98	112
29	139	263	406	862	205	390	1,060	440	128	131	100	105
30	119	233	384	579	-------	358	847	463	168	120	93	98
31	106	-------	406	498	-------	327	-------	445	-------	105	91	-------

* Discharge measurement made on this day.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	100	68	298	207	508	227	419	419	160	55	35	19
2	112	61	271	199	430	203	375	448	145	55	31	19
3	154	60	276	335	402	*215	*345	375	122	60	33	*19
4	120	64	262	345	*360	565	312	325	*109	52	31	21
5	120	55	445	276	325	670	392	375	102	48	32	21
6	112	46	1,180	231	312	448	340	402	95	65	31	31
7	109	49	794	231	325	365	814	380	95	83	28	30
8	100	55	616	*227	335	316	1,520	532	104	54	26	25
9	91	50	526	307	302	298	996	556	95	*52	53	21
10	78	52	478	442	271	294	849	478	89	46	168	21
11	73	61	639	592	244	262	905	414	80	42	82	21
12	69	52	919	538	258	271	726	365	77	39	60	20
13	73	50	733	436	280	819	684	345	113	42	52	22
14	80	49	604	380	248	989	828	424	160	45	39	22
15	75	54	520	360	309	733	684	355	112	41	46	21
16	69	104	454	355	448	1,030	719	312	93	39	34	30
17	66	100	414	360	355	856	891	320	86	35	27	25
18	64	91	350	436	289	658	684	350	78	31	33	22
19	64	*82	320	520	258	684	807	289	73	32	31	21
20	69	88	294	466	253	684	758	253	69	36	28	21
21	73	572	308	419	386	562	622	215	62	36	26	21
22	71	1,440	478	408	472	490	538	211	86	46	26	24
23	66	1,740	436	392	365	442	490	345	162	102	33	23
24	62	1,220	*355	753	320	616	442	284	93	116	32	21
25	62	821	298	1,760	302	940	402	211	71	64	24	20
26	60	568	266	1,300	280	788	392	207	62	49	21	20
27	60	472	253	940	266	705	448	235	56	42	22	21
28	64	408	181	794	244	580	419	188	52	39	18	21
29	64	375	215	746	-------	526	355	164	58	35	17	20
30	62	325	203	610	-------	490	320	174	61	42	16	24
31	62	-------	199	526	-------	460	-------	164	-------	44	19	-------

* Discharge measurement made on this day.

Rockaway River above reservoir, at Boonton--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	109	100	80	b100	210	157	167	a125	35	18	286
2	22	100	97	78	117	490	*151	160	a115	50	17	117
3	22	97	93	77	100	454	145	179	a105	36	84	80
4	21	*109	93	75	117	658	130	532	a100	39	64	62
5	20	102	125	69	112	496	127	466	89	41	36	48
6	24	97	123	86	112	386	136	340	a85	39	31	40
7	27	125	475	82	102	335	170	289	a80	36	25	39
8	24	136	430	61	92	307	167	428	a70	40	21	40
9	21	122	*280	68	97	280	145	520	a65	35	71	41
10	21	117	405	64	93	253	130	466	58	31	109	36
11	23	114	397	48	93	231	127	478	61	29	54	236
12	21	109	248	68	77	215	157	370	60	28	37	239
13	20	107	280	56	63	199	142	312	78	26	30	112
14	18	104	454	54	73	280	127	271	75	26	26	78
15	19	104	550	61	*77	312	109	244	*69	41	27	69
16	*42	102	350	71	91	244	139	223	68	32	*29	155
17	49	100	262	71	220	207	337	199	66	28	24	355
18	49	97	174	62	302	184	538	184	60	26	21	219
19	50	95	160	58	215	164	375	*164	54	25	23	195
20	56	97	160	64	170	426	289	a160	48	25	43	215
21	75	97	148	123	164	430	244	a300	45	24	42	160
22	78	95	145	167	235	294	215	a400	40	*22	40	170
23	78	157	139	102	199	248	199	a270	54	22	30	139
24	80	142	120	102	167	223	207	a220	52	21	25	109
25	117	130	107	104	174	227	188	a190	42	20	25	93
26	127	142	104	114	188	284	170	a175	40	22	27	84
27	104	122	97	178	235	244	184	a165	39	21	28	*91
28	136	112	89	240	199	199	215	a150	36	20	24	82
29	167	104	100	151	-------	178	207	a145	35	21	23	71
30	170	100	100	b140	-------	170	184	a140	34	21	32	66
31	125	-------	93	b110	-------	160	-------	a135	-------	18	277	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Whippany River at Morristown and Pequest River at Huntsville.
b Stage-discharge relation affected by ice.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	66	102	330	424	a75	262	223	195	71	52	19	154
2	64	96	294	386	a80	307	207	167	62	49	18	148
3	64	314	271	386	75	262	203	154	58	42	17	136
4	73	307	235	335	b70	335	203	142	58	37	16	109
5	*71	262	215	294	b80	365	188	133	82	35	15	107
6	73	219	180	294	120	365	178	133	77	32	16	139
7	69	170	157	298	650	442	192	136	56	27	18	136
8	64	142	181	224	515	340	181	125	46	32	23	127
9	62	127	184	235	271	312	170	122	56	31	23	117
10	77	114	262	227	215	302	160	109	58	34	16	104
11	77	107	211	199	254	294	148	102	56	41	16	102
12	80	107	174	181	340	276	157	95	93	32	88	127
13	68	102	160	188	258	266	203	91	89	29	829	97
14	52	95	238	151	231	248	188	84	75	27	*1,160	89
15	49	86	520	178	215	235	188	78	64	25	738	84
16	82	95	408	174	181	258	170	78	54	25	526	82
17	73	93	307	157	278	235	154	75	45	24	355	77
18	69	*86	399	143	335	215	148	69	44	21	530	77
19	68	86	652	157	276	215	142	64	42	24	1,710	a80
20	75	171	478	127	244	219	174	62	71	23	2,020	a130
21	73	712	335	122	235	227	167	58	89	20	1,610	127
22	64	1,210	294	139	223	408	178	56	157	19	1,080	109
23	56	800	298	136	294	592	170	58	148	18	776	82
24	58	598	262	130	*335	436	151	78	127	18	538	a225
25	54	538	248	122	276	350	157	66	120	18	419	a165
26	50	442	219	120	240	340	188	*62	104	19	307	a140
27	52	365	215	117	231	360	192	56	86	*18	244	a130
28	60	316	211	95	227	307	157	52	73	18	211	a175
29	104	414	262	97	-------	280	188	54	*64	18	188	a190
30	157	419	570	81	-------	266	240	68	56	18	170	a150
31	127	-------	598	77	-------	240	-------	61	-------	18	157	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Pequest River at Huntsville and Whippany River at Morristown.
b Stage-discharge relation affected by ice.

Rockaway River above reservoir, at Boonton--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	1,273	61	30	41.1		
November	7,342	1,830	28	245		
December	16,329	1,760	135	527		
Calendar year 1950	73,664	1,830	28	202		
January 1951	9,927	767	155	320		
February	13,015	848	263	465		
March	16,130	2,290	257	520		
April	18,490	1,800	251	616		
May	5,799	406	91	187		
June	5,331	500	78	178		
July	4,553	960	45	147		
August	3,609	337	49	116		
September	2,060	269	37	68.7		
Water year 1950-51	103,858	2,290	28	285		
October 1951	4,368	428	56	141		
November	15,244	1,590	233	508		
December	13,953	1,590	172	450		
Calendar year 1951	112,479	2,290	37	308		
January 1952	14,135	1,040	245	456		
February	10,912	928	205	376		
March	17,771	2,270	201	573		
April	16,708	1,290	266	557		
May	13,140	1,030	245	424		
June	16,676	2,770	128	556		
July	6,084	1,210	67	196		
August	5,793	573	69	187		
September	10,091	1,590	98	336		
Water year 1951-52	144,875	2,770	56	396		
October 1952	2,504	154	60	80.8		
November	9,232	1,740	46	308		
December	13,585	1,180	181	438		
Calendar year 1952	136,631	2,770	46	373		
January 1953	15,891	1,760	199	513		
February	9,147	508	244	327		
March	17,186	1,030	203	554		
April	18,476	1,520	312	616		
May	10,115	556	164	326		
June	2,820	162	52	94.0		
July	1,567	116	31	50.5		
August	1,154	168	16	37.2		
September	667	31	19	22.2		
Water year 1952-53	102,344	1,760	16	280		
October 1953	1,828	170	18	59.0		
November	3,344	157	95	111		
December	6,498	550	89	210		
Calendar year 1953	88,693	1,760	16	243		
January 1954	2,884	240	48	93.0		
February	3,984	302	63	142		
March	8,988	658	160	290		
April	5,811	538	109	194		
May	8,442	532	135	272		
June	1,948	125	34	64.9		
July	900	50	18	29.0		
August	1,363	277	17	44.0		
September	3,727	355	36	124		
Water year 1953-54	49,717	658	17	136		
October 1954	2,231	157	49	72.0		
November	8,695	1,210	86	290		
December	9,368	652	157	302		
Calendar year 1954	58,341	1,210	17	160		
January 1955	5,994	424	77	193		
February	6,824	650	70	244		
March	9,559	592	215	308		
April	5,365	240	142	179		
May	2,883	195	52	93.0		
June	2,281	157	42	76.0		
July	854	52	18	27.5		
August	13,853	2,020	15	447		
September	3,715	225	77	124		
Water year 1954-55	71,622	2,020	15	196		

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 (gage heights only January to February 1904), January 1906 to September 1955. Published as "near Boonton" 1903-4 and as "at Boonton" 1906-37. March 1903 to February 1904 published in Water-Supply Papers 97 and 125 of the United States Geological Survey.

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 1.9 miles (revised) downstream at different datum. Jan. 1, 1906, to Sept. 30, 1918 (revised), reference-point gage on Boonton Dam, 2,000 ft upstream at datum 109.57 ft higher than present datum.

Average discharge.--42 years (1913-55), 133 cfs (adjusted for sewage effluent since October 1929).

Extremes.--1903-4, 1906-55: Maximum daily discharge, 7,560 cfs Oct. 10, 1903, practically no flow for many days.

Maximum discharge.--
1950-51: Mar. 31 (3:30 p.m.) 1,900 cfs (6.07 ft).
1951-52: June 2 (7:30 a.m.) 2,660 cfs (7.18 ft).
1952-53: Jan. 25 (1 p.m.) 1,580 cfs (5.56 ft).
1953-54: May 9 (11 a.m.) 409 cfs (3.37 ft).
1954-55: Aug. 21 (1 a.m.) 1,870 cfs (6.03 ft).

Remarks.--Records given herein represent flow over control only. Flow regulated by Boonton Reservoir 2,000 ft above station and by Splitrock Reservoir 16½ miles above station (see p.120). Sewage effluent from Rockaway Valley trunk sewer is discharged to Rockaway River 600 ft below station. Most of the water for sewage effluent is diverted by water departments or companies by pumping from wells in vicinity of Wharton, Dover, Denville, and Boonton. Water diverted from Boonton Reservoir for municipal supply for Jersey City (see p.126).

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

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.9	1.0	280	168	162	276	1,540	236	171	8.3	105	1.1
2	1.0	1.0	243	136	354	276	1,130	182	115	48	50	.8
3	.8	.8	214	122	376	290	999	146	89	42	26	.9
4	.9	1.7	283	171	297	319	1,030	126	75	27	6.4	1.1
5	.8	1.4	685	262	254	353	830	117	234	*84	1.3	1.0
6	.7	.9	712	243	211	*372	637	109	334	83	1.3	1.0
7	.7	.7	542	211	264	360	528	96	239	46	1.2	1.2
8	.6	.6	888	208	575	330	468	85	157	25	1.4	.9
9	.8	.6	1,460	157	430	290	417	77	113	12.1	1.4	.8
10	.8	.6	1,070	132	396	246	364	49	94	4.5	4.3	.9
11	.7	.6	840	122	308	217	364	60	92	3.6	2.1	.8
12	.8	.6	674	109	269	202	337	152	75	3.8	2.2	.9
13	.9	.7	518	100	276	182	514	149	56	3.9	68	.9
14	.8	.5	421	100	330	277	586	104	154	4.0	129	.9
15	.7	.5	357	287	308	478	468	77	286	3.7	104	1.8
16	.8	.6	388	473	256	421	392	59	243	4.2	109	1.0
17	.7	.7	413	345	249	334	364	39	168	4.5	171	1.0
18	.6	.8	334	243	396	283	319	19.2	113	4.2	199	.9
19	.7	.8	266	217	380	252	283	14.8	80	6.8	129	.9
20	.8	1.2	217	205	337	504	249	17.8	53	5.6	78	.8
21	.7	1.3	168	199	372	701	230	26	37	2.9	56	.9
22	.8	1.1	154	165	606	514	214	30	21	1.1	28	.9
23	1.0	.9	146	136	576	425	311	45	39	1.5	10.9	.8
24	1.1	.9	146	287	434	388	372	196	67	1.3	5.3	1.0
25	1.0	16.7	144	561	349	349	311	297	50	1.1	5.2	.9
26	.9	9.2	111	455	311	300	266	186	22	1.1	5.0	1.0
27	1.0	5.5	80	334	304	272	227	134	13.9	1.5	5.2	2.2
28	1.0	546	91	283	286	246	199	146	1.6	39	3.7	2.0
29	1.0	586	122	252	-------	249	196	173	1.9	566	1.2	1.8
30	1.2	361	211	230	-------	582	243	262	1.6	456	1.2	1.7
31	.9	-------	220	173	-------	1,700	-------	246	-------	212	1.2	-------

* Discharge measurement made on this day.

Rockaway River below reservoir, at Boonton--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.0	119	149	319	400	115	233	591	1,230	60	1.3	182
2	2.3	289	126	330	384	117	233	468	2,500	43	1.2	1,170
3	2.7	372	122	372	384	111	217	400	1,820	24	1.0	1,190
4	3.1	491	117	380	482	113	202	341	1,300	16.1	1.2	962
5	3.3	409	174	341	756	188	414	294	1,120	6.2	1.4	622
6	3.3	311	341	300	622	211	983	269	924	5.9	2.1	405
7	6.9	500	328	256	491	176	809	252	642	6.2	2.9	283
8	6.6	1,160	269	211	421	149	637	220	468	6.9	4.0	205
9	4.7	957	233	217	372	136	518	188	396	93	4.8	162
10	5.0	707	205	214	315	*136	442	179	425	711	19.4	126
11	7.2	537	179	208	311	543	384	188	337	919	122	98
12	7.3	425	158	179	297	1,870	334	388	252	498	111	72
13	56	337	162	162	246	1,380	311	438	205	290	113	59
14	102	315	136	171	188	1,020	472	341	182	169	124	47
15	77	445	165	230	188	772	*606	276	146	82	84	49
16	80	434	190	243	182	581	523	233	113	42	89	66
17	64	434	144	214	214	464	442	196	89	26	306	63
18	40	388	166	262	259	400	376	202	124	19.2	380	51
19	38	322	254	276	233	392	334	227	134	13.9	276	81
20	31	196	290	243	208	430	286	243	102	9.4	211	154
21	19.6	157	752	217	208	504	252	337	85	6.1	149	152
22	8.6	176	1,340	216	199	500	230	283	87	4.0	165	111
23	3.0	176	929	562	179	532	196	220	96	4.1	165	87
24	6.9	182	723	632	165	648	185	176	111	2.0	117	77
25	61	185	566	430	152	591	207	360	100	1.6	71	59
26	96	243	491	514	132	500	392	804	70	2.2	40	46
27	64	290	442	835	120	425	537	637	39	1.2	22	30
28	60	233	334	820	117	372	804	447	24	1.5	11.3	26
29	72	188	326	756	111	322	899	372	26	2.2	12.3	16.0
30	53	162	294	523	-------	290	734	372	61	1.5	6.6	8.2
31	43	-------	304	425	-------	259	-------	368	-------	1.5	5.9	-------

* Discharge measurement made on this day.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.2	2.2	199	120	413	142	341	286	87	2.7	1.6	0.4
2	7.3	2.0	178	115	364	124	304	353	67	2.5	1.5	.5
3	28	2.2	176	196	326	120	269	322	170	2.5	1.5	.4
4	30	2.3	160	266	*290	310	239	269	181	2.3	1.2	.4
5	22	2.3	237	214	249	504	294	290	7.3	2.5	.6	.4
6	18	2.3	830	160	224	380	272	326	6.9	4.4	.6	.5
7	11	2.5	778	136	230	290	522	322	6.2	2.0	.5	.5
8	5.9	2.5	537	139	246	239	1,230	345	6.2	.8	.5	.6
9	2.7	2.5	438	208	230	211	919	388	7.0	.8	1.1	.6
10	2.3	2.5	388	311	188	193	734	380	5.9	.9	1.2	.6
11	2.2	2.9	438	438	160	176	756	345	5.9	.9	.5	.7
12	2.2	2.9	728	447	165	173	637	294	5.9	.9	.5	.7
13	3.3	3.7	648	372	188	457	556	280	7.2	1.5	.4	.7
14	2.3	4.0	518	304	171	845	632	319	6.2	2.2	.5	.7
15	2.3	8.0	430	269	252	642	586	311	6.2	2.2	.6	.8
16	2.3	5.4	364	262	322	794	561	256	5.9	1.4	.5	.7
17	2.5	5.5	319	262	297	750	750	252	5.9	.8	.4	.6
18	2.5	5.4	269	319	230	551	616	280	5.9	1.2	.4	.6
19	2.5	5.4	227	400	182	523	648	233	6.2	1.7	.4	.5
20	2.7	7.0	199	376	168	551	663	190	5.9	1.7	.4	.5
21	2.5	9.5	205	345	252	473	537	154	5.9	1.7	.4	.7
22	2.5	48	322	326	368	409	460	144	7.6	1.7	.4	.8
23	2.5	1,240	345	304	308	360	405	217	6.6	4.5	.4	.7
24	2.5	1,160	283	473	252	425	360	239	5.3	2.0	.4	.7
25	2.5	804	230	1,420	217	750	330	160	3.5	1.9	.4	.7
26	2.3	528	179	1,180	208	696	326	126	2.9	1.9	.4	.6
27	2.5	396	168	875	185	606	345	144	3.1	1.9	.4	.6
28	2.5	311	114	696	157	500	334	120	2.7	1.7	.4	.6
29	2.5	276	115	632	-------	447	286	91	3.5	1.7	.4	.6
30	63	236	115	528	-------	400	252	89	2.9	1.7	.4	.5
31	80	-------	111	442	-------	372	-------	89	-------	1.7	.4	-------

* Discharge measurement made on this day.

Rockaway River below reservoir, at Boonton--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.6	0.4	0.8	0.5	0.1	3.7	59	73	22	0.8	0.5	0.8
2	.8	.5	.8	.4	.1	2.4	77	61	14	.7	.4	.7
3	1.1	.6	.8	.4	.1	4.8	38	76	1.5	.6	3.7	.6
4	1.5	.4	.8	.4	.2	2.7	32	315	1.0	.7	.7	.5
5	1.1	.4	1.2	.5	.2	2.0	70	364	1.1	.8	.5	.5
6	.8	.4	1.7	.8	.1	1.2	74	252	1.5	.8	.5	.5
7	.8	1.4	4.9	.6	.1	1.6	1.1	188	.9	.7	.5	1.1
8	.8	1.0	1.0	.4	.1	6.3	1.0	284	.8	.5	.5	.8
9	.8	.8	.8	.2	.1	129	.8	388	.8	.5	2.0	.7
10	.9	.6	3.4	.2	.1	162	.8	353	.8	.4	.8	.6
11	.9	.5	1.1	.2	.1	144	1.0	360	.8	.4	.6	8.4
12	.9	.5	1.3	.2	.1	129	.9	280	.8	.4	.6	1.1
13	1.1	.7	1.5	.1	.1	117	.9	220	.9	.4	.6	.8
14	1.1	.7	8.8	.1	.1	149	.8	176	.6	.5	.6	.7
15	.8	.7	1.8	.1	.1	202	.8	146	.6	.6	.6	.8
16	.8	.7	1.1	.1	.1	160	1.0	132	.6	.5	.6	2.4
17	.5	.7	.8	.1	1.5	122	6.5	109	.6	.4	.4	1.9
18	.5	.7	.5	.2	.9	94	241	87	.6	.4	.4	1.1
19	.6	.7	.4	.2	.7	78	300	66	.6	.5	.6	2.0
20	.6	.8	.4	.1	.6	230	220	56	.5	.5	.7	1.3
21	.6	.7	.4	.5	1.5	326	160	152	.5	.5	1.0	1.2
22	.7	.7	.5	.4	1.9	224	134	304	.5	.4	.6	1.1
23	.8	1.1	.5	.3	1.3	165	102	220	.7	.4	.5	.8
24	.6	.9	.5	.1	1.5	134	111	142	.6	.4	.5	.8
25	.9	1.1	.5	.1	1.5	126	102	102	.5	.4	.5	.8
26	.9	.6	.5	.2	1.8	176	81	69	.5	.4	.7	.9
27	.9	.5	.5	.5	1.3	157	87	47	.5	.5	.5	.8
28	2.0	.6	.5	.4	1.0	124	106	36	.5	.6	.5	.8
29	1.8	.7	.5	.3	-------	96	109	35	.6	.8	.5	.9
30	.7	.8	.5	.1	-------	73	94	31	.6	.6	.8	.8
31	.4	-------	.5	.1	-------	67	-------	27	-------	.4	3.9	-------

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.8	0.5	236	353	a0.6	146	129	115	0.4	0.5	0.5	47
2	.8	1.2	190	269	a.6	199	111	83	.4	.4	.4	37
3	.9	1.3	165	294	a.9	173	109	64	.4	.4	.4	36
4	.8	.9	149	252	a1.0	208	104	175	.6	.4	.4	22
5	.8	.7	113	214	a.6	269	91	115	.6	.5	.4	17
6	.8	.5	100	199	a.4	280	78	1.0	.5	.5	.4	18
7	.8	.4	55	205	155	322	87	1.1	.5	.7	.4	18
8	.8	.5	73	149	396	272	80	1.2	.4	.4	.5	11
9	.7	.8	73	149	244	230	66	1.0	.5	.4	.5	8.1
10	.7	.5	129	134	142	211	67	1.6	.5	.4	.5	6.0
11	.7	.4	120	106	138	199	49	.8	.7	.4	.5	1.9
12	.7	.3	87	89	230	185	45	.8	.7	.4	2.8	3.0
13	.7	.3	66	87	179	176	81	4.5	.5	.4	17	.8
14	.7	.3	103	64	134	160	94	.8	.5	.4	4.6	.8
15	.7	.3	310	66	122	144	100	.7	.4	.5	1.7	1.6
16	.8	.4	315	77	92	154	77	2.0	.4	.5	1.2	.8
17	.7	.3	227	70	132	144	66	.7	.4	.5	.8	.8
18	.7	.4	242	39	220	124	51	.7	.4	.5	5.8	.8
19	.7	.4	447	42	193	122	43	.7	.4	.5	20	.8
20	.7	3.3	380	36	165	120	56	.6	.9	.5	1,230	.8
21	.6	17	272	19	144	120	70	.6	1.3	.5	1,670	.8
22	.6	3.9	188	37	126	239	73	.5	.8	.5	1,110	.8
23	.6	2.0	193	41	162	417	73	.6	.7	.5	744	.8
24	.6	1.9	171	32	230	357	61	.6	.6	.5	490	1.8
25	.6	1.5	152	21	193	272	52	.6	.7	.4	349	.8
26	.7	1.0	132	18	152	256	67	*.5	.6	.4	243	.8
27	.9	92	*120	21	126	272	89	.5	.6	.5	165	1.0
28	.8	193	106	3.7	126	220	69	.5	.6	.4	120	12
29	1.5	276	138	a2.2	-------	179	77	.5	.6	.5	91	52
30	.8	290	332	a1.0	-------	168	124	.5	.6	.4	75	51
31	.6	-------	473	a.7	-------	152	-------	.8	-------	.4	60	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for nearby stations.

Rockaway River below reservoir, at Boonton--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Observed				Sewage effluent		
	Cfs-days	Maximum	Minimum	Mean	Mean*	Per square mile	Runoff in inches
October 1950	26.1	1.2	0.6	0.84	5.4		
November	1,544.9	586	.5	51.5	6.2		
December	12,398	1,460	80	400	8.3		
Calendar year 1950	36,285.7	1,460	.5	99.4	6.2		
January 1951	7,086	561	100	229	7.4		
February	9,666	606	162	345	8.5		
March	11,988	1,700	182	387	9.0		
April	14,388	1,540	196	480	10.1		
May	3,655.8	297	15	118	7.4		
June	3,196.0	334	1.6	107	7.2		
July	1,707.7	566	1.1	55.1	6.9		
August	1,312.5	199	1.2	42.3	7.0		
September	32.8	2.2	.8	1.09	6.3		
Water year 1950-51	67,001.8	1,700	.5	184	7.5		
October 1951	1,029.5	102	2.0	33.2	6.6		
November	11,140	1,160	119	371	8.5		
December	10,417	1,340	117	336	8.1		
Calendar year 1951	75,619.3	1,700	.8	207	7.7		
January 1952	11,058	835	162	357	8.3		
February	8,336	756	111	287	8.2		
March	14,247	1,870	111	460	8.8		
April	13,192	983	185	440	8.9		
May	10,310	804	176	333	8.5		
June	13,208	2,500	24	440	9.9		
July	3,068.7	919	1.2	99.0	7.6		
August	2,620.4	380	1.0	84.5	7.1		
September	6,659.2	1,190	8.2	222	7.7		
Water year 1951-52	105,285.8	2,500	1.0	288	8.2		
October 1952	323.5	80	2.2	10.4	6.1		
November	5,082.0	1,240	2.0	169	6.7		
December	10,243	830	111	330	8.7		
Calendar year 1952	98,347.8	2,500	1.0	269	8.0		
January 1953	12,535	1,420	115	404	8.9		
February	6,842	413	157	244	7.9		
March	13,413	845	120	433	8.8		
April	15,164	1,230	239	505	9.8		
May	7,614	388	89	246	8.8		
June	649.7	181	2.7	21.7	7.5		
July	58.3	4.5	.8	1.88	6.8		
August	19.3	1.6	.4	.62	6.4		
September	17.9	.8	.4	.60	6.2		
Water year 1952-53	71,961.7	1,420	.4	197	7.7		
October 1953	27.3	2.0	.4	.88	6.0		
November	20.9	1.4	.4	.70	6.1		
December	39.3	8.8	.4	1.27	6.7		
Calendar year 1953	56,400.7	1,420	.4	155	7.5		
January 1954	8.8	.8	.1	.28	5.7		
February	17.3	1.9	.1	.62	6.3		
March	3,408.7	326	1.2	110	7.8		
April	2,212.6	300	.8	73.8	7.4		
May	5,151	388	27	166	8.0		
June	56.5	22	.5	1.88	6.9		
July	16.5	.8	.4	.53	6.5		
August	25.8	3.7	.4	.83	6.5		
September	36.2	8.4	.5	1.21	7.3		
Water year 1953-54	11,020.9	388	.1	30.2	6.8		
October 1954	23.3	1.5	.6	.75	6.7		
November	892.0	290	.3	29.7	7.9		
December	5,857	473	55	189	7.9		
Calendar year 1954	17,705.7	473	.1	48.5	7.1		
January 1955	3,090.6	353	.7	99.7	7.2		
February	3,815.1	396	.4	136	6.7		
March	6,490	417	120	209	7.2		
April	2,339	129	43	78.0	6.7		
May	576.4	175	.5	18.6	6.7		
June	17.2	1.3	.4	.57	7.1		
July	14.2	.7	.4	.46	6.8		
August	6,405.8	1,670	.4	207	9.1		
September	354.0	52	.8	11.8	7.6		
Water year 1954-55	29,874.6	1,670	.3	81.8	7.3		

* Equivalent in cubic feet per second.

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 1955.

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.--34 years, 50.0 cfs (revised).

Extremes.--1921-55: Maximum discharge (revised), 2,000 cfs Aug. 26, 1928 (gage height, 7.3 ft), from rating curve extended above 430 cfs on basis of slope-area measurement and computation of flow over dam at gage height 6.29 ft; minimum, 2.8 cfs Aug. 27, 1932 (gage height, 0.73 ft).

Peak discharge (base, 450 cfs).--
1950-51: Nov. 26 (4:30 a.m.) 711 cfs (4.58 ft); Dec. 8 (3:30 p.m.) 543 cfs (4.14 ft); Mar. 31 (4:30 a.m.) 938 cfs (5.14 ft); July 28 (8:30 a.m.) 536 cfs (4.12 ft).
1951-52: Nov. 7 (9 p.m.) 613 cfs (4.33 ft); Dec. 21 (1 p.m.) 817 cfs (4.84 ft); Mar. 11 (9 p.m.) 1,140 cfs (5.57 ft); May 25 (9 p.m.) 648 cfs (4.42 ft); June 1 (7 p.m.) 1,360 cfs (6.02 ft); July 10 (5 a.m.) 522 cfs (4.08 ft); Sept. 1 (1 p.m.) 560 cfs (4.21 ft).
1952-53: Nov. 22 (3 p.m.) 775 cfs (4.74 ft); Dec. 6 (12:30 a.m.) 470 cfs (3.93 ft); Jan. 24 (11 p.m.) 804 cfs (4.81 ft); Mar. 13 (6 p.m.) 558 cfs (4.18 ft); Apr. 7 (6:30 p.m.) 759 cfs (4.70 ft).
1953-54: Sept. 11 (6 a.m.) 282 cfs (3.29 ft), (maximum below base).
1954-55: Nov. 21 (12 m.) 788 cfs (4.82 ft); Feb. 7 (10 a.m.) 518 cfs (4.11 ft); Aug. 13 (3 p.m.) 962 cfs (5.23 ft); Aug. 19 (10 a.m.) 1,160 cfs (5.65 ft).

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

Revisions.--Special Report 9: Drainage area. Revised figures of discharge, in cubic feet per second, for the water years 1924, 1928-29, and 1933-34, superseding those published in Bulletin 33 and Special Report 5, are given herewith:

1924		1932	
Apr. 7	903	Nov. 10	680
19	325	19	540
		20	495
1928		1933	
July 6	791	Aug. 24	588
Aug. 26	465	Sept. 15	1,050
27	1,150	16	425
28	355		
1929		1934	
Feb. 7	480	Mar. 5	614
27	312	Sept. 30	564

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
April 1924	-	903	47	130	4.42	4.93
Water year 1923-24	-	903	8	51.4	1.75	23.81
July 1928	-	791	40	118	4.01	4.62
August	-	1,150	40	142	4.83	5.58
Water year 1927-28	-	1,150	22	85.9	2.92	39.78
February 1929	-	480	18	65.8	2.24	2.33
Water year 1928-29	-	480	8	47.2	1.61	21.80
November 1932	-	680	26	132	4.49	5.00
August 1933	-	588	10.7	50.4	1.71	1.98
September	-	1,050	19.5	102	3.47	3.87
Water year 1932-33	-	1,050	5.0	67.2	2.29	31.03
March 1934	-	614	22	81.3	2.77	3.19
September	-	564	8.9	68.2	2.32	2.59
Water year 1933-34	-	614	8.9	48.8	1.66	22.54
Calendar year 1934	20,183.9	614	8.9	55.3	1.88	25.52

Whippany River at Morristown--Continued

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13.6	14.1	32	44	80	79	213	74	40	50	34	23
2	13.1	14.1	31	40	138	87	178	64	40	34	42	28
3	12.6	14.7	33	43	66	82	278	61	36	27	20	30
4	12.1	25	127	71	57	110	198	59	45	27	24	27
5	12.1	72	*184	58	53	128	152	52	65	68	23	22
6	12.1	28	69	44	52	119	128	51	44	33	23	24
7	11.6	*21	59	46	188	101	111	50	35	25	23	47
8	12.1	18.2	404	50	223	86	105	48	31	22	42	26
9	13.6	17.0	172	36	82	74	99	46	32	21	29	22
10	23	15.8	103	35	64	65	95	44	32	21	93	21
11	16.4	15.3	99	36	56	61	93	66	33	21	176	21
12	21	14.1	79	35	64	62	99	106	27	29	66	22
13	18.2	13.6	66	33	79	62	198	58	31	24	162	19.9
14	14.7	13.6	61	39	86	146	107	47	116	21	74	19.9
15	14.1	13.6	58	222	65	129	86	43	75	19.3	46	57
16	14.1	14.1	101	108	58	82	79	39	45	18.7	75	29
17	13.6	15.3	68	58	108	69	82	36	35	19.3	70	22
18	13.6	14.1	54	53	167	62	72	35	32	19.9	42	21
19	14.1	13.6	48	52	84	62	71	35	29	32	36	19.9
20	14.1	19.0	42	54	89	*247	65	36	28	45	34	18.7
21	13.1	40	41	53	159	135	61	37	29	27	33	19.3
22	13.1	21	40	44	259	103	59	40	29	21	32	19.3
23	20	18.2	42	40	126	89	174	60	37	32	*29	18.7
24	18.2	17.6	43	138	93	91	92	159	32	21	27	17.6
25	15.3	204	44	96	86	82	72	64	34	18.7	26	22
26	14.1	395	36	62	86	72	66	43	27	18.2	26	19.9
27	14.1	74	37	53	84	68	61	47	26	17.5	26	18.7
28	14.1	52	34	50	80	66	59	71	25	326	24	23
29	14.1	44	56	57	-------	96	80	64	32	236	24	18.7
30	14.1	38	66	52	-------	315	146	68	34	59	23	17.6
31	13.6	-------	53	41	-------	580	-------	46	-------	40	23	-------

* Discharge measurement made on this day.

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18.2	93	48	91	101	51	69	103	859	36	22	247
2	18.2	94	48	99	109	48	71	95	478	32	28	223
3	19.3	148	47	128	103	47	69	89	222	31	30	152
4	19.3	112	46	101	208	54	65	82	191	30	25	69
5	18.2	68	82	89	215	101	177	77	208	30	26	43
6	17.0	46	105	84	144	80	164	74	149	27	85	36
7	46	302	64	69	111	59	89	71	116	28	68	33
8	123	243	56	62	101	54	82	66	99	57	36	31
9	39	103	52	61	97	56	80	64	107	153	32	30
10	24	80	48	71	89	*53	80	59	103	356	122	29
11	57	71	46	65	93	548	66	71	80	96	52	29
12	79	66	45	56	89	376	62	200	71	45	34	28
13	33	62	44	57	72	160	64	93	65	39	35	27
14	26	70	41	72	66	133	216	72	61	35	28	26
15	24	117	76	77	62	105	138	66	56	32	26	31
16	23	118	63	71	61	97	103	62	52	31	49	32
17	22	114	44	61	86	87	72	54	52	31	52	26
18	21	75	63	115	95	82	68	65	51	30	32	26
19	21	68	119	72	79	109	72	61	47	29	26	49
20	21	65	69	71	65	155	68	89	44	28	25	33
21	19.9	63	549	62	66	133	65	89	42	29	30	27
22	19.9	53	242	75	65	103	64	64	46	32	52	26
23	21	54	152	242	59	161	62	52	53	26	28	28
24	29	58	119	123	57	146	61	46	52	25	24	27
25	68	53	105	79	56	116	83	382	44	23	23	26
26	34	107	128	239	52	97	157	271	40	23	22	25
27	26	82	109	232	52	89	138	119	36	29	21	23
28	38	54	80	213	50	84	283	114	35	30	23	23
29	33	52	79	168	50	80	176	86	38	31	23	23
30	26	50	86	123	-------	77	126	97	45	23	21	22
31	25	-------	95	103	-------	72	-------	114	-------	23	23	-------

* Discharge measurement made on this day.

Whippany River at Morristown--Continued

Daily discharge, in cubic feet per second, 1950-55

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	19	29	41	107	51	91	137	48	26	18	12
2	28	18	30	40	80	50	*93	95	45	29	21	12
3	36	18	34	99	79	51	86	80	*40	29	20	11
4	24	18	32	64	74	262	82	74	40	23	18	12
5	22	*18	180	46	68	138	95	102	39	23	21	13
6	22	19	266	41	65	80	80	86	36	46	17	17
7	21	19	81	41	74	72	468	101	39	37	17	18
8	21	18	72	44	71	66	292	89	37	*25	18	16
9	21	18	65	94	62	65	168	80	35	25	25	12
10	21	19	53	183	56	62	197	71	32	23	58	12
11	21	17	144	173	52	58	220	64	31	22	23	12
12	21	17	143	119	65	64	160	54	30	21	18	13
13	21	16	74	79	65	378	194	82	66	24	17	15
14	20	17	61	72	54	214	211	105	51	23	20	13
15	18	22	56	74	108	179	144	75	36	22	21	13
16	18	36	53	71	120	325	217	a70	32	21	17	14
17	18	23	51	66	68	178	194	a120	30	20	20	13
18	18	21	48	132	54	146	155	a90	30	18	21	14
19	18	19	46	103	53	196	218	72	30	18	15	13
20	18	32	43	79	51	165	178	58	27	21	16	13
21	18	137	68	75	146	123	138	56	27	20	16	16
22	18	521	109	87	120	109	121	53	75	22	15	16
23	18	158	52	80	68	103	116	129	68	82	15	13
24	18	61	56	384	64	216	105	65	32	43	15	12
25	18	46	48	392	61	222	99	53	31	24	14	13
26	17	41	47	181	61	165	109	68	30	22	13	14
27	18	37	45	138	58	146	101	64	27	21	13	13
28	15	33	36	160	53	121	89	53	27	19	*13	13
29	9.6	31	37	141	-------	116	82	47	33	18	12	12
30	12	31	37	107	-------	105	75	52	27	29	12	12
31	19	-------	39	99	-------	99	-------	54	-------	21	12	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for nearby stations.

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	18	15	17	18	58	36	32	29	25	10	63
2	11	15	15	18	20	111	32	34	28	32	10	25
3	11	15	14	18	23	98	30	53	27	18	89	18
4	12	14	14	18	25	123	28	150	27	21	29	16
5	12	14	37	18	22	57	29	62	27	22	17	15
6	16	14	28	25	22	47	32	47	25	19	15	14
7	17	37	143	20	21	43	39	43	25	18	12	15
8	13	29	51	16	21	41	34	167	23	*19	11	16
9	13	23	31	16	21	38	29	117	23	*16	68	15
10	13	20	102	17	22	39	27	84	23	15	31	13
11	13	18	48	15	22	37	29	72	28	14	*18	173
12	14	17	37	19	18	34	38	61	23	13	15	52
13	13	16	51	17	15	36	30	54	35	13	13	25
14	12	16	169	18	16	64	28	51	25	16	12	21
15	13	16	92	18	18	52	28	48	25	23	14	21
16	13	16	42	19	21	38	37	46	25	14	15	51
17	12	15	33	17	66	35	115	44	22	14	13	88
18	11	15	25	16	47	33	107	43	22	13	12	37
19	12	15	21	17	31	31	53	42	19	14	16	51
20	12	15	21	18	26	134	44	42	18	13	21	49
21	12	15	22	38	31	65	39	137	17	12	29	34
22	12	15	23	42	48	46	39	91	18	11	19	37
23	12	32	24	25	35	43	39	53	31	11	12	25
24	12	25	20	22	*28	40	41	46	24	9.6	11	22
25	20	26	18	22	35	47	35	43	19	11	12	19
26	19	27	19	27	40	54	35	40	19	16	12	20
27	15	19	18	46	48	42	41	39	21	14	11	23
28	53	18	19	46	34	38	45	36	16	11	11	19
29	59	16	22	25	-------	37	39	35	17	12	11	18
30	44	16	20	22	-------	35	34	33	16	16	42	18
31	23	-------	19	20	-------	35	-------	29	-------	11	197	-------

* Discharge measurement made on this day.

Whippany River at Morristown--Continued

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	21	46	61	25	72	52	45	25	*18	11	34
2	18	35	42	81	26	67	53	40	21	15	9.2	32
3	21	106	*36	67	25	*52	52	36	21	13	8.8	31
4	22	58	35	57	27	99	51	36	24	12	9.2	29
5	18	43	35	51	27	74	47	38	30	12	9.6	28
6	19	32	33	64	78	88	49	39	26	12	15	34
7	17	27	29	61	390	95	52	35	21	12	20	29
8	16	24	29	48	91	61	45	37	22	12	20	25
9	17	22	45	44	48	61	43	33	25	12	10	24
10	17	20	61	45	45	61	41	30	22	23	*9.6	25
11	17	19	41	44	92	58	40	30	33	23	13	28
12	16	19	36	42	90	56	49	27	41	13	124	25
13	16	19	33	43	48	54	61	26	29	15	702	22
14	16	19	95	39	41	51	52	25	24	14	191	22
15	18	18	154	38	44	49	54	24	21	12	71	23
16	21	18	72	37	41	60	46	24	19	11	38	22
17	17	20	51	33	117	51	42	22	17	11	29	22
18	16	19	122	33	78	49	42	22	16	11	239	22
19	16	21	126	34	52	49	42	22	17	10	811	24
20	16	63	66	32	48	47	44	22	35	10	166	35
21	16	464	52	29	47	53	43	22	30	11	97	22
22	15	224	47	32	48	171	46	21	72	9.6	114	20
23	15	76	46	31	98	156	41	26	26	9.2	68	20
24	15	61	48	30	73	79	40	34	27	10	53	80
25	15	62	45	30	53	68	41	26	25	11	49	44
26	14	48	42	30	52	79	48	25	22	10	42	27
27	16	42	42	29	51	88	43	22	24	10	39	23
28	16	41	42	25	52	66	39	21	18	10	36	70
29	42	106	61	24	-------	58	62	22	16	10	34	33
30	35	57	184	23	-------	56	57	25	16	10	35	27
31	28	-------	88	23	-------	53	-------	28	-------	10	38	-------

* Discharge measurement made on this day.

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	453.6	23	11.6	14.6	0.497	0.57
November	1,290.0	395	13.6	43.0	1.46	1.63
December	2,382	404	31	76.8	2.61	3.01
Calendar year 1950	14,257.8	404	11.6	39.1	1.33	18.02
January 1951	1,843	222	33	59.5	2.02	2.33
February	2,832	259	52	101	3.44	3.58
March	3,610	580	61	116	3.95	4.57
April	3,379	278	59	113	3.84	4.27
May	1,749	159	35	56.4	1.92	2.21
June	1,156	116	25	38.5	1.31	1.46
July	1,393.6	326	17.5	45.0	1.53	1.76
August	1,427	176	20	46.0	1.56	1.81
September	715.2	57	17.6	23.8	.810	.90
Water year 1950-51	22,230.4	580	11.6	60.9	2.07	28.10
October 1951	1,009.0	123	17.0	32.5	1.11	1.28
November	2,741	302	46	91.4	3.11	3.47
December	2,950	549	41	95.2	3.24	3.73
Calendar year 1951	24,804.8	580	17.0	68.0	2.31	31.37
January 1952	3,231	242	56	104	3.54	4.09
February	2,553	215	50	88.0	2.99	3.23
March	3,613	548	47	117	3.98	4.57
April	3,140	283	61	105	3.57	3.97
May	3,047	382	46	98.3	3.34	3.85
June	3,542	859	35	118	4.01	4.48
July	1,470	356	23	47.4	1.61	1.86
August	1,123	122	21	36.2	1.23	1.42
September	1,450	247	22	48.3	1.64	1.83
Water year 1951-52	29,869.0	859	17.0	81.6	2.78	37.78

Whippany River at Morristown--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1952	608.6	36	9.6	19.6	.667	.77
November	1,500	521	16	50.0	1.70	1.90
December	2,135	266	29	68.9	2.34	2.70
Calendar year 1952	27,412.6	859	9.6	74.9	2.55	34.67
January 1953	3,505	392	40	113	3.84	4.43
February	2,057	146	51	73.5	2.50	2.60
March	4,325	378	50	140	4.76	5.47
April	4,578	468	75	153	5.20	5.79
May	2,399	137	47	77.4	2.63	3.03
June	1,131	75	27	37.7	1.28	1.43
July	817	82	18	26.4	.898	1.03
August	571	58	12	18.4	.626	.72
September	402	18	11	13.4	.456	.51
Water year 1952-53	24,028.6	521	9.6	65.8	2.24	30.38
October 1953	536	59	11	17.3	.588	.68
November	567	37	14	18.9	.643	.72
December	1,213	169	14	39.1	1.33	1.53
Calendar year 1953	22,101.0	468	11	60.6	2.06	27.94
January 1954	692	46	15	22.3	.759	.88
February	794	66	15	28.4	.966	1.00
March	1,631	134	31	52.6	1.79	2.06
April	1,212	115	27	40.4	1.37	1.53
May	1,874	167	29	60.5	2.06	2.37
June	697	35	16	23.2	.789	.88
July	486.6	32	9.6	15.7	.534	.62
August	808	197	10	26.1	.888	1.02
September	1,013	173	13	33.8	1.15	1.28
Water year 1953-54	11,523.6	197	9.6	31.6	1.07	14.58
October 1954	579	42	14	18.7	.636	.73
November	1,804	464	18	60.1	2.04	2.28
December	1,884	184	29	60.8	2.07	2.38
Calendar year 1954	13,474.6	464	9.6	36.9	1.26	17.03
January 1955	1,260	81	23	40.6	1.38	1.59
February	1,907	390	25	68.1	2.32	2.41
March	2,181	171	47	70.4	2.39	2.76
April	1,417	62	39	47.2	1.61	1.79
May	885	45	21	28.5	.969	1.12
June	765	72	16	25.5	.867	.97
July	381.8	23	9.2	12.3	.418	.48
August	3,111.4	811	8.8	100	3.40	3.94
September	902	80	20	30.1	1.02	1.14
Water year 1954-55	17,077.2	811	8.8	46.8	1.59	21.59

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 1955.

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

Average discharge.--51 years (1904-55), 53.6 cfs (unadjusted).

Extremes.--1892-55: 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.

Maximum discharge.--
1950-51: Mar. 31 (6 to 8 a.m.) 1,990 cfs (1.85 ft).
1951-52: June 1-2 (6 p.m. to 6 a.m.) 1,990 cfs (1.85 ft).
1952-53: Jan. 25 (6 a.m.) 1,160 cfs (1.30 ft).
1953-54: Mar. 4 (6 a.m.) 73 cfs (0.20 ft).
1954-55: Aug. 19-20 (10 p.m. to 5 a.m.) 2,330 cfs (2.05 ft).

Remarks.--Records given herein represent flow over intake dam only. Flow regulated by Oak Ridge, Canistear, Clinton, and Echo Lake Reservoirs (see p. 120). Water diverted above intake dam for municipal supply of Newark (see p. 126).

Cooperation.--Station operated and records, in millions of gallons, furnished by Department of Public Affairs, Division of Water, Newark.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	78	88	1,190	11.1	0	0	78	0
2	0	0	0	0	147	78	713	5.0	0	0	0	0
3	0	0	0	0	141	78	648	0	0	0	0	0
4	0	0	25	0	93	94	572	0	0	0	0	0
5	0	0	56	0	93	99	535	0	49	4.2	0	0
6	0	0	5.6	0	93	105	311	0	147	0	0	0
7	0	0	0	68	300	116	311	0	105	0	0	0
8	0	0	58	58	355	128	209	0	31	0	0	0
9	0	0	364	36	355	116	194	0	0	0	0	0
10	0	0	160	1.4	246	93	99	0	0	0	0	0
11	0	0	105	0	245	58	54	0	0	0	0	0
12	0	0	36	0	180	54	123	0	0	0	0	0
13	0	0	1.4	0	170	54	312	0	0	0	0	0
14	0	0	0	0	286	166	337	0	0	0	4.2	0
15	0	0	0	65	224	286	201	0	0	0	0	0
16	0	0	0	32	111	238	141	0	0	0	0	0
17	0	0	0	73	173	173	105	0	0	0	0	0
18	0	0	0	45	209	141	105	0	0	0	0	4.3
19	0	0	0	54	194	187	111	0	0	0	27	52
20	0	0	0	93	187	278	93	0	0	0	0	17.5
21	0	0	0	83	286	294	68	0	0	0	0	0
22	0	0	0	49	320	238	73	0	0	0	0	0
23	0	0	0	18.1	270	180	116	0	0	17.9	0	0
24	0	0	0	134	201	160	123	0	0	0	0	0
25	0	232	0	238	167	141	73	0	0	0	0	0
26	0	346	0	160	153	105	45	0	0	0	0	0
27	0	194	0	99	187	99	32	0	0	10.4	0	0
28	0	105	0	83	134	78	28	0	0	53	0	0
29	0	68	0	73	-------	134	28	0	0	246	0	0
30	0	7.0	0	49	-------	910	24	0	0	312	0	0
31	0	-------	0	32	-------	1,700	-------	0	-------	231	0	-------

Pequannock River at Macopin intake dam--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	36	0	73	116	1.1	128	336	1,020	0	0	567
2	0	54	0	73	124	3.4	134	262	1,620	0	0	782
3	0	78	0	78	160	1.1	134	209	988	0	0	725
4	0	83	0	88	278	0	160	173	561	0	0	438
5	0	73	1.9	72	373	.5	508	128	346	0	0	216
6	0	58	49	49	364	1.1	782	78	216	0	0	94
7	18.4	224	13.9	36	320	.8	670	73	128	0	0	36
8	14.4	320	11.1	28	223	.6	447	45	94	0	0	14.1
9	49	160	49	28	160	0	329	28	73	50	3.4	10.4
10	19.6	99	36	32	128	0	278	21	47	201	45	3.2
11	4.6	88	21	32	129	364	187	49	32	117	11.1	0
12	11.1	73	8.2	28	111	1,120	111	128	5.6	8.8	0	0
13	11.1	58	0	28	93	773	123	160	0	0	0	0
14	0	49	0	32	68	504	201	132	0	0	0	0
15	0	34	11.1	68	49	337	262	99	0	2.8	0	0
16	0	39	9.6	83	49	246	238	94	0	8.2	13.8	0
17	0	28	11.1	93	36	194	194	68	8.2	8.2	105	0
18	0	0	19.3	105	49	160	141	54	8.2	11.1	231	0
19	0	0	73	105	54	169	111	49	36	0	194	0
20	0	0	147	99	49	194	78	78	0	0	105	173
21	0	0	466	83	91	224	52	134	0	0	88	153
22	0	0	725	111	49	231	49	99	0	3.4	88	69
23	0	0	572	194	36	271	49	17.5	0	3.4	17.5	0
24	1.4	0	320	194	28	309	54	0	0	0	0	0
25	32	0	223	194	17.3	320	141	48	0	0	0	0
26	24	2.8	23	240	11.1	278	286	320	0	0	0	0
27	21	11.1	63	419	11.1	246	373	303	0	0	0	0
28	17.5	0	49	410	11.1	216	497	173	0	0	0	0
29	17.5	0	49	239	5.6	173	561	147	0	0	0	0
30	28	0	58	231	-------	141	466	153	7.0	0	0	0
31	32	-------	73	133	-------	128	-------	231	-------	0	0	-------

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	73	0	0	173	21	123	117	0	0	0	0
2	0	57	0	3.2	134	3.2	105	134	0	0	0	0
3	0	133	0	56	99	11	99	105	0	0	0	0
4	0	141	1.1	68	99	111	99	83	0	0	0	0
5	0	78	194	36	88	167	105	99	0	0	0	0
6	0	36	561	24	68	105	115	111	0	0	0	0
7	0	28	456	14	68	68	329	99	0	0	0	0
8	0	28	246	45	73	54	561	180	0	0	0	0
9	0	28	147	99	63	36	456	303	0	0	0	0
10	0	28	134	160	60	21	410	287	0	0	0	0
11	0	28	311	195	14	14	373	141	0	0	0	0
12	0	22	391	173	18	32	303	49	0	0	0	0
13	0	1.1	455	160	32	223	320	32	0	0	0	0
14	0	.3	302	123	28	373	364	40	0	0	0	0
15	0	24	201	123	73	329	286	49	0	0	0	0
16	0	1.4	134	128	129	364	294	45	0	0	0	0
17	0	0	111	111	111	329	382	28	0	0	0	0
18	0	0	128	141	97	311	373	36	0	0	0	0
19	0	0	105	187	97	254	362	0	0	0	0	0
20	3.2	0	105	160	105	246	285	0	0	0	0	0
21	11	78	147	141	160	201	135	0	0	0	0	0
22	11	83	167	141	194	167	99	0	0	0	0	0
23	11	486	111	116	173	141	83	0	0	0	0	0
24	11	194	99	497	134	262	78	28	0	0	0	0
25	11	73	99	1,010	99	419	54	17	0	0	0	0
26	11	28	73	1,130	68	391	78	17	0	0	0	0
27	11	0	58	419	32	320	111	32	0	0	0	0
28	0	0	41	329	32	255	105	5.6	0	0	0	0
29	0	0	.3	270	-------	209	73	0	0	0	0	0
30	73	0	.2	223	-------	194	63	0	0	0	0	0
31	73	-------	0	173	-------	166	-------	0	-------	0	0	-------

Pequannock River at Macopin intake dam--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	45	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	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	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	-------	0	0	0	0	0	0	0
31	0	-------	0	0	-------	0	-------	0	-------	0	0	-------

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	0	0	50	0	0	0	0	0
2	0	0	0	0	0	0	45	0	0	0	0	0
3	0	0	0	0	0	0	45	0	0	0	0	0
4	0	0	0	0	0	0	32	0	0	0	0	0
5	0	0	0	0	0	0	11	0	0	0	0	0
6	0	0	0	0	0	0	11	0	0	0	0	0
7	0	0	0	0	0	0	32	0	0	0	0	0
8	0	0	0	0	0	0	21	0	0	0	0	0
9	0	0	0	0	0	0	9.3	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	352	0
14	0	0	0	0	0	0	0	0	0	0	294	0
15	0	0	0	0	0	0	0	0	0	0	88	0
16	0	0	0	0	0	0	0	0	0	0	32	0
17	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	231	0
19	0	0	0	0	0	0	0	0	0	0	1,360	0
20	0	0	0	0	0	0	0	0	0	0	1,730	0
21	0	83	0	0	0	0	0	0	0	0	1,090	0
22	0	94	0	0	0	.6	0	0	0	0	737	0
23	0	1.9	0	0	0	41	0	0	0	0	497	0
24	0	0	0	0	0	78	0	0	0	0	270	0
25	0	0	0	0	0	122	0	0	0	0	160	0
26	0	0	0	0	0	141	0	0	0	0	116	0
27	0	0	0	0	0	141	0	0	0	0	57	0
28	0	0	0	0	0	105	0	0	0	0	36	0
29	0	0	0	0	-------	78	0	0	0	0	8.4	0
30	0	0	4.6	0	-------	58	0	0	0	0	0	0
31	0	-------	4.3	0	-------	50	-------	0	-------	0	0	-------

Pequannock River at Macopin intake dam--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	0	0	0	0		
November	952.0	346	0	31.7		
December	811.0	364	0	26.2		
Calendar year 1950	3,222.9	364	0	8.83		
January 1951	1,543.5	238	0	49.8		
February	5,598	355	78	200		
March	6,669	1,700	54	215		
April	6,974	1,190	24	232		
May	16.1	11.1	0	.52		
June	332	147	0	11.1		
July	874.5	312	0	28.2		
August	109.2	78	0	3.52		
September	73.8	52	0	2.46		
Water year 1950-51	23,953.1	1,700	0	65.6		
October 1951	301.6	49	0	9.73		
November	1,567.9	320	0	52.3		
December	3,082.2	725	0	99.4		
Calendar year 1951	27,141.8	1,700	0	74.4		
January 1952	3,678	419	28	119		
February	3,193.2	373	5.6	110		
March	6,606.6	1,120	0	213		
April	7,744	782	49	258		
May	3,889.5	336	0	125		
June	5,190.0	1,620	0	173		
July	413.9	201	0	13.4		
August	901.8	231	0	29.1		
September	3,280.7	782	0	109		
Water year 1951-52	39,849.4	1,620	0	109		
October 1952	226.2	73	0	7.30		
November	1,648.8	486	0	55.0		
December	4,777.6	561	0	154		
Calendar year 1952	41,550.3	1,620	0	114		
January 1953	6,445.2	1,130	0	208		
February	2,521	194	14	90.0		
March	5,797.2	419	3.2	187		
April	6,623	561	54	221		
May	2,037.6	303	0	65.7		
June	0	0	0	0		
July	0	0	0	0		
August	0	0	0	0		
September	0	0	0	0		
Water year 1952-53	30,086.6	1,130	0	82.4		
October 1953	0	0	0	0		
November	0	0	0	0		
December	0	0	0	0		
Calendar year 1953	23,434	1,130	0	64.2		
January 1954	0	0	0	0		
February	0	0	0	0		
March	45	45	0	1.5		
April	0	0	0	0		
May	0	0	0	0		
June	0	0	0	0		
July	0	0	0	0		
August	0	0	0	0		
September	0	0	0	0		
Water year 1953-54	45	45	0	.1		
October 1954	0	0	0	0		
November	178.9	94	0	5.96		
December	8.9	4.6	0	.29		
Calendar year 1954	187.8	94	0	.51		
January 1955	0	0	0	0		
February	0	0	0	0		
March	814.6	141	0	26.3		
April	256.3	50	0	8.54		
May	0	0	0	0		
June	0	0	0	0		
July	0	0	0	0		
August	7,058.4	1,730	0	228		
September	0	0	0	0		
Water year 1954-55	8,317.1	1,730	0	22.8		

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 1955.

Gage.--Water-stage recorder. Datum of gage is 608.86 ft above mean sea level (New Jersey Geological Survey bench mark). Prior to Oct. 9, 1931, staff gage on former railroad bridge at site 100 ft upstream at datum 89.75 ft lower. Oct. 9, 1931 to Mar. 2, 1932, staff gage on outside of gatehouse at present datum.

Extremes.--1898-1903, 1907-55: 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.

Maximum gage height.--
1950-51: Mar. 31 (9 a.m.) 12.00 ft.
1951-52: June 2 (3 a.m.) 11.78 ft.
1952-53: Nov. 23 (1 to 10 a.m.) 11.20 ft.
1953-54: Mar. 4 (6 a.m. to 5 p.m.) 10.72 ft.
1954-55: Aug. 19 (estimated) 12.05 ft.

Remarks.--See records for Wanaque River at Awosting for discharge from Greenwood Lake. See p.125 for records of month-end contents.

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

Daily mean gage height, in feet, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.88	9.87	10.49	-	10.43	10.36	11.50	10.24	10.39	10.19	10.42	10.07
2	9.87	9.87	10.42	-	10.45	10.34	11.15	10.23	10.36	10.18	10.34	10.08
3	9.86	9.89	10.37	-	10.44	10.33	11.04	10.19	10.31	10.16	10.28	10.09
4	9.86	9.91	10.48	-	10.41	10.36	10.95	10.17	10.31	10.14	10.26	10.07
5	9.85	10.06	10.76	-	10.37	10.35	10.82	10.15	10.37	10.16	10.20	10.06
6	9.83	10.10	10.74	-	10.35	10.34	10.71	10.13	10.35	10.16	10.16	10.05
7	9.82	10.10	10.64	-	10.43	10.34	10.63	10.12	10.31	10.12	10.14	10.06
8	9.81	10.11	10.95	-	10.67	10.34	10.56	10.11	10.27	10.09	10.15	10.04
9	9.81	10.12	11.08	10.36	10.66	10.33	10.50	10.09	10.24	10.07	10.13	10.02
10	9.85	10.14	10.94	10.33	10.58	10.32	10.44	10.09	10.22	10.06	10.16	10.01
11	9.85	10.13	10.81	10.31	10.52	10.29	10.42	10.11	10.20	10.05	10.23	10.00
12	9.87	10.13	10.69	10.29	10.48	10.27	10.39	10.16	10.17	10.05	10.22	10.01
13	9.88	10.12	10.58	10.27	10.45	10.26	10.59	10.16	10.16	10.07	10.29	10.00
14	9.86	10.12	10.49	10.25	10.47	10.32	10.60	10.14	10.22	10.06	10.27	10.00
15	9.86	10.12	10.44	10.33	10.45	10.38	10.54	10.13	10.25	10.05	10.28	10.10
16	9.85	10.12	10.47	10.39	10.44	10.38	10.50	10.12	10.25	10.03	10.41	10.11
17	9.85	10.14	10.42	10.39	10.43	10.38	10.47	10.11	10.23	10.03	10.66	10.10
18	9.85	10.13	10.37	10.36	10.47	10.35	10.43	10.11	10.20	10.02	10.64	10.09
19	9.85	10.10	10.36	10.36	10.47	10.31	10.38	10.09	10.19	10.02	10.54	10.07
20	9.85	10.10	10.35	10.35	10.47	10.43	10.37	10.09	10.17	10.03	10.45	10.07
21	9.84	10.18	10.31	10.34	10.50	10.46	10.32	10.09	10.15	10.00	10.39	10.05
22	9.84	10.13	10.29	10.31	10.60	10.47	10.30	10.09	10.14	9.99	10.35	10.04
23	9.88	10.11	10.27	10.29	10.60	10.42	10.35	10.12	10.15	10.10	10.29	10.03
24	9.89	10.10	10.25	10.50	10.58	10.41	10.35	10.22	10.16	10.09	10.25	10.02
25	9.89	10.38	10.25	10.63	10.50	10.40	10.33	10.21	10.15	10.07	10.21	10.02
26	9.89	11.07	10.24	10.62	10.44	10.36	10.33	10.20	10.12	10.05	10.18	10.01
27	9.88	11.01	10.23	10.57	10.41	10.32	10.30	10.21	10.11	10.08	10.15	9.99
28	9.87	10.85	10.21	10.51	10.38	10.29	10.28	10.25	10.13	10.40	10.13	10.01
29	9.88	10.69	-	10.48	-------	10.30	10.28	10.32	10.14	10.65	10.12	9.99
30	9.88	10.58	-	10.42	-------	10.75	10.27	10.43	10.16	10.59	10.10	9.97
31	9.88	-------	-	10.39	-------	11.88	-------	10.43	-------	10.49	10.09	-------

Note.--No gage-height record Dec. 29 to Jan. 8.

Greenwood Lake at Awosting--Continued

Daily mean gage height, in feet, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.95	10.24	10.29	10.35	10.44	10.19	10.33	10.68	11.03	10.09	9.96	10.40
2	9.95	10.27	10.27	10.37	10.43	10.19	10.32	10.58	11.68	10.06	9.95	10.96
3	9.96	10.42	10.24	10.41	10.41	10.19	10.31	10.51	11.35	10.05	9.95	10.91
4	9.98	10.51	10.24	10.40	10.51	10.19	10.29	10.45	11.08	10.04	9.93	10.76
5	9.97	10.50	10.30	10.40	10.62	10.24	10.71	10.39	10.90	10.03	9.91	10.63
6	9.98	10.47	10.38	10.39	10.60	10.24	11.20	10.35	10.74	10.02	9.98	10.53
7	10.00	10.66	10.39	10.36	10.55	10.24	11.07	10.34	10.63	10.00	10.00	10.44
8	10.14	10.97	10.37	10.32	10.49	10.24	10.90	10.28	10.52	10.01	10.01	10.36
9	10.16	10.88	10.35	10.29	10.46	10.24	10.77	10.25	10.44	10.16	10.01	10.30
10	10.14	10.74	10.34	10.29	10.41	10.24	10.65	10.24	10.38	10.56	10.08	10.26
11	10.18	10.64	10.30	10.28	10.40	10.73	10.58	10.24	10.34	10.60	10.10	10.23
12	10.24	10.55	10.29	10.25	10.40	11.32	10.52	10.37	10.26	10.50	10.11	10.20
13	10.25	10.48	10.27	10.24	10.34	11.20	10.45	10.38	10.23	10.42	10.18	10.18
14	10.21	10.45	10.25	10.26	10.29	11.02	10.52	10.35	10.20	10.34	10.16	10.16
15	10.20	10.48	10.32	10.29	10.24	10.83	10.61	10.35	10.18	10.28	10.12	10.15
16	10.17	10.47	10.29	10.30	10.24	10.69	10.64	10.34	10.18	10.23	10.22	10.14
17	10.15	10.46	10.26	10.26	10.29	10.56	10.59	10.30	10.15	10.20	10.65	10.13
18	10.14	10.43	10.27	10.35	10.31	10.50	10.55	10.30	10.24	10.16	10.65	10.12
19	10.12	10.39	-	10.34	10.27	10.47	10.48	10.29	10.20	10.14	10.54	10.25
20	10.11	10.36	-	10.36	10.24	10.45	10.44	10.30	10.19	10.12	10.44	10.30
21	10.09	10.32	-	10.37	10.23	10.46	10.40	10.34	10.15	10.14	10.38	10.27
22	10.08	10.30	-	10.35	10.24	10.49	10.35	10.33	10.16	10.13	10.36	10.23
23	10.08	10.27	-	10.49	10.22	10.55	10.33	10.30	10.15	10.10	10.30	10.21
24	10.09	10.29	-	10.51	10.21	10.59	10.30	10.27	10.14	10.07	10.23	10.19
25	10.16	10.27	-	10.47	10.19	10.58	10.35	10.37	10.14	10.05	10.17	10.16
26	10.15	10.32	-	10.54	10.19	10.54	10.48	10.57	10.13	10.02	10.16	10.15
27	10.15	10.31	a10.50	10.63	10.19	10.50	10.57	10.59	10.12	10.01	10.14	10.14
28	10.16	10.31	-	10.64	10.18	10.46	10.79	10.53	10.10	10.01	10.12	10.13
29	10.16	10.30	10.39	10.62	10.19	10.42	10.85	10.49	10.09	10.00	10.11	10.11
30	10.15	10.29	10.38	10.54	-------	10.38	10.79	10.46	10.10	9.99	10.10	10.10
31	10.14	-------	10.36	10.48	-------	10.34	-------	10.42	-------	9.98	10.10	-------

a Staff-gage reading at 11 a.m.
Record missing Dec. 19-26, 28.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10.09	9.93	10.33	10.18	10.45	10.24	10.44	10.37	10.12	9.95	9.71	9.23
2	10.10	9.92	10.29	10.17	10.40	10.20	10.41	10.38	10.11	9.94	9.70	9.22
3	10.13	9.92	10.30	10.24	10.35	10.18	10.37	10.36	10.09	9.96	9.67	9.20
4	10.08	9.91	10.26	10.25	10.33	10.29	10.34	10.35	10.07	9.93	9.64	9.17
5	10.07	9.90	10.30	10.24	10.28	10.34	10.33	10.37	10.06	9.90	9.63	9.18
6	10.07	9.89	10.59	10.22	10.25	10.33	10.31	10.37	10.06	9.91	9.61	9.24
7	10.07	9.88	10.63	10.21	10.25	10.32	10.49	10.37	10.10	9.94	9.59	9.20
8	10.05	9.86	10.57	10.22	10.25	10.28	10.74	10.40	10.10	9.92	9.57	9.18
9	10.04	9.85	10.51	10.28	10.24	10.26	10.72	10.45	10.09	9.93	9.59	9.15
10	10.03	9.86	10.46	10.32	10.23	10.24	10.67	10.45	10.08	9.90	9.63	9.13
11	10.02	9.88	10.68	10.34	10.19	10.20	10.63	10.43	10.05	9.87	9.62	9.10
12	10.00	9.93	10.92	10.37	10.20	10.21	10.58	10.39	10.03	9.85	9.60	9.07
13	10.00	9.94	10.85	10.34	10.20	10.44	10.58	10.38	10.04	9.84	9.58	9.09
14	10.00	9.94	10.74	10.32	10.18	10.64	10.65	10.42	10.05	9.82	9.58	9.06
15	10.00	9.95	10.64	10.31	10.23	10.67	10.59	10.38	10.03	9.80	9.56	9.04
16	10.01	10.00	10.55	10.31	10.29	10.77	10.60	10.36	10.02	9.78	9.54	9.03
17	10.01	10.00	10.48	10.32	10.30	10.73	10.62	10.35	10.00	9.77	9.52	9.01
18	10.00	10.00	10.42	10.38	10.27	10.66	10.59	10.35	10.00	9.75	9.51	8.99
19	9.99	9.99	10.38	10.43	10.25	10.63	10.58	10.33	9.98	9.73	9.48	8.95
20	10.00	10.04	10.34	10.44	10.23	10.61	10.55	10.30	9.97	9.72	9.45	8.95
21	9.98	10.53	10.35	10.44	10.28	10.55	10.51	10.26	9.96	9.70	9.43	8.96
22	9.97	10.98	10.39	10.42	10.33	10.50	10.45	10.23	9.97	9.68	9.41	8.96
23	9.96	11.18	10.36	10.39	10.31	10.45	10.42	10.25	9.98	9.80	9.40	8.94
24	9.96	11.03	10.32	10.60	10.29	10.56	10.38	10.22	9.95	9.88	9.38	8.90
25	9.95	10.86	10.30	11.04	10.28	10.74	10.35	10.19	9.92	9.85	9.36	8.88
26	9.93	10.70	10.29	10.98	10.27	10.79	10.36	10.19	9.91	9.83	9.35	8.87
27	9.92	10.60	10.27	10.83	10.25	10.76	10.41	10.20	9.99	9.82	9.33	8.87
28	9.94	10.51	10.25	10.74	10.25	10.68	10.38	10.18	9.98	9.81	9.31	8.86
29	9.95	10.43	10.21	10.65	-------	10.63	10.35	10.14	9.97	9.78	9.20	8.85
30	9.94	10.37	10.20	10.56	-------	10.57	10.31	10.13	9.96	9.77	9.27	8.83
31	9.93	-------	10.19	10.48	-------	10.48	-------	10.13	-------	9.75	9.25	-------

Greenwood Lake at Awosting--Continued

Daily mean gage height, in feet, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.82	8.82	9.08	10.11	-	10.39	10.16	10.26	10.17	9.86	9.55	9.66
2	8.80	8.81	9.09	10.10	-	10.51	10.13	10.27	10.15	9.85	9.52	9.67
3	8.78	8.80	9.08	10.10	10.22	10.59	10.15	10.28	10.14	9.84	9.56	9.66
4	8.75	8.79	9.08	10.09	-	10.71	10.11	10.45	10.13	9.85	9.56	9.65
5	8.76	8.77	9.15	10.07	-	10.67	10.10	10.49	10.11	9.87	9.55	9.65
6	8.75	8.80	9.17	10.10	-	10.59	10.10	10.47	10.08	9.87	9.55	9.65
7	8.78	8.87	9.46	10.10	-	10.52	10.14	10.42	10.07	9.85	9.52	9.63
8	8.73	8.85	9.60	10.10	-	10.46	10.15	10.46	10.05	9.87	9.50	9.63
9	8.70	8.84	9.69	10.07	-	10.40	10.13	10.48	10.04	9.86	9.54	9.63
10	8.70	8.84	9.95	10.08	10.18	10.37	10.11	10.59	10.03	9.84	9.57	9.61
11	8.68	8.84	10.14	-	-	10.33	10.11	10.65	10.03	9.83	9.55	9.75
12	8.68	8.84	10.22	-	-	10.30	10.14	10.62	10.02	9.81	9.52	9.77
13	8.65	8.84	10.32	-	-	10.27	10.11	10.56	10.05	9.79	9.50	9.76
14	8.64	8.83	10.50	-	-	10.31	10.11	10.50	10.05	9.77	9.48	9.75
15	8.62	8.83	10.63	-	10.16	10.32	10.11	10.45	10.05	9.80	9.49	9.76
16	8.62	8.83	10.60	-	-	10.31	10.14	10.40	10.04	9.77	9.48	9.83
17	8.60	8.83	10.53	-	-	10.28	10.26	10.36	10.02	9.75	9.48	9.87
18	8.59	8.83	10.45	10.12	-	10.25	10.37	10.33	10.01	9.72	9.43	9.89
19	8.58	8.84	10.38	-	-	10.22	10.39	10.30	10.00	9.71	9.42	9.95
20	8.58	8.84	10.33	-	-	10.31	10.36	10.27	9.98	9.69	9.47	10.05
21	8.57	8.84	10.30	-	-	10.36	10.34	10.34	9.97	9.68	9.47	10.08
22	8.57	8.85	10.27	-	-	10.34	10.31	10.38	9.96	9.66	9.46	10.12
23	8.58	8.92	10.26	-	10.32	10.31	10.31	10.37	9.97	9.64	9.44	10.13
24	8.57	8.94	10.22	-	-	10.29	10.33	10.34	9.96	9.61	9.42	10.12
25	8.58	8.98	10.18	-	-	10.27	10.30	10.30	9.94	9.60	9.45	10.10
26	8.61	9.01	10.16	-	-	10.27	10.29	10.29	9.92	9.63	9.45	10.11
27	8.61	9.03	10.16	10.22	-	10.25	10.30	10.25	9.91	9.62	9.43	10.15
28	8.68	9.05	10.15	-	-	10.21	10.32	10.23	9.88	9.60	9.41	10.12
29	8.78	9.05	10.15	-	-------	10.20	10.31	10.22	9.87	9.60	9.40	10.11
30	8.84	9.05	10.14	-	-------	10.20	10.29	10.22	9.87	9.58	9.40	10.10
31	8.83	-------	10.12	-	-------	10.16	-------	10.20	-------	9.55	9.60	-------

Note.--Occasional staff-gage readings Jan. 11 to Feb. 28.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10.10	10.02	10.42	10.41	-	-	10.25	10.24	10.05	10.04	9.71	10.15
2	10.09	10.08	10.38	10.41	-	-	10.22	10.23	10.05	10.03	9.70	10.13
3	10.08	10.28	10.35	10.40	-	-	10.20	10.22	10.02	10.03	9.67	10.12
4	10.08	10.35	10.31	10.37	-	-	10.20	10.20	10.00	10.02	9.65	10.10
5	10.07	10.37	10.29	10.33	-	10.46	10.17	10.20	10.05	10.00	9.64	10.08
6	10.06	10.35	10.28	10.32	-	-	10.16	10.20	10.04	10.03	9.63	10.09
7	10.03	10.33	10.23	10.34	10.20	-	10.15	10.16	10.04	10.15	9.62	10.08
8	10.00	10.30	10.20	10.29	-	-	10.15	10.15	10.04	10.11	9.63	10.05
9	9.99	10.28	10.20	10.25	10.20	-	10.11	10.15	10.03	10.09	9.60	10.02
10	9.99	10.25	10.22	10.23	-	10.40	10.10	10.11	10.01	10.09	9.57	10.01
11	9.99	10.23	10.21	10.23	-	-	10.10	10.10	10.02	10.09	9.68	10.00
12	9.99	10.22	10.19	10.24	-	-	10.13	10.08	10.06	10.05	10.07	9.99
13	9.99	10.19	10.19	10.26	-	-	10.17	10.07	10.07	10.02	11.18	9.98
14	9.98	10.17	10.24	10.25	-	-	10.17	10.07	10.07	10.00	11.58	9.96
15	10.00	10.17	10.36	-	-	-	10.17	10.06	10.05	9.98	11.23	9.95
16	10.04	10.15	10.40	-	-	10.30	10.17	10.05	10.05	9.97	10.95	9.96
17	10.02	10.16	10.38	-	10.26	10.30	10.15	10.05	10.02	9.96	10.74	9.95
18	10.00	10.17	10.45	-	-	10.26	10.15	10.03	10.00	9.95	10.69	9.94
19	10.00	10.17	10.57	-	-	10.25	10.15	10.02	10.02	9.94	11.80	9.95
20	9.99	10.24	10.57	-	-	10.23	10.15	10.02	10.15	9.91	11.78	9.96
21	9.96	10.53	10.53	-	-	10.24	10.15	10.02	10.14	9.90	11.36	9.94
22	9.94	10.74	10.46	-	-	10.35	10.18	10.00	10.13	9.87	11.09	9.91
23	9.92	10.71	10.40	-	-	10.45	10.18	10.00	10.11	9.85	10.86	9.90
24	9.92	10.66	10.37	-	-	10.45	10.18	10.01	10.13	9.86	10.66	10.02
25	9.91	10.63	10.35	10.10	10.36	10.43	10.20	10.03	10.14	9.85	10.52	10.10
26	9.90	10.56	10.34	-	-	10.43	10.22	10.05	10.12	9.83	10.42	10.09
27	9.90	10.48	10.32	-	-	10.40	10.23	10.03	10.10	9.81	10.34	10.07
28	9.90	10.42	10.27	-	-	10.35	10.22	10.02	10.08	9.80	10.28	10.12
29	9.95	10.47	10.25	-	-------	10.33	10.23	10.02	10.05	9.77	10.23	10.12
30	10.00	10.46	10.39	-	-------	10.30	10.24	10.02	10.05	9.75	10.19	10.11
31	10.02	-------	10.43	-	-------	10.25	-------	10.04	-------	9.73	10.17	-------

Note.--Occasional staff-gage readings Jan. 15 to Mar. 15.

Wanaque River at Awosting

Location.--Lat 40°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 1955.

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.--36 years, 52.2 cfs (unadjusted).

Extremes.--1919-55: Maximum discharge, 1,190 cfs Mar. 31, 1951 (gage height, 5.44 ft, from rating curve extended above 300 cfs on basis of laboratory rating; maximum gage height, 5.58 ft, Aug. 19, 1955; no flow at times when gates at Greenwood Lake were closed and no water passed over spillway.

Peak discharge (base, 200 cfs).--
1950-51: Nov. 26 (1 p.m.) 506 cfs (3.97 ft); Dec. 9 (1 a.m.) 498 cfs (3.95 ft); Jan. 25 (1 to 7 p.m.) 214 cfs (3.15 ft); Feb. 8 (2:30 p.m.) 228 cfs (3.20 ft); Feb. 22 (6:30 p.m.) 203 cfs (3.11 ft); Mar. 31 (5 a.m.) 1,190 cfs (5.44 ft); July 29 (10 a.m. to 5 p.m.) 200 cfs (3.10 ft); Aug. 17 (9 p.m.) 220 cfs (3.17 ft).
1951-52: Nov. 8 (11 a.m.) 358 cfs (3.65 ft); Dec. 22 (8:30 to 11:30 a.m.) 351 cfs (3.63 ft); Mar. 12 (6 a.m.) 558 cfs (4.23 ft); Apr. 6 (8 a.m.) 470 cfs (3.99 ft); Apr. 29 (10:30 a.m.) 298 cfs (3.45 ft); June 2 (6 a.m.) 868 cfs (4.97 ft); Aug. 17 (5 to 7 and 11 to 12 p.m.) 219 cfs (3.16 ft); Sept. 2 (10 a.m.) 351 cfs (3.63 ft).
1952-53: Nov. 23 (5 to 10 a.m.) 474 cfs (4.00 ft); Dec. 12 (5 to 9 a.m.) 333 cfs (3.57 ft); Jan. 25 (1 to 6 p.m.) 389 cfs (3.75 ft); Mar. 16 (1 to 3 p.m.) 250 cfs (3.28 ft); Mar. 26 (4 a.m. to 7 p.m.) 258 cfs (3.31 ft); Apr. 8 (11 a.m. to 10 p.m.) 239 cfs (3.24 ft).
1953-54: Dec. 15 (1 p.m.) 212 cfs (3.16 ft); Mar. 4 (2:30 p.m.) 236 cfs (3.25 ft); May 10 (12 p.m.) 217 cfs (3.18 ft).
1954-55: Nov. 22 (1 to 9 p.m.) 242 cfs (3.27 ft); Aug. 13 (8 p.m.) 855 cfs (4.95 ft); Aug. 19 (4 p.m.) 1,160 cfs (5.58 ft).

Remarks.--Flow regulated by Greenwood Lake (see p.125 and records for Greenwood Lake at Awosting).

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

Revisions.--Special Report 9: Drainage area. Revised figures of discharge, in cubic feet per second, for the water year 1936, superseding those published in Special Report 9, are given herewith:

1935		1935-Con.	
Dec. 20	40	Dec. 24	35
21	30	25	35
22	20	26	35
23	35		

Month	Observed			
	Cfs-days	Maximum	Minimum	Mean
December 1935	1,843	174	20	59.5
Calendar year 1935	14,482.7	195	7.3	39.7
Water year 1935-36	20,886.3	841	7.5	57.1

Wanaque River at Awosting--Continued

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.7	2.9	139	42	108	85	824	46	90	34	103	13.5
2	2.9	2.9	110	39	118	80	556	43	77	32	76	14.0
3	2.9	2.9	94	37	112	77	473	36	64	29	56	14.5
4	3.3	3.1	139	52	101	87	406	29	64	24	48	13.0
5	3.3	4.2	264	79	90	84	321	26	85	30	36	10.2
6	3.3	4.0	243	84	80	80	252	23	79	26	29	9.1
7	3.1	3.7	206	92	118	82	200	19.8	66	19.1	23	11.0
8	3.1	3.7	374	95	217	84	160	17.2	52	15.5	26	9.0
9	3.1	3.7	473	84	206	79	132	15.3	44	11.5	23	6.3
10	3.1	6.8	375	74	174	76	110	14.5	38	10.6	29	5.2
11	3.1	8.3	297	67	146	64	99	17.7	34	9.5	44	4.7
12	3.1	8.3	240	61	122	60	91	26	27	8.1	42	4.7
13	3.1	7.6	187	55	114	56	160	27	26	11.5	63	4.7
14	3.1	7.6	148	53	122	74	167	22	40	9.5	59	4.5
15	3.1	7.3	126	79	118	92	148	21	47	7.6	60	18.8
16	3.1	7.6	141	101	106	94	132	19.8	46	6.3	103	20
17	3.1	9.5	118	99	103	92	122	18.4	41	6.3	206	19.1
18	3.1	14.1	103	92	120	84	104	17.9	36	5.8	195	15.0
19	3.1	13.0	84	90	120	74	90	13.5	32	5.5	152	12.5
20	3.1	13.3	71	88	124	116	79	13.0	27	6.7	118	10.6
21	3.1	37	61	87	137	124	64	13.0	24	4.5	94	9.1
22	3.1	26	53	79	187	130	56	13.0	22	4.3	79	7.6
23	3.1	24	49	71	184	112	76	22	26	15.9	61	8.0
24	3.1	22	46	146	169	106	71	39	27	14.5	47	5.5
25	3.1	113	42	211	137	101	67	36	25	12.5	38	5.2
26	*2.9	465	41	197	116	88	67	35	18.4	10.6	32	5.5
27	2.9	418	39	169	104	74	60	40	17.8	14.2	26	3.7
28	2.9	310	36	143	94	66	53	47	21	94	23	4.9
29	2.9	228	42	128	-------	68	55	69	24	195	20	4.2
30	2.9	174	47	108	-------	320	55	103	29	172	18.4	3.3
31	2.9	-------	45	95	-------	1,110	-------	103	-------	130	14.0	-------

* Discharge measurement made on this day.

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.1	46	60	86	114	32	72	209	347	14.2	3.1	114
2	3.1	56	56	91	109	32	76	166	765	9.2	3.1	338
3	3.3	108	48	107	105	31	67	138	577	7.2	3.3	315
4	4.2	142	46	105	142	32	58	116	399	6.5	3.1	250
5	4.2	138	66	105	187	49	231	107	309	6.8	3.1	189
6	4.4	122	91	100	178	49	456	91	229	5.3	4.2	144
7	6.1	212	95	90	159	*47	383	88	190	4.0	4.7	114
8	21	348	91	78	*136	44	292	61	140	4.0	5.3	84
9	22	303	86	66	120	43	232	51	109	24	5.3	66
10	21	239	78	64	103	43	187	48	91	153	12.6	54
11	32	197	67	61	96	229	157	51	76	180	17.7	46
12	42	157	60	51	93	540	128	98	54	142	19.3	39
13	39	130	56	48	79	467	112	103	42	109	34	34
14	34	122	50	53	66	367	140	91	35	83	31	29
15	30	128	71	61	50	275	175	76	32	60	24	26
16	28	126	60	71	46	209	190	72	26	47	46	25
17	26	124	51	69	63	162	173	57	26	35	195	22
18	24	111	62	81	71	128	153	63	43	29	197	19.5
19	21	96	86	83	57	118	130	57	39	23	153	46
20	17.6	88	84	84	*49	118	116	61	34	19.5	118	63
21	12.7	72	251	86	47	120	100	72	24	21	95	54
22	11.7	63	345	81	46	126	84	72	25	21	91	43
23	10.9	57	300	130	40	151	79	61	23	14.2	67	39
24	12.0	63	245	140	37	171	66	54	22	10.4	48	34
25	26	58	202	128	35	166	77	86	22	6.8	36	29
26	26	72	180	146	33	149	126	146	19.5	4.7	31	25
27	26	76	149	190	31	136	159	157	18.3	4.5	26	22
28	26	64	122	197	30	118	245	142	16.1	4.5	22	17.7
29	27	67	*102	185	30	103	289	128	14.8	4.0	19.5	15.6
30	24	66	91	157	-------	91	261	116	17.1	2.7	18.9	15.1
31	23	-------	88	132	-------	78	-------	103	-------	2.9	17.1	-------

* Discharge measurement made on this day.

Wanaque River at Awosting--Continued

Daily discharge, in cubic feet per second, 1950-55

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	9.6	79	39	128	51	112	88	22	8.2	7.8	7.5
2	14	9.6	69	37	109	44	107	93	21	7.8	7.8	7.5
3	20	9.6	76	54	95	39	95	88	17	8.5	8.2	7.5
4	12	8.9	61	57	84	66	84	81	14	7.8	8.2	7.5
5	10	8.9	84	51	72	86	81	90	13	7.8	8.2	7.8
6	10	8.5	185	46	61	83	67	91	13	7.8	8.2	8.2
7	11	8.2	190	44	61	79	138	90	17	7.8	7.8	8.2
8	7.5	7.5	171	46	61	69	234	102	18	8.2	7.8	7.8
9	5.9	7.5	149	64	56	60	226	116	16	7.8	7.8	7.5
10	6.7	7.2	130	74	53	56	206	116	17	7.8	7.8	7.5
11	4.5	6.8	233	84	41	44	190	109	14	7.8	7.8	7.5
12	3.7	6.8	318	91	44	43	164	96	10	7.8	7.8	7.5
13	3.5	6.8	277	81	42	123	166	90	12	7.8	7.8	7.5
14	3.5	6.8	229	*78	39	192	192	102	14	7.8	7.8	7.5
15	3.1	6.8	187	76	50	197	166	95	11	7.8	7.8	7.5
16	3.3	6.8	153	76	69	242	171	86	10	7.8	7.8	7.5
17	3.3	6.8	128	79	72	232	180	81	9.2	7.8	7.8	7.2
18	3.1	6.8	109	98	64	199	166	81	8.9	7.8	7.8	6.8
19	3.2	6.8	93	116	57	187	166	74	8.5	7.8	7.8	6.8
20	3.3	7.7	81	118	54	185	155	64	8.5	7.8	7.8	6.8
21	1.9	135	84	116	66	155	138	53	8.5	7.5	*7.8	6.8
22	1.6	342	96	114	81	136	116	43	8.2	7.5	7.5	6.8
23	1.5	464	88	105	78	116	105	49	8.5	8.2	7.5	6.8
24	1.5	389	78	202	71	153	96	40	8.2	8.2	7.5	6.8
25	1.5	295	72	379	67	229	84	34	8.2	8.2	7.5	6.8
26	1.3	226	67	348	61	255	84	34	8.5	8.2	7.5	6.8
27	1.3	180	64	277	56	242	102	36	8.9	8.2	7.5	6.8
28	1.4	144	40	239	54	209	95	35	8.5	7.8	7.5	6.8
29	1.3	112	46	206	-------	187	84	24	8.5	7.5	7.5	6.8
30	1.2	95	42	168	-------	164	69	22	8.5	7.5	7.5	6.8
31	5.7	-------	41	140	-------	134	-------	22	-------	7.8	7.5	-------

* Discharge measurement made on this day.

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.3	5.7	4.1	26	52	79	33	61	31	4.8	4.6	4.6
2	6.3	5.7	4.1	23	47	132	27	62	29	4.6	4.6	4.6
3	6.3	5.7	4.1	23	46	158	33	65	25	4.6	4.6	4.6
4	6.3	5.4	4.1	22	49	219	25	117	22	4.6	4.6	a4.6
5	6.3	5.4	4.1	21	47	201	22	128	19	4.8	4.6	a4.6
6	6.3	5.1	4.1	27	43	170	24	120	15	4.8	4.6	a4.6
7	6.3	4.8	4.3	26	40	141	30	106	13	4.8	4.6	4.6
8	6.0	4.8	4.1	22	37	118	32	117	11	4.8	4.6	4.6
9	6.0	4.8	4.1	12	38	97	30	124	8.3	4.8	4.6	4.6
10	6.0	4.8	6.2	19	35	89	24	165	7.6	4.8	4.6	4.6
11	6.0	4.8	14	22	32	76	25	201	8.3	4.8	4.6	4.8
12	6.0	4.8	28	25	31	66	32	*182	7.6	4.8	4.6	4.6
13	5.7	4.8	73	22	28	60	26	154	12	4.6	4.6	4.6
14	5.7	4.6	132	20	25	72	25	128	11	4.3	4.6	4.6
15	5.7	4.6	199	21	23	76	25	107	*9.9	4.8	4.6	4.6
16	5.7	4.6	189	23	*25	70	30	92	9.1	4.6	4.6	4.6
17	5.7	4.6	149	23	48	60	64	79	7.2	4.6	4.6	4.6
18	5.7	4.3	115	21	69	54	94	70	6.6	4.6	4.6	4.6
19	5.7	4.3	95	19	69	46	99	61	5.7	4.6	4.6	5.1
20	5.7	4.3	81	19	65	70	92	55	5.1	4.6	4.8	9.1
21	5.7	4.3	70	26	65	84	86	76	4.8	4.6	4.8	13
22	5.7	4.3	62	35	69	81	78	87	4.8	*4.3	4.8	19
23	5.7	4.6	57	39	65	70	78	82	5.1	4.3	4.8	22
24	5.7	4.6	48	38	61	66	79	76	5.4	4.3	5.1	20
25	5.7	4.6	41	38	61	61	70	66	4.8	4.3	5.4	18
26	5.7	4.6	37	37	62	61	63	57	4.8	4.3	5.4	20
27	5.7	4.3	35	45	73	55	66	49	5.1	4.6	4.8	27
28	6.0	4.3	31	65	70	45	75	43	4.8	4.6	4.8	22
29	6.0	4.3	32	63	-------	42	72	42	4.8	4.6	4.8	21
30	5.7	4.3	31	61	-------	42	65	42	4.8	4.6	4.8	19
31	5.7	-------	29	58	-------	34	-------	37	-------	4.6	4.8	-------

* Discharge measurement made on this day.
a No gage-height record Sept. 4-6; discharge estimated.

Wanaque River at Awosting--Continued

Daily discharge, in cubic feet per second, 1950-55

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19	5.1	106	111	13	82	65	45	12	8.7	4.3	31
2	18	6.7	95	111	14	99	54	42	9.9	8.3	4.3	28
3	16	51	79	109	a13	95	51	40	8.9	a8	4.3	22
4	15	82	68	95	a12	115	50	37	7.7	a7	4.1	19
5	13	89	63	82	a11	122	41	36	11	a6	4.1	17
6	14	84	57	79	a15	126	39	34	9.1	9.4	4.1	17
7	9.9	76	46	87	a45	134	41	27	8.0	27	4.1	17
8	6.3	*68	39	38	43	120	38	27	8.0	22	4.3	13
9	5.7	62	40	58	40	109	28	26	8.1	17	4.1	11
10	5.7	52	44	55	36	100	27	18	5.4	16	4.1	8.7
11	5.7	47	41	51	45	94	25	*18	5.7	18	4.3	7.6
12	5.4	46	38	45	65	87	25	16	11	12	11	7.6
13	5.4	38	36	42	58	81	28	14	14	7.2	500	6.3
14	5.4	33	53	39	54	70	28	15	13	5.7	742	4.8
15	6.0	32	84	33	50	65	29	12	12	5.1	515	4.8
16	8.3	28	95	31	47	70	31	11	9.5	5.1	347	4.8
17	6.9	31	89	29	57	72	26	12	7.6	5.1	242	4.3
18	6.3	32	a100	a28	62	63	25	8.6	6.6	4.8	*221	4.3
19	7.6	33	a170	a25	62	60	25	7.2	6.6	4.8	948	4.3
20	7.6	59	165	a23	62	54	25	6.6	28	4.8	908	4.6
21	5.4	152	145	a22	62	57	25	6.3	26	4.8	576	4.8
22	5.7	239	115	20	62	87	31	5.7	22	4.8	417	4.3
23	5.4	225	97	20	73	132	32	5.4	19	4.8	292	4.3
24	5.4	199	89	19	84	136	31	6.3	21	4.8	196	9.1
25	5.1	184	79	19	82	124	37	7.3	24	4.8	136	21
26	5.1	156	73	18	76	122	42	11	21	4.8	100	18
27	5.1	126	66	18	72	115	42	8.4	17	4.6	75	13
28	5.1	107	57	17	69	99	42	6.6	14	4.6	57	23
29	5.1	126	60	16	-------	86	46	7.2	12	4.6	44	24
30	5.1	122	102	15	-------	76	46	7.2	9.5	4.6	34	21
31	5.1	-------	117	14	-------	66	-------	a10	-------	4.6	31	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of record for station at Monks.
Note.--Fragmentary or no gage-height record Dec. 18, 19, Jan. 18-21, Feb. 3-7, May 31, July 3-5, Aug. 19 to Sept. 23; discharge estimated on basis of recorded range in stage, reconstructed graph from fragmentary gage-height record on 8 days, and records for Greenwood Lake at Awosting and station at Monks.

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	94.7	3.3	2.7	3.05		
November	1,951.5	465	2.9	65.0		
December	4,433	473	36	143		
Calendar year 1950	20,278.2	473	2.7	55.6		
January 1951	2,897	211	37	93.5		
February	3,647	217	80	130		
March	3,919	1,110	56	126		
April	5,250	824	53	175		
May	986.1	103	13.0	31.8		
June	1,249.2	90	17.8	41.6		
July	976.0	195	4.3	31.5		
August	1,943.4	206	14.0	62.7		
September	277.4	20	3.3	9.25		
Water year 1950-51	27,624.3	1,110	2.7	75.7		
October 1951	611.3	42	3.1	19.7		
November	3,651	348	46	122		
December	3,439	345	46	111		
Calendar year 1951	28,846.4	1,110	3.1	79.0		
January 1952	3,126	197	48	101		
February	2,352	187	30	81.1		
March	4,424	540	31	143		
April	5,014	456	58	167		
May	2,941	209	48	94.9		
June	3,764.8	765	14.8	125		
July	1,058.4	180	2.7	34.1		
August	1,354.3	197	3.1	43.7		
September	2,311.9	338	15.1	77.1		
Water year 1951-52	34,047.7	765	2.7	93.0		

Wanaque River at Awosting--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1952	164.8	20	1.2	5.32		
November	2,536.4	464	6.8	84.5		
December	3,720	318	40	120		
Calendar year 1952	32,767.6	765	1.2	89.5		
January 1953	3,703	379	37	119		
February	1,846	128	39	65.9		
March	4,257	255	39	137		
April	4,029	234	67	135		
May	2,225	116	22	71.8		
June	358.6	22	8.2	12.0		
July	244.1	8.5	7.5	7.87		
August	240.4	8.2	7.5	7.75		
September	217.6	8.2	6.8	7.25		
Water year 1952-53	23,551.9	464	1.2	64.5		
October 1953	183.0	6.3	5.7	5.90		
November	142.1	5.7	4.3	4.74		
December	1,591.3	199	4.1	51.3		
Calendar year 1953	19,047.1	379	4.1	52.2		
January 1954	941	65	12	30.4		
February	1,375	73	23	49.1		
March	2,695	219	34	86.9		
April	1,524	99	22	50.8		
May	2,851	201	37	92.0		
June	312.6	31	4.8	10.4		
July	142.8	4.8	4.3	4.61		
August	146.5	5.4	4.6	4.73		
September	298.2	27	4.6	9.94		
Water year 1953-54	12,202.5	219	4.1	33.4		
October 1954	244.8	19	5.1	7.90		
November	2,590.8	239	5.1	86.4		
December	2,508	170	36	80.9		
Calendar year 1954	15,629.7	239	4.3	42.8		
January 1955	1,369	111	14	44.2		
February	1,384	84	11	49.4		
March	2,918	136	54	94.1		
April	1,075	65	25	35.8		
May	533.8	45	5.4	17.2		
June	387.6	28	5.4	12.9		
July	253.8	27	4.6	8.19		
August	6,438.1	948	4.1	208		
September	379.6	31	4.3	12.7		
Water year 1954-55	20,082.5	948	4.1	55.0		

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 1955.

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.--20 years, 82.6 cfs (unadjusted).

Extremes.--1935-55: Maximum discharge, 3,640 cfs Aug. 19, 1955 (gage height, 4.15 ft, from high-water mark in gage house), from rating curve extended above 1,000 cfs by logarithmic plotting; no flow for part of day in some years just after waste gate was closed and water was below intake to ports.

Peak discharge (base, 400 cfs).--
1950-51: Nov. 26 (8 a.m.) 684 cfs (1.82 ft); Dec. 4 (10:30 p.m.) 558 cfs (1.64 ft); Dec. 8 (11 a.m.) 826 cfs (2.02 ft); Jan. 24 (11:30 a.m.) 517 cfs (1.58 ft); Feb. 7 (6:30 p.m.) 663 cfs (1.79 ft); Mar. 31 (1 a.m.) 2,660 cfs (3.85 ft), from floodmark); Apr. 13 (1:30 a.m.) 434 cfs (1.45 ft); July 28 (6:30 p.m.) 415 cfs (1.42 ft); Aug. 10 (4:30 p.m.) 478 cfs (1.52 ft); Aug. 17 (2:30 p.m.) 586 cfs (1.68 ft).
1951-52: Nov. 7 (6 p.m.) 607 cfs (1.71 ft); Dec. 21 (6 a.m.) 954 cfs (2.18 ft); Mar. 11 (3:30 p.m.) 2,300 cfs (3.56 ft); Apr. 5 (3:30 p.m.) 1,300 cfs (2.58 ft); Apr. 28 (8 p.m.) 498 cfs (1.55 ft); June 1 (6 p.m.) 1,440 cfs (2.73 ft); July 10 (6:30 a.m.) 428 cfs (1.44 ft); Aug. 17 (12:30 a.m.) 789 cfs (1.97 ft); Sept. 1 (3:30 p.m.) 962 cfs (2.19 ft).
1952-53: Nov. 22 (1 p.m.) 908 cfs (2.12 ft); Dec. 5 (7 p.m.) 470 cfs (1.55 ft); Dec. 11 (4 p.m.) 688 cfs (1.86 ft); Jan. 24 (4 p.m.) 1,010 cfs (2.23 ft); Mar. 13 (1 p.m.) 488 cfs (1.58 ft); Mar. 16 (2 a.m.) 452 cfs (1.52 ft); Mar. 24 (1 p.m.) 556 cfs (1.68 ft); Apr. 7 (2 p.m.) 440 cfs (1.50 ft).
1953-54: Dec. 14 (12 m.) 500 cfs (1.60 ft); Mar. 3 (7:30 p.m.) 464 cfs (1.54 ft).
1954-55: Nov. 21 (5 p.m.) 688 cfs (1.86 ft); Aug. 13 (11 a.m.) 1,720 cfs (2.90 ft); Aug. 19 (time unknown) 3,640 cfs (4.15 ft).

Remarks.--Records given herein include flow over spillway, through ports in dam, and down fish ladder. Flow regulated by Greenwood Lake (see p.120).

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

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.4	5.2	174	b60	160	115	*970	64	122	46	129	22
2	4.4	5.2	143	57	194	112	677	57	100	44	93	22
3	4.4	5.2	126	57	158	103	677	50	84	38	71	25
4	4.4	7.4	320	118	143	118	544	44	108	31	64	22
5	4.4	33	446	143	126	122	434	38	144	46	48	17.4
6	4.4	13.0	355	132	112	122	343	35	109	37	37	15.6
7	4.4	10.2	292	132	276	122	276	31	89	27	31	16.5
8	4.8	8.4	696	132	367	122	222	28	71	23	37	15.6
9	4.8	7.9	628	115	297	112	182	25	61	17.4	32	11.5
10	6.1	8.4	484	103	245	103	150	25	55	13.8	125	10.2
11	5.6	11.5	409	95	204	92	136	28	50	13.8	118	8.4
12	5.6	11.5	320	89	178	86	130	46	40	11.5	101	8.4
13	6.0	10.8	250	81	182	81	307	40	37	16.5	151	8.4
14	5.6	10.2	199	76	199	139	245	34	73	13.0	103	7.9
15	5.2	10.2	174	167	174	146	204	31	78	10.8	115	30
16	5.2	10.2	208	166	146	136	182	28	68	9.6	187	31
17	4.8	10.8	166	143	154	129	170	27	57	8.4	434	27
18	4.8	13.0	140	136	199	115	143	25	50	10.2	297	22
19	4.8	15.6	b110	136	174	103	126	22	42	9.6	217	17.4
20	4.8	15.0	b95	136	190	238	109	20	37	10.8	166	14.7
21	5.2	49	b80	129	232	194	89	20	32	7.9	136	13.0
22	5.6	35	b70	109	320	194	81	20	29	7.4	112	10.8
23	8.4	32	74	98	276	166	125	25	36	31	89	10.8
24	6.9	a29	68	355	235	154	103	75	38	22	68	9.6
25	6.0	a158	64	337	199	140	95	53	32	17.4	57	7.4
26	5.6	649	b60	281	166	122	92	46	27	14.7	48	7.9
27	5.6	504	b55	235	146	103	84	60	23	38	38	6.4
28	5.6	385	b65	199	132	95	74	71	27	238	34	7.9
29	5.6	281	b85	178	-------	104	74	122	37	276	31	7.4
30	5.2	217	b100	150	-------	a1,090	76	182	42	217	28	6.9
31	5.2	-------	68	126	-------	a2,000	-------	150	-------	162	24	-------

* Discharge measurement made on this day.
a Fragmentary or no gage-height record; discharge estimated on basis of available recorder graph, floodmark (Mar. 31), shape of typical graph, and records for station at Awosting.
b Stage-discharge relation affected by ice.

Wanaque River at Monks--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.0	84	74	115	146	48	100	292	775	20	5.6	379
2	5.6	89	68	122	150	50	98	230	1,000	14.7	5.6	478
3	5.6	203	64	150	140	46	95	182	733	11.5	5.6	409
4	5.6	217	57	136	246	46	84	146	517	10.2	5.2	297
5	6.4	190	105	136	276	74	f700	129	397	9.6	5.2	222
6	6.0	162	132	126	235	71	f770	109	297	9.0	13.1	166
7	15.0	a420	122	109	208	66	565	103	240	7.4	9.6	132
8	52	a530	115	b95	178	61	415	81	182	6.9	7.4	98
9	32	a400	106	86	154	61	320	68	126	51	8.4	78
10	28	309	98	84	132	64	255	61	109	265	22	66
11	44	240	84	81	129	f880	208	64	95	204	27	57
12	61	190	76	68	118	874	170	175	68	154	28	50
13	52	158	71	64	98	656	146	136	53	115	50	46
14	44	136	64	81	81	510	243	115	46	89	40	38
15	38	150	95	92	68	385	276	103	38	66	31	35
16	35	150	b75	98	61	286	276	95	34	55	162	35
17	32	154	b65	92	80	217	235	81	34	44	441	31
18	31	150	b80	118	92	174	208	92	61	35	255	34
19	28	136	b130	106	76	158	178	81	50	29	186	102
20	25	118	b120	112	66	178	158	98	44	25	140	86
21	17.4	95	717	109	66	a180	129	103	34	24	112	71
22	16.5	81	544	112	64	a190	109	92	32	27	112	57
23	14.7	76	422	255	57	235	100	76	32	19.4	81	52
24	16.8	81	326	199	53	255	89	66	31	14.7	61	46
25	50	76	260	*170	52	235	115	148	28	10.8	48	40
26	40	107	235	268	48	208	208	162	27	9.0	40	35
27	35	100	186	292	48	186	245	182	24	7.4	34	32
28	38	81	146	292	46	162	459	190	22	9.0	29	27
29	40	81	126	250	46	143	453	166	21	7.4	27	23
30	35	78	115	199	-------	122	373	150	27	*6.4	24	22
31	32	-------	112	170	-------	106	-------	136	-------	5.6	24	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Wanaque River at Awosting and Ringwood Creek near Wanaque.
b Stage-discharge relation affected by ice.
f Fragmentary gage-height record; discharge computed from partly estimated gage-height graph based on recorder graph, staff-gage reading (Mar. 11), and records for Wanaque River at Awosting and Ringwood Creek near Wanaque.
Note.--Doubtful gage-height record Nov. 10-20, June 1-17; discharge computed from reconstructed gage-height graph based on occasional staff-gage readings, shape of recorder graph, and records for the 2 stations indicated above.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	13	102	61	171	72	152	136	34	9.3	9.3	8.1
2	20	13	88	57	139	65	142	126	31	10	9.3	7.5
3	34	12	90	99	126	61	126	119	28	11	8.1	7.5
4	23	11	80	90	113	148	113	110	22	10	8.1	7.5
5	20	11	204	75	96	126	116	126	20	9.3	8.1	8.7
6	18	11	315	70	85	113	96	126	18	11	8.1	10
7	17	11	266	65	88	104	298	122	22	12	8.1	9.3
8	14	10	226	65	90	96	358	136	27	10	8.1	8.7
9	11	10	194	85	80	88	305	167	22	11	13	7.9
10	11	10	171	124	75	80	295	152	23	10	12	7.4
11	9.3	9.3	441	145	63	70	266	139	20	10	9.3	7.4
12	8.1	9.3	470	145	63	68	226	122	16	10	9.3	7.4
13	7.5	9.3	380	122	65	301	234	116	18	10	9.3	8.4
14	7.0	9.3	295	113	61	295	275	145	22	9.3	9.3	9.6
15	7.5	9.3	244	113	86	296	230	126	17	9.3	9.3	9.6
16	7.0	17	202	116	110	398	252	119	14	9.3	9.3	*9.0
17	6.5	13	171	122	102	315	248	113	12	8.7	9.3	7.9
18	6.5	11	142	166	88	266	222	113	11	8.7	9.3	7.9
19	6.5	11	122	179	80	270	239	102	11	8.7	9.3	7.9
20	6.0	27	107	171	78	248	214	88	11	8.7	8.1	7.9
21	6.5	337	120	163	111	210	186	*78	11	8.7	*8.1	7.9
22	5.5	650	145	160	116	182	156	65	13	8.7	8.1	7.9
23	5.5	619	122	145	104	160	139	70	12	28	8.1	7.4
24	5.1	476	110	496	96	329	126	61	11	17	8.1	7.4
25	5.1	358	104	598	93	364	113	52	10	11	8.1	7.4
26	5.1	275	96	470	85	374	113	48	11	11	8.7	7.4
27	5.1	222	88	364	80	325	142	57	14	10	8.7	7.4
28	5.5	179	b65	325	75	275	122	50	10	10	8.7	7.4
29	6.5	142	b70	266	-------	244	107	39	10	10	8.7	7.4
30	6.0	119	b70	218	-------	214	96	34	10	10	8.7	7.4
31	6.0	-------	63	186	-------	179	-------	36	-------	10	8.1	-------

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

Wanaque River at Monks--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.9	7.9	9.6	b40	b70	136	57	99	46	6.5	5.1	12
2	6.9	7.4	9.6	36	68	244	48	104	41	6.5	5.1	7.5
3	6.9	6.9	9.6	33	68	288	52	114	37	6.5	7.2	6.5
4	7.4	6.9	9.0	34	75	347	43	248	34	8.0	6.0	6.5
5	7.4	6.9	16	30	70	280	41	214	31	7.5	6.0	6.0
6	7.4	6.9	17	34	63	234	41	190	24	7.0	5.5	6.0
7	7.9	9.9	120	34	57	198	50	163	21	7.0	5.5	5.5
8	7.4	9.0	54	31	52	171	*50	214	17	7.0	5.5	6.0
9	7.4	8.4	34	22	52	145	46	210	14	6.5	7.4	6.0
10	7.4	7.9	*88	33	50	132	39	323	12	6.5	6.9	5.5
11	7.4	8.4	68	37	48	113	37	305	11	6.5	6.0	22
12	7.4	8.4	66	b45	43	99	48	262	11	6.5	5.5	13
13	7.4	7.9	132	b35	b40	90	41	218	17	6.0	5.5	8.7
14	7.4	7.9	313	b30	39	126	39	186	18	5.5	5.5	7.5
15	7.4	7.9	295	33	36	119	39	156	15	6.5	6.0	8.1
16	7.4	7.4	244	34	41	104	46	132	15	6.0	5.5	19
17	7.4	6.9	202	33	103	90	139	116	13	6.0	5.5	16
18	7.4	6.9	160	b30	116	85	175	104	11	5.5	*5.1	11
19	7.4	6.9	129	30	102	72	152	90	10	5.5	6.0	27
20	7.4	6.9	110	28	96	146	136	80	8.7	5.5	7.0	31
21	7.4	6.4	99	43	96	136	126	139	8.1	5.5	6.0	28
22	6.9	6.9	90	54	107	122	110	136	7.5	5.5	6.0	36
23	6.9	12	80	b50	99	110	129	119	7.5	5.5	5.5	34
24	7.4	12	68	52	90	104	132	107	7.5	5.1	5.5	30
25	7.9	13	b60	52	93	102	113	93	7.5	5.4	6.0	26
26	7.9	16	52	54	96	102	102	80	7.0	6.5	6.0	27
27	7.4	13	50	80	119	90	116	70	7.0	5.5	5.5	37
28	12	12	44	116	107	75	136	63	7.0	5.5	5.5	31
29	12	10	48	b95	-------	70	119	59	6.5	5.5	5.5	30
30	11	9.6	46	85	-------	70	104	59	6.5	5.5	5.5	27
31	8.4	-------	43	80	-------	61	-------	52	-------	5.5	25	-------

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Gate leaking Oct. 1 to Dec. 6; discharge includes 0.9 cfs leakage on basis of 1 discharge measurement and engineers+ notes.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	11	156	160	20	142	90	72	21	11	5.5	50
2	24	22	139	163	20	160	82	65	18	11	5.5	44
3	23	119	119	156	b19	139	78	63	15	10	5.5	37
4	20	129	104	132	b19	198	78	59	11	8.7	5.5	33
5	19	122	96	119	b18	190	68	57	22	7.5	5.1	28
6	18	110	85	113	23	198	61	54	16	10	5.1	28
7	16	99	b70	113	88	202	65	44	15	59	5.5	28
8	9.3	85	b60	80	63	171	61	43	13	31	6.5	22
9	8.7	78	63	b90	52	156	50	41	13	24	5.5	18
10	8.7	70	75	80	a50	145	44	34	*8.7	21	5.5	14
11	8.1	63	65	b75	68	132	43	31	8.1	24	6.7	13
12	8.1	61	61	b70	90	122	44	*30	18	16	22	14
13	7.5	52	57	59	b80	113	52	27	28	10	a1,000	11
14	7.5	46	108	b55	b70	102	50	26	21	8.7	1,090	10
15	7.5	44	167	b50	68	88	50	24	19	7.5	712	10
16	11	39	152	b48	63	104	50	21	15	7.0	412	10
17	11	37	136	b43	90	104	44	22	11	7.0	278	10
18	9.3	41	270	b43	102	90	41	19	9.3	6.5	330	10
19	9.3	43	270	b37	96	90	39	15	8.1	6.5	a2,900	12
20	10	87	234	34	96	82	43	15	47	6.5	a1,500	11
21	8.7	433	198	b33	93	88	39	13	37	6.5	a930	11
22	7.5	422	b160	31	93	182	52	11	31	6.0	699	8.7
23	7.5	325	b140	b30	122	218	52	11	27	6.0	416	8.7
24	7.5	275	122	30	129	194	50	12	26	6.5	290	33
25	7.0	262	107	28	119	175	59	12	33	6.5	198	46
26	7.0	214	96	28	110	175	68	19	27	6.5	152	33
27	7.0	179	90	26	104	149	68	17	26	6.0	119	26
28	7.0	152	80	b25	102	139	65	11	19	6.0	90	41
29	14	210	*85	23	-------	122	75	11	15	6.0	70	41
30	17	182	210	b22	-------	110	75	12	13	6.0	59	34
31	13	-------	182	b21	-------	99	-------	15	-------	6.0	52	-------

* Discharge measurement made on this day.
a No gage-height record; discharge computed from reconstructed graph based on high-water marks, occasional staff-gage readings, and records for station at Awosting.
b Stage-discharge relation affected by ice.

Wanaque River at Monks--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	164.8	8.4	4.4	5.32		
November	2,561.7	649	5.2	85.4		
December	6,524	696	55	210		
Calendar year 1950	29,677.2	696	4.1	81.3		
January 1951	4,471	355	57	144		
February	5,584	367	112	199		
March	6,778	2,000	81	219		
April	7,120	970	74	237		
May	1,522	182	20	49.1		
June	1,798	144	23	59.9		
July	1,468.8	276	7.4	47.4		
August	3,221	434	24	104		
September	441.1	31	6.4	14.7		
Water year 1950-51	41,654.4	2,000	4.4	114		
October 1951	887.6	61	5.6	28.6		
November	5,042	530	76	168		
December	4,990	717	57	161		
Calendar year 1951	43,323.5	2,000	5.6	119		
January 1952	4,387	292	64	142		
February	3,214	276	46	111		
March	6,927	880	46	223		
April	7,780	770	84	259		
May	3,912	292	61	126		
June	5,187	1,000	21	173		
July	1,362.0	265	5.6	43.9		
August	2,039.7	441	5.2	65.8		
September	3,244	478	22	108		
Water year 1951-52	48,972.3	1,000	5.2	134		
October 1952	322.8	34	5.1	10.4		
November	3,614.5	650	9.3	120		
December	5,363	470	63	173		
Calendar year 1952	47,353.0	1,000	5.1	129		
January 1953	5,574	598	57	180		
February	2,619	171	61	93.5		
March	6,336	398	61	204		
April	5,707	358	96	190		
May	3,093	167	34	100		
June	511	34	10	17.0		
July	330.7	28	8.7	10.7		
August	276.1	13	8.1	8.91		
September	240.6	10	7.4	8.02		
Water year 1952-53	33,987.7	650	5.1	93.1		
October 1953	242.2	12	6.9	7.81		
November	264.5	16	6.4	8.82		
December	2,765.8	313	9.0	89.2		
Calendar year 1953	27,959.9	598	6.4	76.6		
January 1954	1,423	116	22	45.9		
February	2,096	119	36	74.9		
March	4,261	347	61	137		
April	2,506	175	37	83.5		
May	4,505	323	52	145		
June	478.8	46	6.5	16.0		
July	189.5	8.0	5.1	6.11		
August	199.8	25	5.1	6.45		
September	536.8	37	5.5	17.9		
Water year 1953-54	19,468.4	347	5.1	53.3		
October 1954	365.2	26	7.0	11.8		
November	4,012	433	11	134		
December	3,957	270	57	128		
Calendar year 1954	24,530.1	433	5.1	67.2		
January 1955	2,017	163	21	65.1		
February	2,067	129	18	73.8		
March	4,379	218	82	141		
April	1,736	90	39	57.9		
May	906	72	11	29.2		
June	591.2	47	8.1	19.7		
July	360.9	59	6.0	11.6		
August	11,280.9	2,900	5.1	367		
September	695.4	50	8.7	23.2		
Water year 1954-55	32,467.6	2,900	5.1	89.0		

Ringwood Creek near Wanaque

Location.--Lat 41°07'36", long 74°15'52", on right bank 500 ft upstream from Wanaque Reservoir, 0.7 mile downstream from Ringwood Mill Pond Dam, and 6½ miles north of Wanaque, Passaic County.

Drainage area.--19.1 sq mi.

Records available.--December 1934 to September 1955.

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.--20 years (1935-55), 33.1 cfs.

Extremes.--1934-55: Maximum discharge, 1,150 cfs Mar. 30, 1951 (gage height, 3.74 ft, from floodmark), from rating curve extended above 240 cfs on basis of laboratory rating and approximate discharge at gage height 3.18 ft; no flow for part of day in most years just after waste gate was closed and water was below intake to ports.

Peak discharge (base, 225 cfs).--
1950-51: Nov. 25 (9:30 p.m.) 430 cfs (2.30 ft); Dec. 8 (11:30 a.m.) 562 cfs (2.65 ft); Feb. 7 (6 p.m.) 326 cfs (1.99 ft); Mar. 30 (9 p.m.) 1,150 cfs (3.74 ft, from floodmark); Apr. 3 (12 m.) 361 cfs (2.10 ft); Apr. 13 (1 a.m.) 248 cfs (1.73 ft); Aug. 10 (6 p.m.) 598 cfs (2.74 ft); Aug. 17 (1 a.m.) 286 cfs (1.86 ft).
1951-52: Nov. 7 (12:30 p.m.) 392 cfs (2.19 ft); Dec. 21 (1 p.m.) 566 cfs (2.66 ft); Mar. 11 (6 p.m.) 969 cfs (3.54 ft); Apr. 5 (5 p.m.) 640 cfs (2.84 ft); June 1 (4:30 p.m.) 701 cfs (2.98 ft); Aug. 17 (5 a.m.) 317 cfs (1.96 ft); Sept. 1 (6 p.m.) 470 cfs (2.41 ft).
1952-53: Nov. 22 (1 p.m.) 450 cfs (2.33 ft); Dec. 11 (4 p.m.) 325 cfs (1.95 ft); Jan. 24 (6 p.m.) 590 cfs (2.73 ft); Mar. 13 (1 p.m.) 398 cfs (2.18 ft); Mar. 16 (2 a.m.) 234 cfs (1.63 ft); Mar. 24 (2 p.m.) 402 cfs (2.19 ft); Apr. 7 (3 p.m.) 255 cfs (1.70 ft).
1953-54: May 10 (8 a.m.) 192 cfs (1.47 ft), (maximum below base).
1954-55: Nov. 21 (5 p.m.) 246 cfs (1.67 ft); Aug. 13 (11 a.m.) 740 cfs (3.15 ft); Aug. 19 (8:30 a.m.) 924 cfs (3.61 ft); Aug. 21 (10 p.m.) 322 cfs (1.94 ft).

Remarks.--Records given herein include flow over spillway and through port or waste gate in dam. Flow slightly regulated by Ringwood Mill Pond, Sterling and Sterling Forest Lakes, and several smaller lakes above station.

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

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.0	2.1	37	27	66	55	g304	26	39	15.4	14.7	13.5
2	2.0	2.1	34	24	85	53	g184	23	33	14.7	11.6	13.5
3	2.0	2.1	34	26	b60	50	290	21	29	11.0	10.0	14.6
4	2.1	2.8	85	56	57	55	190	19.3	50	10.4	12.2	13.5
5	2.0	12.6	154	61	50	60	140	17.7	81	18.5	9.0	12.0
6	1.9	8.6	100	52	43	60	118	16.9	43	11.6	7.4	11.6
7	1.8	5.6	87	52	132	57	104	16.1	33	8.6	7.0	*13.0
8	1.8	4.4	426	47	129	53	94	14.7	27	7.0	10.5	10.8
9	1.8	4.0	225	b36	b99	47	84	13.4	25	6.6	9.0	8.6
10	2.9	3.5	136	b35	b70	42	75	12.8	22	5.9	149	7.4
11	3.4	3.2	122	35	b65	38	68	16.4	20	5.6	118	7.2
12	3.2	3.0	102	34	70	37	72	26	16.9	5.6	64	7.2
13	3.5	2.7	87	32	77	35	154	18.5	16.9	9.2	82	6.3
14	3.0	2.7	77	29	84	66	94	14.7	34	6.2	47	5.6
15	2.5	2.7	72	80	65	61	80	12.8	36	5.0	48	16.5
16	2.0	2.7	89	68	58	52	75	11.6	25	4.7	89	13.4
17	1.4	2.8	73	53	66	47	72	11.0	19.3	7.3	226	9.5
18	1.8	2.7	63	52	91	42	61	10.0	16.9	12.2	116	7.8
19	1.7	2.5	53	55	75	37	55	9.5	14.7	9.8	84	6.6
20	2.0	3.2	47	57	82	102	49	9.5	12.8	9.6	66	5.9
21	1.9	11.4	40	53	102	75	42	9.5	11.6	6.0	57	5.6
22	1.9	8.8	36	42	136	70	39	9.5	11.0	5.1	49	5.0
23	2.7	6.2	35	37	104	63	64	10.5	19.0	21	38	5.0
24	4.2	*5.3	33	148	84	60	49	34	17.7	10.5	33	4.4
25	3.2	129	30	112	76	53	42	21	12.2	7.2	29	4.2
26	2.7	201	25	89	75	47	39	12.8	10.0	5.3	25	4.7
27	2.4	85	b22	74	*68	42	35	16.6	9.5	8.1	22	4.4
28	2.2	65	b20	66	61	39	33	25	10.5	62	20	5.6
29	2.1	53	34	63	-------	43	33	58	16.7	59	18.4	4.4
30	2.2	45	40	55	-------	g420	30	77	18.0	28	15.8	3.7
31	2.2	-------	33	40	-------	g641	-------	52	-------	17.7	14.6	-------

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
g Intake to recorder well partly plugged; discharge computed from reconstructed gage-height graph based on peak stage determined from floodmark, daily staff-gage readings, and adjacent portions of recorder graph.
Note.--Waste gate was leaking Aug. 22 to Sept. 13; discharge based on 1 discharge measurement.

Ringwood Creek near Wanaque--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.5	29	28	56	62	25	48	96	437	9.2	3.7	192
2	3.7	28	27	57	66	23	47	84	398	7.9	3.7	172
3	4.2	67	25	66	62	23	45	75	192	7.5	3.7	98
4	4.0	60	25	57	115	22	40	66	131	7.1	3.5	70
5	3.7	42	70	54	106	36	420	60	122	7.1	3.1	54
6	3.2	33	73	51	85	31	378	54	100	6.4	20	45
7	8.0	208	57	43	75	28	182	48	82	5.4	12.2	38
8	35	158	52	38	66	27	129	43	70	5.2	7.9	29
9	14.0	102	50	38	62	26	110	38	63	31	7.1	25
10	9.0	85	45	38	56	27	94	35	57	97	15.3	22
11	12.1	73	42	35	56	461	84	37	48	37	12.3	20
12	16.9	63	39	30	51	467	72	109	*43	20	10.6	17.5
13	11.6	57	36	29	40	226	68	65	38	14.6	23	22
14	9.0	65	30	42	36	151	119	52	30	12.6	11.0	19.8
15	8.2	75	42	45	31	116	122	48	26	10.2	7.1	14.6
16	7.0	72	33	43	29	100	106	48	23	9.7	56	15.3
17	6.2	72	29	39	39	87	91	40	24	8.3	208	13.2
18	6.2	60	40	52	43	78	82	47	44	7.9	68	13.5
19	6.2	54	62	44	35	75	73	42	25	7.5	39	51
20	5.6	47	47	48	31	84	65	50	23	6.7	27	39
21	4.7	*43	388	44	33	91	57	54	19.1	9.6	22	20
22	4.7	39	224	46	30	89	51	42	19.1	10.2	31	16.0
23	4.7	38	125	114	28	91	48	36	19.1	7.1	20	15.3
24	5.7	40	98	77	27	98	44	31	17.5	*6.0	14.6	14.6
25	19.3	38	85	62	26	98	62	94	16.0	4.9	11.4	12.6
26	12.8	51	84	117	25	91	100	110	13.0	4.6	9.7	12.0
27	9.5	43	72	118	25	80	106	82	11.4	5.3	9.2	10.8
28	11.0	35	58	108	24	72	193	66	10.8	5.9	9.0	9.2
29	10.5	31	57	89	25	63	154	63	10.8	4.4	8.8	8.8
30	9.0	29	54	70	-------	57	116	60	11.4	3.9	8.8	8.8
31	7.8	-------	56	63	-------	51	-------	57	-------	3.7	8.8	-------

* Discharge measurement made on this day.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.4	4.4	44	26	78	30	73	74	18	4.7	2.5	1.1
2	9.9	4.4	39	25	62	27	66	59	16	4.4	2.2	1.0
3	14	4.1	38	51	59	27	61	53	14	4.7	1.9	.8
4	10	4.1	36	42	54	76	54	48	13	4.4	1.9	.8
5	8.9	3.8	83	32	47	59	58	59	12	4.4	2.1	1.3
6	8.4	3.6	148	28	44	45	48	56	11	4.7	2.1	1.1
7	7.6	3.6	96	26	47	42	156	61	13	5.0	1.9	1.4
8	7.2	3.6	77	27	45	40	158	64	14	5.0	1.7	1.7
9	6.8	3.4	68	33	39	35	111	80	12	8.7	2.2	.8
10	6.8	3.6	61	63	34	33	116	64	10	7.8	3.4	1.1
11	6.4	3.6	206	71	30	28	109	56	9.9	6.0	3.6	a1.1
12	6.0	3.4	195	61	32	31	92	50	8.9	4.7	2.8	a1.1
13	6.4	3.2	125	51	32	222	107	48	11	4.4	2.5	a1.1
14	6.8	3.2	102	*45	30	152	125	73	13	4.1	2.3	a1.1
15	6.0	3.4	88	48	46	133	94	59	10	3.4	2.2	1.1
16	5.6	6.8	77	51	56	188	120	53	8.9	3.2	1.8	1.1
17	5.3	8.5	69	51	43	130	107	51	8.4	3.0	1.6	1.0
18	5.0	6.0	68	77	35	109	92	54	*7.2	2.8	1.5	1.1
19	4.7	5.3	56	77	33	120	107	44	6.4	2.8	1.5	1.1
20	4.7	13	51	68	32	114	90	*39	6.0	2.7	*1.5	1.1
21	4.7	171	59	64	55	90	78	35	6.0	2.5	1.3	1.0
22	5.3	313	73	64	53	78	68	32	6.4	2.3	1.3	1.0
23	4.1	222	58	59	43	71	61	33	6.7	11	1.3	.9
24	4.1	125	51	328	42	207	54	27	6.0	13	1.1	.8
25	4.1	94	47	346	38	198	53	24	5.0	6.4	1.1	1.1
26	3.8	80	43	165	35	185	59	25	4.1	5.3	1.1	1.3
27	3.8	69	38	118	34	145	80	28	4.1	5.0	1.1	1.3
28	7.0	61	32	123	31	116	56	26	4.7	3.8	1.1	1.0
29	7.2	54	28	102	-------	104	48	21	4.7	3.2	1.0	.9
30	5.3	48	28	88	-------	92	44	19	4.4	2.7	1.3	1.0
31	4.7	-------	27	80	-------	80	-------	20	-------	2.5	1.4	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated.

Ringwood Creek near Wanaque--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0	3.0	3.8	14	20	56	24	34	19	4.3	1.7	6.0
2	.9	2.3	3.8	14	20	107	22	36	17	4.1	1.7	3.4
3	1.0	2.2	3.6	13	21	110	21	54	15	4.1	2.4	2.8
4	1.0	1.8	3.4	12	27	125	19	109	14	5.0	2.8	2.7
5	.8	1.6	6.8	12	25	90	17	77	13	5.6	2.7	2.5
6	.6	1.5	8.0	13	21	75	17	62	13	4.7	2.1	2.2
7	1.0	2.2	72	12	19	66	20	54	11	4.1	1.8	2.2
8	.9	4.1	43	10	17	59	18	82	10	5.3	1.8	2.2
9	1.0	3.8	27	9.9	17	53	17	77	9.9	3.4	2.6	1.9
10	1.0	3.6	66	9.9	17	48	15	165	9.9	2.8	3.9	1.7
11	1.0	3.6	50	8.9	17	43	15	158	9.9	2.8	2.8	18
12	1.0	3.6	39	10	14	38	17	*118	9.4	2.8	2.3	8.9
13	1.0	3.4	51	10	13	36	15	98	12	2.3	2.1	5.6
14	1.0	3.6	124	9.9	13	52	14	82	10	2.3	2.1	*4.7
15	1.1	3.0	96	9.9	15	48	14	69	9.4	2.7	2.1	5.1
16	1.1	2.7	62	9.9	19	39	19	62	8.9	2.3	2.1	10
17	1.0	2.5	48	9.4	*49	34	56	54	8.4	2.3	2.1	9.4
18	1.0	2.5	38	b9.5	45	31	69	50	8.0	2.3	1.9	7.6
19	1.0	2.3	35	9.4	34	27	51	40	7.2	2.3	1.9	17
20	.7	2.3	33	9.4	30	66	44	39	6.4	2.2	2.1	17
21	.7	2.2	31	14	32	51	39	69	6.0	2.1	2.5	13
22	.6	2.2	30	17	38	42	36	62	5.3	1.9	2.5	15
23	.7	4.6	28	14	34	38	63	48	6.0	1.8	2.0	10
24	1.0	6.4	24	13	30	35	61	42	6.8	1.7	1.7	8.9
25	1.0	6.4	21	13	33	36	44	38	5.6	1.5	1.7	8.4
26	1.1	7.8	20	14	37	39	36	34	5.6	1.8	1.7	8.4
27	1.0	5.6	18	26	45	33	47	31	5.3	1.8	1.8	10
28	2.7	5.0	*17	40	39	31	54	27	4.7	1.8	1.4	9.4
29	3.4	4.1	18	26	-------	28	44	25	4.4	1.8	1.4	8.0
30	3.8	3.6	17	23	-------	26	38	25	4.4	1.8	1.5	7.6
31	3.8	-------	16	b20	-------	25	-------	21	-------	1.8	13	-------

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Oct. 10-13, Jan. 6, 7, Aug. 17-27; discharge estimated on basis of weather records and records for Cupsaw Brook near Wanaque and West Brook near Wanaque.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.6	5.3	53	62	9.9	62	40	30	a8.0	5.3	2.5	25
2	6.8	18	48	64	9.9	62	38	28	8.4	5.0	2.3	22
3	6.0	48	43	61	10	50	36	26	7.6	4.4	a2.2	19
4	5.3	34	40	56	10	80	36	24	9.0	3.8	a2.0	17
5	4.4	30	38	45	9.4	75	33	24	13	3.6	a1.8	15
6	4.0	24	33	47	13	78	32	21	10	16	1.9	15
7	3.9	20	27	47	42	82	33	20	8.4	58	1.9	13
8	a3.7	18	26	35	25	68	30	18	7.6	25	2.2	11
9	a3.5	16	26	36	19	61	26	17	*6.8	16	2.2	10
10	a3.4	15	32	34	17	61	25	16	6.8	13	2.2	9.9
11	3.2	14	27	31	29	53	*23	15	6.4	13	2.5	9.4
12	3.6	13	25	27	32	51	24	15	19	10	5.5	9.4
13	3.4	13	24	26	b25	48	28	13	25	9.9	415	8.0
14	3.2	12	44	23	25	43	26	11	14	8.9	215	7.2
15	3.7	11	68	23	22	40	26	10	10	8.0	122	6.8
16	6.0	10	51	22	22	54	24	10	9.4	7.6	87	6.8
17	4.7	10	42	20	41	60	21	a10	7.6	7.2	68	6.0
18	4.1	10	102	19	40	50	20	10	6.8	6.4	*110	6.0
19	3.8	10	116	18	36	39	19	9.9	5.6	5.0	756	9.0
20	3.6	31	86	17	35	35	18	a9.0	27	4.4	432	9.2
21	3.6	175	69	16	34	39	18	a8.0	17	4.4	245	4.6
22	a3.5	135	58	16	34	80	24	7.6	13	4.1	223	3.6
23	a3.5	80	54	15	48	94	23	7.6	10	3.6	150	3.0
24	a3.5	68	53	14	47	77	20	8.0	10	3.6	109	22
25	3.4	68	47	15	42	68	24	7.6	10	3.8	84	27
26	3.0	53	40	14	39	69	27	8.0	10	3.8	69	15
27	3.0	45	40	12	38	a60	28	a8.0	8.9	4.1	58	10
28	3.2	40	*38	12	38	a55	24	7.6	8.0	3.0	47	18
29	7.6	71	42	b11	-------	53	33	7.2	6.4	2.7	38	16
30	8.4	59	104	b10	-------	47	35	a7.2	5.3	2.7	32	13
31	7.6	-------	77	9.2	-------	43	-------	7.2	-------	2.7	28	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for West Brook near Wanaque.
b Stage-discharge relation affected by ice.

Ringwood Creek near Wanaque--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	72.5	4.2	1.4	2.34	0.123	0.14
November	685.7	201	2.1	22.9	1.20	1.34
December	2,451	426	20	79.1	4.14	4.77
Calendar year 1950	11,200.3	426	1.4	30.7	1.61	21.80
January 1951	1,692	148	24	54.6	2.86	3.29
February	2,221	136	43	79.3	4.15	4.32
March	2,602	641	35	83.9	4.39	5.07
April	2,769	304	30	92.3	4.83	5.39
May	646.8	77	9.5	20.9	1.09	1.26
June	730.7	81	9.5	24.4	1.28	1.42
July	414.8	62	4.7	13.4	.702	.81
August	1,502.2	226	7.0	48.5	2.54	2.92
September	251.5	16.5	3.7	8.38	.439	.49
Water year 1950-51	16,039.2	641	1.4	43.9	2.30	31.22
October 1951	277.0	35	3.2	8.94	.468	.54
November	1,837	208	28	61.2	3.20	3.58
December	2,153	388	25	69.5	3.64	4.19
Calendar year 1951	17,097.0	641	3.2	46.8	2.45	33.28
January 1952	1,813	118	29	58.5	3.06	3.53
February	1,389	115	24	47.9	2.51	2.70
March	2,994	467	22	96.6	5.06	5.83
April	3,306	420	40	110	5.76	6.44
May	1,832	110	31	59.1	3.09	3.57
June	2,124.2	437	10.8	70.8	3.71	4.14
July	383.9	97	3.7	12.4	.649	.75
August	695.5	208	3.1	22.4	1.17	1.35
September	1,099.0	192	8.8	36.6	1.92	2.14
Water year 1951-52	19,903.6	467	3.1	54.4	2.85	38.76
October 1952	200.0	14	3.8	6.45	.338	.39
November	1,332.0	313	3.2	44.4	2.32	2.59
December	2,211	206	27	71.3	3.73	4.31
Calendar year 1952	19,379.6	467	3.1	52.9	2.77	37.74
January 1953	2,490	346	25	80.3	4.20	4.85
February	1,209	78	30	43.2	2.26	2.35
March	3,007	222	27	97.0	5.08	5.85
April	2,545	158	44	84.8	4.44	4.96
May	1,435	80	19	46.3	2.42	2.79
June	274.8	18	4.1	9.16	.480	.54
July	148.6	13	2.3	4.79	.251	.29
August	56.3	3.6	1.0	1.82	.095	.11
September	32.3	1.7	.8	1.08	.057	.06
Water year 1952-53	14,941.0	346	.8	40.9	2.14	29.09
October 1953	38.9	3.8	.6	1.25	.065	.08
November	103.3	7.6	1.5	3.44	.180	.20
December	1,053.4	124	3.4	34.0	1.78	2.05
Calendar year 1953	12,393.6	346	.6	34.0	1.78	24.13
January 1954	436.1	40	8.9	14.1	.738	.85
February	741	49	13	26.5	1.39	1.44
March	1,587	125	25	51.2	2.68	3.09
April	966	69	14	32.2	1.69	1.88
May	1,942	165	21	62.6	3.28	3.78
June	275.5	19	4.4	9.18	.481	.54
July	87.5	5.6	1.5	2.82	.148	.17
August	76.2	13	1.4	2.46	.129	.15
September	229.6	18	1.7	7.65	.401	.45
Water year 1953-54	7,536.5	165	.6	20.6	1.08	14.68
October 1954	138.2	8.4	3.0	4.46	.234	.27
November	1,156.3	175	5.3	38.5	2.02	2.25
December	1,573	116	24	50.7	2.65	3.06
Calendar year 1954	9,208.4	175	1.4	25.2	1.32	17.93
January 1955	857.2	64	9.2	27.7	1.45	1.67
February	792.2	48	9.4	28.3	1.48	1.54
March	1,837	94	35	59.3	3.10	3.58
April	814	40	18	27.1	1.42	1.58
May	420.9	30	7.2	13.6	.712	.82
June	315.0	27	5.3	10.5	.550	.61
July	269.0	58	2.7	8.68	.454	.52
August	3,317.2	756	1.8	107	5.60	6.46
September	366.9	27	3.0	12.2	.639	.71
Water year 1954-55	11,856.9	756	1.8	32.5	1.70	23.07

Cupsaw Brook near Wanaque

Location.--Lat 41°06'32", long 74°15'16", on left bank just upstream from Wanaque Reservoir, 0.3 mile downstream from Cupsaw Lake, and 5 miles north of Wanaque, Passaic County.

Drainage area.--4.38 sq mi.

Records available.--December 1934 to September 1955.

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.--20 years (1935-55), 7.94 cfs.

Extremes.--1934-55: 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).--
1950-51: Nov. 25 (9 p.m.) 134 cfs (1.17 ft); Dec. 4 (12 p.m.) 83 cfs (0.89 ft); Dec. 8 (9:30 a.m.) 227 cfs (1.60 ft); Jan. 24 (1 p.m.) 75 cfs (0.84 ft); Feb. 7 (8 p.m.) 90 cfs (0.93 ft); Mar. 30 (11 p.m.) 521 cfs (2.64 ft); Apr. 3 (1 p.m.) 75 cfs (0.84 ft); Apr. 13 (3 a.m.) 83 cfs (0.89 ft); June 5 (1 a.m.) 82 cfs (0.88 ft); Aug. 11 (1 to 6 a.m.) 118 cfs (1.09 ft).
1951-52: Nov. 19-20 (1 p.m. to 9 a.m.) 75 cfs (0.84 ft); Dec. 21 (6 a.m.) 180 cfs (1.39 ft); Jan. 23 (2 to 4 a.m.) 72 cfs (0.82 ft); Mar. 11 (1:30 p.m.) 405 cfs (2.28 ft); Apr. 5 (2 p.m.) 270 cfs (1.78 ft); June 1 (1 p.m.) 305 cfs (1.92 ft); July 10 (7 a.m.) 72 cfs (0.82 ft); Sept. 1 (5 p.m.) 138 cfs (1.19 ft).
1952-53: Dec. 5 (9 p.m.) 87 cfs (0.91 ft); Dec. 11 (4 p.m.) 106 cfs (1.02 ft); Jan. 24 (5 p.m.) 184 cfs (1.41 ft); Mar. 13 (1 p.m.) 148 cfs (1.24 ft); Mar. 16 71 cfs (0.81 ft); Mar. 24 (3 p.m.) 99 cfs (0.98 ft); Apr. 7 (7 p.m.) 88 cfs (0.92 ft).
1953-54: May 10 (1 p.m.) 72 cfs (0.82 ft).
1954-55: Nov. 21 (4 p.m.) 118 cfs (1.09 ft); Aug. 13 (1 p.m.) 232 cfs (1.62 ft); Aug. 19 (6 a.m.) 442 cfs (2.40 ft).

Remarks.--Records given herein include flow over spillway and through ports in dam. Flow occasionally regulated by Cupsaw Lake (capacity, 227,000,000 gal), and Sheppard Pond.

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

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.2	0.4	4.9	7.4	15.2	6.9	56	4.5	8.0	3.2	1.6	1.4
2	.2	.4	4.1	6.4	23	6.9	35	4.1	5.4	2.2	.6	1.2
3	.2	.8	4.1	5.9	13.8	6.9	59	2.9	4.1	1.3	0	1.2
4	.2	.8	29	19.2	11.0	9.1	37	2.6	17.4	1.1	.2	1.2
5	.2	2.5	48	19.5	9.7	10.3	26	2.6	48	5.8	0	1.0
6	.2	1.6	18.4	13.1	8.5	11.7	19.9	2.3	18.1	2.2	0	1.0
7	.2	.8	14.1	12.4	37	10.3	17.6	2.3	10.3	.9	0	1.2
8	.2	.4	137	11.7	40	8.5	15.3	2.0	6.9	.4	.1	.9
9	.2	.4	54	9.1	18.4	6.9	13.1	1.7	5.9	.1	.1	.3
10	.4	.6	30	8.0	13.1	5.9	11.0	1.7	4.9	.2	36	.3
11	.4	.4	27	7.4	11.7	5.4	9.7	2.4	4.1	.2	91	.2
12	.4	.4	21	6.9	11.0	5.4	12.6	6.4	2.9	.2	40	.2
13	.4	.2	16.0	6.4	14.4	4.9	53	4.1	2.9	.4	46	.2
14	.4	.2	13.1	6.4	18.4	15.5	23	2.3	10.4	.2	23	.4
15	.6	.2	12.2	26	13.1	14.6	16.0	1.7	12.4	.2	18.0	3.4
16	.6	.2	28	21	10.3	9.1	13.8	1.4	7.4	.2	27	1.9
17	.6	.2	18.4	13.1	13.5	7.4	13.1	1.2	4.5	.2	43	.8
18	.4	.6	13.8	11.7	22	6.4	11.0	1.0	3.3	.2	22	.4
19	.2	.4	*11.0	13.1	11.7	5.9	9.7	.5	2.3	.4	13.8	0
20	.4	.6	9.1	13.8	13.8	37	9.1	.6	1.7	.6	10.3	.1
21	.4	3.2	8.0	11.7	22	18.6	7.4	.8	1.4	.6	8.5	.2
22	.4	1.3	7.4	8.5	38	13.8	6.9	.8	1.4	.7	7.4	.2
23	.4	.6	7.4	7.4	18.1	11.0	15.8	1.8	4.8	5.8	4.9	.4
24	.4	.6	7.4	47	12.0	10.3	11.0	10.9	4.1	1.7	3.7	.2
25	.4	47	6.9	30	10.0	9.1	8.5	6.2	2.3	.6	2.9	.2
26	.8	48	5.9	19.2	10.3	6.9	8.0	2.6	1.0	.2	2.6	*.6
27	.4	14.6	5.9	14.5	8.5	5.9	6.4	3.7	.8	5.8	2.0	.2
28	.4	9.6	4.9	13.1	7.4	5.4	5.9	6.9	1.3	40	2.0	1.3
29	.4	8.0	8.7	12.4	-------	7.4	5.9	21	2.7	23	1.7	1.0
30	.4	5.9	13.1	11.0	-------	190	5.4	27	4.0	7.1	1.4	.4
31	.4	-------	9.1	9.1	-------	171	-------	13.8	-------	2.5	1.2	-------

* Discharge measurement made on this day.

Cupsaw Brook near Wanaque--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.2	1.0	0.3	13.1	12.4	6.9	9.7	18.4	166	0.6	0.2	58
2	.2	.6	.2	13.1	15.3	5.9	10.3	14.5	80	.1	.2	42
3	8.0	1.3	.4	17.6	15.3	5.9	9.1	11.7	36	0	.2	21
4	13.1	.8	.4	13.8	39	6.3	8.0	10.3	24	0	.2	11.7
5	13.1	9.3	1.3	13.1	33	11.7	140	8.5	19.9	.1	.2	7.1
6	13.1	15.6	.8	11.7	21	10.3	80	8.0	14.5	0	5.2	4.7
7	14.5	18.5	.6	9.1	16.8	8.5	40	8.0	11.0	0	3.2	3.3
8	13.8	17.2	.6	7.4	14.5	8.0	26	6.4	8.0	0	1.3	2.1
9	13.1	17.2	.6	7.4	13.1	7.4	21	5.9	10.2	10.9	.6	2.0
10	13.1	17.2	.4	8.0	11.7	8.0	*17.6	4.9	10.1	44	4.3	1.7
11	13.1	17.2	.4	8.0	13.1	169	15.3	6.4	6.4	11.7	3.2	1.4
12	13.8	17.2	.4	6.9	10.5	74	13.1	26	4.1	4.7	3.5	1.2
13	13.1	16.4	.4	6.4	8.5	38	12.4	14.8	3.7	2.3	10.0	1.0
14	13.1	16.4	.4	11.9	7.4	27	37	9.7	2.9	1.4	3.4	1.0
15	13.1	16.4	.8	14.5	6.4	19.9	36	7.4	2.3	.6	1.3	1.2
16	13.1	17.5	.6	13.1	5.9	16.0	27	6.9	2.0	.2	18.4	1.7
17	5.5	17.7	.4	10.3	11.6	13.8	19.9	5.4	3.4	0	43	1.2
18	.1	17.7	.8	17.6	13.8	12.4	16.8	8.0	11.3	0	12.2	1.0
19	.2	53	5.7	13.1	9.7	16.7	14.5	6.9	4.7	0	5.8	8.5
20	.2	75	12.7	14.5	7.4	24	13.1	11.5	2.7	0	3.2	5.9
21	.2	30	121	12.4	8.0	25	11.0	13.5	1.7	.4	2.5	2.9
22	.2	.4	51	15.5	7.4	19.9	9.7	8.5	2.0	.3	4.6	1.8
23	.2	.4	28	50	6.9	30	9.7	5.9	2.3	.1	2.2	1.7
24	9.5	.4	22	24	6.4	28	8.5	4.9	2.3	.1	1.1	1.4
25	16.0	.4	18.0	16.0	5.9	22	14.7	34	2.0	.1	.4	1.3
26	15.3	.9	18.8	38	5.4	17.6	31	32	1.3	.1	.2	1.0
27	15.3	13.9	14.9	35	5.9	14.5	30	17.2	.8	.1	.1	1.0
28	15.3	23	12.0	30	5.9	13.1	60	11.7	.4	.1	.1	.3
29	6.2	23	10.6	23	6.4	11.7	38	14.5	.4	.2	.1	.3
30	.4	8.5	11.3	16.0	-------	10.3	26	16.5	2.1	.2	.6	.6
31	.2	-------	12.8	13.1	-------	9.1	-------	13.1	-------	.2	.6	-------

* Discharge measurement made on this day.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.6	0.8	4.8	4.8	15	6.3	13	21	2.9	0.2	0.2	0
2	1.6	.8	4.0	4.4	12	5.8	13	17	2.3	.2	.2	0
3	2.5	.8	6.3	13	9.8	5.3	12	13	1.7	.2	.2	0
4	1.3	1.0	5.3	11	9.6	27	9.8	11	1.4	.2	.2	0
5	1.0	1.0	32	7.9	8.4	18	12	15	1.4	.2	.1	0
6	.8	.2	47	6.8	7.9	12	9.6	15	1.2	.2	.1	.1
7	1.6	a0	21	6.3	9.6	9.6	57	24	1.4	.2	0	.1
8	1.0	a0	15	6.3	9.8	8.4	52	28	1.7	.2	0	.1
9	1.0	a0	12	9.8	8.4	7.3	28	43	1.2	.2	0	.1
10	17	a0	9.8	24	7.3	7.3	28	24	.8	.2	.1	.1
11	26	a0	54	27	6.3	5.8	30	18	.7	.2	0	.1
12	26	a0	46	21	7.3	6.3	23	15	.6	.2	0	.1
13	26	a0	26	15	7.9	85	27	12	1.3	.2	0	.1
14	26	a0	18	12	7.3	47	32	13	2.5	.1	0	.1
15	26	a0	15	12	16	36	21	11	1.6	.1	.1	.1
16	26	a0	12	13	20	56	35	10	.8	.1	.1	.1
17	18	a0	9.6	14	12	31	30	10	.6	.1	.1	0
18	14	a0	9.0	25	9.0	24	23	11	.2	.1	.1	0
19	12	a0	7.3	24	7.9	29	27	8.0	.2	.1	.1	0
20	12	.3	6.8	18	7.9	26	21	5.9	.2	.1	0	0
21	12	1.8	11	15	17	19	18	4.9	.2	.2	0	0
22	7.6	2.8	18	16	16	16	15	4.5	.4	.2	0	.1
23	1.0	1.1	12	15	9.8	15	14	5.9	.6	*2.9	0	.1
24	1.0	4.8	9.6	85	9.0	55	12	4.1	.2	2.9	0	.1
25	1.3	12	8.4	73	8.4	49	11	2.9	.2	.8	0	.1
26	1.3	9.8	7.3	36	7.9	46	15	3.3	.4	.4	0	.1
27	1.3	9.0	6.3	25	7.3	31	27	4.9	1.0	.2	0	.1
28	1.3	7.3	4.2	26	6.8	25	16	4.1	.6	.4	0	.1
29	1.3	5.8	4.4	22	-------	20	12	2.3	.4	.2	0	.1
30	1.0	5.3	4.0	17	-------	18	9.9	2.9	.2	.2	0	.1
31	.8	-------	4.4	15	-------	15	-------	-------	-------	.2	0	-------

* Discharge measurement made on this day.
a No gage-height record Nov. 7-19; discharge estimated.

Cupsaw Brook near Wanaque--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	0.1	0.2	2.5	3.2	16	5.3	9.6	2.2	0.2	0	a1
2	.1	.1	.2	2.5	3.2	42	4.8	12	2.2	.2	0	a.5
3	.1	.1	.2	2.2	4.4	31	4.8	18	1.9	.2	.4	a.3
4	.1	.1	.2	2.2	7.3	36	3.6	43	1.3	.4	.2	.2
5	.1	.1	.8	2.2	6.8	21	3.2	23	1.3	.2	.2	.2
6	.1	.1	2.1	3.2	5.3	16	4.0	17	.9	.2	.2	.2
7	.1	.2	36	2.8	4.4	13	5.8	14	.9	.2	.1	.2
8	.1	.2	11	2.2	4.0	12	5.3	27	.8	.2	.2	.2
9	.1	.2	5.3	1.9	4.0	9.6	4.0	24	.1	.2	.1	.2
10	.1	.2	21	1.9	3.6	9.0	3.2	56	.1	.2	.1	.2
11	.1	.2	12	2.8	3.6	*7.3	3.2	40	.2	.2	.1	15
12	.1	.2	7.9	2.8	3.2	6.8	4.4	25	.2	.2	.1	7.8
13	.1	.2	15	2.5	2.5	6.8	3.6	19	1.6	.2	.1	2.2
14	.2	.2	40	1.9	2.2	15	3.2	16	1.0	.1	.2	1.0
15	.2	.2	29	2.2	2.5	14	3.2	13	.8	.1	.2	1.0
16	.2	.2	16	2.5	3.2	9.0	5.4	12	.6	.1	0	5.5
17	.2	.2	11	2.5	13	7.3	22	9.6	.6	.1	0	6.3
18	.2	.2	7.9	2.2	14	6.3	30	9.0	.6	.1	0	3.6
19	.2	.2	6.3	1.9	9.0	5.8	15	7.9	.4	0	.1	9.1
20	.2	.2	5.3	1.9	6.8	20	11	6.8	.2	0	.2	11
21	.2	.2	4.8	4.3	7.3	15	9.0	18	.2	0	.2	7.0
22	.2	.2	4.8	6.3	10	10	7.9	15	.2	0	.2	10
23	.2	.6	4.8	4.0	7.9	8.4	15	9.6	.4	0	0	5.3
24	.2	.4	4.0	3.2	6.8	7.3	24	7.9	.6	0	a0	3.2
25	.2	.4	3.2	3.2	8.4	8.4	15	6.3	.2	0	a0	1.9
26	.2	.4	3.2	3.2	10	11	12	5.8	.2	0	a0	1.9
27	.1	.4	3.2	7.2	15	9.0	15	4.4	.2	0	a0	2.5
28	.3	.4	2.5	12	10	9.0	13	4.4	.4	0	a0	1.9
29	.4	.4	3.2	6.8	-------	7.3	15	4.0	.2	0	a0	1.6
30	.2	.2	3.2	4.8	-------	7.9	11	3.2	.2	0	a0	1.1
31	.2	-------	3.2	4.4	-------	5.3	-------	2.5	-------	0	a4	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for Blue Mine Brook, West Brook, and Ringwood Creek, all near Wanaque.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.3	2.2	14	15	1.3	17	8.4	7.9	1.9	a0.1	a0	1.9
2	.9	8.0	12	15	1.6	18	7.3	6.8	1.1	a.1	a0	1.6
3	.9	29	10	14	1.9	12	7.3	5.8	.8	a.1	a0	1.3
4	1.1	14	9.0	11	1.9	22	7.9	4.8	1.5	a.1	a0	1.3
5	.9	10	8.4	9.0	1.6	19	6.3	4.8	4.6	a.1	a0	1.3
6	1.2	7.3	7.3	9.6	2.9	20	6.3	4.8	1.9	.2	a0	1.9
7	1.1	5.3	5.8	8.4	22	23	7.3	3.2	.9	12	a0	1.6
8	.2	4.4	5.3	7.3	9.7	15	6.3	3.6	.7	3.4	a0	.4
9	.2	4.0	5.8	6.8	5.8	12	5.3	3.2	.7	1.2	a0	a0
10	.2	3.2	8.4	6.8	4.8	12	4.8	2.2	a.2	.4	a0	a0
11	.6	2.5	7.3	6.3	9.2	11	4.4	2.5	.5	.7	a0	a0
12	.6	2.5	6.3	5.3	15	11	5.3	2.2	4.7	2.0	a0	.7
13	.6	1.6	5.3	5.3	8.4	9.6	6.8	1.9	5.6	a.3	103	.1
14	.6	1.9	15	4.8	6.3	8.4	6.3	1.9	2.9	a.2	27	a0
15	1.5	2.8	30	4.8	5.8	7.9	6.3	1.6	1.6	a.2	10	a0
16	2.2	1.9	18	4.4	5.3	12	5.8	1.1	.8	a.2	5.8	.2
17	1.6	1.6	12	4.0	14	12	4.8	1.6	.4	a.2	3.5	a0
18	1.6	1.6	32	3.6	15	9.6	4.4	0.7	a.2	a.1	19	a0
19	1.6	1.9	36	3.2	12	9.0	4.0	.7	.3	a.1	217	a0
20	1.6	15	21	3.2	9.6	9.0	4.4	.9	11	a.1	52	.4
21	.6	83	15	2.5	8.4	9.8	4.0	.8	4.9	a.1	30	.3
22	.8	51	12	2.5	7.9	28	7.6	.3	2.2	a.1	35	a0
23	.4	26	10	2.5	12	34	7.3	.5	1.3	a.1	18	a0
24	.4	22	10	2.5	14	20	5.8	1.1	2.9	a.1	11	7.7
25	.2	24	9.0	2.5	9.6	15	6.3	1.3	3.6	a.1	7.3	9.2
26	.2	16	7.9	2.5	9.0	17	7.3	1.6	1.5	a.1	5.8	10
27	.4	13	7.3	2.5	8.4	18	7.9	.9	.5	a.1	4.4	20
28	.8	12	*6.8	2.2	9.0	13	6.3	1.1	.3	a0	4.0	21
29	2.9	27	8.7	1.9	-------	11	9.8	.4	a.2	a0	2.8	21
30	4.4	19	36	1.9	-------	9.6	9.8	1.1	a.1	a0	2.2	21
31	3.2	-------	22	1.6	-------	9.0	-------	1.6	-------	a0	2.2	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Blue Mine Brook, West Brook, and Ringwood Creek near Wanaque.

Cupsaw Brook near Wanaque--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	11.4	0.8	0.2	0.37	0.084	0.10
November	150.9	48	.2	5.03	1.15	1.28
December	597.9	137	4.1	19.3	4.41	5.08
Calendar year 1950	2,442.7	137	.1	6.69	1.53	20.75
January 1951	422.4	47	5.9	13.6	3.11	3.59
February	455.9	40	7.4	16.3	3.72	3.87
March	644.4	190	4.9	20.8	4.75	5.47
April	542.1	59	5.4	18.1	4.13	4.60
May	143.8	27	.5	4.64	1.06	1.22
June	204.7	48	.8	6.82	1.56	1.74
July	108.2	40	.1	3.49	.797	.92
August	411.0	91	0	13.3	3.04	3.49
September	22.0	3.4	0	.73	.167	.19
Water year 1950-51	3,714.7	190	0	10.2	2.33	31.55
October 1951	266.3	16.0	.1	8.59	1.96	2.26
November	464.1	75	.4	15.5	3.54	3.94
December	348.6	121	.2	11.2	2.56	2.96
Calendar year 1951	4,033.5	190	0	11.1	2.53	34.25
January 1952	503.6	50	6.4	16.2	3.70	4.28
February	344.6	39	5.4	11.9	2.72	2.93
March	690.9	169	5.9	22.3	5.09	5.87
April	805.4	140	8.0	26.8	6.12	6.84
May	371.4	34	4.9	12.0	2.74	3.15
June	438.5	166	.4	14.6	3.33	3.72
July	78.5	44	0	2.53	.578	.67
August	132.1	43	.1	4.26	.973	1.12
September	190.0	58	.3	6.33	1.45	1.61
Water year 1951-52	4,634.0	169	0	12.7	2.90	39.35
October 1952	270.3	26	.6	8.72	1.99	2.30
November	64.6	12	0	2.15	.491	.55
December	450.5	54	4.0	14.5	3.31	3.83
Calendar year 1952	4,340.4	169	0	11.9	2.72	36.87
January 1953	620.3	85	4.4	20.0	4.57	5.27
February	281.6	20	6.3	10.1	2.31	2.39
March	762.1	85	5.3	24.6	5.62	6.47
April	653.3	57	9.6	21.8	4.98	5.55
May	367.0	43	2.3	11.8	2.69	3.12
June	28.9	2.9	.2	.96	.219	.25
July	11.9	2.9	.1	.38	.087	.10
August	1.6	.2	0	.05	.011	.01
September	2.0	.1	0	.07	.016	.02
Water year 1952-53	3,514.1	85	0	9.63	2.20	29.86
October 1953	5.1	.4	.1	.16	.037	.04
November	7.0	.6	.1	.23	.053	.06
December	267.5	40	.2	8.63	1.97	2.27
Calendar year 1953	3,008.3	85	0	8.24	1.88	25.55
January 1954	106.2	12	1.9	3.43	.783	.90
February	181.6	15	2.2	6.49	1.48	1.54
March	402.5	42	5.3	13.0	2.97	3.42
April	286.9	30	3.2	9.56	2.18	2.44
May	483.0	56	2.5	15.6	3.56	4.10
June	20.7	2.2	.1	.69	.158	.18
July	3.3	.4	0	.11	.025	.03
August	6.9	4	0	.22	.050	.06
September	102.1	15	.2	3.40	.776	.87
Water year 1953-54	1,872.8	56	0	5.13	1.17	15.91
October 1954	34.8	4.4	.2	1.12	.256	.30
November	413.7	83	1.6	13.8	3.15	3.51
December	413.6	36	5.3	13.3	3.04	3.51
Calendar year 1954	2,455.3	83	0	6.73	1.54	20.86
January 1955	172.9	15	1.6	5.58	1.27	1.47
February	232.4	22	1.3	8.30	1.89	1.97
March	453.9	34	7.9	14.6	3.33	3.85
April	191.8	9.8	4.0	6.39	1.46	1.63
May	72.7	7.9	.3	2.35	.537	.62
June	59.8	11	.1	1.99	.454	.51
July	22.5	12	0	.73	.167	.19
August	560.0	217	0	18.1	4.13	4.75
September	122.9	21	0	4.10	.936	1.04
Water year 1954-55	2,751.0	217	0	7.54	1.72	23.35

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 1955.

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.--20 years, 24.1 cfs.

Extremes.--1935-55: Maximum discharge, 1,900 cfs Mar. 30, 1951 (gage height, 6.6 ft, from floodmark), from rating curve extended above 630 cfs; no flow for part of day in most years just after waste gate was closed and water was below intake to ports.

Peak discharge (base, 400 cfs).--
1950-51: Nov. 25 (time and discharge unknown); Dec. 8 (10 a.m.) 548 cfs (3.25 ft); Mar. 30 (time unknown) about 1,900 cfs (6.6 ft, from floodmark); July 27 (time unknown) about 775 cfs (about 4.2 ft).
1951-52: Nov. 7 (time and discharge unknown); Dec. 21 (time and discharge unknown); Mar. 11 (4 p.m.) 835 cfs (4.42 ft); Apr. 5 (time and discharge unknown); June 1 (time and discharge unknown); Sept. 1 (time and discharge unknown).
1952-53: Nov. 22 (11 a.m.) 529 cfs (3.17 ft); Jan. 24 (3 p.m.) 647 cfs (3.68 ft); Mar. 13 (12 m.) 400 cfs (2.56 ft).
1953-54: Dec. 14 (11:30 a.m.) 238 cfs (1.72 ft), (maximum below base).
1954-55: Nov. 21 (1 p.m.) 619 cfs (3.56 ft); Aug. 13 (time and discharge unknown); Aug. 19 (5 a.m.) 1,200 cfs (5.73 ft).

Remarks.--Records given herein include flow over spillway and through ports in dam.

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

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.9	2.7	28	19.9	44	30	153	17.1	23	19.1	29	7.0
2	1.9	2.7	24	18.4	66	29	92	14.9	18.4	17.6	19.9	6.5
3	2.2	3.0	26	21	b45	28	156	13.5	14.0	12.6	16.1	7.0
4	3.7	5.6	100	55	35	33	102	12.8	35	10.6	14.0	6.5
5	4.8	20	143	54	30	38	74	12.8	74	29	10.8	5.6
6	5.2	8.5	72	42	26	39	62	11.5	38	14.7	9.0	5.6
7	5.2	6.5	57	37	110	40	50	10.9	26	10.8	8.5	6.5
8	5.2	5.2	343	32	104	38	44	10.3	19.9	8.5	14.0	5.2
9	5.2	4.8	144	27	79	34	38	9.7	16.8	7.0	12.0	4.4
10	7.0	4.4	82	23	61	28	34	9.6	15.4	6.0	75	4.4
11	5.6	4.0	75	22	44	25	28	9.6	14.7	5.6	80	4.0
12	5.2	3.7	63	21	40	25	33	f16.1	12.0	5.2	53	4.0
13	5.2	3.4	49	19.9	53	22	115	b12.6	f12.0	4.8	117	4.0
14	4.8	a3.4	38	19.1	58	67	66	9.6	f38	4.4	54	3.7
15	4.4	a3.4	34	74	43	68	48	8.0	33	4.0	50	14.8
16	8.4	a3.4	56	63	36	48	42	7.5	24	3.4	77	8.0
17	8.7	a3.4	40	43	44	40	38	7.0	17.6	3.4	114	6.0
18	4.2	a5.2	34	38	63	35	34	6.5	14.7	3.4	62	5.2
19	3.0	a4.8	27	40	50	31	30	6.0	11.4	4.9	42	4.4
20	3.0	a5.6	23	39	54	131	26	6.0	9.0	7.0	33	4.0
21	3.0	14.7	21	35	80	78	24	6.0	8.0	4.4	30	3.7
22	3.0	9.0	18.4	26	113	61	22	6.0	7.0	4.7	26	3.4
23	5.3	7.5	19.9	23	73	49	48	7.8	13.5	18.0	19.1	3.7
24	4.8	*7.0	19.1	167	56	45	32	35	12.0	8.0	16.1	3.4
25	*3.4	a60	17.6	107	50	38	28	19.9	7.5	5.2	14.0	3.0
26	2.7	a110	14.7	70	45	33	26	12.6	5.2	4.4	12.6	2.7
27	2.7	70	14.0	51	40	28	22	18.7	15.8	f82	11.4	2.7
28	2.7	50	12.6	46	34	26	20	22	22	f318	10.2	5.6
29	2.7	39	24	43	-------	36	20	44	24	138	9.0	4.0
30	2.7	33	31	34	-------	f495	18.6	53	22	58	8.0	3.4
31	2.7	-------	24	29	-------	412	-------	32	-------	35	7.5	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated 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.
f Fragmentary gage-height record; discharge based on partly estimated gage-height graph.
Note.--Waste gate open Apr. 10, 11, May 4-10; discharge estimated on basis of records for Blue Mine Brook near Wanaque.

West Brook near Wanaque--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.0	39	24	35	38	16.1	24	53	f590	6.5	5.2	f210
2	4.8	34	24	39	44	15.4	25	43	275	5.2	6.5	150
3	4.8	94	22	49	42	14.7	22	38	110	4.0	5.6	89
4	5.2	69	19.9	38	104	15.9	19.9	34	70	4.0	3.7	56
5	5.6	44	49	36	90	30	f392	30	56	3.7	3.0	38
6	5.6	34	53	32	60	23	214	28	43	3.4	12.8	29
7	15.0	f273	40	26	49	21	100	25	34	3.0	10.8	22
8	34	142	35	23	43	19.1	71	21	28	3.4	9.0	17.6
9	12.0	73	31	23	39	18.4	58	18.4	26	40	6.0	14.7
10	8.5	56	28	23	35	18.4	48	16.1	21	f175	28	12.6
11	20	45	26	20	37	f400	40	21	17.6	52	21	12.0
12	22	36	25	18.4	31	247	34	91	14.7	29	16.5	a12
13	14.0	31	22	18.4	23	123	33	49	12.6	16.1	29	a11
14	11.4	41	16.1	29	21	75	96	34	10.8	11.4	15.4	a10
15	10.2	55	25	34	17.6	58	113	30	9.6	9.6	9.6	10.2
16	8.5	53	19.1	33	16.8	48	*90	26	8.5	7.5	a49	10.8
17	7.0	51	a17	28	25	40	63	22	24	8.0	f162	8.5
18	6.5	43	a30	42	26	36	49	29	16.1	6.5	50	14.1
19	5.6	38	a35	33	21	40	42	23	10.8	5.6	30	70
20	5.2	31	a30	36	19.1	53	36	43	8.5	4.8	24	38
21	4.8	27	a350	32	19.1	57	32	42	8.5	4.8	18.4	22
22	4.8	25	147	38	18.4	63	28	30	9.0	4.8	31	16.8
23	4.4	24	81	143	17.6	92	26	24	9.0	4.4	18.4	16.1
24	6.3	25	66	66	16.1	78	24	21	8.5	4.0	12.0	14.7
25	18.6	23	53	46	16.1	63	42	138	7.5	4.0	9.6	12.6
26	11.4	42	50	110	15.4	48	71	114	6.5	3.7	8.0	10.2
27	11.4	33	36	110	16.1	40	87	60	5.6	8.0	7.5	9.0
28	14.0	27	30	87	15.4	35	207	40	4.8	14.0	a6.5	8.5
29	12.0	27	29	63	16.1	32	137	42	4.4	12.6	6.0	8.0
30	9.6	25	29	44	-------	29	77	37	a12.6	5.6	6.0	7.5
31	8.5	-------	32	39	-------	26	-------	40	-------	5.2	5.6	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of daily gage readings, weather records, and records for other streams in Wanaque River basin.
f Fragmentary gage-height record; discharge computed from partly estimated gage-height graph.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.0	3.7	26	15	39	19	37	44	9.9	2.4	1.6	0.5
2	7.0	3.7	23	15	31	17	35	36	8.4	2.4	1.9	.5
3	11	3.4	19	39	29	17	31	32	7.4	2.7	2.2	a.5
4	8.0	4.4	18	30	26	73	29	29	6.4	2.4	1.6	a.5
5	7.0	3.4	137	22	22	56	32	42	5.9	2.2	1.6	a1.0
6	7.0	3.4	164	20	21	38	26	36	5.5	2.4	1.6	g1.6
7	6.0	3.4	79	19	24	32	211	38	5.5	3.7	1.6	g1.2
8	6.0	3.0	61	18	25	28	156	45	5.5	2.4	1.4	g.8
9	6.0	3.4	50	24	21	25	81	61	5.1	2.2	4.5	g.5
10	6.0	5.2	48	48	18	24	90	45	4.7	2.2	5.0	g1.9
11	5.2	3.7	161	54	16	21	80	40	4.3	1.9	2.2	g.8
12	5.2	4.8	115	49	18	22	66	36	3.9	1.9	1.9	g.8
13	4.8	7.6	72	39	18	213	80	29	6.2	1.6	1.4	g1.6
14	4.4	7.0	58	35	17	118	88	27	7.4	1.9	1.4	1.0
15	4.4	6.5	48	36	31	96	61	25	5.1	1.9	1.4	.5
16	4.4	12	40	43	40	152	90	22	4.3	1.9	1.2	.6
17	4.4	9.0	33	44	30	84	76	23	3.9	1.6	1.2	.5
18	4.4	8.0	29	75	24	67	63	22	3.6	1.6	1.2	.5
19	4.0	7.5	27	69	22	76	72	18	3.3	1.2	1.2	.5
20	4.4	21	23	54	21	66	61	15	2.9	1.2	*1.0	.6
21	6.5	207	34	46	46	50	48	13	2.6	1.4	1.0	.8
22	9.0	330	45	43	40	43	40	13	4.5	1.6	1.0	1.0
23	9.6	160	35	39	31	38	36	22	5.2	16	1.0	.8
24	9.0	81	31	292	28	164	32	14	3.7	6.6	1.0	.8
25	6.0	63	31	223	26	143	30	11	3.0	3.7	1.0	.5
26	5.6	48	28	99	25	123	32	12	3.1	2.7	.8	.5
27	5.2	42	24	70	23	84	42	13	6.5	2.2	.9	.6
28	5.6	36	17	71	21	67	30	11	3.7	2.2	1.0	.8
29	4.8	32	17	58	-------	56	27	9.5	3.7	1.9	.6	.8
30	3.7	29	16	45	-------	48	24	9.5	3.0	1.6	.5	.5
31	4.0	-------	16	40	-------	42	-------	11	-------	1.6	.5	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for nearby stations.
g From graph based on once-daily staff-gage readings.

West Brook near Wanaque--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.8	2.7	4.1	8.9	a18	44	19	25	11	2.1	1.2	8.6
2	3.4	3.4	4.1	9.4	a18	a70	19	25	9.4	2.1	1.0	4.1
3	2.7	12	3.8	8.9	a19	a70	17	42	8.4	1.8	4.9	3.0
4	2.1	*11	3.8	8.4	22	a80	15	126	7.3	4.1	3.0	2.4
5	2.1	*11	9.0	7.8	19	a60	14	71	6.8	3.8	2.1	2.1
6	1.8	9.4	8.4	8.4	17	50	16	51	5.8	3.0	1.8	1.8
7	2.4	11	82	7.8	15	41	23	41	5.3	2.7	1.8	1.8
8	1.8	4.5	41	6.3	14	37	19	84	4.9	2.4	1.5	2.4
9	1.5	3.8	29	6.3	14	*31	17	72	4.5	2.4	3.3	2.4
10	1.2	3.8	*77	6.3	14	28	14	117	4.5	2.1	3.8	2.4
11	1.0	3.8	47	5.8	13	24	14	80	4.1	1.8	2.4	32
12	1.0	3.8	38	7.3	11	22	16	59	3.8	1.8	1.8	14
13	.8	4.5	50	7.3	8.9	23	14	47	5.8	1.5	1.5	7.3
14	.8	8.1	142	6.3	9.4	41	14	38	4.9	1.5	1.2	5.8
15	.8	3.0	85	6.3	12	36	14	34	4.1	2.7	1.8	5.5
16	.8	2.7	51	6.3	15	27	19	29	3.8	1.8	1.8	20
17	.8	2.4	39	6.3	*47	23	74	26	3.8	1.5	1.5	20
18	1.0	2.4	31	6.3	47	21	80	*22	3.4	1.5	1.2	14
19	1.0	2.1	25	5.8	33	19	49	20	3.4	1.5	1.2	36
20	1.2	2.1	22	6.3	26	69	37	19	3.0	1.2	2.4	35
21	2.7	2.1	22	a10	27	49	32	50	2.4	1.2	1.8	25
22	2.7	2.1	21	a20	33	36	28	40	2.4	1.2	1.8	34
23	2.4	9.5	20	15	26	31	30	29	2.7	1.0	1.5	20
24	2.1	6.8	17	16	24	28	35	24	3.0	1.0	1.2	14
25	2.1	7.5	16	16	25	28	28	20	2.4	2.0	1.2	12
26	2.4	9.4	13	18	29	32	24	17	2.7	3.0	1.2	11
27	1.5	6.3	12	32	35	26	37	16	2.1	1.8	1.5	12
28	3.5	5.8	11	a40	28	23	41	15	1.8	1.8	1.2	9.4
29	7.2	4.5	12	a30	-------	21	34	14	2.1	1.5	1.0	8.4
30	6.9	3.8	11	a23	-------	19	29	14	2.1	1.2	1.2	7.3
31	3.0	-------	11	a18	-------	19	-------	12	-------	1.2	22	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for Blue Mine Brook near Wanaque and Ringwood Creek near Wanaque.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.3	9.7	39	46	5.8	47	25	23	6.3	3.8	1.0	10
2	7.3	32	34	47	6.3	44	24	20	5.3	3.4	.8	8.9
3	6.3	67	30	40	b6.3	35	22	18	4.5	3.0	1.2	8.4
4	6.3	46	27	35	b6.3	63	21	17	5.2	2.7	2.8	7.3
5	5.3	33	26	31	6.3	53	19	16	7.3	2.4	1.5	6.8
6	4.5	25	22	31	9.5	62	19	16	4.9	2.8	1.2	8.9
7	4.5	21	19	29	49	61	21	13	4.1	6.8	.8	7.3
8	4.1	19	18	24	25	43	18	13	4.1	4.1	1.8	6.3
9	3.8	*16	21	23	17	39	16	12	4.5	3.4	1.2	5.3
10	3.8	14	24	22	16	38	15	11	4.1	3.4	a.8	4.9
11	3.8	14	19	19	32	35	14	11	4.5	5.3	a.6	4.9
12	3.8	13	17	18	b35	31	16	*8.9	11	*3.0	a.5	5.3
13	3.8	13	16	18	b25	29	22	8.4	14	2.4	a291	4.5
14	3.8	13	45	16	21	25	20	7.3	7.8	1.8	a90	4.5
15	3.8	12	77	16	21	*24	20	7.3	6.3	1.8	44	4.5
16	4.5	11	53	15	18	33	18	6.8	4.9	1.8	23	4.5
17	3.8	11	38	14	40	29	16	6.8	4.1	1.8	*14	4.5
18	3.0	12	119	13	40	25	14	6.3	3.8	1.2	75	4.1
19	3.0	12	98	12	35	24	14	5.3	3.4	1.2	644	3.8
20	3.0	40	63	11	31	24	14	4.9	15	1.2	125	4.1
21	*3.0	a267	46	11	29	28	14	4.9	8.9	1.2	93	3.4
22	3.0	137	36	11	28	87	21	4.5	7.8	1.0	112	3.4
23	3.0	73	33	11	43	84	18	4.5	5.8	.8	60	3.0
24	4.5	65	31	11	39	55	16	5.3	12	2.2	39	31
25	5.3	63	27	9.4	31	43	19	5.3	19	1.8	25	26
26	5.3	48	24	9.4	27	47	24	4.9	10	1.2	22	14
27	5.3	42	22	8.4	26	44	24	4.5	7.3	1.2	19	8.9
28	4.9	38	22	7.3	27	36	20	4.1	5.3	1.2	15	20
29	11	70	29	6.8	-------	33	26	4.5	4.5	1.2	13	14
30	12	48	102	6.3	-------	31	28	4.9	3.8	1.2	12	12
31	9.4	-------	65	5.8	-------	27	-------	5.3	-------	1.0	12	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of reconstructed graphs and/or records for Blue Mine Brook and Ringwood Creek near Wanaque.
b Stage-discharge relation affected by ice.

West Brook near Wanaque--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	130.5	8.7	1.9	4.21	0.357	0.41
November	503.9	110	2.7	16.8	1.42	1.59
December	1,674.3	343	12.6	54.0	4.58	5.28
Calendar year 1950	8,207.5	343	1.6	22.5	1.91	25.87
January 1951	1,339.3	167	18.4	43.2	3.66	4.22
February	1,576	113	26	56.3	4.77	4.97
March	2,130	495	22	68.7	5.82	6.71
April	1,525.6	156	18.6	50.9	4.31	4.80
May	469.0	53	6.0	15.1	1.28	1.48
June	603.9	74	5.2	20.1	1.70	1.90
July	857.7	318	3.4	27.7	2.35	2.70
August	1,054.2	117	7.5	34.0	2.88	3.32
September	152.4	14.8	2.7	5.08	.431	.48
Water year 1950-51	12,016.8	495	1.9	32.9	2.79	37.86
October 1951	315.7	34	4.0	10.2	.864	.99
November	1,560	273	23	52.0	4.41	4.92
December	1,474.1	350	16.1	47.6	4.03	4.65
Calendar year 1951	13,057.9	495	2.7	35.8	3.03	41.14
January 1952	1,393.8	143	18.4	45.0	3.81	4.39
February	931.8	104	15.4	32.1	2.72	2.94
March	1,875.0	400	14.7	60.5	5.13	5.91
April	2,300.9	392	19.9	76.7	6.50	7.25
May	1,262.5	138	16.1	40.7	3.45	3.98
June	1,462.6	590	4.4	48.8	4.14	4.61
July	469.8	175	3.0	15.2	1.29	1.48
August	626.1	162	3.0	20.2	1.71	1.97
September	960.9	210	7.5	32.0	2.71	3.03
Water year 1951-52	14,633.2	590	3.0	40.0	3.39	46.12
October 1952	185.6	11	3.7	5.99	.508	.58
November	1,152.1	330	3.0	38.4	3.25	3.63
December	1,525	164	16	49.2	4.17	4.81
Calendar year 1952	14,146.1	590	3.0	38.7	3.28	44.58
January 1953	1,774	292	15	57.2	4.85	5.59
February	733	46	16	26.2	2.22	2.31
March	2,102	213	17	67.8	5.75	6.62
April	1,806	211	24	60.2	5.10	5.69
May	804.0	61	9.5	25.9	2.19	2.53
June	148.2	9.9	2.6	4.94	.419	.47
July	83.2	16	1.2	2.68	.227	.26
August	46.4	5.0	.5	1.50	.127	.15
September	23.5	1.9	.5	.78	.066	.07
Water year 1952-53	10,383.0	330	.5	28.4	2.41	32.71
October 1953	66.5	7.2	.8	2.15	.182	.21
November	165.3	12	2.1	5.51	.467	.52
December	958.2	142	3.8	30.9	2.62	3.02
Calendar year 1953	8,710.3	292	.5	23.9	2.03	27.44
January 1954	380.5	40	5.8	12.3	1.04	1.20
February	619.3	47	8.9	22.1	1.87	1.95
March	1,128	80	19	36.4	3.08	3.56
April	822	80	14	27.4	2.32	2.59
May	1,279	126	12	41.3	3.50	4.03
June	131.7	11	1.8	4.39	.372	.42
July	60.2	4.1	1.0	1.94	.164	.19
August	76.8	22	1.0	2.48	.210	.24
September	373.7	36	1.8	12.5	1.06	1.18
Water year 1953-54	6,061.2	142	.8	16.6	1.41	19.11
October 1954	156.2	12	3.0	5.04	.427	.49
November	1,284.7	267	9.7	42.8	3.63	4.05
December	1,242	119	16	40.1	3.40	3.91
Calendar year 1954	7,554.1	267	1.0	20.7	1.75	23.81
January 1955	577.4	47	5.8	18.6	1.58	1.82
February	695.5	49	5.8	24.8	2.10	2.19
March	1,279	87	24	41.3	3.50	4.03
April	578	28	14	19.3	1.64	1.82
May	284.7	23	4.1	9.18	.778	.90
June	209.5	19	3.4	6.98	.592	.66
July	71.3	6.8	.8	2.30	.195	.22
August	1,742.2	644	.5	56.2	4.76	5.49
September	254.5	31	3.0	8.48	.719	.80
Water year 1954-55	8,375.0	644	.5	22.9	1.94	26.38

Blue Mine Brook near Wanaque

Location.--Lat 41°03'04", long 74°19'10", on left bank 0.2 mile upstream from Wanaque Reservoir, 1¾ miles northwest of Wanaque, Passaic County.

Drainage area.--1.71 sq mi.

Records available.--December 1934 to September 1955.

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.--20 years (1935-55), 2.34 cfs.

Extremes.--1934-55: Maximum discharge, 458 cfs Mar. 30, 1951 (gage height, 2.15 ft), from rating curve extended above 80 cfs; no flow for many days.

Peak discharge (base, 60 cfs).--
1950-51: Nov. 25 (7:30 p.m.) 141 cfs (1.32 ft); Dec. 8 (9 a.m.) 66 cfs (0.95 ft); Mar. 30 (8:30 p.m.) 458 cfs (2.15 ft); July 27 (11 p.m.) 98 cfs (1.13 ft).
1951-52: Nov. 7 (11:30 a.m.) 111 cfs (1.19 ft); Dec. 21 (4 a.m.) 122 cfs (1.24 ft); Mar. 11 (1:30 p.m.) 254 cfs (1.71 ft); Apr. 5 (12:30 p.m.) 129 cfs (1.27 ft); June 1 (12 m.) 251 cfs (1.70 ft); Sept. 1 (2 p.m.) 146 cfs (1.34 ft).
1952-53: Nov. 22 (9 a.m.) 85 cfs (1.06 ft); Dec. 5 (5 p.m.) 71 cfs (0.98 ft); Jan. 24 (1:30 p.m.) 122 cfs (1.24 ft); Mar. 13 (9:30 a.m.) 167 cfs (1.42 ft); Apr. 7 (1 p.m.) 68 cfs (0.96 ft).
1953-54: Dec. 14 (10 a.m.) 46 cfs (0.81 ft), (maximum below base).
1954-55: Nov. 21 (1 p.m.) 81 cfs (1.04 ft); Aug. 13 (9 a.m.) 134 cfs (1.29 ft); Aug. 19 (5 a.m.) 156 cfs (1.38 ft).

Remarks.--Records given herein include flow over spillway and through ports in dam.

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

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	0.1	1.9	1.3	3.9	2.2	13.7	1.6	1.8	2.2	2.0	0.3
2	.1	.1	1.7	1.3	5.6	2.4	8.8	1.4	1.4	1.4	1.4	.4
3	.1	.1	1.7	1.5	3.1	2.2	15.9	1.2	1.2	1.1	1.2	.4
4	.1	.4	13.3	5.6	2.5	2.9	9.7	1.1	7.2	1.2	1.1	.4
5	.1	2.3	12.6	4.2	2.1	3.4	7.1	1.1	8.8	3.3	.9	.3
6	.1	.7	5.9	3.1	1.9	3.4	5.5	1.0	4.0	1.4	.7	.3
7	.1	.6	4.9	2.5	15.4	3.4	4.2	1.0	3.4	.9	.7	.4
8	.1	.5	35	2.1	10.1	3.2	3.6	.9	2.0	.8	1.1	.3
9	.3	.4	11.4	1.7	5.3	2.6	3.1	.8	1.6	.7	1.0	.3
10	.6	.4	6.7	1.7	4.0	2.2	2.8	.4	1.4	.6	4.8	.2
11	.6	.4	6.3	1.5	3.4	2.0	2.3	.5	1.2	.5	4.1	.2
12	1.4	.4	4.2	1.5	3.2	2.0	4.0	1.0	1.1	.5	6.8	.1
13	.2	.4	3.1	1.3	4.6	1.8	9.5	.8	1.1	.5	9.9	.1
14	.1	.4	2.5	1.2	4.9	7.7	5.2	.7	4.1	.4	3.9	.1
15	.1	.4	2.5	8.6	3.4	6.0	4.2	.6	3.2	.4	3.6	.7
16	.1	.4	5.2	5.5	2.6	4.0	3.3	.6	2.2	.4	5.7	.2
17	.1	.4	3.1	3.6	4.6	3.2	3.3	.5	1.6	.2	11.0	.2
18	.1	.4	2.5	2.8	5.8	2.6	2.8	.5	1.2	.2	4.8	.2
19	.1	.4	2.1	3.1	4.3	2.4	2.5	.5	1.1	.3	3.2	.2
20	.1	.6	1.7	2.8	4.9	18.3	2.1	.5	1.0	.5	2.2	.1
21	.1	2.2	1.5	2.5	9.6	8.0	1.8	.5	.9	.3	1.8	.1
22	.5	1.0	1.5	1.7	12.0	5.6	1.8	.5	.8	.3	1.4	.1
23	.5	.8	1.3	1.7	7.2	4.3	4.8	.6	1.5	1.2	1.1	.1
24	.1	.6	1.3	19.2	4.9	4.0	2.6	3.6	1.1	.4	.9	1.0
25	.1	43	1.1	8.4	4.0	3.2	2.4	1.4	.7	.3	.8	.2
26	.1	18.4	1.0	5.2	3.4	2.6	2.2	1.0	.6	.3	.7	.1
27	.1	6.3	b1.0	3.6	2.9	2.2	2.0	1.7	3.1	14.5	.6	.1
28	.1	4.2	b1.0	3.1	2.6	2.0	1.8	2.0	2.0	39	.5	.2
29	.1	2.8	2.2	2.8	-------	3.8	1.8	5.0	2.6	12.8	.4	.2
30	.1	2.3	2.1	2.1	-------	121	1.6	4.9	2.4	5.2	.4	.1
31	.1	-------	1.7	1.7	-------	45	-------	2.6	-------	2.8	.4	-------

b Stage-discharge relation affected by ice.
Note.--No gage-height record Oct. 1-9, 13-30; discharge estimated on basis of engineer's notes, precipitation records, and records for West Brook near Wanaque.

Blue Mine Brook near Wanaque--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	4.2	1.3	2.5	3.0	1.2	2.3	5.4	99	0.4	0.2	40
2	.1	2.4	1.2	2.7	3.5	1.2	2.3	4.1	22	.3	.2	9.9
3	.1	9.4	1.0	4.4	3.0	1.0	2.1	3.5	9.7	.3	.2	8.4
4	.1	4.8	1.0	3.2	9.7	1.2	1.9	3.0	6.3	.3	.2	4.6
5	.1	2.7	4.3	3.0	7.8	2.7	53	2.5	4.5	.3	.2	3.2
6	.1	2.1	4.4	2.5	*5.0	2.1	15.6	2.3	3.3	.2	.7	2.2
7	1.5	33	3.0	1.9	3.8	1.9	9.0	1.8	2.3	.2	.7	1.6
8	1.8	10.6	2.5	1.9	3.2	1.7	6.5	1.1	1.7	.2	.4	1.4
9	.5	5.0	2.1	1.7	2.7	1.5	5.0	1.2	1.5	3.1	.4	1.2
10	.3	3.5	1.7	1.9	2.3	1.7	4.1	1.2	1.3	9.3	2.5	1.1
11	1.0	2.7	1.5	1.5	2.7	84	3.5	2.1	1.0	1.7	.9	1.0
12	1.2	2.3	1.5	1.3	2.1	19.8	3.0	10.0	.8	.8	2.1	.8
13	.6	1.9	1.3	1.3	1.5	10.3	2.7	4.7	*.8	.6	2.7	.7
14	.5	3.8	1.0	2.4	1.3	7.7	10.6	3.3	.8	.5	.9	.6
15	.5	5.0	2.1	2.3	1.3	5.7	12.4	*2.7	.7	.4	.6	.9
16	.4	5.0	1.3	2.3	1.2	4.7	*9.4	2.3	.3	.3	9.4	.6
17	.4	4.1	1.0	2.1	2.3	3.8	6.1	1.9	1.7	.3	14.9	.6
18	.4	3.2	3.9	4.1	2.1	3.3	4.7	2.5	2.5	.3	4.0	.3
19	.4	2.5	3.6	2.7	*1.5	3.8	3.8	2.1	1.0	.3	2.2	2.4
20	.4	2.1	3.1	3.0	1.5	5.5	3.3	4.0	.6	.3	1.4	1.2
21	.4	1.7	56	2.3	1.5	5.7	3.0	3.5	.3	.2	1.4	.8
22	.4	1.5	13.8	7.0	1.5	6.1	2.7	2.5	.7	.3	2.6	.6
23	.4	1.5	7.3	17.6	1.5	10.7	2.5	2.1	.8	.2	1.2	.7
24	.7	1.5	5.0	6.5	1.3	9.0	2.3	1.9	.8	.1	.9	.7
25	1.4	1.3	4.1	4.4	1.3	6.5	4.9	15.1	.4	.1	.7	.4
26	.6	3.3	3.5	14.5	1.3	5.4	8.1	9.5	0	.1	.5	0
27	.4	2.1	2.5	10.5	1.3	4.1	10.8	5.4	.3	.3	.2	0
28	.6	1.7	2.3	8.6	1.2	3.3	24	3.8	.3	.6	.2	0
29	.5	1.5	2.1	5.7	1.2	2.7	10.8	5.4	.3	.9	.3	.2
30	.4	1.5	2.1	4.1	-------	2.5	7.3	4.7	.6	.3	0	.4
31	.5	-------	2.3	3.5	-------	4.0	-------	4.4	-------	.2	.3	-------

* Discharge measurement made on this day.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.5	0.4	1.4	1.4	3.4	1.8	3.1	6.0	0.8	0.1	0.1	0.1
2	.5	.3	1.4	1.4	2.6	1.6	3.1	4.3	.7	.1	.1	.1
3	.8	.3	1.4	4.0	2.4	1.4	2.6	3.7	.6	.1	.1	.1
4	.7	.3	1.2	2.6	2.2	10	2.4	3.1	.5	.1	.1	.1
5	.5	.3	24	2.0	2.0	5.6	2.6	4.6	.4	.1	.1	.1
6	1.3	.3	17	1.6	1.8	3.7	2.2	3.7	.4	.1	.1	.1
7	.4	.3	7.2	1.6	2.2	3.1	34	4.0	.4	.2	.1	.1
8	.3	.3	4.6	1.6	2.2	2.6	16	4.7	.4	.2	.1	.1
9	.3	.3	4.0	2.2	1.8	2.4	8.9	8.0	.2	.2	.4	.1
10	.3	.4	3.4	5.7	1.6	2.2	12	6.0	.1	.2	.4	.1
11	.3	.4	19	7.2	1.4	2.0	8.4	4.6	.1	.2	.2	.1
12	.3	.4	10	6.0	1.6	2.2	6.8	3.7	.1	.1	.1	.1
13	.3	.3	6.4	4.3	1.4	61	8.4	3.4	.3	.1	.1	.1
14	.3	.3	4.6	3.7	1.4	22	9.3	3.4	.5	.1	.1	.1
15	.3	.4	3.7	*3.7	3.3	13	6.4	3.1	.3	.1	.1	.1
16	.3	.9	3.1	4.3	3.4	19	10	2.6	.2	.1	.1	.1
17	.3	.5	2.6	4.6	2.6	9.8	8.0	2.6	.2	.1	.1	.1
18	.3	.4	2.4	9.1	2.0	7.2	6.8	2.6	.2	.1	.1	0
19	.3	.4	2.0	6.8	2.0	8.9	8.0	2.0	.2	.1	.1	0
20	.3	3.7	1.8	4.9	1.8	6.8	6.4	1.6	.1	.1	.1	0
21	.3	17	3.4	4.3	4.9	5.3	4.9	1.2	.1	.1	.1	0
22	.3	37	4.6	3.7	3.7	4.3	4.0	1.1	.2	.1	.1	0
23	.3	12	3.4	3.4	2.8	4.0	3.7	2.4	.4	1.5	.1	0
24	.3	5.6	2.8	42	2.6	24	3.1	1.2	.2	.4	.1	0
25	.4	3.7	2.4	25	2.2	16	2.8	1.1	.2	.2	.1	0
26	.4	3.1	2.2	11	2.2	14	4.3	1.1	.2	.2	.1	0
27	.5	2.6	2.0	7.2	2.0	8.9	5.2	1.1	.3	.1	.1	0
28	.5	2.2	1.6	7.6	1.8	6.4	3.7	1.0	.2	.1	.1	.1
29	.8	1.8	1.4	5.3	-------	5.3	3.1	.8	.2	.1	.1	0
30	.7	1.8	1.4	4.3	-------	4.3	2.6	.8	.1	.1	.1	0
31	.5	-------	1.4	3.7	-------	3.7	-------	.8	-------	.1	.1	-------

* Discharge measurement made on this day.

Blue Mine Brook near Wanaque--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.2	0.3	0.8	1.1	6.0	1.2	2.2	0.6	0	0	0.5
2	0	.1	.3	.8	1.1	9.6	1.2	2.0	.5	0	0	.3
3	0	.1	.3	.8	1.1	12	1.2	4.7	.3	0	.7	.2
4	0	.1	.3	.7	1.8	11	1.1	16	.2	0	.3	.2
5	0	.1	1.0	.7	1.4	5.6	1.1	7.2	.1	.2	.1	.1
6	0	.1	.9	.8	1.1	4.0	1.2	4.9	0	.1	.1	.1
7	0	.2	13	.7	1.0	3.4	1.6	3.4	.1	.1	.1	.1
8	0	.3	3.4	.6	.8	2.6	1.2	10	.2	.1	0	.1
9	0	.3	2.0	.5	.8	2.2	*2.7	7.6	.2	0	0	.1
10	0	.3	11	.5	.8	2.0	1.0	13	.2	0	.2	.1
11	0	.3	4.8	.5	.8	1.8	1.1	8.4	.2	0	.1	3.9
12	0	.4	3.5	.5	b.7	1.4	1.2	4.8	.2	0	.1	1.0
13	0	.4	5.5	.5	.7	1.6	1.1	3.4	.3	0	0	.4
14	0	.4	22	.5	.6	3.5	1.0	3.4	.3	0	0	.3
15	0	.4	8.8	.5	.8	2.4	1.0	2.6	.2	0	0	.3
16	0	.3	4.6	.5	1.0	2.0	1.7	2.2	.2	0	0	2.3
17	0	.3	3.1	.5	*4.6	1.8	8.8	2.0	.2	0	0	2.3
18	0	.3	2.4	b.5	3.4	1.6	7.7	1.6	.2	0	0	1.2
19	0	.3	2.0	.4	2.2	1.6	4.3	1.4	.1	0	0	4.6
20	0	.3	1.8	.4	2.0	8.2	3.1	1.2	.1	0	0	3.7
21	0	.3	1.6	2.9	2.2	4.3	2.4	4.8	.1	0	0	2.2
22	0	.2	1.4	2.1	2.8	3.1	2.4	2.6	.1	0	0	3.2
23	0	1.0	1.2	b1.4	2.2	2.6	2.4	1.8	.1	0	0	1.6
24	0	.7	1.1	1.2	2.0	2.4	2.4	1.6	.1	0	0	1.1
25	0	.7	1.0	1.2	2.2	2.6	2.0	1.4	0	0	0	.8
26	0	.9	1.0	1.4	2.7	2.6	1.8	1.2	0	.2	0	.8
27	0	.7	1.0	2.8	3.1	2.0	3.8	1.1	0	0	0	1.9
28	0	.5	1.0	2.7	2.2	1.8	3.1	1.1	0	0	0	.6
29	.5	.4	1.0	1.6	-------	1.6	2.6	1.0	0	0	0	.1
30	.5	.3	1.0	1.4	-------	1.6	2.4	1.0	0	0	0	.3
31	.2	-------	.8	1.2	-------	1.4	-------	.7	-------	0	1.5	-------

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

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.5	0.5	3.4	4.3	0.4	3.4	2.0	2.0	0.4	a0.1	a0	0.9
2	.7	2.5	2.8	4.6	.5	3.4	1.8	1.8	a.2	a.1	a0	.9
3	.5	6.1	2.6	3.7	.5	2.6	1.8	1.6	a.1	a.1	a0	.8
4	.5	3.4	2.2	3.1	a.3	6.2	1.6	1.4	.2	a.1	a0	.4
5	.5	2.3	2.0	2.6	a.2	4.3	2.9	1.4	.5	a.1	a0	.3
6	.5	1.9	1.6	2.6	1.2	5.6	1.4	1.4	a.2	a.1	a0	.6
7	.5	1.5	1.2	2.4	4.9	5.6	1.6	1.1	a.1	a.2	a0	.3
8	.4	1.3	1.2	2.0	1.6	4.0	1.4	1.1	a.1	a.2	a0	a0
9	.4	1.1	1.6	2.0	1.4	3.4	1.2	1.0	a.1	a.2	a0	a0
10	.4	.9	2.0	1.8	1.2	3.1	1.1	.3	a.1	a.2	a0	a0
11	.4	.9	1.4	1.4	3.2	2.6	1.1	a.2	.2	a.2	a0	a0
12	.4	.9	1.2	1.2	3.7	2.4	*1.4	.4	1.1	a.2	.2	a0
13	.3	.8	1.2	1.2	b2.6	2.2	1.8	.6	1.2	a.2	38	a0
14	.3	.8	a8.0	1.2	2.4	2.0	1.4	.6	.4	a.2	6.0	a0
15	.3	.8	a7.5	1.1	1.8	1.8	1.4	.6	a.2	a.2	3.0	a0
16	.5	.8	4.6	1.1	1.6	2.4	1.2	.5	a.1	a.2	1.7	a0
17	.5	.8	3.4	1.0	4.3	2.0	1.2	.5	a.1	a.2	1.4	a0
18	.3	.8	16	.8	4.0	1.8	1.1	.4	a.1	a.1	16	a0
19	.2	.8	10	.8	3.1	1.8	1.1	a.3	a.1	a.1	64	a0
20	.2	4.4	6.0	.7	2.6	1.8	1.1	a.2	1.3	a.1	9.6	a0
21	.2	40	4.6	b.6	2.4	2.2	1.1	a.2	.3	a.1	9.0	a0
22	.2	13	3.4	.6	2.2	10	1.4	a.2	.3	a.1	12	a0
23	.2	6.0	2.8	.6	3.7	8.0	1.2	a.2	a.1	a.1	5.2	a0
24	.2	5.3	2.8	.6	3.4	4.9	1.1	a.3	1.8	a.1	3.1	1.9
25	.2	4.6	2.4	.6	2.6	3.7	1.2	.4	1.6	a.1	2.5	1.0
26	.2	3.4	2.0	.6	2.2	4.0	1.6	.5	.7	a.1	1.9	.1
27	.2	2.6	2.0	.6	2.2	3.7	1.6	a.2	.3	a.1	1.5	a0
28	.2	2.2	1.8	b.5	2.2	2.8	1.4	a.2	a.2	a0	1.4	1.0
29	.9	6.6	2.2	.5	-------	2.6	2.2	a.2	a.1	a0	1.1	.4
30	.9	4.3	12	.3	-------	2.4	2.2	.3	a.1	a0	1.0	a0
31	.8	-------	6.2	a.2	-------	2.2	-------	.4	-------	a0	1.0	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for West Brook and Cupsaw Brook near Wanaque.
b Stage-discharge relation affected by ice.

Blue Mine Brook near Wanaque--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	6.5	1.4	0.1	0.21	0.123	0.14
November	91.4	43	.1	3.05	1.78	1.99
December	144.0	35	1.0	4.65	2.72	3.13
Calendar year 1950	766.6	43	0	2.10	1.23	16.65
January 1951	108.9	19.2	1.2	3.51	2.05	2.37
February	142.2	15.4	1.9	5.08	2.97	3.09
March	279.6	121	1.8	9.02	5.27	6.08
April	136.4	15.9	1.6	4.55	2.66	2.97
May	40.5	5.0	.4	1.31	.766	.88
June	66.3	8.8	.6	2.21	1.29	1.44
July	94.6	39	.2	3.05	1.78	2.06
August	79.1	11.0	.4	2.55	1.49	1.72
September	7.6	1.0	.1	.25	.146	.17
Water year 1950-51	1,197.1	121	.1	3.28	1.92	26.04
October 1951	16.8	1.8	.1	.54	.316	.37
November	127.9	33	1.3	4.26	2.49	2.78
December	143.8	56	1.0	4.64	2.71	3.13
Calendar year 1951	1,243.7	121	.1	3.41	1.99	27.06
January 1952	133.4	17.6	1.3	4.30	2.51	2.90
February	73.6	9.7	1.2	2.54	1.49	1.60
March	224.8	84	1.0	7.25	4.24	4.89
April	237.7	53	1.9	7.92	4.63	5.17
May	120.0	15.1	1.1	3.87	2.26	2.61
June	166.3	99	0	5.54	3.24	3.62
July	23.4	9.3	.1	.75	.439	.51
August	53.1	14.9	0	1.71	1.00	1.15
September	86.5	40	0	2.88	1.68	1.88
Water year 1951-52	1,407.3	99	0	3.85	2.25	30.61
October 1952	13.6	1.3	.3	.44	.257	.30
November	97.7	37	.3	3.26	1.91	2.12
December	147.8	24	1.2	4.77	2.79	3.21
Calendar year 1952	1,377.9	99	0	3.76	2.20	29.96
January 1953	196.2	42	1.4	6.33	3.70	4.27
February	65.3	4.9	1.4	2.33	1.36	1.42
March	282.5	61	1.4	9.11	5.33	6.14
April	202.8	34	2.4	6.76	3.95	4.41
May	90.3	8.0	.8	2.91	1.70	1.96
June	8.8	.8	.1	.29	.170	.19
July	5.5	1.5	.1	.18	.105	.12
August	3.8	.4	.1	.12	.070	.08
September	1.8	.1	0	.06	.035	.04
Water year 1952-53	1,116.1	61	0	3.06	1.79	24.26
October 1953	1.2	.5	0	.04	.023	.03
November	10.9	1.0	.1	.36	.211	.24
December	103.1	22	.3	3.33	1.95	2.24
Calendar year 1953	972.2	61	0	2.66	1.56	21.14
January 1954	31.6	2.9	.4	1.02	.596	.69
February	47.2	4.6	.6	1.69	.988	1.03
March	110.3	12	1.4	3.56	2.08	2.40
April	69.8	8.8	1.0	2.33	1.36	1.52
May	120.3	16	.7	3.88	2.27	2.62
June	4.8	.6	0	.16	.094	.10
July	.7	.2	0	.02	.012	.02
August	3.2	1.5	0	.10	.058	.07
September	34.4	4.6	.1	1.15	.673	.75
Water year 1953-54	537.5	22	0	1.47	.860	11.71
October 1954	12.5	.9	.2	.40	.234	.27
November	121.3	40	.5	4.04	2.36	2.64
December	122.1	16	1.2	3.94	2.30	2.66
Calendar year 1954	678.2	40	0	1.86	1.09	14.77
January 1955	45.3	4.6	.2	1.46	.854	.99
February	62.4	4.9	.2	2.23	1.30	1.36
March	108.9	10	1.8	3.51	2.05	2.37
April	44.6	2.9	1.1	1.49	.871	.97
May	20.5	2.0	.2	.66	.386	.45
June	12.3	1.8	.1	.41	.240	.27
July	3.8	.2	0	.12	.070	.08
August	179.6	64	0	5.79	3.39	3.91
September	8.6	1.9	0	.29	.170	.19
Water year 1954-55	741.9	64	0	2.03	1.19	16.16

Wanaque River at Wanaque

Location.--Lat 41°02'33", long 74°17'36", on left bank 750 ft downstream from Raymond Dam in Wanaque, Passaic County, 50 ft upstream from bridge on State Highway 511.

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 1955. December 1903 to December 1905 published in United States Geological Survey Water-Supply Papers 97, 125 and 166.

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.--36 years (1919-55), 86.8 cfs (unadjusted).

Extremes.--1912-15, 1919-55: Maximum discharge, 8,470 cfs Mar. 31, 1951 (gage height, 9.12 ft), from rating curve extended above 4,300 cfs by logarithmic plotting; minimum daily, 0.5 cfs Dec. 11, 12, 14-23, 1949.

Maximum discharge.--
1950-51: Mar. 31 (3 a.m.) 8,470 cfs (9.12 ft).
1951-52: June 1 (8 p.m.) 3,940 cfs (7.62 ft).
1952-53: Jan. 25 (3 a.m.) 1,770 cfs (6.00 ft).
1953-54: July 25 (7:30 p.m.) 38 cfs (1.59 ft).
1954-55: Aug. 19 (4 a.m.) 53 cfs (1.77 ft).

Remarks.--Flow regulated by Greenwood Lake 11 miles above station, and since 1928 by Wanaque Reservoir (see p.120). North Jersey District Water Supply Commission diverts water for municipal supply from Wanaque Reservoir and diverts water to Wanaque Reservoir from Post Brook near Wanaque and from Ramapo River at Pompton Lakes (see p.126).

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

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16.4	17.1	16.4	17.1	17.7	125	*1,960	42	22	16.8	*14.3	25
2	16.4	17.1	16.4	17.1	18.4	138	1,160	64	21	16.3	17.3	24
3	16.4	16.4	16.4	17.1	18.4	132	1,150	38	21	16.3	18.3	23
4	16.4	16.8	18.4	17.1	18.4	183	*962	*31	22	16.3	18.3	23
5	16.4	17.1	18.4	16.4	19.0	183	744	28	18.9	*16.8	18.9	22
6	16.4	16.4	17.7	15.8	19.7	171	558	26	18.3	17.8	18.9	22
7	16.4	16.4	17.7	15.8	23	168	439	28	21	16.8	20	*21
8	16.4	16.4	22	15.8	35	176	356	26	20	16.8	20	21
9	16.4	16.4	19.0	15.8	70	160	285	24	20	15.8	19.4	20
10	16.4	16.4	19.0	15.8	91	184	225	22	19.4	14.3	18.9	20
11	16.4	16.4	18.4	15.8	110	116	197	21	20	13.8	20	19.4
12	17.1	16.4	17.7	15.8	122	67	169	21	21	14.3	24	18.3
13	16.4	16.4	17.7	15.8	145	47	458	22	21	14.3	24	17.8
14	16.4	16.4	17.7	15.8	217	119	427	24	22	14.3	24	17.3
15	16.4	16.4	17.1	17.1	220	205	352	24	22	13.8	25	17.3
16	16.4	16.4	18.4	16.4	196	199	277	24	22	13.8	26	16.8
17	16.4	16.4	17.7	15.8	196	192	236	23	22	13.8	42	16.8
18	16.4	16.4	17.7	15.8	298	162	183	23	21	13.8	220	16.3
19	16.4	16.4	17.7	15.2	283	143	*156	24	20	14.3	287	16.3
20	16.4	17.1	17.7	15.2	277	366	147	24	19.4	13.3	227	16.8
21	17.1	16.4	17.7	15.2	*333	364	88	23	18.3	12.3	162	17.3
22	16.4	15.8	17.1	15.2	644	333	83	23	18.3	12.3	127	17.8
23	16.4	16.4	17.1	15.2	*520	238	153	22	18.9	12.8	85	17.8
24	16.4	*16.4	17.1	17.1	*442	229	131	24	17.8	12.3	46	17.8
25	16.4	20	17.1	16.4	301	223	107	23	18.3	11.9	42	17.8
26	*16.4	18.4	17.1	*16.4	*223	204	104	23	17.3	11.9	31	17.3
27	16.4	17.7	17.1	17.1	*177	127	67	23	17.3	15.3	27	17.8
28	16.4	17.1	17.1	17.1	140	99	56	22	17.8	15.8	27	18.3
29	16.4	17.1	17.1	17.1	-------	104	63	*23	17.3	13.8	26	17.8
30	16.4	16.4	16.4	17.1	-------	1,630	74	22	16.8	13.3	26	17.8
31	16.4	-------	17.7	17.1	-------	*5,260	-------	22	-------	12.8	25	-------

* Discharge measurement made on this day.

Wanaque River at Wanaque--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18.3	20	35	181	214	172	127	466	2,030	15.2	17.1	25
2	18.3	19.4	34	181	214	142	124	344	2,530	15.2	17.7	22
3	18.3	20	35	221	227	72	97	280	1,310	14.6	17.7	22
4	18.3	19.4	35	190	363	37	68	230	880	15.2	17.7	21
5	18.3	18.9	35	193	*509	40	1,060	178	674	15.2	17.7	21
6	18.3	18.9	36	198	398	38	1,740	147	491	15.8	18.3	21
7	20	23	37	205	320	37	1,050	191	386	15.2	17.7	22
8	19.4	20	39	107	250	36	*726	77	263	15.2	17.7	23
9	18.9	19.4	48	66	248	36	527	60	214	16.4	17.7	23
10	18.9	19.4	56	102	199	36	405	48	170	18.2	17.7	22
11	18.9	19.4	44	105	216	632	*338	49	169	19.0	17.1	22
12	18.9	19.4	44	56	221	1,990	250	188	77	19.7	18.6	22
13	18.9	19.4	45	55	149	1,190	237	*227	34	19.7	17.7	22
14	18.3	20	42	56	107	*886	408	183	29	19.7	17.7	22
15	18.3	23	53	57	67	626	506	137	27	19.7	17.1	21
16	18.3	29	46	88	55	498	506	130	25	19.7	22	20
17	18.3	29	44	60	86	358	383	67	28	19.7	21	20
18	18.3	28	44	107	183	243	317	94	28	19.0	20	20
19	18.3	*30	94	100	*83	263	253	86	24	17.7	20	21
20	18.3	32	52	142	47	287	240	105	*25	17.1	20	20
21	18.9	35	951	177	39	304	196	150	20	16.4	*20	20
22	18.9	37	1,230	116	38	314	156	145	19.7	15.8	21	20
23	18.9	37	844	428	38	430	142	65	17.7	15.8	20	20
24	19.4	38	608	*405	38	491	96	49	15.8	15.8	20	20
25	19.4	39	480	280	37	412	110	227	15.2	15.8	20	20
26	19.4	37	423	447	37	327	273	506	15.2	15.8	20	20
27	20	43	303	626	37	280	424	398	15.8	16.6	19.7	20
28	22	35	199	593	71	230	817	280	17.7	15.8	20	20
29	20	*35	175	477	181	202	840	263	17.1	*17.5	20	19.7
30	18.9	35	172	310	-------	190	656	270	15.2	16.4	20	19.7
31	*18.9	-------	181	247	-------	156	-------	253	-------	16.4	20	-------

* Discharge measurement made on this day.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	28	29	45	274	76	182	135	25	21	21	24
2	24	28	28	42	167	53	167	158	28	21	21	24
3	23	28	28	45	141	46	144	149	26	22	21	24
4	*21	28	28	47	138	59	124	127	25	22	21	21
5	21	28	30	44	75	122	147	141	25	21	21	21
6	21	28	30	43	59	104	122	149	25	22	21	21
7	21	28	30	43	63	133	449	158	25	22	21	21
8	15.2	28	29	42	102	104	822	191	25	22	21	21
9	3.8	28	29	48	107	92	618	280	25	22	21	21
10	3.8	28	29	49	149	95	541	262	25	22	21	21
11	3.4	28	31	60	48	49	526	204	25	21	19.9	19.3
12	3.4	28	31	146	46	46	429	152	25	21	21	17.9
13	3.4	28	31	82	47	393	437	119	25	21	21	17.9
14	3.4	28	34	92	45	759	544	135	24	21	21	18.6
15	4.5	28	36	*95	63	629	376	124	23	21	21	18.6
16	7.8	28	35	114	55	*829	395	109	23	21	21	*17.9
17	9.9	28	35	111	69	676	485	104	23	21	21	17.9
18	16.1	28	36	198	54	507	391	111	*23	21	22	17.9
19	19.3	28	34	283	46	492	448	77	22	21	*23	17.2
20	19.9	30	34	241	45	467	384	*58	23	21	23	17.9
21	21	30	35	220	55	361	291	42	23	21	23	17.9
22	21	33	42	198	78	302	*220	36	25	22	23	17.9
23	22	30	41	164	78	251	195	70	21	23	22	17.9
24	25	33	40	734	71	494	156	40	19.9	*21	22	18.6
25	25	34	40	1,540	77	822	117	28	19.9	19.9	23	19.3
26	25	29	41	976	59	801	135	25	21	21	23	17.9
27	27	29	63	654	59	658	220	37	21	21	23	17.2
28	28	29	63	566	80	526	173	46	21	21	23	18.6
29	28	29	45	452	-------	456	133	27	21	21	23	18.6
30	28	29	44	324	-------	414	90	26	21	22	23	17.9
31	28	-------	45	258	-------	248	-------	26	-------	23	25	-------

* Discharge measurement made on this day.

Wanaque River at Wanaque--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17.9	17.2	17.9	17.9	16.6	18.6	17.2	17.9	17.2	18.6	18.6	17.2
2	17.9	17.9	17.9	17.9	16.6	17.9	17.9	17.9	17.9	18.6	17.9	17.2
3	17.9	17.9	17.9	17.9	16.6	19.3	17.9	19.3	17.9	17.9	19.1	17.2
4	17.9	18.6	17.2	17.2	17.2	18.6	17.9	19.3	17.9	17.9	17.9	17.2
5	17.9	*17.9	17.9	17.2	17.2	18.6	17.9	16.6	17.9	17.9	17.9	17.2
6	17.9	17.9	17.9	17.2	16.6	18.6	17.9	16.0	17.2	17.2	17.9	17.2
7	17.9	18.6	19.3	17.2	16.6	18.6	17.2	16.6	18.6	17.2	17.9	16.6
8	17.9	18.6	17.9	17.2	16.6	18.6	*17.2	17.2	18.6	17.2	17.2	16.6
9	17.9	17.9	17.2	17.2	16.6	*18.6	17.9	16.6	18.6	17.2	17.9	17.2
10	17.9	17.9	18.6	17.2	16.6	17.2	17.9	17.9	*18.6	17.2	17.2	17.2
11	17.9	17.9	17.9	17.2	16.6	16.0	17.9	17.2	19.3	17.2	17.2	19.3
12	17.9	19.3	17.9	17.2	17.2	16.0	17.9	16.6	18.6	17.9	16.6	17.9
13	17.9	17.9	17.9	17.2	17.2	16.0	17.9	*16.6	18.6	18.6	17.2	17.2
14	17.9	17.2	19.9	17.2	16.6	16.6	17.2	16.6	18.6	18.6	17.2	17.2
15	17.9	17.2	17.9	17.2	16.6	16.6	17.2	16.6	17.9	17.2	17.2	*17.2
16	17.9	17.2	17.9	17.2	*16.6	16.6	17.9	16.6	17.9	17.9	17.2	17.9
17	17.9	17.2	17.9	19.3	17.2	16.6	18.6	16.6	17.9	17.9	17.2	17.9
18	17.9	16.6	17.2	17.9	17.2	16.6	17.9	16.6	17.9	17.9	17.2	17.9
19	17.9	17.2	17.2	18.6	16.6	16.6	17.9	16.6	17.9	17.9	*17.9	17.9
20	17.9	17.2	17.2	*17.2	16.6	17.2	17.9	16.6	18.6	17.9	18.6	17.2
21	17.9	17.2	17.2	17.2	16.6	16.0	17.2	17.2	18.6	17.9	17.9	17.9
22	17.9	17.2	17.2	17.2	17.2	16.6	17.2	17.2	18.6	17.9	17.9	17.2
23	17.2	17.9	17.2	17.2	17.2	16.6	17.9	17.2	17.9	*17.9	17.2	17.2
24	17.2	17.2	17.2	17.2	17.2	16.6	17.9	17.2	17.9	17.9	17.2	17.2
25	17.2	17.9	17.2	17.2	17.2	17.2	17.9	17.2	17.2	18.2	17.2	17.2
26	17.2	18.6	17.2	17.2	17.9	17.2	17.9	17.2	17.9	17.9	17.2	17.2
27	*17.2	17.9	17.9	17.2	17.9	16.6	18.6	17.2	18.6	17.9	17.2	17.2
28	17.9	17.9	*17.9	17.2	17.9	16.6	17.9	17.2	18.6	17.9	17.2	17.2
29	17.9	17.9	17.2	17.2	-------	16.6	17.9	17.2	18.6	17.9	17.2	16.6
30	17.2	17.9	17.2	17.2	-------	16.6	17.9	17.2	18.6	17.2	17.2	16.6
31	17.2	-------	17.2	17.2	-------	16.6	-------	17.2	-------	17.9	18.6	-------

* Discharge measurement made on this day.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17.2	16.6	16.6	16.6	16.0	16.6	17.9	17.2	17.2	17.2	17.9	17.9
2	17.2	17.2	16.6	16.6	16.0	16.0	18.6	17.2	17.9	17.2	17.9	17.9
3	17.2	16.6	16.6	16.6	16.0	16.0	17.9	16.6	17.9	17.2	17.9	17.9
4	16.6	16.0	16.6	16.6	16.0	16.6	17.9	16.6	17.9	17.2	17.9	17.9
5	16.0	16.0	16.6	16.6	16.0	16.6	18.6	16.6	18.6	17.9	17.9	18.6
6	16.0	16.0	16.6	16.6	17.2	16.6	18.6	16.6	18.6	18.6	17.9	18.6
7	16.6	16.0	16.6	16.6	16.6	16.6	18.6	16.6	18.6	18.6	17.9	17.9
8	16.6	*16.0	16.6	16.0	16.6	16.6	18.6	16.6	*18.6	18.6	17.2	18.6
9	16.6	16.0	16.6	16.0	*16.0	16.6	18.6	17.2	17.9	18.6	17.2	18.6
10	16.6	16.0	16.6	16.0	16.0	16.6	17.9	17.2	17.9	19.3	17.2	18.6
11	16.6	16.0	16.0	*16.0	16.6	16.6	*17.9	*16.6	17.9	*18.0	16.6	18.6
12	16.0	16.0	16.0	16.0	16.6	16.6	17.9	17.2	17.9	*17.9	17.9	17.9
13	16.0	16.0	16.0	16.0	16.6	16.6	17.9	17.2	17.2	17.2	22	18.6
14	16.0	16.0	16.6	16.0	16.0	16.6	17.9	17.2	17.2	17.2	17.9	18.6
15	16.6	16.0	16.6	16.0	16.0	*16.6	17.2	17.2	17.2	17.9	17.2	18.6
16	16.6	16.0	16.6	16.0	16.0	16.6	17.2	17.2	17.2	17.9	16.6	18.6
17	16.6	16.0	16.6	16.0	17.2	17.2	17.2	17.9	17.2	17.9	16.6	18.6
18	16.6	16.0	17.9	16.0	16.6	17.2	17.2	17.9	16.6	17.9	18.6	18.6
19	16.6	16.0	17.2	16.0	16.6	16.6	17.2	17.9	17.2	17.9	25	18.6
20	16.6	16.6	16.6	16.0	16.6	16.6	17.2	17.2	18.6	17.9	19.3	17.9
21	*16.6	22	16.6	16.6	16.6	17.2	21	17.2	17.2	17.9	19.9	17.9
22	16.0	17.9	16.6	16.6	16.6	17.9	19.9	17.2	17.2	17.9	19.3	17.9
23	16.0	16.6	16.6	16.6	16.6	17.2	17.2	17.2	17.2	17.9	18.6	17.9
24	16.0	16.6	16.6	16.6	16.6	17.2	17.2	17.2	17.9	17.9	18.6	18.6
25	16.0	16.6	16.6	16.6	16.6	17.2	17.2	17.2	17.2	17.9	17.9	17.9
26	16.0	16.6	16.6	16.6	16.6	17.9	17.2	17.2	17.2	17.9	17.9	17.9
27	16.0	16.0	16.6	16.0	16.6	17.9	17.2	17.2	17.2	17.9	17.2	17.9
28	16.6	16.0	*16.6	16.0	16.6	17.9	17.2	17.2	17.2	17.9	17.2	18.6
29	16.6	16.6	16.6	16.0	-------	17.9	17.2	17.2	17.2	17.9	17.2	18.6
30	16.6	16.6	17.2	16.0	-------	17.9	17.2	17.2	17.2	17.9	17.9	18.6
31	16.6	-------	16.6	16.0	-------	17.9	-------	17.2	-------	17.9	17.9	-------

* Discharge measurement made on this day.

Wanaque River at Wanaque--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	509.8	17.1	16.4	16.4		
November	502.9	20	15.8	16.8		
December	547.8	22	16.4	17.7		
Calendar year 1950	3,802.9	22	.7	10.4		
January 1951	503.5	17.1	15.2	16.2		
February	5,174.6	644	17.7	185		
March	12,047	5,260	47	389		
April	11,367	1,960	56	379		
May	809	64	21	26.1		
June	592.1	22	16.8	19.7		
July	448.0	17.8	11.9	14.5		
August	1,727.3	287	14.3	55.7		
September	571.6	25	16.3	19.1		
Water year 1950-51	34,800.6	5,260	11.9	95.3		
October 1951	586.5	22	18.3	18.9		
November	818.6	43	18.9	27.3		
December	6,464	1,230	34	209		
Calendar year 1951	41,109.2	5,260	11.9	113		
January 1952	6,576	626	55	212		
February	4,672	509	37	161		
March	10,955	1,990	36	353		
April	13,072	1,740	68	436		
May	5,893	506	48	190		
June	9,582.4	2,530	15.2	319		
July	525.3	19.7	14.6	16.9		
August	588.9	22	17.1	19.0		
September	631.4	25	19.7	21.0		
Water year 1951-52	60,366.1	2,530	14.6	165		
October 1952	543.9	28	3.4	17.5		
November	867	34	28	28.9		
December	1,126	63	28	36.3		
Calendar year 1952	55,033.9	2,530	3.4	150		
January 1953	7,956	1,540	42	257		
February	2,350	274	45	83.9		
March	11,064	829	46	357		
April	9,461	822	90	315		
May	3,246	280	25	108		
June	703.8	28	19.9	23.5		
July	662.9	23	19.9	21.4		
August	676.9	25	19.9	21.8		
September	581.9	24	17.2	19.4		
Water year 1952-53	39,339.4	1,540	3.4	108		
October 1953	550.0	17.9	17.2	17.7		
November	532.9	19.3	16.6	17.8		
December	549.2	19.9	17.2	17.7		
Calendar year 1953	38,434.6	1,540	16.6	105		
January 1954	539.5	19.3	17.2	17.4		
February	474.7	17.9	16.6	17.0		
March	532.6	19.3	16.0	17.2		
April	533.5	18.6	17.2	17.8		
May	531.1	19.3	16.0	17.1		
June	546.1	19.3	17.2	18.2		
July	552.4	18.6	17.2	17.8		
August	545.0	19.1	16.6	17.6		
September	519.9	19.3	16.6	17.3		
Water year 1953-54	6,406.9	19.9	16.0	17.6		
October 1954	509.8	17.2	16.0	16.4		
November	494.5	22	16.0	16.5		
December	515.3	17.9	16.0	16.6		
Calendar year 1954	6,294.4	22	16.0	17.2		
January 1955	503.8	16.6	16.0	16.3		
February	460.0	17.2	16.0	16.4		
March	526.1	17.9	16.0	17.0		
April	536.5	21	17.2	17.9		
May	531.1	17.9	16.6	17.1		
June	528.0	18.6	16.6	17.6		
July	555.0	19.3	17.2	17.9		
August	564.2	25	16.6	18.2		
September	548.9	18.6	17.9	18.3		
Water year 1954-55	6,273.2	25	16.0	17.2		

Ramapo River near Mahwah

Location (revised).--Lat 41°05'51", long 74°09'48", on left bank 350 ft downstream from State Highway 17, 0.6 mile downstream from Mahwah River, and 1.0 mile west of Mahwah, Bergen County.

Drainage area.--118 sq mi.

Records available.--February 1903 to December 1906, September 1922 to September 1955.

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.--33 years (1922-55), 217 cfs.

Extremes.--1903-6, 1922-55: Maximum discharge, 12,400 cfs Oct. 9, 1903 (gage height, 11.0 ft (revised), from graph based on gage readings, site and datum then in use), from rating curve extended above 14,000 cfs; minimum, 7 cfs Dec. 16, 1930, Sept. 12, 1932; minimum daily, 8 cfs Aug. 25, 1929, Sept. 5, 12, 1932.

Revisions.--The figures of maximum discharge for water years 1904 and 1927 have been revised to 12,400 cfs Oct. 9, 1903 (gage height, 11.0 ft, from graph based on gage readings, site and datum then in use and 3,450 cfs Sept. 2, 1927 (gage height, 8.23 ft), superseding those published in Special Report 9 and Bulletin 33, respectively.

Peak discharge (base, 1,400 cfs).--

1950-51: Nov. 26 (11:30 a.m.) 1,840 cfs (7.43 ft); Dec. 8 (8 p.m.) 2,280 cfs (7.86 ft); Mar. 31 (1 and 6 a.m.) 4,940 cfs (10.67 ft); Apr. 3 (6:30 p.m.) 1,630 cfs (7.16 ft).

1951-52: Nov. 8 (3 a.m.) 1,470 cfs (6.92 ft); Dec. 2 (8 p.m.) 2,610 cfs (8.14 ft); Mar. 12 (2 a.m.) 4,150 cfs (9.18 ft); Apr. 5 (12 p.m.) 2,550 cfs (8.09 ft); Apr. 28 (12 p.m.) 1,530 cfs (7.02 ft); June 2 (1 a.m.) 3,940 cfs (9.05 ft); Aug. 17 (6 a.m.) 1,600 cfs (7.11 ft); Sept. 2 (5 a.m.) 1,880 cfs (7.48 ft).

1952-53: Nov. 23 (2 a.m.) 2,440 cfs (8.00 ft); Dec. 12 (4 a.m.) 2,420 cfs (7.98 ft); Jan. 25 (time unknown) 2,520 cfs (8.07 ft); Mar. 13 (7 p.m.) 2,260 cfs (7.85 ft); Mar. 25 (1 a.m.) 1,720 cfs (7.28 ft).

1953-54: Dec. 15 (2 a.m.) 1,260 cfs (6.49 ft), (maximum below base).

1954-55: Nov. 21 (7 p.m.) 1,470 cfs (6.91 ft); Aug. 13 (9 to 10 p.m.) 4,740 cfs (9.53 ft); Aug. 19 (1 p.m.) 8,580 cfs (11.35 ft).

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

Revisions (water years).--Special Report 12: 1937-38, 1940. Revised figures of discharge, in cubic feet per second, for high-water periods in the water years 1924, 1927-28, 1933, and 1937, superseding those published in Special Report 9 and 12, are given herewith:

1924	
Apr. 7	3,520
8	2,030
1927	
Sept. 2	4,450
3	2,360
Nov. 4	2,920
1932	
Nov. 19	1,440
1932-Con.	
Nov. 20	3,100
1933	
Aug. 24	4,900
25	3,100
1936	
Dec. 20	2,590
21	1,980

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
April 1924	-	3,520	252	694	5.88	6.56
Water year 1923-24	-	3,520	20	247	2.09	28.54
September 1927	-	4,450	64	478	4.05	4.52
Water year 1926-27	-	4,450	22	261	2.21	29.98
November 1927	-	2,920	166	562	4.76	5.32
Water year 1927-28	-	2,920	61	339	2.87	39.10
November 1932	-	3,100	242	731	6.19	6.91
August 1933	-	4,900	12	397	3.36	3.88
Water year 1932-33	-	4,900	10	292	2.47	33.54
December 1936	13,357	2,590	56	431	3.65	4.21
Calendar year 1936	91,094	6,630	13	249	2.11	28.73
Water year 1936-37	92,088	2,590	26	252	2.14	29.06

Ramapo River near Mahwah--Continued

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	59	31	280	203	366	338	2,050	178	311	103	84	56
2	59	30	246	184	572	328	1,280	164	236	98	69	57
3	57	32	239	182	451	315	1,420	151	203	80	57	60
4	58	37	466	330	368	350	1,380	141	260	71	53	56
5	68	107	1,330	524	315	380	1,000	132	517	141	45	55
6	70	103	942	380	278	388	785	120	282	97	41	53
7	69	68	645	332	530	362	632	115	222	72	39	53
8	68	67	1,720	308	1,120	352	527	108	174	62	43	48
9	68	65	1,680	254	723	315	460	107	154	58	46	46
10	81	58	1,050	221	504	278	410	97	139	55	309	45
11	79	43	845	211	409	252	371	116	128	53	678	43
12	83	43	720	199	385	246	349	201	111	53	313	43
13	89	43	594	189	432	235	738	163	107	54	334	42
14	82	42	510	182	554	388	594	127	200	54	210	41
15	77	42	471	429	430	572	460	112	259	53	172	60
16	73	41	575	548	360	419	394	97	205	51	278	66
17	70	41	496	368	369	348	399	86	163	48	685	60
18	70	39	422	313	642	306	341	80	133	47	496	48
19	68	38	308	325	527	274	302	76	112	48	325	46
20	65	*41	227	350	557	637	276	77	94	50	240	47
21	64	93	205	330	650	591	246	78	*90	42	194	73
22	63	90	191	271	1,200	476	230	77	89	42	176	72
23	73	74	189	231	926	422	351	84	104	77	164	72
24	77	65	186	835	652	398	325	218	115	57	118	71
25	69	422	184	1,070	522	370	267	216	90	50	103	75
26	41	1,690	158	680	*471	318	255	143	76	42	96	71
27	34	895	b140	496	424	280	228	141	71	50	87	72
28	33	510	b135	414	375	260	218	214	70	196	84	*82
29	32	393	188	383	-------	276	212	320	78	316	73	71
30	32	335	267	338	-------	1,810	201	655	105	166	65	71
31	35	-------	231	280	-------	*5,340	-------	455	-------	107	60	-------

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Backwater from grass Oct. 1 to Nov. 25; discharge computed by shifting-control method based on 2 discharge measurements and recorder graph.

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	73	146	190	a320	371	169	291	648	2,020	67	36	615
2	72	*224	181	a360	415	154	293	504	3,140	63	35	1,630
3	72	429	192	a400	450	149	295	420	1,570	60	35	962
4	71	551	194	a400	713	146	242	364	985	58	34	581
5	69	368	353	351	922	223	1,160	318	1,100	56	36	394
6	69	276	655	a320	645	220	2,190	289	777	54	76	300
7	89	800	471	a280	510	196	1,300	261	584	52	115	230
8	224	1,260	368	a250	439	183	887	232	447	52	84	183
9	149	766	318	224	397	173	665	210	374	128	67	159
10	110	527	286	234	349	173	539	187	341	790	132	144
11	131	410	253	a220	344	1,590	455	214	278	475	124	128
12	209	337	234	a210	334	3,190	386	490	228	224	97	114
13	152	293	216	a200	261	1,540	354	410	197	141	196	111
14	120	329	190	a220	236	1,020	628	295	174	107	117	100
15	97	502	226	a270	207	727	*818	250	152	86	*80	101
16	65	471	201	a300	194	569	841	234	139	75	391	107
17	57	490	185	a280	261	460	610	199	146	66	1,370	90
18	54	394	220	a330	289	402	496	228	265	63	655	86
19	50	327	384	a330	240	415	420	236	164	61	339	208
20	46	282	325	306	214	504	368	255	139	58	230	261
21	44	250	2,060	a310	*210	575	318	320	121	65	181	178
22	42	230	1,940	a290	201	591	284	261	120	66	244	161
23	41	*224	1,040	a700	185	706	267	207	122	61	176	139
24	45	a230	692	632	176	781	250	180	114	*55	128	139
25	78	a240	533	433	169	682	291	481	104	51	105	126
26	87	a280	499	661	163	554	672	910	91	46	91	118
27	70	a330	425	942	163	474	766	622	85	43	84	112
28	71	a260	339	818	158	415	1,240	450	82	42	77	105
29	70	a230	311	658	164	371	1,340	418	75	42	76	100
30	63	201	a280	488	-------	337	918	439	73	39	72	96
31	57	-------	a290	402	-------	306	-------	371	-------	38	71	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for station at Pompton Lakes.

Ramapo River near Mahwah--Continued

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	93	56	188	156	450	180	443	463	128	44	26	13
2	96	55	169	151	364	168	415	464	109	42	27	13
3	122	56	168	266	332	159	373	380	96	40	22	13
4	120	43	164	293	304	436	325	341	86	39	22	14
5	105	39	398	224	267	447	334	385	80	36	21	17
6	100	38	1,140	185	240	316	294	408	74	38	20	16
7	91	38	727	166	265	267	744	410	82	41	19	16
8	89	37	504	164	302	234	1,180	532	124	41	18	16
9	86	36	415	205	248	210	798	685	103	43	24	16
10	84	36	368	317	210	196	718	580	84	38	24	15
11	84	36	1,040	433	178	176	752	470	66	37	23	15
12	82	35	2,110	415	192	180	589	390	58	36	24	17
13	81	35	1,180	337	194	1,430	637	350	68	34	25	18
14	80	34	777	297	187	1,630	860	440	76	31	25	17
15	78	38	578	a290	244	1,030	649	376	71	29	25	16
16	78	60	479	a290	418	1,360	700	332	62	27	25	17
17	72	54	407	a350	311	992	760	320	58	26	22	*16
18	47	53	356	a450	238	746	595	371	54	25	21	16
19	44	53	311	a540	216	774	670	302	*53	24	20	16
20	42	58	272	a460	207	760	589	252	50	26	19	16
21	42	625	286	a420	328	598	495	223	52	22	19	17
22	42	1,330	410	a400	402	507	430	198	82	22	19	17
23	52	1,920	339	a380	300	443	385	206	*103	60	19	17
24	56	927	302	a900	261	965	343	177	60	62	18	15
25	55	569	282	a2,200	242	1,480	316	144	53	45	17	14
26	54	415	255	a1,300	226	1,390	322	155	50	41	17	15
27	54	339	228	a900	212	1,130	472	196	49	38	*17	16
28	58	280	181	a750	194	*840	376	180	46	35	16	15
29	60	238	168	682	-------	670	309	131	46	32	15	16
30	60	214	159	519	-------	568	277	125	45	*32	14	33
31	57	-------	156	455	-------	516	-------	139	-------	29	14	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage, and records for station at Pompton Lakes.

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	47	37	53	103	b135	370	163	224	124	32	19	266
2	48	32	53	97	133	822	157	212	109	32	18	128
3	54	27	52	95	138	766	148	263	97	30	66	85
4	53	25	49	91	180	1,050	133	629	92	37	60	71
5	49	22	75	88	173	*751	123	605	86	39	40	60
6	54	*23	104	92	150	572	*121	439	79	40	34	51
7	55	39	498	91	134	442	139	360	73	37	29	42
8	52	46	484	80	123	388	133	460	66	35	26	*40
9	52	39	300	83	123	332	119	563	65	34	32	38
10	52	41	474	80	120	295	109	833	62	30	*41	37
11	54	41	495	b75	114	259	106	1,060	*61	28	35	448
12	52	39	345	b75	106	230	114	742	53	27	29	533
13	51	37	408	b80	b95	217	109	554	58	25	26	255
14	51	36	826	b80	94	308	97	445	64	*24	24	165
15	51	38	1,070	76	*95	368	94	372	60	25	26	133
16	50	34	632	76	117	277	110	322	56	24	24	210
17	50	32	428	b75	241	237	293	275	53	22	22	243
18	49	32	320	b75	352	213	635	245	48	22	20	203
19	36	45	255	72	255	201	433	215	43	24	24	281
20	30	54	219	*70	208	379	316	197	40	27	28	382
21	26	33	199	94	199	395	257	324	39	24	37	314
22	23	31	190	206	273	300	226	415	35	21	30	340
23	*21	51	187	b165	267	257	247	292	36	20	26	239
24	20	67	162	b150	245	237	368	234	36	20	24	178
25	21	65	140	136	267	237	281	194	34	20	25	152
26	18	80	133	134	310	271	236	178	34	20	23	144
27	19	74	124	201	408	236	251	160	36	20	22	157
28	36	64	116	b290	345	206	338	154	34	20	20	138
29	42	58	127	249	-------	190	305	146	35	20	21	116
30	46	53	124	194	-------	176	255	154	32	20	59	104
31	46	-------	116	160	-------	168	-------	146	-------	17	273	-------

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

Ramapo River near Mahwah--Continued

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	97	109	375	442	75	345	243	273	75	50	22	142
2	99	171	324	402	71	495	226	236	73	45	22	130
3	88	918	285	392	b70	375	222	213	66	41	21	123
4	83	743	255	338	b70	475	234	199	66	38	24	114
5	81	475	237	295	68	524	221	183	68	32	20	109
6	74	352	217	288	88	502	210	162	68	55	20	113
7	70	281	190	288	355	575	236	146	65	200	22	108
8	65	237	167	230	*261	451	213	142	61	96	25	96
9	63	*210	188	215	163	392	188	132	*56	72	22	92
10	62	190	236	203	133	382	175	120	53	63	23	91
11	58	170	219	190	198	355	163	*114	55	203	32	87
12	56	154	199	170	318	324	*163	106	72	124	111	88
13	53	140	178	160	234	295	187	100	94	77	3,000	82
14	53	132	244	153	197	265	178	91	87	65	3,100	81
15	61	123	715	151	170	247	183	87	72	57	1,190	83
16	75	113	575	145	157	283	171	80	64	50	574	82
17	80	105	400	138	267	312	157	77	56	44	354	104
18	73	110	593	129	320	263	148	75	50	39	*589	123
19	67	110	946	124	275	245	140	74	51	35	*5,970	116
20	66	244	707	117	257	236	142	70	151	32	3,080	131
21	64	1,100	515	b110	253	245	138	65	165	30	1,410	75
22	63	1,260	405	108	241	518	171	62	119	28	1,020	68
23	62	728	335	108	310	721	182	58	92	26	625	67
24	58	566	318	108	388	575	162	61	92	35	436	143
25	55	566	292	104	305	460	182	60	104	30	342	175
26	51	445	255	103	263	439	217	62	88	28	285	113
27	51	368	236	100	245	433	251	68	71	26	259	94
28	52	326	232	91	249	352	224	70	64	25	249	130
29	71	1,020	255	88	-------	318	281	66	57	22	228	127
30	101	485	596	81	-------	290	330	67	52	22	182	105
31	119	-------	620	b75	-------	263	-------	70	-------	22	154	-------

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Shifting-control method used Aug. 19 to Sept. 30.

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	1,966	89	32	63.4	0.537	0.62
November	5,578	1,690	30	186	1.58	1.76
December	15,840	1,720	135	511	4.33	4.99
Calendar year 1950	73,484	1,720	25	201	1.70	23.17
January 1951	11,360	1,070	182	366	3.10	3.58
February	15,112	1,200	278	540	4.58	4.76
March	17,624	5,340	235	569	4.82	5.55
April	16,701	2,050	201	557	4.72	5.26
May	5,049	655	76	163	1.38	1.59
June	4,898	517	70	163	1.38	1.54
July	2,493	316	42	80.4	.681	.79
August	5,737	685	39	185	1.57	1.81
September	1,755	82	41	58.5	.496	.55
Water year 1950-51	104,113	5,340	30	285	2.42	32.80
October 1951	2,647	224	41	85.4	.724	.83
November	11,657	1,260	146	389	3.30	3.67
December	14,051	2,060	181	453	3.84	4.43
Calendar year 1951	109,084	5,340	39	299	2.53	34.36
January 1952	12,139	942	200	392	3.32	3.83
February	9,380	922	158	323	2.74	2.96
March	17,995	3,190	146	580	4.92	5.67
April	19,584	2,190	242	653	5.53	6.17
May	10,903	910	180	352	2.98	3.44
June	14,207	3,140	73	474	4.02	4.48
July	3,284	790	38	106	.898	1.04
August	5,554	1,370	34	179	1.52	1.75
September	7,778	1,630	86	259	2.19	2.45
Water year 1951-52	129,179	3,190	34	353	2.99	40.72

Ramapo River near Mahwah--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1952	2,264	122	42	73.0	.619	.71
November	7,747	1,920	34	258	2.19	2.44
December	14,517	2,110	156	468	3.97	4.58
Calendar year 1952	125,352	3,190	34	342	2.90	39.52
January 1953	14,895	2,200	151	480	4.07	4.69
February	7,532	450	178	269	2.28	2.37
March	20,798	1,630	159	671	5.69	6.55
April	16,150	1,180	277	538	4.56	5.09
May	10,127	685	125	327	2.77	3.19
June	2,168	128	45	72.3	.613	.68
July	1,115	62	22	36.0	.305	.35
August	637	27	14	20.5	.114	.20
September	488	33	13	16.3	.138	.15
Water year 1952-53	98,438	2,200	13	270	2.29	31.00
October 1953	1,308	55	18	42.2	.358	.41
November	1,295	80	22	43.2	.366	.41
December	8,758	1,070	49	283	2.40	2.76
Calendar year 1953	85,271	2,200	13	234	1.98	26.85
January 1954	3,633	290	70	117	.992	1.15
February	5,400	408	94	193	1.64	1.70
March	11,150	1,050	168	360	3.05	3.51
April	6,416	635	94	214	1.81	2.02
May	11,412	1,060	146	368	3.12	3.60
June	1,740	124	32	58.0	.492	.55
July	816	40	17	26.3	.223	.26
August	1,183	273	18	38.2	.324	.37
September	5,553	533	37	185	1.57	1.75
Water year 1953-54	58,664	1,070	17	161	1.36	18.49
October 1954	2,171	119	51	70.0	.593	.68
November	11,951	1,260	105	398	3.37	3.77
December	11,309	946	167	365	3.09	3.56
Calendar year 1954	72,734	1,260	17	199	1.69	22.92
January 1955	5,646	442	75	182	1.54	1.78
February	6,001	388	68	214	1.81	1.89
March	11,955	721	236	386	3.27	3.77
April	5,938	330	138	198	1.68	1.87
May	3,389	273	58	109	.924	1.07
June	2,307	165	50	76.9	.652	.73
July	1,712	203	22	55.2	.468	.54
August	23,411	5,970	20	755	6.40	7.38
September	3,192	175	67	106	.898	1.01
Water year 1954-55	88,982	5,970	20	244	2.07	28.05

Ramapo River at Pompton Lakes

Location (revised).--Lat 40°59'33", long 74°16'44", on right end of dam at pumping station in borough of Pompton Lakes, Passaic County, 2.0 miles upstream from mouth.

Drainage area.--160 sq mi.

Records available.--October 1921 to September 1955.

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

Average discharge.--34 years, 294 cfs (adjusted for diversion since Dec. 1, 1953).

Extremes.--1922-55: Maximum discharge, 12,300 cfs Mar. 12, 1936 (gage height, 3.56 ft), from rating curve extended above 2,000 cfs by computation of peak flow over dam; maximum gage height, 3.58 ft (from graph based on hook-gage readings) Aug. 19, 1955; 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).--
1950-51: Nov. 26 (12 m.) 2,180 cfs (1.50 ft); Dec. 5 (3 p.m.) 1,740 cfs (1.31 ft); Dec. 8 (12 p.m.) 3,080 cfs (1.86 ft); Feb. 8 (5 a.m.) 1,640 cfs (1.26 ft); Mar. 31 (8 a.m.) 8520 cfs (3.55 ft).
1951-52: Nov. 7 (12 p.m.) 1,900 cfs (1.47 ft); Dec. 22 (2 a.m.) 3,000 cfs (1.93 ft); Mar. 12 (8 a.m.) 4,680 cfs (2.50 ft); Apr. 6 (6 a.m.) 3,190 cfs (2.00 ft); Apr. 29 (7 a.m.) 1,790 cfs (1.42 ft); June 2 (7 a.m.) 4,780 cfs (2.53 ft); Aug. 17 (2 p.m.) 1,730 cfs (1.39 ft); Sept. 2 (1 p.m.) 1,980 cfs (1.51 ft).
1952-53: Nov. 23 (10 a.m.) 2,510 cfs (1.74 ft); Dec. 12 (2 p.m.) 2,560 cfs (1.76 ft); Jan. 25 (12 m.) 3,190 cfs (2.00 ft); Mar. 14 (2 a.m.) 2,920 cfs (1.90 ft); Mar. 25 (9 a.m.) 1,960 cfs (1.50 ft); Apr. 8 (8 a.m.) 1,650 cfs (1.35 ft).
1953-54: Dec. 15 (7 to 9 a.m.) 1,360 cfs (1.17 ft), (maximum below base).
1954-55: Nov. 21 (8 p.m.) 2,100 cfs (1.52 ft); Aug. 14 (4 to 6 p.m.) 4,400 cfs (2.41 ft); Aug. 19 (6 p.m.) 8,570 cfs (3.58 ft).

Remarks.--Water diverted by North Jersey District Water Supply Commission to Wanaque Reservoir for municipal supply since Dec. 1, 1953. Slight regulation by Pompton Lakes (capacity, 300,000,000 gal).

Revisions.--Revised figures of discharge for the water years 1924 and 1925, superseding those published in Bulletin 33, are given herein:

Daily discharge, in cubic feet per second, 1923-25, 1950-55

1923-24

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	212	872	294	296	133	530	523	241	93	36	40
2	50	179	739	283	254	124	460	445	221	90	37	47
3	50	153	482	463	241	142	431	346	196	82	33	44
4	51	138	363	673	246	143	523	297	201	58	36	45
5	51	138	350	535	273	189	652	274	199	78	36	47
6	48	134	1,030	357	412	309	804	241	181	36	35	45
7	20	142	1,410	331	304	480	5,300	222	176	69	36	39
8	2	158	846	296	*253	339	4,290	234	152	44	36	44
9	2	149	568	263	221	267	1,950	794	180	341	12	50
10	2	134	450	250	190	386	1,310	1,230	165	218	1.4	127
11	2	115	410	460	194	432	990	921	148	141	1.4	144
12	44	118	415	1,100	183	561	743	*1,300	146	111	18	95
13	53	115	350	801	168	*416	607	*2,030	132	96	113	75
14	50	115	331	545	156	348	545	1,540	134	113	95	59
15	54	111	292	459	157	307	454	1,100	123	104	77	59
16	51	107	248	439	146	260	393	889	134	93	66	57
17	53	105	247	1,650	129	243	351	713	118	77	57	48
18	24	77	220	1,400	154	242	474	582	110	75	46	44
19	2	92	195	871	132	278	1,510	573	105	73	41	43
20	2	92	182	740	139	282	1,060	513	92	40	46	48
21	41	91	180	584	*199	315	823	492	108	73	44	46
22	55	82	194	372	187	292	730	467	108	42	44	50
23	61	94	303	392	161	301	694	389	97	38	48	50
24	679	239	443	331	129	343	577	341	105	37	45	62
25	1,520	261	360	518	137	373	487	371	97	34	44	68
26	776	214	304	649	133	392	407	329	94	36	76	54
27	382	191	271	406	125	408	360	284	79	28	102	51
28	242	173	291	327	129	449	335	309	88	33	75	47
29	302	149	347	308	128	492	308	321	74	35	69	50
30	175	306	287	299	-------	634	303	344	100	34	67	399
31	214	-------	277	303	-------	*649	-------	297	-------	37	40	-------

* Discharge measurement made on this day.

Ramapo River at Pompton Lakes--Continued

Daily discharge, in cubic feet per second, 1923-25, 1950-55

1924-25

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,750	58	92	78	82	649	540	199	218	102	400	54
2	870	52	92	79	85	1,400	453	204	193	90	258	54
3	384	58	94	96	92	894	414	165	177	87	179	57
4	215	57	67	90	94	694	387	151	177	77	146	56
5	146	57	80	87	86	559	330	149	166	72	128	56
6	185	57	182	85	84	527	305	145	142	83	132	28
7	156	54	234	93	95	541	262	139	119	78	122	41
8	143	56	207	81	95	522	236	134	110	120	112	49
9	130	49	257	83	137	482	214	128	110	189	105	53
10	111	54	243	81	398	417	214	110	121	142	186	55
11	104	55	194	74	b1,140	376	296	164	137	116	155	56
12	92	54	174	83	b2,970	428	265	a288	111	84	113	54
13	85	56	166	94	*2,250	414	239	a148	101	87	104	51
14	*82	54	177	84	b1,350	362	207	185	87	80	109	54
15	80	56	161	78	1,170	357	295	174	90	a150	82	57
16	80	49	148	87	1,370	335	314	185	108	a150	67	96
17	78	57	141	96	1,220	306	254	176	103	a150	63	116
18	69	57	155	105	879	401	213	164	98	a150	76	91
19	62	59	155	97	691	731	183	143	88	a150	68	74
20	66	54	155	94	599	901	194	131	90	a150	63	69
21	71	54	125	102	569	660	186	126	71	a150	57	53
22	67	66	87	101	548	507	161	109	57	179	62	58
23	56	191	109	99	611	437	152	97	68	289	50	54
24	60	250	125	b94	627	387	146	199	72	173	52	55
25	62	166	151	b89	600	363	145	612	73	129	51	49
26	60	129	132	98	757	313	144	533	81	121	50	55
27	55	98	123	103	832	295	161	413	78	147	47	51
28	66	94	99	76	582	725	137	331	80	127	50	58
29	56	92	92	97	-------	1,010	124	287	70	125	54	61
30	59	83	101	111	-------	821	137	297	96	112	52	61
31	57	-------	98	93	-------	694	-------	258	-------	123	52	-------

* Discharge measurement made on this day.

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	83	59	399	309	485	g442	*3,230	266	454	178	*155	100
2	83	54	341	276	755	g430	1,740	247	354	170	126	100
3	78	54	330	265	665	g407	1,740	228	293	140	106	106
4	78	62	511	403	553	g442	1,830	219	311	126	94	100
5	83	135	1,640	695	473	g489	1,290	202	811	186	88	94
6	88	149	*1,360	566	423	537	982	194	489	178	76	94
7	94	123	902	485	645	513	811	186	365	133	76	94
8	94	105	2,240	460	1,520	*478	682	178	293	113	76	88
9	94	99	2,620	374	1,010	442	616	170	256	100	76	88
10	105	99	1,560	330	740	386	550	170	238	94	99	82
11	111	83	1,180	309	607	354	501	178	219	94	803	76
12	123	73	989	309	566	333	466	293	194	94	454	76
13	123	73	819	287	593	333	826	266	186	94	616	76
14	117	73	695	276	755	472	782	219	284	88	354	76
15	117	68	635	568	635	740	602	186	376	88	266	94
16	111	68	819	787	525	576	513	170	323	88	386	100
17	105	68	725	566	525	489	501	155	266	82	785	94
18	99	73	593	473	919	418	466	140	219	76	668	88
19	94	63	512	448	803	386	407	133	194	100	454	82
20	94	69	a400	473	g697	853	365	133	170	106	354	76
21	88	123	a330	460	g740	842	333	133	155	88	293	88
22	88	142	a280	399	g1,540	668	312	133	155	82	256	94
23	99	129	a260	316	g1,200	576	454	140	155	126	228	100
24	111	111	a255	822	g920	537	454	275	178	113	202	94
25	105	445	a250	1,420	g682	501	376	344	155	94	170	*100
26	83	2,040	a210	971	g589	442	354	247	133	76	163	100
27	68	1,380	201	725	g525	397	323	219	140	102	147	106
28	63	755	210	593	g478	365	303	312	140	358	133	186
29	63	566	265	553	-------	386	293	407	133	563	126	119
30	59	460	411	499	-------	2,090	284	754	163	312	119	106
31	59	-------	362	423	-------	*7,200	-------	629	-------	202	113	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of record for station near Mahwah.
g Computed from once-daily staff-gage reading.
Note.--Head gates leaking or open Oct. 1 to Feb. 19, Mar. 30, 31.

Ramapo River at Pompton Lakes--Continued

Daily discharge, in cubic feet per second, 1923-25, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	102	228	286	459	545	256	414	851	2,070	109	58	616
2	102	370	276	496	558	256	*403	677	*4,280	96	58	1,880
3	102	611	266	637	637	246	403	570	2,250	90	58	1,270
4	96	778	276	637	836	256	359	496	1,290	90	53	778
5	96	558	432	558	1,180	337	1,410	436	1,270	84	53	545
6	96	425	792	533	899	381	2,920	403	1,030	84	101	425
7	115	1,110	650	a460	733	327	1,770	*381	763	73	159	327
8	359	1,730	521	a410	624	307	1,160	348	610	73	141	266
9	256	1,100	447	370	570	297	867	327	508	140	109	216
10	*178	748	403	381	508	286	704	307	496	788	191	197
11	168	583	359	359	496	1,370	597	317	414	716	216	187
12	286	484	337	337	496	4,060	521	677	337	359	159	150
13	246	425	317	327	403	2,160	496	624	297	216	297	132
14	187	459	a290	359	348	1,320	807	459	266	168	216	132
15	159	704	a320	436	337	946	994	392	236	124	141	141
16	116	677	a300	484	307	748	1,040	359	216	109	475	159
17	96	704	a280	459	370	624	822	317	230	109	1,590	141
18	84	570	a320	545	447	545	664	327	447	96	940	124
19	84	484	a550	545	403	570	570	359	297	90	496	214
20	78	414	a450	508	348	691	508	359	226	84	348	337
21	78	381	a1,800	533	337	733	447	472	197	84	276	266
22	73	348	2,540	459	337	733	403	414	187	90	270	216
23	73	327	1,400	1,070	317	883	381	327	187	84	297	197
24	73	337	930	962	297	1,030	359	286	187	78	216	197
25	124	348	763	677	286	899	392	645	178	73	168	187
26	132	425	624	915	276	748	763	1,230	150	73	141	168
27	116	484	597	1,270	266	650	946	867	132	84	124	159
28	109	392	a520	1,130	256	570	1,460	637	132	84	124	150
29	116	327	a460	946	246	508	1,710	570	124	96	116	141
30	102	297	414	691	-------	459	1,200	650	124	68	109	141
31	96	-------	436	583	-------	425	-------	545	-------	63	109	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for station near Mahwah.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	132	78	266	a210	558	256	583	533	216	68	40	25
2	141	78	236	a210	484	246	545	624	197	63	40	21
3	159	78	226	a350	436	236	508	521	178	63	40	25
4	159	78	226	a400	414	531	447	459	159	58	36	21
5	150	73	422	a320	370	637	436	484	141	58	36	21
6	141	68	1,380	256	348	459	414	545	124	63	36	25
7	132	68	994	236	337	381	986	533	124	73	36	28
8	124	63	677	226	392	337	1,570	733	132	63	32	28
9	124	63	558	276	348	317	1,150	930	141	63	36	28
10	116	63	484	414	297	297	962	822	150	63	36	28
11	116	58	872	597	256	266	1,030	650	141	58	36	25
12	116	58	2,390	583	266	256	822	545	124	58	36	25
13	116	58	1,560	484	276	1,580	836	496	116	53	32	28
14	109	58	962	425	266	2,400	1,100	*533	116	53	36	28
15	109	63	719	414	312	1,420	899	521	116	49	32	*28
16	109	84	610	403	521	*1,790	899	484	109	44	32	36
17	109	90	521	436	436	1,420	1,030	459	*96	44	32	36
18	96	84	459	545	348	1,030	822	484	90	40	28	28
19	84	78	414	719	307	978	883	447	84	40	*25	25
20	78	88	359	624	297	994	822	370	78	36	25	28
21	73	644	359	558	403	807	691	327	78	36	25	32
22	68	1,340	521	533	533	677	597	297	90	36	28	32
23	73	2,300	472	508	425	597	533	317	*168	118	28	28
24	78	1,280	414	1,050	359	940	472	286	109	144	28	28
25	78	763	381	2,920	337	1,880	436	246	90	73	28	28
26	78	558	348	1,830	317	1,710	425	226	78	68	25	25
27	78	447	307	1,110	297	1,460	533	276	78	63	28	25
28	84	370	246	930	276	1,110	521	276	68	58	28	28
29	84	317	a230	851	-------	883	425	246	78	49	25	28
30	78	286	a220	664	-------	748	392	216	73	49	25	28
31	78	-------	a220	570	-------	677	-------	216	-------	44	21	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for station near Mahwah.

Ramapo River at Pompton Lakes--Continued

Daily discharge, in cubic feet per second, 1923-25, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	75	75	138	138	274	96	145	189	44	23	383
2	44	64	59	131	124	756	96	145	163	44	19	207
3	49	59	69	124	117	787	82	204	145	39	84	131
4	54	49	75	103	142	1,020	82	626	138	44	96	110
5	54	44	110	96	139	802	69	654	131	54	64	89
6	54	44	124	96	116	570	75	453	117	54	49	75
7	59	54	508	89	114	418	*75	348	110	49	44	64
8	59	69	640	89	110	348	75	430	103	49	35	64
9	59	64	383	117	96	284	69	597	96	44	54	54
10	59	64	505	110	96	224	69	909	*89	44	69	54
11	59	59	597	89	b95	180	64	*1,160	89	39	54	595
12	59	59	430	103	96	138	69	834	82	39	49	725
13	59	59	479	103	101	131	75	583	89	35	44	406
14	59	54	830	110	b105	204	89	492	89	*31	39	264
15	59	54	1,250	110	110	305	103	505	89	35	39	189
16	59	54	818	103	124	*215	69	441	82	31	39	*264
17	59	54	544	103	207	171	187	394	75	31	35	359
18	59	49	383	103	*305	145	626	336	69	27	31	315
19	59	49	348	*b90	198	103	466	305	64	31	*35	383
20	54	64	295	103	131	257	305	274	59	31	44	557
21	54	59	215	117	110	359	215	371	54	31	49	453
22	49	54	198	180	180	254	*163	531	54	31	49	492
23	39	69	189	171	207	189	145	430	54	27	44	371
24	35	89	215	224	180	154	295	336	49	23	39	274
25	39	96	189	163	171	145	233	284	49	35	35	224
26	44	103	180	145	215	189	163	243	49	44	35	207
27	39	110	163	215	326	163	180	224	44	31	35	215
28	69	96	131	348	295	254	264	215	44	27	35	198
29	96	89	115	274	-------	170	254	215	44	27	31	171
30	110	82	131	215	-------	138	198	215	44	27	47	154
31	82	-------	131	224	-------	131	-------	207	-------	23	304	-------

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

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	145	145	518	611	89	248	180	406	103	69	31	189
2	131	171	441	531	89	430	154	348	96	69	27	171
3	131	813	394	518	92	336	284	315	89	59	23	163
4	124	914	348	453	110	394	305	284	89	54	27	145
5	117	597	326	335	103	505	305	274	103	49	27	138
6	110	453	295	233	116	611	284	233	96	63	23	145
7	96	359	254	233	400	640	315	215	*82	224	23	138
8	96	315	233	163	*259	441	295	207	75	154	23	124
9	96	264	243	284	110	359	264	198	75	96	23	117
10	89	243	295	192	110	359	243	180	75	82	23	110
11	89	215	295	*103	160	305	233	171	75	145	23	110
12	82	207	264	75	326	274	224	154	117	171	86	103
13	82	189	243	69	315	371	254	145	117	110	1,850	103
14	75	171	326	82	204	274	264	145	124	82	3,750	96
15	75	163	818	82	124	171	264	131	103	75	1,580	96
16	89	154	756	179	117	207	254	124	82	69	727	96
17	96	145	557	123	200	264	233	117	75	59	456	103
18	96	138	659	96	315	207	224	117	69	54	584	131
19	89	145	1,250	82	254	171	215	110	64	49	6,380	131
20	82	300	931	94	336	305	207	110	125	44	4,630	163
21	82	1,530	668	93	274	233	207	103	215	44	1,880	103
22	75	1,750	531	103	189	468	243	96	171	39	1,480	82
23	75	1,070	453	131	251	914	274	96	131	35	890	75
24	75	756	406	117	371	654	254	96	138	39	640	131
25	*69	756	383	103	274	479	264	103	171	44	479	243
26	69	611	336	103	215	430	305	96	138	39	394	154
27	69	505	*315	96	315	583	348	89	117	35	359	110
28	69	441	295	92	243	418	326	96	96	35	336	138
29	89	611	326	110	-------	284	359	96	82	31	315	154
30	117	640	720	89	-------	233	453	96	75	31	254	131
31	145	-------	818	89	-------	207	-------	103	-------	31	215	-------

* Discharge measurement made on this day.

Ramapo River at Pompton Lakes--Continued

Monthly and annual discharge, in cubic feet per second, 1923-25, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1923	5,108	1,520	2	165	1.03	1.19
November	4,384	306	77	146	.912	1.02
December	13,257	1,410	180	428	2.68	3.09
Calendar year 1923	92,434	2,230	0	253	1.58	21.50
January 1924	16,699	1,650	250	539	3.37	3.88
February	5,576	412	125	192	1.20	1.29
March	10,529	649	124	340	2.12	2.44
April	28,401	5,300	303	947	5.92	6.60
May	18,711	2,030	222	604	3.78	4.36
June	4,104	241	74	137	.856	.95
July	2,459	341	28	79.3	.496	.57
August	1,512.8	113	1.4	48.8	.305	.35
September	2,077	399	39	69.2	.432	.48
Water year 1923-24	112,817.8	5,300	1.4	308	1.92	26.22
October 1924	5,557	1,750	55	179	1.12	1.29
November	2,326	250	49	77.5	.484	.54
December	4,416	257	67	142	.888	1.03
Calendar year 1924	102,367.8	5,300	1.4	280	1.75	23.78
January 1925	2,808	111	74	90.6	.566	.65
February	20,113	2,970	82	718	4.49	4.68
March	17,508	1,400	295	565	3.53	4.07
April	7,308	540	124	244	1.52	1.70
May	6,544	612	97	211	1.32	1.52
June	3,292	218	57	110	.688	.77
July	3,982	289	72	128	.800	.93
August	3,245	400	47	105	.656	.75
September	1,776	116	28	59.2	.370	.41
Water year 1924-25	78,875	2,970	28	216	1.35	18.34
October 1950	2,860	123	59	92.3	.577	.66
November	7,801	2,040	54	260	1.62	1.81
December	22,304	2,620	201	719	4.49	5.18
Calendar year 1950	102,308	2,620	40	280	1.75	23.76
January 1951	15,840	1,420	265	511	3.19	3.68
February	20,568	1,540	423	735	4.59	4.78
March	23,524	7,200	333	759	4.74	5.47
April	22,386	3,230	284	746	4.66	5.20
May	7,526	754	133	243	1.52	1.75
June	7,802	811	133	260	1.62	1.81
July	4,444	563	76	143	.894	1.03
August	8,062	803	76	260	1.62	1.87
September	2,877	186	76	95.9	.599	.67
Water year 1950-51	145,994	7,200	54	400	2.50	33.91
October 1951	4,098	359	73	132	.825	.95
November	16,828	1,730	228	561	3.51	3.91
December	18,356	2,540	266	592	3.70	4.27
Calendar year 1951	152,311	7,200	73	417	2.61	35.39
January 1952	18,536	1,270	327	598	3.74	4.31
February	13,663	1,180	246	471	2.94	3.18
March	23,621	4,060	246	762	4.76	5.49
April	25,490	2,920	359	850	5.31	5.92
May	15,629	1,230	286	504	3.15	3.63
June	19,131	4,280	124	638	3.99	4.45
July	4,575	788	63	148	.925	1.06
August	7,909	1,590	53	255	1.59	1.84
September	10,059	1,880	124	335	2.09	2.34
Water year 1951-52	177,895	4,280	53	486	3.04	41.35
October 1952	3,270	159	68	105	.656	.76
November	9,734	2,300	58	324	2.02	2.26
December	18,053	2,390	220	582	3.64	4.20
Calendar year 1952	169,670	4,280	53	464	2.90	39.44
January 1953	19,652	2,920	210	634	3.96	4.57
February	10,216	558	256	365	2.28	2.37
March	27,320	2,400	236	881	5.51	6.35
April	21,769	1,570	392	726	4.54	5.06
May	14,102	930	216	455	2.84	3.28
June	3,542	216	68	118	.738	.82
July	1,848	144	36	59.6	.372	.43
August	971	40	21	31.3	.196	.23
September	819	36	21	27.3	.171	.19
Water year 1952-53	131,296	2,920	21	360	2.25	30.52

Ramapo River at Pompton Lakes--Continued

Monthly and annual discharge, in cubic feet per second, 1923-25, 1950-55

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Runoff in inches
October 1953	1,771	110	35	57.1	57.1	0.357	0.41
November	1,988	110	44	66.3	66.3	.414	.46
December	10,379	1,250	59	335	354	2.21	2.55
Calendar year 1953	114,377	2,920	21	313	315	1.97	26.72
January 1954	4,386	348	89	141	155	.969	1.12
February	4,348	326	95	155	251	1.57	1.63
March	9,478	1,020	103	306	460	2.88	3.31
April	4,951	626	64	165	297	1.86	2.07
May	13,106	1,160	145	423	496	3.10	3.58
June	2,553	189	44	85.1	85.1	.532	.59
July	1,121	54	23	36.2	36.2	.226	.26
August	1,649	304	19	53.2	53.2	.332	.38
September	8,047	725	54	268	268	1.68	1.87
Water year 1953-54	63,777	1,250	19	175	215	1.34	18.23
October 1954	2,924	145	69	94.3	94.3	.589	.68
November	14,771	1,750	138	492	492	3.08	3.43
December	14,697	1,250	233	474	474	2.96	3.42
Calendar year 1954	82,031	1,750	19	225	264	1.65	22.34
January 1955	5,664	611	69	183	244	1.52	1.76
February	5,961	400	89	213	299	1.87	1.95
March	11,775	914	171	380	508	3.18	3.66
April	8,034	453	154	268	282	1.76	1.96
May	5,054	406	89	163	163	1.02	1.17
June	3,168	215	64	106	106	.662	.74
July	2,180	224	31	70.3	70.3	.439	.51
August	27,558	6,380	23	889	889	5.62	6.47
September	3,893	243	75	130	130	.812	.90
Water year 1954-55	105,679	6,380	23	290	315	1.97	26.65

* Adjusted for diversion to Wanaque Reservoir after Oct. 1, 1953.

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, May 1940 to September 1955. March 1903 to December 1904 published in United States Geological Survey Water-Supply Papers 97 and 125.

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.--15 years (1940-55), 488 cfs (unadjusted).

Extremes.--1940-55: Maximum discharge, 13,100 cfs Mar. 31, 1951 (gage height, 18.75 ft, at Pequannock); minimum daily, 41 cfs Oct. 9, 13-15, 1941.

Revisions.--The maximum discharge for the water year 1945 has been revised to 690 cfs July 23, 1945 (gage height, 16.29 ft, at Pequannock), superseding figure published in Special Report 12.

Peak discharge at Pequannock (base, 2,200 ft).--

1950-51: Nov. 26 (8 a.m.) 3,080 cfs (10.00 ft); Dec. 8 (11:30 p.m.) 4,180 cfs (11.72 ft); Feb. 8 (6 a.m.) 2,380 cfs (8.55 ft); Feb. 22 (10 p.m.) 3,030 cfs (9.92 ft); Mar. 20 (7 p.m.) 2,420 cfs (8.65 ft); Mar. 31 (12:30 p.m.) 13,100 cfs (18.75 ft).

1951-52: Nov. 7 (12 p.m.) 3,250 cfs (10.31 ft); Dec. 22 (6 a.m.) 5,340 cfs (13.06 ft); Jan. 23 (7 p.m.) 2,290 cfs (8.21 ft); Jan. 27 (12 m.) 2,700 cfs (9.01 ft); Feb. 5 (10 a.m.) 2,570 cfs (8.74 ft); Mar. 12 (12 m.) 7,890 cfs (15.00 ft); Mar. 24 (5 a.m.) 2,330 cfs (8.24 ft).

1952-53: Nov. 23 (9 a.m.) 3,840 cfs (11.11 ft); Dec. 6 (8 a.m.) 2,760 cfs (9.03 ft); Dec. 12 (6 p.m.) 3,530 ft (10.53 ft); Jan. 25 (3 p.m.) 5,980 cfs (13.62 ft); Mar. 14 (5 a.m.) 4,360 cfs (12.03 ft); Mar. 25 (12 m.) 3,580 cfs (10.61 ft); Apr. 8 (9 a.m.) 3,780 cfs (11.00 ft); Apr. 14 (1 p.m.) 2,550 cfs (8.60 ft).

1953-54: Dec. 15 (5 to 8 a.m.) 1,790 cfs (7.01 ft), (maximum below base).

1954-55: Nov. 21 (12 p.m.) 3,480 cfs (9.15 ft); Aug. 14 (8 a.m.) 6,310 cfs (11.83 ft); Aug. 20 (1 a.m.) 12,900 cfs (15.69 ft).

Remarks.--Water diverted from reservoirs on Pequannock and Wanaque Rivers for municipal supply (see p.126). Flow regulated by Oak Ridge, Canistear, Clinton, and Echo Lake Reservoirs on Pequannock River and by Greenwood Lake and Wanaque Reservoir on Wanaque River (see p.120). Some diurnal fluctuation at low flow caused by powerplant on Wanaque River.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	111	86	491	398	749	855	*e8,220	406	571	246	358	150
2	111	92	426	366	1,160	855	e4,620	386	438	221	229	149
3	111	92	426	355	1,020	815	e4,090	336	364	189	187	149
4	112	99	685	524	813	938	e4,100	308	428	173	164	143
5	117	239	2,080	852	685	1,030	3,070	279	1,230	271	143	136
6	118	212	*1,640	700	597	1,030	2,290	262	789	245	130	136
7	124	164	1,130	662	1,010	996	1,850	245	562	180	129	136
8	124	136	3,320	639	2,250	963	1,550	237	418	150	136	130
9	124	130	3,400	504	1,620	866	1,350	228	327	136	136	122
10	137	130	2,210	428	1,230	805	1,160	220	289	123	164	116
11	145	116	1,640	396	1,000	675	1,020	237	270	123	1,050	116
12	158	104	1,330	385	919	597	902	396	237	116	582	116
13	166	104	1,030	364	1,000	549	2,000	336	220	116	997	116
14	158	104	889	354	1,320	954	1,870	270	387	122	523	110
15	150	98	811	839	1,170	1,530	1,440	237	527	116	387	137
16	144	98	1,110	1,180	956	1,280	1,170	212	439	116	575	144
17	130	98	914	834	965	1,060	1,120	195	337	116	930	136
18	123	104	762	662	1,630	931	963	179	280	110	969	123
19	123	97	582	621	1,470	818	847	172	245	158	913	130
20	117	102	472	662	1,430	2,000	797	172	220	149	730	123
21	117	180	420	636	1,700	2,000	625	172	203	122	540	130
22	111	179	386	549	2,950	1,600	574	172	195	116	460	136
23	122	164	367	449	2,500	1,280	951	187	212	187	376	136
24	128	150	357	1,250	1,850	1,150	905	396	237	157	308	130
25	122	921	346	1,990	1,460	1,090	724	426	204	129	253	130
26	107	3,040	315	1,400	1,250	956	658	298	172	116	237	136
27	90	1,840	283	1,030	1,120	774	561	289	187	176	212	150
28	80	1,060	262	837	965	692	482	406	195	876	195	320
29	80	811	337	786	-------	713	481	561	196	1,200	187	180
30	86	621	504	703	-------	e2,900	482	1,010	237	927	172	157
31	86	-------	451	572	-------	*e11,700	-------	825	-------	614	157	-------

* Discharge measurement made on this day.

e At Pequannock; stage-discharge relation for spillway affected by backwater.

Note.--Fragmentary or no gage-height record for main spillway Oct. 22-31, Dec. 9 to Jan. 2, July 3, 4, Aug. 10-18; discharge estimated on basis of recorded range in stage, and records for upper spillway and for Ramapo River at Pompton Lakes.

Pompton River at Pompton Plains--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	150	387	406	883	1,070	507	813	2,030	e3,220	189	122	1,640
2	150	572	395	944	1,090	461	803	1,540	e9,180	158	116	3,400
3	148	948	384	1,130	1,210	417	769	1,280	e5,970	147	116	2,460
4	147	1,200	385	1,060	1,730	364	651	1,090	*3,270	142	110	1,560
5	142	865	413	957	2,480	492	e2,020	913	2,700	142	116	1,010
6	142	638	1,190	907	1,930	537	e5,760	756	2,010	137	196	660
7	189	2,000	949	818	1,520	459	e4,180	775	1,500	129	253	473
8	536	2,730	712	617	1,260	427	*2,830	589	1,100	136	228	388
9	356	1,710	645	561	1,140	406	2,080	504	903	345	195	345
10	290	1,190	607	574	996	395	1,660	448	845	1,640	357	324
11	263	940	515	617	944	e1,710	1,400	470	699	1,160	356	293
12	396	793	480	504	1,020	e7,190	1,070	1,260	516	562	279	272
13	327	663	448	459	762	e4,980	1,000	1,230	406	345	469	241
14	254	693	405	516	605	3,290	1,790	926	364	262	336	240
15	220	1,040	492	639	527	2,270	2,150	728	326	228	237	230
16	196	985	481	735	469	1,770	2,210	667	298	204	676	251
17	173	1,040	375	666	584	1,430	1,730	539	327	212	2,300	220
18	157	818	524	860	837	1,140	1,390	577	785	187	1,490	203
19	144	671	891	837	654	1,180	1,160	600	470	172	904	346
20	136	583	709	808	537	1,430	1,020	624	345	157	584	616
21	136	515	e3,100	889	504	1,520	883	883	289	149	449	496
22	130	480	e5,000	716	492	1,500	756	765	279	172	651	377
23	130	469	3,270	2,070	459	1,880	692	539	289	156	469	288
24	143	469	2,210	1,890	427	2,240	610	417	279	143	326	279
25	247	469	1,730	1,330	406	1,970	703	1,240	262	129	269	261
26	237	609	1,600	1,830	385	1,630	1,530	2,470	236	122	236	245
27	204	701	1,300	2,640	385	1,420	1,990	1,830	209	149	219	236
28	204	525	963	2,520	385	1,210	e2,910	1,300	199	164	211	220
29	212	448	847	2,100	495	1,060	e3,510	1,140	199	196	211	212
30	187	416	808	1,490	-------	950	2,860	1,250	252	150	198	203
31	180	-------	853	1,180	-------	866	-------	1,100	-------	136	178	-------

* Discharge measurement made on this day.
e At Pequannock; stage-discharge relation for spillways affected by backwater.
Note.--No gage-height record for main spillway Oct. 3-9, June 27 to July 6, Aug. 30 to Sept. 16; discharge estimated on basis of recorded range in stage and records for the upper spillway and for Ramapo River at Pompton Lakes.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	204	207	375	337	1,230	460	1,080	941	263	130	85	53
2	212	174	346	328	1,010	417	1,010	1,110	237	123	85	53
3	237	206	346	526	861	375	928	934	212	123	92	53
4	213	308	346	666	796	979	804	826	195	116	79	53
5	204	224	846	517	654	1,200	843	861	180	110	79	52
6	204	158	2,660	428	574	881	786	986	173	133	79	53
7	195	137	1,910	376	573	756	e1,920	934	173	150	79	48
8	187	131	1,300	376	685	652	e3,660	1,340	221	123	74	48
9	187	131	967	546	625	585	2,860	1,880	212	117	74	48
10	180	131	833	826	594	550	2,380	1,640	180	110	92	48
11	172	131	1,530	1,120	428	459	2,420	1,250	157	110	79	48
12	172	131	e3,320	1,180	406	438	1,890	928	144	110	74	53
13	164	123	2,550	934	428	2,920	1,920	804	180	104	74	58
14	172	116	1,610	831	418	e4,090	2,480	886	204	98	79	53
15	164	130	1,220	801	546	e3,010	1,900	858	173	98	79	48
16	157	174	993	806	936	e3,600	1,960	773	150	92	74	58
17	157	188	863	848	773	3,110	2,350	720	144	92	74	58
18	143	150	761	1,100	610	2,240	1,900	790	137	86	74	53
19	130	136	685	1,450	562	2,130	2,130	663	136	80	74	48
20	123	176	613	1,260	539	2,130	1,850	526	130	80	74	48
21	a127	1,140	666	1,120	784	1,680	1,420	448	130	80	73	58
22	a137	e2,730	959	1,090	1,020	1,390	1,180	396	217	74	73	58
23	a148	e3,660	804	979	821	1,200	1,030	460	271	232	73	53
24	a148	1,950	685	e1,940	705	e1,760	898	418	187	225	73	53
25	150	1,130	625	e5,520	642	e3,470	765	347	150	136	68	53
26	144	802	574	e4,440	550	e3,400	765	318	137	123	63	53
27	144	633	518	2,720	505	e2,990	1,060	386	137	110	63	53
28	158	516	472	2,190	494	2,320	953	386	123	104	68	48
29	165	448	376	1,930	-------	1,900	791	328	158	98	63	48
30	174	417	346	1,480	-------	1,660	670	280	137	92	58	48
31	174	-------	337	1,260	-------	1,340	-------	271	-------	91	53	-------

e At Pequannock; stage-discharge relation for spillways affected by backwater.

Pompton River at Pompton Plains--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	63	109	149	204	212	386	173	254	253	91	53	481
2	74	96	129	195	187	963	173	254	237	85	53	280
3	74	90	135	187	187	1,040	158	316	211	85	170	196
4	85	84	143	157	221	1,410	144	986	195	91	150	164
5	85	84	195	149	208	1,080	137	954	186	98	98	150
6	85	90	212	157	180	802	150	674	172	92	86	123
7	91	130	714	143	180	610	165	515	164	91	74	110
8	85	143	812	136	172	505	173	686	156	91	69	110
9	85	130	481	172	157	428	150	911	149	85	105	104
10	91	116	703	164	150	356	144	1,300	143	85	123	97
11	91	116	780	143	150	300	136	1,580	143	79	98	733
12	98	116	572	157	150	255	150	1,160	143	74	85	974
13	92	116	646	149	143	230	150	839	143	68	74	515
14	86	115	1,170	149	187	310	157	695	143	68	69	337
15	86	115	1,610	164	164	428	187	695	143	68	69	254
16	79	122	1,060	164	173	319	144	606	130	68	74	347
17	84	115	720	157	309	263	362	537	123	68	63	449
18	84	115	526	143	428	238	871	480	116	63	58	386
19	84	115	470	157	290	174	666	416	110	63	65	481
20	78	135	407	150	213	464	482	385	104	63	85	668
21	73	135	328	180	188	528	337	537	98	63	92	548
22	73	122	309	263	281	387	272	742	97	63	85	607
23	68	164	290	237	291	301	255	583	104	58	79	458
24	68	186	309	290	263	256	407	468	104	58	74	355
25	73	186	290	229	255	247	346	385	97	69	74	299
26	84	203	271	221	300	301	271	355	97	86	74	271
27	78	186	254	300	428	264	281	317	91	69	74	280
28	135	179	220	460	376	347	375	307	85	64	68	263
29	159	163	201	373	-------	279	386	289	85	63	68	245
30	163	149	212	300	-------	221	309	289	91	58	98	221
31	121	-------	212	290	-------	213	-------	280	-------	58	441	-------

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	212	204	690	828	157	365	337	504	157	116	63	288
2	187	247	597	736	150	572	300	438	143	116	58	261
3	187	951	526	712	130	481	417	396	136	104	58	245
4	172	1,120	481	609	136	560	449	356	136	97	58	220
5	164	745	438	471	143	681	427	337	156	91	58	212
6	157	560	406	357	177	806	386	309	136	108	58	228
7	143	448	346	356	592	861	448	271	130	298	58	212
8	136	386	337	255	397	608	418	263	116	212	58	186
9	136	346	337	365	238	504	365	254	116	143	58	172
10	130	308	406	300	212	504	328	229	116	130	53	179
11	130	289	396	213	287	449	318	212	116	203	58	179
12	130	262	364	173	493	406	309	196	172	220	172	172
13	130	245	346	158	438	492	346	187	172	157	3,110	164
14	123	237	444	158	318	396	356	180	172	130	5,190	156
15	123	221	1,060	158	229	280	365	172	149	116	2,140	149
16	136	204	1,010	245	220	327	346	164	136	110	945	149
17	143	204	729	196	356	385	309	157	122	104	600	149
18	143	204	889	157	481	327	290	157	116	91	756	179
19	136	204	1,610	144	396	280	263	144	110	85	*e8,520	186
20	130	386	1,220	150	470	406	263	143	220	79	e10,800	211
21	130	2,240	901	150	396	355	263	136	270	79	e5,020	164
22	123	2,640	701	157	309	698	300	130	237	74	2,780	143
23	123	1,500	608	187	386	1,280	337	123	187	68	1,740	122
24	123	1,060	560	172	526	981	300	130	212	73	1,140	229
25	116	1,040	516	150	417	811	300	136	262	78	823	346
26	116	841	459	150	337	748	356	143	204	74	644	237
27	123	690	427	150	427	950	407	130	172	68	535	187
28	117	608	406	136	375	701	386	130	143	68	479	254
29	158	835	438	164	-------	505	438	130	130	63	425	254
30	196	876	1,010	157	-------	439	549	136	122	63	363	220
31	212	-------	1,110	150	-------	376	-------	157	-------	63	307	-------

* Discharge measurement made on this day.
e Stage-discharge relation for spillways affected by backwater; discharge computed on basis of gage heights at Pequannock.

Pompton River at Pompton Plains--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	3,732	166	80	120		
November	11,371	3,040	86	379		
December	29,378	3,400	262	948		
Calendar year 1950	137,028	3,400	74	375		
January 1951	21,927	1,990	354	707		
February	36,789	2,950	597	1,314		
March	44,402	11,700	549	1,432		
April	50,872	8,220	481	1,696		
May	10,055	1,010	172	324		
June	10,616	1,230	172	354		
July	7,796	1,200	110	251		
August	12,529	1,050	129	404		
September	4,223	320	110	141		
Water year 1950-51	243,690	11,700	80	668		
October 1951	6,526	536	130	211		
November	25,567	2,730	387	852		
December	33,087	5,000	375	1,067		
Calendar year 1951	264,389	11,700	110	724		
January 1952	33,747	2,640	459	1,089		
February	25,303	2,480	385	873		
March	47,101	7,190	364	1,519		
April	52,930	5,760	610	1,764		
May	30,480	2,470	417	983		
June	37,727	9,180	199	1,258		
July	8,320	1,640	122	268		
August	12,857	2,300	110	415		
September	17,989	3,400	203	600		
Water year 1951-52	331,634	9,180	110	906		
October 1952	5,246	237	123	169		
November	16,688	3,660	116	556		
December	30,436	3,320	337	982		
Calendar year 1952	318,824	9,180	110	871		
January 1953	39,925	5,520	328	1,288		
February	18,769	1,230	406	670		
March	54,092	4,090	375	1,745		
April	46,603	3,660	670	1,553		
May	23,688	1,880	271	764		
June	5,248	271	123	175		
July	3,550	232	74	115		
August	2,301	92	53	74.2		
September	1,559	58	48	52.0		
Water year 1952-53	248,105	5,520	48	680		
October 1953	2,775	163	63	89.5		
November	3,925	203	84	131		
December	14,530	1,610	129	469		
Calendar year 1953	216,965	5,520	48	594		
January 1954	6,340	460	136	205		
February	6,443	428	143	230		
March	13,905	1,410	174	449		
April	8,111	871	136	270		
May	18,795	1,580	254	606		
June	4,113	253	85	137		
July	2,285	98	58	73.7		
August	2,948	441	53	95.1		
September	10,506	974	97	350		
Water year 1953-54	94,676	1,610	53	259		
October 1954	4,485	212	116	145		
November	20,101	2,640	204	670		
December	19,768	1,610	337	638		
Calendar year 1954	117,800	2,640	53	323		
January 1955	8,464	828	136	273		
February	9,193	592	130	328		
March	17,534	1,280	280	566		
April	10,676	549	263	356		
May	6,550	504	123	211		
June	4,766	270	110	159		
July	3,481	298	63	112		
August	47,127	10,800	53	1,520		
September	6,053	346	122	202		
Water year 1954-55	158,198	10,800	53	433		

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.--August 1897 to September 1955.

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.--58 years, 1,216 cfs (unadjusted).

Extremes.--1898-1955: 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).--
1950-51: Nov. 26 (7 p.m.) 4,490 cfs (117.35 ft); Dec. 9 (12:30 p.m.) 6,480 cfs (117.96 ft); Feb. 23 (1 to 3 a.m.) 4,600 cfs (117.65 ft); Apr. 1 (8 p.m.) 12,400 cfs (120.17 ft).
1951-52: Nov. 7 (12:30 p.m.) 4,800 cfs (117.81 ft); Dec. 23 (1 a.m.) 6,980 cfs (118.36 ft); Jan. 28-29 (4 p.m. to 3 a.m.) 5,260 cfs (117.65 ft); Feb. 5 (2 to 7 p.m.) 4,520 cfs (117.36 ft); Mar. 13 (3 to 10 p.m.) 8,800 cfs (119.02 ft); Apr. 7 (6 a.m.) 6,940 cfs (118.31 ft); Apr. 30 (9 a.m.) 5,700 cfs (117.87 ft); June 3 (3 p.m.) 12,000 cfs (119.92 ft).
1952-53: Nov. 23 (2 to 7 p.m.) 4,990 cfs (117.95 ft); Dec. 13 (1 a.m.) 4,920 cfs (117.80 ft); Jan. 26 (3 p.m.) 7,430 cfs (118.69 ft); Mar. 17 (2 to 5 a.m.) 7,070 cfs (118.58 ft); Mar. 26 (8 p.m.) to Mar. 27 (7 a.m.) 5,790 cfs (118.11 ft); Apr. 11 (2 to 4 a.m.) 5,810 cfs (118.13 ft).
1953-54: May 11 (2 to 5 p.m.) 2,970 cfs (116.94 ft), (maximum below base).
1954-55: Nov. 22 (7 a.m.) 4,580 cfs (117.73 ft); Aug. 14 (6 to 7 p.m.) 5,470 cfs (117.98 ft); Aug. 20 (11 p.m.) to Aug. 21 (1 a.m.) 9,850 cfs (119.38 ft).

Remarks.--Records given herein include flow over dam, through powerplant, and in raceway and represent total flow just above Great Falls. Diurnal fluctuation at medium and low flow caused by hydroelectric plant at Beatties Dam. Flow regulated by reservoirs in Rockaway, Pequannock, and Wanaque River basins (see p.120). Large diversions for municipal supply from Passaic River above Beatties Dam, and from Rockaway, Pequannock, and Wanaque Rivers (see p.126). In addition the Commonwealth Water Co. diverts from Canoe Brook near Summit; that company and the city of East Orange also divert water for municipal supply by pumping from wells.

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

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	151	127	2,280	1,240	1,400	2,390	11,800	1,240	1,510	534	1,600	185
2	141	119	2,160	1,080	1,940	2,260	*11,400	1,130	1,270	589	1,400	173
3	140	116	2,040	1,040	1,920	2,110	9,860	994	952	578	1,110	198
4	139	163	2,370	1,300	1,730	2,160	8,760	867	805	492	644	194
5	137	424	3,480	1,680	1,650	2,300	*7,580	750	1,450	586	374	171
6	151	519	3,430	1,680	1,500	2,300	6,230	713	1,500	626	286	174
7	208	349	2,980	1,600	1,920	*2,260	4,970	613	1,270	512	258	226
8	175	317	5,090	1,580	3,220	2,250	4,030	581	1,070	416	291	232
9	159	283	6,390	1,400	2,660	2,140	3,430	555	817	307	307	198
10	233	240	5,840	1,190	2,320	2,010	2,920	527	643	255	365	173
11	238	227	5,210	1,010	2,230	1,840	2,540	530	558	228	1,160	145
12	279	176	4,640	931	2,160	1,660	2,230	1,020	495	221	1,280	119
13	286	175	4,010	857	2,160	1,480	2,810	1,100	440	166	1,460	138
14	271	168	3,460	748	2,350	1,720	3,090	881	764	141	1,350	156
15	264	161	3,050	1,610	2,180	2,490	2,730	684	1,290	190	1,090	169
16	218	172	3,280	2,240	1,880	2,420	2,470	567	1,460	157	1,180	230
17	184	188	3,040	2,010	1,810	2,220	2,360	453	1,280	156	1,340	198
18	179	218	2,570	1,850	2,560	2,060	2,140	417	983	152	1,630	170
19	181	178	2,260	1,810	2,660	1,900	1,940	297	733	332	1,500	159
20	175	164	1,960	1,820	2,620	2,980	1,770	335	534	393	1,260	156
21	165	352	1,640	1,770	3,170	3,330	1,520	366	402	300	912	110
22	160	410	1,250	1,590	4,450	3,020	1,320	331	358	269	713	161
23	197	348	a1,110	1,350	4,540	2,820	1,620	351	383	294	567	149
24	228	296	978	1,900	4,180	2,710	1,870	989	472	298	442	121
25	216	1,000	943	2,880	3,770	2,540	*1,740	1,400	433	204	330	162
26	203	4,130	779	2,570	3,340	2,310	1,610	1,280	357	177	327	164
27	149	3,920	596	2,160	3,020	2,030	1,520	1,130	298	243	281	146
28	134	2,810	630	2,010	2,690	1,800	1,310	1,280	323	1,180	251	415
29	155	*2,430	827	1,900	-------	1,670	1,170	1,490	323	2,300	240	267
30	150	2,320	1,210	1,750	-------	4,060	1,290	1,860	438	2,010	210	207
31	127	-------	1,360	1,450	-------	8,280	-------	1,810	-------	1,820	201	-------

* Discharge measurement made on this day.
a Interpolated.

Passaic River at Paterson--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	187	840	1,190	2,510	3,560	1,030	1,940	4,860	5,670	577	195	1,240
2	169	1,430	1,050	2,480	3,360	1,020	1,760	4,070	9,530	506	215	4,050
3	154	2,060	995	2,670	3,300	957	1,660	3,460	*11,900	425	187	4,230
4	152	2,390	953	2,640	3,810	870	1,480	2,960	10,800	498	161	3,400
5	182	2,140	1,240	2,560	4,530	1,300	2,760	2,550	8,970	359	185	2,930
6	182	1,960	*1,890	2,480	4,300	1,430	6,000	2,150	7,160	338	343	2,600
7	237	3,370	1,910	2,300	3,940	1,600	6,770	1,940	5,480	329	704	2,300
8	929	4,570	1,760	2,050	3,600	1,540	5,630	1,630	4,160	277	617	2,010
9	910	3,920	1,600	1,840	3,280	1,610	*4,380	1,360	3,330	485	608	1,750
10	739	3,470	1,500	1,700	3,000	1,260	3,650	1,190	2,820	2,130	980	1,520
11	759	3,180	1,340	1,530	2,770	2,930	3,060	1,180	2,380	2,370	1,140	1,150
12	956	2,890	1,200	1,440	2,630	6,370	2,590	2,140	1,930	1,820	1,010	758
13	932	2,580	1,080	1,240	2,250	8,620	2,220	2,440	1,620	1,600	1,170	571
14	791	2,370	987	1,350	1,900	8,290	3,020	2,170	1,310	1,480	1,030	512
15	703	2,540	1,060	1,590	1,600	6,900	3,460	1,960	1,100	1,320	643	402
16	549	2,420	1,250	1,720	1,270	5,540	3,700	1,810	856	878	789	449
17	443	2,350	943	1,730	1,430	4,410	3,440	1,630	693	524	2,300	409
18	363	2,100	1,160	1,940	1,860	3,630	3,070	1,460	994	435	2,360	376
19	315	1,880	1,660	2,080	1,860	3,330	2,750	1,400	929	339	1,630	597
20	273	1,700	1,810	2,030	1,670	3,520	2,380	1,400	700	306	1,230	1,070
21	284	1,570	4,600	2,060	1,540	3,400	2,100	1,730	591	282	989	1,120
22	220	1,540	6,710	2,080	1,430	3,260	1,800	1,700	534	329	1,090	916
23	205	1,390	6,840	3,380	1,320	3,610	1,560	1,480	506	314	1,080	684
24	214	1,310	6,050	3,530	1,200	4,050	1,370	1,290	544	297	921	577
25	393	1,260	5,310	3,080	1,080	3,940	1,360	1,880	543	230	643	539
26	548	1,340	4,870	3,730	996	3,620	2,230	3,670	513	228	457	437
27	585	1,480	4,310	4,760	932	3,330	3,200	3,490	454	223	416	377
28	544	1,450	3,580	5,230	933	3,040	4,670	3,120	399	342	344	357
29	558	1,370	3,140	5,210	959	2,760	5,420	2,980	418	344	307	346
30	486	1,290	2,830	4,540	-------	2,470	5,630	3,150	729	287	281	298
31	462	-------	2,650	3,940	-------	2,190	-------	3,000	-------	203	301	-------

* Discharge measurement made on this day.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	254	334	1,520	858	3,080	1,160	2,630	1,780	742	300	127	17
2	263	258	1,240	814	2,630	1,020	2,320	1,990	651	293	99	18
3	370	261	1,070	1,150	2,200	890	2,100	1,890	579	270	97	17
4	506	297	968	1,570	1,990	1,770	1,820	1,780	552	261	119	17
5	347	313	1,780	1,530	1,760	2,430	1,700	1,840	615	223	121	99
6	332	247	3,760	1,450	1,600	2,220	1,600	1,920	362	290	118	100
7	300	217	3,620	1,240	1,500	2,190	2,960	1,880	429	451	96	106
8	269	220	3,270	1,080	1,510	2,130	4,820	2,140	350	427	67	84
9	253	186	3,040	1,410	1,470	2,000	5,200	2,650	343	307	62	53
10	232	211	2,820	2,130	1,400	1,810	5,360	2,680	319	271	157	51
11	248	199	3,240	2,730	1,230	1,600	5,600	2,340	271	203	160	36
12	243	168	4,530	2,830	1,030	1,410	5,060	1,960	242	174	118	32
13	232	173	4,620	2,720	1,150	3,920	4,760	1,750	349	155	97	92
14	225	170	3,660	2,650	1,190	5,710	4,930	1,750	490	123	109	38
15	216	165	3,050	2,540	1,350	5,920	4,440	1,780	380	126	115	49
16	218	249	2,590	2,460	1,870	6,750	4,340	1,710	321	96	123	101
17	210	351	2,240	2,340	1,850	6,820	4,550	1,670	265	70	69	84
18	241	281	1,950	2,430	1,730	6,080	4,250	1,710	254	59	68	64
19	149	256	1,670	2,750	1,650	5,520	4,400	1,630	224	64	59	52
20	180	365	1,510	2,590	1,590	5,120	4,160	1,500	256	63	52	44
21	161	1,350	1,390	2,410	1,680	4,470	3,630	1,350	196	60	41	66
22	162	3,750	1,750	2,400	2,020	3,790	3,180	1,120	258	57	38	88
23	178	4,890	1,760	2,250	1,910	3,340	2,820	1,280	620	558	67	51
24	195	4,310	1,680	3,150	1,800	3,750	2,500	1,440	505	941	34	35
25	232	3,510	1,630	5,640	1,740	5,070	2,190	1,400	337	554	17	51
26	183	3,110	1,530	7,240	1,600	5,620	1,960	1,280	261	266	17	30
27	180	2,860	1,370	6,690	1,470	5,570	2,050	1,230	301	216	17	44
28	196	2,500	1,240	5,660	1,320	4,850	1,950	1,080	257	189	17	59
29	204	2,130	951	4,810	-------	4,100	1,690	1,030	308	110	17	35
30	202	1,820	890	4,000	-------	3,600	1,530	876	321	140	17	30
31	224	-------	832	3,450	-------	3,080	-------	770	-------	148	17	-------

Passaic River at Paterson--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	224	229	365	473	1,010	534	594	377	85	50	1,140
2	53	151	214	333	421	1,670	507	554	321	100	40	755
3	77	116	178	324	389	2,160	485	537	275	100	181	445
4	69	e110	181	302	451	2,480	409	1,480	259	100	329	297
5	66	e110	388	264	483	2,300	391	1,910	270	117	206	245
6	48	e110	499	273	479	1,920	396	1,740	216	100	90	176
7	106	245	1,210	268	437	1,740	509	1,600	149	90	80	130
8	106	349	1,560	230	347	1,540	410	1,860	170	90	50	130
9	88	279	1,240	246	313	1,310	372	2,190	160	80	178	140
10	85	188	1,440	277	313	1,110	328	2,450	160	153	306	140
11	84	202	1,660	154	334	993	334	2,910	150	60	198	1,760
12	96	167	1,460	185	286	897	362	2,650	150	40	114	2,340
13	85	152	1,440	245	270	749	331	2,220	170	45	70	1,780
14	95	185	2,210	251	329	965	324	1,850	170	40	45	1,420
15	94	141	2,800	276	293	1,310	367	1,710	170	50	35	1,070
16	101	133	2,360	306	303	1,300	384	1,430	160	60	50	930
17	87	126	1,970	300	692	1,070	799	1,160	150	40	45	1,330
18	95	161	1,770	209	1,130	917	1,770	961	140	30	40	1,240
19	92	148	1,580	237	1,090	666	1,740	815	120	30	30	1,150
20	85	116	1,260	229	948	1,180	1,620	701	110	30	80	1,410
21	63	155	883	357	809	1,520	1,480	998	100	30	109	1,310
22	71	137	682	548	872	1,450	1,250	1,550	95	25	134	1,230
23	36	238	675	626	924	1,370	934	1,540	110	20	99	1,020
24	52	294	625	649	831	1,200	954	1,420	110	20	45	727
25	78	315	585	573	799	974	844	1,190	110	20	50	610
26	101	369	517	478	806	1,040	683	868	90	25	74	554
27	111	332	469	700	1,020	1,080	601	676	80	50	30	501
28	193	290	380	1,090	1,080	1,030	714	552	70	70	50	433
29	435	268	362	1,030	-------	937	816	488	70	60	84	360
30	443	223	375	840	-------	640	714	511	80	60	96	339
31	274	-------	383	619	-------	674	-------	493	-------	50	815	-------

Note.--Indefinite data or rating for turbines and/or stage-discharge relation for flow over dam Nov. 4-6, June 8-30, July 1-4, 6-9, 11-31, Aug. 1, 2, 6-8, 13-20, 24, 27, 28, Sept. 7-10; discharge estimated on basis of records for station at Little Falls.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	376	442	1,960	2,090	246	1,210	1,260	1,290	276	196	e40	813
2	272	514	1,790	2,040	218	1,410	879	1,110	261	120	e35	600
3	313	1,290	1,600	2,040	212	1,500	1,040	955	207	137	e25	490
4	304	1,790	1,460	1,920	225	1,570	1,030	780	248	117	e20	462
5	252	1,560	1,250	1,770	262	1,790	986	818	271	99	e25	385
6	239	1,320	1,040	1,590	339	1,930	900	797	227	88	e20	394
7	199	1,070	846	1,460	1,440	2,170	931	558	210	264	e25	352
8	208	866	724	1,290	1,490	1,900	910	506	174	282	e30	289
9	216	703	747	1,160	1,480	1,800	843	473	156	253	63	260
10	203	634	968	1,040	1,480	1,750	732	414	176	173	140	245
11	187	531	1,070	773	1,670	1,680	705	392	200	180	161	248
12	192	490	1,020	649	1,830	1,580	671	358	343	270	589	241
13	181	432	911	600	1,510	1,460	793	331	398	201	3,420	219
14	142	419	1,110	543	1,560	1,340	865	275	382	169	5,320	219
15	191	369	2,090	513	1,430	1,040	958	284	230	147	4,450	199
16	178	355	2,220	566	1,250	1,020	947	251	175	131	3,050	195
17	221	337	1,940	604	1,310	1,090	834	240	142	142	2,530	271
18	182	328	2,130	423	1,450	1,020	728	243	146	e70	2,610	208
19	172	352	2,800	423	1,420	913	646	239	126	e80	6,570	249
20	174	986	2,670	368	1,430	959	664	233	328	e60	9,200	258
21	198	3,050	2,300	321	1,340	1,020	733	194	499	e65	9,070	264
22	201	4,190	2,080	370	1,170	1,500	867	165	609	e65	7,300	194
23	162	3,280	1,860	368	1,220	2,520	950	180	645	e60	5,860	179
24	154	2,780	1,670	392	1,410	2,360	832	213	512	e55	4,400	399
25	147	2,740	1,460	350	1,480	2,250	743	246	674	e60	3,680	676
26	102	2,480	1,240	337	1,390	2,220	894	232	501	e55	3,280	446
27	103	2,280	1,060	328	1,340	2,380	1,000	160	359	e50	2,890	291
28	143	2,050	963	241	1,280	2,180	1,020	203	281	e45	2,500	410
29	282	2,220	1,040	286	-------	1,890	1,060	221	225	e50	2,170	582
30	363	2,220	1,880	256	-------	1,690	1,280	265	185	e90	1,790	458
31	482	-------	2,300	231	-------	1,490	-------	305	-------	e50	1,310	-------

e Indefinite stage-discharge relation; discharge estimated on basis of records for station at Little Falls.

Passaic River at Paterson--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	5,793	286	127	187		
November	22,500	4,130	116	750		
December	80,863	6,390	596	2,608		
Calendar year 1950	322,748	6,390	68	884		
January 1951	50,006	2,880	748	1,613		
February	72,030	4,540	1,400	2,572		
March	77,520	8,280	1,480	2,501		
April	110,030	11,800	1,170	3,668		
May	26,541	1,860	297	856		
June	23,611	1,510	298	787		
July	16,126	2,300	141	520		
August	24,359	1,630	201	786		
September	5,466	415	110	182		
Water year 1950-51	514,845	11,800	110	1,411		
October 1951	14,424	956	152	465		
November	64,160	4,570	840	2,139		
December	77,468	6,840	943	2,499		
Calendar year 1951	561,741	11,800	110	1,539		
January 1952	81,420	5,230	1,240	2,626		
February	66,310	4,530	932	2,287		
March	101,827	8,620	870	3,285		
April	95,060	6,770	1,360	3,169		
May	71,250	4,860	1,180	2,298		
June	87,563	11,900	399	2,919		
July	20,075	2,370	203	648		
August	24,321	2,360	161	785		
September	37,975	4,230	298	1,266		
Water year 1951-52	741,853	11,900	152	2,027		
October 1952	7,405	506	149	239		
November	35,151	4,890	165	1,172		
December	67,171	4,620	832	2,167		
Calendar year 1952	695,528	11,900	149	1,900		
January 1953	86,972	7,240	814	2,806		
February	47,320	3,080	1,030	1,690		
March	113,710	6,820	890	3,668		
April	100,500	5,600	1,530	3,350		
May	51,206	2,680	770	1,652		
June	11,358	742	196	379		
July	7,465	941	57	241		
August	2,332	160	17	75.2		
September	1,643	106	17	54.8		
Water year 1952-53	532,233	7,240	17	1,458		
October 1953	3,503	443	34	113		
November	6,034	369	110	201		
December	31,585	2,800	178	1,019		
Calendar year 1953	463,628	7,240	17	1,270		
January 1954	12,784	1,090	154	412		
February	16,922	1,130	270	604		
March	39,202	2,480	640	1,265		
April	21,362	1,770	324	712		
May	41,608	2,910	488	1,342		
June	4,762	377	70	159		
July	1,870	153	20	60.3		
August	3,805	815	30	123		
September	25,112	2,340	130	837		
Water year 1953-54	208,547	2,910	20	571		
October 1954	6,739	482	102	217		
November	42,078	4,190	328	1,403		
December	48,199	2,800	724	1,555		
Calendar year 1954	264,441	4,190	20	724		
January 1955	25,342	2,090	231	817		
February	32,882	1,830	212	1,174		
March	50,632	2,520	913	1,633		
April	26,701	1,280	646	890		
May	12,931	1,290	160	417		
June	9,166	674	126	306		
July	3,824	282	45	123		
August	82,573	9,200	20	2,664		
September	10,496	813	179	350		
Water year 1954-55	351,563	9,200	20	963		

Saddle River at Ridgewood

Location.--Lat 40°59'05", long 74°05'30", on left bank 15 ft upstream from bridge on State Highway 17 at Ridgewood, Bergen County, and 2¾ miles upstream from Hohokus Brook.

Drainage area.--21.6 sq mi.

Records available.--October 1954 to September 1955.

Gage.--Two water-stage recorders. Datum of gage is 71.74 ft above mean sea level (New Jersey Geological Survey bench mark).

Extremes.--1954-55: Maximum discharge, 1,510 cfs Aug. 19, 1955 (gage height, 8.88 ft); minimum daily, 4.3 cfs Aug. 5-7, 1955.

Peak discharge (base, 375 cfs).--
1954-55: Aug. 13 (2 p.m.) 1,120 cfs (7.80 ft); Aug. 19 (10 a.m.) 1,510 cfs (8.88 ft); Aug. 22 (2 p.m.) 478 cfs (5.67 ft).

Remarks.--Diurnal fluctuation at low and medium flows caused by unknown source.

Daily discharge, in cubic feet per second, 1954-55

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	22	52	53	20	51	37	34	21	12	5.6	32
2	25	60	49	61	b19	50	33	34	15	11	5.3	30
3	26	131	45	54	b18	37	39	27	12	9.4	4.9	30
4	26	59	48	49	b21	67	46	25	13	8.3	4.6	27
5	24	46	48	44	22	52	39	24	16	7.4	4.3	27
6	24	36	44	49	32	67	39	21	15	14	4.3	39
7	23	31	44	48	150	63	42	19	13	50	4.3	29
8	22	29	39	39	*49	43	34	20	13	17	5.6	23
9	22	24	48	38	33	42	29	22	13	12	5.3	21
10	22	23	63	39	30	44	28	19	*12	11	5.6	23
11	22	23	49	*37	69	40	31	19	13	17	*7.5	25
12	22	23	43	32	70	38	36	18	25	12	48	23
13	21	22	41	34	b43	37	48	16	19	*9.4	544	21
14	21	21	100	32	b35	33	42	14	15	8.6	86	21
15	23	*21	114	30	31	33	45	16	13	8.2	42	21
16	38	20	66	31	28	51	36	17	12	10	25	21
17	22	21	48	29	87	44	31	16	10	9.0	22	19
18	20	21	111	b27	57	39	32	14	9.4	8.2	56	19
19	20	21	89	26	42	39	30	15	9.8	7.4	*696	27
20	*19	76	59	25	38	39	29	13	39	6.3	112	29
21	18	286	49	b24	37	43	29	12	23	6.3	86	18
22	18	99	43	24	36	*123	41	12	22	6.0	208	18
23	17	60	40	24	67	94	33	15	15	6.0	70	17
24	17	66	43	24	54	54	32	14	20	6.7	56	56
25	17	67	42	23	40	48	41	12	23	9.0	49	50
26	17	55	38	23	34	59	56	14	17	7.4	46	26
27	18	48	39	23	38	63	48	12	14	7.0	44	21
28	19	45	40	b21	40	49	37	12	12	6.0	39	43
29	35	108	52	b20	-------	44	62	16	11	6.0	36	29
30	37	64	142	b19	-------	43	49	19	11	6.0	34	23
31	27	-------	70	b19	-------	39	-------	24	-------	5.8	34	-------

b Stage-discharge relation affected by ice.

Saddle River at Ridgewood--Continued

Monthly and annual discharge, in cubic feet per second, 1954-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1954	708	38	17	22.8	1.06	1.22
November	1,628	286	20	54.3	2.51	2.80
December	1,798	142	38	58.0	2.69	3.10
Calendar year						
January 1955	1,021	61	19	32.9	1.52	1.76
February	1,240	150	18	44.3	2.05	2.13
March	1,568	123	33	50.6	2.34	2.70
April	1,154	62	28	38.5	1.78	1.99
May	565	34	12	18.2	.843	.97
June	476.2	39	9.4	15.9	.736	.82
July	320.2	50	5.6	10.3	.477	.55
August	2,389.3	696	4.3	77.1	3.57	4.11
September	808	56	17	26.9	1.25	1.39
Water year 1954-55	13,675.7	696	4.3	37.5	1.74	23.54

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 1955.

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.--32 years, 96.0 cfs.

Extremes.--1923-50: Maximum discharge, 3,500 cfs July 23, 1945 (gage height, 10.00 ft, from floodmark in recorder shelter; 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.

Revisions.--The figures of maximum and peak discharge for some water years have been revised, as shown in the following table. They supersede figures published in Special Report 9.

Water year	Date	Time	Discharge (cfs)	Gage height (feet)
1936	Mar. 12, 1936	6-7 p.m.	1,720	6.27
1938	Sept.22, 1938	11 a.m.	1,680	6.21
1940	Mar. 15, 1940	9:30 p.m.	1,380	4.98

Peak discharge (base, 600 cfs).--

1950-51: Dec. 9 (7:30 a.m.) 675 cfs (3.76 ft); Feb. 8 (7 p.m.) 660 cfs (3.73 ft); Feb. 22 (2:30 p.m.) 696 cfs (3.80 ft); Mar. 31 (10 a.m.) 2,530 cfs (7.27 ft); Apr. 4 (1 a.m.) 792 cfs (3.98 ft); Aug. 14 (12:30 a.m.) 707 cfs (3.82 ft).

1951-52: Nov. 8 (9 a.m.) 847 cfs (4.08 ft); Dec. 21 (11 p.m.) 1,090 cfs (4.52 ft); Mar. 12 (6 a.m.) 1,100 (4.53 ft); Apr. 6 (4 a.m.) 1,470 cfs (5.13 ft); Apr. 28 (11 p.m.) 639 cfs (3.69 ft); May 26 (8 a.m.) 902 cfs (4.18 ft); June 2 (4 a.m.) 1,740 cfs (5.59 ft); Sept. 2 (2 p.m.) 830 cfs (4.05 ft).

1952-53: Nov. 23 (8 a.m.) 624 cfs (3.66 ft); Dec. 6 (2 p.m.) 836 cfs (4.06 ft); Dec. 12 (11 a.m.) 680 cfs (3.77 ft); Jan. 25 (10 a.m.) 830 cfs (4.05 ft); Mar. 14 (1 a.m.) 1,860 cfs (5.80 ft); Mar. 16 (5 p.m.) 863 cfs (4.11 ft); Mar. 25 (7 a.m.) 993 cfs (4.34 ft); Apr. 8 (5 a.m.) 1,090 cfs (4.51 ft).

1953-54: Sept. 12 (3 a.m.) 1,270 cfs (4.82 ft).

1954-55: Nov. 22 (4 a.m.) 732 cfs (3.87 ft); Aug. 14 (2 a.m.) 1,660 cfs (5.44 ft); Aug. 19 (10 p.m.) 2,200 cfs (6.47 ft).

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

Revisions.--Special Report 9: Drainage area. Revised figures of discharge, in cubic feet per second, for high-water period in the water year 1938, superseding those published in Special Report 9, are given herewith:

Sept. 22, 1958..... 1,450

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
September 1938.....	5,225	1,450	33	174	3.19	3.56
Water year 1937-38.....	42,894	1,450	32	118	2.16	29.22
Calendar year 1938.....	43,203	1,450	33	118	2.16	29.43

Saddle River at Lodi--Continued

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	25	71	141	108	144	738	102	120	74	60	40
2	22	24	61	104	183	156	429	93	80	78	52	41
3	22	26	63	97	164	158	543	87	78	60	46	44
4	22	34	90	120	136	180	608	84	76	50	44	44
5	21	118	256	164	111	223	366	80	180	64	42	44
6	20	109	283	141	102	216	299	78	256	84	39	38
7	20	57	136	113	166	183	264	78	118	a60	39	49
8	21	44	202	125	440	158	237	74	80	a45	49	49
9	21	39	543	97	368	141	223	71	71	a40	48	39
10	39	36	274	82	212	123	212	68	69	a37	52	37
11	39	34	180	78	138	113	199	84	71	a34	149	36
12	39	33	161	78	131	113	186	176	66	*32	130	35
13	40	31	133	78	147	113	237	196	63	35	244	*36
14	34	30	108	76	183	131	271	104	118	35	458	34
15	30	29	100	175	173	202	206	78	170	34	149	37
16	27	29	176	291	128	173	176	71	144	32	147	50
17	27	30	256	196	129	131	173	63	91	31	196	40
18	25	29	180	118	295	115	164	54	74	30	245	35
19	25	30	118	106	303	108	150	55	66	45	115	34
20	24	32	95	113	209	328	141	60	61	93	82	32
21	25	*81	84	108	245	438	128	63	57	58	71	32
22	25	91	80	93	593	230	123	63	54	41	66	31
23	29	57	80	*80	401	173	164	64	64	72	61	33
24	40	45	85	157	241	158	223	141	76	105	54	30
25	36	100	87	323	186	156	156	206	61	52	52	31
26	30	365	72	220	170	133	131	113	50	39	53	33
27	27	316	64	133	167	120	118	87	48	52	50	33
28	27	144	66	111	150	115	106	144	57	144	46	91
29	28	97	96	113	-------	133	108	173	66	312	45	117
30	27	82	173	115	-------	726	115	279	95	218	42	53
31	27	-------	202	82	-------	2,110	-------	245	-------	90	40	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for Pascack Brook at Westwood and Whippany River at Morristown.

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	125	97	156	153	115	128	196	613	63	39	148
2	40	241	95	161	170	108	131	164	1,310	57	38	629
3	36	315	91	189	199	106	128	150	466	54	44	339
4	38	447	87	216	248	108	115	136	275	52	39	179
5	35	241	128	170	415	220	390	131	267	52	40	97
6	34	136	212	180	283	*237	1,070	133	264	49	92	78
7	46	251	176	144	196	170	406	136	189	48	128	69
8	228	691	120	113	170	147	264	118	158	46	72	64
9	279	326	108	106	158	133	216	111	158	112	66	58
10	93	186	100	115	147	120	192	102	189	297	137	55
11	102	153	91	125	150	302	180	127	153	372	131	55
12	189	133	87	106	156	858	164	412	123	104	82	53
13	154	123	85	102	123	350	161	402	111	71	161	50
14	82	*125	80	123	108	237	372	183	104	61	111	49
15	64	186	106	176	106	196	406	138	95	54	61	53
16	60	241	115	156	104	173	295	133	93	50	103	60
17	54	245	85	125	164	158	202	111	89	61	420	53
18	54	196	118	167	245	147	167	133	187	52	261	50
19	52	138	209	180	192	170	150	141	200	49	85	118
20	50	118	234	144	147	291	138	144	104	46	69	128
21	48	108	712	141	138	275	128	209	85	56	64	74
22	46	102	740	135	141	212	120	144	95	78	142	60
23	45	104	311	392	128	241	120	102	97	*52	112	58
24	44	111	206	356	123	353	113	91	93	45	64	58
25	85	113	173	180	118	267	136	238	85	38	57	53
26	85	161	183	224	115	202	283	722	74	37	50	50
27	61	206	199	433	113	170	375	336	66	44	50	48
28	61	133	150	349	108	156	548	173	63	54	49	45
29	68	106	133	315	111	144	485	138	64	66	49	46
30	58	104	138	196	-------	136	279	170	72	53	46	42
31	53	-------	158	156	-------	128	-------	199	-------	49	50	-------

* Discharge measurement made on this day.

Saddle River at Lodi--Continued

Daily discharge, in cubic feet per second, 1950-55

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	41	34	60	80	161	91	202	216	78	39	28	15.9
2	45	33	57	78	133	87	202	328	71	40	32	15.9
3	71	34	66	172	125	87	192	189	61	45	35	17.1
4	60	33	66	192	128	*248	173	161	58	34	31	17.1
5	46	33	129	113	120	379	186	212	57	35	32	19.7
6	42	33	602	93	113	164	170	a220	55	52	31	27
7	40	32	340	87	128	125	459	a220	59	79	27	20
8	42	31	144	87	150	113	885	a250	112	46	26	25
9	41	31	113	168	123	106	415	a230	61	42	29	17.1
10	40	34	104	303	108	106	315	a170	54	35	42	17.1
11	39	34	210	366	104	95	401	a140	49	33	29	14.7
12	38	34	538	299	111	108	311	131	48	32	27	15.9
13	38	32	279	196	123	826	361	128	74	30	28	26
14	37	32	156	153	115	1,190	a450	156	106	28	31	22
15	36	35	128	147	174	466	a300	147	68	27	39	21
16	37	78	111	138	283	722	a380	147	*54	27	27	31
17	36	58	108	131	173	504	a420	141	50	25	27	22
18	35	45	108	172	120	328	a300	176	49	27	23	18.4
19	35	40	100	212	108	332	a400	131	46	27	22	17.8
20	35	50	95	150	108	388	a350	a110	44	30	21	19.0
21	34	190	122	136	167	287	a270	a100	48	40	19.7	22
22	34	370	209	167	226	234	a220	a90	107	27	21	21
23	34	518	161	156	131	216	a200	a120	165	132	22	19.0
24	33	219	123	276	113	312	a190	a90	76	323	20	18.4
25	33	104	111	675	108	792	a180	a80	53	94	18.4	18.4
26	33	85	102	361	102	548	a190	a85	48	49	17.3	19.0
27	36	78	93	192	104	410	199	a110	50	42	18.1	19.0
28	33	71	78	199	97	319	167	a100	46	36	18.4	19.7
29	34	63	74	223	-------	275	153	a80	64	35	19.0	20
30	35	61	74	173	-------	245	144	76	48	38	17.1	15.3
31	35	-------	76	156	-------	223	-------	85	-------	34	15.9	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for Pascack Brook at Westwood.

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	39	35	48	43	76	61	73	60	29	19	500
2	16	33	35	46	46	*177	61	73	54	30	17	144
3	15	30	33	46	*47	155	60	102	50	30	64	63
4	15	28	31	45	66	237	54	224	50	31	81	50
5	19	28	90	43	58	144	54	234	51	37	37	45
6	19	27	75	43	56	96	57	115	48	33	33	40
7	28	86	177	45	48	85	71	90	47	30	28	47
8	21	92	139	40	46	81	66	178	41	30	23	57
9	19	58	75	40	47	75	60	332	40	31	67	50
10	19	46	155	41	46	74	56	293	39	26	117	39
11	19	41	142	31	47	73	53	341	41	23	50	533
12	18	36	86	46	41	67	66	208	41	23	35	907
13	18	35	115	40	35	69	58	139	50	23	30	258
14	17	33	225	37	39	111	54	117	50	22	28	115
15	17	35	341	41	39	124	53	109	43	28	27	96
16	17	33	154	43	41	86	64	100	41	23	30	146
17	18	31	94	41	105	73	143	92	41	20	26	230
18	17	29	77	34	127	67	269	88	36	20	23	146
19	18	29	67	39	75	64	163	86	36	20	24	174
20	17	29	64	39	64	142	96	83	36	22	33	237
21	16	28	61	60	67	139	81	141	33	21	32	157
22	17	29	63	74	88	88	73	168	30	17	32	134
23	17	58	64	51	75	74	83	109	48	16	28	115
24	18	56	58	51	61	69	146	86	65	15	23	90
25	22	50	57	46	69	74	100	81	36	17	22	79
26	30	60	54	54	71	96	85	77	33	43	27	77
27	22	46	51	83	83	77	100	69	31	39	23	90
28	73	37	50	96	71	66	122	67	29	24	22	75
29	102	35	57	64	-------	64	102	67	30	21	22	67
30	102	35	54	56	-------	61	83	83	29	20	42	66
31	54	-------	51	47	-------	60	-------	67	-------	19	288	-------

* Discharge measurement made on this day.

Saddle River at Lodi--Continued

Daily discharge, in cubic feet per second, 1950-55

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	69	63	141	174	57	113	96	109	77	39	22	81
2	66	91	117	146	56	136	92	92	54	37	22	77
3	64	224	106	154	45	109	96	81	46	34	19	74
4	71	237	100	134	54	139	111	74	45	32	19	71
5	64	129	100	115	54	171	102	77	61	30	19	69
6	58	100	96	113	72	165	98	73	50	29	19	98
7	57	83	90	117	281	198	109	60	45	91	22	83
8	53	73	83	100	279	136	96	60	42	71	22	64
9	53	67	90	96	115	111	88	63	41	42	22	58
10	54	63	129	92	92	111	81	57	40	35	19	57
11	54	60	115	92	123	109	*81	56	41	46	23	57
12	53	60	98	85	224	109	86	53	93	37	177	61
13	51	58	90	85	141	102	113	50	145	31	726	56
14	50	58	129	79	100	96	109	48	66	29	1,090	50
15	53	57	285	81	94	98	109	47	50	29	302	50
16	66	*54	254	81	86	115	102	47	43	29	130	51
17	57	56	149	77	177	131	88	47	40	33	96	48
18	50	56	169	73	195	104	83	43	35	29	133	47
19	47	58	281	73	134	102	81	41	34	27	1,130	47
20	46	124	211	69	109	100	79	39	85	24	1,120	77
21	45	451	136	63	100	102	83	36	81	22	335	61
22	43	605	111	69	98	203	94	37	113	22	295	46
23	42	273	102	69	129	336	100	41	64	22	326	47
24	42	180	102	67	177	208	83	50	70	27	174	111
25	41	195	102	66	124	134	90	48	102	29	134	168
26	40	171	96	64	104	144	129	47	67	28	115	96
27	42	129	92	64	102	174	141	36	53	25	106	66
28	45	117	92	57	104	141	115	35	43	24	98	99
29	73	192	109	58	-------	117	129	40	39	23	92	100
30	104	224	241	54	-------	106	149	79	36	22	86	71
31	79	-------	297	53	-------	100	-------	74	-------	22	85	-------

* Discharge measurement made on this day.

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	862	40	20	27.8	0.509	0.59
November	2,197	365	24	73.2	1.34	1.50
December	4,575	543	61	148	2.71	3.12
Calendar year 1950	25,907	543	20	71.0	1.30	17.68
January 1951	4,028	323	76	130	2.38	2.74
February	5,979	593	102	214	3.92	4.07
March	7,701	2,110	108	248	4.54	5.25
April	7,194	738	106	240	4.40	4.90
May	3,334	279	54	108	1.98	2.27
June	2,680	256	48	89.3	1.64	1.83
July	2,176	312	30	70.2	1.29	1.48
August	2,966	458	39	95.7	1.75	2.02
September	1,278	117	30	42.6	.780	.87
Water year 1950-51	44,970	2,110	20	123	2.25	30.64
October 1951	2,390	279	34	77.1	1.41	1.63
November	5,865	691	102	196	3.59	3.99
December	5,527	740	80	178	3.26	3.76
Calendar year 1951	51,118	2,110	30	140	2.56	34.81
January 1952	5,831	433	102	188	3.44	3.97
February	4,729	415	104	163	2.99	3.22
March	6,630	858	106	214	3.92	4.52
April	7,862	1,070	113	262	4.80	5.36
May	5,823	722	91	188	3.44	3.97
June	5,942	1,310	63	198	3.63	4.05
July	2,322	372	37	74.9	1.37	1.58
August	2,912	420	38	93.9	1.72	1.98
September	2,919	629	42	97.3	1.78	1.99
Water year 1951-52	58,752	1,310	34	161	2.95	40.02

Saddle River at Lodi--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1952	1,208	71	33	39.0	.714	.82
November	2,525	518	31	84.2	1.54	1.72
December	4,737	602	57	153	2.80	3.23
Calendar year 1952	53,440	1,310	31	146	2.67	36.41
January 1953	6,051	675	78	195	3.57	4.12
February	3,756	283	97	134	2.45	2.56
March	10,326	1,190	87	333	6.10	7.03
April	8,785	885	144	293	5.37	5.98
May	4,619	328	76	149	2.73	3.15
June	1,959	165	44	65.3	1.20	1.33
July	1,583	323	25	51.1	.936	1.08
August	793.9	42	15.9	25.6	.469	.54
September	591.5	31	14.7	19.7	.361	.40
Water year 1952-53	46,934.4	1,190	14.7	129	2.36	31.96
October 1953	835	102	15	26.9	.493	.57
November	1,232	92	27	41.1	.753	.84
December	2,830	341	31	91.3	1.67	1.93
Calendar year 1953	43,361.4	1,190	14.7	119	2.18	29.53
January 1954	1,510	96	31	48.7	.892	1.03
February	1,701	127	35	60.8	1.11	1.16
March	2,944	237	60	95.0	1.74	2.01
April	2,594	269	53	86.5	1.58	1.77
May	4,092	341	67	132	2.42	2.79
June	1,259	65	29	42.0	.769	.86
July	783	43	15	25.3	.463	.53
August	1,353	288	17	43.6	.799	.92
September	4,827	907	39	161	2.95	3.29
Water year 1953-54	25,960	907	15	71.1	1.30	17.70
October 1954	1,732	104	40	55.9	1.02	1.18
November	4,308	605	54	144	2.64	2.93
December	4,313	297	83	139	2.55	2.94
Calendar year 1954	31,416	907	15	86.1	1.58	21.41
January 1955	2,720	174	53	87.7	1.61	1.85
February	3,426	281	45	122	2.23	2.33
March	4,220	336	96	136	2.49	2.87
April	3,013	149	79	100	1.83	2.05
May	1,740	109	35	56.1	1.03	1.19
June	1,801	145	34	60.0	1.10	1.23
July	1,020	91	22	32.9	.603	.69
August	6,978	1,130	19	225	4.12	4.75
September	2,141	168	46	71.4	1.31	1.46
Water year 1954-55	37,412	1,130	19	102	1.87	25.47

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 1955.

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

Average discharge.--14 years (1937-43, 1947-55), 5.31 cfs.

Extremes.--1937-55: Maximum discharge, 450 cfs Mar. 13, 1953 (gage height, 3.35 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).--
1950-51: Feb. 7 (5:30 p.m.) 151 cfs (2.37 ft); Mar. 20 (4 a.m.) 170 cfs (2.45 ft); Mar. 30 (9 p.m.) 332 cfs (3.04 ft).
1951-52: Oct. 7 (9 p.m.) 200 cfs (2.57 ft); Nov. 7 (11 a.m.) 287 cfs (2.89 ft); Dec. 21 (2 a.m.) 326 cfs (3.02 ft); Mar. 11 (12 m.) 207 cfs (2.60 ft); Apr. 5 (7:30 a.m.) 140 cfs (2.32 ft); Apr. 14 (2:30 a.m.) 182 cfs (2.50 ft); May 25 (12 m.) 187 cfs (2.52 ft); June 1 (11:30 a.m.) 223 cfs (2.66 ft); July 10 (3:30 a.m.) 145 cfs (2.34 ft); Sept. 1 (11 a.m.) 217 cfs (2.64 ft).
1952-53: Nov. 22 (5 a.m.) 184 cfs (2.51 ft); Dec. 5 (5 p.m.) 239 cfs (2.72 ft); Dec. 11 (11 a.m.) 158 cfs (2.40 ft); Jan. 24 (1 p.m.) 261 cfs (2.80 ft); Mar. 4 (6 a.m.) 163 cfs (2.42 ft); Mar. 13 (10 a.m.) 450 cfs (3.35 ft); Mar. 15 (11 p.m.) 165 cfs (2.40 ft); Mar. 24 (12 m.) 258 cfs (2.76 ft); Apr. 7 (11 a.m.) 243 cfs (2.71 ft); Apr. 16 (11 a.m.) 170 cfs (2.42 ft); July 6 (6 p.m.) 178 cfs (2.45 ft); July 23 (1 p.m.) 185 cfs (2.48 ft).
1953-54: Dec. 14 (8:30 a.m.) 180 cfs (2.46 ft); May 8 (6 p.m.) 153 cfs (2.31 ft); May 10 (4:30 a.m.) 170 cfs (2.40 ft); Sept. 11 (8 a.m.) 426 cfs (3.33 ft).
1954-55: Feb. 7 (time and discharge unknown); Aug. 13 (10 a.m.) 317 cfs (2.99 ft); Aug. 19 (3:30 a.m.) 212 cfs (2.62 ft).

Remarks.--Occasional regulation by mill above station.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.6	0.69	1.9	5.4	8.0	8.1	24	3.9	4.2	4.0	2.5	0.98
2	1.0	.55	2.5	4.3	11.8	7.6	19.8	3.7	3.9	2.8	2.2	1.1
3	.71	.52	2.7	5.0	5.2	6.5	46	2.9	3.7	2.2	2.0	1.1
4	.65	10.0	31	6.8	4.9	17.4	21	2.7	7.1	2.5	1.7	.98
5	.43	19.2	8.6	4.0	5.2	10.0	17.8	2.7	5.2	10	1.5	.85
6	.60	2.2	4.2	3.9	4.2	7.9	13.8	2.9	3.2	3.0	1.8	1.3
7	.60	1.1	3.9	7.4	40	7.7	12.3	2.9	2.7	1.9	2.5	2.0
8	1.3	1.2	48	4.7	9.8	7.1	10.7	2.9	2.7	2.1	5.0	.85
9	.89	1.2	10.3	2.5	5.7	6.5	9.5	2.3	2.7	1.8	2.5	.85
10	9.7	1.3	9.5	2.6	5.2	5.4	8.4	2.5	2.7	1.8	10	.85
11	1.0	1.4	11.5	2.4	5.8	5.2	7.1	14.0	2.7	2.0	2.5	.85
12	4.6	1.9	6.5	2.4	5.6	5.0	11.0	7.2	2.7	4.5	4.0	.98
13	1.2	1.4	5.3	2.7	5.8	4.2	10.5	3.7	3.8	1.7	2.8	.85
14	1.3	.64	4.4	7.8	5.5	13.0	6.8	3.2	19.5	1.7	2.3	1.1
15	1.8	.58	4.9	25	4.1	5.5	6.5	2.9	10.7	1.4	*8.0	2.0
16	1.2	.68	23	5.2	4.0	4.4	7.2	2.7	5.2	1.9	4.3	1.2
17	.42	.55	7.9	4.0	29	4.4	5.6	2.7	3.9	1.6	2.3	1.0
18	.53	.66	5.5	3.8	15.2	4.8	4.7	2.5	3.4	1.4	2.1	1.0
19	.52	1.4	4.2	3.9	8.5	4.6	4.7	2.5	3.2	17.0	1.9	.9
20	.65	3.2	3.8	4.2	9.0	52	*4.2	2.9	2.9	3.2	1.7	.9
21	1.1	4.1	3.4	4.4	50	8.9	3.9	2.9	2.7	2.0	1.7	.8
22	1.7	1.4	3.1	3.1	28	7.7	4.2	2.5	2.8	1.5	1.5	.8
23	3.6	1.7	3.8	2.2	*11.7	7.3	13.9	5.8	4.4	3.0	1.3	.9
24	.79	.64	4.4	29	10.4	8.4	4.7	27	2.7	2.1	1.1	.6
25	.65	47	4.1	6.6	10.5	6.9	3.9	5.0	2.5	2.0	1.5	1.5
26	.44	9.5	2.9	5.6	9.6	5.2	3.7	3.2	2.3	2.0	1.6	.85
27	.54	4.2	2.2	5.3	7.9	4.5	3.4	8.1	2.5	3.0	1.1	8.0
28	1.0	3.9	2.1	5.3	6.8	4.3	3.9	4.9	2.3	40	.98	3.0
29	2.0	2.9	15.3	6.9	-------	9.8	16.6	17.4	9.2	5.0	1.1	1.1
30	1.4	2.3	7.6	4.0	-------	139	5.8	11.6	3.2	3.0	1.0	.98
31	.56	-------	9.6	3.2	-------	40	-------	5.0	-------	2.6	1.3	-------

* Discharge measurement made on this day.

Note.--Waste gate open July 2-12, no gage-height record July 20 to Aug. 15, Sept. 14-24; discharge estimated on basis of recorded range in stage when available, precipitation record, and records for Second River at Belleville and Elizabeth River at Elizabeth.

Weasel Brook at Clifton--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.98	28	3.4	7.4	9.9	3.9	5.6	9.9	116	2.9	1.8	66
2	.85	8.5	3.2	9.2	10.3	4.8	5.6	9.1	22	2.5	4.0	8.5
3	.98	41	3.2	15.4	9.2	4.4	5.0	8.4	14.2	2.3	2.1	9.9
4	.98	7.9	3.2	7.1	34	11.3	4.7	7.7	24	1.9	2.1	4.2
5	.74	5.0	12.6	12.3	13.5	15.2	49	7.7	16.3	1.9	2.1	3.7
6	.60	3.9	5.3	8.0	10.3	6.2	11.6	8.1	11.2	1.9	15.8	3.4
7	28	70	3.9	6.5	9.5	5.9	8.4	5.9	9.1	2.1	4.5	2.9
8	16.7	*11.8	3.4	5.9	8.4	5.3	7.4	5.3	8.0	2.8	3.4	2.8
9	2.5	7.7	3.4	5.9	8.0	4.7	6.8	4.7	13.0	13.7	2.8	2.5
10	1.9	6.5	3.2	8.2	7.4	*4.7	6.2	5.0	8.0	33	27	2.7
11	15.2	5.3	3.2	5.9	9.3	67	5.9	24	6.5	3.4	4.2	2.3
12	4.0	4.7	3.2	5.6	6.8	14.2	5.3	30	5.6	3.2	15.2	2.3
13	2.3	4.4	2.9	5.3	5.9	11.2	5.3	7.4	5.3	2.5	4.7	2.3
14	2.1	10.5	2.7	10.1	5.3	9.5	45	6.2	5.0	2.3	3.2	2.1
15	2.1	6.5	9.0	6.8	5.0	7.7	11.2	5.9	4.7	2.3	2.7	3.4
16	1.9	13.2	3.9	5.9	5.0	7.1	8.0	5.0	4.4	2.3	16.9	2.0
17	1.9	5.9	3.2	6.2	17.8	6.5	6.8	4.7	4.3	2.1	5.5	2.1
18	1.7	4.7	21	12.1	9.9	6.2	6.2	8.8	4.2	2.1	3.2	2.1
19	1.4	4.2	8.5	5.6	6.5	23	5.9	5.0	3.7	1.9	2.7	10.6
20	1.3	3.9	16.2	7.1	5.6	12.2	5.3	12.1	3.7	1.7	2.5	2.9
21	1.1	3.7	94	5.3	6.2	8.4	5.0	6.2	3.4	8.1	3.6	2.5
22	1.4	3.7	16.8	35	5.3	8.9	5.0	4.4	4.2	3.5	5.1	2.3
23	1.3	3.7	11.2	21	5.0	22	5.0	3.7	3.9	2.3	2.1	2.5
24	6.7	3.9	10.3	9.5	5.0	11.7	4.7	3.7	3.7	2.1	2.1	2.3
25	5.1	3.4	10.3	8.0	4.7	9.1	15.8	47	3.4	1.7	1.9	1.9
26	1.4	16.4	15.0	37	4.4	7.7	14.2	13.2	3.2	1.4	1.7	1.9
27	1.3	4.4	9.5	15.8	4.4	7.1	33	7.4	2.9	9.8	1.9	1.6
28	3.5	3.7	7.7	25	4.4	6.5	47	6.2	2.7	3.7	1.9	1.6
29	1.7	3.7	7.7	14.2	4.2	6.2	15.0	7.2	7.1	10.4	2.1	1.9
30	1.4	3.7	8.4	10.3	-------	5.9	11.7	6.2	6.5	2.3	2.1	1.9
31	1.3	-------	7.4	9.5	-------	5.9	-------	12.2	-------	1.7	4.2	-------

* Discharge measurement made on this day.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.6	0.98	2.3	3.4	7.4	3.7	8.9	19	3.0	2.7	2.0	1.7
2	7.5	.98	2.3	3.2	6.5	4.4	8.5	7.2	3.0	5.0	2.1	2.0
3	2.8	.98	3.0	19	6.3	5.0	7.2	5.7	3.0	3.0	2.2	2.0
4	1.9	.72	2.9	5.0	5.9	40	6.7	5.7	3.0	1.7	2.0	2.0
5	1.7	.60	61	3.9	5.6	7.6	6.8	13	2.9	1.3	2.2	2.0
6	1.9	.85	13	3.4	5.3	6.2	6.4	5.7	3.0	26	2.2	1.3
7	1.7	.85	7.1	3.7	6.5	5.3	82	7.0	a3.5	5.2	2.2	.90
8	1.4	.85	6.5	4.6	5.3	5.0	16	6.6	a3	3.0	1.5	1.5
9	1.4	*.85	5.3	30	5.3	5.3	13	5.4	a3	2.7	2.8	1.7
10	1.6	.85	5.0	29	4.7	5.0	31	4.3	a3	2.5	2.9	1.7
11	1.6	.72	47	a20	4.7	4.7	15	4.3	a2.7	2.0	2.0	2.0
12	1.4	.60	9.3	a12	6.4	11	22	*4.6	a2.7	1.7	2.2	1.7
13	1.4	.85	7.1	a9	5.3	137	28	7.2	a13	2.2	2.2	4.0
14	1.3	.98	6.2	a7	4.2	20	15	5.1	a2.7	2.2	6.9	1.9
15	1.3	5.2	5.6	a6	27	41	12	5.7	a2.5	2.0	2.6	2.0
16	1.3	*3.8	4.7	a5.5	8.8	31	47	4.3	a2.7	2.0	1.7	3.2
17	1.3	1.3	4.4	a5.5	8.7	16	15	11	a2.7	2.0	2.8	1.5
18	1.3	1.3	4.2	a15	7.4	14	18	6.0	a2.5	1.7	2.5	1.5
19	1.1	1.1	3.7	a7	6.6	25	20	4.6	a2.5	1.3	2.2	1.5
20	1.4	18	3.4	a6	5.0	14	14	4.6	*2.2	2.2	1.7	.90
21	1.3	9.3	14	7.8	17	11	12	4.3	2.0	2.2	2.0	2.2
22	1.3	64	8.5	8.8	5.9	9.8	*10	3.8	5.0	2.2	1.7	2.0
23	1.6	6.8	4.7	5.9	5.3	9.8	9.4	5.9	2.7	49	1.3	1.3
24	1.1	4.2	4.2	68	5.3	57	8.0	3.0	2.2	4.9	2.0	1.3
25	1.1	3.4	4.2	24	5.3	27	8.0	3.3	2.2	*3.3	1.5	1.5
26	1.1	3.2	3.7	12	5.0	17	9.8	4.5	2.2	2.2	1.5	1.3
27	1.3	2.7	3.7	11	5.0	14	6.8	3.6	2.0	2.7	1.5	.82
28	.98	2.3	2.9	14	4.8	12	5.7	3.0	1.5	2.7	1.7	1.4
29	.98	2.3	2.9	9.5	-------	11	5.7	2.7	7.4	2.5	1.5	1.7
30	.98	2.5	3.2	8.4	-------	9.8	*5.6	3.7	2.7	5.5	1.3	1.5
31	.85	-------	3.4	7.7	-------	9.4	-------	2.7	-------	2.5	2.0	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for nearby stations.

Weasel Brook at Clifton--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.5	1.7	2.3	2.2	2.0	11	4.3	e1.5	4.3	4.4	2.1	6.2
2	1.5	1.7	2.2	2.0	2.5	*4.2	3.3	2.7	3.7	2.7	2.2	4.0
3	1.3	1.3	2.2	2.0	4.3	23	3.0	11	4.3	2.3	19	2.7
4	1.1	1.5	2.2	2.7	3.3	5.7	2.5	8.8	4.6	3.6	*3.2	2.7
5	1.3	1.5	16	2.7	3.6	4.3	*3.0	4.0	3.5	1.9	2.7	1.9
6	3.2	1.5	9.3	2.7	3.4	4.0	4.0	e3.5	2.5	2.5	2.3	1.7
7	2.1	21	24	2.5	2.2	3.3	3.7	e3.5	3.2	*2.6	1.7	2.5
8	1.7	2.7	4.6	2.0	2.8	3.6	e3.0	38	3.0	2.5	1.5	2.8
9	2.0	2.2	4.0	2.0	2.7	3.7	2.2	11	3.2	2.1	20	*2.3
10	1.7	2.0	19	1.7	2.7	*4.3	2.2	31	3.2	1.8	4.3	3.0
11	1.1	5.3	4.6	2.0	2.5	3.6	4.2	7.6	3.2	1.3	3.2	140
12	1.6	1.7	6.9	2.2	2.2	3.6	3.7	e6.0	2.7	1.7	2.5	12
13	1.7	1.7	5.6	2.0	1.7	4.5	2.7	e5.5	3.8	1.9	2.5	9.0
14	1.7	1.5	48	2.0	2.0	10	*2.7	5.2	3.1	5.1	2.1	7.2
15	1.7	1.3	8.0	2.5	2.8	4.3	2.7	4.6	4.0	4.7	1.9	9.2
16	1.7	1.5	6.4	2.5	2.7	3.6	5.8	3.5	3.5	1.9	2.3	14
17	1.5	1.7	4.8	2.0	11	3.6	25	4.4	3.5	1.5	2.1	10
18	.9	1.7	4.3	2.0	3.3	3.0	5.2	1.9	3.2	1.2	1.9	6.2
19	1.5	1.7	3.6	2.2	2.7	3.8	4.3	*4.9	2.5	2.2	4.8	14
20	2.0	1.7	3.0	2.5	2.7	19	3.3	6.5	1.7	2.1	3.0	6.8
21	1.7	1.5	3.6	9.4	4.6	4.0	3.0	26	2.3	2.3	3.6	6.6
22	1.5	1.3	4.3	3.3	2.9	4.0	2.7	5.8	3.0	2.1	1.3	5.8
23	1.5	11	4.0	2.2	2.2	3.6	4.2	5.1	6.5	2.1	2.1	5.2
24	1.3	2.5	3.0	2.0	2.5	4.0	2.8	5.2	3.0	1.4	2.1	4.9
25	3.2	5.9	2.7	2.5	5.4	7.1	2.0	4.6	2.7	1.2	2.1	4.0
26	1.7	2.3	2.7	3.7	4.0	4.3	2.2	4.3	2.2	2.1	8.0	4.8
27	1.5	1.7	2.7	5.2	3.0	3.6	3.9	4.6	1.5	2.3	2.3	5.0
28	11	1.7	3.4	3.3	2.5	3.6	2.4	4.6	2.4	2.7	1.7	4.3
29	19	1.5	3.3	2.5	-------	3.6	1.7	3.8	2.5	3.4	1.2	4.0
30	3.4	2.0	3.0	2.5	-------	3.6	e1.6	3.7	2.5	1.9	6.4	5.3
31	2.2	-------	3.0	2.0	-------	3.3	-------	3.5	-------	2.6	49	-------

* Discharge measurement made on this day.
e Waste gate open part of each day; discharge estimated on basis of records for Second River at Belleville and Elizabeth River at Elizabeth.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.3	2.5	4.5	5.8	2.7	6.9	5.5	4.6	3.8	4.1	1.9	6.5
2	4.0	35	4.0	10	2.7	4.6	4.9	4.6	3.5	2.7	2.3	5.8
3	3.4	10	4.0	6.2	2.5	3.7	7.3	4.3	3.2	2.3	2.3	4.9
4	4.0	7.0	4.0	5.8	2.5	14	5.2	4.0	7.6	2.1	2.3	4.6
5	4.0	7.0	3.7	5.5	2.5	4.9	4.9	7.7	2.6	2.5	2.3	4.9
6	3.5	4.5	3.7	7.8	50	18	6.4	*4.3	2.8	3.4	1.9	7.8
7	3.5	3.5	3.7	5.2	30	5.8	5.5	3.5	3.0	6.8	1.5	5.5
8	3.5	4.0	3.7	4.9	7.0	5.2	4.3	4.2	2.7	3.0	2.5	4.3
9	3.0	3.5	12	4.6	4.5	5.2	4.0	3.7	4.0	2.5	1.9	4.0
10	2.5	2.7	5.0	4.9	3.7	4.9	4.0	3.5	2.5	2.4	1.7	3.7
11	3.6	2.7	3.7	4.3	20	4.6	4.3	3.7	6.0	2.5	2.1	3.5
12	3.2	2.7	3.7	4.3	5.5	4.6	11	3.7	19	2.1	71	3.5
13	3.5	2.3	3.7	4.3	4.0	4.6	6.4	3.5	4.6	2.1	125	3.2
14	3.5	2.1	29	3.7	4.0	4.3	5.2	2.7	3.5	1.9	16	3.2
15	4.8	2.8	10	4.0	4.6	5.2	6.7	2.5	3.0	1.9	11	3.5
16	2.3	3.0	6.5	3.7	5.2	6.0	4.0	3.0	2.7	2.1	9.4	3.5
17	2.1	3.2	5.5	3.7	17	4.3	3.7	3.4	2.5	2.1	7.8	3.0
18	2.3	2.7	26	3.7	4.9	6.1	4.0	3.0	2.5	1.9	25	3.0
19	2.5	5.0	8.4	3.7	4.3	4.0	7.9	3.0	2.1	2.1	94	3.7
20	2.5	31	7.2	3.2	4.0	3.7	4.2	3.0	8.9	2.1	20	5.0
21	2.5	60	5.8	3.5	4.0	7.7	5.2	2.7	5.5	2.1	25	3.2
22	2.5	10	5.2	3.2	3.7	40	7.2	2.5	12	1.9	18	2.7
23	2.3	6.5	5.2	3.2	11	9.7	4.0	3.8	4.0	1.7	13	3.0
24	2.1	10	4.9	3.5	4.9	7.9	4.0	3.8	14	1.9	11	25
25	2.5	5.0	4.6	3.5	4.6	6.8	4.6	4.4	8.0	2.5	8.7	4.3
26	3.0	4.5	4.3	3.2	4.0	15	16	3.0	5.7	2.5	7.9	3.2
27	4.0	4.5	4.3	3.0	4.0	7.2	5.2	2.7	3.7	2.3	7.5	3.0
28	3.5	4.0	4.3	3.0	4.3	6.5	4.6	2.5	3.5	2.3	6.8	14
29	20	20	13	3.0	-------	6.5	13	10	3.5	2.3	6.5	3.5
30	8.0	5.0	24	2.5	-------	5.8	5.4	4.7	3.2	1.9	6.5	5.5
31	3.0	-------	6.8	2.7	-------	5.8	-------	16	-------	1.7	7.7	-------

* Discharge measurement made on this day.
Note.--No gage-height record Oct. 19 to Nov. 9, Nov. 19 to Dec. 12, Feb. 6-10, June 5-9; discharge estimated on basis of records for Second River at Belleville.

Weasel Brook at Clifton--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	44.45	9.7	0.42	1.43	0.321	0.37
November	128.01	47	.52	4.27	.960	1.07
December	258.1	43	1.9	8.33	1.87	2.16
Calendar year 1950	1,291.9	48	.16	3.54	.796	10.81
January 1951	183.6	29	2.2	5.92	1.33	1.53
February	327.4	50	4.0	11.7	2.63	2.74
March	429.3	139	4.2	13.8	3.10	3.59
April	315.6	46	3.4	10.5	2.36	2.64
May	167.1	27	2.3	5.39	1.21	1.40
June	130.7	19.5	2.3	4.36	.980	1.09
July	134.7	40	1.4	4.35	.978	1.13
August	77.78	10	.98	2.51	.564	.65
September	40.17	8.0	.85	1.34	.301	.34
Water year 1950-51	2,236.94	139	.42	6.13	1.38	18.71
October 1951	114.33	28	.60	3.69	.829	.96
November	303.9	70	3.4	10.1	2.27	2.54
December	316.9	94	2.7	10.2	2.29	2.65
Calendar year 1951	2,541.48	139	.60	6.96	1.56	21.26
January 1952	347.1	37	5.3	11.2	2.52	2.90
February	241.2	34	4.2	8.32	1.87	2.02
March	330.4	67	3.9	10.7	2.40	2.76
April	371.6	49	4.7	12.4	2.79	3.11
May	298.3	47	3.7	9.62	2.16	2.49
June	330.2	116	2.7	11.0	2.47	2.76
July	135.8	33	1.4	4.38	.984	1.13
August	155.1	27	1.7	5.00	1.12	1.30
September	159.1	66	1.6	5.30	1.19	1.33
Water year 1951-52	3,103.93	116	.60	8.48	1.91	25.95
October 1952	49.49	7.5	.85	1.60	.360	.41
November	143.06	64	.60	4.77	1.07	1.20
December	259.4	61	2.3	8.37	1.88	2.17
Calendar year 1952	2,820.75	116	.60	7.71	1.73	23.58
January 1953	375.3	68	3.2	12.1	2.72	3.14
February	196.5	27	4.2	7.02	1.58	1.64
March	589.0	137	3.7	19.0	4.27	4.92
April	473.5	82	5.6	15.8	3.55	3.96
May	177.5	19	2.7	5.73	1.29	1.48
June	96.5	13	1.5	3.22	.724	.81
July	152.1	49	1.3	4.91	1.10	1.27
August	66.9	6.9	1.3	2.16	.485	.56
September	52.02	4.0	.82	1.73	.389	.43
Water year 1952-53	2,631.27	137	.60	7.21	1.62	21.99
October 1953	80.8	19	.9	2.61	.587	.68
November	88.3	21	1.3	2.94	.661	.74
December	216.7	48	2.2	6.99	1.57	1.81
Calendar year 1953	2,565.12	137	.82	7.03	1.58	21.44
January 1954	83.0	9.4	1.7	2.68	.602	.69
February	90.2	11	1.7	3.22	.724	.75
March	170.8	23	3.0	5.51	1.24	1.43
April	117.3	25	1.6	3.91	.879	.98
May	236.3	38	1.5	7.62	1.71	1.97
June	95.3	6.5	1.5	3.18	.715	.80
July	74.1	5.1	1.2	2.39	.537	.62
August	165.1	49	1.2	5.33	1.20	1.38
September	308.1	140	1.7	10.3	2.31	2.57
Water year 1953-54	1,726.0	140	.9	4.73	1.06	14.42
October 1954	119.4	20	2.1	3.85	.865	1.00
November	266.7	60	2.1	8.89	2.00	2.23
December	234.4	29	3.7	7.56	1.70	1.96
Calendar year 1954	1,960.7	140	1.2	5.37	1.21	16.38
January 1955	133.6	10	2.5	4.31	.969	1.12
February	222.1	50	2.5	7.93	1.78	1.86
March	239.5	40	3.7	7.73	1.74	2.00
April	178.6	16	3.7	5.95	1.34	1.49
May	132.0	16	2.5	4.26	.957	1.10
June	153.6	19	2.1	5.12	1.15	1.28
July	75.7	6.8	1.7	2.44	.548	.63
August	520.5	125	1.5	16.8	3.78	4.35
September	154.5	25	2.7	5.15	1.16	1.29
Water year 1954-55	2,430.6	125	1.5	6.66	1.50	20.31

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, 1,100 ft downstream from Hendricks Pond Dam, and 1.4 miles upstream from mouth.

Drainage area.--11.6 sq mi.

Records available.--May 1937 to September 1955.

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

Average discharge.--18 years, 18.1 cfs.

Extremes.--1937-55: Maximum discharge, 3,300 cfs July 23, 1938 (gage height, 7.05 ft), from rating curve extended above 480 cfs by critical-depth study at 4.35 ft and contracted-opening method and critical-depth study at 7.05 ft; minimum, 0.8 cfs July 29, 1941 (gage height, 1.12 ft).

Peak discharge (base, 950 cfs).--
1950-51: Oct. 10 (1 a.m.) 1,020 cfs (4.14 ft); Nov. 25 (5 p.m.) 1,130 cfs (4.31 ft); Mar. 30 (7:30 p.m.) 1,250 cfs (4.50 ft).
1951-52: Nov. 7 (11 a.m.) 825 cfs (3.80 ft), (maximum below base).
1952-53: Jan. 24 (time and discharge unknown); Mar. 24 (11:30 a.m.) 1,050 cfs (4.20 ft); May 23 (2:30 a.m.) 984 cfs (4.09 ft); June 28 (7 p.m.) 1,190 cfs (4.43 ft); July 20 (7 p.m.) 972 cfs (4.07 ft); July 23 (10 a.m.) 1,590 cfs (5.03 ft).
1953-54: Sept. 11 (8 a.m.) 2,140 cfs (5.74 ft).
1954-55: May 31 (6 a.m.) 1,040 cfs (4.18 ft); Aug. 7 (11 p.m.) 960 cfs (4.05 ft); Aug. 13 (7:30 a.m.) 1,330 cfs (4.65 ft); Aug. 19 (time and discharge unknown).

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.5	5.2	6.5	8.9	41	22	33	12.5	16.3	21	10.9	6.9
2	a6.2	5.2	a6	8.5	22	14.3	28	12.5	16.6	*9.9	9.4	6.5
3	a5.8	5.2	a6	10.9	10.4	13.7	116	12.0	12.0	9.9	8.9	5.8
4	5.5	87	a100	16.8	10.4	51	30	12.0	22	8.6	7.2	6.9
5	4.9	45	a50	a11	10.9	18.4	25	10.9	18.7	35	6.5	7.2
6	6.7	8.5	a20	a9	10.4	15.6	22	9.9	12.0	9.4	7.6	11.8
7	6.8	6.5	a10	24	115	15.0	21	10.9	12.0	8.5	14.5	17.2
8	6.2	5.8	a200	12.3	20	13.7	18.4	10.9	13.6	7.2	22	6.5
9	5.2	6.5	a30	9.9	14.3	13.1	17.0	10.9	10.9	9.4	9.4	5.2
10	77	5.8	a20	8.9	12.0	12.0	17.7	10.9	9.4	9.9	43	6.5
11	8.8	5.2	a30	8.9	12.0	11.4	16.3	41	9.9	9.4	10.8	7.6
12	42	4.6	a13	8.5	12.5	12.0	37	18.9	10.9	12.3	16.4	7.2
13	8.2	4.9	a11	8.5	12.0	11.4	20	9.9	19.8	24	11.2	7.6
14	6.1	4.9	9.9	45	10.9	60	15.0	9.9	82	8.0	9.9	7.6
15	4.6	6.1	12.3	76	9.9	14.3	13.7	10.9	35	6.5	32	13.6
16	5.2	5.5	55	13.7	9.4	12.5	23	10.9	12.0	10.4	27	5.2
17	5.5	5.2	13.1	11.4	97	11.4	14.3	10.9	9.4	17.3	11.0	6.1
18	5.5	4.6	10.9	10.9	23	10.9	13.7	9.9	10.9	8.5	6.9	6.5
19	5.8	4.0	9.9	10.4	16.5	16.8	13.7	9.9	11.4	73	6.1	6.5
20	5.5	37	9.4	9.4	17.5	145	13.1	9.4	10.9	17.8	8.5	6.9
21	4.9	18.7	8.9	8.9	158	19.8	11.4	10.9	10.9	8.5	8.9	7.6
22	4.3	5.5	8.5	8.5	54	20	14.6	10.9	13.8	7.2	8.5	7.6
23	26	4.3	7.6	8.5	26	15.6	65	44	20	13.2	7.6	7.0
24	5.5	4.6	7.6	85	19.8	21	13.1	91	8.5	8.9	7.6	5.8
25	5.2	236	7.2	13.7	17.0	13.1	13.1	13.7	10.4	8.5	12.0	13.9
26	4.9	24	7.2	11.4	16.3	12.5	13.7	12.0	10.4	8.5	12.6	6.5
27	4.9	10.9	7.2	10.4	15.0	11.4	12.5	30	16.6	12.1	8.0	6.1
28	4.9	15.3	7.2	10.8	13.7	12.0	12.0	15.9	10.4	161	8.5	7.2
29	5.5	9.4	45	21	-------	29	46	75	33	17.7	8.5	5.2
30	5.5	8.0	14.0	10.4	-------	351	16.4	41	8.5	12.0	8.5	5.2
31	4.9	-------	23	9.4	-------	69	-------	18.4	-------	11.4	8.5	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of precipitation records and records for Whippany River at Morristown, Saddle River at Lodi, Elizabeth River at Elizabeth, and Rahway River near Springfield.

Second River at Belleville--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.5	53	8.0	10.9	18.4	12.0	15.0	21	252	17.0	10.4	89
2	8.3	35	6.9	18.0	17.7	16.8	15.6	19.8	59	13.7	15.8	27
3	6.9	128	7.2	30	16.3	12.5	14.3	17.0	35	13.1	9.9	28
4	6.5	14.3	9.0	13.7	64	67	13.7	16.3	40	13.8	10.4	13.7
5	7.8	10.4	43	32	28	31	80	17.0	32	10.9	11.4	12.5
6	6.9	8.9	12.0	14.3	22	15.6	30	22	24	9.9	78	12.0
7	80	193	10.4	13.1	19.8	15.6	20	16.3	21	12.0	33	9.4
8	40	25	9.4	12.5	18.4	13.1	17	15.6	17.7	25	21	10.9
9	10	14.3	8.0	12.5	17.0	12.0	15	15.0	61	88	15.2	11.4
10	7	11.4	7.6	21	15.0	12.0	14	14.3	19.8	87	48	10.9
11	40	9.9	8.5	12.0	21	193	13	62	17.7	15.0	16.3	11.4
12	12	9.4	8.5	11.4	15.6	34	12	70	17.0	13.1	18.2	11.4
13	10	9.9	8.0	10.9	14.3	27	12	17.7	16.3	11.4	15.0	10.4
14	8	33	7.6	20	*13.7	21	70	16.3	15.0	13.1	12.0	8.9
15	7	14.2	41	13.1	13.1	18.4	27	16.3	13.7	13.7	11.4	14.9
16	7	43	8.5	11.4	12.5	17.0	21	14.3	16.3	13.1	33	12.0
17	7	12.0	8.5	16.2	62	16.3	18.4	13.1	16.3	21	16.9	11.4
18	6	9.9	80	38	23	14.3	17.0	29	16.3	13.1	11.4	14.7
19	6	8.9	18.2	11.4	14.3	60	15.6	13.7	17.7	10.9	11.4	17.7
20	6.1	8.9	20	15.2	13.7	27	13.7	40	13.7	9.9	11.4	9.4
21	4.9	8.9	147	10.9	17.0	19.1	14.3	16.3	13.1	30	15.8	8.0
22	5.8	8.5	28	90	13.1	22	14.3	13.7	12.5	19.1	22	8.5
23	5.8	8.0	18.4	40	12.5	46	14.3	13.1	15.6	12.5	8.9	10.9
24	34	11.4	15.6	20	12.0	27	13.1	12.5	14.3	12.0	8.0	8.9
25	22	7.6	15.8	15	13.7	21	61	100	13.7	10.9	8.9	9.4
26	6.5	56	34	100	12.5	19.1	39	42	14.3	10.9	10.4	9.4
27	5.5	8.9	14.3	40	12.0	17.7	79	22	13.7	35	10.9	8.5
28	17.8	8.9	13.1	60	12.0	17.0	*132	19.1	12.5	13.2	13.4	6.9
29	5.8	8.5	12.0	30	11.4	15.6	33	17.7	28	21	12.0	8.5
30	5.8	8.5	14.2	20	-------	14.3	26	15.0	64	11.4	16.8	8.9
31	6.1	-------	12.0	18.4	-------	14.3	-------	31	-------	10.9	21	-------

* Discharge measurement made on this day.

Note.--No gage-height record Oct. 7-19, Jan. 22-30, Apr. 5-14; discharge estimated on basis of recorded range in stage, weather records, and records for Weasel Brook at Clifton and Elizabeth River at Elizabeth.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.4	5.6	6.0	a9	14	8.0	17	89	12	10	7.1	6.7
2	20	4.9	7.5	a9	12	8.4	16	16	11	12	12	7.1
3	a14	6.3	15	a50	12	8.9	14	14	11	15	7.1	7.5
4	6.7	5.6	14	a15	12	64	17	15	10	6.7	7.1	7.1
5	5.6	5.6	104	a12	11	16	14	45	11	6.3	8.0	7.5
6	6.7	6.3	31	a10	11	13	14	16	11	78	7.5	11
7	7.5	6.0	16	a11	14	12	248	25	15	12	8.0	5.1
8	7.1	5.6	11	a13	11	11	41	32	11	9.3	6.7	4.9
9	6.7	4.9	11	a90	11	11	27	16	11	8.9	14	5.2
10	6.7	6.0	10	a70	9.8	11	75	12	11	8.0	10	5.2
11	6.3	6.7	55	a40	9.8	10	30	14	10	6.7	7.1	5.2
12	5.2	6.3	18	a30	21	28	66	14	9.8	6.7	7.1	5.2
13	6.7	5.6	12	a20	10	211	78	30	72	8.0	7.1	22
14	7.5	6.3	10	a16	9.8	37	33	16	9.3	8.4	44	4.3
15	7.5	30	9.8	a14	82	134	26	21	9.8	8.9	8.7	7.5
16	7.1	16	9.8	a13	17	66	138	12	9.8	8.9	5.2	14
17	6.3	6.0	9.3	a13	13	29	34	56	9.3	8.4	14	4.9
18	6.0	6.0	9.3	a35	12	29	51	18	8.9	8.0	6.7	4.3
19	5.2	6.0	8.9	a17	12	67	39	14	9.3	6.7	6.0	3.4
20	9.8	48	8.0	a14	11	24	26	12	9.3	44	6.0	3.4
21	6.3	32	41	a20	36	20	22	12	12	11	6.0	9.6
22	6.3	86	25	a25	12	16	*21	12	41	8.4	4.6	8.4
23	6.7	13	12	a15	11	18	20	111	11	241	4.3	4.6
24	6.3	10	10	a150	11	158	19	14	9.3	14	5.6	4.0
25	5.6	8.4	8.9	45	11	66	18	13	9.3	7.5	6.7	4.6
26	5.2	7.5	9.3	22	12	34	31	21	9.3	6.3	7.1	4.0
27	5.6	6.3	9.3	18	11	26	18	14	8.9	8.0	6.7	3.4
28	7.1	6.0	8.0	28	8.9	21	16	11	70	8.9	6.7	4.3
29	6.3	6.3	8.4	16	-------	26	16	11	30	8.4	6.0	4.9
30	6.0	7.1	8.9	15	-------	19	15	16	10	27	4.6	4.9
31	6.3	-------	8.4	14	-------	18	-------	9.8	-------	8.9	5.6	-------

* Discharge measurement made on this day.

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

Second River at Belleville--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.2	2.9	4.3	3.7	3.7	48	11	6.0	8.4	41	6.0	8.4
2	4.3	3.7	3.4	3.4	4.3	8.9	6.3	5.2	8.4	9.9	5.6	6.7
3	3.7	3.7	2.9	4.0	14	77	6.0	38	8.0	6.3	76	6.0
4	2.9	3.4	3.4	4.0	5.6	13	4.9	109	9.3	8.5	8.9	5.2
5	4.0	3.4	48	4.6	4.3	8.0	5.6	10	7.5	4.9	6.0	3.7
6	18	4.0	41	6.3	3.7	6.7	7.5	6.7	6.0	6.0	5.6	3.4
7	7.7	47	55	4.0	3.4	6.0	9.5	6.7	6.7	8.6	4.3	5.2
8	3.7	5.2	6.0	4.0	4.3	6.3	11	150	7.5	6.7	3.7	14
9	4.0	4.3	7.8	4.9	5.6	6.3	6.0	27	7.1	6.0	*110	6.7
10	3.7	4.3	56	4.6	4.3	6.3	5.6	68	7.1	4.6	9.8	9.4
11	2.7	4.0	6.3	3.7	4.3	5.6	15	17	8.0	4.3	6.7	553
12	3.1	4.0	18	5.2	3.7	5.2	10	15	6.7	6.0	6.0	17
13	3.7	3.7	11	4.3	3.1	21	6.0	11	22	6.3	6.0	10
14	4.3	3.7	167	4.3	3.1	37	6.3	11	7.5	38	4.3	8.4
15	4.3	2.9	13	5.6	4.0	7.1	6.3	8.9	7.5	16	4.9	13
16	4.3	3.1	8.0	7.5	4.6	6.0	20	8.4	7.5	6.0	6.0	31
17	3.4	4.0	6.3	4.6	38	6.0	78	11	7.1	4.6	4.9	16
18	2.4	4.3	6.0	4.0	6.0	6.0	11	9.3	6.7	4.3	4.6	8.9
19	3.7	4.3	5.2	4.0	4.9	11	8.9	10	6.0	6.0	27	35
20	4.3	4.0	4.6	5.5	4.0	66	8.4	14	4.9	6.7	25	9.3
21	4.0	3.1	4.6	36	15	8.0	8.0	95	7.1	7.1	27	8.9
22	3.1	2.9	6.7	6.3	6.0	8.0	8.0	10	7.1	7.1	3.7	9.8
23	3.7	44	4.9	4.3	4.9	7.5	12	11	26	6.3	4.6	7.5
24	3.1	4.0	4.9	4.0	5.6	7.1	8.6	9.3	7.5	4.9	5.2	7.1
25	26	23	4.0	4.9	16	26	6.0	9.3	8.0	4.3	9.8	6.0
26	11	3.7	4.0	6.0	10	8.9	6.7	9.3	6.7	6.1	6.7	9.6
27	3.7	3.1	4.3	12	4.9	6.0	13	8.4	6.0	6.3	4.9	7.8
28	90	2.9	6.9	6.0	4.3	5.6	9.3	8.9	11	6.3	4.3	7.5
29	35	2.7	6.4	4.6	-------	6.7	7.1	8.4	8.0	7.1	2.9	7.1
30	46	3.1	5.2	4.3	-------	6.7	6.3	8.9	7.5	7.1	25	8.4
31	4.3	-------	4.0	3.1	-------	6.3	-------	6.7	-------	6.0	197	-------

* Discharge measurement made on this day.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.5	4.3	7.5	10	6.3	19	11	9.8	9.3	17	6.3	9.3
2	6.3	90	7.1	23	6.3	8.9	10	9.8	8.0	7.5	7.1	8.9
3	19	23	7.1	10	6.0	8.0	13	10	8.0	6.0	7.5	7.5
4	7.5	11	7.1	9.8	6.0	54	11	10	31	6.0	7.1	6.0
5	8.9	13	6.3	9.3	6.0	11	10	16	7.1	8.0	7.1	8.8
6	8.9	7.5	6.0	18	127	52	16	*11	7.5	23	6.0	14
7	7.1	6.0	6.0	8.9	63	14	11	8.0	8.0	13	92	9.3
8	7.1	6.7	6.0	8.0	10	12	9.3	11	7.5	8.4	46	7.5
9	7.1	6.7	31	7.5	8.4	11	8.4	8.4	16	7.5	8.4	7.1
10	6.3	6.3	10	8.0	8.0	a10	8.0	8.4	7.5	20	6.3	6.0
11	6.3	4.3	6.3	8.0	42	a9.8	9.3	8.4	22	10	8.4	5.2
12	7.5	4.3	6.0	8.0	11	a9.4	41	8.9	29	7.5	219	6.3
13	7.5	3.7	6.0	8.4	7.5	a9.4	14	8.9	8.4	7.5	368	6.7
14	7.1	4.0	66	7.5	8.0	a8.5	11	8.0	7.5	7.5	20	7.1
15	14	3.7	20	7.1	9.8	15	16	7.1	7.5	7.5	14	7.5
16	9.2	4.0	11	6.7	8.7	14	9.8	8.0	8.0	6.3	11	8.0
17	3.7	4.9	8.9	7.1	39	8.4	8.0	9.3	8.0	6.0	9.8	6.3
18	4.6	4.6	66	7.1	9.8	15	8.9	8.9	6.3	7.5	d115	4.6
19	4.9	8.9	14	7.1	8.0	9.3	24	8.9	5.6	7.5	d254	8.6
20	4.9	76	11	6.7	7.5	8.0	11	8.9	58	7.1	22	15
21	4.9	156	10	6.7	8.4	24	13	6.7	53	8.0	d35	7.1
22	4.9	18	9.3	7.1	7.5	109	19	6.0	30	7.5	21	6.3
23	4.3	11	8.9	6.0	33	21	9.3	18	9.8	6.3	15	6.7
24	3.7	25	8.4	6.3	10	15	9.4	12	33	6.0	12	54
25	4.6	10	8.4	6.7	8.9	13	11	12	11	6.3	11	7.1
26	4.9	8.0	8.0	6.7	8.4	41	29	9.3	14	7.1	10	6.3
27	8.2	8.0	8.0	6.3	8.4	14	11	8.4	7.5	7.1	8.9	6.0
28	5.6	8.7	8.4	6.3	8.9	12	10	7.1	8.0	7.1	8.0	36
29	50	50	37	6.0	-------	12	24	23	8.4	6.3	8.9	6.7
30	14	8.0	68	5.2	-------	12	12	11	8.4	5.2	9.8	13
31	5.2	-------	14	6.0	-------	11	-------	88	-------	4.9	17	-------

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and record for Weasel Brook at Clifton.

d Doubtful gage-height record; discharge computed from reconstructed gage-height graph based on recorded graph, weather records, and records for Weasel Brook at Clifton.

Second River at Belleville--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	304.5	77	4.3	9.82	0.847	0.98
November	599.4	236	4.0	20.0	1.72	1.92
December	766.4	200	6	24.7	2.13	2.46
Calendar year 1950	5,410.8	236	2.9	14.8	1.28	17.35
January 1951	520.9	85	8.5	16.8	1.45	1.67
February	806.9	158	9.4	28.8	2.48	2.59
March	1,068.9	351	10.9	34.5	2.97	3.43
April	725.7	116	11.4	24.2	2.09	2.33
May	617.8	91	9.4	19.9	1.72	1.98
June	498.2	82	8.5	16.6	1.43	1.60
July	585.0	161	6.5	18.9	1.63	1.88
August	378.4	43	6.1	12.2	1.05	1.21
September	227.4	17.2	5.2	7.58	.653	.73
Water year 1950-51	7,099.5	351	4.0	19.5	1.68	22.78
October 1951	408.0	80	4.9	13.2	1.14	1.31
November	787.6	193	7.6	26.3	2.27	2.53
December	654.7	147	6.9	21.1	1.82	2.10
Calendar year 1951	7,279.5	351	4.9	19.9	1.72	23.36
January 1952	781.9	100	10.9	25.2	2.17	2.51
February	556.0	64	11.4	19.2	1.66	1.78
March	868.7	193	12.0	28.0	2.41	2.79
April	880.3	132	12	29.3	2.53	2.82
May	769.1	100	12.5	24.8	2.14	2.47
June	923.2	252	12.5	30.8	2.66	2.96
July	611.6	88	9.9	19.7	1.70	1.96
August	558.2	78	8.0	18.0	1.55	1.79
September	434.9	89	6.9	14.5	1.25	1.39
Water year 1951-52	8,234.2	252	4.9	22.5	1.94	26.41
October 1952	224.7	20	5.2	7.25	.625	.72
November	376.3	86	4.9	12.5	1.08	1.21
December	524.8	104	6.0	16.9	1.46	1.68
Calendar year 1952	7,509.7	252	4.9	20.5	1.77	24.08
January 1953	869	150	9	28.0	2.41	2.79
February	428.3	82	8.9	15.3	1.32	1.37
March	1,220.3	211	8.0	39.4	3.40	3.91
April	1,200	248	14	40.0	3.45	3.85
May	731.8	111	9.8	23.6	2.03	2.35
June	482.3	72	8.9	16.1	1.39	1.55
July	630.3	241	6.3	20.3	1.75	2.02
August	263.3	44	4.3	8.49	.732	.84
September	194.2	22	3.4	6.47	.558	.62
Water year 1952-53	7,145.3	248	3.4	19.6	1.69	22.91
October 1953	323.3	90	2.4	10.4	.897	1.04
November	212.4	47	2.7	7.08	.610	.68
December	529.1	167	2.9	17.1	1.47	1.70
Calendar year 1953	7,084.3	248	2.4	19.4	1.67	22.72
January 1954	183.7	36	3.1	5.93	.511	.59
February	195.6	38	3.1	6.99	.603	.63
March	454.2	77	5.2	14.7	1.27	1.46
April	328.3	78	4.9	10.9	.940	1.05
May	727.4	150	5.2	23.5	2.03	2.33
June	254.8	26	4.9	8.49	.732	.82
July	269.3	41	4.3	8.69	.749	.86
August	622.4	197	2.9	20.1	1.73	2.00
September	850.0	553	3.4	28.3	2.44	2.73
Water year 1953-54	4,950.5	553	2.4	13.6	1.17	15.89
October 1954	265.7	50	3.7	8.57	.739	.85
November	593.6	156	3.7	19.8	1.71	1.90
December	497.7	68	6.0	16.1	1.39	1.60
Calendar year 1954	5,242.7	553	2.9	14.4	1.24	16.82
January 1955	255.5	23	5.2	8.24	.710	.82
February	491.8	127	6.0	17.6	1.52	1.58
March	590.7	109	8.0	19.1	1.65	1.89
April	408.4	41	8.0	13.6	1.17	1.31
May	389.2	88	6.0	12.6	1.09	1.25
June	453.3	58	5.6	15.1	1.30	1.45
July	262.6	23	4.9	8.47	.730	.84
August	1,391.6	368	6.0	44.9	3.87	4.46
September	308.9	54	4.6	10.3	.888	.99
Water year 1954-55	5,909.0	368	3.7	16.2	1.40	18.94

Reservoirs in Passaic River basin

Splitrock Reservoir.--Lat 40°57'40", long 74°27'45", at dam on Beaver Brook, 2 miles northeast of Hibernia, Morris County. Drainage area, 5.50 sq mi. Records available, October 1950 to September 1955 in this report. December 1948 to September 1950 in files of Trenton district office, United States Geological Survey. Staff gage. Datum of gage is at mean sea level.

Reservoir is formed by a concrete gravity dam with earth embankment; sluice gate first closed in December 1948. Capacity at spillway level (elevation, 835 ft), 3,310,000,000 gal. Flow is released for diversion for municipal supply of city of Jersey City. Elevation record and capacity table furnished by city of Jersey City, Bureau of Water.

Boonton Reservoir.--Lat 40°53', long 74°24', at dam on Rockaway River at Boonton, Morris County. Drainage area, 119 sq mi. Records available, October 1950 to September 1955 in this report. October 1906 to September 1911 and October 1913 to September 1950 in files of Trenton district office, United States Geological Survey. Hook gage. Datum of gage is at mean sea level.

Reservoir is formed by a cyclopean masonry dam with earth wings; dam completed in 1904. Capacity at spillway level (elevation, 305.25 ft), 7,620,000,000 gal. Water is diverted from reservoir for municipal supply of city of Jersey City. Elevation record and data for capacity table furnished by city of Jersey City, Bureau of Water.

Canistear Reservoir.--Lat 41°06'30", long 74°29'30", at dam on Pacock Brook near Stockholm, Sussex County. Drainage area, 5.6 sq mi. Records available, October 1950 to September 1955 in this report. October 1924 to September 1950 in files of Trenton district office, United States Geological Survey. Staff gage. Datum of gage is at mean sea level.

Dam is earth embankment type; dam completed in 1896. Capacity at spillway level (elevation, 1,086.0 ft), 2,407,000,000 gal. Reservoir used for storage and water released for diversion at Macopin intake dam on Pequannock River for municipal supply of city of Newark. Elevation record and capacity table furnished by city of Newark, Division of Water.

Oak Ridge Reservoir.--Lat 41°02'30", long 74°30'10", at dam on Pequannock River near Russia, Morris County. Drainage area, 27.3 sq mi. Records available, October 1950 to September 1955 in this report. October 1924 to September 1950 in files of Trenton district office, United States Geological Survey. Staff gage. Datum of gage is at mean sea level.

Reservoir is formed by earth-fill dam with ogee overflow section; date dam completed unknown; dam raised 10 ft in 1917-18. Capacity at spillway level (elevation, 846.0 ft), 3,895,000,000 gal. Reservoir used for storage and water released for diversion at Macopin intake dam on Pequannock River for municipal supply of city of Newark. Elevation record and capacity table furnished by city of Newark, Division of Water.

Clinton Reservoir.--Lat 41°04', long 74°27', at dam on Clinton Brook at Clinton, Passaic County. Drainage area, 10.5 sq mi. Records available, October 1950 to September 1955 in this report. October 1924 to September 1950 in files of Trenton district office, United States Geological Survey. Staff gage. Datum of gage is at mean sea level.

Reservoir is formed by earth-fill dam completed about 1890. Capacity at spillway level (elevation, 992.0 ft), 3,518,000,000 gal. Reservoir used for storage and water released for diversion at Macopin intake dam on Pequannock River for municipal supply of city of Newark. Elevation record and capacity table furnished by city of Newark, Division of Water.

Echo Lake.--Lat 41°03'00", long 74°24'30", at dam on Macopin River near Charlotteburg, Passaic County. Drainage area, 4.35 sq mi. Records available, October 1950 to September 1955 in this report. October 1924 to September 1950 in files of Trenton district office, United States Geological Survey. Staff gage. Datum of gage is at mean sea level.

Greenwood Lake.--Lat 41°09'36", long 74°20'30", in gatehouse near right end of Greenwood Lake Dam on Wanaque River at Awosting, Passaic County. Drainage area, 27.1 sq mi. Records available, October 1950 to September 1955 in this report. June 1898 to November 1903, June 1907 to September 1950 in files of Trenton district office, United States Geological Survey. 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.

Reservoir is formed by concrete spillway and earth-fill; dam completed about 1837 and reconstruction completed in 1928 with crest of spillway 0.25 ft lower. 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, 7,140,000,000 gal. Records given herein represent usable capacity. Lake used for recreation.

Reservoirs in Passaic River basin--Continued

Wanaque Reservoir.--Lat 41°02'33", long 74°17'36", at Raymond Dam on Wanaque River at Wanaque, Passaic County. Drainage area, 90.4 sq mi. Records available, October 1950 to September 1955 in this report. October 1929 to September 1950 in files of Trenton district office, United States Geological Survey. Water-stage recorder. Datum of gage is at mean sea level (North Jersey District Water Supply Commission datum).

Reservoir is formed by earth-fill with concrete core-wall main dam and seven secondary dams; dams completed in 1927 and storage began in March 1928. Total capacity at spillway level (elevation, 300.3 ft), 28,010,000,000 gal. Capacity available by gravity at spillway level, 26,230,000,000 gal. Diversion to reservoir from Post Brook and Ramapo River (see p. 126). Elevation record and capacity table furnished by North Jersey District Water Supply Commission.

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Note.--See pp. 122-125 for records of month-end elevation or gage height and contents for reservoirs in Passaic River basin.

Reservoirs in Passaic River basin--Continued

Month-end elevation and contents, October 1950 to September 1955

Date	Splitrock Reservoir*			Boonton Reservoir†		
	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in cfs)
September 30, 1950	825.75	1,740	-	302.28	6,858	-
October 31	825.75	1,740	0	298.52	5,925	-46.6
November 30	827.95	2,062	+16.6	305.81	7,766	+94.9
December 31	830.55	2,484	+21.1	305.87	7,781	+.7
Calendar year 1950	-	-	+10.3	-	-	+15.8
January 31, 1951	832.40	2,802	+15.9	305.97	7,807	+1.3
February 28	835.10	3,330	+29.2	305.97	7,807	0
March 31	835.65	3,440	+5.5	307.07	8,093	+14.3
April 30	835.05	3,320	-6.2	305.94	7,799	-15.2
May 31	835.20	3,350	+1.5	305.87	7,781	-.9
June 30	835.00	3,310	-2.1	305.52	7,690	-4.7
July 31	835.20	3,350	+2.0	305.79	7,760	+3.5
August 31	834.95	3,300	-2.5	304.82	7,508	-12.6
September 30	835.08	3,326	+1.3	303.15	7,075	-22.3
Water year 1950-51	-	-	+6.7	-	-	+.9
October 31, 1951	835.10	3,330	+.2	305.76	7,753	+33.8
November 30	835.12	3,334	+.2	305.83	7,771	+.9
December 31	835.22	3,354	+1.0	306.02	7,820	+2.4
Calendar year 1951	-	-	+3.7	-	-	+.2
January 31, 1952	835.28	3,366	+.6	306.12	7,846	+1.3
February 29	835.05	3,320	-2.5	305.76	7,753	-5.0
March 31	835.08	3,326	+.3	305.96	7,805	+2.6
April 30	835.40	3,390	+3.3	306.32	7,898	+4.8
May 31	835.12	3,334	-2.8	306.38	7,914	+.8
June 30	835.05	3,320	-.7	305.70	7,737	-9.1
July 31	835.10	3,330	+.5	305.20	7,607	-6.5
August 31	835.10	3,330	0	305.50	7,685	+3.9
September 30	835.08	3,326	-.2	305.52	7,690	+.3
Water year 1951-52	-	-	0	-	-	+2.6
October 31, 1952	835.0	3,310	-.8	303.16	7,078	-30.5
November 30	835.3	3,370	+3.1	305.90	7,789	+36.7
December 31	835.2	3,350	-1.0	305.74	7,747	-2.1
Calendar year 1952	-	-	0	-	-	-.3
January 31, 1953	835.4	3,390	+2.0	306.08	7,836	+4.4
February 28	835.3	3,370	-1.1	305.80	7,763	-4.0
March 31	835.4	3,390	+1.0	306.06	7,831	+3.4
April 30	835.2	3,350	-2.1	306.00	7,815	-.8
May 31	835.2	3,350	0	305.71	7,740	-3.7
June 30	835.2	3,350	0	304.07	7,313	-22.0
July 31	834.9	3,290	-3.0	299.99	6,285	-51.3
August 31	834.6	3,230	-3.0	294.31	4,934	-67.4
September 30	834.30	3,170	-3.1	286.30	3,250	-86.8
Water year 1952-53	-	-	-.7	-	-	-18.8
October 31, 1953	831.70	2,679	-24.5	282.45	2,468	-39.0
November 30	824.70	1,588	-56.3	284.10	2,810	+17.6
December 31	824.10	1,504	-4.2	295.45	5,196	+119
Calendar year 1953	-	-	-7.8	-	-	-10.8
January 31, 1954	824.80	1,602	+4.9	294.85	5,058	-6.9
February 28	825.80	1,742	+7.7	298.68	5,963	+50.0
March 31	827.90	2,055	+15.6	305.70	7,737	+88.5
April 30	829.20	2,262	+10.7	307.46	8,195	+23.6
May 31	831.00	2,560	+14.9	307.36	8,169	-1.3
June 30	831.05	2,568	+.4	303.78	7,238	-48.0
July 31	830.95	2,552	-.8	297.64	5,714	-76.1
August 31	831.15	2,586	+1.7	293.44	4,742	-48.5
September 30	831.70	2,679	+4.8	295.34	5,171	+22.1
Water year 1953-54	-	-	-2.1	-	-	+8.1
October 31, 1954	831.70	2,679	0	292.74	4,588	-29.1
November 30	833.35	2,980	+15.5	305.77	7,755	+163.3
December 31	834.80	3,270	+14.5	305.96	7,805	+2.5
Calendar year 1954	-	-	+7.5	-	-	+11.1
January 31, 1955	835.05	3,320	+2.5	305.22	7,612	-9.6
February 28	835.35	3,380	+3.3	305.57	7,703	+5.0
March 31	835.30	3,370	-.5	305.59	7,708	+.2
April 30	835.30	3,370	0	305.58	7,706	-.1
May 31	835.95	3,300	-3.5	303.42	7,144	-28.0
June 30	835.10	3,330	+1.5	301.34	6,622	-26.9
July 31	834.80	3,270	-3.0	294.12	4,891	-86.4
August 31	835.25	3,360	+4.5	305.44	7,669	+138.6
September 30	835.15	3,340	-1.0	305.43	7,667	-.1
Water year 1954-55	-	-	+2.8	-	-	+10.6

* Elevation at 9 a.m. on first day of following month.
† Elevation at 8 a.m. on first day of following month.

Reservoirs in Passaic River basin--Continued

Month-end elevation and contents, October 1950 to September 1955

Date	Canistear Reservoir*			Oak Ridge Reservoir†		
	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in cfs)
September 30, 1950	1,085.31	2,335	-	832.19	2,094	-
October 31	1,085.28	2,331	-0.2	820.38	956	-56.8
November 30	1,086.30	2,439	+5.6	827.85	1,618	+34.1
December 31	1,086.31	2,440	0	845.16	3,776	+108
Calendar year 1950	-	-	+9.5	-	-	+11.1
January 31, 1951	1,086.30	2,439	0	846.22	3,927	+7.5
February 28	1,086.30	2,439	0	846.14	3,915	-.7
March 31	1,086.45	2,456	+.8	846.53	3,971	+2.8
April 30	1,086.24	2,433	-1.2	846.07	3,905	-3.4
May 31	1,086.21	2,430	-.1	846.06	3,904	0
June 30	1,086.22	2,431	+.1	845.26	3,790	-5.9
July 31	1,086.28	2,437	+.3	846.18	3,921	+6.5
August 31	1,086.17	2,425	-.6	844.58	3,694	-11.3
September 30	1,086.13	2,421	-.2	839.22	2,969	-37.4
Water year 1950-51	-	-	+.4	-	-	+3.7
October 31, 1951	1,086.22	2,431	+.5	835.87	2,538	-21.5
November 30	1,086.23	2,432	+.1	845.36	3,804	+65.3
December 31	1,086.28	2,437	+.2	846.09	3,908	+5.2
Calendar year 1951	-	-	0	-	-	+.6
January 31, 1952	1,086.26	2,435	-.1	846.06	3,904	-.2
February 29	1,086.21	2,430	-.3	845.88	3,878	-1.4
March 31	1,086.30	2,439	+.4	846.09	3,908	+1.5
April 30	1,086.31	2,440	+.1	846.23	3,928	+1.0
May 31	1,086.40	2,450	+.5	846.21	3,925	-.1
June 30	1,086.20	2,429	-1.1	845.02	3,756	-8.7
July 31	1,086.13	2,421	-.4	844.43	3,711	-2.2
August 31	1,086.13	2,421	0	845.23	3,786	+3.7
September 30	1,086.15	2,423	+.1	844.90	3,739	-2.4
Water year 1951-52	-	-	0	-	-	+3.3
October 31, 1952	1,085.92	2,399	-1.2	838.54	2,880	-42.9
November 30	1,086.27	2,436	+1.9	843.68	3,569	+35.5
December 31	1,086.11	2,419	-.8	846.04	3,901	+16.6
Calendar year 1952	-	-	-.1	-	-	0
January 31, 1953	1,086.19	2,428	+.4	846.17	3,920	+.9
February 28	1,084.01	2,203	-12.4	846.14	3,915	-.3
March 31	1,086.18	2,426	+11.1	846.15	3,917	+.1
April 30	1,086.13	2,421	-.3	846.10	3,909	-.4
May 31	1,086.10	2,418	-.1	846.06	3,904	-.2
June 30	1,086.05	2,412	-.3	838.70	2,901	-51.7
July 31	1,083.87	2,189	-11.1	826.48	1,485	-70.7
August 31	1,081.91	1,992	-9.8	819.25	871	-30.6
September 30	1,081.73	1,975	-.9	791.50	0	-44.9
Water year 1952-53	-	-	-1.9	-	-	-15.8
October 31, 1953	1,072.86	1,176	-39.8	819.35	878	+43.8
November 30	1,064.23	527	-33.5	826.80	1,516	+32.9
December 31	1,068.72	842	+15.7	832.05	2,078	+28.0
Calendar year 1953	-	-	-6.7	-	-	-7.7
January 31, 1954	1,070.47	978	+6.8	828.80	1,717	-18.0
February 28	1,072.79	1,170	+10.6	831.95	2,066	+19.3
March 31	1,077.44	1,574	+20.2	840.70	3,164	+54.8
April 30	1,080.09	1,820	+12.7	842.80	3,448	+14.6
May 31	1,084.00	2,202	+19.1	844.85	3,732	+14.2
June 30	1,084.26	2,228	+1.3	839.60	3,019	-36.8
July 31	1,084.11	2,213	-.7	834.20	2,327	-34.5
August 31	1,084.53	2,255	+2.1	828.90	1,728	-29.9
September 30	1,085.40	2,344	+4.6	827.25	1,560	-8.8
Water year 1953-54	-	-	+1.6	-	-	+6.6
October 31, 1954	1,085.17	2,320	-1.2	819.20	867	-34.6
November 30	1,086.20	2,429	+5.6	833.30	2,222	+69.9
December 31	1,086.24	2,433	+.2	841.20	3,231	+50.3
Calendar year 1954	-	-	+6.7	-	-	+4.9
January 31, 1955	1,086.12	2,420	-.6	839.55	3,012	-10.9
February 28	1,086.20	2,429	+.5	839.65	3,025	+.7
March 31	1,086.16	2,424	-.2	846.10	3,909	+44.1
April 30	1,086.16	2,424	0	846.10	3,909	0
May 31	1,086.09	2,417	-.3	840.50	3,138	-38.5
June 30	1,086.10	2,418	0	838.40	2,862	-14.2
July 31	1,085.84	2,390	-1.4	836.90	2,669	-9.6
August 31	1,086.13	2,421	+1.5	846.05	3,902	+61.5
September 30	1,086.13	2,421	0	843.00	3,475	-22.0
Water year 1954-55	-	-	+.3	-	-	+8.1

* Elevation at 12 m. on first day of following month.
† Elevation at 6 a.m. on first day of following month.

Reservoirs in Passaic River basin--Continued

Month-end elevation and contents, October 1950 to September 1955

Date	Clinton Reservoir*			Echo Lake†		
	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in cfs)
September 30, 1950	983.35	2,416	-	887.64	1,124	-
October 31	979.30	1,985	-21.5	885.61	961	-8.1
November 30	981.50	2,218	+12.0	887.78	1,136	+9.0
December 31	988.21	3,033	+40.7	890.02	1,322	+9.3
Calendar year 1950	-	-	+7.2	-	-	+1.1
January 31, 1951	992.25	3,550	+25.8	893.15	1,596	+13.7
February 28	992.22	3,547	-.2	895.02	1,775	+9.9
March 31	992.66	3,604	+2.8	895.80	1,853	+3.9
April 30	992.12	3,534	-3.6	895.00	1,773	-4.1
May 31	992.18	3,541	+.3	893.27	1,608	-8.2
June 30	989.89	3,248	-15.1	893.80	1,658	+2.6
July 31	988.50	3,070	-8.9	894.93	1,766	+5.4
August 31	991.31	3,430	+18.0	894.53	1,728	-1.9
September 30	986.52	2,798	-32.6	893.58	1,636	-4.7
Water year 1950-51	-	-	+1.6	-	-	+2.2
October 31, 1951	982.55	2,328	-23.5	892.73	1,558	-3.9
November 30	987.34	2,911	+30.1	895.01	1,774	+11.1
December 31	992.08	3,528	+30.8	895.02	1,775	0
Calendar year 1951	-	-	+2.1	-	-	+1.9
January 31, 1952	992.23	3,548	+1.0	895.00	1,773	-.1
February 29	992.06	3,526	-1.2	894.50	1,726	-.3
March 31	992.20	3,544	+.9	894.82	1,756	+1.5
April 30	992.37	3,566	+1.1	894.93	1,766	+.5
May 31	992.44	3,575	+.4	895.48	1,821	+2.7
June 30	991.12	3,405	-8.8	894.43	1,719	-5.3
July 31	988.60	3,083	-16.1	894.34	1,710	-.4
August 31	989.02	3,137	+2.7	894.32	1,708	-.1
September 30	992.06	3,526	-20.1	894.60	1,735	+1.4
Water year 1951-52	-	-	+3.1	-	-	+.4
October 31, 1952	991.74	3,485	-2.0	892.85	1,569	-8.3
November 30	992.18	3,541	+2.9	893.05	1,588	+1.0
December 31	992.12	3,534	-.3	893.01	1,584	-.2
Calendar year 1952	-	-	0	-	-	-.8
January 31, 1953	992.30	3,557	-1.1	893.10	1,592	+.4
February 28	992.17	3,540	-.9	893.03	1,586	-.3
March 31	992.25	3,550	+.5	893.11	1,593	+.3
April 30	992.26	3,552	+.1	893.06	1,588	-.3
May 31	991.97	3,514	-1.9	892.96	1,579	-.4
June 30	990.82	3,367	-7.6	891.42	1,442	-7.1
July 31	990.53	3,330	-1.8	890.09	1,327	-5.7
August 31	985.25	2,638	-34.5	889.26	1,258	-3.4
September 30	980.13	2,072	-29.2	888.77	1,216	-2.2
Water year 1952-53	-	-	-6.2	-	-	-2.2
October 31, 1953	969.10	1,034	-51.8	885.06	916	-15.0
November 30	961.50	504	-27.3	885.35	938	+1.1
December 31	968.85	1,015	+25.5	886.37	1,020	+4.1
Calendar year 1953	-	-	-10.7	-	-	-2.4
January 31, 1954	971.30	1,215	+10.0	885.80	973	-2.3
February 28	974.80	1,528	+17.3	884.20	849	-6.9
March 31	981.08	2,174	+32.2	887.75	1,134	+14.2
April 30	984.92	2,599	+21.9	889.50	1,276	+7.3
May 31	989.78	3,234	+31.7	892.32	1,521	+12.2
June 30	990.28	3,298	+3.3	888.45	1,188	-17.2
July 31	990.10	3,275	-1.1	884.25	852	-16.8
August 31	984.75	2,578	-34.8	880.18	551	-15.0
September 30	981.70	2,239	-17.5	880.82	597	+2.4
Water year 1953-54	-	-	+.7	-	-	-2.6
October 31, 1954	978.85	1,938	-15.0	879.98	536	-3.0
November 30	980.88	2,153	+11.1	882.60	730	+10.0
December 31	985.60	2,680	+26.3	884.40	863	+6.6
Calendar year 1954	-	-	+7.1	-	-	-.7
January 31, 1955	986.97	2,858	+8.9	884.52	873	+.5
February 28	988.92	3,124	+14.7	885.81	974	+5.6
March 31	992.18	3,541	+20.8	887.60	1,120	+7.3
April 30	991.85	3,499	-2.2	889.33	1,263	+7.4
May 31	990.06	3,270	-11.4	889.74	1,297	+1.7
June 30	988.80	3,108	-8.4	889.94	1,316	+1.0
July 31	983.28	2,408	-34.9	884.30	856	-23.0
August 31	992.10	3,531	+56.1	888.87	1,224	+18.4
September 30	992.00	3,518	-.7	888.53	1,196	-1.4
Water year 1954-55	-	-	+5.4	-	-	+2.5

* Elevation at 9 a.m. on first day of following month.
† Elevation at 12 m. on first day of following month.

Reservoirs in Passaic River basin--Continued

Month-end gage height or elevation and contents, October 1950 to September 1955

Date	Greenwood Lake*			Wanaque Reservoir†		
	Gage height (feet)	Contents (million gallons)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in cfs)
September 30, 1950	9.88	6,787	-	289.13	20,258	-
October 31	9.87	6,781	-0.3	284.88	17,698	-128
November 30	10.53	7,189	+21.0	286.54	18,660	+49.6
December 31	10.21	6,990	-9.9	295.23	24,331	+283
Calendar year 1950	-	-	+.1	-	-	+64.5
January 31, 1951	10.41	7,114	+6.2	299.85	27,665	+166
February 28	10.36	7,083	-1.7	302.37	29,606	+107
March 31	11.71	7,927	+42.1	303.34	30,352	+37.2
April 30	10.25	7,015	-47.0	302.32	29,566	-40.5
May 31	10.41	7,114	+4.9	301.32	28,796	-38.4
June 30	10.17	6,965	-7.7	301.01	28,558	-12.3
July 31	10.45	7,139	+8.7	300.28	27,994	-28.1
August 31	10.07	6,903	-11.8	301.65	29,050	+52.7
September 30	9.95	6,830	-3.8	298.25	26,475	-133
Water year 1950-51	-	-	+.2	-	-	+26.3
October 31, 1951	10.14	6,947	+5.8	296.14	24,968	-75.2
November 30	10.29	7,040	+4.8	301.30	28,780	+197
December 31	10.35	7,077	+1.8	302.09	29,392	+30.5
Calendar year 1951	-	-	+.4	-	-	+21.4
January 31, 1952	10.46	7,145	+3.4	302.14	29,428	+1.8
February 29	10.19	6,978	-8.9	301.50	28,940	-26.0
March 31	10.54	7,071	+4.6	302.38	29,614	+33.6
April 30	10.72	7,306	+12.1	302.63	29,804	+9.8
May 31	10.43	7,127	-8.9	302.74	29,892	+4.4
June 30	10.10	6,922	-10.6	301.01	28,558	-68.8
July 31	9.98	6,848	-3.7	298.65	26,765	-89.5
August 31	10.10	6,922	+3.7	297.72	26,094	-33.5
September 30	10.10	6,922	0	298.76	26,842	+38.6
Water year 1951-52	-	-	+.4	-	-	+1.6
October 31, 1952	9.93	6,817	-5.2	295.14	24,268	-128
November 30	10.35	7,077	+13.4	297.10	25,650	+71.3
December 31	10.20	6,984	-4.6	301.94	29,272	+181
Calendar year 1952	-	-	-.4	-	-	-.5
January 31, 1953	10.45	7,139	+7.7	302.54	29,738	+23.3
February 28	10.23	7,003	-7.5	302.23	29,494	-13.5
March 31	10.45	7,139	+6.8	302.49	29,702	+10.4
April 30	10.30	7,046	-4.8	302.43	29,654	-2.5
May 31	10.12	6,934	-5.6	301.71	29,098	-27.7
June 30	9.95	6,830	-5.4	297.88	26,206	-149
July 31	9.73	6,695	-6.7	292.31	23,007	-160
August 31	9.25	6,402	-14.6	287.82	19,432	-178
September 30	8.82	6,142	-13.4	281.84	15,964	-179
Water year 1952-53	-	-	-3.3	-	-	-46.1
October 31, 1953	8.82	6,142	0	275.95	12,935	-151
November 30	9.07	6,293	+7.8	270.41	10,394	-131
December 31	10.11	6,928	+31.7	273.09	11,585	+59.4
Calendar year 1953	-	-	-.6	-	-	-75.0
January 31, 1954	10.22	6,996	+3.4	270.31	10,345	-61.9
February 28	10.38	7,096	+5.5	274.06	12,030	+93.1
March 31	10.17	6,965	-6.5	284.12	17,256	+261
April 30	10.27	7,027	+3.2	289.34	20,394	+162
May 31	10.19	6,978	-2.4	298.30	26,510	+305
June 30	9.86	6,775	-10.5	294.86	24,072	-126
July 31	9.55	6,586	-9.4	290.53	21,168	-145
August 31	9.65	6,646	+3.0	286.47	18,622	-127
September 30	10.10	6,922	+14.2	282.89	16,545	-107
Water year 1953-54	-	-	+3.3	-	-	+2.5
October 31, 1954	10.02	6,872	-2.5	277.27	13,595	-147
November 30	10.44	7,133	+13.5	281.65	15,860	+117
December 31	10.43	7,127	-.3	286.18	18,448	+129
Calendar year 1954	-	-	+.8	-	-	+291
January 31, 1955	10.15	6,953	-8.7	287.50	19,240	+39.5
February 28	10.40	7,108	+8.6	291.40	21,730	+138
March 31	10.24	7,009	-4.9	299.42	27,336	+280
April 30	10.22	6,996	-.7	299.15	27,135	-10.4
May 31	10.05	6,891	-5.2	296.35	25,115	-101
June 30	10.04	6,885	-.3	292.83	22,688	-125
July 31	9.72	6,689	-9.8	287.67	19,342	-167
August 31	10.16	6,959	+13.5	298.45	26,620	+363
September 30	10.11	6,928	-1.6	295.23	24,331	-118
Water year 1954-55	-	-	0	-	-	+330

* Gage height at 12 p.m.
† Elevation at 8 a.m. on first day of following month.

Diversions in Passaic River basin

Jersey City diverts water from Boonton Reservoir on Rockaway River at Boonton for municipal supply.

City of Newark diverts water from reservoir formed by Macopin intake dam on Pequannock River.

North Jersey District Water Supply Commission diverts water for municipal supply from Wanaque Reservoir on Wanaque River. In addition to water from Wanaque River, the Commission stores water diverted into the Wanaque Reservoir from Post Brook near Wanaque and Ramapo River by pumping from Pompton Lakes. Figures of diversion from Wanaque Reservoir given herein show total diversion from Passaic River basin by North Jersey District Water Supply Commission.

The Passaic Valley Water Commission diverts water from Passaic River above Beattie's Dam at Little Falls for municipal supply.

Diversion, in cubic feet per second, October 1950 to September 1955

Month	Jersey City	Newark	North Jersey District Water Supply Commission			Passaic Valley Water Commission
			From Wanaque Reservoir	From Post Brook to Wanaque Reservoir	From Ramapo River to Wanaque Reservoir	
October 1950	90.3	102	125	0		55.0
November	91.4	80.4	116	4.06		53.4
December	87.4	101	119	5.53		51.3
Calendar year 1950	91.7	91.8	94.1	3.13		67.8
January 1951	97.0	97.5	127	4.94		52.0
February	97.1	95.2	123	6.78		58.3
March	91.1	93.1	119	12.6		50.0
April	89.4	98.8	116	6.65		52.5
May	91.3	97.0	125	1.78		53.0
June	91.9	100	133	1.83		55.1
July	94.0	91.6	133	3.90		44.1
August	96.1	110	135	2.85		60.1
September	93.1	101	135	0		52.5
Water year 1950-51	92.5	97.4	125	4.23		53.0
October 1951	90.9	100	127	3.85		47.5
November	91.0	94.0	127	14.4		48.0
December	93.5	90.7	123	9.42		49.9
Calendar year 1951	93.0	97.5	127	5.74		51.8
January 1952	92.8	98.7	123	6.00		51.9
February	94.2	93.1	120	3.89		51.0
March	92.1	89.8	119	15.6		50.4
April	92.5	95.6	124	15.3		47.4
May	91.6	95.5	123	6.71		50.1
June	99.4	108	132	10.7		62.0
July	98.9	103	152	4.39		48.7
August	96.0	82.6	150	5.19		71.8
September	95.2	84.1	148	6.18		64.7
Water year 1951-52	94.0	94.7	131	8.45		53.6
October 1952	93.5	79.2	141	.81		61.7
November	97.7	79.6	146	2.53		56.6
December	96.5	89.6	138	4.91		54.8
Calendar year 1952	95.0	89.9	135	6.84		55.9
January 1953	97.3	88.5	134	8.18		52.0
February	97.2	89.1	130	4.01		56.8
March	96.0	90.3	124	12.1		54.0
April	93.6	92.9	130	6.67		48.9
May	91.6	90.8	135	3.80		53.2
June	97.1	105	151	.12		58.8
July	94.6	102	158	0		49.4
August	95.9	84.3	160	0		66.5
September	96.6	85.3	164	0		71.2
Water year 1952-53	95.6	88.0	143	3.60		57.0

Diversions in Passaic River basin--Continued

Diversion, in cubic feet per second, October 1950 to September 1955

Month	Jersey City	Newark	North Jersey District Water Supply Commission			Passaic Valley Water Commission
			From Wanaque Reservoir	From Post Brook to Wanaque Reservoir	From Ramapo River to Wanaque Reservoir	
October 1953	91.7	77.5	150	0	-	72.8
November	91.8	68.8	143	0	-	60.6
December	91.1	75.9	144	3.60	18.6	54.1
Calendar year 1953	94.5	87.5	144	3.22	1.6	58.2
January 1954	96.6	71.8	151	1.53	13.7	50.3
February	91.2	63.2	149	1.89	95.9	48.9
March	91.8	77.3	152	2.93	154	41.0
April	91.2	74.5	138	1.41	132	55.2
May	103	110	62.0	3.81	73.5	87.2
June	103	81.4	135	.01	0	92.0
July	98.2	68.0	134	0	0	83.8
August	99.9	91.4	129	.02	0	86.8
September	101	68.9	154	.05	0	57.6
Water year 1953-54	95.9	77.5	136	1.28	40.3	66.0
October 1954	99.2	70.5	160	0	0	45.6
November	93.7	82.0	141	2.50	0	42.3
December	95.3	97.1	132	2.50	0	39.4
Calendar year 1954	97.1	79.8	136	1.39	38.7	60.9
January 1955	97.6	89.3	131	1.21	61.4	40.9
February	99.8	94.8	111	3.98	86.3	46.4
March	96.3	95.0	129	3.06	128	41.1
April	98.2	88.8	132	1.25	13.9	37.9
May	94.9	93.3	138	.41	0	49.9
June	97.8	74.5	156	.07	0	62.2
July	103	77.5	171	0	0	62.9
August	101	84.5	175	9.96	9.6	68.8
September	100	86.2	155	.08	0	53.9
Water year 1954-55	98.1	86.1	144	2.08	24.6	49.3

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 3.3 miles upstream from mouth.

Drainage area (revised).--20.2 sq mi of which 2.2 sq mi contributes to a storm sewer which bypasses the station.

Records available.--October 1921 to September 1955.

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.--34 years, 23.0 cfs (unadjusted).

Extremes.--1921-55: Maximum discharge, 2,720 cfs July 23, 1938, from rating curve extended above 1,100 cfs on basis of contracted-opening measurement of peak flow; maximum gage height, 15.02 ft Sept. 11, 1954, from floodmark in recorder shelter; no flow many times.

Revisions.--The figures of maximum and peak discharge for some water years have been revised, as shown in the following table. They supersede figures published in Special Reports 12 and 14.

Water year	Date	Discharge (cfs)	Gage height (feet)
1942	Aug. 9, 1942	1,970	11.28
1944	Oct. 27, 1943	2,040	11.84
	Sept.13, 1944	†1,850	-
	Sept.14, 1944	2,220	13.00
1945	Sept.19, 1945	1,760	9.88
1948	Nov. 8, 1947	2,070	11.98
	July 22, 1948	1,800	10.17

† Estimated

Peak discharge (base, 850 cfs, revised).--

1950-51: Nov. 5 (1 a.m.) 1,000 cfs (6.60 ft); Nov. 25 (9:30 p.m.) 890 cfs (6.25 ft); July 28 (11 a.m.) 1,130 cfs (6.99 ft).

1951-52: Nov. 7 (1 p.m.) 1,170 cfs (7.12 ft); Dec. 21 (4 a.m.) 1,100 cfs (6.90 ft); May 25 (3:30 p.m.) 1,010 cfs (6.62 ft); June 1 (5:30 p.m.) 1,830 cfs (9.46 ft); Aug. 6 (7 p.m.) 2,000 cfs (11.48 ft); Aug. 30 (12 p.m.) 1,380 cfs (7.83 ft); Sept. 1 (3 p.m.) 1,290 cfs (7.52 ft).

1952-53: Jan. 24 (2 p.m.) 1,030 cfs (6.66 ft); Mar. 13 (10 a.m.) 1,920 cfs (10.97 ft); Mar. 16 (12:30 a.m.) 884 cfs (6.21 ft); Mar. 24 (2 p.m.) 876 cfs (6.19 ft); Apr. 7 (2 p.m.) 884 cfs (6.21 ft); May 23 (5 a.m.) 860 cfs (6.15 ft); July 23 (1 p.m.) 1,280 cfs (7.50 ft).

1953-54: Dec. 14 (7:30 a.m.) 929 cfs (6.33 ft); Sept. 11 (10 a.m.) 2,600 cfs (15.02 ft).

1954-55: Aug. 7 (11:30 p.m.) 2,440 cfs (13.88 ft); Aug. 13 (7 a.m.) 2,230 cfs (13.19 ft); Aug. 19 (3:30 p.m.) 1,290 cfs (7.52 ft).

Remarks.--Diversion by pumpage from Hammock well field, in Union, for municipal supply by Elizabethtown Water Co. probably reduces the flow past the station. Occasional regulation by Ursino Lake.

Revisions (water years).--Special Report 9: Drainage area. 1927(M). Revised figures of discharge, in cubic feet per second, for the water years 1922-23, 1932, superseding those published in Bulletin 33 and Special Report 5, are given herewith:

1922		1922-Con.	
June 29	229	July 9	149
30	184	10	118
July 1	206	Dec. 28	215
2	300		
3	278	1923	
4	285	Jan. 1	267
5	293	2	127
6	274		
7	184	1932	
8	160	July 16	4.8

Month	Maximum	Minimum	Mean
June 1922	229	2.9	28.1
July	300	0	83.1
December	215	.4	9.86
January 1923	267	3.8	23.8
Water year 1922-23	267	0	10.2
July 1932	-	-	6.24
Water year 1931-32	343	-	12.9

Elizabeth River at Elizabeth--Continued

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.0	6.7	12.3	12.3	50	32	41	18.1	17.0	30	13.4	8.6
2	5.8	6.7	8.9	10.5	43	19.1	32	15.0	12.3	9.5	13.0	8.6
3	7.2	6.2	8.0	12.3	15.0	17.5	f117	13.8	9.7	8.6	13.0	8.6
4	7.0	62	110	16.9	11.9	f103	38	12.6	19.4	88	12.3	8.3
5	6.2	183	38	12.9	14.1	26	27	10.5	42	*29	11.6	8.3
6	5.8	*16.7	15.5	10.5	14.6	21	22	8.6	22	9.8	10.9	10.2
7	5.2	13.4	15.5	39	177	17.6	17.1	14.6	11.9	8.0	10.9	27
8	4.2	11.2	125	18.1	34	15.9	14.6	11.6	7.7	6.5	30	8.0
9	*6.2	11.2	29	12.3	32	14.6	15.0	11.9	3.1	7.2	13.0	7.7
10	87	9.8	20	11.2	20	11.6	16.7	11.2	3.6	7.5	21	7.7
11	10.5	7.2	38	11.2	13.0	10.2	16.3	69	8.9	7.5	69	7.7
12	93	5.4	16.7	11.2	13.4	11.6	19.9	f57	9.5	8.9	19.3	7.7
13	13.0	6.2	15.9	9.5	15.2	13.0	f40	13.7	20	12.6	23	7.7
14	8.3	7.5	15.5	29	16.7	67	15.5	11.2	79	9.2	*13.8	7.7
15	6.0	7.2	15.0	105	15.0	21	12.3	11.9	31	9.2	14.3	8.6
16	6.0	7.5	100	28	11.6	16.7	f21	11.9	13.2	9.5	28	8.6
17	7.2	7.7	18.2	16.7	104	12.3	16.2	11.2	8.3	10.2	18.5	8.3
18	7.5	6.2	14.6	14.2	42	10.2	14.6	10.2	9.1	10.5	12.3	8.3
19	7.2	5.0	14.2	13.0	24	10.9	14.6	9.2	10.2	105	11.9	8.3
20	7.2	24	13.4	11.6	26	136	13.4	7.7	10.9	22	11.9	8.3
21	6.0	44	13.0	9.4	227	47	11.9	9.5	10.9	11.2	11.6	7.7
22	4.9	8.4	13.0	8.9	118	*29	10.4	10.2	10.6	10.9	11.2	7.5
23	43	6.2	12.3	10.5	37	18.1	f79	61	30	15.0	10.2	7.5
24	7.2	5.8	11.2	83	27	25	19.1	186	7.5	10.9	7.2	6.7
25	7.2	297	8.9	24	22	11.6	15.9	36	8.9	10.9	16.6	16.6
26	6.7	82	7.0	16.3	18.1	5.4	14.6	28	9.5	10.9	19.8	7.7
27	6.2	26	6.7	12.3	16.7	1.2	13.4	47	f35	10.9	9.5	7.0
28	5.4	28	5.8	14.5	15.5	6.6	12.1	36	12.5	529	9.8	7.0
29	5.2	17.1	66	33	-------	40	41	80	f45	44	9.5	7.0
30	5.3	14.6	20	14.6	-------	228	f37	56	12.2	18.6	8.9	7.0
31	6.7	-------	33	13.0	-------	139	-------	31	-------	13.0	8.9	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Second River at Belleville.
f Fragmentary gage-height record; discharge estimated from partly estimated gage-height graph based on the adjacent graph and shape of graphs for typical peaks.

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.7	176	10.2	10.9	18.6	11.9	14.2	24	839	15.0	9.5	361
2	6.7	44	8.0	22	17.1	21	15.5	19.5	103	12.6	11.4	54
3	6.7	233	9.2	48	15.0	14.6	13.8	15.0	54	11.2	14.8	55
4	6.7	30	11.2	16.7	127	54	13.0	11.9	76	101	8.9	27
5	6.7	18.1	66	62	49	74	102	12.6	57	30	8.3	22
6	7.0	15.0	14.6	19.1	31	24	22	19.3	34	13.8	365	19.5
7	106	294	12.3	16.3	26	22	17.1	15.2	24	9.5	104	14.6
8	131	40	10.9	14.2	21	17.6	16.3	13.4	17.6	28	57	13.4
9	15.5	24	8.9	13.0	17.6	14.2	15.0	12.6	82	145	34	13.0
10	12.3	14.6	9.5	30	14.6	13.8	14.6	11.2	30	93	138	11.9
11	91	10.9	10.9	14.2	21	287	13.4	85	19.1	22	27	11.9
12	17.1	9.5	10.5	11.6	14.6	47	11.6	137	17.6	15.5	36	11.6
13	10.5	8.9	9.8	9.5	13.0	37	10.2	34	15.9	10.2	23	10.9
14	7.5	36	9.8	23	13.0	27	82	24	14.2	10.2	17.6	8.0
15	6.7	28	80	15.4	*13.0	21	28	19.1	11.2	11.9	15.0	18.0
16	7.7	80	13.8	13.4	11.2	16.3	21	16.7	12.6	12.3	112	14.7
17	8.0	17.6	11.6	14.1	86	15.0	16.7	13.0	15.5	34	27	10.9
18	8.0	13.1	116	56	32	14.6	15.9	24	*15.0	14.6	17.1	69
19	7.5	12.3	33	15.0	18.6	118	13.4	13.0	27	12.3	15.5	49
20	6.2	12.6	46	21	16.3	33	11.2	45	16.2	9.2	13.8	15.0
21	5.0	11.9	314	13.4	22	24	11.9	25	10.9	36	19.0	9.5
22	5.0	8.9	42	64	15.8	27	13.4	17.6	8.9	32	94	10.2
23	6.5	9.2	26	78	13.0	103	13.8	13.8	8.9	18.1	17.1	14.9
24	23	15.0	19.1	26	11.9	43	11.9	11.9	10.9	15.0	12.3	11.2
25	58	7.7	21	19.5	13.0	29	60	288	8.6	12.3	11.2	10.9
26	9.8	64	52	112	13.8	23	70	128	6.5	10.9	11.6	10.5
27	7.5	13.8	21	46	15.0	19.1	103	48	8.5	9.8	11.9	9.2
28	30	11.9	15.5	83	13.4	17.6	200	29	9.2	13.6	16.8	6.7
29	7.0	11.9	13.0	47	13.0	15.5	46	24	7.5	15.4	13.6	8.1
30	8.0	11.8	16.2	27	-------	12.6	34	17.8	55	11.2	131	9.8
31	7.7	-------	12.3	22	-------	12.6	-------	54	-------	9.8	150	-------

* Discharge measurement made on this day.

Elizabeth River at Elizabeth--Continued

Daily discharge, in cubic feet per second, 1950-55

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	6.6	10	12	18	9.7	20	149	12	a11	9.4	5.0
2	48	5.0	12	10	13	11	22	28	*12	a15	19	8.3
3	26	10	28	106	14	13	16	20	12	a13	10	8.0
4	9.4	*8.0	20	18	13	178	23	20	12	a10	10	8.3
5	7.7	8.3	193	14	13	38	28	52	12	a10	21	6.8
6	8.8	9.4	55	12	13	25	15	32	11	a60	11	15
7	10	8.3	17	14	20	17	360	59	23	a20	11	13
8	9.4	7.7	14	27	11	15	71	43	11	a12	9.4	6.6
9	9.7	5.9	13	158	12	14	40	40	12	a10	28	11
10	9.1	8.8	13	127	11	15	119	29	11	9.4	23	8.3
11	8.0	8.8	133	44	11	14	42	17	11	8.6	10	7.4
12	6.4	9.1	24	29	36	50	105	16	11	6.9	9.7	7.2
13	6.9	9.1	16	22	16	698	151	51	77	7.7	10	26
14	8.8	8.8	13	18	15	73	74	40	32	9.4	35	6.7
15	9.4	52	12	16	192	190	38	39	18	9.7	38	7.4
16	8.8	29	12	16	36	177	135	16	13	9.1	10	30
17	9.1	8.8	11	12	*23	48	62	83	12	9.7	16	10
18	8.3	10	13	58	17	38	41	38	12	8.0	11	8.3
19	6.4	10	16	18	17	119	71	21	12	7.2	10	6.6
20	13	108	12	17	20	37	43	18	11	39	10	5.5
21	9.4	80	58	51	88	25	27	16	9.1	36	10	13
22	8.8	210	57	49	20	19	23	16	27	20	8.0	12
23	8.6	30	19	21	15	19	21	193	15	297	5.5	7.7
24	8.6	16	15	293	17	217	18	25	13	36	7.1	7.2
25	7.4	14	11	69	15	99	17	21	12	20	4.8	7.7
26	6.1	13	10	32	15	57	43	42	12	13	15	7.2
27	7.7	11	9.1	26	14	35	19	21	11	11	5.4	5.2
28	9.4	9.7	6.6	49	11	24	17	10	38	12	3.2	5.0
29	10	11	8.0	22	-------	24	16	7.2	28	11	3.9	7.7
30	8.3	11	9.4	19	-------	21	15	9.4	a15	23	4.1	8.0
31	8.3	-------	9.4	17	-------	20	-------	11	-------	11	4.1	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for nearby stations.

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.0	9.4	8.3	5.7	7.7	67	19	9	*7	55	7.7	20
2	8.3	9.1	8.3	5.2	8.8	25	10	8.5	11	15	7.7	12
3	6.6	10	*8.3	5.5	*25	116	7.2	15	10	9	128	11
4	5.0	9.4	8.0	6.1	13	33	5.7	150	12	20	17	8.0
5	5.2	10	107	7.7	9.4	17	7.2	15	10	8	11	7
6	24	11	52	11	6.9	11	10	11	8	10	9.7	9
7	28	152	112	9.4	5.5	8.6	11	10	9	14	7.4	11
8	10	18	16	8.3	7.4	9.4	24	235	10	11	6.9	22
9	9.7	13	12	8.3	9.1	11	11	50	9.5	9	212	5.2
10	8.8	11	120	7.2	8.6	12	8.3	90	9.5	7	22	10
11	8.3	10	18	7.2	8.6	11	18	25	11	6.5	12	800
12	12	11	30	8.8	7.7	9.7	26	22	9.5	10	10	70
13	13	9.7	24	8.3	6.1	37	10	20	30	11	9.1	20
14	13	8.3	250	8.3	5.2	75	10	17	10	45	6.6	15
15	13	6.6	32	9.4	6.6	17	9.7	15	10	63	8.6	20
16	13	7.4	16	16	8.8	13	26	10	10	7.7	7.9	50
17	12	8.8	12	12	75	12	145	9.4	9	6.6	8.8	25
18	9.1	9.1	11	7.2	13	11	32	11	8.5	6.4	8.0	15
19	11	9.1	8.8	8.3	10	13	17	11	8	9.1	28	60
20	13	8.6	7.2	10	7.7	98	15	15	7	10	*48	20
21	14	7.7	8.0	53	26	14	13	167	9.5	8.6	65	12
22	15	5.9	11	15	26	11	11	22	10	8.3	8.3	13
23	14	71	9.4	8.6	10	11	14	16	30	7.7	7.8	11
24	12	13	8.0	6.9	10	11	15	11	10	6.6	9.4	10
25	31	49	6.1	8.3	35	36	10	13	11	6.4	15	8.3
26	16	12	5.7	12	23	18	11	11	9	9.9	10	8.6
27	13	8.3	5.9	10	11	11	*20	11	8.5	9.4	8.8	12
28	180	8.0	9.4	14	7.2	8.8	15	11	15	8.0	7.2	9.7
29	123	5.7	13	9.4	-------	9.1	12	9.7	12	8.3	5.9	10
30	24	6.1	8.3	8.3	-------	11	10	9.8	10	8.8	15	10
31	15	-------	7.7	6.9	-------	11	-------	8	-------	7.4	184	-------

* Discharge measurement made on this day.
Note.--No gage-height record June 2-21, Sept. 10-20; discharge estimated on basis of weather records and records for Second River at Belleville and Rahway River near Springfield. Stage-discharge relation indefinite Apr. 25-30, May 1-7, 9-16, 31, June 22 to July 14; discharge estimated on basis of 2 discharge measurements and records for stations as for no gage-height record.

Elizabeth River at Elizabeth--Continued

Daily discharge, in cubic feet per second, 1950-55

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	7.7	d11	13	10	34	13	8.6	20	22	16	13
2	8.6	99	d10	41	10	14	12	9.0	10	9.2	30	13
3	9.2	65	d9.5	13	9.7	12	9.4	9.1	8.0	6.9	30	11
4	8.8	21	d9.0	13	9.4	63	10	10	46	5.9	31	8.6
5	9.4	20	d8.5	12	8.6	18	12	10	14	6.9	35	7.7
6	32	10	8.0	35	67	50	17	10	6.1	9.1	9.1	19
7	9.1	7.4	8.3	13	168	28	13	7.7	7.1	10	*307	12
8	8.6	8.0	8.8	9.7	19	18	9.7	5.7	7.6	8.8	296	11
9	7.2	8.8	d40	8.8	14	16	e8.0	6.4	e18	8.3	32	11
10	5.9	8.6	d20	9.7	13	14	d7.5	7.7	e10	108	19	9.7
11	7.1	8.6	d11	11	46	13	e10	8.3	d23	48	57	8.0
12	9.3	8.3	8.8	11	15	11	e51	8.6	e40	12	f729	9.1
13	9.6	8.0	8.3	11	9.6	10	22	8.8	e11	11	*822	10
14	10	6.9	d80	10	11	10	10	8.0	*e10	9.4	73	11
15	15	6.1	*d30	9.1	15	24	18	6.6	10	9.1	37	11
16	13	6.6	d20	8.3	12	20	7.4	8.6	10	8.0	27	11
17	5.9	7.4	15	9.1	45	12	5.0	9.7	10	6.4	22	9.7
18	*6.6	7.7	d85	9.7	14	26	6.8	10	8.8	7.8	53	7.7
19	8.3	8.0	31	10	11	13	32	10	6.9	8.8	412	9.1
20	8.3	12	19	10	9.7	10	18	10	89	8.6	44	25
21	8.3	271	d14	10	10	43	19	7.2	19	8.6	72	10
22	8.3	d60	d12	9.7	11	148	25	5.2	60	8.6	31	9.7
23	6.9	d20	*d10	8.6	50	39	10	13	21	7.6	19	9.4
24	5.0	33	9.1	8.8	15	23	7.4	28	41	6.0	16	127
25	6.2	d20	7.2	10	13	18	10	49	20	7.1	16	14
26	8.0	d16	6.6	10	15	69	40	13	28	8.3	14	11
27	19	d14	7.7	10	10	18	13	12	10	8.8	13	11
28	11	13	8.8	9.7	13	14	11	8.3	11	8.3	10	73
29	77	d60	66	8.3	-------	14	43	37	12	8.3	12	14
30	25	d20	128	7.7	-------	14	14	31	11	7.2	14	18
31	8.8	-------	19	8.8	-------	15	-------	193	-------	8.3	26	-------

* Discharge measurement made on this day.
d Doubtful gage-height record; discharge estimated on basis of 2 discharge measurements, weather records, and records for Second River at Belleville and Rahway River at Springfield.
d Waste gate open.
f Fragmentary gage-height record; discharge computed from partly estimated gage-heights.

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	409.3	93	4.2	13.2		
November	939.9	297	5.0	31.3		
December	840.6	125	5.8	27.1		
Calendar year 1950	7,588.1	297	4.2	20.8		
January 1951	644.9	105	8.9	20.8		
February	1,173.8	227	11.6	41.9		
March	1,138.1	228	1.2	36.7		
April	778.6	117	10.4	26.0		
May	921.6	186	7.7	29.7		
June	530.9	79	3.1	17.7		
July	1,014.0	529	6.5	32.7		
August	494.3	69	7.2	15.9		
September	265.9	27	6.7	8.86		
Water year 1950-51	9,151.9	529	1.2	25.1		
October 1951	643.0	131	5.0	20.7		
November	1,283.7	294	7.7	42.8		
December	1,054.3	314	8.0	34.0		
Calendar year 1951	9,943.1	529	1.2	27.2		
January 1952	983.3	112	9.5	31.7		
February	706.5	127	11.2	24.4		
March	1,209.4	287	11.9	39.0		
April	1,030.9	200	10.2	34.4		
May	1,222.6	288	11.2	39.4		
June	1,615.8	839	6.5	53.9		
July	795.4	145	9.2	25.7		
August	1,543.4	365	8.3	49.8		
September	911.4	361	6.7	30.4		
Water year 1951-52	12,997.7	839	5.0	35.5		

Elizabeth River at Elizabeth--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1952	325.8	48	6.1	10.5		
November	737.3	210	5.0	24.6		
December	849.5	193	6.6	27.4		
Calendar year 1952	11,929.3	839	5.0	32.6		
January 1953	1,396	293	10	45.0		
February	716	192	11	25.6		
March	2,339.7	698	9.7	75.5		
April	1,692	360	15	56.4		
May	1,182.6	193	7.2	38.1		
June	517.1	77	9.1	17.2		
July	775.7	297	6.9	25.0		
August	382.6	38	3.2	12.3		
September	286.1	30	5.0	9.54		
Water year 1952-53	11,200.4	698	3.2	30.7		
October 1953	688.0	180	5.0	22.2		
November	528.2	152	5.7	17.6		
December	953.4	250	5.7	30.8		
Calendar year 1953	11,457.4	698	3.2	31.4		
January 1954	322.3	53	5.2	10.4		
February	398.3	75	5.2	14.2		
March	758.6	116	8.6	24.5		
April	553.1	145	5.7	18.4		
May	1,038.4	235	8	33.5		
June	334.0	30	7	11.1		
July	422.7	63	6.4	13.6		
August	912.8	212	5.9	29.4		
September	1,314.8	800	5.2	43.8		
Water year 1953-54	8,224.6	800	5.0	22.5		
October 1954	385.4	77	5.0	12.4		
November	862.1	271	6.1	28.7		
December	729.6	128	6.6	23.5		
Calendar year 1954	8,032.1	800	5.0	22.0		
January 1955	369.0	41	7.7	11.9		
February	654.0	168	8.6	23.4		
March	831	148	10	26.8		
April	484.2	51	5.0	16.1		
May	569.5	193	5.2	18.4		
June	598.5	89	6.1	20.0		
July	411.3	108	5.9	13.3		
August	3,324.1	822	9.1	107		
September	524.7	127	7.7	17.5		
Water year 1954-55	9,743.4	822	5.0	26.7		

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 Sprin field, Union County.

Drainage area.--25.5 sq mi.

Records available.--July 1938 to September 1955.

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

Average discharge.--17 years, 27.0 cfs (unadjusted).

Extremes.--1938-55: Maximum discharge, 1,940 cfs July 23, 1938 (gage height, 7.41 ft); from rating curve extended above 900 cfs on basis of contracted-opening measurement of peak flow; minimum, 0.9 cfs Sept. 7-9, 11, 12, 1944 (gage height, 1.18 ft).

Peak discharge (base, 500 cfs).--
1950-51: Nov. 26 (1 a.m.) 623 cfs (4.06 ft); Feb. 22 (4:30 a.m.) 620 cfs (4.05 ft); Mar. 30 (12 p.m.) 954 cfs (5.10 ft); July 28 (3 p.m.) 640 cfs (4.12 ft).
1951-52: Nov. 7 (2 p.m.) 738 cfs (4.45 ft); Dec. 21 (7 a.m.) 961 cfs (5.12 ft); Mar. 11 (5 p.m.) 875 cfs (4.87 ft); May 25 (4:30 p.m.) 748 cfs (4.48 ft); June 1 (6 p.m.) 1,280 cfs (5.97 ft); Aug. 6 (11 p.m.) 669 cfs (4.22 ft); Sept. 1 (4 p.m.) 875 cfs (4.87 ft).
1952-53: Dec. 5 (7 p.m.) 609 cfs (4.01 ft); Jan. 24 (5 p.m.) 838 cfs (4.76 ft); Mar. 4 (10 a.m.) 595 cfs (3.96 ft); Mar. 13 (12 m.) 1,330 cfs (6.10 ft); Mar. 16 (2 a.m.) 646 cfs (4.14 ft); Mar. 24 (4 p.m.) 720 cfs (4.39 ft); Apr. 7 (5 p.m.) 909 cfs (4.97 ft).
1953-54: Dec. 14 (11 a.m.) 535 cfs (3.74 ft); Sept. 11 (1 p.m.) 947 cfs (5.08 ft).
1954-55: Nov. 21 (3 p.m.) 516 cfs (3.67 ft); Aug. 13 (10 a.m.) 1,270 cfs (5.95 ft); Aug. 19 (4 a.m.) 1,060 cfs (5.41 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.

Revision.--The daily discharge for Jan. 3, 1945 has been corrected to 36 cfs, superseding figure published in Special Report 12.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.9	2.2	9.6	23	35	26	89	16.8	21	24	8.7	4.0
2	2.4	2.2	8.7	16.8	64	31	51	14.0	16.8	8.7	7.4	4.3
3	3.2	2.0	8.7	25	23	24	208	12.8	14.0	7.0	7.4	4.9
4	2.7	19.0	*93	60	17.5	86	91	11.6	21	6.6	6.6	4.3
5	2.4	101	100	39	15.3	67	48	11.1	28	27	5.2	4.0
6	3.2	11.1	24	23	13.4	44	39	11.1	12.2	6.6	5.2	6.7
7	2.7	6.6	18.3	33	180	34	33	10.6	10.6	5.9	6.4	31
8	2.0	5.2	297	33	146	27	29	9.6	10.1	5.6	26	4.6
9	1.8	4.6	95	16.0	40	22	23	9.6	10.6	5.2	6.3	3.7
10	28	4.0	37	11.6	23	18.3	23	9.1	10.1	5.2	38	4.0
11	4.0	3.4	42	12.8	18.3	16.0	22	46	10.1	4.6	51	3.7
12	35	3.2	25	11.6	19.1	16.0	26	56	8.2	4.6	13.4	3.7
13	*7.3	2.9	17.5	10.6	23	14.6	54	15.3	14.2	11.6	12.1	5.5
14	4.0	3.2	14.0	21	25	78	26	11.6	78	4.8	7.0	4.3
15	3.2	3.2	12.8	189	17.5	42	21	10.6	34	4.3	6.3	8.3
16	2.9	3.4	80	62	14.6	27	27	9.1	28	3.7	14.1	3.7
17	3.2	3.4	36	29	64	21	22	8.7	14.0	6.8	13.7	3.2
18	3.2	3.2	22	23	135	17.5	16.8	8.2	10.6	4.3	5.6	3.2
19	2.7	2.7	15.3	19.1	44	16.0	16.0	8.2	9.1	*45	5.6	3.2
20	2.7	3.8	12.2	17.5	42	238	14.6	9.1	7.8	26	5.2	3.2
21	2.7	32	11.1	16.0	174	67	13.4	9.6	7.8	7.0	5.2	3.2
22	2.4	4.9	10.6	12.8	372	42	13.5	8.7	7.4	5.2	4.9	3.2
23	16.0	4.0	10.6	11.1	83	29	87	47	16.7	11.8	4.9	3.7
24	4.9	3.4	10.6	105	48	33	28	198	7.4	5.2	4.6	3.7
25	3.4	237	10.1	60	36	24	19.9	44	7.0	4.6	34	9.8
26	3.2	251	8.7	29	29	21	17.5	21	6.3	4.6	17.6	4.0
27	2.9	29	9.1	21	27	16.8	16.0	55	17.1	4.6	6.6	3.4
28	2.7	23	10.6	17.5	23	16.0	14.6	43	9.4	384	5.2	2.9
29	2.4	15.3	45	28	-------	31	35	87	21	88	4.9	2.7
30	2.4	11.6	35	19.9	-------	377	36	100	8.9	20	4.6	2.2
31	2.4	-------	36	11.6	-------	480	-------	33	-------	10.6	4.3	-------

* Discharge measurement made on this day.

Rahway River near Springfield--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.2	103	10.1	19.1	28	14.0	18.3	36	927	9.1	4.9	412
2	3.9	34	9.6	30	34	16.0	18.3	28	449	7.8	14.9	154
3	5.0	183	9.1	69	34	14.6	16.0	23	87	8.6	8.7	82
4	2.9	52	8.2	31	231	27	14.6	21	47	18.9	4.9	25
5	2.7	18.8	44	63	100	120	130	18.3	49	9.0	5.2	15.3
6	2.4	11.6	32	38	48	53	75	18.3	34	7.0	250	11.6
7	50	405	17.5	24	39	33	30	16.8	26	6.3	194	9.1
8	101	153	15.3	18.3	30	28	25	14.6	21	19.0	28	8.7
9	10.1	39	12.2	16.8	27	26	21	12.8	57	108	14.3	8.2
10	5.6	22	10.6	28	23	23	19.1	12.2	34	75	118	7.8
11	54	15.3	9.6	19.9	34	488	17.5	40	19.1	13.4	28	7.4
12	18.6	12.8	9.1	15.3	23	237	14.6	145	15.3	9.1	13.4	7.0
13	7.0	11.6	8.7	14.0	17.5	64	16.0	34	14.0	7.4	11.8	6.6
14	4.9	22	7.4	*26	15.4	47	*207	22	12.8	7.0	8.2	6.6
15	4.9	26	60	23	14.6	34	79	19.1	12.2	6.3	7.4	8.7
16	4.6	70	18.9	21	14.0	28	41	15.3	13.2	6.3	55	10.1
17	4.6	46	11.6	16.8	61	24	29	12.8	11.1	22	37	6.3
18	4.0	23	116	70	50	21	24	33	10.6	7.0	10.6	15.0
19	3.7	14.0	113	25	28	116	19.9	14.6	16.3	6.3	7.8	15.6
20	3.7	10.6	49	28	19.9	108	18.3	48	10.6	5.9	7.0	8.0
21	3.2	10.6	683	19.1	23	51	16.0	29	9.1	39	8.4	6.3
22	4.0	10.1	128	75	21	45	14.6	17.5	10.1	17.9	51	5.9
23	3.7	9.6	46	211	18.3	136	14.0	13.4	12.6	7.0	9.1	7.0
24	9.5	11.1	30	51	16.8	86	13.4	11.6	11.1	5.6	7.0	6.3
25	33	9.6	28	30	15.3	57	47	384	9.6	5.9	6.6	5.9
26	5.9	49	63	227	15.3	39	90	235	8.2	5.6	6.3	5.6
27	5.2	28	33	133	14.6	31	151	58	7.4	5.9	6.3	5.2
28	15.8	14.6	19.9	136	15.3	26	374	31	7.8	11.1	10.9	5.2
29	5.2	11.6	18.3	76	13.4	23	110	25	8.2	10.7	9.1	5.2
30	4.3	10.6	22	42	-------	21	53	22	40	5.2	63	5.6
31	4.0	-------	21	31	-------	19.1	-------	84	-------	5.2	105	-------

* Discharge measurement made on this day.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.2	3.7	6.3	9.6	23	11	24	95	12	6.6	4.0	2.7
2	16	3.7	5.6	9.1	17	10	27	34	11	7.7	11	2.3
3	19	4.0	9.9	67	15	10	21	23	9.6	11	5.6	2.1
4	5.2	4.6	*9.6	28	15	333	18	20	9.1	5.6	4.6	2.3
5	4.6	3.7	236	15	12	73	23	47	9.1	5.6	6.7	9.0
6	4.9	3.7	212	11	11	33	18	27	8.7	62	4.0	16
7	4.6	4.0	36	11	16	24	*471	88	14	32	3.7	9.3
8	4.9	3.7	18	13	14	21	222	61	8.7	7.0	3.7	2.7
9	5.2	3.4	14	134	9.6	18	57	48	7.8	5.9	7.9	2.7
10	4.9	3.4	12	180	10	15	138	30	7.4	5.6	14	2.5
11	4.6	3.7	128	118	9.6	13	85	23	7.0	5.2	4.6	2.5
12	4.6	3.4	63	63	20	27	94	19	7.0	4.9	4.0	2.7
13	4.6	3.2	21	34	13	856	181	23	65	4.6	4.0	17
14	4.6	3.7	15	26	11	207	134	41	18	4.9	28	2.5
15	4.9	6.8	12	24	147	177	52	23	9.1	4.9	17	2.7
16	4.6	21	10	22	86	367	246	18	7.8	4.6	4.3	15
17	4.6	4.6	9.6	18	30	76	105	55	7.0	4.6	7.3	2.5
18	4.6	3.7	9.1	61	18	50	66	75	7.0	4.3	4.6	2.3
19	4.3	4.0	8.2	31	16	141	111	23	7.0	4.0	3.7	2.3
20	5.1	25	8.2	23	15	66	78	18	6.6	9.9	3.7	2.1
21	5.6	81	36	38	93	40	43	15	5.9	14	3.4	5.1
22	4.3	213	48	58	38	33	35	14	65	6.8	3.4	4.3
23	4.6	32	21	30	23	27	31	189	16	176	3.4	2.1
24	4.3	12	14	380	18	330	27	29	7.4	31	3.4	1.9
25	4.0	7.8	12	273	16	204	24	18	6.6	7.0	3.7	2.1
26	3.7	7.0	10	56	15	108	38	33	5.9	5.6	3.2	2.1
27	4.0	7.0	9.1	35	13	60	25	21	5.6	5.2	2.7	2.1
28	3.7	6.3	7.4	51	12	46	20	15	38	4.9	2.5	1.9
29	4.9	5.6	7.8	34	-------	37	18	13	19	4.6	2.5	1.9
30	4.9	6.6	7.8	23	-------	33	17	16	7.4	14	2.3	1.7
31	4.3	-------	7.8	21	-------	27	-------	13	-------	4.9	2.5	-------

* Discharge measurement made on this day.

Rahway River near Springfield--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.7	2.7	3.0	3.2	4.0	36	8.4	4.6	4.6	5.3	1.5	16
2	*1.7	2.5	2.5	4.0	4.3	25	5.6	4.6	*4.6	9.1	1.7	4.9
3	1.7	2.5	2.7	3.2	11	83	5.2	11	4.3	2.5	61	3.4
4	1.7	2.7	2.7	3.7	7.4	40	4.9	50	4.9	12	7.7	2.7
5	1.9	3.0	61	4.0	4.6	14	4.6	8.2	4.3	3.7	3.4	2.3
6	5.2	3.4	17	5.6	4.0	11	5.2	6.6	3.7	3.4	2.7	2.1
7	11	75	91	3.7	3.7	9.1	5.9	5.9	3.4	4.9	2.1	2.3
8	2.1	9.1	8.8	3.0	4.0	7.8	8.2	127	3.7	6.4	2.3	9.9
9	2.1	4.6	5.9	3.0	4.6	7.0	5.2	59	4.7	3.2	80	3.9
10	2.3	3.7	80	4.3	4.3	6.6	4.3	72	4.3	3.2	15	2.5
11	2.3	3.2	11	2.7	4.0	5.9	6.7	22	4.0	2.7	4.0	589
12	1.9	3.0	9.1	b3.0	3.2	5.6	19	15	3.7	2.5	3.2	69
13	2.1	2.7	24	b2.5	2.7	23	4.6	13	23	2.3	2.7	12
14	2.1	2.7	258	b3.0	3.7	50	4.6	11	4.6	3.9	2.5	7.8
15	2.3	2.5	38	3.7	3.7	14	4.3	9.6	3.7	33	3.4	7.0
16	2.5	2.3	12	4.9	3.7	8.2	14	8.7	4.0	2.7	3.2	30
17	2.3	2.5	8.7	6.2	38	7.4	90	8.2	3.7	2.5	2.5	26
18	2.1	2.5	5.6	3.0	7.4	6.3	26	7.8	3.4	2.7	2.5	8.7
19	2.1	2.3	5.6	3.4	5.9	7.6	12	7.4	3.4	2.5	11	41
20	2.1	2.3	5.6	3.7	4.6	72	9.6	7.6	3.0	2.1	37	13
21	1.9	2.3	5.6	36	11	14	7.8	102	2.5	1.9	29	7.8
22	1.9	2.1	6.3	12	9.5	10	7.0	15	2.7	2.1	5.5	7.0
23	1.9	40	5.6	5.6	4.9	9.1	6.6	11	14	1.9	3.2	4.9
24	1.7	6.2	4.3	5.2	4.3	8.2	8.7	8.7	3.7	1.5	2.7	4.6
25	9.9	21	4.0	4.9	15	24	6.3	9.1	3.0	2.1	4.0	a3.0
26	6.7	6.1	4.3	7.3	11	12	5.6	8.2	2.7	2.1	4.3	a3.5
27	2.3	3.2	4.0	12	7.0	8.2	7.2	7.0	2.3	2.3	2.7	a6.0
28	57	3.0	4.0	11	4.9	7.4	15	6.3	2.3	1.9	2.7	a3.5
29	69	2.7	6.1	4.9	-------	7.4	5.9	5.6	4.0	1.5	2.3	a3.0
30	8.7	2.7	4.0	4.3	-------	6.6	5.2	5.6	4.3	1.9	3.0	a2.5
31	4.3	-------	3.7	4.0	-------	5.9	-------	4.9	-------	1.7	152	-------

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

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a4.5	3.0	9.6	19	a4.0	*22	12	11	16	7.8	2.5	8.2
2	a7.0	58	8.2	37	a4.5	17	11	9.6	5.9	4.3	3.0	7.0
3	a7.0	48	7.4	21	4.3	12	11	9.1	4.9	3.4	2.3	6.6
4	a6.0	*18	6.6	15	3.7	94	11	8.2	11	3.0	1.7	5.9
5	a5.0	9.0	6.3	12	3.7	32	9.6	8.2	17	3.0	3.9	5.9
6	a19	4.9	5.6	25	37	82	10	7.8	5.2	4.6	2.7	8.2
7	a15	3.7	4.9	16	213	66	11	7.0	4.6	5.2	48	6.6
8	a4.0	3.7	4.9	11	27	24	9.6	7.8	4.6	3.7	140	5.6
9	a2.6	3.4	35	9.6	13	19	8.7	7.8	9.6	3.2	15	5.6
10	a3.5	3.4	17	9.6	9.6	16	8.7	6.3	4.9	18	4.9	5.6
11	a3.0	3.4	7.8	8.7	40	14	7.8	6.3	9.5	34	18	5.2
12	a3.5	3.7	6.3	8.2	38	12	28	6.3	42	6.3	269	5.2
13	a4.0	3.4	6.3	8.2	13	12	22	5.6	8.7	4.3	872	4.9
14	a2.5	3.4	69	7.8	9.6	9.6	12	7.0	5.2	3.7	118	5.2
15	4.6	3.0	44	7.4	12	12	18	4.9	4.0	3.0	26	5.2
16	7.0	3.0	18	7.4	9.6	16	11	4.6	3.7	2.7	12	5.2
17	2.5	3.0	12	7.0	55	9.1	8.7	4.6	3.4	2.7	a10	4.6
18	2.1	3.2	84	5.9	22	14	8.7	4.6	3.4	2.7	a63	4.0
19	2.3	4.0	63	6.3	13	12	18	4.9	3.0	3.2	a720	4.3
20	2.1	43	21	5.6	11	9.6	21	4.9	47	3.2	a118	8.2
21	3.4	351	13	5.2	9.6	23	12	4.3	13	3.7	a39	4.3
22	3.7	65	10	5.6	9.6	190	16	3.7	71	3.7	a51	4.0
23	3.0	18	9.6	5.6	49	124	12	5.1	9.1	2.7	a19	4.0
24	2.3	24	9.1	5.6	24	35	9.6	15	19	3.4	a12	48
25	2.3	15	7.8	5.2	16	23	10	15	19	4.3	a9.6	17
26	2.7	9.6	7.0	4.9	12	58	33	6.7	16	4.0	9.1	5.2
27	2.8	8.2	7.0	5.2	11	36	13	4.9	5.2	3.2	8.2	4.3
28	5.1	7.8	6.6	4.6	9.6	20	9.6	4.3	4.6	2.7	7.4	36
29	78	69	26	4.3	-------	17	24	8.0	4.0	2.3	7.4	10
30	14	14	133	4.3	-------	15	15	17	4.0	2.7	7.4	5.6
31	5.2	-------	37	a3.5	-------	13	-------	54	-------	2.3	14	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated 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, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	164.9	35	1.8	5.32		
November	801.5	251	2.0	26.7		
December	1,165.5	297	8.7	37.6		
Calendar year 1950	6,271.2	297	1.8	17.2		
January 1951	1,007.9	189	10.6	32.5		
February	1,751.7	372	13.4	62.6		
March	2,002.2	480	14.6	64.6		
April	1,160.3	208	13.4	38.7		
May	945.4	198	8.2	30.5		
June	477.4	78	6.3	15.9		
July	762.9	384	3.7	24.6		
August	348.0	51	4.3	11.2		
September	152.3	31	2.2	5.08		
Water year 1950-51	10,740.0	480	1.8	29.4		
October 1951	390.6	101	2.4	12.6		
November	1,437.5	405	9.6	47.9		
December	1,664.1	683	7.4	53.7		
Calendar year 1951	12,100.3	683	2.2	33.2		
January 1952	1,627.3	227	14.0	52.5		
February	1,024.4	231	13.4	35.3		
March	2,055.7	488	14.0	66.3		
April	1,716.6	374	13.4	57.2		
May	1,495.3	384	11.6	48.2		
June	1,990.3	927	7.4	66.3		
July	478.5	108	5.2	15.4		
August	1,111.8	250	4.9	35.9		
September	883.2	412	5.2	29.4		
Water year 1951-52	15,875.3	927	2.4	43.4		
October 1952	169.3	19	3.7	5.46		
November	495.3	213	3.2	16.5		
December	1,024.4	236	5.6	33.0		
Calendar year 1952	14,072.1	927	3.2	38.4		
January 1953	1,896.7	380	9.1	61.2		
February	736.2	147	9.6	26.3		
March	3,473	856	10	112		
April	2,449	471	17	81.6		
May	1,167	189	13	37.6		
June	415.7	65	5.6	13.9		
July	474.9	176	4.0	15.3		
August	179.4	28	2.3	5.79		
September	128.4	17	1.7	4.28		
Water year 1952-53	12,609.3	856	1.7	34.5		
October 1953	218.5	69	1.7	7.05		
November	224.5	75	2.1	7.48		
December	704.1	258	2.5	22.7		
Calendar year 1953	12,067.4	856	1.7	33.1		
January 1954	181.0	36	2.5	5.84		
February	196.4	38	2.7	7.01		
March	552.3	83	5.6	17.8		
April	323.6	90	4.3	10.8		
May	642.6	127	4.6	20.7		
June	140.5	23	2.3	4.68		
July	131.5	33	1.5	4.24		
August	460.8	152	1.5	14.9		
September	899.3	589	2.1	30.0		
Water year 1953-54	4,675.1	589	1.5	12.8		
October 1954	229.7	78	2.1	7.41		
November	809.8	351	3.0	27.0		
December	703.0	133	4.9	22.7		
Calendar year 1954	5,270.5	589	1.5	14.4		
January 1955	301.7	37	3.5	9.73		
February	683.8	213	3.7	24.4		
March	1,058.3	190	9.1	34.1		
April	412.0	33	7.8	13.7		
May	274.5	54	3.7	8.85		
June	378.5	71	3.0	12.6		
July	157.0	34	2.3	5.06		
August	2,634.1	872	1.7	85.0		
September	255.6	48	4.0	8.52		
Water year 1954-55	7,898.0	872	1.7	21.6		

Rahway River at Rahway

Location.--Lat 40°37'05", long 74°17'00", on left bank 100 ft upstream from St. Georges Avenue Bridge in Rahway, Union County, and 0.9 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 1955. July 1908 to April 1915 published in United States Geological Survey Water-Supply Paper 541.

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.--34 years (1921-55), 46.0 cfs (unadjusted).

Extremes.--1921-55: Maximum discharge, 3,140 cfs July 24, 1938 (gage height, 6.35 ft), from rating curve extended above 900 cfs by logarithmic plotting; minimum, 0.4 cfs Aug. 2, 3, 1955 (gage height, 1.05 ft).

Peak discharge (base, 600 cfs).--
1950-51: Nov. 25 (9 p.m.) 606 cfs (3.22 ft); Feb. 22 (2 to 3 p.m.) 632 cfs (3.27 ft); Mar. 31 (9:30 a.m.) 1,020 cfs (3.93 ft); July 28 (1:30 p.m.) 703 cfs (3.40 ft).
1951-52: Nov. 8 (4 a.m.) 611 cfs (3.23 ft); Dec. 21 (7 p.m.) 1,010 cfs (3.92 ft); Mar. 12 (4 a.m.) 888 cfs (3.71 ft); May 26 (3 a.m.) 782 cfs (3.54 ft); June 1 (7 p.m.) 1,720 cfs (4.87 ft); Sept. 2 (4:30 a.m.) 703 cfs (3.40 ft).
1952-53: Jan. 25 (6 a.m.) 854 cfs (3.64 ft); Mar. 13 (10 a.m.) 1,590 cfs (4.68 ft); Mar. 16 (1 a.m.) 686 cfs (3.36 ft); Mar. 25 (5 a.m.) 656 cfs (3.31 ft); Apr. 8 (3 a.m.) 950 cfs (3.80 ft).
1953-54: Sept. 11 (9 a.m.) 1,380 cfs (4.41 ft).
1954-55: Nov. 21 (3 p.m.) 640 cfs (3.28 ft); Aug. 7 (12 p.m.) 1,010 cfs (3.89 ft); Aug. 13 (8 a.m.) 2,440 cfs (5.63 ft); Aug. 19 (8 p.m.) 1,070 cfs (3.97 ft).

Remarks.--Water for municipal supply diverted from river by 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.

Revisions.--Special Report 9: Drainage area. Revised figures of discharge, in cubic feet per second, for periods in water years 1924 and 1937, superseding figures published in Bulletin 33 and Special Report 9, are given herewith:

1924		1924-Con.		1937	
Apr. 7	1,070	Apr. 19	534	July 16	74
8	510	July 9	867		

Month	Cfs-days	Maximum	Minimum	Mean
April 1924	-	1,070	28	133
July	-	867	8	55.0
Water year 1923-24	-	1,070	3	55.8
July 1937	621.3	88	7.7	20.0
Water year 1936-37	18,625.9	522	7.7	51.0
Calendar year 1937	18,532.9	374	7.7	50.8

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.4	2.1	15.5	47	37	34	269	30	27	23	14.1	4.4
2	2.6	2.4	13.4	27	99	50	85	22	23	21	11.3	5.0
3	2.0	1.7	13.8	26	43	38	258	18.7	24	8.0	9.5	5.9
4	2.0	3.6	78	60	29	133	210	17.4	27	9.0	9.6	3.8
5	2.0	197	192	61	24	123	83	16.8	55	44	8.8	3.7
6	1.8	38	55	34	22	72	61	18.6	19.7	13.8	4.7	2.6
7	2.0	11.8	29	37	158	51	51	14.7	14.5	8.0	7.9	25
8	3.7	6.6	342	64	331	43	43	13.4	12.7	7.5	*41	12.8
9	2.9	5.3	256	27	89	34	38	13.3	15.3	8.2	14.2	6.6
10	30	5.6	76	18.1	40	28	33	13.8	15.7	7.8	16.4	4.2
11	12.8	6.3	73	16.5	30	26	35	52	14.0	4.0	122	3.1
12	28	4.8	40	15.3	28	24	32	121	11.3	3.2	29	3.4
13	*25	2.8	28	13.9	31	22	83	33	11.5	5.9	26	6.6
14	6.8	1.9	21	19.7	41	100	44	18.9	100	8.5	12.7	10.8
15	4.1	*2.2	18.5	256	29	83	34	15.1	52	5.0	9.6	5.7
16	3.0	2.3	100	162	22	44	30	13.0	41	3.7	12.5	8.8
17	2.2	1.6	74	48	52	33	43	12.6	23	2.8	35	3.1
18	2.8	1.5	34	34	212	27	28	11.0	14.4	4.9	13.4	2.3
19	2.4	1.8	24	29	91	23	25	11.3	11.1	24	8.6	2.0
20	1.8	2.9	17.3	27	68	307	23	16.4	10.3	67	7.8	2.0
21	1.6	52	15.1	26	215	179	21	14.9	8.8	16.2	7.2	1.9
22	1.8	10.9	14.2	18.8	595	72	21	8.2	8.7	9.0	6.1	2.0
23	9.6	6.2	15.6	14.8	241	45	121	40	15.4	9.6	3.7	2.5
24	14.8	4.6	17.4	111	416	48	57	292	15.3	7.7	2.5	2.4
25	3.3	216	15.9	126	59	42	33	132	7.2	4.6	9.5	1.7
26	2.0	425	12.2	51	48	*30	29	39	*5.3	2.7	56	9.5
27	5.1	124	11.0	41	41	27	22	50	19.1	1.9	18.3	3.3
28	2.6	40	9.6	37	35	25	22	85	15.7	398	10.2	1.8
29	2.7	32	43	52	-------	36	31	90	25	384	4.8	1.7
30	2.4	15.9	78	40	-------	386	82	156	28	68	2.9	1.9
31	2.8	-------	62	21	-------	865	-------	61	-------	21	2.5	-------

* Discharge measurement made on this day.

Rahway River at Rahway--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.2	131	15.7	42	64	26	32	63	1,120	17.8	7.8	316
2	1.7	102	15.0	44	73	26	31	47	1,240	10.9	11.2	524
3	6.7	275	12.0	90	83	28	30	38	291	9.7	27	152
4	3.5	177	11.6	66	319	39	27	35	92	57	9.8	51
5	5.1	45	60	81	264	205	123	30	107	44	9.4	25
6	2.3	23	65	89	92	108	176	28	66	14.0	107	22
7	35	310	32	44	60	62	64	29	48	10.4	471	18.6
8	200	454	24	30	48	49	43	25	38	24	96	12.4
9	38	102	23	26	44	43	37	22	47	168	43	*14.2
10	12.1	42	16.4	34	38	37	*32	23	81	201	154	12.7
11	63	29	13.7	42	38	401	29	46	37	41	93	11.9
12	69	20	14.2	27	41	652	27	229	28	19.0	41	11.1
13	17.4	16.4	14.0	26	30	145	27	99	25	17.3	31	11.8
14	9.4	27	12.4	27	24	83	219	43	22	12.7	21	11.4
15	6.5	56	96	38	23	60	163	34	23	10.8	13.4	12.9
16	5.1	90	60	33	25	49	*75	28	20	7.6	99	17.0
17	5.1	96	23	28	82	40	50	25	19.4	29	96	9.8
18	3.3	40	113	97	92	35	39	52	18.5	16.9	25	29
19	6.7	25	189	57	59	104	34	35	18.9	13.0	17.8	39
20	4.8	18.0	89	42	38	219	31	70	24	10.6	12.9	27
21	4.6	15.1	811	36	35	94	26	77	18.0	19.3	12.7	13.9
22	2.8	16.6	487	54	39	67	23	35	18.4	57	110	9.6
23	2.0	13.8	94	303	33	168	22	27	19.8	15.2	25	12.8
24	6.9	16.4	54	125	28	198	21	23	21	10.8	15.7	10.1
25	52	17.0	45	52	27	107	44	351	12.9	8.3	10.9	7.9
26	16.3	82	95	202	26	69	142	585	14.5	10.1	8.6	9.0
27	12.1	50	66	312	25	53	245	152	12.9	11.2	9.2	10.0
28	14.7	26	35	222	25	44	520	58	13.5	14.0	14.2	9.4
29	16.7	19.4	29	160	24	40	308	43	14.1	15.0	22	7.9
30	7.6	17.4	31	76	-------	36	99	40	41	11.5	22	6.9
31	5.3	-------	39	63	-------	33	-------	143	-------	8.3	155	-------

* Discharge measurement made on this day.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.0	6.9	10	15	32	21	44	133	21	11	5.6	1.0
2	13	7.2	17	15	28	17	39	84	18	11	12	1.6
3	42	5.7	20	102	24	18	38	47	17	15	15	1.2
4	13	7.4	22	61	23	394	34	38	15	11	7.7	1.3
5	10	6.5	161	32	20	275	47	64	15	8.4	9.8	1.3
6	7.8	5.6	448	21	19	61	32	48	16	18	8.0	10
7	7.6	7.0	109	*17	30	44	428	106	22	89	*5.4	19
8	7.0	4.5	40	25	31	36	*638	93	17	17	5.3	3.8
9	9.6	3.0	26	180	18	31	128	67	12	9.7	7.1	7.0
10	15	4.8	22	308	10	26	174	63	12	7.4	24	3.2
11	9.6	4.7	111	234	16	24	187	39	10	7.5	8.9	1.3
12	9.7	5.5	153	120	29	33	138	32	9.4	7.5	5.3	1.5
13	7.7	4.1	46	63	30	1,040	292	33	67	6.3	5.4	16
14	7.1	3.9	29	44	21	832	*278	80	88	4.9	31	7.9
15	7.4	12	23	36	178	247	100	42	20	5.4	51	4.6
16	7.0	35	18	34	243	620	235	36	13	3.8	11	24
17	6.7	12	16	29	62	214	285	55	12	1.1	6.4	8.3
18	8.8	12	15	72	36	89	104	147	12	.9	8.7	1.6
19	8.8	6.4	13	74	28	186	174	49	11	2.8	4.4	1.2
20	7.5	18	14	41	26	144	122	34	13	14	3.7	2.6
21	5.2	172	40	39	104	73	76	26	15	34	2.5	2.1
22	8.5	257	97	91	99	56	57	24	21	15	3.7	6.7
23	6.3	148	44	54	42	41	52	238	69	203	3.6	3.3
24	5.6	30	27	312	34	233	44	108	15	176	2.2	1.2
25	6.8	16	22	644	32	503	42	39	10	20	1.5	1.7
26	6.6	14	17	161	31	214	67	48	9.2	11	2.3	1.8
27	4.7	14	16	63	28	105	50	50	9.3	7.5	2.7	1.5
28	4.6	11	14	68	27	74	38	28	30	6.3	2.6	2.0
29	4.9	10	11	60	-------	63	32	22	75	10	2.8	1.3
30	5.5	11	11	44	-------	54	29	29	20	11	2.2	1.9
31	6.4	-------	12	39	-------	47	-------	29	-------	11	1.7	-------

* Discharge measurement made on this day.

Rahway River at Rahway--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.4	7.2	3.7	3.6	4.3	28	9.7	8.4	4.5	0.7	0.8	75
2	1.0	3.3	4.0	5.3	*5.1	76	9.8	9.0	4.3	.7	.8	13
3	1.0	1.6	4.3	6.9	14	82	9.2	18	4.2	1.0	47	6.2
4	1.2	7.4	3.5	*4.8	15	139	7.7	95	4.4	2.0	28	5.4
5	1.0	1.8	84	4.9	8.5	35	5.8	23	5.6	10	5.2	3.7
6	1.0	1.6	37	6.4	7.5	21	6.5	12	4.7	3.4	2.4	2.0
7	3.2	86	151	6.6	6.4	17	7.0	8.8	7.0	1.2	1.6	1.3
8	3.4	61	45	3.9	4.5	13	9.9	194	1.9	1.4	1.2	1.1
9	1.4	18	16	4.5	5.3	8.0	13	183	1.7	1.2	138	14
10	1.4	7.1	111	6.2	5.2	10	6.8	108	1.6	1.1	61	11
11	1.2	5.0	52	5.5	5.4	8.7	7.6	60	1.1	1.2	9.6	811
12	1.3	3.9	20	4.3	4.5	6.8	26	27	1.6	1.1	3.9	495
13	1.1	3.1	45	3.4	3.9	19	10	21	25	.9	1.9	44
14	1.0	3.6	284	2.7	5.0	93	6.5	17	12	1.0	1.6	18
15	1.1	3.7	230	3.8	4.0	53	5.7	14	3.5	*46	2.0	18
16	1.0	3.0	40	7.3	5.4	18	10	15	4.1	7.4	1.3	25
17	1.0	1.4	22	11	50	12	134	11	3.4	1.1	1.0	57
18	.8	1.7	6.6	4.1	33	10	111	11	2.7	1.1	.8	18
19	3.8	1.1	11	3.8	11	9.4	27	8.8	2.5	1.0	1.7	47
20	1.4	1.3	10	5.3	8.8	102	18	11	2.3	.8	*38	45
21	1.0	3.0	9.4	37	14	43	12	150	1.8	1.0	60	16
22	1.0	2.3	17	50	35	20	10	77	1.4	1.3	20	11
23	1.0	41	9.7	12	14	13	10	22	1.3	.8	3.3	7.2
24	.9	32	3.7	12	7.3	13	15	14	9.2	.8	1.5	2.7
25	1.7	19	7.4	11	25	28	12	13	2.5	.7	1.4	5.3
26	8.2	32	5.0	12	15	34	8.2	10	1.3	.7	.9	5.6
27	4.7	10	7.1	29	21	16	9.4	8.7	1.4	.8	1.3	10
28	90	6.4	7.2	22	13	13	23	7.9	1.4	.8	.9	4.6
29	102	5.6	11	8.4	-------	10	13	9.5	.8	.8	1.1	4.3
30	54	3.8	8.7	8.1	-------	10	8.0	10	1.0	.8	1.6	2.0
31	8.4	-------	6.9	7.5	-------	8.1	-------	7.9	-------	.8	228	-------

* Discharge measurement made on this day.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.9	4.0	18	a50	4.8	32	18	20	58	8.7	0.8	15
2	7.8	62	13	a60	5.3	34	19	13	14	4.3	.7	6.9
3	7.1	124	11	a40	4.4	18	18	12	7.5	4.8	.8	3.9
4	6.2	32	11	27	3.9	140	15	11	12	3.2	.8	4.3
5	3.0	16	10	20	5.8	79	13	10	38	2.9	.8	5.3
6	23	12	7.5	36	27	109	13	10	8.9	2.0	.7	4.8
7	12	7.3	5.5	38	308	147	17	10	5.8	1.5	69	5.8
8	1.9	4.6	5.8	21	105	48	15	12	5.3	1.5	302	4.3
9	1.2	4.1	21	19	31	32	16	9.4	23	1.5	64	3.2
10	2.2	3.3	62	16	19	27	13	7.5	2.6	51	13	4.3
11	1.8	3.2	18	13	31	23	9.3	6.9	4.6	58	57	7.5
12	2.8	2.7	12	12	86	20	43	6.4	70	11	698	4.2
13	4.0	3.3	8.8	12	26	19	62	6.4	28	3.6	1,670	3.2
14	1.1	4.6	74	10	17	15	16	6.9	8.4	2.3	*872	2.6
15	8.0	2.1	124	12	16	20	28	6.9	4.9	2.0	90	2.9
16	10	1.6	*44	12	16	26	22	3.6	3.9	1.8	33	3.9
17	3.1	1.6	23	8.8	65	10	16	3.9	2.4	1.8	20	4.3
18	2.6	1.9	90	8.1	44	17	12	2.9	2.6	1.3	49	5.3
19	.9	3.4	153	8.1	24	24	13	3.2	3.9	1.0	850	14
20	2.3	60	48	6.9	20	17	37	2.9	94	.8	500	7.0
21	1.2	452	23	5.8	16	28	22	3.2	31	.8	84	2.4
22	.9	281	16	8.8	17	272	27	4.3	194	.8	64	1.1
23	1.0	48	16	8.8	61	284	22	2.3	38	1.0	36	1.1
24	2.0	38	16	6.4	60	84	18	16	23	1.0	21	64
25	1.5	34	14	6.4	27	39	15	23	41	1.0	14	41
26	.9	17	12	5.8	22	81	44	26	38	.8	12	10
27	.9	14	10	6.4	19	76	34	5.2	12	.8	11	5.3
28	.9	12	10	4.3	17	38	18	39	7.1	.8	10	57
29	58	119	35	5.8	-------	27	33	21	4.3	.8	7.5	26
30	39	40	221	5.8	-------	24	36	53	3.2	.8	8.8	9.7
31	22	-------	126	4.0	-------	21	-------	89	-------	.8	7.7	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for station at Springfield.

Rahway River at Rahway--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	190.0	30	1.6	6.13		
November	1,228.8	425	1.5	41.0		
December	1,794.5	342	9.6	57.9		
Calendar year 1950	9,826.4	425	1.4	26.9		
January 1951	1,561.1	256	13.9	50.4		
February	3,126	595	22	112		
March	3,050	865	22	98.4		
April	1,947	269	21	64.9		
May	1,451.1	292	8.2	46.8		
June	671.0	100	5.3	22.4		
July	1,202.0	398	1.9	38.8		
August	537.8	122	2.5	17.3		
September	150.5	25	1.7	5.02		
Water year 1950-51	16,909.8	865	1.5	46.3		
October 1951	637.9	200	1.7	20.6		
November	2,352.1	454	13.8	78.4		
December	2,685.0	811	11.6	86.6		
Calendar year 1951	19,371.5	865	1.7	53.1		
January 1952	2,568	312	26	82.8		
February	1,799	319	23	62.0		
March	3,320	652	26	107		
April	2,739	520	21	91.3		
May	2,535	585	22	81.8		
June	3,551.9	1,240	12.9	118		
July	915.4	201	7.6	29.5		
August	1,791.6	471	7.8	57.8		
September	1,426.3	524	6.9	47.5		
Water year 1951-52	26,321.2	1,240	1.7	71.9		
October 1952	278.4	42	4.6	8.98		
November	855.2	257	3.0	28.5		
December	1,624	448	10	52.4		
Calendar year 1952	23,403.8	1,240	3.0	63.9		
January 1953	3,098	644	15	99.9		
February	1,301	243	10	46.5		
March	5,815	1,040	17	188		
April	4,004	638	29	133		
May	1,931	238	22	62.3		
June	693.9	88	9.2	23.1		
July	756.5	203	.9	24.4		
August	263.5	51	1.5	8.50		
September	141.9	24	1.0	4.73		
Water year 1952-53	20,762.4	1,040	.9	56.9		
October 1953	302.6	102	.8	9.76		
November	377.9	86	1.1	12.6		
December	1,273.2	284	3.5	41.1		
Calendar year 1953	19,958.5	1,040	.8	54.7		
January 1954	313.3	50	2.7	10.1		
February	351.1	50	3.9	12.5		
March	969.0	139	6.8	31.3		
April	561.8	134	5.7	18.7		
May	1,185.0	194	7.9	38.2		
June	120.2	25	.8	4.01		
July	93.6	46	.7	3.02		
August	667.8	228	.8	21.5		
September	1,779.4	811	1.1	59.3		
Water year 1953-54	7,994.9	811	.7	21.9		
October 1954	233.2	58	.9	7.52		
November	1,408.7	452	1.6	47.0		
December	1,258.6	221	5.5	40.6		
Calendar year 1954	8,941.7	811	.7	24.5		
January 1955	498.2	60	4.0	16.1		
February	1,098.2	308	3.9	39.2		
March	1,831	284	10	59.1		
April	684.3	62	9.3	22.8		
May	446.9	89	2.3	14.4		
June	789.4	194	2.4	26.3		
July	174.4	58	.8	5.63		
August	5,367.6	1,670	.7	173		
September	330.3	64	1.1	11.0		
Water year 1954-55	14,120.8	1,670	.7	38.7		

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, 3,200 ft downstream from Middlesex Reservoir Dam, and 1.6 miles upstream from mouth.

Drainage area.--21.6 sq mi.

Records available.--September 1939 to September 1955.

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.--16 years, 25.4 cfs (unadjusted).

Extremes.--1939-55: Maximum discharge, 1,490 cfs Mar. 13, 1953 (gage height, 5.36 ft), from rating curve extended above 750 cfs on basis of laboratory rating; no flow at times.

Peak discharge (base, 450 cfs).--
1950-51: Nov. 25 (11:30 p.m.) 663 cfs (4.80 ft); Dec. 8 (11:30 a.m.) 468 cfs (4.63 ft); Feb. 22 (3:30 a.m.) 593 cfs (4.74 ft); Mar. 30 (9:30 p.m.) 789 cfs (4.90 ft).
1951-52: Dec. 21 (8:30 a.m.) 741 cfs (4.87 ft); Feb. 4 (12 m.) 525 cfs (4.69 ft); Mar. 11 (4:30 p.m.) 617 cfs (4.77 ft); Apr. 28 (7 a.m.) 536 cfs (4.70 ft); May 25 (4 p.m.) 594 cfs (4.75 ft); June 1 (4 p.m.) 1,300 cfs (5.26 ft).
1952-53: Jan. 24 (4 p.m.) 702 cfs (4.84 ft); Mar. 13 (9 a.m.) 1,490 cfs (5.36 ft); Mar. 16 (2 a.m.) 552 cfs (4.71 ft); Apr. 7 (4 p.m.) 638 cfs (4.80 ft).
1953-54: Dec. 14 (10 a.m. to 1 p.m.) 387 cfs (4.56 ft), (maximum below base).
1954-55: Nov. 21 (6 p.m.) 462 cfs (4.63 ft); Mar. 22 (6 p.m.) 451 cfs (4.62 ft); Aug. 13 (3 p.m.) 1,000 cfs (5.06 ft).

Remarks.--Water for municipal supply diverted by Middlesex Water Co. from Middlesex Reservoir (capacity, 300,000,000 gal).

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.1	1.1	12.4	36	24	15.9	130	11.0	11.0	2.0	5.4	1.8
2	2.2	1.0	9.7	18.1	76	33	44	8.5	7.4	2.1	4.5	1.4
3	2.1	1.0	9.7	15.9	33	20	200	5.4	9.7	1.8	6.4	1.3
4	2.1	1.2	49	33	18.1	134	113	4.7	8.5	1.7	4.4	1.5
5	2.0	20	143	36	14.0	108	40	5.4	12.4	1.9	3.2	1.1
6	2.1	20	45	20	12.4	36	27	8.5	8.5	2.3	2.6	1.0
7	2.1	8.5	20	28	140	27	20	7.4	8.5	2.5	2.6	1.0
8	2.1	4.7	334	50	236	20	18.1	6.4	3.8	3.8	3.3	1.0
9	2.1	4.2	206	18.1	76	15.9	15.9	5.4	5.4	3.6	3.3	1.0
10	2.6	3.8	58	11.0	18.1	12.4	14.0	3.5	5.4	1.8	3.4	1.0
11	2.1	3.6	36	8.5	12.4	8.5	15.9	7.4	7.4	1.1	12.1	.9
12	1.7	3.3	*27	7.4	12.4	8.5	14.0	62	6.4	.9	9.8	.9
13	1.4	2.6	15.9	7.4	*14.0	8.5	35	23	7.4	.8	11.0	.9
14	1.2	2.6	12.4	8.8	20	78	23	11.0	11.0	.8	4.6	1.0
15	1.2	2.5	11.0	220	15.9	78	15.9	8.5	20	.8	4.2	.9
16	1.0	2.4	59	127	11.0	33	12.4	4.2	14.0	.8	3.3	.9
17	1.0	2.1	51	34	38	20	20	4.7	9.7	.7	*8.6	.9
18	1.0	2.1	20	23	128	15.9	14.0	4.7	8.5	.7	3.4	1.0
19	1.0	2.4	12.4	20	48	14.0	12.4	6.4	7.4	1.0	2.0	.8
20	1.0	1.8	7.4	18.1	44	273	12.4	3.8	5.4	1.6	2.0	.7
21	1.0	2.5	5.4	14.0	219	129	7.4	5.4	6.4	1.2	2.3	.7
22	1.3	2.5	4.2	12.4	447	36	7.4	6.4	3.1	.9	4.2	.7
23	1.3	2.4	4.2	7.4	161	27	58	7.4	2.5	.8	2.2	1.0
24	1.3	2.4	4.7	82	40	23	34	151	2.1	.9	2.4	.9
25	1.2	187	6.4	83	23	20	18.1	76	1.7	1.0	2.3	.8
26	1.1	426	5.4	33	20	15.9	14.0	18.1	1.2	.9	2.8	.7
27	1.1	160	4.2	18.1	18.1	11.0	9.7	18.1	1.0	.8	2.3	.6
28	1.1	40	4.2	15.9	15.9	12.4	8.5	30	1.0	150	1.7	.6
29	1.1	27	14.1	27	-------	20	9.7	27	1.1	172	1.6	.7
30	.9	15.9	40	33	-------	320	15.9	33	1.7	46	2.6	1.1
31	1.0	-------	40	15.9	-------	435	-------	18.1	-------	9.9	3.4	-------

* Discharge measurement made on this day.

Robinsons Branch Rahway River at Rahway--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.2	93	9.2	24	14.6	10.3	11.6	27	930	1.5	1.2	112
2	.9	84	9.2	30	24	10.3	11.6	18.7	558	1.3	1.0	212
3	.9	256	7.0	67	30	11.6	11.6	14.6	181	1.2	1.5	82
4	.9	185	7.0	37	353	24	10.3	13.0	46	2.6	1.4	24
5	.8	52	54	60	231	209	77	11.6	156	5.7	1.2	a14
6	.9	18.6	52	66	59	93	70	11.6	54	3.8	2.3	a11
7	3.0	254	24	24	30	37	24	11.6	24	2.5	16.4	a9
8	7.3	214	16.6	14.6	21	27	18.7	10.3	18.7	2.3	18.6	a7
9	2.9	61	13.0	13.0	18.7	21	16.6	10.3	16.6	70	16.4	6.0
10	3.4	24	9.2	21	14.6	18.7	*13.0	10.3	18.7	142	55	3.1
11	8.7	18.6	7.0	24	14.6	328	13.0	12.9	16.6	27	40	a2.7
12	40	12.9	7.0	14.6	14.6	269	9.2	144	14.6	14.5	38	a2.5
13	14.5	10.2	6.0	11.6	10.3	64	10.3	46	10.3	11.5	93	a2.3
14	9.0	12.3	5.3	13.0	9.2	37	128	24	8.0	7.9	21	a2.2
15	7.9	40	79	18.7	6.0	24	86	16.6	7.0	5.9	12.9	a3.0
16	5.9	77	48	18.7	7.0	18.7	37	14.6	4.1	3.9	44	a2.5
17	5.2	67	16.0	*14.6	60	14.6	21	11.6	5.3	2.9	135	a2.0
18	4.7	24	62	93	67	13.0	14.6	18.7	4.2	3.0	27	a7.0
19	4.0	14.6	147	37	34	86	10.3	16.6	2.0	2.0	14.5	a5.0
20	3.7	10.3	61	30	18.7	142	10.3	72	1.6	1.6	12.9	a2.5
21	3.0	6.0	554	21	18.7	41	9.2	76	1.8	1.6	11.5	a2.0
22	2.0	6.0	284	42	21	30	8.0	24	3.2	3.9	71	a1.5
23	1.5	7.0	58	199	18.7	128	9.2	14.6	4.3	3.7	31	a2.0
24	1.5	9.2	24	48	14.6	109	7.0	10.3	4.3	2.7	14.5	a1.6
25	2.5	10.3	21	21	13.0	62	16.5	297	4.7	1.9	12.9	a1.5
26	2.3	74	72	146	11.6	34	98	290	4.1	1.4	11.5	a1.5
27	2.6	36	43	171	11.6	24	217	88	2.9	1.5	9.0	a1.4
28	3.3	14.6	16.6	178	10.3	18.7	428	24	1.6	1.4	5.2	a1.3
29	3.2	11.6	14.6	112	9.2	14.6	192	16.6	1.6	1.7	5.2	a1.2
30	2.9	10.3	16.6	30	-------	14.6	51	14.6	1.9	1.5	4.3	a1.4
31	2.5	-------	24	18.7	-------	13.0	-------	119	-------	1.2	3.4	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for nearby stations.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.0	1.3	7.8	5.4	17	10	15	69	11	0.7	0.4	0
2	7.0	1.2	6.9	5.4	*15	8.8	9.7	39	8.8	.5	0	0
3	4.0	1.1	6.9	41	15	6.9	1.5	29	6.9	.3	0	0
4	2.0	*1.3	7.8	61	13	249	.3	22	6.1	.5	0	.1
5	1.5	1.2	138	22	13	133	9.4	32	6.1	.4	.1	.9
6	1.3	1.2	245	15	11	35	13	39	5.3	1.2	0	.2
7	1.2	1.2	63	12	11	26	328	89	4.7	1.8	0	.3
8	1.2	1.2	19	11	11	19	*286	51	5.4	0	.6	.5
9	1.1	1.2	15	154	10	15	68	42	6.7	0	.2	.4
10	1.1	1.5	13	281	8.8	13	133	26	3.1	0	.1	0
11	1.1	1.5	68	188	11	13	121	17	1.9	0	0	.4
12	1.2	1.4	67	70	13	15	96	17	1.7	0	0	1.8
13	1.2	1.4	22	29	15	718	263	15	2.9	0	0	1.5
14	1.3	1.5	15	19	15	351	198	59	11	.1	.8	.6
15	1.3	1.3	13	15	149	259	54	35	11	.1	.8	.6
16	1.3	7.8	10	15	187	379	*162	29	8.8	.1	.1	.6
17	1.2	2.1	11	13	49	115	124	36	6.9	.5	0	.7
18	1.2	1.7	10	43	26	46	42	82	6.1	.6	.2	.8
19	1.3	1.4	8.8	39	19	115	100	26	4.6	.5	0	.6
20	1.4	2.1	7.8	22	17	88	63	17	2.9	.6	0	.2
21	1.7	22	8.8	28	46	39	35	11	1.5	.8	0	.8
22	1.6	176	56	86	48	32	22	11	1.1	.8	0	0
23	1.5	95	29	32	26	26	17	83	.8	3.4	.1	0
24	1.4	22	17	301	19	171	17	27	.6	1.2	.1	0
25	1.3	13	15	319	15	199	15	15	.5	1.2	0	0
26	1.3	15	13	93	13	105	41	24	.7	1.0	0	0
27	1.2	13	10	29	11	55	35	33	2.3	.2	0	0
28	1.2	10	10	32	10	35	19	15	4.8	.6	0	0
29	1.4	8.8	7.8	35	-------	29	*11	10	3.7	0	0	0
30	1.6	7.8	6.9	22	-------	22	11	10	1.1	.1	.3	0
31	1.4	-------	6.1	19	-------	17	-------	10	-------	.3	.1	-------

* Discharge measurement made on this day.
Note.--No gage-height record Oct. 1-13, Oct. 15 to Nov. 3; discharge estimated on basis of weather records and records for nearby stations.

Robinsons Branch Rahway River at Rahway--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.8	0.8	1.2	4.7	20	7.9	4.1	2.4	0	0	0.6
2	0	.1	.2	1.7	*1.2	77	6.5	3.3	.2	0	0	.3
3	0	0	.2	.8	1.7	80	6.2	7.3	0	0	0	.3
4	0	0	.5	.5	6.5	119	6.1	33	0	0	0	.3
5	0	0	1.9	.5	6.5	28	4.9	26	1.1	0	0	.3
6	0	.1	1.1	.8	5.3	13	4.1	13	.3	0	0	.2
7	0	4.8	44	.2	3.6	11	6.4	13	.1	0	0	.2
8	0	4.1	24	0	2.3	9.1	6.2	113	.9	0	0	.2
9	0	.8	11	.5	1.7	9.1	6.8	131	.2	0	2.3	.2
10	0	.5	86	.2	1.2	7.7	6.8	69	0	0	1.4	.2
11	0	.5	33	.8	1.2	7.7	7.9	40	0	0	.3	178
12	0	.2	13	.2	.8	7.7	6.7	23	0	0	.1	276
13	0	.2	38	.2	1.2	7.7	3.1	16	0	0	0	93
14	0	2.4	238	.5	.1	51	2.5	13	0	0	.1	18
15	0	2.1	135	.5	.2	47	1.0	13	0	0	.1	5.4
16	0	.5	27	1.2	.2	18	.5	13	0	0	a.1	4.5
17	0	.5	11	.2	6.0	11	45	12	0	0	a.1	29
18	0	.2	7.7	.2	9.1	9.1	105	10	0	0	a.1	12
19	0	.5	7.7	.1	9.1	9.1	20	9.3	0	0	a.2	13
20	0	.2	6.5	.1	9.1	38	12	8.3	0	0	.4	*23
21	0	.5	6.5	3.6	9.1	24	9.3	78	0	0	1.8	8.8
22	0	2.0	6.5	9.1	37	13	5.1	72	0	0	.4	5.4
23	0	1.2	5.3	13	18	11	5.1	23	0	0	.3	4.5
24	0	.8	4.4	13	11	6.5	8.3	16	0	0	.2	3.7
25	0	1.2	3.6	11	15	6.5	6.5	13	0	0	.2	3.7
26	0	.8	4.4	9.1	15	21	7.3	10	0	0	.1	4.5
27	0	.5	3.6	11	15	9.1	*6.5	1.0	0	0	.2	5.4
28	3.0	.8	2.9	13	11	6.5	9.3	3.8	0	0	.2	4.5
29	2.9	.8	2.3	15	-------	7.5	8.3	5.6	0	0	.2	3.1
30	.8	.5	2.3	15	-------	6.5	3.5	3.0	0	0	.1	2.4
31	.2	-------	1.7	11	-------	9.0	-------	1.8	-------	0	4.5	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.8	1.0	16	39	1.3	20	8.7	14	3.0	3.0	0	0
2	1.8	3.8	12	39	1.0	23	8.7	10	3.0	2.3	0	0
3	.5	25	12	39	a1.0	12	6.3	8.7	2.3	1.8	0	0
4	.5	29	8.8	23	a.8	121	7.4	8.7	2.3	1.0	0	0
5	.5	16	6.3	14	a1.0	60	6.3	7.4	6.3	.5	0	0
6	1.8	12	6.3	16	a15	93	6.3	6.3	5.4	.3	0	0
7	1.0	7.5	3.7	26	a120	125	5.3	4.8	3.7	.2	0	0
8	1.4	5.4	1.8	12	a40	32	3.7	3.6	3.0	.1	.3	0
9	1.4	4.5	3.8	8.7	a15	23	5.3	2.3	3.7	0	.2	0
10	.5	3.1	29	7.4	a10	16	3.7	1.7	3.0	.3	0	0
11	.5	3.1	20	6.3	a20	14	4.4	1.7	3.0	1.0	.7	0
12	.7	3.7	10	5.3	a50	10	7.1	2.3	8.3	.6	204	0
13	.7	2.4	7.5	4.4	a15	10	44	2.1	10	.3	820	0
14	1.0	1.8	33	4.4	a10	8.8	23	1.8	4.4	.2	*g434	0
15	.5	1.8	132	3.0	a8.0	8.8	16	1.3	3.0	.1	g172	0
16	.7	1.8	57	3.0	6.3	10	10	1.0	3.0	0	*g52	0
17	.5	1.8	23	3.0	32	10	8.7	.5	1.8	0	g12	0
18	.3	1.8	47	3.0	23	7.4	7.4	.3	1.8	0	14	0
19	.3	3.1	96	3.0	14	10	8.1	.3	1.8	0	280	0
20	.3	8.1	39	3.0	12	12	48	.3	12	0	218	0
21	.3	351	16	3.0	10	20	29	.3	9.3	0	72	0
22	.3	246	15	3.0	10	256	29	.1	125	0	16	0
23	.3	75	5.4	3.0	54	246	20	.1	22	0	6.3	0
24	.1	26	4.5	3.0	39	69	12	.2	8.7	0	4.4	0
25	.1	29	4.5	3.0	20	26	10	.6	14	0	3.7	0
26	.1	16	4.5	2.3	14	51	14	.6	14	0	3.0	0
27	.4	12	3.7	1.8	12	54	16	.3	7.4	0	3.0	0
28	.7	8.8	4.5	1.8	12	20	12	.2	4.4	0	1.8	.1
29	2.8	80	12	1.8	-------	14	23	.3	3.7	0	.5	.2
30	1.8	43	151	1.3	-------	12	26	1.0	3.7	0	.2	.2
31	1.4	-------	114	1.3	-------	8.7	-------	1.8	-------	0	.1	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for Rahway River stations.
g From graph based on staff-gage readings.

Robinsons Branch Rahway River at Rahway--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	47.5	3.1	0.9	1.53		
November	956.6	426	1.0	31.9		
December	1,271.7	334	4.2	41.0		
Calendar year 1950	6,316.1	426	.9	17.3		
January 1951	1,082.0	220	7.4	34.9		
February	1,935.3	447	11.0	69.1		
March	2,008.9	435	8.5	64.8		
April	979.7	200	7.4	32.7		
May	592.4	151	3.5	19.1		
June	199.6	20	1.0	6.65		
July	417.1	172	.7	13.5		
August	127.9	12.1	1.6	4.13		
September	28.8	1.8	.6	.96		
Water year 1950-51	9,647.5	447	.6	26.4		
October 1951	153.1	40	.8	4.94		
November	1,713.5	256	6.0	57.1		
December	1,767.3	554	5.3	57.0		
Calendar year 1951	11,005.6	554	.6	30.2		
January 1952	1,618.5	199	11.6	52.2		
February	1,166.0	353	6.0	40.2		
March	1,947.1	328	10.3	62.8		
April	1,640.0	428	7.0	54.7		
May	1,490.1	297	10.3	48.1		
June	2,107.1	930	1.6	70.2		
July	335.6	142	1.2	10.8		
August	732.8	135	1.0	23.6		
September	527.2	212	1.2	17.6		
Water year 1951-52	15,198.3	930	.8	41.5		
October 1952	50.5	7.0	1.1	1.63		
November	417.2	176	1.1	13.9		
December	934.6	245	6.1	30.1		
Calendar year 1952	12,966.7	930	1.0	35.4		
January 1953	2,056.8	319	5.4	66.3		
February	813.8	187	8.8	29.1		
March	3,344.7	718	6.9	108		
April	2,309.9	328	.3	77.0		
May	1,020	89	10	32.9		
June	139.0	11	.5	4.63		
July	17.5	3.4	0	.56		
August	3.9	.8	0	.13		
September	11.0	1.8	0	.37		
Water year 1952-53	11,118.9	718	0	30.5		
October 1953	6.9	3.0	0	.22		
November	27.6	4.8	0	.92		
December	730.1	238	.2	23.6		
Calendar year 1953	10,481.2	718	0	28.7		
January 1954	134.2	15	0	4.33		
February	202.8	37	.1	7.24		
March	700.8	119	6.5	22.6		
April	334.8	105	.5	11.2		
May	797.5	131	1.0	25.7		
June	5.2	2.4	0	.17		
July	0	0	0	5.79		
August	13.4	4.5	0	.43		
September	700.7	276	.2	23.4		
Water year 1953-54	3,654.0	276	0	10.0		
October 1954	25.0	2.8	.1	.81		
November	1,023.5	351	1.0	34.1		
December	899.3	151	1.8	29.0		
Calendar year 1954	4,837.2	351	0	13.3		
January 1955	287.8	39	1.3	9.28		
February	566.4	120	.8	20.2		
March	1,402.7	256	7.4	45.2		
April	429.4	48	3.7	14.3		
May	84.6	14	.1	2.73		
June	296.9	125	1.8	9.90		
July	11.7	3.0	0	.38		
August	2,318.2	820	0	74.8		
September	.6	.2	0	.02		
Water year 1954-55	7,346.1	820	0	20.1		

South Branch Raritan River near High Bridge

Location (revised).--Lat 40°40'40", 74°52'45", on left bank 1.0 mile northeast of High Bridge, Hunterdon County, and 4.4 miles upstream from Spruce Run.

Drainage area.--65.3 sq mi.

Records available.--February 1919 to September 1955.

Gage.--Water-stage recorder. Concrete control since September 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.--35 years (1920-55), 117 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, 1950; minimum daily, 17 cfs Jan. 8, 1940.

Peak discharge (base, 1,000 cfs).--
1950-51: Nov. 26 (1 a.m.) 1,880 cfs (9.47 ft); Dec. 8 (12 m.) 1,560 cfs (9.14 ft); Jan. 15 (1 p.m.) 1,060 cfs (8.55 ft); Feb. 7 (10 p.m.) 1,510 cfs (9.09 ft); Mar. 31 (1:30 a.m.) 2,680 cfs (10.19 ft); July 28 (4:30 p.m.) 2,800 cfs (10.29 ft).
1951-52: Nov. 7 (3:30 p.m.) 2,360 cfs (9.92 ft); Dec. 21 (12:30 p.m.) 1,880 cfs (9.47 ft); Jan. 26 (6 p.m.) 1,200 cfs (8.73 ft); Mar. 11 (5:30 p.m.) 3,060 cfs (10.49 ft); Apr. 5 (6:30 p.m.) 1,640 cfs (9.23 ft); May 25 (6 p.m.) 1,020 cfs (8.48 ft); June 1 (7 p.m.) 1,090 cfs (8.58 ft); July 10 (3:30 a.m.) 1,000 cfs (8.46 ft); Sept. 1 (10 p.m.) 1,800 cfs (9.39 ft).
1952-53: Nov. 22 (2 p.m.) 1,960 cfs (9.70 ft); Dec. 5 (12 p.m.) 1,320 cfs (8.95 ft); Dec. 11 (5 p.m.) 1,490 cfs (9.17 ft); Jan. 24 (9 p.m.) 1,890 cfs (9.62 ft); Apr. 7 (8 p.m.) 1,150 cfs (8.73 ft).
1953-54: Mar. 4 (12:30 a.m.) 775 cfs (8.13 ft), (maximum below base).
1954-55: Nov. 21 (1:30 p.m.) 1,010 cfs (8.53 ft); Feb. 7 (time and discharge unknown); Aug. 13 (3 p.m.) 1,770 cfs (9.49 ft); Aug. 19 (8 a.m.) 2,760 cfs (10.46 ft).

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

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

Revisions.--Special Report 9: Drainage area. Revised figures of discharge, in cubic feet per second, for the water years 1921 and 1923, superseding those published in Bulletin 33, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1920		1920-Con.		1920-Con.		1920-Con.	
Nov. 18	275	Nov. 30	130	Dec. 14	735	Dec. 26	140
19	175	Dec. 2	400	15	360	27	150
20	150	3	275	16	275	28	200
21	125	4	220	17	240		
22	130	6	350	18	210	1923	
23	370	7	250	19	200	Apr. 8	225
24	210	8	200	20	190	9	200
25	180	9	180	21	215	10	175
26	160	10	190	22	240	11	160
27	140	11	175	23	260	12	150
28	130	12	150	24	180	13	145
29	140	13	190	25	150		

Month	Maximum	Minimum	Mean	Per square mile	Runoff in inches
November 1920.....	835	31	144	2.21	2.46
December.....	735	140	258	3.95	4.55
Water year 1920-21.....	835	23	138	2.11	28.74
February 1923.....	-	-	60	.919	.96
April.....	541	88	172	2.63	2.93
Water year 1922-23.....	828	23	93.4	1.43	19.41

South Branch Raritan River near High Bridge--Continued

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	31	106	108	230	168	527	161	91	175	168	52
2	30	30	102	96	424	182	420	143	91	110	147	59
3	30	31	108	106	180	182	656	132	96	78	134	65
4	29	42	427	202	161	245	432	125	93	79	127	58
5	28	173	515	163	145	257	343	123	162	213	110	52
6	29	69	219	119	138	236	302	117	102	100	102	53
7	28	52	190	119	690	203	276	114	82	71	89	96
8	29	46	1,080	123	505	182	254	108	75	70	112	62
9	31	44	396	90	214	165	236	104	73	59	94	53
10	56	41	292	98	178	149	239	96	78	59	95	50
11	45	40	289	94	170	140	254	110	83	59	141	49
12	44	39	239	89	175	143	237	147	70	62	98	49
13	50	37	200	87	245	136	448	110	73	62	123	48
14	40	36	180	99	251	246	257	94	215	56	93	52
15	36	36	170	729	175	231	222	89	170	50	87	118
16	34	36	219	236	149	180	206	85	114	50	206	74
17	32	37	175	158	247	156	217	85	89	50	286	*56
18	32	37	149	143	369	143	190	80	78	52	143	50
19	31	34	136	140	208	136	178	76	71	72	112	48
20	31	36	125	138	217	473	168	78	68	158	108	44
21	30	64	121	140	380	251	154	80	65	76	98	44
22	30	53	119	114	506	219	149	80	68	65	93	44
23	37	44	114	104	266	195	304	152	147	73	83	44
24	45	40	114	494	211	200	192	259	104	*65	80	43
25	38	542	112	258	195	185	165	140	75	58	78	48
26	36	821	87	185	190	161	158	102	64	52	76	44
27	33	208	b85	154	188	149	147	106	87	50	73	41
28	31	156	b85	149	178	147	140	123	87	1,430	68	95
29	31	132	b140	152	-------	269	145	262	93	714	62	66
30	32	117	156	138	-------	931	295	225	114	273	58	54
31	31	-------	129	102	-------	1,380	-------	129	-------	200	54	-------

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

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	317	134	270	242	127	175	282	724	68	56	679
2	52	215	132	289	270	119	190	254	451	65	59	481
3	60	594	125	a350	248	119	170	231	270	64	64	353
4	53	322	121	a250	576	123	*158	217	228	66	56	180
5	49	219	407	a240	392	180	956	200	370	66	54	136
6	45	172	332	a220	282	156	638	192	234	62	59	119
7	66	1,300	214	a190	251	129	365	178	195	59	71	104
8	206	594	185	a170	231	125	308	165	175	78	64	94
9	91	354	175	a170	228	129	276	158	202	689	70	91
10	66	285	161	182	211	143	251	152	222	728	205	85
11	152	248	149	163	234	1,520	231	156	170	202	98	75
12	196	219	145	149	214	797	214	424	152	140	75	66
13	106	203	138	149	175	420	208	234	140	117	83	64
14	85	232	125	168	156	350	515	182	129	102	71	64
15	76	315	198	211	156	285	538	168	123	93	62	68
16	71	263	158	198	156	260	388	156	117	87	76	78
17	68	263	117	163	182	236	298	140	110	73	228	66
18	65	206	179	279	190	217	263	175	106	70	104	60
19	64	182	289	192	170	273	239	154	104	70	83	180
20	60	168	282	182	156	340	225	221	102	68	73	132
21	59	154	1,360	170	161	340	206	214	96	66	73	94
22	58	149	584	184	156	282	192	156	100	70	149	85
23	56	154	346	600	143	412	188	132	112	65	80	91
24	78	163	302	245	140	350	178	123	114	59	70	*76
25	236	154	270	195	134	298	226	637	94	56	64	65
26	100	257	285	714	132	245	412	384	82	54	59	62
27	80	203	245	528	129	228	508	242	76	54	53	59
28	118	152	200	556	127	208	686	195	75	74	50	56
29	106	147	200	365	127	195	437	180	75	80	50	56
30	80	138	217	270	-------	185	332	192	73	65	49	54
31	75	-------	254	251	-------	178	-------	219	-------	59	45	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for station at Stanton.

South Branch Raritan River near High Bridge--Continued

Daily discharge, in cubic feet per second, 1950-55

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	52	129	134	257	129	185	286	123	48	39	28
2	58	52	127	129	198	123	190	231	109	52	40	29
3	84	52	129	229	192	125	175	198	98	56	41	30
4	62	52	125	190	185	529	168	180	92	50	39	36
5	58	51	507	145	170	276	190	231	89	47	40	31
6	58	50	710	127	165	198	163	211	84	47	38	39
7	a55	48	307	121	195	178	764	192	89	54	36	35
8	a55	48	245	127	195	165	484	*295	91	47	35	32
9	a55	47	222	253	165	156	308	208	78	46	55	31
10	a55	48	206	460	149	154	387	198	*72	45	115	31
11	55	48	*901	433	140	140	376	165	67	45	55	31
12	54	48	525	313	154	152	284	145	67	43	43	29
13	56	47	351	228	161	463	365	136	116	42	40	31
14	54	47	294	206	143	281	427	165	126	43	36	30
15	52	51	254	222	257	313	281	149	82	40	38	30
16	51	82	231	242	280	495	*482	143	72	39	36	33
17	50	61	214	208	182	291	358	154	66	38	38	33
18	48	54	203	355	149	251	307	165	64	38	38	30
19	47	51	185	269	140	365	454	127	62	38	35	29
20	48	78	170	225	140	284	330	119	61	40	35	29
21	51	784	240	228	352	234	275	113	58	45	34	30
22	56	1,430	367	248	246	211	248	111	58	46	33	30
23	62	612	234	222	182	198	231	333	68	84	34	29
24	60	313	203	943	170	478	214	154	61	70	33	28
25	56	239	185	730	161	363	203	125	56	46	33	28
26	55	206	170	394	154	313	225	162	56	40	32	29
27	55	185	158	320	147	272	303	163	a54	42	32	29
28	56	161	127	354	136	239	211	123	a52	43	31	29
29	58	147	134	300	-------	222	188	115	50	36	31	28
30	55	140	134	251	-------	206	175	121	54	39	30	27
31	54	-------	134	239	-------	195	-------	143	-------	42	30	-------

* Discharge measurement made on this day.
a No gage-height record Oct. 7-10, June 27, 28; discharge estimated.

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	36	38	48	b55	179	98	85	67	35	24	99
2	27	35	36	51	b60	366	98	105	62	38	23	48
3	27	33	35	48	60	352	94	126	60	35	46	39
4	26	32	35	48	73	427	85	*439	58	34	40	34
5	26	31	47	47	66	222	84	208	52	38	31	31
6	28	31	57	54	61	172	89	145	48	36	28	30
7	30	36	446	50	56	149	117	123	55	35	26	29
8	28	41	125	43	52	138	101	199	48	36	26	29
9	27	41	84	47	55	127	91	185	47	35	43	29
10	27	42	323	48	55	125	84	161	45	32	52	29
11	27	42	140	32	55	113	84	161	47	31	35	67
12	28	42	103	48	b45	105	117	132	42	29	29	59
13	27	42	158	b45	b40	107	94	113	48	29	28	36
14	27	40	437	b45	b45	206	85	103	52	29	26	33
15	27	38	207	b50	b50	163	82	96	46	36	26	31
16	27	36	125	b55	60	115	91	94	47	36	27	40
17	26	35	96	b50	244	103	297	94	46	30	26	122
18	26	34	70	b45	180	98	194	91	42	30	25	62
19	27	33	b65	b55	105	94	132	85	41	29	26	78
20	27	32	b65	b55	87	392	107	87	39	29	*36	100
21	27	32	b70	b120	106	188	100	205	38	*28	41	66
22	27	32	70	b120	190	138	96	168	38	26	39	77
23	26	61	72	b65	121	127	96	109	43	26	31	58
24	27	64	61	b65	98	119	100	94	43	25	26	48
25	36	50	56	b65	96	138	92	89	38	23	27	45
26	34	58	55	b70	122	175	91	85	38	28	26	42
27	32	47	55	129	156	127	100	78	36	26	25	43
28	49	42	54	159	107	115	117	78	33	25	26	42
29	82	40	60	78	-------	111	105	80	35	26	24	40
30	93	39	58	b70	-------	105	87	96	35	26	39	39
31	45	-------	55	b60	-------	100	-------	78	-------	26	308	-------

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

South Branch Raritan River near High Bridge--Continued

Daily discharge, in cubic feet per second, 1950-55

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	47	98	158	b42	178	111	85	54	30	22	96
2	38	48	89	188	b45	180	105	77	47	31	21	84
3	36	165	82	170	b42	129	105	73	42	30	20	78
4	36	115	77	140	b40	272	105	70	40	28	19	73
5	35	100	78	123	b45	192	101	67	42	27	19	70
6	36	82	68	140	b60	244	96	68	43	28	20	75
7	34	66	60	145	b500	260	105	62	38	28	21	70
8	33	58	72	103	192	161	96	62	38	28	24	62
9	33	54	87	107	119	152	89	62	42	27	26	60
10	34	52	123	103	101	149	87	60	43	26	23	58
11	35	50	91	96	190	140	84	58	45	28	28	58
12	34	48	77	87	182	132	91	56	68	27	155	60
13	33	47	73	92	117	129	115	55	54	25	1,170	55
14	32	46	145	79	101	117	101	54	47	24	327	52
15	33	46	238	87	101	111	98	*51	41	24	171	54
16	38	45	140	84	92	123	87	48	39	24	97	52
17	35	46	107	78	185	113	78	48	35	23	117	51
18	33	47	322	73	196	107	78	47	34	24	579	50
19	32	46	286	75	132	107	75	46	32	25	1,840	50
20	32	88	165	66	115	113	113	45	50	25	493	55
21	32	680	117	68	109	119	100	43	51	24	331	52
22	32	326	105	78	105	363	109	42	41	21	333	47
23	31	158	117	72	268	335	92	45	38	22	219	46
24	31	127	109	68	186	198	82	73	38	21	175	96
25	31	123	98	66	132	163	87	52	42	22	152	92
26	31	101	85	66	115	175	96	46	40	23	136	62
27	32	92	89	64	111	168	92	43	36	23	125	54
28	35	89	89	55	117	138	82	42	33	21	115	102
29	61	184	122	b52	-------	132	94	42	32	22	105	77
30	84	119	444	b45	-------	123	107	45	30	21	103	62
31	61	-------	221	b42	-------	115	-------	46	-------	20	101	-------

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

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	1,070	56	28	34.5	0.528	0.61
November	3,104	821	30	103	1.58	1.77
December	6,579	1,080	85	212	3.25	3.75
Calendar year 1950	37,255	1,080	28	102	1.56	21.23
January 1951	5,127	729	87	165	2.53	2.92
February	7,185	690	138	257	3.94	4.09
March	8,040	1,380	136	259	3.97	4.58
April	7,911	656	140	264	4.04	4.51
May	3,835	262	76	124	1.90	2.18
June	2,878	215	64	95.9	1.47	1.64
July	4,741	1,430	50	153	2.34	2.70
August	3,398	286	54	110	1.68	1.94
September	1,711	118	41	57.0	.873	.97
Water year 1950-51	55,579	1,430	28	152	2.33	31.66
October 1951	2,729	236	45	88.0	1.35	1.55
November	8,342	1,300	138	278	4.26	4.75
December	8,029	1,360	117	259	3.97	4.57
Calendar year 1951	63,926	1,430	41	175	2.68	36.40
January 1952	8,263	714	149	267	4.09	4.71
February	5,969	576	127	206	3.15	3.40
March	8,969	1,520	119	289	4.43	5.11
April	9,971	956	158	332	5.08	5.68
May	6,713	637	123	217	3.32	3.82
June	5,221	724	73	174	2.66	2.97
July	3,669	728	54	118	1.81	2.09
August	2,453	228	45	79.1	1.21	1.40
September	3,873	679	54	129	1.98	2.21
Water year 1951-52	74,201	1,520	45	203	3.11	42.26

South Branch Raritan River near High Bridge--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1952	1,729	84	47	55.8	.855	.98
November	5,284	1,430	47	176	2.70	3.01
December	8,121	901	125	262	4.01	4.63
Calendar year 1952	70,235	1,520	45	192	2.94	40.01
January 1953	8,845	943	121	285	4.36	5.04
February	5,165	352	136	184	2.82	2.94
March	7,999	529	123	258	3.95	4.56
April	8,946	764	163	298	4.56	5.09
May	5,361	333	111	173	2.65	3.05
June	2,275	126	50	75.8	1.16	1.30
July	1,431	84	36	46.2	.708	.82
August	1,225	115	30	39.5	.605	.70
September	914	39	27	30.5	.467	.52
Water year 1952-53	57,295	1,430	27	157	2.40	32.64
October 1953	1,019	93	26	32.9	.504	.58
November	1,197	64	31	39.9	.611	.68
December	3,358	446	35	108	1.65	1.91
Calendar year 1953	47,735	943	26	131	2.01	27.19
January 1954	1,965	159	32	63.4	.971	1.12
February	2,500	244	40	89.3	1.37	1.42
March	5,196	427	94	168	2.57	2.96
April	3,208	297	82	107	1.64	1.83
May	3,992	439	78	129	1.98	2.27
June	1,369	67	33	45.6	.698	.78
July	947	38	23	30.5	.467	.54
August	1,235	308	23	39.8	.609	.70
September	1,525	122	29	50.8	.778	.87
Water year 1953-54	27,511	446	23	75.4	1.15	15.66
October 1954	1,151	84	31	37.1	.568	.66
November	3,295	680	45	110	1.68	1.88
December	4,074	444	60	131	2.01	2.32
Calendar year 1954	30,457	680	23	83.4	1.28	17.35
January 1955	2,870	188	42	92.6	1.42	1.63
February	3,740	500	40	134	2.05	2.13
March	5,138	363	107	166	2.54	2.93
April	2,861	115	75	95.4	1.46	1.63
May	1,713	85	42	55.3	.847	.98
June	1,255	68	30	41.8	.640	.71
July	772	31	20	24.9	.381	.44
August	7,087	1,840	19	229	3.51	4.04
September	1,953	102	46	65.1	.997	1.11
Water year 1954-55	35,909	1,840	19	98.4	1.51	20.46

South Branch Raritan River at Stanton

Location.--Lat 40°34'21", long 74°52'10", on right bank at downstream side of highway bridge at Stanton railroad station, Readington Township, Hunterdon County, 0.4 mile upstream from Prescott Brook.

Drainage area.--147 sq mi.

Records available.--July 1903 to December 1906, July 1919 to September 1955.

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.--35 years (1920-55), 242 cfs.

Extremes.--1903-6, 1919-55: Maximum discharge, 18,000 cfs Aug. 19, 1955 (gage height, 15.22 ft), from rating curve extended above 6,400 cfs on basis of computation of flow over Clinton Dam 6.5 miles upstream at gage height 10.72 ft, contracted-opening measurement 1.7 miles downstream, and slope-area measurement 0.4 mile downstream at gage height 15.22 ft, adjusted to present site; minimum, 9 cfs Nov. 7, 1931; minimum daily, 20 cfs Sept. 22, 1939

Revisions.--The figures of maximum and peak discharge for some water years have been revised, as shown in the following table. They supersede figures published in Special Reports 5 and 9.

Water year	Date	Discharge (cfs)	Gage height (feet)
1904	Oct. 9, 1903	9,020	11.2
1933	Aug. 23, 1933	7,640	10.46
1935	July 9, 1935	8,260	10.80

Peak discharge (base, 2,600 cfs).--

1950-51: Nov. 25 (8:30 p.m.) 6,840 cfs (10.00 ft); Dec. 8 (8 a.m.) 4,400 cfs (8.35 ft); Jan. 15 (11 a.m.) 2,700 cfs (6.78 ft); Feb. 7 (7 p.m.) 3,950 cfs (7.98 ft); Mar. 30 (11 p.m.) 4,940 cfs (8.76 ft); July 28 (5 p.m.) 4,930 cfs (8.83 ft).

1951-52: Nov. 7 (1 p.m.) 10,600 cfs (12.01 ft); Dec. 21 (8:30 a.m.) 4,440 cfs (8.38 ft); Mar. 11 (6:30 p.m.) 4,510 cfs (8.43 ft); Apr. 5 (5:30 p.m.) 4,010 cfs (8.03 ft); Apr. 15 (12 m.) 2,650 cfs (6.72 ft); May 25 (3 p.m.) 2,770 cfs (6.86 ft).

1952-53: Nov. 22 (10:30 a.m.) 4,330 cfs (8.29 ft); Dec. 5 (11 p.m.) 2,610 cfs (6.68 ft); Dec. 11 (2:30 p.m.) 3,540 cfs (7.63 ft); Jan. 24 (5:30 p.m.) 4,560 cfs (8.47 ft); Apr. 7 (3 p.m.) 2,690 cfs (6.77 ft); May 23 (4 a.m.) 2,610 cfs (6.67 ft).

1953-54: May 4 (3 a.m.) 2,060 cfs (6.07 ft), (maximum below base).

1954-55: Feb. 7 (time and discharge unknown); Aug. 13 (10 a.m.) 7,330 cfs (10.29 ft); Aug. 19 (2 a.m.) 18,000 cfs (15.22 ft).

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

Revisions.--Revised figures of discharge, in cubic feet per second, for the water year 1904, superseding those published in Bulletin 33, are given herewith:

Month	Maximum	Minimum	Mean	Per square mile	Runoff in inches
March 1904.....	3,000	200	496	3.37	3.89
September.....	3,700	58	308	2.10	2.34

South Branch Raritan River at Stanton--Continued

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	57	59	222	b220	499	346	1,100	263	166	433	317	98
2	56	63	197	b190	969	367	862	236	148	239	267	113
3	54	62	210	197	424	358	1,330	216	166	158	236	126
4	50	71	817	351	379	609	868	206	197	146	222	111
5	49	321	1,010	312	309	528	703	200	310	424	191	98
6	50	*136	442	216	313	*484	620	191	188	200	177	100
7	50	104	379	219	1,630	415	553	183	153	143	*163	158
8	50	83	2,640	239	1,060	379	508	177	133	129	210	117
9	57	76	886	b180	494	341	475	169	133	115	177	96
10	*102	71	631	b180	397	309	465	160	153	111	222	92
11	96	50	626	185	354	289	508	180	166	107	393	96
12	85	65	503	169	325	286	*435	260	133	126	200	133
13	89	63	410	163	444	274	885	185	138	148	232	90
14	73	60	358	178	484	505	489	158	451	115	177	87
15	63	59	341	1,870	333	470	419	148	354	104	156	253
16	60	60	442	531	286	362	393	140	232	102	367	148
17	62	63	337	325	457	317	410	138	171	115	523	102
18	63	62	278	293	717	293	354	133	150	*115	253	92
19	65	59	b260	274	*401	278	333	129	136	153	191	89
20	66	62	b240	271	437	998	309	136	129	246	253	83
21	60	115	b230	267	908	513	286	138	126	146	188	80
22	59	94	b220	219	1,110	460	274	136	126	122	171	80
23	76	74	216	200	579	410	528	200	297	163	150	80
24	92	70	216	926	456	415	350	441	222	126	140	76
25	76	2,130	210	525	415	379	297	239	146	117	138	80
26	65	1,650	b170	*354	406	325	282	166	124	107	131	*85
27	60	456	b170	297	393	301	260	163	*129	100	129	78
28	60	341	b170	289	358	289	246	203	286	2,570	120	117
29	60	282	278	301	-------	526	256	454	274	1,630	115	100
30	60	242	379	267	-------	2,080	408	422	216	543	107	87
31	63	-------	278	210	-------	2,840	-------	222	-------	388	102	-------

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

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	83	756	249	543	518	246	337	631	1,400	126	89	960
2	85	460	242	594	558	229	371	563	933	117	107	934
3	100	1,450	246	708	513	232	325	508	548	113	117	697
4	89	736	249	*508	1,340	236	297	465	470	117	96	333
5	81	489	680	503	893	397	1,990	428	610	126	89	246
6	74	388	679	460	620	333	1,310	415	451	113	102	206
7	146	4,310	415	388	553	278	725	375	384	109	138	183
8	456	1,520	367	358	503	260	615	350	337	122	122	163
9	158	831	333	346	494	263	553	329	379	1,270	124	153
10	*117	647	313	384	447	286	499	317	428	1,200	321	143
11	260	548	293	346	484	2,470	456	325	317	354	194	131
12	346	475	286	317	442	f1,860	419	758	286	229	124	120
13	180	433	*274	313	358	f783	415	465	253	191	131	115
14	158	487	260	329	329	658	1,050	354	232	169	115	111
15	136	653	379	401	325	548	1,460	321	225	156	100	124
16	131	573	346	393	313	489	909	309	219	143	104	140
17	120	543	278	325	393	447	658	286	184	*129	289	113
18	96	424	359	590	401	415	*573	350	194	122	156	104
19	120	379	642	384	333	676	513	301	*185	124	117	329
20	100	341	484	384	305	691	475	401	188	143	104	229
21	90	*313	3,210	341	321	642	428	424	174	146	107	150
22	107	309	1,340	352	313	533	401	305	185	131	371	133
23	107	313	766	1,150	286	783	384	260	222	115	138	140
24	117	325	653	494	278	686	358	216	225	102	109	133
25	470	305	573	397	263	584	460	1,330	185	96	100	*109
26	194	526	697	1,460	253	494	862	872	160	92	92	104
27	153	388	538	1,110	249	451	1,160	513	148	90	85	98
28	218	297	428	1,200	242	*419	*1,720	406	143	107	*78	94
29	213	286	415	777	242	393	1,020	379	143	122	80	92
30	160	274	460	594	-------	367	760	393	143	104	76	92
31	150	-------	533	563	-------	350	-------	442	-------	96	73	-------

* Discharge measurement made on this day.
f Fragmentary gage-height record; based on reconstructed graph.

South Branch Raritan River at Stanton--Continued

Daily discharge, in cubic feet per second, 1950-55

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	90	78	219	239	508	249	371	523	256	90	62	41
2	94	78	216	229	388	239	384	451	225	98	76	39
3	150	80	222	415	375	219	350	367	200	104	76	42
4	104	78	213	350	354	1,150	333	333	188	87	68	60
5	92	76	1,050	282	321	543	367	415	180	81	71	49
6	90	76	1,380	242	309	393	317	401	171	85	65	74
7	87	74	538	200	375	354	1,550	367	177	96	59	62
8	85	73	433	216	375	337	1,010	523	180	83	56	53
9	87	73	388	656	313	321	610	375	169	85	121	47
10	87	76	358	1,170	289	301	*789	358	*138	76	203	46
11	89	78	1,790	956	263	271	754	313	136	74	102	45
12	83	74	924	664	274	289	568	286	133	71	76	44
13	85	71	626	489	305	952	737	278	272	68	66	47
14	81	70	533	437	263	563	825	309	274	73	63	44
15	80	78	456	442	540	691	553	286	169	65	63	42
16	80	136	410	456	552	1,210	936	278	146	*62	59	65
17	78	*102	384	406	358	615	725	321	133	59	60	50
18	76	90	358	679	305	533	605	384	129	57	68	45
19	73	85	321	528	282	813	924	260	124	60	57	42
20	74	107	297	*433	278	594	637	239	120	80	54	42
21	*76	1,160	414	424	680	484	543	229	111	87	52	45
22	80	2,730	763	470	496	442	494	216	122	85	50	46
23	89	1,070	428	424	358	415	465	1,130	131	216	50	44
24	87	528	367	2,170	333	954	424	384	113	161	47	42
25	83	406	333	1,520	321	737	401	297	102	71	47	41
26	81	346	309	783	313	647	442	341	100	71	*45	44
27	83	309	286	642	301	548	584	354	98	70	45	44
28	85	274	b240	708	271	489	406	267	90	90	44	*42
29	87	249	b245	599	-------	451	358	239	96	68	42	41
30	83	229	*242	503	-------	415	329	249	94	70	41	40
31	80	-------	246	475	-------	393	-------	317	-------	71	41	-------

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

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	67	65	90	85	291	174	150	122	58	37	296
2	36	60	62	93	100	609	172	177	117	70	37	117
3	36	56	58	91	120	599	166	174	91	60	172	81
4	37	53	58	89	137	681	157	1,040	100	68	91	70
5	37	52	89	85	*120	350	155	402	97	85	63	62
6	38	53	95	106	110	294	134	294	87	68	55	58
7	50	68	913	95	104	269	205	258	*89	62	48	55
8	41	80	262	75	95	255	177	354	87	65	46	58
9	40	80	160	75	100	235	157	354	81	62	127	60
10	40	78	633	80	104	224	144	302	80	55	134	53
11	41	76	280	70	104	205	144	306	85	48	76	157
12	41	74	199	85	89	189	202	252	81	46	58	144
13	40	72	326	80	70	195	163	221	108	46	52	81
14	40	68	1,040	80	80	354	142	202	100	46	47	67
15	38	63	466	85	93	306	139	189	85	70	50	63
16	40	62	240	90	104	224	155	177	87	60	55	91
17	40	*58	190	80	318	192	504	169	85	48	47	269
18	38	55	140	75	301	183	373	166	81	46	41	139
19	40	53	130	90	174	169	241	157	70	47	47	142
20	40	53	130	90	147	579	202	160	65	47	93	205
21	40	53	*144	200	163	338	183	356	68	41	104	134
22	38	55	147	200	269	255	174	320	56	40	95	155
23	37	126	147	110	192	238	172	199	91	*38	63	117
24	38	134	122	110	160	221	180	172	81	38	50	91
25	53	95	105	110	163	248	163	157	68	44	47	83
26	62	115	110	120	177	*322	157	152	63	37	50	80
27	52	93	104	220	235	235	177	139	62	38	*44	81
28	94	78	100	220	177	211	235	139	55	38	42	78
29	*166	70	112	120	-------	195	195	139	60	37	42	*68
30	202	67	110	120	-------	195	160	169	58	42	58	65
31	87	-------	102	100	-------	186	-------	137	-------	40	724	-------

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 16-20, 25, Jan. 1, 5, 8-31, Feb. 1-3, 8, 9, 13, 14.

South Branch Raritan River at Stanton--Continued

Daily discharge, in cubic feet per second, 1950-55

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	65	93	208	334	85	347	235	169	106	36	37	218
2	65	95	189	384	90	350	224	150	85	36	36	202
3	62	299	172	350	85	252	218	142	76	37	32	183
4	62	208	*160	290	80	574	218	139	72	38	31	160
5	60	189	160	262	90	392	205	134	78	100	32	160
6	76	150	144	298	120	499	202	127	80	48	33	157
7	62	115	130	302	1,000	502	208	120	72	60	46	144
8	56	*106	150	228	397	286	189	122	74	*25	134	132
9	56	108	190	224	235	322	174	120	89	22	50	129
10	58	78	276	218	203	314	169	110	83	24	40	129
11	62	100	192	195	399	294	163	110	96	50	72	132
12	56	74	160	186	382	269	192	108	160	53	699	134
13	55	102	152	192	258	258	241	102	112	48	4,390	122
14	*53	63	278	160	231	231	205	100	91	46	1,390	117
15	55	80	536	175	*208	224	205	97	85	44	625	117
16	67	78	306	170	199	245	177	93	81	42	346	117
17	62	81	238	*160	328	224	160	89	80	40	*300	112
18	55	83	526	150	375	215	155	85	65	37	1,920	110
19	53	83	585	155	241	215	160	85	55	36	*8,060	112
20	55	168	330	139	218	218	221	83	83	40	1,430	120
21	55	1,610	250	139	208	241	202	81	74	38	924	108
22	53	798	220	160	208	809	215	80	70	34	880	97
23	52	366	250	150	514	678	186	81	67	32	575	95
24	50	290	224	140	362	397	157	112	72	33	453	212
25	48	276	205	134	266	342	166	102	74	38	391	195
26	50	231	189	135	235	370	186	87	78	42	338	127
27	53	199	180	130	228	358	186	81	78	38	310	106
28	56	180	180	115	238	298	163	83	76	37	276	208
29	144	411	238	105	-------	283	189	81	81	34	255	157
30	183	266	1,000	90	-------	266	215	87	94	37	245	*120
31	124	-------	470	85	-------	248	-------	93	-------	37	241	-------

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 7-9, 21-23, Jan. 14-19, 22-24, Jan. 26 to Feb. 7.

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	2,028	102	49	65.4	0.445	0.51
November	7,103	2,130	50	237	1.61	1.80
December	13,766	2,640	170	444	3.02	3.48
Calendar year 1950	75,290	2,640	49	206	1.40	19.06
January 1951	10,418	1,870	163	336	2.29	2.64
February	15,337	1,630	286	548	3.73	3.88
March	16,746	2,840	274	540	3.67	4.24
April	15,206	1,330	246	507	3.45	3.85
May	6,392	454	129	206	1.40	1.62
June	5,753	451	124	192	1.31	1.46
July	9,441	2,570	100	305	2.07	2.39
August	6,418	523	102	207	1.41	1.62
September	3,145	253	76	105	.714	.80
Water year 1950-51	111,753	2,840	49	306	2.08	28.29
October 1951	5,015	470	74	162	1.10	1.27
November	19,779	4,310	274	659	4.48	5.00
December	16,987	3,210	242	548	3.73	4.30
Calendar year 1951	130,637	4,310	74	358	2.44	33.07
January 1952	17,012	1,460	313	549	3.73	4.30
February	12,569	1,340	242	433	2.95	3.18
March	17,499	2,470	229	564	3.84	4.43
April	21,503	1,990	297	717	4.88	5.44
May	13,791	1,330	216	445	3.03	3.49
June	9,951	1,400	143	332	2.26	2.52
July	6,374	1,270	90	206	1.40	1.61
August	4,048	371	73	131	.891	1.02
September	6,679	960	92	223	1.52	1.69
Water year 1951-52	151,207	4,310	73	413	2.81	38.25

South Branch Raritan River at Stanton--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1952	2,679	150	73	86.4	.588	.68
November	8,954	2,730	70	298	2.03	2.27
December	14,989	1,790	213	484	3.29	3.79
Calendar year 1952	136,048	2,730	70	372	2.53	34.42
January 1953	18,207	2,170	200	587	3.99	4.61
February	10,100	680	263	361	2.46	2.56
March	16,612	1,210	219	536	3.65	4.20
April	17,791	1,550	317	593	4.03	4.50
May	11,090	1,130	216	358	2.44	2.81
June	4,577	274	90	153	1.04	1.16
July	2,614	216	57	84.3	.573	.66
August	2,029	203	41	65.5	.446	.51
September	1,408	74	39	46.9	.319	.36
Water year 1952-53	111,050	2,730	39	304	2.07	28.11
October 1953	1,660	202	36	53.5	.364	.42
November	2,167	134	52	72.2	.491	.55
December	6,839	1,040	58	221	1.50	1.73
Calendar year 1953	95,094	2,170	36	261	1.78	24.07
January 1954	3,334	220	70	108	.735	.84
February	4,091	318	70	146	.993	1.03
March	9,047	681	169	292	1.99	2.29
April	5,702	504	134	190	1.29	1.44
May	7,583	1,040	137	245	1.67	1.92
June	2,460	122	55	82.0	.558	.62
July	1,590	85	37	51.3	.349	.40
August	2,695	724	37	86.9	.591	.68
September	3,220	296	53	107	.728	.81
Water year 1953-54	50,388	1,040	36	138	.939	12.73
October 1954	2,063	183	48	66.5	.452	.52
November	6,980	1,610	63	233	1.59	1.77
December	8,488	1,000	130	274	1.86	2.15
Calendar year 1954	57,253	1,610	37	157	1.07	14.47
January 1955	5,955	384	85	192	1.31	1.51
February	7,483	1,000	80	267	1.82	1.89
March	10,521	809	215	339	2.31	2.66
April	5,786	241	155	193	1.31	1.46
May	3,253	169	80	105	.714	.82
June	2,487	160	55	82.9	.564	.63
July	1,262	100	22	40.7	.277	.32
August	24,591	8,060	31	793	5.39	6.22
September	4,232	218	95	141	.959	1.07
Water year 1954-55	83,101	8,060	22	228	1.55	21.02

Walnut Brook near Flemington

Location (revised).--Lat 40°30'55", long 74°52'52", on right bank 1.2 miles northwest of Flemington, Hunterdon County, and 2.3 miles upstream from mouth.

Drainage area.--2.24 sq mi.

Records available.--April 1936 to September 1955.

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

Average discharge.--19 years, 3.23 cfs.

Extremes.--1936-55: 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).--
1950-51: Nov. 25 (6 p.m.) 286 cfs (2.74 ft); Dec. 8 (3 a.m.) 165 cfs (2.44 ft); Feb. 21 (1 p.m.) 112 cfs (2.26 ft); Mar. 30 (4:30 p.m.) 208 cfs (2.56 ft).
1951-52: Nov. 7 (9 a.m.) 286 cfs (2.74 ft); Dec. 21 (1 a.m.) 158 cfs (2.42 ft); Feb. 4 (6:30 a.m.) 122 cfs (2.30 ft); Mar. 11 (8 a.m.) 139 cfs (2.36 ft); Apr. 28 (6 a.m.) 189 cfs (2.51 ft); May 25 (8 a.m.) 134 cfs (2.34 ft); June 1 (2 p.m.) 102 cfs (2.22 ft).
1952-53: Nov. 22 (6 a.m.) 102 cfs (2.24 ft); Dec. 5 (1 p.m.) 124 cfs (2.35 ft); Dec. 11 (8 a.m.) 116 cfs (2.32 ft); Jan. 24 (10 a.m.) 180 cfs (2.53 ft); Mar. 4 (5:30 a.m.) 135 cfs (2.39 ft); Mar. 13 (8 a.m.) 147 cfs (2.43 ft); Mar. 15 (9:30 p.m.) 138 cfs (2.40 ft); Apr. 7 (9 a.m.) 169 cfs (2.50 ft); May 23 (1 a.m.) 100 cfs (2.25 ft).
1953-54: Mar. 20 (3 a.m.) 97 cfs (2.24 ft), (maximum below base).
1954-55: Aug. 13 (6 a.m.) 314 cfs (2.85 ft); Aug. 18 (12 p.m.) 410 cfs (3.02 ft).

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.13	0.16	3.1	1.3	11.4	4.4	11.2	1.3	1.7	3.5	1.3	0.10
2	.13	.13	3.1	1.1	9.7	5.6	8.0	1.1	1.4	1.5	.92	.20
3	.13	.13	3.3	1.4	4.1	4.1	25	1.0	1.5	1.0	.83	.20
4	.10	4.2	27	2.9	3.6	24	9.6	.92	1.8	.92	.75	.16
5	.10	2.8	10.6	2.0	3.6	10.1	7.4	.83	2.1	14.5	.67	.13
6	.10	1.3	6.3	1.7	3.6	7.0	5.6	.83	1.4	3.6	.53	.13
7	.10	.92	7.9	2.3	26	6.3	5.0	.75	1.1	2.4	.60	.16
8	.13	.83	52	2.1	8.2	5.0	4.1	.67	1.0	1.7	.75	.10
9	.24	.75	11.7	1.4	4.7	4.1	3.6	.67	.92	1.3	.60	.08
10	.45	.60	7.8	1.3	3.6	3.3	3.3	.60	1.1	1.0	1.8	.08
11	.20	.53	7.8	1.3	2.9	3.1	3.1	1.2	1.0	.83	1.4	.06
12	.24	.46	5.3	1.3	3.3	2.9	5.4	1.4	.83	.97	.92	.06
13	.20	.46	4.1	1.0	4.2	2.7	6.5	.83	.88	.92	.83	.08
14	.20	.40	3.3	7.1	3.6	10.3	4.1	.67	10.0	.75	.60	.10
15	.20	.40	3.1	35	2.7	6.3	3.6	.60	6.8	.60	.95	.24
16	.16	.34	4.1	6.6	2.2	4.7	3.3	.53	4.7	.53	.83	.13
17	.16	.34	3.1	4.7	11.4	3.8	3.1	.53	3.1	.53	.67	.10
18	.16	.34	2.4	4.1	7.0	3.3	2.7	.46	2.4	.53	.53	.13
19	.13	.34	2.0	3.6	*6.2	3.6	2.7	.46	1.7	4.3	.46	.13
20	.13	.37	1.7	3.3	8.2	30	2.2	.53	1.4	1.5	.66	.10
21	.10	.75	1.4	3.8	40	9.1	1.8	.53	1.3	.92	.46	.10
22	.10	.53	1.4	2.7	26	7.4	1.8	.53	1.0	.75	.40	.08
23	.40	.53	1.3	2.0	10.6	5.6	4.4	.65	1.0	.75	.34	.08
24	.34	.46	1.3	15.8	7.0	5.6	2.4	3.0	.92	.67	.29	.08
25	.29	50	1.1	6.3	5.6	4.4	2.0	1.3	.75	.53	.29	.06
26	.24	16.0	.92	4.7	5.3	3.6	1.7	.92	.60	.40	.24	.06
27	.20	7.0	b.9	3.6	5.6	*3.1	1.5	.75	.60	.34	.20	.06
28	.20	5.3	b.8	3.1	4.4	2.9	1.4	.85	.60	12.9	.16	.06
29	.20	4.4	1.8	3.6	-------	*9.6	1.5	7.5	1.3	3.6	.16	.06
30	.16	3.6	2.1	2.9	-------	*52	1.5	4.1	2.1	2.4	.16	.06
31	.16	-------	1.9	2.0	-------	21	-------	2.4	-------	1.8	.13	-------

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Backwater from leaves or rocks Oct. 1-10, 13-31, Nov. 1-3, July 31 to Aug. 2, Sept. 15-26.

Walnut Brook near Flemington--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.06	12.9	2.5	5.7	5.0	1.3	3.1	7.0	47	0.20	0.08	16.4
2	.08	6.8	2.5	9.6	5.9	1.3	2.9	5.3	15.2	.16	.20	4.2
3	.08	37	2.0	12.1	5.4	1.3	2.7	4.4	8.2	.13	.24	14.1
4	.08	9.1	2.0	6.3	45	2.1	2.2	3.6	6.2	.17	.16	4.1
5	.08	*5.3	*15	7.5	17.8	7.0	17.1	3.1	7.1	.20	.10	2.4
6	.08	3.8	8.6	5.9	9.1	5.0	8.4	2.7	4.4	.10	.27	1.8
7	.82	81	5.3	4.4	7.0	4.1	5.3	2.2	3.3	.10	.36	1.7
8	.46	20	5.0	3.6	5.6	5.2	4.4	2.0	2.7	.08	.24	1.3
9	.16	8.0	4.1	3.3	4.7	5.3	3.6	1.5	2.2	.10	.24	1.0
10	.13	6.0	3.6	4.4	4.1	5.0	3.1	1.4	1.8	.10	1.7	.92
11	1.0	5.0	3.1	3.3	4.1	56	2.9	2.4	1.5	1.3	.67	.75
12	.67	4.0	2.9	2.9	3.3	14.7	2.7	9.6	1.3	.83	.46	.67
13	.40	3.0	2.4	2.7	2.7	9.1	2.6	3.6	1.1	.67	.40	.60
14	.34	5.0	2.0	2.9	2.2	7.0	14.7	2.9	.92	.60	.29	.60
15	.29	7.0	6.5	3.8	2.0	5.0	29	2.4	.83	.40	.24	.67
16	.29	12	3.8	4.1	1.8	4.4	14.0	2.0	.75	.34	.39	.67
17	.24	8.0	2.9	3.2	3.3	3.6	8.2	1.7	.67	.29	.34	.53
18	.24	6.0	11.1	11.0	3.3	3.3	6.3	2.3	.60	.29	.24	.46
19	.24	5.0	9.0	4.4	2.7	16.6	5.0	1.7	.46	.24	.16	1.0
20	.24	4.0	13.1	4.7	2.2	10.4	4.1	8.0	.46	.48	.16	.67
21	.24	3.0	*88	3.8	2.2	7.0	3.3	5.0	.40	.75	1.0	.53
22	.24	2.5	17.8	13.4	2.2	7.0	3.1	3.3	.46	.48	1.9	.46
23	.24	2.5	9.1	17.6	1.8	16.5	2.7	2.7	.60	.34	.40	.46
24	.90	2.5	7.0	7.4	1.7	12.6	2.2	2.2	.60	.24	.29	.46
25	1.1	2.0	6.4	5.3	1.5	9.1	4.6	57	.46	.20	.20	*.34
26	.60	10	11.4	35	1.4	6.6	12.4	24	.34	.16	.16	.34
27	.46	5.0	5.9	18.0	1.5	5.6	26	10.1	.29	.16	.16	.34
28	.75	4.0	4.4	30	1.4	4.7	*70	6.3	.24	.16	.16	.29
29	.67	3.5	3.8	12.4	1.3	3.8	18.3	7.2	.24	.13	.16	.29
30	.60	3.0	4.4	7.4	-------	3.3	10.6	5.9	.24	.10	.16	.29
31	.53	-------	4.7	5.6	-------	3.1	-------	8.5	-------	.10	.16	-------

* Discharge measurement made on this day.

Note.--No gage-height record Nov. 8 to Dec. 5, July 9, 10; discharge estimated on basis of weather records and records for Neshanic River at Reaville.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.29	0.16	1.5	1.7	3.8	2.3	3.4	3.3	2.4	0.46	0.16	0.02
2	.41	.13	1.5	1.5	2.7	2.0	3.1	2.7	1.7	.60	.31	.02
3	.40	.13	1.5	7.6	2.7	2.1	2.7	2.2	1.4	.46	.23	.55
4	.29	.13	1.5	4.1	2.3	30	3.0	1.8	1.1	.34	.16	.15
5	.24	.13	38	3.1	2.0	8.3	3.4	3.2	1.0	.34	.16	.95
6	.24	.13	17	2.5	2.0	*5.8	2.7	2.7	.83	.78	.13	.48
7	.20	.13	7.5	2.2	2.5	4.6	62	3.4	.92	.46	.10	.23
8	.20	.10	5.5	3.0	2.5	4.1	15	3.6	.92	.34	.10	.16
9	.20	.10	4.4	27	2.0	3.6	9.6	2.5	.83	.34	5.2	.13
10	.20	.13	3.8	30	1.7	3.1	14	2.2	.60	.23	2.2	.10
11	.20	.13	*32	20	1.5	2.7	7.9	1.8	.60	.23	.92	.08
12	.20	.13	10	11	2.2	3.4	7.6	1.7	.60	.19	.67	.08
13	.20	.13	6.8	*7.9	2.2	40	15	2.8	1.7	.19	.53	.08
14	.16	.10	5.2	7.5	1.7	11	10	2.9	1.0	.16	.46	.08
15	.16	.22	4.1	6.8	15	40	6.8	2.2	.74	.16	.40	.09
16	.16	.37	3.4	6.5	6.8	24	21	2.0	.60	.10	.34	.26
17	.16	.20	2.9	4.6	4.9	11	8.7	3.9	.53	.10	.34	.10
18	.16	.20	2.5	12	3.6	7.9	9.5	3.7	.46	.08	.34	.08
19	.13	.16	2.2	6.5	3.1	16	11	2.3	.46	.08	.23	.06
20	.16	.64	2.0	5.5	2.9	7.9	6.5	2.0	.40	.77	.23	.04
21	.16	10	6.3	5.9	16	6.5	5.2	1.7	.34	.29	.19	.06
22	.16	47	9.6	6.1	6.5	5.2	4.4	1.5	8.9	.16	.16	.08
23	.16	10	4.9	4.6	4.9	4.6	3.8	18	2.4	2.7	.13	.06
24	.16	5.5	4.1	47	4.4	12	3.1	5.2	1.5	.67	.10	.04
25	.20	3.8	3.4	18	3.8	7.2	2.9	3.8	1.1	.40	.10	.04
26	.20	3.1	3.1	8.3	3.6	6.5	3.1	3.6	.92	.34	.08	.04
27	.20	2.7	2.7	5.8	3.1	5.2	2.7	2.9	.67	.49	.06	.04
28	.20	2.0	2.0	6.8	2.7	4.6	2.2	2.2	.77	.43	.06	.04
29	.20	1.8	1.8	4.9	-------	5.2	2.0	1.8	.74	.23	.04	.04
30	.16	1.7	1.7	3.8	-------	4.4	1.8	2.0	.60	.23	.02	.04
31	.16	-------	1.7	3.6	-------	3.6	-------	2.3	-------	.19	.02	-------

* Discharge measurement made on this day.

Walnut Brook near Flemington--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.04	0.44	0.67	1.1	1.7	19	2.9	2.0	0.76	a0.03	0	1.1
2	.01	.38	.59	1.1	1.7	11	2.5	2.0	.67	a.02	0	.51
3	.02	.32	.51	1.1	1.8	24	2.1	3.8	.59	a.02	.03	.38
4	.02	.27	.51	1.1	1.8	12	2.0	*8.3	.51	a.25	.02	.27
5	.02	.27	3.0	.95	1.7	6.5	2.0	3.7	.51	a.10	.01	.18
6	.06	.27	2.7	1.3	1.6	4.9	2.0	3.1	.44	a.02	.01	.18
7	.11	.38	17	1.1	1.3	4.1	2.0	2.7	.38	a.02	0	.14
8	.08	.44	4.4	.85	1.3	3.9	2.0	7.8	.32	a.06	0	.18
9	.08	.51	3.5	.85	1.4	3.5	1.7	4.4	.27	a.04	.48	.18
10	.06	.59	14	.85	1.4	3.5	1.6	3.7	.27	a.02	.16	.14
11	.06	.59	4.6	b.5	1.4	3.1	1.6	3.3	.27	a.02	.06	5.5
12	.06	.51	6.1	b.9	b.8	2.7	1.7	2.9	.27	.01	.04	1.3
13	.06	.44	8.0	b1.0	b.8	4.2	1.6	2.3	.44	.01	.04	.85
14	.06	.44	34	b1.1	b.9	12	1.4	2.0	.32	.01	.04	.59
15	.04	.44	8.7	1.1	1.1	5.5	1.3	1.8	.27	.02	.04	.51
16	.04	.38	5.5	.85	1.3	4.1	1.4	1.7	.27	0	.03	.97
17	.04	.38	4.1	.76	7.6	3.7	9.9	1.6	.27	0	0	6.1
18	.04	.32	3.1	b.8	3.7	3.3	4.4	1.3	.22	0	0	2.0
19	.04	.32	2.5	b.9	2.9	3.3	3.3	1.2	.18	0	1.2	2.6
20	.04	.32	2.3	.77	2.9	23	2.9	1.2	.14	0	.47	2.1
21	.04	.32	2.1	15	5.3	7.2	2.5	8.3	.11	0	1.2	1.7
22	.02	.32	2.1	5.3	6.8	4.9	2.1	3.3	.11	0	3.8	1.6
23	.02	.73	2.0	3.7	3.9	4.6	2.1	2.3	.11	0	.22	1.2
24	.02	.67	1.8	2.9	3.5	3.9	2.0	2.0	.11	0	.14	.95
25	.04	.95	1.6	2.7	4.1	8.0	1.8	1.8	.08	0	.11	.85
26	.04	1.2	1.4	3.4	6.0	6.5	1.7	1.6	.06	0	.08	.67
27	.04	.85	1.4	5.2	5.2	4.4	2.3	1.3	.06	0	.06	.67
28	.70	.85	1.3	4.2	3.9	4.1	4.2	1.3	.04	0	.06	.51
29	2.6	.67	1.4	2.7	-------	3.7	2.3	1.3	.04	0	.06	.44
30	.95	.67	1.4	2.3	-------	3.5	2.1	1.2	a.03	0	.06	.44
31	.51	-------	1.3	1.8	-------	3.1	-------	.85	-------	0	6.2	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for Neshanic River at Reaville.
b Stage-discharge relation affected by ice.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.44	1.1	3.7	5.5	0.67	8.7	2.9	2.9	0.44	0.06	0	1.1
2	.38	2.4	3.3	8.7	.59	5.5	2.7	2.5	.32	.04	0	1.0
3	.44	3.1	2.9	5.2	b.9	4.1	2.5	2.1	.27	.04	0	.85
4	.44	2.0	2.5	4.6	b.7	14	2.1	2.0	.22	.02	0	.76
5	.38	2.1	2.3	*3.5	a1.0	7.5	2.1	1.8	.22	0	0	.67
6	1.2	2.0	2.0	4.6	a7.0	20	2.0	1.7	.22	0	0	.59
7	.59	1.7	1.7	3.7	a32	9.8	2.0	1.4	.18	.01	0	.51
8	.51	1.6	1.6	3.3	a3.0	6.1	1.7	1.4	.18	.01	0	.51
9	.51	1.3	4.3	2.9	a2.5	5.5	1.6	1.3	.59	.01	0	.44
10	.44	1.2	3.9	2.7	2.5	4.6	1.6	1.2	.32	.01	0	.38
11	.44	1.1	2.9	2.3	8.8	4.1	1.4	1.1	.44	0	1.6	.38
12	.38	1.1	2.3	2.1	3.9	3.5	3.0	.95	.59	0	18	.32
13	.32	.95	2.1	2.1	2.7	3.1	3.7	.76	.44	0	86	.27
14	.32	.95	13	1.8	2.3	2.9	3.1	.76	.32	0	6.5	.27
15	.32	.85	10	1.8	2.3	2.9	3.3	.76	.27	0	3.4	.22
16	.32	.85	6.8	1.7	2.3	3.3	2.5	.67	.18	0	2.3	.22
17	.32	.76	4.6	1.4	9.6	2.5	2.1	.59	.14	0	1.8	.22
18	.32	.76	15	1.4	3.9	2.5	2.1	.59	.11	0	78	.22
19	.27	.85	8.3	1.3	3.1	2.7	5.4	.51	.23	0	65	.22
20	.27	8.1	5.5	1.1	2.9	2.5	5.8	.51	.62	0	9.8	.22
21	.27	44	3.9	1.1	2.9	6.5	4.9	.44	.22	0	6.3	.18
22	.27	11	3.3	1.2	3.1	47	5.5	.38	.18	0	11	.18
23	.27	6.5	2.9	1.1	14	15	3.9	.38	.11	0	5.2	.18
24	.27	5.2	2.7	.95	5.5	8.7	3.5	.38	.14	0	3.7	.67
25	.27	4.1	2.3	.85	4.4	6.1	3.3	.32	.14	0	2.9	.44
26	.27	3.5	2.0	.85	3.7	9.3	3.3	.32	.14	0	2.3	.27
27	.27	3.1	1.8	.76	3.7	6.1	3.1	.27	.11	0	2.0	.22
28	.32	2.9	1.8	.85	3.9	4.6	2.9	.27	.08	0	1.6	.44
29	2.8	11	5.5	b.8	-------	3.9	3.9	.27	.06	0	1.3	.32
30	1.7	4.1	25	b.75	-------	3.7	3.5	.27	.06	0	1.2	.27
31	1.3	-------	7.5	b.7	-------	3.3	-------	.72	-------	0	1.2	-------

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

Walnut Brook near Flemington--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	5.78	0.45	0.10	0.186	0.083	0.10
November	104.37	50	.13	3.48	1.55	1.73
December	184.62	52	.8	5.96	2.66	3.07
Calendar year 1950	1,028.05	52	.02	2.82	1.26	17.06
January 1951	136.0	35	1.0	4.39	1.96	2.26
February	234.7	40	2.2	8.38	3.74	3.90
March	268.9	52	2.7	8.67	3.87	4.46
April	139.5	25	1.4	4.65	2.08	2.32
May	38.41	7.5	.46	1.24	.554	.64
June	57.00	10.0	.60	1.90	.848	.95
July	67.94	14.5	.34	2.19	.978	1.13
August	19.47	1.8	.13	.628	.280	.32
September	3.17	.24	.06	.106	.047	.05
Water year 1950-51	1,259.86	52	.06	3.45	1.54	20.93
October 1951	12.31	1.1	.06	.397	.177	.20
November	286.9	81	2.0	9.56	4.27	4.76
December	270.6	88	2.0	8.73	3.90	4.49
Calendar year 1951	1,534.90	88	.06	4.21	1.88	25.48
January 1952	261.7	35	2.7	8.44	3.77	4.34
February	152.2	45	1.3	5.25	2.34	2.53
March	247.0	56	1.3	7.97	3.56	4.10
April	295.5	70	2.2	9.85	4.40	4.91
May	202.0	57	1.4	6.52	2.91	3.35
June	110.56	47	.24	3.69	1.65	1.84
July	9.60	1.3	.08	.310	.138	.16
August	11.59	1.8	.08	.374	.167	.19
September	58.34	16.4	.29	1.94	.866	.97
Water year 1951-52	1,918.30	88	.06	5.24	2.34	31.84
October 1952	6.32	.41	.13	.204	.091	.10
November	91.15	47	.10	3.04	1.36	1.51
December	194.6	38	1.5	6.28	2.80	3.23
Calendar year 1952	1,640.56	70	.08	4.48	2.00	27.23
January 1953	285.8	47	1.5	9.22	4.12	4.75
February	113.1	16	1.5	4.04	1.80	1.88
March	294.8	40	2.0	9.51	4.25	4.89
April	254.1	62	1.8	8.47	3.78	4.22
May	97.9	18	1.5	3.16	1.41	1.63
June	36.73	8.9	.34	1.22	.545	.61
July	12.54	2.7	.08	.405	.181	.21
August	14.17	5.2	.02	.457	.204	.24
September	4.22	.95	.02	.141	.063	.07
Water year 1952-53	1,405.43	62	.02	3.85	1.72	23.34
October 1953	5.96	2.6	.01	.192	.086	.10
November	15.24	1.2	.27	.508	.227	.25
December	143.58	34	.51	4.63	2.07	2.38
Calendar year 1953	1,278.14	62	.01	3.50	1.56	21.23
January 1954	68.18	15	.5	2.20	.982	1.13
February	77.8	7.6	.8	2.78	1.24	1.29
March	211.2	24	2.7	6.81	3.04	3.51
April	73.4	9.9	1.3	2.45	1.09	1.22
May	86.05	8.3	.85	2.78	1.24	1.43
June	8.12	.76	.03	.271	.121	.13
July	.65	.25	0	.021	.0094	.01
August	11.20	6.2	0	.361	.161	.19
September	34.81	6.1	.14	1.16	.518	.58
Water year 1953-54	736.19	34	0	2.02	.902	12.22
October 1954	16.62	2.8	.27	.536	.239	.28
November	130.17	44	.76	4.34	1.94	2.16
December	157.4	25	1.6	5.08	2.27	2.61
Calendar year 1954	875.60	44	0	2.40	1.07	14.54
January 1955	71.61	8.7	.7	2.31	1.03	1.19
February	133.86	32	.59	4.78	2.13	2.22
March	230.0	47	2.5	7.42	3.31	3.82
April	91.4	5.8	1.4	3.05	1.36	1.52
May	29.52	2.9	.27	.952	.425	.49
June	7.54	.62	.06	.251	.112	.13
July	.20	.06	0	.006	.0027	.003
August	311.1	86	0	10.0	4.46	5.17
September	12.54	1.1	.18	.418	.187	.21
Water year 1954-55	1,191.96	86	0	3.27	1.46	19.80

Neshanic River at Reaville

Location (revised).--Lat 40°28'18", long 74°49'42", on left bank 50 ft downstream from highway bridge, 0.6 mile southwest of Reaville, Hunterdon County, 1.5 miles downstream from Third Neshanic River, and 2.2 miles upstream from Back Brook.

Drainage area.--25.7 sq mi.

Records available.--June 1930 to September 1955.

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

Average discharge.--25 years, 35.3 cfs.

Extremes.--1930-55: Maximum discharge, 10,300 cfs July 18, 1945 (gage height, 12.33 ft, from high-water mark in gage house), from rating curve extended above 1,700 cfs on basis of slope-area measurement 0.7 mile downstream at gage height 11.90 ft, adjusted to present site; minimum, 0.2 cfs Feb. 2, 1931, Aug. 27-30, 1934, June 26, 1935, Feb. 15, 1940.

Revisions.--The figures of maximum and peak discharge for some water years have been revised, as shown in the following table. They supersede figures published in Special Reports 5, 9, 12, and 14.

Water year	Date	Discharge (cfs)	Gage height (feet)
1933	Aug. 23, 1933	5,970	10.80
1936	Jan. 3, 1936	3,340	9.12
1938	July 20, 1938	3,200	9.00
	July 23, 1938	3,340	9.12
	Sept. 21, 1938	5,850	10.74
1940	Mar. 15, 1940	3,250	9.04
1942	Aug. 9, 1942	9,150	12.00
1945	July 18, 1945	10,300	12.33
1946	June 2, 1946	4,610	10.03

Peak discharge (base, 1,600 cfs).--

1950-51: Nov. 25 (8 p.m.) 5,220 cfs (10.40 ft); Dec. 8 (6:30 a.m.) 2,240 cfs (8.10 ft); Feb. 7 (4:30 p.m.) 2,040 cfs (7.80 ft); Mar. 30 (7 p.m.) 2,430 cfs (8.39 ft).

1951-52: Nov. 7 (10 a.m.) 5,170 cfs (10.37 ft); Dec. 21 (4 a.m.) 2,710 cfs (8.79 ft); Feb. 4 (7 a.m.) 1,690 cfs (7.26 ft); Mar. 11 (12 p.m.) 2,190 cfs (8.04 ft); Apr. 28 (7 a.m.) 2,640 cfs (8.68 ft); May 25 (12 m.) 2,050 cfs (7.84 ft); June 1 (1 p.m.) 1,640 cfs (7.19 ft).

1952-53: Nov. 22 (6:30 a.m.) 2,630 cfs (8.67 ft); Dec. 11 (11:30 a.m.) 2,250 cfs (8.13 ft); Jan. 24 (1 p.m.) 2,460 cfs (8.43 ft); Mar. 13 (9 a.m.) 1,960 cfs (7.70 ft); Mar. 15 (12 p.m.) 2,480 cfs (8.45 ft); Apr. 7 (11:30 a.m.) 2,380 cfs (8.32 ft).

1953-54: Dec. 14 (11 a.m.) 1,690 cfs (7.26 ft).

1954-55: Nov. 21 (12 m.) 1,750 cfs (7.36 ft); Mar. 22 (5 p.m.) 1,720 cfs (7.32 ft); Aug. 13 (9 a.m.) 3,440 cfs (9.20 ft); Aug. 19 (1 a.m.) 8,830 cfs (11.90 ft).

Revisions.--Revised figures of discharge, in cubic feet per second, for high-water periods in the water years, 1933, 1938, and 1945-46, superseding those published in Special Report 5, 9, 12, and 14, are given herewith:

Aug. 23, 1933..... 1,820
Sept. 21, 1938..... 1,710
July 18, 1945..... 1,250
June 2, 1946..... 1,760

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
August 1933.....	-	1,820	1.3	122	4.75	5.48
Water year 1932-33.....	-	1,820	.5	53.2	2.07	28.07
September 1938.....	3,462.9	1,710	2.1	115	4.47	4.98
Water year 1937-38.....	18,088.4	1,710	1.2	49.6	1.93	26.19
Calendar year 1938.....	18,653.8	1,710	2.1	51.1	1.99	27.02
July 1945.....	2,461.3	1,250	2.8	79.4	3.09	3.56
Water year 1944-45.....	15,710.1	1,250	1.0	43.0	1.67	22.74
Calendar year 1945.....	18,298.4	1,250	2.8	50.1	1.95	26.50
June 1946.....	2,673.1	1,760	5.7	89.1	3.47	3.87
Water year 1945-46.....	15,167.5	1,760	2.0	41.6	1.62	21.97
Calendar year 1946.....	10,447.1	1,760	1.4	28.6	1.11	15.14

Neshanic River at Reaville--Continued

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.1	2.6	53	18.2	74	44	106	15.0	13.9	46	6.9	1.4
2	1.8	2.4	44	13.3	126	49	78	12.8	11.4	11.8	5.7	1.5
3	1.7	*2.0	45	16.6	40	40	245	10.9	11.2	8.2	4.9	1.8
4	1.7	7.4	248	30	36	195	99	10.1	22	6.6	4.6	1.8
5	1.7	51	133	24	42	98	74	9.7	41	41	3.6	1.7
6	1.7	13.9	73	17.9	44	68	59	8.9	17.9	13.3	3.2	1.4
7	1.7	10.5	60	29	491	59	48	8.2	12.8	9.3	*2.7	1.7
8	1.8	8.9	785	32	101	48	41	7.8	10.5	7.2	4.1	1.5
9	2.5	7.8	129	18.2	54	40	36	7.2	10.9	6.0	3.6	1.3
10	6.0	6.6	84	15.0	37	31	34	6.6	12.8	5.2	5.4	1.2
11	2.6	5.7	86	15.0	32	28	33	11.8	13.9	4.6	14.0	1.2
12	2.4	5.2	54	13.5	30	27	31	41	8.5	4.1	30	1.2
13	3.0	4.6	41	11.6	35	25	72	12.1	8.9	5.4	31	1.2
14	2.3	4.1	34	40	34	79	37	8.9	69	4.1	11.4	1.1
15	2.0	3.8	33	571	25	56	31	7.8	34	3.4	9.2	4.2
16	1.8	3.8	47	69	21	43	27	7.2	24	3.0	12.4	2.5
17	1.7	3.8	31	46	121	36	29	6.9	17.3	4.2	8.2	1.5
18	1.7	3.4	23	40	82	31	23	5.7	13.9	4.0	5.7	1.3
19	1.7	3.0	19.9	37	56	27	21	5.7	10.9	26	4.4	1.4
20	1.5	3.0	16.1	36	86	262	18.5	6.3	9.3	17.0	4.4	1.3
21	1.5	9.9	13.9	41	420	86	16.1	7.2	8.2	6.3	3.6	1.2
22	1.5	6.0	12.8	25	299	70	15.0	6.3	7.5	5.2	3.4	1.1
23	9.6	4.6	14.4	21	110	53	40	6.2	7.8	5.4	2.6	1.2
24	6.8	4.4	14.4	161	73	53	21	44	7.2	4.4	2.1	1.2
25	4.9	939	11.6	77	60	40	18.5	15.9	5.7	3.6	2.1	1.3
26	3.8	430	9.3	*54	58	33	17.3	10.9	4.6	3.0	2.4	1.3
27	3.2	114	8.9	38	55	28	14.4	9.3	5.2	2.4	2.1	1.3
28	3.0	84	7.2	34	46	27	12.8	9.4	4.6	53	1.8	1.2
29	3.0	71	17.3	41	-------	63	16.8	58	8.1	21	1.8	1.0
30	3.0	58	34	31	-------	659	28	33	12.6	12.3	1.7	1.0
31	2.6	-------	34	17.3	-------	235	-------	19.2	-------	8.2	1.5	-------

* Discharge measurement made on this day.

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.1	97	25	61	50	13.3	28	70	638	3.6	2.6	150
2	1.2	45	23	125	58	15.1	27	54	168	3.4	2.9	50
3	1.2	373	19.8	143	54	14.4	23	43	87	3.0	4.8	130
4	1.2	98	18.5	73	549	18.9	19.8	36	82	3.0	3.0	50
5	1.8	50	109	85	155	113	108	32	95	3.4	2.4	25
6	2.0	36	77	63	87	66	67	28	47	3.0	18.6	20
7	3.9	1,010	53	45	66	50	42	23	36	2.7	32	17
8	11.6	171	44	38	53	47	35	19.8	28	2.7	13.2	15
9	2.6	76	38	35	46	45	31	18.5	24	101	11.4	11
10	1.8	55	32	50	39	41	27	16.1	21	67	90	10
11	8.5	44	27	37	40	756	24	27	17.3	19.2	41	9
12	10.1	35	25	27	31	152	22	107	13.9	12.8	22	8
13	4.1	31	19.8	27	23	94	21	37	12.3	9.3	16.7	7
14	3.2	49	13.8	29	17.9	70	84	27	10.9	7.2	11.4	7
15	2.7	67	60	38	19.2	50	263	24	9.7	5.7	8.5	8
16	2.6	117	34	38	19.2	44	132	20	8.9	4.6	13.7	8
17	2.3	77	27	31	39	36	74	16.7	8.2	3.8	13.3	6
18	2.1	54	80	117	38	32	55	25	7.2	3.6	7.5	5
19	2.0	42	109	53	26	228	43	17.9	6.6	4.1	6.0	15
20	2.0	33	71	55	22	118	36	64	6.6	8.9	5.2	10
21	1.8	27	1,320	40	25	74	30	50	6.0	47	4.6	8.2
22	1.8	24	188	93	23	70	*25	31	7.2	30	36	7.2
23	1.7	24	87	179	19.2	139	23	24	8.5	10.5	9.3	7.5
24	2.6	26	67	66	18.5	115	20	20	8.9	7.8	6.6	6.6
25	13.8	21	59	46	17.9	92	43	658	6.6	5.4	5.4	*5.4
26	4.4	96	116	344	16.1	66	99	328	5.4	4.6	4.6	5.2
27	3.6	46	60	166	16.7	54	272	108	4.6	4.1	3.8	4.4
28	4.6	33	39	303	15.5	46	*1,100	67	4.4	3.8	3.4	4.1
29	5.2	32	37	116	14.4	39	184	100	4.4	3.6	3	3.8
30	3.8	27	42	66	-------	33	105	68	4.1	3.0	3	3.6
31	3.6	-------	48	53	-------	29	-------	82	-------	2.6	3	-------

* Discharge measurement made on this day.

Note.--No gage-height record Jan. 7, 8, Aug. 29 to Sept. 20; discharge estimated on basis of weather records and records for Walnut Brook near Flemington.

Neshanic River at Reaville--Continued

Daily discharge, in cubic feet per second, 1950-55

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.4	2.1	18	16	44	21	31	31	21	4.2	1.8	0.8
2	5.0	2.1	17	16	29	18	30	26	15	4.0	2.0	.8
3	12	2.1	18	87	29	18	26	21	11	4.0	2.5	.8
4	4.9	2.1	19	52	26	314	25	18	10	4.0	1.9	.8
5	3.8	2.1	516	36	22	86	32	23	8.5	3.1	1.7	.9
6	3.8	2.0	235	29	20	58	23	22	7.8	3.8	1.7	6.8
7	3.4	2.0	87	26	30	46	695	28	7.8	7.0	1.5	1.8
8	3.0	2.0	60	31	27	39	177	45	7.8	3.6	1.3	1.4
9	3.0	2.0	49	401	22	34	100	28	6.9	3.1	a50	1.1
10	3.2	2.1	42	461	18	31	*191	24	6.0	2.6	a35	1.0
11	2.7	2.3	454	232	16	26	111	18	4.9	2.4	7.5	.9
12	3.0	2.1	126	122	22	32	92	16	4.6	2.1	4.7	.9
13	2.7	2.0	74	77	*21	*555	185	24	19	2.1	3.7	1.7
14	2.6	1.8	56	63	17	122	138	52	12	1.9	3.3	1.9
15	2.6	2.2	43	58	153	546	77	27	7.5	1.7	3.3	1.5
16	2.6	7.8	36	53	86	460	233	22	6.0	1.5	2.4	1.7
17	2.4	3.4	32	41	56	117	98	33	5.2	*1.4	4.6	1.8
18	2.4	3.0	27	110	40	84	78	46	4.9	1.3	5.1	1.5
19	2.3	2.6	23	67	34	202	125	26	4.4	3.6	2.7	1.4
20	2.1	4.6	20	55	32	94	67	22	4.1	8.9	2.2	1.5
21	2.0	126	60	76	170	70	54	18	3.2	8.5	1.9	1.8
22	2.1	849	130	119	67	56	44	17	a70	3.5	1.8	1.9
23	2.6	135	60	66	49	49	38	124	38	18	1.7	1.8
24	2.4	71	49	694	43	121	32	34	10	16	1.5	1.7
25	2.3	50	40	221	37	76	28	27	6.8	5.1	1.4	1.4
26	2.1	42	34	90	33	68	34	27	5.5	2.7	1.3	1.3
27	2.1	34	28	64	29	54	27	24	4.7	2.5	1.3	1.4
28	2.3	27	b20	79	24	47	22	17	4.0	7.1	1.2	1.1
29	2.3	22	18	53	-------	49	20	14	4.0	3.3	1.1	1.3
30	2.1	21	18	41	-------	40	18	16	4.2	2.6	1.1	1.3
31	2.1	-------	17	40	-------	34	-------	21	-------	2.2	1.1	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated.
b Stage-discharge relation affected by ice.

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.8	2.1	2.7	8.9	13	150	20	12	5.5	1.1	0.6	a15
2	.6	1.7	2.6	7.4	14	113	18	11	4.9	1.1	.6	7.3
3	.6	1.4	2.4	7.0	15	288	16	12	4.3	1.1	3.4	4.8
4	.7	1.3	2.4	6.7	16	121	14	73	4.1	1.3	2.4	3.6
5	.8	1.3	14	6.2	13	66	13	28	3.8	1.7	1.1	2.6
6	.9	1.2	8.5	9.7	11	48	13	21	3.1	1.5	.9	2.1
7	1.1	3.1	162	7.0	9.8	41	16	17	*2.7	1.5	.8	1.8
8	1.4	5.2	39	5.9	8.4	36	15	36	2.2	1.5	.8	1.9
9	1.1	4.3	27	5.2	10	33	13	27	2.1	1.3	16	2.4
10	1.1	4.1	140	5.7	10	30	11	22	2.2	1.3	11	1.9
11	1.1	3.6	45	2.4	9.7	*24	11	20	2.4	1.1	2.9	a60
12	1.1	3.1	39	7.0	5.7	21	11	17	2.1	1.0	1.8	22
13	.8	2.7	103	7.0	5.5	37	9.7	14	3.0	0.7	1.3	12
14	.8	2.4	492	7.0	5.8	147	9.3	12	4.3	1.1	1.0	8.9
15	.8	2.4	109	8.1	7.4	64	9.3	11	2.9	1.7	1.1	7.0
16	.8	2.2	61	8.5	8.5	44	11	10	2.9	.9	1.2	9.4
17	.9	2.1	40	8.5	51	37	73	8.9	2.6	.7	1.0	69
18	.8	1.9	26	5.8	31	31	41	8.1	2.1	.6	.8	25
19	.9	1.9	22	7.4	23	27	27	7.4	1.8	1.9	3.2	25
20	.8	1.9	20	6.7	20	178	21	7.4	1.7	2.0	24	22
21	.9	1.8	18	140	34	58	18	70	1.4	.9	9.7	16
22	.9	1.8	19	66	52	43	16	32	1.5	.6	12	14
23	.8	3.6	20	50	33	37	15	20	1.7	.5	6.8	9.7
24	.8	4.1	14	29	28	31	14	16	1.8	.5	3.8	7.4
25	1.0	3.3	12	26	35	64	13	14	1.4	.5	2.7	6.4
26	1.2	6.4	12	37	39	60	11	11	1.2	11	2.4	6.1
27	1.2	4.1	10	53	37	38	14	9.3	1.2	1.7	2.1	5.8
28	7.5	3.6	9.3	45	29	33	28	9.3	1.0	.9	1.8	4.6
29	16	3.1	11	25	-------	31	18	8.9	.9	.8	1.7	3.8
30	8.9	2.9	11	21	-------	27	14	9.3	1.1	.6	1.5	3.3
31	2.7	-------	8.9	15	-------	23	-------	6.4	-------	.5	a70	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Walnut Brook near Flemington.

Neshanic River at Reaville--Continued

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.3	11	43	61	4.1	62	26	16	5.4	1.3	0.6	11
2	3.3	18	37	90	3.8	46	23	13	2.9	1.3	.5	9.3
3	3.1	40	*30	55	4.6	33	21	12	2.6	1.2	.4	8.5
4	3.6	25	25	48	4.1	145	19	11	2.4	1.1	.3	7.4
5	2.9	25	23	38	4.6	77	17	*9.7	2.4	.8	.3	6.4
6	12	20	18	47	84	245	16	8.1	2.2	.9	.3	6.1
7	6.1	17	17	34	367	121	16	7.4	1.8	a.9	.6	5.5
8	4.1	*14	13	27	38	64	13	7.0	1.7	a.9	7.8	4.6
9	3.8	12	41	24	23	58	12	6.4	7.3	a.9	1.8	4.1
10	3.6	10	48	23	19	48	11	5.8	3.4	a.9	.9	4.1
11	3.3	10	27	19	123	40	10	6.1	3.1	a.9	2.2	3.8
12	2.7	11	22	16	44	33	23	4.9	5.8	.9	137	3.8
13	2.6	9.7	20	16	28	28	34	4.3	5.1	.8	1,260	3.1
14	2.2	9.3	127	15	20	23	23	4.6	3.1	.6	135	2.9
15	2.4	8.9	114	14	20	23	23	4.1	2.6	.6	60	2.7
16	2.6	8.1	70	13	26	32	a18	3.6	2.0	.6	35	2.7
17	2.6	9.3	47	9.9	110	21	a14	3.3	1.7	.7	46	2.7
18	2.2	9.7	221	9.6	39	22	a14	3.1	1.4	.7	1,090	2.6
19	2.1	9.7	100	9.1	28	23	a36	2.9	1.8	.6	*1,570	2.6
20	2.1	66	60	8.3	26	23	a40	2.9	7.7	.5	112	2.7
21	2.1	853	38	7.6	25	46	a34	2.7	2.6	.4	75	2.4
22	2.1	157	34	8.1	28	514	a36	2.6	2.0	.5	159	2.2
23	1.9	87	27	7.7	115	180	a24	2.6	1.9	.4	58	2.2
24	1.8	67	27	7.1	53	90	a22	2.9	4.5	.4	38	7.0
25	1.8	55	21	6.3	42	63	a20	2.7	2.7	.5	30	6.6
26	1.5	42	17	6.2	35	116	19	2.2	2.7	.5	23	3.1
27	2.1	36	16	5.7	35	65	17	1.9	2.2	.5	20	2.7
28	4.6	32	17	4.5	35	47	15	1.9	1.9	.4	16	7.0
29	37	145	58	4.3	-------	41	20	2.1	1.6	.4	13	4.3
30	22	54	283	3.8	-------	35	22	2.6	1.3	.5	13	3.3
31	16	-------	84	3.3	-------	30	-------	6.7	-------	.5	11	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for Walnut Brook near Flemington.

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	86.3	9.6	1.5	2.78	0.108	0.12
November	1,874.4	939	2.0	62.5	2.43	2.71
December	2,216.8	785	7.2	71.5	2.78	3.21
Calendar year 1950	11,806.0	939	1.3	32.3	1.26	17.00
January 1951	1,633.6	571	11.6	52.7	2.05	2.36
February	2,688	491	21	96.0	3.74	3.89
March	2,633	659	25	84.9	3.30	3.81
April	1,342.4	245	12.8	44.7	1.74	1.94
May	430.0	58	5.7	13.9	.541	.62
June	445.6	69	4.6	14.9	.580	.64
July	355.2	53	2.4	11.5	.447	.51
August	200.5	31	1.5	6.47	.252	.29
September	44.0	4.2	1.0	1.47	.057	.06
Water year 1950-51	13,949.8	939	1.0	38.2	1.49	20.16
October 1951	114.9	13.8	1.1	3.71	.144	.17
November	2,916	1,010	21	97.2	3.78	4.22
December	2,968.9	1,320	13.8	95.8	3.73	4.30
Calendar year 1951	15,772.1	1,320	1.0	43.2	1.68	22.81
January 1952	2,642	344	27	85.2	3.32	3.82
February	1,598.6	549	14.4	55.1	2.14	2.31
March	2,760.7	756	13.3	89.1	3.47	3.99
April	3,062.8	1,100	19.8	102	3.97	4.43
May	2,242.0	658	16.1	72.3	2.81	3.24
June	1,387.7	638	4.1	46.3	1.80	2.01
July	394.4	101	2.6	12.7	.494	.57
August	408.9	90	2.4	13.2	.514	.59
September	617.0	150	3.6	20.6	.802	.89
Water year 1951-52	21,113.9	1,320	1.1	57.7	2.25	30.54

Neshanic River at Reaville--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1952	95.3	12	2.0	3.07	.119	.14
November	1,429.4	849	1.8	47.6	1.85	2.07
December	2,428	516	17	78.3	3.05	3.51
Calendar year 1952	19,064.8	1,100	1.8	52.1	2.03	27.57
January 1953	3,576	694	16	115	4.47	5.17
February	1,196	170	16	42.7	1.66	1.73
March	3,567	555	18	115	4.47	5.16
April	2,851	695	18	95.0	3.70	4.13
May	891	124	14	28.7	1.12	1.29
June	324.8	70	3.2	10.8	.420	.47
July	137.8	18	1.3	4.45	.173	.20
August	154.3	50	1.1	4.98	.194	.22
September	46.0	6.8	.8	1.53	.060	.07
Water year 1952-53	16,694.6	849	.8	45.7	1.78	24.16
October 1953	59.8	8.9	.6	1.93	.075	.09
November	84.6	6.4	1.2	2.82	.110	.12
December	1,502.8	492	2.4	48.5	1.89	2.17
Calendar year 1953	14,391.1	694	.6	39.4	1.53	20.82
January 1954	645.1	140	2.4	20.8	.809	.93
February	574.8	52	5.5	20.5	.798	.83
March	1,981	288	21	63.9	2.49	2.87
April	533.3	73	9.3	17.8	.693	.77
May	581.0	73	6.4	18.7	.728	.84
June	73.9	5.5	.9	2.46	.096	.11
July	43.6	11	.5	1.41	.054	.06
August	190.4	70	.6	6.14	.239	.28
September	380.8	69	1.8	12.7	.494	.55
Water year 1953-54	6,651.1	492	.5	18.2	.708	.62
October 1954	163.5	37	1.5	5.27	.205	.24
November	1,871.7	853	8.1	62.4	2.43	2.71
December	1,725	283	13	55.6	2.16	2.50
Calendar year 1954	8,734	853	.4	23.9	.930	12.64
January 1955	641.5	90	3.3	20.7	.805	.93
February	1,384.2	367	3.8	49.4	1.92	2.00
March	2,394	514	21	77.2	3.00	3.46
April	638	40	10	21.3	.829	.92
May	167.1	16	1.9	5.39	.210	.24
June	89.8	7.3	1.3	2.99	.116	.13
July	22.1	1.3	.4	.71	.028	.03
August	4,916.7	1,570	.3	159	6.19	7.11
September	137.4	11	2.2	4.58	.178	.20
Water year 1954-55	14,151.0	1,570	.3	38.8	1.51	20.47

North Branch Raritan River near Far Hills

Location (revised).--Lat 40°42'30", long 74°38'11", on left bank 75 ft upstream from Ravine Lake Dam, 1.6 miles north of Far Hills, Somerset County, and 2.3 miles upstream from Peapack Brook.

Drainage area.--26.2 sq mi.

Records available.--February 1922 and September 1955.

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.--33 years, 47.7 cfs.

Extremes.--1922-55: 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).--

1950-51: Nov. 25 (9 p.m.) 1,340 cfs (4.13 ft); Feb. 7 (5:30 p.m.) 913 cfs (3.67 ft); Mar. 30 (10 p.m.) 1,310 cfs (4.10 ft); July 28 (11 a.m.) 1,310 cfs (4.10 ft); Aug. 12 (8:30 p.m.) 1,210 cfs (3.99 ft).

1951-52: Nov. 7 (12:30 p.m.) 2,010 cfs (4.76 ft); Dec. 21 (5 a.m.) 1,060 cfs (3.84 ft); Mar. 11 (1:30 p.m.) 1,290 cfs (4.09 ft); May 25 (1:30 p.m.) 1,150 cfs (3.94 ft); June 1 (3:30 p.m.) 1,030 cfs (3.81 ft); Sept. 1 (2:30 p.m.) 1,150 cfs (3.94 ft).

1952-53: Nov. 22 (9 a.m.) 1,270 cfs (4.07 ft); Jan. 24 (3 p.m.) 1,380 cfs (4.18 ft); Mar. 13 (11 a.m.) 759 cfs (3.50 ft); Apr. 7 (2 p.m.) 903 cfs (3.67 ft).

1953-54: Aug. 31 (1 p.m.) 513 cfs (3.18 ft), (maximum below base).

1954-55: Nov. 21 (2 p.m.) 993 cfs (3.77 ft); Feb. 7 (2 a.m.) 1,320 cfs (4.12 ft); Aug. 13 (8 a.m.) 1,550 cfs (4.34 ft); Aug. 19 (4 a.m.) 2,280 cfs (4.99 ft).

Remarks.--Records given herein include 2 cfs diverted by small turbine at dam Oct. 1, 1950 to Dec. 31, 1951, May 1 to Sept. 30, 1952, May 1 to Sept. 30, 1953, Apr. 1 to Sept. 30, Oct. 11-25, 1954, and Apr. 26 to Sept. 5, Sept. 20-30, 1955.

Revisions.--Special Report 9: Drainage area. Revised figures of discharge, in cubic feet per second, for the water years 1922-23, superseding those published in Bulletin 33, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1922		1922-Con.		1923-Con.		1923-Con.	
Feb. 20	208	July 1	708	Mar. 5	131	Mar. 21	106
27	93	2	114	12	158	22	106
Mar. 5	131	3	149	13	136	23	114
7	402	4	140	14	149	24	122
8	823	5	167	15	102	25	97
11	106	6	89	16	369	26	97
12	81			17	241	27	97
20	324	1923		18	158	28	85
21	89	Mar. 3	177	19	162		
28	93	4	208	20	126		

Month	Maximum	Minimum	Mean	Per square mile	Runoff in inches
March 1902.....	823	38	111	4.24	4.89
July.....	708	25	83.1	3.17	3.66
March 1923.....	369	32	116	4.43	5.11
Water year 1922-23.....	403	5	33.1	1.26	17.16

North Branch Raritan River near Far Hills--Continued

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10.7	10.1	61	45	83	64	225	61	34	85	38	27
2	10.7	10.1	64	38	140	70	209	52	34	42	36	28
3	10.7	10.7	70	40	55	70	294	50	34	29	35	31
4	9.5	12.7	190	87	55	95	158	50	39	29	32	28
5	8.4	66	145	62	50	107	132	47	81	105	27	*26
6	8.4	26	76	45	47	92	110	47	42	35	25	26
7	8.4	18.3	70	45	292	91	107	45	31	28	25	57
8	9.0	15.6	358	50	114	84	95	42	27	25	36	30
9	10.7	14.9	132	32	64	73	107	40	27	23	29	25
10	23	14.3	118	32	58	64	110	38	28	22	94	23
11	33	14.3	118	34	55	64	103	52	31	19.7	57	22
12	30	13.1	99	33	58	67	99	89	27	19.7	218	23
13	20	13.1	88	32	70	64	194	47	28	22	167	22
14	14.9	*12.5	76	34	73	155	84	40	92	19.0	70	21
15	12.5	11.9	70	272	55	103	84	36	62	18.3	74	78
16	11.3	11.3	115	76	50	80	80	35	38	23	160	35
17	10.7	12.5	80	58	109	70	*84	33	31	33	113	28
18	9.5	11.9	64	52	110	67	73	32	27	34	64	23
19	10.1	11.3	55	50	67	67	70	31	25	58	55	21
20	9.5	13.7	50	50	73	218	64	32	22	58	55	19.7
21	9.5	30	47	50	164	*95	61	34	23	32	50	18.3
22	9.5	22	45	40	180	88	61	32	36	32	47	17.6
23	12.5	14.3	47	36	95	80	167	56	38	38	38	18.3
24	15.6	11.9	47	154	76	84	76	107	33	33	36	17.0
25	13.1	382	45	76	73	73	67	50	24	26	36	17.0
26	11.3	229	35	61	70	67	64	34	18.3	16.3	35	a18.5
27	10.1	84	33	52	70	64	61	40	20	17.0	36	a17
28	9.5	67	36	52	64	61	58	60	23	451	34	a17
29	9.5	58	83	55	-------	109	68	71	32	150	31	a16
30	9.5	52	82	50	-------	432	112	79	38	103	29	a15
31	10.1	-------	55	36	-------	358	-------	42	-------	64	28	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for stations on nearby streams.

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14.7	123	105	84	88	58	77	90	531	24	14.7	320
2	15.9	63	102	92	96	55	84	79	226	22	15.3	91
3	24	170	79	118	81	55	73	69	163	21	20	139
4	18.5	86	57	77	216	59	70	69	136	21	17.2	57
5	15.9	66	138	77	138	107	217	69	140	22	15.3	47
6	14.7	52	*90	73	92	77	127	66	105	19.2	106	42
7	24	534	66	61	88	64	81	60	90	17.8	68	35
8	100	236	63	55	96	58	73	57	79	22	32	32
9	29	158	72	58	96	64	*70	55	94	181	29	32
10	22	131	72	64	92	67	67	42	86	220	60	33
11	61	113	75	55	107	565	61	52	66	45	44	33
12	60	102	79	50	84	187	58	144	57	32	28	32
13	31	90	75	53	77	142	58	69	55	27	32	30
14	28	119	66	61	84	124	191	57	52	24	27	29
15	27	162	120	70	84	107	107	*52	50	22	22	32
16	34	166	59	61	84	100	96	47	47	21	33	38
17	29	140	36	55	116	88	77	42	42	19.9	59	28
18	18.5	118	87	105	111	84	70	60	42	19.2	30	23
19	16.5	105	87	61	92	120	67	47	42	17.2	25	37
20	15.9	105	53	64	81	161	67	74	33	16.5	20	32
21	15.3	113	531	55	84	138	61	64	33	19.5	22	25
22	15.3	113	184	66	81	116	80	47	36	28	54	22
23	15.3	113	122	244	70	185	66	40	40	19.2	29	24
24	19.1	122	109	88	67	138	50	38	42	15.3	23	24
25	71	118	102	73	67	124	76	372	36	13.5	19.9	22
26	33	188	113	346	64	107	134	173	31	12.3	17.8	20
27	27	126	90	171	64	96	166	122	28	13.5	15.3	19.2
28	45	113	72	201	58	92	239	94	27	26	14.7	18.5
29	45	109	72	129	61	84	129	94	27	21	16.5	19.2
30	36	105	79	100	-------	84	103	105	27	6.7	16.5	30
31	35	-------	86	92	-------	81	-------	113	-------	14.7	17.8	-------

* Discharge measurement made on this day.

North Branch Raritan River near Far Hills--Continued

Daily discharge, in cubic feet per second, 1950-55

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	15	43	39	102	45	79	121	43	19	9.4	5.6
2	18	16	39	37	82	43	79	84	34	19	10	5.8
3	28	16	47	84	82	45	72	74	31	24	13	5.2
4	19	15	43	57	79	246	72	68	30	18	a12	*5.6
5	17	15	203	45	*63	90	94	90	*32	15	a11	6.0
6	17	15	147	39	60	72	69	74	30	18	9.9	8.3
7	18	13	72	37	69	66	458	71	31	27	a9.5	7.8
8	17	13	*63	39	66	63	200	92	33	19	a9	6.4
9	17	13	57	*66	57	60	*147	68	29	16	a20	5.6
10	16	13	57	171	52	60	190	62	28	14	a50	4.8
11	17	14	247	134	52	54	171	54	25	13	*21	4.8
12	17	13	111	98	60	60	138	51	24	13	16	4.8
13	17	13	98	75	63	336	171	59	46	12	12	6.0
14	16	13	94	72	54	134	168	94	44	13	11	5.6
15	17	15	82	75	110	168	120	68	31	13	12	5.2
16	17	32	79	79	84	258	229	56	27	12	9.9	6.4
17	16	22	75	69	60	147	142	71	25	11	10	6.4
18	16	17	72	138	52	129	134	86	24	10	12	5.6
19	16	15	66	86	52	181	200	47	24	10	9.9	4.8
20	15	18	63	75	49	129	147	45	22	11	8.8	5.2
21	16	198	82	75	174	111	120	e52	21	17	8.3	6.4
22	17	534	90	82	72	102	111	e57	65	16	8.3	7.8
23	17	111	57	75	54	94	102	e66	51	42	7.8	6.8
24	17	66	52	502	52	211	94	e58	30	28	7.3	6.0
25	16	66	49	222	49	134	90	e57	25	16	6.8	5.6
26	15	60	45	138	49	129	102	e57	23	17	6.4	6.0
27	15	60	43	120	49	111	90	e57	22	19	6.4	6.4
28	16	57	35	147	47	98	75	e39	20	13	6.0	13
29	17	47	37	111	-------	90	69	e16	20	10	5.6	17
30	16	47	39	90	-------	82	66	47	20	12	5.6	e13
31	15	-------	39	82	-------	79	-------	51	-------	12	5.6	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for station near Raritan.
e Waste gate open.

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3	0.2	24	14	14	54	38	32	27	12	5.3	45
2	3	.2	24	14	17	92	38	36	27	14	5.0	26
3	3	.2	24	14	19	112	35	43	25	12	59	18
4	3	1.4	24	14	22	94	34	139	25	12	25	15
5	3	6.3	45	13	20	52	33	54	24	13	13	14
6	3	7.3	57	17	18	45	33	45	22	13	9.8	13
7	3	9.4	154	16	16	39	39	41	20	13	8.8	11
8	3	17	36	*11	14	37	34	104	20	13	7.8	11
9	3	14	24	12	17	37	32	71	*20	12	26	12
10	3	18	96	13	16	39	31	81	19	9.8	30	11
11	3	16	35	11	17	37	32	56	22	9.3	15	81
12	3	15	28	14	13	36	36	45	20	*8.8	9.8	32
13	3	16	49	13	11	37	32	43	25	8.3	8.3	20
14	3	17	149	12	13	67	31	41	22	7.8	7.3	16
15	3	16	52	14	14	44	31	38	19	12	7.8	14
16	3	17	34	15	17	33	34	36	19	10	*8.3	28
17	3	17	28	14	50	33	108	35	19	8.3	7.3	74
18	3	18	20	11	38	32	72	36	17	8.8	6.1	32
19	3	19	21	19	28	33	47	35	16	13	6.1	49
20	3	20	20	15	24	157	41	35	14	15	14	49
21	2	20	20	35	26	57	39	132	14	12	26	34
22	.2	21	21	35	47	47	38	61	13	6.5	21	36
23	.2	33	*22	17	32	47	36	45	19	6.9	12	26
24	.2	34	19	18	27	45	38	39	20	5.7	8.8	21
25	.2	30	15	18	*30	52	35	38	16	6.1	8.3	19
26	.2	41	17	19	32	57	34	36	14	13	7.8	19
27	.2	33	16	35	41	47	38	33	13	16	7.3	19
28	.2	29	14	38	31	45	43	33	11	8.8	6.5	18
29	.2	26	17	20	-------	43	38	33	12	6.9	6.1	16
30	.2	24	18	21	-------	37	34	34	12	6.5	11	15
31	.2	-------	17	17	-------	36	-------	32	-------	6.1	220	-------

* Discharge measurement made on this day.
Note.--Ravine Lake filling Oct. 1 to Nov. 4; leakage through gate and/or dam only Oct. 1 to Nov. 3.

North Branch Raritan River near Far Hills--Continued

Daily discharge, in cubic feet per second, 1950-55

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	20	49	63	27	69	49	35	21	9.8	3.8	34
2	16	29	*47	82	28	*63	45	33	17	9.8	3.5	32
3	15	96	45	66	24	49	45	32	14	9.3	2.9	31
4	14	49	43	60	24	98	43	31	14	8.3	2.5	29
5	13	39	45	54	27	66	39	29	22	7.3	*2.7	28
6	12	32	36	63	105	92	41	27	20	7.3	4.2	28
7	11	27	33	60	431	84	43	26	15	8.8	7.3	29
8	11	24	37	47	72	60	37	25	14	7.8	8.3	24
9	10	22	52	47	54	60	37	33	16	7.3	6.9	24
10	11	21	65	47	52	60	36	32	16	11	5.0	24
11	14	20	43	43	102	60	36	22	19	18	5.4	24
12	*15	20	39	41	76	60	39	21	32	9.3	83	26
13	14	19	37	43	45	60	52	19	23	7.8	589	27
14	13	19	90	37	42	54	43	19	19	6.9	78	26
15	14	20	105	39	49	57	45	19	16	6.5	44	27
16	21	19	57	39	45	69	39	18	13	6.5	30	27
17	20	20	49	36	128	54	37	16	12	6.5	25	25
18	17	19	158	34	71	52	36	15	11	6.1	263	24
19	16	19	98	36	52	49	40	15	11	6.9	902	24
20	14	52	66	31	49	54	52	14	26	6.1	134	32
21	15	480	54	30	47	60	43	14	19	5.7	93	26
22	22	143	47	36	47	181	45	15	26	5.3	105	21
23	15	79	49	33	107	115	39	16	16	5.0	54	21
24	13	75	49	32	68	79	33	31	15	5.0	43	55
25	13	82	47	31	54	75	37	23	19	5.3	38	39
26	11	60	43	31	49	94	38	19	16	5.3	36	30
27	11	49	43	30	49	82	38	16	13	4.6	35	23
28	12	45	43	25	52	69	38	15	11	3.8	34	58
29	30	121	60	28	-------	60	41	16	10	3.5	34	40
30	37	52	200	24	-------	57	47	19	9.8	3.5	34	25
31	28	-------	75	24	-------	52	-------	*19	-------	3.5	35	-------

* Discharge measurement made on this day.

Note.--Backwater from trees and debris Oct. 1-12, Nov. 22 to Dec. 2, Mar. 29 to Apr. 1, Apr. 10 to May 2, May 5-12, Aug. 19 to Sept. 7.

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	391.2	33	8.4	12.6	0.481	0.56
November	1,274.5	382	10.1	42.5	1.62	1.81
December	2,654	358	33	85.6	3.27	3.77
Calendar year 1950	14,275.2	382	8.4	39.1	1.49	20.28
January 1951	1,829	272	32	59.0	2.25	2.60
February	2,470	292	47	88.2	3.37	3.51
March	3,276	432	61	106	4.05	4.65
April	3,277	294	58	109	4.16	4.65
May	1,504	107	31	48.5	1.85	2.13
June	1,045.3	92	18.3	34.8	1.33	1.48
July	1,690.0	451	16.3	54.5	2.08	2.40
August	1,810	218	25	58.4	2.23	2.57
September	765.4	78	15	25.5	.973	1.09
Water year 1950-51	21,986.4	451	8.4	60.2	2.30	31.22
October 1951	956.6	100	14.7	30.9	1.18	1.36
November	4,059	534	52	135	5.15	5.76
December	3,141	531	36	101	3.85	4.46
Calendar year 1951	25,823.3	534	14.7	70.7	2.70	36.66
January 1952	2,959	346	50	95.5	3.65	4.20
February	2,619	216	58	90.3	3.45	3.72
March	3,587	565	55	116	4.43	5.09
April	2,895	239	50	96.5	3.68	4.11
May	2,562	372	38	82.6	3.15	3.64
June	2,463	531	27	82.1	3.13	3.50
July	1,003.5	220	6.7	32.4	1.24	1.42
August	944.0	106	14.7	30.5	1.16	1.34
September	1,365.9	320	18.5	45.5	1.74	1.94
Water year 1951-52	28,555.0	565	6.7	78.0	2.98	40.54

North Branch Raritan River near Far Hills--Continued

Monthly and annual discharge, in cubic feet per second 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1952	530	28	15	17.1	.653	.75
November	1,562	534	13	52.1	1.99	2.22
December	2,326	247	35	75.0	2.86	3.30
Calendar year 1952	24,816.4	565	6.7	67.8	2.59	35.23
January 1953	3,159	502	37	102	3.89	4.48
February	1,894	174	47	67.6	2.58	2.69
March	3,627	336	43	117	4.47	5.15
April	3,999	458	66	133	5.08	5.68
May	1,992	121	16	64.3	2.45	2.83
June	910	65	20	30.3	1.16	1.29
July	509	42	10	16.4	.626	.72
August	350.5	50	5.6	11.3	.431	.50
September	203.7	17	4.8	6.79	.259	.29
Water year 1952-53	21,061.3	534	4.8	57.7	2.20	29.90
October 1953	64.0	3	.2	2.06	.079	.09
November	536.0	41	.2	17.9	.683	.76
December	1,140	154	14	36.8	1.40	1.62
Calendar year 1953	18,381.6	502	.2	50.4	1.92	26.10
January 1954	549	38	11	17.7	.676	.78
February	664	50	11	23.7	.905	.94
March	1,623	157	32	52.4	2.00	2.30
April	1,184	108	31	39.5	1.51	1.68
May	1,562	139	32	50.4	1.92	2.22
June	566	27	11	18.9	.721	.80
July	319.6	16	5.7	10.3	.393	.45
August	614.5	220	5.0	19.8	.756	.87
September	794	81	11	26.5	1.01	1.13
Water year 1953-54	9,616.1	220	.2	26.3	1.00	13.64
October 1954	494	37	10	15.9	.607	.70
November	1,772	480	19	59.1	2.26	2.52
December	1,904	200	33	61.4	2.34	2.70
Calendar year 1954	12,046.1	480	5.0	33.0	1.26	17.09
January 1955	1,292	82	24	41.7	1.59	1.83
February	1,976	431	24	70.6	2.69	2.80
March	2,194	181	49	70.8	2.70	3.11
April	1,233	52	33	41.1	1.57	1.75
May	684	35	14	22.1	.844	.97
June	505.8	32	9.8	16.9	.645	.72
July	217.8	18	3.5	7.03	.268	.31
August	2,741.5	902	2.5	88.4	3.37	3.89
September	883	58	21	29.4	1.12	1.25
Water year 1954-55	15,897.1	902	2.5	43.6	1.66	22.55

Lamington (Black) River near Pottersville

Location.--Lat 40°43'39", long 74°43'50", on right bank 1.1 miles upstream from bridge on State Highway 512, 1.2 miles northwest of Pottersville, Somerset County, and 5.5 miles upstream from Cold Brook.

Drainage area.--32.8 sq mi.

Records available.--November 1921 to September 1955. 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 July 1, 1922 (corrected), chain gage on downstream side of highway bridge at Pottersville, 1.1 miles downstream at different datum.

Average discharge.--34 years, 56.1 cfs.

Extremes.--1921-55: Maximum discharge, 2,630 cfs Mar. 15, 1940 (gage height, 5.34 ft), from rating curve extended above 380 cfs on basis of slope-area measurement at gage height 4.71 ft; minimum, 1.3 cfs Oct. 4, 1930.

Revisions.--The figures of maximum and peak discharge for some water years have been revised, as shown in the following table. They supersede figures published in special reports indicated.

Special Report	Water year	Date	Discharge (cfs)	Gage height (feet)
*33	1928	Nov. 17, 1927	1,800	4.75
9	1935	Feb. 14, 1935	750	3.45
		July 8, 1935	783	3.50
		July 9, 1935	686	3.35
	1938	Jan. 25, 1938	574	3.39
		July 23, 1938	420	3.12
		Sept. 21, 1938	966	3.97
	1939	Apr. 19, 1939	425	3.13
	1940	Jan. 15, 1940		c3.48
		Mar. 15, 1940	2,630	5.34
		June 1, 1940	425	3.13
		July 11, 1940	502	3.27
12	1941	Feb. 7, 1941	745	3.65
	1942	Aug. 9, 1942	508	3.28
		Aug. 10, 1942	1,140	4.13
		Aug. 14, 1942	1,640	4.60
		Sept. 18, 1942	892	3.84
	1943	Dec. 22, 1942		c3.00
		Dec. 30, 1942	520	3.30
		May 26, 1943	445	3.17
	1944	Mar. 7, 1944	562	3.37
		Mar. 13, 1944	634	3.49
		Apr. 24, 1944	568	3.38
	1945	Jan. 1, 1945	731	3.63
		July 22, 1945	1,200	4.20
14	1946	Nov. 22, 1945	544	3.34
		Dec. 25, 1945		c3.66
		May 12, 1946	908	3.86
		July 23, 1946	752	3.66
	1947	May 5, 1947	435	3.15
		July 22, 1947	544	3.84
	1948	Nov. 8, 1947	675	3.55
		Nov. 12, 1947	405	3.09
		Apr. 1, 1948	580	3.40
	1949	Dec. 30, 1948	710	3.60
		Jan. 5, 1949	580	3.40

* Bulletin
c Backwater from ice; discharge not determined.

Lamington (Black) River near Pottersville--Continued

Peak discharge (base, 375 cfs).--
1950-51: Nov. 25 (5:30 p.m.) 556 cfs (3.36 ft); Feb. 7 (3 p.m.) 703 cfs (3.59 ft); Mar. 30 (6:30 p.m.) 788 cfs (3.71 ft); July 28 (8 a.m.) 940 cfs (3.90 ft).
1951-52: Nov. 7 (8:30 a.m.) 964 cfs (3.93 ft); Dec. 21 (2 a.m.) 550 cfs (3.35 ft); Jan. 26 (9 a.m.) 375 cfs (3.08 ft); Mar. 11 (11 a.m.) 622 cfs (3.47 ft); May 25 (10 a.m.) 580 cfs (3.40 ft); Sept. 1 (12:30 p.m.) 1,570 cfs (4.54 ft).
1952-53: Nov. 22 (4:30 a.m.) 444 cfs (3.24 ft); Dec. 11 (10:30 a.m.) 392 cfs (3.12 ft); Jan. 24 (12 m.) 550 cfs (3.35 ft); Apr. 7 (12:30 p.m.) 422 cfs (3.19 ft).
1953-54: Aug. 31 (9 a.m.) 275 cfs (2.80 ft), (maximum below base).
1954-55: Feb. 6 (12 p.m.) 1,150 cfs (4.14 ft); Aug. 13 (4:45 a.m.).

Revisions.--Revised figures of discharge, in cubic feet per second, for the water years 1922 and 1940, superseding those published in Bulletin 33 and Special Report 9, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1922		1922-Con.		1922-Con.		1940	
Jan. 12	18	Jan. 18	22	Jan. 26	22	Mar. 14	250
13	21	19	25	27	20	15	888
14	24	22	50	28	18	16	425
15	23	23	40	29	16		
16	24	24	30	30	18		
17	23	25	25	31	20		

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
January 1922.....	-	70	16	31.1	0.948	1.09
March 1940.....	4,108	888	22	133	4.05	4.66
Water year 1939-40.....	20,054.8	888	10.7	54.8	1.67	22.71
Calendar year 1940.....	23,108.3	888	10.7	63.1	1.92	26.18

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10.5	13.4	73	52	75	84	266	82	61	82	125	29
2	10.5	13.4	61	50	110	86	218	82	58	55	98	31
3	11.1	14.0	55	55	84	84	238	76	52	48	76	32
4	10.0	29	106	71	78	96	193	73	51	51	64	30
5	10.5	55	120	68	73	102	173	66	60	110	54	28
6	10.0	36	86	58	68	98	154	61	49	64	48	30
7	10.5	35	86	63	191	94	139	58	46	55	46	47
8	11.1	34	203	60	136	92	127	55	45	50	52	36
9	12.7	33	139	48	96	86	118	52	44	46	46	34
10	25	26	122	48	88	78	116	49	44	41	57	34
11	18.8	19.6	120	46	84	73	116	55	41	35	58	33
12	21	17.4	107	42	82	71	118	66	36	32	55	33
13	22	16.0	92	38	94	68	149	58	39	30	64	32
14	20	*14.6	80	40	98	88	132	56	82	28	63	30
15	18.8	14.0	73	193	86	88	127	55	63	26	75	53
16	16.7	14.0	88	101	80	86	120	50	56	24	105	39
17	14.0	15.3	73	80	119	88	113	48	55	24	105	35
18	13.4	16.7	63	90	125	84	102	45	54	23	82	38
19	12.8	16.0	60	90	105	*78	96	42	49	41	75	40
20	13.4	16.0	58	76	109	150	90	41	41	39	71	*40
21	12.2	d50	50	68	143	111	84	40	36	31	68	36
22	11.6	32	48	56	176	111	80	36	35	32	61	34
23	*15.3	31	48	50	137	105	132	38	45	41	54	32
24	19.6	28	45	122	118	100	102	68	40	41	48	29
25	19.6	165	44	96	105	90	98	63	34	39	44	29
26	18.1	157	38	80	98	82	94	66	32	34	41	28
27	16.0	111	36	76	94	76	86	70	34	31	38	27
28	15.3	120	39	70	86	75	80	66	34	303	36	28
29	14.6	109	56	75	-------	105	78	68	40	193	34	26
30	14.0	90	60	68	-------	292	84	73	49	157	*32	25
31	13.4	-------	54	63	-------	322	-------	64	-------	149	31	-------

* Discharge measurement made on this day.
d Doubtful gage-height record; discharge computed from reconstructed gage-height graph based on recorded graph, shape of typical peak at this station, and records for North Branch Raritan River near Far Hills.

Lamington (Black) River near Pottersville--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	99	a80	113	125	66	86	144	233	36	27	216
2	28	75	a70	122	127	63	88	127	182	34	30	124
3	33	137	a65	144	122	63	82	113	173	33	31	139
4	32	109	61	127	196	66	78	102	167	32	29	137
5	30	102	134	120	176	84	197	96	154	31	27	120
6	28	94	120	111	162	73	170	90	137	28	30	98
7	42	279	100	98	149	70	157	84	125	27	34	80
8	70	190	100	88	134	71	149	80	113	29	33	66
9	42	173	94	84	122	73	132	76	113	156	33	56
10	39	167	84	84	113	73	118	73	105	181	75	50
11	76	144	76	78	118	303	107	77	90	120	46	45
12	80	120	71	75	107	248	98	132	84	127	39	40
13	63	107	66	75	96	*231	96	96	82	111	40	38
14	56	109	58	80	86	190	171	92	75	84	39	35
15	55	120	78	86	82	154	165	94	70	64	35	39
16	52	120	63	90	82	134	154	86	64	52	40	39
17	48	118	58	88	88	122	139	76	60	46	50	*33
18	44	111	80	120	90	111	125	84	55	41	38	32
19	40	105	84	100	82	120	111	75	52	38	36	52
20	36	96	83	100	78	137	102	92	50	34	42	42
21	33	86	314	94	84	130	94	90	48	35	49	36
22	32	80	215	117	86	125	88	78	48	35	70	36
23	30	a80	190	184	80	152	84	75	55	32	42	45
24	40	a85	162	137	76	142	80	71	58	30	38	46
25	65	a85	139	130	75	134	94	229	52	29	35	41
26	44	a120	137	243	73	125	130	160	49	28	34	39
27	40	a110	122	215	71	118	157	144	46	27	32	36
28	55	a100	*107	234	70	107	199	134	44	27	31	33
29	55	a90	100	190	68	100	179	116	44	31	30	32
30	49	a85	105	152	-------	94	165	100	40	28	28	30
31	45	-------	109	134	-------	88	-------	113	-------	27	27	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for South Branch Raritan River near High Bridge.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	24	60	55	125	a70	94	127	63	25	17	8.5
2	34	24	56	55	109	a65	92	113	58	26	18	8.0
3	36	25	55	82	102	a65	88	107	54	25	17	13
4	30	24	52	75	96	a180	94	102	49	22	16	13
5	29	24	145	68	88	a130	105	111	46	20	17	13
6	30	23	154	68	84	118	94	102	42	23	16	18
7	31	22	118	66	88	116	289	105	42	22	15	15
8	31	21	120	64	90	102	234	125	41	20	14	15
9	30	21	116	*82	86	88	209	107	39	19	28	15
10	29	21	100	127	82	80	215	100	36	*19	44	13
11	29	21	193	127	76	73	187	92	34	18	35	12
12	28	21	152	111	76	75	160	84	34	17	34	11
13	26	21	137	105	78	*178	170	78	54	17	34	11
14	25	21	132	107	73	137	165	82	50	17	31	10
15	25	25	116	109	102	174	147	78	44	17	26	10
16	25	32	102	105	107	209	195	78	45	17	20	10
17	25	27	92	94	94	165	167	90	44	15	19	10
18	25	26	86	122	88	149	165	90	40	15	17	11
19	25	29	78	109	84	170	190	75	35	15	16	12
20	25	38	75	102	80	144	167	71	31	15	15	11
21	25	154	91	102	128	132	154	66	29	15	14	11
22	24	303	109	102	111	122	139	63	33	15	13	11
23	24	252	90	96	105	113	127	115	32	41	13	11
24	24	221	90	243	102	157	116	75	30	30	12	10
25	23	165	90	231	94	144	109	73	35	25	12	10
26	23	127	84	221	a90	*142	113	90	40	26	11	10
27	24	102	78	190	a85	139	122	84	36	28	11	9.5
28	24	84	60	170	a75	127	109	71	32	26	10	9.5
29	25	73	60	152	-------	116	105	68	29	22	10	9.0
30	24	68	58	132	-------	107	100	70	27	21	9.5	8.5
31	24	-------	56	125	-------	100	-------	70	-------	19	9.0	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for South Branch Raritan River near High Bridge.

Lamington (Black) River near Pottersville--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.8	41	17	23	27	64	42	38	29	17	8.4	88
2	8.8	36	17	23	b28	86	41	41	27	19	8.4	75
3	9.4	22	17	22	30	104	40	55	25	17	25	68
4	8.4	18	16	22	34	115	36	102	24	16	22	50
5	8.4	16	26	21	32	86	36	82	23	17	16	26
6	9.3	15	30	24	29	76	38	80	22	16	13	17
7	10	20	125	24	26	76	48	70	22	15	12	15
8	10	27	80	*19	23	64	48	86	21	17	11	14
9	10	29	78	23	24	55	45	78	*19	16	26	14
10	9.8	29	124	21	24	52	39	78	19	14	29	13
11	9.8	27	82	13	24	48	36	75	21	13	22	43
12	9.8	26	73	18	18	45	49	66	21	12	16	45
13	9.8	24	82	b20	a15	44	45	58	27	12	13	39
14	9.8	22	136	b18	a18	60	39	49	26	11	12	33
15	9.8	20	97	b20	a21	61	36	44	24	16	12	22
16	9.8	19	82	b22	a30	58	41	41	23	15	*12	35
17	9.8	17	73	b20	a70	54	89	39	22	13	11	64
18	9.8	17	61	b19	a55	45	88	38	21	12	9.3	50
19	9.8	16	46	b25	a45	40	82	35	19	12	9.8	66
20	9.8	15	35	b25	a35	112	75	36	18	12	17	63
21	9.8	15	33	58	a40	88	60	83	17	10	21	52
22	9.8	15	32	55	a70	86	46	78	16	9.8	19	50
23	9.8	30	35	40	a50	80	41	75	23	9.3	14	38
24	9.8	35	33	b30	a40	68	41	70	22	8.8	12	30
25	15	33	25	b28	a40	63	41	55	19	8.8	11	24
26	16	34	26	b30	46	64	39	41	18	11	11	22
27	16	29	24	59	50	60	41	35	17	12	10	22
28	27	22	23	61	48	56	49	34	15	10	9.8	21
29	43	19	25	55	-------	50	49	32	15	9.8	9.8	19
30	45	18	27	44	-------	46	44	39	15	9.8	26	19
31	41	-------	27	30	-------	44	-------	33	-------	9.3	152	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for North Branch Raritan River near Far Hills.
b Stage-discharge relation affected by ice.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19	*36	63	111	b27	71	56	52	25	14	6.7	52
2	18	38	60	111	a29	*75	55	45	23	13	6.3	49
3	18	71	49	95	a28	71	54	39	21	13	5.6	48
4	18	64	41	82	a29	97	54	36	19	11	4.0	45
5	18	64	39	73	29	84	52	34	22	*9.8	*5.2	44
6	17	64	34	71	101	93	50	33	22	8.8	7.8	41
7	17	52	35	70	293	95	52	31	19	9.3	8.8	40
8	16	39	35	54	128	75	50	30	19	9.8	10	36
9	16	30	47	55	125	75	48	29	20	9.3	10	34
10	17	26	60	55	102	73	45	28	20	9.3	9.3	33
11	15	24	52	50	110	70	42	28	26	12	12	32
12	15	24	48	45	73	66	46	27	39	15	93	33
13	15	23	44	46	90	64	56	26	32	11	460	31
14	15	22	59	39	80	61	54	25	25	9.8	189	29
15	15	22	63	45	68	58	54	24	21	9.3	179	28
16	18	22	56	44	56	58	50	22	18	8.8	157	29
17	19	22	55	40	90	58	46	21	17	8.8	120	28
18	17	23	121	38	78	55	44	21	15	8.8	*303	28
19	16	23	115	40	71	55	48	21	15	10	606	29
20	15	45	95	36	71	55	61	20	33	9.3	271	33
21	15	216	80	b33	64	58	55	19	30	8.8	240	29
22	15	157	63	b35	60	118	55	19	26	7.9	216	27
23	15	138	64	b35	92	115	52	23	22	7.5	*172	26
24	15	125	56	b33	82	99	46	34	23	7.5	140	60
25	15	104	48	b32	75	93	45	25	22	7.5	111	54
26	15	80	46	b32	68	88	46	22	21	7.5	91	44
27	15	66	44	b31	61	78	46	21	18	7.1	78	42
28	17	56	46	b27	60	68	45	20	16	6.7	70	69
29	35	80	61	b26	-------	68	49	20	15	6.3	61	52
30	49	68	150	b25	-------	64	56	22	14	6.7	56	46
31	41	-------	118	b25	-------	60	-------	*22	-------	6.7	55	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for North Branch Raritan River near Far Hills.
b Stage-discharge relation affected by ice.

Lamington (Black) River near Pottersville--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	462.5	25	10.0	14.9	0.454	0.52
November	1,341.4	165	13.4	44.7	1.36	1.52
December	2,383	203	36	76.9	2.34	2.70
Calendar year 1950	15,653.8	203	10.0	42.9	1.31	17.75
January 1951	2,193	193	38	70.7	2.16	2.49
February	2,938	191	68	105	3.20	3.33
March	3,243	322	68	105	3.20	3.68
April	3,823	266	78	127	3.87	4.33
May	1,822	82	36	58.8	1.79	2.07
June	1,405	82	32	46.8	1.43	1.59
July	1,955	303	23	63.1	1.92	2.22
August	1,906	125	31	61.5	1.87	2.16
September	998	53	25	33.3	1.02	1.13
Water year 1950-51	24,469.9	322	10.0	67.0	2.04	27.74
October 1951	1,407	80	25	45.4	1.38	1.60
November	3,496	279	75	117	3.57	3.96
December	3,325	314	58	107	3.26	3.77
Calendar year 1951	28,511	322	23	78.1	2.38	32.33
January 1952	3,813	243	75	123	3.75	4.32
February	3,018	196	68	104	3.17	3.42
March	3,767	303	63	122	3.72	4.27
April	3,795	199	78	126	3.84	4.30
May	3,199	229	71	103	3.14	3.63
June	2,668	233	40	88.9	2.71	3.03
July	1,633	181	27	52.7	1.61	1.85
August	1,170	75	27	37.7	1.15	1.33
September	1,855	216	30	61.8	1.88	2.10
Water year 1951-52	33,146	314	25	90.6	2.76	37.58
October 1952	831	36	23	26.8	.817	.94
November	2,039	303	21	68.0	2.07	2.31
December	3,005	193	52	96.9	2.95	3.41
Calendar year 1952	30,793	303	21	84.1	2.56	34.91
January 1953	3,597	243	55	116	3.54	4.08
February	2,598	128	73	92.8	2.83	2.95
March	3,887	209	65	125	3.81	4.41
April	4,421	289	88	147	4.48	5.01
May	2,762	127	63	89.1	2.72	3.13
June	1,204	63	27	40.1	1.22	1.37
July	652	41	15	21.0	.640	.74
August	573.5	44	9.0	18.5	.564	.65
September	339.0	18	8.0	11.3	.345	.38
Water year 1952-53	25,908.5	303	8.0	71.0	2.16	29.38
October 1953	433.1	45	8.4	14.0	.427	.49
November	706	41	15	23.5	.716	.80
December	1,607	136	16	51.8	1.58	1.82
Calendar year 1953	22,779.6	289	8.0	62.4	1.90	25.83
January 1954	912	61	13	29.4	.896	1.03
February	992	70	15	35.4	1.08	1.12
March	2,050	115	40	66.1	2.02	2.32
April	1,444	89	36	48.1	1.47	1.64
May	1,766	102	32	57.0	1.74	2.00
June	630	29	15	21.0	.640	.71
July	400.6	19	8.8	12.9	.393	.45
August	600.5	152	8.4	19.4	.591	.68
September	1,137	88	13	37.9	1.16	1.29
Water year 1953-54	12,678.2	152	8.4	34.7	1.06	14.35
October 1954	581	49	15	18.7	.570	.66
November	1,824	216	22	60.8	1.85	2.07
December	1,947	150	34	62.8	1.91	2.21
Calendar year 1954	14,284.1	216	8.4	39.1	1.19	16.18
January 1955	1,534	111	25	49.5	1.51	1.74
February	2,240	293	27	80.0	2.44	2.54
March	2,318	118	55	74.8	2.28	2.63
April	1,512	61	42	50.4	1.54	1.71
May	839	52	19	27.1	.826	.95
June	658	39	14	21.9	.668	.75
July	290.3	15	6.3	9.36	.285	.33
August	3,753.7	606	4.0	121	3.69	4.26
September	1,171	69	26	39.0	1.19	1.33
Water year 1954-55	18,668	606	4.0	51.1	1.56	21.18

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, 1.4 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 1955. 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 30 ft downstream at same datum.

Average discharge.--32 years, 299 cfs.

Extremes.--1923-55: Maximum discharge, 20,700 cfs Aug. 19, 1955 (gage height, 13.59 ft, from high-water mark in gage house), from rating curve extended above 6,000 cfs on basis of slope-area measurement at gage height 12.16 ft and contracted-opening measurement at gage-height 13.59 ft; minimum observed, about 3 cfs Nov. 28, 1930 (gage height, 1.72 ft), result of freezeup; minimum daily, 8 cfs Nov. 30, 1930.

Revisions.--The figures of maximum discharge for the water years 1928 and 1934 have been revised to 10,500 cfs Nov. 3, 1927 (gage height, 10.0 ft) and 12,200 cfs Sept. 30, 1934 (gage height, 10.6 ft) superseding those published in Bulletin 33 and Special Report 5.

Peak discharge (base, 5,000 cfs).--

1950-51: Nov. 26 (12:30 a.m.) 9,640 cfs (9.66 ft); Dec. 8 (10:30 a.m.) 6,380 cfs (8.21 ft); Feb. 7 (10:30 p.m.) 6,300 cfs (8.17 ft); Mar. 31 (2:30 a.m.) 8,060 cfs (8.99 ft); July 28 (5 p.m.) 5,800 cfs (7.92 ft).

1951-52: Nov. 7 (2 p.m.) 10,900 cfs (10.63 ft); Dec. 21 (10 a.m.) 8,470 cfs (9.66 ft); Mar. 11 (6:30 p.m.) 7,240 cfs (9.12 ft); May 25 (7 p.m.) 6,980 cfs (9.00 ft); June 1 (7 p.m.) 6,550 cfs (8.80 ft); Sept. 1 (8:30 p.m.) 7,800 cfs (9.37 ft).

1952-53: Nov. 22 (1 p.m.) 5,600 cfs (8.30 ft); Dec. 11 (5 p.m.) 5,260 cfs (8.08 ft); Jan. 24 (8 p.m.) 7,290 cfs (9.14 ft); Mar. 13 (1 p.m.) 5,860 cfs (8.45 ft); Apr. 7 (5 p.m.) 7,570 cfs (9.27 ft).

1953-54: Dec. 14 (12 m.) 4,590 cfs (7.57 ft).

1954-55: Nov. 21 (4 p.m.) 6,320 cfs (8.71 ft); Feb. 7 (time and discharge unknown); Aug. 13 (12 m.) 17,400 cfs (12.70 ft); Aug. 19 (7 a.m.) 20,700 cfs (13.59 ft).

Revisions.--Revised figures of discharge, in cubic feet per second, for the water years 1924-26, 1928-35, superseding those published in Bulletin 33 and Special Reports 5 and 9, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge
1924		1926-Con.		1931	
Apr. 7	3,700	Feb. 23	300	Mar. 29	2,800
		24	300		
1925		25	1,500	1932	
Feb. 11	2,000	26	1,500	Mar. 28	3,600
12	2,500			Nov. 7	3,340
13	2,000	1927		10	3,140
14	1,200	Oct. 18	2,940		
15	1,700	19	4,330	1933	
16	1,300	Dec. 8	3,140	Aug. 23	2,650
17	1,000			24	3,600
26	3,010	1928		Sept.15	5,190
Mar. 19	3,270	Feb. 8	4,170		
Oct. 25	3,010	23	3,510	1934	
				Sept.30	5,010
1926		1929		1	
Feb. 19	2,000	Feb. 7	3,910	1935	
20	1,000			Feb. 15	3,200
21	600	1930			
22	400	Mar. 8	3,340		

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
April 1924.....	-	3,700	249	711	3.74	4.17
Water year 1923-24.....	-	3,700	36	323	1.70	23.17
February 1925.....	-	3,010	100	948	4.99	5.20
March.....	-	3,270	310	579	3.05	3.51
Water year 1924-25.....	-	3,270	34	246	1.29	17.58
October 1925.....	-	3,010	28	303	1.59	1.84
February 1926.....	-	2,000	-	492	2.59	2.70
Water year 1925-26.....	-	3,400	28	254	1.34	18.12

North Branch Raritan River near Raritan--Continued

Revised figures of monthly discharge, in cubic feet per second, 1924-26, 1928-35--Continued

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1927	-	4,330	82	571	3.01	3.46
December	-	3,140	260	699	3.68	4.24
February 1928	-	4,170	100	715	3.76	4.06
Water year 1927-28	-	4,330	82	490	2.58	35.06
February 1929	-	3,910	65	491	2.58	2.69
Water year 1928-29	-	3,940	23	255	1.34	18.21
March 1930	-	3,340	163	397	2.09	2.41
Water year 1929-30	-	3,340	14	186	.979	13.27
March 1931	-	2,800	142	355	1.87	2.16
Water year 1930-31	-	2,800	8	197	1.04	14.08
March 1932	-	3,600	81	362	1.91	2.20
Water year 1931-32	-	3,600	11	138	.726	9.91
November 1932	-	3,340	188	779	4.10	4.57
August 1933	-	3,600	45	406	2.14	2.46
September	-	5,190	134	585	3.08	3.44
Water year 1932-33	-	5,190	17	376	1.98	26.88
September 1934	-	5,010	46	416	2.19	2.44
Water year 1933-34	-	6,000	44	257	1.35	18.36
Calendar year 1934	112,069	6,000	44	307	1.62	21.95
February 1935	11,572	3,200	145	413	2.17	2.26
Water year 1934-35	94,159	3,200	44	258	1.36	18.41
Calendar year 1935	84,840	3,700	30	232	1.22	16.60

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	41	47	263	232	420	387	1,120	284	181	552	297	100
2	39	47	220	196	1,000	444	920	277	167	270	232	103
3	39	45	226	202	364	394	1,760	256	167	186	191	123
4	38	56	1,160	341	340	998	942	250	172	157	181	107
5	36	439	985	323	333	684	759	232	278	454	147	96
6	36	149	428	226	325	533	648	220	176	229	135	93
7	38	111	364	253	2,180	462	589	*202	147	167	127	175
8	39	96	3,380	318	1,080	419	515	191	131	143	167	123
9	43	*89	834	185	419	371	487	186	131	127	143	103
10	107	80	638	181	379	325	487	176	139	119	278	93
11	83	68	570	191	356	297	524	202	157	107	758	93
12	96	62	462	176	333	290	*462	395	127	100	430	93
13	86	57	371	156	396	277	1,350	226	119	119	702	89
14	65	57	318	140	419	545	589	191	486	100	277	86
15	57	55	297	2,440	311	496	505	181	370	83	232	243
16	52	52	487	602	270	379	462	167	220	80	582	150
17	50	55	340	364	577	340	462	157	176	112	643	107
18	47	57	263	333	859	311	394	152	157	103	297	96
19	45	52	238	325	444	290	371	143	139	183	238	96
20	*45	55	207	304	533	1,550	340	143	123	262	396	96
21	43	138	196	297	1,540	608	311	147	115	119	*250	93
22	41	111	202	226	1,770	524	297	143	123	96	220	86
23	63	86	202	204	739	453	674	160	151	143	181	83
24	86	80	196	970	551	462	410	436	148	119	162	80
25	68	2,550	181	540	478	394	356	242	111	103	147	80
26	60	3,070	a120	371	453	340	340	181	93	96	143	86
27	52	542	a110	297	444	*318	304	181	121	83	135	77
28	50	444	a120	284	394	304	290	252	214	2,560	123	77
29	50	340	244	333	-------	611	297	294	227	1,080	119	74
30	50	311	402	284	-------	2,440	367	437	233	453	111	68
31	47	-------	333	a170	-------	3,460	-------	226	-------	364	103	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of gage-height record for adjacent days, weather records, and records for station near Far Hills.

North Branch Raritan River near Raritan--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	74	1,500	290	579	589	250	364	579	4,120	135	77	3,060
2	80	599	284	718	599	238	371	505	*1,430	127	96	931
3	123	2,220	263	1,010	579	238	333	444	844	115	115	1,540
4	93	751	256	599	2,110	274	311	402	698	123	93	524
5	86	505	1,000	667	1,260	1,020	1,160	379	657	127	83	387
6	77	402	739	608	*770	513	899	364	533	111	483	311
7	160	5,630	*478	453	648	379	561	325	453	103	450	256
8	*832	1,190	419	394	570	340	505	304	394	103	172	214
9	195	791	387	387	542	333	453	297	460	932	176	196
10	139	657	348	419	478	318	419	270	453	1,700	649	176
11	622	570	311	394	515	3,700	379	318	333	418	309	162
12	571	478	304	325	462	1,390	356	1,020	297	311	172	152
13	256	428	277	325	371	876	348	453	270	270	172	139
14	202	639	b238	356	348	739	1,180	364	256	220	147	131
15	181	689	b561	410	333	589	898	333	238	186	127	139
16	167	988	402	410	318	524	739	318	220	162	149	162
17	167	638	f325	348	428	462	542	277	208	*139	226	131
18	139	496	f698	799	478	419	478	363	*196	123	139	119
19	131	436	f887	453	379	944	428	304	186	119	115	186
20	123	387	470	462	325	882	394	486	191	115	111	181
21	115	348	5,180	402	348	648	356	480	176	119	115	131
22	111	333	1,340	525	348	551	333	318	191	152	779	123
23	107	325	855	1,660	304	1,150	340	277	214	111	193	135
24	139	340	728	618	284	855	297	256	256	96	139	139
25	478	304	628	505	277	759	394	3,090	202	86	119	127
26	202	775	898	2,200	263	579	780	1,290	176	83	111	119
27	167	402	628	1,290	256	515	1,380	728	162	83	103	111
28	281	325	478	1,570	250	462	2,160	561	152	89	100	103
29	232	325	453	953	250	419	942	589	152	111	103	100
30	181	304	478	f708	-------	387	718	579	152	74	96	100
31	172	-------	551	628	-------	371	-------	791	-------	74	100	-------

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
f Fragmentary gage-height record; discharge computed from partly estimated gage-height record.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	107	77	214	220	542	270	402	572	256	83	50	27
2	103	74	196	220	410	250	410	505	220	86	52	27
3	152	77	208	558	394	250	379	410	191	96	68	25
4	107	74	208	419	379	2,010	371	379	176	80	55	34
5	96	74	1,770	290	333	749	496	*444	172	74	58	34
6	93	74	1,490	250	325	524	371	419	162	128	52	59
7	93	71	579	238	364	470	3,800	419	162	142	43	50
8	89	71	470	244	371	419	a1,400	533	172	86	43	39
9	86	68	428	1,140	318	379	a880	410	147	77	104	36
10	86	74	379	1,900	284	348	a1,310	364	139	68	343	33
11	86	74	2,350	1,150	263	311	1,050	311	123	62	111	31
12	86	71	900	759	304	333	812	284	119	60	86	31
13	86	71	599	533	333	*3,100	1,150	284	190	60	80	36
14	83	74	515	478	284	898	1,110	356	244	60	77	34
15	80	77	436	462	820	1,600	718	333	157	60	74	34
16	80	150	387	444	689	2,380	1,470	304	139	55	60	50
17	77	111	356	394	419	909	931	461	135	52	55	38
18	77	93	325	792	340	759	759	748	127	47	57	33
19	77	89	297	576	311	1,350	1,310	318	119	47	52	33
20	74	104	270	478	304	823	834	284	111	57	45	33
21	74	1,220	398	502	1,040	657	698	270	100	68	43	34
22	77	3,220	834	687	579	589	618	297	147	65	41	*39
23	77	1,120	453	470	419	533	570	1,300	205	163	39	36
24	77	638	387	3,170	394	1,110	505	410	115	158	38	33
25	74	478	348	1,720	379	844	470	340	103	80	36	33
26	74	387	311	920	348	739	505	444	107	68	34	33
27	74	325	290	739	325	648	505	394	100	65	36	34
28	77	270	212	812	297	561	428	290	100	74	33	31
29	80	238	232	657	-------	524	387	220	107	62	31	34
30	77	226	*238	533	-------	428	371	256	107	60	28	33
31	77	-------	226	496	-------	436	-------	304	-------	60	28	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated.

North Branch Raritan River near Raritan--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55	75	61	84	111	484	201	172	127	52	26	369
2	90	72	59	90	140	894	191	196	123	59	23	201
3	81	61	56	87	140	1,110	181	213	115	56	184	162
4	64	49	56	87	162	914	162	*936	111	54	128	136
5	47	43	136	84	144	453	162	390	108	64	70	101
6	43	47	119	111	136	359	162	314	97	61	49	72
7	39	78	1,080	104	115	321	201	267	90	56	41	61
8	34	111	314	67	94	301	186	721	87	59	35	59
9	26	94	219	75	123	267	167	503	84	54	148	61
10	29	84	922	b75	123	248	152	437	84	47	172	56
11	30	84	359	37	119	225	148	382	87	41	87	a450
12	30	72	260	72	78	207	201	308	84	39	56	a200
13	30	70	503	b90	61	225	172	260	108	37	45	a120
14	29	64	2,090	b80	94	565	162	230	108	35	41	a100
15	27	61	585	b85	104	390	152	207	90	52	41	a85
16	29	59	343	b95	115	267	162	196	87	52	45	108
17	29	56	248	b90	468	236	708	176	87	41	41	287
18	27	52	172	b70	390	213	588	172	81	35	34	186
19	27	52	b160	75	248	191	336	162	72	35	34	294
20	27	52	b150	84	219	1,090	287	157	67	35	72	343
21	27	49	148	255	230	453	248	743	61	35	136	219
22	26	49	152	430	359	351	219	413	61	30	114	201
23	27	88	152	191	254	314	201	274	75	27	70	172
24	29	132	123	167	219	280	201	236	101	26	52	140
25	35	104	101	162	*248	327	191	213	75	26	45	119
26	54	132	119	190	248	421	181	191	67	35	*43	111
27	43	101	104	359	328	280	191	167	59	37	37	108
28	105	84	97	382	236	254	254	162	54	37	37	101
29	174	70	115	186	-------	242	225	157	52	32	35	87
30	206	64	115	172	-------	225	186	167	52	29	38	84
31	90	-------	108	140	-------	207	-------	148	-------	29	1,280	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for station near Far Hills.
b Stage-discharge relation affected by ice.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	84	115	294	469	a120	512	280	207	108	45	21	191
2	81	139	267	615	a125	477	260	186	87	45	20	176
3	78	503	230	485	a100	336	254	172	78	43	18	176
4	75	274	207	397	a115	973	248	162	70	39	15	162
5	75	242	201	336	a120	539	230	152	81	*37	14	152
6	72	207	172	429	a200	961	*225	140	90	35	20	148
7	72	172	123	413	b3,000	*778	242	132	72	37	77	144
8	67	144	157	287	521	437	213	132	67	37	295	132
9	64	119	186	280	366	413	201	127	84	35	52	119
10	67	104	429	274	328	397	191	144	84	52	35	119
11	67	97	242	248	757	359	181	119	84	89	128	115
12	64	94	201	236	594	321	201	111	157	47	2,560	115
13	64	87	191	225	b350	301	301	104	115	41	9,380	104
14	61	87	490	201	b300	274	242	101	94	35	1,090	101
15	59	84	697	213	b280	260	248	97	78	30	597	97
16	56	81	405	201	274	308	219	90	67	30	419	101
17	61	84	308	176	866	274	191	84	56	29	336	94
18	61	87	995	167	518	254	186	81	52	27	1,160	94
19	61	87	703	176	314	267	181	81	52	27	*9,950	94
20	61	260	429	133	287	267	294	78	152	29	1,150	132
21	59	4,240	321	132	267	317	254	75	101	27	770	97
22	59	1,090	267	176	267	1,780	267	72	115	26	844	84
23	59	585	287	167	779	1,070	230	75	81	24	521	81
24	56	477	267	157	512	557	201	108	78	23	421	217
25	54	445	230	140	359	461	201	104	101	23	351	225
26	54	336	207	148	321	575	213	87	81	24	301	132
27	54	280	219	140	301	530	207	75	67	23	274	115
28	56	254	201	95	308	390	196	72	56	21	242	269
29	142	800	293	a130	-------	359	219	75	52	20	213	186
30	213	374	*1,640	a120	-------	328	260	90	47	20	207	136
31	148	-------	615	a115	-------	294	-------	94	-------	21	201	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for station near Far Hills.
b Stage-discharge relation affected by ice.

North Branch Raritan River near Raritan--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	1,692	107	36	54.6	0.287	0.33
November	9,401	3,070	45	313	1.65	1.84
December	14,357	3,380	110	463	2.44	2.81
Calendar year 1950	80,625	3,380	36	221	1.16	15.79
January 1951	11,464	2,440	140	370	1.95	2.24
February	17,707	2,180	270	632	3.33	3.47
March	19,706	3,460	277	636	3.35	3.86
April	17,332	1,760	290	578	3.04	3.39
May	6,930	437	143	224	1.18	1.36
June	5,299	486	96	177	.932	1.04
July	8,869	2,560	80	286	1.51	1.74
August	8,147	758	103	263	1.38	1.59
September	3,069	243	68	102	.537	.60
Water year 1950-51	123,973	3,460	36	340	1.79	24.27
October 1951	6,603	832	74	213	1.12	1.29
November	23,775	5,630	304	792	4.17	4.65
December	21,154	5,180	238	682	3.59	4.14
Calendar year 1951	150,055	5,630	68	411	2.16	29.37
January 1952	21,175	2,200	325	683	3.59	4.14
February	14,682	2,110	250	506	2.66	2.87
March	21,124	3,700	238	681	3.58	4.13
April	18,818	2,160	297	627	3.30	3.68
May	17,064	3,090	256	550	2.89	3.34
June	14,270	4,120	152	476	2.51	2.79
July	6,717	1,700	74	217	1.14	1.31
August	6,019	779	77	194	1.02	1.18
September	10,285	3,060	100	343	1.81	2.01
Water year 1951-52	181,686	5,630	74	496	2.61	35.53
October 1952	2,656	152	74	85.7	.451	.52
November	9,770	3,220	68	326	1.72	1.91
December	16,306	2,350	196	526	2.77	3.19
Calendar year 1952	158,886	4,120	68	434	2.28	31.07
January 1953	22,251	3,170	220	718	3.78	4.36
February	11,568	1,040	263	413	2.17	2.26
March	25,201	3,100	250	813	4.28	4.93
April	25,020	3,800	371	834	4.39	4.90
May	12,663	1,300	220	408	2.15	2.48
June	4,452	256	100	148	.779	.87
July	2,403	163	47	77.5	.408	.47
August	1,949	343	28	62.9	.331	.38
September	1,057	59	25	35.2	.185	.21
Water year 1952-53	135,296	3,800	25	371	1.95	26.48
October 1953	1,609	206	26	51.9	.273	.31
November	2,209	132	43	73.6	.387	.43
December	9,226	2,090	56	298	1.57	1.81
Calendar year 1953	119,608	3,800	25	328	1.73	23.41
January 1954	4,276	430	37	138	.726	.84
February	5,306	468	61	190	1.00	1.04
March	12,314	1,110	191	397	2.09	2.41
April	6,778	708	148	226	1.19	1.33
May	9,270	936	148	299	1.57	1.81
June	2,554	127	52	85.1	.448	.50
July	1,307	64	26	42.2	.222	.26
August	3,259	1,280	23	105	.553	.64
September	4,793	450	56	160	.842	.94
Water year 1953-54	62,901	2,090	23	172	.905	12.32
October 1954	2,304	213	54	74.3	.391	.45
November	11,948	4,240	81	398	2.09	2.34
December	11,474	1,640	123	370	1.95	2.25
Calendar year 1954	75,583	4,240	23	207	1.09	14.81
January 1955	7,481	615	95	241	1.27	1.46
February	12,649	3,000	100	452	2.38	2.48
March	15,369	1,780	254	496	2.61	3.01
April	6,836	301	181	228	1.20	1.34
May	3,427	207	72	111	.584	.67
June	2,507	157	47	83.6	.440	.49
July	1,041	89	20	33.6	.177	.20
August	31,682	9,950	14	1,022	5.38	6.20
September	4,108	269	81	137	0.721	0.80
Water year 1954-55	110,826	9,950	14	304	1.60	21.69

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, 1.4 miles (revised) 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), August 1921 to September 1955. August 1908 to April 1915 published in United States Geological Survey Water-Supply Paper 521.

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. Since Oct. 1, 1952, water-stage recorder at station at Bound Brook used as auxiliary gage when stage is above 5.0 ft.

Average discharge.--34 years (1921-55), 752 cfs (unadjusted).

Extremes.--1903-7, 1921-55: Maximum discharge, 36,100 cfs Sept. 22, 1938 (gage height, 20.42 ft, from floodmark in recorder shelter), from rating curve extended above 14,000 cfs on basis of slope-area measurement at gage heights 14.9 and 20.42 ft; maximum gage height, 22.1 ft Aug. 19, 1955; minimum, about 15 cfs Sept. 12, 1932 (does not include water diverted to Johns-Manville plant).

Revisions.--The figures of maximum and peak discharge for some years have been revised, as shown in the following table. Discharge was computed by using fall as a factor with station at Bound Brook used as auxiliary gage since Jan. 1, 1945. The figures of discharge supersede those published in the special reports indicated.

Special Report	Water year	Date	Discharge (cfs)	Gage height (feet)
*33	1904	Oct. 10, 1903	28,600	18.5
5	1933	Aug. 24, 1933	21,000	16.22
12	1945	Jan. 2, 1945	13,800	14.4
		Feb. 27, 1945	9,050	11.9
		July 20, 1945	10,400	12.6
14	1946	June 2, 1946	19,900	17.8
		July 24, 1946	11,800	13.6
	1947	Apr. 5, 1947	7,480	10.9
	1948	Nov. 9, 1947	11,900	13.6
		Nov. 12, 1947	11,000	13.2
		May 14, 1948	11,600	13.4
	1950	Mar. 23, 1950	8,660	11.6

* Bulletin

Peak discharge (base, 10,000 cfs).--

1950-51: Nov. 26 (6:30 a.m.) 18,200 cfs (16.2 ft); Dec. 8 (3:30 p.m.) 13,400 cfs (14.4 ft); Feb. 8 (2 a.m.) 10,200 cfs (12.5 ft); Mar. 31 (8 a.m.) 13,700 cfs (14.7 ft).

1951-52: Nov. 7 (11 p.m.) 20,400 cfs (17.2 ft); Dec. 21 (4 p.m.) 17,100 cfs (16.7 ft); Mar. 11 (11:30 p.m.) 14,300 cfs (15.1 ft); Apr. 28 (6:30 a.m.) 10,500 cfs (12.8 ft); May 25 (10:30 p.m.) 11,700 cfs (13.1 ft); June 2 (12:30 p.m.) 12,300 cfs (13.8 ft); Sept. 2 (1 a.m.) 10,300 cfs (12.6 ft).

1952-53: Nov. 22 (5 p.m.) 12,700 cfs (13.5 ft); Dec. 6 (3 a.m.) 10,000 cfs (12.2 ft); Dec. 11 (9 p.m.) 10,500 cfs (12.6 ft); Jan. 24 (12 p.m.) 15,200 cfs (14.7 ft); Mar. 13 (5 p.m.) 11,400 cfs (13.3 ft); Mar. 16 (8 a.m.) 11,200 cfs (13.1 ft); Apr. 7 (9 p.m.) 15,400 cfs (14.7 ft).

1953-54: Dec. 14 (5 p.m.) 9,820 cfs (12.1 ft), (maximum below base).

1954-55: Nov. 21 (9 p.m.) 14,600 cfs (14.8 ft); Feb. 7 about 10,500 cfs; Aug. 13 (6 a.m.) 26,600 cfs (19.9 ft), maximum gage height, 20.0 ft at 7 a.m.; Aug. 19 (11 a.m.) 34,600 cfs (21.8 ft), maximum gage height, 22.1 ft at 1 p.m.

Remarks.--Records given herein represent flow at gage only. Diversion to Johns-Manville plant, 1,500 ft above station, which was returned to river 0.6 mile below station. Slight diurnal fluctuation at low flow.

Raritan River at Manville--Continued

Revisions.--Revised figures of discharge, in cubic feet per second, for periods in water years 1904, 1906, 1922, 1924-25, 1930, superseding those published in Bulletin 33 and Special Report 5 are given herein. Observed monthly figures of runoff for September 1921 to September 1940, adjusted monthly figures for water year 1941, and inclusion of diversion in daily figures of discharge for water year 1942-50, previously published in special reports, may be subject to error because of diversion or uncertainty in the adjustments for diversion above station. Records of flow at gage for the water years 1942-50 are given herein.

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1922				1924-Con.		1925-Con.	
Feb. 23	1,130	Dec. 23	5,000	Jan. 28	800	Feb. 9	600
26	690	24	3,500	29	800	10	1,500
Mar. 24	900			30	1,000	11	4,500
25	800	1924		31	1,100	12	7,500
26	750	Jan. 22	900			13	4,500
Apr. 2	1,360	23	800	1925			
6	960	24	2,000	Feb. 5	300	1930	
7	1,080	25	6,000	6	350	Mar. 10	2,120
9	1,130	26	1,600	7	350		
10	900	27	1,000	8	450		

Revised figures of monthly discharge, in cubic feet per second, 1904, 1906 1922, 1924-25, 1930

Month	Maximum	Minimum	Mean	Per square mile	Runoff in inches
May 1904	829	171	415	0.847	0.98
January 1906	5,930	497	995	2.03	2.34
February	4,650	350	761	1.55	1.61
July	4,840	189	682	1.39	1.60
September	519	133	186	.380	.42
Water year 1905-6	10,500	122	732	1.49	20.27
February 1922	5,330	440	1,520	-	-
March	7,200	580	1,730	-	-
April	3,440	366	1,080	-	-
Water year 1921-22	7,200	83	686	-	-
December 1923	5,000	416	1,180	-	-
January 1924	6,000	750	1,810	-	-
Water year 1923-24	15,100	64	918	-	-
February 1925	7,500	260	2,410	-	-
Water year 1924-25	7,500	117	610	-	-
March 1930	7,730	533	1,260	-	-
Water year 1929-30	7,730	42	568	-	-

Daily discharge, in cubic feet per second, 1941-55

1941-42

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	126	102	325	2,310	312	870	297	170	119	2,560	440
2	39	569	97	656	782	306	756	290	165	165	744	416
3	42	273	97	769	482	3,080	701	284	178	392	458	384
4	54	169	105	537	482	2,240	669	278	193	290	339	368
5	56	133	114	485	502	1,100	627	259	241	290	284	360
6	59	105	141	252	505	1,150	588	241	224	203	259	332
7	51	338	174	192	3,090	1,170	539	578	178	219	224	311
8	46	357	111	172	3,130	990	502	*744	193	*259	203	304
9	44	200	111	162	1,150	3,040	578	440	183	165	a11,000	384
10	56	152	*108	162	782	2,000	1,870	360	*153	136	a4,980	529
11	68	141	83	162	632	1,190	1,840	304	133	126	a2,980	*376
12	87	114	90	*162	*482	*1,030	1,400	272	144	170	1,760	325
13	81	108	316	162	432	858	1,060	259	284	178	2,460	311
14	68	*100	5,060	172	402	1,390	882	266	432	129	13,500	290
15	50	100	1,190	202	402	1,810	778	241	392	105	4,540	278
16	67	97	645	182	425	1,180	691	224	241	99	2,890	272
17	*81	100	485	162	3,400	3,250	617	304	174	86	6,230	539
18	83	100	373	182	1,560	1,880	588	346	219	812	a4,980	1,210
19	59	100	349	394	990	1,300	529	247	209	511	2,540	3,940
20	67	97	266	1,820	495	1,040	493	219	209	214	1,900	1,510
21	72	90	187	1,380	582	977	467	224	193	140	1,550	1,030
22	61	90	182	955	582	5,440	*440	706	174	122	1,290	659
23	67	102	202	780	532	2,530	416	449	241	105	1,130	539
24	72	193	943	668	462	1,570	400	376	278	99	1,080	511
25	51	174	1,250	612	422	1,230	376	290	178	97	882	432
26	68	114	723	516	382	1,050	368	253	136	97	712	400
27	50	119	580	465	349	917	339	219	133	305	638	2,180
28	83	111	495	465	299	823	325	198	136	2,530	588	4,760
29	108	119	425	432		767	318	178	140	617	558	1,690
30	94	111	292	332	-------	835	311	178	122	376	588	1,170
31	85	-------	260	482	-------	965	-------	178	-------	811	493	-------

* Discharge measurement made on this day.

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

Note.--Stage-discharge relation affected by ice Jan. 6-18, 29-31, Feb. 2-5, 10-15, 21-26.

Raritan River at Manville--Continued

Daily discharge, in cubic feet per second, 1941-55

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	984	884	1,410	3,060	598	997	577	545	1,270	257	171	142
2	859	884	3,710	2,150	b550	871	651	476	1,490	220	160	133
3	730	947	1,850	1,660	535	835	*566	457	959	197	146	121
4	662	959	1,330	1,510	*506	608	486	437	730	191	138	105
5	640	730	b1,080	1,230	566	934	496	391	587	337	155	116
6	764	662	1,040	b980	2,310	1,150	457	363	506	535	186	121
7	651	640	*972	b880	3,710	4,170	373	363	741	400	146	121
8	556	629	859	b760	1,790	1,700	391	330	1,190	437	142	133
9	515	629	800	b680	1,540	1,100	391	382	674	674	191	129
10	476	629	776	b600	1,380	1,050	373	382	*640	545	354	108
11	457	1,230	752	b570	3,850	*1,380	354	476	587	997	*307	105
12	437	*776	764	b540	3,950	1,650	330	1,260	486	788	181	91
13	400	674	764	b510	1,350	1,540	662	1,410	428	*535	146	87
14	391	608	577	b500	b880	1,300	566	730	409	373	270	87
15	428	515	811	b560	b780	1,380	476	566	337	730	307	277
16	457	515	685	*608	b740	1,580	419	486	315	315	197	186
17	506	515	b620	662	b720	2,050	437	*466	277	238	155	*129
18	1,310	515	b600	811	b720	1,990	685	409	577	226	142	108
19	*741	506	b580	2,110	859	1,480	556	608	330	202	129	91
20	556	476	b430	1,300	1,510	1,470	1,560	3,380	264	181	116	87
21	556	466	b380	788	3,470	1,230	1,090	1,820	238	776	112	94
22	997	457	*b380	b620	2,580	1,090	1,080	1,420	220	382	116	91
23	752	457	b440	b510	1,810	947	859	1,090	197	515	112	91
24	598	1,100	b580	b450	1,820	847	752	a780	186	264	112	87
25	556	4,640	685	b440	1,850	811	674	a580	186	202	94	84
26	1,180	3,580	764	b420	1,300	764	619	a5,380	213	*202	*98	80
27	2,680	1,850	934	b400	1,130	696	545	a4,980	1,270	191	108	77
28	1,210	1,410	3,020	391	1,040	685	535	a1,980	337	322	400	53
29	934	1,270	5,590	515		587	476	a1,480	300	251	264	80
30	823	2,400	8,360	696	-------	587	476	1,100	354	207	181	62
31	752	-------	7,790	566	-------	608	-------	972	-------	191	151	-------

* Discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for other stations in basin.
b Stage-discharge relation affected by ice.

1943-44

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	566	330	b265	391	662	1,200	1,240	251	186	87	28
2	171	496	264	b265	*363	400	1,100	1,090	257	176	84	31
3	165	1,450	307	*b385	409	447	1,140	997	257	160	91	36
4	142	947	285	b3,480	363	419	909	909	232	151	*108	50
5	112	640	238	b2,480	285	315	909	859	202	151	101	44
6	105	545	257	12,100	315	330	884	764	*202	151	98	44
7	101	457	257	3,400	251	*6,300	1,020	776	197	*142	87	*44
8	*101	447	232	1,060	245	*2,410	984	947	191	116	87	44
9	94	8,160	270	b580	238	1,060	896	718	191	112	71	36
10	80	2,770	251	b540	257	752	800	651	220	112	56	31
11	94	1,380	b200	b485	202	587	707	556	1,210	112	62	36
12	98	1,020	b170	466	b195	587	776	556	322	105	56	52
13	91	871	b230	400	b265	8,070	752	752	238	112	56	333
14	84	696	b200	447	*b255	3,690	608	651	207	105	39	1,130
15	87	*598	b190	b355	3,770	1,440	730	556	515	108	36	2,750
16	186	556	b170	b305	2,340	1,160	3,630	525	400	101	53	629
17	730	496	b150	b265	776	1,450	2,500	566	277	108	36	220
18	337	447	b155	b275	1,690	1,610	1,470	447	238	121	44	160
19	207	409	b165	*292	1,240	1,010	1,140	400	466	*84	53	133
20	181	382	b200	285	545	776	972	363	1,900	94	53	138
21	155	373	b155	307	515	847	871	382	823	98	*47	133
22	155	776	b180	285	447	934	896	363	535	121	50	121
23	*160	651	b160	292	1,450	2,160	*909	345	363	105	59	108
24	165	447	b150	577	1,050	7,220	2,850	*382	*363	94	36	94
25	151	428	b140	373	707	2,740	10,200	400	515	94	31	91
26	202	363	165	400	577	1,810	3,020	428	382	65	47	71
27	2,690	373	2,330	651	685	1,520	2,610	409	285	62	33	80
28	2,270	354	800	1,680	1,120	*1,550	2,720	391	251	77	33	101
29	2,560	*315	363	1,120	1,280	1,160	1,720	330	226	80	28	101
30	1,010	315	b310	752	-------	2,290	1,440	277	207	91	25	108
31	764	-------	b270	506	-------	1,620	-------	257	-------	84	25	-------

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

Raritan River at Manville--Continued

Daily discharge, in cubic feet per second, 1941-55

1944-45

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	106	81	1,990	3,420	210	*2,000	652	726	444	250	1,340	383
2	*84	73	1,100	8,340	*210	1,930	652	1,070	534	*228	2,310	410
3	78	81	590	1,490	200	2,830	775	870	959	279	1,260	404
4	63	96	*490	990	190	2,660	*643	1,960	786	250	959	333
5	72	90	526	690	200	1,950	827	1,710	*1,020	218	775	302
6	63	84	503	490	210	2,570	1,030	1,280	914	1,130	*887	*291
7	91	*87	430	440	*220	3,120	669	1,040	652	545	2,420	273
8	90	90	567	530	210	2,170	590	970	558	320	1,160	262
9	78	67	1,360	510	210	1,810	566	1,130	488	262	1,280	256
10	72	108	786	390	279	1,620	526	1,530	474	267	1,290	782
11	62	281	616	370	320	1,490	510	*4,590	503	569	870	1,510
12	71	245	2,640	340	554	1,260	474	1,760	495	302	717	901
13	57	181	1,580	390	765	1,160	444	1,330	430	239	616	503
14	74	136	959	390	616	*1,050	437	1,320	430	212	574	465
15	63	115	660	*340	534	990	495	*1,020	404	276	534	1,180
16	80	185	652	290	853	982	452	970	320	495	503	686
17	69	358	526	320	1,960	959	474	982	308	339	437	503
18	66	262	440	360	1,000	859	1,680	2,050	308	790	417	1,040
19	56	212	340	340	848	786	903	2,230	333	8,820	410	4,210
20	67	191	310	310	678	828	634	1,370	721	6,370	370	1,580
21	230	2,930	290	270	558	1,280	590	1,070	657	3,600	358	1,030
22	351	4,030	290	270	1,830	2,030	608	959	1,350	1,800	339	765
23	239	*1,210	290	290	5,140	1,500	510	903	671	3,630	314	652
24	176	765	351	270	3,690	1,150	452	746	430	1,870	490	608
25	141	566	410	230	2,510	959	*673	660	437	1,260	1,720	566
26	136	437	590	200	3,500	859	2,620	599	*351	1,100	1,760	503
27	111	2,210	490	220	9,100	786	1,670	590	345	1,520	847	459
28	102	5,200	440	220	3,410	736	1,100	736	302	970	582	444
29	99	1,760	490	240		678	891	848	285	948	495	430
30	93	2,780	440	240	-------	634	796	660	267	817	444	377
31	93	-------	410	220	-------	608	-------	518	-------	697	410	-------

* Discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Dec. 3, 4, 18-23, 26-31, Jan. 3 to Feb. 9.

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	351	267	1,940	3,520	840	1,610	820	299	600	471	305	275
2	358	256	1,470	1,800	609	1,360	800	311	8,370	2,470	*293	235
3	370	256	1,250	1,390	430	1,310	889	281	9,410	*981	281	246
4	320	267	1,180	1,230	360	1,290	791	263	2,860	541	275	225
5	308	256	1,050	*1,140	420	1,170	706	281	*1,870	405	252	188
6	314	*245	1,550	1,400	455	1,070	644	293	1,490	357	252	*169
7	569	234	1,810	2,150	1,320	988	592	263	1,260	357	697	169
8	*534	234	1,330	1,800	830	1,210	541	257	1,060	305	800	178
9	488	239	1,090	1,510	583	1,380	592	257	899	269	397	174
10	566	239	*1,010	2,080	541	1,060	550	252	744	257	299	174
11	424	256	921	1,490	502	830	*471	230	715	252	293	169
12	383	452	734	1,470	455	715	448	420	1,350	246	246	136
13	377	430	688	1,360	423	688	455	2,200	1,020	257	241	132
14	358	424	725	1,080	541	653	433	715	791	252	*412	128
15	333	526	700	988	810	1,310	412	1,750	734	203	337	140
16	314	542	500	750	441	1,390	397	889	617	198	275	121
17	308	424	400	740	525	932	370	1,290	*550	183	337	*124
18	302	397	500	780	478	1,420	363	5,260	558	*174	679	121
19	296	509	520	720	*346	2,550	343	2,820	533	164	*494	118
20	273	2,350	520	500	350	*1,370	324	1,630	486	154	426	118
21	279	1,090	500	660	430	1,080	343	1,410	510	276	330	124
22	256	4,370	450	680	400	932	324	1,260	478	1,560	305	225
23	250	2,700	450	520	450	820	287	879	441	5,970	269	196
24	320	1,460	500	520	430	744	293	762	383	5,000	241	208
25	*358	1,130	520	600	400	1,000	*287	661	357	1,320	235	680
26	397	959	7,580	560	363	932	376	609	337	859	208	312
27	351	796	4,410	520	438	*3,570	412	1,370	305	626	257	219
28	320	888	2,010	420	*1,840	1,630	363	1,810	339	517	214	179
29	296	7,300	2,040	480		1,210	311	1,010	617	441	263	168
30	262	3,510	2,400	*480	-------	1,130	311	810	800	376	*781	208
31	267	-------	4,290	954	-------	986	-------	688	-------	324	370	-------

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 15-25, Jan. 16-30, Feb. 3-5, 20-25.

Raritan River at Manville--Continued

Daily discharge, in cubic feet per second, 1941-55

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	262	158	144	256	873	280	513	4,160	834	432	243	198
2	179	149	121	185	708	344	844	1,790	738	543	214	438
3	158	153	70	299	560	1,070	2,720	1,320	692	*455	214	366
4	158	153	149	358	560	980	*1,210	2,080	*611	380	209	237
5	153	140	93	280	380	780	3,700	*2,940	560	324	203	273
6	158	*111	*118	330	390	1,040	3,860	3,840	527	305	203	260
7	*136	124	124	230	400	1,540	1,840	1,930	728	279	*158	254
8	128	140	132	306	390	1,380	1,390	1,550	2,490	595	163	298
9	124	163	128	237	350	988	1,320	1,250	2,360	646	264	249
10	149	158	124	*210	380	*963	1,200	1,110	1,140	603	620	209
11	191	144	128	225	370	988	987	986	895	543	366	203
12	174	168	124	299	330	973	931	874	747	417	249	*193
13	414	208	144	380	330	1,010	818	795	637	373	209	163
14	325	163	153	428	*310	3,930	740	710	893	588	198	158
15	214	144	136	817	372	2,850	740	719	2,200	478	183	149
16	179	132	114	1,720	414	1,730	740	664	1,030	673	203	198
17	168	153	124	1,360	420	1,350	1,070	620	786	628	1,320	232
18	163	163	118	925	390	1,100	*759	710	738	*646	551	168
19	225	158	105	717	360	931	649	805	776	510	331	153
20	225	144	*87	2,760	230	848	605	1,880	*754	637	1,430	149
21	179	132	526	2,960	158	778	614	1,550	1,430	519	886	163
22	158	158	1,120	990	380	740	848	*2,290	824	1,180	*447	178
23	153	168	520	730	380	740	631	1,890	664	967	331	273
24	153	168	407	862	320	684	546	1,230	551	568	286	198
25	*149	144	358	774	*300	*1,310	538	1,640	560	447	249	178
26	153	132	292	662	320	1,130	622	3,720	527	394	226	*173
27	262	163	225	*1,360	310	759	605	1,620	486	373	266	145
28	219	185	262	935	300	684	546	1,230	440	331	237	140
29	185	168	286	754		649	505	1,120	409	324	214	132
30	168	149	393	671	-------	622	474	1,710	409	292	198	132
31	158	-------	292	990	-------	546	-------	1,010	-------	266	203	-------

* 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	132	462	432	420	295	a2,180	4,510	585	1,300	985	280	182
2	119	305	409	1,580	295	a2,180	3,460	560	*1,040	798	310	173
3	*124	*249	*424	1,500	295	*3,340	2,140	637	876	696	568	*160
4	132	1,250	424	1,000	*275	*2,550	1,620	*757	779	618	*635	156
5	140	1,480	417	885	265	1,640	1,420	898	723	551	524	164
6	128	814	440	757	275	1,320	*1,280	1,440	661	567	723	160
7	115	603	417	692	275	1,480	1,200	2,040	609	576	474	151
8	111	3,730	440	640	275	1,680	1,060	2,560	798	481	368	147
9	111	5,090	462	620	275	1,480	1,000	1,320	643	*415	298	164
10	104	1,380	373	719	265	2,180	885	1,040	567	381	280	225
11	104	1,000	373	540	255	2,120	874	885	520	361	252	274
12	119	*6,610	359	580	266	1,580	2,060	786	489	323	489	215
13	94	2,220	324	701	286	1,360	1,620	5,880	948	329	695	177
14	124	1,140	275	925	432	1,180	1,960	6,920	741	1,180	401	147
15	108	905	275	680	1,640	1,160	3,190	3,160	567	512	310	134
16	94	824	1,300	540	1,100	2,000	1,920	2,540	543	381	258	123
17	97	701	943	527	1,390	2,540	1,600	3,920	504	348	236	115
18	104	611	628	551	3,920	1,780	1,300	2,680	452	361	230	119
19	97	560	527	405	a5,780	1,600	1,160	1,900	1,350	726	220	138
20	97	502	416	415	a6,380	2,080	1,080	1,560	4,850	437	282	134
21	128	478	435	424	a3,780	1,540	1,020	1,380	1,540	348	1,330	123
22	108	447	425	510	a1,980	1,480	915	1,240	995	926	661	115
23	97	637	424	*465	a1,480	1,360	824	1,100	1,120	1,120	813	104
24	94	692	355	435	a1,180	1,720	795	967	1,200	760	466	100
25	97	1,420	295	455	a1,280	1,300	834	1,100	3,210	536	395	96
26	101	805	273	405	a2,380	1,120	824	995	1,320	408	335	96
27	101	655	305	385	a1,980	1,310	719	856	1,300	368	286	96
28	104	594	424	365	a4,180	2,660	682	798	1,780	348	247	96
29	470	551	400	345	a3,180	1,560	646	732	3,300	310	247	100
30	447	494	360	325	-------	1,300	628	3,000	1,300	286	215	119
31	462	-------	380	305	-------	1,140	-------	2,100	-------	252	196	-------

* 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.

Raritan River at Manville--Continued

Daily discharge, in cubic feet per second, 1941-55

1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	219	119	430	*5,480	1,460	1,120	a880	595	381	108	a70	126
2	215	111	341	2,620	1,240	*1,020	980	611	*347	105	*54	105
3	168	107	*304	1,880	1,020	985	706	3,090	314	105	56	89
4	134	258	388	1,500	1,100	968	654	1,460	289	102	83	98
5	126	350	381	2,040	1,220	1,080	587	985	277	102	137	105
6	126	225	329	*9,800	1,140	1,360	1,750	834	264	102	126	787
7	126	286	298	3,350	1,710	1,140	*1,300	1,450	241	102	105	208
8	126	388	280	2,300	2,050	919	949	959	219	108	83	114
9	130	230	252	1,800	*1,540	862	881	742	197	111	70	89
10	134	201	242	1,540	1,560	815	815	733	192	111	63	83
11	*134	236	230	1,340	1,260	929	760	742	192	a115	54	75
12	123	242	225	1,200	1,020	1,020	706	*620	192	a125	65	75
13	119	206	225	1,120	1,040	815	672	538	187	a125	89	65
14	111	187	211	1,020	1,240	733	834	515	178	a255	111	122
15	107	*168	201	910	1,200	706	760	571	173	a165	130	168
16	111	156	269	852	1,220	646	680	484	173	a185	95	163
17	123	143	692	834	1,460	620	637	446	168	a185	92	137
18	134	147	866	778	1,100	629	646	410	163	*252	118	105
19	134	147	541	769	1,000	595	2,160	395	168	219	102	89
20	134	344	466	760	2,130	571	1,240	479	178	182	108	89
21	130	528	b500	724	1,540	604	978	815	173	141	92	98
22	115	310	b455	4,760	1,520	706	954	563	163	118	83	86
23	130	292	497	2,240	3,690	2,560	2,280	1,370	137	111	65	92
24	134	317	b385	2,700	1,820	1,620	1,380	815	122	98	56	118
25	156	274	b335	2,120	1,480	1,060	1,000	1,100	122	95	56	105
26	143	236	b385	1,710	1,320	959	890	715	114	92	58	86
27	134	206	b305	2,400	1,100	a880	815	706	114	89	65	81
28	126	230	317	*4,790	1,080	a780	724	579	114	86	75	61
29	115	454	338	2,940		a680	637	492	114	83	98	*114
30	123	661	8,660	1,720	-------	a580	620	454	111	83	173	347
31	126	-------	*18,200	1,460	-------	a580	-------	410	-------	a80	158	-------

* 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	236	*202	126	395	881	461	978	843	961	153	118	381
2	145	163	122	347	1,880	388	910	824	1,530	158	111	192
3	102	114	111	340	1,860	b310	824	733	824	153	198	173
4	89	95	102	374	968	b340	910	*680	1,320	208	388	295
5	83	92	95	334	742	b360	824	689	1,010	258	197	*208
6	81	95	78	301	646	374	742	689	715	*258	149	134
7	75	86	86	403	689	308	646	620	579	241	145	105
8	81	83	81	432	530	354	604	476	500	182	118	95
9	86	78	65	261	1,160	1,370	563	446	424	149	111	86
10	89	78	68	468	1,660	645	523	454	395	379	114	102
11	86	78	118	1,100	1,200	538	500	403	361	715	118	149
12	86	78	149	612	949	579	507	381	327	689	145	141
13	83	86	604	530	843	911	469	368	289	439	145	137
14	78	92	836	571	2,470	929	454	354	283	359	114	213
15	81	114	417	476	*5,580	680	439	*334	388	395	*105	*192
16	89	*122	*224	*410	3,370	595	424	410	417	295	89	137
17	83	98	b188	340	1,900	*546	*381	334	538	*289	86	114
18	*81	89	219	361	1,390	554	368	518	361	258	86	98
19	73	92	301	395	1,170	469	361	1,010	295	202	92	92
20	65	98	368	268	910	446	560	733	*289	182	628	98
21	75	95	282	277	595	812	778	571	301	149	439	105
22	54	89	247	270	724	1,280	538	417	264	141	197	130
23	73	86	236	277	715	6,450	461	388	224	137	141	111
24	68	86	347	270	697	2,970	507	515	208	126	114	108
25	58	95	295	277	689	1,580	563	538	299	137	102	105
26	102	95	252	277	500	1,240	563	446	327	145	89	89
27	163	105	2,770	*289	439	2,010	612	410	213	130	86	86
28	118	92	1,760	308	*b440	1,940	680	347	178	118	81	105
29	92	*105	881	381		*1,680	663	822	158	122	73	89
30	89	108	*595	523	-------	1,430	595	1,120	153	137	388	89
31	118	-------	424	724	-------	1,090	-------	*672	-------	*130	546	-------

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

Raritan River at Manville--Continued

Daily discharge, in cubic feet per second, 1941-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	98	105	755	626	906	*940	3,210	665	435	1,160	824	229
2	102	105	650	468	2,810	1,060	2,420	566	368	791	665	225
3	81	*105	634	461	1,090	958	3,500	537	379	481	551	284
4	92	118	1,780	714	850	2,410	2,780	495	429	391	515	259
5	95	968	3,420	859	824	1,990	2,040	474	772	1,130	448	211
6	*70	571	*1,460	558	789	1,450	*1,690	468	515	717	391	203
7	86	314	1,110	558	3,020	1,210	1,450	429	*379	454	368	295
8	98	264	8,940	784	4,900	1,070	1,310	410	333	385	435	306
9	118	219	3,770	458	1,280	940	1,190	397	295	333	422	229
10	224	192	1,900	b445	958	815	1,130	362	a335	290	730	198
11	247	158	1,690	468	850	747	1,240	379	a405	274	2,130	194
12	230	134	1,370	454	841	714	1,060	755	a335	279	1,230	198
13	219	141	1,070	414	904	673	2,640	522	a295	385	2,170	229
14	173	126	913	398	1,120	1,140	1,420	404	a820	290	822	173
15	149	122	824	5,990	*815	*1,360	1,180	362	a980	259	618	422
16	126	*122	1,130	*2,160	665	976	1,050	339	a680	229	1,060	441
17	105	126	931	976	1,010	832	1,070	*328	a500	313	1,560	254
18	*98	126	730	832	2,320	755	913	306	397	425	818	207
19	95	126	578	764	1,150	706	850	295	339	515	595	198
20	86	126	527	730	1,260	3,500	798	301	311	880	*833	*194
21	89	241	b465	722	3,070	2,120	714	311	284	443	588	173
22	95	320	b440	588	5,530	1,430	681	301	284	333	502	169
23	126	236	b490	468	2,540	1,160	1,290	328	347	*391	429	173
24	241	187	b465	1,930	1,520	1,060	984	1,100	537	339	379	166
25	197	2,400	b415	1,900	1,240	990	772	706	328	284	356	162
26	145	11,100	b290	1,070	1,140	824	714	429	254	264	356	173
27	130	2,150	b290	824	1,120	739	650	410	266	229	333	162
28	105	1,300	b340	764	1,010	698	618	508	*574	4,650	295	158
29	114	1,060	416	807		1,250	634	739	451	4,880	279	207
30	111	859	781	*781	-------	5,040	824	1,160	764	1,510	259	173
31		-------	798	422	-------	9,420	-------	595	-------	1,020	*234	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for other stations in Raritan River basin.
b Stage-discharge relation affected by ice.

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	158	2,600	698	1,340	1,380	577	810	1,640	6,740	273	188	3,620
2	170	1,900	657	1,740	1,440	554	775	1,380	*6,470	246	183	4,820
3	218	5,090	616	2,360	1,420	561	793	1,180	2,510	231	284	3,590
4	202	3,220	600	1,630	4,940	600	706	1,060	1,760	301	231	1,830
5	170	1,640	1,860	1,580	3,510	2,130	1,780	937	2,220	301	192	1,130
6	158	1,180	2,310	1,590	2,200	1,560	3,080	900	1,460	252	554	855
7	284	8,520	1,340	1,150	1,750	1,070	1,580	810	1,170	216	1,080	740
8	1,860	9,280	1,120	956	1,500	937	1,300	723	984	241	399	600
9	539	2,590	1,000	937	1,390	900	1,160	706	984	2,270	418	517
10	319	1,850	900	993	1,220	864	1,050	657	1,180	4,250	1,280	466
11	*828	1,510	801	984	1,220	6,500	965	732	864	1,340	984	432
12	1,620	1,260	758	801	1,190	7,790	882	2,210	723	784	502	386
13	616	1,100	715	775	956	2,530	864	1,390	673	624	418	a340
14	494	1,120	*600	801	819	1,920	2,320	909	616	502	373	a320
15	399	2,020	1,280	928	828	1,480	2,660	810	569	*432	290	a350
16	360	2,030	1,080	*1,010	793	1,300	2,570	740	531	380	354	a390
17	336	2,030	611	837	1,010	1,120	1,650	640	494	348	593	a320
18	273	1,360	1,100	1,800	1,180	1,010	1,380	775	432	307	494	a300
19	252	1,120	2,440	1,220	919	1,760	1,170	723	412	313	313	a570
20	252	*956	1,540	1,140	793	2,620	1,070	980	432	301	263	a630
21	212	846	12,600	1,020	810	1,770	956	1,330	399	373	268	a400
22	207	793	7,150	971	828	1,430	864	837	425	556	1,870	a340
23	207	775	2,560	3,530	723	2,110	855	*690	459	319	608	a350
24	216	784	1,890	1,750	706	2,340	*766	585	577	263	392	360
25	1,000	766	1,600	1,260	657	1,980	859	4,720	459	231	313	324
26	569	1,570	2,250	3,870	632	1,480	1,990	5,950	380	207	268	290
27	392	1,210	1,730	3,900	616	*1,280	3,160	2,360	336	207	252	279
28	487	864	1,170	3,670	600	1,130	8,150	1,530	319	216	231	263
29	600	801	1,100	2,860	577	1,020	4,200	1,430	324	252	226	241
30	412	758	1,110	1,750	-------	956	2,420	1,520	*307	236	221	236
31	373	-------	1,310	1,510	-------	864	-------	1,670	-------	207	226	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for station at Bound Brook and Millstone River at Blackwells Mills.

Raritan River at Manville--Continued

Daily discharge, in cubic feet per second, 1941-55

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	254	166	586	618	1,210	666	895	1,060	690	184	118	65
2	249	166	546	578	988	610	904	1,080	602	193	118	53
3	358	162	586	1,120	904	594	842	886	498	223	153	55
4	313	157	k570	1,220	868	k4,190	786	786	443	198	141	57
5	254	153	k3,110	826	786	k2,180	956	859	428	175	122	83
6	238	153	6,190	714	746	1,240	802	964	392	208	122	115
7	228	149	1,860	626	802	1,070	k6,240	931	400	375	112	157
8	218	145	1,300	618	913	964	k6,380	1,190	428	198	105	108
9	207	149	1,090	k2,750	770	886	2,370	980	378	166	137	83
10	207	153	980	k5,440	682	834	2,950	886	352	153	1,130	76
11	212	153	k5,000	k4,160	634	738	2,780	754	*284	130	358	70
12	218	149	k4,210	k2,490	*674	*770	1,770	682	284	141	202	73
13	202	145	1,770	1,490	770	k6,300	2,600	682	378	134	157	86
14	198	141	1,400	1,240	674	k3,700	3,280	1,040	818	126	157	76
15	193	149	1,180	1,190	a1,690	k3,100	1,750	802	450	134	157	73
16	180	272	1,040	1,130	a2,390	k7,470	3,080	754	346	122	134	83
17	170	289	948	1,040	a1,190	k2,620	2,620	818	307	102	118	112
18	162	198	868	1,670	a890	1,740	1,690	1,510	284	105	122	83
19	166	184	794	*1,590	a840	3,140	2,910	*802	266	99	130	78
20	157	*207	730	1,180	a790	2,100	*1,850	698	249	112	105	73
21	141	2,730	834	1,180	a2,190	1,480	1,490	634	228	*188	99	81
22	153	k8,180	2,340	1,790	a1,890	1,280	1,260	658	348	166	99	*81
23	166	k4,760	*1,340	1,240	1,060	1,150	1,150	k3,530	572	345	99	78
24	175	1,800	1,070	k5,600	956	2,240	1,040	1,330	289	612	96	76
25	175	1,260	956	k7,880	904	2,400	964	940	233	228	86	70
26	175	1,020	868	k2,520	842	1,690	1,000	980	223	145	86	57
27	*166	895	802	1,750	786	1,460	1,120	1,020	212	134	86	65
28	166	770	609	1,800	730	1,270	940	770	193	145	86	73
29	175	682	618	1,580	-------	1,170	826	626	233	153	78	65
30	180	642	666	1,240	-------	1,040	770	626	228	141	81	70
31	170	-------	618	1,120	-------	964	-------	794	-------	130	*73	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for station at Bound Brook and Millstone River at Blackwells Mills.
k Computed by using fall as a factor with station at Bound Brook as auxiliary gage.

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	68	175	118	207	b320	742	490	385	272	83	63	k1,630
2	108	*138	112	228	358	k2,560	458	421	249	81	55	490
3	112	115	105	223	339	k2,170	443	466	233	105	196	320
4	108	99	102	207	378	k3,350	392	k2,130	198	102	463	238
5	83	89	244	188	358	1,330	378	1,110	218	145	157	188
6	63	81	295	244	313	1,020	378	786	207	126	99	141
7	73	149	k2,710	*254	284	886	421	666	175	102	83	115
8	73	228	1,060	162	223	810	458	1,330	170	99	83	105
9	63	193	626	193	260	722	421	1,210	166	99	232	118
10	47	175	k2,290	233	254	690	352	940	162	92	575	108
11	53	162	1,170	130	249	610	346	886	198	86	223	k2,390
12	57	145	722	166	198	538	*428	730	188	76	130	1,200
13	49	141	1,290	b200	188	562	400	626	207	70	96	458
14	49	138	k5,680	b190	198	1,420	332	546	244	65	83	313
15	51	134	k2,650	188	212	1,210	313	514	193	81	86	244
16	51	122	1,150	223	228	818	339	458	170	112	89	238
17	57	108	818	254	760	690	1,300	421	170	99	83	927
18	63	105	530	b220	1,020	610	1,550	414	145	83	68	674
19	60	99	546	149	618	546	810	378	145	73	70	594
20	*60	86	490	188	506	k2,170	642	*372	138	73	368	850
21	60	96	421	500	514	1,330	546	k1,450	115	70	326	586
22	63	96	*421	1,360	850	904	482	1,300	108	73	407	*498
23	63	138	414	850	*690	786	458	730	105	63	218	414
24	70	326	346	690	570	706	466	578	*202	45	138	307
25	86	244	249	482	610	762	428	498	138	57	*102	254
26	118	266	289	498	602	1,110	392	436	112	*73	96	244
27	115	244	272	b690	834	778	414	358	105	102	96	233
28	217	184	233	b890	642	682	642	339	92	63	99	202
29	474	149	266	b640	-------	618	578	352	81	55	99	175
30	658	134	284	b490	-------	570	450	372	83	53	78	166
31	278	-------	266	b390	-------	530	-------	358	-------	55	k2,170	-------

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
k Computed by using fall as a factor with station at Bound Brook as auxiliary gage.

Raritan River at Manville--Continued

Daily discharge, in cubic feet per second, 1941-55

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	162	346	868	1,170	207	1,080	730	538	254	118	47	490
2	157	346	762	1,330	b230	1,290	682	450	166	78	43	428
3	166	*1,080	682	1,210	b200	886	666	400	149	76	41	365
4	170	826	610	956	b180	*2,120	626	378	138	78	*39	358
5	162	674	570	842	b210	1,730	578	365	175	76	33	320
6	223	610	453	940	b300	2,190	530	*332	153	96	28	307
7	223	530	b300	*956	a8,000	2,720	*586	307	145	*76	63	295
8	162	392	b400	714	1,720	1,260	530	307	118	78	578	254
9	141	372	474	674	859	1,140	466	307	166	65	157	233
10	157	301	*1,020	642	738	1,090	450	301	184	73	73	233
11	166	254	690	594	*b1,600	956	428	272	157	105	191	233
12	145	266	546	514	1,850	850	474	254	326	76	k3,780	233
13	138	238	514	538	770	802	786	228	301	68	*k7,400	223
14	130	254	857	428	786	714	626	212	*202	63	k9,100	198
15	*122	202	2,280	b470	722	666	618	207	157	60	k2,300	198
16	138	207	1,210	b450	674	746	546	184	138	57	k1,050	202
17	162	207	913	b410	1,630	690	506	180	126	63	843	207
18	141	218	2,050	b350	1,360	626	450	170	118	63	k2,280	212
19	130	223	2,420	b390	826	666	436	157	118	51	*k21,300	207
20	138	563	1,210	b330	730	658	842	153	407	47	k7,460	266
21	134	k8,520	850	b300	690	706	714	145	238	55	2,490	238
22	134	k5,480	b600	378	682	k3,910	754	141	223	51	2,430	193
23	138	k1,740	b700	372	1,550	k3,900	674	141	162	53	1,500	198
24	134	1,280	730	326	1,510	1,570	570	175	184	55	1,110	360
25	118	1,170	618	301	964	1,270	530	223	202	60	934	602
26	112	948	490	b300	842	1,550	570	175	198	49	814	313
27	126	794	498	b280	794	1,440	578	153	157	47	730	254
28	141	706	482	b200	794	1,030	506	138	134	45	666	437
29	352	2,050	626	b220	-------	940	530	149	122	41	586	490
30	714	1,170	3,680	b210	-------	859	690	188	96	45	530	313
31	474	-------	1,860	b200	-------	778	-------	193	-------	51	506	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for station at Bound Brook and Millstone River at Blackwells Mills.
b Stage-discharge relation affected by ice.
k Computed by using fall as a factor with station at Bound Brook as auxiliary gage.

Monthly and annual discharge, in cubic feet per second, 1941-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1941	2,008	108	39	64.8		
November	4,702	569	90	157		
December	15,556	5,060	83	502		
Calendar year 1941	170,796	10,500	38	468		
January 1942	14,419	1,820	162	465		
February	26,045	3,400	299	930		
March	47,420	5,440	306	1,530		
April	20,338	1,870	311	678		
May	9,702	744	178	313		
June	6,046	432	122	202		
July	9,967	2,530	86	322		
August	74,340	13,500	203	2,398		
September	26,250	4,760	272	875		
Water year 1941-42	256,793	13,500	39	704		
October 1942	23,558	2,680	391	760		
November	31,553	4,640	457	1,052		
December	49,333	8,360	380	1,591		
Calendar year 1942	338,971	13,500	86	929		
January 1943	27,477	3,060	391	886		
February	43,844	3,950	506	1,566		
March	38,087	4,170	587	1,229		
April	17,912	1,560	330	597		
May	35,499	5,380	330	1,145		
June	16,298	1,490	186	543		
July	11,881	997	181	383		
August	5,487	400	94	177		
September	3,276	277	53	109		
Water year 1942-43	304,205	8,360	53	833		

Raritan River at Manville--Continued

Monthly and annual discharge, in cubic feet per second, 1941-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1943	13,528	2,690	60	436		
November	27,728	8,160	315	924		
December	9,554	2,330	140	308		
Calendar year 1943	250,571	8,160	53	686		
January 1944	35,073	12,100	265	1,131		
February	22,226	3,770	195	766		
March	57,326	8,070	315	1,849		
April	50,363	10,200	608	1,679		
May	18,287	1,240	257	590		
June	11,923	1,900	191	397		
July	3,478	186	62	112		
August	1,772	108	25	57.2		
September	6,977	2,750	28	233		
Water year 1943-44	258,235	12,100	25	706		
October 1944	3,233	351	56	104		
November	24,911	5,200	67	830		
December	21,556	2,640	290	695		
Calendar year 1944	257,125	12,100	25	703		
January 1945	23,410	8,340	200	755		
February	40,005	9,100	190	1,429		
March	44,244	3,120	608	1,427		
April	23,343	2,620	437	778		
May	38,197	4,590	518	1,232		
June	16,176	1,350	267	539		
July	40,373	8,820	212	1,302		
August	26,888	2,420	314	867		
September	22,108	4,210	256	737		
Water year 1944-45	324,444	9,100	56	889		
October 1945	10,902	569	250	352		
November	33,006	7,300	234	1,100		
December	45,038	7,580	400	1,453		
Calendar year 1945	363,690	9,100	190	996		
January 1946	34,292	3,520	420	1,106		
February	16,020	1,840	346	572		
March	38,320	3,570	653	1,236		
April	14,248	889	287	475		
May	31,230	5,260	230	1,007		
June	40,484	9,410	305	1,349		
July	25,765	5,970	154	831		
August	11,064	800	208	357		
September	5,859	680	118	195		
Water year 1945-46	306,228	9,410	118	839		
October 1946	5,820	414	124	188		
November	4,593	208	111	153		
December	7,117	1,120	70	230		
Calendar year 1946	234,812	9,410	70	643		
January 1947	24,010	2,960	185	775		
February	10,985	873	158	392		
March	33,717	3,930	280	1,088		
April	32,565	3,860	474	1,086		
May	49,743	4,160	620	1,605		
June	26,436	2,490	409	881		
July	15,716	1,180	266	507		
August	11,074	1,430	158	357		
September	6,260	438	132	209		
Water year 1946-47	288,036	4,160	70	625		
October 1947	4,463	470	94	144		
November	37,209	6,610	249	1,240		
December	13,734	1,300	273	433		
Calendar year 1947	265,912	6,610	94	729		
January 1948	19,096	1,580	305	616		
February	45,669	6,380	255	1,575		
March	53,920	3,340	1,120	1,739		
April	43,226	4,510	628	1,441		
May	56,336	6,920	560	1,817		
June	36,025	4,850	452	1,201		
July	16,688	1,180	252	538		
August	13,024	1,330	196	420		
September	4,303	274	96	143		
Water year 1947-48	343,693	6,920	94	939		

Raritan River at Manville--Continued

Monthly and annual discharge, in cubic feet per second, 1941-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1948	4,166	219	107	134		
November	7,759	661	107	259		
December	37,548	18,200	201	1,211		
Calendar year 1948	337,760	18,200	96	923		
January 1949	69,457	9,800	724	2,241		
February	40,260	3,690	1,000	1,438		
March	28,542	2,560	571	921		
April	28,875	2,280	587	962		
May	24,678	3,090	395	796		
June	5,777	381	111	193		
July	3,940	255	80	127		
August	2,790	173	54	90.0		
September	4,080	787	61	136		
Water year 1948-49	257,872	18,200	54	706		
October 1949	2,882	236	54	93.0		
November	2,989	202	78	99.6		
December	12,448	2,770	65	402		
Calendar year 1949	226,718	9,800	54	621		
January 1950	12,591	1,100	261	406		
February	35,597	5,580	439	1,271		
March	33,639	6,450	308	1,085		
April	17,947	978	361	598		
May	17,545	1,120	334	566		
June	14,131	1,530	153	471		
July	7,434	715	118	240		
August	5,513	628	73	178		
September	4,159	381	86	139		
Water year 1949-50	166,875	6,450	54	457		
October 1950	4,047	247	70	131		
November	24,121	11,100	105	804		
December	39,372	8,940	290	1,270		
Calendar year 1950	216,096	11,100	70	592		
January 1951	29,393	5,990	398	948		
February	45,532	5,530	665	1,626		
March	48,977	9,420	673	1,580		
April	40,822	3,500	618	1,361		
May	15,381	1,160	295	496		
June	13,391	980	254	446		
July	24,324	4,880	229	785		
August	21,195	2,170	234	684		
September	6,665	441	158	222		
Water year 1950-51	313,220	11,100	70	858		
October 1951	14,181	1,860	158	457		
November	61,543	9,280	758	2,051		
December	56,496	12,600	600	1,822		
Calendar year 1951	377,900	12,600	158	1,035		
January 1952	50,663	3,900	775	1,634		
February	36,607	4,940	577	1,262		
March	54,143	7,790	554	1,747		
April	52,785	8,150	706	1,760		
May	42,524	5,950	585	1,372		
June	35,209	6,740	307	1,174		
July	16,979	4,250	207	548		
August	14,268	1,870	183	460		
September	25,289	4,820	236	843		
Water year 1951-52	460,687	12,600	158	1,259		
October 1952	6,226	358	141	201		
November	26,179	8,180	141	873		
December	45,479	6,190	546	1,467		
Calendar year 1952	406,351	8,180	141	1,110		
January 1953	59,390	7,880	578	1,916		
February	28,569	2,390	634	1,020		
March	61,056	7,470	594	1,970		
April	58,015	6,380	770	1,934		
May	30,072	3,530	626	970		
June	11,036	818	193	368		
July	5,665	612	99	183		
August	4,867	1,130	73	157		
September	2,375	157	53	79.2		
Water year 1952-53	338,929	8,180	53	929		

Raritan River at Manville--Continued

Monthly and annual discharge, in cubic feet per second, 1941-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1953	3,550	658	47	115		
November	4,559	326	81	152		
December	26,169	5,680	102	844		
Calendar year 1953	295,323	7,880	47	809		
January 1954	11,527	1,360	130	372		
February	12,576	1,020	188	449		
March	32,230	3,350	530	1,040		
April	15,507	1,550	313	517		
May	21,560	2,130	339	695		
June	4,989	272	81	166		
July	2,561	145	45	82.6		
August	7,131	2,170	55	230		
September	14,420	2,390	105	481		
Water year 1953-54	156,779	5,680	45	430		
October 1954	5,710	714	112	184		
November	31,967	8,520	202	1,066		
December	29,963	3,680	300	967		
Calendar year 1954	190,069	8,520	59	521		
January 1955	16,995	1,330	200	548		
February	31,418	8,000	180	1,122		
March	40,833	3,910	626	1,317		
April	17,672	842	428	589		
May	7,523	538	138	243		
June	5,414	407	96	180		
July	2,019	118	41	65.1		
August	79,102	21,300	28	2,552		
September	8,860	802	193	295		
Water year 1954-55	277,476	21,300	28	760		

Stony Brook at Princeton

Location.--Lat 41°19'59", long 74°40'56", on right bank 12 ft downstream from bridge on U. S. Highway 206, 4 miles upstream from Lake Carnegie, and 1.6 miles southwest of Princeton, Mercer County.

Drainage area.--44.5 sq mi.

Records available.--October 1953 to September 1955.

Gage.--Water-stage recorder and concrete control. Datum of gage is 63.30 ft above mean sea level (New Jersey Geological Survey bench mark).

Extremes.--1954-55: Maximum discharge, 5,130 cfs Aug. 13, 1955 (gage height, 11.90 ft); minimum, 0.02 cfs Aug. 5, 1955 (gage height, 1.05 ft).

Peak discharge (base, 1,800 cfs).--
1953-54: Dec. 14 (time unknown) 3,000 cfs (8.66 ft); Mar. 3 (7:30 p.m.) 2,120 cfs (7.10 ft).
1954-55: Nov. 21 (1 p.m.) 2,930 cfs (8.55 ft); Feb. 7 (3:30 a.m.) 2,210 cfs (7.28 ft); Mar. 22 (1:30 p.m.) 1,840 cfs (6.57 ft); Aug. 13 (11 a.m.) 5,130 cfs (11.90 ft); Aug. 19 (5:30 a.m.) 4,790 cfs (11.42 ft); Aug. 22 (2 a.m.) 2,180 cfs (7.22 ft).

Daily discharge, in cubic feet per second, 1953-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.3	4.0	5.2	12	20	236	37	25	11	1.7	0.15	24
2	.2	3.5	4.8	12	*22	257	31	22	*9.8	1.8	.11	7.2
3	.2	3	4.6	12	23	573	29	24	8.3	1.5	2.1	5.0
4	.2	2.5	4.5	11	25	*280	24	143	7.2	1.3	.70	3.8
5	.25	2.5	25	10	22	110	22	56	6.3	1.5	.66	2.9
6	.3	2.5	15	19	20	76	23	35	5.5	1.2	1.4	2.1
7	.35	5	300	16	17	63	26	26	5.2	.84	.91	1.9
8	.45	10	60	*11	15	57	69	93	4.5	.84	.84	11
9	.4	9	45	11	16	51	80	101	4.2	.77	74	5.5
10	.4	8	250	11	16	48	37	71	4.0	.58	49	4.7
11	.35	7	70	5.3	15	39	30	57	4.6	.52	10	562
12	.3	6	60	12	8.8	35	32	40	5.2	*.52	*5.7	66
13	.25	5.5	150	13	10	52	26	30	11	.38	3.8	28
14	.25	5	1,000	9.4	9.8	320	22	25	8.4	.30	2.5	18
15	.25	4.5	160	10	11	137	21	22	6.0	.38	1.7	15
16	.25	4	*82	16	13	73	26	19	6.0	.42	1.4	19
17	.25	3.8	54	26	79	*57	341	17	5.0	.27	.99	65
18	.25	3.7	33	18	75	48	201	16	4.2	.21	.77	36
19	.25	3.6	31	16	38	43	84	13	3.4	.18	.77	27
20	.25	3.5	29	18	30	189	59	14	2.9	.21	.91	26
21	.25	3.5	26	b300	44	84	47	477	2.2	.18	3.0	22
22	.25	3.5	27	135	103	55	39	150	2.1	.18	2.1	28
23	.25	7	27	47	52	47	35	66	2.1	.15	1.6	17
24	.25	8	20	47	42	40	34	56	2.2	.13	1.6	13
25	.3	7	17	40	77	121	30	36	2.1	.21	1.3	12
26	.4	12	17	45	66	152	26	30	2.2	.24	1.5	11
27	1.2	9	16	63	70	70	31	23	1.8	.21	1.4	9.8
28	20	7	15	78	50	55	60	21	1.6	.18	.91	7.9
29	35	6	16	34	-------	48	49	18	1.6	.18	.91	6.9
30	15	5.5	16	31	-------	43	31	17	1.7	.15	.77	6.3
31	5.5	-------	14	24	-------	39	-------	13	-------	.17	31	-------

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Oct. 1 to Dec. 15, discharge estimated.

Stony Brook at Princeton--Continued

Daily discharge, in cubic feet per second, 1953-55
1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.5	18	63	82	5.5	90	44	39	27	3.6	0.07	19
2	6.0	22	54	130	5.7	92	39	28	12	3.1	.05	16
3	9.4	89	44	93	a5.5	55	36	23	6.9	2.9	.04	14
4	8.3	44	38	70	a5.7	*302	33	22	5.2	2.5	.03	12
5	5.9	34	35	55	a6.0	147	34	21	11	2.4	.41	10
6	16	30	26	66	a60	412	27	17	23	2.0	1.2	12
7	17	24	22	*62	841	254	27	13	8.6	2.1	18	12
8	9.0	20	23	42	82	108	23	12	6.4	1.8	63	8.3
9	7.2	18	37	37	46	94	20	12	65	1.7	18	6.3
10	6.6	16	94	37	37	82	23	9.8	30	1.7	8.6	5.7
11	6.0	14	48	32	327	68	18	9.4	17	1.7	9.4	5.7
12	5.5	14	33	26	160	57	70	8.6	42	1.2	406	6.6
13	4.7	13	30	28	58	51	141	7.2	31	.99	*2530	5.2
14	4.5	12	128	21	46	43	68	6.6	16	.91	404	4.7
15	3.8	12	210	24	43	42	78	5.7	12	.84	76	4.5
16	3.8	11	94	20	48	60	55	5.0	8.6	.70	81	4.2
17	4.0	12	60	18	175	48	39	4.2	6.3	.58	84	3.8
18	4.5	12	344	16	91	44	34	3.8	4.7	.64	498	3.8
19	4.7	12	181	17	55	50	32	3.4	4.2	.34	*1,970	3.6
20	3.6	83	88	11	47	47	61	3.1	86	.27	146	3.4
21	3.2	1,500	55	13	46	74	52	4.5	24	.24	118	2.7
22	3.2	232	39	13	47	*1,060	52	3.8	12	.24	630	2.7
23	3.1	113	39	13	198	379	44	3.6	8.3	.21	124	2.5
24	2.9	88	38	12	118	138	32	4.0	7.2	.15	68	6.6
25	2.9	78	32	10	*74	96	30	3.4	7.2	.13	50	14
26	2.7	57	26	10	60	238	34	3.4	8.3	.09	37	6.6
27	3.2	48	29	9.8	57	123	34	*3.2	6.9	.07	17	4.2
28	3.8	44	26	6.5	57	80	28	2.9	5.0	.09	26	11
29	55	297	58	7.6	-------	66	31	4.1	3.8	.13	21	11
30	46	92	461	5.5	-------	57	62	18	3.6	.09	20	6.3
31	31	-------	126	4.7	-------	50	-------	13	-------	.07	19	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated.

Monthly and annual discharge, in cubic feet per second, 1953-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1953	84.10	35	0.2	2.71	0.061	0.07
November	165.1	12	2.5	5.50	.124	.14
December	2,594.1	1,000	4.5	83.7	1.88	2.17
Calendar year						
January 1954	1,112.7	300	5.3	35.9	.807	.93
February	989.6	103	8.8	35.3	.793	.83
March	3,498	573	35	113	2.54	2.92
April	1,602	341	21	53.4	1.20	1.34
May	1,756	477	13	56.6	1.27	1.47
June	142.3	11	1.6	4.74	.107	.12
July	17.40	1.8	.13	.561	.13	.01
August	204.50	74	.11	6.60	.148	.17
September	1,064.0	562	1.9	35.5	.798	.89
Water year 1953-54	13,229.8	1,000	.11	36.2	.813	11.06
October 1954	293.0	55	2.7	9.45	.212	.24
November	3,059	1,500	11	102	2.29	2.56
December	2,581	461	22	83.3	1.87	2.16
Calendar year 1954	16,319.50	1,500	.11	44.7	1.00	13.64
January 1955	992.1	130	4.7	32.0	.719	.83
February	2,801.4	841	5.5	100	2.25	2.34
March	4,507	1,060	42	145	3.26	3.77
April	1,301	141	18	43.4	.975	1.09
May	317.7	39	2.9	10.2	.229	.27
June	509.2	86	3.6	17.0	.382	.43
July	33.48	3.6	.07	1.08	.024	.03
August	7,443.80	2,530	.03	240	5.39	6.22
September	228.4	19	2.5	7.61	.171	.19
Water year 1954-55	24,067.08	2,530	.03	65.9	1.48	20.13

Lake Carnegie at Princeton

Location.--Lat 40°22'11", long 74°37'15", at right end of Lake Carnegie dam, 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 1955.

Gage.--Water-stage recorder above dam. Datum of gage is 50.00 ft above mean sea level, datum of 1929. Prior to Oct. 1, 1950, staff gage at left end of dam at datum 2.56 ft higher.

Extremes.--1924-55: Maximum stage, 4.20 ft (elevation, 56.76 ft) Sept. 21, 1938, from floodmark on dam.

Maximum gage height.--
1950-51: Nov. 26, 1950 (3 a.m.) 4.45 ft (elevation, 54.45 ft).
1951-52: Apr. 28, 1952 (2 p.m.) 4.59 ft (elevation, 54.49 ft).
1952-53: Mar. 13, 1953 (4-5 p.m.) 4.44 ft (elevation, 54.44 ft).
1953-54: Dec. 14, 1953 (8 p.m.) 3.97 ft (elevation, 53.97 ft).
1954-55: Aug. 13, 1955 (4 p.m.) 5.02 ft (elevation, 55.02 ft).

Remarks.--Elevation of crest of lower spillway (top of timber on low crest) is 52.56 ft (gage height, 2.56 ft).

Daily gage-height at 8 a.m., in feet, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.81	2.80	3.08	3.00	3.00	3.06	3.54	-	2.93	2.78	2.69	1.86
2	2.80	2.79	3.04	3.00	-	3.08	3.34	-	2.89	2.82	2.69	1.81
3	2.80	2.77	3.00	2.97	-	3.06	3.38	2.90	2.85	2.79	2.70	1.79
4	2.78	2.79	2.99	2.96	-	-	3.45	2.88	2.85	2.78	2.68	1.78
5	2.78	3.11	3.30	3.01	-	-	3.34	2.87	3.00	2.81	2.68	1.80
6	2.75	2.99	3.10	2.99	-	-	3.23	2.85	2.95	2.78	2.69	2.01
7	2.75	2.94	3.07	2.97	-	-	3.15	2.85	2.84	2.77	2.68	1.82
8	2.75	2.91	3.44	3.08	-	-	3.10	2.85	2.80	2.77	2.68	1.55
9	2.76	2.90	3.42	2.95	-	-	3.08	2.83	2.81	2.76	2.68	1.62
10	2.85	2.85	3.33	2.96	-	-	3.05	2.80	2.80	2.75	2.68	1.70
11	2.82	2.85	3.27	2.93	-	-	3.07	2.83	2.82	2.74	3.11	1.78
12	2.82	2.84	3.18	2.91	-	-	3.05	2.93	2.83	2.73	2.93	2.02
13	2.80	2.83	3.10	2.89	-	-	3.19	2.96	2.81	2.71	3.69	2.26
14	2.80	2.81	3.05	2.87	-	-	3.15	2.93	2.87	2.72	3.00	2.48
15	2.78	2.80	3.00	3.25	-	-	3.10	2.92	2.93	2.71	2.76	2.60
16	2.77	2.80	3.01	3.31	-	-	3.05	2.87	2.92	2.71	2.78	2.67
17	2.78	2.80	3.03	3.21	-	-	3.07	2.83	2.87	2.70	2.58	2.67
18	2.77	2.80	2.99	3.16	-	-	3.05	2.78	2.85	2.72	2.68	2.69
19	2.76	2.80	2.93	3.09	-	-	3.03	2.79	2.84	2.69	2.67	2.70
20	2.76	2.85	2.92	3.04	-	-	3.00	2.77	2.80	2.83	2.64	2.69
21	2.76	2.80	2.90	3.02	-	-	3.00	2.80	2.80	2.79	2.21	2.68
22	2.76	2.84	2.88	2.99	-	-	2.97	2.80	2.78	2.74	1.89	2.68
23	2.84	2.83	2.86	2.95	-	3.17	3.02	2.80	2.78	2.73	1.87	2.69
24	2.90	2.83	2.86	2.99	-	3.13	3.12	3.11	2.76	2.71	1.84	2.68
25	2.88	2.80	2.88	3.21	-	3.12	3.09	3.14	2.76	2.70	1.84	2.69
26	2.87	4.08	2.86	3.15	-	3.05	3.05	3.07	2.74	2.69	1.84	2.69
27	2.88	3.38	2.82	3.10	-	3.04	3.02	3.09	2.77	2.69	1.72	2.69
28	2.86	3.31	2.83	3.07	-	3.00	-	3.03	2.77	2.66	1.76	2.69
29	2.84	3.20	2.83	3.03	-------	3.00	-	2.99	2.75	2.71	1.82	2.68
30	2.82	3.11	2.91	3.07	-------	3.18	-	3.15	2.77	2.71	1.92	2.68
31	2.80	-------	2.98	2.97	-------	3.92	-------	2.98	-------	2.71	1.91	-------

Note.--No gage-height record Feb. 2-28, Mar. 4-22, Apr. 28 to May 2.

Lake Carnegie at Princeton--Continued

Daily gage height at 8 a.m., in feet, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.68	2.87	2.98	-	3.17	2.88	3.00	3.28	3.20	2.74	2.74	2.91
2	2.67	3.21	2.95	a3.14	3.15	2.96	3.00	3.18	3.82	2.74	2.75	3.48
3	2.67	3.30	2.93	3.22	3.15	2.96	3.00	3.13	3.64	2.74	2.80	3.55
4	2.66	3.48	2.91	3.25	3.28	2.97	2.98	3.08	3.38	2.73	2.80	3.31
5	2.68	3.32	2.94	3.21	3.50	3.22	3.00	3.00	3.20	2.72	2.83	3.20
6	2.69	3.22	-	3.25	3.37	3.36	3.26	3.00	3.11	2.72	2.82	3.11
7	2.68	3.30	-	3.20	3.27	3.29	3.13	2.97	3.03	2.72	2.99	3.03
8	3.13	3.51	-	3.13	3.19	3.21	3.09	2.96	2.98	2.72	3.11	3.00
9	2.95	3.26	-	3.10	3.13	3.19	3.05	2.93	2.95	2.80	3.08	2.95
10	2.94	3.19	-	3.06	3.10	3.15	3.02	2.93	2.92	3.15	3.04	2.93
11	2.95	3.14	2.95	3.15	3.08	3.23	2.95	2.93	2.87	3.27	3.16	2.91
12	3.02	3.07	2.93	3.11	3.05	3.68	2.97	3.31	2.87	3.12	3.10	2.90
13	2.92	3.01	-	3.09	3.03	3.42	2.96	3.19	2.85	3.02	3.08	2.88
14	2.88	3.01	-	3.06	3.00	3.31	3.06	3.17	2.84	2.93	3.03	2.86
15	2.86	3.08	-	3.05	2.97	3.22	3.25	3.14	2.82	2.87	2.96	2.86
16	2.81	3.07	-	3.05	2.95	3.16	3.24	3.07	2.81	2.82	2.95	2.85
17	2.77	3.22	-	3.04	3.03	3.10	3.17	3.01	2.80	2.84	3.28	2.85
18	2.76	3.14	-	3.20	3.16	3.07	3.11	3.00	2.79	2.81	3.26	2.83
19	2.75	3.09	-	3.21	3.20	3.03	3.05	3.01	2.77	2.78	3.18	2.84
20	2.75	3.03	-	3.22	3.17	3.45	3.01	3.02	2.76	2.78	3.10	2.86
21	2.75	2.98	-	3.21	3.13	3.23	2.97	3.22	2.76	2.89	3.01	2.86
22	2.75	2.94	-	3.13	3.10	3.20	2.96	3.13	2.77	3.25	3.48	2.87
23	2.74	2.92	-	3.50	3.06	3.20	2.94	3.07	2.78	2.91	3.18	2.95
24	2.74	2.91	-	3.26	3.03	3.29	2.93	3.04	2.83	2.86	3.14	2.87
25	2.82	2.92	-	3.20	3.01	3.33	2.92	3.09	2.84	2.86	3.05	2.85
26	2.86	3.03	-	3.20	2.99	3.27	3.19	3.76	2.84	2.85	2.97	2.84
27	2.85	3.19	-	3.48	2.97	3.20	3.34	3.42	2.83	2.82	2.93	2.83
28	2.84	3.11	-	3.47	2.97	3.15	4.26	3.30	2.81	2.78	2.89	2.84
29	2.81	3.08	-	3.54	2.96	3.10	3.84	3.20	2.79	2.78	2.88	2.82
30	2.79	3.03	-	3.35	-------	3.05	3.47	3.11	2.75	2.75	2.87	2.82
31	2.78	-------	-	3.23	-------	3.03	-------	3.06	-------	2.75	2.85	-------

a Reading at 1 p.m.

Note.--No gage-height record Dec. 6-10, 13 to Jan. 1.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.81	2.76	2.91	2.91	3.07	2.96	3.07	3.04	2.93	2.75	2.72	2.66
2	2.80	2.76	2.88	2.91	3.05	2.95	3.04	3.06	2.92	2.75	2.72	2.65
3	2.81	2.76	2.92	3.00	3.00	2.93	3.02	3.05	2.91	2.74	2.75	2.58
4	2.81	2.78	3.00	3.25	2.98	3.18	3.00	3.03	2.89	2.72	2.75	2.53
5	2.79	-	3.02	3.17	2.98	3.37	3.10	3.00	2.85	2.72	2.75	2.49
6	2.80	-	3.68	3.13	2.96	3.28	3.06	3.12	2.84	2.73	2.74	2.50
7	2.77	-	3.28	3.07	2.95	3.20	3.14	3.17	2.84	2.71	2.73	2.64
8	2.75	-	3.22	3.02	2.98	3.12	3.65	3.13	2.83	2.71	2.72	2.69
9	2.78	-	3.15	3.25	2.98	3.08	3.32	3.07	2.82	2.70	2.73	2.69
10	2.77	-	3.09	3.60	2.96	3.05	3.28	3.04	2.80	2.70	2.90	2.67
11	2.77	-	3.08	3.60	2.94	3.02	3.40	3.01	2.79	2.72	2.83	2.68
12	2.78	-	3.43	3.43	2.95	3.01	3.25	2.98	2.78	2.71	2.79	2.68
13	2.78	-	3.24	3.28	2.96	3.65	3.43	2.94	2.77	2.72	2.79	2.71
14	2.78	-	3.18	3.20	2.96	3.82	3.52	3.06	3.00	2.70	2.75	2.70
15	2.78	-	3.11	3.14	2.95	3.55	3.34	3.02	3.00	2.70	2.82	2.70
16	2.78	-	3.04	3.11	3.37	4.08	3.32	2.95	2.96	2.69	2.80	2.73
17	2.77	-	3.00	3.07	3.28	3.51	3.36	2.95	2.93	2.68	2.82	2.70
18	2.78	-	2.98	3.10	3.23	3.35	3.25	3.39	2.86	2.67	2.82	2.69
19	2.77	-	2.95	3.21	3.13	3.33	3.34	3.12	2.83	2.67	2.78	2.69
20	2.77	-	2.94	3.17	3.06	3.40	3.30	3.09	2.81	2.70	2.76	2.68
21	2.78	-	2.92	3.14	3.08	3.28	3.25	3.03	2.80	2.72	2.75	2.68
22	2.76	-	3.10	3.34	3.25	3.22	3.18	2.98	2.78	2.73	2.74	2.68
23	2.75	-	3.15	3.22	3.16	3.15	3.09	3.01	2.78	2.84	2.72	2.65
24	2.75	-	3.13	3.21	3.13	3.13	3.07	3.05	2.75	2.99	2.72	2.66
25	2.75	-	3.10	3.74	3.07	3.36	3.05	2.98	2.75	2.87	2.71	2.65
26	2.75	-	3.04	3.43	3.04	3.34	3.10	2.96	2.73	2.84	2.71	2.65
27	2.76	-	2.99	3.28	3.01	3.28	3.17	2.97	2.70	2.80	2.70	2.65
28	2.75	-	2.92	3.20	2.99	3.21	3.12	2.92	2.72	2.76	2.70	2.65
29	2.77	-	2.92	3.19	-------	3.15	3.07	2.92	2.77	2.75	2.68	2.65
30	2.77	-	2.90	3.13	-------	3.12	3.02	2.90	2.76	2.73	2.67	2.66
31	2.75	-------	2.90	3.10	-------	3.08	-------	2.92	-------	2.73	2.67	-------

Note.--No gage-height record; Nov. 5-30.

Lake Carnegie at Princeton--Continued

Daily gage height at 8 a.m., in feet, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.62	2.95	2.78	2.81	2.82	2.92	2.92	2.91	2.80	2.62	2.54	2.95
2	2.50	2.89	2.78	2.80	2.82	3.40	2.92	2.88	2.77	2.64	2.52	2.89
3	2.39	2.81	2.76	2.80	2.82	3.11	2.86	2.86	2.75	2.63	2.67	2.90
4	2.35	2.76	2.76	2.80	2.84	3.58	2.86	3.04	2.74	2.63	2.66	2.88
5	2.48	2.75	2.82	2.80	2.85	3.20	2.85	3.06	2.72	2.66	2.66	2.83
6	2.61	2.72	2.87	2.82	2.84	3.15	2.85	2.98	2.72	2.63	2.66	2.75
7	2.68	2.87	3.04	2.82	2.83	3.08	2.86	2.93	2.70	2.64	2.66	2.72
8	2.64	2.85	3.06	2.80	2.80	3.01	2.88	2.94	2.68	2.64	2.66	2.83
9	2.62	2.92	2.98	2.78	2.81	2.97	3.05	3.10	2.69	2.63	2.70	2.76
10	2.72	2.95	3.05	2.79	2.81	2.95	2.94	3.02	2.67	2.62	3.08	2.76
11	2.70	2.95	3.10	2.80	2.81	2.94	2.92	3.05	2.67	2.62	2.91	3.25
12	2.70	2.89	2.98	2.79	2.80	2.92	2.90	3.00	2.68	2.62	2.94	3.32
13	2.70	2.83	3.14	2.78	2.76	2.90	2.90	2.94	2.75	2.62	2.88	3.48
14	2.70	2.80	3.24	2.78	2.75	3.06	2.86	2.89	2.77	2.59	2.81	3.25
15	2.70	2.78	3.42	2.78	2.75	3.21	2.84	2.86	2.78	2.58	2.74	3.10
16	2.70	2.77	3.31	2.80	2.62	3.15	2.86	2.85	2.79	2.57	2.70	3.00
17	2.70	2.76	3.19	2.84	2.86	3.11	2.95	2.83	2.77	2.56	2.66	3.00
18	2.70	2.75	3.03	2.82	3.01	3.01	3.35	2.81	2.73	2.57	2.68	2.98
19	2.70	2.75	2.97	2.84	2.93	2.96	3.26	2.81	2.74	2.54	2.67	2.95
20	2.70	2.75	2.92	2.84	2.90	3.02	3.18	2.80	2.72	2.58	2.67	2.94
21	2.70	2.75	2.89	2.88	2.87	3.10	3.08	3.01	2.71	2.60	2.70	2.92
22	2.70	2.75	2.88	3.23	3.01	3.04	2.98	3.28	2.69	2.58	2.72	2.93
23	2.70	2.75	2.89	2.98	2.99	2.99	2.93	3.24	2.66	2.57	2.73	2.90
24	2.71	2.78	2.88	3.03	2.96	2.95	2.92	3.17	2.66	2.57	2.74	2.90
25	2.73	2.80	2.85	2.96	2.98	2.93	2.91	3.05	2.68	2.55	2.71	2.91
26	2.73	2.80	2.85	2.92	2.98	3.19	2.90	2.94	2.67	2.61	2.69	2.88
27	2.72	2.84	2.83	2.94	2.99	3.09	2.90	2.88	2.65	2.60	2.67	2.84
28	2.88	2.86	2.82	3.02	2.95	3.05	2.93	2.86	2.63	2.60	2.68	2.82
29	2.92	2.83	2.82	2.91	-------	3.00	2.97	2.84	2.63	2.60	2.68	2.78
30	2.97	2.80	2.82	2.89	-------	2.93	2.95	2.82	2.64	2.60	2.68	2.77
31	2.96	-------	2.82	2.85	-------	2.94	-------	2.81	-------	2.58	2.85	-------

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.76	2.91	3.11	3.22	2.75	2.98	2.97	2.97	2.78	2.73	2.59	3.00
2	2.76	2.92	3.07	3.18	2.77	3.08	2.95	2.92	2.81	2.70	2.57	2.98
3	2.77	3.02	3.01	3.14	2.77	3.00	2.92	2.91	2.86	2.68	2.57	2.97
4	2.79	2.99	2.96	3.08	2.78	3.12	2.93	2.89	2.84	2.66	2.57	2.95
5	2.77	3.03	2.93	3.04	2.77	3.22	2.90	2.87	2.81	2.65	2.56	2.95
6	2.82	3.03	2.89	3.02	2.77	3.23	2.89	2.83	2.82	2.64	2.60	2.81
7	2.82	2.97	2.87	3.03	3.50	3.48	2.90	2.80	2.78	2.64	2.62	2.81
8	2.79	2.93	2.86	2.98	3.26	3.27	2.88	2.79	2.76	2.64	2.88	2.80
9	2.78	2.89	2.84	2.97	3.20	3.18	2.88	2.78	2.85	2.62	2.83	2.80
10	2.78	2.86	2.99	2.95	3.14	3.10	2.87	2.79	2.88	2.62	2.78	2.78
11	2.78	2.85	2.95	2.92	3.07	3.07	2.86	2.77	2.82	2.62	2.79	2.78
12	2.76	2.83	2.93	2.89	3.33	3.00	2.85	2.77	2.84	2.62	2.92	2.77
13	2.75	2.82	2.92	2.90	3.04	2.99	3.15	2.77	2.90	2.63	3.87	2.77
14	2.75	2.82	2.90	2.86	3.04	2.95	3.06	2.75	2.85	2.61	4.15	2.76
15	2.74	2.79	3.26	2.87	3.01	2.93	3.03	2.74	2.86	2.59	3.68	2.76
16	2.67	2.81	3.24	2.85	2.95	2.95	3.01	2.75	2.83	2.57	3.34	2.76
17	2.70	2.81	3.19	2.85	3.05	2.93	2.96	2.71	2.79	2.58	3.23	2.77
18	2.71	2.79	3.15	2.83	3.12	2.95	2.93	2.72	2.76	2.58	3.36	2.77
19	2.69	2.81	3.28	2.83	3.03	2.94	2.90	2.71	2.73	2.58	4.43	2.76
20	2.69	2.84	3.18	2.82	3.00	2.95	2.93	2.68	2.87	2.57	3.37	2.76
21	2.70	3.43	3.17	2.80	2.97	2.95	2.95	2.71	2.84	2.57	3.24	2.76
22	2.70	3.50	3.07	2.81	2.96	3.26	2.97	2.72	2.75	2.56	3.83	2.79
23	2.71	3.32	2.96	2.80	3.00	3.76	2.97	2.72	2.72	2.56	3.36	2.77
24	2.71	3.21	2.92	2.81	3.17	3.47	2.92	2.73	2.70	2.55	3.25	2.81
25	2.71	3.14	2.91	2.81	3.09	3.27	2.90	2.73	2.71	2.55	3.19	2.83
26	2.71	3.06	2.88	2.80	3.05	3.23	2.92	2.71	2.73	2.57	3.17	2.82
27	2.71	3.01	2.88	2.79	3.00	3.22	2.92	2.72	2.72	2.57	3.11	2.80
28	2.71	2.97	2.88	2.78	2.98	3.18	2.91	2.72	2.64	2.56	3.07	2.85
29	2.70	3.21	2.88	2.78	-------	3.12	2.91	2.71	2.67	2.55	3.04	2.82
30	2.95	3.13	3.30	2.77	-------	3.06	2.95	2.80	2.67	2.57	3.03	2.82
31	2.91	-------	3.20	2.76	-------	2.99	-------	2.76	-------	2.58	3.00	-------

Millstone River at Blackwells Mills

Location.--Lat 40°28'30", long 74°34'34", on left bank 30 ft downstream from highway bridge at Blackwells Mills, Somerset County, 0.3 mile downstream from Six Mile Run (revised).

Drainage area.--258 sq mi.

Records available.--June 1903 to December 1940 (gage heights only), August 1921 to September 1955. Published as "at Millstone" 1903-4. June 1903 to December 1904 published in United States Geological Survey Water-Supply Papers 97 and 125.

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 27, 1903, to Dec. 31, 1904, staff gage at bridge 2.0 miles downstream at Millstone at different datum. Aug. 4, 1921, to Aug. 16, 1928, staff gage at present site and datum.

Average discharge.--33 years (1922-55), 369 cfs.

Extremes.--1921-58: Maximum discharge, 18,300 cfs Sept. 21, 1938 (gage height, 15.29 ft, from floodmark), from rating curve extended above 6,900 cfs on basis of slope-area measurement of peak flow; minimum, about 5 cfs Sept. 16, 1932.

Peak discharge (base, 3,000 cfs).--
1950-51: Nov. 26 (12 m.) 5,180 cfs (9.21 ft); Dec. 8 (10:30 p.m.) 3,630 cfs (7.83 ft); Feb. 22 (11:30 a.m.) 4,090 cfs (8.29 ft); Mar. 31 (12:30 p.m.) 3,810 cfs (8.01 ft); Aug. 13 (8 a.m.) 3,760 cfs (7.96 ft).
1951-52: Nov. 8 (6 a.m.) 4,740 cfs (8.87 ft); Dec. 21 (9 p.m.) 8,870 cfs (11.53 ft); Mar. 12 (3 a.m.) 5,670 cfs (9.57 ft); Apr. 28 (8:30 p.m.) 6,580 cfs (10.21 ft); May 26 (10 a.m.) 3,890 cfs (8.09 ft); June 2 (5 a.m.) 3,360 cfs (7.54 ft).
1952-53: Nov. 23 (2 a.m.) 3,060 cfs (7.21 ft); Jan. 25 (7 a.m.) 5,400 cfs (9.38 ft); Mar. 13 (10 p.m.) 5,650 cfs (9.56 ft); Mar. 16 (1 p.m.) 3,950 cfs (8.15 ft); Apr. 8 (5 a.m.) 4,670 cfs (8.81 ft).
1953-54: Dec. 15 (2 a.m.) 2,980 cfs (7.12 ft), (maximum below base).
1954-55: Nov. 22 (2 a.m.) 4,820 cfs (8.93 ft); Mar. 23 (6 a.m.) 3,560 cfs (7.76 ft); Aug. 14 (time and discharge unknown); Aug. 19 (time and discharge unknown).

Remarks.--Inflow to and losses from Delaware & Raritan Canal above station. Flow slightly regulated by Lake Carnegie (capacity, 310,000,000 gal).

Revisions.--Revised figures of discharge, in cubic feet per second, for a high-water period in the water year 1926, superseding those published in Bulletin 33, are given herewith:

Sept. 7, 1926..... 5,920

Month	Maximum	Minimum	Mean
September 1926.....	5,920	99	438
Water year 1925-26.....	5,920	44	343

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	96	93	383	320	433	394	1,940	254	222	125	60	71
2	93	88	337	270	992	421	953	222	179	125	56	69
3	90	85	307	250	607	383	1,590	196	156	98	58	69
4	83	91	588	290	499	934	1,480	175	169	83	54	69
5	78	444	988	400	404	872	917	164	587	106	48	67
6	*76	288	463	320	347	568	656	149	317	96	44	45
7	73	217	394	300	828	487	493	142	226	83	44	88
8	73	196	2,440	460	2,000	415	421	135	138	76	48	78
9	80	175	2,430	260	865	357	383	125	138	71	46	48
10	132	149	970	240	535	307	362	116	138	69	57	43
11	116	132	690	220	399	283	388	138	156	62	618	41
12	103	122	511	180	352	273	342	302	135	56	678	30
13	98	112	410	160	337	254	706	254	119	52	3,300	24
14	93	106	347	150	352	378	487	217	227	52	1,220	*21
15	85	103	317	1,500	332	457	394	192	283	50	439	22
16	85	98	394	1,600	292	394	342	153	240	52	373	39
17	83	98	362	620	429	347	383	128	179	50	283	48
18	83	98	302	520	1,090	302	332	106	145	54	145	50
19	76	96	254	427	670	*268	307	103	128	*90	128	50
20	73	103	b210	388	709	1,670	283	103	112	153	138	48
21	76	112	b200	367	1,380	1,400	258	116	101	90	183	46
22	76	128	b180	317	3,680	753	240	116	103	67	196	43
23	131	119	b210	263	2,540	580	446	116	96	58	122	44
24	192	116	b210	787	1,200	487	427	821	90	54	116	46
25	160	932	b180	875	709	427	352	533	83	48	112	48
26	145	4,370	b140	554	561	357	317	352	73	44	112	50
27	142	1,880	130	445	493	322	273	357	82	43	103	52
28	132	876	130	388	421	292	245	362	98	290	76	52
29	116	600	120	394	-------	322	235	398	96	166	67	44
30	103	451	250	410	-------	976	292	469	116	83	65	44
31	98	-------	340	288	-------	3,250	-------	302	-------	69	71	-------

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Dec. 27 to Jan. 18; discharge estimated on basis of records for stations on Raritan River at Manville and Bound Brook.

Millstone River at Blackwells Mills--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	838	302	451	574	240	307	847	1,850	96	73	1,100
2	48	945	273	642	594	249	297	600	3,100	90	73	2,020
3	48	1,790	249	927	600	245	283	475	2,100	85	93	1,460
4	46	2,160	231	783	1,690	270	263	399	1,120	133	93	847
5	48	1,070	568	771	2,110	1,180	454	337	1,270	103	101	529
6	50	709	800	812	1,150	1,150	702	312	529	80	139	388
7	94	1,990	505	614	795	822	451	278	388	78	258	322
8	579	3,850	410	481	600	663	378	258	317	112	307	273
9	254	1,200	362	427	493	580	337	221	273	769	302	226
10	200	670	317	475	433	493	307	217	245	1,000	288	204
11	379	517	278	517	404	2,460	268	240	213	688	357	183
12	*740	410	254	427	362	4,250	254	991	192	433	307	168
13	268	347	226	394	317	1,160	240	574	171	312	288	156
14	209	337	200	378	283	968	662	475	160	226	249	145
15	179	548	591	378	258	676	777	415	142	171	196	142
16	145	777	649	383	245	542	789	342	132	135	224	142
17	116	868	433	352	473	457	554	288	128	128	535	128
18	101	554	701	980	628	404	421	297	116	122	505	135
19	93	445	1,710	722	594	758	352	297	106	106	404	149
20	88	362	948	702	517	1,440	307	442	101	112	312	164
21	83	307	6,120	600	463	*759	268	628	98	192	240	149
22	80	268	5,440	528	415	635	245	427	103	386	989	145
23	78	254	2,000	1,470	362	842	226	357	119	213	579	183
24	78	249	966	859	337	947	217	307	142	153	367	164
25	220	240	683	614	312	932	309	1,320	138	142	292	138
26	183	681	1,020	1,250	288	735	753	3,410	138	132	222	132
27	156	620	800	1,920	273	574	1,340	1,840	135	112	179	122
28	145	429	548	1,890	263	475	4,650	827	122	96	156	122
29	138	383	475	1,950	249	404	4,310	574	109	88	149	112
30	116	347	457	1,090	-------	357	1,860	445	98	83	138	109
31	103	-------	463	716	-------	332	-------	427	-------	78	132	-------

* Discharge measurement made on this day.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	108	83	202	202	410	252	*355	385	244	120	56	28
2	108	83	194	194	360	235	350	395	231	120	56	26
3	130	*83	226	504	325	226	325	360	214	120	70	18
4	117	80	288	754	310	1,510	310	340	190	86	68	11
5	105	83	849	512	283	1,490	452	340	171	70	68	10
6	102	83	2,250	416	265	775	375	458	160	70	63	13
7	97	80	1,020	350	278	572	1,770	494	157	*88	58	14
8	91	75	635	325	301	446	3,740	446	160	80	54	31
9	94	70	494	1,500	306	395	1,460	375	160	65	54	40
10	100	72	405	2,500	256	350	1,310	320	140	56	123	38
11	100	80	1,260	2,360	239	320	1,450	265	133	56	120	34
12	102	80	1,970	1,480	252	320	942	244	127	56	88	38
13	97	75	751	833	278	*3,430	1,650	222	188	54	83	54
14	88	72	544	607	261	3,900	1,850	406	385	56	77	54
15	88	75	428	500	811	2,180	1,120	320	335	46	127	50
16	91	120	355	440	1,300	3,530	1,420	256	270	40	105	56
17	91	114	310	380	*789	2,220	1,350	340	235	36	105	50
18	91	120	278	617	579	1,150	815	1,050	178	34	111	44
19	88	124	256	705	440	1,460	1,140	518	153	33	97	42
20	83	120	235	518	375	1,310	870	428	143	40	75	38
21	86	520	252	492	812	845	698	355	130	56	65	40
22	83	1,990	615	988	814	656	572	288	124	72	58	38
23	77	2,290	512	670	530	518	452	725	120	253	56	34
24	75	913	428	1,950	512	1,130	395	476	97	279	50	33
25	72	572	375	4,460	405	1,410	360	340	83	157	48	29
26	77	422	320	1,820	345	1,080	446	2968	80	124	46	28
27	80	340	278	862	315	830	494	301	75	102	44	28
28	80	283	226	754	278	621	390	252	77	80	40	26
29	83	244	206	642	-------	506	330	218	105	72	34	26
30	83	226	198	482	-------	434	296	210	102	68	31	26
31	83	-------	194	434	-------	390	-------	244	-------	63	29	-------

* Discharge measurement made on this day.

Millstone River at Blackwells Mills--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*26	190	102	133	168	340	222	206	120	28	21	261
2	17	153	94	127	164	1,030	218	178	102	29	18	182
3	12	111	91	124	168	856	178	175	91	28	28	171
4	10	77	86	120	186	*1,790	171	603	83	28	46	153
5	7.1	65	178	120	182	704	160	410	77	36	34	124
6	9.0	58	198	146	171	500	160	301	65	34	34	86
7	26	135	706	146	157	410	171	248	61	31	33	65
8	28	182	458	124	140	340	242	433	58	31	34	119
9	21	178	315	114	136	301	355	500	54	29	132	100
10	27	194	872	117	133	274	256	410	50	25	358	83
11	46	202	602	111	130	248	222	395	48	23	186	1,800
12	44	168	355	117	114	222	206	320	61	22	164	1,840
13	44	130	633	114	97	244	198	261	86	21	143	1,190
14	46	108	1,830	108	88	783	168	218	*100	21	111	656
15	50	100	2,330	108	86	798	157	190	97	22	72	375
16	52	88	939	130	61	500	164	175	100	21	56	301
17	50	86	586	171	283	410	713	157	91	19	46	546
18	50	83	370	160	385	335	1,250	143	77	19	38	335
19	52	80	292	157	283	283	733	136	68	22	38	315
20	52	77	248	157	239	580	524	127	61	21	52	310
21	50	72	222	575	231	470	375	979	54	22	78	256
22	50	70	218	841	400	355	296	1,100	48	23	77	239
23	50	100	222	422	340	310	244	642	40	22	63	202
24	52	114	202	360	283	265	231	476	40	22	63	194
25	61	124	175	296	335	328	214	355	40	21	58	190
26	68	140	168	274	705	600	202	265	40	23	*48	171
27	65	143	157	335	345	410	202	210	36	*33	38	160
28	125	146	146	405	288	350	296	182	29	26	36	130
29	198	130	153	274	-------	310	296	164	28	23	36	108
30	244	114	150	235	-------	261	244	153	29	23	36	100
31	206	-------	146	190	-------	244	-------	133	-------	21	346	-------

* Discharge measurement made on this day.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	94	231	476	663	83	355	301	283	143	40	14	157
2	91	265	405	677	88	416	278	231	127	46	14	150
3	97	586	335	572	91	325	252	210	133	40	14	140
4	102	400	283	440	86	863	239	190	130	34	*12	130
5	94	*355	252	375	88	811	226	171	127	31	11	133
6	140	335	218	375	148	1,010	*214	146	160	*26	14	124
7	133	283	178	370	2,270	1,640	202	130	111	23	22	114
8	108	244	190	310	1,160	*808	182	124	88	22	198	102
9	94	210	202	288	600	614	182	111	146	21	146	94
10	91	182	385	265	476	470	168	108	194	19	100	91
11	91	164	301	244	668	405	164	105	136	18	105	86
12	86	146	248	214	1,130	340	201	100	164	17	c500	86
13	80	140	231	214	586	310	464	108	210	17	c4,500	80
14	77	130	440	190	390	274	385	88	150	17	c6,500	77
15	68	124	1,030	190	340	252	350	80	143	19	3,210	77
16	82	124	726	175	*306	292	325	77	124	19	1,370	75
17	56	124	586	164	563	274	261	68	100	18	976	75
18	61	120	934	157	524	256	226	65	83	14	1,140	75
19	58	114	1,190	150	385	274	222	61	68	13	c4,300	72
20	56	241	614	136	345	274	518	54	162	11	4,400	75
21	56	2,610	500	127	315	318	340	56	150	11	914	80
22	54	3,650	335	130	296	1,570	340	63	91	11	1,500	80
23	56	1,290	306	130	568	3,170	301	65	65	10	795	80
24	58	677	270	127	644	1,730	252	68	58	14	446	91
25	56	512	248	120	458	839	226	65	61	18	345	120
26	58	390	218	120	395	955	235	63	65	15	288	108
27	61	320	206	117	360	831	244	58	63	15	239	94
28	80	278	202	108	335	586	218	58	36	15	202	117
29	213	1,020	271	100	-------	482	244	63	31	14	182	120
30	330	652	1,370	91	-------	400	320	143	34	13	175	105
31	278	-------	943	86	-------	335	-------	114	-------	12	164	-------

* Discharge measurement made on this day.
c Backwater from Raritan River.

Millstone River at Blackwells Mills--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	3,140	192	73	101	0.391	0.45
November	12,478	4,370	85	416	1.61	1.80
December	15,187	2,440	120	490	1.90	2.19
Calendar year 1950	119,656	4,370	36	328	1.27	17.26
January 1951	13,963	1,600	150	450	1.74	2.01
February	23,456	3,680	292	838	3.25	3.38
March	18,930	3,250	254	611	2.37	2.73
April	16,244	1,940	235	541	2.10	2.34
May	7,316	821	103	236	.915	1.05
June	4,932	587	73	164	.636	.71
July	2,615	290	43	84.4	.327	.38
August	9,060	3,300	44	292	1.13	1.31
September	1,489	88	21	49.6	.192	.21
Water year 1950-51	128,810	4,370	21	353	1.37	18.56
October 1951	5,111	740	46	165	.640	.74
November	24,175	3,850	240	806	3.12	3.48
December	28,979	6,120	200	935	3.62	4.18
Calendar year 1951	156,270	6,120	21	428	1.66	22.52
January 1952	24,503	1,950	352	790	3.06	3.53
February	16,082	2,110	245	555	2.15	2.32
March	25,999	4,250	240	839	3.25	3.75
April	22,581	4,650	217	753	2.92	3.25
May	18,877	3,410	217	609	2.36	2.72
June	13,855	3,100	98	462	1.79	2.00
July	6,654	1,000	78	215	.833	.96
August	8,547	989	73	276	1.07	1.23
September	10,257	2,020	109	342	1.33	1.48
Water year 1951-52	205,620	6,120	46	562	2.18	29.64
October 1952	2,850	130	72	91.9	.356	.41
November	9,572	2,290	70	319	1.24	1.38
December	16,554	2,250	194	534	2.07	2.39
Calendar year 1952	176,331	4,650	70	482	1.87	25.42
January 1953	29,251	4,460	194	944	3.66	4.22
February	12,429	1,300	239	444	1.72	1.79
March	34,491	3,900	226	1,113	4.31	4.97
April	27,487	3,740	296	916	3.55	3.96
May	11,667	1,050	210	376	1.46	1.68
June	4,967	385	75	166	.643	.72
July	2,652	279	33	85.5	.331	.38
August	2,159	127	29	69.6	.270	.31
September	997	56	10	33.2	.129	.14
Water year 1952-53	155,076	4,460	10	425	1.65	22.35
October 1953	1,838.1	244	7.1	59.3	.230	.26
November	3,618	202	58	121	.469	.52
December	13,244	2,330	86	427	1.66	1.91
Calendar year 1953	144,800.1	4,460	7.1	397	1.54	20.86
January 1954	6,811	841	108	220	.853	.98
February	6,298	705	61	225	.872	.91
March	14,851	1,790	222	479	1.86	2.14
April	9,068	1,250	157	302	1.17	1.30
May	10,245	1,100	127	330	1.28	1.48
June	1,934	120	28	64.5	.250	.28
July	769	36	19	24.8	.096	.11
August	2,523	358	18	81.4	.316	.36
September	10,762	1,840	65	359	1.34	1.55
Water year 1953-54	81,961.1	2,330	7.1	225	.872	11.80
October 1954	3,059	330	54	98.7	.383	.44
November	15,917	3,650	114	531	2.06	2.29
December	14,093	1,370	178	455	1.76	2.03
Calendar year 1954	96,330	3,650	18	264	1.02	13.87
January 1955	7,425	677	86	240	.930	1.07
February	13,698	2,270	83	489	1.90	1.97
March	21,479	3,170	252	693	2.69	3.10
April	8,080	518	164	269	1.04	1.16
May	3,326	283	54	107	.415	.48
June	3,353	210	31	112	.434	.48
July	613	46	10	19.8	.077	.09
August	32,796	6,500	11	1,058	4.10	4.73
September	3,008	157	72	100	.388	.43
Water year 1954-55	126,847	6,500	10	348	1.35	18.27

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, 1.3 miles (revised) 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 1955 (September 1903 to December 1905 published in United States Geological Survey Water-Supply Papers 97, 125, and 166.

Gage.--Water-stage recorder and concrete control. Datum of gage is 18.06 ft above mean sea level, datum of 1929. Sept. 12, 1903, to March 31, 1909, staff and chain gages at highway bridge 1.4 miles downstream at different datum.

Average discharge.--10 years (1945-55), 1,225 cfs (adjusted for diversion).

Extremes.--1903-9, 1945-58: Maximum discharge, 32,100 cfs Oct. 10, 1903 (gage height, 15.0 ft, from graph based on gage readings, site and datum then in use), from rating curve extended above 6,000 cfs on basis of area-velocity study; minimum daily, 40 cfs Sept. 6, 1957.

Revisions.--The figures of maximum discharge for some water years have been revised, as shown in the following table. They supersed figures published in Special Report 12 and 14.

Water year	Date	Discharge (cfs)	Gage height (feet)
1904	Oct. 10, 1903	32,100	15.0
1946	June 3, 1946	24,800	13.55
1949	Dec. 31, 1948	30,600	16.14

Peak discharge (base, 12,000 cfs).--

1950-51: Nov. 26 (10 a.m.) 20,200 cfs (11.03 ft); Dec. 8 (7 p.m.) 16,000 cfs (9.58 ft); Feb. 8 (3:30 p.m.) 12,300 cfs (8.12 ft); Mar. 31 (10:30 a.m.) 17,600 cfs (10.13 ft).

1951-52: Nov. 8 (2:30 a.m.) 21,100 cfs (11.89 ft); Dec. 21 (8 p.m.) 22,500 cfs (12.53 ft); Mar. 12 (2:30 a.m.) 19,500 cfs (10.79 ft); Apr. 28 (7 p.m.) 15,900 cfs (9.54 ft); May 26 (1:30 a.m.) 13,800 cfs (8.73 ft); June 2 (2 a.m.) 15,200 cfs (9.26 ft).

1952-53: Nov. 22 (8 p.m.) 13,300 cfs (8.61 ft); Dec. 6 (6 a.m.) 12,100 cfs (8.06 ft); Dec. 11 (11 p.m.) 12,400 cfs (8.18 ft); Jan. 25 (4 a.m.) 17,300 cfs (10.30 ft); Mar. 13 (8 p.m.) 15,900 cfs (9.72 ft); Mar. 16 (10 a.m.) 14,300 cfs (9.06 ft); Apr. 8 (1 a.m.) 17,100 cfs (10.21 ft).

1953-54: Dec. 14 (7 p.m.) 11,500 cfs (7.76 ft) (maximum below base).

1954-55: Nov. 22 (1 a.m.) 16,700 cfs (10.07 ft); Feb. 7 (3 p.m.) 12,300 cfs (8.15 ft); Aug. 13 (9 p.m.) 27,300 cfs (14.68 ft); Aug. 19 (4 p.m.) 30,800 cfs (16.20 ft).

Remarks.--Records given herein 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. Record of diversion one mile above station furnished by Elizabethtown Water Co.

Revisions.--Revised figures of discharge, in cubic feet per second, for the water years 1906-7, 1949, superseding those published in Special Report 12 and 14, are given herewith:

Dec. 30, 1948..... 13,000
Dec. 31, 1948..... 27,400

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Runoff in inches
June 1906.....	-	1,890	430	705		0.881	0.98
September.....	-	875	312	426		.532	.60
February 1907.....	-	1,300	520	847		1.06	1.10
Calendar year 1907.....	-	14,900	172	1,620		2.02	27.53
December 1948.....	57,801	27,400	324	1,865	1,884	2.42	2.79
Calendar year 1948.....	523,942	27,400	179	1,432	1,450	1.86	25.34
Water year 1948-49.....	410,012	27,400	103	1,123	1,142	1.47	19.90

* Adjusted for diversion from river a mile above station by Elizabethtown Water Co. Diversion began in 1931.

Raritan River at Bound Brook--Continued

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	212	210	1,200	1,040	1,350	1,440	6,170	980	709	1,280	872	329
2	211	199	1,020	814	4,250	1,600	3,720	845	594	939	735	322
3	178	196	970	782	1,800	1,460	6,200	770	575	589	619	366
4	175	209	2,470	1,090	1,450	3,540	4,840	709	624	498	580	344
5	163	1,140	5,240	1,370	1,340	*3,230	3,170	677	1,440	1,190	510	309
6	148	803	2,040	961	1,250	2,170	2,480	653	911	852	446	277
7	144	511	1,580	935	3,780	1,810	2,070	623	670	554	422	a400
8	161	446	11,000	1,380	7,710	1,600	1,830	594	506	465	478	a400
9	178	398	7,360	793	2,200	1,380	1,650	559	489	412	479	a300
10	313	356	3,130	753	1,620	1,210	1,560	541	501	374	595	a260
11	*356	310	2,530	756	1,370	1,100	1,720	568	593	355	2,950	a250
12	326	261	2,020	682	1,290	1,060	1,440	1,110	490	349	1,540	a250
13	317	259	1,590	621	1,330	998	3,710	832	433	439	5,170	a260
14	269	254	1,340	595	1,590	a1,600	2,040	669	1,150	356	2,350	a220
15	244	240	1,210	7,910	1,260	1,910	1,650	604	1,370	308	1,110	a450
16	219	229	1,630	4,190	1,050	1,480	1,450	550	950	270	1,370	a480
17	203	235	1,380	1,790	1,310	1,280	1,530	507	701	320	1,770	a320
18	193	236	1,110	1,510	4,000	1,130	1,310	466	576	469	998	a270
19	185	229	879	1,340	2,060	1,020	1,200	457	498	525	755	a260
20	176	244	782	1,260	2,150	5,630	1,130	465	451	1,010	944	*254
21	170	337	720	1,250	4,810	3,860	1,010	473	420	536	809	237
22	184	419	670	1,020	9,950	2,370	968	466	413	397	737	226
23	253	346	759	838	5,540	1,830	1,750	483	451	428	600	226
24	430	296	733	3,010	3,060	1,730	1,520	1,980	652	391	538	215
25	364	2,990	652	3,150	2,110	1,600	1,190	1,400	427	333	522	215
26	322	15,200	473	1,790	1,850	1,310	1,100	866	346	300	520	231
27	289	4,510	457	1,390	1,750	1,170	969	819	371	275	464	220
28	261	2,220	508	1,240	1,550	1,080	898	945	691	5,110	415	210
29	258	1,750	567	1,290	-------	1,350	892	1,120	563	6,360	387	246
30	240	1,380	1,100	1,330	-------	4,980	1,130	1,760	895	1,580	358	221
31	218	-------	1,230	752	-------	14,400	-------	980	-------	1,100	358	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and combined records for upstream stations.

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	215	3,800	1,050	1,880	2,020	d847	1,210	2,650	8,960	d390	283	4,630
2	248	3,120	970	2,500	2,120	d824	1,220	2,030	10,300	d355	285	7,160
3	297	6,990	912	3,580	2,140	d837	1,160	1,710	4,770	339	388	5,460
4	a270	6,260	876	2,640	7,090	870	1,030	1,480	2,930	409	378	2,550
5	a250	2,860	2,490	2,450	6,710	3,350	2,570	1,310	3,890	455	335	1,580
6	a230	1,960	3,300	2,650	3,600	2,880	4,750	1,220	2,040	365	520	1,220
7	326	9,200	1,900	1,950	2,600	1,930	2,150	1,110	1,570	316	1,320	1,030
8	2,360	15,400	1,590	1,560	2,120	1,620	1,790	984	1,320	343	708	858
9	823	4,230	1,410	1,460	1,910	1,500	1,590	948	1,260	3,090	731	738
10	543	2,620	1,250	1,550	1,720	1,390	1,440	893	1,460	5,950	1,370	*658
11	1,140	2,100	1,110	1,630	1,630	8,230	1,310	963	1,110	2,010	1,300	611
12	1,960	1,730	1,050	1,370	1,600	13,500	1,190	3,170	932	1,210	814	557
13	902	1,520	972	1,310	1,310	4,680	1,160	1,990	829	930	690	522
14	710	1,490	836	1,330	1,110	3,130	3,360	1,390	752	738	632	506
15	606	2,670	1,870	1,450	1,070	2,260	4,090	1,200	715	611	524	497
16	538	2,970	1,780	1,580	1,060	1,950	3,720	1,110	657	531	589	558
17	489	3,130	1,070	1,380	1,450	1,670	2,350	961	630	d464	1,090	514
18	424	2,020	1,530	2,860	1,830	1,490	1,870	1,090	557	441	1,020	457
19	393	1,660	4,110	2,080	1,590	2,680	1,590	1,080	522	426	750	652
20	384	1,410	2,260	1,900	1,380	4,910	1,440	1,460	528	424	620	883
21	a350	1,200	16,700	1,730	1,310	2,770	1,290	2,010	496	559	547	605
22	a340	1,120	14,100	1,510	1,300	2,180	1,190	1,320	531	889	2,580	508
23	337	1,100	5,140	5,950	1,160	3,510	1,120	1,070	565	567	1,270	540
24	349	1,110	3,070	2,840	d1,080	3,710	1,010	905	687	441	785	576
25	1,180	1,070	2,380	1,960	d1,020	3,190	1,110	5,980	d566	391	651	498
26	799	2,270	3,420	5,320	d970	2,370	2,750	10,400	d497	378	d530	442
27	588	1,960	2,710	7,070	d930	1,980	5,010	4,530	470	372	d465	425
28	633	1,370	1,830	6,700	d900	1,710	12,300	2,370	440	378	d415	405
29	773	1,240	1,660	5,370	d860	1,500	9,280	*1,910	435	371	400	377
30	577	1,160	1,630	3,060	-------	1,380	4,750	1,910	d420	328	395	379
31	525	-------	1,860	2,300	-------	1,280	-------	2,030	-------	308	384	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for nearby stations.
d Doubtful gage-height record; discharge computed from reconstructed gage-height graph and records for nearby stations.

Raritan River at Bound Brook--Continued

Daily discharge, in cubic feet per second, 1950-55

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	378	250	807	842	1,770	949	1,360	1,530	916	316	193	106
2	356	250	746	774	1,430	873	1,330	1,640	829	316	194	92
3	473	249	808	1,680	1,290	840	1,240	1,320	705	330	225	87
4	410	249	867	2,170	1,250	5,880	1,160	1,170	645	289	210	76
5	345	240	3,220	1,430	1,120	4,210	1,520	1,240	599	244	249	87
6	324	233	9,480	1,180	1,050	2,210	1,260	1,530	549	256	190	104
7	312	229	3,250	1,020	1,110	1,810	7,590	a1,500	556	427	171	142
8	298	228	2,130	983	1,280	1,500	11,500	a1,700	567	291	158	109
9	298	231	1,740	4,430	1,080	1,360	4,190	1,430	527	244	180	99
10	313	240	1,500	8,440	961	1,250	4,420	1,280	483	217	1,000	102
11	323	250	6,040	7,150	895	1,100	4,460	1,060	415	202	476	105
12	327	246	7,040	4,350	950	1,120	2,950	949	407	208	290	107
13	313	234	2,810	2,640	1,080	10,100	4,410	920	534	202	243	144
14	286	233	2,140	2,100	957	8,380	5,420	1,540	1,160	202	230	131
15	279	244	1,740	1,900	2,390	5,740	3,140	1,190	765	202	277	121
16	272	388	1,480	1,750	3,850	11,700	4,770	1,060	634	177	247	135
17	266	411	1,300	1,580	2,100	5,330	4,300	1,150	549	155	237	158
18	270	327	1,180	2,420	1,610	3,230	2,740	2,700	478	144	241	125
19	298	318	1,090	2,610	1,330	4,820	4,250	1,390	440	146	230	120
20	275	330	981	1,870	1,210	3,840	2,980	1,150	407	150	196	116
21	253	2,990	1,080	1,770	2,960	2,630	2,390	1,010	391	221	177	121
22	272	9,580	3,100	3,090	2,880	2,170	2,050	940	442	227	173	118
23	266	7,690	2,070	2,120	1,740	1,880	1,760	4,300	691	527	170	118
24	266	2,850	1,600	6,500	1,510	3,640	1,570	1,930	383	849	151	105
25	262	1,950	1,410	13,400	1,370	4,250	1,430	1,280	316	404	137	99
26	250	1,510	1,220	4,910	1,230	3,140	1,560	1,290	308	285	137	90
27	241	1,260	1,100	2,900	1,160	2,600	1,790	1,360	298	252	134	95
28	252	1,060	840	2,770	1,050	2,110	1,430	1,010	289	242	130	96
29	257	926	806	2,490	-------	1,870	1,210	826	351	*236	121	94
30	258	881	851	1,900	-------	1,660	1,120	820	335	220	116	94
31	254	-------	830	1,710	-------	1,500	-------	999	-------	204	115	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated.

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	86	378	232	373	519	1,010	752	617	393	133	97	1,760
2	124	302	228	375	546	3,920	691	610	369	130	93	734
3	131	236	212	365	546	3,240	647	634	337	144	174	530
4	132	189	207	336	582	5,780	590	2,750	283	130	411	445
5	115	159	424	314	551	2,260	556	1,630	298	188	189	338
6	97	147	506	399	513	1,640	556	1,100	272	168	142	246
7	100	268	3,080	408	452	1,360	594	894	243	150	129	198
8	98	411	1,620	282	382	1,200	684	1,740	228	138	127	231
9	*90	368	927	296	426	1,050	805	1,860	212	138	345	234
10	76	367	2,840	364	412	993	642	1,400	202	133	914	197
11	97	367	1,950	351	408	894	590	1,310	227	137	466	4,350
12	107	321	1,100	282	313	794	644	1,050	238	110	316	3,220
13	104	269	1,960	335	244	812	624	883	281	101	254	1,660
14	100	241	6,890	295	311	2,230	539	759	323	92	206	1,080
15	101	228	5,700	294	328	2,310	508	688	285	114	173	723
16	105	206	2,220	369	315	1,390	539	629	264	136	143	633
17	108	189	1,450	438	947	1,150	1,990	566	253	124	129	1,610
18	114	184	905	360	1,500	970	3,110	539	225	126	115	1,080
19	113	175	743	316	925	859	1,620	503	221	117	119	977
20	109	159	760	368	767	2,770	1,250	494	199	120	463	1,200
21	110	162	665	1,060	757	2,020	967	2,320	173	120	446	880
22	110	167	656	2,260	1,220	1,320	830	2,670	*165	117	496	794
23	107	225	651	1,080	1,040	1,130	743	1,400	156	98	271	704
24	107	405	572	986	839	995	727	1,060	224	79	200	547
25	130	355	463	805	948	1,090	672	872	180	88	164	488
26	163	412	480	784	947	1,790	624	734	167	95	138	446
27	161	375	450	1,160	1,180	1,260	634	593	160	152	134	451
28	299	331	400	1,460	944	1,070	926	546	135	119	130	368
29	641	292	433	881	-------	959	894	533	128	96	129	315
30	848	253	439	737	-------	871	723	540	146	93	115	291
31	506	-------	429	608	-------	816	-------	506	-------	90	2,340	-------

* Discharge measurement made on this day.

Raritan River at Bound Brook--Continued

Daily discharge, in cubic feet per second, 1950-55

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	284	567	1,390	2,060	310	1,400	1,020	828	394	156	65	664
2	271	603	1,180	2,190	329	1,790	954	695	*301	136	57	602
3	288	1,660	1,040	1,990	296	1,250	890	635	292	128	*54	558
4	286	1,210	886	1,540	270	3,060	862	594	278	124	52	531
5	257	989	810	1,320	310	2,680	806	554	303	115	50	488
6	365	941	713	1,410	434	3,180	764	499	334	131	43	477
7	377	777	473	1,460	9,500	a4,000	762	459	265	104	69	444
8	289	634	583	1,060	3,280	a1,800	687	452	222	*95	680	397
9	261	566	654	982	1,540	a1,600	637	428	287	92	346	366
10	272	487	1,450	917	1,210	1,540	622	428	370	120	178	360
11	249	425	1,020	862	2,310	*1,370	577	404	296	130	295	360
12	247	418	812	736	3,260	1,200	637	375	451	100	3,930	371
13	233	369	734	769	1,240	1,100	1,200	334	496	94	18,600	328
14	217	380	1,210	618	1,130	972	1,020	316	347	89	17,400	296
15	213	328	3,480	668	1,070	906	949	303	304	89	*6,180	283
16	233	322	2,020	658	949	1,020	869	274	272	78	2,620	276
17	229	328	1,560	587	2,290	976	750	256	240	76	1,680	290
18	212	328	3,040	516	2,010	886	664	240	207	74	3,240	293
19	203	332	3,890	557	1,240	933	634	229	188	56	*23,000	283
20	199	693	1,990	458	1,080	936	1,320	213	481	44	14,100	336
21	196	9,460	1,410	408	1,000	1,000	1,030	210	391	50	3,710	310
22	194	10,800	951	533	975	5,850	1,050	219	302	52	3,890	265
23	205	3,380	1,040	498	2,150	8,090	956	218	238	63	2,480	253
24	205	2,070	1,010	460	2,340	3,790	801	245	237	54	1,640	415
25	185	1,790	868	422	1,460	2,290	734	291	253	59	1,310	684
26	186	1,390	749	422	1,250	2,640	774	239	253	50	1,120	432
27	198	1,170	703	428	1,170	2,470	774	217	220	55	986	343
28	240	1,040	694	295	1,130	1,720	694	208	183	46	888	485
29	518	3,090	872	335	-------	1,480	733	217	156	46	763	610
30	1,040	1,940	5,200	302	-------	1,280	978	332	144	58	724	407
31	762	-------	3,130	290	-------	1,120	-------	316	-------	63	704	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for station at Manville and Millstone River at Blackwells Mills.

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1950	7,360	430	144	237	256	0.329	0.38
November	36,413	15,200	196	1,214	1,234	1.58	1.77
December	58,350	11,000	457	1,882	1,902	2.44	2.82
Calendar year 1950	355,055	15,200	144	973	990	1.27	17.25
January 1951	47,632	7,910	595	1,537	1,557	2.00	2.30
February	74,780	9,950	1,050	2,671	2,691	3.45	3.60
March	72,428	14,400	998	2,336	2,356	3.02	3.49
April	62,297	6,200	892	2,077	2,096	2.69	3.00
May	24,471	1,980	457	789	809	1.04	1.20
June	19,460	1,440	346	649	670	0.860	0.96
July	28,364	6,360	270	915	937	1.20	1.39
August	30,401	5,170	358	981	1,002	1.29	1.48
September	8,568	480	210	286	308	.395	.44
Water year 1950-51	470,524	15,200	144	1,289	1,309	1.68	22.83
October 1951	19,559	2,360	215	631	652	.837	.96
November	90,740	15,400	1,070	3,025	3,045	3.91	4.36
December	86,836	16,700	836	2,801	2,821	3.62	4.17
Calendar year 1951	565,536	16,700	210	1,549	1,570	2.02	27.35
January 1952	82,920	7,070	1,310	2,675	2,695	3.46	3.99
February	55,590	7,090	860	1,917	1,938	2.49	2.68
March	86,128	13,500	824	2,778	2,799	3.59	4.14
April	80,800	12,300	1,010	2,693	2,714	3.48	3.89
May	63,184	10,400	893	2,038	2,058	2.64	3.05
June	50,839	10,300	420	1,695	1,719	2.21	2.46
July	24,779	5,950	308	799	824	1.06	1.22
August	22,769	2,580	283	734	759	.974	1.12
September	36,396	7,160	377	1,213	1,237	1.59	1.77
Water year 1951-52	700,540	16,700	215	1,914	1,936	2.49	33.81

* Adjusted for diversion from river 1 mile above station by Elizabethtown Water Co.

Raritan River at Bound Brook--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Runoff in inches
October 1952	9,247	473	241	298	314	.403	.46
November	36,077	9,580	228	1,203	1,218	1.56	1.74
December	65,256	9,480	746	2,105	2,121	2.72	3.14
Calendar year 1952	613,985	13,500	228	1,678	1,698	2.18	29.66
January 1953	94,879	13,400	774	3,061	3,078	3.95	4.55
February	42,613	3,850	895	1,522	1,538	1.97	2.06
March	103,692	11,700	840	3,345	3,361	4.31	4.97
April	91,300	11,500	1,120	3,043	3,059	3.93	4.38
May	43,214	4,300	820	1,388	1,403	1.80	2.08
June	15,969	1,160	289	532	552	.709	.79
July	8,385	849	144	270	290	.372	.43
August	6,998	1,000	115	226	243	.312	.36
September	3,296	158	76	110	128	.164	.18
Water year 1952-53	520,926	13,400	76	1,427	1,444	1.85	25.14
October 1953	5,289	848	76	171	185	.237	.27
November	8,141	412	147	271	284	.365	.41
December	39,592	6,890	207	1,277	1,291	1.66	1.91
Calendar year 1953	463,168	13,400	76	1,269	1,285	1.65	22.39
January 1954	18,741	2,260	282	605	619	.795	.92
February	18,862	1,500	244	674	691	.887	.92
March	49,953	5,780	794	1,611	1,629	2.09	2.41
April	25,671	3,110	508	856	874	1.12	1.25
May	32,430	2,750	494	1,046	1,063	1.36	1.57
June	6,987	393	128	233	259	.332	.37
July	3,776	188	79	122	148	.190	.22
August	9,568	2,340	93	309	333	.427	.49
September	26,730	4,350	197	891	913	1.17	1.31
Water year 1953-54	245,740	6,890	76	673	692	.888	12.05
October 1954	9,114	1,040	185	294	317	.407	.47
November	48,487	10,800	322	1,616	1,637	2.10	2.35
December	45,562	5,200	473	1,470	1,497	1.92	2.21
Calendar year 1954	295,881	10,800	79	811	832	1.07	14.49
January 1955	25,751	2,190	290	831	856	1.10	1.27
February	45,533	9,500	270	1,626	1,652	2.12	2.21
March	64,339	8,090	886	2,075	2,104	2.70	3.11
April	25,148	1,320	577	838	864	1.11	1.24
May	11,228	828	208	362	388	.498	.58
June	8,705	496	144	290	315	.404	.45
July	2,627	156	44	84.7	107	.137	.16
August	110,854	23,000	43	3,576	3,604	4.63	5.33
September	12,207	684	253	407	431	.553	.62
Water year 1954-55	409,555	23,000	43	1,122	1,147	1.47	20.00

* Adjusted for diversion from river 1 mile above station by Elizabethtown Water Co.

Green Brook at Plainfield

Location.--Lat 40°36'53" (revised), 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 1955.

Gage.--Water-stage recorder and concrete control. Datum of gage is 70.37 ft above mean sea level, datum of 1929.

Average discharge.--17 years, 11.3 cfs (unadjusted).

Extremes.--1938-55: Maximum discharge, 2,890 cfs July 23, 1938 (gage height, 5.82 ft), from rating curve extended above 220 cfs on basis of contracted-opening measurements of peak flow (a peak over flow of about 4,400 cfs bypassed gage based on computation of flow over Lower Seeley Dam 4.4 miles upstream by New Jersey Department of Conservation and Economic Development); no flow at times.

Peak discharge (base, 375 cfs).--
1950-51: Nov. 25 (8:30 p.m.) 569 cfs (3.14 ft); Dec. 8 (6:30 a.m.) 414 cfs (2.77 ft); Mar. 30 (10 p.m.) 465 cfs (2.90 ft); July 28 (11 a.m.) 482 cfs (2.94 ft).
1951-52: Nov. 7 (11 a.m.) 425 cfs (2.80 ft); Dec. 21 (5 a.m.) 538 cfs (3.07 ft); Mar. 11 (1 p.m.) 516 cfs (3.02 ft); May 25 (2:30 p.m.) 688 cfs (3.39 ft); June 1 (6 a.m.) 968 cfs (3.89 ft); Aug. 21 (11 p.m.) 402 cfs (2.74 ft); Sept. 1 (3:30 p.m.) 551 cfs (3.10 ft).
1952-53: Dec. 5 (5 p.m.) 473 cfs (2.92 ft); Jan. 24 (3 p.m.) 542 cfs (3.08 ft); Mar. 2 (8 a.m.) 383 cfs (2.69 ft); Mar. 13 (10 a.m.) 888 cfs (4.06 ft); Mar. 16 (1 a.m.) 395 cfs (2.92 ft); Apr. 7 (3 p.m.) 654 cfs (3.58 ft).
1953-54: Sept. 11 (4 a.m.) 406 cfs (2.75 ft).
1954-55: Aug. 13 (8 a.m.) 1,270 cfs (4.32 ft); Aug. 19 (3 a.m.) 639 cfs (3.29 ft).

Remarks.--Water diverted from Baltusrol well field by Commonwealth Water Co. and from wells in vicinity of Mountainside and Scotch Plains by Plainfield-Union Water Co. for municipal supply and from private and industrial wells in Plainfield and vicinity. Diurnal fluctuation at low flow caused by pumping from wells near river in Plainfield. During extreme high stages considerable overflow above gage from Green Brook basin to adjacent Cedar Brook basin which returns to Green Brook 5.1 miles below gage by way of Bound Brook.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.5	0.1	4.8	a10	20	14.9	43	7.5	8.6	5.5	3.8	0.9
2	.5	.1	4.3	6.4	24	19.1	30	6.5	7.4	3.8	3.1	.7
3	.5	.1	4.8	10.0	11.4	15.9	96	6.6	6.4	2.6	2.6	.9
4	.3	7.5	58	21	10.2	54	39	5.6	10.5	2.3	2.5	.9
5	.3	16.6	38	12.8	8.6	33	26	5.1	13.3	14.2	1.8	.6
6	.2	2.9	12.1	9.0	8.0	22	21	4.7	5.9	3.2	1.5	1.1
7	.3	1.5	16.2	12.6	77	17.9	18.0	4.3	4.6	2.3	2.8	2.7
8	.3	1.0	184	13.3	38	15.3	15.4	4.2	4.2	1.7	5.9	1.0
9	.6	.7	33	7.1	19.1	12.8	13.7	3.8	4.1	1.5	2.4	.2
10	4.4	.6	18.5	6.5	14.3	10.7	13.2	3.4	4.6	1.7	11.0	.6
11	.6	.3	16.9	6.0	9.5	9.7	12.3	15.6	*4.3	1.5	12.2	.5
12	6.4	.2	*12.3	5.5	9.6	9.4	13.7	19.7	3.2	1.9	5.0	.6
13	1.9	.2	9.3	5.1	10.8	8.7	26	6.8	7.1	2.9	4.4	.8
14	.6	.2	8.2	10.5	11.6	60	12.6	5.5	26	1.9	2.6	.5
15	.1	.2	7.9	102	8.7	27	10.0	4.3	12.7	1.1	3.7	1.5
16	.1	.1	25	27	7.0	17.1	10.9	4.1	6.5	1.4	4.5	.5
17	.1	.2	11.9	17.6	30	13.4	11.3	3.4	4.5	1.5	6.2	.5
18	.1	.2	8.9	14.7	38	11.0	8.8	3.1	3.8	1.8	2.3	.3
19	.1	.1	6.8	13.0	18.2	11.0	7.9	3.0	3.2	14.6	1.5	.3
20	.1	2.2	5.2	12.1	19.5	110	7.2	3.2	3.0	5.0	6.6	.5
21	.1	5.0	4.6	12.0	113	31	6.0	3.3	2.9	1.5	1.8	.3
22	0	1.7	4.5	8.8	138	23	6.2	3.2	2.8	1.9	1.1	.2
23	4.8	.8	4.8	7.2	43	16.9	56	15.0	3.0	2.7	1.7	.3
24	1.5	.9	5.0	c48	27	18.1	17.5	80	2.5	1.7	1.5	.3
25	.3	185	4.0	c17.6	21	14.1	12.2	17.6	2.2	1.5	2.5	1.0
26	.1	50	33	12.8	18.8	11.4	10.8	9.2	1.8	1.4	4.0	.8
27	0	13.3	a2.5	9.6	17.3	10.0	8.9	18.3	7.2	1.1	1.7	.5
28	0	10.6	a2.5	10.0	14.4	9.7	8.1	16.4	3.2	166	1.5	.2
29	0	7.6	a10	13.3	-------	19.1	8.9	24	7.4	18.9	1.5	.2
30	.1	5.9	a18	10.7	-------	189	12.7	29	4.0	8.2	1.5	.2
31	.1	-------	a15	6.3	-------	119	-------	12.6	-------	5.0	1.3	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of record for adjacent days, weather records, and records for stations on nearby streams.
c Backwater from debris.

Green Brook at Plainfield--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.2	61	5.7	12.5	17.8	6.7	10.0	19.2	478	2.3	1.4	163
2	4.7	14.6	5.4	14.1	21	6.9	10.0	15.8	100	2.2	3.0	26
3	4.1	93	4.5	26	19.2	6.0	8.7	13.5	45	2.2	2.8	30
4	.7	22	4.9	15.2	121	15.0	7.5	11.4	31	13.6	1.4	10.0
5	.6	10.4	24	21	48	56	47	10.0	26	4.8	1.5	6.4
6	1.0	7.1	14.6	24	27	25	24	9.1	18.5	2.3	24	5.1
7	25	143	10.4	17.8	21	17.1	13.5	8.3	13.5	2.0	10.1	3.8
8	27	37	8.3	12.5	17.1	15.2	10.9	7.1	10.9	25	6.7	3.6
9	1.8	15.2	7.1	9.5	15.8	15.2	10.0	6.4	12.6	86	4.3	3.1
10	.8	10.9	6.0	14.1	13.5	13.5	9.1	6.0	10.9	45	29	2.9
11	21	8.7	5.4	11.4	15.2	217	8.7	15.2	7.9	7.1	6.9	a2.8
12	8.1	7.1	5.4	8.3	12.5	63	7.5	52	7.1	4.5	5.8	a2.6
13	2.7	6.4	4.5	8.3	9.2	33	8.9	14.8	5.7	3.6	5.2	a2.5
14	1.5	12.1	2.9	10.4	7.7	26	58	9.5	5.1	2.9	3.3	a2.5
15	1.1	17.2	39	12.0	7.8	19.2	27	8.7	4.5	2.9	2.5	a3
16	1.4	37	13.0	10.9	6.7	16.4	17.8	7.1	4.5	2.9	24	a3.5
17	1.0	19.7	6	9.8	26	14.1	13.0	5.7	4.3	5.6	19.4	a2.5
18	.6	12.0	25	34	21	12.5	11.4	12.4	3.8	2.9	4.5	a4
19	.4	9.5	*40	14.1	13.0	56	10.0	7.1	4.3	2.7	3.3	a10
20	.6	7.5	28	15.2	10.0	45	9.1	24	3.8	2.3	2.9	a5
21	.6	6.4	267	11.4	11.4	24	7.9	15.8	3.3	11.4	11.6	a3
22	.4	5.7	58	41	10.4	21	7.5	9.1	3.3	7.3	29	a2
23	.4	5.7	29	72	9.1	71	7.1	6.4	3.8	3.1	4.8	a2.5
24	3.0	7.1	22	22	8.3	43	6.0	5.4	4.0	2.7	2.9	a2
25	7.6	5.7	20	15.2	7.5	31	17.9	205	3.3	2.2	2.5	a1.7
26	1.5	30	32	102	7.1	21	47	76	3.1	2.2	2.5	a1.5
27	.7	11.0	19.2	58	6.7	17.1	95	30	2.5	1.5	2.3	a1.4
28	4.4	7.1	13.0	68	6.4	14.6	139	18.5	2.5	1.8	2.3	1.3
29	2.5	6.7	12.5	37	6.0	13.0	44	15.7	2.3	2.3	2.3	1.1
30	1.5	6.0	13.5	26	-------	11.4	27	12.5	3.6	2.0	2.0	a1.0
31	1.4	-------	14.1	20	-------	*10.4	-------	40	-------	1.8	1.8	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for station at Rahway River at Rahway.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.8	0.4	2.2	4.0	14	6.4	13	36	7.3	2.2	1.3	0.9
2	4.0	.4	2.0	3.7	9.1	5.4	13	19	5.9	3.2	3.0	.7
3	5.0	*.4	*4.2	31	9.1	7.2	12	13	4.9	3.3	1.6	.7
4	.6	.4	2.9	12	8.7	144	13	11	4.6	1.9	1.5	.7
5	.5	.4	136	7.9	6.7	36	13	16	4.4	1.6	1.8	3.9
6	.5	.4	83	6.0	6.7	19	*9.8	13	4.1	6.0	2.2	2.5
7	.4	.4	18	5.7	8.3	15	258	33	5.5	5.3	1.3	.6
8	.5	.4	11	7.8	8.3	13	*77	36	4.1	2.2	1.4	.7
9	.5	.4	8.7	56	6.4	11	35	21	3.8	2.2	1.5	.7
10	.4	.7	7.5	79	5.4	10	73	15	3.6	2.0	3.5	.6
11	.4	.6	39	54	4.8	8.7	41	11	3.3	1.9	1.5	.6
12	.4	.5	18	32	9.9	15	48	10	3.1	1.8	1.3	2.0
13	.4	.4	11	19	8.3	305	89	12	21	1.6	1.3	4.7
14	.4	.4	8.3	15	6.0	58	56	14	6.6	1.7	7.4	.4
15	.4	4.4	6.7	14	78	96	31	12	4.6	1.7	4.6	2.9
16	.5	5.1	6.0	12	37	137	99	10	3.6	1.7	1.4	3.8
17	.4	1.3	5.4	10	19	44	43	28	3.1	1.6	1.6	.8
18	.4	.8	4.8	27	14	34	34	30	2.9	1.5	1.6	.7
19	.4	.6	4.0	16	11	66	48	13	2.6	1.4	1.2	.4
20	.6	12	3.6	12	10	35	31	9.8	2.4	3.5	1.3	.2
21	.4	30	11	17	42	25	23	8.5	2.1	4.3	1.2	1.0
22	.5	84	29	24	19	21	19	7.7	13	2.5	1.2	.9
23	.4	14	12	16	12	17	16	59	5.7	60	.9	.6
24	.5	6.0	10	175	11	122	14	15	2.6	10	.9	.5
25	.4	4.3	8.3	86	10	54	13	10	2.4	2.5	1.0	.3
26	.3	3.6	7.5	32	9.1	41	19	20	2.2	2.4	1.0	.6
27	.4	3.1	6.4	21	8.3	30	13	14	1.9	2.2	1.1	.4
28	.5	2.7	4.5	28	7.1	23	11	9.3	4.2	2.0	.7	.3
29	.4	2.3	4.3	20	-------	20	*9.3	7.3	6.5	1.7	.6	.9
30	.4	2.5	3.8	15	-------	17	8.9	10	3.8	4.0	.6	.6
31	.4	-------	3.8	13	-------	14	-------	8.9	-------	2.0	.5	-------

* Discharge measurement made on this day.
Note.--No gage-height record Oct. 1-14, July 10-31, Aug. 1-6, 9-14; discharge estimated on basis of recorded range in stage, weather records, and records for nearby station. Backwater from log Mar. 13 to Apr. 22.

Green Brook at Plainfield--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*0.6	0.4	0.3	1.0	a1.0	27	5.9	4.6	3.6	1.4	1.4	4.1
2	.6	.1	.3	1.1	a2.2	29	5.2	5.6	3.1	1.1	0.7	1.8
3	.6	.1	.2	0.9	6.0	55	4.9	16	3.1	1.0	18	1.1
4	.6	.1	.2	1.1	6.6	31	4.1	*73	2.9	.5	3.9	1.2
5	.5	.1	18	1.0	4.5	14	3.8	17	2.6	.6	1.4	.4
6	1.3	.1	6.4	1.8	3.7	11	3.8	12	1.9	1.1	1.0	.4
7	1.3	16	35	1.2	2.5	8.9	4.1	9.8	1.8	1.0	.7	.6
8	.4	3.9	5.9	.6	2.5	8.1	5.5	62	2.3	1.3	.6	1.8
9	.1	1.4	3.2	1.1	3.2	6.9	4.1	30	2.0	c1.2	32	1.7
10	.1	.7	39	.7	3.0	6.9	3.3	32	2.5	c1.1	5.6	2.4
11	.2	.3	9.1	0	2.8	6.2	4.1	20	2.3	c1.0	1.8	154
12	.3	.4	6.9	1.2	1.6	4.9	8.2	15	2.2	.9	1.3	9.5
13	.3	.1	10	a.8	1.2	11	4.4	12	6.1	1.0	.9	3.3
14	.3	.2	118	a.6	1.4	36	3.8	11	2.3	4.2	.8	2.2
15	.2	.1	18	a1.6	1.9	16	3.6	8.9	1.8	5.6	.5	1.8
16	.1	.1	8.3	2.8	2.4	9.3	6.2	8.1	1.9	1.6	1.0	7.5
17	.3	.1	4.5	2.2	23	8.1	72	7.3	2.0	1.1	.7	*11
18	.1	.1	3.0	a.9	9.2	7.3	31	6.2	1.6	.4	.6	3.4
19	.2	.1	a2.2	a.6	5.5	7.6	15	5.5	1.6	.8	3.7	9.0
20	.1	.1	a2.0	1.8	4.9	45	11	7.2	.8	1.3	3.9	5.8
21	.4	.1	a2.2	22	7.8	14	9.8	59	1.4	.9	7.2	*3.8
22	.1	.2	a3.1	20	10	9.8	8.9	16	1.3	.9	1.9	2.8
23	.1	12	a2.6	16	5.9	8.9	8.9	10	4.7	.8	1.3	1.6
24	.1	3.1	1.7	4.6	5.2	8.1	8.9	7.7	2.1	.8	.9	1.5
25	1.2	5.5	1.3	4.4	10	15	7.3	7.3	1.4	.5	.8	1.4
26	.6	3.4	1.6	6.5	9.4	14	5.9	5.9	1.3	1.1	1.0	1.6
27	.1	1.2	1.2	16	10	8.5	8.3	5.2	.5	.9	.7	2.6
28	14	.9	1.7	22	6.2	7.3	11	4.9	1.0	1.1	.7	1.0
29	18	.1	2.2	9.8	-------	6.9	6.9	5.4	1.0	.9	.4	1.1
30	3.5	.3	1.7	4.7	-------	6.6	5.2	5.2	1.1	.8	3.7	1.6
31	.9	-------	1.4	3.9	-------	5.9	-------	3.6	-------	1.2	48	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Rahway River near Springfield.
c Backwater from sandbags on control.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.3	1.6	8.5	14	1.9	*20	9.8	11	*4.0	1.8	0.7	3.6
2	2.2	15	7.3	22	2.1	14	8.9	8.5	2.6	1.7	.7	3.1
3	3.1	24	6.2	15	2.1	9.8	8.1	7.7	1.9	.8	.8	2.6
4	1.7	*8.3	5	12	1.6	60	8.5	*6.9	5.1	.7	.9	1.9
5	1.1	5.9	4.5	10	1.7	21	7.3	6.9	4.8	1.9	.8	1.6
6	8.1	4.1	4	18	22	57	7.3	6.2	2.2	2.5	1.2	2.1
7	1.4	3.3	3.7	14	91	34	7.7	5.9	1.8	1.9	9.2	1.9
8	.7	2.6	3.5	9.0	15	18	6.6	5.2	2.3	1.3	17	2.1
9	1.1	2.4	21	8.4	10	16	5.5	4.1	3.3	1.2	1.5	1.6
10	.5	2.2	11	8.1	8.9	15	5.2	3.6	1.8	2.2	.8	1.4
11	1.3	1.4	7	6.9	28	13	5.2	3.8	4.6	2.1	19	1.4
12	1.1	1.2	5	6.0	17	12	13	3.8	12	1.3	165	1.4
13	.8	1.5	4.5	6.2	9.6	11	14	3.6	3.4	1.0	374	1.3
14	*1.2	1.6	40	5.4	7.4	9.3	8.5	3.1	2.3	1.2	54	1.3
15	2.0	1.6	32	5.5	8.5	9.8	12	2.6	2.0	1.0	15	1.3
16	1.5	1.4	16	5.5	7.9	11	8.5	2.9	1.8	1.0	8.3	1.3
17	.5	1.6	11	4.6	24	8.9	6.9	2.4	1.6	.3	9.7	1.2
18	.5	1.4	51	4.1	12	10	6.6	2.6	1.2	.8	82	1.2
19	.5	1.6	25	4.0	8.9	8.9	14	2.6	1.6	.9	264	1.3
20	.6	32	14	3.4	8.1	9.3	17	2.2	20	.9	34	2.5
21	.5	189	14	3.2	7.7	18	15	2.1	13	1.1	16	1.4
22	.4	31	8.3	3.6	7.7	131	14	1.3	42	.9	12	1.3
23	.4	14	7.9	3.6	31	48	9.8	2.6	5.4	.9	8.9	1.3
24	.3	12	8.1	3.6	16	25	8.1	3.9	9.7	.3	6.6	15
25	.3	10	6.6	3.2	12	18	8.1	4.4	7.5	.7	5.5	5.0
26	.3	7.7	5.6	2.9	9.8	33	11	3.8	6.4	.9	4.9	2.0
27	.9	6.6	5.2	2.6	9.3	23	9.3	2.0	3.4	.8	4.4	1.5
28	.4	7.4	4.7	2.2	9.7	16	7.7	1.8	2.7	1.1	3.1	10
29	16	39	16	2.2	-------	13	15	5.9	2.2	.8	3.1	2.9
30	8.0	12	75	1.9	-------	12	12	5.1	2.0	.9	4.1	2.4
31	3.6	-------	21	1.7	-------	10	-------	10	-------	.3	5.8	-------

* Discharge measurement made on this day.
Note.--No gage-height record Dec. 4-14, Sept. 11-28; discharge estimated on basis of recorded range in stage, weather records, and records for Rahway River at Springfield, N. J.

Green Brook at Plainfield--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	25.0	6.4	0	0.81		
November	315.8	185	.1	10.5		
December	560.0	184	2.5	18.1		
Calendar year 1950	2,984.9	185	0	8.18		
January 1951	478.5	102	5.1	15.4		
February	786.0	138	7.0	28.1		
March	954.2	189	8.7	30.8		
April	583.3	96	6.0	19.4		
May	349.0	80	3.0	11.3		
June	180.9	26	1.8	6.03		
July	282.3	166	1.1	9.11		
August	106.5	12.2	1.1	3.44		
September	19.6	2.7	.2	.65		
Water year 1950-51	4,641.1	189	0	12.7		
October 1951	128.3	27	.2	4.14		
November	642.8	143	5.7	21.4		
December	760.4	267	2.9	24.5		
Calendar year 1951	5,281.8	267	.2	14.5		
January 1952	773.7	102	8.3	25.0		
February	523.4	121	6.0	18.0		
March	956.3	217	6.0	30.8		
April	720.5	139	6.0	24.0		
May	697.7	205	5.4	22.5		
June	829.1	478	2.3	27.6		
July	261.1	86	1.5	8.42		
August	226.0	29	1.4	7.29		
September	309.8	163	1.0	10.3		
Water year 1951-52	6,829.1	478	.2	18.7		
October 1952	22.1	5.0	.3	.71		
November	182.9	84	.4	6.10		
December	482.9	136	2.0	15.6		
Calendar year 1952	5,985.5	478	.3	16.4		
January 1953	871.1	175	3.7	28.1		
February	399.2	78	4.8	14.3		
March	1,449.7	305	5.4	46.8		
April	1,183.0	258	8.9	39.4		
May	532.5	59	7.3	17.2		
June	145.8	21	1.9	4.86		
July	141.9	60	1.4	4.58		
August	52.0	7.4	.5	1.68		
September	34.6	4.7	.2	1.15		
Water year 1952-53	5,497.7	305	.2	15.1		
October 1953	47.2	18	.1	1.52		
November	51.3	16	.1	1.71		
December	311.2	118	.2	10.0		
Calendar year 1953	5,219.5	305	.1	14.3		
January 1954	152.9	22	0	4.93		
February	153.6	23	1.0	5.49		
March	452.2	55	4.9	14.6		
April	285.1	72	3.3	9.50		
May	493.4	73	3.6	15.9		
June	64.2	6.1	.5	2.14		
July	38.1	5.6	.4	1.23		
August	147.1	48	.4	4.75		
September	242.0	154	.4	8.07		
Water year 1953-54	2,438.3	154	0	6.68		
October 1954	62.3	16	.3	2.01		
November	443.4	189	1.2	14.8		
December	452.6	75	3.5	14.6		
Calendar year 1954	2,986.9	189	0	8.18		
January 1955	212.8	22	1.7	6.86		
February	390.9	91	1.6	14.0		
March	715.0	131	8.9	23.1		
April	290.6	17	5.2	9.69		
May	138.5	11	1.3	4.47		
June	174.6	42	1.2	5.82		
July	35.2	2.5	.3	1.14		
August	1,133.0	374	.7	36.5		
September	78.9	15	1.2	2.63		
Water year 1954-55	4,127.8	374	.3	11.3		

Lawrence Brook at Farrington Dam

Location (revised).--Lat 40°27'00", long 74°27'05", on left bank 300 ft upstream from Farrington Dam, 0.7 mile southwest of Milltown, Middlesex County, and 5.4 miles upstream from mouth.

Drainage area.--34.4 sq mi.

Records available.--May 1927 to September 1955.

Gage.--Water-stage recorder above concrete dam. Datum of gage is 25.73 ft above mean sea level, datum of 1929.

Average discharge.--27 years (1928-55), 37.7 cfs (adjusted for storage).

Extremes.--1927-55: 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).--
1950-51: Nov. 25 (9 p.m.) 686 cfs (25.36 ft); Feb. 22 (4 a.m.) 535 cfs (25.26 ft).
1951-52: Dec. 21 (10 a.m.) 808 cfs (25.48 ft); Mar. 11 (5 p.m.) 623 cfs (25.36 ft); Apr. 28 (7 a.m.) 776 cfs (25.46 ft); May 25 (6 p.m.) 524 cfs (25.29 ft); June 1 (8 p.m.) 925 cfs (25.55 ft); June 5 (5 a.m.) 460 cfs (25.24 ft); Sept. 1 (7 p.m.) 498 cfs (25.27 ft).
1952-53: Jan. 24 (8 p.m.) 550 cfs (25.30 ft); Mar. 13 (1 p.m.) 1,110 cfs (25.62 ft); Mar. 16 (5 a.m.) 522 cfs (25.28 ft).
1953-54: Sept. 11 (1 to 2 p.m.) 643 cfs (25.36 ft).
1954-55: Nov. 21 (6 p.m.) 480 cfs (25.25 ft); Mar. 22 (5 p.m.) 550 cfs (25.30 ft); Aug. 13 (11 a.m.) 1,450 cfs (25.78 ft); Aug. 19 (7 a.m.) 566 cfs (25.31 ft).

Remarks.--Records given herein include flow over dam and through blow-off gates. Flow regulated by Farrington Reservoir (capacity, 87,600,000 cu ft).

Cooperation.--Water-stage recorder inspected and records of blow-off gates furnished by employee of city of New Brunswick.

Revisions.--Special Report 9: Drainage area.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10.5	15.8	41	47	51	47	130	47	28	10.5	1.9	6.8
2	*10.5	*15.1	36	36	118	53	88	36	25	10.5	2.1	6.5
3	9.7	14.3	32	*32	74	47	214	32	22	9.7	2.3	6.5
4	9.7	14.1	70	47	53	121	142	28	31	9.1	10.9	6.5
5	9.1	68	92	53	41	102	95	28	106	9.7	13.9	6.5
6	8.8	40	51	36	36	74	74	28	53	9.4	13.4	6.3
7	8.5	25	41	36	130	53	60	25	32	8.8	15.6	17.2
8	8.3	19.3	275	53	182	53	47	25	25	8.5	17.0	21
9	8.5	19.3	132	36	84	47	47	22	19.3	7.7	14.6	18.5
10	10.0	16.8	100	28	53	36	41	19.3	22	7.7	13.2	17.4
11	10.5	16.8	74	25	36	36	47	30	28	7.7	13.3	17.0
12	10.5	14.5	60	25	32	32	53	67	22	7.4	15.7	17.0
13	10.5	14.5	41	25	*36	32	88	47	19.3	7.1	*79	17.0
14	10.0	12.1	32	27	41	65	74	36	32	6.8	40	*17.6
15	9.4	10.5	32	192	47	74	53	28	47	6.5	22	18.9
16	9.1	10.5	55	117	36	53	53	25	47	6.3	16.8	18.8
17	9.1	12.1	47	74	54	47	67	22	28	6.0	14.5	18.7
18	9.1	12.1	36	53	132	41	53	19.3	19.3	6.0	11.3	18.7
19	17.9	10.5	28	47	88	41	47	19.3	16.8	7.4	10.5	19.2
20	24	12.3	25	41	81	241	47	19.3	14.5	*9.1	10.0	19.5
21	22	22	22	36	232	130	47	22	12.1	8.3	10.1	19.4
22	19.8	22	19.3	32	381	88	41	22	10.0	7.4	14.5	19.3
23	10.5	16.8	19.3	28	177	64	92	27	10.0	7.1	11.3	19.3
24	7.4	14.5	22	79	123	53	81	194	10.5	16.0	10.0	19.2
25	9.4	267	22	92	88	47	53	98	10.0	20	9.4	19.2
26	10.5	320	19.3	53	74	41	47	53	9.1	18.3	9.4	19.2
27	12.1	133	19.3	41	60	36	41	47	9.4	17.2	9.4	19.2
28	10.5	81	14.5	32	53	32	41	53	10.5	17.8	9.1	19.2
29	10.5	60	26	32	-------	33	36	41	16.8	19.2	8.5	19.1
30	20	47	47	41	-------	202	53	41	14.5	7.5	8.0	19.1
31	20	-------	47	32	-------	260	-------	36	-------	1.8	7.4	-------

* Discharge measurement made on this day.
Note.--Blow-off gate open Oct. 19-23, Oct. 30 to Nov. 6, July 24-30, Aug. 4-13, Sept. 7-30.

Lawrence Brook at Farrington Dam--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18.6	40	29	37	47	37	33	77	551	10.0	7.1	212
2	18.1	84	25	64	59	33	37	65	354	9.7	7.4	162
3	18.1	272	22	*97	65	33	33	47	136	9.4	8.0	97
4	17.4	162	19.3	a80	277	44	29	37	96	9.4	8.3	53
5	16.6	77	46	a65	176	171	61	33	267	10.0	8.3	33
6	16.6	47	53	a90	97	125	71	33	81	9.7	31	25
7	16.5	191	37	53	71	77	47	29	53	9.4	74	22
8	6.5	137	29	37	59	65	42	29	37	12.7	37	19.3
9	0	65	25	37	47	53	37	25	33	108	25	19.3
10	0	47	22	64	42	47	33	25	29	90	33	19.3
11	0	42	19.3	73	47	*324	29	31	25	33	29	16.8
12	0	33	19.3	47	37	203	29	105	22	19.3	19.3	16.8
13	0	*29	16.8	47	37	105	29	59	22	14.5	19.3	14.5
14	0	33	16.8	53	33	90	106	42	19.3	12.5	14.5	14.5
15	0	65	90	65	29	59	77	37	16.8	10.5	12.5	16.8
16	0	92	77	59	33	53	65	33	14.5	*10.0	21	*14.5
17	0	89	37	59	104	47	42	29	14.5	10.0	47	11.3
18	.1	53	84	121	112	37	37	37	*11.3	9.7	25	10.5
19	11.5	37	177	77	71	90	33	37	10.5	9.7	16.8	12.5
20	19.1	29	82	83	53	134	29	78	10.5	9.7	14.5	16.8
21	19.0	25	527	65	59	77	25	98	10.5	11.2	14.5	14.5
22	*19.0	25	192	68	47	59	25	53	12.5	14.5	117	12.5
23	18.9	22	97	138	42	95	22	37	16.8	10.5	44	12.5
24	18.0	25	71	77	37	105	22	33	19.3	9.7	25	12.5
25	17.2	22	59	59	*37	97	51	259	16.8	9.1	*19.3	11.3
26	13.0	94	115	152	33	65	151	250	14.5	8.5	16.8	11.3
27	10.1	71	71	143	33	59	214	110	11.3	8.0	14.5	10.5
28	9.9	42	42	195	33	47	543	59	11.3	8.0	12.5	10.5
29	14.1	33	33	148	33	42	201	42	10.5	7.7	12.5	10.5
30	17.0	29	33	77	-------	37	112	33	10.5	7.4	12.5	10.5
31	17.0	-------	42	59	-------	33	-------	52	-------	7.4	12.5	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for stations on nearby streams.
Note.--Blow-off gate open Oct. 1-8, Oct. 19 to Nov. 1.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	10	18	21	a35	23	45	79	31	11	14	13
2	10	10	18	18	35	23	45	79	27	11	14	13
3	15	13	32	a30	35	23	40	61	23	10	14	13
4	12	15	41	a60	31	232	45	55	20	9.9	14	13
5	11	15	87	a40	31	130	73	61	17	9.2	14	13
6	10	*15	160	35	27	67	55	79	17	9.0	14	13
7	10	15	74	31	27	50	207	67	20	9.0	14	13
8	9.9	15	51	35	31	45	201	55	17	8.8	14	13
9	9.9	15	41	192	27	40	99	55	15	8.3	14	13
10	9.5	15	36	252	23	35	113	50	13	7.8	14	13
11	9.2	15	85	151	20	31	106	40	13	7.2	14	13
12	9.5	15	91	99	27	35	92	35	12	7.0	14	13
13	9.5	15	51	67	*31	*608	194	31	40	6.7	14	13
14	9.5	15	41	55	27	232	202	35	67	6.7	14	13
15	14	15	32	45	124	191	99	35	40	14	14	13
16	22	15	28	40	140	347	151	35	27	16	14	13
17	15	15	24	35	73	143	120	51	20	14	14	14
18	9.0	15	21	60	50	92	85	99	17	14	*14	15
19	17	15	21	67	40	155	151	50	15	14	14	15
20	20	15	18	50	35	127	99	40	13	14	14	15
21	18	15	28	46	78	85	79	*35	12	14	13	16
22	*16	71	62	92	73	67	61	31	11	16	13	16
23	15	121	51	61	50	55	50	132	11	17	13	16
24	14	69	41	242	40	147	50	67	10	18	13	*16
25	13	41	32	238	35	151	45	40	9.9	15	13	16
26	12	36	28	99	31	113	92	40	9.5	14	13	16
27	12	28	24	a70	27	79	99	35	9.0	14	13	16
28	11	24	18	a60	23	61	61	31	9.2	14	13	15
29	11	21	18	a50	-------	55	55	27	13	14	13	14
30	11	21	18	a45	-------	50	50	27	13	14	13	14
31	10	-------	21	a40	-------	45	-------	31	-------	14	13	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records and records for stations on nearby streams.
Note.--Blow-off gate open Oct. 15-17, Oct. 20 to Jan. 2, July 15 to Sept. 30.

Lawrence Brook at Farrington Dam--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	0	0	13	15	32	20	20	13	14	6.0	0
2	13	0	.2	12	15	61	17	20	11	14	8.8	0
3	13	0	.8	13	17	82	15	22	9.9	14	12	0
4	13	0	2.1	13	20	121	15	87	9.5	14	12	0
5	6.8	0	6.5	13	17	55	15	50	9.2	14	12	0
6	0	0	9.9	15	17	40	17	35	8.8	14	12	0
7	0	0	75	15	17	31	17	27	8.3	14	12	.2
8	0	0	45	13	15	27	20	64	7.8	14	12	1.1
9	0	0	31	12	*15	23	27	79	7.5	14	9.1	2.1
10	0	0	64	13	13	23	20	55	7.2	13	6.1	2.1
11	0	0	50	17	13	23	17	40	7.0	13	6.1	346
12	0	0	35	13	13	20	20	31	7.2	4.5	6.1	138
13	8.8	0	67	13	12	27	17	27	9.0	0	6.1	55
14	15	0	221	13	11	96	13	20	9.9	0	6.1	35
15	11	0	119	13	11	78	13	20	9.5	0	6.1	27
16	7.4	0	61	17	13	45	17	17	9.2	0	6.1	31
17	6.8	0	45	23	42	35	130	17	9.0	0	*6.1	55
18	6.8	0	31	20	40	27	154	15	8.8	0	6.1	35
19	5.9	0	23	17	31	23	67	13	8.5	0	6.1	31
20	*5.2	0	20	17	23	59	40	16	8.0	0	6.1	35
21	5.2	0	20	75	23	45	31	166	7.5	0	6.1	27
22	4.4	0	20	70	45	31	23	110	12	0	6.1	23
23	4.0	0	20	35	35	27	20	61	18	0	6.1	17
24	4.0	0	17	27	27	23	20	40	16	0	6.1	15
25	4.0	0	17	23	35	38	17	35	14	0	6.1	13
26	4.0	0	15	23	35	64	17	27	14	9.4	6.1	13
27	4.1	0	13	31	31	40	20	23	14	15	6.1	13
28	1.8	0	13	40	27	31	45	20	14	15	6.1	12
29	0	0	15	27	-------	27	40	17	14	15	6.1	10
30	0	0	15	20	-------	20	27	23	14	9.6	6.0	10
31	0	-------	13	17	-------	20	-------	17	-------	6.0	2.7	-------

* Discharge measurement made on this day.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.9	27	50	67	12	45	40	40	15	7.8	14	17
2	9.5	38	40	67	13	50	35	35	12	7.0	14	17
3	9.9	106	35	61	17	40	27	27	11	6.2	14	17
4	10	55	31	50	15	102	27	17	11	5.7	13	17
5	9.5	45	31	40	15	92	20	13	15	5.2	13	15
6	17	40	27	45	24	115	23	11	12	4.5	13	15
7	17	31	23	40	188	149	27	9.5	11	4.2	13	13
8	13	27	20	40	92	73	23	9.2	9.9	3.7	5.0	12
9	11	23	27	35	55	61	23	9.0	15	3.2	0	11
10	10	20	50	31	40	50	23	9.0	17	4.0	0	10
11	10	20	40	27	60	40	20	9.5	15	5.5	0	9.9
12	9.9	17	31	27	85	40	44	11	17	5.2	1.4	9.9
13	9.2	20	27	27	50	40	85	11	15	4.5	887	9.9
14	9.0	17	65	23	40	31	61	11	12	4.0	356	9.2
15	8.8	15	127	23	35	31	50	11	11	3.5	143	9.0
16	8.3	13	67	20	31	40	40	10	10	3.2	85	9.5
17	8.0	15	50	20	50	31	40	9.5	9.2	2.8	67	9.9
18	7.8	17	87	20	55	31	35	9.5	8.8	11	72	9.9
19	7.5	20	99	20	40	35	35	9.2	8.5	14	367	9.5
20	7.2	41	61	17	40	35	73	8.8	13	14	113	9.9
21	7.2	351	40	17	40	47	67	8.5	13	14	61	9.9
22	10	193	31	17	40	315	61	8.3	11	14	61	9.9
23	9.2	92	27	17	68	238	45	8.3	9.9	14	61	9.5
24	8.3	67	27	17	99	113	40	8.8	9.9	14	40	17
25	7.8	61	27	17	50	79	35	8.8	10	14	35	20
26	7.0	50	27	17	40	113	40	8.3	11	14	31	17
27	7.2	45	23	17	40	92	40	7.8	10	14	27	13
28	8.5	35	23	15	40	61	35	7.2	9.5	14	27	20
29	28	116	38	15	-------	61	40	7.5	8.8	14	23	20
30	50	73	171	13	-------	55	55	11	8.0	14	20	17
31	40	-------	99	13	-------	50	-------	15	-------	14	20	-------

* Discharge measurement made on this day.

Lawrence Brook at Farrington Dam--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October 1950	366.4	24	7.4	11.8	11.3	0.328	0.38
November	1,356.9	320	10.5	45.2	46.0	1.34	1.49
December	1,577.7	275	14.5	50.9	51.0	1.48	1.71
Calendar year 1950	14,106.0	384	1.4	38.6	38.8	1.13	15.31
January 1951	1,528	192	25	49.3	49.2	1.43	1.65
February	2,593	381	32	92.6	92.7	2.69	2.81
March	2,281	260	32	73.6	74.2	2.16	2.48
April	2,052	214	36	68.4	67.9	1.97	2.20
May	1,237.2	194	19.3	39.9	39.8	1.16	1.33
June	750.1	106	9.1	25.0	24.7	.718	.80
July	302.5	20	1.8	9.76	8.54	.248	.29
August	445.1	79	1.9	14.4	15.2	.442	.51
September	487.8	21	6.3	16.3	8.3	.241	.27
Water year 1950-51	14,977.7	381	1.8	41.0	40.3	1.17	15.92
October 1951	332.4	19.1	0	10.7	16.7	.485	.56
November	2,012	272	22	67.1	69.6	2.02	2.26
December	2,208.5	527	16.8	71.2	71.3	2.07	2.39
Calendar year 1951	16,229.6	527	0	44.5	44.5	1.29	17.55
January 1952	2,489	195	37	80.3	80.4	2.34	2.69
February	1,850	277	29	63.8	63.6	1.85	1.99
March	2,543	324	33	82.0	82.0	2.38	2.75
April	2,265	543	22	75.5	75.9	2.21	2.46
May	1,914	259	25	61.7	61.6	1.79	2.06
June	1,937.4	551	10.5	64.6	64.1	1.86	2.08
July	519.2	108	7.4	16.7	16.4	.477	.55
August	759.1	117	7.1	24.5	25.0	.727	.84
September	923.5	212	10.5	30.8	30.7	.892	.99
Water year 1951-52	19,753.1	551	0	54.0	54.7	1.59	21.62
October 1952	385.0	22	9.0	12.4	11.2	.326	.38
November	735	121	10	24.5	25.9	.753	.84
December	1,311	160	18	42.3	42.4	1.23	1.42
Calendar year 1952	17,631.2	551	7.1	48.2	48.2	1.40	19.05
January 1953	2,426	252	18	78.3	78.4	2.28	2.63
February	1,226	140	20	43.8	43.7	1.27	1.32
March	3,537	608	23	114	114	3.31	3.83
April	2,864	207	40	95.5	95.5	2.78	3.10
May	1,588	132	27	51.2	51.1	1.49	1.71
June	571.6	67	9.0	19.1	18.8	.547	.61
July	371.6	18	6.7	12.0	8.70	.253	.29
August	423	14	13	13.6	7.05	.205	.24
September	422	16	13	14.1	5.54	.161	.18
Water year 1952-53	15,860.2	608	6.7	43.5	41.9	1.22	16.55
October 1953	158.2	15	0	5.10	8.22	.239	.28
November	0	0	0	0	13.3	.387	.43
December	1,084.5	221	0	35.0	37.1	1.08	1.25
Calendar year 1953	14,671.9	608	0	40.2	40.2	1.17	15.87
January 1954	683	75	12	22.0	2.1	.642	.74
February	628	45	11	22.4	22.5	.654	.68
March	1,294	121	20	41.7	41.7	1.21	1.40
April	931	154	13	31.0	31.1	.904	1.01
May	1,214	166	13	39.2	39.1	1.14	1.31
June	315.8	18	7.0	10.5	6.77	.197	.22
July	226.5	15	0	7.31	2.43	.071	.08
August	226.6	12	2.7	7.31	10.7	.311	.36
September	946.5	346	0	31.6	36.7	1.07	1.19
Water year 1953-54	7,708.1	346	0	21.1	22.7	.660	8.95
October 1954	385.7	50	7.0	12.4	12.7	.369	.43
November	1,690	351	13	56.3	56.5	1.64	1.83
December	1,521	171	20	49.1	49.2	1.43	1.65
Calendar year 1954	10,062.1	351	0	27.6	27.6	.802	10.90
January 1955	875	67	13	28.2	27.7	.805	.93
February	1,374	188	12	49.1	49.4	1.44	1.50
March	2,355	315	31	76.0	76.0	2.21	2.55
April	1,209	85	20	40.3	40.3	1.17	1.30
May	379.7	40	7.2	12.2	11.9	.346	.40
June	349.5	17	8.0	11.6	11.1	.323	.36
July	273.2	14	2.8	8.81	3.92	.114	.13
August	2,596.4	887	0	83.8	89.2	2.59	2.99
September	393.9	20	9.0	13.1	13.1	.381	.43
Water year 1954-55	13,402.4	887	0	36.7	36.7	1.07	14.50

* Adjusted for change in contents in Farrington Reservoir.

South River at Old Bridge

Location (revised).--Lat 40°24'22", long 74°22'08", on right abutment of Duhernal Dam, 0.6 mile south of Old Bridge, Middlesex County, 2.3 miles upstream from Deep Run, and 9.1 miles upstream from mouth.

Drainage area.--94.6 sq mi.

Records available.--August 1939 to September 1955.

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

Average discharge.--16 years, 141 cfs (unadjusted).

Extremes.--1939-55: Maximum discharge, 4,250 cfs Sept. 15, 1944 (elevation, 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).--
1950-51: Nov. 27 (3 to 7 a.m.) 782 cfs (10.53 ft); Feb. 23 (2 to 7 a.m.) 895 cfs (10.59 ft); Mar. 31-Apr. 1 (10 p.m. to 3 a.m.) 1,100 cfs (10.69 ft); Apr. 4 (4 to 10 a.m.) 710 cfs (10.49 ft).
1951-52: Nov. 4 (2 to 8 p.m.) 876 cfs (10.58 ft); Dec. 22 (12 m.) 1,120 cfs (10.70 ft); Feb. 5 (1 to 5 p.m.) 745 cfs (10.51 ft); Mar. 12 (3 to 9 p.m.) 876 cfs (10.58 ft); Apr. 29 (1 to 2 a.m.) 1,730 cfs (10.80 ft); June 2 (8 a.m.) 2,360 cfs (10.97 ft).
1952-53: Jan. 10 (4 to 10 p.m.) 745 cfs (10.51 ft); Mar. 14 (6 a.m.) 2,030 cfs (11.06 ft).
1953-54: Dec. 15 (6 to 10 p.m.) 745 cfs (10.51 ft); Sept. 12 (6 to 9 a.m.) 1,970 cfs (11.04 ft).
1954-55: Mar. 23 (5 p.m.) 998 cfs (10.64 ft); Aug. 13 (7 p.m.) 2,650 cfs (11.27 ft).

Remarks.--Records given herein include flow over spillway and direct diversion from pond for dilution of industrial wastes in sewer which discharges into 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. Some regulation by Duhernal Lake (capacity, 138,000,000 gal).

Cooperation.--Water-stage recorder inspected and record of diversion furnished by Duhernal Water Co.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48	58	148	150	177	148	797	141	124	83	34	29
2	46	57	141	120	433	155	319	114	74	77	28	28
3	45	55	128	120	314	155	447	106	77	64	26	32
4	42	57	138	140	185	206	644	98	83	55	24	39
5	40	118	271	150	155	294	332	95	90	57	24	36
6	39	155	226	125	141	215	259	90	85	60	23	33
7	37	111	163	125	161	177	215	88	77	52	22	30
8	39	92	333	160	448	*163	194	83	68	45	30	29
9	42	83	595	120	320	141	177	81	66	37	36	27
10	48	79	351	106	177	123	170	77	70	34	33	26
11	55	74	215	103	134	120	177	79	85	32	42	24
12	53	70	194	100	134	117	177	188	85	30	81	24
13	52	68	155	95	128	117	194	204	74	37	158	24
14	52	66	128	127	148	150	185	135	81	37	119	23
15	48	64	120	370	148	250	148	106	100	34	72	22
16	45	62	149	360	128	200	148	92	100	32	55	22
17	45	64	177	237	128	160	170	81	85	38	46	22
18	45	64	148	170	271	150	163	72	70	43	42	22
19	45	62	120	148	271	160	134	70	62	43	37	21
20	45	52	100	134	215	250	141	74	57	84	33	20
21	45	67	92	130	275	480	128	83	53	78	34	19.2
22	43	100	88	115	698	271	117	85	52	53	50	19.2
23	61	83	88	110	724	194	167	85	52	45	72	19.2
24	127	72	92	200	319	170	237	313	62	40	55	20
25	108	147	100	320	194	170	170	611	58	36	43	21
26	85	614	90	200	177	148	141	312	50	32	43	24
27	70	633	72	160	163	128	134	177	50	29	45	27
28	62	283	80	150	155	120	117	185	64	34	45	*24
29	62	248	120	170	-------	123	117	163	70	45	40	22
30	60	185	200	185	-------	280	148	170	81	46	34	21
31	60	-------	180	148	-------	885	-------	163	-------	40	32	-------

* Discharge measurement made on this day.

Note.--No gage-height record Dec. 27 to Jan. 2, Jan. 4-9, 15, 16, 21-29, Mar. 14-21; discharge estimated on basis of occasional fragmentary record, recorded range in stage when available, precipitation records, and records for Matawan Creek at Matawan, Swimming River near Red Bank, and Manasquan River at Squankum.

South River at Old Bridge--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	128	114	155	177	128	134	294	718	62	46	199
2	22	271	109	177	185	114	148	215	1,760	57	50	490
3	26	447	103	319	226	134	141	177	746	52	72	332
4	26	820	98	283	364	134	134	163	294	52	72	204
5	27	468	114	237	660	a300	160	155	215	58	57	141
6	28	215	185	319	388	a500	259	148	194	55	73	114
7	39	264	155	226	215	a250	194	134	163	52	294	103
8	237	519	128	163	194	a200	163	128	134	65	259	100
9	283	296	117	148	170	a180	148	120	117	263	177	92
10	115	163	106	163	163	a170	128	117	114	406	226	88
11	105	141	100	271	155	331	120	170	109	248	419	83
12	194	123	95	194	226	801	120	484	98	141	230	79
13	143	114	90	163	114	452	120	595	90	95	148	77
14	96	109	85	155	92	294	177	283	85	79	112	74
15	77	163	200	155	95	226	248	194	81	68	92	72
16	68	204	344	148	112	185	283	177	77	*60	208	*74
17	60	248	185	141	225	170	215	155	74	72	533	72
18	57	177	186	254	419	155	163	163	70	79	303	68
19	55	141	490	319	332	170	141	215	70	66	148	77
20	52	117	505	237	215	344	123	220	66	58	114	109
21	50	109	598	226	185	283	120	369	66	62	98	100
22	48	100	1,020	177	185	204	112	283	72	128	271	83
23	48	100	436	356	163	248	106	185	83	109	248	81
24	48	100	226	344	148	394	109	155	117	74	134	88
25	83	103	194	204	141	394	132	242	117	60	103	85
26	110	184	292	246	134	306	306	595	90	53	90	79
27	88	306	259	490	128	226	476	595	74	48	81	74
28	74	194	170	519	128	194	1,120	294	66	48	77	70
29	70	141	155	644	123	163	1,290	204	66	66	74	68
30	64	123	148	372	-------	155	469	170	64	55	74	66
31	62	-------	155	177	-------	155	-------	215	-------	48	85	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for nearby stations.
Note.--Floodgates in dam open Apr. 28, 29, June 2, 3; discharge included in daily record.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	64	57	100	112	155	117	170	177	114	50	27	20
2	66	57	100	114	148	114	170	215	106	45	29	18
3	83	72	186	228	134	112	170	185	92	43	34	16
4	100	98	259	369	134	308	163	163	83	42	39	14
5	83	66	215	226	128	533	170	170	79	42	39	15
6	74	64	462	170	120	283	177	294	72	39	*37	16
7	70	60	369	141	128	185	242	237	79	37	30	16
8	66	58	215	134	155	170	433	204	90	37	24	17
9	66	58	170	334	141	155	306	215	81	36	24	18
10	64	60	155	693	123	155	271	204	70	34	43	17
11	64	64	177	595	117	155	369	163	64	33	79	17
12	64	66	344	356	120	148	259	128	60	30	57	18
13	64	66	237	226	148	676	306	114	76	30	42	28
14	64	64	177	185	128	1,670	562	112	259	30	43	33
15	62	66	148	170	213	590	419	137	248	30	122	30
16	62	109	123	155	595	660	319	248	134	28	122	33
17	62	128	120	148	433	595	406	177	100	26	74	29
18	60	90	117	170	226	319	294	332	85	24	68	26
19	58	46	112	259	177	369	433	319	77	26	62	26
20	58	57	106	204	163	462	433	177	76	26	48	29
21	57	213	112	177	214	294	271	148	64	32	42	28
22	57	462	306	332	319	237	248	128	60	42	39	27
23	58	548	319	294	204	204	163	219	58	63	37	27
24	58	283	194	331	170	248	170	215	53	103	34	28
25	58	177	163	644	155	448	170	141	50	72	33	24
26	58	148	141	433	141	406	194	123	46	52	34	24
27	57	128	123	237	128	294	237	141	45	42	36	32
28	57	114	112	204	120	237	177	120	45	37	30	28
29	58	106	*92	204	-------	194	163	103	50	34	27	22
30	58	100	100	177	-------	185	148	98	52	29	27	21
31	58	-------	100	155	-------	177	-------	112	-------	28	24	-------

* Discharge measurement made on this day.

South River at Old Bridge--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19	79	60	77	66	88	95	92	57	22	7.8	204
2	18	64	66	74	70	138	88	85	48	22	7.4	118
3	16	57	64	72	77	141	81	83	45	26	11	68
4	15	52	60	72	95	306	81	114	42	26	17	50
5	15	46	81	70	103	215	79	117	42	32	18	40
6	18	45	109	70	90	134	83	98	39	33	16	33
7	28	133	142	70	83	109	85	83	36	30	15	32
8	36	356	185	68	77	103	90	126	33	27	13	58
9	33	255	120	60	74	100	112	271	32	23	31	*62
10	30	141	117	68	74	95	106	271	30	21	213	48
11	29	124	177	72	72	92	88	185	30	19	171	483
12	28	60	141	66	68	85	90	123	30	18	74	1,700
13	28	72	185	74	55	88	85	112	42	17	48	666
14	28	74	364	a75	57	200	79	98	68	15	36	194
15	28	70	660	a75	62	332	74	88	58	15	30	123
16	28	68	410	a80	70	185	79	83	50	15	29	117
17	28	64	185	a100	92	128	190	79	46	15	24	155
18	28	62	134	a90	141	114	448	74	42	13	21	148
19	28	58	109	a85	112	103	294	68	39	12	19	123
20	28	57	103	85	92	123	155	66	33	13	19	141
21	27	57	103	194	88	170	120	212	30	12	25	123
22	28	57	103	271	142	128	103	419	26	11	59	164
23	27	70	106	120	155	112	92	237	26	10	57	177
24	27	128	100	109	114	100	100	134	28	9.1	37	112
25	28	120	88	98	106	106	114	112	30	8.2	28	90
26	32	120	85	98	103	177	100	98	28	9.5	23	79
27	34	109	83	106	98	155	92	83	23	12	21	74
28	65	88	81	117	90	117	120	77	20	13	21	68
29	162	79	81	98	-------	103	141	72	20	12	19	60
30	185	70	81	83	-------	98	109	70	21	11	19	58
31	118	-------	79	79	-------	95	-------	64	-------	9.1	68	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for Lawrence Brook at Farrington Dam.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	66	123	177	271	53	120	123	128	117	29	8.2	58
2	70	112	128	194	58	155	120	128	92	27	8.7	55
3	60	306	120	204	a70	128	114	114	70	23	7.8	55
4	57	294	109	170	a60	244	112	98	62	21	6.2	53
5	53	194	103	148	a55	356	109	95	72	19	5.6	50
6	60	155	100	134	a100	259	103	85	79	18	7.1	50
7	79	128	88	155	a350	394	109	77	58	17	12	46
8	72	112	81	134	548	271	106	72	50	17	42	43
9	62	100	85	117	248	155	100	68	72	17	70	40
10	58	92	128	112	155	148	95	68	98	17	64	39
11	58	88	141	109	155	120	92	66	81	17	74	39
12	55	83	114	98	226	120	103	64	88	17	561	39
13	52	83	103	95	155	114	204	60	92	16	1,860	39
14	48	81	136	90	120	109	185	58	74	15	1,730	37
15	46	79	419	90	117	103	155	57	*62	14	505	36
16	43	79	406	90	112	109	141	53	53	13	226	36
17	48	79	204	88	123	114	120	52	46	13	155	36
18	50	79	214	81	155	109	112	48	40	14	163	36
19	48	79	406	79	134	112	106	45	37	13	294	37
20	46	100	306	77	117	120	199	45	40	12	215	70
21	46	294	177	64	114	120	194	45	40	12	128	48
22	45	490	a150	74	112	390	163	45	37	11	114	34
23	45	344	a120	74	140	914	141	45	36	10	100	30
24	45	185	a105	74	204	570	117	45	39	9.1	90	37
25	43	170	a100	74	155	248	117	52	48	9.1	79	57
26	43	148	a95	74	123	271	128	45	52	9.1	72	66
27	45	120	a90	72	114	356	134	42	50	8.7	66	53
28	55	112	95	60	114	237	120	40	42	7.8	62	55
29	83	221	112	62	-------	155	120	39	34	7.4	60	74
30	194	294	314	58	-------	148	148	55	29	7.4	58	68
31	177	-------	476	55	-------	134	-------	112	-------	7.4	58	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range lines and records for Lawrence Brook at Farrington Dam.

South River at Old Bridge--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	1,694	127	37	54.6		
November	3,943	633	52	131		
December	5,202	595	72	168		
Calendar year 1950	42,250.6	745	19.3	116		
January 1951	5,048	370	95	163		
February	6,921	724	128	247		
March	6,420	885	117	207		
April	6,667	797	117	222		
May	4,421	611	70	143		
June	2,205	124	50	73.5		
July	1,452	84	29	46.8		
August	1,458	158	22	47.0		
September	749.6	39	19.2	25.0		
Water year 1950-51	46,180.6	885	19.2	127		
October 1951	2,476	283	21	79.9		
November	6,588	820	100	220		
December	7,162	1,020	85	231		
Calendar year 1951	51,567.6	1,020	19.2	141		
January 1952	7,982	644	141	257		
February	6,062	660	92	209		
March	7,960	801	114	257		
April	7,559	1,290	106	252		
May	7,614	595	117	246		
June	6,090	1,760	64	203		
July	2,839	406	48	91.6		
August	4,968	533	46	160		
September	3,442	490	66	115		
Water year 1951-52	70,742	1,760	21	193		
October 1952	1,988	100	57	64.1		
November	3,685	548	46	123		
December	5,654	462	92	182		
Calendar year 1952	65,843	1,760	46	180		
January 1953	8,177	693	112	264		
February	5,137	595	117	183		
March	10,700	1,670	112	345		
April	8,013	562	148	267		
May	5,519	332	98	178		
June	2,562	259	45	85.4		
July	1,222	103	24	39.4		
August	1,406	122	24	45.4		
September	697	33	14	23.2		
Water year 1952-53	54,760	1,670	14	150		
October 1953	1,242	185	15	40.1		
November	2,835	356	45	94.5		
December	4,462	660	60	144		
Calendar year 1953	51,972	1,670	14	142		
January 1954	2,876	271	60	92.8		
February	2,526	155	55	90.2		
March	4,240	332	85	137		
April	3,573	448	74	119		
May	3,894	419	64	126		
June	1,094	68	20	36.5		
July	530.9	33	8.2	17.1		
August	1,197.2	213	74	38.6		
September	5,568	1,700	32	186		
Water year 1953-54	34,038.1	1,700	7.4	93.3		
October 1954	1,952	194	43	63.0		
November	4,824	490	79	161		
December	5,402	476	81	174		
Calendar year 1954	37,677.1	1,700	7.4	103		
January 1955	3,277	271	55	106		
February	4,187	548	53	150		
March	6,903	914	103	223		
April	3,890	204	92	130		
May	2,046	128	39	66.0		
June	1,790	117	29	59.7		
July	448.0	29	7.4	14.5		
August	6,901.6	1,860	5.6	223		
September	1,416	74	30	47.2		
Water year 1954-55	43,036.6	1,860	5.6	118		

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 1955 (discontinued).

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.--22 years (1932-47, 1948-55), 10.1 cfs (adjusted for storage).

Extremes.--1932-55: Maximum discharge, 1,420 cfs Aug. 13, 1955 (gage height, 4.25 ft), from rating curve extended above 32 cfs on basis of computation of peak flow over dam, over road, and through waste gates; no flow for many days when water was below spillway and waste gates were closed.

Maximum discharge.--
1950-51: Nov. 25 (8 p.m.) a376 cfs (2.24 ft).
1951-52: Apr. 28 (3 a.m.) a 511 cfs (2.82 ft).
1952-53: Mar. 13 (9 a.m.) a856 cfs (3.63 ft).
1953-54: Sept. 11 (10 a.m.) 732 cfs (3.74 ft).
1954-55: Aug. 13 (6 a.m.) a1,420 cfs (4.25 ft).
a Waste gate open.

Remarks.--Records represent flow over dam and through waste gates. Flow occasionally regulated by Lake Lefferts.

Revisions (water years).--Special Report 12: 1938(M). Revised figures of discharge, in cubic feet per second, for periods in the water years 1948 and 1949 are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1947		1948-Con.		1948-Con.		1948-Con.	
Oct. 13	2.5	Oct. 20	4.4	Oct. 30	4.7	Nov. 9	6.0
14	2.5	21	4.6	31	4.4	10	6.0
15	2.5	22	4.3	Nov. 1	4.4	11	8.0
16	2.5	23	4.2	2	4.3	12	6.5
17	2.5	24	4.6	3	4.3	13	6.0
18	2.5	25	8.0	4	5.4	14	5.7
19	3.0	26	10	5	6.5		
20	5.0	27	8.0	6	6.0		
1948		28	5.0	7	7.0		
Oct. 19	4.3	29	5.0	8	7.0		

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Runoff in inches
October 1948.....	133.6	10	2.5	4.31	4.42	0.723	0.83
November.....	206.9	20	4.3	6.90	7.03	1.15	1.28
Water year 1948-49..	3,703.4	159	0	10.1	10.2	1.67	22.55

* Adjusted for change in contents in Lake Lefferts.

Matawan Creek at Matawan--Continued

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.7	4.6	8.8	15.0	47	8.8	7.2	a8.0	7.0	5.3	4.6	2.5
2	3.0	4.6	8.2	10.4	62	8.8	13.0	a6.6	6.0	5.6	3.6	2.5
3	3.0	4.2	8.2	9.6	6.5	8.8	64	a6.0	6.0	4.9	3.3	2.7
4	3.6	5.6	29	12.1	9.6	31	23	a5.5	5.3	4.2	3.0	2.7
5	3.9	17.0	22	13.0	9.6	43	17.0	a5.1	6.5	4.9	3.0	2.7
6	4.2	12.1	16.0	10.4	8.8	35	13.0	4.9	6.5	4.2	2.7	2.7
7	4.2	8.2	12.1	11.2	51	19.5	11.2	4.6	5.6	4.2	2.7	2.7
8	4.6	6.0	100	18.0	36	12.0	9.6	4.2	4.9	4.2	3.6	2.2
9	4.9	5.3	21	12.1	9.6	a10	8.8	4.2	4.6	4.2	3.6	2.2
10	7.6	4.6	17.0	*8.8	9.6	a9	8.8	3.9	4.6	3.9	3.3	2.0
11	6.0	4.2	15.0	8.2	8.8	a8.5	8.8	5.3	6.0	3.6	3.3	2.0
12	4.9	3.9	8.8	7.6	8.2	a8	8.2	13.0	5.6	3.9	3.6	2.2
13	3.9	3.6	8.2	7.0	8.8	a4	11.2	9.6	4.9	4.2	6.5	2.5
14	3.3	3.3	7.6	7.6	8.8	0	9.6	7.0	6.5	3.6	6.0	2.2
15	3.0	3.3	7.0	48	8.8	0	7.6	6.0	7.0	3.3	4.9	1.3
16	2.7	3.6	15.0	18.0	7.6	1.4	7.0	5.3	7.0	7.0	3.9	32
17	2.7	3.6	17.0	14.0	11.1	5.3	8.2	4.9	6.5	*8.2	3.6	15.8
18	3.0	3.6	11.2	12.1	29	7.6	8.2	4.2	5.3	6.5	3.3	1.3
19	4.2	3.3	8.8	11.2	19.0	8.8	7.0	4.6	4.6	6.0	3.0	1.3
20	4.6	3.6	7.6	10.4	18.0	56	7.0	4.9	3.9	7.6	3.0	1.3
21	4.6	6.5	7.0	8.8	77	28	6.5	5.6	3.6	6.0	3.3	1.3
22	4.6	6.0	6.5	7.6	50	17.0	6.0	5.6	3.6	4.9	3.6	1.3
23	7.0	5.3	6.5	7.0	17.0	13.0	12.7	6.0	4.2	4.6	3.6	1.3
24	9.6	4.6	6.5	33	16.0	12.1	12.1	69	4.2	4.2	3.6	1.3
25	7.6	173	7.0	31	13.0	10.4	9.6	22	3.6	3.3	3.3	1.3
26	5.3	75	6.0	19.0	12.1	8.8	8.2	14.0	3.0	3.0	2.7	1.3
27	4.6	6.2	5.6	13.0	11.2	8.2	7.0	12.1	3.9	3.0	2.5	1.3
28	4.2	14.0	4.9	11.2	9.6	8.8	6.5	13.0	4.2	8.9	2.5	1.3
29	3.9	13.0	13.3	13.0	-------	9.6	6.5	12.1	4.2	10.4	2.5	1.3
30	4.2	9.6	21	15.0	-------	90	8.8	10.4	4.6	7.0	2.5	1.3
31	4.2	-------	21	12.1	-------	68	-------	8.2	-------	5.3	2.5	-------

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of records for South River at Old Bridge and Swimming River near Red Bank.

Note.--Waste gates through dam open Nov. 25, 26, Dec. 4, 8, 11, Jan. 15, Feb. 1, 2, 7, 8, 21, 22, Mar. 5-13, 30, 31, Apr. 3, May 24, Sept. 16-30.

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.3	42	8.2	9.6	11.2	4.5	6.0	80	182	2.2	1.3	51
2	1.3	.4	8.2	16.0	12.1	4.5	7.0	70	51	2.0	1.7	29
3	1.3	123	7.6	26	14.0	5	7.0	50	16.0	1.7	4.5	20
4	1.3	27	7.6	19.0	81	10	6.5	30	16.0	2.2	4	11.2
5	1.3	10.4	13.0	29	37	40	9.6	10	15.0	3.3	2.5	8.2
6	1.3	12.1	19.0	25	21	15	13.0	9	11.2	3.0	70	7.0
7	1.9	129	15.0	15.0	15.0	12	9.6	8	7.6	2.7	40	5.6
8	28	53	14.0	11.2	13.0	11	8.2	7	6.0	25	15	4.9
9	14.3	0	12.1	10.4	11.2	10	7.6	6	5.6	31	7	4.6
10	9.5	0	9.6	15.0	10.4	9.6	7.0	5.5	5.6	23	15	4.6
11	49	0	8.8	19.0	9.6	92	6.5	20	4.9	10.4	33	4.6
12	26	0	8.8	13.0	8.2	38	6.0	50	4.2	6.0	12.1	4.2
13	0	0	7.0	11.2	7.0	1.9	6.0	20	3.9	4.6	8.8	3.9
14	0	1.2	6.0	9.6	6.5	8.2	10.4	10	3.6	3.9	6.5	4.2
15	0	12.1	40	9.6	6.0	9.6	13.0	9	3.6	3.3	5.6	5.3
16	0	29	27	10.4	6.0	8.2	13.0	8	3.3	2.7	74	5.6
17	0	32	12.1	11.2	22	7.6	11.2	7.5	3.3	2.7	45	5.3
18	0	20	68	37	31	7.0	9.6	6	2.7	2.5	15.0	4.9
19	.3	13.0	44	22	18.0	15.3	8.2	0	2.5	2.5	8.2	6.5
20	1.1	8.8	15.0	22	11.2	27	7.6	0	2.0	2.2	6.5	8.8
21	1.7	7.6	162	18.0	9.6	16.0	6.5	0	2.0	2.5	6.5	8.2
22	2.5	7.0	37	17.4	8.8	12.1	6.5	0	2.5	2.7	58	6.5
23	3.3	7.0	0	43	7.0	26	6.0	0	3.0	2.2	18.0	6.0
24	*3.9	7.0	.2	18.0	6.5	31	6.0	0	4.6	2.5	8.2	5.6
25	9.6	7.0	3.7	13.0	5.6	29	9.7	0	4.6	2.0	6.0	5.3
26	10.4	25	28	54	5.3	18.0	25	0	3.9	1.7	5.6	4.9
27	8.2	20	19.0	32	5.3	13.0	70	0	3.6	1.5	5.3	4.9
28	6.5	12.1	12.1	51	4.9	10.4	279	0	3.0	1.5	4.9	3.9
29	5.3	9.6	10.4	44	4.5	9.6	121	0	2.7	1.5	4.9	3.6
30	4.6	8.8	9.6	20	-------	8.2	90	0	2.5	1.5	4.9	3.3
31	4.2	-------	9.6	13.0	-------	7.6	-------	0	-------	1.5	4.9	-------

* Discharge measurement made on this day.

Note.--No gage-height record Feb. 29 to Mar. 9, Aug. 3-10; discharge estimated on basis of weather records, recorded range in stage, and records for stations at Swimming River near Red Bank and South River at Old Bridge. Waste gates through dam open Oct. 1-12, Nov. 1-4, 7, 8, Dec. 18, 19, 21, 22, Jan. 23, 26, 27, Feb. 4, Mar. 11, 12, Apr. 28 to May 18, June 1, 2, Sept. 1.

Matawan Creek at Matawan--Continued

Daily discharge, in cubic feet per second, 1950-55

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.3	3.0	5.3	7.6	6.0	6.5	8.2	11	6.0	2.2	1.7	1.7
2	3.6	3.0	5.6	7.0	5.3	6.0	8.2	13	5.3	2.2	2.0	1.7
3	5.6	3.0	e38	42	4.9	6.5	8.2	11	4.6	2.0	2.0	1.7
4	4.9	3.3	6.0	31	4.9	e47	7.6	8.8	4.2	1.7	1.7	1.7
5	3.9	3.6	e52	17	4.6	19	8.2	13	3.9	1.5	1.7	1.7
6	3.6	3.9	e37	11	4.2	14	7.6	17	3.6	1.3	1.5	1.7
7	3.6	3.0	6.6	9.6	4.9	10	e41	13	3.9	1.3	1.3	1.5
8	3.6	2.7	9.6	10	6.0	9.6	*20	12	3.9	1.3	1.1	1.1
9	3.6	2.7	10	e121	*5.6	9.6	17	15	3.6	1.3	1.7	1.1
10	3.3	3.3	8.2	e60	4.6	8.8	27	a10	a3.5	1.1	3.9	1.1
11	3.0	3.6	28	16	3.9	8.2	23	8.8	a3	1.1	3.9	1.1
12	3.0	a3.5	30	19	4.9	8.8	15	a8	a2.5	.9	3.3	1.3
13	3.0	a3.5	15	14	5.6	e272	e38	a7	a3.5	.9	3.0	2.5
14	2.7	a3.5	10	11	5.3	e33	e54	a7	a14	.9	e28	2.0
15	2.7	a4	8.8	10	e61	e67	4.4	*12	9.6	.9	e2.3	2.0
16	3.0	a7	7.6	9.6	e41	e66	23	a12	a7	1.1	.1	3.3
17	3.0	4.2	7.0	8.2	14	1.0	22	a10	5.3	1.3	.9	2.7
18	3.0	a4	6.5	16	14	6.5	15	22	4.2	1.3	2.0	2.2
19	3.3	a4	6.0	18	12	32	42	11	*3.6	1.1	2.5	1.7
20	3.0	6.0	6.0	13	11	27	26	8.8	3.3	1.3	2.5	2.0
21	2.7	20	15	14	23	16	16	7.0	3.0	*1.7	2.0	2.5
22	2.7	e50	55	35	20	13	11	6.5	2.5	1.5	2.0	2.5
23	3.0	22	23	20	13	10	9.6	13	2.2	4.2	1.7	2.0
24	3.0	11	15	51	11	30	*8.2	8.8	2.0	5.6	2.0	1.7
25	3.0	8.8	10	e54	8.8	36	8.2	6.5	1.7	3.9	2.0	1.7
26	3.0	7.6	8.8	17	8.8	28	13	9.6	1.7	3.0	1.7	1.7
27	3.3	6.5	7.6	10	8.2	17	13	10	1.5	2.2	1.7	2.2
28	3.6	5.6	6.5	9.6	7.0	13	8.8	7.0	1.7	2.0	1.7	2.2
29	3.6	5.3	6.0	8.8	-------	11	7.6	6.0	2.2	1.7	2.0	2.5
30	3.3	4.9	5.6	7.6	-------	9.6	7.0	5.6	2.2	1.7	2.0	2.5
31	3.0	-------	6.0	6.5	-------	8.8	-------	6.0	-------	1.7	2.0	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for South River at Old Bridge and Swimming River near Red Bank.
e Waste gates through dam open.

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.7	7.6	4.6	3.9	4.2	8.1	5.3	6.0	2.7	1.7	1.7	17
2	3.0	a7.0	4.2	3.6	4.2	16	4.9	5.6	2.5	2.2	1.3	7.6
3	3.3	a4.5	3.9	3.6	4.9	27	3.9	5.6	2.2	2.5	2.8	5.3
4	3.9	a4.0	3.9	*3.6	6.0	39	3.6	8.2	2.2	2.2	3.0	3.6
5	4.2	a4.0	6.5	3.6	6.5	14	3.6	7.6	2.0	2.5	2.7	3.3
6	5.3	a4.5	8.2	3.6	6.0	8.8	3.9	6.0	1.5	2.2	2.7	3.3
7	8.2	a25	19	3.6	5.6	7.6	4.2	5.3	1.3	2.2	2.5	3.0
8	6.0	a15	12	3.0	4.9	6.5	7.8	13	1.3	2.2	2.5	7.6
9	5.3	a9.0	8.8	3.0	4.9	a6.0	13	34	1.3	2.2	9.4	6.0
10	4.6	7.0	16	3.0	4.6	a5.5	8.2	20	1.3	2.2	17	5.3
11	4.2	a5.5	13	4.2	4.6	a5.5	7.0	12	1.7	2.2	8.2	207
12	3.9	a5.0	9.6	4.2	3.9	a5.5	6.5	8.8	2.0	1.7	6.0	36
13	3.6	4.9	19	3.6	3.3	a7.0	5.6	7.0	4.1	1.7	6.0	14
14	3.6	4.9	e137	3.6	3.0	a20	5.3	6.0	3.9	2.0	5.6	8.8
15	4.2	4.9	27	3.6	3.3	a15	4.9	5.6	3.3	3.3	4.6	6.5
16	4.9	4.6	14	4.6	3.9	a10	5.6	5.3	2.5	2.7	3.6	6.0
17	5.3	5.3	*8.8	6.0	9.5	a8.0	38	4.6	2.2	2.5	3.6	15
18	5.6	7.0	6.5	5.3	13	*6.5	51	4.6	2.0	2.5	3.3	10
19	5.6	8.2	5.3	4.9	9.6	6.0	18	6.0	1.7	2.0	2.7	8.2
20	4.9	8.2	4.9	4.9	7.6	12	10	6.0	1.7	2.0	2.5	9.6
21	4.2	8.2	4.9	23	8.8	9.6	7.6	21	1.7	1.7	4.2	9.6
22	3.9	7.6	5.3	18	19	7.0	7.0	18	2.0	1.7	3.9	8.8
23	3.9	8.8	5.6	8.8	15	6.5	6.0	10	2.0	1.7	2.7	6.0
24	3.9	11	5.3	7.0	10	6.0	6.5	7.6	2.0	1.7	2.5	4.9
25	3.9	10	4.9	6.0	10	7.0	6.0	6.5	2.0	1.7	2.2	4.2
26	4.2	11	4.9	6.0	10	11	5.3	5.6	2.0	1.7	2.5	3.9
27	3.9	8.8	4.2	6.5	8.2	8.2	5.6	4.6	2.0	1.7	2.7	*4.6
28	14	6.5	3.9	8.8	7.0	7.0	8.2	4.2	1.7	2.0	2.7	4.2
29	28	5.3	3.9	6.5	-------	6.5	8.2	4.2	1.7	2.2	2.7	4.6
30	17	*4.6	4.2	5.6	-------	5.6	7.0	4.2	1.7	2.0	3.0	5.3
31	9.6	-------	4.2	4.9	-------	5.3	-------	3.3	-------	2.0	22	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for South River at Old Bridge and Swimming River near Red Bank.
e Waste gates through dam open.

Matawan Creek at Matawan--Continued

Daily discharge, in cubic feet per second, 1950-55

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.3	0	*11	17	2.7	9.6	e100	8.2	5.6	3.3	0.9	3.7
2	5.3	.1	8.8	16	3.3	12	e15	7.6	4.2	2.7	.9	3.5
3	4.9	13	7.6	17	3.6	8.8	e10	7.6	3.3	2.2	.9	3.5
4	4.9	17	7.0	12	3.6	37	e5.0	6.5	3.3	2.2	.9	3.3
5	4.2	13	6.5	10	3.6	26	e5.0	6.0	3.9	1.7	1.3	3.1
6	7.6	12	5.6	10	7.0	31	e3.0	4.9	3.6	1.7	2.2	3.0
7	8.2	10	5.3	11	64	36	*e4.0	4.6	3.0	1.7	3.3	2.7
8	6.0	9.0	4.9	8.8	21	16	e3.5	4.2	2.2	1.7	16	2.5
9	4.9	8.0	5.3	8.2	11	11	e3.5	3.6	4.6	1.7	7.6	2.3
10	4.9	7.0	8.2	7.0	8.8	9.6	e3.5	3.6	4.9	2.0	4.6	2.0
11	4.9	6.0	7.6	6.5	11	8.2	e3.0	3.6	4.2	2.5	4.2	2.0
12	4.2	5.5	6.5	6.5	18	7.0	e3.0	3.6	3.9	1.5	e148	2.0
13	3.6	5.5	5.6	6.0	9.6	6.5	e6.0	3.6	3.6	1.3	e454	2.0
14	3.6	5.5	56	5.6	7.0	6.0	e15	3.3	2.7	1.1	e21	1.9
15	e82	5.6	e60	5.6	6.5	6.0	e3	3.0	2.5	1.1	.3	1.9
16	0	5.3	0	5.3	*6.0	6.5	0	2.0	2.2	1.3	10	2.0
17	0	5.3	.9	4.9	7.6	6.0	0	2.0	1.7	1.7	15	2.1
18	0	5.6	26	4.6	8.8	6.0	0	*1.7	1.5	1.7	15	2.1
19	0	6.5	33	4.6	8.2	6.5	0	1.7	1.5	1.7	50	2.0
20	0	10	17	4.2	7.6	6.5	0	1.5	1.5	1.3	25	2.1
21	0	e121	10	4.2	7.0	8.8	0	1.5	1.3	1.3	15	2.1
22	0	e64	7.6	4.2	6.5	e69	0	1.5	1.3	1.3	10	2.1
23	0	0	6.5	4.2	12	e47	0	1.5	1.3	1.3	9.0	2.0
24	0	0	6.5	4.2	15	19	0	1.7	17	1.3	8.0	3.5
25	0	0	6.5	4.2	10	13	.6	1.7	7.6	1.3	7.0	4.0
26	0	0	6.0	4.2	8.8	26	3.6	1.7	5.6	1.1	6.0	3.5
27	0	0	5.6	3.9	7.6	20	5.6	1.5	4.2	1.1	5.5	3.0
28	0	1.2	5.6	3.9	7.6	10	6.0	1.3	3.9	1.1	5.0	4.0
29	0	31	7.6	3.6	-------	8.2	7.0	1.3	3.6	1.1	5.0	4.0
30	0	18	57	3.3	-------	e66	8.2	2.5	3.0	.9	4.5	3.5
31	0	-------	31	2.7	-------	e100	-------	4.2	-------	.9	4.0	-------

* Discharge measurement made on this day.
e Waste gates open.
Note.--No gage-height record Nov. 8-14, Aug. 16 to Sept. 30; discharge estimated on basis of records for Lawrence Brook at Farrington Dam and Swimming River near Red Bank.

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Runoff in inches
October 1950	139.8	9.6	2.7	4.51	4.58	0.750	0.86
November	421.4	173	3.3	14.0	14.2	2.32	2.59
December	453.8	100	4.9	14.6	14.8	2.42	2.79
Calendar year 1950	3,539.5	178	0	9.70	9.72	1.59	21.58
January 1951	435.4	48	7.0	14.0	13.9	2.27	2.63
February	583.7	77	6.5	20.8	20.7	3.39	3.54
March	559.4	90	0	18.0	17.7	2.90	3.36
April	342.3	64	6.0	11.4	11.6	1.90	2.13
May	295.8	69	3.9	9.54	9.51	1.56	1.79
June	153.4	7.0	3.0	5.11	5.03	.823	.92
July	160.1	10.4	3.0	5.16	5.17	.846	.98
August	107.1	6.5	2.5	3.45	3.32	.543	.63
September	99.8	32	1.3	3.33	2.16	.354	.39
Water year 1950-51	3,752.0	173	0	10.3	10.2	1.67	22.61
October 1951	198.1	49	0	6.39	7.61	1.25	1.44
November	624.1	129	0	20.8	21.0	3.44	3.83
December	642.6	162	0	20.7	20.7	3.39	3.91
Calendar year 1951	4,201.8	162	0	11.5	11.5	1.88	25.55
January 1952	664.6	54	9.6	21.4	21.5	3.52	4.05
February	408.9	81	4.5	14.1	13.9	2.27	2.45
March	517.3	92	1.9	16.7	16.8	2.75	3.16
April	792.7	279	6.0	26.4	22.4	3.67	4.09
May	406.0	80	0	13.1	15.4	2.52	2.90
June	382.4	182	2.0	12.7	14.2	2.32	2.59
July	158.0	31	1.5	5.10	5.05	.827	.95
August	502.9	74	1.3	16.2	16.4	2.68	3.09
September	251.6	51	3.3	8.39	8.31	1.36	1.52
Water year 1951-52	5,549.2	279	0	15.2	15.3	2.50	33.98

* Adjusted for change in contents in Lake Lefferts.

Matawan Creek at Matawan--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Runoff in inches
October 1952	102.9	5.6	2.7	3.32	3.30	.540	.62
November	216.5	50	2.7	7.22	7.32	1.20	1.34
December	461.7	55	5.3	14.9	15.0	2.45	2.82
Calendar year 1952	4,865.5	279	0	13.3	13.3	2.18	29.58
January 1953	684.5	121	6.5	22.1	22.1	3.62	4.16
February	323.5	61	3.9	11.6	11.6	1.90	1.97
March	850.9	272	1.0	27.4	27.4	4.48	5.18
April	517.8	54	4.4	17.3	17.3	2.83	3.15
May	316.4	22	5.6	10.2	10.2	1.67	1.92
June	119.2	14	1.5	3.97	3.80	.622	.69
July	55.9	5.6	.9	1.80	1.77	.290	.33
August	87.9	28	.1	2.84	2.84	.465	.54
September	57.3	3.3	1.1	1.91	1.97	.322	.36
Water year 1952-53	3,794.5	272	.1	10.4	10.4	1.70	23.08
October 1953	188.8	28	2.7	6.09	6.30	1.03	1.19
November	227.9	25	4.0	7.60	7.47	1.22	1.36
December	383.5	137	3.9	12.4	12.4	2.03	2.33
Calendar year 1953	3,813.6	272	.1	10.4	10.4	1.70	23.18
January 1954	180.5	23	3.0	5.82	5.84	.956	1.10
February	201.5	19	3.0	7.20	7.28	1.19	1.24
March	313.7	39	5.3	10.1	10.1	1.65	1.90
April	277.7	51	3.6	9.26	9.29	1.52	1.70
May	266.4	34	3.3	8.59	8.46	1.38	1.60
June	62.2	4.1	1.3	2.07	2.00	.327	.37
July	64.8	3.3	1.7	2.09	2.09	.342	.39
August	142.8	22	1.3	4.61	5.11	.836	.96
September	439.2	207	3.0	14.6	14.3	2.34	2.61
Water year 1953-54	2,749.0	207	1.3	7.53	7.54	1.23	16.75
October 1954	154.5	82	0	4.98	3.16	.517	.60
November	385.1	121	0	12.8	14.9	2.44	2.72
December	432.7	60	0	14.0	14.1	2.31	2.65
Calendar year 1954	2,921.1	207	0	8.00	8.03	1.31	17.84
January 1955	213.4	17	2.7	6.88	6.49	1.06	1.22
February	293.4	64	2.7	10.5	10.7	1.75	1.82
March	649.2	100	1.0	20.9	17.7	2.90	3.35
April	213.5	100	0	7.12	10.4	1.70	1.90
May	103.2	8.2	1.3	3.33	3.28	.537	.62
June	112.7	17	1.3	3.76	3.63	.594	.66
July	48.8	3.3	.9	1.57	1.44	.236	.27
August	860.1	454	.3	27.7	27.5	4.50	5.27
September	81.4	4.0	1.9	2.71	2.69	.440	.49
Water year 1954-55	3,548.0	454	0	9.72	9.71	1.59	21.57

* Adjusted for change in contents in Lake Lefferts.

Swimming River near Red Bank

Location (revised).--Lat 40°19'03", long 74°06'57", on right bank of Swimming River Reservoir, 3.4 miles southwest of Red Bank, Monmouth County, and 4.9 miles upstream from mouth.

Drainage area.--48.5 sq mi.

Records available.--July 1922 to September 1955.

Gage.--Water-stage recorder above dam. Datum of gage is 12.33 ft above mean sea level, datum of 1929.

Average discharge.--33 years, 76.4 cfs (adjusted for storage and diversion).

Extremes.--1922-55: 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 on some days in 1923, 1925, 1927, 1930, 1955.
A flood in July 1919 reached a stage of 7.84 ft, from floodmark (discharge about 11,800 cfs).

Peak discharge (base, 600 cfs).--
1950-51: Nov. 26 (2 a.m.) 840 cfs (4.26 ft); Feb. 22 (6 a.m.) 617 cfs (3.83 ft); Mar. 31 (5 a.m.) 822 cfs (4.24 ft).
1951-52: Nov. 3 (4 p.m.) 624 cfs (4.00 ft); Nov. 7 (10 p.m.) 664 cfs (4.05 ft); Dec. 21 (12 m.) 815 cfs (4.23 ft); Mar. 11 (9 p.m.) 721 cfs (4.12 ft); Apr. 28 (9 a.m.) 1,070 cfs (4.50 ft); June 1 (5 p.m.) 690 cfs (4.08 ft).
1952-53: Mar. 13 (4 p.m.) 1,400 cfs (4.81 ft).
1953-54: Sept. 11 (3 p.m.) 2,370 cfs (5.58 ft).
1954-55: Feb. 7 (12 m.) 607 cfs (3.99 ft); Aug. 13 (11 a.m.) 3,900 cfs (6.56 ft).

Remarks.--Records given herein represent flow over spillway only. Diversion above station for municipal supply.

Cooperation.--Water-stage recorder inspected and record of diversion furnished by Monmouth Consolidated Water Co.

Revisions.--Special Report 9: Drainage area.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	30	64	101	116	96	161	76	52	48	24	15.5
2	26	29	59	68	190	*95	130	68	46	44	22	26
3	24	27	59	64	99	93	230	64	48	35	20	30
4	24	36	65	78	80	96	185	61	48	29	20	26
5	23	247	116	86	79	103	133	59	50	39	20	20
6	23	111	78	66	91	103	116	57	48	33	15.5	17.8
7	24	61	66	66	99	101	108	55	42	26	15.5	20
8	24	50	191	86	150	98	116	55	41	24	30	16.6
9	26	46	158	59	108	94	98	50	44	20	29	14.5
10	36	42	95	55	99	91	95	48	50	15.5	24	14.5
11	39	41	95	59	94	87	105	66	64	14.5	22	13.4
12	33	39	89	57	92	84	95	140	48	15.9	24	13.4
13	35	37	73	55	89	82	92	81	42	33	93	12.4
14	30	37	68	55	*87	85	89	61	59	29	55	11.5
15	29	35	66	152	85	101	83	55	64	22	30	12.4
16	27	37	96	129	82	101	83	50	73	43	24	14.5
17	26	37	101	78	86	98	98	48	50	222	23	13.4
18	27	35	76	73	98	94	86	46	41	62	20	12.4
19	27	33	64	68	101	32	81	50	37	59	19.0	11.5
20	30	33	57	66	99	134	81	57	33	186	19.0	10.6
21	29	68	52	66	101	146	76	61	33	63	20	9.8
22	29	60	55	57	428	101	a76	57	32	41	40	a10.1
23	50	44	61	52	172	*92	a110	59	37	37	30	a13.2
24	82	41	64	98	118	89	a110	281	42	33	20	a10.7
25	46	201	61	138	106	83	a85	163	32	30	17.8	a16.7
26	37	452	50	83	103	76	76	81	26	26	19.0	a16.9
27	32	122	37	68	102	71	71	68	38	22	26	a13.8
28	32	92	41	66	99	71	68	71	46	30	24	12.4
29	32	83	70	78	-------	78	73	76	57	46	22	9.8
30	32	68	157	83	-------	148	89	76	59	35	19.0	9.8
31	30	-------	130	64	-------	480	-------	61	-------	*29	16.6	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for Manasquan River at Squankum.
Note.--Waste gates through dam open Feb. 3 to Mar. 19; discharge included in records.

Swimming River near Red Bank--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10.6	57	59	83	108	76	95	133	445	42	23	101
2	11.5	116	57	124	126	73	95	119	330	39	48	218
3	16.6	418	55	148	126	86	92	108	157	35	186	116
4	17.8	275	55	116	246	90	86	105	126	33	56	78
5	20	112	67	133	222	270	105	98	116	37	37	61
6	17.8	78	95	140	136	157	122	95	108	35	48	52
7	24	229	71	98	119	116	92	92	98	30	256	50
8	318	*281	64	81	108	112	86	86	89	30	102	48
9	98	108	59	83	105	95	86	83	86	48	78	46
10	42	83	55	107	98	*86	83	81	112	83	131	44
11	58	78	52	133	98	305	81	145	86	66	188	42
12	142	71	52	92	95	283	78	344	78	42	78	39
13	62	66	50	86	86	144	78	174	73	35	66	37
14	44	66	46	86	78	153	108	122	71	29	57	37
15	39	92	148	86	83	122	136	112	66	*24	48	39
16	35	81	136	86	83	112	122	105	61	24	59	42
17	35	86	58	81	196	98	98	92	59	61	157	37
18	33	71	88	152	218	95	*83	114	59	43	75	33
19	32	61	325	122	133	131	78	122	55	33	*55	44
20	30	57	116	108	105	*229	73	123	50	29	48	61
21	29	57	480	101	105	133	66	165	52	38	46	46
22	29	55	214	89	101	119	61	108	66	74	104	39
23	30	57	122	183	92	182	61	86	76	40	90	41
24	30	59	101	119	83	197	64	86	117	27	52	48
25	70	57	95	92	83	192	76	158	71	23	44	42
26	56	112	140	134	81	140	122	318	57	22	42	39
27	42	114	112	197	78	122	198	188	48	20	41	37
28	35	71	83	227	78	112	667	119	44	40	42	35
29	*30	66	83	228	76	105	243	101	46	33	48	33
30	29	61	86	119	-------	98	169	95	48	26	42	32
31	29	-------	89	101	-------	95	-------	152	-------	24	61	-------

* Discharge measurement made on this day.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	29	44	66	78	68	98	130	73	25	13.4	6.2
2	33	29	41	59	68	66	101	119	68	28	15.8	5.0
3	57	30	105	128	71	66	95	105	61	28	29	5.0
4	48	30	102	126	73	186	89	98	57	22	24	5.6
5	39	30	77	81	71	159	105	101	52	21	22	7.5
6	35	30	204	66	66	92	92	130	48	21	17.8	9.8
7	33	30	95	64	73	81	164	108	59	20	14.5	11.5
8	32	33	68	66	81	78	214	112	*59	20	14.5	10.6
9	32	33	61	214	71	78	133	153	48	14	16.6	7.5
10	33	37	57	270	64	76	140	119	42	14	63	6.2
11	33	41	82	187	61	71	165	101	39	13	43	6.2
12	33	39	139	122	73	76	122	92	37	15	27	6.8
13	32	37	76	95	81	615	178	89	50	16.6	e43	21
14	30	37	64	86	66	257	273	78	228	16.6	e32	19.0
15	30	39	57	81	137	153	144	160	104	15.5	147	14.5
16	32	82	52	78	279	327	178	135	68	12.4	59	12
17	30	58	52	73	119	161	182	133	57	9.0	44	10
18	30	44	50	98	89	130	136	232	51	7.5	57	9.8
19	32	41	48	119	81	188	251	119	43	7.5	37	12
20	30	41	48	89	81	177	165	95	36	12.4	29	13
21	35	112	72	81	111	126	136	86	31	16.6	26	15
22	37	186	256	154	136	116	122	83	39	16.6	25	20
23	37	132	116	105	92	108	112	131	44	106	25	15
24	37	71	81	115	*81	156	112	103	39	142	20	14
25	33	57	71	217	78	217	105	78	33	43	19.0	13
26	29	50	66	119	76	187	116	92	27	30	15.5	12
27	30	48	59	92	73	133	119	98	26	26	14.5	13
28	30	46	48	98	71	119	101	78	28	22	12.4	12.4
29	30	44	48	95	-------	112	95	68	28	17.8	9.8	9.0
30	27	46	52	81	-------	105	89	68	26	16.6	9.0	7.5
31	29	-------	55	78	-------	101	-------	78	-------	16.6	8.2	-------

* Discharge measurement made on this day.
e Waste gate open.
Note.--No gage-height record June 18 to July 12, Sept. 16, 17, 19-27; discharge estimated on basis of recorded range in stage, weather records, and records for Manasquan River at Squankum.

Swimming River near Red Bank--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.8	24	24	26	23	35	39	37	20	3.5	0	144
2	6.8	20	24	26	29	61	35	35	18	5.0	0	42
3	6.2	19	23	27	33	57	32	37	17	3.0	0	22
4	6.2	18	23	27	55	120	30	46	17	2.4	0	17
5	6.8	17	35	26	44	59	32	41	16	10	0	13
6	10	19	42	29	35	48	35	33	13	11	0	12
7	24	167	71	27	32	42	37	29	12	7.5	0	9.0
8	20	167	57	22	29	42	35	67	9.8	8.2	0	20
9	13	57	37	20	29	41	42	119	9.8	5.6	0	22
10	12	41	46	29	30	39	35	76	9.0	2.7	221	13
11	12	35	61	20	29	37	32	55	11	1.3	64	925
12	12	32	41	20	24	37	35	46	9.8	.6	24	310
13	12	29	72	27	16	41	32	41	20	.1	14	92
14	9.8	27	207	29	24	90	29	37	32	0	9.8	61
15	9.8	26	175	27	32	103	29	35	22	0	9.0	48
16	11	24	68	37	*33	57	37	33	19	0	8.2	55
17	11	23	50	52	46	48	76	30	17	0	6.2	81
18	12	23	*35	28	52	42	148	32	14	0	4.0	71
19	12	23	35	30	35	*42	70	30	11	0	3.5	59
20	12	22	39	35	32	66	48	30	8.2	0	5.5	64
21	13	22	39	97	35	64	42	78	5.6	0	14	55
22	14	22	39	79	79	44	39	92	2.4	0	30	91
23	14	37	39	33	52	41	39	55	1.9	0	16	69
24	13	68	30	37	41	41	57	44	8.3	0	9.8	48
25	14	42	29	37	41	44	50	37	8.2	0	7.5	46
26	20	52	30	37	37	66	41	33	5.0	0	5.6	37
27	19	37	30	41	35	48	42	30	2.1	0	4.5	37
28	37	32	29	42	33	41	59	30	1.1	0	3.5	33
29	86	27	30	27	-------	41	55	32	2.7	0	3.5	32
30	66	26	30	29	-------	37	41	33	4.0	0	3.4	35
31	35	-------	30	29	-------	39	-------	26	-------	0	105	-------

* Discharge measurement made on this day.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	41	64	83	33	59	61	55	61	6.2	0	35
2	39	45	57	81	39	71	61	57	33	5.0	0	35
3	33	152	52	81	32	52	59	48	24	2.1	0	35
4	32	84	48	71	35	105	59	42	23	.7	0	35
5	30	59	46	64	35	111	57	41	39	.2	0	30
6	37	55	44	66	42	86	57	37	30	0	0	32
7	48	46	33	71	338	131	66	33	20	0	0	32
8	35	41	37	57	125	76	57	33	19	0	77	29
9	32	37	44	55	66	66	55	33	44	0	58	26
10	30	35	68	55	59	61	52	32	44	0	23	27
11	27	33	55	52	66	57	50	32	29	3.0	19	27
12	*27	33	46	50	87	55	59	27	30	4.0	499	30
13	24	33	42	50	48	55	95	27	26	1.8	1,950	26
14	24	30	85	46	50	50	76	27	20	.5	315	a26
15	24	30	259	46	55	48	*66	26	16	.1	133	a26
16	24	29	101	50	52	59	59	*24	12	0	89	26
17	23	35	73	44	57	55	52	19	8.2	0	73	23
18	23	37	91	42	59	52	50	19	9.8	0	71	24
19	22	39	161	46	52	59	48	18	11	0	108	27
20	23	54	86	41	50	57	59	17	13	0	83	33
21	23	166	66	29	50	61	57	17	12	0	59	30
22	22	174	50	44	48	192	55	17	9.0	0	50	24
23	22	78	52	48	68	251	52	19	7.5	0	50	22
24	20	64	59	44	81	108	48	19	9.6	0	48	32
25	19	68	57	42	59	83	57	14	24	0	44	50
26	19	57	52	41	52	139	66	12	22	0	41	35
27	20	50	50	41	55	127	64	12	18	0	39	27
28	30	46	50	30	55	78	55	12	14	0	37	40
29	40	119	66	30	-------	71	55	9.8	11	0	35	52
30	86	92	170	33	-------	68	61	24	6.8	0	35	37
31	64	-------	129	30	-------	64	-------	39	-------	0	35	-------

* Discharge measurement made on this day.

Swimming River near Red Bank--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Observed				Adjusted*		
	Cfs-days	Maximum	Minimum	Mean	Mean	Per square mile	Runoff in inches
October 1950	993	82	23	32.0	42.1	0.868	1.00
November	2,274	452	27	75.8	86.0	1.77	1.98
December	2,514	191	37	81.1	91.0	1.88	2.16
Calendar year 1950	18,879.8	452	7.5	51.7	62.1	1.28	17.37
January 1951	2,374	152	52	76.6	86.5	1.78	2.06
February	3,253	428	79	116	123	2.54	2.64
March	3,303	480	32	107	120	2.47	2.85
April	3,089	230	68	103	113	2.33	2.59
May	2,301	281	46	74.2	85.7	1.77	2.04
June	1,382	73	26	46.1	58.6	1.21	1.35
July	1,391.9	222	14.5	44.9	59.5	1.23	1.41
August	803.4	93	15.5	25.9	39.5	.814	.94
September	449.6	30	9.8	15.0	27.8	.573	.64
Water year 1950-51	24,128.4	480	9.8	66.1	77.3	1.59	21.66
October 1951	1,495.3	318	10.6	48.2	59.5	1.23	1.41
November	3,195	418	55	106	117	2.41	2.69
December	3,313	480	46	107	118	2.43	2.80
Calendar year 1951	26,350.2	480	9.8	72.2	83.6	1.72	23.42
January 1952	3,735	228	81	120	131	2.70	3.12
February	3,346	246	76	115	126	2.60	2.81
March	4,328	305	73	140	150	3.09	3.57
April	3,604	667	61	120	131	2.70	3.02
May	4,029	344	81	130	142	2.92	3.38
June	2,950	445	44	98.3	114	2.35	2.61
July	1,165	83	20	37.6	55.1	1.14	1.31
August	2,408	256	23	77.7	92.8	1.91	2.21
September	1,617	218	32	53.9	67.6	1.39	1.55
Water year 1951-52	35,185.3	667	10.6	96.1	109	2.25	30.48
October 1952	1,040	57	27	33.5	45.7	.942	1.09
November	1,562	186	29	52.1	59.8	1.23	1.37
December	2,446	256	41	78.9	89.4	1.84	2.12
Calendar year 1952	32,230	667	20	88.1	100	2.06	28.16
January 1953	3,403	270	59	110	120	2.47	2.86
February	2,501	279	61	89.3	100	2.06	2.15
March	4,585	615	66	148	159	3.28	3.77
April	4,132	273	89	138	149	3.07	3.43
May	3,372	232	68	109	121	2.49	2.88
June	1,601	228	26	53.4	69.1	1.42	1.59
July	791.7	142	7.5	25.5	45.7	.942	1.09
August	933.0	147	8.2	30.1	46.9	.967	1.12
September	330.1	21	5.0	11.0	27.5	.567	.63
Water year 1952-53	26,696.8	615	5.0	73.1	86.1	1.78	24.10
October 1953	556.4	86	6.2	17.9	32.6	.672	.77
November	1,178	167	17	39.3	52.3	1.08	1.20
December	1,520	207	23	49.0	62.0	1.28	1.47
Calendar year 1953	24,903.2	615	5.0	68.2	82.1	1.69	22.97
January 1954	1,052	97	20	33.9	47.1	.971	1.12
February	1,015	79	16	36.2	49.4	1.02	1.06
March	1,613	120	35	52.0	65.2	1.34	1.55
April	1,353	148	29	45.1	58.7	1.21	1.35
May	1,379	119	26	44.5	58.8	1.21	1.40
June	346.9	32	1.1	11.6	29.7	.612	.68
July	60.9	11	0	1.96	18.5	.381	.44
August	572.0	221	0	18.5	40.5	.835	.96
September	2,562.0	925	9	85.4	99.9	2.06	2.30
Water year 1953-54	13,208.2	925	0	36.2	51.0	1.05	14.30
October 1954	968	86	19	31.2	44.8	.924	1.07
November	1,862	174	29	62.1	74.8	1.54	1.72
December	2,293	259	33	74.0	86.7	1.79	2.06
Calendar year 1954	15,076.8	925	0	41.3	56.0	1.15	15.71
January 1955	1,563	83	29	50.4	63.1	1.30	1.50
February	1,848	338	32	66.0	79.5	1.64	1.71
March	2,607	251	48	84.1	96.6	1.99	2.30
April	1,768	95	48	58.9	71.9	1.48	1.65
May	841.8	57	9.8	27.2	43.1	.889	1.02
June	645.9	61	6.8	21.5	35.7	.736	.82
July	23.6	6.2	0	.76	18.4	.379	.44
August	3,971	1,950	0	128	146	3.01	3.48
September	933	52	22	31.1	45.2	.932	1.04
Water year 1954-55	19,324.3	1,950	0	52.9	67.2	1.39	18.81

* Adjusted for diversion above station for municipal supply and change in contents in Swimming River Reservoir for months of February, March 1951, July, August 1954, and June, July, August 1955 (change in contents negligible for other months of year).

Manasquan River at Squankum

Location (revised).--Lat 40°09'47", long 74°09'21", on right bank 20 ft downstream from bridge on State Highway 547 (Squankum Park Road) in Squankum, Monmouth County, 0.4 mile downstream from Marsh Bog Brook.

Drainage area.--43.4 sq mi.

Records available.--July 1931 to September 1955.

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.--24 years, 72.2 cfs.

Extremes.--1931-55: Maximum discharge, 2,940 cfs Sept. 21, 1938 (gage height, 12.45 ft, from floodmark, site then in use), from rating curve extended above 900 cfs on basis of contracted-opneing measurement of peak flow; minimum, 12.9 cfs Sept. 10, 1952.

Revisions.--The figures of maximum discharge for some water years have been revised, as shown in the following table. They supersede figures published in Special Reports 5, 9, and 12.

Water year	Date	Discharge (cfs)	Gage height (feet)
1934	Sept. 9, 1934	932	8.60
1935	Feb. 15, 1935	632	7.50
1936	Jan. 3, 1936	1,160	9.22
1944	Oct. 27, 1943	2,360	10.15
	Sept. 15, 1944	2,360	10.15
1945	July 24, 1945	1,860	a9.1

a From estimated graph based on partial gage-height record.

Peak discharge (base, 600 cfs).--
1950-51: Feb. 22 (2:30 p.m.) 723 cfs (6.58 ft); Mar. 31 (10 a.m.) 723 cfs (6.58 ft).
1951-52: Dec. 21 (7 p.m.) 826 cfs (6.97 ft); Mar. 12 (4 a.m.) 671 cfs (6.37 ft); Apr. 28 (4 p.m.) 1,100 cfs (7.90 ft); May 26 (3 a.m.) 757 cfs (6.71 ft); June 1 (8 p.m.) 726 cfs (6.59 ft).
1952-53: Mar. 13 (8 p.m.) 1,160 cfs (8.06 ft).
1953-54: Sept. 11 (12 p.m.) 848 cfs (7.05 ft).
1954-55: Aug. 13 (9 p.m.) 1,330 cfs (8.56 ft).

Revisions.--Revised figures of discharge, in cubic feet per second, for high-water periods in the water years 1934, 1936, and 1944, superseding those published in Special Reports 5, 9, and 12, are given herewith:

Sept. 9, 1934..... 660
Jan. 3, 1936..... 785
Jan. 9, 1936..... 627
Oct. 27, 1943..... 1,690
Sept. 15, 1944..... 1,560

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
September 1934.....	-	660	17.2	78.1	1.80	2.01
Water year 1933-34.....	-	660	16.4	59.4	1.37	18.64
Calendar year 1934.....	21,925.2	660	16.4	60.1	1.38	18.82
January 1936.....	4,527	785	30	146	3.36	3.88
Water year 1935-36.....	27,976.7	785	17.0	76.4	1.76	23.97
Calendar year 1936.....	29,438.7	785	17.0	80.4	1.85	25.22
October 1943.....	3,521.4	1,690	19.2	114	2.63	3.02
Calendar year 1943.....	23,155.1	1,690	17.7	63.4	1.46	19.83
September 1944.....	3,370.1	1,560	17.7	112	2.58	2.89
Water year 1943-44.....	29,805.5	1,690	17.7	81.4	1.88	25.52
Calendar year 1944.....	31,254.1	1,560	17.7	85.4	1.97	26.77

Manasquan River at Squankum--Continued

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	34	70	76	151	93	190	59	51	43	26	23
2	34	33	64	61	*176	93	139	62	48	40	25	24
3	34	33	62	61	99	85	260	65	47	36	24	30
4	34	38	83	72	81	135	188	62	44	33	24	27
5	33	246	106	76	76	123	137	54	48	42	23	24
6	*30	93	74	62	70	99	117	49	44	36	22	24
7	32	67	65	64	101	91	103	48	42	30	24	25
8	30	58	243	87	197	79	93	51	41	29	29	24
9	32	52	159	62	99	76	91	54	43	28	27	22
10	41	48	106	55	77	70	89	49	44	27	25	22
11	35	46	99	55	70	69	103	59	52	26	24	22
12	35	43	87	55	72	69	87	114	43	26	25	22
13	38	42	74	52	77	67	83	72	42	30	33	22
14	33	41	67	54	79	116	77	56	58	29	26	21
15	32	40	67	176	72	110	74	54	54	28	25	21
16	30	40	85	117	67	89	72	49	48	29	24	22
17	30	40	77	85	80	77	83	48	42	34	24	21
18	30	40	67	77	144	70	74	44	40	32	24	21
19	30	42	61	72	103	69	70	46	36	36	22	21
20	30	38	56	69	110	209	69	48	35	54	24	21
21	29	78	54	65	191	137	65	52	34	34	25	21
22	28	55	52	56	590	110	64	49	34	30	48	21
23	94	47	54	55	224	93	91	51	45	30	33	22
24	80	43	56	118	139	89	83	261	42	29	25	21
25	49	130	55	117	114	81	72	137	36	27	24	24
26	42	379	49	87	99	74	67	81	32	26	24	25
27	38	128	47	72	93	70	62	65	36	25	27	*22
28	37	112	44	70	85	70	61	65	37	28	25	21
29	36	99	75	79	-------	72	64	72	42	34	24	20
30	35	77	98	81	-------	154	64	70	48	30	24	19.4
31	35	-------	97	70	-------	516	-------	56	-------	27	24	-------

* Discharge measurement made on this day.

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19.4	79	58	87	103	74	91	142	500	47	35	178
2	19.4	83	55	162	121	76	89	117	334	43	61	415
3	20	378	52	164	117	77	83	106	164	42	103	215
4	20	268	51	121	259	85	77	99	126	44	48	119
5	24	117	72	164	214	281	95	93	110	44	41	87
6	21	83	83	144	144	194	103	93	101	40	70	72
7	38	223	65	108	121	137	87	89	87	38	326	72
8	226	245	61	91	106	121	77	79	77	40	126	67
9	58	117	58	87	99	106	74	77	74	58	106	61
10	40	89	55	126	91	95	72	87	89	92	204	58
11	72	77	54	131	91	247	70	96	72	54	174	56
12	94	70	51	99	85	376	67	256	64	44	91	55
13	51	67	48	91	79	164	69	139	61	42	79	54
14	41	67	46	87	76	164	108	110	59	41	65	51
15	36	81	179	87	72	123	130	103	56	37	58	54
16	36	77	123	85	72	110	119	93	54	36	90	56
17	36	79	77	77	198	101	89	79	*51	38	343	51
18	34	67	130	164	239	91	77	116	55	37	123	48
19	32	61	274	117	144	150	70	108	49	37	81	65
20	30	56	110	117	114	*230	69	231	48	36	69	65
21	29	55	594	103	110	144	65	149	48	40	62	54
22	28	55	279	99	101	126	64	103	55	48	91	49
23	28	55	154	190	91	210	62	83	106	36	67	56
24	29	54	121	117	89	192	67	76	123	34	56	56
25	87	52	101	95	83	219	91	280	74	30	52	51
26	49	124	144	166	81	146	128	469	58	30	49	48
27	40	97	110	208	79	126	238	198	51	35	48	47
28	37	70	89	291	77	112	855	130	49	113	49	44
29	36	65	85	236	76	103	328	108	48	55	51	43
30	34	62	91	137	-------	95	195	95	51	40	65	43
31	33	-------	93	110	-------	91	-------	154	-------	36	130	-------

* Discharge measurement made on this day.

Manasquan River at Squankum--Continued

Daily discharge, in cubic feet per second, 1950-55

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43	38	49	81	87	72	95	126	74	38	29	27
2	43	38	51	72	77	69	101	106	65	40	34	27
3	69	38	120	168	77	72	93	99	61	40	36	26
4	49	38	91	130	76	216	91	87	58	33	33	27
5	44	38	120	97	76	149	108	135	55	33	33	28
6	42	38	221	83	69	110	89	182	54	34	30	29
7	42	37	117	76	76	93	202	126	62	37	29	28
8	41	37	87	87	81	87	197	129	58	34	30	26
9	41	37	79	312	74	85	132	169	55	34	35	25
10	41	40	72	304	69	83	174	110	51	32	56	25
11	40	40	128	216	67	79	174	91	48	30	36	25
12	40	38	135	156	87	95	132	79	47	30	32	26
13	40	37	97	123	83	713	192	76	82	32	30	40
14	40	37	89	108	72	340	258	74	190	33	57	29
15	40	43	74	*101	222	213	152	189	101	32	126	27
16	40	81	67	95	278	358	209	132	74	28	49	27
17	38	51	65	87	144	190	179	139	62	27	78	26
18	38	44	61	128	110	152	144	294	55	27	79	25
19	38	43	58	130	97	221	252	144	52	27	49	26
20	38	44	56	106	93	179	166	126	49	28	42	26
21	38	126	134	99	149	139	135	103	46	30	38	29
22	40	203	316	144	126	123	119	106	48	29	36	28
23	38	121	154	108	97	112	110	114	52	156	35	27
24	38	83	112	156	91	182	99	89	43	83	38	26
25	37	67	93	211	85	216	95	81	41	47	33	26
26	37	64	83	132	81	190	110	81	41	38	32	26
27	38	58	76	108	77	142	101	89	38	*36	30	26
28	40	54	67	114	74	126	91	72	38	35	30	25
29	38	51	64	106	-------	117	97	65	41	32	29	24
30	37	49	64	93	-------	106	93	67	40	33	28	24
31	38	-------	69	89	-------	99	-------	76	-------	32	27	-------

* Discharge measurement made on this day.

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	33	42	46	41	48	54	56	39	23	17	65
2	23	30	42	46	43	74	51	54	36	23	18	35
3	23	29	40	44	47	81	48	54	35	22	28	29
4	23	28	40	44	62	146	46	62	35	23	23	27
5	23	28	69	44	52	79	47	55	34	27	22	25
6	24	30	58	47	48	67	49	51	32	24	23	23
7	35	233	116	44	46	61	49	47	30	23	20	22
8	25	122	76	42	43	58	49	113	29	25	19	25
9	24	70	61	42	44	55	52	166	29	22	42	23
10	24	55	81	49	43	55	46	101	29	22	119	22
11	24	48	74	44	42	52	46	81	30	21	36	515
12	24	46	61	48	40	49	47	67	30	20	28	340
13	24	44	97	43	36	56	43	59	58	21	24	104
14	24	42	300	42	38	130	42	55	45	21	23	66
15	24	41	221	44	41	110	42	54	39	24	22	54
16	24	40	112	59	43	76	51	51	37	22	22	61
17	24	38	89	65	55	67	105	48	35	20	21	61
18	24	38	70	51	52	*61	158	49	33	19	19	51
19	24	37	62	48	46	56	89	46	31	20	*19	52
20	25	36	62	58	43	93	77	46	29	20	20	51
21	24	36	61	146	52	74	61	180	28	20	28	48
22	24	36	64	93	99	62	54	126	28	19	29	84
23	24	68	61	65	64	58	62	78	30	18	22	52
24	24	79	55	58	55	55	134	63	34	18	22	45
25	26	64	52	55	55	69	77	57	29	18	21	41
26	27	70	51	56	51	83	77	51	28	22	20	39
27	26	52	49	56	47	64	74	47	26	22	21	36
28	48	49	48	54	46	59	97	47	22	20	20	35
29	69	48	51	46	-------	55	72	49	25	19	21	33
30	55	43	49	46	-------	54	61	57	23	19	22	36
31	36	-------	48	44	-------	54	-------	43	-------	18	119	-------

* Discharge measurement made on this day.

Manasquan River at Squankum--Continued

Daily discharge, in cubic feet per second, 1950-55

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	36	63	82	39	63	66	66	58	22	18	36
2	34	51	58	87	40	68	63	66	37	22	18	36
3	33	114	52	82	39	54	58	57	34	22	17	35
4	32	68	49	72	37	129	58	51	33	21	16	34
5	31	61	48	66	40	104	55	52	43	20	16	33
6	39	54	46	74	47	108	60	61	34	20	17	32
7	37	46	41	76	302	149	66	49	31	21	17	32
8	33	43	41	64	110	87	57	43	30	20	109	30
9	33	41	46	61	78	78	54	40	69	20	48	30
10	32	39	68	60	61	71	51	37	51	31	29	30
11	31	41	54	58	74	66	49	37	41	39	28	30
12	30	41	48	52	89	61	60	39	45	26	214	29
13	30	36	46	54	60	61	91	37	40	22	1,030	28
14	29	36	135	51	52	57	74	35	35	21	589	28
15	28	36	225	49	54	57	68	34	33	20	163	29
16	30	34	104	48	52	64	60	32	30	22	97	28
17	29	35	80	46	61	57	54	32	28	22	72	28
18	28	35	136	45	61	57	51	31	27	20	78	28
19	28	37	173	*46	55	61	51	30	27	19	110	28
20	28	49	97	45	52	57	78	30	28	18	74	31
21	28	160	71	42	51	67	63	31	26	17	63	29
22	28	125	63	45	54	223	61	31	27	15	57	28
23	28	76	60	45	81	224	57	30	25	15	55	28
24	28	68	60	43	76	116	52	30	26	15	55	34
25	28	66	57	43	64	91	63	*28	29	17	45	39
26	28	58	52	42	57	161	66	28	32	17	42	30
27	28	55	51	45	55	124	60	28	28	16	41	29
28	31	52	54	43	55	91	55	27	26	*17	39	41
29	43	124	69	39	-------	82	54	26	24	17	37	37
30	58	76	177	36	-------	74	57	34	23	17	39	33
31	48	-------	113	35	-------	68	-------	50	-------	18	36	-------

* Discharge measurement made on this day.

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	1,162	94	28	37.5	0.864	1.00
November	2,262	379	33	75.4	1.74	1.94
December	2,453	243	44	79.1	1.82	2.10
Calendar year 1950	20,719	379	20	56.8	1.31	17.75
January 1951	2,358	176	52	76.1	1.75	2.02
February	3,536	590	67	126	2.90	3.03
March	3,355	516	67	108	2.49	2.87
April	2,892	260	61	96.4	2.22	2.48
May	2,102	261	44	67.8	1.56	1.80
June	1,288	58	32	42.9	.988	1.10
July	989	54	25	31.9	.735	.85
August	803	48	22	25.9	.597	.69
September	675.4	30	19.4	22.5	.518	.58
Water year 1950-51	23,875.4	590	19.4	65.4	1.51	20.46
October 1951	1,377.8	226	19.4	44.4	1.02	1.18
November	3,073	378	52	102	2.35	2.63
December	3,563	594	46	115	2.65	3.05
Calendar year 1951	26,012.2	594	19.4	71.3	1.64	22.28
January 1952	4,061	291	77	131	3.02	3.48
February	3,332	259	72	115	2.65	2.86
March	4,566	376	74	147	3.39	3.91
April	3,809	855	62	127	2.93	3.26
May	4,158	469	76	134	3.09	3.56
June	2,894	500	48	96.5	2.22	2.48
July	1,387	113	30	44.7	1.03	1.19
August	3,013	343	35	97.2	2.24	2.58
September	2,390	415	43	79.7	1.84	2.05
Water year 1951-52	37,623.8	855	19.4	103	2.37	32.23

Manasquan River at Squankum--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1952	1,266	69	37	40.8	.940	1.08
November	1,713	203	37	57.1	1.32	1.47
December	3,069	316	49	99.0	2.28	2.63
Calendar year 1952	35,658	855	30	97.4	2.24	30.55
January 1953	4,020	312	72	130	3.00	3.44
February	2,795	278	67	99.8	2.30	2.40
March	5,128	713	69	165	3.80	4.39
April	4,190	258	89	140	3.23	3.59
May	3,556	294	65	115	2.65	3.05
June	1,781	190	38	59.4	1.37	1.53
July	1,200	156	27	38.7	.892	1.03
August	1,279	126	27	41.3	.952	1.10
September	806	40	24	26.9	.620	.69
Water year 1952-53	30,803	713	24	84.4	1.94	26.40
October 1953	872	69	23	28.1	.647	.75
November	1,613	233	28	53.8	1.24	1.38
December	2,362	300	40	76.2	1.76	2.02
Calendar year 1953	29,602	713	23	81.1	1.87	25.37
January 1954	1,669	146	42	53.8	1.24	1.43
February	1,374	99	36	49.1	1.13	1.18
March	2,161	146	48	69.7	1.61	1.85
April	1,960	158	42	65.3	1.50	1.68
May	2,113	180	43	68.2	1.57	1.81
June	968	58	22	32.3	.74	.83
July	655	27	18	21.1	.49	.56
August	910	119	17	29.4	.68	.78
September	2,100	515	22	70.0	1.61	1.80
Water year 1953-54	18,757	515	17	51.4	1.18	16.07
October 1954	1,007	58	28	32.5	.749	.86
November	1,793	160	34	59.8	1.38	1.54
December	2,437	225	41	78.6	1.81	2.09
Calendar year 1954	19,147	515	17	52.5	1.21	16.41
January 1955	1,676	87	35	54.1	1.25	1.44
February	1,896	302	37	67.7	1.56	1.62
March	2,830	224	54	91.3	2.10	2.42
April	1,812	91	49	60.4	1.39	1.55
May	1,202	66	26	38.8	.894	1.03
June	1,020	69	23	34.0	.783	.87
July	629	39	15	20.3	.468	.54
August	3,269	1,030	16	105	2.42	2.80
September	943	41	28	31.4	.724	.81
Water year 1954-55	20,514	1,030	15	56.2	1.29	17.57

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 1955.

Gage.--Water-stage recorder. Datum of gage is 8.10 ft above mean sea level, datum of 1929.

Average discharge.--26 years (1929-55), 206 cfs.

Extremes.--1928-55: 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).

Maximum discharge.--
1950-51: Apr. 2 (6 p.m.) 574 cfs (6.95 ft).
1951-52: Apr. 29 (10 p.m.) 1,250 cfs (10.53 ft).
1952-53: Mar. 15 (12 m.) 878 cfs (8.70 ft).
1953-54: Sept. 13 (7 p.m.) 719 cfs (7.83 ft).
1954-55: Aug. 15 (9 a.m.) 909 cfs (8.86 ft).

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	92	116	260	200	224	254	420	179	230	179	94	89
2	88	113	230	197	245	242	555	173	205	178	87	107
3	87	107	210	191	263	231	566	166	186	164	84	105
4	84	109	203	190	269	241	553	162	181	149	83	101
5	81	146	210	190	257	248	550	163	186	150	81	96
6	*79	194	211	190	233	257	498	162	180	153	78	92
7	83	241	215	187	226	259	428	163	172	143	77	89
8	85	255	249	194	245	247	361	162	163	128	*86	87
9	86	222	279	190	234	234	314	158	161	116	90	84
10	94	194	304	180	245	221	287	156	161	109	88	81
11	99	172	334	176	270	209	273	166	175	103	84	79
12	101	154	325	169	239	200	264	197	186	97	84	73
13	104	141	282	163	220	193	259	216	175	97	108	74
14	104	133	254	160	211	208	249	245	179	120	129	75
15	102	128	233	188	*206	224	239	255	191	135	135	74
16	97	125	221	212	200	239	230	259	188	143	166	75
17	94	122	210	233	199	247	231	210	174	146	188	75
18	92	119	200	243	220	237	243	182	157	140	152	74
19	89	116	191	231	233	222	255	169	147	135	127	73
20	88	115	178	210	248	247	231	166	139	148	126	73
21	86	153	169	197	265	261	219	173	132	152	126	73
22	85	169	166	184	358	290	216	176	127	140	122	72
23	122	172	163	173	431	303	226	184	131	125	119	70
24	169	166	161	185	504	288	234	249	152	115	119	73
25	196	174	162	205	472	258	239	298	152	107	114	78
26	216	226	160	224	392	237	240	419	139	99	111	92
27	210	261	149	230	321	219	231	456	147	94	111	96
28	175	327	148	220	279	206	210	333	158	93	111	93
29	157	365	161	209	-------	199	199	266	157	104	109	72
30	140	313	179	204	-------	221	191	260	163	115	104	71
31	126	-------	196	203	-------	329	-------	247	-------	103	94	-------

* Discharge measurement made on this day.

Toms River near Toms River--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71	140	191	281	411	246	284	771	488	178	110	299
2	75	150	180	287	352	237	278	590	631	166	122	396
3	75	200	170	300	324	242	270	486	850	156	139	471
4	80	220	164	310	352	261	264	417	692	149	143	482
5	80	250	170	334	388	324	266	377	542	147	131	424
6	80	250	186	346	434	364	278	346	446	145	133	351
7	100	250	196	346	453	421	291	320	379	139	292	277
8	150	280	196	339	409	444	299	300	331	134	429	227
9	250	350	184	310	357	394	286	294	301	151	447	208
10	200	300	174	304	314	344	270	301	279	208	482	190
11	170	250	165	316	294	355	258	292	264	230	548	176
12	200	230	160	317	278	428	244	347	243	234	590	169
13	200	220	155	317	265	544	238	376	220	216	550	160
14	170	210	151	301	251	600	262	444	210	169	446	153
15	150	210	202	281	242	520	284	496	200	147	347	152
16	140	225	243	266	235	444	307	429	192	134	296	157
17	130	228	252	252	278	386	321	356	195	129	316	157
18	120	218	290	268	326	340	320	327	188	128	333	150
19	110	211	334	273	366	335	300	321	178	128	374	156
20	100	210	335	295	405	366	274	322	178	133	369	195
21	100	191	464	299	387	382	252	347	175	132	290	196
22	95	178	645	288	340	399	238	362	180	140	238	178
23	95	171	789	307	303	392	227	355	197	138	213	170
24	100	167	664	313	282	395	230	330	231	129	193	175
25	120	165	512	324	265	435	246	343	266	126	176	175
26	170	193	433	321	251	468	282	411	286	121	164	165
27	150	218	379	338	243	457	352	561	254	113	155	156
28	130	221	348	385	238	413	580	629	210	118	151	147
29	140	224	324	469	247	360	1,070	508	186	120	155	143
30	150	209	301	507	-------	321	1,100	422	178	111	186	139
31	140	-------	286	457	-------	299	-------	407	-------	108	248	-------

* Discharge measurement made on this day.

Note.--No gage-height record Oct. 3 to Nov. 14, June 13-15; discharge estimated on basis of weather records and records for nearby stations.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	134	118	188	221	259	235	314	324	281	156	126	101
2	133	117	180	223	246	225	305	321	288	149	127	100
3	156	117	209	247	237	220	296	322	272	149	150	99
4	173	118	230	264	231	252	290	320	258	145	146	97
5	171	118	254	284	224	291	292	335	238	137	137	99
6	164	118	294	287	218	324	294	356	217	133	132	103
7	152	117	322	266	224	346	330	383	218	137	126	106
8	143	116	346	254	230	320	364	390	224	140	121	103
9	139	116	320	316	227	287	409	399	216	137	143	99
10	135	119	272	391	*220	*269	471	351	202	128	187	96
11	134	125	257	500	210	255	478	*317	200	123	197	94
12	133	128	269	561	211	257	464	*288	204	118	200	92
13	132	127	279	500	218	368	483	273	214	117	171	107
14	129	128	286	424	220	534	512	262	316	117	187	117
15	127	141	265	357	261	846	*534	244	356	116	305	108
16	127	162	239	316	339	787	558	248	368	113	317	103
17	126	174	220	286	405	695	547	307	*350	109	320	98
18	125	180	207	279	485	623	542	368	303	107	317	95
19	125	171	197	284	431	571	553	408	258	104	275	94
20	122	161	191	292	353	534	539	500	228	106	238	94
21	121	202	224	294	324	489	558	467	203	108	193	97
22	122	273	316	298	334	461	495	412	202	110	166	107
23	123	347	348	291	331	418	429	388	291	227	151	106
24	123	467	379	303	326	392	378	383	275	428	141	99
25	122	461	360	324	301	402	346	378	235	421	133	97
26	121	383	304	342	278	*433	330	356	213	324	126	96
27	121	303	265	361	262	464	327	338	190	265	120	95
28	120	251	242	346	247	435	326	330	175	214	116	95
29	120	221	218	310	-------	392	324	313	167	173	111	94
30	119	202	213	288	-------	356	309	287	164	149	108	91
31	118	-------	209	274	-------	331	-------	275	-------	137	103	-------

* Discharge measurement made on this day.

Toms River near Toms River--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	89	217	183	182	166	169	183	346	207	108	82	269
2	86	186	175	176	166	183	178	295	193	104	80	278
3	85	165	167	174	166	200	173	273	183	101	98	278
4	85	153	161	173	180	241	164	278	175	100	106	221
5	86	139	171	170	190	259	161	300	170	102	98	160
6	92	140	180	170	186	273	162	287	164	102	108	129
7	118	251	225	166	176	251	164	244	156	101	108	113
8	121	340	237	162	170	221	165	269	152	101	96	104
9	109	360	243	158	165	202	170	336	156	98	101	99
10	102	417	250	161	160	190	171	399	147	95	155	97
11	100	381	239	173	157	179	166	475	145	92	167	290
12	100	301	230	176	152	173	162	442	141	90	157	454
13	100	248	235	170	140	173	158	365	143	89	126	639
14	98	217	298	170	144	210	166	298	153	87	108	637
15	97	195	385	169	145	250	157	266	155	98	100	468
16	97	182	426	184	149	269	156	247	153	*107	97	320
17	96	171	462	220	161	272	195	238	167	97	91	278
18	96	162	400	209	174	243	264	227	173	92	86	257
19	97	156	312	210	175	217	292	221	153	91	82	248
20	96	152	269	209	165	221	322	218	147	94	83	244
21	96	149	246	239	166	227	292	308	126	96	102	231
22	95	147	234	264	210	224	237	418	118	88	149	232
23	96	176	227	282	221	211	218	534	118	85	161	228
24	96	230	220	275	218	197	312	558	137	81	132	220
25	98	252	207	242	206	199	361	450	138	79	107	206
26	*103	274	200	221	193	223	434	346	123	95	96	183
27	107	264	195	213	182	228	416	291	111	113	91	166
28	137	246	190	214	171	224	402	261	104	103	88	153
29	190	218	188	196	-------	209	413	238	104	94	87	146
30	220	196	187	184	-------	195	407	230	107	90	86	145
31	223	-------	186	179	-------	187	-------	223	-------	87	182	-------

* Discharge measurement made on this day.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	137	164	232	288	139	183	220	206	176	176	76	104
2	135	171	231	305	174	187	207	231	160	114	72	100
3	134	209	211	291	a160	190	196	234	143	104	66	99
4	132	225	193	265	a140	206	190	221	135	97	64	99
5	126	237	183	247	a130	232	188	202	152	92	64	96
6	125	242	174	231	a150	264	197	220	157	88	64	94
7	129	224	164	217	a250	298	207	187	139	97	64	92
8	128	200	156	210	a300	309	207	167	133	94	71	89
9	129	180	161	202	a300	305	200	161	197	84	82	85
10	126	186	180	195	a290	284	188	153	239	90	84	83
11	122	166	190	190	a250	255	178	157	250	131	80	83
12	120	147	188	186	a230	228	176	153	247	118	129	83
13	116	139	180	180	a200	207	210	143	237	107	356	81
14	112	134	217	178	a180	193	231	138	216	103	612	80
15	110	132	283	174	a180	174	251	132	186	98	867	78
16	114	*129	307	171	a190	121	258	128	162	94	658	78
17	113	132	343	169	a200	179	224	125	137	94	458	77
18	113	132	350	164	203	184	207	123	120	88	314	78
19	111	135	352	161	209	187	196	125	111	81	251	78
20	112	147	339	158	197	187	202	128	110	78	213	97
21	111	188	334	152	214	192	203	128	113	77	184	117
22	109	238	284	155	191	246	209	135	147	73	157	110
23	107	259	247	155	171	301	206	131	138	70	146	101
24	106	288	230	153	182	342	200	126	125	68	139	108
25	106	283	214	153	191	385	209	120	141	71	131	126
26	104	248	196	152	217	369	217	116	173	73	123	129
27	106	218	187	150	202	335	218	110	173	73	118	116
28	110	209	183	143	190	307	216	107	152	71	112	121
29	121	228	193	139	-------	290	206	104	144	71	108	138
30	144	232	237	139	-------	*264	203	116	133	74	107	147
31	162	-------	262	134	-------	238	-------	149	-------	77	106	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for North Branch Rancocas Creek at Pemberton.

Toms River near Toms River--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	3,511	216	79	113	0.911	1.05
November	5,348	365	107	178	1.44	1.60
December	6,613	334	148	213	1.72	1.98
Calendar year 1950	61,098	391	67	167	1.35	18.32
January 1951	6,128	243	160	198	1.60	1.84
February	7,709	504	199	275	2.22	2.31
March	7,471	329	193	241	1.94	2.24
April	9,211	566	191	307	2.48	2.76
May	6,770	456	156	218	1.76	2.03
June	4,994	230	127	166	1.34	1.50
July	3,980	179	93	128	1.03	1.19
August	3,387	188	77	109	.879	1.02
September	2,466	107	70	82.2	.663	.74
Water year 1950-51	67,588	566	70	185	1.49	20.26
October 1951	4,041	250	71	130	1.05	1.21
November	6,539	350	140	218	1.76	1.96
December	9,243	789	151	298	2.40	2.77
Calendar year 1951	71,939	789	70	197	1.59	21.57
January 1952	10,051	507	252	324	2.61	3.01
February	9,290	453	235	320	2.58	2.79
March	11,916	600	237	384	3.10	3.57
April	10,171	1,100	227	339	2.73	3.05
May	12,587	771	292	406	3.27	3.78
June	9,170	850	175	306	2.47	2.75
July	4,572	234	108	147	1.19	1.37
August	8,766	590	110	283	2.28	2.63
September	6,589	482	139	220	1.77	1.98
Water year 1951-52	102,935	1,100	71	281	2.27	30.87
October 1952	4,110	173	118	133	1.07	1.23
November	5,781	467	116	193	1.56	1.73
December	8,103	379	180	261	2.10	2.43
Calendar year 1952	101,106	1,100	108	276	2.23	30.32
January 1953	9,983	561	221	322	2.60	2.99
February	7,852	485	210	280	2.26	2.35
March	12,812	846	220	413	3.33	3.84
April	12,397	558	290	413	3.33	3.72
May	10,643	500	244	343	2.77	3.19
June	7,326	368	164	244	1.97	2.20
July	5,097	428	104	164	1.32	1.53
August	5,390	320	103	174	1.40	1.62
September	2,982	117	91	99.4	.802	.89
Water year 1952-53	92,476	846	91	253	2.04	27.72
October 1953	3,411	223	85	110	.887	1.02
November	6,685	417	139	223	1.80	2.00
December	7,528	462	161	243	1.96	2.26
Calendar year 1953	92,106	846	85	252	2.03	27.61
January 1954	6,091	282	158	196	1.58	1.83
February	4,854	221	140	173	1.40	1.46
March	6,720	273	169	217	1.75	2.02
April	7,221	434	156	241	1.94	2.17
May	9,881	558	218	319	2.57	2.96
June	4,419	207	104	147	1.19	1.33
July	2,960	113	79	95.5	.770	.89
August	3,410	182	80	110	.887	1.02
September	7,493	639	97	250	2.02	2.25
Water year 1953-54	70,673	639	79	194	1.56	21.21
October 1954	3,730	162	104	120	.968	1.12
November	5,822	288	129	194	1.56	1.75
December	7,201	352	158	232	1.87	2.16
Calendar year 1954	69,802	639	79	191	1.54	20.96
January 1955	5,807	305	134	187	1.51	1.74
February	5,630	300	130	201	1.62	1.69
March	7,642	385	121	247	1.99	2.29
April	6,220	258	176	207	1.67	1.87
May	4,676	234	104	151	1.22	1.40
June	4,846	250	110	162	1.31	1.45
July	2,770	131	68	89.4	.721	.83
August	6,076	867	64	196	1.58	1.82
September	2,967	147	77	98.9	.798	.89
Water year 1954-55	63,387	867	64	174	1.40	19.01

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 1955.

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.--23 years, 107 cfs.

Extremes.--1932-55: Maximum discharge, 1,050 cfs Oct. 28, 1943 (elevation, 4.50 ft), from rating curve extended above 300 cfs; maximum elevation, 6.45 ft Feb. 16, 1936 (backwater from ice and tide); minimum discharge, 12.9 cfs Oct. 2, 1947 (elevation, 2.13 ft).

Maximum discharge.--
1950-51: Apr. 29 (11 a.m.) 252 cfs. Maximum gage height, c5.09 ft Nov. 25.
1951-52: Apr. 30 (about 10 a.m.) about 440 cfs. Maximum gage height, c3.57 ft Apr. 30.
1952-53: Mar. 17 (1 a.m.) 409 cfs (3.49 ft).
1953-54: Nov. 7 (12 m.) 434 cfs (3.55 ft).
1954-55: Aug. 13, a330 cfs. Maximum gage height, c3.66 ft Aug. 13.
a Maximum daily discharge.
c Backwater from tide.

Remarks.--Flow regulated by cranberry bogs.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	51	55	81	75	91	125	177	91	83	78	55	18.7
2	51	55	75	78	103	119	181	88	83	78	53	30
3	51	94	73	78	97	113	199	86	83	73	70	68
4	53	c60	75	75	91	c122	206	83	63	70	a100	71
5	53	c67	86	70	88	113	181	75	67	70	a70	a20
6	81	67	c83	67	83	106	173	70	73	67	a60	a40
7	43	*60	81	70	86	110	155	71	70	67	a54	a60
8	43	60	c110	83	106	110	139	98	70	65	53	a60
9	51	58	119	81	65	103	128	143	75	63	53	a50
10	55	55	110	81	106	100	116	67	78	60	53	a30
11	55	55	c113	78	103	94	116	c73	97	60	60	*18.7
12	55	53	96	75	94	91	122	c82	89	75	63	32
13	58	53	37	73	88	c94	143	71	91	65	58	39
14	58	53	70	70	86	c135	c97	96	88	55	58	41
15	55	51	75	81	86	c116	86	110	91	55	55	41
16	55	51	75	86	83	113	94	78	83	55	53	41
17	80	51	75	83	83	188	103	86	81	63	53	41
18	34	51	60	81	88	155	103	86	78	60	53	41
19	43	51	58	78	91	97	103	83	75	58	53	41
20	49	51	67	75	94	119	103	83	73	32	51	41
21	49	67	67	75	113	128	91	88	70	47	53	41
22	49	65	67	73	185	119	88	86	67	43	51	41
23	c65	63	67	70	236	51	103	86	73	49	49	43
24	c78	60	67	78	188	49	103	135	78	67	49	34
25	c75	c86	65	88	177	143	94	164	78	58	47	54
26	c73	c135	65	88	169	116	100	135	86	53	47	49
27	c70	c122	65	86	147	100	100	106	119	53	45	49
28	65	110	65	83	128	94	103	49	88	51	48	34
29	63	94	50	81	-------	60	199	119	78	55	45	14.8
30	58	86	22	81	-------	*99	100	106	78	60	47	36
31	55	-------	42	78	-------	151	-------	131	-------	58	38	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, precipitation records, and records for stations on nearby streams.
c Stage-discharge relation affected by tide.

Cedar Creek at Lanoka Harbor--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	114	116	81	106	149	34	137	*c240	259	100	81	a150
2	30	73	75	110	137	81	126	*232	278	97	91	a200
3	37	148	75	119	130	100	130	181	284	94	122	a240
4	41	216	73	122	141	116	130	110	262	91	110	a220
5	45	133	75	126	160	187	130	260	229	91	100	a190
6	45	86	81	133	160	187	141	168	235	91	c120	a160
7	60	112	81	130	160	*164	141	144	141	88	c220	a120
8	160	116	75	120	152	168	154	105	152	88	c220	a110
9	50	180	73	108	188	164	267	201	152	88	c250	a100
10	133	126	73	53	32	156	183	141	112	94	c320	94
11	103	100	70	116	77	183	88	145	115	116	a350	83
12	116	91	55	133	191	253	28	209	206	106	a300	*67
13	72	86	45	122	141	252	73	213	130	91	a250	94
14	76	83	53	119	74	199	116	157	130	86	a200	106
15	107	81	86	110	44	98	156	180	130	75	a150	94
16	51	83	75	106	97	145	152	187	*116	81	a140	91
17	24	86	91	103	122	152	176	164	110	88	a150	91
18	20	86	106	119	160	141	172	156	110	88	a170	88
19	23	83	133	116	187	130	130	160	116	86	183	91
20	45	78	126	113	232	219	209	164	116	88	172	103
21	49	75	176	116	156	244	168	176	116	110	145	94
22	53	73	216	113	141	207	133	176	116	133	130	86
23	*153	65	183	122	130	110	126	160	119	141	96	81
24	63	18.7	187	122	122	176	130	152	119	149	73	86
25	73	18.7	172	122	119	202	133	156	119	126	91	88
26	75	66	160	122	168	202	149	225	116	100	86	88
27	60	86	149	133	130	183	259	222	110	91	91	83
28	65	97	130	152	43	180	c360	206	106	88	103	75
29	67	168	122	168	81	180	*c390	199	103	86	a110	91
30	26	103	116	168	-------	164	*c390	180	103	83	a110	94
31	26	-------	113	164	-------	152	-------	187	-------	83	a120	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for stations on nearby streams.
c Backwater from tide.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	86	36	88	116	122	110	229	149	160	113	103	81
2	83	65	83	119	119	106	156	160	160	106	91	88
3	70	63	110	126	116	106	105	160	152	106	94	86
4	53	60	119	141	116	122	68	156	145	103	91	73
5	64	55	119	141	113	160	113	195	137	100	91	75
6	160	55	145	126	110	152	122	137	130	100	88	78
7	83	68	141	122	113	141	145	183	126	100	86	81
8	70	142	130	126	133	130	202	219	130	100	86	81
9	64	83	116	183	137	126	187	191	130	100	88	81
10	26	100	110	216	*119	122	122	176	137	100	106	81
11	45	83	116	241	116	122	137	164	122	97	130	78
12	78	83	130	255	116	126	133	152	116	94	130	75
13	83	78	126	212	116	194	137	145	130	91	113	75
14	117	75	116	195	113	267	152	141	229	88	136	55
15	143	78	110	176	133	281	206	152	232	88	286	87
16	94	94	88	156	191	330	212	172	206	88	229	78
17	68	94	70	145	187	344	216	156	180	86	195	70
18	102	91	45	137	176	222	209	152	149	81	191	72
19	53	86	73	149	168	149	316	152	133	78	176	67
20	60	86	81	141	160	202	180	152	122	*78	145	73
21	78	145	103	126	152	212	127	156	113	81	130	75
22	105	229	168	145	156	199	180	152	113	78	119	67
23	82	183	216	145	156	202	270	191	168	140	110	40
24	72	156	89	149	152	206	168	153	202	238	103	106
25	45	145	130	156	149	164	156	183	209	216	100	112
26	50	126	166	156	141	145	199	191	187	195	94	65
27	94	110	133	145	141	145	216	195	152	149	113	75
28	75	100	103	145	133	176	172	134	133	110	113	73
29	65	94	106	141	-------	195	133	127	119	100	74	70
30	77	91	106	133	-------	176	133	229	113	91	51	70
31	70	-------	103	130	-------	199	-------	168	-------	119	75	-------

* Discharge measurement made on this day.

Cedar Creek at Lanoka Harbor--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	130	97	94	94	94	88	111	97	67	62	160
2	26	187	99	94	79	100	88	193	91	65	60	152
3	26	88	106	94	65	103	86	103	91	67	75	126
4	26	88	91	94	133	126	83	89	91	63	65	103
5	26	86	100	94	22	122	83	23	88	65	53	83
6	26	90	103	94	64	116	98	107	88	65	62	73
7	83	299	113	91	86	110	110	73	86	65	58	67
8	63	240	101	86	86	196	177	245	83	67	51	65
9	60	209	118	86	86	97	91	152	83	65	65	63
10	122	216	113	88	83	231	98	130	96	65	75	65
11	101	175	112	94	83	64	156	26	60	65	70	230
12	75	129	114	100	83	23	65	229	78	63	65	277
13	52	*107	141	150	81	37	51	148	78	66	60	256
14	50	113	188	159	83	60	53	110	81	45	58	272
15	a90	133	232	97	81	91	67	103	81	69	58	184
16	a70	103	152	103	75	103	77	100	81	*49	58	149
17	a60	97	196	110	86	100	106	97	81	53	43	152
18	a50	71	195	a100	88	97	156	91	81	55	31	149
19	a50	85	152	a100	88	94	153	86	78	55	63	133
20	67	88	130	a110	88	94	156	86	75	67	37	126
21	70	90	122	a120	91	97	81	149	73	56	70	116
22	81	113	110	122	106	97	78	209	70	54	86	113
23	128	110	43	122	103	94	91	199	73	56	81	68
24	129	114	55	122	103	91	133	191	75	32	70	95
25	59	137	81	130	103	91	110	168	75	49	63	112
26	41	160	91	106	103	97	106	145	73	58	60	91
27	58	113	91	97	100	100	116	126	70	60	58	86
28	84	119	103	88	97	94	145	116	70	60	58	83
29	122	113	91	128	-------	91	137	113	70	58	55	81
30	130	81	91	106	-------	86	122	110	67	69	55	81
31	126	-------	94	100	-------	88	-------	103	-------	61	132	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for Toms River near Toms River and East Branch Wading River at Harrisville.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	78	88	98	138	238	91	104	104	83	67	53	67
2	78	104	104	138	27	98	134	101	80	67	51	62
3	75	191	85	138	19	98	182	98	78	65	51	62
4	75	91	55	131	30	104	56	91	78	65	49	62
5	72	107	78	124	100	101	21	88	78	60	49	62
6	72	110	123	117	145	104	64	85	78	60	49	62
7	57	98	55	117	78	117	146	55	75	67	49	62
8	82	88	78	107	70	120	107	89	75	62	58	53
9	106	85	51	104	137	120	94	61	199	62	62	34
10	43	78	27	104	214	114	91	117	186	60	67	28
11	55	75	34	94	98	110	88	55	142	67	70	45
12	62	70	58	98	67	104	88	67	142	91	80	53
13	62	67	72	101	67	101	114	85	120	62	c330	50
14	62	67	91	134	124	94	114	72	101	60	*c286	55
15	135	67	134	174	138	91	253	49	85	58	c276	55
16	122	67	124	65	172	91	127	61	78	58	c232	53
17	44	98	124	75	58	94	62	97	75	55	157	53
18	72	82	134	45	41	94	27	66	67	62	131	55
19	50	39	165	67	65	98	70	102	67	49	c127	88
20	72	75	148	75	80	98	98	58	67	49	107	107
21	58	117	120	75	83	101	104	53	78	55	88	62
22	21	131	*84	107	83	142	127	58	88	60	80	31
23	22	124	124	212	88	174	178	72	78	51	80	49
24	56	117	114	152	91	165	91	62	83	55	72	58
25	152	120	98	91	101	148	114	*58	83	67	72	60
26	75	110	104	88	101	138	120	62	107	53	67	53
27	55	67	212	60	88	142	*120	62	107	53	65	45
28	47	83	93	18	85	148	114	62	*94	49	65	80
29	44	94	62	21	-------	134	117	62	78	49	62	65
30	60	88	83	43	-------	117	117	65	72	51	55	62
31	90	-------	131	95	-------	107	-------	67	-------	53	67	-------

* Discharge measurement made on this day.
c Backwater from tide.

Cedar Creek at Lanoka Harbor--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	1,774	81	34	57.2	1.02	1.18
November	2,039	135	51	68.0	1.21	1.35
December	2,261	119	22	72.9	1.30	1.50
Calendar year 1950	27,809.2	231	14.1	76.2	1.36	18.45
January 1951	2,419	88	67	78.0	1.39	1.61
February	3,155	236	65	113	2.02	2.10
March	3,433	188	49	111	1.98	2.28
April	3,806	206	86	127	2.27	2.53
May	2,925	164	49	94.4	1.69	1.94
June	2,406	119	63	80.2	1.43	1.60
July	1,863	78	32	60.1	1.07	1.24
August	1,697	100	38	54.7	.977	1.13
September	1,220.2	71	14.8	40.7	.727	.81
Water year 1950-51	28,998.2	236	14.8	79.4	1.42	19.27
October 1951	2,062	160	20	66.5	1.19	1.37
November	2,933.4	216	18.7	97.8	1.75	1.95
December	3,326	216	45	107	1.91	2.21
Calendar year 1951	31,245.6	236	14.8	85.6	1.53	20.77
January 1952	3,786	168	53	122	2.18	2.51
February	3,824	232	32	132	2.36	2.54
March	5,129	253	34	165	2.95	3.41
April	5,077	390	28	169	3.02	3.37
May	5,556	260	105	179	3.20	3.69
June	4,510	284	103	150	2.68	3.00
July	3,017	149	75	97.3	1.74	2.00
August	4,854	350	73	157	2.80	3.22
September	3,358	240	67	112	2.00	2.23
Water year 1951-52	47,432.4	390	18.7	130	2.32	31.50
October 1952	2,415	160	26	77.9	1.39	1.60
November	2,954	229	36	98.5	1.76	1.96
December	3,539	216	45	114	2.04	2.35
Calendar year 1952	48,019	390	26	131	2.34	31.88
January 1953	4,774	241	116	154	2.75	3.17
February	3,854	191	110	138	2.46	2.56
March	5,531	344	106	178	3.18	3.67
April	5,101	316	68	170	3.04	3.39
May	5,143	229	127	166	2.96	3.42
June	4,535	232	113	151	2.70	3.01
July	3,414	238	78	110	1.96	2.27
August	3,737	286	51	121	2.16	2.48
September	2,288	112	40	76.3	1.36	1.52
Water year 1952-53	47,285	344	26	130	2.32	31.40
October 1953	2,221	130	26	71.6	1.28	1.47
November	3,884	299	71	129	2.30	2.58
December	3,625	232	43	117	2.09	2.41
Calendar year 1953	48,107	344	26	132	2.36	31.95
January 1954	3,279	159	86	106	1.89	2.18
February	2,440	133	22	87.1	1.56	1.62
March	3,084	231	23	99.5	1.78	2.05
April	3,161	177	51	105	1.88	2.10
May	3,931	245	23	127	2.27	2.61
June	2,384	97	60	79.5	1.42	1.58
July	1,854	69	32	59.8	1.07	1.23
August	1,957	132	31	63.1	1.13	1.30
September	3,811	277	63	127	2.27	2.53
Water year 1953-54	35,631	299	22	97.6	1.74	23.66
October 1954	2,154	152	21	69.5	1.24	1.43
November	2,798	191	39	93.3	1.67	1.86
December	3,063	212	27	98.8	1.76	2.03
Calendar year 1954	33,916	277	21	92.9	1.66	22.52
January 1955	3,108	212	18	100	1.79	2.06
February	2,688	238	19	96.0	1.71	1.79
March	3,558	174	91	115	2.05	2.36
April	3,242	253	21	108	1.93	2.15
May	2,284	117	49	73.7	1.32	1.52
June	2,822	199	67	94.1	1.68	1.87
July	1,842	91	49	59.4	1.06	1.22
August	3,107	330	49	100	1.79	2.06
September	1,733	107	28	57.8	1.03	1.15
Water year 1954-55	32,399	330	18	88.8	1.59	21.50

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 1955.

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.--27 years (1927-38, 1939-55), 125 cfs.

Extremes.--1927-55: Maximum daily discharge, 1,310 cfs Aug. 24, 1933; minimum daily, 15 cfs Aug. 3, 1933.
A stage of 8.7 ft occurred Aug. 20, 1939, from floodmark in recorder shelter.

Maximum discharge.--
1950-51: Nov. 25, a567 cfs. Maximum gage height, 6.03 ft Nov. 25.
1951-52: Apr. 29, a1,130 cfs. Maximum gage height, 6.27 ft Apr. 29.
1952-53: Mar. 15, a731 cfs. Maximum gage height, 4.84 ft Mar. 14.
1953-54: Sept. 13, a573 cfs. Maximum gage height, 4.36 Sept. 13.
1954-55: Nov. 23 (8:30 a.m.) 1,280 cfs (6.14 ft, result of dam failure).
a Maximum daily discharge.
Note.--Maximum gage heights result of regulation and/or backwater from tide.

Remarks.--Prior to Nov. 23, 1954, flow occasionally regulated by sluice gates and sawmill at dam 300 ft above station.

Revisions.--Special Report 9: Drainage area. Revised figures of discharge, in cubic feet per second, for the water years 1930, 1933, 1936, and 1938, superseding those published in Special Reports 5 and 9, are given herewith:

1930		1935	
Mar. 9	170	Nov. 2	474
		3	412
1933		1938	
Aug. 23	850	Sept. 22	900
24	1,310	23	1,060
25	1,080	24	840
26	790	25	570

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
March 1930	-	230	91	127	1.80	2.08
Water year 1929-30	-	238	22	92.5	1.31	17.32
Calendar year 1930	-	238	22	84.0	1.19	16.18
August 1933	-	1,310	15	257	3.65	4.20
Water year 1932-33	-	1,310	15	146	2.07	28.15
Calendar year 1933	-	1,310	15	139	1.97	26.78
November 1935	7,138	474	145	238	3.38	3.77
Calendar year 1935	48,059	618	37	132	1.87	25.39
Water year 1935-36	55,134	474	37	151	2.14	29.06
September 1938	6,886	1,060	76	230	3.26	3.63
Water year 1937-38	51,660	1,060	59	142	2.01	27.28
Calendar year 1938	55,951	1,060	69	153	2.17	29.55

Batsto River at Batsto--Continued

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	62	65	238	94	119	170	301	115	165	87	71	a54
2	62	*62	202	92	124	157	328	113	152	90	65	a54
3	62	*53	175	94	135	147	342	111	137	98	72	a53
4	61	53	121	96	140	155	354	109	124	87	57	53
5	59	72	128	90	133	149	377	104	115	100	61	59
6	59	77	137	96	128	152	413	98	106	90	64	64
7	59	76	175	102	140	149	293	96	104	87	64	53
8	57	98	167	102	135	147	277	102	102	79	59	50
9	59	79	155	102	149	137	227	102	106	76	*59	50
10	61	65	172	102	149	131	167	102	113	72	53	55
11	62	56	197	98	145	124	152	100	121	72	53	54
12	62	59	181	98	142	126	152	131	119	71	57	50
13	64	62	139	96	140	126	149	181	115	69	72	50
14	62	64	152	94	133	212	159	162	115	67	140	50
15	61	64	145	98	131	128	155	147	115	65	90	50
16	61	64	137	106	126	133	149	142	113	65	76	50
17	59	72	131	113	126	131	142	137	113	69	67	58
18	59	77	124	115	131	128	142	133	104	94	59	59
19	59	65	117	115	147	126	140	117	94	83	61	50
20	57	62	96	109	159	142	142	109	90	79	61	57
21	59	71	89	102	220	147	137	117	87	69	72	55
22	59	76	87	102	267	170	128	131	74	71	69	47
23	64	77	89	100	323	181	128	157	79	71	56	47
24	99	76	90	106	342	181	133	225	85	67	56	51
25	89	567	92	109	296	159	135	288	92	65	56	55
26	79	222	90	115	257	152	135	283	81	62	56	47
27	74	389	89	117	215	142	128	288	81	62	56	55
28	71	479	87	115	161	133	124	236	85	62	65	48
29	69	335	89	*113	-------	128	119	212	81	71	65	46
30	69	290	92	113	-------	147	117	204	77	77	55	46
31	67	-------	92	113	-------	189	-------	153	-------	74	55	-------

* Discharge measurement made on this day.
a No gage-height record; discharge by interpolation.

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	74	111	172	255	124	189	678	295	88	73	156
2	46	92	104	167	250	126	*183	542	497	84	76	249
3	46	137	100	167	229	131	199	278	635	78	88	390
4	47	133	98	165	236	137	157	493	508	76	84	359
5	47	147	*98	175	243	165	137	275	398	75	78	303
6	46	162	102	189	290	183	162	253	292	75	84	237
7	47	197	104	199	309	257	157	220	233	73	136	185
8	*64	167	104	210	280	248	162	189	198	71	226	154
9	89	170	104	194	245	222	159	165	177	91	330	134
10	87	189	104	189	220	207	152	159	*134	125	410	123
11	96	186	96	155	202	245	147	178	151	146	605	114
12	94	165	90	210	183	280	137	202	148	148	*709	105
13	94	145	92	204	133	476	126	262	136	132	556	101
14	83	133	87	194	142	495	133	248	130	105	418	99
15	79	128	92	129	140	416	140	210	123	91	311	97
16	79	126	102	205	124	345	162	204	116	86	249	97
17	72	119	113	124	142	215	183	204	112	82	216	95
18	79	117	128	183	162	238	178	250	105	78	237	93
19	59	113	149	170	175	285	183	212	99	82	382	95
20	61	109	202	162	189	243	167	217	93	86	353	99
21	59	102	290	165	186	243	152	225	93	86	269	97
22	62	96	422	165	172	248	142	225	97	91	216	97
23	56	96	691	178	155	248	135	186	124	97	189	97
24	56	89	594	189	149	260	137	194	105	97	144	99
25	62	90	351	204	147	283	147	234	108	89	127	101
26	71	102	298	212	137	309	165	277	105	82	114	97
27	72	109	262	222	131	309	320	374	97	76	105	93
28	72	119	236	255	128	277	582	385	93	86	103	89
29	71	124	204	368	126	248	1,130	323	89	80	101	88
30	69	119	175	399	-------	225	946	265	88	76	99	86
31	67	-------	178	345	-------	204	-------	250	-------	75	99	-------

* Discharge measurement made on this day.

Batsto River at Batsto--Continued

Daily discharge, in cubic feet per second, 1950-55

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	86	57	141	139	154	156	193	214	269	95	64	61
2	86	64	134	139	136	146	185	182	292	91	66	61
3	97	66	141	151	136	141	177	171	284	89	68	61
4	95	75	124	136	136	151	166	174	256	88	78	61
5	93	58	215	198	132	158	164	171	211	86	71	60
6	91	69	221	180	130	166	161	171	177	86	68	60
7	86	76	180	134	127	177	182	188	169	93	66	61
8	78	68	*230	130	127	180	219	261	158	89	61	61
9	70	66	224	166	127	169	242	292	154	91	64	60
10	66	66	201	339	125	161	266	330	146	88	73	58
11	68	63	196	446	87	156	303	322	139	78	71	58
12	66	68	174	451	116	161	322	266	80	68	71	58
13	64	68	233	329	118	264	325	252	135	73	71	56
14	66	68	235	289	127	587	390	237	166	73	174	58
15	70	76	216	259	194	721	412	235	216	73	109	60
16	71	84	188	214	203	662	410	221	230	*71	95	60
17	64	89	166	180	*287	656	398	219	221	70	125	60
18	88	91	148	166	347	584	426	203	185	68	130	60
19	91	78	136	158	297	446	404	*188	146	68	123	58
20	50	87	130	*166	242	448	370	247	123	70	112	58
21	47	292	134	201	226	390	341	221	123	68	105	58
22	56	242	193	188	224	314	269	226	118	73	88	58
23	77	431	254	171	228	261	252	228	148	108	80	60
24	80	521	269	177	237	261	233	244	125	116	76	60
25	76	451	256	190	224	269	211	256	123	132	70	58
26	71	322	226	203	188	276	188	269	114	134	70	58
27	71	249	196	214	196	284	141	279	103	116	66	58
28	71	178	169	206	169	279	148	282	101	95	60	52
29	70	177	154	188	-------	256	166	276	103	84	61	49
30	70	156	139	174	-------	233	171	259	97	78	61	52
31	68	-------	134	166	-------	216	-------	252	-------	64	64	-------

* Discharge measurement made on this day.

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	112	125	101	112	105	110	193	97	55	49	89
2	52	105	120	99	108	112	103	169	91	58	49	97
3	52	82	93	99	103	120	101	151	82	61	55	110
4	52	73	108	75	101	141	95	141	75	56	55	99
5	54	63	116	97	101	161	91	136	78	54	48	78
6	54	91	108	101	101	174	91	127	78	56	48	71
7	55	232	120	89	99	169	93	101	80	60	48	58
8	56	136	136	82	97	161	95	108	73	55	48	55
9	60	141	146	66	97	144	101	178	73	55	46	55
10	60	171	151	68	93	130	101	182	73	55	48	55
11	58	146	151	82	93	123	101	193	73	50	49	252
12	58	136	151	150	89	112	*84	190	71	49	50	244
13	58	127	148	99	86	112	82	174	71	49	50	573
14	58	97	188	66	84	114	84	132	75	49	50	470
15	56	114	235	86	82	127	82	163	64	50	50	300
16	55	105	308	95	84	139	78	156	71	50	52	247
17	55	86	336	103	88	144	120	136	68	50	55	167
18	54	86	261	103	91	136	139	125	70	50	52	136
19	54	89	214	103	93	125	182	123	68	50	*50	134
20	62	89	177	108	91	127	182	127	68	55	49	118
21	59	98	124	120	93	123	188	*171	64	52	49	116
22	49	88	139	132	105	123	161	198	63	52	70	118
23	50	120	141	134	112	120	139	247	61	50	80	118
24	52	120	134	134	120	118	125	247	58	49	75	114
25	52	139	125	*146	123	101	141	214	52	49	58	112
26	62	161	118	125	114	108	130	169	54	49	52	103
27	52	161	114	110	110	134	125	134	54	49	52	97
28	81	156	112	132	105	123	151	123	52	49	52	91
29	126	144	110	130	-------	101	206	118	54	49	52	86
30	116	132	108	123	-------	119	214	110	55	49	52	82
31	114	-------	105	116	-------	114	-------	103	-------	49	75	-------

* Discharge measurement made on this day.

Batsto River at Batsto--Continued

Daily discharge, in cubic feet per second, 1950-55

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71	78	151	219	80	114	114	108	67	63	47	81
2	70	86	151	211	80	116	110	108	67	63	47	78
3	73	116	136	198	82	116	114	103	66	61	47	74
4	73	95	120	185	80	132	112	99	64	58	44	72
5	73	108	114	169	82	146	108	127	63	56	43	69
6	71	86	110	156	89	166	101	169	61	54	44	67
7	71	138	103	136	123	190	101	120	59	54	45	67
8	70	114	97	120	154	216	99	98	66	54	54	66
9	68	101	99	118	214	219	97	92	111	53	63	64
10	58	101	105	118	206	198	93	83	120	51	58	63
11	52	89	112	114	203	177	91	81	142	56	54	61
12	64	82	116	110	171	154	93	85	152	87	61	61
13	68	78	112	108	151	139	105	87	145	105	155	59
14	66	71	118	105	134	125	114	88	140	72	192	58
15	138	70	134	103	127	114	120	90	124	61	300	58
16	70	71	151	101	123	112	120	87	105	58	268	58
17	61	73	151	99	120	112	116	*76	92	54	218	58
18	58	75	166	97	*118	112	108	71	81	53	178	58
19	55	75	171	95	118	108	103	67	78	51	148	58
20	54	76	177	91	114	103	99	66	74	50	128	71
21	55	133	177	89	110	110	95	66	72	48	122	87
22	58	114	166	89	108	134	97	64	69	*48	111	109
23	64	393	154	89	112	144	99	64	66	48	100	115
24	70	247	141	89	110	169	103	63	64	48	218	100
25	68	219	127	89	112	182	110	61	63	48	228	88
26	64	198	120	88	114	177	112	59	69	48	170	87
27	64	169	116	88	116	156	114	59	74	48	131	83
28	68	146	112	86	114	148	114	58	72	48	109	81
29	70	144	120	84	-------	139	112	58	67	47	94	78
30	70	141	144	82	-------	130	108	61	64	47	87	76
31	73	-------	171	80	-------	120	-------	69	-------	47	83	-------

* Discharge measurement made on this day.

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	2,006	99	57	64.7	0.918	1.06
November	3,927	567	53	131	1.86	2.07
December	4,075	238	87	131	1.86	2.15
Calendar year 1950	34,718	567	48	95.1	1.35	18.33
January 1951	3,217	117	92	104	1.48	1.70
February	4,813	342	119	172	2.44	2.54
March	4,599	212	124	148	2.10	2.43
April	5,845	413	117	195	2.77	3.08
May	4,705	288	96	152	2.16	2.48
June	3,145	165	74	105	1.49	1.66
July	2,351	100	62	75.8	1.08	1.24
August	2,022	140	53	65.2	.925	1.07
September	1,570	64	46	52.3	.742	.83
Water year 1950-51	42,275	567	46	116	1.65	22.31
October 1951	2,078	96	46	67.0	.950	1.10
November	3,855	197	74	128	1.82	2.03
December	5,881	691	87	190	2.70	3.10
Calendar year 1951	44,081	691	46	121	1.72	23.26
January 1952	6,265	399	124	202	2.87	3.30
February	5,480	309	124	189	2.68	2.89
March	7,892	495	124	255	3.62	4.16
April	7,069	1,130	126	236	3.35	3.73
May	8,377	678	159	270	3.83	4.42
June	5,579	635	88	186	2.64	2.94
July	2,807	148	71	90.5	1.28	1.48
August	7,167	709	73	231	3.28	3.78
September	4,229	390	86	141	2.00	2.23
Water year 1951-52	66,679	1,130	46	182	2.58	35.16

Batsto River at Batsto--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1952	2,303	97	47	74.3	1.05	1.21
November	4,456	521	57	149	2.11	2.35
December	5,757	269	124	186	2.64	3.04
Calendar year 1952	67,381	1,130	47	185	2.62	35.53
January 1953	6,448	451	130	208	2.95	3.40
February	5,040	347	87	180	2.55	2.66
March	9,329	721	141	301	4.27	4.92
April	7,835	426	141	261	3.70	4.13
May	7,336	330	171	237	3.36	3.87
June	4,912	292	80	164	2.33	2.59
July	2,676	134	64	86.3	1.22	1.41
August	2,561	174	60	82.6	1.17	1.35
September	1,753	61	49	58.4	.828	.92
Water year 1952-53	60,406	721	47	165	2.34	31.85
October 1953	1,928	126	49	62.2	.882	1.02
November	3,590	232	63	120	1.70	1.89
December	4,722	336	93	152	2.16	2.49
Calendar year 1953	58,130	721	49	159	2.26	30.65
January 1954	3,276	150	66	106	1.50	1.73
February	2,775	123	82	99.1	1.41	1.46
March	3,960	174	101	128	1.82	2.09
April	3,695	214	78	123	1.74	1.95
May	4,839	247	101	156	2.21	2.55
June	2,066	97	52	68.9	.977	1.09
July	1,613	61	49	52.0	.738	.85
August	1,668	80	46	53.8	.763	.88
September	4,445	573	55	9 148	2.10	2.34
Water year 1953-54	38,577	573	46	106	1.50	20.34
October 1954	2,108	138	52	68.0	.965	1.11
November	3,687	393	70	123	1.74	1.94
December	4,142	177	97	134	1.90	2.18
Calendar year 1954	38,274	573	46	105	1.49	20.17
January 1955	3,606	219	80	116	1.65	1.90
February	3,465	214	80	124	1.76	1.83
March	4,478	219	103	144	2.04	2.36
April	3,182	120	91	106	1.50	1.68
May	2,587	169	58	83.5	1.18	1.36
June	2,557	152	59	85.2	1.21	1.35
July	1,739	105	47	56.1	.796	.92
August	3,647	300	43	118	1.67	1.92
September	2,205	115	58	73.5	1.04	1.16
Water year 1954-55	37,403	393	43	102	1.45	19.71

Oswego River at Harrisville
(Formerly published as 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 mouth.

Drainage area.--64.0 sq mi.

Records available.--January 1931 to September 1955.

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.--23 years (1931-38, 1939-55), 86.1 cfs.

Extremes.--1931-55: 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).--
1950-51: Feb. 22 (9 a.m.) and Feb. 23 (1 to 9:30 a.m.) 244 cfs (3.94 ft); Apr. 4 (9:30 a.m. to 1 p.m.) 231 cfs (3.84 ft).
1951-52: Dec. 22 (11:30 a.m. to 2 p.m.) 269 cfs (4.12 ft); Apr. 29 (3 to 8 a.m.) 454 cfs (5.30 ft); May 27 (10 to 11 a.m.) 230 cfs (3.83 ft); June 2 (7 to 9 a.m.) 304 cfs (4.37 ft); Aug. 11 (1 to 5 a.m.) 414 cfs (5.07 ft).
1952-53: Nov. 23 (8 a.m. to 2 p.m.) 248 cfs (3.97 ft); Jan. 11 (7 a.m. to 1 p.m.) 251 cfs (3.99 ft); Mar. 14 (4 to 8 p.m.) 340 cfs (4.61 ft); Apr. 17 (6 to 11 p.m.) 231 cfs (3.84 ft).
1953-54: Nov. 8 (11 a.m. to 1 p.m.) 346 cfs (4.67 ft); Dec. 15 (7 p.m.) to Dec. 16 (1 a.m.) 229 cfs (3.82 ft); May 22 (4 to 10 p.m.) 239 cfs (3.88 ft); Sept. 12 (4 to 6 p.m.) 256 cfs (4.00 ft).
1954-55: July 11 (1 p.m.) 286 cfs (4.23 ft), occurred when gate was open, Aug. 14 (5 to 7 a.m.) 263 cfs (4.05 ft).

Remarks.--Flow regulated occasionally by pond 200 ft above station, and by ponds and cranberry bogs 5 to 10 miles upstream.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	45	72	82	92	105	212	69	63	a68	37	23
2	38	46	69	76	103	103	186	69	60	a58	*35	23
3	37	48	65	70	92	96	216	105	56	53	35	24
4	35	46	78	70	80	107	227	114	53	48	35	24
5	*35	69	86	69	82	112	200	78	53	61	32	24
6	35	61	84	63	78	107	166	65	51	56	31	24
7	37	53	76	67	86	98	141	60	50	54	31	26
8	48	48	128	82	96	96	128	65	51	46	32	26
9	45	46	136	78	92	92	116	69	67	42	34	24
10	45	45	121	70	94	86	109	60	70	38	34	24
11	42	43	116	69	84	82	105	58	78	38	34	24
12	43	42	109	69	80	80	98	82	70	37	34	24
13	43	40	101	67	82	76	98	80	65	37	37	24
14	43	43	88	65	82	98	92	74	74	37	37	23
15	65	48	80	84	78	107	82	67	70	32	35	24
16	46	45	78	88	74	101	80	65	67	34	34	24
17	40	50	76	82	74	96	90	60	61	59	32	24
18	40	53	76	78	92	96	84	51	56	67	32	24
19	38	46	67	74	92	96	74	50	53	54	30	24
20	40	43	61	72	92	126	70	50	*50	56	28	24
21	40	65	58	69	128	131	67	51	50	50	30	23
22	38	61	56	65	238	118	63	53	48	43	31	23
23	69	53	54	61	238	105	80	57	58	40	30	26
24	78	48	56	*82	206	103	84	116	61	37	28	27
25	67	125	58	90	163	98	78	112	56	34	30	26
26	58	183	58	82	136	96	74	90	50	32	27	26
27	56	163	56	74	124	90	70	74	50	31	24	26
28	54	112	53	70	109	86	67	69	48	37	23	26
29	53	92	65	72	-------	84	74	70	a56	51	22	24
30	50	78	78	76	-------	121	74	76	a70	46	23	24
31	46	-------	86	76	-------	206	-------	70	-------	42	24	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, precipitation records, and records for stations on nearby streams.

Oswego River at Harrisville--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	69	60	94	130	86	118	302	255	53	48	72
2	37	76	58	98	110	92	114	244	293	74	58	101
3	33	103	54	105	116	92	107	197	247	58	69	86
4	65	112	51	103	138	109	98	147	218	51	67	78
5	*46	98	54	116	*161	161	105	131	198	53	65	72
6	28	82	56	124	152	179	116	136	163	48	101	67
7	31	106	56	114	136	163	112	124	141	46	204	67
8	94	118	54	101	124	147	107	107	126	*45	259	67
9	74	109	54	105	114	138	107	96	116	71	316	63
10	56	92	53	118	107	131	121	90	109	76	352	63
11	72	78	51	128	103	169	98	96	103	63	402	63
12	96	70	50	124	96	*216	96	169	98	56	334	60
13	78	67	48	109	92	222	94	163	94	51	284	58
14	63	65	48	103	86	207	103	141	86	50	242	56
15	60	*67	84	96	82	183	116	141	78	46	200	54
16	61	69	80	94	82	158	161	126	74	45	161	56
17	53	70	63	94	109	138	169	116	72	43	141	54
18	48	67	82	107	128	128	138	128	65	43	124	53
19	45	67	109	109	128	136	114	136	60	45	109	56
20	43	60	107	105	114	174	105	155	63	46	98	63
21	42	54	221	101	107	186	98	166	58	51	90	61
22	38	56	259	101	103	169	142	155	67	70	84	58
23	35	58	227	131	98	169	171	136	65	70	78	58
24	35	56	169	131	96	193	116	124	65	67	72	58
25	53	53	136	118	94	217	114	147	63	58	72	56
26	48	78	136	118	90	212	128	207	60	53	78	54
27	43	82	124	141	88	188	173	224	58	53	72	53
28	42	76	107	171	84	166	362	202	54	56	51	51
29	43	69	98	197	84	149	440	166	53	51	40	50
30	40	63	96	190	-------	136	*370	155	54	50	58	50
31	46	-------	96	160	-------	126	-------	197	-------	48	50	-------

* Discharge measurement made on this day.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	34	88	101	103	98	121	110	130	65	56	46
2	51	37	84	101	98	94	121	110	120	58	56	45
3	63	37	98	121	92	90	118	120	109	54	60	43
4	58	37	98	121	88	112	114	118	101	53	58	43
5	56	35	103	107	86	124	114	118	96	51	56	42
6	60	34	121	103	84	118	105	121	90	53	54	42
7	55	34	126	101	90	109	134	138	92	63	53	42
8	50	32	116	109	98	112	155	144	92	63	51	42
9	48	32	107	188	101	109	152	144	82	63	51	40
10	48	37	101	236	98	107	158	158	74	61	51	40
11	46	40	116	248	96	105	179	147	69	60	*51	40
12	46	40	136	230	98	112	179	128	65	58	48	38
13	45	40	131	202	101	233	183	118	79	53	46	40
14	45	40	112	171	98	326	209	112	149	53	79	40
15	46	43	103	144	143	321	209	107	176	51	121	31
16	48	67	94	126	202	310	209	105	149	*50	128	30
17	48	76	90	112	207	286	226	101	126	46	134	32
18	46	67	88	107	183	247	222	101	109	45	147	32
19	46	69	84	*112	155	232	218	105	98	43	136	32
20	46	70	80	112	136	226	207	124	92	43	112	32
21	43	121	109	109	147	200	183	124	84	45	96	37
22	43	220	191	121	161	171	174	128	88	43	84	40
23	34	244	218	126	149	149	169	134	112	118	74	40
24	34	220	186	121	134	166	163	126	105	155	69	37
25	34	181	155	138	121	179	141	109	103	144	63	35
26	35	141	136	144	112	188	128	118	98	112	56	35
27	35	121	121	131	107	176	126	147	92	101	53	34
28	37	105	105	121	103	163	118	131	86	88	50	35
29	37	98	94	116	-------	144	126	103	80	74	48	35
30	37	94	90	112	-------	136	107	112	76	67	46	34
31	35	-------	90	105	-------	128	-------	152	-------	61	46	-------

* Discharge measurement made on this day.

Oswego River at Harrisville--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	72	88	72	78	78	80	122	68	38	32	90
2	34	a70	84	70	76	90	90	106	*65	51	32	76
3	35	a66	80	70	74	94	76	94	61	38	37	58
4	44	a58	72	68	74	113	65	90	58	37	44	52
5	35	56	72	68	72	106	74	90	56	40	40	48
6	35	63	68	67	67	84	84	84	54	35	38	46
7	44	245	104	65	63	92	84	74	52	34	40	44
8	41	336	104	63	61	90	82	118	51	37	38	43
9	38	295	99	63	61	86	82	202	51	37	48	43
10	44	250	97	67	61	82	76	206	51	35	59	44
11	46	208	97	72	61	80	84	163	51	34	51	196
12	41	171	94	68	59	78	67	118	51	34	38	242
13	38	128	104	74	58	76	*59	118	51	32	28	226
14	37	101	168	82	58	88	56	125	49	*32	24	194
15	37	92	223	76	63	88	54	101	49	43	24	143
16	43	92	220	84	65	80	59	90	51	56	23	*113
17	38	92	178	94	70	74	97	84	51	44	23	106
18	35	82	138	90	70	70	135	80	49	38	22	86
19	34	82	118	84	67	68	122	76	46	40	22	82
20	34	80	106	88	63	86	101	80	44	49	24	72
21	34	74	99	110	72	88	92	160	44	44	41	67
22	34	70	97	113	104	84	84	228	44	46	49	68
23	34	86	97	87	99	78	86	224	44	41	46	67
24	32	108	86	108	88	74	104	183	46	37	40	63
25	34	122	76	97	84	80	135	150	44	34	37	58
26	35	128	74	94	80	88	150	132	44	37	35	56
27	35	118	72	97	76	84	125	113	43	40	34	54
28	74	104	72	92	74	80	161	97	40	38	34	52
29	120	99	72	86	-------	74	171	84	38	35	34	51
30	115	94	72	78	-------	72	145	80	38	35	34	48
31	92	-------	74	80	-------	74	-------	74	-------	32	81	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48	48	86	a140	61	78	101	94	56	46	30	46
2	46	54	74	132	65	84	97	97	46	44	28	46
3	a45	74	68	122	67	80	78	92	43	43	27	46
4	44	72	61	113	68	90	72	86	41	40	25	43
5	44	68	58	104	65	108	68	82	44	38	24	41
6	44	63	54	99	73	115	68	74	43	38	27	40
7	43	58	46	92	150	132	80	74	41	38	31	40
8	*38	56	52	86	143	128	80	97	46	38	46	40
9	38	56	59	80	115	113	70	72	106	35	54	38
10	38	63	78	80	101	106	61	58	99	38	49	37
11	51	72	74	78	101	97	56	54	86	130	44	37
12	59	65	67	76	106	92	63	76	90	37	56	37
13	48	56	63	74	92	88	97	72	92	4.4	186	35
14	37	49	92	72	84	84	110	54	84	29	246	34
15	35	*46	125	70	80	80	99	49	70	35	234	34
16	37	44	122	70	76	84	88	46	63	34	180	34
17	38	44	108	68	76	84	82	43	59	32	138	34
18	37	44	122	68	72	82	72	38	52	32	113	34
19	32	44	148	68	68	82	68	37	49	30	101	34
20	31	48	143	65	67	80	68	49	49	30	88	44
21	32	108	*120	65	65	84	68	54	48	30	76	51
22	32	145	74	65	63	115	72	46	48	30	59	44
23	31	135	118	65	72	145	74	43	49	28	56	41
24	31	120	99	65	80	135	72	43	48	28	56	44
25	32	101	94	65	76	115	88	41	49	28	52	46
26	32	90	86	65	72	113	94	40	61	28	49	43
27	34	80	82	65	70	110	94	38	61	27	48	40
28	38	78	80	74	72	104	90	38	*58	28	46	43
29	43	a90	108	76	-------	97	88	41	52	28	44	44
30	51	97	a130	65	-------	88	97	49	48	30	43	41
31	52	-------	a150	61	-------	88	-------	58	-------	30	43	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated.

Oswego River at Harrisville--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	1,442	78	35	46.5	0.727	0.84
November	1,940	183	40	64.7	1.01	1.13
December	2,445	136	53	78.9	1.23	1.42
Calendar year 1950	22,570	184	27	61.8	.966	13.11
January 1951	2,292	90	61	73.9	1.15	1.33
February	3,067	238	74	110	1.72	1.78
March	3,198	206	76	103	1.61	1.86
April	3,305	227	63	110	1.72	1.92
May	2,229	116	50	71.9	1.12	1.30
June	1,765	78	48	58.8	.919	1.03
July	1,418	68	31	45.7	.714	.82
August	961	37	22	31.0	.484	.56
September	732	27	23	24.4	.381	.43
Water year 1950-51	24,794	238	22	67.9	1.06	14.42
October 1951	1,572	96	24	50.7	.792	.91
November	2,290	118	53	76.3	1.19	1.33
December	2,941	259	48	94.9	1.48	1.71
Calendar year 1951	25,770	259	22	70.6	1.10	14.98
January 1952	3,706	197	94	120	1.88	2.15
February	3,152	161	82	109	1.70	1.83
March	4,940	222	86	159	2.48	2.87
April	4,413	440	94	147	2.30	2.56
May	4,824	302	90	156	2.44	2.80
June	3,256	293	53	109	1.70	1.89
July	1,690	76	43	54.5	.852	.98
August	4,379	402	40	141	2.20	2.54
September	1,858	101	50	61.9	.967	1.08
Water year 1951-52	39,021	440	24	107	1.67	22.65
October 1952	1,405	63	34	45.3	.708	.82
November	2,444	244	32	81.5	1.27	1.42
December	3,571	218	80	115	1.80	2.08
Calendar year 1952	39,638	440	32	108	1.69	23.02
January 1953	4,196	248	101	135	2.11	2.44
February	3,391	207	84	121	1.89	1.97
March	5,271	326	90	170	2.66	3.06
April	4,768	226	105	159	2.48	2.77
May	3,813	158	101	123	1.92	2.22
June	3,022	176	65	101	1.58	1.76
July	2,094	155	43	67.5	1.05	1.22
August	2,233	147	46	72.0	1.12	1.30
September	1,134	46	30	37.8	.591	.66
Water year 1952-53	37,342	326	30	102	1.59	21.72
October 1953	1,406	120	32	45.4	.709	.82
November	3,642	336	56	121	1.89	2.12
December	3,205	223	68	103	1.61	1.86
Calendar year 1953	38,175	336	30	105	1.64	22.20
January 1954	2,527	113	63	81.5	1.27	1.47
February	1,998	104	58	71.4	1.12	1.16
March	2,589	113	68	83.5	1.30	1.50
April	2,880	171	54	96.0	1.50	1.67
May	3,746	228	74	121	1.89	2.18
June	1,484	68	38	49.5	.773	.86
July	1,203	56	32	38.8	.606	.70
August	1,152	81	22	37.2	.581	.67
September	2,588	242	43	86.3	1.35	1.50
Water year 1953-54	28,420	336	22	77.9	1.22	16.51
October 1954	1,241	59	31	40.0	.625	.72
November	2,168	145	44	72.3	1.13	1.26
December	2,841	150	46	91.6	1.43	1.65
Calendar year 1954	26,417	242	22	72.4	1.13	15.34
January 1955	2,488	140	61	80.3	1.25	1.45
February	2,300	150	61	82.1	1.28	1.34
March	3,081	145	78	99.4	1.55	1.79
April	2,415	110	56	80.5	1.26	1.40
May	1,835	97	37	59.2	.925	1.07
June	1,781	106	41	59.4	.928	1.03
July	1,106.4	130	4.4	35.7	.558	.64
August	2,299	246	24	74.2	1.16	1.34
September	1,211	51	34	40.4	.631	.70
Water year 1954-55	24,766.4	246	4.4	67.9	1.06	14.39

Absecon Creek at Absecon

Location.--Lat 39°25'45", long 74°31'16", on right bank 30 ft downstream from Doughty Pond Dam, of Atlantic City Water Department, 1 mile west of Absecon, Atlantic County, and 3.4 miles (revised) 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 1955.

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.--18 years (1924-28, 1933-38, 1946-55), 27.9 cfs (adjusted for diversion).

Extremes.--1923-29, 1933-38, 1946-55: Maximum daily discharge, 307 cfs Sept. 6, 1935; no flow for several days in 1925-26, 1949, 1951, and 1954.

Remarks.--Records given herein represent only flow at gage. Diversion from Doughty Pond for municipal supply of Atlantic City. Flow regulated by Doughty Pond (capacity, 245,000,000 gal), and by Kuehnle Reservoir (capacity, 250,000,000 gal) 1½ miles above station.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18.5	0.3	16.7	18.7	17.7	15.7	39	14.7	12.9	9.0	5.8	1.1
2	10.5	.3	13.8	15.7	22	22	33	16.7	11.1	5.8	2.4	.9
3	11.8	.3	15.7	15.7	14.7	15.7	46	9.5	9.5	7.8	1.2	18.4
4	21	.3	26	18.3	10.7	28	41	12.9	8.7	8.2	5.8	25
5	18.7	.3	25	12.0	12.0	27	33	13.8	11.1	27	1.7	17.7
6	12.9	.3	11.1	12.0	*12.0	23	24	13.8	9.5	18.4	1.7	13.8
7	11.1	.3	14.7	16.3	23	22	24	15.7	8.7	8.7	4.7	15.7
8	6.0	.3	36	25	22	19.7	25	12.9	14.9	8.0	8.7	8.3
9	2.0	.3	29	9.5	15.1	24	24	10.3	36	6.5	5.2	3.5
10	1.6	.3	25	10.3	15.7	26	24	9.5	33	8.7	4.0	4.6
11	1.6	.3	33	11.1	14.7	10.7	25	12.9	33	7.2	2.9	4.6
12	1.2	.3	25	12.9	13.8	7.2	22	18.7	22	*5.8	2.9	4.6
13	1.2	.3	19.7	12.0	12.9	12.9	21	14.6	16.7	5.8	4.0	4.0
14	1.2	.3	18.7	12.0	13.8	24	21	10.3	27	5.2	3.5	2.9
15	1.6	.3	16.7	22	12.0	27	19.7	9.5	18.7	4.0	2.4	5.2
16	7.7	.3	23	18.8	11.1	23	18.7	9.5	14.7	3.5	1.6	7.2
17	13.8	.3	13.8	8.0	15.7	19.7	23	10.3	12.9	5.4	1.9	5.8
18	13.8	.3	18.6	12.0	25	15.7	18.7	10.3	11.1	10.3	2.4	5.2
19	13.8	.3	13.5	12.9	18.7	15.7	18.7	11.1	5.8	13.3	.3	5.2
20	14.7	.3	10.3	11.1	16.7	42	18.7	12.9	4.6	16.5	.3	2.9
21	6.2	.3	12.9	16.3	35	30	13.8	11.1	5.2	10.3	.3	2.4
22	.3	.3	12.9	7.7	53	29	15.7	9.5	12.9	5.8	4.7	2.0
23	.3	.3	12.9	5.8	34	15.7	25	12.9	32	6.5	2.9	4.8
24	.3	.3	14.7	19.7	32	22	19.7	33	36	3.8	2.4	3.5
25	.3	15.3	15.7	22	14.8	18.7	19.7	27	22	4.6	4.0	5.3
26	.3	85	14.7	17.7	6.6	19.7	21	15.7	8.0	4.6	7.2	5.5
27	.3	72	12.9	11.1	24	13.8	13.8	12.9	9.5	3.0	6.5	2.9
28	.3	39	12.0	12.0	17.3	16.7	14.7	12.0	12.9	2.0	5.2	9.1
29	.3	27	17.7	13.8	-------	18.7	17.7	18.7	8.0	4.4	4.0	3.3
30	.3	18.7	17.7	13.8	-------	36	14.7	28	9.5	8.0	2.9	.9
31	.3	-------	22	12.9	-------	52	-------	18.7	-------	7.2	2.0	-------

* Discharge measurement made on this day.
Note.--Leakage around control Oct. 21 to Nov. 23; discharge estimated.

Absecon Creek at Absecon

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.0	15.7	0	17.7	25	40	33	56	100	24	17.7	32
2	1.6	16.7	0	19.7	24	30	34	47	90	22	27	39
3	1.9	17.7	0	22	24	29	31	45	70	22	36	33
4	5.2	18.7	0	15.7	38	38	29	43	55	19.7	27	21
5	6.3	28	0	31	42	55	39	40	51	17.7	19.7	19.7
6	.9	31	0	29	31	48	41	44	48	17.7	18.7	19.7
7	1.9	37	0	30	28	34	34	45	47	19.7	34	22
8	18.0	36	0	5.2	23	29	30	40	40	*21	73	22
9	12.0	35	0	6	26	28	29	44	*39	34	110	21
10	12.0	31	0	a10	22	27	28	38	39	38	94	18.7
11	28	28	0	a25	30	47	29	44	42	25	a80	16.7
12	24	26	0	a35	18.0	48	25	64	36	25	a60	16.7
13	14.7	12.8	0	a25	20	47	25	61	36	22	54	14.7
14	10.3	9.5	0	a20	22	49	38	51	35	18.7	50	12.9
15	9.5	13.8	0	18.7	19.4	35	49	45	34	14.7	38	16.7
16	19.8	18.7	0	21	19.7	39	54	45	33	16.7	38	22
17	31	19.7	0	17.7	44	32	43	38	33	18.7	38	18.7
18	31	15.7	0	35	48	25	35	48	31	19.7	29	15.7
19	31	12.0	0	24	29	40	30	48	27	35	27	19.7
20	33	8.0	.3	27	28	45	30	59	26	45	24	21
21	33	5.8	46	20	28	39	27	59	30	39	23	17.7
22	31	5.8	54	*16.7	26	35	27	49	34	41	41	18.7
23	31	6.5	33	35	19.7	48	30	40	36	28	22	22
24	31	8.0	24	26	22	64	35	40	38	21	23	18.7
25	30	8.7	21	16.7	23	64	43	53	33	11.1	21	15.7
26	30	6.9	30	25	23	54	52	72	28	15.7	21	14.7
27	30	0	24	35	26	42	75	66	24	16.7	19.7	14.7
28	28	0	14.7	48	22	38	139	53	25	17.7	19.7	12.9
29	15.9	0	17.7	55	22	34	98	47	27	13.8	19.7	13.8
30	11.1	0	18.7	36	-------	34	72	51	25	17.7	22	14.7
31	14.1	-------	18.7	28	-------	33	-------	69	-------	18.7	19.7	-------

* Discharge measurement made on this day.

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

Note.--Water bypassing control; included Apr. 28 to June 24; bypass discharge estimated on basis of 2 field estimates.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	9.5	16	27	31	27	34	46	79	28	8.7	8.7
2	15	10	17	22	17	23	38	45	72	19	11	8.0
3	24	14	27	28	22	26	35	39	28	21	12	8.0
4	14	14	22	25	24	54	35	52	.55	16	11	8.0
5	15	10	27	22	20	67	36	54	.55	17	12	8.7
6	15	16	33	20	21	48	33	54	.55	20	8.7	9.5
7	18	15	25	21	30	38	52	52	.30	23	9.5	9.5
8	11	7.8	21	24	25	38	54	61	.55	23	9.5	10
9	13	8.0	*19	59	31	35	43	86	.55	23	9.5	8.7
10	16	14	17	65	27	34	46	87	.55	16	22	8.7
11	16	15	24	54	22	*29	48	58	.30	17	17	8.7
12	13	15	31	45	30	36	42	62	.55	17	10	8.7
13	13	8.7	25	24	30	98	55	48	6.0	19	8.7	11
14	15	11	21	28	24	96	57	51	45	18	70	8.0
15	15	20	20	28	54	74	46	52	49	18	108	7.2
16	17	30	19	33	67	75	60	72	*39	15	63	8.7
17	13	24	16	24	52	62	62	68	33	14	52	7.9
18	12	20	17	28	35	51	62	43	30	11	43	2.9
19	14	17	15	28	30	62	62	23	27	12	33	4.0
20	24	19	15	28	30	57	48	54	25	16	25	5.8
21	5.2	43	35	38	46	45	42	58	24	15	21	19
22	7.2	75	52	42	49	42	36	43	25	12	19	13
23	11	60	36	34	38	42	39	62	30	50	17	7.2
24	12	36	28	23	33	48	38	68	23	55	16	5.8
25	13	25	23	41	31	57	35	51	22	33	15	6.5
26	6.5	22	21	31	33	60	38	72	23	24	15	8.7
27	8.7	22	22	21	30	46	39	74	24	20	12	11
28	15	19	16	29	29	42	34	51	23	17	12	12
29	12	14	11	25	-------	42	31	36	28	12	10	8.7
30	6.3	19	15	23	-------	47	33	41	34	13	8.7	8.0
31	8.0	-------	20	24	-------	32	-------	67	-------	12	9.5	-------

* Discharge measurement made on this day.

Absecon Creek at Absecon

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.9	11	22	30	0.2	22	18	17	11	0.8	1.2	4.8
2	6.6	9.3	18	31	.2	24	12	17	.2	1.2	.5	10
3	6.6	7.3	17	34	.5	27	20	16	.5	1.5	a.5	6.6
4	4.3	7.8	18	31	.5	31	6.3	19	.5	.5	a.5	4.6
5	4.3	7.3	24	35	.5	20	12	58	.5	.5	a.4	.8
6	98	25	21	36	.2	17	14	*75	.2	.5	.2	.8
7	14	111	36	36	.2	16	13	74	.2	.2	.5	.5
8	3.3	123	28	32	.2	16	15	70	.2	.5	.5	*1.2
9	4.3	74	26	34	.2	14	14	68	.2	.8	.2	1.2
10	6.0	47	a25	36	*.2	18	12	65	.2	.8	.5	3.0
11	6.0	35	a25	41	.2	16	13	51	.5	.8	.5	109
12	6.6	30	a25	23	2.3	15	18	35	.8	.8	.2	79
13	6.0	26	a30	a25	.2	15	5.3	28	.5	.5	.2	39
14	5.4	24	a45	a30	.2	27	7.3	21	.5	.8	.5	20
15	5.4	23	a60	35	.2	26	8.6	7.3	.5	.9	.5	13
16	6.0	*22	*51	41	22	19	14	7.9	.5	4.4	.5	12
17	5.4	22	41	41	49	13	38	11	.5	1.5	.5	12
18	4.9	20	31	36	.2	10	47	8.6	.5	1.2	.5	10
19	5.4	19	28	32	.2	31	31	9.3	.2	1.2	.5	10
20	5.4	18	27	35	.2	23	21	9.3	.5	2.1	.5	12
21	6.0	18	30	35	.5	20	16	8.6	.2	1.3	.8	12
22	7.3	18	31	70	7.8	12	14	7.3	.2	.5	.8	12
23	5.7	37	31	84	14	12	15	7.3	.5	1.4	.8	9.4
24	1.9	44	31	79	18	12	18	3.9	.5	1.2	.8	7.5
25	4.9	38	36	63	21	17	17	.2	1.2	.8	.8	7.3
26	5.4	34	36	21	20	26	14	.2	.5	.8	.8	7.3
27	4.9	27	35	.5	18	13	15	.5	.8	1.2	.8	7.0
28	27	23	35	0	16	13	21	18	1.2	.8	.8	3.3
29	39	20	35	0	-------	14	17	31	1.3	.5	.8	2.8
30	30	19	34	.1	-------	14	15	31	.5	.8	.8	2.8
31	15	-------	35	.1	-------	16	-------	28	-------	.8	2.8	-------

* Discharge measurement made on this day.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.8	10	10	16	6.0	16	13	0.8	0.2	4.3	0.8	5.6
2	3.8	18	10	18	11	18	12	.8	.2	4.9	1.2	3.8
3	3.8	34	6.6	12	9.3	8.6	16	.8	.2	2.4	.8	2.8
4	3.5	19	9.3	13	7.3	16	16	.8	.5	.8	.8	1.5
5	2.2	15	11	10	6.6	21	6.6	.8	.5	.8	1.2	.8
6	1.8	10	18	17	6.4	26	11	.8	.5	.8	1.2	1.5
7	8.5	7.3	3.2	16	35	29	22	.8	.5	.8	.8	3.8
8	0.2	7.3	7.3	4.4	31	19	11	.8	1.3	.5	.8	2.4
9	2.4	5.2	11	5.0	19	15	2.8	.8	50	.5	.8	1.2
10	8.6	3.4	18	11	14	12	8.0	.8	49	.8	.8	.8
11	8.6	5.4	14	7.3	16	11	6.6	.8	34	.8	.5	1.2
12	11	8.7	6.6	7.9	17	12	12	1.2	34	.5	.8	6.8
13	8.6	4.3	7.9	10	4.9	15	15	1.2	23	.5	16	1.2
14	7.9	4.9	a12	7.9	10	8.6	13	1.2	15	.5	41	.8
15	19	4.9	a17	7.9	10	12	16	1.2	13	.5	19	.5
16	2.8	4.3	a14	8.6	10	22	13	.8	10	.5	9.3	.8
17	.8	7.3	a12	8.6	12	14	10	.8	6.6	.8	3.8	.5
18	.2	7.3	a15	8.6	12	20	11	.8	6.0	.8	2.8	.5
19	7.3	7.9	a18	8.6	7.9	12	12	.5	6.6	.8	7.2	.8
20	9.3	9.3	a22	8.6	8.6	12	11	.5	8.6	.8	2.4	5.6
21	6.0	49	a20	6.0	8.6	18	42	.8	6.0	.8	.8	3.5
22	5.2	46	7.4	9.3	8.6	31	93	.5	6.0	.5	.5	1.5
23	3.0	26	11	9.3	16	36	89	.5	5.4	.5	5.3	1.2
24	4.2	19	11	8.6	12	22	82	.2	4.9	.5	6.6	2.4
25	.8	16	10	8.6	13	15	72	.2	4.9	.5	3.8	6.3
26	.8	12	10	8.6	12	21	63	.2	10	.5	2.8	1.9
27	2.0	10	10	7.9	12	25	37	.2	6.6	.8	3.3	.5
28	5.5	9.3	10	7.3	12	15	15	.2	5.4	.8	2.5	2.1
29	13	25	18	7.3	-------	11	6.6	.2	4.4	.8	1.5	1.5
30	24	18	28	6.0	-------	12	.8	.2	2.8	.8	2.8	1.2
31	14	-------	20	6.0	-------	10	-------	.2	-------	.8	1.5	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for East Branch Wading River at Harrisville and Batsto River at Batsto.

Absecon Creek at Absecon--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Observed				Diversion*		
	Cfs-days	Maximum	Minimum	Mean	Mean		
October 1950	193.9	21	0.3	6.25	4.41		
November	264.2	85	.3	8.81	5.29		
December	571.4	36	10.3	18.4	3.6		
Calendar year 1950	4,381.1	85	.1	12.0	6.7		
January 1951	439.1	25	5.8	14.2	4.3		
February	536.0	53	6.6	19.1	5.1		
March	693.3	52	7.2	22.4	5.2		
April	695.3	46	13.8	23.2	8.0		
May	449.4	33	9.5	14.5	9.7		
June	477.9	36	4.6	15.9	12.8		
July	245.3	27	2.0	7.91	12.64		
August	105.5	8.7	.3	3.40	11.16		
September	196.3	25	.9	6.54	9.14		
Water year 1950-51	4,867.6	85	.3	13.3	7.6		
October 1951	579.2	33	.9	18.7	9.4		
November	472.7	37	0	15.8	11.0		
December	302.1	54	0	9.75	11.05		
Calendar year 1951	5,192.1	54	0	14.2	9.2		
January 1952	776.1	55	5.2	25.0	11.1		
February	772.8	48	18.0	26.6	10.4		
March	1,250	64	25	40.3	8.3		
April	1,284	139	25	42.8	10.2		
May	1,544	72	38	49.8	7.8		
June	1,212	100	24	40.4	10.1		
July	716.7	45	11.1	23.1	10.3		
August	1,146.9	110	17.7	37.0	9.1		
September	586.5	39	12.9	19.6	6.4		
Water year 1951-52	10,643.0	139	0	29.1	9.6		
October 1952	410.9	24	5.2	13.3	6.9		
November	633.0	75	7.8	21.1	7.9		
December	706	52	11	22.8	8.1		
Calendar year 1952	11,038.9	139	5.2	30.2	8.8		
January 1953	964	65	20	31.1	8.1		
February	911	67	17	32.5	8.0		
March	1,533	98	23	49.5	8.1		
April	1,313	62	31	43.8	8.7		
May	1,730	87	23	55.8	8.2		
June	693.45	79	.30	23.1	9.0		
July	626	55	11	20.2	10.6		
August	698.8	108	8.7	22.5	9.4		
September	260.6	19	2.9	8.69	7.81		
Water year 1952-53	10,479.75	108	.30	28.7	8.4		
October 1953	358.9	98	1.9	11.6	9.49		
November	939.7	123	7.3	31.3	6.35		
December	967	60	17	31.2	3.96		
Calendar year 1953	12,745.35	123	.30	34.9	8.15		
January 1954	1,026.7	84	0	33.1	4.54		
February	192.9	49	.2	6.89	3.35		
March	569	31	10	18.4	6.71		
April	501.5	47	5.3	16.7	8.40		
May	803.4	75	.2	25.9	5.54		
June	25.6	11	.2	.85	7.97		
July	31.6	4.4	.2	1.02	11.8		
August	20.2	2.8	.2	.65	8.92		
September	420.9	109	.5	14.0	5.44		
Water year 1953-54	5,857.4	123	0	16.0	6.90		
October 1954	192.6	24	.2	6.21	7.07		
November	423.8	49	3.4	14.1	7.92		
December	398.3	28	3.2	12.8	7.80		
Calendar year 1954	4,606.5	109	0	12.6	7.15		
January 1955	291.3	18	4.4	9.40	8.18		
February	348.2	35	4.9	12.4	8.74		
March	535.2	36	8.6	17.3	7.67		
April	738.4	93	.8	24.6	8.53		
May	20.4	1.2	.2	.658	9.42		
June	316.1	50	.2	10.5	8.56		
July	30.4	4.9	.5	.981	12.9		
August	143.4	41	.5	4.63	12.3		
September	65.0	6.8	.5	2.17	8.25		
Water year 1954-55	3,503.1	93	.2	9.60	8.95		

* Diversion above station from Doughty Pond for municipal supply of Atlantic City, equivalent in cubic feet per second.

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 1955. Prior to October 1940, 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.--30 years, 84.0 cfs.

Extremes.--1925-55: Maximum discharge, 1,440 cfs Sept. 3, 1940 (gage height, 9.09 ft); minimum, 19 cfs Aug. 5, 1931.

Revisions.--Special Report 9: Drainage area. Figures of maximum discharge for the water years 1928 and 1933 have been revised to 210 cfs Apr. 29, 30, 1928 (gage height, 5.07 ft) and 700 cfs Aug. 25, 1933 (gage height, 7.56 ft), superseding those published in Bulletin 33 and Special Report 5.

Maximum discharge.--
1950-51: Nov. 28 (12 p.m.) 233 cfs (4.78 ft).
1951-52: Apr. 30 (2 to 9 a.m.) 461 cfs (6.10 ft).
1952-53: Mar. 17 (1 a.m.) 355 cfs (5.56 ft).
1953-54: Dec. 17 (1 to 9 a.m.) 200 cfs (4.63 ft).
1954-55: Aug. 16 (1 to 4 a.m.) 241 cfs (4.89 ft).

Revisions.--Revised figures of discharge, in cubic feet per second, in high-water period in the water year 1933, superseding those published in Special Report 5, are given herewith:

1933		1933-Con.	
Aug. 23	332	Aug. 27	490
24	615	28	340
25	695	29	254
26	642	30	209

Month	Maximum	Minimum	Mean	Per square mile	Runoff in inches
August 1933	695	37	168	2.98	3.44
Water year 1932-33	695	26	101	1.79	24.27
Calendar year 1933	370	30	98.1	1.74	23.66

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	43	166	79	84	107	137	80	103	80	43	32
2	37	42	139	77	91	99	161	77	92	98	40	32
3	*36	41	118	75	99	96	186	74	80	107	38	32
4	*34	42	105	74	107	96	205	72	72	84	37	36
5	34	50	99	77	103	98	212	71	67	80	37	33
6	34	56	99	77	*94	103	203	69	64	84	36	32
7	33	55	101	75	87	103	179	69	61	79	34	33
8	33	50	105	79	94	98	154	67	60	64	36	33
9	34	48	114	82	101	92	132	66	64	56	36	31
10	37	46	134	77	107	86	118	63	67	50	36	30
11	37	45	143	77	105	82	110	64	79	*49	51	30
12	37	43	137	72	94	79	105	80	79	46	80	30
13	36	42	126	69	87	77	105	94	74	45	75	30
14	36	42	114	66	87	86	105	107	79	45	72	29
15	36	41	105	74	87	96	103	108	84	43	80	30
16	34	41	96	84	86	108	101	92	80	40	58	31
17	34	41	91	91	86	116	99	75	72	41	49	*31
18	33	41	89	94	94	110	99	67	64	45	46	31
19	33	40	86	92	105	101	99	64	60	45	43	30
20	33	40	79	86	118	103	96	63	55	46	46	30
21	33	48	72	80	128	120	91	66	54	43	45	29
22	33	50	69	75	148	145	87	79	50	42	41	28
23	45	49	67	71	172	154	89	94	52	40	38	26
24	69	46	67	72	184	145	96	120	58	40	37	28
25	69	67	67	82	175	130	105	128	61	38	36	26
26	64	99	66	91	155	116	107	146	58	37	36	28
27	56	157	64	92	136	105	99	148	55	36	36	28
28	52	220	61	89	118	98	92	128	71	37	34	28
29	49	225	63	82	-------	94	86	114	71	48	34	28
30	48	198	71	80	-------	98	82	112	72	56	33	31
31	46	-------	75	80	-------	112	-------	108	-------	48	32	-------

* Discharge measurement made on this day.

Great Egg Harbor River at Folsom--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	a50	83	120	183	85	a120	389	206	59	46	70
2	27	a60	76	116	162	87	116	300	355	56	46	91
3	27	78	73	120	148	96	113	237	377	53	56	104
4	27	a90	70	125	154	101	110	192	342	52	56	116
5	28	a110	72	135	175	113	108	162	277	50	52	116
6	27	a120	78	143	195	*135	113	143	219	48	59	106
7	28	a130	83	144	198	159	122	132	175	*47	125	89
8	60	a140	83	138	181	162	130	122	146	46	205	75
9	67	*146	78	130	162	151	127	116	125	65	261	68
10	60	143	75	123	144	144	120	111	111	94	261	64
11	60	132	70	125	133	154	111	108	110	104	292	60
12	70	116	67	133	122	200	106	113	108	104	*273	59
13	72	103	65	135	113	253	103	122	99	89	297	56
14	64	89	62	133	108	262	103	128	92	70	267	54
15	56	85	76	127	101	243	110	130	83	60	205	54
16	52	87	92	116	99	208	123	122	78	56	159	58
17	47	87	99	108	106	178	130	111	75	54	133	56
18	46	87	104	110	120	157	127	108	73	53	130	54
19	44	85	113	113	138	146	118	110	68	54	130	56
20	43	78	130	120	144	148	110	120	67	64	130	68
21	40	72	217	122	136	160	103	133	65	64	128	75
22	38	68	330	118	125	164	96	141	70	75	113	75
23	37	67	375	127	115	160	91	140	73	72	91	70
24	38	65	355	141	108	165	92	128	78	64	78	72
25	47	65	292	149	101	183	99	128	80	58	72	70
26	48	76	241	149	98	193	115	164	75	53	67	65
27	48	89	201	159	96	186	167	211	68	50	64	60
28	47	96	170	195	92	170	337	219	65	48	60	58
29	47	98	149	233	92	154	446	198	62	47	62	54
30	47	92	135	229	-------	a140	*455	168	60	47	62	53
31	46	-------	125	205	-------	a130	-------	149	-------	46	62	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated by interpolation.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	53	48	99	94	113	103	123	113	188	67	46	39
2	52	47	92	98	106	98	116	111	211	64	47	38
3	56	47	91	104	103	94	115	116	209	60	50	37
4	62	48	98	111	98	101	113	118	188	58	52	35
5	64	48	110	118	96	118	111	116	160	54	52	37
6	60	48	133	120	94	141	113	116	136	53	48	35
7	56	48	152	115	92	148	130	132	118	62	47	37
8	54	47	156	110	92	140	156	152	113	67	46	38
9	53	47	154	125	92	128	181	200	122	65	46	35
10	52	47	138	178	91	120	188	201	132	59	*48	35
11	52	52	135	233	89	113	188	173	127	54	56	34
12	50	52	149	241	89	113	205	149	108	52	54	34
13	50	52	165	221	92	173	211	130	99	50	50	42
14	50	50	165	192	98	280	219	115	122	48	58	40
15	48	53	a160	165	110	306	217	108	156	48	87	39
16	48	68	a140	148	146	342	219	106	192	47	94	37
17	48	75	a120	133	198	337	224	106	170	*44	103	35
18	47	78	a110	123	208	*290	214	110	140	43	99	35
19	47	76	*99	120	185	264	214	115	113	42	98	34
20	46	72	96	120	159	241	209	120	96	47	85	34
21	46	87	98	122	148	216	201	122	87	48	68	35
22	46	128	116	120	143	193	186	133	80	46	60	37
23	44	221	149	118	148	172	167	143	83	58	56	37
24	44	251	170	120	144	160	151	144	87	87	53	35
25	44	241	167	128	133	159	138	140	82	103	53	33
26	46	209	151	138	123	167	130	146	73	110	53	33
27	46	173	135	144	115	172	127	181	70	85	48	33
28	47	144	120	141	108	164	127	221	67	62	46	34
29	47	123	106	135	-------	152	125	219	64	54	43	34
30	48	110	98	127	-------	140	118	190	65	54	40	34
31	48	-------	94	120	-------	130	-------	178	-------	52	39	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for nearby stations.

Great Egg Harbor River at Folsom--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	135	79	74	80	77	80	129	56	33	21	74
2	30	132	74	72	75	86	80	114	54	33	21	75
3	30	114	71	71	74	98	80	96	52	33	22	66
4	30	89	67	71	74	115	74	87	50	34	23	49
5	30	72	69	69	74	132	71	84	50	34	24	43
6	31	66	72	69	72	140	69	82	48	35	24	39
7	37	67	86	71	71	132	67	79	46	34	23	36
8	37	72	98	71	69	115	69	82	43	34	22	35
9	35	77	107	69	67	99	72	98	41	33	25	35
10	35	80	114	69	67	89	71	110	41	33	37	35
11	34	84	114	71	66	84	67	119	44	31	37	98
12	34	89	108	72	64	79	66	114	46	30	34	122
13	34	92	110	71	61	75	63	101	48	30	30	124
14	34	94	131	69	60	84	61	86	49	29	28	129
15	33	94	165	67	60	96	58	77	46	36	26	112
16	33	91	195	74	61	108	61	71	46	34	26	77
17	33	86	198	84	64	112	72	67	54	31	26	75
18	33	80	176	87	*69	107	94	64	52	31	25	80
19	33	74	148	89	69	92	115	63	46	30	24	79
20	33	69	127	87	67	89	137	63	44	30	23	71
21	33	66	110	94	67	92	129	87	41	29	35	64
22	33	64	101	110	82	92	108	115	*39	28	48	69
23	33	72	96	127	91	91	89	135	40	28	41	71
24	33	91	92	129	96	82	86	139	40	25	35	66
25	34	98	89	120	92	80	94	122	37	24	33	60
26	34	105	86	110	87	87	96	98	37	24	31	54
27	34	105	82	103	84	92	91	82	35	24	31	50
28	46	101	79	101	80	94	96	74	33	23	30	48
29	86	94	77	101	-------	89	112	67	33	23	30	44
30	103	89	77	96	-------	84	129	69	34	22	29	43
31	117	-------	75	87	-------	80	-------	63	-------	22	55	-------

* Discharge measurement made on this day.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43	49	92	140	50	80	80	69	40	44	26	49
2	43	50	94	145	50	79	77	67	39	43	24	48
3	40	55	91	135	52	79	74	64	37	41	23	46
4	40	56	86	122	b51	82	72	61	37	37	22	46
5	39	58	77	110	50	92	69	60	36	35	22	44
6	37	56	71	99	52	105	67	56	39	34	21	43
7	39	55	67	91	80	131	71	55	39	41	21	43
8	37	54	63	86	94	142	72	54	41	49	51	41
9	36	50	63	79	112	139	72	54	84	49	61	40
10	36	49	69	75	127	127	69	52	101	44	46	39
11	36	46	74	72	124	114	67	49	117	41	40	39
12	36	46	75	69	115	101	69	48	135	37	55	39
13	35	44	75	67	b105	92	79	46	135	34	115	37
14	35	43	77	66	b98	84	86	46	129	33	167	36
15	35	43	92	64	96	80	92	44	114	31	230	35
16	34	41	103	64	94	80	94	44	91	29	232	35
17	35	*43	112	63	87	82	89	44	69	29	190	35
18	36	43	115	*63	86	82	82	41	60	28	143	34
19	*35	44	120	61	84	84	75	40	54	26	117	35
20	34	46	120	61	82	84	72	39	52	25	112	50
21	34	75	117	60	79	84	*69	39	52	24	117	61
22	34	96	110	58	75	92	71	39	49	25	112	61
23	33	127	98	58	77	105	71	39	46	23	*103	61
24	33	164	89	58	80	120	69	39	43	22	82	61
25	33	160	82	58	86	127	72	39	46	24	72	61
26	33	139	a77	58	89	124	75	37	54	25	64	58
27	33	120	74	56	87	114	77	37	58	25	58	54
28	34	103	72	56	82	107	77	37	58	25	55	52
29	36	96	77	54	-------	99	74	37	54	25	52	50
30	43	92	94	52	-------	91	71	41	49	25	52	49
31	49	-------	115	50	-------	84	-------	43	-------	26	50	-------

* Discharge measurement made on this day.
a No gage-height record; discharge interpolated.
b Stage-discharge relation affected by ice.

Great Egg Harbor River at Folsom--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	1,263	69	33	40.7	0.723	0.83
November	2,048	225	40	68.3	1.21	1.35
December	2,988	166	61	96.4	1.71	1.97
Calendar year 1950	24,634	225	28	67.5	1.20	16.26
January 1951	2,471	94	66	79.7	1.42	1.63
February	3,132	184	84	112	1.99	2.07
March	3,253	154	77	105	1.87	2.15
April	3,643	212	82	121	2.15	2.41
May	2,765	148	63	89.2	1.58	1.83
June	2,058	103	50	68.6	1.22	1.36
July	1,692	107	36	54.6	.970	1.12
August	1,375	80	32	44.4	.789	.91
September	906	36	26	30.2	.536	.60
Water year 1950-51	27,594	225	26	75.6	1.34	18.23
October 1951	1,418	72	27	45.7	.812	.94
November	2,804	146	50	93.5	1.66	1.85
December	4,239	375	62	137	2.43	2.80
Calendar year 1951	29,756	375	26	81.5	1.45	19.67
January 1952	4,341	233	108	140	2.49	2.87
February	3,849	198	92	133	2.36	2.54
March	4,987	262	85	161	2.86	3.29
April	4,321	455	91	144	2.56	2.85
May	4,855	389	108	157	2.79	3.21
June	3,882	377	60	129	2.29	2.56
July	1,902	104	46	61.4	1.09	1.26
August	4,042	297	46	130	2.31	2.67
September	2,126	116	53	70.9	1.26	1.40
Water year 1951-52	42,766	455	27	117	2.08	28.24
October 1952	1,554	64	44	50.1	.890	1.03
November	2,790	251	47	93.0	1.65	1.84
December	3,966	170	91	128	2.27	2.62
Calendar year 1952	42,615	455	44	116	2.06	28.14
January 1953	4,282	241	94	138	2.45	2.83
February	3,413	208	89	122	2.17	2.25
March	5,475	342	94	177	3.14	3.62
April	4,936	224	111	165	2.93	3.26
May	4,424	221	106	143	2.54	2.92
June	3,658	211	64	122	2.17	2.42
July	1,843	110	42	59.5	1.06	1.22
August	1,827	103	39	58.9	1.05	1.21
September	1,075	42	33	35.8	.636	.71
Water year 1952-53	39,243	342	33	108	1.92	25.93
October 1953	1,248	117	30	40.3	.716	.82
November	2,642	135	64	88.1	1.56	1.75
December	3,273	198	67	106	1.88	2.16
Calendar year 1953	38,096	342	30	104	1.85	25.17
January 1954	2,655	129	67	85.6	1.52	1.75
February	2,043	96	60	73.0	1.30	1.35
March	2,972	140	75	95.9	1.70	1.96
April	2,557	137	58	85.2	1.51	1.69
May	2,837	139	63	91.5	1.63	1.87
June	1,325	56	33	44.2	.785	.88
July	920	36	22	29.7	.528	.61
August	919	55	21	29.6	.526	.61
September	2,023	129	35	67.4	1.20	1.34
Water year 1953-54	25,414	198	21	69.6	1.24	16.79
October 1954	1,136	49	33	36.6	.650	.75
November	2,143	164	41	71.4	1.27	1.42
December	2,741	120	63	88.4	1.57	1.81
Calendar year 1954	24,271	164	21	66.5	1.18	16.03
January 1955	2,350	145	50	75.8	1.35	1.55
February	2,344	127	50	83.7	1.49	1.55
March	3,086	142	79	99.5	1.77	2.04
April	2,254	94	67	75.1	1.33	1.49
May	1,460	69	37	47.1	.837	.96
June	1,958	135	36	65.3	1.16	1.29
July	999	49	22	32.2	.572	.66
August	2,535	232	21	81.8	1.45	1.67
September	1,382	61	34	46.1	.819	.91
Water year 1954-55	24,388	232	21	66.8	1.19	16.10

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 1955.

Gage.--Water-stage recorder. Concrete control since Dec. 27, 1937. Datum of gage is 46.94 ft above mean sea level, datum of 1929.

Average discharge.--23 years, 172 cfs.

Extremes.--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.

Revisions.--The maximum discharge for the water year 1933 has been revised to 880 cfs Aug. 26, 1933 (gage height, 5.14 ft), superseding figure published in Special Report 5.

Peak discharge (base, 375 cfs).--
1950-51: Nov. 29 (5 to 10 a.m.) 430 cfs (3.51 ft); Apr. 4 (8 a.m. to 2 p.m.) 430 cfs (3.51 ft); July 6 (3 to 6 a.m.) 396 cfs (3.44 ft).
1951-52: Dec. 23 (11 p.m.) 752 cfs (4.08 ft); Jan. 28 (8 to 11 a.m.) 456 cfs (3.56 ft); Mar. 14 (8 p.m.) to Mar. 15 (8 a.m.) 420 cfs (3.49 ft); Apr. 29 (2 a.m.) 645 cfs (3.90 ft); June 2 (12 m. to 5 p.m.) 430 cfs (3.51 ft); Aug. 7 (12 p.m.) 776 cfs (4.12 ft); Aug. 13 (1 to 7 a.m.) 565 cfs (3.76 ft).
1952-53: Nov. 23 (6 p.m.) 531 cfs (3.70 ft); Mar. 16 (5 p.m.) 604 cfs (3.83 ft); Apr. 11 (10 a.m.) 446 cfs (3.54 ft); Apr. 19 (7 p.m.) 467 cfs (3.58 ft); May 28 (9 a.m.) 467 cfs (3.58 ft).
1953-54: Dec. 15 (1 to 4 p.m.) 410 cfs (3.47 ft).
1954-55: Aug. 14 (11 a.m.) 580 cfs (3.80 ft).

Remarks.--Occasional regulation from filling and draining of ponds above station.

Revisions.--Revised figures of discharge, in cubic feet per second, for high-water period in the water year 1933, superseding those published in Special Report 5.

1933		1933-Con.	
Aug. 24	677	Aug. 27	635
25	788	28	495
26	828		

Month	Maximum	Minimum	Mean	Per square mile	Runoff in inches
August 1933	828	74	250	2.21	2.55
Water year 1932-33	828	30	213	1.88	25.67

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	94	94	307	155	171	229	298	192	182	149	136	69
2	73	*94	269	155	182	221	289	185	152	168	109	90
3	*73	94	240	152	178	182	348	174	149	221	*101	99
4	77	97	229	152	161	202	420	168	139	149	97	85
5	79	111	225	155	174	210	386	109	128	231	89	79
6	79	109	*196	152	174	210	343	125	125	334	85	77
7	77	109	136	155	178	206	343	145	125	161	83	85
8	79	109	202	165	171	202	307	168	128	168	85	77
9	81	106	225	158	199	199	298	142	131	165	81	69
10	83	104	233	152	196	192	*281	128	136	149	67	67
11	83	99	264	142	192	185	269	139	142	128	69	65
12	83	97	260	142	185	178	256	185	133	117	79	64
13	81	92	240	142	178	174	248	210	131	109	99	64
14	79	89	225	142	174	196	221	206	152	104	131	62
15	79	87	214	158	168	202	214	202	155	97	132	71
16	77	87	210	161	161	202	199	199	155	94	97	67
17	77	85	199	161	171	206	210	182	149	89	109	65
18	77	83	188	161	196	210	217	161	139	77	136	65
19	77	81	182	168	199	206	221	128	131	55	101	65
20	75	81	171	171	202	240	221	136	119	75	94	64
21	75	94	161	165	229	252	217	142	111	79	99	64
22	77	87	155	158	269	252	214	139	109	83	101	62
23	97	87	152	152	277	252	229	136	114	85	99	64
24	106	92	152	165	325	252	229	185	111	87	94	64
25	128	187	152	174	311	248	221	214	109	85	89	62
26	174	386	149	171	285	240	214	214	104	83	89	62
27	161	266	142	171	264	225	210	199	106	79	85	62
28	131	277	139	168	244	214	202	210	114	85	81	60
29	109	415	142	168	-------	206	199	199	114	142	77	58
30	81	348	152	168	-------	225	196	196	131	171	75	57
31	92	-------	155	165	-------	289	-------	196	-------	185	71	-------

* Discharge measurement made on this day.

Maurice River at Norma--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	57	119	149	273	352	214	298	537	376	111	99	174
2	57	131	145	221	343	225	285	499	420	117	104	202
3	57	185	145	240	338	229	281	451	415	117	111	210
4	57	240	142	264	376	240	269	367	410	114	111	220
5	57	233	152	281	396	264	269	348	396	111	109	220
6	57	229	158	285	400	*277	281	325	352	111	127	210
7	62	244	155	289	405	281	285	307	325	111	372	188
8	92	334	155	281	391	281	281	289	294	111	716	174
9	87	285	155	273	362	277	277	273	273	*145	548	165
10	92	236	152	269	343	269	269	256	244	185	371	152
11	132	165	149	264	320	285	264	240	236	206	396	145
12	182	171	142	260	307	352	260	256	225	178	499	133
13	149	174	136	256	285	381	252	256	214	165	537	125
14	122	174	133	256	273	410	248	256	158	152	472	122
15	94	174	171	252	260	415	252	256	139	133	348	119
16	97	174	147	252	252	386	264	252	152	125	316	119
17	92	171	174	248	281	357	264	248	155	122	307	117
18	87	165	192	252	294	338	264	244	161	117	269	114
19	85	158	277	244	285	320	252	248	168	136	244	122
20	83	152	285	244	281	338	244	260	155	206	214	139
21	81	145	362	240	277	334	233	269	155	196	161	139
22	79	139	526	244	273	329	221	260	161	171	152	139
23	77	136	633	269	269	338	214	256	165	145	155	139
24	77	133	674	273	260	357	221	248	168	131	152	139
25	92	114	537	273	248	396	229	264	165	117	149	136
26	87	142	420	285	240	391	285	303	161	111	142	131
27	85	145	391	320	236	362	334	338	155	109	139	125
28	85	145	357	441	240	367	493	320	142	106	136	122
29	85	149	307	415	229	352	593	316	133	101	136	117
30	85	152	289	362	-------	325	520	338	125	101	136	114
31	83	-------	285	367	-------	316	-------	338	-------	99	131	-------

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	111	85	171	165	244	217	289	264	357	133	114	71
2	111	83	174	155	233	210	285	225	357	128	104	71
3	131	a80	188	171	225	199	277	236	334	119	109	65
4	125	a80	196	174	217	229	236	225	316	114	109	50
5	122	a85	206	185	206	244	248	221	303	109	109	57
6	119	a90	240	188	199	248	248	229	281	122	106	60
7	114	a90	244	192	196	248	285	252	269	152	101	69
8	111	a90	233	196	196	252	329	264	248	145	99	71
9	111	a90	236	252	192	248	334	289	229	171	101	71
10	109	a95	244	294	188	236	352	298	229	155	97	71
11	109	a100	252	307	182	229	425	289	229	139	97	69
12	106	104	248	329	185	229	371	277	229	128	109	69
13	104	104	244	343	188	316	396	252	225	128	101	69
14	109	104	244	334	188	446	415	229	256	122	131	67
15	117	114	240	307	229	410	396	202	260	114	174	65
16	119	133	229	285	285	553	410	199	273	106	171	62
17	111	131	214	264	298	553	410	214	273	101	185	60
18	106	133	196	256	303	*499	348	229	260	101	185	60
19	101	131	185	248	307	499	415	229	240	109	158	60
20	97	133	178	244	298	400	415	256	199	128	139	58
21	92	182	192	240	298	376	391	269	182	89	125	69
22	94	260	229	248	294	386	371	277	174	89	117	71
23	97	414	233	256	285	367	357	281	182	136	106	67
24	99	396	233	260	273	352	311	269	171	174	99	67
25	99	357	233	264	260	343	311	260	122	320	99	67
26	92	334	229	264	252	338	289	303	131	196	87	67
27	89	303	221	264	236	338	281	348	145	117	85	67
28	89	273	206	269	229	343	a280	441	142	*111	79	67
29	87	244	192	264	-------	338	a270	400	145	122	77	67
30	87	152	185	260	-------	320	a270	338	142	111	73	67
31	85	-------	178	248	-------	298	-------	343	-------	111	75	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for nearby stations.

Maurice River at Norma--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	67	233	119	136	161	152	155	171	97	40	31	117
2	67	233	119	131	155	168	155	168	94	45	35	111
3	64	188	119	128	152	182	152	155	87	60	33	109
4	65	142	117	125	149	217	139	155	81	45	33	97
5	69	79	122	122	149	229	136	a150	64	45	48	77
6	69	79	119	122	149	221	136	a145	42	55	40	79
7	75	87	142	122	142	217	136	139	40	53	37	65
8	73	97	142	122	136	206	133	168	47	55	40	64
9	71	111	139	119	136	196	131	174	57	53	52	67
10	71	117	161	119	133	185	128	171	62	53	75	75
11	69	125	161	128	131	174	128	174	67	57	57	169
12	67	131	165	125	125	171	122	174	73	75	53	229
13	67	133	182	125	119	168	117	168	87	55	52	236
14	65	136	233	125	117	185	114	155	85	55	50	221
15	65	136	371	122	117	*188	119	145	83	64	48	192
16	64	131	320	136	117	188	125	136	85	58	55	168
17	64	128	202	142	128	188	161	111	89	53	60	145
18	64	125	214	142	128	185	192	109	89	47	40	122
19	64	119	221	142	128	182	196	111	83	42	48	79
20	64	114	214	149	125	185	199	117	58	40	60	85
21	64	111	202	178	136	185	202	171	62	58	57	97
22	64	109	192	188	168	178	188	174	60	47	62	119
23	64	139	185	192	168	171	168	185	64	47	67	168
24	64	155	174	196	168	165	168	225	69	47	64	139
25	64	171	168	196	168	168	165	206	69	48	67	104
26	64	264	165	192	165	174	158	178	89	53	65	71
27	65	158	158	192	158	171	155	152	64	57	83	73
28	83	111	152	188	152	168	168	133	69	55	48	75
29	149	117	145	178	-------	158	168	122	65	47	62	75
30	161	119	142	174	-------	152	171	106	58	60	55	75
31	182	-------	139	171	-------	149	-------	101	-------	43	122	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	73	77	208	190	95	142	157	128	79	79	48	88
2	73	84	151	197	95	145	157	128	77	73	50	88
3	75	93	125	201	95	142	160	128	77	86	36	95
4	84	90	125	194	95	145	154	125	77	77	36	137
5	81	90	a120	183	93	164	142	118	73	69	44	110
6	81	90	a115	177	102	174	134	110	59	57	42	97
7	65	88	a110	167	157	197	131	102	57	55	44	77
8	59	86	a110	151	167	205	131	102	70	54	86	69
9	61	84	a110	142	174	208	125	97	154	63	128	69
10	61	79	110	140	180	208	120	93	227	63	115	69
11	61	77	a105	137	183	197	118	97	227	61	177	79
12	63	75	a100	131	190	190	140	90	268	63	151	110
13	65	75	a105	128	180	183	170	86	277	63	270	86
14	67	75	a110	125	170	*170	174	86	248	65	520	71
15	63	73	a120	123	160	160	177	93	208	63	538	71
16	61	73	a120	120	151	164	180	95	*157	65	464	79
17	63	73	120	118	148	164	177	*88	131	63	331	86
18	63	73	a145	115	142	160	167	77	120	59	303	84
19	*63	75	a155	115	140	160	157	42	112	44	268	75
20	63	86	a160	112	137	160	151	42	100	42	248	160
21	61	154	160	110	134	170	*190	42	77	47	243	154
22	61	303	122	110	131	187	134	50	73	42	180	148
23	63	227	220	110	145	194	155	*61	79	44	174	131
24	63	164	208	107	157	190	70	84	84	33	167	128
25	63	170	154	107	164	194	115	79	84	35	164	134
26	63	174	137	105	157	197	128	77	84	47	174	128
27	63	164	131	105	145	197	134	69	86	50	151	128
28	65	154	125	105	142	190	131	67	95	57	142	123
29	77	164	142	102	-------	177	128	69	95	45	137	115
30	79	160	174	100	-------	167	128	88	81	50	77	105
31	79	-------	183	97	-------	164	-------	86	-------	50	73	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for Great Egg Harbor River at Folsom.

Maurice River at Norma--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	2,814	174	73	90.8	0.804	0.93
November	4,147	386	81	138	1.22	1.36
December	6,066	307	136	196	1.73	2.00
Calendar year 1950	49,201	386	45	135	1.19	16.21
January 1951	4,924	174	142	159	1.41	1.62
February	5,814	325	161	208	1.84	1.91
March	6,707	289	174	216	1.91	2.21
April	7,720	420	196	257	2.27	2.54
May	5,314	214	109	171	1.51	1.75
June	3,924	182	104	131	1.16	1.29
July	4,004	334	55	129	1.14	1.32
August	2,940	136	67	94.8	.839	.97
September	2,064	99	57	68.8	.609	.68
Water year 1950-51	56,438	420	55	155	1.37	18.58
October 1951	2,714	182	57	87.5	.774	.89
November	5,314	334	114	177	1.57	1.75
December	8,095	674	133	261	2.31	2.66
Calendar year 1951	59,534	674	55	163	1.44	19.59
January 1952	8,693	441	221	280	2.48	2.86
February	8,816	405	229	304	2.69	2.90
March	10,006	415	214	323	2.86	3.29
April	8,702	593	214	290	2.57	2.86
May	9,418	537	240	304	2.69	3.10
June	6,798	420	125	227	2.01	2.24
July	4,160	206	99	134	1.19	1.37
August	7,859	716	99	254	2.25	2.59
September	4,471	220	114	149	1.32	1.47
Water year 1951-52	85,046	716	57	232	2.05	27.98
October 1952	3,253	131	85	105	.929	1.07
November	4,970	414	80	166	1.47	1.64
December	6,693	252	171	216	1.91	2.20
Calendar year 1952	83,839	716	80	230	2.04	27.59
January 1953	7,726	343	155	249	2.20	2.54
February	6,686	307	182	239	2.12	2.20
March	10,264	553	199	331	2.93	3.38
April	10,015	425	236	334	2.96	3.30
May	8,408	441	199	271	2.40	2.77
June	6,903	357	122	230	2.04	2.27
July	4,100	320	89	132	1.17	1.35
August	3,521	185	73	114	1.01	1.16
September	1,971	71	50	65.7	.581	.65
Water year 1952-53	74,510	553	50	204	1.81	24.53
October 1953	2,368	182	64	76.4	.676	.78
November	4,098	264	79	137	1.21	1.35
December	5,404	371	117	174	1.54	1.78
Calendar year 1953	71,464	553	50	196	1.73	23.53
January 1954	4,627	196	119	149	1.32	1.52
February	3,980	168	117	142	1.26	1.31
March	5,626	229	149	181	1.60	1.85
April	4,585	202	114	153	1.35	1.51
May	4,749	225	101	153	1.35	1.56
June	2,139	97	40	71.3	.631	.70
July	1,612	75	40	52.0	.460	.53
August	1,699	122	31	54.8	.485	.56
September	3,503	236	64	117	1.04	1.15
Water year 1953-54	44,390	371	31	122	1.08	14.60
October 1954	2,082	84	59	67.2	.595	.69
November	3,450	303	73	115	1.02	1.14
December	4,280	220	100	138	1.22	1.41
Calendar year 1954	42,332	303	31	116	1.03	13.93
January 1955	4,124	201	97	133	1.18	1.36
February	4,029	190	93	144	1.27	1.33
March	5,465	208	142	176	1.56	1.80
April	4,335	190	70	144	1.27	1.43
May	2,699	128	42	87.1	.771	.89
June	3,636	277	57	121	1.07	1.20
July	1,764	86	33	56.9	.504	.58
August	5,581	538	36	180	1.59	1.84
September	3,094	160	69	103	.912	1.02
Water year 1954-55	44,539	538	33	122	1.08	14.69

Manantico Creek near Millville

Location.--Lat 39°25'12", long 74°58'00", on right bank at upstream side of Millville-Millmay 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 1955.

Gage.--Water-stage recorder and concrete control. Datum of gage is 36.63 ft above mean sea level, datum of 1929.

Average discharge.--24 years, 38.0 cfs.

Extremes.--1931-55: 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).--
1950-51: Nov. 26 (5 to 8 p.m.) 157 cfs (2.67 ft).
1951-52: Dec. 22 (5 to 8 a.m.) 238 cfs (3.18 ft); Mar. 6 (5 p.m.) 128 cfs (2.46 ft); Apr. 29 (8 p.m.) 190 cfs (2.89 ft); June 2 (8:30 p.m.) 241 cfs (3.20 ft); July 10 (11 p.m.) 132 cfs (2.49 ft); July 20 (7:30 p.m.) 179 cfs (2.82 ft); Aug. 7 (11:30 p.m.) 432 cfs (4.15 ft).
1952-53: Nov. 23 (1 a.m.) 164 cfs (2.66 ft); Jan. 9 (2 p.m.) 125 cfs (2.38 ft); Feb. 16 (3 p.m.) 138 cfs (2.49 ft); Mar. 14 (10 a.m.) 227 cfs (3.07 ft); July 7 (7 p.m.) 204 cfs (2.91 ft).
1953-54: Oct. 29 (3 p.m.) 131 cfs (2.41 ft).
1954-55: Aug. 14 (6 to 10 a.m.) 176 cfs (2.72 ft).

Remarks.--Diurnal fluctuation caused by small powerplant above station.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16.8	19.8	40	38	33	39	70	34	28	43	21	15.7
2	39	19.6	36	35	39	39	63	25	13.1	33	19.1	16.3
3	20	24	35	33	26	38	71	28	9.9	14.1	19.1	19.7
4	21	28	37	33	36	42	76	39	18.0	18.5	19.7	22
5	19.3	11.2	*43	35	33	45	65	34	23	77	19.1	18.5
6	20	27	39	32	31	42	58	25	25	77	18.5	18.0
7	11.7	22	35	30	35	39	48	39	25	48	18.0	18.0
8	18.5	25	52	36	36	38	37	37	26	33	19.7	17.4
9	28	22	63	34	45	36	49	27	31	27	19.1	29
10	23	23	54	34	43	35	46	28	32	22	19.1	32
11	23	10.3	48	31	35	33	*44	30	36	8.6	21	23
12	23	15.7	46	30	32	32	45	54	31	14.1	21	18.1
13	22	31	41	29	33	32	44	60	29	19.7	19.7	6.6
14	21	27	38	29	35	43	41	35	43	19.7	19.1	*9.0
15	11.2	17.3	36	37	35	51	36	26	38	19.1	18.5	13.1
16	16.8	19.2	39	40	32	47	45	28	31	18.5	18.0	15.7
17	25	19.6	37	36	35	42	46	28	26	20	17.4	16.3
18	21	14.2	35	34	49	44	45	28	24	22	16.3	16.3
19	21	9.9	31	31	50	32	41	28	23	23	15.7	15.7
20	21	22	32	31	44	41	37	28	21	39	18.5	15.7
21	18.7	21	31	30	51	53	37	34	19.7	41	21	15.2
22	10.8	24	29	28	73	54	35	47	21	28	31	14.7
23	32	35	29	28	74	45	49	51	23	12.7	27	15.7
24	30	24	29	31	59	42	49	81	48	15.2	21	15.7
25	24	76	31	36	49	34	45	63	41	17.4	19.7	15.2
26	24	144	30	34	47	45	40	47	6.2	19.1	18.5	15.7
27	22	119	28	31	44	36	43	33	9.8	17.4	18.0	15.2
28	21	72	24	30	40	33	41	43	18.5	16.8	17.4	15.2
29	13.1	53	22	29	-------	39	22	40	23	26	17.4	14.7
30	26	43	26	31	-------	55	39	40	36	36	16.8	14.1
31	25	-------	36	31	-------	80	-------	35	-------	27	16.3	-------

* Discharge measurement made on this day.

Manantico Creek near Millville--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14.1	33	27	38	54	43	*52	90	107	33	23	48
2	14.1	45	26	50	53	42	52	74	190	25	38	57
3	14.1	56	26	53	54	44	51	66	150	26	57	61
4	14.7	58	25	47	68	50	50	61	96	26	35	53
5	15.2	45	30	50	89	67	50	57	74	25	41	36
6	14.7	35	35	57	76	91	57	46	46	24	67	31
7	16.1	43	31	56	59	72	57	28	65	25	326	33
8	31	54	28	*48	56	53	52	43	55	26	295	35
9	28	44	28	46	53	48	40	46	57	*57	172	34
10	22	36	26	51	47	45	39	45	35	97	166	32
11	29	32	25	62	41	61	43	47	46	80	157	31
12	34	30	24	58	45	92	43	61	56	36	106	30
13	26	28	23	50	45	96	43	60	56	35	*89	29
14	22	28	24	47	a45	77	47	52	34	31	88	28
15	21	29	44	45	a45	65	56	48	22	30	74	30
16	19.7	32	46	43	46	57	71	51	40	29	62	33
17	19.1	40	41	42	58	53	68	44	41	29	58	32
18	18.5	35	57	51	65	50	58	45	30	26	46	31
19	18.0	31	83	55	56	55	50	46	24	31	43	32
20	18.0	28	70	51	50	68	48	59	30	127	45	40
21	17.4	26	144	47	47	67	45	68	35	139	44	39
22	17.4	26	216	46	45	58	43	64	44	79	43	34
23	16.8	25	130	60	43	61	43	52	45	54	43	33
24	16.8	26	80	67	43	76	50	47	53	30	41	34
25	21	26	58	56	42	85	60	64	43	19.2	39	31
26	21	40	58	54	41	94	73	106	37	31	38	31
27	19.7	45	57	66	41	74	87	107	36	28	36	29
28	19.1	36	50	70	40	59	144	85	26	26	38	28
29	19.1	31	47	82	40	50	174	63	31	26	46	28
30	18.5	28	46	77	-------	54	125	58	29	26	48	28
31	18.0	-------	39	63	-------	53	-------	69	-------	24	40	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for station on nearby streams.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	26	39	46	47	44	58	55	77	33	23	21
2	27	25	38	47	45	39	58	57	77	27	24	21
3	29	24	43	54	43	39	58	54	62	15	28	20
4	35	43	45	58	43	62	57	52	52	18	31	21
5	33	32	48	54	42	86	57	50	47	23	28	20
6	30	16	66	46	41	76	56	51	44	27	27	a19
7	28	20	66	43	42	60	71	66	47	124	21	a18
8	*26	18	55	48	43	54	86	69	48	157	20	a18
9	27	23	48	98	42	52	76	59	45	87	22	a17
10	28	30	45	120	41	51	70	44	42	65	23	a17
11	27	39	55	109	39	51	74	24	*47	53	23	17
12	27	31	74	86	41	53	71	39	37	44	22	18
13	27	28	68	70	46	116	84	*41	43	41	21	18
14	27	26	56	49	45	207	105	62	77	35	72	18
15	27	30	49	46	65	144	93	59	73	33	92	18
16	26	46	46	50	113	122	85	45	53	21	63	18
17	25	46	43	48	91	116	96	48	45	20	48	18
18	26	38	42	50	67	*96	89	52	39	33	28	18
19	24	32	40	54	56	91	86	51	37	33	*22	18
20	24	33	39	53	52	93	86	58	35	26	27	19
21	32	74	47	51	58	84	76	63	34	28	27	20
22	29	148	80	55	68	74	*66	61	42	*25	27	20
23	18	147	83	57	63	68	64	66	54	55	26	20
24	16	103	64	57	55	69	61	55	45	79	25	19
25	20	70	46	61	53	78	57	46	36	46	24	19
26	21	49	40	57	59	81	60	66	32	43	23	18
27	23	33	42	50	52	77	64	104	31	44	23	18
28	23	39	40	50	46	69	60	88	31	25	23	18
29	21	39	39	51	-------	65	56	62	31	25	23	18
30	18	39	39	49	-------	62	53	54	32	25	23	18
31	23	-------	41	47	-------	59	-------	66	-------	25	22	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated.

Manantico Creek near Millville--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	50	33	33	35	35	33	24	*22	13	9.7	39
2	18	39	32	33	35	*41	32	30	19	13	9.2	24
3	18	33	32	33	35	47	32	32	18	12	9.7	11
4	18	26	31	32	*37	63	30	32	19	13	11	11
5	18	11	35	32	36	60	30	31	18	13	10	12
6	18	18	39	32	35	48	31	30	18	13	10	13
7	19	55	50	32	33	42	31	20	18	13	10	13
8	19	58	55	31	32	38	31	25	18	14	9.7	12
9	19	42	46	30	31	38	32	35	18	13	12	12
10	19	39	42	31	30	36	31	36	18	13	13	13
11	19	31	39	34	30	35	30	33	19	13	15	86
12	18	35	39	34	30	34	29	30	19	12	14	96
13	18	42	44	32	29	33	27	28	20	*12	12	68
14	18	42	*73	31	29	41	27	27	20	c12	12	40
15	18	41	108	31	29	47	27	27	21	c13	12	20
16	18	39	89	37	29	a45	28	25	21	c14	12	11
17	18	35	62	45	32	a42	44	25	21	c14	12	15
18	18	33	50	43	33	a38	63	27	20	c13	11	18
19	18	31	45	38	32	a35	60	26	22	c14	11	20
20	18	30	42	38	31	37	58	30	14	c14	10	21
21	18	30	42	50	33	39	37	66	15	c15	12	21
22	*18	29	42	60	50	36	30	67	15	c15	15	24
23	18	38	42	50	50	34	20	55	14	c14	16	23
24	18	59	40	45	42	32	24	27	14	c12	14	21
25	18	57	38	*42	39	35	26	29	13	c11	14	19
26	19	52	37	43	35	41	27	32	13	c13	18	18
27	19	46	36	48	35	39	29	30	13	c14	15	17
28	34	39	36	51	33	35	36	28	13	c12	13	16
29	101	36	35	44	-------	32	37	27	13	12	12	16
30	102	35	35	40	-------	32	34	26	13	11	12	16
31	78	-------	35	38	-------	32	-------	25	-------	10	41	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for nearby stations.
c Backwater from rocks.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	18	31	46	21	29	28	16	16	16	12	14
2	16	19	29	39	21	30	27	20	16	15	11	18
3	16	23	27	36	21	30	27	21	16	15	11	28
4	16	22	26	33	21	32	27	21	16	15	10	21
5	16	22	25	32	21	41	26	20	15	14	10	13
6	15	21	23	30	22	47	25	20	16	14	10	17
7	*14	20	16	29	37	53	25	20	17	13	10	17
8	14	19	22	28	45	51	25	20	29	12	22	17
9	14	18	23	27	38	43	25	20	61	13	34	17
10	15	18	26	27	33	38	25	19	42	14	33	16
11	15	17	26	27	31	35	24	20	31	15	42	16
12	14	17	25	26	35	33	28	20	45	16	52	16
13	14	16	25	26	27	32	37	19	35	16	134	16
14	14	16	30	25	35	30	39	20	29	16	164	15
15	23	16	39	25	30	28	38	25	26	16	108	a15
16	24	16	38	25	28	30	33	21	23	15	60	a16
17	9.2	16	32	*25	28	32	30	14	22	14	40	a16
18	9.2	16	35	24	28	31	28	12	22	13	37	a16
19	12	18	45	24	28	31	27	14	21	12	42	a16
20	13	20	41	23	27	33	26	13	22	12	41	a25
21	14	64	34	18	26	32	26	16	20	11	35	a30
22	14	77	26	25	26	39	27	16	19	11	29	a28
23	14	48	32	24	29	*46	27	15	18	11	27	a26
24	14	36	29	23	32	43	27	15	17	11	20	24
25	14	32	28	23	32	37	30	15	16	11	23	27
26	14	30	27	23	30	35	31	15	18	11	37	24
27	14	27	26	22	30	33	30	15	*19	12	43	22
28	15	27	25	22	29	32	29	15	17	12	46	22
29	15	30	30	22	-------	30	28	14	17	12	7.6	22
30	18	32	46	21	-------	29	26	15	16	12	8.2	21
31	20	-------	54	21	-------	29	-------	16	-------	12	8.5	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for Batsto River at Batsto and Maurice River at Norma.
Note.--Backwater from rocks June 18-20, July 3 to Aug. 7.

Manantico Creek near Millville--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	668.9	39	10.8	21.6	0.969	1.12
November	1,018.8	144	9.9	34.0	1.52	1.70
December	1,132	63	22	36.5	1.64	1.89
Calendar year 1950	10,230.1	144	7.4	28.0	1.26	17.06
January 1951	1,007	40	28	32.5	1.46	1.68
February	1,174	74	26	41.9	1.88	1.96
March	1,306	80	32	42.1	1.89	2.18
April	1,407	76	22	46.9	2.10	2.35
May	1,175	81	25	37.9	1.70	1.96
June	779.2	48	6.2	26.0	1.17	1.30
July	852.9	77	8.6	27.5	1.23	1.42
August	601.7	31	15.7	19.4	.870	1.00
September	507.5	32	6.6	16.9	.758	.85
Water year 1950-51	11,630.0	144	6.2	31.9	1.43	19.41
October 1951	614.1	34	14.1	19.8	.888	1.02
November	1,071	58	25	35.7	1.60	1.79
December	1,644	216	23	53.0	2.38	2.74
Calendar year 1951	12,139.4	216	6.2	33.3	1.49	20.25
January 1952	1,688	82	38	54.5	2.44	2.82
February	1,487	89	40	51.3	2.30	2.48
March	1,960	96	42	63.2	2.83	3.27
April	1,871	174	39	62.4	2.80	3.12
May	1,852	107	28	59.7	2.68	3.09
June	1,633	190	22	54.4	2.44	2.72
July	1,300.2	139	19.2	41.9	1.88	2.17
August	2,444	326	23	78.8	3.53	4.08
September	1,051	61	28	35.0	1.57	1.75
Water year 1951-52	18,615.3	326	14.1	50.9	2.28	31.05
October 1952	794	35	16	25.6	1.15	1.32
November	1,347	148	16	44.9	2.01	2.24
December	1,566	83	38	50.5	2.26	2.61
Calendar year 1952	18,993.2	326	16	51.9	2.33	31.67
January 1953	1,814	120	43	58.5	2.62	3.03
February	1,498	113	39	53.5	2.40	2.50
March	2,438	207	39	78.6	3.52	4.07
April	2,133	105	53	71.1	3.19	3.56
May	1,767	104	24	57.0	2.56	2.95
June	1,395	77	31	46.5	2.09	2.33
July	1,335	157	15	43.1	1.93	2.23
August	931	92	20	30.0	1.35	1.55
September	560	21	17	18.7	.839	.93
Water year 1952-53	17,578	207	15	48.2	2.16	29.32
October 1953	808	102	18	26.1	1.17	1.35
November	1,151	59	11	38.4	1.72	1.92
December	1,404	108	31	45.3	2.03	2.34
Calendar year 1953	17,234	207	11	47.2	2.12	28.76
January 1954	1,193	60	30	38.5	1.73	1.99
February	960	50	29	34.3	1.54	1.60
March	1,222	63	32	39.4	1.77	2.04
April	1,006	63	20	33.5	1.50	1.68
May	985	67	20	31.8	1.43	1.64
June	519	22	13	17.3	.776	.87
July	400	15	10	12.9	.578	.67
August	407.3	41	9.2	13.1	.587	.68
September	746	96	11	24.9	1.12	1.24
Water year 1953-54	10,801.3	108	9.2	29.6	1.33	18.02
October 1954	465.4	24	9.2	15.0	.673	.78
November	771	77	16	25.7	1.15	1.29
December	941	54	16	30.4	1.36	1.57
Calendar year 1954	9,615.7	96	9.2	26.3	1.18	16.05
January 1955	821	46	18	26.5	1.19	1.37
February	811	45	21	29.0	1.30	1.35
March	1,094	53	28	35.3	1.58	1.82
April	851	39	24	28.4	1.27	1.42
May	545	25	12	17.6	.789	.91
June	697	61	15	23.2	1.04	1.16
July	412	16	11	13.3	.596	.69
August	1,167.3	164	7.6	37.7	1.69	1.95
September	591	30	13	19.7	.883	.99
Water year 1954-55	9,166.7	164	7.6	25.1	1.13	15.30

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 1955.

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.--17 years (1937-46, 1947-55), 1.43 cfs.

Extremes.--1937-55: 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, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.25	0.05	0.83	1.03	1.03	1.14	1.36	1.25	1.14	1.36	0.83	0.64
2	.13	.05	.73	.93	1.14	1.14	5.20	1.14	1.03	1.14	.73	.64
3	.09	.02	.73	.93	.93	1.14	1.30	1.14	1.03	.93	.73	.83
4	.09	.02	1.03	1.03	.83	1.48	1.86	1.36	1.03	5.55	.73	.83
5	.09	.13	*1.14	1.03	.83	1.36	1.60	1.36	1.03	16.8	.73	.73
6	.05	.13	.83	.93	.83	1.25	1.48	1.25	.93	1.60	.73	.64
7	.05	.09	.83	1.03	4.55	1.25	1.48	1.25	.93	1.25	1.03	.93
8	.05	.09	2.93	1.14	.39	1.25	1.36	1.25	1.03	1.14	1.14	.83
9	.13	.09	.64	.93	.64	1.14	1.36	1.14	1.03	.93	1.03	.73
10	.25	.09	.83	.93	.73	1.03	1.36	1.14	1.36	.93	.93	.64
11	.19	.05	1.03	.93	.73	1.03	1.36	4.83	1.48	.83	.83	.64
12	.19	.05	1.03	.93	.83	1.14	1.36	1.60	1.14	.83	1.03	.64
13	.13	.05	.93	.93	1.03	1.14	1.36	1.60	1.14	.83	4.73	.64
14	.09	.05	.93	.93	1.03	4.81	1.25	1.36	1.60	.83	.39	.64
15	.05	.05	.93	1.73	1.03	.47	1.25	a1.3	1.36	.83	.64	.83
16	.05	.05	.93	1.36	.93	1.03	1.36	a1.2	1.14	.83	.73	.93
17	.02	.05	.93	1.03	1.36	1.14	1.60	a1.2	1.03	5.33	.64	.83
18	.02	.05	.93	1.03	1.86	1.14	1.48	a1.2	1.03	.60	.64	.73
19	.02	.05	.83	1.03	1.25	1.25	1.36	a1.2	.93	1.25	.64	.73
20	.02	.09	.83	.93	1.14	5.02	1.36	a1.3	.93	2.00	.73	.64
21	.02	.25	.73	.93	4.76	1.48	1.25	a1.3	.93	1.25	.83	.64
22	0	.25	.73	.83	4.20	1.36	1.25	1.36	.93	1.03	.73	.64
23	.39	.19	.83	.83	.83	1.36	5.11	5.06	1.36	1.03	.73	.83
24	.47	.19	.83	1.25	1.03	1.36	.83	1.20	1.25	.93	.64	.83
25	.25	88	.93	1.25	1.14	1.25	1.14	1.60	1.03	.93	.64	.73
26	.13	.19	.83	1.03	1.14	1.25	1.25	1.36	.93	.93	.73	.73
27	.09	.93	.83	.93	1.14	1.25	1.25	1.25	.83	.83	.73	.64
28	.09	1.14	.73	.93	1.14	1.14	1.25	1.25	.93	.83	.73	.64
29	.09	1.03	.93	.93	-------	1.25	1.25	1.36	.93	.93	.73	.56
30	.09	.93	1.03	.93	-------	1.60	1.25	1.36	1.25	.93	.64	.56
31	.09	-------	1.03	.93	-------	1.73	-------	1.25	-------	.83	.64	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of precipitation records and records for stations on nearby streams.

Loper Run near Bridgeton--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.56	5.51	0.83	1.60	1.86	4.59	2.14	0.67	8.23	1.86	1.36	6.13
2	.56	1.36	.83	1.73	2.00	1.60	4.35	6.47	.54	1.73	10.6	2.00
3	.64	8.86	.83	1.73	2.00	5.66	1.48	.55	2.14	1.73	.51	5.15
4	.64	.73	.83	1.60	12.1	2.89	2.14	2.00	6.08	1.73	1.25	1.25
5	.73	1.03	1.60	2.14	.89	3.06	4.40	2.44	.76	1.73	1.36	1.60
6	.64	.73	1.36	2.14	2.00	1.73	2.14	2.44	2.14	1.73	17.8	1.60
7	.93	7.70	.93	1.86	2.14	2.00	2.28	2.44	2.28	1.73	33	1.60
8	.83	.13	.83	1.73	2.14	2.00	2.28	2.44	2.28	1.86	13.4	1.60
9	1.03	.25	.83	1.73	2.14	2.00	2.28	2.44	2.28	11.1	12.4	1.48
10	.83	.64	.83	4.70	2.14	2.00	2.28	2.44	2.28	3.30	13.8	1.48
11	1.60	.73	.83	1.25	2.14	12.4	2.28	7.57	2.28	1.73	1.25	1.48
12	1.36	.73	.83	1.36	2.00	1.23	2.28	.94	2.14	1.73	2.00	1.48
13	.93	.73	.83	1.48	2.00	4.17	5.62	2.28	2.14	1.73	12.8	1.48
14	.83	.83	.93	1.48	2.00	1.73	.61	2.28	2.14	1.73	1.73	1.48
15	.83	.93	4.16	1.48	2.00	2.00	4.53	2.44	2.14	1.60	1.86	1.48
16	.83	.93	.39	1.48	5.19	2.00	4.62	2.28	2.14	1.60	1.86	1.60
17	.83	1.03	.64	1.48	1.26	2.00	1.60	2.28	2.00	1.60	1.86	1.48
18	.73	.83	7.33	4.01	4.04	2.00	2.14	4.94	2.00	1.60	1.73	1.36
19	.83	.73	4.83	1.36	1.60	5.13	2.28	1.48	1.86	1.60	1.73	5.43
20	.83	.73	9.16	1.60	1.86	4.55	2.28	4.48	1.86	1.73	1.73	3.93
21	.83	.73	40	1.60	2.00	1.36	2.28	4.11	1.86	1.73	1.73	.83
22	.93	.73	1.04	5.37	2.00	2.00	2.28	1.60	1.86	1.60	1.86	1.25
23	.93	.73	1.73	.88	2.00	8.58	4.85	2.14	a5.5	1.60	1.73	1.60
24	1.03	.73	1.73	1.48	2.14	4.32	.64	2.14	a1.0	1.48	1.60	1.60
25	1.48	.73	1.73	1.48	2.14	1.27	8.18	10.5	2.00	1.48	1.60	1.48
26	1.14	1.73	2.00	4.59	2.14	3.80	4.59	.23	2.00	1.36	1.60	1.36
27	1.03	1.25	1.73	1.60	2.14	1.60	4.78	1.86	2.00	1.36	1.48	1.36
28	1.03	1.03	1.60	4.65	2.14	3.96	8.38	2.14	1.86	1.36	1.60	1.25
29	1.03	.93	1.60	1.86	2.14	5.34	4.77	2.28	1.86	1.36	1.73	1.25
30	.93	.83	1.60	2.00	-------	.58	5.62	5.12	1.86	1.36	1.73	1.25
31	.93	-------	1.73	1.86	-------	1.86	-------	5.51	-------	1.36	1.60	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated from reconstructed gage-height graph based on weather records and normal operation of siphon.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.2	1.1	1.4	1.7	1.9	1.9	2.1	4.0	5.6	2.0	1.6	1.2
2	5.7	1.1	1.4	1.5	1.9	2.0	1.4	3.3	1.3	1.9	4.4	1.2
3	.57	1.2	1.7	2.0	1.9	5.8	1.7	2.3	4.1	1.7	.42	1.2
4	.73	1.4	1.5	1.6	1.9	4.3	2.7	2.1	1.5	1.7	1.2	1.2
5	1.1	1.2	5.9	1.5	1.9	.70	2.6	4.3	2.1	1.7	1.5	1.2
6	1.2	1.2	.39	1.4	1.9	1.7	4.0	5.0	5.6	5.0	1.5	1.2
7	1.2	1.2	1.1	1.4	2.0	1.9	4.4	4.5	.93	.73	1.5	1.4
8	1.2	1.1	1.2	5.0	2.0	2.0	2.8	4.3	2.3	5.3	1.5	1.4
9	1.2	1.1	1.2	8.7	2.0	2.0	1.0	4.3	2.3	1.0	4.6	1.2
10	1.2	1.4	1.2	.26	1.9	2.0	3.2	1.9	2.3	1.7	.56	1.2
11	1.2	1.4	5.3	1.7	1.9	2.0	2.7	2.4	2.1	1.7	1.2	1.1
12	1.2	1.2	1.1	4.4	2.1	5.6	4.1	2.4	2.0	1.7	1.4	1.2
13	1.2	1.2	1.2	.90	2.1	9.2	2.7	4.3	5.4	1.7	1.4	1.2
14	1.2	1.2	1.2	1.4	2.0	1.2	4.5	1.7	1.9	1.7	6.2	1.2
15	1.2	4.4	1.2	1.5	8.5	9.9	1.0	4.0	2.3	1.6	1.9	1.2
16	1.2	.36	1.2	1.5	4.6	10	8.0	6.1	2.3	1.6	1.2	1.2
17	1.2	1.0	1.2	1.5	1.6	4.4	.57	4.4	2.3	1.6	4.5	1.1
18	1.2	1.1	1.2	1.6	2.0	5.0	5.0	1.1	2.1	1.5	1.1	1.1
19	1.2	1.1	1.2	1.7	2.0	4.9	3.3	2.3	2.1	1.5	1.5	1.1
20	1.1	5.4	1.2	1.9	2.0	4.9	4.0	4.8	2.1	1.9	1.5	1.1
21	1.1	3.7	4.6	5.6	4.6	1.2	3.8	4.2	2.1	2.0	1.5	2.1
22	1.1	4.1	1.1	.44	1.9	4.6	*.78	5.0	2.0	1.7	1.4	1.7
23	1.1	2.0	1.4	1.5	1.9	5.0	4.7	4.3	2.0	17	1.4	1.4
24	1.1	1.7	1.4	4.8	1.9	.69	1.7	1.5	2.0	1.9	1.4	1.2
25	1.2	1.6	1.4	4.6	1.9	3.6	4.3	2.1	1.9	1.9	1.4	1.2
26	1.2	1.5	1.4	1.5	1.9	3.1	4.5	6.0	1.9	1.9	1.4	1.2
27	1.2	1.5	1.4	1.7	1.9	3.9	1.9	1.8	1.9	1.7	1.4	1.2
28	1.2	1.4	1.2	1.9	1.9	.61	3.9	2.3	1.9	1.7	1.4	1.2
29	1.2	1.4	1.2	2.0	-------	3.5	2.0	2.3	2.0	1.7	1.4	1.2
30	1.2	1.4	1.2	1.9	-------	1.0	4.1	4.3	2.0	1.6	1.2	1.2
31	1.2	-------	1.5	1.9	-------	3.3	-------	6.1	-------	1.6	1.2	-------

* Discharge measurement made on this day.

Loper Run near Bridgeton--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.1	1.2	1.2	1.2	1.2	5.0	1.2	1.0	0.73	0.39	0.09	0.83
2	1.1	1.2	1.2	1.2	1.2	.39	1.1	1.0	.73	.39	.05	.64
3	1.1	1.2	1.2	1.2	1.2	4.4	1.1	1.0	.73	.39	.09	.47
4	1.1	1.2	1.2	1.2	1.4	.93	1.0	1.7	.73	.39	.09	.39
5	1.1	1.1	1.5	1.2	1.4	1.2	1.0	1.1	.73	.47	.13	.39
6	1.5	1.2	1.5	1.2	1.2	1.2	1.2	1.0	.73	.64	.13	.39
7	1.7	2.0	2.0	1.1	1.2	1.2	1.2	1.0	.73	.56	.13	.32
8	1.2	1.7	1.5	1.1	1.2	1.2	1.2	5.1	.64	.47	.13	.32
9	1.2	1.6	1.4	1.1	1.2	1.2	1.2	5.7	.64	.47	4.7	.32
10	1.2	1.6	1.7	1.2	1.1	1.2	1.1	1.6	.64	.47	4.6	.39
11	1.2	1.6	1.5	1.6	1.1	1.2	1.1	1.4	.64	.39	.83	8.4
12	1.2	1.5	1.5	1.4	1.1	1.2	1.1	1.1	.73	.39	.47	1.1
13	1.2	1.5	1.7	1.2	1.0	1.2	1.0	1.1	1.0	.32	.39	.73
14	1.2	1.5	12	1.1	1.0	4.8	1.0	1.0	.93	.32	.32	.64
15	1.2	1.4	.90	1.1	1.1	.39	1.0	1.0	.83	1.1	.32	.56
16	1.2	1.4	1.4	1.6	1.1	.93	1.1	1.0	.73	.64	.32	.47
17	1.2	1.4	1.4	1.6	1.4	1.1	5.0	1.0	.73	.47	.32	.47
18	1.1	1.4	1.4	1.2	1.2	1.1	1.6	1.0	.73	.32	.25	.47
19	1.1	1.2	1.2	1.1	1.1	1.0	1.5	1.0	.64	.25	.19	.56
20	1.1	1.1	1.2	1.4	1.1	1.5	1.2	1.1	.64	.25	.25	.56
21	1.1	1.1	1.2	1.9	4.9	1.2	1.1	4.5	.64	.19	3.9	.64
22	1.1	1.1	1.4	1.7	.83	1.1	1.1	1.1	.56	.19	.83	.83
23	1.2	5.1	1.4	1.5	1.0	1.0	1.2	1.0	.56	.19	.56	.64
24	1.2	.41	1.4	1.4	1.0	1.0	1.4	.93	.56	.19	.47	.47
25	1.2	1.2	1.2	1.4	1.2	1.6	1.2	.93	.47	.13	.39	.47
26	1.4	1.5	1.2	1.4	1.2	1.5	1.1	.93	.47	.09	.39	.47
27	1.4	1.4	1.2	1.5	1.2	1.2	1.1	.93	.47	.13	.32	.47
28	10	1.4	1.2	1.4	1.1	1.1	1.5	.83	.39	.19	.32	.39
29	8.0	1.2	1.2	1.2	-------	1.1	1.2	.83	.32	.19	.32	.39
30	.44	1.2	1.2	1.2	-------	1.1	1.1	.83	.39	.19	.32	.39
31	1.1	-------	1.2	1.2	-------	1.2	-------	.73	-------	.13	4.5	-------

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.39	0.47	0.39	1.03	0.64	0.93	0.73	0.73	0.73	0.47	0.09	0.56
2	.39	.64	.47	1.03	.73	1.03	.73	.73	.56	.47	.13	.56
3	.39	1.14	.56	.93	.73	.83	.73	.73	.56	.39	.19	.56
4	.39	.83	.56	.93	.73	1.14	.73	.73	.47	.39	.19	.56
5	.39	.73	.56	.83	.64	1.86	.73	.73	.73	.32	.13	.56
6	.39	.64	.56	.83	6.8	9.3	.73	.64	1.60	.32	.09	.56
7	.32	.64	.56	.83	9.7	4.4	.83	.56	.83	.32	.09	.56
8	.25	.56	.56	.83	1.60	.47	.73	.56	4.9	.32	1.03	.47
9	.25	.56	.73	.83	1.14	.64	.73	.56	*5.6	.32	.83	.47
10	.32	.56	1.03	.83	1.03	.73	.73	.56	1.60	.32	.64	.47
11	.32	.56	.93	.83	1.14	.73	.73	.56	5.3	.25	1.25	.47
12	.32	.56	.83	.83	1.48	.73	1.36	.56	2.00	.19	7.6	.47
13	.32	.56	.83	.73	.93	.73	1.48	.56	1.25	.19	10	.47
14	.32	.56	1.25	.73	.83	.73	1.14	.56	.83	.19	1.25	.47
15	.39	.56	1.48	.73	.73	.73	1.03	.64	.83	.19	.93	.47
16	.47	.56	1.03	.73	.73	.93	.93	.56	.73	.19	.73	.47
17	.39	.56	.83	.73	.73	.93	.73	.56	.64	.19	a.7	.47
18	.39	.56	1.14	.73	.83	.83	.73	.56	.56	.13	a5	.47
19	.32	.64	1.36	.64	.73	.83	.73	.56	.64	.13	a6	.47
20	.32	1.03	.93	.64	.73	.83	.73	.56	.73	.09	a.3	3.9
21	.32	18	1.03	.64	.73	.93	*.73	.56	.73	.09	a.7	1.03
22	.39	.37	.73	.73	.73	1.36	.93	.56	.64	.09	a.7	.73
23	.39	.64	.73	.73	1.14	1.25	.83	.47	.64	.05	a.7	.64
24	.39	.64	.73	.73	1.14	1.03	.83	.47	1.73	.05	.64	1.03
25	.39	.73	.73	.73	1.03	.83	1.03	.47	.93	.09	.64	1.03
26	.39	.73	.73	.73	.83	.83	1.03	.47	.93	.09	.64	.73
27	.47	.73	.73	.73	.83	.83	.93	.39	.73	.09	.64	.64
28	.56	.64	.73	.64	.83	.83	.83	.39	.56	.09	.56	.73
29	5.8	8.2	1.14	.64	-------	.73	.83	.47	.47	.09	.56	.83
30	.25	.05	1.86	.64	-------	.73	.83	1.03	.47	.09	.56	.73
31	.47	-------	1.48	.64	-------	.73	-------	.83	-------	.09	.56	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for West Branch Cohansey River at Seeley.

Loper Run near Bridgeton--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	3.67	0.47	0	0.118	0.050	0.06
November	94.40	88	0.02	3.15	1.35	1.50
December	29.25	2.93	.64	.944	.403	.46
Calendar year 1950	276.72	88	0	.758	.324	4.40
January 1951	31.51	1.73	.83	1.02	.436	.50
February	38.47	4.76	.39	1.37	.585	.61
March	45.38	5.02	.47	1.46	.624	.72
April	47.93	5.20	.83	1.60	.684	.76
May	47.42	5.06	1.14	1.53	.654	.75
June	32.69	1.60	.83	1.09	.466	.52
July	56.24	16.8	.60	1.81	.774	.89
August	27.38	4.73	.39	.883	.377	.44
September	21.49	.93	.56	.716	.306	.34
Water year 1950-51	475.83	88	0	1.30	.556	7.55
October 1951	28.28	1.60	.56	.912	.390	.45
November	44.56	8.86	.13	1.49	.637	.71
December	96.12	40	.39	3.10	1.32	1.53
Calendar year 1951	517.47	40	.13	1.42	.607	8.22
January 1952	65.31	5.37	.88	2.11	.902	1.04
February	72.34	12.1	.89	2.49	1.06	1.15
March	99.41	12.4	.58	3.21	1.37	1.58
April	100.39	8.38	.61	3.35	1.43	1.60
May	92.93	10.5	.23	3.00	1.28	1.48
June	71.51	8.23	.54	2.38	1.02	1.14
July	61.20	11.1	1.36	1.97	.842	.97
August	152.29	33	.51	4.91	2.10	2.42
September	58.32	6.13	.83	1.94	.829	.93
Water year 1951-52	942.66	40	.13	2.58	2.10	15.00
October 1952	40.00	5.7	.57	1.29	.551	.64
November	50.66	5.4	.36	1.69	.722	.81
December	50.79	5.9	.39	1.64	.701	.81
Calendar year 1952	915.15	33	.23	2.50	1.07	14.57
January 1953	71.00	8.7	.26	2.29	.979	1.13
February	66.0	8.5	1.6	2.36	1.01	1.05
March	111.90	10	.61	3.61	1.54	1.78
April	93.45	8.0	.57	3.12	1.33	1.49
May	109.4	6.1	1.1	3.53	1.51	1.74
June	72.33	5.6	.93	2.41	1.03	1.15
July	73.93	17	.73	2.38	1.02	1.18
August	55.78	6.2	.42	1.80	.769	.89
September	37.5	2.1	1.1	1.25	.534	.60
Water year 1952-53	832.74	17	.26	2.28	.974	13.27
October 1953	52.14	10	.44	1.68	.718	.83
November	43.61	5.1	.41	1.45	.620	.69
December	52.40	12	.90	1.69	.722	.83
Calendar year 1953	839.44	17	.26	2.30	.983	13.36
January 1954	40.8	1.9	1.1	1.32	.564	.65
February	35.93	4.9	.83	1.28	.547	.57
March	45.44	5.0	.39	1.47	.628	.72
April	38.9	5.0	1.0	1.30	.556	.62
May	44.44	5.7	.73	1.43	.611	.71
June	19.46	1.0	.32	.649	.277	.31
July	10.90	1.1	.09	.352	.150	.17
August	26.12	4.7	.05	.843	.360	.42
September	23.58	8.4	.32	.786	.336	.37
Water year 1953-54	433.72	12	.05	1.19	.509	6.89
October 1954	16.86	5.8	.25	.544	.232	.27
November	43.65	18	.05	1.46	.624	.69
December	27.21	1.86	.39	.878	.375	.43
Calendar year 1954	373.29	18	.05	1.02	.436	5.93
January 1955	23.80	1.03	.64	.768	.328	.38
February	39.86	9.7	.64	1.42	.607	.63
March	39.41	9.3	.47	1.27	.543	.63
April	25.79	1.48	.73	.860	.368	.41
May	18.32	1.03	.39	.591	.253	.29
June	38.92	5.6	.47	1.30	.556	.62
July	6.29	.47	.05	.203	.087	.10
August	44.07	10	.09	1.42	.607	.70
September	21.58	3.9	.47	.719	.307	.34
Water year 1954-55	345.76	18	.05	.947	.405	5.49

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 1955.

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.

Extremes.--1904-55: Maximum discharge, 233,000 cfs Aug. 19, 1955 (gage height, 23.91 ft, from floodmark in gage house), from rating curve extended above 89,000 cfs on basis of slope-area measurement of peak flow; minimum, 175 cfs Sept. 23, 1908 (gage height, 0.6 ft); minimum daily, 175 cfs Sept. 23, 1908.

Maximum discharge previously 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).--

1950-51: Nov. 26 (2 p.m.) 81,200 cfs (13.48 ft); Dec. 5 (8 a.m.) 75,100 cfs (13.01 ft); Mar. 31 (3 p.m.) 91,400 cfs (14.35 ft).

1951-52: Nov. 8 (time unknown) 41,800 cfs (9.69 ft); Mar. 12 (9 a.m.) 44,600 cfs (9.64 ft); July 10 (11:30 a.m.) 81,000 cfs (13.50 ft).

1952-53: Dec. 12 (1 a.m.) 96,300 cfs (14.72 ft); Jan. 25 (10 a.m.) 58,800 cfs (11.51 ft).

1953-54: Jan. 28 (8:15 a.m.) 37,700 cfs (9.18 ft), (maximum below base).

1954-55: Aug. 19 (5:30 a.m.) 233,000 cfs (23.91 ft).

Remarks.--Flow regulated by Lake Wallenpaupack and by Pepacton, Swinging Bridge, Toronto, and Cliff Lake Reservoirs (see p.388) and smaller reservoirs. Diversion from Pepacton Reservoir (see p.394). Large diurnal fluctuations at medium and low flow caused by powerplants on tributary streams.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,040	800	9,300	3,810	6,280	8,870	*48,100	5,280	3,660	3,360	3,710	1,450
2	1,070	798	7,640	3,530	20,400	8,080	28,500	*4,810	2,930	4,190	2,900	870
3	1,420	872	6,600	4,000	16,000	7,260	23,700	4,410	2,220	3,660	2,600	989
4	*1,640	916	*18,400	4,860	9,090	6,240	20,600	4,250	2,760	2,790	2,320	*1,390
5	1,590	2,090	65,600	17,900	*8,600	6,480	17,000	3,490	3,270	2,890	1,910	2,050
6	1,390	4,870	36,000	12,200	8,480	7,210	13,900	2,950	2,750	2,780	1,610	1,710
7	1,060	4,080	21,100	9,770	10,800	*7,300	11,500	3,430	2,410	2,660	1,590	*1,790
8	1,010	3,100	25,000	8,630	23,600	9,180	9,710	*3,420	2,330	2,370	1,800	1,350
9	*840	2,660	27,900	7,440	13,300	10,400	9,620	3,260	1,900	2,090	1,790	1,540
10	1,840	2,480	18,900	6,300	9,220	8,100	9,510	3,290	1,480	2,100	2,120	1,500
11	1,290	2,300	15,000	*6,000	7,540	6,200	10,900	3,480	*1,880	2,210	1,600	1,920
12	1,650	2,090	13,100	5,970	7,610	6,630	*11,000	3,110	2,190	2,270	1,140	1,800
13	1,630	2,030	11,000	5,250	*9,270	8,300	19,200	2,870	2,300	2,570	1,390	1,830
14	1,550	1,940	9,420	4,220	13,500	8,900	18,600	3,310	3,280	2,780	1,680	1,780
15	1,250	1,800	*8,140	5,030	12,600	12,100	14,200	3,220	*3,900	2,350	1,880	1,820
16	1,320	1,850	7,200	8,380	9,700	10,700	12,700	2,980	3,240	2,140	1,860	2,540
17	1,460	1,740	b6,000	8,200	8,530	*8,650	11,300	2,900	2,540	*2,360	3,180	2,980
18	1,260	1,630	b5,600	6,660	7,910	7,280	10,100	2,800	2,570	2,200	4,490	2,410
19	964	1,480	b5,800	6,460	9,060	7,220	9,160	2,230	2,570	2,190	2,970	2,130
20	1,000	*1,530	b5,200	7,490	10,900	*11,000	8,310	1,810	2,200	3,080	2,470	1,620
21	926	2,320	b4,400	8,850	*14,900	13,000	6,990	2,230	2,380	5,520	2,530	1,270
22	843	4,450	b4,100	9,460	28,300	10,900	5,880	2,520	2,250	3,820	2,600	1,180
23	1,090	3,860	b3,700	8,140	20,200	8,980	6,850	2,660	2,330	3,430	1,980	1,180
24	1,600	3,290	b3,600	13,400	13,100	8,850	8,920	3,140	1,860	3,380	1,660	1,070
25	1,490	7,060	b3,800	*25,100	10,100	13,100	7,760	2,830	2,910	2,650	1,440	1,440
26	1,340	68,300	b3,500	16,000	9,770	12,000	7,290	2,140	2,800	*2,140	1,430	1,570
27	1,270	45,300	*b3,600	11,400	9,850	9,940	7,070	1,770	3,020	2,220	1,260	1,540
28	1,080	21,500	b3,400	9,350	9,860	9,120	5,920	*2,440	2,960	2,280	1,810	1,510
29	883	14,500	b3,300	8,330	-------	10,300	5,420	3,560	2,680	2,920	1,730	1,020
30	*848	11,700	b3,200	7,810	-------	32,200	5,660	4,350	2,780	6,720	1,420	1,060
31	836	-------	3,620	7,470	-------	77,400	-------	4,350	-------	4,600	1,430	-------

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

Delaware River at Port Jervis, N. Y.--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,030	a3,300	5,030	8,620	*8,500	3,200	11,300	9,080	9,550	1,410	1,810	1,270
2	1,530	a5,800	4,800	13,300	9,240	2,400	19,100	8,100	13,400	1,010	1,620	5,820
3	1,610	a9,800	4,610	14,200	12,600	2,700	26,500	7,150	12,000	960	797	7,750
4	*1,670	a22,000	4,600	*11,400	12,400	3,200	19,600	5,930	9,250	887	*1,110	5,770
5	1,780	a15,000	6,830	9,750	21,600	*3,300	19,300	5,540	8,830	789	1,830	*4,160
6	1,450	a10,200	14,900	8,660	19,600	3,200	37,500	5,660	8,830	753	2,000	3,250
7	939	a11,800	12,300	7,970	*14,600	3,100	28,800	*5,030	7,040	762	1,770	2,610
8	2,660	a32,000	10,100	6,920	11,800	2,900	*19,900	*4,790	6,060	807	1,620	*2,240
9	3,960	a26,000	9,240	5,970	10,100	2,400	15,200	4,460	5,810	2,300	2,000	2,090
10	3,460	a16,000	11,600	*6,070	8,710	2,400	12,500	3,900	5,550	50,400	1,080	1,930
11	3,290	a12,200	10,600	6,170	8,190	7,080	10,400	3,790	5,030	30,500	1,940	2,010
12	3,340	a10,000	*8,880	4,880	7,800	39,200	8,920	6,380	4,380	13,600	2,330	2,200
13	4,570	*a8,600	7,970	4,480	6,600	25,700	8,070	14,000	3,950	9,000	2,180	1,940
14	4,010	a7,600	7,050	4,870	5,400	15,400	13,700	13,500	3,360	6,750	1,840	1,190
15	3,370	a8,200	6,000	5,420	4,600	10,800	26,400	10,200	2,900	5,640	*1,780	1,540
16	3,120	8,850	5,200	8,600	4,600	8,530	30,900	10,700	2,930	4,890	2,170	2,160
17	2,610	8,870	4,400	8,400	4,100	7,750	*19,100	8,470	3,500	3,890	1,490	2,180
18	2,780	7,890	4,000	8,830	4,300	7,070	13,900	7,480	2,950	3,510	1,960	2,420
19	2,700	6,920	4,000	12,600	4,700	7,260	11,400	7,490	2,510	2,670	2,350	2,550
20	2,440	6,360	4,100	10,200	4,500	7,020	9,770	7,580	*2,320	1,960	2,040	1,980
21	1,840	5,750	5,600	10,100	4,600	7,760	8,620	8,600	2,050	2,550	1,850	1,660
22	1,870	4,920	14,500	8,000	4,100	17,200	7,650	8,230	1,800	*3,380	2,320	1,850
23	2,410	4,500	13,800	8,180	3,600	18,400	7,110	7,220	2,040	3,610	1,960	*2,110
24	2,440	5,750	10,100	10,100	3,300	*23,200	6,540	5,930	2,400	2,870	1,250	1,260
25	*3,320	7,480	8,410	7,600	3,400	19,900	6,530	12,000	2,280	2,170	1,070	1,370
26	4,500	7,100	6,950	6,870	3,700	17,900	8,710	27,600	1,960	2,100	1,180	1,360
27	4,240	6,420	6,600	26,000	3,600	18,600	8,780	18,900	1,550	1,320	1,660	1,170
28	3,720	6,040	6,000	29,400	3,600	17,700	9,460	13,300	1,610	1,450	1,690	762
29	3,330	5,420	5,400	19,200	3,500	14,300	12,300	10,900	1,140	2,070	1,680	930
30	3,380	4,920	5,340	12,900	-------	11,900	11,400	8,870	1,260	1,940	1,360	1,580
31	a3,000	-------	6,110	9,660	-------	11,000	-------	7,950	-------	1,950	586	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for stations at Montague and on Neversink River at Godeffroy.
Note.--Stage-discharge relation affected by ice Dec. 15-22, 27-29, Jan. 25, Feb. 12 to Mar. 10.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,600	932	3,650	3,810	8,400	7,100	12,400	13,300	4,800	3,150	964	1,200
2	1,670	496	3,340	3,540	8,890	6,140	11,500	18,700	3,980	2,640	603	1,250
3	1,900	554	3,140	3,590	7,850	b6,000	10,900	17,000	3,430	2,020	502	1,310
4	1,740	1,460	2,970	3,350	7,160	*7,500	8,890	*14,800	3,160	1,300	456	1,240
5	1,070	762	3,530	b3,100	6,700	10,900	7,720	13,400	3,230	892	671	1,090
6	*1,220	1,300	7,490	3,080	5,930	8,910	8,020	16,900	3,250	*931	822	430
7	1,720	1,480	8,680	2,770	7,010	7,100	12,100	14,300	3,310	1,160	580	743
8	1,630	1,320	7,020	2,820	10,600	b5,400	19,800	13,500	4,090	1,150	428	1,940
9	1,260	520	5,810	2,620	9,620	b5,600	15,500	13,200	3,760	1,150	445	2,760
10	1,540	757	5,660	2,830	*7,930	b5,400	13,400	11,400	3,160	1,050	513	1,540
11	909	1,300	41,100	4,050	6,740	b5,000	13,400	10,300	2,560	946	710	1,080
12	707	880	75,400	*5,440	6,630	4,830	11,000	8,830	2,410	810	628	855
13	695	1,460	35,300	5,150	6,060	5,320	11,600	8,150	2,340	950	935	897
14	1,080	1,390	19,800	4,370	5,670	5,610	13,500	8,010	2,500	1,520	856	1,340
15	1,050	1,050	14,400	4,160	5,390	6,740	11,700	*7,930	2,880	1,440	1,030	1,580
16	1,150	564	*11,400	4,030	6,270	17,100	10,400	7,450	2,680	a1,200	775	1,300
17	*883	799	9,570	4,520	*6,470	17,700	11,300	7,500	*2,400	a1,600	1,180	1,010
18	890	1,460	8,280	6,210	5,560	13,200	9,730	10,200	2,180	1,560	*1,010	855
19	833	1,470	7,400	9,200	5,130	12,100	9,820	9,510	2,080	1,130	787	749
20	745	*1,450	6,110	9,590	4,980	13,700	10,100	8,140	1,840	1,010	544	689
21	1,390	4,290	5,340	8,420	9,970	11,000	9,710	7,220	1,460	1,740	482	729
22	1,260	12,900	6,110	7,680	26,000	8,950	8,880	6,540	1,560	1,710	436	1,110
23	667	18,900	6,740	7,150	16,900	8,740	8,130	5,940	1,890	1,690	404	748
24	748	13,900	6,190	13,400	12,600	10,900	7,530	6,410	1,870	1,230	372	643
25	668	9,130	5,780	52,100	11,000	22,200	6,710	5,640	1,720	962	854	616
26	430	6,970	5,420	34,100	9,830	23,800	7,440	5,620	1,860	758	774	651
27	454	5,880	5,170	19,500	8,900	*26,400	18,700	5,420	1,690	*782	762	581
28	1,180	4,980	b4,200	15,300	8,300	22,700	19,900	4,970	1,040	1,100	991	518
29	1,600	4,600	*b3,600	14,500	-------	17,700	15,200	4,600	1,460	964	897	636
30	*1,330	3,960	4,120	11,400	-------	14,500	12,600	4,040	2,430	1,260	385	644
31	1,300	-------	4,370	8,890	-------	13,300	-------	3,970	-------	1,140	514	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Delaware River above Lackawaxen River, near Barryville, Wallenpaupak Creek at Wilsonville, Lackawaxen River at Hawley, and Mongaup River near Mongaup.
b Stage-discharge relation affected by ice.

Delaware River at Port Jervis, N. Y.--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,120	3,130	3,810	2,340	6,690	8,200	5,380	7,340	4,660	858	495	2,210
2	600	2,410	3,530	2,070	5,450	16,800	5,040	6,840	3,930	843	f520	2,410
3	480	2,020	3,220	2,030	6,400	16,600	4,870	6,870	3,770	804	*659	2,360
4	418	1,740	3,080	2,730	5,800	15,000	4,340	11,600	3,630	858	561	1,460
5	*f440	1,740	a2,900	2,750	5,200	12,300	4,240	13,900	3,490	868	618	985
6	1,400	*2,030	a3,000	2,980	4,300	9,600	4,180	*10,500	2,740	*864	731	805
7	1,250	2,150	a12,400	2,900	3,700	8,000	4,410	8,750	2,740	880	f500	a780
8	1,200	1,520	a22,500	2,100	3,800	8,180	5,400	8,820	2,860	922	a430	a880
9	1,270	1,660	a16,000	1,500	3,800	7,740	4,740	11,900	*2,650	702	f620	843
10	1,180	2,320	a14,500	1,350	3,600	*6,730	4,490	13,400	2,510	806	676	*852
11	872	2,140	15,600	1,900	3,500	6,630	4,110	23,800	2,470	616	596	785
12	800	2,190	11,600	2,600	3,300	5,890	5,210	18,400	2,140	587	f640	651
13	1,110	2,320	11,000	2,700	2,400	5,200	5,300	14,400	2,080	777	f520	594
14	1,200	2,040	11,500	2,600	1,550	5,250	4,740	11,800	3,070	920	f580	694
15	1,060	1,900	14,700	2,300	1,850	*6,420	*4,620	9,490	3,660	928	f560	940
16	754	2,100	12,900	1,900	3,270	6,230	5,020	8,270	2,830	802	*f560	1,040
17	726	2,720	10,200	1,600	*13,500	5,410	14,200	7,520	2,720	593	606	1,120
18	568	2,170	7,980	1,800	31,500	4,900	26,800	6,420	2,440	452	f430	1,450
19	*538	2,100	6,600	2,100	20,700	4,500	17,000	5,930	2,020	595	f500	1,050
20	605	2,010	5,760	1,900	14,600	5,450	13,100	5,250	1,550	859	f640	1,630
21	907	1,980	6,140	2,350	11,300	8,400	10,600	5,900	*1,720	965	812	2,040
22	732	a1,950	6,250	4,300	17,700	8,000	8,750	6,170	1,990	892	f460	1,710
23	707	a2,900	*6,000	5,000	18,300	7,000	7,960	7,040	2,160	670	a280	1,360
24	a540	6,000	5,200	4,280	13,500	6,510	8,160	6,650	1,850	668	f500	1,100
25	a500	6,450	4,040	3,950	12,000	6,280	7,320	5,790	1,720	602	672	960
26	a540	6,030	3,740	*4,600	11,300	*7,320	6,750	*5,190	1,850	586	766	854
27	a700	6,560	3,700	5,400	9,840	8,350	6,450	4,740	1,130	712	634	833
28	1,110	5,260	3,900	19,500	8,590	6,930	9,040	4,460	878	717	f460	785
29	1,520	4,490	4,220	13,400	-------	6,500	9,770	3,620	827	762	f440	*745
30	2,860	4,220	3,760	9,490	-------	6,390	8,660	4,240	858	642	651	1,070
31	3,400	-------	3,470	8,200	-------	5,910	-------	4,840	-------	670	1,130	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Delaware River above Lackawaxen River near Barryville, Wallenpaupack Creek at Wilsonville, Lackawaxen River at Hawley, and Mongaup River near Mongaup.
f Fragmentary gage-height record; discharge computed from partly estimated gage heights.
Note.--Stage-discharge relation affected by ice Dec. 19, 23, 24, 27, 28, Jan. 7-23, 26-28, 31, Feb. 3-15, Mar. 6, 7, 13, 18, 19, 22, 23.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,630	976	8,320	10,500	2,400	10,800	6,120	5,700	3,480	1,730	752	5,520
2	1,280	1,330	7,410	9,020	2,450	21,000	5,690	5,620	3,330	1,690	1,330	4,750
3	731	8,040	6,400	10,200	2,400	14,000	6,020	5,020	2,900	1,280	1,420	4,550
4	712	16,200	5,690	9,190	*2,200	11,800	6,760	4,370	2,440	1,210	1,290	3,430
5	1,540	12,500	4,560	8,160	1,500	11,000	*6,740	4,360	2,170	1,420	1,390	3,150
6	1,460	9,360	4,300	7,800	1,120	10,700	6,590	3,650	2,430	1,500	1,150	3,450
7	902	7,040	4,200	7,850	1,700	10,800	7,230	2,980	2,660	1,250	784	3,310
8	694	*5,940	3,760	5,810	*4,400	8,000	7,100	2,760	*3,070	1,150	839	2,950
9	638	5,380	4,140	4,890	4,000	6,970	5,980	3,320	3,980	1,340	802	3,020
10	d514	5,010	3,980	5,130	3,600	8,050	5,110	3,320	3,070	1,080	801	2,660
11	618	4,220	3,770	4,900	3,800	11,100	5,190	2,940	2,600	959	*939	1,740
12	652	3,990	3,180	4,200	4,200	15,000	5,420	2,740	2,350	967	1,420	2,380
13	738	3,420	3,480	3,900	4,000	14,400	6,250	2,460	3,310	828	5,750	3,390
14	1,240	3,100	4,120	3,900	*3,800	*12,500	6,330	2,120	4,450	802	10,800	*2,950
15	1,570	3,180	7,300	3,200	3,700	10,800	8,580	1,700	3,800	896	9,380	2,980
16	1,020	3,630	11,000	2,600	3,370	*10,300	9,400	2,140	2,990	1,310	5,760	2,750
17	863	3,640	7,150	3,100	3,080	11,800	7,800	2,140	2,560	984	4,370	2,180
18	706	3,150	6,340	3,400	2,640	9,580	7,080	*1,910	2,110	1,380	13,800	1,510
19	1,040	3,580	13,300	*3,100	2,500	7,670	6,680	1,990	1,720	1,750	*163,000	2,390
20	*1,020	3,190	12,600	2,800	2,440	6,800	6,080	1,970	1,820	1,310	50,000	3,660
21	996	8,310	9,000	2,450	3,390	7,100	5,810	1,490	2,090	1,010	23,400	1,980
22	865	22,700	7,400	1,900	3,440	10,000	5,600	1,080	*2,040	*1,390	17,400	1,880
23	1,080	15,900	6,200	1,450	4,950	18,600	5,400	1,530	1,930	1,250	17,000	1,820
24	873	12,000	5,550	1,850	11,800	15,000	4,990	2,200	2,010	848	12,600	1,940
25	765	9,580	5,150	2,350	9,120	11,500	6,350	2,180	1,600	1,070	*8,930	2,870
26	875	8,500	4,420	2,450	6,930	10,000	8,090	2,790	1,380	1,290	6,880	3,070
27	1,110	7,570	*3,960	2,400	5,920	9,010	8,380	2,380	1,320	1,040	5,450	2,830
28	860	6,180	4,110	2,450	*6,420	7,930	*7,690	1,760	1,350	1,030	4,660	*3,100
29	*1,050	7,720	4,560	1,850	-------	7,030	7,150	1,600	1,270	1,220	4,360	4,700
30	894	*10,200	11,900	1,100	-------	6,400	6,890	1,990	1,380	1,040	4,120	4,190
31	884	-------	14,200	1,650	-------	6,040	-------	3,260	-------	673	*4,750	-------

* Discharge measurement made on this day.
d Doubtful gage-height record; discharge computed from partly estimated gage heights.
Note.--Stage-discharge relation affected by ice Dec. 6, 7, 21-23, Jan. 11 to Feb. 15.

Delaware River at Port Jervis, N. Y.--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	38,480	1,840	836	1,241		
November	223,536	68,300	798	7,451		
December	363,120	65,600	3,200	11,710		
Calendar year 1950	2,372,196	68,300	798	6,499		
January 1951	267,410	25,100	3,530	8,626		
February	338,470	28,300	6,280	12,090		
March	371,890	77,400	6,200	12,000		
April	385,370	48,100	5,420	12,850		
May	99,290	5,280	1,770	3,203		
June	78,350	3,900	1,480	2,612		
July	92,720	6,720	2,090	2,991		
August	64,300	4,490	1,140	2,074		
September	48,309	2,980	870	1,610		
Water year 1950-51	2,371,245	77,400	798	6,497		
October 1951	86,369	4,570	939	2,786		
November	295,690	32,000	3,300	9,856		
December	235,020	14,900	4,000	7,581		
Calendar year 1951	2,363,188	77,400	870	6,474		
January	315,300	29,400	4,460	10,170		
February	217,340	21,600	3,300	7,494		
March	342,470	39,200	2,400	11,050		
April	449,360	37,500	6,530	14,980		
May	278,780	27,600	3,790	8,993		
June	138,240	13,400	1,140	4,608		
July	167,898	50,400	753	5,416		
August	52,323	2,350	586	1,688		
September	70,912	7,750	762	2,364		
Water year 1951-52	2,649,702	50,400	586	7,240		
October 1952	35,319	1,900	430	1,139		
November	106,914	18,900	496	3,564		
December	337,090	75,400	2,970	10,870		
Calendar year 1952	2,511,946	75,400	430	6,863		
January 1953	280,670	52,100	2,620	9,054		
February	242,490	26,000	4,980	8,660		
March	351,540	26,400	4,830	11,340		
April	347,580	19,900	6,710	11,590		
May	292,890	18,700	3,970	9,448		
June	77,020	4,800	1,040	2,567		
July	40,945	3,150	758	1,321		
August	21,310	1,180	372	687		
September	30,734	2,760	430	1,024		
Water year 1952-53	2,164,502	75,400	372	5,930		
October 1953	31,107	3,400	418	1,003		
November	88,250	6,560	1,520	2,942		
December	243,200	22,500	2,900	7,845		
Calendar year 1953	2,047,736	52,100	372	5,610		
January 1954	124,820	19,500	1,350	4,026		
February	247,440	31,500	1,550	8,837		
March	242,620	16,800	4,500	7,826		
April	230,650	26,800	4,110	7,688		
May	269,840	23,800	3,620	8,705		
June	72,943	4,660	827	2,431		
July	23,420	965	452	755		
August	18,247	1,130	280	589		
September	34,996	2,410	594	1,167		
Water year 1953-54	1,627,533	31,500	280	4,459		
October 1954	29,820	1,630	514	962		
November	215,536	22,700	976	7,185		
December	201,450	14,200	3,180	6,498		
Calendar year 1954	1,711,782	31,500	280	4,690		
January 1955	135,550	10,500	1,100	4,375		
February	111,270	11,800	1,120	3,974		
March	331,480	21,000	6,040	10,690		
April	198,500	9,400	4,990	6,617		
May	85,470	5,700	1,080	2,757		
June	73,610	4,450	1,270	2,454		
July	36,697	1,750	673	1,184		
August	385,327	163,000	752	12,430		
September	91,100	5,520	1,510	3,037		
Water year 1954-55	1,895,810	163,000	514	5,194		

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 February 1940 (gage heights only), February 1940 to September 1955.

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.--15 years, 6552 cfs (unadjusted).

Extremes.--1940-55: Maximum discharge, 250,000 cfs Aug. 19, 1955 (gage height, 35.15 ft), from rating curve extended above 90,000 cfs on basis of flood-routing study; minimum daily, 412 cfs Aug. 23, 1954.

Maximum stage known, 35.5 ft Oct. 10, 1903 (present datum), 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).--

1950-51: Nov. 26 (2:30 p.m.) 92,500 cfs (21.04 ft); Dec. 5 (9 a.m.) 78,900 cfs (19.46 ft); Dec. 8 (11 p.m.) 37,400 cfs (13.79 ft); Feb. 2 (11:30 p.m.) 39,100 cfs (14.06 ft); Mar. 31 (3:30 p.m.) 107,200 cfs (22.66 ft).

1951-52: Nov. 8 (5:30 p.m.) 43,700 cfs (14.79 ft); Jan. 27 (10 p.m.) 37,700 cfs (13.83 ft); Mar. 12 (12:30 p.m.) 46,600 cfs (15.22 ft); Apr. 6 (11 a.m. and 3 p.m.) 49,200 cfs (15.60 ft); Apr. 16 (1 a.m.) 44,500 cfs (14.90 ft); July 10 (2:30 p.m. 84,000 (20.07 ft).

1952-53: Dec. 12 (3 a.m.) 108,000 cfs (22.62 ft); Jan. 25 (11 a.m.) 65,700 cfs (17.82 ft).

1953-54: Feb. 18 (10 a.m.) 34,600 cfs (13.20 ft).

1954-55: Aug. 19 (9 to 10 a.m.) 250,000 cfs (35.15 ft).

Remarks.--Flow regulated by Lake Wallenpaupack and by Pepacton, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see p.388) and smaller reservoirs. Diversion from Pepacton and Neversink Reservoirs (see p.394). Diurnal fluctuation at medium and low flow caused by powerplants on tributary streams.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,390	1,090	11,000	b4,500	7,030	10,500	55,200	6,500	4,760	4,340	4,590	1,790
2	1,330	1,070	9,050	b4,200	21,400	9,580	32,200	5,930	4,000	5,340	3,670	1,090
3	1,820	1,140	7,780	b4,600	20,200	8,750	27,100	5,390	3,170	4,740	3,150	1,170
4	2,030	1,200	17,400	b5,500	11,400	7,660	24,300	5,230	3,260	3,560	3,020	1,530
5	2,020	1,990	69,000	19,000	*10,300	7,570	20,000	4,590	4,150	3,930	2,470	2,290
6	1,690	5,800	38,400	13,800	10,600	8,560	16,600	3,830	3,580	3,880	2,130	1,940
7	1,550	5,050	23,400	11,100	11,900	8,620	14,000	4,050	3,200	3,460	1,880	2,150
8	1,360	3,860	26,900	9,850	26,600	10,400	12,000	4,270	2,910	3,110	2,330	1,770
9	982	3,400	31,300	8,790	16,600	12,000	11,600	4,030	2,700	2,760	2,250	1,750
10	2,190	3,060	21,800	7,720	11,500	9,750	11,500	4,030	2,070	2,550	2,620	*1,530
11	1,730	2,830	17,500	7,090	9,410	7,510	12,800	4,190	2,150	2,890	2,370	2,110
12	2,110	2,620	15,500	7,060	9,210	7,630	12,900	4,120	2,720	2,850	1,530	1,980
13	2,250	*2,450	13,000	6,410	10,900	9,510	20,900	3,670	2,740	3,310	1,790	2,030
14	2,050	2,430	11,200	5,280	15,000	10,300	21,800	3,930	4,030	3,670	2,150	1,920
15	1,790	2,250	9,750	5,810	14,800	13,900	16,800	3,980	5,080	3,060	2,210	2,210
16	1,580	2,210	8,820	9,880	11,500	12,700	14,700	3,670	4,440	2,600	2,470	2,930
17	1,960	2,150	7,540	10,200	10,300	10,600	13,200	3,580	3,440	2,830	3,580	3,310
18	1,640	2,030	6,820	7,900	9,680	8,950	11,800	3,460	3,090	2,760	5,610	2,780
19	1,430	1,880	b6,400	7,720	10,600	8,620	10,800	2,910	3,440	2,700	3,810	2,430
20	1,340	1,840	b5,800	8,790	12,300	12,300	9,750	2,430	2,980	4,170	2,870	1,980
21	1,200	2,550	b5,300	10,300	16,100	15,400	8,590	2,600	2,980	6,530	3,090	1,440
22	1,160	5,080	b5,000	10,700	29,600	13,100	7,240	3,110	2,850	4,870	3,310	1,340
23	1,280	4,690	5,080	9,710	23,000	11,100	7,990	3,280	3,090	*4,100	2,550	1,280
24	1,980	3,860	4,790	14,500	15,500	10,600	10,800	*3,910	2,850	4,120	2,230	1,130
25	2,030	6,100	5,050	28,100	12,100	14,600	9,410	3,880	3,530	3,530	1,840	1,530
26	1,750	72,900	4,520	18,700	11,500	14,100	8,660	3,130	3,580	2,740	1,840	1,730
27	1,660	49,800	b4,000	13,800	11,600	11,800	8,470	2,430	3,600	2,700	*1,480	1,550
28	1,460	24,400	b3,600	11,200	11,600	10,700	7,390	2,870	3,650	3,170	2,150	1,800
29	1,250	16,800	b4,000	9,820	-------	11,400	6,640	4,400	3,350	3,260	2,070	1,090
30	1,090	13,500	b4,800	9,280	-------	36,600	6,730	6,020	3,650	7,420	1,790	1,190
31	1,160	-------	b4,500	8,430	-------	89,300	-------	5,470	-------	5,500	1,660	-------

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Backwater from grass June 9 to Sept. 30.

Delaware River at Montague--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,070	4,070	5,930	10,000	10,900	4,240	13,100	11,500	14,900	1,920	2,410	1,820
2	1,640	7,090	5,690	15,000	10,900	3,200	21,300	10,100	21,100	1,300	2,290	8,720
3	1,660	12,000	5,530	16,600	14,300	3,110	24,900	8,880	16,700	1,220	1,390	9,710
4	1,800	25,800	5,530	13,200	14,200	4,000	22,400	7,720	12,600	1,140	1,300	7,450
5	1,860	17,600	7,530	11,300	24,200	4,050	23,500	6,850	11,900	1,030	2,250	5,390
6	1,670	12,300	18,000	10,100	22,500	3,930	45,100	7,150	11,400	982	2,330	4,290
7	1,060	14,300	14,800	9,110	17,000	3,810	33,900	6,330	9,380	956	2,410	3,420
8	2,840	38,600	11,900	8,180	14,300	3,810	23,800	5,990	7,870	1,010	2,090	*2,910
9	4,690	31,000	10,900	7,180	11,900	2,950	18,500	5,500	7,240	2,220	2,370	2,720
10	4,120	19,400	*13,400	6,970	10,500	3,000	15,300	5,100	6,940	51,200	1,710	2,550
11	3,760	14,600	12,300	7,270	9,710	7,420	12,900	4,720	6,270	37,000	2,090	2,470
12	4,240	11,900	10,300	5,930	9,380	39,300	11,000	8,040	5,500	16,500	2,910	2,640
13	5,420	10,200	9,410	5,180	8,120	29,600	9,880	16,600	4,950	11,000	2,780	2,570
14	5,050	9,180	8,060	5,660	6,730	18,500	16,500	16,100	4,360	8,180	2,290	1,730
15	*4,000	9,880	7,240	6,300	5,740	13,200	28,600	13,200	3,720	6,670	2,210	1,670
16	3,910	10,400	5,800	9,540	5,770	10,500	35,200	12,100	*3,490	5,820	2,620	2,700
17	3,330	10,500	5,000	9,820	5,340	9,250	*22,500	10,400	4,240	4,740	2,130	2,720
18	3,200	9,410	4,800	9,880	5,150	8,590	16,500	9,080	3,790	4,170	2,350	2,780
19	3,220	8,270	4,600	14,000	5,880	8,850	13,700	*8,930	3,310	3,430	2,780	3,130
20	3,150	7,630	4,600	11,700	5,610	*8,620	11,900	9,050	3,040	2,550	2,410	2,850
21	2,350	6,910	9,000	11,700	5,740	9,180	10,400	10,400	2,660	*2,740	2,150	2,170
22	2,170	5,990	18,000	9,540	5,260	18,400	9,410	10,100	2,350	4,100	2,680	2,000
23	2,890	5,530	15,000	9,610	4,560	20,400	8,620	8,720	2,290	4,340	2,600	2,550
24	2,870	6,610	12,000	11,900	4,150	25,600	8,020	7,450	2,980	3,580	1,690	1,880
25	4,120	8,590	10,000	9,880	4,120	22,600	7,900	12,900	2,830	2,760	1,310	1,670
26	5,390	8,310	9,000	8,500	4,620	20,200	11,000	32,000	2,530	2,720	1,550	1,770
27	5,260	7,510	8,000	27,500	4,490	20,700	11,100	22,600	2,010	1,900	1,750	1,600
28	4,590	6,970	7,000	32,800	4,540	20,000	11,800	16,200	2,010	1,710	1,940	1,250
29	4,100	6,410	7,000	22,200	4,540	16,600	15,400	13,300	1,570	2,550	1,860	1,170
30	4,120	5,770	7,000	15,700	-------	13,900	14,100	11,100	1,440	2,430	1,750	1,940
31	3,670	-------	8,000	11,900	-------	12,800	-------	9,710	-------	2,450	846	-------

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Dec. 16 to Jan. 2. Backwater from aquatic vegetation Oct. 1-15, July 30 to Sept. 30.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,770	1,230	4,890	4,830	10,500	8,620	14,700	15,400	5,770	3,660	1,020	1,320
2	1,790	786	4,380	4,430	10,700	7,250	13,700	21,400	4,940	3,140	705	1,420
3	2,120	705	4,260	4,500	9,580	7,400	13,300	19,800	4,220	2,720	625	1,470
4	2,160	1,620	4,020	4,290	9,000	8,820	11,100	17,500	3,790	1,770	560	1,450
5	1,340	964	4,360	4,120	8,150	13,300	9,580	15,700	3,900	1,250	728	1,250
6	1,340	1,440	9,500	4,120	7,100	10,900	9,580	19,500	3,950	1,230	872	740
7	1,960	1,640	11,000	3,680	8,580	8,760	13,500	16,900	4,170	1,440	665	846
8	1,900	1,620	9,000	3,460	12,900	7,130	24,000	15,900	*4,780	1,560	515	*1,810
9	1,470	786	7,520	3,680	11,500	6,740	19,200	15,800	4,500	1,560	507	3,220
10	1,770	833	*7,220	3,640	9,400	6,590	16,100	13,700	3,790	1,420	*675	1,900
11	1,250	1,540	38,800	4,890	8,150	6,300	16,700	12,300	3,090	1,230	808	1,340
12	992	1,060	86,500	6,440	8,060	5,910	13,700	10,800	2,880	1,140	705	1,050
13	898	1,570	41,400	6,250	7,340	6,680	14,100	10,000	2,900	*1,120	1,050	1,150
14	1,350	1,530	24,000	5,330	6,890	7,940	16,800	10,000	3,030	1,790	937	1,420
15	1,230	1,320	17,600	4,990	6,590	9,000	14,500	9,790	3,220	1,770	1,090	1,790
16	1,370	833	13,900	4,910	7,400	*22,600	13,000	9,370	3,220	1,420	774	1,570
17	1,120	898	11,800	5,200	7,850	22,600	14,100	9,340	2,820	1,860	1,340	1,250
18	978	*1,610	10,400	7,340	6,770	16,500	12,300	12,400	2,660	1,810	1,220	1,060
19	1,060	1,640	9,090	10,700	6,280	14,900	12,100	11,800	2,480	1,280	924	924
20	992	1,660	7,640	11,200	5,970	16,600	12,300	9,960	2,370	1,150	675	820
21	1,520	6,630	6,590	9,820	11,200	13,700	11,900	8,720	1,810	1,960	587	797
22	1,490	18,700	7,400	9,180	29,900	11,200	11,100	8,000	1,770	1,960	551	1,280
23	937	27,000	8,180	8,340	20,300	10,700	10,000	7,460	2,330	1,960	515	978
24	964	18,900	7,760	15,200	15,000	13,100	9,210	7,850	2,240	1,570	*507	762
25	924	12,600	7,190	58,300	13,000	27,800	8,510	6,770	2,160	1,120	964	705
26	695	9,540	6,740	38,300	11,700	28,100	8,500	6,770	2,220	924	911	716
27	675	7,940	6,470	22,600	10,800	30,600	20,700	6,830	2,410	859	833	762
28	1,190	6,800	5,520	18,200	10,000	26,500	23,300	6,190	1,370	1,210	1,120	605
29	1,850	6,220	4,850	17,200	-------	21,300	17,500	5,720	1,640	1,110	1,110	751
30	1,540	5,280	5,170	13,700	-------	17,500	14,500	5,090	2,550	1,220	515	705
31	1,470	-------	5,410	11,200	-------	15,800	-------	5,020	-------	1,320	515	-------

* Discharge measurement made on this day.

Note.--Backwater from aquatic vegetation Oct. 1 to Nov. 21, July 11 to Sept. 30.

Delaware River at Montague--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,210	3,810	4,290	3,010	7,500	9,150	6,220	8,300	5,090	978	655	2,590
2	776	2,930	3,880	2,630	6,300	a15,000	5,660	7,730	4,430	964	499	2,720
3	578	2,550	3,570	2,590	7,340	a19,000	5,440	7,670	4,120	911	740	2,830
4	524	2,180	3,370	3,140	6,890	18,200	4,940	12,400	4,100	978	786	2,000
5	499	1,920	3,290	3,260	6,190	14,800	4,680	16,000	4,050	1,010	728	1,320
6	1,400	2,220	3,440	3,570	5,250	11,500	4,650	12,200	3,240	1,010	881	1,080
7	1,500	2,800	17,200	3,300	4,360	9,820	4,960	10,100	2,950	1,010	605	950
8	1,290	1,810	*26,500	2,500	4,410	*9,440	5,940	9,790	3,180	1,080	515	1,110
9	1,250	1,660	17,200	2,000	4,340	8,900	5,380	13,600	2,990	833	605	1,110
10	1,350	2,670	15,000	1,600	4,170	7,790	5,070	14,100	2,820	833	898	1,050
11	1,010	2,610	17,600	1,700	4,000	7,580	4,600	25,600	2,720	808	751	1,080
12	846	2,460	13,200	2,500	3,800	6,800	*5,800	21,300	2,670	685	788	898
13	1,150	2,700	12,500	2,800	3,000	6,110	6,050	16,600	2,440	846	569	*808
14	1,270	2,630	12,900	3,000	2,400	6,110	5,410	13,600	*2,950	964	578	740
15	1,140	2,350	16,900	3,000	2,100	7,400	5,090	11,100	4,000	*1,060	736	1,080
16	859	*2,260	14,900	2,500	3,790	7,280	5,690	9,480	3,160	937	551	1,280
17	808	3,160	11,700	2,200	11,100	6,360	12,800	*8,400	2,950	695	786	1,440
18	685	2,800	9,650	2,000	32,400	5,880	28,700	7,280	2,740	542	542	1,680
19	*596	2,590	8,060	2,300	*23,200	5,300	19,200	6,710	2,460	615	551	1,490
20	625	2,370	6,950	2,500	16,600	6,050	14,800	5,940	1,830	992	792	1,810
21	937	2,370	6,980	3,000	12,600	9,300	11,900	6,680	1,630	992	964	2,590
22	808	2,160	7,100	3,500	18,100	9,240	10,000	7,430	2,180	1,020	761	2,240
23	762	2,730	7,040	5,500	19,800	7,940	8,900	7,970	2,260	797	*412	1,790
24	605	6,250	6,140	4,500	15,100	7,460	9,150	7,550	1,960	685	479	1,420
25	560	7,130	4,960	4,500	13,500	7,040	8,300	6,680	1,960	792	924	1,220
26	569	6,620	4,410	5,500	12,600	8,340	7,610	6,000	1,960	*645	937	1,140
27	751	7,100	4,600	6,000	11,200	9,370	7,310	5,410	1,440	833	833	1,110
28	1,300	5,830	4,580	17,000	9,820	7,880	9,370	5,090	978	820	587	1,080
29	2,040	5,040	4,890	15,000	-------	7,370	11,000	4,460	898	820	533	950
30	3,790	4,580	4,410	10,000	-------	7,130	9,860	4,630	924	808	721	*1,120
31	4,140	-------	4,120	9,000	-------	6,620	-------	5,330	-------	820	1,450	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for station at Belvidere.
Note.--Stage-discharge relation affected by ice Jan. 7-31, Feb. 1, 12-15. Backwater from aquatic vegetation Oct. 1-28.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,990	1,190	9,680	11,800	2,500	11,000	6,710	6,620	3,880	1,780	844	6,000
2	1,650	1,400	8,340	10,100	2,400	21,700	6,290	*6,290	3,480	1,870	*1,420	5,400
3	950	6,880	7,250	*11,300	2,300	15,400	6,500	5,850	3,280	1,520	1,650	4,900
4	808	16,800	6,530	10,300	2,400	12,500	7,070	5,100	2,610	1,290	1,420	3,900
5	1,770	14,200	5,330	9,180	2,500	11,600	7,220	4,850	2,470	1,370	1,540	3,500
6	1,710	10,900	5,070	8,580	2,000	11,700	7,010	4,320	2,330	1,740	1,420	3,650
7	1,190	8,480	5,120	8,650	*2,100	12,000	7,610	3,530	*2,850	1,420	952	3,600
8	872	7,130	4,830	6,600	4,000	9,000	7,730	3,220	3,150	1,230	1,070	3,250
9	820	6,280	4,630	5,600	4,500	7,700	6,470	3,510	4,020	1,450	1,000	3,250
10	728	5,880	4,480	5,740	4,500	8,680	5,680	3,820	3,240	1,220	1,000	3,000
11	740	5,070	4,380	5,500	4,000	11,500	5,500	3,420	2,850	1,110	*1,080	2,250
12	808	4,700	3,700	4,800	4,500	15,700	5,680	3,150	2,550	1,130	1,650	2,200
13	859	4,280	3,750	4,400	3,700	15,400	6,500	2,940	3,350	*976	5,390	3,600
14	1,470	3,790	4,500	4,300	*4,200	13,500	6,710	2,470	4,500	928	12,200	3,400
15	1,680	3,700	7,400	4,100	4,500	11,400	8,570	2,150	4,050	952	11,100	3,150
16	1,470	4,100	10,500	3,100	3,700	10,600	10,700	2,170	3,260	1,500	6,770	3,000
17	1,150	4,190	8,000	3,000	4,100	12,700	9,030	2,610	2,690	1,110	5,040	2,700
18	978	3,570	7,250	3,800	3,200	10,300	8,000	*2,170	2,410	1,170	9,880	1,750
19	1,170	4,000	14,100	3,500	3,000	8,270	7,430	2,210	1,900	2,040	*187,000	*2,330
20	1,230	3,860	14,300	3,300	2,600	7,280	6,770	2,290	1,840	1,520	*63,000	4,080
21	1,220	8,430	10,600	3,100	*3,500	7,490	6,410	1,890	2,150	1,160	28,000	2,420
22	1,080	*25,100	8,930	2,800	4,200	10,700	6,180	1,290	2,250	1,490	19,500	2,100
23	1,120	18,400	7,400	1,900	5,000	20,800	5,980	1,450	2,090	1,500	18,500	2,010
24	1,190	13,800	6,680	2,000	12,000	17,000	5,520	2,350	2,170	976	14,500	2,580
25	924	11,100	6,190	2,500	10,100	13,000	6,890	2,380	1,930	1,110	10,500	3,330
26	911	9,790	5,460	2,800	7,550	11,500	9,180	3,020	1,540	1,520	8,150	3,390
27	1,270	8,820	4,910	2,700	6,350	10,300	9,700	2,750	1,420	1,130	6,550	3,200
28	978	7,220	4,890	2,600	*6,650	9,000	8,720	2,050	1,370	1,220	5,450	3,260
29	1,080	8,370	5,200	2,500	-------	7,910	8,210	1,930	1,490	1,390	5,000	5,450
30	1,200	11,600	11,400	1,600	-------	7,100	7,910	2,050	1,290	1,090	4,450	4,920
31	1,060	-------	15,600	1,600	-------	*6,710	-------	3,110	-------	972	5,250	-------

* Discharge measurement made on this day.
Note.--No gage-height record Aug. 21 to Sept. 18; discharge estimated on basis of records for station at Port Jervis, N. Y. and Neversink River at Godeffroy, N. Y. Stage-discharge relation affected by ice Jan. 8, 9, Jan. 11 to Feb. 24.

Delaware River at Montague--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	50,262	2,250	982	1,621		
November	250,030	72,900	1,070	8,334		
December	409,000	69,000	3,600	13,190		
Calendar year 1950	2,749,622	72,900	982	7,533		
January 1951	309,740	28,100	4,200	9,992		
February	392,230	29,600	7,030	14,010		
March	434,110	89,300	7,510	14,000		
April	451,870	55,200	6,640	15,060		
May	124,890	6,500	2,430	4,029		
June	101,040	5,080	2,070	3,368		
July	116,450	7,420	2,550	3,756		
August	80,510	5,610	1,480	2,597		
September	54,770	3,310	1,090	1,826		
Water year 1950-51	2,774,902	89,300	982	7,602		
October 1951	103,220	5,420	1,060	3,330		
November	352,730	38,600	4,070	11,760		
December	281,320	18,000	4,600	9,075		
Calendar year 1951	2,802,880	89,300	1,060	7,679		
January 1952	364,150	32,800	5,180	11,750		
February	260,150	24,200	4,120	8,971		
March	390,310	39,300	2,950	12,590		
April	528,230	45,100	7,900	17,610		
May	337,820	32,000	4,720	10,900		
June	185,370	21,100	1,440	6,179		
July	194,318	51,200	956	6,268		
August	65,246	2,910	846	2,105		
September	92,240	9,710	1,170	3,075		
Water year 1951-52	3,155,104	51,200	846	8,621		
October 1952	42,115	2,160	675	1,359		
November	144,895	27,000	705	4,830		
December	398,360	86,500	4,020	12,850		
Calendar year 1952	3,003,204	86,500	675	8,205		
January 1953	330,040	58,300	3,460	10,650		
February	290,610	29,900	5,970	10,380		
March	430,840	30,600	5,910	13,900		
April	419,580	24,000	8,500	13,990		
May	351,780	21,400	5,020	11,350		
June	92,980	5,770	1,370	3,099		
July	49,533	3,660	859	1,598		
August	24,523	1,340	507	791		
September	35,861	3,220	605	1,195		
Water year 1952-53	2,611,117	86,500	507	7,154		
October 1953	35,628	4,140	499	1,149		
November	100,290	7,130	1,660	3,343		
December	281,330	26,500	3,290	9,075		
Calendar year 1953	2,442,995	58,300	499	6,693		
January 1954	135,600	17,000	1,600	4,374		
February	271,860	32,400	2,100	9,709		
March	276,160	19,000	5,300	8,908		
April	254,480	28,700	4,600	8,483		
May	305,130	25,600	4,460	9,843		
June	81,080	5,090	898	2,703		
July	26,783	1,080	542	864		
August	22,157	1,450	412	715		
September	43,726	2,830	740	1,458		
Water year 1953-54	1,834,224	32,400	412	5,025		
October 1954	36,076	1,990	728	1,164		
November	243,010	25,100	1,190	8,100		
December	226,400	15,600	3,700	7,303		
Calendar year 1954	1,922,456	32,400	412	5,267		
January 1955	153,750	11,800	1,600	4,960		
February	122,050	12,000	2,000	4,359		
March	359,440	21,700	6,710	11,590		
April	217,880	10,700	5,500	7,263		
May	96,960	6,620	1,290	3,128		
June	78,410	4,500	1,290	2,614		
July	40,884	2,040	928	1,319		
August	441,276	187,000	844	14,230		
September	101,570	6,000	1,750	3,390		
Water year 1954-55	2,117,706	187,000	728	5,802		

Flat Brook near Flatbrookville

Location.--Lat 41°06'24", long 74°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 1955.

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.--32 years, 111 cfs.

Extremes.--1923-55: Maximum discharge, 9,560 cfs Aug. 19, 1955 (gage height, 12.58 ft, from high-water mark in gage house), from rating curve extended above 1,400 cfs on basis of slope-area measurement of peak flow; minimum, 4 cfs Sept. 6, 7, 1923 (gage height, 1.35 ft).

Revisions.--The figures of maximum discharge for some years have been revised, as shown in the following table. They supersede figures published in Bulletin 33 and Special Report 9.

Water year	Date	Discharge (cfs)	Gage height (feet)
1924	Apr. 7, 1924	3,040	† 7.1
1925	Feb. 11, 1925	3,040	7.10
1936	Oct. 31, 1935	2,640	6.66
1938	Sept. 22, 1938	2,980	7.03
1939	Dec. 6, 1938	2,400	6.37

† From high-water mark.

Peak discharge (base, 650 cfs).--

1950-51: Nov. 26 (7:30 a.m.) 2,370 cfs (6.11 ft); Dec. 5 (8 a.m.) 1,040 cfs (4.44 ft); Dec. 8 (8 p.m.) 730 cfs (3.84 ft); Feb. 8 (2 a.m.) 730 cfs (3.84 ft); Mar. 20 (6 p.m.) 750 cfs (3.88 ft); Mar. 31 (9:30 a.m.) 1,760 cfs (5.45 ft).

1951-52: Nov. 8 (3 to 4 a.m.) 1,040 cfs (4.37 ft); Dec. 21 (7 p.m.) 1,050 cfs (4.38 ft); Jan. 23 (1 p.m.) 673 cfs (3.75 ft); Jan. 27 (3 p.m.) 695 cfs (3.79 ft); Feb. 4 (11 p.m.) 667 cfs (3.74 ft); Mar. 12 (1 a.m.) 1,730 cfs (5.32 ft); Apr. 6 (3 a.m.) 3,170 cfs (7.24 ft); Apr. 15 (12 p.m.) 996 cfs (4.30 ft); Apr. 29 (12:30 a.m.) 834 cfs (4.03 ft); May 26 (1:30 a.m.) 834 cfs (4.03 ft); June 2 (1:30 a.m.) 2,180 cfs (5.83 ft); July 10 (4 p.m.) 1,010 cfs (4.32 ft); Sept. 2 (3 a.m.) 1,770 cfs (5.37 ft).

1952-53: Nov. 22 (10 p.m.) 1,210 cfs (4.64 ft); Dec. 11 (10 p.m.) 2,130 cfs (5.78 ft); Jan. 25 (2 a.m.) 2,700 cfs (6.72 ft); Mar. 16 (7 p.m.) 653 cfs (3.76 ft); Apr. 8 (4 a.m.) 1,060 cfs (4.42 ft).

1953-54: Dec. 7 (about 12 noon) 2,360 cfs (6.32 ft); Dec. 14 (10 p.m.) 670 cfs (3.82 ft).

1954-55: Nov. 22 (3 a.m.) 722 cfs (3.92 ft); Mar. 23 (7 a.m.) 710 cfs (3.90 ft); Aug. 13 (11 p.m.) 982 cfs (4.37 ft); Aug. 19 (11 a.m.) 9,560 cfs (12.58 ft).

Revisions.--Special Report 9: Drainage area. Revised figures of discharge, in cubic feet per second, for some periods in the water years 1929, 1932, 1936, 1939-40, superseding those published in Special Reports 5 and 9, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1929		1932-Con.		1936 Con.		1939 Con.	
Jan. 2	60	Sept. 20	6.7	Sept. 11	12	Sept. 3	12
3	50	21	10	12	12	4	12
4	50	22	7.3	13	12	5	13
5	50	23	7.4	14	12	6	13
1932		24	11	15	12	7	12
Sept. 1	14	25	6.2	17	15	8	12
4	14	26	7.4	18	14	9	12
5	14	27	11	19	14	10	13
7	14	28	11	20	13	11	12
8	14	29	12	21	13	12	12
9	11	30	11	22	13	13	12
10	9.5	1936		23	12	14	11
11	8.4	Sept. 2	15	24	12	15	10
12	10	3	15	25	12	16	10
13	11	4	15	26	12	17	9.8
14	9.8	5	14	27	12	18	8.6
15	9.8	6	13	28	12	19	8.6
16	10	7	13	29	12	20	8.6
17	12	8	13	1939		21	9.2
18	8.6	9	12	Sept. 1	13	22	9.8
19	12	10	12	2	13	23	9.2

Flat Brook near Flatbrookville--Continued

Revised figures of daily discharge, in cubic feet per second, 1929, 1932 1936, 1939-Continued

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1939-Con.		1939-Con.		1939-Con.		1939-Con.	
Sept.24	8.6	Sept.30	11	Oct. 12	9.8	Oct. 18	9.2
25	8.6	Oct. 7	13	13	9.8	19	9.8
26	8.0	8	12	14	9.8	20	9.8
27	8.6	9	12	15	9.2	21	10
28	9.8	10	11	16	9.8		
29	11	11	10	17	9.2		

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
January 1929.....	-	186	42	73.5	1.13	1.30
Water year 1928-29.....	-	620	13	89.0	1.37	18.57
Calendar year 1929.....	-	620	13	92.6	1.42	19.30
September 1932.....	-	19.6	6.2	11.2	.172	.19
Water year 1931-32.....	-	737	6.2	64.8	.995	13.55
Calendar year 1932.....	-	1,050	6.2	97.0	1.49	20.28
September 1936.....	397.5	16.5	12	13.2	.203	.23
Water year 1935-36.....	52,648.0	2,220	12	144	2.21	30.05
Calendar year 1936.....	44,316.2	2,220	12	121	1.86	25.29
September 1939.....	321.4	14.8	8.0	10.7	.164	.18
Water year 1938-39.....	43,909.4	1,840	8.0	120	1.84	25.07
October 1939.....	516.2	35	9.2	16.7	.257	.29
Calendar year 1939.....	32,423.6	701	8.0	88.8	1.36	18.50
Water year 1939-40.....	38,086.3	1,360	9.2	104	1.60	21.75

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19.9	16.5	124	77	168	174	695	98	105	77	73	21
2	19.0	17.3	108	71	371	167	459	90	90	69	60	22
3	16.5	17.3	108	71	239	160	532	86	82	55	48	24
4	14.2	21	292	166	199	180	522	84	84	45	45	24
5	13.5	43	866	231	170	210	376	80	100	119	39	21
6	13.5	44	439	151	154	220	307	77	82	88	35	21
7	14.2	32	293	135	313	210	265	73	69	60	34	25
8	14.2	28	557	115	550	190	235	71	58	48	36	24
9	15.0	26	519	94	288	170	210	67	55	40	36	21
10	23	24	341	96	222	160	196	64	53	36	35	19.0
11	23	23	293	98	188	155	203	65	51	48	44	19.0
12	22	22	256	100	210	150	184	77	46	39	38	19.9
13	23	21	203	92	280	150	400	71	46	36	123	18.1
14	19.9	19.9	170	85	387	180	288	62	108	39	96	19.0
15	17.3	19.9	154	219	265	210	227	56	147	32	55	28
16	*17.3	19.9	154	262	207	190	196	53	92	30	55	31
17	15.7	21	132	170	226	170	192	50	71	30	69	23
18	15.7	19.9	112	154	341	160	170	46	60	32	60	*19.0
19	15.0	19.0	112	164	265	*154	157	46	51	70	44	17.3
20	14.2	19.0	95	210	279	545	144	46	46	90	40	16.5
21	13.5	32	88	214	350	457	132	53	44	60	38	15.7
22	13.5	38	90	160	522	326	127	55	42	45	36	15.0
23	20	31	92	136	366	265	181	58	85	60	32	14.2
24	32	28	92	354	274	248	164	*170	102	50	29	14.2
25	25	200	88	444	243	222	138	138	65	35	28	15.0
26	23	1,460	68	265	231	188	132	90	50	29	27	15.0
27	19.9	473	b64	203	210	170	118	82	44	25	27	15.0
28	19.0	256	b66	177	192	160	110	105	44	287	*25	15.0
29	18.1	184	b74	167	-------	203	112	179	46	419	24	14.2
30	22	151	b80	151	-------	603	105	203	60	155	22	15.7
31	18.1	-------	82	b100	-------	1,310	-------	141	-------	95	21	-------

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Mar. 3-18, July 17-23; discharge estimated on basis of observer's weekly readings, precipitation records, recorded range in stage, and records for Paulins Kill at Blairstown and Beaver Brook near Belvidere.

Flat Brook near Flatbrookville--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19.7	96	a94	194	220	88	134	345	687	51	28	368
2	18.9	156	a92	282	240	76	270	282	1,370	44	27	1,000
3	16.3	280	a90	345	224	78	224	240	528	41	27	360
4	15.5	291	88	265	425	74	176	212	350	40	26	227
5	14.8	169	213	228	515	102	918	190	322	38	26	150
6	14.0	123	309	197	327	95	2,240	176	240	35	32	115
7	15.2	389	212	169	270	84	714	165	197	34	36	90
8	58	787	172	143	232	80	447	150	162	33	32	78
9	*38	341	150	146	212	80	341	137	153	242	30	70
10	27	228	132	140	186	82	287	129	153	714	87	63
11	28	179	*120	126	176	615	248	156	129	294	98	58
12	79	146	112	118	165	1,130	216	370	110	146	50	54
13	51	132	102	115	134	504	208	344	100	102	58	50
14	37	140	82	147	118	345	634	224	90	80	44	48
15	29	165	93	204	112	261	715	190	84	68	34	45
16	25	153	90	261	112	220	775	172	78	60	41	60
17	23	179	76	204	118	190	468	146	74	56	158	50
18	22	143	86	265	120	169	360	190	93	51	80	44
19	21	123	107	240	107	179	300	172	76	47	51	102
20	21	107	107	228	100	197	257	*172	68	44	41	105
21	19.7	95	570	232	100	265	220	220	61	43	37	66
22	18.9	90	692	181	95	322	194	172	68	48	50	53
23	18.9	88	345	552	93	350	179	143	76	43	38	53
24	19.7	105	252	374	90	355	165	129	78	37	32	53
25	69	107	208	248	90	291	262	396	66	34	29	45
26	56	a110	190	427	*80	240	579	673	58	32	26	43
27	40	a115	159	667	86	208	547	372	51	32	25	40
28	38	a105	123	536	86	183	667	257	63	44	23	37
29	41	a100	140	374	86	176	718	216	53	44	24	36
30	36	a96	137	257	-------	165	463	216	69	36	23	36
31	33	-------	150	224	-------	143	-------	137	-------	32	22	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, precipitation records, and records for stations on nearby streams.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	26	102	93	223	120	168	237	90	26	14	8.0
2	34	25	95	90	174	107	181	230	76	26	14	8.0
3	60	25	98	105	165	110	168	202	68	38	15	8.0
4	47	25	88	120	156	317	149	178	63	30	16	29
5	38	23	149	98	134	*329	159	191	60	25	16	16
6	35	23	510	86	134	216	143	205	54	25	16	52
7	32	26	279	82	161	185	444	*171	82	27	16	36
8	30	22	205	82	205	162	787	181	90	24	13	26
9	30	22	178	86	159	143	420	205	68	27	13	19
10	29	22	165	100	132	137	324	178	53	25	18	16
11	29	23	893	143	118	118	304	156	45	22	24	13
12	29	22	1,140	143	126	120	260	137	43	22	19	12
13	28	22	480	115	126	174	360	132	45	21	16	16
14	29	22	334	102	118	249	428	171	53	*20	15	17
15	30	22	264	100	126	191	300	152	45	19	15	13
16	28	32	227	110	185	528	355	140	41	18	13	13
17	27	35	198	120	156	356	375	143	38	17	13	12
18	28	*30	178	178	126	271	283	227	37	16	13	11
19	28	27	159	234	120	287	342	159	35	16	13	11
20	27	41	140	195	126	291	279	132	33	16	12	10
21	27	473	140	178	208	230	241	118	32	17	12	10
22	27	753	195	171	291	198	216	107	30	20	11	9.8
23	26	793	162	162	205	185	191	129	30	23	11	9.8
24	25	356	159	814	174	280	171	110	29	33	10	9.2
25	25	237	149	1,820	162	418	162	93	27	24	10	9.2
26	24	191	137	614	149	334	178	98	27	19	9.8	9.8
27	24	162	126	370	143	304	478	112	42	17	9.8	9.2
28	25	140	100	334	132	264	304	95	41	17	9.2	9.2
29	27	126	95	304	-------	227	234	84	33	17	9.2	8.6
30	27	112	98	237	-------	202	202	84	28	15	8.0	8.6
31	26	-------	98	219	-------	185	-------	100	-------			-------

* Discharge measurement made on this day.

Flat Brook near Flatbrookville--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.0	66	a50	72	64	136	93	107	66	22	10	90
2	8.0	51	a50	72	72	347	93	126	63	22	10	38
3	8.0	40	a45	70	74	278	86	140	60	21	13	26
4	8.0	35	a45	68	84	428	78	393	56	36	20	21
5	8.0	30	a70	65	80	279	78	304	53	41	16	18
6	9.2	28	a90	68	72	216	80	212	43	34	13	16
7	11	35	a1,500	63	66	185	80	178	48	27	13	16
8	11	40	*620	53	*58	171	76	198	44	33	12	15
9	10	41	320	50	60	156	70	216	41	27	15	16
10	10	44	405	45	58	149	65	230	40	23	19	15
11	10	44	320	b40	56	134	63	237	40	22	16	24
12	9.8	44	241	b45	47	123	74	188	36	22	13	32
13	9.8	45	304	b50	44	118	68	162	45	20	12	22
14	9.8	48	452	b45	45	169	63	143	48	20	12	18
15	9.8	47	490	b40	53	185	65	132	40	25	12	18
16	9.8	45	308	b40	84	143	76	126	38	21	13	45
17	9.8	44	234	b45	138	126	229	112	37	18	12	50
18	9.8	40	178	b40	162	115	268	102	36	17	10	35
19	12	37	159	b45	115	112	181	93	35	18	13	37
20	12	a35	146	b50	95	247	143	88	32	16	24	54
21	12	a35	140	b70	107	212	120	181	30	*16	20	41
22	*9.8	a30	134	b90	198	162	107	249	29	16	17	35
23	9.8	a50	129	b70	159	152	105	159	28	15	15	29
24	10	a100	110	b70	140	140	134	129	28	14	12	25
25	11	a70	98	b65	137	132	110	118	25	13	12	22
26	12	a80	95	b65	123	140	100	107	25	14	13	22
27	13	a70	88	a100	134	120	123	90	24	13	14	22
28	22	a65	84	140	118	107	168	86	24	12	12	21
29	128	a60	90	93	-------	105	149	84	23	12	11	19
30	270	a55	88	93	-------	100	120	88	23	12	11	18
31	100	-------	84	76	-------	98	-------	74	-------	11	112	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for nearby stations.
b Stage-discharge relation affected by ice.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	22	140	205	41	142	129	120	36	20	8.0	88
2	16	24	120	185	40	188	118	105	36	20	*8.0	78
3	16	142	107	171	37	140	107	95	34	17	6.8	70
4	16	140	88	149	b37	195	105	93	30	17	6.8	63
5	15	95	86	134	b43	188	100	86	35	16	6.8	58
6	16	76	74	137	47	188	95	78	34	15	8.0	60
7	15	60	65	140	b250	209	100	74	35	19	20	56
8	15	58	65	112	b200	156	93	74	34	16	29	50
9	15	48	68	105	121	149	86	74	35	15	18	45
10	16	43	76	98	68	149	82	68	36	16	12	44
11	16	41	74	88	84	149	70	65	35	17	12	43
12	16	37	68	80	100	140	80	61	72	17	15	50
13	15	35	65	80	b90	129	118	56	84	16	462	45
14	14	34	68	70	72	115	100	56	56	14	506	*41
15	13	33	134	74	68	107	110	51	44	13	369	38
16	14	30	126	72	68	129	102	48	35	12	191	40
17	16	29	95	65	76	149	88	47	29	12	122	37
18	16	29	179	60	93	123	84	44	26	12	* 468	36
19	15	29	316	60	84	115	80	44	24	12	6,310	35
20	16	41	198	51	78	112	95	43	33	11	1,510	34
21	17	315	134	b48	80	120	86	41	32	9.8	508	32
22	16	535	115	56	78	323	107	38	30	9.8	a260	29
23	16	253	107	54	130	608	105	38	27	9.8	a180	29
24	15	181	107	53	162	347	93	44	28	9.8	a160	75
25	15	165	95	b45	115	260	149	41	35	12	a140	114
26	13	137	78	b45	100	234	156	37	27	11	126	63
27	14	112	78	b40	95	212	152	35	26	9.8	112	48
28	14	105	*78	b35	95	181	134	32	25	9.8	110	61
29	18	201	95	b37	-------	162	137	32	22	9.8	95	66
30	37	188	338	b38	-------	146	137	38	22	9.8	86	56
31	27	-------	304	b41	-------	*134	-------	37	-------	8.6	98	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for stations at Paulins Kill at Blairstown and Bushkill Creek at Shoemakers, Pa.
b Stage-discharge relation affected by ice.

Flat Brook near Flatbrookville--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	570.2	32	13.5	18.4	0.283	0.33
November	3,326.7	1,460	16.5	111	1.71	1.90
December	6,212	866	64	200	3.07	3.55
Calendar year 1950	40,876.1	1,460	13.5	112	1.72	23.34
January 1951	5,132	444	71	166	2.55	2.93
February	7,710	550	154	275	4.22	4.40
March	8,057	1,310	150	260	3.99	4.60
April	7,277	695	105	243	3.73	4.16
May	2,636	203	46	85.0	1.31	1.51
June	2,078	147	42	69.3	1.06	1.19
July	2,343	419	25	75.6	1.16	1.34
August	1,374	123	21	44.3	.680	.78
September	581.8	31	14.2	19.4	.298	.33
Water year 1950-51	47,297.7	1,460	13.5	130	2.00	27.02
October 1951	963.6	79	14.0	31.1	.478	.55
November	5,338	787	88	178	2.73	3.05
December	5,493	692	76	177	2.72	3.14
Calendar year 1951	48,983.4	1,310	14.0	134	2.06	27.98
January 1952	8,089	667	115	261	4.01	4.62
February	4,919	515	80	170	2.61	2.81
March	7,347	1,130	74	237	3.64	4.20
April	13,926	2,240	134	464	7.13	7.96
May	7,153	673	129	231	3.55	4.09
June	5,707	1,370	51	190	2.92	3.26
July	2,645	714	32	85.3	1.31	1.51
August	1,335	158	22	43.1	.662	.76
September	3,599	1,000	36	120	1.84	2.06
Water year 1951-52	66,514.6	2,240	14.0	182	2.80	38.01
October 1952	935	60	24	30.2	.464	.53
November	3,858	793	22	129	1.98	2.20
December	7,341	1,140	88	237	3.64	4.19
Calendar year 1952	66,854.0	2,240	22	183	2.81	38.19
January 1953	7,605	1,820	82	245	3.76	4.34
February	4,434	291	118	158	2.43	2.53
March	7,238	528	107	233	3.58	4.13
April	8,606	787	143	287	4.41	4.92
May	4,657	237	84	150	2.30	2.66
June	1,438	90	27	47.9	.736	.82
July	678	38	15	21.9	.336	.39
August	412.6	24	8.0	13.3	.204	.24
September	439.4	52	8.0	14.6	.224	.25
Water year 1952-53	47,642.0	1,820	8.0	131	2.01	27.20
October 1953	791.4	270	8.0	25.5	.392	.45
November	1,454	100	28	48.5	.745	.83
December	7,167	1,500	45	231	3.55	4.09
Calendar year 1953	44,920.4	1,820	8.0	124	1.90	25.65
January 1954	1,998	140	40	64.5	.991	1.14
February	2,643	198	44	94.4	1.45	1.51
March	5,280	428	93	170	2.61	3.02
April	3,265	268	63	109	1.67	1.87
May	4,852	393	74	157	2.41	2.77
June	1,160	66	23	38.7	.594	.66
July	633	41	11	20.4	.313	.36
August	527	112	10	17.0	.261	.30
September	860	90	15	28.7	.441	.49
Water year 1953-54	30,630.4	1,500	8.0	83.9	1.29	17.49
October 1954	510	37	13	16.5	.253	.29
November	3,238	535	22	108	1.66	1.85
December	3,741	338	65	121	1.86	2.14
Calendar year 1954	28,707	535	10	78.6	1.21	16.40
January 1955	2,628	205	35	84.8	1.30	1.50
February	2,552	250	37	91.1	1.40	1.46
March	5,699	608	107	184	2.83	3.26
April	3,198	156	70	107	1.64	1.83
May	1,795	120	32	57.9	.889	1.03
June	1,057	84	22	35.2	.541	.60
July	417.0	20	8.6	13.5	.207	.24
August	11,963.4	6,310	6.8	386	5.93	6.83
September	1,584	114	29	52.8	.811	.90
Water year 1954-55	38,382.4	6,310	6.8	105	1.61	21.93

Delaware River at Portland, Pa.

Location.--Lat 40°55'30", long 75°05'55", on highway bridge at Portland, Northampton County.

Records available.--Gage heights only, March 1936 to August 1955 (discontinued).

Gage.--Wire-weight gage. Datum of gage is 199.53 ft above mean sea level, datum of 1929.

Extremes.--1936-55: Maximum gage height, 98.97 ft Aug. 19, 1955, from floodmark; minimum observed, 69.08 ft Aug. 5, 1940.

Maximum gage height observed.--
1950-51: Mar. 31 (11 p.m.) 86.20 ft.
1951-52: July 10 (11 p.m.) 83.50 ft.
1952-53: Dec. 12 (10-11 a.m.) 87.00 ft.
1953-54: Feb. 18 (3 p.m.) 78.55 ft.
1954-55: Aug. 19 (about 6 p.m.) 98.87 ft, from floodmark.

Remarks.--Gage read hourly above 74.6 ft and twice daily below. 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, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70.73	69.82	73.68	71.29	71.94	73.53	83.90	72.22	71.84	71.10	71.41	70.10
2	69.88	69.77	73.15	71.15	72.96	73.27	78.45	71.95	71.41	71.32	71.06	70.04
3	69.77	69.76	72.70	71.15	77.35	73.05	77.15	71.90	71.06	71.57	70.79	69.84
4	70.06	69.78	72.54	71.35	73.83	72.76	a76.80	71.63	70.93	71.54	70.56	69.84
5	70.13	70.05	80.95	72.39	72.93	72.41	75.80	71.55	71.21	71.10	70.40	69.98
6	70.11	70.30	80.45	74.77	73.05	72.87	75.08	71.30	71.25	71.27	70.35	70.23
7	70.01	71.63	76.78	73.53	73.08	72.89	74.47	71.09	70.93	71.28	70.24	70.13
8	69.88	71.12	76.33	72.98	75.84	73.10	73.85	71.19	70.78	70.90	70.18	70.19
9	69.80	70.80	78.38	72.75	75.29	73.53	73.75	71.02	70.63	70.81	70.20	70.15
10	69.68	70.60	76.64	72.40	73.45	73.44	73.40	71.00	70.49	70.66	70.20	70.11
11	70.20	70.60	75.40	72.05	73.19	72.80	73.60	71.03	70.40	70.57	70.44	69.99
12	70.00	70.50	74.93	72.27	72.98	72.34	73.97	71.07	70.44	70.54	70.30	70.20
13	70.22	70.40	74.27	72.35	73.13	72.74	74.55	71.14	70.54	70.65	70.60	70.15
14	70.22	70.32	73.80	72.22	74.52	73.10	76.20	70.98	70.72	70.88	70.42	70.17
15	70.19	70.34	73.41	71.61	75.07	73.11	75.00	71.06	71.39	70.79	70.33	70.51
16	70.07	70.30	73.16	72.51	74.00	74.08	74.31	70.95	71.64	70.56	70.38	70.39
17	69.98	70.32	72.68	73.19	73.84	73.68	74.16	70.87	71.21	70.47	70.47	70.69
18	70.06	70.30	72.33	72.82	73.50	73.08	73.75	70.80	70.84	70.49	70.85	70.67
19	69.94	70.21	72.22	72.64	73.41	72.72	73.47	70.96	70.74	70.36	71.35	70.40
20	69.88	70.16	71.89	72.76	73.49	73.56	73.24	70.92	70.72	70.51	70.80	70.31
21	69.85	70.28	71.77	76.80	73.96	74.98	73.00	70.50	70.54	71.20	70.53	70.17
22	69.80	70.41	71.45	73.68	76.30	74.41	72.54	70.54	70.51	71.74	70.53	70.00
23	69.82	7,.52	71.63	73.08	76.88	73.93	72.39	70.66	70.72	71.21	70.54	69.97
24	69.89	71.40	71.47	73.34	75.25	73.42	73.26	71.08	71.14	71.04	70.33	69.35
25	70.15	71.03	71.46	77.11	74.20	73.46	73.23	71.41	70.80	70.93	70.27	69.83
26	70.19	77.68	71.35	76.06	73.60	74.37	72.81	71.36	71.03	70.69	70.13	69.98
27	70.09	82.10	71.22	74.61	73.64	73.69	72.76	71.04	70.83	70.33	70.10	70.12
28	70.03	77.25	71.03	73.73	73.61	73.41	72.66	70.52	70.92	70.60	70.11	70.10
29	69.94	75.16	71.49	73.24	-------	73.33	72.14	70.73	70.84	71.42	70.06	70.13
30	69.84	74.20	71.21	73.10	-------	75.31	72.05	71.82	70.84	71.14	70.09	69.81
31	69.74	-------	71.21	72.24	-------	82.88	-------	71.95	-------	72.20	70.00	-------

a Reading at 1 p.m.

Delaware River at Portland, Pa.--Continued

Daily gage height at 8 a.m., in feet, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	69.92	70.90	71.80	72.61	73.35	71.61	73.86	74.27	73.40	70.17	70.34	70.24
2	69.81	71.74	71.81	73.40	73.40	71.04	74.34	73.71	76.39	70.26	70.34	72.75
3	70.10	72.84	71.86	75.13	73.85	70.79	77.10	73.45	75.60	70.06	70.23	73.69
4	70.15	76.23	71.78	74.32	74.25	70.64	76.20	73.10	74.43	70.03	69.99	73.56
5	70.15	75.64	71.86	74.00	75.86	71.08	75.75	72.00	74.17	70.00	69.90	73.62
6	70.10	74.30	74.28	73.62	76.60	71.05	79.67	72.55	73.87	69.95	70.32	71.84
7	70.10	73.45	74.87	73.28	75.30	70.92	79.20	72.55	73.44	69.90	70.45	71.47
8	70.15	78.32	73.99	73.03	74.48	70.86	77.00	72.15	72.78	69.86	70.43	70.10
9	71.08	78.72	73.51	72.62	74.00	70.86	75.70	72.05	72.52	70.05	70.25	70.85
10	71.54	76.17	73.57	72.48	73.46	70.71	74.82	71.88	72.48	74.36	70.38	70.75
11	70.78	74.93	73.87	72.45	73.19	71.09	74.30	71.77	72.30	81.13	70.40	70.67
12	70.85	74.09	73.52	72.38	73.20	76.91	73.72	72.15	72.08	75.97	70.40	70.60
13	71.14	73.52	73.08	71.80	72.85	78.55	73.32	73.88	71.78	74.02	70.38	70.59
14	71.50	73.21	72.82	71.80	72.18	76.11	74.07	75.03	71.60	73.12	70.10	70.81
15	71.38	73.17	72.60	72.20	71.70	74.66	76.42	74.30	71.31	72.46	70.20	70.23
16	70.85	73.23	71.89	72.50	71.66	73.70	79.75	73.98	71.16	72.10	70.10	70.09
17	70.66	73.51	71.41	73.37	71.54	73.18	76.86	73.65	71.06	71.82	71.05	70.53
18	70.57	73.27	71.60	73.11	71.87	73.07	75.46	73.12	71.10	71.17	70.41	70.55
19	70.48	72.88	71.42	73.42	71.66	72.88	74.67	73.00	70.95	70.98	70.49	70.71
20	70.43	72.60	71.21	73.29	71.93	73.09	74.09	73.05	70.75	70.72	70.49	71.00
21	70.42	72.54	72.08	73.78	71.94	73.09	73.68	73.30	70.71	70.61	70.34	70.65
22	70.28	72.30	73.39	73.48	71.93	73.72	73.38	73.50	70.64	70.72	70.32	70.45
23	70.24	71.97	74.52	73.70	71.45	75.63	73.10	73.23	70.55	70.97	70.46	70.33
24	70.35	71.92	74.08	74.03	71.39	76.20	72.87	72.90	70.65	70.95	70.37	70.47
25	70.66	72.44	73.43	73.53	71.56	76.33	72.82	72.55	70.65	70.62	70.08	70.23
26	71.12	72.80	73.02	73.03	71.32	75.52	73.51	77.85	70.54	70.36	70.03	70.23
27	71.70	72.60	72.79	74.28	71.54	75.25	74.07	77.15	70.41	70.44	70.07	70.17
28	71.85	72.40	72.43	78.52	71.40	75.45	74.10	75.40	70.30	70.21	70.22	70.12
29	71.20	72.18	72.14	76.84	71.56	75.00	75.18	74.45	70.30	70.17	70.25	69.97
30	70.00	71.95	72.16	74.87	-------	74.27	74.92	74.00	70.11	70.41	70.24	69.92
31	71.02	-------	72.25	73.80	-------	73.80	-------	73.55	-------	70.34	70.16	-------

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70.28	70.11	71.87	71.69	73.40	72.90	74.40	74.13	71.56	70.25	69.91	69.22
2	70.30	69.97	71.71	71.46	73.56	72.57	74.10	75.15	71.82	70.59	69.32	69.80
3	70.35	69.73	71.58	71.46	73.32	72.38	74.02	75.35	71.37	70.46	69.63	69.86
4	70.37	69.70	71.47	71.56	72.95	72.80	73.64	74.81	71.08	70.29	69.54	70.69
5	70.34	70.21	71.33	71.39	72.89	74.00	73.08	74.46	70.83	70.03	69.46	69.90
6	70.03	69.85	73.37	71.29	72.62	73.98	72.85	74.68	70.69	69.95	69.60	70.13
7	70.04	70.10	74.13	71.14	70.44	73.25	73.43	74.89	71.00	69.84	69.75	69.90
8	70.24	70.19	73.65	71.09	73.31	72.90	76.15	74.52	71.24	69.95	69.50	69.72
9	70.24	70.16	73.08	71.13	73.87	72.28	75.82	74.55	71.39	69.72	69.41	70.13
10	70.10	69.63	72.77	71.02	73.36	72.48	74.90	74.15	71.01	69.89	69.58	70.49
11	70.25	69.67	74.68	71.43	72.96	72.30	74.82	73.74	70.72	69.86	68.56	70.09
12	70.15	70.13	86.80	71.61	72.36	72.00	74.32	73.57	70.52	69.85	69.68	69.87
13	69.84	69.83	81.54	72.37	72.55	72.09	74.11	73.25	70.41	69.75	69.50	69.79
14	69.83	70.20	77.52	72.08	72.35	72.52	74.75	73.17	70.55	69.77	69.80	69.82
15	69.95	70.18	75.68	71.75	72.37	72.70	74.70	73.18	70.60	69.85	69.84	69.97
16	69.97	70.07	74.86	71.70	72.37	73.77	74.20	73.18	70.63	70.00	69.92	70.07
17	70.04	69.75	74.23	71.73	72.79	76.44	74.31	73.00	70.50	69.89	69.80	69.98
18	79.98	69.80	73.78	72.16	72.75	75.07	74.22	73.22	70.31	70.10	69.78	69.82
19	69.75	70.13	73.40	72.79	72.50	74.50	73.88	73.89	70.25	70.00	69.71	69.72
20	68.80	70.17	73.04	73.93	72.14	74.47	73.82	73.36	70.23	69.90	69.69	69.60
21	69.78	71.92	72.39	73.46	72.17	74.50	73.91	73.03	70.24	69.85	69.50	69.60
22	70.10	75.30	72.53	73.35	a77.20	74.11	73.70	72.71	70.07	70.13	69.40	69.57
23	70.13	73.34	72.90	73.04	76.20	73.30	73.43	72.63	70.00	70.00	69.20	69.91
24	70.15	76.75	72.86	73.02	74.70	73.41	73.18	72.33	69.90	70.22	69.30	69.74
25	69.84	74.60	72.57	80.52	74.40	76.05	73.00	72.26	70.14	70.05	69.28	69.55
26	69.75	73.84	72.52	80.42	73.80	76.61	72.58	72.18	70.12	69.90	69.67	69.47
27	69.70	73.17	72.31	77.30	73.65	77.48	73.64	72.20	70.20	69.78	69.65	64.48
28	69.69	72.73	72.07	75.61	73.30	76.85	76.20	72.18	70.27	69.70	69.47	69.57
29	70.00	72.39	71.54	75.37	-------	75.98	75.30	71.88	69.92	69.86	69.73	69.55
30	70.19	72.16	71.49	74.89	-------	75.04	74.50	71.80	70.02	69.72	69.79	69.56
31	70.25	-------	71.54	74.00	-------	74.64	-------	71.66	-------	69.90	69.38	-------

a Reading at 4 p.m.

Delaware River at Portland, Pa.--Continued

Daily gage height at 8 a.m., in feet, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	69.37	71.06	71.00	-	71.95	72.60	72.03	72.67	71.54	69.65	69.48	70.40
2	69.90	70.72	-	-	71.90	73.50	71.80	72.38	71.48	69.73	69.38	70.55
3	69.60	70.62	-	-	71.97	75.33	71.68	72.35	71.10	69.70	69.35	70.33
4	69.40	70.35	-	-	72.21	75.13	71.55	73.02	71.00	69.70	69.40	70.35
5	69.37	70.21	-	-	71.95	74.65	71.36	74.45	70.72	69.80	69.50	70.05
6	69.29	70.20	-	-	71.65	73.85	71.44	74.02	70.88	69.79	68.43	69.83
7	70.00	70.24	-	-	71.35	73.74	71.39	73.40	70.61	69.79	69.48	69.72
8	69.96	70.82	-	-	71.15	72.92	71.63	73.02	70.52	69.78	69.50	69.65
9	69.90	70.42	-	-	71.00	73.00	71.82	73.47	70.50	69.85	69.33	69.70
10	69.86	70.05	-	-	70.93	72.78	71.43	73.77	70.42	69.70	69.44	69.76
11	69.83	70.30	-	-	70.98	72.40	71.30	75.40	70.35	69.62	69.58	69.76
12	69.63	70.24	-	-	71.00	72.47	71.31	75.83	70.50	69.65	69.45	69.79
13	69.64	70.31	-	-	70.70	72.42	71.92	74.77	70.30	69.55	69.40	69.66
14	69.85	70.39	-	a70.75	70.60	71.98	71.64	74.18	70.37	69.60	69.42	69.60
15	69.79	70.35	-	b70.75	70.38	72.20	71.45	73.70	70.55	69.75	69.35	69.52
16	69.79	70.34	-	70.70	70.46	72.50	71.42	73.05	70.85	69.80	69.57	69.70
17	69.78	70.30	-	70.47	71.24	72.28	71.25	72.71	70.45	69.78	69.35	70.00
18	69.50	70.45	-	70.48	76.76	72.03	76.80	72.62	70.32	69.50	69.45	70.00
19	69.58	70.37	-	70.28	76.35	71.78	75.44	72.31	70.25	69.45	69.37	70.02
20	69.95	70.36	-	70.85	74.60	72.00	74.30	72.10	70.20	69.41	69.35	70.00
21	69.50	70.31	-	70.66	73.75	72.53	73.67	72.03	70.07	69.75	69.45	70.11
22	69.70	70.42	-	70.67	73.80	73.00	73.22	72.54	69.98	69.70	69.57	70.25
23	69.57	70.30	-	70.66	75.65	72.72	72.82	72.32	70.05	69.71	69.60	70.22
24	69.57	70.75	-	71.73	74.51	72.45	72.89	72.35	70.20	69.50	69.25	70.06
25	68.73	72.20	-	71.23	73.85	72.22	72.95	72.37	70.10	69.57	69.18	69.88
26	68.40	72.15	-	71.28	73.67	72.45	72.27	72.10	70.05	69.65	69.55	69.80
27	68.70	71.95	-	71.53	73.55	72.71	72.37	71.85	70.07	69.40	69.50	69.75
28	69.40	71.75	-	71.74	73.03	72.62	72.54	71.55	69.90	69.50	69.50	69.75
29	70.03	71.50	-	74.63	-------	72.23	73.48	71.48	69.76	69.50	69.36	69.70
30	70.60	71.29	-	73.15	-------	72.22	73.00	71.20	69.72	69.45	69.25	69.65
31	70.81	-------	-	72.30	-------	72.25	-------	71.55	-------	69.43	69.40	-------

a Reading at 10 a.m.
b Reading at 9 a.m.
Note.--No gage-height record from Dec. 2 to Jan. 13.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	69.70	69.65	73.21	74.07	70.10	72.42	72.25	72.41	70.27	69.94	69.64	-
2	70.10	69.82	72.75	73.33	70.63	74.02	72.20	72.02	70.96	70.06	69.49	-
3	70.00	70.45	72.50	73.21	70.72	74.90	72.02	72.11	70.90	70.06	69.88	-
4	69.65	74.00	72.20	73.44	70.62	73.80	72.15	71.86	70.73	69.95	69.93	-
5	69.55	74.35	71.85	73.00	70.81	73.95	72.51	71.60	70.45	69.88	69.88	-
6	70.10	73.34	71.45	72.75	70.51	73.25	72.33	71.54	70.37	69.90	69.90	-
7	70.00	72.70	71.27	72.79	70.48	73.67	72.43	71.20	70.34	70.05	69.85	-
8	69.76	72.05	71.10	72.67	70.64	73.45	72.60	70.98	70.39	69.95	69.65	-
9	69.60	71.90	71.09	71.67	70.60	72.80	72.30	70.95	70.53	69.85	69.62	-
10	69.58	71.61	71.19	71.63	71.10	72.65	71.85	71.12	70.76	69.94	69.60	-
11	69.55	71.51	71.18	71.95	71.21	72.95	71.65	71.06	70.53	69.86	69.56	-
12	69.45	71.75	71.00	71.40	71.16	73.95	71.80	70.92	70.63	69.78	69.67	-
13	69.55	71.07	70.85	71.70	71.24	74.38	72.10	70.82	70.74	69.77	70.40	-
14	69.55	70.82	70.95	71.10	71.11	74.00	72.19	70.71	70.90	69.69	74.26	-
15	69.95	70.73	71.43	71.05	71.13	73.60	72.48	70.53	71.17	69.65	73.85	-
16	70.00	70.77	73.09	71.00	71.05	73.35	73.50	70.38	70.90	69.65	73.00	-
17	69.90	70.80	72.94	70.93	71.10	73.60	72.95	70.40	70.64	69.93	71.95	-
18	69.76	70.70	72.25	70.87	71.00	73.55	72.62	70.49	70.45	69.80	71.59	-
19	69.71	70.57	72.98	70.97	70.78	73.00	72.50	70.32	70.30	69.65	89.90	-
20	69.85	70.78	74.49	70.80	70.76	72.50	72.45	70.30	70.20	70.03	-	-
21	69.85	71.15	73.62	70.85	70.67	72.30	72.20	70.26	70.18	69.91	-	-
22	69.80	75.70	73.00	70.75	71.04	72.85	72.13	70.12	70.21	69.69	-	-
23	69.70	75.55	72.26	70.70	71.05	75.23	72.14	70.03	70.20	69.93	-	-
24	69.67	74.22	71.79	70.35	71.70	75.58	71.80	70.05	70.12	69.90	-	-
25	69.76	73.70	72.04	70.30	72.85	74.45	71.82	70.32	70.19	69.64	-	-
26	69.66	73.05	71.72	70.34	72.74	73.85	72.85	70.25	70.10	69.67	-	-
27	69.65	72.93	71.32	70.64	72.27	73.55	73.15	70.53	70.04	69.90	-	-
28	69.80	72.41	71.42	70.62	71.97	73.15	73.00	70.37	69.98	69.75	-	-
29	69.70	72.15	71.45	70.73	-------	72.95	72.75	70.21	69.95	69.78	-	-
30	69.75	73.30	72.29	70.70	-------	72.66	72.75	70.20	69.97	69.90	-	-
31	69.80	-------	74.74	70.65	-------	72.40	-------	70.25	-------	69.56	-	-------

Note.--No gage-height record from Aug. 20 to Sept. 30.

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 1955.

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 of former highway bridge 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.--34 years, 194 cfs.

Extremes.--1921-55: Maximum discharge, 8,750 cfs Aug. 19, 1955 (gage height, 11.12 ft, from high-water mark in gage house); minimum, about 2.8 cfs Nov. 1, 1922; minimum daily, 5 cfs Aug. 13, 14, 1930.

Peak discharge (base, 1,000 cfs).--
1950-51: Nov. 26 (7 a.m.) 2,680 cfs (6.45 ft); Dec. 5 (12 m.) 1,320 cfs (4.61 ft); Feb. 8 (4 a.m.) 1,360 cfs (4.69 ft); Feb. 22 (6 a.m.) 1,150 cfs (4.28 ft); Mar. 31 (12 m.) 1,710 cfs (5.33 ft).
1951-52: Nov. 8 (2:30 a.m.) 1,990 cfs (5.74 ft); Dec. 22 (4 a.m.) 1,040 cfs (4.05 ft); Jan. 23 (time and discharge unknown); Jan. 27 (7:30 a.m.) 1,280 cfs (4.55 ft); Feb. 5 (4 a.m.) 1,080 cfs (4.13 ft); Mar. 12 (4 a.m.) 1,780 cfs (5.45 ft); Apr. 6 (12:30 a.m.) 3,070 cfs (7.12 ft); Apr. 16 (4:30 a.m.) 1,700 cfs (5.31 ft); Apr. 28 (12 p.m.) 1,260 cfs (4.49 ft); May 26 (4:30 a.m.) 1,340 cfs (4.65 ft); June 2 (4:30 a.m.) 2,170 cfs (5.94 ft); July 10 (5:30 p.m.) 1,290 cfs (4.46 ft); Aug. 17 (3 p.m.) 1,570 cfs (5.10 ft); Sept. 2 (4 a.m.) 1,730 cfs (5.36 ft).
1952-53: Dec. 12 (2 a.m.) 1,690 cfs (5.30 ft); Jan. 25 (1 a.m.) 2,960 cfs (7.01 ft), Mar. 16 (3 p.m.) 1,090 cfs (4.15 ft); Apr. 8 (3 a.m.) 1,480 cfs (4.94 ft).
1953-54: Dec. 7 (9 p.m.) 1,400 cfs (4.79 ft); Dec. 15 (3 a.m.) 1,090 cfs (4.16 ft).
1954-55: Aug. 19 (12 m.) 8,750 cfs (11.12 ft).

Remarks.--Diurnal fluctuation caused by powerplant above station and flow regulated by Swartswood Lake.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35	34	309	148	272	361	1,160	176	171	136	150	52
2	35	31	265	140	490	339	833	166	152	122	130	62
3	31	38	270	139	421	326	910	154	144	101	107	64
4	32	43	407	280	337	340	924	146	172	92	98	59
5	30	103	1,200	415	295	372	690	136	298	109	85	57
6	31	94	841	296	269	426	561	128	216	96	76	65
7	33	71	614	270	613	431	476	121	168	82	73	74
8	34	61	778	242	1,070	408	420	115	141	72	78	72
9	37	55	783	208	662	366	377	109	129	65	73	63
10	42	52	602	196	477	312	359	105	124	73	99	59
11	40	50	532	190	371	278	377	108	121	79	135	56
12	43	47	473	181	346	272	358	118	107	68	101	58
13	45	44	398	176	465	262	525	115	107	69	213	52
14	42	41	342	168	634	317	459	103	200	64	165	55
15	38	40	310	369	578	391	375	95	253	56	118	126
16	36	41	307	492	371	330	341	91	194	52	138	101
17	32	42	277	357	395	290	333	87	149	56	283	74
18	33	42	243	317	606	264	301	88	128	51	209	63
19	35	39	221	328	499	244	272	81	113	85	141	58
20	34	39	192	376	499	514	251	79	101	92	116	55
21	32	72	178	366	668	507	227	83	93	71	118	52
22	30	76	167	308	1,040	417	212	88	94	62	102	53
23	40	64	170	261	770	370	341	127	210	104	88	53
24	58	58	168	470	565	347	318	223	230	*90	79	49
25	49	360	164	662	482	329	264	193	155	70	74	48
26	43	1,960	b140	455	451	292	243	141	122	61	69	50
27	39	1,040	b130	356	423	260	220	138	106	59	65	52
28	37	630	b140	326	391	248	197	166	100	292	61	70
29	36	446	b160	307	-------	330	200	245	107	573	58	59
30	36	366	171	282	-------	763	202	298	123	290	56	50
31	34	-------	158	b200	-------	1,570	-------	221	-------	181	52	-------

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

Paulins Kill at Blairstown--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	224	192	350	386	186	250	638	832	124	71	624
2	59	342	186	499	419	170	440	516	1,844	103	65	1,450
3	60	607	181	622	442	166	370	437	1,240	89	67	1,070
4	59	722	175	536	695	165	308	387	857	86	63	760
5	55	455	284	440	992	220	1,340	351	858	83	61	512
6	54	356	397	391	718	236	2,580	327	620	74	68	393
7	66	934	324	340	569	201	1,500	308	481	69	79	332
8	157	1,670	273	287	470	190	1,010	276	393	72	74	277
9	120	1,030	265	267	434	188	750	249	358	371	70	238
10	90	702	250	264	389	207	594	234	373	980	137	215
11	104	536	228	246	372	809	499	258	329	717	139	198
12	203	432	216	228	358	1,520	422	448	276	414	120	186
13	155	372	200	213	296	965	402	475	234	287	238	171
14	116	363	b175	252	248	698	982	351	211	219	161	159
15	103	398	b180	353	223	528	1,300	303	193	177	112	161
16	95	394	b170	388	219	427	1,540	277	177	151	281	174
17	89	423	b150	342	236	374	1,050	239	168	138	1,450	148
18	84	358	b160	a400	250	339	783	268	176	126	1,020	142
19	76	311	b180	a370	234	348	618	256	160	113	554	351
20	73	277	b180	a350	217	377	516	283	149	104	370	348
21	70	246	613	*351	212	426	436	348	135	96	302	244
22	67	229	924	293	209	398	385	285	153	*104	355	193
23	69	221	638	a1,000	198	494	362	234	169	89	265	191
24	80	263	503	a600	194	582	338	208	177	80	204	182
25	185	258	408	396	188	477	422	584	159	72	173	163
26	156	276	377	760	179	405	858	1,190	138	66	153	146
27	125	303	341	1,230	179	366	910	757	126	70	141	136
28	125	243	283	a1,000	176	330	1,140	512	113	96	132	123
29	129	217	277	a700	181	296	1,120	411	102	112	125	115
30	114	204	267	a500	-------	275	837	401	126	101	119	112
31	104	-------	286	a400	-------	255	-------	374	-------	82	114	-------

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

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	110	60	173	151	442	235	286	309	133	57	26	19
2	117	59	166	151	371	216	286	325	117	40	28	17
3	158	57	170	181	325	207	270	281	104	51	36	18
4	136	57	162	207	297	564	255	250	96	41	29	21
5	120	56	196	181	265	617	275	265	90	34	29	22
6	113	53	565	154	250	419	255	303	85	34	32	38
7	113	51	423	147	314	361	714	265	110	42	29	40
8	133	53	325	151	376	314	1,280	286	120	36	28	28
9	102	52	281	166	303	275	807	297	96	37	29	26
10	90	54	260	199	255	260	658	270	88	40	43	23
11	85	54	830	255	235	235	600	225	77	33	91	24
12	80	52	1,430	275	240	235	490	203	70	36	58	17
13	80	52	897	240	245	394	526	199	75	32	*44	27
14	80	48	634	216	235	546	664	221	82	30	41	32
15	77	50	490	*212	273	444	523	207	72	32	30	23
16	75	74	419	235	400	970	482	199	65	34	34	23
17	68	77	366	255	346	770	507	199	63	21	36	20
18	68	70	336	362	275	569	450	296	61	32	28	22
19	67	64	297	512	255	594	545	235	59	20	30	19
20	66	80	265	432	356	591	477	194	56	30	33	16
21	64	340	255	381	415	460	409	173	55	25	23	24
22	66	678	309	361	571	400	361	154	54	30	25	25
23	63	827	292	351	390	366	331	199	50	81	24	18
24	62	525	281	1,270	341	435	297	170	38	94	26	20
25	62	366	260	2,530	320	575	275	143	44	56	22	17
26	57	297	235	1,450	292	490	297	154	42	41	25	13
27	59	255	216	897	275	450	395	170	74	43	19	17
28	60	225	173	750	255	409	356	147	73	30	20	21
29	63	203	162	650	-------	366	292	126	64	34	25	21
30	64	185	158	499	-------	336	260	130	57	33	12	19
31	62	-------	154	428	-------	309	-------	143	-------	36	21	-------

* Discharge measurement made on this day.

Paulins Kill at Blairstown--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	57	80	143	130	245	181	181	122	32	13	153
2	19	49	76	140	133	592	170	185	110	33	21	86
3	14	97	68	136	133	522	166	194	103	34	21	55
4	22	108	51	136	154	703	151	515	95	30	24	37
5	21	102	53	130	154	501	143	532	87	38	24	33
6	26	99	68	117	140	409	151	376	81	38	24	29
7	26	102	936	113	130	361	170	309	76	34	22	26
8	25	96	892	107	120	336	162	320	72	39	18	34
9	21	80	484	104	120	*309	147	351	67	36	21	28
10	25	72	655	99	113	286	130	356	64	39	35	36
11	19	62	618	63	113	260	130	361	62	23	30	46
12	24	61	432	87	99	235	140	297	59	27	28	72
13	21	60	468	99	83	225	126	260	72	27	25	54
14	23	52	731	78	90	303	123	230	70	29	23	43
15	18	52	950	71	90	346	123	207	63	28	18	46
16	19	51	595	70	117	270	136	190	59	31	25	71
17	20	50	423	80	240	240	286	173	57	36	18	*118
18	20	52	325	84	314	221	351	166	53	15	20	90
19	23	48	270	105	235	203	265	154	49	23	18	92
20	23	51	245	98	203	395	221	151	45	26	23	117
21	20	44	235	131	207	405	199	225	47	24	37	104
22	22	45	225	173	309	314	181	297	38	23	28	108
23	25	52	230	120	270	281	181	216	41	21	25	99
24	22	50	203	133	230	260	225	181	41	23	23	78
25	16	50	177	123	230	255	194	166	46	14	20	66
26	27	83	162	123	230	275	181	158	38	22	24	62
27	25	80	154	199	260	250	207	140	30	18	27	66
28	37	77	151	280	230	216	270	133	30	19	18	62
29	110	85	158	189	-------	203	245	130	34	19	20	57
30	175	82	158	173	-------	199	203	185	34	22	22	50
31	94	-------	151	143	-------	185	-------	154	-------	14	98	-------

* Discharge measurement made on this day.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	49	45	245	395	69	275	235	181	53	26	17	207
2	48	46	221	371	68	376	221	162	50	26	9.1	181
3	42	126	203	366	71	*292	212	151	48	28	14	173
4	42	172	185	320	106	386	207	136	40	34	12	158
5	37	150	170	281	122	409	190	133	49	16	12	147
6	36	124	154	286	132	386	181	a125	48	25	9.1	162
7	35	105	120	286	546	409	199	a115	41	22	17	151
8	35	90	123	235	361	325	185	107	38	23	38	130
9	28	83	126	216	216	303	170	103	44	22	28	117
10	28	77	147	199	172	303	158	94	41	26	16	113
11	37	68	140	185	194	297	151	91	48	21	20	110
12	31	66	130	166	230	286	162	86	78	30	22	107
13	33	63	123	166	185	265	190	79	87	20	299	104
14	31	60	151	138	173	240	181	79	71	15	671	93
15	21	58	309	145	154	225	185	74	58	17	558	90
16	40	56	286	142	136	250	173	67	52	19	336	93
17	31	56	225	131	166	286	154	67	44	18	226	82
18	40	56	265	115	260	245	143	62	42	18	409	80
19	28	55	437	118	203	230	143	59	36	16	*5,950	81
20	30	83	336	108	185	221	173	58	57	*19	3,750	81
21	32	392	245	98	173	225	166	55	63	13	2,380	73
22	28	689	203	109	166	485	181	53	58	17	1,700	69
23	27	442	194	101	260	865	181	50	53	15	1,110	68
24	25	331	185	95	314	573	166	58	47	13	712	170
25	37	320	177	91	230	464	221	54	50	17	506	356
26	25	270	158	88	207	428	235	53	49	25	408	216
27	20	230	151	81	194	400	225	50	43	15	345	154
28	35	203	147	71	194	341	203	48	40	a10	292	173
29	36	297	190	77	-------	309	203	47	43	a10	249	173
30	57	309	543	70	-------	281	207	52	32	17	221	147
31	53	-------	554	68	-------	280	-------	50	-------	8.0	216	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for stations on nearby streams.

Paulins Kill at Blairstown--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	1,152	58	30	37.2	0.295	0.34
November	6,079	1,960	31	203	1.61	1.79
December	11,110	1,200	130	358	2.84	3.28
Calendar year 1950	75,793	1,960	30	208	1.65	22.36
January 1951	9,281	662	139	299	2.37	2.74
February	14,460	1,070	269	516	4.10	4.27
March	12,276	1,570	244	396	3.14	3.62
April	12,726	1,160	197	424	3.37	3.76
May	4,244	298	79	137	1.09	1.25
June	4,528	298	93	151	1.20	1.34
July	3,473	573	51	112	.889	1.03
August	3,410	283	52	110	.873	1.01
September	1,861	126	48	62.0	.492	.55
Water year 1950-51	84,600	1,960	30	232	1.84	24.98
October 1951	3,096	203	54	99.9	.793	.91
November	13,366	1,670	204	446	3.54	3.95
December	9,283	924	150	299	2.37	2.74
Calendar year 1951	92,004	1,670	48	252	2.00	27.17
January 1952	14,368	1,230	213	463	3.67	4.24
February	9,883	992	176	341	2.71	2.92
March	12,618	1,520	165	407	3.23	3.72
April	24,062	2,580	250	802	6.37	7.10
May	12,185	1,190	208	393	3.12	3.60
June	11,327	1,844	102	378	3.00	3.34
July	5,465	980	66	176	1.40	1.61
August	7,283	1,450	61	235	1.87	2.15
September	9,514	1,450	112	317	2.52	2.81
Water year 1951-52	132,450	2,580	54	362	2.87	39.09
October 1952	2,620	158	57	84.5	.671	.77
November	5,074	827	48	169	1.34	1.50
December	11,180	1,430	154	361	2.87	3.30
Calendar year 1952	125,579	2,580	48	343	2.72	37.06
January 1953	14,249	2,530	147	460	3.65	4.21
February	8,917	571	235	318	2.52	2.63
March	13,412	970	207	433	3.44	3.96
April	13,623	1,280	255	454	3.60	4.02
May	6,738	325	126	217	1.72	1.99
June	2,270	133	38	75.7	.601	.67
July	1,215	94	20	39.2	.331	.36
August	976	91	12	31.5	.250	.29
September	670	40	13	22.3	.177	.20
Water year 1952-53	80,944	2,530	12	222	1.76	23.90
October 1953	1,011	175	14	32.6	.259	.30
November	2,049	108	44	68.3	.542	.60
December	10,424	950	51	336	2.67	3.08
Calendar year 1953	75,554	2,530	12	207	1.64	22.31
January 1954	3,847	280	63	124	.984	1.14
February	4,877	314	83	174	1.38	1.44
March	9,805	703	185	316	2.51	2.89
April	5,558	351	123	185	1.47	1.64
May	7,493	532	130	242	1.92	2.21
June	1,845	122	30	61.5	.488	.54
July	837	39	14	27.0	.214	.25
August	793	98	13	25.6	.203	.23
September	2,018	153	26	67.3	.534	.60
Water year 1953-54	50,557	950	13	139	1.10	14.92
October 1954	1,077	57	20	34.7	.275	.32
November	5,122	689	45	171	1.36	1.51
December	6,843	554	120	221	1.75	2.02
Calendar year 1954	50,115	703	13	137	1.09	14.79
January 1955	5,318	395	68	172	1.37	1.57
February	5,487	546	68	196	1.56	1.62
March	10,640	865	221	343	2.72	3.14
April	5,601	235	143	187	1.48	1.65
May	2,599	181	47	83.8	.665	.77
June	1,503	87	32	50.1	.398	.44
July	601.0	34	8.0	19.4	.154	.18
August	20,552.2	5,950	9.1	663	5.26	6.07
September	4,059	356	68	135	1.07	1.20
Water year 1954-55	69,402.2	5,950	8.0	190	1.51	20.49

Delaware River at Delaware

Location.--Lat 40°53'55", long 75°04'40", on highway bridge at Delaware, Warren County.

Records available.--Gage heights only March 1936 to April 1954 (discontinued).

Gage.--Wire-weight gage. Datum of gage is 200.00 ft above mean sea level (Pennsylvania Railroad bench mark).

Extremes.--1936-54: Maximum gage height observed, 82.61 ft Mar. 19, 1936; minimum observed, 58.20 ft Sept. 27, 1943, Sept. 6, 1944.

Maximum gage height observed.--
1950-51: Mar. 31 (11 p.m.) 77.60 ft.
1951-52: July 10 (10 p.m.) 73.75 ft.
1952-53: Dec. 12 (11 a.m.) 77.92 ft.
1953-54: Feb. 18 (6 p.m.) 65.73 ft.

Remarks.--Gage read hourly above 64.5 ft and twice daily below. 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, 1950-54

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	59.12	58.90	62.00	-	61.55	62.90	74.87	61.70	61.40	69.90	61.30	60.07
2	58.96	58.88	61.55	-	62.35	62.70	68.32	61.55	61.10	61.18	60.90	60.15
3	58.90	58.80	61.15	60.92	66.90	62.45	66.70	61.45	60.87	61.22	60.65	59.95
4	59.08	58.90	61.90	60.12	63.24	62.28	66.24	61.30	60.45	61.05	60.60	59.90
5	59.22	59.00	70.75	61.85	62.35	61.95	65.20	61.35	60.95	60.85	60.50	59.95
6	59.14	59.26	70.00	63.20	62.45	62.35	64.44	61.00	61.00	61.00	60.35	60.23
7	59.00	60.25	65.25	62.90	62.58	62.38	63.82	60.85	60.79	60.86	60.25	60.26
8	58.92	59.92	64.70	61.36	65.30	62.50	63.22	60.95	60.68	60.78	60.25	60.25
9	59.00	59.62	67.25	61.20	64.80	62.90	62.86	60.90	60.55	60.62	60.30	60.20
10	58.84	59.61	65.13	61.90	62.05	62.87	63.00	60.82	60.56	60.45	60.30	60.00
11	59.28	59.50	63.70	61.65	62.80	62.25	62.97	60.85	60.38	60.55	60.50	59.45
12	59.02	59.40	63.20	61.75	62.92	61.85	63.30	60.91	60.42	60.45	60.36	60.20
13	59.28	59.40	62.60	61.75	62.55	61.95	63.90	60.85	60.50	60.50	60.58	60.20
14	59.28	59.35	62.14	61.55	63.50	62.54	65.60	60.78	60.66	60.62	60.43	60.15
15	59.15	59.32	62.20	61.35	64.40	63.12	64.35	60.80	61.00	60.68	60.35	60.50
16	59.05	59.25	61.55	62.10	63.32	63.40	63.60	60.80	61.35	60.52	60.42	60.49
17	59.00	59.33	61.18	62.65	62.88	63.00	63.45	60.68	60.95	60.45	60.52	60.65
18	59.10	59.32	60.90	62.30	62.95	62.50	63.13	60.67	60.65	60.45	60.78	60.62
19	58.85	59.22	60.80	62.12	62.72	62.20	62.85	60.62	60.65	60.35	61.10	60.36
20	59.00	59.14	60.45	62.25	63.10	63.00	62.65	60.50	60.62	60.50	60.72	60.30
21	58.83	59.28	60.75	62.45	63.75	64.25	62.41	60.42	60.45	60.95	60.54	60.15
22	58.80	59.42	-	62.70	65.80	63.60	62.10	60.50	60.50	61.38	60.50	60.00
23	58.87	60.18	-	62.45	66.50	63.25	61.95	60.60	60.70	61.05	60.55	60.00
24	59.00	59.52	-	63.30	64.54	62.80	62.65	60.80	60.97	60.90	60.35	59.90
25	59.12	60.06	-	66.50	63.48	62.85	62.67	60.95	60.70	60.78	60.28	59.95
26	59.13	65.75	-	65.41	63.00	63.60	62.28	60.77	60.85	60.63	60.20	59.95
27	59.05	72.05	-	63.80	63.10	63.10	62.20	60.58	60.70	60.35	60.20	60.10
28	59.00	65.95	-	63.10	63.05	62.80	62.10	60.54	60.80	60.52	60.10	60.20
29	58.95	63.50	-	62.70	-------	62.75	61.82	60.82	60.65	61.30	60.28	60.16
30	58.90	62.55	-	62.60	-------	64.60	61.70	61.60	60.70	60.95	60.28	59.45
31	58.75	-------	-	62.10	-------	73.60	-------	61.57	-------	61.75	60.17	-------

Delaware River at Delaware--Continued

Daily gage height at 8 a.m., in feet, 1950-54

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	59.90	60.82	61.41	62.06	62.75	61.04	63.10	63.55	63.05	60.17	60.30	59.90
2	59.90	60.84	61.45	62.80	62.85	60.87	63.68	63.10	65.55	60.22	60.30	62.24
3	60.14	62.30	61.40	64.35	63.25	60.65	66.38	62.75	64.81	60.06	60.25	62.90
4	60.18	65.44	61.38	63.65	64.18	60.75	65.50	62.50	63.80	60.04	59.45	62.75
5	60.18	64.90	61.50	63.22	65.02	60.87	64.55	62.00	63.45	60.00	59.90	61.92
6	60.20	63.55	63.20	63.00	65.95	60.85	69.70	62.05	63.10	59.97	59.95	61.40
7	60.12	62.85	64.10	62.55	64.66	60.80	69.15	61.90	62.83	59.93	60.41	61.10
8	60.23	67.80	63.30	62.35	63.85	60.75	66.45	61.65	62.15	59.90	60.31	60.84
9	60.85	68.63	62.93	61.98	63.38	60.73	65.03	61.60	62.00	60.13	60.25	60.70
10	60.92	65.63	62.92	62.05	62.85	60.65	64.10	61.40	62.00	63.45	60.30	60.63
11	60.72	64.10	63.15	61.98	62.55	60.68	63.60	61.35	61.84	70.87	60.30	60.56
12	60.75	63.42	62.80	61.65	62.62	65.79	63.05	61.68	61.55	64.94	60.36	60.50
13	60.82	62.85	62.45	61.42	62.35	68.36	62.70	63.20	61.30	63.15	60.45	60.50
14	61.30	62.60	62.25	61.42	61.65	65.50	63.50	64.15	61.15	62.34	60.40	60.46
15	60.95	62.60	62.28	60.80	61.30	63.97	65.88	63.35	61.00	61.82	60.24	60.30
16	60.75	62.65	61.40	61.95	61.22	63.05	69.87	63.15	60.90	61.50	60.29	60.30
17	60.68	62.94	61.10	62.85	61.40	62.50	66.41	62.73	60.80	61.35	61.05	60.45
18	60.53	62.70	61.20	62.55	61.42	62.55	64.82	62.43	60.84	60.90	60.70	60.50
19	60.50	62.36	61.15	63.25	61.52	62.34	63.95	62.34	60.73	60.75	60.55	60.60
20	60.40	62.27	60.95	63.50	61.40	62.52	63.95	62.35	60.60	60.60	60.50	60.82
21	60.40	62.06	61.80	62.95	61.43	62.50	62.95	62.64	60.60	60.50	60.35	60.55
22	60.30	61.72	64.04	62.85	61.40	63.00	62.76	62.80	60.60	60.58	60.30	60.40
23	60.22	61.58	64.15	63.00	61.15	65.00	62.50	62.55	60.47	60.75	60.46	60.35
24	60.30	61.57	63.30	62.80	61.10	65.30	62.21	62.25	60.53	60.70	60.37	60.45
25	60.60	61.95	62.82	62.85	61.04	65.55	62.18	62.65	60.53	60.50	60.13	60.25
26	60.90	62.28	62.40	63.05	61.06	64.67	62.47	67.20	60.45	60.35	60.05	60.15
27	61.20	62.18	62.26	63.50	60.96	64.46	63.40	66.40	60.40	60.35	60.10	60.18
28	61.35	61.90	61.95	68.46	60.96	64.60	63.57	64.45	60.26	60.20	60.22	60.15
29	61.02	61.75	61.70	66.43	61.05	64.20	64.52	63.62	60.22	60.20	60.20	60.00
30	60.85	61.52	61.75	64.15	-------	63.45	64.25	63.22	60.15	60.38	60.15	59.68
31	60.85	-------	61.80	63.25	-------	63.07	-------	62.82	-------	60.28	60.20	-------

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60.30	60.00	61.38	61.22	62.79	62.45	62.80	62.55	60.47	59.39	59.10	58.42
2	60.27	59.92	61.27	61.18	62.94	62.15	62.50	63.48	60.55	59.74	59.08	58.97
3	60.35	59.72	61.18	61.19	62.69	62.00	62.45	63.65	60.19	59.55	58.90	59.06
4	60.35	59.68	61.08	61.26	62.42	62.37	62.14	63.44	60.12	59.43	58.75	59.18
5	60.20	60.12	61.00	61.12	62.35	63.52	61.64	62.80	59.83	59.16	58.81	59.10
6	60.00	59.82	62.65	61.01	62.19	63.44	61.45	63.12	59.85	59.00	58.90	59.30
7	59.98	60.00	63.25	60.92	62.09	62.75	62.02	63.20	59.95	59.05	58.94	59.10
8	60.21	60.12	62.83	61.01	62.65	62.48	64.72	62.87	60.16	59.20	58.70	58.90
9	60.20	60.10	62.36	61.09	63.18	62.00	64.27	62.92	60.25	59.47	58.60	59.18
10	60.10	59.66	62.12	60.82	62.75	62.10	63.30	62.55	59.00	59.10	58.85	59.63
11	60.20	59.65	63.60	61.19	62.40	60.90	63.25	62.20	59.74	59.00	58.90	59.26
12	59.95	59.68	77.05	61.66	62.36	60.80	62.78	62.02	59.59	58.98	58.90	59.05
13	59.85	57.80	71.60	61.87	62.10	60.85	62.58	61.80	59.54	58.94	58.68	59.00
14	59.80	60.10	66.74	61.65	61.90	61.27	63.22	61.72	59.50	58.95	59.12	59.00
15	59.90	60.10	64.75	61.48	61.94	61.22	63.08	61.70	59.74	59.18	58.92	59.20
16	59.98	60.00	63.95	61.40	61.98	62.35	62.91	61.70	59.66	59.15	59.00	59.30
17	60.00	59.78	63.43	61.32	62.29	64.88	62.79	61.68	59.63	59.05	58.94	59.16
18	59.85	59.78	62.98	61.35	62.12	63.45	62.65	61.75	59.48	59.25	58.95	59.00
19	59.82	60.07	62.72	62.28	61.86	62.83	62.40	62.29	59.43	59.19	59.00	58.93
20	59.82	60.10	62.42	63.20	61.80	63.18	62.32	61.84	59.40	59.11	58.88	58.83
21	59.83	61.42	61.91	62.80	61.80	62.90	62.40	61.56	59.42	59.08	58.76	58.78
22	60.05	64.05	62.06	62.72	65.20	62.20	62.18	61.25	59.21	59.30	58.61	58.77
23	60.07	67.32	62.33	62.40	65.42	61.90	61.95	61.24	59.18	59.25	58.57	59.05
24	59.83	65.64	62.11	62.78	63.95	62.13	61.75	60.97	59.30	59.50	58.52	58.90
25	59.82	63.86	62.05	70.17	63.46	64.55	61.58	60.94	59.30	59.30	58.50	58.73
26	59.79	62.96	61.90	70.51	63.15	65.05	61.52	60.75	59.24	59.15	58.31	58.72
27	59.68	62.42	61.82	66.55	62.57	65.96	62.12	60.87	59.36	58.95	58.85	58.70
28	59.60	62.05	61.81	64.83	62.70	65.33	64.58	60.96	59.39	59.02	58.65	58.81
29	59.90	61.80	61.53	64.57	-------	64.30	63.60	60.60	59.16	59.10	58.90	58.62
30	60.16	61.62	61.11	64.06	-------	63.38	62.87	60.47	59.24	59.12	58.98	58.78
31	60.18	-------	61.24	63.30	-------	63.00	-------	60.45	-------	59.10	58.56	-------

Delaware River at Delaware--Continued

Daily gage height at 8 a.m., in feet, 1950-54

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	58.60	60.05	60.19	60.05	60.70	61.60	60.95					
2	59.08	59.86	60.06	59.75	60.60	61.40	60.66					
3	58.78	59.62	59.96	59.60	60.59	63.75	60.50					
4	58.60	59.52	59.88	59.65	60.25	63.60	60.37					
5	58.60	59.43	59.85	59.82	60.60	63.50	60.25					
6	58.51	59.24	59.85	59.81	60.38	62.90	60.31					
7	59.17	59.24	62.22	59.92	60.20	61.59	60.29					
8	59.20	59.55	65.71	59.55	59.89	61.55	60.45					
9	59.12	59.45	63.85	59.50	60.00	61.31	-					
10	59.04	59.34	63.12	59.55	59.98	61.17	-					
11	59.05	59.24	a63.20	59.50	59.99	61.10	-					
12	59.00	59.60	-	59.40	60.01	61.16	-					
13	58.77	59.56	62.37	59.77	60.05	61.12	-					
14	59.10	59.54	62.34	59.92	60.01	61.11	-					
15	59.10	59.55	63.14	60.05	59.54	61.18	-					
16	59.00	59.60	63.15	60.00	59.60	61.20	-					
17	58.86	59.54	62.40	59.90	59.70	60.00	-					
18	58.76	59.65	61.85	59.54	64.95	60.77	-					
19	58.80	59.63	61.27	59.30	64.20	60.60	-					
20	58.64	59.58	60.90	60.00	63.25	60.85	-					
21	58.70	59.56	60.94	59.83	62.50	61.39	-					
22	58.95	59.53	61.12	59.93	61.70	61.66	-					
23	58.80	59.55	60.90	59.90	64.09	61.38	-					
24	58.85	59.80	60.75	60.50	62.90	61.34	-					
25	58.73	60.96	60.70	60.40	62.30	61.00	-					
26	58.80	60.93	60.46	60.30	61.99	61.18	-					
27	58.60	60.75	60.20	60.37	62.05	61.40	-					
28	58.83	60.74	60.22	60.40	61.95	61.28	-					
29	59.25	60.42	60.24	63.00	-------	60.96	-					
30	59.83	60.27	60.38	61.67	-------	61.01	-					
31	59.95	-------	60.20	60.05	-------	60.99	-------		-------			-------

a Reading at 4 p.m.

Pequest River at Huntsville

Location.--Lat 40°58'49", long 74°46'38", on right bank 20 ft upstream from highway bridge in Huntsville, Sussex County, and three-eights of a mile downstream from East Branch.

Drainage area.--31.4 sq mi.

Records available.--November 1939 to September 1955.

Gage.--Water-stage recorder and concrete control. Datum of gage is 553.81 ft above mean sea level, datum of 1929.

Average discharge.--16 years, 45.9 cfs.

Extremes.--1939-55: Maximum discharge, 560 cfs Aug. 19, 1955 (gage height, 5.05 ft); minimum, 1.1 cfs Aug. 2, 1955 (gage height, 2.14 ft).

Revisions.--The figure of maximum discharge for the water year 1945 has been revised to 486 cfs July 20, 1945 (gage height, 4.68 ft), superseding the figure published in Special Report 12.

Peak discharge (base, 125 cfs).--

1950-51: Nov. 26 (2 p.m.) 287 cfs (3.76 ft); Dec. 5 (10 a.m. to 5 p.m.) 180 cfs (3.44 ft); Dec. 8 (11 p.m.) to Dec. 9 (5 a.m.) 201 cfs (3.51 ft); Jan. 25 (6 a.m.) 141 cfs (3.30 ft); Feb. 7 (4 p.m.) 201 cfs (3.51 ft); Feb. 22 (9 a.m. to 2 p.m.) 160 cfs (3.37 ft); Mar. 31 (2 p.m.) 230 cfs (3.60 ft).

1951-52: Nov. 8 (9 a.m. to 1 p.m.) 201 cfs (3.51 ft); Dec. 22 (1 to 6 a.m.) 149 cfs (3.33 ft); Jan. 27 or 28 (time unknown) 186 cfs (3.46 ft); Feb. 5 (7 to 11 a.m.) 165 cfs (3.39 ft); Mar. 12 (7 a.m.) 244 cfs (3.64 ft); Apr. 6 (6 a.m.) 295 cfs (3.78 ft); Apr. 16 (4 to 8 a.m.) 192 cfs (3.48 ft); Apr. 28 (12 p.m.) 227 cfs (3.59 ft); June 2 (11 a.m.) 330 cfs (3.87 ft); July 10 (4 p.m.) 201 cfs (3.49 ft); Aug. 17 (2 to 5 p.m.) 208 cfs (3.50 ft); Sept. 2 (10 a.m.) 192 cfs (3.44 ft).

1952-53: Nov. 23 (3 a.m. to 1 p.m.) 169 cfs (3.40 ft); Dec. 12 (7 a.m. to 12 m.) 201 cfs (3.51 ft); Jan. 25 (9 a.m. to 2 p.m.) 310 cfs (3.82 ft); Mar. 16 (1 to 5 p.m.) 141 cfs (3.29 ft); Mar. 25 (1 to 4 a.m.) 129 cfs (3.24 ft); Apr. 8 (4 to 11 a.m.) 169 cfs (3.40 ft).

1953-54: Mar. 4 (6 to 11 a.m.) 124 cfs (3.23 ft), (maximum below base).

1954-55: Aug. 19 (12 p.m.) 560 cfs (5.05 ft).

Revisions.--Revised figures of discharge, in cubic feet per second, for high-water periods in the water years 1945 and 1949, superseding those published in Special Reports 12 and 14, are given herewith:

July 20, 1945..... 462
Jan. 1, 1949..... 298

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
July 1945.....	3,931	462	28	127	4.04	4.66
Water year 1944-45.....	24,260	462	4.4	66.5	2.12	28.71

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.8	6.2	90	45	78	98	195	63	42	30	44	15.6
2	9.3	6.2	82	42	115	94	168	57	39	30	37	17.7
3	10.8	6.6	78	44	109	90	174	52	37	26	32	19.2
4	14.3	9.8	94	74	94	92	174	50	40	23	30	17.7
5	14.9	23	171	82	86	96	152	45	72	23	26	16.3
6	22	17.0	154	67	80	96	136	42	60	22	23	14.9
7	22	14.9	134	63	129	*94	127	39	47	20	22	17.0
8	22	13.1	171	58	180	92	115	38	40	18.4	22	15.6
9	19.2	12.5	192	52	141	86	109	36	38	17.0	21	14.3
10	15.6	11.4	160	51	119	78	104	35	36	16.3	24	13.7
11	13.1	10.8	146	50	104	72	109	35	35	17.0	30	13.7
12	10.8	10.3	136	48	*100	74	102	40	31	16.3	36	13.1
13	10.8	9.8	122	47	109	71	124	37	30	15.6	63	11.9
14	8.8	9.8	111	45	119	82	117	32	50	14.9	42	13.1
15	7.9	11.4	106	84	104	94	102	30	57	13.7	36	30
16	7.5	14.3	106	94	98	86	94	29	47	12.5	47	27
17	7.5	15.6	98	76	106	80	96	27	38	10.8	78	22
18	7.5	13.7	86	74	124	76	90	29	33	11.4	60	19.2
19	7.0	10.8	76	76	115	71	80	28	30	25	47	17.0
20	7.0	10.8	67	80	115	90	76	27	28	35	40	15.6
21	6.6	14.9	62	82	129	96	71	28	25	25	37	15.6
22	6.2	14.3	58	72	157	88	67	26	24	22	33	a15
23	8.4	13.1	57	67	144	82	80	35	40	30	30	a14
24	9.8	12.5	55	108	119	80	76	58	44	27	28	a13
25	8.8	71	54	136	117	76	71	54	35	a22	25	a12
26	7.9	254	b46	111	117	71	67	40	28	a20	23	a14
27	7.5	174	b40	96	109	65	62	37	24	*19.2	22	a19
28	7.5	129	b41	92	104	63	57	40	23	67	*25	a28
29	7.5	*113	b43	88	-------	69	62	58	24	100	19.2	a20
30	7.0	100	47	84	-------	106	74	67	28	67	17.7	a17
31	*6.6	-------	47	72	-------	214	-------	52	-------	51	15.6	-------

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of recorded range in stage, precipitation records, and records for stations on nearby streams especially Flat Brook near Flatbrookville and Beaver Brook near Belvidere.

b Stage-discharge relation affected by ice.

Pequest River at Huntsville--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a17	46	69	94	104	51	76	163	157	39	26	92
2	a16	58	63	102	106	50	86	146	310	35	27	180
3	*16.3	78	60	111	111	48	84	134	244	31	28	*152
4	14.3	98	58	106	134	48	76	122	204	30	25	139
5	15.6	84	82	102	163	52	168	111	230	30	24	117
6	11.9	76	100	98	144	54	276	104	201	28	23	102
7	15.4	115	90	90	127	51	237	98	165	25	24	86
8	30	198	82	80	115	48	198	90	141	24	24	76
9	25	174	80	80	109	48	171	84	127	95	23	71
10	18.4	149	74	78	102	50	152	78	124	189	45	65
11	27	129	67	72	98	128	136	76	113	141	38	60
12	40	113	63	71	96	227	124	98	98	100	33	58
13	35	102	60	67	82	183	117	106	88	80	47	55
14	27	98	51	72	72	163	141	92	80	67	38	51
15	24	111	55	80	69	141	168	84	72	54	31	50
16	23	106	50	84	69	122	189	78	65	50	69	52
17	22	106	a45	76	71	111	168	69	*62	44	195	50
18	21	98	a50	86	74	100	152	71	67	39	154	51
19	19.2	88	a55	84	71	100	139	69	58	38	119	92
20	18.4	78	a60	82	65	109	127	72	55	36	106	106
21	17.7	72	115	82	63	111	117	80	52	33	92	78
22	17.0	69	146	74	63	106	109	71	54	37	90	63
23	16.3	67	127	106	60	111	102	62	60	33	78	62
24	17.6	72	113	102	58	122	98	55	67	30	67	58
25	32	72	106	86	57	113	104	84	62	28	58	52
26	30	80	104	117	54	106	152	111	54	25	54	48
27	24	84	98	a174	54	100	168	94	48	25	50	44
28	25	72	86	a160	52	94	211	82	42	26	47	40
29	27	72	82	a140	51	88	217	80	40	38	45	38
30	24	71	80	117	-------	82	189	90	42	32	42	36
31	24	-------	*84	111	-------	78	-------	84	-------	28	40	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage where available, weather records, and records for stations at Pequest and on nearby streams.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35	14	57	50	131	61	80	91	42	14	6.4	2.9
2	36	13	54	48	112	57	78	91	36	13	6.0	2.9
3	43	13	53	60	106	55	76	84	33	12	6.0	2.9
4	39	12	48	64	95	*91	73	75	30	11	5.6	2.6
5	34	12	64	57	82	101	76	82	28	11	6.4	4.5
6	33	12	115	51	80	86	75	*86	26	11	6.0	8.7
7	32	12	95	48	84	78	119	80	37	10	5.6	6.0
8	30	12	84	48	91	71	164	110	54	9.2	4.9	4.9
9	39	12	78	53	84	64	143	112	*42	8.2	6.4	4.2
10	54	13	75	64	75	63	136	97	35	7.7	13	*3.9
11	54	19	129	76	68	58	138	88	29	6.4	9.7	3.6
12	53	18	195	75	64	75	124	78	24	6.4	8.2	3.6
13	37	*16	166	68	66	96	126	73	27	6.8	*7.3	3.9
14	16	14	146	*63	64	110	141	70	30	*6.8	7.7	3.6
15	a17	12	124	64	75	99	126	68	26	*6.4	7.3	3.3
16	a18	19	112	66	95	136	133	64	23	6.0	5.6	3.3
17	a17	17	101	68	84	126	143	64	22	5.3	5.3	3.1
18	a16	16	95	89	73	115	129	73	20	4.9	5.3	2.9
19	a15	16	88	99	68	119	143	64	19	4.9	5.3	2.9
20	a15	20	80	93	66	119	133	58	18	5.3	4.9	2.9
21	a14	64	80	91	84	108	121	53	16	4.9	4.9	2.9
22	14	126	93	91	97	99	112	48	15	4.6	4.6	2.9
23	14	166	88	89	84	93	104	64	15	23	4.6	2.6
24	14	131	86	157	76	106	95	55	14	22	4.2	2.6
25	14	101	80	298	73	124	91	48	13	12	3.9	2.6
26	14	88	75	240	70	*117	91	50	12	10	3.9	2.6
27	14	76	68	195	66	112	112	55	18	9.7	4.9	2.6
28	22	66	53	184	63	104	101	48	16	12	6.0	2.6
29	21	61	53	166	-------	95	91	42	18	8.7	4.6	2.6
30	14	60	50	141	-------	89	82	41	16	8.7	3.6	2.6
31	14	-------	50	133	-------	84	-------	45	-------	7.7	3.1	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated.

Pequest River at Huntsville--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.6	7.2	11	29	29	55	44	37	33	6.4	3.1	27
2	2.6	6.4	11	28	30	93	43	35	30	6.4	2.9	14
3	2.6	6.4	13	27	32	91	41	38	27	6.4	4.2	9.1
4	2.4	6.4	12	27	37	120	38	99	25	8.1	3.9	7.7
5	2.4	6.8	20	25	34	99	37	97	23	8.6	3.3	6.4
6	2.6	6.4	21	25	32	89	37	84	22	8.1	a3.2	6.0
7	3.1	8.1	80	24	30	82	48	73	20	7.7	a3.1	5.3
8	2.9	9.1	68	20	28	80	45	71	19	8.1	3.1	6.4
9	2.9	9.1	*52	22	28	74	41	71	18	7.2	a4.0	6.8
10	2.9	9.6	71	20	27	73	35	73	17	6.0	a4.9	6.0
11	2.6	9.6	71	15	26	69	34	*76	17	5.6	4.2	13
12	2.6	10	61	b20	21	64	37	68	16	4.9	3.6	15
13	5.8	10	68	b22	b19	61	35	61	21	4.2	3.3	10
14	18	10	87	b21	20	73	33	53	20	4.2	3.1	8.1
15	16	10	99	b20	22	80	31	49	20	4.9	3.1	8.1
16	4.6	7.2	86	b21	28	69	34	46	19	4.2	3.1	15
17	3.9	7.2	74	b15	*56	62	62	44	17	3.9	2.9	19
18	3.6	6.8	61	b19	68	56	71	41	*15	3.6	2.4	15
19	3.3	6.8	55	17	56	53	61	39	13	3.6	2.4	16
20	3.3	6.4	48	18	49	74	53	39	12	3.6	3.1	19
21	3.3	6.0	45	33	49	76	48	64	11	3.1	3.1	17
22	3.1	5.6	44	35	61	66	44	74	11	2.6	3.1	22
23	2.9	11	46	31	56	61	43	59	11	2.6	2.9	19
24	2.9	14	43	28	49	58	41	51	11	2.6	2.6	15
25	3.1	14	39	26	48	56	39	46	10	2.9	2.9	14
26	3.6	18	35	28	48	61	38	41	8.1	2.9	3.3	14
27	3.6	19	34	40	53	56	41	38	7.7	2.6	3.3	16
28	6.4	16	32	49	49	52	46	35	7.2	2.4	3.1	15
29	13	12	32	37	-------	49	45	34	6.8	*2.9	2.9	14
30	15	17	33	37	-------	48	40	40	6.8	2.4	3.3	12
31	10	-------	32	30	-------	45	-------	37	-------	2.2	32	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated.
b Stage-discharge relation affected by ice.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	12	56	84	a23	64	61	34	11	5.6	2.2	68
2	11	*25	*52	80	a22	78	59	31	10	5.3	1.8	62
3	11	37	49	78	a21	*68	58	29	10	4.9	1.6	58
4	10	34	45	71	a20	84	55	28	9.1	4.2	1.6	55
5	9.6	32	41	68	a21	87	52	26	11	4.2	1.6	51
6	9.1	31	39	82	a30	86	51	27	10	4.2	1.6	62
7	8.1	33	b30	69	84	91	52	23	9.1	*3.9	2.0	56
8	7.2	30	32	58	61	78	49	22	8.6	3.3	3.3	51
9	6.8	29	35	55	53	78	45	23	9.6	3.1	3.1	46
10	6.8	27	45	53	44	76	43	21	8.6	3.3	2.6	43
11	*6.4	26	39	53	51	74	41	20	9.6	4.6	2.9	39
12	6.0	24	35	49	55	71	40	19	14	3.6	7.7	38
13	6.0	17	33	45	48	68	41	18	17	3.1	58	35
14	5.6	16	43	b38	40	62	41	17	14	3.1	76	32
15	12	16	71	41	38	61	41	17	12	2.6	48	31
16	28	16	68	40	35	64	40	15	10	2.9	29	30
17	28	16	59	38	41	66	37	15	9.1	3.1	24	28
18	28	16	69	34	49	62	35	14	8.1	2.9	43	27
19	22	16	93	34	45	61	34	14	7.7	3.1	*355	26
20	12	20	82	31	44	58	40	12	15	2.9	481	26
21	11	62	66	a25	44	58	39	12	14	2.9	322	25
22	11	74	59	a35	44	78	41	11	13	2.6	273	22
23	11	66	53	a32	55	99	40	11	11	2.6	211	22
24	10	62	51	a30	61	89	37	12	10	2.9	156	41
25	10	66	49	a28	53	84	38	12	9.1	2.9	124	64
26	9.6	61	45	a26	51	82	39	12	8.1	2.6	106	51
27	8.6	56	43	a26	48	80	39	11	7.7	2.4	93	41
28	9.1	46	43	a20	48	74	37	9.6	6.8	2.6	86	49
29	12	62	55	a25	-------	71	38	9.6	6.4	2.4	78	49
30	15	62	89	a24	-------	69	39	9.1	5.6	2.4	73	43
31	14	-------	95	a23	-------	64	-------	9.1	-------	2.4	71	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for station at Pequest.
b Stage-discharge relation affected by ice.

Pequest River at Huntsville--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	331.6	22	6.2	10.7	0.341	0.39
November	1,133.8	254	6.2	37.8	1.20	1.34
December	2,930	192	40	94.5	3.01	3.47
Calendar year 1950	16,604.6	254	6.2	45.5	1.45	19.65
January 1951	2,260	136	42	72.9	2.32	2.68
February	3,221	180	78	115	3.66	3.81
March	2,722	214	63	87.8	2.80	3.22
April	3,131	195	57	104	3.31	3.71
May	1,266	67	26	40.8	1.30	1.50
June	1,125	72	23	37.5	1.19	1.33
July	848.1	100	10.8	27.4	.873	1.00
August	1,036.5	78	15.6	33.4	1.06	1.23
September	512.2	30	11.9	17.1	.545	.61
Water year 1950-51	20,517.2	254	6.2	56.2	1.79	24.29
October 1951	691.1	40	11.9	22.3	.710	.82
November	2,836	198	46	94.5	3.01	3.36
December	2,455	146	45	79.2	2.52	2.91
Calendar year 1951	22,103.9	214	10.8	60.6	1.93	26.18
January 1952	2,984	174	67	96.3	3.07	3.53
February	2,494	163	51	86.0	2.74	2.95
March	2,995	227	48	96.6	3.08	3.55
April	4,452	276	76	148	4.71	5.27
May	2,838	163	55	91.5	2.91	3.36
June	3,182	310	40	106	3.38	3.77
July	1,510	189	24	48.7	1.55	1.79
August	1,762	195	23	56.8	1.81	2.09
September	2,224	180	36	74.1	2.36	2.63
Water year 1951-52	30,423.1	310	11.9	83.1	2.65	36.03
October 1952	802	54	14	25.9	.825	.95
November	1,231	166	12	41.0	1.31	1.46
December	2,735	195	48	88.2	2.81	3.24
Calendar year 1952	29,209.0	310	12	79.8	2.54	34.59
January 1953	3,089	298	48	99.6	3.17	3.66
February	2,276	131	63	81.3	2.59	2.70
March	2,911	136	55	93.9	2.99	3.45
April	3,356	164	73	112	3.57	3.97
May	2,157	112	41	69.6	2.22	2.55
June	754	54	12	25.1	.799	.89
July	289.6	23	4.6	9.34	.297	.34
August	181.2	13	3.1	5.85	.186	.21
September	103.2	8.7	2.6	3.44	.110	.12
Water year 1952-53	19,885.0	298	2.6	54.5	1.74	23.54
October 1953	157.6	18	2.4	5.08	.162	.19
November	292.1	19	5.6	9.74	.310	.35
December	1,484	99	11	47.9	1.53	1.76
Calendar year 1953	17,050.7	298	2.4	46.7	1.49	20.19
January 1954	809	49	15	26.1	.831	.96
February	1,085	68	19	38.8	1.24	1.29
March	2,145	120	45	69.2	2.20	2.54
April	1,285	71	31	42.8	1.36	1.52
May	1,713	99	34	55.3	1.76	2.03
June	494.6	33	6.8	16.5	.525	.59
July	144.9	8.6	2.2	4.67	.149	.17
August	129.4	32	2.4	4.17	.133	.15
September	390.9	27	5.3	13.0	.414	.46
Water year 1953-54	10,130.5	120	2.2	27.8	.885	12.01
October 1954	366.9	28	5.6	11.8	.376	.43
November	1,090	74	12	36.3	1.16	1.29
December	1,664	95	30	53.7	1.71	1.97
Calendar year 1954	11,317.7	120	2.2	31.0	.987	13.40
January 1955	1,395	84	20	45.0	1.43	1.65
February	1,229	84	20	43.9	1.40	1.46
March	2,285	99	58	73.7	2.35	2.71
April	1,302	61	34	43.4	1.38	1.54
May	543.4	34	9.1	17.5	.557	.64
June	305.2	17	5.6	10.2	.325	.36
July	102.6	5.6	2.4	3.31	.105	.12
August	2,739.0	481	1.6	88.4	2.82	3.24
September	1,271	68	22	42.4	1.35	1.51
Water year 1954-55	14,293.1	481	1.6	39.2	1.25	16.92

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 1955.

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.--34 years, 153 cfs.

Extremes.--1921-55: Maximum discharge, 1,810 cfs Mar. 14, 1936 (gage height, 4.97 ft, from rating curve extended above 1,200 cfs; minimum, 14 cfs Aug. 4, 5, 1955 (gage height, 1.03 ft).

Peak discharge (base, 500 cfs).--
1950-51: Feb. 7 (2:30 p.m.) 712 cfs (3.23 ft); Mar. 31 (7 to 11 a.m.) 619 cfs (3.06 ft); July 28 (4 a.m.) 695 cfs (3.20 ft); Aug. 16 (11 p.m.) 537 cfs (2.90 ft).
1951-52: Nov. 7 (10 a.m.) 842 cfs (3.45 ft); Dec. 21 (9 p.m.) 537 cfs (2.90 ft); Jan. 27 (time unknown) 542 cfs (2.91 ft); Feb. 5 (1 a.m.) 527 cfs (2.88 ft); Mar. 11 (10 p.m.) 673 cfs (3.16 ft); Apr. 6 (2 a.m.) 724 cfs (3.25 ft); Apr. 15 (10 p.m.) 724 cfs (3.25 ft); Apr. 28 (3 p.m.) 741 cfs (3.28 ft); June 2 (3 a.m.) 542 cfs (2.91 ft); July 10 (1:30 a.m.) 572 cfs (2.97 ft); Sept. 2 (3 a.m.) 542 cfs (2.91 ft).
1952-53: Nov. 22 (7 p.m.) 668 cfs (3.15 ft); Dec. 11 (12 p.m.) 629 cfs (3.08 ft); Jan. 25 (3 a.m.) 690 cfs (3.19 ft); Apr. 8 (1 a.m.) 567 cfs (2.96 ft).
1953-54: May 4 (2 p.m.) 532 cfs (2.89 ft).
1954-55: Aug. 14 (2:30 p.m.) 567 cfs (2.96 ft); Aug. 19 (10:30 a.m.) 1,110 cfs (3.87 ft).

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	36	298	144	194	306	547	210	213	151	295	101
2	39	36	245	136	310	291	542	186	164	134	232	103
3	39	37	216	138	262	280	603	172	156	113	170	113
4	36	46	264	224	325	298	582	164	151	101	151	109
5	40	99	391	270	337	321	562	156	213	105	134	99
6	40	87	374	242	280	333	532	151	216	95	122	97
7	48	66	370	207	436	317	499	144	175	86	113	129
8	50	58	443	178	396	291	448	138	146	82	120	107
9	50	54	430	143	421	270	395	134	134	76	115	95
10	61	50	417	159	446	242	357	129	131	75	125	87
11	54	47	417	156	421	226	345	131	129	76	245	84
12	54	45	412	148	391	219	329	141	118	78	226	82
13	52	44	391	144	374	219	378	138	113	76	317	80
14	47	43	365	138	382	*242	370	127	170	73	306	82
15	43	44	329	340	361	280	349	118	213	68	239	144
16	39	44	306	365	317	273	313	111	189	65	386	154
17	37	52	276	321	310	245	298	105	151	63	466	113
18	36	51	242	276	361	226	276	105	127	63	417	95
19	36	50	213	248	370	210	252	103	113	86	352	86
20	35	47	180	248	365	287	232	103	103	175	262	82
21	35	59	161	256	408	295	219	103	97	124	213	78
22	35	61	156	232	484	276	210	101	101	95	192	75
23	39	56	156	198	461	256	270	151	210	118	172	71
24	51	54	159	323	434	248	259	245	226	113	156	68
25	42	175	156	386	399	239	232	229	161	91	148	68
26	42	461	113	365	374	219	219	167	124	*80	138	68
27	39	386	108	333	349	204	198	141	113	76	129	90
28	37	378	129	295	329	195	186	164	124	492	122	148
29	37	374	136	262	-------	245	195	232	109	646	118	107
30	39	349	148	245	-------	417	216	374	122	567	111	89
31	36	-------	151	189	-------	603	-------	337	-------	494	105	-------

* Discharge measurement made on this day.

Pequest River at Pequest--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	82	200	229	337	421	180	245	651	413	115	82	277
2	78	284	223	378	403	175	273	608	527	111	86	513
3	78	370	213	412	399	175	270	532	503	103	97	489
4	75	412	210	395	484	178	248	430	508	99	87	461
5	71	408	270	370	518	210	501	374	527	97	80	421
6	68	349	329	337	503	226	695	345	503	93	78	317
7	82	567	306	306	480	201	662	317	471	89	86	252
8	195	668	280	259	448	195	695	295	425	99	86	213
9	151	624	252	256	403	201	701	280	370	346	86	189
10	109	619	235	252	361	213	662	266	365	557	126	175
11	126	608	223	245	341	500	603	259	306	475	141	161
12	210	577	210	229	321	624	547	329	266	370	111	151
13	172	532	198	223	287	577	475	349	239	256	144	146
14	131	494	180	235	245	567	572	310	216	189	124	138
15	113	461	186	280	232	542	668	273	198	156	101	136
16	105	434	175	302	226	503	690	252	183	136	160	144
17	97	417	156	280	239	439	678	229	178	127	430	136
18	91	386	172	321	252	382	629	229	178	120	408	127
19	89	349	198	313	245	357	557	225	172	115	386	233
20	86	306	198	295	232	391	466	280	161	111	313	287
21	82	270	451	287	229	382	395	*313	151	107	248	239
22	80	248	484	259	226	357	353	259	151	105	302	186
23	82	245	457	391	213	386	333	213	172	101	239	172
24	86	262	461	370	204	403	313	195	192	91	183	172
25	144	262	443	313	198	386	362	262	178	86	156	154
26	141	325	403	440	192	357	572	443	156	82	138	138
27	115	a300	357	a540	189	325	624	349	141	82	127	131
28	124	a250	280	a520	183	302	718	284	131	95	122	122
29	131	239	287	a500	183	280	701	256	127	97	120	118
30	113	232	273	a480	-------	262	684	295	120	97	113	113
31	103	-------	295	a470	-------	252	-------	295	-------	87	107	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage when available, precipitation record, and records for station at Huntsville and Flat Brook near Flatbrookville.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	111	61	172	159	494	201	266	295	148	61	48	27
2	113	61	161	156	408	186	259	302	134	61	48	25
3	136	61	161	186	341	180	252	280	120	63	50	24
4	129	61	161	210	302	345	242	256	111	56	48	25
5	115	59	221	186	*270	374	248	248	105	54	48	31
6	109	58	430	164	252	306	242	256	101	54	43	51
7	103	56	353	154	284	266	432	256	107	55	39	48
8	99	56	284	151	310	242	537	341	120	50	40	37
9	93	56	248	186	284	226	489	345	124	51	47	32
10	105	55	232	235	252	213	480	321	109	48	84	30
11	118	56	452	313	226	201	466	270	97	45	66	30
12	120	58	592	302	219	198	434	235	89	45	51	29
13	120	58	542	266	229	301	434	219	95	45	48	29
14	103	58	523	239	219	345	457	207	101	44	42	28
15	82	58	489	239	263	349	425	201	93	43	40	28
16	82	70	421	256	349	461	421	198	84	42	39	28
17	75	71	341	259	298	434	434	195	80	40	36	27
18	71	66	302	310	252	399	430	198	76	39	36	27
19	68	65	276	370	229	417	471	189	75	37	34	27
20	65	75	252	341	219	408	448	172	71	39	34	27
21	66	306	259	310	313	370	412	161	70	45	32	26
22	66	574	321	302	353	329	370	154	68	47	32	26
23	68	598	298	302	295	302	333	219	71	82	32	*25
24	65	518	273	436	262	353	306	192	66	107	31	25
25	63	443	252	651	248	412	287	159	61	66	30	24
26	61	325	235	592	235	403	298	170	58	54	29	25
27	61	259	210	598	226	386	391	189	56	51	29	26
28	61	223	170	619	213	349	349	164	58	51	29	25
29	68	195	167	614	-------	321	302	144	68	48	31	25
30	70	180	164	572	-------	295	273	141	70	50	29	24
31	63	-------	161	527	-------	280	-------	156	-------	52	28	-------

* Discharge measurement made on this day.

Pequest River at Pequest--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	51	52	99	86	170	134	124	111	42	21	111
2	22	43	48	95	115	310	129	129	101	40	20	71
3	22	37	44	91	103	291	124	158	95	37	27	50
4	22	35	44	91	120	365	115	499	89	36	31	40
5	22	33	78	89	115	291	113	457	86	44	31	34
6	23	34	86	87	109	259	115	365	82	44	27	33
7	26	34	323	87	101	235	138	*270	78	40	25	31
8	25	44	287	66	93	226	138	252	73	42	24	30
9	25	50	213	71	93	210	124	252	70	40	32	31
10	25	54	315	82	93	204	115	242	68	37	40	31
11	25	54	284	45	91	192	111	256	68	36	35	44
12	24	54	229	68	74	178	120	229	68	34	26	51
13	24	52	252	75	60	172	113	201	73	33	26	45
14	23	51	325	68	84	223	107	178	73	32	26	39
15	31	48	365	66	80	242	103	167	70	36	26	35
16	36	45	302	68	95	204	109	156	68	39	26	48
17	30	43	242	70	211	180	195	146	66	35	25	84
18	26	40	170	61	262	167	239	138	61	33	23	68
19	24	39	161	63	195	154	192	131	63	32	22	70
20	23	36	161	65	164	243	161	129	56	31	28	84
21	23	36	144	120	170	248	146	175	54	29	30	73
22	23	36	144	148	235	207	136	213	51	28	30	86
23	22	55	151	107	192	186	131	189	50	26	27	76
24	23	71	138	103	164	175	136	159	50	25	25	61
25	28	65	122	99	159	178	129	141	47	25	24	54
26	27	78	115	103	156	195	124	131	43	27	*23	51
27	26	68	111	159	175	178	129	122	48	26	22	51
28	39	65	107	198	159	161	146	118	45	24	23	50
29	79	56	109	128	-------	151	146	118	43	25	23	47
30	115	52	109	124	-------	141	131	144	42	28	26	44
31	70	-------	109	103	-------	136	-------	129	-------	24	77	-------

* Discharge measurement made on this day.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43	51	161	276	68	201	186	120	45	32	16	183
2	40	51	141	256	68	252	175	107	45	32	16	170
3	40	102	129	248	61	216	170	97	44	31	15	161
4	37	118	120	226	63	262	167	95	42	28	*14	148
5	35	109	113	201	65	280	156	89	42	27	15	138
6	34	97	101	198	82	280	151	87	42	25	17	138
7	33	84	71	207	306	302	151	84	40	25	16	146
8	33	78	99	183	256	245	146	80	37	25	16	134
9	32	73	99	161	210	223	138	78	39	24	16	124
10	32	68	134	156	164	226	134	75	42	24	16	115
11	33	65	129	148	178	*219	127	73	45	28	16	111
12	32	63	113	138	183	210	127	70	56	27	54	105
13	*30	61	105	134	138	201	136	68	55	24	270	101
14	29	55	132	104	141	183	136	66	52	22	409	95
15	29	52	248	122	138	172	136	65	51	21	351	93
16	30	51	239	124	124	175	131	61	45	21	240	91
17	51	50	198	113	156	183	122	59	40	22	147	89
18	52	50	226	100	195	175	113	58	37	21	228	86
19	52	50	291	107	167	172	111	56	35	23	942	84
20	51	70	252	88	151	170	124	54	43	21	832	82
21	40	257	186	74	146	167	127	52	45	19	854	80
22	37	345	148	111	144	269	134	52	44	18	891	76
23	36	252	167	99	204	378	131	52	40	17	820	75
24	35	195	154	93	223	310	118	58	39	16	704	105
25	34	180	141	86	180	266	122	54	40	18	608	159
26	33	161	129	84	164	256	131	51	39	19	532	146
27	34	146	124	86	159	252	134	48	37	18	448	120
28	34	136	124	60	159	229	124	48	36	17	329	138
29	53	175	154	80	-------	216	124	48	34	16	242	148
30	70	183	321	71	-------	204	131	47	33	16	207	127
31	61	-------	329	68	-------	195	-------	45	-------	16	195	-------

* Discharge measurement made on this day.

Pequest River at Pequest--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	1,308	61	35	42.2	0.391	0.45
November	3,389	461	36	113	1.05	1.17
December	8,152	443	108	263	2.44	2.81
Calendar year 1950	52,930	461	35	145	1.34	18.23
January 1951	7,309	386	136	236	2.19	2.52
February	10,299	484	194	368	3.41	3.55
March	8,573	603	195	277	2.56	2.95
April	10,413	603	186	347	3.21	3.59
May	5,010	374	101	162	1.50	1.73
June	4,512	226	97	150	1.39	1.55
July	4,737	646	63	153	1.42	1.63
August	6,398	466	105	206	1.91	2.20
September	2,904	154	68	96.8	.896	1.00
Water year 1950-51	73,004	646	35	200	1.85	25.15
October 1951	3,410	210	68	110	1.02	1.17
November	11,698	668	200	390	3.61	4.03
December	8,634	484	156	279	2.58	2.97
Calendar year 1951	83,897	668	63	230	2.13	28.89
January 1952	10,595	540	223	342	3.17	3.65
February	8,857	518	183	305	2.82	3.05
March	10,528	624	175	340	3.15	3.63
April	15,892	718	245	530	4.91	5.47
May	10,117	651	195	326	3.02	3.48
June	8,228	527	120	274	2.54	2.83
July	4,794	557	82	155	1.44	1.65
August	5,067	430	78	163	1.51	1.74
September	6,511	513	113	217	2.01	2.24
Water year 1951-52	104,331	718	68	285	2.64	35.91
October 1952	2,729	136	61	88.0	.815	.94
November	4,840	598	55	161	1.49	1.67
December	9,123	592	161	294	2.72	3.14
Calendar year 1952	97,281	718	55	266	2.46	33.49
January 1953	10,205	651	151	329	3.05	3.51
February	7,845	494	213	280	2.59	2.70
March	9,852	461	180	318	2.94	3.39
April	11,188	537	242	373	3.45	3.85
May	6,833	345	141	220	2.04	2.35
June	2,686	148	56	89.5	.829	.92
July	1,625	107	37	52.4	.485	.56
August	1,253	84	28	40.4	.374	.43
September	861	51	24	28.7	.266	.30
Water year 1952-53	69,040	651	24	189	1.75	23.76
October 1953	976	115	22	31.5	.292	.34
November	1,459	78	33	48.6	.450	.50
December	5,340	365	44	172	1.59	1.84
Calendar year 1953	60,123	651	22	165	1.53	20.69
January 1954	2,899	198	45	93.5	.866	1.00
February	3,754	262	60	134	1.24	1.29
March	6,472	365	136	209	1.94	2.23
April	4,049	239	103	135	1.25	1.39
May	6,118	499	118	197	1.82	2.11
June	1,992	111	42	66.4	.615	.69
July	1,030	44	24	33.2	.307	.35
August	871	77	20	28.1	.260	.30
September	1,623	111	30	54.1	.501	.56
Water year 1953-54	36,583	499	20	100	.926	12.60
October 1954	1,215	70	29	39.2	.363	.42
November	3,428	345	50	114	1.06	1.18
December	5,078	329	71	164	1.52	1.75
Calendar year 1954	38,529	499	20	106	.981	13.27
January 1955	4,202	276	60	136	1.26	1.45
February	4,293	306	61	153	1.42	1.48
March	7,089	378	167	229	2.12	2.44
April	4,113	186	111	137	1.27	1.42
May	2,097	120	45	67.6	.626	.72
June	1,264	56	33	42.1	.390	.44
July	693	32	16	22.4	.207	.24
August	9,476	942	14	306	2.83	3.26
September	3,568	183	75	119	1.10	1.23
Water year 1954-55	46,516	942	14	127	1.18	16.03

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 1955.

Gage.--Water-stage recorder. Datum of gage is 303.36 ft above mean sea level, datum of 1929.

Average discharge.--33 years, 52.6 cfs.

Extremes.--Maximum discharge, 1,510 cfs Mar. 12, 1936 (gage height, 5.76 ft), from rating curve extended above 280 cfs on basis of slope-area and contracted-opening measurements of peak flow; minimum, 1.1 cfs Aug. 3, 4, 1955.

Revisions.--The figure of maximum discharge for the water year 1928 has been revised to 687 cfs July 15, 1928 (gage height, 3.92 ft), superseding the figure published in Bulletin 33.

Peak discharge (base, 225 cfs).--

1950-51: Nov. 25 (6:30 p.m.) 227 cfs (3.04 ft); Feb. 22 (2 to 6 p.m.) 230 cfs (3.05 ft); Mar. 31 (1 p.m.) 488 cfs (3.85 ft); July 29 (10 a.m.) 477 cfs (3.82 ft).

1951-52: Nov. 8 (7 a.m.) 552 cfs (4.01 ft); Dec. 22 (4:30 p.m.) 240 cfs (3.09 ft); Jan. 27 (time unknown) 276 cfs (3.22 ft); Mar. 11 or 12 (time and discharge unknown); Apr. 6 (9 a.m.) 443 cfs (3.73 ft); Apr. 16 (2 a.m.) 512 cfs (3.91 ft); Apr. 29 (1 a.m.) 334 cfs (3.41 ft).

1952-53: Nov. 23 (3 a.m. to 1 p.m.) 241 cfs (3.11 ft); Dec. 12 (8 a.m.) 348 cfs (3.46 ft); Jan. 25 (9 a.m.) 435 cfs (3.70 ft).

1953-54: Dec. 15 (6 to 10 a.m.) 246 cfs (3.07 ft).

1954-55: Aug. 19 (8 p.m.) 795 cfs (4.39 ft).

Revisions.--Special Report 9: Drainage area. Revised figures of discharge, in cubic feet per second, for some periods in water years 1923 and 1928, superseding those published in Bulletin 33, are given herewith:

1923		1923-Con.	
Jan. 7	45	Jan. 15	25
8	40	16	30
9	40	1928	
10	40	July 15	652
14	25		

Month	Maximum	Minimum	Mean	Per square mile	Runoff in inches
January 1923	132	16	43.7	1.21	1.40
Water year 1922-23	636	3.1	34.7	.959	13.02
July 1928	652	49	195	5.39	6.21
Water year 1927-28	652	15	106	2.93	39.94

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.0	5.9	51	37	88	109	373	49	45	37	168	32
2	6.2	5.9	46	35	143	107	294	45	40	32	128	37
3	5.9	6.2	46	36	148	99	277	41	40	24	99	42
4	5.9	7.0	81	68	111	111	254	40	39	20	85	35
5	5.9	14.8	175	77	92	122	206	37	44	23	70	31
6	5.6	16.3	170	58	a85	122	179	36	37	21	60	30
7	5.6	12.2	145	57	a170	*115	160	34	32	17.7	56	44
8	5.6	10.5	160	53	a250	111	141	32	28	15.8	60	35
9	5.6	10.1	173	40	a180	103	126	31	27	14.4	54	29
10	7.8	9.2	152	43	a130	92	115	29	26	13.5	60	27
11	9.2	8.2	143	44	a110	83	122	30	28	14.8	105	25
12	8.7	7.8	133	44	a100	81	105	34	24	14.8	85	24
13	9.2	7.4	109	42	*143	77	139	32	23	14.4	77	22
14	8.2	7.4	92	41	160	90	115	28	49	13.9	59	26
15	7.4	7.4	83	112	135	103	99	27	51	12.2	74	68
16	7.4	7.4	85	145	111	86	90	25	38	12.2	150	59
17	6.6	7.4	74	105	117	78	92	23	31	12.2	172	*41
18	6.6	7.0	63	97	158	71	81	22	26	13.5	165	35
19	6.2	7.0	54	97	137	67	74	22	23	39	115	31
20	5.9	6.6	50	99	130	114	68	22	20	64	95	27
21	5.6	8.7	45	99	154	107	62	22	19.2	30	85	25
22	5.6	10.9	41	78	217	97	58	21	19.2	25	74	23
23	6.2	9.7	41	68	203	92	92	46	58	34	64	21
24	7.4	8.2	42	130	175	88	72	66	49	31	57	19.7
25	7.8	65	40	175	158	85	60	50	33	24	52	19.2
26	7.4	176	34	145	145	75	57	36	*26	19.7	48	18.7
27	6.6	144	32	110	135	70	52	32	23	17.7	45	19.4
28	6.2	88	34	100	119	67	49	34	23	190	41	35
29	6.2	71	37	90	-------	91	50	56	23	414	39	28
30	5.9	59	39	80	-------	186	58	85	30	303	37	23
31	5.9	-------	40	65	-------	397	-------	56	-------	220	34	-------

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of recorded range in stage, precipitation records, and records for Flat Brook near Flatbrookville and other stations on nearby streams.

Note.--Stage-discharge relation affected by ice Dec. 18-22, 25-29, Jan. 8-10, 22, Jan. 27 to Feb. 4.

Beaver Brook near Belvidere--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19.7	69	74	117	149	60	73	217	117	17.4	9.1	68
2	18.5	94	71	142	149	54	108	181	140	16.3	9.1	153
3	19.1	148	68	162	146	56	86	157	104	14.8	10.7	144
4	17.9	213	67	164	171	54	75	134	89	14.3	9.9	115
5	16.8	195	93	153	213	70	168	119	84	13.8	9.1	87
6	15.3	170	104	144	183	75	400	108	74	12.8	9.1	73
7	20	223	86	126	162	65	331	95	65	12.0	9.9	62
8	65	481	83	104	146	60	262	86	57	14.8	10.3	53
9	44	360	80	104	134	60	210	78	65	76	10.3	47
10	34	270	78	99	119	65	179	73	83	128	12.4	43
11	37	217	73	92	115	180	153	73	59	67	14.8	39
12	59	183	71	84	108	400	130	101	48	42	13.8	35
13	44	159	67	80	89	300	121	87	42	32	17.9	33
14	39	142	59	86	80	220	228	71	39	27	14.3	29
15	35	142	65	97	74	180	347	65	36	22	11.5	29
16	34	132	b60	99	71	150	462	60	33	19.7	32	34
17	32	136	b55	91	81	125	344	52	33	17.4	123	31
18	29	119	b60	117	86	110	*264	62	34	16.3	103	27
19	28	106	b70	104	75	100	215	56	29	15.3	65	65
20	27	95	b70	104	70	110	183	76	28	14.3	47	74
21	24	86	160	104	70	115	157	*83	25	14.3	43	53
22	23	80	224	92	68	104	136	61	28	13.8	77	44
23	24	78	197	157	62	123	121	51	34	12.8	47	43
24	24	87	166	146	62	134	111	45	39	11.5	35	41
25	49	86	146	113	60	119	125	106	32	10.3	29	35
26	38	105	138	164	56	110	199	162	27	9.9	24	32
27	32	95	126	267	60	101	222	119	24	9.9	22	29
28	36	85	b95	253	60	94	282	94	21	9.9	19.7	26
29	39	*78	99	210	60	86	316	81	19.7	11.1	19.1	24
30	33	77	95	170	-------	81	264	84	19.1	10.7	17.9	23
31	30	-------	101	157	-------	75	-------	81	-------	9.9	16.8	-------

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Nov. 26-28, Jan. 27-30, Feb. 26 to Mar. 20; discharge estimated on basis of recorded range in stage (Nov. 26-28), weather records, and records for Paulins Kill at Blairstown and for stations on other nearby streams.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	12	60	46	129	72	88	92	40	17	7.9	3.6
2	23	12	55	45	110	65	85	91	35	15	7.6	3.6
3	38	12	54	56	99	62	82	80	30	16	7.3	3.4
4	29	12	52	59	92	114	74	74	27	18	7.3	3.6
5	25	11	72	50	80	146	78	71	25	13	7.0	4.1
6	23	11	133	44	76	118	71	75	23	12	6.7	7.0
7	21	11	118	41	90	107	118	69	26	11	6.1	7.3
8	19	11	102	42	104	96	177	113	29	11	5.5	6.7
9	19	10	92	52	86	88	154	107	24	9.8	6.8	5.5
10	18	10	85	70	75	84	150	88	21	8.3	30	5.0
11	17	10	160	99	66	75	158	78	19	7.6	19	4.6
12	17	10	315	97	67	72	136	71	18	7.0	12	4.3
13	17	10	258	*90	72	94	138	67	20	6.7	9.8	4.1
14	16	*9.8	207	84	65	105	150	64	22	6.7	8.6	4.1
15	16	11	168	84	78	99	133	62	19	6.4	7.6	3.9
16	15	15	140	88	108	144	133	61	17	6.1	7.0	3.9
17	14	15	122	86	91	146	*140	60	16	5.8	7.0	3.9
18	14	14	108	104	79	135	125	62	15	5.3	6.7	3.6
19	14	14	96	135	75	144	142	53	14	5.0	6.1	3.6
20	13	18	84	135	74	150	136	49	14	5.3	5.8	3.4
21	14	94	85	125	99	131	122	45	13	6.4	5.3	3.4
22	14	173	105	124	129	118	112	42	13	6.7	5.0	3.4
23	14	233	90	120	113	108	104	67	14	25	4.8	*3.2
24	13	181	82	165	105	120	94	52	12	37	4.8	*3.1
25	13	140	75	388	100	148	88	43	11	17	4.6	3.1
26	12	112	69	309	92	136	97	48	11	12	4.6	3.1
27	12	96	62	238	86	131	129	53	10	11	4.3	3.1
28	12	82	55	207	79	118	110	42	10	12	4.1	2.9
29	12	71	50	180	-------	110	92	38	15	11	3.9	2.9
30	12	66	46	160	-------	102	84	38	23	9.8	3.6	2.7
31	12	-------	46	140	-------	94	-------	46	-------	9.0	3.6	-------

* Discharge measurement made on this day.

Beaver Brook near Belvidere--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.6	19	20	40	b35	67	49	37	30	7.0	2.1	17
2	2.4	15	19	39	b40	108	47	38	26	6.7	2.1	10
3	2.4	12	18	37	43	109	44	44	24	6.4	3.3	7.6
4	2.4	11	17	36	47	143	40	109	*22	7.6	3.4	5.5
5	2.4	9.0	23	34	46	126	40	108	20	8.6	3.1	4.3
6	2.7	8.3	27	33	43	113	40	84	19	7.9	2.7	3.6
7	2.9	9.0	120	33	40	106	49	74	18	7.3	2.6	3.2
8	2.9	12	181	b26	36	101	45	78	16	6.7	2.4	3.2
9	2.7	13	136	b28	35	92	40	82	15	6.1	4.3	3.4
10	2.7	15	160	b25	35	86	37	76	15	5.5	6.1	3.4
11	2.7	15	194	b20	35	79	35	79	15	5.3	5.0	5.3
12	2.7	15	153	b25	b30	71	37	67	14	4.8	4.1	7.3
13	2.6	15	149	b27	b23	67	34	61	16	4.3	3.6	6.1
14	2.6	14	172	b26	b23	85	32	54	16	5.0	3.2	5.0
15	2.6	13	231	b25	24	90	31	51	14	5.3	3.2	4.8
16	2.6	12	196	b26	33	74	34	48	14	4.8	3.2	7.3
17	2.6	11	160	26	*69	66	69	45	13	4.3	2.9	16
18	2.6	11	148	b23	85	60	82	42	12	4.6	2.6	14
19	2.6	10	124	b23	64	56	65	40	11	4.6	2.7	14
20	2.6	9.8	88	b23	56	86	56	39	10	4.1	3.2	20
21	2.6	9.4	85	b35	60	86	51	58	10	3.9	3.2	18
22	2.6	9.0	82	b45	86	72	47	58	9.8	3.6	3.2	20
23	2.6	22	80	b40	76	69	44	44	9.8	3.6	2.9	18
24	2.7	33	70	b37	69	65	46	39	9.8	3.4	2.7	14
25	3.2	29	59	b35	67	66	43	37	11	3.4	2.6	12
26	3.1	35	55	37	67	76	40	34	10	3.2	2.6	11
27	2.9	30	52	58	74	65	43	30	9.8	2.9	2.4	10
28	4.6	26	49	b62	66	59	50	29	9.0	2.7	2.4	9.8
29	24	23	49	b47	-------	56	47	31	9.4	2.7	2.2	8.6
30	53	22	49	b47	-------	53	40	56	9.6	2.6	2.7	7.6
31	29	-------	46	b42	-------	51	-------	40	-------	2.4	*18	-------

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

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.3	a15	71	111	21	70	75	35	11	5.0	1.6	40
2	7.0	a30	67	104	18	91	71	33	11	5.0	1.3	35
3	6.7	a35	62	106	b18	79	66	30	9.4	4.8	1.2	33
4	6.4	33	58	94	b20	94	61	29	8.6	4.6	*1.2	29
5	6.1	31	55	85	b22	109	*54	28	8.6	4.3	1.4	26
6	5.8	30	46	85	b25	109	50	27	8.6	4.1	1.3	25
7	5.3	26	b40	85	b140	122	49	25	7.6	4.1	1.3	24
8	5.3	25	b35	72	136	102	45	24	7.3	*3.6	1.4	22
9	5.3	23	35	66	60	99	42	23	7.9	3.2	1.3	20
10	5.0	21	*49	65	49	99	40	22	8.6	3.2	1.3	19
11	5.3	20	43	60	56	94	37	21	9.4	4.6	1.6	18
12	5.0	19	38	53	b50	86	38	20	13	3.9	4.8	18
13	5.0	17	36	54	b55	80	46	19	14	3.4	61	17
14	4.8	14	47	50	b45	74	42	18	12	3.1	79	16
15	4.8	13	90	44	40	69	42	17	10	2.9	75	15
16	4.8	12	79	41	37	74	39	16	8.6	2.6	54	15
17	5.5	11	65	38	43	76	35	15	7.6	2.6	34	14
18	5.8	11	72	b35	58	70	33	14	7.0	2.4	46	13
19	5.8	11	104	33	47	69	32	13	6.7	2.6	381	13
20	5.5	19	88	b30	43	67	39	13	7.9	2.6	*522	13
21	5.3	88	b70	b30	42	65	38	12	8.6	2.6	292	11
22	5.3	156	b60	a27	41	101	40	11	7.3	2.2	194	11
23	5.0	122	b55	a27	62	162	38	11	6.7	2.0	143	10
24	4.8	97	54	27	70	147	33	13	7.3	2.2	108	24
25	4.8	90	52	b25	54	128	39	13	7.9	2.6	82	44
26	4.6	78	46	b25	51	122	41	11	7.3	2.2	67	28
27	4.8	67	44	24	50	119	40	11	6.7	2.1	58	22
28	4.8	61	45	b24	50	102	37	9.8	6.4	2.0	50	32
29	11	78	59	b22	-------	94	38	9.8	5.8	1.8	45	34
30	22	82	117	b22	-------	86	40	10	5.3	1.8	40	25
31	18	-------	140	b22	-------	80	-------	11	-------	1.7	40	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Pequest River stations.
b Stage-discharge relation affected by ice.

Beaver Brook near Belvidere--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	207.3	9.2	5.6	6.69	0.185	0.21
November	812.2	176	5.9	27.1	.749	.83
December	2,510	175	32	81.0	2.24	2.58
Calendar year 1950	19,127.0	242	5.6	52.4	1.45	19.65
January 1951	2,470	175	35	79.7	2.20	2.54
February	4,004	250	85	143	3.95	4.11
March	3,296	397	67	106	2.93	3.39
April	3,720	373	49	124	3.43	3.82
May	1,143	85	21	36.9	1.02	1.17
June	974.4	58	19.2	32.5	.898	1.00
July	1,737.8	414	12.2	56.1	1.55	1.79
August	2,513	172	34	81.1	2.24	2.58
September	932.0	68	18.7	31.1	.859	.96
Water year 1950-51	24,319.7	414	5.6	66.6	1.84	24.98
October 1951	986.3	65	15.3	31.8	.878	1.01
November	4,511	481	69	150	4.14	4.63
December	3,001	224	55	96.8	2.67	3.08
Calendar year 1951	29,288.5	481	12.2	80.2	2.22	30.08
January 1952	4,102	267	80	132	3.65	4.21
February	2,979	213	56	103	2.85	3.06
March	3,636	400	54	117	3.23	3.74
April	6,272	462	73	209	5.77	6.44
May	2,918	217	45	94.1	2.60	3.00
June	1,527.8	140	19.1	50.9	1.41	1.57
July	717.3	128	9.9	23.1	.638	.74
August	892.7	123	9.1	28.8	.796	.92
September	1,591	153	23	53.0	1.46	1.63
Water year 1951-52	33,134.1	481	9.1	90.5	2.50	34.03
October 1952	530	38	12	17.1	.472	.54
November	1,486.8	233	9.8	49.6	1.37	1.53
December	3,246	315	46	105	2.90	3.33
Calendar year 1952	29,898.6	462	9.1	81.7	2.26	30.71
January 1953	3,663	388	41	118	3.26	3.76
February	2,519	129	65	90.0	2.49	2.59
March	3,432	150	62	111	3.07	3.53
April	3,500	177	71	117	3.23	3.60
May	2,001	113	38	64.5	1.78	2.06
June	586	40	10	19.5	.539	.60
July	349.9	37	5.0	11.3	.312	.36
August	230.4	30	3.6	7.43	.205	.24
September	120.1	7.3	2.7	4.00	.110	.12
Water year 1952-53	21,664.2	388	2.7	59.4	1.64	22.26
October 1953	182.6	53	2.4	5.89	.163	.19
November	487.5	35	8.3	16.2	.448	.50
December	3,012	231	17	97.2	2.69	3.09
Calendar year 1953	20,083.5	388	2.4	55.0	1.52	20.64
January 1954	1,060	62	20	34.2	.945	1.09
February	1,407	86	23	50.2	1.39	1.44
March	2,503	143	51	80.7	2.23	2.57
April	1,357	82	31	45.2	1.25	1.39
May	1,712	109	29	55.2	1.52	1.76
June	438.2	30	9.0	14.6	.403	.45
July	151.3	8.6	2.4	4.88	.135	.16
August	110.7	18	2.1	3.57	.099	.11
September	290.0	20	3.2	9.67	.267	.30
Water year 1953-54	12,711.3	231	2.1	34.8	.961	13.05
October 1954	202.9	22	4.6	6.55	.181	.21
November	1,335	156	11	44.5	1.23	1.37
December	1,922	140	35	62.0	1.71	1.97
Calendar year 1954	12,489.1	156	2.1	34.2	.945	12.82
January 1955	1,586	111	22	51.2	1.41	1.63
February	1,403	140	18	50.1	1.38	1.44
March	2,939	162	65	94.8	2.62	3.02
April	1,320	75	32	44.0	1.22	1.36
May	564.6	35	9.8	18.2	.503	.58
June	254.1	14	5.3	8.47	.234	.26
July	95.8	5.0	1.7	3.09	.085	.10
August	2,390.7	522	1.2	77.1	2.13	2.46
September	666	44	10	22.2	.613	.68
Water year 1954-55	14,679.1	522	1.2	40.2	1.11	15.08

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 1955.

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.--33 years, 8,259 cfs (unadjusted).

Extremes.--1922-55: Maximum discharge, 273,000 cfs Aug. 19, 1955 (gage height, 30.21 ft, from high-water mark in gage house), from rating curve extended above 110,000 cfs on basis of flood-routing study; minimum, 609 cfs Sept. 28, 29, 1943 (gage height, 2.11 ft).

Flood of Oct. 10, 1903, reached a stage of 28.6 ft, from floodmark (discharge, 220,000 cfs, from rating curve extended above 170,000 cfs).

Revisions.--The maximum discharge for the water year 1933 has been revised to 122,000 cfs Aug. 25, 1933 (gage height, 19.90 ft), superseding the figure published in Special Report 5.

Peak discharge (base, 40,000 cfs).--

1950-51: Nov. 26 (11:30 p.m.) 103,200 cfs (18.10 ft); Dec. 5 (5 p.m.) 93,200 cfs (17.12 ft); Dec. 9 (8:30 a.m.) 49,600 cfs (12.50 ft); Jan. 25 (1 p.m.) 40,800 cfs (11.40 ft); Feb. 3 (6 a.m.) 41,900 cfs (11.55 ft); Feb. 23 (1 a.m.) 40,900 cfs (11.41 ft); Mar. 31 (11:30 p.m.) 120,600 cfs (19.75 ft).

1951-52: Nov. 9 (2 a.m.) 57,300 cfs (13.40 ft); Jan. 28 (7 a.m.) 50,900 cfs (12.65 ft); Mar. 12 (8 p.m.) 60,900 cfs (13.80 ft); Apr. 6 (6 p.m.) 68,800 cfs (14.65 ft); Apr. 16 (9:30 a.m.) 60,800 cfs (13.79 ft); May 26 (1 and 5 p.m.) 43,700 cfs (11.78 ft); July 10 (11:30 p.m.) 87,200 cfs (16.53 ft).

1952-53: Nov. 23 (9 a.m.) 43,100 cfs (11.70 ft); Dec. 12 (1 p.m.) 122,000 cfs (20.00 ft); Jan. 25 (7 p.m.) 81,300 cfs (16.13 ft).

1953-54: Feb. 18 (6 p.m.) 38,000 cfs (11.00 ft), (maximum below base).

1954-55: Aug. 19 (8 p.m.) 273,000 cfs (30.21 ft).

Remarks.--Diurnal fluctuation at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack and by Pepacton, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see p.388) and smaller reservoirs. Diversion from Pepacton and Neversink Reservoirs (see p.394).

Revisions.--Special Report 9: Drainage area. Revised figures of discharge, in cubic feet per second, for the water year 1923, superseding those published in Bulletin 33, are given herewith:

1923		1923-Con.	
Feb. 15	4,000	Feb. 21	2,800
16	3,600	22	2,800
17	3,400	23	2,800
18	3,300	24	2,900
19	3,100	25	2,900
20	3,000	26	3,000

Month	Maximum	Minimum	Mean	Per square mile	Runoff in inches
February 1923	6,800	2,800	4,130	0.911	0.95
Calendar year 1923	70,000	895	7,130	1.57	21.37

Delaware River at Belvidere--Continued

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,950	1,420	15,100	5,800	9,510	14,300	91,600	8,570	7,180	5,140	6,920	2,140
2	1,640	1,360	12,400	5,540	15,200	13,100	48,600	7,760	6,100	6,290	5,570	2,280
3	1,510	1,350	10,600	5,770	29,300	12,100	38,000	7,280	5,140	6,350	4,490	1,770
4	1,880	1,500	13,800	6,950	17,000	11,400	34,300	6,890	4,510	5,310	4,100	1,850
5	2,090	2,000	72,600	13,900	12,700	10,500	28,700	6,470	5,860	5,080	3,480	2,140
6	2,050	3,770	62,500	20,600	12,800	11,700	23,500	5,540	5,740	5,310	3,090	2,810
7	1,830	6,220	34,200	14,400	15,400	11,800	19,700	5,000	4,830	4,750	2,790	2,770
8	1,690	5,000	33,200	11,200	29,300	*12,600	16,800	5,540	4,310	4,280	2,830	2,670
9	1,540	4,120	45,700	10,000	26,500	14,800	15,000	5,310	4,020	3,760	2,980	2,280
10	1,390	3,660	32,900	8,830	16,000	13,900	14,800	5,110	3,500	3,480	3,160	2,240
11	2,450	3,430	25,000	8,320	13,600	11,000	15,000	5,140	3,270	3,920	3,920	2,180
12	2,110	3,200	21,700	8,940	12,800	9,770	16,400	5,540	3,500	3,710	3,130	2,610
13	2,530	2,960	18,400	8,680	14,700	11,100	21,800	5,110	3,680	3,800	3,640	2,430
14	2,490	2,830	15,600	7,410	19,200	12,800	30,000	4,720	4,640	4,200	3,710	2,590
15	2,290	2,710	13,600	7,900	22,000	16,200	23,200	5,080	6,670	4,050	3,540	3,640
16	2,020	2,590	12,500	11,100	16,600	17,000	19,000	4,800	6,830	3,450	4,200	3,430
17	1,850	2,650	10,700	13,100	14,700	14,600	17,400	4,490	5,420	3,450	4,720	4,000
18	2,050	2,530	9,270	11,500	14,800	12,300	15,500	4,380	4,410	3,570	5,980	3,980
19	1,830	2,430	9,310	10,600	14,100	11,000	13,900	4,200	4,380	3,520	6,160	3,250
20	1,670	2,280	8,320	11,600	15,600	15,400	12,800	3,500	4,230	4,100	4,460	2,880
21	1,510	2,630	7,480	12,600	19,800	21,400	11,600	3,200	3,730	5,800	4,000	2,410
22	1,420	3,710	6,670	13,100	33,300	18,900	9,890	3,660	3,780	6,760	*4,050	1,980
23	1,510	5,800	6,950	12,300	35,800	16,100	10,200	4,230	5,000	5,280	3,760	1,880
24	1,750	4,720	6,600	15,600	24,200	14,200	12,400	5,280	5,510	4,970	3,090	1,730
25	2,330	6,290	6,410	34,400	18,300	15,700	12,800	5,740	4,490	4,670	2,790	1,690
26	2,240	58,400	5,510	28,800	15,600	18,600	10,900	4,860	5,050	3,710	2,510	2,000
27	2,000	78,900	4,910	20,200	15,600	15,200	10,500	3,830	4,490	3,160	2,510	2,200
28	1,900	38,300	4,540	16,000	15,100	13,600	9,890	3,660	4,830	6,610	2,220	2,390
29	1,750	24,000	5,220	13,500	-------	14,200	8,790	5,580	4,670	7,690	2,670	2,240
30	1,530	18,400	6,100	12,600	-------	34,400	8,570	8,680	4,700	7,550	2,570	1,570
31	1,360	-------	5,800	10,600	-------	97,800	-------	8,070	-------	8,010	2,280	-------

* Discharge measurement made on this day.

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,690	5,250	7,790	11,100	14,600	6,100	15,600	18,500	16,300	2,430	2,790	4,180
2	1,650	8,140	7,550	15,200	14,600	5,450	19,600	15,700	28,900	2,530	2,710	12,600
3	2,160	12,400	7,480	22,200	17,000	4,490	34,200	13,800	24,900	2,040	2,530	14,900
4	2,160	28,900	7,450	19,000	20,200	5,140	29,300	12,300	18,800	1,920	1,830	12,700
5	2,260	26,200	8,610	16,600	28,900	6,040	31,800	10,300	17,200	1,830	1,860	9,310
6	2,290	18,000	18,400	14,600	31,800	5,980	61,100	10,300	15,600	1,690	2,770	7,310
7	2,140	19,400	21,000	12,800	24,600	5,600	53,900	9,620	13,800	1,570	3,090	6,010
8	2,430	47,500	16,600	11,200	19,800	5,480	35,800	8,790	11,100	1,610	2,770	4,940
9	4,700	49,200	14,300	9,890	17,200	4,890	26,800	8,320	10,200	3,750	2,610	4,360
10	5,280	30,800	14,900	9,850	14,700	4,590	21,500	7,720	9,930	37,400	2,960	4,080
11	4,720	21,900	15,700	9,620	13,100	12,400	18,300	7,380	8,940	59,500	3,050	3,730
12	5,110	17,500	13,600	8,610	12,900	45,100	15,600	9,620	8,070	24,800	3,360	3,680
13	5,360	14,600	12,100	7,620	11,400	46,500	13,800	17,200	7,080	14,900	3,610	3,760
14	6,380	13,000	10,700	7,650	9,540	28,900	19,800	21,000	6,470	10,900	3,340	3,320
15	5,190	13,100	10,000	9,120	8,070	20,400	36,200	17,300	5,600	8,790	2,770	2,630
16	4,670	13,800	7,790	10,800	7,620	15,700	53,900	15,400	5,080	7,580	3,020	3,380
17	4,180	14,600	6,350	13,600	7,690	13,300	36,200	13,800	5,250	6,670	6,100	3,660
18	3,680	13,400	6,540	12,700	7,450	12,400	26,000	12,200	5,510	5,540	4,670	3,640
19	3,730	11,800	6,190	16,600	8,000	11,700	20,800	11,500	4,940	4,940	4,250	4,700
20	3,570	10,700	5,770	16,300	7,690	12,200	17,800	12,000	4,410	3,920	4,020	5,280
21	3,250	9,970	10,500	15,500	7,720	*12,400	15,000	13,100	3,950	3,360	3,430	4,000
22	2,670	8,610	20,000	13,800	7,620	18,100	13,600	13,300	3,780	3,980	3,520	3,360
23	2,730	8,040	21,800	15,400	6,630	26,400	12,200	11,900	3,680	4,890	3,850	3,380
24	3,220	8,210	18,200	16,800	6,190	30,200	11,300	10,600	4,180	4,670	3,160	3,500
25	4,180	9,850	14,800	14,800	5,860	30,300	11,400	12,700	4,250	3,800	2,410	2,770
26	5,280	11,100	12,500	14,400	6,160	26,000	15,700	37,900	3,900	3,130	2,110	2,570
27	6,510	10,400	11,100	25,800	6,100	24,700	18,200	34,500	3,320	2,940	2,140	2,570
28	5,740	9,500	9,970	47,700	6,040	24,900	19,800	23,600	2,920	2,430	2,290	2,370
29	5,340	8,750	9,160	35,200	6,160	22,100	24,900	18,600	2,790	2,590	2,450	2,000
30	4,860	7,900	9,090	23,300	-------	18,400	22,700	16,100	2,410	3,020	2,390	1,920
31	4,720	-------	9,350	17,200	-------	15,800	-------	13,600	-------	2,810	2,180	-------

* Discharge measurement made on this day.

Delaware River at Belvidere--Continued

Daily discharge, in cubic feet per second, 1950-55

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,570	1,920	7,350	7,000	14,600	11,800	18,600	17,700	7,000	3,260	1,670	645
2	2,610	1,750	6,720	6,300	14,400	10,200	17,200	23,100	7,000	3,880	1,410	1,180
3	3,080	1,320	6,510	6,370	13,400	9,920	16,700	24,300	6,000	3,420	1,200	1,440
4	3,140	1,210	6,000	6,440	12,100	12,500	14,900	21,200	5,250	2,730	1,020	1,720
5	2,850	2,000	6,400	5,970	11,300	16,500	12,800	19,000	4,980	2,070	950	1,620
6	2,230	1,470	13,800	5,730	*10,500	16,600	11,800	21,000	4,740	1,690	1,030	1,920
7	2,230	1,870	16,700	5,370	10,800	13,200	15,900	20,900	5,130	1,670	1,200	1,950
8	2,670	2,060	14,300	5,010	14,400	11,100	29,500	19,200	5,610	1,900	1,010	1,410
9	2,560	2,060	12,000	5,400	15,800	9,720	27,200	19,700	6,060	1,920	892	*2,480
10	2,230	1,290	10,800	5,250	13,400	9,720	22,100	17,600	5,370	1,820	1,220	3,100
11	2,460	1,300	31,700	a6,500	11,400	*8,920	21,600	15,500	4,380	1,720	1,250	2,090
12	1,950	2,000	110,000	a8,500	10,600	8,480	19,300	14,200	3,750	1,560	1,200	1,590
13	1,720	1,520	68,700	a9,000	10,400	9,200	18,600	12,900	3,700	1,470	1,050	1,470
14	1,590	2,040	37,200	8,080	9,640	10,900	21,900	12,500	3,700	1,470	1,340	1,470
15	1,950	2,000	25,400	7,350	9,400	11,500	20,800	12,500	3,800	2,090	1,190	1,720
16	1,840	1,940	20,400	7,320	10,200	20,700	18,600	12,400	4,080	2,020	1,290	2,020
17	1,950	1,500	17,000	7,350	11,200	30,300	19,400	11,400	3,750	1,750	1,110	1,780
18	1,720	1,590	14,900	9,280	10,200	23,000	a17,000	13,600	3,360	2,140	1,420	1,440
19	1,540	2,230	13,200	12,300	8,920	20,000	a17,000	15,800	3,180	1,950	1,440	1,290
20	1,620	2,460	11,800	15,300	8,640	20,900	a16,700	13,100	3,020	1,770	1,190	1,110
21	1,580	8,920	10,100	13,800	10,900	19,800	16,600	11,600	2,690	1,820	970	1,090
22	2,040	24,600	10,600	13,100	29,400	15,800	15,200	10,400	2,400	2,420	864	1,040
23	1,970	40,600	11,400	11,800	29,100	14,300	13,900	10,400	2,400	2,770	768	1,410
24	1,520	30,400	11,200	17,300	20,600	16,000	12,800	9,760	2,650	3,080	760	a1,200
25	1,440	20,300	10,400	64,500	17,400	29,300	12,000	9,280	2,610	2,230	720	a1,000
26	1,440	15,100	9,600	61,300	15,600	34,200	11,200	8,800	2,460	1,690	950	a950
27	1,250	12,400	9,280	36,000	14,400	*38,700	19,100	8,800	2,770	1,470	1,050	a950
28	1,160	10,400	8,260	25,900	13,300	34,400	29,000	8,300	2,690	1,410	940	a1,000
29	1,690	9,240	6,680	23,600	-------	28,300	23,500	7,630	1,920	1,620	1,150	a900
30	2,290	8,260	6,790	20,400	-------	22,600	19,000	7,040	2,270	1,560	1,200	a1,000
31	2,070	-------	7,100	16,400	-------	20,000	-------	7,000	-------	1,650	820	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for stations at Montague and Riegelsville.

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a1,300	4,620	5,490	5,040	8,600	11,600	8,400	10,900	6,370	1,360	892	3,100
2	a1,600	3,980	5,040	3,800	7,800	17,700	7,660	9,920	6,060	1,400	836	3,300
3	a1,100	3,240	4,560	3,650	8,520	24,900	7,320	9,800	5,310	1,340	744	3,140
4	760	2,850	4,250	3,700	8,880	24,300	6,820	13,800	5,070	1,280	820	2,850
5	768	2,520	4,280	4,150	8,020	20,900	6,150	20,700	4,980	1,520	980	2,060
6	720	2,480	4,300	4,350	7,320	16,400	6,210	17,300	4,420	1,480	902	1,590
7	1,460	3,080	17,300	4,400	6,150	13,900	6,300	14,000	3,720	1,440	940	1,320
8	1,670	3,020	33,800	3,820	5,250	12,500	6,930	13,200	3,750	1,460	836	1,210
9	1,470	2,400	23,900	3,180	5,520	12,200	7,350	16,000	3,700	1,520	811	1,290
10	1,470	2,500	20,300	2,380	5,490	11,100	6,510	16,800	3,480	1,250	864	1,320
11	1,500	3,180	21,600	1,940	5,340	10,100	6,030	26,400	3,360	1,150	1,040	1,360
12	1,240	3,020	18,600	2,470	4,710	9,640	6,210	27,400	3,240	1,190	921	1,440
13	1,060	3,100	16,500	3,650	3,700	8,680	7,520	21,200	3,120	1,020	912	1,280
14	1,340	3,300	17,700	3,580	3,520	8,840	7,040	17,500	3,100	1,100	845	1,140
15	1,470	3,050	21,500	3,850	3,200	9,720	6,440	15,000	3,950	1,290	696	1,040
16	1,400	2,880	21,000	3,950	3,680	10,100	6,620	12,600	4,300	1,380	902	1,440
17	1,110	3,080	16,600	3,300	6,890	9,120	9,730	11,100	3,620	1,260	680	2,110
18	1,040	3,520	13,400	2,630	31,800	8,220	31,800	10,100	3,380	1,000	828	2,110
19	960	3,120	11,200	2,460	29,200	7,520	25,100	9,080	3,160	912	760	2,270
20	845	2,950	9,600	3,820	20,000	9,080	18,600	8,220	2,710	836	760	2,270
21	864	2,810	8,920	3,900	16,000	11,200	15,100	8,520	2,230	1,200	864	2,650
22	1,150	2,730	*9,600	4,000	18,100	12,600	13,000	10,100	2,330	1,160	1,060	3,080
23	1,060	3,020	9,200	b4,700	25,500	11,200	11,300	10,000	2,570	1,210	1,060	2,610
24	1,000	4,500	8,520	b6,200	19,400	10,200	11,200	9,680	2,690	1,020	*680	2,220
25	940	8,120	7,040	5,490	16,500	9,680	11,000	8,920	2,360	864	610	1,840
26	874	8,160	6,300	5,820	15,500	10,100	9,560	8,020	2,290	1,010	940	1,610
27	811	8,080	6,000	6,860	14,600	11,500	9,400	7,320	2,290	*820	970	1,580
28	1,160	7,770	6,000	14,200	12,700	10,900	10,400	6,680	1,780	940	950	1,480
29	2,130	6,480	6,240	19,900	-------	9,600	13,800	6,300	1,440	950	768	1,420
30	4,240	5,760	6,060	13,400	-------	9,160	12,400	5,640	1,340	970	760	1,290
31	4,740	-------	5,580	10,600	-------	8,920	-------	6,300	-------	930	1,690	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for stations at Montague and at Riegelsville.

Delaware River at Belvidere--Continued

Daily discharge, in cubic feet per second, 1950-55

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,480	1,500	12,800	17,400	b2,100	11,000	9,840	9,800	4,350	1,920	1,160	7,840
2	2,140	1,620	11,000	14,100	b3,300	21,200	9,320	8,400	4,320	2,290	940	8,360
3	1,890	3,450	9,680	14,000	b3,000	22,300	8,920	8,330	4,250	2,140	1,480	6,900
4	1,290	16,100	8,720	14,000	b3,000	16,600	9,200	7,490	3,700	1,870	1,670	6,600
5	1,160	17,700	7,630	12,300	b3,200	16,600	9,720	6,680	3,300	1,750	1,520	5,340
6	1,900	13,400	6,340	11,400	3,400	15,100	9,320	6,540	3,020	1,850	1,560	4,990
7	1,870	10,700	6,270	11,400	4,830	16,100	9,560	5,490	3,300	2,110	1,520	5,160
8	1,460	8,300	5,520	10,100	4,590	14,100	10,200	4,830	3,440	1,820	1,220	4,820
9	1,140	7,380	5,790	7,910	5,850	11,400	9,240	4,560	3,920	1,650	1,120	4,440
10	1,050	6,620	6,060	7,210	5,820	11,200	7,980	5,160	4,500	1,820	1,120	4,330
11	1,050	6,030	5,850	7,660	5,940	12,900	7,100	*5,010	3,750	1,670	1,060	3,900
12	950	5,310	5,130	6,510	6,300	17,400	7,350	4,480	3,920	1,440	1,410	3,100
13	1,050	5,010	4,530	6,030	5,610	19,100	8,300	4,250	4,120	1,460	5,210	3,730
14	1,050	4,250	5,340	5,640	5,280	17,000	8,920	3,850	5,010	1,260	16,200	4,680
15	1,610	3,950	7,210	5,520	5,820	14,900	9,960	3,480	5,430	1,250	15,900	4,120
16	1,940	4,120	12,000	5,100	5,400	13,800	13,600	3,080	4,500	1,210	11,900	4,180
17	1,690	4,500	11,200	b4,000	5,250	15,100	12,400	3,400	3,700	1,690	7,980	3,830
18	1,460	4,300	9,800	b4,500	5,400	14,400	10,700	3,300	3,300	1,420	9,040	3,260
19	1,300	4,050	14,200	5,160	4,560	12,200	10,100	3,120	2,750	1,460	*184,000	2,640
20	1,460	4,770	18,800	4,380	4,450	10,500	9,680	3,140	2,570	2,110	*139,000	3,540
21	1,540	6,800	14,300	4,180	4,320	9,840	9,080	3,020	2,750	1,690	45,500	4,510
22	1,470	24,500	11,300	4,150	5,220	13,600	8,720	2,480	2,880	1,350	29,300	2,890
23	1,380	25,500	9,000	3,720	6,090	27,300	8,760	2,110	2,770	1,620	25,300	2,810
24	1,380	18,000	9,240	2,900	9,840	26,900	7,980	2,690	2,650	1,620	21,600	3,300
25	1,470	15,000	8,300	b2,800	14,400	20,300	8,050	3,280	2,730	1,210	16,200	4,790
26	1,210	12,400	6,960	b3,200	11,300	17,300	11,200	3,260	2,290	1,260	12,800	4,960
27	1,210	11,500	6,000	b3,700	9,880	15,700	12,500	3,680	2,110	1,610	10,500	4,740
28	1,500	9,920	6,150	b3,100	8,400	13,500	12,000	3,240	1,990	1,300	8,900	4,540
29	1,420	9,440	6,440	b3,200	-------	12,200	11,000	2,750	1,940	1,320	7,600	5,400
30	1,640	13,300	11,800	b3,100	-------	11,000	11,000	2,610	1,920	1,460	6,940	6,480
31	1,690	-------	21,100	b2,200	-------	10,000	-------	3,100	-------	1,170	7,420	-------

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--From graph based on hourly wire-weight gage readings by Delaware River Joint Toll Bridge Commission and high-water mark in gage house Aug. 19 (5 a.m.) to Aug. 20 (12 m.).

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	58,160	2,530	1,360	1,876		
November	299,160	78,900	1,350	9,972		
December	543,590	72,600	4,540	17,540		
Calendar year 1950	3,463,060	78,900	1,350	9,488		
January 1951	391,840	34,400	5,540	12,640		
February	519,510	35,800	9,510	18,550		
March	537,470	97,800	9,770	17,340		
April	621,540	91,600	8,570	20,720		
May	167,220	8,680	3,200	5,394		
June	144,470	7,180	3,270	4,816		
July	152,730	9,010	3,160	4,927		
August	115,320	6,920	2,220	3,720		
September	74,030	4,000	1,570	2,468		
Water year 1950-51	3,625,040	97,800	1,350	9,932		
October 1951	121,850	6,510	1,650	3,931		
November	482,520	49,200	5,250	16,080		
December	365,290	21,800	5,770	11,780		
Calendar year 1951	3,693,790	97,800	1,570	10,120		
January 1952	494,960	47,700	7,620	494,960		
February	355,340	31,800	5,860	12,250		
March	521,660	46,500	4,490	16,830		
April	752,800	61,100	11,300	25,090		
May	458,650	37,900	7,380	14,800		
June	263,260	28,900	2,410	8,775		
July	241,930	59,500	1,570	7,804		
August	94,040	6,100	1,830	3,034		
September	146,610	14,900	1,920	4,887		
Water year 1951-52	4,298,910	61,100	1,570	11,750		

Delaware River at Belvidere--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1952	62,960	3,140	1,160	2,031		
November	215,750	40,600	1,210	7,192		
December	552,290	110,000	6,000	17,820		
Calendar year 1952	4,160,250	110,000	1,160	11,370		
January 1953	453,920	64,500	5,010	14,640		
February	382,000	29,400	8,640	13,640		
March	558,560	38,700	8,480	18,020		
April	549,900	29,500	11,200	18,330		
May	436,110	24,300	7,000	14,070		
June	118,720	7,000	1,920	3,957		
July	64,020	3,880	1,410	2,065		
August	34,274	1,670	720	1,106		
September	43,985	3,100	645	1,466		
Water year 1952-53	3,472,489	110,000	645	9,514		
October 1953	43,252	4,740	720	1,395		
November	119,320	8,160	2,400	3,977		
December	370,380	33,800	4,250	11,950		
Calendar year 1953	3,174,441	64,500	645	8,697		
January 1954	165,190	19,900	1,940	5,329		
February	321,890	31,800	3,200	11,500		
March	371,580	24,900	7,520	11,990		
April	311,900	31,800	6,030	10,400		
May	388,500	27,400	5,640	12,530		
June	102,120	6,370	1,340	3,404		
July	36,262	1,520	820	1,170		
August	27,321	1,690	610	881		
September	57,420	3,300	1,040	1,914		
Water year 1953-54	2,315,135	33,800	610	6,343		
October 1954	44,850	2,140	950	1,447		
November	279,420	25,500	1,500	9,314		
December	284,460	21,100	4,530	9,176		
Calendar year 1954	2,390,913	31,800	610	6,550		
January 1955	210,570	17,400	2,200	6,793		
February	162,550	14,400	2,100	5,805		
March	480,540	27,300	9,840	15,500		
April	291,700	13,600	7,100	9,723		
May	136,610	9,800	2,110	4,407		
June	101,180	5,430	1,920	3,379		
July	49,800	2,290	1,170	1,606		
August	597,070	184,000	940	19,260		
September	140,180	8,360	2,640	4,673		
Water year 1954-55	2,778,930	184,000	940	7,614		

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 1955 (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.--1936-55: Maximum gage height, 98.90 ft Aug. 19, 1955, from floodmark; minimum observed, 54.51 ft Oct. 22, 1941.
Flood of Oct. 10, 1903, reached a stage of 93.3 ft (present datum), from floodmark.

Maximum gage height observed.--
1950-51: Apr. 1 (2 to 3 a.m.) 78.60 ft.
1951-52: July 11 (1 to 2 a.m.) 75.06 ft.
1952-53: Dec. 12 (11 a.m. and 12 m.) 80.60 ft.
1953-54: Dec. 8 (12 m. and 1 p.m.) 66.65 ft.
1954-55: Aug. 19 (about 10 p.m.) 98.90 ft, from floodmark.

Remarks.--Gage read hourly above 60.2 ft and twice daily below. 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, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	55.55	61.77	58.05	59.20	62.53	77.25	59.15	58.53	57.85	58.75	56.24
2	-	55.35	60.80	57.95	61.70	61.80	69.20	58.90	58.03	58.07	58.15	56.28
3	-	55.56	60.20	57.85	66.45	61.50	66.75	58.56	57.84	58.33	57.75	56.15
4	-	55.60	60.00	58.20	62.00	61.38	66.00	58.45	57.57	57.90	57.40	55.88
5	55.90	56.30	73.90	59.78	60.75	61.25	64.65	58.20	57.79	57.70	57.15	56.05
6	56.00	56.85	73.10	63.53	60.63	61.30	63.60	58.05	57.90	57.95	56.85	56.48
7	55.75	58.75	67.05	61.20	60.60	61.39	62.60	57.80	57.52	57.65	56.70	56.78
8	55.85	57.70	66.35	60.35	65.80	61.57	61.90	57.80	57.47	57.33	56.45	56.80
9	55.55	57.25	69.58	59.30	64.85	62.15	61.30	57.70	57.43	57.00	56.90	56.40
10	55.75	56.80	66.85	58.80	62.05	62.10	61.25	57.60	57.05	56.90	56.75	56.15
11	56.45	56.90	64.77	59.00	62.25	61.17	61.30	57.55	57.00	56.83	57.40	56.10
12	56.25	56.60	63.80	59.08	61.85	60.60	61.63	57.75	56.90	57.05	57.10	56.45
13	56.35	56.55	62.82	58.93	62.40	60.80	63.85	57.75	56.90	57.10	56.60	56.42
14	56.40	56.20	61.95	58.65	63.56	61.40	65.70	57.60	57.39	57.05	57.35	56.38
15	56.25	56.45	61.28	59.80	64.45	62.68	64.00	57.35	58.22	57.15	57.05	57.34
16	56.15	56.30	60.95	60.38	63.08	63.06	62.70	57.45	58.35	56.85	58.97	57.25
17	55.87	56.33	60.32	60.67	62.25	62.35	62.30	57.25	58.05	56.66	58.85	56.85
18	56.14	56.35	59.82	60.44	63.00	61.60	61.67	57.20	57.55	56.86	58.30	57.00
19	55.92	56.25	59.40	59.87	62.45	61.17	61.10	57.15	57.10	56.81	58.60	56.75
20	55.88	56.05	59.40	60.14	62.90	62.40	60.73	56.85	57.15	57.28	57.80	56.60
21	55.55	56.30	-	60.52	63.40	64.70	60.25	56.85	57.00	57.40	57.30	56.45
22	55.63	56.80	-	60.82	66.15	63.90	59.72	56.78	56.80	58.25	57.45	56.00
23	55.77	57.70	-	60.35	67.60	63.08	59.92	57.15	57.85	57.80	57.27	55.80
24	55.74	57.45	-	60.55	65.10	62.30	60.38	57.60	58.35	57.45	56.90	55.60
25	56.15	57.30	-	66.55	63.55	62.35	60.72	57.95	57.60	57.10	56.80	56.10
26	56.20	70.45	-	65.62	62.65	63.35	59.97	57.60	57.40	57.00	56.45	56.30
27	55.93	75.70	-	63.32	62.70	61.50	59.73	57.25	57.30	56.65	56.45	56.30
28	55.90	67.85	57.70	61.95	62.50	60.85	59.58	57.05	57.20	58.82	56.30	56.55
29	55.87	64.30	57.60	61.18	-------	60.67	59.30	57.30	57.20	61.80	56.85	56.55
30	55.70	62.65	58.30	60.78	-------	63.15	59.34	57.80	57.45	59.55	56.55	55.85
31	55.52	-------	58.35	59.85	-------	73.65	-------	59.05	-------	60.00	56.45	-------

Delaware River at Easton, Pa.--Continued

Daily gage height at 8 a.m., in feet, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56.05	57.60	58.72	59.80	61.57	58.05	61.25	62.40	61.38	56.35	56.60	56.17
2	56.10	59.20	58.74	61.37	61.35	58.02	62.05	62.25	64.50	56.67	56.70	63.27
3	56.10	60.70	58.75	63.65	61.68	57.65	65.20	61.55	62.98	56.20	56.76	63.25
4	56.00	65.20	58.70	63.40	62.62	57.47	64.80	60.87	62.50	56.10	56.25	62.25
5	56.18	64.85	58.86	62.45	64.80	58.12	64.25	60.35	62.00	56.10	56.50	60.69
6	56.20	62.60	62.95	61.70	65.90	58.18	70.80	59.95	61.40	55.95	56.30	59.68
7	56.05	61.60	63.89	61.10	64.25	58.02	70.55	59.75	61.00	55.95	57.05	58.98
8	56.65	69.65	62.39	60.35	63.00	57.80	66.85	59.40	60.18	55.80	56.60	58.20
9	56.70	69.80	61.60	60.00	62.10	57.90	64.80	58.20	59.83	56.50	56.50	57.93
10	57.35	65.80	61.10	59.80	61.40	57.65	63.45	58.95	59.58	65.50	56.55	57.67
11	57.20	63.62	61.57	59.50	60.95	58.05	62.55	58.95	59.27	73.40	58.10	57.47
12	57.40	62.35	61.00	59.35	60.65	68.77	61.75	58.95	58.90	65.10	57.20	57.38
13	57.47	61.45	60.45	58.95	60.25	69.74	61.10	61.75	58.55	61.92	57.55	57.42
14	58.82	60.85	60.00	58.85	59.35	65.78	62.50	62.28	58.30	60.50	57.35	57.40
15	57.55	60.96	59.60	59.35	59.45	63.46	66.20	62.20	58.12	59.50	57.00	56.90
16	57.15	60.95	59.00	59.78	58.75	61.95	70.80	61.60	57.80	59.02	56.85	57.22
17	57.15	61.55	59.00	61.07	59.10	61.16	67.43	61.15	57.55	58.47	58.80	57.49
18	56.90	61.20	58.15	60.88	59.05	60.70	64.90	60.60	57.90	58.02	58.72	57.25
19	56.90	60.65	57.85	61.70	58.85	60.20	63.50	60.45	57.55	57.89	57.95	57.97
20	56.85	60.12	57.85	62.05	58.80	60.65	62.47	60.25	57.35	57.55	57.70	59.10
21	56.82	59.80	59.90	61.75	58.60	60.70	61.68	60.85	57.35	57.28	57.90	57.44
22	56.35	59.40	62.80	61.35	58.80	61.22	61.22	61.10	57.05	57.05	57.80	57.12
23	56.34	59.15	63.25	62.30	58.45	64.05	60.60	60.60	57.05	58.35	57.70	57.02
24	56.65	59.10	62.48	62.20	58.25	64.60	60.30	60.15	57.26	57.85	57.30	57.25
25	56.95	59.65	61.53	61.73	58.15	65.15	59.98	60.30	57.20	57.37	56.85	56.92
26	57.60	60.15	61.04	61.22	58.00	64.05	62.03	66.58	57.32	57.07	56.50	56.62
27	57.98	59.90	60.35	63.42	58.10	63.55	62.78	67.15	57.10	56.92	56.55	56.64
28	57.80	59.50	59.80	69.12	58.85	63.50	63.65	64.30	56.70	56.70	56.35	56.50
29	57.70	59.10	59.50	67.05	58.05	63.02	65.96	62.80	56.65	56.57	56.65	56.31
30	57.38	58.90	59.50	64.12	-------	62.00	64.82	62.00	56.53	57.03	56.60	56.17
31	57.33	-------	59.50	62.30	-------	61.40	-------	61.25	-------	56.88	56.50	-------

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56.46	56.05	58.86	58.46	61.00	60.12	62.20	61.95	58.19	56.58	55.97	55.05
2	56.50	56.00	58.65	58.28	60.85	59.25	61.88	62.65	59.05	57.49	55.75	55.02
3	56.85	55.70	58.40	58.23	60.73	59.30	61.70	63.45	58.49	57.00	55.50	55.45
4	57.10	55.60	58.21	58.34	60.28	60.35	61.35	62.65	58.98	56.75	55.52	55.65
5	56.89	55.85	58.15	58.10	59.84	61.50	60.60	62.22	57.92	56.40	55.45	55.60
6	56.36	55.75	62.65	57.80	59.52	61.90	60.25	62.10	57.83	56.00	55.45	56.05
7	56.32	55.80	62.85	57.72	59.35	60.70	60.95	62.75	57.92	55.75	55.50	57.05
8	56.56	56.00	61.87	57.62	60.65	60.12	64.75	62.40	58.29	56.15	55.35	56.43
9	56.55	56.05	60.86	58.02	61.50	59.70	64.75	62.20	58.29	56.20	55.30	56.10
10	56.24	55.67	60.25	58.27	60.75	59.50	63.35	61.80	57.95	56.00	56.10	56.85
11	56.43	55.68	62.55	59.42	59.35	59.20	62.95	61.30	57.58	56.00	55.75	56.30
12	56.10	56.00	80.08	59.47	59.50	59.05	62.55	60.95	57.29	55.80	55.60	55.87
13	56.00	55.70	74.37	59.55	a59.70	59.15	62.35	60.39	57.25	55.85	55.50	55.82
14	56.95	55.80	67.58	59.25	59.20	59.67	63.00	60.35	57.49	55.15	55.50	55.68
15	56.10	55.82	64.65	58.94	59.25	59.85	63.00	60.15	57.29	55.90	55.45	55.75
16	56.05	55.95	63.15	58.90	60.05	61.95	62.35	60.40	57.19	56.10	55.50	55.90
17	56.02	55.88	62.14	58.99	59.95	65.25	62.65	60.05	57.29	55.95	55.50	56.20
18	56.05	55.70	61.42	59.25	59.60	63.65	62.40	60.78	57.05	56.05	55.45	55.74
19	56.00	56.15	60.30	60.65	59.10	62.75	62.34	61.67	57.00	55.85	55.70	55.57
20	56.00	56.22	60.17	61.54	59.05	62.80	62.08	60.78	56.89	56.05	55.45	55.40
21	56.95	59.50	59.75	61.42	59.20	62.70	62.00	60.26	56.87	55.95	55.40	55.43
22	56.00	66.30	60.16	60.80	63.40	61.75	61.55	59.72	56.59	56.55	55.25	55.35
23	55.95	70.98	60.10	60.35	65.35	60.99	61.10	61.40	56.57	56.50	55.20	55.40
24	55.80	67.27	59.77	60.25	63.10	60.99	60.65	60.56	56.68	57.20	55.15	55.30
25	55.70	64.05	59.70	70.42	62.05	64.00	60.25	60.05	56.68	56.61	55.12	55.25
26	55.70	62.25	59.54	72.13	61.50	66.35	60.25	59.86	56.55	56.05	54.90	55.25
27	55.75	61.14	59.40	66.93	61.00	67.00	61.15	59.74	56.58	55.90	55.32	55.21
28	55.65	60.30	59.05	64.36	60.50	66.10	64.62	59.39	56.78	55.70	55.25	55.25
29	55.65	59.98	58.55	63.56	-------	64.85	63.60	59.97	56.29	55.80	55.25	55.20
30	56.25	59.30	58.23	62.75	-------	63.45	62.45	58.68	56.49	55.80	55.45	55.05
31	56.00	-------	58.44	61.65	-------	62.70	-------	59.19	-------	55.75	55.30	-------

a Reading at 4 p.m.

Delaware River at Easton, Pa.--Continued

Daily gage height at 8 a.m., in feet, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55.20	57.30	57.63	57.10	58.85	59.91	-	59.85	58.15	55.42	55.02	57.15
2	55.21	57.15	57.45	57.20	58.55	62.04	58.65	59.35	57.75	55.35	55.02	56.80
3	55.35	56.69	57.33	56.96	58.34	64.25	58.47	59.40	57.50	55.45	55.10	56.65
4	55.30	56.44	57.20	57.00	58.66	64.11	58.33	60.25	57.33	55.46	54.95	56.70
5	55.23	56.25	57.15	57.10	58.25	63.10	58.08	62.75	57.15	55.35	55.20	56.30
6	55.00	56.09	57.20	59.20	58.13	61.89	57.97	62.15	57.15	55.60	55.00	55.80
7	55.10	56.35	63.40	57.25	57.63	61.03	58.07	61.00	56.87	55.59	55.05	55.60
8	55.70	56.74	66.50	56.95	57.38	60.45	58.17	60.50	56.70	55.57	55.13	55.50
9	55.45	56.14	64.32	56.15	57.37	60.30	58.39	61.00	56.68	55.61	55.00	55.45
10	55.46	56.09	63.40	56.35	57.52	59.92	58.08	61.45	56.62	55.49	55.15	55.55
11	55.58	56.69	63.40	56.39	57.40	59.58	57.91	63.27	56.60	55.34	55.15	55.45
12	55.45	56.70	62.80	55.95	56.95	59.40	57.87	64.65	56.55	55.45	55.25	55.60
13	55.40	56.50	62.10	55.90	56.55	59.08	58.10	63.22	56.85	55.25	55.05	55.60
14	55.30	56.69	62.10	56.45	56.88	59.23	58.36	62.20	56.70	55.19	55.05	55.45
15	55.44	56.68	63.60	56.60	56.68	59.60	58.15	61.40	56.49	55.43	55.00	55.35
16	55.47	56.60	63.50	57.10	56.78	59.60	58.06	60.50	57.09	55.40	54.96	55.35
17	55.35	56.57	62.13	56.70	57.40	59.23	58.90	60.05	56.78	-	55.05	56.30
18	55.30	57.03	61.10	56.35	63.50	58.88	64.97	59.60	56.74	55.15	54.90	56.30
19	55.26	56.19	59.95	56.04	64.55	58.63	64.11	59.15	56.61	55.17	55.05	56.20
20	55.16	56.59	59.65	56.70	62.20	59.23	62.25	58.90	56.33	55.05	55.00	56.53
21	55.11	56.55	59.40	57.06	61.07	60.12	61.39	58.75	56.10	55.12	55.20	56.35
22	55.14	56.55	59.30	57.48	61.58	60.63	60.61	59.20	55.85	55.20	55.40	56.80
23	55.30	56.89	59.20	56.88	63.82	60.14	60.02	59.30	56.30	55.30	55.30	56.55
24	55.23	57.15	59.03	58.30	62.57	59.71	59.76	59.40	56.35	55.23	55.00	56.23
25	55.20	58.60	58.64	57.80	61.55	59.55	59.90	59.00	56.35	55.10	54.95	55.95
26	55.12	58.99	58.20	57.53	61.15	59.75	59.40	58.70	56.25	55.10	54.92	55.80
27	55.07	58.72	57.90	58.20	60.97	59.96	59.25	58.25	56.05	55.05	55.17	55.75
28	55.26	58.70	58.00	58.90	60.30	59.58	59.50	58.14	56.05	55.01	55.27	55.67
29	56.06	58.20	57.95	62.35	-------	59.37	60.60	57.85	55.60	55.14	55.12	55.60
30	57.16	57.85	58.05	60.40	-------	59.24	60.30	58.95	55.52	55.12	55.05	55.55
31	57.60	-------	57.90	59.41	-------	-	-------	57.95	-------	55.12	56.10	-------

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55.55	55.80	60.34	62.35	56.20	59.35	59.47	59.48	56.90	55.95	55.53	-
2	55.80	55.79	59.78	61.20	57.10	61.80	59.40	59.00	57.22	56.25	55.30	-
3	55.90	56.92	59.35	60.90	56.48	63.40	59.18	58.85	57.02	56.35	55.31	-
4	55.55	60.46	59.00	61.05	56.20	61.60	59.12	58.60	56.94	56.25	55.78	-
5	55.50	61.84	58.70	60.49	56.35	61.90	59.22	58.38	56.74	55.84	55.53	-
6	55.75	60.65	58.23	60.10	56.85	61.05	59.15	58.13	56.70	55.90	55.58	-
7	55.75	60.10	57.47	60.00	59.35	61.55	59.10	57.85	56.50	56.15	55.64	-
8	55.74	58.80	57.54	59.75	58.35	61.16	59.30	57.65	56.75	56.10	55.78	-
9	55.41	58.35	57.78	58.90	58.12	60.17	59.19	57.48	57.00	56.05	55.36	-
10	55.37	58.05	58.05	58.68	57.90	60.00	58.66	57.45	57.40	55.90	55.35	-
11	55.35	57.90	57.76	58.48	58.02	60.35	58.45	57.50	57.00	55.96	55.35	-
12	55.25	57.58	57.67	58.25	58.25	61.35	58.40	57.32	57.25	56.00	56.24	-
13	55.20	57.30	57.50	58.05	57.70	61.90	58.70	57.22	57.53	55.95	-	-
14	55.28	57.25	57.40	57.70	57.55	61.37	58.85	57.12	57.60	55.85	62.85	-
15	55.40	57.10	58.35	57.75	57.84	61.05	58.90	56.96	57.15	55.57	-	-
16	55.85	57.00	59.95	57.75	58.70	60.50	60.10	57.00	57.50	55.55	-	-
17	56.25	57.24	60.06	57.50	57.75	60.58	60.15	56.65	57.05	55.78	-	-
18	55.80	57.16	59.22	57.00	57.85	61.00	59.95	56.90	56.73	55.90	-	-
19	55.75	56.95	60.87	57.65	57.60	60.14	59.60	56.70	56.65	55.85	84.92	-
20	55.65	57.29	62.45	57.30	57.50	59.62	59.49	56.66	56.60	55.60	-	56.83
21	55.80	58.36	61.35	57.05	57.40	59.35	59.24	56.75	56.40	55.94	-	57.55
22	55.70	62.73	59.94	57.30	57.40	59.90	59.10	56.65	56.60	55.80	-	56.90
23	55.65	64.20	59.00	57.40	57.85	65.00	59.10	56.32	56.55	55.75	-	56.80
24	55.55	62.15	59.43	56.75	58.90	65.04	59.00	56.85	56.50	55.80	-	57.00
25	55.76	61.25	58.95	56.70	61.69	63.20	58.82	56.90	56.50	55.85	-	58.15
26	55.55	60.44	58.55	56.95	60.00	62.15	59.74	56.95	56.45	55.60	-	57.80
27	55.41	60.00	58.11	57.30	59.47	61.70	60.20	56.90	56.15	55.81	-	57.50
28	55.49	59.49	58.15	56.66	59.00	60.88	60.05	56.73	56.10	55.56	-	57.73
29	55.73	59.35	58.15	56.80	-------	60.36	59.86	56.55	56.05	55.58	-	57.85
30	55.81	60.17	59.55	56.90	-------	60.03	59.78	56.65	56.15	55.60	-	58.12
31	56.00	-------	62.39	56.00	-------	59.70	-------	56.65	-------	55.55	-	-------

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 1955 (gage heights only).

Gage.--Water-stage recorder. Datum of gage is 914.57 ft above mean sea level, (New Jersey Geological Survey bench mark).

Extremes.--1887-1955: Maximum gage height, 10.21 ft May 3, 1945; minimum observed, 0.73 ft Dec. 15, 1948.

Maximum gage height.--
1950-51: Dec. 11 (1 to 4 a.m.) 9.80 ft.
1951-52: June 3 (9 a.m.) to June 4 (10 a.m.) 9.88 ft.
1952-53: Dec. 12 (1 to 4 p.m.) 9.68 ft.
1953-54: May 10 (5 to 12 p.m.) 9.44 ft.
1954-55: Aug. 9 (8 to 12 p.m.) 10.55 ft.

Remarks.--In tables, the gage heights at 8 a.m. are shown. See records for Musconetcong River at outlet of Lake Hopatcong for discharge from Lake Hopatcong. See p. 393 for records of month-end contents.

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

Daily gage height at 8 a.m., in feet, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.43	7.78	-	7.72	7.95	8.23	9.37	9.33	9.27	9.13	9.19	8.59
2	8.42	7.75	-	7.59	8.02	8.22	9.43	9.30	9.24	9.14	9.18	8.54
3	8.39	7.74	-	7.51	8.01	8.19	9.55	9.28	9.24	9.15	9.13	8.47
4	8.37	7.72	-	7.49	8.00	8.22	9.59	9.26	9.22	9.12	9.11	8.40
5	8.32	7.82	9.38	7.53	7.98	8.20	9.58	9.24	9.37	9.16	9.10	8.39
6	8.30	7.80	9.41	7.56	7.96	8.19	9.57	9.22	9.38	9.13	9.07	8.37
7	8.27	7.78	9.41	7.58	7.92	8.17	9.53	9.22	9.37	9.11	9.04	8.37
8	8.23	7.77	9.57	7.65	8.13	8.15	9.51	9.17	9.36	9.10	9.02	8.36
9	8.22	7.74	9.75	7.66	8.16	8.12	9.48	9.15	9.32	9.08	9.01	8.34
10	8.24	7.74	9.77	7.65	8.16	8.08	9.43	9.15	9.30	9.06	9.00	8.32
11	8.22	7.72	9.79	7.65	8.14	8.03	9.42	9.14	9.28	9.06	-	8.29
12	8.22	7.71	9.74	7.66	8.12	8.00	9.40	9.16	9.25	9.05	-	8.27
13	8.22	7.69	9.70	7.64	8.12	7.96	9.50	9.16	9.22	9.04	-	8.24
14	8.18	7.67	9.64	7.63	8.12	8.02	9.48	9.15	9.25	9.03	-	8.22
15	8.17	7.64	9.59	7.74	8.12	8.02	9.47	9.15	9.28	9.02	-	8.27
16	8.13	7.62	9.58	7.78	8.11	8.03	9.45	9.14	9.30	8.99	-	8.28
17	8.12	7.60	9.50	7.81	8.08	8.05	9.43	9.13	9.28	8.97	9.20	8.26
18	8.08	7.58	9.42	7.80	8.13	8.06	9.40	9.13	9.24	8.96	9.19	8.23
19	8.06	7.55	9.32	7.80	8.13	8.06	9.37	9.10	9.25	8.94	9.19	8.20
20	8.02	7.52	9.22	7.79	8.14	8.21	9.38	9.07	9.23	9.00	9.16	8.17
21	8.00	7.60	9.12	7.79	8.16	8.26	9.34	9.07	9.20	8.98	9.14	8.15
22	7.97	7.55	9.00	7.78	8.26	8.32	9.30	9.07	9.20	8.95	9.11	8.12
23	7.98	7.55	8.89	7.78	8.28	8.34	9.37	9.13	9.20	8.99	9.09	8.08
24	7.97	7.54	8.75	7.82	8.32	8.37	9.38	9.25	9.22	8.99	9.07	8.07
25	7.93	7.60	8.63	7.91	8.28	8.43	9.36	9.24	9.21	8.98	9.03	8.03
26	7.93	8.26	8.49	7.93	8.27	8.48	9.33	9.22	9.18	8.98	9.00	8.00
27	7.88	8.38	8.34	7.96	8.27	8.50	9.35	9.22	9.17	8.96	8.97	7.97
28	7.86	-	8.20	7.95	8.25	8.53	9.32	9.22	9.15	9.05	8.89	8.05
29	7.83	-	8.08	7.94	-------	8.57	9.28	9.25	9.12	9.18	8.82	8.03
30	7.82	-	7.98	7.93	-------	8.75	9.33	9.27	9.14	9.20	8.74	7.98
31	7.80	-------	7.84	7.91	-------	9.16	-------	9.28	-------	9.20	8.67	-------

Note.--No gage-height record Nov. 28 to Dec. 4, Aug. 11-16.

Lake Hopatcong at Landing--Continued

Daily gage height at 8 a.m., in feet, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.95	7.84	8.67	8.60	8.75	7.59	8.17	8.96	9.51	9.14	9.01	9.08
2	7.93	7.85	8.62	8.59	8.73	7.57	8.12	9.07	9.76	9.13	9.00	9.58
3	7.91	7.95	8.55	8.60	8.73	7.52	8.08	9.12	9.86	9.08	9.00	9.66
4	7.92	8.02	8.48	8.60	8.75	7.42	8.03	9.15	9.88	9.05	8.99	9.68
5	7.90	8.07	8.45	8.59	8.80	7.32	8.00	7.15	9.85	8.99	8.98	9.64
6	7.88	8.10	8.48	8.58	8.82	7.32	8.15	9.17	9.84	8.98	8.98	9.58
7	7.85	8.23	8.47	8.56	8.81	7.31	8.17	9.17	9.76	8.97	8.98	9.53
8	7.95	8.58	8.43	8.52	8.78	7.30	8.18	9.18	9.69	8.95	8.98	9.47
9	7.92	8.75	8.39	8.49	8.78	7.28	8.20	9.18	9.58	8.97	8.98	9.42
10	7.90	8.80	8.33	8.45	8.73	7.26	8.20	9.18	9.55	9.18	8.98	9.37
11	7.92	8.82	8.26	8.43	8.69	7.24	8.21	9.18	9.52	9.40	8.99	9.33
12	7.95	8.85	8.21	8.38	8.68	7.86	8.19	9.18	9.44	9.42	9.00	9.30
13	7.95	8.85	8.13	8.34	8.61	8.12	8.19	9.23	9.41	9.42	9.03	9.27
14	7.94	8.85	8.05	8.31	8.55	8.33	8.20	9.23	9.39	9.39	9.04	9.25
15	7.92	8.92	8.05	8.29	8.48	8.37	8.22	9.25	9.37	9.32	9.07	9.22
16	7.90	8.94	8.02	8.28	8.42	8.38	8.22	9.25	9.35	9.28	9.07	9.20
17	7.89	9.02	7.96	8.25	8.38	8.39	8.22	9.32	9.33	9.28	9.08	9.20
18	7.88	9.02	7.89	8.23	8.35	8.35	8.22	9.23	9.32	9.24	9.15	9.18
19	7.86	9.01	7.94	8.23	8.30	8.34	8.22	9.34	9.30	9.21	9.15	9.17
20	7.83	9.02	7.91	8.22	8.24	8.35	8.22	9.35	9.28	9.18	9.23	9.24
21	7.81	9.00	8.09	8.20	8.18	8.35	8.22	9.37	9.27	9.16	9.23	9.25
22	7.78	8.96	8.32	8.17	8.13	8.34	8.24	9.39	9.25	9.13	9.24	9.24
23	7.76	8.92	8.44	8.27	8.07	8.33	8.25	9.40	9.23	9.13	9.23	9.23
24	7.74	8.92	8.51	8.28	8.02	8.34	8.25	9.40	9.23	9.10	9.22	9.20
25	7.79	8.90	8.56	8.30	7.90	8.36	8.27	9.40	9.22	9.08	9.19	9.18
26	7.78	8.88	8.62	8.40	7.83	8.35	8.29	9.43	9.20	9.04	9.15	9.15
27	7.77	8.90	8.62	8.53	7.78	8.35	8.42	9.44	9.20	9.02	9.13	9.12
28	7.77	8.83	8.62	8.66	7.67	8.33	8.68	9.44	9.19	9.00	9.12	9.08
29	7.76	8.78	8.65	8.74	7.63	8.32	8.75	9.46	9.17	9.00	9.10	9.05
30	7.74	8.70	8.62	8.75	-------	8.28	8.84	9.45	9.16	9.02	9.10	9.03
31	7.72	-------	8.60	8.75	-------	8.22	-------	9.45	-------	9.02	9.10	-------

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.00	7.82	9.17	8.53	7.94	7.08	8.70	9.39	9.18	8.66	8.09	7.72
2	8.97	7.80	9.14	8.44	7.87	7.07	8.72	9.39	9.17	8.63	8.08	7.69
3	8.96	7.77	9.19	8.40	7.83	7.07	8.75	9.39	9.16	8.60	8.07	7.67
4	8.92	7.78	9.18	8.32	7.77	7.13	8.77	9.38	9.14	8.58	8.04	7.65
5	8.87	7.74	9.16	8.26	7.71	7.25	8.82	9.37	9.11	8.55	8.02	7.62
6	8.84	7.71	9.27	8.18	7.63	7.25	8.85	9.37	9.10	8.52	8.02	7.68
7	8.82	7.68	9.36	8.09	7.58	7.30	8.87	9.35	9.10	8.49	8.00	7.67
8	8.77	7.65	9.38	8.02	7.53	7.31	9.19	9.35	9.10	8.47	7.98	7.64
9	8.72	7.63	9.38	8.01	7.46	7.30	9.27	9.35	9.10	8.43	7.96	7.62
10	8.68	7.62	9.36	e7.96	7.38	7.28	9.42	9.36	9.09	8.40	8.08	7.58
11	8.63	7.59	9.36	e7.92	7.30	7.28	9.50	9.36	9.08	8.37	8.07	7.55
12	8.58	7.55	9.61	e7.87	7.28	7.28	9.52	9.36	9.06	8.36	8.07	7.51
13	8.54	7.53	9.60	e7.83	7.26	7.35	9.53	9.36	9.04	8.31	8.07	7.52
14	8.50	7.51	9.57	7.78	7.23	7.50	9.57	9.34	9.05	8.27	8.06	7.48
15	8.47	7.49	9.53	7.74	7.17	7.56	9.59	9.33	9.05	8.26	8.02	7.45
16	8.42	7.52	9.47	7.68	7.17	7.67	9.57	9.33	9.02	8.24	8.00	7.42
17	8.38	7.51	9.44	7.62	7.17	7.68	9.62	9.30	9.00	8.20	7.97	7.38
18	8.33	7.50	9.40	7.61	7.12	7.93	9.62	9.28	8.98	8.18	7.96	7.35
19	8.28	7.49	9.34	7.61	7.08	7.98	9.62	9.26	8.96	8.17	7.95	7.32
20	8.25	7.48	9.29	7.56	7.07	8.02	9.62	9.26	8.95	8.15	7.93	7.27
21	8.22	7.77	9.26	7.52	7.05	8.16	9.62	9.26	8.93	8.15	7.92	7.27
22	8.17	8.21	9.29	7.52	7.08	8.18	9.60	9.22	8.90	8.15	7.90	7.24
23	8.13	8.57	9.24	7.45	7.09	8.22	9.57	9.20	8.89	8.17	7.88	7.21
24	8.08	8.86	9.16	7.43	7.09	8.28	9.55	9.22	8.87	8.24	7.87	7.17
25	8.07	8.98	9.09	7.76	7.08	8.37	9.52	9.22	8.83	8.22	7.85	7.14
26	8.02	9.05	9.02	7.85	7.10	8.38	9.50	9.22	8.80	8.18	7.84	7.12
27	7.97	9.11	8.96	7.94	7.07	8.54	9.48	9.22	8.77	8.15	7.82	7.11
28	7.93	9.12	8.91	7.96	7.07	8.59	9.48	9.21	8.75	8.14	7.80	e7.05
29	7.93	9.14	8.80	7.98	-------	8.61	9.46	9.20	8.72	8.12	7.78	e7.01
30	7.88	9.16	8.71	7.98	-------	8.62	9.45	9.18	8.70	8.13	7.77	e6.97
31	7.85	-------	8.61	7.97	-------	8.62	-------	9.18	-------	8.12	7.74	-------

e Estimated gage height.

Lake Hopatcong at Landing--Continued

Daily gage height at 8 a.m., in feet, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.91	6.59	6.62	7.77	7.96	8.12	9.02	9.28	9.25	8.85	8.41	8.63
2	6.87	6.58	6.62	7.77	7.95	8.25	8.99	9.28	9.23	8.85	8.38	8.64
3	6.82	6.58	6.60	7.78	7.95	8.32	9.00	9.24	9.23	8.84	8.44	8.64
4	6.78	6.56	6.67	7.79	7.98	8.44	9.01	9.39	9.18	8.84	8.42	8.63
5	6.75	6.54	6.72	7.79	7.98	8.56	9.01	9.41	9.17	8.85	8.38	8.62
6	6.75	6.58	6.77	7.82	7.97	8.62	9.03	9.40	9.12	8.83	8.39	8.62
7	6.76	6.60	6.82	7.84	7.95	8.65	9.09	9.38	9.12	8.80	8.37	8.59
8	6.71	6.59	6.89	7.79	7.94	8.69	9.09	9.38	9.11	8.82	8.35	8.58
9	6.66	6.58	6.92	7.80	7.96	8.72	9.12	9.40	9.08	8.78	8.37	8.58
10	6.62	6.58	7.08	7.82	7.94	8.74	9.12	9.41	9.07	8.78	8.47	8.55
11	6.58	6.57	7.14	7.82	7.92	8.73	9.10	9.43	9.08	8.76	8.45	8.67
12	6.55	6.57	7.22	7.87	7.90	8.77	9.15	9.43	9.09	8.75	8.40	8.63
13	6.51	6.55	7.33	7.87	7.90	8.77	9.12	9.41	9.10	8.72	8.40	8.58
14	6.49	6.55	7.54	7.87	7.88	8.82	9.12	9.40	9.10	8.70	8.38	8.56
15	6.48	6.55	7.57	7.87	7.87	8.83	9.14	9.37	9.09	8.72	8.37	8.53
16	6.48	6.55	7.62	7.87	7.86	8.84	9.15	9.34	9.09	8.70	8.37	8.56
17	6.47	6.54	7.67	7.87	7.90	8.83	9.26	9.32	9.07	8.68	8.35	8.60
18	6.45	6.54	7.66	7.88	7.96	8.82	9.32	9.30	9.04	8.66	8.33	8.59
19	6.44	6.54	7.69	7.88	7.98	8.83	9.35	9.28	9.02	8.64	8.30	8.58
20	6.42	6.54	7.71	7.88	7.97	8.92	9.34	9.26	9.01	8.64	8.33	8.57
21	6.41	6.56	7.76	7.91	7.99	8.95	9.34	9.34	8.98	8.62	8.37	8.57
22	6.44	6.57	7.76	7.93	8.04	8.96	9.33	9.38	8.97	8.60	8.37	8.56
23	6.40	6.58	7.77	7.93	8.05	8.94	9.32	9.37	8.98	8.58	8.37	8.56
24	6.42	6.59	7.76	7.93	8.06	8.97	9.35	9.37	8.97	8.57	8.33	8.53
25	6.42	6.60	7.74	7.93	8.07	8.97	9.31	9.34	8.97	8.55	8.33	8.52
26	6.43	6.60	7.74	7.92	8.08	9.00	9.32	9.33	8.95	8.55	8.34	8.51
27	6.44	6.60	7.74	7.91	8.13	9.03	9.32	9.30	8.95	8.53	8.35	8.50
28	6.49	6.61	7.74	7.91	8.11	9.02	9.32	9.28	8.90	8.52	8.35	8.47
29	6.57	6.61	7.76	7.93	-------	9.00	9.32	9.27	8.88	8.47	8.34	8.47
30	6.62	6.62	7.76	7.95	-------	9.03	9.30	9.30	8.87	8.44	8.33	8.44
31	6.62	-------	7.77	7.96	-------	9.02	-------	9.28	-------	8.43	8.57	-------

Note.--Gage heights for periods Oct. 1 to Dec. 6, Jan. 8 to Feb. 15 from graphs based on occassional staff gage readings.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.42	7.77	8.25	7.70	7.02	7.73	9.03	9.23	9.02	9.12	8.60	9.22
2	8.41	7.74	8.20	7.71	7.02	7.77	9.05	9.23	9.02	9.12	8.60	9.17
3	8.38	7.90	8.15	7.70	7.03	7.80	9.10	9.23	9.02	9.10	8.57	9.13
4	8.35	7.96	8.09	7.69	7.02	7.88	9.11	9.22	8.97	9.08	8.53	9.10
5	8.33	7.98	8.02	7.67	7.05	7.93	9.12	9.22	9.00	9.07	8.52	8.99
6	8.32	8.02	7.97	7.66	7.06	7.98	9.12	9.23	9.00	9.04	8.53	8.99
7	8.26	8.03	7.91	7.65	7.22	8.08	9.16	9.22	8.98	9.04	8.52	8.93
8	8.22	8.04	7.83	7.60	7.21	8.12	9.16	9.22	9.00	9.00	8.56	8.84
9	8.17	8.03	7.77	7.54	7.20	8.15	9.15	9.17	8.98	8.98	8.53	8.75
10	8.14	7.98	7.77	7.52	7.25	8.18	9.15	9.15	8.97	8.97	8.47	8.65
11	8.13	7.96	7.71	7.47	7.26	8.22	9.16	9.15	8.96	9.02	8.45	8.58
12	8.10	7.95	7.65	7.42	7.28	8.28	9.17	9.14	9.02	8.98	8.58	8.50
13	8.07	7.92	7.62	7.38	7.28	8.31	9.18	9.13	9.02	8.95	9.13	8.39
14	8.07	7.87	7.58	7.33	7.28	8.34	9.18	9.13	9.02	8.90	9.27	8.31
15	8.03	7.90	7.67	7.30	7.43	8.35	9.18	9.12	9.02	8.88	9.42	8.21
16	8.05	7.88	7.68	7.26	7.47	8.42	9.19	9.12	9.00	8.85	9.44	8.16
17	8.03	7.87	7.65	7.22	7.50	8.40	9.18	9.12	8.98	8.85	9.41	8.03
18	8.01	7.85	7.64	7.17	7.53	8.42	9.18	9.18	8.96	8.83	9.56	7.93
19	7.99	7.82	7.75	7.15	7.52	8.43	9.17	9.07	8.95	8.87	10.38	7.80
20	7.97	7.83	7.78	7.12	7.53	8.45	9.20	9.07	9.24	8.83	10.52	7.67
21	7.92	8.02	7.78	7.10	7.54	8.47	9.18	9.07	9.26	8.80	10.32	7.45
22	7.89	8.20	7.77	7.10	7.55	8.65	9.21	9.05	9.28	8.78	10.18	7.25
23	7.85	8.26	7.75	7.07	7.58	8.68	9.21	9.04	9.28	8.77	10.00	7.07
24	7.82	8.29	7.72	7.06	7.64	8.75	9.21	9.07	9.27	8.77	9.82	e6.89
25	7.80	8.33	7.68	7.04	7.65	8.80	9.21	9.07	9.27	8.77	9.67	e6.80
26	7.78	8.32	7.65	7.03	7.65	8.89	9.20	9.07	9.25	8.74	9.57	e6.63
27	7.74	8.32	7.61	7.02	7.67	8.92	9.22	9.07	9.22	8.73	9.48	e6.45
28	7.74	8.27	7.57	7.03	7.68	8.95	9.23	9.01	9.20	8.71	9.40	e6.19
29	7.73	8.28	7.57	7.04	-------	8.97	9.24	8.99	9.18	8.68	9.34	e5.98
30	7.79	8.28	7.68	7.03	-------	9.01	9.24	9.00	9.15	8.65	9.29	e5.80
31	7.78	-------	7.70	7.02	-------	9.02	-------	9.01	-------	8.63	9.24	-------

e Estimated gage height.

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 1955.

Gage.--Water-stage recorder and concrete control. Datum of gage is 904.99 ft above mean sea level (New Jersey Geological Survey bench mark).

Average discharge.--27 years, 44.9 cfs (unadjusted).

Extremes.--1928-55: Maximum discharge, 795 cfs Aug. 20, 1955 (gage height, 3.85 ft), from rating curve extended above 300 cfs by logarithmic plotting; minimum daily, 0.1 cfs for many days during March 1940.

Maximum discharge.--
1950-51: Dec. 11 (2 a.m.) 234 cfs (2.39 ft).
1951-52: Junn 2 (1:30 p.m.) 288 cfs (2.61 ft).
1952-53: Dec. 12 (5 a.m.) 168 cfs (2.15 ft).
1953-54: May 10 (7 p.m.) to May 11 (5 a.m.) 91 cfs (1.62 ft).
1954-55: Aug. 20 (5 a.m.) 795 cfs (3.85 ft).

Revisions.--The maximum discharge for the water year 1928 has been revised to 362 cfs Aug. 27, 1928 (gage height, 2.61 ft), superseding figure published in Special Report 5.

Remarks.--Flow regulated by Lake Hopatcong (see p.389 and records for Lake Hopatcong at Landing).

Cooperation.--Water-stage recorder inspected by employee of Morris Canal & Banking Co.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	29	38	191	87	97	94	58	46	25	39	83
2	29	29	39	154	88	97	117	54	44	22	32	82
3	29	29	44	91	88	97	158	47	42	20	25	79
4	29	30	82	51	88	97	165	42	48	18.6	23	31
5	29	30	143	34	88	97	164	36	79	25	19.6	11.0
6	29	30	162	31	87	97	154	34	79	*22	16.8	11.0
7	28	30	169	31	88	97	140	30	73	18.6	16.3	11.0
8	28	30	190	34	90	97	130	24	65	16.3	16.8	11.0
9	28	30	214	42	88	95	116	21	57	12.8	15.9	11.0
10	28	30	223	42	88	94	104	21	55	12.1	15.9	23
11	29	30	214	42	88	94	98	23	47	11.7	19.1	29
12	30	30	189	42	88	92	101	24	40	12.8	19.6	28
13	30	30	167	42	*88	90	126	24	39	14.3	24	*28
14	30	30	150	42	88	87	122	17.6	58	13.9	24	28
15	30	30	143	47	88	82	112	15.1	63	13.6	23	28
16	30	30	158	59	88	77	106	19.6	60	14.7	28	28
17	30	30	164	66	88	76	99	23	52	14.3	44	27
18	30	30	169	66	88	58	90	23	47	13.9	46	27
19	30	30	154	67	88	42	81	18.6	41	13.9	43	27
20	30	30	165	67	88	*42	77	16.8	35	14.3	36	27
21	30	30	181	68	92	42	67	15.9	31	13.9	28	27
22	30	30	183	68	97	36	62	18.1	31	14.3	26	26
23	30	30	193	68	97	23	82	32	37	16.8	23	26
24	30	30	199	79	98	19.1	78	50	36	17.2	25	26
25	30	18.4	210	87	97	19.1	72	45	34	16.8	36	26
26	30	4.3	221	88	97	17.2	71	40	26	16.3	36	25
27	30	17.3	218	88	97	15.5	65	39	22	15.5	62	28
28	30	25	218	88	97	14.7	56	39	21	27	84	30
29	30	28	208	88	-------	14.3	55	50	21	50	84	27
30	29	32	193	88	-------	15.5	67	54	23	50	84	26
31	29	-------	193	87	-------	49	-------	52	-------	44	83	-------

* Discharge measurement made on this day.

Musconetcong River at outlet of Lake Hopatcong--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	12.9	124	85	116	116	122	39	198	18.3	13.2	72
2	27	14.5	124	85	116	116	122	46	282	14.1	12.0	168
3	27	13.7	122	85	114	112	122	49	270	12.8	12.0	190
4	27	13.7	122	85	113	94	120	50	244	13.2	12.0	172
5	27	23	122	85	113	79	120	49	237	13.2	12.0	146
6	27	28	122	85	114	62	120	48	204	12.0	12.4	124
7	26	43	122	85	122	56	122	48	180	11.1	12.8	107
8	28	52	122	85	127	55	122	43	145	15.1	13.7	85
9	30	55	122	85	125	54	122	41	127	48	14.1	69
10	30	61	120	85	124	45	119	39	116	119	16.4	60
11	29	61	119	85	124	28	119	42	100	124	17.8	52
12	29	61	119	85	122	32	119	58	79	112	18.7	46
13	29	61	119	85	122	64	119	61	66	93	23	41
14	29	61	119	84	120	99	119	61	52	79	22	36
15	28	62	118	84	120	108	119	56	45	67	18.3	32
16	28	66	106	84	120	108	119	55	43	57	25	31
17	28	68	104	*84	119	118	110	51	39	47	54	29
18	28	68	104	84	119	122	68	58	44	40	53	*30
19	28	67	104	84	119	122	49	52	38	33	49	50
20	27	66	104	84	118	122	49	64	34	30	43	59
21	27	76	66	84	119	124	28	61	28	28	38	53
22	27	83	43	83	120	124	*11.1	*61	29	29	43	46
23	27	83	43	84	120	124	11.1	57	30	24	41	44
24	28	83	43	84	119	124	12.0	51	30	21	30	39
25	*28	83	56	84	119	124	12.4	91	28	15.9	25	37
26	28	83	78	84	118	125	12.0	125	25	12.8	22	37
27	28	93	86	84	118	125	12.0	127	25	12.8	21	37
28	28	113	85	94	118	124	13.7	116	22	12.8	19.2	33
29	27	113	85	112	118	124	17.3	110	19.7	17.8	17.8	34
30	26	119	85	116	-------	124	30	104	24	15.0	17.3	39
31	20	-------	85	116	-------	122	-------	103	-------	14.1	17.8	-------

* Discharge measurement made on this day.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	42	32	48	132	131	30	23	76	23	23	11	10
2	42	32	50	132	130	30	18	75	20	23	11	10
3	41	31	60	131	130	29	18	68	18	24	11	10
4	41	31	58	131	127	*31	18	63	14	23	11	10
5	41	31	a65	131	125	32	18	66	16	23	11	10
6	41	31	a90	130	122	32	18	66	16	22	11	11
7	41	30	a100	130	121	32	30	66	18	20	11	10
8	42	30	102	128	121	32	52	70	18	20	11	10
9	43	30	*100	128	118	32	66	75	15	20	11	10
10	47	30	96	130	113	32	91	76	15	20	11	10
11	49	30	136	128	108	32	101	73	11	20	11	18
12	48	31	164	128	104	32	106	70	15	21	*11	23
13	48	31	161	128	99	35	114	63	24	21	10	23
14	48	31	151	*128	95	33	124	60	24	21	10	24
15	46	a31	140	128	94	33	115	56	20	*21	10	26
16	43	a31	124	127	93	33	125	51	19	21	10	27
17	42	a31	113	127	90	32	130	49	19	18	11	27
18	42	a31	104	127	87	32	131	47	18	11	11	27
19	42	31	109	127	76	32	137	44	18	11	11	27
20	42	31	109	125	61	32	130	42	18	11	11	27
21	41	31	108	125	51	32	120	37	19	11	11	27
22	41	32	115	125	51	32	106	29	20	11	11	27
23	41	32	124	122	51	32	100	46	23	11	11	27
24	40	32	131	102	50	40	94	41	23	11	11	27
25	40	34	125	110	50	51	84	34	23	11	10	27
26	40	37	120	132	47	51	85	37	23	11	10	27
27	40	43	121	131	36	51	93	37	23	11	10	27
28	40	47	124	131	30	51	82	32	23	11	10	27
29	41	47	130	131	-------	51	75	26	23	11	11	27
30	37	49	136	131	-------	37	68	26	23	11	11	27
31	33	-------	134	131	-------	31	-------	24	-------	11	10	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated.
Note.--Negative figures of adjusted discharge and runoff indicate that evaporation and seepage from lake exceeded in flow.

Musconetcong River at outlet of Lake Hopatcong--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	8.4	12	13	25	43	29	46	33	5.2	4.7	3.6
2	27	8.4	12	13	25	33	19	45	30	5.0	4.5	4.7
3	27	8.4	12	13	27	30	11	46	27	5.0	4.5	4.7
4	27	8.8	11	12	32	35	4.7	76	26	5.0	4.3	5.2
5	27	9.2	12	12	33	39	4.7	83	20	5.0	4.3	5.7
6	26	8.8	12	12	33	39	5.8	81	14	4.7	4.3	6.0
7	26	8.8	12	12	33	39	10	75	13	4.7	4.0	13
8	26	8.8	11	12	33	42	12	81	12	4.7	4.3	21
9	26	8.8	12	12	34	42	12	85	10	4.7	4.3	25
10	26	8.8	12	12	34	42	10	87	9.2	4.5	4.3	25
11	26	8.4	12	12	33	42	11	89	10	4.5	4.0	25
12	26	8.4	12	12	32	42	15	85	9.6	4.5	4.0	25
13	19	8.4	12	15	32	42	12	81	13	4.5	4.0	26
14	12	8.4	11	16	32	42	14	74	12	4.5	4.0	27
15	11	8.4	20	16	*32	42	15	67	11	4.5	4.0	27
16	11	9.2	27	16	31	42	20	58	13	4.5	4.3	27
17	11	10	27	16	30	42	42	52	8.5	4.5	4.3	29
18	11	10	27	17	35	42	56	49	6.6	a4.5	4.3	30
19	11	11	27	17	35	42	62	46	6.0	a4.5	4.3	30
20	10	12	27	19	35	42	60	44	5.5	4.5	4.5	31
21	9.6	13	27	25	35	42	62	60	4.7	4.3	4.5	31
22	8.8	13	29	25	35	42	59	69	4.7	4.5	4.0	32
23	9.6	13	30	25	35	41	61	67	5.0	4.5	4.0	32
24	9.6	13	30	25	35	37	61	63	4.7	4.5	3.8	32
25	9.6	13	30	25	36	37	54	57	4.7	4.5	*3.8	32
26	9.2	12	26	25	43	35	51	54	5.0	4.5	3.8	32
27	9.2	12	18	25	51	34	50	48	5.2	4.5	3.8	31
28	9.2	12	14	25	52	34	53	42	5.5	4.7	3.6	*32
29	8.8	12	14	25	-------	34	50	39	5.5	4.7	3.6	31
30	8.4	12	13	25	-------	34	45	45	5.5	4.7	3.4	31
31	8.4	-------	13	25	-------	34	-------	39	-------	4.7	3.1	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	33	111	88	18	27	11	31	8.8	22	8.4	62
2	31	34	111	88	16	26	11	29	8.8	20	8.4	55
3	31	34	113	88	14	26	17	28	9.6	18	8.4	49
4	31	34	113	88	9.1	25	14	26	8.8	16	8.4	73
5	31	36	113	88	5.8	25	*13	28	8.8	14	8.4	102
6	31	39	113	88	6.0	25	14	29	8.4	13	8.4	102
7	31	39	113	88	5.8	25	19	24	9.2	12	8.4	101
8	31	40	113	88	5.5	25	19	41	13	11	8.8	101
9	31	40	110	88	5.8	25	17	28	11	10	8.4	100
10	31	40	105	88	5.8	25	18	15	8.1	10	8.4	100
11	31	40	105	87	13	17	19	16	8.1	10	8.4	100
12	31	40	100	87	22	13	31	15	8.4	10	8.8	100
13	30	40	91	87	22	13	26	12	8.4	9.6	25	97
14	30	40	88	84	22	11	23	14	8.4	9.2	67	97
15	29	41	88	79	22	11	25	13	8.4	9.2	93	97
16	29	46	88	79	22	11	28	10	8.4	9.2	93	116
17	29	47	88	75	24	10	24	11	8.1	9.2	86	131
18	29	48	88	64	26	10	24	6.3	8.1	9.2	186	129
19	29	56	88	54	26	9.6	20	7.2	102	8.8	658	199
20	29	64	88	48	26	9.6	27	8.8	44	8.8	731	228
21	29	66	88	44	26	9.2	25	11	47	8.4	559	232
22	29	73	88	43	26	9.6	26	10	51	8.4	441	218
23	29	87	88	43	26	8.1	26	9.6	51	8.4	362	230
24	29	98	88	37	26	8.1	28	10	49	8.8	275	245
25	29	104	88	29	27	8.1	29	10	48	8.8	214	248
26	29	105	88	24	27	9.3	27	10	44	8.8	164	258
27	29	105	88	24	27	8.1	26	9.6	37	8.4	133	262
28	29	105	88	22	27	8.4	28	8.8	32	8.4	110	265
29	31	105	88	22	-------	8.8	30	8.8	29	8.4	91	*262
30	33	107	88	21	-------	9.2	31	8.8	25	8.4	74	318
31	33	-------	88	20	-------	9.6	-------	8.8	-------	8.4	66	-------

* Discharge measurement made on this day.

Musconetcong River at outlet of Lake Hopatcong--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	913	30	28	29.5		
November	842.0	32	4.3	28.1		
December	5,194	223	38	168		
Calendar year 1950	16,630.8	223	4.3	45.6		
January 1951	2,138	191	31	69.0		
February	2,532	98	87	90.4		
March	1,970.4	97	14.3	63.6		
April	3,029	165	55	101		
May	1,006.7	68	15.1	32.5		
June	1,352	79	21	45.1		
July	611.6	50	11.7	19.7		
August	1,098.0	84	15.9	35.4		
September	897.0	83	11.0	29.9		
Water year 1950-51	21,583.7	223	4.3	59.1		
October 1951	854	30	20	27.5		
November	1,886.8	119	12.9	62.9		
December	3,093	124	43	99.8		
Calendar year 1951	20,468.5	191	11.0	56.1		
January 1952	2,718	116	83	87.7		
February	3,456	127	113	119		
March	3,076	125	28	99.2		
April	2,360.6	122	11.1	78.7		
May	2,016	127	39	65.0		
June	2,803.7	282	19.7	93.5		
July	1,162.0	124	11.1	37.5		
August	746.5	54	12.0	24.1		
September	1,998	190	29	66.6		
Water year 1951-52	26,170.6	282	11.1	71.5		
October 1952	1,305	49	33	42.1		
November	1,001	49	30	33.4		
December	3,448	164	48	111		
Calendar year 1952	26,090.8	282	11.1	71.3		
January 1953	3,947	132	102	127		
February	2,511	131	30	89.7		
March	1,097	51	29	35.4		
April	2,472	137	18	82.4		
May	1,625	76	24	52.4		
June	582	24	11	19.4		
July	515	24	11	16.6		
August	332	11	10	10.7		
September	620	27	10	20.7		
Water year 1952-53	19,455	164	10	53.3		
October 1953	513.4	27	8.4	16.6		
November	306.4	13	8.4	10.2		
December	564	30	11	18.2		
Calendar year 1953	15,084.8	137	8.4	41.3		
January 1954	554	25	12	17.9		
February	958	52	25	34.2		
March	1,208	43	30	39.0		
April	971.2	62	4.7	32.4		
May	1,933	89	39	62.4		
June	336.9	33	4.7	11.2		
July	143.6	5.2	4.3	4.63		
August	126.6	4.7	3.1	4.08		
September	706.9	32	3.6	23.6		
Water year 1953-54	8,322.0	89	3.1	22.8		
October 1954	935	33	29	30.2		
November	1,786	107	33	59.5		
December	2,995	113	88	96.6		
Calendar year 1954	12,654.2	113	3.1	34.7		
January 1955	1,953	88	20	63.0		
February	528.8	27	5.5	18.9		
March	465.7	27	8.1	15.0		
April	676	31	11	22.5		
May	497.7	41	6.3	16.1		
June	719.8	102	8.1	24.0		
July	332.8	22	8.4	10.7		
August	4,529.6	731	8.4	146		
September	4,677	318	49	156		
Water year 1954-55	20,096.4	731	5.5	55.1		

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 1955.

Gage.--Water-stage recorder above concrete dam. Datum of gage is 630.93 ft above mean sea level (New Jersey Geological Survey bench mark). Prior to Aug. 21, 1923, staff gage and Aug. 21, 1923, to July 19, 1938, water-stage recorder, at site 2,000 ft downstream at datum 26.97 ft lower.

Average discharge.--34 years, 120 cfs (unadjusted).

Extremes.--1921-55: Maximum discharge, 2,170 cfs Aug. 19, 1955 (gage height, 3.97 ft), from rating curve extended above 600 cfs by logarithmic plotting; no flow part of Sept. 6, 1951, when water was below spillway, waste gate was closed, and no flow through swimming pool.

Maximum discharge.--
1950-51: Nov. 26 (11 a.m.) 923 cfs (2.70 ft).
1951-52: Mar. 12 (1 a.m.) 954 cfs (2.74 ft).
1952-53: Nov. 22 (9 to 12 p.m.) 871 cfs (2.64 ft).
1953-54: Mar. 4 (7 a.m.) 310 cfs (1.84 ft).
1954-55: Aug. 19 (3 to 5 p.m.) 2,170 cfs (3.97 ft).

Remarks.--Records given herein include flow bypassed through swimming pool. Flow regulated by Lake Hopatcong (see p.389).

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	40	206	274	263	211	625	166	150	79	125	121
2	42	40	192	273	308	211	500	146	133	76	101	125
3	42	43	183	257	280	206	506	129	129	66	83	125
4	39	54	249	*226	274	211	513	121	129	59	76	117
5	39	122	*568	155	247	226	453	109	262	86	66	*128
6	36	98	532	133	226	*231	402	105	230	76	59	43
7	39	77	460	133	286	236	359	100	196	63	53	47
8	39	69	708	129	386	226	300	86	168	56	59	47
9	45	66	739	125	314	216	278	72	146	50	59	47
10	56	63	611	121	280	192	267	69	137	47	56	48
11	50	59	562	121	258	155	267	76	129	45	109	47
12	50	59	468	117	*253	172	*251	97	113	42	86	52
13	54	56	410	113	247	172	324	90	105	42	90	*57
14	48	59	355	117	269	201	306	79	168	39	86	61
15	46	59	326	202	197	225	278	69	201	39	83	76
16	43	59	326	231	202	215	256	63	177	36	137	70
17	40	59	302	216	206	196	289	63	150	36	257	62
18	41	59	291	202	253	159	251	63	125	39	191	57
19	40	59	274	197	253	146	204	63	*109	46	150	56
20	40	59	263	192	247	206	190	63	93	97	125	54
21	37	90	269	192	269	202	176	63	83	56	113	53
22	37	86	274	178	343	200	162	66	76	45	97	52
23	46	79	274	173	320	180	219	129	113	69	83	52
24	51	79	285	258	258	171	209	201	121	66	72	50
25	46	236	285	320	226	162	185	182	97	56	69	49
26	43	848	274	285	269	144	171	146	86	*47	72	*50
27	40	595	280	258	263	131	158	129	76	45	72	49
28	40	408	285	242	236	123	144	133	69	225	*122	127
29	40	312	280	236	-------	140	144	172	66	396	121	75
30	40	251	269	226	-------	274	180	210	72	230	117	59
31	*39	-------	274	*216	-------	754	-------	177	-------	164	117	-------

* Discharge measurement made on this day.
Note.--Waste gate in main dam open Sept. 5-30.

Musconetcong River near Hackettstown--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	63	83	187	226	284	191	240	279	444	53	38	221
2	59	207	206	241	284	191	272	246	758	50	39	538
3	58	324	211	263	296	186	272	215	696	47	39	490
4	53	390	216	247	366	177	261	201	544	44	36	419
5	49	318	301	231	409	181	496	191	622	42	36	322
6	50	176	343	221	348	159	670	177	475	39	39	260
7	56	345	297	202	313	141	547	167	386	39	44	213
8	99	520	274	192	296	132	453	154	320	39	47	177
9	71	479	258	183	284	128	384	145	285	209	56	148
10	65	384	242	187	268	120	*359	136	302	450	94	131
11	93	278	231	182	273	424	335	136	231	368	80	119
12	140	234	221	182	268	788	306	225	*197	275	66	107
13	105	214	211	173	241	528	272	241	168	207	111	99
14	89	214	202	182	220	404	347	205	146	161	87	87
15	80	256	242	197	210	367	372	186	121	130	69	84
16	75	262	216	211	210	302	359	167	109	110	94	87
17	*69	267	187	197	230	280	329	149	105	102	227	80
18	66	240	197	231	235	274	289	163	105	87	203	73
19	64	225	231	216	220	291	224	159	105	80	161	*155
20	63	210	258	206	215	308	195	177	97	69	130	195
21	63	196	551	206	215	326	171	201	89	66	114	158
22	63	154	542	197	210	307	135	167	89	66	143	131
23	76	150	398	342	205	335	119	154	97	63	118	123
24	75	154	320	279	201	347	107	145	109	53	94	111
25	116	133	247	*241	201	324	131	251	97	47	83	95
26	74	164	253	348	196	300	230	366	86	42	69	84
27	66	168	253	461	191	272	273	325	75	47	*54	80
28	72	172	*231	441	186	267	366	279	68	50	53	80
29	74	177	226	391	186	261	366	246	62	53	50	73
30	66	177	216	325	-------	245	319	235	59	50	47	70
31	70	-------	226	301	-------	240	-------	235	-------	44	44	-------

* Discharge measurement made on this day.
Note.--Waste gate open Oct. 1 to Nov. 2.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	77	60	156	217	298	126	148	223	87	39	28	17
2	87	60	151	217	275	114	144	223	76	39	28	17
3	107	60	156	248	259	110	127	204	69	42	26	17
4	91	56	151	248	248	*204	123	184	63	39	26	17
5	87	56	194	237	232	208	135	180	*60	39	26	19
6	84	56	405	232	227	169	123	*184	56	39	26	24
7	84	*53	344	222	237	151	255	184	60	39	24	21
8	80	56	292	212	243	138	402	208	63	39	24	19
9	80	63	275	237	222	130	318	213	60	36	26	19
10	84	66	254	275	207	126	*310	223	56	*36	53	19
11	87	66	445	315	193	118	322	199	50	36	42	*19
12	87	63	628	298	198	118	299	180	50	33	*31	19
13	84	63	503	270	193	203	310	166	56	33	26	21
14	84	56	431	254	183	243	357	157	63	33	26	28
15	84	60	375	254	207	207	316	148	47	36	26	31
16	77	76	327	259	254	286	345	144	44	36	24	39
17	75	69	286	259	222	248	382	139	42	39	26	42
18	77	69	259	303	193	222	351	139	42	39	26	36
19	82	66	237	321	183	237	394	127	42	33	24	36
20	82	76	232	292	165	222	363	115	39	31	24	36
21	*71	223	243	281	203	193	328	103	36	28	24	39
22	70	628	303	275	227	174	293	95	39	28	24	39
23	67	712	275	264	193	161	265	139	39	47	24	36
24	67	457	264	447	174	230	244	131	36	56	24	36
25	64	333	254	665	165	315	223	110	36	42	24	36
26	64	260	237	523	161	275	223	114	33	33	21	39
27	64	218	222	431	147	248	272	122	33	33	19	42
28	70	199	183	405	130	227	234	106	33	33	19	42
29	67	a180	222	381	-------	212	214	90	39	31	19	39
30	63	a160	217	338	-------	193	194	90	42	33	19	39
31	63	-------	217	292	-------	169	-------	98	-------	33	17	-------

* Discharge measurement made on this day.

Musconetcong River near Hackettstown--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	27	42	61	70	148	98	110	105	18	8.6	83
2	33	27	39	57	70	233	87	110	86	18	9.9	53
3	39	27	a39	57	74	218	76	121	*62	16	16	42
4	60	30	a36	57	88	293	66	262	62	20	14	33
5	69	30	a45	57	88	255	60	253	72	23	13	27
6	69	32	a50	61	84	223	60	221	55	25	11	25
7	69	35	a150	57	81	199	69	202	42	23	9.9	23
8	63	32	a130	51	77	171	76	211	36	25	9.9	20
9	60	32	90	61	81	162	76	226	30	20	20	23
10	50	35	165	61	81	153	69	226	30	16	30	25
11	42	35	147	61	77	144	66	236	27	16	20	59
12	39	36	114	61	70	*135	73	221	27	20	16	73
13	39	*33	130	61	64	131	69	202	32	11	16	56
14	36	28	193	61	70	158	66	178	30	10	14	50
15	31	26	212	61	70	158	63	164	27	13	14	50
16	31	26	179	64	74	140	69	150	27	11	14	69
17	31	27	a150	64	123	144	134	133	25	11	13	118
18	30	35	a130	57	148	144	183	125	20	11	11	90
19	30	32	a110	57	127	95	168	113	18	11	13	80
20	32	27	a105	57	111	158	155	109	18	11	14	87
21	*32	26	a100	88	115	166	146	168	16	9.9	16	80
22	30	24	a105	99	135	144	142	211	16	9.9	16	83
23	27	42	106	77	127	135	142	178	16	9.9	14	73
24	27	50	a100	84	115	127	146	164	16	8.6	13	69
25	35	42	a90	77	115	127	130	142	16	9.9	*14	63
26	39	44	a85	67	123	131	126	129	16	9.9	13	60
27	36	39	a80	81	139	119	122	121	16	9.9	13	64
28	47	36	73	88	139	111	134	109	16	9.9	13	*64
29	53	39	73	70	-------	103	130	101	16	*9.9	14	57
30	47	39	70	70	-------	102	114	109	16	8.6	15	54
31	31	-------	67	70	-------	98	-------	105	-------	8.6	89	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for stations at outlet of Lake Hopatcong and near Bloomsbury.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	86	220	252	58	122	90	93	30	45	15	160
2	51	90	205	235	a58	130	86	*81	32	43	*13	148
3	51	150	195	230	a55	118	86	74	30	40	12	140
4	54	146	185	209	a65	150	86	67	28	35	12	128
5	54	134	185	199	a70	166	78	63	32	*32	12	144
6	45	122	175	204	86	174	74	63	33	30	13	177
7	45	114	163	199	148	194	82	63	33	30	18	182
8	43	110	163	148	106	174	78	67	33	25	24	177
9	43	*102	167	194	78	158	74	74	*31	25	20	177
10	45	94	190	*166	78	150	74	67	31	23	18	160
11	46	86	175	155	90	142	67	57	33	23	20	160
12	46	86	167	a150	98	134	67	51	44	21	49	156
13	*46	86	159	a145	94	122	82	48	46	21	305	156
14	44	78	167	a140	*90	114	78	45	41	17	413	168
15	46	78	247	a140	90	110	82	40	36	17	340	164
16	52	78	*215	a135	86	98	90	37	31	17	276	164
17	49	82	200	a130	102	90	82	35	31	16	242	160
18	44	86	235	a125	118	90	71	32	26	16	283	172
19	44	86	302	a105	110	86	69	30	26	17	1,680	222
20	46	118	258	a95	106	82	85	30	65	15	1,760	255
21	46	256	220	86	106	84	85	30	106	15	1,240	304
22	44	318	195	a80	102	134	93	25	106	15	898	299
23	44	235	195	a76	130	166	93	25	105	13	698	299
24	46	214	185	a72	134	150	93	28	97	18	546	316
25	52	214	175	a68	118	134	93	28	93	16	427	321
26	71	209	167	a64	110	130	89	28	77	16	344	299
27	75	204	159	a57	110	126	93	28	70	16	294	299
28	78	194	159	a58	110	118	93	25	63	15	255	332
29	90	235	180	a58	-------	114	93	25	54	15	217	326
30	114	246	277	58	-------	106	101	25	48	13	187	310
31	98	-------	297	58	-------	94	-------	28	-------	13	168	-------

* Discharge measurement made on this day.
Note.--No gage-height record Jan. 12-20, 22-29, Feb. 2-5; discharge estimated on basis of weather records and records for stations at outlet of Lake Hopatcong and near Bloomsbury.

Musconetcong River near Hackettstown--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	1,333	56	36	43.0		
November	4,243	848	40	141		
December	11,074	739	183	357		
Calendar year 1950	46,528	848	27	127		
January 1951	6,118	320	113	197		
February	7,433	386	197	265		
March	6,494	754	123	209		
April	8,567	625	144	286		
May	3,439	210	63	111		
June	3,909	262	66	130		
July	2,518	396	36	81.2		
August	3,106	257	53	100		
September	2,056	128	43	68.5		
Water year 1950-51	60,290	848	36	165		
October 1951	2,282	140	49	73.6		
November	7,271	520	83	242		
December	8,194	551	187	264		
Calendar year 1951	61,387	754	36	168		
January 1952	7,702	461	173	248		
February	7,261	409	186	250		
March	8,796	788	120	284		
April	9,199	670	107	307		
May	6,323	366	136	204		
June	7,047	758	59	235		
July	3,182	450	39	103		
August	2,565	227	36	82.7		
September	5,010	538	70	167		
Water year 1951-52	74,832	788	36	204		
October 1952	2,410	107	63	77.7		
November	4,620	712	53	154		
December	8,738	628	151	282		
Calendar year 1952	72,853	788	36	199		
January 1953	9,472	665	212	306		
February	5,839	298	130	209		
March	5,977	315	110	193		
April	8,014	402	123	267		
May	4,738	223	90	153		
June	1,491	87	33	49.7		
July	1,133	56	28	36.5		
August	796	53	17	25.7		
September	883	42	17	29.4		
Water year 1952-53	54,111	712	17	148		
October 1953	1,290	69	27	41.6		
November	993	50	24	33.1		
December	3,205	212	36	103		
Calendar year 1953	43,831	665	17	120		
January 1954	2,055	99	57	66.3		
February	2,736	148	64	97.7		
March	4,825	293	95	156		
April	3,115	183	60	104		
May	5,110	262	101	165		
June	991	105	16	33.0		
July	434.0	25	8.6	14.0		
August	517.3	89	8.6	16.7		
September	1,753	118	20	58.4		
Water year 1953-54	27,024.3	293	8.6	74.0		
October 1954	1,706	114	43	55.0		
November	4,337	318	78	145		
December	6,182	302	159	199		
Calendar year 1954	33,761.3	318	8.6	92.5		
January 1955	4,091	252	57	132		
February	2,706	148	55	96.6		
March	3,960	194	82	128		
April	2,507	101	67	83.6		
May	1,412	93	25	45.5		
June	1,511	106	26	50.4		
July	673	45	13	21.7		
August	10,799	1,760	12	348		
September	6,475	332	128	216		
Water year 1954-55	46,359	1,760	12	127		

Musconetcong River near Bloomsbury

Location.--Lat 40°40'20", long 75°03'40", on right bank 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 1955.

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 (revised).--37 years (1903-6, 1921-55), 230 cfs (unadjusted).

Extremes.--1903-7, 1921-55: 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 measurement at gage height 6.95 ft, minimum, 8.1 cfs Aug. 2, 1955; minimum daily, 31 cfs July 23, Aug. 3, 1955.

Revisions.--The figures of maximum and peak discharge for some water years have been revised, as shown in the following table. They supersede figures published in Special Report 9 and 12.

Water year	Date	Discharge (cfs)	Gage height (feet)
1936	Mar. 11, 1936	2,460	5.67
1940	Mar. 15, 1940	5,760	7.55
	May 20, 1940	5,500	7.44
1942	Aug. 11, 1942	3,180	6.25
1944	Mar. 13, 1944	2,090	5.29
1945	July 19, 1945	2,290	5.50

Peak discharge (base, 1,000 cfs).--

1950-51: Nov. 25 (6 p.m.) 1,9 0 cfs (5.15 ft); Dec. 8 (11:30 a.m.) 1,300 cfs (4.05 ft); Jan. 15 (9 a.m.) 1,640 cfs (4.62 ft); Feb. 1 (11:30 p.m.) 1,280 cfs (4.01 ft); Feb. 7 (3 p.m.) 2,080 cfs (5.32 ft); Mar. 31 (3:30 a.m.) 1,590 cfs (4.53 ft); July 28 (3:30 p.m.) 2,420 cfs (5.63 ft).

1951-52: Nov. 7 (3 p.m.) 3,000 cfs (6.13 ft); Dec. 21 (9 a.m.) 1,770 cfs (4.83 ft); Jan. 26 (4:30 p.m.) 1,020 cfs (3.54 ft); Mar. 11 (3 p.m.) 1,430 cfs (4.26 ft); Apr. 5 (7 p.m.) 1,740 cfs (4.79 ft); Apr. 15 (11:30 a.m.) 1,020 cfs (3.54 ft).

1952-53: Nov. 22 (1 p.m.) 1,390 cfs (4.27 ft); Dec. 11 (5 p.m.) 1,220 cfs (3.96 ft); Jan. 24 (5 p.m.) 1,490 cfs (4.43 ft).

1953-54: May 4 (5 a.m.) 692 cfs (2.95 ft), (maximum below base).

1954-55: Feb. 7 (2 a.m.) 1,150 cfs (3.84 ft); Aug. 13 (11 a.m.) 1,360 cfs (4.21 ft); Aug. 19 (9 a.m.) 4,430 cfs (6.95 ft).

Remarks.--Flow regulated by Lake Hopatcong (see p.389). Diurnal fluctuation caused by small powerplants above station.

Revisions.--Revised figures of discharge, in cubic feet per second, for the water years 1904-6, 1922, and 1940, superseding those published in Bulletin 33 and Special Report 9, are given herewith:

1922
Mar. 28..... 272
Sept. 9..... 222

1940
Mar. 15.....2,890

Month	Cfs-days	Maximum	Minimum	Mean
October 1903.....	-	5,850	132	770
February 1903.....	-	1,877	140	309
September.....	-	2,010	56	210
Water year 1903-4.....	-	5,850	56	283
January 1905.....	-	1,740	107	371
Water year 1904-5.....	-	1,740	53	195
February 1906.....	-	858	92	195
Water year 1905-6.....	-	1,050	56	194
March 1922.....	-	830	217	348
September.....	-	723	100	209
March 1940.....	12,043	2,890	74	388
Water year 1939-40.....	80,249	2,890	60	219
Calendar year 1940.....	89,736	2,890	60	245

Musconetcong River near Bloomsbury--Continued

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	79	311	383	592	392	1,130	332	268	217	328	207
2	81	79	280	*374	778	383	905	299	249	184	280	217
3	81	81	268	392	495	370	925	280	246	161	249	221
4	74	97	463	432	460	432	875	260	249	149	224	210
5	70	197	741	311	428	428	770	249	362	231	200	201
6	70	175	741	242	414	424	698	238	353	184	190	192
7	72	137	646	242	1,120	414	628	231	311	152	174	174
8	72	118	1,140	242	771	410	574	217	276	144	193	141
9	79	113	1,100	217	587	392	521	204	242	135	180	126
10	102	105	905	214	513	362	517	190	242	126	174	129
11	97	97	830	207	455	328	521	204	238	118	217	121
12	100	95	712	204	460	311	504	231	214	118	231	118
13	105	92	605	200	482	307	642	217	207	124	228	129
14	95	90	538	226	*473	*374	560	197	307	116	200	135
15	88	86	491	1,030	406	406	517	184	349	107	200	207
16	*86	88	517	442	357	379	486	174	295	107	328	168
17	81	88	477	374	450	349	499	168	260	105	482	149
18	79	95	455	349	504	315	473	168	235	102	370	138
19	81	88	428	332	446	287	419	168	204	132	283	135
20	79	90	396	324	450	450	383	164	187	197	256	129
21	74	113	383	320	564	396	362	164	174	152	231	124
22	79	123	383	295	646	383	344	158	177	124	214	126
23	90	115	396	276	551	357	424	231	249	138	193	129
24	97	110	406	612	495	353	406	362	231	141	180	124
25	92	648	401	538	432	324	366	315	197	129	168	124
26	92	1,040	388	477	437	299	349	256	174	116	168	124
27	79	870	383	432	460	280	328	242	180	107	168	121
28	81	592	428	414	428	272	307	246	194	1,250	180	197
29	79	464	450	401	-------	336	299	349	174	885	207	180
30	81	374	428	374	-------	741	396	383	177	556	*204	132
31	81	-------	406	349	-------	1,370	-------	307	-------	396	200	-------

* Discharge measurement made on this day.

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	135	284	311	464	538	336	419	596	679	158	124	401
2	138	253	332	477	547	332	455	547	925	152	126	656
3	135	574	332	513	543	324	446	499	920	146	126	651
4	129	556	336	468	746	324	432	468	795	144	126	551
5	124	491	495	450	727	353	1,100	442	830	138	118	455
6	111	349	538	428	633	320	1,210	424	722	132	124	383
7	140	1,460	468	392	574	291	940	396	587	132	135	328
8	231	1,100	437	366	538	272	795	383	517	144	135	291
9	174	855	419	362	526	268	684	362	491	529	144	253
10	141	722	392	379	499	276	637	344	508	756	225	228
11	180	582	379	362	508	921	600	344	428	560	190	210
12	246	495	374	344	495	1,210	564	495	374	437	155	190
13	197	446	357	340	442	885	534	477	336	357	190	187
14	171	455	344	357	424	703	751	419	299	295	180	177
15	158	504	414	388	401	610	860	388	276	249	149	174
16	152	491	383	388	392	547	736	362	256	224	164	177
17	144	491	349	362	437	499	*651	332	242	207	320	168
18	138	437	396	*460	442	482	605	357	242	197	299	155
19	135	414	450	406	410	547	526	344	249	184	249	371
20	129	388	428	392	400	578	477	392	231	174	214	315
21	129	366	1,420	379	400	564	442	406	214	168	207	268
22	129	332	1,040	374	390	534	392	349	217	164	272	235
23	132	311	741	633	396	614	357	320	242	158	210	224
24	155	320	614	517	366	610	336	303	246	149	177	210
25	214	291	538	446	357	574	396	534	224	138	158	190
26	171	362	*521	744	349	534	582	587	204	129	144	174
27	141	328	491	820	344	499	660	517	184	126	*141	168
28	161	315	450	855	340	473	840	468	180	141	126	161
29	155	315	442	732	332	468	751	424	174	152	121	158
30	144	311	446	619	-------	442	670	410	171	144	118	149
31	138	-------	460	569	-------	424	-------	419	-------	132	116	-------

* Discharge measurement made on this day.

Musconetcong River near Bloomsbury--Continued

Daily discharge, in cubic feet per second, 1950-55

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	153	138	294	357	522	279	349	447	227	119	88	65
2	175	135	283	353	475	265	346	439	210	130	90	63
3	207	135	290	411	459	262	323	399	194	132	93	59
4	181	135	283	407	443	486	308	372	181	122	86	51
5	171	132	445	376	415	427	323	384	175	119	86	61
6	168	132	625	353	407	361	301	376	165	116	83	74
7	165	130	544	346	443	338	610	365	178	116	79	68
8	162	127	467	346	435	323	661	388	178	111	79	72
9	156	132	435	459	407	308	568	384	171	116	88	60
10	156	141	411	602	380	*297	580	396	159	108	122	60
11	159	138	847	598	357	287	580	368	153	106	111	55
12	162	141	*950	526	368	287	536	338	150	100	94	57
13	159	135	790	467	365	423	572	327	178	100	86	55
14	159	135	674	443	346	439	607	308	181	98	81	57
15	156	135	602	439	427	439	552	308	162	98	79	63
16	153	159	548	443	463	560	625	294	150	96	76	70
17	150	150	483	431	403	483	634	297	144	93	76	70
18	144	141	455	518	365	443	594	301	141	a100	81	70
19	147	138	423	518	346	495	674	272	135	a100	79	70
20	150	165	403	522	327	455	612	265	135	a95	74	76
21	153	548	447	463	423	407	568	248	132	a90	74	70
22	150	1,220	536	463	419	384	536	237	135	a85	74	69
23	147	1,130	471	443	368	365	495	378	135	a110	72	66
24	144	738	435	988	346	510	467	290	138	a130	76	66
25	144	544	419	1,130	331	560	439	254	127	111	64	66
26	141	455	399	860	327	531	447	269	122	100	63	68
27	141	396	380	715	312	483	540	272	116	100	65	68
28	144	357	323	697	294	447	459	244	116	100	63	71
29	150	327	365	643	-------	423	419	223	113	88	59	69
30	141	312	353	572	-------	403	392	223	127	96	59	63
31	144	-------	357	526	-------	376	-------	248	-------	93	61	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for station near Hackettstown.

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	63	68	79	122	135	244	191	194	197	74	48	171
2	61	65	79	119	132	361	191	207	194	63	49	108
3	61	57	76	113	135	385	175	223	159	68	63	90
4	74	57	74	116	150	459	162	521	141	70	63	79
5	88	61	88	113	150	399	156	403	150	72	59	70
6	100	61	96	119	144	349	153	357	150	79	56	63
7	103	68	361	116	141	323	171	327	130	70	51	59
8	96	72	244	98	135	294	171	338	119	72	51	57
9	88	74	175	108	b120	279	165	349	113	57	72	59
10	83	76	382	b80	b120	265	159	346	103	65	74	46
11	79	76	290	b60	b110	251	153	361	103	63	74	74
12	68	74	223	b95	b100	237	175	334	98	61	68	100
13	68	74	248	b100	b80	234	159	312	111	65	50	90
14	65	76	416	b90	b110	287	150	290	113	65	55	76
15	63	72	380	b90	b120	283	150	272	103	72	55	72
16	59	68	312	b90	130	251	156	258	93	57	57	88
17	55	72	269	b95	197	240	269	240	96	59	51	*156
18	55	68	*b220	b85	237	244	301	*227	90	59	51	138
19	55	76	b210	b85	204	223	279	217	83	61	53	127
20	59	72	197	108	184	294	265	214	81	55	67	138
21	57	68	187	184	191	297	251	279	86	53	61	122
22	55	65	181	b160	227	262	240	323	76	55	61	130
23	57	88	181	b140	207	244	234	290	79	48	57	124
24	57	100	171	b130	194	234	240	265	76	51	57	111
25	68	96	159	b130	191	240	230	248	72	49	53	100
26	65	96	159	138	194	258	220	230	70	53	53	96
27	61	90	150	*165	214	230	220	217	68	55	*44	98
28	*88	83	141	175	214	220	237	207	74	51	48	96
29	132	79	141	150	-------	214	227	200	70	47	48	96
30	132	76	135	138	-------	207	207	220	68	45	59	90
31	81	-------	130	135	-------	197	-------	207	-------	48	199	-------

* 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, 1950-55

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	90	124	294	372	122	223	194	184	88	74	40	265
2	88	127	279	365	113	244	187	178	86	72	35	248
3	88	207	262	346	100	217	184	165	79	70	31	234
4	88	214	248	320	116	*276	184	*156	76	68	32	217
5	93	197	244	301	124	283	175	150	72	65	39	214
6	90	175	234	308	207	320	*171	147	*79	65	32	254
7	83	156	219	305	606	349	175	141	81	63	37	258
8	81	144	283	251	240	294	165	147	76	61	48	248
9	81	*135	244	265	178	283	165	144	76	59	44	251
10	83	132	*276	265	159	272	162	150	79	59	46	237
11	88	127	251	244	194	265	159	138	86	*63	48	230
12	86	122	237	230	197	248	156	*122	100	59	132	230
13	81	119	227	234	191	240	168	111	*96	49	858	223
14	*83	116	265	217	184	220	175	111	93	53	674	230
15	88	119	361	223	*165	210	175	106	83	49	476	234
16	108	108	320	214	150	207	168	108	74	44	385	230
17	113	108	287	*207	204	197	168	93	72	39	*335	223
18	106	119	357	197	220	191	159	93	65	37	630	234
19	86	111	435	194	191	184	150	88	63	44	*2,890	262
20	86	150	334	159	184	178	168	88	76	57	2,390	297
21	88	490	327	171	178	187	171	86	113	35	*1,720	327
22	76	483	349	175	181	297	181	83	135	44	1,250	338
23	76	353	287	159	251	349	178	83	141	31	928	331
24	74	305	276	156	248	290	171	106	138	40	734	380
25	72	297	262	150	214	265	181	88	132	48	594	376
26	88	287	244	147	200	262	178	88	124	37	500	346
27	106	272	237	138	191	262	181	86	111	42	451	342
28	108	262	230	127	191	234	178	83	98	39	376	399
29	147	327	258	124	-------	223	181	79	90	39	342	388
30	162	323	467	127	-------	214	187	81	81	39	305	365
31	147	-------	431	130	-------	204	-------	86	-------	37	290	-------

* Discharge measurement made on this day.

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	2,597	105	70	83.8		
November	6,539	1,040	79	218		
December	16,496	1,140	268	532		
Calendar year 1950	78,101	1,140	70	214		
January 1951	11,225	1,030	200	362		
February	14,654	1,120	357	523		
March	12,624	1,370	272	407		
April	16,128	1,130	299	538		
May	7,388	383	158	238		
June	7,221	362	174	241		
July	6,903	1,250	102	223		
August	7,100	482	168	229		
September	4,628	221	118	154		
Water year 1950-51	113,503	1,370	70	311		
October 1951	4,777	246	111	154		
November	14,598	1,460	253	487		
December	15,097	1,420	311	487		
Calendar year 1951	122,343	1,460	102	335		
January 1952	14,786	855	340	477		
February	13,496	746	332	465		
March	15,814	1,210	268	510		
April	18,848	1,210	336	628		
May	13,108	596	303	423		
June	11,963	925	171	399		
July	6,916	756	126	223		
August	5,283	320	116	170		
September	8,258	656	149	275		
Water year 1951-52	142,944	1,460	111	391		

Musconetcong River near Bloomsbury--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1952	4,832	207	141	156		
November	8,801	1,220	127	293		
December	14,737	950	283	475		
Calendar year 1952	136,842	1,220	116	374		
January 1953	16,415	1,130	346	530		
February	10,973	522	294	392		
March	12,546	560	262	405		
April	15,117	674	301	504		
May	9,914	447	223	320		
June	4,628	227	113	154		
July	3,278	132	85	106		
August	2,461	122	59	79.4		
September	1,952	76	51	65.1		
Water year 1952-53	105,654	1,220	51	289		
October 1953	2,296	132	55	74.1		
November	2,228	100	57	74.3		
December	6,154	416	74	199		
Calendar year 1953	87,962	1,130	51	241		
January 1954	3,647	184	60	118		
February	4,466	237	80	160		
March	8,505	459	197	274		
April	6,057	301	150	202		
May	8,676	521	194	280		
June	3,166	197	68	106		
July	1,862	79	45	60.1		
August	1,907	199	44	61.5		
September	2,924	171	46	97.5		
Water year 1953-54	51,888	521	44	142		
October 1954	2,934	162	72	94.6		
November	6,209	490	108	207		
December	9,075	467	219	293		
Calendar year 1954	59,428	521	44	162		
January 1955	6,821	372	124	220		
February	5,493	606	100	196		
March	7,688	349	178	248		
April	5,195	194	150	173		
May	3,569	184	79	115		
June	2,763	141	63	92.1		
July	1,581	74	31	51.0		
August	16,692	2,890	31	538		
September	8,411	399	214	280		
Water year 1954-55	76,437	2,890	31	209		

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 1955 (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.--49 years, 11,220 cfs, including flow of Musconetcong River after Sept. 30, 1931 (unadjusted).

Extremes.--1906-55: Maximum discharge, 340,000 cfs Aug. 19, 1955 (gage height, 38.85 ft, from floodmark), from rating curve extended above 160,000 cfs on basis of flood-routing study and slope-area measurement of peak flow; minimum, not including flow in canal, 870 cfs Sept. 20, 1908 (gage height, 1.55 ft).

Flood of Oct. 10, 1903, reached a stage of 35.9 ft, from floodmark (discharge, 275,000 cfs).

Revisions.--The maximum discharge for the water year 1936 has been revised to 237,000 cfs Mar. 19, 1936 (gage height, 32.45 ft), superseding the figure published in Special Report 9.

Peak discharge (base, 48,000 cfs).--

1950-51: Nov. 27 (2 a.m.) 114,700 cfs (22.50 ft); Dec. 5 (6 p.m.) 110,000 cfs (21.93 ft); Dec. 9 (10 a.m.) 62,500 cfs (15.52 ft); Jan. 25 (4 p.m.) 50,900 cfs (13.66 ft); Feb. 8 (1 a.m.) 50,400 cfs (13.58 ft); Feb. 23 (2 a.m.) 48,600 cfs (13.28 ft); Apr. 1 (3 a.m.) 127,800 cfs (24.03 ft).

1951-52: Nov. 8 (5 p.m.) 69,400 cfs (16.53 ft); Jan. 28 (12 m.) 60,900 cfs (15.27 ft); Mar. 12 (11 p.m.) 73,900 cfs (17.19 ft); Apr. 6 (9 p.m.) 80,300 cfs (18.70 ft); Apr. 16 (1 p.m.) 73,300 cfs (17.10 ft); May 26 (6 p.m.) 54,800 cfs (14.31 ft); July 11 (3 a.m.) 97,800 cfs (20.40 ft).

1952-53: Nov. 23 (5 a.m.) 73,900 cfs (17.18 ft); Dec. 12 (2 p.m.) 140,000 cfs (25.40 ft); Jan. 25 (10 p.m.) 92,400 cfs (19.70 ft); Mar. 27 (1 p.m.) 48,900 cfs (13.33 ft).

1953-54: Dec. 8 (1 p.m.) 46,800 cfs (12.80 ft), (maximum below base).

1954-55: Aug. 19 (11:30 p.m.) 340,000 cfs (38.85 ft).

Remarks.--Diurnal fluctuation at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lakes Hopatcong and Wallenpaupack and by Pepacton, Swinging Bridge, Toronto, Cliff Lake, Neversink, and Wild Creek Reservoirs (see p. 388) and smaller reservoirs. Diversion from Pepacton and Neversink Reservoirs (see p.394) and to Delaware Division Canal (see diversion below and see p. 397 for discharge measurements).

Revisions (water years).--Special Report 5: 1926-27. Special Report 9: Drainage area. Revised figures of discharge, in cubic feet per second, for the water years 1918-20 and 1936, superseding those published in Bulletin 33 and Special Report 9, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1918		1918-Con		1919-Con.		1919-Con.	
Jan. 12	5,000	Feb. 1	2,500	Jan. 7	13,000	July 5	3,300
13	5,000	2	2,500	8	11,000	Dec. 19	10,000
14	5,000	3	2,500	9	9,500	20	7,500
15	5,000	4	2,500	10	8,500	21	7,500
16	3,500	5	2,500	11	8,300	22	7,500
17	3,500	6	2,500	June 19	6,000	23	7,500
18	3,500	7	2,500	20	5,500		
19	3,500	8	2,500	21	4,800	1920	
20	3,500	9	2,500	22	4,500	Jan. 1	4,000
21	3,000	10	3,000	23	4,000	2	4,000
22	3,000	Dec. 23	15,000	24	3,800	3	4,000
23	3,000	24	20,000	25	3,600	4	4,000
24	3,000	25	26,000	27	5,000	5	4,000
25	3,000	26	22,000	28	5,200	6	4,000
26	2,800	27	20,000	29	5,200	7	4,000
27	2,800	28	17,000	30	4,700	8	4,000
28	2,800			July 1	4,500	9	4,000
29	2,800	1919		2	4,000	10	4,000
30	2,800	Jan. 5	20,000	3	3,500	11	3,800
31	2,800	6	16,000	4	3,500	12	3,800

Delaware River at Riegelsville--Continued

Revised figures of discharge, in cubic feet per second, 1918-20, 1936--Continued

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1920-Con.		1936-Con.		1936-Con.		1936-Con.	
Jan. 13	3,800	Aug. 4	2,010	Aug. 23	2,440	Sept.14	2,700
14	3,800	5	2,320	27	4,830	15	2,120
15	3,800	6	2,830	28	3,900	16	2,400
16	3,800	7	2,810	29	3,650	17	2,810
17	3,800	8	2,810	30	3,720	18	2,580
Mar. 7	20,000	9	2,810	31	4,000	19	2,400
8	17,000	10	2,420	Sept. 1	4,390	20	2,660
9	20,000	11	2,440	2	4,420	21	2,480
10	20,000	12	3,030	3	3,740	22	2,140
11	25,000	13	3,210	4	3,250	23	2,440
12	30,000	14	3,160	5	3,030	24	2,460
13	60,000	15	3,320	6	2,730	25	2,340
14	80,000	16	3,480	7	2,560	26	2,270
		17	2,790	8	2,400	27	2,160
1936		18	2,440	9	2,460	28	1,940
Mar. 19	228,000	19	2,340	10	2,850	29	1,850
Aug. 1	2,800	20	2,210	11	3,320	30	2,030
2	2,800	21	2,400	12	3,250		
3	2,400	22	2,810	13	3,180		

Month	Cfs-days	Maximum	Minimum	Mean
January 1918	-	5,000	1,990	3,020
February	-	66,800	2,500	18,600
Water year 1917-18	-	73,300	1,420	9,800
December 1918	-	26,000	3,390	10,100
January 1919	-	24,500	7,170	12,000
June	-	8,150	3,600	5,850
July	-	32,100	2,730	8,570
Water year 1918-19	-	36,300	2,730	10,000
December 1919	-	24,500	5,310	12,000
January 1920	-	4,420	3,050	3,920
March	-	102,000	2,340	41,900
Water year 1919-20	-	102,000	2,250	12,600
March 1936	1,805,600	228,000	11,200	58,250
August	100,080	6,700	2,010	3,228
September	81,360	4,420	1,850	2,710
Water year 1935-36	4,921,260	228,000	1,850	13,450
Calendar year 1936	4,544,290	228,000	1,850	12,420

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,980	2,550	21,400	8,540	15,200	20,200	107,700	12,800	10,700	8,700	11,600	3,900
2	2,810	2,480	18,000	8,130	23,800	18,600	61,800	11,800	9,110	9,230	9,680	4,020
3	2,610	2,480	15,700	8,200	35,800	17,600	48,300	11,000	8,050	9,460	7,900	3,920
4	2,770	2,610	24,600	10,200	24,200	17,500	43,200	10,300	7,680	8,050	6,880	3,710
5	3,020	4,130	93,900	17,900	19,000	16,800	36,700	9,830	8,660	8,160	6,320	3,800
6	3,070	5,790	80,000	25,400	18,100	17,400	31,200	8,810	8,920	8,540	5,550	4,380
7	2,790	8,540	47,400	19,500	28,200	17,600	26,800	7,970	7,600	7,530	5,090	5,060
8	2,810	7,240	47,500	16,000	44,400	18,200	23,300	8,130	6,680	6,580	5,060	4,920
9	2,650	5,980	59,000	13,500	37,100	20,000	21,000	8,050	6,160	5,850	5,290	4,180
10	3,020	5,400	46,100	12,000	24,600	19,500	20,400	7,640	5,940	5,380	5,060	3,900
11	3,780	4,920	35,900	11,900	20,600	16,400	20,700	7,680	5,670	5,490	6,450	3,760
12	3,680	4,630	31,000	12,200	19,100	14,500	21,700	8,470	5,610	5,820	5,820	4,120
13	3,950	4,380	26,200	11,900	22,000	*15,200	30,800	8,050	5,880	5,980	5,790	4,080
14	4,050	4,100	22,300	10,800	27,000	17,700	40,200	7,310	7,380	5,910	6,450	4,120
15	3,730	4,080	19,700	16,700	29,000	22,200	32,300	7,310	9,930	5,940	5,820	6,190
16	3,540	3,850	18,500	17,700	23,600	23,400	27,000	7,130	10,200	5,260	10,600	5,880
17	3,090	3,900	16,300	18,300	21,200	20,600	24,600	6,650	8,470	4,920	11,100	5,460
18	3,290	3,830	14,400	17,000	23,500	17,900	21,900	6,520	6,990	5,200	10,100	5,670
19	3,050	3,640	13,300	15,400	21,300	16,200	19,900	6,260	6,290	5,490	10,200	5,060
20	2,980	3,520	12,400	16,200	22,800	22,200	18,300	5,790	6,290	6,480	7,940	4,600
21	2,630	4,020	11,000	17,400	27,500	29,500	16,700	5,380	5,700	7,130	6,580	4,180
22	2,590	5,090	9,930	18,200	41,700	27,300	14,900	5,380	6,620	8,920	6,420	3,590
23	2,790	7,170	10,600	16,900	44,800	23,700	15,800	6,260	9,760	8,240	6,190	3,380
24	2,880	6,450	10,300	24,400	32,900	21,000	17,800	8,160	9,760	6,990	5,320	3,220
25	3,410	11,600	9,720	45,300	25,800	21,400	18,000	8,920	7,560	*6,450	4,950	3,270
26	3,520	78,200	8,200	39,600	22,400	24,300	16,000	7,640	7,350	5,610	4,460	3,380
27	3,180	94,900	6,850	28,700	22,000	21,200	15,200	6,480	6,780	4,710	4,410	3,640
28	3,050	51,900	6,960	23,300	21,200	18,900	14,400	5,980	6,960	17,800	4,120	4,000
29	2,940	33,500	7,270	20,200	-------	19,200	13,100	7,940	6,920	22,200	4,380	4,080
30	2,750	25,900	9,190	13,500	-------	34,900	13,200	12,300	7,310	14,500	4,380	3,220
31	2,530	-------	9,190	15,600	-------	97,400	-------	12,200	-------	15,000	4,150	-------

* Discharge measurement made on this day.

Delaware River at Riegelsville--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,050	8,370	11,600	16,200	23,000	9,490	20,800	30,900	23,200	4,440	4,760	10,600
2	3,090	13,000	11,500	21,700	21,900	9,080	24,800	25,800	35,000	4,680	5,030	27,600
3	3,450	21,900	11,200	30,400	23,400	7,940	37,700	22,600	32,200	4,150	4,820	28,500
4	3,570	37,700	*11,000	29,200	29,000	7,600	36,500	20,000	26,600	3,950	4,280	23,600
5	3,640	36,200	14,300	25,600	38,000	9,460	39,700	17,700	24,400	3,920	3,760	17,700
6	3,610	26,200	29,000	22,600	41,600	9,650	71,700	16,700	22,200	3,710	4,680	14,100
7	3,610	30,200	31,300	19,900	34,600	9,000	*68,100	15,800	20,000	3,590	5,980	11,700
8	5,120	64,000	25,400	17,400	28,800	8,540	48,900	14,600	16,900	3,590	5,580	9,720
9	5,980	62,700	21,800	15,800	25,100	8,350	38,400	14,100	15,300	5,440	5,150	8,430
10	7,060	43,900	20,800	15,400	22,000	7,490	31,700	13,300	14,900	41,400	5,490	7,710
11	6,550	31,900	21,600	14,800	19,900	17,900	27,000	12,800	14,000	78,100	8,130	7,100
12	7,100	26,200	19,400	13,800	18,900	61,900	23,300	16,000	12,700	39,500	6,850	6,520
13	7,310	22,100	17,400	12,800	17,300	62,900	20,900	23,900	11,400	23,800	7,020	6,480
14	8,050	19,600	15,800	12,300	15,000	42,500	28,000	27,900	10,300	17,500	6,320	6,230
15	7,100	19,600	15,000	13,700	13,600	31,000	45,800	24,100	9,380	14,100	5,430	5,350
16	6,160	20,000	13,300	15,500	12,800	24,400	66,600	21,800	8,430	12,100	5,550	6,070
17	5,790	22,000	10,200	18,700	13,000	20,700	51,900	19,700	7,900	10,500	11,300	6,480
18	5,230	20,400	10,100	19,200	12,900	18,800	39,100	18,100	8,540	9,000	10,500	5,940
19	*5,030	18,300	9,420	22,000	12,500	17,900	31,800	17,300	7,820	8,130	8,130	8,530
20	5,010	16,600	9,420	23,300	12,300	18,800	26,900	17,600	7,130	7,130	7,350	8,890
21	4,840	15,200	19,000	21,900	11,900	18,900	23,300	19,300	6,680	6,550	7,170	7,100
22	4,100	14,100	29,200	20,100	11,800	22,100	20,900	19,200	6,260	6,540	7,860	5,850
23	3,920	12,900	31,000	23,600	11,000	32,900	18,900	17,400	6,230	9,490	6,680	5,550
24	4,540	12,900	26,600	24,400	10,100	37,000	17,500	15,800	6,580	7,860	6,010	5,880
25	5,610	14,400	22,700	22,300	9,650	38,600	17,200	22,300	6,920	6,580	4,980	5,120
26	7,310	16,200	19,700	23,400	9,460	33,500	24,200	46,500	6,420	5,670	4,380	4,650
27	8,050	15,500	17,400	32,600	9,570	31,200	28,300	47,300	5,910	5,260	4,310	4,520
28	7,900	14,200	15,400	57,600	9,280	30,900	34,200	34,700	5,200	4,870	4,200	4,310
29	7,490	13,100	14,600	48,600	9,380	28,400	42,000	27,600	4,950	4,730	4,410	3,950
30	6,780	12,200	14,400	34,900	-------	24,300	37,200	24,200	4,760	5,350	4,280	3,680
31	6,520	-------	14,600	26,800	-------	21,600	-------	21,300	-------	5,010	4,120	-------

* Discharge measurement made on this day.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,230	3,250	11,900	10,500	20,800	16,600	24,600	23,700	12,600	4,600	2,900	1,620
2	4,330	3,110	10,900	9,760	19,900	14,900	23,000	27,600	12,400	5,670	2,800	1,790
3	4,950	2,770	10,300	9,610	18,700	13,700	22,000	29,600	10,900	5,200	2,600	2,400
4	5,170	2,570	9,680	9,900	17,000	18,100	26,200	26,800	9,570	4,300	2,400	2,570
5	4,730	3,000	10,600	9,150	15,900	22,500	18,000	24,300	8,770	3,900	2,300	2,690
6	3,980	2,880	25,100	8,540	14,900	22,600	16,600	25,400	8,350	3,400	2,280	3,640
7	3,850	2,920	26,200	8,130	15,600	18,800	22,500	26,200	8,730	3,300	2,480	4,870
8	4,230	3,160	22,700	7,790	19,500	16,400	35,800	24,900	9,680	3,400	2,340	3,980
9	4,180	3,180	19,000	9,420	20,900	14,500	36,000	24,700	9,570	3,400	2,280	3,610
10	3,780	2,750	17,000	10,900	18,400	13,900	30,400	22,900	8,770	3,300	3,360	4,520
11	3,980	2,490	42,600	14,000	16,200	13,300	28,600	20,700	7,600	3,200	2,880	3,590
12	3,660	2,980	126,400	14,400	15,100	12,700	26,200	18,900	6,580	3,000	2,630	2,900
13	3,320	2,730	88,700	14,400	14,700	13,600	25,700	17,300	6,450	2,900	2,460	2,730
14	3,200	3,020	51,900	13,300	13,800	15,100	28,700	17,000	6,710	2,800	2,510	2,650
15	3,320	3,130	37,300	12,200	13,900	15,800	28,000	16,900	6,580	3,000	2,480	2,830
16	3,360	3,270	29,700	12,100	15,700	25,200	26,200	17,000	6,450	3,500	2,460	3,180
17	3,340	3,020	24,700	12,200	15,800	*37,200	26,800	16,100	6,290	3,200	2,480	3,050
18	3,180	2,790	21,500	14,400	14,700	30,600	25,500	18,700	5,760	3,000	2,530	2,630
19	2,940	3,290	19,000	18,400	13,300	27,300	25,600	21,000	5,430	3,100	2,670	2,400
20	3,050	3,850	17,000	21,200	13,000	27,300	24,500	18,500	5,120	3,300	2,380	2,210
21	2,960	15,900	15,300	19,800	15,600	26,000	23,600	16,400	4,980	3,500	2,150	2,170
22	3,200	51,000	16,500	18,700	32,500	22,000	21,800	15,000	4,680	3,800	1,980	2,080
23	3,340	68,500	16,700	17,300	38,900	19,800	20,100	21,200	4,630	4,500	1,870	2,280
24	3,020	48,400	16,100	25,000	29,000	22,200	18,500	17,700	4,710	6,000	1,790	2,270
25	2,810	33,800	15,000	73,500	24,200	35,800	17,200	15,600	4,520	4,200	1,770	*2,010
26	2,810	24,400	14,200	74,400	21,700	44,600	16,800	14,600	4,410	3,300	1,760	1,890
27	2,670	19,900	13,400	47,700	19,800	47,300	23,300	14,900	4,460	3,000	2,080	1,870
28	2,590	16,900	12,200	36,000	18,200	43,400	34,800	13,700	4,840	2,900	1,990	1,910
29	2,830	14,800	10,500	32,200	-------	37,200	30,500	12,400	4,280	2,800	2,050	1,860
30	3,570	13,300	10,000	28,400	-------	30,600	25,600	11,600	4,330	2,800	2,250	1,740
31	3,380	-------	*10,600	23,600	-------	27,000	-------	12,600	-------	2,800	1,920	-------

* Discharge measurement made on this day.

Note.--Doubtful gage-height record July 3 to Aug. 5; discharge computed on basis of outside gage readings on July 16 and Aug. 5 and records for station at Trenton.

Delaware River at Riegelsville--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,820	6,530	7,200	7,440	11,200	15,900	11,600	14,900	8,540	2,360	1,550	5,520
2	1,940	5,760	6,780	6,170	10,000	25,000	10,800	13,200	8,100	2,400	1,570	4,940
3	2,120	4,720	6,300	5,640	10,200	34,300	10,100	13,700	7,170	2,300	1,700	4,420
4	1,730	4,180	5,860	5,670	11,200	33,800	9,660	19,000	6,780	2,360	1,580	4,310
5	1,620	3,740	5,950	5,980	10,100	29,300	8,960	26,700	6,660	2,500	1,800	3,390
6	1,660	3,430	6,080	6,210	9,340	23,500	8,800	23,800	6,300	2,600	1,710	2,620
7	2,030	3,970	29,100	6,300	8,180	19,900	9,150	19,400	5,520	2,540	1,630	2,300
8	2,770	4,530	44,300	5,640	7,050	17,800	9,380	18,200	5,050	2,500	1,710	2,140
9	2,500	3,720	34,200	4,880	6,900	17,100	9,910	20,900	5,140	2,580	1,900	2,080
10	2,400	3,550	30,700	4,180	7,200	15,800	8,960	22,800	5,110	2,380	1,890	2,170
11	2,480	4,310	30,300	3,700	7,050	14,400	8,480	32,400	4,880	2,140	1,900	2,340
12	2,290	4,420	27,000	3,340	6,340	13,500	8,510	36,100	4,770	2,190	1,890	2,520
13	2,080	4,280	24,200	4,880	4,910	12,300	9,820	29,200	5,020	1,960	1,680	2,320
14	2,120	4,500	26,400	4,580	5,200	12,700	9,580	24,000	4,910	1,890	1,650	2,070
15	2,340	4,550	31,500	5,050	4,910	14,100	8,760	20,600	5,110	2,210	1,490	1,920
16	2,340	4,450	30,200	5,610	5,170	14,100	8,840	17,600	6,110	2,380	1,490	2,190
17	2,160	4,390	24,500	4,940	8,400	13,000	14,300	15,700	5,340	2,270	1,500	3,550
18	1,940	5,200	19,400	4,020	32,300	11,500	35,900	14,400	4,910	2,010	1,360	3,700
19	1,890	4,970	15,900	3,650	35,400	10,700	34,100	12,600	4,550	1,830	1,570	3,600
20	1,760	4,640	14,200	4,880	25,200	13,600	25,400	11,600	4,230	*1,710	1,550	4,100
21	1,680	4,360	13,100	5,760	20,300	16,500	21,000	11,500	3,650	1,820	1,730	3,940
22	1,800	4,260	13,100	6,660	23,400	17,600	17,900	13,300	3,250	1,960	1,890	4,690
23	2,010	5,050	12,700	6,290	31,600	*16,100	15,800	13,100	3,770	2,010	1,990	4,100
24	1,850	7,630	11,900	9,340	26,000	14,600	15,100	12,900	3,840	1,890	1,570	3,480
25	1,850	10,400	10,100	7,630	21,700	14,000	14,900	12,000	3,720	1,680	1,300	2,990
26	1,750	11,300	9,270	7,480	20,300	14,900	13,300	10,600	3,390	1,710	1,370	2,700
27	1,660	10,500	8,540	9,120	19,100	15,400	12,700	9,760	3,250	1,630	1,660	2,560
28	1,990	10,200	8,480	14,700	16,900	15,300	14,100	9,000	3,140	1,570	1,660	2,460
29	3,970	8,720	8,480	24,300	-------	13,500	17,700	8,600	2,540	1,680	1,540	2,380
30	6,080	7,750	8,600	17,500	-------	12,700	16,700	8,540	2,400	1,680	1,830	2,270
31	7,200	-------	8,020	13,500	-------	12,300	-------	8,510	-------	1,680	4,020	-------

* Discharge measurement made on this day.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,190	2,730	16,800	24,800	3,340	13,400	13,100	12,900	5,670	2,900	1,800	12,400
2	2,880	2,990	14,600	20,400	4,640	24,400	12,700	11,200	6,140	3,000	1,500	12,000
3	2,770	5,700	12,900	19,200	4,180	28,700	11,900	10,700	5,640	3,100	1,600	10,500
4	2,250	17,200	11,400	19,200	4,050	22,300	12,000	9,850	5,250	2,800	2,100	9,620
5	2,050	*21,800	10,300	17,100	4,260	22,400	12,500	9,000	4,580	2,500	2,000	8,180
6	2,500	17,300	8,960	15,900	4,770	20,400	12,100	8,600	4,390	2,800	2,300	7,630
7	2,660	13,800	7,520	15,600	12,800	22,000	11,900	7,630	4,130	3,100	2,300	7,520
8	2,460	10,900	7,280	14,100	9,470	19,500	12,500	6,900	4,550	2,800	2,400	7,140
9	1,990	9,540	7,900	11,200	8,260	16,300	11,900	6,600	5,170	2,600	2,100	6,660
10	1,900	8,640	8,570	10,500	8,060	15,600	10,500	6,780	5,920	2,600	2,000	6,500
11	1,850	7,980	8,020	10,300	8,480	16,700	9,420	6,840	5,310	2,800	2,000	6,140
12	1,760	6,990	7,440	9,210	9,060	20,700	9,580	6,370	6,010	2,400	3,560	5,340
13	1,780	6,600	6,750	8,600	8,020	23,200	10,700	5,950	6,750	2,200	11,300	4,910
14	1,780	5,950	7,080	7,780	7,170	21,100	11,700	5,610	6,690	2,100	29,300	6,600
15	2,160	5,490	10,100	7,840	7,780	18,800	15,000	5,110	7,200	2,000	29,000	6,210
16	2,920	5,370	15,000	7,520	7,630	17,300	18,000	4,770	6,370	2,000	20,000	5,950
17	3,210	5,830	15,300	6,720	7,140	18,500	17,200	4,550	5,400	2,200	13,000	5,670
18	2,660	5,760	13,200	6,110	7,810	18,700	15,000	4,940	4,720	*2,200	15,600	5,220
19	2,500	5,430	19,400	7,110	6,840	16,000	13,700	4,470	4,310	2,000	*221,000	4,450
20	2,400	6,690	24,800	6,210	6,570	13,800	13,300	4,450	4,100	2,600	214,000	4,830
21	2,580	11,500	20,200	5,580	6,340	12,800	12,500	4,450	3,840	2,500	79,700	6,470
22	2,500	29,800	15,300	5,950	6,810	17,800	12,200	4,070	4,100	2,200	52,300	5,050
23	2,360	33,000	12,600	5,860	8,760	37,600	12,100	3,550	4,070	2,200	41,800	4,470
24	2,230	24,200	12,900	4,720	12,500	37,800	11,100	4,690	3,900	2,400	33,600	5,220
25	2,420	20,000	11,500	4,420	18,600	29,100	10,900	4,940	3,970	2,100	24,000	7,780
26	2,160	16,800	9,910	4,830	15,300	24,500	14,400	4,720	3,840	2,000	18,800	7,660
27	2,100	15,300	8,800	5,430	13,000	22,000	15,900	5,020	3,340	2,300	15,700	6,900
28	2,340	13,400	8,680	4,500	11,300	19,000	15,600	4,720	3,100	2,000	13,400	7,020
29	2,640	13,100	9,000	4,500	-------	17,000	14,500	4,230	3,000	2,000	11,500	7,750
30	2,850	16,500	16,700	4,580	-------	15,400	14,100	4,310	3,000	2,000	10,600	9,060
31	2,990	-------	28,800	3,430	-------	14,000	-------	4,530	-------	1,900	11,100	-------

* Discharge measurement made on this day.

Note.--Doubtful gage-height record June 28 to Aug. 11; discharge estimated on basis of 1 discharge measurement and records for station at Trenton.

Delaware River at Riegelsville--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Diversion* Mean	Runoff in inches
October 1950	95,940	4,050	2,530	3,095	0	
November	406,780	94,900	2,480	13,560	0	
December	762,810	93,900	6,850	24,610	0	
Calendar year 1950	4,775,670	94,900	2,480	13,080	0	
January 1951	555,570	45,300	8,130	17,920	0	
February	738,800	44,800	15,200	26,390	0	
March	708,500	97,400	14,500	22,850	0	
April	832,900	107,700	13,100	27,760	0	
May	254,140	12,800	5,380	8,198	0	
June	226,930	10,700	5,610	7,564	14	
July	251,520	22,200	4,710	8,114	26	
August	204,060	11,600	4,120	6,583	26	
September	126,690	6,190	3,220	4,223	26	
Water year 1950-51	5,164,640	107,700	2,480	14,150	7.7	
October 1951	172,570	8,050	3,050	5,567	0	
November	701,570	64,000	8,370	23,390	26	
December	554,140	31,300	9,420	17,880	26	
Calendar year 1951	5,327,390	107,700	3,050	14,600	12	
January 1952	716,500	57,600	12,300	23,110	26	
February	527,840	41,600	9,380	18,200	26	
March	722,800	62,900	7,490	23,320	26	
April	1,043,300	71,700	17,200	34,780	26	
May	686,300	47,300	12,800	22,140	44	
June	389,270	35,000	4,760	12,980	60	
July	366,640	78,100	3,590	11,830	60	
August	184,510	11,300	3,760	5,952	60	
September	277,860	28,500	3,680	9,262	60	
Water year 1951-52	6,343,300	78,100	3,050	17,330	37	
October 1952	109,960	5,170	2,590	3,547	65	
November	367,060	68,500	2,490	12,240	65	
December	772,680	126,400	9,680	24,930	65	
Calendar year 1952	6,164,720	126,400	2,490	16,840	49	
January 1953	637,000	74,400	7,790	20,550	65	
February	527,700	38,900	13,000	18,850	65	
March	746,000	47,300	12,700	24,060	65	
April	747,100	36,000	16,600	24,900	65	
May	603,900	29,600	11,600	19,480	65	
June	208,150	12,600	4,280	6,938	65	
July	111,070	6,000	2,800	3,583	65	
August	72,830	3,360	1,760	2,349	65	
September	79,940	4,870	1,620	2,665	65	
Water year 1952-53	4,983,390	126,400	1,620	13,650	65	
October 1953	73,830	7,200	1,620	2,382	65	
November	170,010	11,300	3,430	5,667	65	
December	532,360	44,300	5,860	17,170	65	
Calendar year 1953	4,509,890	74,400	1,620	12,360	65	
January 1954	225,040	24,300	3,340	7,259	65	
February	405,550	35,400	4,910	14,480	65	
March	525,200	34,300	10,700	16,940	65	
April	420,210	35,900	8,480	14,010	65	
May	524,610	36,100	8,510	16,920	65	
June	147,150	8,540	2,400	4,905	65	
July	64,420	2,600	1,570	2,078	60	
August	53,680	4,020	1,300	1,732	50	
September	93,770	5,520	2,070	3,126	65	
Water year 1953-54	3,235,830	44,300	1,300	8,865	63	
October 1954	73,840	3,210	1,760	2,382	65	
November	366,290	33,000	2,730	12,210	65	
December	387,710	28,800	6,750	12,510	65	
Calendar year 1954	3,287,470	36,100	1,300	9,007	63	
January 1955	299,200	24,800	3,430	9,652	65	
February	232,940	18,600	3,340	8,319	65	
March	636,800	37,800	12,800	20,540	50	
April	388,000	18,000	9,420	12,930	50	
May	192,450	12,900	3,550	6,208	80	
June	144,460	7,200	3,000	4,815	80	
July	74,100	3,100	1,900	2,390	80	
August	891,360	221,000	1,500	28,750	40	
September	210,850	12,400	4,450	7,028	60	
Water year 1954-55	3,898,000	221,000	1,500	10,680	64	

* Diversion, in cubic feet per second, to Delaware Diversion Canal.

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 1955 (gage heights only).

Gage.--Wire-weight gage. Datum of gage is 99.83 ft above mean sea level, datum of 1929.

Extremes.--1936-55: Maximum gage height, 40.25 ft Aug. 20, 1955, from floodmark; minimum observed, 8.55 ft Sept. 22, 29, 1943.
Flood of Oct. 10, 1903, reached a stage of 35.8 ft, from floodmark.

Maximum gage height observed.--
1950-51: Apr. 1 (4 to 5 a.m.) 26.56 ft.
1951-52: July 11 (5 a.m.) 23.71 ft.
1952-53: Dec. 12 (4 p.m.) 27.45 ft.
1953-54: Dec. 8 (2 p.m.) 18.05 ft.
1954-55: Aug. 20 (about 2 a.m.) 40.25 ft, from floodmark.

Remarks.--Gage read hourly above 13.9 ft and twice daily below. 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, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.54	9.25	14.21	11.48	12.61	13.85	26.25	12.44	11.94	11.22	12.23	9.50
2	9.50	9.35	13.54	11.35	14.46	13.76	20.40	12.20	11.54	11.50	11.75	9.50
3	9.40	9.37	13.05	11.27	15.79	13.30	18.33	12.18	11.28	11.70	11.39	9.60
4	9.38	9.25	12.82	11.67	15.03	13.33	17.69	11.80	11.10	11.40	11.04	9.50
5	9.50	9.50	21.91	12.73	13.85	13.31	16.79	11.67	11.20	11.43	10.85	9.55
6	9.48	10.43	20.07	15.16	13.61	13.21	15.89	11.57	11.54	11.45	10.65	10.12
7	9.45	11.31	18.58	b13.95	13.50	13.27	15.16	11.34	11.95	11.22	10.46	9.85
8	9.50	11.12	17.48	13.91	c18.28	13.35	14.55	11.16	10.80	10.98	10.43	10.10
9	9.35	10.70	19.86	12.53	-	13.75	14.08	11.27	10.65	10.77	10.60	9.65
10	9.55	10.45	18.30	12.24	-	13.85	13.89	11.12	10.70	10.65	10.35	9.80
11	9.50	10.35	16.65	12.29	-	13.20	13.96	11.15	10.25	10.55	11.00	9.35
12	9.80	10.16	15.85	12.24	13.72	12.77	14.22	11.15	10.35	10.80	10.83	9.65
13	9.85	10.10	a15.12	12.20	14.05	12.80	15.45	11.19	10.38	10.80	10.45	9.97
14	9.98	10.02	14.40	12.05	14.97	13.20	17.44	11.14	10.80	10.78	11.02	9.60
15	9.86	10.04	13.83	13.32	15.55	14.08	16.25	11.02	11.35	10.80	10.52	10.20
16	9.77	9.90	13.50	13.35	14.65	14.54	15.22	11.09	11.78	10.30	12.15	10.86
17	9.60	9.90	13.22	13.50	13.94	14.00	14.78	10.98	11.49	10.10	12.42	10.40
18	9.65	9.95	12.78	13.42	14.75	13.51	14.28	10.92	11.17	10.25	11.85	10.65
19	9.60	9.84	12.31	12.90	14.14	13.18	13.85	10.90	10.82	10.30	12.05	10.95
20	9.58	9.78	12.36	13.07	14.35	13.70	13.52	10.78	10.92	10.60	11.48	10.36
21	9.70	9.80	12.02	13.34	14.65	15.57	13.15	10.59	10.74	10.98	10.97	10.22
22	9.45	10.30	11.86	13.65	16.75	15.20	12.84	10.52	10.68	11.25	11.00	9.94
23	9.40	10.88	11.95	13.30	18.16	14.61	12.92	10.76	11.75	10.85	10.99	9.80
24	9.47	10.91	11.90	13.50	16.27	14.00	13.16	11.30	11.95	10.65	10.66	9.70
25	9.65	10.56	11.61	17.45	15.00	14.05	13.49	11.52	11.26	10.60	10.90	9.80
26	9.72	20.24	11.35	17.48	14.31	14.77	12.96	11.25	11.03	10.35	10.84	9.60
27	9.59	24.86	11.14	15.65	14.23	14.18	12.88	11.00	11.05	10.00	10.15	9.82
28	9.60	19.23	11.24	14.55	14.03	13.68	12.78	10.70	11.05	11.85	10.18	9.79
29	9.58	16.27	11.05	14.02	-------	13.41	12.58	10.84	11.02	14.80	10.12	10.00
30	9.48	14.97	11.67	13.64	-------	15.02	12.61	12.15	11.18	12.60	10.17	9.70
31	9.42	-------	11.74	13.98	-------	22.60	-------	12.38	-------	12.80	10.05	-------

a Estimated
b Reading at 7 a.m.
c Reading at 5 a.m.
Note.--No gage-height record from Feb. 9-11.

Delaware River at Milford--Continued

Daily gage height at 8 a.m., in feet, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.62	11.08	11.70	12.91	14.29	11.45	14.05	15.94	13.85	10.10	10.30	9.95
2	9.14	12.43	11.70	14.14	14.61	11.60	14.30	14.90	15.95	10.27	10.25	15.35
3	9.11	14.83	11.60	15.65	14.34	11.30	16.75	14.30	16.10	10.04	10.30	15.00
4	9.79	16.32	11.40	15.80	15.00	11.10	16.97	13.85	15.15	9.95	10.20	14.38
5	9.77	17.05	11.90	15.05	16.60	11.25	16.16	13.50	14.30	9.94	9.90	13.10
6	9.76	15.22	15.15	14.50	17.60	11.78	20.73	13.18	14.21	9.85	9.84	12.40
7	9.74	14.87	15.90	14.00	16.35	11.62	21.31	13.07	13.60	9.78	10.65	12.05
8	10.37	20.00	14.65	13.49	15.50	11.42	18.56	12.75	12.85	9.75	10.99	11.45
9	10.44	20.40	14.05	13.11	15.00	11.35	16.90	12.60	12.35	10.32	10.35	10.50
10	11.05	17.85	13.30	12.94	14.31	11.15	15.89	12.41	12.75	16.14	10.23	11.15
11	10.90	15.90	14.40	12.78	13.90	11.40	15.10	12.30	12.35	23.42	11.38	10.70
12	11.08	15.05	13.50	12.64	13.83	19.00	14.50	12.44	12.00	17.39	10.00	10.65
13	11.76	14.35	13.46	12.41	13.37	20.74	14.08	14.29	12.03	14.73	-	10.62
14	11.20	13.84	12.65	12.19	12.78	17.30	14.96	15.35	11.40	13.54	-	10.40
15	11.18	13.85	12.75	12.53	12.43	15.87	17.80	14.85	11.35	12.72	-	10.20
16	10.76	13.77	12.80	12.65	12.37	14.75	20.42	14.31	11.35	11.95	-	10.46
17	9.85	14.36	12.95	13.15	12.48	14.07	19.00	13.90	11.14	11.65	-	10.78
18	10.10	14.09	11.65	13.35	12.59	13.68	17.10	13.58	11.45	11.40	-	10.50
19	9.75	13.70	11.40	13.75	12.25	13.29	15.90	13.49	11.15	11.20	b11.21	10.43
20	9.70	13.25	11.60	14.55	12.29	13.66	14.70	13.27	11.04	10.85	11.04	11.42
21	10.46	12.95	13.20	14.25	12.15	13.72	14.43	13.70	11.00	10.98	10.85	11.03
22	9.65	12.72	15.30	14.00	12.17	13.90	13.85	13.75	10.82	10.40	11.46	10.70
23	9.25	12.40	14.90	14.70	12.00	16.22	13.25	13.55	10.77	11.35	10.78	10.21
24	9.90	12.32	15.85	14.68	11.82	16.48	12.90	13.07	10.90	11.05	10.73	10.59
25	10.30	12.70	14.20	14.25	11.70	17.00	12.80	13.22	11.11	10.90	10.26	10.34
26	10.80	13.15	13.90	14.05	11.55	16.29	14.50	16.80	10.80	10.60	9.99	10.90
27	10.75	13.05	12.35	15.70	11.67	15.86	15.25	18.71	10.80	10.35	9.90	10.00
28	11.26	12.71	13.06	19.82	11.61	15.88	16.22	16.57	10.50	10.31	9.79	9.88
29	10.80	12.44	12.35	18.75	11.61	15.50	17.35	15.34	10.34	10.10	9.88	9.85
30	10.55	12.27	a12.73	16.75	-------	14.78	16.75	14.67	10.30	10.35	9.85	9.75
31	10.60	-------	12.40	15.25	-------	14.27	-------	14.10	-------	10.30	9.82	-------

a Reading at 4 p.m.
b Reading at 1 p.m.
Note.--No gage-height record from Aug. 13-18.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.80	9.50	12.00	11.50	14.15	13.54	14.73	14.40	12.37	10.15	9.66	9.10
2	9.82	9.40	11.45	11.54	13.79	13.00	14.49	15.00	12.35	10.75	9.58	9.05
3	10.00	9.45	11.60	11.41	13.70	12.58	14.29	15.80	12.09	10.64	9.56	9.40
4	10.25	9.31	11.25	11.45	13.61	13.28	14.00	15.25	11.83	10.45	9.48	9.40
5	10.06	9.22	11.40	11.31	13.11	14.13	13.30	14.79	11.45	10.10	9.42	9.35
6	9.86	9.45	14.60	11.10	12.86	14.54	13.05	14.50	11.40	10.00	9.20	9.85
7	9.80	9.30	14.95	11.03	12.79	13.73	13.45	15.20	11.28	9.82	9.19	10.60
8	9.80	9.25	14.35	11.00	13.60	13.29	16.20	14.88	11.70	9.84	9.48	10.10
9	9.80	9.30	13.59	11.45	14.14	12.90	16.87	14.65	11.66	9.87	9.38	9.70
10	9.74	9.35	13.10	11.80	13.72	12.66	15.77	14.50	11.52	9.74	10.03	10.30
11	9.72	9.33	14.30	12.62	13.11	12.49	15.30	14.10	11.20	9.74	9.68	10.05
12	9.72	9.20	26.95	12.40	12.80	12.28	15.10	13.77	11.00	9.68	9.55	9.69
13	9.59	9.37	23.60	12.56	12.90	12.35	14.89	13.35	10.82	9.50	9.53	9.58
14	9.56	9.25	18.60	12.32	13.20	12.90	15.15	13.30	11.10	9.33	9.20	9.40
15	9.50	9.50	16.35	12.03	12.54	13.05	15.34	13.10	10.95	9.60	9.20	9.30
16	9.47	9.46	15.39	12.04	13.08	14.52	14.90	13.10	10.87	9.74	9.31	10.40
17	9.35	9.52	14.54	12.30	13.95	17.08	15.10	13.16	10.95	9.69	9.45	9.60
18	9.50	9.45	13.95	12.47	12.88	16.04	14.95	13.56	10.83	9.61	9.44	9.40
19	9.45	9.43	13.47	13.65	12.54	15.22	14.93	14.20	10.70	9.71	9.52	9.46
20	9.40	9.42	13.07	13.89	12.44	15.19	14.83	13.67	10.62	9.80	9.45	9.39
21	9.38	11.80	12.75	13.87	12.56	15.17	14.56	13.21	10.50	9.70	9.38	9.36
22	9.34	16.88	13.02	13.70	15.16	14.37	14.15	12.89	10.18	9.80	9.15	9.20
23	9.50	21.04	12.90	13.40	17.35	13.96	13.85	13.78	10.25	9.96	9.25	9.15
24	9.43	18.50	12.84	13.25	15.55	13.80	13.40	13.62	10.31	10.97	9.10	9.30
25	9.32	16.00	12.53	19.45	14.69	15.91	13.29	13.20	10.15	10.27	9.10	9.32
26	9.28	14.50	12.51	22.50	14.29	17.88	13.23	12.76	10.22	9.86	9.16	9.10
27	9.32	13.38	12.31	18.65	13.86	18.28	13.33	12.65	10.14	9.70	9.36	9.10
28	9.30	13.20	12.24	16.57	13.50	17.80	16.60	12.61	10.33	9.70	9.10	9.16
29	9.32	12.65	12.00	16.05	-------	16.85	15.90	12.28	10.09	9.45	9.15	9.25
30	9.53	12.31	11.57	15.51	-------	15.88	14.90	12.08	10.04	9.45	9.10	9.15
31	9.55	-------	11.68	14.55	-------	15.10	-------	12.31	-------	9.64	9.05	-------

Delaware River at Milford--Continued

Daily gage height at 8 a.m., in feet, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.05	10.82	11.07	11.20	12.40	12.90	12.30	12.97	11.44	9.43	9.15	10.60
2	9.20	10.72	10.95	10.82	11.85	14.27	12.20	12.62	11.24	9.30	9.06	10.70
3	9.12	10.33	10.85	10.58	11.60	16.34	12.10	12.38	11.20	9.40	9.23	10.35
4	9.20	10.05	10.70	10.56	11.65	16.34	11.88	13.30	10.95	9.40	9.15	10.12
5	9.10	9.85	10.72	10.71	11.85	15.40	11.79	15.13	10.72	9.44	9.12	10.10
6	9.11	9.78	10.72	10.81	11.63	14.45	11.45	14.82	10.25	9.50	9.04	9.57
7	9.18	10.57	14.65	10.87	11.42	13.80	11.53	13.90	10.60	9.50	9.12	9.59
8	9.39	10.30	17.74	10.15	11.10	13.70	11.55	13.52	10.35	9.47	9.16	9.35
9	9.43	9.90	16.60	10.30	10.85	13.32	11.65	13.81	10.51	9.45	9.00	9.25
10	9.43	9.86	15.78	10.15	10.85	13.04	11.60	14.31	10.51	9.45	9.22	9.28
11	9.39	10.21	15.60	10.15	11.00	13.08	11.52	15.09	10.45	9.44	9.21	9.40
12	9.35	10.29	15.32	9.86	10.98	12.59	11.45	16.74	10.20	9.31	9.29	9.55
13	9.30	10.10	14.70	10.52	10.60	12.35	11.44	15.67	10.53	9.28	9.20	9.45
14	9.20	10.24	14.89	10.08	10.62	12.35	11.70	14.78	10.30	9.25	9.20	9.35
15	9.20	10.25	15.70	10.29	10.35	12.95	11.50	14.12	10.35	9.37	9.25	9.30
16	9.43	10.44	15.78	10.40	10.40	12.80	11.48	13.54	10.75	9.45	8.99	9.30
17	9.38	10.14	14.84	10.55	10.85	12.70	11.82	13.15	10.60	9.40	9.04	9.83
18	9.25	10.54	13.93	10.10	14.65	12.59	16.10	12.79	10.50	9.35	8.95	8.84
19	9.27	10.45	13.08	9.90	16.78	12.30	16.49	12.38	10.41	9.27	8.90	9.90
20	9.20	10.29	12.83	10.11	14.95	12.17	14.99	12.14	10.25	9.10	9.10	10.10
21	9.10	10.17	12.58	10.55	14.00	13.05	14.17	11.99	10.10	9.10	9.15	9.98
22	9.10	10.14	12.48	10.80	14.27	13.25	13.40	12.37	9.76	9.13	9.18	10.42
23	9.29	10.30	12.50	10.50	15.90	13.21	13.00	12.50	9.60	9.24	9.25	10.12
24	9.25	11.22	12.38	12.00	15.05	13.20	12.80	12.60	10.10	9.22	9.20	9.84
25	9.22	11.66	12.01	11.25	14.10	13.25	12.80	12.28	9.97	9.20	8.97	9.72
26	9.16	12.11	11.75	11.10	13.89	13.00	12.63	11.98	9.80	9.04	8.95	9.53
27	9.15	11.89	11.42	11.60	13.70	13.25	12.35	11.72	9.85	9.18	9.15	9.48
28	9.22	11.95	11.50	12.12	13.30	13.23	12.55	11.51	9.80	9.09	9.15	9.39
29	9.72	11.80	11.38	13.18	-------	12.68	13.28	11.35	9.50	9.18	9.10	9.44
30	10.62	11.20	11.53	13.40	-------	12.40	13.30	11.52	9.50	9.20	9.15	9.40
31	11.25	-------	11.25	12.60	-------	12.35	-------	11.33	-------	9.16	9.45	-------

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.36	9.40	13.70	14.97	9.85	12.26	12.55	12.52	10.43	9.54	9.21	12.35
2	9.48	9.52	13.30	14.03	10.50	14.00	12.47	12.16	10.70	9.57	9.13	12.30
3	9.51	10.40	12.70	13.72	10.52	15.87	12.30	11.95	10.50	9.71	9.05	12.02
4	9.45	12.10	12.50	13.85	10.17	14.35	11.96	11.75	-	9.60	9.10	11.68
5	9.33	14.42	12.15	13.38	10.15	14.34	11.75	11.55	10.30	9.50	9.25	11.49
6	9.29	13.53	12.00	13.08	10.15	13.84	12.20	11.37	10.20	a9.55	9.29	11.29
7	9.48	12.80	11.20	12.90	12.87	14.20	12.10	11.19	10.03	9.85	9.27	11.20
8	9.37	12.58	10.80	12.79	12.52	13.88	12.35	11.15	10.33	9.60	9.65	11.10
9	9.39	11.70	11.00	12.21	11.30	13.70	12.27	10.92	10.56	9.55	9.37	10.99
10	9.20	11.45	11.08	11.90	11.34	13.90	12.00	8.82	10.74	9.50	9.26	10.89
11	9.20	11.25	11.16	11.75	11.40	13.35	11.80	10.70	10.56	9.50	9.27	10.82
12	9.18	11.00	11.02	11.68	11.50	13.87	11.58	10.80	10.66	9.45	9.32	10.58
13	9.15	10.91	11.13	11.42	11.00	14.48	11.75	10.67	11.05	9.32	12.46	10.26
14	8.88	10.80	10.84	11.25	11.18	14.21	12.94	10.65	10.85	9.35	14.42	10.80
15	9.18	10.80	10.76	11.30	11.04	13.75	12.10	10.60	11.04	9.26	15.77	10.84
16	9.52	10.80	11.97	11.00	11.32	13.27	13.20	10.39	10.85	9.26	14.37	10.64
17	9.77	10.70	13.00	10.90	11.21	13.36	13.30	10.17	10.55	9.40	12.75	10.64
18	9.88	10.50	13.24	10.83	10.95	13.45	12.89	10.46	10.34	9.33	12.39	10.56
19	9.50	10.00	13.42	10.32	11.08	13.36	12.75	10.20	10.14	9.30	26.77	10.21
20	9.45	10.12	14.82	10.30	10.95	12.70	12.48	10.38	10.11	9.40	b36.85	10.12
21	9.45	12.00	14.12	10.30	10.85	12.40	12.31	10.32	9.95	9.48	22.00	10.60
22	9.47	14.00	12.80	10.51	10.87	13.00	12.25	10.16	10.15	9.22	18.20	10.52
23	9.42	16.54	12.50	10.08	10.89	16.45	12.22	9.85	10.15	9.31	16.61	10.10
24	9.44	14.77	12.38	10.40	12.33	17.00	12.17	10.15	10.00	9.33	16.08	10.15
25	9.49	14.00	12.12	10.21	13.90	15.55	11.95	10.45	10.05	9.32	14.74	11.13
26	9.49	13.35	11.90	10.20	13.27	14.69	12.48	10.45	10.05	9.23	13.84	11.11
27	9.31	13.20	11.47	10.28	12.70	14.21	12.91	10.45	9.70	9.27	13.19	10.96
28	9.35	12.68	11.40	10.23	12.19	13.75	13.12	10.35	9.70	9.31	12.65	11.00
29	9.60	12.53	11.44	10.15	-------	13.29	12.85	10.17	9.60	9.23	12.20	11.15
30	9.85	12.76	12.50	10.36	-------	13.00	12.65	10.19	9.63	9.22	11.98	11.45
31	9.60	-------	15.38	10.20	-------	12.90	-------	10.10	-------	9.27	11.85	-------

a Reading at 4 p.m.
b Reading at 10 a.m.
Note.--No gage-height record June 4.

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 1955 (gage heights only).

Gage.--Wire-weight gage. Datum of gage is 99.88 ft above mean sea level, datum of 1929.

Extremes.--1936-55: Maximum gage height, 27.79 ft Aug. 20, 1955, from floodmark; minimum observed, 0.53 ft Sept. 18, 20, 1939.
Flood of Oct. 10, 1903, reached a stage of 24.4 ft, from floodmark.

Maximum gage height observed.--
1950-51: Apr. 1 (5 to 6 a.m.) 16.25 ft.
1951-52: July 11 (5 to 6 p.m.) 13.84 ft.
1952-53: Dec. 12 (4 to 5 p.m.) 17.24 ft.
1953-54: Dec. 8 (2 p.m.) 8.84 ft.
1954-55: Aug. 20 (about 2 a.m.) 27.79 ft, from floodmark.

Remarks.--Gage read hourly above 5.80 ft and twice daily below. 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, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.05	0.98	5.40	2.88	4.90	5.08	16.07	3.66	3.20	2.81	3.53	1.27
2	1.04	.88	4.80	2.78	5.64	4.83	10.95	3.51	2.87	2.84	3.10	1.27
3	.95	.88	4.33	2.70	7.70	4.62	9.10	3.26	2.70	3.00	2.72	1.43
4	.92	.89	4.10	2.97	6.26	4.65	8.54	3.08	2.41	2.72	2.42	1.32
5	1.03	1.05	12.17	4.04	5.15	4.60	7.75	2.98	2.55	2.73	2.34	1.32
6	1.03	1.91	13.35	6.17	4.83	4.50	6.95	2.89	2.82	2.80	2.05	1.45
7	1.00	2.71	9.29	5.15	4.75	4.56	6.25	2.65	2.63	2.58	1.86	1.71
8	.99	2.87	8.35	4.35	8.62	4.62	5.69	2.55	2.40	2.30	1.81	1.77
9	.96	2.18	10.43	3.96	8.29	4.95	5.30	2.63	2.20	2.15	1.95	1.47
10	1.05	1.98	9.10	3.80	6.14	5.05	5.09	2.54	2.15	2.03	1.95	1.30
11	1.15	1.82	7.60	3.68	5.34	4.90	5.15	2.53	2.00	1.91	2.33	1.35
12	1.35	1.70	6.89	3.56	4.97	4.10	5.39	2.67	1.95	2.17	2.20	1.35
13	1.33	1.63	6.24	3.60	5.27	4.12	6.43	2.72	2.10	2.19	1.80	1.37
14	1.49	1.51	5.54	3.17	6.09	4.44	8.34	2.43	2.42	2.08	2.37	1.31
15	1.36	1.46	5.05	4.05	6.58	5.26	7.26	2.37	3.00	2.19	2.16	1.90
16	1.36	1.38	4.81	4.60	5.83	5.73	6.33	2.46	3.10	1.95	3.45	2.23
17	1.12	1.38	4.53	4.70	5.17	5.25	5.08	2.38	2.84	1.75	3.70	1.73
18	1.12	1.73	4.21	4.70	5.90	4.78	5.44	2.33	2.52	1.74	3.34	2.06
19	1.10	1.31	3.75	4.20	5.42	4.46	5.05	2.22	2.21	1.97	3.35	1.95
20	1.10	1.33	3.75	4.30	5.53	4.95	4.75	2.19	2.33	2.40	2.80	1.75
21	.95	1.35	3.48	4.55	5.76	6.55	4.44	1.48	2.20	2.30	2.34	1.60
22	.98	1.72	3.27	4.60	7.65	6.36	4.17	1.89	2.08	2.88	2.38	1.31
23	.95	2.30	2.38	4.55	8.97	5.76	4.12	2.15	3.02	2.40	2.30	1.22
24	.98	2.44	3.31	4.65	7.35	5.44	4.44	2.63	3.23	2.40	2.03	1.16
25	1.10	2.50	3.07	8.20	6.13	5.25	4.70	2.87	2.67	2.24	1.84	1.16
26	1.15	10.63	2.75	8.38	5.53	5.84	4.26	2.64	2.40	2.12	1.60	1.12
27	1.12	14.80	2.60	6.70	5.42	5.40	4.10	2.37	2.47	1.78	1.58	1.20
28	1.10	10.04	2.60	5.70	5.25	4.93	3.99	2.07	2.43	2.25	1.57	1.26
29	1.06	7.34	2.44	5.25	-------	4.67	3.84	2.19	2.40	6.22	1.49	1.42
30	.98	6.13	3.05	5.00	-------	6.15	3.80	3.43	2.49	4.15	1.53	1.16
31	.93	-------	3.12	4.64	-------	12.72	-------	2.63	-------	4.35	1.49	-------

Delaware River at Frenchtown--Continued

Daily gage height at 8 a.m., in feet, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.04	2.43	3.45	4.21	5.69	2.90	6.25	6.95	5.34	1.60	1.72	1.81
2	1.13	3.73	3.47	5.34	5.44	2.95	5.52	6.06	7.03	1.64	1.72	6.82
3	1.09	4.77	3.41	6.67	5.59	2.67	7.67	5.57	7.20	1.50	1.72	6.56
4	1.20	7.20	3.33	6.87	6.38	2.45	7.89	5.10	6.25	1.42	1.68	6.00
5	1.17	7.94	3.45	6.20	7.55	3.05	7.15	4.80	5.74	1.40	1.40	4.91
6	1.13	6.31	6.28	5.71	8.40	3.12	11.11	4.57	5.45	1.32	1.48	3.15
7	1.13	5.91	7.17	5.25	7.51	3.04	11.75	4.34	5.13	1.24	2.12	3.65
8	1.81	10.53	6.20	4.66	6.60	2.65	9.33	4.10	4.65	1.20	2.10	3.20
9	1.85	11.10	5.55	4.36	5.94	2.82	7.83	3.94	4.28	1.65	1.81	2.89
10	2.48	8.68	5.13	4.23	5.52	2.55	6.91	3.75	4.10	7.04	1.76	2.64
11	2.34	7.10	5.50	4.10	5.18	3.00	6.25	3.65	3.95	13.51	2.75	2.55
12	2.48	6.15	5.13	3.98	4.92	10.20	5.69	3.62	3.80	8.36	2.45	2.37
13	2.57	5.52	4.72	3.75	4.63	11.25	5.25	5.46	3.39	5.94	2.60	2.42
14	2.56	5.05	4.40	3.53	4.18	8.57	6.05	6.58	3.14	4.80	2.56	2.30
15	2.58	5.02	4.35	3.81	3.85	6.91	8.64	5.91	2.98	4.04	2.16	2.05
16	2.15	5.08	4.19	4.10	3.75	5.93	11.00	5.51	2.76	3.60	1.88	2.12
17	2.17	5.00	3.50	4.97	3.80	5.30	9.75	5.07	2.58	3.25	2.82	2.49
18	1.92	-	3.25	4.90	3.81	4.90	8.03	4.82	2.84	3.03	3.61	2.28
19	1.75	4.75	3.21	5.22	3.56	4.57	6.94	4.75	2.68	2.85	2.81	2.95
20	1.85	4.53	3.25	5.85	3.65	4.94	6.13	4.50	2.56	2.57	2.70	3.07
21	1.73	4.25	4.12	5.50	3.51	4.97	5.63	4.91	2.43	2.40	2.53	2.74
22	1.48	4.04	6.65	5.32	3.53	5.10	5.44	4.98	2.26	2.27	3.13	2.26
23	1.42	3.73	6.84	5.75	3.41	7.18	4.85	4.69	2.26	2.25	2.50	2.10
24	1.65	3.71	6.38	5.80	3.18	7.40	4.60	4.35	2.32	2.80	2.41	2.28
25	1.94	3.83	5.78	5.72	3.08	8.02	4.40	4.45	2.56	2.52	1.96	2.06
26	1.48	4.44	5.30	5.33	2.93	7.28	5.78	7.76	2.43	2.25	1.70	1.84
27	1.64	4.36	4.91	6.75	3.08	6.91	6.46	9.45	2.30	2.00	1.59	1.68
28	2.63	4.03	4.35	10.36	3.04	6.84	7.35	7.53	1.96	1.85	1.51	1.66
29	2.56	3.74	4.09	9.47	3.00	6.59	8.42	6.45	1.78	1.78	1.58	1.57
30	2.40	3.63	4.00	7.61	-------	5.94	7.85	5.90	1.78	2.00	1.54	1.46
31	2.25	-------	4.08	6.35	-------	5.58	-------	5.33	-------	1.90	1.51	-------

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.50	1.23	3.57	3.30	5.32	4.70	5.78	5.67	3.71	1.56	1.06	0.73
2	1.50	1.22	3.30	3.14	5.15	4.27	5.65	5.95	3.70	2.17	0.98	0.69
3	1.74	1.12	3.22	3.06	4.94	3.88	5.47	6.82	3.35	2.08	1.05	.91
4	1.91	1.05	3.10	3.18	4.64	4.55	5.25	6.35	3.05	2.79	.97	.95
5	1.73	.98	2.95	3.00	4.32	5.26	4.85	5.90	2.88	1.46	.93	1.00
6	1.58	1.15	6.00	3.09	4.13	5.65	4.55	5.11	2.88	1.25	.90	1.40
7	1.52	1.06	6.34	2.77	4.95	4.95	4.80	6.31	2.71	1.15	.95	1.85
8	1.53	1.15	5.77	2.65	4.88	4.48	7.15	-	3.07	1.20	.84	1.65
9	1.54	1.17	5.05	3.00	5.43	4.19	7.80	-	3.04	1.33	.82	1.25
10	1.40	1.15	4.62	3.50	4.91	3.95	6.82	-	2.94	1.21	1.35	1.70
11	1.45	.97	5.66	4.21	4.39	3.82	6.48	-	2.70	1.21	1.14	1.47
12	1.43	1.00	16.20	4.11	4.07	3.69	6.28	5.05	2.44	1.14	1.03	1.16
13	1.32	1.10	14.18	4.11	4.10	3.63	-	4.62	2.35	1.11	1.03	1.00
14	1.28	1.05	9.80	4.05	3.99	4.14	-	4.52	2.55	1.08	.94	.98
15	1.21	1.08	7.65	3.65	3.87	4.25	6.57	4.50	2.39	1.00	1.02	1.06
16	1.29	1.25	6.65	3.61	4.53	5.64	6.00	4.57	2.31	1.13	.96	1.16
17	1.23	1.26	5.93	3.63	4.35	7.98	6.14	4.44	2.40	1.15	.83	1.18
18	1.20	1.12	5.38	3.78	4.10	7.07	6.06	4.71	2.29	1.07	.90	1.04
19	1.16	1.15	4.95	4.85	3.80	6.31	6.04	5.38	2.16	1.18	1.02	.95
20	1.12	1.30	4.60	5.35	3.77	6.30	5.98	4.92	2.05	1.25	.96	.90
21	1.11	3.33	4.29	5.20	3.83	6.31	5.77	4.43	1.94	1.18	.92	.84
22	1.09	8.05	4.47	4.92	6.20	-	5.42	4.19	1.63	1.35	.84	.88
23	1.24	11.70	4.50	4.63	8.23	-	5.12	5.10	1.69	1.56	.80	.86
24	1.23	9.49	4.38	5.78	6.65	-	4.82	4.85	1.72	2.34	.75	.90
25	1.12	7.37	4.22	10.25	5.85	-	4.52	4.49	1.57	1.77	.77	.84
26	1.10	6.00	4.08	12.71	5.40	8.73	4.30	4.07	1.56	1.36	.74	.80
27	1.05	5.20	3.91	9.49	5.05	9.02	5.03	4.25	1.46	1.18	.88	.79
28	1.04	4.70	3.81	7.57	4.76	8.64	7.58	3.95	1.71	1.20	.89	.78
29	1.03	4.18	3.34	7.05	-------	7.86	7.02	3.64	1.55	1.09	.81	.79
30	1.23	3.85	3.15	6.57	-------	6.87	6.15	3.44	1.47	1.12	.90	.75
31	1.27	-------	3.34	5.71	-------	6.20	-------	3.63	-------	1.06	.87	-------

Delaware River at Frenchtown--Continued

Daily gage heights at 8 a.m., in feet, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.78	2.34	2.62	2.69	3.95	4.34	3.50	4.25	2.80	0.90	0.70	2.04
2	.74	2.20	2.42	2.31	3.22	5.40	3.47	3.91	2.68	.90	.69	1.85
3	.90	1.80	2.31	2.25	3.05	7.30	3.36	3.80	2.50	.88	.81	1.12
4	.77	1.61	2.15	2.03	3.36	7.33	3.10	4.57	2.41	.88	.73	1.17
5	.70	1.43	2.17	2.17	3.21	6.69	2.95	6.15	2.38	.95	.73	1.40
6	.72	1.25	2.21	2.27	3.05	5.75	2.85	6.00	2.35	.98	.75	1.05
7	.75	1.48	5.56	2.36	2.85	5.15	2.92	5.13	1.85	1.00	.72	.95
8	.99	1.75	8.54	2.32	2.57	4.70	2.90	4.78	1.80	.97	.73	.90
9	.97	1.35	7.59	1.95	2.37	4.57	3.14	5.00	1.95	.96	.71	.85
10	.90	1.34	6.84	1.60	2.63	4.32	2.91	5.47	1.90	.96	.84	.86
11	.97	1.64	6.65	1.59	2.51	4.09	2.86	6.17	1.90	.87	.78	.93
12	.93	1.68	6.45	1.26	2.10	3.90	2.75	7.68	1.80	.80	.84	1.05
13	.84	1.55	5.84	1.79	2.15	3.69	3.03	6.67	1.95	.83	.76	.90
14	.78	1.70	6.05	1.65	2.15	3.70	3.10	5.87	1.72	.80	.73	.85
15	.87	1.80	6.76	1.75	1.82	3.95	2.90	5.30	1.71	.90	.70	.78
16	.93	1.60	6.83	2.00	1.77	4.00	2.80	4.77	2.15	.94	.65	.75
17	.90	1.59	6.00	1.15	1.82	3.80	3.20	4.42	2.14	1.10	.76	1.15
18	.80	1.96	5.13	1.00	5.63	3.52	6.15	4.10	1.80	.85	.62	1.45
19	.78	1.93	4.39	1.36	7.76	3.39	7.49	3.70	1.85	.78	.69	1.30
20	.76	1.74	4.35	1.35	6.16	3.52	6.08	3.48	1.65	.75	.73	1.40
21	.72	1.63	4.00	2.00	5.27	4.39	5.37	3.37	1.55	.70	.77	1.40
22	.70	1.59	3.76	2.48	5.42	4.68	5.09	3.69	1.20	.80	.78	1.35
23	.85	1.75	3.61	2.18	6.90	4.38	4.34	3.62	1.11	.81	.82	1.62
24	.78	2.63	3.73	3.61	6.30	4.11	4.05	3.90	1.36	.82	.79	1.36
25	.78	3.04	3.45	2.72	5.49	4.10	4.18	3.60	1.35	.75	.63	1.20
26	.73	3.43	3.11	2.54	5.15	4.19	3.95	3.32	1.17	.68	.58	1.00
27	.74	3.25	2.18	2.40	5.05	4.28	3.68	3.07	1.18	.75	.74	1.00
28	.77	3.34	2.88	3.30	4.66	4.36	3.78	2.90	1.20	.60	.75	1.00
29	1.22	2.96	2.79	5.70	-------	3.97	4.49	2.17	1.15	.74	.71	.97
30	2.04	2.70	2.98	4.77	-------	3.78	4.57	2.85	1.04	.73	.70	.93
31	2.70	-------	2.83	4.15	-------	3.65	-------	2.70	-------	.73	.85	-------

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.89	1.10	4.65	6.14	1.20	3.59	3.89	3.83	1.92	1.06	0.80	3.83
2	.97	1.05	4.18	5.25	1.35	5.35	3.80	3.54	2.24	.86	.79	3.74
3	1.02	1.75	3.84	5.00	1.65	6.94	3.70	3.31	2.02	.95	.70	3.76
4	.96	3.25	3.45	5.10	1.42	5.59	3.56	2.83	2.02	1.07	.85	3.21
5	.88	5.55	3.25	4.68	1.34	5.57	3.61	2.94	1.77	1.00	.87	2.86
6	.87	4.83	3.31	4.38	1.45	5.12	3.58	2.76	1.42	1.00	.88	2.84
7	.98	4.18	2.49	4.25	4.05	5.48	3.50	2.64	1.53	1.20	.86	2.72
8	.99	3.52	2.53	4.13	3.20	5.18	3.40	2.45	1.47	1.07	1.11	2.67
9	.90	3.08	2.60	3.63	2.70	4.41	3.60	2.38	1.77	1.05	.90	2.60
10	.80	2.87	2.94	3.43	2.80	4.21	3.32	2.27	1.98	1.05	.80	2.40
11	.78	2.74	2.73	3.16	2.78	4.46	3.09	2.41	1.85	1.05	.81	2.35
12	.79	2.50	2.73	3.09	2.90	5.04	2.80	2.30	1.93	.98	1.07	2.80
13	.77	2.35	2.46	2.50	2.80	5.69	3.14	2.17	2.50	.90	4.33	1.90
14	.76	2.41	2.47	2.75	2.72	5.37	3.36	2.15	2.10	.89	5.66	2.41
15	.78	2.05	2.85	2.84	2.67	5.00	4.00	1.96	2.30	.84	6.93	2.35
16	1.04	1.92	3.70	2.76	2.80	4.51	4.45	1.86	2.23	.85	5.63	2.30
17	1.25	2.16	4.34	2.20	2.62	4.56	4.61	1.67	2.08	.83	4.14	2.28
18	1.04	2.20	4.70	2.27	2.78	4.94	4.10	1.98	1.84	.95	3.85	2.18
19	1.01	1.90	4.77	2.35	2.53	4.40	3.91	1.72	1.76	.95	16.14	1.84
20	.94	2.30	6.00	2.30	2.40	4.02	3.80	1.76	1.43	.95	-	1.74
21	1.01	3.50	5.41	2.05	2.30	3.79	3.66	1.75	1.39	1.01	12.35	2.23
22	.99	5.26	4.24	2.08	2.32	4.05	3.61	1.62	1.45	.90	9.13	2.18
23	.96	7.45	3.93	2.05	2.73	7.45	3.30	1.34	1.63	.86	7.70	1.71
24	.91	5.95	3.79	1.90	3.69	7.90	3.25	1.71	1.37	.87	7.27	1.86
25	.85	5.26	3.55	1.84	5.08	6.70	3.38	1.95	1.35	.87	6.04	2.67
26	.90	4.64	3.31	1.65	4.30	5.93	3.80	1.91	1.33	.80	5.18	2.65
27	.84	4.27	3.01	2.15	4.05	5.56	4.20	1.96	.97	.84	4.60	2.55
28	.86	3.97	2.84	1.89	3.56	5.15	4.10	1.90	.92	.87	4.10	2.60
29	.94	3.86	2.87	1.60	-------	4.56	4.62	1.70	1.17	.84	3.69	2.12
30	.98	3.25	3.83	1.80	-------	4.28	4.94	1.67	1.12	.82	3.42	3.04
31	1.15	-------	6.50	1.45	-------	4.07	-------	1.57	-------	.86	3.36	-------

Delaware River at Point Pleasant, Pa.

Location.--Lat 40°25'25", long 75°03'50", on bridge at Point Pleasant, Bucks County.

Records available.--Gage heights only March 1936 to August 1955 (discontinued).

Gage.--Wire-weight gage. Datum of gage is 0.48 ft below mean sea level, datum of 1929.

Extremes.--1936-55: Maximum gage height, 105.32 ft Aug. 20, 1955, from floodmark; minimum observed, 69.17 ft Sept. 2, 1953.

Maximum gage height observed.--
1950-51: Apr. 1 (7 a.m.) 91.93 ft.
1951-52: July 11 (6 a.m.) 88.75 ft.
1952-53: Dec. 12 (5 p.m.) 94.37 ft.
1953-54: Dec. 8 (4 to 5 p.m.) 82.20 ft.
1954-55: Aug. 20 (about 4 a.m.) 105.32 ft, from floodmark.

Remarks.--Gage read hourly (6 a.m. to 10 p.m.) above 79.0 ft and twice daily below. 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, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70.15	70.42	78.76	73.50	75.15	77.35	91.80	75.40	74.80	74.38	75.25	72.00
2	70.85	70.40	76.38	73.46	77.67	77.06	85.20	75.21	74.34	74.86	74.63	71.90
3	70.65	70.40	75.65	73.25	-	76.65	82.70	74.80	74.12	74.40	74.05	72.10
4	70.40	70.35	75.40	73.75	-	77.30	81.90	74.50	74.05	74.00	73.45	71.95
5	70.70	71.09	85.75	75.20	-	76.80	80.93	74.45	73.95	74.30	73.40	71.95
6	70.75	72.10	87.40	78.05	-	76.55	79.87	74.30	74.30	74.25	73.05	72.05
7	70.78	73.30	82.45	77.85	-	76.73	78.95	73.98	b73.62	73.92	72.74	72.40
8	70.60	73.20	81.53	76.10	-	76.75	78.15	73.75	73.60	73.50	72.90	72.55
9	70.50	72.55	83.55	74.90	-	77.05	77.65	73.95	73.40	73.30	72.70	72.20
10	70.75	72.30	82.05	74.60	-	77.30	77.30	73.80	73.12	73.05	72.60	71.95
11	71.00	72.25	80.20	74.70	-	76.50	77.35	73.75	73.00	72.75	73.60	72.05
12	71.32	71.87	79.20	74.57	-	76.05	77.56	73.98	72.97	73.32	73.28	71.93
13	71.50	71.70	78.25	74.60	-	75.90	79.05	74.15	72.91	73.30	72.70	72.05
14	71.55	71.55	77.35	74.40	-	76.55	81.60	73.68	73.65	73.70	73.50	71.95
15	71.50	71.47	76.70	76.80	-	77.55	80.27	73.55	74.45	73.30	73.05	72.55
16	71.15	71.37	76.37	76.18	b78.10	78.22	79.81	73.56	74.65	73.95	75.95	73.15
17	71.11	71.33	75.97	76.23	77.44	77.38	78.63	73.65	74.30	72.63	74.95	72.59
18	70.78	71.38	75.57	76.21	78.44	76.89	77.85	73.31	74.10	73.95	74.57	72.63
19	70.93	71.28	74.68	75.54	77.84	76.53	77.29	73.37	73.29	73.90	74.87	72.92
20	70.77	71.18	74.58	75.47	76.97	77.57	77.89	73.18	73.38	73.55	74.10	72.56
21	70.79	71.32	74.31	75.63	78.56	78.78	76.45	72.88	73.31	73.38	73.44	72.40
22	70.51	71.69	73.87	76.38	80.99	78.67	76.07	72.71	73.05	73.38	73.48	71.95
23	70.54	72.76	73.23	76.94	82.54	78.26	75.99	72.74	74.50	74.90	73.41	71.80
24	70.65	72.83	74.15	76.13	79.76	77.55	76.47	73.86	74.40	73.77	72.96	71.66
25	70.90	72.57	73.41	81.87	78.84	77.55	76.81	74.35	74.03	73.44	72.65	71.55
26	70.10	85.75	73.41	81.10	78.42	77.47	77.22	73.97	73.50	73.20	72.42	71.50
27	70.07	89.09	73.75	79.96	77.74	77.68	76.95	73.43	73.65	72.62	72.38	71.63
28	71.30	a82.68	73.43	78.72	77.57	77.10	75.80	73.15	73.55	73.80	72.30	71.85
29	70.80	79.75	72.81	77.88	-------	76.90	75.62	73.24	73.16	79.92	72.11	72.12
30	70.77	78.84	73.87	76.43	-------	78.74	75.68	75.15	73.70	76.15	72.00	71.76
31	70.51	-------	73.78	75.60	-------	87.35	-------	75.30	-------	75.26	72.10	-------

a Reading at 11 a.m.
b Reading at 4 p.m.
Note.--No gage-height record Feb. 3-15 or Dec. 25.

Delaware River at Point Pleasant, Pa.--Continued

Daily gage height at 8 a.m., in feet, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71.45	73.68	74.95	76.05	78.16	74.37	77.40	79.80	77.65	72.25	72.35	72.10
2	71.62	75.52	74.96	77.64	77.73	74.27	a78.59	78.61	79.83	72.24	72.35	79.68
3	71.40	77.45	a74.75	79.40	77.68	73.93	80.40	77.80	80.25	72.15	72.45	79.40
4	71.80	80.00	a74.85	79.73	d79.16	a73.53	81.00	77.50	79.90	71.95	72.45	78.50
5	71.80	81.25	74.95	78.79	80.72	74.45	79.85	76.52	78.05	72.00	72.00	77.55
6	71.80	79.00	78.95	c77.95	81.57	74.71	85.15	76.30	77.70	71.80	71.91	76.60
7	71.70	78.68	80.15	77.45	80.58	74.45	d85.22	76.35	77.35	71.79	72.86	75.38
8	72.55	84.70	78.80	76.70	d79.19	74.25	82.82	75.90	76.25	71.58	72.95	74.65
9	72.80	85.34	77.85	76.25	78.86	a74.05	80.95	75.60	76.05	a72.62	72.55	74.10
10	73.70	82.20	77.30	76.05	78.09	74.02	79.70	75.40	75.90	d81.91	72.45	73.85
11	73.55	80.05	77.85	75.90	77.49	75.30	78.80	75.10	75.65	88.65	73.65	73.65
12	73.67	78.79	77.27	75.73	76.98	84.20	78.72	75.40	75.19	81.81	73.64	73.38
13	73.80	77.95	76.70	75.41	76.64	85.50	77.50	77.65	74.90	78.50	73.25	73.45
14	73.70	77.21	76.20	75.05	76.09	82.00	78.25	79.10	74.60	76.94	73.45	73.85
15	73.80	77.15	75.95	75.03	75.69	79.80	82.30	78.50	74.25	75.83	72.95	72.85
16	73.12	77.41	75.60	75.02	75.72	78.98	84.74	77.75	74.09	75.13	72.78	73.89
17	73.15	77.27	a74.20	76.96	75.90	a77.44	83.28	77.22	73.63	74.56	73.40	73.51
18	72.77	77.50	a74.60	77.12	75.51	a77.04	e81.17	76.83	73.67	74.39	75.25	73.20
19	a72.65	77.07	74.28	77.46	75.11	76.58	79.79	76.76	74.95	a73.85	74.95	73.30
20	72.60	76.90	74.54	77.69	75.01	a77.23	b78.94	76.60	73.57	73.79	73.85	74.42
21	72.71	76.44	78.15	77.84	a74.81	77.02	78.61	77.07	73.46	73.43	73.62	74.94
22	72.20	74.63	79.41	77.86	74.77	a77.80	77.38	77.15	73.23	73.22	74.31	73.12
23	72.09	74.58	79.94	78.35	74.93	d80.44	77.41	76.70	73.09	74.69	73.49	73.98
24	71.97	75.62	b78.95	78.86	74.47	80.43	77.14	76.17	73.32	74.00	73.43	73.22
25	a72.85	75.87	78.63	78.13	74.42	81.21	76.38	76.29	73.18	73.70	72.80	72.87
26	73.64	75.98	77.66	78.21	74.37	80.26	76.94	80.87	73.43	73.21	72.43	72.41
27	73.55	76.34	76.71	79.57	74.12	79.70	79.27	83.17	73.12	72.71	72.22	72.47
28	73.85	76.17	76.47	-	a74.08	-	80.74	80.61	72.70	72.68	72.18	72.35
29	73.97	75.34	75.95	83.10	74.01	-	81.82	78.75	72.42	72.55	72.27	72.19
30	73.47	75.21	75.67	80.59	-------	a78.20	80.95	78.34	72.37	72.66	72.19	72.05
31	73.38	-------	76.85	78.63	-------	a77.64	-------	78.26	-------	72.55	a72.25	-------

a Reading at 4 p.m.
b Reading at 6 a.m.
c Reading at 1 p.m.
d Reading at 2 p.m.
e Reading at 7 a.m.
Note.--No gage-height record Jan. 28, Mar. 28 and 29.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71.95	71.70	75.40	75.75	78.75	78.10	-	-	-	-	-	71.50
2	72.19	71.61	74.70	75.47	78.20	78.10	-	-	-	-	-	69.17
3	72.50	71.45	74.70	75.30	77.95	-	-	-	-	-	-	69.95
4	72.60	71.20	-	75.54	77.56	-	-	-	-	-	-	70.18
5	72.40	71.05	74.24	75.31	77.15	-	-	-	-	-	-	70.24
6	72.20	71.55	75.55	75.21	76.90	-	-	-	-	-	-	71.04
7	a72.05	71.20	78.45	75.00	76.75	-	-	-	-	-	-	71.25
8	72.05	71.54	78.25	74.84	77.90	-	-	-	-	-	-	71.60
9	72.15	71.58	77.25	75.64	78.60	-	-	-	-	-	-	70.95
10	72.10	71.50	-	76.58	77.90	-	-	-	-	-	-	71.19
11	72.00	71.09	77.65	77.30	77.20	-	-	-	-	-	-	71.24
12	a71.95	71.05	91.52	77.48	76.85	-	-	a76.60	-	-	-	70.70
13	71.75	71.50	90.55	76.95	76.90	-	-	-	-	-	-	70.40
14	71.70	71.20	84.50	76.51	76.75	-	-	76.50	-	-	-	70.25
15	71.60	71.60	81.85	76.22	76.55	-	-	76.45	-	-	-	70.43
16	71.16	71.70	80.43	76.15	77.55	-	-	76.58	-	-	-	70.69
17	71.35	71.72	79.35	76.18	77.19	-	-	76.48	-	-	-	70.75
18	71.60	71.43	78.60	76.21	77.98	-	-	-	-	-	-	70.35
19	71.55	71.33	78.00	77.94	76.58	-	-	-	-	-	a70.30	70.15
20	71.41	71.80	72.55	78.50	76.40	-	-	-	-	-	70.38	70.05
21	71.48	74.18	77.15	78.30	76.50	-	-	-	-	-	70.21	69.85
22	71.34	81.88	77.22	78.05	79.55	-	-	-	-	-	69.92	69.85
23	71.74	86.20	77.79	77.65	82.52	-	-	-	-	-	69.78	69.73
24	71.62	83.78	77.28	78.62	80.35	-	-	-	-	-	69.78	70.10
25	a71.30	80.40	77.00	85.98	79.29	-	-	-	-	-	69.87	69.35
26	71.33	78.60	76.80	88.30	78.58	-	-	-	-	-	70.25	69.69
27	71.32	77.60	76.50	84.00	78.15	-	-	-	-	-	70.68	69.62
28	71.19	76.66	76.30	b81.45	78.15	-	-	-	-	-	70.85	69.55
29	71.19	76.00	75.80	81.00	-------	-	-	-	-	-	70.65	69.67
30	71.65	75.56	75.45	80.15	-------		-	-	-	-	70.96	69.49
31	71.77	-------	75.78	79.00	-------	-	-------	-	-------	-	a71.80	-------

a Reading at 4 p.m.
b Reading at 3 p.m.
Note.--No gage-height record Dec. 4, 10, Mar. 3 to May 11, May 13, May 18 to Aug. 18.

Delaware River at Point Pleasant, Pa.--Continued

Daily gage height at 8 a.m., in feet, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	69.53	73.48	73.52	73.79	75.25	76.20	75.10	76.10	74.04	c71.12	70.24	72.00
2	69.36	73.23	a73.29	73.67	74.60	77.75	74.94	75.60	73.86	71.08	70.13	72.78
3	70.05	72.97	73.21	72.95	74.45	79.73	74.80	75.30	73.62	71.11	70.35	72.58
4	69.62	72.41	73.10	73.00	74.85	70.30	74.56	76.61	73.45	71.04	70.45	72.55
5	69.96	72.13	a73.10	73.07	74.76	79.41	74.43	78.55	73.36	71.12	70.21	72.05
6	69.33	71.92	73.25	73.25	74.32	78.15	74.07	78.40	73.44	71.27	70.47	71.55
7	69.34	72.03	a80.60	73.40	74.16	77.40	74.18	77.40	73.11	71.34	70.26	71.21
8	70.38	72.98	a82.20	73.38	73.78	76.80	74.19	76.80	72.77	71.23	70.23	70.00
9	70.42	72.13	a79.95	72.77	73.45	76.44	74.49	77.10	73.00	71.24	70.25	70.95
10	70.32	72.05	a80.10	72.34	73.82	76.20	74.25	77.14	b72.90	71.30	70.87	70.94
11	70.24	72.15	a79.40	72.53	73.72	75.80	74.18	78.77	72.82	70.00	70.51	71.31
12	70.16	72.34	a78.59	71.74	73.56	75.60	74.04	79.84	72.69	70.76	70.72	71.47
13	70.97	72.25	78.27	72.06	72.87	75.50	74.30	79.41	72.82	70.88	70.41	71.33
14	70.75	72.47	79.55	-	73.12	75.35	74.35	b78.26	72.55	70.60	70.35	71.03
15	70.19	72.57	a79.40	72.58	72.57	75.87	74.19	77.46	72.51	70.80	70.23	70.77
16	70.32	72.36	79.55	72.87	72.60	75.77	74.53	76.78	73.23	70.05	69.95	70.74
17	71.00	72.38	78.50	72.75	73.35	75.41	74.72	76.30	73.11	70.06	70.30	71.80
18	70.62	72.79	77.32	72.45	76.40	75.04	79.00	75.84	72.90	69.94	69.93	72.18
19	70.51	a72.65	76.16	72.09	81.96	74.85	80.54	75.28	72.68	69.48	70.04	71.98
20	70.53	a72.51	75.93	72.19	78.61	75.05	78.65	75.27	72.39	69.51	a70.23	72.25
21	70.32	72.35	75.54	72.90	77.50	76.30	77.60	74.80	72.00	69.28	70.50	72.25
22	70.35	72.31	75.31	73.65	77.60	76.47	76.74	75.26	71.85	70.81	70.55	72.63
23	70.72	72.44	75.45	73.02	79.45	76.87	76.20	75.46	71.82	70.67	70.64	72.34
24	70.55	73.63	73.35	74.70	78.90	75.96	75.80	75.53	-	70.65	70.58	71.00
25	70.50	74.30	74.81	a74.24	78.39	75.75	75.85	75.51	72.00	70.35	70.02	71.78
26	70.48	75.07	74.45	73.65	77.30	76.02	75.70	74.75	71.87	70.19	69.82	81.58
27	70.42	74.68	74.05	74.39	77.19	76.08	75.30	74.43	71.72	70.55	70.27	71.68
28	70.47	74.70	74.07	74.84	76.65	76.25	75.37	74.25	71.73	70.17	70.24	71.40
29	70.43	74.20	74.95	78.70	-------	75.20	76.24	74.99	71.47	70.24	70.22	71.25
30	73.50	73.85	74.90	77.95	-------	75.28	76.53	74.21	71.20	70.20	70.05	71.15
31	73.95	-------	74.07	75.90	-------	75.25	-------	73.90	-------	70.23	70.39	-------

a Reading at 4 p.m.
b Reading at 10 a.m.
c Reading at 9 a.m.
Note.--No gage-height record Jan. 14, June 24.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71.04	71.60	76.68	78.66	71.95	74.09	75.50	75.58	72.79	71.44	70.33	-
2	71.02	71.50	75.90	77.50	71.94	77.47	75.45	74.99	73.31	71.45	70.52	-
3	71.53	72.94	75.52	76.10	72.35	79.64	75.20	74.72	72.95	71.70	69.05	-
4	71.51	74.20	75.03	77.17	72.25	77.02	75.18	74.58	73.00	71.43	70.65	-
5	70.92	77.65	74.85	76.62	72.40	77.84	75.20	74.20	72.55	71.30	a70.40	-
6	70.90	76.73	74.52	76.22	72.55	77.30	75.10	73.94	72.45	71.25	a70.60	-
7	71.47	75.83	73.85	75.04	75.81	77.85	74.47	73.83	72.25	71.72	a70.60	-
8	71.50	75.14	73.85	75.87	72.85	a77.26	74.05	73.60	72.61	71.65	71.19	-
9	71.05	74.46	73.40	75.22	73.85	76.35	75.15	73.38	72.68	71.43	70.43	-
10	70.65	74.14	74.35	74.90	74.05	76.28	74.75	73.25	73.00	71.26	70.45	-
11	70.68	73.93	74.05	74.57	74.05	76.22	74.47	73.50	73.00	71.30	70.49	-
12	70.70	73.60	74.05	74.47	74.60	76.00	74.43	73.40	73.00	71.35	71.00	-
13	70.43	73.33	73.60	74.24	74.40	77.85	74.39	73.12	73.34	70.90	77.87	-
14	70.50	73.22	73.30	73.80	73.65	77.55	74.86	73.12	73.30	70.96	77.77	-
15	70.50	72.91	74.75	73.09	73.48	77.00	75.68	72.82	73.61	70.65	79.65	-
16	71.60	72.81	75.04	73.03	73.06	76.45	75.09	72.67	73.50	70.70	77.80	-
17	71.85	72.05	76.15	72.54	73.79	76.50	74.61	72.30	72.97	70.55	75.35	-
18	71.50	73.19	76.75	73.40	74.05	76.56	75.98	72.50	72.66	71.10	75.67	-
19	71.30	72.92	76.80	73.95	73.75	76.29	76.93	72.47	72.53	70.85	89.70	-
20	71.30	73.30	77.40	73.65	73.45	75.75	75.45	72.45	72.25	70.68	-	-
21	71.30	76.15	78.46	73.03	73.30	75.64	75.24	72.35	72.10	71.32	-	-
22	71.30	77.29	75.92	73.14	73.27	75.00	74.47	72.25	72.20	70.91	-	-
23	71.25	80.49	75.85	73.35	73.57	80.30	75.17	71.96	72.18	70.70	-	-
24	71.05	78.40	75.40	72.75	75.40	81.16	75.10	72.36	72.10	70.90	-	-
25	70.90	77.35	74.06	72.50	76.16	79.45	74.87	72.15	71.09	70.95	-	-
26	70.97	76.35	74.70	72.48	75.15	78.35	75.34	72.70	72.10	70.54	-	-
27	70.78	75.07	74.47	72.90	75.76	77.80	75.87	72.70	71.74	70.24	-	-
28	70.83	75.77	73.04	72.65	74.12	77.12	75.10	72.75	71.80	70.90	-	-
29	71.30	75.65	73.10	72.20	-------	76.52	76.24	72.45	71.11	70.65	-	-
30	71.96	75.95	75.75	72.46	-------	76.15	76.61	72.30	71.25	70.60	-	-
31	71.70	-------	79.00	71.94	-------	75.80	-------	72.28	-------	70.80	-	-------

a Reading at 4 p.m.
Note.--No gage-height record Aug. 20 to Sept. 30.

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 1955.

Gage.--Two water-stage recorders and concrete control. Datum of gage is 40.00 ft above mean sea level, datum of 1929.

Remarks.--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, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48	0	28	27	21	24	27	21	40	43	20	18
2	69	10	28	27	21	24	20	21	33	43	28	18
3	35	14	28	26	21	24	20	21	33	42	31	19
4	10	32	28	25	21	24	20	25	33	42	34	19
5	4	34	17	24	21	24	20	29	33	43	33	10
6	4	34	1	24	21	24	20	29	32	43	30	13
7	4	33	19	24	21	21	20	29	32	42	28	20
8	4	32	51	24	21	19	20	29	31	42	28	10
9	4	32	49	24	21	19	20	29	36	42	27	16
10	4	31	29	23	20	19	20	29	36	42	27	29
11	14	31	29	23	20	19	20	29	26	42	29	37
12	22	30	29	23	20	19	20	29	2	42	28	41
13	22	29	28	23	21	19	20	29	12	15	29	41
14	9	46	27	23	21	19	20	29	25	3	29	17
15	0	55	27	23	21	19	20	28	28	3	29	5
16	7	18	27	22	21	19	20	27	28	3	40	9
17	15	7	27	22	22	19	20	27	28	3	43	12
18	6	29	27	22	22	19	20	33	39	21	39	12
19	11	35	27	22	22	19	20	37	44	28	38	18
20	34	19	27	22	22	19	20	37	43	27	35	20
21	50	14	27	22	23	19	20	37	43	26	31	16
22	55	21	27	22	47	19	20	36	38	25	33	29
23	56	21	27	22	32	19	20	36	35	25	14	30
24	33	27	27	22	23	19	20	38	35	24	19	39
25	0	23	27	22	23	19	20	37	35	24	25	42
26	0	86	27	21	23	19	21	33	34	24	29	40
27	0	60	27	21	24	19	21	33	34	24	32	33
28	0	30	27	21	24	19	21	33	35	25	37	33
29	0	29	27	21	-------	19	21	31	40	25	40	33
30	0	29	27	21	-------	19	21	25	44	25	40	33
31	0	-------	27	21	-------	27	-------	34	-------	16	27	-------

* Discharge measurement made on this day.

Note.--No gage-height record Jan. 12-31, Feb. 3-8, Mar. 3 to Apr. 4, Apr. 11 to May 2, May 4-9; discharge over control estimated from recorded range in stage and records for operation of lock gate and bypass gate.

Delaware & Raritan Canal at Kingston--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	47	30	31	31	32	35	24	51	51	64	76
2	34	48	30	31	31	23	35	49	52	51	65	82
3	35	49	30	31	31	24	28	40	51	51	65	80
4	36	42	30	31	32	47	14	35	50	54	64	78
5	40	35	30	31	37	31	34	38	50	66	64	76
6	43	33	30	31	39	19	28	70	50	69	65	73
7	44	34	30	31	23	36	4	45	50	68	67	73
8	45	35	30	31	32	35	25	49	51	68	67	73
9	44	35	30	31	32	33	43	49	51	68	66	73
10	43	35	29	31	32	23	43	49	51	68	66	73
11	44	34	28	32	31	42	31	49	50	67	67	73
12	44	34	28	32	23	22	31	50	50	67	68	73
13	44	27	29	32	18	34	25	50	50	67	68	67
14	44	17	29	30	51	33	12	50	50	67	68	65
15	44	17	30	*28	40	32	32	50	50	67	67	66
16	45	25	30	29	33	27	32	50	50	67	68	66
17	45	22	30	29	33	20	32	50	50	66	72	66
18	45	21	30	29	33	41	32	50	48	64	67	66
19	45	21	30	29	29	29	32	50	38	61	66	66
20	45	24	30	29	22	25	27	50	39	61	65	66
21	45	28	39	28	59	39	15	50	39	66	65	66
22	45	28	37	28	44	40	53	50	39	69	69	66
23	45	28	33	29	33	24	38	50	40	68	69	65
24	45	34	33	29	26	14	23	50	41	68	66	64
25	45	38	33	29	32	28	47	50	41	68	64	63
26	45	34	33	29	45	23	40	51	41	68	64	64
27	45	31	33	28	31	13	32	51	48	67	65	65
28	45	31	32	26	24	33	12	50	50	67	66	65
29	46	30	32	25	49	34	33	50	50	67	72	66
30	45	30	31	32	-------	32	35	50	51	67	73	67
31	45	-------	31	32	-------	14	-------	50	-------	66	73	-------

* Discharge measurement made on this day.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	59	66	32	26	26	25	17	21	28	27	62	26
2	48	69	29	26	26	24	17	21	28	25	59	29
3	41	70	30	26	26	24	16	21	28	36	58	34
4	30	73	30	27	26	25	16	23	28	47	56	39
5	29	72	30	27	26	25	17	31	28	51	18	45
6	29	69	30	28	26	24	17	34	28	30	8.6	37
7	28	65	30	28	26	24	18	32	29	32	16	28
8	40	62	29	27	27	24	17	29	33	48	31	29
9	57	61	29	27	27	24	16	27	43	50	28	31
10	65	63	29	29	28	24	17	26	39	24	30	36
11	59	67	29	29	27	24	17	28	29	44	31	56
12	53	67	29	28	26	24	17	30	28	49	33	45
13	54	69	29	27	26	26	17	37	28	46	34	42
14	55	62	29	26	26	26	17	42	27	41	36	40
15	67	30	28	26	26	26	17	41	24	41	36	.2
16	72	30	27	26	26	26	17	40	26	37	36	.2
17	71	35	27	26	26	26	17	39	36	41	35	.2
18	70	39	27	26	25	25	17	24	36	47	35	.2
19	70	38	27	27	25	25	16	12	36	50	34	15
20	69	38	27	27	24	24	16	11	36	48	34	27
21	69	38	27	26	25	24	16	10	36	54	33	20
22	63	41	27	27	25	24	17	10	35	58	33	16
23	57	38	27	26	26	19	17	11	37	35	32	15
24	57	38	27	28	26	16	16	15	46	49	18	28
25	59	38	27	30	26	17	14	27	46	58	.2	34
26	62	38	27	29	25	17	12	26	45	33	.2	43
27	63	38	27	27	25	17	13	26	35	31	15	33
28	64	38	27	26	25	17	20	25	36	22	27	25
29	65	37	27	26	-------	17	23	26	37	30	25	32
30	65	37	28	26	-------	17	22	27	36	62	24	31
31	65	-------	27	26	-------	17	-------	28	-------	68	25	-------

Delaware & Raritan Canal at Kingston--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	21	45	49	48	38	18	45	58	65	41	39
2	43	46	46	49	46	38	34	39	58	67	43	39
3	19	55	46	49	45	33	33	63	59	67	43	40
4	9.1	39	46	49	45	9.1	34	27	59	65	45	43
5	25	27	47	49	44	27	35	45	59	62	46	46
6	34	48	48	50	45	.2	35	53	60	54	45	45
7	34	71	48	50	45	12	36	53	60	48	45	45
8	45	49	48	50	50	55	36	53	60	44	50	45
9	27	65	47	50	56	34	36	45	60	45	58	45
10	44	51	48	49	56	54	36	39	61	45	58	46
11	70	57	48	49	55	32	35	47	61	44	55	59
12	56	86	47	48	53	49	35	52	61	46	54	55
13	55	48	49	47	49	48	36	52	61	47	52	51
14	53	63	23	47	49	31	36	52	60	49	52	49
15	63	62	68	47	37	33	36	52	60	45	51	45
16	98	78	55	46	75	33	47	52	61	42	49	46
17	45	32	47	47	49	51	42	52	61	43	49	47
18	28	46	47	48	49	65	43	52	61	45	44	47
19	39	74	47	48	62	75	49	52	61	55	39	48
20	32	71	47	48	45	75	49	52	61	59	32	47
21	32	66	47	48	55	74	53	31	62	58	28	47
22	32	63	48	49	44	54	35	37	62	56	41	47
23	32	61	48	49	61	41	63	40	62	51	47	46
24	32	70	48	50	67	42	50	74	62	49	50	46
25	32	54	49	50	46	43	32	54	60	49	50	44
26	32	42	49	51	37	43	58	47	60	50	49	41
27	32	42	49	51	38	42	35	66	59	50	43	42
28	12	43	49	52	38	43	45	53	60	51	40	45
29	1.2	44	49	52	-------	44	50	59	62	47	40	47
30	.9	45	49	51	-------	17	50	62	65	40	40	47
31	4.0	-------	49	50	-------	.5	-------	49	-------	37	40	-------

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	47	40	30	a36	68	75	45	58	68	47	87	36
2	49	39	30	a36	70	88	43	58	68	71	84	37
3	50	39	30	a39	70	97	41	58	67	83	84	38
4	51	37	30	43	70	97	41	58	66	84	78	41
5	51	36	35	44	70	96	41	59	66	82	74	43
6	51	36	37	46	71	96	40	60	68	80	74	38
7	49	36	36	46	65	96	41	60	67	80	61	45
8	48	40	35	46	59	91	44	59	65	82	62	49
9	49	42	35	46	71	96	44	62	66	82	60	45
10	49	43	35	46	71	96	44	65	68	83	60	42
11	50	43	36	46	72	100	50	65	71	84	60	41
12	51	43	36	46	82	102	53	63	72	82	60	42
13	50	42	36	46	87	102	54	62	71	82	30	45
14	49	42	35	46	87	68	53	63	71	83	39	43
15	50	41	a35	46	96	43	52	65	72	84	80	45
16	45	36	a35	50	102	43	52	66	72	84	61	45
17	43	32	a36	58	102	44	51	68	71	83	65	52
18	42	31	a38	63	102	44	52	67	68	82	56	52
19	43	31	a38	68	102	45	53	58	61	80	36	50
20	44	32	a38	65	100	46	53	56	55	79	48	47
21	42	20	a38	61	88	46	53	53	58	82	63	43
22	42	11	a38	61	70	45	54	68	59	78	41	46
23	43	30	a38	61	75	45	55	56	59	75	36	47
24	42	39	a38	66	91	45	55	72	58	78	36	49
25	42	39	a38	71	97	41	55	74	56	82	36	51
26	40	38	a38	70	97	36	55	68	55	83	36	50
27	39	36	a38	68	96	35	55	67	17	84	35	50
28	36	36	a38	68	84	36	55	68	6.1	82	35	51
29	37	32	a38	68	-------	44	55	68	13	78	35	51
30	39	30	a37	68	-------	49	56	68	17	80	35	51
31	40	-------	a36	68	-------	48	-------	70	-------	88	36	-------

a No gage-height record; discharge estimated on basis of recorded range in stage and gate-opening record at upstream end of canal lock.

Delaware & Raritan Canal at Kingston--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	520	69	0	16.8		
November	891	86	0	29.7		
December	850	51	1	27.4		
Calendar year 1950	11,427	86	0	31.3		
January 1951	709	27	21	22.9		
February	640	47	20	22.9		
March	629	27	19	20.3		
April	612	27	20	20.4		
May	940	38	21	30.3		
June	987	44	2	32.9		
July	874	43	3	28.2		
August	952	43	14	30.7		
September	712	42	5	23.7		
Water year 1950-51	9,316	86	0	25.5		
October 1951	1,338	46	33	43.2		
November	947	49	17	31.6		
December	960	39	28	31.0		
Calendar year 1951	10,300	49	2	28.2		
January 1952	924	32	25	29.8		
February	976	59	18	33.7		
March	902	47	13	29.1		
April	903	53	4	30.1		
May	1,499	70	24	48.4		
June	1,422	52	38	47.4		
July	2,009	69	51	64.8		
August	2,075	73	64	66.9		
September	2,082	82	63	69.4		
Water year 1951-52	16,037	82	4	43.8		
October 1952	1,755	72	28	56.6		
November	1,526	73	30	50.9		
December	875	32	27	28.2		
Calendar year 1952	16,948	82	4	46.3		
January 1953	836	30	26	27.0		
February	724	28	24	25.9		
March	697	26	16	22.5		
April	506	23	12	16.9		
May	800	42	10	25.8		
June	1,007	46	24	33.6		
July	1,314	68	22	42.4		
August	943.0	62	.2	30.4		
September	836.8	56	.2	27.9		
Water year 1952-53	11,819.8	73	.2	32.4		
October 1953	1,097.2	98	1.2	35.4		
November	1,619	86	21	54.0		
December	1,481	68	23	47.8		
Calendar year 1953	11,861.0	98	.2	32.5		
January 1954	1,522	52	46	49.1		
February	1,389	75	37	49.6		
March	1,235.8	75	.2	39.9		
April	1,212	63	18	40.4		
May	1,549	74	27	50.0		
June	1,816	65	58	60.5		
July	1,575	67	37	50.8		
August	1,419	58	28	45.8		
September	1,379	59	39	46.0		
Water year 1953-54	17,294.0	98	.2	47.4		
October 1954	1,403	51	36	45.3		
November	1,072	43	11	35.7		
December	1,111	38	30	35.8		
Calendar year 1954	16,682.8	75	.2	45.7		
January 1955	1,692	71	36	54.6		
February	2,315	102	59	82.7		
March	2,035	102	35	65.6		
April	1,495	56	40	49.8		
May	1,962	74	53	63.3		
June	1,751.1	72	6.1	58.4		
July	2,487	88	47	80.2		
August	1,683	87	30	54.3		
September	1,365	52	36	45.5		
Water year 1954-55	20,371.1	102	6.1	55.8		

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 1955 (gage heights only).

Gage.--Wire-weight gage. Datum of gage is 0.04 ft above mean sea level, datum of 1929.

Extremes.--1936-55: Maximum gage height, 84.40 ft (about 5 a.m.), Aug. 20, 1955 from floodmark; minimum observed, 52.03 ft Sept. 19, 1939.
Flood of Oct. 11, 1903, reached a stage of 81.7 ft, from floodmark.

Maximum gage height observed.--
1950-51: Apr. 1 (5 to 7 a.m.) 72.05 ft.
1951-52: July 11 (7 a.m.) 68.90 ft.
1952-53: Dec. 12 (6 p.m.) 73.24 ft.
1953-54: Dec. 8 (5 to 7 a.m.) 62.85 ft.
1954-55: Aug. 20 (about 5 a.m.) 84.40 ft, from floodmark.

Remarks.--Gage read hourly above 59.0 ft and twice daily below. 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, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	53.65	53.30	55.80	55.65	57.10	58.30	72.00	56.25	55.65	55.30	56.00	53.30
2	53.45	53.30	58.00	55.50	59.20	58.10	66.00	55.85	55.25	55.00	55.40	53.20
3	53.40	53.28	57.45	55.40	60.95	57.85	63.60	55.60	55.05	55.30	55.00	53.40
4	53.25	53.10	57.15	51.35	59.65	58.10	62.70	55.45	55.00	55.05	54.53	53.25
5	53.55	53.95	66.75	56.90	58.70	58.10	61.70	55.30	55.00	55.40	54.45	53.20
6	53.45	54.60	69.02	59.35	58.05	57.70	60.65	55.20	55.25	55.05	54.15	53.30
7	53.40	55.45	63.85	58.45	57.90	57.65	59.80	54.85	55.03	54.70	53.90	53.50
8	53.40	55.45	63.55	58.30	62.30	57.80	59.10	54.70	54.65	54.40	53.80	53.70
9	53.30	54.95	64.70	58.95	62.35	58.10	58.55	54.85	54.35	54.25	53.80	53.45
10	53.55	54.70	63.45	56.70	59.55	58.30	58.30	54.85	54.25	54.00	53.75	53.25
11	53.70	54.45	61.60	56.60	58.85	57.75	58.30	54.75	54.05	53.90	54.30	53.25
12	53.70	54.27	60.60	56.50	58.05	57.20	59.30	54.80	54.05	54.20	54.20	53.15
13	53.92	54.20	59.75	56.65	58.45	57.10	61.65	55.10	54.10	54.50	53.90	53.30
14	54.10	54.10	58.90	56.40	59.55	57.45	61.15	54.65	54.65	54.30	54.50	53.20
15	54.00	54.05	58.35	58.85	59.95	58.55	60.45	54.55	55.30	53.90	54.10	53.65
16	53.80	53.95	58.15	58.00	59.35	59.10	59.30	54.62	55.45	54.00	55.00	53.75
17	53.70	53.95	57.75	58.00	58.35	58.55	58.65	54.60	55.20	53.75	55.80	53.80
18	53.60	53.85	57.20	57.95	59.60	58.05	58.15	54.20	54.72	53.85	55.70	54.15
19	53.60	53.85	56.66	57.35	58.95	57.65	57.70	54.15	54.35	53.90	55.60	54.80
20	53.50	53.80	56.60	57.30	58.70	58.80	57.35	54.10	54.45	54.55	55.00	53.65
21	53.45	53.77	56.45	57.75	59.05	59.90	57.00	53.90	54.30	54.35	54.60	53.40
22	53.25	54.30	56.30	57.95	61.75	60.00	56.55	53.85	54.05	54.85	54.35	53.40
23	53.30	54.32	56.30	57.75	63.35	59.25	56.50	53.75	55.50	54.85	54.05	53.10
24	53.50	55.10	56.15	57.75	61.25	58.60	57.05	54.70	55.70	54.60	53.90	53.00
25	53.65	55.00	55.90	61.95	59.70	56.50	57.25	54.90	54.95	54.50	53.80	52.90
26	53.75	65.30	55.70	62.60	58.95	59.25	56.90	55.00	54.55	54.40	53.75	53.50
27	53.75	70.65	55.50	60.40	58.80	58.70	56.65	54.50	54.70	53.85	53.45	53.55
28	53.65	64.95	55.30	59.20	58.70	58.10	56.50	54.30	54.50	53.75	53.40	53.80
29	53.57	61.35	55.00	58.60	-------	57.85	56.15	54.60	54.60	59.45	53.35	54.00
30	53.45	59.80	55.60	58.10	-------	59.55	56.30	55.90	54.80	56.75	53.25	53.80
31	53.40	-------	55.95	57.60	-------	67.55	-------	50.40	-------	56.65	53.40	-------

Delaware River at Stockton--Continued

Daily gage height at 8 a.m., in feet, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	53.55	55.10	56.35	57.30	59.10	55.80	58.65	60.75	58.75	54.15	54.30	53.90
2	53.60	56.80	56.35	58.60	58.70	55.80	58.40	59.50	60.55	53.95	54.20	60.10
3	50.45	58.55	56.25	a60.00	58.75	55.45	60.90	58.90	61.00	54.00	54.30	60.30
4	53.50	60.70	56.15	60.40	60.60	55.15	61.75	58.20	59.80	53.85	54.25	59.55
5	53.80	62.05	56.25	59.70	61.50	56.00	60.50	57.90	58.95	53.70	53.95	58.55
6	53.75	59.95	59.65	b58.80	62.35	56.15	65.55	57.45	58.90	53.65	53.80	57.65
7	53.70	59.35	61.00	58.50	61.25	55.85	66.75	57.40	58.30	53.55	54.55	56.65
8	54.30	65.15	59.70	50.75	60.20	55.75	63.65	57.10	57.85	53.55	54.65	56.10
9	54.55	65.85	58.90	57.47	59.30	55.70	61.70	56.90	57.30	53.50	54.35	55.60
10	55.35	63.05	58.30	57.25	58.85	55.35	60.50	56.80	57.10	58.90	54.25	55.40
11	55.25	60.90	58.60	57.20	58.40	56.50	59.70	56.45	56.90	68.85	55.25	55.25
12	55.30	59.65	58.30	56.90	57.90	64.90	58.95	56.60	56.55	62.65	55.10	55.00
13	55.40	58.85	57.80	56.60	57.80	66.15	58.85	58.60	56.25	59.40	55.30	54.85
14	55.30	58.25	57.35	56.40	57.25	62.70	58.90	59.85	55.00	58.40	52.00	54.85
15	55.50	58.25	57.15	56.80	57.00	60.60	63.15	59.25	55.80	57.00	54.60	54.60
16	54.90	58.30	56.95	57.15	56.40	59.30	65.30	58.70	55.55	56.50	54.35	54.65
17	54.90	58.85	56.20	57.95	56.60	58.80	64.35	58.25	55.30	56.10	54.95	55.05
18	54.60	58.60	55.90	58.40	56.65	58.95	62.00	58.25	55.60	55.35	56.60	54.80
19	54.40	58.05	55.70	58.35	56.60	58.10	60.55	57.75	55.50	55.50	56.50	54.85
20	54.45	57.65	56.10	59.25	56.45	58.35	59.60	57.80	55.35	55.25	55.35	56.00
21	54.35	57.10	60.55	58.75	56.35	58.10	58.95	58.10	55.15	55.30	55.20	55.55
22	54.00	57.00	60.60	58.50	56.20	57.90	58.45	58.15	54.85	54.95	55.70	59.90
23	54.00	56.65	60.75	59.05	56.30	60.60	58.00	57.90	54.85	56.20	55.05	54.10
24	53.95	56.50	60.05	59.15	55.90	61.15	57.75	57.35	54.95	55.65	54.95	54.15
25	54.95	56.90	59.20	58.90	55.85	61.95	57.50	57.50	55.25	55.30	54.80	54.60
26	55.10	57.40	58.70	58.55	55.65	61.05	59.30	61.65	55.05	54.85	54.25	54.30
27	55.20	57.55	57.80	60.55	55.55	60.40	60.35	63.90	54.80	54.45	54.10	54.20
28	55.45	57.20	57.35	64.85	56.80	60.35	62.70	61.60	54.45	54.50	54.10	54.10
29	55.30	56.80	57.15	63.95	55.90	60.10	62.60	60.05	54.25	54.20	53.90	54.05
30	55.15	56.65	57.00	c60.95	-------	59.35	61.85	59.30	54.20	54.30	53.95	54.00
31	55.00	-------	57.15	59.95	-------	58.75	-------	58.70	-------	54.25	54.05	-------

a Reading at 7 a.m.
b Reading at 4 p.m.
c Reading at 2 p.m.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	53.95	53.70	56.47	56.25	58.50	57.63	59.12	59.05	56.69	54.00	53.60	52.90
2	53.95	53.60	56.25	55.95	58.35	57.28	58.85	58.90	56.62	54.00	53.55	52.77
3	54.10	53.50	56.15	55.90	58.10	56.82	58.80	60.25	56.30	54.64	53.53	53.02
4	54.30	53.40	56.07	56.10	57.02	58.45	58.80	59.77	56.00	54.30	53.35	53.25
5	54.23	53.30	55.90	56.05	57.40	58.83	58.35	59.23	55.50	54.10	53.23	53.35
6	54.15	53.65	59.40	55.65	57.25	58.97	57.90	58.90	55.70	53.80	53.18	53.45
7	53.95	53.40	59.75	55.55	57.00	58.30	58.25	59.65	55.50	53.70	53.18	54.92
8	53.75	53.55	59.25	55.30	58.15	57.70	60.60	59.25	55.85	53.78	53.30	54.37
9	54.05	53.60	58.70	55.50	58.62	57.20	61.71	59.00	55.74	53.75	53.15	53.82
10	54.00	53.55	57.66	57.25	58.00	56.90	60.34	59.00	55.75	53.70	53.35	53.89
11	53.85	53.30	58.14	57.60	57.50	56.85	59.95	58.63	55.47	53.65	53.58	54.05
12	53.95	53.20	71.15	57.55	57.20	56.70	59.76	58.15	55.15	53.50	53.45	53.65
13	53.75	53.15	70.15	57.20	57.30	57.35	59.36	57.75	54.90	53.50	53.30	53.40
14	53.55	53.35	64.35	57.18	57.05	57.50	60.10	57.70	54.95	53.48	53.20	53.28
15	53.60	53.35	61.74	56.55	56.90	57.45	60.05	57.60	55.00	53.48	53.43	53.40
16	53.75	53.74	60.22	56.30	57.85	59.45	59.95	57.50	54.90	53.43	53.25	53.68
17	53.65	53.70	59.30	56.40	57.39	61.85	59.74	57.38	54.85	53.69	53.32	53.72
18	53.65	53.50	58.85	56.45	57.31	60.80	59.36	57.80	54.75	53.55	53.30	53.50
19	53.60	a53.40	58.50	58.10	56.92	59.72	59.60	58.55	54.60	53.68	53.00	53.42
20	53.40	53.80	57.80	58.45	56.80	59.75	59.42	58.30	54.50	53.60	53.38	53.25
21	53.35	55.45	57.40	58.45	56.80	59.72	58.97	57.69	54.32	53.85	53.22	53.15
22	53.40	62.70	58.10	58.25	59.55	58.98	58.93	57.25	54.15	53.70	53.05	53.08
23	53.75	66.70	57.70	57.91	62.37	58.60	58.41	58.50	54.37	53.83	53.00	53.02
24	53.75	64.12	57.45	57.75	60.21	58.40	58.60	58.45	54.10	55.20	52.94	53.25
25	53.55	61.25	57.30	64.25	59.15	60.45	57.00	57.55	54.05	54.50	52.80	53.15
26	53.40	59.60	57.15	68.10	58.95	62.72	57.85	57.05	53.95	54.95	52.80	53.00
27	53.45	58.80	56.83	63.85	58.19	63.00	57.60	57.22	53.85	53.70	52.90	52.95
28	53.35	57.78	56.68	61.35	57.93	62.70	61.94	56.95	54.10	53.50	53.05	52.90
29	53.25	57.18	56.50	60.50	-------	61.80	60.60	56.60	54.20	53.55	52.98	53.00
30	53.60	57.02	55.95	60.05	-------	60.58	59.40	56.35	54.00	53.60	53.05	52.90
31	53.75	-------	55.83	59.10	-------	59.74	-------	56.50	-------	53.36	53.10	-------

a Reading at 4 p.m.

Delaware River at Stockton--Continued

Daily gage height at 8 a.m., in feet, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52.87	55.07	55.23	55.25	56.60	57.35	56.32	57.25	55.25	53.17	52.65	54.75
2	52.85	54.87	55.03	55.20	56.00	58.35	56.20	56.95	55.40	53.15	52.67	54.55
3	52.85	54.45	55.00	54.70	55.90	60.85	56.05	56.55	55.30	53.12	52.72	54.36
4	52.85	54.15	54.73	54.62	56.30	61.10	55.80	57.80	55.10	53.10	52.97	54.25
5	52.82	53.00	54.80	54.62	56.15	60.20	55.60	58.75	55.10	53.15	52.75	53.90
6	52.79	53.75	54.85	54.63	55.90	59.21	55.55	59.45	54.80	53.24	52.90	53.53
7	52.82	53.74	58.50	54.65	55.50	58.35	55.50	58.60	54.70	53.16	52.79	53.30
8	52.84	53.95	62.40	54.80	55.25	57.90	55.70	57.95	54.40	53.21	52.77	53.15
9	53.37	53.90	61.45	54.65	55.05	57.40	55.65	58.35	54.50	53.20	52.73	53.04
10	53.20	53.84	60.85	54.10	55.35	57.35	55.75	58.75	54.15	53.30	52.95	53.05
11	-	53.85	60.15	53.95	55.25	57.02	55.65	59.35	54.38	53.10	52.93	53.25
12	53.20	54.05	59.90	54.10	55.00	56.80	55.37	61.50	54.27	52.96	52.85	53.30
13	53.05	54.07	59.20	54.15	54.75	56.35	55.45	60.25	54.20	52.94	53.00	53.30
14	53.03	54.10	60.70	54.25	54.40	56.40	55.85	59.22	54.30	52.80	57.75	53.15
15	53.10	54.14	60.42	54.35	54.35	57.05	55.80	58.45	54.25	52.90	52.66	53.05
16	53.16	54.07	60.40	54.25	54.25	56.90	55.62	58.35	54.20	53.00	52.65	53.10
17	53.10	54.10	59.50	54.40	54.30	56.65	55.67	57.40	54.80	53.07	52.73	53.65
18	52.95	54.28	58.90	54.55	57.15	56.35	58.90	57.10	54.50	53.03	52.40	54.00
19	52.90	54.30	57.40	53.90	61.74	56.27	61.35	56.60	54.30	52.92	52.38	54.00
20	52.85	54.20	57.15	53.90	59.70	56.55	59.55	56.35	54.15	52.88	52.70	54.02
21	52.85	54.12	56.80	54.55	58.90	57.45	58.85	56.25	53.87	52.81	52.80	51.08
22	52.80	54.02	56.70	55.20	58.60	57.47	58.70	56.55	53.71	52.85	52.95	54.25
23	52.86	54.13	56.60	54.56	60.10	57.40	57.80	56.80	53.50	52.77	52.92	54.15
24	52.85	55.08	56.47	55.80	59.80	57.10	57.15	56.74	53.70	52.84	52.93	53.90
25	52.85	55.65	56.41	55.45	58.95	56.85	57.85	56.47	53.80	52.84	52.45	53.68
26	52.87	55.75	55.65	55.25	58.25	57.25	57.97	56.20	53.65	52.67	52.53	53.50
27	52.75	56.10	55.70	55.78	58.15	57.10	56.72	55.90	53.60	52.85	52.65	53.25
28	53.10	56.12	55.60	55.90	57.80	57.20	56.65	55.73	53.50	52.55	52.70	53.32
29	-	55.75	55.40	58.70	-------	56.95	57.40	55.45	53.42	52.58	52.70	53.24
30	a55.10	55.35	55.40	58.15	-------	56.74	57.90	55.65	53.20	52.65	52.68	53.20
31	55.83	-------	55.37	57.70	-------	56.53	-------	55.45	-------	52.70	52.88	-------

a Reading at 4 p.m.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	53.10	53.55	57.70	59.70	53.80	56.80	56.65	56.80	54.45	53.30	52.97	56.75
2	52.98	53.40	57.07	58.90	53.70	58.10	56.65	56.40	54.83	53.33	52.90	56.45
3	53.20	54.70	57.00	58.65	53.92	60.35	56.40	56.25	54.55	53.27	52.85	56.35
4	53.40	55.45	56.50	58.70	53.52	59.90	56.45	56.00	54.60	53.49	52.75	56.25
5	a53.05	58.90	56.15	58.00	54.10	58.95	56.31	55.75	54.26	52.40	53.03	55.82
6	a53.00	58.00	55.80	57.38	54.25	58.00	56.25	55.55	54.13	53.24	53.10	55.45
7	53.48	57.50	55.55	57.30	57.20	58.85	56.20	55.50	53.90	53.55	53.11	55.30
8	53.35	56.37	55.05	57.20	56.60	58.50	56.25	55.25	53.80	53.55	53.35	55.40
9	a53.10	56.82	55.15	56.95	56.80	57.55	56.10	55.00	54.10	53.45	53.06	55.25
10	52.87	55.70	55.00	56.30	55.25	57.35	56.35	54.86	54.45	53.28	52.90	55.10
11	53.30	55.35	54.95	56.05	55.50	57.23	56.00	55.15	54.68	53.28	52.90	55.05
12	52.90	55.26	54.20	56.05	55.53	57.65	55.70	55.02	54.57	53.25	53.15	54.80
13	52.80	55.24	54.15	55.80	55.68	58.90	56.00	54.85	54.83	53.23	60.60	54.42
14	52.80	55.22	54.17	55.60	55.30	58.40	56.35	54.45	54.80	53.10	58.90	54.40
15	52.82	55.16	54.24	55.62	55.18	58.35	56.20	54.40	55.10	53.05	60.55	55.20
16	53.47	54.50	56.12	55.25	55.25	57.85	57.20	54.36	55.15	52.85	58.95	54.80
17	53.15	55.00	57.40	55.05	55.37	57.55	57.95	54.35	54.95	52.85	58.15	54.95
18	53.45	54.70	57.60	54.95	55.47	57.92	57.25	54.32	54.66	53.23	57.30	54.65
19	53.35	54.85	57.80	55.40	55.28	57.50	56.85	54.30	54.51	53.13	69.47	54.25
20	53.19	54.93	58.77	55.05	55.10	56.90	56.80	54.15	53.71	53.10	84.20	54.30
21	53.22	57.40	58.68	54.65	54.85	56.60	56.65	54.15	53.94	53.10	67.70	54.66
22	53.27	58.20	57.15	54.60	54.80	57.20	56.55	54.00	53.93	53.20	63.65	55.05
23	53.22	61.23	56.75	55.00	55.10	60.75	56.50	53.67	53.90	53.00	61.45	-
24	53.12	59.40	56.65	54.37	56.75	61.80	56.35	53.14	53.91	53.05	60.95	-
25	53.05	58.60	56.49	54.13	58.70	60.35	56.20	54.35	53.96	53.05	59.40	-
26	53.02	58.65	56.12	54.25	58.00	59.25	56.20	54.27	53.70	53.03	58.35	-
27	52.90	57.40	55.80	54.10	56.80	-	56.45	54.15	53.66	52.97	57.65	-
28	52.90	57.45	55.63	54.22	56.70	58.80	57.25	54.35	53.63	53.00	57.05	-
29	53.05	57.07	55.65	54.00	-------	58.40	57.00	54.20	53.45	53.05	56.55	-
30	53.60	57.20	57.30	54.15	-------	58.45	56.85	54.96	53.48	53.05	56.25	-
31	53.60	-------	59.75	53.75	-------	57.05	-------	54.40	-------	52.97	56.08	-------

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 1955 (gage heights only).

Gage.--Wire-weight gage. Datum of gage is 0.11 ft above mean sea level, datum of 1929.

Extremes.--1897-1908, 1936-55: Maximum gage height, 73.27 ft Aug. 20, 1955, from floodmark; minimum observed, 46.70 ft Sept. 29, 30, 1943.

Maximum gage height observed.--
1950-51: Apr. 1 (7 a.m.) 61.14 ft.
1951-52: July 11 (8 a.m.) 58.65 ft.
1952-53: Dec. 12 (5 to 7 p.m.) 62.08 ft.
1953-54: Dec. 8 (time and gage height unknown).
1954-55: Aug. 20 (about 5 a.m.) 73.27 ft, from floodmark.

Remarks.--Gage read hourly above 54.0 ft and twice daily below. 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, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48.51	48.20	52.18	50.20	51.40	51.90	61.10	50.86	50.65	50.45	50.80	49.00
2	48.27	48.05	51.72	50.21	51.05	51.76	56.90	50.77	50.42	50.28	50.50	48.80
3	48.15	48.00	51.32	50.10	51.40	51.58	55.20	50.65	50.29	50.27	50.25	49.17
4	48.01	47.93	51.24	50.11	52.95	51.71	54.60	50.41	50.25	50.31	50.97	48.97
5	48.26	49.10	57.15	50.25	52.25	51.74	53.96	50.30	50.28	50.17	49.97	48.79
6	48.49	49.60	58.85	51.75	51.68	51.50	53.53	50.30	50.44	50.39	49.70	48.90
7	48.41	49.65	55.36	52.43	51.65	51.58	53.04	50.15	50.25	50.25	49.50	49.95
8	48.74	50.15	55.15	51.61	55.10	51.60	52.41	49.90	49.95	49.95	49.40	49.25
9	48.12	49.90	55.83	51.14	54.58	51.73	52.08	49.74	49.82	49.72	49.42	49.25
10	48.49	49.67	55.16	50.85	53.00	51.85	51.84	50.15	50.10	49.64	49.40	49.04
11	48.46	49.56	53.92	50.85	52.65	51.54	51.95	49.95	49.69	48.50	49.71	49.94
12	48.68	49.45	53.28	50.66	51.77	51.21	51.95	50.20	49.58	49.78	49.81	48.87
13	48.85	49.30	52.78	50.64	51.87	51.14	52.29	50.30	49.66	49.71	49.60	49.09
14	48.95	49.15	52.26	50.62	52.57	51.40	54.10	50.05	49.95	49.67	49.40	48.05
15	49.01	49.20	51.90	51.51	52.73	52.98	53.53	49.93	50.39	49.59	49.65	49.29
16	48.90	49.19	51.78	51.65	52.45	52.09	52.87	50.08	50.49	49.57	49.50	49.77
17	48.65	49.00	51.55	51.66	52.21	52.00	52.47	49.97	50.36	49.47	49.40	49.54
18	48.37	49.00	51.25	51.67	52.60	51.86	52.14	49.85	50.08	49.51	50.38	49.55
19	48.46	49.01	51.05	51.28	52.29	51.44	51.86	49.70	49.88	49.51	50.60	49.60
20	48.26	48.90	50.88	51.29	52.12	52.17	51.65	49.74	49.81	49.92	50.30	49.35
21	48.20	49.03	51.16	51.50	52.59	52.78	51.44	49.61	49.80	49.86	50.90	49.00
22	48.11	49.41	50.90	51.65	54.05	53.92	51.28	49.49	49.70	50.15	49.67	49.12
23	48.10	49.73	50.47	51.50	55.97	52.75	51.15	49.58	50.10	50.15	49.77	48.80
24	48.37	49.87	50.54	51.52	53.69	52.68	51.45	49.97	50.65	49.99	49.57	48.71
25	48.47	52.09	50.50	54.05	53.01	52.00	51.61	50.17	50.21	49.90	49.39	48.34
26	48.81	53.85	50.31	54.51	52.47	52.35	51.40	50.25	49.90	49.84	49.35	48.38
27	48.83	60.01	50.17	53.16	52.15	52.15	51.21	49.92	50.06	49.45	49.29	48.56
28	48.65	56.18	50.35	52.44	52.11	51.70	51.14	49.70	49.80	49.35	49.22	48.75
29	48.59	53.72	50.28	52.08	-------	51.78	51.00	49.88	50.04	52.98	48.95	49.14
30	48.49	53.02	50.18	51.74	-------	52.60	51.02	50.83	50.13	51.31	49.17	49.95
31	48.35	-------	50.10	51.48	-------	57.50	-------	50.69	-------	51.20	49.14	-------

Delaware River at Lambertville--Continued

Daily gage height at 8 a.m., in feet, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48.80	49.88	50.70	51.24	52.60	50.47	51.90	53.44	52.10	49.25	49.31	49.20
2	48.28	51.00	50.74	52.00	52.10	50.40	51.95	52.66	53.22	49.10	49.32	53.05
3	48.35	52.97	50.62	52.85	52.15	50.20	53.20	52.26	53.54	49.10	49.47	53.10
4	48.85	53.32	50.58	53.27	53.32	49.95	53.96	52.40	52.81	49.00	49.27	52.67
5	48.86	54.25	50.68	52.67	53.81	50.46	53.95	51.72	52.24	48.95	48.98	51.84
6	49.94	52.85	52.68	52.33	54.35	50.61	56.35	51.35	52.13	48.90	48.85	51.27
7	49.94	52.99	53.47	51.95	53.76	50.45	57.26	51.37	51.89	48.80	49.54	50.89
8	49.32	56.15	52.76	51.59	53.02	50.30	55.30	51.12	51.73	48.22	49.56	50.55
9	49.60	56.60	52.18	51.35	52.53	50.34	53.90	51.02	51.24	48.95	49.38	50.36
10	50.14	54.88	51.85	51.20	52.15	50.09	53.20	50.86	51.14	50.72	49.45	50.18
11	50.00	53.40	52.09	51.05	51.94	50.30	52.65	50.80	51.04	58.65	49.87	50.05
12	50.98	52.66	51.84	51.11	51.74	56.00	52.30	50.91	50.81	54.68	49.98	50.93
13	50.09	52.15	51.52	50.92	51.45	56.85	52.18	51.95	50.66	52.57	49.95	50.90
14	50.07	51.82	51.26	50.75	51.27	54.70	52.15	52.73	50.49	51.66	49.80	49.80
15	50.15	51.81	51.13	50.80	50.91	53.32	54.47	52.47	50.42	51.10	49.74	49.65
16	49.85	51.80	51.14	51.10	50.90	53.10	56.25	52.28	50.21	50.75	49.39	49.67
17	49.81	52.22	50.77	51.59	50.85	53.00	55.68	51.80	49.95	50.56	49.81	49.91
18	49.60	52.00	50.55	51.91	50.90	51.67	54.19	51.60	50.17	50.42	50.90	49.75
19	49.50	51.71	50.81	51.83	50.75	51.57	53.38	51.53	50.12	50.33	50.12	49.72
20	49.48	51.42	51.03	52.43	50.70	51.65	52.67	51.44	50.05	50.10	50.01	50.59
21	49.95	51.20	53.25	52.09	50.75	51.75	52.27	51.74	49.86	50.10	49.95	50.20
22	49.25	51.12	53.35	51.97	50.60	51.78	51.94	51.41	49.89	50.05	50.18	49.85
23	49.15	50.87	53.41	52.20	50.72	53.22	51.85	51.56	49.77	50.25	49.87	49.75
24	49.02	50.79	53.85	52.37	50.48	53.65	51.50	51.43	49.77	50.27	49.83	49.68
25	49.47	51.00	52.42	52.30	50.35	53.56	51.37	51.79	49.86	50.03	49.58	49.65
26	49.92	51.28	52.10	52.31	50.33	53.58	51.29	53.95	49.60	49.75	49.25	49.45
27	50.04	51.40	51.70	53.24	50.25	53.23	53.12	55.36	49.62	49.51	49.16	49.35
28	50.21	51.11	51.20	55.95	50.25	53.20	54.70	53.88	49.35	49.56	49.15	49.20
29	50.10	50.95	51.16	55.45	50.25	53.20	54.52	52.95	49.38	49.36	49.21	49.26
30	49.98	50.65	50.96	53.98	-------	52.54	54.05	52.62	49.38	49.30	49.21	49.13
31	49.93	-------	50.95	53.07	-------	52.18	-------	52.15	-------	49.34	49.24	-------

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	49.05	48.75	50.87	50.21	51.60	51.00	-	-	-	-	-	-
2	49.28	48.76	50.60	50.06	51.40	50.95	-	-	-	-	-	-
3	49.40	48.55	50.50	50.95	51.27	50.49	-	-	-	-	-	-
4	49.51	48.42	50.42	50.20	51.06	51.45	-	-	-	-	-	-
5	49.42	48.29	50.55	50.05	50.86	51.75	-	-	-	-	-	-
6	49.36	48.75	52.28	49.89	50.77	51.91	-	-	-	-	-	-
7	49.13	48.33	52.74	49.88	50.67	51.84	-	-	-	-	-	-
8	49.09	48.63	52.39	49.87	51.27	51.95	-	-	-	-	-	-
9	49.24	48.59	51.83	50.30	51.55	51.75	-	-	-	-	-	-
10	49.50	48.75	-	50.95	51.31	50.58	-	-	-	-	-	-
11	49.00	48.23	-	51.11	50.95	50.55	-	-	-	-	-	-
12	49.16	48.15	60.28	50.97	50.55	50.74	-	-	-	-	-	-
13	48.93	42.68	59.75	50.51	50.82	51.20	-	-	-	-	-	-
14	48.79	48.48	55.31	50.67	50.67	51.94	-	-	-	-	-	-
15	48.69	48.16	53.65	-	50.60	51.92	-	-	-	-	-	-
16	48.43	48.92	52.70	-	51.15	52.16	-	-	-	-	-	-
17	48.82	48.76	52.10	-	51.90	53.95	-	-	-	-	-	-
18	48.90	48.58	51.70	-	50.71	52.95	-	-	-	-	-	-
19	48.73	48.45	51.39	-	50.34	-	-	-	-	-	-	-
20	48.52	48.93	51.10	-	50.51	-	-	-	-	-	-	-
21	48.25	47.55	50.45	-	50.60	-	-	-	-	-	-	-
22	48.56	54.92	51.27	51.45	52.10	-	-	-	-	-	-	-
23	48.89	57.21	51.10	51.29	52.96	-	-	-	-	-	-	-
24	48.86	55.48	51.43	51.00	52.60	-	-	-	-	-	-	-
25	48.52	53.69	50.89	55.22	52.95	-	-	-	-	-	-	-
26	48.40	52.60	50.78	57.76	51.67	-	-	-	-	-	-	-
27	48.52	52.95	50.59	55.01	51.39	-	-	-	-	-	-	-
28	48.78	51.65	50.51	53.33	51.37	-	-	-	-	-	-	-
29	48.24	51.19	50.31	53.89	-------	-	-	-	-	-	-	-
30	48.56	50.94	56.03	52.57	-------	-	-	-	-	-	-	-
31	48.75	-------	50.25	51.88	-------	-	-------	-	-------	-	-	-------

Note.--No gage-height record from Dec. 10-11, Jan. 15-21, Mar. 19 to Sept. 30.

Delaware River at Lambertville--Continued

Daily gage height at 8 a.m., in feet, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	-	-	50.22	51.97	51.23	50.66	51.29	50.06	47.95	47.48	49.64
2	-	-	-	50.93	50.92	51.90	50.56	51.89	49.95	47.90	47.36	49.58
3	-	-	-	49.60	49.98	53.46	50.43	50.78	49.90	47.84	47.60	49.37
4	-	-	-	49.65	49.87	53.61	50.28	51.55	49.85	47.85	47.67	49.17
5	-	-	-	49.68	49.64	53.00	50.20	52.25	49.85	47.97	47.43	48.86
6	-	-	-	49.70	50.02	52.35	50.11	52.51	49.82	48.14	47.65	48.56
7	-	-	-	50.89	49.74	51.85	50.12	51.85	49.56	48.18	47.48	48.27
8	-	-	-	49.94	49.65	51.56	50.08	51.53	49.36	48.20	47.44	48.07
9	-	-	-	49.60	49.85	51.37	50.15	51.70	49.33	48.07	47.50	47.99
10	-	-	-	49.29	49.74	51.44	50.25	52.05	49.26	48.10	48.04	47.95
11	-	-	-	49.40	49.72	50.95	50.19	52.45	49.24	47.90	47.64	48.05
12	-	-	-	49.42	49.78	50.91	50.05	53.75	49.10	47.80	47.78	48.15
13	-	-	-	49.87	50.47	50.75	50.25	53.05	49.21	47.88	47.61	48.26
14	-	-	-	49.62	51.70	51.81	50.32	52.35	49.15	47.63	47.60	48.91
15	-	-	-	49.73	49.27	51.92	50.24	51.90	49.17	47.67	47.62	47.69
16	-	-	-	49.75	49.23	51.98	50.15	51.65	49.60	47.87	47.36	47.70
17	-	-	-	49.85	49.62	51.80	51.06	51.29	49.55	47.77	47.36	48.48
18	-	-	-	49.53	51.20	51.62	52.76	51.04	-	a47.93	47.36	48.94
19	-	-	-	49.25	54.92	51.31	53.79	50.74	59.05	47.68	57.25	48.95
20	-	-	-	49.63	52.67	51.27	52.63	50.68	48.91	47.61	47.69	48.99
21	-	-	-	49.96	52.97	51.46	52.02	50.52	48.71	47.48	47.52	48.98
22	-	-	-	50.21	52.25	51.50	51.52	50.73	48.45	47.66	47.69	48.07
23	-	-	-	49.91	53.12	51.50	51.23	50.69	48.47	47.62	47.79	49.06
24	-	-	-	49.96	52.72	51.36	51.06	50.85	48.65	47.75	47.83	48.83
25	-	-	-	50.30	52.06	51.25	51.10	50.65	48.72	47.55	47.72	48.63
26	-	-	-	50.05	51.85	51.22	51.10	50.45	48.92	47.51	47.12	48.36
27	-	-	50.25	50.40	51.72	51.25	52.04	50.40	48.27	47.60	47.12	48.08
28	-	-	50.27	50.27	51.47	51.28	-	50.29	48.20	47.63	47.43	48.16
29	-	-	50.22	52.74	-------	51.16	51.16	50.18	48.24	47.40	47.52	48.30
30	-	-	50.29	51.96	-------	51.00	51.20	50.11	47.95	47.42	47.44	48.22
31	-	-------	50.31	52.20	-------	50.79	-------	50.08	-------	47.45	47.40	-------

a Reading at 4 p.m.
Note.--No gage-height record from Oct. 1 to Dec. 26, Apr. 28, June 18.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	47.85	48.58	51.12	52.77	48.83	50.75	51.00	50.04	49.22	48.18	47.47	50.36
2	48.05	48.25	51.52	-	48.70	51.86	50.88	50.02	49.77	48.32	47.74	50.74
3	48.38	49.70	51.04	51.88	-	51.86	50.85	50.30	49.64	48.50	47.37	50.71
4	48.32	51.20	59.98	51.83	-	52.38	50.81	50.53	49.62	48.45	47.70	50.39
5	47.97	52.21	a50.61	51.60	-	52.30	50.82	50.35	49.34	48.27	47.95	50.32
6	47.89	51.70	50.52	51.40	47.93	52.54	50.85	50.20	49.05	48.13	47.87	50.17
7	48.53	51.24	51.04	51.32	51.40	52.74	50.79	50.22	48.74	48.45	47.87	49.96
8	48.40	50.83	51.01	51.23	50.90	52.15	50.78	50.33	48.90	48.49	48.35	49.02
9	48.08	50.50	51.11	50.94	50.15	51.95	50.85	49.77	48.90	48.28	47.87	a49.86
10	47.28	50.43	50.14	50.75	50.12	51.27	50.65	49.95	49.55	48.13	47.55	49.12
11	48.44	50.15	50.41	50.57	50.30	51.33	50.50	59.97	49.40	48.00	47.62	49.68
12	48.02	a49.89	50.31	50.47	50.29	51.78	50.40	49.89	49.61	47.97	48.24	49.38
13	47.72	49.93	49.03	50.46	50.31	52.04	50.50	49.73	49.82	47.87	53.42	49.38
14	47.62	49.94	49.84	50.36	50.18	52.06	50.50	49.65	49.15	47.79	52.30	49.04
15	47.62	49.65	50.12	50.36	50.12	51.79	51.11	49.50	49.95	47.52	53.26	49.84
16	48.45	49.63	50.95	50.31	50.08	51.80	50.32	49.37	49.60	47.65	52.27	49.50
17	48.60	49.75	51.18	50.06	50.09	51.51	50.30	49.10	49.56	47.68	51.25	a49.49
18	48.46	49.84	51.10	50.28	50.21	51.70	50.98	49.15	49.06	47.03	51.34	a49.44
19	48.32	-	51.46	50.26	50.19	51.46	50.70	49.15	49.06	47.81	58.50	48.00
20	48.30	49.83	52.43	50.24	-	51.19	50.40	48.96	48.92	47.56	-	48.00
21	48.15	51.02	52.65	50.00	50.15	50.98	50.00	48.88	48.89	48.16	56.20	48.00
22	48.28	52.14	51.43	49.75	49.84	51.43	50.87	48.95	48.79	48.07	55.34	-
23	48.20	53.70	51.12	49.75	49.86	52.64	50.85	48.71	48.80	47.76	53.87	a48.92
24	48.05	53.50	51.65	49.48	50.85	54.17	50.34	48.59	48.82	47.99	53.53	48.82
25	48.03	52.90	50.91	49.19	51.73	53.21	50.84	49.31	48.70	48.05	52.58	49.43
26	47.70	51.57	50.71	49.19	51.79	52.57	50.90	49.47	48.67	47.73	51.91	49.83
27	47.97	51.22	50.20	49.17	51.10	52.26	50.80	49.02	48.55	47.67	51.43	49.78
28	47.88	51.12	50.35	49.24	50.80	52.16	51.29	49.35	48.39	48.05	51.06	49.80
29	48.26	51.15	50.35	49.20	-------	51.55	51.13	49.24	48.33	47.66	50.80	49.80
30	48.91	a51.09	51.65	49.35	-------	51.33	50.40	49.03	48.21	47.72	50.61	50.23
31	48.69	-------	52.86	48.90	-------	51.17	-------	49.01	-------	47.77	50.45	-------

a Reading at 4 p.m.
Note.--No gage-height record Nov. 19, Feb. 20, Aug. 20, Sept. 22.

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 1955 (gage heights only).

Gage.--Wire-weight gage. Datum of gage is 0.14 ft above mean sea level, datum of 1929.

Extremes.--1936-55: Maximum gage height, 53.77 ft Aug. 20, 1955, from floodmark; minimum observed, 22.80 ft Oct. 13, 1943.
Flood of Oct. 11, 1903, reached a stage of 51.9 ft, at site 0.4 mile above bridge, from floodmark.

Maximum gage height observed.--
1950-51: Apr. 1 (8 a.m.) 40.85 ft.
1951-52: July 11 (8 to 9 a.m.) 37.80 ft.
1952-53: Dec. 12 (9 p.m.) 41.85 ft.
1953-54: Dec. 8 (4 p.m.) 32.48 ft.
1954-55: Aug. 20 (6 a.m.) 53.77 ft, from floodmark.

Remarks.--Gage read hourly above 31.0 ft and twice daily below. 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, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24.20	23.90	29.05	26.20	27.60	28.95	40.85	27.30	26.90	26.50	27.35	24.30
2	24.20	23.80	28.45	26.15	29.35	28.55	35.70	27.15	26.65	26.45	26.75	24.40
3	24.10	23.95	27.85	26.00	31.05	28.25	33.20	26.90	26.40	26.45	26.30	24.55
4	24.15	23.95	27.80	26.50	30.15	28.45	32.40	26.75	26.25	26.30	25.85	24.40
5	24.15	24.40	35.75	27.30	29.25	28.55	31.50	26.65	26.40	26.15	25.65	24.35
6	24.30	25.35	38.30	29.40	28.45	28.20	30.70	26.55	26.60	26.45	25.35	24.35
7	24.20	26.05	33.60	28.85	28.40	28.25	30.00	26.20	26.50	26.20	25.10	24.65
8	23.95	26.35	33.40	28.20	33.05	28.30	29.70	26.00	26.25	25.80	24.95	24.90
9	23.90	25.90	33.85	27.65	32.40	28.35	29.00	26.25	26.05	25.60	24.80	24.70
10	23.95	25.50	33.10	27.45	30.05	28.75	28.70	26.15	25.80	25.40	24.90	24.35
11	24.15	25.30	31.30	27.05	29.40	28.35	28.75	26.10	25.60	25.10	25.45	24.30
12	24.30	25.10	30.75	27.15	28.65	27.80	28.80	26.25	25.35	25.30	25.55	24.20
13	24.45	24.80	29.90	27.15	28.75	27.60	29.80	26.40	25.30	25.35	25.40	24.50
14	24.70	24.90	29.20	26.95	29.65	28.05	32.00	26.10	25.60	25.45	25.75	24.40
15	24.65	24.75	28.65	29.45	30.05	28.90	31.05	25.80	26.40	25.35	25.35	24.50
16	24.50	24.75	28.50	28.50	29.60	29.35	30.15	26.05	26.60	25.25	25.75	25.45
17	24.45	24.60	28.20	28.40	28.85	29.30	29.55	25.85	26.60	25.05	26.75	25.05
18	24.30	24.60	27.70	28.45	29.75	28.50	29.10	25.65	26.10	25.00	26.45	25.40
19	24.45	24.65	27.40	28.00	29.15	28.15	28.75	25.65	25.60	25.00	26.75	25.20
20	24.45	24.45	27.40	27.80	29.20	29.35	28.50	25.45	25.60	25.65	26.35	24.75
21	24.40	24.50	27.25	28.15	29.50	30.00	28.15	25.20	25.50	25.50	25.85	24.50
22	24.15	24.95	26.90	28.35	31.50	29.85	27.85	25.12	25.20	26.05	25.55	24.30
23	24.20	25.30	26.65	28.15	33.00	29.35	27.70	25.15	26.90	26.05	25.50	24.15
24	24.40	26.05	26.70	28.30	31.35	28.95	27.95	25.95	26.65	26.00	25.30	24.05
25	24.40	26.30	26.50	31.65	30.05	28.85	28.35	26.40	26.25	25.50	25.00	23.95
26	24.65	34.00	26.45	32.40	29.55	29.40	28.10	26.30	25.80	25.65	24.80	23.95
27	-	39.50	26.40	30.55	29.15	29.10	27.85	25.90	26.10	25.15	24.70	24.10
28	24.40	34.50	26.05	29.60	28.90	28.55	27.25	25.45	25.55	24.80	24.45	24.25
29	24.25	30.90	25.60	29.10	-------	28.20	27.30	25.60	25.90	30.40	24.40	24.40
30	24.20	29.85	26.20	28.65	-------	29.55	27.50	27.15	25.95	27.90	24.65	24.35
31	24.20	-------	26.45	28.20	-------	36.20	-------	27.30	-------	27.65	24.65	-------

Note.--No gage-height record Oct. 27.

Delaware River at Washington Crossing--Continued

Daily gage height at 8 a.m., in feet, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23.85	26.85	27.00	27.45	29.70	26.35	28.75	30.80	29.20	24.75	24.95	25.10
2	23.85	27.85	27.05	28.80	29.15	26.55	28.70	29.80	30.63	24.65	24.60	30.25
3	23.85	28.75	26.85	30.25	29.15	26.20	30.65	29.45	31.40	24.60	25.00	30.50
4	24.20	30.70	26.80	30.65	29.30	25.85	31.65	28.85	30.15	24.45	25.00	29.85
5	24.20	31.85	26.90	29.85	31.40	26.35	30.45	28.50	29.35	24.35	24.60	28.78
6	24.30	30.00	29.75	29.40	32.10	26.80	34.70	28.00	29.20	24.20	24.35	27.90
7	24.15	31.05	30.85	28.90	31.35	26.65	36.40	28.00	28.90	24.10	25.25	27.37
8	24.65	34.45	29.90	28.30	30.40	26.30	33.40	27.70	28.45	23.95	25.30	26.85
9	25.20	35.15	29.15	28.00	29.60	26.40	31.60	27.55	27.90	24.25	25.20	26.47
10	26.00	32.90	28.75	27.80	29.25	26.10	30.65	27.30	27.72	26.65	25.05	26.15
11	26.10	31.00	29.02	27.85	28.80	26.60	29.85	29.20	27.60	37.80	25.60	25.97
12	25.85	29.90	28.70	28.00	28.50	34.35	29.40	27.35	27.28	32.15	26.03	25.78
13	26.10	29.15	28.35	27.70	28.25	35.62	28.95	28.85	27.07	29.60	25.90	25.67
14	26.00	28.60	27.90	27.70	27.90	32.65	29.35	29.95	26.82	28.30	25.65	25.58
15	26.05	28.60	27.70	-	27.65	30.45	32.05	30.55	26.65	27.95	25.35	25.35
16	25.50	28.65	27.70	-	27.25	29.70	34.65	30.20	26.25	27.18	25.25	25.30
17	25.55	29.20	27.15	-	27.35	28.90	34.10	27.85	26.10	26.90	25.70	25.65
18	25.20	28.90	26.65	-	27.40	28.50	32.00	27.85	26.20	26.60	26.60	25.40
19	25.00	28.55	26.80	-	27.15	28.35	30.70	27.65	26.25	26.50	26.40	25.40
20	24.90	28.05	26.90	-	27.25	28.85	29.70	27.50	26.00	26.10	26.30	26.70
21	24.80	27.75	31.05	-	27.10	28.60	29.35	28.05	25.80	26.15	26.15	26.30
22	24.70	27.60	30.60	-	27.15	28.55	28.90	28.20	25.50	25.90	26.25	25.65
23	24.45	27.25	30.50	-	27.05	30.40	28.55	28.10	25.50	26.50	26.30	25.40
24	24.40	27.15	30.20	-	26.75	31.20	28.25	28.00	25.70	26.40	25.60	25.35
25	24.75	27.45	29.60	-	26.65	31.80	28.00	27.90	25.85	26.03	25.60	25.30
26	25.50	27.90	29.00	-	26.45	31.00	28.50	31.60	25.60	25.50	25.40	24.85
27	25.90	28.10	28.50	-	26.65	30.65	30.50	33.63	25.40	25.13	25.25	24.95
28	26.15	27.60	28.00	-	26.50	30.35	32.85	31.50	25.20	25.25	25.05	24.82
29	26.00	27.35	27.70	-	26.55	30.20	32.35	29.95	24.90	24.95	24.90	24.70
30	25.90	27.25	27.55	-	-------	29.20	31.75	29.70	24.90	24.90	24.95	24.50
31	25.65	-------	27.70	29.85	-------	28.80	-------	29.50	-------	25.03	24.90	-------

Note.--No gage-height record from Jan. 15-30.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24.25	24.25	27.30	26.95	29.60	28.25	29.65	29.30	27.45	24.60	23.95	23.40
2	24.75	24.10	-	26.60	28.90	27.90	29.55	29.35	27.30	24.65	24.05	23.15
3	24.90	24.00	-	26.65	28.55	27.50	29.15	30.25	27.20	25.30	23.95	23.05
4	25.60	24.10	26.80	26.85	28.15	28.55	28.85	30.10	26.75	25.05	23.82	23.50
5	24.90	23.70	26.90	26.70	27.90	28.55	28.55	29.75	26.55	24.85	23.65	23.70
6	24.80	24.15	29.55	26.50	27.80	29.35	28.30	29.40	26.50	24.50	23.55	23.80
7	24.75	24.00	30.00	26.40	27.50	28.85	28.45	29.50	26.25	24.24	23.52	23.90
8	24.65	23.85	29.75	26.35	28.60	28.35	30.80	29.50	26.50	24.24	23.60	23.05
9	24.70	23.95	29.40	26.90	29.00	27.85	31.60	29.40	26.50	24.34	23.60	24.45
10	24.60	24.15	28.90	28.10	28.60	27.55	30.80	29.55	26.55	24.20	23.90	24.35
11	24.50	23.75	28.60	28.30	28.30	27.45	29.90	28.95	26.15	24.20	23.96	24.40
12	24.65	23.70	39.05	28.05	27.85	27.40	29.80	28.65	25.75	24.10	23.95	24.25
13	24.55	24.10	39.60	27.85	27.85	28.35	29.75	28.30	25.50	24.00	23.75	24.10
14	24.00	23.75	34.20	29.70	27.70	28.20	30.25	28.30	25.70	24.00	23.63	23.85
15	24.10	24.05	31.80	27.40	27.50	28.15	30.25	28.10	25.60	23.95	23.66	23.80
16	24.30	24.20	30.60	27.25	28.38	29.75	29.75	28.10	25.65	24.25	23.60	23.95
17	24.15	24.15	29.70	27.25	27.96	30.75	30.05	28.10	25.70	24.27	23.62	24.15
18	24.25	24.15	28.45	27.30	28.03	30.95	29.80	28.10	25.44	24.09	23.65	24.08
19	24.15	24.10	28.20	28.60	27.65	29.95	29.90	28.90	25.15	24.20	23.66	23.80
20	24.20	24.20	28.05	28.40	27.45	29.85	29.80	28.75	25.05	24.18	23.74	23.65
21	24.30	24.90	27.90	28.65	27.45	29.75	29.40	28.20	24.94	24.45	23.60	23.55
22	-	33.20	28.50	28.70	29.85	29.55	29.20	27.90	24.81	24.35	23.50	23.50
23	24.30	36.00	28.20	28.70	32.25	28.85	28.85	28.20	25.01	24.40	23.35	23.40
24	24.25	33.70	28.15	28.10	30.50	28.40	28.60	28.20	24.67	25.80	23.30	23.55
25	24.20	31.35	28.00	33.25	29.55	30.80	28.30	28.15	24.75	25.30	23.23	23.45
26	24.20	29.90	27.75	37.35	29.10	32.35	28.20	27.85	24.70	24.64	23.20	23.35
27	24.05	28.80	27.50	33.75	28.80	32.65	28.30	27.80	24.62	24.25	23.20	23.30
28	24.00	28.40	27.35	31.40	28.50	32.40	30.95	27.65	24.73	24.05	23.40	23.22
29	23.75	28.10	27.00	30.75	-------	31.65	30.80	27.35	24.90	23.98	23.35	23.30
30	24.00	27.57	26.65	30.30	-------	30.85	29.80	27.15	24.54	23.95	23.35	23.25
31	24.45	-------	26.95	29.90	-------	29.95	-------	27.30	-------	24.00	23.35	-------

Note.--No gage-height record Oct. 22.

Delaware River at Washington Crossing--Continued

Daily gage height at 8 a.m., in feet, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23.15	26.45	25.40	25.98	27.35	28.05	27.05	27.75	26.30	23.60	23.14	25.45
2	23.18	25.65	25.95	26.50	26.75	28.25	27.00	27.25	26.20	23.55	23.12	25.30
3	23.22	25.20	25.75	26.30	26.65	30.75	26.70	27.25	26.20	23.50	23.10	25.00
4	23.35	24.82	25.54	25.30	27.05	31.15	26.65	28.25	25.90	23.35	23.15	24.75
5	23.30	24.60	25.55	25.30	26.90	30.10	26.50	28.75	25.75	23.40	23.08	24.55
6	23.20	24.35	25.65	25.35	26.55	29.75	26.35	29.67	25.65	23.65	23.40	24.20
7	23.10	24.35	27.90	25.30	26.50	28.90	26.45	27.75	25.55	23.75	23.10	23.75
8	23.22	24.55	32.00	25.28	26.20	28.55	26.52	27.35	25.20	23.15	23.05	23.65
9	23.80	24.75	31.55	25.10	25.75	28.25	26.62	28.60	24.90	23.65	23.10	23.55
10	23.60	24.50	30.75	24.85	25.75	27.95	26.60	29.10	24.80	23.76	23.55	23.40
11	23.50	24.40	30.30	24.50	26.00	27.72	26.35	29.45	24.75	23.54	23.33	23.75
12	23.55	24.70	30.20	24.25	25.85	27.45	26.20	31.40	24.65	23.40	23.30	23.85
13	23.45	24.80	29.75	24.10	25.70	27.25	26.50	30.45	24.55	23.50	23.30	23.75
14	23.27	24.80	30.10	25.25	24.95	27.40	26.45	29.55	24.80	23.30	23.20	23.55
15	23.40	24.82	30.65	25.45	25.40	27.75	26.35	28.85	24.75	23.28	23.15	23.40
16	23.40	24.77	30.50	25.35	25.00	27.55	26.30	28.40	24.85	23.38	23.01	23.40
17	23.45	24.60	29.75	25.30	25.10	27.45	26.55	28.00	24.90	23.50	22.92	23.70
18	23.40	24.82	28.83	25.00	26.85	27.15	29.10	27.65	25.00	23.50	23.00	24.60
19	23.27	25.00	28.10	26.40	31.65	26.95	31.45	27.35	24.85	23.35	23.00	24.40
20	23.25	24.95	27.95	25.30	29.55	27.15	29.80	27.15	24.75	23.30	23.17	24.50
21	23.15	24.85	27.45	25.45	28.70	28.15	29.00	27.00	24.65	23.15	23.18	24.70
22	23.10	24.75	27.15	25.95	28.90	28.20	28.55	27.25	24.55	23.15	23.26	24.70
23	23.10	24.78	27.35	25.70	29.65	28.10	27.95	27.45	24.45	23.25	23.35	24.77
24	23.30	25.65	27.15	26.35	29.90	27.75	27.75	27.48	24.35	23.30	23.35	24.65
25	23.25	26.30	27.00	26.90	29.20	27.55	27.90	27.17	24.40	23.25	23.30	24.30
26	23.20	27.20	26.65	25.95	28.65	27.90	27.40	26.92	24.35	23.23	22.90	23.95
27	23.15	26.90	27.40	26.30	28.60	27.75	27.20	26.65	24.45	23.15	22.85	23.80
28	23.27	26.85	27.15	26.70	28.35	27.90	27.20	26.47	24.40	23.10	23.13	23.90
29	23.47	26.30	26.30	29.10	-------	27.60	27.80	26.38	24.30	23.04	23.17	23.70
30	26.50	26.20	26.40	29.05	-------	27.35	28.15	26.43	23.70	23.12	23.05	23.55
31	26.40	-------	26.19	28.10	-------	27.20	-------	26.20	-------	23.10	23.10	-------

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23.50	24.05	28.20	29.95	25.10	27.00	27.45	27.45	25.00	23.95	23.30	27.40
2	23.45	23.90	27.85	29.00	24.95	28.45	27.35	27.15	25.69	23.90	23.35	27.20
3	23.65	24.95	27.50	28.70	24.90	30.55	27.20	26.80	25.50	24.10	23.10	27.15
4	23.90	26.05	27.20	28.65	24.80	29.40	27.10	26.85	25.20	24.15	23.20	27.30
5	23.80	29.10	27.10	28.25	24.90	28.95	27.05	26.60	25.05	24.10	23.65	26.55
6	23.75	28.45	26.65	28.00	24.90	29.40	26.85	26.40	24.75	23.80	23.50	26.65
7	23.85	27.75	26.32	27.90	27.80	29.40	27.10	26.35	24.70	23.98	23.55	26.50
8	23.85	27.25	26.30	27.70	27.70	28.90	27.15	26.00	24.55	24.15	23.95	26.45
9	23.75	26.70	26.35	27.35	26.10	28.15	27.25	25.65	24.80	23.90	23.65	25.78
10	23.40	26.50	26.55	26.95	26.25	27.85	27.00	25.60	25.20	23.75	23.30	25.53
11	23.30	26.20	26.45	26.70	26.29	27.95	26.65	25.65	25.55	23.80	23.35	25.49
12	23.25	26.15	26.30	26.45	26.50	28.25	26.40	25.60	25.25	23.88	23.45	25.50
13	23.19	25.75	25.85	26.20	26.45	29.10	26.85	25.50	25.65	23.67	29.10	25.35
14	23.17	25.80	25.70	26.15	26.25	29.00	27.15	25.45	25.68	23.57	29.20	25.37
15	23.18	25.40	25.80	26.20	26.00	28.55	27.55	35.25	25.80	23.50	30.95	25.75
16	23.30	25.30	27.30	26.30	26.25	28.40	27.80	25.00	26.00	23.45	29.20	25.60
17	23.60	25.35	28.00	25.80	26.00	28.10	28.30	24.90	25.50	23.40	28.00	25.70
18	23.85	25.48	27.55	25.70	26.20	28.30	28.00	24.75	25.15	23.64	27.45	25.65
19	23.80	25.35	28.20	25.80	26.15	28.05	27.50	24.75	24.85	23.58	36.10	25.57
20	23.65	25.35	29.40	25.95	25.75	27.60	27.45	24.65	25.00	23.35	-	25.35
21	23.58	28.35	29.55	25.85	25.70	27.25	27.35	24.65	24.55	24.02	a35.90	25.00
22	23.75	28.80	28.00	25.70	25.70	27.55	27.35	24.65	24.52	23.85	33.85	25.55
23	23.70	31.26	27.75	25.70	26.20	30.90	27.30	24.50	24.55	23.49	31.70	24.80
24	23.65	29.95	27.30	25.05	27.38	31.90	27.20	24.50	24.58	23.60	31.10	24.85
25	23.55	28.95	27.25	24.90	28.25	30.70	27.00	24.90	24.45	23.70	30.09	25.25
26	23.70	28.30	26.90	24.80	28.15	29.85	27.05	24.90	24.50	23.50	28.85	26.00
27	23.57	27.75	26.50	24.82	27.60	29.25	27.75	24.85	24.40	23.45	28.22	25.30
28	23.40	27.65	26.40	25.00	27.15	28.80	27.89	24.80	24.15	23.78	27.80	25.75
29	23.55	27.70	26.40	24.75	-------	28.25	27.78	24.80	24.05	23.45	27.40	25.75
30	24.45	27.70	27.76	25.00	-------	28.00	27.50	24.75	24.00	23.45	27.02	26.20
31	24.15	-------	28.65	25.15	-------	27.68	-------	24.70	-------	23.37	27.15	-------

a Reading at 2 p.m.

Note.--No gage-height record Aug. 20.

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 August 1955 (gage heights only).

Gage.--Wire-weight gage. Datum of gage is at mean sea level, datum of 1929.

Extremes.--1936-55: Maximum gage height, 41.49 ft Aug. 20, 1955, from floodmark; minimum observed, 12.75 ft Oct. 10, 1951.
Flood of Oct. 11, 1903, reached a stage of 39.1 ft, from floodmark.

Maximum gage height observed.--
1950-51: Apr. 1 (9 a.m.) 28.35 ft.
1951-52: July 11 (9 to 10 a.m.) 25.75 ft.
1952-53: Dec. 12 (time and gage height unknown).
1953-54: Dec. 8 (5 p.m.) 22.70 ft.
1954-55: Aug. 20 (about 6 a.m.) 41.49 ft, from floodmark.

Remarks.--Gage read hourly above 21.0 ft and twice daily below. 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, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13.02	12.75	17.45	14.70	16.05	17.00	28.25	15.65	15.30	14.75	15.65	13.40
2	12.93	12.80	16.85	14.65	17.70	16.90	23.80	15.55	15.05	14.85	15.25	13.33
3	12.90	12.75	16.30	14.50	18.95	16.60	21.50	15.35	14.90	14.95	14.75	13.45
4	12.80	12.75	16.45	14.75	18.10	16.75	20.65	15.15	14.60	14.75	14.35	13.30
5	12.92	13.25	23.70	15.50	17.25	16.85	19.80	15.10	14.90	14.55	14.15	13.20
6	12.90	13.75	26.20	17.75	16.70	16.45	19.98	14.95	15.00	14.90	13.95	13.25
7	13.05	14.15	21.87	17.15	16.65	16.60	18.25	14.60	14.75	14.65	13.80	13.45
8	12.85	14.60	21.90	16.60	21.40	16.60	17.70	14.45	14.40	14.35	13.70	13.45
9	12.84	14.20	22.05	15.90	20.40	16.75	17.20	14.35	14.15	14.15	13.75	13.65
10	12.75	13.90	21.60	15.70	18.45	17.00	17.00	14.60	14.10	13.95	13.75	13.25
11	12.90	13.77	19.80	15.50	17.40	16.55	17.10	14.50	13.95	13.80	13.90	13.25
12	13.20	13.65	18.90	15.35	16.90	16.10	17.10	17.65	13.95	13.90	14.15	13.15
13	13.17	13.50	18.25	15.55	17.00	15.90	17.25	14.70	13.85	13.95	13.95	13.40
14	13.25	13.40	17.55	15.35	17.90	16.10	20.00	14.45	14.15	13.95	14.30	13.30
15	13.35	13.40	17.05	17.40	18.25	17.10	19.30	14.35	14.80	13.90	14.00	13.30
16	13.20	13.35	16.80	16.85	17.90	17.60	18.40	14.45	15.20	13.90	13.85	14.15
17	13.15	13.25	16.55	16.70	17.15	17.20	17.85	14.50	15.05	13.75	15.05	13.80
18	13.00	13.35	16.10	16.70	17.95	16.80	17.40	14.15	14.50	13.65	14.90	13.95
19	13.05	13.25	15.70	16.20	17.40	16.50	17.05	14.15	14.15	13.65	15.40	13.85
20	12.95	13.20	15.85	16.15	17.35	17.25	16.80	14.00	14.15	14.10	14.80	13.55
21	12.85	13.15	15.60	16.45	17.45	18.20	16.50	13.85	14.05	14.05	14.35	13.45
22	12.80	13.15	15.30	16.60	19.95	18.40	16.25	13.80	13.85	14.40	14.15	13.35
23	12.80	13.20	15.10	16.45	21.15	17.75	16.00	13.82	15.65	14.35	14.05	13.15
24	13.00	14.35	15.15	16.50	19.45	17.20	16.45	14.40	15.20	14.45	13.90	13.05
25	13.00	14.40	14.95	19.85	18.15	16.95	16.70	14.75	14.75	14.25	13.70	13.00
26	13.15	21.95	14.95	20.60	17.60	17.60	16.45	14.75	14.30	14.10	13.55	13.05
27	13.20	27.30	14.50	18.75	17.30	17.35	16.15	14.35	14.55	13.80	13.50	13.10
28	13.10	23.05	14.65	17.80	17.15	16.85	15.90	14.00	14.15	13.55	13.45	13.20
29	12.95	19.65	14.60	17.30	-------	16.60	15.85	14.10	14.35	18.80	13.35	13.35
30	12.90	18.25	14.40	16.85	-------	17.57	15.60	15.50	14.40	16.35	13.50	13.30
31	12.80	-------	14.85	16.50	-------	24.15	-------	15.70	-------	15.90	13.50	-------

Delaware River at Yardley, Pa.--Continued

Daily gage height at 8 a.m., in feet, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13.00	14.20	15.40	16.10	17.65	14.90	17.05	19.05	17.45	13.48	13.65	13.61
2	12.95	15.65	15.40	17.10	17.40	14.85	17.05	18.15	18.82	13.44	13.62	18.20
3	12.95	17.05	15.25	18.20	17.35	14.65	18.75	17.60	19.35	13.47	13.80	18.70
4	13.20	17.40	15.22	18.90	18.60	14.35	19.85	17.15	18.40	13.30	13.65	18.13
5	13.20	17.95	15.20	18.10	19.65	14.90	18.75	16.80	17.62	13.27	13.40	17.05
6	13.20	19.05	17.95	17.70	19.70	15.25	22.75	16.35	17.50	13.20	13.27	16.20
7	13.22	17.40	19.15	17.15	19.60	15.00	24.15	16.30	17.15	13.13	13.90	15.70
8	13.50	22.55	18.20	16.75	18.60	14.80	21.60	16.05	16.75	13.10	14.00	15.21
9	13.85	23.25	17.45	16.35	17.90	14.75	19.90	15.85	16.20	13.25	13.85	14.85
10	14.32	21.15	17.05	16.10	17.50	14.50	18.90	15.65	16.00	15.15	13.75	14.55
11	14.50	19.25	17.25	16.10	17.10	14.50	18.20	15.55	15.90	25.65	14.25	14.40
12	14.30	18.15	16.95	16.05	16.70	22.45	17.65	15.65	15.62	20.85	14.50	14.30
13	14.40	17.45	16.55	15.70	16.50	23.85	17.20	17.10	15.40	18.05	14.37	14.15
14	14.42	16.95	16.25	15.45	16.15	20.90	17.35	18.10	15.15	16.82	14.15	14.10
15	14.45	16.95	16.10	15.60	16.00	19.00	20.20	17.85	15.00	16.00	13.97	13.95
16	14.15	17.00	16.00	16.00	15.70	18.00	22.55	17.35	14.65	15.55	13.75	13.85
17	14.10	17.45	15.40	16.50	15.70	17.30	22.20	17.02	14.53	15.25	14.18	14.10
18	13.85	17.20	15.05	17.10	15.45	16.75	20.20	17.00	14.63	15.00	15.65	14.00
19	13.72	16.80	14.90	17.00	15.40	16.50	18.90	16.60	14.63	14.85	14.72	13.99
20	13.65	16.45	15.00	17.75	15.60	17.20	18.15	16.37	14.47	14.50	14.42	15.05
21	13.73	16.10	18.20	17.40	15.40	16.85	17.85	16.86	14.20	14.47	14.23	14.90
22	13.52	15.95	19.00	17.45	15.45	16.85	17.15	16.76	14.05	14.45	14.56	14.19
23	13.38	15.65	19.10	17.55	15.40	18.70	16.85	16.72	14.05	14.80	14.32	14.00
24	13.30	15.45	18.55	17.75	15.00	19.40	16.60	16.26	14.14	14.80	14.13	13.92
25	13.55	15.75	17.85	17.60	14.95	19.95	16.40	16.21	14.22	14.46	13.92	13.94
26	14.08	16.20	17.40	17.45	14.80	19.30	17.60	19.95	14.10	14.03	13.65	13.70
27	14.42	16.40	16.80	18.90	15.00	18.80	18.40	21.80	14.00	13.77	13.50	13.60
28	14.50	16.00	16.45	22.35	14.95	18.70	21.15	19.80	13.80	13.81	13.52	13.54
29	14.50	15.75	16.30	21.90	14.90	18.45	20.50	18.53	13.66	13.63	13.57	13.49
30	14.35	15.65	16.40	19.90	-------	17.90	20.05	17.88	13.63	-	13.58	13.36
31	14.20	-------	16.05	18.40	-------	17.40	-------	17.35	-------	13.75	13.55	-------

Note.--No gage-height record July 30.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13.27	13.15	-	-	19.19	18.40	19.08	19.45	17.65	15.33	14.45	14.56
2	13.55	13.10	-	-	18.90	18.10	19.40	19.42	17.55	15.45	15.05	14.44
3	13.60	13.08	-	-	18.70	17.80	19.22	20.53	17.35	15.80	14.85	14.41
4	13.78	12.90	-	-	18.45	19.35	19.08	20.15	17.05	15.60	14.65	14.70
5	13.73	12.85	-	-	18.20	19.45	18.72	19.70	16.85	15.50	14.70	14.76
6	13.63	13.10	-	-	18.05	19.65	18.38	19.60	16.45	15.30	14.60	14.85
7	13.38	12.80	-	-	17.90	19.35	19.27	20.07	16.50	15.10	14.45	15.15
8	13.30	13.00	-	-	18.85	18.90	20.93	19.58	16.80	15.10	14.63	15.66
9	13.48	13.10	-	-	19.10	18.15	21.80	19.53	16.75	15.15	14.70	15.25
10	13.47	13.15	-	-	18.75	17.75	20.87	19.58	16.70	15.15	14.70	15.20
11	13.45	12.90	-	-	18.38	17.65	20.53	19.15	16.60	15.05	15.00	15.50
12	13.41	12.83	-	-	18.10	17.55	20.28	18.80	16.20	15.05	14.85	15.15
13	13.24	13.05	-	-	18.10	19.05	19.85	18.47	16.10	14.95	14.68	14.90
14	13.11	12.90	-	-	17.90	18.55	20.60	18.45	16.40	14.95	14.70	14.96
15	13.07	13.07	-	-	17.75	17.95	20.35	18.30	16.05	14.90	14.65	14.83
16	13.20	13.15	-	-	18.65	20.05	20.05	18.30	16.00	15.10	14.65	14.90
17	13.17	13.12	-	-	18.85	21.80	20.15	18.35	16.15	15.10	14.70	15.00
18	13.18	13.05	-	-	18.05	21.08	19.95	18.53	15.90	15.00	14.80	15.00
19	13.10	13.08	-	-	17.75	20.25	19.95	19.04	15.70	15.10	14.70	14.83
20	13.04	-	-	-	17.55	20.19	19.90	18.85	15.54	15.05	14.85	14.64
21	13.07	-	-	-	17.65	20.09	19.52	18.40	15.50	15.25	14.70	14.70
22	13.06	-	-	-	19.95	19.65	19.25	18.15	15.60	15.05	14.65	14.65
23	13.19	-	-	18.65	22.40	19.00	18.95	18.17	15.65	15.10	14.55	14.55
24	13.17	-	-	18.40	20.60	18.80	18.70	19.20	15.45	16.25	14.55	14.63
25	12.95	-	-	23.85	19.95	20.70	18.45	18.34	15.35	15.80	14.50	14.86
26	12.90	-	-	27.20	19.45	22.48	18.15	17.94	15.45	15.35	14.45	14.55
27	12.93	-	-	23.20	18.85	22.75	18.60	18.05	15.35	15.10	14.44	14.47
28	12.90	-	-	21.50	18.65	22.55	20.90	17.88	15.45	15.00	14.57	14.55
29	12.87	-	-	20.90	-------	21.85	20.85	17.54	15.35	14.95	14.59	14.46
30	12.96	-	-	20.44	-------	20.92	20.02	17.35	15.30	14.95	14.57	14.60
31	13.30	-------	-	19.68	-------	20.18	-------	17.40	-------	15.00	14.60	-------

Note.--No gage-height record from Nov. 20 to Jan. 22.

Delaware River at Yardley, Pa.--Continued

Daily gage height at 8 a.m., in feet, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14.46	16.20	16.36	16.40	17.50	18.37	17.40	18.05	16.63	14.73	14.37	16.10
2	14.45	16.10	16.35	16.20	17.08	18.90	17.25	17.65	16.60	-	14.30	15.90
3	14.42	15.80	16.16	15.96	16.90	21.00	17.90	17.54	16.60	-	14.39	15.68
4	14.45	15.50	15.85	15.84	17.25	21.25	17.14	18.55	16.20	-	14.51	15.42
5	14.50	15.35	15.75	15.80	17.05	20.62	16.85	19.40	16.05	-	14.42	15.45
6	14.45	15.21	15.65	16.04	16.80	19.78	16.68	19.85	16.05	a14.75	14.41	15.15
7	14.50	14.94	18.75	15.87	16.70	19.04	16.75	18.95	15.95	14.55	14.45	14.90
8	14.40	15.31	22.20	15.85	16.57	18.61	16.85	18.55	15.70	14.60	14.40	14.70
9	14.80	15.45	21.75	15.60	16.18	18.35	16.87	18.70	15.66	14.50	14.47	14.56
10	14.65	15.30	20.90	15.50	16.30	18.20	16.85	19.25	15.60	14.60	14.70	14.56
11	14.57	15.25	20.48	15.40	16.35	18.00	16.90	19.55	15.64	14.60	14.55	15.35
12	14.70	15.50	20.57	15.25	16.25	17.74	16.56	21.53	15.50	14.57	14.50	14.90
13	14.60	15.50	19.92	15.55	16.20	17.54	16.75	20.70	15.64	14.48	14.58	14.95
14	14.50	15.50	20.30	18.96	16.10	17.59	16.90	19.75	15.57	14.50	14.30	14.75
15	14.47	15.50	20.75	19.55	15.65	17.90	16.75	19.10	15.65	14.35	14.38	14.60
16	14.55	15.50	20.70	20.04	15.60	17.70	16.65	18.55	15.85	14.50	14.35	14.46
17	14.50	15.50	19.90	18.80	15.85	17.55	16.90	18.20	16.00	14.52	14.26	14.80
18	14.50	15.50	19.10	18.10	17.57	17.35	19.20	17.85	15.60	14.56	14.35	15.40
19	14.50	15.64	18.25	17.35	21.85	17.24	21.70	17.65	15.46	14.53	14.27	15.35
20	14.50	15.60	18.14	17.45	20.19	17.45	20.20	17.25	15.35	14.42	14.33	15.32
21	14.46	15.55	17.94	17.45	19.25	18.15	19.30	17.00	15.29	14.39	14.39	15.48
22	14.37	15.43	17.56	17.55	19.05	18.40	18.55	17.60	15.15	14.41	14.48	15.37
23	14.55	15.52	17.70	17.45	20.24	18.28	18.18	17.80	15.03	14.38	14.58	15.50
24	14.55	15.60	17.55	16.85	20.24	17.95	17.95	17.45	15.20	14.44	14.60	15.50
25	14.53	16.56	17.25	16.62	19.32	17.75	17.98	17.35	15.25	14.50	14.45	15.30
26	14.50	17.45	16.75	16.35	18.96	17.95	17.77	17.15	15.19	14.48	14.30	15.10
27	14.44	17.18	16.80	16.90	18.80	18.10	17.60	17.10	15.12	14.41	14.20	14.89
28	14.50	17.10	16.64	16.90	18.60	18.20	17.57	16.95	15.00	14.25	14.44	14.84
29	14.60	16.93	16.60	19.40	-------	17.78	18.00	16.75	14.95	14.32	14.45	14.80
30	16.35	16.60	16.73	18.90	-------	17.60	18.45	16.75	14.74	14.22	14.43	14.75
31	16.30	-------	16.55	18.25	-------	17.47	-------	16.60	-------	14.36	14.65	-------

a Reading at 4 p.m.
Note.--No gage-height record from July 2-5.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14.70	14.62	18.40	20.10	15.18	17.28	17.70	-	15.65	15.00	14.66	-
2	14.66	14.85	18.05	19.20	15.19	18.65	17.65	-	16.18	15.00	14.75	-
3	15.04	15.65	17.75	19.00	15.60	19.80	17.50	-	16.10	15.15	14.80	-
4	14.95	16.45	17.45	18.80	17.72	19.65	17.40	-	16.22	15.25	14.55	-
5	14.70	19.25	17.25	18.60	17.50	19.40	17.39	-	15.81	15.10	14.50	-
6	14.71	18.75	16.98	18.20	17.75	19.10	17.48	-	15.55	14.95	14.45	-
7	14.93	17.90	16.65	18.10	18.74	19.55	17.35	-	15.50	15.05	14.45	-
8	14.85	17.50	16.55	18.05	17.63	19.10	17.45	-	15.42	15.25	14.85	-
9	14.95	17.00	16.15	17.70	16.58	18.95	17.55	-	15.70	15.10	14.90	-
10	14.60	16.65	16.80	17.29	16.62	18.05	17.30	-	15.65	15.00	14.70	-
11	14.59	16.75	16.75	17.05	16.57	18.15	17.30	-	15.95	15.10	14.70	-
12	14.54	16.50	16.60	16.85	17.05	18.47	17.02	16.32	15.91	15.03	14.85	-
13	14.49	16.22	16.20	16.85	16.67	19.25	17.05	16.10	16.19	14.90	18.95	-
14	14.45	16.19	16.18	16.85	16.53	19.15	17.40	16.00	16.20	14.85	19.45	-
15	14.45	15.90	17.10	16.65	16.65	18.75	17.75	15.85	16.27	14.80	21.10	-
16	14.81	15.83	17.45	16.55	16.55	18.35	18.10	15.71	16.40	14.73	19.80	-
17	14.91	15.80	18.25	16.30	16.40	18.23	18.55	15.60	16.25	14.70	18.30	-
18	15.05	15.40	17.85	16.05	16.50	18.65	-	15.57	16.10	14.90	17.75	-
19	14.85	15.65	18.30	16.10	16.48	18.30	-	15.58	16.05	14.88	26.85	-
20	14.80	15.85	18.75	16.05	16.18	17.90	-	15.50	15.37	14.75	-	-
21	14.69	19.10	19.30	16.04	16.15	17.65	-	15.50	15.48	15.10	-	-
22	14.79	18.90	18.70	15.90	16.09	17.85	-	15.45	15.40	15.04	-	-
23	14.73	21.20	18.60	15.91	16.55	20.85	-	15.36	15.45	14.82	-	-
24	14.69	20.05	18.10	15.75	17.65	22.05	-	15.26	15.45	14.80	-	-
25	14.30	19.05	17.80	15.52	17.70	20.83	-	15.61	15.35	14.72	-	-
26	14.60	18.55	17.60	15.37	17.80	19.90	-	15.60	15.40	14.80	-	-
27	14.64	18.05	16.90	15.62	16.90	19.50	-	15.50	15.35	14.74	-	-
28	14.48	17.90	16.70	15.70	17.48	19.00	-	15.68	15.19	14.95	-	-
29	14.58	17.90	16.60	15.45	-------	18.55	-	15.53	15.20	14.78	-	-
30	15.10	17.05	18.15	15.50	-------	18.15	-	15.46	15.10	14.75	-	-
31	15.00	-------	19.90	15.55	-------	17.90	-------	15.48	-------	14.66	-	-------

Note.--No gage-height record Apr. 18 to May 11; Aug. 19 to Sept. 30.

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 half a mile upstream from Assunpink Creek.

Drainage area.--6,780 sq mi.

Records available.--February 1913 to September 1955.

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.--42 years, 11,790 cfs (unadjusted).

Extremes.--1913-55: Maximum discharge, 329,000 cfs Aug. 20, 1955 (gage height, 20.83 ft, from high-water mark in gage house), from rating curve extended above 230,000 cfs by logarithmic plotting; minimum, 1,220 cfs Sept. 18, 19, 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).--

1950-51: Nov. 27 (8 a.m.) 118,200 cfs (11.07 ft); Dec. 6 (1 a.m.) 113,300 cfs (10.77 ft); Dec. 9 (3 p.m.) 66,300 cfs (7.60 ft); Jan. 25 (10 p.m.) 51,900 cfs (6.48 ft); Feb. 8 (7 a.m.) 54,000 cfs (6.65 ft); Feb. 23 (6 a.m.) 50,900 cfs (6.40 ft); Apr. 1 (10 a.m.) 133,200 (11.95 ft).

1951-52: Nov. 8 (11 p.m.) 71,800 cfs (8.00 ft); Jan. 28 (5 p.m.) 67,100 cfs (7.66 ft); Mar. 13 (4 a.m.) 76,300 cfs (8.32 ft); Apr. 7 (3 a.m.) 88,200 cfs (8.74 ft); Apr. 16 (8 p.m.) 76,000 cfs (8.30 ft); Apr. 28 (9 a.m.) 52,300 cfs (6.52 ft); May 26 (9 p.m.) 58,800 cfs (7.02 ft); July 11 (8 a.m.) 95,400 cfs (9.64 ft).

1952-53: Nov. 23 (7 a.m.) 79,100 cfs (8.52 ft); Dec. 12 (8 p.m.) 139,000 cfs (12.30 ft); Jan. 26 (4 a.m.) 91,400 cfs (9.37 ft).

1953-54: Dec. 8 (10 p.m.) 46,300 cfs (6.02 ft), (maximum below base).

1954-55: Aug. 20 (6 to 7 a.m.) 329,000 cfs (20.83 ft).

Remarks.--Diurnal fluctuation at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lakes Hopatcong and Wallenpaupack and by Pepacton, Swinging Bridge, Toronto, Cliff Lake, Neversink, and Wild Creek Reservoirs (see p. 388) and smaller reservoirs. Diversion from Pepacton and Neversink Reservoirs and to Delaware & Raritan Canal (see p. 394). Records of chemical analyses, suspended sediment loads, and water temperatures are given in United States Geological Survey Water-Supply Papers 1197, 1250, 1290, and 1450.

Revisions.--Special Report 12: Drainage area. Revised figures of discharge, in cubic feet per second, for the water years 1924 and 1928, superseding those published in Bulletin 33, are given herewith:

1924		1928	
Sept. 30	15,000	July 15	33,000
		16	45,000
1928		23	18,000
June 30	60,000	24	17,000
July 1	80,000	25	15,000

Month	Maximum	Minimum	Mean
September 1924	15,000	1,720	2,840
Water year 1923-24	121,000	1,560	11,100
June 1928	60,000	8,600	20,700
July	80,000	11,000	25,700
Water year 1927-28	106,000	3,020	19,800

Delaware River at Trenton--Continued

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,070	2,600	22,600	9,840	15,000	21,000	120,700	13,000	11,100	9,080	12,400	3,950
2	3,020	2,550	19,000	8,670	23,200	19,600	71,500	12,400	9,890	9,250	10,300	3,810
3	*2,840	2,440	16,500	8,210	36,400	18,300	53,100	11,400	8,870	9,680	8,670	4,090
4	2,600	2,550	18,000	9,350	27,700	19,300	46,100	10,600	8,560	8,820	7,380	3,850
5	2,820	3,680	83,500	13,000	20,800	19,500	39,300	10,000	9,300	9,190	6,820	3,680
6	3,070	5,280	94,200	25,300	18,400	17,500	33,100	9,520	9,680	9,250	6,050	3,810
7	3,040	7,180	54,100	21,100	24,600	18,300	28,300	8,560	8,670	8,410	5,460	4,610
8	2,740	8,120	53,300	17,600	47,800	18,300	24,900	8,010	7,520	7,280	5,170	5,080
9	2,790	6,770	61,500	14,700	41,500	19,500	21,800	8,410	6,820	6,540	5,330	4,450
10	2,930	5,880	51,500	13,400	28,400	20,600	20,600	8,010	6,460	5,880	5,210	3,950
11	*3,160	5,360	39,000	12,200	23,000	18,000	20,700	7,960	6,180	5,420	6,460	3,780
12	3,980	4,970	32,800	11,900	19,500	15,400	21,400	8,510	5,970	5,970	7,050	3,620
13	3,750	4,640	27,600	12,200	20,400	14,600	28,800	8,820	6,100	6,280	6,140	4,020
14	4,140	4,360	23,600	11,500	25,800	17,100	41,400	7,860	7,520	6,100	6,910	3,880
15	4,010	4,180	20,600	21,000	29,100	21,300	36,200	7,380	9,520	6,140	*6,360	4,950
16	3,650	4,040	19,300	19,200	*25,700	24,200	29,200	7,570	10,500	5,750	8,520	6,730
17	3,420	3,940	17,500	18,700	21,800	22,200	26,200	7,240	9,570	5,210	11,100	5,500
18	3,100	3,940	15,200	18,000	25,100	19,400	23,500	6,870	7,960	5,250	9,940	5,920
19	3,190	3,810	13,100	15,800	22,300	17,200	21,100	6,680	6,820	5,500	10,400	*5,670
20	2,990	3,720	13,200	15,900	23,100	22,600	19,300	6,410	6,640	6,910	8,980	4,880
21	2,840	3,810	12,200	17,200	28,900	30,400	17,500	5,750	6,320	6,820	7,380	4,420
22	2,520	4,530	11,100	18,200	42,600	29,200	16,000	5,500	5,750	8,360	6,870	3,920
23	2,760	5,880	10,400	17,200	48,700	25,400	15,500	6,100	9,760	8,560	6,590	3,460
24	2,960	7,310	10,600	21,800	36,600	22,200	17,700	8,060	10,700	7,760	5,880	3,280
25	3,070	15,800	9,890	43,900	27,600	21,400	18,800	9,140	8,560	*6,870	5,250	3,160
26	3,520	66,500	9,410	43,900	23,500	24,200	17,000	8,610	7,280	6,360	4,760	3,100
27	3,490	*107,200	8,000	31,400	22,300	22,500	15,600	7,430	7,570	5,290	4,490	3,310
28	3,220	62,300	7,500	24,700	21,600	19,800	15,000	6,360	6,870	9,290	4,420	3,590
29	3,100	36,900	8,500	21,500	-------	19,000	13,900	7,470	7,280	26,800	*4,050	3,950
30	2,990	27,400	11,000	19,200	-------	32,500	13,700	12,000	7,720	15,700	4,420	3,750
31	2,820	-------	12,700	16,900	-------	89,600	-------	*12,900	-------	14,700	4,340	-------

* Discharge measurement made on this day.

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,040	9,120	11,600	15,900	24,100	9,570	20,800	32,800	26,500	4,380	4,960	7,160
2	2,990	13,100	11,500	21,800	22,200	9,350	22,700	27,000	35,100	4,300	4,880	27,500
3	2,900	22,400	11,200	30,500	22,800	8,410	35,200	23,500	35,600	4,270	5,170	32,000
4	3,370	37,000	11,100	32,100	32,600	7,670	38,800	20,700	28,600	3,810	4,880	27,100
5	3,430	39,800	12,500	26,900	39,800	9,730	40,900	18,700	24,800	3,720	4,050	20,200
6	3,460	28,100	26,100	23,900	43,400	10,800	69,800	16,600	23,100	3,560	4,020	15,800
7	3,620	37,700	33,400	20,900	36,900	9,940	*74,500	16,200	21,000	3,370	5,920	13,000
8	4,720	63,800	27,000	18,200	29,900	9,250	52,500	14,800	18,100	3,280	6,230	10,900
9	5,420	67,300	22,700	16,300	25,600	9,140	39,700	13,800	15,700	5,120	5,420	9,410
10	6,960	47,800	20,400	15,600	22,700	8,460	32,400	13,100	14,900	28,100	5,420	8,460
11	7,280	34,200	21,700	15,100	20,500	20,100	27,400	12,600	14,200	81,300	7,760	7,910
12	7,190	26,800	20,000	14,400	19,000	61,300	23,800	14,200	12,700	44,600	7,860	7,240
13	7,470	22,500	17,800	12,900	17,800	69,000	21,200	21,500	11,600	25,800	7,570	7,050
14	7,520	19,900	16,200	12,100	15,100	46,200	25,900	27,900	10,500	18,800	7,050	6,870
15	8,060	19,900	15,300	13,000	13,500	32,800	47,400	25,400	9,730	14,700	6,140	6,100
16	6,730	20,400	14,300	*15,100	12,500	25,500	67,700	22,300	8,670	*12,400	5,840	5,970
17	*6,320	22,300	b11,500	18,100	12,900	21,400	57,200	20,400	8,010	10,900	8,700	7,000
18	5,710	21,000	b10,500	20,800	13,000	19,100	41,000	18,700	8,510	9,730	12,400	6,500
19	5,250	18,900	b10,000	21,400	12,200	19,800	32,600	17,900	8,160	8,770	9,030	7,760
20	5,250	16,900	b10,000	24,300	12,400	21,100	27,200	17,300	7,570	8,010	8,160	10,100
21	5,040	15,500	b20,000	22,400	11,800	19,800	23,800	19,500	7,050	8,160	7,380	8,560
22	4,570	14,200	33,300	21,400	11,900	20,700	21,000	19,800	6,500	7,280	8,930	6,870
23	4,090	12,800	33,400	24,900	11,400	33,300	19,200	18,500	6,500	8,980	7,570	6,230
24	4,190	12,400	28,600	25,200	10,200	38,000	17,900	16,500	6,730	8,770	6,960	6,320
25	5,290	13,600	24,100	23,700	9,780	41,000	17,000	22,300	*7,190	7,570	5,880	6,010
26	6,820	16,300	22,100	25,300	9,350	*35,900	24,200	46,700	6,820	6,360	4,960	5,130
27	7,620	16,500	19,000	34,000	*9,680	32,200	32,200	52,500	6,320	5,540	*4,450	4,840
28	8,360	*14,600	16,500	59,900	9,460	*31,700	46,600	*37,500	5,500	5,370	4,380	4,680
29	7,910	13,200	14,900	54,100	9,350	29,400	45,700	29,000	4,960	4,920	4,490	4,420
30	7,430	12,500	14,600	37,600	-------	25,400	40,500	25,200	4,880	5,080	4,570	4,020
31	6,820	-------	14,900	28,500	-------	22,300	-------	22,400	-------	5,420	4,490	-------

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

Delaware River at Trenton--Continued

Daily discharge, in cubic feet per second, 1950-55

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,880	3,340	12,400	10,900	22,200	17,700	25,800	24,300	13,200	4,190	2,990	1,930
2	4,490	3,250	11,300	10,300	20,500	15,800	24,200	26,600	12,800	5,170	3,100	1,720
3	4,880	3,130	10,800	10,200	19,500	13,900	23,000	30,700	11,500	5,840	2,900	1,870
4	5,420	2,760	10,300	10,900	18,000	20,000	21,800	27,900	10,000	5,170	2,680	2,340
5	5,290	2,570	12,600	10,000	16,400	24,500	19,500	25,500	9,190	4,380	2,470	2,520
6	4,800	3,130	25,800	9,250	15,400	24,400	17,500	24,900	8,720	3,850	2,340	3,040
7	4,120	2,820	28,300	8,870	14,800	20,900	26,000	27,600	8,510	3,430	2,320	4,160
8	3,950	2,960	24,700	8,560	19,000	17,900	37,800	26,000	9,570	3,430	2,470	4,960
9	4,300	3,160	20,500	12,600	21,500	15,700	39,600	25,200	9,680	3,560	2,500	3,680
10	4,160	3,220	17,800	17,400	19,700	14,300	34,400	24,300	*9,350	3,460	3,100	3,880
11	3,850	2,760	37,500	17,800	*17,000	13,900	31,100	21,800	8,210	3,280	3,340	4,270
12	4,050	2,550	118,000	16,500	15,400	13,100	28,600	19,800	7,140	3,190	*2,870	3,340
13	3,590	3,040	104,000	15,600	15,300	17,900	27,600	17,900	6,960	2,990	2,600	2,840
14	3,340	2,740	57,600	*14,600	14,400	17,200	31,000	17,800	7,520	2,930	2,470	2,710
15	3,190	3,160	39,600	13,200	14,600	18,500	30,400	17,100	6,960	*2,840	2,550	2,710
16	3,400	3,400	31,100	12,600	18,000	28,100	*29,100	17,300	6,870	3,280	2,420	2,930
17	3,340	3,340	*26,000	12,700	16,500	*38,600	28,800	17,000	6,770	3,280	2,500	3,250
18	3,400	3,160	22,600	14,200	16,000	35,100	27,300	18,700	6,230	2,990	2,500	2,960
19	3,160	*2,960	20,100	19,400	14,300	29,700	27,700	21,400	5,710	3,220	2,520	2,600
20	2,930	3,620	18,000	21,400	13,100	28,900	26,600	19,600	5,420	3,250	2,630	2,420
21	3,040	10,300	16,500	21,500	14,600	28,100	24,800	17,200	5,080	3,560	2,370	2,290
22	*3,070	52,100	18,900	20,800	29,100	24,600	23,200	*15,400	5,150	3,400	2,150	2,220
23	3,310	75,400	17,900	19,100	42,600	21,200	21,300	20,000	5,300	4,530	1,990	2,100
24	3,370	54,700	17,200	28,300	31,500	21,400	19,600	20,100	4,490	3,870	1,930	2,240
25	3,020	37,200	16,100	65,200	25,600	32,800	18,100	16,500	4,490	5,460	1,830	2,200
26	2,820	26,500	15,000	83,100	22,800	45,300	17,600	14,700	4,380	4,090	1,810	2,030
27	2,840	21,200	13,900	54,300	20,800	48,100	20,900	15,300	4,230	3,370	1,830	1,930
28	2,680	17,900	13,000	38,500	19,000	46,700	35,100	14,200	4,570	3,160	*2,080	1,910
29	2,630	15,400	11,400	34,000	-------	40,600	33,000	12,600	4,680	3,040	1,990	1,910
30	2,930	13,800	10,200	30,100	-------	33,400	27,300	11,800	4,050	3,040	2,030	1,890
31	3,590	-------	10,800	25,100	-------	28,200	-------	12,500	-------	3,020	2,200	-------

* Discharge measurement made on this day.

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*1,810	7,140	7,620	7,860	12,400	16,400	12,000	15,200	8,870	2,370	1,700	6,460
2	1,830	6,540	7,330	6,910	10,400	22,300	11,400	13,500	8,410	2,290	1,610	5,670
3	1,970	5,500	6,820	6,010	*9,990	34,500	10,500	13,000	7,960	2,290	1,770	5,000
4	2,080	4,680	6,320	5,880	11,200	36,000	9,990	18,100	7,190	2,270	1,890	4,570
5	1,850	4,160	6,460	5,880	10,900	30,600	9,410	24,800	6,870	2,370	1,730	4,120
6	1,770	3,780	6,680	6,410	9,940	24,900	8,820	25,400	6,730	2,520	1,810	3,280
7	1,790	3,680	21,300	6,460	9,140	20,700	9,140	20,500	6,140	2,570	1,750	2,740
8	2,060	4,050	42,000	6,230	8,010	18,300	9,570	18,300	5,370	2,570	1,700	2,500
9	2,650	4,450	*38,500	5,290	7,140	17,000	9,990	19,400	5,370	2,470	2,180	2,340
10	2,390	3,950	32,500	4,680	7,520	16,000	9,570	22,200	5,210	2,570	2,390	2,170
11	2,340	3,810	31,300	4,000	7,430	14,500	8,930	27,800	5,130	2,290	1,970	3,600
12	2,390	4,300	28,900	3,600	7,240	13,500	8,460	36,900	4,920	2,080	1,990	2,900
13	2,200	4,570	26,000	5,200	6,860	12,800	9,250	30,200	5,080	2,100	1,950	2,760
14	2,030	4,530	30,200	4,800	5,290	13,900	*9,990	24,800	4,960	1,930	1,750	2,470
15	2,080	4,680	32,500	5,400	5,460	14,700	9,190	21,100	4,960	1,930	1,720	2,170
16	2,240	4,530	31,600	5,900	5,170	14,200	8,870	18,100	5,670	2,100	1,610	2,150
17	2,270	4,490	26,700	5,200	*6,340	*13,400	11,800	15,900	6,010	2,200	1,580	3,020
18	2,100	*4,840	21,000	4,300	21,800	12,100	29,400	14,400	5,250	2,150	*1,610	4,190
19	1,990	5,250	16,800	3,900	38,300	11,400	37,000	*13,000	4,840	1,970	1,480	3,920
20	1,930	4,880	15,100	5,200	26,900	12,800	27,000	12,100	4,330	*1,890	1,720	4,120
21	1,830	4,610	13,400	6,000	21,300	16,600	21,900	12,100	3,980	1,770	1,790	4,340
22	1,750	4,380	12,700	7,000	21,700	17,500	18,400	12,800	3,460	*1,810	1,950	*4,570
23	1,850	4,840	13,100	6,600	29,200	16,500	16,200	13,600	*3,400	1,890	2,010	4,680
24	1,990	7,330	12,500	10,000	27,800	14,800	14,700	13,000	3,680	1,930	2,030	4,050
25	1,970	9,140	11,500	8,200	22,400	14,600	14,800	12,200	3,780	1,850	1,730	3,520
26	1,930	12,100	9,840	8,110	20,200	15,600	13,700	11,400	3,490	1,810	*1,500	3,070
27	1,850	11,100	9,140	9,030	19,500	15,400	12,700	10,400	3,280	1,750	1,500	2,820
28	1,990	10,700	8,770	10,900	17,700	15,600	13,400	9,620	3,070	1,720	1,730	2,650
29	2,740	9,570	8,610	23,500	-------	14,000	16,200	8,980	2,870	1,640	1,750	2,550
30	7,330	8,410	8,930	19,400	-------	13,000	17,200	8,980	2,440	1,700	1,660	2,440
31	7,670	-------	8,460	15,200	-------	12,600	-------	8,460	-------	1,680	3,100	-------

* Discharge measurement made on this day.

Delaware River at Trenton--Continued

Daily discharge, in cubic feet per second, 1950-55

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,320	3,220	17,800	26,900	b3,500	12,400	13,400	13,600	5,080	3,000	1,900	12,900
2	2,240	2,960	15,400	22,000	b5,000	20,000	13,100	12,100	6,180	2,820	1,900	12,400
3	2,930	5,100	13,800	20,000	b4,500	29,700	12,300	10,900	5,920	3,210	*1,620	11,800
4	2,790	11,200	12,300	19,800	b4,500	24,300	12,100	10,600	5,710	3,210	1,730	10,100
5	2,340	22,200	11,300	18,000	b4,500	23,000	12,300	9,570	5,080	2,850	2,220	9,520
6	2,270	18,800	9,840	16,400	b5,000	22,200	12,500	8,820	4,610	2,590	2,160	8,210
7	2,680	15,100	8,360	15,900	b13,000	23,600	12,100	8,460	4,300	3,030	2,340	7,810
8	2,680	12,200	8,160	15,200	b10,000	20,800	12,400	7,430	4,420	3,240	2,880	7,760
9	2,500	10,200	7,910	12,800	8,770	17,100	12,500	6,960	5,210	2,850	2,480	7,330
10	2,080	9,300	9,300	11,300	8,770	15,600	11,300	6,680	5,670	2,700	1,920	6,820
11	2,030	8,560	8,870	10,400	9,520	16,200	10,200	7,190	5,920	2,760	2,120	6,680
12	1,990	7,910	8,410	10,500	10,600	18,800	9,730	6,870	5,840	2,700	3,840	6,100
13	1,870	7,050	7,430	9,300	9,840	22,400	10,900	6,320	6,870	2,370	28,500	5,330
14	1,810	6,680	7,190	8,980	8,060	21,400	11,900	6,050	6,770	2,290	28,400	6,140
15	1,990	6,050	11,300	8,260	7,960	19,200	14,200	5,500	*7,190	2,090	33,300	6,910
16	2,640	5,630	13,400	8,310	*8,310	17,300	16,700	5,080	7,240	2,040	23,500	6,230
17	2,960	5,920	16,300	7,470	8,010	17,400	17,900	4,610	6,140	2,020	15,800	6,230
18	3,130	6,140	15,300	7,100	8,510	19,000	15,600	*4,800	5,250	2,370	16,900	5,800
19	2,680	5,840	18,300	*7,240	7,960	16,500	14,000	4,720	4,720	2,290	a163,000	5,210
20	*2,520	6,540	24,300	7,430	7,140	14,400	*13,600	4,490	4,610	*1,940	a279,000	4,800
21	2,390	18,700	22,200	6,500	6,910	13,200	13,000	4,450	4,120	2,790	*a88,100	5,800
22	2,570	25,200	16,600	6,140	6,870	20,000	12,800	4,300	4,050	2,480	a50,700	6,410
23	2,470	36,600	14,400	6,410	9,350	*36,600	12,600	3,810	4,160	2,090	a37,800	4,880
24	2,340	26,500	12,800	5,630	12,800	40,900	12,100	3,880	4,160	2,240	33,800	5,090
25	2,340	21,300	12,400	4,880	17,300	31,500	11,200	5,000	3,950	2,370	26,000	6,820
26	2,520	18,000	11,100	4,840	16,000	25,800	12,700	4,920	4,050	2,040	20,500	8,060
27	2,270	15,700	9,570	5,370	13,900	23,100	15,500	4,680	3,650	1,920	17,000	7,620
28	2,150	14,400	*8,870	5,420	12,100	19,900	15,800	4,960	3,340	2,400	14,600	7,470
29	2,570	14,400	9,250	4,650	-------	17,500	14,800	4,610	3,240	2,040	12,600	7,570
30	3,680	15,600	16,400	b4,700	-------	15,800	14,200	4,340	3,060	2,020	11,600	8,510
31	3,340	-------	27,700	b4,000	-------	14,400	-------	4,420	-------	2,020	11,000	-------

* Discharge measurement made on this day.

a No gage-height record Aug. 19 (10 a.m.) to Aug. 23 (1 p.m.); discharge computed from graph based on hourly wire-weight-gage readings by Delaware River Joint Toll Bridge Commission and high-water mark in gage house and flood-routing study.

b Stage-discharge relation affected by ice.

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	97,610	4,140	2,520	3,149		
November	427,640	107,200	2,440	14,250		
December	807,400	94,200	7,500	26,050		
Calendar year 1950	4,839,530	107,200	2,440	13,260		
January 1951	573,470	43,900	8,210	18,500		
February	771,400	48,700	15,000	27,550		
March	720,100	89,600	14,600	23,230		
April	887,900	120,700	13,700	29,600		
May	264,530	13,000	5,500	8,533		
June	241,460	11,100	5,750	8,049		
July	258,420	26,800	5,210	8,336		
August	213,100	12,400	4,050	6,874		
September	126,170	6,730	3,100	4,206		
Water year 1950-51	5,389,200	120,700	2,440	14,760		
October 1951	174,830	8,360	2,900	5,640		
November	730,520	67,300	9,120	24,350		
December	576,200	33,400	10,000	18,590		
Calendar year 1951	5,538,100	120,700	2,900	15,170		
January 1952	746,100	59,900	12,100	24,070		
February	541,820	43,400	9,350	18,680		
March	758,320	69,000	7,670	24,460		
April	1,086,800	74,500	17,000	36,230		
May	705,200	52,500	12,600	22,750		
June	405,500	35,600	4,880	13,520		
July	372,370	81,300	3,280	12,010		
August	195,520	12,400	4,020	6,307		
September	301,110	32,000	4,020	10,040		
Water year 1951-52	6,594,290	81,300	2,900	18,020		

Delaware River at Trenton--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1952	112,840	5,420	2,630	3,640		
November	385,570	75,400	2,550	12,850		
December	809,900	118,000	10,200	26,130		
Calendar year 1952	6,421,050	118,000	2,550	17,540		
January 1953	686,980	83,100	8,560	22,160		
February	547,600	42,600	13,100	19,560		
March	796,500	48,100	13,100	25,690		
April	798,700	39,600	17,500	26,620		
May	621,700	30,700	11,800	20,050		
June	216,730	13,200	4,050	7,224		
July	117,270	6,870	2,840	3,783		
August	75,480	3,340	1,810	2,435		
September	80,850	4,960	1,720	2,695		
Water year 1952-53	5,250,120	118,000	1,720	14,380		
October 1953	74,670	7,670	1,750	2,409		
November	175,990	12,100	3,680	5,866		
December	522,580	42,000	6,320	17,830		
Calendar year 1953	4,745,050	83,100	1,720	13,000		
January 1954	233,050	23,500	3,600	7,518		
February	406,730	38,300	5,170	14,530		
March	536,200	36,000	11,400	17,300		
April	419,480	37,000	8,460	13,980		
May	526,240	36,900	8,460	16,980		
June	152,770	8,870	2,440	5,092		
July	64,480	2,570	1,640	2,080		
August	56,660	3,100	1,480	1,828		
September	104,840	6,460	2,150	3,495		
Water year 1953-54	3,303,690	42,000	1,480	9,051		
October 1954	77,090	3,680	1,810	2,487		
November	383,000	36,600	2,960	12,770		
December	406,260	27,700	7,190	13,110		
Calendar year 1954	3,366,800	38,300	1,480	9,224		
January 1955	321,830	26,900	4,000	10,400		
February	248,680	17,300	3,500	8,881		
March	650,000	40,900	12,400	20,970		
April	393,430	17,900	9,730	13,110		
May	200,120	13,600	3,810	6,455		
June	150,510	7,240	3,060	5,017		
July	76,780	3,240	1,920	2,477		
August	939,010	279,000	1,620	30,290		
September	222,300	12,900	4,800	7,410		
Water year 1954-55	4,069,010	279,000	1,620	11,150		

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 1955.

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 bench mark).

Average discharge.--32 years, 119 cfs.

Extremes.--1923-55: Maximum discharge, 3,320 cfs Sept. 22, 1938 (gage height, 10.74 ft), from rating curve extended above 1,300 cfs; 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).--
1950-51: Nov. 26 (2:30 a.m.) 1,290 cfs (6.82 ft); Feb. 22 (12 m.) 858 cfs (5.68 ft).
1951-52: Dec. 21 (11:30 a.m.) 1,770 cfs (7.96 ft); Mar. 11 (8 p.m.) 1,130 cfs (6.43 ft); Apr. 28 (7 a.m.) 1,720 cfs (7.83 ft); Aug. 17 (7 a.m.) 879 cfs (5.74 ft); Sept. 3 (11:30 a.m.) 914 cfs (5.84 ft).
1952-53: Nov. 22 (12 m.) 1,110 cfs (6.32 ft); Jan. 24 (9 p.m.) 1,560 cfs (7.48 ft); Mar. 13 (2 p.m.) 1,500 cfs (7.33 ft); Mar. 16 (7 a.m.) 990 cfs (6.00 ft).
1953-54: Dec. 14 (6 p.m.) 850 cfs (5.60 ft); Sept. 11 (5 p.m.) 874 cfs (5.68 ft).
1954-55: Nov. 21 (4 p.m.) 970 cfs (5.95 ft); Mar. 22 (5 p.m.) 1,260 cfs (6.73 ft); Aug. 7 (9 p.m.) 1,270 cfs (6.77 ft); Aug. 13 (2 p.m.) 2,400 cfs (9.29 ft); Aug. 19 (9 a.m.) 1,480 cfs (7.27 ft).

Revisions.--Special Report 9: Drainage area.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	53	148	121	160	136	411	98	90	49	22	26
2	46	52	124	*113	*264	141	316	92	78	48	21	30
3	45	50	111	110	196	132	515	82	74	43	21	29
4	44	88	143	119	178	212	372	77	66	45	20	29
5	42	196	165	127	163	200	305	69	61	57	18	29
6	42	118	134	114	129	176	224	65	57	48	20	29
7	42	104	143	121	226	159	170	64	53	40	22	27
8	44	93	*446	139	348	139	143	61	52	37	26	24
9	54	86	305	104	204	122	131	58	49	33	28	23
10	65	*74	282	99	184	113	122	56	51	*30	28	24
11	66	66	245	94	145	102	126	83	56	30	33	24
12	c60	60	188	88	124	*100	125	132	*53	30	90	23
13	c70	57	152	80	119	98	186	110	58	27	180	23
14	c60	55	131	91	127	132	152	99	74	24	121	23
15	c54	53	121	311	122	145	138	88	69	24	119	21
16	c51	53	136	247	113	141	132	77	60	29	119	20
17	c49	57	121	214	139	132	143	65	52	39	100	23
18	c47	55	110	194	250	114	124	57	50	36	65	21
19	c47	51	99	154	220	111	116	52	46	36	42	21
20	c46	53	90	127	245	387	113	57	42	38	41	20
21	c46	68	82	116	404	278	102	64	42	32	58	*20
22	50	65	74	104	779	239	96	65	39	31	58	19
23	104	60	72	94	592	194	162	97	42	34	52	25
24	94	61	74	174	372	157	150	357	40	30	*53	24
25	86	343	77	172	239	134	140	231	41	26	64	26
26	86	733	72	161	188	118	127	165	39	25	80	25
27	88	448	65	146	161	110	113	141	55	23	58	27
28	78	367	61	136	141	104	99	139	48	20	44	24
29	65	258	83	136	-------	122	93	175	50	25	43	20
30	57	188	110	138	-------	268	110	190	52	23	32	19
31	55	-------	124	111	-------	538	-------	118	-------	23	30	-------

* Discharge measurement made on this day.
c Backwater from debris on control; discharge estimated on basis of precipitation records and records for Crosswicks Creek at Extonville.

Assunpink Creek at Trenton--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	224	114	150	202	102	119	273	387	52	131	401
2	22	208	100	212	198	104	119	206	512	48	228	722
3	21	381	93	250	190	110	113	163	642	45	218	806
4	22	357	88	247	440	135	*106	138	429	44	188	*506
5	22	312	*163	280	442	321	181	126	256	44	168	312
6	20	264	167	273	364	314	212	116	168	40	190	206
7	76	*443	134	226	271	273	167	106	124	39	289	170
8	160	356	129	184	208	218	148	99	105	41	228	138
9	87	254	121	170	176	174	131	94	94	254	233	121
10	86	212	108	186	154	150	118	92	87	287	262	110
11	146	180	98	*186	*146	556	108	156	78	335	345	100
12	145	145	92	161	136	606	98	260	74	340	270	93
13	100	121	86	161	124	429	104	190	89	208	271	86
14	88	118	78	150	111	316	159	188	75	121	208	77
15	82	163	159	141	106	224	154	167	62	86	150	82
16	74	186	161	136	105	188	161	127	61	70	351	80
17	58	200	134	134	201	163	157	116	58	57	654	75
18	48	172	207	250	222	145	139	a110	58	56	364	72
19	*42	154	345	206	218	199	116	a110	50	50	271	88
20	38	131	274	228	204	275	104	a170	56	96	228	90
21	36	111	1,230	204	184	218	96	a190	44	173	172	81
22	36	98	883	204	155	214	88	a160	49	269	165	90
23	36	92	547	364	138	260	86	a130	73	157	139	92
24	56	90	345	264	129	275	84	a120	82	119	110	84
25	87	88	250	218	121	*296	165	a600	75	87	100	77
26	70	202	305	336	116	250	250	a700	72	66	93	73
27	66	167	233	372	111	210	489	*a400	*68	63	84	69
28	66	159	184	535	106	*174	1,420	298	60	68	81	62
29	65	152	174	*535	104	150	926	224	55	56	78	60
30	58	136	165	350	-------	134	463	163	70	52	91	55
31	50	-------	161	252	-------	126	-------	154	-------	93	129	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, precipitation records, and records for stations on nearby streams.
Note.--Backwater from debris Sept. 6-30.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	37	97	89	156	102	145	152	119	42	34	24
2	61	37	99	92	137	94	145	143	110	56	48	23
3	66	38	156	184	132	99	137	137	99	37	49	26
4	62	41	156	193	128	404	137	132	86	32	48	35
5	66	41	239	178	119	328	191	253	78	30	42	22
6	70	41	370	160	114	273	143	399	69	60	35	21
7	70	40	a270	133	117	215	417	285	105	59	34	22
8	63	36	a200	128	119	162	432	249	83	55	29	23
9	59	36	a170	429	114	*145	295	212	*73	63	84	20
10	56	41	*152	578	110	137	528	170	67	52	78	19
11	53	43	356	515	*104	128	382	146	59	34	53	19
12	50	42	365	378	109	144	322	*126	52	28	52	20
13	53	43	290	264	112	982	488	117	144	29	53	31
14	55	*42	224	206	107	929	*485	132	197	29	*69	29
15	56	58	174	174	267	729	358	124	158	28	94	30
16	55	81	146	*154	342	804	455	117	124	25	67	27
17	*46	72	128	137	295	524	340	180	102	24	73	25
18	42	75	119	224	235	365	273	405	78	20	75	23
19	41	78	112	208	168	428	378	247	63	73	56	22
20	41	106	105	193	139	352	302	184	55	72	45	20
21	40	348	116	197	224	285	264	145	48	67	38	25
22	40	793	186	266	212	230	208	143	45	75	32	*24
23	40	587	166	233	193	191	174	186	43	370	30	23
24	40	432	172	679	170	400	152	141	38	*306	30	21
25	38	278	154	718	141	348	139	126	36	193	30	20
26	36	197	130	445	128	335	224	146	35	123	28	19
27	38	152	112	302	117	273	208	145	32	83	28	19
28	41	124	94	247	110	219	170	124	32	59	27	22
29	42	109	86	208	-------	186	146	114	38	46	24	22
30	40	102	84	180	-------	166	132	107	38	43	20	22
31	38	-------	84	166	-------	152	-------	114	-------	41	24	-------

* Discharge measurement made on this day.

Assunpink Creek at Trenton--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	112	63	66	60	143	99	94	50	21	7.8	94
2	20	97	59	62	63	249	91	80	46	23	11	100
3	17	73	55	60	69	265	83	88	42	18	71	99
4	16	50	53	62	75	358	72	168	41	15	36	84
5	21	38	110	64	73	217	72	150	35	17	50	63
6	30	36	100	80	69	174	76	121	30	21	43	*36
7	30	93	233	75	63	141	83	100	32	21	28	36
8	28	94	170	66	59	117	136	133	32	22	24	52
9	28	*97	152	57	60	105	139	126	32	19	143	40
10	25	117	*227	57	60	97	99	121	32	14	282	40
11	23	128	160	56	59	91	92	121	55	12	121	614
12	27	97	142	59	56	84	91	104	45	16	91	453
13	*24	72	208	59	41	99	*80	89	80	18	78	388
14	23	57	542	57	40	221	73	75	57	21	52	338
15	25	48	444	59	*46	206	69	66	55	23	30	217
16	25	42	368	78	59	178	81	57	59	18	*30	155
17	23	41	261	91	100	158	280	*56	52	15	28	139
18	21	38	160	81	104	*124	375	57	45	12	25	104
19	24	37	121	*81	91	109	273	52	36	*28	23	94
20	28	37	102	89	78	184	206	66	30	30	24	89
21	28	31	96	186	86	143	145	331	*30	19	48	92
22	27	30	97	188	126	126	109	292	28	14	41	105
23	27	78	99	129	109	116	107	228	37	9.3	46	*89
24	23	75	91	126	100	99	99	199	40	7.1	45	86
25	39	96	83	114	146	159	89	145	35	13	35	83
26	31	107	78	105	135	199	88	102	52	26	27	78
27	28	100	73	112	124	152	128	83	21	21	23	69
28	135	89	72	114	104	133	135	72	21	19	20	56
29	203	80	73	89	-------	117	123	63	20	14	18	49
30	160	70	72	81	-------	105	109	57	20	12	22	45
31	116	-------	70	67	-------	100	-------	50	-------	10	160	-------

* Discharge measurement made on this day.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	42	66	156	204	42	124	121	89	88	26	21	97
2	40	94	148	217	45	135	110	86	63	23	27	94
3	38	143	133	180	45	116	102	80	59	20	16	88
4	40	*110	112	148	42	347	99	75	55	19	14	83
5	37	102	100	132	42	312	94	70	78	21	16	78
6	49	105	92	133	80	399	91	63	78	21	16	78
7	45	99	81	132	500	468	91	56	49	20	169	80
8	40	88	75	112	350	283	86	55	66	19	324	73
9	36	76	92	104	230	226	80	53	156	16	136	66
10	32	64	112	104	190	180	75	50	96	22	100	59
11	32	55	100	99	230	148	75	50	80	35	151	56
12	32	52	92	88	315	128	137	48	81	19	487	57
13	30	49	92	89	230	117	197	45	78	18	1,880	56
14	29	42	134	84	170	107	168	43	*66	18	1,410	55
15	36	41	197	84	140	*105	162	40	63	16	1,090	55
16	31	42	174	81	120	121	137	*38	66	14	632	53
17	29	45	191	72	155	110	114	37	56	12	425	49
18	*31	45	256	64	150	109	102	35	43	13	424	46
19	34	46	247	66	135	110	*99	32	36	14	*950	50
20	35	102	*189	62	120	104	102	31	123	14	435	55
21	35	668	160	56	*110	137	94	31	64	*15	294	49
22	34	400	133	60	109	737	97	28	48	16	398	48
23	29	322	112	59	170	733	94	32	38	12	294	49
24	27	273	105	60	176	497	86	52	40	11	221	77
25	31	204	96	60	143	322	84	46	35	13	176	73
26	32	154	84	60	132	335	88	36	36	15	148	64
27	42	128	80	60	116	273	88	32	32	16	132	64
28	46	117	83	53	109	226	88	29	32	16	116	98
29	95	235	105	50	-------	195	94	41	31	15	104	78
30	75	174	275	43	-------	156	102	70	28	13	102	73
31	64	-------	224	41	-------	133	-------	86	-------	12	109	-------

* Discharge measurement made on this day.

Note.--No gage-height record Feb. 3-21; discharge estimated on basis of recorded range in stage, weather records, and records from nearby stations. Backwater from debris Oct. 1 to Nov. 21.

Assunpink Creek at Trenton--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	1,829	104	42	59.0	0.660	0.76
November	4,065	733	50	136	1.52	1.69
December	4,288	446	61	138	1.54	1.78
Calendar year 1950	41,661	766	18	114	1.28	17.33
January 1951	4,255	311	80	137	1.53	1.77
February	6,532	779	113	233	2.61	2.72
March	5,254	538	98	169	1.89	2.19
April	5,256	515	93	175	1.96	2.19
May	3,284	357	52	106	1.19	1.37
June	1,639	90	39	54.6	.611	.68
July	1,035	57	20	33.4	.374	.43
August	1,708	180	18	55.1	.616	.71
September	718	30	19	23.9	.267	.30
Water year 1950-51	39,863	779	18	109	1.22	16.59
October 1951	1,984	160	20	64.0	.716	.83
November	5,876	443	88	196	2.19	2.44
December	7,328	1,230	78	236	2.64	3.05
Calendar year 1951	44,869	1,230	18	123	1.38	18.68
January 1952	7,565	535	134	244	2.73	3.15
February	5,382	442	104	186	2.08	2.24
March	7,309	606	102	236	2.64	3.04
April	6,782	1,420	84	226	2.53	2.82
May	6,146	700	92	198	2.21	2.56
June	4,113	642	44	137	1.53	1.71
July	3,516	340	39	113	1.26	1.46
August	6,489	654	78	209	2.34	2.70
September	5,078	806	55	169	1.89	2.11
Water year 1951-52	67,568	1,420	20	185	2.07	28.11
October 1952	1,550	70	36	50.0	.559	.64
November	4,150	793	36	138	1.54	1.73
December	5,312	370	84	171	1.91	2.21
Calendar year 1952	63,392	1,420	36	173	1.94	26.37
January 1953	8,258	718	89	266	2.98	3.44
February	4,419	342	104	158	1.77	1.84
March	10,129	982	94	327	3.66	4.21
April	8,170	528	132	272	3.04	3.40
May	5,401	405	107	174	1.95	2.25
June	2,306	197	32	76.9	.860	.96
July	2,254	370	20	72.7	.813	.94
August	1,429	94	20	46.1	.516	.59
September	698	35	19	23.3	.261	.29
Water year 1952-53	54,076	982	19	148	1.66	22.50
October 1953	1,297	203	16	41.8	.468	.54
November	2,160	128	30	72.0	.805	.90
December	4,634	542	53	149	1.67	1.93
Calendar year 1953	51,155	982	16	140	1.57	21.29
January 1954	2,670	188	56	86.1	.963	1.11
February	2,255	146	40	80.5	.900	.94
March	4,769	358	84	154	1.72	1.98
April	3,702	375	69	123	1.38	1.54
May	3,546	331	50	114	1.28	1.48
June	1,190	80	20	39.7	.444	.50
July	548.4	30	7.1	17.7	.198	.23
August	1,682.8	282	7.8	54.3	.607	.70
September	3,987	614	36	133	1.49	1.66
Water year 1953-54	32,441.2	614	7.1	88.9	.994	13.51
October 1954	1,228	95	27	39.6	.443	.51
November	4,141	668	41	138	1.54	1.72
December	4,230	275	75	136	1.52	1.76
Calendar year 1954	33,949.2	668	7.1	93.0	1.04	14.13
January 1955	2,857	217	41	92.2	1.03	1.19
February	4,396	500	42	157	1.76	1.83
March	7,493	737	104	242	2.71	3.12
April	3,157	197	75	105	1.17	1.31
May	1,559	89	28	50.3	.562	.65
June	1,864	156	28	62.1	.694	.78
July	534	35	11	17.2	.192	.22
August	10,817	1,880	14	349	3.90	4.50
September	2,001	98	46	66.7	.746	.83
Water year 1954-55	44,277	1,880	11	121	1.35	18.42

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 October 1951, October 1952 to September 1955.

Gage.--Water-stage recorder and concrete control. Datum of gage is 24.94 ft above mean sea level, datum of 1929.

Average discharge.--14 years (1940-51, 52-55), 123 cfs.

Extremes.--1940-51, 1952-55: Maximum discharge, 3,360 cfs Sept. 1, 1940 (gage height, 12.05 ft); minimum, 13.1 cfs Feb. 14, 1942, resutl of freezeup; minimum daily, 20 cfs Aug. 12, 1949, Aug. 1, 1950, July 23-26, Aug. 4-6, 1955.

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).--

1950-51: Nov. 26 (3 p.m.) 1,040 cfs (7.80 ft); Dec. 9 (6 a.m.) 651 cfs (5.83 ft); Feb. 22 (2 p.m.) 1,040 cfs (7.80 ft); Mar. 31 (10 a.m.) 1,090 cfs (8.03 ft); Apr. 4 (2 a.m.) 760 cfs (6.43 ft).

1951-52: Station discontinued October 1951 tp October 1952.

1952-53: Nov. 23 (2 a.m.) 1,030 cfs (7.73 ft); Jan. 10 (6 a.m.) 782 cfs (6.55 ft); Feb. 16 (6 p.m.) 760 cfs (6.43 ft); Mar. 13 (9 p.m.) 1,840 cfs (9.92 ft); Mar. 16 (8 p.m.) 708 cfs (6.15 ft); Apr. 14 (6 p.m.) 653 cfs (5.84 ft); May 18 (12 p.m.) 721 cfs (6.22 ft).

1953-54: Dec. 15 (8 a.m.) 869 cfs (6.99 ft); Apr. 24 (10 p.m.) 735 cfs (6.30 ft); May 22 (9 a.m.) 847 cfs (6.88 ft); Sept. 12 (3 a.m.) 1,460 cfs (9.26 ft).

1954-55: Nov. 21 (6 p.m.) 752 cfs (6.39 ft); Feb. 7 (9 p.m.) 708 cfs (6.15 ft); Mar. 23 (9 a.m.) 794 cfs (6.61 ft); Aug. 13 or 14 (time unknown) 1,950 cfs (10.10 ft).

Remarks.--Flow regulated occasionally by lakes above station.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	62	117	128	274	123	534	98	115	110	38	33
2	*43	60	100	102	388	133	275	96	96	102	35	35
3	41	59	98	98	202	125	526	93	89	74	33	46
4	41	62	130	120	145	180	592	86	80	62	33	43
5	40	123	236	136	128	208	310	80	78	82	33	38
6	40	112	145	110	117	156	216	76	78	76	32	35
7	40	86	117	107	192	139	175	78	72	59	32	35
8	41	80	387	145	441	128	156	74	68	51	38	35
9	44	76	546	110	279	117	145	76	72	48	41	32
10	70	74	262	93	181	105	145	72	76	44	38	30
11	60	68	198	89	127	100	178	82	105	43	43	30
12	55	62	168	89	123	100	156	255	86	40	73	30
13	70	60	136	84	128	98	165	164	76	57	313	32
14	59	59	120	84	130	170	139	105	91	59	125	30
15	53	60	112	311	*125	230	120	91	*96	46	68	30
16	51	66	125	360	112	162	115	82	82	43	55	32
17	50	64	125	175	127	136	145	76	72	41	50	30
18	50	62	105	139	299	120	128	68	64	44	46	30
19	50	59	96	125	215	110	120	70	60	48	43	30
20	48	57	82	115	208	299	117	74	57	66	40	30
21	46	98	78	110	305	361	107	103	55	55	46	29
22	44	98	76	96	877	205	107	230	53	46	68	29
23	183	80	80	89	597	162	168	159	79	44	48	30
24	361	72	86	187	289	148	175	392	139	43	40	30
25	139	200	86	250	205	136	133	530	74	40	38	36
26	100	900	76	159	157	115	120	252	60	36	40	50
27	86	552	64	125	130	107	110	159	74	35	44	40
28	80	199	68	117	130	105	100	153	80	36	41	35
29	72	175	96	133	-------	110	98	168	66	43	36	35
30	68	142	156	142	-------	290	96	314	91	44	38	30
31	66	-------	148	117	-------	976	-------	162	-------	40	35	-------

* Discharge measurement made on this day.

Crosswicks Creek at Extonville--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30											
2	30											
3	30											
4	30											
5	36											
6	38											
7	51											
8	396											
9	374											
10	72											
11	159											
12	247											
13	123											
14	93											
15	78											
16	68											
17	68											
18	64											
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30					-------							
31		-------			-------		-------		-------			-------

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	59	102	133	145	110	142	148	142	53	40	38
2	80	59	98	130	128	105	148	156	150	55	43	38
3	85	66	195	248	125	105	142	139	112	60	59	38
4	90	66	194	263	125	274	136	128	96	53	48	36
5	90	66	182	172	117	371	181	165	86	48	46	40
6	85	64	438	148	115	212	162	230	80	48	44	46
7	80	60	322	133	123	165	258	198	86	76	41	43
8	75	57	177	136	128	148	421	175	91	62	40	40
9	70	57	142	*441	117	148	271	191	78	55	48	38
10	70	60	139	710	107	150	283	153	74	48	284	36
11	70	68	230	452	102	150	396	125	68	44	139	35
12	65	62	430	316	117	153	286	110	64	43	76	36
13	65	60	229	216	128	1,080	334	98	99	43	60	70
14	60	62	162	184	112	1,170	572	96	273	44	88	57
15	60	68	145	165	243	493	402	146	175	44	269	43
16	60	156	130	153	658	596	320	165	125	44	136	40
17	65	115	123	139	354	485	383	162	100	43	107	38
18	65	91	115	195	219	293	252	464	89	41	148	36
19	60	86	107	258	168	327	442	429	80	41	98	35
20	60	*86	102	181	153	372	402	181	74	46	80	38
21	60	314	130	162	218	258	252	184	68	62	68	48
22	60	798	358	278	298	194	205	172	62	55	60	50
23	60	824	290	205	182	175	175	271	78	88	57	43
24	60	353	198	274	148	237	159	293	72	198	55	38
25	60	184	162	507	142	358	148	156	62	91	53	38
26	65	156	142	313	133	314	148	165	59	70	50	38
27	65	136	125	194	125	244	156	201	57	60	48	38
28	62	117	107	188	117	198	142	145	53	57	48	38
29	60	105	102	184	-------	178	130	120	57	50	46	36
30	59	100	100	156	-------	162	125	110	57	46	43	35
31	59	-------	102	148	-------	150	-------	142	-------	44	40	-------

* Discharge measurement made on this day.

Note.--No gage-height record Oct. 1-27; discharge estimated on basis of weather records and records for Assunpink Creek at Trenton and North Branch Rancocas Creek at Pemberton.

Crosswicks Creek at Extonville--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	80	82	80	76	86	89	148	76	36	27	318
2	35	74	78	78	82	181	82	128	70	35	26	93
3	33	68	72	78	84	159	78	117	62	33	40	78
4	32	66	70	78	100	357	72	172	59	33	50	62
5	30	62	107	76	93	212	70	148	59	36	41	51
6	32	60	110	80	86	136	76	120	53	38	82	46
7	55	230	216	78	80	115	78	107	50	36	48	41
8	46	452	190	70	74	102	80	181	48	38	36	41
9	40	230	125	68	76	93	91	360	48	35	69	41
10	40	153	*159	80	76	91	78	362	48	32	153	40
11	38	125	178	65	74	84	76	241	50	30	72	753
12	38	105	123	96	68	80	74	172	50	30	50	1,140
13	40	93	188	82	59	91	80	136	53	29	44	376
14	40	86	395	78	64	223	86	117	57	29	40	150
15	40	80	755	84	70	297	84	102	53	36	36	115
16	38	76	247	105	76	156	84	96	53	41	36	107
17	40	74	172	142	91	120	180	91	59	33	*36	162
18	41	78	130	96	107	105	384	91	50	30	32	128
19	40	74	110	107	84	93	221	84	46	30	30	115
20	40	70	102	117	78	145	148	82	44	30	30	117
21	41	76	102	350	80	139	117	313	41	27	114	107
22	40	74	107	245	162	107	98	726	38	27	98	219
23	41	125	107	148	125	98	93	344	50	26	55	142
24	40	238	96	125	100	91	428	184	60	26	43	98
25	48	153	89	115	100	115	461	142	46	23	38	84
26	59	191	86	115	93	184	212	120	41	57	38	76
27	48	136	84	115	86	125	238	102	40	48	35	70
28	104	112	82	107	80	100	397	86	35	36	35	64
29	306	98	86	91	-------	93	319	55	33	33	35	60
30	268	89	86	86	-------	89	188	89	35	30	33	60
31	102	-------	84	82	-------	86	-------	89	-------	29	205	-------

* Discharge measurement made on this day.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	64	96	136	184	b64	112	120	100	96	38	a23	51
2	59	93	117	168	b66	136	112	96	64	38	a22	51
3	57	260	102	168	b66	107	107	91	55	33	a21	50
4	55	188	96	145	b64	224	100	84	51	30	a20	50
5	51	139	93	125	b66	316	93	78	70	29	a20	46
6	59	125	82	125	89	244	93	74	60	24	a20	44
7	68	102	74	125	523	354	125	70	51	26	a30	44
8	55	96	74	110	417	218	105	68	50	27	a60	43
9	59	86	100	102	162	159	93	64	147	27	a50	41
10	57	80	142	100	128	139	89	64	133	27	a45	40
11	55	74	107	96	139	123	84	66	91	33	a50	41
12	53	74	91	89	194	112	108	62	137	33	a150	41
13	50	74	89	89	120	107	191	59	133	30	a1,400	38
14	51	70	257	86	110	96	150	59	91	27	a1,000	38
15	48	66	459	82	102	93	139	59	74	26	a500	38
16	46	68	228	82	100	107	120	*53	64	26	a300	38
17	53	74	156	78	112	102	102	50	55	26	a180	38
18	48	74	244	76	120	96	98	50	48	23	128	38
19	46	84	424	76	100	107	98	48	44	21	*203	38
20	48	228	239	74	93	100	123	46	44	21	154	90
21	48	625	153	71	91	107	123	46	44	23	93	89
22	50	428	117	74	96	337	125	50	43	21	78	29
23	46	194	110	74	134	722	117	46	40	20	78	30
24	46	162	107	74	168	340	100	46	41	20	70	55
25	44	145	102	74	125	191	107	46	55	a20	64	93
26	44	120	96	76	112	250	120	43	66	a20	60	64
27	48	110	91	74	102	272	115	41	60	a21	57	51
28	59	105	96	64	107	165	102	41	51	a22	55	73
29	93	241	125	63	-------	139	98	40	46	a22	51	96
30	162	248	318	62	-------	125	105	68	41	a22	53	62
31	165	-------	342	b62	-------	120	-------	78	-------	a23	51	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for nearby stations.
b Stage-discharge relation affected by ice.

Crosswicks Creek at Extonville--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	2,237	361	40	72.2	0.864	1.00
November	3,927	900	57	131	1.57	1.75
December	4,419	546	64	143	1.71	1.97
Calendar year 1950	38,207	900	20	105	1.26	17.02
January 1951	4,245	360	84	137	1.64	1.89
February	6,631	877	112	237	2.83	2.95
March	5,654	976	98	182	2.18	2.52
April	5,671	592	96	189	2.26	2.52
May	4,518	530	68	146	1.75	2.01
June	2,384	139	53	79.5	.951	1.06
July	1,657	110	35	53.5	.640	.74
August	1,685	313	32	54.4	.651	.75
September	1,010	50	29	33.7	.403	.45
Water year 1950-51	44,038	976	29	121	1.45	19.61
October						
November						
December						
Calendar year 1951	-	-	-	-	-	-
January						
February						
March						
April						
May						
June						
July						
August						
September						
Water year 1951-52	-	-	-	-	-	-
October 1952	2,095	90	59	67.6	.809	.93
November	4,555	824	57	152	1.82	2.03
December	5,578	438	98	180	2.15	2.48
Calendar year						
January 1953	7,382	710	130	238	2.85	3.28
February	4,847	658	102	173	2.07	2.16
March	9,375	1,170	105	302	3.61	4.17
April	7,573	572	125	252	3.01	3.37
May	5,618	464	96	181	2.17	2.50
June	2,767	273	53	92.2	1.10	1.23
July	1,812	198	41	58.5	.700	.81
August	2,462	284	40	79.4	.950	1.10
September	1,223	70	35	40.8	.488	.54
Water year 1952-53	55,287	1,170	35	151	1.81	24.60
October 1953	1,865	306	30	60.2	.720	.83
November	3,628	452	60	121	1.45	1.61
December	4,618	755	70	149	1.78	2.05
Calendar year 1953	53,170	1,170	30	146	1.75	23.65
January 1954	3,317	350	65	107	1.28	1.48
February	2,424	162	59	86.6	1.04	1.08
March	4,153	357	80	134	1.60	1.85
April	4,762	461	70	159	1.90	2.12
May	5,305	726	55	171	2.05	2.36
June	1,507	76	33	50.2	.600	.67
July	1,032	57	23	33.3	.398	.46
August	1,707	205	26	55.1	.659	.76
September	4,954	1,140	40	165	1.97	2.20
Water year 1953-54	39,272	1,140	23	108	1.29	17.47
October 1954	1,887	165	44	60.9	.728	.84
November	4,529	625	66	151	1.81	2.01
December	4,967	459	74	160	1.91	2.21
Calendar year 1954	40,544	1,140	23	111	1.33	18.04
January 1955	2,948	184	62	95.1	1.14	1.31
February	3,770	523	64	135	1.61	1.68
March	5,820	722	93	188	2.25	2.59
April	3,362	191	84	112	1.34	1.50
May	1,886	100	40	60.8	.727	.84
June	2,045	147	40	68.2	.816	.91
July	799	38	20	25.8	.309	.36
August	5,086	1,400	20	164	1.96	2.26
September	1,540	96	29	51.3	.614	.69
Water year 1954-55	38,639	1,400	20	106	1.27	17.20

Middle Branch Mount Misery Brook in Lebanon State Forest

Location.--Lat 39°55'00", long 74°30'30", on right bank in Lebanon State Forest, Burlington County, 20 ft upstream from North Branch Road Bridge, 0.3 mile upstream from South Branch Mount Misery Brook, and 5.1 miles southeast of Browns Mills.

Drainage area.--2.73 sq mi.

Records available.--October 1952 to September 1955.

Gage.--Water-stage recorder and concrete control. Datum of gage is 99.71 ft above mean sea level (New Jersey Geological Survey bench mark).

Extremes.--1952-55: Maximum discharge, 15 cfs Mar. 13, 1953 (gage height, 2.00 ft); no flow on many days.

Peak discharge (base, 9.0 cfs).--
1952-53: Mar. 13 (8 to 11 a.m.) 15 cfs (2.00 ft); Apr. 16 (1 p.m.) 9.0 cfs (1.84 ft); May 5 (8 a.m.) 12 cfs (1.92 ft); May 23 (8 a.m.) 10 cfs (1.89 ft); June 13 (11 p.m.) 9.0 cfs (1.84 ft).
1953-54: Sept. 11 (1 p.m.) 10 cfs (1.88 ft).
1954-55: Aug. 13 (12 m.) 10 cfs (1.88 ft).

Daily discharge, in cubic feet per second, 1952-55

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a0.30	0.05	1.0	2.2	2.6	a2.7	4.1	4.3	4.7	1.4	0.37	0.10
2	a.40	.05	1.0	2.2	2.5	a2.5	4.3	4.3	4.3	1.3	.37	.07
3	a.70	*.05	*1.6	3.3	2.4	a2.5	4.1	4.0	3.8	1.2	.37	.05
4	a.50	.07	1.6	3.1	2.4	a2.8	4.0	3.6	3.3	1.0	.33	.04
5	a.50	.07	1.9	2.7	2.4	a4.0	4.3	8.1	3.0	.96	.30	.04
6	a.60	.05	*2.9	2.4	2.2	a3.4	4.0	6.8	2.7	.96	.26	.05
7	a.50	.05	2.5	2.2	2.2	a2.6	6.0	7.6	3.4	1.5	.20	.08
8	a.40	.05	2.0	2.4	2.4	a2.6	6.1	6.1	3.1	1.4	.18	.07
9	a.30	.07	1.8	*5.5	2.2	a2.8	5.1	5.3	2.9	1.2	.76	.05
10	.30	.05	1.6	6.3	2.1	a2.7	6.1	4.7	2.6	.96	2.4	.03
11	.30	.05	2.3	5.3	2.0	2.6	6.3	4.3	2.4	.83	2.2	.02
12	.30	.04	2.7	4.3	2.1	3.2	5.5	4.0	2.2	.76	1.4	.02
13	.26	.04	2.4	3.6	2.1	12	6.3	3.6	4.0	.64	.89	.15
14	*.23	.03	2.0	3.3	a2.1	9.6	7.3	3.4	7.6	.59	1.9	.08
15	*.20	.10	1.7	3.0	a3.5	7.3	5.9	4.8	5.7	.49	4.1	.04
16	.18	.23	1.5	2.9	a6.0	9.6	7.4	4.9	4.1	.45	2.7	.02
17	.18	.15	1.4	2.7	4.7	a8.8	7.3	4.5	3.4	.37	2.6	.01
18	.15	.13	1.4	3.0	3.6	a7.8	6.3	4.9	3.0	.33	2.4	0
19	.13	.13	1.4	3.1	3.1	a6.8	7.9	4.1	2.6	.26	1.8	0
20	.13	.20	1.3	3.0	3.0	a6.2	6.6	4.5	2.5	.30	1.4	0
21	.11	1.0	2.5	2.9	4.6	a5.6	5.7	4.1	2.2	.30	*1.1	*0
22	.11	5.6	5.1	3.0	4.7	a5.2	5.1	4.1	2.1	.26	.89	.03
23	.11	4.9	4.1	2.9	4.0	a4.8	4.7	8.0	2.5	3.3	.76	*.01
24	.11	3.3	3.1	3.3	3.3	a5.6	4.5	6.8	2.2	5.5	.64	0
25	.10	2.2	2.6	4.3	a3.1	a7.8	4.3	5.3	2.0	3.0	.54	0
26	.10	1.8	2.2	3.6	a2.9	*7.0	4.7	5.5	1.8	1.8	.41	0
27	.08	1.5	2.1	3.1	a2.8	5.9	4.5	5.3	1.6	1.4	.33	0
28	.08	1.3	1.9	3.1	a2.9	5.3	4.1	4.5	1.6	.96	.26	0
29	.08	1.2	1.8	3.0		4.9	3.8	4.0	1.5	.76	.20	0
30	.07	1.1	1.7	2.7	-------	4.5	3.6	4.0	1.5	.64	.15	0
31	.07	-------	1.9	2.6	-------	4.3	-------	4.7	-------	.49	.13	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for McDonald Branch in Lebanon State Forest.

Middle Branch Mount Misery Brook in Lebanon State Forest--Continued

Daily discharge, in cubic feet per second, 1952-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.15	1.0	1.5	a1.6	a1.5	1.5	a2.6	2.1	0.33	0	1.3
2	0	.13	.96	1.4	a1.6	1.6	a1.4	a2.2	2.0	.26	0	1.0
3	0	.11	.89	1.4	a1.6	2.1	a1.3	2.0	1.9	.23	0	.70
4	0	.10	a.85	1.4	1.6	3.0	a1.3	a2.1	1.9	.20	0	.41
5	0	.07	a1.1	1.4	a1.6	2.6	1.4	a1.9	1.8	.23	.01	.23
6	0	.10	a1.2	1.4	a1.5	2.1	1.4	a1.7	1.8	.20	.01	.13
7	.02	2.6	a2.0	1.3	a1.3	1.8	1.4	a1.6	1.7	.18	.01	.08
8	0	4.0	1.9	1.3	a1.3	1.7	1.5	a2.8	1.6	.20	0	.05
9	0	3.1	1.8	1.2	a1.2	1.7	1.5	a3.6	1.5	.15	.08	.03
10	0	2.2	1.8	1.2	a1.2	1.6	1.4	a4.3	1.5	.13	.41	.07
11	0	1.8	1.6	1.1	a1.2	1.6	1.3	a3.5	1.5	.08	.26	8.1
12	0	1.4	1.6	a1.1	a1.2	1.5	1.2	a2.8	1.4	.05	.20	8.0
13	0	1.3	1.9	a1.1	a1.2	1.6	1.1	a2.5	1.3	.03	.11	4.1
14	0	1.1	4.4	a1.1	a1.1	2.7	1.0	a2.2	1.3	.01	.05	2.6
15	0	1.0	4.7	1.1	a1.1	2.9	.96	a2.0	1.3	.07	.03	1.9
16	0	.96	3.6	1.4	a1.1	2.5	1.0	a1.9	1.3	.02	.02	2.6
17	0	.89	2.7	1.7	a1.5	2.0	2.5	a1.9	1.2	.01	0	2.6
18	0	.76	2.2	a1.4	a1.4	1.8	3.8	a1.8	1.1	0	0	2.2
19	0	.70	2.0	a1.4	a1.3	1.8	*2.7	a1.7	1.0	0	0	2.0
20	0	.64	2.0	1.6	a1.2	2.4	a2.0	a2.0	.96	0	0	1.8
21	0	.64	2.0	3.0	a1.5	2.1	a1.8	a6.0	.83	0	.01	1.6
22	0	.59	2.0	a3.0	a2.0	1.9	a1.6	a8.0	.70	0	.02	1.8
23	0	1.3	2.0	a2.6	a1.7	1.7	a1.8	a5.0	.83	0	0	1.5
24	0	1.8	1.9	a2.3	a1.8	1.6	a2.6	a4.0	.83	0	0	1.4
25	0	2.0	1.8	a2.1	a1.7	2.0	a2.0	a3.2	.76	0	0	1.2
26	0	2.0	1.7	a2.0	a1.6	2.2	a1.6	a2.9	.64	.06	0	1.1
27	0	1.6	1.7	a2.2	a1.5	2.0	a3.0	a2.6	.54	.04	0	.96
28	.09	1.4	1.6	a2.5	a1.4	1.8	a4.0	a2.4	.45	.01	0	.83
29	.42	1.3	1.6	a2.0		1.7	a4.0	a2.3	.41	0	0	.76
30	.30	1.1	1.6	a1.8	-------	1.6	a3.1	a2.3	.37	0	0	.70
31	.20	-------	1.5	a1.6	-------	1.5	-------	a2.2	-------	0	1.0	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of staff gage readings on Jan. 20, 21, Feb. 4, May 3, weather records, and records for McDonald Branch Bispham Mill Creek in Lebanon State Forest.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.70	0.20	1.4	2.6	a0.60	1.5	1.8	1.6	1.4	0.26	0	0.18
2	.64	.35	1.2	2.5	.59	1.5	1.7	1.9	1.3	.20	0	.15
3	.64	.70	1.0	2.2	a.60	1.4	1.7	1.7	.96	.13	0	.13
4	.59	.76	.96	2.1	.59	1.9	1.6	1.5	.76	.08	0	.11
5	.49	.89	.89	1.9	a.60	2.4	1.6	1.4	.64	.08	0	.08
6	.49	.83	.83	1.8	a1.0	3.0	1.6	1.3	.54	.20	0	.07
7	.45	.70	a.70	1.8	a2.0	*3.7	1.7	1.1	.45	.18	0	.05
8	.41	.59	.70	1.7	3.6	2.9	1.6	1.0	.49	.13	0	.03
9	.41	.49	.76	1.6	2.6	2.5	1.5	.96	1.4	.08	0	.02
10	.41	.41	1.1	1.6	2.1	2.2	1.4	.89	1.7	.18	0	.02
11	.37	.37	1.1	1.5	2.2	2.0	1.3	.89	1.6	.49	0	.02
12	.33	.33	1.1	1.4	2.5	1.9	1.5	.83	1.6	.37	.13	.02
13	.30	.30	.96	1.4	a2.1	1.8	2.2	.83	1.4	.30	7.6	.01
14	.26	.26	1.6	1.4	a1.8	1.7	2.2	.76	1.1	.20	6.8	0
15	.26	.23	2.9	1.4	a1.6	1.6	2.1	.76	.89	.13	3.6	0
16	.30	.23	2.6	1.4	1.4	1.8	1.8	.70	.70	.08	2.2	0
17	.26	.23	2.0	1.3	1.8	1.6	1.6	.64	.54	.03	1.5	0
18	.20	.20	2.4	1.3	1.8	1.7	1.5	.59	.41	.01	1.1	0
19	.20	.20	3.1	1.3	1.7	1.7	1.4	.54	.37	0	.9	0
20	.18	.26	2.6	1.2	1.5	1.7	1.4	.49	.37	0	.8	.32
21	.18	1.3	2.1	1.2	1.5	1.9	1.4	.49	.33	0	.7	.41
22	.15	2.2	1.7	a1.2	1.5	3.4	1.4	.45	.26	0	.6	.41
23	.13	2.1	1.6	a1.1	1.9	4.0	1.5	.45	.20	0	.55	.37
24	.13	1.6	1.5	a1.0	1.9	3.1	1.4	.45	.18	0	.5	.41
25	.11	1.4	1.5	a1.0	1.7	2.5	1.7	.41	.27	0	.45	.33
26	.11	1.1	1.4	a.90	1.5	2.7	*2.0	.37	.96	0	.41	.20
27	.11	1.0	1.4	a.85	1.4	2.6	2.1	.33	.89	0	.37	.13
28	.13	.89	1.4	a.80	1.4	2.4	1.8	.30	.83	0	.30	.18
29	.15	1.5	1.9	a.75		2.1	1.7	.30	.54	0	.26	.15
30	.23	1.5	3.3	a.70	-------	2.0	1.6	.54	.37	0	.23	.11
31	.26	-------	3.1	a.65	-------	1.9	-------	.76	-------	0	.20	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of staff gage readings on Feb. 2, 4 and records for McDonald Branch in Lebanon State Forest.

Middle Branch Mount Misery Brook in Lebanon State Forest--Continued

Monthly and annual discharge, in cubic feet per second, 1952-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1952	7.58	0.70	0.07	0.245	0.090	0.10
November	25.56	5.6	.03	.852	.312	.35
December	65.0	5.1	1.0	2.10	.769	.89
Calendar year 1952	-	-	-	-	-	-
January 1953	101.0	6.3	2.2	3.26	1.19	1.38
February	83.9	6.0	2.0	3.00	1.10	1.14
March	163.4	12	2.5	5.27	1.93	2.23
April	159.9	7.9	3.6	5.33	1.95	2.18
May	154.1	8.1	3.4	4.97	1.82	2.10
June	90.3	7.6	1.5	3.01	1.10	1.23
July	35.31	5.5	.26	1.14	418	.48
August	32.34	4.1	.13	1.04	.381	.44
September	.96	.15	0	.032	.012	.01
Water year 1952-53	919.35	12	0	2.52	.923	12.53
October 1953	1.03	.42	0	.033	.012	.01
November	36.84	4.0	.07	1.23	.451	.50
December	59.60	4.7	.85	1.92	.703	.81
Calendar year 1953	918.68	12	0	2.52	.923	12.51
January 1954	51.6	3.0	1.1	1.66	.608	.70
February	40.0	2.0	1.1	1.43	.524	.54
March	60.6	3.0	1.5	1.95	.714	.83
April	57.16	4.0	.96	1.91	.700	.78
May	88.0	8.0	1.6	2.84	1.04	1.20
June	36.52	2.1	.37	1.22	.447	.50
July	2.49	.33	0	.080	.029	.03
August	2.22	1.0	0	.072	.026	.03
September	51.75	8.1	.03	1.72	.630	.70
Water year 1953-54	487.81	8.1	0	1.34	.491	6.63
October 1954	9.58	.70	.11	.309	.113	.13
November	23.12	2.2	.20	.771	.282	.31
December	50.80	3.3	.70	1.64	.601	.69
Calendar year 1954	473.84	8.1	0	1.30	.476	6.44
January 1955	43.55	2.6	.65	1.40	.513	.59
February	45.48	3.6	.59	1.62	.593	.62
March	69.3	4.0	1.4	2.24	.821	.94
April	49.8	2.2	1.3	1.66	.608	.68
May	25.23	1.9	.30	.814	.298	.34
June	23.45	1.7	.18	.782	.286	.32
July	3.13	.49	0	.101	.037	.04
August	29.20	7.6	0	.942	.345	.40
September	3.91	.41	0	.130	.048	.05
Water year 1954-55	376.55	7.6	0	1.03	.377	5.11

North Branch Rancocas Creek at Pemberton

Location.--Lat 39°58'10", long 74°41'05", on right bank at downstream side of 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 1955.

Gage.--Water-stage recorder above concrete dams. Datum of gage is 31.19 ft above mean sea level, datum of 1929. Prior to June 9, 1923, staff gage and June 9, 1923, to Aug. 9, 1951, water-stage recorder, at site 600 ft downstream at datum 6.54 ft lower.

Average discharge.--34 years, 164 cfs.

Extremes.--1921-55: Maximum discharge, 1,730 cfs Aug. 21, 1939 (gage height, 10.77 ft, from floodmark in recorder shelter, site and datum then in use), from rating curve extended above 1,300 cfs; minimum daily, 9 cfs Sept. 29, 1932.

Peak discharge (base, 600 cfs).--
1950-51: Apr. 3 (1 p.m.) 612 cfs (6.38 ft).
1951-52: Dec. 22 (3 a.m.) 756 cfs (2.64 ft); Apr. 29 (3 p.m.) 1,170 cfs (3.08 ft); May 27 (4 a.m.) 610 cfs (2.46 ft); June 2 (4 p.m.) 782 cfs (2.69 ft); Aug. 11 (10 a.m.) 722 cfs (2.60 ft); Aug. 17 (9 a.m.) 823 cfs (2.63 ft).
1952-53: Nov. 22 (8 p.m.) 690 cfs (2.56 ft); Mar. 14 (3 a.m.) 825 cfs (2.72 ft).
1953-54: Sept. 12 (10 a.m.) 690 cfs (2.56 ft).
1954-55: Aug. 14 (2 p.m.) 673 cfs (2.54 ft).

Remarks.--Flow regulated occasionally by operation of gate in dam.

Revisions.--Revised figures of discharge, in cubic feet per second, in the water year 1933, superseding those published in Special Report 5, are given herewith:

1932
Dec. 29..... 287

1933
Aug. 24..... 1,190
25..... 1,170
26..... 763

Month	Maximum	Minimum	Mean	Per square mile	Runoff in inches
December 1932.....	287	100	148	1.33	1.53
August 1933.....	1,190	40	245	2.21	2.55
Water year 1932-33.	1,190	27	179	1.61	21.88

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	68	151	170	132	226	210	474	154	227	227	95	53
2	*65	130	145	122	253	206	444	145	188	229	78	53
3	64	75	141	115	232	200	568	127	165	178	70	56
4	62	54	151	118	212	212	580	145	148	116	70	*49
5	62	70	175	125	194	221	527	152	141	128	68	49
6	58	*81	176	124	180	216	440	119	135	123	*64	49
7	60	85	*168	124	210	206	381	120	123	108	65	53
8	74	79	248	138	293	195	334	116	123	97	70	53
9	77	82	240	129	263	184	306	109	128	87	70	49
10	87	88	243	117	237	173	286	107	137	82	66	46
11	82	93	234	109	212	162	187	147	154	79	70	43
12	76	88	205	109	200	152	190	231	158	77	89	46
13	82	84	190	107	196	145	*230	221	146	78	77	46
14	78	80	173	108	192	180	221	198	152	79	66	46
15	70	76	156	*189	184	207	196	170	160	78	62	53
16	64	75	157	188	*175	204	188	155	151	83	59	53
17	76	69	151	179	182	197	193	141	132	136	59	49
18	148	70	128	165	227	188	186	120	123	175	59	46
19	137	70	123	149	219	181	180	107	114	172	59	46
20	72	69	119	138	236	272	173	108	105	154	59	46
21	39	88	109	130	216	291	173	128	*101	147	59	46
22	52	106	101	101	454	*293	172	198	108	130	59	49
23	84	111	97	98	476	282	189	232	149	113	59	53
24	106	104	97	145	413	258	204	348	157	101	53	53
25	118	236	98	176	300	228	210	a498	136	92	56	62
26	107	438	97	176	285	202	204	a454	111	85	59	70
27	100	425	103	168	260	184	185	293	107	78	59	66
28	90	403	104	159	234	173	156	276	109	79	56	59
29	92	306	97	158	-------	171	154	265	110	103	56	56
30	87	192	121	158	-------	253	168	275	138	106	53	43
31	114	-------	135	153	-------	486	-------	269	-------	102	49	-------

* Discharge measurement made on this day.
a Computed from estimated or partly estimated gage-height graph.

North Branch Rancocas Creek at Pemberton--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	42	108	139	234	268	192	239	633	551	104	87	267
2	46	121	135	250	279	197	234	443	764	99	87	357
3	42	208	130	268	273	197	229	290	673	91	99	345
4	42	218	121	262	380	229	*218	203	390	99	99	273
5	42	234	135	290	484	320	229	135	351	99	91	229
6	42	229	153	320	436	351	234	139	314	91	101	192
7	69	*256	149	296	364	396	234	203	268	*80	177	173
8	203	273	139	273	308	390	234	273	239	87	273	*153
9	208	279	130	245	239	268	229	229	213	205	370	139
10	153	245	*130	250	245	250	250	234	197	273	524	126
11	149	208	121	273	234	387	250	234	173	245	*714	117
12	168	182	113	268	223	579	250	256	163	177	649	117
13	158	168	104	250	213	579	239	268	158	139	557	113
14	130	158	104	234	203	513	262	333	153	113	436	113
15	*99	168	180	218	192	443	197	333	149	104	314	113
16	108	168	173	213	187	357	229	345	144	95	371	117
17	95	168	173	208	239	273	314	314	135	95	712	117
18	108	158	213	229	285	*285	296	250	126	95	588	117
19	173	149	273	234	296	314	314	208	117	95	403	126
20	144	130	282	239	279	364	285	187	121	95	308	139
21	126	121	624	234	256	273	262	203	126	139	262	130
22	84	117	*715	234	239	302	256	239	130	239	229	117
23	76	121	593	218	229	376	239	250	*144	273	208	121
24	80	126	438	273	223	390	218	234	168	229	192	126
25	108	121	322	268	213	409	218	285	168	173	168	117
26	113	158	*345	290	208	396	250	419	149	139	153	108
27	108	173	326	339	197	364	343	542	130	121	130	117
28	99	173	279	453	192	326	730	443	121	108	130	113
29	99	163	256	528	187	273	*1,050	333	117	99	130	108
30	126	149	250	463	-------	256	879	250	108	91	130	108
31	108	-------	245	376	-------	245	-------	290	-------	95	135	-------

* Discharge measurement made on this day.
Note.--Waste gate open Aug. 17-19.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	108	87	182	163	223	229	279	250	302	113	91	80
2	108	87	182	173	213	213	268	262	279	117	87	76
3	139	84	168	223	203	197	268	273	279	113	91	80
4	149	84	223	256	197	234	279	262	256	113	87	76
5	144	84	245	250	192	285	285	273	223	108	87	80
6	144	87	314	223	187	302	268	308	208	104	84	84
7	139	87	320	213	182	208	308	409	208	113	80	87
8	108	84	302	213	182	229	345	463	197	126	84	80
9	104	84	268	354	182	234	357	456	187	108	104	76
10	113	84	245	491	177	229	390	396	177	99	144	76
11	113	87	292	477	173	229	456	357	163	95	158	72
12	99	84	345	450	173	234	491	314	149	95	130	76
13	95	84	339	383	173	584	477	256	163	95	108	91
14	95	80	285	308	168	764	557	234	262	*91	144	95
15	91	91	250	308	256	698	549	234	*351	91	182	80
16	87	126	223	285	390	682	513	239	326	84	245	72
17	91	139	197	262	422	633	506	268	279	80	245	68
18	117	139	182	256	370	564	470	*402	245	80	229	64
19	99	113	173	256	262	491	470	396	218	76	213	60
20	91	113	153	245	262	416	*477	409	192	84	177	60
21	91	229	182	239	290	422	416	314	163	95	144	72
22	87	578	297	245	314	390	351	268	153	95	126	76
23	87	633	370	245	320	345	345	383	163	153	117	72
24	91	498	339	273	296	376	383	470	163	229	113	68
25	104	339	290	370	262	477	320	429	144	239	104	72
26	99	268	182	345	245	450	285	*357	135	173	95	72
27	95	239	177	262	234	422	273	357	126	139	87	68
28	87	223	187	273	245	345	256	339	121	121	84	64
29	87	208	177	262	-------	333	239	279	130	108	84	60
30	104	187	173	245	-------	314	239	268	126	87	84	57
31	95	-------	177	234	-------	290	-------	290	-------	99	80	-------

* Discharge measurement made on this day.

North Branch Rancocas Creek at Pemberton--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60	121	168	130	135	153	144	245	e145	80	47	168
2	60	113	153	126	130	173	139	234	e157	64	50	177
3	60	108	139	126	130	203	135	218	139	64	57	135
4	60	91	130	130	139	250	130	250	113	64	53	91
5	60	87	144	130	135	250	121	234	104	68	60	72
6	60	84	149	130	130	223	121	203	99	68	80	68
7	76	160	192	130	126	203	130	203	99	68	72	72
8	76	245	203	126	126	187	139	229	105	72	64	60
9	76	339	203	126	126	177	144	345	88	60	84	57
10	84	256	213	130	121	173	139	484	84	57	130	57
11	99	245	197	139	117	163	130	436	99	57	130	415
12	84	213	192	139	113	158	121	250	95	53	99	657
13	72	187	197	144	108	163	117	279	95	53	80	557
14	*76	168	324	144	108	208	117	268	87	53	68	339
15	64	153	422	177	108	229	113	234	87	60	60	256
16	76	144	364	218	108	223	117	223	95	76	64	245
17	68	135	339	218	121	208	182	197	95	60	57	239
18	64	121	273	182	135	192	250	177	91	53	53	229
19	60	113	229	182	130	229	268	58	91	57	47	208
20	60	108	203	192	126	234	250	*153	91	50	53	197
21	60	117	182	245	130	218	187	303	87	50	57	192
22	60	117	163	262	163	192	173	e505	76	50	64	203
23	60	153	153	223	168	173	182	e514	87	50	64	203
24	60	203	158	182	168	139	370	e390	*95	50	60	182
25	72	229	153	163	158	149	390	e328	84	47	57	158
26	80	245	149	158	158	168	279	e247	80	72	57	153
27	76	229	149	153	153	168	250	250	64	72	50	144
28	108	223	149	158	149	168	326	213	76	68	50	130
29	197	203	149	153	-------	182	357	177	60	60	47	121
30	208	182	144	144	-------	153	302	163	64	57	47	117
31	163	-------	135	139	-------	144	-------	e151	-------	50	105	-------

* Discharge measurement made on this day.
e Waste gate open; discharge computed from gate openings.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	113	130	200	233	104	139	149	153	84	68	44	64
2	108	134	183	215	104	144	139	163	76	57	41	64
3	108	146	165	203	99	139	149	168	76	50	38	64
4	104	159	149	192	95	173	158	144	76	50	38	60
5	99	155	139	171	99	203	153	121	76	64	38	60
6	104	141	133	163	113	218	173	113	76	68	38	60
7	108	131	139	163	223	245	187	113	68	53	35	60
8	99	123	129	158	262	239	173	108	74	47	47	60
9	104	116	*119	149	245	223	144	108	140	44	44	57
10	126	109	137	144	192	203	135	108	159	44	44	53
11	130	103	141	144	168	187	158	108	99	64	67	53
12	108	97	135	144	173	173	144	126	130	68	85	53
13	99	95	129	139	149	163	187	104	139	60	443	53
14	91	95	149	139	139	163	187	99	126	53	641	53
15	87	99	207	153	144	168	182	104	108	47	417	53
16	87	101	238	163	149	163	163	95	87	47	245	53
17	95	94	229	158	153	158	144	84	76	47	278	53
18	91	96	233	144	158	158	139	84	68	44	197	50
19	84	106	281	139	158	173	135	*76	68	53	182	97
20	80	136	270	135	149	197	126	87	68	41	135	182
21	*76	217	247	121	149	153	121	113	64	38	130	95
22	72	266	211	117	153	177	130	99	64	38	130	64
23	72	326	187	113	153	285	117	84	57	38	104	60
24	72	295	172	113	158	314	117	68	57	38	87	72
25	68	247	168	121	158	192	153	68	68	38	80	76
26	72	211	159	130	153	229	153	68	108	38	72	60
27	91	179	146	153	149	234	149	64	113	41	68	68
28	99	159	137	144	139	213	144	60	95	44	68	84
29	95	192	149	130	-------	203	126	60	80	44	68	87
30	121	196	207	113	-------	187	135	80	76	41	64	84
31	139	-------	233	104	-------	168	-------	91	-------	44	64	-------

* Discharge measurement made on this day.
Note.--Waste gate open Nov. 2 to Jan. 5.

North Branch Rancocas Creek at Pemberton--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	2,553	148	39	82.4	0.742	0.86
November	4,078	438	54	136	1.23	1.37
December	4,652	248	97	150	1.35	1.56
Calendar year 1950	47,251	438	39	129	1.16	15.83
January 1951	4,307	189	98	139	1.25	1.44
February	6,961	476	175	249	2.24	2.33
March	6,732	486	145	217	1.95	2.26
April	8,099	580	154	270	2.43	2.71
May	6,128	498	107	198	1.78	2.05
June	4,136	227	101	138	1.24	1.39
July	3,622	229	77	117	1.05	1.21
August	1,993	95	49	64.3	.579	.67
September	1,541	70	43	51.4	.463	.52
Water year 1950-51	54,802	580	39	150	1.35	18.37
October 1951	3,348	208	42	108	.973	1.12
November	5,250	279	108	175	1.58	1.76
December	7,490	715	104	242	2.18	2.51
Calendar year 1951	59,607	715	42	163	1.47	19.97
January 1952	8,730	528	208	282	2.54	2.92
February	7,571	484	187	261	2.35	2.54
March	10,494	579	192	339	3.05	3.52
April	9,411	1,050	197	314	2.83	3.15
May	8,998	633	135	290	2.61	3.01
June	6,760	764	108	225	2.03	2.26
July	4,187	273	80	135	1.22	1.40
August	8,827	714	87	285	2.57	2.96
September	4,608	357	108	154	1.39	1.54
Water year 1951-52	85,674	1,050	42	234	2.11	28.69
October 1952	3,261	149	87	105	.946	1.09
November	5,310	633	80	177	1.59	1.78
December	7,439	370	153	240	2.16	2.49
Calendar year 1952	85,596	1,050	80	234	2.11	28.66
January 1953	8,782	491	163	283	2.55	2.94
February	6,793	422	168	243	2.19	2.28
March	11,819	764	197	381	3.43	3.96
April	11,120	557	239	371	3.34	3.73
May	10,215	470	234	330	2.97	3.42
June	6,088	351	121	203	1.83	2.04
July	3,523	239	76	114	1.03	1.18
August	3,883	245	80	125	1.13	1.30
September	2,214	95	57	73.8	.665	.74
Water year 1952-53	80,447	764	57	220	1.98	26.95
October 1953	2,539	208	60	81.9	.738	.85
November	5,092	339	84	170	1.53	1.71
December	6,118	422	130	197	1.77	2.05
Calendar year 1953	78,186	764	57	214	1.93	26.20
January 1954	4,999	262	126	161	1.45	1.67
February	3,719	168	108	133	1.20	1.25
March	5,853	250	139	189	1.70	1.96
April	5,823	390	113	194	1.75	1.95
May	8,261	514	151	266	2.40	2.77
June	2,832	157	60	94.4	.850	.95
July	1,863	80	47	60.1	.541	.62
August	2,066	130	47	66.6	.600	.69
September	5,902	657	57	197	1.77	1.98
Water year 1953-54	55,067	657	47	151	1.36	18.45
October 1954	3,002	139	68	96.8	.872	1.01
November	4,654	326	94	155	1.40	1.56
December	5,521	281	119	178	1.60	1.85
Calendar year 1954	54,495	657	47	149	1.34	18.26
January 1955	4,608	233	104	149	1.34	1.54
February	4,288	262	95	153	1.38	1.44
March	5,984	314	139	193	1.74	2.00
April	4,470	187	117	149	1.34	1.50
May	3,121	168	60	101	.910	1.05
June	2,656	159	57	88.5	.797	.89
July	1,511	68	38	48.7	.439	.51
August	4,032	641	35	130	1.17	1.35
September	2,052	182	50	68.4	.616	.69
Water year 1954-55	45,899	641	35	126	1.14	15.39

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 1955.

Gage.--Water-stage recorder above concrete dam. Datum of gage is 68.51 ft above mean sea level, datum of 1929.

Average discharge.--14 years (1941-55), 11.7 cfs.

Extremes.--1940-55: Maximum discharge, about 4,200 cfs Sept. 1, 1940 (gage height, 6.64 ft); by computation of flow over dam and through break in earth dike; minimum, 3.2 cfs July 24, 25, 1944 (gage height, 0.95 ft).

Peak discharge (base, 50 cfs).--
1950-51: Nov. 25 (4 p.m.) 135 cfs (1.78 ft); June 23 (8:30 a.m.) 63 cfs (1.46 ft).
1951-52: Dec. 21 (8:30 a.m.) 169 cfs (1.90 ft); Mar. 11 (5:30 p.m.) 68 cfs (1.49 ft); Apr. 28 (3 a.m.) 68 cfs (1.49 ft); June 1 (8 a.m.) 59 cfs (1.44 ft); Aug. 10 (3:30 p.m.) 233 cfs (2.10 ft); Sept. 1 (2:30 p.m.) 52 cfs (1.40 ft).
1952-53: Nov. 22 (2 to 5 a.m.) 63 cfs (1.46 ft); Mar. 13 (9 a.m.) 52 cfs (1.40 ft); June 13 (6 p.m.) 83 cfs (1.56 ft).
1953-54: Dec. 14 (11 a.m.) 65 cfs (1.47 ft); Sept. 11 (11 a.m.) 65 cfs (1.47 ft).
1954-55: Aug. 13 (7 a.m.) 130 cfs (1.76 ft); Aug. 19 (9 a.m.) 56 cfs (1.42 ft); Sept. 20 (9 a.m.) 80 cfs (1.55 ft).

Remarks.--Slight regulation by pond just above station.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.5	10.1	*13.5	12.6	19.4	13.5	16.3	12.6	10.2	15.6	8.7	7.3
2	10.2	9.4	12.6	11.8	17.3	13.5	18.2	11.8	10.2	12.8	8.7	8.0
3	10.2	10.2	12.6	11.8	12.6	13.5	38	11.8	10.2	11.0	8.0	8.7
4	11.0	10.8	18.3	12.6	11.8	16.3	20	11.8	9.5	11.0	8.0	9.5
5	11.0	14.4	17.3	12.6	*11.8	12.6	16.3	11.8	9.5	22	8.0	8.0
6	11.0	11.0	14.4	11.0	11.8	11.8	16.3	11.8	9.5	12.8	8.0	8.0
7	11.0	11.0	13.5	12.6	17.4	12.6	15.3	11.0	8.7	11.0	8.0	8.0
8	11.0	11.8	27	15.3	18.3	13.5	14.4	11.0	9.5	10.2	8.7	8.0
9	12.8	9.4	17.3	11.8	11.8	12.6	*14.4	11.0	10.2	9.5	8.7	8.0
10	12.8	9.4	15.3	11.0	11.8	11.8	14.4	11.0	11.9	*8.0	8.0	7.3
11	12.8	9.4	16.3	11.0	11.8	11.0	15.3	15.2	12.8	8.0	12.4	7.3
12	11.9	9.4	14.4	11.8	11.8	11.0	14.4	26	10.2	8.0	13.7	7.3
13	10.2	9.4	13.5	11.0	12.6	11.0	14.4	15.3	10.2	8.0	10.2	7.3
14	9.5	9.4	12.6	12.6	13.5	19.4	14.4	11.8	12.8	8.7	9.5	7.3
15	9.5	9.4	13.5	22	11.0	15.3	13.5	11.0	11.0	8.7	8.7	9.5
16	8.7	10.2	14.4	15.3	11.0	13.5	14.4	10.2	10.2	8.7	8.7	9.5
17	9.5	11.0	13.5	12.6	14.4	12.6	15.3	10.2	9.5	8.7	8.0	8.7
18	9.5	9.4	12.6	12.6	18.3	11.8	13.5	10.2	8.7	8.7	8.0	*8.0
19	10.2	9.4	11.8	12.6	15.3	11.8	12.6	10.2	8.7	9.5	8.0	6.7
20	11.0	9.4	11.8	12.6	14.4	27	12.6	10.2	8.0	10.2	9.5	6.7
21	11.0	12.6	11.8	11.8	26	16.3	12.6	11.0	8.0	9.5	8.7	6.7
22	11.0	11.0	11.8	11.0	27	13.5	12.6	10.2	8.0	8.7	8.0	6.7
23	20	10.2	11.8	11.0	17.3	13.5	18.3	11.7	31	8.7	8.0	6.7
24	13.7	9.4	11.8	16.3	14.4	12.6	14.4	31	12.8	8.7	7.3	6.7
25	10.2	74	11.8	14.4	14.4	12.6	13.5	14.6	9.5	8.7	8.0	7.3
26	10.2	35	11.8	12.6	13.5	11.8	13.5	11.9	8.7	8.7	8.7	7.3
27	10.2	18.3	11.0	11.8	13.5	11.8	12.6	11.9	11.0	8.7	8.0	6.7
28	9.5	16.3	11.0	11.8	12.6	11.8	12.6	11.9	12.8	9.5	7.3	6.7
29	9.5	15.3	13.5	12.6	-------	13.5	12.6	11.9	16.6	11.0	7.3	6.7
30	9.5	14.4	14.4	12.6	-------	25	12.6	12.8	22	10.2	7.3	6.7
31	9.5	-------	13.5	12.6	-------	28	-------	11.0	-------	9.5	7.3	-------

* Discharge measurement made on this day.

Mantua Creek at Pitman--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.7	23	10.2	13.5	15.3	a15	14.4	17.7	44	9.5	11.9	34
2	6.7	16.9	10.2	15.3	15.3	a13	14.4	16.6	20	8.7	14.4	19.2
3	6.7	28	10.2	16.3	15.3	a14	14.4	16.6	15.6	8.7	15.7	16.6
4	6.7	19.4	9.4	14.4	*34	a28	21	15.6	13.7	8.7	11.9	11.9
5	7.3	12.6	13.5	15.3	22	23	19.4	15.6	13.7	9.5	11.0	11.0
6	6.7	11.8	*11.8	16.3	17.3	17.3	16.3	*14.6	13.7	9.5	14.4	9.5
7	8.3	22	11.0	13.5	16.3	15.3	15.3	13.7	12.8	9.5	22	9.5
8	16.6	16.9	11.0	12.6	15.3	14.4	14.4	13.7	11.9	10.2	15.6	9.5
9	8.7	12.6	10.2	*12.6	15.3	14.4	14.4	14.6	11.9	26	15.6	9.5
10	8.0	11.8	10.2	16.3	15.3	13.5	14.4	14.6	12.8	18.9	107	*8.7
11	14.6	11.0	9.4	16.3	14.4	47	14.4	14.6	11.9	*11.0	35	8.7
12	12.0	11.0	9.4	13.5	14.4	29	14.4	21	*11.9	10.2	15.6	8.7
13	8.7	10.2	9.4	13.5	13.5	19.4	14.4	16.6	11.0	10.2	14.6	8.7
14	8.0	10.2	9.4	13.5	13.5	18.3	16.3	14.6	11.0	10.2	12.8	9.5
15	8.0	11.8	17.3	12.6	13.5	17.3	15.3	14.6	11.0	9.5	*11.0	9.5
16	8.0	11.8	13.4	12.6	13.5	16.3	16.3	13.7	11.0	8.7	18.5	9.5
17	8.0	11.8	11.0	12.6	22	15.3	15.3	13.7	11.0	9.5	17.4	8.7
18	8.0	11.0	21	19.4	16.3	14.4	13.5	16.6	10.2	9.5	12.8	8.7
19	8.0	10.2	25	14.4	14.4	22	12.6	15.6	10.2	12.9	11.0	14.0
20	8.0	10.2	16.5	14.4	13.5	20	12.6	17.7	9.5	14.8	10.2	13.8
21	8.0	10.2	100	13.5	13.5	16.3	11.8	15.6	10.2	11.9	10.2	10.2
22	8.0	10.2	26	15.6	13.5	16.3	11.8	12.8	11.0	11.9	10.2	9.5
23	8.0	9.4	17.3	20	13.5	19.4	12.6	11.9	11.9	11.0	10.2	11.0
24	8.4	9.4	16.3	15.3	13.5	22	15.3	14.0	11.9	11.0	10.2	11.0
25	15.6	9.4	15.3	13.5	13.5	22	21	33	11.9	10.2	10.2	10.2
26	10.2	16.7	17.3	21	13.5	17.3	24	25	11.0	10.2	9.5	9.5
27	9.5	12.6	15.3	23	12.6	16.3	29	16.6	10.2	10.2	9.5	9.5
28	9.5	10.2	14.4	27	12.6	15.3	49	15.6	9.5	10.2	10.2	9.5
29	9.5	10.2	13.5	23	12.6	15.3	24	14.6	9.5	11.0	11.0	9.5
30	8.7	10.2	13.5	16.3	-------	15.3	20	13.7	10.2	11.0	11.0	9.5
31	8.7	-------	13.5	15.3	-------	14.4	-------	17.7	-------	11.9	10.2	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for stations on nearby streams.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.5	9.5	11	12	12	12	14	17	22	14	9.5	8.7
2	10	9.5	11	11	12	12	15	16	18	13	13	8.0
3	14	9.5	16	16	12	12	15	15	15	12	12	8.0
4	10	10	13	13	12	25	14	15	14	12	9.5	8.0
5	9.5	10	18	12	11	18	14	15	13	12	9.5	8.0
6	*9.5	10	20	11	11	14	11	26	13	12	9.5	9.5
7	9.5	9.5	14	10	13	13	*29	24	16	12	8.7	9.5
8	9.5	9.5	13	12	13	13	21	20	25	12	8.7	8.7
9	9.5	9.5	12	32	13	13	18	18	16	12	12	8.7
10	9.5	10	12	24	13	13	21	15	14	11	12	8.7
11	9.5	11	*26	17	13	14	22	15	13	10	10	8.7
12	9.5	10	18	16	16	15	19	14	13	9.5	9.5	8.7
13	9.5	*9.5	14	14	16	41	24	14	39	9.5	9.5	9.5
14	9.5	8.7	13	13	15	21	22	13	32	9.5	10	8.7
15	10	12	12	13	32	21	18	17	17	10	11	8.7
16	10	15	12	13	*24	*30	24	15	14	10	10	8.7
17	10	11	11	13	16	19	*19	18	14	*10	13	8.0
18	10	10	11	14	14	17	19	17	*13	9.5	12	8.0
19	10	9.5	11	14	13	22	28	15	13	8.7	9.5	8.0
20	9.5	12	10	13	13	19	19	17	13	8.7	9.5	8.0
21	8.7	29	15	*14	20	17	18	15	13	10	*9.5	9.5
22	8.7	45	20	16	17	16	17	19	15	9.5	9.5	9.5
23	10	19	14	14	14	16	16	17	17	26	9.5	9.5
24	11	15	17	22	14	21	16	14	13	15	9.5	8.7
25	10	14	13	22	13	20	16	15	12	11	9.5	8.7
26	10	13	15	15	13	19	16	35	11	10	9.5	8.7
27	10	12	11	14	13	17	16	22	11	9.5	9.5	8.7
28	9.5	12	8.0	14	12	16	15	16	11	9.5	8.7	8.7
29	9.5	12	8.0	14	-------	16	15	14	15	9.5	8.7	8.7
30	8.7	11	9.5	13	-------	15	15	16	22	9.5	8.7	8.7
31	8.7	-------	10	13	-------	14	-------	22	-------	9.5	8.0	-------

* Discharge measurement made on this day.

Mantua Creek at Pitman--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.7	11	9.5	10	8.7	11	9.5	14	*7.3	4.9	4.2	11
2	8.0	11	9.5	10	8.7	13	9.5	17	6.7	4.9	4.2	7.3
3	8.0	12	9.5	10	*8.7	19	9.5	9.5	7.3	4.9	4.5	6.7
4	8.7	11	9.5	9.5	8.7	14	9	16	7.3	5.5	4.9	6.1
5	8.7	10	14	9.5	8.7	18	9	*8.7	7.3	6.1	4.9	6.1
6	10	10	12	10	8.7	11	*8.7	7.3	6.7	7.3	4.9	5.5
7	13	13	21	9.5	8.7	10	8.7	7.3	6.7	6.7	4.9	4.9
8	10	12	13	9.5	8.7	14	8.7	8.7	6.7	7.3	4.5	4.9
9	10	12	12	9.5	8.7	10	8.0	11	6.7	6.7	7.6	5.5
10	9.5	13	16	9.5	8.0	7.3	8.0	11	6.7	6.1	8.7	5.5
11	9.5	13	*13	11	8.0	6.7	8.0	10	7.6	6.1	*6.1	42
12	8.7	13	12	11	8.0	6.7	8.0	9.5	10	5.5	5.5	14
13	8.7	13	16	10	8.0	8.7	8.0	8.7	8.7	*4.9	4.9	7.3
14	8.7	12	42	9.5	8.0	16	8.0	8.7	8.0	4.9	4.9	6.7
15	*8.0	12	21	9.5	8.0	13	7.3	8.7	7.3	7.3	4.5	6.7
16	8.0	11	14	14	8.0	10	8.7	8.7	9.5	6.1	4.9	6.7
17	8.0	11	13	13	10	9.5	21	8.7	8.7	5.5	4.9	15
18	8.0	11	12	10	9.5	8.7	17	8.7	8.0	4.9	4.5	10
19	8.0	11	11	10	8.7	8.7	12	8.7	7.3	5.5	4.5	7.3
20	8.0	*10	11	*12	8.7	12	10	10	6.7	7.3	5.3	7.3
21	8.0	9.5	11	18	12	8.0	9.5	20	6.7	6.1	11	7.3
22	8.7	9.5	11	13	14	6.7	8.7	13	6.1	5.5	8.7	12
23	8.7	14	12	11	10	6.7	9.5	10	6.1	4.9	6.7	8.7
24	8.7	13	11	11	8.7	6.7	12	9.5	6.1	4.5	5.5	7.3
25	9.5	12	11	11	9.5	11	10	9.5	6.1	4.5	4.9	7.3
26	9.5	12	11	11	8.7	12	10	8.7	5.5	4.5	4.9	6.7
27	9.5	11	11	10	8.7	9.5	18	8.7	5.5	4.5	4.9	6.7
28	19	10	10	10	8.7	9.5	17	8.7	4.9	4.5	4.9	6.7
29	34	10	10	9.5	-------	9.5	12	8.7	4.9	4.9	4.9	6.7
30	20	10	10	9.5	-------	8.7	11	8.0	4.9	4.5	4.9	6.7
31	13	-------	10	9.5	-------	9.5	-------	8.0	-------	4.5	24	-------

* Discharge measurement made on this day.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	e6.5	a13	10	10	7.3	10	9.5	10	8.0	6.7	8.0	9.5
2	e6.5	a11	9.5	10	8.0	10	9.5	9.5	7.3	6.7	8.0	9.5
3	e6.5	a9.5	9.5	10	8.0	9.5	9.5	8.7	7.3	6.7	7.3	9.5
4	e6.5	a9	9.5	9.5	8.0	15	9.5	8.7	7.3	6.1	6.7	11
5	e6.5	a9	9.5	9.5	8.0	17	9.5	8.7	7.3	6.1	6.7	11
6	e6.5	a9	8.7	9.5	11	17	10	8.7	8.7	5.5	6.7	11
7	e6.5	g8.7	8.0	8.7	25	18	11	8.0	7.3	4.9	6.7	11
8	e6.5	a8.5	8.0	8.7	12	13	9.5	8.0	14	4.9	13	11
9	e6.5	a8	9.8	8.7	10	12	9.5	8.0	*33	4.9	8.7	10
10	e6.5	a8	12	8.7	9.5	12	9.5	8.0	13	4.9	7.3	8.7
11	a7	a8	9.5	8.7	11	11	8.7	8.0	13	4.9	7.3	8.7
12	a7	a7.5	8.7	8.7	12	11	14	8.0	14	4.9	17	8.0
13	a7	a7.5	8.7	8.7	9.5	10	17	8.0	12	4.5	77	8.0
14	a7	g7.3	12	8.7	8.7	10	11	8.0	9.5	4.5	19	8.0
15	a7	a7.5	13	8.0	8.7	11	9.5	8.0	8.7	4.5	11	8.7
16	a6.5	a7.5	10	8.0	8.7	14	9.5	8.0	8.0	4.5	9.5	8.7
17	a6	a7.5	9.5	8.0	8.7	11	9.5	7.3	8.0	4.5	9.5	8.7
18	g6.1	a7.5	13	*8.0	8.7	11	9.5	7.3	7.3	4.5	12	8.7
19	a6	a8	13	8.0	8.7	12	9.5	7.3	7.3	4.5	39	8.7
20	a6	a10	9.5	8.0	8.7	11	9.5	7.3	7.3	4.5	15	43
21	a6.5	a30	8.7	8.0	8.7	13	9.5	7.3	7.3	4.5	10	18
22	a7	a15	8.0	8.0	8.7	23	10	7.3	7.3	4.5	8.7	11
23	a7	*10	8.0	8.0	13	18	9.5	*6.7	6.7	4.5	10	10
24	g7.3	10	8.0	8.0	12	12	9.5	6.7	7.3	5.5	10	14
25	a7.5	10	8.0	8.0	10	11	11	6.7	9.5	7.0	9.5	13
26	a7.5	9.5	8.0	8.0	10	11	11	6.7	15	8.7	9.5	10
27	a7.5	8.7	8.0	8.0	10	11	10	6.7	8.7	6.1	9.5	9.5
28	a7.5	8.7	8.0	8.0	10	10	10	6.7	8.0	5.5	9.5	11
29	a20	16	14	8.0	-------	9.5	10	6.7	7.3	5.5	9.5	10
30	a15	11	20	7.3	-------	9.5	10	8.7	7.3	5.5	9.5	9.5
31	g8.7	-------	13	7.3	-------	9.5	-------	8.0	-------	6.7	9.5	-------

* Discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for stations at Salem River at Woodstown and Alloway Creek at Alloway.

e Stage-discharge relation indefinite; discharge computed on basis of records for nearby stations mentioned above.

g Computed from once-daily staff-gage reading.

Mantua Creek at Pitman--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	337.6	20	8.7	10.9	1.61	1.86
November	420.4	74	9.4	14.0	2.07	2.32
December	430.4	27	11.0	13.9	2.06	2.37
Calendar year 1950	4,198.5	92	6.1	11.5	1.70	23.13
January 1951	395.7	22	11.0	12.8	1.90	2.18
February	416.8	27	11.0	14.9	2.21	2.30
March	446.5	28	11.0	14.4	2.13	2.46
April	459.3	38	12.6	15.3	2.27	2.53
May	395.8	31	10.2	12.8	1.90	2.18
June	341.9	31	8.0	11.4	1.69	1.88
July	313.0	22	8.0	10.1	1.50	1.72
August	265.4	13.7	7.3	8.56	1.27	1.46
September	227.3	9.5	6.7	7.58	1.12	1.25
Water year 1950-51	4,450.1	74	6.7	12.2	1.81	24.51
October 1951	277.8	16.6	6.7	8.96	1.33	1.53
November	392.7	28	9.4	13.1	1.94	2.16
December	511.9	100	9.4	16.5	2.44	2.82
Calendar year 1951	4,444.1	100	6.7	12.2	1.81	24.47
January 1952	492.4	27	12.6	15.9	2.36	2.71
February	449.2	34	12.6	15.5	2.30	2.47
March	576.8	47	13	18.6	2.76	3.18
April	522.0	49	11.8	17.4	2.58	2.88
May	502.5	33	11.9	16.2	2.40	2.77
June	386.1	44	9.5	12.9	1.91	2.13
July	346.2	26	8.7	11.2	1.66	1.91
August	510.8	107	9.5	16.5	2.44	2.81
September	338.6	34	8.7	11.3	1.67	1.87
Water year 1951-52	5,307.0	107	6.7	14.5	2.15	29.24
October 1952	302.8	14	8.7	9.77	1.45	1.67
November	387.7	45	8.7	12.9	1.91	2.14
December	418.5	26	8.0	13.5	2.00	2.31
Calendar year 1952	5,233.6	107	8.0	14.3	2.12	28.85
January 1953	464	32	10	15.0	2.22	2.56
February	410	32	11	14.6	2.16	2.26
March	551	41	12	17.8	2.64	3.04
April	546	29	11	18.2	2.70	3.01
May	541	35	13	17.5	2.59	2.98
June	487	39	11	16.2	2.40	2.68
July	346.4	26	8.7	11.2	1.66	1.91
August	309.0	13	8.0	9.97	1.48	1.70
September	260.2	9.5	8.0	8.67	1.28	1.43
Water year 1952-53	5,023.6	45	8.0	13.8	2.04	27.69
October 1953	326.8	34	8.0	10.5	1.56	1.80
November	343.0	14	9.5	11.4	1.69	1.89
December	409.0	42	9.5	13.2	1.96	2.25
Calendar year 1953	4,993.4	42	8.0	13.7	2.03	27.51
January 1954	330.5	18	9.5	10.7	1.59	1.82
February	251.5	14	8.0	8.98	1.33	1.39
March	325.1	19	6.7	10.5	1.56	1.79
April	314.3	21	7.3	10.5	1.56	1.73
May	313.7	20	7.3	10.1	1.50	1.73
June	208.0	10	4.9	6.93	1.03	1.15
July	171.3	7.3	4.5	5.53	.819	.94
August	188.6	24	4.2	6.08	.901	1.04
September	262.6	42	4.9	8.75	1.30	1.45
Water year 1953-54	3,444.4	42	4.2	9.44	1.40	18.98
October 1954	232.1	20	6	7.49	1.11	1.28
November	300.9	30	7.3	10.0	1.48	1.66
December	313.1	20	8.0	10.1	1.50	1.73
Calendar year 1954	3,211.7	42	4.2	8.80	1.30	17.70
January 1955	262.7	10	7.3	8.47	1.25	1.45
February	282.6	25	7.3	10.1	1.50	1.56
March	383.0	23	9.5	12.4	1.84	2.11
April	305.2	17	8.7	10.2	1.51	1.68
May	241.7	10	6.7	7.80	1.15	1.33
June	292.7	33	6.7	9.76	1.45	1.61
July	167.2	8.7	4.5	5.39	.798	.92
August	400.6	77	6.7	12.9	1.91	2.21
September	337.4	43	8.0	11.2	1.66	1.86
Water year 1954-55	3,519.2	77	4.5	9.64	1.43	19.39

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.--March to September 1940, December 1941 to September 1955. March to September 1940 published in Water-Supply Paper 1432 of the United States Geological Survey. Prior to October 1952, published as Salem Creek at Woodstown.

Gage.--Water-stage recorder above concrete dam. Datum of gage is 29.49 ft above mean sea level, datum of 1929.

Average discharge.--13 years (1942-55), 19.5 cfs.

Extremes.--1941-55: Maximum discharge, 22,000 cfs Sept. 1, 1940 (gage height, 7.98 ft, from floodmark in recorder shelter), from rating curve extended above 220 cfs on basis of slope-area measurement of peak flow at site half a mile downstream; no flow for short periods during many years just after waste gate was closed and water was below spillway.

Remarks.--Records given herein include flow over dam and leakage through waste gate.

Daily discharge, in cubic feet per second, 1950-55

1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.9	*9.0	13.7	17.9	80	19.9	26	12.3	11.6	24	5.9	4.4
2	*7.4	10.6	17.9	16.0	46	19.9	38	12.3	11.6	13.3	5.9	4.4
3	9.0	9.0	17.9	16.0	16.0	19.9	178	10.6	10.0	10.0	*5.9	4.4
4	7.4	16.0	45	22	16.0	33	88	12.3	8.4	19.4	5.9	4.4
5	7.4	69	34	19.9	*17.9	26	28	10.6	8.4	220	5.9	4.4
6	5.9	17.9	*22	17.9	16.0	22	24	4.4	6.9	20	5.9	4.4
7	5.9	12.3	19.9	22	65	19.9	22	30	6.9	12.3	9.0	4.4
8	4.4	10.6	86	34	46	19.9	22	12	8.4	10.6	9.0	4.4
9	4.4	9.0	30	17.9	19.9	17.9	*19.9	12	8.4	9.0	9.0	4.4
10	4.4	9.0	26	16.0	17.9	16.0	17.9	12	11.6	*7.4	7.4	4.4
11	4.4	9.0	33	16.0	16.0	16.0	17.9	8	13.3	7.4	8.8	4.4
12	5.9	7.4	24	16.0	22	16.0	19.9	1	10.0	7.4	19.6	4.4
13	5.9	7.4	19.9	16.0	24	16.0	19.9	1	11.6	7.4	10.6	4.4
14	5.9	7.4	19.9	18.6	24	47	17.9	1	28	7.4	9.0	4.4
15	4.4	7.4	19.9	73	22	28	16.0	1	23	7.4	9.0	7.4
16	4.4	7.4	22	26	17.9	22	17.9	6.2	15.1	5.9	5.9	7.4
17	4.4	7.4	17.9	17.9	49	17.9	22	43	11.6	5.9	5.9	5.9
18	4.4	5.9	16.0	17.9	55	17.9	17.9	13.1	8.4	5.9	4.4	*4.4
19	5.9	5.9	14.1	17.9	28	18.7	17.9	8.4	*4.1	9.0	4.4	4.4
20	7.4	7.4	14.1	16.0	28	88	16.0	10.0	4.1	10.6	13.6	4.4
21	7.4	16.0	14.1	14.1	108	30	16.0	11.6	3.3	9.0	9.0	4.4
22	7.4	12.3	14.1	12.3	104	22	16.0	11.6	2.7	7.4	5.9	4.4
23	100	9.0	14.1	*12.3	30	19.9	30	21	30	7.4	5.9	4.4
24	30	7.4	16.0	35	24	19.9	22	49	15.1	7.4	4.4	4.4
25	14.1	912	16.0	24	22	17.9	17.9	26	10.0	7.4	4.4	4.4
26	10.6	75	12.3	17.9	22	16.0	17.9	6.9	8.4	5.9	4.4	4.4
27	9.0	25	11.2	14.1	19.9	16.0	16.0	6.9	8.4	5.9	5.9	4.4
28	7.4	20	10.6	14.1	17.9	16.0	14.1	8.4	8.4	9.5	5.9	3.1
29	7.4	10	16.6	17.9	-------	17.9	14.1	34	23	16.0	5.9	3.1
30	7.4	0	19.9	19.9	-------	49	14.1	39	21	9.0	5.9	3.1
31	7.4	-------	19.9	16.0	-------	65	-------	15.1	-------	7.4	4.4	-------

* Discharge measurement made on this day.
Note.--Waste gate open or leaking Nov. 25-29, May 7 to July 4.

Salem River at Woodstown--Continued

Daily discharge, in cubic feet per second, 1950-55

1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.1	77	16.0	24	24	19.9	*22	24	121	9.0	5.9	35
2	4.4	30	14.1	43	28	19.9	22	22	38	9.0	5.9	24
3	3.1	90	14.1	41	28	19.9	22	17.9	24	7.4	2.3	17.9
4	*4.4	35	14.1	28	261	36	22	17.9	19.9	7.4	1.7	12.3
5	4.4	16.0	52	53	84	80	46	16.0	26	7.4	1.7	9.0
6	5.9	*12.3	35	44	35	33	44	*16.0	19.9	5.9	16.0	9.0
7	8.8	96	22	26	30	26	26	16.0	16.0	5.9	51	9.0
8	34	35	19.9	24	28	24	22	16.0	14.1	9.0	26	9.0
9	10.6	19.9	17.9	*22	24	24	22	16.0	14.1	28	30	7.4
10	7.4	17.9	16.0	52	22	24	19.9	16.0	16.8	22	277	*7.4
11	18.2	14.1	14.1	34	22	231	17.9	16.0	26	*10.6	68	7.4
12	17.4	14.1	14.1	24	19.9	114	17.9	26	*12.3	10.6	22	7.4
13	10.6	14.1	12.3	22	19.9	41	19.9	16.0	12.3	9.0	17.9	7.4
14	9.0	14.1	12.3	22	17.9	38	24	14.1	10.6	7.4	*17.9	7.4
15	7.4	19.9	72	22	17.9	28	24	14.1	10.6	7.4	12.3	7.4
16	9.0	22	32	19.9	19.9	26	26	12.3	10.6	7.4	14.1	7.4
17	9.0	24	16.0	19.9	59	22	22	12.3	10.6	5.9	12.3	7.4
18	7.4	17.9	79	52	30	22	19.9	14.1	9.0	5.9	10.6	7.4
19	7.4	14.1	111	26	24	62	17.9	14.1	9.0	17.9	9.0	12.3
20	7.4	12.3	58	26	22	46	17.9	22	9.0	38	9.0	16.0
21	7.4	12.3	e567	22	19.9	30	16.0	22	9.0	10.6	9.0	9.0
22	7.4	12.3	e84	40	19.9	26	16.0	16.0	10.6	9.0	9.0	7.4
23	9.0	12.3	e26	70	17.9	52	16.0	12.3	14.1	7.4	7.4	9.0
24	12.0	12.3	26	26	17.9	62	22	12.3	14.1	7.4	7.4	9.0
25	22	14.1	26	22	17.9	62	46	44	12.3	5.9	7.4	9.0
26	14.1	49	49	79	17.9	33	62	52	10.6	5.9	7.4	9.0
27	12.3	24	28	76	17.9	28	84	24	10.6	5.9	7.4	7.4
28	12.3	17.9	24	117	17.9	26	173	16.0	9.0	5.9	5.9	7.4
29	10.6	16.0	22	87	17.9	26	46	14.1	9.0	5.9	7.4	7.4
30	10.6	16.0	22	28	-------	26	30	12.3	9.0	5.9	7.4	7.4
31	10.6	-------	24	24	-------	24	-------	30	-------	5.9	5.9	-------

* Discharge measurement made on this day.
e Waste gate open; discharge included in records.

1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.4	4.4	18	18	22	18	20	24	49	11	7.4	5.9
2	9.0	11	18	18	20	16	20	20	35	9.0	11	4.4
3	14	12	24	34	18	18	20	18	24	11	11	4.4
4	9.0	7.4	22	24	18	66	20	18	20	9.0	11	4.4
5	5.9	7.4	34	20	18	41	28	16	18	9.0	9.0	4.4
6	*7.4	7.4	62	16	18	26	24	26	16	9.0	7.4	5.9
7	*5.9	4.4	28	16	18	22	134	52	16	9.0	7.4	12
8	5.9	4.4	24	20	18	22	48	26	18	16	7.4	11
9	5.9	4.4	22	186	18	22	30	24	16	18	9.0	7.4
10	7.4	7.4	20	82	16	24	46	20	14	12	9.0	7.4
11	5.9	9.0	83	46	16	28	94	18	12	12	9.0	7.4
12	4.4	7.4	41	41	22	28	38	18	12	12	7.4	7.4
13	4.4	*5.9	24	28	24	174	85	16	30	12	7.4	7.4
14	4.4	5.9	22	26	20	54	69	16	33	12	11	5.9
15	5.9	12	18	24	142	63	33	22	20	11	16	5.9
16	5.9	28	*16	22	57	*128	68	20	16	11	11	5.9
17	5.9	12	16	20	28	41	*39	30	14	11	11	5.9
18	5.9	11	16	22	22	35	30	35	*12	11	14	5.9
19	5.9	11	16	24	*20	73	69	20	14	9.0	9.0	5.9
20	5.9	19	16	22	20	44	33	*28	16	7.4	*7.4	4.4
21	5.9	76	23	*22	55	33	28	22	9.0	9.0	5.9	4.4
22	5.9	202	46	44	38	30	24	38	11	9.0	5.9	4.4
23	4.4	48	24	26	26	28	22	28	14	*28	5.9	4.4
24	4.4	28	20	136	24	50	22	20	11	16	5.9	4.4
25	4.4	22	18	94	22	49	22	18	9.0	9.0	5.9	4.4
26	4.4	20	16	35	20	55	22	150	9.0	9.0	5.9	4.4
27	16	20	14	28	20	35	20	44	9.0	9.0	5.9	4.4
28	9.0	20	12	26	18	28	18	24	9.0	9.0	5.9	e32
29	5.9	18	11	26	-------	26	18	20	9.0	9.0	5.9	e15
30	4.4	18	11	24	-------	22	18	22	11	9.0	5.9	e4.5
31	4.4	-------	14	22	-------	20	-------	38	-------	9.0	5.9	-------

* Discharge measurement made on this day.
e Waste gate open; discharge included in records.

Salem River at Woodstown--Continued

Daily discharge, in cubic feet per second, 1950-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	10	0.4	8.7	10	32	12	10	*3.7	0.8	0.2	13
2	4	8	7.3	8.7	10	44	10	10	2.8	.4	.2	6.0
3	4	6.5	7.6	8.7	*10	68	10	11	2.8	.2	.2	3.7
4	4	6	8.7	8.7	12	52	8.7	30	2.8	.2	.4	3.7
5	4.5	6	24	8.7	12	20	8.7	*16	2.8	.8	.4	3.7
6	5	7	18	8.7	10	16	*10	10	2.8	2.0	.4	2.8
7	7	9	65	8.7	10	14	10	10	2.8	2.0	.4	*2.8
8	6.5	10	24	8.7	10	14	12	14	2.8	2.8	.4	2.8
9	6	11	16	8.7	10	12	12	24	2.8	2.0	2.4	2.8
10	5.5	14	29	10	10	12	10	14	2.8	2.0	1.4	2.8
11	5	15	*22	15	10	12	10	12	2.8	2.0	.4	40
12	5	14	18	12	8.7	12	10	8.7	4.8	1.3	.2	16
13	5	13	42	10	7.3	14	8.7	8.7	4.8	.8	.2	6.0
14	5	11	197	10	8.7	54	8.7	7.3	3.7	.4	.4	3.7
15	*5.0	10	43	10	8.7	30	8.7	7.3	3.7	3.7	.4	2.8
16	5	9.5	22	22	10	16	8.7	7.3	3.7	3.7	.8	3.7
17	5	9	16	26	12	14	39	7.3	3.7	2.8	1.3	3.7
18	5.5	8.5	14	16	12	12	32	7	3.7	2.0	.8	3.7
19	6	8	12	14	10	12	16	7	2.8	1.3	.8	3.7
20	6	*7.6	12	42	10	28	12	8	2.8	1.3	2.3	4.8
21	6	8.5	12	73	26	16	10	18	2.0	1.3	11	6.3
22	5.5	10	12	29	40	12	10	15	2.0	.8	12	14
23	5	20	12	18	18	10	10	11	2.0	.4	4.8	6.0
24	4.5	18	12	18	16	10	12	8	2.0	.2	3.7	3.7
25	4.5	16	10	18	16	18	12	7	2.0	.2	2.8	2.8
26	5	14	10	*20	16	20	10	7	2.0	.2	2.8	2.8
27	6	12	10	24	14	14	27	6	1.3	.2	2.8	2.8
28	10	4	10	26	14	12	22	5.5	1.3	.2	2.0	2.8
29	35	.2	10	14	-------	12	16	5	1.3	.2	2.0	2.8
30	55	.2	10	12	-------	12	12	4.5	1.3	.2	2.0	2.8
31	15	-------	10	12	-------	12	-------	4	-------	.2	24	-------

* Discharge measurement made on this day.

Note.--Waste gate open and lake drawn down Oct. 1 to Nov. 28; discharge estimated on basis of 2 discharge measurements, weather records, and records for Alloway Creek at Alloway. No gage-height record May 18-31; discharge estimated on basis of recorded range in stage, weather records, and records for Alloway Creek at Alloway.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.8	17	12	22	6.0	16	10	10	8.7	3.7	0.2	4.8
2	2.8	12	8.7	22	6.0	20	10	10	7.3	3.7	.2	4.8
3	2.8	10	8.7	22	4.8	16	10	7.3	6.0	3.7	.2	4.8
4	2.8	6.0	8.7	18	4.8	28	8.7	7.3	6.0	2.8	.2	3.7
5	2.8	6.0	8.7	16	4.8	81	8.7	7.3	6.0	2.0	.2	3.7
6	2.8	6.0	7.3	12	13	58	10	6.0	7.3	1.3	.2	3.7
7	2.8	6.0	7.3	10	108	60	12	4.8	6.0	1.3	2.3	3.7
8	2.8	6.0	7.3	10	26	24	8.7	4.8	12	1.3	20	2.0
9	2.8	4.8	10	10	14	20	8.7	4.8	77	1.3	7.3	.8
10	2.8	4.8	18	10	14	18	8.7	3.7	21	1.3	2.8	.8
11	*3.7	4.8	12	10	26	16	8.7	4.8	21	1.3	19	1.3
12	3.7	4.8	10	10	28	14	28	4.8	33	.8	79	1.3
13	3.7	4.8	10	10	12	12	43	4.8	22	.4	e425	.8
14	2.8	4.8	15	7.3	8.7	12	22	4.8	12	.4	e68	.2
15	3.7	4.8	26	7.3	*10	12	20	4.8	8.7	.4	e16	.2
16	2.8	4.8	16	7.3	12	18	16	4.8	7.3	.4	7.3	.2
17	2.0	4.8	12	7.3	14	16	14	2.8	4.8	.4	7.3	.2
18	2.0	4.8	24	*6.0	14	16	12	2.8	4.8	.4	50	.2
19	2.0	6.0	30	6.0	12	18	12	2.8	4.8	.4	144	e25
20	2.0	14	*16	6.0	6.0	16	10	2.8	6.0	.4	23	e109
21	2.8	62	14	6.0	4.8	19	10	2.8	4.8	.2	10	30
22	2.8	31	12	6.0	4.8	68	12	2.8	4.8	.2	7.3	10
23	2.0	*14	10	6.0	12	47	12	*3.7	3.7	.2	7.3	7.3
24	2.0	10	10	6.0	24	22	10	3.7	3.7	.2	6.0	15
25	2.0	10	10	6.0	18	18	*12	3.7	4.8	**.2	4.8	18
26	2.0	8.7	10	6.0	16	18	12	3.7	10	.4	4.8	10
27	2.8	7.3	10	6.0	14	16	12	3.7	*7.3	.4	3.7	7.3
28	2.8	7.3	10	6.0	14	14	12	3.7	6.0	.2	3.7	7.3
29	29	30	28	6.0	-------	*12	10	4.8	4.8	.2	4.8	7.3
30	21	18	90	6.0	-------	12	10	7.3	4.8	.2	4.8	7.3
31	7.3	-------	38	6.0	-------	12	-------	8.7	-------	.2	4.8	-------

* Discharge measurement made on this day.
** Field estimate made on this day.
e Waste gate open.

Salem River at Woodstown--Continued

Monthly and annual discharge, in cubic feet per second, 1950-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1950	323.2	100	4.4	10.4	0.712	0.82
November	1,331.7	912	0	44.4	3.04	3.39
December	678.0	86	10.6	21.9	1.50	1.73
Calendar year 1950	6,977.9	912	0	19.1	1.31	17.77
January 1951	632.5	73	12.3	20.4	1.40	1.61
February	974.4	108	16.0	34.8	2.38	2.48
March	791.5	88	16.0	25.5	1.75	2.02
April	775.2	178	14.1	25.8	1.77	1.97
May	450.7	49	1	14.5	.993	1.15
June	351.7	30	2.7	11.7	.801	.90
July	512.6	220	5.9	16.5	1.13	1.31
August	223.0	19.6	4.4	7.19	.492	.57
September	135.6	7.4	3.1	4.52	.310	.35
Water year 1950-51	7,180.1	912	0	19.7	1.35	18.30
October 1951	317.2	34	3.1	10.2	.699	.81
November	781.9	96	12.3	26.1	1.79	1.99
December	1,539.9	567	12.3	49.7	3.40	3.92
Calendar year 1951	7,486.2	567	1	20.5	1.40	19.08
January 1952	1,215.8	117	19.9	39.2	2.68	3.10
February	961.6	261	17.9	33.8	2.32	2.50
March	1,331.7	231	19.9	43.0	2.95	3.39
April	986.3	173	16.0	32.9	2.25	2.51
May	593.5	52	12.3	19.2	1.32	1.51
June	538.1	121	9.0	17.9	1.23	1.37
July	306.8	38	5.9	9.90	.678	.78
August	692.2	277	1.7	22.3	1.53	1.76
September	309.5	35	7.4	10.3	.705	.79
Water year 1951-52	9,594.8	567	1.7	26.2	1.79	24.43
October 1952	201.4	16	4.4	6.50	.445	.51
November	663.4	202	4.4	22.1	1.51	1.69
December	749	83	11	24.2	1.66	1.91
Calendar year 1952	8,569.6	277	1.7	23.4	1.60	21.82
January 1953	1,192	186	16	38.5	2.64	3.04
February	778	142	16	27.8	1.90	1.98
March	1,319	174	16	42.5	2.91	3.36
April	1,162	134	18	38.7	2.65	2.96
May	891	150	16	28.7	1.97	2.27
June	506.0	49	9.0	16.9	1.16	1.29
July	346.4	28	7.4	11.2	.767	.88
August	257.7	16	5.9	8.31	.569	.66
September	211.5	32	4.4	7.05	.483	.54
Water year 1952-53	8,277.4	202	4.4	22.7	1.55	21.09
October 1953	254.5	55	4	8.21	.562	.65
November	296.0	20	.2	9.87	.676	.75
December	715.7	197	.4	23.1	1.58	1.82
Calendar year 1953	7,929.8	197	.2	21.7	1.49	20.20
January 1954	529.3	73	8.7	17.1	1.17	1.35
February	361.4	40	7.3	12.9	.884	.92
March	636	68	10	20.5	1.40	1.62
April	398.2	39	8.7	13.3	.911	1.01
May	320.6	30	4	10.3	.705	.82
June	82.6	4.8	1.3	2.75	.188	.21
July	36.6	3.7	.2	1.18	.081	.09
August	83.9	24	.2	2.71	.186	.21
September	179.0	40	2.8	5.97	.409	.46
Water year 1953-54	3,893.8	197	.2	10.7	.733	9.91
October 1954	132.9	29	2.0	4.29	.294	.34
November	335.3	62	4.8	11.2	.767	.85
December	509.7	90	7.3	16.4	1.12	1.30
Calendar year 1954	3,605.5	90	.2	9.88	.677	9.18
January 1955	295.2	22	6.0	9.52	.652	.75
February	451.7	108	4.8	16.1	1.10	1.15
March	749	81	12	24.2	1.66	1.91
April	393.2	43	8.7	13.1	.897	1.00
May	154.6	10	2.8	4.99	.342	.39
June	336.4	77	3.7	11.2	.767	.86
July	30.3	3.7	.2	.98	.067	.08
August	934.2	425	.2	30.1	2.06	2.38
September	290.7	109	.2	9.69	.664	.74
Water year 1954-55	4,613.2	425	.2	12.6	.863	11.75

Alloway Creek at Alloway

Location.--Lat 75°21'35", long 39°33'55", on right bank at Alloway Lake Dam at Alloway, Salem County, 0.8 mile upstream from Deep Run.

Drainage area.--21.9 sq mi.

Records available.--October 1952 to September 1955.

Gage.--Water-stage recorder above concrete dam. Datum of gage is 13.96 ft above mean sea level, datum of 1929.

Extremes.--1952-55: Maximum discharge, 670 cfs Aug. 13, 1955 (gage height, 2.50 ft); no flow Oct. 1-13, 1952, when waste gate was closed and water was below spillway.

Peak discharge (base, 250 cfs).--
1952-53: Nov. 22 (10 a.m.) e368 cfs (2.13 ft); Jan. 9 (time unknown) e388 cfs (2.16 ft); Jan. 24 (time unknown) 299 cfs (2.06 ft); Mar. 13 (2 p.m.) 348 cfs (2.13 ft); Mar. 16 (6 a.m.) 348 cfs (2.13 ft); Apr. 7 (5 p.m.) 325 cfs (2.10 ft).
1953-54: Dec. 14 (4 p.m.) 392 cfs (2.19 ft).
1954-55: Aug. 13 (12 m.) 670 cfs (2.50 ft); Aug. 19 (time unknown) 370 cfs (2.16 ft).
e Waste gate open.

Remarks.--Flow regulated occasionally be operation of waste gate in dam.

Daily discharge, in cubic feet per second, 1952-55
1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	8.9	19	28	a30	25	30	30	78	13	6.5	5.8
2	0	8.9	19	28	a30	25	30	33	64	11	7.2	5.1
3	0	8.9	24	a40	a26	25	30	28	38	12	8.9	5.1
4	0	9.8	26	a35	26	71	30	25	30	12	8.9	5.1
5	0	9.8	33	a30	25	74	40	23	25	11	8.0	4.5
6	0	8.9	82	a26	23	44	36	28	22	11	8.0	8.3
7	0	8.0	46	a26	25	34	183	65	30	12	8.0	16
8	0	8.0	33	a30	a25	34	122	47	31	16	7.2	16
9	0	8.0	28	a250	a25	33	59	42	23	19	8.0	11
10	0	11	25	a120	a23	33	56	34	19	13	9.8	8.9
11	0	12	76	a70	a23	36	128	28	15	9.8	8.9	7.2
12	0	12	*85	a60	a30	40	65	23	*13	8.9	8.0	7.2
13	0	11	44	*e52	a35	220	93	23	15	8.9	7.2	7.2
14	.2	11	31	e43	a30	115	120	*23	23	8.0	12	6.5
15	2.3	13	26	e31	a210	*85	59	25	20	8.0	17	7.2
16	4.8	26	25	31	a90	240	90	26	15	8.0	14	7.2
17	6.5	*23	23	a29	a50	86	76	53	13	7.2	14	7.2
18	6.5	17	23	a32	*38	55	51	133	12	7.2	17	6.5
19	7.2	15	22	a35	34	87	a90	52	11	7.2	14	6.5
20	7.2	18	20	a32	31	70	a60	46	11	7.2	*11	6.5
21	6.5	78	28	a32	60	49	a45	41	11	8.9	8.9	8.9
22	6.5	e266	54	a60	67	40	a35	68	12	9.8	8.0	8.9
23	7.2	e78	44	a40	42	34	*33	64	14	*29	7.2	8.0
24	7.2	44	33	a200	33	48	33	34	13	30	7.2	7.2
25	8.0	33	28	a130	31	70	31	28	11	14	7.2	7.2
26	8.0	28	25	a60	30	81	31	120	9.8	11	6.5	7.2
27	7.2	25	23	a45	26	55	30	101	9.8	8.9	6.5	7.2
28	8.0	22	20	a40	26	42	26	44	9.8	8.0	6.5	8.0
29	8.9	19	17	a35	-------	36	25	30	12	7.2	6.5	8.0
30	8.9	19	17	a35	-------	33	25	28	15	7.2	6.5	7.2
31	8.9	-------	22	a32	-------	30	-------	54	-------	7.2	5.8	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated.
e Waste gate open.

Alloway Creek at Alloway--Continued

Daily discharge, in cubic feet per second, 1952-55

1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.2	17	15	15	17	a25	a19	17	7.2	2.4	a1.4	22
2	6.5	13	14	14	17	68	a17	16	5.1	2.4	a1.4	12
3	6.5	11	14	14	17	58	a16	16	4.5	2.4	a1.4	8.0
4	6.5	11	14	15	17	97	a15	40	5.1	2.4	a1.7	6.5
5	7.2	9.8	22	14	17	42	a15	40	5.1	2.9	a2.0	5.1
6	9.0	11	27	14	16	31	16	23	4.5	3.9	a2.0	5.1
7	12	16	66	14	15	26	*17	15	4.5	3.9	a2.0	*4.5
8	11	17	48	13	14	23	17	17	4.5	5.1	a2.5	3.9
9	9.8	19	28	13	14	22	20	38	3.9	4.5	a4.5	4.5
10	8.9	23	34	14	14	20	17	33	3.9	3.9	a6.5	4.5
11	8.9	25	36	16	14	20	15	25	5.1	3.4	5.8	28
12	8.9	26	28	15	13	a20	15	19	5.1	3.4	4.5	34
13	8.9	23	49	15	11	a22	14	16	5.1	3.4	3.4	15
14	8.9	22	233	14	11	a40	13	14	5.8	3.1	3.4	9.8
15	8.9	17	*114	15	13	a85	13	14	5.8	8.9	3.4	7.2
16	8.9	17	46	22	14	a50	13	13	6.5	7.2	3.4	6.5
17	8.9	16	33	38	15	a30	38	13	6.5	5.1	3.4	7.2
18	9.8	15	25	30	a15	a23	63	12	6.5	3.9	3.4	7.2
19	9.8	14	20	23	a14	a20	33	12	5.1	3.4	2.9	8.0
20	9.8	*13	20	35	a14	a20	23	12	4.5	5.1	3.4	8.9
21	9.8	13	20	100	a35	a37	20	24	4.5	5.1	11	8.9
22	8.9	14	23	60	a55	a25	17	28	3.9	a4.5	15	11
23	*8.9	21	22	33	a35	a19	19	19	3.9	a3.9	9.8	9.8
24	8.0	33	19	30	a27	a17	26	14	3.4	a3.3	6.5	8.0
25	7.2	28	17	26	a24	a17	23	13	3.4	a2.8	5.1	7.2
26	8.0	28	17	31	a22	a30	20	13	3.4	a2.4	4.5	6.5
27	8.0	23	16	36	a21	a32	19	11	2.9	a2.0	3.9	5.8
28	16	19	16	31	a21	a22	31	9.8	2.4	a1.7	3.9	5.8
29	57	17	16	25	-------	a20	28	8.9	2.0	a1.4	3.9	5.1
30	70	16	16	22	-------	a19	22	8.9	2.4	a1.4	3.9	5.8
31	28	-------	15	19	-------	a19	-------	8.0	-------	a1.4	17	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated.

1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.8	12	19	33	a5.5	22	14	14	7.2	3.4	1.4	11
2	6.5	13	14	31	a5.5	25	14	13	5.8	3.4	1.7	9.8
3	6.5	20	12	30	a5	22	14	12	7.2	3.4	2.0	8.9
4	6.5	20	11	25	a5	31	14	a11	7.2	3.4	1.7	7.2
5	5.8	19	14	20	a5	66	13	a10	8.9	2.9	1.7	5.8
6	6.5	17	15	19	a40	62	14	a9	7.2	2.4	1.4	5.1
7	5.1	16	14	17	a120	84	15	a8	5.1	2.4	3.5	5.1
8	5.1	15	14	15	a45	42	14	a7	8.1	2.4	25	4.5
9	4.5	14	17	15	a25	30	13	a6.5	49	2.0	26	4.5
10	5.1	13	23	14	a23	25	12	a6	42	2.0	19	4.5
11	5.1	9.8	19	14	a40	20	11	a7	31	2.4	19	5.1
12	5.1	8.9	14	13	a45	17	31	a8	53	2.4	43	5.1
13	5.1	8.9	14	13	a25	15	81	a9	38	1.7	*419	7.2
14	5.1	8.0	21	12	a20	14	49	a8	25	1.7	a100	7.2
15	5.1	8.0	34	12	19	14	40	a7	19	1.4	a50	7.2
16	3.9	8.0	26	12	19	20	31	a6	12	1.4	a20	6.5
17	3.4	8.0	20	11	20	25	23	a5.5	7.2	1.4	a40	5.1
18	3.4	7.2	25	9.8	20	23	20	a5	5.1	1.4	a80	5.1
19	3.9	7.2	38	a10	17	26	17	a4.5	5.1	1.4	a200	5.1
20	3.9	13	*26	a9.5	16	23	17	a4.5	5.1	1.4	a100	74
21	5.1	69	16	a9	15	25	17	a4.5	5.1	1.1	a50	124
22	5.1	76	13	a8.5	15	73	19	a4.5	4.5	1.1	a25	45
23	5.1	33	12	a8	27	70	19	*4.5	4.5	.8	a20	20
24	5.1	22	12	a8	38	38	16	5.1	7.2	1.1	16	23
25	5.1	17	13	a7.5	30	28	*17	4.5	5.1	1.7	13	30
26	5.8	14	12	a7.5	25	28	20	3.9	*7.2	2.0	11	23
27	6.5	12	12	a7	22	25	20	3.4	7.2	1.7	9.8	17
28	7.2	9.8	11	a6.5	20	20	17	3.4	5.1	1.7	8.0	15
29	14	30	26	a6.5	-------	19	16	3.4	4.5	1.4	6.5	12
30	22	30	94	a6	-------	17	16	7.2	3.9	1.1	6.5	9.8
31	17	-------	65	a6	-------	15	-------	8.0	-------	1.1	9.8	-------

* Discharge measurement made on this day.
a No gage-height record; discharge estimated.

Alloway Creek at Alloway--Continued

Monthly and annual discharge, in cubic feet per second, 1952-55

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1952	120.0	8.9	0	3.87	0.177	0.20
November	860.2	266	8.0	28.7	1.31	1.46
December	1,021	85	17	32.9	1.50	1.73
Calendar year						
January 1953	1,737	250	26	56.0	2.56	2.95
February	1,144	210	23	40.9	1.87	1.94
March	1,950	240	25	62.9	2.87	3.31
April	1,762	183	25	58.7	2.68	2.99
May	1,399	133	23	45.1	2.06	2.38
June	625.4	78	9.8	20.8	.950	1.06
July	351.6	30	7.2	11.3	.516	.60
August	280.4	17	5.8	9.05	.413	.48
September	232.8	16	4.5	7.76	.354	.40
Water year 1952-53	11,483.4	266	0	31.5	1.44	19.50
October 1953	406.1	70	6.5	13.1	.598	.69
November	547.8	33	9.8	18.3	.836	.93
December	1,083	233	14	34.9	1.59	1.84
Calendar year 1953	11,519.1	250	4.5	31.6	1.44	19.57
January 1954	776	100	13	25.0	1.14	1.32
February	532	55	11	19.0	.868	.90
March	999	97	17	32.2	1.47	1.70
April	634	63	13	21.1	.963	1.08
May	562.6	40	8.0	18.1	.826	.96
June	136.5	7.2	2.0	4.55	.208	.23
July	110.6	8.9	1.4	3.57	.163	.19
August	146.9	17	1.4	4.74	.216	.25
September	281.8	34	3.9	9.39	.429	.48
Water year 1953-54	6,216.3	233	1.4	17.0	.776	10.57
October 1954	199.4	22	3.4	6.43	.294	.34
November	558.8	76	7.2	18.6	.849	.95
December	676	94	11	21.8	.995	1.15
Calendar year 1954	5,613.6	100	1.4	15.4	.703	9.55
January 1955	415.8	33	6	13.4	.612	.71
February	712.0	120	5	25.4	1.16	1.21
March	964	84	14	31.1	1.42	1.64
April	634	81	11	21.1	.963	1.08
May	213.4	14	3.4	6.88	.314	.36
June	402.5	53	3.9	13.4	.612	.68
July	59.1	3.4	.8	1.91	.087	.10
August	1,330.0	419	1.4	42.9	1.96	2.26
September	512.8	124	4.5	17.1	.781	.87
Water year 1954-55	6,677.8	419	.8	18.3	.836	11.35

Reservoirs in Delaware River basin

Pepacton Reservoir.--Lat 42°04'30", long 74°57'55", near release chamber at Downsville Dam on East Branch Delaware River, 1.6 miles east of Downsville, Delaware County, N. Y. Drainage area, 371 sq mi. Records available, September 1954 to September 1955. Inclined staff gage read daily. Datum of gage is at mean sea level (levels by Board of Water Supply, City of New York.

Reservoir is formed by an earth-fill dam, rock-faced; storage began Sept. 15, 1954. Capacity, 147,700,000,000 gal between elevations 1,126.50 ft (elevation of release outlet) and 1,280.00 ft (crest of spillway), including 4,200,000,000 gal below elevation 1,143.00 ft (elevation of intake chamber to diversion tunnel). Dead storage, 1,898,000,000 gal. Reservoir impounds water for diversion through East Delaware tunnel to Rondout Reservoir on Rondout Creek, in Hudson River basin, for water supply of city of New York. Figures given herein represent total contents. No diversion prior to Jan. 6, 1955. Records furnished by Board of Water Supply, City of New York.

Lake Wallenpaupack.--Lat 41°27'35", long 75°11'10", at dam on Wallenpaupack Creek at Wilsonville, Wayne County, Pa., 1¼ miles south of Hawley and 1.5 miles upstream from mouth. Drainage area, 228 sq mi. Records available, October 1950 to September 1955 in this report. January 1926 to September 1950 in files of Harrisburg, Pa. district office, United States Geological Survey. Staff gage. Datum of gage is at mean sea level (levels by Pennsylvania Power and Light Co.).

Reservoir is formed by concrete gravity-type and earth-fill dam, with concrete spillway, at elevation 1,176.00 ft, in two sections. Spillway equipped with roller gate, 14 ft high, on each section. Storage began Nov. 3, 1925. Total capacity at elevation 1,190.0 ft (tope of gates) is 209,300 acre-ft, of which 157,800 acre-ft is controlled storage above elevation 1,160.0 ft (minimum pool). Reservoir is used for generation of hydroelectric power. Figures given herein represent usable contents. Records furnished by Pennsylvania Power and Light Co.

Swinging Bridge Reservoir.--Lat 41°34'25", long 74°47'00", at dam on Mongaup River 1¾ miles northwest of Fowlersville, Sullivan County, N. Y. Drainage area, 118 sq mi. Records available, October 1950 to September 1955 in this report. January 1930 to September 1950 in files of Rockland Light and Power Co. Gage, water-stage recorder. Datum of gage is at mean sea level (levels by Rockland Light and Power Co.).

Reservoir is formed by an earth-fill dam. Storage began Jan. 19, 1930. Usable capacity, 1,387,300,000 cu ft between elevations 1,010.0 ft (minimum operating pool) and 1,070.0 ft (top of permanent flashboards). Dead storage, about 212,700,000 cu ft below elevation 1,010.0 ft. Reservoir is used for storage of water for power. Figures given herein represent usable contents. Records furnished by Rockland Light and Power Co.

Toronto Reservoir.--Lat 41°37'15", long 74°49'55", at dam on Black Lake Creek, 2½ miles southeast of village of Black Lake, Sullivan County, N. Y. Drainage area, 23.2 sq mi. Records available, October 1950 to September 1955 in this report. January 1926 to September 1950 in files of Rockland Light and Power Co. Staff gage-read daily. Datum of gage is at mean sea level (levels by Rockland Light and Power Co.).

Reservoir is formed by an earth-fill dam completed July 24, 1926. Storage began Jan. 13, 1926. Usable capacity, 1,098,200,000 cu ft between elevations 1,165.0 ft (minimum operating pool) and 1,222.0 ft (top of permanent flashboards). Dead storage, about 26,800,000 cu ft below elevation 1,165.0 ft. Reservoir is used for storage and power. Figures given herein represent usable capacity. Records furnished by Rockland Light and Power Co.

Cliff Lake Reservoir.--Lat 41°35'00", long 74°47'40", at dam on Black Lake Creek, 2½ miles northwest of Fowlersville, Sullivan County, N. Y. Drainage area, 6.46 sq mi (excluding area above Toronto Reservoir). Records available, October 1950 to September 1955 in this report. January 1939 to September 1950 in files of Rockland Light and Power Co. Staff gage read once daily. Datum of gage is at mean sea level (levels by Rockland Light and Power Co.).

Reservoir is formed by a concrete gravity-type dam. Storage began Jan. 6, 1939. Usable capacity, 136,060,000 cu ft between elevations 1,043.3 ft (minimum operating pool) and 1,072.0 ft (top of permanent flashboards). Reservoir is used for storage of water for power. Water is received from Toronto and Lebanon Lake Reservoirs and is discharged through a tunnel into Swinging Bridge Reservoir. Figures given herein represent usable contents. Records furnished by Rockland Light and Power Co.

Neversink Reservoir.--Lat 41°49'20", long 74°38'30", at gatehouse at Neversink Dam on Neversink River, half a mile downstream from Neversink, Sullivan County, N. Y. Drainage area, 91.8 sq mi. Records available, June 1953 to September 1955. Electric-contact gage read daily. Datum of gage is at mean sea level (levels by Board of Water-Supply, City of New York).

Reservoir is formed by an earth-fill dam, rock-faced; storage began June 2, 1953. Capacity, 35,460,000,000 gal between elevations 1,314.00 ft (elevation of intake chamber) and 1,440.00 ft (crest of spillway); dead storage, 1,680,000,000 gal. Reservoir impounds water for diversion through Neversink-Grahamsville tunnel to Rondout Reservoir on Rondout Creek, in Hudson River basin, for water supply of city of New York. Figures given herein represent total contents. No diversion prior to December 1953. Records furnished by Board of Water Supply, city of New York.

Reservoirs in Delaware River basin--Continued

Wild Creek Reservoir.--Lat 40°53'50", long 75°33'50", at dam on Wild Creek, 1.6 miles upstream from mouth and 2.4 miles south of Hatchery, Carbon County, Pa. Drainage area, 22.2 sq mi. Records available, October 1950 to September 1955 in this report. January 1941 to September 1950 in files of Harrisburg, Pa. district office, United States Geological Survey. Staff gage. Datum of gage is at mean sea level (levels by city of Bethlehem).

Reservoir is formed by an earth-fill dam, with ungated spillway at elevation 820.00 ft. Storage began Jan. 27, 1941. Total capacity at elevation 820.00 ft is 12,500 acre-ft, of which 12,000 acre-ft is controlled storage. Figures given herein represent usable contents. Records furnished by city of Bethlehem.

Lake Hopatcong.--Lat 40°55'00", long 74°39'50", in gatehouse of Lake Hopatcong Dam on Musconetcong River and at Landing, Morris County. Drainage area, 25.6 sq mi. Records available, October 1950 to September 1955 in this report. February 1887 to September 1950 in files of Trenton district office, United States Geological Survey. See p.311 for gage heights only. Gage, water-stage recorder. Datum of gage is 914.57 ft above mean sea level (New Jersey Geological Survey datum).

Lake is formed by concrete spillway and earth fill; dam completed about 1828. Crest of spillway was lowered 0.11 ft in 1925. Usable capacity, about 6,000,000,000 gal between gage heights -3.1 ft (sill of lowest gate) and 9.89 ft (crest of spillway). Flow regulated by 4 gates (3 ft by 5 ft). One 24-inch pipe with gate valve to recreation fountain 150 ft downstream from dam. Dead storage not known. Records given herein represent capacity above gage height 1.0 ft. Lake used for recreation.

Note.--See pp. 390-393 for records of month-end elevation or gage height and contents for reservoirs in Delaware River basin.

Reservoirs in Delaware River basin--Continued

Month-end elevation and contents, October 1950 to September 1955

Date	Pepacton Reservoir*			Lake Wallenpaupack†		
	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in cfs)
September 30, 1950				1,175.25	76,120	-
October 31				1,172.80	63,360	-208
November 30				1,177.70	89,180	+434
December 31				1,184.55	126,680	+610
Calendar year 1950				-	-	+84.9
January 31, 1951				1,184.75	127,800	+18.2
February 28				1,186.35	136,800	+162
March 31				1,187.00	140,500	+60.3
April 30				1,186.95	140,220	-4.8
May 31				1,183.95	123,320	-275
June 30				1,181.75	111,120	-205
July 31				1,180.70	105,380	-93.4
August 31				1,177.05	85,670	-321
September 30				1,173.40	66,480	-322
Water year 1950-51				-	-	-13.3
October 31, 1951				1,169.35	45,650	-339
November 30				1,175.15	75,595	+503
December 31				1,178.75	94,850	+313
Calendar year 1951				-	-	+44.0
January 31, 1952				1,183.85	122,760	+454
February 29				1,182.65	116,080	-116
March 31				1,185.60	132,560	+268
April 30				1,189.55	155,190	+380
May 31				1,189.40	154,320	-14.2
June 30				1,186.40	137,080	-290
July 31				1,186.75	139,075	+32.5
August 31				1,181.55	110,025	-472
September 30				1,179.35	98,090	-201
Water year 1951-52				-	-	+43.5
October 31, 1952				1,174.75	73,500	-400
November 30				1,176.60	83,280	+164
December 31				1,183.25	119,400	+587
Calendar year 1952				-	-	+33.8
January 31, 1953				1,186.55	137,940	+302
February 28				1,186.20	135,940	-36.0
March 31				1,187.60	143,920	+130
April 30				1,187.95	145,920	+33.6
May 31				1,187.25	141,920	-65.1
June 30				1,183.55	121,080	-350
July 31				1,179.15	97,010	-391
August 31				1,176.60	83,280	-223
September 30				1,175.45	77,185	-102
Water year 1952-53				-	-	-28.9
October 31, 1953				1,173.20	65,440	-191
November 30				1,173.70	68,040	+43.7
December 31				1,178.00	90,800	+370
Calendar year 1953				-	-	-39.5
January 31, 1954				1,176.05	80,365	-170
February 28				1,176.80	84,340	+71.6
March 31				1,180.30	103,220	+307
April 30				1,183.55	121,080	+300
May 31				1,186.95	140,215	+311
June 30				1,183.95	123,320	-284
July 31				1,182.75	116,625	-109
August 31				1,181.75	111,120	-89.5
September 30	1,129.50	2,400	+124	1,181.20	108,100	-50.8
Water year 1953-54	-	-	-	-	-	+42.7
October 31, 1954	1,144.18	6,400	+200	1,179.00	96,200	-194
November 30	1,186.43	30,600	+1,248	1,180.25	102,950	+113
December 31	1,209.01	50,600	+998	1,181.45	109,480	+106
Calendar year 1954	-	-	+214	-	-	+25.8
January 31, 1955	1,209.36	50,900	+15.0	1,178.75	94,850	-238
February 28	1,209.24	50,800	-5.5	1,177.65	88,910	-107
March 31	1,220.84	62,916	+605	1,181.10	107,550	+303
April 30	1,222.86	65,186	+117	1,181.30	108,650	+18.5
May 31	1,218.51	60,367	-241	1,180.25	102,950	-92.7
June 30	1,223.13	65,489	+264	1,177.80	89,720	-222
July 31	1,217.87	59,678	-290	1,175.35	76,660	-212
August 31	1,223.05	77,231	+876	1,191.00	163,700	+1,416
September 30	1,232.16	76,132	-56.7	1,183.80	122,480	-693
Water year 1954-55	-	-	+313	-	-	+19.9

* Elevation at 12 p.m. by interpolation.
† Elevation at 12 p.m.

Reservoirs in Delaware River basin--Continued

Month-end elevation and contents, October 1950 to September 1955

Date	Swinging Bridge Reservoir†			Toronto Reservoir†		
	Elevation (feet)	Contents (millions of cubic feet)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (millions of cubic feet)	Change in contents (equivalent in cfs)
September 30, 1950	1,066.5	1,248	-	1,188.0	257	-
October 31	1,062.0	1,078	-63.5	1,180.7	144	-42.2
November 30	1,069.9	1,383	+118	1,188.5	266	+47.1
December 31	1,062.8	1,108	-103	1,198.5	467	+75.0
Calendar year 1950	-	-	+5.5	-	-	+10.1
January 31, 1951	1,065.25	1,200	+34.4	1,204.3	594	+47.4
February 28	1,069.3	1,359	+65.7	1,212.0	815	+91.4
March 31	1,071.3	1,440	+30.3	1,218.5	1,047	+86.6
April 30	1,064.75	1,180	-100	1,219.7	1,095	+18.5
May 31	1,061.3	1,053	-47.4	1,208.4	705	-146
June 30	1,055.4	853	-77.2	1,189.0	274	-166
July 31	1,051.45	730	-45.9	1,180.1	134	-52.3
August 31	1,051.4	728	-.7	1,170.8	30	-38.8
September 30	1,052.7	767	+15.0	1,172.2	41	+4.2
Water year 1950-51	-	-	-15.3	-	-	-6.8
October 31, 1951	1,052.9	773	+2.2	1,177.7	99	+21.6
November 30	1,065.8	1,221	+173	1,191.9	334	+90.7
December 31	1,065.4	1,206	-5.6	1,198.0	457	+45.9
Calendar year 1951	-	-	+3.1	-	-	-.3
January 31, 1952	1,070.5	1,408	+75.4	1,205.4	622	+61.6
February 29	1,059.6	993	-166	1,210.1	755	+53.1
March 31	1,070.5	1,408	+155	1,216.0	953	+73.9
April 30	1,071.1	1,432	+9.3	1,220.7	1,138	+71.4
May 31	1,069.9	1,383	-18.3	1,221.1	1,155	+6.4
June 30	1,064.4	1,167	-83.3	1,220.1	1,112	-16.6
July 31	1,066.5	1,248	+30.3	1,220.1	1,112	0
August 31	1,066.2	1,237	-4.1	1,216.5	972	-52.3
September 30	1,065.1	1,194	-16.6	1,213.6	868	-40.1
Water year 1951-52	-	-	+13.5	-	-	+26.2
October 31, 1952	1,060.1	1,010	-68.7	1,213.3	858	-3.7
November 30	1,060.2	1,014	+1.5	1,212.6	835	-8.9
December 31	1,060.2	1,014	0	1,212.7	838	+1.1
Calendar year 1952	-	-	-6.1	-	-	+12.0
January 31, 1953	1,066.8	1,260	+91.8	1,207.4	676	-60.5
February 28	1,060.8	1,035	-93.0	1,212.3	825	+61.6
March 31	1,070.1	1,391	+133	1,219.4	1,083	+96.3
April 30	1,069.7	1,375	-6.2	1,220.8	1,142	+22.8
May 31	1,065.0	1,190	-69.1	1,220.2	1,117	-9.3
June 30	1,065.2	1,198	+3.1	1,219.9	1,104	-5.0
July 31	1,064.8	1,182	-6.0	1,213.9	879	-84.0
August 31	1,064.4	1,167	-5.6	1,210.3	761	-44.1
September 30	1,062.2	1,085	-31.6	1,210.2	758	-1.2
Water year 1952-53	-	-	-3.5	-	-	-3.5
October 31, 1953	1,065.1	1,194	+40.7	1,201.0	518	-89.6
November 30	1,064.5	1,171	-8.9	1,201.3	525	+2.7
December 31	1,057.5	922	-93.0	1,199.5	487	-14.2
Calendar year 1953	-	-	-2.9	-	-	-11.1
January 31, 1954	1,058.0	938	+6.0	1,196.7	431	-20.9
February 28	1,065.5	1,210	+112	1,201.6	531	+41.3
March 31	1,059.2	979	-86.3	1,207.0	665	+50.0
April 30	1,067.9	1,303	+125	1,210.5	768	+39.7
May 31	1,068.5	1,327	+9.0	1,216.1	957	+70.6
June 30	1,063.3	1,126	-77.5	1,216.1	957	0
July 31	1,064.7	1,179	+19.8	1,207.5	679	-104
August 31	1,064.5	1,171	-3.0	1,201.4	527	-56.7
September 30	1,063.0	a1,115	-21.6	1,201.8	b536	+3.5
Water year 1953-54	-	-	+.9	-	-	-7.0
October 31, 1954	1,063.6	1,139	+8.2	1,189.0	280	-105
November 30	1,068.8	1,339	+77.2	1,194.2	383	+39.7
December 31	1,067.2	1,276	-23.5	1,198.0	468	+31.7
Calendar year 1954	-	-	+11.2	-	-	-1.4
January 31, 1955	1,055.6	864	-154	1,200.7	534	+24.6
February 28	1,056.1	880	+6.6	1,203.5	605	+29.4
March 31	1,067.0	1,268	+145	1,211.0	809	+76.2
April 30	1,069.3	1,359	+35.1	1,214.2	904	+36.7
May 31	1,060.9	1,042	-118	1,215.2	936	+11.9
June 30	1,063.3	1,128	+33.2	1,211.1	812	-47.8
July 31	1,063.6	1,139	+4.1	1,201.1	544	-100
August 31	1,065.4	1,206	+25.0	1,208.8	747	+75.8
September 30	1,064.2	1,161	-17.4	1,205.0	644	-39.7
Water year 1954-55	-	-	+1.4	-	-	+2.6

† Elevation at 12 p.m.
a Contents by capacity table used beginning Oct. 1, 1954, 1,117,000,000 cubic feet.
b Contents by capacity table used beginning Oct. 1, 1954, 561,000,000 cubic feet.

Reservoirs in Delaware River basin--Continued

Month-end elevation and contents, October 1950 to September 1955

Date	Cliff Lake Reservoir†			Neversink Reservoir*		
	Elevation (feet)	Contents (millions of cu feet)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in cfs)
September 30, 1950	1,068.8	117	-			
October 31	1,062.0	72	-16.8			
November 30	1,069.8	125	+20.4			
December 31	1,063.7	82	-16.1			
Calendar year 1950	-	-	+1.0			
January 31, 1951	1,066.5	100	+6.7			
February 28	1,070.0	126	+10.8			
March 31	1,070.4	129	+1.1			
April 30	1,069.0	118	-4.2			
May 31	1,071.5	138	+7.4			
June 30	1,071.0	134	-1.5			
July 31	1,051.5	26	-40.3			
August 31	1,051.8	27	+.4			
September 30	1,052.6	30	+1.2			
Water year 1950-51	-	-	-2.8			
October 31, 1951	1,053.3	32	+.7			
November 30	1,066.0	97	+25.1			
December 31	1,066.3	99	+.7			
Calendar year 1951	-	-	+.5			
January 31, 1952	1,070.6	131	+11.9			
February 29	1,061.5	69	-24.8			
March 31	1,071.8	141	+26.9			
April 30	1,072.4	146	+1.9			
May 31	1,072.5	147	+.4			
June 30	1,064.7	88	-22.8			
July 31	1,066.5	100	+4.5			
August 31	1,067.0	104	+1.5			
September 30	1,065.4	93	-4.2			
Water year 1951-52	-	-	+2.0			
October 31, 1952	1,060.1	61	-11.9	-	-	-
November 30	1,060.8	65	+1.5	-	-	-
December 31	1,064.4	86	+7.8	-	-	-
Calendar year 1952	-	-	-.4	-	-	-
January 31, 1953	1,070.3	129	+16.1	-	-	-
February 28	1,062.7	76	-21.9	-	-	-
March 31	1,071.3	137	+22.8	-	-	-
April 30	1,072.4	146	+3.5	-	-	-
May 31	1,067.5	107	-14.5	-	0	-
June 30	1,065.6	94	-5.0	1,316.3	1,913	+98.7
July 31	1,068.1	112	+6.7	1,318.9	2,192	+13.9
August 31	1,064.5	87	-9.3	1,317.37	2,024	-8.39
September 30	1,062.3	73	-5.4	1,317.14	2,003	-1.08
Water year 1952-53	-	-	-.6	-	-	+8.49
October 31, 1953	1,070.5	130	+21.3	1,321.35	2,469	+23.3
November 30	1,064.9	90	-15.4	1,333.88	4,096	+83.9
December 31	1,069.5	122	+11.9	1,360.43	9,093	+249
Calendar year 1953	-	-	+1.2	-	-	+38.5
January 31, 1954	1,057.7	49	-27.3	1,363.07	9,699	+30.3
February 28	1,066.0	97	+19.9	1,380.81	14,259	+252
March 31	1,059.6	58	-14.5	1,398.39	19,787	+276
April 30	1,068.0	111	+20.4	1,410.18	24,089	+222
May 31	1,068.3	113	+.7	1,422.20	28,974	+244
June 30	1,063.3	79	-13.1	1,410.70	24,293	-241
July 31	1,071.9	142	+23.5	1,405.24	22,226	-103
August 31	1,069.8	125	-6.4	1,402.62	21,280	-47.2
September 30	1,063.3	c79	-17.7	1,402.02	21,063	-11.2
Water year 1953-54	-	-	+.2	-	-	+80.8
October 31, 1954	1,068.7	110	+13.8	1,402.72	21,314	+12.5
November 30	1,068.9	111	+.4	1,415.06	26,009	+242
December 31	1,067.1	98	-4.8	1,417.69	27,088	+53.8
Calendar year 1954	-	-	-.6	-	-	+76.3
January 31, 1955	1,056.5	38	-22.4	1,421.62	28,727	+81.8
February 28	1,056.0	36	-.8	1,425.49	30,387	+91.7
March 31	1,068.3	107	+26.5	1,433.00	34,718	+216
April 30	1,069.4	115	+3.1	1,440.18	37,231	+130
May 31	1,061.1	60	-20.5	1,439.61	36,951	-14.0
June 30	1,067.8	103	+16.6	1,437.93	36,137	-42.0
July 31	1,066.8	96	-2.6	1,428.07	31,535	-230
August 31	1,068.4	107	+4.1	1,432.84	33,714	+109
September 30	1,067.8	103	-1.5	1,426.09	30,654	-158
Water year 1954-55	-	-	+1.0	-	-	+40.7

† Elevation at 12 p.m.
* Elevation at 12 p.m. by interpolation.
c Contents by capacity table used beginning Oct. 1, 1954, 73,000,000 cubic feet.

Reservoirs in Delaware River basin--Continued

Month-end elevation or gage height and contents, October 1950 to September 1955

Date	Wild Creek Reservoir†			Lake Hopatcong ‡		
	Elevation (feet)	Contents (acre feet)	Change in contents (equivalent in cfs)	Gage height (feet)	Contents (million gallons)	Change in contents (equivalent in cfs)
September 30, 1950	813.38	10,250	-	8.44	4,945	-
October 31	809.54	9,220	-16.7	7.78	4,438	-25.3
November 30	817.28	11,230	+35.5	8.80	5,225	+40.6
December 31	820.10	12,050	+11.4	7.76	4,423	-40.0
Calendar year 1950	-	-	+5.2	-	-	+4.1
January 31, 1951	820.37	12,110	+1.3	7.94	4,558	+6.7
February 28	820.31	12,090	-.4	8.23	4,782	+12.4
March 31	820.44	12,130	+.7	9.31	5,631	+42.4
April 30	820.20	12,060	-1.2	9.33	5,647	+.8
May 31	820.03	12,010	-.8	9.27	5,598	-2.4
June 30	819.58	11,920	-1.5	9.14	5,493	-5.4
July 31	819.51	11,900	-.3	9.20	5,542	+2.4
August 31	817.71	11,450	-7.3	8.61	5,077	-23.2
September 30	814.16	10,470	-16.5	7.96	4,573	-26.0
Water year 1950-51	-	-	+.3	-	-	-1.6
October 31, 1951	809.86	9,290	-19.2	7.72	4,393	-8.9
November 30	819.96	11,990	+45.4	8.69	5,139	+38.1
December 31	820.26	12,080	+1.5	8.60	5,069	-3.5
Calendar year 1951	-	-	+.1	-	-	+2.7
January 31, 1952	820.78	12,230	+2.4	8.75	5,186	+5.8
February 29	820.07	12,020	-3.7	7.60	4,304	-46.9
March 31	820.21	12,060	+.7	8.17	4,735	+21.8
April 30	820.42	12,130	+1.2	8.92	5,318	+30.3
May 31	820.47	12,140	+.2	9.46	5,752	+21.7
June 30	820.00	12,000	-2.4	9.15	5,501	-12.9
July 31	820.03	12,010	+.2	9.01	5,388	-5.7
August 31	820.58	12,170	+2.6	9.08	5,445	-2.8
September 30	819.87	11,970	-3.4	9.01	5,388	-2.9
Water year 1951-52	-	-	+2.1	-	-	+3.5
October 31, 1952	816.45	11,100	-14.2	7.82	4,468	-45.9
November 30	820.32	12,100	+16.8	9.16	5,509	+53.7
December 31	820.14	12,040	-1.0	8.56	5,038	-23.5
Calendar year 1952	-	-	-.1	-	-	-.1
January 31, 1953	820.37	12,110	+1.1	7.93	4,551	-24.4
February 28	820.28	12,080	-.5	7.07	3,908	-35.5
March 31	820.37	12,110	+.5	8.70	5,147	+61.8
April 30	820.37	12,110	0	9.40	5,703	+28.7
May 31	820.22	12,070	-.7	9.18	5,526	-8.8
June 30	819.72	11,940	-2.2	8.67	5,124	-20.8
July 31	819.29	11,340	-9.8	8.11	4,688	-21.7
August 31	812.60	10,040	-21.1	7.73	4,401	-14.3
September 30	806.97	8,620	-23.8	6.91	3,791	-31.4
Water year 1952-53	-	-	-4.6	-	-	-6.8
October 31, 1953	800.69	7,180	-23.4	6.60	3,568	-11.1
November 30	796.24	6,380	-13.4	6.62	3,582	+.7
December 31	809.53	9,220	+46.2	7.78	4,438	+42.7
Calendar year 1953	-	-	-3.9	-	-	-2.5
January 31, 1954	811.55	9,740	+8.5	7.96	4,573	+6.7
February 28	813.86	10,390	+11.7	8.10	4,681	+6.0
March 31	820.17	12,050	+27.0	9.01	5,388	+35.3
April 30	820.12	12,040	-.2	9.28	5,607	+11.3
May 31	820.02	12,010	-.5	9.26	5,590	-.8
June 30	817.65	11,440	-9.6	8.86	5,272	-16.4
July 31	813.52	10,290	-18.7	8.41	4,921	-17.5
August 31	810.37	9,420	-14.2	8.62	5,084	+8.1
September 30	806.76	8,570	-14.3	8.42	4,930	-8.0
Water year 1953-54	-	-	-.1	-	-	+4.8
October 31, 1954	802.30	7,550	-16.6	7.77	4,431	-24.9
November 30	802.99	7,710	+2.7	8.25	4,797	+18.9
December 31	805.84	8,360	+10.6	7.70	4,378	-20.9
Calendar year 1954	-	-	-1.2	-	-	-.3
January 31, 1955	808.13	8,890	+8.6	7.02	3,870	-25.3
February 28	807.70	8,790	-1.8	7.71	4,386	+28.5
March 31	817.14	11,290	+40.6	9.03	5,405	+50.8
April 30	820.08	12,020	+12.3	9.24	5,574	+8.7
May 31	818.69	11,720	-4.9	9.03	5,405	-8.4
June 30	817.02	11,260	-7.7	9.14	5,493	+4.5
July 31	812.16	9,920	-21.8	8.61	5,077	-20.8
August 31	820.32	12,100	+35.5	9.23	5,566	+24.4
September 30	818.76	11,740	-6.1	5.55	2,828	-141
Water year 1954-55	-	-	+4.4	-	-	-8.9

† Elevation at 12 p.m.
‡ Gage height at 12 p.m.

Diversions from Delaware River basin

Water diverted from Pepacton Reservoir, N. Y. on East Branch Delaware River to Rondout Reservoir on Rondout Creek in Hudson River basin, for water supply of city of New York. No diversion prior to Jan. 6, 1955. Records furnished by Board of Water Supply, City of New York.

Water diverted from Neversink Reservoir, N. Y. on Neversink River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for water supply of city of New York. No diversion prior to Dec. 3, 1953. Records furnished by Board of Water Supply, City of New York.

Water diverted by Delaware & Raritan Canal from Delaware River at Raven Rock. N. J., for municipal and industrial supply. Water discharged into Raritan River at New Brunswick. Records of discharge are collected at Delaware & Raritan Canal at Kingston (see p. 341).

Diversion, in cubic feet per second, October 1950 to September 1955

Month	Pepacton Reservoir		Neversink Reservoir		Delaware & Raritan Canal at Kingston	
October 1950					16.8	
November					29.7	
December					27.4	
Calendar year 1950					31.3	
January 1951					22.9	
February					22.9	
March					20.3	
April					20.4	
May					30.3	
June					32.9	
July					28.2	
August					30.7	
September					23.7	
Water year 1950-51					25.5	
October 1951					43.2	
November					31.6	
December					31.0	
Calendar year 1951					28.2	
January 1952					29.8	
February					33.7	
March					29.1	
April					30.1	
May					48.4	
June					47.4	
July					64.8	
August					66.9	
September					69.4	
Water year 1951-52					43.8	
October 1952					56.6	
November					50.9	
December					28.2	
Calendar year 1952					46.3	
January 1953					27.0	
February					25.9	
March					22.5	
April					16.9	
May					25.8	
June					33.6	
July					42.4	
August					30.4	
September					27.9	
Water year 1952-53					32.4	

Diversions from Delaware River basin--Continued

Diversion, in cubic feet per second, October 1950 to September 1955

Month	Pepacton Reservoir	Neversink Reservoir	Delaware & Raritan Canal at Kingston
October 1953		-	35.4
November		-	54.0
December		94.5	47.8
Calendar year 1953		8.0	32.5
January 1954		90.2	49.1
February		101	49.6
March		106	39.9
April		90.8	40.4
May		173	50.0
June		347	60.5
July		77.4	50.8
August		16.3	45.8
September		10.6	46.0
Water year 1953-54		92.0	47.4
October 1954	-	7.9	45.3
November	-	79.5	35.7
December	-	233	35.8
Calendar year 1954	-	111	45.7
January 1955	526	64.8	54.6
February	660	46.3	82.7
March	870	180	65.6
April	932	209	49.8
May	575	104	63.3
June	.7	104	58.4
July	5.0	188	80.2
August	280	399	54.3
September	172	247	45.5
Water year 1954-55	333	156	55.8

In addition to the records of streamflow obtained at gaging stations, discharge measurements and determinations of peak discharge by indirect methods were made at points indicated in the following tables.

Miscellaneous discharge measurements during period October 1950 to September 1955

Passaic River basin

Date	Stream	Tributary to or diverting from-	Locality	Drainage area (sq mi)	Discharge (cfs)
1954					
Dec. 29	Erskine Brook	Wanaque River	Lat 41° 05' 26", long 74° 15' 59", at site of former gaging station, at mouth 3½ miles north of Wanaque.	1.14	1.60

Raritan River basin

Date	Stream	Tributary to or diverting from-	Locality	Drainage area (sq mi)	Discharge (cfs)
1953					
May 22	Stony Brook	Millstone River	Lat 41° 19' 59", long 74° 40' 56", at bridge on U. S. Highway 206 and 1.6 miles southwest of Princeton.	44.0	36.4
1954					
Sept. 23	Duck Pond Run	Stony Brook	At bridge, 1 mile northeast of intersection of U. S. Highway 1 and Mercer County Route 533 at Clarksville.	-	2.08
Sept. 23	....do.....	....do.....	....do.....		1.45
Dec. 27	....do.....	....do.....	....do.....		1.44
1955					
Jan. 17	....do.....	....do.....	....do.....		1.14
Aug. 15	Middle Brook	Raritan River	At highway bridge, ½ mile upstream from mouth at Bound Brook.		83.5
1951					
Mar. 28	Green Brook	....do.....	At Seeley Mills, 3/4 mile north of Scotch Plains.	6.28	8.85
1952					
Apr. 8	....do.....	....do.....	....do.....		9.57
1953					
Dec. 1	Bound Brook	Green Brook	At bridge on South Lincoln Avenue at Middlesex.	-	9.02
Dec. 1	Ambrose Brook	....do.....	0.2 mile northwest of Reading Ry. overpass of Possumtown Road, Piscataway Township, near Bound Brook.	-	5.24

Cohansey River basin

Date	Stream	Tributary to or diverting from-	Locality	Drainage area (sq mi)	Discharge (cfs)
1951					
Feb. 6	Foster Run	Hands Pond	At Bridgeton-Deerfield road, 3¼ miles north of city line of Bridgeton.	-	2.05
7	....do.....	....do.....	....do.....		1.21
20	....do.....	....do.....	....do.....		2.70
21	....do.....	....do.....	....do.....		3.50
Mar. 20	....do.....	....do.....	....do.....		3.53
Apr. 13	....do.....	....do.....	....do.....		3.70
Oct. 16	....do.....	....do.....	....do.....		.85
Feb. 7	Parsonage Run	Foster Run	Half a mile below Bridgeton-Deerfield road and 3½ miles north of city line of Bridgeton.	-	1.07
20	....do.....	....do.....	....do.....		1.38
21	....do.....	....do.....	....do.....		5.93
Mar. 20	....do.....	....do.....	....do.....		4.11
Apr. 13	....do.....	....do.....	....do.....		4.01
Oct. 16	....do.....	....do.....	....do.....		.41
Nov. 14	....do.....	....do.....	....do.....		.40
1952					
Jan. 24	....do.....	....do.....	....do.....		1.45
Apr. 23	....do.....	....do.....	....do.....		2.21
May 7	....do.....	....do.....	....do.....		2.29
1951					
Feb. 20	Hands Pond Outlet	Cohansey River	Just below Hands Pond, 4,000 ft above mouth and 3½ miles north of city line of Bridgeton.	-	6.58
21	....do.....	....do.....	....do.....		8.29
Mar. 21	....do.....	....do.....	....do.....		9.12
Apr. 13	....do.....	....do.....	....do.....		9.10
18	....do.....	....do.....	....do.....		6.16
July 25	....do.....	....do.....	....do.....		3.80
Oct. 16	....do.....	....do.....	....do.....		5.19
Nov. 14	....do.....	....do.....	....do.....		6.58
1952					
Jan. 24	....do.....	....do.....	....do.....		7.29
1951					
Feb. 20	....do.....	....do.....	At road bridge, 2,000 ft below Hands Pond, 2,000 ft above mouth, and 3 miles north of city line of Bridgeton.	-	6.53
21	....do.....	....do.....	....do.....		10.1
Mar. 21	....do.....	....do.....	....do.....		8.67

Miscellaneous discharge measurements during period October 1950 to September 1955--Continued

Cohansey River basin--Continued

Date	Stream	Tributary to or diverting from-	Locality	Drainage area (sq mi)	Discharge (cfs)
1951					
Apr. 13	....do.....	....do.....	....do.....		9.85

Delaware River basin

Date	Stream	Tributary to or diverting from-	Locality	Drainage area (sq mi)	Discharge (cfs)
1954					
May 6	Pequest River	Delaware River	At Great Meadows.	-	299
18	....do.....	....do.....	....do.....		112
June 4	....do.....	....do.....	....do.....		63.0
11	....do.....	....do.....	....do.....		43.8
Aug. 31	....do.....	....do.....	....do.....		59.9
Oct. 14	....do.....	....do.....	....do.....		17.3
1955					
Mar. 23	....do.....	....do.....	....do.....		300
June 19	....do.....	....do.....	....do.....		23.5
Aug. 19	....do.....	....do.....	....do.....		486
1953					
Feb. 6	....do.....	....do.....	At Hardwick St., Belvidere	1.58	365
Sept. 9	....do.....	....do.....	....do.....		74.2
1955					
Mar. 8	....do.....	....do.....	....do.....		374
23	....do.....	....do.....	....do.....		555
1951					
Dec. 4	Delaware Division Canal	Lehigh River	At Durham Aqueduct, 1 mile south of Riegelsville, Pa.	-	25.5
1952					
Apr. 7	....do.....	....do.....	....do.....		26.4
1953					
Apr. 21	....do.....	....do.....	....do.....		59.7
July 16	....do.....	....do.....	....do.....		65.7
Sept. 24	....do.....	....do.....	....do.....		67.6
1954					
May 18	....do.....	....do.....	....do.....		65.9
1955					
June 6	....do.....	....do.....	....do.....		80.7
1950					
Oct. 16	Stanley Spring	Musconetcong River	2½ miles southwest of Asbury	-	1.01
Nov. 20	....do.....	....do.....	....do.....		.68
1951					
Jan. 2	....do.....	....do.....	....do.....		2.34
1951					
Oct. 19	Musconetcong River	Delaware River	At mouth, in Riegelsville	156	163
Dec. 4	....do.....	....do.....	....do.....		343
1952					
Apr. 7	....do.....	....do.....	....do.....		1,020
Dec. 31	....do.....	....do.....	....do.....		383
1952					
Sept. 25	....do.....	....do.....	....do.....		73.2
1954					
Mar. 23	....do.....	....do.....	....do.....		321
July 20	....do.....	....do.....	....do.....		85.8
1955					
July 18	....do.....	....do.....	....do.....		20.5
1954					
Aug. 16	Delaware & Raritan Canal	Delaware River	At Lower Ferry Road, Trenton.	-	67.9
1950					
Oct. 10	....do.....	....do.....	At Calhoun St., Trenton.	-	67.9
Nov. 10	....do.....	....do.....	....do.....		22.4
Dec. 8	....do.....	....do.....	....do.....		a44.8
1951					
Jan. 29	....do.....	....do.....	....do.....		b2
Feb. 2	....do.....	....do.....	....do.....		a19.8
Mar. 5	....do.....	....do.....	....do.....		1.95
Apr. 26	....do.....	....do.....	....do.....		b5
June 25	....do.....	....do.....	....do.....		20.5
July 6	....do.....	....do.....	....do.....		40.2
Aug. 24	....do.....	....do.....	....do.....		25.7
Sept. 21	....do.....	....do.....	....do.....		0
Oct. 19	....do.....	....do.....	....do.....		46.9
Dec. 5	....do.....	....do.....	....do.....		18.1
1952					
Jan. 11	....do.....	....do.....	....do.....		30.8
Feb. 18	....do.....	....do.....	....do.....		15.5
Mar. 24	....do.....	....do.....	....do.....		0
June 10	....do.....	....do.....	....do.....		53.1
27	....do.....	....do.....	....do.....		57.4
July 17	....do.....	....do.....	....do.....		65.5
Sept. 4	....do.....	....do.....	....do.....		28.4
Nov. 18	....do.....	....do.....	....do.....		15.8
Dec. 10	....do.....	....do.....	....do.....		31.5
1953					
Jan. 16	....do.....	....do.....	....do.....		28.2
Feb. 11	....do.....	....do.....	....do.....		34.7
Mar. 9	....do.....	....do.....	....do.....		16.2
Apr. 14	....do.....	....do.....	....do.....		92.7

Miscellaneous discharge measurements during period October 1950 to September 1955--Continued

Delaware River basin--Continued

Date	Stream	Tributary to or diverting from-	Locality	Drainage area (sq mi)	Discharge (cfs)
1953	Delaware & Raritan Canal	Delaware River	At Calhoun St., Trenton		64.1
May 12	....do	....do	....do		54.3
June 9	....do	....do	....do		29.2
July 15	....do	....do	....do		75.1
Aug. 12	....do	....do	....do		44.1
Oct. 21	....do	....do	....do		32.5
Nov. 18	....do	....do	....do		49.6
Dec. 9	....do	....do	....do		
1954					
Jan. 21	....do	....do	....do		30.0
Feb. 15	....do	....do	....do		31.2
Mar. 16	....do	....do	....do		58.6
Apr. 14	....do	....do	....do		26.7
May 17	....do	....do	....do		60.7
June 23	....do	....do	....do		73.6
July 19	....do	....do	....do		83.7
Aug. 16	....do	....do	....do		60.4
Sept.23	....do	....do	....do		38.7
1952					
Feb. 7	Middle Branch Mount Misery Brook	Mount Misery Brook	At Glassworks Road in Lebanon State Forest.	-	1.47
26	....do	....do	....do		1.11
Apr. 3	....do	....do	....do		1.48
Feb. 26	....do	....do	At North Branch Road, in Lebanon State Forest.	2.48	2.56
Apr. 3	....do	....do	....do		3.54
July 23	....do	....do	....do		3.76
1955					
Apr. 20	Mount Misery Brook	Greenwood Branch	At State Highway 70, Lebanon State Forest.	-	24.5
1952					
Feb. 7	McDonald Branch	Bisphams Mill Creek	At Butterworth Road, in Lebanon State Forest.	2.31	2.33
26	....do	....do	....do		1.64
Apr. 3	....do	....do	....do		2.50
July 23	....do	....do	....do		1.92
Dec. 6	....do	....do	....do		1.95
1955					
Apr. 20	Bisphams Mill Creek	Greenwood Branch	At State Highway 70, Lebanon State Forest.	-	14.6
1954					
Apr. 20	Greenwood Branch	North Branch Rancocas Creek	At New Lisbon.	-	63.8
1955					
July 25	North Branch Rancocas Creek	Rancocas Creek	At Smithville.	-	48.6
1953					
Oct. 28	South Branch Rancocas Creek	Rancocas Creek	At State Route 38, near Mt. Holly.	-	745
Oct. 28	North Branch Big Timber Creek	Big Timber Creek	At State Route, 42 near Runnemede	-	43.4

a Flow upstream.
b Estimated.

Miscellaneous determinations of peak discharge during period October 1950 to September 1955

Raritan River basin

Date	Stream	Tributary to-	Locality	Drainage area (sq mi)	Discharge (cfs)
Aug. 19	Clove River*	Papakating Creek	Lat 41°12'40", long 74°36'42", at Sussex, N. J.	19.7	5,780
Aug. 19	South Branch Raritan River	Raritan River	Lat 40°38'08", long 74°54'50", at Clinton, N. J.	112	8,080
Aug. 18	Cakepaulin Creek	South Branch Raritan River	Lat 40°36'28", long 74°54'58", at Lansdowne, N. J.	13.7	7,230
Aug. 18	Prescott Brook	South Branch Raritan River	Lat 40°35'11", long 74°51'57", 1 mile north of Stanton, N. J.	8.37	2,010

*Hudson River basin

Delaware River basin

Aug. 19	Big Flat Brook	Flat Brook	Lat 41°12'55", long 74°47'00", 2.3 miles southeast of Hainesville, N. J.	19.9	4,140
Aug. 19	Paulins Kill	Delaware River	Lat 41°06'23", long 74°42'00", at Lafayette, N. J.	33.6	1,440
Aug. 19	Culvers Brook	Dry Brook	Lat 41°09'35", long 74°46'57", 1½ miles northwest of Branchville, N. J.	7.12	444

Miscellaneous determinations of peak discharge during period October 1950 to September 1955

Delaware River basin--Continued

Date	Stream	Tributary to-	Locality	Drainage area (sq mi)	Discharge (cfs)
Aug. 19	Culvers Brook	Dry Brook	Lat 41°08'53", long 74°45'40", at Branchville, N. J.	10.7	1,560
Aug. 19	Dry Brook	Paulins Kill	Lat 41°09'13", long 74°44'06", at Branchville, N. J.	4.80	1,790
Aug. 19	Paulins Kill	Delaware River	Lat 41°03'08", long 74°49'39", 3½ miles west of Newton, N. J.	81	6,020
Aug. 19	Trout Brook	Paulins Kill	Lat 41°03'33", long 74°51'54", at Middleville, N. J.	5.50	899

Period of records of gaging stations

Explanation

The table lists the stations in New Jersey for which records of discharge or gage heights only have been published for periods prior to Sept. 30, 1955. 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, 1955. 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-
Pascack Brook at Westwood	29.6	1934-
Hackensack River at Oradell	-	(1908-13*a/).
Hackensack River at New Milford	133	1921-
PASSAIC RIVER BASIN		
Passaic River near (at) Millington	55.4	1903-6; 1921-
Passaic River near Chatham	100	1903-11; 1937-
Canoe Brook near Summit	11	1930-b/
Rockaway River:		
Beaver Brook at outlet of Splitrock Reservoir (Pond)	5.50	1925-46
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 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 Ridgewood	21.6	1954-
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	1939-50
Rahway River near Springfield	25.5	1938-
Rahway River at Rahway	40.9	(1908-15*a/); 1921-
Robinsons Branch Rahway River at Goodmans	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/).
Lamington (Black) River near Pottersville	32.8	1921-
North Branch Raritan River near Raritan (at Milltown)	190	1923-

* 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		
Raritan River at Manville (Finderne)	490	(1903-4*a/); 1904-7; (1908-15*a/); 1921-
Millstone River:		
Stony Brook at Princeton	44.5	1933-
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:		
Oswego (East Branch Wading River) at Harrisville	64.0	1931-
ABSECON CREEK BASIN		
Absecon Creek at Absecon	16.6	1923-29; 1933-38. 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	1936-48*
Flat Brook near Flatbrookville	65.1	1923-
Delaware River at Portland, Pa.	4,165	1936-55*
Paulins Kill at Blairstown	126	1921-
Paulins Kill at Columbia	179	(1908-9a/).
Delaware River at Delaware	4,351	1936-54*
Pequest River at Huntsville	31.4	1939-
Pequest River at Pequest	108	1921-
Beaver Brook near Belvidere	36.2	1922-
Delaware River at Belvidere	4,535	1922-
Delaware River at Easton, Pa. (at Phillipsburg)	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	1903-7; 1921-
Delaware River at Riegelsville	6,328	1906-
Delaware River at Milford	6,381	1936-*
Delaware River at Frenchtown	6,420	1936-*
Delaware River at Point Pleasant, Pa.	6,473	1936-55*
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:		
Mount Misery Brook:		
Middle Branch Mount Misery Brook in Lebanon State Forest	2.73	1952-
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-
Alloway River at Alloway	21.9	1952-

* Gage heights or gage heights and discharge measurements only.
a/In Water-Supply Papers of United States Geological Survey.

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