

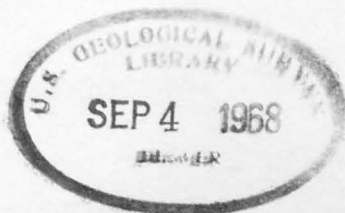
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Magnitude and Frequency of Floods in the United States

Part 1-B. North Atlantic Slope Basins, New York
to York River

By RICHARD H. TICE

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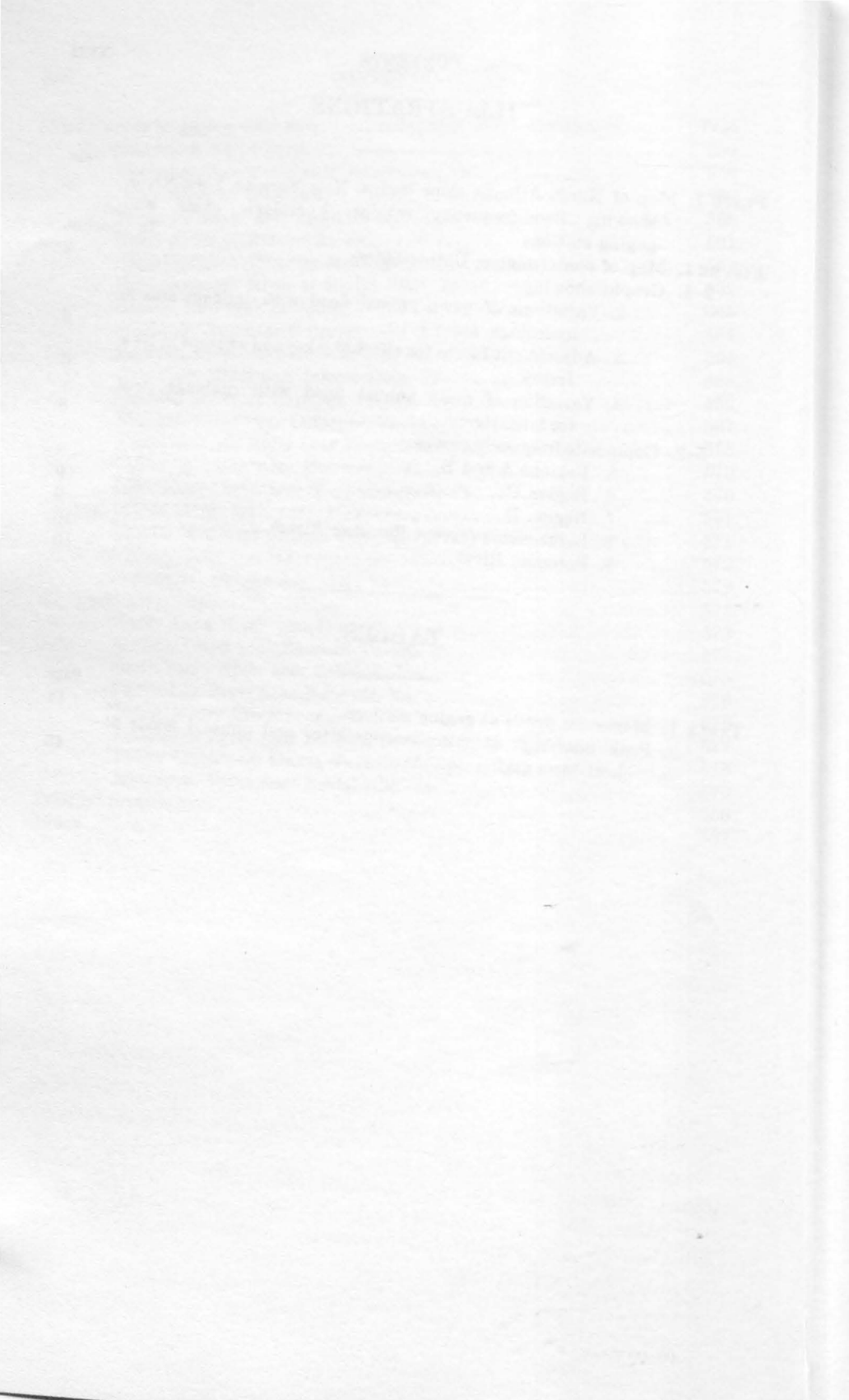
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MAGNITUDE AND FREQUENCY OF FLOODS IN THE UNITED STATES

PART 1-B. NORTH ATLANTIC SLOPE BASINS, NEW YORK TO YORK RIVER

By RICHARD H. TICE

ABSTRACT

Flood magnitude-frequency relations applicable to streams in the North Atlantic slope basins, New York to York River, Va., are presented in this report. The relations are based on flood data collected at 487 gaging stations having 5 or more years of record not materially affected by regulation. For sites on most streams, the magnitude of a flood of any given frequency between 1.1 and 50 years can be determined from two curves—one expressing the relation between the mean annual flood and size of drainage basin and the other expressing the ratio to the mean annual flood of floods of other recurrence intervals. For New Jersey streams, an adjustment to the mean annual flood is based on the percentage of surface area covered by lakes and swamps in the basin.

INTRODUCTION

PURPOSE AND SCOPE

This report provides a means for estimating the magnitude and frequency of floods for most streams in the report area and presents all known significant peak flood data.

The area covered by this report (fig. 1) is the North Atlantic slope basins, New York to York River. Some of the larger rivers in this area are the Hudson River, the Delaware River, the Susquehanna River and the Potomac River.

ACKNOWLEDGMENTS

Most of the peak data listed in this report have been published in the annual series of reports on surface-water supplies published by the U.S. Geological Survey. These records were collected by the Geological Survey with the assistance of many other Federal, State, county, and municipal agencies and by corporations and private individuals. A record completely collected by another agency is noted in the individual station data.

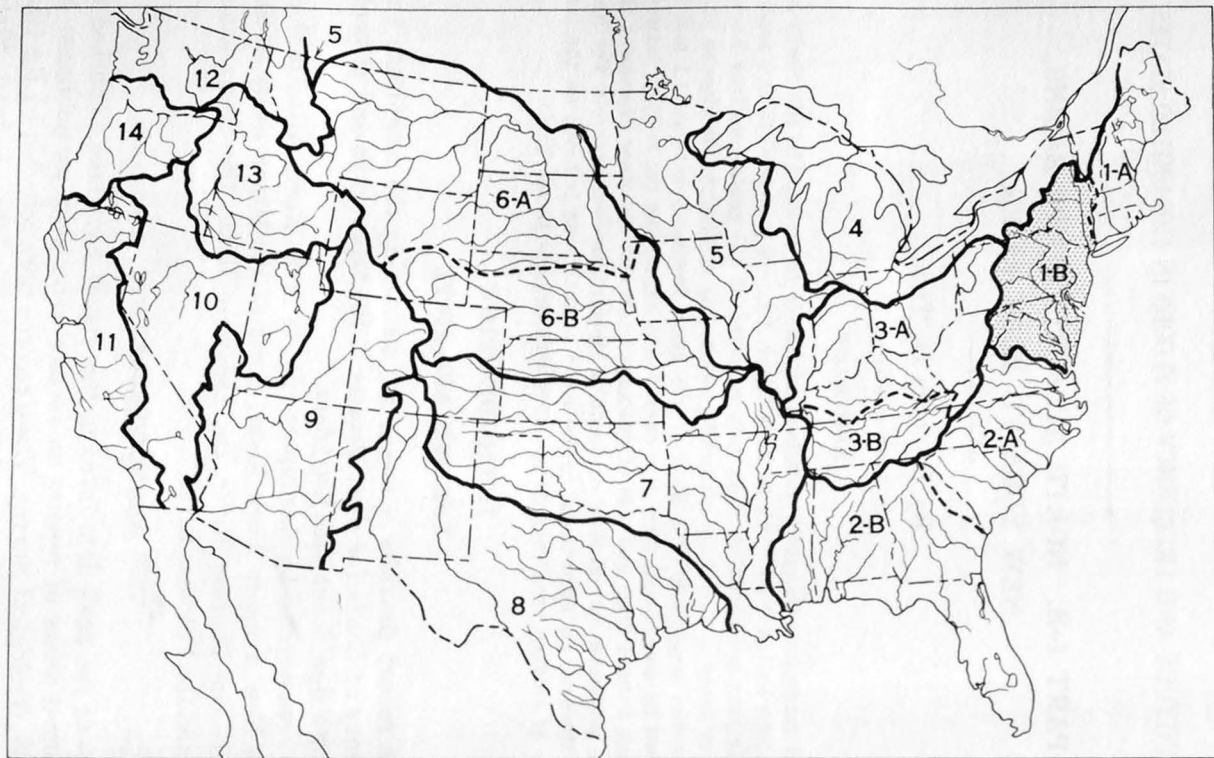


FIGURE 1.—Conterminous United States. The area covered by this report is shaded.

Technical assistance in preparing this report was furnished by Tate Dalrymple and A. Rice Green, Washington, D.C., and J. L. Patterson, Little Rock, Ark. Basic data were furnished under the direction of the following district engineers: Charles E. Knox, Boston, Mass., Donald F. Dougherty, Albany, N.Y., John E. McCall, Trenton, N.J., Robert E. Steacy, Harrisburg, Pa., William E. Forrest, College Park, Md., J. Wyatt Gambrell, Charlottesville, Va., William C. Griffin, Charleston, W. Va.

FLOOD FREQUENCY ANALYSIS

PREVIOUS STUDIES

The analysis for this report has considered previous work in making the flood analysis in much of the area. For some streams, results obtained by methods given in this report may vary slightly from results obtained from previous reports. Previous flood-frequency studies in this area were for the Shenandoah Valley of Virginia (Tice, 1950), Delaware River basin (Tice, 1958), Maryland (Darling, 1959), Pennsylvania (Busch and Shaw, 1960), New York (Robison, 1961), and New Jersey (Thomas, 1964).

PROCEDURES FOR ESTIMATING FLOOD FREQUENCIES

The method of analysis used in this report is explained by Dalrymple (1960). The method uses two principal base curves: a composite frequency curve showing the ratio of flood discharges of various recurrence intervals to that of the mean annual flood, and a curve of mean annual flood expressed as a function of size of drainage basin. In New Jersey, a third curve modifies the mean annual flood on the basis of the surface area of lakes, ponds, and swamps. The base curves were obtained by first analyzing station data and then combining the station data by a regional analysis.

FLOOD FREQUENCY AT A GAGING STATION

STATION FREQUENCY CURVES

A flood-frequency curve based on the records collected at one gaging station represents what has happened at the site during a specific period in the past. A station frequency curve alone may be a poor guide for estimating future floods at the site.

Flood data can be analyzed on the basis of either an annual flood series or a partial-duration flood series. In the annual flood series, only the highest peak discharge in each water year is used. The partial-duration flood series includes all peaks above a selected base. The two series give practically the same results for floods with recurrence

intervals greater than 10 years. The analysis for this report used the annual flood series, although the section entitled "Flood records at gaging stations and miscellaneous sites" includes data for both series for most stations.

The term "recurrence interval" refers to an average time between floods. For example, a flood having a recurrence interval of 10 years will occur on an average of once every 10 years, or on the average of 10 times in 100 years. It will not occur at regular 10-year intervals. A 10-year flood may not occur in 50 years, but then again, 10-year floods may occur in successive months.

The reciprocal of the recurrence interval in the annual flood series is the probability of the event occurring in any one year. A 20-year flood, for example, has a 5-percent chance of occurring in any one year.

RECORDS USED

In general, peak discharge data for gaging stations having 5 or more years of record relatively unaffected by artificial regulation or diversion were used in the analysis. The location of gaging stations for which data are contained in the report are shown on plate 1. A distinction is made thereon between stations used in defining flood-frequency relations and those not used.

REGIONAL FLOOD FREQUENCY

The flood experience at any one gaging station is a short sample from the infinite number of possible floods. Bensen (1960), studying a theoretical 1,000-year record, found that there can be considerably more variation in a short record than in a long record (1,000 yr.). Fifteen-year records gave the 50-year flood within 25 percent four times out of five. The vagaries of nature probably increase the error for short streamflow records over that found in the theoretical study. In this report area, 70 stations with 40 years of record or longer, 400 stations with 15 years of record or longer, and 487 stations with 5 or more years of record (through Sept. 30, 1961) were used in the analysis.

Errors inherent in predicting flood-frequency relations at a given point from records for a short period can be reduced by combining peak-flow data for many gaging stations in an area that is hydrologically homogeneous. The flood-frequency relations derived by combining data can then be applied to ungaged streams in that area.

BASE PERIODS

Floods in any given period of years may be higher or lower than those for some other equal period of years or for an infinitely long period because of the nature of random samples and because of the

possibility of persistent or cyclic changes in climate. To combine records, comparable data should be analyzed. Data should be adjusted to a common time period, and the time period should be as long as possible. However, there is little justification in trying to use exactly the same period in New York as in Virginia because the storms causing floods are seldom the same for both States.

In general, records for this study were adjusted to a base period of 1928-61. The Delaware River records were adjusted to the period 1913-61. For a few stations, historical data extending back to colonial times were available, and these data were used in drawing the station frequency curves.

MEAN ANNUAL FLOODS

The mean annual flood for a gaging station is, by definition, a flood having a recurrence interval of 2.33 years in the annual series. The graphic mean annual flood is considered more reliable than the arithmetic mean. The mean annual flood can be related to measurable physical characteristics of a stream or of a drainage basin and is used in this report as an index flood.

HYDROLOGIC AREAS

Size of drainage basin has been determined as the most important factor affecting peak flow. Some other factors affecting peak flow are basin storage, slope of basin and stream, altitude, surface and bedrock geology, land use, orientation of basin, and basin shape. In this report drainage basin size and storage in lakes and swamps were found to be important factors influencing peak flow. However, for most of the report area a satisfactory method of measuring the storage was not found. In New Jersey, useful values of storage could be measured from 1:24,000-scale topographic maps. The ratio of the surface area of lakes and swamps to the drainage area was used to determine flood factors for modifying the mean annual flood as obtained from plots of mean annual flood versus drainage area size. The influence of other factors on the mean annual flood is indirectly recognized by the delineation of hydrologic areas shown on plate 1. In many places, geology was given considerable weight in drawing the boundaries of a hydrologic area. The coastal plain from New York to Virginia (hydrologic areas 1 and 2) is an area having relatively small floods. Limestone regions in Pennsylvania, Maryland, and Virginia (hydrologic area 9) with sinkholes and subterranean channel storage have lower floods than surrounding areas. An area in the Piedmont region along the fall line from Philadelphia to Washington (hydrologic area 10) has larger floods than adjacent areas, especially on streams draining less than 50 square miles.

The variation of the mean annual flood with drainage area for 10 hydrologic areas is shown in figure 2. Values of mean annual flood shown in figure 2 must be multiplied by an adjustment factor obtained from figure 3 for streams in New Jersey.

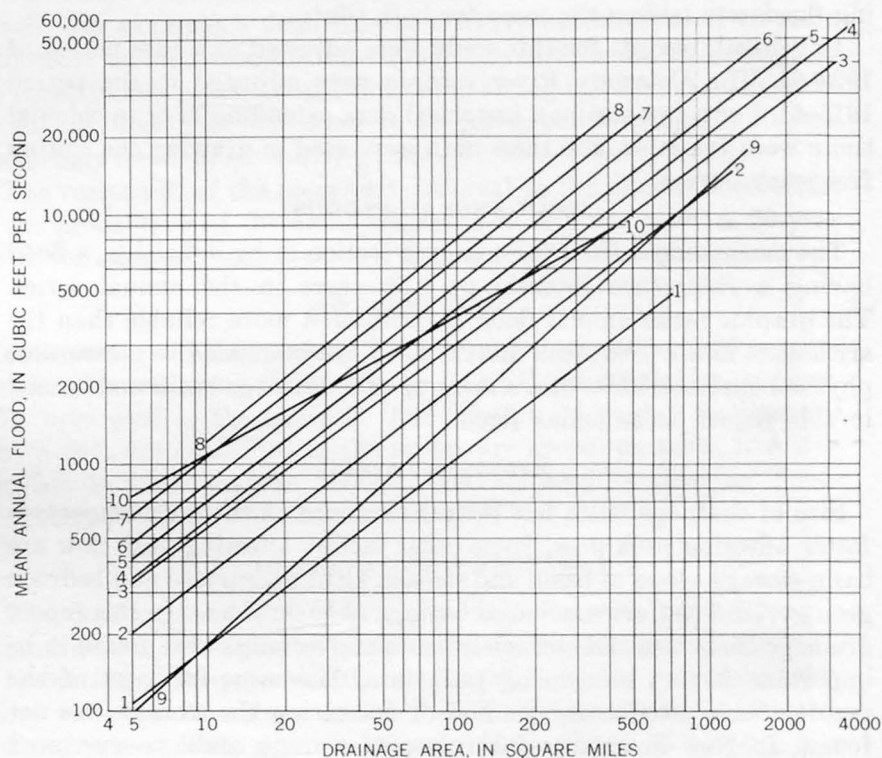


FIGURE 2.—Variation of mean annual flood with drainage area in hydrologic

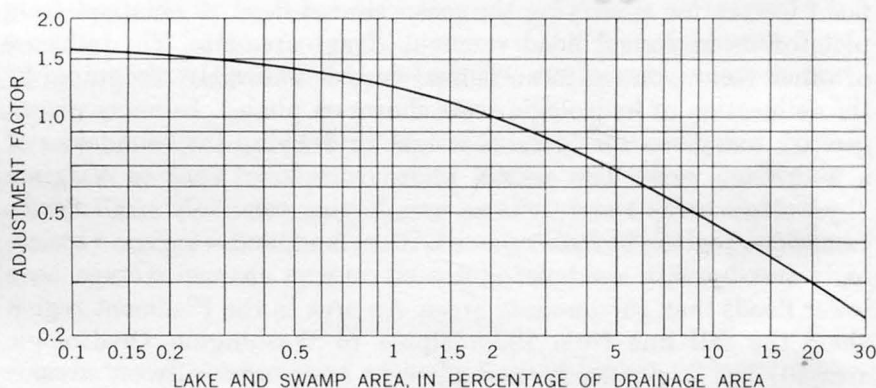


FIGURE 3.—Adjustment factor for effect of lakes and swamps in New Jersey.

LARGE RIVERS

Floods on the main stem of most of the large rivers reflect the characteristics of several hydrologic areas. The large-river floods are summations of the floods from the many small tributaries with various degrees of synchronization (or lack of synchronization) of the peaks. It was necessary to develop individual flood-frequency relations for most large rivers. The variation of the mean annual flood with drainage area for Hudson River below Cedar River, Mohawk River below West Canada Creek, Delaware River below the East and West Branches, Schuylkill River below Little Schuylkill River, Susquehanna River below Cherry Valley Creek, Chemung River, West Branch Susquehanna River below Moshannon Creek, and Potomac River below the North and South Branches is given in figure 4.

COMPOSITE FREQUENCY CURVES

Flood-frequency curves showing the relation of flood magnitude to recurrence interval can be reduced to a dimensionless form by dividing the magnitude of floods of various recurrence intervals by that of the mean annual flood. Station frequency curves plotted in this way exhibit similarity in slope over relatively large areas. This similarity is interpreted as evidence of homogeneity in flood characteristics and constitutes the basis for combining many station curves to define a composite curve showing the relation of flood peaks to the mean annual flood.

FLOOD-FREQUENCY REGIONS

Four flood-frequency regions, designated by letters A to D, are outlined on plate 1. For the most part, flood records were analyzed for smaller regions than those shown. When the curves for two or more regions, as originally analyzed, were in close agreement, they were combined into one curve. The curves and regions shown represent an integration of the several analyses. Figure 5 gives composite frequency curves for flood-frequency regions A and B. In regions C and D the shape of the frequency curve tended to vary with size of the drainage basin. Curves for drainage areas of 5, 50, 200, and 1,000 and more square miles were defined for these two regions. Figure 6 gives these frequency curves for region C, and figure 7 gives the curves for region D. Interpolation for other size drainage areas should be made.

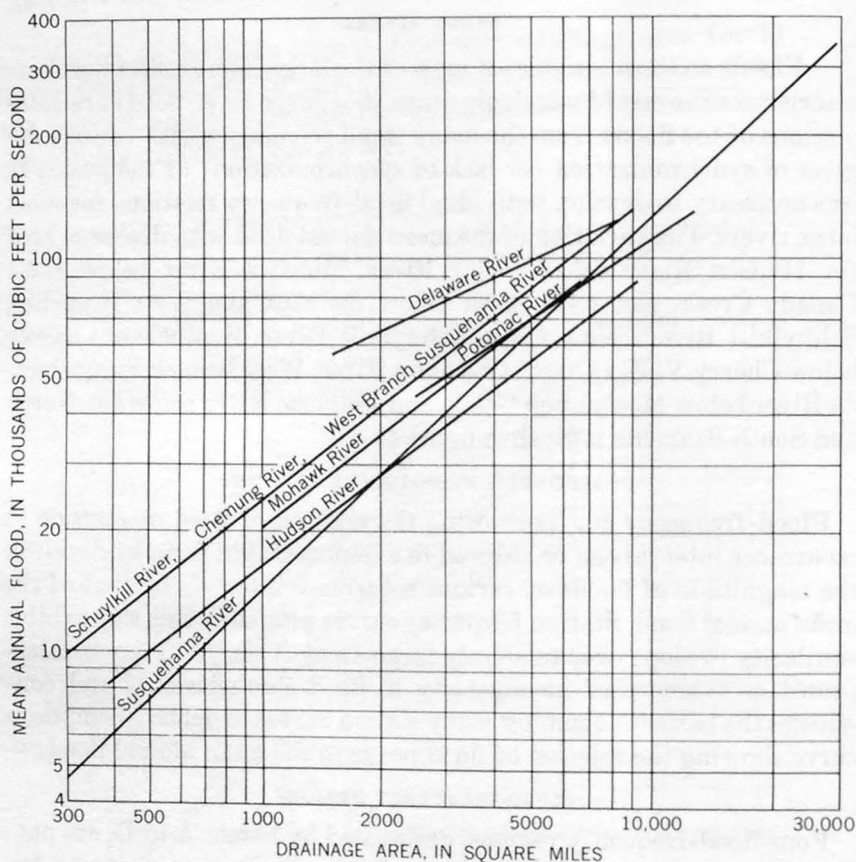


FIGURE 4.—Variation of mean annual flood with drainage area for large rivers. Curves are applicable for the following river reaches: Hudson River below Cedar River, Mohawk River below West Canada Creek, Delaware River below the East and West Branches, Schuylkill River below Little Schuylkill River, Susquehanna River below Cherry Valley Creek, Chemung River, West Branch Susquehanna River below Moshannon Creek, and Potomac River below the North and South Branches.

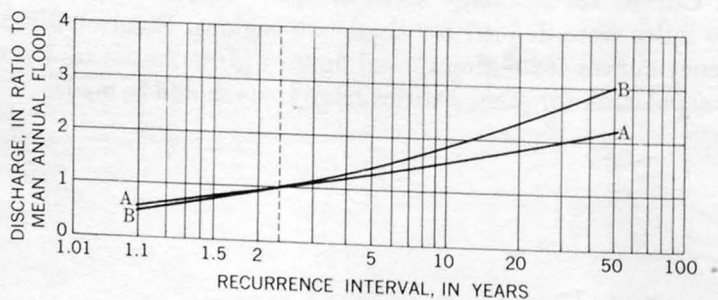


FIGURE 5.—Composite frequency curves for regions A and B.

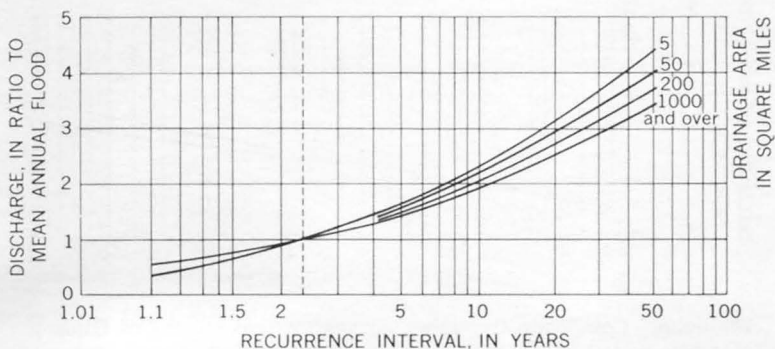


FIGURE 6.—Composite frequency curves for region C.

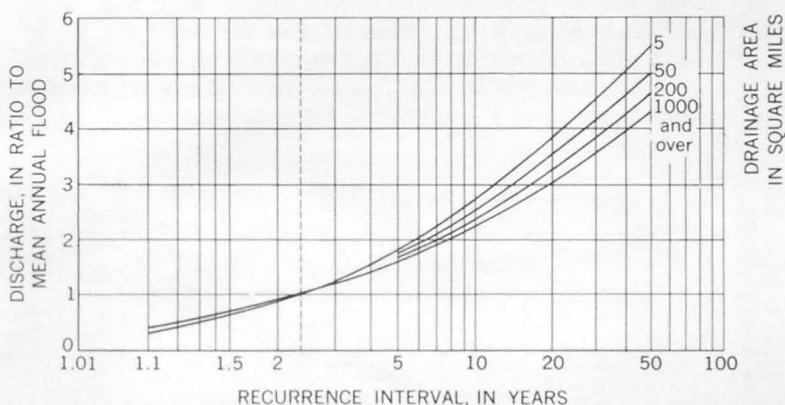


FIGURE 7.—Composite frequency curves for region D.

LARGE RIVERS

Many of the main-stem streams have flood characteristics that differ from those of the flood-frequency region or regions constituting its drainage basin. Therefore, some large rivers are assigned frequency curves differing from those for the region or regions in which the stream is located. Figure 8 gives composite frequency curves for use on the Hudson River, Mohawk River, Delaware River, Chemung River, Schuylkill River, West Branch Susquehanna River, Juniata River, and Susquehanna River. Curves A and B shown in figure 8 are the same as those shown in figure 5 except that curve B is extended to the 100-year recurrence interval. For the Potomac River the shape of the frequency curve changes with size of drainage area and a family of curves for three drainage areas is shown in figure 9. Ratios to mean annual flood for other drainage basin sizes can be determined by interpolation.

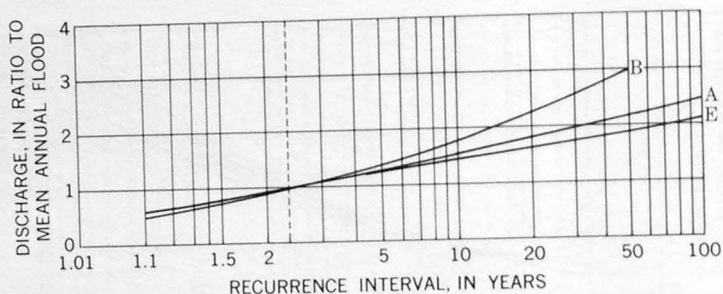


FIGURE 8.—Composite frequency curves for main stems of Hudson, Mohawk, Delaware, Chemung, Schuylkill, West Branch Susquehanna, Juniata, and Susquehanna Rivers. Curve A: Use for Hudson River below Cedar River, West Branch Susquehanna, Juniata, and Susquehanna Rivers. Curve B: Use for Schuylkill River below Little Schuylkill River, West Branch Susquehanna River below Moshannon Creek, and Juniata River. Curve E: Use for Susequehanna River below Cherry Valley Creek.

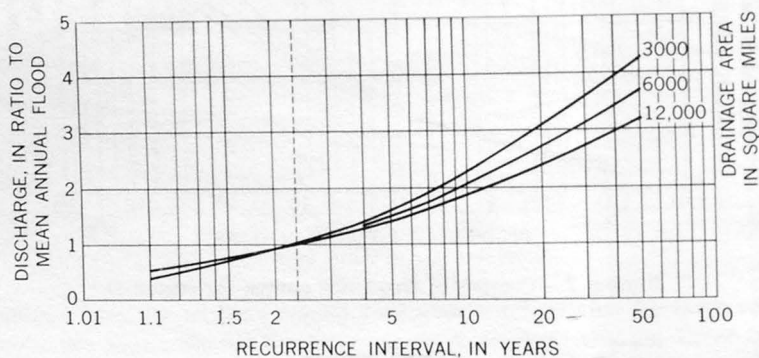


FIGURE 9.—Composite frequency curves for Potomac River.

SPECIAL CONDITIONS

The records for Long Island could not be used because of rapidly changing manmade conditions and because of the indeterminate drainage areas. Therefore Long Island was excluded from this study.

The curves defined in this analysis are for rural conditions. Urban and suburban development can significantly affect flood magnitudes. Wiitala (1961) determined that urban development of a small drainage basin might double or triple flood peak discharge, and Carter (1961) found that suburban development might increase the mean annual flood discharge by as much as 80 percent. Thomas (1964) found that for New Jersey the regional relations were applicable for drainage basins with less than 25 percent of the basin urbanized. Except in

the large metropolitan areas of New York, Philadelphia, Baltimore, and Washington, few streams larger than 5 square miles are more than 25 percent urbanized.

APPLICATION OF METHODS

In general, the magnitude of a flood of a given recurrence interval on a stream of more than 5 square miles drainage area unaffected by regulation can be estimated in the following manner:

1. Determine the drainage area of the stream at the selected site.
2. Determine from plate 1 the hydrologic area (1-10) and flood-frequency region (A-D) in which the stream is located.
3. Determine from the appropriate curve in figure 2 (or 4 if large stream in the expected category) the magnitude of the mean annual flood for the given size of drainage basin.
4. Determine from the appropriate curve in figures 5-7 (8 or 9 if large stream in the expected category) the ratio to the mean annual flood of the flood of the selected recurrence interval.
5. Multiply the ratio (step 4) by the mean annual flood (step 3) to obtain the magnitude of the flood corresponding to the selected recurrence interval. The procedure (steps 4 and 5) can be repeated for other recurrence intervals to define a flood-frequency curve for the selected site.

In New Jersey the ratio of the surface area of lakes and swamps to the total drainage area should be determined and the mean annual flood (step 3) multiplied by the adjustment factor from figure 3. For consistency with the data used in this analysis, the use of U.S. Geological Survey 7½-minute quadrangle maps is recommended.

SUMMARY

Curves presented in this report can be used to estimate the magnitude of floods having recurrence intervals ranging from 1.1 to 50 years for most streams in the report area. The flood-frequency relations were defined for virtually natural conditions and do not apply to streams on Long Island, to streams whose peak flows are materially affected by regulation or diversion, to streams for which more than 25 percent of the drainage basin is urbanized, and to streams for which the size of the drainage basin is beyond the limits defined by the data. Extrapolation of any of the curves presented could lead to unreliable results, and is not recommended. It is emphasized that results presented are based on average conditions indicated by the available data; anomalous conditions resulting in considerable deviation from the average should be anticipated for some sites.

The mean annual flood is used as an index flood to which floods of other recurrence intervals are referenced by a discharge ratio. The only independent variable related to mean annual flood is the size of the drainage basin, except in New Jersey where the surface area of lakes and swamps is used as a secondary variable. Large streams traversing regions of different hydrologic characteristics were analyzed separately, and separate curves applicable only to the large streams have been prepared. The ratio to mean annual flood was found to vary with the size of drainage basin in regions C and D, and for main stem Potomac River.

FLOOD RECORDS AT GAGING STATIONS AND MISCELLANEOUS SITES

A summary of maximum known stages and discharges for the 604 gaging stations for which records are included in this report are contained in table 1. Table 2 contains similar data for outstanding floods at miscellaneous sites and at gaging stations having less than 5 years peakflow record through the 1961 water year. The data are listed in the downstream order currently being used by the U.S. Geological Survey. The station numbers shown in table 1 are permanent reference numbers used in Geological Survey water-supply papers since 1958. The station number and location of stations included in table 1 are shown on plate 1. Because all stations are in Part 1-B, the prefix denoting the "Part" has been omitted. Sites for data listed in table 2 have been numbered consecutively beginning with number 1 as the most upstream site. The period of known floods is the period, in water years, during which the listed peak is believed to be the maximum and does not necessarily indicate that all the annual floods are known for the period.

Following the tables of maximum known floods is a compilation of flood peaks for the 604 gaging stations given in table 1. A brief description of each gaging station is accompanied by a tabulation of peaks. Both peak stages and discharges are usually given, but occasionally only peak stage or discharge is given. Sometimes the peak stage for the year is caused by backwater from ice and occurs on a different day than the peak discharge. For such events, both peak stage and discharge are given with date of corresponding occurrence.

Peak discharges, unless otherwise noted, are instantaneous peaks expressed in cubic feet per second. The peaks are arranged by the water year which begins October 1 and ends September 30 and is identified by the year in which it ends; thus, a peak occurring in October, November, or December 1949, would be given in the 1950 water year. Peaks are generally given for period of record through 1961.

Underlines in the tabular data have the following significance:

1. A horizontal line in "Water year" column means discontinuous record.
2. Lines beginning at "Date" column and extending through "Discharge" column means change in site and datum.
3. Line in "Gage height" column means change in datum.
4. Line in "Date" and "Discharge" columns means significant change in site, but no change in datum.
5. No underlines are used for changes in site and datum if data have been adjusted to present conditions.

MAXIMUM KNOWN FLOODS

Table 1.--Maximum floods at gaging stations

No.	Gaging station	Flood region and area	Drainage area (sq mi)	Period of known floods (water years)	Station Q2.35 (cfs)	Areal Q2.35 (cfs)	Date	Gage height (feet)	Maximum flood		
									Discharge		
									(cfs)	Cfs per sq mi	Reurrence interval (years)
Blind Brook basin											
3000	Blind Brook at Rye, N. Y.....	-	9.20	1944-64	-	-	Oct. 16, 1955	9.62	1,360	148	-
Beaver Swamp Brook basin											
3005	Beaver Swamp Brook near Harrison, N. Y.	-	4.71	1944-64	-	-	Mar. 12, 1962	3.09	167	35.5	-
Mamaroneck River basin											
3010	Mamaroneck River at Mamaroneck, N. Y.	-	23.4	1938-64 1944-52	-	-	Sept. 21, 1938 Oct. 15, 1955	all 1.5 -	- 1,940	- 82.9	- -
Hutchinson River basin											
3015	Hutchinson River at Pelham, N. Y.	-	5.76	1944-64	-	-	Mar. 12, 1962	4.98	390	67.7	-
Bronx River basin											
3020	Bronx River at Bronxville, N. Y..	-	26.50	1944-64	-	-	Oct. 16, 1955	6.65	922	34.8	-
Streams on Long Island											
3025	Cedar Swamp Creek at Glen Cove, N. Y.	-	11	1939-64	-	-	Sept. 12, 1960	7.12	1,860	169	-
3030	Mill Neck Creek at Mill Neck, N. Y.	-	11.5	1937-64	-	-	Sept. 21, 1938 Sept. 12, 1960	a4.85 -	- 137	- 11.9	- -
3035	Cold Spring Brook at Cold Spring Harbor, N. Y.	-	7.3	1951-64	-	-	Aug. 31, 1954 Sept. 11, 1954	a5.34 -	- 108	- 14.8	- -
3040	Nissequogue River near Smithtown, N. Y.	-	27	1944-64	-	-	Oct. 15, 1955	1.96	324	12.0	-
3045	Peconic River at Riverhead, N. Y.	-	75	1943-64	-	-	Apr. 14, 1953	0.966	140	1.87	-
3050	Carmans River at Yaphank, N. Y...	-	71	1943-64	-	-	Sept. 11, 1954	1.247	83.2	1.17	-
3055	Swan River at East Patchogue, N. Y.	-	8.8	1947-64	-	-	Nov. 30, 1963	1.61	99	11.3	-
3060	Patchogue Creek at Patchogue, N. Y.	-	13.5	1946-64	-	-	Oct. 16, 1955	-	b82.7	6.13	-
3065	Connetquot River near Oakdale, N. Y.	-	24	1944-64	-	-	Oct. 16, 1955	-	b263	11.0	-
3070	Champlin Creek at Islip, N. Y....	-	6.5	1948-64	-	-	Oct. 15, 1955	1.411	91	14	-
3075	Penataquit Creek at Bay Shore, N. Y.	-	5	1946-64	-	-	Oct. 16, 1955	2.31	63.8	12.8	-
3080	Sampawams Creek at Babylon, N. Y.	-	23	1945-64	-	-	Sept. 12, 1960	2.11	136	5.91	-
3085	Carlis River at Babylon, N. Y....	-	35	1945-64	-	-	Mar. 12, 1962	1.85	175	5.00	-
Hudson River basin											
3090	Santapogue River at Lindenhurst, N. Y.	-	7	1947-64	-	-	July 14, 1948 Sept. 11, 1954	1.15 -	- 42.2	- 6.03	- -
3095	Massapequa Creek at Massapequa, N. Y.	-	38	1937-39 1961-64	-	-	July 20, 1961 June 1, 1952	2.28 2.566	387 340	10.2 20.0	- -
3100	Wantagh Stream at Bellmore, N. Y.	-	17	1938-55 1956-64	-	-	Sept. 12, 1960 Sept. 12, 1960	- 4.38	b162 835	9.53 26.9	- -
3105	East Meadow Brook at Freeport, N. Y.	-	31	1937-64	-	-	Sept. 12, 1960	4.51	346	34.6	-
3110	Pines Brook at Malverne, N. Y....	-	10	1937-64	-	-	Sept. 12, 1960	4.51	346	34.6	-
3115	Valley Stream at Valley Stream, N. Y.	-	4.5	1954-64	-	-	Sept. 12, 1960	5.50	232	51.6	-
3120	Hudson River near Newcomb, N. Y..	A4	192	1926-64	4,210	5,700	Jan. 1, 1949	11.40	7,440	38.8	6
3135	Cedar River below Chain Lakes, near Indian Lake, N. Y.	A4	160	1931-61	3,870	5,000	Sept. 28, 1942	14.40	10,200	63.8	34
3140	Hudson River at Gooley, near Indian Lake, N. Y.	A3	419	1917-64	9,300	8,700	Jan. 1, 1949 Feb. 18, 1954	- c11.20	15,000 -	35.8 -	17 -
3150	Indian River near Indian Lake, N. Y.	-	132	1913, 1917-64	-	-	Mar. 28, 1913	7.8	3,460	26.2	(d)
3155	Hudson River at North Creek, N. Y.	A3	792	1908-64	14,500	14,000	Dec. 31, 1948	12.14	28,900	36.5	38
3160	North Creek at North Creek, N. Y.	A4	21.8	1925-32	600	1,050	Apr. 7, 1930	5.55	1,690	77.5	10
3170	Schroon River at Riverbank, N. Y.	A4	527	1908-64	5,300	-	Mar. 21, 1936	12.18	12,100	23.0	(d)
3180	Hudson River at Thurman, N. Y....	A3	1,533	1908-20	-	23,000	Mar. 27, 1913	12.5	46,000	30.0	32
3185	Hudson River at Hadley, N. Y....	A3	1,664	1922-64	21,400	25,000	Jan. 1, 1949	21.21	42,700	25.7	16
3190	East Branch Sacandaga River at Griffin, N. Y.	A4	114	1934-64	5,100	3,800	Dec. 31, 1948	14.35	10,700	93.9	e1.28
3205	West Branch Sacandaga River at Blackbridge, near Wells, N. Y.	A4	210	1911-16	-	6,100	Mar. 27, 1913	13.0	14,500	69.0	e1.08
3210	Sacandaga River near Hope, N. Y..	A4	491	1912-64	14,200	11,500	Mar. 27, 1913	11.0	32,000	65.2	e1.26
3230	Kennytto Creek near Broadalbin, N. Y.	A4	28.3	1940-46, 1960-61	-	1,250	Apr. 8, 1940 Apr. 4, 1960	c5.7 -	- 1,270	- 44.8	- 2
3250	Sacandaga River at Stewarts Bridge, near Hadley, N. Y.	A4	1,055	1908-29 1930-64	16,000 -	21,000 -	Mar. 28, 1913 Apr. 30, 1953	12.36 7.76	35,500 8,560	33.6 8.11	15 (d)
3265	Hudson River at Spier Falls, N. Y.	A3	2,779	1900-22	36,000	36,000	Mar. 28, 1913	18.59	89,100	32.1	e1.13
3280	Bond Creek at Dunham Basin, N. Y.	A4	14.7	1948-64	900	800	Dec. 31, 1948	8.52	1,370	93.2	17
3290	Batten Kill at Arlington, Vt.....	C4	152	1929-64	3,700	4,700	Mar. 18, 1936	11.3	11,100	73.0	13
3295	Batten Kill at Battenville, N. Y.	C4	394	1923-64	6,700	10,000	Nov. 4, 1927	17.7	21,300	54.1	12
3300	Glowegee Creek at West Milton, N. Y.	A4	26.0	1949-63	700	1,200	Dec. 31, 1948	7.04	1,670	64.2	7
3305	Kayaderoseras Creek near West Milton, N. Y.	A4	90	1927-64	1,800	3,100	Mar. 18, 1936	10.78	4,710	52.3	10
3315	Hoosic River at Adams, Mass.....	C4	46.3	1932-64	1,320	1,900	Sept. 21, 1938	8.25	5,080	110	16
3320	North Branch Hoosic River at North Adams, Mass.	C4	39.0	1928-64	2,400	1,630	November 1927	-	9,980	256	e1.49
3325	Hoosic River near Williamstown, Mass.	C4	132	1941-64	4,500	4,300	Dec. 31, 1948	14.85	13,000	98.5	24

See footnotes at end of table.

Table 1.--Maximum floods at gaging stations--Continued

Table 1.--Maximum floods at gaging stations--Continued							Maximum flood				
No.	Gaging station	Flood region and area	Drainage area (sq mi)	Period of known floods (water years)	Station 42.33 (cfs)	Areal 42.33 (cfs)	Date	Gage height (feet)	Discharge		
									(cfs)	Cfs per sq mi	Reurrence interval (years)
Hudson River basin--Continued											
3330	Green River at Williamstown, Mass.	C4	42.6	1949-64, 1950-64	1,750	1,800	Dec. 31, 1948	7.5	-	62.0	-
				1949-64	2,000	2,200	Sept. 12, 1960	5.94	2,640	133	30
3335	Little Hoosic River at Petersburg, N. Y.	C4	56.1	1932-64	3,600	3,800	Dec. 31, 1948	9.4	7,470	76.1	11
3340	Wallomsac River near North Bennington, Vt.	C4	111	1911-64	11,000	12,000	Sept. 21, 1938	12.04	8,450	109	el.32
3345	Hoosic River near Eagle Bridge, N. Y.	C4	510	1911-64	11,000	12,000	Dec. 31, 1948	21.15	55,400	109	el.32
3350	Hoosic River at Buskirk, N. Y....	C4	577	1904-09	-	13,000	Feb. 20, 1909	15.4	21,000	36.4	6
3355	Hudson River at Mechanicville, N. Y.	A3	4,500	1868-1956	40,000	52,000	Mar. 28, 1913	-	120,000	26.7	el.05
3360	Mohawk River below Delta Dam, near Rome, N. Y.	-	150	1928-64	-	-	Oct. 2, 1945	11.18	8,560	57.1	-
3440	West Canada Creek at Hinckley, N. Y.	-	375	1920-59	-	-	Oct. 2, 1945	12.94	17,100	45.6	-
3460	West Canada Creek at Kast Bridge, N. Y.	A4	556	1913-64	10,600	13,000	Mar. 26, 1913	-	23,300	41.9	19
3470	Mohawk River near Little Falls, N. Y.	A4	1,348	1928-64	-	-	Mar. 5, 1964	18.33	127,200	20.2	-
3475	East Canada Creek at Dolgeville, N. Y.	A4	261	1899-1912, 1928-46	-	7,200	Oct. 2, 1945	15.1	19,300	73.9	el.22
3480	East Canada Creek at East Creek, N. Y.	A4	291	1946-64	9,400	8,000	Oct. 12, 1945	9.0	24,000	82.5	el.36
3490	Otsquago Creek at Fort Plain, N. Y.	C4	59.2	1950-64	6,300	2,300	Aug. 31, 1950	8.24	9,030	153	48
3500	Schoharie Creek at Prattsville, N. Y.	C8	236	1903-64	14,000	15,500	Oct. 16, 1955	19.14	55,200	234	50
3505	Schoharie Creek at Middleburg, N. Y.	C4	532	1909, 1915, 1928-39	-	-	Mar. 18, 1936	16.8	47,800	89.8	-
3510	Fox Creek at West Berne, N. Y....	C4	73.0	1925-32, 1963-64	2,500	2,700	Apr. 21, 1929	7.8	4,190	57.4	6
3515	Schoharie Creek at Burtonsville, N. Y.	C4	883	1936-64	19,000	18,207	Oct. 16, 1955	12.39	76,500	86.6	el.20
3560	Mohawk River at Vischer Ferry Dam, N. Y.	A4	3,385	1914-19, 1924-26	-	-	Mar. 28, 1914	-	140,000	41.4	-
3575	Mohawk River at Cohoes, N. Y.....	A4	3,456	1918-64	58,000	53,000	Mar. 6, 1964	23.15	143,000	41.4	el.12
3580	Hudson River at Green Island, N. Y.	A3	8,090	1913-64, 1914-64	92,000	80,000	Mar. 28, 1913	29.7	-	-	el.12
				1913-64	92,000	80,000	Mar. 19, 1936	29.48	215,000	26.6	48
3585	Poesten Kill near Troy, N. Y.....	C4	89.4	1924-64	2,400	3,100	Sept. 22, 1938	12.1	11,900	133	48
3610	Kinderhook Creek at Rossmann, N. Y.	C4	329	1913, 1929-64	6,150	8,600	Dec. 31, 1948	19.8	29,800	90.6	42

3615	Catskill Creek at Oak Hill, N. Y.	C4	98	1911-64	4,100	3,400	Nov. 25, 1950	14.08	12,500	128	44
3620	Catskill Creek at South Cairo, N. Y.	C4	270	1902-06	-	7,300	Oct. 9, 1903	21.0	25,000	92.6	42
3625	Esopus Creek at Coldbrook, N. Y..	C8	192	1932-64	14,700	13,400	Mar. 30, 1951	20.70	59,600	310	el.20
3640	Esopus Creek at Kingston, N. Y....	C6	317	1902-09	-	12,600	Oct. 9, 1903	25.5	24,500	77.3	9
3650	Rondout Creek near Lowes Corners, N. Y.	C6	38.5	1937-64	2,880	2,300	July 22, 1938	8.2	7,600	197	26
3655	Chestnut Creek at Grahamsville, N. Y.	C6	20.9	1939-64	1,300	1,450	Oct. 15, 1955	5.02	4,640	222	24
3665	Rondout Creek near Lackawack, N. Y.	C6	100	1907-64	5,700	5,100	Aug. 26, 1928	-	26,700	267	el.35
3666.5	Sandburg Creek at Ellenville, N. Y.	C6	56.7	1957-64	-	3,300	Aug. 19, 1960	7.01	4,660	82.2	4
3675	Rondout Creek at Rosendale, N. Y.	C6	386	1902-03, 1906-18, 1927-64	12,400	15,000	Oct. 16, 1955	26.8	35,800	927	16
3680	Wallkill River near Unionville, N. Y.	C2	144	1938-64	2,000	2,800	Aug. 19, 1955	13.35	6,880	47.8	14
3685	Rutgers Creek at Gardnerville, N. Y.	C2	59.7	1944-64	1,800	1,400	Aug. 19, 1955	12.38	8,490	142	el.53
3690	Pochuck Creek near Pine Island, N. Y.	C2	98.0	1938-64	1,130	2,000	Oct. 16, 1955	8.62	3,090	31.5	(d)
3695	Quaker Creek at Florida, N. Y....	C2	9.74	1938-64	400	340	Sept. 21, 1938	6.0	1,050	108	20
3700	Wallkill River at Pellets Island Mountain, N. Y.	C2	385	1920-64	4,350	5,800	Mar. 14, 1936	15.0	12,400	32.2	11
3705	Wallkill River near Phillipsburg, N. Y.	C2	419	1936-59	-	6,200	Aug. 21, 1955	11.33	9,200	22.0	5
3710	Shawangunk Kill at Pine Bush, N. Y.	C6	102	1925-64	3,800	5,200	Aug. 19, 1955	12.5	9,700	95.1	9
3715	Wallkill River at Gardiner, N. Y.	C2	711	1925-64	11,400	9,400	Oct. 16, 1955	19.81	30,800	43.3	40
3721	East Branch Wappinger Creek near Clinton Corners, N. Y.	C2	33.3	1957-63	900	900	Feb. 26, 1961	4.72	1,340	40.2	5
3722	Wappinger Creek near Clinton Corners, N. Y.	C2	92.4	1956-64	1,400	1,900	Feb. 26, 1961	11.55	2,260	24.4	3
3723	Little Wappinger Creek at Salt Point, N. Y.	C2	32.9	1957-64	520	880	Feb. 26, 1961	5.88	807	24.5	2
3725	Wappinger Creek near Wappinger Falls, N. Y.	C2	181	1929-64	2,600	3,300	Aug. 19, 1955	19.60	18,600	103	el.52
3735	Fishkill Creek at Beacon, N. Y....	C2	190	1902, 1945-64	2,290	3,400	Mar. 1, 1905	-	13,700	72.1	el.08
3750	Croton River at New Croton Dam, near Croton-on-Hudson, N. Y.	-	378	1934-64	-	-	Oct. 16, 1955	18.44	45,400	120	-
3755	Bird Brook near Croton, N. Y.....	-	0.36	1934-38, 1940-41	-	-	Sept. 21, 1938	1.98	27	75.0	-
3765	Saw Mill River at Yonkers, N. Y..	A2	25.6	1944-64	400	720	Oct. 16, 1955	5.34	890	34.8	5

Hackensack River basin

3770	Hackensack River at Rivervale, N. J.	A2	58.0	1942-64	750	1,040	Oct. 17, 1955	6.03	1,450	25.0	7
3775	Pascack Brook at Westwood, N. J..	A2	29.6	1935-64	680	700	July 23, 1945	6.76	1,610	54.4	el.04
3785	Hackensack River at New Milford, N. J.	A2	113	1922-64	1,800	1,720	Mar. 31, 1951	6.14	3,660	32.4	46

See footnotes at end of table.

MAGNITUDE AND FREQUENCY OF FLOODS, PART 1-B

MAXIMUM KNOWN FLOODS

Table 1.--Maximum floods at gaging stations--Continued

No.	Gaging station	Flood region and area	Drainage area (sq mi)	Period of known floods (water years)	Station 42.33 (cfs)	Areal 42.33 (cfs)	Date	Gage height (feet)	Maximum flood		
									Discharge		Recur-rence interval (years)
									(cfs)	Cfs per sq mi	
Passaic River basin											
3790	Passaic River near Millington, N. J.	A4	55.4	1904-06, 1922-64	740	680	Jan. 9, 1905	7.8	2,000	36.1	e1.33
3795	Passaic River near Chatham, N. J.	A4	100	1904-11, 1938-64	1,170	1,400	Jan. 9, 1905	8.3	3,000	30.0	46
3800	Beaver Brook at outlet of Splitrock Reservoir, N. J.	-	5.50	1926-46	-	-	Mar. 12, 1936	2.70	126	22.9	-
3805	Rockaway River above reservoir, at Boonton, N. J.	A4	116	1938-64	1,850	2,200	June 2, 1952	6.62	3,250	28.0	9
3810	Rockaway River below reservoir, at Boonton, N. J.	-	119	1904-64	-	-	Oct. 10, 1903	-	b7,560	63.5	-
3815	Whippany River at Morristown, N. J.	A4	29.4	1922-64	880	1,400	Aug. 26, 1928	7.3	2,000	68.0	8
3835	Wanaque River at Awosting, N. J.	C4	27.1	1920-64	400	420	Oct. 16, 1955	5.85	1,300	48.0	21
3840	Wanaque River at Monks, N. J.	C4	40.4	1935-64	1,000	800	Aug. 19, 1955	4.15	3,640	90.1	e1.14
3845	Ringwood Creek near Wanaque, N. J.	C4	19.1	1935-64	520	580	Mar. 30, 1951	3.74	1,150	60.2	8
3850	Cupsaw Brook near Wanaque, N. J.	C4	4.38	1935-58	160	-	Mar. 11, 1936	2.94	536	122	-
3860	West Brook near Wanaque, N. J.	C4	11.8	1935-64	570	540	Mar. 30, 1951	6.6	1,900	161	30
3865	Blue Mine Brook near Wanaque, N. J.	C4	1.71	1935-58	115	-	Mar. 30, 1951	2.15	458	268	-
3870	Wanaque River at Wanaque, N. J.	-	90.4	1913-15, 1919-64	-	-	Mar. 31, 1951	9.12	8,470	93.7	-
3875	Ramapo River near Mahwah, N. J.	C4	118	1903-06, 1923-64	2,700	2,800	Oct. 9, 1903	11.0	12,400	105	e1.15
3880	Ramapo River at Pompton Lakes, N. J.	C4	160	1922-64	3,400	3,500	Mar. 12, 1936	3.56	12,300	76.9	34
3885	Pompton River at Pompton Plains, N. J.	C4	355	1904, 1941-64	5,000	5,500	Oct. 10, 1903	14.3	28,340	79.8	e1.42
3895	Passaic River at Little Falls, N. J.	A4	762	1898-1964	6,800	7,900	Oct. 10, 1903	-	b28,000	36.7	e1.61
3905	Saddle River at Ridgewood, N. J.	A2	21.6	1955-64	880	450	Aug. 19, 1955	8.88	1,510	69.9	e1.53
3910	Hohokus Brook at Hohokus, N. J.	A2	16.4	1955-64	710	330	Aug. 19, 1955	4.71	2,350	143	e3.2
3915	Saddle River at Lodi, N. J.	A2	54.6	1924-64	1,160	980	July 23, 1945	10.00	3,500	64.1	e1.59
3920	Weasel Brook at Clifton, N. J.	A2	4.45	1937-64	290	-	Mar. 12, 1962	3.69	556	125	-
3925	Second River at Belleville, N. J.	-	11.6	1938-64	1,580	-	July 23, 1938	7.05	3,300	284	-
Elizabeth River basin											
3930	Elizabeth River at Irvington, N. J.	A2	2.91	1931-38	-	-	July 23, 1938	12.1	1,750	601	-
3935	Elizabeth River at Elizabeth, N. J.	A2	20.2	1922-64	1,500	-	July 23, 1938 Sept. 11, 1954	- 15.02	2,720 -	135 -	(d) -
Rahway River basin											
3940	West Branch Rahway River at Millburn, N. J.	A2	7.1	1938, 1940-50	460	-	July 23, 1945	3.19	1,090	154	-
3945	Rahway River near Springfield, N. J.	A2	25.5	1938-64	900	1,200	July 23, 1938	7.41	1,940	76.1	12
3950	Rahway River at Rahway, N. J.	A2	40.9	1922-64	1,200	1,500	July 24, 1938	6.35	3,140	76.8	40
3960	Robinsons Branch Rahway River at Rahway, N. J.	A2	21.6	1940-64	890	410	Mar. 13, 1953	5.36	1,490	69.0	e1.66
Raritan River basin											
3965	South Branch Raritan River near High Bridge, N. J.	B2	65.3	1919-64	1,850	1,600	Mar. 15, 1940	11.78	5,160	79.0	e1.47
3970	South Branch Raritan River at Stanton, N. J.	B4	147	1904-06, 1919-64	5,000	6,100	Aug. 19, 1955	15.22	18,000	122	50
3975	Walnut Brook near Flemington, N. J.	B4	2.24	1937-61, 63-64	190	-	July 18, 1945	3.30	645	288	-
3980	Neshanic River at Reaville, N. J.	B4	25.7	1931-64	2,850	1,900	July 18, 1945	12.33	10,300	401	e1.80
3985	North Branch Raritan River near Far Hills, N. J.	B4	26.2	1919-64	1,320	1,600	July 23, 1919	7.6	7,000	267	e1.46
3995	Lamington (Black) River near Pottersville, N. J.	B4	32.8	1922-64	800	990	Mar. 15, 1940	5.34	2,630	80.2	32
4000	North Branch Raritan River near Raritan, N. J.	B4	190	1924-64	8,800	7,200	Aug. 19, 1955	13.59	20,700	109	42
4005	Raritan River at Manville, N. J.	A4	490	1904-06, 1922-64	16,200	16,000	Sept. 22, 1938	20.42	36,100	73.7	20
4010	Stony Brook at Princeton, N. J.	A4	44.5	1954-64	3,550	-	Aug. 13, 1955	11.90	5,130	115	-
4015	Millstone River near Kingston, N. J.	A4	171	1933-49	4,500	4,900	Sept. 21, 1938	14.12	9,820	57.4	32
4020	Millstone River at Blackwells Mills, N. J.	A4	258	1921-64	6,200	7,200	Sept. 21, 1938	15.29	18,300	70.9	e1.14
4030	Raritan River at Bound Brook, N. J.	A4	779	1800-1964 1904-09, 1936-39, 1942, 1945-64	-	-	Feb. 6, 1896 Oct. 10, 1903 Sept. 22, 1938	18.3 - 16.3	- 32,100 -	- 41.2 -	- - -
4035	Green Brook at Plainfield, N. J.	A4	9.75	1904-64	600	710	July 23, 1938	5.82	h2,890	296	e1.85
4045	Lawrence Brook at Patricks Corner, N. J.	B2	29	1922-26	-	-	Apr. 7, 1924	8.70	1,370	47.2	-
4050	Lawrence Brook at Farrington Dam, N. J.	B2	34.4	1927-64	890	640	Sept. 21, 1938	26.18	2,660	77.3	e1.40
4055	South River at Old Bridge, N. J.	B2	94.6	1940-64	1,820	1,320	Sept. 15, 1944	11.71	4,250	44.9	e1.06
4060	Deep Run near Browntown, N. J.	B2	8.07	1933-40	390	480	Sept. 21, 1938	9.61	1,240	154	6
4065	Tennent Brook near Browntown, N. J.	B2	5.25	1933-41	120	160	Sept. 21, 1938	10.69	177	33.7	3
Matawan Creek basin											
4070	Matawan Creek at Matawan, N. J.	B2	6.11	1933-55	470	200	Aug. 13, 1955	4.25	1,420	232	e2.4
Navesink River basin											
4075	Swimming River near Red Bank, N. J.	B2	48.5	1919-64	1,200	1,320	July 1919	7.84	11,800	243	e2.9

See footnotes at end of table.

See footnotes at end of table.

Table 1.--Maximum floods at gaging stations--Continued

No.	Gaging stations	Flood region and area	Drainage area (sq mi)	Period of known floods (water years)	Station 2.33 (cfs)	Areal 2.33 (cfs)	Date	Maximum flood			
								Gage height (feet)	Discharge		
									(cfs)	Cfs per sq mi	Reurrence interval (years)
Manasquan River basin											
4080	Manasquan River at Squankum, N. J.	B2	43.4	1932-64	950	1,260	Sept. 21, 1938	12.45	2,940	67.7	22
Toms River basin											
4085	Toms River near Toms River, N. J.	B2	124	1929-64	720	870	Sept. 23, 1938	12.50	2,000	16.1	20
Cedar Creek basin											
4090	Cedar Creek at Lanoka Harbor, N. J.	B2	56.0	1933-58	410	490	Oct. 28, 1943	4.50	1,050	18.8	16
Mullica River basin											
4095	Batsto River at Batsto, N. J.	C2	70.5	1928-64	540	430	Aug. 20, 1939	8.7	-	-	-
4100	Oswego River at Harrisville, N. J.	C2	64.0	1931-64	350	480	Aug. 20, 1939	9.54	1,390	21.7	20
Absecon Creek basin											
4105	Absecon Creek at Absecon, N. J. ...	C2	16.6	1925-28, 1954-38, 1947-64	-	-	Sept. 6, 1935	-	b295	17.8	-
Great Egg Harbor River basin											
4110	Great Egg Harbor River at Folsom, N. J.	D1	56.3	1926-64	250	240	Sept. 3, 1940	9.09	1,440	25.6	e1.20
Maurice River basin											
4115	Maurice River at Norma, N. J.	D1	113	1933-64	490	580	Sept. 2, 1940	8.72	7,360	65.1	e2.6
4120	Manantico Creek near Millville, N. J.	D1	22.3	1932-57	180	180	Aug. 20, 1939	6.21	1,050	47.1	e1.12
Cohansey River basin											
4125	West Branch Cohansey River at Seeley, N. J.	D1	2.55	1952-64	92	-	Aug. 6, 1952	5.72	342	134	-
4130	Loper Run near Bridgeton, N. J. ...	D1	2.34	1938-59	-	-	Aug. 25, 1958	-	b106	45.3	-

Delaware River basin											
4135	East Branch Delaware River at Margaretville, N. Y.	B6	163	1937-64	7,000	7,700	Nov. 25, 1950	13.84	15,700	96.3	14
4140	Platte Kill at Dunraven, N. Y.	B6	34.7	1942-62	1,550	2,100	Nov. 25, 1950	8.01	3,810	110	10
4145	Mill Brook at Arena, N. Y.	B6	25.0	1937-64	1,800	1,700	Sept. 21, 1938	7.6	4,500	180	32
4150	Tremper Kill near Shavertown, N. Y.	B6	33.0	1937-64	1,600	2,100	Sept. 21, 1938	7.12	4,250	129	14
4155	Terry Clove Kill near Pepacton, N. Y.	B6	14.1	1937-62	810	1,080	May 23, 1942	5.49	4,010	284	e1.24
4165	Coles Clove Kill near Pepacton, N. Y.	B6	28.0	1945-53	1,600	1,800	Mar. 22, 1948	6.41	2,400	85.7	5
4170	East Branch Delaware River at Downsville, N. Y.	B6	371	1904-64,	13,000	14,500	Oct. 9, 1903	16.0	-	-	-
4175	East Branch Delaware River at Harvard, N. Y.	B6	457	1942-64	17,000	17,000	Nov. 26, 1950	14.52	23,900	64.4	8
4180	Beaver Kill near Turnwood, N. Y. ..	B6	40.8	1949-59	3,600	2,500	Nov. 25, 1950	9.16	7,400	181	48
4185	Beaver Kill at Craigie Clair, N. Y.	B6	82	1937-64	5,100	4,300	Sept. 27, 1942	10.74	10,300	126	22
4195	Willowemoc Creek near Livingston Manor, N. Y.	B6	63	1938-64	4,000	3,500	Mar. 31, 1951	9.01	10,500	167	50
4200	Little Beaver Kill near Livingston Manor, N. Y.	B6	19.8	1925-64	1,400	1,400	Aug. 26, 1928	8.7	3,420	173	24
4205	Beaver Kill at Cooks Falls, N. Y.	B6	241	1914-64	12,500	10,500	Mar. 31, 1951	16.02	31,600	131	50
4210	East Branch Delaware River at Fishs Eddy, N. Y.	B6	783	1904-64	28,000	26,000	Oct. 9, 1903	23.6	70,000	89.4	32
4220	West Branch Delaware River at Delhi, N. Y.	A4	142	1937-60	4,200	4,500	Sept. 21, 1938	8.81	8,940	63.0	30
4225	Little Delaware River near Delhi, N. Y.	A4	49.8	1938-64	2,200	2,000	Aug. 13, 1953	7.78	4,530	91.0	e1.03
4230	West Branch Delaware River at Walton, N. Y.	A4	331	1951-64	11,000	8,700	Jan. 22, 1959	13.76	-	-	-
4235	Dryden Creek near Granton, N. Y. ..	A4	8.85	1952-64	400	530	Mar. 5, 1964	-	15,800	47.7	20
4240	Trout Creek near Rock Royal, N. Y.	A4	20.4	1952-64	1,060	1,050	Apr. 4, 1960	4.64	633	71.5	4
4245	Trout Creek at Cannonsville, N. Y.	A4	49.5	1941-63	2,400	1,940	Nov. 28, 1959	7.57	1,920	94.1	22
4250	West Branch Delaware River at Stilesville, N. Y.	A4	456	1952-64	13,000	11,000	Mar. 22, 1948	9.95	4,600	92.9	e1.08
4255	Cold Spring Brook at China, N. Y.	A4	1.51	1935-64	85	-	Oct. 30, 1935	4.5	335	222	-
4260	Oquaga Creek at Deposit, N. Y.	A4	66	1941-64	2,500	2,500	Mar. 22, 1948	9.21	-	-	-
4265	West Branch Delaware River at Hale Eddy, N. Y.	A4	593	1904-64	16,000	13,400	Mar. 10, 1964	-	5,850	88.6	e1.06
4275	Callicoon Creek at Callicoon, N. Y.	B6	111	1940-64	5,200	5,600	Oct. 10, 1903	20.3	46,000	77.6	e1.56
4280	Tenmile River at Tusten, N. Y.	B4	45.0	1947-64	1,300	1,900	Aug. 17, 1947	9.68	16,000	144	42
4285	Delaware River above Lackawaxen River, near Barryville, N. Y.	All	2,023	1941-64	60,000	65,000	Aug. 19, 1955	9.08	6,850	152	e1.20
4290	West Branch Lackawaxen River at Prompton, Pa.	B6	59.7	1942-64,	-	-	Aug. 19, 1955	26.40	130,000	44.3	33
				1945-64	3,400	3,400	May 23, 1942	16.7	-	-	-
							Aug. 18, 1955	9.24	5,860	98.2	9

See footnotes at end of table.

Table 1.--Maximum floods at gaging stations--Continued

No.	Gaging station	Flood region and area	Drainage area (sq mi)	Period of known floods (water years)	Station Q2.33 (cfs)	Areal Q2.33 (cfs)	Maximum flood				
							Date	Gage height (feet)	Discharge		
									(cfs)	Cfs per sq mi	Recur-rence interval (years)
Delaware River basin--Continued											
4295	Dyberry Creek near Dyberry, Pa...	B6	64.6	1942-64,	4,600	3,600	May 23, 1942	15.86	-	240	e1.29
4300	Lackawaxen River near Honesdale, Pa.	B6	164	1944-64	6,600	7,800	July 10, 1952	14.6	15,500	-	-
4305	Lackawaxen River at West Hawley, Pa.	B6	206	1922-42	-	9,200	May 23, 1942	24.5	34,000	207	e1.31
4310	Middle Creek near Hawley, Pa....	B6	78.4	1922-42	-	9,200	May 23, 1942	22.3	38,000	184	e1.25
4315	Lackawaxen River at Hawley, Pa...	B6	290	1942-64,	3,200	4,200	May 23, 1942	18.0	-	-	-
4320	Wallenpaupack Creek at Wilsonville, Pa.	-	228	1945-64	10,500	12,000	Aug. 19, 1955	24.8	12,000	153	42
4325	Shohola Creek near Shohola, Pa...	B4	83.2	1909-17, 1936,	-	-	Aug. 19, 1955	24.8	51,900	179	e1.44
4335	Mongaup River near Mongaup, N. Y.	-	202	1938-64	-	-	Mar. 29, 1914	-	b4,840	21.2	-
4340	Delaware River at Port Jervis, N. Y.	All	3,076	1914, 1925	-	-	Apr. 7, 1924	5.0	2,020	24.3	(d)
4350	Neversink River near Claryville, N. Y.	C8	65.6	1919-28	1,500	3,000	Aug. 19, 1955	-	b12,300	60.9	-
4355	Neversink River at Halls Mills, near Curry, N. Y.	-	68	1940-64	78,000	80,000	Aug. 19, 1955	23.91	233,000	75.7	e1.32
4360	Neversink River at Neversink, N. Y.	-	91.9	1904-64	6,200	5,600	Nov. 25, 1950	9.0	23,400	357	e1.05
4365	Neversink River at Woodbourne, N. Y.	C6	113	1938-49	-	-	July 22, 1938	10.05	12,400	182	-
4370	Neversink River at Oakland Valley, N. Y.	C6	222	1942-64	-	-	Sept. 27, 1942	11.65	-	-	-
4375	Neversink River at Godeffroy, N. Y.	C6	302	1938-64	7,000	5,700	Nov. 25, 1950	11.19	22,300	243	e1.04
4385	Delaware River at Montague, N. J.	All	3,480	1938-64	10,000	9,800	Nov. 26, 1950	11.19	22,000	195	-
4390	Delaware River at Dingmans Ferry, Pa.	All	3,542	1928-64	11,000	11,300	Aug. 19, 1955	12.74	23,800	107	14
4395	Bush Kill at Shoemakers, Pa.....	B4	117	1938-64	11,000	11,300	Aug. 19, 1955	12.49	33,000	109	25
4400	Flat Brook near Flatbrookville, N. J.	B2	65.1	1904-64,	-	-	Oct. 10, 1903	35.5	-	-	-
4410	McMichaels Creek at Stroudsburg, Pa.	B4	65.3	1936-64	80,000	84,000	Aug. 19, 1955	35.15	250,000	71.8	e1.35
4415	Pococono Creek near Stroudsburg, Pa.	B4	41.0	1904-55	-	-	Oct. 10, 1903	98.3	-	-	-
4425	Brodhead Creek at Minisink Hills, Pa.	B4	259	1909-64	2,400	3,900	Aug. 19, 1955	13.95	23,400	200	e2.00
				1924-64	1,800	1,470	Aug. 19, 1955	12.58	9,560	147	e2.16
				1912-55	1,950	2,500	Aug. 18, 1955	14.1	5,740	87.9	20
				1912-55,	-	-	Aug. 18, 1955	-	-	86.5	e4.4
				1912-19	-	1,700	Feb. 26, 1918	7.1	3,300	80.5	12
				1951-64	6,500	7,100	Aug. 19, 1955	29.9	68,800	266	e3.2
4430	Delaware River at Portland, Pa...	All	-	1904, 1955	-	-	Aug. 19, 1955	98.87	-	-	-
4435	Paulins Kill at Blairstown, N. J.	B2	126	1922-64	1,950	1,550	Aug. 19, 1955	11.12	8,750	-	-
4445	Delaware River at Delaware, N. J.	All	-	1936-54	-	-	Mar. 19, 1936	82.61	-	69.4	e1.88
4450	Pequest River at Huntsville, N. J.	B2	31.4	1940-62	240	640	Aug. 19, 1955	5.05	560	17.8	-
4455	Pequest River at Pequest, N. J...	B2	108	1922-64	730	1,470	Mar. 14, 1936	4.97	1,810	16.8	-
4460	Beaver Brook near Belvidere, N. J.	B2	36.2	1923-61	580	830	Mar. 12, 1936	5.76	1,510	41.7	10
4465	Delaware River at Belvidere, N. J.	All	4,535	1904-64	93,000	95,000	Aug. 19, 1955	30.21	273,000	60.2	e1.31
4470	Delaware River at Easton, Pa....	All	4,717	1904, 1961	-	-	Aug. 19, 1955	98.90	-	-	-
4475	Lehigh River at Stoddartsville, Pa.	B4	91.7	1942, 1944-64	2,600	3,200	Aug. 19, 1955	16.37	31,900	348	e3.01
4480	Lehigh River at Tannery, Pa.....	B4	322	1915-59	6,800	8,500	Aug. 19, 1959	22.2	58,300	181	e2.3
4485	Dilldown Creek near Long Pond, Pa.	B4	2.39	1949-64	190	-	Aug. 18, 1955	3.37	342	143	-
4495	Wild Creek at Hatchery, Pa.....	B4	16.8	1941-64	860	880	May 23, 1942	6.00	2,360	140	31
4500	Fohopoco Creek near Parryville, Pa.	B4	109	1941-64	2,300	3,700	May 23, 1942	7.42	5,300	48.6	(d)
4505	Aquashicola Creek at Palmerton, Pa.	B4	76.7	1940-64	2,700	2,800	July 10, 1945	13.63	11,700	153	e1.39
4510	Lehigh River at Walnutport, Pa...	B4	889	1942-64	-	-	May 23, 1942	20.6	-	-	-
4515	Little Lehigh Creek near Allentown, Pa.	B9	80.8	1947-64	20,000	18,000	Aug. 19, 1955	17.68	77,800	87.5	e1.44
4520	Jordan Creek at Allentown, Pa....	B4	75.8	1946-64	900	1,200	July 9, 1935	9.5	-	-	-
4525	Monocacy Creek at Bethlehem, Pa.	B9	44.5	1942-64	2,600	2,800	Feb. 28, 1958	6.30	1,960	24.3	7
4530	Lehigh River at Bethlehem, Pa....	B9	1,279	1945-64	370	730	Aug. 19, 1955	8.00	9,520	126	e1.13
4535	Saucon Creek at Lanark, Pa.....	B7	12.0	1902-64	25,000	25,000	July 10, 1945	9.74	5,200	117	e2.4
4540	South Branch Saucon Creek at Friedensville, Pa.	B7	10.6	1948-53	-	1,200	May 23, 1942	25.9	92,000	71.9	e1.23
4545	Saucon Creek at Friedensville, Pa.	B7	26.6	1948-53	-	1,100	Nov. 25, 1950	6.21	1,180	98.3	-
4555	Musconetcong River at outlet of Lake Hopatcong, N. J.	B2	25.6	1948-53	-	2,300	Nov. 25, 1950	12.49	943	89.0	2
4560	Musconetcong River near Hackettstown, N. J.	B2	70.0	1929-64	250	200	Aug. 20, 1955	3.85	1,330	50.0	(d)
4570	Musconetcong River near Bloomsbury, N. J.	B2	143	1922-64	680	690	Aug. 19, 1955	3.97	795	31.1	e1.33
4575	Delaware River at Riegelsville, N. J.	All	6,328	1904-06,	1,850	1,900	Aug. 19, 1955	3.97	2,170	31.0	e1.03
4580	Delaware River at Milford, N. J..	All	-	1922-64	111,000	110,000	Oct. 10, 1903	8.00	6,960	48.7	e1.22
4585	Delaware River at Frenchtown, N. J.	All	-	1907-64	-	-	Aug. 19, 1955	38.85	340,000	53.7	e1.40
4590	Delaware River at Point Pleasant, Pa.	All	-	1841-1956	-	-	Aug. 20, 1955	40.25	-	-	-
4595	Tohickon Creek near Pipersville, Pa.	B7	97.4	1904, 1955	-	-	Aug. 20, 1955	27.79	-	-	-
4600	Tohickon Creek at Point Pleasant, Pa.	B7	107	1936-64	7,000	6,400	Aug. 20, 1955	105.32	-	-	-
				1884-1913	-	7,000	Aug. 18, 1955	11.26	16,000	164	26
					-	-	May 21, 1894	-	11,500	107	8

See footnotes at end of table.

MAGNITUDE AND FREQUENCY OF FLOODS, PART 1-B

MAXIMUM KNOWN FLOODS

Table 1.--Maximum floods at gaging stations--Continued

No.	Gaging station	Flood region and area	Drainage area (sq mi)	Period of known floods (water years)	Station Q2.33 (cfs)	Areal Q2.33 (cfs)	Maximum flood				
							Date	Gage height (feet)	Discharge		
									(cfs)	Cfs per sq mi	Recur-rence interval (years)
Delaware River basin--Continued											
4610	Delaware River at Lumberville, Pa.	All	6,598	1862-1945	-	-	Oct. 11, 1903	96.1	-	-	-
4615	Delaware River at Stockton, N. J.	All	-	1841-1955	-	-	Aug. 20, 1955	84.40	-	-	-
4620	Delaware River at Lambertville, N. J.	All	6,680	1787-1959	-	-	Aug. 20, 1955	73.27	-	-	-
4625	Delaware River at Washington Crossing, N. J.	All	-	1889-1907	-	113,000	Oct. 11, 1903	24.6	274,000	41.0	70
4630	Delaware River at Yardley, Pa....	All	-	1904, 1961	-	-	Aug. 20, 1955	53.77	-	-	-
4635	Delaware River at Trenton, N. J..	All	6,780	1904-64	115,000	114,000	Aug. 20, 1955	41.49	-	-	-
4640	Assunpink Creek at Trenton, N. J.	B2	89.4	1924-64	1,480	1,700	Mar. 8, 1904	c22.8	-	-	-
4645	Crosswicks Creek at Extonville, N. J.	B2	83.6	1938-64	1,460	950	Aug. 20, 1955	20.83	329,000	48.5	e1.31
4650	Neshaminy Creek at Rushland, Pa..	B7	134	1885-1913, 1932-34	-	8,400	Sept. 22, 1938	10.74	3,320	37.1	12
4655	Neshaminy Creek near Langhorne, Pa.	B7	210	1933-64	10,500	12,000	Sept. 22, 1938	13.0	4,100	49.0	e1.46
4660	Middle Branch Mount Misery Brook in Lebanon State Forest, N. J.	B2	2.73	1953-64	10.9	-	Sept. 8, 1934	-	b10,500	78.4	-
4665	McDonalds Branch in Lebanon State Forest, N. J.	B2	2.31	1954-64	8.5	-	Aug. 19, 1955	22.84	49,300	235	e1.37
4670	North Branch Rancocas Creek at Pemberton, N. J.	B2	111	1922-64	740	800	Aug. 25, 1958	2.47	45	16.5	-
4675	Schuylkill River at Pottsville, Pa.	B4	53.4	1942-64	2,480	2,100	Aug. 25, 1958	2.33	35	15.2	-
4685	Schuylkill River at Landingville, Pa.	B4	133	1942, 1948-53, 1955, 1964	4,500	4,300	Aug. 21, 1939	10.77	1,730	15.6	16
4695	Little Schuylkill River at Tamaqua, Pa.	B4	42.9	1920-64	2,000	1,800	May 1942	8.8	6,170	116	47
4705	Schuylkill River at Berne, Pa....	B5	355	1942-64	11,000	11,000	Nov. 25, 1950	13.29	8,570	64.4	12
4710	Tulpehocken Creek near Reading, Pa.	B4	211	1952-64	4,900	6,100	Aug. 18, 1955	11.10	7,790	182	e1.44
4715	Schuylkill River at Reading, Pa..	B5	880	1757-1930	21,000	22,000	Aug. 19, 1955	15.73	29,400	82.8	32
4720	Schuylkill River at Pottstown, Pa.	B5	1,147	1902-64	21,000	28,000	Sept. 1, 1952	8.65	7,680	36.4	4
4725	Perkiomen Creek near Frederick, Pa.	B7	152	1885-1913	-	9,200	Sept. 2, 1850	23.0	80,000	90.9	e1.21
4730	Perkiomen Creek at Graterford, Pa.	B7	279	1915-64	18,000	14,500	Feb. 28, 1902	21.0	53,900	47.0	12
4735	Schuylkill River at Norristown, Pa.	B5	1,760	1928-33	-	39,000	Feb. 6, 1896	-	b9,790	64.4	-
4740	Wissahickon Creek near Philadelphia, Pa.	B7	64.6	1897-99, 1901-06	-	4,600	July 9, 1935	18.26	39,900	143	36
4745	Schuylkill River at Philadelphia, Pa.	B5	1,893	1870-1964	45,000	41,000	July 15, 1931	10.40	42,000	23.9	3
4750	Mantua Creek at Pitman, N. J.....	D1	6.75	1940-64	102	220	July 22, 1897	-	a2,820	43.7	-
4760	Crum Creek at Woodlyn, Pa.....	B10	33.3	1932-37	-	2,100	Oct. 4, 1869	17.0	135,000	71.3	e1.10
4765	Ridley Creek at Moylan, Pa.....	B10	31.9	1932-55	1,200	2,000	Sept. 1, 1940	6.64	4,200	622	e3.5
4766	Still Run near Mickleton, N. J....	D2	3.95	1958-64	2,800	3,000	Aug. 23, 1933	7.56	1,420	42.6	1.2
4770	Chester Creek near Chester, Pa....	B10	61.1	1932-64	480	750	Nov. 25, 1950	10.84	5,720	179	42
4775	Oldmans Creek near Woodstown, N. J.	D2	19.3	1931-40	-	-	Sept. 12, 1960	4.80	275	69.6	-
4778	Shellpot Creek at Wilmington, Del.	B10	7.46	1940-63	1,400	920	Nov. 25, 1950	16.21	14,400	236	e1.60
4780	Christina River at Coochs Bridge, Del.	B10	20.5	1943-63	1,500	1,600	Sept. 1, 1940	20.3	8,100	420	e2.1
4785	White Clay Creek above Newark, Del.	B10	66.7	1953-59, 1963	-	3,100	July 9, 1952	8.6	4,080	547	e1.48
4790	White Clay Creek near Newark, Del.	B10	87.8	1932-63, 1943-57	3,800	3,600	May 1, 1947	12.41	2,620	128	7
4800	Red Clay Creek at Wooddale, Del..	B10	47.0	1960-63	2,450	2,500	Aug. 18, 1955	9.21	4,050	60.7	4
4805	West Branch Brandywine Creek at Coatesville, Pa.	B4	45.8	1944-64	1,400	1,900	July 1937	23	-	-	-
4810	Brandywine Creek at Chadds Ford, Pa.	B4	287	1942-51	7,000	7,700	Sept. 12, 1960	16.11	6,340	72.2	9
4815	Brandywine Creek at Wilmington, Del.	B10	314	1912-55, 1963-64	-	7,400	Sept. 12, 1960	9.93	6,000	128	23
4825	Salem River at Woodstown, N. J....	D2	14.6	1947-64	820	530	Aug. 9, 1942	12.3	8,600	188	e1.51
4830	Alloway Creek at Alloway, N. J....	D2	21.9	1940-64	440	-	Mar. 5, 1920	15.0	17,200	59.9	18
4832	Blackbird Creek at Blackbird, Del.	D2	3.85	1953-64	150	-	Aug. 19, 1955	13.89	17,800	56.7	23
Leipsic River basin											
4835	Leipsic River near Cheswold, Del.	D2	9.35	1940-64	250	330	Sept. 1, 1940	7.98	22,000	1,510	e7.8
Murderkill River basin											
4840	Murderkill River near Felton, Del.	D2	13.6	1953-64	440	-	Sept. 12, 1960	4.24	1,860	84.9	-
Broadkill River basin											
4843	Sowbridge Branch near Milton, Del.	D1	7.08	1951-63	150	-	Sept. 12, 1960	4.10	510	132	-
Indian River basin											
4845	Stockley Branch at Stockley, Del.	D1	5.24	1957-63	-	140	Aug. 25, 1958	5.86	80	11.3	-

See footnotes at end of table.

Table 1.--Maximum floods at gaging stations--Continued

Table 1.--Maximum floods at gaging stations--Continued											
No.	Gaging station	Flood region and area	Drainage area (sq mi)	Period of known flood (water years)	Station Q2.33 (cfs)	Areal Q2.33 (cfs)	Date	Gage height (feet)	Maximum flood		
									(cfs)	Cfs per sq mi	Recur-rence interval (years)
Pocomoke River basin											
4850	Pocomoke River near Willards, Md.	D1	60.5	1950-63	680	720	Mar. 21, 1958	12.03	-	-	-
4855	Nassawango Creek near Snow Hill, Md.	D1	44.9	1950-63	600	510	Jan. 8, 1962 Aug. 16, 1953	- 7.82	984 988	14.6 22.0	3 6
Manokin River basin											
4860	Manokin Branch near Princess Anne, Md.	D1	5.8	1951-63	138	120	Aug. 13, 1955	6.63	237	40.9	6
Wicomico River basin											
4865	Beaverdam Creek near Salisbury, Md.	D1	19.5	1930-33, 1936-63	330	300	Aug. 23, 1933 Aug. 4, 1948	- 14.31	(g) 1,480	- 75.9	- 42
Nanticoke River basin											
4870	Nanticoke River near Bridgeville, Del.	D1	75.4	1935-63	680	850	September 1935 Aug. 26, 1958	11 8.84	- 2,300	- 30.5	- 11
4875	Trap Pond Outlet near Laurel, Del.	D1	16.7	1952-63	200	270	Jan. 7, 1962	3.55	462	27.7	5
4880	Holly ditch near Laurel, Del.....	D1	2.19	1951-56, 1959-63	-	-	Feb. 8, 1961	3.30	62	28.3	-
4885	Marshy Hope Creek near Adamsville, Del.	D2	44.8	1935-63	800	1,100	September 1935 Aug. 26, 1958	14.5 11.55	- 2,270	- 50.7	- 7
4890	Faulkner Branch at Federalsburg, Md.	D2	7.10	1951-63	210	270	Sept. 12, 1960	4.73	672	94.6	9
4895	Rewastico Creek near Hebron, Md..	D1	12.2	1951-56, 1959-60	-	210	Aug. 8, 1959 1959	5.30 5.70	160 (k)	13.1 -	2 -
Transquaking River basin											
4900	Chicamacomico River near Salem, Md.	D1	15.0	1952-63	230	250	Jan. 1, 1961	4.40	470	31.3	6
Choptank River basin											
4904.7	Tappahanna ditch near Hartly, Del.	D2	5.93	1951-63	-	230	Apr. 13, 1961	8.57	-	-	-
4905	Culbreth Marsh ditch near Chapel-town, Del.	D2	11.6	1952-63	470	400	Sept. 12, 1960	9.14	-	-	-
4910	Choptank River near Greensboro, Md.	D2	113	1948-63	1,600	2,300	Sept. 13, 1960	12.45	5,040	44.6	8
4915	Tuckahoe Creek near Ruthsburg, Md.	D2	85.2	1952-56	-	1,800	Aug. 13, 1955	5.87	1,620	19.0	2
4920	Beaverdam Branch at Matthews, Md.	D2	5.85	1950-63	380	230	Sept. 12, 1960	10.24	2,200	376	e1.74
Wye River basin											
4925	Sallie Harris Creek near Carmichael, Md.	D2	8.09	1952-63	260	300	Sept. 12, 1960	7.43	1,240	153	25
Chester River basin											
4930	Unicorn Branch near Millington, Md.	D2	22.3	1948-63	330	660	Sept. 12, 1960	7.17	1,060	47.5	5
4935	Morgan Creek near Kennedyville, Md.	D2	10.5	1952-63	540	370	Sept. 12, 1960	8.88	1,530	146	25
4940	Southeast Creek at Church Hill, Md.	D2	12.5	1952-63	630	420	Sept. 12, 1960	10.4	-	-	-
Sassafras River basin											
4945	Jacobs Creek near Sassafras, Md..	D2	5.39	1951-56	-	210	Aug. 13, 1955	5.59	229	42.5	3
Elk River basin											
4950	Big Elk Creek at Elk Mills, Md...	C10	52.6	1884-1963	3,500	2,800	June 1884	19	18,000	342	e1.61
4955	Little Elk Creek at Childs, Md...	C10	26.8	1949-58	1,800	1,800	Aug. 12, 1955	8.37	5,400	201	20
Northeast River basin											
4960	Northeast Creek at Leslie, Md....	C10	24.3	1949-63	1,800	1,700	July 27, 1958	6.92	3,220	133	8
Susquehanna River basin											
4965	Oaks Creek at Index, N. Y.....	A4	103	1930-32, 1937-64	1,570	-	Jan. 22, 1959	6.87	2,550	24.8	(d)
4970	Cherry Valley Creek at Westville, N. Y.	A4	81.3	1930-31, 1938-41	2,800	3,000	Sept. 22, 1938	8.65	4,470	55.0	9
4975	Susquehanna River at Colliersville, N. Y.	E12	351	1925-64	4,800	5,400	Mar. 19, 1936	8.13	8,740	24.9	12
4985	Charlotte Creek at West Davenport, N. Y.	A4	167	1938-64	4,400	5,200	Sept. 22, 1938	9.65	14,000	83.8	e1.22
4990	Otego Creek near Oneonta, N. Y...	A4	108	1941-64	3,000	3,700	Dec. 30, 1942	14.10	6,000	55.6	12
5000	Ouleut Creek at East Sidney, N. Y.	A4	102	1935-64	3,800	3,500	July 1935	-	16,700	164	e2.16
5005	Susquehanna River at Unadilla, N. Y.	E12	984	1938-64	14,200	14,000	Dec. 30, 1942 Aug. 4, 1960	- 14.25	21,500 -	21.8 -	13 (d)
5010	Unadilla River near New Berlin, N. Y.	A4	196	1924-64	4,100	5,800	Mar. 5, 1964	10.12	6,940	35.4	-
5015	Sage Brook near South New Berlin, N. Y.	A4	0.70	1933-64	45	-	July 22, 1945	5.53	287	410	-
5020	Butternut Creek at Morris, N. Y..	A4	59.6	1938-64	1,850	2,300	Mar. 5, 1964	8.47	4,260	71.5	21

See footnotes at end of table.

See footnotes at end of table.

Table 1.--Maximum floods at gaging stations--Continued

No.	Gaging station	Flood region and area	Drainage area (sq mi)	Period of known floods (water years)	Station Q2.33 (cfs)	Areal Q2.33 (cfs)	Date	Gage height (feet)	Maximum flood		
									(cfs)	Cfs per sq mi	Recur-rence interval (years)
Susquehanna River basin--Continued											
5025	Unadilla River at Rockdale, N. Y.	A4	518	1930-33, 1937-64	9,400	12,000	Dec. 31, 1942	12.98	17,400	33.6	8
5030	Susquehanna River at Conklin, N. Y.	E12	2,240	1913-64	35,000	32,000	Mar. 18, 1936	-	61,600	27.5	50
5050	Chenango River at Sherburne, N. Y.	A4	264	1936-61	-	-	Mar. 22, 1948	20.83	-	-	-
5055	Canasawacta Creek near South Plymouth, N. Y.	A4	58.3	1939-64	5,000	7,200	Mar. 18, 1936	10.6	-	-	-
5070	Chenango River at Greene, N. Y...	A4	598	1937-64	9,400	13,000	Mar. 5, 1964	9.80	9,200	34.8	(d)
5075	Genegantslet Creek at Smithville Plats, N. Y.	A4	83.1	1945-64	2,900	2,500	Jan. 22, 1959	c6.16	-	-	-
5080	Shackham Brook near Truxton, N. Y.	A4	3.12	1933-64	220	-	Feb. 25, 1961	5.94	6,980	120	e1.38
5085	Albright Creek at East Homer, N. Y.	A4	7.08	1938-64	2,750	3,000	Dec. 31, 1942	18.33	18,900	31.6	(d)
5090	Tioughnioga River at Cortland, N. Y.	A4	296	1938-64	2,750	3,000	Dec. 30, 1942	10.4	5,890	70.9	26
5100	Otselic River at Cincinnati, N. Y.	A4	148	1933-64	220	-	June 24, 1940	4.45	-	-	-
5105	Otselic River near Upper Lisle, N. Y.	A4	216	1939-64	480	440	June 3, 1947	-	487	156	-
5115	Tioughnioga River at Itaska, N. Y.	A4	735	1939-64	480	440	June 3, 1947	-	787	111	17
5125	Chenango River near Chenango Forks, N. Y.	A4	1,492	1931-64	6,800	8,000	June 13, 1961	3.85	-	-	-
5135	Susquehanna River at Vestal, N. Y.	E12	3,960	1939-64	6,800	8,000	Mar. 5, 1964	12.49	13,000	43.9	12
5140	Owego Creek near Owego, N. Y.....	A4	186	1938-64	4,800	4,700	Dec. 30, 1942	10.67	8,390	56.7	19
5145	Dean Creek at Spencer, N. Y.....	A4	8.03	1935-64	6,500	6,200	July 8, 1935	12.35	15,400	71.3	e1.13
5150	Susquehanna River near Waverly, N. Y.	E12	4,780	1930-64	15,000	16,000	Mar. 23, 1948	ml9.35	61,100	83.1	e1.74
5165	Corey Creek near Mainesburg, Pa..	B6	12.2	1936-64	25,000	28,000	July 8, 1935	20.3	96,000	64.3	e1.56
5170	Elk Run near Mainesburg, Pa.....	B6	10.2	1913-64	55,000	53,000	March 1936	30.5	107,000	27.0	75
5180	Tioga River at Tioga, Pa.....	B6	282	1936-64	55,000	53,000	March 1936	30.5	107,000	27.0	75
5185	Crooked Creek at Tioga, Pa.....	B6	122	1930-64	6,600	5,600	July 8, 1935	10.50	23,500	126	e1.91
5200	Cowanessque River near Lawrenceville, Pa.	B6	295	1955-60	-	490	Oct. 15, 1955	5.62	544	67.7	3
5205	Tioga River at Lindley, N. Y.....	B6	770	1936-64	69,000	63,000	Mar. 6, 1959	c5.98	-	-	-
5215	Canisteo River at Arkport, N. Y..	B6	30.5	1936-64	69,000	63,000	March 1936	2.14	128,000	26.8	75
5225	Karr Valley Creek at Almond, N. Y.	B6	27.6	1935-64	900	980	Oct. 14, 1955	7.88	2,210	181	19
5235	Canacadea Creek near Hornell, N. Y.	B6	58.7	1937-64	660	850	Oct. 14, 1955	6.77	1,240	122	5
5245	Canisteo River below Canacadea Creek, at Hornell, N. Y.	B6	159	1955-64	-	-	May 27, 1946	8.90	10,000	104	13
5250	Bennett Creek at Canisteo, N. Y..	B6	95.8	1889	12,500	12,000	May 27, 1946	15.47	39,000	138	e1.08
5255	Canisteo River at West Cameron, N. Y.	B6	342	1939-64	5,000	6,000	Oct. 14, 1955	12.73	10,900	89.3	11
5260	Tuscarora Creek near South Addison, N. Y.	B6	114	1954-64	13,000	12,000	Mar. 5, 1964	11.89	25,400	86.1	16
5265	Tioga River near Erwins, N. Y....	B6	1,370	1952-64	30,000	26,000	May 28, 1946	22.87	75,000	97.4	43
5270	Cohocton River at Cohocton, N. Y.	A2	53.3	1935-64	-	-	July 8, 1935	-	4,820	158	(d)
5275	Cohocton River at Avoca, N. Y....	A2	157	1939-64	3,500	1,800	July 18, 1942	8.8	5,900	214	e1.09
5280	Fivemile Creek near Kanona, N. Y.	A2	68.0	1927-64	-	3,400	July 8, 1935	-	21,000	358	e2.06
5290	Mud Creek near Savona, N. Y.....	A2	76.1	1943-64	-	-	May 26, 1943	13.30	9,340	58.7	(d)
5295	Cohocton River near Campbell, N. Y.	A2	472	1939-47	6,400	5,000	May 27, 1946	8.90	10,000	104	13
5305	Newton Creek at Elmira, N. Y.....	A2	79.8	1931-64	11,500	13,000	July 8, 1935	-	35,000	102	34
5310	Chemung River at Chemung, N. Y....	A5	2,530	1937-64	8,200	5,800	Mar. 30, 1951	8.79	14,000	123	23
5315	Susquehanna River at Towanda, Pa.	E12	7,797	1937-64	46,000	42,000	May 28, 1946	23.54	94,000	68.6	18
5320	Towanda Creek near Monroeton, Pa.	B6	215	1919-64	520	-	Apr. 1, 1960	6.23	883	16.8	(d)
5335	North Fork Mehoopty Creek near Lovelton, Pa.	B6	35.2	1951-64	3,050	3,000	Mar. 17, 1942	8.88	3,880	24.7	4
5340	Tunkhannock Creek at Dixon, Pa...	B6	383	1937-64	1,660	1,500	Mar. 31, 1940	c6.10	-	-	-
5345	Lackawanna River at Archbald, Pa.	B6	108	1956	-	-	Mar. 7, 1956	-	2,680	39.4	19
5355	Lackawanna River at Moosic, Pa...	B4	264	1919, 1937-64	-	-	Mar. 7, 1956	6.89	1,860	24.4	(d)
5360	Lackawanna River at Old Forge, Pa.	B4	332	1919-64	9,700	7,000	July 8, 1935	11.6	41,100	87.1	e2.67
5365	Susquehanna River at Wilkes-Barre, Pa.	E12	9,960	1938-64	2,500	1,700	Dec. 30, 1942	-	3,460	43.4	36
5370	Toby Creek at Luzerne, Pa.....	B4	32.4	1904-64	54,000	50,000	Oct. 16, 1955	17.06	-	-	-
5375	Solomon Creek at Wilkes-Barre, Pa.	B4	15.7	1865-1964	123,000	100,000	May 28, 1946	23.97	132,000	52.2	e1.20
5380	Wapwallopen Creek near Wapwallopen, Pa.	B4	43.8	1914-64	10,400	9,500	May 29, 1946	25.08	191,000	24.5	27
5385	Nesopeck Creek near St. Johns, Pa.	B4	49	1941-58	2,000	2,200	May 28, 1946	12.53	31,300	146	e1.10
5390	Fishing Creek near Bloomsburg, Pa.	B4	274	1941-58	2,070	2,200	Mar. 11, 1952	8.76	9,300	264	e1.41
5395	Little Fishing Creek at Evers Grove, Pa.	B4	56.5	1914-64	16,000	15,000	Mar. 10, 1964	14.26	33,600	87.7	18
5400	Fishing Creek at Bloomsburg, Pa..	B4	355	1940-64	3,100	5,400	May 22, 1942	10.58	9,510	88.1	9
5405	Susquehanna River at Danville, Pa.	E12	11,220	1914-28	-	7,200	Oct. 19, 1927	9.3	10,200	38.6	5
5410	West Branch Susquehanna River at Bower, Pa.	B4	315	1939-64	8,000	8,700	Aug. 19, 1955	20.05	31,000	93.4	e1.19
5425	Karr Valley Creek at Almond, N. Y.	B6	27.6	1787-1964	-	-	Mar. 18, 1865	33.1	232,000	23.3	-
5435	Lackawanna River at Archbald, Pa.	B6	108	1891-1964	130,000	130,000	Mar. 20, 1936	33.07	232,000	23.3	30
5445	Lackawanna River at Archbald, Pa.	B6	108	1942-64	1,250	1,400	Dec. 30, 1942	-	3,010	92.9	16
5455	Lackawanna River at Archbald, Pa.	B6	108	1942-64	1,250	1,400	July 31, 1946	5.01	-	-	-
5465	Lackawanna River at Archbald, Pa.	B6	108	1933-64	1,020	840	Sept. 16, 1933	11.4	-	-	-
5475	Lackawanna River at Archbald, Pa.	B6	108	1940-64	1,400	1,800	Aug. 18, 1955	9.83	2,450	156	46
5485	Lackawanna River at Archbald, Pa.	B6	108	1920-64	1,400	1,800	Aug. 18, 1955	9.23	3,140	71.7	9
5495	Lackawanna River at Archbald, Pa.	B6	108	1920-26	1,500	1,900	Mar. 13, 1920	8.0	2,540	51.8	5
5505	Lackawanna River at Archbald, Pa.	B6	108	1936-64	10,200	11,000	Mar. 31, 1940	12.08	18,100	66.1	8
5515	Lackawanna River at Archbald, Pa.	B6	108	1941-58	2,070	2,200	Oct. 14, 1955	-	3,350	59.3	6
5525	Lackawanna River at Archbald, Pa.	B6	108	1941-58	2,070	2,200	Feb. 26, 1958	c7.42	-	-	-
5535	Lackawanna River at Archbald, Pa.	B6	108	1914-31	13,600	9,200	Sept. 30, 1924	17.3	23,000	64.8	26
5545	Lackawanna River at Archbald, Pa.	B6	108	1865-99	-	-	Mar. 18, 1865	28.0	-	-	-
5555	Lackawanna River at Archbald, Pa.	B6	108	1900-64	138,000	145,000	Mar. 9, 1904	c30.7	-	-	-
5565	Lackawanna River at Archbald, Pa.	B6	108	1889-1964	8,300	8,400	Mar. 20, 1936	28.0	250,000	22.3	26
5575	Lackawanna River at Archbald, Pa.	B6	108	1889-1964	8,300	8,400	Mar. 18, 1936	19.74	31,500	100	e1.25

See footnotes at end of table.

Table 1.--Maximum floods at gaging stations--Continued

Table 1.--Maximum floods at gaging stations--Continued											
No.	Gaging station	Flood region and area	Drainage area (sq mi)	Period of known floods (water years)	Station Q2.33 (cfs)	Areal Q2.33 (cfs)	Date	Maximum flood			
								Gage height (feet)	(cfs)	Cfs per sq mi	Reurrence interval (years)
Susquehanna River basin--Continued											
5412	West Branch Susquehanna River near Curwensville, Pa.	B4	367	1956-64	9,600	9,400	Mar. 10, 1964	14.19	15,700	42.8	8
5415	Clearfield Creek at Dimeling, Pa.	B4	371	1914-64	8,600	9,400	Mar. 18, 1936	18.49	30,600	82.5	e1.08
5420	Moshannon Creek at Osceola Mills, Pa.	B4	68.8	1936-64	-	-	Mar. 18, 1936	17.7	-	-	(d)
				1941-64	1,790	2,600	Mar. 10, 1964	9.34	2,930	42.6	(d)
5425	West Branch Susquehanna River at Karthaus, Pa.	B5	1,462	1936-64	29,000	34,000	Mar. 18, 1936	24.5	135,000	92.3	e1.32
5430	Driftwood Branch Sinnemahoning Creek at Sterling Run, Pa.	C4	272	1914-64	8,800	7,400	July 18, 1942	14.70	47,800	176	e1.80
5435	Sinnemahoning Creek at Sinnemahoning, Pa.	C4	685	1936-64	19,000	15,000	Mar. 18, 1936	21.94	61,200	89.3	e1.18
5440	First Fork Sinnemahoning Creek near Sinnemahoning, Pa.	C4	245	1942-64	-	6,800	July 18, 1942	-	80,000	327	e3.20
5445	Kettle Creek at Cross Fork, Pa...	C4	136	1936-64	3,150	4,400	Mar. 18, 1936	14.0	20,000	147	e1.20
5450	Kettle Creek near Westport, Pa...	C4	233	1955-64	5,500	6,600	Mar. 8, 1956	10.48	7,970	34.2	3
							Jan. 22, 1959	13.31	-	-	e1.40
							Mar. 18, 1936	29.39	236,000	79.3	
5455	West Branch Susquehanna River at Renovo, Pa.	B5	2,975	1889-1964	65,000	56,000	June 17, 1916	11.5	18,500	155	e1.54
5460	North Bald Eagle Creek at Milesburg, Pa.	B4	119	1911-28, 1934	7,000	4,000	March 1936	8.6	-	-	(d)
5465	Spring Creek near Axemann, Pa....	B9	87.2	1936-64	-	-	Nov. 25, 1950	5.44	1,670	19.2	(d)
				1941-64	750	1,300	Mar. 15, 1912	6.4	5,160	35.6	25
				1911-19	2,000	2,100	Mar. 10, 1964	6.60	8,950	33.8	4
5470	Spring Creek near Bellefonte, Pa.	B9	145	1957-64	4,300	7,200	Mar. 10, 1964	6.60	8,950	33.8	(d)
5472	North Bald Eagle Creek below Spring Creek, at Milesburg, Pa.	B4	265	1957-64	4,300	7,200	Mar. 10, 1964	6.60	8,950	33.8	(d)
5475	North Bald Eagle Creek at Blanchard, Pa.	B4	339	1955-64	4,800	8,800	Mar. 10, 1964	11.59	6,890	20.3	(d)
5477	Marsh Creek at Blanchard, Pa....	B4	44.1	1957-64	1,300	1,800	Feb. 26, 1961	6.63	3,300	74.8	10
5480	North Bald Eagle Creek at Beech Creek Station, Pa.	B4	559	1911-64	10,900	13,000	Mar. 18, 1936	14.42	25,600	45.8	(d)
5485	Pine Creek at Cedar Run, Pa.....	C4	604	1919-64	12,400	14,000	May 28, 1946	14.39	52,000	86.1	e1.07
5490	Pine Creek near Waterville, Pa...	C4	750	1909-20	20,000	16,000	May 1, 1909	12.5	30,000	40.0	9
5495	Blockhouse Creek near English Center, Pa.	B6	37.7	1936-64	2,300	2,300	Mar. 18, 1936	9.0	5,780	153	26
5500	Lycoming Creek near Trout Run, Pa.	B6	173	1914-64	7,000	8,000	May 27, 1946	19.37	21,800	126	35
5510	Graffius Run at Williamsport, Pa..	B6	3.14	1940-53	329	-	May 27, 1946	3.43	910	290	-
5515	West Branch Susquehanna River at Williamsport, Pa.	B5	5,682	1889-1964	110,000	95,000	Mar. 18, 1936	33.57	264,000	46.5	36
5520	Loyalsock Creek at Loyalsock, Pa.	B6	443	1926-64	18,000	17,000	Nov. 26, 1950	12.32	51,200	116	50

5525	Muncy Creek near Sonestown, Pa...	B6	23.8	1936-64	-	-	March 1936	9.3	-	-	-
				1941-64	1,600	1,600	Mar. 11, 1952	8.61	7,310	307	e1.52
5535	West Branch Susquehanna River at Lewisburg, Pa.	B5	6,847	1865-1964	116,000	110,000	Mar. 19, 1936	32.1	287,000	41.9	30
5540	Susquehanna River at Sunbury, Pa.	E12	18,300	1865-1964	230,000	230,000	Mar. 19, 1936	26.85	556,000	30.4	e1.27
5545	Shamokin Creek near Shamokin, Pa.	B4	54.2	1940-64	1,440	2,100	Aug. 27, 1962	5.00	3,120	57.6	6
5550	Penn Creek at Penns Creek, Pa....	B4	301	1930-64	7,600	8,000	Sept. 16, 1934	13.00	14,900	49.5	12
5555	East Mahantango Creek near Dalmatia, Pa.	B4	162	1930-64	5,300	5,000	Aug. 24, 1933	13.66	10,600	65.4	15
5560	Frankstown Branch Juniata River at Williamsburg, Pa.	B4	291	1889-1964	7,800	7,800	June 1, 1889	19.1	-	-	-
5565	Little Juniata River at Tipton, Pa.	B4	93.7	1946-62	3,100	3,200	Mar. 18, 1936	18.58	47,600	164	e2.03
							Nov. 25, 1950	9.06	5,700	60.8	9
5570	Little Juniata River near Tyrone, Pa.	B4	101	1940-45	-	3,500	Mar. 30, 1940	8.0	4,240	42.0	3
5575	South Bald Eagle Creek at Tyrone, Pa.	B4	44.1	1936-64	-	-	Mar. 18, 1936	15.0	-	-	-
				1940-64	1,790	1,800	Nov. 25, 1950	7.5	5,140	117	42
5580	Little Juniata River at Spruce Creek, Pa.	B4	220	1936-64	5,600	6,300	Mar. 18, 1936	19.1	59,800	181	e2.10
5585	Shaver Creek near Petersburg, Pa.	B4	46.4	1930-38	2,100	1,900	Mar. 18, 1936	9.32	3,420	73.7	10
5590	Juniata River at Huntingdon, Pa..	B4	816	1896-1964	16,300	17,000	Mar. 18, 1936	21.87	81,000	99.3	e1.58
5595	Standing Stone Creek near Huntingdon, Pa.	B4	128	1930-58	2,900	4,200	Nov. 25, 1950	10.96	8,500	66.4	14
5600	Dunning Creek at Belden, Pa.....	C4	172	1936-64	4,800	5,200	Mar. 18, 1936	17.8	16,900	98.3	30
5605	Dunning Creek at Yount, Pa.....	C4	191	1930-39	-	5,500	Mar. 18, 1936	18.08	17,900	93.7	30
5610	Brush Creek at Gapsville, Pa.....	C4	36.8	1931-58	1,040	1,600	Mar. 17, 1936	9.81	6,870	187	e1.03
5620	Raystown Branch Juniata River at Saxton, Pa.	C4	756	1889-1964	15,100	16,000	Mar. 18, 1936	24.54	80,500	106	e1.44
5625	Great Trough Creek near Marklesburg, Pa.	B4	84.6	1930-57	2,100	3,000	Mar. 17, 1936	8.46	8,400	99.3	39
5630	Raystown Branch Juniata River near Huntingdon, Pa.	B4	957	1936-64	16,200	19,000	Mar. 18, 1936	31.0	87,000	90.9	e1.53
5635	Juniata River at Mapleton Depot, Pa.	B4	2,030	1936-64	29,000	36,000	Mar. 18, 1936	38.2	145,000	71.4	e1.34
5640	Aughwick Creek near Orbisonia, Pa.	C4	174	1930-38	-	5,400	Mar. 18, 1936	19.16	18,900	109	42
5645	Aughwick Creek near Three Springs, Pa.	C4	205	1889-1964	-	-	June 1, 1889	19.3	-	-	-
5650	Kishacoquillas Creek at Reedsville, Pa.	B4	164	1939-64	8,100	6,000	Nov. 25, 1950	18.04	20,600	100	36
				1930-64	-	-	March 1936	14.1	-	-	-
5660	Tuscarora Creek near Port Royal, Pa.	C4	214	1940-64	3,100	5,100	Nov. 25, 1950	13.12	9,830	60.0	12
				1912-58	6,800	6,200	Mar. 19, 1936	21.60	-	-	-
							Nov. 25, 1950	19.73	19,400	90.7	29
5665	Cocolamus Creek near Millerstown, Pa.	B4	57.2	1930-58	3,600	2,200	Nov. 2, 1956	8.27	4,690	82.0	16
5670	Juniata River at Newport, Pa.....	B4	3,354	1889-1964	48,000	53,000	June 1, 1889	35.9	209,000	62.3	e1.32
5675	Bixler Run near Loysville, Pa....	C4	15.0	1955-64	750	810	Nov. 1, 1956	10.39	8,780	585	e2.46
5680	Sherman Creek at Shermantown, Pa.	C4	200	1927-64	7,200	5,900	July 22, 1927	20.34	44,000	220	e2.02
5685	Clark Creek near Carsonville, Pa.	B4	22.5	1938-64	-	-	Nov. 13, 1937	-	988	43.9	(d)
5690	Stony Creek near Dauphin, Pa.....	B4	35.0	1938-45	870	1,500	Nov. 9, 1943	7.97	2,360	67.4	7
5700	Conodoguinet Creek near Hogestown, Pa.	C9	470	1912-17, 1930-58	9,100	6,300	Mar. 12, 1952	12.16	15,700	33.4	12

See footnotes at end of table.

MAGNITUDE AND FREQUENCY OF FLOODS, PART 1-B

MAXIMUM KNOWN FLOODS

Table 1.--Maximum floods at gaging stations--Continued

Table 1.--Maximum floods at gaging stations--Continued											
No.	Gaging station	Flood region and area	Drainage area (sq mi)	Period of known floods (water years)	Station 22.33 (cfs)	Areal 22.33 (cfs)	Date	Maximum flood			
								Gage height (feet)	(cfs)	Cfs per sq mi	Recur-rence interval (years)
Susquehanna River basin--Continued											
5705	Susquehanna River at Harrisburg, Pa.	E12	24,100	1786-1964	290,000	300,000	Mar. 19, 1936	29.23	740,000	30.7	e1.30
5710	Paxton Creek near Penbrook, Pa...	B4	11.2	1940-50	1,600	640	Aug. 27, 1949	6.97	1,900	170	48
5715	Yellow Breeches Creek near Camp Hill, Pa.	C9	216	1910-19, 1953-64	2,500	3,100	Aug. 22, 1915	8.61	5,550	25.7	8
5720	Lower Little Swatara Creek at Pine Grove, Pa.	B4	34.3	1920-32	1,120	1,500	Mar. 8, 1920	8.9	1,500	43.7	(d)
5730	Swatara Creek at Harper Tavern, Pa.	B4	337	1889-1964	9,800	8,800	Sept. 30, 1924 June 11, 1889	25.6	53,000	157	e2.00
5735	Manada Creek at Manada Gap, Pa...	B4	13.5	1938-58	600	740	Aug. 16, 1942	8.60	2,650	196	e1.19
5740	West Conewago Creek near Manchester, Pa.	C4	510	1929-64	17,200	12,000	Aug. 24, 1933	24.14	47,600	93.3	e1.13
5745	Codorus Creek at Spring Grove, Pa.	C4	74.3	1930-64	2,700	2,700	Aug. 23, 1933	11.84	11,200	151	e1.06
5750	South Branch Codorus Creek near York, Pa.	C4	117	1928-64	2,600	3,900	Aug. 23, 1933	17.97	19,300	165	e1.29
5755	Codorus Creek near York, Pa.....	C4	222	1933-64	4,700	6,400	Aug. 23, 1933	24.0	32,000	144	e1.35
5760	Susquehanna River at Marietta, Pa.	E12	25,990	1889-64	300,000	320,000	Mar. 19, 1936	60.73	787,000	30.3	e1.30
5765	Conestoga Creek at Lancaster, Pa.	C4	324	1929-64	7,600	8,700	Aug. 24, 1933	17.52	22,800	70.4	20
5770	Susquehanna River near McCall Ferry, Pa.	E12	26,800	1903-10	-	330,000	Mar. 8, 1904	146.6	631,000	23.5	50
5775	Muddy Creek at Castle Pin, Pa....	C4	133	1929-38	4,900	4,300	Aug. 23, 1933	21.11	16,600	125	50
5785	Octoraro Creek near Rising Sun, Md.	C4	193	1884-1963	5,500	5,800	June 1884	24.3	60,000	311	-
5790	Basin Run at Liberty Grove, Md...	C4	5.31	1949-58	620	360	July 27, 1958	6.33	1,560	294	50
5800	Deer Creek at Rocks, Md.....	C4	94.4	1888-1963	4,000	3,300	Aug. 23, 1933	17.7	13,600	144	e1.08
Bush River basin											
5810	Bynum Run near Bel Air, Md.....	C10	7.50	1951-55	-	920	July 4, 1951 Nov. 22, 1952	7.15	2,190	292	11
5815	Bynum Run at Bel Air, Md.....	C10	8.52	1945-50, 1956-63	1,500	990	July 19, 1945	6.25	3,620	425	32
Gunpowder River basin											
5820	Little Falls at Blue Mount, Md...	C4	52.9	1933-63	-	-	August 1933	14	-	-	-
5830	Slade Run near Glyndon, Md.....	C4	2.09	1945-63	2,900	2,100	Sept. 10, 1950	11.93	5,730	108	16
5835	Western Run at Western Run, Md...	C4	59.8	1948-63	160	-	July 21, 1956	4.68	485	232	-
5840	Gunpowder Falls near Carney, Md...	C4	314	1945-63	2,800	2,300	July 21, 1956	10.84	5,590	93.5	13
					3,000	8,300	July 9, 1952	9.50	7,000	22.3	2
5845	Little Gunpowder Falls at Laurel Brook, Md.	C10	36.1	1927-63	2,900	2,200	Aug. 23, 1933	10.3	9,200	255	50
Patapsco River basin											
5855	Cranberry Branch near Westminster, Md.	C4	3.29	1949-63	200	-	July 12, 1949	5.2	750	228	-
5860	North Branch Patapsco River at Cedarhurst, Md.	C4	56.6	1946-63	2,300	2,200	Aug. 13, 1955	10.38	4,130	73.0	7
5865	North Branch Patapsco River near Reisterstown, Md.	C4	91.0	1928-53	2,700	3,200	Aug. 24, 1933	14.6	11,000	121	36
5870	North Branch Patapsco River near Marriottsville, Md.	C4	165	1930-60	4,000	5,100	Aug. 24, 1933	20.8	19,500	118	48
5875	South Branch Patapsco River at Henryton, Md.	C4	64.4	1949-63	2,900	2,500	July 21, 1956	19.40	12,100	188	e1.24
5880	Piney Run near Sykesville, Md....	C4	11.4	1932-63	1,000	650	July 20, 1956	12.0	7,380	647	e2.64
5885	Patapsco River at Woodstock, Md.	C4	251	1897-99, 1902-1908	-	7,000	Aug. 2, 1906	18.0	27,000	108	e1.05
5890	Patapsco River at Hollofield, Md.	C4	285	1933-63	-	-	August 1933	19.5	-	-	-
5893	Gwynns Falls at Villa Nova, Md...	C10	32.5	1944-63	6,500	7,700	July 21, 1956	15.88	19,000	66.7	16
5895	Sawmill Creek at Glen Burnie, Md.	C2	4.97	1956-63	-	2,000	July 21, 1956	12.6	5,270	162	15
				1945-52	60	210	Sept. 1, 1952	4.77	157	31.6	(d)
South River basin											
5900	North River near Annapolis, Md...	C2	8.5	1932-63	170	310	Aug. 2, 1944	6.22	5,000	588	e3.66
5905	Bacon Ridge Branch at Chesterfield, Md.	C2	6.92	1944-52	360	270	Aug. 2, 1944	5.49	2,100	303	e1.81
Patuxent River basin											
5910	Patuxent River near Unity, Md....	C4	34.8	1945-63	1,600	1,500	July 21, 1956	14.35	10,700	307	e1.77
5915	Cattail Creek at Roxbury Mills, Md.	C4	27.7	1945-56	850	1,250	July 21, 1956	14.19	10,100	365	e1.92
5920	Patuxent River near Burtonsville, Md.	C4	127	1911-44	2,900	4,100	Aug. 24, 1933	21.7	11,000	86.6	17
5925	Patuxent River near Laurel, Md...	C10	132	1945-63	-	4,500	July 21, 1956	17.7	11,800	89.4	17
5935	Little Patuxent River at Guilford, Md.	C10	38.0	1933-63	1,500	2,200	Sept. 1, 1952	13.26	5,300	139	13
5940	Little Patuxent River at Savage, Md.	C10	98.4	1933-63	-	-	August 1933	17.5	-	-	-
5944	Dorsey Run near Jessup, Md.....	C10	11.6	1940-63	3,000	3,800	Sept. 1, 1952	13.15	6,280	63.8	6
5945	Western Branch near Largo, Md....	C2	30.2	1949-63	500	1,150	Aug. 13, 1955	12.77	1,400	121	(d)
				1950-63	1,000	830	Aug. 13, 1955	8.51	1,580	52.3	7
Potomac River basin											
5950	North Branch Potomac River at Steyer, Md.	C4	73.0	1955-63	-	-	Oct. 15, 1954	13.0	-	-	-
5953	Abram Creek at Oakmont, W. Va....	C4	47.3	1956-63	5,100	2,700	Mar. 5, 1963	9.13	6,240	85.5	12
5955	North Branch Potomac River at Kitzmiller, Md.	C4	225	1955-64	1,450	1,900	Aug. 18, 1955	9.82	3,830	81.0	9
5960	North Branch Potomac River at Bloomington, Md.	C4	287	1950-63	7,500	6,400	Oct. 15, 1954	13.73	33,400	148	e1.40
				1924-55	9,400	7,800	Oct. 15, 1954	-	37,400	130	e1.33

See footnotes at end of table.

Table 1.--Maximum floods at gaging stations--Continued

No.	Gaging station	Flood region and area	Drainage area (sq mi)	Period of known floods (water years)	Station Q2.33 (cfs)	Areal Q2.33 (cfs)	Date	Gage height (feet)	Maximum flood		
									Discharge		
									(cfs)	Cfs per sq mi	Recurrence interval (years)
Potomac River basin--Continued											
5965	Savage River near Barton, Md.....	C4	49.1	1949-63	1,900	2,000	Oct. 15, 1954	8.45	7,510	153	42
5970	Crabtree Creek near Swanton, Md...	C4	16.7	1949-63	560	880	July 12, 1949	5.01	3,260	195	34
5975	Savage River below Savage River Dam, near Bloomington, Md.	C4	106	1949-63	-	-	Oct. 16, 1954	7.70	6,530	61.6	-
5980	Savage River at Bloomington, Md..	C4	115	1924-50	-	-	Mar. 29, 1924	13	-	-	-
5985	North Branch Potomac River at Luke, Md.	C4	404	1925-27, 1930-50	3,500	3,800	Mar. 17, 1936	10.8	14,800	129	50
5990	Georges Creek at Franklin, Md....	C4	72.4	1900-06	11,000	10,000	Oct. 15, 1954	17.15	39,400	97.5	el.10
5995	New Creek near Keyser, W. Va.....	C4	45.7	1924-63	-	-	Mar. 29, 1924	10	-	-	-
6000	North Branch Potomac River at Pinto, Md.	C4	596	1924, 1931-63	2,200	2,700	Mar. 17, 1936	9.6	8,500	117	26
6010	Wills Creek below Hyndman, Pa....	C4	146	1931-63	-	-	March 1936	7.85	-	-	-
6015	Wills Creek near Cumberland, Md..	C4	247	1951-63	1,100	1,800	Aug. 18, 1955	7.40	3,110	68.1	6
6030	North Branch Potomac River near Cumberland, Md.	C4	875	1924-63	15,500	14,000	Mar. 29, 1924	24	55,000	92.3	el.12
6035	Evitts Creek near Centerville, Pa.	C4	30.2	1924-63	-	-	unknown	8	-	-	-
6045	Patterson Creek near Headsville, W. Va.	C4	219	1933-63	1,020	1,400	Mar. 17, 1936	7.13	5,240	174	36
6055	South Branch Potomac River at Franklin, W. Va.	D4	182	1939-63	6,500	6,200	Aug. 18, 1955	12.20	16,000	73.1	18
6060	North Fork South Branch Potomac River at Cabins, W. Va.	D4	314	1936-63	-	-	March 1936	13	-	-	-
6065	South Branch Potomac River near Petersburg, W. Va.	D4	642	1940-63	4,500	5,500	June 17, 1949	11.40	15,000	82.4	14
6075	South Fork South Branch Potomac River at Brandywine, W. Va.	D4	102	1936-63	8,500	8,400	June 17, 1949	18.0	50,000	159	el.32
6080	South Fork South Branch Potomac River near Moorefield, W. Va.	D4	283	1887-1963	13,000	14,000	June 17, 1949	22.83	62,000	96.6	50
6085	South Branch Potomac River near Springfield, W. Va.	D4	1,471	1944-63	5,000	3,500	June 17, 1949	14.6	41,200	404	e2.45
6090	Town Creek near Oldtown, Md.....	C4	148	1924, 1929-36, 1939-63	8,000	7,700	June 18, 1949	16.1	39,000	138	el.10
6095	Sawpit Run near Oldtown, Md.....	C4	5.08	1877-1963	28,000	28,000	Mar. 18, 1936	34.2	143,000	97.2	el.21
6100	Potomac River at Paw Paw, W. Va.	F13	3,109	1928-36	5,500	4,700	Mar. 17, 1936	19.0	27,000	182	el.50
6105	Cacapon River at Yellow Spring, W. Va.	D4	306	1948-58	320	350	Oct. 15, 1954	4.72	770	152	9
6115	Cacapon River near Great Cacapon, W. Va.	D4	677	1877-1964	52,000	52,000	Mar. 18, 1936	54.0	240,000	77.2	el.09
				1936-51	10,000	8,200	Oct. 15, 1942	22.22	36,700	120	48
				1889-1964	15,500	15,000	Mar. 18, 1936	30.1	87,600	129	el.33
6125	Little Tonoloway Creek near Hancock, Md.	C4	16.9	1948-64	540	880	Oct. 15, 1954	7.10	1,470	87.0	6
6130	Potomac River at Hancock, Md.....	F13	4,073	1889-1964	64,000	62,000	Mar. 18, 1936	47.6	340,000	83.5	el.35
6135	Licking Creek near Sylvan, Pa....	C4	158	1931-41	4,800	4,900	Mar. 18, 1936	17.4	20,700	131	el.11
6140	Back Creek near Jones Spring, W. Va.	C4	243	1929-64	6,200	6,800	Oct. 15, 1942	25.17	22,400	92.2	36
6145	Conococheague Creek at Fairview, Md.	C9	494	1889-63	7,300	6,600	1889	16.5	22,000	44.5	38
6150	Opequon Creek near Berryville, Va.	D3	58	1942-64	-	-	October 1942	18.4	-	-	-
6160	Abrams Creek near Winchester, Va.	C9	16.5	1944-64	2,400	2,000	Dec. 4, 1950	10.03	3,710	64.0	6
6165	Opequon Creek near Martinsburg, W. Va.	C9	272	1950-60	380	300	Dec. 4, 1950	6.16	962	58.3	24
6170	Tuscarora Creek above Martinsburg, W. Va.	C9	11.3	1906, 1936-64	3,800	3,700	March 1936	17.5	-	-	-
6180	Potomac River at Shepherdstown, W. Va.	F13	5,936	1947-64	3,800	3,700	Dec. 4, 1950	14.12	9,100	33.5	16
6195	Antietam Creek near Sharpsburg, Md.	C9	281	1949-63	175	200	June 15, 1960	5.01	234	20.7	(d)
6205	North River near Stokesville, Va.	D3	23.4	1889-63	80,000	80,000	Mar. 19, 1936	42.1	335,000	56.4	el.13
6210	Dry River at Rawley Springs, Va..	D3	74	1928-63	3,100	3,900	July 20, 1956	16.73	12,600	44.8	35
6212	War Branch Muddy Creek near Hinton, Va.	D3	9.45	1947-64	850	1,000	June 17, 1949	10.9	11,100	474	e2.13
6214	Blacks Run at Harrisonburg, Va...	D3	5.52	1942-64	2,900	2,400	October 1942	10.5	13,000	176	el.11
6220	North River near Burkettown, Va...	D3	375	1949-64	560	520	Aug. 15, 1949	6.7	2,500	265	36
6230	Bell Creek at St. Pauls Chapel, near Staunton, Va.	D3	0.61	1949-61	500	350	Aug. 15, 1949	-	1,920	348	50
6235	Bell Creek near Staunton, Va.	D3	3.8	1852-1964	9,500	8,000	June 18, 1949	36.3	62,600	167	el.76
6240	Bell Creek at Franks Mill, near Staunton, Va.	D3	9.3	1949-55	20	-	Oct. 15, 1954	2.12	306	502	-
6250	Middle River near Grottoes, Va...	D3	360	1949-56	50	-	June 20, 1949	2.74	722	190	-
6260	South River near Waynesboro, Va...	D3	136	1877-1964	180	520	June 28, 1949	4.86	912	95.0	5
6275	South River at Harrison, Va.....	D3	222	1949-64	6,500	7,800	Mar. 18, 1936	28.57	24,500	68.1	20
6285	South Fork Shenandoah River near Lynnwood, Va.	D3	1,076	1928-64	3,500	3,800	Aug. 18, 1955	13.95	13,500	99.3	22
6295	South Fork Shenandoah River near Luray, Va.	D3	1,377	1870-1964	-	-	1870, 1877	18.8	-	-	-
6310	South Fork Shenandoah River at Front Royal, Va.	D3	1,638	1924-51	6,400	5,500	Oct. 15, 1942	17.2	23,100	104.	40
6315	Happy Creek at Front Royal, Va...	D3	13.8	1870-1964	17,500	17,500	Oct. 15, 1942	27.2	80,000	74.3	el.07
6320	North Fork Shenandoah River at Cootes Store, Va.	D4	215	1897-1951	-	21,000	Oct. 16, 1942	25.7	100,000	72.6	el.13
6323	Long Glade Run near Broadway, Va.	D3	8.15	1870-1964	24,000	24,000	Oct. 16, 1942	34.8	130,000	79.4	el.27
6330	North Fork Shenandoah River at Mount Jackson, Va.	D3	509	1949-64	1,050	700	Oct. 5, 1948	-	2,490	180	18
6335	Stony Creek at Columbia Furnace, Va.	D3	76	1836-1964	9,600	6,200	Dec. 4, 1950	7.00	-	-	-
6340	North Fork Shenandoah River near Strasburg, Va.	D3	772	1950-64	140	470	Oct. 15, 1954	4.03	1,260	155	10
6345	Cedar Creek near Winchester, Va.	D3	101	1943-64	12,000	10,000	Oct. 15, 1942	20.2	80,000	157	el.81
				1942-64	-	-	October 1942	11.5	-	-	-
				1947-64	2,800	2,500	Sept. 30, 1959	9.20	6,900	90.8	12
				1926-64	13,000	13,000	Oct. 16, 1942	31.2	100,000	130	el.77
				1936-64	3,000	3,000	Oct. 15, 1942	27.0	22,000	218	el.52

See footnotes at end of table.

Table 1.--Maximum floods at gaging stations--Continued

No.	Gaging station	Flood region and area	Drainage area (sq mi)	Period of known floods (water years)	Station Q2.33 (cfs)	Areal Q2.33 (cfs)	Maximum flood				
							Date	Gage height (feet)	Discharge		
									(cfs)	Cfs per sq mi	Recur-rence interval (years)
Potomac River basin--Continued											
6355	Passage Creek at Buckton, Va.....	D3	87	1933-64	2,400	2,700	Oct. 15, 1942	15.5	21,000	241	e1.60
6360	North Fork Shenandoah River near Riverton, Va.	D3	1,040	1900-01, 1903-06	-	17,000	Apr. 21, 1901	18.2	34,000	32.7	8
6362	Shenandoah River at Riverton, Va.	D3	2,694	1870-1961	-	-	Sept. 30, 1870	47.0	-	-	-
6365	Shenandoah River at Millville, W. Va.	D3	3,040	1870-1964	36,000	38,000	Oct. 16, 1942	32.4	230,000	75.7	e1.41
6370	Little Catocin Creek at Harmony, Md.	C4	8.83	1947-63	900	520	Aug. 20, 1952	8.49	5,400	612	e2.38
6375	Catocin Creek near Middletown, Md.	C4	66.9	1948-63	2,400	2,500	July 18, 1949	11.18	7,760	116	24
6385	Potomac River at Point of Rocks, Md.	F13	9,651	1889-1963	112,000	110,000	Mar. 19, 1936	41.03	480,000	49.7	e1.28
6390	Monocacy River at Bridgeport, Md.	C4	173	1889-1963	-	-	Aug. 24, 1933	25	-	-	-
6395	Big Pipe Creek at Bruceville, Md.	C4	102	1942-63	8,500	5,300	May 21, 1943	20.53	15,000	86.7	20
6400	Little Pipe Creek at Avondale, Md.	C4	8.10	1948-63	4,000	3,600	July 12, 1949	11.92	9,500	93.1	17
6405	Owens Creek at Lantz, Md.....	C4	5.93	1932-63	480	390	Dec. 1, 1934	8.4	3,270	551	e1.90
6410	Hunting Creek at Jimtown, Md.....	C4	18.4	1950-63	560	940	Sept. 1, 1952	4.94	1,170	63.6	4
6415	Fishing Creek near Lewistown, Md.	C4	7.29	1948-63	150	450	July 12, 1949	3.73	500	68.6	(d)
6420	Monocacy River near Frederick, Md.	C4	665	1889-1930	18,000	15,000	June 1889	35	46,000	69.2	34
6425	Linganore Creek near Frederick, Md.	C4	82.3	1933-63	2,600	3,000	June 2, 1946	12.22	-	-	-
6430	Monocacy River at Jug Bridge, near Frederick, Md.	C4	817	1889-1963	21,000	17,000	Aug. 13, 1955	-	4,130	50.2	(d)
6435	Bernett Creek at Park Mills, Md..	C4	62.8	1949-58, 1960-63	2,000	2,400	Nov. 21, 1952	10.34	3,230	51.4	4
6440	Goose Creek near Leesburg, Va....	D5	338	1889-1964	8,000	10,000	May or June 1889	29	65,000	192	e1.45
6445	Great Seneca Creek near Gaithersburg, Md.	C4	41.0	1926-30	-	1,700	Nov. 16, 1926	8.80	800	195	(d)
6450	Seneca Creek at Dawsonville, Md..	C4	101	1931-63	2,300	3,500	July 21, 1956	12.17	15,000	149	e1.11
6457	Difficult Run near Fairfax, Va...	C2	4.29	1950-64	500	-	Mar. 12, 1962	7.9	900	210	-
6460	Difficult Run near Great Falls, Va.	C2	58	1935-64	1,600	1,400	July 21, 1956	10.96	3,190	55.0	12
6465	Potomac River near Washington, D. C.	F13	11,560	1889-1963	126,000	124,000	Mar. 19, 1936	28.1	484,000	41.9	e1.21
6470	Little Falls Branch near Bethesda, Md.	C10	4.1	1944-61	1,100	-	July 31, 1945	7.50	2,340	571	-
6480	Rock Creek at Sherrill Drive, Washington, D. C.	C10	62.2	1930-63	1,600	3,000	July 21, 1956	13.19	7,220	116	14
6495	Northeast Branch Anacostia River at Riverdale, Md.	C10	72.8	1933-63	2,400	3,200	Aug. 23, 1933	15.5	10,500	144	31
6505	Northwest Branch Anacostia River near Colesville, Md.	C10	21.3	1924-63	1,400	1,600	Aug. 8, 1953	10.99	4,910	231	20
6510	Northwest Branch Anacostia River near Hyattsville, Md.	C10	49.4	1933-63	-	-	Aug. 24, 1933	13.5	-	-	-
6525	Fourmile Run at Alexandria, Va...	C2	14.4	1939-63	2,200	2,600	Aug. 8, 1959	12.12	4,170	844	-
6530	Cameron Run at Alexandria, Va....	C2	33.7	1947-64	1,100	480	Aug. 20, 1963	9.89	11,700	812	(d)
6535	Henson Creek at Oxon Hill, Md....	C10	16.7	1955-64	3,300	900	May 5, 1953	11.9	-	-	-
6540	Accotink Creek near Annandale, Va.	C2	23.6	1948-63	1,500	1,400	Aug. 12, 1955	9.95	7,620	226	(d)
6545	Long Branch near Annandale, Va...	C2	3.71	1947-64	320	-	Aug. 13, 1955	7.33	3,000	180	10
6550	Accotink Creek near Accotink Station, Va.	C2	37.0	1949-57	1,450	970	June 8, 1947	9.9	3,950	167	e1.37
6555	Cedar Run near Warrenton, Va.....	C4	13.0	1943-64	-	-	Aug. 13, 1955	14.21	1,100	296	-
6560	Cedar Run near Catlett, Va.....	C4	93.5	1951-64	1,500	720	October 1942	13	-	-	-
6562	Broad Run near Warrenton, Va.....	C4	2.94	1943-64	-	-	June 8, 1955	9.59	3,100	238	e1.02
6565	Broad Run at Buckland, Va.....	C4	50.3	1951-64	1,900	2,000	October 1942	22	-	-	-
6570	Bull Run near Manassas, Va.....	C4	147	1951-64	7,000	4,600	June 8, 1955	17.25	7,300	78.1	12
6575	Occoquan Creek near Occoquan, Va.	C4	570	1913-16, 1921-23, 1937-56	15,000	13,000	June 8, 1955	6.68	-	-	-
6580	Mattawoman Creek near Pomomkey, Md.	C2	57.7	1950-63	1,400	1,400	June 10, 1961	-	175	59.5	-
6585	South Fork Quantico Creek near Independent Hill, Va.	C2	7.50	1951-64	650	280	July 20, 1956	13.08	11,600	231	e1.45
6590	North Branch Chopawamsic Creek near Independent Hill, Va.	C2	5.79	1951-57	260	230	July 5, 1956	16.45	11,200	76.2	14
6595	Middle Fork Chopawamsic Creek near Garrisonville, Va.	C2	4.51	1951-57	190	-	Oct. 16, 1942	27.6	37,000	64.9	26
6600	South Branch Chopawamsic Creek near Garrisonville, Va.	C2	2.56	1951-57	170	-	Aug. 13, 1955	5.80	340	75.4	-
6605	Beaverdam Run near Garrisonville, Va.	C2	12.7	1951-57	360	420	Mar. 15, 1953	7.07	320	125	-
6610	Chaptico Creek at Chaptico, Md...	C2	10.7	1948-63	380	380	Aug. 15, 1955	7.03	1,370	108	24
6615	St. Marys River at Great Mills, Md.	C2	24.0	1947-63	800	690	Sept. 10, 1950	8.56	7,800	729	e4.85
							July 30, 1960	12.08	4,900	204	e1.69
Rappahannock River basin											
6620	Rappahannock River near Warren- ton, Va.	D5	192	1943-64	4,600	7,000	Oct. 15, 1942	23.5	32,000	167	48
6625	Rush River at Washington, Va.....	D5	15.2	1954-64	950	980	Aug. 18, 1955	8.14	2,500	164	9
6630	Thornton River near Laurel Mills, Va.	D5	142	1943-56	5,100	5,400	Oct. 15, 1942	26.8	40,000	282	e1.52

See footnotes at end of table.

Table 1.--Maximum floods at gaging stations--Continued

No.	Gaging station	Flood region and area	Drainage area (sq mi)	Period of known floods (water years)	Station Q2.33 (cfs)	Areal Q2.33 (cfs)	Maximum flood				
							Date	Gage height (feet)	Discharge		
									(cfs)	Cfs per sq mi	Recurrence interval (years)
Rappahannock River basin--Continued											
6635	Hazel River at Rixeyville, Va....	D5	286	1937-64	7,500	9,200	Oct. 15, 1942	31.8	60,000	210	el.44
6640	Rappahannock River at Remington, Va.	D5	616	1943-63	12,000	17,000	Oct. 16, 1942	30.0	90,000	146	el.20
6645	Rappahannock River at Kellys Ford, Va.	D5	641	1828-1952	-	17,000	Oct. 16, 1942	32.6	90,000	140	el.20
6647	Browns Run near Bealeton, Va.....	D5	7.54	1954-61	590	560	July 23, 1958	-	760	101	4
6650	Mountain Run near Culpeper, Va...	D5	14.7	1950-64	1,300	960	Apr. 5, 1960	5.52	-	-	-
6655	Rapidan River near Ruckersville, Va.	D5	111	1943-64	5,500	4,500	Aug. 18, 1955	11.0	5,440	370	el.08
6665	Robertson River near Locust Dale, Va.	D5	180	1943-64	5,800	6,600	Oct. 15, 1942	20.8	30,700	277	el.43
6670	Rapidan River at Rapidan, Va.....	D5	446	1901, 1924-64	-	13,000	Oct. 15, 1942	23.9	44,000	244	el.42
6675	Rapidan River near Culpeper, Va..	D5	465	1931-64	10,500	13,000	Oct. 16, 1942	27.6	57,000	128	46
6680	Rappahannock River near Fredericksburg, Va.	D5	1,599	1889-1964	30,000	36,000	Oct. 16, 1942	30.3	58,100	125	el.02
6685	Cat Point Creek near Montross, Va.	D1	45	1935-64	-	-	Oct. 16, 1942	25.9	140,000	87.6	40
6690	Piscataway Creek near Tappa-hannock, Va.	D1	28.1	1944-64	510	570	September 1935	9.3	-	-	-
				1952-64	320	400	Aug. 13, 1955	7.56	2,350	52.2	30
							Aug. 13, 1955	7.07	1,870	66.5	38
Piankatank River basin											
6695	Dragon Run near Church View, Va..	D1	86	1935-64	-	-	September 1935	17	-	-	-
				1944-64	710	930	June 4, 1963	10.00	3,990	46.4	36
Ware River basin											
6700	Beaverdam Swamp near Ark, Va.....	D1	7.1	1950-64	75	140	Sept. 12, 1960	5.88	570	803	25
York River basin											
6710	North Anna River near Doswell, Va.	C2	439	1927-64	6,200	6,500	Aug. 12, 1928	33.7	18,400	41.9	27
6715	Hudson Creek near Boswells Tavern, Va.	C2	4.1	1949-64	300	-	June 10, 1951	7.30	680	166	-
6725	South Anna River near Ashland, Va.	C2	393	1928-64	3,900	6,000	Aug. 15, 1928	24	14,500	36.9	16
6730	Pamunkey River near Hanover, Va..	C2	1,072	1928-64	-	-	August 1928	32.6	-	-	-
6735	Totopotomoy Creek near Atlee, Va.	D1	6.0	1942-64	10,000	13,000	Aug. 20, 1955	26.12	20,900	19.5	7
				1945-64	125	120	Aug. 13, 1955	8.62	748	125	el.15
6740	Mattaponi River near Bowling Green, Va.	C2	251	1928-64	4,100	4,200	August 1928	19.5	15,000	59.8	50
6742	Reedy Creek near Dawn, Va.....	D1	16.8	1951-64	190	270	Sept. 1, 1952	5.28	310	18.5	(d)
6745	Mattaponi River near Beulahville, Va.	D1	619	1928-64	4,100	4,200	August 1928	23	12,000	19.4	17

a From hurricane wave.

b Maximum daily discharge.

c Backwater from ice.

d Areal relationships do not hold for this station.

e Ratio of peak discharge to 50-year flood.

f River channel only.

g Affected by dam failure or release of ice jam.

h Pass gage; 4,400 cfs bypassed gage.

j At present site and datum.

k Not determined; greater than previous maximum, and may have been exceeded Sept. 12, 1960.

m Backwater from Whitney Point Dam.

n Backwater from Juniata River.

Table 2.--Peak discharge at miscellaneous sites and unusual floods at short-term gaging stations

No.	Stream and vicinity	Tributary to	Flood region and area	Drainage area (sq mi)	Areal $Q_{2.33}$	Period of known floods (water years)	Date	Gage height (feet)	Maximum flood		
									Discharge		Recur- rence interval (years)
									Cfs	Cfs per sq mi	
Hudson River basin											
3125	Opalescent River below Flowed Lands, near Tahawus, N.Y.	Hudson River	A4	9.0	530	1921-22	Mar. 21, 1921	7.8	2,600	289	*2.2
3130	Cedar River near Indian Lake, N. Y.	Hudson River	A4	85	3,000	1911-17	June 12, 1917	-	4,200	49.5	7
	Schroon River near Severence, N. Y.	Hudson River	A4	169	5,200		Dec. 31, 1948	-	8,620	51.0	14
	Stony Creek near Stony Creek, N. Y.	Sacandaga River	A4	42.1	1,700		Mar. 31, 1951	-	6,730	160	*1.80
3195	Sacandaga River at Wells, N. Y.	Hudson River	A4	260	7,200	1908-11	May 2, 1908	10.65	15,600	21.5	2
3215	West Stony Creek near Northville, N. Y.	Sacandaga River	A4	88	3,100	1934-38	September 1938	-	8,680	98.6	*1.27
3220	East Stony Creek near Northville, N. Y.	Sacandaga River	A4	89	3,100	1934-37	Mar. 18, 1936	5.8	10,400	117	*1.52
3225	Sacandaga River at Northville, N. Y.	Hudson River	A4	712	15,500	1908-11	May 1, 1908	10.9	23,100	32.4	9
	Batten Kill at West Arlington, Vt.	Hudson River	C4	199	5,900		Mar. 18, 1936	-	14,600	73.4	15
	Gordon Creek at Ballston Spa, N. Y.	Kayaderos Creek	A4	13.1	730		Dec. 31, 1948	-	1,600	122	50
	Hoosic River at L.L. Brown Paper Co. lower dam, at Adams, Mass.	Hudson River	C4	50.1	2,000		Mar. 18, 1936	-	3,800	75.8	8
	Hoosic River at Phoenix Dam, at North Adams, Mass.	Hudson River	C4	73.6	2,700		Mar. 18, 1936	-	4,850	65.9	7
	North Branch Hoosic River at North Adams, Mass.	Hoosic River	C4	8.8	520		Sept. 21, 1938	-	1,800	205	26
	Green River near New Ashford, Mass.	Hoosic River	C4	4.65	-		July 22, 1945	-	1,300	280	-
	Green River near Williamstown, Mass.	Hoosic River	C4	41.0	1,700		July 22, 1945	-	5,800	141	28
	Unnamed stream in Barber Hollow, near Berlin, N. Y.	Little Hoosic River	C4	2.43	-		Dec. 31, 1948	-	442	183	-
	Woods Brook near Hoosic Falls, N. Y.	Hoosic River	C4	1.32	-		Sept. 1, 1950	-	312	236	-
	Woods Brook at Hoosic Falls, N. Y.	Hoosic River	C4	2.15	-		Sept 1, 1950	-	331	154	-
	City Stream at Sawmill dam, at Woodford, Vt.	Walloomsac Brook	C4	2.8	-		Sept 21, 1938	-	450	161	-
	Owl Kill at Eagle Bridge, N. Y.	Hoosic River	C4	56.4	2,200		Dec. 31, 1948	-	3,440	61.0	5

* Ratio of peak discharge to 50-year flood.

	Hoosic River at Johnsonville, N. Y.	Hudson River	C4	604	14,000	1909-38	Sept. 22, 1938		39,000	64.6	24
	Hoosic River at Schaghticoke, N. Y.	Hudson River	C4	635	14,000	1908-38	Nov. 4, 1927		40,000	63.0	26
	Hudson River tributary near Mechanicville, N. Y.	Hudson River	A4	6.21	400		Aug. 16, 1951		710	114	18
	Hudson River tributary near Waterford, N. Y.	Hudson River	A4	3.41	-		Aug. 16, 1951		1,530	449	-
	Mohawk River at North Western, N. Y.	Hudson River	A4	77.7	2,800		Oct. 2, 1945		10,300	133	*1.67
	Tannery Brook near North Western, N. Y.	Mohawk River	A4	1.19	-		Aug. 31, 1956		197	1,040	-
	Tripp Brook near North Western, N. Y.	Mohawk River	A4	1.45	-		Sept. 6, 1956		178	396	-
	Big Brook near North Western, N. Y.	Wells Creek	A4	18.1	940		Sept. 6, 1956		2,610	144	*1.26
	Sixmile Creek near Rome, New York	Erie Canal	A4	5.92	390		Oct. 2, 1945		605	102	10
3380	Ninemile Creek at Stittville, N. Y.	Erie Canal	A4	57	2,200	1898-99	Aug. 25, 1898		7,820	137	*1.62
3385	Oriskany Creek near Oriskany, N. Y.	Mohawk River	A4	145	4,600	1901-04	Dec. 15, 1901		7,350	50.7	12
	Mohawk River at Utica, N. Y.	Hudson River	A4	523	12,000	1902, 1946	Oct. 2, 1945		21,000	40.2	17
3425	Reels Creek at Utica, N. Y.	Erie Canal	A4	9.35	550		Oct. 2, 1945		1,520	163	*1.26
	Starch Factory Creek near New Hartford, N. Y.	Mohawk River	A4	3.39	-	1905	July 11, 1905		730	215	-
	Sterling Creek near East Schuyler, N. Y.	Erie Canal	A4	20.1	1,000		Oct. 2, 1945		5,160	257	*2.3
	Moyer Creek at Frankfort, N. Y.	Mohawk River	A4	21.8	1,050		Sept. 10, 1950		2,640	121	*1.14
	McGowan Creek near Ilion, N. Y.	Mohawk River	A4	3.37	-		Sept. 10, 1950		1,580	469	-
	Miller Creek at Mohawk, N.Y.	Tory Creek	A4	.70	-		July 6, 1948		540	771	-
3428	Tory Creek at Mohawk, N. Y.	Mohawk River	A4	1.56	-		July 6, 1948		690	442	-
	West Canada Creek at Nobleboro, N. Y.	Mohawk River	A4	192	5,800	1946, 1959-64	Oct. 2, 1945		16,800	87.5	*1.32
3435	West Canada Creek at Twin Rock Bridge, near Hinckley, N. Y.	Mohawk River	A4	360	9,700	1900-09	Dec. 15, 1901		a34,400	95.6	*1.61
3450	West Canada Creek at Poland, N. Y.	Mohawk River	A4	461	11,000	1908-14	Mar. 27, 1913		a17,300	37.5	11
	Steuben Creek at Barneveld, N. Y.	West Canada Creek	A4	44.1	1,800		June 3, 1947		3,600	81.6	32
	Spruce Creek near Salisbury Center, N. Y.	East Canada Creek	A4	48.2	1,900		Oct. 2, 1945		2,800	58.1	9
	Otsquago Creek tributary No. 1 at Van Hornsville, N. Y.	Otsquago Creek	C4	.057	-		Aug. 16, 1951		31.4	551	-
	Otsquago Creek tributary No. 2 at Van Hornsville, N. Y.	Otsquago Creek	C4	.074	-		Aug. 16, 1951		53.2	719	-

* Ratio of peak discharge to 50-year flood.
a Maximum daily discharge.

Table 2.--Peak discharge at miscellaneous sites and unusual floods at short-term gaging stations

No.	Stream and vicinity	Tributary to	Flood region and area	Drainage area (sq mi)	Areal 2.33	Period of known floods (water years)	Date	Gage height (feet)	Maximum flood		
									Discharge		
									Cfs	Cfs per sq mi	Recur-rence interval (years)
Hudson River basin--Continued											
	Cayadutta Creek at Johnstown, N. Y.	Mohawk River	C4	38.0	1,600		Spring, 1896	-	2,895	76.2	7
	Broadway Creek at Ponda, N. Y.	Mohawk River	C4	.63	-		Apr. 26, 1953	-	183	290	-
	Schoharie Creek at Hunter, N. Y.	Mohawk River	C8	39.5	3,700	1951,1953	Mar. 31, 1951	-	13,800	349	38
	East Kill near Jewett Center, N. Y.	Schoharie Creek	C8	35.2	3,300	1951,1956	Oct. 16, 1955	-	9,920	282	20
	West Kill near West Kill, N. Y.	Schoharie Creek	C8	26.8	2,700	1953,1956	Oct. 16, 1955	-	4,880	182	7
	Batavia Kill at Hensonsville, N. Y.	Schoharie Creek	C8	13.5	1,550	1955,1960	Aug. 13, 1955	-	5,000	370	23
	Nauro Stream at Windham, N. Y.	Batavia Kill	C8	3.88	-	1955,1960	Aug. 17, 1955	-	1,700	438	-
	Mad Brook near Windham, N. Y.	Batavia Kill	C8	6.88	-		Sept.12, 1960	-	4,550	661	-
	Batavia Kill at Ashland, N. Y.	Schoharie Creek	C8	62.1	5,300	1956,1960	Sept.12, 1960	-	24,000	386	*1.16
	Bear Kill tributary near Conesville, N. Y.	Bear Kill	C8	4.57	-		Nov. 25, 1950	-	3,470	759	-
	Schoharie Creek at Gilboa Dam, N. Y.	Mohawk River	C8	314	20,000	1927,1936	Mar. 18, 1936	-	32,000	102	6
	Keyser Kill at Breakabeen, N. Y.	Schoharie Creek	C4	16.3	860		Nov. 25, 1950	-	5,760	353	*1.60
	Fox Creek near West Berne, N. Y.	Schoharie Creek	C4	74.6	2,800		Sept.12, 1960	-	8,000	107	12
	Schoharie Creek near Central Bridge, N. Y.	Mohawk River	C4	671	15,000		Mar. 18, 1936	-	62,200	92.7	*1.18
3543	Plotter Kill at Rynex Corners, N. Y.	Mohawk River	C4	3.70	-	1958-64	Sept.12, 1960	7.30	725	196	-
	Heck Creek at Niskayuna, N. Y.	Mohawk River	C4	.58	-		Aug. 16, 1951	-	141	243	-
	Poesten Kill at East Poesten Kill, N. Y.	Hudson River	C4	20.2	1,000		Dec. 31, 1948	-	2,930	145	18
	Normans Kill near Slingerlands, N. Y.	Hudson River	C4	169	5,200		Oct. 16, 1955	-	13,300	78.7	17
	Vloman Kill at Bethlehem Church, N.Y.	Hudson River	C4	19.7	1,000		Apr. 5, 1952	-	1,520	77.2	5
	Vloman Kill near Selkirk, N. Y.	Hudson River	C4	29.8	1,300		Apr. 5, 1952	-	3,440	115	14
	Onesquethaw Creek near South Bethlehem, N. Y.	Coeymans Creek	C4	28.1	1,300		Dec. 11, 1952	-	3,720	132	17

MAGNITUDE AND FREQUENCY OF FLOODS, PART 1-B

	Coeymans Creek near South Bethlehem, N. Y.	Hudson River	C4	34.6	1,500		Dec. 11, 1952	-	2,740	-	7
	Rathbun Brook near Hancock, Mass.	Kinderhook Creek	C4	.92	-		July 22, 1945	-	3,000	3,260	-
	West Brook at Stephentown, N. Y.	East Brook Creek	C4	19.1	980		Dec. 31, 1948	-	2,190	115	10
	Kinderhook Creek at East Nassau, N. Y.	Stockport Creek	C4	116	3,900		Dec. 31, 1948	-	16,500	142	*1.10
	Kinderhook Creek near Brainard, N. Y.	Stockport Creek	C4	154	4,800		Dec. 31, 1948	-	19,600	127	*1.07
	Taghkanic Creek near Claverack, N. Y.	Claverack Creek	C4	83	2,950		Dec. 31, 1948	-	5,260	63.41	7
	Durham Kill at Oak Hill, N. Y.	Catskill Creek	C4	5.82	390		Aug. 13, 1955	-	2,860	492	*1.69
	Catskill Creek at Preston Hollow, N. Y.	Hudson River	C4	47.5	1,900		Oct. 16, 1955	-	3,980	83.8	9
	Eightmile Creek at Medusa, N. Y.	Tenmile Creek	C4	13.3	740		Oct. 16, 1955	-	1,710	129	10
	Palmer Creek at West Greenville, N. Y.	Basic Creek	C4	.94	-		Apr. 5, 1952	-	169	180	-
	Basic Creek at Freehold, N. Y.	Catskill Creek	C4	41	1,700		1901	-	3,330	81.2	8
	Catskill Creek at Woodstock Dam near Cairo, N. Y.	Hudson River	C4	242	6,800		Oct. 16, 1955	-	40,900	169	*1.67
	Shingle Kill at Cairo, N. Y.	Catskill Creek	C4	13.9	760	1953,1956	Oct. 16, 1955	-	3,100	223	45
	Potic Creek at Earlton, N. Y.	Catskill Creek	C4	12.5	700		Dec. 11, 1952	-	1,230	98.4	6
	Potic Creek near South Cairo, N. Y.	Catskill Creek	C4	43.2	1,800		Dec. 11, 1952	-	6,030	140	28
	Kaaterskill Creek at Palenville, N. Y.	Catskill Creek	C4	14.2	780		Oct. 16, 1955	-	4,820	339	*1.45
	Stony Brook near Palenville, N. Y.	Kaaterskill Creek	C4	1.59	-		Dec. 31, 1948	-	230	145	-
	Bashbish Brook at Copake Falls, N. Y.	Roeliff Jansen Kill	C2	15.9	500		Aug. 19, 1955	-	10,800	680	*5.1
3621	Roeliff Jansen Kill near Hillsdale, N. Y.	Hudson River	C2	27.5	770	1958-64	Mar. 3, 1959	6.04	1,370	49.8	7
	Esopus Creek at Shandaken, N. Y.	Hudson River	C8	47.4	4,200		Oct. 16, 1955	-	9,210	194	10
	Woodland Creek near Phoenicia, N. Y.	Esopus Creek	C8	12.6	1,500		July 10, 1952	-	2,600	206	6
	Woodland Creek at Phoenicia, N. Y.	Esopus Creek	C8	20.5	2,200		Oct. 16, 1955	-	6,240	304	16
	Stony Clove Creek (Bushkill) at Chichester, N. Y.	Esopus Creek	C8	17.5	1,900		Mar. 30, 1951	-	8,540	487	*1.07
	Stony Clove Creek (Bushkill) at Phoenicia, N. Y.	Esopus Creek	C8	33.3	3,200		Nov. 25, 1950	-	6,560	197	8

* Ratio of peak discharge to 50-year flood.

MAXIMUM KNOWN FLOODS

Table 2.--Peak discharges at miscellaneous sites and unusual floods at short-term gaging stations--Continued

No.	Stream and vicinity	Tributary to	Flood region and area	Drainage area (sq mi)	Areal Q2.33	Period of known floods (water years)	Maximum flood			
							Date	Gage height (feet)	Discharge	Recur- rence interval (years)
									Cfs	Cfs per sq mi
Hudson River basin--Continued										
3635	Beaver Kill near Mount Tremper, N. Y.	Esopus Creek	C8	22.2	2,300	1907-14	Oct. 16, 1955	-	3,930	177
	Bush Kill at West Shokan, N. Y.	Esopus Creek	C8	9.24	-		Oct. 16, 1955	-	3,670	397
	Maltby Hollow Creek near West Shokan, N. Y.	Bushkill	C8	5.45	-		July 10, 1952	-	1,880	345
	Esopus Creek near Olive Bridge, N. Y.	Hudson River	C8	239	16,000		Apr. 26, 1910	-	28,100	118
	Esopus Creek at Stone Ridge, N. Y.	Hudson River	C6	275	11,000		Mar. 30, 1951	-	27,900	101
	Saw Kill near Shady, N. Y.	Esopus Creek	C6	9.5	790		July 1935	-	9,180	966
	Cooper Lake Outlet at Shady, N. Y.	Sawkill	C6	1.40	-		May 13, 1953	-	304	217
	Saw Kill near Bearsville, N. Y.	Esopus Creek	C6	12.1	980		July 1935	-	9,980	825
	Saw Kill near Kingston, N. Y.	Esopus Creek	C6	35	2,200		1896	-	8,000	229
	Saw Kill near Saw Kill, N. Y.	Esopus Creek	C6	35.3	2,200		Mar. 31, 1951	-	7,800	221
3645	Esopus Creek at Mount Marion, N. Y.	Hudson River	C6	419	16,000	1907-13	Apr. 26, 1910	25.10	28,000	66.8
	Sundown Creek at Sundown, N. Y.	Rondout Creek	C6	5.13	480		Mar. 31, 1951	-	1,790	349
	Chestnut Creek above Red Brook at Grahamsville, N. Y.	Rondout Creek	C6	12.2	980		July 22, 1938	5.8	2,600	213
3660	Sandburg Creek at Spring Glen, N. Y.	Beer Kill	C6	27.3	1,800	1952,1955	Aug. 19, 1955	-	3,210	118
	Botsford Brook at Ulster Heights, N. Y.	Beer Kill	C6	8.63	730		June 1, 1952	-	1,380	160
	West Branch Beer Kill near Ellenville, N. Y.	Beer Kill	C6	19.7	1,400		Aug. 19, 1955	-	3,110	158
	Fantine Kill at Ellenville, N. Y.	Sandburg Creek	C6	2.46	-		Aug. 19, 1955	-	1,410	573
	Rochester Creek near Accord, N. Y.	Rondout Creek	C6	50.0	2,900		June 1, 1952	-	4,770	95.4
	Stony Kill near Granite, N. Y.	Rondout Creek	C6	6.32	570		Aug. 19, 1955	-	3,530	559
	Peters Kill near Accord, N. Y.	Rondout Creek	C6	5.53	510		Aug. 19, 1955	-	2,550	461
	Clove River at Clove Acres Lake Outlet, at Sussex, N. J.	Papakating Creek	C2	19.7	600		Aug. 19, 1955	-	5,780	293
	Monhagen Brook at Middletown, N. Y.	Wallkill River	C2	3.38	-		July 10, 1959	-	268	79.3
	Little Shawangunk Kill near Winterton, N. Y.	Shawangunk Kill	C2	8.92	320		June 1, 1952	-	1,030	115
3714	Verkeerder Kill at Ulsterville, N. Y.	Shawangunk Kill	C6	13.0	1,000	1943,46,52,55, 1956, 1962-64 1901-03	June 1, 1952	-	2,240	172
	Pakanasink Creek near Bullville, N. Y.	Shawangunk Kill	C6	5.83	530		June 1, 1952	-	917	157
	Dwaer Kill at Dwaarkill, N. Y.	Shawangunk Kill	C6	10.4	860		June 1, 1952	-	1,870	180
	Shawangunk Kill at Ganahgote, N. Y.	Wallkill River	C2	147	2,800		Oct. 16, 1955	-	14,000	95.3
	Wallkill River at New Paltz, N. Y.	Rondout Creek	C2	739	9,600		Mar. 3, 1902	-	24,500	33.2
	Wappinger Creek at dam, at Wappinger Falls, N.Y.	Hudson River	C2	194	3,500		Sept.22, 1938	-	15,700	80.9
	Quassaic Creek at Newburgh, N. Y.	Hudson River	C2	44.5	1,100		Oct. 16, 1955	-	1,890	42.5
	Woodbury Creek near Mountainville, N. Y.	Moodna Creek	C2	17.5	550		Aug. 19, 1955	-	1,520	86.9
	Moodna Creek at Firthcliffe, N. Y.	Hudson River	C2	162	3,000		Aug. 19, 1955	-	11,000	67.9
	Beacon Reservoir Outlet at Beacon, N. Y.	Fishkill Creek	C2	.25	-		July 14, 1891	-	800	3,200
3744.2	Beechy Bottom Creek near Bear Mountain, N. Y.	Popolopen Creek	C2	8.68	320	1953,1956	Oct. 16, 1955	-	2,010	232
	Peekskill Hollow Creek near Peekskill, N. Y.	Annsville Creek	C2	48.2	1,200		Oct. 16, 1955	-	3,200	66.4
	Lake Tiorati Brook at Cedar Flats, N. Y.	Cedar Pond Brook	C2	10.5	370		Aug. 26, 1961	5.19	769	73.2
	Cedar Pond Brook near Stony Point, N. Y.	Hudson River	C2	15.0	490		Oct. 16, 1955	-	2,740	183
	Cedar Pond Brook at Stony Point, N. Y.	Hudson River	C2	17.3	540		Aug. 26, 1961	4.95	830	48.0
	Minisceongo Creek at Thiells, N. Y.	Hudson River	C2	15.0	490		Aug. 19, 1960	3.45	747	49.8
	Minisceongo Creek at Garnerville, N. Y.	Hudson River	C2	18.1	560		Aug. 12, 1951	-	1,420	78.5
	East Branch Croton River at Patterson, N. Y.	Croton River	C2	17.6	550		Oct. 16, 1955	-	2,480	141
	Quaker Brook near Patterson, N. Y.	East Branch Croton River	C2	11.8	400		Oct. 16, 1955	-	2,740	232
	East Branch Croton River near Brewster, N. Y.	Croton River	C2	79.5	1,700		Oct. 15, 1955	-	8,130	102
3762.7	Gory Brook near Tarrytown, N. Y.	Pocartico River	C2	.68	-	1960-63	July 14, 1948	-	180	265
	Sparkill Creek at Tappan, N. Y.	Hudson River	A2	4.94	-		Aug. 19, 1960	4.65	440	89.1

* Ratio of peak discharge to 50-year flood.

Table 2.--Peak discharges at miscellaneous sites and unusual floods at short-term gaging stations--Continued

No.	Stream and vicinity	Tributary to	Flood region and area	Drainage area (sq mi)	Areal $Q_{2.33}$	Period of known floods (water years)	Date	Maximum flood		
								Gage height (feet)	Discharge	Reurrence interval (years)
								Cfs	Cfs per sq mi	
Hackensack River basin										
3766	Hackensack River at Brookside Park, N. Y.	Raritan Bay	A2	13.2		1960-63	Aug. 19, 1960	6.67	1,010	76.5
3768.5	Naurausaun Brook at Naurausaun, N. Y.	Hackensack River	A2	6.08		1960-63	Aug. 19, 1960	5.3	1,300	214
3772	Pascack Brook tributary at Spring Valley, N. Y.	Pascack Brook	A2	4.58		1960-64	Aug. 19, 1960	4.46	378	82.5
3773	Pascack Brook at Pearl River, N. Y.	Hackensack River	A2	10.2		1960-63	Aug. 19, 1960	8.50	800	78.4
	Pascack Brook at Silver Lake Dam, at Park Ridge, N. J.	Hackensack River	A2	15.3			July 23, 1945	-	1,300	85.0
	Pascack Brook at Woodcliff Lake Dam, at Hillsdale, N. J.	Hackensack River	A2	20.2			July 23, 1945	-	1,320	65.3
Passaic River basin										
	Whippany River at Pocahontas Dam, at Morristown, N. J.	Rockaway River	A4	26			Mar. 12, 1936	-	1,380	53.1
	Ramapo River near Tuxedo, N. Y.	Pompton River	C4	57.7			Oct. 16, 1955	-	5,970	103
3873	Stony Brook at Sloatsburg, N. Y.	Ramapo River	C4	18.2		1960-64	Aug. 19, 1960	3.14	1,060	58.2
	Ramapo River at Ramapo Dam, at Ramapo, N. Y.	Pompton River	C4	85	31,000		Mar. 12, 1936	-	6,100	71.8
3874.1	Torne Brook at Ramapo, N. Y.	Ramapo River	C4	2.62		1960-63	Mar. 12, 1962	7.26	489	187
	Ramapo River at power dam, at Hillburn, N.Y.	Pompton River	C4	90	3,100		Mar. 12, 1936	-	6,600	73.3
3874.8	Mahwah River at Suffern, N. Y.	Ramapo River	C4	20.7	1,000	1945 1959-64	July 23, 1945	-	2,800	135
	Ramapo River at Chapman Dam, at Darlington, N. J.	Pequannock River	C4	132			Mar. 12, 1936	-	8,500	64.4
	Slippery Rock Brook at Barbours Pond, at West Paterson, N. J.	Passaic River	A4	.59			July 23, 1945	-	515	873
	Slippery Rock Brook at Highland Lake, at West Paterson, N. J.	Passaic River	A4	.75			July 23, 1945	-	2,600	3,640
	Peckman Brook at Verona Lake, at Verona, N. J.	Passaic River	A4	2.17			July 23, 1945	-	1,490	687
	Peckman Brook at Bradford Ave., at Cedar Grove, N.J.	Passaic River	A4	4.48			July 23, 1945	-	4,100	915
	Mollyann Brook at Haledon Upper Reservoir, at North Haledon, N. J.	Passaic River	A4	1.53			July 23, 1945	-	930	603
	Mollyann Brook at Haledon Lower Reservoir, at North Haledon, N. J.	Passaic River	A4	1.61			July 23, 1945	-	975	605
	Mollyann Brook at Sicomoc Road Dam, at North Haledon, N. J.	Passaic River	A4	1.82			July 23, 1945	-	912	501
	Mollyann Brook at Squaw Lake Dam, at North Haledon, N. J.	Passaic River	A4	3.84			July 23, 1945	-	3,100	807
	Mollyann Brook at Oldham Pond Dam, at North Haledon, N. J.	Passaic River	A4	5.16			July 23, 1945	-	2,370	459
	Mollyann Brook below Redwood Ave., at Paterson, N. J.	Passaic River	A4	6.87			July 23, 1945	-	4,800	699
	Goffle Brook at Rambeau Pond, at Wortendyke, N.J.	Passaic River	A4	1.55			July 23, 1945	-	170	110
	Goffle Brook at Maple Lake, at Wortendyke, N. J.	Passaic River	A4	2.30			July 23, 1945	-	507	220
	Goffle Brook at Wortendyke Pond, at Wortendyke, N. J.	Passaic River	A4	3.20			July 23, 1945	-	560	175
	Goffle Brook at Kenihers Dam, at Midland Park, N.J.	Passaic River	A4	3.89			July 23, 1945	-	730	187
	Goffle Brook at Oriental Rug Dam, at Midland Park, N. J.	Passaic River	A4	3.95			July 23, 1945	-	945	239
	Goffle Brook at Arnold Dam, at Hawthorne, N. J.	Passaic River	A4	7.20			July 23, 1945	-	2,970	412
3902	Saddle River near Spring Valley, N. Y.	Passaic River	A2	2.06		1960-63	Aug. 19, 1960	8.63	404	196
3903	Pine Brook near Spring Valley, N. Y.	Saddle River	A2	2.28		1960-62	Mar. 12, 1962	2.89	120	526
	Hohokus Brook at Cooks Lake Dam, at Hawthorne, N. J.	Saddle River	A2	4.27			July 23, 1945	-	1,700	398
	Hohokus Brook at Whites Lake Dam, at Waldwick, N. J.	Saddle River	A2	15.1			July 23, 1945	-	3,010	199
	Hohokus Brook at Coles Pond, at Hohokus, N. J.	Saddle River	A2	16.5			July 23, 1945	-	2,240	136
	Hohokus Brook below Spring Ave., at Ridgewood, N. J.	Saddle River	A2	19.1			July 23, 1945	-	5,800	304
	Second River at Brighton Ave., at East Orange, N. J.	Passaic River	A2	5.03			July 23, 1938	-	1,800	358
	Second River at Bloomfield Ave., at Bloomfield, N.J.	Passaic River	A2	10.1			July 23, 1938	-	2,800	277

Table 2.--Peak discharges at miscellaneous sites and unusual floods at short-term gaging stations--Continued

No.	Stream and vicinity	Tributary to	Flood region and area	Drainage area (sq mi)	Areal 2.33	Period of known floods (water years)	Date	Gage height (feet)	Maximum flood		
									Discharge		Recurrence interval (years)
									Cfs	Cfs per sq mi	
Passaic River basin--Continued											
	Second River at Newark pipeline, at Belleville, N. J.	Passaic River	A2	14.5			July 23, 1938	-	3,300	228	-
Elizabeth River basin											
	Elizabeth River at Nye Ave., Irvington, N. J.	Arthur Kill	A2	3.83			July 23, 1938	-	1,945	508	-
	Elizabeth River at Lyons Ave., Irvington, N. J.	Arthur Kill	A2	3.87			July 23, 1938	-	1,910	494	-
	Elizabeth River at Yale Ave., Irvington, N. J.	Arthur Kill	A2	5.02			July 23, 1938	-	2,200	438	-
	Elizabeth River at Chancellor Ave., Irvington, N.J.	Arthur Kill	A2	5.14			July 23, 1938	-	2,300	447	-
Rahway River basin											
3955	Robinsons Branch Rahway River at Goodmans, N. J.	Rahway River	A2	12.7		1921-24	Apr. 7, 1924	-	470	37.0	-
Raritan River basin											
3968	Spruce Run at Clinton, N. J.	South Branch Raritan River	B4	41.3		1960-64	Sept. 12, 1960	6.80	2,220	53.8	-
	South Branch Raritan River at Clinton, N. J.	Raritan River	B4 1	112		1936, 1938, 1955	Aug. 19, 1955	-	8,080	72.1	-
	Capepoulin Creek at Lansdowne, N. J.	South Branch Raritan River	B4	13.7			Aug. 18, 1955	-	7,230	528	-
	Prescott Brook near Stanton, N. J.	South Branch Raritan River	B4	8.37			Aug. 18, 1955	-	2,010	240	-
	South Branch Raritan River at Flemington Junction, N. J.	Raritan River	B4	167			Mar. 12, 1936	-	6,980	41.8	-
4009.32	Baldwin Creek at Baldwin Lake, near Pennington, N. J.	Stony Brook	B4	2.52		1963-64	Jan. 9, 1964	10.98	234	92.9	-
4053	Matchaponix Brook at Spotswood, N. J.	Raritan River	B2	43.9		1957-64	Sept. 13, 1960	6.10	2,050	46.7	-
4054	Manalapan Brook at Spotswood, N. J.	Matchaponix Brook	B2	40.7		1957-64	Sept. 13, 1960	1.50	860	21.1	-
Mullica River basin											
4094	Mullica River at Batsto, N. J.	Great Bay	C2	46.1		1958-64	Aug. 27, 1958	5.37	783	17.0	-
Cohansey River basin											
	Cohansey River at Bostwick Dam, at Beals Mill, N. J.	Delaware Bay	D1	8.3	-		Sept. 1, 1940	-	2,100	253	-
	Barrett Run at Mary Elmer Dam, at Bridgeton, N. J.	Cohansey River	D1	7.5	-		Sept. 1, 1940	-	1,850	247	-
Delaware River basin											
	Bush Kill at Arkville, N. Y.	East Branch Delaware River	B6	46.4	2,800		Nov. 25, 1950	-	7,370	159	32
	Dry Brook near Arkville, N. Y.	Bush Kill	B6	31.2	2,000		Nov. 25, 1950	-	13,300	426	*2.2
	Bull Run at Margaretville, N. Y.	East Branch Delaware River	B6	2.32	-		Nov. 25, 1950	-	722	311	-
	Bryants Brook near Dunraven, N. Y.	Platte Kill	B6	6.99	610		Nov. 25, 1950	-	1,120	160	10
	Downs Brook at Downsville, N. Y.	East Branch Delaware River	B6	17.4	1,300		May 23, 1942	-	4,940	284	*1.26
	Mongaup Creek near DeBruce, N. Y.	Willowemoc Creek	B6	10.3	850		Mar. 30, 1951	-	2,430	236	42
	Trout Brook at Peakville, N. Y.	Beaver Kill	B6	18.4	1,300		May 23, 1942	-	3,320	180	28
	Fish Creek at Fishs Eddy, N. Y.	East Branch Delaware River	B6	11.4	930		May 23, 1942	-	2,510	220	32
	Wright Brook tributary near Bloomville, N. Y.	Wright Brook	A4	2.73	-		Sept. 23, 1956	-	2,330	854	-
	Wright Brook at Bloomville, N. Y.	West Branch Delaware River	A4	11.2	650		July 1935	-	2,370	212	*1.66
	Steele Brook near Delhi, N. Y.	West Branch Delaware River	A4	5.4	360	1935, 1942	July 1935	-	2,850	528	*3.6
	Brush Brook at Bovina Center, N. Y.	Little Delaware River	A4	5.42	360		Aug. 13, 1953	-	2,570	474	*3.2
	Brush Brook tributary near Bovina Center, N. Y.	Brush Brook	A4	.66	-		Aug. 13, 1953	-	489	740	-
	Miller Creek near Bovina Center, N. Y.	Little Delaware River	A4	1.36	-		Aug. 13, 1953	-	1,560	1,150	-
4227	West Branch Delaware River near Hamden, N. Y.	Delaware River	A4	256	7,100	1960-64	Mar. 5, 1964	10.44	16,200	63.2	*1.04
	East Brook near Walton, N.Y.	West Branch Delaware River	A4	23.5	1,100		July 1935	-	2,790	119	*1.15

* Ratio of peak discharge to 50-year flood.

Table 2.--Peak discharges at miscellaneous sites and unusual floods at short-term gaging stations--Continued

No.	Stream and vicinity	Tributary to	Flood region and area	Drainage area (sq mi)	Areal Q _{2.33}	Period of known floods (water years)	Maximum flood				
							Date	Gage height (feet)	Discharge		
									Cfs	Cfs per sq mi	Reurrence interval (years)
Delaware River basin--Continued											
	Big Hollow Creek at Deposit, N. Y.	West Branch Delaware River	A4	4.80	-		July 28, 1951		932	144	
	Shehawken Creek near Starlight, Pa.	Delaware River	B6	13.0	1,000		May 23, 1942		3,350	258	*1.11
	Equinunk Creek near Equinunk, Pa.	Delaware River	B6	57.4	3,300		May 23, 1942		18,800	328	*1.90
	Humphrey Brook at Lordville, N. Y.	Delaware River	B6	2.65			July 10, 1952		1,200	453	-
	Pea Brook at Long Eddy, N. Y.	Delaware River	B6	6.42	580		July 10, 1952		1,390	217	22
	Hoolihan Brook at Long Eddy, N. Y.	Pea Brook	B6	4.74	-		May 23, 1942		1,660	350	-
	Basket Creek near Long Eddy, N. Y.	Delaware River	B6	22.7	1,600		May 23, 1942		5,340	235	*1.11
	Hankins Creek at Fremont Center, N. Y.	Delaware River	B6	8.36	710		Sept. 10, 1959		3,340	400	*1.57
	College Brook at Callicoon, N. Y.	Delaware River	B6	.74	-		July 10, 1952		310	419	-
	East Branch Callicoon Creek at Midway, N. Y.	Callicoon Creek	B6	5.25	500		Aug. 16, 1947		2,900	552	*1.93
	Panther Rock Brook near Youngsville, N. Y.	East Br. Callicoon Creek	B6	5.42	500		Aug. 16, 1947		3,000	554	*2.00
	Briscoe Lake Outlet near Jeffersonville, N. Y.	East Br. Callicoon Creek	B6	10.8	880		Aug. 16, 1947		1,500	139	8
	East Br. Callicoon Creek at Jeffersonville, N. Y.	Callicoon Creek	B6	31.9	2,000		Aug. 17, 1947		8,100	254	*1.35
	East Br. Callicoon Creek near Kenosha Lake, N. Y.	Callicoon Creek	B6	44.3	2,700		Aug. 17, 1947		8,700	196	*1.07
	Kenosha Lake Outlet at Kenosha Lake, N. Y.	East Callicoon Creek	B6	11.8	-		Aug. 17, 1947		680	57.6	-
	East Branch Callicoon Creek near Hortonville, N. Y.	Callicoon Creek	B6	69.6	3,800		Aug. 17, 1947		7,400	106	12
	The Gulf Stream near Callicoon Center, N. Y.	North Branch Callicoon Creek	B6	2.11	-		Aug. 16, 1947		1,700	806	-
	Bethlehem stream near Callicoon Center, N. Y.	North Br. Callicoon Creek	B6	1.33	-		Aug. 16, 1947		1,100	827	-
	Bethlehem stream tributary near Callicoon Center, N. Y.	Bethlehem Stream	B6	.31	-		Aug. 16, 1947		470	1,520	-
	Bethlehem Stream tributary near Callicoon Center, N. Y.	Bethlehem Stream	B6	.34	-		Aug. 16, 1947		430	1,260	-
	North Br. Callicoon Cr. near North Branch, N. Y.	Callicoon Creek	B6	15.2	1,200		Aug. 16, 1947		8,300	546	*2.3
	Buck Brook near North Branch, N. Y.	North Branch Callicoon Creek	B6	4.75	-	1947-1952	Aug. 16, 1947		2,300	484	-
	Buck Brook at North Branch, N. Y.	North Branch Callicoon Creek	B6	6.70	600		Sept. 10, 1959		4,620	690	*2.6
	Waymart Br. Lackawaxen River at Stanton Pond near Waymont, Pa.	West Branch Lackawaxen River	B6	2.67	-		May 23, 1942		438	164	-
	Waymart Br. Lackawaxen River at Keen Pond near Waymont, Pa.	West Branch Lackawaxen River	B6	15.1	1,100		May 23, 1942		2,890	191	32
	West Br. Dyberry Creek at Tanners Falls, Pa.	Dyberry Cr.	B6	28.2	1,800		May 23, 1942		8,770	311	*1.62
	Big Brook tributary near Tanners Falls, Pa.	Big Brook	B6	.72	-		May 23, 1942		157	218	-
	Carley Brook near Honeydale, Pa.	Lackawaxen River	B6	12.3	990		May 23, 1942		1,920	156	12
	Middle Cr. at Brunson Dam, near South Canaan, Pa.	Lackawaxen River	B6	3.06	-		May 23, 1942		512	167	-
	Middle Cr. at Lake Quinsigamund, near South Canaan, Pa.	Lackawaxen River	B6	5.19	490		May 23, 1942		1,910	368	*1.30
	Wangum Creek near Hawley, Pa.	Middle Cr.	B6	8.59	730		May 23, 1942		1,110	129	6
	Wallenpaupack Creek at South Sterling, Pa.	Lackawaxen River	B6	14.3	1,100		Aug. 19, 1955		22,200	1,550	*6.7
	Angels Creek at Angels, Pa.	Wallenpaupack Cr.	B4	1.33	-		Aug. 18, 1955		1,070	805	-
	East Branch Wallenpaupack Creek at Greentown, Pa.	Wallenpaupack Cr.	B4	33.9	1,500		Aug. 19, 1955		33,300	982	*7.4
	Wallenpaupack Creek near Newfoundland, Pa.	Lackawaxen River	B6	75.4	4,000		May 23, 1942		10,600	141	32
	Jones Creek at Lake Henry Dam, Pa.	West Branch Wallenpaupack Cr.	B4	9.0	540		July 10, 1914		990	110	10
	West Br. Wallenpaupack Cr. near Sterling, Pa.	Wallenpaupack Cr.	B4	52.4	2,100		Aug. 19, 1955		14,000	267	*2.2
	Butternut Creek near Sterling, Pa.	West Branch Wallenpaupack Cr.	B4	5.03	340		Aug. 18, 1955		3,520	700	*3.4
	West Br. Wallenpaupack Cr. near Newfoundland, Pa.	Wallenpaupack Cr.	B4	68.9	2,600		May 23, 1942		7,720	112	48
	Shohola Creek at Lords Valley, Pa.	Delaware River	B4	25.2	1,200		Aug. 19, 1955		13,800	548	*3.8
	Shingle Kill near Sparrowbush, N. Y.	Delaware River	B4	12.1	690		Aug. 19, 1955		6,590	545	*3.2

* Ratio of peak discharge to 50-year flood.

Table 2.--Peak discharge at miscellaneous sites and unusual floods at short-term gaging stations--Continued

No.	Stream and vicinity	Tributary to	Flood region and area	Drainage area (sq mi)	Areal $Q_{2.33}$	Period of known floods (water years)	Date	Gage height (feet)	Maximum flood		
									Discharge		
									Cfs	Cfs per sq mi	Recurrence interval (years)
Delaware River basin--Continued											
4404	Gumaer Brook near Wurtsboro, N. Y.	Basher Kill	C6	6.92	600		Aug. 19, 1955	-	2,870	415	*1.11
	Pine Kill near West Brookville, N. Y.	Basher Kill	C6	10.7	870		Aug. 19, 1955	-	2,640	247	20
	Dingmans Creek at Dingmans Ferry, Pa.	Delaware River	B4	15.2	820		Aug. 19, 1955	-	3,660	241	*1.49
	Bush Kill near Shoemakers, Pa.	Delaware River	B4	85.6	3,000		Aug. 19, 1955	-	19,500	228	*2.2
	Saw Creek near Shoemakers, Pa.	Bush Kill	B4	29.9	1,300		Aug. 19, 1955	-	3,870	129	50
	Big Flat Brook near Hainesville, N. J.	Flat Brook	B2	19.9	600		Aug. 19, 1955	-	4,140	208	*2.3
	Middle Branch Brodhead Creek near Canadensis, Pa.	Brodhead Creek	B4	6.14	400		Aug. 18, 1955	-	3,840	625	*3.2
	Brodhead Creek near Analomink, Pa.	Delaware River	B4	65.9	2,500	1958-64	Dec. 21, 1957	8.31	6,570	99.7	32
	Paradise Creek near Paradise Valley, Pa.	Brodhead Creek	B4	12.6	700		Aug. 18, 1955	-	8,870	704	*4.2
	Brodhead Creek at Analomink, Pa.	Delaware River	B4	124	4,100		Aug. 18, 1955	-	72,200	582	*5.9
	Paulins Kill at Lafayette, N. J.	Delaware River	B2	33.6			Aug. 19, 1955	-	1,440	42.9	-
	Dry Brook at Branchville, N.J.	Paulins Kill	B2	4.80	-		Aug. 19, 1955	-	1,790	373	-
	Culvers Brook at Culvers Pond Outlet, near Branchville, N.J.	Dry Brook	B2	7.12	-		Aug. 19, 1955	-	444	62.4	-
	Culvers Brook at Branchville, N. J.	Dry Brook	B2	10.7	-		Aug. 19, 1955	-	1,560	146	-
	Paulins Kill at Paulins Kill Lake Dam, near Newton, N. J.	Delaware River	B2	81	-		Aug. 19, 1955	-	6,020	74.3	-
	Trout Brook at Middleville, N.J.	Paulins Kill	B2	5.50	-		Aug. 19, 1955	-	899	163	-
	Lopahannock Cr. at Roxburg, N.J.	Buckham Cr.	B2	1.56	-		July 9, 1945	-	1,500	962	-
	Buckhorn Creek at Hutchinson, N. J.	Delaware River	B2	11.7	-		July 9, 1945	-	4,500	385	-
4466	Martins Creek near East Bangor, Pa.	Delaware River	B9	10.4	190	1962-64	Mar. 2, 1962	3.40	351	33.8	10
	Lehigh River at West End Pond, at Gouldsboro, Pa.	Delaware River	B4	16.6			May 22, 1942	-	357	21.5	
	Tobyhanna Creek near Tobyhanna, Pa.	Lehigh River	B4	7.6	470		Aug. 19, 1955	-	2,310	304	*1.64
	Bear Creek at Bear Creek, Pa.	Lehigh River	B4	35.0	1,500		May 24, 1942	-	6,010	172	*1.34
* Ratio of peak discharge to 50-year flood.											
4478	Lehigh River below Francis E. Waller Reservoir, near White Haven, Pa.	Delaware River	B4	290	7,900	1955, 1958-64	Aug. 19, 1955	-	54,200	187	*2.3
	Black Creek near Weatherly, Pa.	Lehigh River	B4	55	2,200		May 22, 1942	-	8,160	148	*1.24
4490	Lehigh River at Leighton, Pa.	Delaware River	B4	591	13,000	1942, 1946-48	May 23, 1942	20.7	45,000	76.2	*1.15
	Wild Creek at Wild Creek Reservoir, Pa.	Pohopoco Creek	B4	22.2	1,000		May 23, 1942	-	1,440	64.9	5
4523	East Branch Monocacy Creek near Bath, Pa.	Monocacy Creek	B9	5.35	100	1963-64	Mar. 6, 1963	4.60	245	45.8	25
	Lopatcong Creek at Lower Harmony, N. J.	Delaware River	B2	4.12			July 9, 1945	-	6,400	1,550	-
4552	Lopatcong Creek near Stewartsville, N. J.	Delaware River	B2	8.00			July 9, 1945	-	6,800	850	-
	Merrill Brook at Ingersoll-Rand Dam, at Phillipsburg, N. J.	Lopatcong Creek	B2	3.0			July 9, 1945	-	2,320	772	-
4571.5	Pohatcong Creek at New Village, N. J.	Delaware River	B2	33.4		1960-64	Sept. 12, 1960	4.56	798	23.9	-
	Pohatcong Creek at Springtown, N. J.	Delaware River	B2	55.4			July 9, 1945	-	4,000	72.2	-
4671.5	Pohatcong Creek at Carpentersville, N. J.	Delaware River	B2	56.6			July 9, 1945	-	4,200	74.2	-
	Nishisakawick Creek at Frenchtown, N. J.	Delaware River	B7	10.9			July 18, 1945	-	6,500	596	-
4700	Little Nishisakawick Creek at Frenchtown, N. J.	Delaware River	B7	3.64			July 18, 1945	-	4,300	1,180	-
	Delaware River tributary at Byram, N. J.	Delaware River	B7	1.25			July 9, 1945	-	2,900	2,320	-
4731	Cooper River at Haddonfield, N. J.	Delaware River	B2	17.4		1964	Nov. 7, 1963	2.80	520	29.9	-
	Big Timber Creek at Clementon Park Dam, at Clementon, N. J.	Delaware River	B2	2.8			Sept. 1, 1940	-	800	286	-
4700	Little Schuylkill River near Tamqua, Pa.	Schuylkill River	B4	58.8	2,300		May 22, 1942	-	7,960	135	*1.15
	Little Schuylkill River at Dreherstown, Pa.	Schuylkill River	B4	122	4,100	1947-51, 1955, 1964	Aug. 19, 1955	14.76	18,200	149	*1.48
4731	Cacoosing Creek near West Lawn, Pa.	Tulpehocken Creek	B4	21.0	1,000		May 22, 1942	-	3,540	169	*1.18
	Deep Creek near Green Lane, Pa.	Perkiomen Creek	B7	6.09	720		Aug. 9, 1942	-	1,630	268	19
4731	West Swamp Creek near Zieglerville, Pa.	Perkiomen Creek	B7	51.5	3,800		Aug. 9, 1942	-	14,000	272	*1.22
	Zacharias Creek near Skippack, Pa.	Skippack Creek	B7	7.27	820	1960-64	Aug. 23, 1961	-	2,750	378	*1.12
4731	Raccoon Creek at Mullica Hill, N. J.	Delaware River	D2	14.0	-		Sept. 1, 1940	-	2,900	207	-
	Oldmans Creek at Jessups Mill, N. J.	Delaware River	D2	4.15	-		Sept. 1, 1940	-	2,950	711	-
* Ratio of peak discharge to 50-year flood.											

Table 2.--Peak discharge at miscellaneous sites and unusual floods at short-term gaging stations--Continued

Discharge at miscellaneous sites and unusual floods at short-term gaging stations--Continued											
No.	Stream and vicinity	Tributary to	Flood region and area	Drainage area (sq mi)	Areal Q 2.33	Period of known floods (water years)	Date	Gage height (feet)	Discharge		
									Cfs	Cfs per sq mi	Recurrence interval (years)
Delaware River basin--Continued											
4782	Raccoon Creek at Mullica Hill, N. J.	Delaware River	D2	14.0	-	1960-64	Sept. 1, 1940	-	2,900	207	-
	Oldmans Creek at Jessups Mill, N. J.	Delaware River	D2	4.15	-		Sept. 1, 1940	-	2,950	711	-
	Middle Branch White Clay Creek near Landenberg, Pa.	White Clay Creek	B10	12.7	1,200		Sept. 12, 1960	9.41	1,900	150	7
	Hyde Run at Brandywine Springs, Del.	Red Clay Creek	B10	2.38	-		July 9, 1952	-	1,570	660	-
4803	Little Mill Creek at Elsmere, Del.	Christina River	B10	3.73	-	1960-64	July 9, 1952	-	2,230	598	-
	Chestnut Run at Elsmere, Del.	Little Mill Creek	B10	1.17	-		July 9, 1952	-	819	700	-
	West Branch Brandywine Creek near Honey Brook, Pa.	Brandywine Creek	B4	18.7	950		Sept. 12, 1960	8.60	1,870	100	12
	Rock Run near Coatesville, Pa.	West Branch Brandywine Cr.	B4	6.13	400		Aug. 9, 1942	-	2,250	367	*1.87
4808	West Branch Brandywine Creek near Coatesville, Pa.	Brandywine Cr.	B4	52.4	2,100	1942, 1959-64	Aug. 9, 1942	-	9,300	177	*1.48
	Sucker Run near Coatesville, Pa.	West Branch Brandywine Cr.	B4	2.11	-		Aug. 9, 1942	-	1,280	607	-
	East Branch Brandywine Creek at Downingtown, Pa.	Brandywine Cr.	B4	81.6	2,900		Aug. 9, 1942	12.49	11,900	146	*1.37
	Salem River at Woods Mill, N. J.	Delaware River	D2	4.3	-		Sept. 1, 1940	-	7,090	1,650	-
	Salem River Branch near Woodstown, N. J.	Salem River	D2	3.2	-		Sept. 1, 1940	-	3,880	1,210	-
	Alloway Creek Branch near Alloway, N. J.	Alloway Creek	D2	8.7	-		Sept. 1, 1940	-	10,800	1,240	-
	Alloway Creek Branch at Alloway, N. J.	Alloway Creek	D2	5.5	-		Sept. 1, 1940	-	3,300	600	-
St. Jones River basin											
4837	St. Jones River at Dover, Del.	Delaware Bay	D2	31.9	860	1958-63	Sept. 13, 1960	9.45	1,900	59.6	7
Mispillion River basin											
4841	Beaverdam Branch at Houston, Del.	Mispillion River	D1	2.83		1959-63	Sept. 12, 1960	5.55	176	62.2	-
Susquehanna River basin											
	Ouleout Creek tributary near Meridale, N. Y.	Ouleout Creek	A4	.52			July 1935		170	327	-
* Ratio of peak discharge to 50-year flood.											
5004.95	Ouleout Creek tributary near Meridale, N. Y.	Ouleout Creek	A4	.44	-	1954, 1961-64	July 1935	-	156	355	-
	Hamilton Creek at East Sidney, N. Y.	Ouleout Creek	A4	1.55	-		July 29, 1961	-	4,500	2,900	-
	McKown Brook near East Sidney, N. Y.	Ouleout Creek	A4	.24	-		July 29, 1961	-	319	1,330	-
	Martin Brook near Unadilla, N. Y.	Susquehanna River	A4	2.21	-		July 29, 1961	8.3	2,530	1,140	-
	Kilkenny Creek at Unadilla, N. Y.	Susquehanna River	A4	.48	-		July 29, 1961	-	2,300	4,790	-
	Depot Creek at Sidney Center, N. Y.	Carrs Creek	A4	.60	-		June 10, 1954	-	1,660	2,770	-
	Carrs Creek at Sidney Center, N. Y.	Susquehanna River	A4	20.1	1,000		June 10, 1954	-	3,400	169	*1.55
	Galley Brook at Sidney Center, N. Y.	Carrs Creek	A4	1.02	-		July 29, 1961	-	3,200	3,140	-
	Smokey Kill near Sidney Center, N. Y.	Carrs Creek	A4	.38	-		July 29, 1961	-	376	989	-
	Carrs Creek at Unadilla, N. Y.	Susquehanna River	A4	29.5	1,300		June 10, 1954	-	7,730	262	*2.7
5008	Crumb Brook near Leonardsville, N. Y.	Unadilla River	A4	2.83	-	1954, 1961-64	Sept. 1, 1950	-	2,580	912	-
	Mill Brook near Edmeston, N. Y.	Wharton Creek	A4	9.4	550		Sept. 3, 1905	-	2,300	245	*1.90
	Kingsley Creek at South Windsor, N. Y.	Susquehanna River	A4	.54	-		May 21, 1960	-	1,040	1,930	-
	Tuscarora Creek tributary near Damascus, N. Y.	Tuscarora Creek	A4	1.33	-		July 28, 1951	-	190	143	-
	Tuscarora Creek tributary near Damascus, N. Y.	Tuscarora Creek	A4	1.35	-		July 28, 1951	-	255	189	-
	Park Creek near Binghamton, N. Y.	Susquehanna River	A4	15.7	830		Oct. 11, 1962	-	3,070	196	*1.68
	Mill Creek at North Brookfield, N. Y.	Sangerfield River	A4	2.79	-		Sept. 1, 1950	-	543	195	-
	Mad Brook at Sherburne, N. Y.	Chenango River	A4	5.00	340		Sept. 3, 1905	-	1,300	260	*1.73
	Gilmore Brook tributary near Preston, N. Y.	Gilmore Brook	A4	.62	-		July 1935	-	518	835	-
	Clear Brook at Preston, N. Y.	Fly Meadow Creek	A4	1.34	-		July 1935	-	449	335	-
5095	Strong's Brook near Smithville Flats, N. Y.	Genegantslet Creek	A4	6.41	410	1935, 1939-40	July 1935	-	6,650	1,040	*7.4
	Mosquito (North) Creek near McGraw, N. Y.	Trout Brook	A4	2.13	-		Nov. 20, 1948	-	294	136	-
	Hunts (Willett) at Marathon, N. Y.	Tioughnioga River	A4	11.0	630		July 1935	-	6,430	585	*4.6
	Dudley Creek at Lisle, N. Y.	Tioughnioga River	A4	30.0	1,300		July 8, 1935	-	16,200	540	*5.7
	Otselic Creek at Georgetown, N. Y.	Otselic River	A4	5.16	350		June 3, 1961	-	1,070	207	*1.39
* Ratio of peak discharge to 50-year flood.											

Table 2.--Peak discharge at miscellaneous sites and unusual floods at short-term gaging stations--Continued

No.	Stream and vicinity	Tributary to	Flood region and area	Drainage area (sq mi)	Areal 2.33	Period of known floods (water years)	Date	Gage height (feet)	Maximum flood		
									Discharge		
									Cfs	Cfs per sq mi	Reurrence interval (years)
Susquehanna River basin--Continued											
5137.9	Merrill Creek near Upper Lisle, N. Y.	Otselic River	A4	20.8	1,100		July 1935	-	15,100	726	*6.2
	Glen Castle Creek at Hinman Corners, N. Y.	Castle Creek	A4	1.42	-		Oct. 11, 1962	-	777	547	-
	Castle Creek near Binghamton, N. Y.	Chenango River	A4	28.8	1,300	1956,1963	Oct. 30, 1955	-	5,530	192	*1.94
	Phelps Creek near Binghamton, N. Y.	Chenango River	A4	2.44	-		Oct. 11, 1962	-	916	375	-
	Little Chocanut Cr. tributary near Chocanut Center, N. Y.	Little Chocanut Creek	A4	1.07	-		Oct. 11, 1962	-	623	582	-
	Little Chocanut Creek near Johnson City, N. Y.	Susquehanna River	A4	6.94	440		June 17, 1960	-	8,200	1,180	*8.5
	Lewis Creek at Maine, N. Y.	Nanticoke Cr.	A4	3.56	-		Oct. 11, 1962	-	1,880	528	-
	Nanticoke Creek at Union Center, N. Y.	Susquehanna River	A4	89.7	3,100	1956,1963-64	Oct. 15, 1955	-	9,900	110	*1.45
	Bradley Creek near Union Center, N. Y.	Nanticoke Creek	A4	7.61	470		Oct. 11, 1962	-	3,540	465	*3.4
	Catatonk Creek at Spencer, N.Y.	Owego Creek	A4	26.5	1,200		Oct. 15, 1955	-	1,680	63.4	7
	Burhite Creek near Spencer, N. Y.	Dean Creek	A4	1.35	-		Oct. 15, 1955	-	597	442	-
	Spring Brook near Halsey Valley, N. Y.	S. Br. Catatonk Creek	A4	4.87	-		June 11, 1949	-	1,000	205	-
	Baker Creek near Van Etten, N. Y.	Cayuta Creek	A4	2.75	-		July 8, 1958	-	652	237	-
	Langford Cr. at Van Etten, N.Y.	Cayuta Creek	A4	5.26	360		July 8, 1958	-	1,080	205	*1.36
	Corey Creek tributary near Mainesburg, Pa.	Corey Creek	B6	1.54	-		Oct. 14, 1955	-	321	208	-
5168	Manns Creek near Mansfield, Pa.	Tioga River	B6	3.01	-	1960-64	Mar. 10, 1964	5.63	502	167	-
5175	Mill Creek near Tioga, Pa.	Tioga River	B6	76.4	4,100	1939-40	Mar. 31, 1940	7.65	6,250	81.8	6
5190	Troups Creek at Knoxville, Pa.	Cowanesque River	B6	66.5	3,700	1939-41	Mar. 31, 1941	8.96	5,530	83.2	6
5195	Cowanesque River at Nelson, Pa.	Tioga River	B6	266	11,000	1939-41	Mar. 31, 1940	11.17	18,500	69.5	8
	Carrington Creek at Fremont Center, N. Y.	Canistota River	B6	13.6	1,050		July 1935	-	3,750	276	*1.19
	Big Creek near North Hornell, N. Y.	Canistota River	B6	16.5	1,200		July 1935	-	11,900	721	*3.3
	Canacadea Creek at Almond, N. Y.	Canistota River	B6	49.8	2,900		July 1935	-	18,000	361	*2.1
	Canistota River at Canistota, N. Y.	Tioga River	B6	185	8,400		July 1935	-	25,000	135	48
	Bennett Creek near Canistota, N. Y.	Canistota River	B6	71.5	3,900		July 1935	-	12,400	173	*1.06

* Ratio of peak discharge to 50-year period.

5312.5	Purdy Creek near Canistota, N. Y.	Bennett Creek	B6	21.2	1,500		July 1935	-	8,990	424	*2.0
	Stephens Creek near Carson, N. Y.	Canistota River	B6	7.04	620		July 1935	-	6,700	952	*3.6
	Helmer Creek near Cameron Mills, N. Y.	Canistota River	B6	4.07	-		July 22, 1953	-	625	154	-
	Neil River near Bloomerville, N. Y.	Cohocton River	A2	20.8	620		July 1935	-	5,040	242	*3.7
	Tenmile Creek above West Creek, N. Y.	Cohocton River	A2	5.96	240		July 1935	-	1,510	253	*2.9
	Campbell Creek near Kanona, N. Y.	Cohocton River	A2	35.8	940		July 1935	-	14,000	391	*6.8
	Harrisburg Hollow near Bath, N. Y.	Cohocton River	A2	2.02	-		July 1935	-	2,220	1,100	-
	Harrisburg Hollow near Bath, N. Y.	Cohocton River	A2	2.49	-		July 1935	-	2,810	1,130	-
	Mud Creek tributary at Bradford, N. Y.	Mud Creek	A2	1.68	-		July 1935	-	1,940	1,150	-
	South Branch Michigan Creek at Risingville, N. Y.	Michigan Creek	A2	.96	-		July 22, 1953	-	819	853	-
	Pine Creek near Monterey, N. Y.	Meads Creek	A2	5.00	200		July 1935	-	3,270	654	*7.4
	Meads Creek at East Campbell, N. Y.	Cohocton Creek	A2	46.1	1,100		July 1935	-	30,300	657	*12
	Chemung River at Elmira, N. Y.	Susquehanna River	A5	2,162	45,000	1889,1936	June 1, 1889	-	138,000	63.9	*1.40
	Newtown Creek at Breesport, N. Y.	Chemung River	A2	20.5	620		July 8, 1958	-	2,300	112	*1.69
	Mudlick Creek near Seely Creek, N. Y.	Seely Creek	A6	22.6	1,500		Oct. 15, 1955	-	2,580	114	12
5322	Rorick Hollow Creek near Breesport, N. Y.	Baldwin Creek	A2	1.12	-		July 8, 1958	-	370	330	-
	Wyncoop Creek at Chemung, N. Y.	Chemung River	A4	33.7	1,500		Oct. 15, 1955	-	3,000	89.0	32
5332.5	North Branch Sugar Creek tributary near Columbia Cross Roads, Pa.	North Branch Sugar Creek	B6	8.83	740	1963-64	Mar. 10, 1964	5.20	1,030	117	5
	South Branch Towanda Creek at New Albany, Pa.	Towanda Creek	B6	13.3	1,050	1963-64	Mar. 10, 1964	7.4	1,530	115	6
5332.5	Tuscarora Creek near Silvara, Pa.	Susquehanna River	B6	11.8	950	1963-64	Mar. 10, 1964	12.72	1,350	114	5
	Roaring Brook at Dunmore, Pa.	Lackawanna River	B4	49.4	2,000	1914,1955	Aug. 19, 1955	-	18,500	374	*3.1
	Little Roaring Brook at Dunmore, Pa.	Roaring Brook	B4	5.12	350		Aug. 18, 1955	-	601	117	8
	Spring Brook at Watres Reservoir, at Rockdale, Pa.	Lackawanna River	B4	15.9	840	1942,1955	Aug. 19, 1955	-	3,130	197	*1.24
	Spring Brook at Nesbitt Reservoir, near Rockdale, Pa.	Lackawanna River	B4	37.0	1,600	1942,1955	Aug. 19, 1955	-	9,280	251	*1.93
	Spring Brook at intake dam, near Moosic, Pa.	Lackawanna River	B4	43.1	1,800	1942,1955	Aug. 19, 1955	-	10,500	244	*1.94
	Spring Brook near Moosic, Pa.	Lackawanna River	B4	50.7	2,000		Aug. 19, 1955	-	10,300	203	*1.72

* Ratio of peak discharge to 50-year flood.

Table 2.--Peak discharge at miscellaneous sites and unusual floods at short-term gaging stations--Continued

Table 2.--Peak discharge at miscellaneous sites and unusual floods at short-term gaging stations--Continued											
No.	Stream and vicinity	Tributary to	Flood region and area	Drainage area (sq mi)	Areal 2.33	Period of known floods (water years)	Date	Gage height (feet)	Maximum flood		
									Discharge	Recur-rence interval (years)	
								Cfs	Cfs per sq mi		
Susquehanna River basin--Continued											
	Nescopeck Creek near Nescopeck, Pa.	Susquehanna River	B4	161	5,000		Aug. 18, 1955		13,400	83.2	32
	Stony Creek at Spangler, Pa.	W. Br. Susquehanna River	B4	2.7	-		Sept. 1912		1,110	411	-
	North Creek near Lockwood, Pa.	Driftwood Br. Sinnemahoning Creek	B4	20.3	1,000		July 18, 1942		4,700	232	*1.57
	Driftwood Branch Sinnemahoning Creek at Emporium, Pa.	Sinnemahoning Creek	B4	86.3	3,100		July 18, 1942		28,000	324	*3.0
	West Creek near Emporium, Pa.	Driftwood Br. Sinnemahoning Creek	B4	59.7	2,300		July 18, 1942		11,000	184	*1.59
	Sinnemahoning Portage Creek near Emporium, Pa.	Driftwood Br. Sinnemahoning Creek	B4	60.0	2,300		July 18, 1942		18,000	300	*2.6
	Salt Run near Emporium, Pa.	Sinnemahoning Portage Cr.	B4	5.83	390		July 18, 1942		1,900	326	*1.63
	South Woods Branch near Costello, Pa.	First Fork Sinnemahoning Creek	B4	17.8	910		July 18, 1942		7,500	421	*2.7
	Freeman Run above Austin, Pa.	First Fork	B4	10.9	630		July 18, 1942		9,800	900	*5.2
	Freeman Run above Austin, Pa.	First Fork	B4	13.7	750		July 18, 1942		17,000	1,240	*7.6
	Freeman Run above Austin, Pa.	First Fork	B4	14.0	770		July 18, 1942		16,000	1,140	*6.9
	Freeman Run above Austin, Pa.	First Fork	B4	14.6	790		July 18, 1942		19,000	1,300	*8.0
	First Fork Sinnemahoning Creek near Costello, Pa.	Sinnemahoning Creek	B4	103	3,500		July 18, 1942		31,000	301	*2.9
	Big Nelson Run near Wharton, Pa.	First Fork	B4	9.92	580		July 18, 1942		6,600	667	*3.8
	East Fork Sinnemahoning Creek above Wharton, Pa.	First Fork	B4	47.6	1,900		July 18, 1942		6,100	128	*1.07
	Bailey Run near Bailey, Pa.	First Fork	B4	12.1	680		July 18, 1942		5,300	438	*2.6
	Rattlesnake Run near First Fork, Pa.	First Fork	B4	1.13	-		July 18, 1942		1,300	1,150	-
	Brook Run at Lusbaugh, Pa.	First Fork	B4	6.87	-		July 18, 1942		1,600	233	-
	West Branch Susquehanna River near Westport, Pa.	Susquehanna River	B5	2,678	53,000		Mar. 18, 1936		213,000	79.5	*1.34
	Kettle Creek at Oleana, Pa.	West Branch Susquehanna River	C4	46.0	1,900		May 28, 1946		6,200	135	26

* Ratio of peak discharge to 50-year flood.

5497	McBrides Gap Run at Rockview Prison, Pa.	Spring Creek	B9	2.4	-		Mar. 18, 1936	-	1,010	421	-
	Babb Creek near Morris, Pa.	Pine Creek	C4	81.5	2,900		May 28, 1946	-	9,900	121	32
	Pine Creek below Little Pine Creek, near Waterville, Pa.	West Branch Susquehanna River	C4	944	19,000	1958-63	Feb. 26, 1961	10.87	32,000	33.9	7
5530.5	Trout Run near Trout Run, Pa.	Lycoming Cr.	B6	14.0	1,050		May 28, 1948	-	2,580	184	25
	White Deer Hole Creek near Elmsport, Pa.	West Branch Susquehanna River	B4	18.2	940	1961-64	Mar. 12, 1962	8.90	1,940	107	15
5536	White Hall Creek near Washingtonville, Pa.	Chillisquaque Creek	B4	9.48	560	1961-64	Feb. 25, 1961	-	870	91.8	7
5558	McDonald Run near East Freedom, Pa.	Franktown Br.	B4	1.54	-	1959-64	Feb. 25, 1961	3.24	283	184	-
	Kettle Creek near Altoona, Pa.	Juniata River	B4	1.54	-	1959-64	Feb. 25, 1961	3.24	283	184	-
	Bells Gap Run near Bellwood, Pa.	Brush Run	B4	2.8	-		March 1936	-	777	278	-
	Sinking Run near Tyrone, Pa.	Little Juniata River	B4	18.2	940		March 1936	-	3,350	184	*1.18
	Sinking Run near Tyrone, Pa.	Little Juniata River	B4	6.0	390		March 1936	-	1,000	167	28
	Sinking Run near Tyrone, Pa.	Little Juniata River	B4	6.1	400		March 1936	-	913	150	19
	Raystown Br. Juniata River at Juniata Crossing, Pa.	Juniata River	C4	549	13,000		March 1936	-	67,000	122	*1.47
	Delaware Creek at Thompsonstown, Pa.	Juniata River	B4	12.1	690		Nov. 1, 1936	-	3,300	273	*1.59
5725	Spring Creek at Harrisburg, Pa.	Susquehanna River	B4	11.6	660		February 1908	-	2,580	222	*1.30
	Swatara Creek at Jonestown, Pa.	Susquehanna River	B4	190	5,700	1911-14	Mar. 27, 1913	12.0	9,400	49.5	8
	Canadochly Creek near Long Level, Pa.	Susquehanna River	C4	2.2	-		July 15, 1914	-	2,460	1,120	-
	Cabin Creek near Long Level, Pa.	Susquehanna River	C4	13.9	760		July 15, 1914	-	4,990	359	*1.55
	Wisslers Run near Creswell, Pa.	Susquehanna River	C4	.6	-		July 15, 1914	-	456	760	-
	Fishing Creek near Long Level, Pa.	Beaver Creek	C4	18.2	940		July 15, 1914	-	3,130	172	25
	Green Branch near Long Level, Pa.	Susquehanna River	C4	1.7	-		July 15, 1914	-	2,720	1,600	-
	Manns Run near Creswell, Pa.	Susquehanna River	C4	.7	-		July 15, 1914	-	1,780	2,540	-
	Indian Run near Creswell, Pa.	Susquehanna River	C4	2.1	-		July 15, 1914	-	4,050	1,930	-
	Pequa Creek near Strasburg, Pa.	Pequa Creek	C4	78.1	2,800		June 26, 1938	-	8,930	114	28
	Pequa Creek near Pequa, Pa.	Susquehanna River	C4	153	4,800		June 26, 1938	-	28,000	183	*1.53
	Broad Creek tributary at Pylesville, Md.	Broad Creek	C4	3.96	-		July 15, 1951	-	4,410	1,110	-

* Ratio of peak discharge to 50-year flood.

Table 2.--Peak discharge at miscellaneous sites and unusual floods at short-term gaging stations--Continued

No.	Stream and vicinity	Tributary to	Flood region and area	Drainage area (sq mi)	Areal $Q_{2.33}$	Period of known floods (water years)	Date	Gage height (feet)	Maximum flood		
									Discharge		
									Cfs	Cfs per sq mi	Recurrence interval (years)
Susquehanna River basin--Continued											
5784	Bowery Run near Quarryville, Pa.	W. Br. Octo-raro Creek	C4	5.98	390	1963-64	July 3, 1964	7.7	2,220	371	-
5805	Deer Creek near Churchville, Md.	Susquehanna River	C4	141	4,500	1906-08	Feb. 26, 1908	11.5	10,600	75.2	12
Gunpowder River basin											
5825	Gunpowder Falls at Glencoe, Md.	Gunpowder River	C4	160	5,000	1905-08	Feb. 26, 1908	15.0	11,000	68.8	10
	Beaver Dam Run at Cockeysville, Md.	Gunpowder River	C4	21.0	1,000		July 21, 1956	-	3,950	188	42
5851	Whitemarsh Run at White Marsh, Md.	Bird River	C10	7.61	920	1960-63	Sept. 12, 1960	6.60	1,580	208	6
Back River basin											
5852	West Branch Herring Run at Idlewylde, Md.	Herring Run	C10	2.13	-	1958-63	July 6, 1958	5.78	602	283	-
5853	Stemmers Run at Rossville, Md.	Northeast Creek	C10	4.94	-	1959-63	Sept. 12, 1960	7.40	1,170	237	-
5854	Brien Run at Stemmers Run, Md.	Stemmers Run	C10	1.97	-	1959-63	Sept. 12, 1960	5.03	506	257	-
Patapsco River basin											
5891	East Branch Herbert Run at Arbutus, Md.	Herbert Run	C10	2.47	-		July 20, 1956	5.7	1,090	441	-
5892	Gwynn Falls near Owings Mills, Md.	Patapsco River	C10	4.90	730	1958-63	Mar. 6, 1963	2.49	205	42	-
5893	Gwynns Falls at Villa Nova, Md.	Patapsco River	C10	32.5	2,050	1957-63	July 21, 1956	12.6	5,270	162	14
Patuxent River basin											
5946	Cocktown Creek near Huntington, Md.		C2	3.85		1957-63	June 4, 1960	-	1,120	291	-
Potomac River basin											
5952	Stony River near Mount Storm, W. Va.	North Br. Potomac R.	C4	48.8	1,900	1962-64	Mar. 19, 1963	8.41	3,120	63.9	6
	Bear Pen Run near Barton, Md.	Savage River	C4	3.27	-		Oct. 15, 1954	-	1,380	422	-
	Evitts Creek at Thomas W. Koon Dam, Pa.	North Branch	C4	44.8	1,800		Mar. 17, 1936	-	6,120	132	30

* Ratio of peak discharge to 50-year flood.

6040	Evitts Creek near Cumberland, Md.	North Branch	C4	89.0	3,100	1928, 1930-32, 1936	July 1928	11.1	19,000	213	*1.60
	Patterson Creek at Headsville, W. Va.	North Branch	C4	161	5,000		Mar. 17, 1936	-	14,600	90.7	24
6050	Patterson Creek at Alaska, W. Va.	North Branch	C4	249	6,900	1931, 1936	Mar. 17, 1936	-	17,400	69.9	17
	South Branch Potomac River below Franklin, W. Va.	Potomac River	D4	198	5,800		June 17, 1949	-	17,000	85.8	16
	South Branch Potomac River below Upper Tract, W. Va.	Potomac River	D4	302	8,100		June 17, 1949	-	27,000	89.4	22
	Thorn Creek at McCoys Mill, W. Va.	South Branch Potomac R.	D4	50.7	2,000		June 17, 1949	-	11,000	217	*1.10
	Jordan Run at mouth, near Hopeville, W. Va.	North Fork	D4	20.5	1,000		June 17, 1949	-	18,000	878	*3.5
	Lunice Creek at Mays Gap, at Maysville, W. Va.	South Br.	D4	20.6	1,000		June 17, 1949	-	7,800	379	*1.70
	Lunice Creek at Seymourville, W. Va.	South Branch	D4	64.0	2,100		June 17, 1949	-	17,000	266	*1.65
	North Mill Creek near Petersburg, W. Va.	Mill Creek	D4	44.8	1,800		June 17, 1949	-	39,000	870	*4.3
	Mill Creek near Petersburg, W. Va.	South Branch	D4	94.4	3,200		June 17, 1949	-	35,000	371	*2.3
	South Fork South Br. Potomac River at Sugar Grove, W. Va.	South Branch	D4	46.3	1,900		June 17, 1949	-	19,000	410	*2.3
	South Branch Potomac River at McNeill, W. Va.	Potomac River	D4	1,294	25,000		June 17, 1949	-	100,000	77.3	42
6110	Cacapon River at Capon Bridge, W. Va.	Potomac River	D4	367	9,400	1924, 1931-32, 1936	Mar. 17, 1936	26	46,000	125	*1.10
	Little Antietam Creek at Keedysville, Md.	Antietam Creek	C9	24.5	415		July 20, 1956	-	13,800	563	*8.03
	North River at Staunton Dam, near Stokesville, Va.	South Fork Shenandoah River	D3	26.1	1,100		June 17, 1949	-	11,700	448	*2.1
	Skidmore Fork near Stokesville, Va.	North River	D3	5.7	360		June 17, 1949	-	10,200	1,790	*5.2
	North River above Little River, near Stokesville, Va.	South Fork Shenandoah River	D3	39.1	1,500		June 17, 1949	-	16,400	419	*2.1
	Coal Run near Stokesville, Va.	Little River	D3	2.4	-		June 17, 1949	-	4,420	1,840	-
	Little River near Stokesville, Va.	North River	D3	25.0	1,050		June 17, 1949	-	32,900	1,320	*6.0
	North River at Stokesville, Va.	South Fork Shenandoah River	D3	65	2,200		June 18, 1949	-	54,000	831	*5.0
	Briery Br. above Hone Quarry Run, near Spring Creek, Va.	North River	D3	16.3	800		June 18, 1949	-	12,300	755	*2.9
	Hone Quarry Run near Spring Creek, Va.	Briery Br.	D3	10.4	560		June 17, 1949	-	3,000	288	50

* Ratio of peak discharge to 50-year flood.

Table 2.--Peak discharge at miscellaneous sites and unusual floods at short-term gaging stations--Continued

No.	Stream and vicinity	Tributary to	Flood region and area	Drainage area (sq mi)	Area 2.33	Period of known floods (water years)	Maximum flood			
							Date	Gage height (feet)	Discharge	Recurrence interval (years)
								Cfs	Cfs per sq mi	
Potomac River basin--Continued										
	Blacks Run tributary at Harrisonburg, Va.	Blacks Run	D3	1.1	-		Aug. 15, 1949	-	690	-
	Buffalo Branch at Christian, Va.	Middle River	D3	8.6	480		June 18, 1949	-	3,200	*1.24
6255	Jennings Branch at Lone Fountain, Va.	Middle River	D3	24.0	1,000		June 18, 1949	-	9,100	*1.75
	North River at Port Republic, Va.	South Fork Shenandoah River	D3	804	14,000	1896-98	Sept. 30, 1896	18.1	24,000	6
6280	South River at Port Republic, Va.	South Fork Shenandoah River	D3	248	5,800	1896-99	Sept. 29, 1896	18.3	9,700	5
	Linville Creek at Broadway, Va.	North Fork Shenandoah River	D3	49	1,700		June 19, 1949	-	8,800	*1.04
6329	Smith Creek near New Market, Va.	North Fork Shenandoah River	D3	92.1	2,800	1961-64	Mar. 19, 1963	9.10	2,700	2
6380	Catoctin Creek near Jefferson, Md.	Potomac River	C4	111	3,800	1885-1931	June 19, 1928	11.3	6,980	7
6452	Watts Branch at Rockville, Md.	Potomac River	C4	3.70	-	1885-1928 1958-63	July 13, 1960	5.10	710	-
6458	Piney Branch at Vienna, Va.	Difficult Run	C2	.51	-	1963-64	June 20, 1963	5.00	194	-
6459	Colvin Run near Herndon, Va.	Difficult Run	C2	5.09	210	1961-64	June 30, 1963	5.13	790	32
6462	Scott Run near McLean, Va.	Potomac R.	C2	4.69	-	1961-64	June 10, 1961	19.63	810	-
6463	Dead Run near McLean, Va.	Scott Run	C2	1.94	-	1961-62	June 2, 1962	5.48	232	-
6466	Pimmit Run near Falls Church, Va.	Potomac River	C2	2.87	-	1961-64	June 10, 1961	5.53	622	-
6467	Pimmit Run at Arlington, Va.	Potomac R.	C2	8.12	300	1961-64	May 13, 1964	5.20	935	20
6468	Little Pimmit Run at Arlington, Va.	Pimmit Run	C2	2.31	-	1961-64	May 13, 1964	9.10	1,160	-
6490	Rock Creek at Q Street, Washington, D. C.	Potomac River	C10	75.8	3,300	1930-33	Aug. 24, 1933	14.0	4,650	5
6524	Long Branch at Arlington, Va.	Fourmile Run	C2	.94	-	1963-64	June 10, 1961	7.02	930	-
6526	Holmes Run at Merrifield, Va.	Cameron Run	C2	2.70	-	1960-64	May 13, 1964	4.81	661	-
6526.1	Holmes Run near Annandale, Va.	Cameron Run	C2	7.10	270	1960-64	June 30, 1963	7.61	780	16
6526.2	Tripps Run at Falls Church, Va.	Holmes Run	C2	1.78	-	1960-64	June 10, 1961	6.50	736	-

* Ratio of Peak discharge to 50-year flood.

6526.45	Tripps Run tributary near Falls Church, Va.	Tripps Run	C2	.50	-	1963-64	May 13, 1964	6.41	302	604	-
6526.5	Tripps Run near Falls Church, Va.	Holmes Run	C2	4.55	-	1960-64	June 10, 1961	21.41	2,610	574	-
6526.7	Holmes Run below Lake Barcroft, near Alexandria, Va.	Cameron Run	C2	14.7	470	1959-61	July 12, 1959	3.76	875	59.5	7
6526.9	Holmes Run at Alexandria, Va.	Cameron Run	C2	18.9	570	1959-61	Aug. 26, 1961	5.24	1,440	76.2	12
6527.1	Back Lick Run at Springfield, Va.	Cameron Run	C2	2.02	-	1960-64	Aug. 20, 1963	5.53	932	461	-
	Turkeycock Run at Pinecrest, near Lincolnia, Va.	Backlick Run	C2	.67	-		May 5, 1953	-	483	721	-
	Turkeycock Run at Lincolnia, Va.	Backlick Run	C2	.93	-		May 5, 1953	-	669	719	-
6528.1	Turkeycock Run at Alexandria, Va.	Backlick Run	C2	2.26	-	1959-64	1963	6.58	827	366	-
6529.1	Back Lick Run at Alexandria, Va.	Cameron Run	C2	13.4	450	1960-64	Aug. 20, 1963	7.15	3,230	241	*1.67
6530.07	Pike Branch at Alexandria, Va.	Cameron Run	C2	2.65	-	1960-64	July 13, 1961	7.50	970	366	-
	Taylor Run at Duke Street, Alexandria, Va.	Cameron Run	C2	.92	-		May 5, 1953	-	880	957	-
	Timber Branch at Ivy Hill Cemetery, Alexandria, Va.	Cameron Run	C2	.45	-		May 5, 1953	-	1,170	2,600	-
6539	Accotink Creek at Fairfax, Va.	Potomac R.	C2	6.80	260	1961-64	May 13, 1964	7.74	1,600	235	*1.43
6539.5	Long Branch at Vienna, Va.	Accotink Cr.	C2	1.18	-	1961-64	June 29, 1963	5.06	744	631	-
6553.3	Sideburn Branch near Fairfax Station, Va.	Pohick Creek	C2	2.79	-	1961-62	Aug. 26, 1961	5.78	346	124	-
6553.4	Pohick Creek tributary near Burke, Va.	Pohick Creek	C2	.34	-	1964	May 13, 1964	6.06	70	206	-
6553.5	Pohick Creek near Springfield, Va.	Potomac River	C2	15.0	490	1961-64	Aug. 26, 1961	7.52	1,320	88.0	5
6553.7	Middle Run near Lorton, Va.	Pohick Creek	C2	3.56	-	1961-64	Aug. 26, 1961	4.55	638	179	-
6553.9	Pohick Creek at Lorton, Va.	Potomac R.	C2	31.0	840	1961-64	Aug. 26, 1961	4.85	1,420	45.8	-

Rappahannock River basin

	Beautiful (Smith) Run at Pratts, Va.	Rapidan River	D5	.72	-		Aug. 18, 1955	-	207	288	-
	Massaponax River tributary near Massaponax, Va.	Rappahannock River	C2	3.0	-		Sept. 10, 1950	-	3,020	1,010	-

York River basin

6711	Little River near Doswell, Va.	North Anna River	C2	107	2,200	1962-64	Oct. 22, 1961	7.70	4,430	41.4	9
6720	South Anna River of Vontay, Va.	Pamunkey River	C2	332	3,200	1927-30	Aug. 15, 1928	22.83	13,500	40.7	19
6748	Garnetts Creek near St. Stephens Church, Va.	Mattaponi River	D1	19.5	300	1954-57	Aug. 13, 1955	7.74	1,430	73.3	34

* Ratio of peak discharge to 50-year flood.

3000. Blind Brook at Rye, N. Y.

Location.--Lat 40°59'00", long 73°41'15", on left bank at Rye, Westchester County, just upstream from Theodore Fremd Avenue Bridge, a quarter of a mile southwest of New York, New Haven, and Hartford Railroad station and 0.85 mile upstream from mean high tide in Milton Harbor.

Drainage area.--9.20 sq mi.

Gage.--Recording and concrete control. Datum of gage is 13.05 ft above mean sea level, datum of 1929 (levels by city of Rye).

Stage-discharge relation.--Defined by current-meter measurements below 790 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 406 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Jan. 6, 1944	4.23	442	1952	Dec. 21, 1951	4.36	463
	Mar. 7, 1944	4.70	531		May 25, 1952	4.58	502
	Mar. 13, 1944	5.37	664		June 1, 1952	5.99	770
	Mar. 23, 1944	4.20	436		Aug. 13, 1952	4.05	407
	Apr. 24, 1944	4.17	430	1953	Mar. 13, 1953	8.48	1,200
	Sept. 15, 1944	9.36	1,330		Mar. 16, 1953	4.43	475
					Mar. 26, 1953	4.27	447
1945	Apr. 25, 1945	4.125	422	1954	Sept. 11, 1954	4.29	450
	July 18, 1945	4.71	533				
	Aug. 6, 1945	5.12	614	1955	Aug. 19, 1955	4.45	479
1946	Dec. 26, 1945	4.54	501				
	May 27, 1946	6.25	834	1956	Oct. 16, 1955	9.62	1,360
1947	Apr. 5, 1947	4.06	409		Oct. 30, 1955	4.71	527
					Nov. 4, 1955	4.13	421
1948	Nov. 12, 1947	4.13	432	1957	Oct. 31, 1956	3.84	369
	Apr. 1, 1948	4.50	502				
1949	Dec. 31, 1948	4.26	456	1958	Jan. 22, 1958	4.58	502
	Jan. 6, 1949	4.67	534		Feb. 28, 1958	4.97	576
1950	Mar. 23, 1950	2.40	119		Apr. 6, 1958	4.58	502
1951	Mar. 20, 1951	5.29	652	1959	Mar. 6, 1959	4.04	405
	Mar. 30, 1951	4.25	454				
	Mar. 31, 1951	7.00	964	1960	Sept. 12, 1960	4.21	436
1952							
	Nov. 7, 1951	4.59	504	1961	Apr. 16, 1961	5.50	664

BEAVER SWAMP BROOK BASIN

3005. Beaver Swamp Brook near Harrison, N. Y.

Location.--Lat 40°57'30", long 73°43'00", on right bank just downstream from Short Street bridge, in the village of Mamaroneck, a quarter of a mile downstream from Brentwood Brook, a quarter of a mile upstream from mean high tide in Mamaroneck Harbor, and 1 mile south of Harrison, Westchester County.

Drainage area.--4.71 sq mi.

Gage.--Nonrecording and concrete control prior to June 8, 1946; recording and concrete control thereafter. Datum of gage is 24.99 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Flow affected by natural storage in swampy areas above station. Base for partial-duration series, 86 cfs.

Peak stages and discharges of Beaver Swamp Brook near Harrison, N. Y.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Jan. 6, 1944	2.10	106	1953	Mar. 15, 1953	2.07	107
	Mar. 13, 1944	2.24	117		Apr. 7, 1953	1.98	101
	Apr. 25, 1944	1.85	86		July 23, 1953	1.82	89
	Sept. 15, 1944	2.57	140	1954	Sept. 11, 1954	1.92	96
1945	Aug. 6, 1945	1.88	88	1955	Aug. 19, 1955	1.78	86
1946	May 27, 1946	2.36	137	1956	Oct. 16, 1955	2.86	156
	June 2, 1946	1.93	99		Nov. 4, 1955	1.81	88
1947	Apr. 5, 1947	1.91	93	1957	Oct. 31, 1956	2.03	104
1948	Aug. 12, 1948	1.95	96		Apr. 5, 1957	1.91	96
1949	Dec. 31, 1948	2.17	114	1958	Feb. 28, 1958	2.13	109
	Jan. 6, 1949	1.93	98		Apr. 6, 1958	1.98	91
1950	Aug. 20, 1950	1.09	29.8		Apr. 28, 1958	1.80	87
1951	Mar. 31, 1951	2.39	130	1959	Jan. 2, 1959	1.72	81
1952	Nov. 7, 1951	1.93	98		Dec. 7, 1959	1.79	86
	Apr. 28, 1952	1.78	86		July 30, 1960	1.97	99
	June 1, 1952	2.58	141		Aug. 19, 1960	1.94	96
1953	Mar. 13, 1953	2.57	140		Sept. 12, 1960	2.13	111
				1961	Apr. 16, 1961	2.25	120

MAMARONECK RIVER BASIN

3010. Mamaroneck River at Mamaroneck, N. Y.

Location.--Lat 40°57'15", long 73°44'05", on left bank in Mamaroneck, Westchester County, 113 ft downstream from Halstead Avenue Bridge, 700 ft downstream from Sheldrake River, and 0.3 mile upstream from mean high tide in Mamaroneck Harbor.

Drainage area.--23.4 sq mi.

Gage.--Recording and concrete control. Prior to Sept. 10, 1954, at datum 0.41 ft higher. Datum of gage is 11.46 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--Not subject to overflow in vicinity of gage.

Remarks.--Flow affected by storage in and diversion from water-supply reservoirs on Mamaroneck and Sheldrake Rivers. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Sept. 21, 1938	11.5	-	1952	June 1, 1952	6.63	1,270
				1953	Mar. 13, 1953	7.68	1,620
1944	Sept. 15, 1944	7.82	1,760	1954	Sept. 11, 1954	3.45	a900
1945	Aug. 7, 1945	4.56	738	1955	Aug. 13, 1955	4.57	1,370
1946	May 27, 1946	6.45	1,200	1956	Oct. 15, 1955	5.93	1,940
1947	Apr. 5, 1947	4.80	795	1957	Nov. 1, 1956	2.99	711
1948	Apr. 1, 1948	4.36	660	1958	Feb. 28, 1958	4.31	1,260
1949	Jan. 6, 1949	4.60	723	1959	Jan. 2, 1959	3.02	723
1950	Mar. 23, 1950	2.54	232	1960	Aug. 19, 1960	4.86	1,490
1951	Mar. 31, 1951	7.27	1,550	1961	Apr. 16, 1961	4.88	1,500

a Maximum for the period Sept. 10-30, 1954; probably maximum for year.

3015. Hutchinson River at Pelham, N. Y.

Location.--Lat 40°54'40", long 73°48'55", on right bank in Pelham, Westchester County, just upstream from New York, New Haven, and Hartford Railroad bridge, 100 ft downstream from Pelham Lake and 1½ miles west of New Rochelle.

Drainage area.--5.76 sq mi.

Gage.--Recording and concrete control. Datum of gage is 12.92 ft above mean sea level, datum of 1929 (levels by county of Westchester).

Stage-discharge relation.--Defined by current-meter measurements below 120 cfs and extended above by logarithmic plotting.

Remarks.--Flow controlled by lake and three reservoirs above station. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Sept. 14, 1944	4.77	388	1953	Mar. 13, 1953	4.31	254
1945	June 21, 1945	3.80	162	1954	Sept. 11, 1954	4.08	210
				1955	Aug. 13, 1955	4.16	225
1946	May 27, 1946	3.66	136				
1947	Apr. 5, 1947	3.41	96	1956	Oct. 16, 1956	4.82	356
1948	Aug. 12, 1948	4.73	378	1957	Oct. 31, 1957	4.15	224
1949	Aug. 16, 1949	3.64	143	1958	Jan. 22, 1958	4.08	205
1950	Aug. 20, 1950	3.67	148	1959	Sept. 3, 1959	4.72	335
				1960	July 30, 1960	3.94	179
1951	Mar. 30, 1951	4.40	298				
1952	Nov. 7, 1951	4.06	206	1961	Apr. 16, 1961	3.79	140

BRONX RIVER BASIN

3020. Bronx River at Bronxville, N. Y.

Location.--Lat 40°56'10", long 73°50'15", on right bank in Bronxville, Westchester County, just upstream from New York Central Railroad Bridge, 800 ft downstream from Sprain Brook.

Drainage area.--26.5 sq mi (not including 18.1 sq mi, the entire flow from which is diverted for municipal water supply and drainage purposes).

Gage.--Recording and concrete control. Datum of gage is 73.74 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 453 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Jan. 6, 1944	3.49	546	1951	Mar. 20, 1951	3.33	519
	Feb. 15, 1944	3.45	540		Mar. 31, 1951	5.96	861
	Mar. 7, 1944	3.34	522				
	Mar. 13, 1944	4.35	667	1952	Oct. 8, 1951	3.03	465
	Apr. 24, 1944	3.07	475		Nov. 7, 1951	4.86	743
	Sept. 13, 1944	3.44	538		Dec. 18, 1951	3.07	472
	Sept. 15, 1944	6.37	876		Dec. 21, 1951	4.86	743
1945	Aug. 6, 1945	2.86	435		Mar. 11, 1952	3.16	489
					Apr. 5, 1952	3.10	478
1946	Dec. 26, 1945	3.08	484		May 25, 1952	3.33	519
	May 27, 1946	5.16	778		June 1, 1952	5.19	781
	June 2, 1946	3.06	480		Aug. 13, 1952	3.48	545
1947	Apr. 5, 1947	3.17	501	1953	Nov. 22, 1952	3.13	483
					Dec. 5, 1952	3.05	468
1948	Nov. 12, 1947	3.17	501		Dec. 11, 1952	3.42	534
	Apr. 1, 1948	3.35	532		Jan. 24, 1953	3.08	474
					Mar. 13, 1953	5.64	829
1949	Dec. 31, 1948	3.08	484		Mar. 16, 1953	3.59	562
					Mar. 24, 1953	3.36	524
1950	July 10, 1950	2.51	370		Apr. 7, 1953	3.36	524
					July 23, 1953	4.94	753

Peak stages and discharges of Bronx River at Bronxville, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Sept. 11, 1954	4.81	737	1959	Nov. 29, 1958	3.17	491
1955	Nov. 2, 1954	3.41	533		Jan. 2, 1959	4.71	725
	Aug. 13, 1955	5.30	793		Mar. 6, 1959	3.65	572
	Aug. 19, 1955	3.70	580		Aug. 9, 1959	4.07	636
					Sept. 3, 1959	3.31	516
1956	Oct. 16, 1955	6.65	922	1960	Dec. 7, 1959	2.98	455
	Oct. 30, 1955	4.23	680		July 30, 1960	4.45	691
1957	Nov. 1, 1956	4.37	680		Aug. 19, 1960	5.38	802
					Sept. 12, 1960	5.14	775
1958	Dec. 21, 1957	3.09	476	1961	Apr. 16, 1961	4.05	634
	Jan. 22, 1958	4.88	746		July 20, 1961	4.55	704
	Feb. 28, 1958	4.61	712		Aug. 27, 1961	3.29	512
	Apr. 6, 1958	4.27	666				

STREAMS ON LONG ISLAND

3025. Cedar Swamp Creek at Glen Cove, N. Y.

Location.--Lat 40°51'45", long 73°38'05", on right bank just downstream from highway bridge at 8- by 10-foot concrete culvert outlet at pond in Pratt Park, 1 block west of post office, Glen Cove, Nassau County.

Drainage area.--About 11 sq mi.

Gage.--Recording and concrete control. Prior to Sept. 10, 1957, at datum 0.05 ft. lower. Datum of gage is 15.93 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 220 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 160 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Jan. 6, 1939	2.677	162	1949	May 3, 1949	2.50	134
	Aug. 12, 1939	2.744	172		July 16, 1950	2.773	175
	Sept. 8, 1939	3.288	273		July 28, 1950	2.819	182
1940	July 11, 1940	2.660	159	1951	July 27, 1951	2.918	199
1941	Feb. 7, 1941	4.99	782		Aug. 12, 1951	2.865	190
	Aug. 25, 1941	3.680	365				
	Aug. 26, 1941	2.663	159	1952	Oct. 7, 1951	3.716	372
1942	June 7, 1942	2.71	167		Mar. 11, 1952	2.750	171
	July 18, 1942	3.28	272	1953	Mar. 13, 1953	3.069	227
	July 27, 1942	4.66	661		July 23, 1953	3.449	305
	Aug. 17, 1942	2.68	162	1954	May 3, 1954	3.138	241
1943	July 5, 1943	2.760	175		Sept. 11, 1954	2.855	188
1944	Jan. 6, 1944	3.180	249	1955	Nov. 20, 1954	2.870	191
	Feb. 15, 1944	3.040	222		July 6, 1955	3.478	315
	Mar. 13, 1944	2.786	177		Aug. 12, 1955	5.62	1,040
	Sept. 14, 1944	3.90	421		Aug. 14, 1955	2.775	175
1945	July 18, 1945	3.64	353	1956	Oct. 16, 1955	3.701	368
	Sept. 14, 1945	2.97	209	1957	May 14, 1957	5.548	1,010
1946	July 23, 1946	2.66	157		July 29, 1957	2.817	175
					Aug. 21, 1957	4.408	574
1947	July 16, 1947	3.043	222				
	Aug. 26, 1947	3.066	227	1958	Feb. 28, 1958	2.992	218
	Sept. 15, 1947	2.858	189		Apr. 6, 1958	4.432	585
1948	May 17, 1948	3.059	225	1959	June 28, 1959	2.82	182
	Aug. 19, 1948	2.866	190				

Peak stages and discharges of Cedar Swamp Creek at Glen Cove, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1960	Oct. 7, 1959	3.01	216	1960	Aug. 30, 1960	3.51	321
	Dec. 7, 1959	2.98	210		Sept. 12, 1960	7.12	1,860
	Apr. 25, 1960	2.83	184				
	July 1, 1960	2.74	169	1961	Oct. 20, 1960	3.18	239
	July 3, 1960	5.36	929		Nov. 1, 1960	3.20	243
	July 14, 1960	2.81	176		Jan. 1, 1961	2.69	162
	July 30, 1960	5.10	823		July 20, 1961	3.07	224
	Aug. 15, 1960	3.79	391		Sept. 15, 1961	3.77	361
	Aug. 19, 1960	5.93	1,190				

3030. Mill Neck Creek at Mill Neck, N. Y.

Location.--Lat 40°53'15", long 73°33'55", on right bank at Beaver Dam, 30 ft upstream from Peaks Lane (Cleft Road) bridge in Mill Neck, Nassau County, and 1½ miles southwest of Bayville.

Drainage area.--About 11.5 sq mi.

Gage.--Recording and steel sheet-piling control. Datum of gage is 6.55 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 35 cfs and extended above by logarithmic plotting.

Remarks.--Considerable backwater from high tide at times. Base for partial-duration series, 32 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Sept. 13, 1937	0.96	48.8	1948	Oct. 31, 1947	0.949	51.9
1938	Nov. 28, 1937	.76	33		Nov. 12, 1947	.779	37.7
	Sept. 19, 1938	1.02	54		Apr. 1, 1948	.743	34.9
	Sept. 21, 1938	1.38	86	1949	Dec. 31, 1948	.820	40.8
	Sept. 21, 1938	a4.85	-		Jan. 6, 1949	.757	35.5
1939	Feb. 3, 1939	.74	32	1950	Aug. 20, 1950	.564	21.6
	Aug. 20, 1939	.807	36.6	1951	Nov. 25, 1950	a1.893	-
1940	Nov. 5, 1939	.77	34		Mar. 31, 1951	.800	39.0
	Jan. 15, 1940	.834	38.7	1952	Mar. 11, 1952	.722	32.6
	Mar. 15, 1940	.78	35		Apr. 28, 1952	.767	36.2
1941	Feb. 7, 1941	1.273	76.1		June 1, 1952	.859	44.2
1942	Mar. 3, 1942	.91	45	1953	Mar. 13, 1953	.967	52.7
	July 27, 1942	.976	50.1		Mar. 26, 1953	.729	32.2
	Aug. 9, 1942	.76	33		July 23, 1953	1.008	56.8
	Aug. 13, 1942	.79	35	1954	Nov. 7, 1953	a2.088	-
1943	Mar. 7, 1943	.751	32.6		Nov. 7, 1953	.766	35
1944	Oct. 27, 1943	.916	45.8		Aug. 31, 1954	a4.248	-
	Jan. 6, 1944	1.066	56.5		Sept. 11, 1954	1.089	67.8
	Feb. 15, 1944	.869	39.9	1955	Nov. 3, 1954	.723	32.6
	Mar. 13, 1944	.966	47.7		Nov. 21, 1954	.735	33.6
	Apr. 24-25, 1944	.77	33		Aug. 12, 1955	1.577	135
	Sept. 13, 1944	0.915	46		Aug. 19, 1955	.726	32.6
	Sept. 15, 1944	a2.048	-	1956	Oct. 15, 1955	a1.250	-
	Sept. 15, 1944	1.56	104		Oct. 16, 1955	1.015	59.6
1945	July 18, 1945	1.114	61.8		Nov. 4, 1955	.725	32.5
1946	Nov. 29, 1945	.906	46.7	1957	Apr. 5, 1957	.747	33.5
	June 2, 1946	.75	34		May 15, 1957	1.115	68.8
	Sept. 30, 1946	.74	34	1958	Feb. 28, 1958	1.052	61.7
1947	Apr. 5, 1947	.712	31.6		Apr. 6, 1958	.932	49.2

Peak stages and discharges of Mill Neck Creek at Mill Neck, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Mar. 6, 1959	0.71	30.9	1961	Apr. 13, 1961	0.83	40
1960	July 30, 1960	.85	42	1961	Apr. 13, 1961	a2.18	-
	Aug. 19, 1960	.82	39		Apr. 16, 1961	.80	38
	Sept. 12, 1960	1.60	137				

a Backwater from high tides.

3035. Cold Spring Brook at Cold Spring Harbor, N. Y.

Location.--40°51'25", long 73°27'50", on left bank 270 ft upstream from State Highway 25A, at Cold Spring Harbor State Fish Hatchery, Nassau County, and 1 mile southwest of village of Cold Spring Harbor, Suffolk County.

Drainage area.--About 7.3 sq mi.

Gage.--Recording and concrete control. Datum of gage is 5.38 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 28 cfs and extended above by logarithmic plotting.

Remarks.--Flow occasionally regulated at outlet of pond 40 ft above station. Diversion from this pond by New York State Fish Hatchery bypasses station. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	May 4, 1951	0.892	34.7	1957	May 4, 1957	0.616	16.9
1952	Aug. 23, 1952	.920	36.9	1958	July 6, 1958	1.20	77.1
1953	July 2, 1953	.586	16.1	1959	Mar. 6, 1959	1.015	48.6
	Aug. 31, 1954	a5.342	-	1960	Mar. 14, 1960	.82	31
1954	Sept. 11, 1954	1.332	108	1961	Feb. 7, 1961	.89	37
1955	Aug. 12, 1955	.994	46				
1956	Aug. 10, 1956	.824	31.2				

a Backwater from high tide.

3040. Nissequogue River near Smithtown, N. Y.

Location.--Lat 40°50'55", long 73°13'25", on left bank half a mile downstream from Blydenburgh Pond, 1 mile southwest of Smithtown, Suffolk County, and 1½ miles southwest of Smithtown Branch.

Drainage area.--About 27 sq mi.

Gage.--Recording and concrete control. Datum of gage is 9.59 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 128 cfs and extended above by logarithmic plotting.

Remarks.--Flow regulated by ponds above station. Only annual peaks are shown.

Peak stages and discharges of Nissequogue River near Smithtown, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Sept. 14, 1944	1.32	147	1953	Mar. 13, 1953	1.074	106
1945	Apr. 25, 1945	.956	80.8	1954	Sept. 11, 1954	1.199	131
				1955	Aug. 12, 1955	1.222	138
1946	Aug. 8, 1946	1.064	99.6	1956	Oct. 15, 1955	1.96	324
1947	July 16, 1947	1.181	130	1957	Apr. 5, 1957	.902	75.5
1948	Apr. 1, 1948	.941	80.9	1958	Feb. 28, 1958	1.154	125
1949	Dec. 31, 1948	1.029	97.0	1959	Sept. 1, 1959	1.125	118
1950	Aug. 20, 1950	1.044	99.9	1960	Sept. 12, 1960	1.62	231
1951	Apr. 4, 1951	.908	75.3				
1952	June 1, 1952	1.045	100	1961	Mar. 14, 1961	.97	88

3045. Peconic River at Riverhead, N. Y.

Location.--Lat 40°54'50", long 72°41'10", on right bank 200 ft downstream from Long Island Lighting Co. dam, 0.4 mile west of Riverhead, Suffolk County, and 1.2 miles upstream from outlet of Sweezy Pond.

Drainage area.--About 75 sq mi.

Gage.--Recording and concrete control. Datum of gage is 6.54 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 98 cfs and extended above by logarithmic plotting.

Remarks.--Flow regulated by ponds above station. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Aug. 20, 1942	0.769	886.9	1952	Mar. 11, 1952	0.734	78
1943	Feb. 15, 1943	.661	61.0	1953	Apr. 14, 1953	.966	140
1944	Jan. 6, 1944	.695	68.6	1954	Sept. 17, 1954	.796	90.8
1945	Sept. 26, 1945	.694	68.4	1955	Aug. 12, 1955	.762	81
1946	Aug. 7, 1946	.728	76.5	1956	Nov. 7, 1955	.857	107
1947	Nov. 27, 1946	.694	68.4	1957	Apr. 11, 1957	.927	128
1948	Nov. 13, 1947	.713	72.7	1958	Apr. 16, 1958	.923	124
1949	Jan. 1, 1949	.753	82.8	1959	Oct. 31, 1958	.865	110
1950	Feb. 15, 1950	.689	67.3	1960	Oct. 16, 1959	.88	111
1951	Feb. 22, 1951	.697	69.1	1961	Apr. 19, 1961	.70	72

a Maximum during period July to September.

3050. Carmans River at Yaphank, N. Y.

Location.--Lat 40°49'50", long 72°54'20", on left bank 50 ft upstream from Long Island Railroad Bridge, a quarter of a mile northeast of Yaphank Station, and half a mile southeast of Yaphank, Suffolk County.

Drainage area.--About 71 sq mi.

Gage.--Recording and concrete control. Datum of gage is 18.95 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 45 cfs and extended above by logarithmic plotting.

Remarks.--Some regulation by two lakes above station. Only annual peaks are shown.

Peak stages and discharges of Carmans River at Yaphank, N. Y.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Jan. 17, 1943	0.852	42.7	1953	Mar. 13, 1953	0.852	43.7
1944	Sept. 14, 1944	.976	53.6	1954	Sept. 11, 1954	1.247	83.2
1945	Apr. 25, 1945	.772	34.4	1955	Aug. 12, 1955	.952	56
1946	Aug. 7, 1946	1.187	76.3	1956	Oct. 16, 1955	1.178	81.6
1947	Apr. 5, 1947	.766	34.2	1957	Nov. 1, 1956	.878	48
1948	Nov. 12, 1947	.830	41.7	1958	Aug. 26, 1958	1.005	60
1949	Dec. 30, 1948	.860	44.4	1959	July 11, 1959	1.09	66
1950	May 24, 1950	.784	36.9	1960	Sept. 12, 1960	.98	57
1951	Feb. 25, 1951	.768	35	1961	July 20, 1961	1.11	70
1952	Dec. 23, 1951	.857	44.1				

3055. Swan River at East Patchogue, N. Y.

Location.--Lat 40°46'00", long 72°59'35", on left bank 94 ft downstream from Montauk Highway in East Patchogue, Suffolk County, 200 ft downstream from outlet of Swan Lake, and 1½ miles upstream from mouth.

Drainage area.--About 8.8 sq mi.

Gage.--Recording and concrete control. Datum of gage is 2.84 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 18 cfs and extended above by logarithmic plotting.

Remarks.--Flow regulated occasionally at outlet of Swan Lake. Peak flows affected occasionally by submergence from debris and/or extreme high tides. Base for partial-duration series, 35 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	Mar. 3, 1947	1.355	-	1955	Aug. 12, 1955	1.521	47
	Aug. 16, 1947	.745	20.4	1956	Oct. 16, 1955	1.464	42
1948	July 21, 1948	.809	23.3		Nov. 4, 1955	1.078	43
1949	Aug. 31, 1949	.833	-	1957	Nov. 1, 1956	.98	39
	Sept. 1, 1949	.797	24.6		May 20, 1957	.984	39
1950	May 24, 1950	.680	18.3		Aug. 9, 1957	1.117	-
	June 14, 1950	.765	-	1958	July 30, 1958	1.299	35
1951	Nov. 25, 1950	.808	24.9	1959	July 11, 1959	1.38	41
	Nov. 26, 1950	.835	-	1960	Dec. 7, 1959	1.65	-
1952	Aug. 10, 1952	.828	27.7		July 3, 1960	1.17	35
1953	July 21, 1953	.947	37.0	1961	July 20, 1961	1.26	28
1954	Sept. 11, 1954	1.801	46				

STREAMS ON LONG ISLAND

3060. Patchogue Creek at Patchogue, N. Y.

Location.--Lat 40°45'55", long 73°01'15", on left bank just downstream from Montauk Highway in Patchogue, Suffolk County, 1 mile upstream from mouth.

Drainage area.--13.5 sq mi.

Gage.--Recordings. Auxiliary recording gage on right bank 254 ft downstream from base gage. Datum of gage is 0.50 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Unit-fall rating used.

Remarks.--Flow occasionally regulated by powerplant above station. Only maximum daily discharges are shown.

Maximum daily mean discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	July 3, 1946		46.6	1955	Aug. 12, 1955		45.6
1947	Feb. 22, 1947		41.7	1956	Oct. 16, 1955		82.7
1948	Jan. 2, 1948		53.3	1957	May 14, 1957		48.5
1949	July 14, 1949		50.6	1958	Apr. 7, 1958		48.3
1950	Sept. 11, 1950		60.0	1959	July 11, 1959		49.7
				1960	Sept. 12, 1960		50
1951	May 14, 1951		48.3				
1952	Feb. 18, 1952		39.6				
1953	May 5, 1953		49.9	1961	July 21, 1961		53
1954	Sept. 12, 1954		51.6				

3065. Connetquot River near Oakdale, N. Y.

Location.--Lat 40°44'50", long 73°09'00", on left bank just downstream from highway bridge 1 mile west of Oakdale, Suffolk County.

Drainage area.--About 24 sq mi.

Gage.--Recording and wooden stoplog control. Datum of gage is 1.56 ft above mean sea level, datum of 1929. Supplementary recording gage and concrete control on left bank of secondary channel a quarter of a mile northeast of base gage at datum 5.74 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined at base gage by current-meter measurements below 85 cfs and extended above by logarithmic plotting. Defined at supplementary gage by current-meter measurements below 27 cfs and extended above by logarithmic plotting. Affected by backwater from high tides.

Remarks.--Flow regulated occasionally by cleaning operations at fish screens above station. Discharge figures given are those of combined flows in main and secondary channels. Only annual maximum daily discharges are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Sept. 15, 1944		101	1954	Dec. 14, 1953		92.8
1945	Nov. 28, 1944		62.0	1955	Aug. 13, 1955		123
1946	Aug. 7, 1946		117	1956	Oct. 16, 1955		263
1947	Apr. 6, 1947		62.8	1957	Apr. 6, 1957		62.6
1948	Nov. 12, 1947		77.4	1958	Feb. 28, 1958		90.8
1949	Dec. 31, 1948		96.8		Apr. 7, 1958		
1950	Feb. 15, 1950		51.8	1959	July 11, 1959		80.7
				1960	Sept. 12, 1960		93
1951	Mar. 31, 1951		66.0				
1952	Nov. 3, 1951		79.3	1961	July 21, 1961		100
1953	Mar. 16, 1953		97.8				

3070. Champlin Creek at Islip, N. Y.

Location.--Lat 40°44'15", long 73°12'05", on right bank just upstream from Long Island Railroad bridge, 220 ft downstream from Moffitt Boulevard, at Islip, Suffolk County, and 1 $\frac{1}{4}$ miles upstream from mouth.

Drainage area.--About 6.5 sq mi.

Gage.--Recording and concrete control. Datum of gage is 10.85 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 56 cfs.

Remarks.--Base for partial-duration series, 29 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	July 14, 1948	0.744	31.1	1956	Feb. 18, 1956	0.742	30.5
1949	Aug. 31, 1949	.672	24.6		July 21, 1956	.884	45.2
1950	Aug. 20, 1950	.657	22.4	1957	Apr. 2, 1957	.716	27.5
1951	Mar. 30, 1951	.689	26.0	1958	Feb. 28, 1958	.865	41.5
1952	May 12, 1952	.748	31.5		Apr. 6, 1958	.845	39.8
1953	Mar. 13, 1953	.746	31.7		May 6, 1958	.78	32.5
	Apr. 16, 1953	.740	31	1959	Jan. 2, 1959	.79	33.8
	July 23, 1953	.780	35.1		May 13, 1959	.78	32.8
1954	May 21, 1954	.737	30.3		July 11, 1959	1.00	59
	Aug. 31, 1954	.750	31.5		July 15, 1959	.905	46
	Sept. 11, 1954	1.117	64	1960	Oct. 24, 1959	.75	30
1955	Oct. 15, 1954	.787	34.5		Feb. 19, 1960	.74	29
	Aug. 12, 1955	.934	51		Feb. 26, 1960	.83	37
1956	Oct. 15, 1955	1.411	91		July 3, 1960	.92	46
	Oct. 30, 1955	.724	29.0		July 14, 1960	.92	45
	Nov. 4, 1955	.818	38.0		July 30, 1960	.81	33
	Nov. 16, 1955	.757	31.5		Sept. 12, 1960	1.05	58
				1961	Jan. 1, 1961	.77	32
					July 20, 1961	1.17	69

3075. Penataquit Creek at Bay Shore, N. Y.

Location.--Lat 40°43'40", long 73°14'40", on right bank just upstream from Union Avenue in Bay Shore, Suffolk County, 4,500 ft upstream from mouth.

Drainage area.--About 5 sq mi.

Gage.--Recording and concrete control. Datum of gage is 6.64 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 55 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 30 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	Aug. 7, 1946	1.000	35.8	1952	Apr. 28, 1952	0.899	30
1947	Apr. 5, 1947	.991	35.2		May 12, 1952	.953	34.0
	July 15, 1947	1.015	36.0		Aug. 16, 1952	.908	31.3
1948	Nov. 12, 1947	.949	31.6	1953	Mar. 13, 1953	.951	32.6
1949	Feb. 23, 1949	.839	25.8		July 23, 1953	.972	33.8
1950	Aug. 20, 1950	1.021	33.5	1954	Dec. 14, 1953	.989	34.8
1951	Mar. 30, 1951	.823	24.9		Aug. 9, 1954	.940	31.5
					Aug. 31, 1954	.988	34.5
					Sept. 11, 1954	1.076	40

STREAMS ON LONG ISLAND

Peak stages and discharges of Penataquit Creek at Bay Shore, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Aug. 12, 1955	1.379	51	1960	Oct. 24, 1959	0.985	32.6
	Aug. 13, 1955	1.21	49		Feb. 18, 1960	.975	33.3
1956	Oct. 16, 1955	2.31	63.8	1961	Feb. 26, 1960	1.015	36.7
	Nov. 4, 1955	1.187	32		July 3, 1960	1.185	44.8
	Feb. 18, 1956	.930	30		July 14, 1960	1.185	44.8
					July 30, 1960	1.175	44.4
1957	Apr. 2, 1957	.890	28		Aug. 19, 1960	.965	33.8
					Sept. 12, 1960	1.66	56.4
1958	Feb. 28, 1958	1.072	39.6		Dec. 21, 1960	1.40	52
	Apr. 6, 1958	1.085	40.6		Dec. 29, 1960	1.03	37
	May 6, 1958	.930	30		Jan. 1, 1961	1.51	54
1959	July 11, 1959	1.275	48.2		Mar. 9, 1961	.94	32
	July 15, 1959	1.00	34.9		July 20, 1961	1.86	55
	Aug. 5, 1959	.97	31.5		Aug. 3, 1961	1.07	31

3080. Sampawams Creek at Babylon, N. Y.

Location.--Lat 40°42'15", long 73°18'50", on left bank at upstream side of John Street bridge in Babylon, Suffolk County, 180 ft downstream from Long Island Railroad, and 3,000 ft upstream from mouth.

Drainage area.--About 23 sq mi.

Gage.--Recording and concrete control. Datum of gage is 6.70 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 135 cfs and extended above by logarithmic plotting.

Remarks.--Flow regulated occasionally by ponds above station. Indeterminate effect caused by pumpage for water-supply purposes at Smith Street sub-station a quarter of a mile northwest of gage. Base for partial-duration series, 36 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Apr. 25, 1945	0.855	37.4	1956	Oct. 16, 1955	1.672	98
1946	Mar. 10, 1946	.861	37.7		Nov. 4, 1955	1.186	58.0
	June 2, 1946	.899	41.7	1957	July 21, 1956	1.115	51.6
1947	July 15, 1947	.919	40.6		Apr. 5, 1957	.867	33.1
1948	Nov. 12, 1947	.900	38.8	1958	Jan. 15, 1958	1.113	51.5
	July 13, 1948	1.009	49.9		Jan. 25, 1958	1.003	42.5
1949	Dec. 31, 1948	.810	30.0		Feb. 28, 1958	1.227	46
					Mar. 24, 1958	.950	38
1950	Feb. 15, 1950	.669	20.9		Mar. 26, 1958	.931	36.5
					Apr. 6, 1958	1.183	57.8
1951	Mar. 31, 1951	.751	26.5		May 6, 1958	.979	40.8
1952	Apr. 28, 1952	.895	36.6	1959	Jan. 2, 1959	.96	39.5
1953	Mar. 13, 1953	1.083	50.8		Apr. 2, 1959	1.035	45.1
	Mar. 16, 1953	.940	39.4		July 11, 1959	1.165	56.2
	Apr. 7, 1953	.950	40.2		July 15, 1959	1.055	46.7
	Apr. 16, 1953	.901	36.4		Aug. 5, 1959	.915	36.4
	July 23, 1953	1.063	41	1960	Feb. 26, 1960	.98	40.9
1954	Dec. 14, 1953	1.206	62		July 14, 1960	1.355	70.7
	Apr. 17, 1954	.962	41.2		July 30, 1960	1.185	56.6
	Aug. 9, 1954	1.008	45		Sept. 12, 1960	2.11	136
	Aug. 31, 1954	1.131	56	1961	Jan. 1, 1961	1.00	40
	Sept. 11, 1954	1.436	83.6		Mar. 14, 1961	.98	39
1955	Aug. 12, 1955	1.854	95		Apr. 16, 1961	1.10	50
					July 20, 1961	1.79	108
					Aug. 3, 1961	1.22	59
					Sept. 21, 1961	.92	37

3085. Carlls River at Babylon, N. Y.

Location.--Lat 40°42'30", long 73°19'50", on left bank in Babylon, Suffolk County, 130 ft downstream from outlet of Kennel Club Pond (known locally as Southards Pond) and 0.9 mile upstream from mouth.

Drainage area.--About 35 sq mi.

Gage.--Recording and concrete control. Datum of gage is 10.63 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 66 cfs.

Remarks.--Occasional regulation by several ponds above station. Base for partial-duration series, 75 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Apr. 26, 1945	1.095	62.6	1954	Sept.11, 1954	1.495	106
1946	June 2, 1946	1.244	79.7	1955	Aug. 12, 1955	1.745	132
	Aug. 7, 1946	1.231	78.1	1956	Oct. 16, 1955	1.596	118
1947	July 15, 1947	1.440	100		Nov. 4, 1955	1.349	92.4
	July 16, 1947	1.349	89.1		Nov. 8, 1955	1.265	82.8
1948	Nov. 12, 1947	1.342	88.2	1957	Apr. 5, 1957	1.193	74.2
1949	Dec. 31, 1948	1.281	80.9	1958	Jan. 15, 1958	1.225	76.0
1950	Aug. 20, 1950	1.081	60.4	Feb. 28, 1958	1.47	105	
				Apr. 7, 1958	1.375	94.6	
1951	Feb. 22, 1951	1.087	61.1	Aug. 6, 1958	1.435	101	
1952	Apr. 27, 1952	1.257	76.8	1959	Apr. 3, 1959	1.33	89.4
	June 2, 1952	1.243	75.2		July 11, 1959	1.30	86.0
1953	Mar. 13, 1953	1.381	93.2		July 16, 1959	1.335	89
					Aug. 5, 1959	1.23	76.7
	Mar. 16, 1953	1.318	85.7	Aug. 9, 1959	1.24	78.2	
	Apr. 8, 1953	1.240	76.9	1960	Feb. 26, 1960	1.32	76
	Apr. 14, 1953	1.238	76.7		July 15, 1960	1.41	85
	Apr. 16, 1953	1.261	79.2		July 30, 1960	1.47	91
July 23, 1953	1.278	81.1	Sept.12, 1960		2.20	166	
1954	Dec. 14, 1953	1.277	81.0	1961	Mar. 10, 1961	1.44	89
	Aug. 31, 1954	1.256	78.7	Mar. 14, 1961	1.30	76	
	Sept. 7, 1954	1.223	75.0	July 21, 1961	1.83	129	

3090. Santapogue River at Lindenhurst, N. Y.

Location.--Lat 40°41'30", long 73°21'20", on left bank just upstream from East Hoffman Avenue Bridge, 1 mile east of Long Island Railroad station in Lindenhurst, Suffolk County, and 1½ miles upstream from mouth.

Drainage area.--About 7 sq mi.

Gage.--Recording and concrete control. Datum of gage is 9.71 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 20 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)	
1947	July 15, 1947	1.024	21.3	1953	Mar. 13, 1953	0.724	22.5	
1948	July 14, 1948	1.152	22.6	1954	Mar. 16, 1953	.701	20.9	
					Apr. 8, 1953	.690	20.1	
1949	Jan. 6, 1949	.767	17.0		Apr. 14, 1953	.695	20.4	
1950	Aug. 20, 1950	.626	13.7		Apr. 17, 1953	.720	22.2	
					Apr. 19, 1953	.698	20.7	
1951	Apr. 3, 1951	.638	14.3	Dec. 14, 1953	.691	22.2		
1952	Aug. 10, 1952	.723	20.2		Aug. 31, 1954	.682	20.1	
					Sept. 11, 1954	.911	42.2	

Peak stages and discharges of Santapogue River at Lindenhurst, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Aug. 13, 1955	0.916	36.1	1960	Feb. 26, 1960	0.67	20
					July 30, 1960	.67	20
1956	Nov. 4, 1955	.761	23.2		Sept. 13, 1960	.91	41
1957	Apr. 16, 1957	.716	19.2	1961	Dec. 15, 1960	.77	25
					Dec. 21, 1960	.72	21
1958	Jan. 15, 1958	.727	20.0		Jan. 1, 1961	.73	22
	Feb. 28, 1958	.725	20.6		Mar. 9, 1961	.71	20
	Apr. 7, 1958	.739	21.6		Mar. 14, 1961	.72	21
					July 20, 1961	.85	32
1959	July 11, 1959	.72	20.5		Aug. 3, 1961	.74	23

3095. Massapequa Creek at Massapequa, N. Y.
(Published as "Massatayun Creek at Massapequa" prior to 1942)

Location.--Lat 40°41'20", long 73°27'20", on left bank 350 ft west of Garfield Street at Lake Shore Drive, Massapequa, Nassau County, a quarter of a mile north of Massapequa Park, and 3,000 ft upstream from Clarke Avenue Bridge and head of Massapequa Pond of Brooklyn water-supply system.

Drainage area.--About 38 sq mi.

Gage.--Recording and concrete control. Prior to March 1961, at datum 1.0 ft higher. Datum of gage is 18.31 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 180 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 110 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Sept. 13, 1937	1.09	53	1951	Mar. 31, 1951	0.931	37.9
1938	Sept. 21, 1938	1.37	90	1952	June 1, 1952	1.612	136
1939	Apr. 7, 1939	1.138	58.6	1953	Mar. 13, 1953	1.261	78.5
1940	Mar. 5, 1940	1.125	58.0	1954	Sept. 11, 1954	1.276	81.1
1941	Feb. 8, 1941	1.364	90	1955	Aug. 12, 1955	1.833	180
1942	July 27, 1942	.949	37.7	1956	Nov. 4, 1955	1.222	73.5
1943	Sept. 15, 1943	1.238	71.6	1957	Oct. 7, 1956	1.17	66.7
1944	Jan. 7, 1944	1.616	151	1958	Feb. 28, 1958	1.44	106
	Feb. 15, 1944	1.559	138		Apr. 6, 1958	1.395	98.6
1945	Feb. 23, 1945	.952	38.8		July 27, 1958	1.255	78.1
1946	Aug. 7, 1946	1.203	74.3	1959	June 28, 1959	1.545	124
1947	July 15, 1947	1.037	50.8		July 11, 1959	1.51	118
					July 15, 1959	1.59	132
1948	July 14, 1948	1.158	67.7		Aug. 9, 1959	1.555	126
1949	May 3, 1949	1.025	49.3	1961a	Mar. 14, 1961	1.59	112
					Apr. 16, 1961	1.62	120
1950	Aug. 20, 1950	.912	35.6		July 20, 1961	2.28	387
					July 31, 1961	1.92	218
					Aug. 3, 1961	1.97	230

a Partial year; March to September.

3100. Wantagh Stream at Bellmore, N. Y.
(Published as "at Wantagh" prior to 1958)

Location.--Lat 40°40'43", long 73°30'58", on right bank, 40 ft east of intersection of Valentine Place and Mill Road, in Bellmore, half a mile north of Sunrise Highway, and half a mile northwest of Wantagh, Nassau County.

Drainage area.--About 17 sq mi.

Gage.--Gage 1: Recording, and since Aug 2, 1958, auxiliary recording gage on right bank 500 ft upstream. Datum of gage is 15.00 ft above mean sea level, datum of 1912.

Gage 2: Recording and concrete control on right bank of secondary channel about 1,000 ft east of gage 1 at datum 16.88 ft above mean sea level, adjustment of 1912 (used as base gage Sept. 23, 1937, to Aug. 1, 1958).

Stage-discharge relation.--Gage 1: Defined by current-meter measurements below 67 cfs and extended above by logarithmic plotting.

Gage 2: Defined by current-meter measurements below 150 cfs and extended above by logarithmic plotting.

Remarks.--Prior to Nov. 4, 1955, flow at all stages regulated intermittently at outlet of Wantagh Reservoir, one mile above station, and prior to November 1953 by Browning Pond, half a mile above station. Subsequent to Nov. 3, 1955, permanent diversion of a substantial portion of the flow through west branch of Wantagh Stream. Base for partial-duration series, 122 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Sept. 21, 1938	1.29	74	1951	July 18, 1951	1.102	53.1
1939	Aug. 20, 1939	1.165	58.0	1952	June 1, 1952	2.566	340
1940	Mar. 4, 1940	1.634	125	1953	Mar. 13, 1953	1.927	180
1941	Feb. 8, 1941	1.778	154		Mar. 25, 1953	1.725	142
1942	July 27, 1942	1.021	42.0		July 23, 1953	1.903	175
1943	Sept. 15, 1943	1.067	46.9	1954	Dec. 14, 1953	1.79	152
1944	Jan. 4, 1944	1.85	a176		Sept. 11, 1954	2.002	194
	Jan. 6, 1944	2.06	a222	1955	June 21, 1955	1.69	134
	Feb. 15, 1944	1.98	a217		Aug. 12, 1955	1.875	168
1945	Feb. 23, 1945	1.467	97.3	1956	Oct. 15, 1955	1.76	147
1946	Aug. 7, 1946	1.447	94.5		July 21, 1956	1.72	b140
1947	Apr. 5, 1947	-	44.5	1957	Apr. 2, 1957	1.64	b126
	Sept. 3, 1947	1.050	-	1958	July 27, 1958	1.618	b122
1948	July 13, 1948	1.349	83.6	1959	Aug. 9, 1959	-	c118
1949	Nov. 10, 1948	1.205	65.0	1960	Sept. 12, 1960	-	c162
1950	June 10, 1950	1.060	48	1961	July 20, 1961	-	c86

a Includes flow by passing station.

b Does not include flow diverted past gage No. 1.

c Maximum daily discharge for combined flow in both channels.

3105. East Meadow Brook at Freeport, N. Y.

Location.--Lat 40°39'55", long 73°43'10", on left bank in Freeport, Nassau County, 50 ft upstream from bridge on Hempstead-Babylon Turnpike, and 300 ft west of Meadowbrook Parkway.

Drainage area.--About 31 sq mi.

Gage.--Recording and concrete control in 2 sections. Datum of gage is 10.92 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 280 cfs and extended above on basis of flow-through-culvert and contracted-opening measurement at 835 cfs.

Remarks.--Submergence by Freeport Pond at most high flows prior to 1961. Base for partial-duration series, 170 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Sept. 14, 1937	0.84	56	1954	Dec. 14, 1953	1.595	178
1938	Sept. 21, 1938	1.76	149		Aug. 9, 1954	1.788	204
1939	Feb. 4, 1939	1.12	90.8		Sept. 11, 1954	3.08	270
1940	Mar. 4, 1940	1.525	130	1955	Nov. 3, 1954	1.836	204
1941	Feb. 8, 1941	3.15	(a)		Feb. 7, 1955	1.566	170
1942	July 27, 1942	1.422	121		Aug. 12, 1955	3.646	353
1943	Mar. 16, 1943	1.011	77.8		Aug. 13, 1955	3.658	355
1944	Jan. 4, 1944	1.535	173	1956	Oct. 15, 1955	3.290	185
	Jan. 6, 1944	1.948	251	1957	Apr. 5, 1957	2.916	170
	Feb. 15, 1944	2.192	297	1958	Feb. 28, 1958	3.245	172
	Sept. 15, 1944	2.144	288		Apr. 6, 1958	3.245	172
1945	Feb. 23, 1945	.944	74.3		May 25, 1958	3.10	169
1946	June 2, 1946	1.286	129	1959	July 11, 1959	1.735	193
1947	Apr. 5, 1947	1.163	105		Aug. 9, 1959	2.615	250
1948	July 14, 1948	1.629	190	1960	Oct. 24, 1959	1.82	254
1949	May 3, 1949	1.343	134		Dec. 7, 1959	1.59	210
1950	Aug. 20, 1950	1.604	170		Feb. 19, 1960	1.88	266
1951	May 24, 1951	1.341	100		Feb. 26, 1960	1.62	216
1952	June 5, 1952	2.031	224		July 4, 1960	1.65	222
1953	Mar. 13, 1953	2.147	232		July 14, 1960	2.17	324
	July 23, 1953	2.191	234		July 30, 1960	2.21	332
					Aug. 19, 1960	2.02	294
					Sept. 12, 1960	4.38	835
				1961	Jan. 1, 1961	1.93	272
					Apr. 13, 1961	2.10	308
					July 20, 1961	2.35	353
					July 31, 1961	2.87	465
					Aug. 3, 1961	1.97	276

a Heavy submergence; discharge not determined.

3110. Pines Brook at Malverne, N. Y.

Location.--Lat 40°40'00", long 73°39'30", on left bank 100 ft downstream from Lakeview Avenue and south line of Malverne, Nassau County.

Drainage area.--About 10 sq mi.

Gage.--Recording and concrete control with V-notch weir. Datum of gage is 9.42 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 95 cfs and extended above on basis of flow-through-culvert measurement at 346 cfs.

Remarks.--Prior to Feb. 20, 1956, flow occasionally regulated by Pines Pond. Indeterminate diversion from Pines Pond for emergency municipal water supply for city of New York August 1953 to September 1954. Base for partial-duration series, 80 cfs.

Peak stages and discharges of Pines Brook at Malverne, N. Y.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	June 14, 1937	1.77	32.6	1954	Sept. 11, 1954	2.56	146
1938	Sept. 21, 1938	2.06	74	1955	Aug. 12, 1955	2.755	191
1939	Apr. 7, 1939	1.729	32.1		Aug. 13, 1955	2.359	107
1940	Sept. 25, 1940	1.597	22.3	1956	July 21, 1956	2.419	118
1941	Feb. 7, 1941	1.992	62.9	1957	Oct. 7, 1956	2.196	81.5
					Apr. 5, 1957	2.236	87.2
1942	Feb. 3, 1942	1.95	-	1958	Feb. 28, 1958	2.347	105
	July 18, 1942	1.587	21.7		May 25, 1958	2.404	115
					July 27, 1958	2.193	81.1
1943	Aug. 11, 1943	1.809	39.7	1959	Nov. 29, 1958	2.255	90.0
1944	Sept. 14, 1944	2.16	88.6		Jan. 2, 1959	2.315	99.5
1945	July 18, 1945	1.764	35.3		Mar. 6, 1959	2.355	106
1946	June 2, 1946	2.151	87.0		July 11, 1959	2.46	125
1947	Aug. 19, 1947	1.891	48.5		Aug. 9, 1959	2.43	120
1948	Nov. 12, 1947	1.886	47.9	1960	Dec. 7, 1959	2.28	94
	July 13, 1948	2.273	110		Feb. 19, 1960	2.57	148
1949	May 3, 1949	1.901	51.6		Feb. 26, 1960	2.68	173
1950	Aug. 20, 1950	1.955	57.8		July 3, 1960	2.44	122
1951	Mar. 30, 1951	1.862	47.9		July 14, 1960	2.68	172
1952	June 4, 1952	2.084	75.5		July 30, 1960	2.64	165
1953	July 23, 1953	2.217	84.5		Aug. 19, 1960	2.37	110
					Sept. 12, 1960	4.51	346
					Sept. 20, 1960	2.34	105
				1961	Nov. 1, 1960	2.50	133
					Jan. 1, 1961	2.58	150
					July 26, 1961	2.62	158
					July 31, 1961	3.06	244
					Sept. 15, 1961	2.52	137

3115. Valley Stream at Valley Stream, N. Y.
(Published as "Watts Creek at Valley Stream" prior to 1957)

Location.--Lat 40°39'50", long 73°42'15", on right bank 40 ft upstream from West Valley Stream Boulevard, at Valley Stream, Nassau County.

Drainage area.--About 4.5 sq mi.

Gage.--Recording and concrete control. Datum of gage is 8.53 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 90 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Aug. 31, 1954	2.927	104	1958	May 25, 1958	2.685	96.1
	Sept. 11, 1954	4.52	155		Aug. 25, 1958	2.785	98.6
1955	Nov. 2, 1954	2.821	100	1959	Oct. 23, 1958	2.85	101
	Nov. 20, 1954	2.526	90		Aug. 9, 1959	1.87	129
	Aug. 12, 1955	5.134	174	1960	Feb. 19, 1960	2.83	106
	Aug. 13, 1955	4.07	140		July 30, 1960	4.45	199
1956	July 21, 1956	2.456	88.2		Aug. 19, 1960	3.21	159
1957	Oct. 31, 1956	3.045	108		Sept. 12, 1960	5.50	232
	Apr. 2, 1957	1.56	95.5		Sept. 20, 1960	1.97	110
	Apr. 5, 1957	1.64	104	1961	Nov. 1, 1960	2.04	112
1958	Dec. 21, 1957	2.53	92.2		Jan. 1, 1961	2.41	128
	Feb. 28, 1958	3.48	115		July 26, 1961	1.87	100
	Apr. 6, 1958	2.98	104		July 31, 1961	3.96	187
					Aug. 3, 1961	3.19	159

3120. Hudson River near Newcomb, N. Y.

Location.--Lat 43°58'00", long 74°07'55", on left bank 100 ft upstream from bridge on State Highway 28N, half a mile downstream from outlet of Harris Lake, 2 miles east of Newcomb, Essex County, and 4 miles upstream from Wolf Creek.

Drainage area.--192 sq mi.

Gage.--Nonrecording prior to Aug. 6, 1931, at site 125 ft downstream; recording thereafter. Datum of gage is 1,550.38 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 2,500 cfs. Only annual peaks are shown prior to 1932.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Apr. 26, 1926	7.1	4,660	1945	May 19, 1945	7.13	3,110
1927	Nov. 18, 1926	5.6	2,710	1946	Oct. 3, 1945	9.33	5,110
1928	Apr. 9, 1928	8.0	6,250	1947	Apr. 13, 1947	7.63	3,450
1929	Apr. 8, 1929	6.45	3,740		May 3, 1947	7.78	3,580
1930	Apr. 14, 1930	5.55	2,740		May 7, 1947	7.41	3,250
1931	Apr. 12, 1931	5.3	2,470		May 23, 1947	9.85	5,680
1932	May 3, 1932	5.93	2,140		June 4, 1947	8.43	4,210
1933	Oct. 7, 1932	9.90	5,690	1948	Mar. 24, 1948	6.75	2,680
	Apr. 19, 1933	9.94	5,730		Mar. 29, 1948	7.28	3,130
	May 4, 1933	6.87	2,810		Apr. 3, 1948	7.67	3,480
1934	Apr. 12, 1934	6.32	2,370	1949	Jan. 1, 1949	11.40	7,440
1935	May 1, 1935	6.52	2,530		Mar. 29, 1949	6.98	2,860
1936	Mar. 20, 1936	9.69	5,760	1950	Apr. 21, 1950	7.03	2,910
1937	May 16, 1937	6.46	2,550	1951	Apr. 1, 1951	7.06	2,930
1938	Mar. 25, 1938	7.92	3,870		Apr. 14, 1951	7.34	3,190
	Sept. 22, 1938	8.98	4,970	1952	Apr. 21, 1952	7.81	3,610
1939	Apr. 28, 1939	8.35	4,300	1953	Dec. 13, 1952	7.67	3,480
1940	May 4, 1940	8.46	4,210		Mar. 28, 1953	9.56	5,360
1941	Apr. 16, 1941	8.04	3,830	1954	Apr. 18, 1954	9.09	4,870
1942	Apr. 9, 1942	7.12	3,400	1955	Apr. 17, 1955	7.96	3,740
	Apr. 18, 1942	7.41	3,370	1956	May 1, 1956	8.33	4,130
	Sept. 28, 1942	8.36	4,310	1957	Apr. 22, 1957	5.97	2,100
1943	Apr. 27, 1943	6.56	2,600	1958	Dec. 22, 1957	9.36	5,200
	May 9, 1943	7.35	3,320		Apr. 23, 1958	8.74	4,490
	May 13, 1943	8.22	4,170	1959	Apr. 20, 1959	-	a3,300
1944	Apr. 26, 1944	7.38	3,350	1960	Oct. 26, 1959	-	a3,500
	May 2, 1944	6.65	2,680		Apr. 19, 1960	-	a3,800
	May 6, 1944	6.94	2,940		Apr. 26, 1960	-	a3,500
1945	Mar. 22, 1945	6.89	2,890	1961	Apr. 24, 1961	6.17	2,420
	Mar. 30, 1945	7.74	3,690				

a Estimated.

3135. Cedar River below Chain Lakes, near Indian Lake, N. Y.

Location.--Lat 43°51'20", long 74°14'20", on left bank 1½ miles downstream from Rock River, 2 miles east of outlet of Chain Lakes, 3 miles upstream from mouth, and 5½ miles northeast of village of Indian Lake, Hamilton County.

Drainage area.--160 sq mi.

Gage.--Recording. Datum of gage is 1,540.00 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 3,300 cfs and extended above on basis of slope-area measurement at 10,200 cfs.

Remarks.--Base for partial-duration series, 2,400 cfs.

Peak stages and discharges of Cedar River below Chain Lakes, near Indian Lake, N. Y.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Apr. 14, 1931	7.80	2,510	1947	June 3, 1947	11.76	6,620
1932	May 2, 1932	8.07	2,790	1948	Mar. 23, 1948	9.17	3,870
1933	Oct. 7, 1932	11.80	6,050		Mar. 28, 1948	8.56	3,340
	Apr. 19, 1933	10.01	4,360		Apr. 2, 1948	8.78	3,520
1934	Apr. 18, 1934	7.13	2,160	1949	Dec. 31, 1948	12.37	7,370
1935	May 1, 1935	7.26	2,240		Mar. 28, 1949	8.17	3,030
1936	March 1936	10.35	4,660	1950	Apr. 20, 1950	10.69	-
1937	May 15, 1937	8.58	3,120	1951	Mar. 31, 1951	8.98	3,700
1938	Sept. 22, 1938	10.45	4,800		Apr. 13, 1951	8.79	3,530
1939	Apr. 27, 1939	9.36	3,890		Apr. 27, 1951	7.79	2,720
1940	May 2, 1940	10.45	3,500	1952	Apr. 6, 1951	8.22	3,070
1941	Apr. 16, 1941	8.84	3,470		Apr. 21, 1951	8.94	3,670
1942	May 24, 1942	8.02	2,910	1953	Dec. 12, 1952	10.47	5,170
	Sept. 28, 1942	14.40	10,200		Mar. 27, 1953	9.94	4,630
1943	Apr. 27, 1943	7.48	2,480	1954	Apr. 8, 1954	7.46	2,460
	May 9, 1943	8.82	3,560		Apr. 17, 1954	9.03	3,750
	May 13, 1943	8.59	3,360	1955	Apr. 12, 1955	7.97	2,870
1944	Apr. 25, 1944	7.56	2,540		Apr. 16, 1955	8.68	3,430
	May 1, 1944	8.09	2,970	1956	May 1, 1956	8.81	3,550
	June 24, 1944	10.14	4,830	1957	Jan. 23, 1957	6.15	-
1945	Mar. 30, 1945	7.48	2,480		May 20, 1957	6.01	1,490
	May 18, 1945	8.56	3,340	1958	Dec. 21, 1957	10.46	5,160
1946	Oct. 3, 1945	9.64	4,330		Apr. 22, 1958	10.06	4,750
	Mar. 9, 1946	7.42	2,430	1959	Apr. 20, 1959	7.83	2,750
1947	Apr. 13, 1947	9.16	3,860	1960	Nov. 28, 1959	7.75	2,690
	May 22, 1947	9.44	4,130		Apr. 18, 1960	9.29	3,980
					Apr. 25, 1960	8.34	3,160
				1961	Apr. 24, 1961	8.16	3,020

a Backwater from logs; discharge estimated.

b Backwater from logs; discharge probably exceeded 2300 cfs.

c Backwater from ice.

3140. Hudson River at Gooley, near Indian Lake, N. Y.

Location.--Lat 43°49'55", long 74°11'45", on right bank half a mile upstream from Gooley, Essex County, 1 mile upstream from Indian River, 1½ miles downstream from Cedar River, and 5 miles northeast of village of Indian Lake, Hamilton County.

Drainage area.--419 sq mi.

Gage.--Recording. Datum of gage is 1,433.02 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 9,000 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 5,800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1917	May 2, 1917	7.25	7,120	1918	Apr. 24, 1918	7.66	8,000
	May 25, 1917	7.70	8,090		May 3, 1918	7.31	7,240
	May 31, 1917	7.74	8,180		May 14, 1918	7.41	7,450
	June 12, 1917	9.87	13,500		May 19, 1918	8.08	8,960
1918	Apr. 3, 1918	6.60	5,820		June 10, 1918	7.55	7,760
	Apr. 19, 1918	7.68	8,050	1919	Apr. 12, 1919	8.70	10,400

Peak stages and discharges of Hudson River at Gooley, near Indian Lake, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1920	Apr. 22, 1920	7.88	8,500	1944	Apr. 27, 1944	7.11	6,950
	Apr. 26, 1920	6.80	5,820		May 2, 1944	6.90	6,530
	Apr. 30, 1920	7.66	7,560		June 25, 1944	7.21	7,160
	May 8, 1920	7.10	6,400	1945	Mar. 22, 1945	7.17	7,080
1921	Mar. 22, 1921	8.30	9,600		Mar. 30, 1945	7.00	6,730
1922	Apr. 12, 1922	10.00	13,900		May 18, 1945	7.05	6,830
	Apr. 26, 1922	7.48	7,730	1946	Oct. 3, 1945	8.41	9,860
1923	Apr. 23, 1923	7.05	6,830	1947	Apr. 13, 1947	7.50	7,770
	Apr. 29, 1923	7.85	8,540		May 3, 1947	6.94	6,610
	May 18, 1923	7.90	8,660		May 23, 1947	8.44	9,940
1924	May 2, 1924	-	(a)		June 3, 1947	9.32	12,100
	May 5, 1924	-	(a)	1948	Mar. 25, 1948	6.98	6,550
1925	Oct. 1, 1924	8.35	9,720		Mar. 28, 1948	7.17	6,930
	Mar. 29, 1925	7.50	7,770		Apr. 2, 1948	7.54	7,690
1926	Apr. 25, 1926	8.3	9,600	1949	Jan. 1, 1949	10.44	15,000
	May 3, 1926	7.73	8,280		Mar. 28, 1949	6.84	6,290
1927	Nov. 18, 1926	6.9	6,530	1950	Apr. 6, 1950	d7.61	-
1928	Nov. 18, 1927	7.13	6,990		Apr. 20, 1950	6.88	6,360
	Apr. 8, 1928	-	(b)	1951	Mar. 31, 1951	d10.03	-
1929	Mar. 25, 1929	-	c5,500		Apr. 1, 1951	7.19	e6,970
	Apr. 8, 1929	-	c7,500		Apr. 13, 1951	7.54	7,690
1930	Apr. 15, 1930	6.5	5,760	1952	Apr. 6, 1952	6.70	e6,020
1931	Apr. 14, 1931	6.48	5,720		Apr. 21, 1952	7.79	8,240
1932	May 2, 1932	6.38	5,530	1953	Dec. 12, 1952	7.70	8,040
1933	Oct. 7, 1932	9.22	11,900		Mar. 27, 1953	9.13	11,400
	Apr. 19, 1933	9.30	12,100	1954	Feb. 18, 1954	d11.20	-
1934	Apr. 12, 1934	6.10	5,030		Apr. 18, 1954	7.96	8,650
1935	May 1, 1935	6.40	5,700	1955	Apr. 17, 1955	7.66	8,010
1936	Mar. 20, 1936	9.36	12,200	1956	May 1, 1956	7.85	8,480
1937	Jan. 1, 1937	7.38	-	1957	Jan. 23, 1957	d6.72	-
	May 15, 1937	7.00	6,860		Apr. 23, 1957	5.36	3,780
1938	Mar. 24, 1938	7.64	8,080	1958	Dec. 22, 1957	8.59	10,100
	Sept. 22, 1938	8.46	9,980		Apr. 22, 1958	8.48	9,890
1939	Apr. 29, 1939	8.17	9,290		Apr. 8, 1959	d8.55	-
1940	May 3, 1939	7.96	8,800		Apr. 20, 1959	7.03	6,760
1941	Dec. 30, 1940	d8.82	-	1960	Oct. 26, 1959	7.17	7,040
	Apr. 16, 1941	7.78	8,390		Apr. 5, 1960	d8.80	-
1942	Apr. 8, 1942	7.23	7,200		Apr. 18, 1960	8.29	9,460
	Sept. 28, 1942	9.89	13,600	1961	Apr. 25, 1960	7.24	7,180
1943	May 9, 1943	7.64	8,080		Feb. 27, 1961	d6.87	-
	May 13, 1943	7.72	8,250		Apr. 24, 1961	6.80	6,320
1944	Apr. 11, 1944	d8.30	-				

a Not recorded, but estimated to be in excess of 8,000 cfs.

b Not recorded, but estimated to be in excess of 11,000 cfs.

c Maximum daily, estimated.

d Backwater from ice jam.

e Release from upstream ice jam.

3150. Indian River near Indian Lake, N. Y.

Location--Lat 43°45'30", long 74°16'05", on right bank three-quarters of a mile downstream from Indian Lake Dam, 1 mile upstream from Big Brook, and 2 miles south of village of Indian Lake, Hamilton County.

Drainage area--132 sq mi.

Gage--Nonrecording prior to Aug. 30, 1916; recording thereafter. Datum of gage is 1,604.27 ft above mean sea level, adjustment of 1912.

Stage-discharge relation--Defined by current-meter measurements.

Remarks--Flow almost completely regulated by Indian Lake (usable capacity, about 4,500,000,000 cu ft). Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1913	Mar. 28, 1913	7.8	3,460	1924	June 7, 1924	6.01	2,150
1917	June 19, 1917	6.38	2,410	1925	Apr. 26, 1925	4.23	1,140
1918	June 12, 1918	4.85	1,450	1926	Nov. 15, 1925	4.9	1,580
1919	May 5, 1919	5.88	2,060	1927	June 17, 1927	4.2	1,170
1920	May 27, 1920	4.92	1,500	1928	Jan. 22, 1928	4.25	1,160
				1929	May 3, 1929	5.5	1,940
1921	May 21, 1921	5.76	1,990	1930	July 5, 1930	3.7	895
1922	June 23, 1922	4.99	1,530				
1923	May 21, 1923	5.55	1,860	1931	Aug. 29, 1931	3.90	1,050

Peak stages and discharges of Indian River near Indian Lake, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	May 6, 1932	4.34	1,300	1947	June 4, 1947	6.05	2,180
1933	Nov. 20, 1932	4.87	1,580	1948	May 15, 1948	3.93	982
1934	May 26, 1934	4.30	1,240	1949	May 11, 1949	3.61	826
1935	Sept. 1, 1935	4.03	1,090	1950	May 1, 1950	3.99	1,010
1936	May 4, 1936	4.26	1,220	1951	Apr. 27, 1951	4.59	1,310
1937	May 16, 1937	4.40	1,300	1952	Apr. 21, 1952	6.42	2,440
1938	May 21, 1938	3.56	849	1953	May 4, 1953	4.45	1,240
1939	May 8, 1939	3.85	990	1954	Apr. 23, 1954	4.20	980
1940	Aug. 24, 1940	4.04	1,080	1955	June 2, 1955	4.00	1,010
1941	Jan. 25, 1941	3.36	749	1956	Aug. 7, 1956	3.49	781
1942	June 16, 1942	4.17	1,150	1957	Dec. 28, 1956	3.13	631
1943	May 13, 1943	7.05	2,880	1958	Jan. 9, 1958	3.47	772
1944	June 26, 1944	3.59	860	1959	July 5, 1959	3.35	741
1945	May 19, 1945	4.18	1,160	1960	Apr. 27, 1960	4.18	1,110
1946	Dec. 15, 1945	4.38	1,200	1961	Aug. 3, 1961	3.13	650

3155. Hudson River at North Creek, N. Y.

Location.--Lat 43°42'00", long 73°59'00", on left bank 125 ft upstream from bridge on State Highway 28N in village of North Creek, Warren County, 500 ft upstream from North Creek.

Drainage area.--792 sq mi.

Gage.--Nonrecording prior to Oct. 15, 1930, at sites 80 ft and 125 ft downstream; recording thereafter. Datum of gage is 987.51 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Appreciable regulation by Indian Lake and other smaller lakes. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1908	Apr. 28, 1908	8.80	15,000	1935	May 1, 1935	-	7,390
1909	May 12, 1909	9.1	16,100	1936	Mar. 19, 1936	a12.10	23,000
1910	Mar. 31, 1910	7.5	10,700	1937	May 16, 1937	8.17	11,900
1911	May 2, 1911	8.1	12,600	1938	Sept. 22, 1938	9.42	16,700
1912	Apr. 17, 1912	8.2	12,900	1939	Apr. 29, 1939	8.65	13,500
1913	Mar. 27, 1913	11.7	28,400	1940	May 3, 1940	8.73	13,000
1914	Apr. 20, 1914	9.75	18,900	1941	Apr. 16, 1941	8.57	12,400
1915	July 11, 1915	6.9	8,810	1942	Sept. 28, 1942	10.13	18,600
1916	May 18, 1916	8.6	14,100	1943	May 13, 1943	8.60	12,500
1917	June 12, 1917	10.6	21,700	1944	June 25, 1944	8.51	11,800
1918	Apr. 3, 1918	7.65	11,100	1945	May 18, 1945	9.40	15,300
1919	Apr. 12, 1919	8.5	13,800	1946	Oct. 3, 1945	8.95	13,100
1920	Apr. 24, 1920	7.52	10,700	1947	June 3, 1947	11.37	23,600
1921	Mar. 21, 1921	8.20	12,800	1948	Mar. 22, 1948	8.60	12,200
1922	Apr. 12, 1922	10.5	21,300	1949	Dec. 31, 1948	12.14	28,900
1923	May 18, 1923	7.50	10,400	1950	Apr. 20, 1950	8.50	11,800
1924	May 7, 1924	8.0	12,000	1951	Mar. 31, 1951	8.72	12,600
1925	Mar. 28, 1925	8.65	14,200	1952	Apr. 20, 1952	8.07	14,000
1926	Apr. 25, 1926	9.2	17,200	1953	Mar. 27, 1953	10.69	21,200
1927	Nov. 18, 1926	7.2	9,990	1954	Apr. 17, 1954	9.25	15,200
1928	Apr. 8, 1928	9.8	18,900	1955	Apr. 16, 1955	8.42	12,000
1929	Apr. 8, 1929	7.4	10,400	1956	May 1, 1956	8.33	11,700
1930	Apr. 8, 1930	6.9	9,390	1957	Apr. 22, 1957	6.12	5,180
1931	Apr. 11, 1931	7.50	10,000	1958	Apr. 22, 1958	9.72	16,100
1932	May 2, 1932	7.04	7,810	1959	Apr. 4, 1959	a8.51	-
1933	Oct. 7, 1932	10.70	20,300	1960	Apr. 20, 1959	-	9,900
1934	Apr. 2, 1934	a10.00	-	1961	Apr. 18, 1960	9.14	14,100
1935	Apr. 18, 1934	-	7,960				
	Jan. 10, 1935	a8.00	-				

a Backwater from ice.

3160. North Creek at North Creek, N. Y.

Location.--Lat 43°41'50", long 73°59'05", on left bank, just downstream from abandoned dam in village of North Creek, Warren County, 1,000 ft upstream from mouth.

Drainage area.--21.8 sq mi.

Gage.--Nonrecording. Altitude of gage is 980 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 235 cfs and extended above by logarithmic plotting. Peak stages are frequently affected by backwater from Hudson River.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1925	Mar. 28, 1925	5.1	655	1929	Mar. 16, 1929	4.3	727
1926	Apr. 25, 1926	5.5	715	1930	Apr. 7, 1930	5.55	1,690
1927	Mar. 18, 1927	3.65	430	1931	Apr. 11, 1931	3.7	445
1928	Apr. 5, 1928	4.5	910	1932	Apr. 22, 1932	-	360

3170. Schroon River at Riverbank, N. Y.

Location.--Lat 43°36'40", long 73°44'10", on right bank 30 ft upstream from highway bridge at Riverbank, Warren County, three-quarters of a mile upstream from Alder Brook, 4 miles south of Horicon, and 9 miles downstream from Schroon Lake.

Drainage area.--527 sq mi.

Gage.--Nonrecording prior to Oct. 3, 1925; recording thereafter. Datum of gage is 699.31 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Regulation by Schroon Lake and other lakes. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1908	Apr. 12, 1908	6.40	4,600	1931	Apr. 15, 1931	6.21	3,570
1909	Apr. 16, 1909	8.67	8,250	1932	Apr. 14, 1932	7.57	5,080
1910	Apr. 1, 1910	7.25	5,880	1933	Apr. 20, 1933	9.74	7,610
				1934	Apr. 14, 1934	7.70	5,040
1911	Apr. 17, 1911	5.50	3,400	1935	May 2, 1935	5.27	2,480
	May 3, 1911	-	-	1936	Mar. 21, 1936	12.18	12,100
1912	Apr. 19, 1912	7.40	6,120	1937	May 18, 1937	7.11	4,590
1913	Mar. 28, 1913	10.70	10,400	1938	Mar. 26, 1938	7.50	4,590
1914	Mar. 22, 1914	9.25	7,500	1939	Apr. 28, 1939	9.16	7,150
1915	Apr. 15, 1915	4.7	2,260	1940	May 4, 1940	7.96	4,950
1916	May 19, 1916	6.02	3,600	1941	Apr. 17, 1941	6.65	3,570
1917	Apr. 5, 1917	6.50	4,630	1942	Apr. 9, 1942	6.90	3,820
1918	Apr. 4, 1918	7.25	5,820	1943	May 1, 1943	6.68	3,600
1919	Apr. 13, 1919	6.7	4,600	1944	Apr. 27, 1944	8.29	5,330
1920	Apr. 16, 1920	6.25	4,240	1945	Mar. 23, 1945	8.06	5,060
1921	Mar. 23, 1921	7.18	5,720	1946	Mar. 18, 1946	6.57	3,570
1922	Apr. 13, 1922	10.23	9,740	1947	June 4, 1947	9.16	6,570
1923	Apr. 12, 1923	6.70	4,670	1948	Apr. 3, 1948	8.33	5,540
1924	May 5, 1924	7.11	5,200	1949	Jan. 2, 1949	9.25	6,680
1925	Mar. 30, 1925	9.3	8,350	1950	Apr. 22, 1950	7.61	4,670
1926	Apr. 26, 1926	9.6	7,720	1951	Apr. 14, 1951	8.57	5,820
1927	Mar. 22, 1927	5.6	3,000	1952	Apr. 8, 1952	8.95	6,360
1928	Apr. 9, 1928	8.2	5,840	1953	Mar. 28, 1953	10.41	8,330
1929	Mar. 26, 1929	6.63	4,030	1954	Apr. 19, 1954	8.27	5,500
1930	Apr. 9, 1930	6.8	4,220	1955	Apr. 17, 1955	8.36	5,610

Peak stages and discharges of Schroon River at Riverbank, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	May 2, 1956	6.63	3,640	1959	Apr. 11, 1959	8.00	5,180
1957	Jan. 3, 1957	4.31	-	1960	Apr. 19, 1960	7.98	5,160
	Apr. 9, 1957	-	1,390				
1958	Apr. 23, 1958	9.30	6,820	1961	Apr. 25, 1961	5.60	2,670

a Backwater from ice.

3180. Hudson River at Thurman, N. Y.

Location.--Lat 43°28'50", long 73°44'15", at upstream side near center of left span of Delaware & Hudson Railroad bridge near Thurman railroad station, Warren County, half a mile downstream from Schroon River, and 13 miles upstream from Sacandaga River.

Drainage area.--1,533 sq mi.

Gage.--Nonrecording. Altitude of gage is 610 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 17,300 cfs and extended above by logarithmic plotting.

Remarks.--Flow partly regulated by Indian Lake, Schroon Lake, and other lakes. Gage-height record 1914-20 furnished by the International Paper Co. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1908	Jan. 11, 1908	8.38	-	1914	Apr. 20, 1914	9.93	27,200
	Apr. 27, 1908	-	17,000	1915	Apr. 12, 1915	6.40	11,400
1909	Apr. 15, 1909	8.46	20,900				
1910	Mar. 31, 1910	7.7	17,400	1916	May 18, 1916	7.77	16,900
				1917	June 12, 1917	9.45	24,800
1911	May 2, 1911	7.5	16,600	1918	Apr. 23, 1918	7.28	14,800
1912	Apr. 18, 1912	8.0	18,600	1919	Apr. 12, 1919	8.25	18,600
1913	Mar. 27, 1913	12.5	46,000	1920	Apr. 22, 1920	7.28	14,800

a Backwater from ice.

3185. Hudson River at Hadley, N. Y.

Location.--Lat 43°19'10", long 73°50'40", on right bank at Hadley, Saratoga County, 400 ft downstream from outlet of Lake Luzerne, and a quarter of a mile upstream from Sacandaga River.

Drainage area.--1,664 sq mi.

Gage.--Recording. Datum of gage is 563.99 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Flow partly regulated by Indian Lake, Schroon Lake, and other lakes. Base for partial-duration series, 15,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	Apr. 12, 1922	19.71	33,100	1924	Apr. 19, 1924	12.02	16,800
	June 23, 1922	11.26	15,200		May 2, 1924	12.98	18,900
					May 4, 1924	13.25	19,500
1923	Apr. 9, 1923	12.91	18,700				
	Apr. 23, 1923	11.44	15,600	1925	Oct. 2, 1924	11.66	16,100
	Apr. 30, 1923	11.42	15,600		Mar. 29, 1925	15.30	23,800

Peak stages and discharges of Hudson River at Hadley, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Apr. 25, 1926	16.4	26,100	1946	Oct. 3, 1945	10.78	17,300
	May 4, 1926	11.90	16,300		Mar. 19, 1946	10.33	16,200
1927	Nov. 18, 1926	9.1	11,000				
	Mar. 19, 1927	a10.7	-	1947	Apr. 13, 1947	12.63	21,700
1928	Dec. 8, 1927	b12.12	16,000		May 6, 1947	10.71	17,100
	Apr. 9, 1928	15.4	23,800		May 23, 1947	10.26	16,000
1929	Mar. 26, 1929	12.0	16,500		June 4, 1947	17.32	33,000
1930	Apr. 8, 1930	12.1	16,700	1948	Mar. 23, 1948	a11.98	-
1931	Apr. 12, 1931	11.10	14,700		Mar. 28, 1948	11.82	19,800
1932	Apr. 12, 1932	11.68	15,900		Apr. 3, 1948	11.51	19,000
1933	Oct. 7, 1932	15.15	23,300	1949	Jan. 1, 1949	21.21	42,700
	Apr. 19, 1933	17.23	28,100	1950	Apr. 21, 1950	11.38	18,700
1934	Apr. 18, 1934	11.09	14,700	1951	Mar. 31, 1951	12.54	21,500
1935	July 9, 1935	8.49	11,300		Apr. 13, 1951	12.45	21,300
1936	Mar. 18, 1936	19.59	41,200	1952	Apr. 6, 1952	13.29	23,300
1937	May 16, 1937	10.41	16,700		Apr. 21, 1952	12.32	21,000
1938	Mar. 24, 1938	11.74	20,000	1953	Dec. 12, 1952	12.79	22,100
	Sept. 22, 1938	12.96	23,200		Mar. 28, 1953	16.68	31,400
1939	Apr. 28, 1939	12.68	22,500	1954	Apr. 18, 1954	12.58	21,600
1940	May 3, 1940	12.45	21,900	1955	Apr. 16, 1955	11.76	19,600
1941	Apr. 16, 1941	10.88	17,900	1956	May 1, 1956	10.67	17,000
1942	Apr. 8, 1942	10.43	16,800	1957	May 21, 1957	6.75	7,900
	Sept. 28, 1942	11.90	20,400	1958	Dec. 21, 1957	12.06	20,300
1943	May 14, 1943	10.90	18,000		Apr. 22, 1958	14.47	26,100
1944	Apr. 26, 1944	11.70	19,600	1959	Apr. 9, 1959	9.97	15,300
	June 24, 1944	11.26	18,400		Apr. 20, 1959	10.00	15,400
1945	Mar. 22, 1945	12.03	20,400	1960	Oct. 25, 1959	10.80	17,300
	Mar. 30, 1945	9.93	15,200		Nov. 28, 1959	11.10	18,000
	May 19, 1945	11.73	19,600		Apr. 5, 1960	12.89	22,300
					Apr. 18, 1960	12.35	21,000
					Apr. 25, 1960	10.53	16,700
				1961	Apr. 24, 1961	9.51	14,300

a Backwater from ice.

b Backwater from flashboards on dam.

3190. East Branch Sacandaga River at Griffin, N. Y.

Location.--Lat 43°28'25", long 74°28'25", on left bank 300 ft upstream from highway bridge at Griffin, Hamilton County, 2 miles downstream from Georgia Creek, 3 miles upstream from mouth, and 7 miles upstream from Wells.

Drainage area.--114 sq mi.

Gage.--Nonrecording prior to June 19, 1959; recording thereafter. Datum of gage is 1,254.32 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 4,400 cfs and extended above on basis of slope-area and contracted-opening measurements at 10,700 cfs.

Remarks.--Base for partial-duration series, 2,700 cfs. Only annual peaks are shown prior to 1951.

Peak stages and discharges of East Branch Sacandaga River at Griffin, N. Y.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1934	Apr. 17, 1934	8.2	2,620	1953	Dec. 11, 1952	12.50	7,960
1935	July 9, 1935	9.2	3,800		Mar. 24, 1953	10.85	5,800
					Mar. 27, 1953	10.07	4,870
1936	Mar. 18, 1936	12.6	8,100				
1937	May 15, 1937	8.6	3,330	1954	Apr. 17, 1954	10.02	4,810
1938	Sept. 21, 1938	11.1	6,400				
1939	Apr. 25, 1939	8.35	3,080	1955	Apr. 15, 1955	8.15	2,880
1940	May 2, 1940	8.40	3,130				
				1956	Oct. 31, 1955	10.05	4,840
1941	Apr. 14, 1941	7.85	2,620		Apr. 29, 1956	9.12	3,830
1942	June 14, 1942	11.5	7,000				
1943	Apr. 26, 1943	7.92	2,710	1957	Jan. 23, 1957	a7.70	-
1944	June 24, 1944	10.50	5,550		May 20, 1957	6.95	1,900
1945	July 20, 1945	9.4	4,190				
				1958	Dec. 21, 1957	11.17	6,190
1946	Oct. 2, 1945	10.12	5,060		Apr. 22, 1958	8.54	3,250
1947	June 3, 1947	11.97	7,750				
1948	Mar. 22, 1948	11.1	6,100	1959	Apr. 3, 1959	a7.46	2,290
1949	Dec. 31, 1948	14.35	10,700				
1950	Apr. 20, 1950	8.96	3,670	1960	Oct. 25, 1959	9.69	4,450
					Nov. 28, 1959	11.02	6,000
1951	Nov. 26, 1950	8.94	3,650		Apr. 4, 1960	8.22	2,950
	Mar. 31, 1951	10.27	5,100		Apr. 15, 1960	8.57	3,280
	Apr. 13, 1951	9.23	3,940				
1952	Apr. 6, 1952	10.10	4,900	1961	Apr. 23, 1961	8.16	2,890
	Apr. 20, 1952	8.15	2,880				

a Backwater from ice jam.

3205. West Branch Sacandaga River at Blackbridge, near Wells, N. Y.

Location.--Lat 43°22'10", long 74°19'30", on upstream side of highway bridge known as Blackbridge, about 3 miles west of Wells, and 2 miles upstream from mouth.

Drainage area.--210 sq mi.

Gage.--Nonrecording. Altitude of gage is 1,000 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,650 cfs and extended above by logarithmic plotting.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1911	Apr. 28, 1911	7.55	3,180	1915	Aug. 22, 1915	8.50	4,530
1912	May 6, 1912	8.20	4,080				
1913	Mar. 27, 1913	13.0	14,500	1916	May 17, 1916	8.00	3,800
1914	Apr. 20, 1914	9.20	5,670				

3210. Sacandaga River near Hope, N. Y.

Location.--Lat 43°21'10", long 74°16'15", on left bank $1\frac{1}{2}$ miles downstream from West Branch Sacandaga River and $4\frac{1}{2}$ miles upstream from Hope, Hamilton County.

Drainage area.--491 sq mi.

Gage.--Nonrecording prior to July 24, 1929, at site 300 ft upstream; recording thereafter. Datum of gage is 881.31 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 15,000 cfs, and extended above on basis of slope-area measurement.

Remarks.--Base for partial-duration series, 9,100 cfs. Only annual peaks are shown prior to 1930.

Peak stages and discharges of Sacandaga River near Hope, N. Y.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Apr. 23, 1912	7.40	11,000	1944	Mar. 25, 1944	a7.68	-
1913	Mar. 27, 1913	11.0	32,000		Apr. 25, 1944	6.77	10,200
1914	Apr. 20, 1914	8.6	16,500		June 24, 1944	6.71	9,930
1915	Apr. 12, 1915	7.5	11,400	1945	Mar. 18, 1945	6.70	9,890
1916	May 17, 1916	8.50	16,000		Mar. 22, 1945	7.12	11,600
1917	June 11, 1917	9.0	18,600		July 20, 1945	8.84	20,000
1918	Oct. 30, 1917	6.7	8,490	1946	Oct. 2, 1945	8.24	16,700
1919	Apr. 12, 1919	7.2	10,300		Mar. 8, 1946	a10.28	-
1920	Mar. 16, 1920	a6.90	-		Mar. 9, 1946	6.82	10,200
	Apr. 22, 1920	-	7,230	1947	Apr. 12, 1947	7.52	13,100
1921	July 11, 1921	9.30	20,400		June 3, 1947	8.21	16,600
1922	Apr. 12, 1922	9.3	20,400	1948	Mar. 20, 1948	6.84	10,300
1923	Apr. 6, 1923	7.21	10,300		Mar. 22, 1948	8.24	16,700
1924	Apr. 19, 1924	7.40	11,000		Mar. 27, 1948	7.82	14,600
1925	Mar. 28, 1925	7.75	12,500		Apr. 1, 1948	7.21	11,700
1926	Apr. 25, 1926	9.0	18,600	1949	Dec. 31, 1948	10.55	31,400
1927	Nov. 17, 1926	7.0	9,320	1950	Apr. 5, 1950	6.75	9,910
1928	Apr. 7, 1928	8.2	14,400		Apr. 20, 1950	7.04	11,100
1929	Mar. 24, 1929	7.6	11,700	1951	Mar. 31, 1951	8.48	17,600
1930	Jan. 9, 1930	7.2	11,800		Apr. 13, 1951	7.53	12,800
1931	Apr. 11, 1931	6.35	8,640	1952	Apr. 6, 1952	8.21	16,200
1932	Apr. 22, 1932	6.20	7,790	1953	Dec. 11, 1952	9.36	22,900
1933	Oct. 6, 1932	8.22	16,500		Mar. 24, 1953	8.73	19,100
	Nov. 19, 1932	6.79	10,000		Mar. 27, 1953	8.16	15,900
	Apr. 18, 1933	7.68	13,900	1954	Feb. 17, 1954	a8.04	-
1934	Apr. 17, 1934	6.95	10,600		Feb. 17, 1954	6.84	9,850
1935	Jan. 9, 1935	a8.10	-		Apr. 17, 1954	7.50	12,600
	July 9, 1935	6.93	11,200	1955	Mar. 1, 1955	a13.32	-
1936	Mar. 12, 1936	a10.08	-		Apr. 11, 1955	6.58	9,240
	Mar. 12, 1936	6.68	10,200		Apr. 15, 1955	6.97	10,700
	Mar. 18, 1936	9.40	23,900	1956	Oct. 16, 1955	6.93	10,500
	Mar. 27, 1936	7.23	12,400		Oct. 31, 1955	6.95	10,600
	Apr. 6, 1936	7.18	12,200		Apr. 30, 1956	7.78	14,200
1937	May 15, 1937	6.41	9,180	1957	Jan. 23, 1957	a8.15	-
1938	May 24, 1938	8.13	16,600		Jan. 23, 1957	6.15	7,820
	Sept. 22, 1938	8.04	16,200	1958	Dec. 21, 1957	9.10	21,300
1939	Feb. 21, 1939	a7.46	-	1959	Jan. 22, 1959	a8.18	-
	Apr. 25, 1939	7.13	11,700		Jan. 22, 1959	6.61	9,340
1940	Apr. 1, 1940	a8.40	-	1960	Nov. 28, 1959	8.50	17,800
	May 2, 1940	6.83	10,600		Apr. 4, 1960	7.11	11,200
1941	Apr. 15, 1941	6.93	11,000		Apr. 15, 1960	6.84	10,200
1942	Dec. 24, 1941	6.51	9,440	1961	Feb. 25, 1961	a8.28	-
	June 14, 1942	7.74	14,500		Apr. 23, 1961	6.85	10,200
	Sept. 27, 1942	7.03	11,400				
1943	Feb. 25, 1943	a8.0	-				
	Apr. 28, 1943	6.85	10,500				

a Backwater from ice.

3230. Kenneyetto Creek near Broadalbin, N. Y.

Location.--Lat 43°03'57", long 74°09'48", at bridge on county highway, 1.8 mile east of Broadalbin, Fulton County.

Drainage area.--28.3 sq mi.

Gage.--Nonrecording and masonry weir at slightly different site and datum prior to 1960; crest-stage gage thereafter. Altitude of gage is 820 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Kenyetto Creek near Broadalbin, N. Y.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Apr. 8, 1940	a5.7	860	1945	Feb. 23, 1945	a4.0	-
1941	Dec. 28, 1940	a5.65	-		Mar. 22, 1945	3.65	780
	Dec. 29, 1940	-	1,000	1946	Mar. 9, 1946	a5.27	-
1942	Mar. 9, 1942	3.75	-		May 21, 1946	3.58	724
	Mar. 22, 1942	3.6	739	1960	Apr. 4, 1960	4.17	1,270
1943	Mar. 17, 1943	a4.6	-	1961	Feb. 26, 1961	3.91	1,010
	Apr. 28, 1943	3.4	590				
1944	Mar. 17, 1944	-	b450				

a Backwater from ice.

b Maximum daily.

3250. Sacandaga River at Stewarts Bridge, near Hadley, N. Y.
(Published as "near Hadley" 1907-10, "at Hadley" 1911-32, and
"at Conklingville" 1932-52)

Location.--Lat 43°18'40", long 73°52'00", on left bank 1 mile downstream from Stewarts Bridge, 1.1 miles west of Hadley, Saratoga County, 1.4 miles upstream from mouth, and 1.5 miles downstream from Stewarts Bridge hydro-electric plant.

Drainage area.--1,055 sq mi, 1,044 sq mi. at site used Oct. 1, 1932, to Sept. 30, 1951. Area of Sacandaga Reservoir filled to capacity, 41.7 sq mi.

Gage.--Nonrecording prior to Jan. 1, 1911, at site 1 mile upstream at different datum; recording thereafter. Jan. 1, 1911, to Sept. 30, 1932, at site 0.8 mile downstream at datum 8.82 ft lower. Oct. 1, 1932, to Sept. 30, 1951, at site 3.6 miles upstream at datum 85.47 ft higher. Datum of gage is 582.00 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements, except for site "at Hadley", at which the relation was defined by current-meter measurements below 20,000 cfs and extended above by logarithmic plotting.

Remarks.--Flow completely regulated by Sacandaga Reservoir since March 27, 1930; usable capacity for stream regulation, 29,670,000,000 cu ft. An additional 3,450,000,000 cu ft is available exclusively for flood storage. Since Oct. 1, 1932, discharge computed by Board of Hudson River-Black River Regulating District from rating developed by Geological Survey. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1908	Apr. 29, 1908	6.55	15,400	1936	Apr. 2, 1936	7.05	7,350
1909	Apr. 17, 1909	7.5	20,000	1937	May 16, 1937	7.20	7,800
1910	Apr. 2, 1910	6.55	15,400	1938	Sept. 23, 1938	6.12	5,040
1911	Apr. 17, 1911	7.6	9,060	1939	Mar. 19, 1939	6.48	5,830
1912	Apr. 9, 1912	9.05	14,800	1940	June 5, 1940	7.10	7,500
1913	Mar. 28, 1913	12.36	35,500	1941	Jan. 6, 1941	6.08	4,960
1914	Apr. 21, 1914	10.22	20,800	1942	June 17, 1942	7.20	7,800
1915	Apr. 13, 1915	8.2	11,300	1943	May 13, 1943	7.20	7,890
1916	Apr. 3, 1916	8.2	11,300	1944	Nov. 24, 1943	6.57	6,140
1917	Apr. 4, 1917	8.53	12,800	1945	May 18-21, 1945	7.19	7,860
1918	Apr. 4, 1918	8.80	13,900	1946	May 28, 1946	7.00	7,290
1919	Apr. 13, 1919	8.3	11,900	1947	June 3-10, 1947	7.23	7,980
1920	Mar. 30, 1920	8.67	13,300	1948	May 21, 1948	6.21	5,300
1921	Mar. 23, 1921	8.28	11,800	1949	Jan. 4-7, 1949	6.16	5,190
1922	Apr. 13, 1922	10.70	23,100	1950	May 1, 1950	6.80	6,740
1923	Apr. 8, 1923	10.12	20,000	1951	Apr. 27-28, 1951	7.16	7,770
1924	Apr. 20, 1924	9.05	15,000	1952	May 14, 28, 1952	7.00	6,930
1925	Mar. 30, 1925	8.94	14,500	1953	Apr. 30, 1953	7.76	8,560
1926	Apr. 26, 1926	10.6	22,500	1954	Apr. 23, 1954	7.46	7,890
1927	Mar. 20, 1927	9.0	14,800	1955	Jan. 5, 1955	6.31	5,620
1928	Apr. 9, 1928	10.2	20,400	1956	May 21, 1956	6.46	5,890
1929	Mar. 25, 1929	9.8	18,400	1957	Jan. 15, 1957	6.24	5,580
1930	Jan. 17, 1930	6.8	6,640	1958	Jan. 31, 1958	6.18	5,480
1931	June 30, 1931	6.22	5,080	1959	May 8, 1959	6.28	5,500
1932	May 2, 1932	7.11	7,600	1960	May 30, 1960	6.27	5,530
1933	Dec. 2, 1932	6.88	6,700	1961	June 30, 1961	6.26	5,510
1934	Sept. 27, 1934	6.00	4,790				
1935	July 12, 1935	7.15	7,650				

3265. Hudson River at Spier Falls, N. Y.
Published as "at Fort Edward", January 1899 to 1908 (records to
May 1904 used herein) and as "at Corinth", June 1904 to
December 1912 (records 1905-1912 used herein)

Location.--Lat 43°14'29", long 73°44'50", on right bank 0.5 mile downstream from
Spier Falls dam, 11 miles southwest of Glens Falls, Warren County, and about
11½ miles downstream from Sacandaga River.

Drainage area.--2,779 sq mi; 2,817 sq mi at site used prior to June 1, 1904, and
2,755 sq mi at site used June 1, 1904, to Sept. 30, 1912.

Gage.--Nonrecording prior to October 1912; recording thereafter. At site about
14 miles downstream at different datum prior to 1905 and at site about 7 miles
upstream at different datum 1905 to 1912. Datum of gage is 344.05 ft above
mean low tide at New York City (levels by New York State Water Supply Com-
mission).

Remarks.--Base for partial-duration series, 26,000 cfs. Only annual maximum
daily discharges are shown prior to 1913.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1900	Apr. 23, 1900	-	43,900	1916	May 19, 1916	10.80	28,000
1901	Apr. 23, 1901	-	42,800	1917	Apr. 4, 1917	11.34	30,500
1902	Mar. 17, 1902	-	29,700		Apr. 22, 1917	11.21	30,000
1903	Mar. 24, 1903	-	35,800		June 12, 1917	12.82	38,100
1904	Apr. 11, 1904	-	31,600	1918	Apr. 4, 1918	12.16	34,500
1905	Apr. 1, 1905	-	37,500				
1906	Apr.20,21,1906	-	28,200	1919	Apr. 13, 1919	11.64	32,000
1907	Mar. 31, 1907	-	34,000				
1908	Apr. 29, 1908	-	31,400	1920	Apr. 1, 1920	11.03	29,000
1909	Apr. 16, 1909	-	41,400		Apr. 3, 1920	11.03	29,000
1910	Apr. 1, 1910	-	32,600		Apr. 24, 1920	10.48	26,500
1911	May 3, 1911	-	25,700	1921	Mar. 17, 1921	10.80	28,000
1912	Apr. 19, 1912	-	34,800		Mar. 22, 1921	11.79	32,800
1913	Mar. 28, 1913	18.59	89,100	1922	Mar. 31, 1922	11.42	31,000
1914	Apr. 21, 1914	15.33	52,200		Apr. 13, 1922	16.30	58,000
1915	Apr. 13, 1915	10.50	26,600		June 23, 1922	10.80	28,000

3280. Bond Creek at Dunham Basin, N. Y.
(Published as Bond Brook prior to 1950)

Location.--Lat 43°18'25", long 73°32'55", on left bank at Dunham Basin, Washing-
ton County, a quarter of a mile upstream from Glens Falls feeder and abandon-
ed Champlain Canal, half a mile upstream from Champlain (Barge) Canal, and
4 miles upstream from mouth at Fort Edward.

Drainage area.--14.7 sq mi.

Gage.--Recording. Datum of gage is 140.30 ft above mean sea level (Barge Canal
datum.)

Stage-discharge relation.--Defined by current-meter measurements below 1,000 cfs
and extended above on basis of contracted-opening measurement at 8.52 ft.

Remarks.--During canal navigation season a portion of the flow is diverted at
point half a mile below gage into Lake Champlain basin through summit level
of Champlain (Barge) Canal at Dunham Basin. Base for partial-duration series,
400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Mar. 20, 1948	7.60	1,070	1951	Feb. 7, 1951	8.47	-
	July 13, 1948	5.45	466		Feb. 21, 1951	5.36	450
1949	Nov. 20, 1948	5.79	553	1952	Mar. 26, 1952	5.21	414
	Dec. 31, 1948	8.52	1,370		Apr. 5, 1952	5.79	561
1950	Mar. 28, 1950	6.88	862		June 1, 1952	8.17	1,240

Peak stages and discharges of Bond Creek at Dunham Basin, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Dec. 11, 1952	6.48	750	1957	Jan. 23, 1957	5.93	622
	Jan. 24, 1953	5.38	455	1958	Dec. 21, 1957	7.10	956
	Feb. 21, 1953	6.74	823				
1954	Feb. 17, 1954	a7.78	-	1959	Mar. 20, 1959	a7.81	-
	Apr. 17, 1954	5.16	404	1959	Apr. 2, 1959	6.35	734
	June 1, 1954	6.46	745				
1955	Feb. 23, 1955	5.61	514	1960	Nov. 28, 1959	6.45	762
	Mar. 1, 1955	6.03	626		Dec. 13, 1959	5.23	455
	Mar. 11, 1955	5.73	545		Feb. 11, 1960	6.13	674
	Apr. 4, 1955	5.51	488		Mar. 31, 1960	5.88	609
1956	Oct. 16, 1955	6.21	675		Apr. 4, 1960	5.97	632
	Apr. 5, 1956	7.30	1,020	1961	Feb. 26, 1961	7.01	928

a Backwater from ice.

3290. Batten Kill at Arlington, Vt.

Location.--Lat 43°04'40", long 73°09'30", on left bank 5 ft upstream from bridge on Highway 313 at Arlington, Bennington County, and 0.9 mile downstream from Warm Brook.

Drainage area.--152 sq mi.

Gage.--Nonrecording at downstream side of bridge prior to Nov. 18, 1941; recording at present site thereafter. Datum of gage is 597.68 ft above mean sea level, unadjusted.

Stage-discharge relation.--Defined by current-meter measurements below 5,200 cfs and extended above on basis of slope-area measurement and computation of peak flow over dam at 8,410 cfs.

Remarks.--Base for partial-duration series, 2,200 cfs. Only annual peaks are shown prior to 1941.

Peak stages and discharges

Peak stages and discharges							
Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Apr. 26, 1929	7.3	3,650	1948	Feb. 14, 1948	8.78	-
1930	Dec. 19, 1929	5.5	1,520		Mar. 22, 1948	7.81	4,010
					Mar. 28, 1948	7.00	3,050
1931	July 22, 1931	7.8	4,600		Apr. 1, 1948	6.50	2,510
1932	Apr. 1, 1932	6.7	2,740				
1933	Apr. 19, 1933	7.8	4,600	1949	Dec. 31, 1948	9.77	7,000
1934	Apr. 12, 1934	6.7	2,740		Jan. 6, 1949	6.92	2,970
1935	July 7, 1935	8.4	6,410				
				1950	Apr. 5, 1950	7.15	3,220
1936	Mar. 18, 1936	11.33	11,100		Sept. 1, 1950	7.07	3,140
1937	May 15, 1937	6.26	2,140				
1938	Sept. 21, 1938	9.08	8,430	1951	Nov. 26, 1950	8.10	4,390
1939	Apr. 20, 1939	6.85	3,270		Mar. 31, 1951	6.34	2,390
1940	May 3, 1940	7.10	3,630				
				1952	Oct. 8, 1951	6.26	2,310
1941	Apr. 15, 1941	6.50	2,640		Apr. 6, 1952	6.31	2,360
					June 1, 1952	7.56	3,430
1942	Apr. 8, 1942	7.19	3,410				
				1953	Dec. 11, 1952	6.41	2,270
1943	Apr. 28, 1943	6.85	2,860		Mar. 27, 1953	7.45	3,300
	May 8, 1943	6.61	2,530		Apr. 27, 1953	6.64	2,480
	May 12, 1943	6.87	2,860				
				1954	Dec. 7, 1953	7.02	2,850
1944	Nov. 9, 1943	6.57	2,580		Aug. 31, 1954	6.41	2,270
	Mar. 17, 1944	6.53	2,450				
				1955	Nov. 4, 1954	6.76	2,290
1945	Mar. 18, 1945	6.40	2,300		Apr. 15-16, 1955	7.14	2,630
	Mar. 21, 1945	6.58	2,510				
	Apr. 26, 1945	7.41	3,800	1956	Oct. 17, 1955	7.74	3,220
	July 15, 1945	7.10	3,240		Apr. 17, 1956	6.36	2,290
					Apr. 30, 1956	7.85	3,800
1946	Mar. 9, 1946	7.36	3,400				
				1957	Nov. 22, 1956	6.40	2,330
1947	Jan. 31, 1947	6.19	2,250		Jan. 23, 1957	6.94	2,830
	Mar. 15, 1947	7.02	3,080		Apr. 2, 1957	6.49	2,410
	Apr. 12, 1947	7.95	4,200				

Peak stages and discharges of Batten Kill at Arlington, Vt.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Dec. 21, 1957	7.10	2,990	1960	Jan. 3, 1960	6.73	2,390
	Apr. 22, 1958	7.47	3,090		Apr. 1, 1960	7.92	3,540
	Apr. 29, 1958	6.54	2,230		Apr. 5, 1960	8.09	3,720
1959	Jan. 22, 1959	7.65	3,270		Apr. 15, 1960	7.24	2,860
1960	Oct. 24, 1959	6.94	2,580		Apr. 18, 1960	7.88	3,500
	Nov. 28, 1959	7.92	3,540	1961	Sept. 12, 1960	7.13	2,750
	Dec. 13, 1959	6.59	2,270		May 10, 1961	7.12	2,740

3295. Batten Kill at Battenville, N. Y.

Location.--Lat 43°06'05", long 73°25'55", on left bank 1 mile southwest of Battenville, Washington County, and 3 miles downstream from Whitaker Brook.

Drainage area.--394 sq mi.

Gage.--Recording. Datum of gage is 369.09 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 16,000 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 4,100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1923	Mar. 19, 1923	a8.86	-	1939	Dec. 6, 1938	7.92	5,320
	Apr. 7, 1923	8.13	5,630		Feb. 15, 1939	a10.01	-
	Apr. 29, 1923	7.78	5,170		Apr. 20, 1939	8.19	5,670
1924	Dec. 1, 1923	8.60	6,240	1940	Mar. 31, 1940	11.06	9,740
	Jan. 12, 1924	7.08	4,320		Apr. 13, 1940	7.65	5,000
1925	Feb. 11, 1925	a11.52	-		Apr. 19, 1940	6.89	4,100
	Feb. 12, 1925	-	7,350		May 3, 1940	8.26	5,760
1926	Jan. 19, 1926	a7.80	-	1941	Dec. 30, 1940	6.98	4,200
	Apr. 10, 1926	6.95	4,160	1942	Apr. 9, 1942	6.88	4,090
	Apr. 25, 1926	7.53	4,860	1943	Feb. 24, 1943	a7.65	-
1927	Mar. 15, 1927	6.87	4,060		Feb. 25, 1943	6.84	4,040
	Mar. 19, 1927	7.10	4,340	1944	Mar. 7, 1944	a8.50	-
1928	Nov. 4, 1927	17.7	21,300		Mar. 17, 1944	8.15	5,620
	Dec. 8, 1927	7.29	4,660		Mar. 23, 1944	7.45	4,760
1929	Mar. 14, 1929	8.40	6,040	1945	Mar. 1, 1945	a8.21	-
	Apr. 21, 1929	6.72	3,970		Apr. 26, 1945	7.15	4,360
	Apr. 27, 1929	7.94	5,440	1946	Mar. 9, 1946	9.26	7,100
	Apr. 29, 1929	7.31	4,680	1947	Mar. 15, 1947	8.64	6,250
1930	Feb. 24, 1930	5.8	2,950		Apr. 13, 1947	9.03	6,780
1931	July 22, 1931	11.07	9,800	1948	Mar. 23, 1948	10.61	9,060
1932	Apr. 1, 1932	9.54	7,570		Mar. 28, 1948	6.98	4,200
1933	Nov. 20, 1932	8.03	5,560	1949	Dec. 31, 1948	15.88	18,000
	Apr. 19, 1933	8.28	5,560		Jan. 7, 1949	8.34	5,860
1934	Mar. 5, 1934	11.36	10,100	1950	Mar. 29, 1950	7.67	5,020
	Mar. 28, 1934	7.02	4,330		Apr. 6, 1950	7.46	4,770
	Apr. 13, 1934	6.71	3,960	1951	Nov. 26, 1950	9.13	6,920
1935	Jan. 10, 1935	10.35	8,840		Feb. 7, 1951	7.16	4,410
	July 8, 1935	10.90	9,610	1952	Dec. 22, 1951	a8.38	-
1936	Nov. 29, 1935	6.08	4,170		Apr. 7, 1952	7.26	4,420
	Mar. 12, 1936	12.59	12,100		June 2, 1952	7.90	5,190
	Mar. 18, 1936	14.0	14,400	1953	Jan. 25, 1953	9.07	6,700
	Apr. 7, 1936	7.31	4,780		Mar. 27, 1953	7.72	4,970
1937	Jan. 25, 1937	6.95	4,350	1954	Feb. 17, 1954	a9.21	-
	Apr. 6, 1937	6.74	5,100		Feb. 17, 1954	7.11	4,260
	May 16, 1937	6.70	4,050	1955	Feb. 23, 1955	a10.48	-
1938	Sept. 22, 1938	14.82	16,000				

Peak stages and discharges of Batten Kill at Battenville, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Apr. 16, 1955	6.98	4,120	1959	Jan. 22, 1959	a15.60	8,640
1956	Jan. 10, 1956	a10.75	-				
	Apr. 5, 1956	8.74	6,260	1960	Nov. 29, 1959	10.01	8,020
	Apr. 17, 1956	7.33	4,510		Jan. 3, 1960	7.57	4,790
	Apr. 30, 1956	8.89	6,460		Apr. 1, 1960	11.17	10,600
					Apr. 4, 1960	11.60	11,400
1957	Jan. 23, 1957	a8.88	-		Apr. 19, 1960	7.05	4,300
	Jan. 23, 1957	a7.39	b3,000	1961	Feb. 25, 1961	a9.5	-
1958	Dec. 21, 1957	7.79	5,060		Feb. 26, 1961	6.30	3,430
	Apr. 22, 1958	7.15	4,300				

a Backwater from ice.

b Estimated.

3300. Glowegee Creek at West Milton, N. Y.

Location--Lat 43°01'50", long 73°55'40", on left bank at upstream side of highway bridge, half a mile south of West Milton, Saratoga County, 1½ miles upstream from mouth, and 4 miles northwest of Ballston Spa.

Drainage area--26.0 sq mi.

Gage--Nonrecording prior to Aug. 27, 1948; recording thereafter. Concrete control since June 20, 1952. Datum of gage is 407.22 ft above mean sea level, datum of 1929.

Stage-discharge relation--Defined by current-meter measurements below 930 cfs and extended above by logarithmic plotting.

Remarks--Base for partial-duration series, 400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Dec. 31, 1948	7.04	1,670	1955	Nov. 3, 1954	5.28	439
	Jan. 6, 1949	4.24	420		Mar. 1, 1955	6.13	790
					Mar. 11, 1955	a5.98	575
1950	Jan. 26, 1950	a4.29	401				
	Mar. 28, 1950	5.68	934	1956	Oct. 16, 1955	5.95	704
	Apr. 4, 1950	4.60	528		Oct. 31, 1955	5.93	695
					Apr. 6, 1956	5.76	620
1951	Mar. 31, 1951	5.53	867		Apr. 11, 1956	5.31	450
1952	Apr. 2, 1952	4.74	539	1957	Mar. 16, 1957	5.21	415
	Apr. 6, 1952	5.77	933				
	May 12, 1952	5.08	654	1958	Apr. 6, 1958	5.05	364
	May 25, 1952	4.93	601				
	June 1, 1952	4.78	552	1959	Apr. 2, 1959	6.06	756
1953	Dec. 11, 1952	6.59	1,040				
	Apr. 7, 1953	5.19	409	1960	Nov. 28, 1959	5.46	503
	May 1, 1953	5.52	525		Mar. 31, 1960	5.54	532
	May 17, 1953	5.54	532		Apr. 4, 1960	6.86	1,200
					Sept. 12, 1960	5.90	681
1954	May 8, 1954	5.17	402	1961	Feb. 26, 1961	5.79	633

a Backwater from ice.

3305. Kayaderosseras Creek near West Milton, N. Y.

Location--Lat 43°02'25", long 73°54'30", on left bank 500 ft downstream from Glowegee Creek, 1 mile east of West Milton, Saratoga County, and 3½ miles northwest of Ballston Spa.

Drainage area--90 sq mi, approximately.

Gage--Recording. Datum of gage is 376.06 ft above mean sea level, datum of 1929.

Stage-discharge relation--Defined by current-meter measurements.

Remarks--Base for partial-duration series, 1,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Aug. 29, 1927	6.4	1,650	1945	Apr. 26, 1945	5.63	1,430
1928	Dec. 8, 1927	5.3	1,120	1946	Oct. 2, 1945	5.16	1,220
1929	Mar. 16, 1929	7.5	2,350		Mar. 9, 1946	5.90	1,560
1930	Mar. 8, 1930	6.0	1,600		May 21, 1946	5.50	1,380
1931	July 10, 1931	6.25	1,720	1947	Apr. 6, 1947	5.49	1,370
1932	Apr. 12, 1932	5.46	1,330		May 6, 1947	5.93	1,570
1933	Nov. 19, 1932	6.05	1,620	1948	Mar. 22, 1948	7.74	2,620
	Apr. 18, 1933	5.55	1,380		Mar. 24, 1948	5.20	1,210
1934	Mar. 5, 1934	a7.34	-	1949	Dec. 31, 1948	10.31	4,340
	Apr. 12, 1934	5.36	1,280	1950	Mar. 29, 1950	6.34	1,800
1935	Jan. 10, 1935	a6.95	1,900		Apr. 4, 1950	5.52	1,360
	July 8, 1935	8.92	3,360	1951	Mar. 31, 1951	7.65	2,570
	July 16, 1935	5.35	1,270	1952	Apr. 2, 1952	5.70	1,450
1936	Nov. 14, 1935	5.24	1,220		Apr. 6, 1952	7.73	2,620
	Mar. 12, 1936	7.65	2,570		May 12, 1952	5.87	1,540
	Mar. 18, 1936	10.78	4,710		May 25, 1952	5.51	1,360
	Mar. 27, 1936	5.83	1,520		June 1, 1952	5.45	1,320
	Apr. 6, 1936	5.43	1,320	1953	Dec. 11, 1952	6.82	2,070
1937	Jan. 25, 1937	6.23	1,720	1954	Feb. 18, 1954	a5.06	-
	Feb. 22, 1937	8.09	2,830		June 2, 1954	5.05	1,140
	May 15, 1937	5.22	1,210	1955	Mar. 1, 1955	a5.87	-
1938	Sept. 21, 1938	6.56	1,920		Mar. 1, 1955	5.68	1,440
1939	Apr. 2, 1939	5.09	1,140	1956	Oct. 17, 1955	6.11	1,670
1940	Mar. 31, 1940	5.22	1,210		Oct. 31, 1955	5.61	1,400
	Apr. 6, 1940	6.18	1,690		Apr. 6, 1956	5.33	1,270
	Apr. 8, 1940	6.63	1,920		Apr. 17, 1956	5.47	1,340
	Apr. 18, 1940	6.08	1,640	1957	Jan. 23, 1957	a5.46	-
1941	Dec. 28, 1940	5.29	1,280		Mar. 16, 1957	4.51	924
	Sept. 1, 1941	5.67	1,450	1958	Dec. 21, 1957	4.61	964
1942	Mar. 17, 1942	5.23	1,250		Jan. 28, 1958	a4.69	-
	Mar. 22, 1942	6.12	1,660	1959	Apr. 3, 1959	5.88	1,540
1943	Dec. 30, 1942	a5.48	-	1960	Nov. 28, 1959	5.35	1,280
	Dec. 31, 1942	5.12	1,200		Apr. 1, 1960	5.22	1,220
1944	Mar. 17, 1944	5.80	1,510		Apr. 4, 1960	7.40	2,420
1945	Mar. 22, 1945	5.18	1,230		Sept. 12, 1960	5.51	1,360
				1961	Feb. 26, 1961	-	b1,500

a Backwater from ice.
b Approximate.

3315. Hoosic River at Adams, Mass.

Location.--Lat 42°36'37", long 73°07'32", on right bank just downstream from Dry Brook, at Adams, Berkshire County, and 0.5 mile upstream from Pecks Brook.

Drainage area.--46.3 sq mi.

Gage.--Recording. Datum of gage is 837.01 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,700 cfs and extended above on basis of computations of peak flows over dam. Major changes in relation occur.

Remarks.--Flow regulated by Cheshire Reservoir. Base for partial-duration series, 900 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	Apr. 1, 1932	3.20	1,030	1947	Apr. 12, 1947	4.00	970
1933	Apr. 18, 1933	2.96	892	1948	Mar. 22, 1948	4.81	1,250
1934	Apr. 12, 1934	2.97	904		Apr. 1, 1948	4.39	1,050
	July 14, 1934	3.07	948	1949	Dec. 31, 1948	7.81	3,100
	Sept. 9, 1934	3.00	920		Jan. 6, 1949	4.61	1,100
1935	Jan. 9, 1935	3.35	1,110	1950	Apr. 5, 1950	3.30	750
	July 8, 1935	3.10	975	1951	Nov. 26, 1950	6.36	1,800
1936	Mar. 13, 1936	5.25	2,630		Mar. 31, 1951	4.97	990
	Mar. 18, 1936	6.33	3,670	1952	Apr. 5, 1952	3.85	985
	May 9, 1936	3.23	1,040		June 1, 1952	4.69	1,430
1937	Feb. 22, 1937	3.66	1,330	1953	Dec. 11, 1952	3.79	955
	May 15, 1937	3.17	965		Mar. 16, 1953	3.97	1,040
1938	Oct. 20, 1937	3.42	1,150		Mar. 24, 1953	4.36	1,250
	Jan. 25, 1938	3.80	1,450		Mar. 26, 1953	3.90	1,010
	July 23, 1938	4.41	1,590		Mar. 27, 1953	3.98	1,050
	Sept. 21, 1938	8.25	5,080	1954	Sept. 11, 1954	3.65	885
1939	Dec. 6, 1938	3.59	1,050	1955	Nov. 3, 1954	3.76	940
	Apr. 19, 1939	4.99	1,820		Nov. 21, 1954	3.68	900
1940	Apr. 12, 1940	3.87	1,110		Mar. 11, 1955	3.77	945
	Apr. 18, 1940	3.48	930	1956	Oct. 15, 1955	3.96	1,040
	May 3, 1940	3.67	1,000		Apr. 16-17, 1956	4.36	1,250
1941	Feb. 8, 1941	2.72	560		Apr. 30, 1956	4.00	1,060
1942	Mar. 9, 1942	4.12	1,260	1957	Jan. 23, 1957	3.73	925
	Mar. 17, 1942	3.83	1,110	1958	Dec. 21, 1957	4.07	1,100
1943	Nov. 25, 1942	4.13	1,220	1959	Jan. 22, 1959	5.28	1,790
	Apr. 28, 1943	3.70	960	1960	Oct. 24, 1959	3.78	915
1944	Nov. 9, 1943	3.86	980		Jan. 3, 1960	4.29	1,210
1945	Apr. 26, 1945	4.50	1,340		Feb. 11, 1960	4.26	1,190
	June 20, 1945	4.08	1,010		Mar. 31, 1960	4.65	1,410
	July 22, 1945	5.29	1,840		Apr. 4, 1960	4.72	1,450
1946	Mar. 9, 1946	3.84	855		Sept. 12, 1960	4.98	1,610
					Sept. 20, 1960	4.31	1,220
1947	Apr. 6, 1947	4.35	1,180	1961	Apr. 23, 1961	3.49	835

3320. North Branch Hoosic River at North Adams, Mass.

Location.--Lat 42°42'08", long 73°05'37", on left bank 0.4 mile downstream from Hudson Brook, at North Adams, Berkshire County, and 1½ miles upstream from mouth.

Drainage area.--39.0 sq mi.

Gage.--Recording except nonrecording July 9, 1959, to July 29, 1960. Prior to Sept. 23, 1938, at site 100 ft upstream. July 9, 1959, to July 29, 1960, at site 500 ft upstream at datum about 4.6 ft lower. Datum of gage is 820.46 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 5,100 cfs and extended above on basis of computations of flow over dam at 5,700 cfs, 6,300 cfs, and 8,950 cfs. Major Changes in relation occur.

Remarks.--Base for partial-duration series, 1,300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	November 1927	-	9,980	1948	Mar. 27, 1948	5.56	1,610
1932	Apr. 1, 1932	4.40	1,110	1948	Apr. 1, 1948	6.04	2,110
1933	Nov. 19, 1932	6.69	3,150	1949	Dec. 31, 1948	9.42	6,300
	Apr. 18, 1933	5.29	1,780		Jan. 6, 1949	5.99	2,060
1934	Apr. 12, 1934	5.74	1,970	1950	Apr. 5, 1950	5.75	1,780
	June 19, 1934	4.85	1,400		Sept. 1, 1950	5.53	1,560
1935	Nov. 30, 1934	4.90	1,460	1951	Nov. 26, 1950	9.25	5,820
	Jan. 10, 1935	5.94	2,380		Mar. 31, 1951	6.78	2,890
1936	Mar. 12, 1936	6.32	2,730	1952	Oct. 8, 1951	5.84	1,870
	Mar. 18, 1936	9.25	6,100		Apr. 5, 1952	5.84	1,870
	Mar. 21, 1936	5.30	1,750		June 1, 1952	6.94	3,060
	Apr. 6, 1936	5.15	1,620	1953	Dec. 11, 1952	6.60	2,690
1937	Feb. 22, 1937	5.64	1,920		Mar. 16, 1953	5.87	1,900
	May 15, 1937	5.39	1,680		Mar. 24, 1953	6.59	2,680
1938	Oct. 20, 1937	6.09	2,370		Apr. 27, 1953	5.28	1,310
	Sept. 21, 1938	12.05	8,950	1954	Dec. 7, 1953	6.76	2,870
1939	Dec. 6, 1938	6.09	2,140		Mar. 2, 1954	5.39	1,420
	Apr. 19, 1939	5.90	1,920	1955	Nov. 3, 1954	5.70	1,730
	Apr. 25, 1939	5.32	1,320		Nov. 21, 1954	5.41	1,440
1940	May 3, 1940	5.46	1,460	1956	Oct. 15, 1955	5.89	1,920
	Sept. 1, 1940	5.45	1,460		Oct. 17, 1955	5.46	1,490
1941	Dec. 29, 1940	5.00	1,050		Apr. 16, 1956	5.56	1,590
1942	Apr. 8, 1942	5.70	1,710		Apr. 30, 1956	5.90	1,930
1943	Apr. 28, 1943	5.54	1,560	1957	Jan. 23, 1957	5.43	1,460
	May 12, 1943	5.93	1,980	1958	Dec. 21, 1957	6.30	2,360
	May 26, 1943	5.71	1,710		Apr. 18, 1958	5.37	1,400
	June 11, 1943	5.50	1,510		Apr. 23, 1958	5.60	1,630
1944	Nov. 9, 1943	7.07	3,210		July 11, 1958	5.95	1,980
	Apr. 24, 1944	5.50	1,510	1959	Jan. 22, 1959	5.73	1,760
1945	Apr. 26, 1945	6.30	2,360	1960	Oct. 24, 1959	13.58	2,330
	July 15, 1945	5.33	1,350		Nov. 28, 1959	12.39	1,490
1946	Mar. 9, 1946	5.79	1,800		Jan. 3, 1960	-	1,800
1947	Apr. 6, 1947	5.67	1,680		Mar. 31, 1960	12.49	1,560
	Apr. 12, 1947	6.35	2,420		Apr. 4, 1960	15.55	3,420
1948	Mar. 22, 1948	6.03	2,100		Sept. 12, 1960	9.95	3,520
					Sept. 20, 1960	9.07	2,270
				1961	Apr. 23, 1961	8.45	1,500

3325. Hoosic River near Williamstown, Mass.

Location.--Lat 42°42'21", long 73°10'50", on left bank 1.0 mile upstream from Green River and 1½ miles east of Williamstown, Berkshire County.

Drainage area.--132 sq mi.

Gage.--Recording. Altitude of gage is 595 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,300 cfs and extended above on basis of contracted-opening measurement at 13,000 cfs. Changes in relation occur.

Remarks.--Flow regulated by Cheshire Reservoir. Base for partial-duration series, 2,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Feb. 8, 1941	7.12	2,030	1952	Oct. 8, 1951	7.82	2,540
					Apr. 6, 1952	8.51	3,090
1942	Mar. 9, 1942	8.62	3,430		June 1, 1952	10.46	5,130
	Apr. 8, 1942	7.88	2,940	1953	Dec. 11, 1952	9.01	3,500
1943	Nov. 25, 1942	8.23	3,230		Jan. 25, 1953	7.61	2,470
	Apr. 28, 1943	7.67	2,830		Mar. 16, 1953	8.50	3,160
	May 12, 1943	8.33	3,310		Mar. 24, 1953	9.20	3,730
	May 26, 1943	8.21	3,230	1954	Dec. 7, 1953	9.25	3,780
1944	Nov. 9, 1943	10.51	5,500				
	Apr. 25, 1944	7.66	2,920	1955	Nov. 3, 1954	8.39	3,070
1945	Mar. 18, 1945	7.46	2,760	1956	Oct. 15, 1955	8.51	3,170
	Mar. 21, 1945	7.15	2,510		Apr. 17, 1956	8.11	3,450
	Apr. 5, 1945	7.20	2,530		Apr. 30, 1956	7.76	3,200
	Apr. 26, 1945	9.60	4,570	1957	Jan. 23, 1957	6.74	2,490
	June 20, 1945	7.73	2,960				
	July 23, 1945	7.33	2,640	1958	Dec. 21, 1957	7.43	2,970
1946	Mar. 9, 1946	8.49	3,580		Apr. 18, 1958	6.62	2,400
					Apr. 23, 1958	6.77	2,510
1947	Jan. 31, 1947	7.59	2,970	1959	Jan. 22, 1959	8.80	4,470
	Apr. 6, 1947	9.00	4,170		Apr. 3, 1959	6.49	2,510
	Apr. 12, 1947	9.59	4,720	1960	Oct. 24, 1959	7.98	3,890
1948	Mar. 22, 1948	10.12	5,340		Jan. 3, 1960	7.84	3,750
	Mar. 28, 1948	7.70	3,020		Feb. 11, 1960	7.18	3,120
	Apr. 1, 1948	8.87	4,080		Mar. 31, 1960	7.81	3,720
1949	Dec. 31, 1948	14.85	13,000		Apr. 4, 1960	9.64	5,610
	Jan. 6, 1949	9.90	4,450		Sept. 12, 1960	9.82	5,810
1950	Apr. 5, 1950	8.71	3,210		Sept. 20, 1960	8.98	4,890
1951	Nov. 26, 1950	13.85	10,800	1961	Apr. 23, 1961	6.46	2,600
	Mar. 31, 1951	10.60	5,310				

3330. Green River at Williamstown, Mass.

Location.--Lat 42°42'32", long 73°11'50", on left bank 0.1 mile upstream from bridge on State Highway 2 at Williamstown, Berkshire County, and 0.8 mile upstream from mouth.

Drainage area.--42.6 sq mi.

Gage.--Recording. Altitude of gage is 615 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,300 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 650 cfs.

Peak stages and discharges of Green River at Williamstown, Mass.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Dec. 31, 1948	a7.5	-	1955	Mar. 1, 1955	3.74	814
1950	Mar. 28, 1950	3.55	700	1955	Mar. 11, 1955	3.62	742
	Apr. 5, 1950	3.53	688		Feb. 25, 1956	3.73	808
1951	Nov. 26, 1950	5.28	2,010	1956	Mar. 7, 1956	3.91	927
	Dec. 4, 1950	4.02	1,000		Apr. 5, 1956	3.97	969
	Feb. 1, 1951	-	b900		Apr. 17, 1956	4.17	1,110
	Mar. 30 or 31, 1951	4.56	1,410		Apr. 30, 1956	3.92	934
1952	Oct. 8, 1951	3.80	850	1957	Jan. 23, 1957	3.76	836
	Nov. 3, 1951	3.63	748		Jan. 23, 1957	c4.63	-
	Apr. 5, 1952	4.38	1,260	1958	Dec. 21, 1957	4.40	1,280
	June 1, 1952	4.75	1,560		Dec. 26, 1957	3.46	656
1953	Dec. 11, 1952	4.45	1,320		Apr. 6, 1958	4.12	1,070
	Jan. 24, 1953	4.34	1,230		Apr. 23, 1958	3.53	698
	Mar. 13, 1953	-	b700	1959	Jan. 21, 1959	c4.93	-
	Mar. 16, 1953	4.24	1,160		Jan. 22, 1959	4.57	1,420
	Mar. 24, 1953	4.05	1,020		Mar. 6, 1959	-	b1,000
	Mar. 27, 1953	3.82	864		Apr. 2, 1959	3.97	969
	Apr. 27, 1953	3.64	754	1960	Jan. 3, 1960	4.67	1,500
1954	Dec. 7, 1953	4.50	1,360		Feb. 11, 1960	4.70	1,520
	Mar. 3, 1954	3.52	682		Mar. 31, 1960	4.53	1,380
	May 10, 1954	3.47	652		Apr. 4, 1960	5.17	1,910
1955	Nov. 3, 1954	3.55	700		Sept. 12, 1960	5.94	2,640
	Dec. 18, 1954	4.07	1,040		Sept. 24, 1960	4.71	1,530
	Feb. 23, 1955	3.77	832	1961	Feb. 26, 1961	4.14	1,090

a Annual peak only; about.

b Estimated.

c Backwater from ice.

3335. Little Hoosic River at Petersburg, N. Y.

Location.--Lat 42°45'55", long 73°20'20", on left bank 100 ft downstream from highway bridge, 1 mile downstream from Petersburg, Rensselaer County, and 4.9 miles upstream from mouth.

Drainage area.--56.1 sq mi.

Gage.--Recording. Datum of gage is 587.40 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,600 cfs and extended above on basis of contracted-opening measurement at 7,470 cfs.

Remarks.--Base for partial-duration series, 1,250 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Dec. 31, 1948	9.4	a7,470	1956	Apr. 16, 1956	5.67	1,630
1952	Apr. 5, 1952	5.29	1,480	1957	Nov. 21, 1956	5.47	1,470
	June 1, 1952	6.80	2,910		Dec. 21, 1957	6.17	2,000
1953	Dec. 11, 1952	5.54	1,610	1958	Apr. 6, 1958	5.27	1,280
	Jan. 24, 1953	5.82	1,860		Jan. 21, 1959	6.86	2,630
	Mar. 16, 1953	5.16	1,490	1959	Mar. 6, 1959	6.64	2,380
	Apr. 26, 1953	5.04	1,380		Apr. 2, 1959	5.78	1,560
	Dec. 7, 1953	5.05	1,390	1960	Nov. 28, 1959	5.91	1,550
1954	Jan. 20, 1954	5.20	1,520		Jan. 3, 1960	6.29	2,020
	Mar. 3, 1954	4.87	1,290		Feb. 11, 1960	6.82	2,300
	June 16, 1954	5.32	1,650		Mar. 31, 1960	6.68	2,430
1955	Dec. 18, 1954	4.84	1,260		Apr. 4, 1960	7.26	3,110
	Feb. 7, 1955	b5.67	-		Sept. 12, 1960	8.28	4,760
	Feb. 23, 1955	5.64	1,610		Sept. 20, 1960	-6.45	2,160
	Mar. 11, 1955	5.18	1,250	1961	Feb. 19, 1961	b6.38	-
1956	Mar. 7, 1956	5.83	1,780		Feb. 26, 1961	5.89	1,700
	Apr. 5, 1956	5.42	1,430				

a Annual peak only.

b Backwater from ice.

3340. Walloomsac River near North Bennington, Vt.

Location.--Lat 42°54'47", long 73°15'25", on left bank 0.6 mile downstream from Paran Creek and 1.4 miles south of North Bennington, Bennington County.

Drainage area.--111 sq mi.

Gage.--Recording. Altitude of gage is 525 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,800 cfs and extended above on basis of several indirect measurements.

Remarks.--Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	Apr. 1, 1932	5.91	1,910	1947	May 1, 1947	5.89	2,200
1933	Oct. 6, 1932	5.87	2,080	1948	Mar. 22, 1948	7.23	3,280
	Nov. 19, 1932	8.25	3,820		Mar. 28, 1948	6.56	2,720
	Apr. 19, 1933	7.79	3,500		Apr. 1, 1948	6.57	2,730
1934	Apr. 12, 1934	6.36	2,340	1949	Dec. 31, 1948	11.60	7,920
	Apr. 25, 1934	6.49	2,400		Jan. 6, 1949	6.65	2,790
1935	Jan. 10, 1935	7.03	2,900	1950	Apr. 5, 1950	6.04	2,310
	July 7, 1935	7.57	3,340		Aug. 18, 1950	10.13	6,180
					Sept. 1, 1950	11.50	7,800
1936	Nov. 29, 1935	6.56	2,600	1951	Nov. 26, 1950	10.49	6,590
	Mar. 12, 1936	8.58	4,140		Mar. 31, 1951	6.60	2,750
	Mar. 18, 1936	11.44	6,600				
1937	May 15, 1937	5.37	1,700	1952	Oct. 8, 1951	6.55	2,710
1938	Sept. 21, 1938	12.04	8,450		June 1, 1952	9.30	5,270
1939	Dec. 6, 1938	5.87	2,220	1953	Dec. 11, 1952	6.71	2,840
	Apr. 19, 1939	6.71	2,900		Mar. 24, 1953	6.80	2,910
	Apr. 25, 1939	5.66	2,080		Mar. 27, 1953	6.33	2,530
					Apr. 27, 1953	5.98	2,260
1940	Mar. 31, 1940	6.88	3,060	1954	Dec. 7, 1953	7.28	3,320
	May 3, 1940	7.02	3,150				
	Sept. 1, 1940	6.18	2,470	1955	Nov. 3, 1954	5.53	1,930
1941	Sept. 1, 1941	5.63	2,000	1956	Oct. 17, 1955	6.89	2,990
1942	Apr. 8, 1942	6.96	3,080		Apr. 16-17, 1956	5.78	2,120
					Apr. 30, 1956	8.30	4,250
1943	Apr. 28, 1943	6.51	2,670	1957	Nov. 22, 1956	5.31	1,770
	May 12, 1943	8.38	4,350				
1944	Nov. 9, 1943	7.00	3,080	1958	Dec. 21, 1957	7.68	3,670
	Mar. 17, 1944	5.94	2,240		Apr. 21, 1958	6.39	2,580
	Apr. 25, 1944	5.88	2,190		Apr. 30, 1958	5.98	2,260
1945	Apr. 26, 1945	7.36	3,390	1959	Jan. 22, 1959	7.30	3,340
	June 17, 1945	5.80	2,130				
	July 15, 1945	7.49	3,500	1960	Oct. 24, 1959	6.43	2,610
1946	Oct. 2, 1945	5.63	2,000		Nov. 28, 1959	6.45	2,630
	Mar. 9, 1946	6.27	2,490		Jan. 3, 1960	5.89	2,200
	May 28, 1946	5.72	2,070		Feb. 11, 1960	5.88	2,190
					Mar. 31, 1960	6.28	2,490
					Apr. 4, 1960	8.57	4,520
					Apr. 18, 1960	7.37	3,390
1947	Jan. 31, 1947	5.77	2,160		Sept. 12, 1960	7.28	3,320
	Mar. 6, 1947	5.64	2,060	1961	Aug. 26, 1961	5.71	2,060
	Apr. 12, 1947	6.70	2,830				

3345. Hoosic River near Eagle Bridge, N. Y.

Location.--Lat 42°56'10", long 73°22'30", on right bank three-quarters of a mile downstream from Walloomsac River and 1½ miles southeast of village of Eagle Bridge, Rensselaer County.

Drainage area.--510 sq mi.

Gage.--Nonrecording prior to March 1922; recording thereafter. Prior to July 19, 1936, at site a quarter of a mile upstream at different datum. Datum of gage is 355.41 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 21,400 cfs and extended above on basis of flow-over-dam and contracted-opening measurements at gage height 17.8 and 21.5 ft.

Remarks.--Base for partial-duration series, 7,400 cfs. Only annual peaks are shown prior to 1924.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1911	Mar. 28, 1911	14.2	8,300	1938	Jan. 25, 1938	11.67	14,200
1912	Mar. 29, 1912	13.5	6,860		Sept. 22, 1938	17.78	35,300
1913	Mar. 27, 1913	15.0	10,600				
1914	Apr. 20, 1914	14.2	8,300	1939	Dec. 6, 1938	10.99	11,300
1915	July 9, 1915	13.5	16,500		Feb. 15, 1939	11.05	
					Apr. 20, 1939	10.86	11,100
1916	Dec. 26, 1915	12.0	13,000				
1917	Feb. 27, 1917	9.7	8,040	1940	Mar. 31, 1940	12.28	13,800
1918	Feb. 20, 1918	a12.0	a13,000		Apr. 9, 1940	10.09	8,600
1919	Mar. 1, 1919	9.45	7,920		Apr. 13, 1940	9.82	8,030
1920	Mar. 13, 1920	b13.8	-		May 3, 1940	9.69	7,760
	Mar. 27, 1920	10.35	9,730	1941	Feb. 8, 1941	9.58	6,750
1921	Mar. 10, 1921	11.4	12,100	1942	Mar. 17, 1942	10.47	7,910
1922	Mar. 7, 1922	12.1	c13,600	1943	Nov. 26, 1942	10.74	10,100
					May 13, 1943	11.09	10,900
1924	Oct. 24, 1923	10.02	8,850	1944	Nov. 9, 1943	11.12	10,900
	Dec. 1, 1923	11.36	11,700		Mar. 17, 1944	10.06	8,560
	Jan. 11, 1924	11.01	11,000		Apr. 25, 1944	9.63	7,730
	Apr. 7, 1924	10.10	9,020				
	Apr. 19, 1924	9.46	7,720	1945	Apr. 26, 1945	10.53	9,570
1925	Feb. 11, 1925	b11.87	-				
	Feb. 12, 1925	11.12	11,200	1946	Mar. 9, 1946	10.65	9,840
	Mar. 28, 1925	9.17	7,090		May 28, 1946	9.80	8,050
1926	Nov. 16, 1925	9.5	7,350	1947	Jan. 31, 1947	10.06	8,560
1927	Mar. 15, 1927	9.5	7,350		Mar. 14, 1947	10.50	9,500
					Apr. 12, 1947	10.17	8,790
1928	Nov. 4, 1927	18.8	41,500	1948	Mar. 16, 1948	10.66	9,870
	Dec. 8, 1927	9.53	7,410		Mar. 22, 1948	11.63	12,200
	Feb. 15, 1928	9.60	7,540		Mar. 28, 1948	9.48	7,450
1929	Mar. 14, 1929	10.9	10,100	1949	Dec. 31, 1948	21.15	55,400
	Apr. 26, 1929	10.19	8,680		Jan. 6, 1949	11.72	13,700
1930	Mar. 8, 1930	8.3	5,380	1950	Mar. 9, 1950	10.15	8,780
1931	May 23, 1931	9.17	6,920		Sept. 1, 1950	11.88	13,100
1932	Apr. 1, 1932	10.90	9,640	1951	Nov. 26, 1950	13.73	19,100
1933	Nov. 20, 1932	12.39	11,900		Dec. 5, 1950	9.66	7,790
	Apr. 19, 1933	11.32	9,820		Feb. 1, 1951	9.69	7,850
					Mar. 31, 1951	11.54	12,100
1934	Mar. 5, 1934	12.24	11,600	1952	Apr. 6, 1952	10.31	9,090
	Apr. 11, 1934	10.89	9,000		June 2, 1952	12.80	15,900
1935	Jan. 10, 1935	12.82	13,000	1953	Dec. 12, 1952	10.27	9,010
	July 8, 1935	10.16	7,680		Jan. 25, 1953	10.37	9,220
1936	Mar. 12, 1936	13.30	a18,000		Mar. 16, 1953	9.96	8,370
	Mar. 18, 1936		a31,500		Mar. 25, 1953	9.96	8,370
					Mar. 27, 1953	10.13	8,710
1937	May 15, 1937	9.56	7,920		Apr. 27, 1953	9.54	7,570

a About.

b Backwater from ice.

c Maximum for period October 1, to Mar. 31, 1922.

Peak stages and discharges of Hoosic River near Eagle Bridge, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Dec. 7, 1953	10.72	10,000	1959	Jan. 22, 1959	12.15	14,400
	Feb. 17, 1954	12.87	-		Jan. 30, 1959	9.13	7,720
1955	Feb. 7, 1955	b13.19	-		Mar. 6, 1959	9.50	8,420
	Feb. 23, 1955	9.41	7,640		Apr. 3, 1959	9.01	7,490
1956	Apr. 5, 1956	9.55	8,710	1960	Nov. 28, 1959	9.94	9,300
	Apr. 17, 1956	10.27	10,200		Jan. 3, 1960	10.46	10,400
	Apr. 30, 1956	10.61	10,900		Feb. 11, 1960	10.23	9,910
					Mar. 31, 1960	11.21	12,100
1957	Jan. 23, 1957	b11.49	-		Apr. 4, 1960	12.69	15,800
	Jan. 23, 1957	8.78	7,190		Sept. 13, 1960	12.73	15,900
					Sept. 20, 1960	9.55	8,920
1958	Dec. 21, 1957	9.57	8,560	1961	Feb. 26, 1961	9.45	8,320
1959	Jan. 21, 1959	b13.90	-				

b Backwater from ice.

3350. Hoosic River at Buskirk, N. Y.

Location--Lat 42°57'30", long 73°26'00", on upstream side near center of covered wooden highway bridge at Buskirk, Rensselaer County.

Drainage area--577 sq mi.

Gage--Nonrecording. Altitude of gage is 330 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurement below 6,100 cfs and extended above by logarithmic plotting.

Remarks--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Mar. 8, 1904	a17.0	-	1907	Mar. 14, 1907	a14.9	-
	June 9, 1904	-	b13,700		Mar. 30, 1907	6.6	5,480
1905	Mar. 25, 1905	10.2	11,200	1908	Feb. 15, 1908	12.3	c15,000
				1909	Feb. 20, 1909	15.4	c21,000
1906	Apr. 15, 1906	12.3	15,000				

a Backwater from ice.

b Maximum daily discharge.

c Approximate.

3355. Hudson River at Mechanicville, N. Y.

Location--Lat 42°54'45", long 73°40'45", on right bank at dam of West Virginia Pulp & Paper Co., at Mechanicville, Saratoga County, three-quarters of a mile upstream from Anthony Kill, and 1½ miles downstream from Hoosic River.

Drainage area--4,500 sq mi.

Gage--Nonrecording prior to 1911; recording thereafter. Datum of gage is 66.63 ft above mean sea level, datum of 1929.

Stage-discharge relation--Discharge determined by combining flow over dam, flow through wheels and water used for lockage on Champlain (Barge) Canal. Manufacturers ratings used for the wheels.

Historical data--Flood of April 1869 was greatest known prior to 1913 (Report of U.S. Board of Engineers on Deep Watersways).

Remarks--Records of discharge over dam and through wheels furnished by West Virginia Pulp & Paper Co. Very slight regulation by Indian Lake since 1898. Considerable regulation by Sacandaga Reservoir since 1930. Only annual maximum daily discharges are shown.

Peak stages and discharges of Hudson River at Mechanicville, N. Y.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1869	April 1869		a70,000	1922	Apr. 12, 1922		72,900
1888	May 2, 1888		45,630	1923	Apr. 9, 1923		43,700
1889	Dec. 18, 1888		27,330	1924	Apr. 19, 1924		39,800
1890	Sept. 18, 1890		26,000	1925	Mar. 30, 1925		44,300
1891	Apr. 20, 1891		33,180	1926	Apr. 26, 1926		51,800
1892	Apr. 7, 1892		43,190	1927	Mar. 21, 1927		35,600
1893	May 6, 1893		54,060	1928	Nov. 4, 1927		70,000
1894	Mar. 24, 1894		25,560	1929	Mar. 25, 1929		40,200
1895	Apr. 10, 1895		49,630	1930	Apr. 8, 1930		23,600
1896	Apr. 19, 1896		59,393	1931	July 22, 1931		24,300
1897	July 15, 1897		31,060	1932	Apr. 12, 1932		27,700
1898	Mar. 14, 1898		39,231	1933	Apr. 19, 1933		46,700
1899	Apr. 26, 1899		41,475	1934	Apr. 12, 1934		29,400
1900	Apr. 23, 1900		43,546	1935	Jan. 10, 1935		34,000
1901	Apr. 24, 1901		54,862	1936	Mar. 19, 1936		72,700
1902	Mar. 18, 1902		42,940	1937	May 16, 1937		28,500
1903	Mar. 25, 1903		56,283	1938	Sept. 22, 1938		65,600
1904	Apr. 11, 1904		36,305	1939	Apr. 29, 1939		33,800
1905	Apr. 1, 1905		48,877	1940	Mar. 31, 1940		40,100
1906	Apr. 16, 1906		40,300	1941	Dec. 31, 1940		22,600
1907	Apr. 1, 1907		36,700	1942	Apr. 8, 1942		27,100
1908	Apr. 28, 1908		34,300	1943	May 13, 1943		33,100
1909	Apr. 16, 1909		46,300	1944	Apr. 26, 1944		32,800
1910	Apr. 3, 1910		37,800	1945	Mar. 22, 1945		32,600
1911	May 3, 1911		26,200	1946	Mar. 9, 1946		31,500
1912	Apr. 8, 1912		45,630	1947	June 4, 1947		40,700
1913	Mar. 28, 1913		a120,000	1948	Mar. 23, 1948		40,100
1914	Apr. 22, 1914		64,788	1949	Jan. 1, 1949		a118,000
1915	Feb. 25, 1915		33,185	1950	Apr. 5, 1950		27,000
1916	Apr. 2, 1916		35,845	1951	Mar. 31, 1951		39,400
1917	June 13, 1917		36,300	1952	Apr. 6, 1952		46,300
1918	Apr. 3, 1918		35,500	1953	Mar. 27, 1953		44,400
1919	Apr. 13, 1919		31,600	1954	Apr. 18, 1954		38,200
1920	Apr. 6, 1920		36,100	1955	Apr. 16, 1955		33,000
1921	Mar. 22, 1921		33,000	1956	Apr. 30, 1956		32,900

a Maximum peak discharge.

3360. Mohawk River below Delta Dam, near Rome, N. Y.

Location.--Lat 43°15'50", long 75°26'10", on right bank at Rome Fish Hatchery, 1 mile downstream from Delta Dam and 4 miles north of Rome, Oneida County.

Drainage area.--150 sq mi.

Gage.--Nonrecording prior to Jan. 24, 1937, at site 200 ft downstream; recording thereafter. Datum of gage is 474.00 ft above mean sea level (Barge Canal datum).

Stage-discharge relation.--Defined by current-meter measurements below 5,200 cfs and extended above on basis of computation of flow over Delta Dam at 8,900 cfs.

Remarks.--During canal navigation season, water is diverted from Black River through Forestport feeder and Black River Canal (flowing south) into Delta Reservoir above station. Flow almost completely regulated by Delta Reservoir (usable capacity, 2,800,000,000 cu ft). Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Apr. 8, 1928	a6.9	2,930	1932	Jan. 18, 1932	5.85	2,220
1929	May 3, 1929	5.4	1,940	1933	Nov. 2, 1932	5.6	2,050
1930	Jan. 15, 1930	4.9	1,600	1934	Apr. 13, 1934	4.4	1,300
1931	Apr. 11, 1931	4.9	1,540	1935	July 9, 1935	8.1	4,060

a Approximate.

Peak stages and discharges of Mohawk River below Delta Dam, near Rome, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Mar. 27, 1936	7.6	3,610	1950	Apr. 4, 1950	5.41	1,920
1937	Jan. 15, 1937	6.8	2,840	1951	Apr. 13, 1951	5.52	1,970
1938	Mar. 21, 1938	7.31	3,110	1952	Apr. 8, 1952	5.19	1,750
1939	Dec. 13, 1938	4.67	1,440	1953	May 3, 1953	4.88	1,550
1940	Apr. 12, 1940	6.83	2,830	1954	Apr. 28, 1954	5.35	1,860
1941	Dec. 31, 1940	4.35	1,250	1955	Apr. 15, 1955	5.33	1,850
1942	Dec. 30, 1941	b4.42	-	1956	May 13, 1956	6.46	2,610
	Apr. 11, 1942	4.35	1,250	1957	Apr. 23, 1957	4.08	1,040
1943	Mar. 22, 1943	6.25	2,420	1958	Dec. 26, 1957	3.27	669
1944	Apr. 25, 1944	5.78	2,130	1959	Jan. 22, 1959	b.532	-
1945	Sept. 30, 1945	6.37	2,560		May 20, 1959	4.80	1,460
1946	Oct. 2, 1945	11.18	8,560	1960	Apr. 24, 1960	7.91	3,960
1947	May 22, 1947	9.86	6,350				
1948	Mar. 22, 1948	7.41	3,540	1961	June 22, 1961	5.54	1,940
1949	Mar. 28, 1949	5.00	1,630				

a Approximate.

b Backwater from ice.

3440. West Canada Creek at Hinckley, N. Y.

Location.--Lat 43°18'20", long 75°07'10", on right bank at Hinckley, Oneida County, 1 mile downstream from Hinckley Dam, $1\frac{1}{2}$ miles east of Prospect, and $6\frac{1}{2}$ miles upstream from Steuben Creek.

Drainage area.--375 sq mi.

Gage.--Recording. Datum of gage is 1,134.00 ft above mean sea level (Utica Gas & Electric Co. datum).

Stage-discharge relation.--Defined by current-meter measurement below 10,500 cfs and extended above on basis of flow-over-dam measurement.

Remarks.--Flow almost completely regulated by Hinckley Reservoir (usable capacity, 3,320,000,000 cu ft). Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1920	Apr. 24, 1920	7.08	5,900	1941	Dec. 31, 1940	7.21	5,740
1921	Mar. 22, 1921	7.48	7,020	1942	Sept. 29, 1942	6.66	4,440
1922	Apr. 12, 1922	8.93	10,800	1943	May 13, 1943	7.78	7,170
1923	Apr. 23, 1923	7.63	6,960	1944	May 2, 1944	6.93	5,060
1924	May 5, 1924	7.48	6,570	1945	Apr. 5, 1945	8.02	7,590
1925	Mar. 29, 1925	6.94	5,240	1946	Oct. 2, 1945	a12.94	-
1926	Apr. 26, 1926	8.2	8,550		Oct. 2, 1945	11.45	17,100
1927	Nov. 17, 1926	6.95	5,260	1947	June 3, 1947	10.10	13,200
1928	Nov. 30, 1927	7.2	5,860	1948	Mar. 28, 1948	9.82	12,400
1929	Apr. 7, 1929	8.1	8,260	1949	Jan. 7, 1949	6.56	4,150
1930	Jan. 9, 1930	8.8	10,400	1950	Dec. 28, 1949	7.62	6,580
1931	Apr. 22, 1931	6.34	3,930	1951	Apr. 13, 1951	8.20	8,060
1932	May 2, 1932	7.50	6,620	1952	Apr. 21, 1952	7.61	6,560
1933	Apr. 19, 1933	8.41	9,170	1953	Mar. 29, 1953	7.04	5,190
1934	Apr. 17, 1934	8.90	10,700	1954	Apr. 17, 1954	8.09	7,770
1935	July 9, 1935	7.00	5,380	1955	Apr. 17, 1955	7.79	7,000
1936	Mar. 28, 1936	8.02	8,040	1956	May 31, 1956	8.53	9,110
1937	Jan. 15, 1937	7.64	6,990	1957	May 21, 1957	5.73	2,590
1938	Sept. 23, 1938	6.92	5,190	1958	June 3, 1958	6.48	4,000
1939	Apr. 30, 1939	6.27	3,720	1959	Apr. 20, 1959	7.59	6,610
1940	May 3, 1940	7.78	7,370				

a From high-water mark in gage well; backwater from debris.

3460. West Canada Creek at Kast Bridge, N. Y.

Location.--Lat 43°04'15", long 74°59'25", on left bank 600 ft downstream from bridge on State Highway 28 at Kast Bridge station on New York Central Railroad, Herkimer County, 1 mile downstream from North Creek, and 4 miles upstream from mouth and Herkimer.

Drainage area.--556 sq mi.

Gage.--Nonrecording prior to Sept. 18, 1920, at former highway bridge 500 ft upstream at different datum; recording thereafter. Datum of gage is 438.99 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Historical data.--Flood of Mar. 26, 1913, is maximum known according to reports of New York State Engineer.

Remarks.--Since March 1914 flow partly regulated by Hinckley Reservoir 31 miles upstream (usable capacity, 3,320,000,000 cu ft). Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1913	Mar. 26, 1913	-	23,300	1941	Dec. 29, 1940	6.37	12,600
1921	Mar. 22, 1921	5.27	6,400	1942	Dec. 25, 1941	5.35	8,240
1922	June 21, 1922	7.30	16,500	1943	Feb. 17, 1943	a10.47	-
1923	Apr. 5, 1923	5.17	7,260	1944	May 12, 1943	5.61	9,260
1924	Sept. 30, 1924	6.35	11,900	1944	Mar. 17, 1944	a5.69	-
1925	Feb. 11, 1925	7.15	14,300	1945	Apr. 10, 1944	5.46	8,660
1926	Apr. 26, 1926	5.8	9,980	1945	Sept. 26, 1945	6.68	13,500
1927	Nov. 16, 1926	6.3	12,000	1946	Oct. 2, 1945	6.08	20,500
1928	Nov. 30, 1927	5.9	10,400	1947	June 3, 1947	7.08	14,700
1929	Apr. 8, 1929	5.8	9,760	1948	Mar. 28, 1948	6.97	14,200
1930	Jan. 9, 1930	6.5	12,500	1949	Dec. 30, 1948	5.62	8,330
1931	July 20, 1931	4.48	5,380	1950	Mar. 28, 1950	5.68	8,560
1932	Jan. 17, 1932	5.35	8,150	1951	Mar. 31, 1951	6.33	11,300
1933	Oct. 6, 1932	5.89	10,500	1952	Apr. 21, 1952	5.11	6,690
1934	Mar. 3, 1934	a7.67	-	1953	May 1, 1953	5.46	7,890
1935	Mar. 27, 1934	6.56	13,300	1954	Apr. 17, 1954	5.82	9,220
1935	Jan. 9, 1935	a6.37	-	1955	Mar. 11, 1955	6.43	11,700
1936	July 8, 1935	5.84	10,900	1956	May 31, 1956	6.85	13,600
1937	Mar. 17, 1936	a6.12	-	1957	Jan. 23, 1957	6.36	11,400
1938	Mar. 18, 1936	5.86	10,900	1958	Dec. 21, 1957	5.12	6,730
1939	Feb. 22, 1937	6.08	11,700	1959	February 1958	a6.99	-
1940	Sept. 21, 1938	6.29	12,700	1960	Jan. 21, 1959	5.56	8,250
1940	Mar. 27, 1939	4.71	6,210	1960	Apr. 23, 1960	7.43	16,700
1940	July 24, 1940	5.95	10,700	1961	Feb. 25, 1961	a7.16	b8,000

a Backwater from ice.

b Approximate.

3470. Mohawk River near Little Falls, N. Y.

Location.--Lat 43°00'50", long 74°46'40", on left bank 1,800 ft downstream from Rocky Rift Dam, 2 miles upstream from East Canada Creek, and 4½ miles southeast of city of Little Falls, Herkimer County.

Drainage area.--1,348 sq mi.

Gage.--Recording. Datum of gage is 310.0 ft above mean sea level (Barge Canal datum).

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Peaks shown are for river channel only and do not include diversion at Rocky Rift Dam into Erie (Barge) Canal for power and lockage at lock 16 near St. Johnsville. Appreciable regulation by Delta and Hinckley Reservoirs (total usable capacity, 6,120,000,000 cu ft). Base for partial-duration series, 16,000 cfs.

Peak stages and discharges of Mohawk River near Little Falls, N. Y.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Nov. 30, 1927	14.20	16,400	1946	Oct. 3, 1945	17.80	25,300
1929	Jan. 19, 1929	14.50	17,000		Mar. 9, 1946	15.40	19,300
	Mar. 15, 1929	16.4	21,300	1947	Mar. 25, 1947	14.01	16,000
	Apr. 6, 1929	14.26	16,500		Apr. 6, 1947	16.51	22,000
	Apr. 21, 1929	14.05	16,000		June 4, 1947	16.89	22,900
1930	Jan. 10, 1930	15.5	19,200	1948	Mar. 20, 1948	16.57	22,100
1931	July 22, 1931	11.41	10,600		Mar. 28, 1948	14.64	17,500
1932	Dec. 14, 1931	14.05	16,000	1949	Dec. 30, 1948	14.56	17,300
1933	Oct. 6, 1932	15.46	19,200	1950	Mar. 29, 1950	16.22	21,200
					Apr. 5, 1950	14.98	18,300
1934	Mar. 5, 1934	b15.95	-	1951	Mar. 31, 1951	15.42	19,300
	Mar. 27, 1934	14.37	16,800				
	Apr. 17, 1934	14.10	16,200	1952	Apr. 6, 1952	12.10	11,900
1935	Jan. 9, 1935	16.30	21,100	1953	Mar. 27, 1953	12.96	13,700
	July 8, 1935	14.57	17,200				
1936	Mar. 18, 1936	17.24	23,200	1954	Feb. 17, 1954	14.85	18,000
					Apr. 17, 1954	14.52	17,200
1937	Apr. 6, 1937	14.58	17,200	1955	Mar. 11, 1955	16.07	20,900
1938	Feb. 7, 1938	15.40	19,000	1956	Apr. 5, 1956	16.17	21,100
	Sept. 22, 1938	17.01	22,700		June 1, 1956	14.22	16,900
1939	Mar. 27, 1939	13.46	14,800	1957	Jan. 23, 1957	a15.34	-
					Feb. 27, 1957	11.29	10,600
1940	Apr. 9, 1940	17.05	22,800	1958	Dec. 21, 1957	12.52	12,800
	Apr. 18, 1940	14.42	16,900				
1941	Dec. 29, 1940	15.91	20,200	1959	Jan. 22, 1959	14.54	17,400
					Apr. 2, 1959	13.97	16,100
1942	Mar. 17, 1942	b13.9	15,700	1960	Nov. 28, 1959	16.90	23,000
1943	Dec. 31, 1942	15.50	19,200		Apr. 1, 1960	15.27	19,100
	Mar. 17, 1943	15.73	19,800		Apr. 4, 1960	16.22	21,300
					Apr. 24, 1960	14.73	17,900
1944	Apr. 10, 1944	14.17	16,300	1961	Feb. 26, 1961	16.89	23,000
1945	Mar. 18, 1945	14.59	17,300				
	Mar. 22, 1945	14.30	16,700				
	Sept. 26, 1945	14.17	16,400				

a Backwater from ice.

b Estimated.

3475. East Canada Creek at Dolgeville, N. Y.

Location.--Lat 43°06'05", long 74°46'15", on right bank at Dolgeville, Herkimer County, 100 ft downstream from lower highway bridge, and 1 mile downstream from Spruce Creek.

Drainage area.--261 sq mi; 264 sq mi at site used 1898-1912.

Gage.--Nonrecording 1898 to 1912 at High Falls Dam 1 mile downstream at different datum; recording since 1927. Datum of gage is 750.00 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 11,500 cfs and extended above on basis of flow-over-dam measurement at 19,300 cfs.

Remarks.--Base for partial-duration series, 6,200 cfs. Only annual maximum daily discharges are shown for period 1899 to 1912 (from reports of State Engineer and Surveyor of New York).

Peak stages and discharges of East Canada Creek at Dolgeville, N. Y.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1899	Apr. 21, 1899	-	4,472	1935	Jan. 10, 1935	b11.37	-
1900	Apr. 19, 1900	4.5	a5,750		July 8, 1935	10.85	7,100
1901	Apr. 22, 1901	-	4,775	1936	Mar. 12, 1936	b11.16	-
1902	Dec. 15, 1901	-	9,990		Mar. 18, 1936	11.81	13,100
1903	Mar. 11, 1903	-	7,123		Mar. 27, 1936	10.50	8,550
1904	Oct. 10, 1903	-	5,973		Apr. 6, 1936	10.32	8,010
1905	Apr. 1, 1905	-	6,000	1937	Jan. 25, 1937	10.10	6,820
1906	Apr. 15, 1906	-	5,760	1938	Mar. 24, 1938	10.78	8,840
1907	Jan. 4, 1907	-	3,866		Aug. 17, 1938	10.20	7,100
1908	Apr. 9, 1908	-	4,302		Sept. 22, 1938	11.09	9,920
1909	Apr. 14, 1909	-	7,537	1939	Apr. 26, 1939	10.31	7,230
1910	Mar. 1, 1910	-	5,137	1940	Apr. 18, 1940	10.31	7,230
1911	Apr. 15, 1911	-	4,573	1941	Dec. 30, 1940	10.00	6,330
1912	Apr. 17, 1912	-	5,225		Sept. 1, 1941	10.97	9,480
1928	Apr. 8, 1928	11.2	8,500	1942	May 23, 1942	10.96	9,440
1929	Mar. 16, 1929	10.4	6,600		Sept. 28, 1942	10.53	7,890
	Apr. 6, 1929	10.4	6,600	1943	Mar. 16, 1943	b11.37	-
1930	Jan. 9, 1930	10.9	7,800		Apr. 28, 1943	10.52	7,860
	Apr. 7, 1930	10.3	6,370		May 1, 1943	10.49	7,770
1931	Apr. 11, 1931	10.15	6,030	1944	Apr. 25, 1944	10.25	7,050
1932	Apr. 23, 1932	9.90	4,940	1945	Mar. 22, 1945	10.43	7,590
1933	Oct. 6, 1932	11.01	6,540	1946	Oct. 2, 1945	15.1	c19,300
1934	Mar. 29, 1934	b12.93	-				
	Apr. 17, 1934	10.15	5,160				

a Momentary maximum.

b Backwater from ice.

c Result of failure of dam.

3480. East Canada Creek at East Creek, N. Y.

Location.--Lat 43°01'00", long 74°44'30", on right bank at village of East Creek, Herkimer County, a quarter of a mile downstream from Niagara Mohawk Power Corp. Beardslee powerplant, 1½ miles upstream from mouth, and 3½ miles northwest of St. Johnsville.

Drainage area.--291 sq mi.

Gage.--Recording. Datum of gage is 335.70 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 11,000 cfs and extended above on basis of slope-area measurement at 24,000 cfs.

Remarks.--Base for partial-duration series, 7,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	Oct. 2, 1945	9.0	24,000	1953	Mar. 27, 1953	6.34	8,710
1947	Apr. 12, 1947	6.57	9,580	1954	Apr. 17, 1954	5.88	6,770
	June 3, 1947	6.68	10,000	1955	Apr. 16, 1955	6.38	8,580
	June 15, 1947	6.24	7,650	1956	Apr. 17, 1956	6.08	7,480
1948	Mar. 22, 1948	6.87	10,800		Apr. 30, 1956	7.00	11,200
	Mar. 28, 1948	6.50	9,210		May 31, 1956	6.44	8,820
	Apr. 2, 1948	6.09	7,540	1957	Jan. 23, 1957	6.22	7,980
1949	Dec. 30, 1948	6.50	9,290	1958	Dec. 21, 1957	6.42	8,740
	Mar. 28, 1949	6.10	7,690	1959	Jan. 22, 1959	5.50	5,410
1950	Apr. 5, 1950	6.09	7,670	1960	Nov. 6, 1959	6.05	7,380
	Apr. 20, 1950	6.40	8,890		Nov. 28, 1959	6.91	10,800
1951	Mar. 30, 1951	7.03	12,200		Apr. 4, 1960	6.31	8,320
1952	Apr. 6, 1952	6.78	10,700	1961	Feb. 26, 1961	5.88	6,790
1953	Dec. 11, 1952	6.09	7,740				
	Mar. 24, 1953	6.51	9,440				

3490. Otsquago Creek at Fort Plain, N. Y.

Location.--Lat 42°55'50", long 74°37'35", on left bank 25 ft downstream from bridge on State Highway 163 in Fort Plain, Montgomery County, and half a mile upstream from mouth.

Drainage area.--59.2 sq mi.

Gage.--Recording. Datum of gage is 303.16 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 5,500 cfs and extended above on basis of slope-area measurement at 8,620 cfs.

Remarks.--Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Mar. 28, 1950	6.37	4,400	1955	Mar. 1, 1955	5.15	a2,600
	Apr. 4, 1950	5.40	2,850		Mar. 11, 1955	7.87	6,920
	Aug. 31, 1950	8.24	9,030	1956	Oct. 16, 1955	6.02	3,660
1951	Nov. 25, 1950	7.16	5,850		Apr. 5, 1956	6.43	4,240
	Dec. 4, 1950	5.24	2,400		Apr. 11, 1956	5.19	2,640
	Feb. 21, 1951	5.25	2,420	1957	Jan. 23, 1957	5.47	2,960
	Mar. 31, 1951	6.17	3,810		Feb. 26, 1957	b5.90	-
	Aug. 16, 1951	7.94	8,000	1958	Apr. 22, 1958	5.13	2,570
1952	Jan. 1, 1952	5.53	a2,910		Jan. 22, 1959	6.80	4,820
	Mar. 12, 1952	5.00	a2,210	1959	Mar. 20, 1959	5.23	2,680
	Apr. 5, 1952	6.21	3,990		Apr. 2, 1959	4.58	2,010
1953	Dec. 11, 1952	6.93	5,380	1960	Nov. 28, 1959	8.62	8,720
	Feb. 21, 1953	7.48	6,620		Jan. 3, 1960	4.88	2,300
	Mar. 4, 1953	4.90	2,090		Feb. 11, 1960	5.57	a3,080
	Mar. 27, 1953	5.00	2,210		Apr. 1, 1960	5.30	2,760
	May 1, 1953	6.12	3,830		Apr. 4, 1960	6.44	4,260
1954	Feb. 17, 1954	7.49	6,180		Apr. 24, 1960	6.24	3,970
	Apr. 17, 1954	7.45	6,090		Sept. 12, 1960	6.56	5,040
	June 2, 1954	5.33	2,710	1961	Feb. 25, 1961	6.91	5,010
1955	Feb. 23, 1955	4.68	a2,110				

a Release from upstream ice jam.

b Backwater from ice.

3500. Schoharie Creek at Prattsville, N. Y.

Location.--Lat 42°19'15", long 74°26'10", on left bank 100 ft upstream from highway bridge in Prattsville, Greene County, a quarter of a mile upstream from Schoharie Reservoir, and 1½ miles downstream from Batavia Kill.

Drainage area.--236 sq mi.

Gage.--Nonrecording prior to Oct. 1, 1915; recording thereafter. Prior to July 18, 1936, at old highway bridge 80 ft upstream, and July 18, 1936, to July 15, 1954, at site a quarter of a mile downstream, both at datum 1.56 ft lower than present datum. Datum of gage is 1,131.57 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 8,800 cfs and extended above on basis of contracted-opening measurement at 55,200 cfs.

Remarks.--Records prior to 1937 furnished by Board of Water Supply, City of New York. Base for partial duration series, 4,400 cfs. Only annual peaks are shown prior to 1937.

Peak stages and discharges of Schoharie Creek at Prattsville, N. Y.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1908	Nov. 7, 1907	-	13,550	1945	Jan. 1, 1945	a6.12	5,740
1909	Feb. 20, 1909	-	8,800		Mar. 17, 1945	6.41	6,690
1910	Apr. 26, 1910	-	21,500		July 20, 1945	6.51	6,580
					Sept. 19, 1945	6.80	7,370
1911	Apr. 5, 1911	-	4,500				
1912	Mar. 15, 1912	-	9,400	1946	Jan. 6, 1946	a14.66	-
1913	Mar. 27, 1913	-	16,500		Jan. 7, 1946	5.87	5,170
1914	Mar. 28, 1914	-	9,180		Mar. 9, 1946	7.07	7,710
1915	Jan. 7, 1915	-	13,420		May 28, 1946	7.33	8,290
1916	Feb. 25, 1916	-	14,300	1947	Mar. 14, 1947	a6.94	5,000
1917	Mar. 27, 1917	-	7,600		Mar. 25, 1947	5.38	4,440
1918	Oct. 30, 1917	-	16,276		Apr. 5, 1947	6.03	5,720
1919	Sept. 3, 1919	-	13,900		May 6, 1947	8.29	10,800
1920	Mar. 12, 1920	-	16,500				
1921	Mar. 9, 1921	-	7,690	1948	Nov. 8, 1947	8.19	10,400
1922	Mar. 7, 1922	-	16,800		Feb. 14, 1948	a9.49	-
1923	Oct. 24, 1922	-	9,390		Mar. 16, 1948	6.75	6,650
1924	Sept. 30, 1924	-	29,000		Mar. 22, 1948	8.06	9,480
1926	Nov. 13, 1925	-	9,650	1949	Dec. 30, 1948	10.21	17,500
1927	Nov. 16, 1926	-	42,300		Jan. 6, 1949	7.17	7,690
1928	Nov. 3, 1927	-	11,800				
1930	Oct. 23, 1929	-	11,200	1950	Mar. 9, 1950	5.76	4,870
					Mar. 28, 1950	6.57	6,440
1931	Apr. 11, 1931	-	5,120		Apr. 5, 1950	5.79	4,920
1932	Apr. 1, 1932	-	5,990				
1933	Aug. 24, 1933	18.30	39,000	1951	Nov. 25, 1950	15.50	49,500
1934	Mar. 3, 1934	11.69	11,69		Dec. 4, 1950	8.93	13,000
1935	July 8, 1935	15.50	27,400		Dec. 8, 1950	7.03	7,740
					Feb. 1, 1951	a12.28	-
1936	Mar. 18, 1936	17.44	38,500		Mar. 31, 1951	-	b32,500
					Apr. 13, 1951	-	b6,340
1937	Dec. 20, 1936	5.77	4,980		July 19, 1951	6.54	6,630
	Feb. 22, 1937	11.30	29,800	1952	Nov. 3, 1951	6.38	6,310
	May 15, 1937	9.22	22,100		Nov. 7, 1951	11.22	21,800
	Sept. 14, 1937	8.51	14,800		Dec. 21, 1951	a14.92	-
1938	Oct. 23, 1937	10.90	27,400		Apr. 2, 1952	5.71	5,050
	Nov. 13, 1937	8.32	13,900		Apr. 5, 1952	9.84	16,100
	Jan. 25, 1938	8.89	16,500		May 12, 1952	5.96	5,500
	July 23, 1938	6.46	6,060		June 1, 1952	7.20	8,150
	Sept. 21, 1938	15.60	45,000		July 10, 1952	7.80	9,960
					Sept. 1, 1952	5.66	4,900
1939	Dec. 6, 1938	8.46	11,900	1953	Nov. 22, 1952	6.27	6,080
	Dec. 10, 1938	6.02	5,040		Dec. 11, 1952	12.50	28,200
	Feb. 17, 1939	a10.09	-		Jan. 24, 1953	7.84	10,200
	Feb. 20, 1939	6.08	5,180		Mar. 16, 1953	5.23	4,870
1940	Mar. 31, 1940	8.87	13,300		Mar. 24, 1953	6.87	7,920
	Apr. 9, 1940	7.66	9,380		Mar. 26, 1953	7.47	9,290
	Apr. 12, 1940	6.28	5,620		Mar. 27, 1953	5.78	5,800
	Apr. 20, 1940	5.93	4,850	1954	Dec. 7, 1953	5.46	5,250
	May 31, 1940	5.78	4,520		Mar. 2, 1954	6.14	6,470
1941	Feb. 8, 1941	a6.76	-		Mar. 3, 1954	5.62	5,520
	Apr. 14, 1941	5.28	3,520		May 21, 1954	6.65	7,460
1942	Dec. 24, 1941	9.02	13,900	1955	Nov. 3, 1954	10.53	11,000
	Mar. 9, 1942	a8.80	12,200		Dec. 15, 1954	8.31	5,880
	Sept. 27, 1942	10.74	19,900		Dec. 18, 1954	9.49	8,260
1943	Nov. 25, 1942	6.30	5,860		Aug. 13, 1955	13.83	25,100
	Dec. 30, 1942	a8.32	10,400		Aug. 18, 1955	12.27	18,300
	Feb. 24, 1943	a10.80	-	1956	Oct. 16, 1955	19.14	55,200
	Mar. 12, 1943	a10.75	6,000		Oct. 31, 1955	10.46	11,800
	Mar. 17, 1943	5.82	4,760		Apr. 5, 1956	8.79	7,100
1944	Oct. 27, 1943	5.88	4,900		Apr. 16, 1956	9.06	7,760
	Nov. 9, 1943	7.37	8,540	1957	Apr. 29, 1956	8.05	5,480
					Jan. 23, 1957	a8.52	-

a Backwater from ice.
b Estimated.

Peak stages and discharges of Schoharie Creek at Prattsville, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	Apr. 6, 1957	7.10	3,790	1960	Nov. 28, 1959	11.51	15,400
1958	Dec. 21, 1957	15.07	31,000		Dec. 7, 1959	7.62	4,900
	Dec. 26, 1957	9.16	8,140		Jan. 3, 1960	8.16	5,920
	Apr. 6, 1958	7.49	4,660		Feb. 11, 1960	all.75	12,800
	Apr. 18, 1958	9.60	9,300		Mar. 31, 1960	9.51	9,050
1959	Jan. 22, 1959	8.62	6,880		Apr. 4, 1960	9.89	10,100
	Mar. 6, 1959	9.12	8,050		Sept. 12, 1960	18.35	49,900
	Apr. 2, 1959	11.45	15,200		Sept. 20, 1960	8.03	5,140
1960				1961	Feb. 26, 1961	10.95	13,400
	Oct. 24, 1959	10.86	13,100		Apr. 25, 1961	7.70	4,970

^a Backwater from ice.

3505. Schoharie Creek at Middleburg, N. Y.

Location.--Lat 42°36'00", long 74°20'15", on right bank 150 ft downstream from highway bridge in Middleburg, Schoharie County, and 20 miles downstream from Gilboa Dam.

Drainage area.--532 sq mi.

Gage.--Nonrecording prior to Sept. 23, 1938; recording thereafter. Altitude of gage is 620 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 14,000 cfs and extended above on basis of slope-area measurement at 47,800 cfs.

Remarks.--Entire flow from 314 sq mi of drainage area controlled by Schoharie Reservoir. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1909	Feb. 20, 1909	-	31,600	1932	Apr. 3, 1932	5.6	4,220
1915	Jan. 19, 1915	-	18,900	1933	Sept. 16, 1933	10.1	15,600
				1934	Apr. 12, 1934	6.6	6,070
1928	Nov. 4, 1927	10.5	17,000	1935	July 10, 1935	7.5	8,070
1929	Apr. 26, 1929	10.0	15,200	1936	Mar. 18, 1936	16.8	47,800
1930	Mar. 19, 1930	3.3	1,390	1937	May 15, 1937	11.4	20,100
				1938	Sept. 22, 1938	15.6	40,600
1931	Apr. 10, 1931	6.2	5,290	1939	Feb. 20, 1939	10.71	17,800

3510. Fox Creek at West Berne, N. Y.

Location.--Lat 42°37'45", long 74°11'00", on right bank 500 ft upstream from highway bridge in West Berne, Albany County, and 1½ miles downstream from Switz Kill.

Drainage area.--73.0 sq mi.

Gage.--Nonrecording. Altitude of gage is 920 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,950 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1925	Feb. 11, 1925	6.6	2,900	1929	Apr. 21, 1929	7.8	4,190
1926	Apr. 9, 1926	5.3	1,900	1930	Mar. 8, 1930	5.1	1,560
1927	Mar. 13, 1927	5.9	2,230	1931	July 22, 1931	5.1	1,560
1928	Nov. 3, 1927	7.4	3,750	1932	Apr. 12, 1932	5.8	2,140

3515. Schoharie Creek at Burtonsville, N. Y.

Location.--Lat 42°47'55", long 74°15'45", on right bank 0.4 mile south of Burtonsville, Montgomery County, 2.7 miles north of Esperance, and 13.5 miles upstream from mouth.

Drainage area.--883 sq mi.

Gage.--Recording. Datum of gage is 507.98 ft above mean sea level, unadjusted.

Stage-discharge relation.--Defined by current-meter measurements.

Historical data.--Flood of October 1903 is known to have exceeded those of 1936 and 1938.

Remarks.--Entire flow from 314 sq mi of drainage area controlled by Schoharie Reservoir. Base for partial duration series, 8,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	March 1936	10.5	-	1951	Dec. 9, 1950	4.74	12,000
1938	September 1938	10.2	-		Jan. 4, 1951	a4.64	8,600
1940	Mar. 31, 1940	6.77	25,200		Feb. 2, 1951	5.54	16,900
	Apr. 5, 1940	5.64	16,700		Feb. 7, 1951	4.39	10,100
	Apr. 9, 1940	6.09	19,800		Feb. 22, 1951	4.15	8,840
	Apr. 21, 1940	4.36	9,400		Mar. 31, 1951	8.00	37,900
	June 1, 1940	4.97	12,100	1952	Nov. 8, 1951	4.75	12,100
1941	Feb. 8, 1941	a4.28	-		Dec. 22, 1951	4.20	9,100
	Apr. 7, 1941	3.86	6,980		Jan. 2, 1952	4.06	8,380
1942	Mar. 9, 1942	a6.34	20,100		Jan. 27, 1952	a4.48	10,000
	Mar. 17, 1942	5.77	17,600		Mar. 27, 1952	4.07	8,430
	June 14, 1942	4.11	8,150		Apr. 2, 1952	4.93	13,100
1943	Dec. 31, 1942	6.43	22,400		Apr. 6, 1952	7.03	28,600
	Feb. 21, 1943	a5.77	-		May 13, 1952	4.82	12,500
	Feb. 24, 1943	5.51	15,900		June 2, 1952	4.43	10,300
	Mar. 12, 1943	4.65	10,900	1953	Dec. 11, 1952	4.86	12,700
	Mar. 18, 1943	4.99	12,700		Jan. 25, 1953	4.75	12,100
	Apr. 22, 1943	4.32	9,140		Feb. 21, 1953	4.59	11,200
	May 11, 1943	4.44	9,800		Mar. 27, 1953	5.67	17,800
	May 22, 1943	4.73	11,300		May 2, 1953	4.26	9,410
	June 2, 1943	4.25	8,790	1954	Feb. 17, 1954	5.09	14,000
1944	Mar. 17, 1944	5.44	15,400		May 22, 1954	4.13	8,750
	Apr. 25, 1944	4.30	9,040	1955	Nov. 3, 1954	4.05	8,350
1945	Feb. 27, 1945	a4.98	-		Feb. 23, 1955	4.01	8,150
	Mar. 4, 1945	4.83	11,800		Mar. 1, 1955	4.15	8,850
	Mar. 6, 1945	4.15	8,300		Mar. 11, 1955	4.20	9,100
	Mar. 18, 1945	4.95	12,500		Aug. 19, 1955	4.97	13,300
	Mar. 22, 1945	4.55	10,300	1956	Oct. 16, 1955	12.39	76,500
	May 14, 1945	4.09	8,010		Oct. 31, 1955	5.74	18,800
1946	Jan. 6, 1946	6.37	22,000		Mar. 7, 1956	4.98	13,800
	Mar. 7, 1946	4.94	12,400		Apr. 5, 1956	6.71	26,200
	Mar. 9, 1946	5.34	14,800		Apr. 17, 1956	6.09	14,500
	May 28, 1946	6.04	19,500		Apr. 30, 1956	4.78	12,600
	June 3, 1946	4.16	8,350	1957	Jan. 23, 1957	a4.69	11,600
1947	Mar. 15, 1947	4.67	10,900	1958	Dec. 27, 1957	4.03	8,520
	Mar. 29, 1947	4.74	11,300		Apr. 7, 1958	4.85	13,000
	May 6, 1947	6.04	19,500		Apr. 22, 1958	5.66	18,300
1948	Mar. 16, 1948	a6.44	-	1959	Jan. 22, 1959	-	17,100
	Mar. 17, 1948	5.95	18,800		Apr. 3, 1959	5.34	16,100
	Mar. 20, 1948	5.00	12,800	1960	Nov. 28, 1959	6.44	24,000
	Mar. 23, 1948	5.36	14,900		Dec. 7, 1959	4.32	10,100
1949	Dec. 31, 1948	5.69	17,000		Jan. 3, 1960	a5.58	17,400
	Jan. 6, 1949	5.73	17,300		Feb. 12, 1960	6.75	26,500
1950	Mar. 28, 1950	5.79	17,700		Mar. 31, 1960	7.20	30,100
	Apr. 5, 1950	4.09	8,010		Apr. 4, 1960	7.25	30,500
1951	Nov. 26, 1950	6.04	19,500		Sept. 13, 1960	7.03	28,700
	Dec. 5, 1950	6.23	22,900		Sept. 20, 1960	4.71	12,200
				1961	Feb. 26, 1961	6.50	24,500
					Mar. 29, 1961	4.28	9,570
					Apr. 17, 1961	4.13	9,040

a Backwater from ice.

3560. Mohawk River at Vischer Ferry Dam, N. Y.
(Published as "at Barge Canal lock 7" in 1914)

Location.--Lat 42°48'30", long 73°50'55", on southerly corner of basin near upper end of Barge Canal lock 7 at Vischer Ferry Dam, 1 mile upstream from Stony Creek and Vischer Ferry, Saratoga County, and 11 miles upstream from mouth.

Drainage.--3,385 sq mi.

Gage.--Recording above and nonrecording below dam. Datum of gage above dam is 211.0 ft above mean sea level (Barge Canal datum).

Stage-discharge relation.--Defined by current-meter measurements below 2,500 cfs (made in 1913-14), and extended above on basis of theoretical coefficients for flow-over-dam.

Remarks.--Some regulation by Delta and (since 1916), by Hinckley Reservoirs (total usable capacity, 6,120,000,000 cu ft). Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	Mar. 28, 1914	7.6	4140,000	1919	Apr. 13, 1919	-	38,100
1915	July 9, 1915	3.7	44,600				
1916	Apr. 2, 1916	6.9	6113,000	1924	Jan. 12, 1924	4.64	-
1917	June 12, 1917	4.07	51,500	1925	Oct. 1, 1924	4.19	-
1918	Oct. 31, 1917	4.00	50,200	1926	Nov. 14, 1925	3.0	-

a Result of release from ice jam; discharge estimated by State engineer and surveyor of New York.

b About.

3575. Mohawk River at Cohoes, N. Y.
(Published as "at Crescent Dam prior to July 17, 1925)

Location.--Lat 42°47'05", long 73°42'25", on right bank at Niagara Mohawk Power Corp. School Street powerplant in Cohoes, Albany County, and 1 $\frac{1}{4}$ miles upstream from mouth.

Drainage area.--3,456 sq mi; 3,453 sq mi, at site used 1918-25.

Gage.--Recording. Prior to July 17, 1925, at site 1 $\frac{1}{4}$ miles upstream at Crescent Dam at datum 130.87 ft higher. Datum of gage is 49.13 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Since 1924, most of flow of Schoharie Creek above Gilboa Dam, a tributary of Mohawk River, is diverted out of basin through Shandaken tunnel for water supply of city of New York. Flow partly regulated by Delta and Hinckley Reservoirs for period of record and since 1926 by Schoharie Reservoir (total usable capacity of three reservoirs, 8,738,000,000 cu ft). Base for partial-duration series, 41,000 cfs. Only annual peaks are shown prior to 1926.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1918	Mar. 23, 1918	8.22	45,400	1929	Mar. 16, 1929	18.3	72,000
1919	Apr. 13, 1919	7.59	35,000		Apr. 7, 1929	15.80	42,500
1920	Mar. 27, 1920	9.24	64,500		Apr. 21, 1929	17.93	66,000
1921	Dec. 6, 1920	8.31	47,100	1930	Mar. 9, 1930	15.4	38,500
1922	Apr. 12, 1922	8.83	56,400				
1923	Apr. 6, 1923	8.93	58,300	1931	Apr. 11, 1931	14.70	33,000
1924	Apr. 7-8, 1924	9.60	71,500				
1925	Oct. 1, 1924	8.88	57,500	1932	Apr. 1, 1932	15.50	41,000
1926	Apr. 10, 1926	16.6	52,600	1933	Oct. 7, 1932	16.17	47,600
	Apr. 25, 1926	15.53	41,300		Apr. 19, 1933	15.67	42,100
1927	Mar. 15, 1927	16.8	54,800	1934	Mar. 6, 1934	15.95	45,200
1928	Nov. 4, 1927	16.67	53,400	1935	Jan. 10, 1935	18.15	61,100
	Dec. 9, 1927	16.8	54,800		July 8, 1935	16.00	45,700

a Occurred earlier in day; ice jam.

Peak stages and discharges of Mohawk River at Cohoes, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Nov. 14, 1935	16.13	47,100	1949	Feb. 16, 1949	16.30	41,600
	Mar. 13, 1936	18.00	66,500	1950	Mar. 29, 1950	19.14	72,800
	Mar. 19, 1936	22.57	130,000		Apr. 5, 1950	16.72	46,300
1937	Jan. 25, 1937	16.62	48,900	1951	Nov. 26, 1950	16.63	45,400
	Feb. 22, 1937	16.15	43,400		Dec. 5, 1950	16.67	45,800
	May 16, 1937	16.20	44,000		Apr. 1, 1951	19.58	77,300
1938	Feb. 8, 1938	16.21	44,100	1952	Apr. 6, 1952	18.52	60,800
	Sept. 22, 1938	20.61	102,000	1953	Dec. 12, 1952	17.54	49,600
1939	Dec. 11, 1938	16.79	51,000		Jan. 25, 1953	16.75	41,600
	Feb. 21, 1939	16.19	43,900		Mar. 27, 1953	18.37	59,000
	Mar. 28, 1939	16.31	41,000		May 1, 1953	17.24	46,500
1940	Mar. 31, 1940	18.17	59,200	1954	Feb. 18, 1954	18.29	56,800
	Apr. 9, 1940	18.53	63,000		Apr. 17, 1954	17.51	47,800
1941	Dec. 30, 1940	17.18	49,100	1955	Mar. 2, 1955	16.97	41,200
1942	Mar. 9, 1942	16.60	43,600		Mar. 12, 1955	17.86	51,500
	Mar. 17, 1942	16.98	47,200	1956	Oct. 17, 1955	21.15	100,000
1943	Dec. 31, 1942	18.62	63,900		Apr. 6, 1956	19.75	77,200
	Mar. 18, 1943	18.22	59,700		Apr. 17, 1956	18.19	55,900
1944	Mar. 17, 1944	16.85	46,000		Apr. 30, 1956	17.61	48,900
1945	Mar. 19, 1945	16.92	46,600	1957	Jan. 24, 1957	14.90	23,000
	Mar. 22, 1945	17.01	47,500	1958	Apr. 7, 1958	16.78	39,700
1946	Oct. 3, 1945	17.62	53,500		Jan. 22, 1959	18.85	64,400
	Jan. 7, 1946	17.14	48,800		Apr. 3, 1959	17.75	50,600
	Mar. 10, 1946	18.09	58,300	1960	Nov. 29, 1959	19.10	67,800
	May 28, 1946	16.31	41,000		Feb. 12, 1960	17.65	49,400
1947	Apr. 7, 1947	17.26	51,300		Apr. 1, 1960	19.55	74,200
	May 6, 1947	16.40	42,600		Apr. 4, 1960	20.15	83,300
1948	Mar. 17, 1948	16.80	46,600		Sept. 13, 1960	18.18	57,300
	Mar. 20, 1948	19.91	82,700	1961	Feb. 26, 1961	19.39	71,900
1949	Dec. 31, 1948	20.18	86,300				

3580. Hudson River at Green Island, N. Y.

Location.--Lat 42°45'10", long 73°41'20", on right bank at Green Island, Albany County, just upstream from Troy Lock and dam, half a mile downstream from 5th branch Mohawk River.

Drainage area.--8,090 sq mi, approximately (including that above site of auxiliary gage).

Gage.--Recording and since July 1, 1946, auxiliary recording gage on bypass channel at datum 10.59 ft higher. Datum of gage is 0.31 ft below mean sea level, datum of 1929 (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 135,000 cfs and extended above on basis of peak discharge of floods of Mar. 19, 1936, and Dec. 31, 1948, at upstream stations.

Historical data.--Flood of Mar. 28, 1913, prior to construction of Sacandaga Reservoir and Troy Lock and dam, reached a stage about 0.2 ft higher than the flood of Mar. 19, 1936, upstream from former dam near same site. Downstream from dams, flood in 1913 was about 3.3 ft higher than flood in 1936, from information by Corps of Engineers.

Remarks.--Records include flow over spillway, through power plant units, and through lock. Records of flow through powerplant prior to December 1960 furnished by Ford Motor Co. from ratings developed by the Geological Survey. Flow appreciably regulated by Sacandaga Reservoir, Indian Lake, and Delta, Hinckley and Schoharie Reservoirs. Gage heights are for main channel. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Mar. 19, 1936	22.48	215,000	1954	Apr. 18, 1954	21.24	75,400
1946	Mar. 10, 1946	22.13	93,500	1955	Mar. 12, 1955	20.83	66,500
1947	May 6, 1947	21.64	83,900	1956	Oct. 17, 1955	23.13	113,000
1948	Mar. 23, 1948	22.97	109,000	1957	Jan. 24, 1957	19.62	43,400
1949	Dec. 31, 1948	27.05	181,000	1958	Apr. 23, 1958	21.01	70,600
1950	Mar. 29, 1950	22.19	93,900	1959	Jan. 22, 1959	22.21	92,400
1951	Apr. 1, 1951	23.05	111,000	1960	Apr. 5, 1960	24.41	135,000
1952	Apr. 6, 1952	22.78	108,000	1961	Feb. 27, 1961	22.37	92,500
1953	Mar. 28, 1953	22.75	107,000				

a Stage at gage on opposite bank, from information by Corps of Engineers.

3585. Poesten Kill near Troy, N. Y.

Location.--Lat 42°44'00", long 73°38'00", on left bank 600 ft downstream from bridge on State Highway 2, a quarter of a mile downstream from Sweet Milk Creek, 1½ miles west of Eagle Mills, 3 miles east of Troy, Rensselaer County, and 5 miles upstream from mouth.

Drainage area.--89.4 sq mi.

Gage.--Recording. Prior to Sept. 22, 1938, at site 90 ft upstream. Datum of gage is 321.46 ft above mean sea level (city of Troy, N. Y., datum).

Stage-discharge relation.--Defined by current-meter measurements below 3,100 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series 1,700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1924	Dec. 1, 1923	5.89	2,940	1943	Feb. 24, 1943	b6.68	-
	Jan. 11, 1924	5.62	2,640				
	Apr. 7, 1924	5.10	2,100	1944	Nov. 9, 1943	4.98	1,920
1925	Feb. 12, 1925	a6.2	3,280	1945	July 15, 1945	4.77	1,840
					July 22, 1945	5.55	2,560
1926	Nov. 16, 1925	4.8	1,810				
	Mar. 20, 1926	b7.7	-	1946	Mar. 7, 1946	b4.67	1,710
	Apr. 8, 1926	4.76	1,770				
1927	Mar. 14, 1927	4.95	1,950	1947	Jan. 20, 1947	b7.25	-
					Jan. 31, 1947	5.08	2,120
1928	Oct. 13, 1927	4.82	1,830	1948	Mar. 16, 1948	5.14	2,180
	Nov. 4, 1927	8.4	7,030		Mar. 22, 1948	4.61	1,700
1929	Mar. 14, 1929	5.6	2,210	1949	Dec. 31, 1948	11.26	10,100
	Apr. 21, 1929	5.48	2,100		Jan. 6, 1949	6.01	3,020
1930	June 10, 1930	5.35	1,990	1950	Mar. 8, 1950	b4.91	-
1931	July 10, 1931	4.98	1,670		Sept. 1, 1950	5.72	2,730
1932	Apr. 1, 1932	5.13	1,770	1951	Nov. 26, 1950	5.81	2,820
	Apr. 12, 1932	5.60	2,150		Mar. 31, 1951	5.14	2,180
1933	Nov. 19, 1932	5.40	1,990	1952	Nov. 8, 1951	4.68	1,760
	Apr. 2, 1933	5.30	1,910		Apr. 6, 1952	4.54	1,900
					June 1, 1952	6.09	3,490
1934	Mar. 3, 1934	b6.66	1,760	1953	Jan. 25, 1953	4.94	2,270
1935	Jan. 9, 1935	5.28	2,080		Apr. 27, 1953	5.27	2,600
					May 1, 1953	4.41	1,780
1936	Mar. 12, 1936	7.45	4,750	1954	June 16, 1954	4.32	1,700
	Mar. 18, 1936	7.40	4,680				
1937	May 15, 1937	4.56	1,480	1955	Feb. 23, 1955	4.65	2,000
1938	Jan. 25, 1938	6.11	2,970	1956	Mar. 7, 1956	5.15	2,480
	Sept. 22, 1938	12.1	11,900		Apr. 17, 1956	4.56	1,920
1939	Dec. 6, 1938	5.20	2,300	1957	Jan. 23, 1957	4.23	1,630
	Feb. 15, 1939	6.16	3,330				
	Apr. 20, 1939	5.04	2,140	1958	Dec. 21, 1957	4.58	2,080
1940	Mar. 31, 1940	6.95	4,320	1959	Mar. 1, 1959	b5.32	-
	Apr. 9, 1940	4.82	1,940		Apr. 3, 1959	4.98	2,480
1941	Nov. 15, 1940	3.88	1,200	1960	Nov. 28, 1959	6.00	3,450
	Feb. 8, 1941	b6.20	-		Feb. 11, 1960	4.87	2,300
1942	Mar. 17, 1942	5.54	2,440		Mar. 31, 1960	5.43	2,860
					Apr. 4, 1960	5.71	3,140
1943	Nov. 25, 1942	5.27	2,180		Sept. 12, 1960	7.43	5,040
	Dec. 31, 1942	5.40	2,300		Sept. 20, 1960	4.99	2,420
				1961	Feb. 26, 1961	-	c1,400

a Estimated

b Backwater from ice.

c Approximate.

3610. Kinderhook Creek at Rossman, N. Y.

Location.--Lat 42°19'50", long 73°44'40", on right bank just downstream from highway bridge in Rossman, Columbia County, 1 mile upstream from Claverack Creek, and 2½ miles downstream from Stuyvesant Falls.

Drainage area.--329 sq mi.

Gage.--Nonrecording at different datum prior to May 1914; recording thereafter. Datum of gage is 25.78 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series 3,600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1913	Mar. 28, 1913	33.4	a8,780	1947	Jan. 31, 1947	5.82	4,910
					Mar. 14, 1947	5.83	4,930
1929	Mar. 14, 1929	6.9	6,660		Apr. 6, 1947	5.10	3,830
	Apr. 21, 1929	6.17	5,410		May 6, 1947	5.33	4,160
1930	June 10, 1931	5.2	3,770	1948	Mar. 17, 1948	b6.97	-
1931	Mar. 29, 1931	4.92	3,350		Mar. 22, 1948	6.41	5,880
1932	Apr. 1, 1932	5.84	4,780		June 25, 1948	6.00	5,200
	Apr. 12, 1932	6.18	5,360	1949	Dec. 31, 1948	19.8	29,800
					Jan. 6, 1949	6.73	6,450
1933	Nov. 20, 1932	7.90	8,680	1950	Mar. 28, 1950	4.90	3,520
	Mar. 22, 1933	5.12	3,860				
	Apr. 2, 1933	5.21	4,000	1951	Nov. 26, 1950	5.00	3,660
	Sept. 16, 1933	6.88	6,960		Dec. 5, 1950	5.07	3,760
1934	Mar. 5, 1934	6.52	6,240		Feb. 2, 1951	5.19	3,940
	Mar. 28, 1934	5.64	4,530		Feb. 22, 1951	5.34	4,170
	Apr. 1, 1934	5.16	3,800		Mar. 31, 1951	6.22	5,560
	Apr. 25, 1934	5.32	4,040	1952	Apr. 6, 1952	6.25	5,620
1935	Jan. 10, 1935	5.96	5,050		June 2, 1952	6.63	6,270
1936	Mar. 12, 1936	10.25	12,900	1953	Dec. 12, 1952	5.59	4,540
	Mar. 19, 1936	9.72	12,100		Jan. 25, 1953	6.53	6,090
1937	Apr. 6, 1937	5.03	3,610		Mar. 16, 1953	5.08	3,780
1938	Jan. 25, 1938	7.05	7,070		Mar. 27, 1953	5.52	4,440
	June 13, 1938	5.09	3,780		Mar. 31, 1953	5.01	3,680
	July 23, 1938	6.57	6,310		Apr. 27, 1953	5.46	4,350
	Sept. 22, 1938	18.4	27,800		May 1, 1953	5.29	4,100
1939	Dec. 6, 1938	6.69	6,540	1954	Dec. 7, 1953	5.04	3,720
	Feb. 20, 1938	5.57	4,530				
	Apr. 20, 1938	5.60	4,580	1955	Dec. 19, 1954	5.32	4,140
1940	Mar. 31, 1940	9.53	12,100	1956	Mar. 7, 1956	6.31	5,720
	Apr. 9, 1940	5.88	4,820		Apr. 6, 1956	5.88	5,010
1941	Feb. 8, 1941	5.00	3,470		Apr. 17, 1956	6.01	5,220
1942	Mar. 17, 1942	7.73	8,320	1957	Apr. 6, 1957	4.07	2,370
1943	Nov. 26, 1942	7.78	8,420	1958	Dec. 21, 1957	5.52	4,440
	Dec. 30, 1942	7.31	7,480		Apr. 7, 1958	5.40	4,260
	May 13, 1943	5.42	4,190	1959	Jan. 21, 1959	b7.00	-
1944	Nov. 9, 1943	6.18	5,410		Jan. 22, 1959	6.41	5,890
	Mar. 17, 1944	5.61	4,580		Mar. 7, 1959	6.42	5,900
1945	June 20, 1945	5.66	4,660		Apr. 3, 1959	5.29	4,100
	July 23, 1945	11.38	15,800	1960	Jan. 3, 1960	6.34	5,770
	July 29, 1945	5.07	3,790		Feb. 12, 1960	6.67	6,350
1946	Mar. 9, 1946	5.61	4,580		Apr. 1, 1960	6.75	6,490
	May 28, 1946	5.11	3,840		Apr. 5, 1960	7.04	7,020
					Sept. 13, 1960	6.10	5,360
					Sept. 20, 1960	4.98	3,630
				1961	Feb. 25, 1961	b7.26	-
					Feb. 26, 1961	6.72	6,440

a Annual peak only.

b Backwater from ice.

3615. Catskill Creek at Oak Hill, N. Y.

Location.--Lat 42°24'20", long 74°09'05", on right bank just downstream from highway bridge in southern most part of Oak Hill, Greene County, and 100 ft downstream from small tributary.

Drainage area.--98 sq mi, approximately.

Gage.--Nonrecording prior to Aug. 4, 1930; recording thereafter. Datum of gage is 612.65 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 6,100 cfs and extended above on basis of slope-area measurement at 12,500 cfs.

Remarks.--Base for partial duration series 2,300 cfs. Only annual peaks are shown prior to 1931.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1911	June 13, 1911	-	a1,650	1945	Mar. 3, 1945	7.83	3,200
1912	Mar. 29, 1912	-	a1,304		Mar. 16, 1945	7.45	2,780
1913	Mar. 27, 1913	-	a4,000				
1914	Nov. 9, 1913	-	12,300	1946	Jan. 7, 1946	7.30	2,610
1915	Aug. 22, 1915	-	4,700		Mar. 9, 1946	7.84	3,210
					May 28, 1946	9.39	4,970
1916	Mar. 30, 1916	-	2,250				
1917	Feb. 27, 1917	-	a1,205	1947	May 6, 1947	8.33	3,280
1918	Oct. 30, 1917	-	4,300				
1919	Sept. 3, 1919	-	3,360	1948	Mar. 16, 1948	8.90	3,920
1920	Apr. 5, 1920	-	4,660		Mar. 22, 1948	7.94	2,850
1921	Dec. 5, 1920	-	a2,535	1949	Dec. 31, 1948	8.98	4,020
1922	Nov. 28, 1921	-	5,020		Jan. 6, 1949	7.53	2,430
1923	Mar. 23, 1923	-	a2,055				
1924	May 12, 1924	-	6,200	1950	Mar. 28, 1950	8.32	3,270
1925	Mar. 28, 1925	-	2,540				
				1951	Nov. 25, 1950	14.08	12,500
1926	Apr. 9, 1926	-	2,320		Dec. 4, 1950	9.77	5,040
1927	May 24, 1927	-	a2,940		Dec. 8, 1950	8.08	3,100
1928	Nov. 3, 1927	-	5,300		Feb. 1, 1951	7.47	2,490
1929	Apr. 20, 1929	-	4,910		Mar. 30, 1951	10.45	5,950
1930	Mar. 8, 1930	-	2,560				
				1952	Nov. 7, 1951	9.02	4,120
1931	May 10, 1931	8.63	3,110		Apr. 5, 1952	9.26	4,410
					May 12, 1952	8.66	3,730
1932	Apr. 12, 1932	7.83	2,290				
				1953	Dec. 11, 1952	10.11	5,480
1933	Oct. 6, 1932	11.38	6,720		Jan. 24, 1953	7.31	2,360
	Oct. 18, 1932	8.11	2,570		Mar. 26, 1953	7.97	2,990
	Nov. 10, 1932	10.12	4,490		May 8, 1953	8.71	3,780
	Nov. 19, 1932	9.08	3,620				
1934	Mar. 4, 1934	8.7	3,190	1954	May 21, 1954	7.13	2,200
	Apr. 1, 1934	7.86	2,320				
1935	Mar. 6, 1935	7.79	2,560	1955	Nov. 3, 1954	9.38	4,560
					Dec. 14, 1954	7.45	2,380
1936	Mar. 11, 1936	10.78	6,040		Aug. 13, 1955	10.08	5,440
	Mar. 18, 1936	12.83	8,880		Aug. 18, 1955	7.77	2,620
				1956	Oct. 16, 1955	13.95	12,300
1937	Feb. 22, 1937	10.12	5,540		Oct. 31, 1955	8.87	3,900
	May 15, 1937	8.60	3,900		Mar. 7, 1956	8.52	3,530
	Sept. 13, 1937	9.01	4,310		Apr. 5, 1956	8.56	3,580
					Apr. 16, 1956	7.67	2,600
1938	Jan. 25, 1938	7.63	2,970	1957	May 20, 1957	6.57	1,570
	Sept. 21, 1938	12.08	7,900				
1939	Dec. 6, 1938	7.85	3,160	1958	Apr. 6, 1958	7.20	2,650
	Dec. 10, 1938	7.71	3,010		Apr. 17, 1958	7.18	2,630
	Feb. 20, 1939	9.13	4,440	1959	Jan. 22, 1959	8.09	3,540
					Apr. 2, 1959	8.68	4,160
1940	Mar. 31, 1940	9.11	4,700				
	Apr. 5, 1940	7.08	2,560	1960	Nov. 28, 1959	8.03	3,480
	Apr. 8, 1940	7.72	2,800		Dec. 7, 1959	7.14	2,480
					Jan. 3, 1960	8.11	3,560
1941	Apr. 6, 1941	6.62	2,100		Feb. 11, 1960	8.49	3,950
					Mar. 31, 1960	7.81	3,260
1942	Mar. 9, 1942	8.85	4,420		Apr. 4, 1960	8.97	4,460
					Sept. 12, 1960	13.75	11,900
1943	Nov. 25, 1942	7.10	2,430		Sept. 20, 1960	9.96	5,320
	Dec. 23, 1942	7.78	3,180				
	Feb. 24, 1943	7.61	2,990	1961	Feb. 26, 1961	8.25	3,700
1944	Oct. 27, 1943	6.95	2,260				

a Maximum daily discharge.

3620. Catskill Creek at South Cairo, N. Y.

Location.--Lat 42°16'40", long 73°57'30", near right bank on downstream side of highway bridge at South Cairo, Greene County.

Drainage area.--270 sq mi.

Gage.--Nonrecording. Altitude of gage is 170 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,400 cfs and extended above by logarithmic plotting.

Remarks.--Only annual peaks shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1902	Sept. 29, 1902	16.1	17,300	1905	Mar. 25, 1905	10.27	7,260
1903	Mar. 23, 1903	11.9	10,100	1906	Mar. 27, 1906	10.2	7,140
1904	Oct. 9, 1903	21.0	25,000				

3625. Esopus Creek at Coldbrook, N. Y.

Location.--Lat 42°00'45", long 74°16'10", on left bank at downstream side of highway bridge at Coldbrook, Ulster County, 1½ miles upstream from Ashokan Reservoir, and 2½ miles south of Mount Tremper.

Drainage area.--192 sq mi.

Gage.--Recording. Datum of gage is 621.54 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 13,000 cfs and extended above on basis of slope-area measurements at 13,900, 24,800, and 59,600 cfs.

Remarks.--Water diverted from Schoharie Creek (Schoharie Reservoir) through Shandaken Tunnel enters Esopus Creek about 6 miles above station. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	Mar. 31, 1932	-	7,650	1947	Apr. 6, 1947	9.32	5,640
1933	Aug. 24, 1933	20.40	55,000	1948	Mar. 22, 1948	12.39	13,900
1934	Sept. 17, 1934	10.05	6,490	1949	Dec. 30, 1948	14.37	21,500
1935	July 8, 1935	13.50	17,100	1950	Apr. 5, 1950	9.81	6,540
1936	Mar. 12, 1936	17.90	38,500	1951	Mar. 30, 1951	20.70	59,600
1937	Feb. 22, 1937	15.6	27,000	1952	July 10, 1952	15.46	26,300
1938	Oct. 23, 1937	15.05	24,200	1953	Dec. 11, 1952	17.03	34,700
1939	Dec. 6, 1938	11.25	10,300	1954	Mar. 2, 1954	9.74	6,460
1940	Mar. 31, 1940	11.88	12,100	1955	Aug. 19, 1955	12.30	13,600
1941	Dec. 29, 1940	9.05	5,530	1956	Oct. 15, 1955	20.00	54,000
1942	Dec. 24, 1941	15.15	24,800	1957	Jan. 23, 1957	7.83	3,390
1943	Dec. 30, 1942	10.26	7,970	1958	Dec. 21, 1957	18.98	46,900
1944	Nov. 9, 1943	11.24	10,300	1959	Apr. 2, 1959	11.70	11,500
1945	July 19, 1945	10.53	8,270	1960	Oct. 24, 1959	14.66	22,600
1946	Mar. 9, 1946	10.04	7,130	1961	Feb. 26, 1961	11.42	10,700

3640. Esopus Creek at Kingston, N. Y.

Location.--Lat 41°56'25", long 74°01'40", at upstream side of Washington Street Bridge in Kingston, Ulster County.

Drainage area.--317 sq mi.

Gage.--Nonrecording. Altitude of gage is 140 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurement below 13,000 cfs and extended above by logarithmic plotting.

Remarks.--Records for 1907-9 furnished by Board of Water Supply, City of New York. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1902	Dec. 15, 1901	23.7	20,700	1906	Apr. 15, 1906	18.0	10,900
1903	Mar. 1, 1903	17.6	10,400	1907	Jan. 1, 1907	-	a3,850
1904	Oct. 9, 1903	25.5	24,500	1908	Feb. 15, 1908	-	a10,660
1905	Mar. 20, 1905	15.5	7,840	1909	Feb. 20, 1909	-	a20,500

a Daily mean.

3650. Rondout Creek near Lowes Corners, N. Y.

Location.--Lat 41°51'55", long 74°29'10", on left bank 100 ft downstream from small tributary, 350 ft upstream from highway bridge, 1 mile upstream from Sugarloaf Brook, 1.1 miles east of Lowes Corners, Sullivan County, and 2 miles southwest of Sundown.

Drainage area.--38.5 sq mi.

Gage.--Nonrecording; at site 350 ft downstream at different datum prior to Oct. 3, 1938; recording thereafter. At site three-quarters of a mile downstream at different datum Oct. 4, 1938, to July 5, 1951. Datum of gage is 874.44 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,000 cfs.

Remarks.--Base for partial-duration series, 1,200 cfs. Only annual peaks are shown prior to 1939.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Feb. 22, 1937	6.0	4,200	1948	Nov. 8, 1947	4.18	1,810
1938	July 22, 1938	8.2	7,600		Nov. 12, 1947	3.75	1,400
					Mar. 22, 1948	4.72	2,400
1939	Dec. 6, 1938	4.47	1,870	1949	Dec. 30, 1948	5.72	4,250
1940	Mar. 31, 1940	3.92	1,330		Jan. 6, 1949	3.67	1,600
	Apr. 8, 1940	4.83	2,230	1950	Apr. 4, 1950	4.12	1,160
	Apr. 12, 1940	3.83	1,250	1951	Nov. 25, 1950	7.41	5,400
1941	Dec. 28, 1940	3.93	1,340		Dec. 4, 1950	4.94	1,950
1942	Dec. 24, 1941	5.38	3,270		Dec. 8, 1950	4.11	1,220
1943	Dec. 30, 1942	3.55	1,180		Mar. 30, 1951	9.60	7,200
1944	Nov. 9, 1943	3.95	1,500	1952	Apr. 5, 1952	6.05	3,040
	Sept. 14, 1944	4.66	2,270		June 1, 1952	5.31	2,000
1945	Mar. 17, 1945	4.18	1,750		July 10, 1952	9.19	7,430
	May 19, 1945	3.79	1,380	1953	Nov. 22, 1952	6.01	2,220
	July 19, 1945	5.25	3,080		Dec. 11, 1952	7.05	3,680
	July 28, 1945	3.75	1,340		Mar. 15, 1953	5.56	1,710
1946	Mar. 9, 1946	3.46	1,100		Mar. 24, 1953	5.63	1,780
1947	Apr. 6, 1947	3.55	1,140	1954	Mar. 1, 1954	4.44	846
				1955	Aug. 13, 1955	6.56	2,940

Peak stages and discharges of Rondout Creek near Lowes Corners, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)	
1955	Aug. 19, 1955	8.02	4,180	1959	Apr. 2, 1959	5.27	1,870	
1956	Oct. 15, 1955	10.38	6,940	1960	Oct. 1, 1959	4.58	1,240	
	Apr. 16, 1956	4.58	1,310		Oct. 24, 1959	7.12	3,680	
	Apr. 29, 1956	4.62	1,350		Dec. 12, 1959	4.79	1,490	
1957	Jan. 23, 1957	4.11	941		Apr. 4, 1960	5.88	2,450	
					Sept. 12, 1960	5.72	2,290	
1958	Dec. 21, 1957	7.40	3,960	1961	Feb. 26, 1961	5.53	1,730	
	Apr. 6, 1958	4.64	1,300		Apr. 25, 1961	5.54	1,740	
1959	Jan. 22, 1959	4.54	1,210					

3655. Chestnut Creek at Grahamsville, N. Y.

Location.--41°50'45", long 74°32'25", on right bank just downstream from highway bridge in Grahamsville, Sullivan County, 600 ft downstream from Red Brook, and half a mile upstream from bridge on State Highway 55.

Drainage area.--20.9 sq mi.

Gage.--Recording. Datum of gage is 880.96 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,300 cfs and extended above on basis of slope-area measurement at 3,800 cfs.

Remarks.--Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)	
1939	Dec. 6, 1938	2.45	895	1948	Apr. 12, 1948	2.71	610	
1940	Mar. 31, 1940	2.57	874		May 17, 1948	2.68	556	
	Apr. 8, 1940	2.41	691	1949	Dec. 30, 1948	3.85	2,060	
	May 16, 1940	2.30	580		Jan. 5, 1949	2.99	719	
	May 20, 1940	2.31	590					
1941	Dec. 28, 1940	2.94	803	1950	Mar. 28, 1950	2.85	572	
1942				1951	Nov. 25, 1950	-	b3,900	
	Dec. 24, 1941	3.30	1,650		Dec. 4, 1950	3.09	838	
	Mar. 9, 1942	2.70	710		Jan. 24, 1951	2.94	664	
	Mar. 22, 1942	2.63	619		Feb. 7, 1951	2.99	719	
	May 23, 1942	2.67	671		Mar. 30, 1951	4.04	2,440	
	Sept. 27, 1942	2.86	1,060		July 19, 1951	3.00	774	
1943	Dec. 30, 1942	2.72	872	1952	Nov. 7, 1951	2.83	609	
	Mar. 17, 1943	2.61	712		Apr. 5, 1952	3.32	1,160	
	May 12, 1943	2.73	859		Apr. 14, 1952	3.02	796	
1944					May 25, 1952	2.91	683	
	Nov. 9, 1943	2.90	890		June 1, 1952	3.42	1,310	
	Mar. 17, 1944	2.90	890	July 10, 1952	4.44	3,320		
	Mar. 24, 1944	2.69	593	Sept. 1, 1952	2.96	734		
Apr. 24, 1944	2.85	815						
1945				1953	Nov. 22, 1952	2.82	599	
	Mar. 6, 1945	2.53	542		Dec. 11, 1952	3.11	897	
	Mar. 17, 1945	2.56	580		Jan. 24, 1953	2.71	506	
	Apr. 5, 1945	2.79	896		Mar. 15, 1953	2.93	703	
	May 19, 1945	2.78	881					
	July 15, 1945	3.15	995	1954	May 10, 1954	2.60	492	
	July 19, 1945	4.07	2,200					
	July 28, 1945	3.54	2,090					
1946	Mar. 9, 1946	2.64	340	1955	Aug. 13, 1955	3.08	863	
			Aug. 18, 1955		4.68	3,800		
1947	Apr. 5, 1947	3.21	1,080	1956	Oct. 6, 1955	2.56	654	
			Oct. 15, 1955		5.02	4,640		
1948					Oct. 30, 1955	2.98	969	
	Nov. 8, 1947	2.84	902		Apr. 7, 1956	2.73	724	
	Nov. 12, 1947	2.80	804		Apr. 16, 1956	2.46	510	
	Feb. 14, 1948	a3.26	-		Apr. 29, 1956	2.74	733	
	Mar. 22, 1948	2.82	853					

a Backwater from ice.

b Estimated.

Peak stages and discharges of Chestnut Creek at Grahamsville, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	Jan. 23, 1957	2.48	524	1960	Oct. 24, 1959	2.98	970
	Feb. 26, 1957	2.52	553		Nov. 28, 1959	2.47	551
	Apr. 6, 1957	2.68	680		Dec. 12, 1959	2.71	719
1958	Dec. 20, 1957	3.88	2,190	1961	Jan. 3, 1960	2.69	704
	Dec. 26, 1957	2.90	770		Feb. 11, 1960	2.72	728
	Jan. 22, 1958	2.65	569		Mar. 31, 1960	2.65	674
	Apr. 6, 1958	3.05	918		Apr. 4, 1960	3.72	1,920
1959	Jan. 22, 1959	3.01	1,000	1961	Aug. 5, 1960	2.70	663
	Mar. 6, 1959	3.08	949		Aug. 19, 1960	3.26	1,230
	Apr. 2, 1959	3.21	1,230		Sept. 12, 1960	2.97	896
	July 20, 1959	2.70	711		Sept. 20, 1960	2.95	878
1960	Oct. 9, 1959	2.46	545	1961	Feb. 25, 1961	2.80	786
					Apr. 25, 1961	2.89	871
					Aug. 10, 1961	2.52	564

3665. Rondout Creek near Lackawack, N. Y.

Location.--Lat 41°46'30", long 74°24'10", on left bank at downstream side of highway bridge known as Wilburs Bridge, 2½ miles southeast of Lackawack, Ulster County, and 3 miles downstream from Merriman Dam (Rondout Reservoir).

Drainage area.--100 sq mi.

Gage.--Recording. At site half a mile downstream at datum 13.40 ft lower prior to Feb. 15, 1939. Datum of gage is 601.07 ft above mean sea level (levels by Board of Water Supply, City of New York).

Stage-discharge relation.--Defined by current-meter measurements below 10,300 ft.

Historical data.--Flood of Aug. 26, 1928, is maximum known.

Remarks.--Subsequent to May 1951 entire flow from 94.4 sq mi of drainage area controlled by Rondout Reservoir. Base for partial-duration series, 2,000 cfs. Only annual peaks are shown prior to 1938, and subsequent to 1951.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Aug. 26, 1928	-	a26,700	1943	Dec. 30, 1942	6.07	3,830
1932	Apr. 1, 1932	-	2,600		May 12, 1943	4.93	2,150
1933	Aug. 24, 1933	9.32	12,000	1944	Nov. 9, 1943	5.43	2,710
1934	Sept. 17, 1934	4.26	3,510		Apr. 24, 1944	4.88	2,100
1935	Dec. 1, 1934	5.40	5,080		Sept. 14, 1944	5.54	2,770
1936	Mar. 18, 1936	9.15	9,600	1945	Mar. 17, 1945	5.62	2,930
1937	Feb. 22, 1937	9.65	9,070		Apr. 5, 1945	4.80	2,010
1938	Oct. 23, 1937	9.60	8,980		May 19, 1945	5.18	2,420
	Nov. 14, 1937	5.79	3,450		July 15, 1945	5.48	2,770
	Jan. 25, 1938	4.98	2,560		July 19, 1945	7.9	6,300
	July 22, 1938	14.00	17,700		July 28, 1945	6.72	4,420
	Aug. 11, 1938	11.60	12,400	1946	Mar. 9, 1946	4.62	1,900
	Sept. 21, 1938	7.80	5,930		Apr. 5, 1947	5.59	2,940
1939	Dec. 6, 1938	6.83	4,700		May 26, 1947	4.80	2,080
1940	Mar. 31, 1940	6.52	4,210	1948	Nov. 8, 1947	5.82	3,210
	Apr. 9, 1940	6.96	5,140		Nov. 12, 1947	5.38	2,550
	Apr. 12, 1940	4.98	2,520		Mar. 20, 1948	5.32	2,490
	Apr. 16, 1940	4.79	2,310		Mar. 22, 1948	6.69	4,100
	Apr. 20, 1940	4.93	2,460	1949	Dec. 30, 1948	9.08	7,810
1941	Dec. 28, 1940	5.53	3,100		Jan. 6, 1949	6.22	3,490
	Dec. 29, 1940	5.35	2,870	1950	Apr. 5, 1950	4.64	1,820
1942	Dec. 24, 1941	7.00	5,200		Nov. 26, 1950	5.72	3,000
	Mar. 9, 1942	5.23	2,730	1951	Mar. 31, 1951	6.67	4,070
	Mar. 22, 1952	5.18	2,670				
	Sept. 27, 1942	6.95	5,120	1952	June 1, 1952	3.20	731
1943	Oct. 26, 1942	5.05	2,510	1953	Dec. 11, 1952	2.86	550
	Nov. 25, 1942	5.63	3,230	1954	May 10, 1954	2.15	270

a From slope-area measurement by Board of Water Supply, City of New York.

Peak stages and discharges of Rondout Creek near Lackawack, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Aug. 19, 1955	5.76	2,360	1959	Mar. 6, 1959	2.56	318
1956	Oct. 15, 1955	5.44	2,030	1960	Sept. 12, 1960	2.47	290
1957	Apr. 6, 1957	1.47	97	1961	Apr. 25, 1961	6.63	2,220
1958	Apr. 30, 1958	4.30	1,020				

3666.5 Sandburg Creek at Ellenville, N. Y.

Location.--Lat 41°42'54", long 74°23'21", on right bank at Canal Street Bridge at Ellenville, Ulster County, 800 ft downstream from North Gully, half a mile upstream from Beer Kill, and 2 miles upstream from mouth.

Drainage area.--56.7 sq mi.

Gage.--Nonrecording prior to Aug. 28, 1957; recording thereafter. Datum of gage is 303.22 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 3,450 cfs.

Remarks.--Base for partial duration series, 800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	Apr. 6, 1957	3.79	925	1960	Feb. 11, 1960	3.81	1,270
1958	Dec. 21, 1957	6.1	3,570		Mar. 31, 1960	3.93	1,350
	Dec. 26, 1957	3.72	1,210		Apr. 5, 1960	4.29	1,620
	Apr. 6, 1958	4.51	1,840		Aug. 19, 1960	7.01	4,660
1959	Jan. 22, 1959	3.66	1,710		Sept. 12, 1960	6.63	4,090
	Feb. 10, 1959	3.53	1,080		Sept. 20, 1960	4.57	1,850
	Mar. 6, 1959	5.75	3,120	1961	Feb. 26, 1961	4.15	1,510
	Apr. 2, 1959	4.10	1,500		Mar. 6, 1961	3.15	864
1960	Jan. 3, 1960	3.18	880		Mar. 29, 1961	3.04	808
					Apr. 16, 1961	3.50	1,060
					Apr. 25, 1961	3.35	975

a Backwater from ice.

3675. Rondout Creek at Rosendale, N. Y.

Location.--Lat 41°50'35", long 74°05'10", on left bank 30 ft upstream from upper highway bridge in Rosendale, Ulster County, and 3 miles upstream from Wallkill River.

Drainage area.--386 sq mi.

Gage.--Nonrecording at site 150 ft downstream at datum 4.0 ft lower prior to January 1919; recording thereafter. Datum of gage is 42.83 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 15,000 cfs and extended above on basis of contracted-opening measurement at 30,900 cfs.

Remarks.--Flow regulated by hydroelectric plant above station. Subsequent to May, 1951, entire flow from 94.4 sq mi of drainage area controlled by Rondout Reservoir. Base for partial-duration series, 6,500 cfs. Only annual peaks are shown prior to 1927.

Peak stages and discharges of Rondout Creek at Rosendale, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1910	Apr. 26, 1910	-	21,600	1942	Dec. 24, 1941	10.97	10,300
1915	Aug. 4, 1915	-	15,180		Mar. 9, 1942	11.03	10,200
1916	July 27, 1916	-	14,000		Sept. 28, 1942	11.55	11,100
1918	Feb. 20, 1918	-	15,500	1943	Oct. 26, 1942	9.17	7,180
1927	Nov. 17, 1926	11.3	10,400		Nov. 25, 1942	11.63	11,200
	Jan. 23, 1927	all. 48	-		Dec. 2, 1942	9.21	7,250
	Sept. 2, 1927	11.03	10,000		Dec. 30, 1942	13.60	14,700
1928	Oct. 19, 1927	9.28	7,490	1944	Nov. 9, 1943	11.39	10,800
	Nov. 3, 1927	12.22	12,000		Apr. 25, 1944	8.73	6,500
	Nov. 18, 1927	11.20	10,300	1945	Mar. 4, 1945	all 3.29	-
	Dec. 8, 1927	10.09	8,640		Mar. 18, 1945	9.57	7,900
	Feb. 15, 1928	10.09	8,640		June 20, 1945	9.30	7,500
	June 30, 1928	12.15	11,800		July 19, 1945	10.25	8,950
	Aug. 27, 1928	21.9	27,300		July 29, 1945	10.60	9,510
	Sept. 3, 1928	9.01	7,110		Sept. 19, 1945	8.68	6,590
1929	Feb. 7, 1929	all 0.00	-	1946	May 28, 1946	9.65	8,020
	Mar. 15, 1929	9.9	8,360	1947	Apr. 6, 1947	10.15	8,790
1930	Mar. 8, 1930	9.65	8,010		May 26, 1947	8.88	6,870
1931	Mar. 29, 1931	9.47	7,760	1948	Nov. 8, 1947	11.56	11,100
1932	Apr. 1, 1932	10.45	9,130		Nov. 12, 1947	9.57	7,900
1933	Nov. 1, 1932	9.67	8,040		Mar. 16, 1948	all 3.42	-
	Nov. 10, 1932	10.24	8,840		Mar. 17, 1948	9.00	7,080
	Nov. 19, 1932	10.27	8,880		Mar. 21, 1948	10.11	8,730
	Mar. 21, 1933	8.79	6,810		Mar. 22, 1948	11.27	10,600
	Apr. 18, 1933	11.79	11,000	1949	Dec. 31, 1948	17.65	22,600
	Aug. 24, 1933	16.75	18,700		Jan. 6, 1949	11.30	10,700
	Sept. 4, 1933	12.05	11,400	1950	Mar. 29, 1950	9.15	7,280
	Sept. 16, 1933	8.95	7,030	1951	Nov. 26, 1950	10.39	9,050
1934	Mar. 4, 1934	all 1.44	-		Dec. 5, 1950	9.50	7,800
	July 28, 1934	8.86	6,900		Dec. 8, 1950	9.67	8,060
	Apr. 12, 1934	8.86	6,900		Jan. 24, 1951	8.85	6,820
	Sept. 8, 1934	8.86	6,900		Jan. 24, 1951	9.33	7,540
	Sept. 17, 1934	10.24	8,840		Mar. 31, 1951	16.80	20,900
1935	Dec. 1, 1934	11.31	10,300	1952	Mar. 11, 1952	9.94	8,460
	July 8, 1935	12.84	12,600		Apr. 5, 1952	13.76	15,000
1936	Oct. 31, 1935	9.27	7,210		June 1, 1952	16.13	19,600
	Nov. 29, 1935	8.86	6,630		July 10, 1952	13.40	14,300
	Mar. 12, 1936	18.21	21,100	1953	Nov. 22, 1952	11.62	11,200
	Mar. 18, 1936	15.79	17,200		Dec. 11, 1952	13.15	13,900
	Mar. 21, 1936	9.02	6,840		Jan. 24, 1953	10.21	8,890
	Apr. 6, 1936	10.23	8,640		Mar. 16, 1953	8.63	6,510
1937	Dec. 20, 1936	9.06	7,010		May 10, 1954	8.66	6,550
	Feb. 22, 1937	13.75	15,000	1955	Nov. 3, 1954	9.41	7,660
	May 15, 1937	12.52	12,700		Aug. 19, 1955	23.93	30,900
1938	Oct. 24, 1937	10.50	9,310	1956	Oct. 16, 1955	26.8	35,800
	Nov. 14, 1937	12.25	12,300	1957	Apr. 6, 1957	7.06	4,530
	Jan. 25, 1938	12.44	12,600	1958	Dec. 21, 1957	14.16	15,200
	July 23, 1938	13.70	14,900		Apr. 7, 1958	9.09	7,440
	Aug. 14, 1938	8.83	6,660	1959	Jan. 22, 1959	all 3.22	9,100
	Aug. 19, 1938	14.53	16,400		Mar. 6, 1959	10.85	10,100
	Sept. 22, 1938	15.38	18,100		Apr. 3, 1959	8.68	6,850
1939	Dec. 6, 1938	12.82	13,300	1960	Feb. 11, 1960	9.09	7,440
1940	Mar. 15, 1940	all 4.38	-		Mar. 31, 1960	8.63	6,780
	Mar. 31, 1940	12.91	13,500		Apr. 4, 1960	9.40	7,900
	Apr. 9, 1940	12.43	12,700		Sept. 12, 1960	14.20	15,200
	Apr. 21, 1940	9.10	7,400		Sept. 20, 1960	9.42	7,930
	Sept. 1, 1940	8.78	6,920	1961	Feb. 26, 1961	10.16	9,040
1941	Dec. 28, 1940	9.29	7,680				
	Feb. 8, 1941	all 1.37	-				

a Backwater from ice.

3680. 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.

Gage--Nonrecording prior to Nov. 16, 1949; recording thereafter. Altitude of gage is 390 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements.

Remarks--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Sept. 22, 1938	11.2	3,120	1951	Nov. 26, 1950	10.20	2,210
1939	Dec. 7, 1938	10.55	1,960	1952	June 2, 1952	10.24	2,250
1940	Apr. 1, 1940	10.1	1,550	1953	Jan. 25, 1953	9.83	1,890
				1954	Dec. 9, 1953	8.28	1,200
1941	Nov. 16, 1940	-	al,040	1955	Aug. 19, 1955	13.35	6,880
1942	Aug. 18, 1942	10.0	al,300				
1943	Nov. 26, 1942	10.0	al,850	1956	Oct. 16, 1955	11.01	2,730
1944	Nov. 10, 1943	b9.2	al,240	1957	Apr. 7, 1957	9.38	1,590
	Apr. 26, 1944			1958	Mar. 1, 1958	9.20	1,650
1945	July 20, 1945	10.8	3,000	1959	Mar. 8, 1959	c8.03	978
				1960	Sept. 14, 1960	9.72	2,230
1946	Jan. 9, 1946	9.1	1,300				
1947	Mar. 15, 1947	9.4	2,180	1961	Feb. 27, 1961	10.46	2,770
1948	Mar. 18, 1948	9.7	2,000				
1949	Dec. 31, 1948	11.4	5,000				
1950	Mar. 10, 1950	8.62	1,160				

a Daily mean discharge.

b Occurred Nov. 10, 1943.

c Occurred Jan. 23, 1959; backwater from ice.

3685. Rutgers Creek at Gardnerville, N.Y.

Location--Lat 41°20'40", long 74°29'10", on left bank 30 ft upstream from highway bridge at Gardnerville, Orange County, 1.7 miles southeast of Johnson, and 2.2 miles upstream from mouth.

Drainage area--59.7 sq mi.

Gage--Nonrecording prior to June 22, 1948; recording thereafter. Datum of gage is 404.48 ft above mean sea level, datum of 1929.

Stage-discharge relation--Defined by current-meter measurements below 2,200 cfs and extended above on basis of flow-over-dam measurement at gage height 8.88 ft and slope-area measurement at gage height 12.38 ft.

Remarks--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Nov. 9, 1943	6.6	1,940	1953	Jan. 24, 1953	7.69	2,760
1945	July 13, 1945	5.6	1,290	1954	Dec. 7, 1953	6.19	1,720
				1955	Aug. 19, 1955	12.38	8,490
1946	May 28, 1946	5.8	1,460				
1947	Apr. 5, 1947	6.1	1,640	1956	Oct. 16, 1955	9.91	4,780
1948	Mar. 17, 1948	a8.1	1,850	1957	Apr. 6, 1957	5.72	1,420
1949	Dec. 31, 1948	8.88	3,600	1958	Dec. 21, 1957	6.37	1,840
1950	Mar. 8, 1950	5.22	1,170	1959	Jan. 22, 1959	a5.83	1,140
				1960	Sept. 13, 1960	5.77	1,500
1951	Mar. 31, 1951	6.40	1,880				
1952	June 1, 1952	8.26	3,160	1961	Feb. 26, 1961	a5.99	1,550

a Backwater from ice.

3690. Pochuck Creek near Pine Island, N.Y.

Location.--Lat 41°16'30", long 74°28'20", on right bank 15 ft downstream from highway bridge at Newport, 2.3 miles south of Pine Island, Orange County, 3 miles west of Edenville, and 4 miles upstream from mouth.

Drainage area.--98.0 sq mi.

Gage.--Recording. Datum of gage is 382.39 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Sept. 22, 1938	7.80	2,070	1951	Apr. 1, 1951	6.60	1,280
1939	Dec. 7, 1938	6.25	1,010	1952	June 3, 1952	7.39	1,590
1940	Apr. 1, 1940	6.49	1,230	1953	Jan. 26, 1953	5.89	1,040
				1954	Mar. 5, 1954	4.34	619
1941	Feb. 9, 1941	5.81	955	1955	Aug. 20, 1955	8.43	2,870
1942	Aug. 18, 1942	6.76	900				
1943	Nov. 27, 1942	6.53	1,340	1956	Oct. 16, 1955	8.62	3,090
1944	Apr. 26, 1944	5.18	771	1957	Apr. 8, 1957	5.45	988
1945	July 21, 1945	a6.82	1,130	1958	Apr. 8, 1958	6.16	1,290
				1959	Mar. 7, 1959	3.94	623
1946	Jan. 8, 1946	5.78	973	1960	Apr. 6, 1960	5.88	1,500
1947	Apr. 7, 1947	5.58	1,090				
1948	Mar. 18, 1948	b6.03	1,060	1961	Feb. 27, 1961	6.79	1,800
1949	Jan. 1, 1949	7.28	1,770				
1950	Mar. 10, 1950	5.05	806				

a Occurred Feb. 28, 1945; backwater from ice.

b Occurred Feb. 21, 1948; backwater from ice.

3695. Quaker Creek at Florida, N.Y.

Location.--Lat 41°20'20", long 74°21'45", on right bank at downstream side of farm bridge, a quarter of a mile north of railroad station at Florida, Orange County, and 5 miles southwest of Goshen.

Drainage area.--9.74 sq mi.

Gage.--Nonrecording prior to Dec. 12, 1949; recording thereafter. Altitude of gage is 390 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 210 cfs and extended above on basis of contracted-opening measurement at gage height 5.8 ft.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Sept. 21, 1938	6.0	1,050	1951	Mar. 30, 1951	5.04	536
1939	Dec. 6, 1938	4.1	279	1952	June 1, 1952	5.31	634
1940	Mar. 15, 1940	4.2	327	1953	Jan. 24, 1953	4.37	356
				1954	Dec. 14, 1953	3.34	188
1941	Dec. 28, 1940	3.2	182	1955	Aug. 19, 1955	5.27	619
1942	Aug. 16, 1942	5.8	900				
1943	Nov. 25, 1942	5.5	714	1956	Oct. 15, 1955	5.29	626
1944	Nov. 9, 1943	4.2	303	1957	Apr. 6, 1957	3.43	200
1945	Mar. 4, 1945	3.8	257	1958	Feb. 28, 1958	4.50	395
				1959	Jan. 21, 1959	3.96	290
1946	Mar. 3, 1946	3.6	222	1960	Aug. 19, 1960	5.01	655
1947	Apr. 5, 1947	4.4	362				
1948	Mar. 16, 1948	4.3	341	1961	Feb. 26, 1961	4.00	377
1949	Dec. 30, 1948	4.7	432				
1950	Mar. 8, 1950	4.38	358				

3700. Wallkill River at Pellets Island Mountain, N. Y.

Location.--Lat 41°22'50", long 74°24'50", on right bank 10 ft downstream from highway bridge at Pellets Island Mountain, Orange County, 2 miles downstream from small tributary, and 4½ miles south of Middletown.

Drainage area.--385 sq mi.

Gage.--Nonrecording prior to Mar. 20, 1937; recording thereafter. At datum 10 ft higher prior to May 5, 1936, and at datum 5 ft higher May 5, 1936, to June 4, 1937.

Stage-discharge relation.--Defined by current-meter measurements below 9,160 cfs.

Remarks.--Base for partial-duration series, 2,700 cfs. Only annual peaks are shown prior to 1937.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1920	Mar. 16, 1920	20.7	8,350	1947	Apr. 6, 1947	13.13	4,180
1921	Mar. 5, 1921	14.86	3,820	1948	Feb. 21, 1948	12.00	3,000
1922	Mar. 9, 1922	15.02	3,970		Mar. 17, 1948	14.45	5,240
1923	Mar. 19, 1923	17.0	5,200		Apr. 15, 1948	10.72	2,990
1924	Apr. 9, 1924	11.65	5,240	1949	Dec. 31, 1948	16.60	6,750
1925	Feb. 15, 1925	10.3	4,100		Jan. 6, 1949	13.82	4,810
1926	Feb. 28, 1926	-	3,000	1950	Mar. 9, 1950	11.30	3,300
1927	Sept. 3, 1927	10.6	4,340		Mar. 24, 1950	11.35	3,330
1928	Nov. 6, 1927	10.2	4,020	1951	Nov. 28, 1950	12.95	3,900
1929	Mar. 7, 1929	9.7	4,170		Dec. 8, 1950	10.91	2,880
1930	Mar. 10, 1930	7.3	2,330		Feb. 8, 1951	10.57	2,730
1931	June 17, 1931	7.1	2,130		Feb. 22, 1951	10.61	2,750
1932	Apr. 1, 1932	8.4	3,130		Mar. 31, 1951	13.13	4,000
1933	Aug. 26, 1933	8.9	3,530		Apr. 3, 1951	12.49	3,680
1934	Mar. 6, 1934	9.1	3,740	1952	Nov. 8, 1951	10.55	2,720
1935	Jan. 10, 1935	6.3	1,810		Jan. 27, 1952	10.57	2,730
1936	Mar. 14, 1936	15.0	12,400		Mar. 12, 1952	12.63	3,740
1937	Jan. 26, 1937	19.6	2,880		Apr. 6, 1952	13.96	4,460
1938	Nov. 14, 1937	10.45	2,700		Apr. 15, 1952	11.07	2,960
	Jan. 26, 1938	13.42	4,640		Apr. 28, 1952	11.41	3,140
	July 24, 1938	13.81	4,920		June 2, 1952	15.80	5,510
	Sept. 23, 1938	15.58	6,210		Sept. 2, 1952	12.89	3,880
1939	Dec. 6, 1938	13.58	4,760	1953	Nov. 23, 1952	12.44	3,650
	Feb. 16, 1939	11.12	3,200		Dec. 12, 1952	10.56	2,730
	Mar. 1, 1939	10.81	3,020		Jan. 25, 1953	14.60	4,810
	Apr. 2, 1939	10.95	3,100		Mar. 16, 1953	11.58	3,220
1940	Mar. 17, 1940	10.92	3,080		Apr. 8, 1953	10.88	2,870
	Mar. 21, 1940	12.52	4,040	1954	Dec. 7, 1953	11.06	2,770
	Mar. 31, 1940	14.43	5,350	1955	Nov. 22, 1954	11.65	3,030
	Apr. 9, 1940	11.69	3,540		Aug. 21, 1955	21.76	10,100
	Apr. 22, 1940	12.27	3,890	1956	Oct. 17, 1955	21.22	9,580
1941	Dec. 29, 1940	10.09	2,620		Nov. 17, 1955	11.49	2,990
	Feb. 8, 1941	11.28	-		Apr. 10, 1956	11.51	3,000
1942	Aug. 17, 1942	12.39	3,770	1957	Apr. 9, 1957	13.74	4,030
	Sept. 28, 1942	10.53	2,760	1958	Dec. 21, 1957	12.62	3,470
1943	Nov. 26, 1942	12.92	4,090		Jan. 27, 1958	11.91	3,150
	Dec. 31, 1942	13.19	4,250		Mar. 2, 1958	13.25	4,150
	Feb. 22, 1943	11.14	3,040		Mar. 27, 1958	10.45	2,740
1944	Nov. 9, 1943	11.90	3,480		Apr. 7, 1958	12.52	3,760
	Mar. 25, 1944	10.67	2,860		May 8, 1958	10.79	2,900
	Apr. 25, 1944	11.49	3,280	1959	Jan. 22, 1959	11.37	2,800
1945	Mar. 4, 1945	14.25	4,850	1960	Jan. 4, 1960	11.97	3,380
	July 21, 1945	12.97	4,080		Feb. 12, 1960	10.76	2,810
	July 29, 1945	10.51	2,800		Apr. 1, 1960	12.53	3,660
	Sept. 19, 1945	10.59	2,840		Apr. 6, 1960	14.35	4,670
1946	Jan. 8, 1946	11.56	3,330		Aug. 20, 1960	12.22	3,510
	May 28, 1946	11.50	3,300		Sept. 13, 1960	12.64	3,720
	June 3, 1946	10.57	2,840		Sept. 20, 1960	12.23	3,520
1947	Mar. 15, 1947	12.59	3,850	1961	Feb. 28, 1961	16.43	5,950

a Backwater from ice.

3705. Wallkill River near Phillipsburg, N. Y.

Location.--Lat 41°26'00", long 74°22'20", on left bank a quarter of a mile upstream from abandoned electric railway bridge and Masonic Creek, 1 mile southwest of Phillipsburg, Orange County, and 1.9 miles northeast of New Hampton.

Drainage area.--419 sq mi.

Gage.--Nonrecording prior to July 26, 1937; recording thereafter. Datum of gage is 352.61 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 6,550 cfs.

Historical data.--Maximum stage known, that of Mar. 13, 1936, from staff gage readings by Corps of Engineers (discharge unknown).

Remarks.--Base for partial-duration series, 3,100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Mar. 13, 1936	a11.3	-	1950	Mar. 9, 1950	6.26	3,690
1937	Jan. 26, 1937	5.90	3,030		Mar. 23, 1950	6.43	3,860
1938	Jan. 26, 1938	7.62	4,920	1951	Nov. 28, 1950	6.63	4,060
	July 23, 1938	7.88	5,180		Dec. 5, 1950	5.65	3,140
	Sept. 21, 1938	9.67	7,090		Dec. 8, 1950	5.69	3,170
1939	Dec. 6, 1938	7.83	5,130		Feb. 8, 1951	5.81	3,280
	Feb. 15, 1939	6.76	4,060		Feb. 11, 1951	b6.85	-
	Mar. 1, 1939	6.09	3,390		Feb. 22, 1951	5.84	3,310
	Apr. 2, 1939	6.31	3,610		Mar. 31, 1951	7.20	4,630
	Apr. 20, 1939	5.81	3,110		Apr. 3, 1951	6.83	4,260
1940	Mar. 21, 1940	7.10	4,400	1952	Jan. 27, 1952	5.77	3,240
	Mar. 31, 1940	8.69	6,010		Mar. 12, 1952	6.66	4,090
	Apr. 9, 1940	6.87	4,170		Apr. 5, 1952	7.98	5,410
	Apr. 21, 1940	7.23	4,530		Apr. 15, 1952	6.01	3,460
1941	Dec. 29, 1940	5.79	3,090		Apr. 28, 1952	6.12	3,560
	Feb. 8, 1941	b7.17	-		May 25, 1952	6.01	3,460
1942	Aug. 17, 1942	6.70	4,000		June 1, 1952	9.93	7,370
	Sept. 28, 1942	5.84	3,140		Sept. 2, 1952	7.25	4,680
1943	Nov. 26, 1942	7.38	4,680	1953	Nov. 23, 1952	6.67	4,100
	Dec. 2, 1942	5.90	3,200		Dec. 12, 1952	5.65	3,140
	Dec. 21, 1942	8.00	5,300		Jan. 24, 1953	8.17	5,600
	Feb. 22, 1943	b9.61	3,300		Mar. 16, 1953	6.25	3,680
	Mar. 12, 1943	5.94	3,240		Apr. 8, 1953	5.93	3,390
1944	Nov. 9, 1943	6.56	3,860		Apr. 14, 1953	5.70	3,180
	Mar. 25, 1944	6.11	3,410	1954	Dec. 7, 1953	6.22	3,650
	Apr. 25, 1944	6.51	3,810		Dec. 14, 1953	5.80	3,270
1945	Mar. 4, 1945	8.28	5,580		May 4, 1954	5.66	3,140
	July 19, 1945	7.01	4,350	1955	Nov. 21, 1954	6.45	3,880
	July 29, 1945	6.34	3,680		Mar. 23, 1955	5.85	3,240
	Sept. 19, 1945	6.15	3,490		Aug. 21, 1955	11.33	9,200
1946	Dec. 27, 1945	b6.90	-	1956	Oct. 17, 1955	11.24	9,090
	Jan. 8, 1946	6.35	3,780		Nov. 16, 1955	6.31	3,700
	May 28, 1946	6.55	3,980		Apr. 10, 1956	6.26	3,650
	June 3, 1946	5.88	3,310	1957	Apr. 6, 1957	7.41	4,800
1947	Mar. 15, 1947	7.00	4,430	1958	Dec. 21, 1957	6.79	4,180
	Apr. 6, 1947	7.44	4,870		Feb. 28, 1958	b7.73	-
1948	Mar. 17, 1948	8.28	5,710		Mar. 2, 1958	7.18	4,570
	Apr. 15, 1948	6.06	3,500		Mar. 26, 1958	5.69	3,160
1949	Dec. 31, 1948	9.94	7,380		Apr. 7, 1958	6.64	4,030
	Jan. 6, 1949	7.80	5,230	1959	May 8, 1958	5.87	3,320
					Oct. 27, 1958	5.68	3,150
					Jan. 22, 1959	b6.73	3,200

a Annual peak only.

b Backwater from ice.

3710. Shawangunk Kill at Pine Bush, N. Y.

Location.--Lat 41°37'05", long 74°17'40", on left bank 50 ft downstream from Hardenburg Bridge, half a mile northeast of Pine Bush, Orange County, 2½ miles downstream from Pakanasink Creek, and 11 miles above the mouth at Ganahgote.

Drainage area.--102 sq mi.

Gage.--Nonrecording prior to July 1, 1957; recording thereafter. Altitude of gage is 305 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,300 cfs, and extended above on basis of slope-area measurement at 4,680 cfs, an estimated discharge in 1952 based on floodmarks at Pine Bush and indirect measurements on Shawangunk Kill at Winterton and at Ganahgote, and an estimated discharge in 1955 based on a floodmark at Pine Bush and indirect measurements at Ganahgote.

Remarks.--Base for partial duration series, 2,000 cfs. Only annual peaks are shown prior to 1957.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1925	Mar. 28, 1925	5.6	2,240	1958	Feb. 28, 1958	7.83	4,430
1926	Nov. 16, 1925	5.4	2,070		Apr. 6, 1958	6.06	2,660
1927	Sept. 1, 1927	10.5	7,350	1959	Jan. 22, 1959	67.53	2,100
1928	Nov. 3, 1927	7.5	4,100		Feb. 10, 1959	7.22	3,820
1929	Mar. 5, 1929	7.2	3,800		Mar. 6, 1959	7.71	4,310
1930	Mar. 8, 1930	5.2	1,910		Apr. 3, 1959	5.31	2,000
1931	Mar. 29, 1931	5.6	2,240	1960	Jan. 3, 1960	6.46	2,920
1932	Apr. 1, 1932	4.1	1,110		Feb. 11, 1960	6.26	2,720
1952	June 1, 1952	11.0	27,200		Mar. 31, 1960	6.08	2,550
1955	Aug. 19, 1955	12.5	29,700		Apr. 5, 1960	5.73	2,240
1956	Oct. 16, 1955	12.5	29,700		Aug. 19, 1960	7.37	3,910
1958	Dec. 21, 1957	8.07	4,680		Sept. 12, 1960	7.89	4,480
					Sept. 20, 1960	6.44	2,900
				1961	Feb. 25, 1961	69.49	-
					Feb. 26, 1961	67.32	3,400

a Based on unit runoff at stations on Shawangunk Kill at Winterton and Ganahgote.

b Backwater from ice.

3715. Wallkill River at Gardiner, N. Y.

Location.--Lat 41°41'10", long 74°09'55", on left bank 400 ft upstream from highway bridge, 500 ft downstream from Shawangunk Kill, and three-quarters of a mile northwest of Gardiner, Ulster County.

Drainage area.--711 sq mi.

Gage.--Recording. Datum of gage is 185.70 ft above mean sea level, adjustment of 1912.

Stage-discharge relation. Defined by current-meter measurements below 28,300 cfs.

Remarks.--Flow regulated by hydroelectric plant above station. Base for partial duration series, 6,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1925	Feb. 12, 1925	113.31	8,500	1928	Feb. 9, 1928	111.30	-
1926	Mar. 3, 1926	111.7	5,500		July 6, 1928	9.08	7,320
1927	Sept. 2, 1927	12.6	12,900		July 14, 1928	8.49	6,450
1928	Oct. 19, 1927	9.47	7,900		Aug. 27, 1928	10.41	9,360
	Nov. 3, 1927	11.7	11,400	1929	Feb. 28, 1929	9.30	7,800
	Nov. 18, 1927	10.50	9,500		Mar. 6, 1929	10.4	9,450
	Dec. 8, 1927	9.42	7,830	1930	Feb. 21, 1930	110.69	-
	Dec. 14, 1927	8.80	6,900		Sept. 17, 1930	8.05	5,970

a Backwater from ice.

Peak stages and discharges of Wallkill River at Gardiner, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Feb. 19, 1931	a11.12	-	1947	Mar. 15, 1947	9.27	7,790
	June 17, 1931	8.76	6,990		Apr. 6, 1947	9.35	8,100
1932	Apr. 1, 1932	8.97	7,300		May 26, 1947	9.11	7,760
1933	Nov. 10, 1932	10.00	8,850	1948	Nov. 12, 1947	8.17	6,450
	Nov. 20, 1932	11.19	10,600		Mar. 17, 1948	a13.89	-
	Mar. 21, 1923	9.98	8,820		Mar. 17, 1948	12.28	13,700
	Apr. 2, 1933	8.58	6,430		Apr. 15, 1948	8.81	7,530
	Apr. 18, 1933	8.93	7,240	1949	Dec. 31, 1948	14.81	21,000
	Aug. 25, 1933	8.98	7,320		Jan. 6, 1949	10.78	10,800
	Sept. 16, 1933	10.55	9,680	1950	Mar. 9, 1950	a10.94	-
1934	Mar. 5, 1934	a17.04	-		Mar. 9, 1950	8.97	7,690
	Apr. 12, 1934	8.92	7,230		Mar. 24, 1950	8.88	7,550
	Sept. 17, 1934	9.99	8,840	1951	Jan. 5, 1951	a12.08	-
1935	Dec. 1, 1934	8.45	6,530		Mar. 31, 1951	11.74	12,600
	Mar. 7, 1935	a13.42	-		Apr. 3, 1951	9.07	7,850
1936	Mar. 12, 1936	a16.42	-	1952	Mar. 11, 1952	10.26	9,870
	Mar. 12, 1936	15.16	18,000		Apr. 6, 1952	12.42	14,000
	Mar. 18, 1936	11.78	12,500		June 1, 1952	14.88	21,200
	Apr. 6, 1936	8.37	7,300		July 10, 1952	9.17	8,020
1937	Jan. 25, 1937	8.57	7,600		Sept. 2, 1952	9.98	9,400
	Feb. 22, 1937	8.94	7,730	1953	Nov. 22, 1952	10.14	9,670
	May 15, 1937	9.42	8,500		Dec. 11, 1952	b9.0	7,740
1938	Jan. 25, 1938	10.75	10,700		Jan. 24, 1953	11.93	13,000
	July 23, 1938	10.74	9,700		Mar. 13, 1953	8.38	6,750
	Aug. 11, 1938	9.60	7,900		Mar. 16, 1953	9.21	7,780
	Sept. 22, 1938	14.92	17,500		Apr. 7, 1953	8.90	7,270
1939	Dec. 6, 1938	11.08	11,200	1954	Dec. 7, 1953	9.81	8,810
	Feb. 16, 1939	a14.18	-		Apr. 4, 1954	8.65	6,870
	Mar. 1, 1939	8.03	6,520		May 10, 1954	9.16	7,690
	Apr. 2, 1939	8.85	7,740	1955	Mar. 23, 1955	9.08	7,100
1940	Mar. 15, 1940	a13.24	-		Aug. 19, 1955	19.77	30,600
	Mar. 20, 1940	a12.40	8,000	1956	Oct. 16, 1955	19.81	30,800
	Mar. 31, 1940	12.60	13,700		Oct. 31, 1955	8.76	6,620
	Apr. 9, 1940	9.76	8,360	1957	Jan. 23, 1957	a10.46	-
	Apr. 21, 1940	9.82	8,450		Apr. 6, 1957	9.12	7,160
1941	Dec. 29, 1940	8.50	6,600		Apr. 9, 1957	8.78	6,650
	Feb. 8, 1941	a12.37	-	1958	Dec. 21, 1957	10.48	9,270
1942	Mar. 9, 1942	8.34	6,380		Jan. 26, 1958	a12.67	-
1943	Nov. 26, 1942	9.82	8,450		Jan. 27, 1958	a9.75	7,000
	Dec. 2, 1942	8.95	7,230		Feb. 28, 1958	10.24	8,880
	Dec. 30, 1942	12.85	13,000		Apr. 7, 1958	9.32	7,460
	Mar. 12, 1943	a14.87	-	1959	Jan. 22, 1959	a11.44	7,500
1944	Nov. 9, 1943	10.41	9,320		Feb. 10, 1959	a12.90	-
	Mar. 24, 1944	8.85	7,090		Mar. 6, 1959	9.16	7,740
	Apr. 25, 1944	9.38	7,830	1960	Jan. 3, 1960	9.63	8,400
1945	Mar. 7, 1945	a18.83	-		Feb. 11, 1960	8.82	7,270
	Mar. 7, 1945	11.91	11,600		Apr. 1, 1960	9.23	7,840
	July 23, 1945	13.43	13,900		Apr. 5, 1960	10.19	9,190
	July 29, 1945	8.68	6,710		Aug. 19, 1960	8.85	7,310
	Sept. 19, 1945	9.08	7,520		Sept. 13, 1960	10.89	10,200
					Sept. 20, 1960	9.29	7,390
1946	Dec. 26, 1945	a12.09	-	1961	Feb. 26, 1961	a18.49	-
	Jan. 8, 1946	a10.32	7,000		Feb. 28, 1961	a12.44	11,000
	May 28, 1946	8.94	7,330				

a Backwater from ice.

3721. East Branch Wappinger Creek near Clinton Corners, N. Y.

Location.--Lat 41°48'45", long 73°45'35", on left bank 55 ft upstream from old mill dam, 185 ft upstream from highway bridge, 585 ft upstream from mouth, and 1½ miles south of Clinton Corners, Dutchess County.

Drainage area.--33.6 sq mi.

Gage.--Nonrecording prior to July 3, 1958; recording thereafter. Altitude of gage is 250 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 560 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Feb. 25, 1956	4.2	1,250	1959	Feb. 4, 1959	3.68	508
	Apr. 5, 1956	3.81	761		Feb. 10, 1959	4.34	976
	Apr. 17, 1956	3.58	544		Mar. 6, 1959	3.84	604
1957	Apr. 7, 1957	3.26	329	1960	Jan. 3, 1960	3.83	598
1958	Dec. 21, 1957	3.60	560		Apr. 5, 1960	3.86	616
	Feb. 28, 1958	3.54	513		Sept. 12, 1960	3.75	550
1959	Jan. 21, 1959	4.64	1,260	1961	Feb. 26, 1961	4.72	1,340

3722. Wappinger Creek near Clinton Corners, N. Y.

Location.--Lat 41°48'55", long 73°45'50", on right downstream wingwall of highway bridge, 850 ft downstream from abandoned bridge abutment of Philadelphia, Reading, and New England Railroad, 1,900 ft downstream from East Branch Wappinger Creek, and 1 mile south of Clinton Corners, Dutchess County.

Drainage area.--90.6 sq mi.

Gage.--Nonrecording prior to Sept. 9, 1957; recording thereafter. Altitude of gage is 230 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,200 cfs

Remarks.--Base for partial-duration series, 900 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Feb. 25, 1956	8.15	902	1959	Feb. 10, 1959	9.69	1,460
	Apr. 5, 1956	8.55	1,010		Mar. 6, 1959	8.67	1,120
1957	Apr. 6, 1957	7.38	734	1960	Jan. 3, 1960	9.04	1,230
1958	Dec. 21, 1957	8.93	1,200		Apr. 5, 1960	9.17	1,280
	Apr. 7, 1958	8.28	1,000		Sept. 12, 1960	8.28	1,000
					Sept. 20, 1960	8.50	1,070
1959	Jan. 22, 1959	11.35	2,160	1961	Feb. 26, 1961	11.55	2,260
	Feb. 4, 1959	8.40	1,040		June 11, 1961	8.83	1,170

3723. Little Wappinger Creek at Salt Point, N. Y.

Location.--Lat 41°48'20", long 73°47'35", on right bank 200 ft downstream from abandoned bridge abutment of New York, New Haven, and Hartford Railroad at Salt Point, Dutchess County, and half a mile upstream from Wappinger Creek.

Drainage area.--32.2 sq mi.

Gage.--Nonrecording at site 400 ft upstream at datum 1.73 ft higher prior to June 19, 1958; recording thereafter.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 260 cfs.

Peak stages and discharges of Little Wappinger Creek at Salt Point, N. Y.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Feb. 12, 1956	4.11	268	1959	Jan. 22, 1959	4.00	-
	Feb. 25, 1956	4.61	408		Jan. 22, 1959	5.80	775
	Mar. 8, 1956	4.35	332		Feb. 4, 1959	4.34	291
	Apr. 5, 1956	5.00	473		Feb. 10, 1959	4.68	379
	Apr. 9, 1956	4.37	298		Mar. 6, 1959	4.40	305
	Apr. 17, 1956	4.37	298	1960	Jan. 4, 1960	4.79	412
	Apr. 30, 1956	4.22	262		Feb. 12, 1960	4.35	293
1957	Apr. 7, 1957	4.30	325		Apr. 5, 1960	4.98	473
					Sept. 20, 1960	4.41	308
1958	Dec. 21, 1957	4.57	400	1961	Feb. 26, 1961	5.88	807
	Apr. 7, 1958	4.49	377		June 11, 1961	5.85	795
	Apr. 30, 1958	4.09	269				
1959	Oct. 27, 1958	4.37	298				

a Backwater from ice.

3725. Wappinger Creek near Wappingers Falls, N. Y.

Location.--Lat 41°39'05", long 73°52'20", on left bank 700 ft downstream from Red Oak Mill dam and 4½ miles northeast of village of Wappingers Falls, Dutchess County.

Drainage area.--182 sq mi.

Gage.--Recording. Datum of gage is 114.37 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 3,800 cfs and extended above on basis of flow-over-dam and contracted-opening measurement at 15,900 cfs, and contracted-opening and flow-over-road measurement at 18,600 cfs.

Remarks.--Base for partial-duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Feb. 8, 1929	4.35	2,600	1939	Feb. 21, 1939	6.71	1,890
	Mar. 6, 1929	7.00	2,630		Mar. 1, 1939	6.80	1,960
	Mar. 15, 1929	4.62	1,510		Apr. 20, 1939	7.46	2,490
	Apr. 18, 1929	5.27	1,820	1940	Mar. 15, 1940	6.23	1,550
	Apr. 21, 1929	5.35	1,850		Mar. 21, 1940	6.49	1,730
1930	Mar. 9, 1930	3.95	1,200		Mar. 31, 1940	11.99	7,090
					Apr. 9, 1940	6.30	1,600
1931	Mar. 29, 1931	3.99	1,220		Apr. 13, 1940	6.28	1,590
					Apr. 22, 1940	6.80	1,960
1932	Apr. 1, 1932	6.72	1,960	1941	Feb. 8, 1941	6.83	1,980
	Apr. 12, 1932	6.53	1,800		Mar. 22, 1942	6.20	1,530
1933	Nov. 20, 1932	8.19	3,170	1942	Nov. 26, 1942	6.66	1,850
	Mar. 22, 1933	6.92	2,120		Dec. 31, 1942	7.60	2,600
	Sept. 4, 1933	6.81	2,030				
	Sept. 17, 1933	7.34	2,450	1944	Mar. 25, 1944	7.04	2,080
1934	Mar. 5, 1934	11.78	-		Feb. 28, 1945	6.63	1,770
	Mar. 5, 1934	11.20	5,950		Mar. 4, 1945	7.21	2,220
1935	Feb. 26, 1935	6.25	1,560		May 20, 1945	6.32	1,550
1936	Mar. 12, 1936	12.13	6,880	1946	Dec. 8, 1945	5.94	1,230
	Mar. 19, 1936	8.30	3,200				
1937	Jan. 26, 1937	6.76	1,930	1947	Mar. 15, 1947	8.46	3,170
	May 15, 1937	6.32	1,610				
1938	Jan. 25, 1938	8.52	3,670	1948	Mar. 18, 1948	8.79	3,540
	June 28, 1938	7.87	2,820		Mar. 21, 1948	7.86	2,720
	July 22, 1938	8.08	3,000		Apr. 15, 1948	6.39	1,580
	July 24, 1938	7.68	2,660	1949	Jan. 1, 1949	12.52	7,730
	Aug. 11, 1938	7.24	2,310		Jan. 6, 1949	8.43	3,220
	Sept. 22, 1938	18.02	15,900	1950	Nov. 9, 1949	6.23	1,530
1939	Dec. 7, 1938	7.58	2,580	1951	Feb. 2, 1951	6.23	1,530
	Feb. 16, 1939	7.31	2,370				

a Backwater from ice.

Peak stages and discharges of Wappinger Creek near Wappingers Falls, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Feb. 8, 1951	6.45	1,680	1956	Feb. 26, 1956	7.01	2,110
	Feb. 22, 1951	6.26	1,550		Apr. 6, 1956	7.09	2,170
	Mar. 31, 1951	7.16	2,230		Apr. 10, 1956	6.24	1,520
	Apr. 4, 1951	6.97	2,080		Apr. 17, 1956	6.37	1,620
1952	Jan. 27, 1952	6.47	1,700	1957	Apr. 6, 1957	6.21	1,500
	Mar. 12, 1952	6.57	1,770		Dec. 21, 1957	6.90	2,130
	Apr. 6, 1952	7.39	2,420	1958	Mar. 4, 1958	6.09	1,510
	Apr. 29, 1952	6.22	1,520		Apr. 7, 1958	6.50	1,810
	June 2, 1952	7.68	2,670	1959	Oct. 27, 1958	6.22	1,600
1953	Dec. 12, 1952	6.46	1,690		Jan. 22, 1959	10.20	5,340
	Jan. 25, 1953	10.11	5,230		Feb. 4, 1959	6.37	1,710
	Mar. 14, 1953	6.40	1,650		Feb. 10, 1959	7.27	2,430
	Mar. 16, 1953	7.00	2,100		Mar. 6, 1959	-	bl,800
	Mar. 27, 1953	7.30	2,340	1960	Jan. 4, 1960	7.23	2,390
	Apr. 8, 1953	6.58	1,780		Apr. 5, 1960	7.74	2,850
1954	Dec. 15, 1953	5.66	1,170		Sept. 13, 1960	6.28	1,610
	Aug. 19, 1955	19.60	18,600		Sept. 20, 1960	6.41	1,720
1955	Feb. 7, 1955	7.92	2,890	1961	Feb. 26, 1961	10.29	5,450
	Oct. 16, 1955	12.47	8,170		June 11, 1961	7.20	2,360

b About.

3735. Fishkill Creek at Beacon, N. Y.

Location.--Lat 41°30'40", long 73°56'55", on left bank at upstream side of Bridge Street Bridge in Beacon, Dutchess County, 2½ miles upstream from mouth.

Drainage area.--186 sq mi.

Gage.--Recording. Datum of gage is 131.17 ft above mean sea level.

Stage-discharge relation.--Defined by current-meter measurements below 6,400 cfs.

Remarks.--Base for partial-duration series, 1,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1902	Mar. 1, 1902	-	al3,700	1953	Mar. 27, 1953	6.03	2,290
1945	Jan. 3, 1945	4.37	1,230		Apr. 8, 1953	4.73	1,460
	Mar. 5, 1945	5.95	2,290		Apr. 14, 1953	4.74	1,460
	May 20, 1945	5.23	1,780	1954	Dec. 15, 1953	4.27	1,200
	July 23, 1945	4.68	1,420		Sept. 13, 1954	5.24	1,760
1946	Dec. 8, 1945	4.70	1,430	1955	Nov. 4, 1954	4.88	1,550
	Dec. 27, 1945	4.76	1,470		Nov. 22, 1954	5.06	1,660
	Jan. 8, 1946	4.33	1,210		Dec. 19, 1954	4.50	1,320
	May 28, 1946	4.33	1,210		Mar. 23, 1955	4.33	1,230
	June 3, 1946	4.30	1,200		Aug. 20, 1955	12.13	8,800
	Mar. 15, 1947	5.85	2,220	1956	Oct. 16, 1955	11.78	8,280
1947	May 6, 1947	4.51	1,320		Nov. 1, 1955	4.91	1,600
	Nov. 13, 1947	4.84	1,510		Nov. 6, 1955	5.29	1,380
1948	Mar. 18, 1948	6.96	2,970		Nov. 12, 1955	4.47	1,350
	Mar. 22, 1948	6.69	2,750		Nov. 17, 1955	4.62	1,430
	Apr. 15, 1948	4.65	1,400		Apr. 6, 1956	5.20	1,770
	June 25, 1948	4.45	1,280		Apr. 18, 1956	4.48	1,250
	Jan. 1, 1949	7.03	3,020	1957	Apr. 7, 1957	4.40	1,240
1949	Jan. 7, 1949	6.62	2,700		Apr. 10, 1957	4.52	1,310
1950	Mar. 9, 1950	4.33	1,210	1958	Dec. 21, 1957	6.42	2,500
	Nov. 27, 1950	4.36	1,250		Dec. 27, 1957	5.12	1,650
1951	Jan. 25, 1951	4.31	1,220		Jan. 23, 1958	5.00	1,580
	Feb. 9, 1951	4.87	1,540		Jan. 27, 1958	5.12	1,650
	Feb. 23, 1951	4.90	1,560		Mar. 1, 1958	5.52	1,900
	Apr. 1, 1951	6.31	2,490		Mar. 5, 1958	4.90	1,520
	Apr. 4, 1951	5.92	2,210		Apr. 8, 1958	6.12	2,290
	Apr. 12, 1958	5.01	1,590	1959	Apr. 12, 1958	5.01	1,590
1952	Nov. 9, 1951	4.72	1,450		Jan. 22, 1959	5.56	1,920
	Dec. 22, 1951	5.18	1,730		Feb. 11, 1959	5.61	1,960
	Jan. 28, 1952	4.84	1,520		Mar. 7, 1959	4.96	1,560
	Mar. 12, 1952	7.21	3,170	1960	Jan. 4, 1960	4.90	1,520
	Apr. 6, 1952	6.02	2,280		Feb. 12, 1960	4.79	1,450
	Apr. 16, 1952	4.32	1,230		Feb. 20, 1960	4.32	1,200
	Apr. 29, 1952	5.34	1,820		Apr. 6, 1960	5.89	2,140
	June 2, 1952	6.27	2,460		Sept. 13, 1960	5.05	1,610
1953	Dec. 12, 1952	5.73	2,080		Sept. 21, 1960	4.83	1,480
	Jan. 25, 1953	7.28	3,220	1961	Feb. 26, 1961	8.52	4,340
	Mar. 17, 1953	5.01	1,630		Apr. 26, 1961	4.54	1,320

a Annual peak only at site of Glenham.

3750. Croton River at New Croton Dam, near Croton-on-Hudson, N. Y.
(Published as "at Quaker Bridge near Croton" 1933-41, and as
"near Croton" 1942-54)

Location.--Lat 41°13'30", long 73°51'35", on left bank 1,000 ft downstream from New Croton Dam and 1½ miles northeast of Croton-on-Hudson, Westchester County.

Drainage area.--378 sq mi.

Gage.--Recording and concrete control with trapezoidal-notch weir. Prior to Oct. 1, 1941, at site about 1 mile downstream at Quaker Bridge. Altitude of gage is 50 ft (from topographic map).

Stage-discharge relation.--1934-44: Defined by current-meter measurements. 1945-1951: Defined by current-meter measurements below 2,400 cfs and extended above on basis of slope-area measurement at 4,200 cfs. 1951-54: Defined by current-meter measurements. 1955-61: Defined by current-meter measurements below 9,700 cfs and extended above on basis of slope-area measurement at 45,400 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Entire flow, except for periods of spilling, diverted from New Croton Reservoir for municipal supply of City of New York. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1934	Mar. 5, 1934	9.56	3,940	1948	Apr. 2, 1948	5.11	2,390
1935	Mar. 13, 1935	6.14	1,500	1949	May 7, 1949	3.90	1,120
				1950	July 21, 1950	1.63	25.3
1936	Mar. 19, 1936	10.30	4,530	1951	Mar. 31, 1951	6.94	4,540
1937	Jan. 26, 1937	7.34	2,260	1952	June 2, 1952	8.57	5,510
1938	Sept. 22, 1938	11.4	8,410	1953	Mar. 26, 1953	6.78	3,900
1939	Dec. 8, 1938	7.91	2,660	1954	Sept. 11, 1954	1.45	16.7
1940	June 1, 1940	6.70	1,840	1955	Aug. 20, 1955	9.82	9,960
1941	Apr. 7, 1941	4.41	634				
1942	July 27, 1942	1.46	19.2	1956	Oct. 16, 1955	18.44	45,400
1943	Mar. 17, 1943	4.78	1,740	1957	Apr. 7, 1957	4.75	2,380
1944	May 3, 1944	3.27	595	1958	Apr. 8, 1958	5.60	3,520
1945	July 19, 1945	6.36	3,920	1959	Mar. 7, 1959	5.47	3,340
				1960	Apr. 6, 1960	5.48	3,350
1946	June 3, 1946	5.40	2,720				
1947	May 26, 30, 1947	4.09	1,240	1961	Feb. 26, 1961	6.68	4,720

3755. Bird Brook near Croton, N. Y.

Location.--Lat 41°12'40", long 73°52'00", on left bank 300 ft upstream from mouth, 900 ft northeast of Quaker Bridge, and 1 mile east of Croton, Westchester County.

Drainage area.--0.36 sq mi.

Gage.--Recording and concrete control with V-notch weir. Altitude of gage is 80 ft (from topographic map).

Stage-discharge relation.--Defined by volumetric and current-meter measurements below 2.6 cfs and extended above by logarithmic plotting.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1934	May 3, 1934	1.60	14.0	1938	Sept. 21, 1938	1.98	27
1935	Oct. 6, 1934	1.10	4.1				
1936	Mar. 12, 1936	1.82	20.6	1940	Mar. 15, 1940	1.54	12.2
1937	Aug. 21, 1937	1.71	17.3	1941	Feb. 7, 1941	1.57	13.1

3765. Saw Mill River at Yonkers, N.Y.

Location.--Lat 40°56'20", long 73°53'05", on left bank in Yonkers, Westchester County, just upstream from Old Croton aqueduct, near intersection of Nepperhan Avenue and Center Street, 1.2 miles upstream from mouth.

Drainage area.--25.6 sq mi.

Gage.--Recording. Datum of gage is 90.99 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	June 21, 1945	3.05	330	1954	Sept. 11, 1954	3.35	412
				1955	Aug. 13, 1955	3.26	390
1946	May 26, 1946	3.90	577				
1947	Apr. 5, 1947	2.99	319	1956	Oct. 16, 1955	5.34	890
1948	Aug. 12, 1948	3.02	332	1957	Nov. 1, 1956	3.34	405
1949	Jan. 1, 1949	2.98	322	1958	Mar. 1, 1958	3.66	486
1950	July 10, 1950	2.72	265	1959	Mar. 7, 1959	-	330
				1960	Sept. 12, 1960	-	a340
1951	Mar. 31, 1951	4.21	578				
1952	June 1, 1952	3.69	460	1961	July 20, 1961	3.17	374
1953	Mar. 14, 1953	4.11	555				

a Daily mean discharge.

HACKENSACK RIVER BASIN

3770. Hackensack River at Rivervale, N.J.

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. Area of swamps, lakes, and reservoirs, 2.4 sq mi.

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

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--5 ft.

Remarks.--Flow regulated after February 1956 at DeForest Lake about 11 miles upstream, capacity, 5,638,000,000 gal at top of Bascule gates. Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Mar. 22, 1942	3.32	519	1948	Mar. 18, 1948	3.38	546
	Aug. 17, 1942	3.44	575		Apr. 1, 1948	3.31	514
1943	Dec. 31, 1942	4.05	820		May 15, 1948	3.32	519
1944	Nov. 11, 1943	3.46	582	1949	Jan. 1, 1949	3.83	737
	Mar. 13, 1944	3.30	510		Jan. 8, 1949	3.28	501
	Apr. 25, 1944	3.66	667	1950	July 12, 1950	2.93	334
1945	Feb. 28, 1945	3.29	505	1951	Feb. 22, 1951	3.49	609
	Mar. 7, 1945	3.35	532		Apr. 1, 1951	5.70	1,350
	July 19, 1945	5.28	1,250				
	July 23, 1945	5.26	1,250	1952	Nov. 8, 1951	3.40	569
1946	Dec. 28, 1945	3.31	514		Dec. 21, 1951	3.67	681
	May 28, 1946	3.61	644		Mar. 13, 1952	3.27	507
	June 3, 1946	3.41	560		Apr. 7, 1952	4.02	811
	July 23, 1946	3.92	772		Apr. 28, 1952	3.69	689
	Aug. 14, 1946	3.56	624		June 2, 1952	4.75	1,060
1947	Apr. 6, 1947	3.48	595	1953	Jan. 25, 1953	3.36	550
					Mar. 13, 1953	4.95	1,120
1948	Nov. 12, 1947	3.28	501		Mar. 26, 1953	3.84	746
					Apr. 9, 1953	3.46	595

Peak stages and discharges of Hackensack River at Rivervale, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Sept. 11, 1954	3.84	746	1958	Feb. 28, 1958	4.11	844
1955	Aug. 13, 1955	3.73	708	1959	Apr. 7, 1958	3.52	621
	Aug. 19, 1955	4.28	903		May 8, 1959	3.05	398
1956	Oct. 17, 1955	6.03	1,450	1960	Aug. 19, 1960	3.63	666
1957	Apr. 6, 1957	3.68	685	1961	Sept. 13, 1960	3.60	654
					Feb. 27, 1961	3.74	708
1958	Jan. 22, 1958	3.61	658		Apr. 19, 1961	3.56	638
	Jan. 26, 1958	3.57	642				

3775. Pascack Brook at Westwood, N.J.

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. Area of lakes, ponds, and swamps, 0.9 sq mi.

Gage--Recording. Datum of gage is 28.62 ft above mean sea level, datum of 1929.

Stage-discharge relation--Defined by current-meter measurements; shifts in relation occur.

Bankfull stage--5 ft.

Remarks--Flow regulated by Woodcliff Lake 3 miles above station, capacity at spillway level, 835,000,000 gal. Base for partial-duration series, 330 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Oct. 5, 1934	2.78	216	1945	July 23, 1945	6.76	1,610
1936	Mar. 12, 1936	5.53	1,190	1946	Dec. 26, 1945	3.88	462
	Mar. 19, 1936	3.49	414		May 18, 1946	3.49	361
	Apr. 6, 1936	3.40	386		May 28, 1946	4.63	693
1937	Dec. 20, 1936	3.46	405		June 3, 1946	3.95	482
	May 15, 1937	3.92	547	1947	July 23, 1946	4.98	813
	Sept. 14, 1937	3.88	540		Mar. 15, 1947	3.39	338
1938	Nov. 29, 1937	3.42	392	1948	Apr. 6, 1947	3.84	451
	Jan. 25, 1938	4.14	636		Nov. 12, 1947	3.46	354
	June 28, 1938	3.50	417	1949	Apr. 2, 1948	3.52	368
	July 24, 1938	4.05	600		May 14, 1948	3.39	338
	Sept. 22, 1938	5.37	1,120	1950	Jan. 6, 1949	3.67	405
1939	Dec. 6, 1938	3.77	496	1951	Mar. 23, 1950	3.03	266
	Feb. 4, 1939	3.27	347		Feb. 8, 1951	3.50	363
	Apr. 7, 1939	3.23	336		Feb. 22, 1951	3.73	421
1940	Jan. 15, 1940	3.23	336		Mar. 31, 1951	6.50	1,470
	Mar. 15, 1940	4.81	893		Apr. 3, 1951	3.83	448
1941	Apr. 9, 1940	4.12	625		Aug. 13, 1951	4.04	509
	June 1, 1940	3.91	550	1952	Nov. 3, 1951	3.40	340
1942	Feb. 8, 1941	3.90	547		Nov. 8, 1951	3.82	446
1942	Mar. 22, 1942	3.48	344		Dec. 21, 1951	4.26	575
	Aug. 9, 1942	3.55	364		Mar. 12, 1952	4.20	556
	Aug. 10, 1942	3.59	377		Apr. 6, 1952	4.78	743
	Aug. 17, 1942	4.28	613		Apr. 28, 1952	3.84	451
1943	Dec. 31, 1942	4.30	620		May 26, 1952	3.86	457
					June 1, 1952	5.75	1,120
1944	Oct. 27, 1943	3.82	452		Sept. 2, 1952	3.56	377
	Nov. 9, 1943	4.11	553	1953	Dec. 6, 1952	3.79	437
	Mar. 13, 1944	3.52	355		Dec. 12, 1952	3.80	440
	Apr. 25, 1944	4.16	571		Jan. 25, 1953	4.03	506
	Sept. 15, 1944	3.54	361		Mar. 13, 1953	5.90	1,180
					Mar. 25, 1953	4.47	640
1945	July 19-20, 1945	6.06	1,250		Apr. 8, 1953	4.47	640

HACKENSACK RIVER BASIN

Peak stages and discharges of Pascack Brook at Westwood, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	July 23, 1953	3.62	392	1958	Feb. 28, 1958	5.37	1,120
1954	Sept. 12, 1954	4.15	535		Apr. 6, 1958	4.29	697
					Apr. 12, 1958	3.09	352
1955	Nov. 21, 1954	4.10	455	1959	Mar. 7, 1959	3.20	390
	Aug. 13, 1955	5.62	998				
	Aug. 19, 1955	6.06	1,190	1960	Jan. 3, 1960	3.20	365
1956	Oct. 16, 1955	6.45	1,330		July 30, 1960	3.76	520
	Oct. 31, 1955	4.04	350		Aug. 19, 1960	4.94	918
					Sept. 12, 1960	5.09	976
1957	Apr. 6, 1957	3.72	410	1961	Feb. 26, 1961	4.11	619
1958	Dec. 21, 1957	3.72	410		Mar. 14, 1961	3.40	415
	Jan. 22, 1958	4.55	665		Apr. 16, 1961	4.17	638
	Jan. 26, 1958	4.00	490		Apr. 19, 1961	3.19	357

3785. Hackensack River at New Milford, N.J.
(Published as "at Oradell" 1908-13)

Location.--Lat 40°56'52", long 74°01'34", on right bank upstream from two masonry dams and two lift gates at pumping plant of Hackensack Water Co., New Milford, Bergen County, 0.6 mile downstream from Oradell Dam, 4.0 miles downstream from Pascack Brook, and 21.8 miles upstream from mouth.

Drainage area.--113 sq mi. Area of swamps, lakes, and reservoirs, 4.6 sq mi.

Gage.--Nonrecording prior to Nov. 23, 1923; recording thereafter. At same site above south dam at datum 0.05 ft lower prior to Sept. 25, 1934. Datum of gage is 6.25 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--5 ft.

Remarks.--Flow regulated by Oradell Reservoir 1 mile above station, Woodcliff Lake 9 miles above station, and DeForest Lake (since February 1956) 17 miles above station (combined capacity of reservoirs, 9,320,000,000 gal). Water diverted at gage and at West Nyack, N.Y., for municipal supply, averaging about 90 cfs in 1958. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	Mar. 9, 1922	3.32	1,230	1942	Aug. 9, 1942	3.58	1,560
1923	Mar. 17, 1923	3.60	1,450	1943	Dec. 31, 1942	3.79	1,740
1924	Apr. 7, 1924	4.05	1,880	1944	Apr. 25, 1944	3.70	1,660
1925	Feb. 12, 1925	3.86	1,760	1945	July 19, 1945	4.91	2,670
1926	Mar. 8, 1926	2.94	970	1946	July 23, 1946	4.90	2,660
1927	Sept. 2, 1927	4.58	2,500	1947	Apr. 5, 1947	3.42	1,430
1928	July 6, 1928	4.55	2,500	1948	Aug. 12, 1948	3.63	1,600
1929	Feb. 7, 1929	3.60	1,520	1949	Dec. 31, 1948	3.49	1,480
1930	Mar. 8, 1930	2.79	857	1950	July 11, 1950	2.74	874
1931	June 17, 1931	3.25	1,220	1951	Mar. 31, 1951	6.14	3,660
1932	Mar. 28, 1932	3.60	1,520	1952	June 1, 1952	4.94	2,390
1933	Sept. 15, 1933	3.81	1,700	1953	Mar. 13, 1953	5.00	2,740
1934	Sept. 30, 1934	3.83	1,840	1954	Sept. 11, 1954	3.48	1,490
1935	Feb. 15, 1935	3.03	1,130	1955	Aug. 19, 1955	4.40	2,260
1936	Mar. 12, 1936	5.08	2,800	1956	Oct. 16, 1955	5.89	3,460
1937	Dec. 21, 1936	a3.29	1,200	1957	Apr. 6, 1957	3.59	1,580
1938	July 24, 1938	b4.72	2,350	1958	(e)	3.68	1,650
1939	-	c3.14	d1,200	1959	Mar. 6, 1959	3.45	1,470
1940	Mar. 16, 1940	4.01	1,930	1960	Sept. 12, 1960	5.24	2,930
1941	Feb. 8, 1941	3.43	1,430	1961	Apr. 16, 1961	3.84	1,780

a Occurred May 15, 1937, when waste gate channel closed.

b Occurred Sept. 21, 1938.

c Occurred Feb. 3, 28, 1939.

d Occurred Dec. 6, 1938, Feb. 3, 28, 1939.

e Occurred Jan. 22 and Mar. 1, 1958.

3790. Passaic River near Millington, N.J.
(Published as "at Millington" 1903-6)

Location.--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. At site used Nov. 25, 1903, to July 15, 1906, 57 sq mi, approximately. Area of lakes, ponds, and swamps, 10.0 sq mi.

Gage.--Nonrecording prior to July 3, 1925; recording thereafter. At site 0.7 mile downstream at different datum prior to July 15, 1906; and at site 200 ft downstream at present datum Nov. 10, 1921, to Sept. 1, 1923. Datum of gage is 215.60 ft above mean sea level (New Jersey Geological Survey bench mark).

Stage-discharge relation.--For 1903-6 defined by current-meter measurements below 140 cfs and extended above on basis of area-velocity study. Since 1921, defined by current-meter measurements below 1,400 cfs and by slope-area measurement of 1,480 cfs.

Remarks.--Only annual peaks, from graph of twice-daily gage readings, are shown prior to 1926. Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Mar. 8, 1904	7.6	1,920	1938	June 29, 1938	6.60	521
1905	Jan. 9, 1905	7.8	2,000		July 24, 1938	7.21	719
					Sept. 22, 1938	8.11	1,040
1906	Mar. 4, 1906	6.1	1,320	1939	Dec. 6, 1938	6.72	553
					Feb. 4, 1939	6.79	585
1922	Mar. 7, 1922	6.50	548		Mar. 1, 1939	6.57	506
1923	Mar. 17-18, 1923	6.6	700				
1924	Apr. 7, 1924	8.00	1,100	1940	Mar. 15, 1940	7.82	938
1925	Feb. 25, 1925	6.95	718		Apr. 9, 1940	6.94	634
				1941	Feb. 8, 1941	6.51	493
1926	Dec. 6, 1925	6.36	511				
	Feb. 26, 1926	6.81	668	1942	Aug. 14, 1942	8.57	1,360
	Mar. 8, 1926	6.50	565				
				1943	Nov. 26, 1942	6.57	525
1927	Feb. 26, 1927	6.30	490		Dec. 31, 1942	7.59	916
1928	Oct. 20, 1927	6.81	668	1944	Mar. 14, 1944	6.63	546
	Dec. 8, 1927	6.44	541		Mar. 24, 1944	6.55	518
	Feb. 24, 1928	6.93	700		Apr. 25, 1944	6.71	574
	Apr. 24, 1928	6.48	557	1945	Feb. 27, 1945	7.17	748
	July 6, 1928	6.72	637				
	Aug. 28, 1928	6.90	700	1946	Nov. 30, 1945	6.67	588
1929	Feb. 28, 1929	7.03	735		May 18, 1946	7.11	748
	Mar. 6, 1929	6.43	537		June 3, 1946	7.25	800
	Apr. 17, 1929	6.36	511		July 24, 1946	6.64	577
	Apr. 26, 1929	6.97	724				
				1947	Mar. 15, 1947	6.44	508
1930	Mar. 8, 1930	6.54	565		Apr. 6, 1947	6.56	549
1931	Mar. 30, 1931	6.22	460	1948	Nov. 9, 1947	7.15	762
					Nov. 12, 1947	7.03	718
1932	Mar. 28, 29, 1932	6.81	665		Feb. 20, 1948	(a)	(a)
					Mar. 17, 1948	6.88	528
1933	Nov. 10, 1932	7.49	860		Apr. 2, 1948	6.83	549
	Nov. 20, 1932	7.38	824		May 14, 1948	7.37	722
	Mar. 22, 1933	6.55	536				
	Aug. 24, 25, 1933	6.46	504	1949	Dec. 31, 1948	8.71	1,300
	Sept. 16, 17, 1933	7.73	934		Jan. 6, 1949	7.17	715
1934	Jan. 8, 1934	6.57	536				
	Mar. 5-6, 1934	7.79	972	1950	Mar. 24, 1950	6.20	395
	Apr. 1, 1934	6.58	552				
				1951	Nov. 26, 1950	6.69	549
1935	Feb. 17, 1935	6.44	504		Dec. 9, 1950	6.75	569
					Feb. 22, 1951	6.79	583
1936	Jan. 3, 1936	6.88	651		Mar. 31, 1951	7.24	740
	Jan. 10, 1936	6.43	504				
	Mar. 12, 1936	9.18	1,480	1952	Nov. 8, 1951	6.69	549
	Mar. 19, 1936	6.84	634		Dec. 21, 1951	6.98	648
	Apr. 6, 1936	6.95	668		Mar. 12, 1952	7.00	655
					June 2, 1952	7.44	813
1937	Dec. 20, 1936	6.73	602				
				1953	Nov. 23, 1952	6.80	585
1938	Jan. 25, 1938	6.83	602		Jan. 25, 1953	6.89	616
	a Unknown.						

Peak stages and discharges of Passaic River near Millington, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Mar. 16, 1953	7.21	728	1958	Mar. 1, 1958	7.20	725
	Apr. 8, 1953	7.06	676		Apr. 7, 1958	6.72	561
1954	Dec. 15, 1953	5.95	335	1959	Oct. 27, 1958	6.33	439
1955	Nov. 22, 1954	6.68	548	1960	Apr. 5, 1960	6.98	682
	Aug. 14, 1955	6.90	620		Sept. 13, 1960	6.82	558
	Aug. 19, 1955	7.88	977	1961	Feb. 26, 1961	7.77	990
1956	Oct. 16, 1955	7.14	704		Mar. 24, 1961	6.68	586
	Apr. 7, 1957	7.14	704		Apr. 14, 1961	6.88	642
1958	Dec. 21, 1957	6.93	630	1962	Jan. 7, 1962	6.54	506
	Jan. 26, 1958	6.68	548		Mar. 1, 1962	6.78	602
					Mar. 13, 1962	7.72	972

3795. Passaic River near Chatham, N.J.

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

Drainage area.--100 sq mi. Area of lakes, ponds, and swamps, 11.2 sq mi.

Gage.--Nonrecording 1904-11; recording since Dec. 15, 1937. On Stanley Avenue Bridge 150 ft upstream at different datum 1904-11. Concrete control since Sept. 19, 1938. Datum of gage is 193.51 ft above mean sea level, datum of 1929.

Stage-discharge relation.--For 1904-11 well defined by current-meter measurements below 600 cfs, but considered only approximate above 750 cfs. Since 1937, defined by current-meter measurements.

Bankfull stage.--8 ft.

Remarks.--Only maximum observed peaks are shown 1904-11. Base for partial-duration series, 800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Oct. 11, 1903	7.2	2,310	1944	Jan. 6, 1944	5.57	936
1905	Jan. 9, 1905	8.3	3,000		Mar. 13, 1944	5.57	936
					Mar. 25, 1944	5.48	875
					Apr. 26, 1944	5.61	964
1906	Apr. 16, 1906	5.3	1,190	1945	Feb. 27, 1945	a6.67	-
1907	Mar. 18, 1907	8.0	2,860		July 23, 1945	5.49	881
1908	Feb. 28, 1908	5.9	1,600		Sept. 19, 1945	5.71	1,040
1909	Feb. 25, 1909	5.5	1,360				
1910	Mar. 4, 1910	7.0	2,260	1946	Dec. 1, 1945	5.43	841
					June 4, 1946	5.71	1,040
					July 23, 1946	5.51	895
1911	Nov. 5, 1910	3.9	525	1947	Apr. 5, 1947	5.47	869
					May 4, 1947	5.46	862
1938	Jan. 25, 1938	4.85	1,060	1948	Nov. 8, 1947	6.05	1,220
	July 23, 1938	6.51	1,840		Nov. 12, 1947	6.35	1,410
	Sept. 21, 1938	6.86	1,910		Feb. 20, 1948	a6.30	bl,000
1939	Dec. 7, 1938	5.41	828		Feb. 24, 1948	a6.65	-
	Feb. 5, 1939	5.62	972		Mar. 1, 1948	5.37	801
1940	Mar. 15, 1940	5.79	1,090		May 15, 1948	5.60	950
	Apr. 10, 1940	5.69	1,020		June 25, 1948	5.44	849
	May 31, 1940	5.69	1,020	1949	Jan. 1, 1949	6.78	1,710
					Jan. 28, 1949	5.40	821
1941	Feb. 9, 1941	5.30	756	1950	May 23, 1950	5.17	670
1942	Aug. 9, 1942	6.31	1,470				
	Aug. 16, 1942	7.32	2,020				
	Sept. 20, 1942	5.67	1,010	1951	Dec. 8, 1950	5.71	1,010
1943	Nov. 26, 1942	5.52	902		Feb. 22, 1951	5.46	862
	Dec. 31, 1942	6.21	1,420		Apr. 3, 1951	5.72	1,010
	May 28, 1943	5.48	875				
1944	Nov. 10, 1943	5.41	828				

a Backwater from ice.

b Estimated daily mean discharge.

Peak stages and discharges of Passaic River near Chatham, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Nov. 7, 1951	5.59	944	1957	Apr. 7, 1957	5.86	1,100
	Dec. 23, 1951	5.73	1,020		Dec. 21, 1957	5.69	995
	Jan. 28, 1952	5.40	821	1958	Dec. 26, 1957	5.45	860
	Mar. 13, 1952	5.62	960		Jan. 27, 1958	5.55	920
	May 25, 1952	5.44	849		Mar. 2, 1958	5.94	1,140
	June 1, 1952	6.17	1,290		Mar. 27, 1958	5.52	902
1953	Jan. 26, 1953	5.58	938		Apr. 8, 1958	5.54	914
	Mar. 16, 1953	5.95	1,150		Apr. 30, 1958	5.49	884
	Apr. 9, 1953	5.77	1,040	1959	Oct. 26, 1958	5.30	770
1954	Dec. 14, 1953	5.13	651	1960	Apr. 6, 1960	5.71	1,010
1955	Nov. 23, 1954	5.49	884		Sept. 12, 1960	5.88	1,110
	Aug. 14, 1955	6.30	1,380	1961	Feb. 22, 1961	5.69	-
	Aug. 19, 1955	6.31	1,390		Feb. 27, 1961	6.17	1,290
1956	Oct. 16, 1955	5.95	1,150		Mar. 23, 1961	5.46	866
	Apr. 8, 1956	5.44	854		Apr. 16, 1961	5.87	1,100

a Backwater from ice.

3800. Beaver Brook at outlet of Splitrock Reservoir, N.J.
(Published as "at outlet of Splitrock Pond")

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

Drainage area.--5.50 sq mi.

Gage.--Recording gage and wooden weir. Altitude of gage is 790 ft (from topographic map).

Stage-discharge relation.--Defined by weir formula and verified by current-meter measurements below 40 cfs.

Remarks.--Some flood peaks affected by regulation of Splitrock Reservoir (capacity at spillway level, 3,310,000,000 gal). Base for partial-duration series, 50 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Nov. 18, 1925	-	53	1937	Jan. 3-6, 1937	1.39	25
	Dec. 7, 1925	-	52		Jan. 26, 1938	1.94	60
1927	Oct. 27, 1926	-	50	1938	July 24, 1938	2.37	95
	Nov. 18, 1926	1.99	64		Sept. 22-23, 1938	2.12	75
	Aug. 31, 1927	-	50	1939	Dec. 6, 1938	2.30	89
1928	Oct. 21, 1927	-	89		Jan. 15-16, 1940	2.34	93
	Nov. 20, 1927	-	56	1940	Apr. 25, 1940	1.94	60
	Apr. 29, 1928	-	55		June 5, 1940	2.28	87
	Aug. 28, 1928	2.08	71	1941	Apr. 7, 1941	1.74	46
1929	Apr. 26, 1929	1.96	62		Nov. 3, 1941	2.11	74
1930	Mar. 9-12, 1930	1.58	36	1942	Aug. 11, 1942	2.13	75
1931	June 9, 1931	1.84	53		Aug. 18, 1942	2.11	74
	Sept. 15, 1931	2.02	65		Sept. 28, 1942	2.42	100
1932	Apr. 1, 1932	1.69	43	1943	Nov. 25, 1942	1.91	58
1933	Nov. 20, 1932	2.50	107	1944	Apr. 25, 1944	1.91	58
1934	Sept. 17-18, 1934	1.84	53	1945	Mar. 7, 1945	2.00	65
1935	Dec. 1, 1934	1.98	63		July 20, 1945	2.01	66
	May 11, 1935	1.87	56	1946	May 28, 1946	1.79	50
1936	Mar. 12, 1936	2.70	126		July 24, 1946	1.87	56
	Mar. 20, 1936	2.06	70				

3805. Rockaway River above reservoir, at Boonton, N.J.

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

Drainage area.--116 sq mi. Area of lakes, ponds, and swamps, 7.8 sq mi.

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

Stage-discharge relation.--Defined by current-meter measurements below 2,400 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 950 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Nov. 14, 1937	5.13	1,900	1951	Dec. 8, 1950	5.06	1,980
	Jan. 25, 1938	5.15	1,900		Feb. 8, 1951	3.83	984
	June 28, 1938	3.99	1,010		Mar. 20, 1951	3.92	1,060
	July 24, 1938	5.43	2,120		Mar. 31, 1951	5.59	2,460
	Sept. 22, 1938	5.55	2,260		July 29, 1951	3.97	1,100
1939	Dec. 6, 1938	4.38	1,310	1952	Nov. 8, 1951	4.73	1,700
	Mar. 1, 1939	4.20	1,160		Dec. 21, 1951	5.07	1,990
	Apr. 7, 1939	3.98	1,000		Jan. 23, 1952	4.02	1,060
	Apr. 20, 1939	4.38	1,310		Jan. 27, 1952	4.10	1,120
1940	Mar. 15, 1940	5.76	2,390		Feb. 5, 1952	3.93	988
	Mar. 31, 1940	4.00	1,030		Mar. 12, 1952	5.83	2,540
	Apr. 9, 1940	4.42	1,330		Apr. 6, 1952	4.45	1,380
	Apr. 21, 1940	4.00	1,030		Apr. 28, 1952	4.18	1,180
	June 2, 1940	3.95	995		May 26, 1952	4.15	1,160
	Sept. 2, 1940	3.89	954		June 2, 1952	6.62	3,250
1941	Feb. 8, 1941	3.82	908		July 10, 1952	4.58	1,480
1942	Mar. 4, 1942	4.01	1,030		Sept. 2, 1952	4.86	1,710
	Aug. 11, 1942	4.11	1,100	1953	Nov. 22, 1952	5.28	2,050
	Sept. 28, 1942	4.25	1,200		Dec. 6, 1952	4.37	1,300
1943	Nov. 26, 1942	4.56	1,440		Dec. 12, 1952	3.98	996
	Dec. 31, 1943	4.80	1,620		Jan. 25, 1953	5.10	1,890
1944	Mar. 7, 1944	3.95	982		Mar. 13, 1953	4.30	1,240
	Mar. 13, 1944	4.00	1,020		Mar. 16, 1953	4.13	1,110
	Mar. 24, 1944	4.03	1,040		Mar. 25, 1953	4.02	1,030
	Apr. 25, 1944	4.57	1,450		Apr. 8, 1953	4.83	1,660
1945	Mar. 7, 1945	4.21	1,170		Apr. 17, 1953	3.97	989
	July 21, 1945	4.69	1,540	1954	Mar. 4, 1954	3.55	705
	Sept. 19, 1945	4.01	1,030	1955	Nov. 22, 1954	4.52	1,420
1946	Nov. 23, 1945	4.07	1,070		Aug. 13, 1955	4.64	1,510
	Dec. 26, 1945	4.19	1,150		Aug. 19, 1955	5.43	2,190
	June 3, 1946	4.14	1,120	1956	Oct. 16, 1955	5.15	1,940
	July 24, 1946	4.56	1,440	1957	Apr. 6, 1957	4.43	1,340
1947	Mar. 15, 1947	4.60	1,470	1958	Dec. 21, 1957	5.31	2,080
	Apr. 6, 1947	4.46	1,360		Dec. 27, 1957	4.42	1,340
	May 26, 1947	4.28	1,220		Jan. 22, 1958	3.95	975
1948	Nov. 9, 1947	5.01	1,790		Feb. 28, 1958	4.82	1,660
	Nov. 12, 1947	4.37	1,290		Apr. 7, 1958	4.61	1,490
	Mar. 17, 1948	4.37	1,290		Apr. 12, 1958	4.02	1,030
	Apr. 2, 1948	4.15	1,120	1959	Mar. 7, 1959	4.22	1,170
	May 14, 1948	4.02	1,030	1960	Dec. 13, 1959	4.03	1,020
1949	Dec. 31, 1948	6.30	2,860		Dec. 29, 1959	3.93	951
	Jan. 6, 1949	4.93	1,720		Jan. 3, 1960	4.38	1,290
1950	Mar. 23, 1950	3.96	991		Apr. 5, 1960	4.87	1,690
1951	Nov. 26, 1950	5.07	1,990		Sept. 13, 1960	4.88	1,690
	Dec. 5, 1950	4.02	1,130	1961	Feb. 26, 1961	4.92	1,730
					Apr. 14, 1961	4.00	1,000
					Apr. 17, 1961	4.41	1,320

3810. Rockaway River below reservoir, at Boonton, N.J.

(Published as "Rockaway River near Boonton" 1903-4,
and as "Rockaway River at Boonton" 1906-37)

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. At site used in 1904, 121 sq mi. Area of lakes,
ponds, and swamps, 9.0 sq mi.

Gage.--Nonrecording prior to Sept. 30, 1924, recording thereafter. During
1904, at site 1.9 miles downstream at different datum; 1913-24, on Boonton
Reservoir 2,000 ft upstream at datum 305.25 ft above mean sea level.
Concrete control completed Nov. 5, 1936. Datum of gage is 195.68 ft above
mean sea level (New Jersey Geological Survey bench mark).

Stage-discharge relation.--For 1904, defined by current-meter measurements
below 900 cfs and extended above by logarithmic plotting; 1912-24, defined
by weir formula; 1925-61, defined by current-meter measurements below 1,400
cfs and extended above by logarithmic plotting.

Remarks.--Flow regulated by Boonton and Splitrock Reservoirs. Prior to 1926
gage height and discharge are mean for day. Only annual peaks are shown.

Peak stages and discharges a/

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Oct. 10, 1903	7.8	7,560	1937	May 16, 1937	4.46	914
1913	Jan. 4, 1913	1.55	1,560	1938	Sept. 22, 1938	6.06	1,860
1914	Mar. 29, 1914	1.29	1,200	1939	Dec. 7, 1938	4.60	993
1915	Jan. 14, Feb. 2, 1915	1.49	1,480	1940	Apr. 9, 1940	4.64	1,010
1916	Feb. 26, 1916	1.20	1,060	1941	Feb. 8-9, 1941	3.93	652
1917	Mar. 29, 1917	.91	698	1942	Aug. 10, 1942	4.62	1,000
1918	Feb. 21, 27, 1918	1.21	1,060	1943	Dec. 31, 1942	5.11	1,270
1919	July 24, 1919	3.84	2,670	1944	Apr. 25, 1944	4.86	1,130
1920	Mar. 14, 1920	1.92	2,120	1945	July 21, 1945	5.06	1,270
1921	Jan. 16, 1921	1.15	993	1946	July 24, 1946	4.78	1,110
1922	Mar. 9, 1922	1.73	1,870	1947	Mar. 15, 1947	4.83	1,140
1923	Mar. 18, 19, 1923	bl. 15	994	1948	Mar. 17, 1948	4.73	1,080
1924	Apr. 8, 1924	1.79	1,950	1949	Dec. 31, 1948	6.76	2,360
1925	Feb. 15, 16, 1925	c3.64	684	1950	Mar. 24, 1950	4.08	756
1926	Feb. 26, 1926	3.49	688	1951	Mar. 31, 1951	6.07	1,910
1927	Aug. 29, 1927	3.70	759	1952	June 2, 1952	7.18	2,670
1928	Aug. 27, 1928	4.64	1,110	1953	Jan. 25, 1953	5.56	1,590
1929	Apr. 26, 1929	3.66	759	1954	May 9, 1954	3.37	418
1930	Mar. 9, 1930	3.38	659	1955	Aug. 21, 1955	6.03	1,870
1931	July 11, 1931	4.36	1,000	1956	Oct. 16, 17, 1955	5.94	1,810
1932	Mar. 29, 1932	4.11	900	1957	Apr. 6, 1957	4.68	1,060
1933	Nov. 20, 1932	5.46	2,150	1958	Apr. 7, 1958	4.99	1,230
1934	Sept. 30, 1934	4.37	1,460	1959	Mar. 7, 1959	4.41	924
1935	July 11, 1935	4.91	1,790	1960	Sept. 13, 1960	5.82	1,730
1936	Mar. 12, 1936	8.03	3,750	1961	Feb. 26, 1961	5.44	1,500

a Prior to 1926 gage height and discharge are mean for day.

b Occurred Mar. 19, 1923.

c Occurred Feb. 16, 1925.

3815. Whippany River at Morristown, N.J.

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. Area of lakes, ponds, and swamps, 0.3 sq mi.

Gage.--Nonrecording prior to July 16, 1930; recording thereafter. Concrete control since July 1, 1936. Datum of gage is 260.01 ft above mean sea level (New Jersey Geological Survey bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 430 cfs and extended above on basis of slope-area and flow-over-dam measurement of 1,500 cfs.

Bankfull stage.--3 ft.

Remarks.--Regulation by Pocahontas Lake 2.5 miles above station may occasionally affect peaks. Only annual peaks from graph of twice-daily gage readings are shown prior to 1931. Base for partial-duration series, 450 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	July 1, 1922	5.40	1,020	1944	Mar. 13, 1944	4.02	501
1923	Mar. 16-17, 1923	4.90	815		Mar. 24, 1944	3.94	474
1924	Apr. 7, 1924	6.50	1,530				
1925	Aug. 1, 1925	5.30	975	1945	Jan. 1-2, 1945	3.90	460
					Sept. 18, 1945	3.90	460
1926	Feb. 25, 1926	4.82	783				
1927	Nov. 16, 1926	3.80	450	1946	May 13, 1946	5.30	1,020
1928	Aug. 26, 1928	7.30	2,000		May 17, 1946	4.04	508
1929	Feb. 7, 1929	6.00	1,290		June 2, 1946	4.11	533
1930	Mar. 8, 1930	4.2	570		July 23, 1946	4.31	606
1931	July 11, 1931	4.14	552	1947	Mar. 14, 1947	3.97	484
					Apr. 5, 1947	3.93	470
1932	Mar. 28, 1932	4.31	604		May 26, 1947	4.27	591
1933	Nov. 19, 1932	7.00	1,820	1948	Nov. 8, 1947	4.87	829
	Apr. 12, 1933	4.21	573		Nov. 12, 1947	3.92	467
	Aug. 24, 1933	4.84	791		Apr. 1, 1948	3.88	453
	Sept. 15, 1933	5.95	1,260		May 13, 1948	4.12	536
					June 7, 1948	3.93	470
1934	Oct. 1, 1933	4.47	660		Aug. 20, 1948	3.96	480
	Mar. 5, 1934	4.98	847				
	Sept. 30, 1934	4.92	823	1949	Dec. 31, 1948	6.00	1,350
					Jan. 6, 1949	4.88	834
1935	Oct. 6, 1934	3.70	467				
				1950	Mar. 23, 1950	3.63	375
1936	Oct. 31, 1935	3.79	496				
	Jan. 3, 1936	5.40	1,080	1951	Nov. 26, 1950	4.58	711
	Mar. 12, 1936	6.29	1,500		Dec. 8, 1950	4.14	543
	Mar. 18, 1936	3.78	496		Mar. 31, 1951	5.14	938
	Apr. 6, 1936	5.26	1,020		July 28, 1951	4.12	536
1937	Dec. 20, 1936	4.08	491	1952	Nov. 7, 1951	4.33	613
					Dec. 21, 1951	4.84	817
1938	Nov. 13, 1937	4.56	699		Mar. 11, 1952	5.57	1,140
	Jan. 25, 1938	4.41	640		May 25, 1952	4.42	648
	Sept. 22, 1938	5.62	1,170		June 1, 1952	6.02	1,360
					July 10, 1952	4.08	522
1939	Mar. 8, 1939	3.97	477		Sept. 1, 1952	4.21	569
	Apr. 19, 1939	4.12	529				
				1953	Nov. 22, 1952	4.74	775
1940	Mar. 15, 1940	6.33	1,500		Dec. 6, 1952	3.93	470
	Apr. 8, 1940	4.09	526		Jan. 24, 1953	4.81	804
					Mar. 13, 1953	4.18	558
1941	Feb. 8, 1941	4.50	679		Apr. 7, 1953	4.70	759
	July 12, 1941	4.05	502				
				1954	Sept. 11, 1954	3.29	282
1942	July 18, 1942	3.87	450				
	Aug. 9, 1942	4.55	699	1955	Nov. 21, 1954	4.82	788
	Aug. 11, 1942	5.66	1,190		Feb. 7, 1955	4.11	518
	Aug. 14, 1942	5.71	1,220		Aug. 13, 1955	5.23	962
					Aug. 19, 1955	5.65	1,160
1943	Nov. 25, 1942	3.91	463				
	Dec. 30, 31, 1942	4.13	540	1956	Oct. 15, 1955	5.10	900
					Sept. 6, 1956	4.57	688
1944	Mar. 7, 1944	4.40	640				

Peak stages and discharges of Whippany River at Morristown, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	May 14, 1957	4.38	613	1960	Apr. 4, 1960	4.18	543
1958	Dec. 21, 1957	5.05	880		July 27, 1960	4.40	620
	Jan. 22, 1958	3.90	452		Aug. 19, 1960	4.03	494
	Feb. 28, 1958	5.15	925		Sept. 12, 1960	4.56	684
	Apr. 6, 1958	4.11	518	1961	Feb. 26, 1961	3.97	475
1959	Aug. 9, 1959	4.08	509				

3835. Wanaque River at Awosting, N.J.
(Published as "at Greenwood Lake" prior to 1941)

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

Drainage area.--27.1 sq mi. Area of lakes, ponds, and swamps, 3.6 sq mi.

Gage.--Nonrecording prior to Apr. 1, 1926; recording thereafter. Prior to Oct. 31, 1938, at site 100 ft upstream at same datum. Concrete control since Oct. 31, 1938. Datum of gage is 601.32 ft above mean sea level (New Jersey Geological Survey bench mark).

Stage-discharge relation.--Prior to Oct. 31, 1938, defined by current-meter measurements below 290 cfs and extended on basis of flow-over-dam measurement of 914 cfs. Since 1938, defined by current-meter measurements below 310 cfs and extended above by logarithmic plotting.

Bankfull stage.--3 ft.

Remarks.--Regulation by Greenwood Lake could affect some flood peaks. Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1919a/	July 28, 1919	2.3	201	1933	Nov. 20, 1932	3.3	413
1920	Mar. 14, 1920	3.3	440		Mar. 22, 1933	2.40	224
					Apr. 18, 1933	3.00	341
1921	Oct. 2, 1920	2.6	261		Aug. 24, 1933	4.45	851
	Mar. 10, 1921	2.7	284		Sept. 17, 1933	2.82	336
1922	Mar. 9, 1922	2.4	220	1934	Apr. 1, 1934	2.36	226
	May 21, 1922	2.38	220		Sept. 18, 1934	2.53	261
1923	Mar. 18, 1923	2.54	248	1935	Dec. 2, 1934	2.32	217
1924	Jan. 17, 1924	2.56	252	1936	Nov. 29, 1935	2.24	205
	Apr. 7, 1924	3.72	600		Mar. 12, 1936	4.82	914
1925	Feb. 16, 1925	2.57	261		Mar. 19, 1936	3.60	537
					Apr. 8, 1936	2.25	206
1926	Dec. 6-7, 1925	2.22	187	1937	Dec. 21, 1936	3.23	440
1927	Sept. 2, 1927	3.25	384		Feb. 22, 1937	2.90	350
				1938	Nov. 14, 1937	2.92	355
1928	Nov. 6, 1927	2.31	206		Jan. 26, 1938	3.20	445
	Feb. 16, 1928	2.33	215		June 28, 1938	3.67	570
	May 10, 1928	2.49	242		July 23, 1938	3.33	486
	July 7, 1928	2.84	310		Sept. 22, 1938	3.90	642
	Aug. 28, 1928	2.82	300	1939	Dec. 6, 1938	3.65	344
					Mar. 1, 1939	3.24	225
1929	Jan. 7, 1929	2.71	280	1940	Mar. 16, 1940	3.51	301
	Mar. 6, 1929	2.64	270		Apr. 1, 1940	3.87	413
	Mar. 16, 1929	2.40	224		Apr. 9, 1940	3.50	298
	Apr. 17, 1929	2.40	224		Apr. 22, 1940	3.41	272
1930	Mar. 9, 1930	2.30	206		Sept. 2, 1940	3.88	417
				1941	Nov. 16, 1940	3.11	192
1931	Apr. 1, 1931	2.30	206	1942	Aug. 18, 1942	3.41	270
	June 17, 1931	2.52	242		Sept. 28, 1942	3.74	370
1932	Apr. 1, 1932	2.77	290	1943	Nov. 26, 1942	3.75	373
1933	Nov. 2, 1932	2.56	252		Dec. 31, 1942	3.68	351
	Nov. 11, 1932	2.97	330				

a Period May 13 to Sept. 30, 1919.

Peak stages and discharges of Wanaque River at Awosting, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Nov. 10, 1943	3.25	227	1953	Dec. 12, 1952	3.57	333
	Apr. 25, 1944	3.32	245		Jan. 25, 1953	3.75	389
1945	Mar. 7, 1945	3.38	262		Mar. 16, 1953	3.28	250
	May 19, 1945	3.19	212		Mar. 26, 1953	3.31	258
	July 20, 1945	4.05	473		Apr. 8, 1953	3.24	239
	Sept. 20, 1945	3.18	209	1954	Dec. 15, 1953	3.16	212
1946	Nov. 23, 1945	3.48	290		Mar. 4, 1954	3.25	236
	Nov. 30, 1945	3.32	245		May 10, 1954	3.18	217
	Dec. 27, 1945	3.17	207	1955	Nov. 22, 1954	3.27	242
	May 28, 1946	3.56	314		Aug. 13, 1955	4.95	855
	June 3, 1946	3.29	237		Aug. 19, 1955	5.58	1,160
	July 24, 1946	3.16	204	1956	Oct. 16, 1955	5.85	1,300
1947	Mar. 15, 1947	3.56	314		Oct. 31, 1955	3.43	289
	Apr. 6, 1947	3.53	305		Apr. 8, 1956	3.43	289
1948	Nov. 12, 1947	3.20	214		Apr. 30, 1956	3.53	319
	Mar. 18, 1948	3.56	314	1957	Dec. 16, 1956	3.22	228
1949	Dec. 31, 1948	4.70	709		Apr. 7, 1957	3.92	446
	Jan. 6, 1949	3.85	405	1958	Dec. 21, 1957	4.52	668
1950	Mar. 24, 1950	3.37	280		Dec. 27, 1957	3.60	340
1951	Nov. 26, 1950	3.97	506		Jan. 27, 1958	3.42	286
	Dec. 9, 1950	3.95	498		Mar. 1, 1958	3.45	295
	Jan. 25, 1951	3.15	214		Apr. 2, 1958	3.32	256
	Feb. 8, 1951	3.20	228		Apr. 8, 1958	3.75	385
	Feb. 22, 1951	3.11	203		May 8, 1958	3.23	230
	Mar. 31, 1951	5.44	1,190	1959	Mar. 7, 1959	3.19	219
	July 29, 1951	3.10	200	1960	Oct. 25, 1959	3.66	358
	Aug. 17, 1951	3.17	220		Jan. 4, 1960	3.19	219
1952	Nov. 8, 1951	3.65	358		Feb. 12, 1960	3.23	230
	Dec. 22, 1951	3.63	351		Apr. 1, 1960	3.47	301
	Mar. 12, 1952	4.23	558		Apr. 5, 1960	4.07	498
	Apr. 6, 1952	3.99	470		July 31, 1960	3.16	212
	Apr. 29, 1952	3.45	298		Aug. 20, 1960	3.14	206
	June 2, 1952	4.97	868		Sept. 13, 1960	3.98	464
	Aug. 17, 1952	3.16	219	1961	Feb. 26, 1961	4.12	516
	Sept. 2, 1952	3.63	351		Mar. 6, 1961	3.34	262
1953	Nov. 23, 1952	4.00	474		Apr. 17, 1961	3.27	242

3840. Wanaque River at Monks, N.J.

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. Area of lakes, ponds, and swamps, 3.7 sq mi.

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

Stage-discharge relation.--Defined by current-meter measurements below 1,000 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935a/	Jan. 10, 1935	1.28	312	1937	Apr. 6, 1937	1.51	440
	Feb. 2, 1935	1.58	-		May 15, 1937	1.46	410
1936	Jan. 3, 1936	bl.84	-	1938	Nov. 13, 1937	2.62	1,320
	Feb. 15, 1936	bl.50	-		Jan. 25, 1938	2.59	1,320
	Mar. 12, 1936	3.15	1,920		June 27, 1938	2.71	1,420
	Mar. 18, 1936	2.40	1,130		July 23, 1938	2.10	870
	Apr. 6, 1936	1.68	551		Sept. 21, 1938	3.50	2,330
1937	Dec. 20, 1936	2.36	1,090	1939	Dec. 5 or 6, 1938	2.25	999
	Jan. 25, 1937	1.52	448		Feb. 28, 1939	1.56	473
	Feb. 22, 1937	2.25	998				

a Period Jan. 1 to Sept. 30, 1935. Maximum for year probably occurred Dec. 2, 1934.

b Backwater from ice.

Peak stages and discharges of Wanaque River at Monks, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Apr. 2, 1939	1.61	505	1951	Apr. 13, 1951	1.45	434
	Apr. 6, 1939	1.54	460		July 28, 1951	1.42	415
	Apr. 19, 1939	1.53	454		Aug. 10, 1951	1.52	478
					Aug. 17, 1951	1.68	586
1940	Feb. 15, 1940	bl.92	-	1952	Nov. 7, 1951	1.71	607
	Mar. 15, 1940	2.11	880		Dec. 21, 1951	2.18	954
	Mar. 31, 1940	1.92	728		Mar. 11, 1952	3.56	2,300
	Apr. 8, 1940	1.93	734		Apr. 5, 1952	2.58	1,300
	Sept. 1, 1940	1.89	726		Apr. 28, 1952	1.55	498
1941	Nov. 15, 1940	1.42	387		June 1, 1952	2.73	1,440
1942	Mar. 22, 1942	1.46	410		July 10, 1952	1.44	428
	Aug. 17, 1942	1.60	497		Aug. 17, 1952	1.97	789
	Sept. 27, 1942	2.21	964		Sept. 1, 1952	2.19	962
1943	Nov. 25, 1942	2.37	1,100	1953	Nov. 22, 1952	2.12	908
	Dec. 2, 1942	1.54	459		Dec. 5, 1952	1.55	470
	Dec. 30, 1942	2.05	829		Dec. 11, 1952	1.86	688
1944	Nov. 9, 1943	1.77	633		Jan. 24, 1953	2.23	1,010
	Apr. 24, 1944	1.65	546		Mar. 13, 1953	1.58	488
1945	Mar. 3, 1945	1.49	441		Mar. 16, 1953	1.52	452
	Mar. 6, 1945	1.55	480		Mar. 24, 1953	1.68	556
	May 18, 1945	1.44	411		Apr. 7, 1953	1.50	440
	July 19, 1945	2.74	1,500	1954	Dec. 14, 1953	1.60	500
	July 23, 1945	1.64	540		Mar. 3, 1954	1.54	464
	Sept. 19, 1945	1.66	554	1955	Nov. 21, 1954	1.86	688
1946	Nov. 22, 1945	2.13	925		Aug. 13, 1955	2.90	1,720
	Dec. 26, 1945	bl.87	-		Aug. 19, 1955	4.15	3,640
	May 27, 1946	1.79	648	1956	Oct. 15, 1955	3.78	3,010
	June 2, 1946	1.64	540		Oct. 30, 1955	2.12	908
	July 23, 1946	1.94	764		Nov. 16, 1955	1.64	528
1947	Mar. 14, 1947	1.88	717		Apr. 10, 1956	1.46	416
	Apr. 5, 1947	2.18	969		Apr. 30, 1956	1.46	416
	May 1, 1947	1.55	480	1957	Dec. 16, 1956	1.45	410
	July 22, 1947	1.45	417		Apr. 6, 1957	1.83	664
1948	Nov. 8, 1947	1.71	589	1958	Dec. 21, 1957	2.84	1,020
	Nov. 12, 1947	1.56	486		Dec. 26, 1957	2.29	712
	Mar. 17, 1948	1.79	648		Jan. 26, 1958	1.78	464
	May 30, 1948	1.45	417		Feb. 28, 1958	2.53	784
1949	Dec. 30-31, 1948	3.16	1,950		Apr. 6, 1958	2.34	712
	Jan. 6, 1949	2.22	1,000	1959	Mar. 6, 1959	1.66	535
1950	Mar. 23, 1950	1.70	582	1960	Oct. 24, 1959	2.19	962
1951	Nov. 26, 1950	1.82	684		Jan. 3, 1960	1.57	476
	Dec. 4, 1950	1.64	558		Feb. 11, 1960	1.47	416
	Dec. 8, 1950	2.02	826		Apr. 5, 1960	1.92	728
	Jan. 24, 1951	1.58	517		July 30, 1960	1.86	680
	Feb. 7, 1951	1.79	663		Sept. 12, 1960	2.35	1,110
	Mar. 31, 1951	3.85	2,660	1961	Feb. 26, 1961	2.36	1,130
					Apr. 16, 1961	1.64	528

b Backwater from ice.

3845. Ringwood Creek near Wanaque, N.J.

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, and 6½ miles north of Wanaque, Passaic County.

Drainage area.--19.1 sq mi. Area of lakes, ponds, and swamps, 1.2 sq mi.

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

Stage-discharge relation.--Defined by current-meter measurements below 240 cfs and extended above on basis of laboratory rating and approximate discharge at gage height 3.18 ft.

Bankfull stage.--2.5 ft.

Remarks.--Base for partial-duration series, 230 cfs.

Peak stages and discharges of Ringwood Creek near Wanaque, N.J.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935a/	Jan. 10, 1935	1.51	173	1950	Mar. 23, 1950	1.90	298
1936	Mar. 12, 1936	3.40	864	1951	Nov. 25, 1950	2.30	430
	Mar. 18, 1936	2.51	479		Dec. 8, 1950	2.65	562
	Mar. 21, 1936	2.04	317		Feb. 7, 1951	1.99	326
	Apr. 6, 1936	2.10	336		Mar. 30, 1951	b3.74	1,150
1937	Dec. 20, 1936	2.58	505		Apr. 3, 1951	2.10	361
	Feb. 22, 1937	2.84	610		Apr. 13, 1951	1.73	248
1938	Nov. 13, 1937	2.77	581		Aug. 10, 1951	2.74	598
	Jan. 25, 1938	2.79	589		Aug. 17, 1951	1.86	286
	June 27, 1938	2.38	431	1952	Nov. 7, 1951	2.19	392
	July 23, 1938	1.89	272		Dec. 21, 1951	2.66	566
	Sept. 21, 1938	3.33	830		Mar. 11, 1952	3.34	868
1939	Nov. 25, 1938	2.00	305		Apr. 5, 1952	c2.84	c640
	Dec. 6, 1938	2.44	453		June 1, 1952	2.98	701
	Apr. 19, 1939	1.91	278		Aug. 17, 1952	1.96	317
1940	Mar. 15, 1940	2.18	362	1953	Sept. 1, 1952	2.41	470
	Mar. 31, 1940	2.12	343		Nov. 22, 1952	2.33	450
	Apr. 8, 1940	2.31	406		Dec. 11, 1952	1.95	325
1941	Feb. 8, 1941	1.52	176		Jan. 24, 1953	2.73	590
1942	Mar. 3, 1942	1.78	242		Mar. 13, 1953	2.18	398
	Sept. 28, 1942	2.32	410		Mar. 16, 1953	1.63	234
1943	Nov. 25, 1942	2.34	444	1954	Mar. 24, 1953	2.19	402
	Dec. 30, 1942	2.29	426		Apr. 7, 1953	1.70	255
1944	Nov. 9, 1943	2.48	496	1955	May 10, 1954	1.47	192
	Apr. 24, 1944	1.87	289		Nov. 21, 1954	1.67	246
1945	Mar. 6, 1945	1.75	254		Aug. 13, 1955	3.15	740
	July 19, 1945	b3.40	897		Aug. 19, 1955	3.61	924
	July 23, 1945	2.55	522		Aug. 21, 1955	1.94	322
	Sept. 19, 1945	1.87	289	1956	Oct. 15, 1955	-	c1,000
1946	Nov. 22, 1945	1.79	265		Oct. 30, 1955	1.97	331
	Nov. 29, 1945	1.72	246		Apr. 30, 1956	1.65	240
	Dec. 26, 1945	1.79	265		July 9, 1956	1.86	298
	May 27, 1946	1.94	310	1957	Apr. 6, 1957	2.26	426
	June 2, 1946	1.84	280	1958	Dec. 21, 1957	3.26	784
	July 23, 1946	2.26	416		Dec. 26, 1957	2.09	367
1947	Mar. 14, 1947	2.27	419		Feb. 28, 1958	2.58	538
	Apr. 5, 1947	2.41	470		Apr. 6, 1958	2.22	412
1948	Mar. 16, 1948	2.13	371	1959	Mar. 6, 1959	1.54	210
	Mar. 20, 1948	1.81	271	1960	Oct. 24, 1959	2.34	454
1949	Dec. 31, 1948	3.00	710		Jan. 3, 1960	1.64	237
	Jan. 6, 1949	2.46	488		Apr. 5, 1960	1.92	316
					July 30, 1960	2.55	528
					Sept. 12, 1960	2.75	598
				1961	Feb. 26, 1961	2.74	594

a Period Dec. 27, 1934, to Sept. 30, 1935. Maximum for year may have occurred on Oct. 7 or Dec. 2, 1934.

b From floodmark.

c About.

3850. Cupsaw Brook near Wanaque, N.J.

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. Area of lakes, ponds, and swamps, 0.3 sq mi.

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

Stage-discharge relation.--Defined by current-meter measurements below 200 cfs and extended above on basis of laboratory rating.

Remarks.--Regulation at Cupsaw Lake (capacity, 227,000,000 gal) may affect some flood peaks. Base for partial-duration series, 70 cfs.

Peak stages and discharges of Cupsaw Brook near Wanaque, N.J.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935a	Jan. 10, 1935	0.73	53	1947	May 26, 1947	0.97	99
1936	Jan. 3, 1936	1.02	101		July 22, 1947	1.00	104
	Mar. 11, 1936	2.94	536	1948	Mar. 16, 1948	1.09	120
	Mar. 18, 1936	1.23	142		Apr. 14, 1948	.79	70
	Mar. 21, 1936	.89	77		May 13, 1948	.89	85
	Apr. 6, 1936	1.20	136	1949	Dec. 30, 1948	1.55	218
1937	Dec. 20, 1936	1.64	226		Jan. 6, 1949	1.18	138
	Jan. 8, 1937	1.04	105	1950	Mar. 23, 1950	1.09	118
	Jan. 10-11, 1937	.92	83	1951	Nov. 25, 1950	1.17	134
	Feb. 22, 1937	2.12	329		Dec. 4, 1950	.89	83
	May 15, 1937	.85	71		Dec. 8, 1950	1.60	227
	Sept. 13, 1937	.88	76		Jan. 24, 1951	.84	75
1938	Nov. 13, 1937	1.92	288		Feb. 7, 1951	.93	90
	Nov. 28, 1937	1.00	97		Mar. 30, 1951	2.64	521
	Jan. 25, 1938	1.66	231		Apr. 3, 1951	.84	75
	June 28, 1938	1.09	114		Apr. 13, 1951	.89	83
	July 21, 1938	.85	71		June 5, 1951	.88	82
	July 23, 1938	1.04	105		Aug. 11, 1951	1.09	118
	Sept. 21, 1938	2.18	352	1952	Nov. 19, 1951	.84	75
1939	Apr. 2, 1939	.98	93		Dec. 21, 1951	1.39	180
	Apr. 19, 1939	1.05	106		Jan. 23, 1952	.82	72
1940	Mar. 15, 1940	1.15	128		Mar. 11, 1952	2.28	405
	Mar. 31, 1940	1.07	114		Apr. 5, 1952	1.78	270
	Apr. 8, 1940	1.28	154		June 1, 1952	1.92	305
	May 31, 1940	1.04	108		July 10, 1952	.82	72
1941	Apr. 2, 1941	.94	91		Sept. 1, 1952	1.19	138
1942	Mar. 22, 1942	.82	71	1953	Dec. 5, 1952	.91	87
	Sept. 27, 1942	1.04	108		Dec. 11, 1952	1.02	106
1943	Sept. 24, 1943	.76	65		Jan. 24, 1953	1.41	184
1944	Oct. 28, 1943	.85	79		Mar. 13, 1953	1.24	148
	Mar. 13, 1944	.86	81		Mar. 16, 1953	.81	71
	Apr. 25, 1944	.89	85		Mar. 24, 1953	.98	99
	May 8, 1944	.87	82		Apr. 7, 1953	.92	88
1945	Nov. 6, 1944	.84	77	1954	May 10, 1954	.82	72
	July 19, 1945	1.99	326	1955	Nov. 21, 1954	1.09	118
	July 23, 1945	2.16	373		Aug. 13, 1955	1.62	232
	Sept. 19, 1945	1.34	171		Aug. 19, 1955	2.40	442
1946	Oct. 1-2, 1945	.87	82	1956	Oct. 16, 1955	2.18	375
	Nov. 16, 1945	.86	81		Apr. 30, 1956	.88	82
	Nov. 19, 1945	.82	74	1957	Nov. 2, 1956	.98	99
	May 27, 1946	1.06	115		Dec. 14, 1956	.87	80
	June 2, 1946	.90	87		Apr. 6, 1957	1.15	130
	July 23, 1946	.94	94	1958	Dec. 21, 1957	1.89	298
	Sept. 24, 1946	1.21	144		Dec. 26, 1957	1.07	115
1947	Mar. 14, 1947	1.14	130		Jan. 22, 1958	.95	94
	Apr. 5, 1947	1.20	142		Feb. 28, 1958	1.76	266
					Apr. 6, 1958	1.10	120

a Period Dec. 27, 1934, to Sept. 30, 1935.

3860. West Brook near Wanaque, N.J.

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. Area of lakes, ponds, and swamps, 0.4 sq mi.

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

Stage-discharge relation.--Defined by current-meter measurements below 700 cfs and extended above by logarithmic plotting.

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 400 cfs.

Peak stages and discharges of West Brook near Wanaque, N.J.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935a/	Jan. 10, 1935	1.68	211	1948	Nov. 12, 1947	2.75	438
1936	Jan. 3, 1936	2.95	484		Mar. 16, 1948	2.59	406
	Mar. 11, 1936	5.80	1,450	1949	Dec. 31, 1948	2.65	388
	Mar. 18, 1936	3.41	591		Jan. 6, 1949	(c)	(c)
	Apr. 6, 1936	3.26	555	1950	Mar. 23, 1950	2.49	386
1937	Dec. 20, 1936	4.00	750	1951	Dec. 8, 1950	3.25	548
	Feb. 22, 1937	3.58	636		Mar. 30, 1951	6.6	1,900
1938	Nov. 13, 1937	4.60	897		July 27, 1951	4.2	775
	Jan. 25, 1938	4.44	855	1952	Mar. 11, 1952	4.42	835
	June 27, 1938	3.80	691		June 1, 1952	(c)	(c)
	Sept. 21, 1938	4.70	924	1953	Nov. 22, 1952	3.17	529
1939	Dec. 6, 1938	3.18	543		Jan. 24, 1953	3.68	647
1940	Mar. 15, 1940	4.02	746		Mar. 13, 1953	2.56	400
	Mar. 31, 1940	2.70	430	1954	Dec. 14, 1953	1.72	238
	Apr. 8, 1940	2.80	450	1955	Nov. 21, 1954	3.56	619
1941	Feb. 7, 1941	1.58	191		Aug. 19, 1955	5.73	1,200
1942	Sept. 27, 1942	3.46	596	1956	Oct. 15, 1955	5.68	1,180
1943	Nov. 25, 1942	3.44	591		Oct. 30, 1955	3.22	541
	Dec. 30, 1942	3.15	525	1957	Apr. 6, 1957	2.56	400
1944	Nov. 9, 1943	2.71	430	1958	Dec. 20, 1957	3.80	676
1945	July 19, 1945	3.82	681		Feb. 28, 1958	2.74	436
	Sept. 19, 1945	2.60	408	1959	Mar. 6, 1959	2.52	392
1946	Nov. 22, 1945	3.36	573	1960	Oct. 24, 1959	3.12	518
	May 27, 1946	3.06	505		July 30, 1960	-	650
1947	Mar. 14, 1947	2.8	449		Sept. 12, 1960	3.87	693
	Apr. 5, 1947	3.42	587	1961	Feb. 25, 1961	3.10	514
1948	Nov. 8, 1947	4.43	838				

a Period Jan. 1 to Sept. 30, 1935.

b Occurred Dec. 30, backwater from ice.

c Unknown, may have been maximum for year.

3865. Blue Mine Brook near Wanaque, N.J.

Location.--Lat 41°03'04", long 74°19'10", on left bank 0.2 mile upstream from Wanaque Reservoir, 1.8 miles northwest of Wanaque, Passaic County.

Drainage area.--1.71 sq mi. Area of lakes, ponds, and swamps, 0 sq mi.

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

Stage-discharge relation.--Defined by current-meter measurements below 80 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 60 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935a/	Jan. 10, 1935	0.52	17	1938	July 23, 1938	1.10	81
1936	Mar. 12, 1936	1.63	219		Sept. 21, 1938	1.66	229
	Mar. 18, 1936	.98	61	1939	Dec. 6, 1938	1.04	71
	Apr. 6, 1936	1.15	91	1940	Mar. 15, 1940	1.50	178
1937	Dec. 20, 1936	1.30	124	1941	Feb. 7, 1941	.77	36
	Feb. 22, 1937	1.05	72	1942	Sept. 27, 1942	1.13	98
	Aug. 23, 1937	1.01	66	1943	Nov. 25, 1942	1.11	94
1938	Nov. 13, 1937	1.56	197		Dec. 30, 1942	1.06	85
	Jan. 25, 1938	1.38	145				
	June 27, 1938	1.22	106				

a Period Dec. 27, 1934, to Sept. 30, 1935; maximum for year probably occurred about Dec. 2, 1934.

Peak stages and discharges of Blue Mine Brook near Wanaque, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Nov. 9, 1943	1.05	83	1952	Nov. 7, 1951	1.19	111
1945	Jan. 1, 1945	.94	64	1952	Dec. 21, 1951	1.24	122
	July 19, 1945	1.09	90	1952	Mar. 11, 1952	1.71	254
	July 23, 1945	1.14	100	1952	Apr. 5, 1952	1.27	129
	Sept. 18, 1945	.94	64	1952	June 1, 1952	1.70	251
1946	Nov. 22, 1945	1.06	85	1952	Sept. 1, 1952	1.34	146
	Dec. 26, 1945	1.11	94	1953	Nov. 22, 1952	1.06	85
	May 27, 1946	.98	71	1953	Dec. 5, 1952	.98	71
	Sept. 24, 1946	1.28	131	1953	Jan. 24, 1953	1.24	122
1947	Mar. 14, 1947	.97	69	1953	Mar. 13, 1953	1.42	167
	Apr. 5, 1947	1.19	111	1953	Apr. 7, 1953	.96	68
1948	Nov. 8, 1947	1.32	141	1954	Dec. 14, 1953	.81	46
	Nov. 12, 1947	1.00	74	1955	Nov. 21, 1954	1.04	81
1949	Dec. 30, 1948	1.28	131	1955	Aug. 13, 1955	1.29	134
	Jan. 6, 1949	.93	63	1955	Aug. 19, 1955	1.38	156
1950	Mar. 23, 1950	.84	50	1956	Oct. 14, 1955	1.21	115
1951	Nov. 25, 1950	1.32	141	1956	Oct. 15, 1955	1.11	94
	Dec. 8, 1950	.95	66	1956	Oct. 30, 1955	1.09	90
	Mar. 30, 1951	2.15	458	1957	Apr. 6, 1957	.88	55
	July 27, 1951	1.13	98	1958	Dec. 21, 1957	1.66	238
				1958	Feb. 28, 1958	1.23	120

3870. Wanaque River at Wanaque, N.J.

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 (excludes above 4 sq mi on Post Brook above diversion to Wanaque Reservoir). Area of lakes, ponds, and swamps, 9.0 sq mi.

Gage.--Nonrecording prior to Apr. 1, 1922; recording thereafter. Prior to Apr. 1, 1922, at site 200 ft downstream at different datum, and Apr. 1, 1922, to Mar. 14, 1931, at site 400 ft downstream at present datum. Datum of gage is 210.00 ft above mean sea level (New Jersey Geological Survey bench mark).

Stage-discharge relation.--Prior to Mar. 14, 1931, defined by current-meter measurements. Since 1931, defined by current-meter measurements below 4,300 cfs and extended above by logarithmic plotting; shifts in relation occur.

Remarks.--Regulation by Greenwood Lake and since 1928 by Wanaque Reservoir affects flood peaks. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1913	Mar. 27, 1913	a6.73	a1,340	1933	Apr. 18, 1933	5.85	1,830
1914	Mar. 28, 1914	a6.80	a1,380	1934	Apr. 2, 1934	3.33	628
1915	Jan. 13, 1915	a7.45	a1,610	1935	Dec. 1, 1934	3.79	795
1919	July 23, 1919	a7.55	a1,690	1936	Mar. 19, 1936	6.07	1,940
1920	Mar. 14, 1920	a7.10	a1,490	1937	May 15, 1937	3.63	778
1921	Oct. 1, 1920	7.50	1,650	1938	Jan. 25, 1938	6.17	2,020
1922	Mar. 8, 1922	7.65	1,690	1939	Apr. 20, 1939	4.05	920
1923	Mar. 17, 1923	4.17	1,220	1940	June 2, 1940	3.72	802
1924	Apr. 7, 1924	8.01	5,050	1941	Mar. 30, 1941	2.52	231
1925	Feb. 12, 1925	5.57	2,040	1942	Apr. 2, 1942	1.65	46
1926	Nov. 13, 1925	4.00	1,030	1943	Mar. 18-20, 1943	2.86	376
1927	Sept. 2, 1927	6.90	3,390	1944	June 19, 1944	1.59	40
1928	Nov. 4, 1927	4.91	1,610	1945	July 23, 1945	6.37	1,690
1929	Mar. 6, 1929	3.78	1,040	1946	June 3, 1946	4.41	898
1930	Mar. 9, 1930	3.36	855	1947	May 30, 1947	2.97	415
1931	June 17, 1931	4.69	1,210	1948	May 14, 1948	3.60	665
1932	Apr. 1, 1932	3.91	835	1949	July 30, 1949	1.58	38

a Daily mean.

Peak stages and discharges of Wanaque River at Wanaque, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	June 27, Aug. 29, 1950	1.57	37	1956	Oct. 17, 1955	5.96	1,740
				1957	Apr. 21, 1957	2.36	144
1951	Mar. 31, 1951	9.12	8,470	1958	Apr. 7, 1958	5.62	1,480
1952	June 1, 1952	7.62	3,940	1959	Aug. 31, 1959	1.57	35
1953	Jan. 25, 1953	6.00	1,770	1960	Apr. 5, 1960	5.67	1,520
1954	July 25, 1954	1.59	38	1961	Apr. 17, 1961	4.44	887
1955	Aug. 19, 1955	1.77	53				

3875. Ramapo River near Mahwah, N.J.

Location.--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. Area of lakes, ponds, and swamps, 5.4 sq mi.

Gage.--Nonrecording prior to July 31, 1914; recording since Sept. 1, 1922. At site on former bridge 250 ft downstream at different datum prior to July 31, 1914, and just downstream from former bridge at present datum from Sept. 1, 1922, to Dec. 23, 1936. Datum of gage is 253.10 ft above mean sea level, datum of 1929.

Stage-discharge relation.--For 1903-14, defined by current-meter measurements below 1,400 cfs and extended above by logarithmic plotting and shape of subsequent relations. For 1923-61, defined by current-meter measurements below 6,500 cfs and extended above by logarithmic plotting; shifts in relation occur.

Bankfull stage.--7 ft.

Remarks.--Gage-height record 1903-14, obtained by U.S. Weather Bureau. Only annual peaks as determined from graph of once-daily gage readings are shown 1903-14. Base for partial-duration series, 1,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1903a/	Apr. 15, 1903	7.4	3,360	1931	Mar. 9, 1931	5.65	1,040
1904	Oct. 9, 1903	11.0	12,400				
1905	Oct. 22, 1904	7.0	2,300	1932	Mar. 28, 1932	6.30	1,420
1906	Mar. 4, 1906	6.95	2,220	1933	Nov. 2, 1932	6.40	1,490
1907	Mar. 18, 1907	7.30	2,810		Nov. 10-11, 1932	6.76	1,740
1908	Oct. 30, 1907	7.50	3,250		Nov. 19, 1932	7.75	3,720
1909	Feb. 20, 1909	7.60	3,450		Aug. 24, 1933	8.40	5,650
1910	Jan. 22, 1910	8.40	5,200		Sept. 17, 1933	6.33	1,500
1911	Aug. 29, 1911	7.70	3,650	1934	Mar. 5, 1934	6.94	1,930
1912	Mar. 13, 1912	7.60	3,450		Apr. 1, 1934	6.85	1,860
1913	Mar. 27, 1913	7.30	2,810	1935	Dec. 1, 1934	6.18	1,400
1914	Oct. 25, 1913	7.50	3,250				
1923	Mar. 17, 1923	6.47	1,520	1936	Mar. 12, 1936	9.00	7,780
1924	Oct. 25, 1923	6.45	1,510		Mar. 19, 1936	7.64	3,320
	Dec. 7, 1923	6.35	1,450		Apr. 6, 1936	7.09	2,000
	Jan. 17, 1924	6.35	1,450	1937	Dec. 20, 1936	7.69	3,450
	Apr. 7, 1924	7.90	4,150		Feb. 22, 1937	8.05	2,500
	May 13, 1924	6.60	1,590		May 15, 1937	6.94	1,450
	Sept. 30, 1924	6.83	1,730	1938	Nov. 14, 1937	7.92	2,340
1925	Feb. 12, 1925	7.22	2,410		Nov. 29, 1937	6.88	1,450
1926	Feb. 26, 1926	6.40	1,490		Jan. 25, 1938	8.15	2,620
1927	Sept. 2, 1927	8.23	5,140		June 28, 1938	7.21	1,710
1928	Oct. 19, 1927	6.92	1,830		July 23, 1938	7.83	2,240
	Nov. 4, 1927	7.50	3,100		Sept. 22, 1938	10.40	6,720
	Dec. 8, 1927	6.59	1,600	1939	Dec. 6, 1938	8.06	2,480
1929	Mar. 6, 1929	6.47	1,560		Apr. 20, 1939	7.24	1,740
1930	Mar. 9, 1930	6.27	1,390	1940	Mar. 15, 1940	7.50	1,960
					Mar. 31, 1940	7.58	2,030
					Apr. 9, 1940	7.58	2,030
					Apr. 22, 1940	6.87	1,480

a Period Feb. 10 to Sept. 30, 1903; maximum for year probably occurred in December 1902.

Peak stages and discharges of Ramapo River near Mahwah, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	May 31, 1940	7.07	1,620	1952	Apr. 5, 1952	8.09	2,550
1941	Feb. 8, 1941	6.99	1,560		Apr. 28, 1952	7.02	1,530
1942	Mar. 3, 1942	6.85	1,480		June 2, 1952	9.05	3,940
	Aug. 18, 1942	7.24	1,590		Aug. 17, 1952	7.11	1,600
	Sept. 28, 1942	7.02	1,580		Sept. 2, 1952	7.48	1,880
1943	Nov. 26, 1942	7.28	1,780	1953	Nov. 23, 1952	8.00	2,440
	Dec. 31, 1942	7.64	2,090		Dec. 12, 1952	7.98	2,420
1944	Oct. 27, 1943	7.35	1,760		Jan. 25, 1953	8.07	2,520
	Nov. 9, 1943	7.48	1,880		Mar. 13, 1953	7.85	2,260
	Apr. 25, 1944	6.87	1,410		Mar. 25, 1953	7.28	1,720
1945	July 19, 1945	8.67	3,350	1954	Dec. 15, 1953	6.49	1,260
	July 23, 1945	9.25	4,330	1955	Nov. 21, 1954	6.91	1,470
	Sept. 19, 1945	7.10	1,580		Aug. 13, 1955	9.53	4,740
1946	Nov. 30, 1945	6.98	1,510		Aug. 19, 1955	11.35	8,580
	Dec. 26, 1945	7.07	1,560	1956	Oct. 16, 1955	12.53	10,900
	May 28, 1946	7.52	1,920		Oct. 31, 1955	7.56	1,640
1947	Mar. 15, 1947	7.65	2,050	1957	Apr. 6, 1957	7.83	1,950
	Apr. 6, 1947	7.34	1,760	1958	Dec. 21, 1957	9.33	3,800
1948	Mar. 17, 1948	7.42	1,830		Dec. 27, 1957	7.93	2,040
1949	Dec. 31, 1948	9.18	4,200		Jan. 26, 1958	7.80	1,920
	Jan. 6, 1949	7.85	2,260		Feb. 28, 1958	8.39	2,510
1950	Mar. 23, 1950	6.54	1,290		Apr. 7, 1958	8.14	2,240
1951	Nov. 26, 1950	7.43	1,840	1959	Mar. 6, 1959	7.43	1,620
	Dec. 8, 1950	7.86	2,280	1960	Jan. 4, 1960	7.20	1,470
	Mar. 31, 1951	10.67	6,940		Apr. 1, 1960	7.51	1,690
	Apr. 3, 1951	7.16	1,630		Apr. 5, 1960	8.07	2,170
1952	Nov. 8, 1951	6.92	1,470		July 31, 1960	7.93	2,040
	Dec. 21, 1951	8.14	2,610		Aug. 20, 1960	9.10	3,450
	Mar. 12, 1952	9.18	4,150		Sept. 13, 1960	8.48	2,620
				1961	Feb. 26, 1961	8.87	3,120
					Apr. 17, 1961	7.11	1,420

3880. Ramapo River at Pompton Lakes, N.J.

Location.--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. Area of lakes, ponds, and swamps, 7.7 sq mi.

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

Stage-discharge relation.--Prior to August 1939 discharge was obtained by adding flow through turbines and through waste gates to flow over spillway. Powerplant not operated since August 1939. Alterations to gage well in July 1938 resulted in changed stage-discharge relation for spillway. Prior to July 1938, spillway rating defined by current-meter measurements below 2,000 cfs and extended above by weir formula. Since July 1938, spillway rating defined by current-meter measurements.

Remarks.--Prior to August 1939 minor effect on peak flows by powerplant operations. Base for partial-duration series, 1,600 cfs. Only annual peaks are shown prior to 1940, except 1938 water year.

Peak stages and discharges of Ramapo River at Pompton Lakes, N.J.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	Mar. 7, 1922	2.37	5,900	1947	May 26, 1947	1.33	1,780
1923	Mar. 18, 1923	1.37	2,270				
1924	Apr. 7, 1924	2.58	6,800	1948	Nov. 12, 1947	1.29	1,690
1925	Feb. 12, 1925	1.88	3,200		Mar. 18, 1948	1.58	2,360
1926	Feb. 27, 1926	1.28	2,020	1949	Dec. 31, 1948	2.65	5,520
1927	Sept. 2, 1927	2.68	7,220		June 6, 1949	1.82	2,980
1928	Nov. 4, 1927	1.90	3,930				
1929	Mar. 6, 1929	1.24	2,040	1950	Mar. 24, 1950	1.32	1,780
1930	Mar. 9, 1930	1.13	1,720				
				1951	Nov. 26, 1950	1.50	2,180
1931	May 9, 1931	.97	1,420		Dec. 5, 1950	1.31	1,740
1932	Mar. 29, 1932	1.25	1,870		Dec. 8, 1950	1.86	3,080
1933	Aug. 24, 1933	2.33	5,680		Feb. 8, 1951	1.26	1,640
1934	Mar. 6, 1934	1.44	2,650		Mar. 31, 1951	3.55	8,520
1935	Dec. 1, 1934	1.14	1,840				
				1952	Nov. 7, 1951	1.47	1,900
1936	Mar. 12, 1936	3.56	12,300		Dec. 22, 1951	1.93	3,000
1937	Feb. 22, 1937	1.78	3,510		Mar. 12, 1952	2.50	4,680
					Apr. 6, 1952	2.00	3,190
1938	Nov. 14, 1937	1.67	3,140		Apr. 29, 1952	1.42	1,790
	Nov. 29, 1937	1.19	1,870		June 2, 1952	2.53	4,780
	Jan. 26, 1938	1.81	3,620		Aug. 17, 1952	1.39	1,730
	June 28, 1938	1.33	2,100		Sept. 2, 1952	1.51	1,980
	July 23, 24, 1938	1.76	2,820	1953	Nov. 23, 1952	1.74	2,510
	Sept. 22, 1938	3.13	6,620		Dec. 12, 1952	1.76	2,560
1939	Dec. 6, 1938	1.93	3,260		Jan. 25, 1953	2.00	3,190
					Mar. 14, 1953	1.90	2,920
1940	Mar. 15, 1940	1.72	2,700		Mar. 25, 1953	1.50	1,960
	Apr. 1, 1940	1.67	2,570		Apr. 8, 1953	1.35	1,650
	Apr. 9, 1940	1.81	2,940	1954	Dec. 15, 1953	1.17	1,360
	Apr. 22, 1940	1.41	1,950				
	June 1, 1940	1.41	1,950	1955	Nov. 21, 1954	1.52	2,100
1941	Feb. 8, 1941	1.37	1,860		Aug. 14, 1955	2.41	4,480
					Aug. 19, 1955	3.58	8,570
1942	Mar. 4, 1942	1.31	1,720	1956	Oct. 16, 1955	4.40	12,000
	Mar. 22, 1942	1.28	1,670		Oct. 31, 1955	1.48	2,010
	Aug. 18, 1942	1.41	1,960				
	Sept. 28, 1942	1.26	1,630	1957	Apr. 6, 1957	1.71	2,540
1943	Nov. 26, 1942	1.43	2,010				
	Dec. 31, 1942	1.73	2,740	1958	Dec. 21, 1957	2.50	4,750
					Dec. 27, 1957	1.60	2,280
1944	Oct. 27, 28, 1943	1.30	1,710		Jan. 26, 1958	1.51	2,070
	Nov. 10, 1943	1.51	2,200		Feb. 28, 1958	2.09	3,550
	Apr. 25, 1944	1.43	2,010		Apr. 7, 1958	1.81	2,800
				1959	Mar. 7, 1959	1.31	1,640
1945	Mar. 7, 1945	1.29	1,690				
	July 20, 1945	2.14	3,890	1960	Jan. 4, 1960	1.30	1,620
	July 23, 1945	3.45	8,560		Apr. 1, 1960	1.44	1,920
	Sept. 19, 1945	1.43	2,020		Apr. 6, 1960	1.70	2,520
1946	Nov. 30, 1945	1.36	1,860		July 31, 1960	1.51	2,070
	Dec. 26, 1945	1.43	1,990		Aug. 20, 1960	2.09	3,550
	May 28, 1946	1.64	2,520		Sept. 13, 1960	1.86	2,930
	June 3, 1946	1.34	1,810				
1947	Mar. 15, 1947	1.65	2,540	1961	Feb. 26, 1961	2.23	3,950
	Apr. 6, 1947	1.61	2,440		Apr. 17, 1961	1.37	1,770

3885. Pompton River at Pompton Plains, N.J.

Location.--Lat 40°56'46", long 74°16'44", 250 ft upstream from State Highway 23, three-quarters of a mile east of Pequannock, Morris County, 9,300 ft downstream from two gages used to determine low-flow records, and 4¼ miles upstream from mouth.

Drainage area.--358 sq mi. Area of lakes, ponds, and swamps, 22.6 sq mi.

Gage.--Nonrecording 1903-4; recording since Nov. 4, 1940. At site about 9,000 ft upstream at different datum 1903-4. Datum of gage is 160.00 ft above mean sea level, datum of 1929. Two additional recorders 9,300 ft upstream are used to obtain low-flow records.

Stage-discharge relation.--For 1903-4, poorly defined by current-meter measurements and computation of flow over dam based on laboratory experiments. Since November 1940, defined by current-meter measurements below 13,000 cfs and extended above by logarithmic plotting; shifts in relation occur.

Remarks.--Regulation by Oak Ridge, Canistear, Clinton, Echo Lake, and Wanaque Reservoirs (combined capacity, 46,273,000,000 gal) may affect peak flows. Base for partial-duration series, 2,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1903a/	Apr. 16, 1903	b6.7	b4,300	1952	Jan. 27, 1952	9.01	2,700
1904	Oct. 10, 1903	b14.3	b28,340		Feb. 5, 1952	8.74	2,570
1905c/	Oct. 22, 1904	b5.7	b2,330		Mar. 12, 1952	15.00	7,890
					Mar. 24, 1952	8.24	2,350
1940d/	June 2, 1940	-	e3,100		Apr. 6, 1952	13.79	6,250
					Apr. 16, 1952	8.20	2,310
1941	Feb. 8, 1941	8.50	2,440		Apr. 29, 1952	10.87	3,590
					May 26, 1952	8.92	2,580
1942	Mar. 3, 1942	8.26	2,340		June 2, 1952	16.37	9,790
	Mar. 22, 1942	8.50	2,460		Aug. 17, 1952	8.66	2,520
	Aug. 18, 1942	9.64	2,840		Sept. 2, 1952	10.63	3,440
	Sept. 28, 1942	9.28	2,840				
				1953	Nov. 23, 1952	11.11	3,840
1943	Nov. 26, 1942	10.61	3,600		Dec. 6, 1952	9.03	2,760
	Dec. 31, 1942	11.51	4,310		Dec. 12, 1952	10.53	3,530
					Jan. 25, 1953	13.62	5,980
1944	Nov. 10, 1943	8.98	2,710		Mar. 14, 1953	12.03	4,360
	Apr. 25, 1944	9.84	3,100		Mar. 25, 1953	10.61	3,580
					Apr. 8, 1953	11.00	3,780
1945	Mar. 7, 1945	8.74	2,420		Apr. 14, 1953	8.60	2,550
	May 5, 1945	8.48	2,370				
	July 20, 1945	13.60	5,970	1954	Dec. 15, 1953	7.01	1,790
	July 23, 1945	16.29	9,690				
	Sept. 19, 1945	9.27	2,910	1955	Nov. 21, 1954	9.15	3,480
					Aug. 14, 1955	11.83	6,310
1946	Nov. 30, 1945	10.50	3,360		Aug. 20, 1955	15.69	12,900
	Dec. 27, 1945	10.40	3,300				
	Jan. 8, 1946	8.96	2,560	1956	Oct. 16, 1955	17.06	15,800
	May 28, 1946	10.86	3,590		Oct. 31, 1955	10.57	4,630
	June 3, 1946	10.71	3,500		Nov. 17, 1955	8.29	2,930
	July 23, 1946	8.61	2,400		Apr. 8, 1956	8.20	2,880
	Sept. 24, 1946	9.24	2,690		Apr. 17, 1956	7.52	2,470
					May 1, 1956	8.12	2,850
1947	Mar. 15, 1947	10.38	3,290				
	Apr. 6, 1947	11.0	3,750	1957	Apr. 6, 1957	9.99	4,050
	May 26, 1947	9.21	2,670				
1948	Nov. 8, 1947	8.28	2,250	1958	Dec. 21, 1957	12.61	6,650
	Nov. 12, 1947	8.76	2,490		Dec. 27, 1957	8.92	3,180
	Mar. 17-18, 1948	10.02	3,100		Jan. 26, 1958	8.19	2,740
	May 14, 1948	9.34	2,690		Feb. 28, 1958	11.43	5,140
					Mar. 4, 1958	8.21	2,760
1949	Dec. 31, 1948	14.14	6,780		Apr. 1, 1958	8.29	2,800
	Jan. 6, 1949	11.18	3,800		Apr. 7, 1958	12.07	5,940
					Apr. 12, 1958	9.02	3,240
1950	Mar. 23, 1950	8.65	2,480		May 8, 1958	8.39	2,860
1951	Nov. 26, 1950	10.00	3,080	1959	Mar. 7, 1959	7.32	2,260
	Dec. 8, 1950	11.72	4,180				
	Feb. 8, 1951	8.55	2,380	1960	Apr. 1, 1960	8.37	2,850
	Feb. 22, 1951	9.92	3,030		Apr. 6, 1960	11.93	5,740
	Mar. 20, 1951	8.65	2,420		July 31, 1960	7.23	2,210
	Mar. 31, 1951	18.75	13,100		Aug. 20, 1960	9.98	3,850
1952	Nov. 7, 1951	10.31	3,250		Sept. 13, 1960	11.37	5,070
	Dec. 22, 1951	31.06	5,340	1961	Feb. 26, 1961	11.55	5,240
	Jan. 23, 1952	8.21	2,290		Apr. 17, 1961	9.65	3,760

a Period Mar. 7 to Sept. 30, 1903. b Maximum observed. c Period Oct. 1 to Dec. 31, 1904. d Period May 21 to Sept. 30, 1940. e Obtained from two upstream gages.

3895. Passaic River at Little Falls, N.J.
(Published as "at Paterson, N.J." prior to October 1955)

Location.--Lat 40°53'05", long 74°13'35", on left bank 0.6 mile downstream from Beatties Dam in Little Falls, Passaic County, and 1 mile upstream from Peckman River. From 1898 to 1955, lat 40°54'50", long 74°10'51", on right bank 3 ft upstream from Spruce Street Bridge in Paterson, Passaic County, about 250 ft upstream from dam at hydroelectric plant of Plant Management Commission, and 500 ft upstream from Passaic Falls.

Drainage area.--762 sq mi. Area of lakes, ponds, and swamps, 67.1 sq mi. At site used prior to October 1955, drainage area was 785 sq mi.

Gage.--Nonrecording prior to Jan. 8, 1933; recording thereafter. Prior to Sept. 30, 1955, at site 3.7 miles upstream at mean sea level datum (New Jersey Geological Survey bench mark). Datum of present gage is 120.00 ft above mean sea level (Passaic Valley Water Commission bench mark).

Stage-discharge relation.--Prior to October 1955, discharge was sum of flow over dam computed from theoretical rating checked by current-meter measurements, computed flow through powerplant, metered flow through Dyers' pipe (prior to 1931), and estimated flow through raceway. Since October 1955, stage-discharge relation defined by current-meter measurements.

Bankfull stage.--5 ft.

Remarks.--Discharge records provided by Society for Establishing Useful Manufactures prior to 1933. Regulation by reservoirs in Rockaway, Pequannock, and Wanaque River basins affects flood flow. Discharge at site used prior to 1955 is considered equivalent to discharge at present site. Only maximum daily discharges are shown prior to 1933 and only annual peaks are shown 1933-45. Base for partial-duration series, 4,500 cfs.

Peak stages and discharges a/

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1898	Feb. 22, 1898	-	9,500	1934	Apr. 2, 1934	118.03	5,660
1899	Mar. 6, 1899	-	7,830	1935	Dec. 2, 1934	117.34	3,950
1900	Feb. 14, 1900	-	9,430				
				1936	Mar. 13, 1936	121.04	19,200
1901	Apr. 23, 1901	-	9,270	1937	Feb. 23, 1937	117.96	5,400
1902	Mar. 2, 1902	-	21,400	1938	Sept. 23, 1938	119.22	9,350
1903	Dec. 23, 1902	-	11,000	1939	Dec. 7, 1938	118.07	5,670
1904	Oct. 10, 1903	-	28,000	1940	Apr. 9, 10, 1940	117.92	5,620
1905	Mar. 22, 1905	-	8,760				
				1941	Feb. 8, 1941	117.23	5,070
1906	Mar. 5, 1906	-	6,110	1942	Aug. 18, 1942	118.46	7,050
1907	Mar. 19, 1907	-	8,100	1943	Jan. 1, 1943	118.47	7,490
1908	Nov. 8, 1907	-	9,190	1944	Apr. 25, 26, 1944	117.70	5,080
1909	Feb. 25, 1909	-	6,490	1945	July 23, 1945	112.05	19,500
1910	Apr. 27, 1910	-	8,980				
				1946	Nov. 30, 1945	117.85	5,080
1911	Apr. 6, 1911	-	3,370		Dec. 27, 1945	117.99	7,090
1912	Mar. 16, 17, 1912	-	10,400		May 29, 1946	117.94	5,390
1913	Mar. 29, 1913	-	7,450		June 3, 1946	117.85	5,180
1914	Mar. 29, 1914	-	7,980				
1915	Jan. 14, 1915	-	7,800	1947	Mar. 15, 1947	117.67	4,600
					Apr. 6, 1947	117.90	5,490
1916	Apr. 1, 1916	-	6,130				
1917	Mar. 28, 1917	-	4,530	1948	Nov. 8, 1947	118.08	5,220
1918	Feb. 28, 1918	-	6,490		Nov. 13, 1947	117.87	5,030
1919	July 24, 1919	-	8,630		Mar. 22, 1948	117.11	4,780
1920	Mar. 18, 1920	-	11,600		May 17, 1948	117.58	4,920
1921	Mar. 4, 1921	-	6,244	1949	Jan. 1, 1949	118.97	8,960
1922	Mar. 9, 1922	-	6,563		Jan. 7, 1949	118.53	7,570
1923	Mar. 18, 1923	-	7,675				
1924	Apr. 8, 1924	-	10,787	1950	Mar. 24, 1950	117.32	4,320
1925	Feb. 16, 1925	-	6,036				
				1951	Dec. 9, 1950	117.96	6,480
1926	Feb. 26, 1926	-	5,519		Dec. 23, 1951	117.65	4,600
1927	Sept. 3, 1927	-	8,707		Apr. 1, 1951	120.17	12,400
1928	Oct. 21, 1927	-	5,965				
1929	Mar. 7, 1929	-	5,116	1952	Nov. 7, 1951	117.81	4,800
1930	Mar. 9, 1930	-	3,614		Dec. 23, 1951	118.36	6,980
					Jan. 28, 29, 1952	117.65	5,260
1931	June 18, 1931	-	3,953		Feb. 5, 1952	117.36	4,520
1932	Apr. 2, 1932	-	4,650		Mar. 13, 1952	119.02	8,800
1933	Nov. 21, 1932	119.0	8,480		Apr. 7, 1952	118.31	6,940

a Discharges prior to 1933 are maximum daily means.

b Occurred Mar. 15-16, 1940.

c Occurred Apr. 7, 1941.

Peak stages and discharges of Passaic River at Little Falls, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Apr. 30, 1952	117.87	5,700	1957	Apr. 9, 1957	6.23	5,270
	June 3, 1952	119.92	12,000				
1953	Nov. 23, 1952	117.95	4,990	1958	Dec. 22, 1957	6.65	5,970
	Dec. 13, 1952	117.80	4,920		Dec. 27, 1957	5.92	4,770
	Jan. 26, 1953	118.69	7,430		Jan. 27, 1958	5.74	4,520
	Mar. 17, 1953	118.58	7,070		Mar. 1, 1958	6.45	5,620
	Mar. 26, 1953	118.11	5,790		Apr. 8, 1958	6.85	6,330
	Apr. 11, 1953	118.13	5,810		May 8, 1958	5.74	4,520
				1959	Mar. 7, 1959	5.00	3,600
1954	May 11, 1954	116.94	2,970				
1955	Nov. 22, 1954	117.73	4,580	1960	Apr. 7, 1960	7.15	7,140
	Aug. 14, 1955	117.98	5,470		Sept. 14, 1960	6.15	5,340
	Aug. 20, 1955	119.38	9,850	1961	Feb. 27, 1961	7.40	7,610
1956					Apr. 17, 1961	6.56	6,060
	Oct. 18, 1955	9.45	11,600				

3905. Saddle River at Ridgewood, N.J.

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 2½ miles upstream from Hohokus Brook.

Drainage area--21.6 sq mi. Area of lakes, ponds, and swamps, 1.0 sq mi.

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

Stage-discharge relation--Defined by current-meter measurements below 1,000 cfs and extended above by logarithmic plotting; shifts in relation occur.

Remarks--Base for partial-duration series, 380 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Aug. 13, 1955	7.80	1,120	1958	Jan. 26, 1958	6.16	400
	Aug. 19, 1955	8.88	1,510		Feb. 28, 1958	8.04	922
	Aug. 22, 1955	5.67	478		Apr. 6, 1958	6.92	595
1956	Oct. 14, 1955	5.69	482	1959	Nov. 29, 1958	6.32	502
	Oct. 16, 1955	7.25	925		Mar. 6, 1959	6.33	505
	Oct. 30, 1955	5.65	472	1960	Jan. 3, 1960	5.46	395
	Sept. 6, 1956	5.26	377		July 30, 1960	6.04	572
1957	Nov. 2, 1956	5.75	498		Aug. 19, 1960	7.22	916
	Apr. 6, 1957	5.52	440		Sept. 12, 1960	7.26	730
1958	Dec. 21, 1957	6.48	480	1961	Feb. 26, 1961	6.54	709
	Jan. 22, 1958	6.80	560		Apr. 16, 1961	5.97	542

3910. Hohokus Brook at Hohokus, N.J.

Location.--Lat 40°59'52", long 74°06'48", on left bank 500 ft upstream from Maple Avenue Bridge in Hohokus Borough, Bergen County, and 3.5 miles upstream from Saddle River.

Drainage area.--16.4 sq mi. Area of lakes, ponds, and swamps, 0.9 sq mi.

Gage.--Recording gage and concrete control. Datum of gage is 120.09 ft above mean sea level (New Jersey Geological Survey bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 750 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 450 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954a/	Sept. 11, 1954	3.08	854	1958	Jan. 22, 1958	2.64	518
1955	Nov. 21, 1954	2.60	490		Feb. 28, 1958	3.24	996
	Aug. 13, 1955	3.30	1,050		Apr. 6, 1958	2.64	518
	Aug. 19, 1955	4.50	2,350	1959	Mar. 6, 1959	2.58	476
1956	Oct. 15, 1955	2.90	710	1960	July 30, 1960	2.95	750
	Oct. 30, 1955	2.62	504		Aug. 19, 1960	2.69	553
	Sept. 6, 1956	2.63	511		Sept. 12, 1960	2.68	546
1957	Nov. 2, 1956	2.71	567	1961	Feb. 25, 1961	2.66	532
1958	Dec. 21, 1957	2.61	497		Apr. 16, 1961	2.58	476
	Dec. 26, 1957	2.56	462		July 20, 1961	2.95	750

a Period Apr. 1 to Sept. 30.

3915. Saddle River at Lodi, N.J.

Location.--Lat 40°53'25", long 74°04'51", on left bank 560 ft upstream from Outwater Lane Bridge in Lodi, Bergen County, and 3.2 miles upstream from mouth.

Drainage area.--54.6 sq mi. Area of lakes, ponds, and swamps, 2.2 sq mi.

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

Stage-discharge relation.--Prior to Nov. 2, 1938, defined by current-meter measurements below 980 cfs and extended above on basis of shape of subsequent rating; shifts in relation occurred. Since 1938, defined by current-meter measurements below 2,600 cfs and extended above on basis of slope-area measurement of 3,480 cfs.

Remarks.--Base for partial-duration series, 600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1924	Jan. 17, 1924	4.10	653	1928	July 7, 1928	4.83	829
	Apr. 7, 1924	5.44	1,280	1929	Feb. 8, 1929	5.00	903
	Apr. 19, 1924	5.04	1,080		Apr. 8, 1930	3.66	418
	May 10, 1924	4.30	735	1930	Apr. 24, 1931	4.08	549
	May 13, 1924	4.24	711		Mar. 29, 1932	4.50	686
1925	Feb. 12, 1925	4.94	980	1932	Nov. 20, 1932	5.30	1,320
	Mar. 2, 1925	4.75	897		Apr. 13, 1933	4.00	671
1926	Feb. 26, 1926	4.38	741	1933	Apr. 18, 1933	4.55	939
	Mar. 8, 1926	4.35	727		July 2, 1933	4.05	694
1927	July 24, 1927	4.20	616		Aug. 24, 1933	5.16	1,240
	Sept. 2, 1927	6.82	1,630		Sept. 16, 1933	4.95	1,140
1928	Oct. 19, 1927	4.65	775	1934	Mar. 6, 1934	4.41	850
	Nov. 4, 1927	4.68	793		Apr. 1, 1934	4.12	706
	Feb. 15, 1928	4.34	668				
	Feb. 24, 1928	4.60	757				

Peak stages and discharges of Saddle River at Lodi, N. J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1934	June 20, 1934	4.14	730	1949	Jan. 6, 1949	3.94	771
1935	Oct. 1, 1934	4.13	614	1950	Mar. 24, 1950	3.31	452
1936	Jan. 4, 1936	3.96	637	1951	Dec. 9, 1950	3.76	675
	Mar. 12, 1936	6.27	1,720		Feb. 8, 1951	3.73	660
	Mar. 19, 1936	4.31	808		Feb. 22, 1951	3.80	696
	Mar. 12, 1936	4.05	684		Mar. 31, 1951	7.27	2,530
	Apr. 7, 1936	5.16	1,300		Apr. 4, 1951	3.98	792
					Aug. 14, 1951	3.82	707
1937	Dec. 21, 1936	4.54	942	1952	Nov. 8, 1951	4.08	847
	Feb. 23, 1937	4.22	757		Dec. 21, 1951	4.52	1,090
	May 15, 1937	4.86	1,060		Mar. 12, 1952	4.53	1,100
1938	Nov. 14, 1937	4.18	708		Apr. 6, 1952	5.13	1,470
	Nov. 29, 1937	3.93	614		Apr. 28, 1952	3.69	639
	Jan. 26, 1938	5.19	1,340		May 26, 1952	4.18	902
	June 29, 1938	4.25	782		June 2, 1952	5.59	1,740
	July 24, 1938	4.75	1,060		Sept. 2, 1952	4.05	830
	Sept. 22, 1938	6.21	1,680	1953	Nov. 23, 1952	3.66	624
1939	Dec. 6, 1938	3.90	760		Dec. 6, 1952	4.06	836
	Feb. 4, 1939	3.67	631		Dec. 12, 1952	3.77	680
1940	Mar. 15, 1940	4.98	1,380		Jan. 25, 1953	4.05	830
	Apr. 9, 1940	4.40	1,090		Mar. 14, 1953	5.80	1,860
	June 1, 1940	4.38	1,080		Mar. 16, 1953	4.11	863
1941	Feb. 8, 1941	4.32	1,030		Mar. 25, 1953	4.34	993
1942	Mar. 4, 1942	3.72	658		Apr. 8, 1953	4.51	1,090
	Mar. 22, 1942	3.90	760	1954	Sept. 12, 1954	4.82	1,270
	Aug. 10, 1942	4.00	820	1955	Nov. 22, 1954	3.87	732
	Aug. 17, 1942	3.82	714		Aug. 14, 1955	5.44	1,660
1943	Dec. 31, 1942	4.30	1,020		Aug. 19, 1955	6.47	2,200
1944	Oct. 27, 1943	4.24	977	1956	Oct. 16, 1955	5.23	1,530
	Nov. 10, 1943	4.23	970		Oct. 31, 1955	4.01	806
	Mar. 14, 1944	3.86	737	1957	Nov. 2, 1956	3.99	795
	Apr. 16, 1944	3.67	631		Apr. 6, 1957	3.99	795
	Apr. 25, 1944	4.27	998	1958	Dec. 21, 1957	4.26	946
1945	July 20, 1945	5.15	1,480		Dec. 27, 1957	3.83	708
	July 23, 1945	10.00	3,500		Jan. 15, 1958	3.72	650
	Sept. 19, 1945	4.08	847		Jan. 22, 1958	4.29	964
1946	Dec. 26, 1945	4.16	891		Feb. 28, 1958	5.63	1,760
	May 18, 1946	3.63	608		Apr. 7, 1958	4.54	1,100
	May 28, 1946	4.54	1,100		Apr. 12, 1958	3.62	600
	June 3, 1946	4.22	924	1959	Nov. 29, 1958	3.93	765
	July 24, 1946	4.37	1,010		Mar. 7, 1959	4.01	806
1947	Mar. 15, 1947	3.62	603	1960	July 31, 1960	4.07	842
	Apr. 6, 1947	4.36	1,010		Aug. 20, 1960	4.07	842
1948	Nov. 9, 1947	4.05	830		Sept. 13, 1960	4.69	1,190
	Nov. 13, 1947	3.85	722	1961	Feb. 26, 1961	4.27	952
	Apr. 2, 1948	3.79	691		Mar. 15, 1961	3.67	625
	May 14, 1948	3.63	608		Apr. 17, 1961	4.12	870
1949	Dec. 31, 1948	4.41	1,030				

3920. Weasel Brook at Clifton, N.J.

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. Area of lakes, ponds, and swamps, 0 sq mi.

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

Stage-discharge relation.--Defined by current-meter measurements below 120 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 140 cfs to Sept. 30, 1956, and 200 cfs thereafter.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	July 23, 1938	2.33	147	1952	Sept. 1, 1952	2.64	217
	Sept. 21, 1938	2.93	301	1953	Nov. 22, 1952	2.51	184
1939	Feb. 3, 1939	2.10	99		Dec. 5, 1952	2.72	239
1940	Jan. 14, 1940	2.52	191		Dec. 11, 1952	2.40	158
	Mar. 15, 1940	2.78	259		Jan. 24, 1953	2.80	261
	Apr. 8, 1940	2.33	147		Mar. 4, 1953	2.42	163
1941	Feb. 7, 1941	2.73	245		Mar. 13, 1953	3.35	450
	Aug. 25, 1941	2.40	162		Mar. 15, 1953	2.40	165
1942	July 27, 1942	2.54	196		Mar. 24, 1953	2.76	258
	Aug. 9, 1942	2.69	234		Apr. 7, 1953	2.71	243
	Aug. 10, 1942	2.67	229		Apr. 16, 1953	2.42	170
	Aug. 16, 1942	2.78	259		July 6, 1953	2.45	178
1943	Dec. 30, 1942	2.44	172	1954	July 23, 1953	2.48	185
	July 5, 1943	2.38	158		Dec. 14, 1953	2.46	180
1944	Oct. 27, 1943	3.02	327		May 8, 1954	2.31	153
	Nov. 9, 1943	2.45	174		May 10, 1954	2.40	170
	Mar. 13, 1944	2.32	144		Sept. 11, 1954	3.33	426
	Sept. 14, 1944	2.39	160	1955	Aug. 13, 1955	2.99	317
1945	July 18, 1945	2.38	158		Aug. 19, 1955	2.62	212
	July 23, 1945	3.36	438	1956	Oct. 14, 1955	2.90	290
	Sept. 19, 1945	2.57	204		Oct. 15, 1955	2.55	194
1946	Dec. 25, 1945	2.40	162		Oct. 16, 1955	2.60	207
	May 17, 1946	2.84	275		Oct. 30, 1955	2.48	177
	May 27, 1946	2.35	151		Nov. 16, 1955	2.46	172
	June 2, 1946	2.34	149		Feb. 18, 1956	2.40	158
	June 11, 1946	2.30	140		June 2, 1956	2.44	168
	July 23, 1946	2.76	253		July 9, 1956	2.35	147
	Aug. 3, 1946	2.44	172		Sept. 6, 1956	2.44	168
	Sept. 24, 1946	2.60	211	1957	Nov. 2, 1956	2.98	330
1947	Apr. 5, 1947	2.44	162		Feb. 26, 1957	2.62	212
1948	Nov. 8, 1947	3.08	335		May 14, 1957	3.02	362
	Nov. 12, 1947	2.62	206		Aug. 25, 1957	2.59	228
	Apr. 1, 1948	2.39	156	1958	Dec. 21, 1957	2.59	228
	May 30, 1948	2.43	165		Dec. 26, 1957	2.66	248
	June 7, 1948	2.78	255		Jan. 22, 1958	3.11	394
	June 24, 1948	2.53	190		Feb. 28, 1958	2.98	348
	Aug. 12, 1948	2.33	143		Apr. 6, 1958	2.50	205
1949	Apr. 6, 1949	2.44	168		July 29, 1958	2.55	218
1950	July 10, 1950	2.69	230	1959	Nov. 28, 1958	2.73	241
1951	Feb. 7, 1951	2.37	151		Jan. 2, 1959	2.66	223
	Mar. 20, 1951	2.45	170		Mar. 6, 1959	2.62	212
	Mar. 30, 1951	3.04	332		Aug. 9, 1959	2.96	308
1952	Oct. 7, 1951	2.57	200		Aug. 31, 1959	2.61	210
	Nov. 7, 1951	2.89	287		Sept. 1, 1959	2.72	239
	Dec. 21, 1951	3.02	326	1960	Sept. 12, 1960	3.53	4496
	Mar. 11, 1952	2.60	207	1961	Oct. 16, 1960	2.60	207
	Apr. 5, 1952	2.32	140		Apr. 10, 1961	2.79	258
	Apr. 14, 1952	2.50	182		Apr. 16, 1961	3.47	474
	May 25, 1952	2.52	187		July 15, 1961	2.85	276
	June 1, 1952	2.66	223		July 20, 1961	3.24	396
	July 10, 1952	2.34	145		July 24, 1961	3.48	478
					July 31, 1961	2.63	215
					Aug. 3, 1961	2.83	270
					Aug. 26, 1961	3.23	393
					Sept. 14, 1961	2.66	223

a Annual peak only.

3925. Second River at Belleville, N.J.

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. Area of lakes, ponds, and swamps, 0 sq mi.

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

Stage-discharge relation.--Defined by current-meter measurement below 480 cfs and extended above on basis of critical-depth and contracted-opening measurements of 1,150 cfs and 3,300 cfs.

Bankfull stage.--8 ft.

Remarks.--Base for partial-duration series, 950 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937a/	June 21, 1937	4.84	1,480	1949	Aug. 29, 1949	4.64	1,340
	Aug. 22, 1937	4.23	1,100				
1938	Oct. 20, 1937	4.42	1,190	1950	July 10, 1950	4.32	1,130
	June 7, 1938	4.09	994		Aug. 19, 1950	4.65	1,340
	July 11, 1938	4.77	1,430		Aug. 29, 1950	6.15	2,500
	July 23, 1938	7.05	3,300	1951	Oct. 10, 1950	4.14	1,020
	Aug. 6, 1938	4.72	1,390		Nov. 25, 1950	4.31	1,130
	Aug. 8, 1938	5.47	1,950		Mar. 30, 1951	4.50	1,250
	Sept. 21, 1938	4.99	1,580				
1939	Aug. 19, 1939	5.11	1,670	1952	Nov. 7, 1951	3.80	825
1940	May 31, 1940	5.53	1,990	1953	Mar. 24, 1953	4.20	1,050
	June 26, 1940	4.64	1,340		May 23, 1953	4.09	984
	July 11, 1940	5.65	2,090		June 28, 1953	4.43	1,190
1941	Feb. 7, 1941	4.64	1,340		July 20, 1953	4.07	972
	Aug. 25, 1941	5.27	1,790		July 23, 1953	5.03	1,590
1942	Dec. 13, 1941	4.50	1,250	1954	Sept. 11, 1954	5.74	2,140
	May 7, 1942	4.35	1,150	1955	May 31, 1955	4.18	1,040
	July 18, 1942	4.05	970		Aug. 7, 1955	4.05	960
	July 27, 1942	4.03	958		Aug. 13, 1955	4.65	1,330
	Aug. 13, 1942	4.62	1,320	1956	Nov. 16, 1955	4.27	1,090
	Aug. 16, 1942	5.77	2,190		Sept. 6, 1956	5.80	2,190
1943	Dec. 30, 1942	4.21	1,070	1957	Nov. 2, 1956	4.38	1,160
1944	June 24, 1944	4.06	976		May 14, 1957	4.97	1,570
	Aug. 16, 1944	4.82	1,460		Aug. 25, 1957	5.68	2,110
	Sept. 12, 1944	4.67	1,360	1958	Jan. 22, 1958	4.56	1,270
	Sept. 13 or 14, 1944	5.55	2,010		Feb. 28, 1958	4.36	1,150
1945	June 13, 1945	4.17	1,040		July 12, 1958	4.47	1,210
	June 19, 1945	4.41	1,190		July 31, 1958	5.39	1,860
	July 18, 1945	4.56	1,290	1959	July 20, 1959	4.50	1,230
	July 23, 1945	4.75	1,410		July 23, 1959	4.72	1,370
	July 31, 1945	5.55	2,010		Aug. 9, 1959	5.87	2,250
	Sept. 14, 1945	5.54	2,000		Aug. 31, 1959	4.10	990
	Sept. 18, 1945	4.86	1,490		Sept. 1, 1959	5.54	1,980
1946	Dec. 25, 1945	4.27	1,100	1960	Oct. 9, 1959	4.22	1,060
	July 2, 1946	4.15	1,030		Oct. 24, 1959	4.50	1,230
	Sept. 24, 1946	4.62	1,320		Apr. 3, 1960	4.04	964
1947	July 22, 1947	4.02	952		July 3, 1960	4.70	1,380
	Aug. 16, 1947	4.36	1,150		July 27, 1960	4.10	1,000
1948	Apr. 1, 1948	4.03	958		July 30, 1960	6.54	2,840
	June 19, 1948	4.14	1,020		Aug. 19, 1960	4.09	994
	June 24, 1948	5.55	2,010		Sept. 12, 1960	4.92	1,530
	June 27, 1948	4.78	1,440	1961	Apr. 16, 1961	5.36	1,860
	July 13, 1948	4.67	1,360		July 15, 1961	4.20	1,060
	July 21, 1948	4.76	1,420		Aug. 26, 1961	4.81	1,460

a For period May 26 to Sept. 30, 1937.

3930. Elizabeth River at Irvington, N.J.

Location.--Lat 40°44'10", long 74°13'46", on right bank 135 ft downstream from Valley Avenue Bridge in Irvington, Essex County.

Drainage area.--2.91 sq mi. Area of lakes, ponds, and swamps, 0 sq mi.

Gage.--Recording. Altitude of gage is 132 ft (from river-profile map).

Stage-discharge relation.--Defined by current-meter measurements below 190 cfs and extended above on basis of index velocities at gage height 6.90 ft and by logarithmic plotting. Shifts in relation occurred after 1933, due to debris in channel.

Remarks.--Base for partial-duration series, 800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	June 7, 1931	5.23	456	1935	July 22, 1935	10.22	1,360
1932	June 27, 1932	9.67	1,300	1936	June 13, 1936	9.87	1,250
	Aug. 6, 1932	10.52	1,460		June 18, 1936	9.18	1,120
1933	Nov. 18, 1932	7.58	885		June 21, 1936	9.30	1,140
	May 20, 1933	7.70	904		Aug. 23, 1936	9.90	1,200
	June 6, 1933	8.13	980	1937	May 14, 1937	9.73	1,300
	June 10, 1933	8.32	1,020		June 21, 1937	9.73	1,300
	July 1, 1933	10.21	1,400		June 30, 1937	7.27	809
1934	Mar. 4, 1934	7.26	828		Aug. 12, 1937	7.91	923
	July 7, 1934	9.37	1,240	1938	July 23, 1938	12.1	1,750
	Sept. 8, 1934	8.57	1,080		Aug. 8, 1938	8.15	1,000
1935	June 27, 1935	7.41	847		Sept. 21, 1938	8.97	1,060

3935. Elizabeth River at Elizabeth, N.J.

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.--20.2 sq mi, of which 2.2 sq mi contributes to a storm sewer which has bypassed the station since December 1928. Area of lakes, ponds, and swamps, 0.1 sq mi.

Gage.--Nonrecording prior to May 18, 1923; recording thereafter. At datum 4.14 ft higher prior to Oct. 1, 1922. Datum of gage is 5.23 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Altered by changes in channel in February 1941. Prior to February 1941, defined by current-meter measurements below 1,100 cfs and extended above on basis of contracted-opening measurement of 2,720 cfs. Since February 1941, defined by current-meter measurements below 920 cfs and extended above on basis of culvert measurements of 2,230, 2,280 and 2,460 cfs.

Bankfull stage.--10 ft.

Remarks.--Base for partial-duration series, 700 cfs prior to Sept. 1, 1956, and 850 cfs thereafter.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	Feb. 2, 1922	2.51	380	1925	Mar. 1, 1925	7.59	860
1923	Mar. 16, 1923	6.94	510		July 31, 1925	8.18	1,260
	Mar. 23, 1923	6.94	510	1926	July 25, 1926	7.79	980
1924	Jan. 16, 1924	7.33	718		Sept. 6, 1926	8.06	1,170
	Apr. 7, 1924	8.15	1,240	1927	July 23, 1927	7.96	1,130
	May 9, 1924	7.39	745		Aug. 1, 1927	9.48	1,830
	July 8, 1924	8.16	1,250		Aug. 9, 1927	8.94	1,690
	Sept. 30, 1924	7.40	745		Aug. 14, 1927	7.44	772

Peak stages and discharges of Elizabeth River at Elizabeth, N. J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Sept. 1, 1927	9.71	1,890	1950	July 11, 1950	6.5	970
1928	Oct. 18, 1927	7.63	860	1951	Nov. 5, 1950	6.60	1,000
	Feb. 23, 1928	8.07	1,200		Nov. 25, 1950	6.25	890
	July 6, 1928	8.82	1,610		Mar. 30, 1951	6.09	856
	July 10, 1928	7.44	772		July 28, 1951	6.99	1,130
	Aug. 27, 1928	7.63	860	1952	Oct. 8, 1951	6.05	820
1929	Feb. 7, 1929	8.11	1,200		Nov. 7, 1951	7.12	1,170
	Feb. 26, 1929	7.88	1,060		Dec. 21, 1951	6.90	1,100
1930	Mar. 8, 1930	7.57	860		Mar. 11, 1952	5.98	792
1931	Mar. 8, 1931	7.19	635		May 25, 1952	6.62	1,010
1932	Mar. 28, 1932	7.80	990		June 1, 1952	9.46	1,850
1933	Nov. 7, 1932	7.87	1,060		Aug. 6, 1952	11.48	2,000
	Nov. 10, 1932	7.77	990		Aug. 30, 1952	7.83	1,380
	Nov. 19, 1932	9.73	1,900		Sept. 1, 1952	7.52	1,290
	Sept. 15, 1933	7.73	920	1953	Nov. 20, 1952	5.78	710
1934	Mar. 5, 1934	7.43	772		Dec. 5, 1952	5.87	748
	Sept. 8, 1934	7.21	1,190		Jan. 24, 1953	6.66	1,030
1935	Oct. 6, 1934	5.96	678		Mar. 13, 1953	10.97	1,920
1936	Jan. 3, 1936	6.04	722		Mar. 16, 1953	6.21	884
	June 13, 1936	6.02	700		Mar. 24, 1953	6.19	876
1937	Aug. 11, 1937	6.00	700		Apr. 7, 1953	6.21	884
1938	July 23, 1938	13.05	2,720		May 23, 1953	6.15	860
	Sept. 21, 1938	9.25	1,780	1954	July 23, 1953	7.50	1,280
1939	Dec. 5, 1938	5.75	700		Dec. 14, 1953	6.33	929
	Feb. 3, 1939	5.82	728		Aug. 9, 1954	6.02	808
	Aug. 20, 1939	5.92	768		Sept. 11, 1954	15.02	2,600
1940	Apr. 8, 1940	5.87	748	1955	Feb. 7, 1955	5.78	710
	May 31, 1940	11.40	2,320		May 31, 1955	6.12	848
	July 11, 1940	6.00	800		Aug. 7, 1955	13.88	2,440
1941	Feb. 7, 1941	7.34	1,230		Aug. 13, 1955	13.19	2,230
	Aug. 25, 1941	7.30	1,220		Aug. 19, 1955	7.52	1,290
	Aug. 26, 1941	6.16	858	1956	Oct. 14, 1955	-	2,000
1942	Dec. 13, 1941	6.06	824		Feb. 18, 1956	5.81	724
	Aug. 9, 1942	11.28	1,970		July 21, 1956	6.00	800
	Aug. 16, 1942	6.89	1,100		Sept. 6, 1956	6.65	1,020
	Aug. 18, 1942	6.05	820	1957	Nov. 2, 1956	6.54	992
1943	Mar. 6, 1943	6.14	852		Feb. 26, 1957	6.18	872
	May 12, 1943	6.61	1,000		Aug. 26, 1957	8.49	1,500
1944	Oct. 27, 1943	11.84	2,040		Sept. 10, 1957	6.14	856
	Jan. 6, 1944	6.47	961	1958	Dec. 21, 1957	6.34	932
	Mar. 13, 1944	6.61	1,000		Dec. 26, 1957	7.03	1,140
	Apr. 24, 1944	6.46	958		Jan. 14, 1958	6.48	974
	Aug. 7, 1944	5.89	756		Jan. 22, 1958	7.23	1,200
	Sept. 13, 1944	10.5	1,850		Feb. 28, 1958	8.49	1,500
	Sept. 14, 1944	13.00	2,220		Apr. 6, 1958	7.98	1,390
1945	July 18, 1945	6.91	1,100		Apr. 28, 1958	7.16	1,180
	Sept. 14, 1945	7.92	1,410		July 21, 1958	6.67	1,030
	Sept. 19, 1945	9.88	1,760	1959	Oct. 23, 1958	8.31	1,460
1946	Dec. 26, 1945	5.94	776		Nov. 28, 1958	6.41	953
	May 15, 1946	5.85	740		Jan. 2, 1959	7.10	1,160
	May 21, 1946	5.80	720		July 20, 1959	7.30	1,220
	June 2, 1946	6.70	1,040		Aug. 9, 1959	13.36	2,260
1947	Apr. 5, 1947	5.62	645		Aug. 29, 1959	7.83	1,350
1948	Nov. 8, 1947	11.98	2,070		Sept. 1, 1959	12.50	2,140
	Nov. 12, 1947	7.23	1,200	1960	Oct. 24, 1959	9.96	1,770
	May 25, 1948	6.30	910		Jan. 3, 1960	6.21	884
	June 24, 1948	7.22	1,200		Apr. 4, 1960	6.15	860
	July 13, 1948	7.06	1,150		July 30, 1960	12.37	2,120
	July 22, 1948	10.17	1,800		Aug. 19, 1960	7.38	1,240
1949	Jan. 5, 1949	5.75	700		Sept. 12, 1960	12.42	2,130
					Sept. 19, 1960	6.31	923
				1961	Oct. 20, 1960	7.75	1,330
					Jan. 1, 1961	6.44	962
					Mar. 14, 1961	6.84	1,080
					Mar. 23, 1961	7.44	1,250
					Apr. 10, 1961	7.32	1,220
					Apr. 16, 1961	8.22	1,440
					July 15, 1961	7.02	1,140
					July 20, 1961	11.71	2,030
					July 24, 1961	6.44	962
					July 31, 1961	8.84	1,570

3940. West Branch Rahway River at Millburn, N.J.

Location.--Lat 40°43'51", long 74°18'26", on left bank 100 ft upstream from Diamond Mill Pond Dam, 1,000 ft upstream from Glen Avenue in Millburn, Essex County, and 1.9 miles upstream from confluence with East Branch.

Drainage area.--7.1 sq mi.

Gage.--Recording gage above masonry dam. Datum of gage is 173.04 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by laboratory rating and verified by current-meter measurements below 100 cfs and by flow-over-dam measurement of 965 cfs.

Remarks.--Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	July 23, 1938	a3.07	a965	1945	Feb. 27, 1945	1.91	234
					May 10, 1945	1.90	229
1940	Mar. 15, 1940	2.15	338		July 18, 1945	2.35	478
	Apr. 8, 1940	2.05	287		July 23, 1945	3.19	1,090
	May 31, 1940	2.46	517		Sept. 19, 1945	3.07	996
1941	Feb. 7, 1941	1.96	258	1946	Nov. 29, 1945	1.87	215
1942	Mar. 22, 1942	1.90	229		Dec. 26, 1945	1.98	268
	July 27, 1942	2.12	342		June 2, 1946	2.26	422
	Aug. 9, 1942	3.15	1,060		July 23, 1946	2.12	342
	Aug. 13, 1942	2.51	577	1947	Apr. 5, 1947	2.03	294
	Aug. 16, 1942	2.21	393		July 22, 1947	1.93	244
1943	Dec. 30, 1942	2.09	326	1948	Nov. 8, 1947	2.85	820
	May 12, 1943	1.97	263		Nov. 12, 1947	2.32	459
	May 20, 1943	1.91	234		Apr. 1, 1948	2.05	304
1944	Oct. 27, 1943	1.84	202		May 13, 1948	1.93	244
	Nov. 9, 1943	1.93	244		May 25, 1948	2.09	326
	Mar. 13, 1944	2.20	387		June 24, 1948	2.48	558
	Mar. 23, 24, 1944	1.90	229	1949	Dec. 31, 1948	2.09	326
	Apr. 24, 1944	2.05	304		Jan. 6, 1949	2.08	320
	Sept. 14, 1944	1.97	263	1950	Mar. 23, 1950	1.68	136
1945	Jan. 1, 1945	1.89	224				

a Annual maximum only.

3945. Rahway River near Springfield, N.J.

Location.--Lat 40°41'11", long 74°18'44", on left bank 50 ft downstream from bridge on U.S. Highway 22 (formerly State Highway 29), 100 ft downstream from Pope Brook, and 1½ miles south of Springfield, Union County.

Drainage area.--25.5 sq mi. Area of lakes, ponds, and swamps, 0.1 sq mi.

Gage.--Recording gage above concrete control. Datum of gage is 66.17 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 900 cfs and extended above on basis of contracted-opening measurement of 1,880 cfs.

Remarks.--Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938a/	July 23, 1938	7.41	1,940	1941	Feb. 7, 1941	4.90	885
	Sept. 21, 1938	6.70	1,590	1942	Mar. 22, 1942	3.75	538
1939	Feb. 3, 1939	4.32	699		July 27, 1942	3.83	559
1940	Mar. 15, 1940	4.84	865		Aug. 9, 1942	6.07	1,320
	Apr. 9, 1940	4.09	631		Aug. 11, 1942	3.92	584
	May 31, 1940	5.60	1,140		Aug. 14, 1942	4.64	799

a Period July 7 to Sept. 30, 1938.

Peak stages and discharges of Rahway River near Springfield, N. J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Dec. 30, 1942	4.20	663	1952	Sept. 1, 1952	4.87	875
	May 12, 1943	3.94	589				
1944	Oct. 27, 1943	4.45	738	1953	Dec. 5, 1952	4.01	609
	Jan. 6, 1944	4.58	780		Jan. 24, 1953	4.76	838
	Mar. 13, 1944	4.69	815		Mar. 4, 1953	3.96	595
	Apr. 25, 1944	4.23	672		Mar. 13, 1953	6.10	1,350
	Sept. 15, 1944	4.68	812		Mar. 16, 1953	4.14	646
1945	Nov. 21, 1944	3.84	562		Mar. 24, 1953	4.39	720
	July 18, 1945	4.72	825		Apr. 7, 1953	4.97	909
	July 23, 1945	4.69	815	1954	Dec. 14, 1953	3.74	535
	Sept. 19, 1945	6.20	1,370		Sept. 11, 1954	5.08	947
1946	Dec. 26, 1945	4.23	672	1955	Nov. 21, 1954	3.67	516
	June 2, 1946	5.16	975		Aug. 13, 1955	5.95	1,270
	July 23, 1946	4.61	789		Aug. 19, 1955	5.41	1,060
1947	Apr. 5, 1947	4.14	646	1956	Oct. 14, 1955	4.13	643
1948	Nov. 4, 1947	4.25	678		Feb. 18, 1956	3.68	519
	Nov. 8, 1947	5.98	1,280		Sept. 6, 1956	3.80	551
	Nov. 12, 1947	4.96	905	1957	Apr. 5, 1957	3.75	538
	Apr. 1, 1948	4.27	684				
	May 13, 1948	3.73	532	1958	Dec. 21, 1957	3.92	584
	May 25, 1948	5.04	933		Dec. 26, 1957	4.22	669
	June 25, 1948	4.66	805		Jan. 15, 1958	4.42	729
	July 13, 1948	3.65	511		Jan. 22, 1958	4.37	714
	July 22, 1948	4.41	726		Feb. 28, 1958	4.78	844
1949	Dec. 31, 1948	4.68	812		Apr. 6, 1958	4.22	669
	Jan. 6, 1949	4.75	834		Apr. 28, 1958	4.09	631
	Jan. 28, 1949	3.64	508	1959	Oct. 23, 1958	3.91	581
1950	Mar. 23, 1950	3.61	501		July 20, 1959	3.95	592
1951	Nov. 26, 1950	4.06	623		Aug. 9, 1959	4.90	885
	Feb. 22, 1951	4.05	620		Sept. 1, 1959	4.59	783
	Mar. 30, 1951	5.10	954	1960	Apr. 4, 1960	3.83	525
	July 28, 1951	4.12	640		July 30, 1960	4.24	622
1952	Nov. 7, 1951	4.45	738		Aug. 31, 1960	3.77	511
	Dec. 21, 1951	5.12	961		Sept. 12, 1960	5.27	911
	Mar. 11, 1952	4.87	875	1961	Mar. 14, 1961	3.66	503
	May 25, 1952	4.48	748		Mar. 23, 1961	4.17	654
	June 1, 1952	5.97	1,280		Apr. 13, 1961	4.17	654
	Aug. 6, 1952	4.22	669		Apr. 16, 1961	4.35	708
					July 20, 1961	4.09	630

3950. Rahway River at Rahway, N.J.

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. Area of lakes, ponds, and swamps, 0.2 sq mi.

Gage.--Nonrecording prior to Aug. 25, 1934; recording thereafter. At site 1,500 ft downstream at datum 2.77 ft lower prior to Aug. 25, 1934. Datum of gage is 8.77 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Prior to August 1934, defined by current-meter measurements below 970 cfs and extended above by logarithmic plotting. Since August 1934, defined by current-meter measurements below 770 cfs and extended above by logarithmic plotting.

Remarks.--Prior to 1935, only annual peaks as determined from graph of twice-daily gage readings are shown. Base for partial-duration series, 600 cfs.

Peak stages and discharges of Rahway River at Rahway, N.J.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	May 19, 1922	3.32	642	1948	Nov. 4, 1947	3.64	841
1923	Mar. 17, 1923	3.75	811		Nov. 9, 1947	4.40	1,350
1924	Apr. 7, 1924	5.10	1,350		Nov. 12, 1947	3.74	902
1925	Feb. 12, 1925	4.25	1,000		Apr. 2, 1948	3.29	643
					May 26, 1948	3.81	945
1926	Sept. 7, 1926	4.22	984		May 30, 1948	3.29	643
1927	Aug. 2, 1927	6.00	1,740		June 25, 1948	3.30	648
1928	July 6, 1928	5.05	1,310				
1929	Feb. 27, 1929	3.48	755	1949	Dec. 31, 1948	4.40	1,350
1930	Mar. 8, 1930	3.10	569		Jan. 6, 1949	3.70	877
1931	Mar. 29, 1931	2.90	500	1950	Mar. 23, 1950	3.03	510
1932	Mar. 28, 1932	4.00	905				
1933	Sept. 6, 1933	5.64	1,560	1951	Nov. 25, 1950	3.22	606
1934	Mar. 5, 1934	3.43	722		Feb. 22, 1951	3.27	632
					Mar. 31, 1951	3.93	1,020
1935	Oct. 6, 1934	3.37	660		July 28, 1951	3.40	703
1936	Jan. 3, 1936	3.57	778	1952	Nov. 8, 1951	3.23	611
	Mar. 12, 1936	4.12	1,120		Dec. 21, 1951	3.92	1,010
	Apr. 7, 1936	3.39	695		Mar. 12, 1952	3.71	888
1937	Dec. 20, 1936	3.31	640		May 26, 1952	3.54	782
					June 1, 1952	4.87	1,720
1938	Jan. 25, 1938	3.35	676		Sept. 2, 1952	3.40	703
	July 24, 1938	6.35	3,140	1953	Jan. 25, 1953	3.64	854
	Sept. 22, 1938	4.94	1,780		Mar. 13, 1953	4.68	1,590
1939	Feb. 3, 1939	3.67	847		Mar. 16, 1953	3.36	686
					Mar. 25, 1953	3.31	656
1940	Mar. 15, 1940	3.58	805		Apr. 8, 1953	3.80	950
	Apr. 9, 1940	3.28	637	1954	Sept. 11, 1954	4.41	1,380
	May 31, 1940	4.68	1,560				
1941	Feb. 7, 1941	3.86	976	1955	Nov. 21, 1954	3.28	640
					Aug. 7, 1955	3.89	1,010
1942	Aug. 9, 1942	4.52	1,440		Aug. 13, 1955	5.63	2,440
	Aug. 14, 1942	3.84	963		Aug. 19, 1955	3.97	1,070
	Aug. 17, 1942	3.96	1,040	1956	Apr. 8, 1956	3.20	600
1943	Dec. 30, 1942	3.65	847				
	Mar. 6, 1943	3.25	622	1957	Apr. 6, 1957	3.50	770
	May 12, 1943	3.59	811				
	May 26, 1943	3.32	659	1958	Dec. 21, 1957	3.39	704
1944	Oct. 27, 1943	3.99	1,060		Dec. 27, 1957	3.23	615
	Jan. 6, 1944	3.91	1,010		Jan. 15, 1958	3.67	872
	Mar. 13, 1944	3.81	945		Jan. 22, 1958	3.47	752
	Apr. 24, 1944	3.75	908		Feb. 28, 1958	4.12	1,170
	Sept. 13, 1944	4.17	1,190		Apr. 6, 1958	3.44	734
	Sept. 14, 1944	4.38	1,340	1959	Oct. 23, 1958	4.01	1,100
1945	Nov. 21, 1944	3.21	600		Oct. 26, 1958	3.23	615
	Feb. 27, 1945	3.25	622		Aug. 9, 1959	4.66	1,580
	July 18, 1945	3.65	847		Sept. 1, 1959	3.94	1,050
	July 24, 1945	3.44	725	1960	July 30, 1960	3.72	902
	Sept. 19, 1945	4.69	1,570		Sept. 12, 1960	4.99	1,850
1946	Dec. 26, 1945	3.47	742	1961	Mar. 23, 1961	3.68	878
	June 3, 1946	4.05	1,100		Apr. 13, 1961	3.66	866
	July 23, 1946	4.10	1,140		Apr. 16, 1961	3.56	806
1947	Apr. 5, 1947	3.25	622		July 20, 1961	3.52	782
					July 31, 1961	3.58	818

3960. Robinsons Branch Rahway River at Rahway, N.J.

Location.--Lat 40°36'20", long 74°17'57", on right bank 200 ft upstream from Milton Lake Dam, 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. Area of lakes, ponds, and swamps, 1.2 sq mi.

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

Stage-discharge relation.--Defined by current-meter measurements below 250 cfs and extended above on basis of laboratory rating.

Remarks.--Possibly some effect on flood peaks from Middlesex Reservoir, capacity, 300,000,000 gal. Base for partial-duration series, 450 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Mar. 4, 1940	4.70	526	1951	Mar. 30, 1951	4.90	789
	Mar. 15, 1940	4.66	485	1952	Dec. 21, 1951	4.87	741
	Apr. 8-9, 1940	4.68	505		Feb. 4, 1952	4.69	525
	May 31, 1940	5.35	1,400		Mar. 11, 1952	4.77	617
1941	Feb. 7, 1941	4.96	832		Apr. 28, 1952	4.70	536
					May 25, 1952	4.75	594
1942	Mar. 3, 1942	4.64	472		June 1, 1952	5.26	1,300
	Aug. 3, 1942	5.25	1,240	1953	Jan. 24, 1953	4.84	702
	Aug. 9, 1942	4.72	548		Mar. 13, 1953	5.36	1,490
1943	Dec. 30, 1942	4.72	548		Mar. 16, 1953	4.71	552
	Mar. 7, 1943	4.70	526		Apr. 7, 1953	4.80	638
	May 12, 1943	4.83	673	1954	Dec. 14, 1953	4.56	387
	May 27, 1943	4.65	474				
1944	Oct. 27, 1943	4.68	505	1955	Nov. 21, 1954	4.63	462
	Jan. 6, 1944	4.95	819		Mar. 22, 1955	4.62	451
	Mar. 13, 1944	4.88	732		Aug. 13, 1955	5.06	1,000
	Apr. 24, 1944	4.84	685	1956	Apr. 8, 1956	4.68	515
	Sept. 15, 1944	4.88	732				
1945	Nov. 21, 1944	4.76	593	1957	Apr. 5, 1957	4.71	557
	May 10, 1945	4.66	498				
	July 18, 1945	4.76	611	1958	Dec. 21, 1957	4.73	561
	Sept. 19, 1945	5.06	1,010		Dec. 26, 1957	4.64	464
1946	June 2, 1946	5.01	932		Jan. 15, 1958	4.85	700
	July 23, 1946	4.93	830		Jan. 22, 1958	4.63	454
1947	Apr. 5, 1947	4.69	535		Feb. 28, 1958	5.14	1,110
					Apr. 6, 1958	4.73	561
1948	Nov. 4, 1947	4.98	885		Apr. 28, 1958	4.66	486
	Nov. 8, 1947	5.11	1,070	1959	Oct. 23, 1958	5.11	1,060
	Nov. 12, 1947	4.80	654		Oct. 26, 1958	4.70	528
	Apr. 1, 1948	4.64	472		Mar. 6, 1959	4.66	486
	May 13, 1948	4.70	537		Aug. 9, 1959	5.12	1,080
	May 25, 1948	4.77	619	1960	Feb. 19, 1960	4.64	464
1949	Dec. 31, 1948	4.99	899		July 30, 1960	4.90	764
	Jan. 6, 1949	4.74	584		Sept. 12, 1960	5.20	1,190
	Jan. 22, 1949	4.62	450	1961	Mar. 14, 1961	4.64	464
1950	Mar. 23, 1950	4.67	512		Mar. 23, 1961	4.98	868
					Apr. 13, 1961	4.87	726
1951	Nov. 25, 1950	4.80	663		Apr. 16, 1961	4.67	496
	Dec. 8, 1950	4.63	468		July 20, 1961	4.68	510
	Feb. 22, 1951	4.74	593		July 31, 1961	4.65	478

3965. South Branch Raritan River near High Bridge, N.J.

Location.--Lat 40°40'40", long 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. Area of lakes, ponds, and swamps, 1.1 sq mi.

Gage.--Nonrecording prior to Sept. 30, 1921; recording thereafter. Datum of gage is 282.10 ft above mean sea level (New Jersey Geological Survey bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 1,600 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1896	Feb. 6, 1896	-	7,560	1936	Oct. 31, 1935	8.95	1,380
1902	February 1902	-	3,840		Jan. 3, 1936	10.00	2,450
					Mar. 11, 1936	10.51	3,080
1904	October 1903	-	2,670		Mar. 18, 1936	8.90	1,340
					Apr. 6, 1936	9.55	1,960
1919	July 23, 1919	10.0	a2,580	1937	Dec. 20, 1936	8.98	1,430
1920	Sept. 30, 1920	9.2	a1,820		Feb. 22, 1937	8.63	1,140
1921	Dec. 14, 1920	8.7	a1,410	1938	Nov. 13, 1937	8.95	1,380
1922	Feb. 2, 1922	10.97	3,600		Jan. 25, 1938	9.74	2,180
	Mar. 8, 1922	9.09	1,730		July 24, 1938	9.69	2,120
	July 1, 1922	9.40	2,000		Sept. 21, 1938	10.17	2,650
	July 3, 1922	8.40	1,190	1939	Dec. 6, 1938	8.90	1,340
	Sept. 4, 1922	9.38	2,000		Feb. 28, 1939	8.50	1,030
1923	Jan. 1, 1923	8.82	1,510		Apr. 20, 1939	8.50	1,030
	Mar. 16, 1923	8.80	1,490	1940	Jan. 15, 1940	d10.00	-
1924	Jan. 17, 1924	9.00	1,340		Mar. 15, 1940	11.78	5,160
	Apr. 6, 1924	9.91	2,230		Apr. 9, 1940	8.78	1,240
1925	Oct. 1, 1924	8.37	1,010		May 21, 1940	9.11	1,530
	Feb. 8-13, 1925	(b)	(b)		June 2, 1940	9.33	1,740
1926	Feb. 26, 1926	8.55	1,120	1941	Feb. 7, 1941	8.60	1,100
	Mar. 7, 1926	8.62	1,120	1942	Aug. 1, 1942	8.46	1,000
1927	Nov. 16, 1926	8.55	1,120		Aug. 9, 1942	8.83	1,280
1928	Nov. 3, 1927	9.58	1,890		Aug. 11, 1942	9.85	2,280
	Nov. 18, 1927	9.93	2,250		Sept. 28, 1942	9.09	1,510
	Dec. 8, 1927	8.86	1,280	1943	Nov. 25, 1942	8.90	1,340
	Feb. 23, 1928	8.70	1,170		Dec. 30, 1942	9.27	1,680
	July 6, 1928	8.72	1,170		May 26, 1943	8.70	1,180
	July 14, 1928	8.45	1,010	1944	Nov. 9, 1943	8.51	1,040
	July 28, 1928	9.05	1,340		Feb. 15, 1944	d10.39	-
	Aug. 22, 1928	8.57	1,120		Mar. 7, 1944	8.88	1,320
1929	Feb. 7, 1929	8.75	1,230		Mar. 13, 1944	9.10	1,520
	Apr. 26, 1929	8.38	1,010		Mar. 24, 1944	8.52	1,040
1930	June 10, 1930	7.94	765		Apr. 24, 1944	8.57	1,080
1931	June 17, 1931	8.83	1,240	1945	Jan. 1, 1945	8.80	1,260
	July 11, 1931	9.36	1,580		Feb. 27, 1945	8.78	1,240
1932	Mar. 28, 1932	8.48	1,020		July 19, 1945	9.05	1,480
1933	Nov. 10, 1932	8.48	1,020		July 23, 1945	8.94	1,380
	Nov. 19, 1932	9.22	1,480		July 22, 1945	9.90	2,340
	Aug. 24, 1933	8.79	1,210	1946	Nov. 22, 1945	9.18	1,590
	Sept. 15, 1933	8.70	1,150		Dec. 25, 1945	d9.75	-
1934	Mar. 5, 1934	(c)	(c)		June 2, 1946	8.77	1,240
	Sept. 30, 1934	9.99	2,320		July 23, 1946	8.70	1,180
1935	July 9, 1935	9.35	1,580	1947	Mar. 14, 1947	8.72	1,200
					May 1, 1947	8.58	1,090
					May 5, 1947	8.61	1,110
					May 25, 1947	8.52	1,040
				1948	Nov. 8, 1947	9.02	1,450
					Apr. 1, 1948	8.62	1,120

a Annual peak only, from graph of gage readings.

b Unknown, believed maximum for year.

c Unknown, believed to have exceeded base.

d Backwater from ice.

Peak stages and discharges of South Branch Raritan River near
High Bridge, N. J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	May 13, 1948	9.06	1,480	1953	Apr. 7, 1953	8.73	1,150
1949	Dec. 30, 1948	9.80	2,230	1954	Jan. 21, 1954	d8.97	-
	Jan. 6, 1949	9.44	1,850		Mar. 4, 1954	8.13	775
1950	Mar. 23, 1950	8.42	976	1955	Nov. 21, 1954	8.53	1,010
1951	Nov. 26, 1950	9.47	1,880		Aug. 13, 1955	9.49	1,770
	Dec. 8, 1950	9.14	1,560		Aug. 19, 1955	10.46	2,760
	Jan. 5, 1951	8.55	1,060	1956	Oct. 15, 1955	9.81	2,070
	Feb. 7, 1951	9.09	1,510		Dec. 14, 1956	8.60	1,060
	Mar. 31, 1951	10.19	2,680	1957	Apr. 6, 1957	8.60	1,060
	July 28, 1951	10.29	2,800		Dec. 21, 1957	9.66	1,970
	Nov. 7, 1951	9.92	2,360	1958	Dec. 26, 1957	9.14	1,480
1952	Dec. 21, 1951	9.47	1,880		Jan. 22, 1958	8.90	1,280
	Jan. 26, 1952	8.73	1,200		Feb. 28, 1958	9.04	1,390
	Mar. 11, 1952	10.49	3,060		Apr. 6, 1958	8.88	1,260
	Apr. 5, 1952	9.23	1,640	1959	Mar. 6, 1959	8.95	1,320
	May 25, 1952	8.48	1,020		Jan. 3, 1960	8.83	1,220
	June 1, 1952	8.58	1,090	1960	Apr. 5, 1960	8.57	1,040
	July 10, 1952	8.46	1,000		July 30, 1960	8.52	1,000
	Sept. 1, 1952	9.39	1,800		Sept. 13, 1960	9.06	1,410
	Nov. 22, 1952	9.70	1,960		Feb. 26, 1961	8.85	1,240
1953	Dec. 5, 1952	8.95	1,320				
	Dec. 11, 1952	9.17	1,490				
	Jan. 24, 1953	9.62	1,890				

d Backwater from ice.

3970. South Branch Raritan River at Stanton, N. J.

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. Area of lakes, ponds, and swamps, 1.2 sq mi.

Gage.--Nonrecording prior to Aug. 17, 1925, recording thereafter. Datum of gage is 125.01 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 6,400 cfs and extended to 8,100 cfs on basis of flow-over-dam measurement at site 6.5 miles upstream, and to 18,000 cfs on basis of slope-area measurement 0.4 mile downstream, and contracted-opening measurement 1.7 miles downstream (discharges adjusted to gaging site).

Bankfull stage.--8 ft.

Remarks.--Base for partial-duration series, 2,600 cfs. Only annual peaks from graph of twice-daily gage readings are shown prior to 1926.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Oct. 9, 1903	a11.2	9,020	1926	Feb. 19, 1926	b9.52	-
1905	Jan. 7, 1905	b12.5	6,840		Feb. 25, 1926	8.05	4,220
					Mar. 7, 1926	7.60	3,690
1906	Mar. 3, 1906	8.8	5,000	1927	Jan. 21, 1927	b8.01	-
					Feb. 26, 1927	6.60	2,590
1919	July 21, 1919	10.0	6,840	1928	Oct. 18, 1927	8.00	3,730
1920	Mar. 17, 1920	c11.5	2,860		Nov. 3, 1927	8.10	3,840
					Nov. 18, 1927	8.05	3,730
1921	Jan. 15, 1921	7.2	3,060		Dec. 8, 1927	7.50	3,220
1922	Feb. 2, 1922	9.0	4,330		Feb. 8, 1928	7.20	2,920
1923	Mar. 16, 1923	8.5	4,590		Feb. 15, 1928	8.57	4,720
1924	Apr. 7, 1924	10.0	6,840				
1925	Feb. 12, 1925	9.8	3,200				

a Occurred Mar. 7, 1904, backwater from ice.

b Backwater from ice.

c Occurred Mar. 5, 1920, backwater from ice.

Peak stages and discharges of South Branch Raritan River at Stanton, N. J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Feb. 23, 1928	7.30	3,020	1945	Jan. 1, 1945	7.93	3,880
	July 14, 1928	7.60	3,320		Feb. 22, 1945	b7.73	-
1929	Feb. 7, 1929	9.34	5,790		July 19, 1945	12.22	10,900
	Feb. 26, 1929	8.42	4,490		July 21, 1945	6.98	2,870
	Apr. 26, 1929	7.00	2,800		July 23, 1945	7.12	3,010
1930	Mar. 8, 1930	6.80	2,630	1946	Nov. 22, 1945	7.21	3,110
1931	July 10, 1931	6.76	2,630		Dec. 26, 1945	b9.06	-
1932	Mar. 28, 1932	6.57	2,470		June 2, 1946	9.03	5,320
1933	Nov. 10, 1932	9.25	5,660	1947	July 23, 1946	8.61	4,740
	Nov. 19, 1932	8.10	3,800		May 5, 1947	6.11	2,180
	Aug. 23, 1933	10.46	7,640	1948	Feb. 19, 1948	b8.54	-
	Sept. 15, 1933	7.60	3,540		May 13, 1948	8.66	4,810
1934	Mar. 4, 1934	b10.05	d2,980		June 28, 1948	7.70	3,620
	Sept. 30, 1934	9.22	5,610	1949	Dec. 30, 1948	9.85	6,580
1935	Feb. 15, 1935	b7.92	-		Jan. 6, 1949	8.54	4,650
	July 9, 1935	10.80	8,260	1950	Mar. 23, 1950	6.30	2,320
1936	Jan. 3, 1936	(e)	(e)	1951	Nov. 25, 1950	10.00	6,840
	Jan. 9, 1936	7.40	3,290		Dec. 8, 1950	8.35	4,400
	Mar. 12, 1936	9.37	5,800		Jan. 15, 1951	6.78	2,700
	Mar. 18, 1936	7.64	3,500		Feb. 7, 1951	7.98	3,950
	Apr. 6, 1936	8.38	4,460		Mar. 30, 1951	8.76	4,940
1937	Dec. 20, 1936	7.66	3,610		July 28, 1951	8.83	4,930
	Feb. 22, 1937	7.24	3,090	1952	Nov. 7, 1951	12.01	10,600
	Aug. 23, 1937	6.80	2,710		Dec. 21, 1951	8.38	4,440
1938	Nov. 13, 1937	7.61	3,500		Mar. 11, 1952	8.43	4,510
	Jan. 25, 1938	7.61	3,500		Apr. 5, 1952	8.03	4,010
	July 23, 1938	8.51	4,600		Apr. 15, 1952	6.72	2,650
	Sept. 21, 1938	10.72	8,130		May 25, 1952	6.86	2,770
1939	Dec. 6, 1938	8.08	4,080	1953	Nov. 22, 1952	8.29	4,330
	Jan. 30, 1939	b7.32	-		Dec. 5, 1952	6.68	2,610
	Feb. 3, 1939	7.64	3,500		Dec. 11, 1952	7.63	3,540
	Feb. 28, 1939	7.01	2,900		Jan. 24, 1953	8.47	4,560
	Apr. 6, 1939	6.78	2,690		Apr. 7, 1953	6.77	2,690
1940	Jan. 15, 1940	b7.91	-		May 23, 1953	6.67	2,610
	Feb. 11, 1940	b8.00	-	1954	May 4, 1954	6.07	2,080
	Mar. 15, 1940	12.19	10,900	1955	Feb. 7, 1955	(e)	(e)
	Apr. 9, 1940	7.16	3,050		Aug. 13, 1955	10.29	7,330
	May 21, 1940	9.35	5,780		Aug. 19, 1955	15.22	18,000
	June 2, 1940	8.40	4,460	1956	Oct. 14, 1955	12.55	11,700
1941	Feb. 7, 1941	8.00	3,960		Feb. 6, 1956	6.78	2,650
1942	Aug. 9, 1942	8.92	5,160	1957	Dec. 15, 1956	6.50	2,400
	Aug. 14, 1942	7.30	3,190		Jan. 23, 1957	b6.74	-
	Aug. 18, 1942	6.79	2,700	1958	Dec. 21, 1957	8.29	4,320
	Sept. 28, 1942	7.03	2,920		Jan. 22, 1958	7.08	2,940
1943	Dec. 30, 1942	7.40	3,290		Feb. 28, 1958	9.04	5,340
	Feb. 11, 1943	6.90	2,800		Apr. 6, 1958	7.15	3,010
	May 26, 1943	6.80	2,710	1959	Jan. 2, 1959	b7.59	2,310
1944	Nov. 9, 1943	6.71	2,630	1960	Dec. 29, 1959	6.94	2,800
	Jan. 6, 1944	7.86	3,790		Jan. 3, 1960	7.03	2,890
	Mar. 7, 1944	6.86	2,760		Sept. 12, 1960	8.12	4,100
	Mar. 13, 1944	8.46	4,540	1961	Feb. 19, 1961	b7.28	-
	Apr. 24, 1944	8.15	4,140		Feb. 26, 1961	6.95	2,810

b Backwater from ice.

d Daily mean discharge.

e Unknown, believed to have exceeded base.

3975. Walnut Brook near Flemington, N.J.

Location.--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. Area of lakes, ponds, and swamps, 0 sq mi.

Gage.--Recording gage above concrete control. Datum of gage is 267.33 ft above mean sea level, unadjusted.

Stage-discharge relation.--Defined by current-meter measurements below 120 cfs and extended above by logarithmic plotting.

Bankfull stage.--3 ft.

Remarks.--Base for partial-duration series, 100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936a/	Apr. 11, 1936	1.81	26	1947	May 5, 1947	2.41	141
1937	Dec. 20, 1936	2.37	130	1948	Apr. 1, 1948	2.29	109
	Feb. 22, 1937	2.44	165		May 13, 1948	2.31	114
					June 28, 1948	2.36	127
1938	Oct. 23, 1937	2.22	102	1949	Dec. 30, 1948	2.35	124
	Nov. 13, 1937	2.43	161				
	Jan. 25, 1938	2.34	134	1950	Mar. 23, 1950	2.20	88
	July 20, 1938	2.25	110				
	July 21, 1938	2.29	168	1951	Nov. 25, 1950	2.74	286
	July 22, 1938	2.34	134		Dec. 8, 1950	2.44	165
	July 23, 1938	2.39	148		Feb. 21, 1951	2.26	112
	Sept. 20, 1938	2.33	131		Mar. 30, 1951	2.56	208
	Sept. 21, 1938	2.82	326				
1939	Dec. 6, 1938	2.28	131	1952	Nov. 7, 1951	2.74	286
	Feb. 3, 1939	2.54	225		Dec. 21, 1951	2.42	158
	Feb. 28, 1939	2.31	140		Feb. 4, 1952	2.30	122
	Apr. 6, 1939	2.46	193		Mar. 11, 1952	2.36	139
	Apr. 19, 1939	2.40	170		Apr. 28, 1952	2.51	189
	May 21, 1939	2.56	157		May 25, 1952	2.34	134
					June 1, 1952	2.22	102
1940	Mar. 15, 1940	2.72	311	1953	Nov. 22, 1952	2.24	102
	Apr. 8, 1940	2.70	300		Dec. 5, 1952	2.35	124
	Apr. 20, 1940	2.24	120		Dec. 11, 1952	2.32	116
1941	Dec. 16, 1940	2.22	115		Jan. 24, 1953	2.53	180
	Dec. 28, 1940	2.18	104		Mar. 4, 1953	2.39	135
	Feb. 7, 1941	2.40	170		Mar. 13, 1953	2.43	147
1942	Dec. 13, 1941	2.49	182		Mar. 15, 1953	2.40	138
	Mar. 22, 1942	2.25	123		Apr. 7, 1953	2.50	169
	Aug. 9, 1942	2.83	331		May 23, 1953	2.25	100
	Aug. 13, 1942	2.33	147	1954	Mar. 20, 1954	2.24	97
	Sept. 27, 1942	2.18	104				
1943	Feb. 11, 1943	2.32	128	1955	Aug. 13, 1955	2.85	314
	May 20, 1943	2.30	122		Aug. 18, 1955	3.02	410
	May 26, 1943	2.26	112	1956	Oct. 14, 1955	3.03	416
	June 26, 1943	2.45	168				
1944	Nov. 9, 1943	2.27	114	1957	Apr. 5, 1957	2.34	134
	Jan. 6, 1944	2.55	204	1958	Dec. 20, 1957	2.47	175
	Mar. 7, 1944	2.24	107		Feb. 28, 1958	2.56	208
	Mar. 13, 1944	2.28	117		Apr. 6, 1958	2.25	109
	Apr. 24, 1944	2.29	119	1959	Oct. 26, 1958	2.28	117
1945	July 18, 1945	3.30	645		Mar. 6, 1959	2.29	119
1946	Nov. 29, 1945	2.25	100	1960	Apr. 3, 1960	2.24	106
	Dec. 26, 1945	b2.32	-		Sept. 12, 1960	2.30	133
	June 2, 1946	2.35	124	1961	Mar. 23, 1961	2.22	112
1947	May 1, 1947	2.29	109				

a For period Apr. 8 to Sept. 30, 1936.

b Backwater from ice.

3980. Neshanic River at Reaville, N.J.

Location.--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. Area of lakes, ponds, and swamps, 0 sq mi.

Gage.--Recording. Datum of gage is 109.46 ft above mean sea level, unadjusted.

Stage-discharge relation.--Defined by current-meter measurements below 1,700 cfs and extended to 8,830 cfs on basis of slope-area measurement 0.7 mile downstream (adjusted to gaging site).

Bankfull stage.--9 ft.

Remarks.--Base for partial-duration series, 1,600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Feb. 17, 1931	6.07	1,100	1946	July 22, 1946	7.34	1,760
1932	Mar. 28, 1932	8.75	2,730		July 23, 1946	8.28	2,360
1933	Nov. 7, 1932	9.48	3,800	1947	May 5, 1947	6.43	1,240
	Nov. 10, 1932	9.62	4,000	1948	Nov. 8, 1947	8.05	2,200
	Nov. 19, 1932	9.44	3,750		Nov. 12, 1947	7.60	1,920
	Aug. 23, 1933	10.80	5,970		Feb. 18, or 19 1948	8.30	2,370
1934	Mar. 5, 1934	9.35	3,640		June 20, 1948	8.82	2,730
1935	Feb. 14, 1935	7.17	1,680		June 28, 1948	8.16	2,280
	July 9, 1935	8.67	2,660	1949	Dec. 30, 1948	8.22	2,310
1936	Jan. 3, 1936	9.12	3,340		Jan. 5, 1949	7.76	2,020
	Jan. 9, 1936	8.79	2,710	1950	Mar. 23, 1950	7.77	2,020
	Mar. 11, 1936	7.91	2,110	1951	Nov. 25, 1950	10.40	5,220
	Apr. 6, 1936	7.56	1,900		Dec. 8, 1950	8.10	2,240
1937	Dec. 20, 1936	8.50	2,510		Feb. 7, 1951	7.80	2,040
	Feb. 22, 1937	7.51	1,870		Mar. 30, 1951	8.39	2,430
	Aug. 11, 1937	7.69	1,970	1952	Nov. 7, 1951	10.37	5,170
1938	Nov. 13, 1937	8.60	2,580		Dec. 21, 1951	8.79	2,710
	July 20, 1938	9.00	3,200		Feb. 4, 1952	7.26	1,690
	July 23, 1938	9.12	3,340		Mar. 11, 1952	8.04	2,190
	Sept. 21, 1938	10.74	5,850		Apr. 28, 1952	8.68	2,640
	Sept. 27, 1938	7.66	1,960		May 25, 1952	7.84	2,050
1939	Dec. 6, 1938	7.31	1,740		June 1, 1952	7.19	1,640
	Feb. 3, 1939	8.62	2,580	1953	Nov. 22, 1952	8.67	2,630
	Feb. 28, 1939	8.11	2,240		Dec. 11, 1952	8.13	2,250
	Apr. 6, 1939	7.33	1,740		Jan. 24, 1953	8.43	2,460
	Apr. 19, 1939	8.42	2,440		Mar. 13, 1953	7.70	1,960
1940	Mar. 15, 1940	9.04	3,250		Mar. 15, 1953	8.45	2,480
	Apr. 8, 1940	8.76	2,690		Apr. 7, 1953	8.32	2,380
1941	Feb. 7, 1941	8.39	2,430	1954	Dec. 14, 1953	7.26	1,690
1942	Dec. 14, 1941	7.30	1,740	1955	Nov. 21, 1954	7.36	1,750
	Aug. 9, 1942	12.00	9,150		Mar. 22, 1955	7.32	1,720
	Aug. 13, 1942	8.73	2,670		Aug. 13, 1955	9.20	3,440
1943	Dec. 30, 1942	7.52	1,870		Aug. 19, 1955	11.90	8,830
	Feb. 11, 1943	7.62	1,930	1956	Oct. 14, 1955	10.81	5,990
1944	Jan. 6, 1944	8.51	2,520	1957	Apr. 6, 1957	7.49	1,830
	Mar. 13, 1944	7.63	1,940	1958	Dec. 20, 1957	8.49	2,680
	Apr. 24, 1944	7.15	1,650		Jan. 22, 1958	7.78	2,040
1945	Jan. 1, 1945	7.29	1,730		Feb. 28, 1958	9.21	3,450
	Feb. 22, 1945	8.43	-		Apr. 6, 1958	8.60	2,770
	July 18, 1945	12.33	10,300	1959	Jan. 2, 1959	7.37	1,750
	Aug. 1, 1945	7.55	1,890	1960	Apr. 4, 1960	7.13	1,610
	Sept. 11, 1945	7.31	1,750		Sept. 12, 1960	8.15	2,340
1946	Nov. 29, 1945	7.20	1,680	1961	Jan. 1, 1961	7.07	-
	June 2, 1946	10.03	4,610		Mar. 23, 1961	6.99	1,540

a Backwater from ice.

3985. North Branch Raritan River near Far Hills, N.J.

Location.--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. Area of lakes, ponds, and swamps, 0.2 sq mi.

Gage.--Nonrecording prior to June 18, 1925; recording thereafter at sites above masonry dam. Datum of gage is 224.49 ft above mean sea level (New Jersey Geological Survey bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 500 cfs and extended above on basis of weir formula.

Remarks.--Only annual peaks are shown prior to 1926. Base for partial-duration series, 700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1919	July 23, 1919	7.6	7,000	1943	Dec. 30, 1942	3.63	870
1922	Mar. 7, 1922	5.1	2,450		May 26, 1943	3.57	819
1923	Mar. 16, 1923	4.0	1,220	1944	Mar. 7, 1944	3.93	1,140
1924	Apr. 6, 1924	4.1	1,320		Mar. 13, 1944	3.85	1,060
1925	July 31, 1925	3.7	947		Mar. 23, 1944	3.47	737
					Apr. 24, 1944	3.60	845
1926	Jan. 18, 1926	4.01	1,230	1945	Jan. 1, 1945	4.06	1,260
1927	July 23, 1927	3.62	857	1946	Dec. 26, 1945	3.45	720
1928	Nov. 18, 1927	4.64	1,850		May 12, 1946	4.23	1,430
	Feb. 15, 1928	3.77	1,010		June 2, 1946	3.61	854
	Feb. 23, 1928	3.50	772		July 23, 1946	3.97	1,170
	July 5, 1928	4.49	1,750	1947	Mar. 14, 1947	3.49	753
1929	Feb. 7, 1929	3.80	1,040	1948	Nov. 8, 1947	4.21	1,420
	Feb. 26, 1929	3.60	857		Nov. 12, 1947	3.62	869
	Apr. 26, 1929	3.75	994		Apr. 1, 1948	3.60	852
1930	Mar. 8, 1930	3.29	615	1949	Dec. 30, 1948	4.31	1,520
1931	July 10, 1931	4.10	1,320		Jan. 6, 1949	3.90	1,120
1932	Mar. 28, 1932	3.76	1,000	1950	Mar. 23, 1950	3.08	448
1933	Nov. 1, 1932	3.95	1,180	1951	Nov. 25, 1950	4.13	1,340
	Nov. 10, 1932	3.84	1,080		Feb. 7, 1951	3.67	913
	Nov. 19, 1932	4.26	1,480		Mar. 30, 1951	4.10	1,310
	Aug. 24, 1933	3.50	772		July 28, 1951	4.10	1,310
	Sept. 15, 1933	3.88	1,110		Aug. 12, 1951	3.99	1,210
1934	Mar. 5, 1934	4.37	1,580	1952	Nov. 7, 1951	4.76	2,010
	June 19, 1934	3.50	772		Dec. 21, 1951	3.84	1,060
	Sept. 30, 1934	5.24	2,630		Mar. 11, 1952	4.09	1,290
1935	Oct. 6, 1934	3.44	724		May 25, 1952	3.94	1,150
					June 1, 1952	3.81	1,030
1936	Jan. 3, 1936	4.81	-		Sept. 1, 1952	3.94	1,150
	Mar. 11, 1936	4.60	1,860	1953	Nov. 22, 1952	4.07	1,270
	Apr. 5, 1936	4.24	1,480		Jan. 24, 1953	4.18	1,380
1937	Dec. 20, 1936	3.91	1,140		Mar. 13, 1953	3.50	759
	Feb. 22, 1937	4.07	1,270		Apr. 7, 1953	3.67	903
1938	Nov. 13, 1937	3.71	956	1954	Aug. 31, 1954	3.18	513
	Jan. 25, 1938	3.80	1,040	1955	Nov. 21, 1954	3.77	993
	July 23, 1938	3.69	938		Feb. 7, 1955	4.12	1,320
	Aug. 6, 1938	4.09	1,290		Aug. 13, 1955	4.34	1,550
	Sept. 21, 1938	5.31	2,700		Aug. 19, 1955	4.99	2,280
1939	Feb. 3, 1939	3.37	657	1956	Oct. 14, 1955	5.33	2,710
1940	Jan. 15, 1940	3.44	703	1957	Apr. 6, 1957	3.19	518
	Mar. 15, 1940	5.85	3,410	1958	Dec. 21, 1957	3.79	1,010
	Apr. 8, 1940	3.60	835		Jan. 22, 1958	3.67	903
	June 1, 1940	3.47	728		Feb. 28, 1958	4.00	1,200
1941	Feb. 7, 1941	4.05	1,240		Apr. 6, 1958	3.62	860
1942	Mar. 3, 1942	3.46	729	1959	Nov. 29, 1958	3.44	710
	Aug. 10, 1942	5.75	3,280	1960	Aug. 19, 1960	4.29	750
	Aug. 14, 1942	4.09	1,290		Sept. 12, 1960	3.78	1,000
	Sept. 27, 1942	3.69	921	1961	Feb. 26, 1961	3.41	686
1943	Nov. 25, 1942	3.65	887				

a Backwater from ice.

b Backwater from debris.

3995. Lamington (Black) River near Pottersville, N.J.
(Published as "Black River" prior to October 1952)

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. Area of lakes, ponds, and swamps, 1.6 sq mi.

Gage.--Nonrecording prior to July 1, 1922; recording thereafter. Concrete control since July 1, 1937. On downstream side of highway bridge at Pottersville, 1.1 miles downstream, at different datum prior to July 1, 1922. Datum of gage is 284.14 ft above mean sea level (New Jersey Geological Survey bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 760 cfs prior to July 1937, and below 380 cfs thereafter. Both relations extended on basis of slope-area measurement of 1,700 cfs.

Bankfull stage.--5 ft.

Remarks.--Base for partial-duration series, 380 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1896	Feb. 6, 1896	-	2,600	1936	Mar. 12, 1936	3.55	818
1922	Feb. 2, 1922	3.20	390	Mar. 18, 1936	2.86	408	
	July 1, 1922	3.76	970	Apr. 6, 1936	3.38	704	
	July 3, 1922	3.25	624	1937	Feb. 22, 1937	2.92	438
	Sept. 4, 1922	3.04	502		1938	Jan. 25, 1938	3.39
1923	Jan. 1, 1923	2.92	438	July 23, 1938	3.12	420	
	Mar. 16, 1923	3.00	450	Sept. 21, 1938	3.97	996	
1924	Jan. 16, 1924	3.33	673	1939	Apr. 19, 1939	3.13	425
	Apr. 6, 1924	3.54	811	1940	Jan. 15, 1940	a3.54	-
	Sept. 30, 1924	3.00	480		Mar. 15, 1940	5.34	2,630
1925	Feb. 10, 1925	3.35	686		June 1, 1940	3.13	425
	July 31, 1925	3.45	750		July 11, 1940	3.27	502
	1926	Jan. 18, 1926	3.49	776	1941	Feb. 7, 1941	3.65
Feb. 25, 1926		2.91	433	1942	Aug. 9, 1942	3.28	508
1927	Jan. 20, 1927	a2.83	-		Aug. 10, 1942	4.13	1,140
	July 23, 1927	3.15	564		Aug. 14, 1942	4.60	1,640
	Sept. 18, 1942	3.84	892				
1928	Nov. 3, 1927	3.37	698	Sept. 27, 1942	3.31	526	
	Nov. 17, 1927	4.75	1,800	1943	Dec. 22, 1942	a3.00	-
	Feb. 14, 1928	3.70	925		Dec. 30, 1942	3.30	520
	Feb. 23, 1928	3.05	508		May 26, 1943	3.17	445
	July 11, 1928	3.31	660		1944	Mar. 7, 1944	3.37
1929	Feb. 7, 1929	3.80	1,000	Mar. 13, 1944		3.49	634
	Feb. 26, 1929	3.28	590	Apr. 24, 1944		3.38	568
1930	June 10, 1930	2.78	355	1945	Jan. 1, 1945	3.63	731
1931	Nov. 17, 1930	2.94	449		July 22, 1945	4.20	1,200
	July 10, 1931	3.35	686	1946	Nov. 22, 1945	3.34	544
1932	Mar. 28, 1932	2.83	375		Dec. 25, 1945	a3.66	450
	Nov. 1, 1932	3.14	558		May 12, 1946	3.86	908
1933	Nov. 10, 1932	3.10	535		July 23, 1946	3.66	752
	Nov. 19, 1932	4.14	1,270	1947	May 5, 1947	3.15	410
	Aug. 23, 1933	3.09	530		July 22, 1947	3.34	544
	Sept. 15, 1933	3.34	679	1948	Nov. 8, 1947	3.55	675
	1934	Mar. 3, 1934	a3.33		-	Nov. 12, 1947	3.09
Mar. 4, 1934		a3.51	-		Apr. 1, 1948	3.40	580
Mar. 5, 1934		4.28	1,390	1949	Dec. 30, 1948	3.60	710
1935	Feb. 14, 1935	3.45	750		Jan. 5, 1949	3.40	580
	July 8, 1935	3.50	783	1950	June 1, 1950	2.73	242
	July 9, 1935	3.35	686		1951	Nov. 25, 1950	3.36
1936	Oct. 30, 1935	3.36	692	Feb. 7, 1951	3.59	703	
	Jan. 3, 1936	a4.19	780	Mar. 30, 1951	3.71	788	
	Jan. 9, 1936	2.92	438				

a Backwater from ice.

Peak stages and discharges of Lamington (Black) River near Pottersville, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	July 28, 1951	3.90	940	1956	Oct. 14, 1955	4.41	1,420
1952	Nov. 7, 1951	3.93	964		July 27, 1956	3.29	514
	Dec. 21, 1951	3.35	550		Sept. 6, 1956	3.48	628
	Mar. 11, 1952	3.47	622	1957	Apr. 6, 1957	2.88	307
	May 25, 1952	3.40	580	1958	Jan. 22, 1958	3.62	724
	Sept. 1, 1952	4.54	1,570		Apr. 6, 1958	3.09	405
1953	Nov. 22, 1952	3.24	444	1959	Jan. 21, 1959	a3.64	-
	Dec. 11, 1952	3.12	392		Mar. 6, 1959	2.99	341
	Jan. 24, 1953	3.35	550	1960	July 30, 1960	3.11	400
	Apr. 7, 1953	3.19	422		Aug. 19, 1960	3.11	400
1954	Aug. 31, 1954	2.80	275		Sept. 12, 1960	3.19	440
1955	Feb. 6, 1955	4.14	1,150	1961	Feb. 25, 1961	3.01	350
	Aug. 13, 1955	5.24	2,480				
	Aug. 18, 1955	4.71	1,770				

a Backwater from ice.

4000. North Branch Raritan River near Raritan, N.J.
(Published as "at Milltown" prior to 1944)

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. Area of lakes, ponds, and swamps, 1.9 sq mi.

Gage.--Nonrecording prior to Oct. 17, 1936; recording thereafter. Datum of gage is 50.43 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 6,000 cfs and extended above on basis of slope-area measurements of 11,900 and 16,500 cfs, and contracted-opening measurement of 20,700 cfs.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1936. Base for partial-duration series, 5,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1896	Feb. 6, 1896	-	19,000	1941	Dec. 28, 1940	7.57	5,140
1924	Apr. 7, 1924	9.5	9,260		Feb. 8, 1941	9.10	8,310
1925	Mar. 19, 1925	a9.0	5,570	1942	Aug. 9, 1942	11.78	15,500
1926	Mar. 7, 1926	8.8	7,630		Aug. 14, 1942	11.33	14,200
1927	Aug. 1, 1927	8.4	6,770		Aug. 16, 1942	8.95	7,960
1928	Nov. 3, 1927	10.0	10,500		Sept. 19, 1942	9.75	9,860
1929	Feb. 7, 1929	9.4	9,020		Sept. 28, 1942	8.01	5,980
1930	Mar. 8, 1930	8.4	6,770	1943	Nov. 25, 1942	7.53	5,060
1931	Mar. 29, 1931	8.0	5,960		Dec. 30, 1942	8.11	6,180
1932	Mar. 28, 1932	9.9	10,300		May 27, 1943	8.94	7,940
1933	Sept. 15, 1933	10.0	10,500	1944	Nov. 9, 1943	7.96	5,880
1934	Sept. 30, 1934	10.6	12,200		Jan. 6, 1944	8.63	7,260
1935	Oct. 6, 1934	8.4	6,770		Mar. 7, 1944	8.00	5,960
1936	Jan. 3, 1936	11.35	14,400		Apr. 25, 1944	8.60	7,190
1937	Dec. 20, 1936	8.60	7,190		Mar. 13, 1944	8.50	6,980
	Feb. 22, 1937	7.85	5,660		Mar. 24, 1944	7.64	5,270
1938	Jan. 25, 1938	8.34	6,560		Apr. 25, 1944	8.60	7,190
	July 23, 1938	8.92	7,900	1945	Jan. 1, 1945	9.22	8,590
	Aug. 6, 1938	8.00	5,960	1946	Dec. 26, 1945	7.87	5,700
	Sept. 21, 1938	12.16	16,500		May 18, 1946	7.98	5,920
1939	Feb. 3, 1939	8.67	7,410		June 2, 1946	10.18	11,000
	Feb. 28, 1939	7.56	5,120		July 23, 1946	9.09	8,290
	Apr. 19, 1939	7.76	5,490	1947	Apr. 5, 1947	7.86	5,680
1940	Mar. 15, 1940	11.62	15,100	1948	Nov. 8, 1947	8.88	7,810
	Apr. 9, 1940	8.72	7,450		Nov. 12, 1947	8.50	6,980
	June 2, 1940	8.07	6,100		Dec. 20, 1948	b9.39	-
					May 13, 1948	8.38	6,730

a Occurred Feb. 12, 1925, backwater from ice.

b Backwater from ice.

Peak stages and discharges of North Branch Raritan River near Raritan, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Dec. 30, 1948	11.25	14,000	1954	Dec. 14, 1953	7.57	4,590
	Jan. 6, 1949	8.55	7,080	1955	Nov. 21, 1954	8.71	5,320
1950	Mar. 23, 1950	6.56	3,660		Feb. 7, 1955	-	(c)
1951	Nov. 26, 1950	9.66	9,640		Aug. 13, 1955	12.70	17,400
	Dec. 8, 1950	8.21	6,380		Aug. 19, 1955	13.59	20,700
	Feb. 7, 1951	8.17	6,300	1956	Oct. 15, 1955	12.68	17,300
	Mar. 31, 1951	8.99	8,060		Sept. 7, 1956	8.38	5,710
	July 28, 1951	7.92	5,800	1957	Apr. 5, 1957	7.65	4,680
1952	Nov. 7, 1951	10.63	10,900	1958	Dec. 21, 1957	8.58	6,060
	Dec. 21, 1951	9.66	8,470		Jan. 22, 1958	8.07	5,220
	Mar. 11, 1952	9.12	7,240		Feb. 28, 1958	8.67	6,240
	May 25, 1952	9.00	6,980		Apr. 6, 1958	8.27	5,520
	June 1, 1952	8.80	6,550	1959	Nov. 29, 1958	8.30	5,570
	Sept. 1, 1952	9.37	7,800	1960	Sept. 12, 1960	8.57	6,050
1953	Nov. 22, 1952	8.30	5,600	1961	Mar. 23, 1961	8.42	5,780
	Dec. 11, 1952	8.08	5,260				
	Jan. 24, 1953	9.14	7,290				
	Mar. 13, 1953	8.45	5,860				
	Apr. 7, 1953	9.27	7,570				

c Unknown, may have exceeded base.

4005. Raritan River at Manville, N.J.
(Published as "at Finderne" 1903-7)Location.--Lat 40°33'18", long 74°35'02", on left bank at downstream end of highway bridge at Manville, Somerset County, 1.4 miles upstream from Millstone River.Drainage area.--490 sq mi. Area of lakes, ponds, and swamps, 3.2 sq mi.Gage.--Nonrecording prior to Aug. 15, 1923; recording thereafter. Datum of gage is 20.61 ft above mean sea level, datum of 1929.Stage-discharge relation.--Often affected by backwater from Millstone River. Prior to 1945, relation defined by current-meter measurements below 14,000 cfs and extended above on basis of slope-area measurements of 17,700 and 36,100 cfs. Since 1945, measured fall to station at Bound Brook used as a factor in computing discharge; relation defined by current-meter measurements below 18,000 cfs and extended above on basis of contracted-opening measurements of 27,100 cfs and 33,300 cfs.Bankfull stage.--11 ft.Remarks.--Only annual peaks are shown prior to 1924. Base for partial-duration series, 10,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Oct. 10, 1903	18.5	28,600	1926	Sept. 7, 1926	12.25	11,200
1905	Jan. 7, 1905	15.4	18,600	1927	Aug. 1, 1927	12.60	12,100
1906	Mar. 4, 1906	13.3	13,600	1928	Oct. 19, 1927	14.1	15,600
1907a/	Mar. 15, 1907	12.5	11,900		Nov. 4, 1927	11.58	10,000
1909	Feb. 24, 1909	14.0	15,300		Nov. 18, 1927	12.89	12,700
1910	Jan. 22, 1910	15.5	18,900		Dec. 8, 1927	12.64	12,100
1911	Sept. 1, 1911	12.0	10,800		Feb. 8, 1928	11.94	10,600
1912	Mar. 13, 1912	16.0	20,400		Feb. 23, 1928	11.97	10,800
1913	Dec. 31, 1912	13.5	14,100	1929	Feb. 7, 1929	11.63	10,000
1914	Mar. 18, 1914	14.0	15,300		Feb. 27, 1929	13.34	13,600
1915	Feb. 2, 1915	17.5	25,200	1930	Mar. 8, 1930	11.93	11,300
1922	Feb. 2, 1922	13.0	13,000	1931	July 11, 1931	11.30	9,690
1923	Mar. 16, 1923	13.5	14,100	1932	Mar. 28, 1932	13.76	14,800
1924	Jan. 17, 1924	11.7	10,200	1933	Nov. 7, 1932	13.47	14,100
	Apr. 7, 1924	15.00	17,500		Nov. 10, 1932	14.53	16,600
1925	Feb. 12, 1925	13.36	15,000		Nov. 20, 1932	14.92	17,300
1926	Feb. 26, 1926	13.0	13,000		Apr. 12, 1933	11.56	10,000

a Period Oct. 1, 1906, to Mar. 31, 1907.

Peak stages and discharges of Raritan River at Manville, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	Aug. 24, 1933	16.22	21,000	1948	Nov. 12, 1947	13.23	11,000
	Sept. 15, 1933	13.18	13,400		May 14, 1948	13.42	11,600
1934	Mar. 5, 1934	14.52	16,600	1949	Dec. 31, 1948	19.8	22,100
1935	Feb. 15, 1935	11.60	10,500		Jan. 6, 1949	14.30	12,600
1936	Jan. 3, 1936	16.10	20,600	1950	Mar. 23, 1950	11.59	8,660
	Jan. 10, 1936	13.04	13,000	1951	Nov. 26, 1950	16.17	18,200
	Mar. 12, 1936	14.85	17,000		Dec. 8, 1950	14.41	13,400
	Mar. 18, 1936	11.60	10,000		Feb. 8, 1951	12.51	10,200
	Apr. 6, 1936	12.78	12,500		Mar. 31, 1951	14.74	13,700
1937	Dec. 20, 1936	14.23	15,800	1952	Nov. 7, 1951	17.17	20,400
1938	Nov. 14, 1937	12.77	12,500		Dec. 21, 1951	16.70	17,100
	Jan. 25, 1938	13.55	14,300		Mar. 11, 1952	15.09	14,300
	July 23, 1938	17.75	26,000		Apr. 28, 1952	12.81	10,500
	Sept. 22, 1938	20.42	36,100		May 25, 1952	13.10	11,700
1939	Jan. 31, 1939	11.70	10,200		June 2, 1952	13.78	12,300
	Feb. 4, 1939	14.99	17,500		Sept. 2, 1952	12.59	10,300
	Feb. 28, 1939	12.08	11,000	1953	Nov. 22, 1952	13.5	12,700
	Apr. 7, 1939	12.25	11,200		Dec. 6, 1952	12.2	10,000
	Apr. 20, 1939	12.53	11,900		Dec. 11, 1952	12.6	10,500
1940	Mar. 4, 1940	11.60	10,000		Jan. 24, 1953	14.7	15,200
	Mar. 15, 1940	18.15	27,400		Mar. 13, 1953	13.3	11,400
	Apr. 9, 1940	14.80	17,000		Mar. 16, 1953	13.1	11,200
1941	Feb. 8, 1941	15.00	17,500		Apr. 7, 1953	14.7	15,400
1942	Aug. 9, 1942	19.70	33,200	1954	Dec. 14, 1953	12.1	9,820
	Aug. 14, 1942	16.67	22,500	1955	Nov. 21, 1954	14.8	14,600
1943	Dec. 31, 1942	13.73	14,500		Aug. 13, 1955	19.9	26,600
1944	Nov. 9, 1943	12.80	12,600		Aug. 19, 1955	b22.1	34,600
	Jan. 6, 1944	15.09	18,000	1956	Oct. 15, 1955	b19.6	26,200
	Mar. 7, 1944	12.36	11,600	1957	Apr. 5, 1957	13.1	10,800
	Mar. 13, 1944	13.82	15,100	1958	Dec. 21, 1957	14.1	13,000
	Apr. 25, 1944	13.98	15,500		Dec. 26, 1957	13.4	12,400
1945	Jan. 2, 1945	14.4	13,800		Jan. 15, 1958	12.2	10,300
	Feb. 27, 1945	11.89	9,050		Jan. 22, 1958	13.1	11,400
	July 20, 1945	12.63	10,400		Feb. 28, 1958	16.1	16,500
1946	June 2, 1946	17.76	19,900		Apr. 7, 1958	13.5	11,500
	July 24, 1946	13.60	11,800	1959	Oct. 26, 1958	11.96	9,200
1947	Apr. 5, 1947	10.89	7,480	1960	Dec. 29, 1959	12.3	10,100
					Apr. 4, 1960	12.5	10,100
1948	Nov. 9, 1947	13.57	11,900		Sept. 13, 1960	15.3	14,700
				1961	Mar. 24, 1961	13.55	11,500

b Occurred at different time than peak discharge.

4010. Stony Brook at Princeton, N.J.

Location--Lat 40°19'59", long 74°40'56", on right bank 12 ft downstream from bridge on U.S. Highway 206, 1.6 miles southwest of Princeton, Mercer County, and 4 miles upstream from Lake Carnegie.

Drainage area--44.5 sq mi.

Gage--Recording. Datum of gage is 63.30 ft above mean sea level (New Jersey Geological Survey bench mark).

Stage-discharge relation--Defined by current-meter measurements below 3,100 cfs and extended above by logarithmic plotting.

Bankfull stage--8 ft.

Remarks--Base for partial-duration series, 1,800 cfs.

Peak stages and discharges of Stony Brook at Princeton, N. J.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Dec. 14, 1953	8.66	3,000	1958	Jan. 22, 1958	7.57	2,360
	Mar. 3, 1954	7.10	2,120		Jan. 25, 1958	7.06	2,100
1955	Nov. 21, 1954	8.55	2,930		Feb. 28, 1958	10.46	4,150
	Feb. 7, 1955	7.28	2,210		Aug. 6, 1958	8.94	3,160
	Mar. 22, 1955	6.57	1,840		July 6, 1958	6.72	1,920
	Aug. 13, 1955	11.90	5,130	1959	Nov. 29, 1958	7.62	2,390
	Aug. 19, 1955	11.42	4,790		Jan. 2, 1959	6.53	1,820
	Aug. 22, 1955	7.22	2,180		Mar. 6, 1959	7.73	2,460
1956	Oct. 15, 1955	9.35	3,420	1960	July 30, 1960	8.65	2,990
	Feb. 18, 1956	7.14	2,140		Sept. 12, 1960	10.85	4,400
	Mar. 14, 1956	7.61	2,390	1961	Jan. 1, 1961	7.33	2,240
1957	Apr. 5, 1957	7.37	2,260		Feb. 19, 1961	7.72	2,450
	Dec. 21, 1957	7.53	2,340		Mar. 23, 1961	8.83	3,100
1958	Dec. 26, 1957	6.66	1,890		Apr. 13, 1961	7.35	2,250
					July 29, 1961	9.44	3,480

4015. Millstone River near Kingston, N.J.

Location.--Lat 40°23'05", long 74°37'29", on left bank at Princeton sewage-disposal plant, 0.8 mile north of Kingston, Middlesex County, 0.8 mile downstream from Heathcote Brook, and 1.1 miles downstream from Lake Carnegie Dam.

Drainage area.--171 sq mi. Area of lakes, ponds, and swamps, 4.5 sq mi.

Gage.--Recording. Datum of gage is 38.00 ft above mean sea level (New Jersey Geological Survey bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 4,100 cfs and extended above by logarithmic plotting.

Bankfull stage.--5 ft.

Remarks.--Possible diversion to or inflow from Delaware and Raritan Canal above station. Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933a	Aug. 24, 1933	10.60	4,950	1943	Mar. 7, 1943	8.17	2,880
1934	Mar. 5, 1934	8.85	3,270		May 20, 1943	7.33	2,230
	Sept. 18, 1934	7.25	2,100	1944	Nov. 9, 1943	7.82	2,600
1935	Sept. 6, 1935	6.84	1,820		Jan. 5, 1944	8.47	3,130
					Jan. 6, 1944	11.03	5,830
1936	Jan. 3, 1936	-	4,500		Mar. 13, 1944	10.35	5,010
	Jan. 10, 1936	9.43	4,050		Apr. 25, 1944	9.50	4,100
	Mar. 12, 1936	9.09	3,710		Sept. 15, 1944	11.39	6,300
1937	Dec. 20, 1936	8.77	3,440	1945	Nov. 28, 1944	8.13	2,840
					Jan. 2, 1945	8.20	2,900
1938	Jan. 25, 1938	7.82	2,380		Feb. 23, 1945	7.89	2,650
	June 28, 1938	8.11	2,580		July 20, 1945	8.22	2,530
	July 23, 1938	13.37	8,600		July 23, 1945	9.28	3,340
	Sept. 21, 1938	14.12	9,820		Sept. 12, 1945	8.28	2,580
1939	Jan. 31, 1939	8.61	2,990		Sept. 19, 1945	7.81	2,250
	Feb. 4, 1939	10.90	5,260	1946	Nov. 29, 1945	9.02	3,140
	Apr. 7, 1939	8.96	3,280		Dec. 26, 1945	8.17	2,500
1940	Mar. 4, 1940	8.27	2,960		Mar. 27, 1946	8.16	2,490
	Mar. 15, 1940	9.68	4,280		June 2, 1946	12.79	7,080
	Apr. 9, 1940	10.50	5,190		July 23, 1946	9.14	3,230
	May 31, 1940	7.40	2,280	1947	Apr. 5, 1947	6.25	1,320
1941	Feb. 8, 1941	9.37	3,970	1948	Nov. 9, 1947	8.38	2,580
1942	Aug. 9, 1942	10.10	4,730		Nov. 12, 1947	9.09	3,230
					Apr. 1, 1948	8.35	2,660
1943	Dec. 30, 1942	8.58	3,220	1949	Dec. 30, 1948	12.86	7,230
	Feb. 11, 1943	7.07	2,050		Jan. 6, 1949	7.57	2,130

a Period May 24 to Sept. 30, 1933.

4020. Millstone River at Blackwells Mills, N.J.

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.

Drainage area.--258 sq mi. Area of lakes, ponds, and swamps, 4.9 sq mi.

Gage.--Nonrecording prior to Aug. 17, 1928; recording thereafter. Datum of gage is 26.97 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 6,900 cfs and extended above on basis of slope-area measurement of 18,300 cfs.

Bankfull stage.--6 ft.

Remarks.--Possible diversion to or inflow from Delaware & Raritan Canal above station. Only annual peaks, from graph of twice-daily gage readings, prior to 1929. Base for partial-duration series, 3,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1921	Aug. 8, 1921	8.55	4,190	1945	Nov. 22, 1944	7.19	3,060
1922	Mar. 8, 1922	7.50	3,420		Nov. 28, 1944	7.61	3,420
1923	Mar. 17, 1923	8.2	3,840		Jan. 2, 1945	7.39	3,220
1924	Apr. 7, 1924	11.0	7,900		Feb. 23, 1945	7.38	3,210
1925	Feb. 12, 1925	10.05	6,340		Feb. 27, 1945	7.28	3,130
					Sept. 19, 1945	7.32	3,170
1926	Sept. 7, 1926	11.0	7,900				
1927	July 23, 1927	10.8	7,540	1946	Nov. 29, 1945	8.91	4,790
1928	Oct. 18, 1927	10.4	7,000		Dec. 26, 1945	8.68	4,520
					Jan. 1, 1946	7.17	3,050
1929	Feb. 27, 1929	8.22	4,000		Mar. 27, 1946	7.22	3,090
	Mar. 6, 1929	7.45	3,280		June 3, 1946	12.37	10,500
					July 24, 1946	8.15	3,950
1930	Mar. 8, 1930	7.3	3,140	1947	Apr. 6, 1947	5.79	2,130
1931	June 17, 1931	6.94	2,810				
1932	Mar. 28, 1932	10.25	6,650	1948	Nov. 9, 1947	7.93	3,730
					Nov. 12, 1947	8.17	3,970
1933	Nov. 10, 1932	9.22	5,200		Feb. 18, 1948	as 8.38	3,100
	Nov. 19, 1932	10.21	6,650		Apr. 2, 1948	7.51	3,330
	Mar. 21, 1933	7.44	3,270		June 20, 1948	7.23	3,090
	Aug. 24, 1933	9.77	5,980	1949	Dec. 31, 1948	13.84	14,000
1934	Mar. 5, 1934	9.32	5,300		Jan. 6, 1949	7.88	3,680
1935	Feb. 16, 1935	6.91	2,810	1950	Feb. 15, 1950	7.70	3,500
					Mar. 23, 1950	7.62	3,430
1936	Jan. 3, 1936	10.05	6,330	1951	Nov. 26, 1950	9.21	5,180
	Jan. 10, 1936	8.08	3,880		Dec. 8, 1950	7.83	3,630
	Mar. 12, 1936	9.27	5,260		Feb. 22, 1951	8.29	4,090
1937	Dec. 20, 1936	7.97	3,800		Mar. 31, 1951	8.01	3,810
					Aug. 13, 1951	7.96	3,760
1938	Jan. 25, 1938	8.00	3,800	1952	Nov. 8, 1951	8.87	4,740
	June 29, 1938	7.20	3,050		Dec. 21, 1951	11.53	8,870
	July 23, 1938	13.22	12,400		Mar. 12, 1952	9.57	5,670
	Sept. 21, 1938	15.29	18,300		Apr. 28, 1952	10.21	6,580
1939	Jan. 31, 1939	as 8.38	3,600		May 26, 1952	8.09	3,890
	Feb. 4, 1939	10.04	6,270		June 2, 1952	7.54	3,360
	Mar. 1, 1939	7.22	3,050	1953	Nov. 23, 1952	7.21	3,060
	Apr. 7, 1939	7.84	3,600		Jan. 25, 1953	9.38	5,400
					Mar. 13, 1953	9.56	5,650
1940	Mar. 4, 1940	8.07	3,870		Mar. 16, 1953	8.15	3,950
	Mar. 15, 1940	9.41	5,440		Apr. 8, 1953	8.81	4,670
	Apr. 9, 1940	9.15	5,100	1954	Dec. 15, 1953	7.12	2,980
	May 31, 1940	7.37	3,200				
1941	Feb. 8, 1941	8.88	4,760	1955	Nov. 22, 1954	8.93	4,820
1942	Aug. 9, 1942	11.57	8,940		Mar. 23, 1955	7.76	3,560
					Aug. 14, 1955	b12.42	-
1943	Dec. 30, 1942	8.90	4,780		Aug. 19, 1955	b12.12	-
	Mar. 7, 1943	7.25	3,100	1956	Oct. 15, 1955	b11.57	-
1944	Jan. 6, 1944	10.05	6,340		Apr. 9, 1956	7.20	3,050
	Mar. 13, 1944	9.07	5,000	1957	Apr. 6, 1957	8.43	4,240
	Apr. 25, 1944	8.80	4,660				
	Sept. 15, 1944	9.92	6,160	1958	Dec. 21, 1957	8.00	3,800

a Backwater from ice.

b Backwater from Raritan River.

Peak stages and discharges of Millstone River at Blackwells Mills, N. J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Feb. 28, 1958	11.05	7,990	1960	Sept. 13, 1960	11.07	8,030
	Apr. 7, 1958	8.44	4,250				
1959	Oct. 26, 1958	7.55	3,360	1961	Jan. 2, 1961	7.40	3,060
	Aug. 9, 1959	7.67	3,460		Feb. 20, 1961	8.15	3,720
					Mar. 24, 1961	9.07	4,670
1960	Apr. 5, 1960	7.68	3,480		Apr. 14, 1961	9.03	4,630
	July 31, 1960	8.77	4,620		July 30, 1961	7.74	3,350

4030. Raritan River at Bound Brook, N.J.

Location.--Lat 40°33'00", long 74°33'05", on left bank 120 ft upstream from Calco Dam and Cuckold Brook, 1.0 mile downstream from Millstone River, and 1.3 miles southwest of borough of Bound Brook, Somerset County.

Drainage area.--779 sq mi. At site used 1904-9, 800 sq mi. Area of lakes, ponds, and swamps, 8.3 sq mi.

Gage.--Nonrecording prior to Jan. 1, 1945; recording thereafter. At site 1.4 miles downstream on highway bridge at different datum 1904-9. Datum of gage is 18.06 ft above mean sea level, datum of 1929.

Stage-discharge relation.--For 1904-9, defined by current-meter measurements below 6,000 cfs and extended above on basis of area-velocity study. Since 1945, defined by current-meter measurements below 17,000 cfs and extended above on basis of slope-area measurement of 30,800 cfs.

Bankfull stage.--4 ft.

Historical data.--Flood of Feb. 6, 1896, stage 18.3 ft (present datum), is highest since before 1800. Stage for this flood was determined by American Cyanamid Co. from surveys to mark in old barn near present gage site. At Fieldville Dam, 3 miles downstream, the highest floods of 1800-1900 (from information in Annual Report of the State Geologist for the years 1894 and 1896) are: Feb. 6, 1896, 32.2 ft; Sept. 24, 1882, 31.2 ft; Nov. 24, 1810, 8 inches to 3 ft lower than 1882; and July 17, 1865, somewhat lower than 1810. For comparison, more recent stages at Fieldville Dam are: Sept. 22, 1938, 27.4 ft; and Aug. 19, 1955, 26.4 ft.

Remarks.--Only annual peaks are shown prior to 1945. Peaks of 1904-9 determined from graph of twice-daily gage readings, and discharge is considered equivalent to present site. Peak stages 1936-42 determined by American Cyanamid Co. and discharge obtained by applying stage-discharge relation determined since 1945. Base for partial-duration series, 12,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Oct. 10, 1903	15.0	32,100	1948	Nov. 9, 1947	9.20	15,000
1905	Jan. 7, 1905	12.4	24,200		Nov. 12, 1947	9.06	14,600
					May 14, 1948	8.84	14,100
1906	Mar. 4, 1906	10.0	17,800				
1907	Sept. 29, 1907	9.3	16,100	1949	Dec. 31, 1948	16.14	30,600
1908	Jan. 12, Feb. 26, 1908	9.0	15,400		Jan. 6, 1949	10.14	17,600
1909	Feb. 25, 1909	8.4	14,100	1950	Mar. 23, 1950	7.80	11,600
1936	Mar. 12, 1936	12.0	21,300	1951	Nov. 26, 1950	11.03	20,200
1937	Dec. 20, 1936	10.0	16,600		Dec. 8, 1950	9.58	16,000
1938	Sept. 22, 1938	16.3	31,000		Feb. 8, 1951	8.12	12,300
1939	Feb. 4, 1939	11.2	19,500		Mar. 31, 1951	10.13	17,600
1942	Aug. 9, 1942	14.2	26,200	1952	Nov. 8, 1951	11.89	21,100
					Dec. 21, 1951	12.53	22,500
1945	Jan. 2, 1945	9.30	15,800		Mar. 12, 1952	10.79	19,500
	Feb. 27, 1945	8.10	12,200		Apr. 28, 1952	9.54	15,900
	July 20, 1945	8.21	12,500		May 26, 1952	8.73	13,800
					June 2, 1952	9.26	15,200
1946	Nov. 29, 1945	8.02	12,100	1953	Nov. 22, 1952	8.61	13,300
	Dec. 26, 1945	8.20	12,500		Dec. 6, 1952	8.06	12,100
	June 3, 1946	13.55	24,800		Dec. 11, 1952	8.18	12,400
	July 24, 1946	9.18	14,900		Jan. 25, 1953	10.30	17,300
1947	Apr. 5, 1947	7.40	10,700		Mar. 13, 1953	9.72	15,900

Peak stages and discharges of Raritan River at Bound Brook, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Mar. 16, 1953	9.06	14,300	1958	Dec. 27, 1957	8.13	12,300
	Apr. 8, 1953	10.21	17,100		Jan. 22, 1958	8.54	13,200
1954	Dec. 14, 1953	7.76	11,500		Feb. 28, 1958	12.09	21,500
					Apr. 7, 1958	9.32	15,000
1955	Nov. 22, 1954	10.07	16,700	1959	Oct. 26, 1958	8.13	12,300
	Feb. 7, 1955	8.15	12,300		Mar. 6, 1959	8.15	12,200
	Aug. 13, 1955	14.68	27,300	1960	Apr. 4, 1960	8.15	12,300
	Aug. 19, 1955	16.20	30,800		Sept. 13, 1960	11.08	19,200
1956	Oct. 15, 1955	14.38	26,700	1961	Mar. 24, 1961	9.59	15,600
1957	Apr. 6, 1957	9.51	15,400		Apr. 14, 1961	9.10	14,400
1958	Dec. 21, 1957	9.40	15,200				

4035. Green Brook at Plainfield, N.J.

Location.--Lat 40°36'53", long 74°25'55", on left bank 20 ft downstream from Sycamore Avenue Bridge in Plainfield, Union County, and 1.0 mile upstream from Stony Brook.

Drainage area.--9.75 sq mi. Area of lakes, ponds, and swamps, 0.1 sq mi.

Gage.--Recording. Datum of gage is 70.37 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 220 cfs and extended above on basis of contracted-opening measurement of 2,890 cfs.

Bankfull stage.--4 ft.

Historical data.--Flood of July 23, 1938, was largest since, and probably exceeded flood of Oct. 9, 1903. Flood of July 26, 1916 (estimated as 2,100 cfs at gage site and 2,200 cfs bypassing gage site) is believed the third largest, and flood of Sept. 21, 1938, is believed the fourth largest flood since at least 1896. This data obtained from a 1944 study by New Jersey Department of Conservation and Economic Development.

Remarks.--During extreme floods considerable flow bypasses gage by overflow from Green Brook basin to adjacent Cedar Brook basin. The overflow returns via Bound Brook to Green Brook 5.1 miles downstream from gage. Only data on flow at gage is shown in table. Estimates of overflow made by New Jersey Department of Conservation and Economic Development are based on flow-over-dam measurements at Lower Seely Dam 4.4 miles upstream from gage. Base for partial-duration series, 380 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938a/	July 23, 1938	5.82	b2,890	1944	Mar. 13, 1944	3.12	560
	Sept. 21, 1938	4.89	c1,750		Apr. 24, 1944	3.00	507
1939	Feb. 3, 1939	2.86	422		Sept. 14, 1944	2.80	425
				1945	Sept. 19, 1945	2.91	469
1940	Mar. 15, 1940	3.36	639				
	Apr. 8, 1940	3.09	516	May 15, 1946	3.03	520	
	May 31, 1940	3.92	950	June 2, 1946	3.08	542	
	July 27, 1940	2.86	422	July 23, 1946	2.83	437	
1941	Feb. 7, 1941	2.88	430	1947	Apr. 5, 1947	2.76	410
	July 12, 1941	2.76	384				
1942	July 27, 1942	2.83	411	1948	Nov. 8, 1947	3.87	955
	Aug. 9, 1942	4.65	d1,500		Nov. 12, 1947	3.26	625
	Aug. 13, 1942	3.45	684		Apr. 1, 1948	3.24	616
	Aug. 16, 1942	3.36	639		Aug. 20, 1948	2.79	421
1943	Dec. 30, 1942	2.80	399	1949	Dec. 30, 1948	3.41	698
	May 12, 1943	3.23	578				
	May 26, 1943	2.85	418	1950	Mar. 23, 1950	2.47	305
1944	Jan. 6, 1944	2.89	461				

a Period May 15 to Sept. 30, 1938. b Estimated peak overflow bypassing gage, about 4,400 cfs. c Estimated peak overflow bypassing gage, about 2,200 cfs. d Estimated peak overflow bypassing gage, about 500 cfs.

Peak stages and discharges of Green Brook at Plainfield, N. J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Dec. 8, 1950	2.77	414	1955	Aug. 19, 1955	3.29	639
	Mar. 30, 1951	2.90	465	1956	Oct. 14, 1955	3.29	639
	July 28, 1951	2.94	482				
1952	Nov. 7, 1951	2.80	425	1957	Apr. 5, 1957	2.41	285
	Dec. 21, 1951	3.07	538	1958	Dec. 21, 1957	3.12	560
	Mar. 11, 1952	3.02	516		Jan. 22, 1958	2.92	473
	May 25, 1952	3.39	688		Feb. 28, 1958	3.21	602
	June 1, 1952	3.89	968		Apr. 6, 1958	3.03	520
	Aug. 21, 1952	2.74	402		Apr. 28, 1958	2.72	395
	Sept. 1, 1952	3.10	551	1959	Nov. 28, 1958	2.67	376
1953	Dec. 5, 1952	2.92	473		Aug. 9, 1959	3.53	760
	Jan. 24, 1953	3.08	542		Sept. 1, 1959	3.33	659
	Mar. 4, 1953	2.69	383	1960	Aug. 31, 1960	2.71	391
	Mar. 13, 1953	4.06	888			3.55	770
	Mar. 16, 1953	2.92	395		Sept. 12, 1960		
	Apr. 7, 1953	3.58	654	1961	Mar. 23, 1961	3.05	529
1954	Sept. 11, 1954	2.75	406				
1955	Aug. 13, 1955	4.32	1,270				

4045. Lawrence Brook at Patricks Corner, N. J.

Location--Lat 40°25'20", long 74°28'45", on right bank 150 ft upstream from Church Lane Bridge at Patricks Corner, Middlesex County, 0.4 mile downstream from Ireland Brook, 2.5 miles upstream from Farrington Dam, and 2.9 miles southwest of Milltown.

Drainage area--29 sq mi, approximately.

Gage--Recording. Altitude of gage is 50 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 500 cfs and extended above by logarithmic plotting.

Remarks--Records not equivalent with station at Farrington Dam, N. J. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922a	July 24, 1922	4.78	230	1926	Sept. 7, 1926	8.40	1,280
1923	Jan. 1, 1923	6.67	784	1927b	Oct. 31, 1926	4.55	292
1924	Apr. 7, 1924	8.70	1,370				
1925	Feb. 11, 1925	6.57	751				

a Period June 21 to Sept. 30, 1922; peak for year probably occurred prior to July 24.
b Period Oct. 1 to Dec. 31, 1926; peak for year probably occurred after Dec. 31.

4050. Lawrence Brook at Farrington Dam, N. J.

Location--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. Area of lakes, ponds, and swamps, 1.6 sq mi.

Gage--Recording gage above concrete dam. Datum of gage is 25.73 ft above mean sea level, datum of 1929.

Stage-discharge relation--Altered when dam spillway was raised in October 1938. Prior to October 1938, defined by current-meter measurements below 510 cfs and extended above on basis of weir formula. Since October 1938, defined by current-meter measurements below 1,100 cfs and extended above on basis of weir formula.

Remarks--Minor effect from regulation of Farrington Dam blowoff gates. Base for partial-duration series, 450 cfs.

Peak stages and discharges of Lawrence Brook at Farrington Dam, N.J.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927 ^a	July 17, 1927	25.76	1,720	1945	Sept. 19, 1945	25.40	749
	Aug. 9, 1927	25.37	1,000				
1928	Oct. 13, 1927	25.00	454	1946	Nov. 29, 1945	25.37	702
	Oct. 18, 1927	25.81	1,830		Dec. 26, 1945	25.23	492
	Dec. 5, 1927	25.12	620		Mar. 27, 1946	25.42	783
	Apr. 24, 1928	25.06	535		May 15, 1946	25.22	478
	July 6, 1928	25.84	1,900		June 2, 1946	25.69	1,280
	July 13, 1928	25.10	590		July 23, 1946	25.57	1,050
1929	Apr. 16, 1929	25.18	705	1947	May 4, 1947	25.20	457
	May 19, 1929	25.08	560	1948	Nov. 12, 1947	25.34	664
1930	Feb. 14, 1930	25.04	505		Apr. 1, 1948	25.23	500
	Mar. 8, 1930	25.00	454		June 20, 1948	25.24	515
1931	Mar. 29, 1931	24.98	429	1949	Dec. 31, 1948	25.51	944
1932	Mar. 28, 1932	25.39	1,040		Jan. 6, 1949	25.22	486
1933	Nov. 10, 1932	25.20	735		Jan. 22, 1949	25.23	500
	Nov. 19, 1932	25.24	795	1950	Feb. 15, 1950	25.20	457
	Mar. 20, 1933	25.02	480		July 10, 1950	25.48	884
	Apr. 12, 1933	25.01	467	1951	Nov. 25, 1950	25.36	686
	Aug. 24, 1933	24.98	429		Feb. 22, 1951	25.26	535
1934	Mar. 5, 1934	25.06	535	1952	Dec. 21, 1951	25.48	808
1935	Oct. 6, 1934	25.14	645		Mar. 11, 1952	25.36	623
	Sept. 6, 1935	25.16	675		Apr. 28, 1952	25.46	776
1936	Oct. 31, 1935	25.08	560		May 25, 1952	25.29	524
	Jan. 3, 1936	25.26	825		June 1, 1952	25.55	925
	Jan. 9, 1936	25.06	535		June 5, 1952	25.24	460
	Mar. 12, 1936	25.13	630		Sept. 1, 1952	25.27	498
1937	Dec. 20, 1936	25.04	505	1953	Jan. 24, 1953	25.30	550
1938	Jan. 25, 1938	24.99	441		Mar. 13, 1953	25.62	1,110
	July 21, 1938	24.99	441		Mar. 16, 1953	25.28	522
	July 23, 1938	25.40	1,050	1954	Sept. 11, 1954	25.36	643
	Sept. 21, 1938	26.18	2,660	1955	Nov. 21, 1954	25.25	480
1939	Feb. 3, 1939	25.42	885		Mar. 22, 1955	25.30	550
	Apr. 7, 1939	25.42	749		Aug. 13, 1955	25.78	1,450
1940	Mar. 4, 1940	25.27	521		Aug. 19, 1955	25.31	566
	Apr. 9, 1940	25.31	577	1956	Oct. 16, 1955	25.37	658
	May 17, 1940	25.23	465		Feb. 18, 1956	25.24	466
	May 31, 1940	25.70	1,260		Mar. 14, 1956	25.25	480
1941	Feb. 8, 1941	25.46	816		Apr. 8, 1956	25.24	466
1942	Aug. 9, 1942	25.39	700	1957	Apr. 5, 1957	25.31	567
1943	Dec. 30, 1942	25.29	548	1958	Dec. 21, 1957	25.35	629
	Mar. 7, 1943	25.41	732		Jan. 15, 1958	25.30	550
	May 20, 1943	25.24	479		Jan. 25, 1958	25.27	508
1944	Jan. 4, 1944	25.29	587		Feb. 28, 1958	25.56	994
	Jan. 6, 1944	25.43	809		Apr. 6, 1958	25.57	1,010
	Mar. 13, 1944	25.57	1,050	1959	Oct. 26, 1958	25.29	536
	Apr. 25, 1944	25.43	809		July 24, 1959	25.85	1,610
	Sept. 15, 1944	26.12	2,220		Aug. 9, 1959	25.25	480
1945	Nov. 21, 1944	25.28	563	1960	Feb. 19, 1960	25.31	566
	Nov. 27, 1944	25.30	592		July 30, 1960	25.57	1,010
	Jan. 1, 1945	25.21	463		Sept. 12, 1960	25.76	1,400
	May 11, 1945	25.24	506	1961	Feb. 19, 1961	25.29	536
					Mar. 23, 1961	25.47	828
					Apr. 13, 1961	25.45	792

^a Period May 6 to Sept. 30, 1927; peak of July 17, 1927, believed maximum for year.

4055. South River at Old Bridge, N.J.

Location.--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. Area of lakes, ponds, and swamps, 4.8 sq mi.

Gage.--Recorder above concrete dam. Datum of gage is at mean sea level, datum of 1929.

Stage-discharge relation.--Discharge is flow over spillway plus occasional flow through floodgates. Stage-discharge relation for spillway defined by current-meter measurements below 770 cfs and extended above on basis of laboratory rating. Discharge through floodgates computed from rate of change of stage of lake.

Remarks.--Flood peaks occasionally affected by operation of floodgates of Duhernal Dam. Capacity of Duhernal Lake, 138,000,000 gal. Base for partial-duration series, 700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Feb.20, 1940	10.51	741	1950	Aug. 4, 1950	10.51	745
	Mar. 5, 1940	10.54	797				
	Apr.9,10,1940	10.51	741	1951	Nov. 27, 1950	10.53	782
	Apr. 21, 1940	10.63	973		Feb. 23, 1951	10.59	895
	June 1, 1940	10.73	1,190		Mar.31,Apr. 1, 1951	10.69	1,100
	Sept. 2, 1940	10.67	1,060		Apr. 4, 1951	10.49	710
1941	Feb. 8, 1941	10.80	1,350				
	Mar. 13, 1941	10.53	778	1952	Nov. 4, 1951	10.58	876
	July 5, 1941	10.81	1,380		Dec. 22, 1951	10.70	1,120
	July 9, 1941	10.77	1,280		Feb. 5, 1952	10.51	745
1942	Feb. 8, 1942	10.47	673		Mar. 12, 1952	10.58	876
					Apr. 29, 1952	10.80	1,730
1943	Nov. 26, 1942	10.56	835		June 2, 1952	10.97	2,360
	Dec. 31, 1942	10.61	951	1953	Jan. 10, 1953	10.51	745
	Mar. 8, 1943	10.52	760		Mar. 14, 1953	11.06	2,030
1944	Oct. 28, 1943	10.60	910	1954	Dec. 15, 1953	10.51	749
	Jan.6-7, 1944	10.82	1,400		Sept.12, 1954	11.04	1,970
	Mar. 14, 1944	10.80	1,350	1955	Mar. 23, 1955	10.64	998
	Apr.25,26,1944	10.71	1,140		Aug. 13, 1955	11.27	2,650
	June 12, 1944	10.63	973	1956	Oct. 16, 1955	10.66	1,040
	Sept.15, 1944	11.71	4,250		Feb. 19, 1956	10.54	801
1945	Nov. 22, 1944	10.76	1,260		Apr. 9, 1956	10.67	1,060
	Nov. 29, 1944	10.57	858	1957	Apr. 6, 1957	10.54	801
	Feb. 24, 1945	10.59	895				
	July 19, 1945	11.40	3,200	1958	Jan. 16, 1958	10.78	1,670
	July 24, 1945	10.59	1,340		Jan. 26, 1958	10.69	1,100
	Sept.19, 1945	10.69	1,100		Feb. 9, 1958	10.51	745
1946	Nov. 30, 1945	11.01	1,890		Mar. 1, 1958	10.79	1,670
	Dec. 27, 1945	10.75	1,240		Mar. 25, 1958	10.51	745
	Dec.30,31,1945	10.66	1,040		Apr. 7, 1958	10.58	1,070
	June 3, 1946	11.04	2,320		May 8, 1958	10.50	726
	July 23, 1946	11.08	2,430	1959	Oct. 27, 1958	10.73	1,520
1947	May 5, 1947	10.37	809		July 24, 1959	10.83	1,750
1948	Nov. 13, 1947	10.51	745		Aug. 9, 1959	10.51	745
	Feb. 18, 1948	10.59	895	1960	Feb. 20, 1960	10.49	710
	Apr. 2, 1948	10.62	956		July 31, 1960	10.66	1,040
	July 24, 1948	10.67	1,060		Sept.13, 1960	11.20	2,430
	Aug. 6, 1948	10.52	764	1961	Jan. 2, 1961	10.60	914
	Aug. 21, 1948	11.29	3,030		Feb. 20, 1961	10.77	al,620
1949	Dec. 31, 1948	10.91	2,060		Mar. 10, 1961	10.50	726
	Jan. 6, 1949	10.52	764		Mar. 15, 1961	10.52	764
	Jan. 29, 1949	10.50	726		Mar. 24, 1961	10.74	al,380
1950	Feb. 16, 1950	10.51	745		Apr. 14, 1961	10.79	al,500
	July 17, 1950	10.58	876		July 30, 1961	10.78	al,640

a Waste gate open.

4060. Deep Run near Browntown, N.J.

Location.--Lat 40°22'30", long 74°18'14", on right bank 5 ft upstream from highway Bridge, 0.7 mile downstream from Middlesex-Monmouth County line, and 1.8 miles south of Browntown, Middlesex County.

Drainage area.--8.07 sq mi. Area of lakes, ponds, and swamps, 0 sq mi.

Gage.--Recording. Altitude of gage is 50 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 400 cfs and extended above arithmetically.

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 150 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	Nov. 10, 1932	5.65	310	1936	Sept. 19, 1936	6.39	452
	Nov. 19, 1932	5.26	254		Dec. 20, 1936	5.57	294
	Mar. 21, 1933	4.80	202		Apr. 27, 1937	5.18	247
	Apr. 13, 1933	4.77	197		May 15, 1937	4.35	156
	June 6, 1933	5.69	318		Aug. 23, 1937	4.28	152
1934	Jan. 6, 1934	4.62	183	1938	Nov. 13, 1937	4.74	196
	Mar. 5, 1934	5.06	229		June 27, 1938	1.47	710
	Apr. 1, 1934	4.60	183		July 20, 1938	6.79	543
	July 29, 1934	4.47	170		July 24, 1938	5.83	340
	Sept. 9, 1934	8.27	917		Sept. 21, 1938	9.61	1,240
	Sept. 17, 1934	7.21	642				
1935	Feb. 15, 1935	4.24	154	1939	Nov. 20, 1938	5.88	353
	Apr. 9, 1935	4.82	202		Jan. 6, 1939	5.02	223
1936					Jan. 30, 1939	5.57	294
	Oct. 31, 1935	4.25	154		Feb. 3, 1939	6.02	371
	Nov. 29, 1935	5.09	235		Feb. 28, 1939	4.53	178
	Jan. 3, 1936	6.16	400		Apr. 7, 1939	5.37	266
	Jan. 9, 1936	4.98	223	1940	Feb. 19, 1940	5.04	229
	Feb. 25, 1936	4.65	185		May 31, 1940	5.94	360
	Mar. 11, 1936	5.23	254				

4065. Tennent Brook near Browntown, N.J.

Location.--Lat 40°24'57", long 74°19'08", on right bank 1.2 miles northwest of Browntown, Middlesex County, 1.5 miles upstream from Tennent Pond Dam, and 2.6 miles upstream from mouth.

Drainage area.--5.25 sq mi. Area of lakes, ponds, and swamps, 0.2 sq mi.

Gage.--Recording. Datum of gage is 10.00 ft above mean sea level (New Jersey Geological Survey bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 60 cfs and extended above by logarithmic plotting; shifts in relation occur.

Bankfull stage.--9 ft.

Remarks.--Base for partial-duration series, 60 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	Nov. 10, 1932	8.64	83	1935	Feb. 15, 1935	8.20	64
	Nov. 19, 1932	8.82	90		Apr. 9, 1935	8.53	78
	Mar. 21, 1933	8.74	88	1936	Nov. 29, 1935	8.90	95
	Apr. 12, 1933	8.66	83		Jan. 3, 1936	9.18	110
	June 6, 1933	8.95	96		Jan. 9, 1936	8.82	73
1934	Jan. 6, 1934	8.60	81		Mar. 4, 1936	8.61	64
	Mar. 5, 1934	8.73	88		Mar. 11, 1936	8.92	78
	Apr. 1, 1934	8.68	85	1937	Dec. 20, 1936	8.95	80
	July 28, 1934	9.45	122		Apr. 27, 1937	8.82	73
	Sept. 8, 1934	10.17	166	1938	June 28, 1938	9.12	87
	Sept. 17, 1934	9.13	108		July 23, 1938	9.18	92
	Sept. 30, 1934	8.72	85		Sept. 21, 1938	10.69	177
1935	Oct. 6, 1934	8.59	81				

Peak stages and discharges of Tennent Brook near Browntown, N. J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Jan. 6, 1939	8.66	66	1940	Apr. 9, 1940	8.71	108
	Jan. 30, 1939	8.83	76		Apr. 21, 1940	8.36	92
	Feb. 3, 1939	9.49	107		May 31, 1940	9.40	143
	Feb. 28, 1939	8.75	71		Sept. 1, 1940	8.68	107
	Apr. 6, 1939	9.40	102	1941	Jan. 25, 1941	7.77	69
1940	Feb. 19, 1940	8.38	93		Feb. 7, 1941	9.59	152
	Mar. 4, 1940	8.34	92		Apr. 6, 1941	7.56	60
	Mar. 15, 1940	8.26	88		July 4, 1941	8.11	82

MATAWAN CREEK BASIN

4070. Matawan Creek at Matawan, N.J.

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. Area of lakes, ponds, and swamps, 0.2 sq mi.

Gage.--Recording gage above concrete dam. Datum of gage is 13.98 ft above mean sea level (New Jersey Geological Survey bench mark).

Stage-discharge relation.--Discharge is sum of flow over dam and flow through waste gates. Dam crest altered in August 1937. Prior to August 1937, stage-discharge relation for flow over dam defined by current-meter measurements below 160 cfs and extended above by logarithmic plotting. Since 1937, relation for flow over dam defined by current-meter measurements below 32 cfs and extended above on basis of computation of flow over dam, over road, and through waste gates totaling 1,000 cfs. Discharge through waste gates computed on basis of rate of change of storage in Lake Lefferts.

Remarks.--Peak flows sometimes affected by operation of waste gates in dam on Lake Lefferts. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	June 6, 1933	3.11	494	1944	Sept. 14, 1944	b4.01	1,190
1934	Sept. 8, 1934	4.40	1,070	1945	July 19, 1945	3.79	965
1935	Apr. 9, 1935	2.18	216	1946	July 23, 1946	2.75	503
1936	Sept. 18, 1936	2.90	347	1947	Dec. 21, 1946	c1.98	181
1937	Dec. 20, 1936	2.77	293	1948	Aug. 22, 1948	(d)	(d)
1938	Sept. 21, 1938	4.34	1,390	1949	Dec. 31, 1948	e2.13	285
1939	Feb. 3, 1939	2.26	372	1950	Aug. 3, 1950	2.09	357
1940	May 31, 1940	2.47	403	1951	Nov. 25, 1950	2.24	376
1941	Feb. 7, 1941	2.67	462	1952	Apr. 28, 1952	2.82	511
1942	Mar. 9, 1942	a2.04	284	1953	Mar. 13, 1953	3.63	856
1943	Nov. 25, Dec. 30, 1942	2.61	385	1954	Sept. 11, 1954	3.74	732
				1955	Aug. 13, 1955	4.25	1,420

a Occurred July 2, 1942.

b Occurred Oct. 27, 1943.

c Occurred Mar. 3, 1947.

d Unknown, believed to have exceeded July 23, 1948, gage height of 2.86 ft and discharge of 474 cfs.

e Occurred Dec. 30, 1948.

NAVESINK RIVER BASIN

4075. Swimming River near Red Bank, N.J.

Location.--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. Area of lakes, ponds, and swamps, 0.7 sq mi.

Gage.--Recording, above dam. Datum of gage is 12.33 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Changes in dam crest in October 1926, September to November 1938, and June 1956, plus changes in flashboards since 1956, have altered relation. Relations defined by current-meter measurements below 400 to 600 cfs and extended above by weir formula or logarithmic plotting. Sluice gate in dam is occasionally open and discharge through gate, computed from theoretical rating, is added to discharge over dam to obtain total discharge.

Remarks.--Base for partial-duration series, 600 cfs.

Peak stages and discharges of Swimming River near Red Bank, N.J.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1919	July 1919	7.84	all, 800	1943	Nov. 25, 1942	4.17	761
1923	Jan. 1, 1923	2.57	1,350		Dec. 30, 1942	4.02	639
	Mar. 17, 1923	1.81	603		Mar. 7, 1943	4.03	647
1924	Feb. 6, 1924	2.03	744	1944	Oct. 27, 1943	8.96	8,910
	Feb. 20, 1924	3.05	2,000		Jan. 4, 1944	4.96	1,570
	Apr. 7, 1924	2.13	843		Jan. 6, 1944	5.00	1,620
	Apr. 19, 1924	1.89	611		Feb. 15, 1944	4.10	702
1925	Feb. 10, 1925	1.87	600		Mar. 13, 1944	4.37	940
1926	Feb. 19, 1926	2.12	810		Apr. 25, 1944	4.22	804
	Feb. 25, 1926	3.42	2,590		June 11, 1944	4.15	743
1927	Dec. 29, 1926	4.08	1,060		Sept. 15, 1944	7.05	4,780
	July 23, 1927	4.75	1,770	1945	Nov. 22, 1944	4.01	631
	Aug. 9, 1927	4.02	1,010		July 20, 1945	4.32	896
1928	Oct. 18, 1927	4.04	1,000	1946	Nov. 29, 1945	4.59	1,160
	Apr. 28, 1928	3.72	728		Dec. 26, 1945	4.25	832
	July 6, 1928	3.75	755		Dec. 29-30, 1945	4.12	719
1929	Feb. 7, 1929	3.58	630		June 2, 1946	4.58	1,150
	Feb. 27, 1929	3.92	890		July 24, 1946	4.27	850
	Apr. 16, 1929	4.34	1,320	1947	Dec. 21, 1946	3.70	414
1930	Feb. 13, 1930	3.83	845	1948	Nov. 4, 1947	4.47	1,040
1931	Mar. 8, 1931	3.40	475		Nov. 9, 1947	4.27	848
1932	Mar. 28, 1932	3.91	900		Nov. 12, 1947	4.22	806
1933	Nov. 10, 1932	3.69	702		Apr. 1, 1948	4.01	632
	Apr. 13, 1933	3.62	646		May 26, 1948	4.28	858
	June 6, 1933	3.86	854		Aug. 23, 1948	4.06	673
1934	Sept. 9, 1934	5.65	2,930	1949	Dec. 31, 1948	4.11	711
	Sept. 17, 1934	4.13	1,110	1950	July 16, 1950	4.20	788
1935	Apr. 9, 1935	3.68	694	1951	Nov. 26, 1950	4.26	840
	Sept. 6, 1935	3.62	646		Feb. 22, 1951	3.83	617
1936	Jan. 3, 1936	4.64	1,640		Mar. 31, 1951	4.24	822
	Jan. 9, 1936	3.90	890	1952	Nov. 3, 1951	4.00	624
	Feb. 29, 1936	3.75	755		Nov. 7, 1951	4.05	664
	Mar. 12, 1936	3.69	702		Dec. 21, 1951	4.23	815
	Sept. 19, 1936	3.85	845		Mar. 11, 1952	4.12	721
1937	Oct. 17, 1936	4.17	1,150		Apr. 28, 1952	4.50	1,070
	Dec. 20, 1936	3.93	920		June 1, 1952	4.08	690
	Apr. 27, 1937	3.91	901	1953	Mar. 13, 1953	4.81	1,400
	Aug. 23, 1937	3.67	690	1954	Sept. 11, 1954	5.58	2,370
1938	Oct. 20, 1937	3.88	881	1955	Feb. 7, 1955	3.99	607
	Nov. 13, 1937	3.65	674		Aug. 13, 1955	6.56	3,900
	June 28, 1938	4.60	1,610	1956	Feb. 18, 1956	4.01	622
	July 20, 1938	4.49	1,500		July 21, 1956	b6.01	-
	July 24, 1938	4.34	1,340	1957	Apr. 5, 1957	4.44	478
	Aug. 8, 1938	4.03	1,020		Apr. 29, 1957	c5.62	-
	Sept. 21, 1938	6.96	7,370		Sept. 30, 1957	4.83	d764
1939	Nov. 20, 1938	4.29	964	1958	Jan. 15, 1958	5.72	1,570
	Jan. 30, 1939	4.40	968		Jan. 25, 1958	4.88	804
	Feb. 3, 1939	4.86	1,460		Feb. 28, 1958	5.65	1,500
	Apr. 7, 1939	4.20	785		Apr. 7, 1958	4.94	852
	Aug. 20, 1939	4.46	1,030		May 26, 1958	c6.31	-
1940	Feb. 20, 1940	4.58	1,150		Sept. 30, 1958	5.50	d1,350
	Mar. 4, 1940	4.23	811	1959	Oct. 26, 1958	5.11	989
	May 31, 1940	4.39	958		July 23, 1959	c6.24	-
1941	Jan. 25, 1941	4.09	692		Sept. 30, 1959	5.22	d1,090
	Feb. 8, 1941	5.43	2,160	1960	Sept. 12, 1960	8.46	a5,700
	July 9, 1941	4.48	1,050	1961	July 29, 1961	9.13	a3,630
1942	Feb. 7, 1942	3.90	549				

a Annual peak only.

b Backwater from construction on dam crest.

c Backwater from flashboards on dam crest.

d Approximate discharge caused by removal of flashboards.

4080. Manasquan River at Squankum, N.J.

Location.--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. Area of lakes, ponds, and swamps, 0.5 sq mi.

Gage.--Recording. Prior to Aug. 13, 1940, at site 80 ft upstream at same datum. Datum of gage is 18.82 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Prior to August 1940, defined by current-meter measurements below 720 cfs and extended above on basis of contracted-opening measurement of 2,940 cfs. Since August 1940, defined by current-meter measurements below 1,200 cfs and extended by logarithmic plotting; shifts in relation occur due to backwater from debris.

Bankfull stage.--7 ft.

Remarks.--Base for partial-duration series, 600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	Mar. 28, 1932	8.16	796	1945	July 24, 1945	d9.1	1,860
1933	Nov. 10, 1932	8.24	819	1946	Nov. 29, 1945	7.99	1,390
	Nov. 20, 1932	7.52	636		Dec. 26, 1945	6.51	864
1934	Mar. 15, 1934	7.38	607		Dec. 30, 1945	6.51	864
	Sept. 9, 1934	8.60	932		June 2, 1946	b6.9	991
1935	Feb. 15, 1935	7.50	632		July 24, 1946	d6.6	890
	Apr. 9, 1935	7.36	603	1947	Dec. 21, 1946	4.55	382
1936	Jan. 3, 1936	9.22	1,160	1948	Nov. 4, 1947	6.44	688
	Jan. 9, 1936	8.52	906		Nov. 9, 1947	6.42	683
	Mar. 12, 1936	7.79	699		Nov. 12, 1947	6.87	799
	Sept. 19, 1936	(a)	(a)		Feb. 15, 1948	7.26	907
1937	Oct. 18, 1936	7.69	679		May 26, 1948	6.93	815
	Dec. 20, 1936	8.40	840		May 31, 1948	6.67	746
	Apr. 27, 1937	7.85	714		Aug. 21, 1948	6.27	647
1938	Oct. 20, 1937	8.11	782	1949	Dec. 31, 1948	6.98	829
	Nov. 29, 1937	7.63	654	1950	Aug. 21, 1950	5.22	428
	June 28, 1938	10.09	1,550	1951	Feb. 22, 1951	6.58	723
	July 20, 1938	9.96	1,480		Mar. 31, 1951	6.58	723
	July 24, 1938	9.06	1,100	1952	Dec. 21, 1951	6.97	826
	Aug. 8, 1938	8.15	807		Mar. 12, 1952	6.37	671
	Sept. 21, 1938	b12.45	2,940		Apr. 28, 1952	7.90	1,100
1939	Jan. 31, 1939	8.20	807		May 26, 1952	6.71	757
	Feb. 4, 1939	8.14	779		June 1, 1952	6.59	726
	Mar. 1, 1939	7.39	609	1953	Mar. 13, 1953	8.06	1,160
	Apr. 7, 1939	8.10	779	1954	Sept. 11, 1954	7.05	848
1940	Feb. 20, 1940	8.21	810	1955	Aug. 13, 1955	8.56	1,330
	Mar. 4, 1940	7.70	677	1956	Feb. 18, 1956	6.22	658
	May 31, 1940	8.42	873	1957	Mar. 16, 1957	5.62	540
1941	Jan. 25, 1941	5.57	690	1958	Jan. 15, 1958	8.22	1,210
	Feb. 8, 1941	7.60	1,210		Jan. 26, 1958	6.87	810
	Mar. 12, 1941	5.33	632		Feb. 28, 1958	7.87	1,090
	July 1, 1941	5.95	781	1959	Oct. 26, 1958	7.34	933
1942	Feb. 7, 1942	5.54	683		July 24, 1959	6.08	629
1943	Nov. 25, 1942	5.98	788	1960	Feb. 19, 1960	6.13	639
	Dec. 31, 1942	5.68	716		Feb. 26, 1960	6.95	830
	Mar. 7, 1943	c5.65	c709		Sept. 13, 1960	10.13	2,040
1944	Oct. 27, 1943	10.15	2,360	1961	Jan. 2, 1961	7.29	919
	Jan. 4, 1944	6.38	805		Feb. 20, 1961	7.16	864
	Jan. 6, 1944	6.64	845		Mar. 24, 1961	6.98	837
	Mar. 13, 1944	6.37	777		Apr. 14, 1961	6.89	814
	Apr. 25, 1944	5.70	612		July 30, 1961	8.29	1,240
	Sept. 15, 1944	10.15	2,360				
1945	Nov. 22, 1944	6.15	760				
	Nov. 28, 1944	6.12	751				
	Feb. 23, 1945	5.70	639				

a Unknown, may have exceeded base.

b From floodmark.

c About.

d Esti-

mated from graph based on partial gage-height record.

4085. Toms River near Toms River, N.J.

Location.--Lat 39°59'10", long 74°13'29", on left bank 1.9 miles downstream from Union Branch and 2.6 miles northwest of village of Toms River, Ocean County.

Drainage area.--124 sq mi. Area of lakes, ponds, and swamps, 16.9 sq mi.

Gage.--Recording. Datum of gage is 8.10 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,200 cfs and extended above by logarithmic plotting; shifts in relation occur.

Bankfull stage.--8 ft.

Remarks.--Base for partial-duration series, 450 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929a/	Mar. 1, 1929	7.05	550	1944	Apr. 19, 1944	6.50	472
	Mar. 7, 1929	7.65	640		Apr. 27, 1944	6.99	541
	Apr. 18, 1929	8.95	851		Sept. 17, 1944	10.58	1,140
1930	Mar. 11, 1930	6.31	443	1945	Nov. 24, 1944	7.41	640
1931	Apr. 1, 1931	5.72	362		Nov. 30, 1944	7.85	710
1932	Mar. 9, 1932	6.54	477		Dec. 14, 1944	7.99	732
	Mar. 30, 1932	7.79	661		Feb. 25, 1945	6.41	486
	Apr. 14, 1932	7.88	678		July 21, 1945	7.43	643
1933	Nov. 12, 1932	7.28	587	1946	Dec. 1, 1945	8.82	873
	Nov. 22, 1932	6.52	475		Dec. 31, 1945	8.17	763
	Mar. 23, 1933	6.74	500		June 5, 1946	7.34	628
	Aug. 26, 1933	8.86	835		July 26, 1946	6.95	568
1934	Mar. 8, 1934	6.73	500	1947	May 24, 1947	6.39	484
	May 6, 1934	6.70	500	1948	Nov. 14, 1947	6.92	563
1935	Feb. 18, 1935	7.10	557		Jan. 5, 1948	6.20	455
	Sept. 8, 1935	8.65	787		Feb. 17, 1948	6.39	484
1936	Nov. 3, 1935	6.77	514		Apr. 4, 1948	6.85	552
	Jan. 6, 1936	7.76	660		May 8, 1948	6.62	518
	Mar. 14, 1936	8.30	739		May 14, 1948	7.17	602
	May 6, 1936	6.50	472		June 2, 1948	8.05	742
	Sept. 2, 1936	7.55	632		Aug. 6, 1948	6.54	506
1937	Dec. 22, 1936	6.87	528		Aug. 23, 1948	6.57	510
	Jan. 24, 1937	6.68	500	1949	Jan. 2, 1949	8.48	816
	Apr. 29, 1937	7.29	587		Jan. 30, 1949	6.86	554
1938	Oct. 23, 1937	6.57	486		Feb. 25, 1949	6.84	551
	Oct. 31, 1937	6.76	514		Apr. 9, 1949	6.24	461
	Nov. 16, 1937	6.65	493	1950	Feb. 17, 1950	5.90	411
	Dec. 1, 1937	7.37	602	1951	Feb. 24, 1951	6.58	515
	June 29, 1938	11.1	1,440		Apr. 2, 1951	6.95	574
	July 26, 1938	10.15	1,060		May 27, 1951	6.46	496
	Aug. 9, 1938	7.81	662	1952	Dec. 23, 1951	8.37	818
	Sept. 23, 1938	12.50	2,000		Jan. 30, 1952	6.58	516
1939	Feb. 5, 1939	8.73	808		Feb. 7, 1952	6.20	461
	Mar. 3, 1939	7.11	557		Mar. 13, 1952	7.24	621
	Mar. 18, 1939	6.83	518		Mar. 26, 1952	6.27	471
	Apr. 1, 1939	7.37	602		Apr. 29, 1952	10.53	1,250
	Apr. 9, 1939	7.46	617		May 15, 1952	6.52	507
	Apr. 29, 1939	6.96	556		May 28, 1952	7.55	672
	Aug. 22, 1939	9.32	902		June 3, 1952	8.72	882
1940	Mar. 7, 1940	6.38	455		Aug. 12, 1952	7.08	595
	Apr. 23, 1940	7.76	656		Sept. 4, 1952	6.45	496
	May 19, 1940	6.88	525	1953	Nov. 24, 1952	6.46	498
	June 2, 1940	7.50	617		Jan. 12, 1953	6.94	572
1941	July 11, 1941	6.34	450		Feb. 18, 1953	6.43	494
1942	July 5, 1942	5.93	393		Mar. 15, 1953	8.70	878
1943	Jan. 1, 1943	6.61	487		Apr. 21, 1953	6.92	569
1944	Oct. 29, 1943	7.81	664		May 20, 1953	6.57	514
	Jan. 7, 1944	7.09	556	1954	July 24, 1953	6.21	462
	Mar. 16, 1944	6.75	507		Dec. 7, 1953	6.29	474
					Apr. 26, 1954	6.12	450
					May 11, 1954	6.47	500
					May 23, 1954	7.06	592
					Sept. 13, 1954	7.83	719

a Period Dec. 28, 1928, to Sept. 30, 1929; peak of Apr. 18, 1929, believed maximum for year.

Peak stages and discharges of Toms River near Toms River, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Aug. 15, 1955	8.86	909	1958	Apr. 9, 1958	6.85	558
1956	Oct. 17, 1955	7.42	650		May 1, 1958	7.35	639
	Feb. 21, 1956	6.34	481		May 8, 1958	8.15	776
	Apr. 10, 1956	7.44	654		Aug. 27, 1958	8.15	776
	July 23, 1956	7.48	661	1959	Oct. 28, 1958	9.03	941
					July 17, 1959	6.88	563
1957	Dec. 18, 1956	6.46	498		July 26, 1959	7.64	687
	Apr. 7, 1957	6.33	479		July 31, 1959	6.31	476
1958	Jan. 17, 1958	7.91	734	1960	Sept. 14, 1960	10.57	bl, 370
	Jan. 27, 1958	7.78	711	1961	Apr. 15, 1961	8.95	b938
	Feb. 2, 1958	10.09	1,160				
	Mar. 24, 1958	7.89	730				

b Annual peak only.

CEDAR CREEK BASIN

4090. Cedar Creek at Lanoka Harbor, N.J.

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. Area of lakes, ponds, and swamps, 6.9 sq mi.

Gage.--Recording. Prior to Oct. 14, 1933, at site 70 ft downstream. Datum of gage is at mean sea level, datum of 1929.

Stage-discharge relation.--Prior to 1938, defined by current-meter measurements below 380 cfs and extended above by logarithmic plotting. Since channel improvements in 1938 and 1939, defined by current-meter measurements below 410 cfs and extended above by logarithmic plotting. Relation occasionally affected by tides, and channel shifting.

Remarks.--Peak flows often affected by regulation of cranberry bogs. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932a/	Aug. 2, 1932	2.83	176	1946	June 13, 1946	f3.67	496
1933	Aug. 24, 1933	4.68	508	1947	Aug. 21, 1947	3.46	491
1934	May 4, 1934	4.75	510	1948	May 11, 1948	3.64	590
1935	Apr. 10, 1935	4.44	422	1949	May 14, 1949	3.15	340
				1950	Apr. 30, 1950	3.18	354
1936	Feb. 16, 1936	b6.45	(c)	1951	Apr. 29, 1951	g5.09	252
1937	June 12, 1937	d3.69	276	1952	Apr. 30, 1952	3.57	440
1938	Sept. 23, 1938	5.55	786	1953	Mar. 17, 1953	3.49	409
1939	Aug. 21, 1939	4.07	842	1954	Nov. 7, 1953	3.55	434
1940	Apr. 24, June 8, 1940	3.35	435	1955	Feb. 10, 1955	h3.66	367
1941	June 8, 1941	3.03	289	1956	Mar. 23, 1956	j3.71	341
1942	Aug. 12, 1942	3.16	345	1957	Apr. 12, 1957	3.27	396
1943	Apr. 27, 1943	3.07	305	1958	Aug. 27, 1958	3.66	601
1944	Oct. 28, 1943	4.50	1,050				
1945	June 9, 1945	e3.17	340				

a Period July 1 to Sept. 30, 1932. b Backwater from ice and tide. c Not determined, exceeded 321 cfs. d Occurred Aug. 25, 1937, backwater from tide. e Occurred Nov. 30, 1944, backwater from tide. f Occurred Nov. 29, 1945, backwater from tide. g Occurred Nov. 25, 1950, backwater from tide. h Occurred Aug. 13, 1955, backwater from tide. j Occurred Oct. 15, 1955, backwater from tide.

4095. Batsto River at Batsto, N.J.

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. Area of swamps, lakes, and bogs, 12.9 sq mi.

Gage.--Recording. Datum of gage is 1.4 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 930 cfs and extended above by logarithmic plotting. Tides cause backwater at times.

Bankfull stage.--3 ft.

Remarks.--Some flood peaks affected by regulation at pond 300 ft upstream, capacity, about 90 cfs-days. Because of regulation and effect of tides, only annual maximum stage and annual maximum daily discharge are shown.

Annual maximum stages and maximum daily discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Apr. 29, 1928	a4.45	361	1946	Dec. 31, 1945	4.82	644
1929	Feb. 28, 1929	4.66	441	1947	May 7, 1947	3.87	382
1930	May 19, 1930	b4.22	238	1948	Aug. 24, 1948	h5.52	833
				1949	Jan. 2, 1949	j4.40	563
1931	June 19, 1931	3.6	303	1950	Mar. 25, 1950	k2.97	233
1932	Mar. 30, 1932	c4.27	385				
1933	Aug. 24, 1933	7.25	1,310	1951	Nov. 25, 1950	6.03	567
1934	Mar. 6, 1934	4.33	380	1952	Apr. 29, 1952	6.27	1,130
1935	Sept. 7, 8, 1935	6.02	618	1953	Mar. 15, 1953	m4.77	721
				1954	Sept. 13, 1954	4.36	573
1936	Nov. 2, 1935	4.52	474	1955	Nov. 23, 1954	6.14	393
1937	May 17, 18, 1937	4.29	336				
1938	Sept. 23, 1938	6.5	1,060	1956	Oct. 17, 1955	4.12	528
1939	Aug. 20, 1939	8.7	-	1957	Nov. 3, 1956	3.86	412
1940	Sept. 3, 1940	d5.64	924	1958	Aug. 26, 1958	7.10	1,100
				1959	Oct. 27, 1958	4.36	516
1941	June 16, 1941	3.49	291	1960	Sept. 14, 1960	6.08	1,060
1942	May 13, 1942	e3.66	226				
1943	Feb. 8, 1943	f3.47	274	1961	Mar. 25, 1961	n4.43	521
1944	Sept. 16, 1944	g4.88	601				
1945	July 21, 1945	4.47	636				

a Occurred on Oct. 20, 1927. b Occurred on June 9, 1930. c Occurred on Mar. 29, 1932. d Occurred on May 18, 1940. e Occurred on Jan. 31, 1942. f Occurred on July 9, 1943. g Occurred on Sept. 14, 1944. h Occurred on June 1, 1948. j Occurred on Jan. 29, 1949. k Occurred on Mar. 26, 1950. m Occurred on Mar. 14, 1953. n Occurred on Feb. 21, 1961.

4100. Oswego River at Harrisville, N.J.
(Published as East Branch Wading River 1931-55)

Location.--Lat 39°39'47", long 74°31'26", 50 ft downstream from highway bridge at Harrisville, Burlington County, and half a mile upstream from confluence with West Branch.

Drainage area.--64.0 sq mi. Area of swamps, lakes, and bogs, 9.5 sq mi.

Gage.--Recording. Datum of gage is 4.62 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 640 cfs and extended above by logarithmic plotting.

Bankfull stage.--4.5 ft.

Remarks.--Some flood peaks affected by regulation at pond 200 ft upstream (capacity, 50 cfs-days), and by ponds and bogs 5 to 10 miles upstream. Base for partial-duration series, 230 cfs.

Peak stages and discharges of Oswego River at Harrisville, N.J.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Apr. 2-3, 1931	2.95	179	1948	May 7, 1948	3.74	237
1932	Mar. 23, 1932	3.48	250		May 14, 1948	4.63	374
	Mar. 29, 1932	3.92	309		May 22, 1948	3.80	251
	Apr. 12, 1932	3.84	301		May 25, 1948	4.29	321
1933	Nov. 11, 1932	3.58	263		June 1, 1948	3.85	258
	Mar. 22, 1933	3.31	225		Aug. 6, 1948	4.28	320
	Aug. 24, 1933	6.96	859		Aug. 21, 1948	5.47	519
1934	Mar. 5, 1934	3.77	272	1949	Nov. 30, 1948	3.93	270
	Sept. 10, 1934	4.27	354		Dec. 5, 1948	3.74	237
1935	Feb. 16, 1935	4.09	330		Jan. 1, 1949	4.02	283
	Sept. 7, 1935	5.95	516		Jan. 29, 1949	4.23	312
1936	Nov. 19, 1935	4.60	400		Mar. 2, 1949	3.78	246
	Jan. 5, 1936	4.46	386		Apr. 7, 1949	3.77	244
	Jan. 21, 1936	4.00	316	1950	Mar. 24, 1950	3.57	187
	Feb. 18, 1936	4.21	344	1951	Feb. 22, 23, 1951	3.94	244
	Mar. 30, 1936	3.47	240		Apr. 4, 1951	3.84	231
	Sept. 20, 1936	3.84	295	1952	Dec. 22, 1951	4.12	269
1937	Dec. 22, 1936	3.80	288		Apr. 29, 1952	5.30	454
	Jan. 22, 1937	3.68	274		May 27, 1952	3.83	230
	Mar. 17, 1937	3.48	246		June 2, 1952	4.37	304
	Apr. 28, 1937	4.03	323		Aug. 11, 1952	5.07	414
	Aug. 28, 1937	4.22	344	1953	Nov. 23, 1952	3.97	248
1938	Oct. 21, 1937	4.69	391		Dec. 23, 1952	3.97	248
	Nov. 30, 1937	4.42	346		Jan. 11, 1953	3.99	251
	June 29, 1938	3.98	273		Mar. 14, 1953	4.61	340
	July 21, 1938	5.58	513		Apr. 17, 1953	3.84	231
	July 24, 1938	5.55	513	1954	Nov. 8, 1953	4.67	346
	Sept. 21, 1938	8.18	988		May 22, 1954	3.88	239
1939a/	Aug. 20, 1939	9.54	1,390		Sept. 12, 1954	4.00	256
	Aug. 31, 1939	4.19	263	1955	July 11, 1955	4.23	286
1940	Apr. 22, 1940	4.05	244		Aug. 14, 1955	4.05	263
	June 1, 1940	4.05	244	1956	July 22, 1956	3.91	243
1941	May 15, 1941	4.05	244		Sept. 3, 1956	4.54	328
	June 16, 1941	4.89	365	1957	Mar. 2, 1957	3.74	216
1942	Apr. 29, 1942	4.22	267	1958	Jan. 16, 1958	4.20	282
1943	Dec. 30, 1942	3.63	206		Jan. 27, 1958	4.20	282
1944	Oct. 28, 1943	4.59	367		Mar. 1, 1958	5.32	454
	Nov. 3, 1943	3.72	233		Mar. 23, 1958	4.65	344
	Jan. 7, 1944	3.96	274		Apr. 12, 1958	3.83	231
	Mar. 14, 1944	4.00	280		Apr. 30, 1958	4.14	275
	Apr. 26, 1944	4.33	328		May 8, 1958	4.51	323
	Aug. 3, 1944	3.72	233		July 28, 1958	4.02	259
	Sept. 16, 1944	4.75	355		Aug. 26, 1958	5.90	553
1945	Nov. 22, 1944	3.80	251		Sept. 29, 1958	4.08	267
	Nov. 29, 1944	4.50	353	1959	Oct. 3, 1958	4.30	295
1946	Nov. 30, 1945	3.81	252		Oct. 27, 1958	5.33	456
	Dec. 30, 1945	4.25	315		July 11, 1959	3.96	247
	July 24, 1946	3.89	264		July 16, 1959	4.79	372
1947	May 5-6, 1947	3.75	239		July 24, 1959	5.36	464
	May 23, 1947	3.71	230	1960	Sept. 13, 1960	b5.24	400
1948	Feb. 15, 1948	3.91	267	1961	Jan. 1, 1961	3.77	234
	Apr. 2, 1948	3.81	252		Feb. 26, 1961	3.84	254
	Apr. 15, 1948	3.82	254		Mar. 10, 1961	3.85	257
					Mar. 25, 1961	4.24	331
					Apr. 14, 1961	3.92	276
					June 16, 1961	3.78	236

a Period June 23 to Sept. 30, 1939; peak of Aug. 20, 1939, believed maximum for year.

b Backwater from West Branch Wading River.

4105. Absecon Creek at Absecon, N.J.

Location.--Lat 39°25'45", long 74°31'16", on right bank 30 ft downstream from Doughty Pond of Atlantic City Water Department, 1 mile west of Absecon, Atlantic County, and 3.4 miles upstream from mouth.

Drainage area.--16.6 sq mi.

Gage.--Recording above artificial control. Prior to May 1946, at same site at datum 0.16 ft lower. Datum of gage is at mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 100 cfs and extended above by logarithmic plotting. Relation is affected by tides.

Remarks.--Flow regulated by Doughty Pond (capacity, 245,000,000 gal) for period of record, and since 1936 by Kuehnle Reservoir, 1½ miles above station (capacity 250,000,000 gal). Only annual maximum daily discharges are shown.

Maximum daily discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1925	Oct. 1, 1924	-	33	1950	Nov. 2, 1949	-	61
1926	Oct. 26, 1925	-	19.7	1951	Nov. 26, 1950	-	85
1927	Nov. 20, 1926	-	39.3	1952	Apr. 28, 1952	-	139
1928	Sept. 20, 1928	-	58	1953	Aug. 15, 1953	-	108
				1954	Nov. 8, 1953	-	123
1934	Nov. 7, 1933	-	155	1955	Apr. 22, 1955	-	93
1935	Sept. 6, 1935	-	295				
1936	Feb. 15, 1936	-	112	1956	June 7, 1956	-	74
1937	Nov. 25, 1936	-	63	1957	Nov. 1, 1956	-	63
1938	Sept. 22, 1938	-	94	1958	Aug. 26, 1958	-	186
				1959	July 11, 1959	-	176
1947	Nov. 22, 1946	-	42	1960	Nov. 25, 1959	-	90
1948	Aug. 21, 1948	-	162	1961	Apr. 6, 1961	-	80
1949	Feb. 5, 1949	-	96				

GREAT EGG HARBOR RIVER BASIN

4110. Great Egg Harbor River at Folsom, N.J.
(Published as Great Egg River 1925-47)

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. Area of swamps, lakes, or bogs, 7.8 sq mi.

Gage.--Recording, except nonrecording Mar. 6 to Oct. 5, 1941. Prior to Mar. 6, 1941, at site 100 ft downstream at present datum and Mar. 6 to Oct. 5, 1941, at site 145 ft downstream at datum 0.25 ft higher. Datum of gage is 53.32 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements. Shifts in relation have occurred due to construction and channel improvements.

Bankfull stage.--5 ft.

Remarks.--Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Feb. 22, 1926	4.56	150	1931	Apr. 3, 1931	4.19	127
1927	Aug. 21, 1927	4.81	160	1932	Mar. 31-Apr. 1, 1932	5.16	216
1928	Dec. 9, 1927	5.03	204	1933	Nov. 12, 1932	5.42	260
	Apr. 29-30, 1928	5.07	210		Aug. 25, 1933	7.56	700
1929	Mar. 1-2, 1929	5.22	208	1934	Mar. 7-8, 1934	5.11	203
	Apr. 19-20, 1929	5.28	229		Aug. 18, 1934	5.11	203
1930	Mar. 11, 1930	4.60	160				

Peak stages and discharges of Great Egg Harbor River at Folsom, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Feb. 18, 1935	5.07	277	1948	Feb. 18, 1948	4.67	215
	Apr. 12, 1935	4.88	248		Apr. 4, 1948	4.83	241
	Sept. 8, 1935	6.18	599		May 16, 1948	4.82	239
1936	Nov. 2, 1935	4.68	231		June 1, 1948	5.68	392
	Nov. 20, 1935	4.53	201		Aug. 5-6, 1948	4.72	223
	Jan. 6, 1936	5.30	368	1949	Jan. 2, 1949	5.34	327
	Jan. 20, 1936	4.99	300		Jan. 29, 1949	5.01	270
	Feb. 16, 1936	5.08	322		May 4-5, 1949	4.94	258
	Mar. 14, 1936	4.91	278	1950	Mar. 25-26, 1950	4.60	203
1937	Jan. 22-23, 1937	4.53	206	1951	Nov. 28, 1950	4.78	233
	Apr. 30, 1937	4.52	204		Apr. 5, 1951	4.65	212
1938	June 30, 1938	5.72	478	1952	Dec. 23, 1951	5.70	381
	July 25, 1938	5.92	530		Jan. 29, 1952	4.87	238
	Aug. 10, 1938	5.23	366		Feb. 7, 1952	4.65	203
	Sept. 23, 1938	6.59	718		Mar. 14, 1952	5.04	265
1939	Oct. 2, 1938	5.08	330		Apr. 30, 1952	6.10	461
	Dec. 8, 1938	4.65	230		May 28, 1952	4.78	224
	Feb. 6, 1939	5.20	354		June 3, 1952	5.70	381
	Feb. 12, 1939	4.93	292		Aug. 11, 1952	5.26	302
	Mar. 2, 1939	4.70	241	1953	Nov. 24, 1952	4.95	251
	Mar. 17, 1939	4.79	261		Jan. 12, 1953	4.90	243
	Apr. 1, 1939	4.87	278		Feb. 18, 1953	4.71	213
	Apr. 10, 1939	4.73	248		Mar. 17, 1953	5.56	355
	Apr. 20, 1939	4.51	202		Apr. 17, 1953	4.79	225
	Apr. 29, 1939	4.62	224		May 9, 1953	4.70	211
	Aug. 22, 1939	5.93	543		May 29, 1953	4.80	227
1940	Mar. 7, 1940	4.55	210	1954	Dec. 17, 1953	4.63	200
	Apr. 23, 1940	4.76	254	1955	Aug. 16, 1955	4.89	241
	May 24, 1940	5.40	402	1956	Oct. 18, 1955	4.85	235
	June 1, 1940	4.97	300		Mar. 18, 1956	4.82	230
	Sept. 3, 1940	9.09	1,440		July 24, 1956	4.93	246
1941	Mar. 13, 1941	3.92	211	1957	Nov. 4-5, 1956	5.16	285
1942	Feb. 10, 1942	4.22	133		Dec. 17-18, 1956	4.67	206
1943	Jan. 1, 1943	4.51	198	1958	Jan. 17-18, 1958	4.65	203
1944	Jan. 7, 1944	4.82	244		Jan. 27, 1958	4.91	245
	Mar. 16, 1944	4.60	203		Mar. 1-2, 1958	5.90	420
	Apr. 28, 1944	4.82	244		Mar. 28, 1958	5.47	339
1945	Dec. 1, 1944	4.70	221		May 7-8, 1958	5.82	404
	July 20, 1945	4.66	214		July 27, 1958	4.66	205
1946	Dec. 2, 1945	4.78	233		Aug. 18-19, 1958	5.00	259
	Jan. 1, 1946	5.44	346		Aug. 27, 1958	6.63	577
	May 19, 1946	4.67	215	1959	Oct. 2, 1958	5.17	287
	May 30, 1946	4.78	233		Jan. 6, 1959	4.72	-
	June 16, 1946	4.67	215		Sept. 4, 1959	4.72	214
	July 25-26, 1946	5.68	392	1960	Sept. 15, 1960	6.97	655
1947	May 26-27, 1947	4.49	184	1961	Apr. 16, 1961	5.15	b284
1948	Jan. 5, 1948	4.58	200				

a Backwater from ice.

b Annual peak only.

4115. Maurice River at Norma, N.J.

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. Area of lakes, ponds, and swamps, 10.0 sq mi.

Gage.--Recording. Datum of gage is 46.94 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 3,000 cfs and extended above by logarithmic plotting; channel improvements in 1939 and 1940 altered relation.

Bankfull stage.--3.5 ft.

Remarks.--Base for partial-duration series, 380 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	Nov. 14, 1932	3.61	394	1947	May 26, 1947	3.26	311
	Mar. 24, 1933	3.56	384				
	Apr. 15, 1933	3.68	412	1948	May 14, 1948	3.71	537
	Aug. 26, 1933	5.14	880		May 17, 1948	3.49	420
1934	Aug. 4, 1934	3.76	404		June 3, 1948	3.72	542
					June 22, 1948	3.42	386
1935	Feb. 18, 1935	3.86	490		Aug. 4, 1948	3.90	645
	Apr. 14, 1935	3.48	391	1949	Jan. 4, 1949	3.61	482
	Sept. 8, 1935	5.30	1,090		Feb. 1, 1949	3.82	599
					May 6, 1949	3.55	451
1936	Jan. 6, 1936	4.60	754	1950	Sept. 12, 1950	3.48	415
	Jan. 22, 1936	4.22	605				
	Jan. 25, 1936	4.01	-	1951	Nov. 29, 1950	3.51	430
	Feb. 16, 1936	4.63	774		Apr. 4, 1951	3.51	430
	Mar. 15, 1936	3.89	506		July 6, 1951	3.44	396
	Mar. 31, 1936	3.66	432				
	Apr. 11-13, 1936	3.48	391	1952	Dec. 23, 1951	4.08	752
	Sept. 21, 1936	3.55	404		Jan. 28, 1952	3.56	456
1937	Jan. 25, 1937	3.58	418		Mar. 14-15, 1952	3.49	420
					Apr. 29, 1952	3.90	645
1938	July 1, 1938	3.77	552		June 2, 1952	3.51	430
	July 25, 1938	4.47	878		Aug. 7, 1952	4.12	776
	Aug. 10, 1938	3.75	543		Aug. 13, 1952	3.76	565
	Sept. 23, 1938	4.81	1,060	1953	Nov. 23, 1952	3.70	531
	Sept. 30, 1938	3.49	420		Mar. 16, 1953	3.83	604
1939	Oct. 4, 1938	3.54	445		Apr. 11, 1953	3.54	446
	Feb. 4, 1939	3.80	587		Apr. 19, 1953	3.58	467
	Feb. 13, 1939	3.72	542		May 28, 1953	3.58	467
	Mar. 2, 1939	3.68	520	1954	Dec. 15, 1953	3.47	410
	Mar. 16, 1939	3.65	504				
	Apr. 1, 1939	3.72	542	1955	Aug. 14, 1955	3.80	580
	Apr. 9, 1939	3.57	461				
	Apr. 29, 1939	3.54	446	1956	Mar. 19, 1956	3.33	326
	Aug. 21, 1939	3.94	669				
1940	Apr. 23, 1940	3.52	435	1957	Nov. 6, 1956	3.58	458
	May 17, 1940	3.51	430				
	Sept. 2, 1940	8.72	7,360	1958	Mar. 3, 1958	3.85	610
	Sept. 20, 1940	3.52	435		Mar. 24, 1958	3.81	586
1941	Mar. 13, 1941	3.33	343		May 7, 1958	3.92	652
					July 26, 1958	3.67	505
1942	Aug. 20, 1942	3.23	298		July 28, 1958	3.50	410
					Aug. 27, 1958	4.80	1,200
1943	Feb. 16, 1943	3.35	352		Sept. 29, 1958	4.30	800
				1959	July 16, 1959	3.89	634
1944	Apr. 25, 1944	3.65	504				
	Apr. 28, 1944	3.54	446	1960	Sept. 14, 1960	5.03	1,370
	Sept. 15, 1944	3.65	504				
1945	July 21, 1945	3.34	348	1961	Jan. 3, 1961	3.53	428
					Feb. 22, 1961	3.71	526
1946	Dec. 31, 1945	3.96	680		Mar. 26, 1961	3.67	505
	May 29, 1946	3.50	425		Apr. 16, 1961	3.79	574
	July 26, 1946	3.82	599				

a Backwater from ice.

4120. Manantico Creek near Millville, N.J.

Location.--Lat 39°25'12", long 74°58'00", on right bank at upstream side of Millville-Milmay highway bridge, 4 miles northeast of Millville, Cumberland County, and 7 miles upstream from mouth.

Drainage area.--22.3 sq mi. Area of swamps, lakes, and bogs, 1.6 sq mi.

Gage.--Recording. Datum of gage is 36.63 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 300 cfs and extended above by logarithmic plotting. Relation altered by channel improvements in 1936.

Remarks.--At times regulation on lake above station affects peak flow. Base for partial-duration series, 125 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	Mar. 30, 1932	2.34	77	1946	Nov. 30, 1945	2.66	155
1933	Aug. 24, 1933	5.22	379		Dec. 26, 1945	2.46	128
1934	Mar. 5, 1934	3.52	185		Dec. 30, 1945	2.58	144
	Aug. 4, 1934	3.14	160		July 24, 1946	2.62	150
	Aug. 17, 1934	2.82	125	1947	Aug. 19, 1946	2.57	143
1935	Feb. 16, 1935	3.16	160		May 23, 1947	2.36	115
	Sept. 7, 1935	5.72	566	1948	Jan. 2, 1948	2.44	125
1936	Oct. 31, 1935	2.99	129		Jan. 28, 1948	2.44	125
	Jan. 4, 1936	3.93	259		Feb. 15, 1948	2.99	206
	Jan. 20, 1936	2.98	129		May 15, 1948	2.57	143
	Feb. 15, 1936	4.83	413		May 18, 1948	2.60	147
	June 13, 1936	3.75	228		May 31, 1948	2.46	128
1937	May 16, 1937	2.59	128		Aug. 21, 1948	4.58	545
1938	Nov. 29, 1937	2.58	127	1949	Nov. 30, 1948	2.54	139
	July 24, 1938	4.46	474		Dec. 5, 1948	2.44	125
	July 31, 1938	2.61	130		Jan. 1, 1949	2.63	151
	Aug. 9, 1938	3.35	239		Jan. 28, 1949	2.47	129
	Sept. 22, 1938	4.19	413	1950	Aug. 10, 1950	2.44	125
1939	Jan. 31, 1939	2.71	142	1951	Nov. 26, 1950	2.67	157
	Feb. 4, 1939	2.57	125	1952	Dec. 22, 1951	3.18	238
	Feb. 12, 1939	2.57	125		Mar. 6, 1952	2.46	128
	Mar. 2, 1939	2.61	130		Apr. 29, 1952	2.89	190
	Aug. 20, 1939	6.21	1,050		June 2, 1952	3.20	241
1940	Apr. 21, 1940	2.51	129		July 10, 1952	2.49	132
	May 17, 1940	3.50	286		July 20, 1952	2.82	179
	Sept. 2, 1940	3.88	363		Aug. 7, 1952	4.15	432
1941	Mar. 7, 1941	2.55	134	1953	Nov. 23, 1952	2.66	164
1942	Sept. 19, 1942	2.91	186		Jan. 9, 1953	2.38	125
1943	Jan. 24, 1943	2.36	110		Feb. 16, 1953	2.49	138
1944	Apr. 25, 1944	3.64	313		Mar. 14, 1953	3.07	227
	June 19, 1944	2.62	144		July 7, 1953	2.91	204
	Sept. 15, 1944	3.77	340	1954	Oct. 29, 1953	2.41	131
1945	Aug. 4, 1945	2.39	119	1955	Aug. 14, 1955	2.72	176
	Aug. 8, 1945	2.39	119	1956	Oct. 15, 1955	2.37	126
				1957	June 27, 1957	2.24	109

4125. West Branch Cohansey River at Seeley, N.J.

Location.--Lat 39°29'06", long 75°15'33", on right bank 15 ft upstream from County Bridge H-31 at Seeley, Cumberland County, 450 ft upstream from mouth, and 4.1 miles northwest of Bridgeton.

Drainage area.--2.55 sq mi.

Gage.--Recording above concrete control. Datum of gage is 42.23 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 30 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 25 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951a	July 5, 1951	2.17	56	1957	Nov. 1, 1956	2.81	105
					Sept. 8, 1957	-	74
1952	Dec. 18, 1951	1.66	26				
	Dec. 21, 1951	2.51	61	1958	Jan. 14, 1958	-	33
	Feb. 4, 1952	1.68	27		Feb. 28, 1958	-	31
	Aug. 6, 1952	5.72	342		Aug. 25, 1958	3.87	173
					Sept. 27, 1958	2.71	97
1953	Feb. 15, 1953	1.69	28				
	Mar. 13, 1953	1.65	26	1959	Oct. 1, 1958	1.98	44
	July 20, 1953	2.37	70		June 3, 1959	2.05	48
	July 23, 1953	3.38	136		July 1, 1959	1.86	37
1954	Dec. 15, 1953	-	31		July 14, 1959	2.11	52
	Aug. 9, 1954	1.93	41		Aug. 8, 1959	1.90	39
1955	Aug. 12, 1955	1.54	20	1960	July 30, 1960	3.54	147
					Aug. 6, 1960	1.74	31
1956	July 27, 1956	1.88	38		Sept. 12, 1960	4.38	215
	July 28, 1956	1.81	34	1961	Jan. 1, 1961	-	35
	Sept. 6, 1956	-	145		Apr. 13, 1961	1.76	32

a Period May 1 to Sept. 30, 1951.

4130. Loper Run near Bridgeton, N.J.

Location.--Lat 39°28'20", long 75°14'55", on right bank of Silver Lake, Q4 mile upstream from mouth and 4 miles northwest of Bridgeton, Cumberland County.

Drainage area.--2.34 sq mi.

Gage.--Recording above dam with two concrete siphon spillways. Datum of gage is 47.10 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by laboratory study of full size model.

Remarks.--Maximum instantaneous discharge was 140 cfs each year except 1940 when both siphons were in operation and maximum instantaneous discharge was 280 cfs. Only maximum daily discharges are shown.

Maximum daily discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	July 24, 1938	-	39	1950	Sept. 11, 1950	-	58
1939	Aug. 19, 1939	-	66				
1940	Sept. 11, 1940	-	94	1951	Nov. 25, 1950	-	88
					Dec. 21, 1951	-	40
1941	July 18, 1941	-	31	1953	July 23, 1953	-	17
1942	Sept. 19, 1942	-	29	1954	Dec. 14, 1953	-	12
1943	Oct. 16, 1942	-	19.8	1955	Nov. 21, 1954	-	18
1944	Sept. 14, 1944	-	30				
1945	July 18, 1945	-	29	1956	July 21, Sept. 6, 1956	-	12
1946	Oct. 23, 1945	-	12.6	1957	Nov. 2, 1956	-	67
1947	May 26, 1947	-	14.1	1958	Aug. 25, 1958	-	106
1948	Feb. 14, 1948	-	52	1959	July 14, 1959	-	47
1949	May 3, 1949	-	13.6				

4135. East Branch Delaware River at Margaretville, N. Y.

Location.--Lat 42°08'40", long 74°39'15", on right bank at downstream side of bridge at southwest end of Margaretville, Delaware County, 1 1/4 miles downstream from Bush Kill.

Drainage area.--163 sq mi.

Gage.--Nonrecording prior to Sept. 9, 1937; recording thereafter. At datum 1.00 ft higher prior to Aug. 17, 1944. Datum of gage is 1,302.38 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 8,700 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 2,800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	May 15, 1937	7.60	6,000	1950	Apr. 5, 1950	6.91	3,320
1938	Oct. 23, 1937	7.10	5,170	1951	Nov. 25, 1950	13.84	15,700
	Jan. 25, 1938	5.43	4,370		Dec. 4, 1950	10.62	7,470
	July 23, 1938	6.22	4,130		Feb. 1, 1951	7.14	3,550
	Sept. 21, 1938	11.74	13,200		Feb. 7, 1951	7.74	4,320
1939	Dec. 6, 1938	6.50	4,450		Mar. 31, 1951	10.04	7,770
	Feb. 15, 1939	6.72	4,710	1952	Nov. 7, 1951	10.21	7,830
	Feb. 20, 1939	5.81	3,660		Apr. 5, 1952	8.64	5,260
1940	Mar. 31, 1940	10.51	9,920	1953	Dec. 11, 1952	11.27	9,850
	Apr. 9, 1940	7.04	4,590		Jan. 24, 1953	8.25	4,720
	Apr. 12, 1940	5.69	3,130	1954	Dec. 7, 1953	6.51	2,890
1941	Apr. 14, 1941	4.60	2,120	1955	Nov. 3, 1954	6.99	3,340
1942	Dec. 24, 1941	6.47	4,000		Aug. 19, 1955	11.09	9,490
	Mar. 9, 1942	9.70	8,760	1956	Oct. 16, 1955	12.87	13,300
	Sept. 27, 1942	8.50	6,900		Apr. 5, 1956	7.84	4,240
1943	Dec. 30, 1942	8.06	6,240		Apr. 16, 1956	7.54	3,900
	Mar. 17, 1943	5.66	3,160		Apr. 30, 1956	6.56	2,930
1944	Nov. 9, 1943	5.66	3,160	1957	Jan. 23, 1957	6.38	2,770
	Mar. 17, 1944	5.66	3,160	1958	Dec. 21, 1957	10.01	7,470
1945	Jan. 1, 1945	7.53	4,150		Apr. 7, 1958	6.58	2,950
	Mar. 3, 1945	6.39	2,890		Apr. 18, 1958	7.86	4,260
	Mar. 18, 1945	7.10	3,640	1959	Jan. 22, 1959	9.50	6,580
1946	Jan. 7, 1946	6.30	2,800		Mar. 6, 1959	7.46	3,810
	Mar. 9, 1946	8.05	4,800		Apr. 2, 1959	7.63	3,990
1947	Mar. 14, 1947	7.02	3,550	1960	Nov. 28, 1959	10.46	8,200
	Apr. 5, 1947	7.33	3,910		Jan. 3, 1960	7.61	3,970
1948	Mar. 16, 1948	7.78	4,450		Feb. 11, 1960	8.96	5,730
	Mar. 22, 1948	11.28	9,690		Mar. 31, 1960	8.83	5,540
1949	Dec. 31, 1948	10.43	8,330		Apr. 4, 1960	9.48	6,550
	Jan. 6, 1949	8.46	5,360		Sept. 12, 1960	9.61	6,770
1950	Mar. 28, 1950	7.92	4,440		Sept. 20, 1960	7.78	4,110
				1961	Feb. 26, 1961	8.90	5,640
					Apr. 25, 1961	7.11	3,310

4140. Platte Kill at Dunraven, N. Y.

Location.--Lat 42°08'00", long 74°41'40", on right bank at upstream side of bridge on State Highway 28 in Dunraven, Delaware County, 0.6 mile upstream from mouth.

Drainage area.--34.7 sq mi.

Gage.--Recording. Datum of gage is 1,296.23 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 940 cfs and extended above on basis of slope-area measurement at 3,240 cfs.

Remarks.--Base for partial-duration series, 600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Mar. 9, 1942	7.05	2,200	1952	Oct. 24, 1951	4.78	770
	Mar. 17, 1942	4.94	716		Nov. 3, 1951	5.07	1,000
	Sept. 27, 1942	5.75	1,220		Nov. 7, 1951	5.40	1,290
1943	Dec. 30, 1942	5.96	1,390		Apr. 5, 1952	4.82	799
	Feb. 24, 1943	-	856	1953	Dec. 11, 1952	5.92	1,760
	Mar. 17, 1943	4.95	748		Jan. 24, 1953	5.34	1,240
1944	Nov. 9, 1943	5.25	920		Feb. 21, 1953	4.79	777
	Mar. 13, 1944	a6.45	-	1954	Dec. 6, 1953	4.75	748
	Mar. 17, 1944	4.97	759		Feb. 17, 1954	4.78	770
	Mar. 23, 1944	4.85	692	1955	Feb. 23, 1955	4.74	741
1945	Jan. 1, 1945	a5.60	900		Aug. 18, 1955	7.26	3,010
	Feb. 22, 1945	a6.18	-	1956	Oct. 16, 1955	5.81	1,660
	Feb. 27, 1945	4.97	759		Mar. 8, 1956	4.88	845
	Mar. 3, 1945	5.01	782		Apr. 4, 1956	5.43	1,320
	Mar. 6, 1945	4.84	688		Apr. 16, 1956	4.85	812
	Mar. 17, 1945	4.86	698		Apr. 30, 1956	4.59	617
1946	Mar. 7, 1946	4.92	731		Sept. 24, 1956	4.68	696
	Mar. 9, 1946	5.28	938	1957	Jan. 22, 1957	a5.31	-
1947	Mar. 14, 1947	a5.09	900		Jan. 23, 1957	5.04	973
	Apr. 5, 1947	5.37	1,290		Apr. 6, 1957	4.75	746
	May 6, 1947	4.80	771		May 20, 1957	4.67	689
	May 22, 1947	4.90	854	1958	Dec. 21, 1957	6.01	1,840
	June 15, 1947	4.70	693		Apr. 6, 1958	4.70	710
1948	Nov. 8, 1947	4.62	635		Apr. 16, 1958	4.57	620
	Nov. 12, 1947	4.57	600		Apr. 16, 1958	4.65	675
	Mar. 16, 1948	a5.32	1,060	1959	Jan. 22, 1959	5.75	1,600
	Mar. 19, 1948	4.90	866		Mar. 6, 1959	4.73	732
	Mar. 22, 1948	7.49	3,240		Apr. 2, 1959	4.91	868
	Apr. 14, 1948	4.79	779	1960	Oct. 9, 1959	4.65	675
	June 25, 1948	5.01	955		Nov. 28, 1959	5.62	1,490
1949	Dec. 30, 1948	6.17	1,980		Jan. 3, 1960	5.49	1,370
	Jan. 6, 1949	5.57	1,440		Feb. 11, 1960	5.65	1,520
1950	Jan. 10, 1950	4.60	638		Mar. 31, 1960	5.49	1,370
	Mar. 8, 1950	a5.18	1,000		Apr. 4, 1960	5.76	1,610
	Mar. 28, 1950	5.41	1,300		Sept. 12, 1960	5.48	1,360
	Apr. 5, 1950	4.82	800		Sept. 20, 1960	5.83	1,680
1951	Nov. 25, 1950	8.01	3,810	1961	Feb. 19, 1961	a5.16	-
	Dec. 4, 1950	5.92	1,760		Feb. 24, 1961	4.66	682
	Feb. 7, 1951	5.32	1,220		Feb. 25, 1961	5.11	1,030
	Mar. 31, 1951	6.31	2,110		Apr. 25, 1961	4.72	725
	July 19, 1951	5.22	1,130				
	July 28, 1951	4.59	636				

a Backwater from ice.

4145. Mill Brook at Arena, N. Y.

Location.--Lat 42°06'25", long 74°43'45", on left bank a quarter of a mile upstream from highway bridge and Pepacton Reservoir, three-quarters of a mile southeast of Arena, Delaware County, and 2½ miles southwest of Dunraven.

Drainage area.--25.0 sq mi.

Gage.--Nonrecording prior to Dec. 8, 1939; recording thereafter. At site 0.2 mile downstream at different datum prior to Oct. 17, 1939. Datum of gage is 1,298.54 ft above mean sea level, datum of Board of Water Supply, City of New York.

Stage-discharge relation.--Defined by current-meter measurements below 960 cfs and extended above on basis of velocity-area study.

Remarks.--Base for partial-duration series, 740 cfs. Only annual peaks are shown prior to 1940.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	May 15, 1937	5.0	1,550	1951	Feb. 7, 1951	6.55	1,250
1938	Sept. 21, 1938	7.6	4,500		Mar. 30, 1951	8.56	2,700
1939	Dec. 6, 1938	5.9	2,550				
				1952	Nov. 7, 1951	8.34	2,520
1940	Mar. 15, 1940	a5.11	-		Mar. 11, 1952	5.70	744
	Mar. 31, 1940	5.11	875		Apr. 5, 1952	7.27	1,740
1941	Mar. 4, 1941	a6.16	-		July 10, 1952	5.94	880
	Apr. 14, 1941	5.64	580	1953	Dec. 11, 1952	9.00	3,050
1942	Dec. 24, 1941	7.74	1,770		Jan. 24, 1953	6.21	1,040
	Mar. 9, 1942	7.00	1,270	1954	Dec. 7, 1953	6.20	1,030
	May 23, 1942	6.06	741	1955	Aug. 19, 1955	7.00	1,550
	Sept. 27, 1942	9.13	2,880	1956	Oct. 15, 1955	6.76	1,390
1943	Dec. 30, 1942	7.88	1,870		Apr. 16, 1956	6.04	939
1944	Nov. 9, 1943	7.12	1,550	1957	Jan. 23, 1957	5.73	761
1945	Jan. 1, 1945	a8.68	-	1958	Dec. 20, 1957	9.44	3,400
	Mar. 17, 1945	6.08	908		Apr. 18, 1958	5.67	775
	July 15, 1945	6.89	1,390	1959	Jan. 22, 1959	7.40	1,880
	July 19, 1945	6.82	1,350		Feb. 10, 1959	a7.88	-
	July 20, 1945	6.51	1,170		Mar. 6, 1959	5.78	839
1946	Mar. 9, 1946	6.66	1,210		Apr. 2, 1959	6.80	1,470
1947	Mar. 14, 1947	5.78	741	1960	Oct. 24, 1959	5.70	792
	Apr. 5, 1947	5.96	840		Nov. 28, 1959	8.67	2,790
1948	Nov. 8, 1947	5.80	752		Dec. 13, 1959	5.74	816
	Mar. 22, 1948	8.36	2,540		Jan. 3, 1960	5.96	946
1949	Dec. 30, 1948	8.22	2,430		Feb. 11, 1960	7.46	1,920
	Jan. 6, 1949	6.92	1,450		Mar. 31, 1960	a6.79	1,300
1950	Mar. 8, 1950	a6.21	-		Apr. 4, 1960	7.27	1,790
	Apr. 5, 1950	5.66	646		Sept. 12, 1960	6.97	1,580
					Sept. 20, 1960	5.79	845
1951	Nov. 25, 1950	9.92	3,820	1961	Feb. 25, 1961	6.82	1,480
	Dec. 4, 1950	8.26	2,460		Apr. 25, 1961	6.07	1,010

a Backwater from ice

4150. Tremper Kill near Shavertown, N. Y.

Location.--Lat 42°07'15", long 74°49'10", on right bank 500 ft upstream from highway bridge about 1,000 ft upstream from Pepacton Reservoir, 2½ miles northeast of Shavertown, Delaware County, and 5 miles south of Andes.

Drainage area.--33.0 sq mi.

Gage.--Nonrecording prior to Sept. 28, 1937; recording thereafter. Prior to Aug. 5, 1937, at site 500 ft downstream and Aug. 5 to Sept. 28, 1937, at site a quarter of a mile downstream at different datums. Datum of gage is 1,285.87 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,500 cfs.

Remarks.--Base for partial-duration series, 700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	May 15, 1937	3.55	568	1951	Nov. 25, 1950	4.74	1,590
1938	Oct. 23, 1937	4.07	1,800		Dec. 4, 1950	5.51	2,280
	Jan. 25, 1938	4.22	900		Feb. 1, 1951	4.06	991
	Aug. 11, 1938	4.92	1,400		Feb. 7, 1951	4.50	1,370
	Sept. 21, 1938	7.12	4,250		Feb. 21, 1951	3.71	710
					Mar. 31, 1951	4.70	1,630
1939	Dec. 6, 1938	4.19	883	1952	Nov. 3, 1951	3.79	772
	Feb. 15, 1939	4.77	1,390		Nov. 7, 1951	4.14	1,060
	Feb. 20, 1939	4.45	855		July 10, 1952	4.00	941
1940	Mar. 31, 1940	6.10	2,800	1953	Dec. 11, 1952	5.15	1,960
	Sept. 1, 1940	4.41	1,050		Jan. 24, 1953	4.18	1,090
1941	Dec. 29, 1940	4.32	976		Feb. 21, 1953	3.73	725
					Sept. 7, 1953	3.72	718
1942	Mar. 9, 1942	5.11	1,700	1954	Dec. 7, 1953	3.79	772
	May 23, 1942	4.70	1,300		Feb. 17, 1954	3.93	884
	Sept. 27, 1942	4.20	890	1955	Aug. 19, 1955	5.08	1,890
1943	Dec. 30, 1942	5.24	1,830		Oct. 15, 1955	3.88	844
	Feb. 24, 1943	4.17	869	1956	Mar. 8, 1956	3.98	923
	Mar. 17, 1943	4.28	946		Apr. 4, 1956	4.32	1,210
1944	Nov. 9, 1943	4.68	1,280		Apr. 16, 1956	3.76	743
	Mar. 17, 1944	4.14	848	1957	Jan. 23, 1957	4.01	948
	Sept. 14, 1944	3.97	730		Dec. 21, 1957	6.26	2,800
1945	Jan. 1, 1945	43.92	-	1958	Apr. 6, 1958	4.74	978
	Mar. 18, 1945	3.67	642	1959	Jan. 22, 1959	6.08	2,590
1946	Mar. 9, 1946	3.86	792		Apr. 2, 1959	5.18	1,510
1947	Apr. 5, 1947	4.00	1,010	1960	Oct. 9, 1959	4.75	991
	May 22, 1947	3.88	813		Nov. 28, 1959	5.36	1,720
1948	Mar. 22, 1948	6.37	3,050		Jan. 3, 1960	5.02	1,310
	Apr. 14, 1948	3.80	743		Feb. 11, 1960	5.17	1,490
	June 25, 1948	3.82	760		Mar. 31, 1960	5.22	1,550
1949	Dec. 30, 1948	5.24	2,040		Apr. 4, 1960	5.30	1,650
	Jan. 6, 1949	4.09	1,000		Sept. 12, 1960	5.63	2,050
1950	Mar. 8, 1950	3.88	844		Sept. 20, 1960	6.08	2,590
	Mar. 28, 1950	4.18	1,090	1961	Feb. 26, 1961	5.22	1,550
	Apr. 5, 1950	3.84	812		Aug. 26, 1961	5.02	1,310

a Backwater from ice.

4155. Terry Clove Kill near Pepacton, N. Y.

Location.--Lat 42°07'50", long 74°54'00", on left bank 600 ft upstream from wooden farm bridge, about 1 mile upstream from Pepacton Reservoir, 3½ miles north of Pepacton, Delaware County, and 6 miles northeast of Downsview.

Drainage area.--14.1 sq mi.

Gage.--Nonrecording at site 600 ft downstream at different datum prior to Oct. 1, 1940; recording thereafter. Datum of gage is 1,329.38 ft above mean sea level, datum of Board of Water Supply, City of New York.

Stage-discharge relation.--Defined by current-meter measurements below 800 cfs and extended above on basis of slope-area measurement at 4,010 cfs.

Remarks.--Base for partial-duration series, 450 cfs. Only annual peaks are shown prior to 1941.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	May 22, 1937	3.15	250	1951	Mar. 30, 1951	3.23	626
1938	Sept. 21, 1938	6.2	1,700	1952	July 10, 1952	2.87	432
1939	Feb. 15, 1939	4.2	620	1953	Dec. 11, 1952	3.97	1,170
1940	Mar. 31, 1940	5.4	1,180		Jan. 24, 1953	2.92	456
1941	Dec. 29, 1940	3.07	482	1954	Feb. 17, 1954	2.78	426
1942	Dec. 24, 1941	-	(a)	1955	Aug. 18, 1955	4.12	1,320
	Mar. 9, 1942	3.81	1,040	1956	Apr. 4, 1956	3.04	519
	May 23, 1942	5.49	4,010	1957	Jan. 23, 1957	3.03	513
1943	Dec. 30, 1942	3.65	814	1958	Dec. 20, 1957	3.63	896
1944	Nov. 9, 1943	3.15	528		Apr. 6, 1958	2.91	451
1945	Jan. 1, 1945	3.22	565	1959	Jan. 21, 1959	3.21	614
1946	Feb. 27, 1946	b3.25	-		Apr. 2, 1959	3.19	602
	May 21, 1946	2.93	415	1960	Oct. 9, 1959	3.31	674
1947	May 22, 1947	3.40	662		Nov. 28, 1959	3.29	662
1948	Mar. 22, 1948	4.28	1,440		Jan. 3, 1960	3.06	529
1949	Dec. 30, 1948	3.37	713		Feb. 11, 1960	3.58	858
1950	Mar. 8, 1950	3.32	681		Mar. 31, 1960	3.02	508
	Mar. 28, 1950	3.07	535		Apr. 4, 1960	3.41	739
1951	Nov. 25, 1950	2.98	487		Sept. 12, 1960	3.90	1,110
	Dec. 4, 1950	3.99	1,190		Sept. 20, 1960	3.84	1,060
	Feb. 1, 1951	3.03	513	1961	Feb. 25, 1961	3.30	668
	Feb. 7, 1951	3.19	602		Aug. 26, 1961	3.67	927

a Not determined (exceeded 450 cfs).

b Backwater from ice.

4165. Coles Clove Kill near Pepacton, N. Y.

Location.--Lat 42°06'20", long 74°54'10", on left bank just downstream from timber farm bridge, 0.6 mile downstream from confluence of Terry Clove Kill and Fall Clove Kill, 1½ miles upstream from mouth, and 2 miles northwest of Pepacton, Delaware County.

Drainage area.--28.0 sq mi.

Gage.--Recording. Datum of gage is 1,193.61 ft above mean sea level, datum of Board of Water Supply, City of New York.

Stage-discharge relation.--Defined by current-meter measurements below 700 cfs and extended above on basis of slope-area and contracted-opening measurements at 2,400 cfs.

Remarks.--Base for partial-duration series, 790 cfs.

Peak stages and discharges of Coles Clove Kill near Pepacton, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Jan. 1, 1945	4.81	874	1950	Apr. 5, 1950	4.56	874
1946	Feb. 28, 1946	a6.62	-	1951	Nov. 25, 1950	5.07	1,200
	Mar. 9, 1946	4.61	780		Dec. 4, 1950	6.21	2,250
1947	Apr. 5, 1947	4.73	835		Feb. 1, 1951	4.65	926
	May 22, 1947	4.96	950		Feb. 7, 1951	5.17	1,270
1948	Feb. 14, 1948	a6.00	-		Mar. 30, 1951	5.32	1,390
	Mar. 16, 1948	4.93	1,010	1952	Nov. 3, 1951	4.42	798
	Mar. 19, 1948	4.63	850		Nov. 7, 1951	4.45	814
	Mar. 22, 1948	6.41	2,400		Mar. 11, 1952	4.63	914
1949	Dec. 30, 1948	5.53	1,400		June 4, 1952	4.53	857
	Jan. 6, 1949	4.67	827		July 10, 1952	4.80	1,020
1950	Mar. 8, 1950	5.51	1,550	1953	Dec. 11, 1952	6.32	2,380
	Mar. 28, 1950	4.99	1,140		Jan. 24, 1953	4.74	980
					Sept. 7, 1953	4.50	840

a Backwater from ice.

4170. East Branch Delaware River at Downsview, N. Y.

Location.--Lat 42°04'30", long 74°58'35", on left bank half a mile downstream from Downsview Dam, at downstream end of outlet channel of Pepacton Reservoir, and 1 mile east of Downsview, Delaware County.

Drainage area.--371 sq mi.

Gage.--Recording. At site three-quarters of a mile downstream at different datum prior to June 27, 1955. Datum of gage is 1,094.92 ft above mean sea level, datum of Board of Water Supply, City of New York.

Stage-discharge relation.--Defined by current-meter measurements below 12,000 cfs and extended above by logarithmic plotting.

Historical data.--Maximum stage known, that of Oct. 9, 1903.

Remarks.--Only annual peaks are shown subsequent to September 1954; entire flow controlled by Pepacton Reservoir. Base for partial-duration series, 7,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Oct. 9, 1903	16	-	1950	Apr. 5, 1950	11.49	9,620
1942	Mar. 9, 1942	11.61	12,000	1951	Nov. 26, 1950	14.52	23,900
	May 23, 1942	11.44	15,600		Dec. 5, 1950	12.63	12,600
	Sept. 28, 1942	12.45	11,900		Mar. 31, 1951	12.74	13,100
1943	Dec. 30, 1942	12.83	14,800	1952	Nov. 8, 1951	11.85	9,520
1944	Nov. 9, 1943	10.98	7,760		Apr. 6, 1952	11.64	8,790
1945	Jan. 1, 1945	11.30	9,380	1953	Dec. 11, 1952	13.45	15,200
	Mar. 18, 1945	10.92	8,370		Jan. 25, 1953	12.02	8,870
1946	Mar. 9, 1946	10.89	8,220	1954	Dec. 7, 1953	10.88	5,620
1947	Mar. 14, 1947	11.05	8,190	1955	Aug. 15, 1955	3.80	620
	Apr. 6, 1947	10.92	8,300	1956	Apr. 17, 1956	6.73	5,200
1948	Feb. 20, 1948	11.35	9,080	1957	June 21, 22,	3.88	a698
	Mar. 16, 1948	11.67	10,200		July 2, 1957		
	Mar. 22, 1948	14.11	22,000	1958	May 18, 1958	4.46	1,600
1949	Dec. 31, 1948	13.36	18,100	1959	June 17-24,	3.92	a754
	Jan. 6, 1949	11.79	11,200		July 1-8, 1959		
1950	Mar. 29, 1950	11.59	8,690	1960	Apr. 5, 1960	8.69	9,410
				1961	Apr. 26, 1961	6.59	5,030

a Maximum daily discharge.

4175. East Branch Delaware River at Harvard, N. Y.

Location.--42°01'30", long 75°07'10", on right bank 1,000 ft downstream from Baxter Brook, and 1,300 ft downstream from highway bridge at Harvard, Delaware County.

Drainage area.--457 sq mi.

Gage.--Recording. At site 1,300 ft upstream at datum 0.65 ft higher prior to Aug. 12, 1958. Datum of gage is 1,007.41 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 10,000 cfs and extended above on basis of slope-area measurement at 26,200 cfs.

Remarks.--Only annual peaks are shown subsequent to September 1954; entire flow from 371 sq mi of drainage area controlled by Pepacton Reservoir. Base for partial-duration series, 8,800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Dec. 1, 1934	11.16	10,400	1947	Mar. 14, 1947	a11.08	-
	Mar. 6, 1935	a12.25	-		Apr. 6, 1947	10.97	9,720
1936	Mar. 12, 1936	13.30	16,700	1948	Feb. 20, 1948	a12.12	11,900
	Mar. 18, 1936	15.58	26,200		Mar. 17, 1948	11.19	10,100
1937	May 15, 1937	10.50	9,390		Mar. 22, 1948	15.75	27,000
1938	Oct. 24, 1937	11.48	11,600	1949	Dec. 31, 1948	14.47	21,400
	Jan. 25, 1938	10.72	9,690		Jan. 6, 1949	11.85	12,000
	Aug. 11, 1938	12.67	14,500	1950	Mar. 9, 1950	a12.96	-
	Sept. 22, 1938	16.93	31,400		Mar. 29, 1950	10.95	9,700
					Apr. 5, 1950	11.17	10,200
1939	Dec. 6, 1938	11.50	11,100	1951	Nov. 26, 1950	15.69	26,800
	Feb. 15, 1939	a13.33	-		Dec. 5, 1950	13.01	15,700
	Feb. 15, 1939	10.64	9,020		Mar. 31, 1951	13.04	15,800
1940	Mar. 31, 1940	15.01	23,100	1952	Nov. 8, 1951	11.72	11,700
	Apr. 9, 1940	11.34	10,900		Apr. 6, 1952	10.81	9,350
1941	Dec. 30, 1940	9.27	6,570	1953	Dec. 12, 1952	13.96	17,800
1942	Mar. 9, 1942	12.26	13,300		Jan. 25, 1953	11.52	10,400
	May 23, 1942	14.62	21,600	1954	Feb. 17, 1954	9.85	6,600
	Sept. 28, 1942	12.30	13,400		Aug. 19, 1955	10.34	7,590
1943	Dec. 31, 1942	13.53	17,400	1955	Apr. 17, 1956	10.23	6,330
1944	Nov. 9, 1943	10.77	9,330	1957	Apr. 6, 1957	6.10	1,560
	Mar. 17, 1944	a11.94	-	1958	Dec. 21, 1957	9.12	4,620
1945	Feb. 27, 1945	a12.74	14,800	1959	Jan. 22, 1959	6.76	3,830
	Mar. 18, 1945	10.93	9,710	1960	Apr. 5, 1960	10.65	11,200
1946	Jan. 6, 1946	a10.83	9,350	1961	Apr. 25, 1961	8.59	6,590
	Mar. 9, 1946	10.73	9,110				

a Backwater from ice.

4180. Beaver Kill near Turnwood, N. Y.

Location.--Lat 42°02'05", long 74°43'55", on left bank 75 ft downstream from highway bridge, 300 ft downstream from Big Pond Outlet, and 1.3 miles northwest of Turnwood, Ulster County.

Drainage area.--40.8 sq mi.

Gage.--Recording. Datum of gage is 1,751.90 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,200 cfs and extended above on basis of contracted-opening measurement at 7,400 cfs.

Remarks.--Base for partial-duration series, 1,000 cfs.

Peak stages and discharges of Beaver Kill near Turnwood N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Dec. 30, 1948	6.68	3,180	1954	Feb. 17, 1954	4.41	1,020
	Jan. 6, 1949	5.69	2,070		Feb. 22, 1954	4.79	1,300
	Feb. 15, 1949	4.50	1,080		Mar. 1, 1954	4.69	1,220
1950	Dec. 13, 1949	4.90	1,380		Apr. 17, 1954	4.81	1,310
	Apr. 5, 1950	5.40	1,800	1955	Nov. 3, 1954	4.54	1,100
	July 11, 1950	6.71	3,220		Aug. 18, 1955	6.18	2,580
1951	Nov. 25, 1950	9.16	7,400	1956	Oct. 15, 1955	6.49	2,940
	Dec. 4, 1950	6.48	2,930		Apr. 16, 1956	5.36	1,760
	Mar. 30, 1951	8.32	5,810		Apr. 29, 1956	5.58	1,970
1952	Nov. 3, 1951	4.62	1,280	1957	Jan. 23, 1957	a6.17	-
	Nov. 7, 1951	7.24	4,000		Jan. 23, 1957	4.94	1,410
	Mar. 11, 1952	4.52	1,100		Apr. 6, 1957	4.55	1,120
	Apr. 2, 1952	4.99	1,450	1958	Dec. 21, 1957	8.12	5,450
	Apr. 5, 1952	6.91	3,500		Dec. 26, 1957	4.75	1,260
1953	July 10, 1952	7.34	4,160		Apr. 18, 1958	5.55	1,310
	Nov. 21, 1952	4.98	1,440	1959	Jan. 22, 1959	a6.97	-
	Dec. 11, 1952	7.78	4,880		Jan. 22, 1959	5.97	2,350
	Jan. 24, 1953	5.41	1,810		Apr. 2, 1959	6.33	2,750
	Mar. 15, 1953	5.39	1,790		Sept. 10, 1959	5.62	2,000
	Mar. 24, 1953	5.97	2,350				
1954	Dec. 7, 1953	5.27	1,680				

a Backwater from ice.

4185. Beaver Kill at Craigie Clair, N. Y.

Location.--Lat 41°57'45", long 74°52'00", on left bank 100 ft downstream from highway bridge at Craigie Clair, Sullivan County, 2½ miles upstream from Spring Brook, and 2½ miles northeast of Rockland.

Drainage area.--82 sq mi, approximately.

Gage.--Nonrecording at site 100 ft upstream at datum 0.56 ft higher prior to Aug. 14, 1937; recording thereafter. Datum of gage is 1,399.69 ft above mean sea level, adjustment of 1912..

Stage-discharge relation.--Defined by current-meter measurements below 4,000 cfs and extended above on basis of slope-area measurement at 10,300 cfs.

Remarks.--Base for partial-duration series, 3,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	May 15, 1937	6.3	2,640	1945	Mar. 17, 1945	7.33	3,070
1938	Oct. 23, 1937	9.76	8,480		July 19, 1945	7.94	4,000
	July 21, 1938	9.77	8,510	1946	Mar. 9, 1946	7.97	4,050
	Aug. 11, 1938	10.11	9,530		Apr. 6, 1947	7.49	3,310
	Sept. 21, 1938	9.72	8,360	1948	Nov. 8, 1947	7.43	3,220
1939	Dec. 6, 1938	7.78	3,910		Mar. 16, 1948	a9.68	-
1940	Mar. 31, 1940	8.10	4,480		Mar. 22, 1948	9.49	6,940
	Apr. 8, 1940	7.59	3,600	1949	Dec. 30, 1948	8.52	5,010
1941	Dec. 29, 1940	6.94	2,670		Jan. 6, 1949	7.70	3,620
1942	Dec. 24, 1941	8.76	5,810	1950	Apr. 4, 1950	7.38	3,450
	Sept. 27, 1942	10.74	10,300		July 12, 1950	7.20	3,190
1943	Dec. 30, 1942	8.25	4,750	1951	Nov. 25, 1950	10.77	10,100
1944	Nov. 9, 1943	8.45	5,120		Dec. 4, 1950	8.45	4,740
					Mar. 30, 1951	10.48	9,270

a Backwater from ice.

Peak stages and discharges of Beaver Kill near Craigie Clair, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Nov. 7, 1951	8.77	5,310	1957	Jan. 23, 1957	6.48	2,110
	Apr. 5, 1952	8.47	5,210	1958	Dec. 21, 1957	10.59	9,710
	July 10, 1952	8.50	5,260				
1953	Dec. 11, 1952	9.01	6,190	1959	Jan. 22, 1959	10.02	-
	Jan. 24, 1953	7.47	3,440	Jan. 22, 1959	7.65	3,900	
	Mar. 24, 1953	7.27	3,140	Apr. 2, 1959	7.73	4,020	
1954	Dec. 7, 1953	7.41	3,350	1960	Nov. 28, 1959	8.81	5,830
1955	Aug. 19, 1955	8.48	5,180		Feb. 11, 1960	7.48	3,660
					Apr. 4, 1960	7.91	4,300
1956	Oct. 15, 1955	7.62	3,680	1961	Feb. 26, 1961	7.63	3,880
1957	Jan. 23, 1957	7.72	-		Apr. 25, 1961	7.53	3,730

a Backwater from ice.

4195. Willowemoc Creek near Livingston Manor, N. Y.

Location.--Lat 41°54'15", long 74°48'50", on right bank three-quarters of a mile upstream from highway bridge in Livingston Manor, Sullivan County, and 1½ miles upstream from Little Beaver Kill.

Drainage area.--63 sq mi, approximately.

Gage.--Recording. Datum of gage is 1,435.85 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 3,300 cfs and extended above on basis of slope-area measurement at 10,500 cfs.

Remarks.--Base for partial-duration series, 2,300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)		
1938	Oct. 23, 1937	6.72	4,470	1951	Dec. 4, 1950	5.28	2,970		
	July 22, 1938	7.10	5,090		Mar. 31, 1951	9.01	10,500		
	Aug. 11, 1938	7.87	6,200	1952	Nov. 7, 1951	5.76	3,880		
	Sept. 21, 1938	6.06	3,730		Apr. 5, 1952	5.77	3,890		
1939	Dec. 6, 1938	5.15	2,720		July 10, 1952	5.91	4,060		
			1940	Mar. 31, 1940	5.50	3,090	1953	Dec. 11, 1952	6.31
Apr. 8, 1940	5.69	3,300		Jan. 24, 1953	4.35	2,330			
1941	Dec. 29, 1940	4.51	2,100		Mar. 16, 1953	4.81		2,790	
			1942	Dec. 24, 1941	6.01	3,690	1954	Dec. 7, 1953	3.29
Sept. 27, 1942	7.53	5,720		Jan. 27, 1954	4.46	-			
1943	Dec. 30, 1942	5.45	3,090	1955	Aug. 19, 1955	6.11	4,300		
1944	Nov. 9, 1943	5.64	3,280	1956	Oct. 15, 1955	5.73	3,850		
1945	Mar. 17, 1945	5.23	2,870		Apr. 16, 1956	3.94	2,330		
			July 19, 1945	4.90	2,540	1957	Jan. 23, 1957	4.75	-
			July 29, 1945	5.00	2,640		Jan. 23, 1957	3.28	1,700
			1946	Mar. 9, 1946	5.08	2,720		1958	Dec. 21, 1957
1947	Apr. 5, 1947	4.71				2,360			1959
			Apr. 2, 1959	4.58	3,010				
1948	Nov. 8, 1947	4.74	2,390	1960	Oct. 9, 1959	4.61	3,050		
	Mar. 22, 1948	5.99	3,490		Nov. 28, 1959	5.40	3,960		
1949	Dec. 30, 1948	6.87	4,490		Dec. 13, 1959	4.24	2,640		
			Jan. 6, 1949		5.30	2,780	Feb. 11, 1960	4.00	2,390
1950	Apr. 4, 1950	4.96	2,560		Apr. 4, 1960	4.98	3,470		
			1951	Nov. 26, 1950	8.38	8,130		1961	Feb. 26, 1961
Apr. 25, 1961	5.03	3,520							

a Backwater from ice.

4200. Little Beaver Kill near Livingston Manor, N. Y.

Location.--Lat 41°52'20", long 74°47'55", on right bank 100 ft downstream from highway bridge, 2½ miles southeast of Livingston Manor, Sullivan County, and 3 miles upstream from Cattail Brook.

Drainage area.--19.8 sq mi.

Gage.--Nonrecording prior to Dec. 9, 1939; recording thereafter. Datum of gage is 1,496.69 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 1,700 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 730 cfs. Only annual peaks are shown prior to 1940.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1925	Feb. 12, 1925	3.3	570	1948	Nov. 12, 1947	4.14	820
1926	Apr. 9, 1926	3.5	515	Mar. 20, 1948	4.42	960	
1927	Nov. 16, 1926	6.5	1,980	Mar. 22, 1948	4.60	1,050	
1928	Aug. 26, 1928	8.7	3,420	1949	Dec. 30, 1948	5.74	1,670
1929	Mar. 14, 1929	4.5	930	Jan. 6, 1949	4.73	1,120	
1930	June 10, 1930	5.9	1,630	1950	Apr. 4, 1950	4.23	884
1931	July 10, 1931	4.96	1,130	1951	Nov. 25, 1950	6.87	2,510
1932	Jan. 7, 1932	4.2	750	Dec. 4, 1950	4.12	884	
1933	Aug. 24, 1933	8.6	3,180	Mar. 30, 1951	6.45	2,220	
1934	Sept. 29, 1934	5.0	1,180	1952	Nov. 7, 1951	5.19	1,400
1935	Dec. 1, 1934	5.5	1,430	Dec. 26, 1951	a5.49	-	
1936	Mar. 18, 1936	8.5	2,440	Apr. 5, 1952	4.33	935	
1937	Feb. 22, 1937	8.4	3,060	July 10, 1952	5.37	1,500	
1938	Sept. 21, 1938	7.0	2,070	1953	Dec. 11, 1952	5.28	1,450
1939	Dec. 6, 1938	5.1	1,120	Mar. 15, 1953	4.64	1,100	
1940	Mar. 31, 1940	4.65	1,080	Mar. 24, 1953	4.15	844	
	Apr. 8, 1940	4.80	1,150	1954	Dec. 7, 1953	3.49	540
1941	Dec. 29, 1940	3.86	720	1955	Aug. 18, 1955	6.36	2,270
1942	Dec. 24, 1941	4.61	1,060	1956	Oct. 15, 1955	5.21	1,580
	May 23, 1942	4.06	792	1957	Nov. 2, 1956	3.47	601
	June 14, 1942	4.23	868	1958	Dec. 20, 1957	6.74	2,490
	Sept. 27, 1942	5.60	1,630	Apr. 6, 1958	3.91	806	
1943	Oct. 6, 1942	3.94	730	1959	Jan. 21, 1959	a5.15	-
	Dec. 30, 1942	4.58	1,040	Jan. 22, 1959	3.80	745	
	May 26, 1943	3.96	747	Apr. 2, 1959	4.01	891	
1944	Nov. 9, 1943	4.98	1,260	July 20, 1959	3.93	848	
1945	Mar. 17, 1945	4.29	896	1960	Oct. 9, 1959	3.98	874
	Apr. 3, 1945	4.43	965	Nov. 28, 1959	4.24	1,020	
	July 15, 1945	4.18	846	1960	Dec. 12, 1959	3.92	841
	July 29, 1945	4.65	1,080	Apr. 4, 1960	4.59	1,210	
	Sept. 11, 1945	4.02	774	Sept. 12, 1960	4.13	956	
1946	Mar. 9, 1946	4.26	891	Sept. 20, 1960	4.51	1,170	
	Sept. 24, 1946	4.77	1,140	1961	Feb. 26, 1961	4.06	918
1947	Jan. 31, 1947	4.12	819	Apr. 25, 1961	4.43	1,120	
	Apr. 5, 1947	5.06	1,230	Aug. 10, 1961	3.75	748	
	Aug. 17, 1947	4.46	980				
1948	Nov. 8, 1947	4.67	1,010				

a Backwater from ice.

4205. Beaver Kill at Cooks Falls, N. Y.

Location.--Lat 41°56'50", long 74°58'45", on left bank 125 ft downstream from highway bridge in Cooks Falls, Delaware County, and 5½ miles downstream from Willowemoc Creek.

Drainage area.--241 sq mi.

Gage.--Nonrecording prior to Oct. 1, 1933; recording thereafter. Datum of gage is 1,151.70 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 13,000 cfs and extended above on basis of slope-area measurements at 15,100 and 29,400 cfs.

Remarks.--Base for partial-duration series, 4,700 cfs. Only annual peaks are shown prior to 1934.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	Mar. 28, 1914	10.9	7,770	1943	Mar. 17, 1943	8.83	6,220
1915	Feb. 25, 1915	9.7	6,240	1944	Nov. 9, 1943	11.31	10,900
1916	July 26, 1916	9.4	5,880		Mar. 17, 1944	all.66	-
1917	Mar. 27, 28, 1917	11.0	7,870	1945	Mar. 17, 1945	9.80	8,860
1918	Oct. 30, 1917	12.4	9,700		Mar. 20, 1945	8.20	5,880
1919	July 22, 1919	7.5	3,720		July 15, 1945	8.52	6,440
1920	Mar. 13, 1920	9.5	5,000		July 19, 1945	9.94	9,140
					July 29, 1945	9.75	8,760
1921	Mar. 9, 1921	9.2	5,530	1946	Mar. 7, 1946	7.86	5,320
1922	Nov. 28, 1921	11.0	7,740		Mar. 9, 1946	10.14	9,650
1923	Apr. 6, 1923	10.8	7,480	1947	Jan. 31, 1947	7.88	5,350
1924	Sept. 30, 1924	15.0	13,400		Apr. 5, 1947	9.60	9,000
1925	Oct. 1, 1924	13.0	10,400		Aug. 17, 1947	7.72	5,230
1926	Nov. 16, 1925	8.8	4,730	1948	Nov. 8, 1947	8.84	7,360
1927	Nov. 16, 1926	-	14,600		Nov. 12, 1947	8.64	6,960
1928	Dec. 8, 1927	11.2	7,560		Mar. 22, 1948	11.73	15,100
1929	Mar. 15, 1929	10.2	6,340		Apr. 14, 1948	7.65	5,120
1930	June 10, 1930	8.2	4,130	1949	Dec. 30, 1948	12.14	16,300
1931	July 11, 1931	9.0	5,060		Jan. 6, 1949	10.32	10,900
1932	Apr. 1, 1932	8.2	4,130		Feb. 16, 1949	7.69	5,180
1933	Aug. 24, 1933	-	17,800	1950	Dec. 13, 1949	8.52	6,720
1934	Mar. 5, 1934	a8.50	-		Mar. 28, 1950	7.64	5,100
	Sept. 29, 1934	8.20	4,580		Apr. 4, 1950	9.54	8,870
1935	Dec. 1, 1934	11.99	11,000	1951	Nov. 26, 1950	15.52	29,400
1936	Oct. 31, 1935	10.10	8,410		Dec. 4, 1950	10.45	11,200
	Nov. 29, 1935	8.29	4,700		Mar. 31, 1951	16.02	31,600
	Mar. 11, 1936	12.72	14,500	1952	Nov. 7, 1951	10.50	11,400
	Mar. 18, 1936	15.02	21,300		Apr. 2, 1952	8.46	6,600
	Apr. 6, 1936	9.81	7,880		Apr. 5, 1952	10.56	11,600
1937	Feb. 22, 1937	13.02	15,300		July 10, 1952	10.38	11,000
	Apr. 6, 1937	8.62	5,910	1953	Dec. 11, 1952	12.54	17,700
	May 15, 1937	9.05	6,570		Jan. 24, 1953	9.35	8,450
1938	Oct. 19, 1937	7.85	4,800		Mar. 16, 1953	9.07	7,850
	Oct. 23, 1937	13.32	16,100		Mar. 24, 1953	8.87	7,430
	Jan. 25, 1938	8.92	6,360	1954	Dec. 7, 1953	8.46	6,600
	July 22, 1938	13.46	16,500		Jan. 27, 1954	a9.63	-
	Aug. 11, 1938	14.51	19,600		Apr. 17, 1954	7.55	4,940
	Sept. 21, 1938	13.67	17,100	1955	Aug. 19, 1955	11.44	14,300
1939	Dec. 6, 1938	10.42	9,040	1956	Oct. 16, 1955	10.73	12,300
1940	Mar. 31, 1940	11.55	11,500		Apr. 5, 1956	7.53	5,060
	Apr. 9, 1940	11.26	10,800		Apr. 16, 1956	8.50	7,000
	Apr. 12, 1940	8.72	6,060		Apr. 30, 1956	7.32	4,700
1941	Dec. 29, 1940	9.31	7,010	1957	Jan. 23, 1957	a8.09	-
1942	Dec. 24, 1941	11.18	10,700		Jan. 23, 1957	7.61	5,210
	Mar. 9, 1942	8.83	6,220	1958	Dec. 21, 1957	15.42	28,900
	May 23, 1942	9.26	6,920		Dec. 26, 1957	7.64	5,260
	Sept. 27, 1942	14.71	20,300				
1943	Dec. 30, 1942	10.95	10,200				

a Backwater from ice.

Peak stages and discharges of Beaver Kill at Cooks Falls, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Apr. 6, 1958	8.12	6,180	1960	Jan. 3, 1960	8.12	6,180
					Feb. 11, 1960	9.44	9,040
1959	Jan. 22, 1959	9.05	8,150		Mar. 31, 1960	9.14	8,350
	Apr. 2, 1959	10.21	10,900		Apr. 4, 1960	10.66	12,100
1960	Oct. 9, 1959	9.24	8,580		Sept. 12, 1960	8.85	7,710
	Oct. 24, 1959	7.57	5,140		Sept. 20, 1960	8.97	7,970
	Nov. 28, 1959	11.39	14,200	1961	Feb. 26, 1961	9.92	10,200
	Dec. 13, 1959	9.15	8,380		Apr. 25, 1961	10.24	11,000

4210. East Branch Delaware River at Fishs Eddy, N. Y.

Location.--Lat 41°58'00", long 75°10'50", on left bank at downstream side of Highway bridge at Fishs Eddy, Delaware County, just upstream from Fish Creek, 4½ miles downstream from Beaver Kill, and 11 miles upstream from confluence of East and West Branches near Hancock.

Drainage area.--783 sq mi.

Gage.--Nonrecording prior to Sept. 27, 1928; recording thereafter. Datum of gage is 950.96 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 22,000 cfs.

Remarks.--Subsequent to September 1954, entire flow from 371 sq mi of drainage area controlled by Pepacton Reservoir. Base for partial-duration series, 16,000 cfs. Only annual peaks are shown prior to 1929.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Oct. 9, 1903	23.6	a70,000	1935	Jan. 10, 1935	12.10	17,600
1913	Mar. 27, 1913	17.4	32,500		Mar. 6, 1935	c17.10	-
1914	Mar. 28, 1914	15.8	30,000	1936	Mar. 11, 1936	16.68	34,200
1915	Jan. 19, 1915	12.8	20,800		Mar. 18, 1936	19.21	46,000
1916	Apr. 2, 1916	11.8	16,600	1937	Feb. 22, 1937	13.54	22,200
1917	Mar. 28, 1917	12.3	18,100				
1918	Oct. 30, 1917	15.4	27,400	1938	Oct. 23, 1937	15.05	27,700
1919	Apr. 12, 1919	8.4	8,390		Jan. 25, 1938	12.36	18,400
1920	Mar. 13, 1920	-	30,400		July 22, 1938	13.29	21,400
					Aug. 11, 1938	17.14	36,000
1921	Mar. 9, 1921	12.76	19,600		Sept. 22, 1938	18.21	41,000
1922	Nov. 29, 1921	13.46	22,000	1939	Dec. 6, 1938	13.39	21,700
1923	Apr. 6, 1923	12.55	19,000		Feb. 15, 1939	c13.63	-
1924	Sept. 30, 1924	19.0	45,000				
1925	Feb. 11, 1925	-	b23,800	1940	Mar. 31, 1940	16.99	35,500
1926	Nov. 16, 1925	11.3	14,400		Apr. 9, 1940	14.33	25,000
1927	Nov. 17, 1926	14.0	26,700				
1928	Dec. 8, 1927	14.4	25,200	1941	Dec. 29, 1940	11.64	16,300
1929	Mar. 14, 1929	14.10	24,200	1942	Dec. 24, 1941	12.27	20,200
	Apr. 21, 1929	12.16	17,800		Mar. 9, 1942	12.84	19,800
	Apr. 26, 1929	12.16	17,800		May 23, 1942	17.18	34,900
1930	Feb. 21, 1930	c13.51	-		Sept. 28, 1942	17.02	34,100
	Feb. 26, 1930	9.60	10,500	1943	Dec. 30, 1942	16.22	32,400
1931	July 11, 1931	12.56	19,000		Feb. 22, 1943	c13.65	-
1932	Apr. 1, 1932	12.04	17,500		Mar. 17, 1943	12.64	19,100
1933	Oct. 6, 1932	17.78	39,000	1944	Nov. 9, 1943	14.05	23,200
	Aug. 24, 1939	20.60	53,500	1945	Mar. 18, 1945	13.66	21,800
1934	Mar. 4, 1934	c13.25	-		July 19, 1945	12.25	16,600
	Mar. 5, 1934	10.18	12,000	1946	Dec. 26, 1945	c13.82	-
1935	Dec. 1, 1934	14.47	25,500		Mar. 9, 1946	13.43	18,400
				1947	Apr. 6, 1947	13.85	21,100

a About.

b Maximum peak discharge; maximum discharge during year, 43,500 cfs, at 12:01 a.m. Oct. 1, 1924, stage falling.

c Backwater from ice.

Peak stages and discharges of East Branch Delaware River at Fishs Eddy, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Mar. 20, 1948	13.90	21,600	1954	Feb. 17, 1954	10.95	12,200
	Mar. 22, 1948	18.64	43,200				
1949	Dec. 30, 1948	17.45	37,200	1955	Aug. 19, 1955	15.29	27,400
	Jan. 6, 1949	14.51	24,000				
				1956	Oct. 16, 1955	12.79	17,600
1950	Apr. 5, 1950	13.77	21,100				
				1957	Apr. 6, 1957	9.67	8,270
1951	Nov. 26, 1950	17.15	35,800				
	Dec. 4, 1950	15.12	26,600	1958	Dec. 21, 1957	17.32	36,600
	Mar. 31, 1951	18.60	43,000				
				1959	Apr. 3, 1959	12.80	17,600
1952	Nov. 8, 1951	13.16	19,200				
	Apr. 6, 1952	13.48	20,000	1960	Nov. 28, 1959	14.30	23,200
	July 10, 1952	13.32	17,700		Apr. 5, 1960	14.44	23,800
					Sept. 30, 1960	13.07	18,500
1953	Dec. 11, 1952	17.69	38,400	1961	Feb. 26, 1961	12.92	18,000
	Jan. 25, 1953	13.33	19,500		Apr. 25, 1961	13.83	21,300

4220. West Branch Delaware River at Delhi, N. Y.

Location--Lat 42°16'15", long 74°55'10", on left bank 300 ft downstream from Steele Brook, a quarter of a mile downstream from bridge on State Highway 28 in Delhi, Delaware County, and 1 mile upstream from Little Delaware River.

Drainage area--142 sq mi.

Gage--Recording. Datum of gage is 1,345.29 ft above mean sea level, datum of 1929.

Stage-discharge relation--Defined by current-meter measurements below 4,000 cfs and extended above on basis of velocity-area studies.

Remarks--Base for partial-duration series, 1,900 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Apr. 6, 1937	5.17	2,180	1946	Mar. 7, 1946	5.84	2,640
	Aug. 27, 1937	4.91	2,260		Mar. 9, 1946	5.91	2,720
1938					May 28, 1946	5.46	2,200
	Jan. 25, 1938	6.82	4,290	1947	Mar. 15, 1947	6.47	3,400
	Aug. 11, 1938	5.23	2,170		Mar. 25, 1947	5.54	2,180
	Sept. 21, 1938	6.81	8,940		Apr. 5, 1947	6.17	2,970
1939	Dec. 6, 1938	6.17	2,920		May 6, 1947	5.36	1,990
	Feb. 15, 1939	7.12	4,520		May 22, 1947	5.52	2,160
	Feb. 20, 1939	6.95	4,190	1948	Feb. 20, 1948	5.41	2,040
1940	Mar. 31, 1940	7.97	6,430		Mar. 22, 1948	7.20	4,680
	Apr. 5, 1940	6.07	2,780		Apr. 14, 1948	5.46	2,100
	Apr. 9, 1940	6.33	3,160	1949	Dec. 30, 1948	6.97	4,250
1941	Dec. 29, 1940	5.23	1,780		Jan. 6, 1949	6.53	3,500
1942	Mar. 9, 1942	7.83	6,090	1950	Mar. 9, 1950	ae.20	2,800
	Mar. 17, 1942	6.92	4,140		Mar. 28, 1950	7.07	4,430
	May 23, 1942	7.48	5,320		Apr. 5, 1950	5.63	2,290
1943	Dec. 30, 1942	7.25	4,870	1951	Nov. 26, 1950	6.08	6,700
	Feb. 24, 1943	6.11	2,850		Dec. 4, 1950	7.51	5,340
	Mar. 17, 1943	5.63	2,270		Feb. 1, 1951	6.53	3,500
1944					Feb. 7, 1951	5.64	2,300
	Nov. 9, 1943	5.46	2,090		Feb. 21, 1951	5.29	1,910
	Mar. 17, 1944	6.52	3,450		Mar. 31, 1951	6.38	3,270
	Mar. 24, 1944	5.40	2,020	1952			
1945	Jan. 1, 1945	6.39	3,240		Nov. 3, 1951	5.56	2,210
	Feb. 27, 1945	5.58	2,220		Nov. 7, 1951	5.95	2,680
	Mar. 4, 1945	6.13	3,000		Dec. 22, 1951	5.50	2,140
	Mar. 6, 1945	6.35	2,080		Jan. 27, 1952	5.46	2,100
	Mar. 18, 1945	5.22	1,930		Mar. 11, 1952	6.13	2,910
					Apr. 5, 1952	5.35	1,980

a Backwater from ice.

Peak stages and discharges of West Branch Delaware River at Delhi, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Dec. 11, 1952	6.68	3,740	1958	Apr. 7, 1958	6.06	2,830
	Jan. 24, 1953	6.44	3,360		Apr. 17, 1958	5.98	2,720
	Feb. 21, 1953	5.90	2,610		Apr. 22, 1958	5.74	2,430
1954	Feb. 17, 1954	5.76	2,560	1959	Jan. 22, 1959	7.58	5,500
1955	Feb. 23, 1955	5.47	2,210		Mar. 6, 1959	5.46	2,120
	Aug. 18, 1955	7.19	4,660		Apr. 3, 1959	6.11	2,890
1956	Oct. 16, 1955	6.73	3,820	1960	Nov. 28, 1959	6.98	4,260
	Mar. 7, 1956	6.53	3,500		Jan. 3, 1960	6.42	3,340
	Apr. 5, 1956	7.26	4,800		Feb. 11, 1960	6.79	3,930
	Apr. 17, 1956	5.70	2,370		Mar. 31, 1960	7.20	4,680
	Sept. 23, 1956	5.95	2,680		Apr. 4, 1960	7.31	4,900
1957	Jan. 23, 1957	6.18	2,980		Sept. 13, 1960	6.93	4,170
					Sept. 20, 1960	6.04	2,800
1958	Dec. 21, 1957	6.03	2,780	1961	Feb. 19, 1961	6.51	2,000
	Dec. 26, 1957	5.30	1,920		Feb. 26, 1961	6.28	3,130

4225. Little Delaware River near Delhi, N. Y.

Location.--Lat 42°15'10", long 74°54'10", on left bank 15 ft downstream from highway bridge, a quarter of a mile downstream from Toll Gate Brook, 1½ miles upstream from mouth, and 2 miles south of Delhi, Delaware County.

Drainage area.--49.8 sq mi.

Gage.--Nonrecording at several temporary sites within a quarter of a mile of present site at various datums prior to Dec. 7, 1939; recording thereafter. Altitude of gage is 1,390 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,600 cfs and extended above on basis of slope-area measurement at 4,530 cfs.

Remarks.--Base for partial-duration series, 1,300 cfs. Only annual maximum discharges are shown prior to 1940.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Sept. 21, 1938	8.5	3,280	1948	Mar. 19, 1948	5.32	1,370
1939	Dec. 6, 1938	5.7	1,340		Mar. 22, 1948	6.80	2,510
1940	Mar. 31, 1940	6.65	2,300	1949	Dec. 30, 1948	6.52	2,310
	Apr. 8, 1940	5.30	1,470		Jan. 6, 1949	5.28	1,490
1941	Dec. 29, 1940	4.79	1,190	1950	Mar. 8, 1950	5.67	1,720
	Mar. 7, 1941	a5.73	-		Mar. 28, 1950	5.96	1,920
1942	Mar. 9, 1942	a7.40	2,550	1951	Nov. 25, 1950	7.13	2,750
	Mar. 17, 1942	6.29	1,990		Dec. 4, 1950	6.95	2,620
	May 23, 1942	6.93	2,490		Feb. 1, 1951	5.71	1,750
1943	Dec. 30, 1942	6.58	2,210		Feb. 7, 1951	6.20	2,090
	Feb. 22, 1943	a7.45	-		Mar. 30, 1951	6.66	2,410
1944	Nov. 9, 1943	6.00	1,790	1952	July 28, 1951	6.92	2,590
	Mar. 16, 1944	a7.01	-		Nov. 3, 1951	5.14	1,400
	Mar. 17, 1944	5.40	1,400		Nov. 7, 1951	5.37	1,540
1945	Jan. 1, 1945	5.90	1,720	1953	July 10, 1952	5.27	1,480
	Feb. 22, 1945	a5.98	-		Dec. 11, 1952	6.37	2,210
1946	Mar. 6, 1946	5.07	1,340		Jan. 24, 1953	5.86	1,890
	Mar. 7, 1946	5.11	1,370		Feb. 21, 1953	5.14	1,400
	Mar. 9, 1946	5.45	1,570		Aug. 13, 1953	7.78	4,530
1947	Mar. 14, 1947	a7.44	-		Sept. 7, 1953	5.53	1,660
	Mar. 14, 1947	5.47	1,520	1954	Dec. 7, 1953	5.02	1,320
	Apr. 5, 1947	5.83	1,740		Feb. 17, 1954	5.14	1,360
	May 22, 1947	5.50	1,540	1955	Feb. 23, 1955	5.23	1,460
1948	Mar. 16, 1948	5.81	1,670		Aug. 18, 1955	6.53	2,590

a Backwater from ice.

Peak stages and discharges of Little Delaware River near Delhi, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Mar. 8, 1956	5.25	1,480	1959	Apr. 2, 1959	5.89	1,970
	Apr. 4, 1956	6.50	2,550	1960	Nov. 28, 1959	5.91	1,990
	Apr. 16, 1956	5.05	1,340		Jan. 3, 1960	5.87	1,950
1957	Jan. 23, 1957	5.29	1,500		Feb. 11, 1960	6.19	2,240
					Mar. 30, 1960	5.98	2,050
1958	Dec. 21, 1957	6.60	2,670		Apr. 4, 1960	6.53	2,590
	Apr. 6, 1958	5.20	1,440		Sept. 12, 1960	6.69	2,780
1959	Jan. 21, 1959	7.47	-		Sept. 20, 1960	6.29	2,330
	Jan. 21, 1959	6.95	3,120	1961	Feb. 25, 1961	5.65	1,770

4230. West Branch Delaware River at Walton, N. Y.

Location.--Lat 42°10'00", long 75°08'25", on left bank in west end of fair-grounds at Walton, Delaware County, 100 ft downstream from West Brook.

Drainage area.--331 sq mi.

Gage.--Recording. Datum of gage is 1,190.30 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 8,800 cfs.

Remarks.--Base for partial-duration series, 4,600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 26, 1950	11.55	10,800	1956	Apr. 5, 1956	12.07	11,200
	Feb. 2, 1951	10.13	7,520	1956	Apr. 17, 1956	9.22	5,670
	Feb. 7, 1951	8.88	5,170		Sept. 24, 1956	8.89	5,160
	Mar. 31, 1951	10.57	8,470	1957	Jan. 23, 1957	9.56	6,220
	July 29, 1951	8.61	4,730				
1952	Nov. 3, 1951	8.56	4,650	1958	Dec. 21, 1957	10.13	7,200
	Nov. 8, 1951	9.02	5,400	1958	Apr. 7, 1958	10.00	6,970
	Jan. 27, 1952	8.78	5,000		Apr. 17, 1958	8.94	5,240
	Mar. 11, 1952	8.52	6,310		Apr. 22, 1958	8.93	5,220
1953	Dec. 11, 1952	12.67	14,300	1959	Jan. 22, 1959	13.76	15,700
	Jan. 24, 1953	10.39	8,080	1959	Apr. 3, 1959	9.34	5,860
	Feb. 21, 1953	9.05	5,460				
1954	Dec. 7, 1953	8.53	4,600	1960	Nov. 28, 1959	11.95	10,900
	Feb. 17, 1954	9.72	6,690	1960	Jan. 3, 1960	9.66	6,390
1955	Nov. 21, 1954	8.53	4,600		Feb. 11, 1960	11.06	8,970
	Aug. 19, 1955	12.87	15,100		Mar. 31, 1960	12.22	11,600
1956	Oct. 16, 1955	10.04	6,480		Apr. 4, 1960	12.67	12,700
	Mar. 8, 1956	10.40	7,690		Sept. 13, 1960	10.72	8,300
					Sept. 20, 1960	9.06	5,420
				1961	Feb. 26, 1961	11.61	10,500

4235. Dryden Creek near Granton, N. Y.

Location.--Lat 42°07'20", long 75°14'45", on right bank 2,000 ft upstream from small tributary, 1.1 miles northeast of Granton, Delaware County, 1.2 miles upstream from mouth, and 3.2 miles northwest of Rock Rift.

Drainage area.--8.85 sq mi.

Gage.--Recording. Datum of gage is 1,187.95 ft above mean sea level (levels and bench mark; Board of Water Supply, City of New York).

Stage-discharge relation.--Defined by current meter measurements below 444 cfs.

Remarks.--Base for partial-duration series, 250 cfs.

Peak stages and discharge of Dryden Creek near Granton, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	July 10, 1952	3.13	191	1958	Apr. 7, 1958	3.69	283
1953	Dec. 11, 1952	3.93	390	1959	Jan. 22, 1959	4.02	387
1954	Apr. 17, 1954	3.41	253		Apr. 2, 1959	3.91	351
1955	Aug. 18, 1955	4.14	452	1960	Nov. 28, 1959	4.13	424
1956	Oct. 15, 1955	3.68	321		Jan. 3, 1960	3.60	258
	Mar. 8, 1956	3.47	250		Feb. 11, 1960	4.07	404
	Apr. 4, 1956	4.19	454		Apr. 4, 1960	4.64	633
1957	May 20, 1957	3.22	170		Sept. 12, 1960	4.25	466
1958	Dec. 20, 1957	4.11	417	1961	Feb. 25, 1961	4.28	478
					Apr. 25, 1961	3.69	283

4240. Trout Creek near Rock Royal, N. Y.

Location.--Lat 42°10'40", long 75°16'45", on right bank at upstream side of farm bridge, 400 ft downstream from Bullock Brook, and 1.4 miles north of Rock Royal, Delaware County.

Drainage area.--20.4 sq mi.

Gage.--Recording. Datum of gage is 1,165.70 ft above mean sea level (levels and bench mark; Board of Water Supply, City of New York).

Stage-discharge relation.--Defined by current-meter measurements below 900 cfs and extended above on basis of contracted-opening measurement at 1,530 cfs.

Remarks.--Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	July 10, 1952	4.63	551	1958	Dec. 20, 1957	5.00	830
1953	Dec. 11, 1952	5.11	919		Apr. 6, 1958	5.17	973
	Jan. 24, 1953	4.74	628		Apr. 22, 1958	4.88	734
1954	Feb. 17, 1954	5.05	870	1959	Jan. 21, 1959	5.59	1,390
	Apr. 17, 1954	5.08	894		Mar. 6, 1959	4.84	702
	June 10, 1954	5.16	964		Apr. 2, 1959	4.86	718
1955	Mar. 1, 1955	4.70	600	1960	Nov. 6, 1959	4.65	570
	June 7, 1955	4.83	694		Nov. 28, 1959	7.57	1,920
	Aug. 18, 1955	4.91	758		Jan. 3, 1960	5.21	1,010
1956	Oct. 15, 1955	5.10	910		Feb. 11, 1960	7.03	1,530
	Mar. 8, 1956	5.05	870		Mar. 30, 1960	4.75	635
	Apr. 4, 1956	5.85	-		Apr. 4, 1960	7.24	1,680
	Apr. 4, 1956	5.62	1,420		Sept. 12, 1960	5.46	1,250
	Sept. 23, 1956	5.66	1,470	1961	Feb. 25, 1961	5.75	1,020
1957	Jan. 23, 1957	5.20	1,000		Apr. 25, 1961	4.57	524
	Apr. 6, 1957	4.75	635		June 8, 1961	4.78	656
	May 20, 1957	4.56	518		Aug. 26, 1961	5.34	1,000

a Backwater from ice.

4245. Trout Creek at Cannonsville, N. Y.

Location.--Lat 42°05'45", long 75°19'20", on left bank at north end of Cannonsville, Delaware County, 0.6 mile upstream from mouth.

Drainage area.--49.5 sq mi.

Gage.--Recording. Datum of gage is 1,041.54 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,600 cfs and extended above on basis of slope-area measurement at 4,600 cfs.

Remarks.--Base for partial-duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Aug. 1, 1941	8.79	3,500	1951	Dec. 4, 1950	9.23	3,760
1942	May 23, 1942	7.72	2,400		Mar. 31, 1951	7.00	1,710
1943	Dec. 30, 1942	9.03	3,790	1952	Mar. 11, 1952	6.91	1,650
	Feb. 24, 1943	6.58	1,630	1953	Dec. 11, 1952	7.32	1,960
	Mar. 17, 1943	6.50	1,570	1954	Apr. 17, 1954	6.93	1,660
1944	Feb. 23, 1944	a6.69	-	1955	Feb. 11, 1955	a7.01	-
	Mar. 17, 1944	6.48	1,560		Aug. 18, 1955	6.26	1,200
1945	Sept. 19, 1945	6.28	1,410	1956	Mar. 8, 1956	6.76	1,530
1946	Feb. 28, 1946	a7.11	-		Apr. 4, 1956	8.46	2,960
	Mar. 9, 1946	6.52	1,550	1957	Jan. 23, 1957	6.67	1,470
	May 28, 1946	6.98	1,930	1958	Apr. 6, 1958	7.00	1,700
1947	Apr. 5, 1947	7.39	1,970	1959	Jan. 22, 1959	7.58	2,160
	July 22, 1947	7.06	1,740	1960	Nov. 28, 1959	7.80	2,350
1948	Mar. 16, 1948	8.08	2,600		Jan. 3, 1960	6.77	1,540
	Mar. 22, 1948	9.95	4,600		Feb. 11, 1960	7.22	1,880
1949	Dec. 30, 1948	7.06	1,750		Apr. 4, 1960	8.32	2,820
	Jan. 6, 1949	6.71	1,510		Sept. 12, 1960	7.10	1,780
1950	Mar. 8, 1950	6.73	1,520	1961	Feb. 25, 1961	7.08	1,760
	Mar. 28, 1950	7.84	2,390				
1951	Nov. 26, 1950	7.22	1,880				

a Backwater from ice.

4250. West Branch Delaware River at Stilesville, N. Y.

Location.--Lat 42°04'35", long 75°23'55", on left bank at Stilesville, Delaware County, 0.4 mile upstream from Cold Spring Creek, and 2 miles northeast of Deposit.

Drainage area.--456 sq mi.

Gage.--Recording. Datum of gage is 993.60 ft above mean sea level (levels and bench mark; Board of Water Supply, City of New York).

Stage-discharge relation.--Defined by current-meter measurements below 12,400 cfs.

Remarks.--Base for partial-duration series, 7,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	July 10, 1952	4.86	5,370	1955	Aug. 19, 1955	8.08	13,300
1953	Dec. 11, 1952	7.96	14,400	1956	Oct. 16, 1955	6.27	8,060
	Jan. 25, 1953	6.33	9,140		Mar. 8, 1956	6.63	9,620
1954	Feb. 17, 1954	5.92	8,000		Apr. 5, 1956	7.48	12,200

Peak stages and discharges of West Branch Delaware River at Stilesville, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	Jan. 23, 1957	6.24	8,540	1960	Jan. 3, 1960	5.90	7,640
1958	Dec. 21, 1957	6.24	8,540		Feb. 11, 1960	6.80	10,100
	Apr. 7, 1958	6.83	10,200		Mar. 31, 1960	7.57	12,500
1959	Jan. 22, 1959	9.01	17,500		Apr. 4, 1960	8.09	14,300
	Apr. 3, 1959	5.95	7,770		Sept. 12, 1960	6.85	10,100
1960	Nov. 28, 1959	7.90	13,600	1961	Feb. 20, 1961	7.74	-
					Feb. 26, 1961	7.72	13,000

a Backwater from ice.

4255. Cold Spring Brook at China, N. Y.

Location.--Lat 42°09'35", long 75°23'35", on left bank 1 mile upstream from China, Delaware County, 1.1 miles upstream from mouth, and 3 miles east of North Sanford.

Drainage area.--1.51 sq mi.

Gage.--Recording and concrete control with V-notch weir. Datum of gage is 1,490.76 ft above mean sea level, adjustment of 1912 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 55 cfs and extended above on basis of theoretical rating.

Remarks.--Base for partial-duration series, 47 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Dec. 1, 1934	3.53	106	1947	Mar. 25, 1947	3.22	64.4
1936	Oct. 30, 1935	4.5	335		Apr. 5, 1947	3.40	88.3
	Nov. 13, 1935	4.24	258		July 8, 1947	3.46	97.6
	Mar. 12, 1936	3.43	92.2	1948	Mar. 16, 1948	3.16	50.0
	Mar. 18, 1936	3.70	133		Mar. 22, 1948	3.88	179
	Mar. 21, 1936	3.36	82.4	1949	Dec. 30, 1948	3.19	53.0
1937	Nov. 4, 1936	2.95	32.6	1950	Apr. 4, 1950	3.34	73.2
1938	Oct. 23, 1937	3.13	51.9		Aug. 3, 1950	3.12	48.0
	Jan. 25, 1938	3.12	50.6	1951	Nov. 25, 1950	3.33	72.0
	Sept. 21, 1938	3.8	151		Dec. 4, 1950	3.51	98.5
1939	Dec. 6, 1938	3.09	47.0		Mar. 30, 1951	3.34	73.4
1940	Mar. 30, 1940	3.27	70.0		July 19, 1951	3.36	74.2
	Apr. 8, 1940	3.17	57.1		July 28, 1951	3.25	59.7
1941	Dec. 29, 1940	3.08	46	1952	Apr. 1, 1952	3.16	50.0
1942	Dec. 24, 1941	3.13	52.2	1953	Dec. 11, 1952	3.28	63.4
	Mar. 9, 1942	3.19	60.6		Jan. 24, 1953	3.18	51.5
	May 23, 1942	3.40	95	1954	Feb. 17, 1954	3.52	100
1943	Dec. 30, 1942	3.35	86		Apr. 17, 1954	3.46	90.0
	Feb. 24, 1943	3.18	57.4	1955	Mar. 11, 1955	3.13	47.0
	May 26, 1943	3.25	70		Aug. 18, 1955	3.59	113
	June 1, 1943	3.20	62	1956	Mar. 8, 1956	3.32	68.6
1944	Nov. 9, 1943	3.30	78		Apr. 5, 1956	3.22	56.2
1945	Jan. 1, 1945	3.03	51.3		Apr. 16, 1956	3.19	53.0
	Mar. 21, 1945	3.20	60		Sept. 23, 1956	3.16	50.0
	Apr. 5, 1945	3.05	53.7	1957	Jan. 23, 1957	3.16	50.5
	Apr. 27, 1945	3.19	58.7		Apr. 6, 1957	3.17	51.0
	June 15, 1945	3.41	93.5	1958	Dec. 20, 1957	3.21	55.1
	Sept. 18, 1945	3.49	106		Apr. 6, 1958	3.32	67.9
1946	Mar. 7, 1946	3.01	54.9		Apr. 22, 1958	3.56	108
	May 21, 1946	3.01	54.9	1959	Jan. 22, 1959	3.34	70.9
	May 27, 1946	3.18	71.8				

Peak stages and discharges of Cold Spring Brook at China, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Apr. 2, 1959	3.40	80.2	1960	Apr. 4, 1960	3.84	169
					Sept. 12, 1960	3.48	93.4
1960	Nov. 6, 1959	3.19	50.8				
	Nov. 28, 1959	3.69	134	1961	Feb. 25, 1961	3.51	98.6
	Jan. 3, 1960	3.25	58.3		Apr. 25, 1961	3.38	77.0
	Feb. 11, 1960	3.42	83.4		June 11, 1961	3.32	67.9

4260. Oquaga Creek at Deposit, N. Y.

Location.--Lat 42°03'35", long 75°25'40", on left bank 200 ft upstream from washed-out dam at rear of Delaware Mills, 400 ft upstream from Mill Street Bridge in Deposit, Broome County, and 0.3 mile upstream from mouth.

Drainage area.--66 sq mi, approximately.

Gage.--Recording. Datum of gage is 984.46 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,610 cfs and extended above on basis of slope-area measurement at 4,400 cfs.

Remarks.--Base for partial duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Dec. 28, 1940	5.52	1,580	1951	July 28, 1951	7.11	2,530
1942	Mar. 9, 1942	6.01	1,660	1952	Mar. 11, 1952	5.08	1,930
	May 23, 1942	7.21	2,500				
1943	Dec. 30, 1942	7.76	2,880	1953	Dec. 11, 1952	5.33	1,920
	Feb. 24, 1943	6.16	1,790		Jan. 24, 1953	4.65	1,590
	Mar. 17, 1943	6.42	1,960	1954	Feb. 17, 1954	4.7	1,850
	May 26, 1943	6.31	1,890		Apr. 17, 1954	5.56	2,620
1944	Nov. 9, 1943	5.80	1,540	1955	Feb. 11, 1955	a5.70	-
	Mar. 17, 1944	6.05	1,670		Aug. 13, 1955	4.36	1,540
					Aug. 18, 1955	5.84	2,880
1945	Jan. 1, 1945	6.11	1,760				
	Mar. 16, 1945	6.08	1,740	1956	Oct. 15, 1955	-	2,810
	Sept. 19, 1945	6.54	2,040		Mar. 8, 1956	5.32	2,680
					Apr. 4, 1956	5.94	3,750
1946	Mar. 7, 1946	5.65	1,520				
	Mar. 9, 1946	5.68	1,540	1957	Jan. 22, 1957	a6.25	-
	May 21, 1946	6.04	1,810		Jan. 23, 1957	5.31	2,720
	May 28, 1946	6.26	1,960		Apr. 6, 1957	4.74	1,900
1947	Mar. 14, 1947	5.82	1,650	1958	Dec. 21, 1957	4.47	1,630
	Mar. 25, 1947	6.39	2,210		Apr. 7, 1958	5.29	2,760
	Apr. 5, 1947	6.89	2,630				
	July 8, 1947	6.72	2,500	1959	Jan. 22, 1959	6.42	4,590
					Apr. 2, 1959	5.01	2,270
1948	Mar. 16, 1948	6.86	2,610	1960	Nov. 6, 1959	4.46	1,850
	Mar. 22, 1948	9.21	4,400		Nov. 28, 1959	5.95	3,760
1949	Dec. 30, 1948	6.10	2,010				
	Aug. 29, 1949	5.38	1,550	1960	Jan. 3, 1960	4.78	2,110
1950	Mar. 28, 1950	6.53	2,360		Feb. 11, 1960	5.33	2,770
	Apr. 4, 1950	5.91	1,950		Mar. 31, 1960	4.60	1,850
	Aug. 20, 1950	5.64	1,770		Apr. 4, 1960	6.31	4,390
					Sept. 12, 1960	5.17	2,500
1951	Nov. 25, 1950	7.25	2,860	1961	Feb. 26, 1961	6.00	3,850
	Dec. 4, 1950	7.97	3,400		Apr. 25, 1961	5.03	2,380
	Mar. 31, 1951	6.33	1,870				

a Backwater from ice.

4265. West Branch Delaware River at Hale Eddy, N. Y.

Location.--Lat 42°00'10", long 75°23'15", on left bank at downstream side of highway bridge in Hale Eddy, Delaware County, 9 miles upstream from confluence of East and West Branches near Hancock.

Drainage area.--593 sq mi.

Gage.--Nonrecording prior to Sept. 8, 1928; recording thereafter. Datum of gage is 946.46 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 15,600 cfs and extended above on basis of contracted-opening measurement at 30,000 cfs.

Historical data.--Maximum discharge known, that of Oct. 10, 1903.

Remarks.--Base for partial-duration series, 9,600 cfs. Only annual peaks are shown prior to 1929.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Oct. 10, 1903	20.3	46,000	1941	Dec. 30, 1940	9.33	8,210
1913	Mar. 27, 1913	15.3	25,000	1942	Mar. 9, 1942	11.40	12,800
1914	Mar. 28, 1914	14.6	21,300		May 23, 1942	14.52	21,900
1915	July 8, 1915	13.9	20,000	1943	Dec. 30, 1942	14.95	23,300
1916	Apr. 2, 1916	12.6	17,400		Feb. 24, 1943	11.08	12,100
1917	Mar. 28, 1917	10.7	11,800		Mar. 17, 1943	10.85	11,500
1918	Oct. 30, 1917	-	18,300	1944	Mar. 17, 1944	11.94	14,200
1919	Apr. 12, 1919	7.5	5,420	1945	Feb. 27, 1945	a13.13	-
1920	Mar. 13, 1920	13.0	18,100		Mar. 3, 1945	a10.45	11,000
1921	Mar. 10, 1921	10.5	11,200		Mar. 18, 1945	10.21	10,500
1922	Nov. 29, 1921	13.3	19,000	1946	Mar. 5, 1946	a12.75	-
1923	Mar. 17, 1923	10.0	11,400		Mar. 9, 1946	9.88	9,650
1924	Sept. 30, 1924	15.8	26,500		May 28, 1946	10.47	11,000
1925	Feb. 12, 1925	14.3	22,000	1947	Mar. 15, 1947	9.93	9,990
1926	Apr. 9, 1926	10.9	12,200		Apr. 6, 1947	11.11	12,800
1927	Nov. 17, 1926	12.5	16,600	1948	Mar. 17, 1948	12.47	16,500
1928	Oct. 19, 1927	11.6	14,000		Mar. 20, 1948	11.77	14,400
1929	Mar. 15, 1929	12.9	17,800		Mar. 22, 1948	15.69	28,900
	Apr. 21, 1929	12.20	17,300	1949	Dec. 31, 1948	12.32	16,000
1930	Dec. 20, 1929	8.3	6,520		Jan. 6, 1949	10.61	11,500
1931	July 22, 1931	9.27	8,340	1950	Mar. 9, 1950	a15.15	-
1932	Apr. 1, 1932	10.44	11,100		Mar. 28, 1950	12.14	15,500
1933	Oct. 6, 1932	11.37	14,600		Apr. 5, 1950	11.22	13,000
	Aug. 24, 1933	12.31	16,000	1951	Nov. 26, 1950	11.00	12,600
	Sept. 16, 1933	9.84	10,300		Dec. 4, 1950	13.39	19,500
1934	Mar. 5, 1934	a11.43	13,000		Mar. 31, 1951	11.29	13,200
1935	Dec. 2, 1934	10.37	11,600	1952	Mar. 11, 1952	10.17	10,500
	Jan. 10, 1935	10.56	12,200	1953	Dec. 11, 1952	12.51	16,600
	July 8, 1935	12.62	19,000		Jan. 25, 1953	10.72	11,800
1936	Nov. 13, 1935	13.10	20,900	1954	Feb. 17, 1954	10.01	10,200
	Mar. 12, 1936	13.97	24,600	1955	Aug. 19, 1955	12.67	16,000
	Mar. 18, 1936	14.22	25,900	1956	Oct. 17, 1955	10.23	10,100
1937	Jan. 25, 1937	9.74	10,100		Mar. 8, 1956	11.41	12,800
1938	Jan. 25, 1938	11.81	15,900		Apr. 5, 1956	12.42	15,300
	Aug. 11, 1938	13.75	19,600	1957	Jan. 23, 1957	9.84	9,230
	Sept. 22, 1938	15.59	25,600	1958	Apr. 7, 1958	11.92	14,100
1939	Dec. 6, 1938	10.55	10,800	1959	Jan. 22, 1959	13.96	20,100
	Feb. 16, 1939	a15.24	-		Apr. 3, 1959	10.22	10,000
	Feb. 20, 1939	12.00	14,300				
1940	Mar. 31, 1940	14.97	23,400				
	Apr. 9, 1940	11.74	13,700				

a Backwater from ice.

Peak stages and discharges of West Branch Delaware River at Hale Eddy, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1960	Nov. 28, 1959	12.67	16,000	1960	Sept. 12, 1960	10.81	11,400
	Feb. 12, 1960	11.02	11,700				
	Mar. 31, 1960	12.70	16,000	1961	Feb. 26, 1961	13.14	17,300
	Apr. 4, 1960	13.42	18,200				

4275. Callicoon Creek at Callicoon, N. Y.

Location.--Lat 41°45'40", long 75°02'55", on right bank 0.7 mile southeast of Callicoon, Sullivan County, 0.9 mile upstream from mouth, and 1.0 mile southwest of Hortonville.

Drainage area.--111 sq mi.

Gage.--Recording. Datum of gage is 759.84 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 5,100 cfs and extended above on basis of slope-area measurement at 16,000 cfs.

Remarks.--Base for partial-duration series, 2,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Sept. 1, 1939	5.59	2,910	1951	Feb. 7, 1951	5.19	3,360
1941	Dec. 29, 1940	4.66	2,130		Feb. 21, 1951	4.64	2,500
	Feb. 8, 1941	a4.82	-		Mar. 31, 1951	6.00	5,020
1942	Mar. 3, 1942	a7.00	-	1952	Nov. 7, 1951	5.37	3,680
	Mar. 9, 1942	4.44	2,510		Jan. 27, 1952	5.13	3,260
	May 22, 1942	4.73	2,970		Mar. 11, 1952	5.26	3,480
	May 23, 1942	5.22	3,770		Apr. 5, 1952	4.43	2,200
	Sept. 27, 1942	6.75	6,500		Apr. 15, 1952	4.59	2,430
1943	Dec. 30, 1942	5.53	4,300		May 25, 1952	5.12	3,240
	Mar. 12, 1943	4.16	2,320		July 10, 1952	6.04	5,120
	Mar. 17, 1943	4.45	2,760	1953	Dec. 11, 1952	6.64	6,710
1944	Nov. 9, 1943	5.37	4,200		Jan. 24, 1953	5.67	4,270
	Feb. 24, 1944	a6.83	-		Feb. 21, 1953	4.79	2,720
1945	Mar. 16, 1945	4.91	2,800		Mar. 15, 1953	4.98	3,020
	Mar. 17, 1945	4.67	2,730		Apr. 27, 1953	4.66	2,530
	Apr. 5, 1945	4.86	2,410	1954	Dec. 7, 1953	4.62	2,460
	July 19, 1945	6.28	5,430		Jan. 27, 1954	a4.62	-
	July 29, 1945	-	3,940		Apr. 17, 1954	4.56	2,330
1946	Feb. 14, 1946	a5.48	-	1955	Nov. 21, 1954	5.13	3,240
	Mar. 9, 1946	4.93	3,240		Aug. 19, 1955	7.11	8,090
	May 28, 1946	4.40	2,320	1956	Oct. 6, 1955	5.66	4,060
1947	Jan. 31, 1947	4.62	2,680		Oct. 15, 1955	6.59	6,180
	Mar. 14, 1947	4.86	3,110		Apr. 5, 1956	4.74	2,480
	Apr. 5, 1947	5.97	5,510	1957	Feb. 26, 1957	4.60	2,280
	Aug. 17, 1947	9.68	16,000		Apr. 6, 1957	4.96	2,830
1948	Mar. 20, 1948	5.91	4,630	1958	Dec. 21, 1957	6.35	5,600
	Mar. 21, 1948	5.54	3,890		Dec. 26, 1957	4.69	2,410
	Apr. 14, 1948	4.88	2,730		Apr. 6, 1958	5.35	3,480
1949	Dec. 30, 1948	6.22	5,350	1959	Jan. 22, 1959	6.29	5,460
	Jan. 6, 1949	5.67	4,270		Feb. 10, 1959	4.93	2,780
	Feb. 15, 1949	a5.9	2,430		Mar. 6, 1959	5.30	3,400
	May 20, 1949	4.58	2,410		Apr. 20, 1959	5.64	4,000
1950	Dec. 13, 1949	4.68	2,560		Sept. 10, 1959	5.62	3,980
	Mar. 8, 1950	4.79	2,720	1960	Oct. 9, 1959	5.42	3,610
	Mar. 28, 1950	5.60	4,120		Nov. 28, 1959	5.85	4,460
1951	Nov. 26, 1950	5.86	4,690		Dec. 12, 1959	4.94	2,790
	Dec. 4, 1950	5.48	3,880		Jan. 3, 1960	5.22	3,250
	Jan. 24, 1951	4.45	2,230		Feb. 11, 1960	5.76	4,270
					Mar. 31, 1960	5.07	3,000
					Apr. 4, 1960	5.79	4,330

a Backwater from ice.

Peak stages and discharges of Callicoon Creek at Callicoon, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1960	June 24, 1960	4.67	2,380	1961	Feb. 26, 1961	5.78	4,310
	Aug. 19, 1960	5.46	3,680		Apr. 25, 1961	5.62	3,980
	Sept. 12, 1960	5.87	4,500				
	Sept. 20, 1960	5.35	3,480				

4280. Tenmile River at Tusten, N. Y.

Location.--Lat 41°33'50", long 75°00'55", on left bank 0.5 mile downstream from East Branch Tenmile River, three-quarters of a mile upstream from mouth, and three-quarters of a mile northeast of Tusten, Sullivan County.

Drainage area.--45.0 sq mi.

Gage.--Recording. Altitude of gage is 750 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,800 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 930 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	June 3, 1946	3.55	486	1955	Nov. 21, 1954	4.55	945
1947	Apr. 5, 1947	5.83	1,440	1955	Aug. 19, 1955	9.08	6,850
1948	Mar. 20, 1948	4.73	981	1956	Oct. 16, 1955	5.85	2,370
	Mar. 22, 1948	4.89	1,060				
1949	Dec. 31, 1948	5.30	1,360	1957	Apr. 6, 1957	3.66	737
	Jan. 6, 1949	5.02	1,200				
1950	Mar. 29, 1950	4.57	955	1958	Dec. 21, 1957	4.07	962
					Apr. 6, 1958	4.80	1,440
1951	Nov. 26, 1950	6.05	1,870	1959	Jan. 22, 1959	3.92	876
	Mar. 31, 1951	5.41	1,430				
1952	Nov. 8, 1951	4.60	970	1960	Nov. 28, 1959	4.08	968
	Apr. 15, 1952	4.88	1,120		Feb. 11, 1960	4.04	944
	July 10, 1952	4.58	960		Mar. 31, 1960	4.30	1,100
					Apr. 4, 1960	4.85	1,480
1953	Dec. 11, 1952	5.86	1,730	1961	Aug. 20, 1960	4.31	1,110
					Sept. 12, 1960	4.92	1,540
1954	May 4, 1954	4.31	828		Sept. 20, 1960	4.06	956
					Feb. 26, 1961	4.22	1,050

4285. Delaware River above Lackawaxen River, near Barryville, N. Y.

Location.--Lat 41°30'30", long 74°59'15", on left bank 1.6 miles upstream from Lackawaxen River and 5.8 miles northwest of Barryville, Sullivan County.

Drainage area.--2,023 sq mi.

Gage.--Recording. Datum of gage is 600.22 ft above mean sea level, datum of 1929

Stage-discharge relation.--Defined by current-meter measurements below 55,000 cfs and extended above on basis of slope-area measurement at 104,000 cfs.

Remarks.--Subsequent to September 1954, entire flow from 371 sq mi of drainage area controlled by Pepacton Reservoir. Base for partial-duration series, 37,000 cfs.

Peak stages and discharges of Delaware River above Lackawaxen River,
near Barryville, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Dec. 30, 1940	11.84	36,000	1951	Nov. 26, 1950	16.52	60,900
1942	Mar. 9, 1942	15.28	53,000		Dec. 5, 1950	16.03	57,700
	May 23, 1942	23.19	105,000		Mar. 31, 1951	17.65	68,200
	Sept. 28, 1942	14.44	47,900	1952	July 10, 1952	15.79	56,100
1943	Dec. 31, 1942	17.89	69,800	1953	Dec. 12, 1952	17.70	68,600
	Mar. 18, 1943	13.01	39,500		Jan. 25, 1953	13.94	45,100
1944	Nov. 9, 1943	12.88	38,700	1954	Jan. 28, 1954	11.81	33,400
1945	Feb. 25, 1945	13.90	-	1955	Aug. 19, 1955	26.40	130,000
	Feb. 28, 1945	13.58	43,100		Oct. 16, 1955	13.04	40,100
	Mar. 18, 1945	13.55	42,900	1956	Jan. 23, 1957	11.31	30,600
1946	Mar. 8, 1946	12.51	37,200		Dec. 21, 1957	15.48	54,200
	Mar. 9, 1946	12.77	38,600		Apr. 7, 1958	12.64	37,900
1947	Jan. 21, 1947	12.77	38,600	1958	Jan. 22, 1959	17.73	68,700
	Mar. 15, 1947	15.73	55,700		Nov. 28, 1959	14.96	51,100
	Apr. 6, 1947	14.66	49,300		Feb. 12, 1960	13.02	40,000
1948	Mar. 17, 1948	13.37	41,900		Mar. 31, 1960	14.13	46,100
	Mar. 20, 1948	14.91	50,800		Apr. 4, 1960	15.65	55,200
	Mar. 22, 1948	20.07	84,000	1960	Feb. 24, 1961	18.19	-
1949	Dec. 31, 1948	17.63	68,100		Feb. 26, 1961	15.02	51,400
	Jan. 6, 1949	13.78	44,200	1961	Apr. 25, 1961	13.77	44,100
1950	Mar. 9, 1950	15.29	-				
	Mar. 29, 1950	13.31	41,600				
	Apr. 5, 1950	14.41	47,800				

a Backwater from ice.

4290. West Branch Lackawaxen River at Prompton, Pa.
(Published as "Lackawaxen River" prior to 1953)

Location--Lat 41°35'15", long 75°19'40", on right bank 1,500 ft upstream from highway bridge at Prompton, Wayne County, and 2,000 ft upstream from Van Auken Creek.

Drainage area--59.7 sq mi.

Gage--Recording. Datum of gage is 1,083.78 ft above mean sea level, datum of 1929.

Stage-discharge relation--Defined by current-meter measurements below 3,600 cfs and extended above by logarithmic plotting.

Bankfull stage--8 ft.

Remarks--Base for partial-duration series, 1,900 cfs. Only annual peaks are shown prior to 1946.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	May 23, 1942	16.7	-	1949	Dec. 30, 1948	5.69	2,440
1945	Mar. 3, 1945	16.16	-	1950	Apr. 4, 1950	6.35	3,140
	July 19, 1945	5.10	1,860	1951	Nov. 25, 1950	8.42	5,230
1946	May 28, 1946	6.52	3,240		Dec. 4, 1950	6.85	3,540
1947	Apr. 5, 1947	8.45	5,230		Mar. 31, 1951	5.94	2,640
	May 22, 1947	6.40	3,140		Apr. 13, 1951	5.85	2,540
	July 8, 1947	5.40	2,140	1952	Apr. 15, 1952	5.98	2,740
1948	Mar. 16, 1948	5.21	1,950		May 25, 1952	5.52	2,250
	Mar. 20, 1948	5.26	2,020		July 10, 1952	5.50	2,250
	Mar. 21, 1948	6.12	2,840	1953	Dec. 11, 1952	5.34	2,150
	Apr. 14, 1948	5.19	1,980		Jan. 24, 1953	5.48	2,250

a Backwater from ice.

Peak stages and discharges of West Branch Lackawaxen River at Prompton, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Apr. 17, 1954	5.18	2,020	1958	Dec. 21, 1957	6.17	2,890
1955	Aug. 18, 1955	9.24	5,860	1958	Apr. 6, 1958	5.78	2,530
1956	Oct. 6, 1955	5.71	2,440	1959	Jan. 22, 1959	6.6	3,250
	Oct. 16, 1955	6.69	3,340	1960	Apr. 5, 1960	4.61	1,660
	Oct. 30, 1955	6.11	2,800	1961	Feb. 26, 1961	4.44	1,560
1957	Apr. 6, 1957	4.75	1,670				

4295. Dyberry Creek near Dyberry, Pa.
(Published as "at Dyberry" prior to 1960)

Location.--Lat 41°36'25", long 75°16'00", on right bank, 180 ft upstream from unnamed tributary, 1,700 ft below Dyberry Dam, 2.1 miles north of Honesdale, Wayne County, and 2.6 miles upstream from mouth.

Drainage area.--64.6 sq mi.

Gage.--Nonrecording prior to Oct. 1, 1957; recording thereafter. Prior to Oct. 1, 1957, at site 1.9 miles upstream at datum 13.70 ft higher. Datum of gage is 970.70 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,500 cfs and extended above on basis of slope-area measurement at 11,400 cfs.

Bankfull stage.--10 ft.

Remarks.--Base for partial-duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	May 23, 1942	15.86	-	1952	Jan. 27, 1952	8.9	1,700
1944	Nov. 9, 1943	10.48	2,840		Mar. 11, 1952	9.42	1,990
1945	Mar. 17, 1945	8.82	1,520		Apr. 15, 1952	10.45	2,750
	July 19, 1945	9.00	1,640		May 25, 1952	10.07	2,490
	July 28, 1945	10.05	2,390		July 10, 1952	14.6	15,500
1946	Mar. 9, 1946	9.00	1,640	1953	Dec. 11, 1952	12.17	6,080
	May 28, 1946	10.51	2,840		Jan. 24, 1953	10.41	2,750
					Feb. 21, 1953	8.82	1,650
1947	Apr. 5, 1947	11.60	4,760	1954	Dec. 7, 1953	8.79	1,650
	May 22, 1947	9.4	1,770		Mar. 1, 1954	8.68	1,600
	July 8, 1947	10.61	3,100		Apr. 17, 1954	9.78	2,260
	July 22, 1947	11.40	4,380		May 10, 1954	9.45	1,990
1948	Mar. 17, 1948	8.78	1,520	1955	Nov. 21, 1954	8.54	1,570
	Mar. 20, 1948	9.76	2,220		Mar. 22, 1955	8.53	1,570
	Mar. 22, 1948	9.58	2,060		Aug. 18, 1955	13.78	11,400
	Apr. 14, 1948	10.60	2,930	1956	Oct. 6, 1955	9.38	2,150
1949	Dec. 30, 1948	10.0	2,390		Oct. 16, 1955	10.28	2,940
	Jan. 6, 1949	9.6	2,060		Oct. 30, 1955	9.59	2,300
1950	Dec. 13, 1949	9.0	1,770		Mar. 8, 1956	8.86	1,810
	Apr. 4, 1950	11.0	3,800		Apr. 5, 1956	8.87	1,810
1951	Nov. 25, 1950	11.81	5,160	1957	Apr. 6, 1957	8.82	1,750
	Dec. 4, 1950	11.32	4,240	1958	Dec. 21, 1957	8.14	4,860
	Dec. 8, 1950	8.5	1,500		Apr. 6, 1958	7.92	4,560
	Feb. 21, 1951	8.6	1,550	1959	Jan. 22, 1959	5.33	1,660
	Mar. 31, 1951	10.98	3,800	1960	Apr. 5, 1960	5.72	1,660
	Apr. 13, 1951	8.97	1,750	1961	Feb. 26, 1961	5.44	1,460
1952	Nov. 3, 1951	8.79	1,650				

4300. Lackawaxen River near Honesdale, Pa.

Location.--Lat 41°33'45", long 75°14'55", 50 ft from left abutment on downstream side of Lemnizer Bridge, (Brown Street) in Honesdale, Wayne County, 1.2 miles downstream from Dyberry Creek.

Drainage area.--164 sq mi.

Gage.--Nonrecording and crest-stage gage. Datum of gage is 946.34 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 11,000 cfs and extended above by logarithmic plotting.

Bankfull stage.--13 ft.

Remarks.--Base for partial-duration series, 3,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	May 23, 1942	24.5	34,000	1954	Dec. 7, 1953	4.90	3,000
					Mar. 2, 1954	5.30	3,400
1949	Dec. 30, 1948	9.2	5,270		Apr. 17, 1954	6.33	4,480
	Jan. 6, 1949	7.7	3,590		May 10, 1954	5.45	3,500
1950	Dec. 13, 1949	7.23	3,040	1955	Nov. 21, 1954	4.92	3,000
	Mar. 28, 1950	7.58	3,470		Aug. 18, 1955	15.52	18,600
	Apr. 4, 1950	9.12	5,150				
1951	Nov. 26, 1950	11.0	7,470	1956	Oct. 6, 1955	7.38	5,840
	Dec. 4, 1950	10.5	6,830		Oct. 16, 1955	8.62	7,450
	Dec. 8, 1950	7.6	3,470		Oct. 30, 1955	7.00	5,340
	Feb. 21, 1951	7.8	3,690		Nov. 16, 1955	5.05	3,000
	Mar. 31, 1951	9.0	5,030		Mar. 8, 1956	5.40	3,510
	Apr. 13, 1951	8.0	3,910		Apr. 5, 1956	5.10	3,200
1952	Nov. 3, 1951	7.6	3,470	1957	Apr. 6, 1957	6.21	4,390
	Jan. 27, 1952	7.8	3,690	1958	Dec. 21, 1957	7.81	6,360
	Mar. 11, 1952	9.7	5,870		Apr. 6, 1958	8.04	6,620
	Apr. 15, 1952	10.0	6,230	1959	Jan. 22, 1959	6.86	5,220
	May 25, 1952	9.2	5,270		Apr. 2, 1959	4.95	3,100
	July 10, 1952	14.2	12,400	1960	Apr. 4, 1960	6.56	4,870
1953	Dec. 11, 1952	12.1	9,100	1961	Feb. 26, 1961	5.63	3,750
	Jan. 24, 1953	10.49	6,880				
	Feb. 21, 1953	7.50	3,360				

4305. Lackawaxen River at West Hawley, Pa.
(Published as "near West Hawley" prior to 1932)

Location.--Lat 41°28'10", long 75°11'15", at Riverside Bridge at West Hawley, Wayne County, half a mile upstream from Middle Creek.

Drainage area.--206 sq mi.

Gage.--Nonrecording. Datum of gage is 885.50 ft above mean sea level (preliminary levels of 1934).

Stage-discharge relation.--Defined by current-meter measurements below 3,000 cfs and extended above on basis of slope-area measurement at 38,000 cfs, 1.4 miles downstream, adjusted to gage site.

Historical data.--Flood of May 23, 1942, is maximum known.

Remarks.--Records prior to 1932 furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 3,300 cfs.

Peak stages and discharges of Lackawaxen River at West Hawley, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	Nov. 28, 1921	9.3	6,980	1932	Feb. 11, 1932	6.8	3,580
	June 18, 1922	8.2	5,460		Apr. 1, 1932	6.5	3,320
1923	Mar. 24, 1923	7.3	4,340		June 17, 1932	6.8	3,580
	Apr. 6, 1923	6.4	3,330	1933	Nov. 10, 1932	7.5	4,280
1924	Jan. 12, 1924	7.6	4,700		Nov. 19, 1932	6.6	3,470
	Apr. 7, 1924	9.0	6,550		June 6, 1933	6.5	3,380
	Sept. 30, 1924	10.48	8,840		Aug. 24, 1933	11.0	9,680
1925	Feb. 12, 1925	7.8	4,500	1934	July 28, 1934	8.75	6,270
					Sept. 17, 1934	6.9	3,740
1926	Nov. 13, 1925	6.4	3,290	1935	Dec. 1, 1934	7.9	4,730
					July 9, 1935	7.7	4,530
1927	Nov. 17, 1926	10.5	8,840	1936	Oct. 31, 1935	7.1	3,930
	Jan. 23, 1927	6.6	3,480		Nov. 13, 1935	6.6	3,470
	Mar. 21, 1927	6.4	3,290		Mar. 12, 1936	11.4	10,400
1928	Oct. 19, 1927	9.6	6,620		Mar. 18, 1936	15.32	18,300
	Nov. 18, 1927	8.0	4,900	1937	Feb. 22, 1937	9.6	7,430
	Dec. 8, 1927	7.4	4,280		Apr. 6, 1937	6.5	3,430
	May 1, 1928	6.4	3,290		Apr. 22, 1937	6.7	3,530
	June 30, 1928	10.3	6,700	1938	Jan. 25, 1938	7.6	4,430
	July 14, 1928	8.5	5,430		Sept. 22, 1938	9.5	7,280
1929	Mar. 15, 1929	7.0	3,740	1942	May 23, 1942	22.3	38,000
	Apr. 21, 1929	7.5	4,580				
1930	Mar. 8, 1930	6.24	3,170				
1931	Mar. 29, 1931	7.1	3,820				

a Backwater from ice.

4310. Middle Creek near Hawley, Pa.

Location.--Lat 41°29'05", long 75°13'20", at highway bridge, 0.1 mile downstream from Red Shale Brook, 2 miles northwest of Hawley, Wayne County, and 2.5 miles upstream from mouth.

Drainage area.--78.4 sq mi.

Gage.--Nonrecording and crest-stage gage prior to 1961; crest-stage gage thereafter. Datum of gage is 1,017.73 ft above mean sea level, unadjusted.

Stage-discharge relation.--Defined by current-meter measurements below 3,500 cfs and extended above by slope-area measurements at gage heights 13.22 and 17.87 ft.

Bankfull stage.--14 ft.

Remarks.--Base for partial-duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	May 23, 1942	18.0	-	1950	Apr. 5, 1950	7.8	1,640
1945	Mar. 4, 1945	8.0	1,760	1951	Nov. 26, 1950	11.1	4,150
	Sept. 2, 1945	9.2	2,630		Dec. 4, 1950	9.92	3,190
1946	May 28, 1946	10.6	3,840		Feb. 21, 1951	7.60	1,520
1947	Apr. 5, 1947	13.22	6,000		Mar. 31, 1951	7.88	1,700
	July 8, 1947	12.62	5,460		Apr. 13, 1951	7.64	1,520
	July 22, 1947	10.0	3,270	1952	Mar. 12, 1952	8.78	2,310
1948	Mar. 17, 1948	8.2	1,890		Apr. 15, 1952	10.31	3,510
	Mar. 22, 1948	8.2	1,890		May 25, 1952	8.95	2,470
	Apr. 15, 1948	8.4	2,030		July 10, 1952	14.17	6,970
1949	Dec. 30, 1948	8.5	2,100	1953	Dec. 11, 1952	10.5	3,670
	Jan. 6, 1949	8.4	2,030		Jan. 24, 1953	8.4	2,030
1950	Mar. 29, 1950	8.4	2,030	1954	Mar. 2, 1954	7.62	1,520
					Apr. 17, 1954	8.35	2,030

Peak stages and discharges of Middle Creek near Hawley, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 22, 1955	9.65	2,720	1958	Apr. 6, 1958	7.61	3,000
	Aug. 19, 1955	17.87	12,000		Apr. 28, 1958	7.05	2,580
1956	Oct. 6, 1955	5.97	1,960	1959	Jan. 22, 1959	7.11	2,650
	Oct. 16, 1955	9.01	4,030		Nov. 28, 1959	5.86	1,900
	Oct. 30, 1955	7.36	2,790	1960	Mar. 31, 1960	5.97	2,200
	Nov. 16, 1955	5.77	1,850		Apr. 4, 1960	7.57	3,270
	Apr. 5, 1956	5.80	1,850		May 22, 1960	5.37	1,850
	Apr. 30, 1956	6.2	2,080				
1957	Apr. 6, 1957	7.97	3,280	1961	Feb. 25, 1961	7.90	a3,480
1958	Dec. 21, 1957	5.69	1,800				

a Annual peak only.

4315. Lackawaxen River at Hawley, Pa.

Location.--Lat 41°28'35", long 75°10'25", on left bank at bridge, at Hawley, Wayne County, 700 ft upstream from Wallenpaupack Creek and 550 ft downstream from Middle Creek.

Drainage area.--290 sq mi.

Gage.--Nonrecording prior to Aug. 10, 1938; recording Aug. 10, 1938, to Aug. 19, 1955; nonrecording and crest-stage gage thereafter. Aug. 10, 1938, to Feb. 13, 1956, at site 1,000 ft downstream at same datum. Datum of gage is 869.00 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 12,000 cfs and extended above on basis of slope-area measurements of 50,000 cfs.

Bankfull stage.--9 ft.

Remarks.--Records 1909-17 furnished by Pennsylvania Department of Forests and Waters. Records exclude flow of Wallenpaupack Creek (228 sq mi), which is diverted around station to hydro-electric plant downstream. Base for partial-duration series, 6,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1909	Feb. 20, 1909	9.56	6,980	1941	Apr. 6, 1941	6.33	a5,930
1910	Apr. 26, 1910	7.80	a4,560	1942	Mar. 9, 1942	6.57	6,480
1911	Mar. 28, 1911	6.90	a3,520		May 23, 1942	20.1	50,000
					Sept. 28, 1942	6.40	6,040
1912	Mar. 29, 1912	7.80	a4,560	1943	Nov. 25, 1942	6.60	6,480
					Dec. 31, 1942	8.64	11,400
1913	Jan. 8, 1913	9.40	6,750				
	Mar. 27, 1913	10.3	8,170	1944	Nov. 9, 1943	7.97	9,820
					Jan. 28, 1944	b7.25	-
1914	Mar. 28, 1914	12.6	12,600				
1915	Feb. 25, 1915	7.7	4,440	1945	Mar. 4, 1945	6.67	6,700
					Mar. 17, 1945	6.42	6,040
1916	Apr. 2, 1916	9.8	7,360		July 19, 1945	6.46	6,260
	Apr. 14, 1916	8.9	6,020	1946	May 28, 1946	8.20	10,300
1917	Mar. 28, 1917	6.9	a3,520	1947	Apr. 5, 1947	9.98	15,300
1936	March 1936	19.1	a27,600		May 22, 1947	6.77	6,930
					July 8, 1947	8.48	11,100
1938	Sept. 22, 1938	7.90	9,570		July 22, 1947	7.56	8,820
				1948	Mar. 17, 1948	6.82	6,930
1939	Dec. 6, 1938	6.64	6,480		Mar. 22, 1948	7.25	7,860
	Feb. 20, 1939	6.71	6,700		Apr. 15, 1948	7.01	7,390
1940	Mar. 31, 1940	9.68	14,400	1949	Dec. 30, 1948	7.56	8,820
	Apr. 5, 1940	6.85	6,930		Jan. 6, 1949	6.72	6,700
	Apr. 9, 1940	7.54	8,580		Feb. 16, 1949	6.60	6,470
	Sept. 1, 1940	6.38	6,040				

a Annual peak only.

b Backwater from ice.

Peak stages and discharges of Lackawaxen River at Hawley, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Dec. 13, 1949	6.90	7,160	1954	May 10, 1954	6.31	6,030
	Mar. 29, 1950	6.71	6,710	1955	Aug. 19, 1955	20.6	51,900
	Apr. 5, 1950	7.36	8,340				
1951	Nov. 26, 1950	8.94	12,200	1956	Oct. 6, 1955	7.68	9,420
	Dec. 4, 1950	8.30	10,600		Oct. 16, 1955	8.13	10,600
	Dec. 8, 1950	6.41	6,050		Oct. 30, 1955	7.36	8,570
	Feb. 22, 1951	6.56	6,490				
	Mar. 31, 1951	7.22	7,860	1957	Apr. 6, 1957	10.38	7,810
	Apr. 13, 1951	6.64	6,490				
1952	Mar. 12, 1952	7.08	8,070	1958	Dec. 21, 1957	11.03	8,820
	Apr. 15, 1952	8.05	10,500		Apr. 6, 1958	10.00	7,810
	May 25, 1952	7.01	7,800	1959	Jan. 22, 1959	10.6	8,140
	July 10, 1952	11.78	21,700				
1953	Dec. 11, 1952	9.40	14,500	1960	Apr. 4, 1960	9.00	8,510
	Jan. 24, 1953	7.39	8,880	1961	Feb. 26, 1961	8.50	7,580
1954	Apr. 17, 1954	6.71	7,020				

4320. Wallenpaupack Creek at Wilsonville, Pa.

Location.--At hydroelectric plant of Pennsylvania Power and Light Co., at lower end of penstock, at Kimble, 3 miles east of dam at lat 41°27'35", long 75°11'10", at Wilsonville, Wayne County, and 1½ miles south of Hawley.

Drainage area.--228 sq mi.

Gage.--Nonrecording at site 1,000 ft downstream from dam at datum 1,146.78 ft above mean sea level, unadjusted.

Remarks.--Records furnished by L. B. Stittwell and H. S. Putman, consulting Engineers, New York City. Flow regulated by Lake Wallenpaupack since Nov. 3, 1925. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	Mar. 29, 1914	-	a4,840	1922	Mar. 9, 1922	4.5	4,400
1919	Mar. 10, 1919	-	1,794	1923	Mar. 24, 1923	3.30	2,340
1920	July 25, 1920	4.00	3,420	1924	Apr. 7, 1924	4.65	b4,550
				1925	Feb. 12, 1926	3.65	c2,850
1921	Mar. 10, 1921	3.92	3,346				

a Maximum daily discharge.

b Maximum discharge recorded; may have been higher on Sept. 30, 1924.

c Maximum peak discharge; maximum discharge during the year not determined, occurred 12:01 a.m. Oct. 1, 1924, stage falling.

4325. Shohola Creek near Shohola, Pa.

Location.--Lat 41°27'00", long 74°55'20", at highway bridge $1\frac{3}{4}$ miles south of Shohola, Pike County, and about 2 miles upstream from mouth.

Drainage area.--83.2 sq mi.

Gage.--Nonrecording. Altitude of gage is 695 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,000 cfs.

Remarks.--Records furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1919	Mar. 11, 1919	3.5	735	1925	Feb. 11, 1925	4.1	1,170
1920	Mar. 13, 1920	4.8	1,810	1926	Feb. 26, 1926	-	800
	Mar. 27, 1920	4.2	1,250	1927	Nov. 16, 1926	4.6	1,610
	July 25, 1920	4.0	1,090		Mar. 20, 1927	3.9	1,010
1921	Mar. 10, 1921	4.5	1,520		May 11, 1927	3.4	673
1922	Mar. 10, 1922	3.8	940		Sept. 2, 1927	4.2	1,250
	June 18, 1922	4.0	1,090	1928	Oct. 19, 1927	4.6	1,610
1923	Mar. 22-27, 1923	3.3	614		Nov. 4, 1927	3.9	1,010
1924	Jan. 12, 1924	3.5	735		Nov. 18, 1927	4.0	1,090
	Mar. 31, 1924	3.6	800		Dec. 8, 1927	4.8	1,810
	Apr. 7, 1924	5.0	2,020		May 1, 1928	3.4	673
1925	Oct. 1, 1924	5.0	2,020		May 4, 1928	3.6	800
					July 1, 1928	4.0	1,090
					July 6, 1928	3.6	800
					Aug. 11, 1928	3.6	800

a Ice affected.

4335. Mongaup River near Mongaup, N. Y.

Location.--Lat 41°27'40", long 74°45'25", on right bank 300 ft downstream from Rio hydroelectric plant of Orange and Rockland Utilities, Inc., half a mile downstream from Falls Bush Kill, and $2\frac{1}{4}$ miles upstream from mouth and Mongaup, Sullivan County.

Drainage area.--202 sq mi.

Gage.--Recording. Prior to July 6, 1956, at sites 25 ft upstream on Rio Tailrace and 200 ft upstream on natural channel, at datum 4.0 ft higher. Datum of gage is 625.05 ft above mean sea level (datum of Orange and Rockland Utilities, Inc.).

Stage-discharge relation.--Defined by current-meter measurements below 8,000 cfs.

Remarks.--Flow completely regulated by Rio hydroelectric plant except for runoff from about 7 sq mi of drainage area below Rio Dam. Maximum daily discharges shown prior to October 1956, annual peaks only thereafter.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Apr. 9, 1940	-	4,240	1951	Mar. 31, 1951	-	3,140
1941	Dec. 30, 1940	-	681	1952	Apr. 6, 1952	-	2,760
1942	Sept. 28, 1942	-	1,270	1953	Apr. 28, 1953	-	1,520
1943	May 22, 1943	-	1,550	1954	May 11, 1954	-	917
1944	Apr. 26, 1944	-	1,590	1955	Aug. 19, 1955	-	12,300
1945	July 29, 1945	-	3,740	1956	Oct. 16, 1955	-	9,420
1946	May 28, 1946	-	875	1957	Apr. 6, 1957	4.51	944
1947	May 27, 1947	-	1,230	1958	Dec. 27, 1957	6.37	2,060
1948	Mar. 24, 1948	-	1,480	1959	June 2, 1959	4.58	976
1949	Jan. 7, 1949	-	940	1960	Apr. 6, 1960	6.18	1,930
1950	Apr. 5, 1950	-	2,100	1961	Apr. 26, 1961	6.32	2,020

4340. 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.

Gage.--Nonrecording prior to Aug. 13, 1928; recording thereafter. Prior to Aug. 13, 1928, at site 250 ft upstream. Datum of gage is 415.35 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 89,000 cfs and extended above on basis of slope-area measurements.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Oct. 10, 1903	23.1	205,000	1933	Aug. 25, 1933	15.03	102,000
1905	Mar. 26, 1905	11.6	56,800	1934	Mar. 6, 1934	14.94	100,000
				1935	Dec. 2, 1934	11.12	55,200
1906	Apr. 16, 1906	11.4	54,800	1936	Mar. 18, 1936	17.55	137,000
1907	Jan. 1, 1907	9.0	34,300	1937	Feb. 22, 1937	10.25	46,500
1908	Feb. 16, 1908	13.5	76,800	1938	Sept. 22, 1938	14.95	101,000
1909	Feb. 21, 1909	11.7	57,800	1939	Dec. 6, 1938	11.25	55,600
1910	Mar. 1, 1910	13.0	71,300	1940	Apr. 1, 1940	15.55	113,000
1911	Mar. 28, 1911	10.7	48,500	1941	Dec. 30, 1940	9.53	40,300
1912	Mar. 30, 1912	10.6	47,600	1942	May 23, 1942	17.76	140,000
1913	Mar. 28, 1913	15.5	100,000	1943	Dec. 31, 1942	13.99	84,000
1914	Mar. 28, 1914	16.0	106,000	1944	Nov. 9, 1943	10.49	46,500
1915	Feb. 25, 1915	10.3	45,200	1945	Mar. 18, 1945	10.76	51,200
1916	Apr. 1, 1916	12.0	60,800	1946	May 28, 1946	10.51	49,200
1917	Mar. 28, 1917	11.3	53,900	1947	Apr. 6, 1947	12.24	66,500
1918	Oct. 31, 1917	12.3	63,800	1948	Mar. 22, 1948	14.16	96,100
1919	Mar. 10, 1919	7.12	21,300	1949	Dec. 31, 1948	14.07	87,800
1920	Mar. 13, 1920	14.0	82,300	1950	Apr. 5, 1950	11.74	62,000
1921	Mar. 10, 1921	12.3	63,800	1951	Mar. 31, 1951	14.35	91,400
1922	Nov. 29, 1921	13.3	74,600	1952	July 10, 1952	13.50	81,000
1923	Mar. 24, 1923	11.9	59,800	1953	Dec. 12, 1952	14.72	96,300
1924	Apr. 7, 1924	12.4	64,800	1954	Jan. 28, 1954	9.18	37,700
1925	Feb. 12, 1925	15.3	97,600	1955	Aug. 19, 1955	23.91	233,000
1926	Apr. 10, 1926	9.4	38,700	1956	Oct. 16, 1955	12.57	70,200
1927	Nov. 17, 1926	13.8	80,100	1957	Apr. 7, 1957	9.76	42,400
1928	Oct. 20, 1927	13.1	72,400	1958	Dec. 21, 1957	12.43	68,600
1929	Mar. 15, 1929	11.9	63,600	1959	Jan. 22, 1959	13.21	77,200
1930	Mar. 9, 1930	8.05	29,400	1960	Apr. 4, 1960	12.69	71,500
1931	Mar. 30, 1931	8.82	35,100	1961	Feb. 26, 1961	12.24	66,500
1932	Apr. 1, 1932	9.97	44,300				

4350. Neversink River near Claryville, N. Y.

Location.--Lat 41°53'25", long 74°35'30", on left bank 50 ft downstream from covered highway bridge, 300 ft upstream from small tributary, 2 miles downstream from confluence of East and West Branches, and 3 miles southwest of Claryville, Sullivan County.

Drainage area.--65.6 sq mi.

Gage.--Recording. Datum of gage is 1,488.77 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 3,000 cfs and extended above by logarithmic plotting.

Historical data.--Maximum discharge known, that of Nov. 25, 1950.

Remarks.--Base for partial-duration series, 3,000 cfs.

Peak stages and discharges of Neversink River near Claryville, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 25, 1950	9.0	a23,400	1956	Apr. 28, 1956	4.65	3,200
1952	Nov. 7, 1951	5.37	4,480	1957	Jan. 23, 1957	3.99	2,240
	Apr. 5, 1952	6.38	6,150		Dec. 21, 1957	6.95	8,230
	June 1, 1952	4.99	3,720	1959	Jan. 22, 1959	4.27	3,320
	July 10, 1952	7.83	10,200		Apr. 2, 1959	4.84	4,250
1953	Nov. 22, 1952	5.45	3,800	1960	Oct. 1, 1959	4.45	3,600
	Dec. 11, 1952	6.77	7,440		Oct. 24, 1959	5.95	6,360
	Jan. 24, 1953	5.19	3,850		Nov. 28, 1959	4.83	4,230
	Mar. 15, 1953	5.52	4,520		Dec. 12, 1959	4.73	4,060
	Mar. 24, 1953	5.80	5,120		Feb. 11, 1960	4.15	3,140
1954	Mar. 1, 1954	5.60	3,890		Apr. 4, 1960	6.00	5,850
	Aug. 13, 1955	7.32	9,350		Sept. 12, 1960	5.55	4,990
1955	Aug. 18, 1955	6.48	6,950	1961	Feb. 26, 1961	4.78	3,680
	Oct. 15, 1955	7.50	9,950		Apr. 25, 1961	5.01	4,050

a Annual peak only, by slope-area measurement.

4355. Neversink River at Halls Mills, near Curry, N. Y.

Location.--Lat 41°52'40", long 74°36'20", on right bank $1\frac{1}{4}$ miles downstream from bridge at Halls Mills, $1\frac{3}{4}$ miles northwest of Curry, Sullivan County, and 3.5 miles downstream from confluence of East and West Branches.

Drainage area.--68 sq mi, approximately.

Gage.--Recording. Altitude of gage is 1,470 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 5,100 cfs.

Remarks.--Base for partial-duration series, 2,600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Oct. 23, 1937	10.37	-	1943	May 26, 1943	4.00	2,810
	July 21, 1938	4.60	3,960		Nov. 9, 1943	6.23	4,840
	July 22, 1938	10.05	12,400	1944	Sept. 14, 1944	4.71	3,420
	July 23, 1938	5.64	5,400		Mar. 17, 1945	5.41	3,900
	Aug. 11, 1938	7.39	7,940	1945	July 15, 1945	6.09	4,650
	Sept. 21, 1938	8.70	10,000		July 19, 1945	5.05	3,540
1939	Dec. 6, 1938	6.22	6,210		July 20, 1945	4.80	3,290
	Mar. 31, 1940	4.67	4,050		July 29, 1945	4.86	3,350
1940	Apr. 8, 1940	5.41	5,070	1946	Mar. 9, 1946	5.72	4,320
	Apr. 12, 1940	3.99	3,170		Apr. 6, 1947	4.76	3,210
	May 16, 1940	4.34	3,620	1948	Nov. 8, 1947	5.42	3,870
	Sept. 1, 1940	3.71	2,830		Nov. 12, 1947	5.08	3,500
	Nov. 12, 1940	3.67	2,780		Feb. 14, 1948	a7.01	-
1941	Dec. 28, 1940	4.66	4,040		Mar. 22, 1948	6.41	5,530
	Dec. 29, 1940	4.77	4,180		Apr. 1, 1948	4.09	2,750
1942	Dec. 24, 1941	9.42	10,000	1949	Nov. 20, 1948	4.35	3,020
	May 23, 1942	4.08	2,900		Dec. 30, 1948	7.65	7,260
	Sept. 27, 1942	8.40	8,500		Jan. 6, 1949	4.84	3,570
1943	Dec. 30, 1942	4.75	3,650				
	Mar. 17, 1943	4.26	3,100				

a Backwater from ice.

4360. Neversink River at Neversink, N. Y.

Location.--Lat 41°49'10", long 74°38'15", on right bank at downstream end of outlet channel, 1,650 ft downstream from Neversink Dam and State Highway 55, 2 miles southwest of Neversink, Sullivan County, and 2½ miles upstream from Wynkoop Brook.

Drainage area.--91.9 sq mi.

Gage.--Recording. Prior to Jan. 17, 1953, at site 650 ft downstream at different datum. Jan. 17, 1953, to Apr. 16, 1954, at present site at datum 0.41 ft higher. Datum of gage is 1,255.24 ft above mean sea level, datum of Board of Water Supply, City of New York.

Stage-discharge relation.--Defined by current-meter measurements below 2,600 cfs and extended above on basis of contracted-opening measurement and critical-depth measurement at 22,300 cfs.

Remarks.--Subsequent to June 1953, entire flow controlled by Neversink Reservoir. Base for partial-duration series, 4,000 cfs. Only annual peaks are shown prior to 1948 and subsequent to 1953.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Dec. 24, 1941	8.54	14,000	1952	Nov. 7, 1951	4.30	5,680
	Sept. 27, 1942	11.65	-		Apr. 5, 1952	5.19	6,720
1943	Dec. 30, 1942	7.76	4,890		July 10, 1952	6.79	10,600
1944	Nov. 9, 1943	7.42	5,670				
1945	July 15, 1945	6.74	5,800	1953	Nov. 22, 1952	3.69	5,010
					Dec. 11, 1952	5.41	8,320
1946	Mar. 9, 1946	6.45	5,080		Jan. 24, 1953	6.97	4,210
1947	Apr. 6, 1947	5.68	3,600		Mar. 16, 1953	7.50	5,300
					Mar. 24, 1953	7.89	6,180
1948	Nov. 8, 1947	5.95	4,100				
	Nov. 12, 1947	6.03	4,260	1954	Sept. 24, 1954	1.93	72
	Mar. 22, 1948	6.55	6,200	1955	Apr. 15, 1955	4.76	1,250
1949	Dec. 30, 1948	7.71	7,800	1956	Apr. 30, 1956	6.17	3,780
	Jan. 6, 1949	5.37	4,320	1957	Feb. 20, 1957	3.92	307
				1958	Apr. 30, 1958	4.96	1,550
1950	Apr. 4, 1950	5.00	3,640	1959	Apr. 20, 1959	4.32	635
				1960	June 18, 1960	4.39	710
1951	Nov. 25, 1950	11.23	22,300	1961	Apr. 25, 1961	6.60	4,640
	Dec. 4, 1950	4.85	6,040				
	Mar. 30, 1951	10.7	20,700				

4365. Neversink River at Woodbourne, N. Y.

Location.--Lat 41°45'25", long 74°35'55", on left bank a quarter of a mile downstream from highway bridge at Woodbourne, Sullivan County.

Drainage area.--113 sq mi.

Gage.--Nonrecording prior to Sept. 20, 1938; recording thereafter. Altitude of gage is 1,180 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 9,100 cfs.

Remarks.--Subsequent to June 1953, entire flow from 91.8 sq mi of drainage area controlled by Neversink Reservoir. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	July 22, 1938	11.2	12,300	1945	July 15, 1945	7.58	5,820
1939	Dec. 6, 1938	8.99	6,980				
1940	Mar. 31, 1940	9.98	-	1946	Mar. 9, 1946	7.13	5,140
	Apr. 9, 1940	-	6,470	1947	Apr. 6, 1947	6.21	3,850
				1948	Mar. 16, 1948	8.29	-
1941	Dec. 29, 1940	6.87	4,560		Mar. 22, 1948	-	6,420
1942	Dec. 24, 1941	9.54	9,050	1949	Dec. 30, 1948	9.35	8,710
1943	Dec. 30, 1942	7.21	5,260	1950	Apr. 4, 1950	6.29	3,960
1944	Nov. 9, 1943	7.70	6,000				

a Backwater from ice.

Peak stages and discharges of Neversink River at Woodbourne, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 26, 1950	11.19	22,000	1957	Feb. 28, 1957	3.04	644
1952	July 10, 1952	10.20	15,000	1958	Apr. 30, 1958	4.36	1,650
1953	Dec. 11, 1952	9.38	11,500	1959	Apr. 2, 1959	3.86	1,230
1954	Mar. 1, 1954	3.46	877	1960	Aug. 19, 1960	4.71	1,630
1955	Aug. 18, 1955	6.63	4,650				
1956	Apr. 30, 1956	6.27	4,060	1961	Apr. 25, 1961	6.63	4,650

4370. Neversink River at Oakland Valley, N. Y.

Location.--Lat 41°29'45", long 74°38'45", on right bank 250 ft downstream from highway bridge known as Paradise Bridge, three-quarters of a mile downstream from Oakland Valley, Sullivan County, and Bush Kill Creek, and 3½ miles northwest of Cuddebackville.

Drainage area.--222 sq mi.

Gage.--Nonrecording prior to Nov. 8, 1928; recording thereafter. Datum of gage is 632.00 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 7,800 cfs and extended above on basis of slope-area measurement at 23,300 cfs.

Remarks.--Subsequent to June 1953, entire flow from 91.8 sq mi of drainage area controlled by Neversink Reservoir. Base for partial-duration series, 4,800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Aug. 26, 1928	10.1	13,000	1940	Apr. 9, 1940	8.41	8,440
1929	Mar. 15, 1929	7.50	6,240	1941	Dec. 29, 1940	7.13	5,770
	Apr. 26, 1929	7.12	5,640				
1930	Oct. 23, 1929	6.99	5,380	1942	Dec. 24, 1941	9.07	10,000
	June 10, 1930	7.30	5,840		Mar. 9, 1942	7.21	5,260
					Sept. 28, 1942	9.65	11,500
1931	Mar. 29, 1931	6.11	3,760	1943	Dec. 31, 1942	7.80	7,100
					Mar. 17, 1943	6.63	4,840
1932	Apr. 1, 1932	6.63	4,610	1944	Nov. 9, 1943	7.54	6,580
1933	Oct. 6, 1932	10.65	15,000	1945	Mar. 18, 1945	7.67	6,840
	Nov. 1, 1932	6.98	5,380		July 15, 1945	7.36	6,220
	Apr. 18, 1933	7.86	7,150		July 19, 1945	7.35	6,200
	Aug. 24, 1933	12.61	22,600		July 29, 1945	7.17	5,840
	Sept. 4, 1933	7.68	6,760	1946	Mar. 9, 1946	7.22	5,940
1934	Mar. 4, 1934	8.00	-	1947	Jan. 21, 1947	7.50	-
	Sept. 17, 1934	6.76	4,790		Apr. 5, 1947	7.34	6,180
1935	Dec. 1, 1934	8.39	8,020	1948	Nov. 9, 1947	7.11	5,730
1936	Oct. 31, 1935	8.29	8,220		Nov. 12, 1947	6.84	5,220
	Nov. 29, 1935	7.11	5,620		Mar. 20, 1948	7.05	5,620
	Mar. 12, 1936	10.48	14,400		Mar. 22, 1948	8.30	8,200
	Mar. 18, 1936	11.48	18,100	1949	Dec. 31, 1948	9.91	12,200
	Mar. 21, 1936	6.78	4,960		Jan. 6, 1949	7.85	7,210
	Apr. 6, 1936	8.18	7,950				
1937	Feb. 22, 1937	11.5	18,200	1950	Apr. 5, 1950	7.07	5,650
	May 15, 1937	7.54	6,480	1951	Nov. 26, 1950	12.62	23,300
1938	Oct. 23, 1937	9.97	12,900		Dec. 5, 1950	8.34	8,590
	Nov. 14, 1937	7.33	6,060		Mar. 31, 1951	12.02	21,000
	July 22, 1938	10.70	14,500	1952	Nov. 7, 1951	8.25	8,360
	July 23, 1938	8.02	7,580		Apr. 5, 1952	9.35	11,500
	Aug. 7, 1938	6.98	5,480		May 25, 1952	6.74	5,040
	Aug. 11, 1938	9.04	9,960		June 1, 1952	8.32	8,540
	Sept. 22, 1938	9.47	11,000		July 10, 1952	10.10	14,000
1939	Dec. 6, 1938	8.67	9,070	1953	Nov. 22, 1952	8.00	7,730
1940	Mar. 31, 1940	9.16	10,300		Dec. 11, 1952	9.78	13,000

a Backwater from ice.

Peak stages and discharges of Neversink River at Oakland Valley, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Jan. 24, 1953	7.49	6,550	1957	Jan. 23, 1957	6.89	5,320
	Mar. 16, 1953	7.65	6,900	1958	Dec. 21, 1957	6.38	4,420
	Mar. 24, 1953	7.59	6,770				
1954	Mar. 2, 1954	4.44	1,790	1959	Apr. 2, 1959	5.78	3,470
1955	Aug. 19, 1955	12.74	23,800	1960	Aug. 19, 1960	6.94	5,420
1956	Oct. 15, 1955	10.16	14,300	1961	Feb. 25, 1961	6.68	-
	Apr. 30, 1956	6.93	5,400		Apr. 25, 1961	6.98	5,490

a Backwater from ice.

4375. Neversink River at Godeffroy, N. Y.

Location.--Lat 41°26'30", long 74°36'10", on right bank just upstream from highway bridge, half a mile downstream from Basher Kill, three-quarters of a mile southeast of Godeffroy, Orange County, 2 miles south of Cuddebackville, and 8½ miles upstream from mouth.

Drainage area.--302 sq mi.

Gage.--Recording. Datum of gage is 459.66 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 11,000 cfs and extended above on basis of slope-area measurement at 33,000 cfs.

Remarks.--Subsequent to June 1953, entire flow from 91.8 sq mi of drainage area controlled by Neversink Reservoir. Base for partial-duration series, 6,500 cfs. Only annual peaks are shown subsequent to 1953.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)							
1938	Oct. 23, 1937	9.90	12,600	1949	Dec. 31, 1948	10.28	14,200							
	Nov. 14, 1937	7.99	6,730	1949	Jan. 6, 1949	8.42	8,370							
	Jan. 25, 1938	7.93	6,580											
	July 22, 1938	10.73	16,100	1950	Apr. 5, 1950	7.63	6,410							
	Aug. 11, 1938	9.37	11,200	1951	Nov. 26, 1950	11.79	24,500							
	Sept. 22, 1938	10.00	13,400					Dec. 5, 1950	8.67	8,860				
1939	Dec. 6, 1938	9.26	10,900					Mar. 31, 1951	11.72	23,900				
					1940	Mar. 31, 1940	9.01	10,100						
1951	Mar. 31, 1951	11.72	23,900											
				1940	Apr. 9, 1940	8.94	9,870							
1941	Dec. 29, 1940	7.60	6,160		1952	Nov. 8, 1951			8.69	8,930				
						1942	Dec. 24, 1941	9.20	10,700		Apr. 6, 1952	9.92	12,900	
1953	Nov. 22, 1952	8.76	9,150											
				1942		Sept. 28, 1942	9.89	13,000		Dec. 11, 1952	10.12	13,600		
1943	Dec. 31, 1942	8.46	8,470		Jan. 24, 1953					8.04	6,950			
					1944	Nov. 9, 1943	7.97	7,140		Mar. 16, 1953	8.10	7,120		
1945	Mar. 18, 1945	8.37	8,220							Mar. 24, 1953	7.96	6,730		
					1954	Dec. 7, 1953	5.46	1,930						
1955	Aug. 19, 1955	12.49	33,000											
				1956					Oct. 15, 1955	10.96	18,300			
					1957	Jan. 23, 1957	5.99	2,680						
1958	Dec. 21, 1957	7.15	4,740											
				1959					Apr. 3, 1959	6.45	3,530			
					1960	Aug. 19, 1960	7.55	5,200						
1961	Apr. 25, 1961	7.61	5,790											
				1946					Mar. 9, 1946	7.69	6,720		1947	Apr. 5, 1947
					1948	Mar. 22, 1948	9.00	10,100						
1949	Dec. 31, 1948	10.28	14,200											
										1950	Apr. 5, 1950	7.63	6,410	
					1951	Nov. 26, 1950	11.79	24,500						
1952	Nov. 8, 1951	8.69	8,930											
										1953	Dec. 11, 1952	10.12	13,600	
					1954	Jan. 24, 1953	8.04	6,950						
1955	Mar. 16, 1953	8.10	7,120											
										1956	Mar. 24, 1953	7.96	6,730	
					1957	Jan. 23, 1957	5.99	2,680						
1958	Dec. 21, 1957	7.15	4,740											
										1959	Apr. 3, 1959	6.45	3,530	
					1960	Aug. 19, 1960	7.55	5,200						
1961	Apr. 25, 1961	7.61	5,790											

4385. Delaware River at Montague, N.J.
(Published as "at Milford, Pa." 1936-39)

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. Area of lakes, ponds, and swamps, 74.4 sq mi.

Gage.--Nonrecording prior to Feb. 9, 1940; recording thereafter. On upstream side of left span of bridge at datum 70 ft lower prior to Feb. 9, 1940. Datum of gage is 369.93 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 90,000 cfs and extended above on basis of flood-routing study.

Remarks.--Some effect on flood peaks from regulation by Lake Wallenpaupack, Toronto Reservoir, Swinging Bridge Reservoir, Cliff Lake Reservoir since 1940, Neversink Reservoir since 1953, Pepacton Reservoir since 1954, and other smaller reservoirs. Only annual maximum observed data is shown for 1936-40. Base for partial-duration series, 34,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Oct. 10, 1903	a35.5	-	1950	Dec. 13, 1949	13.63	36,500
					Mar. 9, 1950	14.91	44,600
1936	Mar. 18, 1936	98.45	164,500		Mar. 29, 1950	16.46	55,200
1937	Feb. 22, 1937	86.65	56,600		Apr. 5, 1950	17.81	65,500
1938	Sept. 22, 1938	92.35	104,400				
1939	Dec. 6, 1938	87.35	61,900	1951	Nov. 26, 1950	21.04	92,500
					Dec. 5, 1950	19.46	78,900
1940	Apr. 1, 1940	24.33	123,100		Dec. 8, 1950	13.79	37,400
	Apr. 9, 1940	19.87	82,300		Feb. 2, 1951	14.06	39,100
	Apr. 22, 1940	14.48	41,800		Mar. 31, 1951	22.66	107,200
1941	Dec. 30, 1940	14.88	44,400	1952	Nov. 8, 1951	14.79	43,700
	Apr. 6, 1941	13.80	37,600		Jan. 27, 1952	13.83	37,700
					Mar. 12, 1952	15.22	46,600
1942	Mar. 10, 1942	17.19	60,600		Apr. 6, 1952	15.60	49,200
	May 23, 1942	25.70	136,500		Apr. 16, 1952	14.90	44,500
	Sept. 28, 1942	18.76	73,100		July 10, 1952	20.07	84,000
1943	Nov. 26, 1942	13.32	34,800	1953	Dec. 12, 1952	22.62	108,000
	Dec. 31, 1942	21.54	97,000		Jan. 25, 1953	17.82	65,700
	Feb. 25, 1943	14.41	41,400				
	Mar. 18, 1943	16.00	52,000	1954	Feb. 18, 1954	13.20	34,600
	May 22, 1943	13.42	35,400				
1944	Nov. 9, 1943	16.12	52,800	1955	Aug. 19, 1955	35.15	250,000
	Mar. 18, 1944	14.30	40,700				
1945	Feb. 28, 1945	b15.42	-	1956	Oct. 16, 1955	19.68	80,800
	Mar. 4, 1945	b17.54	-		Oct. 31, 1955	13.98	38,000
	Mar. 18, 1945	17.06	59,700		Mar. 9, 1956	13.79	37,700
	July 20, 1945	15.32	47,200		Apr. 6, 1956	14.98	44,900
	July 30, 1945	15.00	45,100		Apr. 17, 1956	13.67	37,000
1946	Dec. 27, 1945	b14.70	-	1957	Apr. 7, 1957	14.80	43,800
	Jan. 7, 1946	13.31	34,600				
	Mar. 10, 1946	15.79	50,500	1958	Dec. 21, 1957	18.47	70,800
	May 28, 1946	16.51	55,600		Apr. 7, 1958	16.91	58,800
1947	Jan. 22, 1947	13.22	34,000	1959	Jan. 22, 1959	18.41	70,300
	Mar. 15, 1947	15.72	50,000		Apr. 3, 1959	15.05	45,400
	Apr. 6, 1947	19.14	76,200				
	July 22, 1947	14.00	38,700	1960	Nov. 29, 1959	17.05	59,800
					Jan. 4, 1960	13.68	36,200
					Feb. 12, 1960	16.23	52,600
1948	Feb. 21, 1948	b17.88	-		Apr. 1, 1960	17.58	62,800
	Mar. 17, 1948	16.22	53,500		Apr. 5, 1960	19.09	74,900
	Mar. 22, 1948	22.90	109,500		Sept. 13, 1960	14.50	41,100
	Apr. 15, 1948	15.07	45,600		Sept. 20, 1960	15.21	45,500
1949	Dec. 31, 1948	21.75	98,800	1961	Feb. 26, 1961	18.14	67,300
	Jan. 6, 1949	17.63	64,000		Apr. 11, 1961	16.85	58,400

a Present datum, from floodmark on left bank.

b Backwater from ice.

4390. Delaware River at Dingmans Ferry, Pa.

Location.--Lat 41°13'12", long 74°51'40", on bridge at Dingmans Ferry, Pike County, and 103.1 miles upstream from Calhoun Street Bridge in Trenton, N.J.

Drainage area.--3,542 sq mi.

Gage.--Nonrecording. Datum of gage is 286.06 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Not defined.

Remarks.--Some effect on flood peaks from regulation by Lake Wallenpaupack since 1925, Toronto Reservoir since 1926, Swinging Bridge Reservoir since 1930, Cliff Lake Reservoir since 1940, Neversink Reservoir since 1953, Pepacton Reservoir since 1954, and other smaller reservoirs. Gage heights are maximum of hourly observations by Delaware River Joint Toll Bridge Commission. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Oct. 10, 1903	98.3	-	1943	Dec. 31, 1942	85.95	-
1936	Mar. 19, 1936	93.5	-	1944	Nov. 9, 1943	80.80	-
1937	Feb. 22, 1937	82.05	-	1945	Mar. 18, 1945	82.25	-
1938	Sept. 22, 1938	86.80	-	1946	May 29, 1946	81.65	-
1939	Dec. 7, 1938	82.70	-	1947	Apr. 6, 1947	84.00	-
1940	Mar. 31, 1940	86.70	-	1948	Mar. 22, 1948	87.00	-
1941	Dec. 31, 1940	80.25	-	1955	Aug. 19, 1955	97.3	-
1942	May 23, 1942	89.45	-				

4395. Bush Kill at Shoemakers, Pa.

Location.--Lat 41°05'15", long 75°02'20", at highway bridge, 0.1 mile downstream from Saw Creek, 0.7 mile northwest of Shoemakers, Monroe County, and 2 miles southwest of Bush Kill.

Drainage area.--117 sq mi.

Gage.--Nonrecording prior to Aug. 12, 1938; recording thereafter. Datum of gage is 421.13 ft above mean sea level, unadjusted.

Stage-discharge relation.--Defined by current-meter measurements below 2,600 cfs and extended by logarithmic plotting.

Bankfull stage.--5 ft.

Remarks.--Base for partial-duration series, 1,100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1909	Feb. 17, 1909	3.9	1,270	1918	Feb. 20, 1918	4.10	1,430
	Feb. 20, 1909	5.0	2,270		Feb. 26, 1918	4.70	1,970
	Feb. 24, 1909	4.1	1,430		Apr. 22, 1918	3.80	1,190
	May 2, 1909	3.8	1,190	1919	Mar. 10, 1919	4.10	1,430
1910	Mar. 7, 1910	3.8	1,190		July 22, 1919	5.10	2,380
1911	June 14, 1911	3.7	1,120	1920	Mar. 13, 1920	4.50	1,780
1912	Mar. 15, 1912	3.8	1,190		Mar. 27, 1920	4.40	1,690
1913	Mar. 28, 1913	4.0	1,350		July 24, 1920	7.20	5,250
1914	Mar. 29, 1914	4.0	1,350	1921	Oct. 1, 1920	3.7	1,120
1915	Feb. 24, 1915	4.75	2,070		Mar. 10, 1921	4.50	1,780
1916	Apr. 2, 1916	4.10	1,430	1922	Mar. 8, 1922	4.50	1,780
	Apr. 14, 1916	3.70	1,120	1923	Mar. 24, 1923	3.90	1,270
	July 27, 1916	4.00	1,350	1924	Jan. 11, 1924	4.10	1,430
1917	Mar. 27, 1917	4.20	1,510		Jan. 17, 1924	3.90	1,270
					Apr. 6, 1924	5.20	2,490
					May 13, 1924	3.90	1,270

Peak stages and discharges of Bush Kill at Shoemakers, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1924	Sept. 30, 1924	5.50	2,830	1942	May 25, 1942	4.18	1,660
1925	Feb. 12, 1925	4.09	1,430		Aug. 16, 1942	4.55	2,020
1926	Nov. 13, 1925	4.80	2,070		Sept. 28, 1942	5.28	2,920
	Nov. 16, 1925	5.10	2,380	1943	Nov. 25, 1942	3.84	1,340
	Dec. 6, 1925	3.70	1,120		Dec. 30, 1942	4.33	1,710
	Feb. 25, 1926	3.90	1,270	1944	Nov. 9, 1943	3.63	1,170
1927	Nov. 16, 1926	5.50	2,830		Apr. 25, 1944	4.10	1,500
	Mar. 15, 1927	3.70	1,120	1945	Mar. 18, 1945	3.78	1,290
1928	Oct. 19, 1927	4.70	1,970		July 19, 1945	5.99	3,900
	Nov. 4, 1927	4.20	1,510		July 29, 1945	4.30	1,760
	Nov. 18, 1927	4.50	1,780	1946	Dec. 26, 1945	a5.67	-
	Dec. 8, 1927	4.70	1,970		May 28, 1946	4.58	2,080
	June 30, 1928	4.40	1,690		June 2, 1946	3.93	1,420
	July 5, 1928	4.40	1,690	1947	Mar. 14, 1947	3.94	1,420
	July 14, 1928	3.80	1,190		Apr. 6, 1947	4.19	1,580
	Aug. 27, 1928	3.80	1,190		May 26, 1947	3.93	1,420
	Sept. 3, 1928	4.00	1,350	1948	Mar. 21, 1948	4.59	2,080
1929	Mar. 15, 1929	3.83	1,190		Apr. 15, 1948	3.67	1,170
1930	Nov. 18, 1929	3.75	1,150	1949	Dec. 31, 1948	4.46	1,780
1931	Mar. 29, 1931	3.70	1,080		Jan. 6, 1949	4.10	1,560
1932	Apr. 1, 1932	4.10	1,430	1950	Mar. 29, 1950	4.17	1,540
1933	Oct. 6, 1932	4.5	1,780	1951	Nov. 26, 1950	4.07	1,500
	Nov. 1, 1932	3.8	1,190		Dec. 5, 1950	4.25	1,960
	Nov. 10, 1932	4.0	1,350		Dec. 8, 1950	4.47	1,900
	Nov. 19, 1932	4.2	1,510		Jan. 24, 1951	3.82	1,280
	Apr. 18, 1933	4.1	1,430		Mar. 31, 1951	5.62	2,860
	Aug. 24, 1933	5.04	2,270	1952	Nov. 8, 1951	5.37	2,980
	Sept. 4, 1933	3.9	1,270		Mar. 11, 1952	4.58	2,070
	Sept. 16, 1933	5.7	3,070		Apr. 5, 1952	4.59	2,070
1934	Apr. 12, 1934	3.62	1,040		Apr. 15, 1952	4.19	1,650
1935	Dec. 1, 1934	4.7	1,970		Apr. 28, 1952	3.78	1,280
	July 10, 1935	5.9	3,330		May 26, 1952	3.67	1,160
1936	Nov. 29, 1935	4.7	1,970	1953	Nov. 22, 1952	4.76	2,240
	Mar. 12, 1936	6.1	3,590		Dec. 11, 1952	6.50	4,680
	Mar. 18, 1936	6.92	4,770		Jan. 25, 1953	5.10	2,660
	Apr. 6, 1936	4.00	1,350	1954	Dec. 7, 1953	3.35	928
1937	Apr. 6, 1937	3.90	1,240	1955	Mar. 23, 1955	4.04	1,500
1938	Oct. 24, 1937	3.70	1,110		Aug. 19, 1955	13.95	23,400
	Dec. 18, 1937	a3.66	-	1956	Oct. 16, 1955	5.96	3,680
	Jan. 25, 1938	4.80	2,070		Oct. 31, 1955	4.08	1,450
	June 27, 1938	4.26	1,600		Nov. 16, 1955	3.71	1,110
	July 23, 1938	4.10	1,430		Apr. 30, 1956	3.92	1,270
	Sept. 21, 1938	4.47	1,780	1957	Apr. 6, 1957	4.08	1,460
1939	Dec. 6, 1938	4.99	2,540		Apr. 9, 1957	3.85	1,260
	Feb. 16, 1939	3.58	1,110	1958	Dec. 21, 1957	5.50	3,050
1940	Mar. 15, 1940	a4.10	-		Dec. 26, 1957	4.00	1,380
	Mar. 31, 1940	5.22	2,790		Apr. 7, 1958	4.90	2,290
	Apr. 1, 1940	5.22	2,790	1959	Mar. 6, 1959	3.80	1,260
	Apr. 9, 1940	4.34	1,810	1960	Feb. 11, 1960	4.05	1,540
	Apr. 22, 1940	3.54	1,090		Apr. 1, 1960	3.80	1,360
	Sept. 1, 1940	5.05	2,600		Apr. 5, 1960	4.41	1,800
1941	Apr. 6, 1941	3.74	1,220		Sept. 13, 1960	3.45	1,140
	July 8, 1941	3.56	1,090	1960	Feb. 26, 1961	4.05	1,890
1942	Mar. 9, 1942	4.37	1,810		Apr. 17, 1961	3.32	1,220

a Backwater from ice.

4400. Flat Brook near Flatbrookville, N.J.

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. Area of lakes, ponds, and swamps, 1.0 sq mi.

Gage.--Nonrecording prior to Jan. 6, 1926; recording thereafter. Datum of gage is 347.73 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,400 cfs and extended above on basis of slope-area measurements of 2,780 and 9,550 cfs.

Bankfull stage.--5 ft.

Remarks.--Base for partial-duration series, 650 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1924	Apr. 7, 1924	7.1	a3,040	1938	Nov. 14, 1937	4.11	850
					Jan. 25, 1938	5.62	1,890
1925	Feb. 11, 1925	7.10	a3,040		June 28, 1938	5.22	1,560
					July 24, 1938	6.14	2,400
1926	Feb. 26, 1926	3.50	575		Sept. 22, 1938	7.03	2,980
1927	Nov. 17, 1926	3.93	755	1939	Dec. 6, 1938	6.37	2,400
	Aug. 28, 1927	3.82	710		Feb. 16, 1939	4.23	930
	Sept. 2, 1927	3.88	746		Mar. 1, 1939	3.81	720
					Apr. 2, 1939	4.03	825
1928	Oct. 20, 1927	4.59	1,110				
	Nov. 4, 1927	5.05	1,420	1940	Jan. 15, 1940	b5.47	-
	Nov. 18, 1927	4.33	958		Mar. 15, 1940	4.47	1,060
	Dec. 8, 1927	5.86	2,000		Mar. 31, 1940	5.57	1,860
	Feb. 24, 1928	3.83	724		Apr. 9, 1940	4.30	960
	June 30, 1928	4.72	1,200		Apr. 22, 1940	4.06	830
	July 8, 1928	5.80	1,950		May 17, 1940	3.76	697
	July 14, 1928	5.36	1,630				
	Aug. 18, 1928	3.78	701	1941	Nov. 15, 1940	4.00	800
	Aug. 27, 1928	4.07	805				
				1942	Mar. 9, 1942	4.73	1,220
1929	Mar. 6, 1929	3.82	719		Aug. 10, 1942	3.71	668
	Apr. 13, 1929	3.93	787		Aug. 17, 1942	4.19	895
					Sept. 28, 1942	4.46	1,060
1930	June 10, 1930	3.68	595				
				1943	Oct. 27, 1942	3.70	662
1931	Mar. 29, 1931	3.68	605		Nov. 26, 1942	5.86	2,120
					Dec. 2, 1942	4.08	840
1932	Feb. 11, 1932	3.92	722		Dec. 31, 1942	4.69	1,190
	Apr. 1, 1932	4.15	916		May 27, 1943	4.53	1,100
1933	Oct. 7, 1932	3.95	740	1944	Nov. 9, 1943	4.93	1,360
	Nov. 2, 1932	4.40	1,000		Apr. 25, 1944	4.56	1,120
	Nov. 10, 1932	4.24	904				
	Nov. 20, 1932	4.82	1,260	1945	Mar. 7, 1945	3.76	697
	Mar. 21, 1933	4.09	815		July 19, 1945	4.00	800
	June 6, 1933	3.80	660		July 29, 1945	3.95	780
	Aug. 24, 1933	5.17	1,500		Aug. 25, 1945	3.98	792
	Sept. 4, 1933	4.40	1,000				
	Sept. 17, 1933	5.13	1,470	1946	Jan. 8, 1946	4.12	860
					May 28, 1946	4.75	1,240
1934	Mar. 5, 1934	b6.40	700		June 3, 1946	4.01	805
	Apr. 12, 1934	3.77	644				
				1947	Mar. 15, 1947	5.06	1,450
1935	Dec. 2, 1934	4.10	820		Apr. 6, 1947	5.78	2,050
	July 9, 1935	5.04	1,440		May 6, 1947	3.85	740
					May 28, 1947	4.80	1,270
1936	Oct. 31, 1935	6.66	2,640	1948	Nov. 9, 1947	4.58	1,130
	Nov. 29, 1935	4.85	1,280		Nov. 12, 1947	3.79	714
	Jan. 3, 1936	3.97	752		Feb. 21, 1948	4.50	800
	Mar. 12, 1936	6.50	2,500		Mar. 17, 1948	5.02	1,420
	Mar. 18, 1936	5.47	1,710		Mar. 20, 1948	4.09	845
	Apr. 7, 1936	4.71	1,200		Apr. 15, 1948	4.03	815
					May 14, 1948	3.98	792
1937	Feb. 22, 1937	4.04	790				
	May 15, 1937	4.10	850				

a Annual maximum only.

b Backwater from ice.

Peak stages and discharges of Flat Brook near Flatbrookville, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Dec. 31, 1948	6.94	2,900	1954	Dec. 7, 1953	6.32	2,360
	Jan. 6, 1949	4.83	1,290		Dec. 14, 1953	3.82	670
1950	Mar. 9, 1950	4.45	1,050	1955	Nov. 22, 1954	3.92	722
	Mar. 29, 1950	4.20	900		Mar. 23, 1955	3.90	710
	June 2, 1950	4.63	1,160		Aug. 13, 1955	4.37	982
1951	Nov. 26, 1950	6.11	2,370		Aug. 19, 1955	12.58	9,560
	Dec. 5, 1950	4.44	1,040	1956	Oct. 16, 1955	(c)	(c)
	Dec. 8, 1950	3.84	730		Nov. 17, 1955	3.94	734
	Feb. 8, 1951	3.84	730		Apr. 30, 1956	3.86	690
	Mar. 20, 1951	3.88	750	1957	Apr. 6, 1957	4.97	1,370
	Mar. 31, 1951	5.45	1,760	1958	Dec. 21, 1957	5.86	2,000
1952	Nov. 8, 1951	4.37	1,040		Dec. 27, 1957	4.37	982
	Dec. 21, 1951	4.38	1,050		Apr. 7, 1958	5.56	1,770
	Jan. 23, 1952	3.75	673	1959	Apr. 3, 1959	4.14	844
	Jan. 27, 1952	3.79	695	1960	Jan. 3, 1960	4.63	1,140
	Feb. 4, 1952	3.74	667		Feb. 11, 1960	4.36	988
	Mar. 12, 1952	5.32	1,730		Mar. 31, 1960	4.25	928
	Apr. 6, 1952	7.24	3,170		Apr. 5, 1960	4.81	1,240
	Apr. 15, 1952	4.30	996		Aug. 20, 1960	5.47	1,620
	Apr. 29, 1952	4.03	834		Sept. 13, 1960	7.05	2,720
	May 26, 1952	4.03	834		Sept. 20, 1960	4.17	884
	June 2, 1952	5.83	2,180	1961	Feb. 20, 1961	5.67	-
	July 10, 1952	4.32	1,010		Feb. 26, 1961	5.37	1,560
	Sept. 2, 1952	5.37	1,770		Apr. 17, 1961	3.90	735
1953	Nov. 22, 1952	4.64	1,210				
	Dec. 11, 1952	5.78	2,130				
	Jan. 25, 1953	6.72	2,700				
	Mar. 16, 1953	3.76	653				
	Apr. 8, 1953	4.42	1,060				

b Backwater from ice.

c Unknown, believed maximum for year.

4410. McMichaels Creek at Stroudsburg, Pa.

Location--Lat 40°58'45", long 75°12'05", at dismantled railroad bridge, 0.25 mile upstream from Little Pocono Creek and three-quarters of a mile southwest of Stroudsburg, Monroe County.

Drainage area--65.3 sq mi.

Gage--Nonrecording. Datum of gage is 403.93 ft above mean sea level (preliminary levels of 1912).

Stage-discharge relation--Defined by current-meter measurements below 1,000 cfs and extended above by contracted-opening measurement.

Remarks--Base for partial-duration series, 930 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1911	Aug. 31, 1911	5.85	980	1916	July 27, 1916	8.00	2,080
1912	Feb. 22, 1912	6.00	1,080	1917	Jan. 14, 1917	7.05	1,580
	Mar. 13, 1912	8.15	2,180	1918	Feb. 20, 1918	8.80	2,480
1913	Mar. 14, 1913	6.0	1,080		Feb. 26, 1918	7.40	1,780
	Mar. 27, 1913	8.20	2,180	1919	May 10, 1919	6.00	1,080
	Apr. 28, 1913	5.70	930		July 21, 1919	7.00	1,580
	Aug. 1, 1913	6.25	1,180	1920	Mar. 13, 1920	8.00	2,080
1914	Nov. 9, 1913	6.80	1,480		Mar. 17, 1920	5.90	1,030
	Jan. 31, 1914	7.20	1,680	1921	Mar. 25, 1921	5.40	795
	Mar. 17, 1914	5.66	930	1922	Mar. 7, 1922	7.40	1,780
1915	Jan. 7, 1915	9.00	2,580	1923	Jan. 1, 1923	6.00	1,080
	Jan. 13, 1915	8.00	2,080		Jan. 16, 1923	5.7	930
	Feb. 1, 1915	7.30	1,730				
	Feb. 24, 1915	6.60	1,380				
	Aug. 4, 1915	7.00	1,580				

Peak stages and discharges of McMichaels Creek at Stroudsburg, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)	
1924	Jan. 17, 1924	6.00	1,080	1933	Nov. 19, 1932	6.2	1,180	
	Apr. 6, 1924	7.20	1,680		Apr. 17, 1933	6.2	1,180	
	Sept. 30, 1924	7.40	1,780		Aug. 24, 1933	8.7	2,430	
1925	Mar. 19, 1925	6.00	1,080		Sept. 4, 1933	9.4	2,820	
					Sept. 16, 1933	7.9	2,030	
1926	Nov. 16, 1925	5.90	1,030	1934	June 19, 1934	5.61	888	
	Feb. 25, 1926	5.80	980		1935	Dec. 1, 1934	7.1	1,630
1927	Nov. 16, 1926	7.40	1,780			July 10, 1935	8.5	2,330
					1928	Nov. 29, 1935	5.76	980
Dec. 8, 1927	7.50	1,830	Jan. 3, 1936	6.00		1,080		
Jan. 25, 1928	5.8	980	Mar. 12, 1936	10.5		3,480		
1929	July 23, 1928	6.6	1,380	Mar. 18, 1936	9.0	2,580		
	Jan. 6, 1929	6.1	1,130	Apr. 6, 1936	6.8	1,480		
	Feb. 27, 1929	5.9	1,030	1937	Dec. 20, 1936	6.19	1,180	
Mar. 6, 1929	5.7	930	Feb. 22, 1937		6.3	1,230		
1930	Oct. 2, 1929	6.1	1,130	1938	Nov. 13, 1937	5.8	980	
1931	Mar. 8, 1931	4.9	580		Jan. 25, 1938	7.0	1,580	
					June 28, 1938	6.2	1,180	
1932	Mar. 28, 1932	5.66	930		July 23, 1938	6.1	1,130	
					Sept. 21, 1938	6.6	1,380	
1933	Nov. 1, 1932	7.5	1,830	1955	Aug. 18, 1955	14.1	5,740	
	Nov. 10, 1932	6.4	1,280					

4415. Pocono Creek near Stroudsburg, Pa.

Location.--Lat 40°59'10", long 75°13'35", at highway bridge, 0.3 mile upstream from Flaglers Run, 1.3 miles west of Stroudsburg, Monroe County, and 1.9 miles upstream from mouth.

Drainage area.--41.0 sq mi.

Gage.--Nonrecording. Altitude of gage is 475 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 500 cfs.

Remarks.--Records furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 1,600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Mar. 15, 1912	6.3	2,100	1916	July 26, 1916	6.0	1,740
1913	Mar. 27, 1913	6.7	2,670	1917	Jan. 14, 1917	5.8	1,540
					Mar. 27, 1917	5.8	1,540
1914	Nov. 9, 1913	6.5	2,380	1918	Feb. 26, 1918	7.1	3,300
	Jan. 31, 1914	5.9	1,640				
1915	Jan. 7, 1915	6.8	2,820	1919	Mar. 9, 1919	5.9	1,640
	Feb. 24, 1915	6.3	2,100				

4425. Brodhead Creek at Minisink Hills, Pa.

Location.--Lat 40°59'55", long 75°08'35", on left bank 40 ft downstream from temporary bridge on State Highway 402 at Minisink Hills, Monroe County, 500 ft upstream from Marshall Creek, 1,500 ft downstream from Coates Paper Box Co., 0.8 mile upstream from mouth, and 3 miles southeast of East Stroudsburg.

Drainage area.--259 sq mi.

Gage.--Recorder prior to Aug. 19, 1955; nonrecording Aug. 23, 1955, to July 24, 1956; recording thereafter. Prior to Nov. 24, 1955, at site about 1,300 ft upstream at datum 2.19 ft higher. Datum of present gage is 301.84 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 4,600 cfs and extended above on basis of flow-over-dam measurement at 19,900 cfs, and slope-area measurement at 68,800 cfs.

Bankfull stage.--15 ft.

Remarks.--Base for partial-duration series, 4,300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 25, 1950	9.80	9,820	1955	Mar. 22, 1955	8.21	4,600
	Dec. 4, 1950	9.59	9,470		Aug. 19, 1955	26.9	68,800
	Dec. 8, 1950	8.02	6,900	1956	Oct. 16, 1955	8.74	7,840
	Jan. 24, 1951	6.68	5,110		Apr. 30, 1956	7.59	5,430
	Feb. 8, 1951	6.90	5,370	1957	Apr. 6, 1957	7.43	5,130
	Mar. 30, 1951	10.00	10,200		Dec. 21, 1957	10.50	10,900
	Apr. 13, 1951	6.10	4,380	1958	Dec. 26, 1957	7.64	5,600
1952	Nov. 7, 1951	10.45	10,900		Apr. 6, 1958	7.57	5,600
	Mar. 11, 1952	9.64	9,490	1959	Mar. 6, 1959	7.3	5,600
	Apr. 5, 1952	8.98	8,500		Feb. 11, 1960	6.5	5,510
	Apr. 15, 1952	7.05	5,600	1960	Apr. 5, 1960	7.04	5,660
	July 10, 1952	11.26	12,600		Feb. 26, 1961	6.30	6,090
	Sept. 1, 1952	7.98	6,970				
1953	Nov. 22, 1952	9.27	8,990				
	Dec. 11, 1952	14.43	19,900				
	Jan. 24, 1953	8.51	7,720				
1954	Dec. 7, 1953	6.35	4,840				

4430. Delaware River at Portland, Pa.

Location.--Lat 40°55'30", long 75°05'55", on highway bridge at Portland, Northampton County, and 72.5 miles upstream from Trenton, N.J.

Drainage area.--Not determined.

Gage.--Nonrecording. Datum of gage is 199.53 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Not defined.

Remarks.--Some effect on flood peaks from regulation by Lake Wallenpaupack since 1925, Toronto Reservoir since 1926, Swinging Bridge Reservoir since 1930, Cliff Lake Reservoir since 1940, Neversink Reservoir since 1953, Pepacton Reservoir since 1954, and other smaller reservoirs. Only annual maximums of hourly gage readings by Delaware River Joint Toll Bridge Commission are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Oct. 10, 1903	96.6	-	1946	May 29, 1946	80.62	-
1936	Mar. 19, 1936	92.90	-	1947	Apr. 6, 1947	82.60	-
	Feb. 23, 1937	80.50	-	1948	Mar. 23, 1948	86.38	-
	Sept. 22, 1938	85.75	-	1949	Dec. 31, 1948	85.80	-
	Dec. 7, 1938	81.60	-	1950	Apr. 5, 1950	81.66	-
	Apr. 1, 1940	88.04	-	1951	Mar. 31, 1951	86.20	-
1941	Dec. 30, 1940	78.70	-	1952	July 10, 1952	83.50	-
1942	May 23, 1942	88.03	-	1953	Dec. 12, 1952	87.00	-
1943	Dec. 31, 1942	85.00	-	1954	Feb. 18, 1954	78.55	-
1944	Nov. 10, 1943	80.00	-	1955	Aug. 19, 1955	98.87	-
1945	Mar. 18, 1945	80.70	-				

4435. Paulins Kill at Blairstown, N.J.

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. Area of lakes, ponds, and swamps, 7.4 sq mi.

Gage.--Recording. Prior to June 24, 1931, 1,300 ft downstream at different datum. Since Aug. 1, 1931, at various sites up to 280 ft downstream at same datum. Datum of gage is 335.86 ft above mean sea level, datum of 1929.

Stage-discharge relation.--For 1922-31, defined by current-meter measurements below 1,300 cfs and extended above by logarithmic plotting. For 1931-61, defined by current-meter measurement below 6,100 cfs and extended above on basis of slope-area measurement at 8,750 cfs.

Bankfull stage.--5 ft.

Remarks.--Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	Mar. 8, 1922	7.0	1,800	1939	Feb. 16, 1939	4.75	1,410
					Mar. 1, 1939	4.27	1,150
1923	Mar. 17, 1923	6.93	1,750		Apr. 2, 1939	3.89	1,010
1924	Mar. 14, 1924	6.1	1,320	1940	Mar. 15, 1940	5.49	1,910
	Apr. 7, 1924	6.83	1,680		Mar. 21, 1940	3.91	1,010
	May 12, 1924	5.66	1,140		Mar. 31, 1940	5.10	1,630
1925	Feb. 12, 1925	7.05	1,800		Apr. 9, 1940	4.40	1,220
					Apr. 22, 1940	4.59	1,320
1926	Feb. 26, 1926	5.76	1,170		Sept. 1, 1940	4.00	1,050
	Mar. 8, 1926	5.70	1,140	1941	Nov. 15, 1940	4.26	1,150
1927	Aug. 29, 1927	5.52	925	1942	Aug. 14, 1942	4.74	1,210
					Aug. 17, 1942	5.78	1,860
1928	Oct. 20, 1927	6.68	1,470	1943	Nov. 26, 1942	6.04	2,070
	Nov. 4, 1927	6.37	1,310		Dec. 31, 1942	5.81	1,890
	Nov. 18, 1927	5.84	1,040	1944	Nov. 9, 1943	5.89	1,950
	Dec. 8, 1927	6.30	1,260		Apr. 25, 1944	4.86	1,270
	July 15, 1928	6.94	1,590		June 20, 1944	4.35	1,030
	Aug. 18, 1928	5.77	1,040	1945	Feb. 28, 1945	4.67	1,180
1929	Feb. 7, 1929	5.94	1,080		Mar. 7, 1945	4.84	1,260
	Feb. 27, 1929	6.05	1,120		July 20, 1945	6.65	2,680
	Mar. 6, 1929	6.4	1,310	1946	Jan. 8, 1946	4.92	1,470
1930	Mar. 9, 1930	4.80	700		May 28, 1946	4.31	1,160
1931	July 10, 1931	-	-		June 3, 1946	4.23	1,120
1932	Mar. 29, 1932	4.04	1,070	1947	Mar. 14, 1947	6.16	2,380
	Apr. 1, 1932	3.84	1,020		Apr. 6, 1947	5.48	1,800
1933	Nov. 10, 1932	4.09	1,110		May 1, 1947	3.96	1,000
	Nov. 20, 1932	5.09	1,620		May 6, 1947	4.08	1,060
	Mar. 21, 1933	5.23	1,680		May 26, 1947	5.52	1,820
	Apr. 13, 1933	4.05	1,050	1948	Mar. 17, 1948	5.71	1,970
	Aug. 24, 1933	-	2,300		May 14, 1948	4.02	1,030
	Sept. 4, 1933	6.14	2,260	1949	Dec. 31, 1948	7.02	2,970
	Sept. 17, 1933	5.73	1,990		Jan. 6, 1949	6.04	2,260
1934	Mar. 6, 1934	4.53	1,280	1950	Mar. 9, 1950	5.55	1,840
1935	July 10, 1935	5.76	2,060		Mar. 23, 1950	4.32	1,170
1936	Oct. 31, 1935	5.37	1,800		June 2, 1950	4.25	1,140
	Nov. 29, 1935	5.00	1,560	1951	Nov. 26, 1950	6.45	2,680
	Jan. 3, 1936	4.00	1,050		Dec. 5, 1950	4.61	1,320
	Mar. 12, 1936	6.92	3,480		Feb. 8, 1951	4.69	1,360
	Mar. 19, 1936	5.60	2,000		Feb. 22, 1951	4.28	1,150
	Apr. 6, 1936	5.36	1,800		Mar. 31, 1951	5.33	1,710
1937	Jan. 26, 1937	4.04	1,070	1952	Nov. 8, 1951	5.74	1,990
1938	Jan. 26, 1938	4.80	1,440		Dec. 22, 1951	4.05	1,040
	June 28, 1938	7.08	3,700		Jan. 27, 1952	4.55	1,280
	July 24, 1938	6.16	2,540		Feb. 5, 1952	4.13	1,080
	Sept. 22, 1938	7.56	4,480		Mar. 12, 1952	5.45	1,780
1939	Dec. 6, 1938	6.63	3,120		Apr. 6, 1952	7.12	3,070
					Apr. 16, 1952	5.31	1,700

Peak stages and discharges of Paulins Kill at Blairstown, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Apr. 28, 1952	4.49	1,260	1956	Apr. 30, 1956	5.84	2,040
	May 26, 1952	4.65	1,340		July 9-10, 1956	5.40	1,750
	June 2, 1952	5.94	2,170	1957	Apr. 6, 1957	5.62	1,880
	July 10, 1952	4.46	1,240		Dec. 21, 1957	4.77	1,400
	Aug. 17, 1952	5.10	1,570	1958	Feb. 28, 1958	4.52	1,270
	Sept. 2, 1952	5.36	1,730		Apr. 7, 1958	4.37	1,200
1953	Dec. 12, 1952	5.30	1,690	1959	Jan. 22, 1959	4.20	1,110
	Jan. 25, 1953	7.01	2,960		Jan. 3, 1960	4.45	1,240
	Mar. 16, 1953	4.15	1,090	1960	Apr. 5, 1960	5.30	1,690
	Apr. 8, 1953	4.94	1,480		Aug. 20, 1960	4.71	1,360
1954	Dec. 7, 1953	4.79	1,400	1961	Sept. 13, 1960	6.44	2,470
	Dec. 15, 1953	4.16	1,090		Feb. 26, 1961	5.92	2,060
1955	Aug. 19, 1955	11.2	8,750				
1956	Oct. 16, 1955	7.76	3,740				

4445. Delaware River at Delaware, N.J.

Location--Lat 40°53'55", long 75°04'40", on highway bridge at Delaware, Warren County, 70.4 miles upstream from Calhoun Street Bridge in Trenton.

Drainage area--Not determined.

Gage--Nonrecording. Datum of gage is 200.00 ft above mean sea level (Pennsylvania Railroad bench mark).

Stage-discharge relation--Not defined.

Remarks--Some effect on flood peaks from regulation by Lake Wallenpaupack since 1925, Toronto Reservoir since 1926, Swinging Bridge Reservoir since 1930, Cliff Lake Reservoir since 1940, Neversink Reservoir since 1953, Pepacton Reservoir since 1954, and other smaller reservoirs. Gage heights are maximum of hourly observations by Delaware River Joint Toll Bridge Commission. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Mar. 19, 1936	82.61	-	1946	May 29, 1946	69.81	-
1937	Feb. 23, 1937	69.97	-	1947	Apr. 6, 1947	72.73	-
1938	Sept. 22, 1938	76.11	-	1948	Mar. 23, 1948	76.33	-
1939	Dec. 7, 1938	71.59	-	1949	Dec. 31, 1948	76.14	-
1940	Apr. 1, 1940	78.32	-	1950	Apr. 5, 1950	71.95	-
1941	Dec. 30, 1940	67.52	-	1951	Mar. 31, 1951	77.60	-
1942	May 23, 1942	78.28	-	1952	July 10, 1952	73.75	-
1943	Dec. 31, 1942	74.95	-	1953	Dec. 12, 1952	77.92	-
1944	Nov. 10, 1943	69.20	-	1954	Feb. 18, 1954	65.73	-
1945	Mar. 18, 1945	70.00	-				

4450. Pequest River at Huntsville, N.J.

Location--Lat 40°58'49", long 74°46'38", on right bank 20 ft upstream from highway bridge in Huntsville, Sussex County, and three-eighths of a mile downstream from East Branch.

Drainage area--31.4 sq mi. Area of lakes, swamps, and ponds, 1.3 sq mi.

Gage--Recording gage and concrete control. Datum of gage is 553.81 ft above mean sea level, datum of 1929.

Stage-discharge relation--Defined by current-meter measurements.

Bankfull stage--4 ft.

Remarks--Base for partial-duration series, 130 cfs.

Peak stages and discharges of Pequest River at Huntsville, N.J.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Mar. 15, 1940	3.81	278	1951	Nov. 26, 1950	3.76	287
	Mar. 31, 1940	3.51	193		Dec. 5, 1950	3.44	180
	Apr. 9, 1940	3.50	190		Dec. 8-9, 1950	3.51	201
	Apr. 13, 1940	3.50	190		Jan. 25, 1951	3.30	141
	Apr. 22, 1940	3.59	214		Feb. 7, 1951	3.51	201
	May 22, 1940	3.53	198		Feb. 22, 1951	3.37	160
	June 2, 1940	3.31	142		Mar. 31, 1951	3.60	230
1941	Dec. 29, 1940	-	(a)	1952	Nov. 8, 1951	3.51	201
	Mar. 8, 1941	b3.25	-		Dec. 22, 1951	3.33	149
1942	Sept. 28, 1942	3.21	119		Jan. 27-28, 1952	3.46	186
1943	Nov. 26, 1942	3.69	242		Feb. 5, 1952	3.39	165
	Dec. 3, 1942	3.35	152		Mar. 12, 1952	3.64	244
	Dec. 31, 1942	3.80	275		Apr. 6, 1952	3.78	295
	Jan. 5, 1943	b3.32	-		Apr. 16, 1952	3.48	192
	Feb. 20, 1943	3.50	190		Apr. 28, 1952	3.59	227
	Feb. 25, 1943	3.33	147		June 2, 1952	3.87	330
	May 20, 1943	3.30	140		July 10, 1952	3.49	201
	May 27, 1943	3.35	152		Aug. 17, 1952	3.50	208
1944	Nov. 10, 1943	3.35	152		Sept. 2, 1952	3.44	192
	Mar. 7, 1944	3.27	133	1953	Nov. 23, 1952	3.40	169
	Mar. 13-14, 1944	3.46	180		Dec. 12, 1952	3.51	201
	Mar. 18, 1944	3.29	138		Jan. 25, 1953	3.82	310
	Mar. 24, 1944	3.31	142		Mar. 16, 1953	3.29	141
	Apr. 25, 1944	3.46	180		Apr. 8, 1953	3.40	169
1945	Jan. 2, 1945	3.26	131	1954	Mar. 4, 1954	3.23	124
	Mar. 7, 1945	3.69	242	1955	Aug. 19, 1955	5.05	560
	May 29, 1945	3.28	135		Oct. 17, 1955	3.97	328
	June 23, 1945	3.29	138		Apr. 10, 1956	3.32	147
	July 20, 1945	4.68	486		Apr. 30, 1956	3.26	132
	Aug. 7, 1945	3.38	159		July 10, 1956	4.44	438
	Sept. 16, 1945	3.27	133	1957	Dec. 16, 1956	3.36	158
					Apr. 7, 1957	3.68	254
1946	Dec. 26, 1945	3.32	145	1958	Jan. 26, 1958	3.26	132
	Jan. 1, 1946	3.27	133		Feb. 28, 1958	3.37	161
	Jan. 8, 1946	3.33	147		Apr. 7, 1958	3.58	224
	Mar. 10, 1946	3.26	131		Apr. 12, 1958	3.55	214
	May 28, 1946	3.28	135		Apr. 30, 1958	3.38	164
	June 3, 1946	3.43	172	1959	Mar. 7, 1959	3.43	178
1947	Mar. 15, 1947	3.57	220		Jan. 4, 1960	3.41	172
	Apr. 6, 1947	3.57	220		Apr. 1, 1960	3.28	137
	May 2, 1947	3.51	201		Apr. 6, 1960	3.67	251
	May 6, 1947	3.53	208		Aug. 20, 1960	3.50	198
1948	Mar. 18, 1948	3.67	254	1960	Aug. 31, 1960	3.34	153
	Mar. 28, 1948	3.38	163		Sept. 13, 1960	3.92	315
	Apr. 2, 1948	3.36	157		Sept. 21, 1960	3.52	204
	Apr. 15, 1948	3.38	163	1961	Feb. 27, 1961	3.80	285
1949	Dec. 31, 1948	4.13	368		Mar. 14, 1961	3.42	175
	Jan. 6-7, 1949	3.76	287		Mar. 24, 1961	3.38	164
1950	Mar. 9, 1950	3.40	168		Apr. 17, 1961	3.36	156
	Mar. 24, 1950	3.35	154		Apr. 26, 1961	3.32	145
	July 14, 1950	3.27	134		May 16, 1961	3.28	134

a Unknown; believed to have exceeded base.

b Backwater from ice.

4455. Pequest River at Pequest, N.J.

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. Area of lakes, swamps, and ponds, 5.4 sq mi.

Gage.--Nonrecording prior to June 22, 1926; recording thereafter. Concrete control since Sept. 29, 1929. Datum of gage is 398.78 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Prior to Sept. 29, 1929, defined by current-meter measurements. Since 1929, defined by current-meter measurements below 1,200 cfs and extended above by logarithmic plotting.

Bankfull stage.--4 ft.

Remarks.--Only annual peaks are shown prior to 1927. Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	Mar. 8, 1922	2.5	527	1940	Mar. 15, 1940	4.17	1,330
1923	Mar. 19, 1923	2.91	694		Apr. 9, 1940	2.95	562
1924	Apr. 7, 1924	2.67	593		Apr. 22, 1940	3.08	629
1925	Feb. 18, 1925	2.91	694		May 21, 1940	3.30	752
1926	Feb. 28, 1926	2.78	637	1941	Dec. 17, 1940	2.73	457
1927	Feb. 26, 1927	2.38	489	1942	Aug. 18, 1942	3.12	651
1928	Nov. 4, 1927	2.69	601		Sept. 28, 1942	2.87	523
	Nov. 18, 1927	2.54	542	1943	Nov. 26, 1942	2.98	577
	Dec. 8, 1927	2.66	589		Dec. 30-31, 1942	3.34	776
	Feb. 15, 1928	2.50	527		Feb. 11, 1943	2.90	537
	Feb. 23, 1928	2.63	577		Feb. 21, 1943	3.11	646
	July 14, 1928	2.67	593		May 27, 1943	3.09	635
	Aug. 6, 1928	2.70	605	1944	Nov. 9, 1943	2.92	547
	Aug. 18, 1928	2.62	573		Mar. 7, 1944	2.98	577
	Aug. 27, 1928	3.04	735		Mar. 13, 1944	3.15	668
1929	Feb. 7, 1929	2.68	597		Mar. 24, 1944	2.95	562
	Feb. 27, 1929	2.69	605		Apr. 25, 1944	2.98	577
	Apr. 26, 1929	2.48	542	1945	Feb. 27, 1945	3.34	776
1930	Mar. 9, 1930	2.75	463		July 10, 1945	2.98	577
1931	July 10, 1931	3.59	830		July 16, 1945	3.01	592
1932	Mar. 28, 1932	2.81	454		July 23, 1945	4.18	1,340
1933	Mar. 21, 1933	3.29	680		Aug. 2, 1945	2.89	532
	Apr. 17, 1933	3.07	568		Aug. 7, 1945	2.90	537
	Sept. 19, 1933	3.42	730	1946	May 28, 1946	2.87	523
1934	Mar. 6, 1934	3.26	655		June 2-3, 1946	3.00	587
1935	July 10, 1935	3.42	730	1947	Mar. 14-15, 1947	3.01	592
1936	Oct. 31, 1935	3.00	536		Apr. 6, 1947	2.94	557
	Nov. 29, 1935	3.30	678		May 1, 1947	2.91	542
	Jan. 3, 1936	3.49	780		May 6, 1947	2.92	547
	Mar. 14, 1936	4.97	1,810		June 15, 1947	2.89	532
	Apr. 6, 1936	3.48	780	1948	Mar. 21, 1948	2.91	542
1937	Feb. 22, 1937	3.13	596		Apr. 1, 1948	2.88	527
1938	Nov. 14, 1937	3.03	550		Apr. 15, 1948	2.97	572
	Jan. 25, 1938	3.16	610		May 14, 1948	3.19	690
	June 28, 1938	3.28	678	1949	Dec. 31, 1948	3.47	854
	July 24, 1938	3.34	703		Jan. 6, 1949	3.50	872
	Sept. 22, 1938	3.82	948	1950	Mar. 23-24, 1950	2.73	457
1939	Dec. 5-9, 1938	3.36	787	1951	Feb. 7, 1951	3.23	712
	Feb. 4, 1939	3.06	619		Mar. 31, 1951	3.06	619
	Feb. 16, 1939	2.98	577		July 28, 1951	3.20	695
	Mar. 1, 1939	3.07	624		Aug. 16, 1951	2.90	537
	Mar. 17, 1939	2.93	552	1952	Nov. 7, 1951	3.45	842
	Apr. 2, 1939	2.88	527		Dec. 21, 1951	2.90	537
	Apr. 7, 1939	3.10	640		Jan. 27, 1952	2.91	542
					Feb. 5, 1952	2.88	527
					Mar. 11, 1952	3.16	673

Peak stages and discharges of Pequest River at Pequest, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Apr. 6, 1952	3.25	724	1958	Dec. 26, 1957	3.04	608
	Apr. 15, 1952	3.25	724		Jan. 22, 1958	3.14	662
	Apr. 28, 1952	3.28	741		Jan. 26, 1958	2.86	518
	June 2, 1952	2.91	542		Feb. 28, 1958	3.51	878
	July 10, 1952	2.97	572		Mar. 2, 1958	a3.61	-
	Sept. 2, 1952	2.91	542		Mar. 26, 1958	3.14	662
1953	Nov. 22, 1952	3.15	668		Apr. 7, 1958	3.22	706
	Dec. 11, 1952	3.08	629		Apr. 30, 1958	3.20	695
	Jan. 25, 1953	3.19	690		May 7, 1958	2.93	552
	Apr. 8, 1953	2.96	567	1959	Nov. 28, 1958	3.03	603
1954	May 4, 1954	2.89	532		Jan. 22, 1959	a3.53	640
1955	Aug. 14, 1955	2.96	567		Mar. 6, 1959	3.83	1,090
	Aug. 19, 1955	3.87	1,110	1960	Dec. 13, 1959	2.95	548
1956	Oct. 15, 1955	3.25	724		Jan. 3, 1960	3.40	750
	July 14, 1956	2.90	537		Apr. 5, 1960	3.68	890
1957	Dec. 15, 1956	3.08	629		Sept. 13, 1960	4.44	1,290
	Apr. 6, 1957	3.74	1,030		Sept. 20, 1960	3.04	588
1958	Dec. 21, 1957	3.20	695	1961	Feb. 26, 1961	4.18	1,150
					Mar. 14, 1961	3.26	687
					Mar. 24, 1961	3.02	579
					Apr. 14, 1961	2.99	566

a Backwater from ice.

4460. Beaver Brook near Belvidere, N.J.

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. Area of lakes, ponds, and swamps, 1.1 sq mi.

Gage--Recording. Datum of gage is 303.36 ft above mean sea level, datum of 1929.

Stage-discharge relation--Defined by current-meter measurements below 990 cfs and extended above on basis of slope-area and contracted-opening measurements at 1,510 cfs.

Bankfull stage--4 ft.

Remarks--Base for partial-duration series 230 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1923	Mar. 17, 1923	3.83	656	1928	July 23, 1928	3.68	602
1924	Jan. 23, 1924	a3.05	-		July 29, 1928	2.96	261
	Jan. 28, 1924	a3.00	-		Aug. 18, 1928	3.20	368
	Apr. 7, 1924	3.46	512		Aug. 23, 1928	3.02	285
					Aug. 28, 1928	3.60	604
1925	Dec. 27, 1924	a3.03	-	1929	Feb. 7, 1929	3.27	395
	Feb. 12, 1925	a4.09	600		Feb. 27, 1929	3.19	363
	Feb. 24, 1925	a3.03	-		Mar. 6, 1929	3.25	394
	Feb. 27, 1925	a2.96	-				
1926	Feb. 26, 1926	3.63	623	1930	Jan. 27, 1930	a3.10	-
	Mar. 8, 1926	2.94	254		Mar. 9, 1930	2.84	218
1927	Nov. 17, 1926	3.06	298	1931	July 11, 1931	3.80	645
	Jan. 16, 1927	a3.03	-	1932	Mar. 29, 1932	2.77	195
1928	Oct. 20, 1927	3.45	500	1933	Nov. 10, 1932	2.99	273
	Nov. 4, 1927	3.21	368		Nov. 20, 1932	3.09	316
	Dec. 9, 1927	3.23	384		Dec. 19, 1932	a2.94	-
	Dec. 14, 1927	3.04	298		Mar. 22, 1933	3.58	593
	Jan. 3, 1928	a3.29	-		Apr. 13, 1933	2.89	235
	Jan. 22, 1928	a3.09	-		Aug. 25, 1933	2.90	238
	Feb. 24, 1928	3.09	319		Sept. 5, 1933	2.97	265
	July 15, 1928	3.92	687		Sept. 16, 1933	3.45	500

a Backwater from ice.

Peak stages and discharges of Beaver Brook near Belvidere, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1934	Jan. 31, 1934	a3.04	-	1945	July 9, 1945	3.43	374
	Mar. 3, 1934	a3.30	-		July 21, 1945	4.30	760
	Mar. 5, 1934	3.21	373	1946	Dec. 26, 1945	a4.00	-
1935	July 10, 1935	4.20	760		June 3, 1946	3.20	271
1936	Nov. 29, 1935	3.11	325	1947	Mar. 15, 1947	3.53	373
	Jan. 3, 1936	a3.24	-		Apr. 6, 1947	3.21	274
	Jan. 21, 1936	a3.10	-		May 1, 1947	3.09	240
	Jan. 26, 1936	a3.68	-		May 6, 1947	3.09	240
	Mar. 12, 1936	5.76	1,510		May 26, 1947	3.06	233
	Mar. 18, 1936	3.44	495	1948	Mar. 17, 1948	3.32	306
	Apr. 6, 1936	3.48	515		Apr. 2, 1948	3.06	233
1937	Jan. 26, 1937	3.19	234		June 14, 1948	3.11	246
	June 22, 1937	3.15	306	1949	Dec. 31, 1948	4.26	661
	Aug. 24, 1937	2.98	246		Jan. 6, 1949	4.11	594
1938	Jan. 25, 1938	3.04	267	1950	Mar. 9, 1950	3.35	316
	Jan. 28, 1938	a3.05	-		Mar. 24, 1950	3.08	238
	Jan. 29, 1938	a3.12	-	1951	Feb. 22, 1951	3.05	230
	June 28, 1938	3.11	292		Mar. 31, 1951	3.85	488
	July 23, 1938	3.32	371		July 29, 1951	3.82	477
	Sept. 22, 1938	3.81	586	1952	Nov. 8, 1951	4.01	552
1939	Dec. 6, 1938	-	700		Dec. 22, 1951	3.09	240
	Mar. 1, 1939	2.96	264		Jan. 27, 1952	3.22	276
	Apr. 7, 1939	3.01	280		Apr. 6, 1952	3.73	443
1940	Mar. 15, 1940	4.80	1,020		Apr. 16, 1952	3.91	512
	Apr. 9, 1940	3.11	260		Apr. 29, 1952	3.41	334
	Apr. 13, 1940	3.04	238	1953	Nov. 23, 1952	3.11	241
	Apr. 22, 1940	3.31	329		Dec. 12, 1952	3.46	348
	June 9, 1940	3.04	238		Jan. 25, 1953	3.70	435
1941	Nov. 16, 1940	2.79	175	1954	Dec. 15, 1953	3.07	246
1942	July 28, 1942	3.31	332		Aug. 19, 1955	4.39	795
	July 31, 1942	3.02	240	1956	Oct. 15, 1955	3.83	528
	Aug. 12, 1942	3.31	332		Feb. 7, 1956	3.09	252
	Aug. 14, 1942	3.84	540		July 10, 1956	3.96	587
	Aug. 17, 1942	4.60	910	1957	Apr. 6, 1957	4.02	614
1943	Nov. 26, 1942	3.20	296		Jan. 22, 1958	3.25	302
	Dec. 4, 1942	a2.97	-	1958	Feb. 28, 1958	3.61	439
	Dec. 31, 1942	3.92	575		Mar. 27, 1958	3.09	252
	May 27, 1943	3.15	280		Apr. 7, 1958	3.03	234
1944	Nov. 9-10, 1943	3.31	332	1959	Jan. 22, 1959	3.18	279
	Jan. 10, 1944	a3.07	-		Jan. 4, 1960	3.06	243
	Jan. 28, 1944	3.19	293		Apr. 5, 1960	3.82	524
	Feb. 15, 1944	a3.01	-	1960	Sept. 13, 1960	3.58	427
	Mar. 7, 1944	3.14	277		Feb. 26, 1961	4.20	700
	Mar. 13, 1944	3.36	349				
	Apr. 25, 1944	3.00	234				
1945	Jan. 4, 1945	a3.03	-				
	Jan. 18, 1945	a3.03	-				
	Jan. 20, 1945	a3.02	-				
	Mar. 7, 1945	3.85	468				

a Backwater from ice.

4465. Delaware River at Belvidere, N.J.

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. Area of lakes, ponds, and swamps, 113 sq mi.

Gage.--Nonrecording prior to Jan. 1, 1929; recording thereafter. At site 200 ft upstream at same datum prior to Jan. 1, 1929. Datum of gage is 226.43 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 170,000 cfs and extended above on basis of flood-routing study.

Remarks.--Some effect on flood peaks from regulation by Lake Wallenpaupack since 1925, Toronto Reservoir since 1926, Swinging Bridge Reservoir since 1930, Cliff Lake Reservoir since 1940, Neversink Reservoir since 1953, Pepacton Reservoir since 1954, and other smaller reservoirs. Only annual peaks are shown prior to 1929. Base for partial-duration series, 40,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Oct. 10, 1903	a28.6	220,000	1940	Apr. 22, 1940	13.02	54,100
1923	Mar. 24, 1923	15.70	77,000	1941	Dec. 31, 1940	12.65	50,900
1924	Apr. 7, 1924	19.0	114,000		Apr. 7, 1941	12.3	48,100
1925	Oct. 1, 1924	19.3	118,000	1942	Mar. 10, 1942	14.45	66,800
1926	Apr. 10, 1926	12.02	43,800		May 24, 1942	20.97	133,700
1927	Nov. 17, 1926	18.05	108,000		Sept. 28, 1942	16.14	83,300
1928	Oct. 20, 1927	16.80	84,400	1943	Nov. 26, 1942	12.10	46,500
1929	Mar. 15, 1929	15.90	79,000		Dec. 31, 1942	18.62	108,600
	Apr. 14, 1929	12.00	43,600		Feb. 25, 1943	12.43	49,100
	Apr. 22, 1929	13.68	57,900		Mar. 18, 1943	13.65	59,400
1930	Mar. 9, 1930	11.3	38,400		May 23, 1943	11.30	40,300
1931	Mar. 30, 1931	12.40	46,800	1944	Nov. 10, 1943	14.05	63,100
1932	Apr. 2, 1932	13.6	57,000		Mar. 18, 1944	12.05	46,100
1933	Oct. 8, 1932	15.0	70,000		Apr. 25, 1944	11.40	41,100
	Nov. 20, 1932	12.29	46,000	1945	Jan. 3, 1945	12.20	47,300
	Apr. 18, 1933	12.47	47,600		Mar. 4, 1945	13.73	60,300
	Aug. 25, 1933	19.90	122,000		Mar. 7, 1945	12.42	49,100
	Sept. 17, 1933	12.40	46,800		Mar. 18, 1945	14.65	68,700
1934	Mar. 6, 1934	17.22	92,900		July 20, 1945	14.29	65,300
1935	Dec. 2, 1934	15.03	70,900		July 30, 1945	12.82	52,400
	Jan. 10, 1935	12.87	52,000	1946	Mar. 10, 1946	13.45	57,800
	July 10, 1935	13.52	57,000		May 29, 1946	14.62	68,500
1936	Nov. 1, 1935	12.08	45,600	1947	Mar. 15, 1947	13.27	56,200
	Nov. 14, 1935	12.28	47,200		Apr. 6, 1947	16.93	91,200
	Nov. 30, 1935	11.65	42,200		July 23, 1947	11.42	40,900
	Mar. 12, 1936	22.22	148,000	1948	Mar. 18, 1948	14.54	67,700
	Mar. 19, 1936	25.00	179,000		Mar. 23, 1948	19.68	119,800
	Apr. 7, 1936	11.48	40,800		Apr. 15, 1948	13.35	56,800
1937	Jan. 26, 1937	11.88	44,000	1949	Dec. 31, 1948	19.48	117,700
	Feb. 23, 1937	14.50	67,200		Jan. 7, 1949	15.66	78,500
	Apr. 7, 1937	12.30	47,400	1950	Mar. 10, 1950	11.58	42,100
1938	Oct. 24, 1937	12.40	48,200		Mar. 29, 1950	14.80	70,200
	Jan. 26, 1938	14.88	71,000		Apr. 5, 1950	15.43	76,300
	July 23, 1938	13.00	53,500	1951	Nov. 26, 1950	18.10	103,200
	Aug. 12, 1938	14.50	67,200		Dec. 5, 1950	17.12	93,200
	Sept. 22, 1938	19.27	116,000		Dec. 9, 1950	12.50	49,600
1939	Dec. 7, 1938	15.88	81,000		Jan. 25, 1951	11.40	40,800
	Feb. 17, 1939	12.40	48,200		Feb. 3, 1951	11.55	41,900
	Feb. 21, 1939	13.17	55,300		Feb. 23, 1951	11.41	40,900
1940	Apr. 1, 1940	21.40	138,300		Mar. 31, 1951	19.75	120,600
	Apr. 9, 1940	17.38	95,800	1952	Nov. 9, 1951	13.40	57,300
					Jan. 28, 1952	12.65	50,900
					Mar. 12, 1952	13.80	60,900

a From J. W. Mangan, 1942, Elevations of Major Floods along Pennsylvania Rivers: Commonwealth of Pennsylvania, Department of Forests and Waters; mark converted to present datum.

Peak stages and discharges of Delaware River at Belvidere, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Apr. 6, 1952	14.65	68,800	1958	Dec. 22, 1957	15.69	70,300
	Apr. 16, 1952	15.79	60,800		Apr. 7, 1958	15.58	69,400
	May 26, 1952	11.78	43,700	1959	Jan. 23, 1959	17.48	86,800
	July 10, 1952	16.53	87,200		Apr. 3, 1959	13.06	49,400
1953	Nov. 23, 1952	11.70	43,100	1960	Nov. 29, 1959	14.32	59,100
	Dec. 12, 1952	20.00	122,000		Jan. 4, 1960	12.01	42,100
	Jan. 25, 1953	16.13	81,300		Feb. 12, 1960	14.18	57,900
1954	Feb. 18, 1954	11.00	38,000		Apr. 1, 1960	15.46	68,400
					Apr. 5, 1960	17.56	87,600
1955	Aug. 19, 1955	30.21	273,000		Sept. 13, 1960	12.82	47,700
					Sept. 21, 1960	12.88	46,200
1956	Oct. 16, 1955	18.13	93,300	1961	Feb. 26, 1961	16.40	76,600
	Oct. 31, 1955	11.90	41,300		Apr. 26, 1961	14.16	57,800
	Apr. 6, 1956	12.58	46,100				
1957	Apr. 7, 1957	13.90	55,700				

4470. Delaware River at Easton, Pa.

Location.--Lat 40°41'30", long 75°12'15", on lower highway bridge at Easton, Northampton County, and 48.9 miles upstream from Calhoun Street Bridge in Trenton, N.J.

Drainage area.--4,717 sq mi.

Gage.--Nonrecording. Datum of gage is 100.21 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Not defined.

Historical data.--The following data were compiled by B. F. Fackenthal, Jr., ScD., LL.D., and presented in a paper at a meeting of the Bucks County Historical Society on Sept. 10, 1927.

Date	Stage above low water		Source of data
	(feet)	(inches)	
Oct. 27, 1777	23	8	Weaver's Collections, p. 186.
May 9, 1781	26	0	Do.
Feb. 19, 1783	24	11	Do.
Mar. 17, 1784	26	6	Weaver's Collections, p. 71.
Mar. 17, 1785	27	5	Weaver's Collections, p. 186.
Oct. 6, 1786	25	8	Do.
Apr. 1, 1814	25	0	Weaver's Collections, pp. 71, 186.
1828	18	0	Weaver's Collections, p. 71.
April 1829	18	0	Hazards Register, vol. III, 256.
Mar. 13, 1832	21	0	Weaver's Collections, p. 71.
Apr. 9, 1836	25	0	Weaver's Collections, pp. 71, 100.
Jan. 8, 1841	35	0	Henry's Register of Lehigh Valley.
Oct. 13, 1845	23	2	Weaver's Collections, p. 186.
Mar. 15, 1846	27	6	Do.
June 6, 1862	32	0	Not given.
October 1869	23	0	Do.
Oct. 10, 1903	40	6	Do.

Remarks.--Some effect on flood peaks from regulation by Lake Wallenpaupack since 1925, Toronto Reservoir since 1926, Swinging Bridge Reservoir since 1930, Cliff Lake Reservoir since 1940, Neversink Reservoir since 1953, Pepacton Reservoir since 1954, and other smaller reservoirs. Gage heights are maximum of hourly observations by Delaware River Joint Toll Bridge Commission. Only annual peak stages are shown.

Peak stages and discharges of Delaware River at Easton, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Oct. 10, 1903	a93.3	-	1949	Dec. 31, 1948	79.10	-
				1950	Apr. 6, 1950	72.00	-
1936	Mar. 19, 1936	87.95	-				
1937	Feb. 23, 1937	70.62	-	1951	Apr. 1, 1951	78.60	-
1938	Sept. 22, 1938	77.50	-	1952	July 11, 1952	75.06	-
1939	Dec. 7, 1938	74.20	-	1953	Dec. 12, 1952	80.60	-
1940	Apr. 1, 1940	81.23	-	1954	Dec. 8, 1953	66.65	-
				1955	Aug. 19, 1955	a98.90	-
1941	Apr. 7, 1941	67.90	-				
1942	May 24, 1942	83.00	-	1956	Oct. 16, 1955	78.82	-
1943	Dec. 31, 1942	77.50	-	1957	Apr. 7, 1957	71.59	-
1944	Nov. 10, 1943	71.75	-	1958	Dec. 22, 1957	76.85	-
1945	July 20, 1945	72.30	-	1959	Jan. 23, 1959	75.40	-
				1960	Apr. 5, 1960	77.05	-
1946	May 29, 1946	72.35	-				
1947	Apr. 8, 1947	74.03	-	1961	Feb. 27, 1961	74.45	-
1948	Mar. 23, 1948	77.60	-				

a From floodmark.

4475. Lehigh River at Stoddartsville, Pa.

Location.--Lat 41°07'45", long 75°37'40", on left bank 75 ft upstream from concrete bridge on State Highway 115, at Stoddartsville, Luzerne County, 1.9 miles upstream from Tobyhanna Creek, and 4 miles southwest of Thornhurst.

Drainage area.--91.7 sq mi.

Gage.--Nonrecording at site 350 ft downstream at datum 2.14 ft lower prior to Oct. 1, 1946; recording thereafter. Datum of gage is 1,463.81 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,700 cfs and extended above on basis of slope-area measurement at 31,900 cfs.

Bankfull stage.--7 ft.

Remarks.--Base for partial-duration series, 1,300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	May 22, 1942	a12.03	15,700	1952	Mar. 11, 1952	5.21	2,310
					Apr. 15, 1952	5.13	2,230
1944	Nov. 9, 1943	5.5	2,800		July 10, 1952	4.90	2,070
	Apr. 25, 1944	4.1	1,540				
1945	July 15, 1945	4.2	1,380	1953	Nov. 22, 1952	5.42	2,490
	July 19, 1945	6.1	3,090		Dec. 11, 1952	6.64	3,640
					Jan. 25, 1953	4.10	1,470
1946	May 28, 1946	5.6	2,640	1954	Dec. 7, 1953	3.70	1,200
1947	Apr. 5, 1947	4.82	2,010				
	May 22, 1947	4.17	1,500	1955	Aug. 14, 1955	5.28	2,450
	July 8, 1947	7.74	5,600		Aug. 19, 1955	16.37	31,900
1948	Mar. 20, 1948	4.76	1,950	1956	Oct. 16, 1955	7.06	4,650
					Oct. 30, 1955	4.17	1,500
1949	Dec. 30, 1948	5.38	2,490	1957	Apr. 6, 1957	3.64	1,360
	Jan. 6, 1949	4.86	2,030				
1950	Dec. 27, 1949	2.75	666	1958	Dec. 21, 1957	6.16	3,550
	Jen. 7, 1950	3.25	930		Apr. 7, 1958	4.17	1,700
	Mar. 9, 1950	3.0	790				
	Mar. 28, 1950	4.64	1,870	1959	Jan. 22, 1959	4.35	1,850
	Apr. 5, 1950	4.67	1,870				
1951	Nov. 26, 1950	7.94	5,940	1960	Nov. 28, 1959	3.53	1,300
	Dec. 4, 1950	8.59	7,250		Feb. 11, 1960	3.94	1,560
	Dec. 8, 1950	4.34	1,640		Mar. 31, 1960	4.68	2,130
	Jan. 24, 1951	3.85	1,300		Apr. 4, 1960	4.51	1,970
	Mar. 31, 1951	4.00	1,400		May 22, 1960	6.1	3,440
				1961	Feb. 26, 1961	4.03	1,640

a Annual peak only, at present site and datum.

4480. Lehigh River at Tannery, Pa.

Location.--Lat 41°02'25", long 75°45'45", on right bank 600 ft upstream from highway bridge at Tannery, Luzerne County, and 1½ miles upstream from Black Creek.

Drainage area.--322 sq mi.

Gage.--Nonrecording at site 600 ft downstream at datum 12.65 ft lower prior to Oct. 18, 1928; recording thereafter. Datum of gage is 1,042.06 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 9,500 cfs and extended above on basis of slope-area measurement at 58,300 cfs.

Bankfull stage.--12 ft.

Remarks.--Records prior to 1929 furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 3,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1915	Jan. 19, 1915	7.3	3,750	1936	Nov. 29, 1935	7.04	5,350
	Feb. 25, 1915	7.2	3,650		Mar. 12, 1936	13.34	20,000
1917	Mar. 28, 1917	8.0	4,450		Mar. 18, 1936	13.01	19,100
	Aug. 8, 1917	7.7	4,150	1937	Apr. 6, 1937	5.66	3,400
1918	Oct. 30, 1917	9.0	5,550	1938	Oct. 23, 1937	8.80	7,900
	Feb. 20, 1918	a7.2	3,650		Jan. 25, 1938	8.34	7,260
	Apr. 18, 1918	8.3	4,780		Jan. 27, 1938	6.03	4,010
1919	Mar. 9, 1919	6.8	b3,250		July 22, 1938	6.62	4,790
					July 23, 1938	6.94	5,210
1920	Mar. 12, 1920	8.3	4,560		Sept. 22, 1938	6.26	4,400
	Mar. 27, 1920	7.45	3,850	1939	Dec. 6, 1938	7.90	6,300
1921	Mar. 10, 1921	7.5	3,950		Feb. 15, 1939	6.46	4,660
1922	Nov. 29, 1921	7.4	3,850	1940	Mar. 31, 1940	10.46	12,100
	Dec. 2, 1921	7.4	3,850		Apr. 5, 1940	7.24	5,630
	Mar. 8, 1922	8.3	4,780		Apr. 9, 1940	7.48	6,050
	June 4, 1922	7.2	3,650		Sept. 1, 1940	7.35	5,910
1923	July 28, 1923	7.8	4,250	1941	Apr. 6, 1941	5.60	b3,480
1924	Jan. 11, 1924	8.0	4,450	1942	Mar. 9, 1942	7.03	5,350
	Apr. 6, 1924	9.6	6,210		May 22, 1942	16.51	29,600
	Sept. 30, 1924	13.2	10,400		Sept. 27, 1942	7.94	6,650
1925	Feb. 12, 1925	9.2	5,660	1943	Dec. 30, 1942	8.17	7,070
1926	Nov. 13, 1925	6.6	b3,050	1944	Oct. 27, 1943	5.96	4,010
1927	Nov. 16, 1926	15.0	12,700		Oct. 29, 1943	6.43	4,530
					Nov. 9, 1943	9.70	9,910
1928	Oct. 19, 1927	10.7	7,420		Apr. 25, 1944	5.82	3,780
	Nov. 18, 1927	9.2	5,770	1945	July 16, 1945	5.90	3,880
	Dec. 8, 1927	8.0	4,450		July 19, 1945	8.02	6,750
	May 1, 1928	7.1	3,550	1946	May 28, 1946	7.61	6,140
	June 30, 1928	13.0	10,100		Apr. 5, 1947	6.94	5,210
	July 14, 1928	8.7	5,220		May 22, 1947	6.98	5,350
1929	Mar. 15, 1929	6.27	4,340		May 26, 1947	6.35	4,530
					July 8, 1947	10.13	10,800
1930	June 11, 1930	5.41	b3,090		July 17, 1947	7.66	6,290
1931	Mar. 29, 1931	7.50	6,300	1948	Mar. 17, 1948	6.59	4,920
1932	Apr. 1, 1932	6.83	5,100		Mar. 20, 1948	6.99	5,420
	Apr. 3, 1932	5.77	3,750		Apr. 15, 1948	5.95	4,200
1933	Oct. 7, 1932	5.77	3,880	1949	Dec. 30, 1948	8.42	7,420
	Nov. 2, 1932	5.78	3,750		Jan. 6, 1949	7.40	5,940
	Apr. 18, 1933	5.80	3,750		May 7, 1949	6.26	4,560
	Aug. 24, 1933	12.47	17,600	1950	Mar. 28, 1950	7.36	5,940
	Sept. 16, 1933	10.30	11,200		Apr. 5, 1950	6.45	4,680
1934	Apr. 1, 1934	5.22	b3,010	1951	Nov. 26, 1950	10.9	12,800
1935	Dec. 1, 1934	8.99	8,430		Dec. 4, 1950	11.7	15,200
	July 10, 1935	13.12	19,400		Dec. 8, 1950	6.68	5,040
					Jan. 24, 1951	6.19	4,440

a Backwater from ice.

b Annual peak only.

Peak stages and discharges of Lehigh River at Tannery, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Mar. 31, 1951	7.00	5,420	1955	Aug. 19, 1955	22.2	58,300
1952	Nov. 7, 1951	5.68	3,970	1956	Oct. 15, 1955	9.21	11,000
	Mar. 11, 1952	8.69	7,910		Oct. 30, 1955	5.46	4,630
	Apr. 6, 1952	5.86	4,190		Nov. 16, 1955	4.64	3,650
	Apr. 15, 1952	6.94	5,340	1957	Apr. 6, 1957	6.19	5,830
	Apr. 28, 1952	5.46	3,750		Apr. 9, 1957	5.11	4,340
	May 26, 1952	5.43	3,650	1958	Dec. 21, 1957	10.50	13,900
	July 10, 1952	8.92	8,250		Dec. 27, 1957	5.33	4,600
1953	Sept. 2, 1952	5.46	3,750		Apr. 6, 1958	7.28	7,350
	Nov. 22, 1952	9.17	8,800	1959	Jan. 22, 1959	6.0	5,440
	Dec. 11, 1952	10.11	10,800		Mar. 6, 1959	5.5	4,720
1954	Jan. 24, 1953	6.62	4,980		Apr. 3, 1959	4.58	3,510
	Dec. 7, 1953	5.48	3,750				
1955	Aug. 14, 1955	7.97	6,760				

4485. Dilldown Creek near Long Pond, Pa.

Location.--Lat 41°02'10", long 75°32'35", on left bank 60 ft above timber bridge on Shucks Mill Road, 2.8 miles upstream from Mud Run, 4 miles northeast of Albrightsville, and 4.4 miles west of Long Pond, Monroe County.

Drainage area.--2.39 sq mi (determined from boundary survey by U.S. Forest Service).

Gage.--Recording and concrete control. Datum of gage is 1,665.07 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--2 ft.

Remarks.--Base for partial-duration series, 45 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Dec. 30, 1948	2.19	52	1954	Apr. 17, 1954	2.13	46
	Jan. 5, 1949	2.27	60		Mar. 22, 1955	2.155	48
	May 7, 1949	2.43	88		Aug. 14, 1955	2.625	126
1950	Mar. 8, 1950	2.30	64	1955	Aug. 18, 1955	3.37	342
	Mar. 28, 1950	2.52	105		Oct. 15, 1955	2.915	197
1951	Nov. 4, 1950	2.145	47		Oct. 30, 1955	2.46	94
	Nov. 25, 1950	2.91	196	1956	Apr. 30, 1956	2.155	48
	Dec. 4, 1950	3.005	222		Jan. 23, 1957	2.205	53
	Dec. 8, 1950	2.415	86		Apr. 6, 1957	2.185	51
	Jan. 24, 1951	2.325	71	1957	Dec. 20, 1957	3.31	321
	Feb. 7, 1951	2.285	62		Dec. 26, 1957	2.375	79
	Mar. 30, 1951	2.595	120		Apr. 6, 1958	2.73	150
	Apr. 12, 1951	2.325	71	1958	Jan. 22, 1959	2.14	46
	Nov. 7, 1951	2.185	51		Mar. 6, 1959	2.86	183
	Dec. 5, 1951	2.15	48		Apr. 2, 1959	2.36	77
1952	Dec. 21, 1951	2.15	48	1960	Nov. 28, 1959	2.535	108
	Mar. 11, 1952	2.71	145		Dec. 12, 1959	2.355	76
	Apr. 5, 1952	2.335	73		Jan. 3, 1960	2.255	61
	Apr. 15, 1952	2.35	75		Feb. 11, 1960	2.3	67
	July 10, 1952	3.195	281		Mar. 31, 1960	2.92	199
	Sept. 1, 1952	2.77	160		Apr. 4, 1960	2.345	74
	Nov. 22, 1952	2.67	136		May 22, 1960	-	(a)
	Dec. 5, 1952	2.215	54		Sept. 12, 1960	2.175	48
1953	Dec. 11, 1952	3.075	244	1961	Feb. 25, 1961	2.76	143
	Jan. 24, 1953	2.64	130		Aug. 25, 1961	2.185	52
	Feb. 21, 1953	2.18	50				
	Mar. 24, 1953	2.165	49				
	Dec. 7, 1953	2.175	50				

a Discharge unknown, but probably not maximum for year.

4495. Wild Creek at Hatchery, Pa.

Location.--Lat 40°55'25", long 75°33'30", on left bank at Hatchery, Carbon County, 0.5 mile downstream from Cross Run, 2.2 miles upstream from Wild Creek Dam, and 4 miles upstream from mouth.

Drainage area.--16.8 sq mi.

Gage.--Recording. Datum of gage is 842.71 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 220 cfs and extended above on basis of contracted-opening measurement at gage height 5.59 ft.

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 250 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	July 8, 1941	5.50	1,720	1951	Nov. 25, 1950	4.07	568
					Dec. 4, 1950	4.67	939
1942	May 23, 1942	6.00	2,360		Dec. 8, 1950	3.66	381
	June 7, 1942	3.33	288				
	Aug. 14, 1942	3.55	340	1952	Mar. 11, 1952	3.69	393
	Sept. 27, 1942	3.88	475		May 25, 1952	3.48	290
					July 9, 1952	4.76	1,010
1943	Dec. 30, 1942	3.54	336		Sept. 1, 1952	4.12	595
1944	Nov. 9, 1943	4.16	606	1953	Nov. 22, 1952	4.21	646
	May 27, 1944	3.66	381		Dec. 11, 1952	4.53	841
					Feb. 21, 1953	3.32	252
1945	July 5, 1945	3.28	254				
	July 9, 1945	3.63	370	1954	Dec. 7, 1953	2.93	168
	July 15, 1945	4.28	688				
	July 20, 1945	4.38	748	1955	Aug. 18, 1955	5.59	1,830
1946	May 27, 1946	3.35	258				
	July 23, 1946	3.38	265	1956	Oct. 16, 1955	3.27	251
					Apr. 30, 1956	3.51	326
1947	May 14, 1947	3.30	259	1957	Apr. 6, 1957	3.22	237
	May 24, 1947	4.52	834				
	July 7, 1947	3.85	462	1958	Dec. 20, 1957	3.69	393
	July 15, 1947	3.38	283		Apr. 6, 1958	3.32	265
1948	Apr. 1, 1948	3.39	266	1959	May 20, 1959	2.44	80
1949	Jan. 5, 1949	3.36	277	1960	July 3, 1960	2.98	202
	May 6, 1949	4.18	629				
1950	Mar. 28, 1950	3.00	179	1961	Feb. 26, 1961	3.73	418

4500. Pohopoco Creek near Parryville, Pa.

Location.--Lat 40°49'55", long 75°40'55", on right bank 1.2 miles downstream from Bull Run, 1.2 miles north of Parryville, Carbon County, and 2.3 miles upstream from mouth.

Drainage area.--109 sq mi.

Gage.--Recording. Prior to Dec. 13, 1955, at site 0.2 mile upstream at datum 4.64 ft higher. Datum of present gage is 454.61 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--6 ft.

Remarks.--Peak flows materially affected by Wild Creek Reservoir (capacity, 12,000 acre-ft), and since October 1958 by Penn Forest Reservoir (capacity, 19,980 acre-ft). Base for partial-duration series, 1,100 cfs.

Peak stages and discharges of Pohopoco Creek near Parryville, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	July 8, 1941	4.85	2,500	1951	Dec. 4, 1950	4.82	2,230
1942	May 23, 1942	7.42	5,300		Dec. 8, 1950	3.79	1,310
	Aug. 14, 1942	5.04	2,480		Feb. 7, 1951	4.80	2,230
	Aug. 17, 1942	3.80	1,420		Mar. 31, 1951	3.72	1,230
	Sept. 28, 1942	5.90	3,400	1952	Nov. 7, 1951	3.53	1,120
1943	Dec. 30, 1942	5.26	2,680		Mar. 11, 1952	5.02	2,430
	Feb. 21, 1943	3.80	1,300		Apr. 5, 1952	4.49	1,930
1944	Nov. 9, 1943	4.41	1,850		Apr. 16, 1952	3.60	1,160
	Mar. 13, 1944	3.58	1,190		May 25, 1952	3.94	1,430
	May 27, 1944	3.75	1,300		July 10, 1952	5.67	3,180
1945	July 10, 1945	5.87	3,400		Sept. 1, 1952	4.90	2,330
	July 15, 1945	5.50	2,960	1953	Nov. 22, 1952	5.18	2,630
	July 20, 1945	5.04	2,480		Dec. 11, 1952	6.00	3,520
1946	May 28, 1946	4.10	1,560		Jan. 24, 1953	3.93	1,430
1947	Mar. 14, 1947	3.75	1,270	1954	Dec. 7, 1953	3.57	1,120
	May 26, 1947	4.67	2,080	1955	Aug. 13, 1955	3.40	1,260
	July 8, 1947	3.84	1,350		Aug. 18, 1955	6.77	5,250
	July 17, 1947	3.55	1,120	1956	Oct. 16, 1955	4.75	2,620
1948	Mar. 20, 1948	3.31	960	1957	Apr. 6, 1957	5.15	1,710
1949	Dec. 31, 1948	4.07	1,520	1958	Dec. 21, 1957	6.88	2,850
	Jan. 6, 1949	3.97	1,430		Jan. 22, 1958	4.63	1,380
	May 7, 1949	3.80	1,310	1959	Mar. 6, 1959	4.34	1,200
1950	Mar. 9, 1950	3.49	1,090	1961	Feb. 26, 1961	5.28	1,770
1951	Nov. 25, 1950	4.57	2,000				

4505. Aquashicola Creek at Palmerton, Pa.

Location.--Lat 40°48'20", long 75°35'55", on right bank 1,200 ft upstream from Sixth Street Bridge in Palmerton, Carbon County, and 1½ miles upstream from mouth.

Drainage area.--76.7 sq mi.

Gage.--Recording. Datum of gage is 389.08 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,500 cfs and extended above on basis of contracted-opening measurement at 11,700 cfs.

Bankfull stage.--7 ft.

Remarks.--Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Mar. 15, 1940	10.03	4,550	1945	Feb. 27, 1945	5.70	1,010
	Mar. 31, 1940	6.53	1,740		July 10, 1945	13.63	11,700
	Apr. 9, 1940	5.48	1,130		July 15, 1945	6.59	1,670
	Sept. 1, 1940	6.20	1,550		Sept. 9, 1945	5.62	1,100
					Sept. 19, 1945	5.81	1,200
1941	Nov. 15, 1940	4.84	805	1946	May 28, 1946	6.28	1,490
1942	Feb. 17, 1942	5.44	1,100		July 2, 1946	5.60	1,080
	May 23, 1942	8.09	2,990		July 23, 1946	6.10	1,370
	Aug. 17, 1942	7.42	2,370	1947	Jan. 20, 1947	6.19	1,300
	Sept. 28, 1942	9.08	3,650		Mar. 14, 1947	6.90	1,820
1943	Oct. 27, 1942	5.42	1,070		May 26, 1947	6.35	1,430
	Dec. 30, 1942	7.68	2,590	1948	Nov. 8, 1947	5.69	1,080
	Feb. 21, 1943	5.47	1,100		Mar. 17, 1948	5.72	1,080
1944	Nov. 9, 1943	7.33	2,300		Aug. 22, 1948	6.07	1,220
	Mar. 7, 1944	5.72	1,250	1949	Dec. 30, 1948	7.97	2,660
	Mar. 13, 1944	6.30	1,610		Jan. 6, 1949	6.90	1,820
	Apr. 25, 1944	5.68	1,250				

Peak stages and discharges of Aquashicola Creek at Palmerton, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)			
1949	Apr. 19, 1949	5.81	1,120	1955	Mar. 23, 1955	5.65	1,060			
	May 7, 1949	5.80	1,120		Aug. 14, 1955	6.51	1,580			
1950	Mar. 23, 1950	5.70	1,080		Aug. 19, 1955	9.82	4,380			
				1956	Oct. 16, 1955	7.55	2,370			
1951	Nov. 26, 1950	7.05	1,980					1957	Apr. 6, 1957	7.22
	Dec. 4, 1950	7.06	2,020							
	Feb. 7, 1951	6.87	1,850	1958	Dec. 21, 1957	9.58	4,140			
	Mar. 31, 1951	6.09	1,310		Jan. 22, 1958	6.85	1,800			
	July 28, 1951	6.76	1,740		Feb. 28, 1958	7.55	2,370			
1952	Nov. 3, 1951	5.81	1,130	1959	Jan. 21, 1959	5.80	1,180			
	Nov. 8, 1951	6.88	1,850		Mar. 6, 1959	5.90	1,240			
	Mar. 11, 1952	7.69	2,450	1960	Jan. 3, 1960	5.84	1,210			
	Apr. 5, 1952	6.87	1,850							
	May 25, 1952	5.65	1,060					Feb. 11, 1960	5.89	1,240
	July 10, 1952	9.40	3,940					Apr. 5, 1960	6.37	1,510
	Sept. 1, 1952	7.24	2,060		Sept. 12, 1960	6.28	1,480			
	1953	Nov. 22, 1952	7.90		2,610	1961	Feb. 26, 1961	6.58	1,660	
Dec. 11, 1952		8.31	2,930							
Jan. 24, 1953		6.20	1,370							
1954	Dec. 7, 1953	6.50	1,570							

4510. Lehigh River at Walnutport, Pa.

Location.--Lat 40°45'20", long 75°36'15", on left bank 0.3 mile upstream from highway bridge at Walnutport, Northampton County, and 0.4 mile upstream from Trout Creek.

Drainage area.--889 sq mi.

Gage.--Recording. Datum of gage is 350.27 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--13 ft.

Historical data.--Flood of May 23, 1942, was greatest known.

Remarks.--Flow regulated by Bear Creek Reservoir since February 1961. Base for partial-duration series, 9,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	May 23, 1942	20.6	-	1950	Mar. 29, 1950	6.35	12,600
1947	Mar. 14, 1947	6.20	11,800	1951	Nov. 25, 1950	11.26	38,200
	Apr. 6, 1947	5.64	9,400		Dec. 4, 1950	12.66	46,000
	May 22, 1947	6.24	11,800		Dec. 8, 1950	6.72	13,800
	May 26, 1947	6.70	14,100		Jan. 24, 1951	6.61	13,400
	July 8, 1947	8.35	23,000		Feb. 7, 1951	7.17	16,200
	July 17, 1947	6.77	14,600		Mar. 31, 1951	6.36	12,400
1948	Mar. 17, 1948	5.95	10,600	1952	Nov. 3, 1951	5.94	10,500
	Mar. 20, 1948	6.06	11,100		Nov. 8, 1951	7.17	15,800
	Apr. 1, 1948	5.71	9,600		Dec. 5, 1951	6.05	10,500
	Apr. 15, 1948	5.84	10,200		Mar. 11, 1952	9.42	27,300
1949	Dec. 30, 1948	8.19	21,900		Apr. 6, 1952	6.60	13,000
	Jan. 6, 1949	7.17	16,600		Apr. 16, 1952	6.46	12,600
	May 7, 1949	5.70	9,600		Apr. 28, 1952	6.32	11,700
					May 26, 1952	5.97	10,500

Peak stages and discharges of Lehigh River at Walnutport, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	July 10, 1952	9.15	26,200	1958	Dec. 21, 1957	11.35	37,600
	Sept. 1, 1952	6.62	13,000		Dec. 26, 1957	6.42	11,400
1953	Nov. 22, 1952	10.97	36,100		Feb. 28, 1958	6.45	11,400
	Dec. 6, 1952	5.83	9,900		Apr. 6, 1958	7.37	15,900
	Dec. 11, 1952	10.20	31,700	1959	Jan. 22, 1959	-	b12,000
	Jan. 24, 1953	7.06	15,300		Mar. 6, 1959	6.98	14,000
1954	Dec. 7, 1953	6.26	11,700	1960	Nov. 28, 1959	7.03	14,000
1955	Aug. 14, 1955	6.23	11,400		Feb. 11, 1960	6.96	14,000
	Aug. 19, 1955	17.68	77,800		Mar. 31, 1960	7.24	14,900
1956	Oct. 16, 1955	9.21	25,600		Apr. 5, 1960	7.50	16,400
	Oct. 30, 1955	5.89	10,100		Sept. 12, 1960	7.14	14,400
1957	Jan. 23, 1957	6.41	12,200		Sept. 20, 1960	5.83	9,170
	Apr. 6, 1957	7.89	18,400	1961	Feb. 26, 1961	7.16	a14,900

a Annual peak only.

b About.

4515. Little Lehigh Creek near Allentown, Pa.
(Published as "at Allentown" prior to 1947)

Location.--Lat 40°34'55", long 75°29'00", on right bank at highway bridge on Lehigh Parkway in Allentown, Lehigh County, 0.8 mile upstream from Cedar Creek, and 2.9 miles upstream from mouth.

Drainage area.--80.8 sq mi.

Gage.--Recording. Datum of gage is 253.41 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 980 cfs and extended above by logarithmic plotting.

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 450 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	July 9, 1935	9.5	-	1952	Mar. 11, 1952	3.79	859
1946	June 2, 1946	3.72	729		Apr. 28, 1952	3.47	746
	July 2, 1946	3.47	648		July 10, 1952	3.12	495
	Aug. 18, 1946	5.14	1,300		Sept. 1, 1952	3.32	454
1947	July 17, 1947	3.28	618	1953	Nov. 22, 1952	4.22	925
1948	May 13, 1948	4.07	852		Dec. 11, 1952	4.11	870
	June 20, 1948	4.10	871		Jan. 24, 1953	3.56	650
	Aug. 11, 1948	2.87	472		Mar. 4, 1953	3.10	454
1949	Dec. 30, 1948	3.00	502		Mar. 26, 1953	3.90	835
	Jan. 6, 1949	3.42	633		Apr. 7, 1953	3.17	486
1950	Mar. 23, 1950	3.22	399	1954	Dec. 7, 1953	3.82	747
1951	Nov. 25, 1950	4.75	1,080	1955	Feb. 7, 1955	3.41	524
	Jan. 15, 1951	3.27	456		Aug. 13, 1955	3.83	714
	Feb. 7, 1951	5.03	1,230		Aug. 18, 1955	6.17	1,880
	Apr. 12, 1951	3.15	468		Aug. 22, 1955	3.66	637
1952	Nov. 7, 1951	3.49	631	1956	Oct. 15, 1955	5.46	1,530
					Feb. 7, 1956	3.82	700
				1957	Apr. 5, 1957	3.35	594

Peak stages and discharges of Little Lehigh Creek near Allentown, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Jan. 22, 1958	4.23	950	1960	Jan. 3, 1960	3.70	605
	Feb. 28, 1958	6.30	1,960		Apr. 5, 1960	3.41	462
1959	Jan. 2, 1959	3.61	592		Sept. 12, 1960	4.14	830
	Jan. 21, 1959	3.50	528	1961	Feb. 25, 1961	3.55	516
	Mar. 6, 1959	3.55	557				

4520. Jordan Creek at Allentown, Pa.

Location--Lat 40°37'25", long 75°29'00", on right bank 200 ft upstream from bridge on State Highway 145, 0.5 mile northwest of city limit of Allentown, Lehigh County, and 2.5 miles upstream from mouth.

Drainage area--75.8 sq mi.

Gage--Recording gage and crest-stage indicator. Datum of gage is 259.82 ft above mean sea level, datum of 1929 (Pennsylvania State Highway bench mark).

Stage-discharge relation--Defined by current-meter measurements below 1,900 cfs. and extended on basis of slope-area measurement.

Bankfull stage--6 ft.

Remarks--Base for partial-duration series, 1,300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Feb. 27, 1945	3.66	1,370	1953	Dec. 11, 1952	3.54	1,790
	Sept. 19, 1945	3.85	1,660		Jan. 24, 1953	3.28	1,370
1946	May 28, 1946	3.63	1,320		Mar. 26, 1953	3.62	1,930
	June 2, 1946	3.40	1,340	1954	Dec. 7, 1953	4.19	3,070
	July 2, 1946	3.39	1,330				
1947	Jan. 20, 1947	3.66	1,810	1955	Feb. 7, 1955	3.60	1,840
	Mar. 14, 1947	3.42	1,380		Mar. 23, 1955	3.58	1,810
	May 26, 1947	3.96	2,380		Aug. 14, 1955	3.34	1,410
					Aug. 19, 1955	8.00	9,520
1948	Feb. 20, 1948	a3.65	-	1956	Oct. 16, 1955	4.20	2,730
	Aug. 20, 1948	3.63	1,680		Feb. 7, 1956	3.86	2,130
1949	Dec. 31, 1948	3.93	2,320	1957	Dec. 15, 1956	3.52	1,450
	Jan. 6, 1949	3.63	1,750		Apr. 6, 1957	4.32	2,710
1950	Mar. 23, 1950	3.67	1,820	1958	Dec. 21, 1957	3.59	1,590
1951	Nov. 26, 1950	4.68	4,240		Jan. 22, 1958	4.50	2,040
	Dec. 5, 1950	3.56	1,630		Feb. 28, 1958	5.81	4,000
	Feb. 7, 1951	5.19	5,940		May 9, 1958	3.75	1,320
	July 28, 1951	3.99	2,440		Sept. 27, 1958	5.41	3,280
1952	Nov. 7, 1951	4.05	2,560	1959	Sept. 3, 1959	4.98	1,280
	Mar. 11, 1952	3.70	2,070				
	Apr. 28, 1952	3.33	1,450				
	May 25, 1952	3.60	1,890	1960	Apr. 5, 1960	5.51	1,950
	July 10, 1952	3.33	1,450		Aug. 31, 1960	5.35	1,740
	Sept. 1, 1952	3.52	1,750		Sept. 13, 1960	6.07	2,820
1953	Nov. 22, 1952	4.42	3,520	1961	Feb. 26, 1961	5.56	2,020

a Backwater from ice.

4525. Monocacy Creek at Bethlehem, Pa.

Location.--Lat 40°38'30", long 75°22'50", on downstream side of right span of highway bridge at entrance to Monocacy Park at Bethlehem, Northampton County, 2.1 miles upstream from mouth.

Drainage area.--44.5 sq mi.

Gage.--Nonrecording and crest-stage gage. Datum of gage is 247.24 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 560 cfs and extended above on basis of slope-area measurement at gage height 9.74 ft.

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	July 10, 1945	9.74	5,200	1955	Aug. 19, 1955	4.68	495
1949	Dec. 31, 1948	4.34	354	1956	Oct. 15, 1955	4.74	513
	Jan. 6, 1949	4.18	329		Feb. 7, 1956	5.06	623
1950	Mar. 23, 1950	3.31	186		June 24, 1956	4.89	560
					July 9, 1956	3.98	309
1951	June 23, 1951	4.34	393	1957	Apr. 6, 1957	4.36	420
	July 28, 1951	4.42	419				
1952	Mar. 11, 1952	4.20	368	1958	Dec. 21, 1957	4.00	330
	May 25, 1952	4.06	344		Jan. 22, 1958	6.32	1,150
	July 9, 1952	4.00	321		Feb. 28, 1958	7.63	2,340
	Sept. 1, 1952	4.03	321	1959	Jan. 2, 1959	4.63	555
1953	Nov. 22, 1952	3.99	321		Jan. 21, 1959	5.50	915
	Dec. 11, 1952	4.25	373		Feb. 4, 1959	4.47	520
	May 23, 1953	4.04	330		Mar. 6, 1959	4.66	591
1954	Dec. 7, 1953	4.1	351	1960	Apr. 5, 1960	4.31	447
					Sept. 12, 1960	4.00	353
1955	Feb. 7, 1955	4.69	501	1961	Feb. 26, 1961	3.95	338

4530. Lehigh River at Bethlehem, Pa.
(Published as "at South Bethlehem" prior to 1914)

Location.--Lat 40°37'05", long 75°21'55", on left bank, 1,650 ft upstream from Minsi Trail Bridge at Bethlehem, Northampton County, and 2,400 ft downstream from Monocacy Creek.

Drainage area.--1,279 sq mi.

Gage.--Nonrecording at site 4,130 ft upstream at datum 2.49 ft higher prior to Oct. 1, 1928; recording thereafter. Datum of gage is 208.45 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 50,000 cfs.

Bankfull stage.--18 ft.

Remarks.--Records for 1914-18, 1921-28, furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 11,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1902	Feb. 28, 1902	24.9	88,000	1904	Oct. 10, 1903	-	a25,800
1903	Dec. 17, 1902	-	a15,200		Mar. 7, 1904	-	a20,000
	Dec. 22, 1902	-	a26,800	1905	Jan. 7, 1905	-	a19,600
	Mar. 1, 1903	-	a20,100				
	Mar. 24, 1903	-	a17,000	1910	Dec. 14, 1909	7.5	11,800

a Daily mean discharge.

Peak stages and discharges of Lehigh River at Bethlehem, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1910	Jan. 22, 1910	13.78	32,200	1935	Dec. 2, 1934	11.73	30,400
	Mar. 1, 1910	8.54	14,800		July 10, 1935	18.53	63,700
	Apr. 26, 1910	8.0	13,300				
1911	Aug. 31, 1911	7.77	12,700	1936	Nov. 29, 1935	6.85	12,800
					Mar. 12, 1936	17.04	55,700
1912	Feb. 22, 1912	9.0	16,400		Mar. 18, 1936	15.70	49,000
	Mar. 13, 1912	10.4	20,800		Apr. 6, 1936	7.75	16,600
	Mar. 15, 1912	11.6	24,800	1937	Jan. 26, 1937	6.19	10,500
					Feb. 22, 1937	6.24	10,500
1913	Jan. 4, 1913	7.0	10,700		Apr. 6, 1937	6.18	10,500
	Mar. 14, 1913	7.1	11,000				
	Mar. 27, 1913	12.4	27,500	1938	Oct. 23, 1937	9.37	22,400
	Apr. 13, 1913	11.0	22,700		Jan. 25, 1938	8.40	19,100
1914	Jan. 31, 1914	7.3	11,600		June 28, 1938	8.32	18,700
	Mar. 28, 1914	7.2	11,300		July 22, 1938	7.07	14,000
					July 24, 1938	7.38	15,200
1915	Jan. 7, 1915	8.5	15,000		Sept. 22, 1938	7.36	15,200
	Jan. 13, 1915	11.52	24,500	1939	Dec. 6, 1938	10.47	25,900
	Jan. 20, 1915	7.2	11,300		Dec. 10, 1938	6.26	10,800
	Feb. 1, 1915	10.2	20,100		Feb. 16, 1939	7.10	13,900
	Feb. 25, 1915	9.3	17,300				
1916	Mar. 31, 1916	7.52	12,100	1940	Mar. 4, 1940	6.48	11,100
	July 26, 1916	9.0	16,400		Mar. 15, 1940	12.83	35,000
					Mar. 31, 1940	12.35	33,300
1917	Jan. 14, 1917	7.8	12,900		Apr. 9, 1940	7.83	16,500
	Mar. 28, 1917	9.5	17,900		Sept. 1, 1940	8.13	17,600
				1941	Apr. 6, 1941	5.68	8,210
1918	Oct. 30, 1917	9.5	18,200				
	Feb. 20, 1918	13.0	29,100	1942	Mar. 9, 1942	6.47	11,100
	Feb. 26, 1918	11.0	22,700		May 23, 1942	25.9	92,000
1919	Mar. 9, 1919	9.0	16,800		Sept. 28, 1942	9.72	23,000
	July 21, 1919	7.1	11,400	1943	Oct. 27, 1942	6.45	10,800
					Dec. 31, 1942	10.02	24,000
1920	Mar. 5, 1920	12.0	25,800				
	Mar. 13, 1920	10.5	21,200	1944	Nov. 9, 1943	11.55	30,000
	Mar. 17, 1920	9.3	17,600		Mar. 13, 1944	6.98	13,100
1921	Mar. 4, 1921	6.72	10,200		Apr. 25, 1944	6.80	12,200
1922	Mar. 8, 1922	9.8	19,100	1945	July 10, 1945	8.10	17,600
1923	Mar. 17, 1923	7.0	11,100		July 15, 1945	8.27	18,300
1924	Jan. 11, 1924	8.4	15,000		July 21, 1945	8.30	18,300
	Jan. 17, 1924	9.0	16,800	1946	May 28, 1946	9.53	22,300
	Apr. 7, 1924	11.3	23,600		June 3, 1946	6.95	13,100
					July 23, 1946	6.49	10,940
1925	Oct. 1, 1924	16.2	43,500	1947	Mar. 15, 1947	7.38	14,800
	Feb. 12, 1925	13.0	29,100		Apr. 6, 1947	6.42	10,500
					May 22, 1947	7.08	13,500
1926	Feb. 26, 1926	7.9	13,600		May 26, 1947	8.47	18,900
					July 8, 1947	9.48	22,300
1927	Oct. 20, 1926	10.7	21,800		July 17, 1947	7.84	16,500
	Nov. 17, 1926	16.7	44,000	1948	Nov. 9, 1947	6.25	9,940
1928	Nov. 18, 1927	10.6	21,400		Mar. 17, 1948	6.76	12,200
	Dec. 8, 1927	9.7	18,800		Mar. 20, 1948	6.80	12,200
	Feb. 15, 1928	7.2	11,600		Apr. 1, 1948	6.60	11,400
	June 30, 1928	13.4	30,700		Apr. 15, 1948	7.02	13,100
	July 6, 1928	7.1	11,400	1949	Dec. 31, 1948	10.77	26,900
1929	Mar. 6, 1929	7.8	16,600		Jan. 6, 1949	9.01	20,600
1930	Oct. 3, 1929	6.50	11,600	1950	Mar. 29, 1950	7.27	14,400
1931	Feb. 18, 1931	5.73	8,820	1951	Nov. 26, 1950	14.4	42,500
1932	Apr. 1, 1932	6.56	12,000		Dec. 5, 1950	15.31	46,900
					Dec. 8, 1950	8.38	18,500
1933	Nov. 2, 1932	7.30	14,700		Jan. 24, 1951	7.86	16,700
	Nov. 10, 1932	6.06	10,400		Feb. 7, 1951	9.89	23,700
	Nov. 20, 1932	6.87	13,200		Mar. 31, 1951	7.19	13,700
	Mar. 22, 1933	6.13	10,400		July 28, 1951	8.09	17,500
	Apr. 18, 1933	8.35	18,600	1952	Nov. 3, 1951	7.70	15,900
	Aug. 24, 1933	18.70	64,800		Nov. 8, 1951	9.16	22,600
	Sept. 4, 1933	9.80	23,300		Dec. 6, 1951	6.71	12,600
	Sept. 17, 1933	8.40	18,600		Jan. 28, 1952	6.29	11,000
1934	Apr. 1, 1934	6.32	10,800		Mar. 12, 1952	11.31	31,000
	Sept. 17, 1934	6.35	11,300		Apr. 6, 1952	7.46	15,800
					Apr. 16, 1952	7.16	14,600
					Apr. 29, 1952	7.28	15,000

Peak stages and discharges of Lehigh River at Bethlehem, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	May 25, 1952	6.97	13,800	1958	Dec. 21, 1957	14.03	41,800
	July 10, 1952	10.53	27,800		Dec. 27, 1957	7.28	13,700
	Sept. 2, 1952	7.41	15,400		Jan. 22, 1958	7.49	14,500
1953	Nov. 22, 1952	13.75	41,200		Feb. 28, 1958	10.47	26,700
	Dec. 6, 1952	6.51	11,800		Apr. 7, 1958	8.30	17,700
	Dec. 11, 1952	12.26	35,000	1959	Jan. 22, 1959	8.00	16,500
	Jan. 25, 1953	8.21	18,600		Mar. 6, 1959	8.19	17,300
	Mar. 26, 1953	6.27	11,000	1960	Nov. 28, 1959	7.63	14,900
	May 23, 1953	6.34	11,000		Jan. 4, 1960	6.67	11,400
1954	Dec. 7, 1953	7.73	16,600		Feb. 11, 1960	7.73	15,300
1955	Aug. 14, 1955	7.23	14,700		Apr. 1, 1960	8.06	16,900
	Aug. 19, 1955	23.38	91,300		Apr. 5, 1960	9.42	22,100
1956	Oct. 16, 1955	11.48	30,900		Sept. 13, 1960	9.01	20,500
1957	Apr. 6, 1957	9.75	23,800		Sept. 20, 1960	6.67	11,400
				1961	Feb. 26, 1961	8.81	19,700

4535. Saucon Creek at Lanark, Pa.

Location.--Lat 40°32'50", long 75°25'30", on left bank 200 ft upstream from concrete highway bridge on U.S. Highway 309 and 0.5 mile southeast of Lanark, Lehigh County.

Drainage area.--12.0 sq mi.

Gage.--Nonrecording and crest-stage gage. Datum of gage is 380.42 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 340 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 250 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	May 13, 1948	4.08	530	1951	Jan. 15, 1951	3.43	359
	June 20, 1948	3.80	455		Feb. 7, 1951	4.02	505
1949	Dec. 30, 1948	3.67	431	1952	Dec. 21, 1951	3.70	431
	Jan. 6, 1949	3.62	407		Mar. 11, 1952	4.05	505
1950	Mar. 23, 1950	3.09	290		Apr. 28, 1952	3.61	407
1951	Nov. 25, 1950	6.21	1,180	1953	Nov. 22, 1952	3.36	359
	Dec. 4, 1950	3.56	407		Dec. 11, 1952	5.01	795
					Jan. 24, 1953	4.54	645

4540. South Branch Saucon Creek at Friedensville, Pa.

Location.--Lat 40°32'55", long 75°23'20", on right bank 275 ft upstream from concrete highway bridge on Spring Valley Road, 2,000 ft upstream from confluence with Saucon Creek, and 0.8 mile southeast of Friedensville, Lehigh County.

Drainage area.--10.6 sq mi.

Gage.--Nonrecording and crest-stage gage. Datum of gage is 361.75 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 430 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 440 cfs.

Peak stages and discharges of South Branch Saucon Creek at Friedensville, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	May 13, 1948	2.95	682	1951	Jan. 15, 1951	2.34	440
	June 20, 1948	2.35	440		Feb. 7, 1951	2.86	642
1949	Dec. 30, 1948	2.40	457		Apr. 12, 1951	2.43	457
	Jan. 5, 1949	2.55	528	1952	Mar. 11, 1952	2.84	603
1950	Mar. 23, 1950	2.22	390		Apr. 28, 1952	2.42	457
1951	Nov. 25, 1950	3.60	943	1953	Nov. 22, 1952	2.47	492
	Dec. 4, 1950	2.83	603		Dec. 11, 1952	2.97	682
					Jan. 24, 1953	2.35	440

4545. Saucon Creek at Friedensville, Pa.

Location.--Lat 40°33'20", long 75°23'05", on downstream side of single span steel-girder bridge on private road of Saucon Valley Country Club, 0.3 mile downstream from South Branch Saucon Creek, and 0.5 mile southeast of Friedensville, Lehigh County.

Drainage area.--26.6 sq mi.

Gage.--Nonrecording and crest-stage gage. Datum of gage is 339.92 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 810 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 730 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	May 13, 1948	11.87	1,040	1951	Dec. 4, 1950	12.03	1,080
	June 20, 1948	11.50	855		Feb. 7, 1951	11.69	945
1949	Dec. 30, 1948	11.40	810	1952	Mar. 11, 1952	11.55	900
	Jan. 6, 1949	11.48	855		Apr. 28, 1952	11.35	810
1950	Mar. 23, 1950	10.66	540	1953	Dec. 11, 1952	12.08	1,130
					Jan. 24, 1953	11.60	900
1951	Nov. 25, 1950	12.49	1,330				

4555. Musconetcong River at outlet of Lake Hopatcong, N.J.

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. Area of lakes, ponds, and swamps, 4.9 sq mi.

Gage.--Recording gage and concrete control. Datum of gage is 904.99 ft above mean sea level (New Jersey Geological Survey bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 340 cfs and extended above by logarithmic plotting. Gradual shift in relation has occurred.

Remarks.--Flow regulated by Lake Hopatcong, usable capacity below spillway crest, 7,459,000,000 gal. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928a/	Aug. 27, 1928	2.61	362	1944	Apr. 27, 1944	1.91	173
1929	Apr. 16, 1929	2.18	234	1945	July 23, 1945	2.13	233
1930	Feb. 22 to Mar. 6, 1930	1.29	62	1946	June 2, 1946	1.89	169
				1947	May 26, 1947	1.95	190
1931	July 11, 1931	2.53	330	1948	Sept. 24, 1948	2.64	308
1932	Apr. 4, 1932	1.76	139	1949	Oct. 4, 1949	2.46	263
1933	Sept. 17, 1933	2.30	260	1950	June 4, 1950	1.76	123
1934	Sept. 27, 30, 1934	2.08	206	1951	Dec. 11, 1950	2.39	234
1935	Oct. 12, 1934	2.30	284	1952	June 2, 1952	2.61	288
1936	Mar. 19, 1936	3.17	534	1953	Dec. 12, 1952	2.15	168
1937	Oct. 20, 1936	2.60	362	1954	May 10, 11, 1954	1.62	91
1938	July 24, 1938	2.46	326	1955	Aug. 20, 1955	3.85	795
1939	Sept. 23, 24, 26, 1939	2.17	246	1956	Oct. 3, 1955	2.79	357
1940	June 2-3, 1940	1.99	194	1957	Apr. 9, 1957	1.91	144
1941	Nov. 29 to Dec. 4, 1940	1.51	100	1958	Apr. 7, 1958	2.49	272
1942	Aug. 18, 1942	2.20	255	1959	Sept. 8, 1959	2.34	243
1943	Jan. 4, 6, 1943	1.59	106	1960	Oct. 31, 1959	2.39	255
				1961	Oct. 23, 1960	2.50	282

a Period July 1 to Sept. 30, 1928.

4560. Musconetcong River near Hackettstown, N.J.

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. Area of lakes, ponds, and swamps, 7.2 sq mi.

Gage.--Nonrecording prior to Aug. 21, 1923, recording thereafter. At site 2,000 ft downstream at datum 26.97 ft lower prior to July 19, 1938. Datum of gage is 630.93 ft above mean sea level (New Jersey Geological Survey bench mark).

Stage-discharge relation.--Prior to July 19, 1938, relation was defined by current-meter measurements below 1,000 cfs and extended above by logarithmic plotting. Since 1938, defined by current-meter measurements below 600 cfs and extended above by logarithmic plotting.

Remarks.--Flood peaks may be affected by regulation of Lake Hopatcong, usable capacity below spillway crest, 7,459,000,000 gal. Base for partial-duration series, 350 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	Sept. 5, 1922	4.2	a720	1924	May 12, 1924	3.86	560
1923	Mar. 17, 1923	3.75	a518	1925	Feb. 12, 1925	5.12	1,080
1924	Jan. 22, 1924	b3.44	-	1926	Feb. 26, 1926	3.32	363
	Apr. 7, 1924	4.34	750		Mar. 9, 1926	3.54	442
	Apr. 19, 1924	3.40	395				

a Annual peak only.

b Backwater from ice.

Peak stages and discharges of Musconetcong River near Hackettstown, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Nov. 17, 1926	4.03	550	1944	Apr. 25, 1944	2.12	492
	May 27, 1927	3.55	360				
1928	Oct. 20, 1927	4.26	640	1945	Mar. 7, 1945	2.05	432
	Oct. 24, 1927	4.10	580		May 19, 1945	2.10	482
	Oct. 30, 1927	3.60	430		July 20, 1945	2.30	572
	Nov. 4, 1927	4.94	970		July 24, 1945	2.28	558
	Nov. 18, 1927	4.28	640	1946	Nov. 23, 1945	1.91	351
	Dec. 8, 1927	3.84	490		Dec. 1, 1945	1.89	351
	Dec. 12, 1927	3.80	490		Dec. 26, 1945	2.07	464
	Dec. 19, 1927	3.91	520		Jan. 8, 1946	1.91	363
	Feb. 9, 1928	3.36	360		May 28, 1946	2.01	416
	Feb. 15, 1928	3.87	520		June 3, 1946	2.13	494
	Feb. 24, 1928	3.72	460	1947	Mar. 15, 1947	2.13	506
	Apr. 28, 1928	3.70	460		Apr. 6, 1947	2.11	493
	July 6, 1928	3.42	373		May 6, 1947	2.14	513
	July 15, 1928	3.76	490		May 26, 1947	2.00	421
	July 28, 1928	3.95	550	1948	Nov. 9, 1947	1.95	391
	Aug. 6, 1928	3.76	460		Mar. 18, 1948	2.25	584
	Aug. 18, 1928	3.50	401		Apr. 15, 1948	2.03	440
	Aug. 28, 1928	4.37	675		May 14, 1948	2.08	472
1929	Feb. 7, 1929	c4.65	-	1949	Dec. 31, 1948	2.86	1,080
	Mar. 6, 1929	3.54	416		Jan. 6, 1949	2.32	638
	Apr. 17, 1929	3.60	430				
	Apr. 26, 1929	3.91	520	1950	Mar. 10, 1950	1.90	361
1930	Jan. 25, 1930	b3.58	-	1951	Nov. 26, 1950	2.70	923
	June 11, 1930	3.09	295		Dec. 5, 1950	2.23	603
1931	July 11, 1931	4.57	728		Dec. 8, 1950	2.62	859
1932	Mar. 29, 1932	3.46	387		Feb. 8, 1951	2.06	442
1933	Nov. 20, 1932	3.80	460		Feb. 22, 1951	1.96	380
	Apr. 13, 1933	3.72	460		Mar. 31, 1951	2.57	810
	Apr. 18, 1933	3.82	490		July 29, 1951	2.11	472
	Aug. 24, 1933	4.23	550	1952	Nov. 4, 1951	2.02	415
	Sept. 16, 1933	4.58	692		Nov. 8, 1951	2.22	547
1934	Mar. 5, 1934	3.45	376		Dec. 6, 1951	1.95	374
1935	July 10, 1935	5.55	1,290		Dec. 21, 1951	2.44	710
1936	Oct. 31, 1935	3.62	421		Jan. 23, 1952	1.96	379
	Nov. 29, 1935	3.38	362		Jan. 27, 1952	2.14	494
	Jan. 3, 1936	3.38	362		Feb. 5, 1952	2.07	448
	Jan. 25, 1936	b4.18	-		Mar. 12, 1952	2.74	954
	Mar. 12, 1936	5.88	1,430		Apr. 6, 1952	2.47	731
1937	May 15, 1937	4.12	530		Apr. 15, 1952	1.96	378
1938	Jan. 25, 1938	3.90	487		Apr. 28, 1952	1.99	397
	June 28, 1938	4.14	613		June 2, 1952	2.51	766
	July 24, 1938	2.62	924	1953	July 10, 1952	2.13	489
	Sept. 22, 1938	2.96	1,260		Sept. 2, 1952	2.30	608
1939	Dec. 6, 1938	2.29	642		Nov. 22, 1952	2.64	871
	Dec. 28, 1938	1.88	354		Dec. 6, 1952	2.02	418
	Feb. 16, 1939	1.89	360		Dec. 12, 1952	2.44	711
	Mar. 1, 1939	2.00	431		Jan. 25, 1953	2.55	797
	Apr. 7, 1939	2.08	486		Apr. 8, 1953	2.05	434
	Apr. 20, 1939	2.10	500		Apr. 17, 1953	2.00	406
1940	Mar. 15, 1940	2.25	611	1954	Mar. 4, 1954	1.84	310
	Mar. 31, 1940	1.95	399	1955	Nov. 22, 1954	1.96	370
	Apr. 9, 1940	2.01	438		Aug. 13, 1955	2.22	546
	Apr. 13, 1940	1.89	360		Aug. 19, 1955	3.97	2,170
	Apr. 22, 1940	2.06	472		Sept. 28, 1955	1.95	362
	May 21, 1940	2.22	588	1956	Oct. 15, 1955	2.86	1,060
	June 2, 1940	2.08	486		Oct. 31, 1955	2.11	472
	Sept. 1, 1940	1.96	404		Nov. 4, 1955	1.99	384
1941	Dec. 31, 1940	1.78	294		Nov. 17, 1955	2.00	392
1942	Aug. 11, 1942	2.16	493	1957	Apr. 9, 1957	2.20	554
	Aug. 19, 1942	2.09	459	1958	Dec. 21, 1957	2.61	851
	Sept. 28, 1942	2.17	551		Dec. 27, 1957	2.25	568
1943	Nov. 26, 1942	2.30	626		Jan. 22, 1958	2.07	442
	Dec. 3, 1942	2.02	435		Jan. 26, 1958	2.04	421
	Dec. 31, 1942	2.34	656		Feb. 28, 1958	2.07	442
	Feb. 25, 1943	1.90	361		Apr. 2, 1958	1.98	380
	May 27, 1943	2.00	422	1959	Mar. 6, 1959	2.09	456
1944	Mar. 13, 1944	1.91	360	1960	Sept. 13, 1960	2.63	b867
				1961	Feb. 26, 1961	2.28	b589

b Backwater from ice.

c Backwater from unknown cause.

4570. Musconetcong River near Bloomsbury, N.J.

Location.--Lat 40°40'20", long 75°03'40", just downstream from highway bridge 1½ miles upstream from Bloomsbury, Hunterdon County, and 9½ miles upstream from mouth.

Drainage area.--143 sq mi. Area of swamps, lakes, and ponds, 7.3 sq mi.

Gage.--Nonrecording at different datum prior to 1922; recording thereafter. Datum of gage is 274.83 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by discharge measurements below 1,800 cfs and extended above on basis of slope-area measurement at 4,430 cfs and by logarithmic plotting.

Bankfull stage.--4 ft.

Remarks.--Peak flows may be affected by regulation at Lake Hopatcong, usable capacity, 7,459,000,000 gal. Only annual peaks are shown prior to 1922. Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Oct. 10, 1903	8.00	6,960	1934	Mar. 5, 1934	5.24	2,050
1905	Jan. 7, 1905	5.65	2,440		Sept. 30, 1934	5.19	2,000
1906	Mar. 3, 1906	6.10	2,960	1935	Feb. 15, 1935	4.30	1,410
1922	Feb. 2, 1922	4.93	1,800		July 10, 1935	4.50	1,530
	Feb. 20, 1922	3.92	1,190	1936	Jan. 3, 1936	5.35	2,140
	Mar. 8, 1922	3.72	1,080		Jan. 9, 1936	3.84	1,150
	July 1, 1922	4.98	1,840		Mar. 11, 1936	5.67	2,460
	Sept. 4, 1922	4.02	1,250		Mar. 21, 1936	4.80	1,720
1923	Mar. 16, 1923	3.75	1,100		Apr. 6, 1936	4.48	1,520
1924	Jan. 25, 1924	4.01	1,240		June 18, 1936	4.19	1,340
	Apr. 7, 1924	4.34	1,430	1937	Feb. 22, 1937	3.61	1,020
	Sept. 30, 1924	3.72	1,080		Aug. 23, 1937	3.61	1,020
1925	Feb. 11, 1925	5.90	2,710	1938	Jan. 25, 1938	3.69	1,070
1926	Jan. 18, 1926	4.02	1,250		July 23, 1938	5.12	1,900
	Feb. 19, 1926	4.03	1,260		Sept. 21, 1938	5.14	1,910
	Feb. 25, 1926	5.43	2,200	1939	Dec. 6, 1938	4.25	1,350
	Mar. 7, 1926	4.58	1,580		Feb. 28, 1939	3.70	1,070
1927	Nov. 16, 1926	3.57	1,000		Apr. 6, 1939	3.64	1,040
	Jan. 20, 1927	3.70	1,070	1940	Mar. 4, 1940	3.91	1,180
	Feb. 26, 1927	4.38	1,460		Mar. 15, 1940	7.55	5,760
	Aug. 1, 1927	4.46	1,510		May 20, 1940	7.44	5,500
1928	Oct. 19, 1927	4.29	1,400		Sept. 1, 1940	3.64	1,040
	Nov. 4, 1927	4.35	1,440	1941	Feb. 7, 1941	4.75	1,680
	Nov. 18, 1927	3.88	1,170	1942	July 28, 1942	3.89	1,170
	Dec. 8, 1927	4.42	1,480		July 31, 1942	3.57	1,000
	Feb. 8, 1928	4.77	1,700		Aug. 9, 1942	4.17	1,330
	Feb. 15, 1928	5.13	1,950		Aug. 11, 1942	6.25	3,180
	Feb. 23, 1928	4.80	1,720		Aug. 17, 1942	4.92	1,780
	July 14, 1928	4.47	1,510		Sept. 28, 1942	3.68	1,060
	July 28, 1928	4.21	1,360	1943	Dec. 30, 1942	4.13	1,310
	Aug. 22, 1928	3.86	1,160		Feb. 11, 1943	4.44	1,490
	Aug. 27, 1928	3.97	1,220		Feb. 20, 1943	3.85	1,150
1929	Feb. 7, 1929	6.05	2,900		Feb. 21, 1943	4.03	1,250
	Feb. 26, 1929	4.48	1,520		May 26, 1943	3.74	1,090
	Apr. 26, 1929	3.74	1,090	1944	Jan. 3, 1944	3.83	1,140
	Sept. 7, 1929	5.12	1,950		Jan. 6, 1944	4.38	1,460
1930	Mar. 8, 1930	3.00	715		Feb. 15, 1944	3.78	1,110
1931	Nov. 18, 1930	5.45	2,240		Mar. 7, 1944	4.48	1,520
	Feb. 18, 1931	3.67	1,060		Mar. 13, 1944	5.29	2,090
	July 11, 1931	4.52	1,540	1945	Jan. 1, 1945	4.08	1,280
1932	Apr. 1, 1932	2.73	615		Feb. 27, 1945	3.98	1,220
1933	Nov. 10, 1932	3.99	1,230		July 19, 1945	5.50	2,290
	Nov. 19, 1932	4.25	1,380	1946	June 2, 1946	3.93	1,190
	Aug. 23, 1933	4.04	1,260	1947	Aug. 17, 1947	4.83	1,720
	Sept. 16, 1933	4.03	1,260				

Peak stages and discharges of Musconetcong River near Bloomsbury, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Jan. 25, 1948	a3.64	-	1953	Jan. 24, 1953	4.43	1,490
	May 13, 1948	4.29	1,390	1954	May 4, 1954	2.95	692
1949	Dec. 31, 1948	4.64	1,600	1955	Feb. 7, 1955	3.84	1,150
	Jan. 6, 1949	4.55	1,550		Aug. 13, 1955	4.21	1,360
1950	Mar. 23, 1950	3.36	887		Aug. 19, 1955	6.95	4,430
1951	Nov. 25, 1950	5.15	1,980	1956	Oct. 14, 1955	5.70	2,490
	Dec. 8, 1950	4.05	1,300		Feb. 6, 1956	3.94	1,200
	Jan. 15, 1950	4.62	1,640	1957	Apr. 6, 1957	3.40	895
	Feb. 1, 1951	4.01	1,280	1958	Dec. 21, 1957	3.76	1,110
	Feb. 7, 1951	5.32	2,080		Jan. 22, 1958	4.03	1,260
	Mar. 31, 1951	4.53	1,590		Feb. 28, 1958	5.45	2,240
	July 28, 1951	5.63	2,420		Apr. 6, 1958	3.63	1,040
	Nov. 7, 1951	6.13	3,000	1959	Mar. 6, 1959	3.82	1,140
1952	Dec. 21, 1951	4.83	1,770	1960	Apr. 5, 1960	3.97	1,220
	Jan. 26, 1952	3.54	1,020		Sept. 12, 1960	4.52	1,540
	Mar. 11, 1952	4.26	1,430		Sept. 20, 1960	3.67	1,060
	Apr. 5, 1952	4.79	1,740	1961	Feb. 26, 1961	4.00	1,240
	Apr. 15, 1952	3.54	1,020				
	Nov. 22, 1952	4.27	1,390				
1953	Dec. 11, 1952	3.96	1,220				

a Backwater from ice.

4575. Delaware River at Riegelsville, N.J.

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 prior to Oct. 1, 1931, do not include flow of Musconetcong River and those since do.

Drainage area.--6,238 sq mi since October 1931 (includes that of Musconetcong River). Area of lakes, ponds, and swamps, 143 sq mi. Prior to October 1931, 6,172 sq mi (does not include that of Musconetcong River).

Gage.--Nonrecording prior to Feb. 27, 1924; recording thereafter. Prior to Feb. 27, 1924, at site on bridge 20 ft downstream at same datum. Datum of gage is 125.12 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 160,000 cfs and extended above on basis of flood-routing studies and slope-area measurements of peaks on Mar. 19, 1936, and Aug. 19, 1955.

Bankfull stage.--26 ft.

Historical data.--Flood of 1841 believed largest for period 1692 to 1903, from information in Volume III, Final Report of the State Geologist, 1894, by Vermeule, and data for other sites. Major floods of the 1692 to 1894 period also occurred in 1786 or 1787, 1862, and 1869.

Remarks.--Some effect on flood peaks from regulation by Lake Hopatcong since 1828, Lake Wallenpaupack since 1925, Toronto Reservoir since 1926, Swinging Bridge Reservoir since 1930, Cliff Lake Reservoir since 1940, Wild Creek Reservoir since 1941, Neversink Reservoir since 1953, Pepacton Reservoir since 1954, and other smaller reservoirs. Only annual peaks are shown prior to 1924. Base for partial-duration series, 48,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1841	Jan. 8, 1841	-	a250,000	1911	Mar. 28, 1911	16.0	72,600
1904	Oct. 10, 1903	35.9	275,000	1912	Mar. 17, 1912	18.2	89,000
				1913	Mar. 28, 1913	25.0	144,000
1907	Jan. 1, 1907	14.4	61,000	1914	Mar. 29, 1914	23.4	130,000
1908	Dec. 11, 1907	22.5	120,000	1915	Feb. 26, 1915	17.6	86,100
1909	Feb. 21, 1909	19.9	102,000	1916	Apr. 3, 1916	19.3	97,700
1910	Mar. 1, 1910	20.8	109,000	1917	Mar. 28, 1917	18.1	88,400

a Estimate for Center Bridge, 22.5 miles downstream.

Peak stages and discharges of Delaware River at Riegelsville, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1918	Oct. 31, 1917	18.4	90,700	1943	Nov. 26, 1942	13.60	53,000
1919	Mar. 11, 1919	11.1	38,700		Dec. 31, 1942	22.88	122,800
1920	Mar. 14, 1920	22.1	120,000		Feb. 26, 1943	13.95	55,200
					Mar. 18, 1943	15.25	63,800
1921	Mar. 10, 1921	21.0	111,000				
1922	Nov. 29, 1921	20.4	106,000	1944	Nov. 10, 1943	17.58	80,300
1923	Mar. 24, 1923	17.8	86,100		Mar. 18, 1944	13.05	49,600
					Apr. 26, 1944	13.45	52,100
1924	Jan. 12, 1924	17.0	74,200				
	Apr. 8, 1924	23.1	122,000	1945	Mar. 4, 1945	15.29	64,100
					Mar. 19, 1945	16.43	72,000
1925	Oct. 1, 1924	24.2	132,000		July 20, 1945	18.10	84,200
	Feb. 12, 1925	23.82	128,000		July 30, 1945	14.33	57,700
1926	Apr. 10, 1926	13.05	47,100	1946	Mar. 10, 1946	15.04	59,400
					May 29, 1946	18.25	81,600
1927	Nov. 17, 1926	22.6	118,000		June 3, 1946	13.55	50,200
	Jan. 23, 1927	13.4	49,200				
	Mar. 15, 1927	16.12	67,400	1947	Mar. 15, 1947	15.45	62,100
	Mar. 22, 1927	13.5	48,600		Apr. 6, 1947	20.05	95,100
					May 26, 1947	14.07	53,300
1928	Oct. 20, 1927	21.3	107,000				
	Nov. 5, 1927	15.7	64,500	1948	Mar. 18, 1948	17.17	73,800
	Nov. 19, 1927	17.6	78,000		Mar. 23, 1948	23.28	121,300
	Dec. 9, 1927	18.66	86,200		Apr. 15, 1948	16.05	66,100
	Dec. 15, 1927	13.6	50,500				
	June 7, 1928	13.28	48,600	1949	Dec. 31, 1948	24.50	131,900
	July 1, 1928	18.84	87,000		Jan. 7, 1949	19.73	92,600
1929	Mar. 16, 1929	18.30	83,100	1950	Mar. 30, 1950	17.71	77,700
	Apr. 22, 1929	15.52	63,100		Apr. 6, 1950	18.04	80,100
1930	Mar. 9, 1930	12.4	43,300	1951	Nov. 27, 1950	22.50	114,700
					Dec. 5, 1950	21.93	110,000
1931	Mar. 30, 1931	14.4	57,000		Dec. 9, 1950	15.52	62,500
					Jan. 25, 1951	13.66	50,900
1932	Apr. 2, 1932	15.76	66,600		Feb. 8, 1951	13.58	50,400
					Feb. 23, 1951	13.28	48,600
1933	Oct. 8, 1932	16.4	70,800		Apr. 1, 1951	24.03	127,800
	Nov. 21, 1932	15.38	57,000				
	Apr. 19, 1933	15.5	64,500	1952	Nov. 8, 1951	16.53	69,400
	Aug. 25, 1933	25.0	141,000		Jan. 28, 1952	15.27	60,900
	Sept. 4, 1933	13.58	51,900		Mar. 12, 1952	17.19	73,900
	Sept. 17, 1933	15.69	65,900		Apr. 6, 1952	18.07	80,300
					Apr. 16, 1952	17.10	73,300
1934	Mar. 6, 1934	18.20	84,100		May 26, 1952	14.31	54,800
					July 11, 1952	20.40	97,800
1935	Dec. 2, 1934	18.7	87,900				
	Jan. 10, 1935	14.2	55,700	1953	Nov. 23, 1952	17.18	73,900
	July 10, 1935	23.2	125,000		Dec. 12, 1952	25.40	140,000
					Jan. 25, 1953	19.70	92,400
1936	Nov. 1, 1935	13.28	50,000		Mar. 27, 1953	13.33	48,900
	Nov. 15, 1935	13.02	48,200				
	Nov. 30, 1935	13.60	51,900	1954	Dec. 8, 1953	12.80	46,800
	Mar. 12, 1936	29.8	185,000				
	Mar. 19, 1936	32.45	237,000	1955	Aug. 19, 1955	38.85	340,000
	Apr. 7, 1936	13.93	53,800				
1937	Jan. 26, 1937	13.70	53,600	1956	Oct. 16, 1955	23.80	133,000
	Feb. 23, 1937	16.50	72,500		Oct. 31, 1955	13.85	53,200
	Apr. 7, 1937	13.70	53,600		Apr. 8, 1956	14.18	55,400
					May 1, 1956	13.17	49,000
1938	Oct. 25, 1937	14.56	56,200	1957	Apr. 7, 1957	17.42	76,900
	Jan. 26, 1938	17.7	81,200				
	July 23, 1938	15.52	65,600	1958	Dec. 22, 1957	21.28	109,000
	Aug. 12, 1938	15.55	66,200		Dec. 28, 1957	13.27	49,600
	Sept. 23, 1938	23.0	123,000		Apr. 7, 1958	19.29	91,600
1939	Dec. 7, 1938	20.05	98,800	1959	Jan. 23, 1959	19.60	94,400
	Feb. 17, 1939	14.00	55,600		Apr. 4, 1959	14.81	59,400
	Feb. 21, 1939	14.62	59,500				
1940	Mar. 15, 1940	16.33	71,100	1960	Nov. 29, 1959	16.70	71,900
	Apr. 1, 1940	26.47	154,000		Jan. 4, 1960	14.03	54,400
	Apr. 10, 1940	21.26	109,000		Feb. 12, 1960	16.91	73,400
	Apr. 22, 1940	17.58	80,500		Apr. 1, 1960	18.98	88,800
					Apr. 5, 1960	22.60	121,000
1941	Dec. 31, 1940	13.80	54,300		Sept. 13, 1960	15.95	66,600
	Apr. 7, 1941	13.92	55,000		Sept. 21, 1960	14.90	59,900
1942	Mar. 10, 1942	16.30	71,100	1961	Feb. 27, 1961	20.27	101,000
	May 24, 1942	27.50	164,000		Apr. 26, 1961	16.13	67,900
	Sept. 28, 1942	19.67	96,200				

4580. Delaware River at Milford, N.J.

Location.--Lat 40°34'00", long 75°05'55", on upstream side of bridge 120 ft from New Jersey end, at Milford, Hunterdon County, and 33.1 miles upstream from Calhoun Street Bridge in Trenton.

Drainage area.--Not determined.

Gage.--Nonrecording. Datum of gage is 99.83 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Not defined.

Remarks.--Some effect on flood peaks from regulation by Lake Hopatcong since 1828, Lake Wallenpaupack since 1925, Toronto Reservoir since 1926, Swinging Bridge Reservoir since 1930, Cliff Lake Reservoir since 1940, Wild Creek Reservoir since 1941, Neversink Reservoir since 1953, Pepacton Reservoir since 1954, and other smaller reservoirs. Data prior to 1936 obtained from J. W. Mangan, 1942, Elevations of Major Floods along Pennsylvania Rivers: Commonwealth of Pennsylvania, Department of Forests and Waters. Since 1936, gage heights are maximum of hourly observations by Delaware River Joint Toll Bridge Commission. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1841	Jan. 8, 1841	32.7	-	1941	Apr. 7, 1941	18.95	-
1857	May 1857	27.4	-	1942	May 24, 1942	29.36	-
1862	June 6, 1862	32.0	-	1943	Dec. 31, 1942	25.67	-
1865	March 1865	28.5	-	1944	Nov. 10, 1943	21.61	-
1879	Dec. 11, 1878	29.5	-	1945	July 20, 1945	22.04	-
1895	April 1895	29.3	-	1946	May 29, 1946	22.04	-
1902	Feb. 28, 1902	31.4	-	1947	Apr. 6, 1947	23.42	-
1904	Oct. 10, 1903	35.8	-	1948	Mar. 23, 1948	25.93	-
1936	Mar. 19, 1936	32.57	-	1949	Dec. 31, 1948	26.86	-
1937	Feb. 23, 1937	20.93	-	1950	Apr. 6, 1950	21.91	-
1938	Sept. 23, 1938	25.90	-	1951	Apr. 1, 1951	26.56	-
1939	Dec. 7, 1938	23.51	-	1952	July 11, 1952	23.71	-
1940	Apr. 1, 1940	28.30	-	1953	Dec. 12, 1952	27.45	-
				1954	Dec. 8, 1953	18.05	-
				1955	Aug. 20, 1955	40.25	-
				1956	Oct. 17, 1955	26.62	-

4585. Delaware River at Frenchtown, N.J.

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, and 29.7 miles upstream from Calhoun Street Bridge in Trenton.

Drainage area.--Not determined.

Gage.--Nonrecording. Datum of gage is 99.88 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Not defined.

Remarks.--Some effect on flood peaks from regulation by Lake Hopatcong, Lake Wallenpaupack, Toronto Reservoir, Swinging Bridge Reservoir, Cliff Lake Reservoir since 1940, Wild Creek Reservoir since 1941, Neversink Reservoir since 1953, Pepacton Reservoir since 1954, and several smaller reservoirs. Gage heights listed are maximum of hourly observations by Delaware River Joint Toll Bridge Commission. Only annual peaks are shown.

Peak stages and discharges of Delaware River at Frenchtown, N.J.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Oct. 10, 1903	24.4	-	1946	May 29, 1946	12.34	-
1936	Mar. 19, 1936	21.93	-	1947	Apr. 6, 1947	13.53	-
1937	Feb. 23, 1937	11.35	-	1948	Mar. 23, 1948	15.67	-
1938	Sept. 23, 1938	15.69	-	1949	Dec. 31, 1948	16.68	-
1939	Dec. 7, 1938	13.66	-	1950	Apr. 6, 1950	12.23	-
1940	Apr. 1, 1940	17.91	-	1951	Apr. 1, 1951	16.25	-
1941	Apr. 7, 1941	9.63	-	1952	July 11, 1952	13.84	-
1942	May 24, 1942	18.60	-	1953	Dec. 12, 1952	17.24	-
1943	Dec. 31, 1942	15.45	-	1954	Dec. 8, 1953	8.84	-
1944	Nov. 10, 1943	11.97	-	1955	Aug. 20, 1955	27.79	-
1945	July 20, 1945	12.34	-	1956	Oct. 17, 1955	16.37	-

4590. Delaware River at Point Pleasant, Pa.

Location.--Lat 40°25'25", long 75°03'50", on bridge at Point Pleasant, Bucks County, and 22.6 miles upstream from Calhoun Street Bridge in Trenton, N.J.

Drainage area.--Not determined.

Gage.--Nonrecording. Datum of gage is 0.48 ft below mean sea level, datum of 1929.

Stage-discharge relation.--Not defined.

Remarks.--Some effect on flood peaks from regulation by Lake Hopatcong, Lake Wallenpaupack since 1925, Toronto Reservoir since 1926, Swinging Bridge Reservoir since 1930, Cliff Lake Reservoir since 1940, Wild Creek Reservoir since 1941, Neversink Reservoir since 1953, Pepacton Reservoir since 1954, and other smaller reservoirs. Gage heights since 1936 are maximum of hourly observations by Delaware River Joint Toll Bridge Commission. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Oct. 11, 1903	102.2	-	1946	May 29, 1946	86.81	-
1936	Mar. 19, 1936	98.64	-	1947	Apr. 6, 1947	87.91	-
1937	Feb. 23, 1937	85.52	-	1948	Mar. 23, 1948	90.75	-
1938	Sept. 23, 1938	91.1	-	1949	Dec. 31, 1948	91.80	-
1939	Dec. 7, 1938	88.45	-	1950	Apr. 6, 1950	85.91	-
1940	Apr. 1, 1940	94.04	-	1951	Apr. 1, 1951	91.93	-
1941	Apr. 7, 1941	83.44	-	1952	July 11, 1952	88.75	-
1942	May 24, 1942	95.10	-	1953	Dec. 12, 1952	94.37	-
1943	Dec. 31, 1942	91.05	-	1954	Dec. 8, 1953	82.20	-
1944	Nov. 10, 1943	86.59	-	1955	Aug. 20, 1955	105.32	-
1945	July 20, 1945	86.90	-				

4595. Tohickon Creek near Pipersville, Pa.

Location.--Lat 40°26'00", long 75°07'00", on right bank at highway bridge, 1.5 miles northeast of Pipersville, Bucks County, and 4.5 miles upstream from mouth.

Drainage area.--97.4 sq mi.

Gage.--Recording. Datum of gage is 258.96 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 3,600 cfs and extended on basis of slope-area measurement.

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 3,100 cfs.

Peak stages and discharges of Tohickon Creek near Pipersville, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Oct. 31, 1935	7.43	6,210	1948	June 20, 1948	7.47	6,400
	Nov. 17, 1935	6.04	3,890	1949	Dec. 30, 1948	7.43	6,210
	Jan. 3, 1936	7.20	5,830		Jan. 6, 1949	6.54	4,610
	Mar. 11, 1936	7.22	5,830	1950	Dec. 27, 1949	5.82	3,510
	Mar. 18, 1936	6.59	4,780		Mar. 23, 1950	5.84	3,580
	Apr. 6, 1936	6.69	4,950	1951	Nov. 25, 1950	9.67	11,500
1937	June 13, 1936	7.60	6,600		Dec. 8, 1950	5.92	3,660
	Dec. 20, 1936	6.00	3,820		Jan. 15, 1951	6.30	4,290
1938	Feb. 22, 1937	5.65	3,290		Feb. 7, 1951	5.65	3,290
	Nov. 13, 1937	6.70	4,950		Mar. 30, 1951	6.19	4,130
	July 23, 1938	6.87	5,290	1952	Nov. 7, 1951	7.28	6,020
1939	Sept. 21, 1938	9.11	10,000		Dec. 21, 1951	7.74	6,800
	Dec. 6, 1938	7.12	5,650		Mar. 11, 1952	6.71	4,950
	Jan. 31, 1939	6.90	5,290		Apr. 5, 1952	7.12	5,650
	Feb. 3, 1939	6.75	5,120		Apr. 15, 1952	6.97	5,470
	Feb. 28, 1939	6.45	4,530		Apr. 28, 1952	6.63	4,780
	Apr. 6, 1939	6.39	4,450		May 26, 1952	5.67	3,290
1940	July 30, 1939	7.60	6,600		Sept. 1, 1952	5.70	3,360
	Mar. 4, 1940	6.78	5,120	1953	Nov. 22, 1952	7.45	6,210
	Mar. 15, 1940	7.64	6,600		Dec. 5, 1952	5.57	3,150
	Apr. 8, 1940	6.75	5,120		Dec. 11, 1952	7.19	5,830
	Apr. 20, 1940	5.96	3,740		Jan. 24, 1953	6.98	5,470
1941	May 20, 1940	7.48	6,400		Mar. 15, 1953	6.18	4,130
	Nov. 15, 1940	5.51	3,080	1954	Dec. 7, 1953	5.65	3,290
	Dec. 16, 1940	5.65	3,290		Dec. 14, 1953	6.05	3,890
	Dec. 28, 1940	5.42	2,940	1955	Nov. 21, 1954	5.91	3,660
1942	Feb. 7, 1941	5.50	3,080		Feb. 7, 1955	6.31	4,290
	July 27, 1942	6.25	4,210		Mar. 22, 1955	5.68	3,360
	July 31, 1942	6.29	4,290		Aug. 13, 1955	8.61	8,780
	Aug. 9, 1942	10.48	13,700		Aug. 18, 1955	11.26	16,000
1943	Aug. 13, 1942	6.60	4,780	1956	Oct. 15, 1955	8.90	9,500
	Dec. 30, 1942	7.06	5,650		Feb. 18, 1956	5.72	3,360
	May 20, 1943	7.34	6,020	1957	Mar. 14, 1956	5.93	3,740
1944	May 26, 1943	6.73	4,950		Dec. 14, 1956	6.16	4,050
	Nov. 9, 1943	5.92	3,660	1958	Apr. 5, 1957	6.57	4,780
	Jan. 4, 1944	6.84	5,120		Dec. 21, 1957	7.93	7,210
	Mar. 13, 1944	6.41	4,450	1959	Feb. 28, 1958	8.22	7,850
	Apr. 24, 1944	7.49	6,400		Apr. 6, 1958	7.28	6,030
1945	Sept. 14, 1944	5.65	3,290	1960	Nov. 28, 1958	5.82	3,510
	Jan. 1, 1945	7.44	6,210		Dec. 12, 1959	6.53	4,560
	Feb. 27, 1945	6.10	3,970		Jan. 3, 1960	7.06	5,580
1946	July 19, 1945	9.52	11,000		Apr. 4, 1960	5.95	3,560
	Nov. 29, 1945	5.50	3,080		Aug. 31, 1960	7.42	6,170
	May 18, 1946	6.15	4,050		Sept. 12, 1960	11.07	15,500
1947	June 2, 1946	9.55	11,200		Sept. 20, 1960	6.53	4,560
	July 23, 1946	9.35	10,800	1961	Feb. 25, 1961	6.42	4,380
1948	Mar. 14, 1947	5.27	2,740		Apr. 13, 1961	5.77	3,270
1948	May 13, 1948	6.87	5,290				

4600. Tohickon Creek at Point Pleasant, Pa.

Location.--Lat 40°25'25", long 75°04'00", at Point Pleasant, Bucks County, about one-eighth of a mile upstream from mouth.

Drainage area.--107 sq mi.

Gage.--Recording. Altitude of gage is 70 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Records furnished by Department of Public Works, City of Philadelphia. Only annual maximum daily discharges are shown except as noted. Gage heights unknown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1884	June 26, 1884		4,380	1899	Nov. 19, 1898		3,450
1885	Apr. 5, 1885		3,660				
1886	Feb. 13, 1886		5,400	1901	Apr. 25, 1901		3,390
1887	Jan. 24, 1887		2,540	1902	Mar. 1, 1902		5,960
1888	Sept. 18, 1888		5,550	1903	Dec. 22, 1902		4,260
1889	July 31, 1889		4,710	1904	Oct. 9, 1903		4,970
1890	Feb. 8, 1890		4,230	1905	Jan. 7, 1905		4,170
				1906	Apr. 10, 1906		3,200
1891	Aug. 24, 1891		all, 300	1907	Sept. 29, 1907		4,120
1892	Jan. 14, 1892		3,160	1908	Feb. 15, 1908		2,770
1893	May 4, 1893		2,990	1909	Feb. 24, 1909		3,050
1894	May 21, 1894		all, 500	1910	Apr. 25, 1910		3,550
1895	Apr. 9, 1895		3,860				
				1911	Aug. 31, 1911		2,520
1896	Feb. 6, 1896		6,520	1912	Mar. 15, 1912		3,800
1897	May 13, 1897		3,680	1913	Dec. 31, 1912		2,760
1898	Feb. 20, 1898		4,160				

a Momentary maximum discharge.

4610. Delaware River at Lumberville, Pa.

Location.--Lat 40°24'25", long 75°02'20", on bridge at Lumberville, Bucks County, 20.9 miles upstream from Calhoun Street Bridge in Trenton, N.J.

Drainage area.--6,598 sq mi.

Gage.--Nonrecording. Datum of gage is 0.15 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Not defined.

Remarks.--Some effect on peaks from regulation by Lake Hopatcong since 1828, Lake Wallenpaupack since 1925, Toronto Reservoir since 1926, Swinging Bridge Reservoir since 1930, Cliff Lake Reservoir since 1940, Wild Creek Reservoir since 1941, and other smaller reservoirs. Gage heights listed prior to 1937 obtained from J.W. Mangan, 1942, Elevations of Major Floods along Pennsylvania Rivers, Commonwealth of Pennsylvania, Department of Forests and Waters, and were determined to mean sea level at Tinsmon's Lumber Mill, 0.2 mile upstream from gage. Gage heights since 1937 are maximum of hourly observations by Delaware River Toll Bridge Commission. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1862	June 1862	92.0	-	1936	Mar. 19, 1936	91.0	-
				1937	Feb. 23, 1937	78.10	-
1865	March 1865	88.1	-	1938	Sept. 23, 1938	83.05	-
				1939	Dec. 7, 1938	80.85	-
1870	October 1869	90.4	-	1940	Apr. 1, 1940	86.02	-
1879	December 1878	89.5	-	1941	Apr. 7, 1941	75.95	-
				1942	May 24, 1942	87.12	-
1895	April 1895	89.5	-	1943	Dec. 31, 1942	83.10	-
				1944	Nov. 10, 1943	78.85	-
1902	March 1902	92.0	-	1945	Mar. 19, 1945	77.79	-
1904	Oct. 11, 1903	96.1	-				

4615. Delaware River at Stockton, N.J.

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, and 17.5 miles upstream from Calhoun Street Bridge in Trenton.

Drainage area.--Not determined.

Gage.--Nonrecording. Datum of gage is 0.04 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Not defined.

Historical data.--J. W. Mangan, 1942, in Elevations of Major Floods along Pennsylvania Rivers, Commonwealth of Pennsylvania, Department of Forests and Waters, lists the following mean sea level elevations for peaks at Smiths Mill, 0.5 mile upstream from gage: Dec. 11, 1878, 77.7 ft; April 1895, 77.7 ft; Dec. 16, 1901, 79.2 ft; March 1902, 80.1 ft; Oct. 10, 1903, 84.2 ft; and Mar. 18-19, 1936, 79.7 ft.

Remarks.--Some effect on flood peaks from regulation by Lake Hopatcong since 1828, Lake Wallenpaupack since 1925, Toronto Reservoir since 1926, Swinging Bridge Reservoir since 1930, Cliff Lake Reservoir since 1940, Wild Creek Reservoir since 1941, Neversink Reservoir since 1953, Pepacton Reservoir since 1954, and other smaller reservoirs. Gage heights since 1937 are maximum of hourly observations by Delaware River Joint Toll Bridge Commission. Only annual peaks are shown.

Peak stages and discharges of Delaware River at Stockton, N.J.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1841	Jan. 8, 1841	77.76	-	1943	Dec. 31, 1942	71.15	-
				1944	Nov. 10, 1943	66.90	-
1862	June 6, 1862	75.8	-	1945	July 21, 1945	66.88	-
1902	Feb. 28, 1902	76.79	-	1946	May 29, 1946	67.32	-
				1947	Apr. 6, 1947	68.80	-
1904	Oct. 11, 1903	81.7	-	1948	Mar. 23, 1948	71.30	-
				1949	Jan. 1, 1949	72.50	-
1937	Feb. 23, 1937	66.20	-	1950	Apr. 6, 1950	67.05	-
1938	Sept. 23, 1938	70.4	-				
1939	Dec. 7, 1938	68.02	-	1951	Apr. 1, 1951	72.05	-
1940	Apr. 1, 1940	72.96	-	1952	July 11, 1952	68.90	-
				1953	Dec. 12, 1952	73.24	-
1941	Apr. 7, 1941	63.18	-	1954	Dec. 8, 1953	62.85	-
1942	May 24, 1942	74.80	-	1955	Aug. 20, 1955	84.40	-

4620. Delaware River at Lambertville, N.J.

Location.--Lat 40°21'50", long 74°56'55", at bridge in Lambertville, Hunterdon County.

Drainage area.--6,680 sq mi. Area of lakes, ponds, and swamps, 144 sq mi.

Gage.--Nonrecording. Datum of gage from 1898 to 1908, 46.36 ft above mean sea level, datum of 1929; datum of gage since 1936, 0.11 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined for 1898-1907 by current-meter measurements below 120,000 cfs and extended above on basis of peak discharges in 1903, 1936, and 1955, at Riegelsville.

Remarks.--Gage heights prior to 1898 obtained from U.S Geological Survey WSP 799, and are referenced to mean sea level. Gage heights since 1936 are maximum of hourly observations by Delaware River Joint Toll Bridge Commission. Some effect on flood peaks from regulation by Lake Hopatcong since 1828, Lake Wallenpaupack since 1925, Toronto Reservoir since 1926, Swinging Bridge Reservoir since 1930, Cliff Lake Reservoir since 1940, Wild Creek Reservoir since 1941, Neversink Reservoir since 1953, Pepacton Reservoir since 1944, and other smaller reservoirs. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1787	Oct. 6, 1786	62.9	-	1937	Feb. 23, 1937	56.34	-
1801	-	60.9	-	1938	Sept. 23, 1938	60.30	-
				1939	Dec. 7, 1938	58.53	-
1814	Apr. 1, 1814	60.9	-	1941	Apr. 7, 1941	55.19	-
				1942	May 24, 1942	63.23	-
1836	Apr. 9, 1836	61.4	-	1943	Jan. 1, 1943	60.40	-
				1944	Nov. 10, 1943	57.22	-
1839	April 1839	61.4	-	1945	July 20, 1945	57.77	-
1841	Jan. 8, 1841	66.9	-	1946	May 29, 1946	57.76	-
				1947	Apr. 6, 1947	58.80	-
1844	Oct. 18, 1843	60.9	-	1948	Mar. 23, 1948	60.48	-
				1949	Jan. 1, 1949	61.39	-
1846	Mar. 15, 1846	64.5	-	1950	Apr. 5, 1950	57.90	-
1898	Dec. 16, 1897	10.4	72,800	1951	Apr. 1, 1951	61.14	-
1899	Mar. 7, 1899	10.1	69,200	1952	July 11, 1952	58.65	-
1900	Mar. 2, 1900	13.0	104,000	1953	Dec. 12, 1952	62.08	-
				1954	Dec. 8, 1953	(a)	-
1901	Mar. 22, 1901	10.8	77,600	1955	Aug. 20, 1955	73.27	-
1902	Mar. 2, 1902	20.6	214,000				
1903	Mar. 1, 1903	15.2	134,000	1956	Oct. 16, 1955	61.04	-
1904	Oct. 11, 1903	24.6	274,000	1957	Apr. 7, 1957	57.16	-
1905	Mar. 28, 1905	12.1	88,500	1958	Dec. 22, 1957	59.37	-
				1959	Jan. 23, 1959	57.90	-
1906	Apr. 16, 1906	13.7	112,000	1960	Apr. 5, 1960	60.42	-
1907	Jan. 2, 1907	10.2	60,000				
1936	Mar. 19, 1936	67.00	-	1961	Feb. 27, 1961	58.85	-

a Unknown.

4625. Delaware River at Washington Crossing, N.J.

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, 7.4 miles upstream from Calhoun Street Bridge in Trenton.

Drainage area.--Not determined.

Gage.--Nonrecording. Datum of gage is 0.14 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Not defined.

Remarks.--Some effect on flood peaks from regulation by Lake Hopatcong, Lake Wallenpaupack since 1925, Toronto Reservoir since 1926, Swinging Bridge Reservoir since 1930, Cliff Lake Reservoir since 1940, Wild Creek Reservoir since 1941, Neversink Reservoir since 1953, Pepacton Reservoir since 1954, and other smaller reservoirs. Gage heights since 1936 are maximum of hourly readings by Delaware River Joint Toll Bridge Commission. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Oct. 11, 1903	51.9	-	1949	Dec. 31, 1948	40.97	-
1936	Mar. 19, 1936	47.30	-	1950	Apr. 6, 1950	36.25	-
1937	Feb. 23, 1937	35.35	-	1951	Apr. 1, 1951	40.85	-
1938	Sept. 23, 1938	40.2	-	1952	July 11, 1952	37.80	-
1939	Dec. 7, 1938	37.95	-	1953	Dec. 12, 1952	41.85	-
1940	Apr. 1, 1940	42.52	-	1954	Dec. 8, 1953	32.48	-
				1955	Aug. 20, 1955	53.77	-
1941	Apr. 7, 1941	33.53	-				
1942	May 24, 1942	43.36	-	1956	Oct. 17, 1955	40.89	-
1943	Jan. 1, 1943	40.60	-	1957	Apr. 7, 1957	35.95	-
1944	Nov. 10, 1943	36.65	-	1958	Dec. 22, 1957	38.80	-
1945	July 20, 1945	36.56	-	1959	Jan. 23, 1959	37.30	-
				1960	Apr. 5, 1960	40.04	-
1946	May 29, 1946	36.40	-				
1947	Apr. 7, 1947	37.70	-	1961	Feb. 27, 1961	38.15	-
1948	Mar. 23, 1948	39.29	-				

4630. Delaware River at Yardley, Pa.

Location.--Lat 40°14'45", long 74°50'10", on upstream side of bridge at Yardley, Bucks County, and 3.5 miles upstream from Calhoun Street Bridge, Trenton, N.J.

Drainage area.--Not determined.

Gage.--Nonrecording. Datum of gage is at mean sea level, datum of 1929.

Stage-discharge relation.--Not defined.

Remarks.--Some effect on flood peaks from regulation by Lake Hopatcong, Lake Wallenpaupack since 1925, Toronto Reservoir since 1926, Swinging Bridge Reservoir since 1930, Cliff Lake Reservoir since 1940, Wild Creek Reservoir since 1941, Neversink Reservoir since 1953, Pepacton Reservoir since 1954, and other smaller reservoirs. Gage heights since 1936 are maximum of hourly readings by Delaware River Joint Toll Bridge Commission. Only annual peaks are shown.

Peak stages and discharges of Delaware River at Yardley, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Oct. 11, 1903	39.1	-	1949	Jan. 1, 1949	30.55	-
				1950	Apr. 6, 1950	26.85	-
1936	Mar. 19, 1936	35.90	-				
1937	Feb. 23, 1937	25.54	-	1951	Apr. 1, 1951	28.35	-
1938	Sept. 23, 1938	29.8	-	1952	July 11, 1952	25.75	-
1939	Dec. 7, 1938	27.87	-	1953	Dec. 12, 1952	-	-
1940	Apr. 1, 1940	31.70	-	1954	Dec. 8, 1953	22.70	-
				1955	Aug. 20, 1955	41.49	-
1941	Apr. 7, 1941	23.94	-				
1942	May 24, 1942	32.45	-	1956	Oct. 17, 1955	-	-
1943	Jan. 1, 1943	29.65	-	1957	Apr. 7, 1957	26.08	-
1944	Nov. 10, 1943	26.19	-	1958	Dec. 22, 1957	28.75	-
1945	July 20, 1945	25.86	-	1959	Jan. 23, 1959	28.00	-
				1960	Apr. 5, 1960	29.34	-
1946	May 29, 1946	26.34	-				
1947	Apr. 7, 1947	27.45	-	1961	Feb. 27, 1961	29.20	-
1948	Mar. 23, 1948	29.65	-				

4635. Delaware River at Trenton, N.J.

Location.--Lat 40°13'18", long 74°46'38", on left bank 450 ft upstream from Calhoun Street Bridge at Trenton, Mercer County, and 0.5 mile upstream from Assunpink Creek.

Drainage area.--6,780 sq mi. Area of lakes, ponds, and swamps, 144 sq mi.

Gage.--Nonrecording prior to Oct. 2, 1928; recording thereafter. Prior to Dec. 29, 1912, on upstream side near right bank end of Calhoun Street Bridge, and Dec. 29, 1912, to Oct. 2, 1928, on downstream side near left bank end of bridge at same datum. Datum of gage is 7.77 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 230,000 cfs and extended above by logarithmic plotting.

Historical data.--The flood of Feb. 27, 1692 (reported 12 ft above usual high-water mark) may have been as great or greater than that of August 1955. The flood of Jan. 8, 1841, was reported at that time to be greatest since 1692. The ice jam flood of Feb. 8, 1857, may have had a stage at Trenton equal to or higher than the ice jam flood of Mar. 8, 1904 (highest known stage at Trenton).

Remarks.--Some effect on flood peaks from regulation by Lake Hopatcong since 1828, Lake Wallenpaupack since 1925, Toronto Reservoir since 1926, Swinging Bridge Reservoir since 1930, Cliff Lake Reservoir since 1940, Wild Creek Reservoir since 1941, Neversink Reservoir since 1953, Pepacton Reservoir since 1954, and other smaller reservoirs. Peak stages 1904-28 obtained from graph of once-daily gage readings by U.S. Weather Bureau. Only annual peak data shown prior to 1929. Base for partial-duration series, 50,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1902	March 1902	15.8	-	1914	Mar. 29, 1914	12.4	143,000
				1915	Feb. 26, 1915	(b)	85,000
1904	Oct. 11, 1903	20.7	295,000				
	Mar. 8, 1904	a22.8	-	1916	Apr. 3, 1916	9.5	93,800
1905	Dec. 31, 1904,	10.8	-	1917	Mar. 29, 1917	9.2	90,600
	Jan. 8, 1905			1918	Oct. 31, 1917	9.1	89,100
				1919	July 22, 1919	7.8	69,200
1906	Apr. 16, 1906	9.6	-	1920	Mar. 14, 1920	11.2	121,000
1907	Jan. 26, 1907	a9.0	-				
1908	Dec. 12, 1907	10.6	-	1921	Mar. 11, 1921	10.4	108,000
1909	Feb. 21, 1909	9.9	-	1922	Nov. 30, 1921	10.2	105,000
1910	Apr. 23, 1910	10.7	-	1923	Mar. 24, 1923	8.2	74,800
				1924	Apr. 8, 1924	11.8	132,000
1911	Jan. 5, 1911	7.8	-	1925	Feb. 13, 1925	13.0	154,000
1912	Mar. 16, 1912	10.9	-				
1913	Mar. 28, 1913	13.3	160,000	1926	Apr. 10, 1926	6.20	48,100

a Backwater from ice.

b Unknown, probably exceeded the 7.8 ft gage height of Jan. 13, 1915.

Peak stages and discharges of Delaware River at Trenton, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Nov. 18, 1926	11.30	123,000	1945	Jan. 17, 1945	a8.72	-
1928	Oct. 20, 1927	10.91	116,000		Mar. 5, 1945	7.18	60,600
					Mar. 19, 1945	7.90	70,000
1929	Mar. 16, 1929	8.9	84,800		July 21, 1945	8.75	82,200
	Apr. 14, 1929	6.58	50,600		July 30, 1945	6.86	56,600
	Apr. 23, 1929	7.58	66,400				
				1946	Dec. 20, 1945	a8.67	-
1930	Jan. 26, 1930	a8.08	-		Dec. 26, 1945	all.01	-
	Mar. 10, 1930	6.08	47,400		Mar. 10, 1946	7.19	61,400
					May 29, 1946	8.74	82,300
1931	Mar. 30, 1931	6.6	53,200		June 2, 1946	7.84	69,900
1932	Apr. 2, 1932	7.63	66,100	1947	Feb. 10, 1947	a7.90	-
					Mar. 16, 1947	7.37	63,700
1933	Oct. 8, 1932	8.00	71,400		Apr. 7, 1947	9.60	98,500
	Nov. 21, 1932	7.05	58,400		May 26, 1947	6.80	58,900
	Apr. 19, 1933	7.39	63,500		July 9, 1947	6.35	53,000
	Feb. 13, 1933	a7.90	-				
	Aug. 25, 1933	12.66	147,000	1948	Mar. 18, 1948	8.18	77,700
	Sept. 5, 1933	6.43	50,800		Mar. 23, 1948	11.29	125,600
	Sept. 17, 1933	7.64	66,100		Apr. 16, 1948	7.69	70,900
1934	Jan. 4, 1934	all.83	-	1949	Jan. 1, 1949	12.06	139,100
	Mar. 5, 1934	a14.2	-		Jan. 7, 1949	9.49	96,800
	Mar. 6, 1934	8.65	80,000				
				1950	Mar. 30, 1950	8.45	77,600
1935	Dec. 3, 1934	9.09	87,500		Apr. 6, 1950	8.60	79,800
	Jan. 11, 1935	6.85	55,800				
	Jan. 25, 1935	a7.12	-	1951	Nov. 27, 1950	11.07	118,200
	July 10, 1935	11.74	129,000		Dec. 6, 1950	10.77	113,300
					Dec. 9, 1950	7.60	66,500
1936	Nov. 1, 1935	6.48	52,000		Jan. 25, 1951	6.48	51,900
	Nov. 30, 1935	6.66	54,500		Feb. 8, 1951	6.65	54,000
	Dec. 26, 1935	a6.57	-		Feb. 23, 1951	6.40	50,900
	Jan. 3, 1936	a16.12	-		Apr. 1, 1951	11.95	133,200
	Jan. 22, 1936	a10.20	-				
	Mar. 13, 1936	15.34	199,000	1952	Nov. 8, 1951	8.00	71,800
	Mar. 19, 1936	16.66	227,000		Dec. 21, 1951	a9.48	-
	Apr. 8, 1936	6.80	55,800		Jan. 28, 1952	7.66	67,100
					Mar. 13, 1952	8.32	76,300
1937	Jan. 27, 1937	6.78	55,800		Apr. 7, 1952	8.74	82,200
	Feb. 23, 1937	8.16	74,200		Apr. 16, 1952	8.30	76,000
	Apr. 8, 1937	6.73	54,500		Apr. 28, 1952	6.52	52,300
					May 26, 1952	7.02	58,800
1938	Oct. 25, 1937	7.00	58,400		July 11, 1952	9.64	95,400
	Jan. 27, 1938	8.60	80,000				
	July 23, 1938	8.73	81,500	1953	Nov. 23, 1952	8.52	79,100
	Aug. 12, 1938	7.38	63,500		Dec. 12, 1952	12.30	139,000
	Sept. 23, 1938	11.45	125,000		Jan. 26, 1953	9.37	91,400
1939	Dec. 7, 1938	9.86	99,500	1954	Dec. 8, 1953	6.02	46,300
	Jan. 30, 1939	a7.40	-				
	Feb. 17, 1939	6.73	54,500	1955	Feb. 7, 1955	a7.27	-
	Feb. 22, 1939	7.20	60,900		Aug. 20, 1955	20.83	329,000
1940	Jan. 16, 1940	a8.12	-	1956	Oct. 17, 1955	11.93	133,000
	Mar. 15, 1940	8.25	76,500		Nov. 1, 1955	6.62	53,600
	Apr. 1, 1940	12.85	151,600		Apr. 8, 1956	7.11	59,900
	Apr. 10, 1940	10.25	106,700				
	Apr. 22, 1940	7.50	66,400	1957	Apr. 7, 1957	8.41	77,500
1941	Dec. 31, 1940	6.57	54,400	1958	Dec. 22, 1957	10.47	108,000
	Apr. 7, 1941	6.75	56,800		Feb. 28, 1958	6.74	55,100
					Apr. 7, 1958	9.50	93,300
1942	Feb. 4, 1942	a6.53	-				
	Mar. 10, 1942	7.66	68,500	1959	Jan. 23, 1959	8.93	84,800
	May 24, 1942	13.35	161,200		Apr. 4, 1959	7.15	60,400
	Aug. 9, 1942	6.19	50,000				
	Sept. 29, 1942	9.28	91,800	1960	Nov. 29, 1959	7.89	70,300
					Jan. 5, 1960	6.65	54,000
1943	Nov. 26, 1942	6.43	52,800		Feb. 13, 1960	8.10	73,200
	Jan. 1, 1943	11.00	118,900		Apr. 1, 1960	9.11	87,400
	Feb. 16, 1943	a6.82	-		Apr. 5, 1960	11.41	124,000
	Feb. 20, 1943	a7.88	-		Sept. 13, 1960	7.82	69,300
	Feb. 26, 1943	6.64	55,300		Sept. 21, 1960	7.15	60,400
	Mar. 18, 1943	7.31	63,900				
1944	Nov. 10, 1943	8.47	78,000	1961	Feb. 27, 1961	9.72	96,600
	Apr. 26, 1944	6.66	54,000		Apr. 26, 1961	7.61	66,400
1945	Jan. 12, 1945	a8.24	-				

a Backwater from ice.

4640. Assumpink Creek at Trenton, N.J.

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. Area of swamps, lakes, and bogs, 2.3 sq mi.

Gage.--Recording. Datum of gage is 24.76 ft above mean sea level (New Jersey Geological Survey bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 1,800 cfs and extended above by logarithmic plotting.

Bankfull stage.--8 ft.

Remarks.--Base for partial-duration series, 800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1924	Jan. 17, 1924	4.82	950	1940	Apr. 20, 1940	5.19	877
	Mar. 12, 1924	4.86	995		May 31, 1940	5.40	966
	Apr. 7, 1924	7.85	2,400		Sept. 3, 1940	6.00	1,230
	Apr. 19, 1924	4.85	950	1941	Feb. 8, 1941	6.50	1,270
	May 12, 1924	4.73	905		July 4, 1941	6.03	1,090
	July 9, 1924	5.55	1,320				
	Aug. 12, 1924	5.07	1,080	1942	Mar. 22, 1942	4.85	692
1925	Feb. 11, 1925	6.89	1,900				
1926	Feb. 25, 1926	5.45	982	1943	Dec. 30, 1942	5.84	1,020
	Aug. 13, 1926	4.97	815		Mar. 7, 1943	5.87	1,030
1927	Dec. 28, 1926	5.20	840	1944	Jan. 5, 1944	5.52	909
	Aug. 9, 1927	4.85	825		Jan. 6, 1944	7.21	1,570
1928	Oct. 19, 1927	6.90	1,560		Mar. 13, 1944	6.98	1,470
	Dec. 5, 1927	5.10	850		Apr. 25, 1944	6.10	1,110
	Dec. 8, 1927	5.55	1,040		Apr. 27, 1944	5.37	859
	Feb. 8, 1928	5.03	815		Sept. 15, 1944	7.85	1,790
	Apr. 24, 1928	5.30	930	1945	Feb. 23, 1945	5.34	815
1929	Feb. 27, 1929	5.33	930		July 7, 1945	5.70	941
1930	Feb. 13, 1930	5.18	815	1946	Nov. 29, 1945	5.69	937
1931	July 11, 1931	4.56	660		Dec. 31, 1945	5.31	804
					June 2, 1946	7.91	1,820
1932	Mar. 28, 1932	-	1,750		July 24-25, 1946	5.44	849
1933	Nov. 10, 1932	7.30	1,890	1947	May 4, 1947	5.20	767
	Nov. 19, 1932	6.49	1,500	1948	Nov. 12, 1947	5.65	923
	Mar. 21, 1933	5.38	1,000		Apr. 1, 1948	5.89	1,010
	Apr. 12, 1933	5.48	1,050		June 13, 1948	5.46	856
	Aug. 24, 1933	6.14	1,310	1949	Dec. 30, 1948	8.71	2,200
1934	Mar. 5, 1934	5.41	1,000		June 28, 1949	5.32	808
	Sept. 18, 1934	6.80	1,640		July 17, 1949	5.46	856
1935	Sept. 6, 1935	5.41	1,000	1950	July 10, 1950	5.52	803
1936	Jan. 3, 1936	7.30	1,890	1951	Aug. 3, 1950	8.12	1,850
	Jan. 9, 1936	6.60	1,550		Nov. 26, 1950	6.82	1,290
	Mar. 4, 1936	4.93	820	1952	Feb. 22, 1951	5.68	858
	Mar. 12, 1936	5.57	1,090		Dec. 21, 1951	7.96	1,770
	Mar. 18, 1936	5.00	840	1953	Mar. 11, 1952	6.43	1,130
1937	Dec. 20, 1936	5.02	840		Apr. 28, 1952	7.83	1,720
1938	June 28, 1938	6.86	1,420		Aug. 17, 1952	5.74	879
	July 23, 1938	8.90	2,370		Sept. 3, 1952	5.84	914
	Sept. 22, 1938	10.74	3,320		Nov. 22, 1952	6.32	1,110
1939	Jan. 31, 1939	6.27	1,360		Jan. 24, 1953	7.48	1,560
	Feb. 4, 1939	7.59	2,000		Mar. 13, 1953	7.33	1,500
	Feb. 28, 1939	5.53	1,020		Mar. 16, 1953	6.00	990
	Apr. 7, 1939	6.12	1,290	1954	Dec. 14, 1953	5.60	850
	June 30, 1939	5.34	940		Sept. 11, 1954	5.68	874
	Aug. 20, 1939	5.20	881	1955	Nov. 21, 1954	5.95	970
1940	Mar. 4, 1940	5.41	970		Mar. 22, 1955	6.73	1,260
	Mar. 15, 1940	5.64	1,070		Aug. 7, 1955	6.77	1,270
	Apr. 9, 1940	6.33	1,380		Aug. 13, 1955	9.29	2,400
					Aug. 19, 1955	7.27	1,480

Peak stages and discharges of Assunpink Creek at Trenton, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Oct. 15, 1955	7.75	1,680	1960	Feb. 19, 1960	6.03	959
	Feb. 18, 1956	5.55	835		Apr. 5, 1960	5.98	942
	Mar. 14, 1956	6.26	1,080		July 30, 1960	7.78	1,660
	Apr. 8, 1956	5.84	932		Sept. 12, 1960	8.39	1,620
1957	Apr. 6, 1957	5.73	859	1961	Jan. 1, 1961	7.45	1,050
1958	Jan. 25, 1958	5.69	846		Feb. 19, 1961	8.30	1,370
	Feb. 28, 1958	9.16	2,300		Mar. 23, 1961	8.36	1,750
	Apr. 6, 1958	8.58	2,030		Apr. 13, 1961	7.14	1,280
	Apr. 30, 1958	5.94	926		July 15, 1961	8.42	1,780
	May 7, 1958	5.76	868		July 29, 1961	7.61	1,460
1959	Aug. 29, 1959	5.68	842		July 31, 1961	6.39	1,020

4645. Crosswicks Creek at Extonville, N.J.

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. Area of swamps, lakes, and bogs, 6.1 sq mi.

Gage.--Recording. Datum of gage is 24.94 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--9 ft.

Remarks.--Base for partial-duration series, 750 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)	
1938	Sept. 22, 1938	13.0	4,100	1948	Feb. 14, 1948	10.77	2,360	
1940	Sept. 1, 1940	12.05	a3,360	1948	Apr. 2, 1948	7.18	907	
				1948	May 31, 1948	8.52	1,190	
1941	Jan. 25, 1941	6.26	802	1949	Dec. 31, 1948	8.95	1,300	
	Feb. 8, 1941	8.47	1,270		Jan. 29, 1949	6.80	831	
	Mar. 12, 1941	6.22	794		Feb. 23, 1949	6.57	786	
	July 9, 1941	7.42	1,040		1950	Mar. 24, 1950	5.10	530
1942	Feb. 8, 1942	5.08	566	1951		Nov. 26, 1950	7.80	1,040
1943	Dec. 31, 1942	6.29	808		1951	Feb. 22, 1951	7.80	1,040
	July 8, 1943	9.10	1,460		1951	Mar. 31, 1951	8.03	1,090
1944	Jan. 5, 1944	6.88	788		1951	Apr. 4, 1951	6.43	760
	Mar. 14, 1944	8.03	1,030	1953	Nov. 23, 1952	7.73	1,030	
	Apr. 25, 1944	7.43	897		1953	Jan. 10, 1953	6.55	782
	Sept. 15, 1944	11.05	2,470		1953	Feb. 16, 1953	6.43	760
1945	Nov. 22, 1944	7.23	917		1953	Mar. 13, 1953	9.92	1,840
	Nov. 28, 1944	8.20	1,120	1954	Dec. 15, 1953	6.99	869	
	Dec. 13, 1944	7.18	907		1954	May 22, 1954	6.88	847
	Feb. 23, 1945	7.32	936		1954	Sept. 12, 1954	9.26	1,460
	July 5, 1945	10.12	1,960	1955	Nov. 21, 1954	6.39	752	
	July 19, 1945	8.83	1,260		1955	Mar. 23, 1955	6.61	794
	July 24, 1945	6.41	756		1955	Aug. 13 or 14, 1955	10.10	1,950
1946	Nov. 29, 1945	9.20	1,430	1956	Oct. 15, 1955	8.79	1,250	
	Dec. 26, 1945	8.51	1,180		1956	Feb. 19, 1956	7.58	991
	Dec. 30, 1945	7.98	1,080		1956	Apr. 9, 1956	7.48	970
	June 3, 1946	7.41	955		1956	July 14, 1956	9.07	1,360
	July 24, 1946	9.10	1,370		1956	July 22, 1956	7.86	1,050
1947	Aug. 9, 1947	6.31	737	1957	Dec. 17, 1956	7.27	926	
1948	Nov. 9, 1947	6.56	784		1958	Dec. 22, 1957	6.51	775
	Nov. 13, 1947	7.49	972					
	1948	Jan. 3, 1948	6.60	792				

a Annual peak only.

Peak stages and discharges of Crosswicks Creek at Extonville, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Jan. 15, 1958	8.93	1,290	1960	Feb. 19, 1960	6.89	849
	Jan. 26, 1958	7.93	1,070		Feb. 27, 1960	6.89	849
	Feb. 28, 1958	10.40	2,130		July 31, 1960	8.47	1,170
	Mar. 26, 1958	7.34	940		Sept. 13, 1960	11.99	3,200
	Apr. 7, 1958	6.46	765	1961	Jan. 2, 1961	9.50	1,600
	May 7, 1958	6.78	827		Feb. 19, 1961	8.27	1,130
1959	Aug. 26, 1958	7.67	1,010		Mar. 9, 1961	6.90	851
	Oct. 26, 1958	6.68	807		Mar. 15, 1961	7.28	928
	Mar. 7, 1959	6.74	819		Mar. 23, 1961	9.52	1,610
	July 24, 1959	6.48	769		Apr. 14, 1961	8.92	1,290
1960	Dec. 30, 1959	6.40	754		July 30, 1961	7.15	901

4650. Neshaminy Creek at Rushland, Pa.

(Published as "below forks near Rushland" prior to 1914)

Location--Lat 40°15'20", long 75°02'00", at highway bridge, 0.1 mile downstream from Little Neshaminy Creek, a quarter of a mile west of Rushland, Bucks County, and 0.4 mile upstream from Mill Creek.

Drainage area--134 sq mi.

Gage--Recording at different datum prior to 1932; nonrecording thereafter. Altitude of gage is 120 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements.

Remarks--Records 1884-1913 furnished by Department of Public Works, City of Philadelphia. Only maximum daily discharges are shown. Gage heights unknown except for 1933.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1885	Feb. 10, 1885		4,484	1902	Feb. 26, 1902	-	6,060
				1903	Feb. 26, 1903	-	4,984
1886	Feb. 11, 1886		5,767	1904	Oct. 9, 1903	-	6,985
1887	June 23, 1887		3,159	1905	Jan. 7, 1905	-	4,064
1888	Jan. 1, 1888		4,890				
1889	July 31, 1889		5,531	1906	Mar. 4, 1906	-	3,050
1890	Oct. 27, 1889		3,750	1907	Sept. 29, 1907	-	4,630
				1908	Dec. 23, 1907	-	3,060
1891	Aug. 24, 1891		3,280	1909	Feb. 24, 1909	-	3,760
1892	Jan. 13, 1892		3,584	1910	Mar. 1, 1910	-	3,539
1893	May 4, 1893		3,154				
1894	May 21, 1894		9,010	1911	Aug. 31, 1911	-	5,330
1895	Apr. 9, 1895		3,234	1912	Mar. 13, 1912	-	4,073
				1913	Oct. 24, 1912	-	3,630
1896	Feb. 6, 1896		8,707				
1897	June 9, 1897		4,677	1932	Mar. 28, 1932	-	5,960
1898	Feb. 20, 1898		5,076				
1899	Feb. 27, 1899		3,950	1933	Aug. 23, 1933	17.8	-
1900	May 19, 1900		3,990		Aug. 24, 1933	-	8,100
1901	Mar. 11, 1901		4,624	1934	Sept. 8, 1934	-	10,500

4655. Neshaminy Creek near Langhorne, Pa.

Location--Lat 40°10'25", long 75°57'30", on left bank at bridge on State Highway 213, 0.3 mile downstream from Mill Creek and 1.7 miles west of Langhorne, Bucks County.

Drainage area--210 sq mi.

Gage--Recording gage. Datum of gage is 40.57 ft above mean sea level, datum of 1929.

Stage-discharge relation--Defined by current-meter measurements below 4,700 cfs and extended on basis of contracted-opening and slope-area measurement.

Bankfull stage--7 ft.

Remarks--Base for partial-duration series, 3,600 cfs.

Peak stages and discharges of Neshaminy Creek near Langhorne, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	Aug. 23, 1933	17.3	30,000	1946	July 22, 1946	7.96	5,550
					July 24, 1946	10.48	10,200
1935	Feb. 15, 1935	all.80	-	1947	May 22, 1947	6.25	3,210
	Sept. 6, 1935	6.80	3,640				
1936	Nov. 17, 1935	8.98	7,230	1948	Nov. 8, 1947	8.28	6,030
	Jan. 3, 1936	12.53	14,800		Nov. 12, 1947	8.16	6,410
	Jan. 9, 1936	10.88	11,100		Feb. 18, 1948	6.62	4,310
	Feb. 27, 1936	a7.59	-		Feb. 29, 1948	6.30	3,980
	Mar. 12, 1936	11.00	11,300		Apr. 1, 1948	6.47	4,200
	Mar. 18, 1936	10.24	9,570		May 5, 1948	6.12	3,760
	Apr. 6, 1936	8.14	5,710		May 13, 1948	-	(b)
1937	Dec. 17, 1936	7.43	4,670	1949	Dec. 30, 1948	11.77	13,200
	Dec. 20, 1936	9.09	7,410		Jan. 6, 1949	8.86	7,490
	Feb. 22, 1937	8.73	6,700		Jan. 22, 1949	6.30	3,980
	Apr. 27, 1937	8.14	5,710		Jan. 28, 1949	6.99	4,790
1938	Nov. 13, 1937	10.26	9,780		Mar. 23, 1949	6.10	3,760
	Jan. 25, 1938	7.76	5,250		July 13, 1949	6.02	3,650
	June 8, 1938	6.90	4,000	1950	Dec. 27, 1949	8.08	6,260
	July 20, 1938	7.59	4,950		Mar. 23, 1950	8.63	7,010
	July 22, 1938	9.73	8,550		Aug. 3, 1950	10.03	9,430
	July 23, 1938	15.94	24,800				
	Sept. 20, 1938	8.67	6,700	1951	Nov. 26, 1950	14.92	21,700
	Sept. 21, 1938	13.34	17,100		Dec. 4, 1950	6.18	3,870
1939	Dec. 4, 1938	7.54	4,810		Dec. 8, 1950	8.12	6,260
	Dec. 6, 1938	10.14	9,360		Jan. 15, 1951	7.22	5,040
	Jan. 30, 1939	9.98	9,150		Feb. 7, 1951	7.64	5,560
	Feb. 4, 1939	11.25	11,800		Feb. 21, 1951	7.28	5,170
	Feb. 16, 1939	6.75	3,880		Mar. 31, 1951	7.81	5,840
	Feb. 28, 1939	8.83	6,870	1952	Nov. 7, 1951	8.50	6,860
	Apr. 7, 1939	10.41	9,990		Dec. 21, 1951	11.73	13,000
	Apr. 19, 1939	7.97	5,550		Jan. 26, 1952	6.23	3,870
1940	Jan. 15, 1940	6.62	3,640		Feb. 4, 1952	8.0	6,120
	Jan. 15, 1940	a8.05	-		Mar. 11, 1952	10.60	10,600
	Feb. 20, 1940	all.12	-		Mar. 19, 1952	6.14	3,760
	Mar. 4, 1940	11.12	11,600		Apr. 5, 1952	8.30	6,560
	Mar. 15, 1940	11.45	12,200		Apr. 28, 1952	10.76	11,000
	Apr. 9, 1940	10.72	10,600		May 25, 1952	7.78	5,840
	Apr. 20, 1940	9.58	8,350		June 1, 1952	8.36	6,710
1941	Nov. 15, 1940	7.22	4,390	1953	Sept. 1, 1952	6.27	3,980
	Dec. 17, 1940	6.56	3,640		Nov. 22, 1952	9.59	8,690
	Feb. 8, 1941	8.81	6,870		Dec. 6, 1952	7.00	4,790
	Apr. 6, 1941	6.96	4,130		Dec. 11, 1952	8.87	7,490
	July 13, 1941	8.42	6,190		Jan. 9, 1953	6.51	4,200
	July 30, 1941	9.52	8,160		Jan. 24, 1953	9.27	8,160
1942	July 28, 1942	7.81	5,250		Mar. 4, 1953	6.33	3,980
	Aug. 9, 1942	9.49	8,160		Mar. 13, 1953	6.97	4,790
1943	Dec. 28, 1942	7.52	4,810		Mar. 16, 1953	8.71	7,170
	Dec. 30, 1942	9.27	7,780	1954	Apr. 7, 1953	8.08	6,260
	Feb. 11, 1943	8.20	5,870		Dec. 14, 1953	8.38	6,710
	Mar. 7, 1943	7.59	4,950	1955	Nov. 21, 1954	8.3	6,560
	May 26, 1943	7.29	4,530		Feb. 7, 1955	7.02	4,790
	June 18, 1943	8.03	5,550		Mar. 22, 1955	7.72	5,700
1944	Nov. 9, 1943	8.43	6,190		Aug. 13, 1955	13.55	17,300
	Dec. 27, 1943	a7.24	-		Aug. 19, 1955	22.84	49,300
	Jan. 4, 1944	9.88	8,950	1956	Oct. 15, 1955	9.96	9,430
	Jan. 6, 1944	9.88	8,950		Feb. 3, 1956	8.17	6,410
	Mar. 7, 1944	7.41	4,670		Feb. 6, 1956	7.35	5,300
	Mar. 13, 1944	10.12	9,360		Feb. 18, 1956	7.37	5,300
	Mar. 24, 1944	7.08	4,260		Mar. 8, 1956	5.95	3,650
	Apr. 25, 1944	9.16	7,590		Mar. 14, 1956	8.99	7,650
	Apr. 27, 1944	6.82	3,880		May 7, 1956	6.83	4,550
1945	Nov. 28, 1944	9.00	7,230	1957	Nov. 2, 1956	8.48	6,860
	Dec. 12, 1944	6.50	6,560		Dec. 15, 1956	6.58	4,310
	Jan. 2, 1945	10.2	9,570		Apr. 6, 1957	7.76	5,840
	Feb. 22, 1945	8.00	5,550	1958	Dec. 21, 1957	9.05	7,650
	Feb. 27, 1945	7.85	5,250		Dec. 26, 1957	7.48	5,430
	July 19, 1945	10.28	9,780		Jan. 15, 1958	6.66	4,430
	July 23, 1945	8.84	6,870		Jan. 22, 1958	7.32	5,170
	Sept. 19, 1945	8.54	6,560		Jan. 25, 1958	7.35	5,300
1946	Nov. 22, 1945	6.95	4,130		Feb. 28, 1958	11.13	11,700
	Nov. 29, 1945	9.37	7,970		Mar. 26, 1958	6.98	4,790
	Dec. 26, 1945	8.04	5,550		Apr. 7, 1958	9.09	7,820
	Mar. 27, 1946	6.94	4,000		Apr. 30, 1958	6.61	4,310
	June 2, 1946	14.54	20,500	1959	Nov. 29, 1958	6.6	4,310

a Backwater from ice.

b Annual maximum; discharge not determined.

Peak stages and discharges of Neshaminy Creek near Langhorne, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Jan. 2, 1959	6.79	-	1960	Sept. 20, 1960	8.18	6,410
	Mar. 6, 1959	6.5	4,200				
	Aug. 31, 1959	6.24	3,870	1961	Jan. 1, 1961	9.79	9,050
1960	Dec. 13, 1959	7.27	5,170		Feb. 25, 1961	8.72	7,170
	Dec. 29, 1959	7.34	5,170		Mar. 9, 1961	6.19	3,870
	Jan. 3, 1960	7.43	5,300		Apr. 10, 1961	6.43	4,090
	Feb. 19, 1960	7.27	5,170		Apr. 13, 1961	9.26	8,160
	Apr. 4, 1960	7.59	5,560		July 25, 1961	6.79	4,550
	Sept. 13, 1960	14.36	19,400		July 29, 1961	9.89	9,240

a Backwater from ice.

4660. Middle Branch Mount Misery Brook in Lebanon State Forest, N.J.

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.

Gage.--Recording gage above concrete control. Datum of gage is 99.71 ft above mean sea level (New Jersey Geological Survey bench mark).

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 9 cfs.

Peak stages and discharges of Middle Branch Mount Misery Brook in Lebanon State Forest, N.J.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Mar. 13, 1953	2.00	15	1958	May 26, 1958	1.85	9.3
	Apr. 16, 1953	1.84	9.0		July 25, 1958	1.96	13
	May 5, 1953	1.92	12		July 28, 1958	1.96	13
	May 23, 1953	1.89	10		Aug. 1, 1958	1.96	13
	June 13, 1953	1.84	9.0		Aug. 16, 1958	1.98	14
1954	Sept. 11, 1954	1.88	10		Aug. 25, 1958	2.47	45
1955	Aug. 13, 1955	1.88	10		Sept. 28, 1958	1.88	10
1956	Apr. 8, 1956	1.84	9.0	1959	Oct. 1, 1958	1.87	9.9
1957	Dec. 16, 1956	1.70	5.5		Oct. 26, 1958	1.96	13
1958	Feb. 28, 1958	2.20	24	1960	Sept. 12, 1960	1.95	13
	Mar. 27, 1958	1.93	12	1961	Feb. 23, 1961	1.85	9.5
	Apr. 7, 1958	1.89	10		Mar. 9, 1961	1.88	10
	Apr. 30, 1958	1.95	13		Mar. 14, 1961	1.84	9.2
	May 7, 1958	2.01	15		Mar. 23, 1961	1.99	15
					Apr. 13, 1961	2.01	16
					Aug. 23, 1961	1.91	12

4665. McDonalds Branch in Lebanon State Forest, N. J.

Location.--Lat 39°53'05", long 74°30'20", on right bank in Lebanon State Forest, Burlington County, 25 ft upstream from Butterworth Road Bridge, 3.4 miles upstream from confluence with Cooper Branch, and 7 miles southeast of Browns Mills.

Drainage area.--2.31 sq mi.

Gage.--Recording gage above concrete control. Datum of gage is 117.73 ft above mean sea level (New Jersey Geological Survey bench mark).

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 70 cfs.

Peak stages and discharges of McDonalds Branch in Lebanon State Forest, N.J.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)	
1954	May 22, 1954	1.66	7.1	1959	Oct. 1, 1958	1.77	9.8	
	Sept.11, 1954	1.70	8.0		Oct. 26, 1958	1.86	12	
1955	Aug. 14, 1955	1.69	7.8	1960	Feb. 26, 1960	1.66	7.1	
1956	Oct. 15, 1955	1.68	7.6		Sept.13, 1960	1.90	14	
	Apr. 8, 1956	1.66	7.1	1961	Feb. 19, 1961	1.73	8.8	
1957	Nov. 1, 1956	1.60	5.9		Feb. 24, 1961	1.70	8.0	
					Mar. 9, 1961	1.75	9.3	
1958		1.72	8.5		Mar. 24, 1961	1.86	12	
Aug. 1, 1958	Apr. 13, 1961				1.85	12		
Aug. 18, 1958	May 17, 1961				1.74	9.0		
Aug. 25, 1958	May 27, 1961				1.68	7.6		
Sept.28, 1958	Aug. 24, 1961				1.80	11		

4670. North Branch Rancocas Creek at Pemberton, N.J.

Location.--Lat 39°58'10", long 74°41'05", on right bank at downstream side of highway bridge at Pemberton, Burlington County, 12 miles upstream from confluence with South Branch.

Drainage area.--111 sq mi. Area of swamps, lakes, and bogs, 15.5 sq mi.

Gage.--Nonrecording prior to June 9, 1923; recording thereafter. Prior to Aug. 9, 1951, at site 600 ft downstream at datum 6.54 ft lower. Datum of gage is 31.19 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Prior to 1952, defined by current-meter measurements below 1,300 cfs and extended above by logarithmic plotting; shifts in relation occurred. Since 1952, defined by current-meter measurements.

Bankfull stage.--6 ft at site used 1923-51.

Remarks.--Prior to 1942, most peaks below 7 ft stage regulated by mill just above station. Base for partial-duration series, 600 cfs.

Peak stages and discharges

Peak stages and discharges							
Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	Feb. 2, 1922	4.70	424	1932	Mar. 28, 1932	6.73	698
1923	Mar. 19, 1923	6.20	628		Apr. 13, 1932	6.88	726
1924	Mar. 13, 1924	6.84	790	1933	Nov. 10, 1932	6.69	730
	Apr. 7-9, 1924	-	1,000		Nov. 21, 1932	6.50	700
	May 13, 1924	7.07	844		Apr. 13, 1933	6.06	656
	June 21, 1924	5.95	660		Aug. 24, 1933	8.51	1,230
1925	Aug. 1, 1925	4.52	398	1934	Mar. 5, 1934	5.77	600
					Sept. 17, 1934	5.87	628
1926	Feb. 25, 1926	5.98	600	1935	Sept. 8, 1935	6.15	637
1927	Aug. 19, 1927	6.67	788	1936	Jan. 3, 1936	6.39	667
1928	Oct. 20, 1927	8.95	1,340	1937	Jan. 21, 1937	5.98	609
	Oct. 25, 1927	5.92	616		May 14, 1937	5.96	604
	Dec. 8, 1927	5.96	634	1938	June 29, 1938	8.78	1,300
	Feb. 10, 1928	5.88	616		July 24, 1938	9.08	1,360
	Apr. 24, 1928	6.21	673		Sept. 22, 1938	10.56	1,680
	Apr. 29, 1928	6.33	694		1939	Feb. 1, 1939	6.28
	July 6, 1928	6.16	673	Feb. 3, 1939		7.20	921
	Sept. 21, 1928	6.21	673	Apr. 7, 1939		6.08	653
			Apr. 28, 1939	6.25		673	
1929	Feb. 28, 1929	6.47	705		Aug. 21, 1939	10.77	1,730
	Mar. 6, 1929	6.68	735	1940	Apr. 22, 1940	6.61	766
	Apr. 17, 1929	7.07	765		May 18, 1940	6.27	688
	Apr. 23, 1929	6.02	602		May 24, 1940	6.48	734
			May 31, 1940		7.19	918	
1930	Mar. 8, 1930	6.15	669		Sept. 1, 1940	9.65	1,480
	June 10, 1930	6.10	675				
1931	Apr. 1, 1931	5.45	574				

Peak stages and discharges of North Branch Rancocas Creek at Pemberton, N.J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Feb. 7, 1941	5.76	591	1952	Dec. 22, 1951	2.64	756
1942	July 3, 1942	4.89	462		Apr. 29, 1952	3.08	1,170
1943	July 8, 1943	9.20	1,390		May 27, 1952	2.46	610
1944	Oct. 28, 1943	6.44	699		June 2, 1952	2.69	782
	Mar. 13, 1944	6.13	638	1953	Aug. 11, 1952	2.60	722
	Apr. 18, 1944	6.10	632		Aug. 17, 1952	2.63	823
	Apr. 27, 1944	6.21	653		Nov. 22, 1952	2.56	690
	Sept. 16, 1944	7.29	855		Mar. 14, 1953	2.72	825
1945	Nov. 28, 28, 30, 1944	7.15	785	1954	Sept. 12, 1954	2.56	690
	Feb. 27, 1945	5.18	440	1955	Aug. 14, 1955	2.54	673
	July 22, 1945	8.70	1,170	1956	Feb. 19, 1956	2.36	535
	Aug. 4, 1945	6.25	611		July 23, 1956	2.36	535
1946	Nov. 30, 1945	7.00	773	1957	Dec. 17, 1956	2.22	436
	Dec. 31, 1945	6.90	746	1958	Jan. 15, 1958	2.46	610
	July 24, 1946	7.29	855		Mar. 1, 1958	2.84	934
1947	May 6, 1947	5.30	-		Mar. 26, 1958	2.58	706
	May 22, 1947	5.25	496		May 1, 1958	2.49	633
1948	Feb. 14, 1948	6.34	656		May 8, 1958	2.73	834
	Apr. 2, 1948	6.03	611		Aug. 2, 1958	2.52	657
	May 15, 1948	6.02	610		Aug. 27, 1958	3.61	1,420
	June 1, 1948	6.84	743	1959	Oct. 27, 1958	2.57	698
1949	Dec. 31, 1948	7.04	694	1960	July 30, 1960	2.35	653
	Jan. 28, 1949	6.55	648		Sept. 13, 1960	3.81	1,420
1950	Mar. 24, 1950	4.86	416	1961	Jan. 2, 1961	2.46	610
1951	Apr. 3, 1951	6.38	612		Mar. 24, 1961	2.89	981
					Apr. 14, 1961	2.59	824

a Backwater from debris.

4675. Schuylkill River at Pottsville, Pa.

Location.--Lat 40°41'00", long 76°11'10", on upstream side of Palo Alto Highway Bridge at Pottsville, Schuylkill County, and 1.3 miles downstream from Mill Creek.

Drainage area.--53.4 sq mi.

Gage.--Nonrecording. Datum of gage is 599.24 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,000 cfs.

Bankfull stage.--8 ft.

Remarks.--Base for partial-duration series, 600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	May 1942	8.8	8,170	1948	Apr. 1, 1948	3.6	550
1944	Nov. 8, 1943	6.8	3,320	1949	Dec. 30, 1948	4.4	970
	Sept. 14, 1944	4.3	905		Jan. 5, 1949	4.3	910
1945	July 19, 1945	7.5	4,240	1950	Mar. 27, 1950	3.9	690
	July 29, 1945	4.1	785		July 11, 1950	4.5	1,030
1946	May 21, 1946	3.85	638	1951	Nov. 25, 1950	7.9	4,800
	May 27, 1946	5.6	1,970		Dec. 4, 1950	7.0	3,580
	July 23, 1946	3.9	667		Dec. 8, 1950	4.8	1,240
1947	May 22, 1947	4.5	1,030		Jan. 24, 1951	4.3	910
	June 8, 1947	4.0	740		Feb. 7, 1951	5.1	1,490
	July 8, 1947	7.1	3,710		July 28, 1951	4.6	1,100
	July 15, 1947	7.0	3,580		Aug. 12, 1951	4.0	740
	July 21, 1947	5.1	1,490	1952	Nov. 3, 1951	4.1	790

a Annual peak only.

Peak stages and discharges of Schuylkill River at Pottsville, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Nov. 7, 1951	4.1	790	1956	Oct. 15, 1955	4.06	770
	Dec. 5, 1951	5.0	1,400		Sept. 6, 1956	4.58	1,070
	Mar. 11, 1952	6.0	2,390	1957	Apr. 6, 1957	4.80	1,220
	Apr. 14, 1952	3.8	640		Dec. 21, 1957	5.13	1,510
	Apr. 28, 1952	4.4	970	1958	Dec. 26, 1957	4.93	1,350
	May 25, 1952	4.1	790		Apr. 6, 1958	3.90	750
	Sept. 1, 1952	5.5	1,870	1959	Jan. 21, 1959	3.45	542
1953	Nov. 21, 1952	7.4	4,100		Dec. 13, 1959	3.98	800
	Dec. 5, 1952	4.0	740		Mar. 31, 1960	4.04	800
	Dec. 11, 1952	5.9	2,280		Apr. 5, 1960	4.17	900
	Jan. 24, 1953	4.9	1,320		Sept. 12, 1960	4.20	900
	May 23, 1953	3.8	640		Sept. 20, 1960	4.10	850
	May 26, 1953	4.0	740	1961	Feb. 25, 1961	5.0	1,430
1954	Dec. 6, 1953	4.2	850				
	Mar. 1, 1954	4.36	970				
1955	Aug. 18, 1955	6.33	2,760				

4685. Schuylkill River at Landingville, Pa.

Location.--Lat 40°37'45", long 76°07'30", at Landingville, Schuylkill County, 0.1 mile upstream from Mahannon Creek, and 5 miles downstream from West Branch of Schuylkill River.

Drainage area.--133 sq mi.

Gage.--Recording. Datum of gage is 470.64 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 1,300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	May 1942	12.9	-	1951	Apr. 12, 1951	7.26	1,520
1948	Nov. 8, 1947	6.67	1,690		July 28, 1951	7.55	1,670
	Nov. 12, 1947	-	1,520		Aug. 12, 1951	7.27	1,370
	Apr. 1, 1948	-	1,610	1952	Nov. 3, 1951	8.80	2,050
	Apr. 14, 1948	-	1,420		Nov. 7, 1951	8.45	1,800
1949	Dec. 30, 1948	8.07	2,630		Dec. 5, 1951	9.98	2,950
	Jan. 6, 1949	-	1,960		Mar. 11, 1952	12.93	5,380
1950	July 11, 1950	6.75	1,690		Apr. 28, 1952	9.16	2,410
					May 12, 1952	8.06	1,680
1951	Nov. 25, 1950	13.29	8,570		May 25, 1952	8.42	1,860
	Dec. 4, 1950	12.65	7,460		July 9, 1952	8.09	1,680
	Dec. 8, 1950	8.38	2,990		Aug. 17, 1952	7.48	1,330
	Jan. 24, 1951	8.02	2,190		Sept. 1, 1952	12.06	3,930
	Feb. 7, 1951	9.95	3,800	1955	Aug. 19, 1955	13.19	-

a Annual peak only.

4695. Little Schuylkill River at Tamaqua, Pa.

Location.--Lat 40°48'20", long 75°58'20", on left bank at pumping plant of Panther Valley Water Co., 0.6 mile upstream from Tamaqua, Schuylkill County, and 0.8 mile upstream from Panther Creek.

Drainage area.--42.9 sq mi.

Gage.--Nonrecording at site 3,600 ft downstream at datum 28.64 ft lower prior to June 21, 1927; recording thereafter. Datum of gage is 817.48 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 3,200 cfs and extended above on basis of contracted-opening measurement at 7,790 cfs.

Bankfull stage.--5 ft.

Remarks.--Records prior to 1932 furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 700 cfs.

Peak stages and discharges of Little Schuylkill River at Tamaqua, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1920	Mar. 13, 1920	4.00	1,020	1943	May 19, 1943	5.39	1,750
	Sept. 30, 1920	3.80	865				
1921	Mar. 3, 1921	3.85	902	1944	Oct. 26, 1943	4.27	852
					Nov. 9, 1943	6.31	2,540
1922	Mar. 7, 1922	6.0	3,000		Mar. 13, 1944	4.38	930
1923	Mar. 16, 1923	3.32	520	1945	July 19, 1945	5.57	1,880
					Sept. 18, 1945	4.02	698
1924	Dec. 6, 1923	3.6	720	1946	May 21, 1946	4.27	852
	Jan. 11, 1924	4.8	1,780		May 28, 1946	5.46	1,790
	Jan. 16, 1924	3.8	865		June 2, 1946	4.15	772
	Apr. 6, 1924	4.0	1,020	1947	Mar. 14, 1947	4.30	872
	Sept. 30, 1924	7.5	5,000		May 22, 1947	4.36	915
1925	Feb. 11, 1925	5.6	2,620		July 8, 1947	7.18	3,420
					July 15, 1947	5.53	1,880
1926	Nov. 13, 1925	4.3	1,290		July 17, 1947	4.68	1,180
	Nov. 16, 1925	4.1	1,110		July 21, 1947	4.53	1,060
	Feb. 26, 1926	4.0	1,020	1948	Nov. 12, 1947	4.11	746
	Mar. 7, 1926	4.0	1,020		Apr. 1, 1948	4.38	930
1927	Nov. 16, 1926	5.68	2,740		Apr. 14, 1948	4.07	722
	Jan. 21, 1927	3.9	935	1949	Dec. 30, 1948	4.84	1,300
	July 23, 1927	3.82	1,390		Jan. 5, 1949	4.13	759
1928	Oct. 12, 1927	3.73	1,340	1950	Mar. 21, 1950	4.19	734
	Oct. 19, 1927	3.53	1,150				
	Nov. 17, 1927	3.72	1,300	1951	Nov. 25, 1950	6.75	3,020
	Dec. 8, 1927	4.20	1,770		Dec. 4, 1950	6.50	2,720
	Jan. 25, 1928	3.35	1,000		Dec. 8, 1950	4.58	1,040
	Feb. 14, 1928	5.11	2,740		Jan. 24, 1951	4.70	1,190
	Feb. 23, 1928	3.47	1,100		Feb. 7, 1951	5.68	2,000
	Apr. 29, 1928	3.03	744		July 28, 1951	6.14	2,360
	June 29, 1928	4.90	2,510	1952	Nov. 3, 1951	4.37	922
	July 5, 1928	3.66	1,260		Nov. 7, 1951	5.03	1,460
	July 14, 1928	3.00	720		Dec. 5, 1951	5.29	1,660
1929	Mar. 5, 1929	3.85	1,320		Mar. 11, 1952	5.47	1,790
	Aug. 14, 1929	3.10	800		Apr. 14, 1952	4.06	716
1930	Oct. 2, 1929	3.78	1,390		Apr. 28, 1952	4.36	915
	Apr. 7, 1930	3.04	752		May 25, 1952	4.42	959
1931	May 13, 1931	3.64	505		July 22, 1952	4.72	1,180
1932	Mar. 31, 1932	4.54	1,000		Aug. 17, 1952	4.29	865
					Sept. 1, 1952	4.80	1,260
1933	Nov. 1, 1932	4.48	1,040	1953	Nov. 22, 1952	6.70	2,920
	Nov. 19, 1932	4.18	830		Dec. 11, 1952	5.53	1,880
	Apr. 17, 1933	4.89	1,320		Jan. 24, 1953	5.11	1,500
	Aug. 24, 1933	7.50	3,740		Mar. 24, 1953	4.16	778
	Sept. 4, 1933	7.10	3,320		May 23, 1953	4.69	1,180
1934	Mar. 31, 1934	5.05	1,480	1954	Dec. 7, 1953	4.18	791
					Mar. 1, 1954	4.62	1,100
1935	Dec. 1, 1934	5.70	1,980	1955	Aug. 18, 1955	11.10	7,790
	July 9, 1935	7.35	3,630		Aug. 22, 1955	4.33	718
1936	Mar. 12, 1936	5.59	1,890	1956	Oct. 15, 1955	6.93	2,870
	Mar. 18, 1936	5.65	1,940		Oct. 30, 1955	4.41	756
	Apr. 6, 1936	4.15	810	1957	Apr. 6, 1957	5.28	1,660
1937	Dec. 20, 1936	4.31	868				
	Feb. 22, 1937	4.58	1,060	1958	Dec. 21, 1957	5.73	2,050
1938	Oct. 23, 1937	5.94	2,220		Dec. 26, 1957	4.60	1,100
	Jan. 25, 1938	4.46	1,000		Feb. 28, 1958	4.25	838
	June 27, 1938	5.14	1,540		Apr. 6, 1958	4.35	908
1939	Dec. 6, 1938	4.56	1,070	1959	Jan. 21, 1959	4.74	1,220
	Jan. 5, 1939	4.16	782		Mar. 6, 1959	4.7	1,180
1940	Mar. 15, 1940	5.05	1,460		Apr. 7, 1959	4.1	740
	Mar. 30, 1940	6.32	2,540	1960	Nov. 28, 1959	4.8	1,260
	Aug. 31, 1940	4.90	1,340		Dec. 13, 1959	4.2	795
1941	Apr. 6, 1941	3.11	248		Feb. 11, 1960	4.5	1,020
1942	May 17, 1942	4.45	982		Mar. 31, 1960	5.14	1,540
	May 22, 1942	7.95	4,310		Apr. 4, 1960	4.61	1,100
	Sept. 27, 1942	5.27	1,620		June 17, 1960	5.1	1,500
					Sept. 12, 1960	5.4	1,750
					Sept. 20, 1960	5.2	1,580
1943	Dec. 30, 1942	5.31	1,660	1961	Feb. 25, 1961	5.86	2,140

4705. Schuylkill River at Berne, Pa.

Location.--Lat 40°31'20", long 75°59'55", on right bank at highway bridge at Berne, Berks County, 0.5 mile upstream from Mill Creek, and 6.5 miles downstream from Little Schuylkill.

Drainage area.--355 sq mi.

Gage.--Recording. Datum of gage is 310.65 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 17,000 cfs and extended above by logarithmic plotting.

Bankfull stage.--12 ft.

Remarks.--Base for partial-duration series, 4,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	May 1942	15.0	26,900	1953	Jan. 24, 1953	9.41	8,870
1948	Nov. 4, 1947	8.38	3,530		Mar. 24, 1953	7.78	4,500
	Nov. 8, 1947	8.92	6,500		May 23, 1953	8.06	5,130
	Nov. 12, 1947	8.58	5,820		May 26, 1953	8.07	5,130
	Feb. 18, 1948	all.16	-	1954	Dec. 7, 1953	9.19	8,290
	Apr. 1, 1948	8.64	5,710		Mar. 2, 1954	8.77	7,150
	Apr. 15, 1948	8.32	4,280				
1949	Dec. 30, 1948	10.28	10,400	1955	Aug. 19, 1955	15.73	29,400
	Jan. 6, 1949	8.86	7,560	1956	Oct. 15, 1955	9.33	8,580
1950	Mar. 23, 1950	8.38	5,430	1957	Apr. 6, 1957	9.96	10,700
1951	Nov. 26, 1950	14.52	23,300	1958	Dec. 21, 1957	10.76	13,100
	Dec. 4, 1950	14.46	24,200		Dec. 26, 1957	8.44	6,140
	Dec. 8, 1950	9.15	8,400		Jan. 22, 1958	8.08	5,220
	Jan. 24, 1951	8.46	6,100		Feb. 28, 1958	9.51	9,170
	Feb. 7, 1951	10.71	12,500		Apr. 6, 1958	8.30	5,740
1952	Nov. 3, 1951	8.04	4,950	1959	Jan. 22, 1959	8.45	6,140
	Nov. 7, 1951	8.86	7,080		Mar. 6, 1959	7.78	4,480
	Dec. 5, 1951	9.81	10,100		Sept. 3, 1959	8.95	7,710
	Mar. 11, 1952	12.02	17,000	1960	Nov. 28, 1959	8.37	5,880
	Apr. 28, 1952	9.26	8,580		Dec. 13, 1959	8.53	6,420
	May 25, 1952	8.16	5,390		Mar. 31, 1960	7.97	4,840
	July 10, 1952	8.27	5,650		Apr. 5, 1960	8.54	6,420
	Sept. 1, 1952	10.26	11,600		Sept. 12, 1960	9.15	8,290
					Sept. 20, 1960	9.19	8,290
1953	Nov. 22, 1952	12.86	19,900	1961	Feb. 2, 1961	9.92	10,400
	Dec. 6, 1952	8.02	5,000				
	Dec. 11, 1952	10.21	11,300				

a Backwater from ice.

4710. Tulpehocken Creek near Reading, Pa.

Location.--Lat 40°22'10", long 75°58'45", on right bank at covered bridge 1 mile downstream from Cacoosing Creek, 2.5 miles upstream from mouth, and 3.5 miles northwest of square at Reading, Berks County.

Drainage area.--211 sq mi.

Gage.--Recording. Datum of gage is 216.60 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 3,500 cfs and extended above by logarithmic plotting.

Bankfull stage.--6 ft.

Remarks.--Base for partial-duration series, 2,000 cfs.

Peak stages and discharges of Tulpehocken Creek near Reading, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Nov. 7, 1951	4.13	2,100	1956	Sept. 6, 1956	7.42	6,000
	Dec. 5, 1951	4.65	2,760				
	Feb. 4, 1952	4.13	2,160	1957	Dec. 14, 1956	4.15	2,110
	Mar. 11, 1952	5.32	3,650		Apr. 6, 1957	5.42	3,480
	Apr. 28, 1952	5.12	3,360	1958	Dec. 21, 1957	4.24	2,210
	May 25, 1952	4.16	2,160		Jan. 22, 1958	5.88	4,080
	July 10, 1952	6.44	4,700		Feb. 28, 1958	6.90	5,350
	Sept. 1, 1952	8.65	7,680		Apr. 6, 1958	4.38	2,360
1953	Nov. 22, 1952	6.67	5,090		Sept. 27, 1958	6.96	5,480
	Dec. 11, 1952	4.92	3,080	1959	Jan. 2, 1959	5.01	3,020
	Jan. 24, 1953	4.64	2,760		Jan. 22, 1959	6.26	4,570
	Mar. 24, 1953	4.18	2,210		Feb. 4, 1959	4.30	2,260
	May 23, 1953	5.29	3,650		Mar. 6, 1959	4.07	2,010
	May 26, 1953	5.18	3,500		Sept. 3, 1959	4.83	2,800
1954	Dec. 7, 1953	5.68	3,840	1960	Dec. 12, 1959	4.17	2,110
	Mar. 1, 1954	4.10	2,100		Apr. 5, 1960	4.97	3,020
1955	Feb. 7, 1955	6.43	4,700		Sept. 12, 1960	5.28	3,360
	Mar. 22, 1955	4.45	2,420		Sept. 20, 1960	5.25	3,240
	Aug. 18, 1955	7.94	6,760	1961	Feb. 26, 1961	5.77	3,960
1956	Feb. 6, 1956	4.93	2,910		July 29, 1961	4.19	2,160

4715. Schuylkill River at Reading, Pa.

Location.--Lat 40°20'10", long 75°56'15", at Penn Street Bridge, Reading, Berks County, 1 mile downstream from Tulpehocken Creek, and 2.1 miles upstream from Angelica Creek.

Drainage area.--880 sq mi.

Gage.--Nonrecording. Datum of gage is 188.50 ft above mean sea level.

Stage-discharge relation.--Defined by current-meter measurements below 27,000 cfs and extended above by logarithmic plotting.

Bankfull stage.--11 ft.

Remarks.--Records for 1914-15, 1921-30 furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 12,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1757	July 15, 1757	15.0	37,200	1893	May 3, 1893	9.2	19,800
1787	Oct. 6, 1786	17.3	47,200	1894	May 21, 1894	16.8	44,800
1822	Feb. 21, 1822	10.6	23,600	1902	Dec. 15, 1901	12.0	27,300
1839	Jan. 25, 1839	13.9	33,300		Dec. 30, 1901	9.0	19,300
1841	Jan. 6, 1841	15.8	40,000		Jan. 22, 1902	11.2	25,100
1850	July 20, 1850	18.6	53,900		Feb. 28, 1902	21.5	70,600
	Sept. 2, 1850	23.0	80,000	1903	Dec. 17, 1902	9.8	21,400
1862	June 5, 1862	16.0	41,200		Dec. 22, 1902	12.1	27,600
				1904	Oct. 10, 1903	7.0	14,000
1870	Oct. 4, 1869	21.6	71,200		Jan. 22, 1904	8.8	18,800
	Apr. 19, 1870	10.2	22,500		Feb. 23, 1904	8.8	18,800
1874	Oct. 19, 1873	11.7	26,500	1905	Jan. 7, 1905	10.3	22,700
1878	Nov. 9, 1877	7.6	15,600		Mar. 22, 1905	5.6	10,300
1879	Dec. 11, 1878	6.6	12,900	1906	Feb. 22, 1906	6.2	11,900
1881	Feb. 11, 1881	10.2	22,500		Mar. 4, 1906	13.3	31,300
					July 3, 1906	8.0	16,600
1885	Aug. 3, 1885	9.2	19,800	1907	Jan. 1, 1907	8.1	16,900
1890	Nov. 30, 1889	7.2	14,500		Mar. 15, 1907	7.1	14,200
					Sept. 24, 1907	6.0	11,300
1891	Aug. 24, 1891	12.2	27,900		Dec. 11, 1907	10.0	21,900
				1908	Feb. 16, 1908	13.3	31,300
					Feb. 27, 1908	13.8	32,900
					May 8, 1908	8.9	19,000

Peak stages and discharges of Schuylkill River at Reading, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1908	July 23, 1908	5.4	9,740	1920	Mar. 6, 1920	18.2	-
1909	Feb. 25, 1909	5.4	9,740		Mar. 13, 1920	11.6	25,000
1910	Jan. 22, 1910	12.1	27,600		Mar. 17, 1920	7.7	14,600
	Feb. 22, 1910	6.8	13,400	1921	May 5, 1921	6.6	11,900
	Mar. 1, 1910	6.2	11,900	1922	Dec. 3, 1921	6.8	12,400
	Apr. 25, 1910	5.7	10,500		Mar. 8, 1922	9.13	18,200
1911	Sept. 1, 1911	5.6	10,300	1923	Mar. 4, 1923	5.8	10,000
1912	Oct. 2, 1911	6.9	13,700	1924	Jan. 17, 1924	9.0	18,000
	Feb. 22, 1912	6.6	12,900		Apr. 7, 1924	9.4	19,000
	Mar. 13, 1912	11.2	25,100	1925	Oct. 1, 1924	16.5	38,300
	Mar. 16, 1912	8.1	16,900		Feb. 12, 1925	14.8	31,300
1913	Mar. 14, 1913	6.9	13,700	1926	Jan. 19, 1926	9.6	17,000
	Mar. 27, 1913	12.2	27,900		Feb. 19, 1926	7.8	12,400
	Apr. 28, 1913	7.9	16,400		Feb. 25, 1926	10.7	19,900
1914	Jan. 31, 1914	5.7	10,500	1927	Nov. 17, 1926	10.0	18,100
1915	Jan. 13, 1915	12.3	26,700	1928	Nov. 18, 1927	7.8	12,400
	Feb. 2, 1915	9.1	18,600		Dec. 8, 1927	8.5	14,100
	Feb. 25, 1915	7.0	13,400		Feb. 15, 1928	8.8	14,900
1916	July 26, 1916	10.0	20,800		June 30, 1928	9.8	17,600
1917	Mar. 12, 1917	6.6	12,400	1929	Feb. 26, 1929	10.9	20,400
1918	Feb. 20, 1918	12.3	26,700		Mar. 6, 1929	11.0	20,700
	Feb. 26, 1918	12.0	25,800	1930	Oct. 2, 1929	9.0	15,400
1919	Mar. 10, 1919	7.9	15,100				

a Backwater from ice.

4720. Schuylkill River at Pottstown, Pa.

Location.--Lat 40°14'30", long 75°39'05", on right bank at Hanover Street Bridge in Pottstown, Montgomery County, 0.3 mile downstream from Manatawny Creek.

Drainage area.--1,147 sq mi.

Gage.--Nonrecording prior to Nov. 23, 1928; recording thereafter. Datum of gage is 117.86 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--14 ft.

Historical data.--Flood of Feb. 28, 1902, is greatest known.

Remarks.--Records for 1928-31 furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 7,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1902	Feb. 28, 1902	21.0	53,900	1930	Oct. 3, 1929	9.71	16,400
1928	Oct. 20, 1927	7.9	12,000		Nov. 19, 1929	6.50	8,820
	Nov. 18, 1927	8.3	12,900		Apr. 7, 1930	6.30	8,380
	Dec. 8, 1927	9.0	14,600	1931	July 11, 1931	5.81	7,320
	Feb. 8, 1928	6.6	9,040	1932	Mar. 28, 1932	9.17	15,100
	Feb. 15, 1928	11.3	20,700	1933	Nov. 2, 1932	8.62	13,700
	Feb. 24, 1928	10.0	17,100		Nov. 20, 1932	8.07	12,500
	Apr. 29, 1928	8.2	12,700		Mar. 21, 1933	8.64	13,700
	June 30, 1928	10.6	18,600		Apr. 12, 1933	6.76	9,480
	July 6, 1928	7.8	11,800		Apr. 18, 1933	11.23	20,400
	July 14, 1928	7.6	11,300		May 30, 1933	5.99	7,740
	July 28, 1928	6.0	7,740		July 3, 1933	6.07	7,950
1929	Feb. 7, 1929	5.93	7,530		July 17, 1933	6.03	7,740
	Feb. 27, 1929	11.44	20,600		Aug. 24, 1933	19.2	47,800
	Mar. 6, 1929	11.27	20,700		Sept. 5, 1933	9.07	14,900
	Apr. 17, 1929	7.07	10,200				

Peak stages and discharges of Schuylkill River at Pottstown, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	Sept. 17, 1933	6.02	7,740	1949	Dec. 31, 1948	13.18	25,100
1934	Jan. 8, 1934	5.92	7,530		Jan. 6, 1949	11.74	20,400
	Mar. 5, 1934	5.91	7,530	1950	Feb. 16, 1950	8.48	8,850
	Apr. 1, 1934	8.93	14,400		Mar. 23, 1950	10.27	12,300
	Sept. 17, 1934	6.59	8,960		Sept. 11, 1950	7.88	7,840
	Sept. 30, 1934	11.59	21,600	1951	Nov. 26, 1950	17.90	42,000
1935	Dec. 2, 1934	10.70	18,900		Dec. 5, 1950	15.10	31,700
	Jan. 30, 1935	6.19	7,690		Dec. 8, 1950	9.69	14,600
	July 10, 1935	14.89	31,000		Jan. 15, 1951	-	(a)
1936	Nov. 18, 1935	6.40	8,120		Jan. 24, 1951	-	(a)
	Jan. 3, 1936	8.80	13,800		Feb. 8, 1951	-	(a)
	Jan. 10, 1936	6.22	7,690		Feb. 22, 1951	7.13	8,470
	Mar. 12, 1936	15.13	31,800		Apr. 13, 1951	6.87	8,080
	Mar. 18, 1936	12.54	24,000	1952	Nov. 3, 1951	7.29	8,870
	Apr. 6, 1936	9.70	16,200		Nov. 8, 1951	9.74	15,400
1937	Dec. 20, 1936	6.43	8,120		Dec. 6, 1951	9.37	14,600
	Jan. 25, 1937	6.19	7,690		Dec. 21, 1951	7.55	10,300
	Feb. 22, 1937	7.05	9,460		Jan. 3, 1952	6.81	8,620
1938	Oct. 24, 1937	10.32	17,800		Jan. 28, 1952	7.42	9,890
	Jan. 25, 1938	7.67	11,100		Feb. 4, 1952	6.91	8,830
	June 28, 1938	6.91	9,230		Mar. 12, 1952	12.74	23,900
	July 21, 1938	6.37	8,120		Apr. 6, 1952	6.11	7,210
	July 22, 1938	6.27	7,920		Apr. 16, 1952	6.58	8,210
	July 24, 1938	6.15	7,690		Apr. 29, 1952	10.53	17,500
1939	Dec. 6, 1938	10.66	18,900		May 26, 1952	8.50	12,400
	Feb. 4, 1939	7.61	10,800		June 1, 1952	6.11	7,210
	Feb. 16, 1939	6.00	7,260	1953	July 10, 1952	9.30	14,300
	Mar. 1, 1939	6.89	9,200		Sept. 2, 1952	11.02	18,900
	Apr. 7, 1939	6.19	7,680		Nov. 22, 1952	14.12	28,300
1940	Mar. 4, 1940	9.70	16,000		Dec. 6, 1952	7.38	9,890
	Mar. 15, 1940	13.48	27,000		Dec. 11, 1952	10.31	16,900
	Mar. 31, 1940	10.09	17,100		Jan. 25, 1953	9.63	15,100
	Apr. 9, 1940	9.30	15,000		Feb. 21, 1953	6.24	7,410
	Apr. 21, 1940	7.89	11,400		Mar. 26, 1953	7.37	9,890
	May 20, 1940	6.55	8,390		May 23, 1953	8.08	11,500
	Sept. 1, 1940	8.57	13,100		May 26, 1953	9.29	14,300
1941	Dec. 16, 1940	5.70	6,560	1954	June 1, 1953	6.93	8,830
1942	May 17, 1942	6.75	8,720		Dec. 7, 1953	9.91	15,900
	May 23, 1942	20.15	50,800		Mar. 2, 1954	7.93	11,000
	Aug. 9, 1942	7.66	10,900	1955	Feb. 7, 1955	7.11	9,270
	Aug. 14, 1942	6.42	7,970		Mar. 23, 1955	8.37	12,100
	Aug. 17, 1942	9.20	14,700		Aug. 13, 1955	8.09	11,400
	Sept. 28, 1942	12.06	22,800		Aug. 19, 1955	17.98	43,300
1943	Oct. 27, 1942	6.44	7,970		Aug. 22, 1955	6.84	8,700
	Dec. 31, 1942	11.27	20,500	1956	Oct. 16, 1955	8.22	11,700
	May 20, 1943	6.41	7,940		Feb. 7, 1956	6.72	8,420
1944	Oct. 27, 1943	6.68	8,600		Mar. 14, 1956	6.32	7,620
	Nov. 9, 1943	12.95	25,000		Sept. 7, 1956	6.88	8,830
	Jan. 4, 1944	6.97	9,270	1957	Nov. 3, 1956	7.04	9,040
	Mar. 13, 1944	7.71	10,400		Dec. 15, 1956	7.48	10,100
	Mar. 24, 1944	6.69	8,160		Apr. 6, 1957	11.28	19,700
	Apr. 25, 1944	7.44	9,960	1958	Dec. 21, 1957	10.92	18,600
	Apr. 27, 1944	6.57	8,160		Dec. 27, 1957	7.39	9,890
1945	Feb. 27, 1945	7.81	11,100		Jan. 22, 1958	8.71	12,900
	Mar. 7, 1945	6.16	7,520		Feb. 28, 1958	12.66	23,900
	July 16, 1945	7.43	10,200		Mar. 27, 1958	7.55	10,300
	July 20, 1945	9.66	16,000		Apr. 7, 1958	8.43	12,200
	July 23, 1945	7.63	10,700		May 9, 1958	6.83	8,620
	Sept. 19, 1945	11.29	20,500	1959	Sept. 28, 1958	7.63	10,300
1946	Nov. 29, 1945	7.20	8,420		Jan. 2, 1959	6.21	7,420
	May 28, 1946	11.02	18,300		Jan. 22, 1959	9.59	15,100
	June 2, 1946	11.75	20,700		Mar. 7, 1959	6.84	8,620
1947	Mar. 15, 1947	7.82	9,740		Sept. 3, 1959	9.15	14,100
	May 22, 1947	8.20	10,700	1960	Nov. 29, 1959	6.48	8,020
	May 26, 1947	9.68	14,600		Dec. 8, 1959	6.49	8,020
	May 30, 1947	6.76	7,580		Dec. 13, 1959	8.42	12,200
	July 8, 1947	10.20	16,000		Jan. 4, 1960	6.90	8,830
	July 15, 1947	7.49	9,070		Mar. 31, 1960	6.17	7,420
	July 17, 1947	10.08	15,700		Apr. 5, 1960	10.45	17,200
1948	Nov. 9, 1947	7.91	9,970		Sept. 13, 1960	11.29	19,700
	Nov. 12, 1947	7.29	8,630		Sept. 20, 1960	9.35	14,600
	Apr. 1, 1948	6.79	7,580	1961	Feb. 21, 1961	6.49	8,020
	Apr. 15, 1948	7.58	9,290		Feb. 26, 1961	11.37	20,000
	May 8, 1948	7.33	8,630		Apr. 14, 1961	6.58	8,220
	May 13, 1948	8.18	10,700		Apr. 17, 1961	6.32	7,620

a Peak above base; discharge not determined.

4725. Perkiomen Creek near Frederick, Pa.
(Published as "at Frederick" prior to 1907)

Location.--Lat 40°16'30", long 75°27'20", 0.7 mile upstream from West Swamp Creek, 1.3 miles east of Zieglersville, 4.5 miles southeast of Frederick, Montgomery County, and 12 miles northwest of Norristown.

Drainage area.--152 sq mi.

Gage.--Nonrecording. Altitude of gage 140 ft (from topographic map).

Remarks.--Records furnished by Department of Public Works, City of Philadelphia. Only annual maximum daily discharges are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1885	Dec. 7, 1884		3,420	1900	Feb. 5, 1900		3,610
1886	Feb. 13, 1886		4,400	1901	May 11, 1901		4,720
1887	Jan. 24, 1887		4,100	1902	Feb. 28, 1902		6,840
1888	Sept. 18, 1888		5,300	1903	Feb. 28, 1903		6,180
1889	July 31, 1889		5,570	1904	Sept. 15, 1904		5,460
1890	Feb. 8, 1890		a8,340	1905	Jan. 7, 1905		5,710
1891	Mar. 21, 1891		4,800	1906	May 4, 1906		4,050
1892	Jan. 14, 1892		3,700	1907	Sept. 29, 1907		4,850
1893	May 4, 1893		5,140	1908	Feb. 15, 1908		5,570
1894	May 21, 1894		8,770	1909	Feb. 24, 1909		3,370
1895	Apr. 9, 1895		4,200	1910	Jan. 22, 1910		4,590
1896	Feb. 6, 1896		9,790	1911	Aug. 31, 1911		2,090
1897	May 13, 1897		4,750	1912	Mar. 15, 1912		5,200
1898	Feb. 20, 1898		5,550	1913	Mar. 27, 1913		4,950
1899	Feb. 27, 1899		4,040				

a Momentary maximum discharge.

4730. Perkiomen Creek at Graterford, Pa.
(Published as "at Graters Ford" prior to 1951)

Location.--Lat 40°13'45", long 75°27'10", on left bank 1,650 ft upstream from highway bridge at Graterford, Montgomery County, half a mile upstream from Landis Brook, and 2½ miles north of Collegeville.

Drainage area.--279 sq mi.

Gage.--Nonrecording prior to Sept. 14, 1927; recording thereafter. Prior to Sept. 7, 1921, at site 1,650 ft downstream at datum 3.29 ft lower. Datum of gage is 112.66 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 12,000 cfs and extended above on basis of slope-area measurement at gage height 16.23 ft.

Bankfull stage.--11 ft.

Remarks.--Records prior to 1932 furnished by Pennsylvania Department of Forests and Waters. Flow regulated since Dec. 21, 1956. Base for partial-duration series, 6,800 cfs. Only annual peaks are shown for 1917-26, and subsequent to 1956.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1915	Jan. 7, 1915	14.33	19,800	1920	Nov. 13, 1919	8.6	6,720
	Jan. 13, 1915	13.98	18,900				
	Jan. 18, 1915	10.15	9,600	1921	Feb. 28, 1921	8.6	6,700
	Feb. 1, 1915	14.83	21,300	1922	Mar. 20, 1922	5.6	4,120
	Feb. 24, 1915	10.00	9,200	1923	Mar. 16, 1923	5.8	4,420
	Aug. 4, 1915	16.04	24,900	1924	Apr. 6, 1924	7.6	7,200
				1925	July 26, 1925	8.2	8,220
1916	Dec. 18, 1915	10.50	10,200				
	July 25, 1916	8.8	7,050	1926	Mar. 7, 1926	5.2	3,530
1917	Mar. 12, 1917	9.8	8,820	1927	Oct. 25, 1926	8.0	7,880
1918	Feb. 15, 1918	12.7	15,600		Nov. 16, 1926	10.2	13,000
1919	July 21, 1919	13.5	17,400				

Peak stages and discharges of Perkiomen Creek at Graterford, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Oct. 12, 1927	8.44	8,580	1943	May 20, 1943	8.30	8,770
	Oct. 19, 1927	9.31	10,300		May 26, 1943	9.92	12,600
	Nov. 3, 1927	8.98	9,680		June 18, 1943	11.62	17,000
	Nov. 17, 1927	10.82	13,600	1944	Oct. 27, 1943	7.43	6,860
	Dec. 8, 1927	10.10	12,000		Oct. 28, 1943	7.48	7,150
	Feb. 8, 1928	8.33	8,400		Nov. 9, 1943	11.43	16,400
	Feb. 23, 1928	8.13	8,050		Jan. 6, 1944	8.21	8,560
	Apr. 24, 1928	7.75	7,540		Mar. 13, 1944	10.20	13,300
	Apr. 28, 1928	8.77	9,300		Apr. 24, 1944	10.55	14,300
	July 14, 1928	13.36	21,200	1945	Nov. 27, 1944	7.60	7,200
	Aug. 7, 1928	7.15	6,560		Jan. 1, 1945	11.94	17,900
1929	Feb. 7, 1929	7.93	7,710		Feb. 26, 1945	8.32	8,770
	Feb. 28, 1929	11.22	14,700		July 19, 1945	8.09	8,350
	Mar. 6, 1929	7.10	6,400		Sept. 18, 1945	10.00	14,000
	Apr. 16, 1929	8.77	9,300	1946	Nov. 29, 1945	8.42	9,030
	Aug. 14, 1929	10.45	12,600		May 19, 1946	7.67	7,540
1930	Oct. 2, 1929	11.62	15,800		June 2, 1946	16.23	31,700
1931	July 14, 1931	6.16	5,020		July 23, 1946	12.18	18,900
1932	Jan. 7, 1932	7.44	6,880	1947	May 5, 1947	6.35	5,230
	Mar. 28, 1932	10.27	12,400	1948	May 5, 1948	9.07	9,870
1933	Nov. 7, 1932	9.34	10,300		May 7, 1948	7.36	6,960
	Nov. 10, 1932	9.22	10,100		May 13, 1948	10.19	12,200
	Nov. 19, 1932	9.39	10,500		June 20, 1948	8.20	8,580
	Feb. 20, 1933	7.66	7,370	1949	Dec. 30, 1948	11.85	17,800
	Mar. 21, 1933	9.58	10,900		Jan. 6, 1949	10.77	13,600
	Apr. 17, 1933	9.25	10,100	1950	Dec. 27, 1949	7.99	8,150
	July 17, 1933	9.41	10,500		Mar. 23, 1950	9.61	10,900
	Aug. 23, 1933	16.65	34,600	1951	Nov. 25, 1950	14.60	26,100
1934	Jan. 7, 1934	8.11	8,050		Dec. 4, 1950	8.94	10,200
	Mar. 5, 1934	8.72	9,120		Dec. 8, 1950	8.23	8,580
	Mar. 28, 1934	7.90	7,710		Jan. 15, 1951	8.96	10,500
	Apr. 1, 1934	8.06	8,050		Jan. 24, 1951	7.74	7,540
	Sept. 8, 1934	10.12	12,000		Feb. 7, 1951	9.83	11,300
	Sept. 30, 1934	12.34	19,100		Mar. 31, 1951	7.69	7,540
1935	July 9, 1935	18.26	39,900	1952	Nov. 7, 1951	10.03	11,700
	Aug. 4, 1935	7.83	7,540		Dec. 21, 1951	10.85	13,600
	Sept. 4, 1935	11.55	15,800		Feb. 4, 1952	7.40	6,960
					Mar. 11, 1952	10.98	15,600
1936	Nov. 17, 1935	10.94	13,900		Apr. 28, 1952	11.21	16,100
	Nov. 29, 1935	7.64	7,200		May 26, 1952	8.71	9,740
	Jan. 3, 1936	11.40	16,400		June 1, 1952	7.75	7,740
	Jan. 9, 1936	8.50	8,760		July 10, 1952	11.15	16,100
	Mar. 12, 1936	9.79	11,300	1953	Nov. 22, 1952	13.36	22,400
	Mar. 18, 1936	10.46	12,900		Dec. 11, 1952	12.49	19,700
	Apr. 6, 1936	9.60	10,900		Jan. 10, 1953	7.67	7,540
	June 13, 1936	9.08	9,870		Jan. 24, 1953	11.31	16,400
1937	Feb. 22, 1937	7.38	6,770		Mar. 4, 1953	7.36	6,960
					Mar. 15, 1953	8.31	8,800
					Apr. 7, 1953	8.51	9,260
					May 23, 1953	7.95	8,150
1938	Feb. 20, 1938	7.11	6,410		May 26, 1953	7.98	8,150
	July 23, 1938	8.82	9,300	1954	Dec. 7, 1953	8.27	8,800
	Sept. 21, 1938	10.50	14,000		Dec. 10, 1953	8.43	9,030
1939	Dec. 6, 1938	8.56	8,940		Dec. 14, 1953	8.68	9,740
	Feb. 3, 1939	10.75	14,800	1955	Aug. 13, 1955	14.26	24,200
	Feb. 28, 1939	9.34	10,300		Aug. 19, 1955	14.08	23,600
	Apr. 6, 1939	9.72	11,100	1956	Oct. 15, 1955	12.72	19,100
1940	Mar. 4, 1940	10.23	12,200		Feb. 6, 1956	7.70	7,370
	Mar. 15, 1940	12.71	19,100		Feb. 18, 1956	8.20	8,220
	Apr. 8, 1940	10.31	12,400		Mar. 14, 1956	9.90	11,500
	Apr. 20, 1940	9.00	9,680	1957	Apr. 5, 1957	9.35	10,500
	May 20, 1940	13.28	22,100		Feb. 28, 1958	11.23	14,700
	Sept. 25, 1940	7.17	6,520		Mar. 6, 1959	7.52	7,040
1941	Nov. 15, 1940	8.98	9,680		Sept. 12, 1960	14.55	25,400
	Dec. 17, 1940	9.21	10,100	1961	Feb. 26, 1961	8.44	8,580
	Dec. 28, 1940	-	(a)				
1942	Aug. 9, 1942	15.50	30,200				
	Aug. 14, 1942	8.93	9,490				
	Aug. 18, 1942	7.92	7,710				
1943	Dec. 30, 1942	10.96	14,200				

a Peak believed to have exceeded 6,800 cfs.

4735. Schuylkill River at Norristown, Pa.

Location.--Lat 40°06'40", long 75°20'25", at Schuylkill Navigation Company Dam, 800 ft upstream from DeKalb Street Bridge in Norristown, Montgomery County, and 1.5 miles upstream from Diamond Run.

Drainage area.--1,760 sq mi.

Gage.--Nonrecording at site 800 ft downstream at datum 1.59 ft lower prior to May 28, 1929; recording at described site thereafter. Altitude of gage is 48 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Records prior to 1932 furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 23,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Oct. 19, 1927	7.76	27,900	1930	Oct. 2, 1929	10.26	41,200
	Nov. 18, 1927	8.20	30,100	1931	July 15, 1931	10.40	42,000
	Dec. 8, 1927	8.70	32,700				
	Feb. 8, 1928	9.7	25,900	1932	Mar. 28, 1932	8.83	33,200
	Feb. 15, 1928	9.5	25,100				
	Apr. 28, 1928	9.9	26,700	1933	Nov. 4, 1932	8.20	30,100
	July 14, 1928	12.1	36,400		Nov. 10, 1932	8.00	29,000
1929	Feb. 26, 1929	12.1	36,400		Nov. 19, 1932	7.63	26,900
	Mar. 6, 1929	10.3	28,300		Mar. 22, 1933	10.2	41,000
	Apr. 16, 1929	9.4	24,700		Apr. 12, 1933	8.73	32,700
					Apr. 17, 1933	7.96	29,000

4740. Wissahickon Creek near Philadelphia, Pa.

Location.--Lat 40°00'55", long 75°12'25", about 900 ft upstream from mouth, in Philadelphia, Philadelphia County.

Drainage area.--64.6 sq mi.

Gage.--Recording. Altitude of gage is 30 ft (from topographic map).

Remarks.--Records furnished by Department of Public Works, City of Philadelphia. Only annual maximum daily discharges are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1897	July 22, 1897		2,820	1902	Feb. 28, 1902		1,980
1898	Feb. 20, 1898		1,510	1903	Jan. 3, 1903		1,240
1899	Feb. 27, 1899		1,280	1905	Jan. 7, 1905		1,750
1901	Aug. 24, 1901		1,100	1906	Mar. 4, 1906		1,120

4745. Schuylkill River at Philadelphia, Pa.

Location.--Lat 39°58'00", long 75°11'05", on left bank just upstream from Fairmount Dam in Philadelphia, Philadelphia County, 8.2 miles upstream from mouth.

Drainage area.--1,893 sq mi.

Gage.--Recording. Prior to Nov. 26, 1956, at site on right bank just upstream from Fairmount Dam. Datum of gage is 5.74 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 46,000 cfs.

Bankfull stage.--12 ft.

Historical data.--Flood of Oct. 4, 1869, is greatest known.

Remarks.--Base for partial-duration series, 18,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1870	Oct. 4, 1869	17.0	135,000	1942	May 24, 1942	12.44	61,400
1902	Mar. 1, 1902	14.8	98,000		Aug. 9, 1942	13.10	71,500
					Aug. 18, 1942	9.00	21,000
1932	Mar. 28, 1932	10.27	33,300		Sept. 28, 1942	9.15	22,400
1933	Nov. 1, 1932	8.87	19,200	1943	Dec. 30, 1942	11.36	47,800
	Nov. 7, 1932	9.74	27,600		Feb. 11, 1943	8.68	18,300
	Nov. 10, 1932	9.94	29,600		May 26, 1943	9.46	25,300
	Nov. 19, 1932	9.71	27,100		June 18, 1943	8.83	19,600
	Mar. 20, 1933	9.16	21,800	1944	Nov. 9, 1943	11.19	45,200
	Mar. 21, 1933	10.26	33,300		Jan. 4, 1944	9.75	28,800
	Apr. 12, 1933	10.19	32,200		Jan. 6, 1944	9.45	25,300
	Apr. 17, 1933	9.65	26,600		Mar. 13, 1944	10.11	32,100
	Aug. 24, 1933	14.70	96,200		Apr. 25, 1944	10.44	35,400
1934	Jan. 7, 1934	8.83	19,200		Apr. 28, 1944	8.97	20,600
	Mar. 5, 1934	10.03	30,100	1945	Jan. 1, 1945	11.06	43,900
	Apr. 1, 1934	8.84	19,200		Feb. 27, 1945	9.25	23,300
	Sept. 8, 1934	9.38	24,100		July 19, 1945	9.65	26,800
	Sept. 30, 1934	11.30	44,800		Sept. 19, 1945	11.92	54,400
1935	Dec. 2, 1934	8.95	20,000	1946	Nov. 29, 1945	10.19	33,200
	July 9, 1935	14.10	82,000		Dec. 26, 1945	9.57	26,800
	Sept. 5, 1935	9.84	28,600		Mar. 28, 1946	9.14	22,400
1936	Nov. 17, 1935	9.01	20,500		June 2, 1946	14.57	94,600
	Jan. 3, 1936	11.70	49,600		July 23, 1946	10.63	37,800
	Jan. 9, 1936	9.61	26,100	1947	May 26, 1947	8.63	17,900
	Mar. 12, 1936	11.62	48,400	1948	May 7, 1948	9.20	21,700
	Mar. 18, 1936	10.84	38,800		May 13, 1948	10.18	31,500
	Mar. 22, 1936	9.02	20,500	1949	Dec. 30, 1948	12.00	54,400
	Apr. 6, 1936	9.63	26,600		Jan. 6, 1949	10.96	40,800
1937	Dec. 20, 1936	8.60	17,100		Jan. 28, 1949	8.78	18,100
1938	July 23, 1938	10.21	32,200	1950	Feb. 15, 1950	8.88	19,600
	Sept. 21, 1938	10.66	37,700		Mar. 23, 1950	10.12	31,000
1939	Dec. 6, 1938	10.06	31,100	1951	Nov. 25, 1950	14.32	89,800
	Jan. 30, 1939	9.35	23,600		Dec. 5, 1950	10.70	37,600
	Feb. 3, 1939	11.08	42,400		Dec. 8, 1950	9.55	25,500
	Feb. 28, 1939	9.70	27,100		Jan. 15, 1951	9.14	21,800
	Apr. 7, 1939	9.97	29,600		Feb. 7, 1951	10.74	37,600
1940	Mar. 4, 1940	11.23	43,600	1952	Nov. 7, 1951	10.52	34,800
	Mar. 15, 1940	11.72	49,600		Dec. 21, 1951	10.98	40,800
	Apr. 9, 1940	10.43	34,400		Jan. 28, 1952	8.98	20,500
	Apr. 20, 1940	9.80	28,100		Feb. 4, 1952	9.09	21,400
	May 21, 1940	10.04	30,100		Mar. 11, 1952	10.89	40,000
1941	Nov. 15, 1940	9.22	22,300		Apr. 28, 1952	11.92	53,000
	Dec. 17, 1940	9.08	21,400		May 26, 1952	10.03	30,000
	Dec. 28, 1940	8.74	18,300		June 1, 1952	9.44	24,600

Peak stages and discharges of Schuylkill River at Philadelphia, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	July 10, 1952	9.86	29,000	1956	Oct. 15, 1955	10.12	33,500
	Sept. 2, 1952	9.22	22,300		Mar. 14, 1956	9.22	24,200
1953	Nov. 22, 1952	12.41	60,300	1957	Apr. 6, 1957	9.95	32,400
	Dec. 11, 1952	11.70	50,200		Dec. 21, 1957	8.92	21,300
	Jan. 10, 1953	8.93	20,000	1958	Feb. 28, 1958	10.07	33,500
	Jan. 25, 1953	9.34	23,600		Mar. 27, 1958	8.68	19,500
	Mar. 26, 1953	9.17	21,800		Apr. 7, 1958	9.38	26,200
	Mar. 26, 1953	8.96	20,000	1959	Jan. 22, 1959	8.35	16,400
	Apr. 7, 1953	8.86	19,200		Apr. 5, 1960	9.20	24,200
	May 23, 1953	8.89	19,600	1960	Sept. 12, 1960	11.58	51,200
	May 26, 1953	9.85	28,000		Feb. 26, 1961	8.99	22,200
1954	Dec. 7, 1953	9.28	23,200	1961	Apr. 13, 1961	8.94	21,800
	Dec. 14, 1953	9.36	23,600				
1955	Mar. 23, 1955	-	(a)				
	Aug. 13, 1955	11.25	44,200				
	Aug. 19, 1955	14.32	90,100				

a Peak believed to have exceeded 18,000 cfs.

4750. Mantua Creek at Pitman, N.J.

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. Area of swamps, lakes, and bogs, 0.2 sq mi.

Gage.--Recording gage above concrete dam. Datum of gage is 68.51 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 63 cfs and extended above on basis of laboratory rating and flow-over-dam measurement of 4,200 cfs.

Remarks.--Base for partial-duration series, 50 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940a	May 17, 1940	1.41	54	1945	Aug. 7, 1945	1.41	54
	May 21, 1940	1.48	66		Nov. 29, 1945	1.51	72
	Aug. 28, 1940	1.40	52	1946	Dec. 26, 1945	1.42	56
	Sept. 1, 1940	6.64	4,200		Dec. 29, 1945	1.44	59
1941b	July 7, 1941	1.54	78		June 12, 1946	1.46	63
	Dec. 13-14, 1941	1.40	52		July 3, 1946	1.53	76
1942	July 11, 1942	1.42	56	1947	July 22, 1946	1.70	114
	July 27, 1942	1.43	57		July 19, 1947	1.44	59
	Aug. 12, 1942	1.47	65	1948	Feb. 14, 1948	1.66	104
	Apr. 19, 1943	1.43	57		May 3, 1949	1.37	47
1944	Sept. 14-15, 1944	1.72	119	1950	July 6, 1950	1.45	61
	Nov. 27, 1944	1.44	59		July 10, 1950	1.98	194
1945	July 17, 1945	1.68	109		Aug. 30, 1950	1.61	93
	July 19, 1945	1.63	97				

a Period Apr. 5 to Sept. 1, 1940.

b Period May 19 to Sept. 30, 1941.

Peak stages and discharges of Mantua Creek at Pitman, N. J.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Sept. 13, 1950	1.59	89	1956	Oct. 14, 1955	1.41	54
1951	Nov. 25, 1950	1.78	135	1957	Nov. 2, 1956	1.62	96
	June 23, 1951	1.46	63	1958	Feb. 28, 1958	1.44	59
1952	Dec. 21, 1951	1.90	169		July 22, 1958	1.41	54
	Mar. 11, 1952	1.49	68		July 24, 1958	1.51	72
	Apr. 28, 1952	1.49	68		Aug. 1, 1958	1.46	63
	June 1, 1952	1.44	59		Aug. 16, 1958	1.60	91
	Aug. 10, 1952	2.10	233		Aug. 25, 1958	1.65	102
	Sept. 1, 1952	1.40	52	1959	July 14, 1959	1.83	149
1953	Nov. 22, 1952	1.46	63	1960	July 30, 1960	1.67	107
	Mar. 13, 1953	1.40	52		Sept. 12, 1960	2.12	240
	June 13, 1953	1.56	83		Sept. 30, 1960	1.41	54
1954	Dec. 14, 1953	1.47	65	1961	Jan. 1, 1961	1.51	72
	Sept. 11, 1954	1.47	65		Apr. 13, 1961	1.47	65
1955	Aug. 13, 1955	1.76	130		July 29, 1961	1.45	61
	Aug. 19, 1955	1.42	56				
	Sept. 20, 1955	1.55	80				

4760. Crum Creek at Woodlyn, Pa.

Location.--Lat 39°52'45", long 75°21'00", at highway bridge at Woodlyn, Delaware County, 2 miles northeast of Chester, and 2½ miles upstream from mouth.

Drainage area.--33.3 sq mi.

Gage.--Nonrecording prior to July 13, 1931; recording thereafter. Datum of gage is 19.58 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 550 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 330 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	Mar. 28, 1932	3.00	334	1935	Sept. 4, 1935	6.22	1,060
1933	Apr. 12, 1933	3.67	471	1936	Nov. 17, 1935	4.37	637
	Apr. 17, 1933	3.43	428		Jan. 3, 1936	5.00	775
	June 26, 1933	3.72	482		Jan. 9, 1936	5.08	799
	Aug. 23, 1933	7.56	1,420		Feb. 26, 1936	3.60	460
1934	Mar. 5, 1934	4.38	637		Mar. 12, 1936	3.75	493
	May 3, 1934	3.23	386		Mar. 18, 1936	4.15	592
					Apr. 6, 1936	3.42	418
1935	July 9, 1935	4.52	660	1937	Feb. 22, 1937	3.48	428

4765. Ridley Creek at Moylan, Pa.

Location.--Lat 39°54'10", long 75°23'35", at Fox Bank Bridge at Moylan, Delaware County, and 1 mile south of Media.

Drainage area.--31.9 sq mi.

Gage.--Recording. Datum of gage is 87.36 ft above mean sea level (Pennsylvania Railroad bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 1,300 cfs and extended on basis of contracted-opening measurement.

Remarks.--Base for partial-duration series, 750 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	Mar. 28, 1932	4.60	891	1943	May 12, 1943	4.20	775
1933	May 24, 1933	4.55	866	1944	Jan. 6, 1944	4.30	865
	Aug. 23, 1933	7.36	2,680		Jan. 1, 1945	4.49	980
1934	Mar. 5, 1934	4.86	1,080	1945	July 5, 1945	4.36	842
	July 9, 1935	7.81	3,000		Aug. 1, 1945	4.39	920
1935	Sept. 4, 1935	5.46	1,330		Sept. 18, 1945	4.59	1,040
1936	Nov. 17, 1935	4.28	820	1946	Nov. 29, 1945	4.67	978
	Jan. 3, 1936	5.85	1,590		Dec. 26, 1945	4.72	1,000
	Jan. 9, 1936	5.26	1,280	1947	May 22, 1947	3.44	483
	Mar. 11, 1936	4.14	752		May 5, 1948	4.06	740
	Mar. 18, 1936	4.60	955	1948	Dec. 30, 1948	4.60	1,040
1937	Feb. 22, 1937	4.10	770		Aug. 3, 1950	5.85	1,590
1938	June 12, 1938	4.56	932	1950	Nov. 25, 1950	10.84	5,720
	July 27, 1938	4.66	978		Nov. 7, 1951	4.68	1,000
	July 23, 1938	8.16	3,320	1951	Dec. 21, 1951	5.23	1,280
	Aug. 7, 1938	4.18	775		Feb. 4, 1952	4.18	775
1939	Feb. 3, 1939	4.66	978	1952	Mar. 11, 1952	5.60	1,490
	Aug. 19, 1939	4.62	955		Apr. 5, 1952	4.47	918
1940	Mar. 4, 1940	4.92	1,100	1953	July 9, 1952	4.64	1,020
	Mar. 15, 1940	6.14	1,770		Nov. 22, 1952	4.43	918
1941	Feb. 7, 1941	4.03	746		Dec. 11, 1952	4.15	782
	July 31, 1942	4.29	820	1954	Jan. 24, 1953	4.32	850
1942	Aug. 9, 1942	4.55	932		Dec. 14, 1953	3.89	670
	Aug. 13, 1942	4.68	1,000	1955	Aug. 18, 1955	9.42	a4,390
1943	Dec. 30, 1942	4.48	980				

a Annual peak only.

4766. Still Run near Mickleton, N.J.

Location.--Lat 39°47'19", long 75°15'27", on left bank at downstream side of county highway bridge, 1 mile west of Mickleton, Gloucester County, and 3.4 miles upstream from confluence with Pargey Creek.

Drainage area.--3.95 sq mi.

Gage.--Recording. Altitude of gage is 5 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 210 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 65 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957a/	Aug. 26, 1957	3.33	105	1960	Sept. 12, 1960	4.80	275
1958	June 26, 1958	3.16	84	1961	Jan. 1, 1961	3.44	83
	July 24, 1958	3.11	76		Apr. 13, 1961	3.29	77
1959	Sept. 2, 1959	3.35	82		July 24, 1961	3.29	74
					July 29, 1961	3.22	68
1960	July 30, 1960	3.46	80				

a Period Aug. 15 to Sept. 30, 1957.

4770. Chester Creek near Chester, Pa.

Location.--Lat 39°52'10", long 75°24'30", on right bank 10 ft upstream from Dutton Mill Bridge and 3 miles northwest of Chester, Delaware County.

Drainage area.--61.1 sq mi.

Gage.--Recording. Datum of gage is 23.41 ft above mean sea level (Pennsylvania Railroad bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 2,400 cfs and extended on basis of contracted-opening measurement.

Bankfull stage.--8 ft.

Remarks.--Base for partial-duration series, 1,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	Mar. 28, 1932	7.41	2,100	1939	Feb. 3, 1939	7.48	2,180
1933	Nov. 10, 1932	7.20	2,070		Apr. 6, 1939	6.95	1,740
	Apr. 12, 1933	6.20	1,500		Aug. 19, 1939	9.23	3,630
	Apr. 17, 1933	6.13	1,450	1940	Jan. 14, 1940	6.18	1,390
	Aug. 23, 1933	11.48	6,250		Mar. 4, 1940	7.91	2,420
					Mar. 15, 1940	10.26	4,770
1934	Mar. 5, 1934	7.83	2,480		Apr. 8, 1940	6.68	1,600
1935	July 9, 1935	7.78	2,480		Apr. 20, 1940	6.34	1,440
	Sept. 4, 1935	8.72	2,920		May 21, 1940	7.34	2,130
1936	Nov. 17, 1935	6.66	1,770	1941	Feb. 7, 1941	6.11	1,350
	Jan. 3, 1936	9.94	4,330		Mar. 11, 1941	6.08	1,350
	Jan. 9, 1936	10.50	5,000	1942	Aug. 13, 1942	7.80	2,360
	Feb. 25, 1936	6.82	1,830				
	Mar. 12, 1936	6.63	1,710	1943	Dec. 30, 1942	7.80	2,360
	Mar. 18, 1936	6.25	1,500		Mar. 6, 1943	6.76	1,650
	Apr. 6, 1936	6.36	1,600		Apr. 19, 1943	6.00	1,310
					June 27, 1943	7.79	2,360
1937	Feb. 22, 1937	6.14	1,350	1944	Apr. 24, 1944	6.35	1,480
1938	Nov. 13, 1937	6.25	1,390				
	June 27, 1938	8.22	2,600	1945	July 5, 1945	8.56	3,100
	July 23, 1938	10.57	5,120		Aug. 1, 1945	9.98	4,440
	July 25, 1938	6.88	1,690		Sept. 18, 1945	7.34	2,130
	Aug. 7, 1938	6.80	1,650	1946	Nov. 29, 1945	8.23	2,600
	Sept. 21, 1938	6.53	1,520		June 2, 1946	8.30	2,660
1939	Jan. 30, 1939	6.50	1,520		July 23, 1946	6.65	1,560

Peak stages and discharges of Chester Creek near Chester, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	May 1, 1947	7.56	2,240	1954	Dec. 14, 1953	6.46	1,630
1948	Nov. 4, 1947	7.50	2,180	1955	Feb. 7, 1955	6.02	1,400
	Nov. 8, 1947	6.30	1,430		Aug. 13, 1955	8.28	2,840
	Nov. 12, 1947	7.90	2,420		Aug. 18, 1955	13.57	9,380
	May 5, 1948	6.72	1,770	1956	June 1, 1956	6.75	1,830
	July 14, 1948	6.20	1,500		July 21, 1956	7.98	2,620
1949	Dec. 30, 1948	7.14	1,940	1957	Apr. 2, 1957	4.57	802
1950	Aug. 3, 1950	10.48	5,000	1958	Dec. 21, 1957	6.17	1,500
1951	Nov. 25, 1950	16.21	14,400		Jan. 22, 1958	6.41	1,600
	Mar. 20, 1951	6.34	1,530		Jan. 25, 1958	6.00	1,400
1952	Nov. 7, 1951	8.68	2,920		Feb. 27, 1958	6.60	1,710
	Dec. 21, 1951	9.11	3,200		Apr. 6, 1958	6.96	1,950
	Feb. 4, 1952	7.01	1,880		July 24, 1958	6.72	1,770
	Mar. 11, 1952	8.08	2,540		July 27, 1958	6.80	1,830
	Mar. 19, 1952	6.33	1,530		Aug. 25, 1958	6.00	1,400
	Apr. 5, 1952	6.55	1,680	1959	Jan. 2, 1959	7.20	2,070
	July 9, 1952	9.52	3,920	1960	Sept. 12, 1960	13.89	9,940
1953	Nov. 22, 1952	6.26	1,530	1961	Jan. 1, 1961	6.10	1,450
	Dec. 11, 1952	6.17	1,480		Apr. 13, 1961	7.87	2,550
	Jan. 24, 1953	6.73	1,730				

4775. Oldmans Creek near Woodstown, N.J.

Location.--Lat 39°41'27", long 75°19'09", on left bank at upstream side of Woodstown-Swedesboro highway bridge, 2 miles north of Woodstown, Salem County, and 16 miles upstream from mouth.

Drainage area.--19.3 sq mi. Area of swamps and lakes, 0.2 sq mi.

Gage.--Recording gage and concrete control. Altitude of gage is 13 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 400 cfs and extended above on basis of contracted-opening measurement at 8,100 cfs.

Bankfull stage.--3 ft.

Remarks.--Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931a/	July 8, 1931	5.64	355	1936	June 18, 1936	5.52	325
1932	Mar. 28, 1932	5.54	330	1937	Aug. 22, 1937	4.70	251
	Aug. 7, 1932	4.84	201		Aug. 27, 1937	5.46	362
1933	Nov. 10, 1932	4.94	216	1938	June 27, 1938	9.08	2,000
	Nov. 19, 1932	5.05	232		July 24, 1938	4.47	222
	Apr. 12, 1933	5.04	231		Sept. 20, 1938	6.71	756
	Aug. 23, 1933	8.22	1,380	1939	Jan. 30, 1939	5.49	408
	Aug. 29, 1933	4.83	200		Feb. 3, 1939	4.93	323
1934	Mar. 3, 1934	4.95	218		Feb. 11, 1939	3.47	212
	July 13, 1934	5.72	375		Feb. 28, 1939	3.49	213
	Aug. 3, 1934	6.16	498		Apr. 19, 1939	3.53	216
	Sept. 8, 1934	5.54	330		Apr. 26, 1939	3.53	216
1935	Aug. 15, 1935	5.03	230		Aug. 19, 1939	4.32	273
	Sept. 6, 1935	7.57	1,040	1940	Mar. 4, 1940	3.91	245
1936	Nov. 29, 1935	5.89	418		Mar. 15, 1940	3.56	219
	Jan. 3, 1936	6.67	651		Apr. 9, 1940	3.53	216
	Feb. 14, 1936	5.44	308		Apr. 20, 1940	3.73	232
	Feb. 25, 1936	5.37	294		May 17, 1940	3.63	224
					Sept. 1, 1940	20.3	8,100

a Period June 20 to Sept. 30, 1931.

4778. Shellpot Creek at Wilmington, Del.

Location.--Lat 39°45'39", long 75°31'10", on right bank 100 ft northeast of intersection of Forty-fourth and Pine Streets in Sellers Park, 700 ft downstream from highway bridge on North Market Street in Wilmington, New Castle County, and 0.2 mile downstream from Matson Run.

Drainage area.--7.46 sq mi.

Gage.--Recording. Altitude of gage is 25 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 620 cfs and extended above on basis of flow-over-dam measurement at 2,110 cfs and contracted-opening measurements at 2,190 and 4,110 cfs.

Bankfull stage.--4.0 ft.

Historical data.--Flood of July 9, 1952, is greatest since at least 1940.

Remarks.--Base for partial-duration series, 550 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Aug. 1, 1945	8.5	-	1953	July 23, 1953	3.83	785
1946a	May 18, 1946	4.90	1,340	1954	Dec. 14, 1953	3.92	830
1947	May 1, 1947	6.52	2,140	1955	Aug. 13, 1955	4.21	975
	May 22, 1947	3.90	840		Aug. 18, 1955	6.73	2,280
1948	Nov. 4, 1947	5.13	1,440	1956	Mar. 14, 1956	3.41	575
	Nov. 12, 1947	4.68	1,240		July 21, 1956	4.92	1,330
	Apr. 1, 1948	3.35	572	1957	Nov. 2, 1956	4.27	1,000
	May 5, 1948	3.43	595		Apr. 2, 1957	3.86	800
	May 7, 1948	3.48	640	1958	Dec. 20, 1957	3.92	830
	June 19, 1948	3.45	617		Jan. 25, 1958	3.80	770
1949	Dec. 30, 1948	3.63	715		Feb. 27, 1958	3.64	690
	Jan. 28, 1949	3.53	665		Apr. 6, 1958	4.55	1,140
1950	Aug. 3, 1950	3.35	565		June 11, 1958	3.46	600
1951	Nov. 25, 1950	4.80	1,290		July 6, 1958	3.84	790
	Mar. 20, 1951	3.92	840		Aug. 25, 1958	3.62	680
1952	Nov. 7, 1951	4.43	1,080	1959	June 2, 1959	5.34	1,540
	Dec. 21, 1951	4.02	880		June 25, 1959	3.42	555
	Feb. 4, 1952	3.70	720		Aug. 31, 1959	3.98	860
	Mar. 11, 1952	3.45	595		Sept. 2, 1959	4.39	1,060
	Mar. 19, 1952	3.64	690	1960	Jan. 3, 1960	3.58	660
	June 1, 1952	3.65	695		July 30, 1960	4.08	910
	July 9, 1952	8.6	4,080		Sept. 12, 1960	6.12	1,930
1953	Dec. 11, 1952	3.37	555	1961	Jan. 1, 1961	3.56	650
	Jan. 9, 1953	3.37	555		Apr. 13, 1961	4.68	1,210
	Jan. 24, 1953	3.39	565		July 29, 1961	4.14	940

a Partial year.

b From floodmark; 7.97 ft in gage well.

4780. Christina River at Coochs Bridge, Del.

Location.--Lat 39°38'16", long 75°43'46", on left bank at downstream side of highway bridge, 0.3 mile south of Coochs Bridge, New Castle County, 3.3 miles upstream from Muddy Run, and 3.5 miles south of Newark.

Drainage area.--20.5 sq mi.

Gage.--Nonrecording prior to Sept. 14, 1944; recording thereafter. Datum of gage is 25.6 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--9 ft.

Remarks.--Base for partial-duration series, 1,000 cfs.

Peak stages and discharges of Christina River at Coochs Bridge, Del.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943a/	Apr. 19, 1943	9.75	1,660	1952	Feb. 4, 1952	10.25	1,160
	May 21, 1943	10.55	2,120		Mar. 11, 1952	10.02	1,090
	June 27, 1943	8.50	1,060		May 26, 1952	10.04	1,090
1944					July 9, 1952	10.91	1,360
	Nov. 9, 1943	8.91	1,220	1953	Nov. 22, 1952	9.95	1,020
	Jan. 6, 1944	9.22	1,360		Dec. 11, 1952	10.00	1,040
	Mar. 13, 1944	9.43	1,460		Jan. 24, 1953	10.23	1,110
1945	Apr. 24, 1944	9.98	1,760	1954	Dec. 14, 1953	9.87	1,000
	Dec. 12, 1944	9.29	1,090				
	Jan. 1, 1945	9.45	1,150	1955	Feb. 7, 1955	9.62	1,190
	Apr. 27, 1945	9.28	1,090		Aug. 13, 1955	10.23	1,410
	July 18, 1945	10.22	1,440		Aug. 18, 1955	11.29	1,950
	July 19, 1945	9.68	1,240	1956	Mar. 14, 1956	9.87	1,270
	July 29, 1945	9.72	1,240		July 21, 1956	10.44	1,500
	Aug. 1, 1945	10.84	1,680	1957	Nov. 2, 1956	10.01	1,320
	Sept. 18, 1945	10.05	1,320		Apr. 2, 1957	9.69	1,210
1946	June 2, 1946	9.27	1,090	1958	Dec. 21, 1957	9.30	1,090
	July 23, 1946	10.29	1,440		Jan. 25, 1958	9.68	1,200
1947	May 1, 1947	12.41	2,620		Feb. 28, 1958	10.09	1,360
	May 22, 1947	9.89	1,280		Apr. 6, 1958	10.05	1,020
1948	Jan. 2, 1948	9.87	1,280	1959	Jan. 2, 1959	9.33	1,100
	Feb. 14, 1948	9.67	1,210		Sept. 3, 1959	9.59	1,180
	Apr. 1, 1948	9.53	1,150	1960	Dec. 12, 1959	9.13	1,040
	May 5, 1948	9.58	1,180		Feb. 19, 1960	9.55	1,160
	May 7, 1948	9.16	1,060		Apr. 5, 1960	9.58	1,170
	June 19, 1948	9.54	1,150		Aug. 6, 1960	9.65	1,200
1949	Dec. 30, 1948	10.29	1,440		Sept. 12, 1960	11.33	1,980
1950	Mar. 23, 1950	9.67	1,210	1961	Jan. 1, 1961	9.58	1,170
	Nov. 25, 1950	10.17	1,400		Feb. 19, 1961	9.17	1,050
1951	Mar. 20, 1951	9.80	1,010		Apr. 13, 1961	9.92	1,290
1952	Dec. 21, 1951	10.70	1,290				

a Partial year.

4785. White Clay Creek above Newark, Del.

Location.--Lat 39°42'50", long 75°45'35", on downstream side of right abutment of Tweeds Mill Bridge, 0.9 mile downstream from small tributary, 1.7 miles southeast of Delaware-Maryland-Pennsylvania State corner, 2.1 miles downstream from Pennsylvania-Delaware State line, and 2.2 miles north of Newark, New Castle County.

Drainage area.--66.7 sq mi.

Gage.--Recording. Datum of gage is 78.6 ft above mean sea level, datum of 1929

Stage-discharge relation.--Defined by current-meter measurements below 1,800 cfs and extended above by logarithmic plotting.

Bankfull stage.--7 ft.

Remarks.--Base for partial-duration series, 1,500 cfs.

Peak stages and discharges of White Clay Creek above Newark, Del.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952a/	Mar. 11, 1952	7.50	2,780	1956	July 21, 1956	6.09	1,930
1953	Nov. 22, 1952	6.36	2,100	1957	Nov. 2, 1956	7.76	2,960
	Dec. 11, 1952	6.47	2,160				
	Jan. 9, 1953	5.33	1,520	1958	Dec. 20, 1957	6.10	1,940
	Jan. 24, 1953	7.23	2,620		Jan. 14, 1958	5.30	1,510
1954	Dec. 14, 1953	5.92	1,840		Jan. 22, 1958	6.56	2,220
	Aug. 20, 1954	5.56	1,640		Jan. 25, 1958	6.77	2,340
1955	Feb. 6, 1955	8.15	3,240		Feb. 28, 1958	7.57	2,830
	Aug. 13, 1955	7.16	2,580		Apr. 6, 1958	6.43	1,870
	Aug. 14, 1955	6.00	1,880		Aug. 16, 1958	6.30	2,060
	Aug. 18, 1955	9.21	4,050		Aug. 25, 1958	6.50	2,180
1956	June 1, 1956	5.75	1,750	1959	Jan. 2, 1959	8.05	3,160

a Partial year.

4790. White Clay Creek near Newark, Del.

Location--Lat 39°42'00", long 75°41'10", on left bank 300 ft upstream from Baltimore & Ohio Railroad bridge, 0.4 mile downstream from Pike Creek, and 3.5 miles east of Newark, New Castle County.

Drainage area--87.8 sq mi.

Gage--Recording. Datum of gage is 11.6 ft above mean sea level, datum of 1929.

Stage-discharge relation--Defined by current-meter measurements.

Remarks--Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	Mar. 28, 1932	11.45	3,030	1946	July 23, 1946	15.74	5,960
1933	Apr. 12, 1933	-	2,720	1947	May 1, 1947	12.23	3,170
	Apr. 17, 1933	-	3,100		July 8, 1947	-	2,250
	July 3, 1933	-	2,480	1948	Feb. 14, 1948	12.35	3,310
	Aug. 4, 1933	-	2,720	1949	Dec. 30, 1948	11.73	2,850
	Aug. 23, 1933	16.05	6,230				
	Sept. 15, 1933	-	2,300	1950	Mar. 23, 1950	-	2,160
1934	Mar. 3, 1934	-	3,870		Aug. 3, 1950	14.07	4,590
	Mar. 5, 1934	12.64	3,870	1951	Nov. 25, 1950	12.37	3,310
1935	July 8, 1935	12.25	3,790		Feb. 7, 1951	11.29	2,610
	Sept. 5, 1935	-	3,650	1952	Dec. 21, 1951	13.34	3,980
1936	Nov. 17, 1935	-	3,230		Feb. 4, 1952	11.18	2,540
	Jan. 3, 1936	15.0	6,030		Mar. 11, 1952	12.03	3,050
	Jan. 9, 1936	-	5,230		May 26, 1952	10.48	2,150
	Feb. 26, 1936	-	2,240		July 9, 1952	15.47	5,750
	Mar. 12, 1936	-	4,110	1953	Nov. 22, 1952	10.99	2,420
	Mar. 18, 1936	-	2,740		Dec. 11, 1952	11.41	2,680
	Apr. 6, 1936	-	2,540		Jan. 9, 1953	10.21	2,010
1943a/	June 27, 1943	-	2,420		Jan. 24, 1953	11.99	3,020
	July 11, 1943	11.06	3,020	1954	Dec. 14, 1953	11.20	2,550
1944	Jan. 4, 1944	-	3,510	1955	Feb. 7, 1955	11.90	2,820
	Mar. 13, 1944	-	2,300		Aug. 13, 1955	12.02	2,900
	Apr. 24, 1944	-	2,060		Aug. 18, 1955	15.76	6,010
	Sept. 13, 1944	12.46	4,050	1956	July 21, 1956	12.51	3,250
1945	Jan. 1, 1945	-	3,230	1957	Nov. 2, 1956	13.21	3,800
	Apr. 26, 1945	-	2,240	1960	Sept. 12, 1960	16.11	6,340
	July 18, 1945	-	3,100	1961	Jan. 1, 1961	11.06	2,300
	July 27, 1945	-	2,430				
	Aug. 1, 1945	-	3,170				
	Sept. 19, 1945	13.20	3,870				
1946	June 2, 1946	-	3,100				

a Period June 3 to Sept. 30, 1943.

4800. Red Clay Creek at Wooddale, Del.

Location.--Lat 39°45'52", long 75°38'08", on right bank 12 ft upstream from bridge on State Highway 48, 0.3 mile south of Wooddale, New Castle County, and 2.3 miles north of Marshallton.

Drainage area.--47.0 sq mi.

Gage.--Nonrecording and crest-stage gage prior to Sept. 21, 1950; recording and concrete control thereafter. Altitude of gage is 90 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,600 cfs and extended above on basis of contracted-opening measurement at 6,000 cfs.

Bankfull stage.--5.5 ft.

Remarks.--Base for partial-duration series, 1,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943a/	May 12, 1943	5.52	1,730	1952	Dec. 21, 1951	6.85	2,500
	June 27, 1943	5.14	1,490		Feb. 4, 1952	5.60	1,630
	July 11, 1943	4.85	1,310		Mar. 11, 1952	5.89	1,820
1944	Jan. 4, 1944	5.38	1,670		June 1, 1952	4.88	1,200
	Mar. 13, 1944	5.02	1,430		July 9, 1952	7.21	2,750
1945	Jan. 1, 1945	5.80	1,910	1953	Nov. 22, 1952	5.16	1,370
	July 2, 1945	4.77	1,310		Dec. 11, 1952	5.70	1,690
	July 5, 1945	5.02	1,430		Jan. 24, 1953	5.85	1,800
	July 18, 1945	7.29	2,810	1954	Dec. 14, 1953	4.98	1,260
	Aug. 1, 1945	4.79	1,310	1955	Feb. 7, 1955	6.03	1,920
	Aug. 6, 1945	4.75	1,310		Aug. 13, 1955	7.21	2,750
	Sept. 18, 1945	5.70	1,850		Aug. 18, 1955	8.38	3,650
1946	June 2, 1946	6.19	2,150	1956	Mar. 14, 1956	4.91	1,220
	July 23, 1946	6.76	2,510		June 1, 1956	5.22	1,400
1947	May 1, 1947	6.07	2,030		July 21, 1956	5.42	1,520
1948	Nov. 8, 1947	4.91	1,370	1957	Nov. 2, 1956	6.88	2,520
	Feb. 14, 1948	5.50	1,730	1958	Jan. 22, 1958	5.25	1,420
	Feb. 17, 1948	4.99	1,430		Jan. 25, 1958	5.30	1,450
	Feb. 28, 1948	5.20	1,550		Feb. 28, 1958	5.90	1,830
	June 19, 1948	5.24	1,550		Apr. 6, 1958	5.28	1,440
1949	Dec. 30, 1948	5.80	1,880		June 11, 1958	6.67	2,370
	Jan. 28, 1949	5.50	1,730		Aug. 16, 1958	5.02	1,280
	Mar. 23, 1949	5.56	1,790		Aug. 25, 1958	4.97	1,250
				1959	Jan. 2, 1959	6.17	2,020
1950	Aug. 3, 1950	6.92	2,570				
	Sept. 11, 1950	5.42	1,670	1960	Feb. 19, 1960	5.18	1,410
1951	Nov. 25, 1950	7.20	2,740		Sept. 12, 1960	9.93	6,000
	Feb. 7, 1951	5.11	1,330	1961	Apr. 13, 1961	5.06	1,390
1952	Nov. 7, 1951	5.82	1,770				

a Partial year.

4805. West Branch Brandywine Creek at Coatesville, Pa.

Location.--Lat 39°59'00", long 75°49'35", at bridge on U.S. Highway 30 in Coatesville, Chester County, and 0.6 mile upstream from Sucker Run.

Drainage area.--45.8 sq mi.

Gage.--Nonrecording and crest-stage gage. Datum of gage is 302.38 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 390 cfs and extended above on basis of slope-area measurement at gage height 12.3 ft.

Remarks.--Base for partial-duration series, 650 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Aug. 9, 1942	12.3	8,600	1947	July 8, 1947	3.00	675
1944	Nov. 9, 1943	3.53	945	1948	Nov. 4, 1947	3.1	725
	Jan. 4, 1944	4.2	1,340		Nov. 24, 1947	3.0	675
	Mar. 13, 1944	3.5	945		May 5, 1948	3.9	1,170
1945	Jan. 1, 1945	3.9	1,160		Aug. 22, 1948	3.4	885
	Feb. 23, 1945	3.0	780		Sept. 10, 1948	3.3	830
	July 2, 1945	3.5	1,060	1949	Dec. 30, 1948	3.9	1,170
	July 15, 1945	3.1	835		Jan. 5, 1949	3.6	995
	July 18, 1945	3.9	1,280	1950	Mar. 23, 1950	3.15	785
	Sept. 18, 1945	7.3	3,670		July 11, 1950	3.17	785
1946	Nov. 29, 1945	3.29	945		Aug. 3, 1950	3.3	835
	Feb. 28, 1946	3.15	890	1951	Nov. 25, 1950	6.9	3,330
	May 17, 1946	3.00	780		Dec. 4, 1950	3.7	1,050
	June 2, 1946	3.56	1,110		Dec. 8, 1950	4.3	1,410
	June 12, 1946	3.00	780		Jan. 15, 1951	3.0	685
	July 22, 1946	4.37	1,570		Feb. 7, 1951	4.0	1,230
1947	June 15, 1947	3.0	675		June 29, 1951	3.0	685

4810. Brandywine Creek at Chadds Ford, Pa.

Location.--Lat 39°52'10", long 75°35'35", on left bank 27 ft upstream from Pennsylvania Railroad bridge at Chadds Ford, Delaware County.

Drainage area.--287 sq mi.

Gage.--Nonrecording prior to May 21, 1927; recording thereafter. Datum of gage is 150.45 above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 7,000 cfs and extended on basis of depth-area study.

Remarks.--Base for partial-duration series, 3,500 cfs.

Peak stages and discharges of Brandywine Creek at Chadds Ford, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Feb. 21, 1912	12.00	10,600	1933	Nov. 10, 1932	7.68	3,810
	Feb. 27, 1912	8.20	4,320		Nov. 19, 1932	7.41	3,540
	Mar. 13, 1912	11.6	9,800		Mar. 21, 1933	8.02	4,100
	Mar. 15, 1912	10.0	6,840		Apr. 12, 1933	8.55	4,790
1913	Apr. 28, 1913	7.8	3,900		Apr. 17, 1933	8.37	4,550
					Aug. 4, 1933	9.69	6,360
1914	Jan. 24, 1914	8.2	4,320		Aug. 24, 1933	14.01	14,800
	Apr. 16, 1914	7.7	3,810	1934	Mar. 3, 1934	8.19	4,320
	July 28, 1914	7.6	3,720		Mar. 5, 1934	8.48	4,670
1915	Jan. 7, 1915	10.4	7,520	1935	July 9, 1935	10.00	7,000
	Jan. 12, 1915	11.0	8,620		Sept. 4, 1935	8.38	4,550
	Feb. 2, 1915	11.3	9,200	1936	Nov. 18, 1935	9.51	6,050
	Feb. 6, 1915	7.5	3,630		Jan. 3, 1936	11.21	9,000
	Aug. 4, 1915	14.7	16,500		Jan. 9, 1936	10.08	7,010
1916	June 16, 1916	8.6	4,790		Feb. 26, 1936	7.95	4,100
					Feb. 29, 1936	7.45	3,540
1917	Jan. 22, 1917	8.3	4,430		Mar. 12, 1936	9.46	6,050
					Mar. 18, 1936	8.54	4,670
1918	Jan. 12, 1918	11.8	10,200		Apr. 6, 1936	8.03	4,100
	Jan. 15, 1918	8.0	4,100	1937	Dec. 20, 1936	7.57	3,720
	Feb. 13, 1918	10.0	6,840		Feb. 22, 1937	7.76	3,790
	Feb. 16, 1918	9.3	5,750		Apr. 27, 1937	7.22	3,380
	Feb. 20, 1918	8.8	5,050	1938	Oct. 23, 1937	7.40	3,540
	Mar. 26, 1918	9.0	5,320		Nov. 13, 1937	8.00	4,100
1919	July 22, 1919	10.25	7,180		June 8, 1938	8.65	4,790
					June 12, 1938	7.33	3,460
1920	Jan. 9, 1920	7.9	4,000		June 27, 1938	11.37	9,400
	Mar. 5, 1920	15.0	17,200		July 23, 1938	10.45	7,520
1921	Dec. 1, 1920	6.0	2,560		Sept. 21, 1938	7.48	3,630
1922	Feb. 2, 1922	7.4	3,540	1939	Jan. 30, 1939	7.93	4,000
	Feb. 20, 1922	8.0	4,100		Feb. 4, 1939	9.08	5,460
1923	Apr. 29, 1923	7.0	3,220		Mar. 1, 1939	8.12	4,210
					Apr. 7, 1939	7.40	3,540
1924	Jan. 17, 1924	10.0	6,840		June 14, 1939	8.05	4,210
	Jan. 26, 1924	8.2	4,320		Aug. 20, 1939	10.72	8,060
	Feb. 20, 1924	9.0	5,320	1940	Mar. 4, 1940	9.13	5,460
	Apr. 6, 1924	9.2	5,600		Mar. 15, 1940	9.65	6,190
	Sept. 30, 1924	9.6	6,200		Apr. 9, 1940	8.88	5,180
1925	Feb. 11, 1925	10.5	7,700		Apr. 20, 1940	8.15	4,320
					Sept. 25, 1940	7.59	3,720
1926	Jan. 18, 1926	7.6	3,720	1941	Feb. 8, 1941	8.92	5,060
	Feb. 19, 1926	8.4	4,550		Mar. 11, 1941	7.84	3,900
	Feb. 25, 1926	9.4	5,900	1942	Aug. 9, 1942	14.80	16,800
	Mar. 6, 1926	7.5	3,630		Aug. 13, 1942	7.96	4,100
1927	Nov. 16, 1926	7.4	3,540	1943	Oct. 26, 1942	7.52	3,630
	Dec. 28, 1926	8.0	4,100		Dec. 30, 1942	9.08	5,360
	July 23, 1927	8.2	4,320		Feb. 11, 1943	7.87	3,990
	Sept. 19, 1927	10.1	7,010		Mar. 7, 1943	7.65	3,720
1928	Oct. 13, 1927	8.79	5,050		Apr. 20, 1943	7.93	4,000
	Nov. 18, 1927	9.50	6,050	1944	Nov. 9, 1943	8.56	4,690
	Dec. 8, 1927	8.79	5,050		Dec. 27, 1943	7.66	3,810
	Feb. 8, 1928	8.42	4,550		Jan. 4, 1944	10.6	7,880
	Apr. 28, 1928	8.3	4,430		Mar. 13, 1944	8.77	4,930
	June 6, 1928	9.40	5,900		Apr. 25, 1944	7.62	3,720
	June 22, 1928	7.48	3,630		Sept. 14, 1944	8.43	4,550
	July 14, 1928	8.70	4,920	1945	Jan. 2, 1945	9.10	4,360
	July 28, 1928	7.75	3,900		July 5, 1945	8.50	4,430
	Aug. 18, 1928	11.00	8,620		July 18, 1945	7.73	3,630
					Sept. 19, 1945	10.87	8,240
1929	Feb. 7, 1929	7.62	3,720	1946	Nov. 29, 1945	8.14	4,280
	Feb. 27, 1929	9.77	6,520		Dec. 26, 1945	8.14	4,280
	Apr. 16, 1929	8.97	5,320		May 17, 1946	7.61	3,720
1930	Oct. 2, 1929	8.47	4,670		June 2, 1946	10.02	7,110
					July 23, 1946	11.14	8,810
1931	July 10, 1931	10.80	8,240				
1932	Mar. 28, 1932	9.06	5,460				

Peak stages and discharges of Brandywine Creek at Chadds Ford, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	July 8, 1947	6.00	2,500	1951	Feb. 8, 1951	9.67	6,360
1948	Nov. 4, 1947	8.31	4,380		Apr. 13, 1951	7.40	3,540
	Nov. 8, 1947	7.62	3,720	1952	Nov. 7, 1951	9.45	5,900
	Feb. 14, 1948	7.42	3,540		Dec. 21, 1951	9.49	6,050
	Feb. 18, 1948	7.98	4,080		Feb. 4, 1952	8.30	4,430
	May 5, 1948	7.72	3,810		Mar. 11, 1952	9.09	5,460
	Sept. 10, 1948	9.64	6,190		Apr. 28, 1952	9.04	5,320
1949	Dec. 30, 1948	9.10	5,360		May 26, 1952	8.81	5,050
	Jan. 6, 1949	7.96	4,080		June 1, 1952	7.83	3,900
1950	Mar. 23, 1950	8.08	4,180		July 10, 1952	8.31	4,430
	Aug. 3, 1950	8.65	4,690	1953	Nov. 22, 1952	9.55	6,200
1951	Nov. 25, 1950	12.54	11,600		Dec. 11, 1952	9.51	6,050
	Jan. 15, 1951	7.86	4,000		Jan. 24, 1953	9.63	6,200
					Mar. 16, 1953	7.92	4,000
				1955	Aug. 19, 1955	14.64	16,400

4815. Brandywine Creek at Wilmington, Del.

Location.--Lat 39°46'10", long 75°34'20", on right bank in Rockford Park,
0.2 mile downstream from Henry Clay Bridge, in Wilmington, New Castle County,
and 4.2 miles upstream from mouth.

Drainage area.--314 sq mi.

Gage.--Recording. Datum of gage is 68.23 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 4,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947a/	Apr. 30, 1947	7.79	4,730	1954	Dec. 14, 1953	7.13	3,780
1948	Nov. 4, 1947	7.71	4,390	1955	Feb. 7, 1955	8.05	5,080
	Feb. 14, 1948	8.72	-		Aug. 13, 1955	11.76	12,600
	Feb. 18, 1948	7.55	4,180		Aug. 19, 1955	13.89	17,800
	May 5, 1948	7.50	4,180	1956	Feb. 7, 1956	7.03	4,030
	Sept. 10, 1948	8.41	5,160		Mar. 14, 1956	7.75	5,020
1949	Dec. 30, 1948	8.25	4,940		July 21, 1956	7.50	4,660
	Jan. 6, 1949	7.65	4,280	1957	Nov. 2, 1956	10.36	9,620
1950	Mar. 23, 1950	7.80	4,500	1958	Dec. 21, 1957	7.78	5,070
	Aug. 3, 1950	7.86	4,610		Jan. 22, 1958	7.80	5,100
1951	Nov. 25, 1950	11.34	11,500		Jan. 25, 1958	8.18	5,690
	Jan. 15, 1951	7.46	4,660		Feb. 28, 1958	9.41	7,790
	Feb. 8, 1951	8.38	6,030		Apr. 7, 1958	7.87	5,200
1952	Nov. 7, 1951	8.29	5,450		July 7, 1958	7.79	5,080
	Dec. 21, 1951	8.58	5,930		July 28, 1958	7.67	4,900
	Feb. 4, 1952	7.67	4,580	1959	Jan. 2, 1959	7.22	4,280
	Mar. 11, 1952	8.22	5,300		Sept. 3, 1959	7.70	4,950
	Apr. 28, 1952	8.10	5,000	1960	Dec. 13, 1959	8.13	7,290
	May 26, 1952	7.89	4,720		Feb. 4, 1960	7.06	5,210
	June 1, 1952	7.37	4,070		Sept. 13, 1960	11.42	15,600
	July 9, 1952	9.32	6,960	1961	Feb. 20, 1961	7.54	6,080
1953	Nov. 22, 1952	8.42	5,510		Feb. 26, 1961	7.10	5,280
	Dec. 11, 1952	8.47	5,590		Apr. 14, 1961	8.30	7,660
	Jan. 9, 1953	7.35	4,030		July 29, 1961	6.88	4,900
	Jan. 25, 1953	8.61	5,820				
	Mar. 16, 1953	8.13	5,080				

a Partial year.

b Backwater from ice.

4825. Salem River at Woodstown, N.J.
(Published as Salem Creek prior to 1953)

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. Area of swamps and lakes, 0.2 sq mi.

Gage.--Recording gage above concrete dam. Datum of gage is 29.49 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 220 cfs and extended above on basis of laboratory rating and slope-area measurement of 26,000 cfs at site half a mile downstream (adjusted to 22,000 cfs at gage site).

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 350 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940a/	Apr. 8, 1940	1.99	482	1948	June 19, 1948	1.86	380
	Apr. 20, 1940	2.18	660		Aug. 4, 1948	1.84	362
	May 17, 1940	2.15	630	1949	Dec. 30, 1948	2.16	620
	June 1, 1940	1.83	354		Jan. 28, 1949	1.85	362
	Aug. 17, 1940	2.32	802	1950	July 6, 1950	2.42	912
	Aug. 28, 1940	1.97	466		Sept. 11, 1950	2.76	1,340
	Sept. 1, 1940	7.98	22,000	1951	Nov. 25, 1950	4.23	1,740
1941	July 7, 1941	2.88	bl, 480		July 5, 1951	1.93	434
1942c/	July 31, 1942	2.13	610	1952	Dec. 21, 1951	2.57	1,130
	Aug. 18, 1942	2.39	879		Feb. 4, 1952	1.99	482
1943	Apr. 19, 1943	1.99	482		Mar. 11, 1952	2.00	490
	May 21, 1943	1.94	442		Aug. 10, 1952	2.27	750
1944	Jan. 3, 1944	2.12	600	1953	Nov. 22, 1952	1.81	338
	Mar. 7, 1944	2.00	490	1954	Dec. 14, 1953	1.87	386
	Mar. 13, 1944	2.05	535		Aug. 13, 1955	2.33	860
	Apr. 25, 1944	1.95	450	1956	July 21, 1956	1.83	354
	June 19, 1944	2.22	700		Nov. 2, 1956	2.77	1,290
	Sept. 14, 1944	2.35	835	1958	July 22, 1958	2.01	499
1945	Nov. 28, 1944	2.39	879		July 24, 1958	1.97	466
	Feb. 22, 1945	1.89	402		Aug. 1, 1958	1.89	402
	Aug. 7, 1945	2.02	490		Aug. 25, 1958	2.39	934
	Sept. 19, 1945	2.23	680	1959	Mar. 6, 1959	1.61	195
	Nov. 29, 1945	1.96	458		Sept. 12, 1960	3.01	1,630
1946	Dec. 26, 1945	2.02	508	1960	Sept. 30, 1960	1.91	418
	Dec. 29, 1945	1.94	442	1961	Jan. 1, 1961	2.11	590
	July 2, 1946	1.93	434		Apr. 13, 1961	2.01	499
	July 22, 1946	2.16	640				
	Sept. 24, 1946	2.11	590				
1947	Dec. 21, 1946	1.74	287				
	Jan. 1, 1948	1.94	442				
1948	Jan. 13, 1948	1.86	378				
	Feb. 14, 1948	2.47	1,020				

a Period Mar. 30 to Sept. 2, 1940.

b Annual peak only.

c Period Dec. 6, 1941, to Sept. 30, 1942.

4830. Alloway Creek at Alloway, N.J.

Location.--Lat 39°33'55", long 75°21'35", on right bank at Alloway Lake Dam at Alloway, Salem County, 0.8 mile upstream from Deep Run.

Drainage area.--21.9 sq mi.

Gage.--Recording gage above concrete dam. Datum of gage is 13.96 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 600 cfs and extended above by logarithmic plotting.

Remarks.--Flood peaks occasionally affected by operation of Alloway Lake Dam. Base for partial-duration series, 250 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Nov. 22, 1952	2.13	307	1958	Jan. 25, 1958	1.91	265
	Jan. 9, 1953	2.16	319		July 22, 1958	2.12	282
	Jan. 24, 1953	2.06	255		Aug. 25, 1958	2.79	654
	Mar. 13, 1953	2.13	287	1959	July 14, 1959	2.06	255
	Mar. 16, 1953	2.13	287				
	Apr. 7, 1953	2.10	273	1960	Apr. 5, 1960	2.15	296
1954	Dec. 14, 1953	2.19	315		July 30, 1960	2.09	268
					Sept. 12, 1960	4.24	1,860
1955	Aug. 13, 1955	2.50	476		Sept. 30, 1960	2.31	374
	Aug. 19, 1955	2.16	301	1961	Jan. 1, 1961	2.48	550
1956	Mar. 14, 1956	2.15	296		Feb. 19, 1961	2.04	330
	July 21, 1956	2.03	242		Feb. 23, 1961	1.96	294
1957	Nov. 2, 1956	3.46	1,110		Apr. 10, 1961	2.10	273
					Apr. 13, 1961	2.62	633
1958	Jan. 15, 1958	2.17	356				

4832. Blackbird Creek at Blackbird, Del.

Location.--Lat 39°21'58", long 75°40'10", on right bank 15 ft downstream from highway bridge, 0.5 mile upstream from Barlow Branch, 0.6 mile southwest of Blackbird, New Castle County, and 5.6 miles northwest of Smyrna.

Drainage area.--3.85 sq mi.

Gage.--Nonrecording and crest-stage gage prior to Oct. 16, 1956; recording thereafter. Altitude of gage is 10 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--6 ft.

Remarks.--Base for partial-duration series, 50 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951 ^a	July 20, 1951	4.10	335	1958	Jan. 15, 1958	2.06	111
1952	July 9, 1952	2.90	195		Jan. 25, 1958	1.83	91
					Feb. 8, 1958	1.32	50
1953	May 26, 1953	2.10	115		Feb. 28, 1958	2.11	116
					Mar. 24, 1958	1.38	54
1954	-	-	(b)		Mar. 26, 1958	1.40	56
					Apr. 30, 1958	1.34	51
1955	Aug. 13, 1955	2.96	202		May 8, 1958	1.36	53
					July 9, 1958	1.33	50
1956	July 3, 1956	1.88	95		July 13, 1958	2.13	118
					Aug. 25, 1958	2.47	152
1957	Nov. 2, 1956	3.23	231	1959	July 31, 1959	1.31	49
	Aug. 25, 1957	1.77	86				

^a Partial year.

^b Maximum gage height and discharge for year not determined; maximum discharge less than 80 cfs.

Peak stages and discharges of Blackbird Creek at Blackbird, Del.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1960	Feb. 19, 1960	1.98	55	1961	Feb. 19, 1961	1.87	92
	July 30, 1960	1.53	71		Feb. 23, 1961	1.71	74
	Sept. 12, 1960	4.10	510		Mar. 8, 1961	1.79	83
1961	Jan. 1, 1961	1.80	84		Apr. 13, 1961	2.18	131

LEIPSIC RIVER BASIN

4835. Leipsic River near Cheswold, Del.

Location.--Lat 39°13'58", long 75°37'57", at highway bridge 0.4 mile downstream from confluence of Taylor and Pinks Branches, 1.9 miles east of Kenton, and 2.6 miles northwest of Cheswold, Kent County.

Drainage area.--9.35 sq mi.

Gage.--Nonrecording prior to Aug. 10, 1951; recording Aug. 10, 1951, to Sept. 30, 1957; crest-stage gage thereafter. At different datum prior to Oct. 31, 1933. Altitude of gage is 18 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--5 ft.

Remarks.--Records for July to September 1931 furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 120 cfs. Only annual peaks are shown after 1957.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931a/	Aug. 23, 1931	3.30	-	1950	Sept. 11, 1950	2.90	120
1932	Mar. 6, 1932	4.12	-	1951	Nov. 25, 1950	3.70	182
	May 13, 1932	5.00	-		May 12, 1951	3.82	215
					July 20, 1951	3.14	136
1933	Aug. 23, 1933	6.1	-	1952	Nov. 7, 1951	4.08	268
1943a/	Apr. 20, 1943	3.28	148		Dec. 19, 1951	2.70	122
	June 28, 1943	3.95	250		Dec. 21, 1951	3.80	237
	July 12, 1943	3.60	173		Feb. 4, 1952	3.49	203
1944	Nov. 3, 1943	3.40	156		Apr. 27, 1952	3.50	204
	Nov. 9, 1943	3.00	124		May 26, 1952	2.98	150
	Jen. 4, 1944	4.30	316		June 1, 1952	3.33	185
	Mar. 13, 1944	3.45	160		July 9, 1952	5.44	730
	Apr. 24, 1944	3.56	176		Aug. 13, 1952	3.12	146
1945	Nov. 28, 1944	2.86	120	1953	Nov. 22, 1952	3.26	164
	Jan. 16, 1945	3.10	136		Feb. 15, 1953	3.09	142
1946	Dec. 6, 1945	3.22	144		Mar. 16, 1953	3.42	185
	Dec. 26, 1945	2.89	120		Mar. 26, 1953	3.17	152
1947	May 1, 1947	2.64	100	1954	Dec. 14, 1953	2.79	103
1948	Feb. 14, 1948	4.05	250	1955	Aug. 13, 1955	4.37	334
	May 17, 1948	3.04	128	1956	Aug. 14, 1956	3.12	131
1949	Dec. 2, 1948	3.76	215	1957	Nov. 2, 1956	6.13	1,120
	Dec. 30, 1948	3.33	152	1958	Aug. 25, 1958	5.25	640
	Jan. 22, 1949	3.04	128	1959	May 13, 1959	2.87	107
	May 3, 1949	3.05	128	1960	Sept. 12, 1960	6.45	1,340
1950	Mar. 23, 1950	3.24	144	1961	June 15, 1961	4.26	306

a Partial year.

4840. Murderkill River near Felton, Del.

Location.--Lat 38°58'33", long 75°34'03", on left bank 30 ft downstream from northbound lane of bridge on U.S. Highway 13, 400 ft downstream from Black Swamp Creek, 1.3 miles upstream from Killen Pond and 2.2 miles south of Felton, Kent County.

Drainage area.--13.6 sq mi.

Gage.--Nonrecording at site 200 ft upstream at datum 2.0 ft higher prior to June 1, 1960; recording thereafter. Altitude of gage is 23 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--4½ ft.

Remarks.--Records for July to September 1931 furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 130 cfs. Only annual peaks are shown prior to 1960.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	May 13, 1932	4.36	346	1959	-	a4.23	-
1933	Aug. 23, 1933	5.1	490	1960	July 30, 1960	4.63	144
					Sept. 12, 1960	6.87	805
1952	Aug. 10, 1952	4.47	-				
1953	May 21, 1953	3.33	-	1961	Jan. 1, 1961	5.39	292
1954	April 1954	(a)	-		Feb. 18, 1961	4.94	194
1955	August 1955	(a)	-		Feb. 23, 1961	5.00	205
					Mar. 19, 1961	4.55	132
1956	March 1956	(a)	-		Mar. 23, 1961	4.55	132
1957	November 1956	(a)	-		Apr. 13, 1961	5.10	267
1958	Aug. 25, 1958	a5.46	-				

a Less than 4.23 ft.

BROADKILL RIVER BASIN

4843. Sowbridge Branch near Milton, Del.

Location.--Lat 38°48'51", long 75°19'39", on left bank at downstream side of highway bridge, 1 mile downstream from Reynold's Pond, and 2½ miles north of Milton, Sussex County.

Drainage area.--7.08 sq mi.

Gage.--Recording. Altitude of gage is 10 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Flow regulated by Reynold's Pond. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	June 6, 1957	4.92	28	1960	Sept. 12, 1960	5.22	38
1958	Aug. 25, 1958	5.86	80				
1959	July 16, 1959	5.38	44	1961	Dec. 12, 1960	5.40	41

4845. Stockley Branch at Stockley, Del.

Location.--Lat 38°38'19", long 75°20'31", on left bank at highway bridge in Stockley, Sussex County, 1.6 miles upstream from mouth and 4.4 miles southeast of Georgetown.

Drainage area.--5.24 sq mi.

Gage.--Nonrecording and crest-stage gage prior to Aug. 16, 1950; recording thereafter. Datum of gage is 24.54 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 50 cfs and extended above by logarithmic plotting 1943-57; defined by current-meter measurements thereafter.

Bankfull stage.--2½ ft.

Remarks.--Base for partial-duration series, 45 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943a/	Apr. 20, 1943	2.85	44	1952	Jan. 28, 1952	3.22	53
					Feb. 4, 1952	3.06	46
1944	Mar. 13, 1944	3.03	54		Mar. 11, 1952	3.08	46
	Apr. 25, 1944	2.94	48		Mar. 24, 1952	3.19	51
					Apr. 27, 1952	3.07	49
1945	July 18, 1945	3.16	58				
	July 21, 1945	3.30	64	1953	Feb. 15, 1953	3.09	48
					Mar. 13, 1953	3.36	59
1946	Dec. 6, 1945	3.24	58		Aug. 14, 1953	3.40	60
	Dec. 26, 1945	3.15	56		Aug. 17, 1953	3.08	48
	Dec. 30, 1945	3.50	77				
	July 3, 1946	3.40	71	1954	Sept. 11, 1954	2.70	30
1947	Jan. 21, 1947	2.70	34	1955	Aug. 13, 1955	3.17	51
1948	Jan. 13, 1948	3.20	53	1956	Mar. 17, 1956	2.58	27
	May 18, 1948	3.24	57				
	May 26, 1948	3.40	60	1957	Mar. 9, 1957	2.81	36
	May 31, 1948	3.80	77				
	June 4, 1948	5.00	132	1958	Feb. 28, 1958	3.01	53
	June 16, 1948	3.32	57		Mar. 20, 1958	3.47	89
	Aug. 2, 1948	3.13	49		Mar. 27, 1958	3.56	97
	Aug. 5, 1948	3.60	68		Mar. 31, 1958	3.42	85
					Apr. 11, 1958	3.25	71
1949	Nov. 28, 1948	3.19	45		May 7, 1958	3.12	61
	Dec. 4, 1948	3.28	49		Aug. 26, 1958	3.78	118
1950	Nov. 2, 1949	3.10	45	1959	July 15, 1959	3.09	58
	Mar. 23, 1950	3.03	45				
1951	July 17, 1951	2.59	30	1960	Sept. 12, 1960	2.91	46
	Aug. 8, 1951	2.61	30	1961	Jan. 1, 1961	3.03	54
1952	Nov. 7, 1951	3.06	45		Feb. 8, 1961	3.30	75
	Dec. 21, 1951	3.14	50		Feb. 23, 1961	2.93	47
					Mar. 23, 1961	3.00	55

a Partial year.

POCOMOKE RIVER BASIN

4850. Pocomoke River near Willards, Md.

Location.--Lat 38°23'20", long 75°19'30", on left bank 30 ft downstream from bridge on U.S. Highway 50, at Wicomico-Worcester County line, 0.6 mile upstream from Burnt Mill Branch, 1.3 miles east of Willards, Wicomico County, and 1.3 miles west of Whaleyville.

Drainage area.--60.5 sq mi.

Gage.--Recording. Altitude of gage is 10 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements. Medium changes in relation occur.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 500 cfs.

Peak stages and discharges of Pocomoke River near Willards, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950a	Mar. 23, 1950	7.95	502	1957	Mar. 20, 1957	9.06	554
1951	June 11, 1951	8.85	391	1958	Jan. 25, 1958	9.03	524
1952	Dec. 21, 1951	9.36	626		Feb. 28, 1958	10.50	659
	Jan. 29, 1952	10.45	784		Mar. 21, 1958	12.03	882
	Feb. 4, 1952	8.73	541		Mar. 27, 1958	9.45	576
	Mar. 1, 1952	8.29	507		Apr. 1, 1958	10.40	705
	Mar. 25, 1952	10.19	794		Apr. 11, 1958	10.53	726
	June 1, 1952	10.37	830		May 7, 1958	10.30	642
1953	Feb. 15, 1953	9.45	604		Aug. 27, 1958	10.07	620
	Mar. 13, 1953	10.94	816	1959	Apr. 3, 1959	9.60	556
	Aug. 15, 1953	11.20	630		July 16, 1959	9.65	562
	Aug. 18, 1953	10.93	568		Aug. 9, 1959	9.06	502
1954	Apr. 28, 1954	11.33	679	1960	Mar. 18, 1960	9.68	565
1955	June 12, 1955	10.54	645	1961	Oct. 29, 1960	10.72	669
	Aug. 13, 1955	9.62	523		Jan. 1, 1961	10.23	625
1956	Oct. 15, 1955	10.71	670		Feb. 4, 1961	9.30	526
1957	Oct. 31, 1956	10.15	559		Feb. 9, 1961	10.99	709
					Feb. 24, 1961	10.83	691
					Mar. 23, 1961	9.82	580
					May 12, 1961	9.56	552

a Partial year.

4855. Nassawango Creek near Snow Hill, Md.

Location.--Lat 38°13'45", long 75°28'20", on right bank 15 ft downstream from bridge on State Highway 12, 0.5 mile upstream from Furnace Branch, 0.6 mile downstream from Millville Creek, and 5.5 miles northwest of Snow Hill, Worcester County.

Drainage area.--44.9 sq mi.

Gage.--Recording. Altitude of gage is 10 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--3½ ft.

Remarks.--Base for partial-duration series, 280 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950a	Mar. 25, 1950	5.41	215	1958	Jan. 27, 1958	5.65	288
1951	June 12, 1951	5.75	258		Mar. 1, 1958	6.41	432
1952	Dec. 23, 1951	6.47	419		Mar. 21, 1958	7.36	761
	Jan. 30, 1952	-	(b)		Mar. 28, 1958	6.13	369
	Feb. 6, 1952	5.88	282		Apr. 2, 1958	6.39	427
	Mar. 3, 1952	6.23	357		Apr. 8, 1958	5.62	284
	Mar. 26, 1952	6.70	486		Apr. 12, 1958	6.61	486
	June 2, 1952	6.61	459		May 8, 1958	7.15	673
1953	Jan. 11, 1953	5.88	282		July 26, 1958	6.78	539
	Feb. 17, 1953	6.16	341		Aug. 28, 1958	6.13	369
	Mar. 15, 1953	-	(b)	1959	Dec. 31, 1958	6.84	559
	Aug. 16, 1953	7.82	988		Apr. 4, 1959	6.28	401
1954	Apr. 30, 1954	6.51	430		Apr. 14, 1959	5.80	312
1955	Aug. 14, 1955	7.57	920		July 17, 1959	6.95	597
	Aug. 20, 1955	6.92	607		Aug. 10, 1959	6.13	369
1956	Oct. 16, 1955	6.19	348	1960	Nov. 26, 1959	6.09	361
1957	Nov. 2, 1956	6.79	542		Feb. 20, 1960	5.73	301
	Feb. 3, 1957	5.65	288		Mar. 19, 1960	6.07	358
	Mar. 11, 1957	5.64	287	1961	Oct. 30, 1960	6.19	381
	Mar. 21, 1957	6.00	345		Jan. 3, 1961	6.36	419
1958	Dec. 11, 1957	5.65	288		Feb. 6, 1961	6.42	434
					Feb. 10, 1961	7.10	653
					Feb. 25, 1961	6.84	559
					Mar. 24, 1961	6.31	407
					May 13, 1961	7.09	649

a Partial year.

b Peak above base; discharge not determined.

4860. Manokin Branch near Princess Anne, Md.

Location.--Lat 38°12'50", long 75°40'18", on right bank 5 ft downstream from farm bridge, 1.4 miles northeast of Princess Anne, Somerset County, and 1.6 miles upstream from confluence with Loretto Branch.

Drainage area.--5.8 sq mi, approximately.

Gage.--Recording. Altitude of gage is 15 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 120 cfs and extended above by logarithmic plotting. Medium changes in relation occur.

Bankfull stage.--8 ft.

Remarks.--Base for partial-duration series, 50 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951a/	June 10, 1951	3.68	97	1958	Dec. 10, 1957	3.57	62
1952	Dec. 21, 1951	3.01	53		Jan. 14, 1958	3.37	54
	Jan. 28, 1952	3.58	80		Jan. 25, 1958	4.23	95
	Feb. 4, 1952	3.03	54		Feb. 28, 1958	4.02	84
	Mar. 1, 1952	3.22	62		Mar. 20, 1958	4.93	136
	Mar. 24, 1952	3.65	84		Mar. 31, 1958	3.48	58
					Apr. 11, 1958	4.29	98
1953	Mar. 13, 1953	3.46	57		May 7, 1958	5.49	174
	Mar. 16, 1953	3.45	57		June 2, 1958	4.42	105
	Aug. 14, 1953	5.96	210	1959	Dec. 29, 1958	3.78	72
1954	Mar. 3, 1954	3.02	41		Jan. 2, 1959	3.34	53
	Apr. 17, 1954	3.03	41		Apr. 2, 1959	3.92	78
					Aug. 8, 1959	4.51	111
1955	June 11, 1955	3.95	68	1960	Feb. 16, 1960	3.43	56
	Aug. 13, 1955	6.63	237		Sept. 12, 1960	5.63	184
	Aug. 19, 1955	5.27	139	1961	Oct. 28, 1960	4.04	84
1956	Oct. 1, 1955	3.50	50		Jan. 1, 1961	4.45	107
	Feb. 4, 1956	3.37	54		Feb. 8, 1961	5.17	152
	Apr. 7, 1956	3.25	51		Feb. 23, 1961	4.90	134
1957	Oct. 31, 1956	5.20	154		Mar. 22, 1961	3.35	53
	Mar. 9, 1957	3.72	69		May 11, 1961	4.12	89

a Partial year.

WICOMICO RIVER BASIN

4865. Beaverdam Creek near Salisbury, Md.

(Published as East Branch Wicomico River prior to October 1948)

Location.--Lat 38°21'05", long 75°34'11", on upstream side of Schumaker Dam between spillway and emergency floodgates, three-quarters of a mile upstream from Beaglin Branch, and 2 miles southeast of Salisbury, Wicomico County.

Drainage area.--19.5 sq mi.

Gage.--Recording and concrete spillway of dam. Prior to Sept. 28, 1938, at site on left bank at dam at datum 9.02 ft higher. Datum of gage is 8.93 ft above mean sea level (city of Salisbury bench mark).

Stage-discharge relation.--Defined by current-meter measurements for flow over spillway. Defined on basis of current-meter measurements and orifice equation for flow through floodgates since July 1938.

Remarks.--Some regulation by Parker Pond 1.5 miles upstream. Only annual peaks are shown.

Peak stages and discharges of Beaverdam Creek near Salisbury, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Mar. 19, 1930	1.76	76	1947	Apr. 18, 1947	10.64	69
1931	May 7, 1931	1.48	36	1948	Aug. 4, 1948	14.31	1,480
1932	Mar. 8, 1932	1.98	115	1949	Dec. 5, 1948	11.44	217
1933	Aug. 23, 1933	5.00	(a)	1950	Mar. 24, 1950	10.60	95
1936	Aug. 30, 1936	b2.53	234	1951	May 24, 1951	11.09	143
1937	July 1, 1937	b2.97	334	1952	Mar. 26, 1952	11.42	207
1938	July 26, 1938	-	443	1953	Aug. 14, 1953	12.18	653
1939	Oct. 15, 1939	11.66	283	1954	Apr. 28, 1954	11.45	502
1940	June 7, 1941	10.86	234	1955	Aug. 13, 1955	11.64	338
1941	Apr. 7, 1941	10.91	111	1956	Oct. 3, 1955	11.02	209
1942	Mar. 30, 1942	12.10	392	1957	Oct. 31, 1956	11.43	300
1943	Feb. 6, 1943	10.76	86	1958	Mar. 21, 1958	11.96	337
1944	Sept. 15, 1944	11.08	260	1959	Aug. 9, 1959	12.12	735
1945	July 18, 1945	10.93	115	1960	Sept. 12, 1960	11.40	214
1946	Dec. 30, 1945	11.60	252	1961	Feb. 9, 1961	11.73	337

a Discharge not determined; probably exceeded that of Aug. 4, 1948.

b Partial year; maximum recorded.

Note.--Peak stage frequently occurs on different date or at different time than peak discharge.

NANTICOKE RIVER BASIN

4870. Nanticoke River near Bridgeville, Del.
(Published as Gravelly Fork prior to October 1955)

Location.--Lat 38°43'42", long 75°33'44", on left bank at highway bridge, 800 ft downstream from Gum Branch and 2.5 miles southeast of Bridgeville, Sussex County.

Drainage area.--75.4 sq mi.

Gage.--Nonrecording prior to April 19, 1947; recording thereafter. Datum of gage is 13.64 ft above mean sea level (levels by Soil Conservation Service).

Stage-discharge relation.--Defined by current-meter measurements. Minor changes in relation occur.

Bankfull stage.--6 ft.

Remarks.--Base for partial-duration series, 360 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	September 1935	all	-	1948	June 1, 1948	6.00	630
1943b/	Apr. 21, 1943	5.00	400	1948	June 5, 1948	6.40	830
1944	Mar. 14, 1944	5.13	420	1948	June 18, 1948	5.48	470
1944	Apr. 26, 1944	5.13	420	1948	June 21, 1948	5.07	390
1945	July 23, 1945	5.24	435	1949	Nov. 30, 1948	5.77	575
1946	Dec. 7, 1945	5.16	410	1949	Dec. 5, 1948	5.81	590
1946	Dec. 27, 1945	5.18	435	1949	Dec. 17, 1948	5.34	458
1946	Dec. 30, 1945	6.20	730	1949	Jan. 23, 1949	5.42	470
1946	July 3, 1946	4.95	386	1949	Feb. 1, 1949	5.28	445
1946	July 24, 1946	5.92	600	1949	Mar. 12, 1949	5.36	458
1947	May 27, 1947	4.98	386	1950	Mar. 24, 1950	3.91	216
1948	Jan. 14, 1948	5.66	530	1951	June 12, 1951	4.15	290
1948	Feb. 15, 1948	5.36	445	1952	Dec. 22, 1951	6.21	776
1948	Mar. 9, 1948	5.11	390	1952	Jan. 30, 1952	5.76	578
1948	Apr. 2, 1948	5.56	485	1952	Feb. 5, 1952	5.70	560
1948	May 15, 1948	5.65	515	1952	Mar. 12, 1952	5.15	410
1948	May 18, 1948	5.55	485	1952	Mar. 25, 1952	5.65	545
				1952	Apr. 29, 1952	5.77	581
				1952	June 2, 1952	5.21	422

a Annual peak only, from information by local residents.

b Partial year.

Peak stages and discharges of Nanticoke River near Bridgeville, Del.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Aug. 11, 1952	5.86	614	1958	Aug. 26, 1958	8.84	2,300
1953	Mar. 17, 1953	5.39	468		May 8, 1958	5.42	446
	Apr. 17, 1953	4.92	366	1959	July 16, 1959	6.88	930
	Aug. 15, 1953	4.91	364		July 21, 1959	5.51	393
1954	Mar. 5, 1954	4.53	248	1960	Apr. 6, 1960	5.95	525
1955	Aug. 15, 1955	6.12	680		Sept. 13, 1960	8.08	1,620
1956	Mar. 17, 1956	4.84	270	1961	Jan. 2, 1961	6.47	728
1957	Nov. 3, 1956	6.15	635		Feb. 10, 1961	5.76	458
1958	Jan. 27, 1958	5.49	467		Feb. 15, 1961	5.59	407
	Mar. 1, 1958	5.48	464		Feb. 19, 1961	6.12	588
	Mar. 22, 1958	6.74	1,010		Feb. 23, 1961	6.40	700
	Mar. 28, 1958	6.19	735		Mar. 3, 1961	5.71	443
	Apr. 1, 1958	6.19	735		Mar. 20, 1961	5.47	371
	Apr. 12, 1958	5.57	491		Mar. 24, 1961	5.86	488
					Apr. 2, 1961	5.50	380
					Apr. 14, 1961	6.00	540
					July 25, 1961	5.61	413

4875. Trap Pond Outlet near Laurel, Del.

Location.--Lat 38°31'40", long 75°29'00", on left bank at downstream end of concrete spillway channel, 200 ft downstream from Trap Pond Dam, and 5 miles southeast of Laurel, Sussex County.

Drainage area.--16.7 sq mi.

Gage.--Recording. Altitude of gage is 20 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--3½ ft.

Remarks.--Base for partial-duration series, 100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Dec. 22, 1951	2.39	125	1958	Mar. 21, 1958	3.14	315
	Jan. 29, 1952	2.74	200		Mar. 27, 1958	2.51	148
	Feb. 4, 1952	2.61	169		Apr. 1, 1958	2.78	210
	Mar. 2, 1952	2.35	118		Apr. 7, 1958	2.23	100
	Mar. 25, 1952	2.74	200		Apr. 11, 1958	2.65	178
	Apr. 28, 1952	2.62	172		May 7, 1958	2.90	242
	June 1, 1952	2.23	100		Aug. 26, 1958	2.85	228
1953	Jan. 10, 1953	2.24	101	1959	Apr. 3, 1959	2.25	102
	Feb. 15, 1953	2.46	138		Aug. 9, 1959	2.43	133
	Mar. 13, 1953	2.66	181	1960	Oct. 30, 1959	2.83	a223
	Aug. 15, 1953	2.64	176		Feb. 19, 1960	2.24	101
1954	Apr. 28, 1954	2.51	148		Mar. 18, 1960	2.30	110
1955	June 12, 1955	2.62	172	1961	Jan. 2, 1961	2.58	163
1956	Oct. 15, 1955	2.19	94		Feb. 4, 1961	2.40	127
1957	Nov. 1, 1956	2.52	150		Feb. 9, 1961	2.98	265
1958	Feb. 28, 1958	2.55	156		Feb. 23, 1961	2.92	248
					Mar. 23, 1961	2.59	165
					Apr. 14, 1961	2.33	115

a Flashboards removed from Trap Pond dam.

4880. Holly ditch near Laurel, Del.
(Published as Holly Branch prior to October 1955)

Location.--Lat 38°32'20", long 75°35'55", on left bank 10 ft upstream from culvert on highway, 1½ miles southwest of Laurel, Sussex County, and 2.6 miles upstream from mouth.

Drainage area.--2.19 sq mi.

Gage.--Recording prior to Oct. 1, 1956; crest-stage gage after Sept. 4, 1958. Datum of gage is 24.86 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 7.6 cfs and extended above by logarithmic plotting.

Bankfull stage.--7 ft.

Remarks.--Base for partial-duration series, 4.5 cfs. Only annual peaks are shown after 1956.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950a/	Sept. 22, 1950	1.32	3.0	1953	Mar. 26, 1953	1.37	4.9
1951	Mar. 20, 1951	1.24	1.6		Apr. 13, 1953	1.39	5.3
					Apr. 16, 1953	1.37	4.9
1952	Jan. 28, 1952	1.36	4.7	1954	Apr. 28, 1954	1.20	2.4
	Feb. 4, 1952	1.42	5.9				
	Mar. 1, 1952	1.36	4.7	1955	Aug. 12, 1955	1.33	3.1
	Mar. 11, 1952	1.43	6.1				
	Mar. 14, 1952	1.35	4.5	1956	Mar. 19, 1956	1.14	1.3
	Mar. 24, 1952	1.69	12				
	Apr. 27, 1952	1.67	11	1959			(b)
1953	Mar. 13, 1953	1.50	7.6	1960	Sept. 12, 1960	2.40	31
	Mar. 16, 1953	1.38	5.1	1961	Feb. 8, 1961	3.30	62

a Partial year.

b Peak discharge not determined; less than 9 cfs.

4885. Marshy Hope Creek near Adamsville, Del.
(Published as Marshyhope Creek prior to October 1955)

Location.--Lat 38°51'00", long 75°40'29", on left bank 10 ft upstream from highway bridge, 1.5 miles northeast of Adamsville, Kent County, 1.7 miles upstream from Saulsbury Creek, and 5.3 miles northwest of Greenwood.

Drainage area.--44.8 sq mi.

Gage.--Nonrecording and crest-stage gage prior to Nov. 24, 1953; recording thereafter. Datum of gage is 28.21 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements. Minor changes in relation occur.

Bankfull stage.--7 ft.

Historical data.--Maximum stage known, about 14.5 ft in September 1935, from information by local resident.

Remarks.--Base for partial-duration series, 450 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	September 1935	14.5	-	1945	Jan. 17, 1945	7.98	530
1943b/	Apr. 20, 1943	7.78	486		July 21, 1945	8.57	678
1944	Jan. 5, 1944	8.10	554	1946	Dec. 7, 1945	8.62	652
	Mar. 8, 1944	7.92	508		Dec. 27, 1945	8.12	554
	Mar. 14, 1944	8.20	578		Dec. 30, 1945	9.00	826
	Apr. 25, 1944	8.45	626		July 1, 1946	9.63	1,040
					July 24, 1946	8.87	734
1945	Nov. 28, 1944	7.78	486	1947	Jan. 21, 1947	7.38	404

a About.

b Partial year.

Peak stages and discharges of Marshy Hope Creek near Adamsville, Del.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Jan. 14, 1948	8.74	714	1953	Feb. 16, 1953	7.75	450
	Feb. 15, 1948	8.26	568		Mar. 14, 1953	8.03	547
	Apr. 2, 1948	8.16	542		Mar. 16, 1953	8.18	607
	May 14, 1948	8.35	596		Apr. 14, 1953	8.25	635
	May 17, 1948	8.15	542	1954	Apr. 29, 1954	7.43	328
	May 31, 1948	9.40	933		Aug. 14, 1955	9.27	743
	June 4, 1948	8.30	582	1956	Mar. 15, 1956	7.72	310
1949	Nov. 30, 1948	8.80	730		Nov. 2, 1956	10.42	1,440
	Dec. 5, 1948	8.48	639	1958	Jan. 26, 1958	8.17	522
	Dec. 17, 1948	7.77	457		Feb. 28, 1958	8.32	593
	Dec. 31, 1948	8.25	582		Mar. 22, 1958	9.01	948
	Jan. 22, 1949	8.25	596		Apr. 1, 1958	8.15	526
	Feb. 1, 1949	8.00	529	1959	May 8, 1958	8.09	506
	Mar. 12, 1949	8.20	582		July 25, 1958	8.59	582
1950	Mar. 23, 1950	7.04	232		Aug. 26, 1958	11.55	2,270
					July 16, 1959	8.31	597
1951	June 11, 1951	7.33	325	1960	Apr. 6, 1960	8.25	470
					Sept. 13, 1960	10.24	1,440
1952	Dec. 22, 1951	9.35	990	1961	Jan. 2, 1961	8.88	805
	Jan. 29, 1952	8.34	575		Feb. 19, 1961	8.42	522
	Feb. 5, 1952	7.90	465		Feb. 24, 1961	8.24	467
	Mar. 25, 1952	8.12	520				
	Apr. 28, 1952	8.77	691				
	June 2, 1952	8.56	630				
	Aug. 10, 1952	9.40	1,020				
1953	Jan. 10, 1953	8.00	535				

4890. Faulkner Branch at Federalsburg, Md.

Location--Lat 38°42'45", long 75°47'35", on right bank 25 ft downstream from highway bridge on Nichols Road, 0.9 mile upstream from mouth, and 1 mile northwest of Federalsburg, Caroline County.

Drainage area--7.10 sq mi.

Gage--Recording. Altitude of gage is 15 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 210 cfs and extended above on basis of slope-area measurement at 433 cfs.

Bankfull stage--2½ ft.

Remarks--Base for partial-duration series, 60 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	July 28, 1951	1.93	39	1957	Nov. 2, 1956	3.21	198
1952	Dec. 21, 1951	3.16	175	1958	Mar. 1, 1957	2.20	66
	Jan. 28, 1952	3.00	150		Jan. 25, 1958	2.68	112
	Feb. 4, 1952	2.34	81		Mar. 22, 1958	3.12	168
	Mar. 24, 1952	2.38	87		Mar. 31, 1958	2.68	112
	Apr. 27, 1952	2.47	97		Apr. 11, 1958	2.64	107
	June 1, 1952	2.29	76		May 7, 1958	2.92	140
	July 9, 1952	2.17	64		July 13, 1958	2.74	117
	Aug. 8, 1952	3.04	156		July 28, 1958	2.35	77
	Aug. 10, 1952	3.02	153		Aug. 1, 1958	2.56	98
					Aug. 25, 1958	4.12	440
1953	Jan. 9, 1953	2.14	58	1959	July 15, 1959	3.53	250
	Feb. 15, 1953	2.14	58		Aug. 8, 1959	2.89	136
	Mar. 13, 1953	2.14	58		Sept. 2, 1959	2.41	84
	Mar. 16, 1953	2.13	58		Sept. 7, 1959	2.26	69
1954	Mar. 2, 1954	2.00	44	1960	Nov. 7, 1959	2.77	122
	July 7, 1954	2.00	45		Nov. 25, 1959	2.60	103
1955	Aug. 13, 1955	4.10	433		Feb. 18, 1960	2.26	69
					Apr. 5, 1960	2.92	140
1956	July 9, 1956	2.50	94		July 28, 1960	2.58	101

Peak stages and discharges of Faulkner Branch at Federalsburg, Md.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1960	July 30, 1960	3.09	164	1961	Feb. 19, 1961	2.95	140
	Aug. 6, 1960	2.80	125		Feb. 23, 1961	3.09	159
	Sept. 12, 1960	4.73	672		Mar. 23, 1961	2.50	91
1961	Jan. 1, 1961	3.73	298		Apr. 13, 1961	2.90	137
					May 8, 1961	2.38	81

4895. Rewastico Creek near Hebron, Md.

Location--Lat 38°24'40", long 75°45'15", on left wingwall of old mill sluiceway, 10 ft upstream from bank of stoplogs, on right bank of Rewastico Pond at outlet, 1.5 miles upstream from Little Creek, 2.8 miles north of Quantico, and 3.5 miles southwest of Hebron, Wicomico County.

Drainage area--12.2 sq mi.

Gage--Nonrecording prior to May 16, 1950; recording May 16, 1950 to Sept. 30, 1956; crest-stage gage thereafter. Datum of gage is 1.8 ft above mean sea level, datum of 1929.

Stage-discharge relation--Defined by current-meter measurements.

Remarks--Base for partial-duration series, 40 cfs.

Peak stages and discharges

Peak Stages and Discharges								
Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)	
1950a	Mar. 23, 1950	4.10	55	1953	Mar. 16, 1953	3.97	53	
1951	Mar. 20, 1951	3.90	49		Apr. 7, 1953	3.73	41	
					Apr. 13, 1953	4.02	58	
1952					Apr. 14, 1953	4.58	88	
	Dec. 21, 1951	4.14	62	1954	Apr. 28, 1954	4.44	91	
	Jan. 28, 1952	4.78	98		Sept. 11, 1954	3.62	41	
	Feb. 4, 1952	4.42	78					
	Feb. 17, 1952	3.83	46	1955	Mar. 6, 1955	3.70	48	
	Mar. 1, 1952	3.97	53		June 11, 1955	3.56	41	
	Mar. 4, 1952	3.79	44		Aug. 13, 1955	5.21	153	
	Mar. 11, 1952	3.83	46					
	Mar. 25, 1952	4.68	92	1956	Feb. 7, 1956	3.59	42	
	Apr. 27, 1952	4.49	82		June 3, 1956	3.84	56	
	1953	June 1, 1952	4.15	63				
		Nov. 22, 1952	3.98	54	1959	Aug. 8, 1959	5.30	b160
Jan. 10, 1953		3.91	50					
Feb. 15, 1953		4.35	74	1960	1960	5.70	(c)	
Mar. 13, 1953		4.45	79					

a Partial year.

b Annual peak only.

c Discharge not determined; may have been exceeded Sept. 12, 1960.

4900. Chicamacomico River near Salem, Md.

Location.--Lat 38°30'45", long 75°52'50", on left bank 30 ft downstream from Big Mill Pond dam, 1.6 miles east of Salem, Dorchester County, 3.5 miles northwest of Vienna, and 13 miles upstream from mouth.

Drainage area.--15.0 sq mi.

Gage.--Recording. Altitude of gage is 10 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--3 ft.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951a/	Sept. 15, 1951	2.66	85	1957	June 6, 1957	3.68	260
1952	Jan. 28, 1952	3.92	326	1958	May 7, 1958	3.78	285
1953	Jan. 9, 1953	3.22	152	1959	Aug. 9, 1959	3.45	202
1954	Apr. 28, 1954	2.85	106	1960	Sept. 12, 1960	4.23	419
1955	Aug. 13, 1955	3.88	314				
1956	Mar. 14, 1956	2.71	78	1961	Jan. 1, 1961	4.40	470

a Partial year.

CHOPTANK RIVER BASIN

4904.7. Tappahanna ditch near Hartly, Del.

Location.--Lat 39°08'07", long 75°41'30", 100 ft downstream from bridge on State Highway 103, 2.7 miles southeast of Hartly, Kent County.

Drainage area.--5.93 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 55 ft (from topographic map).

Stage-discharge relation.--Not defined.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951a/	July 21, 1951	6.72		1957	Nov. 3, 1956	7.78	
1952	Nov. 8, 1951	7.05		1958	Aug. 26, 1958	8.12	
1953	May 21, 1953	5.74		1959	Jan. 1, 1959	6.03	
1954	Dec. 15, 1953	5.68		1960	Sept. 12, 1960	8.15	
1955	Aug. 14, 1955	7.03					
1956	Mar. 15, 1956	5.75		1961	Apr. 13, 1961	8.57	

a Partial year.

4905. Culbreth Marsh ditch near Chapeltown, Del.
(Published as Shades Branch prior to 1956)

Location.--Lat 39°04'45", long 75°41'05", on right bank 40 feet and 220 feet downstream from bridge on State Highway 223, 1.6 miles south of Chapeltown, Kent County, 3.0 miles upstream from mouth, 3.1 miles west of Willow Grove.

Drainage area.--11.6 sq mi.

Gage.--Recording prior to 1957; crest-stage gages thereafter. Altitude of gage is 45 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--7 ft.

Remarks.--Base for partial-duration series, 260 cfs. Only annual peaks are shown subsequent to 1955.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951a	Feb. 21, 1951	4.28	203	1954	Dec. 14, 1953	5.70	298
1952	Nov. 7, 1951	6.74	425	1955	Aug. 13, 1955	7.25	340
	Dec. 21, 1951	7.27	642				
	Feb. 4, 1952	5.43	269	1956	Mar. 14, 1956	5.35	264
	Apr. 27, 1952	6.31	345	1957	Nov. 3, 1956	8.52	1,260
	May 26, 1952	6.06	318	1958	Aug. 26, 1958	9.01	1,560
	June 1, 1952	6.63	400	1959	Jan. 1, 1959	5.05	244
1953	Feb. 15, 1953	5.94	307	1960	Sept. 12, 1960	9.14	-
	May 20, 1953	6.11	336				
	May 26, 1953	6.61	397	1961	Feb. 18, 1961	7.64	-

a Partial year.

4910. Choptank River near Greensboro, Md.

Location.--Lat 38°59'50", long 75°47'10", on left bank at highway bridge, 0.1 mile upstream from Gravelly Branch and 2.0 miles northeast of of Greensboro, Caroline County.

Drainage area.--113 sq mi.

Gage.--Recording. Altitude of gage is 5 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948a/	Jan. 14, 1948	7.95	1,600	1953	Mar. 17, 1953	6.84	1,240
	Feb. 14, 1948	-	(b)		Apr. 14, 1953	6.11	1,020
	Apr. 2, 1948	6.35	1,100		May 21, 1953	7.08	1,330
	May 31, 1948	7.25	1,340		May 27, 1953	6.31	1,080
	Aug. 5, 1948	-	(b)	1954	Dec. 15, 1953	6.62	1,180
1949	Nov. 30, 1948	7.04	1,310				
	Dec. 5, 1948	7.76	1,540	1955	Aug. 14, 1955	7.41	1,140
	Dec. 31, 1948	8.24	1,700				
	Jan. 22, 1949	7.22	1,340	1956	Mar. 15, 1956	6.78	989
	Jan. 29, 1949	6.33	1,100				
	Feb. 1, 1949	6.29	1,070	1957	Nov. 3, 1956	11.47	4,140
	Mar. 12, 1949	6.40	1,100				
				1958	Jan. 26, 1958	7.57	1,400
	Mar. 24, 1950	6.17	1,050		Feb. 28, 1958	8.29	1,780
1950	Sept. 11, 1950	6.22	1,050		Mar. 28, 1958	-	(b)
					Apr. 1, 1958	-	(b)
1951	June 11, 1951	5.40	840		Apr. 12, 1958	6.67	1,040
					May 8, 1958	7.32	1,280
1952	Nov. 8, 1951	7.61	1,540		Aug. 14, 1958	6.80	1,080
	Dec. 19, 1951	6.28	1,080		Aug. 26, 1958	11.74	4,380
	Dec. 22, 1951	9.99	3,640	1959	Jan. 3, 1959	5.71	758
	Jan. 29, 1952	7.16	1,360				
	Feb. 5, 1952	7.39	1,460	1960	Feb. 20, 1960	7.07	1,180
	Mar. 12, 1952	6.24	1,060		Apr. 6, 1960	6.63	1,030
	Mar. 25, 1952	6.11	1,020		Sept. 13, 1960	12.45	5,040
	Apr. 28, 1952	9.15	2,540				
	May 27, 1952	6.79	1,230	1961	Jan. 2, 1961	-	c2,400
	June 2, 1952	8.36	1,890		Feb. 19, 1961	6.89	1,080
	Aug. 9, 1952	6.42	1,120		Feb. 24, 1961	7.55	1,390
1953	Jan. 10, 1953	6.19	1,050		Apr. 14, 1961	7.85	1,540
	Feb. 16, 1953	7.08	1,330				

a Partial year.

b Probably above base, gage height and discharge unknown.

c About; gage height not determined.

4915. Tuckahoe Creek near Ruthsburg, Md.

Location.--Lat 38°58'00", long 75°56'35", on downstream side of right abutment of highway bridge, 0.1 mile downstream from Blockston Branch, 2.6 miles downstream from confluence of German Branch and Mason Branch, 2.6 miles south of Ruthsburg, Queen Annes County, and 3.4 miles north of Queen Anne.

Drainage area.--85.2 sq mi.

Gage.--Recording. Altitude of gage is 10 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--3 ft.

Remarks.--Base for partial-duration series, 750 cfs.

Peak stages and discharges of Tuckahoe Creek near Ruthsburg, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Dec. 22, 1951	5.56	1,570	1953	Mar. 26, 1953	4.37	780
	Jan. 29, 1952	4.49	824		May 7, 1953	4.41	799
	Feb. 5, 1952	4.73	968	1954	Dec. 15, 1953	4.11	666
	Apr. 28, 1952	5.55	1,560		Aug. 13, 1955	5.87	1,620
	May 26, 1952	4.39	764		Mar. 15, 1956	3.96	473
	July 10, 1952	4.49	824				
1953	Mar. 16, 1953	4.47	828				

4920. Beaverdam Branch at Matthews, Md.

Location.--Lat 38°48'40", long 75°58'15", on left bank 50 ft upstream from bridge on State Highway 328, 1 mile west of Matthews, Talbot County, 1.2 miles upstream from mouth, and 6 miles northeast of Easton.

Drainage area.--5.85 sq mi.

Gage.--Recording. Altitude of gage is 10 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 440 cfs and extended above on basis of contracted-opening measurement at 1,020 cfs.

Remarks.--Base for partial-duration series, 120 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950e/	Sept. 11, 1950	3.32	181	1956	Mar. 14, 1956	2.60	109
1951	Nov. 25, 1950	3.01	148	1957	Nov. 2, 1956	7.15	1,020
1952	Nov. 1, 1951	2.80	128	1958	Jan. 25, 1958	3.14	161
	Dec. 18, 1951	2.83	131		Feb. 28, 1958	2.72	120
	Dec. 21, 1951	3.97	259		Apr. 11, 1958	2.84	131
	Feb. 4, 1952	3.33	184		July 23, 1958	4.84	404
	Apr. 27, 1952	3.17	167		July 31, 1958	7.24	1,050
	July 9, 1952	3.70	227		Aug. 12, 1958	2.88	134
	Aug. 8, 1952	3.92	253		Aug. 25, 1958	5.94	660
	Sept. 1, 1952	4.11	276	1959	July 14, 1959	3.32	181
1953	Nov. 22, 1952	3.01	149		July 27, 1959	3.74	231
	Dec. 11, 1952	3.11	160		Aug. 8, 1959	3.44	195
	Feb. 15, 1953	2.73	121	1960	Apr. 5, 1960	2.73	121
	Mar. 16, 1953	2.72	120		July 30, 1960	3.58	212
	May 6, 1953	3.65	221		Sept. 12, 1960	10.24	2,200
	May 20, 1953	3.66	222	1961	Jan. 1, 1961	3.89	251
	Aug. 17, 1953	3.51	204		Feb. 19, 1961	2.89	134
1954	Apr. 28, 1954	2.85	133		Feb. 23, 1961	2.89	134
1955	May 30, 1955	2.80	127		Apr. 13, 1961	2.76	121
	June 11, 1955	3.51	203		June 14, 1961	2.81	125
	Aug. 12, 1955	5.19	476				
	Aug. 23, 1955	3.86	247				

a Partial year.

4925. Sallie Harris Creek near Carmichael, Md.

Location.--Lat 38°57'55", long 76°06'30", at right upstream wingwall of bridge on U.S. Highway 50, 2 miles northeast of Carmichael, Queen Annes County, 2.2 miles northwest of Wye Mills, and 2.4 miles upstream from mouth.

Drainage area.--8.09 sq mi.

Gage.--Recording prior to Oct. 1, 1956 (except nonrecording July 25 to Sept. 16, 1952); crest-stage gage thereafter. Altitude of gage is 15 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 370 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 150 cfs. Only annual peaks are shown after 1956.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Dec. 21, 1951	5.56	314	1955	Aug. 13, 1955	7.02	1,030
	Feb. 4, 1952	4.42	176	1956	Mar. 14, 1956	3.27	91
	Apr. 5, 1952	4.34	168				
	Apr. 27, 1952	5.65	327	1957	Nov. 2, 1956	-	(b)
	May 26, 1952	4.69	205	1958	Aug. 26, 1958	5.89	577
	Aug. 13, 1952	5.11	254	1959	Aug. 8, 1959	3.07	75
	Sept. 1, 1952	-	(a)	1960	Sept. 12, 1960	7.43	1,240
				1961	Feb. 18, 1961	3.89	620
1953	Dec. 11, 1952	4.54	175				
	July 6, 1953	4.55	176				
	Aug. 17, 1953	4.85	214				
1954	Dec. 14, 1953	3.97	116				

a Peak above base; discharge not determined.

b Discharge not determined; less than 155 cfs.

CHESTER RIVER BASIN

4930. Unicorn Branch near Millington, Md.

Location.--Lat 39°15'00", long 75°51'40", on right bank 50 ft upstream from bridge on State Highway 313, 0.9 mile upstream from mouth, and 1.4 miles southwest of Millington, Kent County.

Drainage area.--22.3 sq mi.

Gage.--Recording. Altitude of gage is 15 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 180 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948a/	Jan. 13, 1948	3.80	189	1951	May 12, 1951	4.52	190
	Feb. 14, 1948	(b)	(b)		July 20, 1951	4.12	282
	May 5, 1948	3.76	184	1952	Dec. 21, 1951	4.35	370
	May 17, 1948	4.25	238				
1949	Dec. 4, 1948	4.16	228		Feb. 4, 1952	3.98	270
	Dec. 31, 1948	4.62	277		Mar. 12, 1952	3.50	180
	Jan. 22, 1949	3.92	206		Apr. 6, 1952	3.75	217
	Jan. 28, 1949	3.86	194		Apr. 28, 1952	4.41	383
	May 8, 1949	3.87	194		May 26, 1952	3.62	196
					June 1, 1952	3.71	210
1950	Mar. 23, 1950	4.08	222		July 9, 1952	4.37	374
	Sept. 11, 1950	3.98	211	1953	Jan. 25, 1953	3.54	185

a Partial year.

b Not determined; probably maximum for year.

Peak stages and discharges of Unicorn Branch near Millington, Md.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Feb. 16, 1953	3.67	204	1959	Jan. 2, 1959	2.92	116
	Mar. 16, 1953	3.88	244	1960	Feb. 19, 1960	3.64	222
	June 19, 1953	3.92	253		Apr. 6, 1960	3.68	229
1954	Dec. 14, 1953	3.32	157		May 22, 1960	3.39	180
					July 30, 1960	3.71	235
1955	Aug. 13, 1955	4.30	359		Aug. 6, 1960	3.83	258
1956	Mar. 15, 1956	3.30	167	Aug. 10, 1960	4.87	484	
				Sept. 12, 1960	7.17	1,060	
1957	Nov. 2, 1956	5.49	630	1961	Jan. 2, 1961	4.25	330
1958	Jan. 25, 1958	3.77	246	Feb. 19, 1961	3.95	268	
	Feb. 28, 1958	4.50	370	Feb. 23, 1961	4.20	322	
	Mar. 24, 1958	4.03	270	Mar. 9, 1961	3.99	276	
	Mar. 26, 1958	4.07	278	Mar. 19, 1961	3.61	203	
	Apr. 1, 1958	3.67	203	Apr. 13, 1961	4.25	348	
	May 7, 1958	3.79	224	June 15, 1961	4.62	429	
	Aug. 26, 1958	4.17	330				

4935. Morgan Creek near Kennedyville, Md.

Location.--Lat 39°16'50", long 76°00'55", on right bank 200 ft upstream from highway bridge, 2 miles southwest of Kennedyville, Kent County, and 4½ miles upstream from mouth.

Drainage area.--10.5 sq mi.

Gage.--Recording. Altitude of gage is 15 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 440 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951a/	July 19, 1951	4.77	208	1955	Aug. 13, 1955	b6.87	c630
1952	Dec. 21, 1951	6.49	622	1956	July 21, 1956	5.23	291
	Feb. 4, 1952	5.53	356	1957	Nov. 2, 1956	5.24	293
	Apr. 27, 1952	4.92	229				
	July 9, 1952	4.99	239	1958	Jan. 25, 1958	5.10	265
	Aug. 28, 1952	5.22	289		Feb. 28, 1958	5.20	285
	Sept. 1, 1952	5.37	320		Aug. 25, 1958	7.11	834
1953	Dec. 11, 1952	5.82	428	1959	Sept. 2, 1959	5.89	446
	Jan. 24, 1953	5.58	368				
	Mar. 16, 1953	5.29	303	1960	Sept. 12, 1960	8.88	1,530
	Mar. 26, 1953	5.68	392				
	July 23, 1953	4.71	200	1961	Jan. 1, 1961	5.09	263
1954	Dec. 14, 1953	5.12	269		Feb. 18, 1961	-	c300
	May 4, 1954	4.80	212		June 15, 1961	6.50	625

a Partial year.

b Backwater from tide.

c About.

4940. Southeast Creek at Church Hill, Md.

Location.--Lat 39°07'57", long 75°58'51", on right upstream side of bridge on private road, 600 ft downstream from unnamed tributary, 0.7 mile south of Church Hill, Queen Annes County, and 5½ miles upstream from mouth.

Drainage area.--12.5 sq mi.

Gage.--Recording prior to October 1956; crest-stage gage thereafter. Altitude of gage is 20 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 66 cfs and extended above on basis of flow-through-culverts and over-road measurements at 210, 394, 415, 582, and 802 cfs, and by logarithmic plotting.

Remarks.--Base for partial-duration series, 250 cfs. Only annual peaks are shown subsequent to 1956.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951a/	July 19, 1951	5.38	271	1953	July 23, 1953	5.49	286
1952	Dec. 21, 1951	6.92	514	1954	Dec. 14, 1953	5.58	297
	Feb. 4, 1952	6.41	421	1955	Aug. 13, 1955	8.34	990
	Mar. 11, 1952	5.71	315				
	Apr. 27, 1952	6.32	406	1956	Mar. 14, 1956	5.23	253
	May 26, 1952	7.19	578	1957	Nov. 2, 1956	9.4	1,560
	Aug. 13, 1952	7.91	804				
	Sept. 1, 1952	6.44	426	1958	Aug. 25, 1958	9.0	1,320
1953	Nov. 22, 1952	5.43	278	1959	June 1959	5.80	328
	Dec. 11, 1952	6.04	363	1960	Sept. 12, 1960	10.4	-
	Jan. 24, 1953	5.91	344	1961	Feb. 18, 1961	7.35	620
	Feb. 15, 1953	5.46	282				
	Mar. 16, 1953	6.36	413				

a Partial year.

SASSAFRAS RIVER BASIN

4945. Jacobs Creek near Sassafras, Md.

Location.--Lat 39°21'50", long 75°49'13", on upstream right wingwall of bridge on State Highway 290, 1.2 miles southwest of Sassafras, Kent County, and 1.4 miles upstream from mouth.

Drainage area.--5.39 sq mi.

Gage.--Recording. Altitude of gage is 10 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 73 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 40 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951a/	Aug. 20, 1951	4.44	149	1953	May 31, 1953	2.96	64
1952	Dec. 21, 1951	3.92	115		June 13, 1953	2.85	59
	Feb. 4, 1952	3.49	90		July 23, 1953	2.94	63
	Mar. 11, 1952	2.44	42	1954	Oct. 29, 1953	2.80	57
	Apr. 5, 1952	2.50	44				
	Apr. 27, 1952	3.26	79				
	June 1, 1952	2.57	47				
	July 9, 1952	4.68	166	1955	Feb. 6, 1955	2.53	44
	Sept. 1, 1952	2.84	58				
1953	Nov. 22, 1952	2.42	41		June 8, 1955	2.93	51
	Jan. 24, 1953	3.31	82				
	Feb. 15, 1953	2.39	40				
	Mar. 16, 1953	2.67	51				
	Mar. 26, 1953	2.38	40	1956	July 10, 1955	4.27	132
	May 26, 1953	3.60	96				
				1956	Aug. 8, 1955	2.90	41
				1956	Aug. 13, 1955	5.59	229
				1956	July 21, 1956	3.82	85
				1956	Aug. 5, 1956	3.98	98
				1956	Aug. 13, 1956	4.93	179

a Partial year.

4950. Big Elk Creek at Elk Mills, Md.

Location.--Lat 39°39'26", long 75°49'20", on right bank 100 ft downstream from highway bridge at Elk Mills, Cecil County, 3½ miles north of Elkton, and 7 miles upstream from confluence with Little Elk Creek.

Drainage area.--52.6 sq mi.

Gage.--Nonrecording prior to Oct. 7, 1939, and nonrecording and crest-stage gage Oct. 7, 1939, to May 17, 1946, at site 100 ft upstream at same datum; recording thereafter. Datum of gage is 68.5 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,700 cfs and extended above on basis of velocity-area and conveyance studies.

Bankfull stage.--7 ft.

Remarks.--Base for partial-duration series, 1,700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1884	June 1884	19	a18,000	1945	Aug. 1, 1945	7.71	2,780
1932	June 15, 1932	8.0	a3,020		Sept. 18, 1945	10.48	6,030
1933	Apr. 17, 1933	6.4	1,800	1946	June 1, 1946	7.61	3,100
	July 2, 1933	7.6	2,700		July 23, 1946	11.14	7,080
	Aug. 4, 1933	8.3	3,290	1947	Apr. 30, 1947	9.47	5,100
	Aug. 23, 1933	12.4	7,530		July 7, 1947	9.64	5,220
1934	Mar. 3, 1934	7.5	2,620	1948	Nov. 8, 1947	6.07	1,720
	Apr. 1, 1934	7.0	2,220		Jan. 2, 1948	6.37	2,060
1935	July 9, 1935	9.8	4,720		Feb. 14, 1948	d7.08	2,120
1936b/	Feb. 18, 1936	7.5	2,620	1949	Aug. 5, 1949	6.04	1,720
	Mar. 11, 1936	8.16	c3,200	1950	Aug. 3, 1950	7.94	3,400
	Apr. 6, 1936	6.5	1,820	1951	Nov. 25, 1950	7.10	2,620
1937	July 5, 1937	14.5	10,600		Jan. 15, 1951	6.08	1,770
	Aug. 7, 1937	12.6	8,000		Feb. 7, 1951	6.85	2,400
	Aug. 22, 1937	8.4	3,380		July 4, 1951	6.10	1,770
1938	Oct. 23, 1937	7.17	2,310		July 12, 1951	6.05	1,720
	Nov. 13, 1937	6.8	1,990	1952	Dec. 21, 1951	7.78	3,280
	July 23, 1938	6.7	1,910		Mar. 11, 1952	6.98	2,510
1939	Feb. 3, 1939	6.7	1,980		July 9, 1952	6.47	2,220
	Feb. 26, 1939	6.5	1,820		Sept. 1, 1952	7.38	2,880
	Aug. 19, 1939	7.5	2,620	1953	Nov. 22, 1952	7.23	2,740
1940	Jan. 15, 1940	7.0	2,220		Dec. 11, 1952	6.54	2,310
	Mar. 4, 1940	7.2	2,380		Jan. 24, 1953	6.93	2,470
	Mar. 15, 1940	7.55	2,700	1954	Dec. 14, 1953	5.61	1,340
	Apr. 20, 1940	6.9	2,140	1955	Feb. 7, 1955	7.05	2,580
	Sept. 1, 1940	6.81	2,060		Aug. 13, 1955	7.84	3,340
1941	Jan. 24, 1941	6.70	1,980		Aug. 14, 1955	10.13	5,860
	Feb. 7, 1941	7.96	3,020		Aug. 18, 1955	8.93	4,470
	July 2, 1941	10.35	5,680	1956	Jan. 30, 1956	5.86	1,540
1942	Jan. 19, 1942	6.56	1,900	1957	Nov. 2, 1956	7.38	2,880
	Feb. 7, 1942	6.83	2,060		Sept. 10, 1957	7.17	2,680
	Mar. 3, 1942	6.38	1,740	1958	Dec. 20, 1957	6.40	1,990
	July 28, 1942	6.70	1,980		Jan. 22, 1958	6.32	1,920
	July 31, 1942	7.35	2,540		Jan. 25, 1958	7.07	2,590
	Aug. 13, 1942	8.36	3,380		Feb. 28, 1958	6.72	2,280
1943	Dec. 28, 1942	6.47	1,820	1959	Jan. 2, 1959	6.84	2,390
	Apr. 19, 1943	6.98	2,220		Sept. 3, 1959	7.92	3,420
	May 12, 1943	7.75	2,860	1960	Sept. 12, 1960	10.40	6,180
1944	Jan. 3, 1944	7.04	2,220	1961	Jan. 1, 1961	5.67	1,610
	Sept. 13, 1944	7.2	2,380				
1945	Jan. 1, 1945	6.35	1,740				
	July 18, 1945	8.21	3,200				

a Annual peak only.

b Partial year.

c Probably exceeded on Jan. 3, 1936.

d Backwater from ice.

4955. Little Elk Creek at Childs, Md.

Location.--Lat 39°38'30", long 75°52'00", on right bank at downstream side of highway bridge, 0.2 mile southeast of Childs, Cecil County, 1.6 miles upstream from Laurel Run, 2.4 miles northwest of Elkton, and 6.1 miles upstream from confluence with Big Elk Creek.

Drainage area.--26.8 sq mi.

Gage.--Recording. Datum of gage is 66.72 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 690 cfs and extended above on basis of slope-area and flow-over-dam measurements three-quarters of a mile upstream at 1,630 and 1,900 cfs, respectively, and conveyance studies.

Bankfull stage.--8 ft.

Remarks.--Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Dec. 30, 1948	4.08	1,060	1954	Dec. 14, 1953	4.49	1,280
	July 13, 1949	4.19	1,120				
1950	Mar. 23, 1950	4.10	1,070	1955	Feb. 7, 1955	4.71	1,360
	Aug. 3, 1950	5.24	1,700		Aug. 12, 1955	8.37	5,400
					Aug. 13, 1955	6.36	2,580
1951	Nov. 25, 1950	4.76	1,320		Aug. 14, 1955	4.90	1,480
	Feb. 7, 1951	4.20	1,120		Aug. 18, 1955	5.00	1,550
	July 5, 1951	5.05	1,540	1956	Mar. 14, 1956	4.22	1,060
1952					July 21, 1956	4.95	1,520
	Dec. 21, 1951	5.45	1,840	1957	Nov. 2, 1956	5.02	1,560
	Feb. 4, 1952	4.11	1,080		Sept. 10, 1957	5.48	1,890
	Mar. 11, 1952	5.11	1,640	1958	Dec. 20, 1957	4.77	1,390
	May 26, 1952	4.03	1,030		Jan. 25, 1958	4.59	1,280
	Sept. 1, 1952	6.36	2,420		Feb. 27, 1958	5.10	1,620
1953	Nov. 22, 1952	4.67	1,380		Apr. 6, 1958	4.73	1,370
	Dec. 11, 1952	4.52	1,300		Aug. 14, 1958	4.45	1,200
	Jan. 9, 1953	4.12	1,080				
	Jan. 24, 1953	5.05	1,600				

NORTHEAST RIVER BASIN

4960. Northeast Creek at Leslie, Md.

Location.--Lat 39°37'40", long 75°56'40", on left bank at downstream side of highway bridge, 0.7 mile northeast of Leslie, Cecil County, 1.5 miles southeast of Bay View, and 1.7 miles upstream from confluence with Little Northeast Creek.

Drainage area.--24.3 sq mi.

Gage.--Recording. Datum of gage is 115.0 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 640 cfs and extended above on basis of slope-area measurement at 1,640 cfs.

Bankfull stage.--7 ft.

Remarks.--Base for partial-duration series, 800 cfs.

Peak stages and discharges of Northeast Creek at Leslie, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Dec. 30, 1948	4.04	984	1955	Feb. 7, 1955	4.36	1,180
	Jan. 28, 1949	3.83	858		Aug. 13, 1955	6.30	2,590
	Mar. 23, 1949	3.81	846		Aug. 19, 1955	4.53	1,280
	July 13, 1949	4.71	1,340	1956	Mar. 14, 1956	3.83	858
1950	Mar. 23, 1950	4.27	1,120		Nov. 2, 1956	5.36	1,850
	Aug. 3, 1950	5.06	1,640	1957	Sept. 10, 1957	3.89	894
1951	Nov. 25, 1950	4.85	1,460		Dec. 20, 1957	5.31	1,840
	Mar. 20, 1951	3.89	894	1958	Dec. 26, 1957	3.89	814
	July 5, 1951	4.78	1,420		Jan. 22, 1958	4.42	1,140
1952	Dec. 21, 1951	6.08	2,410		Jan. 25, 1958	5.22	1,770
	Feb. 4, 1952	3.82	852		Feb. 28, 1958	4.35	1,100
	Mar. 11, 1952	5.95	2,310		Apr. 6, 1958	4.36	1,100
	May 26, 1952	4.22	1,090		July 27, 1958	6.92	3,220
	Sept. 1, 1952	5.55	1,990		Aug. 15, 1958	4.10	940
1953	Nov. 22, 1952	4.94	1,560	1959	Jan. 2, 1959	4.05	910
	Dec. 11, 1952	3.89	894		Sept. 3, 1959	4.52	1,210
	Jan. 9, 1953	4.13	1,040	1960	Feb. 19, 1960	3.95	850
	Jan. 24, 1953	5.38	1,870		Sept. 12, 1960	6.30	2,790
	May 26, 1953	3.90	900	1961	Apr. 13, 1961	4.23	1,020
1954	May 4, 1954	3.79	834				

SUSQUEHANNA RIVER BASIN

4965. Oaks Creek at Index, N. Y.

Location.--Lat 42°40'00", long 74°57'35", on right bank 200 ft upstream from highway bridge at Index, Otsego County, half a mile upstream from mouth, and 3 miles southwest of Cooperstown.

Drainage area.--103 sq mi.

Gage.--Nonrecording at highway bridge 200 ft downstream at different datum prior to October 1932; recording and concrete control thereafter. Datum of gage is 1,174.50 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 1,700 cfs.

Remarks.--Flow regulated by natural storage in Canadarago Lake. Base for partial-duration series, 900 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Jan. 15, 1930	4.0	710	1943	Dec. 30, 1942	6.69	2,140
1931	Apr. 11, 1931	4.6	920	Feb. 24, 1943	5.13	960	
				Mar. 17, 1943	6.6	2,310	
1932	Apr. 12, 1932	5.3	1,060	1944	Mar. 17, 1944	6.45	2,140
1937	Apr. 6, 1937	4.83	755		Mar. 26, 1944	5.42	1,160
					Apr. 13, 1944	5.07	921
1938	Jan. 25, 1938	5.08	946	1945	Mar. 16, 1945	6.09	1,320
	Feb. 7, 1938	5.52	1,290		Mar. 22, 1945	6.27	1,450
	Sept. 22, 1938	5.71	1,460	1946	Mar. 7, 1946	5.77	1,590
1939	Feb. 20, 1939	6.05	1,770		Mar. 9, 1946	5.71	1,530
					May 28, 1946	5.12	1,030
1940	Mar. 31, 1940	5.90	1,630	1947	Mar. 25, 1947	5.21	1,100
	Apr. 8, 1940	6.57	2,340		Apr. 6, 1947	5.92	1,740
1941	Dec. 29, 1940	5.11	933		Apr. 12, 1947	4.98	936
	Apr. 11, 1941	5.07	906	1948	Mar. 17, 1948	5.51	1,350
1942	Mar. 9, 1942	5.40	1,140		Mar. 20, 1948	6.49	2,370
	Mar. 17, 1942	5.87	1,550		Mar. 22, 1948	6.60	2,500

a Backwater from ice.

Peak stages and discharges of Oaks Creek at Index, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Dec. 30, 1948	5.05	985	1956	Apr. 7, 1956	5.66	1,460
1950	Mar. 28, 1950	5.66	1,480	1956	Apr. 16, 1956	5.85	1,610
	Apr. 4, 1950	5.73	1,550		Apr. 30, 1956	5.18	1,110
	Sept. 1, 1950	5.51	1,350		Jan. 23, 1957	a5.06	800
				1958	Apr. 6, 1958	5.76	1,610
1951	Dec. 4, 1950	4.89	909		Apr. 22, 1958	5.25	1,220
	Feb. 2, 1951	5.34	1,220		Jan. 22, 1959	6.87	2,550
	Mar. 31, 1951	5.37	1,240	1959	Apr. 3, 1959	5.47	1,330
1952	Apr. 2, 1952	5.00	951		Apr. 9, 1959	5.15	1,100
	Apr. 6, 1952	5.10	1,020	1960	Nov. 28, 1959	b5.80	b1,590
1953	Jan. 24, 1953	5.01	978		Apr. 4, 1960	6.70	2,400
	Feb. 21, 1953	5.10	1,040	1961	Feb. 26, 1961	5.69	1,500
1954	Feb. 17, 1954	a5.33	1,100				
1955	Mar. 11, 1955	5.67	1,460				

a Backwater from ice.

b Corrected.

4970. Cherry Valley Creek at Westville, N. Y.

Location--Lat 42°38'00", long 74°52'55", on left bank 40 ft downstream from highway bridge in Westville, Otsego County, 4 miles upstream from mouth, and 5 miles downstream from O'Connell Brook.

Drainage area--81.3 sq mi.

Gage--Nonrecording prior to July 1, 1931; recording thereafter. Altitude of gage is 1,190 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements.

Remarks--Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Mar. 19, 1930	4.75	932	1939	Feb. 21, 1939	6.90	2,620
1931	Apr. 11, 1931	8.3	1,780	1940	Apr. 1, 1940	7.55	2,970
1938	Sept. 22, 1938	8.65	4,470		Apr. 9, 1940	6.57	2,080
				1941	Dec. 30, 1940	5.31	1,330

4975. Susquehanna River at Colliersville, N. Y.

Location--Lat 42°29'55", long 74°58'55", on right bank a quarter of a mile downstream from powerplant of New York State Electric & Gas Corp. and half a mile north of Colliersville, Otsego County.

Drainage area--351 sq mi.

Gage--Recording. Datum of gage is 1,110.80 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Stage-discharge relation--Defined by current-meter measurements.

Remarks--Flow regulated by Otsego Lake. Base for partial-duration series, 3,300 cfs.

Peak stages and discharges of Susquehanna River at Colliersville, N. Y.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1925	Feb. 12, 1925	6.09	4,070	1944	Mar. 27, 1944	5.79	3,470
	Feb. 24, 1925	5.91	3,750				
	Mar. 15, 1925	5.92	3,760	1945	Mar. 8, 1945	5.78	3,460
					Mar. 18, 1945	6.18	4,170
1926	Apr. 10, 1926	6.1	3,860				
	Apr. 16, 1926	5.80	3,460	1946	Mar. 8, 1946	6.67	5,140
	Apr. 26, 1926	5.84	3,510		May 29, 1946	5.99	3,820
1927	Mar. 15, 1927	6.6	4,580	1947	Apr. 7, 1947	6.65	5,100
	Mar. 19, 1927	5.69	3,320				
	Mar. 22, 1927	5.84	3,510	1948	Mar. 17, 1948	6.36	4,510
					Mar. 22, 1948	7.48	6,980
1928	Dec. 9, 1927	5.74	3,380				
	Mar. 27, 1928	5.8	3,460	1949	Dec. 31, 1948	5.86	3,590
1929	Mar. 16, 1929	7.1	6,070	1950	Mar. 30, 1950	6.51	4,810
	Apr. 7, 1929	5.63	3,300		Apr. 5, 1950	6.78	5,370
	Apr. 22, 1929	6.69	5,190		Sept. 2, 1950	6.73	5,260
1930	Jan. 15, 1930	5.05	2,420	1951	Dec. 5, 1950	5.74	3,390
					Apr. 1, 1951	6.01	3,860
1931	Apr. 12, 1931	5.76	3,330				
				1952	Apr. 3, 1952	5.65	3,260
1932	Apr. 11, 1932	5.57	3,080				
				1953	Jan. 25, 1953	6.00	3,840
1933	Oct. 8, 1932	5.70	3,250		Feb. 22, 1953	5.69	3,320
1934	Mar. 5, 1934	5.72	3,280	1954	Feb. 18, 1954	6.02	3,880
1935	Jan. 10, 1935	6.93	5,630	1955	Mar. 12, 1955	6.22	4,250
1936	Nov. 14, 1935	6.27	4,030	1956	Oct. 17, 1955	6.46	4,710
	Mar. 13, 1936	6.82	5,460		Mar. 9, 1956	5.74	3,390
	Mar. 19, 1936	8.13	8,740		Apr. 6, 1956	7.00	5,850
					Apr. 17, 1956	6.89	5,610
1937	Jan. 26, 1936	5.97	3,790		May 1, 1956	5.90	3,660
1938	Feb. 8, 1938	5.71	3,340	1957	Jan. 24, 1957	4.82	2,130
	Sept. 22, 1938	7.20	6,300				
				1958	Apr. 7, 1958	6.94	5,720
1939	Feb. 21, 1939	6.46	4,710		Apr. 17, 1958	5.93	3,570
					Apr. 23, 1958	6.39	4,360
1940	Apr. 9, 1940	7.27	6,470				
				1959	Jan. 23, 1959	7.14	5,900
1941	Dec. 31, 1940	5.91	3,680		Apr. 3, 1959	6.26	4,130
1942	Mar. 18, 1942	6.60	4,990	1960	Nov. 29, 1959	6.54	4,650
					Apr. 1, 1960	6.85	5,260
1943	Dec. 31, 1942	6.55	4,890		Apr. 5, 1960	7.91	7,870
	Feb. 25, 1943	5.96	3,770				
	Mar. 18, 1943	6.82	5,450	1961	Feb. 26, 1961	6.57	4,700
1944	Mar. 18, 1944	6.68	5,160				

4985. Charlotte Creek at West Davenport, N. Y.
(Published as "at Davenport Center" prior to 1957)

Location.--Lat 42°26'40", long 74°57'50", on right bank at downstream side of highway bridge at West Davenport, Delaware County, 700 ft upstream from small tributary.

Drainage area.--167 sq mi. At site used prior to 1957, 163 sq mi.

Gage.--Recording. Prior to Oct. 1, 1956, at site 1.7 miles upstream at datum 21.95 ft higher. Datum of gage is 1,170.69 ft above mean sea level.

Stage-discharge relation.--Prior to Oct. 1, 1956, defined by current-meter measurements below 5,000 cfs and extended above on basis of slope-area measurement at 14,000 cfs. Since Oct. 1, 1956, defined by current-meter measurements below 3,400 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 2,600 cfs.

Peak stages and discharges of Charlotte Creek at West Davenport, N. Y.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Sept. 22, 1938	9.65	14,000	1950	Apr. 5, 1950	5.17	2,770
1939	Dec. 6, 1938	5.80	3,460	1951	Nov. 26, 1950	6.90	4,950
	Feb. 20, 1939	7.03	5,190		Dec. 4, 1950	6.73	4,670
1940	Mar. 31, 1940	7.29	5,930		Feb. 1, 1951	5.84	3,490
	Apr. 5, 1940	5.93	3,790		Mar. 31, 1951	6.09	3,790
	Apr. 9, 1940	6.43	4,480	1952	Apr. 2, 1952	5.30	2,900
1941	Dec. 29, 1940	4.51	2,210	1953	Dec. 11, 1952	5.99	3,670
1942	Mar. 9, 1942	6.93	5,000		Jan. 24, 1953	5.67	3,300
	Mar. 17, 1942	7.51	6,180		Feb. 21, 1953	5.08	2,680
	May 23, 1942	6.82	4,810	1954	Feb. 17, 1954	6.16	3,870
1943	Dec. 30, 1942	7.03	5,190	1955	Mar. 11, 1955	5.12	2,940
	Feb. 24, 1943	6.33	4,090	1956	Oct. 16, 1955	7.27	5,930
	Mar. 17, 1943	6.28	4,020		Mar. 8, 1956	5.88	3,590
	June 2, 1943	5.17	2,820		Apr. 5, 1956	7.02	5,180
1944	Mar. 17, 1944	6.71	4,640		Apr. 16, 1956	5.51	3,180
1945	Mar. 4, 1945	5.20	2,850	1957	Jan. 23, 1957	6.93	2,790
	Mar. 17, 1945	4.96	2,610	1958	Apr. 7, 1958	7.30	3,190
1946	Mar. 8, 1946	5.84	3,490		Apr. 17, 1958	7.37	3,270
	Mar. 9, 1946	5.85	3,500		Apr. 22, 1958	7.35	3,240
	May 21, 1946	5.61	3,230	1959	Jan. 22, 1959	9.50	6,570
	May 28, 1946	5.62	3,240		Apr. 3, 1959	7.42	3,550
1947	Apr. 5, 1947	6.45	4,250	1960	Nov. 28, 1959	8.65	5,180
1948	Mar. 17, 1948	6.43	4,220		Jan. 3, 1960	7.61	3,780
	Mar. 20, 1948	6.30	4,050		Feb. 11, 1960	7.98	4,240
	Mar. 22, 1948	6.65	4,540		Mar. 31, 1960	8.30	4,670
1949	Dec. 30, 1948	6.70	4,620		Apr. 4, 1960	10.66	9,840
	Jan. 6, 1949	5.93	3,600		Sept. 13, 1960	7.76	3,960
1950	Mar. 28, 1950	6.93	5,000	1961	Feb. 26, 1961	7.81	4,140

4990. Otego Creek near Oneonta, N. Y.

Location.--Lat 42°27'00", long 75°06'50", on right bank $1\frac{1}{2}$ miles south of West Oneonta, $1\frac{1}{4}$ miles upstream from mouth, and $2\frac{1}{4}$ miles west of Oneonta, Otsego County.

Drainage area.--108 sq mi.

Gage.--Recording. Datum of gage is 1,047.99 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 3,200 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 1,700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Dec. 30, 1940	9.13	1,740	1947	Mar. 25, 1947	9.14	1,750
1942	Mar. 17, 1942	11.73	3,340		Apr. 6, 1947	9.80	2,050
1943	Dec. 30, 1942	14.10	6,000	1948	Mar. 16, 1948	10.17	2,250
	Feb. 24, 1943	9.34	1,830		Mar. 20, 1948	11.99	3,560
	Mar. 17, 1943	11.66	3,280	1949	Dec. 31, 1948	10.58	2,500
1944	Mar. 17, 1944	13.12	4,230		Jan. 6, 1949	9.40	1,860
1945	Mar. 17, 1945	8.82	1,630	1950	Mar. 29, 1950	11.32	3,020
1946	Mar. 8, 1946	10.12	2,220		Apr. 5, 1950	10.10	2,210
	Mar. 9, 1946	9.43	1,870		Sept. 1, 1950	12.00	3,570
	May 21, 1946	10.03	2,170	1951	Dec. 4, 1950	9.94	2,120
	May 28, 1946	9.44	1,880		Feb. 2, 1951	11.08	2,840

a Backwater from ice.

Peak stages and discharges of Otego Creek near Oneonta, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Jan. 27, 1952	8.47	1,520	1957	Jan. 23, 1957	9.64	1,860
1953	Dec. 11, 1952	10.28	2,310	1958	Apr. 7, 1958	11.48	3,000
	Jan. 25, 1953	10.24	2,290		Apr. 22, 1958	9.45	1,780
	Feb. 22, 1953	9.36	1,840	1959	Jan. 22, 1959	11.46	4,200
1954	Feb. 17, 1954	10.31	2,330		Nov. 28, 1959	12.31	3,740
1955	Mar. 12, 1955	9.51	1,910	1960	Jan. 3, 1960	9.25	1,700
	Mar. 23, 1955	9.06	1,720		Apr. 1, 1960	10.50	2,300
1956	Mar. 8, 1956	10.26	2,160		Apr. 4, 1960	12.33	3,760
	Apr. 5, 1956	11.75	3,240	1961	Feb. 26, 1961	12.57	4,010
	Apr. 17, 1956	9.49	1,800				

a Backwater from ice.

5000. Ouleout Creek at East Sidney, N. Y.

Location.--Lat 42°20'00", long 75°14'05", on right bank a quarter of a mile downstream from highway bridge, half a mile downstream from East Sidney Dam at East Sidney, Delaware County, and 3½ miles upstream from mouth.

Drainage area.--102 sq mi.

Gage.--Recording. At site half a mile upstream at datum 27.30 ft higher prior to June 13, 1947. Datum of gage is 1,086.31 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 4,000 cfs.

Bankfull stage.--Left bank steep and wooded. Above 4 ft, a small amount of water bypasses the gage on the right bank.

Historical data.--Flood in July 1935 is maximum known.

Remarks.--Since November 1949, flow regulated by East Sidney Reservoir. Base for partial-duration series, 2,100 cfs. Only annual peaks are shown subsequent to 1949.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	July 1935	-	16,700	1948	Mar. 20, 1948	4.86	2,750
1941	July 31, 1941	4.76	1,990	1948	Mar. 22, 1948	5.82	4,310
1942	Mar. 9, 1942	5.30	2,680	1949	Dec. 30, 1948	5.18	3,340
	Mar. 17, 1942	5.90	3,610		Jan. 6, 1949	5.12	3,240
	May 23, 1942	6.55	4,760	1950	Mar. 28, 1950	5.38	3,670
1943	Dec. 30, 1942	7.62	7,250	1951	Nov. 26, 1950	4.67	2,590
	Feb. 24, 1943	5.42	3,160	1952	Nov. 7, 1951	3.95	1,730
	Mar. 17, 1943	5.32	3,010	1953	Dec. 12, 1952	3.88	1,660
1944	Mar. 17, 1944	5.92	3,960	1954	Feb. 19, 1954	3.99	1,770
				1955	Nov. 21, 1954	3.61	1,420
1945	Mar. 3, 1945	5.28	2,950	1956	Oct. 19, 1955	4.76	2,480
	Sept. 19, 1945	5.61	3,460	1957	Jan. 24, 1957	3.90	1,560
1946	Mar. 9, 1946	5.04	2,270	1958	Apr. 9, 1958	4.34	1,990
	May 28, 1946	5.48	2,830	1959	Jan. 21, 1959	4.12	-
1947	Mar. 14, 1947	5.22	2,490	1960	Jan. 28, 1959	-	1,740
	Apr. 5, 1947	5.49	2,850		Apr. 7, 1960	6.19	4,000
1948	Mar. 16, 1948	5.86	4,380	1961	July 29, 1961	4.79	2,430

a Annual peak only; flow-over-dam measurement.

b Backwater from ice.

5005. Susquehanna River at Unadilla, N. Y.

Location.--Lat 42°19'15", long 75°19'00", on right bank 25 ft downstream from highway bridge at Unadilla, Otsego County, and 1 mile upstream from Carrs Creek.

Drainage area.--984 sq mi.

Gage.--Recording. Datum of gage is 996.08 ft above mean sea level (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements.

Historical data.--Local reports indicate that during the flood of July 1935, the roadway near the gage corresponding to a stage of about 18 ft was under water for a short time.

Remarks.--Since 1947, peaks regulated to some extent by East Sidney Reservoir. Base for partial-duration series, 11,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Sept. 22, 1938	13.76	21,000	1950	Apr. 6, 1950	10.54	12,000
1939	Feb. 21, 1939	11.90	15,600		Sept. 2, 1950	10.19	11,200
1940	Mar. 31, 1940	13.54	20,300	1951	Dec. 5, 1950	10.45	11,800
	Apr. 9, 1940	12.25	16,500	1952	Apr. 3, 1952	9.39	9,440
1941	Dec. 30, 1940	9.79	10,300	1953	Dec. 12, 1952	10.61	12,200
1942	Mar. 18, 1942	12.09	16,100		Jan. 25, 1953	10.57	12,100
	May 24, 1942	10.66	12,300	1954	Feb. 18, 1954	10.38	11,700
1943	Dec. 30, 1942	13.94	21,500	1955	Mar. 12, 1955	10.27	11,000
	Feb. 24, 1943	10.67	12,400	1956	Oct. 17, 1955	11.09	11,800
	Mar. 18, 1943	11.86	15,500		Mar. 9, 1956	11.06	12,600
1944	Mar. 18, 1944	11.48	14,400		Apr. 6, 1956	12.38	16,000
1945	Mar. 18, 1945	10.31	11,500		Apr. 17, 1956	11.32	13,300
1946	Mar. 8, 1946	11.18	13,700	1957	Jan. 23, 1957	9.67	9,510
	May 22, 1946	10.14	11,100	1958	Apr. 8, 1958	11.71	14,200
	May 28, 1946	11.08	13,400		Apr. 17, 1958	10.54	11,400
1947	Apr. 6, 1947	11.15	13,600		Apr. 23, 1958	10.59	11,500
1948	Mar. 17, 1948	11.21	13,700	1959	Jan. 22, 1959	11.42	17,000
	Mar. 22, 1948	13.18	19,200		Apr. 3, 1959	10.39	11,100
1949	Dec. 31, 1948	11.49	14,500	1960	Nov. 29, 1959	11.79	14,400
	Jan. 6, 1949	10.64	12,300		Apr. 1, 1960	11.97	14,900
1950	Mar. 29, 1950	11.46	14,400		Apr. 4, 1960	14.25	21,200
				1961	Feb. 26, 1961	11.66	14,100

a Backwater from ice.

5010. Unadilla River near New Berlin, N. Y.

Location.--Lat 42°38'35", long 75°19'25", on right bank 150 ft upstream from site of old highway bridge, a quarter of a mile downstream from Shawler Brook, and 1½ miles north of New Berlin, Chenango County.

Drainage area.--196 sq mi.

Gage.--Nonrecording (at highway bridge 150 ft downstream) prior to Oct. 1, 1933; recording and concrete control thereafter. Datum of gage is 1,089.90 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 4,200 cfs.

Bankfull stage.--7½ ft.

Remarks.--Base for partial-duration series, 2,100 cfs.

Peak stages and discharges of Unadilla River near New Berlin, N. Y.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1924	Sept. 30, 1924	a7.85	a4,100	1942	Sept. 28, 1942	7.35	3,000
1925	Feb. 12, 1925	7.6	3,750	1943	Dec. 31, 1942	9.35	5,960
	Feb. 24, 1925	6.82	2,800		Mar. 17, 1943	b8.6	b4,750
	Mar. 14, 1925	6.2	2,210		June 2, 1943	7.05	2,620
1926	Nov. 14, 1925	6.20	2,210	1944	Mar. 17, 1944	8.40	4,450
	Apr. 9, 1926	7.0	3,000		Mar. 26, 1944	7.82	3,630
1927	Nov. 16, 1926	6.7	2,660		Apr. 10, 1944	6.72	2,250
	Mar. 14, 1927	7.80	4,030	1945	Mar. 17, 1945	7.79	3,590
1928	Oct. 20, 1927	6.2	2,120		Mar. 22, 1945	7.11	2,700
	Nov. 18, 1927	6.75	2,720	1946	Oct. 2, 1945	6.91	2,490
	Dec. 8, 1927	6.5	2,440		Mar. 7, 1946	8.49	4,580
	Mar. 25, 1928	7.03	3,040		Mar. 9, 1946	8.02	3,910
1929	Mar. 15, 1929	8.8	5,590	1947	Mar. 25, 1947	7.40	2,830
	Apr. 6, 1929	6.88	2,860		Apr. 6, 1947	8.67	4,860
	Apr. 21, 1929	7.84	4,090		July 22, 1947	8.54	4,210
	May 3, 1929	6.75	2,170	1948	Mar. 17, 1948	7.91	3,390
1930	Dec. 20, 1929	6.5	2,440		Mar. 20, 1948	9.49	5,700
1931	Mar. 26, 1931	6.35	2,280	1949	Dec. 31, 1948	6.96	2,410
	Apr. 11, 1931	6.90	2,770		Jan. 6, 1949	7.00	2,450
1932	Dec. 14, 1931	6.35	2,280		Feb. 16, 1949	6.68	2,180
	Feb. 12, 1932	6.80	2,770	1950	Mar. 29, 1950	8.56	3,830
	Apr. 3, 1932	6.25	2,170		Apr. 5, 1950	9.02	4,430
	Apr. 11, 1932	6.5	2,440		Sept. 1, 1950	9.95	6,600
1933	Oct. 6, 1932	7.8	4,030	1951	Dec. 4, 1950	6.93	2,520
	Nov. 10, 1932	6.2	2,120		Mar. 31, 1951	7.46	3,060
	Apr. 2, 1933	6.25	2,170		Apr. 13, 1951	6.68	2,270
1934	Jan. 1, 1934	6.6	2,110	1952	Jan. 27, 1952	6.80	2,390
	Mar. 5, 1934	8.02	3,630		Mar. 12, 1952	7.34	2,930
	Mar. 28, 1934	7.22	2,660		Apr. 6, 1952	6.53	2,140
1935	Jan. 10, 1935	9.33	5,310	1953	Dec. 11, 1952	7.47	3,070
	July 8, 1935	6.87	2,180		Jan. 25, 1953	7.10	2,690
1936	Oct. 31, 1935	7.46	2,700		Feb. 22, 1953	7.20	2,790
	Mar. 13, 1936	8.80	4,670	1954	Feb. 17, 1954	6.90	2,490
	Mar. 18, 1936	9.80	6,320		Mar. 12, 1955	8.36	4,110
1937	Jan. 26, 1937	6.85	2,490	1956	Mar. 8, 1956	7.16	2,770
	Apr. 6, 1937	8.19	3,800		Apr. 5, 1956	9.06	5,080
1938	Feb. 7, 1938	7.83	3,490		Apr. 16, 1956	7.70	3,330
	Sept. 23, 1938	7.68	3,280	1957	Jan. 23, 1957	6.63	2,280
1939	Dec. 11, 1938	6.80	2,120		Apr. 7, 1958	7.91	3,560
	Feb. 21, 1939	7.65	3,000	1959	Jan. 22, 1959	8.22	3,930
	Mar. 27, 1939	7.61	2,950		Apr. 3, 1959	8.04	3,720
1940	Apr. 1, 1940	8.28	4,270	1960	Nov. 28, 1959	7.73	3,360
	Apr. 5, 1940	8.29	4,290		Feb. 12, 1960	6.70	2,340
	Apr. 9, 1940	8.72	4,930		Mar. 31, 1960	9.22	5,330
1941	Dec. 30, 1940	7.29	2,920		Apr. 4, 1960	8.94	4,900
	Apr. 7, 1941	7.54	3,240	1961	Feb. 26, 1961	9.13	5,190
1942	Mar. 9, 1942	7.56	3,270		Apr. 16, 1961	6.62	2,270
	Mar. 17, 1942	a.02	3,910				
	May 23, 1942	6.89	2,430				

a Revised

b Estimated

5015. Sage Brook near South New Berlin, N. Y.

Location.--Lat 42°31'55", long 75°25'30", on right bank 1½ miles upstream from mouth and 2½ miles west of South New Berlin, Chenango County.

Drainage area.--0.70 sq mi.

Gage.--Recording and concrete control with -notch weir. Datum of gage is 1,430.17 ft above mean sea level, adjustment of 1912 (levels by New York State Conservation Dept.).

Stage-discharge relation.--Defined by current-meter and volumetric measurements below 22 cfs and extended above on basis of flow-over-dam measurement at 287 cfs.

Remarks.--Base for partial-duration series, 21 cfs..

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	Mar. 21, 1933	2.78	16.4	1946	May 28, 1946	3.06	21.7
1934	June 19, 1934	3.01	23.2	1947	Mar. 25, 1947	3.265	29.0
1935	May 7, 1935	3.145	28.8		Apr. 5, 1947	3.145	24.6
	July 8, 1935	4.71	135		May 22, 1947	3.22	27.3
1936	Oct. 30, 1935	3.94	67		June 3, 1947	4.21	85.8
	Nov. 13, 1935	3.115	27.5		July 22, 1947	3.20	26.5
	Mar. 12, 1936	3.375	38.7	1948	Mar. 22, 1948	3.48	38.5
	Mar. 18, 1936	3.705	54.1	1949	Dec. 30, 1948	2.995	19.7
1937	Jan. 25, 1937	2.95	20.8	1950	Mar. 28, 1950	3.00	22.5
1938	Oct. 23, 1937	3.53	45.5		Apr. 4, 1950	3.14	27.2
	Jan. 25, 1938	3.44	27.7		Apr. 20, 1950	3.11	26.2
	Sept. 21, 1938	3.33	36.7		Sept. 1, 1950	3.36	35.4
1939	Dec. 10, 1938	3.425	40.9	1951	Dec. 4, 1950	3.18	28.6
	Feb. 20, 1939	3.27	34.0		Mar. 30, 1951	3.07	24.8
1940	Mar. 31, 1940	3.40	40		Apr. 12, 1951	3.10	25.8
	Apr. 6, 1940	2.97	21.6		July 19, 1951	3.34	34.6
	Apr. 8, 1940	3.125	28.0	1952	Apr. 5, 1952	3.31	33.4
1941	Dec. 28, 1940	3.10	26.9	1953	Dec. 11, 1952	3.205	29.5
	Dec. 29, 1940	3.11	27.5		Jan. 24, 1953	3.96	68.2
	Apr. 6, 1941	3.01	21.0		Mar. 24, 1953	2.985	22.0
1942	Mar. 9, 1942	3.72	52.7	1954	Feb. 17, 1954	3.15	28.0
	Mar. 17, 1942	4.13	81	1955	Mar. 11, 1955	3.05	24.2
	May 23, 1942	3.56	44.0	1956	Mar. 7, 1956	2.95	21.0
1943	Dec. 2, 1942	3.15	26.4		Apr. 4, 1956	3.08	25.1
	Dec. 30, 1942	-	(b)		Apr. 16, 1956	3.08	25.1
	Feb. 24, 1943	3.04	22.6	1957	Jan. 22, 1957	3.12	26.5
	Mar. 16, 1943	3.03	22.3	1958	Apr. 22, 1958	3.35	35.0
	Mar. 17, 1943	3.525	42.2	1959	Jan. 22, 1959	3.23	30.4
	May 26, 1943	3.43	37.8		Apr. 2, 1959	3.20	29.3
1944	Mar. 17, 1944	3.18	27.5	1960	Nov. 28, 1959	-	c24
	June 25, 1944	3.50	41.0		Feb. 11, 1960	2.95	21
1945	July 22, 1945	5.53	287		Apr. 4, 1960	3.17	28
	July 26, 1945	3.55	43.5		May 21, 1960	2.97	22
	July 29, 1945	3.315	32.8		June 17, 1960	2.94	21
1946	Oct. 2, 1945	3.00	21.4	1961	Feb. 25, 1961	3.43	38
	Mar. 7, 1946	3.145	24.6		Apr. 16, 1961	3.06	24
	Mar. 9, 1946	3.15	24.8				
	May 21, 1946	3.45	37.0				

a Backwater from ice.

b Maximum for year occurred on this date; discharge not determined.

c About.

5020. Butternut Creek at Morris, N. Y.

Location.--Lat 42°32'45", long 75°14'20", on right bank 15 ft upstream from highway bridge at Morris, Otsego County, and 1,100 ft upstream from Calhoun Creek.

Drainage area.--59.6 sq mi.

Gage.--Recording. Datum of gage is 1,096.51 ft above mean sea level (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 1,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Sept. 22, 1938	6.70	1,900	1950	Sept. 1, 1950	7.76	3,200
1939	Feb. 20, 1939	7.33	2,360	1951	Feb. 1, 1951	6.20	1,520
1940	Mar. 31, 1940	7.46	2,510	1952	Mar. 11, 1952	5.84	1,240
1941	Apr. 6, 1941	6.09	1,330	1953	Dec. 11, 1952 Jan. 25, 1953	6.10 6.19	1,440 1,510
1942	Mar. 9, 1942 Mar. 17, 1942 May 23, 1942	6.15 7.21 6.50	1,440 2,410 1,560	1954	Feb. 17, 1954	6.29	1,680
1943	Dec. 30, 1942 Mar. 17, 1943	7.75 7.13	3,180 2,430	1955	Mar. 11, 1955	6.09	1,590
1944	Mar. 17, 1944	7.23	2,540	1956	Mar. 8, 1956 Apr. 5, 1956	5.88 6.54	1,440 1,960
1945	Mar. 16, 1945	5.88	1,310	1957	Jan. 23, 1957	5.53	1,190
1946	Mar. 9, 1946	6.25	1,560	1958	Apr. 6, 1958	6.55	1,960
1947	Mar. 25, 1947 Apr. 5, 1947	5.95	1,340	1959	Jan. 22, 1959 Apr. 2, 1959	7.74 5.98	3,240 1,510
1948	Mar. 20, 1948 Mar. 22, 1948	7.23 6.30	2,540 1,600	1960	Nov. 28, 1959 Jan. 3, 1960 Feb. 11, 1960 Mar. 31, 1960 Apr. 4, 1960 June 18, 1960	7.15 5.87 6.05 6.44 7.02 6.61	2,560 1,420 1,480 1,830 2,410 1,990
1949	Dec. 30, 1948	5.84	1,240	1961	Feb. 26, 1961	7.61	3,080
1950	Mar. 28, 1950 Apr. 5, 1950	6.65 6.11	1,920 1,450				

5025. Unadilla River at Rockdale, N. Y.

Location.--Lat 42°22'35", long 75°24'20", on right bank 400 ft downstream from highway bridge at Rockdale, Chenango County, and three-quarters of a mile downstream from Kent Brook.

Drainage area.--518 sq mi.

Gage.--Nonrecording at bridge 400 ft upstream at datum 0.73 ft higher prior to Sept. 30, 1933; recording thereafter. Datum of gage is 992.11 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 5,700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Dec. 20, 1929	7.8	6,800	1933	Oct. 7, 1932	11.0	10,400
1931	Mar. 27, 1931 Apr. 11, 1931	8.3 7.93	6,500 5,940	1937	Apr. 7, 1937	9.77	8,290
1932	Feb. 13, 1932 Apr. 3, 1932	8.3 8.10	6,500 6,200	1938	Jan. 26, 1938 Feb. 7, 1938 Sept. 22, 1938	8.30 8.85 8.82	5,700 - 6,650

a Backwater from ice.

Peak stages and discharges of Unadilla River at Rockdale, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Feb. 21, 1939	10.46	9,300	1950	Apr. 5, 1950	10.66	10,200
	Mar. 28, 1939	9.03	6,640		Sept. 2, 1950	11.77	12,500
1940	Apr. 1, 1940	11.92	13,400	1951	Dec. 5, 1950	9.32	7,600
	Apr. 5, 1940	10.92	10,900		Feb. 2, 1951	8.33	5,770
	Apr. 9, 1940	11.16	11,400		Mar. 31, 1951	8.34	5,790
1941	Dec. 8, 1940	9.41	7,240	1952	Mar. 12, 1952	9.17	7,310
	Apr. 7, 1941	9.81	7,960	1953	Dec. 12, 1952	8.94	6,880
1942	Mar. 18, 1942	10.55	9,400		Jan. 25, 1953	9.06	7,100
	May 23, 1942	9.17	6,810		Feb. 22, 1953	8.73	6,490
1943	Dec. 31, 1942	12.98	17,400	1954	Feb. 18, 1954	8.95	6,900
	Feb. 25, 1943	8.92	6,730		Mar. 12, 1955	10.14	9,180
	Mar. 18, 1943	12.07	14,100	1956	Mar. 8, 1956	10.26	9,420
1944	Mar. 18, 1944	11.00	10,600		Apr. 6, 1956	11.54	13,100
	Mar. 26, 1944	9.24	7,200		Apr. 17, 1956	9.62	8,490
1945	Mar. 17, 1945	9.68	8,030	1957	Jan. 23, 1957	8.39	6,000
	Mar. 22, 1945	8.50	5,860	1958	Apr. 7, 1958	10.81	11,200
1946	Mar. 8, 1946	10.06	8,720		Jan. 22, 1959	11.36	12,700
	May 22, 1946	8.49	5,800		Apr. 3, 1959	9.42	8,090
	May 28, 1946	8.63	6,060	1960	Nov. 29, 1959	10.58	10,700
1947	Mar. 26, 1947	9.44	7,550		Feb. 12, 1960	8.93	7,150
	Apr. 7, 1947	10.21	9,270		Apr. 1, 1960	11.33	12,600
	July 23, 1947	8.78	6,460		Apr. 5, 1960	11.61	13,300
1948	Mar. 17, 1948	-	69,200		June 18, 1960	8.37	6,080
	Mar. 21, 1948	11.86	12,800	1961	Feb. 26, 1961	11.54	13,100
1949	Dec. 31, 1948	8.74	6,250		Apr. 17, 1961	8.16	5,710
	Jan. 6, 1949	8.77	6,310				
1950	Mar. 29, 1950	10.85	10,600				

a Backwater from ice.

b Estimated.

5030. Susquehanna River at Conklin, N. Y.

Location.--Lat 42°02'10", long 75°48'10", on left bank at downstream side of highway bridge at Conklin, Broome County, 0.7 mile downstream from Little Snake Creek, and 3.5 miles downstream from Pennsylvania-New York State line.

Drainage area.--2,240 sq mi, approximately.

Gage.--Nonrecording prior to Oct. 5, 1914, recording thereafter. Datum of gage is 840.95 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--17 ft.

Remarks.--Base for partial-duration series, 18,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1913	Jan. 8, 1913	14.00	30,600	1917	Mar. 28, 1917	13.54	28,600
	Mar. 28, 1913	16.30	51,400		Oct. 30, 1917	13.73	29,400
1914	Mar. 30, 1914	18.00	49,800	1918	Feb. 21, 1918	13.93	22,000
	Apr. 10, 1914	13.70	29,300		Mar. 1, 1918	12.87	25,900
	Apr. 21, 1914	13.20	27,200	1919	Oct. 31, 1918	10.65	17,900
1915	Jan. 19, 1915	12.40	24,000		Mar. 13, 1920	16.79	25,000
	Feb. 16, 1915	12.64	25,000	1920	Mar. 29, 1920	15.05	35,200
	Feb. 25, 1915	12.68	25,100		Oct. 2, 1920	11.57	21,000
	July 8, 1915	16.15	40,500	1921	Dec. 3, 1920	12.90	26,000
	Aug. 5, 1915	11.55	20,900		Mar. 4, 1921	11.12	19,500
1916	Apr. 2, 1916	16.49	42,200		Mar. 10, 1921	13.17	27,100
	Apr. 14, 1916	11.05	19,200				

a Backwater from ice.

Peak stages and discharges of Susquehanna River at Conklin, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	Nov. 29, 1921	16.03	39,900	1940	Apr. 21, 1940	13.05	23,200
	Feb. 24, 1922	14.04	30,300	1941	Dec. 31, 1940	12.44	21,500
	Mar. 8, 1922	13.37	27,400		Apr. 6, 1941	13.40	24,900
	June 12, 1922	10.94	18,500	1942	Mar. 9, 1942	13.38	24,800
1923	Mar. 5, 1923	11.15	19,200		Mar. 19, 1942	14.45	28,100
	Mar. 24, 1923	13.23	27,300		May 23, 1942	13.72	25,500
	Apr. 6, 1923	12.10	22,900	1943	Dec. 31, 1942	18.76	48,600
1924	Jan. 12, 1924	11.63	21,200		Feb. 25, 1943	14.18	27,600
	Apr. 7, 1924	14.00	30,600		Feb. 25, 1943	a15.26	27,500
	Sept. 30, 1924	16.86	44,000		Mar. 19, 1943	15.81	34,300
1925	Feb. 12, 1925	17.04	44,900		May 22, 1943	11.36	18,100
	Feb. 25, 1925	11.28	20,000	1944	Mar. 18, 1944	14.80	30,000
1926	Mar. 26, 1926	12.11	23,000		Mar. 27, 1944	11.79	19,400
	Apr. 10, 1926	14.04	30,800	1945	Mar. 4, 1945	a13.76	24,900
	Apr. 15, 1926	-	b18,000		Mar. 18, 1945	14.17	27,500
1927	Nov. 17, 1926	14.36	31,700	1946	Mar. 9, 1946	15.49	32,900
	Mar. 15, 1927	14.81	33,600		May 21, 1946	13.61	25,400
	Mar. 22, 1927	11.36	20,300		May 28, 1946	15.45	32,700
	May 25, 1927	12.45	24,100	1947	Mar. 16, 1947	12.07	20,400
1928	Oct. 19, 1927	16.88	43,400		Mar. 26, 1947	13.35	24,500
	Nov. 1, 1927	10.97	18,900		Apr. 6, 1947	15.04	31,000
	Nov. 29, 1927	11.16	19,600	1948	Mar. 17, 1948	15.82	34,400
	Dec. 9, 1927	11.63	21,200		Mar. 22, 1948	20.83	60,500
	Dec. 15, 1927	11.11	19,400	1949	Dec. 31, 1948	14.39	28,400
	May 1, 1928	-	b19,000		Jan. 7, 1949	13.65	25,600
	June 6, 1928	-	b18,000	1950	Mar. 29, 1950	15.87	34,600
	June 30, 1928	10.88	18,600		Apr. 5, 1950	14.84	30,200
1929	Mar. 17, 1929	17.60	47,000	1951	Nov. 26, 1950	13.77	26,000
	Apr. 13, 1929	11.48	20,700		Dec. 4, 1950	16.20	36,100
	Apr. 22, 1929	16.37	40,800		Mar. 31, 1951	13.16	23,900
1930	Dec. 20, 1929	10.90	18,600	1952	Jan. 28, 1952	11.78	19,600
1931	Mar. 30, 1931	12.16	22,800		Mar. 12, 1952	13.40	24,700
	Apr. 12, 1931	11.30	19,800	1953	Dec. 13, 1952	12.44	21,600
	Feb. 13, 1932	10.90	18,400		Jan. 25, 1953	13.61	25,400
1932	Apr. 1, 1932	13.75	29,000		Feb. 23, 1953	11.59	19,100
	Apr. 12, 1932	11.13	19,200		Mar. 28, 1953	11.37	18,400
	Oct. 8, 1932	13.10	25,000	1954	Feb. 18, 1954	14.55	29,000
	Nov. 11, 1932	11.20	18,400		Mar. 2, 1955	12.05	20,400
	Nov. 21, 1932	11.34	18,900	1955	Mar. 13, 1955	12.72	22,500
1933	Apr. 3, 1933	11.15	18,200		Oct. 16, 1955	11.40	19,400
	Aug. 24, 1933	12.05	21,400	1956	Mar. 8, 1956	15.68	37,600
	Mar. 5, 1934	13.20	25,400		Apr. 7, 1956	16.04	39,200
1934	Jan. 11, 1935	15.40	34,400		Apr. 18, 1956	12.35	23,600
	July 9, 1935	16.95	41,900	1957	Jan. 23, 1957	11.74	21,400
	Oct. 31, 1935	12.64	23,400		Apr. 6, 1957	11.67	21,100
1935	Nov. 14, 1935	16.28	38,600	1958	Apr. 7, 1958	15.83	38,300
	Mar. 13, 1936	16.94	41,900		Apr. 17, 1958	11.74	21,400
	Mar. 18, 1936	20.14	61,600		Apr. 23, 1958	11.56	20,700
	Jan. 22, 1937	11.85	20,700	1959	Jan. 22, 1959	14.49	32,300
1936	Jan. 26, 1937	12.88	24,300		Apr. 4, 1959	12.25	23,200
	Apr. 7, 1937	12.00	21,200	1960	Nov. 29, 1959	13.71	29,000
	Jan. 26, 1938	12.24	20,600		Jan. 4, 1960	11.42	20,200
1937	Sept. 23, 1938	15.89	34,100		Feb. 12, 1960	12.38	23,700
	Dec. 6, 1938	12.09	20,200		Apr. 1, 1960	15.30	35,800
1938	Dec. 11, 1938	12.52	21,500		Apr. 6, 1960	17.02	44,000
	Feb. 21, 1939	15.64	33,100	1961	Feb. 26, 1961	16.02	39,100
	Mar. 28, 1939	12.30	20,800		Apr. 25, 1961	14.34	31,600
	Apr. 1, 1940	19.13	51,800				
1939	Apr. 6, 1940	15.76	33,500				
	Apr. 10, 1940	16.11	34,900				

a Backwater from ice.

b Estimated.

5050. Chenango River at Sherburne, N. Y.

Location.--Lat 42°40'45", long 75°30'40", on right bank 20 ft downstream from Pratts Bridge, half a mile west of Sherburne, Chenango County, and half a mile downstream from Handsome Brook.

Drainage area.--264 sq mi.

Gage.--Recording, July 22, 1953, to Jan. 26, 1955, at site $1\frac{1}{2}$ miles downstream at datum approximately 11.9 ft lower. Datum of gage is 1,037.0 ft above mean sea level (furnished by U.S. Weather Bureau).

Stage-discharge relation.--Defined by current-meter measurements below 6,500 cfs.

Bankfull stage.--8 ft.

Historical data.--Flood of Mar. 18, 1936, is greatest known.

Remarks.--Base for partial-duration series, 3,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Mar. 18, 1936	a10.6	-	1950	Sept. 1, 1950	9.88	7,000
1938	Sept. 22, 1938	8.39	2,520	1951	Dec. 4, 1950	8.83	3,810
1939	Feb. 20, 1939	9.16	5,150		Dec. 8, 1950	8.83	3,810
	Mar. 27, 1939	8.84	4,190		Feb. 1, 1951	8.86	3,970
1940					Mar. 31, 1951	9.16	5,120
	Apr. 9, 1940	9.52	5,620	1952	Mar. 11, 1952	9.37	5,710
1941	Dec. 29, 1940	8.90	4,460		Apr. 5, 1952	8.85	3,510
	Apr. 6, 1941	9.25	4,960	1953	Dec. 11, 1952	9.38	5,740
1942	Mar. 9, 1942	9.10	4,280		Feb. 21, 1953	9.16	5,120
	Mar. 17, 1942	9.26	4,700	1954			
	Sept. 27, 1942	9.00	3,960		Feb. 17, 1954	13.72	2,190
1943	Dec. 30, 1942	b9.99	5,420	1955	Mar. 11, 1955	9.18	4,680
	Mar. 17, 1943	9.75	5,720	1956	Apr. 6, 1956	9.18	5,890
1944	Mar. 17, 1944	9.37	4,680	1957	Jan. 23, 1957	8.35	3,290
1945	July 20, 1945	9.04	3,510		Jan. 30, 1957	a8.44	-
1946	Mar. 9, 1946	9.02	3,430	1958	Apr. 7, 1958	8.94	4,740
1947	Mar. 25, 1947	9.12	3,950	1959	Jan. 22, 1959	a9.59	6,200
	Apr. 6, 1947	9.42	4,790		Apr. 2, 1959	8.80	4,180
1948	Mar. 17, 1948	9.25	5,380	1960	Nov. 28, 1959	8.80	4,260
	Mar. 20, 1948	9.66	6,450		Feb. 11, 1960	8.59	3,880
1949					Mar. 31, 1960	9.27	5,720
	Jan. 6, 1949	8.61	3,040		Apr. 4, 1960	9.17	5,290
1950	Mar. 28, 1950	9.38	5,740	1961			
	Apr. 4, 1950	9.60	6,300		Feb. 26, 1961	9.77	8,980

a From U.S. Weather Bureau records.

b Backwater from ice.

5055. Canasawacta Creek near South Plymouth, N. Y.

Location.--Lat 42°33'50", long 75°33'10", on right bank 1.4 miles southeast of South Plymouth, Chenango County, 2 miles northwest of Norwich, 2.8 miles downstream from East Branch, and 4.2 miles upstream from mouth.

Drainage area.--58.3 sq mi.

Gage.--Recording. Concrete control since Aug. 6, 1953. Datum of gage is 1,077.80 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 3,000 cfs and extended above by logarithmic plotting.

Bankfull stage.--6 ft.

Remarks.--Base for partial-duration series, 1,500 cfs.

Peak stages and discharges of Canasawacta Creek near South Plymouth, N. Y.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Sept. 18, 1945	5.33	5,910	1953	Mar. 24, 1953	3.99	2,140
1946	Oct. 2, 1945	4.18	2,890	1954	Jan. 27, 1954	a4.29	-
	Mar. 7, 1946	3.56	1,610		Feb. 17, 1954	4.15	1,320
1947	Mar. 25, 1947	3.81	2,110	1955	Mar. 1, 1955	4.33	1,640
	Apr. 5, 1947	3.67	1,830		Mar. 11, 1955	4.70	2,440
	May 25, 1947	4.18	2,860	1956	Oct. 30, 1955	4.52	2,030
1948	Mar. 16, 1948	a4.56	-		Mar. 8, 1956	4.29	1,560
	Mar. 17, 1948	4.43	3,460		Apr. 4, 1956	5.06	3,350
	Mar. 20, 1948	4.42	3,440		Apr. 16, 1956	4.57	2,140
	Mar. 22, 1948	3.96	2,330	1957	Jan. 23, 1957	4.76	2,580
1949	June 25, 1949	3.68	1,540	1958	Dec. 21, 1957	4.40	1,780
1950	Mar. 28, 1950	3.91	1,840		Apr. 6, 1958	4.35	1,680
	Apr. 4, 1950	4.71	3,150		Apr. 22, 1958	4.36	1,700
	Apr. 20, 1950	3.90	1,830	1959	Jan. 22, 1959	a6.16	5,200
	Sept. 1, 1950	5.17	4,120		Apr. 2, 1959	4.81	2,700
1951	Dec. 4, 1950	3.77	1,650	1960	Nov. 6, 1959	4.61	2,230
	Mar. 31, 1951	4.11	2,300		Nov. 28, 1959	4.95	3,060
	June 25, 1951	3.63	1,670		Jan. 3, 1960	4.38	1,600
1952	Jan. 26, 1952	3.50	1,520		Feb. 11, 1960	4.70	2,230
	Mar. 11, 1952	a4.49	2,360		Mar. 31, 1960	a4.90	2,400
	Apr. 5, 1952	3.85	1,940		Apr. 4, 1960	4.86	2,630
1953	Dec. 11, 1952	4.36	2,700	1961	Feb. 25, 1961	5.94	6,980
	Feb. 21, 1953	3.70	1,760		Apr. 16, 1961	4.33	1,870

a Backwater from ice.

5070. Chenango River at Greene, N. Y.

Location.--Lat 42°19'30", long 75°46'15", on left bank 1,700 ft downstream from highway bridge in Greene, Chenango County, and half a mile downstream from Birdsall Creek.

Drainage area.--598 sq mi.

Gage.--Recording. Datum of gage is 892.58 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 12,000 cfs and extended above by logarithmic plotting.

Bankfull stage.--12 ft.

Remarks.--Base for partial-duration series, 5,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Apr. 7, 1937	11.19	6,900	1942	Mar. 10, 1942	10.68	6,080
1938	Oct. 24, 1937	11.53	6,690		Mar. 18, 1942	12.75	9,020
	Jan. 25, 1938	10.27	5,890		May 23, 1942	10.32	5,840
	Feb. 7, 1938	9.82	5,390		Sept. 28, 1942	10.06	5,000
	Sept. 22, 1938	10.95	6,520	1943	Dec. 31, 1942	18.33	18,900
1939	Dec. 11, 1938	10.35	5,980		Feb. 25, 1943	a11.78	7,200
	Feb. 20, 1939	a13.73	-		Mar. 17, 1943	15.18	13,000
	Feb. 21, 1939	13.32	9,650	1944	Mar. 17, 1944	a14.19	11,000
	Mar. 28, 1939	11.40	7,160		Mar. 27, 1944	11.01	6,690
1940	Apr. 1, 1940	a15.76	11,500		May 8, 1944	10.15	5,660
	Apr. 5, 1940	14.24	11,600	1945	Mar. 4, 1945	a11.31	6,200
	Apr. 9, 1940	14.85	12,700		Mar. 18, 1945	12.44	8,700
	Apr. 22, 1940	10.50	6,140		Mar. 22, 1945	11.85	7,870
1941	Dec. 30, 1940	a11.53	6,400		Apr. 27, 1945	9.60	5,040
	Apr. 7, 1941	12.89	9,020		Sept. 19, 1945	9.64	5,040

a Backwater from ice.

Peak stages and discharges of Chenango River at Greene, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	Oct. 2, 1945	9.95	5,420	1954	Feb. 18, 1954	10.96	6,670
	Mar. 9, 1946	12.00	8,080		Mar. 2, 1955	10.21	5,780
	May 28, 1946	10.76	6,390		Mar. 12, 1955	12.14	8,180
1947	Mar. 26, 1947	11.73	7,110	1955	Mar. 23, 1955	9.57	5,080
	Apr. 7, 1947	12.91	8,570		Mar. 8, 1956	13.64	10,300
	June 3, 1947	10.42	5,720		Apr. 6, 1956	15.18	13,300
1948	Mar. 17, 1948	13.31	9,210	1956	Apr. 17, 1956	11.63	7,590
	Mar. 22, 1948	15.81	13,200	1957	Jan. 23, 1957	11.47	7,380
1949	Dec. 31, 1948	10.95	6,340		Dec. 21, 1957	9.87	5,510
	Jan. 6, 1949	10.25	5,550	1958	Apr. 7, 1958	13.21	9,860
1950	Mar. 29, 1950	13.55	10,100		Apr. 22, 1958	10.25	5,920
	Apr. 5, 1950	14.66	11,800	1959	Jan. 22, 1959	14.51	11,800
	Apr. 20, 1950	10.03	5,580		Apr. 3, 1959	11.44	7,340
	Sept. 2, 1950	11.12	6,700	1960	Nov. 28, 1959	12.45	8,710
1951	Dec. 4, 1950	11.65	7,540		Dec. 13, 1959	9.71	5,330
	Feb. 2, 1951	11.71	85,000		Dec. 29, 1959	9.56	5,170
	Feb. 21, 1951	9.67	5,190		Jan. 3, 1960	10.02	5,670
	Mar. 31, 1951	10.87	6,560		Feb. 12, 1960	11.24	7,090
1952	Jan. 2, 1952	11.04	5,200		Apr. 1, 1960	14.98	12,900
	Jan. 6, 1952	9.88	5,420		Apr. 5, 1960	14.38	11,800
	Mar. 12, 1952	11.52	7,380		June 18, 1960	10.38	6,070
1953	Dec. 12, 1952	11.00	6,720	1961	Feb. 26, 1961	15.92	14,700
	Jan. 25, 1953	11.68	7,580		Mar. 29, 1961	9.82	5,450
	Feb. 22, 1953	10.31	5,890		Apr. 17, 1961	10.96	6,750

a Backwater from ice.

b About.

5075. Genegantslet Creek at Smithville Flats, N. Y.

Location.--Lat 42°23'40", long 75°48'15", on left bank 530 ft downstream from highway bridge at Smithville Flats, Chenango County, 1,500 ft downstream from Pond Brook.

Drainage area.--83.1 sq mi.

Gage.--Recording. Datum of gage is 995.67 ft above mean sea level, datum of 1929, adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--For stages 6 to 8 ft, an auxiliary channel, branching to the right 500 ft upstream from gage, carries some flow and merges with the main channel about 1,000 ft downstream. At stages of 8 ft and higher, the main and auxiliary channels are not separated.

Remarks.--Base for partial-duration series, 1,800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Aug. 11, 1938	7.92	2,430	1943	Dec. 30, 1942	10.4	5,890
	Sept. 22, 1938	8.19	2,690		Mar. 17, 1943	8.80	3,560
1939	Dec. 10, 1938	7.34	1,920		Apr. 20, 1943	7.40	1,940
	Feb. 20, 1939	8.03	2,530	1944	Nov. 9, 1943	7.42	1,960
	Mar. 26, 1939	7.59	2,640		Mar. 17, 1944	8.36	2,870
1940	Mar. 31, 1940	11.72	4,090		Mar. 25, 1944	7.67	2,180
	Apr. 8, 1940	8.57	3,960	1945	May 8, 1944	8.42	2,930
	Apr. 20, 1940	6.85	1,880		Mar. 16, 1945	8.61	3,140
1941	Dec. 28, 1940	7.92	2,420		Mar. 22, 1945	8.26	2,760
	Apr. 5, 1941	8.07	2,560	1946	Apr. 27, 1945	8.23	2,730
1942	Dec. 24, 1941	7.88	2,380		May 18, 1945	7.88	2,380
	Mar. 9, 1942	7.57	2,090		Oct. 2, 1945	8.02	2,520
	Mar. 17, 1942	8.93	3,520	1947	Mar. 9, 1946	8.34	2,590
	May 23, 1942	7.51	2,040		May 28, 1946	7.82	2,150
	Sept. 27, 1942	9.15	3,780				

a Backwater from ice.

Peak stages and discharges of Genegantslet Creek at Smithville Flats, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	Apr. 5, 1947	8.89	3,110	1956	Mar. 8, 1956	8.20	2,380
1948	Mar. 20, 1948	9.42	4,080		Apr. 5, 1956	8.70	2,840
1949	Dec. 30, 1948	7.57	1,980		Apr. 16, 1956	7.49	1,830
1950	Mar. 28, 1950	7.59	1,990	1957	Jan. 23, 1957	8.16	2,080
	Apr. 4, 1950	9.38	3,780	1958	Dec. 21, 1957	7.64	1,990
	Apr. 20, 1950	7.66	2,000		Apr. 6, 1958	7.76	2,080
	Sept. 1, 1950	8.99	3,190	1959	Jan. 22, 1959	8.14	3,300
1951	Nov. 26, 1950	8.02	2,290		Apr. 2, 1959	8.32	2,530
	Dec. 4, 1950	8.51	2,690	1960	Nov. 6, 1959	7.68	2,020
	Mar. 31, 1951	9.04	3,250		Nov. 28, 1959	8.60	2,770
1952	Mar. 11, 1952	7.30	1,750		Feb. 11, 1960	7.48	1,880
1953	Dec. 11, 1952	8.08	2,330		Mar. 31, 1960	8.24	2,460
	Feb. 21, 1953	7.57	1,940		Apr. 4, 1960	8.41	2,600
	Mar. 24, 1953	7.50	1,890	1961	Feb. 25, 1961	10.06	-
1954	Feb. 17, 1954	6.98	1,530		Feb. 26, 1961	10.01	5,030
1955	Mar. 11, 1955	8.42	2,610		Apr. 16, 1961	7.78	2,090

a Backwater from ice.

5080. Shackham Brook near Truxton, N. Y.

Location.--Lat 42°46'00", long 76°01'10", on right bank a quarter of a mile downstream from small tributary, three-quarters of a mile upstream from mouth, and 5 miles north of Truxton, Cortland County.

Drainage area.--3.12 sq mi.

Gage.--Recording and concrete control with v-notch weir. Datum of gage is 1,281.52 ft above mean sea level, adjustment of 1912 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter and volumetric measurements below 190 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 88 cfs. Only annual peaks are shown prior to 1944.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	Mar. 15, 1933	3.36	83	1947	Apr. 5, 1947	3.63	172
	Jan. 1, 1934	3.62	-		May 22, 1947	3.67	186
1934	Mar. 31, 1934	3.37	84		June 3, 1947	4.32	487
1935	Jan. 9, 1935	3.44	96	1948	Mar. 16, 1948	3.46	118
1936	Mar. 12, 1936	3.73	153		Mar. 20, 1948	3.80	236
1937	Apr. 6, 1937	3.72	151		May 13, 1948	3.36	93.2
1938	Oct. 23, 1937	4.43	360	1949	Nov. 20, 1948	3.69	193
1939	Feb. 20, 1939	3.74	155	1950	Apr. 4, 1950	3.89	274
1940	June 24, 1940	4.45	416	1951	Nov. 25, 1950	3.40	102
1941	Dec. 28, 1940	3.94	234		Dec. 4, 1950	3.72	205
1942	Dec. 24, 1941	4.08	278		Feb. 1, 1951	8.09	-
1943	Mar. 16, 1943	4.22	328		Mar. 30, 1951	3.90	278
1944	Oct. 26, 1943	3.76	172		Apr. 2, 1951	3.42	109
	Nov. 8, 1943	3.55	130		Apr. 12, 1951	3.36	93
	Mar. 17, 1944	3.47	112	1952	Jan. 30, 1952	8.59	-
	Mar. 25, 1944	3.48	114		Apr. 5, 1952	3.43	110
	Apr. 10, 1944	3.76	172		July 10, 1952	3.36	92.8
	June 24, 1944	3.99	250	1953	Dec. 11, 1952	3.42	107
1945	Mar. 16, 1945	3.78	228		Feb. 21, 1953	3.38	97.4
	Mar. 21, 1945	3.80	236		Mar. 24, 1953	3.60	161
1946	July 1, 1946	3.98	319		Mar. 27, 1953	3.37	95.1
1947	Jan. 30, 1947	3.51	132	1954	Feb. 17, 1954	3.60	161
	Mar. 25, 1947	3.69	193				

a Backwater from ice.

Peak stages and discharges of Shackham Brook near Truxton, N. Y.--Continued

Peak stages and discharges of Shackham Brook near Truxton, N. H.—Continued										
Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)			
1954	Feb. 21, 1954	3.48	124	1959	Jan. 21, 1959	4.06	-			
	May 4, 1954	3.44	113		Jan. 22, 1959	3.70	166			
1955	Mar. 11, 1955	3.77	224		Apr. 2, 1959	3.98	272			
					Apr. 6, 1959	3.73	176			
1956	Apr. 4, 1956	3.54	142	1960	Dec. 12, 1959	3.47	107			
	Apr. 16, 1956	3.50	129		Feb. 11, 1960	3.70	166			
	Apr. 29, 1956	3.34	88.2		Mar. 31, 1960	3.74	180			
1957	Jan. 23, 1957	3.40	102		Apr. 4, 1960	3.72	173			
	Aug. 4, 1957	3.44	113	1961	Feb. 25, 1961	3.87	228			
1958	Apr. 6, 1958	3.46	105		Apr. 16, 1961	3.39	91			
					Apr. 22, 1958	3.47	107	Apr. 25, 1961	3.38	89
					June 5, 1958	3.59	135	June 13, 1961	3.60	137
				June 10, 1958	3.53	120				

a Backwater from ice.

5085. Albright Creek at East Homer, N. Y.
(Published as "East Homer Creek" prior to October 1947)

Location.--Lat 42°40'10", long 76°06'15", on left bank a quarter of a mile upstream from highway bridge in East Homer, Cortland County, and half a mile upstream from mouth.

Drainage area.--7.08 sq mi.

Gage.--Recording and concrete control. Datum of gage is 1,154.49 ft above mean sea level, datum of 1929, supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--6 ft.

Remarks.--Base for partial-duration series, 250 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)	
1939	Feb. 20, 1939	3.46	328	1948	Aug. 12, 1948	3.07	267	
1940	Apr. 4, 1940	3.38	314	1949	Nov. 20, 1948	3.40	484	
	Apr. 8, 1940	3.7	550	1950	Mar. 28, 1950	3.20	374	
	June 25, 1940	3.33	285		Apr. 4, 1950	3.37	507	
1941	Dec. 28, 1940	3.46	363		1951	Dec. 4, 1950	3.23	399
	Apr. 5, 1941	3.44	351	Mar. 30, 1951		3.40	531	
	1942	Dec. 24, 1941	3.43	374		1952	Mar. 2, 1952	a3.22
Mar. 9, 1942		3.28	294	Mar. 11, 1952	2.91		208	
Mar. 17, 1942		3.40	357	1953	Mar. 24, 1953		3.09	305
1943	Dec. 30, 1942	3.80	640		1954	Jan. 23, 1954	a3.26	-
	Mar. 16, 1943	3.70	560			Feb. 17, 1954	3.19	370
	1944	Mar. 17, 1944	3.11	280		May 3, 1954	3.11	318
Mar. 25, 1944		3.08	263	1955	Mar. 1, 1955	3.01	257	
Apr. 10, 1944		3.06	252		Mar. 11, 1955	3.60	708	
June 24, 1944		3.45	527		1956	Apr. 4, 1956	3.54	653
1945	Mar. 16, 1945	3.48	553	Apr. 6, 1956		3.11	316	
	May 17, 1945	3.37	286	1957		June 13, 1957	3.42	548
	1946	Oct. 2, 1945	3.20		-	1958	Apr. 6, 1958	a3.14
Mar. 6, 1946		3.09	269		1959		Jan. 22, 1959	3.27
Mar. 9, 1946		3.17	317	Apr. 2, 1959			3.24	315
July 2, 1946		3.11	280	1960		Dec. 12, 1959	3.23	278
1947	Mar. 25, 1947	3.28	395		Feb. 11, 1960	a3.36	-	
	Apr. 5, 1947	3.29	401		Mar. 31, 1960	3.20	300	
	May 22, 1947	3.23	361		1961	Feb. 25, 1961	3.50	420
	May 25, 1947	3.38	465	June 13, 1961		3.85	710	
June 3, 1947	3.71	787	1948	Mar. 16, 1948		3.21	348	
Aug. 9, 1947	3.64	710		Mar. 19, 1948	3.38	469		
1948	Mar. 16, 1948	3.21		348	Mar. 21, 1948	3.12	294	
	Mar. 19, 1948	3.38	469					
	Mar. 21, 1948	3.12	294					

a Backwater from ice.

5090. Tioughnioga River at Cortland, N. Y.

Location.--Lat 42°36'10", long 76°09'35", on right bank at the foot of Elm Street in Cortland, Cortland County, 0.4 mile downstream from confluence of East and West Branches.

Drainage area.--296 sq mi (including 16 sq mi, the flow from which may be diverted into DeRuyter Reservoir in Oswego River basin).

Gage.--Recording. At datum 1.00 ft higher prior to Oct. 1, 1939. Datum of gage is 1,087.92 ft above mean sea level, datum of 1929, supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Channel improvement project started June 1, 1962, by Corps of Engineers. Base for partial-duration series, 4,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Feb. 21, 1939	6.45	4,290	1950	Mar. 29, 1950	8.79	6,320
					Apr. 5, 1950	10.82	10,000
1940	Apr. 1, 1940	7.97	5,210				
	Apr. 5, 1940	8.58	6,120	1951	Dec. 4, 1951	-	4,400
	Apr. 9, 1940	10.33	9,660		Mar. 31, 1951	8.97	6,600
1941	Apr. 6, 1941	9.49	7,880	1952	Mar. 12, 1952	6.33	3,320
1942	Mar. 9, 1942	7.88	5,330	1953	Feb. 22, 1953	6.40	3,390
	Mar. 17, 1942	8.32	5,950				
				1954	Feb. 18, 1954	6.43	3,420
1943	Dec. 31, 1942	10.56	9,920				
	Mar. 17, 1943	9.73	8,410	1955	Mar. 2, 1955	7.89	4,940
1944	Mar. 17, 1944	8.22	5,960		Mar. 12, 1955	9.77	7,670
1945	Mar. 17, 1945	9.28	7,100	1956	Mar. 8, 1956	8.16	5,420
	Mar. 22, 1945	9.01	6,660		Apr. 5, 1956	10.54	10,000
1946	Mar. 8, 1946	7.62	4,760	1957	Jan. 23, 1957	8.03	5,240
1947	Mar. 25, 1947	7.97	5,200	1958	Apr. 7, 1958	8.66	6,170
	Apr. 7, 1947	9.16	6,900				
	June 3, 1947	8.11	5,380	1959	Jan. 22, 1959	8.71	6,250
1948	Mar. 17, 1948	7.67	4,820		Apr. 3, 1959	9.19	7,050
	Mar. 20, 1948	9.73	7,910	1960	Feb. 11, 1960	8.37	5,720
	Mar. 22, 1948	9.40	7,300		Mar. 31, 1960	10.52	9,980
1949	Jan. 6, 1949	6.08	3,070	1961	Feb. 26, 1961	10.00	8,770

a Daily discharge, estimated.

5100. Otselic River at Cincinnatus, N. Y.

Location.--Lat 42°32'30", long 75°54'00", on right bank 150 ft upstream from Mead Brook and 300 ft downstream from highway bridge at Cincinnatus, Cortland County.

Drainage area.--148 sq mi.

Gage.--Recording. Datum of gage is 1,031.26 ft above mean sea level (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 2,500 cfs.

Peak stages and discharges of Otselic River at Cincinnatus, N. Y.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Sept. 22, 1938	8.30	2,850	1950	Dec. 13, 1949	8.35	2,940
1939	Dec. 10, 1938	8.31	2,860		Jan. 10, 1950	8.11	2,650
	Feb. 20, 1939	9.34	4,440		Mar. 28, 1950	9.04	3,970
	Mar. 27, 1939	8.62	3,080		Apr. 4, 1950	10.68	7,830
1940	Mar. 31, 1940	9.37	4,510		Apr. 20, 1950	8.67	3,380
	Apr. 8, 1940	9.86	5,700		Sept. 1, 1950	9.36	4,560
1941	Dec. 28, 1940	8.83	3,350	1951	Dec. 4, 1950	9.26	4,360
	Apr. 6, 1941	9.44	4,980		Mar. 31, 1951	9.91	5,750
1942	Dec. 24, 1941	9.02	3,740		Apr. 2, 1951	8.25	2,760
	Mar. 9, 1942	9.16	3,750	1952	Mar. 11, 1952	8.40	3,170
	Mar. 17, 1942	9.51	4,610		Apr. 6, 1952	8.01	2,680
					July 10, 1952	9.05	4,100
1943	Dec. 30, 1942	10.67	8,390	1953	Dec. 11, 1952	9.01	3,620
	Feb. 24, 1943	7.99	2,740		Jan. 24, 1953	8.60	2,760
	Mar. 17, 1943	9.77	5,540		Feb. 21, 1953	8.91	3,110
	Apr. 20, 1943	8.07	2,830		Mar. 24, 1953	8.88	3,080
1944	Nov. 9, 1943	8.34	2,610	1954	Feb. 17, 1954	8.33	2,660
	Mar. 17, 1944	9.66	4,950		Feb. 21, 1954	8.38	2,700
	Mar. 25, 1944	8.94	3,540	1955	Mar. 11, 1955	10.19	3,700
	Apr. 10, 1944	8.82	3,340	1956	Oct. 30, 1955	9.37	4,310
	May 8, 1944	8.79	3,300		Mar. 8, 1956	8.35	3,300
1945	Mar. 17, 1945	9.67	4,990		Apr. 5, 1956	9.36	4,300
	Mar. 22, 1945	9.48	4,570		Apr. 16, 1956	8.51	3,450
	Sept. 19, 1945	8.90	3,470	1957	Jan. 23, 1957	8.91	4,050
1946	Oct. 2, 1945	9.78	5,250	1958	Dec. 21, 1957	7.24	2,800
	Mar. 9, 1946	9.45	4,080		Apr. 7, 1958	7.90	3,480
1947	Jan. 31, 1947	8.79	3,210		Apr. 17, 1958	7.22	2,780
	Mar. 25, 1947	9.18	3,750	1959	Jan. 22, 1959	9.65	5,630
	Apr. 6, 1947	9.59	4,400		Apr. 2, 1959	8.74	4,610
	May 29, 1947	8.22	2,530	1960	Nov. 28, 1959	7.47	3,570
	June 3, 1947	9.08	3,600		Feb. 11, 1960	7.58	3,680
1948	Mar. 17, 1948	9.24	4,330		Mar. 31, 1960	8.60	4,750
	Mar. 20, 1948	10.27	6,670		Apr. 4, 1960	7.90	4,000
	Mar. 22, 1948	9.81	5,520	1961	Feb. 26, 1961	9.55	5,920
1949	Dec. 30, 1948	8.28	2,860		Apr. 17, 1961	6.48	3,090
	Jan. 6, 1949	8.28	2,860				
	Feb. 15, 1949	8.21	2,770				

5105. Otselic River near Upper Lisle, N. Y.

Location.--Lat 42°25'20", long 75°57'00", on left bank 300 ft downstream from Salisbury Bridge, half a mile downstream from Barry Run, 2 miles upstream from Upper Lisle, Broome County, and 9 miles upstream from Whitney Point Dam.

Drainage area.--216 sq mi.

Gage.--Recording. Datum of gage is 985.75 ft above mean sea level (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 9,000 cfs and extended above on basis of slope-area measurement at 15,400 cfs. Since 1942, extremely high peaks affected by backwater from Whitney Point detention reservoir, nine miles downstream.

Historical data.--The flood of July 8, 1935, is highest flood known to long-time residents of the community. Peak determined from high-water marks placed by residents in the vicinity and is considered fairly reliable.

Remarks.--Base for partial-duration series, 4,000 cfs.

Peak stages and discharges of Otselic River near Upper Lisle, N. Y.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	July 8, 1935	12.55	15,400	1949	Dec. 31, 1948	5.44	3,580
1937	Apr. 7, 1938	7.25	6,420	1950	Mar. 29, 1950	6.32	4,750
1938	Oct. 24, 1937	8.73	8,840		Apr. 5, 1950	9.27	3,600
	Feb. 7, 1938	5.74	4,210		Apr. 6, 1950	a10.09	(b)
					Sept. 1, 1950	6.92	5,560
1939	Feb. 21, 1939	7.69	6,330	1951	Dec. 4, 1950	6.53	5,040
	Mar. 27, 1939	6.16	4,710		Mar. 31, 1951	7.20	6,060
1940	Mar. 31, 1940	7.30	6,250	1952	July 10, 1952	5.84	4,090
	Apr. 5, 1940	6.79	5,460	1953	Dec. 11, 1952	6.12	4,470
	Apr. 9, 1940	8.30	7,920		Feb. 21, 1953	5.88	4,140
1941	Dec. 28, 1940	6.22	4,630	1954	Feb. 22, 1954	5.22	3,320
	Apr. 7, 1941	7.39	6,390	1955	Mar. 2, 1955	5.79	4,030
1942	Dec. 24, 1941	6.57	5,120		Mar. 12, 1955	7.59	6,680
	Mar. 9, 1942	6.65	5,240	1956	Oct. 31, 1955	6.98	5,730
	Mar. 17, 1942	7.31	6,220		Mar. 8, 1956	6.32	4,850
1943	Dec. 30, 1942	10.43	12,400		Apr. 6, 1956	7.65	6,780
	Feb. 25, 1943	5.93	4,440		Apr. 8, 1956	a10.06	(b)
	Mar. 17, 1943	8.28	8,190		Apr. 17, 1956	6.08	4,410
1944	Mar. 17, 1944	7.72	7,220	1957	Jan. 23, 1957	7.52	6,570
	Mar. 26, 1944	6.09	4,670	1958	Dec. 21, 1957	5.63	4,030
	May 8, 1944	6.04	4,600		Apr. 7, 1958	6.19	4,700
1945	Mar. 17, 1945	7.26	6,470	1959	Jan. 22, 1959	8.26	7,800
	Mar. 23, 1945	a10.77	(b)		Apr. 3, 1959	6.96	5,700
1946	Oct. 2, 1945	6.46	5,220	1960	Nov. 28, 1959	6.41	4,940
	Mar. 7, 1946	6.09	4,670		Feb. 11, 1960	6.79	5,460
	Mar. 9, 1946	6.54	5,340		Apr. 1, 1960	7.79	7,000
1947	Mar. 25, 1947	6.67	5,260		Apr. 6, 1960	a18.25	(b)
	Apr. 6, 1947	7.00	5,750	1961	Feb. 26, 1961	8.94	9,000
1948	Mar. 20, 1948	9.14	9,360		Apr. 17, 1961	5.87	4,270
	Mar. 23, 1948	a19.35	4,800				

a Backwater from Whitney Point Dam.

b Discharge below base.

5115. Tioughnioga River at Itaska, N. Y.

Location.--Lat 42°17'55", long 75°54'30", on right bank at Itaska, Broome County, 3½ miles downstream from Otselic River and village of Whitney Point, and 6 miles upstream from mouth.

Drainage area.--735 sq mi.

Gage.--Recording. Datum of gage is 917.97 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 22,000 cfs and extended above on basis of velocity-area and slope-area studies.

Remarks.--Since March 1942, high flows regulated by Whitney Point detention reservoir upstream. Base for partial-duration series, 7,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Dec. 18, 1929	6.44	7,380	1933	Oct. 6, 1932	7.50	10,000
	Mar. 8, 1930	7.20	9,250		Mar. 15, 1933	6.95	8,620
	Mar. 19, 1930	6.90	8,490	1934	Jan. 2, 1934	6.70	8,000
1931	Mar. 27, 1931	7.84	11,000		Mar. 4, 1934	b10.50	
	Apr. 11, 1931	7.77	10,800		Mar. 5, 1934	8.24	12,100
1932	Dec. 15, 1931	6.75	8,120		Mar. 27, 1934	7.88	11,100
	Jan. 7, 1932	6.85	8,360		Apr. 1, 1934	8.40	12,500
	Feb. 13, 1932	7.92	11,000	1935	Jan. 9, 1935	10.36	21,000
	Apr. 3, 1932	-	(a)		Mar. 17, 1935	6.53	7,580

a Peak above base; discharge not determined.

b Backwater from ice.

Peak stages and discharges of Tioughnioga River at Itaska, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Mar. 21, 1935	6.42	7,110	1948	Mar. 16, 1948	b9.67	-
	May 7, 1935	6.85	8,220		Mar. 17, 1948	7.65	9,760
	July 8, 1935	16.61	61,100		Mar. 20, 1948	8.95	13,800
1936	Mar. 12, 1936	10.44	20,900		Mar. 22, 1948	8.81	13,300
	Mar. 18, 1936	11.91	28,700	1949	Jan. 6, 1949	6.48	6,880
1937	Jan. 25, 1937	7.84	10,500	1950	Mar. 28, 1950	7.80	9,580
	Apr. 7, 1937	9.00	14,300		Apr. 5, 1950	9.20	13,700
	Aug. 27, 1937	6.57	7,210		Sept. 1, 1950	7.08	7,860
1938	Oct. 24, 1937	9.40	15,900	1951	Nov. 26, 1950	7.19	8,100
	Oct. 29, 1937	7.26	8,910		Dec. 4, 1950	7.62	9,110
	Jan. 25, 1938	7.01	8,260		Mar. 31, 1951	8.04	10,200
	Feb. 7, 1938	7.55	9,140		Apr. 2, 1951	7.36	8,480
	Sept. 22, 1938	7.43	9,360	1952	Mar. 11, 1952	7.19	8,100
1939	Dec. 10, 1938	7.40	9,280		Dec. 11, 1952	7.44	8,680
	Feb. 20, 1939	b12.16	15,300	1953	Feb. 21, 1953	6.82	7,320
	Mar. 6, 1939	6.80	7,750		Feb. 17, 1954	7.13	7,970
	Mar. 27, 1939	8.68	13,200	1955	Feb. 28, 1955	b8.98	-
1940	Mar. 31, 1940	b10.63	-		Mar. 1, 1955	7.82	10,000
	Apr. 1, 1940	b9.63	15,000		Mar. 11, 1955	8.67	12,200
	Apr. 5, 1940	9.51	16,300		Mar. 22, 1955	6.50	7,020
	Apr. 9, 1940	10.51	21,200	1956	Oct. 16, 1955	7.56	9,410
	Apr. 21, 1940	7.27	8,930		Mar. 7, 1956	8.31	11,300
1941	Dec. 30, 1940	8.06	11,200		Apr. 5, 1956	9.75	15,800
	Apr. 7, 1941	10.08	19,100		Apr. 9, 1956	7.38	8,980
1942	Dec. 24, 1941	7.22	8,800		Apr. 17, 1956	7.67	9,680
	Mar. 17, 1942	8.58	12,400	1957	Jan. 24, 1957	b11.38	-
1943	Dec. 30, 1942	9.98	18,100		Apr. 6, 1957	6.19	6,370
	Mar. 17, 1943	9.45	15,800		Dec. 21, 1957	6.54	7,100
	Apr. 20, 1943	6.80	7,690		Apr. 3, 1958	6.90	7,890
1944	Nov. 9, 1943	6.54	7,100		Apr. 7, 1958	8.10	10,700
	Mar. 17, 1944	b9.05	12,500		Apr. 16, 1958	7.22	8,620
	Mar. 26, 1944	7.43	9,220		Apr. 22, 1958	7.12	8,390
	Apr. 11, 1944	6.70	7,460	1959	Jan. 22, 1959	b9.66	8,000
1945	Feb. 27, 1945	b10.34	-		Jan. 29, 1959	b10.39	-
	Mar. 17, 1945	8.27	11,600		Apr. 2, 1959	7.68	9,700
	Mar. 19, 1945	8.18	11,300		Apr. 6, 1959	6.93	7,960
	Mar. 22, 1945	8.76	13,200	1960	Nov. 28, 1959	6.92	7,930
1946	Oct. 2, 1945	6.62	7,160		Feb. 11, 1960	7.38	8,980
	Mar. 7, 1946	7.52	9,400		Apr. 1, 1960	9.44	14,600
	Mar. 12, 1946	6.56	7,020		Apr. 5, 1960	8.20	11,000
	May 28, 1946	6.67	7,270	1961	Feb. 26, 1961	11.15	22,600
1947	Mar. 25, 1947	7.83	10,300		Mar. 6, 1961	6.52	7,060
	Apr. 6, 1947	8.43	12,000		Mar. 28, 1961	6.54	7,100
	Apr. 8, 1947	7.10	8,310		Apr. 17, 1961	7.35	8,920
	May 22, 1947	6.49	6,900				
	Apr. 26, 1947	6.91	7,840				

b Backwater from ice.

5125. Chenango River near Chenango Forks, N. Y.

Location.--Lat 42°13'05", long 75°50'55", on left bank $1\frac{1}{2}$ miles downstream from Tioughnioga River and village of Chenango Forks, Broome County.

Drainage area.--1,492 sq mi.

Gage.--Nonrecording prior to Oct. 1, 1914; recording thereafter. At site 300 ft upstream at same datum prior to Aug. 3, 1936. Datum of gage is 871.73 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 32,000 cfs and extended above on basis of slope-area measurement at 96,000 cfs.

Remarks.--Since March 1942, extremely high flows partly regulated by Whitney Point detention reservoir upstream. Base for partial-duration series, 18,000 cfs.

Peak stages and discharges of Chenango River near Chenango Forks, N. Y.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1913	Jan. 8, 1913	10.98	22,900	1935	Jan. 9, 1935	13.50	34,000
	Mar. 27, 1913	13.70	35,500		July 8, 1935	20.3	96,000
1914	Mar. 28, 1914	14.0	37,000	1936	Mar. 12, 1936	12.93	31,800
	Apr. 2, 1914	10.35	20,400		Mar. 18, 1936	15.26	50,100
	Apr. 9, 1914	11.4	24,600	1937	Apr. 7, 1937	10.07	21,000
1915	Jan. 8, 1915	9.78	18,100		Oct. 24, 1937	10.54	23,400
	Feb. 25, 1915	12.04	27,200	1938	Feb. 21, 1939	11.14	25,000
	July 9, 1915	10.72	21,900		Mar. 27, 1939	10.45	22,300
1916	Apr. 2, 1916	12.18	27,900	1939	Apr. 9, 1940	-	b37,000
1917	Mar. 28, 1917	11.16	23,600		Dec. 30, 1940	9.90	19,800
1918	Feb. 26, 1918	a13.54	-	1941	Apr. 7, 1941	11.86	29,000
	Mar. 14, 1918	9.93	18,700		Mar. 17, 1942	10.09	21,000
	May 14, 1918	10.75	22,000	1942	Dec. 30, 1942	14.00	41,000
1919	Oct. 31, 1918	8.1	11,800		Mar. 17, 1943	11.97	29,000
1920	Mar. 13, 1920	a13.06	22,000	1943	Mar. 17, 1944	10.94	24,400
	Mar. 27, 1920	11.53	24,300		Mar. 3, 1945	a13.29	-
1921	Mar. 10, 1921	9.60	17,600	1944	Mar. 22, 1945	10.46	22,200
1922	Feb. 24, 1922	a11.82	-		Mar. 9, 1946	9.49	18,000
	Mar. 8, 1922	10.47	21,200	1945	Apr. 7, 1947	10.35	22,500
	June 12, 1922	10.52	21,400		Mar. 22, 1948	12.22	32,200
1923	Mar. 24, 1923	10.85	22,700	1946	Dec. 30, 1948	9.32	17,800
	Apr. 6, 1923	11.47	25,200		Mar. 30, 1950	10.36	22,500
1924	Jan. 12, 1924	10.48	21,200	1947	Apr. 5, 1950	11.84	30,100
	Apr. 7, 1924	12.27	28,600		Dec. 4, 1950	9.74	19,700
	Sept. 30, 1924	12.45	29,400	1948	Mar. 31, 1951	9.78	19,900
1925	Feb. 12, 1925	13.05	31,900		Mar. 11, 1952	9.26	17,600
1926	Mar. 24, 1926	a13.54	-	1949	Dec. 11, 1952	9.29	17,700
	Mar. 25, 1926	a10.71	b19,000		Jan. 28, 1954	a9.02	-
	Apr. 10, 1926	10.2	20,100	1950	Feb. 17, 1954	8.65	14,500
1927	Nov. 17, 1926	11.29	24,500		Mar. 12, 1955	10.22	21,400
	Mar. 14, 1927	12.59	30,100	1951	Mar. 8, 1956	10.64	23,400
	May 24, 1927	9.85	18,700		Apr. 5, 1956	12.19	31,400
1928	Oct. 19, 1927	11.3	24,500		Apr. 17, 1956	9.57	18,500
	Nov. 27, 1927	9.97	19,200	1952	Jan. 23, 1957	8.89	15,700
1929	Mar. 15, 1929	13.20	32,800		Apr. 7, 1958	10.44	22,400
	Apr. 21, 1929	11.91	27,000	1953	Jan. 22, 1959	a11.32	b20,000
1930	Mar. 8, 1930	8.9	15,200		Apr. 3, 1959	9.51	18,200
1931	Mar. 27, 1931	9.79	18,500	1954	Apr. 1, 1960	12.00	30,400
	Apr. 11, 1931	9.70	18,100		Apr. 5, 1960	11.02	25,300
1932	Feb. 13, 1932	9.67	18,000	1955	Feb. 26, 1961	12.65	34,000
1933	Oct. 6, 1932	10.13	19,800				
1934	Jan. 2, 1934	9.90	18,800				
	Mar. 4, 1934	a12.80	-				
	Mar. 5, 1934	10.42	20,900				
	Apr. 1, 1934	10.23	20,100				

a Backwater from ice.
b About.

5135. Susquehanna River at Vestal, N. Y.

Location.--Lat 42°05'30", long 76°03'25", on left bank 400 ft downstream from highway bridge at Vestal, Broome County, and 800 ft upstream from Choconut Creek.

Drainage area.--3,960 sq mi, approximately.

Gage.--Recording. Datum of gage is 799.19 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--High flows regulated by Whitney Point detention reservoir since 1942 and by East Sidney detention reservoir since 1947. Base for partial-duration series, 32,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	March 1936	30.5	21,07,000	1949	Jan. 7, 1949	17.44	41,900
1937	Apr. 7, 1937	17.58	41,300	1950	Mar. 30, 1950	20.87	57,300
1938	Oct. 24, 1937	17.73	41,900		Apr. 5, 1950	21.29	59,300
	Jan. 26, 1938	16.14	34,600		Sept. 3, 1950	15.36	33,300
	Sept. 23, 1938	19.14	47,600	1951	Nov. 26, 1950	17.66	42,900
1939	Dec. 11, 1938	17.16	38,600		Dec. 5, 1950	20.27	54,500
	Feb. 21, 1939	21.34	56,200		Dec. 8, 1950	15.04	32,000
	Mar. 28, 1939	17.98	41,900		Mar. 31, 1951	17.92	44,000
1940	Apr. 1, 1940	26.58	85,500	1952	Jan. 28, 1952	15.31	33,100
	Apr. 9, 1940	23.81	70,000		Mar. 12, 1952	18.37	46,000
	Apr. 22, 1940	18.18	44,100	1953	Dec. 12, 1952	16.31	37,100
1941	Dec. 30, 1940	17.45	41,000		Jan. 25, 1953	17.41	41,800
	Apr. 7, 1941	20.29	53,400	1954	Feb. 18, 1954	17.13	40,600
1942	Mar. 10, 1942	17.20	39,900	1955	Mar. 2, 1955	16.95	39,800
	Mar. 18, 1942	18.14	43,900		Mar. 13, 1955	17.29	41,300
	May 23, 1942	16.43	36,800	1956	Oct. 16, 1955	18.49	46,500
1943	Dec. 31, 1942	27.41	90,500		Mar. 8, 1956	22.74	64,000
	Feb. 25, 1943	17.71	42,100		Apr. 6, 1956	22.72	63,900
	Mar. 13, 1943	14.87	32,000		Apr. 18, 1956	17.43	40,200
	Mar. 18, 1943	21.81	63,000	1957	Jan. 23, 1957	16.42	36,400
	Apr. 20, 1943	15.07	32,800		Apr. 6, 1957	16.69	37,400
1944	Mar. 18, 1944	19.90	53,900	1958	Apr. 8, 1958	22.80	64,300
	Mar. 26, 1944	16.08	36,900		Apr. 17, 1958	16.69	37,400
	May 8, 1944	15.52	33,500		Apr. 22, 1958	16.81	37,800
1945	Mar. 5, 1945	16.57	39,000	1959	Jan. 22, 1959	20.59	53,700
	Mar. 18, 1945	19.13	50,400		Apr. 3, 1959	17.60	40,900
	Mar. 22, 1945	19.09	50,200	1960	Nov. 7, 1959	15.53	33,100
1946	Mar. 9, 1946	20.30	54,700		Nov. 29, 1959	19.21	47,500
	May 22, 1946	15.80	35,000		Jan. 4, 1960	15.83	34,200
	May 28, 1946	19.96	53,100		Feb. 12, 1960	18.53	44,700
1947	Mar. 25, 1947	18.03	45,600		Apr. 1, 1960	23.45	67,600
	Apr. 6, 1947	20.77	58,400		Apr. 5, 1960	23.20	66,300
1948	Mar. 17, 1948	19.77	52,200	1961	Feb. 26, 1961	24.09	70,800
	Mar. 22, 1948	27.73	92,400		Mar. 30, 1961	15.30	32,300
1949	Dec. 31, 1948	18.54	46,800		Apr. 17, 1961	16.33	36,000
					Apr. 25, 1961	20.20	51,900

a Annual peak only.

5140. Owego Creek near Owego, N. Y.

Location.--Lat 42°07'45", long 76°16'15", on right bank 300 ft upstream from highway bridge, half a mile upstream from Catatonk Creek, and 1½ miles north of Owego, Tioga County.

Drainage area.--186 sq mi.

Gage.--Recording prior to July 8, 1935, and subsequent to Sept. 30, 1936; non-recording during remainder of period at site 250 ft downstream. Datum of gage is 820.82 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 7,800 cfs and extended above on basis of slope-area measurement at 23,500 cfs.

Remarks.--Base for partial-duration series, 3,800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Mar. 8, 1930	5.82	3,470	1947	Apr. 5, 1947	7.73	6,530
1931	May 26, 1931	5.17	3,060		May 25, 1947	7.53	6,190
1932	Apr. 3, 1932	5.65	3,820	1948	Mar. 16, 1948	7.71	6,500
1933	Oct. 6, 1932	5.63	3,790		Mar. 20, 1948	7.83	6,700
1934	Mar. 27, 1934	5.67	3,850		Mar. 22, 1948	8.08	7,150
	Apr. 1, 1934	6.75	5,690	1949	Dec. 30, 1948	6.07	4,010
1935	Jan. 9, 1935	7.83	8,210	1950	Mar. 28, 1950	8.47	7,890
	July 8, 1935	10.50	23,500		Apr. 5, 1950	6.98	5,320
1936	Mar. 18, 1936	9.0	12,200		Sept. 1, 1950	6.69	4,880
1937	Aug. 27, 1937	6.00	3,710	1951	Nov. 26, 1950	7.92	6,870
1938	Oct. 23, 1937	6.54	4,560		Dec. 4, 1950	7.86	6,760
	Sept. 22, 1938	6.12	3,890		Mar. 31, 1951	6.82	5,080
1939	Dec. 10, 1938	6.84	5,000	1952	Mar. 11, 1952	7.23	4,990
	Feb. 20, 1939	8.00	7,230	1953	Dec. 11, 1952	7.41	5,280
1940	Mar. 31, 1940	8.00	8,730	1954	Feb. 17, 1954	6.78	3,970
	Apr. 4, 1940	6.88	6,020		May 4, 1954	7.54	4,900
	Apr. 8, 1940	6.49	5,200	1955	Mar. 1, 1955	7.72	5,990
1941	Apr. 5, 1941	6.10	6,040		Mar. 11, 1955	6.46	3,940
1942	Mar. 9, 1942	6.52	6,750	1956	Oct. 16, 1955	9.09	10,200
	Mar. 17, 1942	6.24	6,130		Mar. 7, 1956	8.65	8,480
1943	Dec. 30, 1942	7.90	10,600		Apr. 4, 1956	7.99	6,620
	Mar. 17, 1943	5.15	4,110	1957	Jan. 23, 1957	7.06	4,790
1944	Oct. 28, 1943	5.74	5,230		Apr. 6, 1957	6.74	4,320
	Nov. 9, 1943	5.40	4,570	1958	Apr. 7, 1958	7.94	6,500
	Mar. 17, 1944	5.99	5,740		Apr. 22, 1958	6.45	3,920
1945	Mar. 22, 1945	5.42	4,090	1959	Jan. 22, 1959	8.45	7,850
	Sept. 19, 1945	5.56	4,330		Apr. 2, 1959	7.46	5,470
1946	Mar. 7, 1946	5.85	4,070	1960	Nov. 28, 1959	8.01	6,680
	Mar. 9, 1946	6.53	5,230		Feb. 11, 1960	8.23	7,220
	May 28, 1946	7.55	7,290		Mar. 31, 1960	8.63	8,400
1947	Mar. 25, 1947	7.18	5,630		Apr. 4, 1960	7.77	6,090
					May 24, 1960	6.72	4,290
				1961	Feb. 26, 1961	9.33	11,200
					Apr. 25, 1961	8.23	7,220

5145. Dean Creek at Spencer, N. Y.

Location.--Lat 42°12'10", long 76°29'50", on right bank 25 ft upstream from small tributary, 85 ft downstream from highway bridge on Spencer Road at Spencer, Tioga County, and 1.2 miles upstream from South Branch Catatonk Creek.

Drainage area.--8.03 sq mi.

Gage.--Recording. Datum of gage is 979.74 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 340 cfs and extended above on basis of an indirect measurement.

Remarks.--Since October 1955, high flows regulated by Pylkas and Peltó flood-control reservoirs upstream. Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Dec. 30, 1954	7.31	a222	1958	Apr. 22, 1958	4.48	245
					July 8, 1958	5.42	534
1956	Oct. 15, 1955	5.62	544				
	Mar. 7, 1956	5.34	465	1959	Jan. 22, 1959	4.71	317
	Apr. 4, 1956	4.61	265		Jan. 22, 1959	b4.80	290
	July 22, 1956	4.53	243		Mar. 6, 1959	b5.98	-
	Sept. 23, 1956	4.59	259		Mar. 15, 1959	b5.07	205
1957	Jan. 23, 1957	4.89	340	1960	Nov. 28, 1959	4.92	385
	Apr. 5, 1957	4.52	240		Feb. 11, 1960	5.09	439
1958	Feb. 28, 1958	4.92	348		Mar. 31, 1960	4.99	408
	Apr. 7, 1958	4.89	376		June 17, 1960	4.37	212

a Maximum for period July to September 1955.

b Backwater from ice.

5150. Susquehanna River near Waverly, N. Y.

Location.--Lat 41°59'05", long 76°30'05", on left bank 1,000 ft upstream from Cayuta Creek, 2,000 ft upstream from bridge at Sayre, Pa., 1 mile downstream from New York-Pennsylvania State line, and 2 miles southeast of Waverly, Tioga County.

Drainage area.--4,780 sq mi, approximately.

Gage.--Recording. At datum 1 ft higher, prior to Nov. 1, 1939, datum of gage is 743.96 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 52,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	March 1936	21.4	a128,000	1946	Mar. 9, 1946	14.38	67,000
					May 28, 1946	16.63	84,700
1937	Apr. 8, 1937	10.30	47,500				
1938	Oct. 24, 1937	11.36	53,400	1947	Mar. 26, 1947	12.80	57,100
	Sept. 23, 1938	11.55	54,900		Apr. 6, 1947	15.65	74,200
1939	Feb. 21, 1939	14.25	72,800	1948	Mar. 17, 1948	14.13	62,900
					Mar. 22, 1948	19.84	109,000
1940	Apr. 1, 1940	19.00	106,000	1949	Dec. 31, 1948	12.38	51,300
	Apr. 9, 1940	16.40	82,600				
1941	Apr. 6, 1941	14.75	68,500	1950	Mar. 29, 1950	15.80	75,400
					Apr. 5, 1950	14.55	65,800
1942	Mar. 10, 1942	12.70	53,500	1951	Dec. 5, 1950	13.61	59,300
					Mar. 31, 1951	12.82	53,900
1943	Dec. 31, 1942	19.70	112,000				
	Mar. 18, 1943	14.92	69,900	1952	Mar. 12, 1952	13.11	55,800
1944	Mar. 18, 1944	13.43	58,600	1953	Dec. 12, 1952	11.63	46,800
1945	Mar. 18, 1945	13.52	59,200	1954	Feb. 18, 1954	11.15	43,900
	Mar. 22, 1945	13.69	60,400				

a Annual peak only.

Peak stages and discharges of Susquehanna River near Waverly, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 2, 1955	11.93	50,000	1959	Jan. 23, 1959	14.65	66,600
1956	Oct. 16, 1955	15.27	72,200	1960	Nov. 29, 1959	12.81	53,900
	Mar. 8, 1956	16.84	83,700		Feb. 12, 1960	12.84	54,000
	Apr. 8, 1956	15.72	74,800		Apr. 1, 1960	17.56	89,500
1957	Apr. 7, 1957	11.85	48,100		Apr. 5, 1960	16.26	79,100
			1961	Feb. 26, 1961	17.43	88,400	
1958	Apr. 8, 1958	16.81		83,500	Apr. 25, 1961	15.52	73,200

5165. Corey Creek near Mainesburg, Pa.

Location.--Lat 41°47'25", long 77°00'55", on right bank 30 ft upstream from township bridge, 500 ft upstream from small tributary, 1.1 miles downstream from Mainesburg, Tioga County, 3½ miles east of Mansfield, and 4¼ miles upstream from mouth.

Drainage area.--12.2 sq mi.

Gage.--Recording. Datum of gage is 1,337.50 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 490 cfs and extended above on basis of slope-area measurements at 2,210 cfs.

Remarks.--Base for partial-duration series, 280 cfs.

Peak stages and discharges

Peak stages and discharges							
Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Dec. 30, 1954	4.83	552	1959	Jan. 21, 1959	5.1	660
	Mar. 4, 1955	4.53	436		Feb. 10, 1959	5.5	840
	Aug. 13, 1955	4.08	284		Mar. 6, 1959	4.32	367
					Mar. 15, 1959	4.0	280
1956	Oct. 14, 1955	7.88	2,210	1960	Nov. 28, 1959	5.27	728
	Oct. 16, 1955	5.20	705		Mar. 29, 1960	5.12	705
	Oct. 30, 1955	4.56	447		May 9, 1960	4.16	372
	Nov. 16, 1955	4.46	411		May 21, 1960	3.81	286
	Mar. 6, 1956	5.43	808		June 24, 1960	4.49	474
	Apr. 3, 1956	4.73	512		Aug. 5, 1960	4.43	458
1957	Nov. 2, 1956	4.17	324		1961	Feb. 19, 1961	-
	Apr. 5, 1957	5.70	930	Feb. 25, 1961		4.24	400
1958	Dec. 26, 1957	4.69	496	Apr. 16, 1961		5.15	720
	Apr. 6, 1958	4.07	298	Apr. 25, 1961		5.03	680
	May 7, 1958	4.06	295	May 9, 1961		6.69	1,450

a Discharge unknown, but probably not maximum for year.

5170. Elk Run near Mainesburg, Pa.

Location.--Lat 41°48'50", long 76°57'55", on left bank 250 ft downstream from highway bridge, half a mile upstream from small tributary, 2.7 miles northeast of Mainesburg, Tioga County, 5½ miles upstream from mouth, and 5.8 miles east of Mansfield.

Drainage area.--10.2 sq mi.

Gage.--Nonrecording and crest-stage gage 250 ft upstream prior to Aug. 29, 1956; recording thereafter. Datum of gage is 1,385.05 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 230 cfs and extended above on basis of slope-area measurement at 1,240 cfs.

Remarks.--Base for partial-duration series, 230 cfs.

Peak stages and discharges of Elk Run near Mainesburg, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Dec. 30, 1954	3.68	290	1959	Jan. 21, 1959	-	(a)
	Mar. 4, 1955	3.45	232		Feb. 10, 1959	3.50	777
	Mar. 22, 1955	3.45	232		Mar. 6, 1959	4.20	1,020
	Aug. 13, 1955	3.46	235		Mar. 15, 1959	3.76	862
1956	Oct. 14, 1955	6.77	1,240	1960	Nov. 28, 1959	2.91	578
	Oct. 16, 1955	4.86	598		Dec. 12, 1959	1.92	237
	Oct. 30, 1955	3.55	258		Feb. 6, 1960	2.07	283
	Nov. 16, 1955	3.69	292		Feb. 11, 1960	2.11	295
	Mar. 2, 1956	3.72	300		Mar. 29, 1960	2.60	482
	Mar. 6, 1956	4.59	518		May 9, 1960	2.34	405
	Apr. 3, 1956	4.34	455		May 21, 1960	2.40	420
1957	Nov. 2, 1956	2.15	300		June 17, 1960	2.07	321
	Apr. 5, 1957	2.66	559		June 24, 1960	2.46	436
1958	Dec. 20, 1957	2.09	282		Aug. 5, 1960	2.14	342
	Dec. 26, 1957	2.34	359	1961	Feb. 26, 1961	2.46	404
	Apr. 6, 1958	2.14	322		Apr. 16, 1961	2.84	560
	Apr. 21, 1958	1.93	267		Apr. 25, 1961	2.61	464
	May 7, 1958	1.82	239		May 9, 1961	2.75	520

a Discharge unknown, but probably not maximum for year.

5180. Tioga River at Tioga, Pa.

Location.--Lat 41°54'30", long 77°07'45", on left bank 130 ft upstream from highway bridge at Tioga, Tioga County, and three-quarters of a mile upstream from Crooked Creek.

Drainage area.--282 sq mi.

Gage.--Recording. At datum 2.11 ft higher prior to Sept. 9, 1953. Datum of gage is 1,021.0 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 5,800 cfs and extended above on basis of slope-area and contracted-opening measurements of 39,000 cfs.

Historical data.--The flood of 1889 reached a stage of 17.4 ft, present datum, from levels of Aug. 1, 1946. This stage was on the basis of a file mark cut by Harry Smith in the Wickham Block in Tioga. The Wickham Block is about 0.2 mile from gage site, on a line normal to stream at gage site.

Remarks.--Base for partial-duration series, 6,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1889	1889	17.4	-	1946	May 27, 1945	13.36	39,000
1939	Feb. 20, 1939	6.99	6,300	1947	Apr. 5, 1947	10.82	22,800
1940	Mar. 30, 1940	9.52	10,000	1947	May 22, 1947	8.64	6,800
	Mar. 31, 1940	10.48	16,200		Aug. 21, 1947	6.95	7,640
	Apr. 3, 1940	8.90	10,700	1948	Mar. 22, 1948	8.21	11,600
	Apr. 4, 1940	7.95	8,170		Apr. 14, 1948	6.61	6,730
1941	Apr. 5, 1941	7.42	6,930		May 24, 1948	7.12	8,120
1942	Mar. 9, 1942	9.63	12,900	1949	Dec. 30, 1948	5.95	5,180
	May 22, 1942	7.49	7,090	1950	Mar. 28, 1950	7.59	9,550
1943	Dec. 30, 1942	10.27	15,300	1951	Nov. 25, 1950	11.33	25,400
	Apr. 21, 1943	7.67	7,500		Dec. 8, 1950	6.96	7,670
	May 21, 1943	7.46	7,020		Mar. 30, 1951	10.02	18,900
1944	May 7, 1944	8.82	10,400	1952	Mar. 11, 1952	8.85	14,000
	June 23, 1944	7.57	7,270		Apr. 5, 1952	6.29	6,700
1945	Mar. 3, 1945	8.25	8,920	1953	Dec. 11, 1952	8.35	12,300
	May 18, 1945	8.84	10,500		Mar. 24, 1953	6.72	7,710

a Annual peak only; at present site and datum.

b Backwater from ice.

c About.

Peak stages and discharges of Tioga River at Tioga, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	May 26, 1953	6.25	6,610	1958	Mar. 1, 1958	67.72	-
1954	Mar. 1, 1954	9.62	15,200	1958	Apr. 7, 1958	7.52	8,040
	May 4, 1954	7.94	8,740	1959	Jan. 22, 1959	7.84	8,960
1955	Feb. 23, 1955	68.04	-		Feb. 10, 1959	613.20	8,800
	Mar. 4, 1955	6.66	5,590	1960	Nov. 28, 1959	8.45	11,000
1956	Oct. 14, 1955	12.69	33,000		Mar. 31, 1960	8.93	12,900
	Oct. 16, 1955	7.66	8,430		May 9, 1960	7.44	7,820
	Mar. 6, 1956	8.05	9,620	1961	Feb. 26, 1961	9.26	14,300
1957	Jan. 22, 1957	610.32	-		Apr. 16, 1961	8.18	10,100
	Apr. 6, 1957	8.58	11,400		Apr. 25, 1961	7.56	8,150

b Backwater from ice.

5185. Crooked Creek at Tioga, Pa.

Location.--Lat 41°54'05", long 77°08'55", on right bank 30 ft upstream from New York Central Railroad bridge, 1 mile southwest of Tioga, Tioga County, 1 mile upstream from Elkhorn Creek, and 3 miles upstream from mouth.

Drainage area.--122 sq mi.

Gage.--Recording. Datum of gage is 1,051.28 ft above mean sea level, datum of 1929, adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements below 4,600 cfs and extended above on basis of slope-area measurement at 10,900 cfs.

Remarks.--Base for partial-duration series, 2,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Mar. 1, 1954	11.42	5,690	1958	Apr. 6, 1958	10.30	3,140
	May 4, 1954	9.68	2,420	1959	Jan. 22, 1959	11.35	5,280
	June 2, 1954	9.85	2,590		Feb. 10, 1959	10.80	3,400
1955	Mar. 4, 1955	9.40	2,180		Mar. 6, 1959	10.42	3,130
1956	Oct. 14, 1955	12.73	10,900	1960	Nov. 28, 1959	10.22	2,850
	Feb. 25, 1956	10.88	4,190		Mar. 31, 1960	11.13	4,590
	Mar. 6, 1956	11.11	4,760	1961	Feb. 26, 1961	11.40	5,450
	Mar. 8, 1956	10.53	3,500		Apr. 16, 1961	10.60	3,400
	Apr. 3, 1956	10.37	3,240		Apr. 25, 1961	10.98	4,200
1957	Jan. 23, 1957	10.41	3,310				
	Apr. 6, 1957	10.77	3,950				

5200. Cowanesque River near Lawrenceville, Pa.

Location.--Lat 41°59'10", long 77°09'00", on left bank three-quarters of a mile downstream from Cook Creek, 1½ miles southwest of Lawrenceville, Tioga County, and 2½ miles upstream from mouth.

Drainage area.--295 sq mi.

Gage.--Recording. Datum of gage is 998.03 ft above mean sea level, datum of 1929, supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements below 7,200 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 6,300 cfs.

Peak stages and discharges of Cowanesque River near Lawrenceville, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Jan. 1, 1952	a10.18	-	1956	Apr. 3, 1956	8.48	9,550
	Jan. 18, 1952	7.91	7,380	1957	Jan. 22, 1957	a10.87	-
	Jan. 27, 1952	7.67	6,760		Jan. 23, 1957	7.59	6,860
	Mar. 11, 1952	9.60	12,500		Apr. 6, 1957	7.77	7,340
	Apr. 5, 1952	8.61	9,020		Apr. 25, 1957	8.30	8,940
1953	Dec. 11, 1952	8.46	8,550	1958	Apr. 7, 1958	8.30	8,940
	Mar. 24, 1953	9.83	13,400				
	May 26, 1953	7.72	6,430	1959	Jan. 21, 1959	a10.77	-
1954	Jan. 27, 1954	a9.23	-		Jan. 22, 1959	10.44	18,100
	Mar. 1, 1954	9.17	10,900		Feb. 10, 1959	a9.55	9,200
	June 2, 1954	8.80	9,640		Mar. 6, 1959	8.50	8,740
1955	Feb. 28, 1955	a10.99	-		Apr. 2, 1959	7.82	6,700
	Mar. 4, 1955	7.47	6,410	1960	Mar. 31, 1960	9.50	12,300
1956	Oct. 14, 1955	10.47	18,200				
	Nov. 16, 1955	8.98	11,400	1961	Feb. 26, 1961	10.34	16,200
	Mar. 6, 1956	9.30	12,700		Apr. 16, 1961	8.39	8,070
	Mar. 8, 1956	9.41	13,200		Apr. 25, 1961	10.70	18,300

a Backwater from ice.

5205. Tioga River at Lindley, N. Y.

Location.--Lat 42°01'45", long 77°07'55", on left bank just downstream from highway bridge at Lindley, Steuben County, 6 miles upstream from Canisteo River.

Drainage area.--770 sq mi, approximately.

Gage.--Nonrecording prior to Feb. 9, 1937; recording thereafter. Datum of gage is 963.94 ft above mean sea level, adjustment of 1912 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 31,000 cfs and extended above on basis of velocity-area study and slope-area measurement at gage height 19.2 ft and by conveyance study and slope-area measurement at gage height 22.87 ft.

Historical data.--The flood of May 28, 1946, was about the same or higher than that of June 1889, according to local residents.

Remarks.--Base for partial-duration series, 10,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Mar. 8, 1930	10.3	8,910	1938	Feb. 13, 1938	11.80	11,200
1931	May 25, 1931	9.5	7,440		Mar. 6, 1938	13.98	16,200
1932	Feb. 11, 1932	12.1	12,400	1939	Feb. 20, 1939	16.20	23,000
	Apr. 1, 1932	13.8	15,800				
	May 11, 1932	12.0	12,200	1940	Mar. 30, 1940	a15.89	18,000
1933	Aug. 24, 1933	13.8	15,800		Apr. 1, 1940	18.78	36,600
					Apr. 4, 1940	17.10	27,000
1934	Mar. 4, 1934	12.3	12,800		Apr. 9, 1940	12.97	13,700
	Mar. 27, 1934	11.4	11,000	1941	Apr. 5, 1941	14.19	16,800
1935	Feb. 26, 1935	a13.4	-		Mar. 9, 1942	17.46	30,800
	Aug. 11, 1935	11.1	10,400	1942	May 23, 1942	13.81	15,900
1936	Mar. 12, 1936	19.2	41,200		Aug. 13, 1942	11.21	10,200
	Mar. 17, 1936	17.8	32,800				
1937	Nov. 5, 1936	11.18	10,600	1943	Dec. 30, 1942	17.63	31,800
	Jan. 22, 1937	12.63	13,600		Mar. 12, 1943	12.11	12,000
	Aug. 27, 1937	12.52	12,700		Apr. 21, 1943	14.80	18,700
					May 12, 1943	12.70	13,500
1938	Oct. 29, 1937	12.80	13,400		May 21, 1943	12.90	13,800
	Nov. 13, 1937	17.13	27,200	1944	Nov. 9, 1943	11.34	10,500
	Jan. 25, 1938	12.92	13,600		Feb. 23, 1944	a14.43	-
					May 7, 1944	13.67	15,600
					June 24, 1944	13.60	14,900

a Backwater from ice.

Peak stages and discharges of Tioga River at Lindley, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Mar. 4, 1945	16.52	25,600	1953	Mar. 24, 1953	16.09	23,400
	Mar. 22, 1945	12.3	12,000		May 26, 1953	13.08	13,400
	May 18, 1945	15.07	19,200	1954	Mar. 2, 1954	16.51	25,600
1946	Jan. 6, 1946	13.29	14,100		May 4, 1954	12.86	13,000
	May 28, 1946	22.87	75,000		June 2, 1954	12.13	11,500
	June 2, 1946	13.02	13,500	1955	Mar. 4, 1955	12.44	12,100
1947	Apr. 5, 1947	18.48	37,400	1956	Oct. 14, 1955	20.18	50,400
	May 22, 1947	13.70	15,200		Oct. 17, 1955	13.59	14,800
	June 3, 1947	12.58	12,500		Nov. 16, 1955	13.48	14,500
	Aug. 14, 1947	12.27	11,800		Feb. 25, 1956	12.67	12,600
1948	Feb. 20, 1948	11.83	11,000		Mar. 6, 1956	16.60	26,000
	Mar. 16, 1948	12.98	13,400		Mar. 8, 1956	16.16	23,800
	Mar. 20, 1948	12.63	12,600		Apr. 4, 1956	14.93	18,700
	Mar. 22, 1948	18.50	37,500	1957	Nov. 2, 1956	11.90	11,000
	Apr. 14, 1948	13.83	15,500		Jan. 23, 1957	13.66	15,000
	May 24, 1948	11.60	10,500		Apr. 6, 1957	15.28	19,900
1949	Dec. 30, 1948	11.28	9,880		Apr. 12, 1957	11.71	10,600
1950	Mar. 29, 1950	17.32	29,900		Apr. 25, 1957	13.16	13,700
	Apr. 5, 1950	12.71	12,800	1958	Apr. 7, 1958	14.71	18,000
1951	Oct. 10, 1950	12.44	11,800		Apr. 22, 1958	12.21	11,600
	Nov. 5, 1950	12.04	10,800		May 7, 1958	12.50	12,200
	Nov. 26, 1950	19.90	48,200	1959	Jan. 22, 1959	17.33	30,000
	Dec. 4, 1950	12.85	12,800		Feb. 10, 1959	15.13	19,400
	Dec. 8, 1950	14.07	16,100		Mar. 6, 1959	13.84	15,500
	Mar. 31, 1951	19.42	44,400		Apr. 2, 1959	12.18	11,600
	Apr. 13, 1951	13.31	14,000	1960	Nov. 28, 1959	13.36	14,200
1952	Jan. 18, 1952	12.55	12,000		Feb. 11, 1960	11.53	10,500
	Jan. 27, 1952	12.47	11,900		Mar. 31, 1960	17.32	29,900
	Feb. 4, 1952	11.66	10,400		May 9, 1960	12.82	12,900
	Mar. 11, 1952	17.71	32,300	1961	Feb. 26, 1961	17.48	30,900
	Apr. 6, 1952	14.99	18,900		Apr. 16, 1961	14.55	17,600
1953	Dec. 11, 1952	16.12	23,600		Apr. 25, 1961	17.04	28,200

5215. Canisteo River at Arkport, N. Y.

Location.--Lat 42°23'45", long 77°42'50", on left bank 1,000 ft downstream from Arkport Dam and 0.9 mile west of Arkport, Steuben County.

Drainage area.--30.5 sq mi.

Gage.--Recording. Datum of gage is 1,202.10 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 2,000 cfs and extended above on basis of slope-area measurement at 4,820 cfs.

Remarks.--Since November 1939, flows above 500 cfs controlled by detention in Arkport Reservoir. Base for partial-duration series, 630 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	July 8, 1935	-	4,820	1939	Mar. 24, 1939	2.77	710
1937	Apr. 15, 1937	3.41	1,410		Mar. 27, 1939	2.86	806
	Apr. 22, 1937	2.95	920		Mar. 30, 1939	2.90	850
	May 6, 1937	2.85	820		Apr. 15, 1939	2.90	850
	June 21, 1937	3.25	1,240	1940	Mar. 30, 1940	a4.60	b640
1938	Feb. 13, 1938	3.10	1,070		Apr. 1, 1940	2.79	771
	Mar. 5, 1938	3.91	2,000		Apr. 4, 1940	2.64	636
	Apr. 12, 1938	3.02	982	1941	Mar. 3, 1941	a4.66	-
	Sept. 22, 1938	2.80	740		Apr. 6, 1941	2.60	710
1939	Feb. 15, 1939	a4.15	b700	1942	Mar. 9, 1942	a5.51	-
	Feb. 20, 1939	c5.63	b2,000		Mar. 17, 1942	2.88	779

a Backwater from ice.

b About.

c Occurred on preceding day.

Peak stages and discharges of Canisteo River at Arkport, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	July 18, 1942	2.72	641	1953	May 26, 1953	2.96	652
1943	Dec. 30, 1942	2.83	734	1953	July 2, 1953	2.96	652
	Jan. 25, 1943	a4.57	-	1954	Feb. 17, 1954	2.94	640
	May 26, 1943	2.82	713	1955	Feb. 22, 1955	a2.93	-
1944	Mar. 16, 1944	2.78	575	1955	Mar. 1, 1955	2.85	584
1945	Feb. 23, 1945	a3.97	-	1956	Oct. 15, 1955	3.14	824
	Mar. 3, 1945	2.92	671	1956	Mar. 7, 1956	3.27	865
1946	May 28, 1946	3.11	742	1957	Jan. 22, 1957	a4.33	-
1947	Apr. 5, 1947	2.94	640	1957	Jan. 23, 1957	3.18	700
	June 3, 1947	3.00	678	1957	Feb. 26, 1957	2.94	640
1948	Feb. 20, 1948	a3.07	-	1957	Apr. 6, 1957	3.00	678
	Mar. 22, 1948	2.96	595	1957	May 12, 1957	3.01	685
1949	Feb. 15, 1949	2.87	596	1957	May 19, 1957	2.97	659
1950	Mar. 28, 1950	3.26	858	1958	Apr. 6, 1958	2.97	659
1951	Nov. 5, 1950	3.07	692	1958	June 13, 1958	3.06	719
	Nov. 26, 1950	3.01	685	1959	Jan. 21, 1959	a5.60	-
	Feb. 13, 1951	a4.44	-	1959	Jan. 23, 1959	3.46	998
	Mar. 30, 1951	3.40	956	1960	Oct. 7, 1959	2.96	652
1952	Mar. 11, 1952	3.02	692	1960	Mar. 31, 1960	3.01	685
1953	Mar. 24, 1953	3.00	678	1960	June 15, 1960	3.00	678
				1961	Feb. 26, 1961	3.03	698
				1961	Apr. 25, 1961	3.00	678

a Backwater from ice.

5225. Karr Valley Creek at Almond, N. Y.

Location.--Lat 42°18'40", long 77°45'05", on right bank 500 ft downstream from McHenry Valley Creek, three-quarters of a mile upstream from mouth, and 1 mile southwest of Almond, Allegany County.

Drainage area.--27.6 sq mi.

Gage.--Recording. Datum of gage is 1,353.68 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 1,600 cfs and extended above on basis of slope-area measurement at 5,900 cfs.

Historical data.--Floodmarks from July 1935 flood still distinct in 1942 indicate that a stage of about 11.9 ft occurred at that time.

Remarks.--Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Apr. 15, 1937	4.82	2,570	1944	Mar. 16, 1944	5.50	1,920
1938	Mar. 5, 1938	5.23	3,490	1945	Feb. 16, 1945	a5.75	-
1939	Feb. 15, 1939	a4.96	-	1945	Feb. 22, 1945	a6.52	-
	Feb. 20, 1939	a4.42	1,900	1945	Mar. 3, 1945	5.22	2,100
1940	Mar. 19, 1940	5.02	2,980	1945	Mar. 21, 1945	5.37	2,280
	Mar. 31, 1940	5.8	3,800	1945	May 17, 1945	7.47	4,720
	Apr. 12, 1940	5.26	2,570	1946	Oct. 2, 1945	5.40	2,320
1941	Apr. 5, 1941	5.85	3,250	1946	May 27, 1946	6.82	4,000
1942	Mar. 9, 1942	5.63	2,050	1947	Jan. 30, 1947	5.47	2,400
	Mar. 17, 1942	6.15	2,580	1947	Apr. 5, 1947	6.63	3,790
	May 22, 1942	6.66	3,150	1947	May 29, 1947	5.67	2,640
	July 18, 1942	8.8	5,900	1947	June 3, 1947	7.89	5,180
1943	May 11, 1943	7.95	4,170	1948	Mar. 19, 1948	5.88	2,900
	May 26, 1943	8.35	5,270	1948	Mar. 22, 1948	5.84	2,850
				1948	Apr. 14, 1948	5.41	2,330

a Backwater from ice.

Peak stages and discharges of Karr Valley Creek at Almond, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	May 22, 1949	5.11	1,970	1955	Mar. 1, 1955	6.93	2,960
1950	Mar. 28, 1950	6.32	2,290	1956	Oct. 14, 1955	6.19	2,150
	Sept. 1, 1950	6.56	2,560		Nov. 16, 1955	6.16	2,120
	Sept. 11, 1950	8.21	4,370		Mar. 7, 1956	7.55	3,640
1951	Nov. 4, 1950	6.48	2,470		May 12, 1956	6.06	2,020
	Nov. 25, 1950	7.01	3,050	1957	Jan. 23, 1957	5.87	1,830
	Mar. 30, 1951	6.59	2,590		June 13, 1958	6.35	2,330
1952	Jan. 18, 1952	5.90	1,860	1959	Jan. 21, 1959	6.64	2,640
1953	Mar. 24, 1953	6.31	2,280	1960	June 15, 1960	6.28	2,250
	May 26, 1953	6.21	2,170		Feb. 25, 1961	7.08	2,170
	July 1, 1953	7.40	3,480		Apr. 25, 1961	7.45	2,720
1954	Jan. 27, 1954	5.08	-				
	Apr. 27, 1954	4.78	803				

a Backwater from ice.

5235. Canacadea Creek near Hornell, N. Y.
(Published as "at Hornell" 1924-29, 1938-40, 1943-44)

Location.--Lat 42°20'05", long 77°41'00", on right bank 35 ft downstream from Morris Bridge near Hornell, Steuben County, 1.5 miles downstream from Almond Dam, and 2 miles upstream from mouth.

Drainage area.--58.7 sq mi.

Gage.--Nonrecording at Seneca Street Bridge at different datum prior to Oct. 1, 1929; recording thereafter. June 23, 1938, to Oct. 22, 1940, at Erie Railroad Bridge at different datum. October 1940 to September 1942, at site 185 ft upstream from described site at different datum. October 1942 to September 1944, at site 10 ft downstream from Seneca Street Bridge at datum 1,150.03 ft above mean sea level, adjustment of 1912. At described site and datum since October 1944. Datum of gage is 1,185.68 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 3,400 cfs and extended above by logarithmic plotting.

Bankfull stage.--8 ft.

Historical data.--Flood of July 1935 is greatest known.

Remarks.--Since 1948, high flows regulated by detention in Almond Reservoir 1.5 miles upstream. Base for partial-duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	May 23, 1927	-	a3,730	1943	Dec. 30, 1942	12.5	2,930
1928	Nov. 30, 1927	-	a4,610		May 26, 1943	15.41	6,970
1935	July 8, 1935	-	a21,000	1944	Mar. 16, 1944	12.91	3,390
1939	Feb. 20, 1939	6.99	3,060	1945	Mar. 3, 1945	3.91	3,740
1940	Mar. 30, 1940	6.80	2,740		Mar. 21, 1945	3.82	3,440
	Mar. 31, 1940	8.3	4,780		May 17, 1945	5.14	9,430
	Apr. 3, 1940	7.30	3,380		June 11, 1945	3.35	2,140
	Apr. 4, 1940	7.40	3,510		Sept. 18, 1945	3.18	1,770
1941	Dec. 12, 1940	4.36	2,100	1946	Oct. 2, 1945	3.87	3,610
	Apr. 5, 1941	5.62	3,880		Jan. 6, 1946	3.24	1,880
1942	Mar. 9, 1942	5.34	3,270		May 27, 1946	5.25	5,270
	Mar. 12, 1942	4.51	2,200	1947	Jan. 30, 1947	3.51	2,420
	Mar. 17, 1942	7.35	6,600		Apr. 5, 1947	4.86	4,900
	May 22, 1942	6.08	4,380		May 29, 1947	3.20	1,800
	July 18, 1942	7.07	6,080		June 3, 1947	6.65	6,900
				1948	Feb. 19, 1948	3.96	2,240

a Annual peak only.

Peak stages and discharges of Canacadea Creek near Hornell, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Feb. 28, 1948	3.46	1,580	1955	Mar. 3, 1955	3.68	1,860
	Mar. 16, 1948	3.67	1,850				
	Mar. 19, 1948	5.13	4,070	1956	Oct. 14, 1955	3.64	1,810
	Mar. 22, 1948	5.28	4,330		Oct. 18, 1955	3.90	2,160
	Apr. 14, 1948	4.39	2,880		Nov. 16, 1955	3.62	1,860
1949					Nov. 17, 1955	3.85	1,960
	Feb. 15, 1949	3.18	1,260		Mar. 6, 1956	3.58	1,610
1950					Mar. 9, 1956	4.54	2,980
	Mar. 28, 1950	4.74	3,420		Mar. 10, 1956	4.58	2,800
	Apr. 5, 1950	3.62	1,790		Apr. 3, 1956	3.59	1,620
	Sept. 1, 1950	3.90	2,160	1957			
	Sept. 11, 1950	3.73	1,930		Jan. 23, 1957	3.74	1,810
1951				1958			
	Oct. 9, 1950	3.39	1,500		June 13, 1958	3.46	1,580
	Nov. 4, 1950	4.40	2,890		Apr. 6, 1958	3.45	1,570
	Nov. 25, 1950	4.38	2,860	1959			
	Dec. 8, 1950	3.42	1,530		Jan. 22, 1959	3.88	2,130
	Feb. 21, 1951	3.53	1,670		Jan. 23, 1959	4.32	2,770
	Mar. 31, 1951	3.89	2,150		Jan. 24, 1959	4.01	2,110
	Apr. 12, 1951	3.68	1,860	1960			
1952					Apr. 3, 1960	4.44	2,750
	Apr. 5, 1952	3.39	1,500		Apr. 6, 1960	3.98	2,070
1953					June 15, 1960	4.10	2,240
	Mar. 25, 1953	3.70	1,890	1961			
1954					Feb. 27, 1961	4.15	2,320
	Feb. 17, 1954	2.80	870		Apr. 26, 1961	4.12	2,270

b Backwater from ice.

5245. Canisteo River below Canacadea Creek, at Hornell, N. Y.

Location.--Lat 42°18'50" long 77°39'05", on right bank 235 ft upstream from Erie Railroad bridge in Hornell, Steuben County, 0.25 mile upstream from Crosby Creek, and 1.5 miles downstream from Canacadea Creek.

Drainage area.--159 sq mi.

Gage.--Recording. Datum of gage is 1,131.10 ft above mean sea level (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 3,700 cfs and extended above on basis of critical-depth measurement at 9,340 cfs.

Remarks.--Floodflows regulated by Arkport Reservoir since November 1939, and by Almond Reservoir since October 1948. Base for partial-duration series, 2,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Dec. 30, 1942	10.05	5,260	1948	Mar. 19, 1948	9.74	4,730
	Apr. 28, 1943	8.14	2,670		Mar. 22, 1948	10.19	5,300
	Apr. 30, 1943	8.57	3,180		Apr. 14, 1948	9.48	4,420
	May 8, 1943	9.57	4,380	1949			
	May 11, 1943	10.59	5,620		Feb. 15, 1949	7.66	2,220
	May 26, 1943	13.30	9,340	1950			
1944					Mar. 28, 1950	10.46	5,650
	Mar. 16, 1944	9.89	4,910		Apr. 5, 1950	8.45	3,220
	Apr. 10, 1944	7.97	2,660	1951	Sept. 1, 1950	9.20	4,060
1945							
	Mar. 3, 1945	10.03	5,090	1951	Oct. 9, 1950	8.23	2,970
	Mar. 16, 1945	7.91	2,590		Nov. 4, 1950	10.00	5,050
	Mar. 21, 1945	9.40	4,320		Nov. 25, 1950	9.39	4,290
	May 17, 1945	11.88	7,500		Dec. 3, 1950	7.92	2,630
	Sept. 16, 1945	8.48	3,220		Dec. 8, 1950	8.34	3,090
1946					Jan. 3, 1951	8.13	2,860
	Oct. 2, 1945	9.27	4,160		Feb. 13, 1951	7.97	2,690
	Jan. 6, 1946	8.68	3,460		Feb. 21, 1951	8.70	3,490
	May 27, 1946	11.23	6,650		Mar. 30, 1951	9.24	4,110
	June 1, 1946	8.61	3,450		Apr. 12, 1951	8.49	3,260
1947				1952			
	Jan. 30, 1947	9.33	4,240		Mar. 11, 1952	8.51	3,280
	Apr. 2, 1947	8.17	2,790		Apr. 5, 1952	8.42	3,180
	Apr. 5, 1947	12.10	7,780	1953			
	June 3, 1947	12.43	8,210		Dec. 11, 1952	8.02	2,740
1948					Mar. 24, 1953	8.73	3,520
	Feb. 20, 1948	8.00	2,690	1954			
	Mar. 16, 1948	8.19	2,900		Mar. 1, 1954	7.67	2,360

Peak stages and discharges of Canisteo River below Canacadea Creek,
at Hornell, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 1, 1955	7.90	2,610	1958	Apr. 6, 1958	8.01	3,340
	Mar. 11, 1955	8.05	2,780		June 13, 1958	7.54	2,760
1956	Oct. 14, 1955	7.66	2,900	1959	Jan. 21, 1959	8.67	4,200
	Nov. 16, 1955	8.09	3,450				
	Mar. 7, 1956	9.35	5,080	1960	Dec. 12, 1959	7.43	2,630
	Apr. 4, 1956	8.14	3,510		Apr. 3, 1960	7.96	3,280
	May 12, 1956	7.39	2,580		June 15, 1960	8.89	4,490
1957	Jan. 23, 1957	8.12	3,490	1961	Feb. 25, 1961	7.87	3,160
	Apr. 5, 1957	7.69	2,940		Apr. 25, 1961	8.33	3,560

5250. Bennett Creek at Canisteo, N. Y.

Location.--Lat 42°15'55", long 77°35'45", on left bank 400 ft upstream from Canisteo-Jasper highway bridge, a quarter of a mile east of Canisteo, Steuben County, half a mile upstream from mouth, and half a mile downstream from Purdy Creek.

Drainage area.--95.8 sq mi.

Gage.--Recording. Datum of gage is 1,121.61 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 4,300 cfs and extended above on basis of slope-area measurement at 10,000 cfs.

Remarks.--Base for partial-duration series, 1,170 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Feb. 20, 1939	5.51	4,620	1943	Mar. 12, 1943	3.64	1,740
1940	Oct. 8, 1939	3.71	1,840		Mar. 16, 1943	3.50	1,570
	Mar. 19, 1940	a6.19	-		Apr. 21, 1943	3.17	1,220
	Mar. 31, 1940	5.96	5,390		Apr. 28, 1943	3.66	1,760
	Apr. 4, 1940	5.66	4,940		Apr. 30, 1943	3.19	1,240
	Apr. 8, 1940	3.98	2,430		May 8, 1943	4.02	2,220
	Apr. 12, 1940	4.96	3,890		May 21, 1943	3.56	1,640
					May 26, 1943	4.93	3,540
1941	Dec. 13, 1940	3.68	2,040	1944	Mar. 17, 1944	4.25	2,080
	Mar. 4, 1941	a3.13	b1,300		June 23, 1944	5.50	4,260
	Apr. 5, 1941	6.00	5,450	1945	Mar. 3, 1945	6.13	5,490
1942	Dec. 24, 1941	3.72	1,840		Mar. 16, 1945	4.44	2,380
	Mar. 9, 1942	6.86	6,780		Mar. 17, 1945	4.08	1,880
	Mar. 12, 1942	4.31	2,780		Mar. 21, 1945	5.38	4,040
	Mar. 14, 1942	3.46	1,600		May 17, 1945	8.54	9,460
	Mar. 17, 1942	5.42	4,470	1946	Oct. 2, 1945	5.13	3,810
	May 22, 1942	5.59	4,740		Jan. 6, 1946	4.99	3,580
	July 18, 1942	6.25	5,800		May 27, 1946	8.90	10,000
1943	Dec. 30, 1942	5.83	4,830		June 1, 1946	3.88	1,980
	Jan. 25, 1943	a4.58	-	1947	Apr. 5, 1947	7.35	7,800
	Feb. 20, 1943	a3.97	-		June 3, 1947	7.45	7,960
	Feb. 24, 1943	3.63	1,810				

a Backwater from ice.

b About.

5255. Canisteo River at West Cameron, N. Y.

Location.--Lat 42°13'20", long 77°25'05", on right bank 250 ft downstream from highway bridge, a quarter of a mile southwest of West Cameron, Steuben County, and 1½ miles north of Cameron.

Drainage area.--342 sq mi.

Gage.--Nonrecording on highway bridge 250 ft upstream prior to Oct. 1, 1931; recording thereafter. Datum of gage is 1,037.71 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 13,000 cfs and extended above on basis of slope-area measurement at 35,000 cfs.

Historical data.--Flood of July 8, 1935, is greatest known.

Remarks.--Base for partial-duration series, 6,100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	May 24, 1931	-	4,000	1950	Mar. 28, 1950	16.39	14,000
1935	July 8, 1935	-	≈35,000		Apr. 4, 1950	12.97	8,100
1937	June 22, 1937	11.45	6,440	1951	Nov. 5, 1950	13.00	8,150
1938	Jan. 25, 1938	11.30	6,220		Nov. 26, 1950	16.17	13,600
	Mar. 6, 1938	14.16	11,400		Dec. 8, 1950	11.65	6,240
1939	Feb. 20, 1939	14.43	10,900		Mar. 30, 1951	16.30	13,800
1940	Mar. 31, 1940	15.42	11,500	1952	Jan. 1, 1952	b12.75	-
	Apr. 4, 1940	13.62	8,870		Mar. 11, 1952	12.32	7,150
	Apr. 12, 1940	12.63	7,520		Apr. 5, 1952	12.44	7,320
1941	Apr. 5, 1941	14.46	10,100	1953	Dec. 11, 1952	11.85	6,490
1942	Mar. 9, 1942	15.65	12,600		Mar. 24, 1953	14.29	10,200
	Mar. 17, 1942	14.88	11,200	1954	Mar. 1, 1954	11.61	6,150
	May 22, 1942	12.94	8,060	1955	Mar. 1, 1955	13.22	8,480
1943	Dec. 30, 1942	15.13	11,600	1956	Oct. 15, 1955	14.09	9,840
	May 26, 1943	14.27	10,100		Nov. 16, 1955	13.72	9,250
1944	Mar. 17, 1944	10.82	5,410		Mar. 7, 1956	17.19	15,600
1945	Mar. 3, 1945	14.14	9,920		Apr. 4, 1956	13.77	9,330
	Mar. 22, 1945	11.99	6,690	1957	Jan. 23, 1957	12.73	7,740
	May 18, 1945	14.84	11,100	1958	Apr. 7, 1958	12.71	7,720
1946	Jan. 6, 1946	12.65	7,620		Apr. 22, 1958	13.07	8,260
	May 28, 1946	18.09	17,600	1959	Jan. 22, 1959	15.60	12,500
1947	Apr. 5, 1947	15.00	11,400		Apr. 2, 1959	12.09	6,830
	June 3, 1947	15.95	13,200	1960	Mar. 30, 1960	13.90	9,540
1948	Mar. 20, 1948	12.32	7,150		May 23, 1960	11.62	6,170
	Mar. 22, 1948	15.28	11,900		June 15, 1960	15.72	12,700
	Apr. 14, 1948	12.31	7,130	1961	Feb. 26, 1961	14.05	9,780
1949	Jan. 6, 1949	9.41	3,600		Apr. 25, 1961	13.63	9,110

a Annual peak only, from slope-area measurement.

b Backwater from ice.

5260. Tuscarora Creek near South Addison, N. Y.

Location.--Lat 42°04'00", long 77°17'00", on left bank 0.9 mile downstream from Elk Creek, 1¼ miles upstream from South Addison, Steuben County, and 3½ miles southwest of Addison.

Drainage area.--114 sq mi.

Gage.--Recording and concrete control. Datum of gage is 1,059.18 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 2,500 cfs.

Peak stages and discharges of Tuscarora Creek near South Addison, N. Y.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Apr. 15, 1937	4.43	2,850	1948	Mar. 22, 1948	7.12	8,930
	Apr. 22, 1937	4.27	2,510		Apr. 14, 1948	5.40	3,720
	May 6, 1937	4.60	3,240	1949	Dec. 30, 1948	3.77	1,350
	June 21, 1937	6.26	9,200				
1938	Nov. 13, 1937	6.41	9,950	1950	Mar. 28, 1950	7.32	9,820
	Jan. 24, 1938	5.10	4,600		Apr. 4, 1950	4.81	2,680
	Mar. 5, 1938	5.96	7,200	1951	Oct. 9, 1950	6.37	6,090
	Apr. 12, 1938	4.72	3,050		Nov. 25, 1950	a7.66	9,400
1939	Feb. 20, 1939	5.75	6,340		Dec. 4, 1950	4.92	2,850
					Dec. 8, 1950	a5.83	4,600
1940	Mar. 30, 1940	5.65	5,040		Jan. 4, 1951	a4.92	2,700
	Mar. 31, 1940	7.15	11,000		Feb. 13, 1951	a4.93	2,600
	Apr. 3, 1940	5.91	6,340		Feb. 21, 1951	a5.02	2,800
	Apr. 4, 1940	5.53	5,010		Mar. 30, 1951	a8.79	14,000
	Apr. 8, 1940	4.90	3,230		Apr. 13, 1951	5.81	4,600
	Apr. 12, 1940	4.65	2,700	1952	Jan. 18, 1952	5.85	4,460
					Jan. 27, 1952	5.23	3,040
1941	Apr. 5, 1941	5.74	6,300		Mar. 11, 1952	5.71	4,090
					Apr. 5, 1952	6.41	6,180
1942	Mar. 9, 1942	6.28	7,750	1953	Dec. 11, 1952	5.47	3,520
	Mar. 17, 1942	4.88	3,130		Mar. 24, 1953	6.77	7,470
	May 22, 1942	5.35	4,340	1954	Mar. 1, 1954	6.65	7,020
1943	Dec. 30, 1942	6.88	10,300		June 1, 1954	5.38	3,330
	Mar. 12, 1943	4.84	3,030				
	Apr. 21, 1943	4.94	3,280	1955	Mar. 1, 1955	5.47	3,520
	Apr. 28, 1943	4.92	3,230		Mar. 11, 1955	6.11	5,220
	May 8, 1943	5.51	4,940		Mar. 22, 1955	5.19	2,960
	May 12, 1943	4.61	2,520	1956	Oct. 14, 1955	7.61	11,000
1944	May 7, 1944	5.37	4,500		Nov. 16, 1955	5.44	3,460
	June 24, 1944	4.88	3,130		Mar. 7, 1956	7.00	8,400
1945	Mar. 3, 1945	6.46	8,180		Apr. 3, 1956	5.60	3,820
	Mar. 21, 1945	4.96	3,330	1957	Jan. 22, 1957	a5.03	-
	May 11, 1945	4.62	2,540		Apr. 6, 1957	4.99	2,720
	May 18, 1945	5.39	4,560	1958	Apr. 6, 1958	5.20	3,090
1946	Jan. 5, 1946	5.49	5,180		Apr. 22, 1958	5.15	3,000
	May 27, 1946	8.44	14,000	1959	Jan. 22, 1959	6.5	5,600
	June 2, 1946	4.86	2,760		Apr. 2, 1959	5.10	2,910
1947	Jan. 15, 1947	4.72	2,540	1960	Mar. 31, 1960	5.92	4,680
	Jan. 30, 1947	5.28	3,490		May 23, 1960	5.44	3,560
	Apr. 5, 1947	7.53	10,900		June 15, 1960	5.50	3,690
	May 22, 1947	6.00	5,070				
	June 3, 1947	7.60	11,000	1961	Feb. 25, 1961	6.54	6,630
	Aug. 21, 1947	4.70	2,510		Apr. 16, 1961	5.15	3,000
	Sept. 2, 1947	4.77	2,620		Apr. 28, 1961	5.32	3,320
1948	Feb. 19, 1948	4.78	2,630				
	Mar. 16, 1948	5.19	3,320				

a Backwater from ice.

5265. Tioga River near Erwins, N. Y.

Location.--Lat 42°07'15", long 77°07'45", on right bank 20 ft downstream from highway bridge, half a mile downstream from Erwins, Steuben County, and 3 miles upstream from confluence with Cohocton River.

Drainage area.--1,370 sq mi, approximately.

Gage.--Nonrecording prior to June 21, 1931; recording thereafter. Datum of gage is 931.24 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 44,000 cfs and extended above on basis of slope-area measurements at gage heights 18.82 and 23.54 ft.

Remarks.--Base for partial-duration series, 17,000 cfs.

Peak stages and discharges of Tioga River near Erwins, N. Y.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1919	May 10, 1919	11.05	21,300	1943	Mar. 12, 1943	10.88	19,000
	May 22, 1919	17.56	a53,100		Apr. 21, 1943	12.87	26,300
1920	Mar. 11, 1920	15.0	39,300		May 12, 1943	11.39	20,800
	July 24, 1920	12.45	27,100		May 21, 1943	10.60	18,000
1921	Feb. 17, 1921	b10.02	17,200	1944	May 7, 1944	12.30	24,000
1922	Nov. 28, 1921	11.22	21,900		June 24, 1944	10.37	17,200
1923	Mar. 5, 1923	10.2	17,900	1945	Mar. 4, 1945	15.98	40,300
1924	Jan. 1, 1924	9.99	17,100		Mar. 22, 1945	11.89	22,500
	Jan. 11, 1924	10.00	17,200		May 18, 1945	13.81	30,100
	Jan. 17, 1924	11.38	22,600	1946	May 28, 1946	23.54	94,000
	Apr. 7, 1924	15.00	39,300		June 2, 1946	11.55	21,300
	May 12, 1924	12.60	27,800	1947	Apr. 5, 1947	17.79	50,700
1925	Oct. 1, 1924	14.00	34,300		May 22, 1947	12.23	23,700
	Feb. 12, 1925	14.20	35,300		June 3, 1947	-	c21,400
1926	Apr. 9, 1926	9.6	15,800	1948	Feb. 20, 1948	11.25	20,300
1927	Nov. 17, 1926	12.9	a29,200		Mar. 17, 1948	12.57	25,100
	Mar. 8, 1927	10.82	20,400		Mar. 20, 1948	12.34	24,200
	Mar. 21, 1927	10.5	19,100		Mar. 22, 1948	17.84	51,100
1928	Oct. 20, 1927	11.0	21,100		Apr. 14, 1948	13.05	27,000
	Nov. 18, 1927	13.98	34,200	1949	Dec. 30, 1948	9.39	14,300
	Dec. 1, 1927	15.0	39,300	1950	Mar. 29, 1950	17.60	49,400
	Dec. 14, 1927	10.10	17,500		Apr. 5, 1950	10.92	19,100
	Feb. 15, 1928	10.70	19,900	1951	Oct. 10, 1950	11.06	19,600
	Apr. 30, 1928	11.45	22,900		Nov. 5, 1950	11.19	20,100
	June 6, 1928	10.40	18,700		Nov. 26, 1950	19.00	58,500
1929	Mar. 15, 1929	12.15	25,600		Dec. 4, 1950	11.71	21,900
	Apr. 6, 1929	10.01	17,000		Dec. 8, 1950	12.49	24,800
	Apr. 21, 1929	16.8	a48,900		Jan. 4, 1951	10.73	18,500
1930	Feb. 26, 1930	9.8	16,300		Feb. 13, 1951	10.68	18,300
1931	May 24, 1931	9.0	13,600		Mar. 31, 1951	18.75	56,200
1932	Feb. 11, 1932	10.68	19,700		Apr. 13, 1951	11.51	21,200
	Apr. 1, 1932	12.00	25,000	1952	Jan. 18, 1952	11.05	19,600
	May 11, 1932	10.71	19,800		Jan. 27, 1952	11.14	19,900
1933	Aug. 24, 1933	11.29	22,200		Mar. 11, 1952	16.81	44,600
1934	Mar. 27, 1934	10.99	21,000		Apr. 6, 1952	13.51	28,800
1935	July 8, 1935	16.44	42,600	1953	Dec. 11, 1952	13.92	30,600
1936	Mar. 5, 1936	b13.07	-		Mar. 24, 1953	14.99	35,500
	Mar. 12, 1936	18.66	55,400		May 26, 1953	10.70	18,400
	Mar. 18, 1936	17.50	48,700	1954	Mar. 2, 1954	14.30	32,400
	Mar. 19, 1936	14.85	34,800		May 4, 1954	10.79	18,700
	Mar. 26, 1936	10.95	19,200		June 2, 1954	10.76	18,600
1937	Jan. 22, 1937	10.90	19,000	1955	Mar. 1, 1955	11.22	20,200
	Jan. 25, 1937	10.65	18,200	1956	Oct. 14, 1955	19.00	58,500
	Aug. 27, 1937	10.50	17,600		Oct. 17, 1955	11.98	22,800
1938	Oct. 29, 1937	10.35	17,200		Nov. 16, 1955	12.26	23,800
	Nov. 13, 1937	14.27	32,200		Mar. 7, 1956	16.50	42,900
	Jan. 25, 1938	11.55	21,300		Apr. 4, 1956	13.72	29,700
	Mar. 6, 1938	12.90	26,400	1957	Jan. 23, 1957	12.92	26,500
1939	Feb. 20, 1939	16.63	43,600		Apr. 6, 1957	13.42	28,500
1940	Apr. 1, 1940	18.84	57,100	1958	Apr. 7, 1958	13.65	29,400
	Apr. 4, 1940	16.10	40,900		Apr. 22, 1958	11.14	19,900
	Apr. 9, 1940	12.22	23,700		May 8, 1958	10.75	18,500
	Apr. 12, 1940	10.72	18,400	1959	Jan. 22, 1959	17.38	47,900
1941	Apr. 15, 1941	14.87	34,000		Feb. 10, 1959	12.37	24,300
1942	Mar. 9, 1942	16.89	44,900		Mar. 6, 1959	11.92	22,600
	Mar. 18, 1942	11.49	21,100		Apr. 2, 1959	11.24	20,200
	May 23, 1942	12.70	25,600	1960	Apr. 1, 1960	16.34	42,100
1943	Dec. 30, 1942	17.68	50,000		Apr. 4, 1960	10.41	17,300
					May 9, 1960	10.61	18,000
					May 23, 1960	10.73	18,500
					June 15, 1960	11.09	19,700
				1961	Feb. 26, 1961	14.90	35,000
					Apr. 16, 1961	12.24	23,800
					Apr. 25, 1961	16.20	41,400

a Revised.

b Backwater from ice.

c Daily mean discharge; estimated.

5270. Cohocton River at Cohocton, N. Y.

Location.--Lat 42°30'00", long 77°30'00", on left bank 450 ft downstream from highway bridge at Cohocton, Steuben County, and 800 ft downstream from small tributary.

Drainage area.--53.3 sq mi.

Gage.--Recording. Datum of gage is 1,275.49 ft above mean sea level, datum of 1929, supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Dec. 6, 1950	4.45	342	1956	Apr. 5, 1956	5.53	629
	Apr. 1, 1951	4.89	444				
1952	Mer. 13, 1952	4.43	353	1957	May 22, 1957	4.02	282
	Apr. 7, 1952	4.27	319				
	Apr. 16, 1952	4.20	306	1958	Apr. 7, 1958	5.72	732
1953	Mer. 26, 1953	4.27	319		Apr. 17, 1958	4.45	417
	July 1, 1953	4.31	327		Apr. 22, 1958	3.95	308
1954	Apr. 29, 1954	3.74	225	1959	Jan. 22, 1959	4.97	-
					Apr. 3, 1959	4.69	453
1955	Mar. 1, 1955	4.95	456	1960	Dec. 14, 1959	4.43	386
	Mer. 13, 1955	4.38	332		Apr. 1, 1960	6.23	883
1956	Oct. 17, 1955	4.60	376	1961	Feb. 26, 1961	5.03	542
	Mer. 8, 1956	6.19	841		Apr. 17, 1961	4.11	319
					Apr. 26, 1961	4.89	505

a Backwater from ice.

5275. Cohocton River at Avoca, N. Y.

Location.--Lat 42°23'50", long 77°25'10", 15 feet below highway bridge, three-quarters of a mile below Avoca, Steuben County, and 4,200 feet above mouths of Salmon and Goff Creeks.

Drainage area.--157 sq mi.

Gage.--Recording.

Stage-discharge relation.--Defined by current-meter measurements below 2,700 cfs.

Remarks.--Base for partial-duration series, 1,650 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Feb. 20, 1939	8.14	-	1942	July 18, 1942	6.75	1,780
	Feb. 20, 1939	7.88	3,560				
	Mar. 27, 1939	6.01	1,680	1943	Dec. 30, 1942	7.92	2,790
1940	Mar. 31, 1940	8.30	3,500		Apr. 30, 1943	6.72	1,760
	Apr. 4, 1940	8.22	3,390		May 8, 1943	6.60	1,680
	Apr. 9, 1940	7.60	2,650	1944	May 26, 1943	8.32	3,200
	Apr. 12, 1940	7.78	2,840		Mar. 16, 1944	7.49	2,250
1941	Apr. 5, 1941	8.22	3,390	1945	Mar. 3, 1945	7.41	2,190
					Mar. 17, 1945	7.62	2,370
1942	Mar. 9, 1942	8.37	3,600		Mar. 22, 1945	7.71	2,450
	Mar. 17, 1942	8.88	3,880				

a Backwater from ice.

5280. Fivemile Creek near Kanona, N. Y.

Location.--Lat 42°23'15", long 77°21'30", on left bank just downstream from highway bridge, 1 $\frac{1}{4}$ miles upstream from mouth and Kanona, Steuben County.

Drainage area.--68.0 sq mi.

Gage.--Recording. Datum of gage is 1,171.30 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 1,400 cfs.

Bankfull stage.--2 ft.

Remarks.--Base for partial-duration series, 880 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Apr. 6, 1937	3.23	713	1951	Dec. 4, 1950	3.61	1,270
1938	Jan. 25, 1938	a3.64	890		Feb. 20, 1951	3.79	-
	Mar. 6, 1938	3.57	1,160		Feb. 22, 1951	3.54	1,190
					Mar. 30, 1951	3.93	1,700
1939	Feb. 20, 1939	a4.22	1,600		June 14, 1951	3.43	1,070
	Feb. 20, 1939	a5.05	-	1952	Jan. 1, 1952	a3.92	-
	Mar. 26, 1939	3.39	902		Mar. 11, 1952	3.64	1,310
1940	Mar. 31, 1940	a6.10	-		Apr. 6, 1952	3.62	1,280
	Apr. 4, 1940	4.05	2,280	1953	Dec. 11, 1952	3.54	1,190
	Apr. 12, 1940	3.40	1,040		Mar. 24, 1953	3.69	1,370
1941	Apr. 6, 1941	4.01	2,190	1954	Feb. 17, 1954	3.62	b1,280
1942	Mar. 9, 1942	a4.87	-	1955	Mar. 1, 1955	4.02	1,830
	Mar. 9, 1942	a3.81	1,060		Mar. 12, 1955	3.38	946
	Mar. 17, 1942	a4.19	2,200	1956	Oct. 14, 1955	4.08	1,820
1943	Dec. 30, 1942	3.81	1,900		Nov. 16, 1955	3.37	936
1944	Mar. 16, 1944	a3.88	-		Mar. 7, 1956	4.59	2,680
	Mar. 17, 1944	3.30	975		Mar. 12, 1956	3.33	900
1945	Mar. 17, 1945	3.47	1,320		Apr. 4, 1956	4.21	2,020
	Mar. 22, 1945	3.58	1,490	1957	Jan. 23, 1957	3.46	1,030
1946	Jan. 6, 1946	a4.21	-		Apr. 6, 1957	3.57	1,150
	Jan. 6, 1946	3.61	1,360		May 20, 1957	3.64	1,230
	May 28, 1946	3.22	909	1958	Apr. 7, 1958	3.96	1,640
1947	Jan. 30, 1947	3.20	889		Apr. 22, 1958	3.39	957
	Apr. 5, 1947	3.48	1,200	1959	Jan. 22, 1959	a4.08	1,250
	June 3, 1947	3.81	1,660		Mar. 7, 1959	a5.07	-
1948	Mar. 16, 1948	3.41	1,110		Apr. 2, 1959	3.71	1,310
	Mar. 22, 1948	3.57	1,310	1960	Dec. 13, 1959	3.56	1,130
1949	Jan. 6, 1949	a3.66	-		Feb. 11, 1960	3.39	957
	Jan. 6, 1949	3.23	919		Mar. 31, 1960	4.46	2,440
1950	Mar. 28, 1950	4.38	2,620		Apr. 4, 1960	3.60	1,180
	Apr. 5, 1950	3.80	1,510		May 9, 1960	3.33	900
1951	Nov. 5, 1950	3.34	978		June 15, 1960	3.86	1,510
	Nov. 26, 1950	3.42	1,060	1961	Feb. 25, 1961	4.53	2,570
					Apr. 16, 1961	3.31	881
					Apr. 25, 1961	3.99	1,690

a Backwater from ice.

b Release from upstream ice jam.

5290. Mud Creek near Savona, N. Y.
(Published as "at Savona" prior to January 1920)

Location.--Lat 42°18'30", long 77°11'50", on left bank just upstream from small tributary entering from east, 2 miles upstream from Savona, Steuben County, and mouth.

Drainage area.--76.1 sq mi.

Gage.--Nonrecording at site $1\frac{1}{2}$ miles downstream at different datum July 1918 to December 1919; recording and concrete control since March 1937. Datum of gage is 1,049.63 ft above mean sea level, adjustment of 1912 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Flow regulated by Lake Lamoka. During each year, a large part of the flow from 45 sq mi of drainage area is diverted into Keuka Lake (St. Lawrence River basin) for power development. Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1919	May 23, 1919	-	852	1948	Mar. 22, 1948	5.11	1,030
					Apr. 15, 1948	4.45	756
1937	Apr. 16, 1937	4.06	588	1949	Jan. 6, 1949	2.66	248
1938	Jan. 25, 1938	3.76	501	1950	Mar. 29, 1950	6.22	1,610
	Mar. 6, 1938	4.58	763	1951	Nov. 26, 1950	4.99	976
1939	Feb. 20, 1939	5.45	1,160		Dec. 5, 1950	4.71	857
1940	Apr. 1, 1940	56.12	1,200		Dec. 8, 1950	4.03	610
	Apr. 5, 1940	5.59	1,220		Feb. 22, 1951	4.48	768
1941	Apr. 6, 1941	4.93	904		Mar. 31, 1951	5.49	1,210
1942	Mar. 9, 1942	55.83	1,020	1952	Mar. 11, 1952	4.75	874
	Mar. 15, 1942	3.82	524		Apr. 6, 1952	4.10	633
	Mar. 17, 1942	5.49	1,180		May 26, 1952	3.76	525
1943	Dec. 30, 1942	5.87	1,360	1953	Dec. 11, 1952	4.42	745
	Feb. 25, 1943	3.74	517		Mar. 24, 1953	4.53	786
	Apr. 22, 1943	4.19	663	1954	Apr. 29, 1954	3.45	436
	May 1, 1943	3.98	594	1955	Mar. 1, 1955	4.44	697
	May 9, 1943	4.46	557	1956	Oct. 16, 1955	6.05	1,380
	May 13, 1943	4.36	721		Oct. 31, 1955	3.84	507
	May 19, 1943	3.69	502		Nov. 17, 1955	4.20	618
1944	Mar. 16, 1944	54.63	680		Mar. 7, 1956	6.89	1,860
	Mar. 24, 1944	3.68	500		Apr. 4, 1956	5.06	926
	May 8, 1944	4.53	760	1957	Apr. 6, 1957	4.49	714
1945	Mar. 4, 1945	54.36	580		May 20, 1957	3.95	540
	Mar. 6, 1945	4.06	587	1958	Apr. 3, 1958	5.05	890
	Mar. 22, 1945	3.95	553		Apr. 23, 1958	4.31	621
	Sept. 19, 1945	4.21	634	1959	Jan. 22, 1959	4.79	789
1946	Jan. 8, 1946	4.32	672	1960	Dec. 13, 1959	4.11	558
	May 28, 1946	5.49	1,160		Apr. 1, 1960	5.75	1,200
	June 2, 1946	4.45	720		May 10, 1960	4.25	602
1947	Apr. 6, 1947	5.06	967	1961	Feb. 26, 1961	5.66	1,160
	May 22, 1947	5.15	1,010		Apr. 17, 1961	3.95	510
	June 3, 1947	6.21	1,610		Apr. 25, 1961	5.53	1,100
1948	Mar. 16, 1948	54.65	580				
	Mar. 20, 1948	4.40	717				

^a Backwater from ice.

5295. Cohocton River near Campbell, N. Y.

Location.--Lat 42°15'10", long 77°13'00", on left bank just downstream from highway bridge, $1\frac{1}{2}$ miles upstream from Michigan Creek, and 2 miles upstream from Campbell, Steuben County.

Drainage area.--472 sq mi.

Gage.--Nonrecording prior to Mar. 5, 1937; recording thereafter. Datum of gage is 1,016.58 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 11,000 cfs and extended above on basis of velocity-area and slope-area measurements.

Remarks.--Base for partial-duration series, 4,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1919	May 23, 1919	7.08	8,250	1945	May 18, 1945	5.26	4,300
					Sept. 19, 1945	5.72	5,210
1920	Mar. 12, 1920	8.62	-				
	Mar. 13, 1920	7.4	9,250	1946	Jan. 6, 1946	6.35	6,380
					May 28, 1946	7.85	10,700
1921	Feb. 17, 1921	4.48	3,290		June 1, 1946	5.34	4,580
1922	June 21, 1922	5.58	5,150	1947	Jan. 31, 1947	5.40	4,730
					Apr. 5, 1947	7.38	8,920
1923	Mar. 5, 1923	6.75	7,300		May 22, 1947	5.76	5,320
					June 3, 1947	8.10	11,700
1924	Apr. 7, 1924	6.72	7,240		Aug. 21, 1947	6.34	6,370
1925	Feb. 12, 1925	7.4	8,630	1948	Mar. 17, 1948	5.95	5,650
					Mar. 20, 1948	6.48	6,640
1926	Mar. 21, 1926	8.3	-		Mar. 22, 1948	7.18	8,290
	Mar. 25, 1926	5.7	5,350		Apr. 14, 1948	6.12	5,960
1927	May 24, 1927	7.08	8,250	1949	Feb. 15, 1949	4.07	2,850
1928	Dec. 1, 1927	9.5	19,700	1950	Mar. 29, 1950	8.38	13,000
					Apr. 5, 1950	6.46	6,600
1929	Apr. 21, 1929	7.8	9,950				
				1951	Nov. 5, 1950	5.67	5,170
1930	Feb. 25, 1930	5.0	4,170		Nov. 26, 1950	6.27	6,230
	Mar. 18, 1930	5.0	4,170		Dec. 4, 1950	5.74	5,290
					Dec. 8, 1950	5.39	4,710
1931	Mar. 29, 1931	5.0	4,200		Feb. 21, 1951	5.24	4,480
					Mar. 31, 1951	7.76	10,300
1932	Mar. 31, 1932	6.2	6,380	1952	Mar. 11, 1952	6.81	7,330
1933	Mar. 15, 1933	5.4	4,870		Apr. 6, 1952	6.17	6,050
1934	Jan. 2, 1934	8.7	-	1953	Dec. 11, 1952	6.07	5,870
	Mar. 4, 1934	5.8	5,600		Mar. 24, 1953	6.98	7,740
1935	July 8, 1935	11.6	41,100	1954	Mar. 2, 1954	5.38	4,700
1936	Mar. 12, 1936	8.8	16,200	1955	Mar. 1, 1955	7.11	8,090
					Mar. 11, 1955	5.37	4,680
1937	Jan. 15, 1937	5.1	4,170	1956	Oct. 15, 1955	7.52	9,230
					Nov. 16, 1955	6.15	5,910
1938	Jan. 25, 1938	8.05	5,900		Mar. 7, 1956	8.79	14,900
	Mar. 6, 1938	6.43	7,070		Mar. 11, 1956	6.22	6,040
1939	Feb. 20, 1939	8.15	10,600		Apr. 4, 1956	7.75	10,100
	Mar. 27, 1939	5.13	4,420	1957	Jan. 23, 1957	8.14	-
1940	Apr. 1, 1940	8.15	12,000		Apr. 6, 1957	5.45	4,710
	Apr. 12, 1940	6.70	7,060		May 20, 1957	5.23	4,360
1941	Apr. 5, 1941	7.66	9,940	1958	Apr. 7, 1958	7.06	7,820
					Apr. 22, 1958	6.03	5,890
1942	Mar. 9, 1942	7.83	10,600	1959	Jan. 22, 1959	7.73	10,000
	Mar. 17, 1942	8.09	11,700		Mar. 6, 1959	5.32	4,500
1943	Dec. 30, 1942	7.77	10,400		Apr. 2, 1959	6.03	5,890
	May 9, 1943	5.41	4,560	1960	Dec. 13, 1959	5.46	4,730
	May 26, 1943	5.76	5,170		Mar. 31, 1960	7.87	10,600
1944	Mar. 16, 1944	6.21	6,110		Apr. 4, 1960	5.89	5,440
	May 7, 1944	5.20	4,360		June 15, 1960	6.20	6,000
1945	Mar. 4, 1945	6.80	7,310	1961	Feb. 26, 1961	7.80	10,300
	Mar. 17, 1945	5.77	5,300		Apr. 18, 1961	5.35	4,550
	Mar. 22, 1945	6.67	7,030		Apr. 25, 1961	8.03	11,200

a Backwater from ice.

5305. Newtown Creek at Elmira, N. Y.

Location.--Lat 42°06'15", long 76°47'55", on left bank 200 ft downstream from Linden Place Bridge in Elmira, Chemung County, and 1½ miles upstream from mouth.

Drainage area.--79.8 sq mi.

Gage.--Recording. Datum of gage is 834.53 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 1,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Sept. 15, 1938	11.25	2,250	1950	Mar. 28, 1950	16.02	2,740
	Sept. 22, 1938	11.31	2,270		Sept. 1, 1950	10.73	1,260
1939	Feb. 20, 1939	12.36	2,770	1951	Nov. 26, 1950	14.43	2,260
					Dec. 4, 1950	11.23	1,390
1940	Mar. 31, 1940	13.84	3,150		Dec. 8, 1950	10.81	1,280
	Apr. 2, 1940	9.05	1,380		Mar. 31, 1951	13.00	1,810
	Apr. 4, 1940	12.79	2,750	1952	Jan. 27, 1952	10.94	1,400
	Apr. 8, 1940	11.68	2,300		Mar. 11, 1952	13.56	2,300
	May 28, 1940	11.30	2,160		Apr. 5, 1952	10.58	1,400
1941	Dec. 28, 1940	11.31	1,900		May 26, 1952	10.21	1,290
	Apr. 5, 1941	11.93	2,090	1953	Dec. 11, 1952	15.89	3,000
1942	Mar. 9, 1942	13.08	2,530		Mar. 24, 1953	13.99	2,430
	Mar. 17, 1942	11.86	2,050	1954	Feb. 17, 1954	10.56	1,400
	May 22, 1942	9.90	1,420		Mar. 2, 1954	10.93	1,510
	Aug. 14, 1942	13.60	2,740		May 4, 1954	12.34	1,930
1943	Dec. 30, 1942	15.23	3,460	1955	Dec. 30, 1954	11.00	1,460
	Mar. 12, 1943	9.49	1,300		Mar. 1, 1955	10.79	1,470
	Apr. 21, 1943	9.75	1,380		Mar. 4, 1955	10.62	1,420
	May 12, 1943	10.67	1,650	1956	Oct. 14, 1955	15.91	3,000
	May 22, 1943	9.68	1,350		Oct. 16, 1955	17.06	3,350
1944	May 26, 1943	10.25	1,520		Nov. 16, 1955	10.98	1,520
	Oct. 28, 1943	10.37	1,560		Mar. 7, 1956	14.61	2,610
	Nov. 9, 1943	12.76	2,400		Apr. 4, 1956	11.36	1,640
	Mar. 17, 1944	10.79	1,690	1957	Dec. 23, 1956	10.45	1,360
	May 7, 1944	13.21	2,580		Jan. 23, 1957	10.05	1,240
1945	June 19, 1944	11.89	2,060		Apr. 6, 1957	12.31	1,920
	Mar. 3, 1945	13.38	2,140	1958	Apr. 7, 1958	12.05	1,720
	May 18, 1945	12.98	2,020		May 7, 1958	10.10	1,260
1946	Nov. 22, 1945	10.26	1,280		July 8, 1958	12.62	2,020
	Mar. 9, 1946	10.12	1,240	1959	Jan. 22, 1959	15.06	2,750
	May 28, 1946	15.54	2,790		Nov. 28, 1959	11.29	1,620
	Aug. 1, 1946	10.14	1,240		Dec. 13, 1959	10.75	1,460
1947	Mar. 25, 1947	10.10	1,240		Feb. 11, 1960	11.17	1,580
	Apr. 5, 1947	15.15	2,680		Apr. 1, 1960	14.25	2,500
	May 22, 1947	14.37	2,440		May 9, 1960	11.44	1,660
	May 29, 1947	11.39	1,550		May 24, 1960	10.62	1,420
	June 3, 1947	16.01	2,930	1961	Feb. 26, 1961	14.31	2,760
1948	Mar. 16, 1948	13.38	2,140		Apr. 16, 1961	10.96	1,590
	Mar. 20, 1948	11.20	1,500		Apr. 25, 1961	15.26	3,090
	Mar. 22, 1948	13.59	2,110		May 10, 1961	10.18	1,330
	Apr. 14, 1948	11.32	1,530		June 8, 1961	10.39	1,400
1949	Jan. 6, 1949	10.11	1,220				

5310. Chemung River at Chemung, N. Y.

Location.--Lat 42°00'10", long 76°38'00", on right bank 60 ft downstream from highway bridge, three-quarters of a mile southwest of Chemung, Chemung County, and 10 miles upstream from mouth.

Drainage area.--2,530 sq mi, approximately.

Gage.--Nonrecording prior to Jan. 10, 1930; recording thereafter. Datum of gage is 778.63 ft above mean sea level, adjustment of 1912 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 65,000 cfs and extended above on basis of slope-area and contracted-opening measurements at gage height 23.97 ft.

Remarks.--Base for partial-duration series, 30,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Feb. 8, 1904	18.4	-	1924	Apr. 7, 1924	15.55	49,700
	Mar. 8, 1904	17.6	63,200		Apr. 19, 1924	12.45	31,200
	Mar. 23, 1904	14.3	41,000		May 13, 1924	13.66	37,900
	Mar. 26, 1904	14.2	40,400	1925	Oct. 1, 1924	14.55	43,200
1905	Mar. 20, 1905	14.9	44,600		Feb. 12, 1925	15.2	47,400
	Mar. 26, 1905	13.1	34,200	1926	Mar. 26, 1926	12.1	29,500
1906	Mar. 28, 1906	12.8	32,700	1927	Nov. 17, 1926	14.1	40,500
1907	Apr. 27, 1907	10.7	22,670		May 24, 1927	12.28	30,400
1908	Dec. 24, 1907	12.35	30,400	1928	Nov. 18, 1927	15.32	47,900
	Feb. 16, 1908	14.95	44,900		Dec. 2, 1927	14.9	45,400
	Mar. 14, 1908	13.48	36,300		Feb. 15, 1928	12.5	32,200
1909	May 2, 1909	15.85	50,700		May 1, 1928	13.82	39,500
1910	Mar. 1, 1910	15.15	46,200	1929	Mar. 15, 1929	12.90	33,400
	Mar. 7, 1910	12.37	30,600		Apr. 21, 1929	17.1	57,400
	Apr. 25, 1910	16.76	57,000	1930	Feb. 26, 1930	11.7	26,300
1911	Mar. 28, 1911	9.44	17,000	1931	Mar. 29, 1931	10.69	21,600
	Apr. 7, 1911	9.70	18,000	1932	Apr. 1, 1932	14.13	39,400
1912	Mar. 16, 1912	13.35	35,600		May 12, 1932	12.46	30,200
	Mar. 30, 1912	15.98	51,600	1933	Aug. 25, 1933	13.03	33,400
1913	Mar. 26, 1913	16.5	52,500	1934	Mar. 4, 1934	13.00	32,300
	Apr. 29, 1913	14.47	42,000	1935	July 9, 1935	19.45	86,000
1914	Mar. 29, 1914	17.00	59,900	1936	Mar. 12, 1936	19.57	87,300
	Apr. 9, 1914	13.20	35,300		Mar. 18, 1936	18.61	76,700
	May 6, 1914	13.02	34,300		Mar. 26, 1936	12.92	30,200
	May 13, 1914	16.35	55,200	1937	Aug. 27, 1937	15.18	44,000
1915	Jan. 8, 1915	15.25	47,800	1938	Nov. 14, 1937	14.58	40,100
	Feb. 16, 1915	13.55	37,300		Mar. 6, 1938	14.18	37,300
	Feb. 25, 1915	16.42	55,700	1939	Feb. 21, 1939	17.80	68,000
	July 9, 1915	14.00	39,900	1940	Apr. 1, 1940	19.62	87,800
1916	Mar. 28, 1916	16.53	56,500		Apr. 4, 1940	17.83	68,300
	Apr. 14, 1916	15.42	48,900		Apr. 9, 1940	14.94	42,600
	Apr. 22, 1916	13.50	37,000	1941	Apr. 6, 1941	16.92	55,300
	June 18, 1916	18.20	68,900	1942	Mar. 10, 1942	17.47	60,700
1917	Mar. 12, 1917	11.70	27,600		Mar. 18, 1942	14.88	39,800
1918	Mar. 1, 1918	12.90	33,700		May 23, 1942	13.48	32,000
	Mar. 15, 1918	17.96	67,000	1943	Dec. 31, 1942	19.04	77,400
	Apr. 16, 1918	13.20	35,300		Apr. 22, 1943	13.96	34,400
1919	May 11, 1919	12.60	32,000		May 12, 1943	14.05	34,800
	May 23, 1919	16.78	58,300	1944	May 8, 1944	14.40	36,900
1920	Mar. 13, 1920	17.18	61,200	1945	Mar. 4, 1945	16.79	54,100
1921	Feb. 17, 1921	12.00	29,000		Mar. 22, 1945	14.00	34,600
1922	Mar. 8, 1922	12.36	30,800				
1923	Mar. 5, 1923	13.65	37,900				

a Backwater from ice.

Peak stages and discharges of Chemung River at Chemung, N. Y.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	May 18, 1945	14.37	36,700	1953	Dec. 12, 1952	15.51	42,200
1946	Jan. 7, 1946	14.39	37,400	1953	Mar. 25, 1953	16.09	46,000
	May 28, 1946	23.97	132,000		Mar. 2, 1954	14.70	37,300
	June 3, 1946	13.32	31,700	1955	Mar. 2, 1955	14.02	33,900
1947	Apr. 6, 1947	18.01	66,500	1956	Oct. 15, 1955	20.13	89,000
	May 22, 1947	14.55	38,400		Nov. 17, 1955	13.73	32,400
	June 4, 1947	16.10	49,200		Mar. 8, 1956	19.22	76,100
1948	Mar. 17, 1948	15.01	41,300		Apr. 5, 1956	16.02	45,500
	Mar. 20, 1948	14.44	37,700	1957	Jan. 23, 1957	13.94	33,500
	Mar. 22, 1948	18.26	69,300		Apr. 6, 1957	15.10	39,700
	Apr. 15, 1948	14.71	39,400	1958	Apr. 7, 1958	16.94	52,400
1949	Jan. 6, 1949	10.86	20,500	1959	Jan. 22, 1959	17.90	61,000
1950	Mar. 29, 1950	19.12	80,300	1959	Apr. 3, 1959	13.35	30,600
	Apr. 5, 1950	14.40	37,500	1960	Mar. 31, 1960	19.02	73,500
1951	Nov. 26, 1950	18.66	74,100		Apr. 4, 1960	13.42	30,900
	Dec. 4, 1950	14.04	35,300		May 10, 1960	13.90	33,300
	Dec. 8, 1950	13.85	34,400	1961	Feb. 26, 1961	17.39	56,300
	Mar. 31, 1951	19.19	81,300		Apr. 17, 1961	14.14	34,500
1952	Mar. 12, 1952	17.17	54,300		Apr. 26, 1961	18.24	64,400
	Apr. 6, 1952	14.84	38,100				

5315. Susquehanna River at Towanda, Pa.

Location--Lat 41°45'55", long 76°26'25", on right bank under Bridge Street Bridge at Towanda, Bradford County, 1½ miles upstream from Towanda Creek.

Drainage area--7,797 sq mi.

Gage--Nonrecording prior to Sept. 30, 1938; recording thereafter. Datum of gage is 694.38 ft above mean sea level, datum of 1929.

Stage-discharge relation--Defined by current-meter measurements.

Bankfull stage--16 ft.

Historical data--Flood of Mar. 17, 1865, was maximum known prior to 1892.

Remarks--Records for 1914-18, 1921-31, furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 68,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1865	Mar. 17, 1865	25.0	188,000	1903	Feb. 5, 1903	13.5	82,200
1893	Mar. 10, 1893	15.3	101,000	1903	Mar. 1, 1903	14.4	91,000
	May 4, 1893	16.0	109,000		Mar. 12, 1903	12.6	74,200
1894	Mar. 8, 1894	12.3	71,700		Mar. 24, 1903	15.5	103,000
					Aug. 30, 1903	15.2	99,500
1895	Apr. 10, 1895	14.8	95,200	1904	Oct. 11, 1903	15.8	106,000
1896	Mar. 31, 1896	15.5	103,000		Jan. 3, 1904	12.0	69,200
					Mar. 4, 1904	13.7	84,000
1897	Mar. 25, 1897	11.3	63,600		Mar. 27, 1904	17.8	133,000
1898	Apr. 25, 1898	12.6	74,200	1905	Mar. 26, 1905	15.0	97,300
1899	Mar. 6, 1899	10.5	57,300	1906	Dec. 4, 1905	11.0	61,200
1900	Feb. 23, 1900	11.0	61,200	1908	Dec. 11, 1907	11.8	67,600
1901	Mar. 27, 1901	15.7	105,000		Dec. 24, 1907	12.6	74,200
	Apr. 7, 1901	12.3	71,700		Feb. 16, 1908	14.9	96,200
	Apr. 22, 1901	13.2	79,400		Mar. 16, 1908	14.0	87,000
1902	Mar. 2, 1902	24.5	184,000	1909	Mar. 30, 1908	13.6	83,100
	Mar. 14, 1902	12.0	69,200		Feb. 21, 1909	12.0	69,200
	Mar. 17, 1902	12.9	76,800	1910	May 2, 1909	15.0	97,300
					Jan. 22, 1910	13.0	77,600
					Mar. 2, 1910	18.4	142,000

Peak stages and discharges of Susquehanna River at Towanda, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1910	Mar. 8, 1910	13.4	81,200	1937	Jan. 26, 1937	12.9	71,700
	Apr. 25, 1910	14.3	90,000		Jan. 26, 1938	11.74	62,100
1911	Mar. 28, 1911	14.2	89,000	1939	Feb. 21, 1939	19.13	128,000
1912	Feb. 27, 1912	12.0	69,200		Mar. 28, 1939	12.57	69,300
	Mar. 30, 1912	16.0	109,000	1940	Apr. 1, 1940	23.84	176,000
	Apr. 2, 1912	15.0	97,300		Apr. 5, 1940	19.75	134,000
	Apr. 8, 1912	12.0	69,200		Apr. 9, 1940	18.13	118,000
1913	Jan. 9, 1913	14.3	90,000		Apr. 22, 1940	12.87	71,700
	Mar. 28, 1913	20.7	146,000	1941	Apr. 6, 1941	18.47	122,000
1914	Mar. 29, 1914	20.4	173,000		Mar. 10, 1942	17.21	109,000
	Apr. 9, 1914	14.1	88,000	1942	Mar. 18, 1942	15.27	92,200
	May 13, 1914	15.0	97,300		May 24, 1942	13.06	73,300
1915	Jan. 8, 1915	13.8	85,000	1943	Dec. 31, 1942	23.30	171,000
	Feb. 16, 1915	12.8	75,900		Mar. 18, 1943	14.70	86,800
	Feb. 25, 1915	17.5	129,000		Apr. 22, 1943	12.88	71,700
	July 9, 1915	17.5	129,000		May 13, 1943	13.25	74,100
1916	Mar. 31, 1916	18.3	140,000		May 22, 1943	12.57	69,300
	Apr. 15, 1916	13.3	80,300	1944	Mar. 18, 1944	13.98	81,300
	June 18, 1916	12.4	72,600		May 8, 1944	13.85	79,700
1917	Mar. 28, 1917	12.2	70,900	1945	Mar. 4, 1945	16.15	99,400
1918	Oct. 31, 1917	12.2	70,900		Mar. 7, 1945	13.04	73,300
	Feb. 21, 1918	13.8	85,000		Mar. 18, 1945	14.40	84,500
	Mar. 2, 1918	14.7	94,200		Mar. 22, 1945	15.51	93,300
	Mar. 15, 1918	17.2	124,000	1946	Mar. 10, 1946	14.41	84,500
1919	May 23, 1919	12.4	72,600		May 29, 1946	25.08	191,000
1920	Mar. 13, 1920	17.2	124,000		June 3, 1946	12.61	70,100
	Mar. 17, 1920	12.6	74,200	1947	Mar. 26, 1947	13.15	74,900
	Mar. 28, 1920	12.6	74,200		Apr. 6, 1947	19.60	132,000
1921	Mar. 10, 1921	12.3	71,700		June 4, 1947	13.15	74,900
1922	Nov. 29, 1921	15.6	104,000	1948	Mar. 17, 1948	16.71	104,000
	Feb. 24, 1922	12.4	72,600		Mar. 23, 1948	23.04	168,000
	Mar. 8, 1922	13.6	83,100		Apr. 15, 1948	14.06	82,100
1923	Mar. 4, 1923	13.4	81,200	1949	Dec. 31, 1948	12.88	72,500
	Apr. 6, 1923	12.4	72,600		Jan. 7, 1949	12.77	71,700
1924	Apr. 7, 1924	17.8	133,000	1950	Mar. 29, 1950	21.18	148,000
1925	Oct. 1, 1924	16.8	119,000		Apr. 5, 1950	16.72	102,000
	Feb. 12, 1925	18.7	146,000	1951	Nov. 27, 1950	17.96	115,000
1926	Mar. 26, 1926	13.5	82,200		Dec. 5, 1950	15.93	94,200
	Apr. 9, 1926	13.6	83,100		Dec. 9, 1950	13.50	73,500
1927	Nov. 17, 1926	16.6	116,000		Mar. 31, 1951	18.91	124,000
	Mar. 15, 1927	14.9	96,200	1952	Mar. 12, 1952	17.59	111,000
	Mar. 21, 1927	13.0	77,600		Apr. 6, 1952	13.16	71,100
	May 25, 1927	14.8	95,200	1953	Dec. 12, 1952	15.61	91,500
					Mar. 25, 1953	13.62	74,300
1928	Oct. 20, 1927	17.3	126,000	1954	May 4, 1954	12.48	65,500
	Nov. 18, 1927	13.6	83,100		Mar. 2, 1955	14.82	84,300
	Mar. 27, 1928	12.2	70,900	1956	Oct. 16, 1955	18.96	124,000
	May 1, 1928	13.2	79,400		Mar. 8, 1956	22.28	160,000
1929	Mar. 17, 1929	16.8	119,000		Apr. 5, 1956	18.27	118,000
	Apr. 22, 1929	19.9	165,000	1957	Jan. 24, 1957	13.63	74,300
1930	Mar. 8, 1930	12.1	65,100		Apr. 7, 1957	15.56	91,500
1931	Mar. 29, 1931	12.4	67,500	1958	Apr. 8, 1958	20.86	144,000
1932	Apr. 1, 1932	14.76	88,000		Apr. 23, 1958	13.39	72,000
	Apr. 3, 1932	14.1	81,700	1959	Jan. 23, 1959	19.52	130,000
1933	Aug. 25, 1933	12.9	71,500		Apr. 3, 1959	14.23	79,100
1934	Mar. 6, 1934	13.6	77,400	1960	Nov. 29, 1959	14.25	79,100
1935	Jan. 10, 1935	16.5	99,500		Dec. 13, 1959	12.92	68,700
	July 9, 1935	21.1	144,000		Feb. 12, 1960	14.55	82,500
1936	Mar. 13, 1936	22.34	157,000		Apr. 1, 1960	22.76	165,000
	Mar. 19, 1936	25.03	188,000		Apr. 5, 1960	17.96	115,000
1937	Jan. 23, 1937	13.1	73,300	1961	Feb. 27, 1961	21.08	147,000
					Apr. 17, 1961	14.07	78,300
					Apr. 26, 1961	19.92	134,000

5320. Towanda Creek near Monroeton, Pa.

Location.--Lat 41°42'25", long 76°28'20", at Lehigh Valley Railroad bridge, 1,000 ft upstream from South Branch Towanda Creek, and half a mile south of Monroeton, Bradford County.

Drainage area.--215 sq mi.

Gage.--Nonrecording at site 1 mile upstream at datum 20.44 ft higher prior to Oct. 1, 1942; recording thereafter. Datum of gage is 753.70 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 9,500 cfs and extended above on basis of slope-area and contracted-opening measurements at gage height 10.33 ft.

Bankfull stage.--6 ft.

Remarks.--Records 1914-20, 1922-31, furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 4,300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	Jan. 31, 1914	6.9	6,900	1930	Mar. 8, 1930	6.4	5,740
	Mar. 28, 1914	7.07	7,960		Apr. 2, 1931	5.52	4,310
	May 13, 1914	6.3	5,530	1915	Mar. 31, 1932	5.7	4,340
1915	Jan. 7, 1915	8.8	12,900		Nov. 19, 1932	5.8	4,530
	Jan. 19, 1915	6.8	6,650	1933	Aug. 24, 1933	10.2	18,500
	Feb. 15, 1915	6.9	6,900		Sept. 4, 1933	8.7	12,500
	Feb. 24, 1915	6.7	6,410		Nov. 19, 1932	5.8	4,530
	July 8, 1915	10.31	19,900		Aug. 24, 1933	10.2	18,500
	Aug. 6, 1915	7.0	7,150		Sept. 4, 1933	8.7	12,500
1916	Mar. 30, 1916	6.8	7,080	1934	Sept. 17, 1934	6.8	6,650
	Apr. 14, 1916	8.0	4,920		Dec. 1, 1934	7.5	8,500
	June 16, 1916	6.5	5,960	1936	Nov. 13, 1935	6.0	4,920
1917	Jan. 14, 1917	5.7	4,340		Mar. 12, 1936	10.12	18,100
	Aug. 9, 1917	9.5	15,700		Mar. 18, 1936	10.78	21,200
1918	Oct. 30, 1917	5.7	4,340	1937	Jan. 22, 1937	6.0	2,950
	Feb. 26, 1918	7.0	7,150		Oct. 23, 1937	5.7	4,340
	Mar. 14, 1918	8.0	10,000	1938	Oct. 28, 1937	5.8	4,530
	Apr. 15, 1918	6.8	6,650		Nov. 13, 1937	6.4	5,740
1919	Mar. 9, 1919	5.7	4,340		Dec. 10, 1938	7.3	7,300
	July 22, 1919	8.8	12,900	1939	Feb. 15, 1939	7.0	7,150
1920	Mar. 5, 1920	7.0	7,150		Feb. 20, 1939	6.4	5,740
	Mar. 12, 1920	7.8	9,400	1940	Mar. 30, 1940	10.0	17,700
	July 24, 1920	6.5	5,960		Apr. 4, 1940	7.1	7,400
1921	Apr. 23, 1921	5.7	4,340		Apr. 20, 1940	6.6	6,180
1922	Mar. 7, 1922	7.6	8,800		July 23, 1940	5.8	4,530
	June 3, 1922	6.2	5,320	1941	Apr. 5, 1941	7.8	8,643
1923	Mar. 16, 1923	5.0	3,380		Dec. 24, 1941	6.65	6,180
1924	Jan. 11, 1924	7.3	7,900	1942	Mar. 9, 1942	7.82	8,640
	Apr. 6, 1924	8.6	12,200		May 23, 1942	7.9	8,660
	May 12, 1924	5.9	4,720		Sept. 27, 1942	6.2	5,390
	Sept. 30, 1924	7.8	9,400	1943	Dec. 30, 1942	8.09	10,100
1925	Feb. 11, 1925	7.25	7,650		Apr. 20, 1943	6.56	5,020
1926	Nov. 13, 1925	5.5	3,960	1944	Oct. 28, 1943	6.12	4,490
	Nov. 16, 1926	11.0	22,000		Nov. 9, 1943	7.55	7,350
1927	Nov. 19, 1926	6.4	5,740		May 7, 1944	9.70	16,800
	Mar. 14, 1927	6.3	5,530		June 24, 1944	6.54	5,450
	Apr. 22, 1927	5.8	4,530	1945	Mar. 3, 1945	6.53	5,470
1928	Oct. 19, 1927	8.5	11,800		Mar. 9, 1946	6.74	5,980
	Nov. 18, 1927	5.8	4,530	1946	May 28, 1946	12.53	31,300
	Dec. 8, 1927	6.5	5,960		Mar. 14, 1947	6.55	6,030
	Apr. 30, 1928	7.4	8,200	1947	Apr. 5, 1947	10.33	19,800
	June 6, 1928	7.1	7,400		May 25, 1947	7.50	8,460
	June 30, 1928	7.0	7,150				
1929	Feb. 26, 1929	5.7	4,340				
	May 2, 1929	7.6	8,800				

Peak stages and discharges of Towanda Creek near Monroeton, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Mar. 16, 1948	5.83	4,520	1956	Oct. 14, 1955	7.87	10,500
	Apr. 14, 1948	6.70	6,260		Mar. 6, 1956	5.84	5,490
1949	Nov. 20, 1948	6.42	5,600		Mar. 8, 1956	6.39	6,630
	Dec. 30, 1948	6.62	6,030		Apr. 4, 1956	5.08	4,320
1950	Mar. 28, 1950	7.29	7,850	1957	Nov. 2, 1956	9.17	15,000
	Apr. 4, 1950	5.83	4,520		Apr. 6, 1957	8.59	12,800
	Sept. 1, 1950	7.38	8,150	1958	Dec. 21, 1957	6.80	7,490
					Apr. 7, 1958	6.21	6,230
1951	Nov. 25, 1950	11.77	27,400		Apr. 22, 1958	6.83	7,490
	Dec. 4, 1950	7.11	7,280	1959	Jan. 22, 1959	5.67	5,290
	Dec. 8, 1950	7.04	7,010		Mar. 6, 1959	5.76	5,470
	Jan. 24, 1951	5.83	4,520		Apr. 2, 1959	6.2	6,230
	Feb. 7, 1951	6.21	5,190		Apr. 2, 1959	6.45	
1952	Mar. 30, 1951	6.84	6,500	1960	Nov. 28, 1959	7.21	8,440
	Mar. 11, 1952	10.38	20,300		Feb. 11, 1960	7.40	8,970
1953	Dec. 11, 1952	7.91	10,200		Mar. 31, 1960	7.12	8,190
	Jan. 24, 1953	5.46	4,490		Apr. 4, 1960	6.18	6,230
	Mar. 24, 1953	6.62	6,590		June 24, 1960	5.30	4,580
1954	Mar. 1, 1954	5.33	4,530	1961	Feb. 25, 1961	8.37	12,100
	May 4, 1954	9.56	16,600		Apr. 16, 1961	6.78	7,490
1955	Dec. 30, 1954	5.42	4,800				

5335. North Fork Mehoopany Creek near Lovelton, Pa.
(Published as "North Branch Mehoopany Creek" prior to 1953)

Location.--Lat 41°31'50", long 76°09'20", 0.5 mile upstream from bridge on State Highway 87, 0.5 mile downstream from Douglas Hollow, 1.7 miles east of Lovelton, Wyoming County, and 2.1 miles upstream from mouth.

Drainage area.--35.2 sq mi.

Gage.--Nonrecording prior to April 4, 1941; recording thereafter. Datum of gage is 842.67 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 3,400 cfs and extended above by logarithmic plotting.

Bankfull stage.--6 ft.

Remarks.--Base for partial-duration series, 600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Apr. 6, 1941	4.26	624	1949	Dec. 30, 1948	5.19	1,160
1942	Dec. 24, 1941	4.46	727		Apr. 14, 1949	5.45	1,420
	Mar. 9, 1942	4.98	1,020		May 20, 1949	4.73	781
	May 22, 1942	5.52	1,470	1950	Mar. 8, 1950	5.43	1,420
1943	Dec. 30, 1942	5.33	1,320		Mar. 28, 1950	5.74	1,760
					Apr. 4, 1950	4.61	697
1944	Nov. 9, 1943	5.35	1,320	1951	Nov. 25, 1950	8.54	8,290
	May 7, 1944	4.95	985		Dec. 4, 1950	6.17	2,360
	May 23, 1944	4.47	684		Dec. 8, 1950	5.72	1,700
	June 24, 1944	4.31	600		Jan. 24, 1951	5.46	1,420
1945	Feb. 22, 1945	5.52	-		Feb. 1, 1951	4.78	816
	Feb. 27, 1945	4.15	502		Feb. 7, 1951	5.66	1,640
1946	Mar. 9, 1946	4.52	620		Mar. 30, 1951	4.89	902
	May 27, 1946	8.28	7,640		Apr. 12, 1951	4.99	982
1947	Mar. 14, 1947	5.09	1,080	1952	Mar. 11, 1952	8.76	9,300
	Apr. 5, 1947	7.16	4,340		May 12, 1952	4.65	775
1948					May 25, 1952	4.88	936
	Mar. 21, 1948	5.32	1,270	1953	Nov. 22, 1952	4.74	838
	Apr. 14, 1948	4.74	788		Dec. 11, 1952	6.15	2,240
	June 27, 1948	4.69	753		Jan. 24, 1953	4.50	603
					Mar. 26, 1953	4.55	636

^a Backwater from ice.

Peak stages and discharges of North Fork Mehoopany Creek near Lovelton, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Feb. 17, 1954	4.66	708	1956	Nov. 16, 1955	4.84	768
	Mar. 1, 1954	5.00	960		Mar. 8, 1956	5.28	1,200
	Apr. 17, 1954	5.00	960	1957	Apr. 6, 1957	5.80	1,780
1955	Dec. 30, 1954	4.50	603		Dec. 20, 1957	6.46	2,740
	Aug. 13, 1955	5.83	1,840	1958	Dec. 26, 1957	4.75	770
	Aug. 18, 1955	5.93	1,960		Apr. 6, 1958	5.48	1,440
1956	Oct. 15, 1955	7.86	6,220		Apr. 22, 1958	4.92	896
	Oct. 30, 1955	4.85	778				

5340. Tunkhannock Creek at Dixon, Pa.

Location.--Lat 41°33'30", long 75°53'40", on left bank 20 ft downstream from abandoned highway bridge, 300 ft upstream from bridge on U.S. Highway 6 at Dixon, Wyoming County, 3 miles northeast of Tunkhannock, and 4 miles upstream from mouth.

Drainage area.--383 sq mi.

Gage.--Nonrecording prior to Aug. 10, 1938; recording thereafter. Datum of gage is 610.50 ft above mean sea level (Pennsylvania State Highway bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 5,200 cfs and extended above on basis of contracted-opening measurement at 32,200 cfs.

Bankfull stage.--9 ft.

Remarks.--Records for 1914-18, 1922-31, furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 5,700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	Mar. 28, 1914	9.99	14,400	1924	Sept. 30, 1924	13.1	27,400
	Apr. 9, 1914	7.6	7,280		Feb. 11, 1925	11.3	19,200
1915	Jan. 13, 1915	8.2	8,880	1926	Apr. 9, 1926	7.1	5,810
	Feb. 15, 1915	7.8	7,800	1927	Oct. 6, 1926	11.2	18,800
1916	Dec. 26, 1915	7.1	6,120		Nov. 16, 1926	9.6	13,000
	Mar. 30, 1916	10.7	16,800	1928	Oct. 19, 1927	11.05	18,000
	Apr. 14, 1916	7.15	6,340		Nov. 18, 1927	7.4	6,290
1917	Jan. 14, 1917	7.05	5,900		Dec. 8, 1927	7.8	7,800
	Feb. 27, 1917	6.9	5,700		Feb. 22, 1928	7.2	5,970
1918	Oct. 30, 1917	11.7	20,900		June 6, 1928	7.2	5,970
	Feb. 20, 1918	9.2	11,800		June 30, 1928	8.7	10,300
	Feb. 26, 1918	7.5	7,040	1929	Mar. 14, 1929	7.2	5,970
	Mar. 14, 1918	7.7	7,540		Dec. 20, 1929	7.0	5,750
1919	Apr. 12, 1919	5.9	3,990	1930	Dec. 20, 1929	7.0	5,750
1920	Nov. 27, 1919	8.8	10,600	1931	July 10, 1931	6.9	5,590
	Mar. 6, 1920	9.3	12,100		Feb. 10, 1932	9.8	13,700
	Mar. 12, 1920	10.0	14,400	1932	Apr. 1, 1932	7.9	8,060
	Mar. 17, 1920	7.4	6,800		Oct. 6, 1932	9.0	11,200
	Mar. 27, 1920	7.25	6,340	1933	Nov. 1, 1932	6.9	5,700
	July 24, 1920	7.5	7,040		Nov. 19, 1932	8.8	10,600
	Sept. 12, 1920	8.1	8,600		Aug. 24, 1933	11.1	18,400
1921	Oct. 1, 1920	9.3	12,100		Sept. 4, 1933	6.9	5,700
	Dec. 1, 1920	7.3	6,560	1934	Sept. 16, 1933	7.8	7,800
	Dec. 14, 1920	8.0	8,320		Mar. 5, 1934	7.4	6,800
	Mar. 3, 1921	7.0	5,900	1935	Sept. 17, 1934	9.0	11,200
	Mar. 10, 1921	8.1	8,600		Dec. 1, 1934	9.7	13,400
1922	Nov. 29, 1921	8.3	9,160	1936	Nov. 13, 1935	10.8	17,200
	Mar. 8, 1922	7.7	7,540		Mar. 12, 1936	9.6	13,000
	June 18, 1922	12.0	22,200		Mar. 18, 1936	11.36	19,600
	June 29, 1922	8.1	8,600	1937	Jan. 25, 1937	6.86	5,620
1923	Mar. 16, 1923	7.5	7,040				
1924	Jan. 11, 1924	7.4	6,800				
	Apr. 6, 1924	10.1	14,800				

Peak stages and discharges of Tunkhannock Creek at Dixon, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Oct. 23, 1937	10.60	16,500	1950	Mar. 9, 1950	7.22	6,340
	Dec. 18, 1937	7.4	6,470		Mar. 28, 1950	9.72	13,400
	Jan. 25, 1938	7.5	6,650	1951	Nov. 26, 1950	13.19	28,000
	Sept. 22, 1938	7.44	6,470		Dec. 4, 1950	13.21	28,000
1939	Dec. 6, 1938	9.00	11,200		Feb. 7, 1951	7.68	7,540
	Dec. 10, 1938	8.34	9,160		Mar. 20, 1951	6.88	5,700
	Feb. 15, 1939	9.90	14,000	1952	Jan. 27, 1952	7.13	6,120
	Feb. 20, 1939	7.63	6,850		Mar. 11, 1952	11.70	20,900
1940	Mar. 31, 1940	13.50	29,400		Apr. 15, 1952	8.08	18,600
	Apr. 5, 1940	7.76	7,800		May 26, 1952	6.92	5,700
	Apr. 8, 1940	7.25	5,840		July 10, 1952	7.61	7,280
1941	Apr. 6, 1941	6.95	5,500	1953	Dec. 11, 1952	9.76	13,700
1942	Mar. 9, 1942	7.36	6,800		Jan. 24, 1953	7.78	7,800
	May 23, 1942	12.45	24,000		Mar. 26, 1953	7.48	7,040
1943	Nov. 25, 1942	7.90	8,060	1954	Mar. 2, 1954	7.27	6,720
	Dec. 2, 1942	8.46	9,720		Apr. 17, 1954	10.36	15,800
	Dec. 30, 1942	11.95	22,200	1955	Aug. 19, 1955	7.92	8,150
	Feb. 24, 1943	7.05	5,900	1956	Oct. 16, 1955	12.95	26,700
	Mar. 17, 1943	7.72	7,540		Oct. 30, 1955	7.21	6,630
	Mar. 20, 1943	7.66	7,540		Nov. 16, 1955	7.26	6,800
	May 21, 1943	7.44	6,800		Feb. 25, 1956	6.92	6,060
	May 26, 1943	6.89	5,700		Mar. 8, 1956	8.61	10,000
1944	Nov. 9, 1943	9.97	14,400	1957	Apr. 6, 1957	9.92	14,000
	Apr. 25, 1944	7.00	5,900	1958	Dec. 21, 1957	8.13	8,610
1945	Feb. 27, 1945	7.29	6,560		Dec. 26, 1957	7.40	7,000
	Mar. 4, 1945	8.44	9,440		Feb. 28, 1958	6.68	5,700
	July 29, 1945	7.51	6,430		Apr. 7, 1958	8.67	10,300
1946	May 21, 1946	9.03	11,200	1959	Jan. 22, 1959	8.05	8,350
	May 28, 1946	11.06	20,400		Feb. 10, 1959	7.21	6,610
1947	Mar. 14, 1947	7.86	8,060		Apr. 2, 1959	6.84	5,880
	Mar. 25, 1947	7.71	7,540	1960	Nov. 28, 1959	12.08	22,700
	Apr. 5, 1947	13.96	32,200		Jan. 3, 1960	8.25	8,800
	July 8, 1947	8.00	8,320		Feb. 11, 1960	8.59	10,000
1948	Mar. 16, 1948	8.75	10,600		Mar. 31, 1960	8.33	9,160
	Mar. 22, 1948	8.08	8,600		Apr. 4, 1960	11.58	20,400
	Apr. 14, 1948	8.17	8,880		June 24, 1960	8.01	8,350
	June 28, 1948	7.06	6,120		Sept. 20, 1960	8.11	8,610
1949	Dec. 30, 1948	8.94	10,900	1961	Feb. 26, 1961	10.65	16,500
	Jan. 6, 1949	8.49	9,720		Apr. 25, 1961	7.60	7,920
1950	Dec. 13, 1949	7.15	6,340				

5345. Lackawanna River at Archbald, Pa.

Location.--Lat 41°30'15", long 75°32'35", on right bank in Archbald, Lackawanna County, 0.5 mile upstream from White Oak Run and Gilmartin Street Bridge.

Drainage area.--108 sq mi.

Gage.--Recording. Datum of gage is 889.33 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,200 cfs and extended above on basis of slope-area measurement at 9,510 cfs.

Bankfull stage.--8 ft.

Remarks.--Flow regulated by Stillwater Reservoir since December 1959. Base for partial-duration series, 2,100 cfs.

Peak stages and discharges of Lackawanna River at Archbald, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Mar. 31, 1940	7.36	4,680	1950	Apr. 5, 1950	5.13	2,160
	Apr. 4, 1940	5.40	2,440		Nov. 25, 1950	7.43	4,920
	Apr. 9, 1940	5.74	2,740		Dec. 4, 1950	6.29	3,500
	Sept. 1, 1940	5.34	2,340		Mar. 31, 1951	5.33	2,380
1941	Apr. 6, 1941	4.98	2,050	1952	Apr. 15, 1952	5.84	2,960
1942	May 22, 1942	10.58	9,510	1953	Dec. 11, 1952	5.72	2,780
1943	Dec. 30, 1942	5.87	2,960	1953	Jan. 25, 1953	5.25	2,260
	Mar. 17, 1943	5.27	2,300	1954	Apr. 17, 1954	5.09	2,110
1944	Nov. 9, 1943	6.22	3,380	1955	Aug. 19, 1955	7.50	5,050
1945	July 19, 1945	5.46	2,520	1956	Oct. 15, 1955	8.02	5,770
	May 28, 1946	6.32	3,500	1957	Apr. 6, 1957	5.20	2,210
1946	July 2, 1946	5.09	2,150	1958	Dec. 21, 1957	5.45	2,480
	Apr. 5, 1947	8.11	5,880		Apr. 6, 1958	5.60	2,660
	May 22, 1947	6.15	3,380	1959	Jan. 22, 1959	5.35	a2,380
1947	July 8, 1947	5.63	2,720		Apr. 4, 1960	6.04	a3,140
1948	Mar. 21, 1948	5.58	2,660	1961	Feb. 25, 1961	5.68	a2,770
1949	Dec. 30, 1948	-	3,300				
	Jan. 6, 1949	5.41	2,430				
1950	Mar. 28, 1950	5.76	2,840				

a Annual peak only.

5355. Lackawanna River at Moosic, Pa.

Location.--Lat 41°21'30", long 75°43'50", at highway bridge at River Street or Moosic Road, at Moosic, Lackawanna County, and 0.4 mile above Spring Brook.

Drainage area.--264 sq mi.

Gage.--Nonrecording. Datum of gage is 619.46 ft above mean sea level, unadjusted.

Stage-discharge relation.--Defined by current-meter measurements below 3,800 cfs and extended above on basis of slope-area measurements at Archbald and Old Forge for flood of May 23, 1942.

Remarks.--Records for 1914-19, 1922-28, furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 2,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	Mar. 28, 1914	8.00	7,520	1922	Apr. 15, 1922	5.3	2,980
	July 10, 1914	8.13	7,710		June 18, 1922	6.1	4,200
1915	Jan. 19, 1915	4.85	2,400		June 29, 1922	5.3	2,980
	Feb. 16, 1915	5.6	3,460		July 1, 1922	6.0	4,040
	Feb. 25, 1915	5.1	2,700	1923	Mar. 23, 1923	4.8	2,460
1916	Apr. 2, 1916	6.8	5,360		Jan. 11, 1924	5.2	2,840
	Apr. 14, 1916	5.8	3,720	1924	Jan. 16, 1924	5.0	2,580
	Apr. 27, 1916	5.0	2,580		Apr. 7, 1924	6.2	4,360
1917	Mar. 24, 1917	5.2	2,840		May 13, 1924	4.9	2,460
					Sept. 30, 1924	8.49	8,500
1918	Oct. 31, 1917	8.8	9,100	1925	Feb. 11, 1925	6.7	5,580
	Feb. 20, 1918	5.35	3,120		Nov. 16, 1925	4.7	2,340
	Feb. 26, 1918	4.9	2,460	1927	Nov. 16, 1926	8.0	7,520
	Apr. 18, 1919	4.9	2,460		Jan. 22, 1927	5.0	2,580
1919	May 10, 1919	4.5	2,020		Mar. 14, 1927	5.8	3,720
					Mar. 21, 1927	4.9	2,460
1920	Nov. 27, 1919	5.0	2,580		May 25, 1927	5.2	2,840
	Mar. 5, 1920	5.1	2,710	1928	Oct. 19, 1927	9.3	10,200
	Mar. 13, 1920	7.7	6,950		Nov. 17, 1927	6.6	5,020
	Mar. 27, 1920	5.1	2,710		Dec. 8, 1927	6.0	4,040
	July 24, 1920	6.3	4,520		Mar. 27, 1928	5.1	2,710
1921	Dec. 2, 1920	5.0	2,580		Apr. 24, 1928	4.95	2,580
	Mar. 10, 1921	5.4	3,300		May 1, 1928	5.8	3,720
1922	Nov. 29, 1921	6.6	5,380		June 29, 1928	6.6	6,770
	Dec. 3, 1921	5.1	2,710		July 5, 1928	5.7	3,570
	Feb. 24, 1922	5.2	2,840		July 13, 1928	6.1	4,200
	Mar. 8, 1922	5.1	2,710				

5360. Lackawanna River at Old Forge, Pa.

Location.--Lat 41°21'30", long 75°44'40", on right bank 150 ft upstream from
From Delaware, Lackawanna and Western Railroad bridge, and 0.5 mile upstream
from St. Johns Creek.

Drainage area.--332 sq mi.

Gage.--Recording. Datum of gage is 595.26 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 5,000 cfs and extended above on basis of slope-area measurement at 31,000 cfs.

Bankfull stage.--11 ft.

Remarks.--Flow regulated by Stillwater Reservoir since December 1959. Base for partial-duration series, 4,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Dec. 6, 1938	7.71	6,980	1950	Mar. 9, 1950	5.76	4,410
	Feb. 15, 1939	7.89	7,320		Mar. 28, 1950	7.92	7,960
					Apr. 5, 1950	6.20	5,070
1940	Mar. 31, 1940	11.86	14,300				
	Apr. 5, 1940	6.67	5,290	1951	Nov. 25, 1950	8.81	9,490
	Apr. 9, 1940	6.70	5,290		Dec. 4, 1950	9.80	11,300
					Mar. 31, 1951	5.70	4,270
1941	Apr. 6, 1941	5.61	4,130				
1942	May 23, 1942	15.30	20,900	1952	Mar. 11, 1952	7.44	7,110
					Apr. 15, 1952	7.71	7,620
1943	Nov. 25, 1942	6.15	4,530		May 26, 1952	6.60	5,750
	Dec. 30, 1942	8.53	8,340	1953	Dec. 11, 1952	7.87	7,960
1944	Nov. 9, 1943	7.52	6,740		Jan. 24, 1953	6.97	6,430
	Apr. 25, 1944	6.00	4,440		Mar. 26, 1953	5.66	4,270
				1954	Apr. 17, 1954	6.59	5,750
1945	Mar. 4, 1945	-	-				
	July 19, 1945	8.15	7,860	1955	Aug. 19, 1955	20.05	31,000
	Sept. 2, 1945	6.56	5,340				
1946	May 28, 1946	8.47	8,510	1956	Oct. 16, 1955	9.53	10,800
	July 31, 1946	6.44	5,190				
1947	Mar. 14, 1947	6.00	4,440	1957	Apr. 6, 1957	7.29	6,940
	Apr. 5, 1947	10.72	12,200		Apr. 8, 1957	5.70	4,220
	May 22, 1947	7.77	7,220	1958	Dec. 21, 1957	6.27	5,240
	July 8, 1947	8.98	9,190		Apr. 6, 1958	7.90	7,960
1948	Mar. 16, 1948	6.00	4,590	1959	Jan. 22, 1959	6.60	5,750
	Mar. 21, 1948	6.26	5,190				
	Apr. 14, 1948	6.21	4,740	1960	Apr. 4, 1960	7.80	8,7450
1949	Dec. 30, 1948	8.11	8,340	1961	Feb. 26, 1961	8.14	8,120
	Jan. 6, 1949	6.69	5,920				

a Annual peak only.

5365. Susquehanna River at Wilkes-Barre, Pa.

Location.--Lat 41°15'00", long 75°52'55", on left bank at foot of West Union Street, Wilkes-Barre, Luzerne County, 800 ft downstream from North Street Bridge, and 1.6 miles upstream from Toby Creek.

Drainage area.--9,960 sq mi.

Gage.--Nonrecording prior to Oct. 31, 1929, and Oct. 16, 1943, to Mar. 23, 1949; recording during remainder of period. At numerous sites within 1,300 ft at present site at present datum prior to Mar. 24, 1949. Datum of gage is 512.07 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--22 ft.

Historical data.--Flood of Mar. 18, 1865, is greatest known.

Remarks.--Records for 1914-18, 1922-31, furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 82,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1787	Oct. 5, 1787	29	189,000	1904	Oct. 11, 1903	21.7	112,000
1807	April 1807	30	202,000		Jan. 23, 1904	20.5	101,000
1809	July 1809	20	95,200		Feb. 10, 1904	25.7	152,000
1833	May 14, 1833	28	176,000		Mar. 9, 1904	30.6	204,000
					Mar. 27, 1904	22.9	124,000
1865	Mar. 18, 1865	33.1	232,000	1905	Mar. 26, 1905	23.4	129,000
1891	Jan. 24, 1891	26.8	164,000	1906	Apr. 1, 1906	18.1	81,300
	Feb. 19, 1891	23.5	130,000				
	Feb. 27, 1891	23.0	125,000	1907	Mar. 16, 1907	16.0	65,500
	Mar. 24, 1891	18.0	80,500				
1892	Jan. 14, 1892	20.0	97,100	1908	Dec. 12, 1907	19.8	95,400
	Jan. 23, 1892	18.0	72,800		Dec. 25, 1907	18.7	86,100
	Feb. 26, 1892	20.0	97,100		Feb. 17, 1908	23.5	130,000
	Mar. 28, 1892	17.0	72,800		Mar. 16, 1908	21.0	106,000
	Apr. 4, 1892	21.6	112,000		Mar. 30, 1908	20.2	98,800
1893	Feb. 16, 1893	18.0	80,500	1909	Feb. 21, 1909	18.6	85,300
	Mar. 11, 1893	a28.7	-		Feb. 26, 1909	18.6	85,300
	May 5, 1893	22.0	115,000		Apr. 15, 1909	17.9	79,700
1894	Mar. 8, 1894	19.0	88,600		May 2, 1909	23.0	125,000
	May 21, 1894	20.0	97,100				
1895	Mar. 3, 1895	a27.0	-	1910	Jan. 23, 1910	19.6	93,700
	Apr. 10, 1895	21.8	113,000		Mar. 3, 1910	26.1	157,000
1896	Jan. 1, 1896	19.0	88,600		Apr. 25, 1910	21.6	112,000
	Feb. 7, 1896	19.0	88,600	1911	Mar. 29, 1911	19.7	94,500
	Mar. 3, 1896	17.0	72,800		Apr. 8, 1911	17.2	74,300
	Mar. 21, 1896	17.0	72,800	1912	Mar. 19, 1912	17.9	79,700
	Apr. 1, 1896	24.0	135,000		Mar. 31, 1912	22.0	115,000
1897	Oct. 15, 1896	19.0	88,600		Apr. 3, 1912	23.2	127,000
	Mar. 26, 1897	17.0	72,800				
1898	Jan. 16, 1898	a21.8	-	1913	Jan. 9, 1913	20.2	97,200
	Apr. 26, 1898	17.8	78,900		Mar. 28, 1913	28.5	184,000
1899	Jan. 7, 1899	a25.0	-	1914	Feb. 1, 1914	17.1	70,800
	Mar. 6, 1899	18.2	82,100		Mar. 29, 1914	28.3	182,000
1900	Jan. 21, 1900	18.8	86,800		Apr. 9, 1914	21.3	107,000
	Mar. 2, 1900	19.7	94,500		Apr. 21, 1914	17.3	72,400
1901	Nov. 28, 1900	22.0	115,000		May 14, 1914	21.0	105,000
	Mar. 28, 1901	21.6	112,000	1915	Jan. 9, 1915	18.8	84,900
	Apr. 8, 1901	18.2	82,100		Jan. 20, 1915	17.5	74,000
	Apr. 23, 1901	19.2	90,300		Feb. 17, 1915	18.8	84,900
	May 31, 1901	17.8	78,900		Feb. 26, 1915	23.3	127,000
1902	Dec. 15, 1901	27.0	166,000		July 10, 1915	22.6	120,000
	Mar. 2, 1902	31.4	213,000	1916	Apr. 2, 1916	26.5	160,000
	Mar. 18, 1902	20.4	101,000		June 18, 1916	17.0	70,000
1903	Dec. 23, 1902	18.2	82,100	1917	Mar. 28, 1917	17.7	75,700
	Jan. 31, 1903	17.7	78,200	1918	Oct. 30, 1917	18.1	79,000
	Feb. 5, 1903	19.5	92,800		Feb. 21, 1918	17.5	74,100
	Mar. 2, 1903	21.4	110,000				
	Mar. 10, 1903	19.6	93,700				
	Mar. 12, 1903	19.3	91,100				
	Mar. 25, 1903	22.4	119,000				
	Aug. 30, 1903	20.5	101,000				

a Backwater from ice.

Peak stages and discharges of Susquehanna River at Wilkes-Barre, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1918	Mar. 2, 1918	18.9	85,700	1940	Apr. 22, 1940	18.48	93,000
	Mar. 15, 1918	23.0	124,000				
	Apr. 17, 1918	18.3	80,700	1941	Apr. 7, 1941	23.50	138,000
1919	May 24, 1919	16.6	66,900	1942	Mar. 11, 1942	20.62	111,000
1920	Mar. 13, 1920	26.0	155,000		Mar. 19, 1942	18.68	94,600
	Mar. 18, 1920	18.3	80,700		May 24, 1942	17.20	82,600
	Mar. 28, 1920	18.4	81,500	1943	Jan. 1, 1943	29.37	191,000
1921	Mar. 10, 1921	19.0	86,600		Mar. 18, 1943	19.40	101,000
1922	Nov. 29, 1921	22.3	117,000	1944	May 9, 1944	18.5	90,000
	Mar. 9, 1922	18.6	83,200	1945	Mar. 5, 1945	21.8	119,000
1923	Mar. 5, 1923	19.6	91,800		Mar. 18, 1945	19.2	95,800
1924	Apr. 8, 1924	23.5	129,000		Mar. 23, 1945	19.4	97,600
1925	Oct. 1, 1924	21.7	111,000	1946	Mar. 10, 1946	19.1	94,800
	Feb. 13, 1925	25.1	145,000		May 29, 1946	32.01	210,000
1926	Mar. 26, 1926	19.4	90,100	1947	Apr. 7, 1947	24.88	151,000
	Apr. 10, 1926	18.6	83,200	1948	Mar. 18, 1948	21.48	118,000
1927	Nov. 17, 1926	22.7	121,000		Mar. 23, 1948	28.76	193,000
	Mar. 15, 1927	19.7	92,700		Apr. 15, 1948	19.36	98,700
	Mar. 22, 1927	17.4	73,300	1949	Dec. 31, 1948	17.39	82,700
	May 26, 1927	18.9	85,700	1950	Mar. 30, 1950	27.04	172,000
1928	Oct. 20, 1927	24.7	141,000		Apr. 6, 1950	21.75	119,000
	Nov. 19, 1927	17.9	77,400	1951	Nov. 27, 1950	21.75	119,000
	Mar. 28, 1928	17.2	71,600		Dec. 5, 1950	21.31	114,000
	May 1, 1928	20.2	97,200		Apr. 1, 1951	22.72	128,000
	June 27, 1928	17.1	70,800	1952	Mar. 13, 1952	22.39	124,000
1929	Mar. 17, 1929	23.1	125,000	1953	Dec. 12, 1952	19.43	98,000
	Apr. 22, 1929	26.4	159,000	1954	May 5, 1954	16.85	78,900
1930	Mar. 9, 1930	16.7	67,600	1955	Mar. 3, 1955	17.80	85,900
1931	Mar. 30, 1931	17.6	74,700	1956	Oct. 16, 1955	26.45	166,000
1932	Apr. 2, 1932	20.5	107,000		Mar. 9, 1956	28.17	186,000
1933	Aug. 25, 1933	19.72	99,800		Apr. 6, 1956	22.50	126,000
1934	Mar. 6, 1934	18.0	85,500	1957	Apr. 7, 1957	20.48	107,000
1935	Jan. 11, 1935	20.75	107,000	1958	Apr. 8, 1958	26.80	170,000
	July 10, 1935	25.39	151,000		Apr. 28, 1958	17.48	83,800
1936	Mar. 13, 1936	28.60	184,000	1959	Jan. 23, 1959	21.14	113,000
	Mar. 20, 1936	33.07	232,000		Apr. 4, 1959	17.90	86,600
1937	Jan. 23, 1937	17.15	77,300	1960	Nov. 29, 1959	18.14	88,000
1938	Sept. 24, 1938	14.70	64,900		Feb. 12, 1960	18.39	90,100
					Apr. 2, 1960	29.60	201,000
1939	Feb. 22, 1939	23.80	137,000	1961	Feb. 27, 1961	26.20	163,000
	Mar. 28, 1939	16.90	82,300		Apr. 18, 1961	18.11	88,000
1940	Apr. 1, 1940	31.53	212,000		Apr. 26, 1961	24.74	148,000

5370. Toby Creek at Luzerne, Pa.

Location.--Lat 41°16'55", long 75°53'45", on right bank 150 ft upstream from bridge on U.S. Highway 309 in Luzerne, Luzerne County, 0.5 mile upstream from outlet works of flood basin, and 2.5 miles upstream from mouth.

Drainage area.--32.4 sq mi.

Gage.--Recording. Datum of gage is 574.60 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,200 cfs.

Bankfull stage.--8 ft.

Remarks.--Base for partial-duration series, 630 cfs.

Peak stages and discharges of Toby Creek at Luzerne, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Feb. 17, 1942	a2.50	-	1952	July 9, 1952	2.65	740
	May 22, 1942	-	b1,600		July 22, 1952	2.94	962
1943	Dec. 30, 1942	4.8	3,010	1953	Dec. 11, 1952	2.83	874
1944	Oct. 26, 1943	2.59	662		Jan. 24, 1953	2.96	978
	Nov. 9, 1943	3.44	1,420	1954	Apr. 17, 1954	3.21	1,200
	Mar. 13, 1944	2.78	640	1955	Aug. 18, 1955	4.33	2,420
1945	July 19, 1945	2.79	822	1956	Oct. 15, 1955	2.56	695
1946	May 28, 1946	4.48	1,800		Feb. 25, 1956	2.47	634
	July 2, 1946	3.87	1,210	1957	Apr. 6, 1957	3.80	1,840
	July 31, 1946	5.01	2,440	1958	Jan. 22, 1958	3.18	1,240
1947	May 22, 1947	2.58	628		Feb. 28, 1958	2.58	721
1948	Mar. 16, 1948	2.79	790		Apr. 6, 1958	2.55	699
	Apr. 14, 1948	3.19	1,170	1959	Jan. 22, 1959	3.1	1,140
1949	Dec. 30, 1948	3.20	1,180		Feb. 10, 1959	2.42	728
	Apr. 14, 1949	2.83	874		Apr. 2, 1959	2.28	674
1950	Mar. 8, 1950	2.93	954	1960	Jan. 3, 1960	2.47	643
	Mar. 28, 1950	3.06	1,060		Apr. 3, 1960	3.58	1,630
1951	Nov. 25, 1950	2.58	691	1961	Feb. 25, 1961	2.99	1,050
	Dec. 4, 1950	3.59	1,580				
	Feb. 7, 1951	2.60	705				

a Backwater from ice.

b Estimated.

5375. Solomon Creek at Wilkes-Barre, Pa.

Location.--Lat 41°13'40", long 75°54'15", at bridge of Central Railroad of Pennsylvania at southwest city limit of Wilkes-Barre, Luzerne County, 0.4 mile downstream from Spring Run, and 3.4 miles upstream from mouth.

Drainage area.--15.7 sq mi.

Gage.--Recording. Datum of gage is 548.31 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 350 cfs and extended above on basis of flow-through-culvert measurement.

Bankfull stage.--9 ft.

Historical data.--Flood of Sept. 16, 1938, is maximum known.

Remarks.--Base for partial-duration series, 320 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Sept. 16, 1938	11.4	-	1946	July 31, 1946	4.90	1,200
1940	Mar. 30, 1940	5.48	1,430	1947	May 22, 1947	5.08	1,260
1941	June 16, 1941	1.98	233		July 8, 1947	3.68	837
1942	May 22, 1942	5.50	1,380		Aug. 17, 1947	6.40	1,610
	July 6, 1942	2.86	325	1948	Apr. 14, 1948	2.95	420
1943	Dec. 30, 1942	3.60	745	1949	Dec. 30, 1948	3.29	594
1944	Oct. 26, 1943	3.96	900		Jan. 5, 1949	2.94	450
	Oct. 28, 1943	2.98	408		May 7, 1949	3.90	860
	Nov. 9, 1943	4.06	920	1950	Mar. 28, 1950	3.18	528
1945	July 15, 1945	4.15	960	1951	Nov. 25, 1950	4.51	1,080
	July 19, 1945	5.14	1,290		Dec. 4, 1950	5.32	1,320
	July 28, 1945	2.86	336		Jan. 24, 1951	2.95	390
	Sept. 1, 1945	4.50	1,080		Feb. 7, 1951	2.97	402
1946	May 28, 1946	2.88	360	1952	Nov. 3, 1951	3.23	558
	June 2, 1946	3.04	480		Nov. 7, 1951	5.04	504
					Mar. 11, 1952	3.90	830

Peak stages and discharges of Solomon Creek at Wilkes-Barre, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	May 25, 1952	3.07	370	1955	Aug. 18, 1955	9.83	2,450
	July 9, 1952	4.28	1,000				
	Sept. 2, 1952	4.59	1,110	1956	Oct. 15, 1955	4.40	1,040
1953	Oct. 2, 1952	3.00	325		Oct. 30, 1955	3.52	630
	Nov. 22, 1952	3.54	688		Nov. 16, 1955	3.53	655
	Dec. 11, 1952	4.16	940		Apr. 29, 1956	3.82	780
	Jan. 6, 1953	3.06	364		May 7, 1956	3.50	630
	Sept. 3, 1953	3.30	520		June 23, 1956	3.26	486
	Sept. 5, 1953	3.09	384		Aug. 15, 1956	3.01	332
1954	Dec. 6, 1953	4.01	880		Sept. 6, 1956	4.38	1,040
	Mar. 1, 1954	-	-	1957	Apr. 6, 1957	4.67	514
	May 10, 1954	3.04	351	1958	Feb. 28, 1958	4.34	438
	Aug. 19, 1954	3.28	507	1959	Jan. 22, 1959	3.64	269
	Aug. 29, 1954	3.00	325				
1955	July 6, 1955	3.50	630	1960	Sept. 12, 1960	4.03	365
	Aug. 11, 1955	3.08	377	1961	Feb. 25, 1961	3.64	272
	Aug. 13, 1955	3.25	480				

5380. Wapwallopen Creek near Wapwallopen, Pa.

Location.--Lat 41°03'35", long 76°05'40", on left bank 100 ft upstream from Harts Bridge, 2½ miles southeast of Wapwallopen, Luzerne County, and 3.7 miles upstream from mouth.

Drainage area.--43.8 sq mi.

Gage.--Nonrecording prior to Mar. 15, 1930; recording thereafter. Datum of gage is 752.41 ft above mean sea level (Pennsylvania Railroad bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 1,800 cfs.

Bankfull stage.--6 ft.

Remarks.--Records for 1922-31, furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 580 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1920	Mar. 12, 1920	5.60	1,150	1931	May 13, 1931	3.15	295
1921	Mar. 3, 1921	4.20	580	1932	Apr. 1, 1932	4.88	807
1922	Nov. 29, 1921	4.60	705		June 17, 1932	4.72	734
	Mar. 7, 1922	5.70	1,120	1933	Oct. 6, 1932	4.35	616
	Apr. 15, 1922	5.80	1,160		July 24, 1933	6.00	1,260
1923	Mar. 5, 1923	5.50	1,040		Aug. 24, 1933	7.31	1,900
	July 28, 1923	5.80	1,160		Sept. 4, 1933	4.56	682
1924	Jan. 11, 1924	5.40	995		Sept. 16, 1933	5.84	1,170
	Jan. 16, 1924	5.10	880	1934	Apr. 1, 1934	5.74	1,120
	July 8, 1924	6.10	1,300	1935	Dec. 1, 1934	5.82	1,170
	Sept. 30, 1924	7.90	2,240		July 9, 1935	7.05	1,740
1925	Feb. 11, 1925	a9.62	-	1936	Nov. 29, 1935	4.98	845
	Feb. 12, 1925	6.6	1,540		Mar. 12, 1936	6.37	1,440
1926	Nov. 16, 1925	3.9	480		Mar. 18, 1936	6.58	1,540
1927	Nov. 16, 1926	7.6	2,070		Mar. 21, 1936	4.23	584
1928	Oct. 13, 1927	4.4	635	1937	Jan. 25, 1937	4.01	511
	Oct. 19, 1927	6.3	1,390	1938	Oct. 23, 1937	6.80	1,640
	Nov. 18, 1927	5.3	955		June 27, 1938	4.68	735
	Apr. 29, 1928	4.5	670		July 22, 1938	4.93	827
	June 29, 1928	6.2	1,340		July 23, 1938	5.07	866
	July 22, 1928	4.6	705	1939	Dec. 6, 1938	5.61	1,080
1929	Feb. 27, 1929	a5.3	-		Dec. 10, 1938	4.85	790
	May 3, 1929	4.0	510		Feb. 15, 1939	5.03	866
1930	Apr. 7, 1930	4.25	584	1940	Mar. 31, 1940	8.84	2,840
					Aug. 31, 1940	4.25	620

a Backwater from ice.

Peak stages and discharges of Wapwallopen Creek near Wapwallopen, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Aug. 16, 1941	5.77	1,170	1952	Mar. 11, 1952	5.64	1,090
1942	May 23, 1942	7.52	2,020		May 26, 1952	4.16	590
1943	Dec. 30, 1942	5.78	1,170		July 9, 1952	4.67	750
1944	Oct. 27, 1943	5.17	922		July 22, 1952	8.96	2,980
	Oct. 28, 1943	4.16	590	1953	Nov. 22, 1952	4.40	668
	Nov. 9, 1943	6.83	1,640		Dec. 11, 1952	5.99	1,260
	Mar. 13, 1944	4.96	852	1954	Dec. 7, 1953	4.46	698
	Apr. 24, 1944	4.18	605		Mar. 1, 1954	4.10	601
1945	Feb. 27, 1945	5.55	-	1955	Aug. 18, 1955	9.23	3,140
	Sept. 19, 1945	4.35	652		Aug. 22, 1955	4.62	748
	Sept. 26, 1945	4.98	870	1956	Oct. 15, 1955	6.32	1,400
1946	Feb. 28, 1946	4.15	590		Oct. 30, 1955	4.74	789
	May 27, 1946	4.65	750		Nov. 16, 1955	4.57	727
	June 2, 1946	4.60	733		Sept. 6, 1956	4.87	822
1947	May 22, 1947	6.50	1,490	1957	Dec. 14, 1956	4.58	742
	July 8, 1947	6.72	1,590		Apr. 6, 1957	6.08	1,300
	Aug. 9, 1947	5.73	1,130		Apr. 8, 1957	4.27	642
	Aug. 17, 1947	4.70	766	1958	Dec. 21, 1957	5.17	940
1948	Apr. 14, 1948	4.87	818		Dec. 26, 1957	4.21	628
	July 13, 1948	6.06	1,300	1959	Jan. 22, 1959	5.7	1,130
1949	Dec. 30, 1948	5.36	1,010		Feb. 10, 1959	5.96	1,260
	Jan. 5, 1949	4.66	750		Mar. 6, 1959	4.33	669
	May 7, 1949	5.39	1,010	1960	Nov. 28, 1959	4.65	758
1950	Mar. 28, 1950	5.18	940		Mar. 31, 1960	4.93	855
1951	Nov. 25, 1950	7.69	2,140		Apr. 4, 1960	5.10	906
	Dec. 4, 1950	8.28	2,500		Sept. 12, 1960	5.66	1,130
	Jan. 24, 1951	4.29	636		Sept. 20, 1960	4.40	683
	Feb. 7, 1951	4.37	652	1961	Feb. 20, 1961	-	(b)
1952	Nov. 7, 1951	4.24	620		Feb. 26, 1961	6.53	1,490

a Backwater from ice.

b Discharge not determined, but probably not maximum for the year.

5385. Nescopeck Creek near St. Johns, Pa.

Location.--Lat 41°01'15", long 76°00'40", on highway bridge half a mile south-west of St. Johns, Luzerne County.

Drainage area.--49 sq mi, approximately.

Gage.--Nonrecording. Altitude of gage is 930 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 500 cfs.

Remarks.--Base for partial-duration series, 570 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1920	Nov. 27, 1919	4.7	825	1923	July 29, 1923	5.9	1,350
	Mar. 13, 1920	8.0	2,540	1924	Oct. 25, 1923	4.0	570
1921	Mar. 4, 1921	4.1	605		Jan. 12, 1924	4.0	570
1922	Nov. 29, 1921	5.5	1,170		Jan. 17, 1924	4.7	825
	Dec. 4, 1921	4.1	605		Apr. 7, 1924	4.1	605
	Feb. 24, 1922	4.1	605		Sept. 30, 1924	7.5	2,240
	Mar. 8, 1922	6.4	1,610	1925	Feb. 9, 1925	5.14	990
	Apr. 11, 1922	4.2	640		May 11, 1925	4.0	570
	Apr. 16, 1922	4.1	605	1926	Nov. 13, 1925	4.0	570
	June 8, 1922	4.3	675		Nov. 16, 1925	4.0	570
1923	Mar. 4, 1923	4.4	710				

5390. Fishing Creek near Bloomsburg, Pa.

Location.--Lat 41°04'40", long 76°25'55", on left bank 25 ft downstream from highway bridge, 0.3 mile upstream from Deerlick Run, 0.9 mile west of Orangeville, and 5.5 miles northeast of Bloomsburg, Columbia County.

Drainage area.--274 sq mi.

Gage.--Recording. Datum of gage is 540.68 ft above mean sea level (Reading Co. bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 9,500 cfs and extended above on basis of contracted-opening measurement at 18,100 cfs.

Bankfull stage.--8 ft.

Remarks.--Base for partial-duration series, 4,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Mar. 18, 1936	11.86	17,600	1950	Mar. 29, 1950	6.47	4,510
					June 1, 1950	6.85	4,690
1939	Dec. 10, 1938	6.64	4,420				
	Feb. 15, 1939	6.52	4,270	1951	Nov. 26, 1950	10.10	12,000
					Dec. 4, 1950	10.78	14,000
1940	Mar. 15, 1940	7.04	5,050				
	Mar. 31, 1940	12.08	18,100	1952	Mar. 11, 1952	11.49	16,200
	Apr. 4, 1940	6.50	4,270		May 12, 1952	6.79	4,740
	Apr. 9, 1940	8.04	6,910		May 16, 1952	6.79	4,740
	Apr. 20, 1940	7.44	5,750				
1941	Apr. 6, 1941	5.87	3,340	1953	Nov. 22, 1952	8.84	8,660
					Dec. 11, 1952	7.54	5,950
1942	Dec. 26, 1941	8.82	8,660		Jan. 24, 1953	7.44	5,770
	May 23, 1942	10.26	13,400	1954	Apr. 17, 1954	7.58	6,140
1943	Dec. 30, 1942	10.74	14,300				
				1955	Aug. 19, 1955	8.54	8,070
1944	Nov. 9, 1943	9.77	12,000				
	Mar. 13, 1944	6.50	4,590	1956	Oct. 16, 1955	8.33	7,540
	Mar. 24, 1944	6.57	4,700				
	Apr. 25, 1944	6.39	4,420	1957	Apr. 6, 1957	9.25	9,610
	May 7, 1944	6.43	4,510		Apr. 9, 1957	6.15	4,270
1945	Mar. 4, 1945	6.51	4,600	1958	Dec. 21, 1957	8.74	8,430
	Sept. 19, 1945	6.59	4,790		Dec. 27, 1957	6.81	4,740
					Jan. 22, 1958	6.41	4,120
1946	Mar. 9, 1946	6.97	5,570		Feb. 28, 1958	8.24	7,330
	May 21, 1946	7.05	5,570		July 8, 1958	6.69	4,580
	May 28, 1946	10.69	14,200	1959	Jan. 22, 1959	8.75	8,130
1947	July 22, 1947	6.24	4,150				
				1960	Oct. 9, 1959	6.80	4,600
1948	Mar. 17, 1948	6.75	5,170		Nov. 28, 1959	6.55	4,300
	Mar. 20, 1948	6.64	4,790		Dec. 13, 1959	6.96	4,900
	Apr. 15, 1948	7.63	6,120		Jan. 3, 1960	6.68	4,450
					Mar. 31, 1960	-	(a)
1949	Dec. 30, 1948	9.71	11,700		Apr. 4, 1960	10.32	12,200
	Jan. 6, 1949	6.51	4,600		Sept. 12, 1960	9.09	8,850
	Apr. 14, 1949	6.61	4,790	1961	Feb. 26, 1961	10.63	13,200
1950	Jan. 7, 1950	7.31	5,560				

a Discharge unknown; probably not maximum for the year.

5395. Little Fishing Creek at Evers Grove, Pa.

Location.--Lat 41°04'50", long 76°30'40", 15 ft upstream from State Highway 42, 0.7 miles southeast of Evers Grove, Columbia County, 3 miles southeast of Millville, and 5.1 miles upstream from mouth.

Drainage area.--56.5 sq mi.

Gage.--Recording. Datum of gage is 558.48 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,000 cfs.

Remarks.--Base for partial-duration series, 1,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Apr. 5, 1941	4.87	1,040	1951	Nov. 25, 1950	6.52	2,450
1942	Dec. 24, 1941	5.70	1,710		Dec. 4, 1950	6.75	2,690
	May 23, 1942	6.02	1,950		Jan. 24, 1951	4.70	1,210
1943	Dec. 30, 1942	6.35	2,260		Feb. 7, 1951	5.41	1,650
	May 26, 1943	4.78	1,270		Feb. 21, 1951	4.72	1,210
1944	Oct. 26, 1943	5.33	1,620	1952	Jan. 27, 1952	4.78	1,270
	Nov. 9, 1943	5.32	1,580		Mar. 11, 1952	7.34	3,100
	Mar. 13, 1944	5.42	1,650		May 12, 1952	5.18	1,510
	Mar. 24, 1944	4.87	1,240		May 25, 1952	5.48	1,720
	May 7, 1944	4.90	1,330		July 22, 1952	4.94	1,350
	May 24, 1944	4.87	1,300	1953	Nov. 22, 1952	6.23	2,210
1945	Mar. 3, 1945	4.82	1,270		Dec. 5, 1952	5.32	1,580
	Sept. 18, 1945	5.47	1,680		Dec. 11, 1952	4.80	1,250
1946	Feb. 28, 1946	6.33	2,290		Jan. 24, 1953	4.83	1,280
	Mar. 9, 1946	5.08	1,450	1954	Mar. 1, 1954	5.34	1,620
	May 27, 1946	6.45	2,370	1955	Aug. 18, 1955	5.66	1,860
1947	Mar. 14, 1947	5.20	1,510	1956	Oct. 14, 1955	6.53	3,350
1948	Mar. 16, 1948	5.41	1,650	1957	Nov. 2, 1956	6.47	3,320
	Apr. 14, 1948	5.06	1,420		Apr. 6, 1957	5.57	1,790
1949	Dec. 30, 1948	6.06	2,140	1958	Dec. 21, 1957	4.68	1,260
1950	Jan. 7, 1950	5.03	1,420		Jan. 22, 1958	4.70	1,260
	Mar. 8, 1950	5.24	1,540		Feb. 26, 1958	6.42	-
	Mar. 21, 1950	5.52	1,720		Feb. 28, 1958	6.44	3,220
	June 1, 1950	5.54	1,760		July 7, 1958	5.41	1,670

a Backwater from ice.

5400. Fishing Creek at Bloomsburg, Pa.

Location.--Lat 41°00'10", long 76°27'50", at Red Rock Bridge, Railroad Street, Bloomsburg, Columbia County, and 2 miles upstream from mouth.

Drainage area.--355 sq mi.

Gage.--Nonrecording. Datum of gage is 462.46 ft above mean sea level, unadjusted.

Stage-discharge relation.--Defined by current-meter measurements below 5,000 cfs.

Remarks.--Records for 1914-19, 1922-28, furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 5,000 cfs.

Peak stages and discharges of Fishing Creek at Bloomsburg, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	Mar. 28, 1914	10.8	10,600	1923	May 13, 1923	7.8	5,080
	Apr. 9, 1914	9.2	7,460		July 29, 1923	12.0	13,200
1915	Jan. 7, 1915	12.0	12,800	1924	Jan. 11, 1924	8.1	5,560
	Feb. 25, 1915	12.6	14,000		Apr. 7, 1924	12.5	13,800
1916	Apr. 14, 1916	10.4	9,800		May 12, 1924	8.6	6,380
	July 26, 1916	15.0	19,700		Sept. 30, 1924	17.3	23,000
1917	Mar. 28, 1917	8.9	6,920	1925	Feb. 12, 1925	13.0	15,000
1918	Oct. 30, 1917	13.7	16,700	1926	Nov. 13, 1925	8.6	6,380
	Mar. 14, 1918	11.0	11,000		Feb. 26, 1926	8.3	5,880
1919	July 21, 1919	7.6	4,770	1927	Nov. 16, 1926	15.6	21,500
1920	Nov. 27, 1919	9.1	7,280		Mar. 14, 1927	8.5	5,080
	Mar. 5, 1920	11.3	11,600		Mar. 21, 1927	9.2	6,200
	Mar. 13, 1920	11.4	11,800	1928	Oct. 19, 1927	10.2	8,030
1921	Dec. 14, 1920	10.5	10,000		Nov. 18, 1927	10.1	7,840
	Mar. 10, 1921	8.5	6,200		Dec. 8, 1927	9.0	5,870
	Apr. 23, 1921	9.3	7,640		Mar. 30, 1928	8.7	5,390
1922	Nov. 29, 1921	9.7	8,400		Apr. 28, 1928	8.8	5,540
	Feb. 23, 1922	8.1	5,560		June 29, 1928	9.5	6,730
	Mar. 8, 1922	11.0	11,000		July 6, 1928	14.0	16,900
	Apr. 15, 1922	9.5	8,000		July 12, 1928	8.6	5,240
	June 6, 1922	11.9	13,000		July 14, 1928	10.1	7,840
	July 2, 1922	10.5	10,000		July 23, 1928	9.5	6,730
1923	Mar. 5, 1923	8.8	6,740	1929	Feb. 26, 1929	10.4	8,420
	Mar. 16, 1923	9.0	7,100		May 3, 1929	14.09	17,100
	Mar. 24, 1923	8.2	5,720	1930	Nov. 18, 1929	9.2	5,630
				1931	Mar. 29, 1931	7.6	3,720

5405. Susquehanna River at Danville, Pa.

Location.--Lat 40°57'30", long 76°37'10", on right bank 200 ft upstream from Mill Street Bridge at Danville, Montour County, and 0.8 mile upstream from Mahoning Creek.

Drainage area.--11,220 sq mi, approximately.

Gage.--Nonrecording at or near Mill Street Bridge prior to June 29, 1939; recording thereafter. Datum of gage is 431.29 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 250,000 cfs.

Bankfull stage.--20 ft.

Historical data.--Maximum stage known prior to 1899, that of March 18, 1865.

Remarks.--Records for 1914-18, 1922-31, furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 90,000 cfs. Only annual peaks are shown subsequent to Sept. 30, 1951.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1865	Mar. 18, 1865	28	-	1903	Feb. 6, 1903	15.8	104,000
1900	Mar. 2, 1900	15.9	105,000		Mar. 2, 1903	17.8	127,000
1901	Nov. 28, 1900	18.5	135,000		Mar. 25, 1903	18.2	132,000
	Mar. 29, 1901	18.0	129,000		Aug. 31, 1903	15.3	98,400
	Apr. 23, 1901	15.7	103,000	1904	Oct. 12, 1903	17.2	120,000
	May 31, 1901	15.0	95,100		Jan. 25, 1904	a26.2	-
1902	Dec. 16, 1901	22.8	188,000		Feb. 10, 1904	a24.6	-
	Mar. 3, 1902	26.9	243,000		Mar. 9, 1904	a30.7	-
	Mar. 14, 1902	16.3	109,000		Mar. 27, 1904	19.6	148,000
	Mar. 18, 1902	16.9	116,000	1905	Mar. 26, 1905	18.62	136,000

a Backwater from ice.

Peak stages and discharges of Susquehanna River at Danville, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1906	Mar. 30, 1906	15.2	97,300	1933	Aug. 25, 1933	17.04	119,000
	Apr. 1, 1906	15.4	99,500	1934	Mar. 6, 1934	14.5	98,600
1907	Mar. 17, 1907	13.0	73,400	1935	Jan. 11, 1935	16.2	108,000
1908	Dec. 12, 1907	15.6	102,000		July 11, 1935	20.0	153,000
	Feb. 17, 1908	17.4	122,000	1936	Mar. 19, 1936	28.0	-
	Mar. 16, 1908	17.0	117,000		Mar. 20, 1936	27.4	250,000
1909	May 2, 1909	18.4	134,000	1937	Jan. 23, 1937	15.2	93,400
1910	Mar. 3, 1910	21.0	165,000	1938	Oct. 24, 1937	13.8	79,400
	Apr. 26, 1910	16.8	115,000	1939	Feb. 22, 1939	19.2	139,000
1911	Mar. 29, 1911	15.2	97,300	1940	Apr. 2, 1940	25.25	222,000
1912	Apr. 3, 1912	17.97	129,000	1941	Apr. 7, 1941	19.45	142,000
1913	Mar. 28, 1913	23.11	192,000	1942	Mar. 11, 1942	17.08	116,000
1914	Mar. 29, 1914	22.6	186,000		Mar. 19, 1942	15.82	100,100
1915	Jan. 9, 1915	15.6	102,000		May 23, 1942	16.10	103,400
	Feb. 26, 1915	19.0	141,000	1943	Jan. 1, 1943	24.00	204,000
1916	Apr. 2, 1916	21.8	175,000		Mar. 19, 1943	16.42	108,000
1917	Mar. 29, 1917	14.8	92,900		Apr. 22, 1943	14.92	91,000
1918	Mar. 16, 1918	18.6	139,000	1944	May 9, 1944	15.48	97,600
1919	May 24, 1919	13.7	80,800	1945	Mar. 5, 1945	17.55	121,000
1920	Mar. 14, 1920	20.9	170,000		Mar. 18, 1945	16.04	103,000
1921	Mar. 10, 1921	15.5	101,000		Mar. 23, 1945	16.79	112,000
1922	Nov. 30, 1921	18.1	133,000	1946	Mar. 10, 1946	16.30	108,000
	Mar. 9, 1922	15.5	101,000		May 29, 1946	25.98	234,000
1923	Mar. 5, 1923	15.8	105,000	1947	Apr. 7, 1947	19.95	150,000
1924	Apr. 8, 1924	18.8	142,000	1948	Mar. 18, 1948	17.69	122,000
1925	Oct. 1, 1924	18.3	135,000		Mar. 24, 1948	22.63	184,000
	Feb. 13, 1925	20.3	162,000		Apr. 16, 1948	17.08	115,000
1926	Mar. 27, 1926	15.5	101,000	1949	Jan. 1, 1949	15.16	89,600
	Apr. 10, 1926	14.7	91,900	1950	Mar. 30, 1950	21.81	168,000
1927	Nov. 17, 1926	18.8	142,000	1951	Nov. 27, 1950	18.09	118,000
	Mar. 16, 1927	16.2	109,000		Dec. 5, 1950	19.02	131,000
	May 26, 1927	16.1	108,000	1952	Apr. 2, 1951	18.58	123,000
1928	Oct. 21, 1927	19.9	156,000		Mar. 13, 1952	18.84	127,000
	May 2, 1928	16.2	109,000	1953	Dec. 13, 1952	16.80	103,000
1929	Mar. 17, 1929	18.1	133,000	1954	May 5, 1954	14.71	82,100
	Apr. 23, 1929	20.35	163,000	1955	Mar. 3, 1955	15.09	85,900
1930	Mar. 9, 1930	13.5	78,700	1956	Mar. 9, 1956	22.47	175,000
1931	Mar. 30, 1931	14.35	88,500	1957	Apr. 8, 1957	17.78	114,000
1932	Apr. 2, 1932	17.05	119,000	1958	Apr. 8, 1958	21.87	169,000
				1959	Jan. 24, 1959	17.45	112,000
				1960	Apr. 2, 1960	23.92	198,000
				1961	Feb. 28, 1961	21.72	167,000

b Backwater from West Branch Susquehanna River.

5410. West Branch Susquehanna River at Bower, Pa.

Location.--Lat 40°53'50", long 78°40'40", on right bank on downstream side of highway bridge at Bower, Clearfield County, 4.6 miles downstream from Chest Creek and Mahaffey.

Drainage area.--315 sq mi.

Gage.--Nonrecording prior to Oct. 17, 1929; recording thereafter. Datum of gage is 1,207.14 ft above mean sea level, adjustment of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 7,200 cfs and extended above on basis of slope-area measurement at 31,500 cfs.

Historical data.--Maximum stage known prior to 1914, that of 1889.

Remarks.--Records for 1914-18, 1922-31, furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 4,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1889	May 31, 1889	18.5	27,000	1925	Feb. 9, 1925	11.2	6,960
					Feb. 11, 1925	10.5	5,900
1914	Nov. 9, 1913	10.5	5,900				
	Jan. 31, 1914	10.2	5,450	1926	Feb. 26, 1926	10.0	5,160
	Mar. 28, 1914	10.0	5,160		Sept. 5, 1926	13.1	10,500
1915	Jan. 7, 1915	12.2	8,640	1927	Jan. 22, 1927	12.8	9,810
	Jan. 19, 1915	10.1	5,300		Mar. 8, 1927	11.1	6,800
	Feb. 2, 1915	11.0	6,650		Mar. 21, 1927	11.8	7,940
	Feb. 15, 1915	10.4	5,750		May 19, 1927	10.4	5,750
1916	Oct. 19, 1915	11.1	6,800	1928	Oct. 20, 1927	11.1	6,800
	Dec. 18, 1915	11.0	6,650		Nov. 29, 1927	9.6	4,600
	Jan. 2, 1916	11.5	7,120		Dec. 14, 1927	11.4	7,280
	Mar. 22, 1916	10.1	5,300		Dec. 16, 1927	10.0	5,160
	Mar. 28, 1916	12.4	9,010		Feb. 5, 1928	9.6	5,050
	Apr. 14, 1916	9.8	4,880		Feb. 15, 1928	9.5	4,460
	June 3, 1916	12.7	9,600		Mar. 30, 1928	11.8	7,940
1917	Jan. 6, 1917	9.7	4,740		Apr. 8, 1928	10.0	5,160
	Jan. 22, 1917	11.1	6,800		Apr. 30, 1928	10.1	5,300
	Mar. 12, 1917	10.1	5,300		June 10, 1928	9.8	4,880
	Aug. 14, 1917	9.65	4,600	1929	Jan. 18, 1929	10.2	5,450
1918	Feb. 15, 1918	10.3	5,600		Feb. 26, 1929	11.5	7,440
	Feb. 20, 1918	13.8	12,200		Apr. 5, 1929	11.57	7,120
	Feb. 26, 1918	11.45	7,280	1930	Oct. 23, 1929	10.31	4,870
	Mar. 14, 1918	10.50	5,900		Feb. 26, 1930	11.27	6,550
1919	Oct. 31, 1918	11.0	6,680	1931	Apr. 4, 1931	10.74	5,500
	Jan. 2, 1919	10.4	5,750	1932	Apr. 1, 1932	9.96	4,160
	May 10, 1919	11.0	6,680	1933	Mar. 15, 1933	11.48	6,930
	May 21, 1919	10.0	5,160		May 10, 1933	10.41	5,020
1920	Nov. 2, 1919	9.5	4,460	1934	Sept. 30, 1934	9.35	3,540
	Nov. 27, 1919	10.8	6,350	1935	July 25, 1935	11.65	7,120
	Mar. 6, 1920	13.7	-	1936	Mar. 11, 1936	10.89	5,840
	Mar. 12, 1920	13.75	12,200		Mar. 18, 1936	19.74	31,500
	June 18, 1920	12.7	9,600	1937	Nov. 5, 1936	10.72	5,500
1921	May 5, 1921	9.5	4,460		Jan. 22, 1937	11.81	7,520
	Aug. 8, 1921	11.5	7,300		Jan. 25, 1937	11.32	6,550
1922	Nov. 2, 1921	10.0	5,610		Apr. 28, 1937	11.50	6,930
	Nov. 29, 1921	12.58	8,950	1938	Oct. 29, 1937	10.02	4,600
	Apr. 15, 1922	12.4	9,010		Dec. 18, 1937	12.66	9,490
1923	Mar. 13, 1923	9.6	4,600	1939	Feb. 15, 1939	9.82	4,320
	May 13, 1923	11.2	6,850	1940	Mar. 19, 1940	10.74	5,660
1924	Dec. 23, 1923	10.0	5,160		Mar. 31, 1940	14.05	12,700
	Dec. 28, 1923	9.5	4,460		Apr. 20, 1940	10.68	5,660
	Jan. 3, 1924	10.3	5,600	1941	June 5, 1941	9.95	4,600
	Jan. 17, 1924	9.6	4,600				
	Mar. 30, 1924	12.4	9,010				
	Apr. 6, 1924	10.0	5,160				
	May 12, 1924	11.0	6,650				
	June 29, 1924	13.4	11,200				
	Aug. 25, 1924	10.0	5,160				

a Backwater from ice.

Peak stages and discharges of West Branch Susquehanna River at Bower, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Mar. 9, 1942	11.13	6,320	1952	Apr. 14, 1952	10.08	4,740
	Mar. 17, 1942	10.0	4,600		May 21, 1952	10.03	4,590
	Apr. 10, 1942	10.23	4,890		May 25, 1952	9.97	4,590
1943	Dec. 30, 1942	14.60	14,300	1953	May 26, 1953	11.20	6,490
	Apr. 20, 1943	10.54	5,340		May 31, 1953	12.01	8,000
	May 12, 1943	10.43	5,190		June 7, 1953	9.94	4,450
1944	Mar. 17, 1944	10.64	5,500	1954	Mar. 2, 1954	12.95	10,200
1945	Feb. 22, 1945	a15.15	-	1955	Oct. 16, 1954	12.55	9,270
	Feb. 27, 1945	11.71	7,410		Dec. 30, 1954	12.18	8,410
	Mar. 3, 1945	13.09	10,400		Feb. 23, 1955	10.02	4,590
	Mar. 7, 1945	13.44	11,200		Mar. 1, 1955	10.01	4,590
	Mar. 22, 1945	10.46	5,340		Mar. 4, 1955	10.39	5,190
1946	Jan. 6, 1946	a12.82	-	1956	Feb. 25, 1956	12.35	8,830
	May 27, 1946	11.96	8,000		Mar. 8, 1956	11.62	7,220
	June 2, 1946	10.02	4,600		Apr. 3, 1956	10.42	5,190
	June 13, 1946	12.03	8,000		May 7, 1956	10.33	5,040
	June 21, 1946	10.91	5,980		May 13, 1956	11.91	7,800
1947	Apr. 26, 1947	9.30	3,660		July 3, 1956	12.84	9,720
					Aug. 8, 1956	10.23	4,890
1948	Apr. 14, 1948	13.30	10,900	1957	Jan. 23, 1957	11.34	6,670
	Apr. 28, 1948	9.87	4,460		Aug. 6, 1957	11.75	7,600
1949	Jan. 6, 1949	9.87	4,460	1958	May 8, 1958	10.43	5,190
	Jan. 27, 1949	9.98	4,600		July 23, 1958	10.0	4,590
1950	Jan. 10, 1950	10.80	5,820	1959	Jan. 2, 1959	a16.08	-
	Feb. 15, 1950	10.17	4,890		Jan. 22, 1959	13.73	11,900
	Mar. 28, 1950	11.45	6,850		Feb. 10, 1959	11.81	7,600
1951	Nov. 5, 1950	12.20	8,410		Apr. 29, 1959	10.73	5,660
	Dec. 4, 1950	10.72	5,660	1960	Dec. 13, 1959	10.06	4,740
	Jan. 4, 1951	10.89	5,980		Mar. 31, 1960	12.62	9,270
	Jan. 21, 1951	10.31	5,040		May 9, 1960	12.50	9,050
	Mar. 31, 1951	10.64	5,500	1961	Feb. 19, 1961	a13.91	-
	Apr. 30, 1951	11.66	7,410		Feb. 20, 1961	12.13	8,200
1952	Jan. 2, 1952	10.90	5,980		Feb. 25, 1961	13.00	10,200
	Jan. 27, 1952	13.53	11,400		Mar. 5, 1961	10.39	5,190
	Mar. 11, 1952	11.76	7,600				

a Backwater from ice.

5412. West Branch Susquehanna River near Curwensville, Pa.

Location.--Lat 40°57'40", long 78°31'10", on left bank 30 ft downstream from highway bridge on State Highway 453, 1.1 miles south of Curwensville, Clearfield County, and 1.8 miles upstream from Anderson Creek.

Drainage area.--367 sq mi.

Gage.--Nonrecording and crest-stage gage prior to Aug. 24, 1956; recording thereafter. Datum of gage is 1,124.52 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 5,100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Feb. 25, 1956	10.8	9,970	1959	Jan. 22, 1959	12.12	12,500
	Mar. 8, 1956	10.0	8,520		Feb. 10, 1959	9.88	8,340
	Apr. 3, 1956	8.30	5,700		Apr. 29, 1959	8.45	5,860
	May 7, 1956	7.9	5,100	1960	Mar. 31, 1960	11.03	10,400
	May 13, 1956	10.5	9,420		May 9, 1960	10.61	9,600
	July 3, 1956	10.89	10,200	1961	Feb. 20, 1961	9.60	8,280
	Aug. 8, 1956	8.4	5,860		Feb. 26, 1961	11.62	12,100
1957	Jan. 23, 1957	9.58	7,850		Mar. 5, 1961	8.27	6,060
	Apr. 6, 1957	10.44	9,240				
1958	May 8, 1958	7.66	4,800				

5415. Clearfield Creek at Dimeling, Pa.

Location.--Lat 40°58'15", long 78°24'25", on right bank on downstream side of highway bridge at Dimeling, Clearfield County, 400 ft downstream from Little Clearfield Creek.

Drainage area.--371 sq mi.

Gage.--Nonrecording prior to Oct. 17, 1928; recording thereafter. Datum of gage is 1,146.08 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 15,000 cfs and extended above by logarithmic plotting.

Bankfull stage.--10 ft.

Remarks.--Records for 1914-18, 1922-31, furnished by Pennsylvania Department of Forests and Waters. Flow regulated by Glendale Reservoir beginning Dec. 1, 1960. Base for partial-duration series, 4,500 cfs. Only annual peaks are shown subsequent to 1959.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	Nov. 10, 1913	9.7	5,270	1925	Feb. 9, 1925	12.65	11,200
	Jan. 31, 1914	10.8	7,340		Feb. 12, 1925	11.6	9,000
	Mar. 28, 1914	9.8	5,440				
	Apr. 16, 1914	9.7	5,270	1926	Feb. 26, 1926	10.0	5,800
1915	Jan. 7, 1915	12.2	10,300		Sept. 6, 1926	11.3	8,370
	Feb. 2, 1915	9.8	5,440	1927	Mar. 8, 1927	11.8	9,440
	Feb. 25, 1915	9.4	4,760				
1916	Dec. 18, 1915	9.82	5,440	1928	Oct. 20, 1927	10.6	6,940
	Jan. 2, 1916	9.96	5,800		Dec. 14, 1927	9.6	5,100
	Jan. 22, 1916	9.56	5,100		Mar. 30, 1928	11.1	7,960
	Mar. 23, 1916	a16.10	-		Apr. 8, 1928	10.2	6,180
	Mar. 28, 1916	12.3	10,500		May 1, 1928	10.3	6,360
	Apr. 14, 1916	9.40	4,760		June 22, 1928	9.4	4,760
	June 3, 1916	11.88	9,660	1929	Feb. 27, 1929	a18.4	-
	June 17, 1916	10.28	6,360		Mar. 14, 1929	9.9	5,620
1917	Dec. 28, 1916	10.06	5,990		Apr. 5, 1929	12.3	10,500
	Jan. 22, 1917	a13.24	-	1930	Oct. 23, 1929	11.0	7,630
	Mar. 12, 1917	10.46	6,750		Feb. 26, 1930	10.65	6,810
	June 8, 1917	9.40	4,760	1931	Apr. 4, 1931	9.99	5,650
1918	Feb. 13, 1918	a16.5	-	1932	Apr. 1, 1932	9.66	5,130
	Feb. 20, 1918	12.0	9,880				
	Feb. 26, 1918	10.9	7,540	1933	Mar. 15, 1933	10.63	6,950
	Mar. 16, 1918	10.3	6,360		May 10, 1933	9.65	4,950
1919	Oct. 31, 1918	9.80	5,440	1934	Dec. 18, 1933	8.22	2,960
	May 10, 1919	9.38	4,760		Mar. 4, 1934	a13.2	-
	May 22, 1919	11.5	8,790	1935	Jan. 1, 1935	a11.61	-
1920	Nov. 27, 1919	9.72	5,270		May 7, 1935	9.2	4,290
	Jan. 10, 1920	12.7	11,500	1936	Mar. 12, 1936	11.96	10,600
	Mar. 11, 1920	a18.5	-		Mar. 18, 1936	18.49	30,600
	Mar. 13, 1920	12.8	11,700	1937	Nov. 5, 1936	10.17	6,030
	Mar. 17, 1920	10.0	5,800		Jan. 22, 1937	11.98	9,900
	June 17, 1920	12.3	10,500		Jan. 25, 1937	10.17	6,030
1921	May 5, 1921	10.4	6,560		Apr. 27, 1937	12.39	10,900
	Aug. 8, 1921	10.6	6,940	1938	Oct. 29, 1937	10.13	5,840
1922	Nov. 29, 1921	12.0	9,880		Dec. 18, 1937	11.73	9,160
	Feb. 3, 1922	10.4	6,560	1939	Feb. 15, 1939	9.18	4,320
	Apr. 15, 1922	11.7	9,220	1940	Mar. 31, 1940	14.23	15,400
1923	Mar. 4, 1923	10.6	6,940		Apr. 4, 1940	9.88	5,480
	May 13, 1923	10.68	7,140		Apr. 21, 1940	10.37	6,410
1924	Dec. 23, 1923	9.5	4,920	1941	Apr. 5, 1941	9.91	5,480
	Dec. 29, 1923	9.4	4,760		June 6, 1941	9.87	5,480
	Jan. 3, 1924	10.3	6,360	1942	Mar. 9, 1942	11.03	7,610
	Jan. 17, 1924	9.8	5,440				
	Feb. 6, 1924	9.8	5,440	1943	Dec. 30, 1942	13.21	12,900
	Mar. 30, 1924	11.4	8,580				
	May 13, 1924	11.9	9,660				
	June 30, 1924	12.0	9,880				
	Aug. 25, 1924	12.6	11,200				

a Backwater from ice.

Peak stages and discharges of Clearfield Creek at Dimeling, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Jan. 19, 1943	9.42	4,720	1952	Jan. 2, 1952	9.59	5,010
	Apr. 21, 1943	9.98	5,680		Jan. 27, 1952	11.14	7,820
	May 12, 1943	9.60	5,020		Mar. 11, 1952	11.27	8,250
1944	Mar. 17, 1944	10.19	6,040	1953	Mar. 24, 1953	9.65	5,010
	May 27, 1944	9.57	5,020		May 26, 1953	10.37	6,410
1945	Feb. 27, 1945	10.27	6,220		May 31, 1953	10.30	6,220
	Mar. 4, 1945	11.22	8,030	1954	Mar. 2, 1954	12.89	12,200
	Mar. 7, 1945	12.09	10,200		Oct. 17, 1954	11.63	8,930
	May 18, 1945	10.24	6,040	1955	Dec. 30, 1954	10.32	6,220
1946	May 28, 1946	11.28	8,250	1956	Feb. 25, 1956	10.22	6,040
	June 3, 1946	9.67	5,180		Mar. 8, 1956	10.13	5,860
	June 14, 1946	10.77	7,200		Apr. 4, 1956	9.28	4,550
	June 21, 1946	9.89	5,510		May 13, 1956	11.91	9,650
1947	Apr. 26, 1947	8.39	3,370		July 2, 1956	11.21	8,030
1948	Feb. 14, 1948	114.89	-	1957	Jan. 23, 1957	9.29	4,550
	Apr. 14, 1948	12.48	11,200		Apr. 6, 1957	10.21	6,040
1949	Jan. 6, 1949	9.15	4,390		Apr. 9, 1957	9.28	4,550
				1958	July 23, 1958	9.51	4,850
1950	Jan. 10, 1950	9.53	4,850				
	Mar. 28, 1950	10.98	7,610	1959	Jan. 22, 1959	10.92	7,400
1951	Oct. 10, 1950	9.69	5,170		Feb. 11, 1959	10.43	6,410
	Nov. 5, 1950	9.63	5,010		Apr. 29, 1959	9.32	4,550
	Dec. 4, 1950	10.33	6,220	1960	Mar. 31, 1960	11.35	8,470
	Dec. 8, 1950	10.13	5,860				
	Jan. 4, 1951	9.75	5,340	1961	Feb. 19, 1961	112.28	-
	Jan. 21, 1951	9.51	4,850		Feb. 26, 1961	-	7,820
	Mar. 31, 1951	10.25	6,040				

a Backwater from ice.

5420. Moshannon Creek at Osceola Mills, Pa.

Location.--Lat 40°50'55", long 78°16'05", on left bank 10 ft upstream from Pennsylvania Railroad bridge at Osceola Mills, Clearfield County, and 0.1 mile downstream from Trout Run.

Drainage area.--68.8 sq mi.

Gage.--Recording. Datum of gage is 1,446.98 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,500 cfs and extended above on basis of contracted-opening measurements at gage heights 7.58 and 9.00 ft.

Bankfull stage.--4 ft.

Historical data.--Maximum stage known, that of Mar. 18, 1936.

Remarks.--Base for partial-duration series, 600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Mar. 18, 1936	17.7	-	1944	Mar. 17, 1944	5.61	1,230
					May 7, 1944	4.78	865
1941	Apr. 5, 1941	5.25	1,060		May 24, 1944	4.90	907
	June 5, 1941	5.37	1,110		May 27, 1944	4.68	824
1942	Dec. 24, 1941	5.23	1,060	1945	Feb. 27, 1945	5.05	972
	Mar. 9, 1942	5.30	1,080		Mar. 3, 1945	5.97	1,410
	Mar. 16, 1942	4.29	665		Mar. 7, 1945	6.68	1,720
	Mar. 22, 1942	4.75	844		Mar. 21, 1945	6.01	1,410
					May 18, 1945	7.28	2,000
1943	Dec. 30, 1942	7.84	2,220	1946	Feb. 27, 1946	4.20	627
	Apr. 21, 1943	5.53	1,200		May 27, 1946	6.95	1,860
	May 12, 1943	4.82	865		June 2, 1946	5.13	1,020
	May 21, 1943	5.14	1,020				

Peak stages and discharges of Moshannon Creek at Osceola Mills, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	June 12, 1946	4.50	743	1955	Dec. 30, 1954	5.35	1,140
	June 21, 1946	4.35	684		Mar. 4, 1955	4.27	694
1947	May 18, 1947	3.96	562	1956	Oct. 14, 1955	4.66	846
1948	Feb. 14, 1948	4.48	(a)		Feb. 25, 1956	5.84	1,230
	Apr. 12, 1948	5.30	1,040		Mar. 8, 1956	6.11	1,460
	Apr. 14, 1948	7.58	2,130		Apr. 3, 1956	4.03	622
1949	Jan. 26, 1949	4.23	620		Apr. 7, 1956	4.20	676
1950	Jan. 10, 1950	4.85	880		May 7, 1956	4.97	965
	Mar. 28, 1950	5.78	1,320		May 13, 1956	7.08	1,900
1951	Oct. 10, 1950	4.18	600		July 2, 1956	6.24	1,500
	Nov. 28, 1950	6.61	1,680		July 4, 1956	4.61	826
	Dec. 4, 1950	6.73	1,720		Aug. 5, 1956	4.07	622
	Dec. 8, 1950	6.23	1,500		Aug. 12, 1956	5.03	1,000
	Jan. 4, 1951	4.64	740	1957	Apr. 6, 1957	-	(a)
	Jan. 21, 1951	4.65	740		Apr. 9, 1957	5.85	1,320
	Mar. 30, 1951	6.08	1,460	1958	Apr. 7, 1958	4.76	885
	June 14, 1951	4.42	617		May 7, 1958	4.20	676
1952	Jan. 1, 1952	4.83	848	1959	Jan. 22, 1959	5.66	1,280
	Jan. 27, 1952	5.76	1,320		Feb. 10, 1959	4.75	855
	Mar. 11, 1952	8.35	2,490		Mar. 6, 1959	4.57	807
	Mar. 23, 1952	4.39	621		Apr. 29, 1959	4.00	604
	May 25, 1952	4.52	675	1960	Oct. 24, 1959	4.06	622
1953	Nov. 22, 1952	4.48	743		Nov. 28, 1959	4.10	640
	Dec. 11, 1952	4.37	684		Mar. 31, 1960	6.84	1,770
	Mar. 24, 1953	5.58	1,230		Apr. 4, 1960	4.74	885
	May 26, 1953	6.72	1,720		May 8, 1960	5.30	1,100
	May 31, 1953	5.51	1,180		May 14, 1960	4.90	945
	Aug. 10, 1953	4.50	743		May 23, 1960	5.94	1,360
1954	Mar. 1, 1954	9.00	2,760	1961	Feb. 20, 1961	-	(a)
1955	Oct. 16, 1954	8.75	2,670		Feb. 26, 1961	6.14	1,460
					Apr. 17, 1961	5.37	1,140
					Apr. 22, 1961	4.2	665
					Aug. 2, 1961	5.0	985

a Peak above base probably occurred on this day.

5425. West Branch Susquehanna River at Karthaus, Pa.

Location.--Lat 41°06'55", long 78°06'40", on left bank 900 ft upstream from highway bridge at Karthaus, Clearfield County, 1,000 ft upstream from Mosquito Creek, and 3.3 miles downstream from Moshannon Creek. Records include flow of Mosquito Creek.

Drainage area.--1,462 sq mi, includes that of Mosquito Creek.

Gage.--Nonrecording at site 900 ft downstream prior to Oct. 1, 1940; recording thereafter. Datum of gage is 830.59 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 50,000 cfs.

Bankfull stage.--19 ft.

Historical data.--Maximum stage known, that of Mar. 18, 1936.

Remarks.--Base for partial-duration series, 13,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Mar. 18, 1936	24.5	135,000	1942	Dec. 25, 1941	7.46	13,600
1940	Mar. 19, 1940	6.50	14,800		Mar. 10, 1942	9.38	22,600
	Apr. 1, 1940	12.4	50,900		Mar. 17, 1942	8.15	16,600
	Apr. 7, 1940	8.4	24,700	1943	Dec. 30, 1942	13.82	50,200
	Apr. 22, 1940	7.3	18,800		Jan. 20, 1943	7.86	15,200
1941	Mar. 5, 1941	8.95	-		Apr. 21, 1943	9.36	22,600
	Apr. 6, 1941	8.79	19,600		May 12, 1943	9.10	21,100

a Backwater from ice.

Peak stages and discharges of West Branch Susquehanna River at Kerthaus, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Mar. 17, 1944	9.13	21,100	1952	May 21, 1952	7.56	13,800
	May 25, 1944	8.07	16,100		May 26, 1952	8.49	17,400
1945	Feb. 27, 1945	9.33	22,100	1953	Mar. 25, 1953	8.53	17,400
	Mar. 4, 1945	11.62	35,600		May 27, 1953	10.34	26,500
	Mar. 7, 1945	12.47	41,100		May 31, 1953	9.57	22,700
	Mar. 22, 1945	9.52	23,100	1954	Mar. 2, 1954	11.42	33,100
	May 18, 1945	8.60	18,600				
1946	May 28, 1946	11.95	36,900	1955	Oct. 17, 1954	9.05	19,700
	June 3, 1946	7.90	14,700		Dec. 30, 1954	9.62	22,700
	June 14, 1946	8.67	18,200		Feb. 23, 1955	7.94	15,000
	June 22, 1946	7.77	14,300		Mar. 5, 1955	8.33	16,600
1947	May 19, 1947	7.26	12,400		Mar. 23, 1955	7.41	13,000
1948	Apr. 14, 1948	12.91	43,200	1956	Feb. 26, 1956	9.59	22,700
1949	Jan. 27, 1949	7.73	13,900		Mar. 8, 1956	10.73	28,900
1950	Jan. 11, 1950	8.72	18,200		Apr. 4, 1956	8.02	15,400
	Feb. 15, 1950	7.91	14,700		May 13, 1956	10.14	25,300
	Mar. 28, 1950	10.44	27,100		July 3, 1956	9.40	21,700
1951	Oct. 10, 1950	7.46	13,200		Aug. 7, 1956	8.16	16,200
	Nov. 5, 1950	9.07	20,200	1957	Apr. 6, 1957	9.42	21,700
	Nov. 25, 1950	12.16	38,300	1958	Apr. 7, 1958	7.45	13,000
	Dec. 5, 1950	8.96	19,700		May 8, 1958	8.28	16,600
	Dec. 8, 1950	8.33	16,600	1959	Jan. 22, 1959	10.5	27,700
	Jan. 5, 1951	8.15	16,200		Feb. 11, 1959	9.07	20,200
	Jan. 21, 1951	8.01	15,400		Apr. 29, 1959	8.49	17,400
	Feb. 22, 1951	8.05	15,400	1960	Mar. 31, 1960	11.80	35,500
	Mar. 5, 1951	7.51	13,400		May 9, 1960	9.71	23,200
	Mar. 31, 1951	9.12	20,200		June 15, 1960	9.08	20,200
	Apr. 30, 1951	7.77	14,600	1961	Feb. 20, 1961	8.07	15,800
1952	Jan. 2, 1952	8.61	17,800		Feb. 26, 1961	11.79	35,500
	Jan. 27, 1952	11.21	31,900		Mar. 5, 1961	8.24	16,200
	Mar. 12, 1952	10.42	27,100		Apr. 17, 1961	7.90	15,000
	Apr. 16, 1952	8.22	16,200				

5430. Driftwood Branch Sinnemahoning Creek at Sterling Run, Pa.

Location.--Lat 41°24'45", long 78°11'50", on downstream side of first pier from right bank of highway bridge at Sterling Run, Cameron County, 300 ft upstream from Sterling Run.

Drainage area.--272 sq mi.

Gage.--Nonrecording prior to Sept. 30, 1931; recording Oct. 1, 1931, to Sept. 30, 1932; nonrecording Oct. 1, 1932, to Sept. 30, 1942; recording thereafter. Prior to Oct. 1, 1932, at present site; Oct. 1, 1932, to Sept. 30, 1942, at site 800 ft upstream. Datum of gage is 894.84 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 11,000 cfs and extended above on basis of slope-area measurement at 47,800 cfs.

Bankfull stage.--6 ft.

Remarks.--Records for 1914-18, 1922-31, furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 4,700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	Mar. 28, 1914	6.0	6,340	1918	Mar. 14, 1918	7.70	12,600
1915	Feb. 25, 1915	4.97	6,090	1919	May 22, 1919	5.84	7,880
1916	Mar. 28, 1916	6.6	9,800	1920	Mar. 5, 1920	10.4	-
1917	Aug. 15, 1917	10.0	20,000		Mar. 13, 1920	5.9	8,110
					Mar. 17, 1920	4.4	4,820
1918	Feb. 20, 1918	7.30	11,600	1921	Mar. 7, 1921	3.22	2,470

a Backwater from ice.

Peak stages and discharges of Driftwood Branch Sinnemahoning Creek
at Sterling Run, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	Nov. 2, 1921	4.5	4,880	1943	May 26, 1943	5.06	5,470
1923	Mar. 5, 1923	6.4	9,280		June 2, 1943	7.26	11,300
	May 12, 1923	5.8	7,840	1944	Mar. 17, 1944	6.80	6,620
	May 21, 1923	7.0	10,800	1945	Mar. 3, 1945	5.99	8,660
1924	Apr. 6, 1924	5.7	7,650		Mar. 7, 1945	4.67	5,850
1925	Feb. 12, 1925	7.8	12,700		Mar. 17, 1945	5.05	6,450
1926	Feb. 26, 1926	4.4	4,820		Mar. 22, 1945	5.76	8,190
	Mar. 23, 1926	4.6	5,240	1946	Oct. 2, 1945	5.27	7,080
1927	Jan. 22, 1927	4.4	4,820		May 27, 1946	9.66	21,600
	Mar. 8, 1927	4.5	5,030		June 13, 1946	4.67	5,850
	Mar. 14, 1927	5.0	6,090	1947	Apr. 5, 1947	5.27	7,080
	Mar. 21, 1927	5.1	6,310		June 7, 1947	4.10	4,730
	May 25, 1927	6.2	8,820	1948	Mar. 20, 1948	4.90	6,250
1928	Dec. 14, 1927	4.9	5,870		Apr. 12, 1948	6.51	9,900
	Dec. 16, 1927	5.6	7,420		Apr. 14, 1948	5.05	6,450
	Apr. 8, 1928	5.0	6,090	1949	Jan. 28, 1949	3.45	3,560
	June 6, 1928	6.4	9,300	1950	Jan. 7, 1950	5.07	6,660
1929	Jan. 19, 1929	4.7	5,450		Mar. 28, 1950	5.46	7,520
	Mar. 15, 1929	5.6	7,420		Apr. 5, 1950	5.54	6,640
1930	Jan. 13, 1930	4.82	5,660	1951	Nov. 5, 1950	6.83	10,100
1931	June 8, 1931	4.27	4,500		Nov. 25, 1950	10.65	25,800
1932	Dec. 13, 1931	4.73	5,450		Mar. 31, 1951	6.19	8,320
	Jan. 15, 1932	4.60	5,240	1952	Jan. 18, 1952	6.65	9,500
	Jan. 18, 1932	5.18	6,530		Jan. 27, 1952	6.02	7,790
	Apr. 1, 1932	4.62	5,240		Mar. 11, 1952	4.73	5,250
	May 8, 1932	6.47	9,550		Apr. 15, 1952	5.21	6,070
1933	Mar. 15, 1933	6.10	4,990		May 25, 1952	5.44	6,440
1934	Apr. 12, 1934	5.2	3,330	1953	Mar. 24, 1953	5.79	7,300
1935	May 8, 1935	5.80	4,380		May 23, 1953	8.74	17,000
1936	Mar. 12, 1936	8.40	11,800		May 26, 1953	6.90	10,400
	Mar. 17, 1936	12.0	28,400		May 31, 1953	5.63	6,850
1937	Jan. 22, 1937	7.37	8,210	1954	Mar. 1, 1954	7.45	12,100
	Jan. 25, 1937	7.14	7,390	1955	Mar. 1, 1955	5.36	6,430
	Apr. 28, 1937	6.70	6,370		Mar. 5, 1955	5.20	6,040
1938	Dec. 18, 1937	7.25	7,660	1956	Oct. 15, 1955	5.19	6,040
	Mar. 6, 1938	6.53	5,890		Feb. 25, 1956	5.43	6,430
1939	Feb. 15, 1939	5.9	4,580		Mar. 8, 1956	8.92	17,800
1940	Mar. 31, 1940	7.0	7,130		Apr. 4, 1956	4.67	5,140
	Apr. 4, 1940	7.1	7,390		May 13, 1956	5.01	5,670
1941	Apr. 15, 1941	6.6	6,130		Aug. 6, 1956	4.56	4,970
1942	Mar. 9, 1942	6.54	5,890	1957	Jan. 23, 1958	5.11	6,430
	Mar. 17, 1942	6.74	6,370	1958	Apr. 7, 1958	4.15	4,990
	July 18, 1942	14.70	47,800	1959	Jan. 22, 1959	8.32	15,400
1943	Dec. 30, 1942	8.30	14,800		Feb. 10, 1959	4.60	5,680
	Mar. 17, 1943	5.12	5,680		Apr. 2, 1959	4.40	5,320
	Apr. 21, 1943	7.45	11,600	1960	Mar. 31, 1960	5.55	7,540
					May 23, 1960	4.50	5,500
				1961	Feb. 26, 1961	8.59	16,600

5435. Sinnemahoning Creek at Sinnemahoning, Pa.

Location.--Lat 41°19'00", long 78°06'10", on left bank 0.2 mile upstream from Grove Run and 0.7 mile upstream from Pennsylvania Railroad bridge at Sinnemahoning, Cameron County.

Drainage area.--685 sq mi.

Gage.--Recording. Datum of gage is 769.36 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 31,000 cfs and extended above on basis of slope-area measurement at 59,800 cfs.

Bankfull stage.--17 ft.

Historical data.--Maximum stage known, that of Mar. 18, 1936.

Remarks.--Base for partial-duration series, 8,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Mar. 18, 1936	21.94	61,200	1951	Jan. 4, 1951	7.61	9,930
1939	Feb. 15, 1939	7.19	8,120		Feb. 22, 1951	7.23	8,900
					Mar. 31, 1951	9.76	16,300
1940	Mar. 31, 1940	10.57	19,100	1952	Jan. 18, 1952	10.11	17,200
	Apr. 5, 1940	10.00	17,000		Jan. 27, 1952	10.47	18,400
	Apr. 9, 1940	7.81	10,400		Mar. 11, 1952	8.94	13,600
1941	Apr. 5, 1941	8.01	10,900		Apr. 15, 1952	9.05	13,900
					May 25, 1952	9.97	16,900
1942	Mar. 9, 1942	8.54	12,400	1953	Mar. 24, 1953	9.26	14,800
	July 18, 1942	21.58	59,800		May 23, 1953	11.67	22,400
1943	Dec. 30, 1942	13.44	28,300		May 26, 1953	11.32	21,000
	Apr. 21, 1943	11.14	20,200		May 31, 1953	9.38	15,100
	May 26, 1943	7.47	9,670	1954	Mar. 1, 1954	12.25	24,100
	June 3, 1943	8.62	12,700		Apr. 27, 1954	7.96	11,000
1944	Mar. 17, 1944	8.78	13,300	1955	Dec. 30, 1954	8.12	11,300
1945	Mar. 3, 1945	10.40	18,100		Mar. 1, 1955	8.61	12,700
	Mar. 7, 1945	9.40	15,100		Mar. 5, 1955	8.05	11,000
	Mar. 17, 1945	8.11	11,300		Mar. 22, 1955	7.26	9,150
	Mar. 22, 1945	9.90	16,600	1956	Oct. 15, 1955	8.97	13,900
	May 18, 1945	7.56	9,930		Nov. 16, 1955	7.25	8,900
1946	Oct. 2, 1945	8.04	11,000		Feb. 25, 1956	9.86	16,600
	May 28, 1946	15.76	36,700		Mar. 8, 1956	13.87	30,000
	June 13, 1946	7.74	10,200		Apr. 5, 1956	7.54	9,670
1947	Apr. 5, 1947	7.42	9,410		May 13, 1956	8.59	12,700
	May 22, 1947	7.34	9,150		Aug. 7, 1956	8.23	11,600
1948	Mar. 20, 1948	7.87	10,700	1957	Jan. 23, 1957	8.58	12,700
	Apr. 12, 1948	9.67	16,000	1958	Apr. 7, 1958	7.78	10,400
	Apr. 14, 1948	9.41	15,100		May 8, 1958	7.63	9,830
1949	Jan. 28, 1949	6.58	7,450	1959	Jan. 22, 1959	13.20	27,600
1950	Jan. 7, 1950	8.04	11,000		Feb. 10, 1959	9.04	13,900
	Mar. 27, 1950	7.25	8,900		Apr. 2, 1959	7.67	10,100
	Mar. 29, 1950	9.68	16,000		Apr. 29, 1959	7.08	8,500
	Apr. 5, 1950	7.86	10,700	1960	Mar. 31, 1960	10.21	17,500
1951	Nov. 5, 1950	10.98	19,900		May 23, 1960	7.19	8,760
	Nov. 25, 1950	19.66	52,200	1961	Feb. 26, 1961	13.62	29,000
	Dec. 4, 1950	7.97	11,000		Apr. 16, 1961	7.86	10,700

5440. First Fork Sinnemahoning Creek near Sinnemahoning, Pa.

Location.--Lat 41°24'05", long 78°01'30", on right bank 350 ft downstream from Woodrock Run, 1,500 ft upstream from Roaring Run, three-quarters of a mile downstream from George B. Stevenson Dam, and 7½ miles northeast of Sinnemahoning, Cameron County.

Drainage area.--245 sq mi.

Gage.--Nonrecording prior to Mar. 31, 1954; recording thereafter. Datum of gage is 878.71 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Historical data.--Greatest flood known, that of July 18, 1942.

Remarks.--Flow regulated by First Fork Sinnemahoning Creek Reservoir since Jan. 31, 1956. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	July 18, 1942	-	a80,000	1957	Jan. 23, 1957	4.28	4,340
				1958	Apr. 7, 1958	4.75	5,400
1954	Mar. 1, 1954	5.64	7,000	1959	Jan. 23, 1959	5.21	6,550
1955	Mar. 5, 1955	4.70	4,930	1960	Apr. 3, 1960	5.10	6,290
1956	Mar. 1, 1956	6.60	10,200	1961	Feb. 28, 1961	5.47	7,360

a By slope-area measurement.

5445. Kettle Creek at Cross Fork, Pa.

Location.--Lat 41°28'30", long 77°49'35", on right bank just upstream from bridge on State Highway 144, 0.2 mile downstream from Potter-Clinton County line, 0.7 mile southwest of village of Cross Fork, Potter County.

Drainage area.--136 sq mi.

Gage.--Recording. Datum of gage is 1,027.12 ft above mean sea level; adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 2,500 cfs and extended above on basis of slope-area measurement at 10.38 ft.

Historical data.--Maximum stage known, that of Mar. 18, 1936.

Remarks.--Base for partial-duration series, 2,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Mar. 18, 1936	14.0	20,000	1948	Apr. 12, 1948	5.35	2,520
					Apr. 15, 1948	5.56	2,800
1941	Apr. 6, 1941	5.42	2,370	1949	Feb. 16, 1949	3.96	1,260
1942	Dec. 24, 1941	5.87	2,860				
	Mar. 9, 1942	6.37	3,520	1950	Apr. 5, 1950	6.69	4,180
	May 22, 1942	7.98	6,100				
	July 18, 1942	5.96	2,960	1951	Nov. 25, 1950	11.04	12,400
					Mar. 30, 1951	8.74	7,400
1943	Dec. 30, 1942	6.50	3,660	1952	Jan. 18, 1952	5.46	2,680
	Apr. 21, 1943	5.94	2,960		Apr. 6, 1952	5.59	2,850
1944	Mar. 17, 1944	5.50	2,470	1953	Mar. 24, 1953	6.61	4,050
	May 8, 1944	5.60	2,580		May 23, 1953	5.97	3,310
1945	Mar. 18, 1945	6.45	3,520	1954	Mar. 2, 1954	6.32	3,670
1946	May 28, 1946	10.38	11,000	1955	Mar. 5, 1955	5.24	2,460
1947	Apr. 6, 1947	5.49	2,470				
1948	Mar. 20, 1948	5.50	2,680	1956	Oct. 14, 1955	7.35	5,140
	Mar. 22, 1948	5.45	2,630		Mar. 8, 1956	7.37	5,140
					Apr. 5, 1956	5.86	3,190

Peak stages and discharges of Kettle Creek at Cross Fork, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	Jan. 23, 1957	5.74	-	1960	Mar. 31, 1960	6.52	3,920
	Apr. 6, 1957	4.39	1,620		May 23, 1960	6.18	3,550
1958	Dec. 21, 1957	5.60	2,850		June 15, 1960	5.99	3,310
	Apr. 7, 1958	5.40	2,630	1961	Feb. 26, 1961	8.83	7,600
					Apr. 17, 1961	5.57	2,800
1959	Jan. 22, 1959	6.2	3,550				
	Apr. 2, 1959	5.97	3,310				

a Backwater from ice.

5450. Kettle Creek near Westport, Pa.

Location.--Lat 41°19'10", long 77°52'25", on left bank 0.4 mile upstream from Short Bend Run, 3.5 miles upstream from mouth and Westport, Clinton County, and 5 miles downstream from Alvin B. Bush Reservoir.

Drainage area.--233 sq mi.

Gage.--Nonrecording prior to Oct. 14, 1956; recording thereafter. Datum of gage is 728.24 ft above mean sea level, unadjusted.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 3,700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 5, 1955	6.92	3,750	1959	Jan. 22, 1959	13.31	5,400
1956	Oct. 15, 1955	10.27	7,710		Apr. 3, 1959	7.79	4,740
	Mar. 8, 1956	10.48	7,970	1960	Apr. 1, 1960	9.09	6,240
	Apr. 5, 1956	7.71	4,630		May 23, 1960	8.62	5,640
1957	Apr. 6, 1957	5.97	2,820		June 15, 1960	8.55	5,640
1958	Dec. 21, 1957	7.15	4,080	1961	Feb. 26, 1961	8.62	5,640
	Apr. 7, 1958	7.26	4,190				

a Backwater from ice; occurred at different time than peak discharge.

b Annual peak only.

5455. West Branch Susquehanna River at Renovo, Pa.

Location.--Lat 41°19'30", long 77°45'05", on left bank on upstream side of Eighth Street Bridge at Renovo, Clinton County, 1 mile upstream from Paddy Run.

Drainage area.--2,975 sq mi.

Gage.--Nonrecording prior to Mar. 17, 1930; recording thereafter. Datum of gage is 634.19 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 87,000 cfs and extended above on basis of slope-area measurement at 236,000 cfs.

Bankfull stage.--16 ft.

Historical data.--Maximum stage known prior to 1895, that of June 1, 1889.

Remarks.--Flow regulated by First Fork Sinnemahoning Creek Reservoir since Jan. 31, 1956. Records prior to 1908 from U.S. Weather Bureau. Records for 1908-19, 1922-31, furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 31,000 cfs. Only annual peaks are shown subsequent to December 1955.

Peak stages and discharges of West Branch Susquehanna River at Renovo, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1889	June 1, 1889	27.3	211,000	1924	Jan. 1, 1924	8.9	34,600
					Jan. 4, 1924	9.2	36,700
1894	May 21, 1894	23	187,000		Mar. 30, 1924	10.2	43,700
1896	Mar. 31, 1896	10.4	46,900		Apr. 7, 1924	13.0	65,000
1897	Mar. 7, 1897	8.5	32,800		May 13, 1924	10.8	47,900
					June 30, 1924	9.4	38,100
1898	Mar. 24, 1898	15.4	101,000	1925	Feb. 12, 1925	14.5	77,000
	Mar. 30, 1898	10.0	43,700	1926	Jan. 19, 1926	8.9	34,600
1899	Mar. 6, 1899	9.0	36,300		Feb. 26, 1926	9.0	35,300
					Sept. 6, 1926	11.1	50,000
1900	Jan. 21, 1900	a12.0	-	1927	Jan. 23, 1927	11.8	55,400
1901	Nov. 27, 1900	11.0	52,200		Mar. 8, 1927	10.5	45,800
	Apr. 8, 1901	8.5	32,800		Mar. 14, 1927	8.4	31,100
	Apr. 22, 1901	11.1	53,200		Mar. 21, 1927	11.8	55,400
	May 30, 1901	10.0	43,700		May 25, 1927	9.6	39,500
1902	Dec. 15, 1901	13.5	79,100	1928	Nov. 29, 1927	8.85	33,900
	Mar. 1, 1902	a17.0	-		Dec. 14, 1927	10.7	47,200
	Mar. 14, 1902	8.8	34,900		Dec. 17, 1927	10.4	45,100
	Mar. 17, 1902	8.5	32,800		Mar. 31, 1928	10.2	43,700
	Apr. 9, 1902	12.5	67,400		Apr. 8, 1928	9.2	36,700
	July 4, 1902	11.0	52,200		May 1, 1928	8.8	33,900
1903	Feb. 5, 1903	11.0	52,200		June 6, 1928	11.9	56,200
	Mar. 1, 1903	13.0	73,400		July 6, 1928	9.9	41,600
	Mar. 9, 1903	10.0	43,700	1929	Feb. 27, 1929	8.4	31,100
	Mar. 24, 1903	9.0	36,300		Mar. 15, 1929	12.3	59,400
1906	Dec. 4, 1905	11.7	59,000	1930	Feb. 27, 1930	9.8	42,200
	Jan. 24, 1906	10.0	43,700	1931	Apr. 5, 1931	8.97	36,400
1907	Jan. 21, 1907	10.0	43,700		May 24, 1931	8.47	32,900
	Mar. 15, 1907	a14.0	-	1932	Apr. 1, 1932	9.80	42,200
1908	Feb. 16, 1908	13.5	71,100	1933	Mar. 15, 1933	11.09	52,000
1909	Apr. 30, 1909	15.5	88,100	1934	Apr. 12, 1934	6.85	21,500
1910	Mar. 1, 1910	-	b61,000	1935	May 8, 1935	9.13	33,600
1911	Jan. 15, 1911	13.1	62,300	1936	Mar. 12, 1936	15.33	82,500
1912	Oct. 2, 1911	11.15	67,900		Mar. 18, 1936	29.39	236,000
1913	Jan. 9, 1913	14.9	83,000	1937	Nov. 6, 1936	8.97	32,900
	Mar. 27, 1913	12.8	65,500		Jan. 22, 1937	13.02	62,200
1914	Feb. 14, 1914	8.74	34,500		Jan. 25, 1937	11.63	51,000
	Mar. 28, 1914	12.54	63,100		Apr. 28, 1937	13.21	63,800
1915	Jan. 8, 1915	13.0	67,100	1938	Dec. 18, 1937	12.83	57,400
1916	Mar. 28, 1916	15.8	87,000	1939	Feb. 16, 1939	8.65	27,900
	June 4, 1916	12.4	56,600	1940	Apr. 1, 1940	16.51	92,900
	June 17, 1916	14.6	76,200		Apr. 5, 1940	13.26	63,800
1917	Mar. 7, 1917	a10.7	-		Apr. 9, 1940	10.80	43,800
	Mar. 17, 1917	8.8	32,800		Apr. 21, 1940	10.10	38,400
1918	Feb. 20, 1918	14.5	75,300	1941	Mar. 5, 1941	a14.37	-
	Feb. 26, 1918	10.1	41,700		Apr. 6, 1941	10.79	43,800
1919	May 11, 1919	11.4	50,800	1942	Mar. 9, 1942	14.38	73,500
	May 22, 1919	13.6	69,400		Mar. 17, 1942	9.92	37,000
1920	Nov. 27, 1919	8.8	33,900		May 23, 1942	9.14	31,400
	Mar. 13, 1920	15.0	81,300		July 18, 1942	18.92	117,000
	Mar. 17, 1920	9.6	39,500	1943	Dec. 30, 1942	17.74	105,000
	June 18, 1920	9.2	36,700		Apr. 21, 1943	13.55	66,300
1921	Mar. 8, 1921	7.97	28,600		May 12, 1943	10.34	39,800
1922	Nov. 29, 1921	11.2	50,700		June 3, 1943	9.12	31,900
	Apr. 16, 1922	8.6	32,500	1944	Jan. 29, 1944	a11.15	-
1923	Feb. 18, 1923	8.9	34,600		Mar. 17, 1944	11.16	47,000
	Mar. 5, 1923	13.06	65,800	1945	Feb. 27, 1945	9.97	37,700
	May 13, 1923	11.8	55,400		Mar. 4, 1945	13.94	69,000
					Mar. 7, 1945	14.18	71,700
					Mar. 17, 1945	10.12	38,400
					Mar. 22, 1945	11.90	52,600

a Backwater from ice.

b Maximum daily discharge.

Peak stages and discharges of West Branch Susquehanna River at Renovo, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	May 18, 1945	10.80	43,800	1952	Mar. 12, 1952	12.01	53,400
1946	May 28, 1946	20.11	130,000		Apr. 16, 1952	11.03	45,400
	June 13, 1946	9.62	34,900		May 26, 1952	10.82	43,800
1947	Apr. 6, 1947	8.48	28,000	1953	Mar. 24, 1953	11.21	47,000
					May 23, 1953	11.17	47,000
1948	Apr. 15, 1948	15.07	79,800		May 26, 1953	12.74	59,000
					May 31, 1953	11.58	50,200
1949	Jan. 29, 1949	8.75	29,800	1954	Mar. 2, 1954	14.79	77,600
1950	Jan. 7, 1950	9.02	31,000	1955	Dec. 31, 1954	10.74	43,000
	Jan. 11, 1950	9.47	34,200		Mar. 2, 1955	10.15	39,000
	Mar. 29, 1950	13.21	63,000		Mar. 5, 1955	10.46	41,400
	Apr. 5, 1950	9.99	37,700		Mar. 23, 1955	9.20	31,800
1951	Nov. 5, 1950	11.60	50,200	1956	Oct. 15, 1955	10.53	41,400
	Nov. 26, 1950	21.96	151,000		Mar. 8, 1956	15.40	82,500
	Dec. 5, 1950	10.30	39,800	1957	Apr. 7, 1957	10.48	41,400
	Dec. 8, 1950	9.45	33,200	1958	Apr. 7, 1958	10.31	39,800
	Feb. 22, 1951	9.06	31,100	1959	Jan. 22, 1959	-	75,300
	Mar. 31, 1951	12.79	59,800	1960	Jan. 22, 1959	a15.09	-
1952	Jan. 2, 1952	9.34	32,500		Mar. 31, 1960	14.24	71,700
	Jan. 18, 1952	10.22	39,000	1961	Feb. 26, 1961	15.91	87,000
	Jan. 27, 1952	13.33	63,800				

a Backwater from ice.

5460. North Bald Eagle Creek at Milesburg, Pa.

Location.--Lat 40°56'30", long 77°47'40", at Milesburg, Centre County, 0.5 mile upstream from Spring Creek and 1.4 miles downstream from Snowshoe Creek.

Drainage area.--119 sq mi.

Gage.--Nonrecording. Altitude of gage is 690 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,000 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1911	Sept. 9, 1911	6.5	6,730	1921	Dec. 14, 1920	5.7	5,200
1912	Oct. 2, 1911	11.0	17,000	1922	Nov. 29, 1921	7.0	7,750
1913	Mar. 27, 1913	6.4	6,530	1923	Mar. 3, 1923	8.0	9,800
1914	Mar. 28, 1914	6.0	5,750	1924	Apr. 6, 1924	7.7	9,150
1915	Feb. 24, 1915	6.6	6,930	1925	Feb. 10, 1925	5.50	4,850
1916	June 17, 1916	11.5	18,500	1926	Feb. 26, 1926	5.1	3,970
1917	Mar. 11, 1917	4.7	3,390	1927	Jan. 22, 1927	5.7	5,300
1918	Feb. 26, 1918	8.3	10,400	1928	Mar. 30, 1928	5.6	5,000
1919	May 22, 1919	6.6	6,930		Apr. 30, 1928		
1920	Mar. 12, 1920	8.2	10,000	1934	Apr. 11, 1934	5.3	4,470

5465. Spring Creek near Axemann, Pa.

Location.--Lat 40°54'25", long 77°47'40", on right bank at upstream side of highway bridge, 1.6 miles west of Axemann, Centre County, 1.7 miles southwest of Bellefonte, and 2.5 miles upstream from Logan Branch.

Drainage area.--87.2 sq mi.

Gage.--Nonrecording prior to Nov. 19, 1940; recording thereafter. Datum of gage is 788.81 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 650 cfs.

Bankfull stage.--4 ft.

Historical data.--Maximum stage known, that of March 1936, from information by local residents.

Remarks.--Base for partial-duration series, 350 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	March 1936	8.6	-	1945	Mar. 22, 1945	3.75	558
1941	Mar. 22, 1941	3.62	500		May 18, 1945	3.41	402
1942	Mar. 8, 1942	3.75	560		May 29, 1945	3.88	622
	Mar. 9, 1942	3.39	402	1946	Nov. 29, 1945	3.79	577
	Apr. 4, 1942	3.61	496		Feb. 28, 1946	4.27	822
	May 23, 1942	3.92	642		May 27, 1946	3.53	456
1943	Dec. 30, 1942	4.56	990		June 2, 1946	3.54	460
	Jan. 17, 1943	3.33	369	1947	June 8, 1947	3.01	229
	Jan. 18, 1943	3.30	357	1948	Feb. 14, 1948	3.50	398
	Mar. 12, 1943	3.69	529		Apr. 14, 1948	4.02	695
	Apr. 21, 1943	3.90	632		May 13, 1948	4.07	712
	Aug. 4, 1943	3.65	510	1949	Dec. 30, 1948	3.49	438
1944	Jan. 26, 1944	3.48	433	1950	Mar. 28, 1950	3.79	577
	Jan. 27, 1944	3.61	492	1951	Nov. 25, 1950	5.44	1,670
	Mar. 13, 1944	3.58	478		Dec. 4, 1950	3.96	671
	Mar. 17, 1944	3.38	390		Dec. 8, 1950	3.82	606
	May 7, 1944	4.03	712		Feb. 7, 1951	4.45	950
	May 28, 1944	3.40	398		Feb. 13, 1951	3.49	454
	June 2, 1944	3.35	378		Feb. 21, 1951	3.28	368
1945	Feb. 27, 1945	3.34	373		Mar. 30, 1951	4.23	832
	Mar. 4, 1945	3.41	402				
	Mar. 7, 1945	3.52	451				

Peak stages and discharges of Spring Creek at Axemann, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Mar. 11, 1952	3.98	696	1956	Aug. 12, 1956	3.26	360
1953	Mar. 24, 1953	3.79	590	1957	Apr. 6, 1957	3.91	650
	May 26, 1953	5.13	1,430				
	May 31, 1953	4.12	750	1958	Jan. 15, 1958	3.40	416
	June 7, 1953	3.53	472		Feb. 26, 1958	3.80	600
1954	Mar. 1, 1954	4.09	750		Feb. 28, 1958	3.74	571
				1959	Jan. 16, 1959	3.34	391
1955	Oct. 16, 1954	3.63	518		Jan. 21, 1959	5.24	1,510
	Feb. 23, 1955	3.40	416		Jan. 21, 1959	as 5.28	-
	Mar. 22, 1955	3.33	383		Feb. 10, 1959	4.85	1,220
	Aug. 13, 1955	3.43	426		Feb. 15, 1959	3.41	398
					Mar. 6, 1959	4.22	802
1956	Oct. 15, 1955	3.30	370		Mar. 15, 1959	3.42	403
	Jan. 30, 1956	3.65	528	1960	Nov. 28, 1959	3.41	398
	Feb. 10, 1956	3.71	556		Mar. 30, 1960	3.66	518
	Feb. 15, 1956	3.52	468		Apr. 4, 1960	3.63	504
	Feb. 18, 1956	3.81	605				
	Feb. 25, 1956	4.42	920	1961	Feb. 26, 1961	4.35	890
	Mar. 8, 1956	3.27	364		Apr. 16, 1961	3.43	416
	Aug. 6, 1956	3.36	400				

a Backwater from ice.

5470. Spring Creek near Bellefonte, Pa.

Location.--Lat 40°55'20", long 77°47'10", at highway bridge, 0.4 mile downstream from Buffalo Run, three-quarters of a mile east of Bellefonte, Centre County, and 1.7 miles upstream from mouth.

Drainage area.--145 sq mi.

Gage.--Nonrecording. Datum of gage is 714.25 ft above mean sea level, unadjusted.

Stage-discharge relation.--Defined by current-meter measurements below 1,000 cfs and extended above by logarithmic plotting.

Remarks.--Records furnished by Pennsylvania Department of Forests and Waters. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1911	May 19, 1911	5.4	3,410	1916	June 17, 1916	5.4	2,740
1912	Mar. 15, 1912	6.4	5,160	1917	Feb. 24, 1917	4.2	1,340
1913	Mar. 27, 1913	3.8	1,380	1918	Feb. 26, 1918	5.0	2,210
1914	Mar. 28, 1914	3.5	1,090	1919	May 22, 1919	4.3	1,430
1915	Feb. 15, 1915	3.9	1,480				

5472. North Bald Eagle Creek below Spring Creek, at Milesburg, Pa.

Location.--Lat 40°56'35", long 77°47'10", on right bank 130 ft downstream from highway bridge on U.S. Highway 220 at Milesburg, Centre County, 250 ft downstream from Spring Creek.

Drainage area.--265 sq mi.

Gage.--Recording. Datum of gage is 682.49 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 3,600 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 2,700 cfs.

Peak stages and discharges of North Bald Eagle Creek below Spring Creek, at Milesburg, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	Oct. 23, 1956	6.60	3,800	1960	Oct. 24, 1959	5.96	3,200
	Apr. 9, 1957	6.75	4,000		Nov. 28, 1959	6.45	3,600
1958	Dec. 26, 1957	5.55	2,810		Mar. 31, 1960	7.30	4,550
					May 23, 1960	7.53	4,770
1959	Jan. 21, 1959	7.38	4,660	1961	Feb. 26, 1961	8.82	6,340
	Feb. 10, 1959	7.59	4,880				
	Mar. 6, 1959	6.28	3,500				

5475. North Bald Eagle Creek at Blanchard, Pa.

Location.--Lat 41°03'05", long 77°36'10", on left bank at end of Smith's Lane, 0.7 mile upstream from Marsh Creek, and 0.9 mile south of Blanchard, Centre County.

Drainage area.--339 sq mi.

Gage.--Recording. Datum of gage 579.79 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 3,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 22, 1955	8.02	3,660	1959	Jan. 22, 1959	9.77	5,040
1956	Oct. 15, 1955	9.89	5,130	Feb. 11, 1959	9.76	5,040	
	Feb. 25, 1956	7.90	3,590	Mar. 6, 1959	8.37	3,940	
	Mar. 8, 1956	8.45	3,940	1960	Nov. 28, 1959	8.68	4,150
	Aug. 7, 1956	7.88	3,590		Mar. 31, 1960	9.49	4,790
			May 23, 1960		9.40	4,710	
1957	Apr. 9, 1957	8.88	4,310	1961	Feb. 26, 1961	10.72	5,900
1958	Feb. 28, 1958	7.43	3,220				

5477. Marsh Creek at Blanchard, Pa.

Location.--Lat 41°03'35", long 77°36'15", on right bank, 20 ft downstream from highway bridge, 0.5 mile southwest of Blanchard, Centre County, and 0.6 mile upstream from North Bald Eagle Creek.

Drainage area.--44.1 sq mi.

Gage.--Recording. Datum of gage is 586.16 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 650 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 450 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)	
1957	Apr. 6, 1957	4.03	910	1960	Nov. 28, 1959	3.96	852	
	Apr. 9, 1957	4.36	1,090		Feb. 19, 1960	3.18	456	
1958	Dec. 26, 1957	3.37	545		Mar. 31, 1960	4.10	940	
		a3.82	-		Apr. 4, 1960	3.21	470	
		3.40	560		May 18, 1960	3.43	575	
					May 23, 1960	3.62	671	
1959	Jan. 22, 1959	-	(b)	1961	Feb. 26, 1961	6.63	3,300	
	Feb. 10, 1959	a4.70	-		Apr. 13, 1961	3.18	456	
	Feb. 10, 1959	4.2	970		Apr. 16, 1961	3.20	465	
	Feb. 14, 1959	3.42	505					
	Mar. 6, 1959	4.11	940					

a Backwater from ice.

b Discharge unknown, but probably was not maximum for year.

5480. North Bald Eagle Creek at Beech Creek Station, Pa.

(Published as "Bald Eagle Creek" prior to 1929)

Location.--Lat 41°03'55", long 77°34'00", at downstream end of center pier of highway bridge just downstream from Beech Creek, at Beech Creek Station, Clinton County.

Drainage area.--559 sq mi.

Gage.--Nonrecording prior to Jan. 10, 1930; recording thereafter. Datum of gage is 571.74 ft above mean sea level (Pennsylvania State Highway bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 12,000 cfs and extended above by logarithmic plotting.

Remarks.--Records for 1910-18, 1922-31, furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 5,700 cfs. Only annual peaks are shown prior to 1920.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1911	Sept. 9, 1911	8.8	10,800	1935	Jan. 10, 1935	6.00	5,350
1912	Oct. 2, 1911	10.9	15,700				
1913	Mar. 27, 1913	9.4	12,000	1936	Mar. 12, 1936	10.90	15,700
1914	Mar. 28, 1914	9.3	11,800		Mar. 18, 1936	14.42	25,600
1915	Feb. 25, 1915	9.0	11,100				
				1937	Jan. 22, 1937	7.05	6,990
1916	June 17, 1916	13.2	22,000		Apr. 28, 1937	8.88	10,900
1917	Mar. 12, 1917	6.6	6,550				
1918	Feb. 26, 1918	9.5	12,300	1938	Dec. 19, 1937	7.34	7,560
1919	May 22, 1919	9.4	12,000		Jan. 25, 1938	6.69	6,420
				1939	Feb. 15, 1939	6.17	5,520
1920	Nov. 27, 1919	6.4	5,960				
	Mar. 13, 1920	10.2	13,900	1940	Mar. 31, 1940	11.06	16,200
	Mar. 17, 1920	7.0	7,060		Apr. 4, 1940	7.08	7,180
1921	May 5, 1921	7.3	8,120		Apr. 9, 1940	6.63	6,240
					Apr. 21, 1940	6.90	6,800
1922	Nov. 29, 1921	9.5	12,300	1941	Apr. 6, 1941	6.33	5,970
	Apr. 15, 1922	7.8	8,610				
1923	Mar. 4, 1923	8.9	10,700	1942	Dec. 24, 1941	7.48	8,010
	Mar. 5, 1923	8.6	10,300		Mar. 9, 1942	7.31	7,630
	July 28, 1923	6.6	6,320		Apr. 4, 1942	7.19	7,440
					May 22, 1942	9.00	11,100
1924	Jan. 17, 1924	7.5	8,010	1943	Dec. 30, 1942	10.94	15,700
	Mar. 29, 1924	6.4	5,960		Apr. 21, 1943	8.70	10,500
	Apr. 6, 1924	11.0	15,900		May 12, 1943	6.43	5,970
	May 9, 1924	6.4	5,960				
	May 12, 1924	8.9	10,900	1944	Mar. 17, 1944	6.91	6,870
	June 29, 1924	7.4	7,820		May 7, 1944	9.38	12,000
1925	Feb. 12, 1925	9.2	11,600	1945	Mar. 4, 1945	7.71	8,410
					Mar. 7, 1945	8.12	9,210
1926	Feb. 26, 1926	7.6	8,840		Mar. 22, 1945	9.02	11,100
	Sept. 5, 1926	7.4	7,820		May 18, 1945	6.72	6,510
1927	Nov. 16, 1926	7.8	9,330	1946	Nov. 29, 1945	8.23	9,420
	Mar. 8, 1927	6.9	6,870		Feb. 28, 1946	6.28	5,790
	Mar. 21, 1927	7.4	7,820		May 27, 1946	12.48	20,000
1928	Apr. 30, 1928	8.2	10,100	1947	June 8, 1947	5.60	4,610
	June 6, 1928	6.8	6,680				
1929	Feb. 26, 1929	7.2	7,440	1948	Apr. 12, 1948	6.86	6,870
	Mar. 14, 1929	7.4	8,360		Apr. 15, 1948	9.65	12,500
	Apr. 17, 1929	7.2	7,440	1949	Dec. 30, 1949	7.91	8,810
	May 28, 1929	7.3	7,630		May 21, 1949	6.3	5,780
1930	Feb. 26, 1930	6.16	5,720	1950	Jan. 10, 1950	7.00	7,060
					Mar. 27, 1950	6.32	5,780
1931	Apr. 2, 1931	6.30	5,780		Mar. 29, 1950	7.94	8,810
	May 8, 1931	6.75	6,680				
	May 23, 1931	8.71	11,500	1951	Nov. 25, 1950	12.96	21,400
1932	Apr. 1, 1932	7.53	8,600		Dec. 4, 1950	7.31	7,630
	May 11, 1932	6.73	6,500		Dec. 8, 1950	6.59	6,320
1933	Mar. 15, 1933	6.69	6,760		Mar. 31, 1951	9.18	11,600
					June 14, 1951	7.72	8,410
1934	Apr. 12, 1934	6.37	6,120	1952	Jan. 27, 1952	6.94	6,870

Peak stages and discharges of North Bald Eagle Creek
at Beech Creek Station, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Mar. 11, 1952	9.52	12,300	1957	Apr. 9, 1957	7.96	9,010
	May 25, 1952	7.18	7,440	1958	Feb. 28, 1958	-	(a)
1953	Mar. 24, 1953	8.59	10,300	1959	Jan. 22, 1959	7.60	8,210
	May 23, 1953	8.05	9,010		Feb. 11, 1959	7.25	7,440
	May 26, 1953	10.30	14,200		Mar. 6, 1959	6.71	6,500
	May 31, 1953	8.34	9,630	1960	Nov. 28, 1959	6.91	6,870
1954	Mar. 2, 1954	9.24	11,600		Mar. 31, 1960	9.24	11,600
1955	Oct. 16, 1954	6.28	5,780		Apr. 4, 1960	6.40	5,960
	Mar. 22, 1955	6.53	6,140		May 23, 1960	8.10	9,210
1956	Oct. 15, 1955	8.58	10,300	1961	Feb. 26, 1961	10.92	15,700
	Mar. 8, 1956	7.93	8,810		Apr. 16, 1961	6.75	6,680

a Backwater from ice; discharge not determined.

5485. Pine Creek at Cedar Run, Pa.

Location.--Lat 41°31'20", long 77°26'55", on left bank at downstream side of highway bridge at village of Cedar Run, Lycoming County, 2000 ft downstream from Cedar Run, and 1.2 miles upstream from Gamble Run.

Drainage area.--604 sq mi.

Gage.--Nonrecording prior to Feb. 13, 1930; recording thereafter. Datum of gage is 780.36 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 16,000 cfs and extended above on basis of slope-area measurement at 52,000 cfs.

Bankfull stage.--8 ft.

Remarks.--Records for 1919, 1922-31, furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 5,900 cfs..

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1919	May 11, 1919	5.7	7,800	1930	Nov. 18, 1929	5.0	5,840
	May 22, 1919	9.1	19,500	1931	May 24, 1931	5.09	6,120
1920	Mar. 13, 1920	7.5	12,500	1932	Apr. 1, 1932	5.91	8,470
1921	Feb. 16, 1921	5.0	5,700		May 11, 1932	5.84	8,110
1922	Nov. 29, 1921	5.52	7,230	1933	Nov. 10, 1932	5.44	7,100
	Mar. 7, 1922	5.4	6,940		Aug. 24, 1933	5.13	6,260
	Apr. 18, 1922	5.1	6,100	1934	Apr. 12, 1934	5.03	5,980
1923	Mar. 4, 1923	6.3	9,600	1935	Jan. 9, 1935	4.82	5,330
1924	Jan. 11, 1924	5.5	7,230		Mar. 6, 1935	a5.00	-
	Jan. 17, 1924	5.1	6,100	1936	Mar. 12, 1936	9.30	20,300
	Apr. 6, 1924	8.6	16,700		Mar. 18, 1936	11.39	30,900
	Apr. 18, 1924	5.3	6,660		Mar. 26, 1936	6.24	9,300
	May 12, 1924	7.1	12,000	1937	Nov. 5, 1936	5.37	6,810
	Sept. 30, 1924	5.9	8,400		Jan. 22, 1937	5.91	8,400
1925	Feb. 12, 1925	7.2	11,500		Jan. 25, 1937	5.15	6,260
1926	Jan. 19, 1926	a8.6	-		Aug. 27, 1937	7.23	12,300
	Mar. 25, 1926	5.8	8,140	1938	Oct. 29, 1937	5.32	6,670
1927	Nov. 16, 1926	6.1	8,990		Nov. 13, 1937	7.96	15,100
	Mar. 8, 1927	5.5	7,230		Jan. 25, 1938	5.58	7,520
	Mar. 21, 1927	5.6	7,520		Mar. 6, 1938	5.51	7,230
1928	Nov. 29, 1927	5.6	7,580		June 27, 1938	5.34	6,810
	Mar. 27, 1928	5.6	7,580	1939	Feb. 20, 1939	6.32	9,600
	Apr. 8, 1928	5.2	6,400	1940	Mar. 31, 1940	7.90	14,700
	Apr. 30, 1928	5.7	7,870		Apr. 4, 1940	7.89	14,700
	June 6, 1928	7.2	12,200		Apr. 9, 1940	7.12	12,000
1929	Mar. 14, 1929	7.16	12,200		Apr. 12, 1940	5.94	8,400
	Apr. 6, 1929	7.10	12,000	1941	Apr. 5, 1941	6.33	9,600
	Apr. 21, 1929	6.40	9,870				

a Backwater from ice.

Peak stages and discharges of Pine Creek at Cedar Run, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Dec. 24, 1941	6.00	8,700	1951	Dec. 8, 1950	6.52	8,700
	Mar. 9, 1942	7.34	12,600		Mar. 30, 1951	10.88	28,100
	Mar. 18, 1942	5.29	6,670	1952	Jan. 18, 1952	6.32	8,000
	May 22, 1942	8.26	16,300		Mar. 11, 1952	7.66	13,300
	July 18, 1942	7.50	13,200		Apr. 6, 1952	7.03	10,500
1943	Dec. 30, 1942	7.56	13,500		Apr. 15, 1952	5.68	6,190
	Mar. 17, 1943	5.50	7,230		May 25, 1952	6.08	7,390
	Apr. 21, 1943	7.33	12,600	1953	Dec. 11, 1952	6.96	10,500
	May 12, 1943	5.80	8,100		Jan. 24, 1953	5.84	6,640
	May 21, 1943	5.16	6,280		Mar. 24, 1953	7.95	14,500
1944	Nov. 8, 1943	5.18	6,410		May 23, 1953	6.55	8,880
	Mar. 17, 1944	5.50	7,230	1954	Mar. 1, 1954	8.76	17,700
	May 7, 1944	6.40	9,900		May 4, 1954	5.91	6,790
	June 19, 1944	5.36	6,820	1955	Mar. 4, 1955	6.06	7,240
1945	Mar. 3, 1945	6.67	10,800	1956	Oct. 14, 1955	9.19	19,600
	Mar. 7, 1945	5.05	6,020		Mar. 8, 1956	8.83	17,600
	Mar. 18, 1945	6.53	10,200		Apr. 5, 1956	7.58	12,900
	Mar. 22, 1945	5.47	7,090	1957	Nov. 2, 1956	6.52	8,700
	May 5, 1945	5.27	6,540		Jan. 23, 1957	5.84	6,640
	May 18, 1945	6.28	9,600		Apr. 6, 1957	6.21	7,690
	June 2, 1945	5.15	6,280		Apr. 25, 1957	5.92	6,790
1946	Jan. 6, 1946	5.50	7,230	1958	Dec. 21, 1957	6.26	7,840
	Mar. 7, 1946	5.52	7,230		Apr. 7, 1958	7.04	10,500
	Mar. 9, 1946	5.35	6,820		Apr. 17, 1958	5.69	6,190
	May 28, 1946	14.59	52,000		May 7, 1958	5.80	6,490
	June 2, 1946	6.00	6,600	1959	Jan. 22, 1959	all. 51	-
1947	Apr. 5, 1947	9.01	18,100		Jan. 22, 1959		14,000
	May 22, 1947	6.11	6,900		Mar. 6, 1959	6.0	7,100
1948	Feb. 20, 1948	-	8,700		Apr. 2, 1959	6.99	10,500
	Mar. 17, 1948	6.10	7,800	1960	Nov. 28, 1959	6.21	7,690
	Mar. 22, 1948	8.90	18,100		Mar. 31, 1960	8.66	17,300
	Apr. 12, 1948	6.13	7,800		Apr. 4, 1960	6.15	7,760
	Apr. 14, 1948	7.25	11,300		Apr. 27, 1960	5.58	6,050
1949	Dec. 30, 1948	5.19	5,130		May 9, 1960	5.67	6,200
1950	Jan. 7, 1950	5.87	7,050		May 24, 1960	6.02	7,280
	Mar. 28, 1950	7.26	11,700		June 15, 1960	5.80	6,650
	Apr. 5, 1950	8.35	16,100	1961	Feb. 26, 1961	9.06	19,100
1951	Oct. 9, 1950	5.82	6,900		Apr. 16, 1961	7.49	17,500
	Nov. 5, 1950	5.66	6,450		Apr. 25, 1961	7.24	11,400
	Nov. 25, 1950	11.77	33,400				
	Dec. 4, 1950	6.28	8,000				

a Backwater from ice.

5490. Pine Creek near Waterville, Pa.
(Published as "at" Waterville prior to 1917)

Location--Lat 41°18'45", long 77°22'45", at highway bridge on State Highway 44, 0.7 mile downstream from Bottom Run, 0.9 mile northwest of Waterville, Lycoming County, and 1.0 mile upstream from Little Pine Creek.

Drainage area--750 sq mi.

Gage--Nonrecording. Datum of gage is 608.04 ft above mean sea level (unadjusted).

Stage-discharge relation--Defined by current-meter measurements below 22,000 cfs.

Remarks--Records for 1908-18 furnished by Pennsylvania Department of Forests and Waters. Only annual peaks are shown.

Peak stages and discharges of Pine Creek near Waterville, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1909	May 1, 1909	12.5	30,000	1915	Feb. 25, 1915	9.97	19,900
1910	Apr. 26, 1910	12.16	28,570	1916	Apr. 14, 1916	9.9	19,600
1911	Mar. 28, 1911	5.67	6,830	1917	Mar. 12, 1917	6.7	9,500
1912	Apr. 3, 1912	8.73	15,600	1918	Mar. 14, 1918	12.3	28,700
1913	Mar. 27, 1913	12	27,900	1919	May 22, 1919	12.1	27,900
1914	Mar. 28, 1914	11.41	25,500	1920	Mar. 13, 1920	9.9	19,600

5495. Blockhouse Creek near English Center, Pa.

Location.--Lat 41°28'30", long 77°13'50", on right bank just downstream from bridge on State Highway 284, 0.7 mile upstream from Blacks Creek, 1.7 miles upstream from confluence with Texas Creek, and 5 miles northeast of English Center, Lycoming County.

Drainage area.--37.7 sq mi.

Gage.--Recording. Datum of gage is 1,041.85 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 920 cfs and extended above on basis of contracted-opening measurement at 5,480 cfs.

Historical data.--Maximum stage known, that of Mar. 18, 1936.

Remarks.--Base for partial-duration series, 1,100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Mar. 18, 1936	9.0	5,780	1951	Dec. 8, 1950	5.74	1,850
1941	Apr. 5, 1941	5.39	1,450		Mar. 30, 1951	8.61	5,180
1942	Dec. 24, 1941	7.29	3,340	1952	Mar. 11, 1952	7.17	3,240
	Mar. 9, 1942	6.53	2,460		Apr. 5, 1952	4.90	1,250
	Mar. 16, 1942	5.00	1,140	1953	Nov. 22, 1952	4.91	1,250
	May 22, 1942	6.34	2,250		Dec. 11, 1952	6.96	3,010
1943	Dec. 30, 1942	6.42	2,300		Mar. 24, 1953	5.94	2,010
	Apr. 21, 1943	5.47	1,460	1954	Nov. 23, 1953	4.94	1,280
1944	Nov. 9, 1943	6.06	1,960		Mar. 1, 1954	6.93	2,900
	May 7, 1944	6.02	1,920		May 4, 1954	5.15	1,420
1945	Mar. 3, 1945	5.28	1,340	1955	Mar. 4, 1955	4.14	780
1946	Nov. 22, 1945	5.05	1,180	1956	Oct. 14, 1955	7.67	3,830
	Nov. 29, 1945	5.21	1,280		Mar. 8, 1956	5.00	1,320
	Feb. 27, 1946	6.28	2,200	1957	Nov. 2, 1956	7.85	4,010
	May 27, 1946	8.81	5,480		Apr. 5, 1957	5.36	1,560
	July 21, 1946	4.96	1,120	1958	Dec. 20, 1957	4.96	1,280
1947	Apr. 5, 1947	4.86	1,060		Jan. 15, 1958	4.95	1,280
1948	Mar. 21, 1948	5.19	1,460	1959	Jan. 22, 1959	a6.05	-
	Apr. 14, 1948	5.17	1,420		Jan. 22, 1959	5.72	1,810
1949	Nov. 20, 1948	5.06	1,360		Feb. 10, 1959	5.29	1,520
1950	Mar. 28, 1950	5.57	1,700		Mar. 6, 1959	5.83	1,930
	Apr. 5, 1950	4.83	1,220	1960	Nov. 28, 1959	4.71	1,420
	Sept. 1, 1950	5.06	1,350		Mar. 31, 1960	4.76	1,500
1951	Nov. 25, 1950	7.26	3,360	1961	Feb. 25, 1961	5.10	1,740
					Apr. 16, 1961	4.90	1,600

a Backwater from ice.

5500. Lycoming Creek near Trout Run, Pa.

Location.--Lat 41°25'05", long 77°02'00", on right bank 150 ft upstream from highway bridge, 300 ft upstream from Pennsylvania Railroad bridge, 0.5 mile downstream from Grays Run, and 2½ miles upstream from village of Trout Run, Lycoming County.

Drainage area.--173 sq mi.

Gage.--Nonrecording at site 150 ft downstream prior to May 26, 1939; recording thereafter. Datum of gage is 693.95 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 9,200 cfs.

Bankfull stage.--9 ft.

Remarks.--Records for 1914-19, 1922-31, furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 2,900 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	Mar. 28, 1914	10.28	5,760	1936	Nov. 13, 1935	7.8	3,920
	May 13, 1914	8.2	3,400		Mar. 12, 1936	11.99	9,100
1915	Jan. 7, 1915	10.3	5,760		Mar. 18, 1936	17.34	17,000
	Feb. 24, 1915	9.99	5,730	1937	Apr. 6, 1937	6.6	3,100
	July 8, 1915	11.30	7,420		Nov. 13, 1937	13.74	11,500
1916	Mar. 31, 1916	8.8	4,380	1939	Feb. 15, 1939	6.6	3,100
	June 17, 1916	10.8	6,740		Feb. 20, 1939	6.8	3,300
	Apr. 14, 1916	8.4	3,980	1940	Mar. 31, 1940	10.10	6,630
	Mar. 27, 1917	7.4	2,980		Apr. 4, 1940	9.88	6,370
1917	Aug. 9, 1917	9.3	4,930		Apr. 8, 1940	9.91	6,370
1918	Feb. 26, 1918	10.1	5,850	1941	Apr. 5, 1941	8.98	5,220
	Mar. 14, 1918	10.2	5,970	1942	Dec. 24, 1941	13.72	11,500
1919	May 22, 1919	10.8	6,740		Mar. 9, 1942	9.85	6,240
	July 22, 1919	12.14	8,550		May 22, 1942	10.94	7,670
1920	Mar. 12, 1920	8.5	4,080		Sept. 27, 1942	7.50	3,590
1921	Dec. 14, 1920	8.8	4,380	1943	Dec. 30, 1942	9.43	5,720
	June 3, 1922	11.24	7,280		Apr. 21, 1943	8.20	4,320
1922	Mar. 16, 1923	7.10	2,690	1944	Nov. 9, 1943	11.71	8,710
	Jan. 11, 1924	9.60	5,260		Mar. 17, 1944	7.07	3,190
1924	Apr. 6, 1924	13.80	11,000		May 7, 1944	10.56	7,280
	Sept. 30, 1924	10.00	5,730	1945	Mar. 3, 1945	7.72	3,790
1925	Feb. 11, 1925	9.50	5,150		Mar. 16, 1945	7.80	3,890
	Nov. 13, 1925	7.80	3,380		Mar. 17, 1945	7.94	3,990
1926	Mar. 25, 1926	7.6	3,180		Mar. 22, 1945	7.20	3,290
	Nov. 16, 1926	16.3	15,400		May 28, 1945	8.58	4,760
1927	Mar. 13, 1927	8.1	4,250		June 3, 1945	7.68	3,790
1928	Apr. 30, 1928	7.7	3,810	1946	Nov. 22, 1945	8.30	4,430
	June 6, 1928	11.0	8,000		Nov. 29, 1945	7.54	3,590
	June 30, 1928	9.0	5,300		Mar. 9, 1946	8.98	5,220
	Mar. 14, 1929	8.42	4,580		May 27, 1946	19.37	21,800
1930	Mar. 8, 1930	6.80	2,860	1947	Oct. 12, 1946	7.14	3,280
	May 23, 1931	6.74	2,760		Apr. 5, 1947	8.92	5,550
1932	Mar. 31, 1932	6.60	2,660		Aug. 21, 1947	7.86	4,210
	Nov. 10, 1932	7.3	3,380		Aug. 26, 1947	7.27	3,500
1933	Nov. 19, 1932	6.9	2,960	1948	Mar. 16, 1948	7.24	3,390
	Aug. 24, 1933	13.9	11,800		Mar. 21, 1948	8.90	5,550
	Sept. 10, 1933	10.5	7,150		Apr. 1, 1948	7.12	3,280
	Apr. 11, 1934	7.84	3,920		Apr. 2, 1948	6.94	3,060
1934	Dec. 1, 1934	9.4	5,780		Apr. 14, 1948	5.16	5,160
	Nov. 25, 1950	12.58	10,900	1949	Nov. 20, 1948	9.83	6,810
1935	Mar. 28, 1950	8.71	5,290		Dec. 30, 1948	7.33	3,650
	Apr. 4, 1950	8.79	5,420	1950	Mar. 28, 1950	8.71	5,290
	Sept. 1, 1950	7.82	4,180		Apr. 4, 1950	8.79	5,420
1951	Nov. 25, 1950	12.58	10,900		Sept. 1, 1950	7.82	4,180
	Nov. 25, 1950	12.58	10,900				

Peak stages and discharges of Lycoming Creek near Trout Run, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Dec. 4, 1950	8.01	4,420	1956	Apr. 4, 1956	6.88	3,220
	Dec. 8, 1950	9.13	5,830	1957	Nov. 2, 1956	12.21	10,300
	Jan. 24, 1951	6.56	2,920		Jan. 23, 1957	7.00	3,320
	Mar. 30, 1951	11.86	9,850		Apr. 6, 1957	8.67	5,290
1952	Dec. 5, 1951	6.89	3,220	1958	Dec. 21, 1957	10.61	7,930
	Feb. 4, 1952	7.64	3,960		Dec. 26, 1957	6.72	3,020
	Mar. 11, 1952	11.78	9,700		Apr. 6, 1958	7.72	4,070
	Apr. 5, 1952	8.88	5,550		Apr. 22, 1958	6.69	3,020
1953	Nov. 22, 1952	8.68	5,290	1959	Jan. 22, 1959	8.59	5,160
	Dec. 11, 1952	12.31	10,400		Mar. 6, 1959	7.80	4,180
	Jan. 24, 1953	8.10	4,540		Apr. 2, 1959	9.96	7,090
	Mar. 24, 1953	10.46	7,790	1960	Nov. 6, 1959	7.99	3,850
1954	Nov. 23, 1953	7.44	3,740		Nov. 28, 1959	9.59	5,760
	Feb. 21, 1954	7.90	4,300		Feb. 11, 1960	8.02	3,880
	Mar. 1, 1954	11.24	8,800		Mar. 31, 1960	10.09	6,420
	May 4, 1954	10.10	7,230		Apr. 4, 1960	8.68	4,660
1955	Dec. 30, 1954	6.67	3,020		May 9, 1960	8.02	3,880
	Mar. 4, 1955	6.73	3,020		June 17, 1960	7.75	3,660
1956	Oct. 14, 1955	16.40	16,800	1961	Feb. 26, 1961	11.80	8,800
	Oct. 16, 1955	7.40	3,740		Apr. 16, 1961	10.12	6,410
	Mar. 8, 1956	8.44	4,900				

5510. Grafius Run at Williamsport, Pa.

Location.--Lat 41°15'15", long 77°00'40", on left bank 10 ft downstream from footbridge at end of Vallamont Drive in Williamsport, Lycoming County, and 1.5 miles upstream from mouth.

Drainage area.--3.14 sq mi.

Gage.--Recording. Datum of gage is 553.66 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 99 cfs.

Remarks.--Base for partial-duration series, 65 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Apr. 3, 1940	1.63	107	1946	Sept. 24, 1946	1.79	130
	Apr. 8, 1940	1.65	111	1947	Jan. 15, 1947	1.55	71
	Apr. 21, 1940	1.48	77		Mar. 16, 1948	1.79	131
	June 1, 1940	1.55	90	1948	Apr. 2, 1948	1.72	113
	July 23, 1940	1.43	70		Apr. 14, 1948	2.13	245
1941	Aug. 15, 1941	1.40	62		July 13, 1948	1.59	88
					July 23, 1948	2.30	245
1942	Nov. 7, 1941	1.68	117	1949	Nov. 1, 1948	1.87	99
	Dec. 24, 1941	2.54	420		Nov. 6, 1948	2.35	238
	July 1942	1.60	85		Nov. 20, 1948	1.84	101
1943	Dec. 30, 1942	2.30	309		Dec. 30, 1948	1.98	169
	Feb. 11, 1943	1.62	90		May 20, 1949	1.51	69
	Mar. 7, 1943	1.62	90	1950	Dec. 26, 1949	1.54	65
	Apr. 19, 1943	1.71	111		Mar. 28, 1950	2.28	293
	Aug. 14, 1943	1.61	87	1951	Nov. 25, 1950	2.91	606
1944	Oct. 26, 1943	1.85	148		Dec. 4, 1950	1.94	176
	Nov. 8, 1943	2.25	288		Dec. 7, 1950	2.01	198
	Mar. 12, 1944	1.58	81		Mar. 30, 1951	1.72	114
	May 7, 1944	1.61	87	1952	Mar. 11, 1952	2.56	430
	June 19, 1944	2.47	386		Apr. 5, 1952	1.55	82
1945	Mar. 21, 1945	1.74	118		Apr. 16, 1952	1.53	78
	May 28, 1945	1.55	75		July 21, 1952	1.54	80
	June 2, 1945	2.15	249	1953	Nov. 22, 1952	1.49	70
	Sept. 27, 1945	1.74	103		Dec. 11, 1952	2.03	206
1946	Nov. 22, 1945	1.60	82		Mar. 24, 1953	1.76	125
	Nov. 29, 1945	2.43	367		May 22, 1953	2.53	415
	Feb. 28, 1946	2.00	195		May 23, 1953	1.52	76
	Mar. 8, 1946	1.93	173				
	May 27, 1946	3.43	910				

Note.--1940 records, April to September only.

5515. West Branch Susquehanna River at Williamsport, Pa.

Location.--Lat 41°14'15", long 76°59'55", on left bank at upstream edge of Market Street Bridge at Williamsport, Lycoming County, 350 ft upstream from Hagermans Run.

Drainage area.--5,682 sq mi.

Gage.--Nonrecording prior to Oct. 1, 1928; recording thereafter. Datum of gage is 494.98 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 210,000 cfs and extended above on basis of slope-area measurement at 264,000 cfs.

Bankfull stage.--20 ft.

Historical data.--Maximum stage known prior to 1895, that of June 1, 1889.

Remarks.--Records for 1914-18, 1921-31, furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 51,000 cfs. Only annual peaks are shown prior to 1901.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1889	June 1, 1889	32.4	252,000	1913	Jan. 9, 1913	17.4	102,000
1895	Apr. 10, 1895	12.0	52,400		Mar. 27, 1913	20.4	135,000
1896	Mar. 31, 1896	14.4	72,700		Apr. 29, 1913	12.0	52,400
1897	Mar. 25, 1897	11.9	51,600		May 29, 1913	12.4	55,400
1898	Mar. 24, 1898	21.0	141,000	1914	Mar. 29, 1914	18.9	119,000
1899	Mar. 5, 1899	13.5	64,600		May 13, 1914	14.15	70,900
1900	Jan. 21, 1900	14.6	74,600	1915	Jan. 8, 1915	16.3	91,900
1901	Nov. 27, 1900	17.0	98,600		Feb. 16, 1915	12.65	57,000
	Apr. 22, 1901	15.9	87,400		Feb. 25, 1915	17.4	103,000
	May 30, 1901	14.0	69,100	1916	Mar. 29, 1916	20.5	136,000
1902	Dec. 15, 1901	20.7	138,000		Apr. 15, 1916	14.8	76,500
	Mar. 1, 1902	21.7	149,000		June 4, 1916	16.2	-
	Mar. 17, 1902	13.8	67,300		June 17, 1916	21.0	141,000
	Apr. 10, 1902	17.0	98,600	1917	Mar. 13, 1917	11.6	49,400
1903	Feb. 4, 1903	16.0	88,400	1918	Feb. 21, 1918	21.4	145,000
	Mar. 1, 1903	17.7	106,000		Feb. 27, 1918	14.56	74,600
	Mar. 10, 1903	13.2	62,000		Mar. 15, 1918	19.12	121,000
	Mar. 24, 1903	13.3	62,800	1919	May 11, 1919	15.7	85,400
1904	Nov. 18, 1903	12.0	52,400		May 22, 1919	20.9	140,000
	Jan. 23, 1904	16.2	-	1920	Mar. 13, 1920	20.4	135,000
	Mar. 4, 1904	21.0	141,000		Mar. 18, 1920	13.5	64,600
	Mar. 8, 1904	18.0	109,000	1921	Mar. 9, 1921	11.8	50,900
	Mar. 24, 1904	18.0	109,000	1922	Nov. 29, 1921	15.8	86,400
	Apr. 2, 1904	17.2	100,000	1923	Mar. 5, 1923	21.6	147,000
1905	Mar. 20, 1905	19.4	124,000		May 13, 1923	14.5	73,600
1906	Dec. 4, 1905	16.8	96,600	1924	Mar. 31, 1924	13.0	60,300
1907	Mar. 15, 1907	18.8	117,000		Apr. 7, 1924	19.0	120,000
1908	Feb. 16, 1908	17.0	98,600		May 13, 1924	16.2	90,400
	Mar. 20, 1908	17.4	103,000	1925	Feb. 12, 1925	19.5	125,000
	Mar. 30, 1908	12.4	55,400	1926	Sept. 6, 1926	13.5	64,600
1909	Feb. 17, 1909	12.0	52,400	1927	Dec. 23, 1926	14.7	75,600
	Feb. 25, 1909	14.5	73,600		Jan. 22, 1927	18.7	117,000
	Apr. 15, 1909	12.8	58,600		Mar. 9, 1927	13.6	65,500
	May 1, 1909	21.0	141,000		Mar. 15, 1927	13.4	63,700
1910	Jan. 22, 1910	12.5	56,200		Mar. 22, 1927	15.5	83,400
	Mar. 1, 1910	16.4	92,500		May 26, 1927	12.8	58,600
	Apr. 26, 1910	17.3	102,000	1928	Dec. 15, 1927	13.3	62,800
1911	Jan. 15, 1911	19.0	120,000		Dec. 17, 1927	14.0	69,100
1912	Oct. 3, 1911	16.0	88,400		Apr. 9, 1928	12.2	53,900
	Mar. 16, 1912	18.4	113,000				
	Mar. 30, 1912	16.6	94,500				
	Apr. 3, 1912	17.9	108,000				

a Backwater from ice.

Peak stages and discharges of West Branch Susquehanna River
at Williamsport, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	May 1, 1928	13.7	66,400	1946	Mar. 9, 1946	13.58	58,800
	June 6, 1928	17.86	108,000		May 28, 1946	29.63	223,000
	July 6, 1928	14.5	73,700				
1929	Mar. 15, 1929	16.62	94,500	1947	Apr. 6, 1947	12.16	49,600
1930	Feb. 27, 1930	12.29	54,700	1948	Mar. 22, 1948	13.67	59,500
					Apr. 15, 1948	20.63	124,000
1931	May 24, 1931	12.76	58,600	1949	Dec. 31, 1948	12.54	51,500
1932	Apr. 1, 1932	14.68	75,600	1950	Mar. 29, 1950	18.35	101,000
	May 12, 1932	13.94	68,200		Apr. 5, 1950	16.01	77,800
1933	Mar. 16, 1933	14.30	71,800	1951	Nov. 6, 1950	13.66	59,300
	Aug. 24, 1933	14.00	69,100		Nov. 26, 1950	28.11	206,000
1934	Jan. 2, 1934	11.49	48,800		Dec. 5, 1950	14.90	68,500
					Dec. 9, 1950	13.96	61,600
1935	Jan. 10, 1935	12.20	53,900		Mar. 31, 1951	20.15	119,000
1936	Mar. 12, 1936	23.6	164,000	1952	Jan. 3, 1952	13.55	58,600
	Mar. 18, 1936	33.57	264,000		Jan. 19, 1952	13.33	56,400
1937	Jan. 24, 1937	16.74	95,000		Jan. 28, 1952	16.59	83,200
	Jan. 27, 1937	14.42	72,800		Apr. 16, 1952	15.36	72,500
	Apr. 29, 1937	16.23	90,000		May 26, 1952	14.71	66,900
1938	Nov. 14, 1937	13.30	57,800	1953	Mar. 25, 1953	16.64	83,200
	Dec. 19, 1937	16.10	80,600		May 23, 1953	16.08	78,700
					May 27, 1953	15.78	76,000
1939	Feb. 21, 1939	12.30	51,600		June 1, 1953	15.52	73,300
1940	Apr. 1, 1940	22.73	146,000	1954	Mar. 2, 1954	19.97	117,000
	Apr. 5, 1940	19.33	112,000	1955	Dec. 31, 1954	13.27	56,400
	Apr. 9, 1940	16.87	89,900		Mar. 2, 1955	12.88	53,600
	Apr. 21, 1940	13.85	64,000		Mar. 6, 1955	13.61	58,600
1941	Apr. 6, 1941	15.46	72,500		Mar. 23, 1955	12.84	52,900
1942	Dec. 25, 1941	13.35	56,800	1956	Oct. 15, 1955	16.86	86,000
	Mar. 10, 1942	16.23	82,600		Mar. 9, 1956	20.37	121,000
	Mar. 18, 1942	13.58	61,000		Apr. 5, 1956	14.22	63,000
	May 23, 1942	19.19	101,000		May 14, 1956	13.75	60,000
	July 19, 1942	18.76	110,000	1957	Nov. 3, 1956	14.79	67,700
1943	Dec. 31, 1942	23.03	148,000		Apr. 7, 1957	15.17	70,900
	Apr. 22, 1943	19.00	109,000	1958	Apr. 7, 1958	15.68	75,100
	May 13, 1943	13.33	60,300		May 9, 1958	13.20	55,700
1944	Mar. 18, 1944	14.95	68,000	1959	Jan. 22, 1959	22.99	150,000
	May 8, 1944	15.70	69,600		Feb. 11, 1959	12.83	52,900
1945	Feb. 28, 1945	15.60	74,200		Apr. 3, 1959	12.57	51,500
	Mar. 4, 1945	17.99	97,000	1960	Apr. 1, 1960	20.92	127,000
	Mar. 7, 1945	17.72	94,000		May 10, 1960	13.30	56,400
	Mar. 18, 1945	14.90	68,500		May 24, 1960	14.57	66,100
	Mar. 23, 1945	16.31	80,500	1961	Feb. 26, 1961	21.68	136,000
	May 18, 1945	14.78	67,700		Mar. 7, 1961	12.90	53,600
1946	Nov. 30, 1945	13.16	56,000		Apr. 17, 1961	15.41	72,500

5520. Loyalsock Creek at Loyalsock, Pa.

Location.--Lat 41°19'25", long 76°54'40", on left bank just downstream from highway bridge at Loyalsock, Lycoming County, 2.5 miles downstream from Wallis Run, and 7.3 miles upstream from mouth.

Drainage area.--443 sq mi.

Gage.--Nonrecording prior to Sept. 16, 1926; recording thereafter. Datum of gage is 585.63 ft above mean sea level (Pennsylvania State highway bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 10,000 cfs and extended above on basis of slope-area measurement at gage height 12.20 ft.

Remarks.--Records for 1925-31 furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 6,400 cfs.

Peak stages and discharges of Loyalsock Creek at Loyalsock, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Nov. 13, 1925	6.80	7,300	1945	May 29, 1945	7.00	7,800
1927	Oct. 6, 1926	7.75	11,300	1946	Nov. 22, 1945	7.31	9,100
	Nov. 16, 1926	12.3	51,200		Mar. 9, 1946	9.08	19,800
	Nov. 19, 1926	7.42	9,550		May 28, 1946	12.20	50,000
	Mar. 14, 1927	7.43	9,550		Sept. 24, 1946	6.64	6,400
1928	Oct. 19, 1927	8.58	15,100	1947	Mar. 14, 1947	7.88	12,100
	Dec. 8, 1927	8.50	14,600		Apr. 5, 1947	8.40	15,100
	Feb. 15, 1928	6.68	7,000		May 6, 1947	6.90	7,400
	Apr. 30, 1928	8.20	13,100		May 25, 1947	8.13	13,600
	June 6, 1928	8.72	15,600		June 15, 1947	6.80	7,000
	June 30, 1928	9.00	17,400	1948	Mar. 16, 1948	7.50	10,100
	July 6, 1928	6.48	6,400		Mar. 20, 1948	7.08	8,200
1929	Mar. 14, 1929	7.00	8,000		Mar. 22, 1948	7.87	11,800
	May 3, 1929	10.50	29,600		Apr. 2, 1948	7.13	8,400
1930	Apr. 7, 1930	6.44	6,340		Apr. 14, 1948	7.90	12,100
1931	Mar. 29, 1931	7.66	10,500	1949	Nov. 20, 1948	7.74	11,400
1932	Apr. 1, 1932	8.06	12,000		Dec. 30, 1948	8.71	17,000
	Apr. 3, 1932	6.98	8,000		Apr. 14, 1949	7.15	8,400
1933	Oct. 6, 1932	6.78	7,300	1950	Dec. 27, 1949	6.79	7,000
	Nov. 19, 1932	6.57	6,550		Jan. 7, 1950	6.67	6,400
	Aug. 24, 1933	12.20	50,000		Mar. 28, 1950	8.29	14,500
	Sept. 4, 1933	6.56	6,550		Apr. 5, 1950	8.03	13,000
	Sept. 16, 1933	8.49	14,600	1951	Nov. 26, 1950	12.32	51,200
1934	Apr. 1, 1934	7.75	10,900		Dec. 4, 1950	8.71	17,000
	Sept. 17, 1934	7.62	10,400		Dec. 8, 1950	7.80	11,600
1935	Dec. 1, 1934	9.31	19,400		Jan. 24, 1951	7.51	10,100
1936	Nov. 13, 1935	8.68	15,600		Feb. 7, 1951	7.19	8,600
	Mar. 12, 1936	10.80	32,700		Mar. 31, 1951	7.75	11,400
	Mar. 18, 1936	11.58	42,900	1952	Mar. 11, 1952	10.70	33,400
	Mar. 21, 1936	7.25	8,320		Apr. 5, 1952	6.79	7,000
1937	Feb. 22, 1937	6.92	6,900		May 12, 1952	7.16	8,400
	Aug. 11, 1937	6.94	7,100	1953	Nov. 22, 1952	7.78	11,600
1938	Oct. 23, 1937	9.25	18,600		Dec. 11, 1952	8.81	17,700
	Nov. 13, 1937	7.52	9,450		Jan. 24, 1953	8.20	13,900
	Jan. 25, 1938	7.05	7,500		Feb. 21, 1953	6.66	6,400
1939	Dec. 10, 1938	8.61	14,700		Mar. 24, 1953	7.04	8,000
	Feb. 15, 1939	7.50	9,450	1954	Dec. 7, 1953	6.71	6,600
	Feb. 20, 1939	6.93	7,100		Feb. 21, 1954	7.33	9,280
1940	Mar. 31, 1940	9.51	21,300		Mar. 2, 1954	7.38	9,500
	Apr. 4, 1940	8.47	15,200		Apr. 17, 1954	6.84	7,200
	Apr. 7, 1940	8.21	13,600		May 4, 1954	8.01	12,200
	Apr. 20, 1940	7.73	11,400	1955	Dec. 30, 1954	7.18	8,700
	Sept. 1, 1940	9.62	22,000	1956	Oct. 14, 1955	8.82	16,200
1941	Apr. 5, 1941	8.32	14,100		Mar. 8, 1956	7.79	11,300
1942	Dec. 24, 1941	9.87	24,100	1957	Nov. 2, 1956	11.78	44,600
	Mar. 9, 1942	8.44	14,600		Jan. 23, 1957	8.27	13,200
	May 23, 1942	9.06	18,200		Apr. 6, 1957	9.35	20,100
	Sept. 27, 1942	8.66	16,400	1958	Dec. 21, 1957	9.98	24,900
1943	Dec. 30, 1942	9.22	19,400		Dec. 26, 1957	7.46	9,420
	Feb. 24, 1943	6.70	6,600		Apr. 6, 1958	7.82	11,000
	Mar. 20, 1943	6.74	6,800		Apr. 22, 1958	7.70	10,500
	Apr. 20, 1943	7.37	9,350	1959	Jan. 22, 1959	8.57	15,000
	May 26, 1943	6.75	6,800		Mar. 6, 1959	7.69	10,600
1944	Oct. 28, 1943	7.50	10,100		Apr. 2, 1959	8.17	12,700
	Nov. 9, 1943	9.05	18,200	1960	Nov. 6, 1959	7.53	9,940
	Mar. 17, 1944	7.38	9,600		Nov. 28, 1959	8.94	16,800
	Mar. 24, 1944	7.02	8,000		Dec. 13, 1959	7.80	11,000
	May 7, 1944	9.49	21,300		Feb. 11, 1960	8.31	13,400
1945	Mar. 3, 1945	7.67	10,800		Mar. 31, 1960	9.28	19,400
	Mar. 17, 1945	7.25	8,850		Apr. 4, 1960	9.06	18,000
	Mar. 22, 1945	6.77	6,800		May 9, 1960	6.67	6,470
	May 5, 1945	6.83	7,200		Sept. 12, 1960	7.68	10,600
				1961	Feb. 26, 1961	9.71	22,400
					Apr. 16, 1961	7.72	10,600

5525. Muncy Creek near Sonestown, Pa.

Location.--Lat 41°21'25", long 76°32'05", on right bank 150 ft downstream from Slip Run, 185 ft downstream from bridge on State Highway 464, and 1.2 miles east of Sonestown, Sullivan County.

Drainage area.--23.8 sq mi.

Gage.--Nonrecording prior to Mar. 31, 1941; recording thereafter. Datum of gage is 1,025.01 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 3,400 cfs.

Remarks.--Base for partial-duration series, 1,100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	March 1936	9.3	-	1951	Jan. 24, 1951	5.94	1,940
1941	Apr. 5, 1941	5.16	1,830		Feb. 7, 1951	5.53	1,500
1942	Dec. 24, 1941	7.35	5,240		Mar. 30, 1951	5.61	1,550
	May 22, 1942	5.28	2,020	1952	Mar. 11, 1952	8.61	7,310
1943	Dec. 2, 1942	4.46	1,120	1953	Nov. 22, 1952	5.38	1,460
	Dec. 30, 1942	4.88	1,560		Dec. 11, 1952	4.99	1,160
	May 26, 1943	4.63	1,300		Jan. 24, 1953	5.04	1,200
1944	Oct. 26, 1943	4.43	1,100	1954	Feb. 21, 1954	4.73	988
	Nov. 8, 1943	4.87	1,500	1955	Aug. 13, 1955	4.30	705
	May 7, 1944	5.00	1,670	1956	Oct. 14, 1955	5.39	1,460
1945	Sept. 18, 1945	4.90	1,560	1957	Nov. 2, 1956	5.77	1,760
1946	Nov. 22, 1945	4.75	1,400		Jan. 23, 1957	5.18	1,300
	Mar. 9, 1946	4.99	1,670		Apr. 6, 1957	5.13	1,140
	May 21, 1946	4.68	1,360	1958	Dec. 20, 1957	5.50	1,510
	May 27, 1947	6.22	3,250	1959	Jan. 22, 1959	6.32	2,420
1947	May 29, 1947	5.13	1,840		Apr. 2, 1959	5.32	1,380
1948	Mar. 19, 1948	4.19	882	1960	Nov. 28, 1959	5.18	1,300
1949	Dec. 30, 1948	4.88	1,560		Dec. 12, 1959	5.02	1,140
	Apr. 14, 1949	4.74	1,410		Feb. 11, 1960	5.62	1,620
	May 24, 1949	4.58	1,240		Mar. 31, 1960	5.53	1,580
	Aug. 29, 1949	5.19	1,250		Apr. 3, 1960	5.25	1,340
1950	Aug. 20, 1950	5.54	1,530		Sept. 12, 1960	5.00	1,140
1951	Nov. 25, 1950	7.38	4,430		Sept. 19, 1960	5.34	1,420
	Dec. 4, 1950	6.29	2,420	1961	Feb. 25, 1961	6.05	-
					Feb. 25, 1961	5.2	1,300

a Backwater from ice.

5535. West Branch Susquehanna River at Lewisburg, Pa.

Location.--Lat 40°58'05", long 76°52'25", at Market Street Bridge at Lewisburg, Union County, 0.2 mile downstream from Buffalo Creek, and 7.4 miles upstream from mouth.

Drainage area.--6,847 sq mi.

Gage.--Nonrecording prior to July 3, 1940; recording thereafter. Datum of gage is 428.20 ft above mean sea level, datum of 1929.

Bankful stage.--23 ft.

Stage-discharge relation.--Defined by current-meter and slope-area measurements.

Historical data.--Maximum stage known, that of Mar. 19, 1936.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of West Branch Susquehanna River at Lewisburg, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1865	Mar. 17, 1865	26.5	-	1946	May 29, 1946	28.43	262,000
1889	June 1, 1889	29.8	-	1947	Apr. 6, 1947	13.29	58,700
1894	May 21, 1894	28.5	-	1948	Apr. 15, 1948	20.07	132,000
1902	Mar. 1, 1902	22.3	-	1949	Dec. 31, 1948	13.66	70,000
1909	May 1, 1909	19.5	-	1950	Mar. 30, 1950	18.15	107,000
1936	Mar. 19, 1936	32.1	a287,000	1951	Nov. 26, 1950	26.05	216,000
1940	Apr. 1, 1940	22.7	164,000	1952	Mar. 12, 1952	18.08	112,000
1941	Apr. 7, 1941	15.21	83,800	1953	Mar. 25, 1953	15.62	90,100
1942	May 23, 1942	18.57	117,000	1954	Mar. 3, 1954	18.51	118,000
1943	Dec. 31, 1942	22.47	151,000	1955	Mar. 6, 1955	13.27	68,100
1944	May 8, 1944	15.32	86,000	1956	Mar. 9, 1956	19.80	121,000
1945	Mar. 5, 1945	17.23	102,000	1957	Nov. 3, 1956	18.60	118,000
				1958	Apr. 8, 1958	16.13	85,800
				1959	Jan. 23, 1959	18.22	115,000
				1960	Apr. 1, 1960	21.00	134,000
				1961	Feb. 27, 1961	21.17	139,000

a From slope-area measurement at Watsontown.

5540. Susquehanna River at Sunbury, Pa.

Location.--Lat 40°51'10", long 76°48'10", on left bank 50 ft downstream from highway bridge at Sunbury, Northumberland County, 0.7 miles upstream from Shamokin Creek, and 1½ miles downstream from West Branch Susquehanna River.

Drainage area.--18,300 sq mi, approximately.

Gage.--Nonrecording prior to Sept. 3, 1919; recording Sept. 4, 1919, to January 1922; nonrecording February 1922, to Dec. 11, 1937; recording thereafter. Prior to Nov. 20, 1934, at site 3,700 ft upstream. Prior to Sept. 30, 1923, at datum 1 ft higher. Datum of present gage is 419.66 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 430,000 cfs.

Bankfull stage.--16 ft.

Historical data.--Maximum stage known prior to 1919, that of March 1865.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1865	March 1865	22.5	-	1938	Dec. 20, 1937	10.25	140,000
1889	June 1889	20.0	-	1939	Feb. 22, 1939	12.63	183,000
1894	May 1894	19.8	-	1940	Apr. 1, 1940	20.14	368,000
1919	May 23, 1919	12.50	190,000	1941	Apr. 7, 1941	13.58	212,000
1920	Mar. 14, 1920	17.0	290,000	1942	May 23, 1942	14.06	223,000
1921	Mar. 10, 1921	10.33	146,000	1943	Jan. 1, 1943	19.32	348,000
1922	Nov. 30, 1921	13.17	204,000	1944	May 9, 1944	11.75	174,000
1923	Mar. 5, 1923	13.8	217,000	1945	Mar. 5, 1945	13.83	217,000
1924	Apr. 7, 1924	15.8	261,000	1946	May 29, 1946	22.98	446,000
1925	Feb. 12, 1925	17.2	295,000	1947	Apr. 7, 1947	13.19	204,000
1926	Mar. 26, 1926	11.2	164,000	1948	Apr. 15, 1948	15.14	245,000
1927	Nov. 17, 1926	14.8	239,000	1949	Dec. 31, 1948	11.18	164,000
1928	Oct. 21, 1927	12.8	196,000	1950	Mar. 30, 1950	16.02	266,000
1929	May 2, 1928	12.8	196,000	1951	Nov. 27, 1950	18.64	330,000
1929	Mar. 16, 1929	13.79	217,000	1952	Mar. 12, 1952	15.06	244,000
1930	Feb. 27, 1930	10.03	140,000	1953	Dec. 12, 1952	11.26	165,000
1931	Mar. 30, 1931	10.0	140,000	1954	Mar. 3, 1954	12.30	186,000
1932	Apr. 2, 1932	13.16	204,000	1955	Mar. 3, 1955	10.51	150,000
1933	Aug. 25, 1933	12.78	196,000	1956	Mar. 9, 1956	17.54	303,000
1934	Mar. 6, 1934	10.28	146,000	1957	Apr. 7, 1957	13.18	204,000
1935	July 11, 1935	11.7	174,000	1958	Apr. 8, 1958	15.38	252,000
1936	Mar. 19, 1936	26.85	556,000	1959	Jan. 23, 1959	13.30	206,000
1937	Jan. 23, 1937	11.92	178,000	1960	Apr. 2, 1960	18.61	330,000
				1961	Feb. 27, 1961	17.88	312,000

5545. Shamokin Creek near Shamokin, Pa.

Location.--Lat 40°48'30", long 76°35'05", on right bank at Weigh Scale, Northumberland County, 1 mile downstream from Trout Run, and 2 miles northwest of Shamokin.

Drainage area.--54.2 sq mi.

Gage.--Recording. Datum of gage is 608.28 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 600 cfs.

Remarks.--Base for partial-duration series, 700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)	
1940	Mar. 30, 1940	3.94	1,850	1951	Dec. 4, 1950	3.79	1,660	
	July 23, 1940	4.18	2,040		Dec. 8, 1950	2.69	722	
	Aug. 6, 1940	3.05	1,070		Feb. 7, 1951	2.70	729	
1941	Aug. 26, 1941	2.75	865		1952	Aug. 15, 1951	3.01	953
				Mar. 11, 1952		2.90	870	
1942	May 22, 1942	3.92	1,720	May 11, 1952	3.34	1,240		
	May 31, 1942	2.88	874	1953	Nov. 22, 1952	2.76	770	
	June 3, 1942	2.72	754		May 23, 1953	2.70	729	
	June 4, 1942	3.78	1,580		May 26, 1953	3.15	1,060	
1943	Dec. 30, 1942	2.80	795	1954	Feb. 17, 1954	2.71	736	
	May 18, 1943	2.81	760		Mar. 1, 1954	2.66	703	
	May 19, 1943	2.98	844		Apr. 17, 1954	2.77	777	
	June 7, 1943	3.64	1,350		May 29, 1954	2.87	848	
	June 17, 1943	4.18	1,930		June 13, 1954	2.82	812	
	June 28, 1943	3.82	1,560	1955	Aug. 18, 1955	3.84	1,710	
1944	Nov. 9, 1943	4.74	2,590		1956	Oct. 14, 1955	2.66	772
	May 7, 1944	2.96	893			June 10, 1956	2.66	772
	June 18, 1944	2.91	830			July 4, 1956	2.82	884
	June 19, 1944	3.18	1,020			July 26, 1956	3.71	1,570
Aug. 7, 1944	2.65	767	Aug. 31, 1956	2.78		856		
1945	May 15, 1945	2.83	809	Sept. 23, 1956	3.45	1,360		
	May 17, 1945	2.82	795	1957	June 12, 1957	2.99	912	
	June 28, 1945	2.71	760		July 9, 1957	2.81	816	
	June 29, 1945	2.61	700		1958	Dec. 20, 1957	2.95	936
	July 28, 1945	2.73	730	July 5, 1958		3.40	1,300	
1946	May 21, 1946	3.13	977	July 15, 1958		2.83	851	
	May 25, 1946	2.76	724	July 28, 1958		3.54	1,440	
	May 26, 1946	2.98	858	1959	Jan. 21, 1959	2.64	718	
	May 27, 1946	3.23	1,030		Sept. 2, 1959	2.97	956	
	June 29, 1946	3.24	1,050		Sept. 9, 1959	2.70	760	
	July 16, 1946	2.91	809	1960	Apr. 4, 1960	2.86	757	
1947	July 10, 1947	3.67	1,390		May 9, 1960	2.82	729	
	July 21, 1947	2.83	754		May 17, 1960	3.10	940	
	July 22, 1947	2.76	712		Aug. 31, 1960	3.74	1,540	
	July 28, 1947	3.70	1,390		Sept. 12, 1960	2.92	800	
	Aug. 30, 1947	2.72	736	1961	June 8, 1961	2.81	722	
1948	May 13, 1948	2.67	634		July 1, 1961	2.85	750	
1949	Sept. 18, 1949	2.62	692		Aug. 10, 1961	3.19	1,010	
1950	July 24, 1950	2.81	775					
1951	Nov. 25, 1950	4.26	2,110					

a Occurred on preceding day.

5550. Penn Creek at Penns Creek, Pa.

Location.--Lat 40°52'00", long 77°02'55", on left bank 200 ft downstream from bridge on State Highway 104 and three-quarters of a mile northeast of Penns Creek, Snyder County.

Drainage area.--301 sq mi.

Gage.--Nonrecording prior to Feb. 1, 1930; recording thereafter. Datum of gage is 506.72 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 5,600 cfs and extended above by logarithmic plotting.

Bankfull stage.--8 ft.

Remarks.--Base for partial-duration series, 3,100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Oct. 23, 1929	6.95	4,020	1948	Apr. 15, 1948	7.65	4,760
	Mar. 8, 1930	6.26	3,260				
1931	May 23, 1931	7.80	4,900	1949	Dec. 30, 1948	6.53	3,470
					Apr. 14, 1949	6.20	3,170
1932	Apr. 1, 1932	7.19	4,240	1950	Mar. 29, 1950	8.53	6,340
1933	Apr. 18, 1933	6.36	3,360	1951	Nov. 25, 1950	11.62	11,700
	Aug. 24, 1933	11.00	10,400		Dec. 4, 1950	8.00	5,640
1934	Mar. 5, 1934	8.32	5,750		Dec. 8, 1950	8.17	5,920
	Sept. 16, 1934	13.00	14,900		Mar. 31, 1951	8.92	6,930
1935	Dec. 1, 1934	8.52	6,010	1952	Mar. 11, 1952	9.29	7,540
					Apr. 6, 1952	6.06	3,290
1936	Mar. 11, 1936	10.90	10,200	1953	Nov. 22, 1952	5.98	3,180
	Mar. 18, 1936	12.12	12,800		Mar. 24, 1953	6.92	4,220
1937	Feb. 22, 1937	7.05	4,000		May 23, 1953	7.36	4,850
	Apr. 28, 1937	6.95	4,000		May 26, 1953	8.36	6,200
					May 31, 1953	7.86	5,500
1938	Nov. 13, 1937	9.16	7,140	1954	Mar. 2, 1954	9.02	7,080
1939	Feb. 4, 1939	6.56	3,530		May 4, 1954	7.72	5,240
1940	Mar. 31, 1940	11.61	11,700	1955	Aug. 13, 1955	6.39	3,620
	Apr. 21, 1940	6.41	3,310	1956	Oct. 15, 1955	9.30	7,540
1941	Apr. 5, 1941	5.80	2,690	1957	Nov. 2, 1956	9.88	8,510
1942	Dec. 24, 1941	7.04	4,000		Apr. 6, 1957	7.50	4,980
	Mar. 9, 1942	6.89	3,890		Apr. 9, 1957	6.64	3,860
	May 23, 1942	10.14	8,710	1958	Dec. 27, 1957	5.70	2,860
1943	Dec. 30, 1942	9.26	7,310	1959	Jan. 22, 1959	8.90	-
	Apr. 21, 1943	6.71	3,670		Jan. 22, 1959	8.56	6,480
1944	Nov. 9, 1943	7.25	4,240		Feb. 11, 1959	7.03	4,340
	Jan. 4, 1944	6.70	3,670		Mar. 6, 1959	6.8	4,100
	May 8, 1944	6.80	3,780	1960	Mar. 31, 1960	7.98	5,640
1945	May 18, 1945	7.10	4,120		Apr. 4, 1960	7.42	4,850
1946	Nov. 29, 1945	8.68	6,340	1961	Feb. 26, 1961	8.12	5,780
	May 27, 1946	9.79	8,170		Apr. 16, 1961	6.90	4,220
	June 2, 1946	6.35	3,370				
1947	Mar. 14, 1947	4.84	1,980				

a Backwater from ice.

5555. East Mahantango Creek near Dalmatia, Pa.
(Published as Mahantango Creek East prior to 1946)

Location.--Lat 40°36'40", long 76°54'45", on right bank at highway bridge
2 miles upstream from mouth and 3¼ miles south of Dalmatia, Northumberland
County.

Drainage area.--162 sq mi.

Gage.--Nonrecording prior to Feb. 11, 1930; recording thereafter. Datum of
gage is 400.50 ft above mean sea level (Pennsylvania State highway bench
mark).

Stage-discharge relation.--Defined by current-meter measurements below
4,000 cfs.

Remarks.--Records for 1930-31 furnished by Pennsylvania Department of Forests
and Waters. Base for partial-duration series, 1,900 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Oct. 2, 1929	10.20	6,050	1946	June 29, 1946	10.19	6,050
	Nov. 18, 1929	5.7	2,180		Aug. 1, 1946	6.30	2,490
	Apr. 7, 1930	5.62	2,090	1947	July 17, 1947	5.57	2,000
	June 18, 1930	6.03	2,500		July 22, 1947	6.70	2,880
1931	May 8, 1931	3.97	900	1948	Apr. 15, 1948	5.88	2,210
1932	Apr. 1, 1932	6.88	3,370		May 14, 1948	5.53	1,930
1933	Mar. 21, 1933	6.12	1,940	1949	Nov. 7, 1948	5.66	2,070
	Aug. 24, 1933	13.66	10,600		Dec. 30, 1948	8.31	4,140
	Sept. 4, 1933	8.85	4,180		Jan. 6, 1949	6.12	2,350
1934	Mar. 4, 1934	ae.85	-	1950	Mar. 23, 1950	5.91	2,210
	Sept. 17, 1934	6.69	2,440		Mar. 24, 1950	6.84	2,880
1935	Dec. 1, 1934	13.00	8,940	1951	Nov. 25, 1950	13.18	9,860
	July 15, 1935	8.17	3,650		Dec. 4, 1950	12.15	8,480
1936	Mar. 12, 1936	9.75	5,180		Dec. 8, 1950	7.40	3,500
	Mar. 19, 1936	8.72	4,100		Jan. 24, 1951	6.41	2,760
1937	Dec. 20, 1936	5.62	1,950		Feb. 7, 1951	8.80	4,620
	Feb. 22, 1937	8.49	4,730	1952	Dec. 6, 1951	5.26	1,990
	Aug. 27, 1937	7.05	3,140		Mar. 12, 1952	11.20	7,210
1938	Oct. 23, 1937	9.35	5,200		May 12, 1952	7.71	3,720
	Nov. 13, 1937	6.17	2,430	1953	Nov. 22, 1952	7.90	3,880
	May 29, 1938	6.54	2,690		Dec. 11, 1952	6.78	3,050
	July 22, 1938	7.28	3,440		Jan. 24, 1953	7.30	3,420
1939	Dec. 6, 1938	7.98	4,170		Mar. 24, 1953	5.36	2,060
	Feb. 4, 1939	5.98	2,270		May 23, 1953	7.86	3,880
1940	Mar. 15, 1940	6.33	2,450		May 26, 1953	6.85	3,050
	Mar. 31, 1940	9.25	5,180	1954	Dec. 7, 1953	5.52	2,130
	Apr. 20, 1940	8.32	4,250		Mar. 1, 1954	8.51	4,350
	Sept. 1, 1940	5.63	1,960		Apr. 17, 1954	5.46	2,020
1941	Nov. 15, 1940	5.17	1,620	1955	Aug. 19, 1955	11.87	8,090
1942	Dec. 24, 1941	8.05	3,950	1956	Oct. 14, 1955	7.26	3,150
	Feb. 7, 1942	5.76	2,020		June 24, 1956	6.06	2,480
	May 23, 1942	10.40	6,510	1957	Dec. 14, 1956	6.33	2,620
	Sept. 28, 1942	5.64	1,960		Apr. 5, 1957	6.67	2,920
1943	Dec. 30, 1942	8.38	4,230	1958	Dec. 20, 1957	8.83	4,620
1944	Oct. 29, 1943	5.47	1,930		Dec. 27, 1957	6.58	2,850
	Nov. 9, 1943	12.53	8,880		Jan. 22, 1958	5.47	2,040
	Jan. 3, 1944	7.16	3,200		Feb. 28, 1958	8.10	4,030
	Apr. 25, 1944	5.84	2,140		Mar. 26, 1958	6.31	2,620
	May 7, 1944	7.84	3,690	1959	Jan. 21, 1959	ae.75	-
	June 20, 1944	6.48	2,640		Jan. 22, 1959	6.6	2,850
1945	July 19, 1945	7.75	3,690		Feb. 10, 1959	5.37	1,970
	July 27, 1945	6.01	2,280		Mar. 6, 1959	5.54	2,040
	July 29, 1945	6.40	2,560	1960	Dec. 13, 1959	5.5	2,040
1946	Nov. 22, 1945	5.53	1,930		Apr. 4, 1960	6.59	2,850
	Jan. 7, 1946	6.21	2,420		May 9, 1960	5.76	2,250
	Feb. 28, 1946	5.57	2,000		Sept. 12, 1960	6.23	2,550
	May 21, 1946	5.88	2,210	1961	Feb. 19, 1961	ae.57	-
	May 27, 1946	7.12	3,120		Feb. 26, 1961	7.35	3,470
	June 2, 1946	5.65	2,000		Apr. 14, 1961	6.15	2,550

a Backwater from ice.

5560. Frankstown Branch Juniata River at Williamsburg, Pa.

Location.--Lat 40°27'45", long 78°12'00", on left bank 10 ft downstream from highway bridge at Williamsburg, Blair County, and 2.5 miles upstream from Clover Creek.

Drainage area.--291 sq mi.

Gage.--Nonrecording prior to Aug. 14, 1928; recording thereafter. Datum of gage is 831.78 ft above mean sea level (Pennsylvania Railroad bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 7,300 cfs and extended above on basis of slope-area measurement at 47,600 cfs.

Bankfull stage.--9 ft.

Historical data.--Maximum stage known, that of June 1, 1889.

Remarks.--Records for 1917-19, 1922-31, furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 4,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1889	June 1, 1889	19.1	35,500	1937	Oct. 17, 1936	8.95	4,910
					Nov. 5, 1936	9.15	5,210
1917	Mar. 12, 1917	10.0	5,950		Jan. 10, 1937	8.67	4,460
1918	Feb. 26, 1918	11.3	7,800		Jan. 22, 1937	9.73	6,010
1919	May 22, 1919	11.8	8,550		Apr. 26, 1937	13.90	16,600
1920	Mar. 13, 1920	10.25	6,700		Apr. 28, 1937	12.43	11,400
1921	May 5, 1921	10.7	7,400	1938	Oct. 28, 1937	9.60	5,850
1922	Nov. 29, 1921	11.6	9,000		Jan. 25, 1938	8.55	4,310
	Apr. 15, 1922	8.8	4,710	1939	Feb. 3, 1939	9.07	5,060
1923	Mar. 4, 1923	7.2	2,960		Feb. 28, 1939	8.58	4,310
1924	Jan. 17, 1924	9.7	5,900		June 23, 1939	10.20	6,850
	Mar. 30, 1924	9.9	6,180	1940	Mar. 31, 1940	12.94	12,900
	Apr. 6, 1924	9.2	5,230		Apr. 4, 1940	9.20	5,210
	May 12, 1924	12.8	11,000		Apr. 20, 1940	9.42	5,530
	June 29, 1924	10.7	7,430	1941	June 5, 1941	10.60	7,560
1925	Feb. 12, 1925	12.4	10,200	1942	Dec. 24, 1941	9.90	6,340
1926	Feb. 22, 1926	9.2	5,230		Mar. 9, 1942	8.60	4,350
	Feb. 25, 1926	9.5	5,620		Apr. 9, 1942	10.10	6,680
	Sept. 5, 1926	8.4	4,230	1943	Dec. 30, 1942	11.60	9,540
1927	Nov. 19, 1926	8.6	4,470		Apr. 21, 1943	9.32	5,370
	Jan. 22, 1927	9.3	5,360		May 12, 1943	9.08	5,060
	Mar. 8, 1927	8.4	4,230	1944	Mar. 14, 1944	8.69	4,480
1928	Oct. 20, 1927	9.2	5,230		May 7, 1944	8.72	4,480
	Nov. 3, 1927	8.4	4,230	1945	Feb. 16, 1945	8.85	4,510
	Mar. 30, 1928	9.1	5,100		Mar. 4, 1945	8.56	4,270
	May 1, 1928	11.1	8,210		Mar. 6, 1945	11.40	8,380
1929	Feb. 26, 1929	9.96	6,330		May 18, 1945	9.83	5,790
	Apr. 5, 1929	10.20	6,630		Sept. 18, 1945	10.20	6,350
	Apr. 16, 1929	9.53	5,620	1946	Feb. 28, 1946	8.78	4,510
1930	Oct. 3, 1929	8.48	4,350		June 2, 1946	10.12	6,210
	Oct. 23, 1929	13.90	13,000		June 12, 1946	10.22	6,350
	Feb. 25, 1930	10.78	7,590		June 13, 1946	10.07	6,210
1931	Apr. 4, 1931	8.35	4,230	1947	Oct. 26, 1946	7.85	3,350
1932	Apr. 1, 1932	8.85	4,710	1948	Apr. 12, 1948	10.01	6,070
1933	Mar. 15, 1933	9.06	4,810		Apr. 14, 1948	11.88	9,680
	Mar. 19, 1933	9.08	4,810		June 19, 1948	9.30	4,740
	May 10, 1933	8.87	4,570	1949	Jan. 26, 1949	8.76	4,190
1934	Sept. 17, 1934	8.63	4,320	1950	Feb. 14, 1950	8.92	4,300
1935	Mar. 2, 1935	7.76	3,430	1951	Oct. 10, 1950	9.75	5,330
1936	Mar. 12, 1936	11.36	8,180		Nov. 25, 1950	11.74	7,040
	Mar. 18, 1936	18.58	47,600		Dec. 4, 1950	9.88	4,810
	Apr. 6, 1936	8.98	4,910		Dec. 8, 1950	9.78	4,700
					Feb. 21, 1951	9.35	4,280
					Mar. 31, 1951	9.45	4,280
					June 14, 1951	10.57	5,620

Peak stages and discharges of Frankstown Branch Juniata River
at Williamsburg, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Jan. 27, 1952	9.63	4,480	1958	Dec. 26, 1957	9.12	3,980
	Mar. 11, 1952	12.82	9,250		Aug. 1, 1958	9.12	3,980
1953	Nov. 22, 1952	9.93	4,810	1959	Feb. 10, 1959	10.31	5,260
	Mar. 24, 1953	11.36	6,630		Mar. 6, 1959	9.8	4,700
	May 31, 1953	10.03	4,920				
1954	Mar. 1, 1954	13.98	13,600	1960	Oct. 24, 1959	9.35	4,280
					Nov. 28, 1959	9.87	4,810
1955	Oct. 16, 1954	12.27	8,000		Mar. 31, 1960	11.59	6,900
	Dec. 30, 1954	9.63	4,480		May 9, 1960	13.36	11,200
	Apr. 22, 1955	11.57	6,900		May 23, 1960	9.46	4,380
1956	Mar. 8, 1956	10.67	5,740	1961	Feb. 20, 1961	9.51	4,380
	July 16, 1956	10.13	5,030		Feb. 26, 1961	14.12	14,000
	Aug. 8, 1956	13.23	10,500		Apr. 16, 1961	11.40	6,630
1957	Apr. 6, 1957	8.23	3,170				

5565. Little Juniata River at Tipton, Pa.

Location.--Lat 40°37'40", long 78°17'38", on left bank at Tipton, Blair County, 100 ft downstream from bridge on U.S. Highway 220, and 150 ft downstream from Tipton Run.

Drainage area.--93.7 sq mi.

Gage.--Recording. Datum of gage is 946.76 ft above mean sea level (Pennsylvania State Highway bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 3,700 cfs and extended above by logarithmic plotting.

Bankfull stage.--7 ft.

Remarks.--Base for partial-duration series, 1,100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	Feb. 27, 1946	4.61	1,160	1953	Nov. 22, 1952	5.73	2,140
	May 27, 1946	6.12	2,210		Dec. 11, 1952	5.4	1,840
	June 2, 1946	5.70	1,740		Mar. 24, 1953	6.90	3,260
	June 12, 1946	6.03	2,130		May 26, 1953	4.72	1,300
	June 13, 1946	7.22	3,240		May 31, 1953	5.95	2,370
	June 21, 1946	4.58	1,160		July 5, 1953	4.53	1,200
1947	Oct. 25, 1946	4.68	1,210	1954	Mar. 1, 1954	8.46	5,130
	July 16, 1947	4.79	1,160				
1948	Apr. 12, 1948	5.70	1,740	1955	Oct. 15, 1954	8.20	4,740
	Apr. 14, 1948	6.75	2,840		Dec. 30, 1954	5.87	2,240
	May 3, 1948	4.90	1,320		Mar. 1, 1955	5.02	1,520
	June 19, 1948	4.72	1,220		Mar. 4, 1955	5.47	1,880
1949	Jan. 26, 1949	4.42	1,080		Mar. 22, 1955	5.24	1,720
					Apr. 21, 1955	5.60	2,010
1950	Feb. 14, 1950	4.44	1,100	1956	Feb. 18, 1956	4.49	1,160
	Mar. 26, 1950	4.71	1,210		Feb. 25, 1956	5.56	1,960
	Mar. 28, 1950	4.55	1,140		Mar. 7, 1956	6.12	2,460
1951	Oct. 9, 1950	5.25	1,580		Apr. 3, 1956	4.82	1,370
	Nov. 25, 1950	9.06	5,700		Apr. 7, 1956	4.99	1,520
	Dec. 4, 1950	5.45	1,720		May 13, 1956	5.77	2,140
	Dec. 7, 1950	5.44	1,720		July 2, 1956	7.87	4,380
	Feb. 21, 1951	5.25	1,580		July 20, 1956	5.04	1,560
	Mar. 30, 1951	5.90	2,050	1957	Apr. 9, 1957	4.79	1,370
	Apr. 12, 1951	4.48	1,130		June 24, 1957	4.75	1,340
	June 10, 1951	5.09	1,470	1958	Dec. 26, 1957	4.70	1,300
	June 13, 1951	7.87	4,040		May 8, 1958	4.51	1,160
1952	Jan. 3, 1952	4.71	1,390	1959	Jan. 22, 1959	5.30	1,760
	Jan. 27, 1952	5.56	2,020		Feb. 10, 1959	6.02	2,370
	Mar. 11, 1952	7.10	3,470		Mar. 6, 1959	5.31	1,760
	Apr. 5, 1952	4.39	1,190		Apr. 28, 1959	5.15	1,640
	May 20, 1952	4.54	1,280	1960	Oct. 24, 1959	4.45	1,120
	May 25, 1952	4.63	1,360		Nov. 28, 1959	4.92	1,440
	Sept. 1, 1952	5.50	1,980				

Peak stages and discharges of Little Juniata River at Tipton, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1960	Dec. 12, 1959	4.53	1,200	1961	Mar. 4, 1961	4.49	1,160
	Mar. 31, 1960	6.54	2,860		Apr. 16, 1961	6.15	2,560
	May 8, 1960	6.56	2,960		Apr. 22, 1961	4.43	1,120
	June 14, 1960	4.65	1,260		Apr. 25, 1961	4.43	1,120
					Aug. 3, 1961	5.68	2,100
1961	Feb. 25, 1961	7.97	4,500				

5570. Little Juniata River near Tyrone, Pa.

Location.--Lat 40°39'20", long 78°15'25", at Pennsylvania Railroad Bridge, 0.5 mile upstream from Hutchinson Run, and 1½ miles southwest of Tyrone, Blair County.

Drainage area.--101 sq mi.

Gage.--Nonrecording. Datum of gage is 905.49 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 880 cfs and extended above on basis of velocity-area studies.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Mar. 30, 1940	8.0	4,240	1943	Dec. 30, 1942	5.58	2,310
1941	June 5, 1941	6.1	2,670	1944	Mar. 17, 1944	4.6	1,630
1942	Dec. 24, 1941	5.3	2,100	1945	May 17, 1945	6.0	2,840

5575. South Bald Eagle Creek at Tyrone, Pa.

Location.--Lat 40°41'00", long 78°14'05", on left bank 0.2 mile upstream from plant of West Virginia Pulp and Paper Co., at Tyrone, Blair County, 0.2 mile upstream from Laurel Run, and 1.3 miles upstream from mouth.

Drainage area.--44.1 sq mi.

Gage.--Recording prior to Nov. 15, 1950. Nonrecording Nov. 16, 1950, to Nov. 30, 1952; recording thereafter. Prior to Dec. 1, 1952, at site half a mile downstream at datum 17.99 ft lower. Datum of gage is 921.80 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,100 cfs and extended above on basis of contracted-opening measurement at 5,140/cfs.

Historical data.--Maximum stage known, that of May 17, 1936.

Remarks.--Base for partial-duration series, 940 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Mar. 17, 1936	15	-	1945	Sept. 18, 1945	3.53	1,100
1940	Mar. 31, 1940	5.2	2,120	1946	May 27, 1946	4.72	2,150
	Apr. 20, 1940	3.93	1,070		June 12, 1946	3.48	1,060
1941	June 5, 1941	3.28	720	1947	July 16, 1947	3.90	1,390
1942	Dec. 24, 1941	4.53	1,510		Aug. 26, 1947	4.27	1,700
	Mar. 9, 1942	4.04	1,140	1948	Apr. 12, 1948	4.11	1,570
1943	Apr. 21, 1943	3.66	950		Apr. 14, 1948	4.27	1,900
1944	May 23, 1944	4.20	1,280	1949	Dec. 30, 1948	3.34	945
1945	Mar. 3, 1945	3.72	1,220	1950	Jan. 10, 1950	3.35	945
	Mar. 6, 1945	3.99	1,480		Mar. 28, 1950	3.42	980
	Mar. 21, 1945	4.69	2,150	1951	Oct. 9, 1950	3.77	1,260
	May 17, 1945	4.80	2,250		Nov. 25, 1950	7.5	5,140

Peak stages and discharges of South Bald Eagle Creek at Tyrone, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Dec. 4, 1950	3.65	1,190	1956	Mar. 8, 1956	3.76	1,180
	Dec. 7, 1950	3.85	1,340		May 7, 1956	3.38	940
	Feb. 21, 1951	3.4	1,050		May 13, 1956	4.36	1,630
	Mar. 30, 1951	4.35	1,860		July 2, 1956	4.32	1,590
	June 13, 1951	5.3	2,750		Aug. 5, 1956	3.57	1,040
					Sept. 6, 1956	3.65	1,100
1952	Jan. 3, 1952	3.4	1,050	1957	Oct. 23, 1956	3.95	1,320
	Jan. 27, 1952	3.8	1,340				
	Mar. 11, 1952	5.0	2,450	1958	Dec. 26, 1957	2.83	596
	Sept. 1, 1952	3.95	1,500		Feb. 28, 1958	a3.26	-
1953	Mar. 24, 1953	3.92	1,280	1959	Apr. 29, 1959	3.45	972
	May 26, 1953	4.03	1,390				
	May 31, 1953	3.49	1,000	1960	Oct. 24, 1959	3.57	1,040
1954	Mar. 1, 1954	4.98	2,170		Mar. 31, 1960	4.27	1,550
					May 22, 1960	3.39	940
1955	Oct. 15, 1954	4.66	1,870	1961	Feb. 25, 1961	4.45	1,710
1956	Oct. 14, 1955	3.63	1,100		Aug. 2, 1961	4.64	1,870

a Backwater from ice.

5580. Little Juniata River at Spruce Creek, Pa.

Location.--Lat 40°36'45", long 78°08'35", on right bank 150 ft downstream from Pennsylvania Railroad bridge, 0.5 mile northwest of village of Spruce Creek, Huntingdon County, and 0.5 mile upstream from Spruce Creek.

Drainage area.--220 sq mi.

Gage.--Recording. Datum of gage is 751.15 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 5,600 cfs and extended above on basis of slope-area measurement at 23,100 cfs.

Bankfull stage.--9 ft.

Historical data.--Maximum stage known, that of Mar. 18, 1936.

Remarks.--Base for partial-duration series, 3,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Mar. 18, 1936	19.1	39,800	1951	Nov. 25, 1950	15.82	23,100
1939	Feb. 28, 1939	7.10	2,970		Dec. 4, 1950	7.33	3,250
1940	Mar. 31, 1940	10.82	7,760		Dec. 7, 1950	7.72	3,690
	Apr. 4, 1940	7.98	4,000		Feb. 21, 1951	7.15	3,150
	Apr. 20, 1940	7.70	3,680		Mar. 30, 1951	8.24	4,260
	June 8, 1940	8.44	4,440		June 14, 1951	10.68	8,040
1941	Apr. 5, 1941	7.00	3,000	1952	Jan. 27, 1952	8.10	4,140
	June 5, 1941	8.22	4,220		Mar. 11, 1952	10.24	7,150
1942	Dec. 24, 1941	8.25	4,220		May 25, 1952	7.20	3,150
	Mar. 9, 1942	7.60	3,580	1953	Nov. 22, 1952	8.19	4,260
	Apr. 9, 1942	7.38	3,380		Dec. 11, 1952	7.60	3,580
1943	Dec. 30, 1942	10.48	7,310		Mar. 24, 1953	9.32	5,700
	Apr. 19, 1943	7.31	3,280		May 26, 1953	7.63	3,580
	Apr. 21, 1943	7.56	3,580		May 31, 1953	8.20	4,260
1944	Mar. 17, 1944	7.34	3,300	1954	Mar. 1, 1954	11.53	9,600
	May 7, 1944	7.26	3,300		June 1, 1954	7.74	3,690
	May 23, 1944	7.06	3,100	1955	Oct. 15, 1954	10.77	8,230
1945	Mar. 3, 1945	7.98	4,050		Dec. 30, 1954	7.54	3,470
	Mar. 7, 1945	8.84	4,980		Mar. 22, 1955	7.35	3,360
	Mar. 21, 1945	7.47	3,500	1956	Feb. 25, 1956	7.61	3,580
	May 18, 1945	9.75	6,280		Mar. 8, 1956	8.76	5,000
	Sept. 18, 1945	7.24	3,200		May 13, 1956	8.86	5,130
1946	May 27, 1946	9.02	5,230		July 2, 1956	9.67	6,320
	June 2, 1946	7.63	3,610	1957	Apr. 9, 1957	7.15	3,150
	June 12, 1946	7.34	3,300	1958	Dec. 26, 1957	6.48	2,470
	June 13, 1946	8.13	4,160	1959	Jan. 22, 1959	-	4,000
1947	July 16, 1947	7.64	3,610		Feb. 10, 1959	8.10	4,140
1948	Apr. 12, 1948	8.41	4,500		Mar. 6, 1959	7.55	3,580
	Apr. 14, 1948	9.70	6,140		Apr. 29, 1959	7.39	3,360
1949	Dec. 30, 1948	6.80	2,800	1960	Oct. 24, 1959	8.26	4,380
	Jan. 26, 1949	6.80	2,800		Nov. 28, 1959	7.34	3,250
1950	Mar. 26, 1950	7.14	3,050		Mar. 31, 1960	9.28	5,700
	Mar. 28, 1950	7.09	3,050		May 8, 1960	8.40	4,500
1951	Oct. 9, 1950	7.51	3,470	1961	May 22, 1960	7.20	3,150
					Feb. 26, 1961	10.14	6,980
					Apr. 16, 1961	7.86	3,910
					Aug. 2, 1961	7.56	3,580

a Occurred at different time than peak discharge.

5585. Shaver Creek near Petersburg, Pa.

Location.--Lat 40°36'40", long 78°00'25". at highway bridge 3½ miles northeast of Petersburg, Huntingdon County, and 4.5 miles upstream from mouth.

Drainage area.--46.4 sq mi.

Gage.--Nonrecording. Datum of gage is 691.38 ft above mean sea level (preliminary levels of 1912).

Stage-discharge relation.--Defined by current-meter measurements below 750 cfs and extended above by logarithmic plotting.

Remarks.--Records for 1930-31 furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 750 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Oct. 22, 1929	5.62	1,070	1935	Dec. 1, 1934	6.6	1,510
	Feb. 25, 1930	5.3	950		May 7, 1935	5.0	831
	Feb. 26, 1930	5.4	990	1936	Mar. 11, 1936	6.87	1,680
1931	May 8, 1931	6.85	1,680		Mar. 18, 1936	9.32	3,420
	May 23, 1931	6.05	1,260		Apr. 6, 1936	6.55	1,560
1932	Mar. 31, 1932	4.98	792		May 13, 1936	5.00	831
	May 11, 1932	4.82	738		June 13, 1936	4.80	755
1933	Nov. 19, 1932	6.3	1,410	1937	Jan. 10, 1937	4.75	755
	Mar. 14, 1933	5.2	910		Jan. 22, 1937	5.9	1,210
	Mar. 15, 1933	5.1	870		Apr. 26, 1937	7.4	2,040
	Mar. 19, 1933	6.2	1,360		Apr. 28, 1937	7.51	2,100
	Apr. 7, 1933	7.0	1,800	1938	Oct. 23, 1937	5.2	910
	Apr. 12, 1933	5.4	990		Oct. 28, 1937	5.0	831
	May 8, 1933	6.95	1,800		Nov. 13, 1937	5.2	910
	May 10, 1933	6.7	1,620		Dec. 18, 1937	6.6	1,560
1934	Apr. 11, 1934	4.88	737	Jan. 25, 1938	6.7	1,620	

5590. Juniata River at Huntingdon, Pa.

(Published as "Frankstown Branch Juniata River" prior to 1951)

Location.--Lat 40°29'05", long 78°01'10", on right bank 450 ft downstream from Smithfield Bridge at Huntingdon, Huntingdon County, and 0.8 mile upstream from Standing Stone Creek.

Drainage area.--816 sq mi.

Gage.--Nonrecording at different sites and datums prior to Sept. 10 1941; recording thereafter. Datum of gage is 599.69 ft above mean sea level. datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 20,000 cfs and extended above on basis of flow-over-dam measurement at 81,000 cfs.

Remarks.--Base for partial-duration series, 5,500 cfs. Only annual peaks are shown prior to 1942.

Peak stages and discharges

Peak stages and discharges							
Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1896	Sept. 30, 1896	11.8	22,500	1909	Feb. 24, 1909	9.5	13,100
1897	Feb. 23, 1897	9.6	13,400	1910	Mar. 1, 1910	9.4	12,800
1898	Mar. 23, 1898	10.7	17,400				
1900	Jan. 21, 1900	8.5	10,200	1911	Sept. 15, 1911	9.7	13,700
				1912	Mar. 15, 1912	10.8	17,800
				1913	May 28, 1913	10.1	15,100
				1914	Mar. 28, 1914	8.4	9,920
1901	Mar. 10, 1901	11.0	18,600	1915	Feb. 24, 1915	10.3	15,800
1902	Feb. 28, 1902	13.8	36,200				
1903	Feb. 4, 1903	11.0	18,600				
1904	Apr. 1, 1904	9.3	12,500	1916	June 17, 1916	14.8	44,800
1905	Mar. 21, 1905	9.5	13,100	1917	Mar. 12, 1917	9.0	11,600
				1918	Feb. 26, 1918	11.5	21,000
1906	Mar. 30, 1906	8.4	9,920	1919	May 22, 1919	11.4	20,500
1907	Mar. 14, 1907	13.4	33,000	1920	Mar. 13, 1920	12.3	25,300
1908	Mar. 19, 1908	13.9	37,000				

Peak stages and discharges of Juniata River at Huntingdon, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1921	May 5, 1921	10.7	17,400	1950	Mar. 29, 1950	6.65	6,930
1922	Nov. 29, 1921	12.4	25,900	1951	Oct. 10, 1950	6.90	7,520
1924	May 12, 1924	12.2	24,700		Nov. 25, 1950	15.29	34,200
1925	Feb. 12, 1925	12.3	25,300		Dec. 4, 1950	8.04	9,830
					Dec. 8, 1950	7.60	8,960
1926	Feb. 26, 1926	8.9	11,300		Feb. 14, 1951	6.24	6,190
1927	Jan. 22, 1927	7.2	6,810		Feb. 22, 1951	7.37	8,540
1928	Apr. 30, 1928	11.7	22,000		Mar. 31, 1951	8.49	11,000
1929	Apr. 17, 1929	9.9	14,400		June 14, 1951	10.39	15,800
1931	May 23, 1931	8.9	12,000	1952	Jan. 3, 1952	6.68	7,120
1932	Apr. 1, 1932	9.2	12,800		Jan. 27, 1952	7.66	9,170
1933	Mar. 16, 1933	9.2	12,800		Mar. 11, 1952	10.95	17,200
1934	Sept. 17, 1934	6.9	7,440		Mar. 23, 1952	6.12	6,020
1935	Mar. 3, 1935	7.1	7,850		Apr. 5, 1952	6.42	6,550
					May 25, 1952	6.47	6,740
1936	Mar. 18, 1936	21.87	81,000	1953	Nov. 22, 1952	8.33	10,500
1937	Apr. 27, 1937	13.7	26,400		Dec. 11, 1952	6.93	7,520
1938	Oct. 29, 1937	8.6	11,200		Jan. 24, 1953	5.43	5,680
					Mar. 24, 1953	10.00	14,800
1942	Dec. 24, 1941	8.51	11,000		May 26, 1953	6.82	7,320
	Mar. 8, 1942	7.33	8,270		May 31, 1953	7.59	8,960
	Apr. 10, 1942	8.86	12,000	1954	Mar. 1, 1954	11.25	17,800
	May 23, 1942	7.57	8,920	1955	Oct. 16, 1954	10.52	16,000
1943	Dec. 30, 1942	11.80	19,500		Dec. 30, 1954	7.40	8,540
	Jan. 19, 1943	5.82	5,510		Mar. 1, 1955	6.50	6,730
	Mar. 12, 1943	6.35	6,550		Mar. 4, 1955	6.43	6,540
	Apr. 20, 1943	8.25	10,300		Mar. 22, 1955	7.38	8,540
	Apr. 21, 1943	7.98	9,830		Apr. 22, 1955	7.80	9,390
	May 12, 1943	7.14	7,920	1956	Feb. 18, 1956	6.08	5,980
1944	Jan. 28, 1944	6.47	6,740		Feb. 25, 1956	6.65	6,920
	Mar. 14, 1944	7.05	7,720		Mar. 8, 1956	8.67	11,500
	Mar. 17, 1944	7.31	8,330		Apr. 4, 1956	6.37	6,540
	Mar. 25, 1944	6.01	5,850		Apr. 8, 1956	6.48	6,730
	Apr. 25, 1944	6.22	6,190		May 13, 1956	7.68	9,170
	May 7, 1944	7.24	8,120		July 2, 1956	7.49	8,750
1945	Feb. 27, 1945	6.72	7,120		Aug. 8, 1956	8.01	9,830
	Mar. 4, 1945	7.47	8,750	1957	Apr. 6, 1957	6.80	7,320
	Mar. 7, 1945	10.41	15,800		Apr. 9, 1957	7.22	8,120
	Mar. 22, 1945	8.39	10,800	1958	Dec. 26, 1957	6.53	6,730
	May 18, 1945	9.19	12,800		May 8, 1958	6.32	6,350
	Sept. 18, 1945	8.01	9,830	1959	Jan. 22, 1959	8.20	10,300
1946	Nov. 22, 1945	6.30	6,370		Feb. 10, 1959	7.93	9,610
	Nov. 29, 1945	6.94	7,520		Mar. 6, 1959	7.54	8,750
	Feb. 28, 1946	6.66	7,120		Apr. 29, 1959	6.58	6,920
	Mar. 9, 1946	5.90	5,680	1960	Oct. 24, 1959	6.87	7,520
	May 27, 1946	8.54	11,000		Nov. 28, 1959	7.34	8,330
	June 2, 1946	8.22	10,300		Mar. 31, 1960	9.33	13,000
	June 12, 1946	8.15	10,300		Apr. 4, 1960	7.14	7,920
	June 13, 1946	8.20	10,300		May 9, 1960	8.92	12,000
1947	Oct. 26, 1946	5.75	5,510		May 11, 1960	6.28	6,350
1948	Mar. 20, 1948	6.44	5,680		May 23, 1960	7.20	8,120
	Apr. 14, 1948	11.21	17,000	1961	Feb. 20, 1961	6.41	6,540
	June 19, 1948	6.16	5,510		Feb. 26, 1961	11.16	17,800
1949	Dec. 30, 1948	6.99	7,720		Mar. 6, 1961	6.13	5,980
	Jan. 6, 1949	6.28	6,370		Apr. 14, 1961	5.91	5,620
	Jan. 27, 1949	6.52	6,740		Apr. 17, 1961	8.01	9,830
	Jan. 28, 1949	6.46	6,740		Aug. 3, 1961	6.13	5,980
1950	Feb. 15, 1950	7.00	7,720				
	Mar. 27, 1950	6.22	6,190				

5595. Standing Stone Creek near Huntingdon, Pa.

Location.--Lat 40°31'25", long 77°58'15", at bridge on State Highway 545, 3½ miles northeast of Huntingdon, Huntingdon County, and 3.5 miles upstream from mouth.

Drainage area.--128 sq mi.

Gage.--Nonrecording prior to Feb. 4, 1930; recording thereafter. Datum of gage is 617.81 ft above mean sea level, unadjusted.

Stage-discharge relation.--Defined by current-meter measurements below 3,600 cfs.

Remarks.--Records for 1930-31 furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 1,600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1899	June 1, 1899	9.38	6,770	1945	Mar. 7, 1945	6.45	2,080
					May 18, 1945	5.85	1,600
1930	Oct. 23, 1929	6.55	2,780				
	Feb. 26, 1930	5.35	1,630	1946	Nov. 29, 1945	7.42	2,870
					Mar. 9, 1946	5.97	1,680
1931	May 8, 1931	6.75	3,000		May 28, 1946	6.63	2,300
	May 21, 1931	6.14	2,320		June 2, 1946	6.75	2,410
	May 23, 1931	6.70	2,890		June 13, 1946	6.25	1,900
1932	Apr. 1, 1932	5.67	1,870	1947	June 9, 1947	6.55	2,180
					Aug. 20, 1947	6.14	1,820
1933	Apr. 7, 1933	5.46	1,710		Aug. 31, 1947	7.21	2,670
	May 30, 1933	5.33	1,630				
	Aug. 24, 1933	6.20	2,420	1948	Apr. 12, 1948	6.75	2,410
1934	Apr. 12, 1934	4.31	1,030		Apr. 15, 1948	7.02	2,490
1935	Dec. 1, 1934	5.41	1,680	1949	Dec. 30, 1948	6.46	2,080
1936	Mar. 12, 1936	6.95	3,230	1950	Feb. 14, 1950	5.35	1,340
	Mar. 18, 1936	9.14	6,250				
	Apr. 6, 1936	5.61	1,830	1951	Nov. 25, 1950	10.96	8,500
	June 14, 1936	7.16	3,470		Dec. 4, 1950	6.73	2,230
					Mar. 31, 1951	7.60	3,070
1937	Nov. 5, 1936	6.34	2,520		June 14, 1951	7.40	2,870
	Jan. 22, 1937	5.71	1,910				
	Feb. 22, 1937	5.50	1,750	1952	Jan. 27, 1952	5.92	1,650
	Apr. 28, 1937	7.24	3,240		Mar. 11, 1952	7.50	2,990
1938	Dec. 18, 1937	5.72	1,960				
	Jan. 25, 1938	5.50	1,830	1953	Nov. 22, 1952	6.40	2,090
					Dec. 11, 1952	6.54	2,160
1939	Feb. 4, 1939	5.83	2,000		Jan. 25, 1953	5.76	1,710
					Mar. 24, 1953	7.08	2,620
1940	Mar. 31, 1940	7.48	3,560		May 26, 1953	8.14	3,630
					May 31, 1953	6.37	2,090
1941	Apr. 5, 1941	5.35	1,620	1954	Mar. 2, 1954	7.51	2,990
1942	Dec. 24, 1941	6.63	2,780	1955	Oct. 16, 1954	8.23	3,750
	Apr. 4, 1942	6.37	2,570		Dec. 30, 1954	5.97	1,830
	May 23, 1942	7.15	3,470		Mar. 22, 1955	5.98	1,830
1943	Dec. 30, 1942	7.69	4,110				
	Apr. 21, 1943	6.24	2,390	1956	Oct. 15, 1955	6.33	2,020
					Mar. 8, 1956	6.60	2,230
1944	Jan. 4, 1944	6.36	2,500		May 13, 1956	5.77	1,710
	Mar. 13, 1944	5.68	1,860	1957	Apr. 6, 1957	6.04	1,830
	Mar. 17, 1944	5.83	2,000				
	May 7, 1944	6.70	2,880	1958	Dec. 27, 1957	6.12	1,890

5600. Dunning Creek at Belden, Pa.

Location.--Lat 40°04'20", long 78°29'35", on left bank 10 ft upstream from covered highway bridge, 0.8 mile southeast of Belden, Bedford County, 3.8 miles north of Bedford, and 4.3 miles upstream from mouth.

Drainage area.--172 sq mi.

Gage.--Recording. Datum of gage is 1,051.16 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 4,000 cfs.

Bankfull stage.--7 ft.

Historical data.--Maximum stage known, that of Mar. 18, 1936.

Remarks.--Base for partial-duration series, 2,300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Mar. 18, 1936	17.8	16,900	1951	Dec. 8, 1950	9.95	4,530
1940	Mar. 31, 1940	11.23	6,150		Feb. 21, 1951	8.55	3,020
	Apr. 4, 1940	8.84	3,280		Mar. 30, 1951	8.15	2,710
	Apr. 20, 1940	8.72	3,190	1952	Jan. 27, 1952	8.80	3,200
1941	Apr. 5, 1941	8.47	3,010		Mar. 11, 1952	10.57	5,310
	June 5, 1941	9.30	3,790	1953	Nov. 22, 1952	10.20	4,790
1942	Dec. 24, 1941	7.90	2,470		Mar. 24, 1953	9.66	4,170
	Mar. 9, 1942	7.83	2,420		May 31, 1953	9.84	4,290
	Apr. 10, 1942	8.72	2,950	1954	Mar. 1, 1954	11.43	6,430
1943	Oct. 16, 1942	10.11	4,590	1955	Oct. 16, 1954	10.96	5,870
	Dec. 30, 1942	11.12	6,010		Dec. 30, 1954	8.94	3,300
	Jan. 19, 1943	8.24	2,760		Mar. 1, 1955	7.56	2,330
	Apr. 20, 1943	9.46	4,010		Mar. 4, 1955	7.83	2,450
	May 12, 1943	8.15	2,760		Mar. 22, 1955	7.33	2,510
1944	Jan. 28, 1944	8.03	2,600		Apr. 22, 1955	10.00	4,530
	May 7, 1944	7.65	2,320	1956	Jan. 30, 1956	7.56	2,330
1945	Feb. 17, 1945	8.12	2,680		Mar. 8, 1956	9.60	4,050
	Feb. 27, 1945	8.45	2,920		Apr. 3, 1956	7.57	2,500
	Mar. 4, 1945	8.65	3,100		Apr. 7, 1956	7.70	2,550
	Mar. 7, 1945	10.00	4,590	1957	Dec. 14, 1956	8.22	2,870
	Sept. 18, 1945	9.63	4,120	1958	Dec. 26, 1957	7.91	2,670
1946	Jan. 7, 1946	8.62	3,100	1959	Jan. 22, 1959	b8.4	-
	Feb. 28, 1946	7.81	2,460		Feb. 10, 1959	8.25	2,870
	June 2, 1946	9.95	4,590		Mar. 6, 1959	7.56	2,500
1947	Oct. 26, 1946	7.49	2,260	1960	Oct. 24, 1959	7.59	2,500
1948	Apr. 13, 1948	9.76	4,350		Nov. 28, 1959	7.80	2,610
	May 29, 1948	9.69	4,230		Mar. 29, 1960	8.46	3,090
	June 20, 1948	8.34	2,840		Mar. 31, 1960	8.80	3,340
1949	Jan. 26, 1949	8.02	2,600		Apr. 4, 1960	7.38	2,390
1950	Feb. 14, 1950	7.68	2,390	1961	May 8, 1960	11.14	6,010
1951	Dec. 4, 1950	8.09	2,640		Feb. 20, 1961	9.80	4,320
					Feb. 28, 1961	10.80	5,590
					Apr. 16, 1961	8.67	3,250

a About; backwater from Roystown Branch Juniata River.

b Backwater from ice.

5605. Dunning Creek at Yount, Pa.

Location.--Lat 40°03'30", long 78°28'30", at highway bridge at Yount, Bedford County, 3 miles upstream from mouth, and 3 $\frac{1}{4}$ miles northeast of Bedford.

Drainage area.--191 sq mi.

Gage.--Nonrecording. Datum of gage is 1,046.43 ft above mean sea level (preliminary levels of 1935).

Stage-discharge relation.--Defined by current-meter measurements below 1,650 cfs

Remarks.--Records for 1930-31 furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 2,300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Oct. 23, 1929	(a)	-	1936	Mar. 12, 1936	9.6	5,300
	Feb. 25, 1930	7.20	2,700		Mar. 18, 1936	18.08	b17,900
1931	Mar. 29, 1931	7.2	2,910	1937	Apr. 6, 1936	8.50	4,160
	Apr. 4, 1931	8.1	3,700		Oct. 17, 1936	7.40	3,070
1932	Dec. 13, 1931	6.70	2,510		Nov. 5, 1936	8.20	3,800
	Apr. 1, 1932	7.40	2,820		Jan. 10, 1937	8.10	3,700
1933	Mar. 15, 1933	8.8	4,400		Jan. 22, 1937	9.00	4,610
	Mar. 20, 1933	7.7	3,340		Apr. 26, 1937	13.38	11,000
	May 10, 1933	7.7	3,340	1938	Oct. 29, 1937	8.2	3,800
	May 30, 1933	6.7	2,510		Dec. 18, 1937	6.7	2,510
1934	Jan. 7, 1934	8.25	3,800		Jan. 25, 1938	6.9	2,670
	Sept. 16, 1934	7.20	2,910		Mar. 15, 1938	6.5	2,370
1935	Dec. 1, 1934	5.8	1,900	1939	Jan. 31, 1939	7.3	2,990
	Feb. 28, 1936	8.40	4,000		Feb. 4, 1939	8.3	3,900
1936					Feb. 28, 1939	8.0	3,610
					June 22, 1939	6.5	2,370

a No record; probable peak of year.

b Estimated; backwater from Roystown Branch Juniata River.

5610. Brush Creek at Gapsville, Pa.

Location.--Lat 39°57'20", long 78°15'15", on left bank 50 ft upstream from covered bridge three-quarters of a mile northwest of Gapsville, Bedford County, 1 $\frac{1}{2}$ miles downstream from Little Brush Creek, and 5 $\frac{1}{2}$ miles upstream from Shaffer Run.

Drainage area.--36.8 sq mi.

Gage.--Nonrecording prior to Feb. 7, 1930; recording thereafter. Datum of gage is 1,122.39 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,800 cfs.

Bankfull stage.--5 ft.

Remarks.--Records for 1931 furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 480 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Mar. 29, 1931	3.63	630	1933	May 10, 1933	3.17	482
	May 23, 1931	4.44	962		May 26, 1933	3.36	552
	July 9, 1931	3.53	592	1934	Jan. 7, 1934	3.32	500
	July 10, 1931	4.30	895		June 19, 1934	3.47	552
	July 20, 1931	3.69	650		Sept. 16, 1934	4.64	1,020
1932	Mar. 31, 1932	3.84	710	1935	Dec. 1, 1934	4.76	1,100
	May 13, 1932	3.30	500	1936	Mar. 11, 1936	4.59	1,030
1933	Nov. 10, 1932	3.60	610		Mar. 17, 1936	9.81	6,870
	Nov. 19, 1932	3.50	570		Apr. 6, 1936	3.36	524
	Mar. 14, 1933	3.64	630		Aug. 26, 1936	4.18	860
	Apr. 17, 1933	3.99	790				
	Apr. 20, 1933	3.56	630				

Peak stages and discharges of Brush Creek at Gapville, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Oct. 17, 1936	4.01	504	1948	May 29, 1948	4.16	353
	Jan. 10, 1937	4.00	500	1949	July 13, 1949	5.56	930
	Feb. 22, 1937	4.85	930		July 18, 1949	-	755
	Apr. 26, 1937	7.03	2,810	1950	May 18, 1950	4.34	409
	Apr. 28, 1937	6.30	2,100		Nov. 25, 1950	7.98	2,930
1938	Oct. 28, 1937	4.74	912	1951	Dec. 8, 1950	5.55	932
1939	Dec. 10, 1938	5.29	795		Mar. 30, 1951	6.50	1,520
	Feb. 3, 1939	4.66	520		June 13, 1951	4.86	600
	Feb. 28, 1939	4.57	486	1952	Mar. 11, 1952	6.91	1,830
1940	Oct. 2, 1939	4.82	584		Nov. 21, 1952	7.83	2,760
	Mar. 31, 1940	4.72	544		Dec. 11, 1952	4.63	520
	June 8, 1940	4.61	501	1953	Mar. 24, 1953	7.03	1,960
1941	June 5, 1941	4.83	596	1954	Mar. 1, 1954	6.8	1,750
1942	Dec. 24, 1941	5.21	750		Oct. 15, 1954	8.39	3,430
	Mar. 9, 1942	4.73	556		Nov. 21, 1954	5.97	1,160
	July 5, 1942	4.70	536	1955	Mar. 5, 1955	5.70	1,020
1943	Oct. 15, 1942	6.13	1,260		Mar. 22, 1955	4.90	620
	Dec. 30, 1942	5.72	1,010		Aug. 18, 1955	5.02	665
	Apr. 19, 1943	4.98	660	1956	Apr. 7, 1956	4.73	560
1944	Mar. 13, 1944	4.53	471		Dec. 14, 1956	4.79	580
1945	Sept. 18, 1945	5.01	665	1958	May 5, 1958	5.7	1,020
1946	June 2, 1946	4.79	580		June 1, 1958	4.97	642
1947	Mar. 14, 1947	3.82	253				

5620. Raystown Branch Juniata River at Saxton, Pa.

Location.--Lat 40°12'55", long 78°15'55", on left bank at former site of highway bridge, 500 ft downstream from present highway bridge on State Highway 913, 0.5 mile west of Saxton, Bedford County, and 1.5 miles upstream from Shoup Run.

Drainage area.--756 sq mi.

Gage.--Nonrecording at site 0.8 mile downstream at datum 4.82 ft lower prior to Oct. 1, 1931; recording thereafter. Datum of gage is 795.77 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 17,000 cfs and extended above by slope-area measurement at 80,500 cfs.

Bankfull stage.--15 ft.

Historical data.--Maximum stage known prior to 1912, that of June 1, 1889.

Remarks.--Records for 1911-18, 1922-31, furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 7,700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1889	June 1, 1889	a23.0	71,300	1915	June 3, 1915	11.6	21,200
1912	Feb. 27, 1912	8.20	-	1916	Aug. 4, 1915	7.2	-
	Mar. 15, 1912	8.9	12,900		Mar. 23, 1916	9.9	15,600
	Mar. 22, 1912	9.5	14,500		Mar. 28, 1916	11.5	20,900
	May 13, 1912	8.7	12,400		June 17, 1916	9.8	15,400
	May 17, 1912	8.9	12,900		July 26, 1916	7.6	9,650
1913	Mar. 27, 1913	7.00	8,300	1917	Mar. 12, 1917	10.8	18,500
	May 28, 1913	11.0	19,100		June 7, 1917	7.9	10,400
1914	Nov. 10, 1913	7.88	10,400	1918	Feb. 20, 1918	9.0	13,100
	Feb. 1, 1914	7.8	10,100		Feb. 26, 1918	10.8	18,500
	Mar. 18, 1914	8.4	11,600		Apr. 15, 1918	8.5	11,800
1915	Feb. 2, 1915	8.80	12,600	1919	May 11, 1919	7.9	-
	Feb. 16, 1915	8.80	12,600		May 22, 1919	10.56	17,800
	Feb. 25, 1915	7.80	10,100				

a At present site and datum.

Peak stages and discharges of Reystown Branch Juniata River at Saxton, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1920	Mar. 5, 1920	12.0	22,700	1941	June 5, 1941	10.20	12,700
	Mar. 13, 1920	8.2	11,100				
1921	Mar. 4, 1921	6.8	7,860	1942	Mar. 9, 1942	8.42	9,520
	May 5, 1921	8.23	10,200		Apr. 10, 1942	8.84	10,300
					May 23, 1942	7.55	8,080
1922	Nov. 29, 1921	9.2	12,700	1943	Oct. 16, 1942	12.63	19,800
1923	Apr. 17, 1923	5.75	5,020		Dec. 30, 1942	12.75	20,400
					Apr. 20, 1943	10.29	13,600
1924	Jan. 17, 1924	9.0	12,200	1944	Jan. 29, 1944	7.85	8,310
	Mar. 30, 1924	12.2	22,600		Mar. 13, 1944	7.71	8,130
	Apr. 7, 1924	8.2	10,200		Apr. 25, 1944	8.46	9,640
	May 10, 1924	9.0	12,200		Apr. 28, 1944	7.58	7,950
	May 12, 1924	13.6	29,000		May 7, 1944	8.31	9,260
	June 29, 1924	10.2	15,600				
1925	Feb. 12, 1925	11.28	19,200	1945	Feb. 27, 1945	8.8	10,200
1926	Nov. 13, 1925	7.8	9,300		Mar. 7, 1945	9.07	10,800
	Feb. 23, 1926	8.9	12,000		Sept. 19, 1945	8.85	10,200
	Feb. 26, 1926	8.3	10,600	1946	June 3, 1946	9.88	12,600
1927	Nov. 17, 1926	8.6	11,300	1947	Oct. 26, 1946	5.64	4,720
	Nov. 19, 1926	8.3	10,600	1948	Apr. 14, 1948	9.48	11,700
	Jan. 22, 1927	8.76	11,800	1949	Jan. 27, 1949	7.68	8,130
	Mar. 8, 1927	7.2	8,000	1950	Feb. 15, 1950	7.32	7,410
1928	Oct. 19, 1927	9.3	13,000	1951	Nov. 25, 1950	10.21	13,300
	May 1, 1928	11.14	18,400		Dec. 4, 1950	9.03	10,100
	June 19, 1928	7.1	7,800		Dec. 8, 1950	10.83	14,000
	July 14, 1928	10.4	16,200		Feb. 22, 1951	8.29	8,860
1929	Feb. 27, 1929	7.2	8,000		Mar. 31, 1951	9.63	11,300
	Feb. 28, 1929	7.4	8,400		June 14, 1951	7.71	7,840
	Apr. 17, 1929	10.85	17,400	1952	Jan. 28, 1952	7.76	8,010
1930	Oct. 23, 1929	11.75	21,000		Mar. 11, 1952	12.26	18,000
1931	May 23, 1931	7.42	8,400	1953	Nov. 22, 1952	12.16	17,700
1932	Apr. 1, 1932	8.26	9,830		Mar. 24, 1953	11.19	15,000
1933	Mar. 14, 1933	10.3	13,800		June 1, 1953	10.37	13,000
	Mar. 20, 1933	7.9	9,070	1954	Mar. 2, 1954	12.20	17,700
1934	Jan. 8, 1934	7.21	7,800	1955	Oct. 16, 1954	13.78	22,800
1935	May 10, 1935	6.23	6,180		Dec. 30, 1954	8.39	9,040
1936	Mar. 12, 1936	10.78	15,600		Mar. 5, 1955	10.95	14,500
	Mar. 18, 1936	24.54	80,500		Mar. 22, 1955	9.85	11,700
	Apr. 6, 1936	7.98	9,580		Apr. 22, 1955	8.36	9,040
1937	Oct. 18, 1936	7.36	8,380	1956	Mar. 9, 1956	8.36	9,040
	Nov. 5, 1936	7.50	8,580		Apr. 8, 1956	8.53	9,220
	Jan. 11, 1937	8.77	11,200	1957	Dec. 15, 1956	9.53	11,100
	Jan. 23, 1937	8.28	10,200	1958	Dec. 27, 1957	7.67	7,840
	Apr. 27, 1937	16.15	31,300		May 5, 1958	9.97	12,200
1938	Oct. 29, 1937	9.44	12,500	1959	Feb. 10, 1959	b10.23	
1939	Feb. 4, 1939	9.34	12,300	1960	Oct. 24, 1959	8.80	9,760
	Mar. 1, 1939	9.00	11,700		Mar. 30, 1960	9.93	11,900
1940	Mar. 31, 1940	11.07	14,600		Apr. 4, 1960	8.73	9,580
	Apr. 4, 1940	7.95	8,470		May 9, 1960	12.50	18,600
	Apr. 20, 1940	10.10	12,500	1961	Feb. 20, 1961	8.13	8,520
1941	Apr. 6, 1941	7.87	8,300		Feb. 26, 1961	11.64	15,100
					Apr. 17, 1961	10.01	11,600

b Backwater from ice; maximum discharge not determined, but was below base.

5625. Great Trough Creek near Marklesburg, Pa.

Location.--Lat 40°21'00", long 78°07'50", on left bank 40 ft downstream from highway bridge, 0.5 mile upstream from mouth, and 3 miles southeast of Marklesburg, Huntingdon County.

Drainage area.--84.6 sq mi.

Gage.--Recording. Datum of gage is 714.48 ft above mean sea level, unadjusted.

Stage-discharge relation.--Defined by current-meter measurements below 2,600 cfs.

Bankfull stage.--6 ft.

Remarks.--Records for 1930-31 furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 950 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Oct. 23, 1929	-	-	1943	Apr. 19, 1943	4.53	1,820
	Feb. 25, 1930	4.14	1,340	1944	Apr. 24, 1944	3.38	930
1931	Apr. 1, 1931	3.78	1,000	1945	Jan. 28, 1945	45.05	-
	May 23, 1931	4.80	1,980		July 26, 1945	3.88	1,320
1932	Apr. 1, 1932	4.52	1,680		Sept. 18, 1945	4.06	1,440
1933	Nov. 10, 1932	4.00	1,220	1946	Nov. 29, 1945	3.91	1,320
	Mar. 15, 1933	4.68	2,040		May 27, 1946	5.24	2,470
	May 10, 1933	3.84	1,070		June 2, 1946	5.06	2,280
	May 29, 1933	3.73	986	1947	Mar. 15, 1947	2.91	597
	Aug. 24, 1933	4.52	1,780	1948	Apr. 14, 1948	3.93	1,360
1934	Sept. 16, 1934	4.48	1,780	1949	Dec. 30, 1948	3.38	962
1935	July 8, 1935	3.67	976		July 12, 1949	3.65	1,210
1936	Mar. 12, 1936	5.57	2,760	1950	Feb. 14, 1950	3.24	842
	Mar. 17, 1936	8.46	8,400	1951	Nov. 25, 1950	6.63	4,180
1937	Feb. 22, 1937	4.27	1,220		Dec. 4, 1950	3.48	980
	Apr. 26, 1937	6.10	3,440		Dec. 7, 1950	4.61	1,870
1938	Oct. 29, 1937	3.72	996		Mar. 30, 1951	4.97	2,180
	May 24, 1938	3.77	1,040	1952	Mar. 11, 1952	4.92	2,140
1939	Feb. 3, 1939	3.89	1,140	1953	Nov. 22, 1952	5.58	2,830
1940	Mar. 31, 1940	5.47	2,670		Dec. 11, 1952	3.53	1,010
	Apr. 4, 1940	3.87	1,250		Jan. 24, 1953	3.50	975
	Apr. 21, 1940	4.01	1,370		Mar. 24, 1953	4.82	2,050
1941	Mar. 4, 1941	44.70	-	1954	Mar. 1, 1954	4.89	2,140
	June 5, 1941	3.86	1,250	1955	Oct. 15, 1954	5.35	2,570
1942	Dec. 24, 1941	3.50	1,060		Mar. 23, 1955	3.47	1,010
	Mar. 9, 1942	3.42	970		Apr. 21, 1955	3.70	1,190
	Apr. 4, 1942	3.57	1,110	1956	Mar. 8, 1956	3.28	1,310
	Apr. 9, 1942	3.83	1,250		Apr. 7, 1956	2.84	975
	May 22, 1942	4.34	1,650		Aug. 5, 1956	3.27	1,270
	June 5, 1942	3.70	1,130		Aug. 7, 1956	2.90	1,010
1943	Oct. 15, 1942	3.55	1,110	1957	Dec. 14, 1956	3.05	1,120
	Dec. 30, 1942	5.58	2,830				

a Backwater from ice.

5630. Raystown Branch Juniata River near Huntingdon, Pa.

Location.--Lat 40°25'35", long 78°01'50", 5 ft downstream from left abutment of highway bridge at village of Hawn Bridge, 6 miles south of Huntingdon, Huntingdon County, and 9 miles upstream from mouth.

Drainage area.--957 sq mi.

Gage.--Recording. Datum of gage is 620.08 ft above mean sea level, adjustment of 1907.

Stage-discharge relation.--Defined by current-meter measurements below 16,000 cfs and extended above on basis of flow-over-dam measurement at gage height 31.0 ft.

Bankfull stage.--11 ft.

Remarks.--Base for partial-duration series, 6,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Mar. 18, 1936	31.0	87,000	1953	June 1, 1953	12.38	14,100
1946	Jan. 8, 1946	9.33	8,540	1954	Mar. 2, 1954	14.23	17,800
	Feb. 28, 1946	8.56	7,420	1955	Oct. 16, 1954	15.56	21,400
	May 18, 1946	8.22	6,800		Dec. 31, 1954	10.05	9,720
	May 27, 1946	8.57	7,420		Mar. 5, 1955	12.71	14,700
	June 3, 1946	12.46	14,300		Mar. 23, 1955	11.94	15,200
1947	Mar. 15, 1947	6.74	4,650		Apr. 23, 1955	10.29	10,200
1948	Apr. 14, 1948	12.68	14,700	1956	Apr. 26, 1955	8.26	6,940
	Dec. 31, 1948	9.00	8,060		Mar. 9, 1956	10.61	10,800
1949	Jan. 27, 1949	9.60	9,040		Apr. 4, 1956	8.86	7,900
	July 18, 1949	8.74	7,580		Apr. 8, 1956	10.53	10,600
1950	Feb. 15, 1950	9.75	9,380	1957	Dec. 15, 1956	11.60	12,600
	Mar. 25, 1950	8.86	7,900	1958	Dec. 27, 1957	9.18	8,380
1951	Nov. 25, 1950	16.74	24,500		Mar. 1, 1958	8.42	7,100
	Dec. 5, 1950	11.16	11,800		Mar. 28, 1958	8.33	6,940
	Dec. 8, 1950	12.84	14,900		May 6, 1958	12.02	13,300
	Feb. 22, 1951	10.67	10,900	1959	Feb. 11, 1959	ae.23	7,740
	Apr. 1, 1951	11.66	12,800		Mar. 7, 1959	8.55	7,420
	June 14, 1951	9.56	9,040	1960	Oct. 25, 1959	9.91	9,550
1952	Jan. 3, 1952	9.54	8,870		Nov. 29, 1959	9.21	8,380
	Jan. 28, 1952	10.09	9,890		Mar. 31, 1960	12.78	14,900
	Mar. 12, 1952	14.39	18,400		Apr. 5, 1960	10.80	11,100
	Mar. 24, 1952	8.22	6,780		May 9, 1960	14.56	18,800
	Apr. 28, 1952	9.38	8,700	1961	Feb. 20, 1961	10.0	9,720
1953	Nov. 22, 1952	14.94	19,600		Feb. 27, 1961	13.68	16,700
	Dec. 12, 1952	9.05	8,060		Mar. 9, 1961	8.47	7,260
	Jan. 25, 1953	9.06	8,220		Apr. 17, 1961	12.22	13,700
	Mar. 25, 1953	13.33	15,900		Apr. 27, 1961	8.29	6,940

a Backwater from ice.

5635. Juniata River at Mapleton Depot, Pa.

Location.--Lat 40°23'30", long 77°56'10", on right bank a quarter of a mile downstream from Scrub Run and a third of a mile downstream from highway bridge on State Highway 376 at Mapleton Depot, Huntingdon County.

Drainage area.--2,030 sq mi.

Gage.--Recording. Datum of gage is 557.31 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 31,000 cfs and extended above on basis of records for station at Newport.

Bankfull stage.--20 ft.

Historical data.--Maximum stage known, that of Mar. 18, 1936.

Remarks.--Base for partial-duration series, 12,500 cfs.

Peak stages and discharges of Juniata River at Mapleton Depot, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Mar. 18, 1936	38.2	145,000	1950	Mar. 26, 1950	10.47	12,900
1938	Dec. 18, 1937	10.82	13,700		Mar. 27, 1950	10.73	13,400
1939	Feb. 4, 1939	12.87	19,800		Mar. 29, 1950	11.13	14,500
	Mar. 1, 1939	12.71	19,200	1951	Oct. 10, 1950	11.09	14,500
1940	Mar. 20, 1940	11.38	15,300		Nov. 25, 1950	26.4	76,800
	Mar. 31, 1940	18.73	40,500		Dec. 5, 1950	13.50	21,500
	Apr. 4, 1950	12.87	19,800		Dec. 9, 1950	14.31	23,900
	Apr. 9, 1940	10.73	13,400		Feb. 22, 1951	12.63	18,800
	Apr. 21, 1940	16.40	32,000		Mar. 31, 1951	14.41	24,200
1941	Apr. 6, 1941	11.70	16,200		June 14, 1951	14.58	24,800
	June 5, 1941	15.28	26,900	1952	Jan. 3, 1952	12.46	18,500
1942	Dec. 24, 1941	11.87	16,800		Jan. 28, 1952	12.49	18,500
	Mar. 10, 1942	12.77	19,400		Mar. 12, 1952	18.14	38,100
	Apr. 3, 1942	11.08	14,500		Mar. 24, 1952	10.58	13,200
	Apr. 10, 1942	13.77	22,400	1953	Nov. 22, 1952	16.47	31,700
	May 23, 1942	13.87	22,700		Dec. 11, 1952	10.57	13,200
1943	Oct. 16, 1942	13.90	22,700		Jan. 25, 1953	10.70	13,400
	Dec. 31, 1942	20.82	46,900		Mar. 25, 1953	16.14	30,100
	Jan. 19, 1943	10.78	13,700		June 1, 1953	13.94	22,700
	Mar. 13, 1943	10.42	12,700	1954	Mar. 2, 1954	17.14	34,100
	Apr. 20, 1943	15.30	26,900		Oct. 16, 1954	16.84	32,900
	May 13, 1943	11.65	15,900	1955	Dec. 31, 1954	12.09	17,300
1944	Jan. 29, 1944	10.43	12,700		Mar. 5, 1955	13.83	22,400
	Mar. 14, 1944	12.80	19,400		Mar. 23, 1955	13.72	22,100
	Mar. 17, 1944	11.92	16,800		Apr. 22, 1955	12.72	19,100
	Mar. 25, 1944	11.38	15,300	1956	Mar. 8, 1956	14.97	26,000
	Apr. 25, 1944	12.18	17,600		Apr. 4, 1956	10.74	13,400
	May 8, 1944	12.14	17,300		Apr. 8, 1956	12.02	17,000
1945	Feb. 27, 1945	13.28	20,900		May 13, 1956	11.27	15,000
	Mar. 4, 1945	12.23	17,600		Aug. 8, 1956	11.62	15,900
	Mar. 7, 1945	15.94	29,300	1957	Dec. 15, 1956	11.86	16,800
	Mar. 22, 1945	11.57	15,900		Apr. 6, 1957	11.77	16,500
	May 18, 1945	12.22	17,600		Apr. 9, 1957	11.45	15,300
	Sept. 19, 1945	13.13	20,300	1958	May 6, 1958	12.59	18,800
1946	Nov. 29, 1945	12.19	17,600	1959	Jan. 21, 1959	13.73	-
	Jan. 8, 1946	11.20	14,800		Jan. 22, 1959	10.84	13,700
	Mar. 1, 1946	10.47	12,900		Feb. 11, 1959	10.58	13,200
	May 28, 1946	13.90	22,700		Mar. 6, 1959	10.48	12,900
	June 3, 1946	14.54	24,500	1960	Nov. 28, 1959	11.17	14,800
	June 13, 1946	12.45	18,200		Mar. 31, 1960	16.07	30,100
1947	Aug. 31, 1947	9.89	11,400		Apr. 5, 1960	13.06	20,300
1948	Apr. 15, 1948	18.05	37,700		May 9, 1960	16.74	32,500
1949	Dec. 31, 1948	11.63	15,900		May 23, 1960	10.81	13,700
	Jan. 28, 1949	11.85	16,500	1961	Feb. 20, 1961	-	(b)
1950	Feb. 15, 1950	12.38	18,200		Feb. 26, 1961	18.61	40,100
					Mar. 7, 1961	10.54	12,900
					Apr. 17, 1961	14.12	23,300

a Backwater from ice.

b Discharge not determined but probably not maximum for year.

5640. Aughwick Creek near Orbisonia, Pa.

Location--Lat 40°12'35", long 77°55'30", at highway bridge, 600 ft upstream from East Broad Top Railroad bridge, 650 ft upstream from Three Springs Creek, and 2½ miles southwest of Orbisonia, Huntingdon County.

Drainage area--174 sq mi.

Gage--Nonrecording. Datum of gage is 619.51 ft above mean sea level, datum of 1929.

Stage-discharge relation--Defined by current-meter measurements below 11,500 cfs.

Remarks--Records for 1930-31 furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 3,100 cfs.

Peak stages and discharges of Aughwick Creek near Orbisonia, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Mar. 8, 1930	7.7	3,810	1934	Sept. 17, 1934	11.6	6,840
1931	Apr. 1, 1931	8.7	3,690	1935	Dec. 1, 1934	12.01	7,350
	May 23, 1931	8.5	3,510				
	July 10, 1931	10.67	5,760	1936	Mar. 12, 1936	11.1	6,240
1932	Mar. 31, 1932	7.99	3,060		Mar. 18, 1936	19.16	18,900
1933	Nov. 10, 1932	8.6	3,600	1937	Feb. 22, 1937	10.8	5,880
	Nov. 19, 1932	8.2	3,240		Apr. 26, 1937	14.45	10,700
	Mar. 14, 1933	8.1	3,150		Apr. 28, 1937	12.1	7,480
	Aug. 24, 1933	10.83	5,880	1938	Oct. 28, 1937	9.1	4,070

5645. Aughwick Creek near Three Springs, Pa.

Location.--Lat 40°12'45", long 77°55'30", on right bank 10 ft downstream from bridge on State Highway 377, 300 ft upstream from East Broad Top Railroad bridge, 350 ft upstream from Three Springs Creek, and 3½ miles northeast of village of Three Springs, Huntingdon County. Records include flow of Three Springs Creek.

Drainage area.--205 sq mi, includes that of Three Springs Creek.

Gage.--Recording. Datum of gage is 618.65 ft above mean sea level, unadjusted.

Stage-discharge relation.--Defined by current-meter measurements below 2,900 cfs and extended above on basis of contracted-opening measurement at 20,600 cfs.

Bankfull stage.--6 ft.

Historical data.--Maximum stage known, that of June 1, 1889.

Remarks.--Base for partial-duration series, 2,100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1889	June 1, 1889	19.3		1946	Nov. 28, 1945	10.03	4,720
1939	Dec. 10, 1938	10.63	6,030		Mar. 9, 1946	7.57	2,290
	Feb. 4, 1939	9.72	4,890		May 27, 1946	9.60	4,150
	Feb. 28, 1939	8.91	3,970		June 2, 1946	12.47	8,770
					June 15, 1946	8.54	2,960
1940	Jan. 15, 1940	7.49	2,580	1947	Mar. 14, 1947	7.29	2,080
	Mar. 31, 1940	10.00	5,250				
	Apr. 4, 1940	8.92	3,970	1948	Apr. 15, 1948	7.50	2,280
	Apr. 9, 1940	7.60	2,670		June 19, 1948	7.45	2,210
	Apr. 21, 1940	8.89	3,970		June 27, 1948	7.35	2,210
					June 30, 1948	7.31	2,140
1941	Apr. 5, 1941	7.94	2,940	1949	Nov. 20, 1948	8.57	3,060
	June 5, 1941	9.08	4,190		Dec. 30, 1948	10.17	5,020
1942	Dec. 24, 1941	8.58	3,640		Jan. 27, 1949	7.44	2,150
	Mar. 9, 1942	8.42	3,440		July 28, 1949	9.41	3,890
	Apr. 3, 1942	8.18	3,240				
	Apr. 10, 1942	8.18	3,240	1950	Feb. 15, 1950	7.84	2,430
	May 23, 1942	8.22	3,240		Mar. 25, 1950	8.17	2,720
	Aug. 18, 1942	7.78	2,840		May 19, 1950	9.13	3,540
1943	Oct. 16, 1942	9.36	4,500	1951	Oct. 9, 1950	7.60	2,290
	Dec. 30, 1942	12.32	8,680		Nov. 5, 1950	7.78	2,430
	Mar. 12, 1943	7.10	2,150		Nov. 25, 1950	18.04	20,600
	Apr. 20, 1943	9.03	4,030		Dec. 4, 1950	9.51	3,820
	May 11, 1943	8.34	3,270		Dec. 8, 1950	10.38	5,070
	May 12, 1943	7.73	2,680		Feb. 7, 1951	8.31	2,690
					Feb. 21, 1951	9.05	3,280
1944	Jan. 28, 1944	7.39	2,410		Mar. 31, 1951	13.79	11,200
	Mar. 13, 1944	8.70	3,700		Apr. 13, 1951	8.71	3,010
	Apr. 25, 1944	9.53	4,620		June 13, 1951	10.05	4,480
	Apr. 27, 1944	7.49	2,500				
	May 7, 1944	8.88	3,920	1952	Jan. 2, 1952	7.79	2,340
	May 27, 1944	8.09	3,070		Jan. 27, 1952	7.57	2,200
1945	Feb. 27, 1945	8.39	3,370		Feb. 4, 1952	7.63	2,200
	Mar. 7, 1945	7.54	2,500		Mar. 11, 1952	13.78	11,200
	May 18, 1945	8.26	2,800		Apr. 5, 1952	8.12	2,550
	Sept. 18, 1945	10.23	5,020		Apr. 27, 1952	9.22	3,480

Peak stages and discharges of Aughwick Creek near Three Springs, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Nov. 22, 1952	17.23	18,600	1957	Oct. 23, 1956	10.73	5,540
	Dec. 11, 1952	10.59	5,380		Nov. 2, 1956	7.46	2,130
	Jan. 24, 1953	8.93	3,190		Dec. 14, 1956	11.55	7,040
	Mar. 24, 1953	12.30	8,290	1958	Dec. 26, 1957	9.47	3,820
	May 31, 1953	8.31	2,690		Feb. 28, 1958	9.08	3,380
1954	Mar. 1, 1954	14.25	12,000		May 7, 1958	8.54	2,850
	Apr. 28, 1954	8.33	2,690	1959	Jan. 22, 1959	all.4	(b)
1955	Oct. 16, 1954	16.28	16,500		Mar. 6, 1959	8.07	2,550
	Dec. 30, 1954	7.81	2,340	1960	Nov. 28, 1959	7.55	2,200
	Mar. 5, 1955	7.94	2,410		Mar. 29, 1960	9.38	3,700
	Mar. 22, 1955	11.10	6,190		Apr. 4, 1960	11.09	6,190
	Apr. 22, 1955	8.00	2,480		May 9, 1960	10.67	5,540
	Aug. 13, 1955	7.60	2,200		May 18, 1960	8.43	2,770
	Aug. 19, 1955	9.29	3,590	1961	Feb. 20, 1961	9.26	3,560
1956	Oct. 15, 1955	9.26	3,590		Feb. 26, 1961	13.24	9,980
	Apr. 3, 1956	8.44	2,770		Apr. 14, 1961	8.58	2,840
	Apr. 7, 1956	8.22	2,620		Apr. 16, 1961	9.33	3,560
	July 3, 1956	8.22	2,620				

a Backwater from ice.

b Discharge not determined; maximum for year.

5650. Kishacoquillas Creek at Reedsville, Pa.

Location--Lat 40°39'15", long 77°35'00", on left bank 150 ft downstream from bridge on U.S. Highway 322, 1 mile southeast of Reedsville, Mifflin County, and 1 mile downstream from Honey Creek.

Drainage area--164 sq mi.

Gage--Recording. Datum of gage is 551.23 ft above mean sea level, datum of 1929.

Stage-discharge relation--Defined by current-meter measurements below 2,400 cfs and extended above on basis of slope-area measurement at 9,830 cfs.

Bankfull stage--9 ft.

Historical data--Flood of March 1936 was 1 ft higher than that of Nov. 25, 1950.

Remarks--Base for partial-duration series, 1,100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Mar. 31, 1940	9.58	4,870	1946	Nov. 29, 1945	7.15	2,040
	Apr. 8, 1940	6.27	1,400		Mar. 9, 1946	6.37	1,440
	Apr. 20, 1940	6.51	1,560		May 28, 1946	8.25	3,100
1941	Apr. 5, 1941	5.74	1,110		June 2, 1946	7.34	2,220
1942	Dec. 24, 1941	6.71	1,680	1947	June 8, 1947	6.01	1,220
	Mar. 9, 1942	6.39	1,470	1948	Mar. 20, 1948	6.01	1,220
	Apr. 4, 1942	6.53	1,580		Apr. 12, 1948	6.35	1,440
	Apr. 10, 1942	5.80	1,110		Apr. 14, 1948	7.87	2,720
	May 22, 1942	11.19	7,200	1949	Dec. 30, 1948	6.63	1,640
1943	Dec. 30, 1942	8.91	3,950		Apr. 14, 1949	6.50	1,540
	Apr. 21, 1943	7.54	2,410	1950	Mar. 24, 1950	6.26	1,370
1944	Nov. 9, 1943	6.18	1,340		Mar. 26, 1950	5.85	1,140
	Jan. 4, 1944	6.87	1,800		Mar. 29, 1950	6.38	1,470
	Mar. 17, 1944	6.53	1,580	1951	Nov. 25, 1950	13.12	9,830
	May 7, 1944	6.87	1,800		Dec. 4, 1950	7.88	2,910
1945	Mar. 4, 1945	5.93	1,190		Dec. 8, 1950	8.23	3,210
	Mar. 7, 1945	6.62	1,610		Feb. 7, 1951	7.28	2,350
	Mar. 21, 1945	6.28	1,400		Feb. 21, 1951	5.84	1,220
	May 18, 1945	8.98	4,080		Mar. 30, 1951	9.58	4,780
	May 28, 1945	5.79	1,100		Apr. 12, 1951	6.42	1,600

Peak stages and discharges of Kishacoquillas Creek at Reedsville, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Apr. 23, 1951	5.83	1,220	1956	Feb. 18, 1956	5.68	1,130
	June 13, 1951	6.78	1,920		Feb. 25, 1956	6.36	1,560
1952	Jan. 3, 1952	5.90	1,250		Mar. 8, 1956	6.57	1,720
	Jan. 27, 1952	5.79	1,190	1957	Nov. 2, 1956	8.48	3,520
	Feb. 4, 1952	6.04	1,360		Apr. 6, 1957	7.25	2,260
	Mar. 11, 1952	8.16	3,210		Apr. 9, 1957	6.79	1,920
	Apr. 5, 1952	6.03	1,360	1958	Dec. 26, 1957	6.32	1,530
1953	Nov. 22, 1952	6.72	1,840		Jan. 22, 1958	5.65	1,100
	Dec. 11, 1952	-	-		Feb. 28, 1958	8.10	3,110
	Jan. 24, 1953	6.71	1,840		May 7, 1958	5.88	1,250
	Mar. 24, 1953	7.80	2,810	1959	Jan. 22, 1959	6.51	1,680
	May 26, 1953	9.38	4,540		Feb. 10, 1959	5.88	1,250
	May 31, 1953	7.67	2,710	1960	Jan. 3, 1960	5.73	1,160
1954	Mar. 1, 1954	8.48	3,520		Mar. 31, 1960	7.05	2,120
	May 4, 1954	7.71	2,710		Apr. 4, 1960	7.54	2,530
1955	Oct. 16, 1954	7.59	2,620		May 9, 1960	6.02	1,320
	Dec. 30, 1954	5.67	1,100		May 23, 1960	6.09	1,390
	Mar. 22, 1955	6.05	1,360	1961	Feb. 26, 1961	8.54	3,520
	Aug. 13, 1955	6.34	1,560		Apr. 13, 1961	6.05	1,360
1956	Oct. 14, 1955	8.11	3,110		Apr. 16, 1961	6.77	1,880
	Feb. 11, 1956	5.83	1,220		May 16, 1961	5.74	1,160

5660. Tuscarora Creek near Port Royal, Pa.

Location.--Lat 40°30'55", long 77°25'10", on left bank 100 ft upstream from highway bridge, 2 miles southwest of Port Royal, Juniata County, and 3½ miles upstream from mouth.

Drainage area.--214 sq mi.

Gage.--Nonrecording at site 100 ft downstream prior to Aug. 5, 1931; recording thereafter. Datum of gage is 420.27 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 5,000 cfs and extended above by logarithmic plotting.

Bankfull stage.--11 ft.

Remarks.--Records for 1912-18, 1922-31, furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 3,700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Mar. 15, 1912	10.7	6,890	1922	Nov. 28, 1921	8.4	3,880
	May 13, 1912	12.4	9,950		July 2, 1922	8.4	3,880
1913	Mar. 27, 1913	10.8	7,030	1923	Mar. 3, 1923	8.3	3,780
1914	Jan. 31, 1914	8.9	4,460	1924	Jan. 17, 1924	11.0	7,320
	Apr. 16, 1914	8.7	4,220		Apr. 6, 1924	12.3	9,780
1915	Jan. 7, 1915	8.55	4,110		May 9, 1924	9.5	5,220
	Jan. 13, 1915	8.8	4,340		May 12, 1924	12.4	10,000
	Feb. 2, 1915	8.9	4,460		June 29, 1924	9.0	4,580
	Feb. 24, 1915	9.4	5,080	1925	Feb. 12, 1925	9.2	4,820
1916	Mar. 28, 1916	11.5	8,250	1926	Feb. 26, 1926	10.2	6,180
	June 17, 1916	11.8	8,790	1927	Nov. 16, 1926	12.8	10,800
1917	Mar. 12, 1917	8.8	4,340		Nov. 19, 1926	9.0	4,580
1918	Feb. 26, 1918	11.4	8,080		Mar. 8, 1927	8.6	4,110
	Apr. 16, 1918	9.6	5,350		July 23, 1927	10.0	5,900
1919	May 21, 1919	12.2	9,550	1928	Oct. 13, 1927	8.6	4,110
1920	Mar. 6, 1920	a12.6	-		Oct. 19, 1927	11.1	7,020
	Mar. 13, 1920	-	b5,500		Nov. 18, 1927	9.4	5,080
1921	May 5, 1921	11.68	8,600		Apr. 30, 1928	10.4	6,460
				1929	Feb. 27, 1929	9.6	4,920
					Apr. 16, 1929	10.4	5,850

a Backwater from ice.

b Maximum daily discharge.

Peak stages and discharges of Tuscarora Creek near Port Royal, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Oct. 3, 1929	8.8	4,020	1945	May 18, 1945	9.67	4,100
	Oct. 23, 1929	16.21	13,000		Nov. 29, 1945	11.44	5,970
	Feb. 25, 1930	8.8	4,020	1946	May 28, 1946	10.95	5,380
	Mar. 8, 1930	9.8	5,150		June 3, 1946	10.88	5,380
1931	July 11, 1931	9.44	4,390	1947	July 16, 1947	12.16	6,960
1932	Apr. 1, 1932	8.71	3,510		May 13, 1948	9.87	4,300
1933	Aug. 24, 1933	13.41	8,900	1949	Dec. 30, 1948	10.18	4,610
1934	Sept. 17, 1934	12.23	6,720		Feb. 15, 1950	8.42	2,850
1935	Dec. 1, 1934	13.05	7,520	1950	Mar. 25, 1950	8.42	2,850
	Nov. 13, 1935	9.46	3,870	1951	Nov. 25, 1950	19.73	19,400
1936	Mar. 12, 1936	15.46	11,800		Dec. 4, 1950	10.32	4,720
	Mar. 18, 1936	21.60	14,400		Dec. 8, 1950	11.68	6,330
1937	Feb. 22, 1937	10.72	5,160		Mar. 31, 1951	13.22	8,310
	Apr. 27, 1937	15.68	12,200		Apr. 13, 1951	9.54	3,890
1938	Nov. 13, 1937	10.06	4,500	1952	Mar. 11, 1952	13.37	8,590
1939	Feb. 3, 1939	8.83	3,230		Sept. 1, 1952	9.90	4,290
	Mar. 31, 1940	10.97	5,490	1953	Nov. 22, 1952	16.79	14,100
1940	Apr. 20, 1940	9.41	3,800		Mar. 24, 1953	10.86	5,380
1941	Apr. 6, 1941	8.23	2,690	1954	Mar. 2, 1954	12.48	7,350
1942	Apr. 4, 1942	9.39	3,800		Oct. 16, 1954	11.87	6,570
	Apr. 10, 1942	9.48	3,900	1955	Mar. 22, 1955	9.76	4,190
	May 22, 1942	14.44	10,100		Aug. 19, 1955	9.88	4,290
1943	Dec. 30, 1942	11.73	6,330	1956	Oct. 15, 1955	10.70	5,160
	Apr. 20, 1943	10.50	4,940	1957	Nov. 1, 1956	11.93	6,570
1944	Apr. 25, 1944	9.72	4,100		Dec. 15, 1956	9.52	3,890
				1958	Feb. 28, 1958	10.40	4,830

c Occurred on following day; backwater from Juniata River.

5665. Cocolamus Creek near Millerstown, Pa.

Location.--Lat 40°33'55", long 77°07'05", on right bank 10 ft upstream from bridge on State Highway 17, 2.3 miles northeast of Millerstown, Perry County, and 3 miles upstream from mouth.

Drainage area.--57.2 sq mi.

Gage.--Recording. Datum of gage is 425.50 ft above mean sea level (Pennsylvania State Highway bench mark).

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--5 ft.

Remarks.--Records for 1930-31 furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Mar. 8, 1930	4.95	1,280	1934	Aug. 11, 1934	5.16	1,380
1931	Apr. 1, 1931	5.15	1,400		Sept. 17, 1934	7.67	3,910
	May 23, 1931	4.90	1,250	1935	Dec. 1, 1934	7.59	3,780
	Aug. 10, 1931	4.71	1,140		Nov. 13, 1935	6.48	2,530
1932	May 11, 1932	4.50	1,010	1936	Mar. 11, 1936	7.18	3,300
					Mar. 18, 1936	6.48	2,530
1933	Oct. 18, 1932	4.72	1,110		Mar. 21, 1936	4.51	1,010
	Nov. 19, 1932	4.73	1,140		Apr. 6, 1936	6.06	2,100
	Apr. 17, 1933	4.59	1,060	1937	Feb. 22, 1937	5.43	1,590
	Aug. 24, 1933	8.20	4,560		Apr. 26, 1937	5.17	1,380
1934	Sept. 4, 1933	5.58	1,710	1938	Nov. 13, 1937	7.78	4,040
	Jan. 7, 1934	5.08	1,340				

Peak stages and discharges of Cocolamus Creek near Millerstown, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Feb. 28, 1939	4.47	986	1950	Jan. 7, 1950	4.71	1,070
1940	Mar. 14, 1940	4.58	1,020		Feb. 14, 1950	4.88	1,180
	Mar. 31, 1940	7.07	3,180		Feb. 15, 1950	5.47	1,520
	Apr. 9, 1940	4.92	1,190		Mar. 24, 1950	5.48	1,550
	Apr. 20, 1940	5.95	1,900		Aug. 19, 1950	4.86	1,150
1941	Dec. 28, 1940	4.55	990	1951	Nov. 25, 1950	8.18	4,560
1942	Dec. 24, 1941	7.04	3,060		Dec. 4, 1950	7.20	3,280
	May 22, 1942	7.21	3,300		Dec. 8, 1950	5.24	1,380
1943	Oct. 16, 1942	4.70	1,070		Jan. 24, 1951	4.95	1,210
	Oct. 17, 1942	4.99	1,250		Feb. 7, 1951	5.78	1,780
	Dec. 2, 1942	4.63	1,040		Feb. 21, 1951	4.83	1,150
	Dec. 30, 1942	6.91	2,940		June 13, 1951	4.69	1,070
	Apr. 20, 1943	5.83	1,820	1952	Feb. 4, 1952	4.76	1,100
	May 26, 1943	5.44	1,540		Mar. 11, 1952	7.94	4,170
1944	Oct. 27, 1943	5.17	1,320		Apr. 5, 1952	5.38	1,480
	Nov. 9, 1943	6.61	2,570		May 12, 1952	5.32	1,410
	Jan. 4, 1944	6.45	2,400	1953	Nov. 22, 1952	6.21	2,150
	Mar. 13, 1944	4.97	1,200		Dec. 11, 1952	5.00	1,240
	Mar. 24, 1944	4.60	1,020		Jan. 24, 1953	5.43	1,520
	Apr. 25, 1944	4.77	1,090		Mar. 24, 1953	5.70	1,700
	May 7, 1944	6.05	2,000		May 26, 1953	5.30	1,410
	May 23, 1944	6.50	2,460		May 31, 1953	6.67	2,620
1945	May 18, 1945	5.37	1,440		June 6, 1953	4.58	1,020
	May 28, 1945	5.66	1,660	1954	Feb. 21, 1954	5.03	1,260
	Aug. 25, 1945	4.89	1,180		Mar. 1, 1954	7.49	3,650
	Sept. 18, 1945	6.25	2,200		May 4, 1954	4.58	1,020
1946	Nov. 22, 1945	4.70	1,070	1955	Dec. 30, 1954	4.67	1,040
	Nov. 29, 1945	7.44	3,520		Mar. 22, 1955	4.92	1,180
	May 27, 1946	6.85	2,860		Aug. 13, 1955	5.96	1,920
	June 2, 1946	5.39	1,480		Aug. 18, 1955	6.01	1,960
1947	Mar. 14, 1947	4.73	1,100	1956	Oct. 14, 1955	7.40	3,520
1948	Nov. 12, 1947	4.82	1,120		Nov. 16, 1955	4.70	1,070
	Apr. 14, 1948	5.18	1,350	1957	Nov. 2, 1956	8.27	4,690
	May 5, 1948	4.65	1,040		Dec. 14, 1956	4.94	1,210
	May 13, 1948	4.65	1,040		Apr. 6, 1957	6.04	2,000
1949	Dec. 30, 1948	5.83	1,820	1958	Dec. 21, 1957	5.71	1,700
	Apr. 14, 1949	6.02	1,960		Dec. 26, 1957	5.01	1,240
					Feb. 28, 1958	6.22	2,150

5670. Juniata River at Newport, Pa.

Location.--Lat 40°28'45", long 77°07'45", on right bank at downstream side of highway bridge at Newport, Perry County, 1,000 feet upstream from Little Buffalo Creek.

Drainage area.--3,354 sq mi.

Gage.--Nonrecording prior to July 16, 1929; recording thereafter. Datum of gage is 363.93 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 100,000 cfs.

Bankfull stage.--22 ft.

Historical data.--Maximum stage known, that of June 1, 1889.

Remarks.--Records for 1914-18, 1922-23, 1927-31, furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 29,000 cfs. Only annual peaks are shown prior to Oct. 1, 1913.

Peak stages and discharges of Juniata River at Newport, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1889	June 1, 1889	35.9	209,000	1934	Sept. 17, 1934	12.84	35,300
1899	Mar. 29, 1899	11.0	31,400	1935	Dec. 1, 1934	14.07	41,400
1900	Mar. 2, 1900	14.4	48,200	1936	Feb. 28, 1936	-	30,000
1901	Mar. 11, 1901	17.7	68,000		Mar. 12, 1936	20.40	77,400
1902	Mar. 1, 1902	25.3	118,000		Mar. 19, 1936	34.24	190,000
1903	Mar. 1, 1903	16.0	57,800	1937	Jan. 23, 1937	13.35	34,000
1904	Mar. 8, 1904	14.7	50,000		Apr. 27, 1937	24.40	100,000
1905	Mar. 22, 1905	16.0	54,500	1938	Oct. 30, 1937	12.57	30,500
1906	Mar. 30, 1906	11.8	32,200	1939	Feb. 4, 1939	12.08	28,400
1907	Mar. 15, 1907	23.0	98,400	1940	Apr. 1, 1940	18.03	58,000
1908	Mar. 20, 1908	21.3	87,100		Apr. 5, 1940	12.42	29,600
1909	Feb. 25, 1909	12.2	34,100		Apr. 21, 1940	15.85	45,600
1910	Jan. 22, 1910	17.4	62,800	1941	June 6, 1941	13.06	32,700
1911	Jan. 15, 1911	11.1	29,000	1942	Apr. 10, 1942	13.18	33,100
1912	Mar. 16, 1912	13.8	42,200		May 23, 1942	16.29	48,200
1913	May 29, 1913	16.9	59,800	1943	Oct. 17, 1942	13.25	33,100
1914	Feb. 1, 1914	13.8	42,200		Dec. 31, 1942	19.97	70,000
	Mar. 18, 1914	13.1	38,500		Apr. 21, 1943	15.23	42,600
	Mar. 29, 1914	12.0	33,100	1944	Mar. 14, 1944	11.77	27,100
1915	Feb. 3, 1915	11.9	32,600		Apr. 26, 1944	11.77	27,100
	Feb. 16, 1915	13.3	39,600		May 8, 1944	11.77	27,100
	Feb. 25, 1915	14.5	46,000	1945	Feb. 18, 1945	12.25	-
	June 4, 1915	16.16	55,400		Mar. 8, 1945	14.54	39,200
1916	Mar. 29, 1916	20.0	72,300		May 19, 1945	12.33	29,200
	June 17, 1916	20.04	72,300	1946	Nov. 29, 1945	14.72	40,100
1917	Mar. 13, 1917	13.7	39,400		Dec. 31, 1945	15.62	44,600
1918	Feb. 21, 1918	14.0	40,700		June 3, 1946	14.95	41,600
	Feb. 27, 1918	16.7	54,100	1947	Aug. 31, 1947	8.15	14,300
	Apr. 16, 1918	14.1	41,200	1948	Apr. 15, 1948	16.81	51,000
1919	May 11, 1919	11.5	29,700	1949	Dec. 31, 1948	12.57	30,500
	May 23, 1919	17.4	57,800	1950	Feb. 15, 1950	13.04	32,200
1920	Mar. 6, 1920	20.9	-	1951	Nov. 26, 1950	25.36	108,000
	Mar. 13, 1920	19.1	67,200		Dec. 5, 1950	13.58	34,900
1921	May 5, 1921	16.0	50,500		Dec. 9, 1950	13.59	34,900
1922	Nov. 30, 1921	14.4	42,600		Mar. 31, 1951	15.50	44,100
1923	Mar. 3, 1923	15.1	46,000		June 15, 1951	13.52	34,500
1924	Jan. 17, 1924	13.7	39,400	1952	Jan. 4, 1952	12.30	29,200
	Mar. 31, 1924	15.5	48,000		Jan. 28, 1952	12.33	29,200
	Apr. 7, 1924	16.0	50,500		Mar. 12, 1952	17.53	55,000
	May 10, 1924	13.6	38,900	1953	Nov. 23, 1952	18.33	59,800
	May 13, 1924	18.97	66,600		Mar. 25, 1953	15.47	44,100
	June 30, 1924	14.7	44,000		June 2, 1953	13.04	32,200
1925	Feb. 12, 1925	16.0	50,500	1954	Mar. 2, 1954	16.77	51,000
1926	Feb. 26, 1926	13.2	37,100	1955	Oct. 17, 1954	15.94	46,100
1927	Nov. 16, 1926	14.2	41,700		Mar. 23, 1955	13.52	34,500
	Nov. 20, 1926	11.9	31,400	1956	Mar. 9, 1956	13.53	34,500
	Mar. 9, 1927	12.5	34,000	1957	Nov. 2, 1956	13.10	32,700
1928	Oct. 20, 1927	15.9	50,000		Apr. 6, 1957	12.48	30,000
	May 1, 1928	17.6	58,800	1958	May 7, 1958	12.78	31,100
1929	Apr. 17, 1929	15.4	47,500	1959	Jan. 22, 1959	19.84	18,800
1930	Oct. 23, 1929	17.26	57,500	1960	Mar. 31, 1960	15.32	43,100
	Feb. 26, 1930	11.68	30,500		Apr. 5, 1960	13.93	36,200
1931	May 24, 1931	12.94	35,800		May 10, 1960	15.06	42,100
1932	Apr. 1, 1932	13.99	40,600	1961	Feb. 27, 1961	17.73	56,200
1933	Mar. 16, 1933	13.35	38,000		Apr. 18, 1961	13.22	33,000
	Mar. 21, 1933	12.64	34,500				
	May 11, 1933	12.28	33,100				
	Aug. 24, 1933	12.35	33,600				

a Daily mean discharge.

b Backwater from ice.

5675. Bixler Run near Loysville, Pa.

Location.--Lat 40° 22' 15", long 77° 24' 10", on left bank 400 ft upstream from bridge on State Highway 850 at Bixler, 2.3 miles upstream from mouth, and 3.6 miles west of Loysville, Perry County.

Drainage area.--15.0 sq mi.

Gage.--Recording. Datum of gage is 601.22 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,000 cfs and extended above on basis of slope-area measurement at 8,780 cfs.

Remarks.--Base for partial-duration series, 250 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Oct. 15, 1954	5.32	256	1959	Jan. 22, 1959	6.56	925
	Aug. 13, 1955	6.77	1,080		Mar. 6, 1959	5.21	316
	Aug. 18, 1955	5.77	426		June 12, 1959	5.24	325
1956	Oct. 14, 1955	6.76	1,060	1960	Oct. 24, 1959	5.02	262
1957	Nov. 1, 1956	10.39	8,780		Apr. 4, 1960	5.93	594
	Dec. 14, 1956	5.08	279		June 18, 1960	5.13	293
1958	Dec. 20, 1957	5.31	347	1961	Feb. 25, 1961	5.56	434
	Dec. 26, 1957	5.06	273		Apr. 13, 1961	5.39	374
	Jen. 14, 1958	5.58	442		Apr. 16, 1961	5.82	538
	Feb. 27, 1958	5.87	559		June 21, 1961	6.04	641

5680. Sherman Creek at Shermandale, Pa.

Location.--Lat 40° 19' 25", long 77° 10' 05", on left bank on downstream side of bridge on State Highway 34 at Shermandale, Perry County, 1½ miles upstream from Fishing Run.

Drainage area.--200 sq mi.

Gage.--Nonrecording prior to Jan. 29, 1930; recording thereafter. Datum of gage is 422.63 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 6,500 cfs and extended above on basis of slope-area measurement at gage height 12.75 ft.

Bankfull stage.--9 ft.

Historical data.--Maximum stage known, that of July 22, 1927.

Remarks.--Records for 1930-31 furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 3,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	July 22, 1927	20.34	44,000	1935	Dec. 1, 1934	12.28	16,700
1930	Oct. 2, 1929	6.0	3,250		July 9, 1935	7.97	5,960
	Oct. 23, 1929	8.6	7,050	1936	Oct. 30, 1935	8.18	6,310
	Mer. 8, 1930	6.48	3,810		Nov. 13, 1935	7.83	5,620
1931	May 23, 1931	6.18	3,460		Mer. 12, 1936	10.28	11,000
					Mar. 18, 1936	8.99	7,840
1932	Mer. 31, 1932	5.08	2,320		Mer. 21, 1936	6.05	3,250
					Apr. 6, 1936	6.86	4,300
1933	Oct. 18, 1932	8.05	5,960	1937	Feb. 22, 1937	7.15	4,780
	Nov. 10, 1932	7.37	4,990		Apr. 27, 1937	9.87	9,330
	Nov. 19, 1932	5.91	3,130		Apr. 28, 1937	8.26	6,420
	Apr. 17, 1933	6.87	4,300	1938	Oct. 28, 1937	6.43	3,770
	Apr. 19, 1933	6.95	4,430		Nov. 13, 1937	9.43	8,360
	Aug. 11, 1933	6.89	4,300				
	Aug. 24, 1933	14.05	22,300	1939	Feb. 28, 1939	5.71	2,980
	Sept. 4, 1933	6.53	3,810				
1934	Sept. 17, 1934	9.06	8,060	1940	Mar. 31, 1940	7.55	5,340

Peak stages and discharges of Sherman Creek at Shermantale, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)				
1940	Apr. 8, 1940	6.34	3,650	1951	Feb. 21, 1951	6.55	3,650				
	Apr. 20, 1940	7.87	5,790		Apr. 13, 1951	7.05	4,180				
1941	Apr. 5, 1941	5.82	3,080		Aug. 12, 1951	6.66	3,780				
				1952	Mar. 11, 1952	13.59	17,800				
Apr. 5, 1952	8.29	6,170									
Apr. 27, 1952	6.64	3,830									
Sept. 1, 1952	8.78	7,040									
1942	Dec. 24, 1941	6.74	4,130		1953	Nov. 22, 1952	11.51	12,700			
	Apr. 10, 1942	6.61	4,010	Dec. 11, 1952		7.05	4,320				
	May 22, 1942	11.14	11,800	Jan. 24, 1953		8.60	6,680				
	Aug. 14, 1942	6.28	3,650	Mar. 24, 1953		9.46	8,380				
	Aug. 18, 1942	6.08	3,410	May 26, 1953		9.71	8,780				
1943	Oct. 16, 1942	7.70	5,490	1954	Feb. 21, 1954	6.48	3,710				
	Dec. 30, 1942	9.02	7,620		Mar. 1, 1954	7.32	4,710				
	Apr. 20, 1943	6.86	4,380		May 4, 1954	6.96	4,320				
	May 20, 1943	8.04	5,940		1955	Mar. 22, 1955	6.93	3,710			
	1944	Nov. 9, 1943	7.50			5,200	Aug. 13, 1955	9.07	6,260		
Jen. 4, 1944		6.11	3,380	Aug. 19, 1955		7.52	4,250				
Apr. 25, 1944		6.80	4,250	1956	Oct. 14, 1955	10.90	10,000				
May 7, 1944		8.06	6,100		1957	Nov. 2, 1956	12.75	18,300			
1945		Sept. 18, 1945	7.18			4,780	Dec. 14, 1956	6.44	3,690		
	Apr. 6, 1957			5.75			3,040				
	1946			Nov. 28, 1945	8.72		7,090	1958	Dec. 20, 1957	7.19	4,700
				May 25, 1946	6.13		3,380		Dec. 26, 1957	6.44	3,690
May 27, 1946		10.22	9,930	Feb. 28, 1958	7.08	4,560					
June 2, 1946		8.12	6,100	1947	May 25, 1947	7.24	4,780	1959	Sept. 2, 1959	6.74	4,050
1948	May 13, 1948	6.93	4,380								
				1949	Dec. 30, 1948	7.94	5,490	Apr. 4, 1960	8.36	6,670	
Apr. 14, 1949	6.36	3,400	May 9, 1960		6.10	3,220					
1950	Mar. 24, 1950	6.58	3,650	1961	Feb. 26, 1961	7.56	5,300				
	Aug. 20, 1950	7.87	5,520		Apr. 13, 1961	6.31	3,460				
1951	Nov. 25, 1950	11.48	12,700		Apr. 16, 1961	6.96	4,390				
	Dec. 4, 1950	9.48	8,380								
	Dec. 8, 1950	7.24	4,460								
	Feb. 7, 1951	7.12	4,320								

5685. Clark Creek near Carsonville, Pa.

Location.--Lat 40°27'35", long 76°45'10", on right bank 0.3 mile downstream from DeHart Dam, 1½ miles southeast of Carsonville, Dauphin County, and 15 miles upstream from mouth.

Drainage area.--22.5 sq mi.

Gage.--Recording at site 1,700 ft upstream at datum 9.49 ft higher prior to Jan. 6, 1939; nonrecording at site 100 ft downstream at different datum Jan. 6, 1939, to July 27, 1940; recording at present site and datum thereafter. Datum of present gage is 552.32 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 400 cfs.

Bankfull stage.--5 ft.

Remarks.--Flow regulated by DeHart Reservoir (capacity, 18,480 acre-ft) since 1941. Only annual peaks are shown.

Peak stages and discharges of Clark Creek near Carsonville, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Nov. 13, 1937	2.91	988	1951	Dec. 8, 1950	3.88	469
1939	Dec. 6, 1938	2.20	481	1952	Mar. 11, 1952	4.77	752
1940	Apr. 25, 1940	2.91	161	1953	Jan. 24, 1953	3.87	454
				1954	May 11, 1954	2.81	185
1941	Apr. 7, 1941	2.65	152	1955	Mar. 29, 1955	2.31	96
1942	May 23, 1942	4.48	665				
1943	May 20, 1943	3.24	282	1956	June 11, 1956	2.35	105
1944	Nov. 8, 1943	2.98	222	1957	Apr. 6, 1957	3.28	293
1945	July 19, 1945	3.53	359	1958	Apr. 7, 1958	3.59	376
				1959	June 8, 1959	2.34	100
1946	May 27, 1946	4.81	769	1960	May 9, 1960	3.46	340
1947	July 22, 1947	3.90	469				
1948	Apr. 1, 1948	3.46	340	1961	Apr. 16, 1961	3.31	301
1949	Jan. 7, 1949	2.87	198				
1950	June 1, 1950	2.98	222				

5690. Stony Creek near Dauphin, Pa.

Location.--Lat 40°22'45", long 76°54'31", at site of Reading Co. railroad bridge (abandoned), 1½ miles northeast of Dauphin, Dauphin County.

Drainage area.--35.0 sq mi.

Gage.--Recording. Datum of gage is 353.7 ft above mean sea level, datum of 1907.

Stage-discharge relation.--Defined by current-meter measurements below 1,200 cfs.

Remarks.--Base for partial-duration series, 400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Oct. 24, 1937	4.14	527	1942	Aug. 17, 1942	4.41	615
	Nov. 13, 1937	5.00	835	1943	Dec. 30, 1942	4.72	723
1939	Dec. 6, 1938	4.32	599	1944	Nov. 9, 1943	7.97	2,360
1940	Mar. 31, 1940	4.77	773		Jan. 4, 1944	3.97	476
	Apr. 8, 1940	4.38	643		Apr. 24, 1944	3.73	400
	Apr. 20, 1940	4.87	811		May 7, 1944	6.10	1,350
1941	Apr. 5, 1941	3.10	224	1945	Apr. 5, 1945	3.78	415
1942	Dec. 24, 1941	4.41	615		May 17, 1945	4.33	598
	May 17, 1942	4.33	598		May 27, 1945	4.32	580
	May 22, 1942	5.79	1,200		May 29, 1945	4.82	760
					July 19, 1945	5.89	1,250

5700. Conodoguinet Creek near Hogestown, Pa.

Location.--Lat 40°15'10", long 77°01'15", on left bank 1,000 ft upstream from highway bridge, three-eighths of a mile downstream from Hogestown Run, and 1 mile northeast of Hogestown, Cumberland County.

Drainage area.--470 sq mi.

Gage.--Nonrecording prior to Aug. 3, 1931; recording thereafter. Prior to September 1919, at site 2.5 miles downstream at different datum. October 1929 to Aug. 3, 1931, at site 1,000 ft downstream. Datum of gage is 351.00 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 11,400 cfs.

Bankfull stage.--6 ft.

Remarks.--Records for 1912-17, 1930-31, furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 4,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Mar. 16, 1912	10.8	8,480	1943	Oct. 17, 1942	8.00	6,430
	Sept. 26, 1912	10.4	7,820		Dec. 31, 1942	9.15	8,530
1913	Mar. 28, 1913	9.6	6,600		Apr. 20, 1943	6.52	4,300
1914	Oct. 26, 1913	8.55	5,130	1944	Nov. 9, 1943	6.84	4,690
	Feb. 1, 1914	8.3	4,750		Jan. 4, 1944	7.33	5,370
1915	Jan. 13, 1915	11.48	9,710		Mar. 14, 1944	6.40	4,180
	June 4, 1915	10.20	7,500		Mar. 25, 1944	6.28	4,060
	Aug. 22, 1915	12.91	12,500		Apr. 25, 1944	6.32	4,060
1916	June 17, 1916	12.00	10,600	1945	Sept. 19, 1945	7.66	5,960
1917	Jan. 15, 1917	9.8	6,900	1946	Nov. 29, 1945	8.46	7,260
1930	Oct. 2, 1929	6.6	5,150		May 28, 1946	9.43	8,910
	Oct. 23, 1929	6.3	4,780		June 3, 1946	8.07	6,590
1931	May 23, 1931	5.7	4,040	1947	May 26, 1947	9.30	8,720
1932	Mar. 29, 1932	6.07	4,090		May 30, 1947	6.53	4,300
1933	Oct. 18, 1932	8.89	8,020	1948	Nov. 12, 1947	6.58	4,430
	Nov. 10, 1932	6.78	4,740	1949	Dec. 31, 1948	7.93	6,270
	Nov. 20, 1932	6.45	4,240	1950	Mar. 24, 1950	6.79	4,530
	Mar. 21, 1933	6.51	4,360	1951	Nov. 26, 1950	9.27	8,720
	Apr. 18, 1933	7.61	5,860		Dec. 5, 1950	8.11	6,590
	Apr. 20, 1933	6.84	4,740		Feb. 8, 1951	6.57	4,370
	Aug. 11, 1933	8.26	6,970		Feb. 22, 1951	7.19	5,190
	Aug. 24, 1933	10.66	11,800		June 15, 1951	7.55	5,790
	Sept. 4, 1933	6.88	4,870	1952	Jan. 3, 1952	6.80	4,630
1934	Sept. 17, 1934	8.97	8,200		Jan. 28, 1952	6.27	4,080
1935	Dec. 2, 1934	11.32	13,100		Mar. 12, 1952	12.16	15,700
1936	Mar. 13, 1936	10.37	11,100		Apr. 28, 1952	7.11	5,110
	Mar. 19, 1936	9.00	8,200		Sept. 2, 1952	8.23	6,750
	Apr. 7, 1936	7.50	5,710	1953	Nov. 23, 1952	10.90	12,200
1937	Apr. 27, 1937	9.66	9,580		Dec. 11, 1952	6.56	4,200
	June 11, 1937	6.54	4,360		Jan. 25, 1953	8.11	6,590
	Aug. 27, 1937	6.47	4,360		Mar. 25, 1953	7.24	5,250
1938	Oct. 29, 1937	7.39	5,560		May 26, 1953	7.61	5,820
	Nov. 14, 1937	7.27	5,420	1954	Mar. 2, 1954	6.08	3,840
1939	Feb. 4, 1939	6.80	4,690	1955	Mar. 23, 1955	8.11	6,590
1940	Jan. 16, 1940	86.32	-		Aug. 19, 1955	7.12	5,110
	Feb. 21, 1940	86.48	-	1956	Oct. 15, 1955	8.50	7,260
	Mar. 31, 1940	6.29	4,060		July 21, 1956	6.81	4,710
	Apr. 9, 1940	7.97	6,430	1957	Nov. 3, 1956	9.55	9,300
	Apr. 21, 1940	8.51	7,260		Dec. 15, 1956	7.65	5,820
1941	Dec. 29, 1940	5.50	3,150		Apr. 6, 1957	6.37	4,200
1942	Dec. 25, 1941	6.38	4,180	1958	Dec. 21, 1957	7.60	5,820
	Apr. 4, 1942	6.36	4,180		Dec. 27, 1957	7.29	5,390
	May 23, 1942	9.39	8,910		Jan. 15, 1958	7.01	4,970
	Aug. 18, 1942	8.51	7,260		Feb. 28, 1958	7.38	5,530
					Mar. 26, 1958	6.69	4,580
					May 8, 1958	6.52	4,320

^a Backwater from ice.

5705. Susquehanna River at Harrisburg, Pa.

Location.--Lat 40°15'10", long 76°52'30", on left bank at Nagle Street, 500 ft upstream from sanitary dam, 3,700 ft downstream from Walnut Street Bridge in Harrisburg, Dauphin County, and 1.1 miles upstream from Paxton Creek.

Drainage area.--24,100 sq mi, approximately.

Gage.--Nonrecording prior to Oct. 1, 1928; recording thereafter. Prior to July 17, 1904, at pumping station 5,800 ft upstream. July 18, 1904, to Sept. 30, 1928, at Walnut Street Bridge 3,700 ft upstream. Datum of gage is 290.01 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--17 ft.

Historical data.--Flood of June 2, 1889, was maximum known during period 1786-1890.

Remarks.--Base for partial-duration series, 180,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1787	Oct. 5, 1786	22	482,000	1910	Apr. 26, 1910	15.8	291,000
1846	Mar. 15, 1846	22	482,000	1911	Jan. 16, 1911	11.5	178,000
1865	Mar. 18, 1865	24.6	573,000	1912	Apr. 4, 1912	14.3	249,000
1868	Mar. 19, 1868	20.0	417,000	1913	Mar. 28, 1913	19.54	402,000
1886	Jan. 6, 1886	19.0	385,000	1914	Feb. 1, 1914	13.0	215,000
	February 1886	a20.8	-		Mar. 30, 1914	18.1	358,000
1889	June 2, 1889	26.8	654,000		May 14, 1914	13.0	215,000
1891	Feb. 19, 1891	19.7	408,000	1915	Jan. 9, 1915	12.3	190,000
1892	Apr. 5, 1892	15.0	270,000		Feb. 17, 1915	12.9	208,000
1893	May 5, 1893	16.9	324,000		Feb. 26, 1915	15.7	286,000
1894	May 22, 1894	25.7	613,000	1916	Mar. 29, 1916	16.8	379,000
1895	Apr. 11, 1895	13.5	230,000		Apr. 16, 1916	13.4	220,000
1896	Apr. 1, 1896	14.8	265,000		June 18, 1916	16.2	300,000
1897	Mar. 26, 1897	11.5	180,000	1917	Mar. 29, 1917	10.8	155,000
1898	Mar. 24, 1898	16.6	315,000	1918	Oct. 31, 1917	12.32	205,000
1899	Mar. 6, 1899	13.4	228,000		Feb. 22, 1918	14.05	236,000
1900	Mar. 2, 1900	13.8	238,000		Feb. 28, 1918	13.5	222,000
1901	Nov. 28, 1900	14.2	249,000		Mar. 3, 1918	11.9	180,000
1902	Mar. 3, 1902	a22.94	b449,000		Mar. 16, 1918	15.8	288,000
1903	Mar. 2, 1903	16.7	276,000		Apr. 17, 1918	13.0	208,000
1904	Mar. 8, 1904	a20.84	b298,000	1919	May 12, 1919	12.1	185,000
1905	Mar. 21, 1905	16.3	306,000		May 23, 1919	16.0	294,000
1906	Dec. 4, 1905	12.8	210,000	1920	Mar. 13, 1920	20.2	423,000
	Mar. 31, 1906	11.9	187,000	1921	Mar. 11, 1921	11.8	178,000
	Apr. 16, 1906	11.6	180,000	1922	Nov. 30, 1921	15.47	278,000
1907	Mar. 15, 1907	14.2	247,000		Feb. 23, 1922	a16.6	-
1908	Feb. 17, 1908	15.0	269,000		Mar. 9, 1922	12.40	192,000
	Mar. 16, 1908	15.1	272,000	1923	Mar. 6, 1923	14.9	261,000
	Mar. 20, 1908	16.0	297,000	1924	Apr. 8, 1924	17.0	324,000
1909	Feb. 26, 1909	13.0	215,000		May 14, 1924	14.4	247,000
	May 2, 1909	16.0	297,000	1925	Oct. 1, 1924	14.25	241,000
1910	Jan. 22, 1910	13.0	215,000		Feb. 13, 1925	18.8	379,000
	Mar. 3, 1910	17.2	332,000	1926	Mar. 27, 1926	11.3	166,000
				1927	Nov. 17, 1926	17.0	323,500
					Jan. 22, 1927	a13.9	-
					Mar. 16, 1927	12.3	190,000
					Mar. 23, 1927	13.0	208,000
					May 27, 1927	12.53	195,000
				1928	Oct. 21, 1927	14.54	249,500
					May 2, 1928	14.65	252,400

a Backwater from ice.

b Daily mean discharge.

Peak stages and discharges of Susquehanna River at Harrisburg, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Mar. 17, 1929	12.55	235,000	1946	Mar. 10, 1946	11.83	212,000
	Apr. 18, 1929	11.23	201,000		May 29, 1946	21.80	494,000
	Apr. 23, 1929	12.29	228,000	1947	Apr. 7, 1947	11.94	214,000
1930	Feb. 28, 1930	10.15	177,000	1948	Mar. 19, 1948	11.05	192,000
1931	Mar. 31, 1931	9.18	153,000		Mar. 24, 1938	13.60	258,000
1932	Apr. 2, 1932	13.02	245,000		Apr. 16, 1948	15.53	308,000
1933	Aug. 25, 1933	14.04	269,000	1949	Jan. 1, 1949	12.10	220,000
1934	Apr. 14, 1934	8.71	141,000	1950	Mar. 30, 1950	15.20	300,000
	Sept. 17, 1934				Apr. 6, 1950	12.31	219,000
1935	Dec. 2, 1934	13.06	242,000	1951	Nov. 27, 1950	19.34	416,000
	July 11, 1935	10.74	187,000		Dec. 5, 1950	15.07	293,000
1936	Mar. 8, 1936	13.80	-		Dec. 9, 1950	11.89	209,000
	Mar. 17, 1936	13.47	252,000		Apr. 1, 1951	14.08	266,000
	Mar. 19, 1936	29.23	740,000	1952	Jan. 29, 1952	11.79	206,000
1937	Jan. 24, 1937	12.62	231,000		Mar. 13, 1952	16.23	324,000
	Apr. 28, 1937	12.08	219,000		Apr. 17, 1952	11.03	187,000
1938	Dec. 20, 1937	10.28	178,000	1953	Dec. 13, 1952	11.39	196,000
1939	Feb. 23, 1939	11.72	210,000		Mar. 26, 1953	12.21	216,000
1940	Apr. 2, 1940	19.75	418,000	1954	Mar. 3, 1954	13.15	242,000
	Apr. 10, 1940	14.46	280,000	1955	Mar. 6, 1955	10.65	177,000
	Apr. 22, 1940	12.72	237,000	1956	Oct. 17, 1955	13.97	263,000
1941	Apr. 7, 1941	13.03	244,000		Mar. 10, 1956	16.66	338,000
1942	Mar. 11, 1942	12.72	216,000		Apr. 9, 1956	12.00	211,000
	May 24, 1942	15.05	290,000	1957	Nov. 3, 1956	10.75	182,000
1943	Jan. 1, 1943	19.40	412,000		Apr. 7, 1957	13.46	250,000
	Apr. 22, 1943	13.38	252,000	1958	Apr. 9, 1958	14.72	281,000
1944	Mar. 19, 1944	10.68	184,000		May 9, 1958	10.98	182,000
	May 9, 1944	11.78	212,000	1959	Jan. 23, 1959	13.53	-
1945	Mar. 1, 1945	11.18	197,000		Jan. 24, 1959	12.77	230,000
	Mar. 5, 1945	13.41	252,000	1960	Apr. 2, 1960	18.20	382,000
	Mar. 8, 1945	13.30	250,000		Apr. 5, 1960	16.83	341,000
	Mar. 19, 1945	10.91	190,000	1961	Feb. 27, 1961	18.48	392,000
	Mar. 24, 1945	12.10	220,000		Apr. 18, 1961	12.38	235,000
					Apr. 27, 1961	11.94	207,000

a Backwater from ice.

5710. Paxton Creek near Penbrook, Pa.

Location.--Lat 40°18'30", long 70°51'00", at bridge on State Highway 543, 2 miles north of Penbrook, Dauphin County, and 7½ miles upstream from mouth.

Drainage area.--11.2 sq mi.

Gage.--Recording. Altitude of gage is 350 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Mar. 4, 1940	3.30	405	1942	July 23, 1942	3.99	567
	Mar. 14, 1940	3.75	580		July 29, 1942	5.43	1,060
	Mar. 30, 1940	3.87	622		Aug. 16, 1942	6.40	1,490
	Apr. 8, 1940	3.36	427		Aug. 17, 1942	4.20	633
	Apr. 20, 1940	3.87	622	1943	Dec. 30, 1942	4.16	616
	Sept. 16, 1940	3.36	427		May 19, 1943	4.25	650
1941	Nov. 2, 1940	2.98	307		May 20, 1943	5.26	1,020
1942	May 22, 1942	6.31	1,440	1944	Oct. 26, 1943	3.55	424

Peak stages and discharges of Paxton Creek near Penbrook, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Nov. 8, 1943	6.56	1,590	1947	June 7, 1947	3.39	480
	Jan. 4, 1944	4.61	768		June 11, 1947	3.36	464
	Mar. 13, 1944	3.50	409		July 16, 1947	4.60	898
	Apr. 24, 1944	3.69	470		July 21, 1947	4.91	1,010
	May 7, 1944	6.57	1,490	1948	Apr. 1, 1948	3.31	447
	June 18, 1944	5.00	910		Apr. 14, 1948	3.66	563
1945	Apr. 5, 1945	3.55	424		June 12, 1948	3.16	402
	May 17, 1945	5.11	928		July 23, 1948	5.60	1,280
	July 19, 1945	6.38	1,540	1949	Nov. 6, 1948	3.40	480
	July 21, 1945	5.91	1,300		Dec. 30, 1948	3.77	597
	July 22, 1945	3.53	424		Jan. 5, 1949	3.39	480
					Aug. 27, 1949	6.97	1,900
1946	Feb. 27, 1946	3.68	584		Aug. 29, 1949	3.77	597
	May 18, 1946	3.51	518	1950	Mar. 23, 1950	4.40	825
	May 21, 1946	5.18	1,140		May 23, 1950	4.12	718
	May 26, 1946	3.66	567		May 31, 1950	3.37	470
	May 27, 1946	4.04	700		June 1, 1950	3.22	423
	June 2, 1946	4.51	874				
1947	May 25, 1947	6.20	1,520				

5715. Yellow Breeches Creek near Camp Hill, Pa.
(Published as "at Olmsted's Mill" prior to June 1954)

Location.--Lat 40°13'30", long 76°53'50", on left bank 50 ft downstream from single span highway bridge, 150 ft downstream from Olmsted's Mill dam, 1 mile southeast of Camp Hill, Cumberland County, and 3.1 miles upstream from mouth.

Drainage area.--216 sq mi.

Gage.--Nonrecording at site 50 ft upstream prior to Dec. 30, 1919; recording at present site thereafter. Datum of gage is 301.49 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 3,700 cfs.

Bankfull stage.--4 ft.

Remarks.--Records for 1910-18 furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 1,250 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1910	Jan. 22, 1910	7.5	4,270	1955	Mar. 22, 1955	4.95	1,470
1911	Aug. 4, 1911	5.6	2,480	1955	Aug. 13, 1955	4.55	1,320
	Aug. 31, 1911	5.37	2,320	1956	Oct. 14, 1955	7.07	2,390
1912	Feb. 22, 1912	5.69	2,550		Feb. 6, 1956	4.69	1,360
	Feb. 27, 1912	5.6	2,480	1957	Dec. 14, 1956	4.72	1,320
	Mar. 15, 1912	6.8	3,560		Apr. 5, 1957	4.67	1,320
1913	Jan. 3, 1913	3.7	1,300	1958	Dec. 21, 1957	6.36	2,050
	Mar. 27, 1913	7.86	4,680		Dec. 26, 1957	5.28	1,560
1914	Jan. 4, 1914	3.65	1,280		Jan. 15, 1958	6.09	1,920
	Jan. 31, 1914	3.93	1,430		Jan. 22, 1958	5.24	1,520
1915	Jan. 13, 1915	8.5	5,500		Feb. 28, 1958	7.22	2,440
	Feb. 2, 1915	5.43	2,360		Mar. 27, 1958	5.28	1,620
	Aug. 22, 1915	8.61	5,550		Apr. 7, 1958	4.57	1,340
					May 7, 1958	4.64	1,340
1916	Sept. 15, 1916	8.35	5,150		July 6, 1958	4.89	1,460
1917	Feb. 19, 1917	3.4	1,160		Aug. 14, 1958	6.07	1,740
				1959	Jan. 22, 1959	6.36	1,980
1918	Feb. 20, 1918	6.7	3,450		Apr. 4, 1960	5.87	1,930
	Feb. 26, 1918	6.8	3,540	1961	Feb. 26, 1961	6.06	2,010
1919	July 23, 1919	6.82	3,540		Apr. 14, 1961	6.25	2,060
1953					Apr. 17, 1961	6.06	2,010
	July 22, 1953	9.4	3,940				

5720. Lower Little Swatara Creek at Pine Grove, Pa.
(Published as Little Swatara Creek near Pine Grove 1919-28,
and as Upper Little Swatara Creek at Pine Grove 1929-32)

Location.--Lat 40°32'15", long 76°22'40", at highway bridge, 0.6 mile upstream from mouth, and three-quarters of a mile southeast of Pine Grove, Schuylkill County.

Drainage area.--34.3 sq mi.

Gage.--Nonrecording prior to Aug. 18, 1931; recording thereafter. Altitude of gage is 500 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 600 cfs and extended above by logarithmic plotting.

Remarks.--Records for 1922-31 furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 920 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1920	Mar. 6, 1920	a8.9	b1,000	1927	Nov. 16, 1926	7.3	1,330
	Mar. 11, 1920	6.0	1,020		Jan. 21, 1927	6.7	1,180
1921	May 5, 1921	5.7	920	1928	June 30, 1928	6.3	1,070
1922	Mar. 7, 1922	5.0	777	1929	Feb. 26, 1929	6.05	1,000
1923	Mar. 3, 1923	7.0	1,260	1930	Oct. 2, 1929	6.7	1,220
1924	Sept. 30, 1924	8.0	1,500	1931	Mar. 29, 1931	3.9	424
1925	Feb. 11, 1925	7.2	1,310	1932	Mar. 28, 1932	5.74	920
	Feb. 19, 1925	5.6	925				
1926	Feb. 25, 1926	6.6	1,160				

a Backwater from ice.

b Maximum daily discharge.

5730. Swatara Creek at Harper Tavern, Pa.
(Published as "at Harpers" prior to 1928)

Location.--Lat 40°24'10", long 76°34'40", on left bank 10 ft downstream from bridge on State Highway 934, at Harper Tavern, Lebanon County, 6 miles northwest of Annville, and 8½ miles downstream from Little Swatara Creek.

Drainage area.--337 sq mi.

Gage.--Nonrecording prior to July 16, 1931; recording thereafter. Datum of gage is 356.68 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 25,000 cfs and extended above by logarithmic plotting.

Bankfull stage.--8 ft.

Historical data.--Maximum stage known, that of June 1, 1889.

Remarks.--Records for 1919, 1921-31 furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 4,800 cfs.

Peak stages and discharges of Swatara Creek at Harper Tavern, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1889	June 1, 1889	25.6	53,000	1933	Aug. 24, 1933	17.53	25,300
1919	July 21, 1919	9.4	6,750	1934	Sept. 30, 1934	7.35	4,820
1920	Mar. 5, 1920	13.6	-	1935	Dec. 2, 1934	11.54	10,400
	Mar. 8, 1920	9.6	7,030	1936	Mar. 12, 1936	13.75	15,800
	Mar. 13, 1920	11.3	10,000		Mar. 18, 1936	9.92	7,710
	Mar. 17, 1920	8.9	6,140		Apr. 6, 1936	10.47	8,620
1921	Dec. 14, 1920	7.9	5,120	1937	Feb. 22, 1937	7.75	5,200
	May 5, 1921	10.16	7,640	1938	Oct. 23, 1937	11.8	11,000
1922	Dec. 3, 1921	8.6	5,820		July 12, 1938	7.61	5,000
	Mar. 8, 1922	10.4	7,880	1939	Dec. 6, 1938	10.30	8,350
1923	Jan. 1, 1923	6.7	3,930	1940	Mar. 4, 1940	7.30	5,380
1924	Jan. 17, 1924	12.0	11,400		Mar. 15, 1940	10.42	9,660
	Apr. 7, 1924	8.8	6,030		Mar. 31, 1940	10.35	9,660
	May 12, 1924	7.8	5,020		Apr. 9, 1940	9.59	8,440
1925	Oct. 1, 1924	13.2	14,200		Apr. 20, 1940	9.22	7,860
	Feb. 12, 1925	14.4	17,200		May 26, 1940	7.31	5,380
	July 17, 1925	7.6	4,820		Sept. 1, 1940	11.51	11,500
1926	Nov. 13, 1925	9.4	6,750	1941	July 8, 1941	5.50	3,440
	Jan. 19, 1926	9.4	6,750	1942	May 17, 1942	7.68	5,740
	Feb. 19, 1926	8.2	5,420		May 23, 1942	12.88	14,000
	Feb. 26, 1926	11.1	9,600		Aug. 14, 1942	7.82	5,980
	Mar. 8, 1926	8.9	6,140		Aug. 17, 1942	11.04	10,300
	July 30, 1926	12.4	12,500		Sept. 28, 1942	9.91	8,440
	Aug. 13, 1926	8.0	5,220	1943	Oct. 27, 1942	7.87	5,740
	Nov. 16, 1926	14.6	17,800		Dec. 30, 1942	11.07	10,300
	Nov. 19, 1926	10.2	7,960		May 19, 1943	6.98	4,800
1928	Oct. 13, 1927	9.1	6,370		May 20, 1943	7.11	5,020
	Oct. 19, 1927	9.2	6,490	1944	Oct. 27, 1943	8.09	6,500
	Nov. 18, 1927	8.4	5,620		Nov. 9, 1943	13.25	14,600
	Dec. 8, 1927	8.2	5,420		Jan. 4, 1944	6.95	5,020
	Feb. 15, 1928	10.6	8,650		Mar. 13, 1944	7.89	5,980
	Apr. 28, 1928	8.8	6,030		Mar. 24, 1944	6.93	4,800
	June 26, 1928	8.0	5,220		Apr. 25, 1944	7.78	5,860
	June 30, 1928	11.0	9,400	1945	July 19, 1945	11.35	10,400
1929	Feb. 27, 1929	10.4	7,880	1946	May 28, 1946	9.47	7,620
	Mar. 6, 1929	10.5	8,000		June 2, 1946	8.82	6,710
	Apr. 17, 1929	7.7	4,920	1947	May 22, 1947	11.72	11,000
1930	Oct. 3, 1929	11.7	9,800		May 26, 1947	9.98	8,310
	Apr. 7, 1930	9.3	6,620		July 8, 1947	10.57	9,190
1931	May 8, 1931	5.60	2,950	1948	Nov. 8, 1947	7.25	4,870
1932	Mar. 28, 1932	9.50	7,020		Apr. 1, 1948	7.68	5,420
1933	Nov. 1, 1932	9.36	6,650	1949	Dec. 31, 1948	11.21	10,400
	Nov. 19, 1932	8.53	5,520		Jan. 6, 1949	10.13	8,810
	Apr. 17, 1933	10.42	8,260				

Peak stages and discharges of Swatara Creek at Harper Tavern, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Mar. 23, 1950	7.59	5,630	1955	Mar. 22, 1955	7.49	5,790
1951	Nov. 26, 1950	13.09	14,000	1955	Aug. 19, 1955	12.35	12,700
	Dec. 5, 1950	13.34	14,400		Oct. 14, 1955	8.83	7,370
	Dec. 8, 1950	8.50	6,700	1957	Dec. 16, 1956	7.03	5,190
	Jan. 24, 1951	8.20	6,340		Apr. 6, 1957	10.30	9,390
	Feb. 7, 1951	11.16	10,500		Dec. 21, 1957	10.47	9,680
	Feb. 21, 1951	7.38	5,410	1958	Dec. 26, 1957	8.99	7,630
	Sept. 2, 1951	7.1	5,080		Jan. 22, 1958	8.78	7,370
1952	Nov. 3, 1951	7.46	5,520		Feb. 28, 1958	9.40	8,150
	Dec. 5, 1951	9.16	7,590		Apr. 6, 1958	8.05	6,390
	Dec. 21, 1951	8.50	6,700	1959	Jan. 22, 1959	9.67	8,550
	Mar. 12, 1952	11.72	11,500		Sept. 3, 1959	9.47	8,280
	Apr. 29, 1952	9.44	8,150	1960	Nov. 28, 1959	6.93	5,120
	May 12, 1952	10.78	10,100		Dec. 13, 1959	7.76	6,150
	May 25, 1952	7.53	5,790		Apr. 4, 1960	7.55	5,910
	Sept. 1, 1952	11.39	11,000		Sept. 12, 1960	8.46	6,990
					Sept. 20, 1960	10.71	9,980
1953	Nov. 22, 1952	11.79	11,700	1961	Feb. 20, 1961	7.10	5,340
	Dec. 6, 1952	7.46	5,790		Feb. 26, 1961	11.10	10,600
	Dec. 11, 1952	7.73	6,030		Apr. 13, 1961	7.21	5,410
	Jan. 24, 1953	9.76	8,690				
	Mar. 26, 1953	-	6,150				
	May 23, 1953	8.01	6,390				
1954	May 26, 1953	8.54	6,990				
	Dec. 7, 1953	8.38	6,870				
	Mar. 2, 1954	7.42	5,670				
	May 10, 1954	7.89	6,270				

a Backwater from ice.

5735. Manada Creek at Manada Gap, Pa.

Location.--Lat 40°23'50", long 76°42'35", on left bank just upstream from highway bridge at Manada Gap, Dauphin County, 3 miles northwest of Shellsville, and 9 miles upstream from mouth.

Drainage area.--13.5 sq mi.

Gage.--Recording. Datum of gage is 516.07 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 790 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 180 cfs.

Peak stages and discharges of Manada Creek at Manada Gap, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Oct. 23, 1937	3.92	361	1950	Feb. 15, 1950	3.53	199
	Nov. 13, 1937	4.00	388		Mar. 23, 1950	4.10	361
1939	Dec. 6, 1938	3.50	238		May 23, 1950	4.55	492
1940	Mar. 4, 1940	3.47	245		May 31, 1950	3.80	279
	Mar. 15, 1940	3.41	227		June 1, 1950	4.38	447
	Mar. 31, 1940	3.76	343	1951	Nov. 25, 1950	5.66	860
	Apr. 8, 1940	3.60	286		Dec. 4, 1950	4.44	462
	Apr. 20, 1940	3.83	370		Dec. 8, 1950	4.11	361
1941	Apr. 5, 1941	2.94	119		Jan. 24, 1951	3.85	292
1942	Dec. 24, 1941	4.07	351		Feb. 7, 1951	3.94	317
	May 17, 1942	3.80	278		Feb. 21, 1951	3.54	215
	May 22, 1942	4.30	418		Sept. 2, 1951	4.71	538
	Aug. 16, 1942	8.60	2,650	1952	Dec. 5, 1951	3.90	213
1943	Dec. 30, 1942	4.67	531		Dec. 21, 1951	3.90	213
	May 19, 1943	3.61	231		Jan. 3, 1952	3.77	185
1944	Oct. 26, 1943	3.44	193		Mar. 11, 1952	5.69	725
	Nov. 8, 1943	7.55	1,970		Apr. 28, 1952	3.87	294
	Jan. 4, 1944	as 25	-		May 12, 1952	8.44	2,510
	Mar. 13, 1944	3.42	188		May 25, 1952	3.56	222
	Apr. 24, 1944	3.73	260		Sept 1, 1952	4.31	417
	June 23, 1944	4.76	566	1953	Nov. 22, 1952	5.11	664
	Aug. 7, 1944	3.80	278		Dec. 5, 1952	3.57	227
1945	Apr. 5, 1945	3.61	243		Dec. 11, 1952	3.34	181
	May 17, 1945	3.98	337		Jan. 24, 1953	4.15	374
	May 29, 1945	4.20	403		Feb. 21, 1953	3.62	239
	July 19, 1945	7.96	2,230		Mar. 26, 1953	3.35	182
	July 22, 1945	4.90	570		May 26, 1953	3.41	194
1946	Nov. 22, 1945	3.57	222		May 31, 1953	3.94	316
	Nov. 28, 1945	3.50	206		July 23, 1953	3.35	182
	May 18, 1946	3.44	193	1954	Mar. 1, 1954	4.46	462
	May 21, 1946	3.93	314		Apr. 17, 1954	3.77	274
	May 27, 1946	6.17	1,070		May 4, 1954	3.41	194
	June 2, 1946	4.30	418	1955	Mar. 22, 1955	3.62	239
	July 22, 1946	5.20	697		Aug. 18, 1955	4.47	462
1947	May 22, 1947	3.49	204		Aug. 30, 1955	3.94	316
	May 25, 1947	5.29	730	1956	Oct. 14, 1955	4.52	477
	July 16, 1947	3.57	222		July 2, 1956	3.48	208
	July 22, 1947	4.13	375	1957	Dec. 15, 1956	3.67	250
1948	Apr. 1, 1948	4.03	341		Apr. 5, 1957	3.68	252
	Apr. 14, 1948	3.75	266	1958	Dec. 20, 1957	4.36	432
	May 5, 1948	3.64	239		Dec. 26, 1957	3.81	279
	May 7, 1948	3.48	202		Jan. 22, 1958	3.70	250
	May 12, 1948	4.39	447		Feb. 27, 1958	4.45	462
1949	Nov. 6, 1948	3.39	182		Mar. 26, 1958	3.54	213
	Dec. 30, 1948	4.85	584		Apr. 6, 1958	3.62	231
	Jan. 5, 1949	3.94	317		July 5, 1958	3.64	236

a Backwater from ice.

5740. West Conewago Creek near Manchester, Pa.
(Published as "Conewago Creek" prior to 1932)

Location.--Lat 40°04'55", long 76°43'10", 500 ft upstream from bridge on State Highway 24, 0.7 mile downstream from Little Conewago Creek, and 1.5 miles north of Manchester, York County.

Drainage area.--510 sq mi.

Gage.--Recording. Datum of gage is 263.68 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--7 ft.

Remarks.--Base for partial-duration series, 10,800 cfs.

Peak stages and discharges of West Conewago Creek near Manchester, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Mar. 6, 1929	11.70	11,800	1945	July 19, 1945	11.39	11,100
	Apr. 17, 1929	15.31	20,300	1946	Nov. 29, 1945	15.86	21,600
	May 3, 1929	13.79	16,500		June 2, 1946	15.74	21,000
1930	Oct. 2, 1929	12.58	13,700	1947	May 22, 1947	13.66	16,000
	Mar. 8, 1930	11.16	10,800	1948	Jan. 2, 1948	10.82	9,980
1931	Apr. 2, 1931	9.14	6,850	1949	Dec. 30, 1948	13.74	16,000
1932	Mar. 28, 1932	12.12	11,900		Jan. 6, 1949	12.96	14,400
1933	Oct. 19, 1932	13.37	14,200	1950	Mar. 23, 1950	12.51	13,300
	Nov. 1, 1932	12.62	12,800		May 19, 1950	12.18	12,700
	Apr. 20, 1933	13.26	14,100	1951	Nov. 26, 1950	12.53	13,300
	Aug. 24, 1933	24.14	47,600		Dec. 4, 1950	13.91	16,400
1934	Sept. 15, 1934	13.71	15,300		Feb. 7, 1951	11.67	11,700
	Sept. 17, 1934	17.41	24,900		Feb. 21, 1951	11.64	11,500
	Sept. 30, 1934	17.20	24,400	1952	Feb. 4, 1952	11.93	12,100
1935	Dec. 1, 1934	15.86	20,700		Mar. 11, 1952	13.88	16,400
1936	Mar. 12, 1936	13.02	13,700		Apr. 28, 1952	11.72	11,700
	Mar. 19, 1936	17.08	-	1953	Nov. 22, 1952	13.96	16,700
	Apr. 6, 1936	12.93	13,500		Jan. 24, 1953	12.66	13,700
	June 13, 1936	11.93	11,400	1954	Mar. 2, 1954	8.30	5,740
1937	Feb. 22, 1937	11.73	12,100	1955	Mar. 22, 1955	14.10	16,900
	Apr. 27, 1937	12.08	12,900		Aug. 13, 1955	11.29	10,900
1938	Oct. 23, 1937	11.27	11,200	1956	Oct. 14, 1955	12.92	14,200
	Nov. 13, 1937	13.82	16,800	1957	Dec. 15, 1956	11.37	11,100
1939	Feb. 4, 1939	13.70	16,500		Apr. 6, 1957	11.34	10,900
	Mar. 1, 1939	11.18	11,000	1958	Dec. 21, 1957	13.77	16,200
1940	Apr. 9, 1940	12.18	12,500		Dec. 27, 1957	13.14	14,600
	Apr. 20, 1940	15.85	21,300		Feb. 28, 1958	12.97	14,400
	Sept. 1, 1940	11.63	11,200		Mar. 26, 1958	12.03	12,300
1941	Apr. 6, 1941	11.16	10,400		May 6, 1958	11.74	11,700
1942	May 22, 1942	12.79	13,800	1959	Jan. 22, 1959	10.07	8,720
	June 5, 1942	12.58	13,400	1960	Apr. 4, 1960	12.55	13,500
	Aug. 18, 1942	14.28	17,400	1961	Feb. 26, 1961	13.00	14,400
1943	Dec. 30, 1942	14.09	16,900		Apr. 13, 1961	12.84	14,000
1944	Nov. 9, 1943	17.33	25,500				
	Mar. 13, 1944	11.36	10,800				
	Mar. 24, 1944	11.39	10,800				
	May 7, 1944	11.37	10,800				

a Backwater from ice.

5745. Codorus Creek at Spring Grove, Pa.

Location.--Lat 39°52'15", long 76°51'50", on left bank 500 ft downstream from bridge on State Highway 116, at Spring Grove, York County, and 0.5 mile downstream from Bunch Creek.

Drainage area.--74.3 sq mi.

Gage.--Nonrecording prior to Jan. 18, 1930; recording gage thereafter. Prior to Sept. 10, 1941, at site 500 ft upstream. Datum of gage is 436.50 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,400 cfs and extended on basis of computation of flow over dam at gage heights 8.70 and 11.84 ft.

Bankfull stage.--5 ft.

Remarks.--Records for 1929-31 furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 1,000 cfs.

Peak stages and discharges of Codorus Creek at Spring Grove, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Oct. 2, 1929	6.48	1,710	1944	May 7, 1944	6.05	1,570
	Mar. 8, 1930	5.40	1,030				
	Apr. 7, 1930	5.61	1,110	1945	July 15, 1945	6.96	2,820
					July 19, 1945	5.53	1,240
1931	Apr. 1, 1931	4.27	685		July 23, 1945	5.09	1,030
1932	Mar. 28, 1932	6.23	1,490	1946	Nov. 28, 1945	6.24	1,730
	June 16, 1932	6.38	1,620		May 18, 1946	5.09	1,030
					June 2, 1946	7.52	3,850
1933	Apr. 19, 1933	6.55	1,760		June 28, 1946	5.40	1,180
	June 13, 1933	6.86	2,210				
	July 3, 1933	6.34	1,580	1947	Jan. 31, 1947	5.83	1,430
	Aug. 23, 1933	11.84	11,200		May 20, 1947	5.37	1,180
					May 22, 1947	5.63	1,300
1934	Oct. 2, 1933	5.48	1,070				
	Mar. 3, 1934	5.59	1,110	1948	Jan. 2, 1948	6.30	1,810
	July 8, 1934	5.80	1,200		Feb. 14, 1948	5.08	1,030
	Sept. 4, 1934	5.41	1,030				
	Sept. 16, 1934	8.70	6,070	1949	Dec. 30, 1948	5.98	1,570
	Sept. 30, 1934	7.78	4,100		Jan. 6, 1949	6.15	1,730
					Jan. 28, 1949	5.16	1,080
1935	Dec. 1, 1934	5.36	1,010		Apr. 14, 1949	5.11	1,030
1936	Jan. 9, 1936	5.44	1,050	1950	Mar. 23, 1950	6.01	1,610
	Feb. 27, 1936	6.11	1,380		May 19, 1950	5.60	1,360
	Feb. 29, 1936	6.09	1,380				
	Mar. 12, 1936	5.52	1,070	1951	Nov. 25, 1950	5.99	1,610
	Mar. 21, 1936	5.79	1,200		Dec. 4, 1950	7.55	4,080
	Apr. 6, 1936	5.92	1,250		Feb. 7, 1951	6.22	1,750
					June 10, 1951	4.81	1,020
1937	Feb. 22, 1937	6.92	2,210				
	Apr. 26, 1937	5.90	1,250	1952	Mar. 11, 1952	5.80	1,480
	Aug. 21, 1937	5.80	1,200		Apr. 14, 1952	5.31	1,220
					Apr. 28, 1952	6.18	1,750
1938	Oct. 23, 1937	7.08	2,550		May 12, 1952	5.54	1,310
	Nov. 13, 1937	7.39	3,180		Sept. 1, 1952	6.08	1,680
	June 27, 1938	5.92	1,250		Sept. 3, 1952	5.39	1,260
1939	Jan. 30, 1939	5.87	1,250	1953	Nov. 22, 1952	6.67	2,180
	Feb. 3, 1939	6.44	1,620		Dec. 11, 1952	5.48	1,310
	Feb. 28, 1939	6.08	1,380		Jan. 24, 1953	4.82	1,020
	Sept. 30, 1939	5.87	1,250		Mar. 26, 1953	5.26	1,220
1940	Mar. 4, 1940	6.20	1,410	1954	Dec. 7, 1953	6.42	1,910
	Mar. 15, 1940	5.98	1,270		Mar. 1, 1954	4.94	1,060
	Apr. 8, 1940	5.89	1,210				
	Apr. 20, 1940	7.27	2,590	1955	Mar. 5, 1955	4.94	1,060
	July 17, 1940	5.50	1,010		Mar. 22, 1955	5.90	1,540
	Aug. 7, 1940	7.20	2,510		Aug. 13, 1955	7.21	3,180
	Sept. 1, 1940	5.88	1,210				
	Sept. 25, 1940	8.85	6,190	1956	Oct. 14, 1955	6.35	1,910
					Feb. 6, 1956	6.00	1,610
1941	Nov. 2, 1940	5.13	870		Mar. 14, 1956	5.15	1,180
1942	Feb. 7, 1942	5.29	1,130	1957	Apr. 6, 1957	5.02	1,100
	May 22, 1942	6.03	1,570				
	June 4, 1942	7.24	3,190	1958	Dec. 26, 1957	5.17	1,180
	June 14, 1942	5.98	1,570		Jan. 15, 1958	4.91	1,060
	July 4, 1942	5.65	1,300		Jan. 22, 1958	5.47	1,310
	Aug. 17, 1942	5.42	1,180		Jan. 25, 1958	5.76	1,480
	Sept. 28, 1942	5.43	1,180		Feb. 28, 1958	6.56	2,180
					Apr. 6, 1958	5.00	1,100
1943	Dec. 30, 1942	6.00	1,570		May 5, 1958	6.02	1,610
	May 21, 1943	8.32	5,510				
	June 12, 1943	7.93	4,730	1959	Jan. 2, 1959	4.86	1,060
	July 13, 1943	5.89	1,500				
				1960	Apr. 5, 1960	5.49	1,310
1944	Oct. 26, 1943	5.97	1,570				
	Nov. 8, 1943	6.89	2,650	1961	Feb. 19, 1961	6.05	1,610
	Jan. 4, 1944	6.86	2,650		Feb. 25, 1961	4.93	1,060
	Jan. 6, 1944	5.54	1,240		Apr. 13, 1961	4.80	1,020
	Mar. 13, 1944	5.64	1,300		July 13, 1961	4.93	1,060
	Mar. 23, 1944	5.30	1,130		Sept. 4, 1961	4.80	1,020

5750. South Branch Codorus Creek near York, Pa.

Location.--Lat 39°55'10", long 76°45'00" on right bank 100 ft downstream from dam of pumping station of York Water Co., 200 ft upstream from Pennsylvania Railroad bridge, half a mile upstream from mouth, and 3 miles southwest of York, York County.

Drainage area.--117 sq mi.

Gage.--Nonrecording at site 180 ft upstream at datum 5.00 ft higher prior to Aug. 21, 1928; recording at present site and datum thereafter. Datum of gage is 373.03 ft above mean sea level, adjustment of 1907.

Stage-discharge relation.--Defined by current-meter measurements below 2,230 cfs and extended above by contracted-opening measurement at 19,300 cfs.

Bankfull stage.--6 ft.

Remarks.--Records for 1928-31 furnished by Pennsylvania Department of Forests and Waters. Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)						
1928	Feb. 8, 1928	2.8	1,260	1940	Oct. 2, 1939	4.88	1,020						
	Feb. 15, 1928	3.4	1,910		Feb. 19, 1940	5.28	1,210						
	Apr. 28, 1928	3.2	1,680		Mar. 4, 1940	5.98	1,590						
	June 22, 1928	3.0	1,460		Mar. 15, 1940	5.80	1,470						
	July 13, 1928	4.35	3,260		Apr. 9, 1940	5.74	1,380						
	Aug. 17, 1928	3.2	1,680		Apr. 20, 1940	7.52	2,610						
1929	Feb. 7, 1929	5.70	1,300	1941	Sept. 1, 1940	5.10	1,030						
	Feb. 26, 1929	8.12	3,320		Sept. 25, 1940	9.02	4,410						
	Mar. 5, 1929	6.61	1,950		Feb. 14, 1941	5.22	1,230						
	Apr. 16, 1929	7.20	2,440		Mar. 15, 1941	4.95	1,100						
1930	Oct. 2, 1929	89.16	-	1942	Mar. 16, 1941	5.37	1,300						
	Oct. 22, 1929	6.94	2,230		Feb. 7, 1942	5.83	1,470						
	Mar. 8, 1930	5.40	1,110		May 22, 1942	6.32	1,760						
	Apr. 7, 1930	6.17	1,620		June 5, 1942	6.35	1,830						
1931	Dec. 27, 1930	5.06	910	1943	June 13, 1942	7.05	2,290						
1932	Mar. 28, 1932	6.35	1,760		Aug. 9, 1942	7.87	3,130						
					Aug. 13, 1942	5.48	1,280						
1933	Oct. 6, 1932	5.23	1,020		Aug. 17, 1942	5.00	1,050						
					Sept. 28, 1942	6.80	2,130						
			Oct. 19, 1932	5.27	1,020	1944	Oct. 26, 1942	5.68	1,380				
			Apr. 20, 1933	6.44	1,840		Dec. 30, 1942	6.01	1,560				
			June 13, 1933	6.04	1,540		May 21, 1943	5.88	1,500				
			July 3, 1933	6.76	2,070		July 13, 1943	9.12	4,540				
1934	Mar. 3, 1934	6.56	1,910	1945	Oct. 27, 1943	5.36	1,210						
					Nov. 9, 1943	9.56	5,210						
			Aug. 13, 1934		5.80	1,370	Dec. 27, 1943	5.33	1,210				
			Sept. 4, 1934		9.02	4,410	Jan. 4, 1944	7.65	2,830				
			Sept. 16, 1934		10.09	5,920	Jan. 6, 1944	5.62	1,330				
			Sept. 30, 1934		7.25	2,440	Mar. 13, 1944	5.51	1,280				
1935	Dec. 1, 1934	4.73	780	1946	July 15, 1945	5.88	1,500						
1936	Jan. 3, 1936	6.20	1,650		July 18, 1945	5.69	1,380						
				1947	June 2, 1946	6.20	1,690						
					Jan. 9, 1936	6.01	1,510	1948	May 22, 1947	4.44	1,020		
					Feb. 28, 1936	6.52	1,880		Jan. 2, 1948	5.78	1,750		
					Mar. 1, 1936	6.36	1,760		Feb. 14, 1948	-	1,300		
					Mar. 4, 1936	5.48	1,180		May 30, 1948	5.22	1,390		
Mar. 11, 1936	5.86	1,400	1949	Dec. 30, 1948	4.76	1,160							
Mar. 21, 1936	5.57	1,210		Jan. 6, 1949	5.59	1,630							
Apr. 6, 1936	5.47	1,140		Jan. 28, 1949	4.52	1,040							
1937	Feb. 22, 1937	7.67		2,890	July 13, 1949	4.71	1,140						
			Apr. 26, 1937		5.43	1,140	1950	Mar. 23, 1950	5.12	1,410			
			1938		Oct. 23, 1937	6.79		2,110	May 19, 1950	4.61	1,180		
Nov. 13, 1937	7.45	2,610		1951					Nov. 25, 1950	7.41	2,920		
June 27, 1938	8.50	3,790							Dec. 4, 1950	9.44	4,960		
July 23, 1938	4.77	998					Feb. 7, 1951		6.43	2,150			
1939	Aug. 18, 1938	5.74	1,440		July 5, 1951	4.47	1,110						
				1952	Dec. 6, 1938	4.95	1,040	Mar. 11, 1952	6.12	1,960			
								Jan. 30, 1939	5.45	1,280			
								Feb. 3, 1939	6.15	1,710			
Feb. 28, 1939	5.48	1,310											

a Backwater from Codorus Creek, probably maximum discharge for year occurred on this day.

Peak stages and discharges of South Branch Codorus Creek near York, Pa.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Apr. 14, 1952	4.63	1,180	1958	Dec. 26, 1957	4.53	1,140
	Apr. 28, 1952	6.93	2,520		Jan. 15, 1958	4.84	1,260
	May 12, 1952	4.66	1,180		Jan. 22, 1958	5.40	1,560
	Sept. 1, 1952	5.91	1,840		Jan. 25, 1958	6.67	2,360
1953	Nov. 22, 1952	6.74	2,360		Feb. 28, 1958	7.25	2,760
	Mar. 26, 1953	4.77	1,240		Mar. 26, 1958	4.25	1,000
1954	Dec. 7, 1953	6.77	2,440		Mar. 29, 1958	4.41	1,070
	Mar. 1, 1954	4.36	1,050		Apr. 6, 1958	4.64	1,180
1955	Feb. 7, 1955	5.44	1,560	1959	May 6, 1958	5.34	1,510
	Mar. 22, 1955	4.32	1,020		Jan. 2, 1959	4.96	1,360
	Aug. 13, 1955	8.43	3,840	1960	Apr. 5, 1960	4.43	1,090
	Aug. 19, 1955	4.67	1,180		May 9, 1960	4.98	1,360
1956	Oct. 14, 1955	4.87	1,310		July 14, 1960	4.50	1,120
	Feb. 7, 1956	5.66	1,720		Aug. 8, 1960	4.31	1,020
	Mar. 14, 1956	4.58	1,160		Sept. 1, 1960	4.36	1,050
					Sept. 12, 1960	7.92	3,360
1957	Apr. 6, 1957	4.90	1,310	1961	Feb. 19, 1961	5.14	1,410
1958					Feb. 25, 1961	4.98	1,360
	Dec. 21, 1957	4.31	1,020		Apr. 13, 1961	4.57	1,140

5755. Codorus Creek near York, Pa.

Location.--Lat 39°56'45", long 76°45'20", on left bank 0.5 mile upstream from Richland Avenue Bridge, 2.0 miles downstream from South Branch Codorus Creek, and 2 miles southwest of York, York County.

Drainage area.--222 sq mi.

Gage.--Nonrecording at site 1.6 miles downstream at different datum prior to Sept. 30, 1932; recording at present site and datum thereafter. Datum of gage is 356.39 ft above mean sea level (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 3,300 cfs.

Bankfull stage.--12 ft.

Historical data.--Maximum stage known, that of Aug. 23, 1933.

Remarks.--Since September 1942 flow regulated by Indian Rock Reservoir (capacity 28,000 acre-ft). Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	Aug. 23, 1933	24.0	32,000	1951	Dec. 4, 1950	12.03	7,770
				1952	Apr. 28, 1952	9.65	4,720
1940	Sept. 25, 1940	11.82	7,060	1953	Nov. 22, 1952	9.37	4,500
				1954	Dec. 7, 1953	8.76	3,880
1941	Mar. 16, 1941	6.77	1,950	1955	Aug. 13, 1955	11.08	6,520
1942	June 5, 1942	8.56	3,550	1956	Feb. 7, 1956	8.25	3,300
1943	July 13, 1943	10.08	5,280		Apr. 6, 1957	7.58	2,790
1944	Nov. 9, 1943	11.66	7,340		Feb. 28, 1958	10.10	5,280
1945	July 15, 1945	8.02	3,120		Jan. 2, 1959	6.87	2,180
1946	June 3, 1946	8.17	3,300	1960	Sept. 12, 1960	9.89	5,050
1947	May 22, 1947	7.07	2,370				
1948	Jan. 2, 1948	8.12	3,210	1961	Feb. 19, 1961	8.14	3,190
1949	Jan. 6, 1949	8.20	3,300				
1950	Mar. 23, 1950	7.79	2,940				

5760. Susquehanna River at Marietta, Pa.

Location.--Lat 40°03'15", long 76°31'50", on left bank 420 ft upstream from Chickies Creek and 1 mile downstream from Marietta, Lancaster County.

Drainage area.--25,990 sq mi approximately (includes that of Chickies Creek).

Gage.--Recording. Datum of gage is 200.56 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 460,000 cfs.

Historical data.--Maximum stage known prior to 1932, that of June 2, 1889.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1889	June 2, 1889	58.3	630,000	1946	May 29, 1946	54.90	492,000
				1947	Apr. 7, 1947	46.28	214,000
1932	Apr. 2, 1932	47.66	256,000	1948	Apr. 16, 1948	49.67	310,000
1933	Aug. 25, 1933	49.44	296,000	1949	Jan. 1, 1949	46.82	227,000
1934	Sept. 17, 1934	44.04	152,000	1950	Mar. 30, 1950	49.29	298,000
	Jan. 3, 1934	44.52	-				
1935	Dec. 2, 1934	48.27	263,000	1951	Nov. 27, 1950	52.96	420,000
				1952	Mar. 13, 1952	50.33	329,000
1936	Mar. 19, 1936	60.73	787,000	1953	Mar. 27, 1953	46.76	227,000
1937	Jan. 24, 1937	47.4	241,000	1954	Mar. 3, 1954	47.50	246,000
1938	Dec. 20, 1937	44.81	176,000	1955	Mar. 7, 1955	45.12	183,000
1939	Feb. 23, 1939	46.30	213,000				
1940	Apr. 2, 1940	53.33	432,000	1956	Mar. 10, 1956	50.25	325,000
				1957	Apr. 7, 1957	47.63	249,000
1941	Apr. 8, 1941	47.59	249,000	1958	Apr. 9, 1958	48.53	274,000
1942	May 24, 1942	49.63	307,000	1959	Jan. 24, 1959	47.33	241,000
1943	Jan. 1, 1943	53.20	428,000	1960	Apr. 2, 1960	51.31	370,000
1944	May 9, 1944	46.23	211,000				
1945	Mar. 5, 1945	47.79	254,000	1961	Feb. 27, 1961	51.82	386,000

a Backwater from ice.

5765. Conestoga Creek at Lancaster, Pa.

Location.--Lat 40°03'00", long 76°16'40", on left bank at Pennsylvania Railroad bridge, 50 ft downstream from small tributary 500 ft downstream from diversion dam of city waterworks, and 0.75 mile east of Lancaster, Lancaster County.

Drainage area.--324 sq mi.

Gage.--Nonrecording at site 600 ft upstream at different datum prior to May 1, 1933; recording at present site and datum thereafter. Prior to May 1, 1933, at site 600 ft upstream at different datum. Datum of gage is 245.63 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 4,000 cfs and extended above by indirect measurements.

Bankfull stage.--8 ft.

Remarks.--Base for partial-duration series, 2,800 cfs.

Peak stages and discharges of Conestoga Creek at Lancaster, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Feb. 27, 1929	6.57	9,400	1945	Feb. 27, 1945	7.93	4,440
	Mar. 6, 1929	4.92	5,860		June 28, 1945	6.68	2,900
	Apr. 17, 1929	3.92	4,060		July 15, 1945	7.52	3,910
1930	Oct. 2, 1929	3.00	2,680		July 19, 1945	7.47	3,910
1931	July 11, 1931	5.20	4,220		July 22, 1945	7.38	3,780
1932	Mar. 28, 1932	5.96	5,480		July 23, 1945	7.20	3,520
1933	May 30, 1933	7.18	3,720	1946	July 27, 1945	6.75	2,960
	July 17, 1933	7.46	4,050		Sept. 11, 1945	9.86	7,370
	July 26, 1933	7.23	3,720		Sept. 19, 1945	8.66	5,560
	Aug. 4, 1933	8.85	5,720	1946	Nov. 29, 1945	7.08	3,390
	Aug. 20, 1933	6.68	3,200		Feb. 28, 1946	6.73	2,960
	Aug. 22, 1933	9.28	6,450		June 2, 1946	12.69	12,400
	Aug. 24, 1933	17.52	22,800	1947	July 18, 1947	6.00	2,130
1934	Mar. 3, 1934	6.57	3,100	1948	Nov. 4, 1947	7.03	3,260
	Apr. 1, 1934	7.59	4,170		Feb. 17, 1948	6.71	2,900
	July 8, 1934	12.80	12,600		May 5, 1948	6.98	3,260
	July 13, 1934	6.52	3,000		May 7, 1948	6.84	3,020
	Sept. 22, 1934	6.77	3,300	1949	Dec. 31, 1948	6.80	3,020
	Sept. 30, 1934	14.04	15,000		Jan. 6, 1949	10.95	9,200
1935	Dec. 1, 1934	6.41	2,900		Jan. 28, 1949	6.72	2,900
	Apr. 8, 1935	6.34	2,800	1950	Mar. 23, 1950	8.95	6,000
1936	Nov. 18, 1935	8.21	4,910	1951	Nov. 26, 1950	10.42	8,180
	Jan. 3, 1936	8.99	5,990		Dec. 4, 1950	8.13	4,720
	Jan. 10, 1936	7.17	3,620		Jan. 15, 1951	8.06	4,720
	Mar. 12, 1936	9.58	6,890		Feb. 7, 1951	9.48	6,750
	Mar. 18, 1936	7.97	4,620		Feb. 21, 1951	6.71	2,900
	Mar. 21, 1936	6.55	2,930		Apr. 13, 1951	6.70	2,900
	Apr. 6, 1936	7.84	4,490	1952	Dec. 21, 1951	7.79	4,300
1937	Feb. 22, 1937	6.85	3,060		Jan. 26, 1952	7.15	3,520
	June 19, 1937	6.95	3,240		Feb. 4, 1952	6.94	3,150
1938	Oct. 23, 1937	9.00	6,280		Mar. 11, 1952	8.30	5,000
	June 12, 1938	8.92	6,110		Apr. 29, 1952	9.04	6,000
	June 27, 1938	8.20	5,010		May 26, 1952	7.26	3,650
	July 12, 1938	8.44	5,310		Sept. 1, 1952	8.47	5,280
	July 21, 1938	7.67	4,280	1953	Nov. 22, 1952	10.04	7,530
1939	Dec. 6, 1938	6.64	2,910		Dec. 11, 1952	8.38	5,140
	Jan. 31, 1939	6.96	3,280		Jan. 9, 1953	7.12	3,390
	Feb. 4, 1939	9.16	6,620		Jan. 24, 1953	7.88	4,440
	Feb. 16, 1939	6.72	2,970		Mar. 16, 1953	7.14	3,390
	Mar. 1, 1939	7.69	4,280		Mar. 26, 1953	7.24	3,520
	Apr. 7, 1939	6.71	2,970		May 26, 1953	6.89	3,150
1940	Mar. 4, 1940	7.65	4,140		June 1, 1953	6.64	2,850
	Mar. 15, 1940	8.49	5,470	1954	Dec. 7, 1953	9.45	6,600
	Apr. 9, 1940	9.35	6,960		Mar. 2, 1954	7.52	3,910
	Apr. 20, 1940	8.25	5,010	1955	Mar. 23, 1955	7.78	4,300
	Sept. 26, 1940	7.84	4,420		Aug. 13, 1955	9.34	6,450
1941	Dec. 17, 1940	6.96	3,200		Aug. 19, 1955	12.11	11,200
	Feb. 7, 1941	6.74	2,900		Aug. 22, 1955	7.67	4,170
1942	May 23, 1942	15.12	17,300	1956	Feb. 7, 1956	7.30	3,650
	June 8, 1942	7.05	3,260		July 3, 1956	8.03	4,580
	July 27, 1942	10.95	9,200	1957	Dec. 15, 1956	6.77	2,970
	Aug. 9, 1942	9.63	7,210		Apr. 5, 1957	7.59	4,040
	Aug. 14, 1942	8.08	4,720	1958	Dec. 21, 1957	6.72	2,910
	Aug. 18, 1942	11.60	10,500		Jan. 22, 1958	6.73	2,970
	Sept. 28, 1942	8.29	5,000		Jan. 25, 1958	6.87	3,150
1943	Oct. 27, 1942	7.47	3,910		Feb. 28, 1958	9.36	6,600
	Dec. 30, 1942	8.85	5,700		Apr. 7, 1958	8.05	4,580
	Feb. 11, 1943	7.33	3,650		July 8, 1958	8.74	5,560
1944	Nov. 9, 1943	9.57	6,900	1959	Jan. 2, 1959	6.69	2,910
	Jan. 4, 1944	8.77	5,700		Sept. 3, 1959	8.97	6,000
	Jan. 6, 1944	6.74	2,840	1960	Dec. 13, 1959	7.89	4,440
	Mar. 13, 1944	7.36	3,780		Jan. 3, 1960	6.90	3,150
	Mar. 24, 1944	7.31	3,650		Apr. 5, 1960	7.62	4,040
	Apr. 25, 1944	7.98	4,580		Sept. 13, 1960	11.77	10,600
1945	Jan. 2, 1945	7.32	3,650	1961	Feb. 26, 1961	9.18	6,300
	Feb. 23, 1945	6.80	3,020		Apr. 13, 1961	7.36	3,780
					July 29, 1961	8.55	5,420

5770. Susquehanna River near McCall Ferry, Pa.
(Published as "at McCall Ferry" prior to January 1906)

Location.--Lat 39°48'50", long 76°18'35", 0.4 mile upstream from Muddy Run, 1.4 miles southeast of Holtwood, Lancaster County, and 2 miles southeast of McCall Ferry.

Drainage area.--26,800 sq mi, approximately.

Gage.--Nonrecording. Prior to Jan. 1, 1906, at site $1\frac{1}{4}$ miles upstream. Datum of gage is mean sea level.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1903	Mar. 2, 1903	136.4	320,000	1907	Mar. 16, 1907	122.9	267,000
1904	Mar. 8, 1904	146.6	631,000	1908	Mar. 20, 1908	125.2	308,000
1905	Mar. 22, 1904	138.4	373,000	1909	May 3, 1909	125.4	311,000
1906	Apr. 16, 1906	119.2	206,000	1910	Mar. 3, 1910	127.1	342,000

5775. Muddy Creek at Castle Fin, Pa.

Location.--Lat 39°46'25", long 76°19'00", 0.6 mile northeast of Castle Fin, York County, and 2.8 miles upstream from mouth.

Drainage area.--133 sq mi.

Gage.--Recording. Datum of gage is 175.42 ft above mean sea level, preliminary levels of 1910.

Stage-discharge relation.--Defined by current-meter measurements below 7,600 cfs and extended above on basis of computation of peak flow over dam at 16,600 cfs.

Remarks.--Base for partial-duration series, 3,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Feb. 7, 1929	7.68	3,860	1935	July 8, 1935	7.38	3,620
	Feb. 26, 1929	8.81	4,740	1936	Jan. 3, 1936	a7.88	-
	Mar. 5, 1929	7.07	3,380		Jan. 9, 1936	7.46	3,700
	Apr. 16, 1929	7.31	3,540	1937	Feb. 22, 1937	8.02	4,100
1930	Oct. 2, 1929	7.95	4,100		July 5, 1937	8.28	4,340
1931	Jan. 19, 1931	6.81	3,140	1938	Oct. 23, 1937	7.31	3,540
1932	Mar. 28, 1932	7.31	3,540		Nov. 13, 1937	8.49	4,500
1933	Aug. 23, 1933	21.11	16,600		June 27, 1938	9.65	5,440
1934	Sept. 17, 1934	12.92	8,500				

a Backwater from ice.

5785. Octoraro Creek near Rising Sun, Md.

Location.--Lat 39°41'27", long 76°07'38", on right bank 10 ft downstream from Porter Bridge, 300 ft downstream from Love Run, 3½ miles upstream from mouth, and 3½ miles west of Rising Sun, Cecil County.

Drainage area.--193 sq mi.

Gage.--Nonrecording prior to May 19, 1946; recording thereafter. Datum of gage is 73.77 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 5,000 cfs and extended on basis of velocity-area studies.

Bankfull stage.--10 ft.

Remarks.--Base for partial-duration series, 2,500 cfs. Only annual peaks shown after Feb. 22, 1951, when Pine Grove Reservoir was completed (capacity 2,800,000,000 gal).

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1884	June 1884	a24.3	b60,000	1943	Feb. 11, 1943	7.92	2,660
1918	-	a16.5	b27,700		July 21, 1943	8.01	2,780
1932c/	May 13, 1932	6.25	980	1944	Nov. 9, 1943	9.14	4,460
1933	Nov. 1, 1932	8.12	2,940		Jan. 4, 1944	10.95	8,300
	Nov. 19, 1932	7.92	2,680		Jan. 6, 1944	9.67	5,540
	Apr. 17, 1933	8.10	2,910	1945	Jan. 1, 1945	8.97	4,280
	July 3, 1933	9.88	5,750		Feb. 23, 1945	8.20	3,060
	Aug. 4, 1933	11.80	10,400		Apr. 26, 1945	8.18	3,060
	Aug. 24, 1933	17.50	34,500		July 18, 1945	10.81	7,820
1934	Apr. 1, 1934	8.13	2,910		July 27, 1945	8.75	3,960
1935	June 18, 1935	8.19	3,050		Sept. 18, 1945	9.09	4,460
	July 9, 1935	13.76	17,200	1946	Nov. 28, 1945	9.92	5,900
	Sept. 4, 1935	10.20	6,480		Dec. 25, 1945	8.42	3,340
1936c/	Feb. 26, 1936	8.32	3,190		May 18, 1946	8.33	3,200
	Mar. 12, 1936	11.40	9,340		July 23, 1946	8.48	4,120
1937	July 6, 1937	7.58	2,280	1947	June 14, 1947	7.59	2,780
1938	Oct. 23, 1937	9.59	5,250		July 7, 1947	8.15	3,550
	Nov. 13, 1937	8.20	3,050	1948	Jan. 1, 1948	7.90	3,200
	June 27, 1938	9.98	5,970		Feb. 14, 1948	8.47	4,040
1939	Jan. 30, 1939	8.54	3,480		Feb. 17, 1948	8.26	3,720
	Feb. 3, 1939	8.31	3,190		May 5, 1948	7.45	2,600
	Feb. 28, 1939	7.82	2,520		June 19, 1948	7.57	2,780
	June 14, 1939	8.98	4,250	1949	Jan. 6, 1949	7.40	2,540
1940	Oct. 2, 1939	9.46	5,080		July 7, 1949	7.80	3,060
	Jan. 15, 1940	8.60	3,630		July 12, 1949	8.17	3,550
	Mar. 15, 1940	9.00	4,250		Aug. 5, 1949	8.16	3,550
	Apr. 20, 1940	7.78	2,520	1950	Mar. 23, 1950	7.38	2,750
	Sept. 25, 1940	7.90	2,650		Aug. 3, 1950	7.50	2,900
1941	Feb. 7, 1941	8.64	3,630	1951	Nov. 25, 1950	8.80	5,200
	July 3, 1941	8.50	3,480		Dec. 4, 1950	7.23	2,520
1942	Feb. 7, 1942	8.06	2,910		Jan. 15, 1951	7.66	3,140
	May 16, 1942	8.76	3,930		Feb. 7, 1951	8.51	4,620
	May 23, 1942	15.56	25,000		July 13, 1951	9.00	5,600
	July 31, 1942	9.10	4,410	1952	July 10, 1952	10.56	9,240
	Aug. 9, 1942	17.57	35,000		Nov. 22, 1952	9.37	6,400
1943	Oct. 26, 1942	7.93	2,660	1954	Mar. 2, 1954	6.80	1,930
	Dec. 30, 1942	7.85	2,540	1955	Aug. 13, 1955	10.05	7,960
				1956	Feb. 7, 1956	6.91	2,090
				1957	Nov. 2, 1956	6.38	1,450
				1958	Jan. 25, 1958	9.58	6,870

a Annual peak only.

b Estimated.

c Partial year.

5790. Basin Run at Liberty Grove, Md.

Location.--Lat 39°39'30", long 76°06'10", on left bank 100 ft upstream from highway bridge, 0.9 mile east of Liberty Grove, Cecil County, 1.0 mile southwest of Colora, and 3 miles upstream from mouth.

Drainage area.--5.31 sq mi.

Gage.--Recording. Altitude of gage is 220 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 150 cfs and extended on basis of slope-area measurements at 514 cfs and 1,420 cfs.

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Jan. 28, 1949	2.36	225	1954	Apr. 23, 1954	2.28	210
	Mar. 23, 1949	2.79	294		May 3, 1954	3.58	460
	July 13, 1949	3.20	354				
1950	Mar. 23, 1950	2.85	305	1955	Feb. 6, 1955	3.11	352
	July 11, 1950	2.76	290		Aug. 13, 1955	3.23	376
	Aug. 3, 1950	3.80	511		Aug. 18, 1955	5.08	967
1951	Nov. 25, 1950	3.65	470	1956	Mar. 14, 1956	2.10	176
	Dec. 4, 1950	3.00	332				
	Jan. 15, 1951	2.61	266	1957	Nov. 2, 1956	3.05	339
	Feb. 7, 1951	2.97	327		Apr. 2, 1957	2.25	205
	Mar. 19, 1951	2.53	253		Apr. 6, 1957	2.37	227
	July 4, 1951	6.06	1,440		May 26, 1957	2.93	319
1952	Dec. 21, 1951	3.93	551		June 2, 1957	2.29	212
	Mar. 11, 1952	3.75	497		Sept. 10, 1957	4.44	724
	May 12, 1952	2.60	264	1958	Dec. 20, 1957	2.95	323
	July 9, 1952	4.07	596		Jan. 15, 1958	3.00	332
	Sept. 1, 1952	3.58	451		Jan. 22, 1958	3.00	332
1953	Nov. 21, 1952	2.81	298		Jan. 25, 1958	3.72	495
	Dec. 11, 1952	2.37	227		Feb. 27, 1958	2.88	310
	Jan. 24, 1953	3.40	425		Apr. 6, 1958	2.52	251
	May 26, 1953	3.39	423		May 5, 1958	2.49	246
	Sept. 12, 1953	2.23	201		July 12, 1958	3.70	490
1954	Dec. 14, 1953	2.22	200		July 27, 1958	6.33	1,560
					Aug. 13, 1958	2.80	296
					Aug. 25, 1958	2.30	214

5800. Deer Creek at Rocks, Md.

Location.--Lat 39°37'49", long 76°24'13", on right bank a quarter of a mile downstream from Maryland & Pennsylvania Railroad bridge, three-quarters of a mile southeast of Rocks, Harford County, 1.2 miles upstream from Stirrup Run, and 7 miles northwest of Bel Air.

Drainage area.--94.4 sq mi.

Gage.--Recording. Datum of gage is 250.40 ft above mean sea level (city of Baltimore bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 3,000 cfs and extended on basis of slope-area measurements at 6,000 cfs and 13,600 cfs.

Bankfull stage.--8 ft.

Historical data.--Flood of August 23, 1933, was maximum stage known since at least 1888.

Remarks.--Base for partial-duration series, 1,900 cfs.

Peak stages and discharges of Deer Creek at Rocks, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Nov. 16, 1926	15.45	9,080	1944	June 24, 1944	6.45	1,960
	Apr. 22, 1927	7.15	2,400				
	July 19, 1927	6.31	1,900	1945	Jan. 1, 1945	9.47	3,730
1928	Oct. 12, 1927	7.63	2,620		Apr. 26, 1945	9.11	3,490
	Feb. 14, 1928	9.11	3,490		July 18, 1945	8.27	3,010
	Apr. 28, 1928	7.02	2,280		Aug. 25, 1945	6.58	2,060
	June 6, 1928	6.80	2,180		Sept. 18, 1945	6.72	2,120
	July 22, 1928	7.93	2,780	1946	May 18, 1946	7.08	2,340
	July 27, 1928	6.77	2,180		May 28, 1946	6.78	2,180
	Aug. 17, 1928	11.08	4,760		June 2, 1946	9.32	3,610
	Aug. 25, 1928	7.22	2,400	1947	June 14, 1947	8.41	3,070
1929	Feb. 8, 1929	6.38	1,960		July 7, 1947	7.01	2,280
	Feb. 26, 1929	7.05	2,280		July 19, 1947	6.36	1,960
	Apr. 16, 1929	7.01	2,280	1948	Nov. 4, 1947	7.08	2,340
	June 22, 1929	6.51	2,010		Jan. 1, 1948	7.95	2,840
1930	Oct. 2, 1929	7.39	2,500		Feb. 17, 1948	7.16	2,400
	Oct. 22, 1929	9.61	3,790		May 30, 1948	6.58	1,960
1931	June 23, 1931	6.44	1,960		July 23, 1948	9.42	3,670
	Aug. 10, 1931	7.50	2,560	1949	July 13, 1949	11.53	5,040
1932	Mar. 28, 1932	7.6	2,620	1950	Aug. 31, 1950	9.48	3,730
1933	Nov. 1, 1932	7.06	2,340		Sept. 10, 1950	9.00	3,430
	June 13, 1933	6.63	2,060	1951	Nov. 25, 1950	10.16	4,160
	Aug. 23, 1933	17.7	13,600		Dec. 4, 1950	10.43	4,290
1934	Mar. 3, 1934	a8.00	2,120		Jan. 15, 1951	6.28	1,900
	Sept. 17, 1934	15.9	9,900		Feb. 7, 1951	8.24	2,950
1935	Sept. 4, 1935	13.4	6,600		Apr. 12, 1951	6.94	2,230
1936	Jan. 3, 1936	8.30	3,010		July 5, 1951	12.19	5,570
	Jan. 9, 1936	7.35	2,500		July 28, 1951	7.34	2,450
	Mar. 11, 1936	8.71	3,250		Aug. 10, 1951	13.23	6,420
1937	Feb. 22, 1937	10.19	4,160		Sept. 14, 1951	6.69	2,120
	July 5, 1937	13.2	6,420	1952	Mar. 11, 1952	7.14	2,340
1938	Oct. 23, 1937	9.04	3,430		May 25, 1952	6.78	2,180
	Nov. 13, 1937	11.8	5,260		Sept. 1, 1952	9.43	3,670
	Aug. 18, 1938	7.10	3,100	1953	Nov. 21, 1952	8.62	3,200
1939	Jan. 30, 1939	6.62	2,060		July 23, 1953	7.32	2,460
	June 13, 1939	9.04	3,430	1954	May 2, 1954	6.71	2,130
1940	Mar. 4, 1940	6.80	2,180	1955	Feb. 7, 1955	-	b2,010
	Apr. 8, 1940	6.59	2,060		June 11, 1955	7.56	2,590
	Sept. 25, 1940	8.26	3,010		Aug. 13, 1955	9.45	3,700
1941	May 23, 1941	6.44	1,960		Aug. 18, 1955	10.25	4,190
	June 23, 1941	13.91	7,100	1956	July 21, 1956	7.30	2,450
1942	Feb. 7, 1942	7.86	2,780	1957	Oct. 23, 1956	6.38	1,940
	May 22, 1942	8.77	3,310		Nov. 2, 1956	9.45	3,700
	July 26, 1942	8.50	3,130		May 26, 1957	8.71	3,260
	Aug. 9, 1942	7.13	2,340	1958	Dec. 20, 1957	7.23	2,410
	Aug. 12, 1942	6.97	2,280		Jan. 14, 1958	7.97	2,820
1943	Oct. 16, 1942	6.47	2,010		Jan. 22, 1958	6.77	2,160
	Oct. 26, 1942	7.12	2,340		Jan. 25, 1958	9.51	3,740
	May 12, 1943	6.42	1,960		Feb. 27, 1958	8.38	3,060
	May 21, 1943	6.62	2,060		Apr. 6, 1958	6.80	2,180
	July 13, 1943	8.94	3,370		July 27, 1958	6.34	1,920
1944	Oct. 26, 1943	9.57	3,790	1959	Jan. 2, 1959	6.46	1,990
	Nov. 9, 1943	11.16	4,820		June 25, 1959	7.40	2,500
	Jan. 4, 1944	10.62	4,420	1960	May 9, 1960	9.11	3,500
	Mar. 13, 1944	6.58	2,060		Sept. 12, 1960	9.78	3,900
	Apr. 24, 1944	7.03	2,280	1961	Jan. 1, 1961	a6.50	1,740

a Backwater from ice.

b Estimated.

5810. Bynum Run near Bel Air, Md.

Location.--Lat 39°32'51", long 76°19'44", on left bank at downstream side of highway bridge, just upstream from small tributary, 0.5 mile upstream from station at Bel Air, and 1.4 miles northeast of Bel Air, Harford County. Records include flow of small tributary.

Drainage area.--7.7 sq mi, approximately.

Gage.--Recording. Altitude of gage is 265 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,100 cfs and extended by logarithmic plotting.

Bankfull stage.--5 ft.

Remarks.--Base for partial-duration series, 350 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Oct. 23, 1950	6.03	446	1952	Sept. 1, 1952	6.96	1,600
	Nov. 25, 1950	6.51	842				
	Dec. 4, 1950	6.46	789	1953	Nov. 21, 1952	7.15	2,190
	Dec. 7, 1950	5.98	418		Dec. 11, 1952	6.63	991
	Feb. 7, 1951	6.17	537		Jan. 9, 1953	6.63	991
	Apr. 12, 1951	6.52	854		Jan. 24, 1953	7.12	2,080
	June 13, 1951	6.19	551		Feb. 15, 1953	5.91	383
	July 4, 1951	7.15	2,190		Mar. 24, 1953	6.85	1,360
	July 28, 1951	5.99	423		May 6, 1953	6.81	1,280
					May 17, 1953	6.27	614
					June 22, 1953	6.15	523
1952	Nov. 1, 1951	5.90	378		Sept. 12, 1953	6.17	537
	Nov. 7, 1951	6.41	736	1954	Dec. 14, 1953	6.57	482
	Dec. 5, 1951	6.35	683		Mar. 1, 1954	6.46	420
	Dec. 21, 1951	6.85	1,360	1955	Feb. 6, 1955	6.69	500
	Feb. 4, 1952	6.03	446		Aug. 6, 1955	6.53	356
	Mar. 11, 1952	6.85	1,360		Aug. 12, 1955	7.10	910
	Mar. 19, 1952	6.01	434		Aug. 18, 1955	6.77	602
	Apr. 27, 1952	6.22	574				
	May 25, 1952	6.97	1,630				
	June 23, 1952	6.68	1,060				
	July 9, 1952	7.12	2,080				

5815. Bynum Run at Bel Air, Md.

Location.--Lat 39°32'30", long 76°19'50", on right bank 30 ft downstream from bridge on State Highway 22, and 1.0 mile east of Bel Air, Harford County.

Drainage area.--8.52 sq mi.

Gage.--Recording. Datum of gage is 251.94 ft above mean sea level (Maryland State Roads Commission bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 560 cfs and extended on basis of contracted-opening measurement at 3,080 cfs prior to Apr. 5, 1951. Since July 1, 1955, defined by current-meter measurements below 720 cfs and extended by logarithmic plotting.

Bankfull stage.--5 ft.

Historical data.--Maximum gage-height known, about 8 or 9 ft, thought to have occurred in August 1933, from information by local resident.

Remarks.--Base for partial-duration series, 440 cfs.

Peak stages and discharges of Bynum Run at Bel Air, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944a/	Sept. 14, 1944	5.38	551	1956	June 2, 1956	3.48	444
1945	Jan. 1, 1945	5.21	446		July 21, 1956	3.74	534
	July 19, 1945	6.25	3,620		Sept. 6, 1956	3.86	576
	Aug. 25, 1945	5.80	1,020	1957	Nov. 2, 1956	6.04	1,700
	Sept. 18, 1945	5.70	865		Sept. 13, 1957	4.18	698
1946	Dec. 6, 1945	5.36	537	1958	Dec. 20, 1957	4.75	955
	Dec. 25, 1945	5.40	565		Dec. 26, 1957	3.47	441
	July 23, 1946	5.37	544		Jan. 14, 1958	4.36	777
1947	Apr. 30, 1947	5.52	670		Jan. 22, 1958	4.47	826
	June 14, 1947	6.01	1,920		Jan. 25, 1958	4.74	950
	July 9, 1947	5.24	462		Feb. 27, 1958	3.70	520
					Apr. 6, 1958	3.93	602
1948	Nov. 3, 1947	5.20	440		May 5, 1958	4.23	722
	Nov. 8, 1947	5.26	473		Aug. 13, 1958	3.59	482
	Jan. 1, 1948	5.48	633		Aug. 22, 1958	3.53	460
1949	Mar. 23, 1949	5.40	565	1959	Jan. 2, 1959	4.02	638
1950					July 20, 1959	5.92	1,610
	Mar. 23, 1950	5.39	558		Sept. 2, 1959	6.05	1,700
	Aug. 30, 1950	6.07	2,300	1960	Dec. 12, 1959	3.53	460
	Sept. 10, 1950	6.18	3,080		Jan. 3, 1960	3.47	441
	Sept. 21, 1950	5.37	544		Feb. 18, 1960	3.61	488
1951a/	Nov. 25, 1950	5.60	750		May 9, 1960	3.74	534
	Dec. 4, 1950	5.61	762		June 14, 1960	4.12	678
	Feb. 7, 1951	5.33	516		Sept. 12, 1960	5.78	1,520
1955a/	Aug. 13, 1955	4.86	1,010	1961	Apr. 10, 1961	3.74	534
	Aug. 18, 1955	3.94	606		Apr. 13, 1961	3.94	606
					July 24, 1961	4.32	759

a Partial year.

GUNPOWDER RIVER BASIN

5820. Little Falls at Blue Mount, Md.

Location.--Lat 39°36'16", long 76°37'16", on left bank at downstream side of Pennsylvania Railroad bridge, 0.2 mile north of Blue Mount, Baltimore County, 0.6 mile upstream from mouth, 0.9 mile downstream from First Mine Branch, and 1.2 miles south of White Hall.

Drainage area.--52.9 sq mi.

Gage.--Recording. Altitude of gage is 305 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,300 cfs and extended on basis of contracted-opening measurement at 5,730 cfs.

Bankfull stage.--8 ft.

Remarks.--Base for partial-duration series, 1,000 cfs.

Peak stages and discharges of Little Falls at Blue Mount, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	August 1933	a14	-	1953	Mar. 24, 1953	4.05	1,010
1945	Jan. 1, 1945	5.98	1,950		July 23, 1953	7.24	2,670
	Apr. 26, 1945	8.07	3,210		Sept. 6, 1953	4.26	1,120
	July 15, 1945	4.52	1,150	1954	May 2, 1954	4.88	1,390
	July 18, 1945	5.86	1,890				
	July 29, 1945	4.63	1,220	1955	Feb. 7, 1955	4.78	1,350
	Aug. 25, 1945	6.05	1,950		June 11, 1955	6.29	2,120
	Sept. 9, 1945	4.45	1,120		Aug. 13, 1955	7.41	2,800
1946	May 18, 1946	6.18	2,070		Aug. 18, 1955	5.08	1,490
	June 2, 1946	6.27	2,130	1956	Oct. 14, 1956	6.53	2,270
1947	June 7, 1947	4.37	1,080		Feb. 6, 1956	4.10	1,030
	July 19, 1947	4.68	1,250		July 4, 1956	5.58	1,740
1948	Jan. 1, 1948	4.23	1,020		July 21, 1956	6.63	2,330
	Feb. 17, 1948	5.09	1,450	1957	Oct. 23, 1956	4.08	1,020
	July 23, 1948	8.45	3,390		May 26, 1957	9.14	3,830
1949	July 13, 1949	11.10	5,170		June 24, 1957	4.03	1,000
1950	Aug. 31, 1950	6.87	2,490		July 28, 1957	4.69	1,300
	Sept. 10, 1950	11.93	5,730		Sept. 7, 1957	4.37	1,150
1951	Nov. 25, 1950	6.32	2,130	1958	Jan. 14, 1958	4.74	1,320
	Dec. 4, 1950	7.45	2,790		Jan. 22, 1958	4.61	1,260
	Jan. 15, 1951	4.39	1,100		Jan. 25, 1958	7.28	2,720
	Feb. 7, 1951	6.57	2,310		Feb. 27, 1958	6.83	2,450
	July 4, 1951	7.07	2,610		Apr. 6, 1958	4.60	1,250
	Aug. 12, 1951	6.67	2,370		May 5, 1958	4.13	1,040
1952	Mar. 11, 1952	4.40	1,160	1959	Jan. 2, 1959	4.95	1,420
	May 25, 1952	6.81	2,430		June 25, 1959	4.66	1,280
	Sept. 1, 1952	7.83	3,030	1960	May 8, 1960	5.90	1,900
					Aug. 10, 1960	4.94	1,420
1953	Nov. 21, 1952	6.06	2,010		Sept. 12, 1960	6.23	2,090
				1961	Jan. 1, 1961	b5.05	1,200

a Annual peak only, from information furnished by the Pennsylvania Railroad.
b Backwater from ice.

5830. Slade Run near Glyndon, Md.

Location.--Lat 39°29'40", long 76°47'45", on left bank at downstream side of bridge on Longenecker Road, 1.1 miles upstream from mouth, 1.6 miles north-east of Glyndon, Baltimore County, and 2.6 miles northeast of Reisterstown.

Drainage area.--2.09 sq mi.

Gage.--Recording. Altitude of gage is 420 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 92 cfs and extended by logarithmic plotting.

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 90 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Jan. 1, 1948	2.73	116	1953	Sept. 6, 1953	2.94	142
	June 19, 1948	2.80	124	1954	July 5, 1954	2.71	113
1949	Mar. 23, 1949	2.94	142	1955	Feb. 6, 1955	-	(a)
	July 12, 1949	2.54	93		June 11, 1955	3.27	190
1950	Sept. 10, 1950	2.96	145		June 25, 1955	2.55	94
1951	Nov. 25, 1950	2.84	124		Aug. 13, 1955	3.42	214
	Dec. 4, 1950	2.76	116	1956	Oct. 14, 1955	3.35	203
	Feb. 7, 1951	2.85	130		May 31, 1956	3.3	195
	Apr. 12, 1951	2.58	98		July 21, 1956	4.68	485
	June 13, 1951	3.06	158	1957	Sept. 13, 1957	2.67	108
1952	May 11, 1952	2.74	117	1958	Jan. 25, 1958	2.86	132
	May 25, 1952	3.88	302		July 23, 1958	2.84	129
	June 23, 1952	2.68	110	1959	Sept. 2, 1959	3.34	201
	Aug. 6, 1952	2.82	127	1960	July 13, 1960	2.93	141
	Sept. 1, 1952	4.53	448		Aug. 10, 1960	2.67	108
1953	Nov. 21, 1952	3.07	160	1961	July 17, 1961	2.62	102
	Mar. 15, 1953	3.12	167				
	Mar. 24, 1953	2.52	91				

a Unknown; probably greater than 90 cfs.

5835. Western Run at Western Run, Md.

Location.--Lat 39°30'38", long 76°40'37", on right bank 100 ft downstream from bridge on Western Run Road, 0.3 mile southeast of Western Run, Baltimore County, 2.5 miles northwest of Cockeysville, and 3.2 miles upstream from Beaver Dam Run.

Drainage area.--59.8 sq mi.

Gage.--Recording. Altitude of gage is 260 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,100 cfs and extended on basis of slope-area measurements at 3,410 cfs and 4,600 cfs.

Bankfull stage.--8 ft.

Remarks.--Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Jan. 1, 1945	6.02	1,550	1952	July 8, 1952	4.82	1,130
	July 18, 1945	6.30	1,670		July 9, 1952	6.88	1,990
	July 19, 1945	6.57	1,790		Aug. 6, 1952	5.83	1,480
	July 27, 1945	9.02	3,700		Sept. 1, 1952	9.75	4,500
1946	Nov. 28, 1945	6.55	1,790	1953	Nov. 21, 1952	8.55	3,390
	Dec. 6, 1945	5.04	1,200		Jan. 9, 1953	4.47	1,060
	June 2, 1946	9.13	3,800		Mar. 15, 1953	5.26	1,370
	Aug. 7, 1946	5.88	1,520		Mar. 24, 1953	5.45	1,450
	Aug. 18, 1946	10.62	5,320		Sept. 6, 1953	7.28	2,440
1947	June 8, 1947	3.97	850	1954	Mar. 1, 1954	4.07	914
1948	Jan. 1, 1948	7.77	2,600		Feb. 7, 1955	6.14	1,770
	Feb. 14, 1948	6.53	1,790	1955	June 11, 1955	5.96	1,680
1949	Mar. 23, 1949	4.50	1,020		Aug. 13, 1955	9.29	4,030
	July 13, 1949	5.68	1,440	1956	Oct. 14, 1955	7.38	2,510
1950	Sept. 10, 1950	9.88	4,600		Feb. 2, 1956	4.63	1,080
					July 21, 1956	10.84	5,590
1951	Nov. 25, 1950	5.68	1,440	1957	Oct. 23, 1956	4.36	1,020
	Dec. 4, 1950	6.64	1,820	1958	Jan. 14, 1958	4.59	1,110
	Dec. 8, 1950	4.69	1,100		Jan. 25, 1958	7.82	2,810
	Feb. 7, 1951	6.36	1,720		Feb. 28, 1958	7.62	2,670
	Apr. 12, 1951	4.88	1,160		July 23, 1958	4.77	1,180
	June 14, 1951	4.97	1,200	1959	Jan. 2, 1959	4.69	1,150
	July 4, 1951	7.2	2,170		May 8, 1960	4.31	998
	July 18, 1951	4.87	1,160	1961	Apr. 13, 1961	3.93	869
	Aug. 11, 1951	5.23	1,270				
1952	Mar. 11, 1952	4.46	1,040				
	Apr. 27, 1952	5.44	1,340				
	May 26, 1952	8.05	2,760				

5840. Gunpowder Falls near Carney, Md.

Location.--Lat 39°25'25", long 76°30'40", on left bank 1 mile downstream from Cowen Run, 2 miles north of Carney, Baltimore County, and 2½ miles downstream from Loch Raven Dam.

Drainage area.--314 sq mi.

Gage.--Recording. Altitude of gage is 135 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,800 cfs and extended by logarithmic plotting.

Bankfull stage.--8 ft.

Remarks.--Flow completely regulated by Prettyboy and Loch Raven Reservoirs (combined usable capacity, 43,270,000,000 gal). Peaks do not include flow diverted about 1½ miles above station from Loch Raven Reservoir. Only annual peaks are shown.

Peak stages and discharges of Gunpowder Falls near Carney, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Sept. 10, 1950	6.88	3,720	1956	July 21, 1956	8.29	5,430
				1957	Apr. 6, 1957	5.03	1,690
1951	Feb. 7, 1951	5.38	2,140	1958	Feb. 28, 1958	7.14	3,590
1952	July 9, 1952	9.50	7,000	1959	Sept. 2, 1959	3.65	630
1953	Nov. 22, 1952	8.04	5,100	1960	Sept. 12, 1960	5.88	2,570
1954	Dec. 14, 1953	3.74	748				
1955	Aug. 18, 1955	5.90	2,620	1961	Feb. 26, 1961	5.54	2,190

5845. Little Gunpowder Falls at Laurel Brook, Md.

Location.--Lat 39°30'18", long 76°25'56", on right bank 700 ft upstream from Laurel Brook, 0.4 mile southwest of Laurel Brook railroad station, Harford County, 1 mile downstream from Maryland & Pennsylvania Railroad bridge, and 5 miles southwest of Bel Air.

Drainage area.--36.1 sq mi.

Gage.--Recording. Datum of gage is 261.43 ft above mean sea level (city of Baltimore bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 2,300 cfs and extended on basis of slope-area measurements at 2,970, 3,100, 3,380, and 9,200 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 1,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Nov. 16, 1926	9.3	7,800	1944	Oct. 26, 1943	5.04	1,660
	Apr. 22, 1927	6.54	3,880		Nov. 9, 1943	7.02	4,050
1928	Oct. 12, 1927	5.36	2,340		Jan. 4, 1944	6.04	2,570
	Nov. 17, 1927	4.82	1,680	1945	Jan. 1, 1945	6.14	2,730
	June 6, 1928	6.36	3,740		July 19, 1945	7.34	4,580
	June 9, 1928	7.05	4,580	1946	July 23, 1946	5.41	1,680
	June 14, 1928	9.64	8,220		Aug. 6, 1946	5.12	1,400
	July 22, 1928	4.69	1,570	1947	June 7, 1947	6.02	2,490
	Aug. 18, 1928	8.69	6,960	1948	Jan. 1, 1948	5.34	1,630
	Aug. 22, 1928	5.59	2,660		May 30, 1948	6.07	2,570
1929	Feb. 7, 1929	4.55	1,410	1949	July 13, 1949	5.13	1,440
	Feb. 26, 1929	4.66	1,520	1950	May 23, 1950	5.45	1,740
1930	Oct. 2, 1929	4.85	1,740		Sept. 11, 1950	6.20	2,810
	Oct. 22, 1929	5.90	3,050	1951	Nov. 25, 1950	5.29	1,580
	Apr. 7, 1930	4.54	1,410		Dec. 4, 1950	5.58	1,910
1931	July 20, 1931	4.22	1,100		Feb. 7, 1951	5.37	1,630
1932	Mar. 28, 1932	5.1	2,030		Apr. 12, 1951	5.11	1,400
1933	Nov. 1, 1932	4.87	1,710		July 4, 1951	6.62	3,450
	Aug. 23, 1933	10.3	9,200		Sept. 14, 1951	6.10	2,650
1934	Sept. 8, 1934	6.79	4,400	1952	Mar. 11, 1952	6.20	2,810
	Sept. 17, 1934	7.6	5,520		May 26, 1952	6.56	3,390
1935	July 10, 1935	4.65	1,560		July 9, 1952	6.05	2,570
1936	Jan. 3, 1936	5.58	1,820		July 16, 1952	5.22	1,510
	Mar. 11, 1936	5.76	2,270		Sept. 1, 1952	8.25	5,920
1937	Feb. 22, 1937	6.15	3,600	1953	Nov. 21, 1952	6.20	2,810
	Apr. 26, 1937	5.07	1,660		Jan. 9, 1953	5.16	1,450
	July 5, 1937	5.63	2,590		Mar. 24, 1953	5.1	1,400
	Aug. 11, 1937	6.85	4,740	1954	Mar. 1, 1954	4.13	755
	Aug. 22, 1937	5.46	2,240	1955	Aug. 13, 1955	6.57	3,400
	Aug. 27, 1937	5.35	2,080		Aug. 18, 1955	6.23	2,860
1938	Oct. 23, 1937	5.67	2,590	1956	Oct. 14, 1955	5.56	1,860
	Nov. 13, 1937	5.71	2,680		July 21, 1956	5.55	1,850
	July 21, 1938	5.29	2,000	1957	Nov. 2, 1956	5.99	2,470
1939	Jan. 30, 1939	5.43	2,240	1958	Dec. 20, 1957	5.19	1,480
	Apr. 26, 1939	5.76	2,780		Jan. 22, 1958	5.38	1,660
	June 14, 1939	5.37	2,080		Jan. 25, 1958	6.18	2,780
1940	May 20, 1940	6.34	3,370		Feb. 27, 1958	5.69	2,030
1941	June 23, 1941	4.93	1,540	1959	Sept. 2, 1959	5.1	1,400
1942	Feb. 7, 1942	4.86	1,430	1960	May 8, 1960	5.33	1,610
	July 11, 1942	5.14	1,790		Sept. 12, 1960	6.48	3,260
	Aug. 9, 1942	4.86	1,430	1961	Apr. 13, 1961	4.19	785
1943	Oct. 26, 1942	4.84	1,430				
	May 21, 1943	5.38	2,160				

5855. Cranberry Branch near Westminster, Md.

Location.--Lat 39°35'35", long 76°58'05", on left bank 80 ft upstream from small wooden bridge, half a mile upstream from mouth, and 1.8 miles north-east of Westminster, Carroll County.

Drainage area.--3.29 sq mi.

Gage.--Recording. Altitude of gage is 670 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 200 cfs.

Bankfull stage.--3 ft.

Remarks.--Base for partial-duration series, 80 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	July 12, 1949	5.2	a750	1955	Aug. 13, 1955	4.17	263
1950	Mar. 22, 1950	3.10	84	1956	July 4, 1956	3.70	136
	Aug. 30, 1950	3.30	97		July 21, 1956	4.00	200
	Sept. 10, 1950	4.17	263	1957	Apr. 6, 1957	3.00	80
1951	Nov. 25, 1950	3.89	170				
	Dec. 4, 1950	4.27	303	1958	Oct. 7, 1957	3.51	115
	Feb. 7, 1951	3.62	126		Jan. 25, 1958	3.75	144
	July 4, 1951	5.14	720		Feb. 27, 1958	3.70	136
1952	May 11, 1952	3.85	162	1959	May 19, 1959	4.66	480
	May 25, 1952	3.52	116		July 20, 1959	3.50	114
	June 23, 1952	3.88	169				
	Sept. 1, 1952	3.85	162	1960	July 11, 1960	3.01	80
1953	Nov. 21, 1952	3.98	195		Aug. 10, 1960	3.26	95
	Mar. 24, 1953	3.08	83	1961	June 14, 1961	2.75	74
1954	Mar. 1, 1954	3.0	75				

a Annual peak only.

5860. North Branch Patapsco River at Cedarhurst, Md.

Location.--Lat 39°30'00", long 76°53'00", on left bank at downstream side of private footbridge at Cedarhurst, Carroll County, 0.8 mile downstream from Roaring Run and 8 miles southeast of Westminster.

Drainage area.--56.6 sq mi.

Gage.--Recording. Altitude of gage is 425 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,700 cfs and extended on basis of logarithmic plotting.

Bankfull stage.--10 ft.

Remarks.--Base for partial-duration series, 1,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	Nov. 28, 1945	5.72	1,600	1949	July 12, 1949	7.82	2,790
	May 18, 1946	7.13	2,370				
	June 2, 1946	7.37	2,550	1950	Mar. 23, 1950	4.92	1,200
	Aug. 6, 1946	8.33	3,130				
	Aug. 18, 1946	8.20	3,060	1951	Nov. 25, 1950	5.52	1,500
	Sept. 23, 1946	6.58	2,070		Dec. 4, 1950	7.20	2,430
1947	June 7, 1947	5.63	1,550		Feb. 7, 1951	6.84	2,000
	July 19, 1947	5.31	1,400		June 13, 1951	5.53	1,270
					July 4, 1951	9.59	3,510
1948	Nov. 12, 1947	5.08	1,300	1952	Apr. 27, 1952	6.08	1,510
	Jan. 1, 1948	6.84	2,190		May 11, 1952	6.02	1,470
	Feb. 14, 1948	a6.64	1,400		May 25, 1952	7.40	2,120
	May 29, 1948	b7.04	1,950		Sept. 1, 1952	8.38	2,700

a Backwater from ice.

b Backwater from temporary dam below control.

Peak stages and discharges of North Branch Patapsco River at Cedarhurst, Md.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Nov. 21, 1952	7.90	2,400	1957	Oct. 23, 1956	4.72	958
	Mar. 24, 1953	6.00	1,470		Dec. 26, 1957	5.44	1,240
	Aug. 8, 1953	5.81	1,390	1958	Jan. 25, 1958	7.30	2,060
1954	Dec. 7, 1953	5.44	1,250		Feb. 27, 1958	7.37	2,100
1955	Feb. 7, 1955	6.25	1,570	1959	May 19, 1959	6.87	1,860
	Aug. 13, 1955	10.38	4,130	1960	July 10, 1960	4.83	1,240
1956	Oct. 14, 1955	6.37	1,620		July 13, 1960	4.78	1,220
	July 4, 1956	5.80	1,390	1961	Feb. 25, 1961	4.35	1,020
	July 21, 1956	9.47	3,420				

5865. North Branch Patapsco River near Reisterstown, Md.

Location.--Lat 39°26'31", long 76°53'14", on left bank at upstream side of bridge on Louisville-Delight highway, 600 ft upstream from Cooks Branch and 3½ miles southwest of Reisterstown, Baltimore County.

Drainage area.--91.0 sq mi.

Gage.--Recording. Datum of gage is 344.35 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 2,400 cfs and extended on basis of velocity-area study at 11,000 cfs.

Bankfull stage.--8 ft.

Remarks.--Base for partial-duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Oct. 4, 1927	5.57	1,530	1938	Oct. 23, 1937	7.26	2,350
	Oct. 18, 1927	5.61	1,530		Nov. 13, 1937	10.7	5,710
	Feb. 14, 1928	6.06	1,780	1939	Jan. 30, 1939	6.15	1,800
	Apr. 28, 1928	5.74	1,580	1940	Apr. 8, 1940	5.9	1,650
	June 6, 1928	5.65	1,530		Apr. 20, 1940	6.7	2,050
	June 8, 1928	5.72	1,580		Sept. 25, 1940	7.37	2,400
	July 12, 1928	6.18	1,830	1941	Nov. 26, 1941	4.43	968
	Aug. 17, 1928	5.83	1,630		Mar. 16, 1941	4.43	968
1929	Feb. 27, 1929	6.56	2,030		Apr. 5, 1941	4.45	968
	Feb. 28, 1929	5.81	1,630	1942	Aug. 9, 1942	7.08	2,260
	June 20, 1929	6.37	1,930		Aug. 14, 1942	8.67	3,290
	June 22, 1929	7.00	2,230	1943	Oct. 16, 1942	6.40	1,870
1930	Oct. 2, 1929	7.5	2,500		Oct. 26, 1942	6.11	1,720
	Apr. 7, 1930	5.63	1,530	1944	Nov. 9, 1943	10.70	5,100
1931	Aug. 10, 1931	5.25	1,340		Jan. 4, 1944	10.87	5,300
1932	Mar. 28, 1932	5.70	1,550		Mar. 13, 1944	5.7	1,520
1933	Nov. 1, 1932	6.42	1,900	1945	July 18, 1945	7.35	2,440
	Apr. 17, 1933	5.58	1,500		July 19, 1945	6.08	1,720
	Aug. 24, 1933	14.6	11,000	1946	Nov. 28, 1945	6.67	2,040
1934	Mar. 3, 1934	6.50	1,950		May 18, 1946	8.40	3,080
	Sept. 17, 1934	11.55	6,880		June 2, 1946	9.96	4,400
1935	Sept. 4, 1935	7.1	2,250		July 20, 1946	5.74	1,520
1936	Jan. 3, 1936	5.80	1,600		Aug. 7, 1946	9.94	4,310
	Feb. 25, 1936	7.95	-		Aug. 18, 1946	8.73	3,290
	Feb. 26, 1936	7.80	2,640		Sept. 23, 1946	7.04	2,200
	Feb. 27, 1936	6.78	2,100	1947	June 8, 1947	4.91	1,120
	Mar. 11, 1936	6.32	1,850	1948	Jan. 1, 1948	7.90	2,740
	Aug. 26, 1936	6.05	1,700		Feb. 14, 1948	6.86	2,140
1937	Feb. 22, 1937	6.70	2,050		May 30, 1948	7.04	2,200
	Apr. 26, 1937	7.9	2,700		June 19, 1948	7.10	2,260
	June 22, 1937	6.10	1,750				
	July 31, 1937	6.50	1,950				

a Backwater from ice.

Peak stages and discharges of North Branch Patapsco River
near Reisterstown, Md.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Dec. 30, 1948	5.90	1,620	1951	July 5, 1951	7.70	2,620
	Jan. 6, 1949	5.88	1,620				
	July 12, 1949	8.05	2,800	1952	Apr. 27, 1952	7.60	2,440
1950	Mar. 23, 1950	5.83	1,570		May 11, 1952	6.80	2,090
1951	Nov. 25, 1950	6.34	1,820		May 26, 1952	9.20	3,680
	Dec. 4, 1950	7.32	2,360		Sept. 1, 1952	8.2	2,940
	Feb. 7, 1951	7.81	2,680	1953	Nov. 22, 1952	9.2	3,680
	June 13, 1951	6.32	1,820		Mar. 24, 1953	6.8	2,090

5870. North Branch Patapsco River near Marriottsville, Md.

Location.--Lat 39°21'56", long 76°53'06", on left bank at downstream side of Highway bridge, 0.9 mile downstream from Liberty Dam, 1.2 miles northeast of Marriottsville, Howard County, and 2.3 miles upstream from confluence with South Branch.

Drainage area.--165 sq mi.

Gage.--Recording. Datum of gage is 269.78 ft above mean sea level (city of Baltimore bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 2,800 cfs and extended above on basis of slope-area measurement at 8,230 cfs and velocity-area study at 19,500 cfs.

Bankfull stage.--15 to 17 ft.

Remarks.--Flow regulated by Liberty Reservoir (usable capacity, 42,070,000,000 gal) since July 22, 1954. Diversion from Liberty Reservoir for municipal supply of Baltimore since Feb. 26, 1953. Base for partial-duration series, 2,200 cfs. Only annual peaks are shown subsequent to 1953.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Oct. 2, 1929	-	a3,600	1945	July 18, 1945	10.87	4,320
	Apr. 6, 1930	7.65	2,380		July 31, 1945	14.46	7,650
1931	Aug. 10, 1931	6.50	1,590	1946	Nov. 28, 1945	8.64	2,720
1932	Mar. 28, 1932	7.2	2,060		May 18, 1946	8.82	2,840
	June 15, 1932	7.2	2,060		June 2, 1946	14.00	7,100
1933	Nov. 1, 1932	8.23	2,650		Aug. 7, 1946	11.68	4,960
	Apr. 17, 1933	7.56	2,260		Aug. 18, 1946	7.83	2,240
	Aug. 24, 1933	20.8	19,500		Sept. 23, 1946	9.32	3,190
1934	Mar. 3, 1934	10.69	4,580	1947	May 19, 1947	7.09	1,820
	Sept. 17, 1934	14.0	7,950	1948	Jan. 1, 1948	10.37	3,960
1935	June 19, 1935	7.80	2,380		Feb. 14, 1948	9.63	3,400
	Aug. 13, 1935	8.21	2,640		May 30, 1948	8.19	2,480
	Sept. 4, 1935	8.3	2,710		June 19, 1948	8.22	2,480
1936	Feb. 27, 1936	8.14	2,600		June 27, 1948	9.59	3,400
	Mar. 11, 1936	7.97	2,500	1949	Dec. 31, 1948	7.84	2,240
1937	Feb. 22, 1937	8.51	2,850		Jan. 6, 1949	8.12	2,420
	Apr. 26, 1937	9.8	3,840		July 13, 1949	8.60	2,720
	June 17, 1937	7.76	2,380	1950	Sept. 10, 1950	10.25	3,680
1938	Oct. 23, 1937	9.38	3,520	1951	Nov. 25, 1950	8.95	2,660
	Nov. 13, 1937	13.93	7,830		Dec. 4, 1950	9.31	2,870
	July 20, 1938	7.59	2,260		Feb. 7, 1951	9.32	2,870
1939	Jan. 30, 1939	8.73	2,780		June 14, 1951	9.14	2,730
1940	Apr. 8, 1940	8.29	2,540		July 5, 1951	8.63	2,380
	Apr. 20, 1940	9.07	3,050	1952	Apr. 27, 1952	12.24	5,260
	Sept. 25, 1940	8.09	2,420		May 12, 1952	9.66	3,150
1941	Nov. 27, 1940	6.53	1,470		May 26, 1952	13.10	6,150
	Apr. 5, 1941	6.51	1,470		Sept. 1, 1952	12.88	5,950
1942	Aug. 9, 1942	9.12	3,050	1953	Nov. 22, 1952	13.45	6,500
	Aug. 14, 1942	9.80	3,540	1954	May 4, 1954	7.77	1,870
1943	Oct. 16, 1942	8.01	2,360	1955	Aug. 13, 1955	3.56	138
	Dec. 30, 1942	7.79	2,240	1956	July 21, 1956	14.20	7,330
1944	Nov. 9, 1943	13.36	6,500		Aug. 6, 1957	5.57	855
	Jan. 4, 1944	13.38	6,500	1958	Feb. 28, 1958	6.60	1,280
				1959	Sept. 2, 1959	4.15	66
				1960	Feb. 18, 1960	3.74	38

a Estimated.

5875. South Branch Patapsco River at Henryton, Md.

Location.--Lat 39°21'05", long 76°54'50", on right bank at downstream side of bridge on State Highway 101 at Henryton, Carroll County, 1.3 miles upstream from Piney Run, 2.3 miles upstream from confluence with North Branch, and 3.2 miles southeast of Sykesville.

Drainage area.--64.4 sq mi.

Gage.--Recording. Datum of gage is 289.15 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,900 cfs and extended on basis of slope-area measurement at 2,710 cfs and contracted-opening measurements at 3,920 cfs and 12,100 cfs.

Bankfull stage.--6 ft.

Remarks.--Base for partial-duration series, 1,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Dec. 30, 1948	4.93	1,370	1953	Mar. 24, 1953	5.34	1,600
	Jan. 5, 1949	4.62	1,240	1954	May 3, 1954	4.18	1,070
	Mar. 23, 1949	4.72	1,280				
	May 15, 1949	7.10	2,400	1955	Feb. 7, 1955	5.87	1,810
1950	Mar. 23, 1950	4.69	1,300		June 11, 1955	5.13	1,500
	May 31, 1950	4.94	1,400		Aug. 13, 1955	10.12	3,920
	Sept. 10, 1950	7.88	2,920	1956	July 21, 1956	19.40	12,100
1951	Nov. 25, 1950	7.80	2,760				
	Dec. 4, 1950	5.46	1,680	1957	Sept. 13, 1957	7.65	2,600
	Feb. 7, 1951	6.14	1,980	1958	Dec. 20, 1957	-	(a)
	June 13, 1951	4.89	1,400		Dec. 26, 1957	7.99	2,760
	June 22, 1951	5.43	1,630		Jan. 25, 1958	6.20	1,940
1952	Apr. 27, 1952	9.00	3,580		June 26, 1958	5.43	1,630
	May 26, 1952	11.04	4,930	1959	Sept. 2, 1959	6.14	1,920
	June 4, 1952	5.07	1,480				
	July 9, 1952	4.77	1,350				
	Aug. 6, 1952	5.09	1,480	1960	June 15, 1960	3.52	750
	Sept. 1, 1952	8.24	3,100				
	Nov. 22, 1952	8.37	3,200	1961	Feb. 25, 1961	4.91	1,400
1953					Apr. 13, 1961	4.89	1,390

a Peak above base; discharge not determined.

5880. Piney Run near Sykesville, Md.

Location.--Lat 39°22'55", long 76°58'00", on left bank 75 ft downstream from bridge on State Highway 32, 1½ miles north of Sykesville, Carroll County, and 5½ miles upstream from mouth.

Drainage area.--11.4 sq mi.

Gage.--Recording prior to July 22, 1956; nonrecording July 22 to Nov. 25, 1956; recording Nov. 26, 1956, to Sept. 30, 1958; nonrecording thereafter. Altitude of gage is 450 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,200 cfs and extended on basis of slope-area measurements at 1,400 and 2,100 cfs and contracted-opening measurement at 7,380 cfs.

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 440 cfs. Only annual peaks are shown after 1958.

Peak stages and discharges of Piney Run near Sykesville, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	June 15, 1932	4.48	715	1946	Nov. 28, 1945	4.45	518
	Aug. 7, 1932	4.00	480		Dec. 5, 1945	4.35	475
1933	Nov. 1, 1932	3.98	471		June 2, 1946	5.36	972
	July 2, 1933	4.50	715		July 24, 1946	6.95	2,100
	Aug. 23, 1933	6.30	1,800		Aug. 6, 1946	6.04	1,420
					Sept. 23, 1946	5.78	1,240
1934	Mar. 3, 1934	a4.35	-	1947	May 19, 1947	4.71	630
	Mar. 3, 1934	4.14	543		June 8, 1947	5.31	945
	Sept. 16, 1934	5.8	1,460		Aug. 26, 1947	4.88	730
1935	June 18, 1935	4.34	635	1948	Jan. 1, 1948	b4.35	b475
	July 16, 1935	4.13	538		Feb. 14, 1948	a5.81	-
	July 20, 1935	4.44	690		Feb. 14, 1948	4.46	522
	Aug. 13, 1935	4.30	615		June 27, 1948	6.31	1,590
1936	Jan. 3, 1936	a4.16	-	1949	Mar. 23, 1949	4.49	536
	Jan. 3, 1936	3.99	476		May 15, 1949	4.64	608
	Feb. 27, 1936	3.96	462	1950	May 31, 1950	5.87	1,280
1937	Feb. 22, 1937	4.27	602		Sept. 10, 1950	5.76	1,210
	Apr. 26, 1937	4.20	570	1951	Nov. 25, 1950	4.64	608
	June 17, 1937	4.66	790		Dec. 4, 1950	4.36	479
	Aug. 12, 1937	4.34	635		Feb. 7, 1951	4.58	576
1938	Oct. 23, 1937	4.41	a665	1952	Apr. 27, 1952	4.87	705
	Oct. 28, 1937	4.10	525		May 25, 1952	6.16	1,480
	Nov. 13, 1937	5.52	1,280		Sept. 1, 1952	5.39	1,000
	July 20, 1938	4.67	790	1953	Nov. 21, 1952	5.07	808
	Aug. 1, 1938	3.93	449		Mar. 24, 1953	4.65	608
	Aug. 31, 1938	4.38	655	1954	May 3, 1954	3.80	275
1939	Jan. 30, 1939	4.31	647	1955	Feb. 6, 1955	a5.45	-
	June 13, 1939	4.23	598		Feb. 6, 1955	4.58	557
1940	Apr. 8, 1940	3.93	449		June 11, 1955	4.41	489
	Apr. 20, 1940	4.03	494		Aug. 13, 1955	5.95	1,230
	Sept. 25, 1940	4.10	528	1956	May 31, 1956	4.39	481
1941	Nov. 26, 1940	3.25	232		July 20, 1956	12.0	7,380
1942	June 13, 1942	4.50	550	1957	Sept. 13, 1957	5.70	1,080
	July 11, 1942	4.59	595	1958	Dec. 20, 1957	4.29	442
	Aug. 9, 1942	5.10	835		Jan. 25, 1958	4.92	704
1943	Oct. 18, 1942	4.40	500		Feb. 27, 1958	4.29	442
1944	Nov. 8, 1943	6.53	1,780	1959	June 5, 1959	4.38	477
	Jan. 3, 1944	4.98	818	1960	June 15, 1960	3.82	281
	June 24, 1944	4.98	818	1961	Feb. 25, 1961	4.20	410
1945	June 18, 1945	4.80	710				
	July 19, 1945	4.34	476				
	July 31, 1945	4.94	755				

a Backwater from ice.

b Estimated.

5885. Patapsco River at Woodstock, Md.

Location.--Lat 39°19'52", long 76°52'23", on upstream side of highway bridge at Woodstock, Howard County, and 1.7 miles downstream from confluence of North and South Branches.

Drainage area.--251 sq mi.

Gage.--Nonrecording. Altitude of gage is 240 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 5,500 cfs and extended by logarithmic plotting.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Patapsco River at Woodstock, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1897	Feb. 6, 1897	14.0	13,900	1904	Feb. 22, 1904	12.5	10,600
1898	Nov. 2, 1897	13.0	11,600	1905	Aug. 25, 1905	13.5	12,700
1899	Mar. 5, 1899	9.0	5,080	1906	Aug. 2, 1906	18.0	27,000
1902	Feb. 25, 1902	15.8	18,900	1907	Mar. 13, 1907	11.0	7,920
1903	June 29, 1903	16.0	19,500	1908	Feb. 26, 1908	17.0	23,000

5890. Patapsco River at Hollofield, Md.

Location.--Lat 39°18'36", long 76°47'39", on right bank at downstream side of highway bridge at Hollofield, Howard County, 0.3 mile downstream from Dogwood Run, and 3.0 miles north of Ellicott City.

Drainage area.--285 sq mi.

Gage.--Recording. Altitude of gage is 190 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--9 ft.

Remarks.--Flow regulated by Liberty Reservoir (usable capacity, 42,070,000,000 gal) since July 22, 1954. Base for partial-duration series, 2,900 cfs. Only annual peaks are shown after 1953.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	August 1933	19.5	-	1950	Mar. 23, 1950	5.58	4,060
					July 11, 1950	5.53	3,980
1944a	June 24, 1944	4.81	2,640		Sept. 10, 1950	7.71	7,590
1945	Dec. 12, 1944	4.93	3,030	1951	Nov. 25, 1950	6.43	5,380
	Jan. 1, 1945	5.67	4,220		Dec. 4, 1950	6.13	4,870
	July 18, 1945	9.01	9,700		Feb. 7, 1951	6.81	6,060
	July 19, 1945	5.91	4,540		June 14, 1951	5.65	4,060
	July 31, 1945	4.94	3,030	1952	Mar. 11, 1952	4.84	2,970
	Aug. 1, 1945	8.91	9,540		Apr. 14, 1952	4.79	2,900
1946	Nov. 28, 1945	6.16	5,040		Apr. 27, 1952	9.76	11,000
	Dec. 6, 1945	5.59	4,060		May 12, 1952	5.84	4,380
	May 18, 1946	6.22	5,040		May 26, 1952	10.69	12,300
	June 2, 1946	11.62	13,500		July 9, 1952	4.98	3,180
	July 20, 1946	5.85	4,380		Sept. 1, 1952	9.25	10,000
	July 23, 1946	5.93	4,540	1953	Nov. 22, 1952	9.72	10,800
	July 24, 1946	5.45	3,820		Jan. 9, 1953	4.96	3,110
	Aug. 7, 1946	8.12	8,260		Mar. 15, 1953	4.87	2,970
	Aug. 18, 1946	5.03	3,180		Mar. 24, 1953	5.22	3,460
	Sept. 24, 1946	6.47	5,550		Sept. 6, 1953	5.20	3,460
1947	May 19, 1947	5.89	4,540	1954	May 4, 1954	4.80	2,900
1948	Jan. 1, 1948	7.38	7,080	1955	Aug. 13, 1955	7.86	7,860
	Feb. 14, 1948	7.21	6,740	1956	July 21, 1956	15.88	19,000
	Feb. 17, 1948	4.85	2,970		Sept. 13, 1957	5.06	3,260
	May 30, 1948	4.94	3,110		Dec. 21, 1957	4.75	2,830
	June 19, 1948	5.86	4,540	1958	Sept. 2, 1959	4.76	2,840
	June 27, 1948	6.45	5,380	1959	Sept. 12, 1960	4.06	1,940
1949	Dec. 30, 1948	5.91	4,540	1960			
	Jan. 6, 1949	5.65	4,060	1961	Feb. 25 or Apr. 13, 1961	-	b2,200
	Jan. 28, 1949	5.22	3,460				
	Mar. 23, 1949	4.97	3,110				
	May 15, 1949	4.87	2,970				
	July 13, 1949	5.55	3,980				

a Partial year.

b About; gage height uncertain.

5893. Gwynns Falls at Villa Nova, Md.

Location.--Lat 39°20'46", long 76°44'04", on right bank at downstream side of bridge on Essex Road, 300 ft north of State Highway 26 (Liberty Road), in Villa Nova, Baltimore County, and 1.2 miles west of Baltimore city limits.

Drainage area.--32.5 sq mi.

Gage.--Recording. Altitude of gage is 360 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--12 ft.

Historical data.--Flood of July 21, 1956, is greatest known.

Remarks.--Base for partial-duration series, 540 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	July 21, 1956	12.6	5,270	1958	July 8, 1958	4.62	627
1957a/	Apr. 5, 1957	4.57	615	1959	Sept. 2, 1959	4.12	511
1958	Dec. 20, 1957	5.22	775	1960	Feb. 18, 1960	4.95	708
	Dec. 26, 1957	5.03	728		May 8, 1960	6.32	1,080
	Jan. 25, 1958	6.08	1,000		Aug. 10, 1960	5.00	720
	Feb. 28, 1958	5.72	900		Sept. 12, 1960	7.00	1,280
	Apr. 6, 1958	4.46	589	1961	Apr. 13, 1961	5.40	771
	May 5, 1958	4.54	608				
	June 26, 1958	4.44	584				

a Partial year.

5895. Sawmill Creek at Glen Burnie, Md.

Location.--Lat 39°10'12", long 76°37'51", on left bank 300 ft upstream from bridge on State Highway 301 and 0.5 mile northwest of Glen Burnie, Anne Arundel County.

Drainage area.--5.1 sq mi, approximately.

Gage.--Recording. Datum of gage is 26.07 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 72 cfs and extended on basis of contracted-opening measurement at 157 cfs.

Bankfull stage.--4.7 ft.

Remarks.--Base for partial-duration series, 30 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	August 1933	4	-	1949	Mar. 23, 1949	2.46	30
1944a/	Aug. 2, 1944	2.60	39		May 23, 1949	2.79	54
	Sept. 13, 1944	2.70	47	1950	June 14, 1950	2.47	31
1945	July 18, 1945	2.55	36		Aug. 20, 1950	b3.31	74
1946	July 22, 1946	2.46	30		Sept. 11, 1950	2.86	55
1947	June 14, 1947	2.38	24	1951	June 10, 1950	2.66	44
	June 17, 1947	2.38	24		Sept. 2, 1950	3.27	82
1948	Nov. 3, 1947	2.47	30		Sept. 14, 1950	2.61	40
	Jan. 1, 1948	2.48	31	1952	Nov. 1, 1951	2.62	41
	June 16, 1948	2.48	31		Nov. 3, 1951	2.59	39
	July 1, 1948	2.47	30		Nov. 7, 1951	3.10	73
	Aug. 1, 1948	2.67	45		Dec. 21, 1951	2.75	51
	Aug. 12, 1948	2.48	31		Feb. 4, 1952	2.67	45
1949	Oct. 5, 1948	2.51	33		Apr. 27, 1952	3.08	72
	Dec. 4, 1948	2.48	31		May 26, 1952	2.86	59
	Jan. 5, 1949	2.47	30		June 17, 1952	2.48	31
					July 8, 1952	3.58	73
					Aug. 22, 1952	2.94	42
					Sept. 1, 1952	4.77	157

a Partial year.

b Backwater from construction.

5900. North River near Annapolis, Md.

Location.--Lat 38°59'09", long 76°37'21", on left bank 500 ft downstream from bridge on State Highway 450, 0.8 mile upstream from confluence with Bacon Ridge Branch, and 7 miles west of Annapolis, Anne Arundel County.

Drainage area.--8.5 sq mi, approximately.

Gage.--Nonrecording prior to Nov. 2, 1933; recording thereafter. Altitude of gage is 10 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 260 cfs and extended on basis of velocity-area studies.

Bankfull stage.--2 ft.

Remarks.--Base for partial-duration series, 75 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932a	May 13, 1932	2.35	104	1948	Nov. 3, 1947	2.64	244
					Jan. 1, 1948	2.18	80
1933	July 3, 1933	2.30	88		Feb. 14, 1948	2.28	109
	Aug. 23, 1933	2.40	120		June 20, 1948	2.30	112
1934	Mar. 5, 1934	2.37	110		Aug. 1, 1948	2.19	81
	Sept. 8, 1934	2.51	171		Aug. 4, 1948	2.07	80
	Sept. 16, 1934	2.43	134		Aug. 12, 1948	2.06	79
1935	Apr. 9, 1935	2.46	147	1949	Oct. 6, 1948	2.04	76
					Nov. 29, 1948	2.10	83
1936	Jan. 3, 1936	(b)	(b)		Dec. 4, 1948	2.52	181
	Feb. 14, 1936	2.36	107		May 3, 1949	2.52	181
	Feb. 25, 1936	2.32	94	1950	June 21, 1950	2.23	101
	May 4, 1936	2.27	80				
1937	Jan. 20, 1937	2.32	94	1951	June 10, 1951	2.20	96
	Apr. 26, 1937	2.78	342		June 14, 1951	2.33	118
	Aug. 27, 1937	2.55	195	1952	Nov. 7, 1951	2.30	112
1938	Oct. 23, 1937	2.31	91		Dec. 21, 1951	2.54	192
	Oct. 28, 1937	2.43	134		Apr. 27, 1952	2.44	148
	Nov. 13, 1937	2.76	329		Aug. 13, 1952	2.34	120
1939	Jan. 30, 1939	2.36	107		Sept. 1, 1952	2.87	404
	Mar. 16, 1939	2.32	94	1953	Nov. 21, 1952	2.38	129
	June 14, 1939	2.40	120		Mar. 26, 1953	2.08	81
	Aug. 19, 1939	2.22	84		July 23, 1953	2.19	95
1940	Apr. 20, 1940	2.45	139		Aug. 9, 1953	2.54	192
	May 21, 1940	2.30	97		Sept. 6, 1953	2.22	99
	July 4, 1940	2.32	101	1954	May 4, 1954	2.29	110
	Sept. 1, 1940	2.33	103	1955	Aug. 13, 1955	3.22	678
1941	Apr. 5, 1941	1.96	59		Aug. 18, 1955	2.27	94
1942	Aug. 9, 1942	2.76	329	1956	Oct. 14, 1955	2.29	97
1943	Oct. 16, 1942	2.58	213		July 21, 1956	2.58	163
1944	Oct. 26, 1943	2.34	106	1957	Nov. 2, 1956	1.86	50
	Jan. 4, 1944	2.48	156	1958	Mar. 20, 1958	2.14	77
	Aug. 2, 1944	6.22	5,000		July 9, 1958	2.34	105
	Sept. 14, 1944	2.24	88		July 13, 1958	2.13	76
1945	May 29, 1945	2.27	92		July 23, 1958	2.62	183
	June 22, 1945	2.33	104		Aug. 25, 1958	2.64	196
	July 18, 1945	2.51	171	1959	Aug. 8, 1959	2.65	202
	July 29, 1945	2.57	207	1960	May 9, 1960	2.29	97
	Sept. 15, 1945	2.14	75		July 30, 1960	2.17	80
	Sept. 18, 1945	2.42	129		Aug. 16, 1960	2.30	98
1946	Dec. 6, 1945	2.37	111		Sept. 12, 1960	2.60	170
	May 26, 1946	2.23	88	1961	Apr. 13, 1961	2.57	160
1947	June 14, 1947	2.42	129				

a Partial year.

b Stage and discharge unknown; probably maximum for year.

5905. Bacon Ridge Branch at Chesterfield, Md.

Location.--Lat 39°00'07", long 76°36'53", on left bank 50 ft downstream from highway bridge, 0.5 mile east of Chesterfield, Anne Arundel County, 1.4 miles upstream from confluence with North River, and 6.8 miles northwest of Annapolis.

Drainage area.--6.92 sq mi.

Gage.--Recording. Altitude of gage is 15 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 140 cfs and extended on basis of velocity-area studies and logarithmic plotting.

Bankfull stage.--2 ft.

Remarks.--Base for partial-duration series, 120 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Oct. 26, 1943	2.99	125	1948	Aug. 1, 1948	3.05	146
	Jan. 4, 1944	3.24	213		Aug. 3, 1948	3.39	271
	Aug. 2, 1944	5.49	2,100		Aug. 12, 1948	2.99	125
1945	May 29, 1945	4.16	708	1949	Dec. 4, 1948	3.34	251
	June 22, 1945	3.32	243		June 18, 1949	3.08	156
	July 18, 1945	3.95	575	1950	June 21, 1950	2.97	119
	July 29, 1945	3.28	228				
1946	Dec. 6, 1945	3.15	180	1951	June 14, 1951	3.31	239
	May 26, 1946	3.12	170		Sept. 2, 1951	3.29	231
1947	June 14, 1947	3.07	152	1952	Nov. 7, 1951	3.43	288
1948					Dec. 21, 1951	3.68	410
	Nov. 3, 1947	3.87	522		Apr. 27, 1952	3.20	198
	Jan. 1, 1948	3.07	152		Aug. 13, 1952	3.42	284
	Feb. 14, 1948	3.05	146		Sept. 1, 1952	3.83	498
	May 31, 1948	3.14	177		Sept. 3, 1952	3.36	259
	June 20, 1948	3.21	202				

PATUXENT RIVER BASIN

5910. Patuxent River near Unity, Md.

Location.--Lat 39°14'18", long 77°03'23", on right bank at downstream side of bridge on State Highway 97, 0.6 mile upstream from Cattail Creek, 0.8 mile upstream from Triadelphia Reservoir, and 1.1 miles northeast of Unity, Montgomery County.

Drainage area.--34.8 sq mi.

Gage.--Nonrecording prior to Aug. 14, 1946; recording thereafter. Datum of gage is 364.76 ft above mean sea level (Washington Suburban Sanitary Commission bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 870 cfs and extended on basis of slope-area measurement at 8,060 cfs.

Bankfull stage.--6 ft.

Remarks.--Base for partial-duration series, 770 cfs.

Peak stages and discharges of Patuxent River near Unity, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	June 21, 1945	6.36	1,050	1952	May 25, 1952	8.66	3,200
	July 18, 1945	5.95	890		June 4, 1952	5.59	1,000
	July 27, 1945	9.01	2,650		July 9, 1952	5.94	1,180
	Aug. 1, 1945	13.58	8,060		Aug. 6, 1952	5.45	932
					Sept. 1, 1952	8.95	3,490
1946	Nov. 28, 1945	6.32	1,010		Nov. 22, 1952	8.09	2,220
	Dec. 6, 1945	6.27	1,010	1953	Mar. 24, 1953	5.84	883
	June 2, 1946	8.02	1,920		Mar. 26, 1953	5.79	861
1947	Aug. 21, 1947	6.14	1,300		Aug. 8, 1953	5.62	793
1948	Jan. 1, 1948	5.73	1,080	1954	Mar. 1, 1954	4.78	494
	Feb. 14, 1948	5.52	955				
1949	Dec. 4, 1948	5.10	776	1955	Aug. 13, 1955	8.06	2,200
	Dec. 30, 1948	5.81	1,100		Aug. 18, 1955	5.82	874
	Jan. 6, 1949	5.59	1,000	1956	July 21, 1956	14.35	10,700
	Mar. 23, 1949	5.24	842				
1950	Mar. 23, 1950	6.03	1,240	1957	Feb. 10, 1957	3.75	240
1951	Nov. 25, 1950	6.99	1,830	1958	Dec. 20, 1957	8.17	2,290
	Dec. 4, 1950	6.16	1,300		Jan. 14, 1958	6.35	1,120
	Feb. 7, 1951	5.83	1,120		Jan. 25, 1958	6.20	1,060
	June 10, 1951	5.79	1,100	1959	Sept. 3, 1959	5.57	788
	June 13, 1951	5.58	1,000				
	June 22, 1951	5.33	888	1960	Feb. 19, 1960	4.51	446
	June 30, 1951	5.22	820				
1952	Apr. 27, 1952	6.70	1,630	1961	Apr. 13, 1961	5.67	828

5915. Cattail Creek at Roxbury Mills, Md.

Location.--Lat 39°15'17", long 77°02'43", on left bank 0.2 mile downstream from unnamed tributary and highway bridge, 0.5 mile southeast of Roxbury Mills, Howard County, and 1.3 miles upstream from mouth.

Drainage area.--27.7 sq mi.

Gage.--Nonrecording prior to Oct. 19, 1945; recording thereafter. Altitude of gage is 370 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 350 cfs and extended above on basis of slope-area measurement at 10,100 cfs.

Bankfull stage.--7 ft.

Remarks.--Base for partial-duration series, 410 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Jan. 1, 1945	6.56	654	1951	Dec. 4, 1950	6.45	626
	June 21, 1945	5.10	444		Feb. 7, 1951	6.22	598
	July 18, 1945	5.86	556		June 10, 1951	5.84	542
	July 19, 1945	5.10	444		June 13, 1951	6.12	584
	July 26, 1945	5.24	458	1952	Apr. 27, 1952	6.71	668
	July 30, 1945	5.55	514		May 11, 1952	5.74	528
	Aug. 1, 1945	8.97	1,010		May 25, 1952	9.29	1,060
1946	Nov. 28, 1945	5.92	556		June 5, 1952	5.80	542
	Dec. 6, 1945	6.10	584		July 8, 1952	5.67	528
	June 2, 1946	7.87	845		Aug. 6, 1952	5.22	458
	Aug. 6, 1946	5.06	444		Sept. 1, 1952	7.86	845
1947	June 7, 1947	5.40	486	1953	Nov. 21, 1952	7.49	785
	Aug. 16, 1947	7.00	710		Mar. 24, 1953	6.56	620
1948	Nov. 12, 1947	5.28	472		Mar. 26, 1953	6.05	540
	Jan. 1, 1948	6.43	626		May 16, 1953	5.08	420
	Feb. 14, 1948	6.74	668		May 31, 1953	5.04	420
1949	Dec. 30, 1948	5.98	570		June 1, 1953	5.49	470
	Jan. 5, 1949	5.90	556	1954	Dec. 14, 1953	5.19	436
	Mar. 23, 1949	5.50	500	1955	Feb. 7, 1955	6.74	600
1950	Mar. 23, 1950	6.08	584		Aug. 13, 1955	8.40	920
	May 31, 1950	4.91	417		Aug. 18, 1955	4.99	429
	Sept. 10, 1950	7.18	740	1956	Oct. 14, 1955	5.18	455
1951	Nov. 25, 1950	7.80	830		Mar. 14, 1956	5.08	441
					July 21, 1956	14.19	10,100

5920. Patuxent River near Burtonsville, Md..

Location.--Lat 39°07'47", long 76°55'04", 150 ft upstream from highway bridge, 1½ miles northeast of Burtonsville, Montgomery County, 4 miles northwest of Laurel, and 8 miles downstream from Hawlings River.

Drainage area.--127 sq mi.

Gage.--Nonrecording at site 150 ft downstream at datum 1.29 ft higher prior to July 23, 1914; recording thereafter. At site 230 ft downstream July 23, 1914, to Sept. 30, 1929. Datum of gage is 232.79 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Prior to July 23, 1914, defined by current-meter measurements below 700 cfs and extended by logarithmic plotting; defined by current-meter measurements below 4,800 cfs and extended on basis of velocity-area study at 11,000 cfs thereafter.

Bankfull stage.--10 ft.

Remarks.--Staff gage read by U.S. Army Engineers July 21, 1911, to June 15, 1912. Flow regulated by Triadelphia Lake (capacity, 3,380,000,000 gal) since June 27, 1942. Base for partial-duration series, 1,600 cfs. Only annual peaks are shown 1911-1914.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1911	Aug. 31, 1911	12.45	3,870	1927	Apr. 22, 1927	8.76	1,860
1912	Feb. 22, 1912	7.00	1,790	1928	Apr. 28, 1928	8.57	1,790
1913	Aug. 3, 1913	7.6	2,010		June 6, 1928	9.24	2,030
1914	Apr. 26, 1914	5.6	1,320		June 15, 1928	9.62	2,170
1915	Jan. 7, 1915	7.66	1,660		June 19, 1928	15.30	5,480
	Jan. 13, 1915	14.58	5,100		Aug. 17, 1928	9.65	2,190
	Feb. 2, 1915	12.42	3,990	1929	Apr. 16, 1929	8.91	1,910
	July 19, 1915	8.15	2,150		June 22, 1929	9.28	2,060
	Aug. 4, 1915	7.26	1,600	1930	Apr. 7, 1930	8.67	1,820
	Aug. 12, 1915	8.58	2,190	1931	July 21, 1931	12.23	3,180
	Aug. 30, 1915	8.61	2,200	1932	Mar. 28, 1932	8.20	1,570
1916	July 25, 1916	8.75	2,260	1933	Nov. 1, 1932	8.40	1,640
1917	Mar. 9, 1917	7.54	1,720		July 3, 1933	12.72	3,900
	June 7, 1917	8.38	2,100		Aug. 24, 1933	21.7	11,000
	July 10, 1917	8.13	1,980	1934	Mar. 4, 1934	10.82	2,920
	July 13, 1917	10.45	3,060		Sept. 17, 1934	11.81	3,230
1918	Jan. 12, 1918	9.84	2,750		Sept. 30, 1934	8.93	2,090
	Feb. 14, 1918	8.78	2,240	1935	Apr. 30, 1935	7.84	1,660
	Feb. 20, 1918	8.00	1,880		May 7, 1935	9.39	2,280
	Mar. 21, 1918	7.51	1,670		Sept. 5, 1935	8.69	2,000
1919	Apr. 12, 1919	7.47	1,650	1936	Jan. 4, 1936	10.99	3,000
	May 22, 1919	11.6	3,650		Jan. 9, 1936	8.38	1,870
	July 16, 1919	8.03	1,860		Feb. 26, 1936	9.33	2,250
	July 22, 1919	8.06	1,870		Aug. 30, 1936	7.95	1,700
	Aug. 17, 1919	9.30	2,450	1937	Dec. 7, 1936	7.87	1,670
1920	Jan. 25, 1920	8.17	1,950		Feb. 22, 1937	8.13	1,770
	Jan. 28, 1920	7.70	1,750		Apr. 26, 1937	11.95	3,500
	Feb. 4, 1920	8.29	2,010		June 18, 1937	10.05	2,570
	Feb. 15, 1920	8.01	1,880		Aug. 12, 1937	9.12	2,170
	Mar. 5, 1920	11.6	3,650		Aug. 23, 1937	9.88	2,500
	July 3, 1920	9.21	2,060		Aug. 26, 1937	10.75	2,890
	Aug. 18, 1920	8.54	1,810	1938	Oct. 23, 1937	11.95	3,480
1921	May 12, 1921	7.93	1,590		Oct. 28, 1937	8.6	1,960
1922	July 19, 1922	7.35	1,460		Nov. 13, 1937	12.42	3,710
1923	July 31, 1923	-	(a)	1939	Jan. 30, 1939	8.66	2,000
1924	Jan. 25, 1924	7.97	1,610		Feb. 3, 1939	7.92	1,690
	Feb. 20, 1924	8.08	1,650	1940	Apr. 9, 1940	8.7	1,960
	Mar. 29, 1924	9.80	2,270		Apr. 20, 1940	9.5	2,300
	Apr. 6, 1924	9.80	2,270	1941	Nov. 27, 1940	6.65	1,170
	May 12, 1924	8.03	1,630	1942	Aug. 10, 1942	8.02	b1,720
	Aug. 25, 1924	8.26	1,640	1943	Oct. 15, 1942	10.38	b2,730
	Sept. 30, 1924	12.90	3,390		Oct. 26, 1942	8.80	b2,040
1925	Feb. 10, 1925	8.5	1,730	1944	Jan. 4, 1944	7.97	1,720
1926	Jan. 18, 1926	8.04	1,610				
	Feb. 19, 1926	8.09	1,630				
	July 5, 1926	9.89	2,270				
	Sept. 5, 1926	15.27	5,480				
	Sept. 24, 1926	12.22	3,200				
1927	Nov. 16, 1926	12.40	3,270				

a Unknown.

b No appreciable storage in Triadelphia Lake.

5925. Patuxent River near Laurel, Md.

Location.--Lat 39°06'56", long 76°52'27", on right bank at Rocky Gorge pumping station, 600 ft downstream from Rocky Gorge Dam, 0.7 mile upstream from Walker Branch, and 1.3 miles northwest of Laurel, Prince Georges County.

Drainage area.--132 sq. mi. At site used prior to Oct. 1, 1955, 133 sq. mi.

Gage.--Recording prior to Oct. 1, 1955; nonrecording Oct. 1, 1955, to Jan. 27, 1957; recording thereafter. At site 0.3 mile downstream at different datum prior to Oct. 1, 1955. At present site at datum 1.2 ft lower Oct. 1, 1955, to Sept. 30, 1956. Altitude of gage is 160 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--Not subject to overflow.

Remarks.--Flow regulated by Triadelphia Reservoir (usable capacity, 6,580,000,000 gal), and since March 1954, by Rocky Gorge Reservoir (usable capacity, 5,920,000,000 gal). Diversion at Rocky Gorge pumping station for municipal supply of Washington Suburban Sanitary District. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Aug. 1, 1945	8.78	3,430	1954	Dec. 14, 1953	3.23	620
				1955	Aug. 13, 1955	10.43	5,160
1946	Dec. 6, 1945	5.38	1,640				
1947	May 1, 1947	4.52	1,300	1956	July 21, 1956	18.9	11,800
1948	Feb. 15, 1948	5.37	1,640	1957	Apr. 6, 1957	8.01	1,980
1949	Dec. 30, 1948	6.44	2,000	1958	July 8, 1958	12.26	5,130
1950	Mar. 23, 1950	5.41	1,640	1959	Mar. 12, 1959	3.47	168
				1960	Apr. 5, 1960	5.98	992
1951	Nov. 25, 1950	7.57	3,220				
1952	Sept. 1, 1952	10.47	5,200	1961	Apr. 13, 1961	9.32	2,790
1953	Nov. 22, 1952	8.98	4,150				

5935. Little Patuxent River at Guilford, Md.

Location.--Lat 39°10'04", long 76°51'07", on left bank 75 ft upstream from bridge on State Highway 32, 1 mile west of Guilford, Howard County, 3 miles upstream from Middle Patuxent River, and 4 miles north of Laurel.

Drainage area.--38.0 sq mi.

Gage.--Nonrecording prior to June 25, 1946; recording thereafter. Altitude of gage is 260 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,800 cfs and extended on basis of contracted-opening measurement at 5,300 cfs.

Bankfull stage.--8 ft.

Remarks.--Base for partial-duration series, 600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	Nov. 10, 1932	7.8	900	1937	Feb. 22, 1937	7.0	745
	Apr. 17, 1933	6.8	644		Apr. 26, 1937	10.3	2,000
	July 3, 1933	9.2	1,390	1938	Oct. 23, 1937	9.6	1,570
	Aug. 23, 1933	12.5	4,210		Nov. 13, 1937	10.1	1,820
1934	Sept. 8, 1934	6.9	723	1939	Jan. 30, 1939	7.9	968
	Sept. 17, 1934	9.4	1,480				
1935	Apr. 9, 1935	7.0	745	1940	Oct. 2, 1939	7.0	745
	May 7, 1935	(a)	-		Feb. 19, 1940	3.5	639
	July 21, 1935	7.7	915		Apr. 8, 1940	7.6	889
	Sept. 5, 1935	6.8	701		Apr. 20, 1940	b11.5	2,740
1936	Jan. 3, 1936	9.0	1,320		Aug. 31, 1940	7.35	839
	Feb. 15, 1936	7.0	745	1941	June 24, 1941	6.14	563

a Unknown.

b Estimated.

Peak stages and discharges of Little Patuxent River at Guilford, Md.--continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	July 11, 1942	10.66	2,180	1953	Nov. 22, 1952	10.20	2,000
					Dec. 11, 1952	6.14	620
1943	Oct. 16, 1942	6.53	639		Jan. 9, 1953	6.73	729
	Oct. 26, 1942	6.32	600		Mar. 15, 1953	6.73	729
	May 12, 1943	9.17	1,400		Mar. 24, 1953	6.53	691
1944	Nov. 9, 1943	10.46	2,060		Mar. 26, 1953	9.07	1,340
	Jan. 4, 1944	8.88	1,280		May 6, 1953	6.32	653
1945	Dec. 12, 1944	7.04	745		May 31, 1953	6.05	604
	Jan. 1, 1945	10.10	1,820		July 23, 1953	7.83	941
	Jan. 16, 1945	8.45	1,120	1954	Sept. 7, 1953	8.15	1,010
	June 22, 1945	6.50	639		Dec. 14, 1953	6.28	645
	July 18, 1945	12.22	3,810	1955	Feb. 7, 1955	6.30	625
	July 19, 1945	8.67	1,220		Aug. 13, 1955	12.11	3,790
	Sept. 18, 1945	6.30	600		Aug. 14, 1955	7.95	922
1946	Nov. 28, 1945	6.83	701		Aug. 18, 1955	6.67	692
	Dec. 6, 1945	8.28	1,080	1956	Oct. 14, 1955	8.37	1,010
	June 2, 1946	6.82	701		Mar. 14, 1956	6.79	713
	July 23, 1946	7.75	783		July 21, 1956	7.63	864
1947	May 1, 1947	8.02	815	1957	Apr. 5, 1957	6.23	612
1948	Jan. 2, 1948	8.97	1,090	1958	Dec. 20, 1957	(a)	-
	Feb. 14, 1948	9.91	1,550		Dec. 26, 1957	6.57	674
	June 20, 1948	7.01	655		Jan. 25, 1958	7.60	859
1949	Dec. 30, 1948	6.74	607		Feb. 28, 1958	6.77	710
	Jan. 6, 1949	7.27	703		Mar. 26, 1958	6.22	611
	May 23, 1949	6.97	655		Apr. 6, 1958	6.21	609
1950	Sept. 11, 1950	6.39	560		July 9, 1958	7.68	873
					July 12, 1958	9.02	1,230
1951	Nov. 25, 1950	7.42	719	1959	Sept. 2, 1959	7.03	756
	Dec. 4, 1950	7.32	703	1960	Feb. 19, 1960	7.80	895
	Feb. 7, 1951	7.70	767		Apr. 5, 1960	6.48	657
	June 3, 1951	10.47	1,970		Sept. 12, 1960	8.34	1,000
	June 10, 1951	7.48	735	1961	Jan. 1, 1961	6.43	648
	June 14, 1951	8.23	855		Feb. 19, 1961	6.64	686
1952	Apr. 27, 1952	9.86	1,550		Apr. 13, 1961	8.18	967
	May 26, 1952	11.82	3,300		Aug. 26, 1961	7.20	787
	Aug. 13, 1952	8.62	960				
	Sept. 1, 1952	13.26	5,300				

a Unknown.

5940. Little Patuxent River at Savage, Md.

Location.--Lat 39°08'00", long 76°48'58", on left bank 400 ft downstream from bridge on U.S. Highway 1, half a mile southeast of Savage, Howard County, and 1 mile downstream from Middle Patuxent River.

Drainage area.--98.4 sq mi.

Gage.--Recording prior to Oct. 1, 1958; crest-stage gage thereafter. Altitude of gage is 125 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--12 ft.

Historical data.--Flood of August 1933 is greatest known, from information by local residents.

Remarks.--Base for partial-duration series, 1,500 cfs. Only annual peaks are shown since 1958.

Peak stages and discharges of Little Patuxent River at Savage, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	August 1933	a17.5	-	1951	June 10, 1951	6.27	2,090
1940	Apr. 8, 1940	6.18	1,900		June 14, 1951	6.54	2,250
	Apr. 20, 1940	7.91	2,920		June 22, 1951	6.77	2,390
	Aug. 31, 1940	6.70	2,200	1952	Apr. 27, 1952	9.12	3,800
1941	Nov. 27, 1940	5.32	1,430		May 26, 1952	11.34	5,130
1942	June 14, 1942	5.75	1,680		Aug. 13, 1952	7.61	2,900
	July 11, 1942	6.76	2,260		Sept. 1, 1952	13.15	6,280
1943	Oct. 16, 1942	7.07	2,260	1953	Nov. 22, 1952	10.42	4,580
	Oct. 26, 1942	5.57	1,530		Dec. 11, 1952	5.58	1,680
	May 12, 1943	8.58	3,040		Jan. 9, 1953	6.48	2,220
1944	Nov. 9, 1943	9.35	3,480		Mar. 15, 1953	5.57	1,670
	Jan. 4, 1944	b7.42	2,410		Mar. 24, 1953	6.18	2,040
1945	Jan. 1, 1945	9.39	3,480		Mar. 26, 1953	8.25	3,280
	Jan. 16, 1945	6.88	2,160		May 6, 1953	6.75	2,380
	June 22, 1945	5.65	1,530		May 17, 1953	5.30	1,520
	July 18, 1945	12.14	5,080	1954	May 31, 1953	5.27	1,500
	July 19, 1945	6.28	1,860		Sept. 6, 1953	5.51	1,640
	July 27, 1945	6.48	1,960		Dec. 14, 1953	5.63	1,710
1946	July 30, 1945	6.56	2,010	1955	Feb. 7, 1955	-	c2,100
	Nov. 28, 1945	6.15	1,810		Aug. 13, 1955	12.95	6,150
	Dec. 6, 1945	7.41	2,410		Aug. 18, 1955	6.33	1,830
1947	June 2, 1946	6.76	2,110		Aug. 23, 1955	6.24	1,770
	May 1, 1947	5.92	1,660	1956	Oct. 14, 1955	9.06	2,830
1948	Nov. 12, 1947	6.17	1,810		Mar. 14, 1956	6.96	1,910
	Jan. 2, 1948	7.65	2,510		July 21, 1956	9.14	3,130
	Feb. 14, 1948	b9.10	3,320	1957	Apr. 5, 1957	6.22	2,060
1949	Dec. 30, 1948	5.94	1,660	1958	Dec. 21, 1957	6.08	1,980
	Jan. 6, 1949	6.24	1,810		Dec. 26, 1957	6.89	2,460
1950	Mar. 23, 1950	5.94	1,660		Jan. 14, 1958	5.80	1,810
	Sept. 11, 1950	7.54	2,460		Jan. 25, 1958	7.04	2,550
					Feb. 28, 1958	7.12	2,600
1951	Nov. 25, 1950	7.32	2,720		Apr. 6, 1958	5.62	1,700
	Dec. 4, 1950	6.30	2,110		May 5, 1958	5.55	1,660
	Dec. 8, 1950	6.00	1,930		July 8, 1958	5.88	1,860
	Feb. 7, 1951	6.55	2,260		July 12, 1958	7.79	3,000
	June 4, 1951	6.53	2,250	1959	Sept. 2, 1959	7.91	3,080
				1960	Sept. 12, 1960	7.26	2,690
				1961	Apr. 13, 1961	8.71	3,560

a Annual peak only, about.

b Backwater from ice.

c Estimated.

5944. Dorsey Run near Jessup, Md.
(Published as "at Annapolis Junction" prior to 1952)

Location.--Lat 39°07'15", long 76°47'00", on left bank at downstream side of bridge on State Highway 32 (formerly State Highway 647), 0.6 mile southeast of Fort George G. Meade Junction (formerly Annapolis Junction), 1.0 mile upstream from mouth, and 2 miles south of Jessup, Anne Arundel County.

Drainage area.--11.6 sq mi.

Gage.--Recording prior to Sept. 30, 1958; crest-stage gage thereafter.
Altitude of gage is 120 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 390 cfs and extended on basis of contracted-opening measurement at 1,360 cfs.

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 300 cfs.

Peak stages and discharges of Dorsey Run near Jessup, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948a/	Aug. 3, 1948	6.49	401	1953	May 7, 1953	7.49	508
1949	Nov. 29, 1948	4.93	309		July 23, 1953	9.04	683
	Dec. 4, 1948	5.79	365		Aug. 8, 1953	10.1	870
	Jan. 6, 1949	5.53	347		Sept. 5, 1953	7.79	535
	May 23, 1949	6.09	381	1954	Dec. 14, 1953	5.21	340
	May 24, 1949	5.35	341	1955	Aug. 13, 1955	12.77	1,400
1950	Mar. 23, 1950	5.14	323		Aug. 18, 1955	6.09	401
	Aug. 20, 1950	7.30	441		Aug. 23, 1955	7.14	479
1951	Feb. 7, 1951	5.24	329	1956	Oct. 14, 1955	5.12	333
	Feb. 21, 1951	4.93	309		Mar. 14, 1956	5.70	374
	June 4, 1951	5.24	329	1957	Sept. 10, 1957	4.69	299
	June 10, 1951	6.50	401	1958	Dec. 20, 1957	6.35	420
	June 13, 1951	6.45	396		Jan. 25, 1958	5.22	340
	July 28, 1951	5.85	365		Feb. 28, 1958	5.78	380
1952	Dec. 21, 1951	4.88	314		Mar. 20, 1958	4.71	301
	Feb. 4, 1952	4.85	312		Apr. 6, 1958	4.82	310
	Apr. 27, 1952	7.31	493		Apr. 28, 1958	5.03	326
	Sept. 1, 1952	11.99	1,250		July 8, 1958	7.39	499
1953	Nov. 21, 1952	8.55	617	1959	Sept. 2, 1959	7.58	516
	Jan. 9, 1953	5.95	392	1960	Sept. 12, 1960	9.10	692
	Mar. 15, 1953	5.53	362	1961	Apr. 13, 1961	7.20	484
	Mar. 24, 1953	5.41	354				
	Mar. 25, 1953	8.24	581				
	Apr. 10, 1953	4.71	301				

a Partial year.

5945. Western Branch near Largo, Md.

Location.--Lat 38°52'34", long 76°47'54", on right bank 200 ft upstream from culvert on State Highway 202, 200 ft downstream from small tributary, 0.1 mile upstream from Southwest Branch, 2.3 miles southeast of Largo, Prince Georges County, and 4.8 miles northwest of Upper Marlboro.

Drainage area.--30.2 sq mi.

Gage.--Recording. Datum of gage is 46.50 ft above mean sea level (levels by private consultant engineers).

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--6 ft.

Remarks.--Base for partial-duration series, 340 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Aug. 24, 1950	5.21	389	1956	Oct. 14, 1955	6.29	587
	Sept. 11, 1950	7.16	1,130	1957	Nov. 1, 1956	3.88	286
1951	June 10, 1951	5.63	456	1958	Feb. 27, 1958	4.55	340
1952	Dec. 21, 1951	7.22	1,170		Mar. 21, 1958	5.26	411
	Feb. 4, 1952	4.93	356		July 8, 1958	5.2	404
	Apr. 28, 1952	6.44	704		July 23, 1958	5.1	393
	Sept. 1, 1952	8.06	1,380		Aug. 25, 1958	7.66	1,150
1953	Nov. 21, 1952	7.68	1,500	1959	May 23, 1959	5.06	389
	Jan. 24, 1953	4.82	364		June 3, 1959	6.56	671
	Mar. 16, 1953	5.72	473		Aug. 8, 1959	8.19	1,420
	Mar. 26, 1953	7.37	1,060	1960	Feb. 18, 1960	5.43	596
	May 6, 1953	6.00	526		Apr. 5, 1960	4.90	490
	May 17, 1953	5.29	415		Aug. 6, 1960	6.06	750
	Aug. 9, 1953	5.44	433		Sept. 12, 1960	6.72	946
	Sept. 5, 1953	4.96	378	1961	Jan. 1, 1961	45.05	b360
1954	Dec. 4, 1953	5.40	428		Feb. 18, 1961	4.58	433
	Apr. 28, 1954	5.14	397		Mar. 22, 1961	4.09	354
	May 4, 1954	6.38	614		Apr. 13, 1961	6.18	784
1955	Aug. 13, 1955	8.51	1,580		Apr. 26, 1961	4.26	382
	Aug. 18, 1955	5.33	420				
	Aug. 23, 1955	4.94	376				

a Backwater from ice.

b About.

5950. North Branch Potomac River at Steyer, Md.

Location.--Lat 39°18'07", long 79°18'26", on left bank 0.3 mile southeast of Steyer, Garrett County, 0.35 mile downstream from Steyer Run, and 2 miles northeast of Gorman.

Drainage area.--73.0 sq mi.

Gage.--Recording. Datum of gage is 2,276.01 ft above mean sea level, datum of 1929, Parkersburg-Uniontown supplementary adjustment of 1944.

Stage-discharge relation.--Defined by current-meter measurements below 2,900 cfs and extended by logarithmic plotting.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 2,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Oct. 15, 1954	a13.0	-	1959	Jan. 22, 1959	6.51	2,750
1956b/	Aug. 6, 1956	8.84	5,800		Feb. 10, 1959	6.31	2,530
1957	Jan. 10, 1957	6.19	2,320	1960	Jan. 15, 1960	6.00	2,200
	Jan. 23, 1957	7.07	3,330		Mar. 30, 1960	7.05	3,400
	Jan. 29, 1957	-	c2,300		Apr. 3, 1960	-	(d)
	Feb. 10, 1957	8.4	5,150		May 8, 1960	6.25	2,460
1958	Dec. 8, 1957	6.07	2,270	1961	Feb. 19, 1961	6.61	2,970
	Apr. 7, 1958	6.48	2,720		Feb. 25, 1961	6.31	2,530
					Aug. 11, 1961	8.00	4,650

a Annual peak only.

b Partial year.

c About.

d No record; probably exceeded base.

5953. Abram Creek at Oakmont, W. Va.

Location.--Lat 39°22'00", long 79°10'45", on downstream side of right wing-wall of highway bridge 0.5 mile east of Oakmont, Mineral County, 1.2 miles downstream from Emory Run, 1.8 miles southwest of Elk Garden, and 1.9 miles upstream from mouth.

Drainage area.--47.3 sq mi.

Gage.--Recording. Altitude of gage is 1,840 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 800 cfs and extended above on basis of contracted opening measurement at 3,830 cfs.

Historical data.--Flood of Aug. 18, 1955, is greatest known.

Remarks.--Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Aug. 18, 1955	9.82	3,830	1960	Oct. 24, 1959	6.50	1,280
1957	Jan. 10, 1957	5.70	830		Jan. 15, 1960	5.31	660
	Jan. 23, 1957	5.13	554		Mar. 30, 1960	7.19	1,720
	Feb. 10, 1957	6.54	1,310		Apr. 3, 1960	6.32	1,160
1958	Dec. 26, 1957	4.98	506		May 8, 1960	6.18	1,110
	Apr. 6, 1958	6.22	1,110	1961	Feb. 19, 1961	6.90	1,520
	Apr. 28, 1958	5.24	630		Feb. 25, 1961	7.00	1,580
	May 5, 1958	5.50	760		Mar. 21, 1961	5.00	515
1959	Jan. 21, 1959	-	a500		Apr. 16, 1961	5.89	960
	Feb. 10, 1959	-	a660		Aug. 12, 1961	6.60	1,340

a About.

5955. North Branch Potomac River at Kitzmiller, Md.

Location.--Lat 39°23'38", long 79°10'55", on left bank 0.6 mile downstream from bridge on State Highway 38 in Kitzmiller, Garrett County, and 1.5 miles downstream from Wolfden Run.

Drainage area.--225 sq mi.

Gage.--Recording at site 0.3 mile upstream at datum 7.58 ft higher prior to Oct. 15, 1954, nonrecording at site half a mile upstream at datum 21.51 ft higher Oct. 15, 1954, to Nov. 20, 1955; recording thereafter. Datum of gage is 1,572.26 ft above mean sea level, datum of 1929, Parkersburg-Uniontown supplementary adjustment of 1944.

Stage-discharge relation.--Defined by current-meter measurements below 20,000 cfs and extended on basis of slope-area measurement at 33,400 cfs.

Bankfull stage.--7 ft.

Remarks.--Base for partial-duration series, 3,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Nov. 29, 1949	7.04	4,730	1955	Mar. 22, 1955	6.9	4,900
	Jan. 31, 1950	7.74	6,170		Aug. 13, 1955	8.7	9,080
	Feb. 9, 1950	6.28	3,460		Aug. 18, 1955	12.8	21,400
	Mar. 13, 1950	6.60	4,010	1956	Jan. 30, 1956	8.7	7,360
	Mar. 28, 1950	7.27	5,330		Feb. 2, 1956	8.85	7,800
1951	Dec. 4, 1950	6.41	3,680		Feb. 18, 1956	8.75	7,500
	Dec. 7, 1950	8.71	8,510		Mar. 14, 1956	7.7	4,810
	Jan. 4, 1951	-	3,600		Apr. 7, 1956	7.13	3,670
	Jan. 15, 1951	6.60	4,010		May 27, 1956	8.56	6,970
	Feb. 1, 1951	7.76	6,390		Aug. 6, 1956	9.02	8,310
	Mar. 30, 1951	6.73	4,190	1957	Jan. 10, 1957	7.68	4,770
	June 13, 1951	8.15	7,190		Jan. 23, 1957	7.84	5,120
1952	Dec. 31, 1951	8.15	7,190		Jan. 29, 1957	7.26	3,910
	Jan. 3, 1952	6.71	4,100		Feb. 10, 1957	8.61	7,110
	Jan. 28, 1952	7.23	5,100	1958	Apr. 6, 1958	7.97	5,430
	Mar. 11, 1952	7.66	6,040		May 5, 1958	7.09	3,590
	Apr. 28, 1952	6.89	4,430	1959	Jan. 22, 1959	7.39	4,170
1953	Dec. 11, 1952	6.32	3,440		Feb. 10, 1959	7.35	4,090
	Jan. 24, 1953	7.14	4,920	1960	Oct. 24, 1959	7.95	5,380
	Feb. 21, 1953	6.95	4,540		Jan. 15, 1960	7.13	3,670
	Mar. 4, 1953	6.40	3,570		Mar. 30, 1960	8.32	6,310
	Apr. 10, 1953	6.80	4,260		Apr. 4, 1960	8.30	6,260
1954	Mar. 1, 1954	9.02	9,280		May 8, 1960	7.71	4,830
	Mar. 13, 1954	6.52	3,760		May 28, 1960	7.00	3,430
	July 15, 1954	-	3,500	1961	Feb. 19, 1961	8.12	5,800
1955	Oct. 15, 1954	16.5	33,400		Feb. 22, 1961	7.42	4,230
	Dec. 30, 1954	8.15	7,760		Feb. 25, 1961	8.15	5,880
	Feb. 7, 1955	6.1	3,440		Apr. 16, 1961	7.20	3,800
	Mar. 1, 1955	6.8	4,700				
	Mar. 5, 1955	6.45	4,050				

5960. North Branch Potomac River at Bloomington, Md.

Location.--Lat 39°28'48", long 79°04'08", at highway bridge at Bloomington, Garrett County, 600 ft upstream from Savage River and 2 miles upstream from Piedmont, W. Va.

Drainage area.--287 sq mi.

Gage.--Nonrecording prior to Sept. 1, 1929; recording thereafter. Datum of gage is 951.98 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 10,000 cfs and extended on basis of slope-area measurements at 11,400 cfs and 22,500 cfs.

Bankfull stage.--10 ft.

Remarks.--Base for partial-duration series, 3,700 cfs. Only annual peaks are shown 1924-1927, 1955.

Peak stages and discharges of North Branch Potomac River at Bloomington, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1924	Mar. 29, 1924	a20.3	29,000	1940	Apr. 17, 1940	9.88	8,310
1925	Feb. 12, 1925	7.5	3,520		Apr. 20, 1940	8.06	4,530
					May 31, 1940	8.96	6,270
1926	Aug. 18, 1926	9.5	6,250				
1927	Jan. 21, 1927	8.4	4,700	1941	June 4, 1941	8.42	5,080
					July 4, 1941	8.70	5,660
1930	Oct. 2, 1929	8.85	9,290				
	Oct. 22, 1929	8.15	6,680	1942	Mar. 9, 1942	7.27	3,900
	Nov. 18, 1929	7.17	3,890		Apr. 9, 1942	8.82	6,440
					May 16, 1942	9.17	7,200
1931	Mar. 29, 1931	b6.73	b3,090		May 22, 1942	8.10	5,180
1932	Feb. 4, 1932	10.45	17,400	1943	Oct. 15, 1942	12.84	16,100
	Mar. 22, 1932	7.15	3,890		Dec. 30, 1942	8.42	5,620
	Mar. 31, 1932	8.09	6,510		Jan. 18, 1943	7.50	4,000
	May 12, 1932	10.07	15,600		Feb. 7, 1943	7.48	4,000
					Apr. 20, 1943	7.60	4,180
1933	Mar. 14, 1933	8.94	9,720				
	Mar. 19, 1933	7.61	5,010	1944	Jan. 28, 1944	8.24	5,260
	Apr. 19, 1933	8.02	6,190		Feb. 23, 1944	8.88	6,600
	Aug. 11, 1933	7.10	3,780		Mar. 7, 1944	7.55	4,090
	Aug. 24, 1933	9.10	10,400		Mar. 13, 1944	7.79	4,540
					Mar. 24, 1944	8.29	5,440
1934	Jan. 7, 1934	8.3	7,180		Apr. 2, 1944	7.53	4,090
	Mar. 5, 1934	7.46	4,610		May 7, 1944	8.06	5,080
1935	Jan. 21, 1935	8.8	9,080	1945	Oct. 21, 1944	8.20	5,260
	May 7, 1935	7.29	4,230		Dec. 26, 1944	8.35	5,620
	Sept. 4, 1935	8.03	6,350		Jan. 1, 1945	7.39	3,840
					Feb. 16, 1945	7.98	4,900
1936	Jan. 9, 1936	7.35	4,360		Feb. 27, 1945	d8.75	6,000
	Feb. 26, 1936	9.91	14,400		Mar. 3, 1945	8.14	5,080
	Mar. 11, 1936	7.57	4,880		Mar. 7, 1945	9.02	6,800
	Mar. 17, 1936	13.2	22,500		Sept. 18, 1945	8.08	5,080
	Mar. 24, 1936	9.35	8,730				
	Apr. 6, 1936	8.11	5,330	1946	June 19, 1946	7.72	4,360
1937	Oct. 17, 1936	7.74	4,560	1947	Mar. 14, 1947	7.50	4,100
	Jan. 10, 1937	7.55	4,140				
	Jan. 23, 1937	8.66	6,670	1948	Jan. 1, 1948	8.93	6,600
	Feb. 8, 1937	8.42	6,040		Feb. 14, 1948	9.51	7,800
	Mar. 21, 1937	8.25	5,680		Mar. 24, 1948	7.72	4,420
	Apr. 26, 1937	10.85	11,400		Apr. 13, 1948	8.46	5,800
					July 21, 1948	7.36	3,860
1938	Oct. 28, 1937	14.85	22,500	1949	Dec. 16, 1948	9.80	8,400
	Dec. 18, 1937	7.86	4,110		Jan. 28, 1949	7.54	4,180
	May 22, 1938	7.91	4,190		June 18, 1949	11.18	11,600
	July 23, 1938	8.46	5,270		July 12, 1949	8.57	6,000
1939	Feb. 3, 1939	11.2	11,600				
	Feb. 11, 1939	8.63	5,460	1950	Jan. 31, 1950	7.90	4,740
	Feb. 28, 1939	8.29	4,890		Mar. 28, 1950	7.39	4,000
	Apr. 16, 1939	9.05	6,270				
				1955	Oct. 15, 1954	20.2	37,400
1940	Feb. 11, 1940	7.61	3,720				

a Maximum stage known, from floodmarks on left bank; equivalent to stage of about 17 ft in gage well on right bank.

b Backwater from ice.

5965. Savage River near Barton, Md.

Location.--Lat 39°34'05", long 79°06'10", on right bank 0.9 mile upstream from Bear Pen Run, 1.5 miles downstream from Poplar Lick Run, and 5.4 miles northwest of Barton, Allegany County.

Drainage area.--49.1 sq mi.

Gage.--Recording. Altitude of gage is 1,605 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,600 cfs and extended on basis of slope-area measurement at 7,510 cfs.

Remarks.--Base for partial-duration series, 800 cfs.

Peak stages and discharges of Savage River near Barton, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Dec. 16, 1948	3.49	819	1956	Feb. 3, 1956	3.40	870
1950	Mar. 27, 1950	3.77	1,080		Feb. 18, 1956	3.62	1,050
	Sept. 21, 1950	5.00	2,630		Apr. 7, 1956	3.37	846
1951	Dec. 7, 1950	3.86	1,180		May 27, 1956	3.37	846
	Feb. 1, 1951	3.57	889		Aug. 6, 1956	4.49	1,920
	June 13, 1951	4.43	1,860	1957	Dec. 14, 1956	3.48	934
1952	Jan. 2, 1952	4.35	1,800		Feb. 10, 1957	3.72	1,140
	Mar. 11, 1952	4.70	2,270	1958	Dec. 26, 1957	3.67	1,090
1953	Jan. 24, 1953	3.45	850		Apr. 6, 1958	3.88	1,220
	Mar. 24, 1953	3.73	1,110		May 5, 1958	4.20	1,660
1954	Mar. 1, 1954	4.52	2,030	1959	Feb. 10, 1959	3.49	942
1955	Oct. 15, 1954	8.45	7,510	1960	Mar. 30, 1960	4.64	2,100
	Dec. 30, 1954	4.20	1,600		Apr. 3, 1960	3.63	1,050
	Mar. 1, 1955	3.52	966		May 8, 1960	4.97	2,500
	Mar. 5, 1955	3.98	1,380	1961	Feb. 19, 1961	3.93	1,330
	Mar. 22, 1955	3.95	1,350		Feb. 25, 1961	5.18	2,770
	June 8, 1955	4.75	2,230		Mar. 4, 1961	3.49	922
	Aug. 18, 1955	4.00	1,400		Apr. 16, 1961	3.95	1,350

5970. Crabtree Creek near Swanton, Md.

Location.--Lat 39°30'00", long 79°09'35", on left bank 0.9 mile upstream from Middle Fork, 1.0 mile downstream from Springlick Run, and 5.0 miles north-east of Swanton, Garrett County.

Drainage area.--16.7 sq mi.

Gage.--Recording. Datum of gage is 1,529.06 ft above mean sea level (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 210 cfs and extended on basis of slope-area and contracted-opening measurements at 3,260 cfs for 1949-50. Defined by current-meter measurements below 580 cfs for 1951-54. Defined by current-meter measurements below 330 cfs and extended on basis of slope-area measurement at 2,290 cfs since 1955.

Bankfull stage.--6 ft.

Remarks.--Base for partial-duration series, 330 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Dec. 15, 1948	2.80	500	1955	Mar. 5, 1955	2.72	397
	July 12, 1949	5.01	3,260		Mar. 22, 1955	2.88	495
1950	Mar. 28, 1950	2.53	336		Aug. 18, 1955	3.20	705
1951	Dec. 7, 1950	2.75	568	1956	Feb. 18, 1956	2.59	357
	June 13, 1951	2.81	615		Aug. 5, 1956	3.12	651
1952	Jan. 2, 1952	2.70	530	1957	Feb. 10, 1957	2.92	568
	Jan. 26, 1952	2.56	433	1958	Aug. 3, 1958	2.45	346
	Mar. 11, 1952	2.57	440	1959	Feb. 10, 1959	2.19	202
	Apr. 25, 1952	2.44	359	1960	Mar. 30, 1960	3.29	824
1953	Jan. 24, 1953	2.37	319		Apr. 3, 1960	2.69	465
1954	Mar. 1, 1954	2.55	426		May 8, 1960	2.62	430
1955	Oct. 15, 1954	4.90	2,290	1961	Feb. 19, 1961	2.56	400
	Dec. 30, 1954	3.15	670		Feb. 25, 1961	2.97	598

5975. Savage River below Savage River Dam, near Bloomington, Md.

Location.--Lat 39°30'05", long 79°07'25", on left bank 0.7 mile downstream from Savage River Dam, 1.1 miles downstream from Crabtree Creek, and 3.2 miles northwest of Bloomington, Garrett County.

Drainage area.--106 sq mi.

Gage.--Recording. Datum of gage is 1,276.40 ft above mean sea level (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 4,900 4,900 cfs.

Bankfull stage.--10 ft.

Remarks.--Flow regulated by Savage River Reservoir (capacity, 20,000 acre-ft) beginning December 1950. Some reduction of peaks by partly completed Savage River Dam prior to December 1950. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	July 13, 1949	5.53	2,910	1956	Aug. 6, 1956	5.97	3,640
1950	Sept. 22, 1950	5.22	2,420	1957	Feb. 11, 1957	5.36	2,710
				1958	Apr. 7, 1958	6.55	4,580
1951	June 14, 1951	5.26	2,570	1959	Mar. 16, 1959	5.01	2,190
1952	Jan. 8, 1952	6.78	4,910	1960	Mar. 28, 1960	6.03	3,740
1953	Jan. 25, 1953	4.36	1,260				
1954	Sept. 14, 1954	5.51	2,620	1961	Apr. 17, 1961	5.97	3,640
1955	Oct. 16, 1954	7.70	6,530				

5980. Savage River at Bloomington, Md.

Location.--Lat 39°29'00", long 79°04'24", on left bank at Bloomington, Garrett County, 2,200 ft upstream from mouth, and 1½ miles west of Piedmont, W. Va.

Drainage area.--115 sq mi.

Gage.--Nonrecording prior to Sept. 6, 1929; recording thereafter. At site 800 ft downstream at different datum prior to Sept. 30, 1927. Datum of gage is 978.76 ft above mean sea level (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 3,500 cfs and extended above on basis of slope-area measurement at 14,800 cfs.

Bankfull stage.--7 ft.

Historical data.--Flood of Mar. 29, 1924, is maximum known, from information by West Virginia Pulp and Paper Co.

Remarks.--Some reduction of peak flows by partly completed Savage River Dam since about 1941. Only annual peaks are shown prior to 1930. Base for partial-duration series, 1,500 cfs.

Peak stages and discharges of Savage River at Bloomington, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1924	Mar. 29, 1924	als	-	1941	Apr. 5, 1941	6.06	2,340
1925	Feb. 11, 1925	6.8	2,480		June 4, 1941	8.77	7,290
					July 7, 1941	5.80	2,020
1926	Nov. 13, 1925	7.00	2,730	1942	Mar. 9, 1942	5.67	1,840
1927	Feb. 24, 1927	6.5	3,100		Apr. 10, 1942	6.10	2,410
					May 7, 1942	6.50	2,980
1930	Oct. 2, 1929	5.52	2,050		May 16, 1942	7.47	4,560
1931	May 13, 1931	5.63	2,220		May 22, 1942	6.38	2,830
1932	Feb. 4, 1932	5.95	2,740	1943	Oct. 15, 1942	9.47	8,950
	Mar. 31, 1932	6.07	2,860		Dec. 30, 1942	6.72	3,290
	May 12, 1932	6.48	3,800		Jan. 18, 1943	5.43	1,620
1933	Mar. 14, 1933	7.9	6,860		Feb. 6, 1943	5.43	1,620
	Mar. 19, 1933	5.36	2,280		Apr. 20, 1943	6.00	2,280
	Apr. 20, 1933	5.59	2,610	1944	Jan. 28, 1944	b5.60	-
1934	Jan. 7, 1934	6.5	4,000		Jan. 28, 1944	5.43	1,620
	Apr. 4, 1934	4.66	1,500		Feb. 23, 1944	5.73	1,890
1935	Jan. 22, 1935	5.15	2,040		Feb. 26, 1944	5.91	2,100
	Feb. 15, 1935	5.21	2,100		Mar. 24, 1944	5.44	1,520
	Aug. 3, 1935	4.65	1,500		May 7, 1944	6.17	2,450
	Sept. 4, 1935	5.40	2,350		June 24, 1944	5.47	1,520
1936	Jan. 9, 1936	b5.23	2,040	1945	Dec. 26, 1944	5.58	1,700
	Feb. 25, 1936	b7.02	-		Feb. 16, 1945	5.98	2,240
	Feb. 26, 1936	b5.99	-		Feb. 27, 1945	6.37	2,740
	Feb. 27, 1936	5.53	2,540		Mar. 3, 1945	6.25	2,600
	Mar. 11, 1936	6.35	3,740		Mar. 7, 1945	6.19	2,520
	Mar. 17, 1936	10.8	14,800		Sept. 18, 1945	6.12	2,380
	Mar. 25, 1936	-	c2,220		Sept. 23, 1945	5.55	1,640
	Apr. 6, 1936	5.30	2,220	1946	June 2, 1946	5.60	1,700
1937	Jan. 10, 1937	b5.84	-	1947	May 4, 1947	5.30	1,370
	Jan. 11, 1937	4.83	2,220	1948	Jan. 2, 1948	6.00	2,240
	Jan. 22, 1937	5.15	2,680		Mar. 24, 1948	5.73	1,900
	Mar. 21, 1937	4.42	1,590		Apr. 13, 1948	7.07	3,840
	Apr. 26, 1937	9.6	9,200		July 4, 1948	5.64	1,770
1938	Oct. 28, 1937	8.92	7,520	1949	Dec. 17, 1948	6.02	2,240
1939	Feb. 3, 1939	6.65	3,210		Jan. 26, 1949	5.61	1,710
	Feb. 28, 1939	5.85	2,080		July 12, 1949	6.69	3,270
	Apr. 17, 1939	6.49	2,980	1950	Feb. 1, 1950	5.58	1,710
1940	Mar. 31, 1940	5.46	1,620		Mar. 28, 1950	5.99	2,240
	Apr. 20, 1940	6.24	2,620		Sept. 22, 1950	6.18	2,520
	May 31, 1940	5.57	1,720				

a Annual peak only. Present site and datum.

b Backwater from ice.

c Estimated.

5985. North Branch Potomac River at Luke, Md.
(Published as "at Piedmont, W. Va." 1899-1906)

Location.--Lat 39°28'45", long 79°03'55", on right bank 0.2 mile downstream from Savage River and 0.5 mile northwest of Luke, Allegany County.

Drainage area.--404 sq mi.

Gage.--Nonrecording prior to July 15, 1906, at site 1.1 miles downstream at datum about 35 ft lower; recording since Oct. 21, 1949. Datum of gage is 946.25 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 25,000 cfs and extended on basis of slope-area measurement at 39,400 cfs.

Remarks.--Flow regulated by Savage River Reservoir (capacity, 20,000 acre-ft) beginning December 1950. Some reduction of peaks by partly completed Savage River Dam from about 1941 to December 1950. Only annual peaks are shown.

Peak stages and discharges of North Branch Potomac River at Luke, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1900	June 17, 1900	7.9	6,980	1952	Dec. 18, 1951	b11.66	-
1901	Nov. 26, 1900	8.8	9,070	1953	Mar. 11, 1952	8.30	7,260
1902	Feb. 28, 1902	11.4	16,000	1954	Jan. 24, 1953	7.78	6,400
1903	Feb. 28, 1903	9.0	9,550	1954	Mar. 1, 1954	9.35	10,500
1904	Jan. 22, 1904	7.9	6,980	1955	Oct. 15, 1954	17.15	39,400
1905	Mar. 21, 1905	8.5	8,350	1956	Aug. 6, 1956	11.48	15,800
1906	Jan. 23, 1906	8.8	8,990	1957	Feb. 10, 1957	10.58	13,200
1924	Mar. 29, 1924	-	a51,000	1958	Apr. 7, 1958	9.82	11,100
1936	Mar. 17, 1936	-	a37,400	1959	Jan. 22, 1959	b9.32	-
1950	Mar. 28, 1950	8.36	6,830	1960	Feb. 10, 1959	7.31	5,560
1951	June 13, 1951	10.28	11,200	1961	Mar. 30, 1960	10.33	12,500
					Feb. 18, 1961	b14.21	-
					Feb. 19, 1961	9.64	10,600

a At West Virginia Pulp and Paper Co. dam half a mile downstream.

b Ice jam.

5990. Georges Creek at Franklin, Md.

Location.--Lat 39°29'38", long 79°02'42", on right bank at Franklin, Allegany County, 1½ miles upstream from Westernport and mouth.

Drainage area.--72.4 sq mi.

Gage.--Recording. At site 95 ft downstream at same datum prior to Oct. 1, 1937. Datum of gage is 958.96 ft above mean sea level (West Virginia Pulp and Paper Co. bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 2,000 cfs and extended on basis of slope-area measurement at 8,500 cfs for 1931-37 site. Since 1937 defined by current-meter measurements below 3,400 cfs and extended on basis of contracted-opening measurement at 4,340 cfs.

Remarks.--Base for partial-duration series, 1,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1924	Mar. 29, 1924	10	-	1948	Jan. 1, 1948	7.37	1,760
1931	May 13, 1931	5.95	1,840		Mar. 24, 1948	-	(a)
1932	May 12, 1932	6.45	2,360		Apr. 13, 1948	8.02	2,220
1933	Mar. 13, 1933	6.45	2,360	1949	June 20, 1949	6.61	1,280
	Apr. 19, 1933	5.57	1,500		July 12, 1949	9.77	3,630
1934	Jan. 7, 1934	5.3	1,310	1950	Sept. 21, 1950	5.56	748
1935	July 26, 1935	5.67	1,580	1951	Dec. 7, 1950	6.95	1,580
1936	Mar. 11, 1936	6.20	2,090		Mar. 30, 1951	6.38	1,230
	Mar. 17, 1936	9.6	8,500		June 13, 1951	8.62	2,710
1937	Jan. 22, 1937	3.9	1,310	1952	Mar. 11, 1952	8.57	2,680
	Apr. 26, 1937	9.0	7,800	1953	Mar. 24, 1953	6.9	1,540
1938	Oct. 28, 1937	9.85	3,510	1954	Mar. 1, 1954	7.87	2,190
1939	Feb. 28, 1939	6.77	1,290	1955	Oct. 15, 1954	10.84	4,340
	Apr. 17, 1939	6.84	1,350		Mar. 5, 1955	6.53	1,320
1940	Apr. 20, 1940	6.72	1,260		Mar. 22, 1955	7.28	1,780
1941	Apr. 5, 1941	6.94	1,410		June 8, 1955	7.59	1,990
	June 4, 1941	8.88	2,760		Aug. 18, 1955	8.10	2,350
1942	May 16, 1942	7.50	1,870	1956	Aug. 6, 1956	6.59	1,350
1943	Oct. 15, 1942	11.08	4,830	1957	Feb. 9, 1957	8.47	2,590
	Dec. 30, 1942	7.50	1,870	1958	May 5, 1958	6.85	1,510
1944	May 7, 1944	7.68	2,010		Aug. 3, 1958	6.75	1,450
1945	Feb. 27, 1945	7.03	1,560	1959	Sept. 30, 1959	6.84	1,500
	Mar. 6, 1945	6.52	1,220	1960	Oct. 24, 1959	7.34	1,820
	Sept. 18, 1945	6.56	1,250		Mar. 30, 1960	7.84	2,170
	Sept. 23, 1945	6.63	1,310		Apr. 3, 1960	7.06	1,640
1946	June 2, 1946	5.95	890		May 8, 1960	9.36	3,230
1947	Aug. 22, 1947	6.63	1,280	1961	Feb. 25, 1961	9.49	3,320
					Apr. 15, 1961	7.04	1,580

a Unknown but less than 2,220 cfs and greater than 1,200 cfs.

5995. New Creek near Keyser, W. Va.

Location.--Lat 39°24'35", long 79°00'05", on right bank at highway bridge, 0.2 mile downstream from Block Run, 1.5 miles south of Keyser, Mineral County and 3.0 miles upstream from mouth.

Drainage area.--45.7 sq mi.

Gage.--Nonrecording prior to July 19, 1948; recording thereafter. At site 0.1 mile upstream at different datum Apr. 19, 1930, to Sept. 30, 1931. Altitude of gage is 870 ft (from topographic maps).

Stage-discharge relation.--Defined by current-meter measurements below 800 cfs and extended above on basis of slope-area measurement at 2,400 cfs.

Bankfull stage.--3 ft.

Remarks.--Base for partial-duration series, 400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	May 13, 1931	3.9	715	1953	Mar. 4, 1953	2.82	450
	May 19, 1931	4.8	1,200		Mar. 25, 1953	2.89	476
1936	March 1936	a7.85	-		Apr. 10, 1953	3.12	560
1948	Jan. 1, 1948	4.04	982	1954	Mar. 1, 1954	4.27	1,100
	Mar. 24, 1948	3.4	660		Oct. 15, 1954	5.07	1,580
	Apr. 14, 1948	4.1	1,010	1955	Dec. 30, 1954	3.72	820
1949	Dec. 16, 1948	3.70	802		Mar. 22, 1955	3.75	845
	Jan. 5, 1949	3.15	550		Apr. 24, 1955	4.61	1,280
	Jan. 27, 1949	3.38	660		June 8, 1955	3.72	820
	June 17, 1949	6.37	2,410		Aug. 13, 1955	3.13	580
	June 20, 1949	3.17	550		Aug. 18, 1955	7.40	3,110
	June 28, 1949	3.59	754	1956	Feb. 6, 1956	2.74	420
	July 12, 1949	4.09	1,010		Feb. 18, 1956	2.78	435
	July 17, 1949	2.79	408		Mar. 14, 1956	3.11	560
1950	Nov. 29, 1949	2.79	408		Apr. 6, 1956	3.42	685
	Feb. 1, 1950	3.34	638	1957	Aug. 6, 1956	2.71	410
	Mar. 24, 1950	2.83	422		Jan. 10, 1957	3.38	685
	May 15, 1950	3.09	525		Feb. 9, 1957	4.46	1,200
	Sept. 22, 1950	2.83	457	1958	June 16, 1957	2.82	450
1951	Dec. 4, 1950	3.78	870		Apr. 28, 1958	3.42	685
	Dec. 7, 1950	4.31	1,120	1959	May 5, 1958	3.30	640
	Feb. 1, 1951	2.87	469		Sept. 30, 1959	2.20	247
	Mar. 30, 1951	3.34	662	1960	Oct. 24, 1959	5.42	1,770
	Apr. 12, 1951	3.39	685		Jan. 15, 1960	2.83	582
	June 10, 1951	2.71	410		Mar. 28, 1960	3.79	960
	June 13, 1951	4.92	1,460		Apr. 3, 1960	3.36	780
1952	Dec. 30, 1951	b3.47	-		May 8, 1960	4.09	1,080
	Jan. 27, 1952	3.10	560	1961	Feb. 16, 1961	3.46	755
	Mar. 11, 1952	4.32	1,120		Feb. 19, 1961	3.80	905
	Mar. 23, 1952	2.72	413		Feb. 25, 1961	4.65	1,320
	Apr. 25, 1952	2.78	435		Mar. 25, 1961	2.78	487
	Apr. 28, 1952	3.26	620		Apr. 16, 1961	3.10	615
1953	Dec. 11, 1952	2.79	438				
	Jan. 24, 1953	3.24	620				

a Maximum stage known, trash on bridge.

b Backwater from ice.

6000. North Branch Potomac River at Pinto, Md.

Location.--Lat 39°33'59", long 78°50'25", on right bank at downstream side of Western Maryland Railway bridge at Pinto, Allegany County, 2.8 miles downstream from Mill Run.

Drainage area.--596 sq mi.

Gage.--Nonrecording prior to Dec. 10, 1938, at site 250 ft downstream at same datum; recording thereafter. Datum of gage is 648.23 ft above mean sea level (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 31,600 cfs and extended on basis of contracted-opening measurement at 38,400 cfs.

Bankfull stage.--21 ft.

Remarks.--Regulation by Savage River Reservoir (capacity, 20,000 acre-ft) since December 1950. Only annual peaks shown prior to 1939 and since 1952. Base for partial-duration series, 6,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1924	Mar. 29, 1924	24	55,000	1945	Feb. 27, 1945	13.22	13,400
					Mar. 3, 1945	11.53	10,800
1936	Mar. 17, 1936	23.5	50,000		Mar. 7, 1945	13.36	13,800
1937	Apr. 26, 1937	22	32,000		Sept. 18, 1945	12.28	12,000
1938	Oct. 28, 1937	23	36,000				
				1946	June 19, 1946	8.88	6,850
1939	Feb. 3, 1939	16.65	20,200				
	Feb. 11, 1939	10.3	8,950	1947	Mar. 15, 1947	9.51	7,750
	Feb. 28, 1939	11.20	10,300				
	Apr. 17, 1939	12.94	12,800	1948	Jan. 2, 1948	13.08	13,200
					Feb. 14, 1948	12.53	12,200
1940	Mar. 19, 1940	8.88	6,850		Mar. 24, 1948	10.55	9,400
	Apr. 17, 1940	12.95	13,000		Apr. 13, 1948	13.33	13,600
	Apr. 20, 1940	12.30	12,000				
	May 31, 1940	12.66	12,600	1949	Dec. 16, 1948	14.12	15,200
					Jan. 28, 1949	10.46	9,250
1941	Apr. 5, 1941	10.43	9,100		June 18, 1949	14.8	16,600
	June 4, 1941	13.35	13,800		July 13, 1949	15.34	17,600
	July 4, 1941	10.70	9,550				
	July 8, 1941	9.20	7,300	1950	Jan. 31, 1950	10.30	8,950
					Mar. 28, 1950	10.30	8,950
1942	Mar. 9, 1942	9.13	7,150		Sept. 22, 1950	8.75	6,700
	Apr. 10, 1942	12.63	12,400				
	May 16, 1942	12.9	12,800	1951	Dec. 4, 1950	8.82	6,700
	May 22, 1942	11.5	10,800		Dec. 8, 1950	12.67	12,600
					Feb. 1, 1951	10.86	9,850
1943	Oct. 16, 1942	22.87	35,200		Mar. 31, 1951	9.09	7,230
	Dec. 30, 1942	13.15	13,400		June 13, 1951	14.92	16,800
	Jan. 18, 1943	8.88	6,850				
	Feb. 7, 1943	9.43	7,600	1952	Dec. 31, 1951	13.26	-
	Apr. 20, 1943	10.14	8,650		Mar. 11, 1952	12.30	11,800
1944	Jan. 28, 1944	10.42	9,100	1953	Jan. 24, 1953	10.00	8,400
	Feb. 23, 1944	11.80	11,200		Mar. 1, 1954	13.0	13,000
	Feb. 26, 1944	9.88	8,350		Oct. 16, 1954	23.23	37,000
	Mar. 7, 1944	9.58	7,900				
	Mar. 13, 1944	10.20	8,800	1956	Aug. 6, 1956	14.86	16,200
	Mar. 24, 1944	11.14	10,200		Feb. 10, 1957	14.46	15,500
	Apr. 2, 1944	8.70	6,550		Apr. 7, 1958	11.96	11,300
	May 7, 1944	11.96	11,500		Feb. 11, 1959	8.35	6,020
					Mar. 31, 1960	14.08	14,800
1945	Oct. 21, 1944	10.42	9,100	1961	Feb. 25, 1961	13.95	14,600
	Dec. 26, 1944	11.00	10,000				
	Feb. 16, 1945	11.37	10,600				

a Annual peak only, about.

b Ice jam.

6010. Wills Creek below Hyndman, Pa.

Location.--Lat 39°48'43", long 78°43'00", on left bank 150 ft upstream from county highway bridge, 150 ft downstream from Pennsylvania Railroad bridge, 0.35 mile downstream from Little Wills Creek, and half a mile south of Hyndman, Bedford County.

Drainage area.--146 sq mi.

Gage.--Recording. Datum of gage is 891.37 ft above mean sea level (Pennsylvania Railroad bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 6,000 cfs and extended above by logarithmic plotting.

Bankfull stage.--11 ft.

Remarks.--Base for partial-duration series, 2,100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Jan. 2, 1952	5.78	2,800	1957	Dec. 14, 1956	6.50	3,810
	Mar. 11, 1952	8.05	6,080				
1953	Nov. 21, 1952	5.50	2,460	1958	Dec. 26, 1957	5.37	2,470
	Jan. 24, 1953	5.31	2,240		Apr. 7, 1958	5.20	2,280
	Mar. 24, 1953	6.65	3,930		May 5, 1958	7.47	5,160
	May 31, 1953	8.96	7,680	1959	Feb. 10, 1959	6.27	3,460
1954	Mar. 1, 1954	8.42	6,680				
				1960	Oct. 24, 1959	5.66	2,730
1955	Oct. 15, 1954	11.02	11,600		Mar. 30, 1960	7.54	5,260
	Dec. 30, 1954	6.42	3,710		Apr. 3, 1960	5.22	2,140
	Mar. 4, 1955	7.02	4,510		May 8, 1960	8.80	7,360
	Mar. 22, 1955	6.08	3,290	1961	Feb. 19, 1961	6.38	3,560
	June 8, 1955	5.30	2,390		Feb. 25, 1961	8.85	7,450
	Aug. 18, 1955	5.38	2,480		Apr. 16, 1961	7.44	5,100
1956	Apr. 7, 1956	5.56	2,680		Apr. 25, 1961	5.18	2,100

6015. Wills Creek near Cumberland, Md.

Location.--Lat 39°40'07", long 78°47'18", on right bank at downstream side of Western Maryland Railway bridge, 2 miles upstream from Cumberland, Allegany County, and mouth.

Drainage area.--247 sq mi.

Gage.--Recording prior to Mar. 17, 1936; nonrecording Apr. 1, 1936, to Mar. 19, 1937; recording thereafter. At site 200 ft upstream at present datum prior to Mar. 19, 1937. Datum of gage is 640.89 ft above mean sea level (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 6,500 cfs and extended on basis of slope-area measurements at 17,900 cfs and 38,100 cfs.

Remarks.--Base for partial-duration series, 3,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1924	Mar. 29, 1924	a13.0	-	1934	Jan. 7, 1934	7.6	5,040
1930	Oct. 22, 1929	7.02	4,170	1935	Feb. 15, 1935	6.25	2,590
1931	May 13, 1931	7.25	4,820	1936	Feb. 26, 1936	-	(b)
1932	Mar. 31, 1932	7.15	4,560		Mar. 11, 1936	-	(b)
	May 12, 1932	7.10	4,430		Mar. 17, 1936	c22.2	38,100
1933	Mar. 14, 1933	8.8	7,320	1937	Apr. 6, 1936	7.5	4,850
	Apr. 20, 1933	7.59	5,040		Jan. 10, 1937	8.8	7,320
	May 10, 1933	7.53	4,940		Jan. 22, 1937	7.5	4,850
					Apr. 26, 1937	13.45	18,600

a Annual peak only, at former site, from information by local resident.

b Peak above base; discharge not determined.

c 20.2 ft at present site.

Peak stages and discharges of Wills Creek near Cumberland, Md.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Oct. 28, 1937	8.94	8,040	1951	Dec. 7, 1950	8.32	6,860
1939	Feb. 3, 1939	7.11	4,710		June 13, 1951	8.10	6,480
	Feb. 28, 1939	6.80	4,230	1952	Jan. 2, 1952	7.03	4,520
	July 29, 1939	7.65	5,570		Mar. 11, 1952	9.17	8,650
1940	Mar. 31, 1940	7.11	4,710	1953	Mar. 24, 1953	7.50	5,380
	Apr. 20, 1940	7.07	4,710		May 31, 1953	9.47	9,280
1941	Apr. 5, 1941	7.68	5,750	1954	Mar. 1, 1954	8.70	7,640
	June 4, 1941	8.68	7,640	1955	Oct. 16, 1954	10.70	11,900
1942	Mar. 9, 1942	6.52	3,770		Dec. 30, 1954	6.98	4,490
	Apr. 10, 1942	6.81	4,230		Mar. 5, 1955	7.71	5,760
1943	Oct. 15, 1942	15.14	23,300		Mar. 22, 1955	7.52	5,420
	Dec. 30, 1942	8.80	7,840		June 8, 1955	6.53	3,750
	Apr. 19, 1943	8.07	6,480	1956	Apr. 7, 1956	6.72	4,050
1944	Apr. 24, 1944	6.85	4,180	1957	Dec. 14, 1956	7.19	4,840
	May 7, 1944	6.52	3,700	1958	Dec. 26, 1957	6.37	3,500
1945	Feb. 16, 1945	6.58	3,860		May 5, 1958	8.53	7,300
	Feb. 27, 1945	7.28	5,030	1959	Feb. 10, 1959	6.93	4,400
	Mar. 3, 1945	6.94	4,350	1960	Oct. 24, 1959	7.41	5,220
	Mar. 6, 1945	6.90	4,350		Mar. 30, 1960	8.57	7,380
1946	June 2, 1946	6.25	3,320		Apr. 4, 1960	6.53	3,750
1947	Aug. 26, 1947	6.06	3,030		May 8, 1960	10.29	11,000
1948	Jan. 1, 1948	6.49	3,700	1961	Feb. 19, 1961	7.88	6,060
	Apr. 13, 1948	7.61	5,560		Feb. 26, 1961	-	(b)
1949	Jan. 26, 1949	6.50	3,700		Apr. 16, 1961	8.10	6,480
1950	Mar. 28, 1950	6.17	3,180				

b Peak above base; discharge not determined.

6030. North Branch Potomac River near Cumberland, Md.

Location.--Lat 39°37'16", long 78°46'24", on left bank at downstream side of Wiley Ford Bridge, 2 miles south of Cumberland, Allegany County, and 2.1 miles downstream from Wills Creek.

Drainage area.--875 sq mi.

Gage.--Recording. Datum of gage is 585.22 ft above mean sea level (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 33,000 cfs and extended on basis of slope-area measurement at 88,200 cfs.

Bankfull stage.--11 ft.

Historical data.--Flood of 1889 is greatest known.

Remarks.--Some regulation since December 1950 by Savage River Reservoir (capacity, 20,000 acre-ft). Base for partial-duration series, 10,000 cfs.

Peak stages and discharges of North Branch Potomac River near Cumberland, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1889	June 1, 1889	29.2	a89,000	1945	Feb. 27, 1945	15.30	18,200
1924	Mar. 29, 1924	28.4	a82,000		Mar. 4, 1945	13.80	15,300
1930	Oct. 3, 1929	-	b11,000		Mar. 7, 1945	14.96	17,600
1931	May 13, 1931	-	b13,500		Sept. 18, 1945	13.79	15,300
1932	Feb. 5, 1932	13.8	15,300	1946	Jan. 8, 1946	10.00	8,610
	Apr. 1, 1932	13.6	14,900		June 3, 1946	10.00	8,610
	May 13, 1932	19.2	28,200		June 20, 1946	10.05	8,610
1933	Mar. 14, 1933	17.8	23,400	1947	Mar. 15, 1947	10.49	9,460
	Mar. 19, 1933	12.1	12,100	1948	Jan. 2, 1948	14.10	15,900
	Apr. 20, 1933	14.9	17,400		Feb. 14, 1948	12.53	12,900
	May 10, 1933	11.0	10,100		Mar. 24, 1948	12.37	12,700
1934	Jan. 7, 1934	14.6	16,800		Apr. 13, 1948	16.00	19,600
1935	Jan. 22, 1935	12.5	12,800	1949	Dec. 16, 1948	15.50	18,600
	Sept. 5, 1935	11.1	10,300		Jan. 28, 1949	12.31	12,600
1936	Feb. 26, 1936	14.3	16,200		June 18, 1949	15.50	18,600
	Mar. 12, 1936	15.1	17,800		July 13, 1949	14.74	17,000
	Mar. 17, 1936	29.1	88,200	1950	Mar. 28, 1950	12.06	11,900
	Mar. 25, 1936	14.1	15,800	1951	Dec. 8, 1950	15.53	18,000
	Apr. 6, 1936	13.1	14,000		Feb. 2, 1951	12.16	11,800
1937	Jan. 11, 1937	13.4	14,500		June 13, 1951	17.65	23,100
	Jan. 23, 1937	14.9	17,400	1952	Dec. 31, 1951	11.8	11,200
	Mar. 21, 1937	11.3	10,600		Mar. 11, 1952	16.69	20,700
	Apr. 26, 1937	24.2	51,700		Apr. 28, 1952	11.84	11,200
1938	Oct. 28, 1937	25.1	57,400	1953	Jan. 24, 1953	12.05	11,500
1939	Feb. 4, 1939	16.75	21,500		May 31, 1953	11.45	10,500
	Feb. 28, 1939	12.67	13,200	1954	Mar. 1, 1954	15.96	19,000
	Apr. 17, 1939	13.30	14,300	1955	Oct. 16, 1954	23.85	38,500
1940	Apr. 17, 1940	12.58	13,000		Dec. 30, 1954	13.88	14,800
	Apr. 20, 1940	14.57	16,800		Mar. 5, 1955	12.40	12,200
	May 31, 1940	12.75	13,400		Mar. 22, 1955	14.18	15,300
1941	Apr. 5, 1941	13.37	14,600		June 8, 1955	11.61	10,800
	June 4, 1941	16.54	20,800		Aug. 18, 1955	22.60	34,300
1942	Mar. 9, 1942	11.08	10,500	1956	Apr. 7, 1956	11.66	10,900
	Apr. 10, 1942	14.58	16,800		May 28, 1956	12.26	11,900
	May 16, 1942	13.88	15,500		Aug. 6, 1956	14.82	16,500
	May 23, 1942	12.42	12,700	1957	Dec. 14, 1956	11.61	10,800
1943	Oct. 15, 1942	24.04	50,500		Feb. 10, 1957	16.00	18,700
	Dec. 30, 1942	17.12	22,200	1958	Dec. 26, 1957	11.32	10,400
	Apr. 20, 1943	13.33	14,400		Apr. 7, 1958	13.44	14,000
1944	Jan. 28, 1944	11.82	11,700		May 6, 1958	15.19	17,200
	Feb. 23, 1944	12.01	12,000	1959	Feb. 11, 1959	8.88	7,630
	Feb. 26, 1944	11.22	10,600	1960	Oct. 24, 1959	13.00	14,200
	Mar. 13, 1944	11.62	11,300		Mar. 31, 1960	17.34	22,200
	Mar. 24, 1944	12.24	12,400		Apr. 4, 1960	13.97	15,900
	May 7, 1944	13.75	15,300		May 8, 1960	17.36	22,200
1945	Oct. 21, 1944	11.01	10,300	1961	Feb. 20, 1961	14.27	17,000
	Dec. 26, 1944	11.46	11,200		Feb. 26, 1961	18.84	25,300
	Feb. 16, 1945	13.46	14,800		Apr. 16, 1961	13.22	15,200

a Annual peak only, about.

b Estimated.

6035, Evitts Creek near Centerville, Pa.
(Published as "near Bedford Valley" prior to October 1952)

Location.--Lat 39°47'23", long 78°38'48", on left bank 2 miles upstream from Thomas W. Koon Dam, 3 miles south of Centerville, Bedford County, and 7 miles upstream from Rock Gully Creek.

Drainage area.--30.2 sq mi.

Gage.--Recording. Datum of gage is 1,027.59 ft above mean sea level (city of Cumberland bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 520 cfs and extended on basis of slope-area measurements at 2,040 and 5,240 cfs.

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)			
1933	Jan. 26, 1933	2.85	414	1947	Oct. 26, 1946	2.56	249			
	Mar. 14, 1933	3.55	905	1948	Apr. 13, 1948	2.90	455			
	Mar. 19, 1933	2.83	402							
	May 10, 1933	3.07	537	1949	June 28, 1949	3.12	630			
1934	Jan. 7, 1934	2.90	441	1950	Mar. 24, 1950	2.51	226			
1935	Feb. 15, 1935	2.79	381	1951	Dec. 4, 1950	3.21	707			
1936	Feb. 27, 1936	4.08	912		Dec. 7, 1950	3.85	1,270			
	Mar. 11, 1936	3.71	856		Feb. 21, 1951	2.94	403			
	Mar. 17, 1936	7.13	5,240		Mar. 30, 1951	3.18	571			
	Apr. 6, 1936	3.08	592		June 13, 1951	3.37	737			
1937	Oct. 17, 1936	2.97	518		Aug. 12, 1951	3.17	564			
	Jan. 10, 1937	2.96	511	1952	Mar. 11, 1952	3.95	1,300			
	Apr. 26, 1937	4.64	2,040							
1938	Oct. 28, 1937	3.58	1,030	1953	Nov. 21, 1952	3.64	993			
	Jan. 25, 1938	3.05	577	Mar. 24, 1953	3.32	717				
1939	Feb. 3, 1939	3.14	615	1954	May 31, 1953	4.39	1,740			
	Feb. 28, 1939	3.17	695					Mar. 1, 1954	4.35	1,700
	July 29, 1939	5.18	2,600	June 11, 1954	3.46	836				
1940	Mar. 31, 1940	3.12	631	1955	Oct. 15, 1954	4.98	2,650			
	Apr. 20, 1940	3.10	615		Mar. 4, 1955	3.15	660			
1941	June 4, 1941	3.32	797		Mar. 22, 1955	3.22	718			
					June 8, 1955	3.10	620			
					Aug. 18, 1955	2.86	442			
1942	Mar. 9, 1942	3.53	982	1956	Apr. 7, 1956	2.99	533			
	Apr. 9, 1942	2.91	475	July 19, 1956	3.56	1,030				
	May 22, 1942	2.84	428	Aug. 28, 1956	3.02	556				
1943	Oct. 15, 1942	4.26	1,660	1957	Dec. 14, 1956	3.12	636			
		3.58	1,030					Apr. 25, 1957	3.32	808
	Apr. 19, 1943	3.15	655	1958	Dec. 26, 1957	3.08	449			
	Apr. 21, 1943	2.88	455					May 5, 1958	3.73	1,050
1944	Jan. 28, 1944	2.92	482	1959	Feb. 10, 1959	2.85	435			
	Mar. 13, 1944	2.92	482	1960	Oct. 23, 1959	4.01	1,500			
	Apr. 24, 1944	2.90	455					Mar. 30, 1960	3.08	604
	Apr. 27, 1944	3.01	540					Apr. 4, 1960	3.04	572
	May 7, 1944	3.58	1,030					May 8, 1960	4.29	1,820
1945	Feb. 27, 1945	2.92	470	1961	June 14, 1960	3.07	596			
	May 17, 1945	3.05	572					Feb. 19, 1961	2.83	421
	July 31, 1945	3.77	1,200					Feb. 25, 1961	3.32	808
	Sept. 18, 1945	2.91	463					Apr. 16, 1961	3.58	1,050
1946	Feb. 27, 1946	2.85	420							
	June 2, 1946	2.84	412							

6045. Patterson Creek near Headsville, W. Va.

Location.--Lat 39°26'35", long 78°49'20", on right bank 100 ft downstream from Hazel Run, 1 mile downstream from Cabin Run, 4 miles northeast of Headsville, Mineral County, and 8 miles east of Keyser, W. Va.

Drainage area.--219 sq mi.

Gage.--Nonrecording prior to Oct. 24, 1946; recording thereafter. At site 1 mile upstream at datum 6.14 ft higher prior to Oct. 11, 1946. Datum of gage 624.90 ft.

Stage-discharge relation.--Defined by current-meter measurements below 5,000 cfs slope-area measurement at 11,500 cfs and current-meter measurement of 14,500 cfs at former site.

Bankfull stage.--7 ft.

Remarks.--Base for partial-duration series, 1,800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Jan. 30, 1939	9.4	3,660	1950	Feb. 1, 1950	9.06	3,250
	Feb. 3, 1939	11.3	7,800		May 15, 1950	7.68	2,100
	Feb. 28, 1939	9.9	4,480		Sept. 13, 1950	7.86	2,230
	Apr. 16, 1939	9.6	3,960		Sept. 22, 1950	8.66	2,880
1940	Apr. 17, 1940	10.18	5,060	1951	Nov. 5, 1950	7.66	2,100
	Apr. 20, 1940	9.74	4,120		Dec. 4, 1950	8.98	3,150
	May 31, 1940	11.80	9,600		Dec. 8, 1950	9.03	3,150
	June 11, 1940	8.1	2,230		Feb. 2, 1951	8.88	3,060
1941	Apr. 5, 1941	7.80	1,980		Feb. 21, 1951	7.73	2,100
	June 4, 1941	7.75	1,980		Mar. 30, 1951	9.26	3,470
	July 5, 1941	8.14	2,330		Apr. 13, 1951	8.67	2,880
	July 8, 1941	7.7	1,900		June 13, 1951	10.60	5,900
1942	Apr. 10, 1942	9.3	3,520	1952	Dec. 31, 1951	8.10	2,380
	May 22, 1942	10.27	5,260		Jan. 2, 1952	8.26	2,540
	Aug. 17, 1942	10.17	5,060		Jan. 28, 1952	8.34	2,540
1943	Oct. 15, 1942	13.00	15,300		Mar. 11, 1952	9.26	3,470
	Dec. 30, 1942	10.23	5,060		Mar. 23, 1952	7.66	2,100
	Feb. 6, 1943	8.87	3,030		Apr. 25, 1952	7.81	2,160
	Apr. 19, 1943	7.90	2,000		Apr. 28, 1952	9.28	3,470
1944	Jan. 28, 1944	8.87	3,030	1953	Dec. 11, 1952	7.45	1,920
	Feb. 26, 1944	8.4	2,480		Jan. 10, 1953	7.22	1,800
	Mar. 5, 1944	9.2	3,380		Jan. 24, 1953	9.04	3,150
	Mar. 8, 1944	8.3	2,380		Mar. 4, 1953	7.89	2,230
	Mar. 13, 1944	9.70	4,120		Mar. 24, 1953	8.28	2,540
	Mar. 23, 1944	9.38	3,660		Apr. 10, 1953	8.72	2,880
	Apr. 27, 1944	7.90	2,000	1954	Mar. 1, 1954	10.46	5,650
	May 7, 1944	11.54	8,400		Aug. 21, 1954	7.35	1,920
1945	Oct. 21, 1944	9.4	3,660	1955	Oct. 16, 1954	10.95	7,200
	Feb. 23, 1945	7.96	2,090		Dec. 30, 1954	9.38	3,630
	Feb. 26, 1945	9.21	3,380		Feb. 7, 1955	8.25	1,800
	Feb. 28, 1945	8.00	2,090		Mar. 22, 1955	10.10	4,700
	Mar. 7, 1945	8.96	3,140		Apr. 25, 1955	9.87	4,350
	Sept. 18, 1945	11.86	10,000		June 8, 1955	9.75	4,200
1946	Feb. 14, 1946	7.8	1,910		June 12, 1955	8.00	2,300
1947	Mar. 15, 1947	5.69	858		July 5, 1955	8.30	2,540
1948	Jan. 2, 1948	8.87	2,780		Aug. 13, 1955	8.10	2,380
	Feb. 14, 1948	8.91	2,080		Aug. 16, 1955	12.20	16,000
	Mar. 24, 1948	9.08	3,040	1956	Feb. 3, 1956	7.87	2,230
	Apr. 13, 1948	8.75	2,660		Feb. 7, 1956	9.09	3,270
1949	Dec. 4, 1948	7.76	1,800		Feb. 18, 1956	7.77	2,160
	Dec. 16, 1948	10.19	4,900		Mar. 14, 1956	9.46	3,750
	Jan. 6, 1949	8.14	2,000		Apr. 7, 1956	9.49	3,750
	Jan. 28, 1949	8.80	2,660		June 17, 1956	7.50	1,980
	June 19, 1949	9.23	3,180		July 6, 1956	7.33	1,860
	June 29, 1949	9.24	3,180		Aug. 6, 1956	8.12	2,380
	July 12, 1949	8.97	2,900	1957	Dec. 23, 1956	7.50	1,980
	July 18, 1949	8.69	2,540		Jan. 10, 1957	9.03	3,150
					Feb. 10, 1957	10.27	5,000
					Apr. 5, 1957	8.44	2,280
					Apr. 8, 1957	8.11	2,050

a Backwater from ice.

Peak stages and discharges of Patterson Creek near Headsville, W. Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)	
1957	June 14, 1957	8.30	2,200	1960	Jan. 15, 1960	9.02	2,900	
1958	Dec. 26, 1957	8.42	2,280		Feb. 19, 1960	8.02	1,980	
	Mar. 27, 1958	9.08	3,040		Mar. 29, 1960	9.33	3,310	
	Apr. 29, 1958	9.74	3,920		Apr. 4, 1960	9.34	3,310	
	May 6, 1958	9.58	3,760		May 8, 1960	10.80	6,740	
	Aug. 3, 1958	7.97	1,980	1961	Feb. 19, 1961	10.06	4,710	
					Feb. 26, 1961	10.17	4,940	
1959	Apr. 29, 1959	6.22	1,110			Mar. 25, 1961	7.77	1,860
						Apr. 14, 1961	8.47	2,370
1960	Oct. 24, 1959	11.53	10,600			Apr. 16, 1961	9.05	2,900

6055. South Branch Potomac River at Franklin, W. Va.

Location.--Lat 38°38'14", long 79°20'14", on left bank half a mile southwest of Franklin, Pendleton County, 2 miles upstream from Friends Run, and 2½ miles downstream from Thorn Creek.

Drainage area.--182 sq mi.

Gage.--Recording. Datum of gage is 1,692.5 ft above mean sea level (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 6,400 cfs and extended above on basis of slope-area measurement at 15,000 cfs.

Historical data.--Flood in March 1936 is maximum known, from information by local residents.

Remarks.--Base for partial-duration series, 1,300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	March 1936	al3	-	1948	Feb. 14, 1948	6.04	4,330
1940b/	Apr. 29, 1940	4.52	1,880		Mar. 24, 1948	4.39	1,760
	May 31, 1940	7.22	6,600		Apr. 14, 1948	6.74	5,600
	June 5, 1940	3.96	1,320	1949	Oct. 5, 1948	4.14	1,480
	June 7, 1940	4.25	1,580		Dec. 2, 1948	4.95	2,490
	June 9, 1940	5.00	2,560		Jan. 5, 1949	4.73	2,210
	June 11, 1940	6.86	6,000		Apr. 13, 1949	7.24	6,280
	June 12, 1940	4.65	2,070		May 23, 1949	5.40	3,250
	Aug. 27, 1940	4.22	1,540		June 17, 1949	11.40	15,000
					June 20, 1949	6.10	4,360
					July 16, 1949	5.95	4,120
					July 19, 1949	5.66	3,640
1941	Apr. 5, 1941	3.98	1,300	1950	Feb. 2, 1950	4.34	1,800
1942	Mar. 9, 1942	4.35	1,700		Sept. 10, 1950	5.10	2,720
	May 16, 1942	8.69	10,100		Sept. 13, 1950	5.24	3,020
	May 22, 1942	7.37	7,080	1951	Dec. 4, 1950	6.31	4,690
	June 7, 1942	5.60	3,520		Dec. 7, 1950	6.64	5,200
	Aug. 8, 1942	4.37	1,700		Feb. 1, 1951	5.72	3,720
1943	Oct. 15, 1942	4.67	2,070		Feb. 7, 1951	4.54	2,060
	Dec. 30, 1942	5.88	4,060		Mar. 30, 1951	4.71	2,260
	Feb. 6, 1943	4.43	1,820		Apr. 12, 1951	4.67	2,200
	Mar. 13, 1943	4.50	1,880		June 13, 1951	6.50	5,030
	Mar. 19, 1943	3.91	1,310	1952	Dec. 21, 1951	4.09	1,480
	Apr. 19, 1943	4.45	1,820		Mar. 11, 1952	6.60	5,200
	July 8, 1943	6.05	4,330		Apr. 28, 1952	4.18	1,610
1944	Feb. 22, 1944	3.97	1,320	1953	Dec. 11, 1952	4.77	2,320
	May 25, 1944	4.43	1,820		Jan. 24, 1953	4.23	1,680
1945	Dec. 26, 1944	4.05	1,370		Feb. 21, 1953	6.13	4,360
	Feb. 22, 1945	4.07	1,370		Mar. 24, 1953	5.83	3,960
	July 29, 1945	4.19	1,530	1954	Mar. 1, 1954	7.31	6,470
	Sept. 18, 1945	5.70	3,700	1955	Oct. 15, 1954	7.06	6,090
1946	Jan. 7, 1946	4.35	1,700		Dec. 30, 1954	6.66	5,370
	May 4, 1946	4.08	1,420		Feb. 6, 1955	5.82	3,880
1947	Mar. 14, 1947	4.42	1,760				
	July 17, 1947	5.18	2,880				

a Annual peak only, about.

b Partial year; record began Apr. 5, 1940.

Peak stages and discharges of South Branch Potomac River at Franklin, W. Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 5, 1955	5.42	3,250	1959	June 2, 1959	5.77	3,800
	Mar. 22, 1955	7.10	6,090				
	Aug. 18, 1955	5.23	3,020	1960	Feb. 11, 1960	4.22	1,610
1956	Mar. 14, 1956	4.21	1,610		Mar. 30, 1960	6.77	5,540
					Apr. 3, 1960	5.90	4,040
1957	Apr. 5, 1957	5.27	3,020		May 8, 1960	5.53	3,480
	Apr. 9, 1957	4.03	1,420		May 28, 1960	5.00	2,660
				1961	Feb. 19, 1961	4.86	2,460
1958	Dec. 26, 1957	4.54	2,060		Feb. 25, 1961	6.22	4,520
	Apr. 6, 1958	4.37	1,800		Apr. 16, 1961	4.12	1,480
	May 5, 1958	4.61	2,130				

6060. North Fork South Branch Potomac River at Cabins, W. Va.
(Formerly published as "North Fork of South Branch Potomac River")

Location.--Lat 38°59'05", long 79°14'10", on left bank 380 ft upstream from highway bridge at Cabins, Grant County, 1½ miles downstream from Jordan Run, 3 miles upstream from mouth, and 6 miles west of Petersburg, W. Va.

Drainage area.--314 sq mi.

Gage.--Recording. Datum of gage is 1,051.13 ft above mean sea level, (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 12,000 cfs and extended above on basis of slope-area measurement at 50,000 cfs.

Bankfull stage.--8 ft.

Historical data.--Flood of Mar. 17, 1936, is maximum known prior to 1940, from information by local residents.

Remarks.--Base for partial-duration series, 3,300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Mar. 17, 1936	12.8	-	1948	Feb. 14, 1948	9.20	8,180
					Mar. 24, 1948	8.58	6,740
1940b/	Mar. 4, 1940	6.82	3,680		Apr. 14, 1948	10.00	10,300
	Apr. 17, 1940	7.21	4,360	1949	Dec. 4, 1948	7.62	4,750
	Apr. 20, 1940	6.94	3,920		Dec. 16, 1948	8.24	5,900
	May 31, 1940	11.10	14,300		Apr. 14, 1949	8.08	5,700
1941	Apr. 6, 1941	6.37	2,990		June 17, 1949	18.0	50,000
					July 17, 1949	9.67	8,100
1942	Mar. 9, 1942	6.92	3,840	1950	Feb. 1, 1950	8.52	5,060
	May 16, 1942	10.80	13,400		Sept. 13, 1950	10.30	9,900
	May 22, 1942	10.03	10,900	1951	Dec. 4, 1950	9.03	6,200
	Aug. 9, 1942	6.70	3,520		Dec. 7, 1950	10.41	10,200
1943	Dec. 30, 1942	8.20	6,340		Feb. 1, 1951	9.33	6,950
	Feb. 5, 1943	6.61	3,360		Mar. 30, 1951	7.79	3,760
	Apr. 20, 1943	7.32	4,540		Apr. 12, 1951	7.54	3,360
	July 8, 1943	6.98	3,920		June 13, 1951	9.93	8,700
1944	Feb. 23, 1944	8.42	6,780	1952	Jan. 27, 1952	7.89	3,930
	Mar. 24, 1944	6.69	3,520		Mar. 11, 1952	8.52	5,060
1945	Oct. 21, 1944	7.22	4,360		Apr. 28, 1952	9.17	6,700
	Dec. 26, 1944	7.92	5,700	1953	Jan. 24, 1953	7.55	3,360
	Jan. 1, 1945	6.83	3,760		Feb. 21, 1953	8.72	5,500
	Feb. 16, 1945	7.30	4,540	1954	Mar. 1, 1954	11.15	12,800
	Feb. 23, 1945	6.70	3,520		July 15, 1954	7.75	4,020
	Feb. 28, 1945	7.66	5,300	1955	Oct. 15, 1954	12.20	15,400
	Mar. 3, 1945	6.80	3,680		Dec. 30, 1954	10.28	9,240
	Sept. 18, 1945	7.50	4,900		Feb. 7, 1955	7.32	3,340
1946	Jan. 7, 1946	8.18	6,340		Mar. 5, 1955	8.95	6,200
	May 5, 1946	6.80	3,680		Mar. 22, 1955	8.50	5,200
1947	Mar. 15, 1947	7.41	4,720		Aug. 13, 1955	7.89	4,200
	Mar. 25, 1947	7.05	4,090				

a Annual peak only.

b Partial year; record began Feb. 1940.

Peak stages and discharges of North Fork South Branch Potomac River at Cabins, W. Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Aug. 18, 1955	12.13	15,000	1958	May 6, 1958	7.63	3,820
1956	Feb. 2, 1956	7.98	4,350	1959	Jan. 22, 1959	7.06	2,970
	Feb. 7, 1956	7.41	3,480		Apr. 29, 1959	7.07	2,970
	Mar. 14, 1956	8.50	5,200		Mar. 30, 1960	10.57	10,100
	Apr. 7, 1956	7.31	3,340	1960	Apr. 4, 1960	9.78	7,960
	May 28, 1956	8.72	5,600		May 8, 1960	9.09	6,420
	Aug. 6, 1956	8.69	5,600		May 28, 1960	8.62	5,400
1957	Jan. 29, 1957	8.94	6,000	1961	Feb. 19, 1961	9.18	6,640
	Feb. 10, 1957	-	5,500		Feb. 23, 1961	8.19	4,690
	Apr. 5, 1957	7.81	4,050		Feb. 25, 1961	9.44	7,080
1958	Apr. 6, 1958	9.05	6,200		Apr. 16, 1961	8.17	4,960

c About.

6065. South Branch Potomac River near Petersburg, W. Va.

Location.--Lat. 38°59'34", long 79°10'26", on right bank 1.2 miles downstream from North Fork of South Branch Potomac River and 2½ miles west of Petersburg, Grant County, W. Va.

Drainage area.--642 sq mi.

Gage.--Nonrecording prior to Dec. 4, 1928; recording thereafter. Datum of gage is 962.00 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 10,000 cfs and extended above on basis of slope-area measurement at 62,000 cfs.

Historical data.--The maximum flood known prior to 1929 was that of 1877.

Remarks.--Base for partial-duration series, 6,000 cfs.

Peak stages and discharges

Peak stages and discharges								
Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)	
1877	1877	a21.2	-	1939	Jan. 30, 1939	10.89	13,700	
1924	1924	a19.2	-		Feb. 3, 1939	14.6	26,000	
					Apr. 16, 1939	10.85	13,500	
					July 22, 1939	7.43	6,020	
					July 30, 1939	8.26	7,800	
1929	Feb. 28, 1929	8.73	7,460	1940				
	Mar. 6, 1929	8.19	6,570			Apr. 17, 1940	7.40	6,020
1930	Oct. 22, 1929	12.21	14,400			Apr. 20, 1940	8.20	7,600
	Nov. 18, 1929	9.31	8,550			May 31, 1940	14.50	25,600
1931	June 16, 1931	7.48	5,400		June 12, 1940	7.38	6,020	
1932	Feb. 4, 1932	15.18	28,300	1941	Apr. 5, 1941	6.61	4,660	
	Mar. 28, 1932	8.36	7,300	1942	May 16, 1942	13.93	23,400	
	May 1, 1932	7.97	6,500			May 22, 1942	13.69	22,600
		May 13, 1932	8.04	6,500	1943			
1933	Mar. 21, 1933	7.86	6,300			Oct. 15, 1942	7.97	7,200
	Apr. 17, 1933	9.72	10,300			Dec. 30, 1942	10.12	11,800
	Apr. 20, 1933	9.08	8,840			Feb. 7, 1943	7.38	6,180
	Aug. 24, 1933	10.2	11,900		Apr. 20, 1943	7.94	7,100	
					July 8, 1943	8.79	8,900	
1934	Mar. 28, 1934	7.8	5,890	1944	Feb. 23, 1944	8.17	7,700	
1935	Jan. 22, 1935	9.9	9,690	1945	Dec. 26, 1944	7.97	7,200	
	Sept. 5, 1935	9.2	8,360			Feb. 28, 1945	7.99	7,200
1936	Feb. 25, 1936	9.17	9,340		Sept. 18, 1945	9.45	10,100	
	Mar. 17, 1936	20.3	49,800	1946				
	Mar. 24, 1936	9.04	9,200			Jah. 7, 1946	8.31	7,800
		Apr. 6, 1936	7.67	6,780	1947			
						Mar. 14, 1947	7.67	6,640
1937	Jan. 21, 1937	8.70	8,600	1948	Feb. 14, 1948	10.00	11,400	
	Apr. 26, 1937	10.3	12,200			Mar. 24, 1948	8.81	8,800
1938						Apr. 14, 1948	12.21	17,600
	Oct. 19, 1937	7.30	6,140	1949				
	Oct. 24, 1937	11.66	16,100			Dec. 4, 1948	8.62	8,400
	May 24, 1938	7.49	6,200			Dec. 16, 1948	8.53	8,200

a Annual peak only.

Peak stages and discharges of South Branch Potomac River
near Petersburg, W. Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Apr. 14, 1949	10.78	13,500	1955	Mar. 5, 1955	8.90	9,780
	June 17, 1949	22.83	62,000		Mar. 22, 1955	9.89	12,100
	July 17, 1949	9.90	11,200		Aug. 18, 1955	12.86	20,300
1950	Feb. 1, 1950	7.86	7,620	1956	Mar. 14, 1956	7.89	7,620
	Sept. 13, 1950	9.50	11,200		May 28, 1956	7.04	6,000
1951	Dec. 4, 1950	9.69	11,600		Aug. 6, 1956	7.88	7,620
	Dec. 8, 1950	10.95	14,800	1957	Jan. 29, 1957	7.52	6,900
	Feb. 1, 1951	9.41	10,900		Apr. 5, 1957	8.00	7,800
	Mar. 30, 1951	7.45	6,720	1958	Apr. 7, 1958	8.22	8,240
	Apr. 12, 1951	7.30	6,540		May 6, 1958	7.27	6,540
	June 13, 1951	10.38	13,300	1959	June 2, 1959	7.27	6,540
1952	Mar. 11, 1952	9.20	10,500		Mar. 30, 1960	11.65	16,500
	Apr. 28, 1952	9.26	10,700	1960	Apr. 4, 1960	10.09	12,600
1953	Feb. 21, 1953	8.89	9,780		May 8, 1960	9.38	10,900
	Mar. 24, 1953	7.37	6,720		May 28, 1960	8.47	8,900
1954	Mar. 1, 1954	11.50	16,200				
1955	Oct. 15, 1954	13.34	21,600	1961	Feb. 19, 1961	9.12	10,200
	Dec. 30, 1954	11.02	14,800		Feb. 23, 1961	7.63	7,080
	Feb. 7, 1955	7.71	7,260		Feb. 26, 1961	10.16	12,800
					Apr. 16, 1961	7.47	6,900

6075. South Fork South Branch Potomac River at Brandywine, W. Va.
(Formerly published as "South Fork of South Branch Potomac River")

Location.--Lat 38°37'53", long 79°13'38", on left bank 50 ft upstream from bridge on U.S. Highway 33, 0.1 mile upstream from Hawes Run, 0.4 mile north of Brandywine, Pendleton County, and 0.9 mile downstream from Broad Run.

Drainage area.--102 sq mi.

Gage.--Nonrecording and crest-stage gage prior to Sept. 25, 1956; recording thereafter. Datum of gage is 1,558.35 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 5,300 cfs and extended above on basis of slope-area measurements.

Remarks.--Base for partial-duration series, 1,600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	May 7, 1944	5.32	1,850	1953	Nov. 21, 1952	4.79	1,980
	May 24, 1944	5.54	2,030		Jan. 24, 1953	4.5	1,650
1945	Oct. 21, 1944	6.2	3,000		Feb. 21, 1953	5.48	2,900
	July 29, 1945	6.1	2,900		Mar. 24, 1953	5.75	3,380
	Sept. 18, 1945	8.4	6,220	1954	Mar. 1, 1954	9.46	10,200
1946	Jan. 7, 1946	5.2	1,680	1955	Oct. 15, 1954	10.75	13,900
1947	Mar. 14, 1947	5.38	2,200		Dec. 21, 1954	5.80	2,720
	July 17, 1947	8.4	6,220		Dec. 30, 1954	6.00	3,000
					Mar. 6, 1955	5.30	2,080
1948	Feb. 14, 1948	6.45	3,200		Mar. 22, 1955	5.90	2,860
	Apr. 14, 1948	5.83	2,600		Aug. 18, 1955	8.68	8,110
1949	Oct. 5, 1948	6.10	2,900	1956	Mar. 14, 1956	4.55	1,130
	Dec. 4, 1948	6.8	3,690				
	Apr. 13, 1949	9.76	9,060	1957	Apr. 5, 1957	7.44	4,050
	May 23, 1949	5.23	1,910				
	June 17, 1949	14.6	41,200	1958	May 5, 1958	5.64	1,770
	July 20, 1949	5.6	2,960				
1950	Sept. 13, 1950	6.38	4,280	1959	June 2, 1959	7.70	4,500
1951	Dec. 7, 1950	7.25	5,640		Feb. 6, 1960	5.91	1,630
	Feb. 1, 1951	4.9	1,920		Mar. 30, 1960	6.86	2,760
	June 13, 1951	4.9	1,920		Apr. 4, 1960	6.77	2,620
					May 8, 1960	8.20	5,000
1952	Feb. 4, 1952	4.94	1,920		May 28, 1960	7.95	4,530
	Mar. 11, 1952	7.4	6,020	1961	Feb. 18, 1961	5.95	1,560
	Apr. 28, 1952	5.43	2,750		Feb. 25, 1961	6.92	2,690
					Aug. 2, 1961	6.21	1,820

6080. South Fork South Branch Potomac River near Moorefield, W. Va.
(Formerly published as "South Fork of South Branch Potomac River")

Location.--Lat 39°00'44", long 78°57'23", on right bank 0.2 mile downstream from Stony Run, 3½ miles south of Moorefield, Hardy County, and 6 miles upstream from mouth.

Drainage area.--283 sq mi.

Gage.--Nonrecording at site 2 miles upstream at different datum prior to Mar. 11, 1940; recording thereafter. Datum of gage is 861.51 ft above mean sea level (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 7,000 cfs and extended above on basis of slope area measurements at 30,000 cfs and 39,000 cfs.

Bankfull stage.--6 ft.

Remarks.--Base for partial-duration series, 2,800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1924	May 1924	al3.5	28,000	1948	Feb. 14, 1948	6.40	4,860
					Apr. 14, 1948	7.11	5,580
1929	Feb. 28, 1929	6.62	4,200				
	Mar. 6, 1929	6.20	3,620	1949	Oct. 6, 1948	5.88	3,760
	Apr. 16, 1929	7.65	5,700		Dec. 4, 1948	6.87	5,260
1930	Oct. 22, 1929	8.75	7,620		Apr. 14, 1949	8.57	8,220
	Nov. 18, 1929	8.2	6,660		May 23, 1949	5.29	2,960
					June 18, 1949	16.1	39,000
1931	Apr. 4, 1931	5.0	2,010		June 28, 1949	5.48	3,000
					July 20, 1949	8.19	7,300
1932	Feb. 4, 1932	7.9	6,570	1950	Feb. 2, 1950	5.43	2,930
	Mar. 28, 1932	6.45	3,890		Sept. 13, 1950	6.84	4,900
	May 1, 1932	6.8	4,570				
	May 12, 1932	7.1	5,100	1951	Dec. 4, 1950	8.99	9,000
1933	Apr. 17, 1933	7.55	5,800		Dec. 8, 1950	10.04	11,500
	Apr. 20, 1933	6.48	3,500		Feb. 2, 1951	6.38	4,300
	Aug. 24, 1933	10.2	14,000	1952	Feb. 4, 1952	5.62	3,560
1934	Mar. 28, 1934	6.3	3,750		Mar. 11, 1952	7.66	7,400
1935	Jan. 22, 1935	6.5	4,090		Apr. 28, 1952	7.46	7,000
	Feb. 10, 1935	5.72	2,810		May 12, 1952	5.38	3,260
	Apr. 12, 1935	5.72	2,810	1953	Feb. 22, 1953	5.11	2,850
	Sept. 6, 1935	8.0	6,780		Mar. 25, 1953	6.22	4,560
1936	Mar. 17, 1936	al4.9	30,400	1954	Mar. 1, 1954	9.45	11,700
1939	Jan. 30, 1939	7.6	5,800	1955	Oct. 16, 1954	12.14	19,800
	Feb. 4, 1939	9.48	12,000		Nov. 21, 1954	6.79	5,640
	July 30, 1939	6.2	2,900		Dec. 30, 1954	6.09	4,386
1940	Apr. 20, 1940	6.13	4,180		Mar. 5, 1955	5.27	3,050
	May 31, 1940	9.42	10,000		Mar. 7, 1955	5.50	3,410
1941	Apr. 5, 1941	5.96	3,820		Mar. 22, 1955	6.94	5,820
	July 12, 1941	6.08	4,080		Aug. 18, 1955	11.23	17,100
1942	May 16, 1942	8.74	8,410	1956	Mar. 14, 1956	5.13	2,920
	May 22, 1942	11.07	14,600		Aug. 5, 1956	5.18	2,980
1943	Oct. 15, 1942	10.53	12,800	1957	Apr. 5, 1957	7.09	6,200
	Dec. 30, 1942	6.96	5,920		May 6, 1958	4.94	2,690
	Apr. 20, 1943	6.23	4,370	1958	June 3, 1959	7.26	6,600
1944	May 7, 1944	5.40	2,970	1960	Mar. 30, 1960	6.52	5,100
1945	Oct. 21, 1944	6.60	5,110		Apr. 5, 1960	6.09	4,380
	July 29, 1945	5.55	3,180		May 8, 1960	8.12	8,250
	Sept. 18, 1945	9.17	9,500		May 28, 1960	6.31	4,740
1946	May 4, 1946	5.74	3,490	1961	Feb. 19, 1961	5.36	3,200
1947	July 18, 1947	5.12	2,570		Feb. 26, 1961	5.46	3,340

a Annual peak only.

6085. South Branch Potomac River near Springfield, W. Va.

Location.--Lat 39°26'49", long 78°39'16", at highway bridge 2 miles east of Springfield, Hampshire County, and 13 miles upstream from confluence with North Branch.

Drainage area.--1,471 sq mi.

Gage.--Nonrecording prior to Sept. 5, 1928; recording thereafter. Prior to February 1902, at Grace bridge 10 miles upstream at different datum. Datum of gage is 562.02 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current meter measurements below 30,000 cfs and extended above on basis of slope-area measurement at 110,000 cfs.

Bankfull stage.--10 ft.

Historical data.--The maximum known flood prior to 1929 was that occurring in November 1877.

Remarks.--Base for partial-duration series, 10,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1878	November 1877	a34	a140,000	1939	Jan. 31, 1939	15.35	21,100
1900	June 17, 1900	13.0	b10,600		Feb. 4, 1939	21.40	47,700
					Apr. 17, 1939	14.68	19,400
1901	Apr. 21, 1901	18.4	b17,350	1940	Apr. 17, 1940	11.27	12,400
1904	May 19, 1904	10.3	9,180		Apr. 21, 1940	13.18	16,000
					May 31, 1940	20.11	41,000
1905	Mar. 10, 1905	11.8	11,700	1941	Apr. 6, 1941	10.15	10,600
	June 24, 1905	11.0	10,300	1942	May 17, 1942	16.63	24,200
1906	Mar. 28, 1906	13.55	15,200		May 23, 1942	22.00	51,000
1929	Mar. 1, 1929	13.58	17,600	1943	Oct. 16, 1942	21.09	46,000
	Mar. 6, 1929	14.20	19,200		Dec. 31, 1942	13.45	17,100
	Apr. 17, 1929	19.13	36,400		Feb. 7, 1943	10.65	11,300
	May 21, 1929	10.2	10,600		Apr. 20, 1943	11.29	12,600
1930	Oct. 23, 1929	16.33	25,600	1944	Mar. 24, 1944	9.93	10,100
	Nov. 19, 1929	15.27	22,300		May 8, 1944	11.10	12,100
1931	Apr. 5, 1931	8.28	7,560	1945	Oct. 21, 1944	12.01	13,700
1932	Feb. 4, 1932	20.4	42,500		Dec. 26, 1944	10.66	11,400
	Mar. 29, 1932	12.30	14,500		Mar. 1, 1945	11.36	12,600
	May 2, 1932	11.12	12,200		Sept. 19, 1945	17.15	28,800
	May 12, 1932	17.88	31,600	1946	Jan. 8, 1946	10.5	11,000
1933	Mar. 22, 1933	11.20	12,400		May 5, 1946	10.43	10,900
	Apr. 17, 1933	-	a10,000	1947	Mar. 15, 1947	9.95	10,200
	Apr. 20, 1933	-	c12,000		1948	Feb. 15, 1948	11.4
	May 12, 1933	11.30	12,600	Mar. 24, 1948		11.47	13,000
	May 16, 1933	11.80	13,500	Apr. 15, 1948		17.35	29,400
1934	Aug. 24, 1933	17.0	28,000	1949	Dec. 4, 1948	12.43	14,700
	Mar. 28, 1934	10.0	10,000		Dec. 16, 1948	12.99	16,100
1935	Jan. 22, 1935	14.2	19,200		Jan. 6, 1949	10.02	10,300
	Apr. 11, 1935	11.08	12,200		Apr. 14, 1949	13.95	18,600
	Sept. 6, 1935	12.59	15,200		June 18, 1949	29.85	104,000
1936	Feb. 26, 1936	16.1	24,800		June 29, 1949	10.17	10,600
	Mar. 18, 1936	34.2	143,000		July 17, 1949	-	a17,000
	Mar. 21, 1936	12.77	15,600	1950	Feb. 2, 1950	12.06	14,100
	Mar. 25, 1936	12.79	15,600		Sept. 13, 1950	14.14	18,900
	Apr. 7, 1936	10.73	11,500	1951	Dec. 5, 1950	17.02	28,000
1937	Jan. 21, 1937	14.75	20,800		Dec. 8, 1950	17.65	30,400
	Apr. 27, 1937	23.0	57,000		Feb. 2, 1951	14.08	18,900
	Aug. 25, 1937	12.09	14,100		Mar. 31, 1951	10.14	10,500
1938	Oct. 20, 1937	10.41	10,900		Apr. 13, 1951	10.06	10,500
	Oct. 29, 1937	21.15	46,600		June 14, 1951	14.54	20,000
	May 25, 1938	10.40	10,900	1952	Jan. 28, 1952	10.13	10,500

a Annual peak only.

b Annual maximum daily discharge only.

c About.

Peak stages and discharges of South Branch Potomac River
near Springfield, W. Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Mar. 12, 1952	13.38	17,100	1956	Aug. 7, 1956	11.26	12,600
	Apr. 28, 1952	15.85	23,900	1957	Feb. 10, 1957	10.58	11,300
	May 12, 1952	10.28	10,800		Apr. 6, 1957	12.98	16,100
1953	Feb. 21, 1953	11.06	12,200	1958	Apr. 7, 1958	10.12	10,500
	Mar. 26, 1953	11.80	13,500		May 6, 1958	10.64	11,300
1954	Mar. 2, 1954	17.31	29,200	1959	June 3, 1959	11.67	13,300
1955	Oct. 16, 1954	21.50	48,200	1960	Mar. 31, 1960	16.33	22,900
	Dec. 30, 1954	15.28	22,300		Apr. 4, 1960	14.10	16,400
	Mar. 6, 1955	11.63	13,100		May 9, 1960	16.70	24,500
	Mar. 23, 1955	14.24	19,200		May 28, 1960	11.00	10,600
	Aug. 13, 1955	10.66	11,500	1961	Feb. 19, 1961	14.70	20,600
	Aug. 19, 1955	25.55	73,400		Feb. 26, 1961	13.37	17,100
1956	Mar. 15, 1956	11.51	13,000		Apr. 16, 1961	10.88	11,800
	Apr. 8, 1956	10.13	10,500				

6090. Town Creek near Oldtown, Md.

Location.--Lat 39°33'12", long 78°33'19", on upstream side of highway bridge, 2.2 miles upstream from Sawpit Run, 3 miles northeast of Oldtown, Allegany County, and 4 miles upstream from mouth.

Drainage area.--148 sq mi.

Gage.--Nonrecording. Altitude of gage is 550 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,100 cfs and extended above on basis of contracted-opening measurement at 27,000 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	July 14, 1928	12.56	7,170	1933	Mar. 14, 1933	10.01	3,900
1929	Apr. 16, 1929	12.5	7,020	1934	Jan. 7, 1934	7.5	1,860
1930	Oct. 23, 1929	14.0	9,700	1935	Feb. 17, 1935	6.8	1,510
1931	July 18, 1931	10.14	4,000	1936	Mar. 17, 1936	19.0	27,000
1932	May 12, 1932	10.5	4,420				

6095. Sawpit Run near Oldtown, Md.

Location.--Lat 39°32'50", long 78°33'20", on left bank 900 ft upstream from bridge on State Highway 51, 1.0 mile upstream from mouth, and 3.0 miles east of Oldtown, Allegany County.

Drainage area.--5.0 sq mi, approximately.

Gage.--Recording. Datum of gage is 574.06 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 110 cfs and extended on basis of slope-area measurement at 770 cfs.

Bankfull stage.--3 ft.

Remarks.--Base for partial-duration series, 100 cfs.

Peak stages and discharges of Sawpit Run near Oldtown, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Jan. 1, 1948	2.95	164	1953	Mar. 24, 1953	3.11	199
	Apr. 12, 1948	2.69	113		May 31, 1953	3.85	392
	Apr. 14, 1948	2.64	105	1954	Mar. 1, 1954	4.30	590
	May 3, 1948	2.71	117				
1949	Dec. 15, 1948	2.67	110	1955	Oct. 15, 1954	4.72	770
	Dec. 30, 1948	2.64	105		Nov. 20, 1954	3.30	248
	Jan. 5, 1949	2.77	128		Mar. 4, 1955	3.18	218
	July 12, 1949	3.59	319		Mar. 22, 1955	3.62	339
	July 18, 1949	3.37	262		Apr. 25, 1955	4.15	530
1950	May 28, 1950	3.41	272		June 8, 1955	4.12	518
					June 12, 1955	3.11	200
1951	Dec. 4, 1950	2.86	146	1956	Feb. 6, 1956	2.70	115
	Dec. 7, 1950	2.94	162		Mar. 14, 1956	2.83	140
	Feb. 21, 1951	2.67	110		Apr. 7, 1956	2.82	138
	Mar. 30, 1951	3.76	366		June 18, 1956	2.95	164
	June 10, 1951	2.66	108	1957	Jan. 10, 1957	2.72	119
	June 13, 1951	2.89	152		Feb. 10, 1957	3.10	198
1952	Jan. 2, 1952	2.66	108	1958	Dec. 26, 1957	2.80	134
	Mar. 11, 1952	2.83	140		May 5, 1958	3.40	275
	May 11, 1952	3.12	202				
1953	Nov. 21, 1952	2.76	126				

6100. Potomac River at Paw Paw, W. Va.

Location.--Lat 39°32'13", long 78°27'28", on left bank 250 ft upstream from bridge on Maryland State Highway 51 at Paw Paw, Morgan County, and 3.3 miles downstream from Little Cacapon River.

Drainage area.--3,109 sq mi.

Gage.--Nonrecording prior to Mar. 25, 1939; recording thereafter. Datum of gage is 487.88 ft above mean sea level (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 85,000 cfs and extended above on basis of slope-area measurement of peak flow of Mar. 18, 1936, at site 5 miles upstream.

Bankfull stage.--40 ft.

Historical data.--Flood of Mar. 18, 1936, is greatest known.

Remarks.--Base for partial-duration series, 20,000 cfs. Only annual peaks are shown prior to 1939.

Peak stages and discharges

Peak stages and discharges							
Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1877	1877	45.0	-	1942	May 17, 1942	20.77	35,700
1889	1889	45.0	-		May 23, 1942	26.98	58,500
1924	1924	43.5	-	1943	Oct. 16, 1942	38.36	111,000
1928	May 1, 1928	31.4	-		Dec. 30, 1942	26.52	56,500
				Feb. 7, 1943	18.04	27,000	
1936	Mar. 18, 1936	54.0	240,000		Apr. 20, 1943	19.42	31,200
1939	Jan. 31, 1939	18.7	30,900	1944	Jan. 29, 1944	15.67	20,500
	Feb. 4, 1939	28.2	66,100		Feb. 23, 1944	15.83	20,800
	Feb. 12, 1939	15.1	20,100		Mar. 8, 1944	16.51	22,700
	Mar. 1, 1939	18.7	30,900		Mar. 13, 1944	17.36	25,300
	Apr. 17, 1939	22.85	42,200		Mar. 24, 1944	18.22	27,600
1940	Apr. 18, 1940	18.86	30,500		May 7, 1944	19.52	31,600
	Apr. 21, 1940	22.85	42,200	1945	Oct. 21, 1944	17.08	24,000
	June 1, 1940	24.90	50,400		Dec. 26, 1944	16.39	22,400
1941	Apr. 6, 1941	18.22	28,400		Feb. 17, 1945	17.12	24,400
	June 5, 1941	18.62	29,600		Feb. 27, 1945	19.27	30,900
1942	Mar. 10, 1942	15.58	20,300		Mar. 4, 1945	16.97	24,100
	Apr. 10, 1942	17.28	25,000	1946	Mar. 7, 1945	18.76	29,400
					Sept. 19, 1945	23.52	45,000
					Jan. 8, 1946	15.35	19,700

Peak stages and discharges of Potomac River at Paw Paw, W. Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	Mar. 15, 1947	15.55	20,300	1954	Mar. 2, 1954	25.06	50,300
1948	Jan. 2, 1948	15.92	21,000	1955	Oct. 16, 1954	32.24	78,100
	Feb. 15, 1948	19.80	32,500		Dec. 31, 1954	22.41	41,000
	Mar. 25, 1948	18.57	28,800		Mar. 6, 1955	18.60	28,800
	Apr. 15, 1948	24.74	49,500		Mar. 23, 1955	22.80	42,300
1949	Dec. 5, 1948	15.58	20,300		June 8, 1955	18.77	29,300
	Dec. 17, 1948	23.18	43,700		Aug. 14, 1955	16.32	22,200
	Jan. 6, 1949	15.48	20,000		Aug. 19, 1955	35.35	91,600
	Jan. 28, 1949	18.35	28,200	1956	Feb. 3, 1956	15.49	20,000
	Apr. 14, 1949	15.99	21,300		Mar. 15, 1956	18.05	27,200
	June 19, 1949	33.91	85,200		Apr. 8, 1956	19.03	30,100
	July 13, 1949	16.00	21,300		Aug. 7, 1956	17.85	26,600
	July 18, 1949	17.02	24,100	1957	Feb. 10, 1957	21.79	38,900
1950	Feb. 2, 1950	19.30	30,900		Apr. 6, 1957	17.71	26,200
	Sept. 14, 1950	15.88	21,000	1958	Apr. 8, 1958	17.45	25,400
1951	Dec. 5, 1950	22.47	41,300		Apr. 29, 1958	16.35	22,300
	Dec. 8, 1950	24.27	47,600		May 6, 1958	21.16	36,800
	Feb. 2, 1951	20.92	36,000	1959	June 3, 1959	13.93	16,300
	Mar. 31, 1951	18.35	28,200	1960	Oct. 25, 1959	18.83	29,500
	Apr. 13, 1951	15.99	21,300		Mar. 31, 1960	25.36	51,400
	June 14, 1951	25.87	53,400		Apr. 4, 1960	21.83	39,000
1952	Jan. 2, 1952	16.14	21,600		May 9, 1960	28.27	62,300
	Jan. 28, 1952	18.30	27,900	1961	Feb. 20, 1961	24.48	48,200
	Mar. 12, 1952	21.89	39,300		Feb. 26, 1961	24.92	49,800
	Apr. 28, 1952	22.53	41,300		Apr. 17, 1961	20.76	35,500
1953	Jan. 25, 1953	17.98	26,900				
	Feb. 22, 1953	15.99	21,300				
	Mar. 26, 1953	18.25	27,800				

6105. Cacapon River at Yellow Spring, W. Va.

Location.--Lat 39°10'56", long 78°30'25", at bridge on State Highway 23 at Yellow Spring, Hampshire County, 2½ miles downstream from Capon Springs Run and 9 miles northeast of Wardensville.

Drainage area.--306 sq mi.

Gage.--Nonrecording. Datum of the gage is 858.51 ft above mean sea level (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 34,000 cfs.

Historical data.--The flood of March 1936 is maximum known prior to 1940.

Remarks.--Base for partial-duration series, 2,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	March 1936	20.2	a28,000	1943	Oct. 15, 1942	22.22	36,700
1937	April 1937	18	a20,000		Dec. 30, 1942	10.86	5,660
1940	Apr. 17, 1940	10.6	5,180		Feb. 7, 1943	8.23	2,760
	Apr. 20, 1940	9.94	4,340		Apr. 20, 1943	9.7	4,200
	May 31, 1940	8.5	2,950	1944	Mar. 23, 1944	8.67	3,200
1941	Apr. 5, 1941	9.62	4,010		May 7, 1944	10.6	5,280
	July 13, 1941	8.13	2,620	1945	Oct. 21, 1944	7.80	2,440
1942	Mar. 9, 1942	8.34	2,840		Mar. 1, 1945	7.50	2,250
	May 16, 1942	10.35	5,040		Sept. 18, 1945	12.86	8,660
	May 22, 1942	12.4	7,860	1946	May 4, 1946	8.4	2,920
	Aug. 17, 1942	12.48	8,020	1947	Mar. 15, 1947	6.65	1,660

a Annual peak only.

Peak stages and discharges of Cacapon River at Yellow Spring, W. Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Feb. 14, 1948	69.31	2,470	1950	Feb. 1, 1950	9.0	3,500
	Apr. 14, 1948	12.76	8,500		May 29, 1950	8.0	2,600
1949	Oct. 6, 1948	8.1	2,780	1951	Dec. 4, 1950	14.8	12,400
	Dec. 16, 1948	8.1	2,780		Dec. 8, 1950	15.5	13,900
	Dec. 30, 1948	7.5	2,330		Feb. 1, 1951	9.6	4,120
	Jan. 6, 1949	8.0	2,700		Mar. 31, 1951	8.86	3,430
	June 18, 1949	9.5	4,020		Apr. 13, 1951	7.6	2,400
	June 29, 1949	18.0	20,500		May 11, 1951	10.2	4,800
	Aug. 5, 1949	7.5	2,250		June 13, 1951	9.5	4,020
	Aug. 18, 1949	8.3	2,840				

b Backwater from ice.

6115. Cacapon River near Great Cacapon, W. Va.

Location.--Lat 39°34'43", long 78°18'34", on left bank at Rock Ford, 3 miles southwest of Great Cacapon, Morgan County, and $6\frac{1}{2}$ miles upstream from mouth.

Drainage area.--677 sq mi.

Gage.--Nonrecording prior to Nov. 10, 1933; recording thereafter. Datum of gage is 456.78 ft (U.S. Corps of Engineers bench mark adjustment 1912).

Stage-discharge relation.--Defined by current-meter measurements below 52,000 cfs and extended above on basis of logarithmic plotting.

Bankfull stage.--13 ft.

Historical data. The flood of May 1889 was maximum known prior to 1923.

Remarks.--Base for partial-duration series, 3,900 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)	
1889	May 1889	24.7	a57,500	1932	Mar. 30, 1932	8.3	6,640	
1923	Apr. 15, 1923	6.30	3,860		May 2, 1932	7.2	5,010	
					May 13, 1932	17.9	29,700	
1924	Mar. 30, 1924	17.0	28,300	1933	Nov. 10, 1932	9.0	7,790	
	May 9, 1924	16.3	25,800		Nov. 20, 1932	7.0	4,740	
	May 12, 1924	19.32	38,000		Jan. 26, 1933	10.3	16,500	
	Sept. 30, 1924	13.3	17,200		Mar. 21, 1933	8.1	6,320	
					Apr. 13, 1933	7.1	4,870	
1925	Feb. 12, 1925	9.8	9,260		Apr. 18, 1933	7.1	4,870	
	Mar. 20, 1925	7.7	5,720		Apr. 21, 1933	13.0	16,500	
	May 1, 1925	7.3	5,150		Aug. 24, 1933	14.6	20,600	
1926	Feb. 20, 1926	7.5	5,430	1934	Sept. 15, 1934	6.1	3,620	
1927	Nov. 16, 1926	b10.2	10,000	1935	Dec. 2, 1934	9.8	9,260	
	Nov. 19, 1926	7.5	5,430		Jan. 22, 1935	8.68	7,280	
	Dec. 27, 1926	7.4	5,290		Feb. 11, 1935	6.86	4,610	
	Feb. 25, 1927	7.9	6,020		Feb. 17, 1935	6.91	4,610	
	May 1, 1927	7.7	5,720		Apr. 11, 1935	8.93	7,620	
1928	Oct. 19, 1927	9.4	8,510		Sept. 6, 1935	6.83	4,480	
	Mar. 23, 1928	8.0	6,170		1936	Jan. 4, 1936	7.80	5,870
	May 1, 1928	17.38	28,300			Jan. 10, 1936	7.28	5,150
	June 23, 1928	7.1	4,870			Feb. 28, 1936	11.25	12,100
1929	Mar. 1, 1929	9.0	7,790			Mar. 13, 1936	8.72	7,280
	Mar. 6, 1929	9.7	9,070		Mar. 18, 1936	30.1	87,600	
	Apr. 17, 1929	20.0	36,000		Mar. 21, 1936	11.4	12,600	
1930	Oct. 3, 1929	9.60	8,880		Mar. 25, 1936	6.58	4,200	
	Oct. 23, 1929	8.2	6,480		1937	Jan. 22, 1937	8.70	6,890
	Nov. 19, 1929	8.7	7,280			Feb. 22, 1937	10.51	10,000
1931	May 24, 1931	6.10	3,620			Apr. 26, 1937	22.6	47,400
					Aug. 26, 1937	9.82	8,730	
1932	Feb. 5, 1932	11.0	11,800	1938	Oct. 28, 1937	16.10	23,200	
	Mar. 18, 1932	6.8	4,480		1939	Dec. 10, 1938	8.18	5,700

a Annual peak only.

b Estimated.

Peak stages and discharges of Cacapon River near Great Cacapon, W. Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Jan. 31, 1939	9.27	7,480	1951	Mar. 31, 1951	-	b9,000
	Feb. 4, 1939	12.54	13,900		May 12, 1951	8.2	5,470
	Apr. 17, 1939	8.23	5,700		June 11, 1951	7.67	4,730
					June 14, 1951	13.64	16,400
1940	Apr. 18, 1940	9.74	8,180				
	Apr. 21, 1940	10.29	9,290	1952	Jan. 1, 1952	(c)	(c)
	June 1, 1940	8.19	5,700		Jan. 28, 1952	7.54	4,450
	June 12, 1940	7.86	5,250		Feb. 5, 1952	7.65	4,590
1941	Apr. 6, 1941	8.93	6,800		Mar. 12, 1952	9.05	6,800
	July 5, 1941	7.20	4,300		Apr. 28, 1952	14.34	18,200
					May 12, 1952	11.21	10,900
1942	Mar. 10, 1942	7.62	4,880	1953	Nov. 22, 1952	13.68	16,600
	May 17, 1942	7.58	4,880		Dec. 12, 1952	8.51	5,950
	May 23, 1942	12.27	13,300		Jan. 11, 1953	7.28	4,170
	Aug. 17, 1942	9.19	7,240		Mar. 26, 1953	10.64	9,740
1943	Oct. 16, 1942	23.67	52,600	1954	Mar. 2, 1954	17.30	27,100
	Dec. 30, 1942	11.48	11,600				
	Feb. 7, 1943	8.49	6,150	1955	Oct. 16, 1954	18.78	32,200
	Apr. 20, 1943	9.34	7,410		Dec. 31, 1954	9.11	6,980
1944	Jan. 29, 1944	6.97	4,100		Mar. 7, 1955	8.19	5,470
	Mar. 14, 1944	7.32	4,490		Mar. 23, 1955	10.21	8,980
	Mar. 24, 1944	9.69	8,090		Apr. 26, 1955	7.25	4,030
	May 7, 1944	10.16	8,980		June 9, 1955	14.67	19,300
1945	Mar. 1, 1945	7.07	4,230		June 13, 1955	10.27	9,170
	Sept. 19, 1945	12.54	13,800		Aug. 14, 1955	15.07	20,400
1946	June 3, 1946	8.75	6,600		Aug. 19, 1955	24.30	55,500
1947	Mar. 15, 1947	6.27	3,180	1956	Feb. 3, 1956	7.74	4,730
1948	Apr. 14, 1948	12.29	13,300		Mar. 15, 1956	9.04	6,800
1949	Oct. 6, 1948	6.87	3,980		Apr. 8, 1956	8.78	6,460
	Nov. 30, 1948	6.98	4,100	1957	Feb. 10, 1957	8.77	6,460
	Dec. 17, 1948	8.66	6,450		Apr. 6, 1957	9.85	8,240
	Dec. 31, 1948	7.89	5,270	1958	Mar. 28, 1958	8.53	5,950
	Jan. 6, 1949	8.27	5,850		May 6, 1958	7.49	4,450
	June 18, 1949	9.48	7,750	1959	June 3, 1959	12.02	12,600
	June 29, 1949	13.41	15,900	1960	Oct. 1, 1959	11.00	10,500
	July 13, 1949	7.05	4,100		Mar. 29, 1960	11.74	12,000
1950	Feb. 2, 1950	9.39	7,520		Apr. 5, 1960	11.68	12,000
	Mar. 24, 1950	7.26	4,170		May 9, 1960	15.74	22,100
1951	Dec. 5, 1950	14.83	19,600		June 4, 1960	10.02	8,600
	Dec. 8, 1950	14.08	17,700		June 15, 1960	8.44	5,790
	Feb. 2, 1951	9.73	8,060	1961	Feb. 20, 1961	12.11	12,800
					Feb. 26, 1961	8.67	6,290
					Apr. 15, 1961	9.12	6,980

b Estimated.

c Ice jam, gage height and discharge unknown.

6125. Little Tonoloway Creek near Hancock, Md.

(Published as "Tonoloway Creek" prior to 1952)

Location.--Lat 39°42'45", long 78°13'55", on right bank at downstream side of highway bridge, 100 ft downstream from unnamed tributary and 2.8 miles northwest of Hancock, Washington County.

Drainage area.--16.9 sq mi.

Gage.--Recording. Datum of gage is 457.51 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 440 cfs and extended on basis of slope-area measurement at 1,470 cfs.

Bankfull stage.--6 ft.

Remarks.--Base for partial-duration series, 200 cfs.

Peak stages and discharges of Little Tonoloway Creek near Hancock, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Apr. 14, 1948	2.41	216	1953	Jan. 24, 1953	3.51	256
1949	Dec. 16, 1948	2.71	282	1953	Mar. 13, 1953	3.30	210
	Dec. 30, 1948	3.09	380	1953	Mar. 24, 1953	4.62	465
	Jan. 5, 1949	2.50	235	1953	May 31, 1953	5.73	789
	Jan. 28, 1949	2.70	280	1954	Mar. 1, 1954	6.96	1,170
	July 17, 1949	4.44	764	1955	Oct. 15, 1954	7.10	1,470
1950	Feb. 15, 1950	-	(a)	1955	Mar. 4, 1955	4.22	471
	Mar. 23, 1950	-	(a)	1955	Mar. 22, 1955	5.21	794
	May 28, 1950	2.89	329	1956	Feb. 6, 1956	2.62	200
	Sept. 21, 1950	3.06	300	1956	Mar. 14, 1956	3.12	218
1951	Oct. 8, 1950	2.62	222	1956	Apr. 7, 1956	3.38	268
	Nov. 4, 1950	2.61	221	1956	July 8, 1956	3.30	243
	Nov. 25, 1950	5.50	792	1956	Aug. 7, 1956	3.16	218
	Dec. 4, 1950	5.40	768	1957	Dec. 14, 1956	2.94	221
	Dec. 7, 1950	3.50	379	1957	Feb. 10, 1957	2.96	225
	Feb. 7, 1951	2.57	214	1958	Dec. 26, 1957	3.63	386
	Feb. 21, 1951	3.81	440	1958	May 5, 1958	4.88	719
	Mar. 30, 1951	6.26	987	1959	Aug. 29, 1959	3.71	426
	June 10, 1951	3.46	346	1960	Feb. 19, 1960	3.92	413
	June 13, 1951	5.69	838	1960	Mar. 28, 1960	2.98	202
	Jan. 1, 1952	5.76	452	1960	Apr. 4, 1960	4.03	410
1952	Jan. 27, 1952	4.40	258	1960	May 8, 1960	6.36	1,150
	Mar. 11, 1952	5.91	482	1961	Feb. 19, 1961	3.56	328
	Apr. 27, 1952	3.79	252	1961	Feb. 25, 1961	3.65	348
	June 30, 1952	4.25	344	1961	Apr. 13, 1961	3.49	313
	July 8, 1952	4.28	349	1961	Apr. 16, 1961	3.17	249
1953	Aug. 31, 1952	5.08	499				
	Nov. 21, 1952	7.01	1,180				
	Dec. 11, 1952	4.36	429				
	Jan. 10, 1953	3.43	241				

a Peak above base; discharge not determined.

6130. Potomac River at Hancock, Md.

Location.--Lat 39°41'49", long 78°10'39", on left bank 0.2 mile downstream from Little Tonoloway Creek, half a mile downstream from bridge on U.S. Highway 522 at Hancock, Washington County, and 1.1 miles upstream from Tonoloway Creek (formerly called Great or Big Tonoloway Creek).

Drainage area.--4,073 sq mi.

Gage.--Nonrecording Oct. 1, 1932, to Jan. 5, 1935, and Mar. 19, 1936, to Jan. 20, 1937; recording during remainder of period. Datum of gage is 383.46 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 120,000 cfs and extended on basis of slope-area measurement at 340,000 cfs.

Historical data.--Flood of May 1889 is greatest known prior to 1933.

Remarks.--Only major floods shown prior to 1933 (gage heights from records of U.S. Weather Bureau). Base for partial-duration series, 23,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1889	May 1889	40	220,000	1934	Jan. 8, 1934	14.2	27,700
1924	March 1924	32.4	130,000	1935	Dec. 2, 1934	13.2	24,500
	May 1924	35.0	160,000	1935	Jan. 23, 1935	17.3	38,600
1929	April 1929	30.3	110,000	1935	Feb. 16, 1935	14.1	27,400
				1935	Apr. 11, 1935	14.8	29,700
1933	Jan. 27, 1933	14.0	27,100	1936	Jan. 10, 1936	14.4	28,400
	Mar. 15, 1933	15.0	30,300	1936	Feb. 28, 1936	21.2	54,800
	Mar. 21, 1933	16.2	34,300	1936	Mar. 18, 1936	47.6	340,000
	Apr. 21, 1933	23.1	64,400	1936	Mar. 25, 1936	15.8	31,200
	May 10, 1933	13.9	26,800	1936	Apr. 7, 1936	16.0	31,900
	Aug. 25, 1933	16.8	36,300				

Peak stages and discharges of Potomac River at Hancock, Md.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Jan. 11, 1937	13.4	24,800	1949	July 13, 1949	13.30	24,000
	Jan. 23, 1937	18.9	46,800		July 18, 1949	16.30	35,000
	Feb. 23, 1937	14.7	29,500	1950	Feb. 2, 1950	17.61	40,300
	Apr. 27, 1937	35.7	153,000	1951	Dec. 5, 1950	22.17	60,000
	Aug. 27, 1937	16.3	35,700		Dec. 8, 1950	22.61	62,200
1938	Oct. 29, 1937	31.8	122,000		Feb. 2, 1951	18.68	43,900
1939	Jan. 31, 1939	16.60	36,900		Feb. 22, 1951	13.17	23,000
	Feb. 4, 1939	24.85	76,600		Mar. 31, 1951	17.30	38,100
	Mar. 1, 1939	16.25	35,300		Apr. 13, 1951	14.25	26,700
	Apr. 17, 1939	19.65	50,000		June 14, 1951	23.61	67,300
1940	Apr. 18, 1940	16.64	36,900	1952	Jan. 3, 1952	14.3	26,800
	Apr. 21, 1940	20.90	56,100		Jan. 28, 1952	16.30	34,200
	June 1, 1940	21.33	58,100		Mar. 12, 1952	19.52	47,600
	June 13, 1940	13.58	25,500		Apr. 29, 1952	21.89	58,600
1941	Apr. 6, 1941	16.48	36,500		May 12, 1952	15.23	30,200
	June 5, 1941	15.82	33,700	1953	Nov. 22, 1952	17.35	38,300
1942	Mar. 10, 1942	13.57	25,000		Jan. 25, 1953	15.73	32,000
	Apr. 11, 1942	14.28	27,500		Mar. 26, 1953	17.10	37,300
	May 17, 1942	16.95	37,800		June 1, 1953	13.34	23,500
	May 23, 1942	23.18	67,000	1954	Mar. 2, 1954	24.52	72,100
1943	Oct. 16, 1942	36.63	155,000	1955	Oct. 17, 1954	29.15	100,000
	Dec. 31, 1942	24.19	72,200		Dec. 31, 1954	19.67	48,200
	Feb. 7, 1943	16.58	36,200		Mar. 6, 1955	16.47	34,900
	Apr. 21, 1943	17.58	40,300		Mar. 23, 1955	20.79	53,300
1944	Jan. 29, 1944	13.32	24,000		June 9, 1955	19.23	46,300
	Mar. 8, 1944	14.39	27,800		June 13, 1955	14.38	27,100
	Mar. 14, 1944	15.28	31,100		Aug. 14, 1955	16.21	33,800
	Mar. 24, 1944	16.85	37,000		Aug. 19, 1955	32.40	123,000
	May 8, 1944	18.10	42,400	1956	Feb. 4, 1956	13.18	23,000
1945	Oct. 22, 1944	13.88	26,100		Feb. 7, 1956	13.74	24,900
	Feb. 17, 1945	14.35	27,800		Mar. 15, 1956	16.39	34,600
	Feb. 24, 1945	12.96	23,000		Apr. 8, 1956	17.82	40,300
	Feb. 28, 1945	16.48	35,800		Aug. 7, 1956	14.53	27,700
	Mar. 4, 1945	14.03	26,400	1957	Feb. 11, 1957	19.43	47,200
	Mar. 8, 1945	15.82	33,000		Apr. 6, 1957	16.40	34,600
	Sept. 19, 1945	21.98	61,000	1958	Mar. 28, 1958	14.73	28,300
1946	June 3, 1946	13.62	25,000		Apr. 8, 1958	14.80	28,600
1947	Mar. 16, 1947	13.05	23,000		Apr. 29, 1958	14.02	25,900
1948	Feb. 15, 1948	21.97	61,000		May 6, 1958	18.85	44,600
	Mar. 25, 1948	14.55	28,600	1959	June 4, 1959	13.11	22,700
	Apr. 15, 1948	22.27	62,500	1960	Oct. 25, 1959	14.41	25,900
1949	Dec. 5, 1948	13.07	23,300		Mar. 31, 1960	22.11	56,600
	Dec. 17, 1948	20.53	53,500		Apr. 5, 1960	20.14	47,600
	Jan. 7, 1949	14.00	26,400		May 9, 1960	26.60	80,600
	Jan. 29, 1949	16.20	34,600	1961	Feb. 20, 1961	22.10	56,500
	Apr. 15, 1949	12.96	23,000		Feb. 26, 1961	21.52	53,800
	June 19, 1949	26.86	88,400		Apr. 17, 1961	18.44	40,800
	June 30, 1949	15.27	31,100				

6135. Licking Creek near Sylvan, Pa.

Location.--Lat 39°43'20", long 78°03'35", at highway bridge 200 ft upstream from Pennsylvania-Maryland State line, 3 miles southwest of Sylvan, Franklin County, and 10 miles upstream from mouth.

Drainage area.--158 sq mi.

Gage.--Nonrecording. Datum of gage is 434.16 ft above mean sea level, adjustment of 1907.

Stage-discharge relation.--Defined by current-meter measurements below 5,500 cfs and extended on basis of contracted-opening measurement at 20,700 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Licking Creek near Sylvan, Pa.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	July 18, 1931	8.1	2,970	1937	Apr. 26, 1937	15.20	14,500
1932	May 13, 1932	8.6	3,390	1938	Oct. 28, 1937	10.0	4,800
1933	Aug. 23, 1933	9.2	3,950	1939	Feb. 3, 1939	10.3	5,160
1934	Sept. 17, 1934	9.4	4,150	1940	Jan. 15, 1940	a8.60	-
1935	Dec. 1, 1934	10.2	5,040		Apr. 20, 1940	-	3,300
1936	Mar. 18, 1936	17.4	20,700	1941	Apr. 5, 1941	6.8	2,010

a Backwater from ice.

6140. Back Creek near Jones Springs, W. Va.
(Published as "near Hedgesville" prior to September 1931)

Location.--Lat 39°30'43", long 78°02'15", on left bank at downstream side of highway bridge, 1.3 miles southeast of Tomahawk, 3.5 miles northeast of village of Jones Springs, Berkeley County, and 9 miles upstream from Tilhance Creek.

Drainage area.--243 sq mi; 252 sq mi prior to September 1931.

Gage.--Nonrecording prior to October 17, 1956; recording thereafter. Auxiliary crest-stage gage since 1940. Prior to September 1931 at site about 5 miles downstream at different datum. Datum of gage is 416.42 feet (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current meter measurements below 6,200 cfs and extended above on basis of current meter measurement of 14,500 cfs made at Hedgesville.

Bankfull stage.--10 ft.

Remarks.--Base for partial-duration series, 2,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Feb. 28, 1929	7.80	3,740	1949	Dec. 17, 1948	10.55	4,020
	Mar. 6, 1929	8.4	4,220		Dec. 31, 1948	10.86	4,230
	Apr. 17, 1929	13.50	8,750		Jan. 6, 1949	9.59	3,320
1930	Oct. 23, 1929	16.9	15,500		Jan. 28, 1949	9.02	2,950
	Nov. 18, 1929	9.60	5,180		June 18, 1949	10.63	4,020
	Mar. 8, 1930	7.4	3,430		June 29, 1949	9.36	3,190
1931	Apr. 2, 1931	6.50	2,800		July 13, 1949	9.66	3,390
	May 8, 1931	8.20	4,060		Aug. 4, 1949	8.25	2,530
1936	Mar. 17, 1936	a25.0	22,000	1950	Feb. 2, 1950	9.10	3,010
					Mar. 24, 1950	8.62	2,730
1939	Jan. 30, 1939	9.4	3,190	1951	Nov. 25, 1950	9.14	3,010
	Feb. 4, 1939	13.3	6,300		Dec. 5, 1950	16.05	9,150
1940	Apr. 20, 1940	9.30	3,130		Dec. 8, 1950	11.7	4,860
1941	Nov. 15, 1940	10.4	3,880		Mar. 14, 1951	9.7	3,390
	Dec. 27, 1940	9.5	3,250		Mar. 31, 1951	11.7	4,860
	Apr. 6, 1941	10.84	4,160		Apr. 13, 1951	9.9	3,530
1942	May 22, 1942	13.70	6,700		June 14, 1951	12.7	5,730
	Aug. 18, 1942	10.0	3,600	1952	Feb. 4, 1952	9.83	3,460
1943	Oct. 15, 1942	25.17	22,400		Mar. 12, 1952	9.98	3,600
	Dec. 30, 1942	13.05	6,000		Apr. 28, 1952	11.97	5,100
	Feb. 6, 1943	9.23	3,070		Sept. 1, 1952	10.36	3,880
	Apr. 20, 1943	11.25	4,460	1953	Nov. 22, 1952	16.6	9,820
1944	Mar. 13, 1944	10.28	3,810		Dec. 11, 1952	9.2	3,070
	Mar. 24, 1944	10.38	3,880		Jan. 11, 1953	8.8	2,830
	May 7, 1944	10.11	3,670		Mar. 24, 1953	9.60	3,320
1945	Aug. 4, 1945	8.93	2,890		May 31, 1953	8.25	2,530
	Sept. 18, 1945	15.05	8,050	1954	Mar. 2, 1954	13.20	6,200
1946	June 3, 1946	10.60	4,020	1955	Oct. 16, 1954	13.00	6,000
1947	Mar. 15, 1947	6.35	1,600		Mar. 22, 1955	10.70	4,090
1948	Apr. 14, 1948	11.22	4,460		Aug. 14, 1955	12.98	6,000
					Aug. 19, 1955	17.34	10,700
				1956	Mar. 15, 1956	10.40	3,880
					Apr. 8, 1956	8.60	2,780
				1957	Feb. 10, 1957	9.72	3,420

a Annual peak only.

Peak stages and discharges of Back Creek near Jones Springs, W. Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Mar. 27, 1958	9.40	3,240	1960	May 9, 1960	10.16	3,740
	May 6, 1958	8.12	2,500		June 15, 1960	8.90	2,940
1959	June 3, 1959	13.81	6,800	1961	Feb. 19, 1961	11.46	4,700
1960	Mar. 29, 1960	8.59	2,780		Feb. 26, 1961	10.50	3,950
	Apr. 5, 1960	9.44	3,240		Mar. 25, 1961	9.04	3,000
					Apr. 13, 1961	11.08	4,380

6145. Conococheague Creek at Fairview, Md.

Location.--Lat 39°42'57", long 77°49'28", on right bank 0.7 mile upstream from highway bridge in Fairview, Washington County, 2 miles upstream from Rockdale Run, and 6½ miles northwest of Hagerstown.

Drainage area.--494 sq mi.

Gage.--Nonrecording prior to Oct. 7, 1933; recording thereafter. At site 0.7 mile downstream at datum 2.85 ft lower prior to Dec. 6, 1932. At site 150 ft downstream from former site at datum 4.84 ft lower than present datum Dec. 6, 1932, to Oct. 7, 1933. Datum of gage is 391.77 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--7 ft.

Historical data.--Flood of 1889 is greatest known, from information by local residents.

Remarks.--Base for partial-duration series, 4,300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1889	1889	at 6.5	22,000	1936	Apr. 7, 1936	8.97	6,150
1924	1924	16	13,000	1937	Jan. 23, 1937	7.73	4,590
1928b/	June 26, 1928	11.1	7,580		Feb. 22, 1937	8.54	5,520
1929	Feb. 27, 1929	7.9	4,590		Apr. 28, 1937	13.84	14,200
	Mar. 6, 1929	8.65	5,220		June 10, 1937	8.22	5,160
	Apr. 16, 1929	11.3	7,780		July 16, 1937	7.78	4,700
1930	Oct. 3, 1929	10.6	7,080	1938	Oct. 28, 1937	9.53	6,810
	Oct. 22, 1929	10.8	7,280	1939	Dec. 10, 1938	7.76	4,700
	Mar. 8, 1930	8.0	4,680		Feb. 4, 1939	9.30	6,540
1931	Apr. 2, 1931	7.8	4,500		Feb. 28, 1939	7.73	4,590
	July 18, 1931	7.6	4,320		June 30, 1939	7.65	4,480
1932	Mar. 28, 1932	7.6	4,320	1940	Apr. 9, 1940	9.54	6,810
	May 13, 1932	8.0	4,680		Apr. 21, 1940	8.39	5,400
1933	Oct. 18, 1932	8.3	5,070	1941	Apr. 5, 1941	7.34	4,150
	Nov. 10, 1932	10.5	7,120	1942	Dec. 24, 1941	8.02	4,920
	Nov. 19, 1932	8.6	5,340		Apr. 3, 1942	8.04	4,920
	Mar. 14, 1933	10.6	5,660		May 23, 1942	9.15	6,410
	Mar. 20, 1933	10.0	5,000	1943	Oct. 16, 1942	12.17	11,100
	Apr. 17, 1933	11.45	6,580		Dec. 30, 1942	10.36	8,100
	Apr. 20, 1933	10.5	5,550		May 21, 1943	10.87	8,870
	May 10, 1933	9.3	4,300	1944	Jan. 4, 1944	8.60	5,640
	Aug. 24, 1933	c13.3	9,000		Mar. 24, 1944	7.80	4,700
1934	July 28, 1934	7.76	4,350	1945	May 18, 1945	8.32	5,280
	Sept. 17, 1934	11.60	10,700		Sept. 18, 1945	10.30	7,950
	Sept. 30, 1934	9.83	6,710	1946	Nov. 29, 1945	8.98	6,150
1935	Dec. 1, 1934	14.80	16,300		May 28, 1946	9.06	6,280
1936	Jan. 5, 1936	c8.30	-	1947	July 12, 1947	7.75	4,700
	Feb. 28, 1936	7.50	4,370	1948	Jan. 2, 1948	7.50	4,370
	Mar. 12, 1936	12.56	12,000				
	Mar. 18, 1936	13.27	13,700				

a About; at present site and datum.

b Partial year.

c Backwater from ice.

Peak stages and discharges of Conococheague Creek at Fairview, Md.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Dec. 31, 1948	9.20	6,410	1954	Mar. 1, 1954	7.82	4,600
	Jan. 6, 1949	8.85	5,890		Oct. 16, 1954	9.60	6,950
	Jan. 28, 1949	7.70	4,590	1955	Mar. 5, 1955	8.49	5,430
	July 18, 1949	9.35	6,670		Mar. 22, 1955	10.21	7,820
1950	May 19, 1950	8.30	5,280		Aug. 19, 1955	8.22	5,080
1951	Nov. 25, 1950	11.72	10,200	1956	Feb. 7, 1956	7.59	4,350
	Dec. 5, 1950	9.32	6,540		Nov. 2, 1956	9.15	6,320
	Dec. 8, 1950	8.13	5,040		Dec. 15, 1956	8.37	5,270
	Feb. 8, 1951	7.52	4,370	1957	Dec. 27, 1957	8.07	4,890
	Feb. 21, 1951	9.60	6,950		Jan. 15, 1958	7.59	4,350
	Mar. 31, 1951	9.50	6,810		Feb. 28, 1958	8.08	4,910
	Apr. 13, 1951	8.52	5,520		May 6, 1958	10.00	7,510
	June 14, 1951	10.15	7,800				
1952	Jan. 3, 1952	8.42	5,340	1959	Jan. 22, 1959	8.29	5,170
	Mar. 12, 1952	14.44	15,500		Apr. 4, 1960	9.24	6,450
	Apr. 28, 1952	8.06	4,880	1960	June 4, 1960	8.05	4,870
	July 9, 1952	8.13	4,970				
	Sept. 2, 1952	9.90	7,370	1961	Feb. 20, 1961	7.98	4,790
1953	Nov. 22, 1952	15.16	17,100		Feb. 26, 1961	11.43	9,630
	Jan. 25, 1953	9.74	7,150		Apr. 13, 1961	9.27	6,490
	Mar. 25, 1953	9.48	6,780		Apr. 16, 1961	8.52	5,470
	May 18, 1953	7.88	4,670				

6150. Opequon Creek near Berryville, Va.

Location.--Lat 39°10'40", long 78°04'20", on left bank 35 ft downstream from bridge on U.S. Highway 340, 0.2 mile upstream from Abrams Creek, and 5.0 miles west of Berryville, Clarke County.

Drainage area.--58 sq mi, approximately.

Gage.--Nonrecording prior to July 26, 1949; recording thereafter. Datum of gage is 503.24 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,200 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 850 cfs. Only annual peaks are shown prior to 1950.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	October 1942	18.4	-	1954	May 3, 1954	5.28	930
1944	May 7, 1944	5.58	995		Oct. 16, 1954	7.03	1,730
1945	Sept. 18, 1945	10.00	3,630	1955	Mar. 6, 1955	5.11	850
1946	Aug. 2, 1946	7.47	1,890		Aug. 13, 1955	5.33	930
	July 22, 1947	3.43	330		Aug. 18, 1955	8.61	2,670
1947	Aug. 12, 1948	5.53	958	1956	Mar. 14, 1956	5.75	1,140
1948	Dec. 30, 1948	7.87	2,250		July 6, 1956	5.41	970
1949	May 18, 1950	9.67	3,470	1957	Apr. 6, 1957	7.98	2,310
	June 1, 1950	7.43	1,950				
1951	Nov. 25, 1950	9.38	3,230	1958	Oct. 7, 1957	5.56	1,050
	Dec. 4, 1950	10.0	3,710		Dec. 26, 1957	6.06	1,280
	Feb. 7, 1951	6.91	1,680		Jan. 14, 1958	5.75	1,140
	Apr. 12, 1951	8.05	2,310		Feb. 28, 1958	5.75	1,140
	May 11, 1951	7.84	2,190		Mar. 27, 1958	5.24	890
1952	Feb. 4, 1952	5.49	1,010	1959	June 2, 1959	7.47	2,010
	Apr. 5, 1952	5.19	890				
	Apr. 27, 1952	8.48	2,610	1960	Apr. 5, 1960	6.06	1,280
1953	Nov. 21, 1952	9.36	3,230		June 3, 1960	8.52	2,610
	Dec. 11, 1952	6.43	1,430	1961	Feb. 19, 1961	6.50	1,480
	Jan. 10, 1953	5.98	1,230		Feb. 25, 1961	5.62	1,050
	May 31, 1953	5.82	1,140		Mar. 24, 1961	5.19	890
					Apr. 13, 1961	6.18	1,330
1954	Mar. 1, 1954	7.87	2,250				

6160. Abrams Creek near Winchester, Va.

Location.--Lat 39°10'40", long 78°05'10", on right bank 0.9 mile upstream from mouth and 4.4 miles east of Winchester, Frederick County.

Drainage area.--16.5 sq mi.

Gage.--Recording. Datum of gage is 526.46 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 410 cfs and extended above on basis of logarithmic plotting.

Bankfull stage.--4 ft.

Remarks.--Subsequent to June 30, 1957, records furnished by Virginia Department of Conservation and Economic Development, Division of Water Resources. Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	May 5, 1950	3.20	216	1954	Mar. 1, 1954	3.87	379
	May 31, 1950	3.20	216				
1951	Nov. 25, 1950	4.88	626	1955	Oct. 15, 1954	3.62	328
	Dec. 4, 1950	6.16	962		Aug. 13, 1955	4.53	537
	Dec. 7, 1950	4.42	506		Aug. 18, 1955	4.96	650
	Feb. 7, 1951	3.54	313	1956	July 5, 1956	2.96	192
	Apr. 12, 1951	4.52	530				
1952	Feb. 4, 1952	3.00	200	1957	Apr. 6, 1957	2.83	168
	Apr. 27, 1952	4.20	458	1958	Feb. 27, 1958	2.85	182
1953	Nov. 21, 1952	4.74	590	1959	June 2, 1959	4.57	542
	Dec. 11, 1952	3.18	236				
	Jan. 10, 1953	3.23	246	1960	June 3, 1960	3.26	256
	May 31, 1953	4.73	590				

6165. Opequon Creek near Martinsburg, W. Va.

Location.--Lat 39°25'25", long 77°56'20", on right bank 300 ft upstream from Evans Run, 2.3 miles upstream from Tuscarora Creek, and 3 miles southeast of Martinsburg, Berkeley County.

Drainage area.--272 sq mi.

Gage.--Nonrecording prior to July 22, 1948; recording thereafter. At different datum prior to July 15, 1906. Altitude of gage 350 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 7,000 cfs.

Historical data.--The flood of March 1936 is maximum known according to information by local resident.

Bankfull stage.--8 ft.

Remarks.--Peaks prior to July 1948 from observed readings. Peak of Apr. 14, 1948, from series of gage readings at time of the crest. Base for partial-duration series, 1,500 cfs.

Peak stages and discharges of Opequon Creek near Martinsburg, W. Va.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1906	Jan. 4, 1906	a8.73	3,420	1953	Mar. 24, 1953	7.62	1,590
1936	March 1936	17.5	-		May 31, 1953	8.39	1,880
1948	Feb. 15, 1948	7.58	1,510	1954	Mar. 2, 1954	9.68	2,470
	Apr. 14, 1948	8.66	1,940	1955	Oct. 16, 1954	8.86	2,070
1949	Oct. 6, 1948	8.13	1,690		Mar. 7, 1955	7.40	1,520
	Nov. 29, 1948	9.24	2,160		Mar. 22, 1955	9.68	2,470
	Dec. 17, 1948	10.27	2,660		Aug. 13, 1955	11.13	3,700
	Dec. 30, 1948	10.41	2,700		Aug. 19, 1955	11.92	4,900
	Jan. 6, 1949	9.30	2,200	1956	Feb. 7, 1956	7.77	1,650
	Jan. 28, 1949	8.67	1,940		Mar. 15, 1956	9.59	2,420
	Feb. 5, 1949	8.02	1,650		Apr. 8, 1956	7.37	1,520
	May 10, 1949	7.86	1,620		July 23, 1956	7.79	1,650
1950	Feb. 2, 1950	8.53	1,740	1957	Nov. 2, 1956	8.25	1,780
	Mar. 24, 1950	9.03	1,960		Feb. 10, 1957	8.60	1,940
	May 19, 1950	10.36	2,740		Apr. 6, 1957	7.77	1,630
	June 1, 1950	9.10	2,010	1958	Dec. 27, 1957	8.57	2,010
1951	Nov. 26, 1950	11.08	3,950		Jan. 15, 1958	8.60	2,010
	Dec. 4, 1950	14.12	9,100		Mar. 21, 1958	7.38	1,590
	Dec. 8, 1950	8.08	1,670		Mar. 27, 1958	8.79	2,090
	Feb. 8, 1951	9.56	2,410		May 6, 1958	8.02	1,770
	Feb. 21, 1951	7.83	1,570	1959	May 20, 1959	8.34	1,890
	Apr. 13, 1951	10.98	3,800		June 3, 1959	11.54	4,300
	May 12, 1951	8.60	1,880	1960	Feb. 19, 1960	7.76	1,630
	June 14, 1951	7.8	1,570		Apr. 5, 1960	9.76	2,530
1952	Feb. 4, 1952	8.81	1,970		May 28, 1960	7.12	1,380
	Apr. 2, 1952	7.60	1,500		June 4, 1960	9.52	2,370
	Apr. 6, 1952	8.16	1,710	1961	Feb. 20, 1961	10.56	3,110
	Apr. 28, 1952	13.09	7,190		Feb. 24, 1961	7.54	1,520
	Sept. 1, 1952	11.65	4,700		Feb. 26, 1961	9.92	2,580
1953	Nov. 22, 1952	13.12	6,980		Mar. 25, 1961	9.35	2,320
	Dec. 11, 1952	8.89	2,070		Apr. 13, 1961	10.67	3,190
	Jan. 11, 1953	9.93	2,580				
	Jan. 24, 1953	7.83	1,650				

a Maximum daily.

6170. Tuscarora Creek above Martinsburg, W. Va.

Location.--Lat 39°28'10", long 77°58'15", on left bank at Martinsburg, Berkeley County, 0.6 mile upstream from Dry Run, and 3.7 miles upstream from mouth.

Drainage area.--11.3 sq mi.

Gage.--Nonrecording prior to Jan. 5, 1949; recording thereafter. Altitude of gage is 450 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 130 cfs.

Remarks.--Base for partial-duration series, 100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Dec. 30, 1948	3.55	119	1952	Feb. 4, 1952	3.44	111
	Jan. 5, 1949	3.78	139		Apr. 28, 1952	3.71	131
	Jan. 28, 1949	3.53	119		Sept. 1, 1952	4.59	208
	June 28, 1949	3.46	111	1953	Nov. 21, 1952	4.26	176
	July 13, 1949	4.32	181		Dec. 11, 1952	3.77	135
1950	May 17, 1950	3.49	115		Jan. 10, 1953	3.54	119
	Aug. 19, 1950	4.25	176		Mar. 15, 1953	3.34	102
	Sept. 21, 1950	3.41	107		Mar. 24, 1953	3.93	151
1951	Nov. 25, 1950	4.49	199	July 22, 1953	4.73	222	
	Dec. 4, 1950	-	(a)	1954	Mar. 1, 1954	2.83	65
	Feb. 7, 1951	3.35	103		1955	Mar. 22, 1955	3.74
	Mar. 30, 1951	3.41	107	Aug. 12, 1955		3.36	104
	Apr. 12, 1951	4.00	155	Aug. 18, 1955		4.10	163
	June 13, 1951	3.50	115				

a Not determined, probably exceeded 200 cfs.

Peak stages and discharges of Tuscarora Creek above Martinsburg, W. Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Mar. 14, 1956	3.17	72	1959	June 2, 1959	3.72	110
1957	Oct. 23, 1956	4.29	176	1960	June 15, 1960	5.01	234
	Nov. 1, 1956	4.08	158	1961	Feb. 20, 1961	3.67	106
1958	May 6, 1958	3.24	76		Feb. 25, 1961	4.35	166
1959	May 19, 1959	4.10	143		Apr. 13, 1961	3.87	122

6180. Potomac River at Shepherdstown, W. Va.

Location.--Lat 39°26'04", long 77°48'07", on right bank 0.1 mile downstream from Rumsey Bridge at Shepherdstown, Jefferson County, and 3.3 miles upstream from Antietam Creek.

Drainage area.--5,936 sq mi.

Gage.--Recording. Datum of gage is 281.00 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 200,000 cfs and extended on basis of slope-area measurement at 335,000 cfs.

Historical data.--Flood of Mar. 19, 1936, is greatest known.

Remarks.--Base for partial-duration series, 23,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1889	June 1, 1889	a39.2	290,000	1936	Mar. 6, 1936	10.26	29,500
1924	May 13, 1924	a29.8	168,000		Mar. 13, 1936	16.52	61,700
1929	Mar. 1, 1929	13.46	44,800		Mar. 19, 1936	42.07	335,000
	Mar. 7, 1929	15.49	55,600		Mar. 22, 1936	16.90	64,100
	Apr. 17, 1929	25.53	126,000		Mar. 26, 1936	12.71	41,000
1930	Oct. 4, 1929	13.55	45,300		Apr. 8, 1936	13.39	44,600
	Oct. 23, 1929	19.83	82,400	1937	Jan. 12, 1937	10.59	30,900
	Nov. 19, 1929	13.56	45,300		Jan. 23, 1937	16.16	60,000
1931	Apr. 2, 1931	10.03	28,100		Feb. 10, 1937	10.24	29,000
	May 15, 1931	10.70	31,300		Feb. 23, 1937	13.26	44,100
	May 24, 1931	10.92	32,200		Apr. 27, 1937	33.2	207,000
1932	Feb. 6, 1932	16.48	61,400		Aug. 27, 1937	13.28	44,100
	Mar. 31, 1932	12.35	39,300	1938	Oct. 21, 1937	8.88	23,300
	May 14, 1932	24.75	119,000		Oct. 29, 1937	26.78	158,000
1933	Nov. 10, 1932	11.68	36,000	1939	Dec. 11, 1938	10.17	29,000
	Nov. 21, 1932	10.00	28,100		Feb. 1, 1939	13.06	43,100
	Jan. 27, 1933	12.78	41,300		Feb. 5, 1939	20.36	86,500
	Mar. 15, 1933	13.27	43,800		Feb. 13, 1939	9.32	25,000
	Mar. 21, 1933	14.34	49,000		Mar. 2, 1939	13.43	44,600
	Apr. 8, 1933	8.95	23,700		Apr. 18, 1939	15.75	57,700
	Apr. 13, 1933	9.64	26,300	1940	Mar. 5, 1940	10.2	29,000
	Apr. 18, 1933	12.96	42,300		Apr. 10, 1940	10.49	30,400
	Apr. 21, 1933	19.1	77,800		Apr. 18, 1940	12.18	38,600
	May 11, 1933	11.84	36,400		Apr. 21, 1940	17.75	69,400
	May 18, 1933	9.66	26,800		June 1, 1940	16.35	61,100
	Aug. 25, 1933	13.54	44,300		June 13, 1940	9.10	24,200
1934	Jan. 8, 1934	11.2	33,600	1941	Apr. 6, 1941	13.53	45,200 ^a
1935	Dec. 2, 1934	17.0	64,400		June 6, 1941	12.13	38,100
	Jan. 23, 1935	13.24	43,300	1942	Mar. 10, 1942	10.63	30,900
	Feb. 18, 1935	11.82	36,400		Apr. 11, 1942	11.59	35,600
	Apr. 12, 1935	11.90	36,900		May 18, 1942	11.90	37,100
1936	Jan. 5, 1936	10.24	29,000		May 24, 1942	18.97	77,100
	Jan. 11, 1936	11.63	35,600	1943	Oct. 16, 1942	32.68	201,000
	Feb. 28, 1936	19.21	78,400		Dec. 3, 1942	8.86	23,300
					Dec. 31, 1942	21.40	95,500
					Feb. 7, 1943	14.15	48,800

^a Annual peak only.

Peak stages and discharges of Potomac River at Shepherdstown, W. Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Feb. 12, 1943	9.26	25,000	1952	Mar. 12, 1952	17.81	69,400
	Mar. 15, 1943	10.40	30,000		Mar. 24, 1952	10.70	31,400
	Apr. 21, 1943	14.57	51,000		Apr. 29, 1952	19.09	77,800
	May 21, 1943	10.80	31,800		May 13, 1952	12.36	39,600
1944	Jan. 29, 1944	10.23	29,000	1953	Nov. 23, 1952	19.98	83,600
	Feb. 28, 1944	9.63	26,400		Dec. 12, 1952	10.41	30,000
	Mar. 8, 1944	11.43	34,700		Jan. 11, 1953	11.16	33,500
	Mar. 14, 1944	12.77	41,600		Jan. 26, 1953	13.28	44,000
	Mar. 25, 1944	14.37	49,900		Feb. 23, 1953	9.53	26,100
	Apr. 29, 1944	10.19	29,000		Mar. 6, 1953	8.83	23,000
	May 8, 1944	14.94	52,600		Mar. 16, 1953	9.59	26,300
1945	Oct. 23, 1944	9.57	26,400		Mar. 25, 1953	14.70	51,600
	Feb. 18, 1945	11.27	34,200		Apr. 12, 1953	9.90	27,700
	Feb. 24, 1945	10.16	29,000		June 1, 1953	11.05	33,000
	Feb. 28, 1945	13.56	45,700	1954	Mar. 3, 1954	19.47	80,200
	Mar. 2, 1945	11.17	33,700	1955	Oct. 17, 1954	22.00	98,000
	Mar. 5, 1945	10.77	31,800		Dec. 31, 1954	14.72	51,700
	Mar. 8, 1945	12.50	40,000		Feb. 8, 1955	9.12	24,300
	Sept. 19, 1945	19.31	79,000		Mar. 7, 1955	13.20	43,600
1946	Nov. 30, 1945	9.80	27,200		Mar. 23, 1955	17.83	69,600
	Jan. 9, 1946	9.73	26,800		Apr. 27, 1955	8.92	23,400
	June 3, 1946	12.65	40,600		June 9, 1955	13.88	47,200
1947	Mar. 16, 1947	9.95	28,200		June 13, 1955	10.66	31,200
1948	Jan. 3, 1948	9.95	28,200		Aug. 14, 1955	12.16	38,400
	Feb. 16, 1948	12.88	42,100		Aug. 20, 1955	25.26	124,000
	Mar. 25, 1948	10.40	30,000	1956	Feb. 4, 1956	10.22	29,100
	Apr. 15, 1948	18.49	73,800		Feb. 8, 1956	11.32	34,300
	May 9, 1948	9.16	24,600		Feb. 20, 1956	9.76	27,100
1949	Dec. 5, 1948	9.35	25,500		Mar. 16, 1956	12.82	41,700
	Dec. 17, 1948	16.90	64,100		Apr. 8, 1956	14.79	52,000
	Dec. 31, 1948	11.86	37,100		Aug. 8, 1956	10.33	29,600
	Jan. 7, 1949	12.02	37,600	1957	Dec. 16, 1956	9.81	27,300
	Jan. 29, 1949	13.64	45,700		Feb. 11, 1957	15.28	54,700
	Apr. 15, 1949	9.25	24,600		Apr. 7, 1957	13.16	43,400
	June 19, 1949	19.84	82,300	1958	Dec. 27, 1957	10.18	29,000
	June 30, 1949	10.38	30,000		Feb. 28, 1958	9.54	26,100
	July 14, 1949	10.12	28,600		Mar. 28, 1958	12.73	41,200
	July 18, 1949	14.9	52,000		Apr. 8, 1958	11.49	35,100
1950	Feb. 3, 1950	14.36	49,900		Apr. 30, 1958	10.52	30,500
	Feb. 16, 1950	9.32	25,000		May 7, 1958	15.88	58,100
	Mar. 25, 1950	11.39	34,700	1959	June 4, 1959	10.32	29,600
	May 19, 1950	9.71	26,800	1960	Oct. 26, 1959	9.90	27,700
	Sept. 15, 1950	9.08	24,200		Jan. 17, 1960	9.02	23,800
1951	Nov. 26, 1950	14.01	47,800		Feb. 20, 1960	-	(b)
	Dec. 5, 1950	19.50	80,400		Apr. 1, 1960	17.33	66,600
	Dec. 9, 1950	18.00	70,600		Apr. 5, 1960	17.32	66,600
	Jan. 16, 1951	9.61	26,400		May 10, 1960	20.35	86,200
	Feb. 3, 1951	14.07	48,300		May 30, 1960	9.58	26,300
	Feb. 8, 1951	9.48	25,900	1961	Feb. 20, 1961	18.57	74,300
	Feb. 22, 1951	11.97	37,600		Feb. 27, 1961	18.17	71,700
	Mar. 31, 1951	15.23	54,300		Mar. 7, 1961	9.13	24,300
	Apr. 14, 1951	11.91	37,100		Mar. 10, 1961	9.99	28,100
	June 15, 1951	19.60	81,000		Mar. 26, 1961	11.13	33,400
1952	Jan. 3, 1952	12.58	40,600		Apr. 14, 1961	14.48	50,400
	Jan. 29, 1952	13.54	45,200		Apr. 17, 1961	14.86	52,400
	Feb. 5, 1952	9.87	27,700				

b Discharge above base but less than that of May 10, 1960.

6195. Antietam Creek near Sharpsburg, Md.

Location.--Lat 39°27'01", long 77°43'52", on left bank 400 ft downstream from Burnside Bridge, 1 mile southeast of Sharpsburg, Washington County, and 4 miles upstream from mouth.

Drainage area.--281 sq mi.

Gage.--Nonrecording prior to July 13, 1933; recording thereafter. At site 400 ft upstream prior to July 13, 1933. Datum of gage is 311.00 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 4,300 cfs and extended on basis of contracted-opening measurement at 12,600 cfs.

Bankfull stage.--7 ft.

Remarks.--Only annual peaks are shown prior to 1933. Base for partial-duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928a/	July 11, 1928	11.9	6,300	1947	June 8, 1947	3.98	745
1929	May 3, 1929	9.8	4,330	1948	Feb. 14, 1948	4.82	1,160
1930	Oct. 23, 1929	7.9	2,860	1949	Dec. 30, 1948	-	(b)
1931	July 9, 1931	8.3	3,140		Jan. 6, 1949	-	(b)
1932	Sept. 2, 1932	7.14	2,360		Jan. 28, 1949	5.50	1,550
1933	Oct. 5, 1932	5.89	1,620		July 13, 1949	6.43	2,120
	Nov. 10, 1932	8.4	3,100		July 18, 1949	11.23	6,470
	June 12, 1933	7.0	2,200	1950	Dec. 27, 1949	4.88	1,220
	July 2, 1933	8.60	3,540	1951	Nov. 26, 1950	9.22	4,720
	Aug. 24, 1933	10.4	5,690		Dec. 5, 1950	9.01	4,480
	Sept. 16, 1933	6.66	2,200		Dec. 8, 1950	7.87	3,310
1934	Sept. 30, 1934	5.40	1,390		Feb. 7, 1951	5.80	1,730
1935	Dec. 1, 1934	10.8	5,730		Feb. 22, 1951	5.76	1,730
	July 25, 1935	8.80	3,590		June 3, 1951	7.31	2,790
1936	Feb. 27, 1936	6.28	1,840		June 14, 1951	5.55	1,610
	Mar. 12, 1936	8.50	3,520	1952	Apr. 28, 1952	6.64	2,260
	Mar. 18, 1936	8.88	3,930		May 25, 1952	10.32	5,480
	Apr. 6, 1936	5.71	1,540		Sept. 1, 1952	6.11	1,910
1937	Feb. 22, 1937	6.86	2,470		Sept. 3, 1952	7.44	2,870
	Apr. 27, 1937	10.67	6,040	1953	Nov. 22, 1952	9.17	4,680
	Aug. 12, 1937	8.25	3,600	1954	Mar. 2, 1954	4.20	880
1938	Oct. 28, 1937	6.74	2,330	1955	Oct. 15, 1954	8.75	4,180
1939	Feb. 4, 1939	5.91	1,790		Feb. 7, 1955	5.95	1,840
	June 22, 1939	6.26	2,050		Mar. 23, 1955	6.01	1,880
1940	Apr. 9, 1940	5.96	1,850		Aug. 11, 1955	5.62	1,650
	Apr. 20, 1940	5.72	1,670		Aug. 19, 1955	6.19	1,980
	May 28, 1940	5.62	1,610		Aug. 21, 1955	5.61	1,650
	July 23, 1940	7.21	2,710		Aug. 22, 1955	5.98	1,860
	Sept. 25, 1940	6.90	2,470	1956	July 20, 1956	16.73	12,600
1941	Nov. 15, 1940	4.87	1,190	1957	Nov. 1, 1956	7.17	2,440
1942	May 22, 1942	7.03	2,550	1958	Mar. 28, 1958	5.58	1,630
	Aug. 14, 1942	5.68	1,670		May 6, 1958	6.54	2,220
1943	Oct. 16, 1942	6.32	2,050	1959	Jan. 22, 1959	4.58	1,080
	Dec. 30, 1942	6.08	1,910	1960	Apr. 5, 1960	5.40	1,530
	May 21, 1943	5.93	1,790		June 18, 1960	7.14	2,660
1944	Jan. 4, 1944	8.53	3,910	1961	Feb. 26, 1961	5.40	1,530
1945	Dec. 12, 1944	5.08	1,320		Apr. 13, 1961	5.86	1,790
1946	June 3, 1946	6.27	2,050				

a Partial year.

b Peak above base; discharge not determined.

6205. North River near Stokesville, Va.

Location.--Lat 38°20'15", long 79°14'25", on left bank 575 ft above highway bridge, 2.8 miles upstream from city of Staunton Dam, 3.8 miles upstream from Broad Run, 5.0 miles west of Stokesville, Augusta County, and 7.8 miles upstream from Skidmore Fork.

Drainage area.--23.4 sq mi.

Gage.--Recording. Prior to June 10, 1958, at site 575 ft downstream at datum 6.0 ft lower. Datum of gage is 2,054.57 ft above mean sea level, datum of 1929, Parkersburg-Uniontown supplementary adjustment of 1944.

Stage-discharge relation.--Defined by current-meter measurements below 900 cfs and extended above on basis of computation of flow-over-dam at 11,000 cfs at former site. Defined by current-meter measurements below 700 cfs and extended above by logarithmic plotting at present site.

Remarks.--Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	Mar. 14, 1947	4.07	326	1954	Feb. 21, 1954	3.50	282
	June 15, 1947	3.99	201		Mar. 1, 1954	6.78	1,850
1948	Nov. 3, 1947	3.52	205	1954	Apr. 17, 1954	3.47	248
	Feb. 14, 1948	3.65	299		Oct. 15, 1954	3.68	363
	Apr. 14, 1948	3.46	250	1955	Nov. 19, 1954	3.84	440
					Dec. 30, 1954	3.87	428
1949	Nov. 7, 1948	3.20	244		Mar. 5, 1955	3.68	325
	Dec. 4, 1948	3.69	377		Mar. 22, 1955	3.65	310
	Jan. 6, 1949	3.64	362		Aug. 18, 1955	4.64	888
	Apr. 13, 1949	4.95	914	1956	Mar. 15, 1956	3.37	179
	June 17, 1949	10.9	11,100				
1950	Nov. 2, 1949	2.74	452	1957	Nov. 1, 1956	3.46	224
	Feb. 2, 1950	2.74	824		Feb. 27, 1957	3.40	200
	Sept. 13, 1950	2.68	908		Apr. 5, 1957	4.68	930
1951	Dec. 4, 1950	3.30	200	1958	Dec. 26, 1957	3.48	212
	Dec. 7, 1950	5.6	1,650		Apr. 7, 1958	3.87	404
	Feb. 2, 1951	3.38	204		Apr. 23, 1958	3.57	252
	Mar. 31, 1951	3.38	232	1959	June 2, 1959	4.12	712
	Apr. 12, 1951	3.58	317				
	June 13, 1951	4.60	870		Oct. 24, 1959	3.35	328
1952	Feb. 4, 1952	3.40	240		Mar. 30, 1960	4.16	736
	Mar. 11, 1952	4.30	685		Apr. 4, 1960	-	-
	Apr. 28, 1952	3.53	294		May 8, 1960	3.66	470
1953	Nov. 21, 1952	3.47	252		May 28, 1960	4.87	1,250
	Dec. 11, 1952	3.44	256		June 4, 1960	4.07	682
	Jan. 10, 1953	3.37	228	1961	Feb. 19, 1961	3.53	277
	Jan. 24, 1953	3.62	335		Feb. 25, 1961	3.79	386
	Feb. 21, 1953	4.32	697		Apr. 16, 1961	3.74	378
	Mar. 24, 1953	4.15	602				

6210. Dry River at Rawley Springs, Va.

Location.--Lat 38°30'10", long 79°03'14", at downstream side of bridge at Rawley Springs, Rockingham County, 1½ miles downstream from Rock Run, 9 miles upstream from North River, and 11 miles west of Harrisonburg.

Drainage area.--74 sq mi, approximately.

Gage.--Nonrecording prior to Oct. 1, 1948; crest-stage gage since Aug. 13, 1950. Altitude of gage is 1,610 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,000 cfs and extended above on basis of slope-area measurements at 4,670 cfs and 6,900 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Dry River at Rawley Springs, Va.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	October 1942	10.5	13,000	1954	Mar. 1, 1954	5.28	3,100
1947	Mar. 14, 1947	a3.90	1,560	1955	Aug. 18, 1955	7.76	6,900
1948	Feb. 14, 1948	a3.74	1,290	1956	Mar. 15, 1956	3.87	1,470
1949	June 17, 1949	6.5	4,670	1957	Apr. 5, 1957	4.88	2,580
1950	Sept. 13, 1950	4.96	2,650	1958	Apr. 23, 1958	3.48	900
1951	Dec. 7, 1950	6.2	4,250	1959	June 2, 1959	4.77	2,400
1952	Mar. 10, 1952	5.16	2,900	1960	May 8, 1960	5.44	3,200
1953	Mar. 23, 1953	4.73	2,400	1961	Feb. 25, 1961	4.22	1,850

a Maximum observed.

6212. War Branch Muddy Creek near Hinton, Va.

Location--Lat 38°28'28", long 78°59'14", at bridge on U.S. Highway 33, 100 ft upstream from Buttermilk Run, and 1 mile west of Hinton, Rockingham County.

Drainage area--9.45 sq mi.

Gage--Crest-stage gage. Altitude of gage is 1,340 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 125 cfs and extended above on basis of slope-area measurement at 570 cfs and contracted-opening measurement at 2,290 cfs.

Bankfull stage--4 ft.

Remarks--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Aug. 15, 1949	6.7	2,500	1956	Mar. 15, 1956	1.91	175
1950	Sept. 13, 1950	4.05	850	1957	Apr. 5, 1957	2.74	380
				1958	July 27, 1958	3.45	600
1951	Dec. 7, 1950	3.1	490	1959	June 2, 1959	3.35	570
1952	May 12, 1952	4.05	850	1960	May 8, 1960	3.50	625
1953	Mar. 23, 1953	2.88	420				
1954	Mar. 1, 1954	2.18	235	1961	Feb. 25, 1961	2.45	295
1955	Aug. 18, 1955	6.44	2,290				

6214. Blacks Run at Harrisonburg, Va.

Location--Lat 38°25'52", long 79°53'02", at bridge on U.S. Highway 11, at south edge of Harrisonburg, Rockingham County.

Drainage area--5.52 sq mi.

Gage--Crest-stage gage. Altitude of gage is 1,260 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 75 cfs and extended above on basis of slope-area measurement at 430 cfs and contracted-opening measurement at 1,000 cfs.

Bankfull stage--6 ft.

Remarks--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Aug. 5, 1949	-	1,920	1956	Mar. 15, 1956	4.00	320
1950	Sept. 13, 1950	6.06	710	1957	Apr. 5, 1957	3.65	235
				1958	July 28, 1958	4.30	385
1951	Dec. 7, 1950	5.3	570	1959	Sept. 30, 1959	4.89	500
1952	Dec. 21, 1951	4.85	490	1960	May 8, 1960	5.20	555
1953	Mar. 23, 1953	4.80	485				
1954	Mar. 1, 1954	4.04	325	1961	Feb. 25, 1961	4.96	515
1955	Oct. 15, 1954	8.05	990				

6220. North River near Burkettown, Va.

Location.--Lat 38°20'25", long 78°54'50", on right bank 0.8 mile downstream from Pleasant Run, 2.8 miles northeast of Burkettown, Augusta County, and 8.5 miles upstream from Middle River.

Drainage area.--375 sq mi; at site downstream, 381 sq mi.

Gage.--Nonrecording at site 3.0 miles downstream at different datum prior to Dec. 12, 1938; recording thereafter. Datum of gage is 1,103.49 ft above mean sea level, datum of 1929.

Stage-discharge relation.--At former site, defined by current-meter measurements below 5,100 cfs and extended above on basis of comparative records at recording site. At present site, defined by current-meter measurements below 16,000 cfs and extended above on basis of slope-area measurements at gage heights 32.4 ft and 36.3 ft, and contracted-opening measurement at gage height 36.3 ft.

Bankfull stage.--7 ft.

Historical data.--The flood of June 18, 1949, is greatest since at least 1852.

Remarks.--Base for partial-duration series, 2,500 cfs. Only annual peaks are shown prior to 1939.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1924	May 1924	22.5	26,000	1948	Apr. 14, 1948	6.73	2,580
1927	Nov. 16, 1926	10.3	7,440	1949	Oct. 5, 1948	8.66	4,030
1928	Aug. 16, 1928	9.5	6,730		Oct. 8, 1948	7.52	3,150
1929	Apr. 16, 1929	10.0	7,170		Nov. 7, 1948	8.26	3,790
1930	Oct. 22, 1929	9.80	7,010		Dec. 4, 1948	8.95	4,380
1931	July 23, 1931	7.58	5,090		Apr. 14, 1949	13.08	8,400
1932	Mar. 28, 1932	7.5	4,980		May 23, 1949	6.59	2,580
1933	Apr. 17, 1933	11.5	8,550		June 18, 1949	36.3	62,600
1934	Sept. 16, 1934	8.5	5,850		June 28, 1949	8.36	3,870
1935	Dec. 1, 1934	19.5	19,100		July 17, 1949	6.88	2,720
1936	Mar. 17, 1936	26.70	37,000		July 20, 1949	10.29	5,550
1937	Apr. 26, 1937	15.0	12,600		Aug. 15, 1949	13.11	8,500
1938	Oct. 19, 1937	12.0	9,050		Aug. 18, 1949	7.65	3,390
					Aug. 29, 1949	11.32	6,600
1939	Jan. 30, 1939	9.0	4,380	1950	Feb. 2, 1950	6.62	2,630
	Feb. 4, 1939	13.5	8,700		May 30, 1950	9.20	4,680
	July 30, 1939	15.2	10,500		Sept. 10, 1950	6.85	2,770
1940	Apr. 20, 1940	6.7	2,580		Sept. 13, 1950	13.35	8,650
	May 31, 1940	10.1	5,370	1951	Dec. 4, 1950	13.16	8,450
	June 14, 1940	16.07	11,500		Dec. 7, 1950	16.56	12,100
	June 17, 1940	10.3	5,550		Feb. 2, 1951	6.58	2,630
	Aug. 16, 1940	10.1	5,370		Feb. 7, 1951	6.57	2,630
	Aug. 31, 1940	7.4	3,070		Mar. 31, 1951	6.93	2,840
1941	Apr. 5, 1941	7.76	3,390		Apr. 13, 1951	6.63	2,630
1942	Mar. 9, 1942	6.6	2,510		June 13, 1951	11.32	6,570
	May 16, 1942	19.9	16,800	1952	Feb. 4, 1952	7.78	3,520
	May 22, 1942	23.37	22,600		Mar. 11, 1952	14.73	9,970
	Aug. 9, 1942	7.7	3,310		Apr. 28, 1952	9.70	5,130
1943	Oct. 15, 1942	32.4	43,000	1953	Nov. 21, 1952	7.28	3,120
	Dec. 30, 1942	10.1	5,370		Jan. 24, 1953	7.35	3,200
	Mar. 13, 1943	7.7	3,310		Feb. 21, 1953	10.38	5,760
	Apr. 21, 1943	7.0	2,790		Mar. 24, 1953	13.16	8,450
	May 20, 1943	8.3	3,790		May 15, 1953	6.42	2,490
	July 13, 1943	8.1	3,630	1954	Mar. 1, 1954	14.30	9,550
1944	May 7, 1944	9.77	5,100		June 14, 1954	8.00	3,680
1945	Sept. 18, 1945	15.38	10,700	1955	Oct. 15, 1954	12.46	7,710
1946	May 4, 1946	6.65	2,510		Nov. 20, 1954	9.87	5,280
1947	Mar. 14, 1947	8.32	3,790		Dec. 30, 1954	8.94	4,450
	July 17, 1947	8.48	3,950		Feb. 6, 1955	8.42	4,020
1948	Feb. 14, 1948	9.40	4,740		Mar. 7, 1955	8.36	3,970
					Mar. 23, 1955	8.18	3,820
					July 10, 1955	6.87	2,830
					Aug. 18, 1955	21.04	18,600
				1956	Mar. 15, 1956	5.28	1,760

Peak stages and discharges of North River near Burkettown, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	Apr. 5, 1957	12.67	8,320	1960	Apr. 5, 1960	10.47	6,030
1958	Apr. 23, 1958	6.82	2,820	1960	May 8, 1960	12.34	7,880
	May 25, 1958	6.94	2,900		May 28, 1960	14.83	10,800
	July 26, 1958	6.92	2,900		June 4, 1960	7.90	3,700
1959	June 2, 1959	14.60	10,600	1961	Feb. 19, 1961	7.81	3,620
1960	Oct. 24, 1959 Mar. 30, 1960	11.25	6,700		Feb. 26, 1961	8.61	4,320
		12.65	8,210		Apr. 13, 1961	7.56	3,460
					Apr. 16, 1961	7.72	3,540

6230. Bell Creek at St. Pauls Chapel, near Staunton, Va.

Location--Lat 38°10'00", long 79°07'35", on right bank 400 ft upstream from culvert on State Highway 720, 500 ft southwest of St. Pauls Chapel, and 3.0 miles west of Staunton, Augusta County.

Drainage area--0.61 sq mi.

Gage--Recording and v-notch weir. Altitude of gage is 1,520 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 10 cfs and extended above on basis of slope-area measurement at 193 cfs and slope-conveyance studies.

Bankfull stage--2 ft.

Remarks--Records furnished by the Soil Conservation Service. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Apr. 13, 1949	1.86	193	1952	Mar. 11, 1952	1.27	7.7
1950	Nov. 1, 1949	1.37	13	1953	Mar. 25, 1953	.91	.61
				1954	June 8, 1954	1.05	1.90
1951	Apr. 12, 1951	1.10	2.6	1955	Oct. 15, 1954	2.12	306

6235. Bell Creek near Staunton, Va.

Location--Lat 38°11'00", long 79°07'05", on left bank 1.2 miles upstream from bridge on U.S. Highway 250 and 3.2 miles northwest of Staunton, Augusta County.

Drainage area--3.8 sq mi, approximately.

Gage--Recording and v-notch weir. Altitude of gage is 1,470 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 50 cfs and extended above on basis of slope-area measurement at 630 cfs.

Bankfull stage--3 ft.

Remarks--Records furnished by Soil Conservation Service. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	June 20, 1949	2.74	722	1952	Mar. 11, 1952	1.55	21
1950	Nov. 1, 1949	1.78	52	1953	Mar. 25, 1953	1.47	14
				1954	Mar. 1, 1954	1.38	8.2
1951	July 25, 1951	1.69	37	1955	Feb. 6, 1955	2.05	132

6240. Bell Creek at Franks Mill, near Staunton, Va.

Location--Lat 38°13'10", long 79°06'35", on right bank 0.3 mile southwest of Franks Mill, 0.4 mile upstream from mouth, and 5.0 miles northwest of Staunton, Augusta County.

Drainage area--9.6 sq mi, approximately.

Gage--Recording and concrete control. Altitude of gage is 1,350 ft (by barometer).

Stage-discharge relation--Defined by current-meter measurements below 160 cfs and extended above on basis of slope-area measurement at 840 cfs.

Bankfull stage--3 ft.

Remarks--Base for partial-duration series, 100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Dec. 3, 1948	2.19	103	1952	Mar. 11, 1952	2.64	169
	Apr. 13, 1949	4.10	840	1953	Mar. 25, 1953	2.34	123
	June 20, 1949	4.18	455				
	June 28, 1949	4.86	912	1954	Mar. 1, 1954	1.96	76
	July 13, 1949	2.96	143				
	July 14, 1949	2.89	140	1955	Oct. 15, 1954	3.67	542
	July 15, 1949	4.12	427		Feb. 6, 1955	2.34	123
	July 16, 1949	3.42	188		Aug. 18, 1955	3.77	602
1950	Nov. 1, 1949	2.26	112	1956	Mar. 15, 1956	1.21	18
1951	July 25, 1951	4.10	840				

6250. Middle River near Grottoes, Va.

Location--Lat 38°15'42", long 78°51'44", on left bank at upstream side of bridge on State Highway 256 at Mount Meridian, Augusta County, 1.8 miles upstream from mouth, and 2.0 miles west of Grottoes, Rockingham County.

Drainage area--360 sq mi.

Gage--Nonrecording prior to Sept. 1, 1938; recording thereafter. Datum of gage is 1,061.51 ft above mean sea level, datum of 1929.

Stage-discharge relation--Defined by current-meter measurements below 15,000 cfs and extended above by logarithmic plotting.

Bankfull stage--8 ft.

Historical data--The flood of Mar. 13, 1936, is considered by local residents to have been the highest since 1877.

Remarks--Base for partial-duration series, 2,000 cfs. Only annual peaks are shown prior to 1939.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1924	May 1924	22.8	16,200	1939	Jan. 30, 1939	9.33	2,810
1926	Jan. 18, 1926	9.7	3,230	1939	Feb. 4, 1939	12.15	5,310
	Apr. 22, 1927	8.8	2,600		1940	May 31, 1940	9.25
	Aug. 17, 1928	12.9	5,740				
	Apr. 16, 1929	13.3	6,090				
	Oct. 2, 1929	9.3	2,950	1941	Apr. 5, 1941	8.14	2,090
1931	Aug. 23, 1931	8.7	2,530				
1932	Mar. 28, 1932	11.0	4,220	1942	May 16, 1942	11.65	4,700
1933	Oct. 18, 1932	17.0	9,560		May 22, 1942	19.08	11,800
1934	Mar. 3, 1934	11.0	4,220		June 27, 1942	9.58	3,160
1935	Dec. 1, 1934	20.6	13,500		Aug. 9, 1942	8.7	2,530
1936	Mar. 18, 1936	28.57	24,500	1943	Oct. 15, 1942	26.30	21,000
1937	Apr. 26, 1937	17.13	9,660		Dec. 30, 1942	12.38	5,340
1938	Oct. 20, 1937	16.1	8,660		Mar. 13, 1943	9.41	3,020

a Maximum for period Apr. 1 to Sept. 30, 1927.

Peak stages and discharges of Middle River near Grottoes, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Apr. 30, 1943	8.30	2,290	1952	Dec. 21, 1951	9.12	2,810
	June 10, 1943	9.11	2,880		Jan. 28, 1952	8.90	2,670
	July 14, 1943	10.38	3,740		Feb. 4, 1952	11.47	4,620
1944	May 7, 1944	8.13	2,190		Mar. 11, 1952	11.25	4,380
	May 22, 1944	10.26	3,660		Apr. 25, 1952	8.15	2,250
	Sept. 19, 1944	14.10	6,810		Apr. 28, 1952	10.90	4,140
1945	Oct. 21, 1944	13.5	6,270	1953	Dec. 11, 1952	8.54	2,430
	Sept. 18, 1945	20.5	13,400		Feb. 22, 1953	9.63	3,160
1946	Dec. 31, 1945	7.18	1,700		Mar. 25, 1953	13.70	6,450
1947	Jan. 3, 1947	7.90	2,070	1954	Mar. 1, 1954	11.86	4,940
	Mar. 14, 1947	10.50	3,820		June 12, 1954	7.88	2,070
1948	Nov. 4, 1947	8.90	2,670	1955	Oct. 16, 1954	15.90	8,460
	Feb. 14, 1948	16.40	8,960		Nov. 20, 1954	9.68	3,220
	Mar. 24, 1948	8.16	2,250		Dec. 30, 1954	9.28	2,940
	Apr. 1, 1948	8.34	2,310		Feb. 7, 1955	9.45	3,060
1949	Oct. 5, 1948	10.43	3,740		Mar. 7, 1955	10.97	4,200
	Nov. 7, 1948	9.81	3,300		Mar. 22, 1955	9.40	3,020
	Dec. 4, 1948	16.10	8,660		June 8, 1955	9.52	3,100
	Dec. 30, 1948	10.09	3,510		Aug. 18, 1955	19.93	12,700
	Jan. 6, 1949	8.70	2,550	1956	Mar. 15, 1956	6.62	1,400
	Apr. 14, 1949	12.84	5,660	1957	Apr. 6, 1957	11.58	4,700
	May 10, 1949	8.48	2,430		May 20, 1957	8.13	2,190
	June 18, 1949	22.74	16,100	1958	Feb. 28, 1958	8.24	2,250
	June 21, 1949	8.75	2,610		Mar. 31, 1958	9.96	3,440
	July 15, 1949	8.17	2,250		Apr. 23, 1958	10.97	4,220
	Aug. 29, 1949	8.95	2,740		Apr. 28, 1958	7.80	2,010
1950	Nov. 2, 1949	8.25	2,250	1959	Dec. 29, 1958	8.66	2,550
	Feb. 2, 1950	9.07	2,810		June 3, 1959	9.68	3,230
1951	Dec. 4, 1950	10.95	4,220	1960	Oct. 1, 1959	8.64	2,490
	Dec. 8, 1950	12.53	5,420		Oct. 24, 1959	8.55	2,490
	Feb. 2, 1951	8.69	2,550		Mar. 31, 1960	11.73	4,780
	Feb. 8, 1951	8.65	2,490		Apr. 5, 1960	11.65	4,700
	Apr. 13, 1951	7.82	2,010		May 9, 1960	11.38	4,540
	June 14, 1951	9.96	3,440		May 28, 1960	12.67	5,580
	July 25, 1951	8.15	2,250	1961	Apr. 13, 1961	9.52	3,090

6260. South River near Waynesboro, Va.
(Published as "at Waynesboro" prior to 1953)

Location.--Lat 38°03'27", long 78°54'30", on right bank 80 ft downstream from bridge on State Highway 664, 1.3 miles southwest of post office at Waynesboro, Augusta County, and 2.4 miles downstream from Back Creek.

Drainage area.--136 sq mi. At site used 1928-52, 144 sq mi.

Gage.--Recording. At site 1.8 miles downstream at datum 19.07 ft lower prior to Oct. 1, 1952. Datum of gage is 1,296.20 ft above mean sea level, datum of 1929, Culpeper supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements below 5,000 cfs and extended above by logarithmic plotting at former site. A change in the high-water rating was assumed to have occurred in 1948. Defined by current-meter measurements below 4,200 cfs and extended above on basis of contracted-opening measurement at 13,700 cfs at present site.

Bankfull stage.--5 ft.

Remarks.--Base for partial-duration series, 1,000 cfs.

Peak stages and discharges of South River near Waynesboro, Va.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Sept. 19, 1928	11.02	6,140	1947	Mar. 14, 1947	6.19	1,780
1929	Apr. 16, 1929	7.00	2,250	1948	Nov. 3, 1947	6.03	1,680
	May 2, 1929	7.52	2,530		Feb. 14, 1948	6.55	2,060
1930	Oct. 2, 1929	5.88	1,650		Apr. 1, 1948	6.71	2,140
	Oct. 22, 1929	7.90	2,770		Aug. 4, 1948	5.98	1,650
	Mar. 7, 1930	6.64	2,030	1949	Nov. 20, 1948	4.96	1,020
1931	Aug. 22, 1931	5.32	1,350		Dec. 4, 1948	9.40	6,220
1932	Mar. 28, 1932	4.26	870		Dec. 30, 1948	5.08	1,120
1933	Oct. 1, 1932	10.98	6,140		May 2, 1949	5.74	1,490
	Nov. 9, 1932	6.41	1,920		June 18, 1949	10.42	8,580
	Jan. 26, 1933	4.74	1,090		Aug. 29, 1949	5.91	1,590
	Apr. 17, 1933	8.98	4,000	1950	Sept. 10, 1950	6.77	2,510
	Apr. 20, 1933	6.53	1,980	1951	Dec. 4, 1950	8.60	4,340
1934	June 18, 1934	5.29	1,350		Dec. 7, 1950	8.38	4,150
	Sept. 16, 1934	7.39	2,470		Feb. 8, 1951	4.90	1,010
1935	Dec. 1, 1934	10.92	6,020		Mar. 30, 1951	5.18	1,180
	Jan. 23, 1935	5.73	1,515		June 13, 1951	4.98	1,080
	Apr. 2, 1935	4.74	1,030	1952	Dec. 21, 1951	5.03	1,080
	Sept. 6, 1935	7.35	2,480		Dec. 3, 1952	6.54	2,310
1936	Jan. 3, 1936	6.33	1,840		Mar. 11, 1952	9.01	5,420
	Jan. 19, 1936	5.66	1,520		Apr. 28, 1952	7.28	3,040
	Feb. 15, 1936	5.38	1,370		Sept. 1, 1952	5.07	1,100
	Feb. 18, 1936	5.21	1,270	1953	Dec. 11, 1952	6.17	1,380
	Mar. 12, 1936	5.11	1,220		Jan. 24, 1953	5.99	1,270
	Mar. 17, 1936	13.90	10,500		Feb. 21, 1953	5.88	1,210
1937	Oct. 17, 1936	9.00	3,520		Mar. 25, 1953	7.20	2,410
	Jan. 20, 1937	6.52	1,960	1954	Feb. 21, 1954	5.49	1,020
	Feb. 22, 1937	8.48	3,170		Mar. 1, 1954	6.56	1,680
	Apr. 26, 1937	10.88	6,020	1955	Oct. 15, 1954	6.86	1,960
1938	Oct. 19, 1937	6.18	1,800		Nov. 21, 1954	5.63	1,100
	Oct. 29, 1937	5.38	1,370		Dec. 30, 1954	5.96	1,290
	Nov. 13, 1937	5.78	1,570		Mar. 7, 1955	5.51	1,040
	July 23, 1938	5.07	1,200		Aug. 13, 1955	5.85	1,220
1939	Aug. 19, 1939	4.40	945		Aug. 18, 1955	13.95	13,500
1940	Aug. 16, 1940	13.90	10,500	1956	July 20, 1956	5.72	1,130
1941	Dec. 29, 1940	4.63	1,010		Sept. 27, 1956	5.73	1,160
1942	May 16, 1942	10.77	5,920	1957	Oct. 31, 1956	7.46	2,550
	May 22, 1942	8.91	3,920		Feb. 26, 1957	6.98	2,090
1943	Oct. 15, 1942	14.8	12,000	1958	Mar. 31, 1958	5.85	1,220
	Dec. 30, 1942	5.94	1,600		Apr. 23, 1958	7.42	2,450
	Apr. 19, 1943	6.57	2,050		May 17, 1958	5.49	1,030
	May 26, 1943	4.99	1,050	1959	Dec. 29, 1958	6.06	1,340
1944	May 7, 1944	-	al,300		Sept. 30, 1959	7.18	2,270
	Sept. 19, 1944	11.06	6,290	1960	Oct. 24, 1959	7.92	3,090
1945	Oct. 20, 1944	8.18	3,310		Mar. 30, 1960	7.75	2,980
	Sept. 18, 1945	13.6	9,970		Apr. 5, 1960	6.37	1,560
1946	May 5, 1946	4.34	715		May 8, 1960	7.10	2,250
					May 28, 1960	6.03	1,300
				1961	Feb. 25, 1961	5.84	1,140
					Apr. 13, 1961	6.17	1,380

a Daily mean discharge.

6275. South River at Harriston, Va.

Location.--Lat 38°13'07", long 78°50'13", on left bank 100 ft downstream from highway bridge in Harriston, Augusta County, 0.6 mile downstream from Paine Run, and 7.2 miles upstream from confluence with North River.

Drainage area.--222 sq mi.

Gage.--Nonrecording at bridge 100 ft upstream prior to Sept. 1, 1938; recording thereafter. Datum of gage is 1,129.87 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 7,300 cfs and extended above by logarithmic plotting.

Bankfull stage.--8 ft.

Remarks.--Peaks are from graph based on gage readings prior to Sept. 1, 1938, unless otherwise noted. Base for partial-duration series, 1,200 cfs. Only annual peaks are shown prior to 1939.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1870	1870	a18.8	-	1943	May 26, 1943	6.65	1,920
1877	1877	a18.8	-	1944	May 7, 1944	8.38	3,830
1924	May 1924	16.6	21,000		Sept. 19, 1944	11.33	8,340
1926	June 18, 1926	7.5	2,770	1945	Oct. 21, 1944	10.2	6,420
1927	Nov. 16, 1926	10.0	6,100		July 27, 1945	6.69	1,920
1928	Sept. 20, 1928	11.9	10,100		Sept. 18, 1945	12.80	11,300
1929	May 3, 1929	10.0	6,100	1946	May 5, 1946	5.26	998
1930	Oct. 22, 1929	10.0	6,100	1947	Mar. 14, 1947	7.53	2,660
1931	Aug. 22, 1931	7.3	2,550	1948	Nov. 4, 1947	7.52	2,770
1932	Mar. 28, 1932	5.9	1,430		Feb. 14, 1948	8.52	3,960
1933	Oct. 17, 1932	11.5	8,700		Apr. 1, 1948	7.80	3,110
1934	Sept. 16, 1934	8.5	3,960		Aug. 4, 1948	7.25	2,500
1935	Dec. 1, 1934	11.3	8,340	1949	Oct. 6, 1948	5.75	1,240
1936	Mar. 18, 1936	13.07	12,600		Nov. 29, 1948	6.01	1,400
1937	Apr. 26, 1937	13.0	11,700		Dec. 4, 1948	10.46	6,930
1938	Nov. 13, 1937	8.2	3,590		Dec. 31, 1948	6.25	1,580
1939	Aug. 19, 1939	5.64	1,260		Jan. 6, 1949	5.70	1,240
1940	Aug. 16, 1940	12.91	12,100		May 3, 1949	6.88	2,140
1941	Dec. 29, 1940	5.80	1,380		June 18, 1949	11.06	7,980
	Apr. 5, 1941	6.00	1,540	1950	Aug. 29, 1949	7.38	2,660
1942	Mar. 9, 1942	5.83	1,280		Sept. 10, 1950	8.52	3,960
	May 16, 1942	10.21	6,420		Sept. 13, 1950	7.13	2,390
	May 22, 1942	8.98	4,610	1951	Dec. 4, 1950	10.64	7,100
1943	Oct. 15, 1942	17.2	23,100		Dec. 8, 1950	10.14	6,260
	Dec. 30, 1942	7.38	2,660		Feb. 7, 1951	6.16	1,560
	Apr. 20, 1943	8.31	3,710		Mar. 31, 1951	5.90	1,400
					June 13, 1951	6.18	1,590

a About.

6285. South Fork Shenandoah River near Lynnwood, Va.

Location.--Lat 38°19'20", long 78°45'30", on left bank 1.2 miles northeast of Lynnwood, Rockingham County, and 3.3 miles downstream from confluence of North and South Rivers.

Drainage area.--1,076 sq mi.

Gage.--Recording. Datum of gage is 1,013.17 ft above mean sea level, datum of 1929, Culpeper supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements below 20,000 cfs and extended above by logarithmic plotting on basis of computations of flow-over-dam at 53,600 and 80,000 cfs.

Bankfull stage.--10 ft.

Historical data.--Maximum stage known since at least 1870, that of Oct. 15, 1942.

Remarks.--Base for partial-duration series, 7,000 cfs.

Peak stages and discharges of South Fork Shenandoah River near Lynnwood, Va.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Aug. 23, 1931	7.80	5,220	1946	May 5, 1946	8.00	5,530
1932	Mar. 28, 1932	10.62	8,990	1947	Mar. 15, 1947	11.44	10,600
1933	Oct. 18, 1932	14.65	17,100	1948	Feb. 14, 1948	15.2	18,500
	Nov. 10, 1932	10.28	8,570		Apr. 1, 1948	10.0	8,260
	Jan. 26, 1933	9.77	7,870	1949	Oct. 6, 1948	10.98	9,900
	Apr. 17, 1933	14.73	17,300		Nov. 29, 1948	9.75	7,940
	Apr. 20, 1933	10.83	9,270		Dec. 4, 1948	16.40	21,500
	July 11, 1933	10.62	8,990		Dec. 30, 1948	9.67	7,780
1934	Sept. 17, 1934	10.18	8,430		Jan. 6, 1949	9.26	7,220
1935	Dec. 1, 1934	21.62	45,600		Apr. 14, 1949	13.59	15,000
	Jan. 23, 1935	14.65	18,400		June 18, 1949	23.60	53,600
	Aug. 11, 1935	10.70	9,740		July 20, 1949	9.26	7,220
	Sept. 6, 1935	16.94	25,000		Aug. 15, 1949	10.74	9,580
					Aug. 29, 1949	11.90	11,500
1936	Jan. 4, 1936	12.48	13,300	1950	Feb. 2, 1950	9.17	7,080
	Jan. 9, 1936	9.86	8,350		Sept. 13, 1950	12.25	12,100
	Jan. 19, 1936	10.44	9,200	1951	Dec. 4, 1950	16.20	20,900
	Feb. 16, 1936	10.87	10,100		Dec. 8, 1950	16.88	22,900
	Feb. 25, 1936	9.60	7,860		June 13, 1951	11.88	11,500
	Mar. 18, 1936	26.57	77,000	1952	Feb. 4, 1952	12.43	11,600
	Mar. 21, 1936	11.88	12,100		Mar. 11, 1952	15.36	18,100
1937	Oct. 17, 1936	12.05	12,300		Apr. 28, 1952	12.98	12,600
	Jan. 20, 1937	14.78	18,800	1953	Feb. 21, 1953	11.64	10,100
	Feb. 22, 1937	14.50	18,100		Mar. 25, 1953	15.17	17,500
	Apr. 26, 1937	20.48	39,800	1954	Mar. 1, 1954	14.12	15,000
	Sept. 5, 1937	9.78	8,180	1955	Oct. 16, 1954	13.64	14,100
1938	Oct. 20, 1937	14.72	18,600		Nov. 20, 1954	10.68	8,690
	Oct. 28, 1937	13.00	14,400		Dec. 30, 1954	11.15	9,400
	July 23, 1938	9.20	7,230		Feb. 7, 1955	9.49	7,030
	Aug. 8, 1938	10.49	9,380		Mar. 7, 1955	11.75	10,400
1939	Jan. 31, 1939	10.23	8,860		Mar. 22, 1955	10.07	7,840
	Feb. 4, 1939	13.20	14,900		Aug. 18, 1955	22.94	46,800
	July 30, 1939	11.24	10,700	1956	Mar. 15, 1956	6.38	3,560
1940	May 31, 1940	10.40	9,240	1957	Apr. 6, 1957	13.31	13,400
	June 14, 1940	11.82	11,700	1958	Mar. 31, 1958	10.18	8,500
	Aug. 17, 1940	19.86	33,100		Apr. 23, 1958	12.05	11,400
1941	Apr. 5, 1941	9.30	7,520	1959	June 3, 1959	13.13	13,500
1942	May 16, 1942	16.97	23,200	1960	Oct. 1, 1959	11.81	11,100
	May 22, 1942	20.37	36,300		Oct. 24, 1959	12.41	12,200
1943	Oct. 15, 1942	27.2	80,000		Mar. 30, 1960	14.21	16,000
	Dec. 30, 1942	12.80	13,300		Apr. 5, 1960	12.80	12,900
	Mar. 13, 1943	9.37	7,360		May 8, 1960	14.55	17,000
	June 16, 1943	9.39	7,360		May 28, 1960	14.37	16,500
1944	May 7, 1944	11.58	11,000	1961	Feb. 19, 1961	9.93	8,050
	Sept. 19, 1944	13.98	15,800		Apr. 13, 1961	11.69	10,900
1945	Oct. 21, 1944	13.1	13,900				
	Sept. 18, 1945	21.7	42,800				

6295. South Fork Shenandoah River near Luray, Va.

Location.--Lat 38°38'46", long 78°32'06", on right bank at bridge on U.S. Highway 211, 1.2 miles downstream from Big Run, 2.2 miles upstream from Mill Creek, and 4.1 miles west of Luray, Page County.

Drainage area.--1,377 sq mi.

Gage.--Nonrecording prior to Sept. 30, 1930; recording thereafter. Datum of gage is 721.76 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurement below 80,000 cfs and extended above by logarithmic plotting.

Bankfull stage.--10 ft.

Remarks.--Base for partial-duration series, 8,000 cfs. Only annual peaks are shown prior to 1939.

Peak stages and discharges of South Fork Shenandoah River near Luray, Va.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1897	October 1896	25.4	-	1944	May 7, 1944	10.38	12,600
1924	May 1924	22.5	72,800		Sept. 19, 1944	11.77	16,100
1926	Jan. 19, 1926	7.8	7,420	1945	Oct. 21, 1944	11.2	14,500
1927	Nov. 17, 1926	11.11	15,100		Sept. 19, 1945	18.36	44,100
1928	Sept. 20, 1928	11.10	15,100	1946	May 5, 1946	7.36	6,320
1929	Apr. 17, 1929	13.20	20,300	1947	Mar. 15, 1947	9.75	11,200
1930	Oct. 23, 1929	12.0	17,300	1948	Feb. 15, 1948	12.66	18,600
1936	Mar. 18, 1936	23.6	81,600		Apr. 1, 1948	8.86	9,200
1939	Jan. 31, 1939	9.1	10,000	1949	Oct. 6, 1948	9.38	10,300
	Feb. 4, 1939	11.90	17,000		Nov. 30, 1948	8.53	8,400
	July 30, 1939	9.36	10,700		Dec. 4, 1948	14.16	23,100
1940	June 1, 1940	9.00	9,800		Dec. 31, 1948	8.72	8,800
	June 15, 1940	10.00	12,100		Jan. 6, 1949	8.46	8,400
	Aug. 17, 1940	17.87	41,100		Apr. 14, 1949	11.13	14,300
1941	Apr. 6, 1941	8.34	8,260		June 18, 1949	20.46	58,100
1942	May 17, 1942	14.46	24,200		Aug. 16, 1949	8.93	9,200
	May 23, 1942	17.82	40,500		Aug. 29, 1949	10.06	11,800
1943	Oct. 16, 1942	25.7	100,000	1950	Feb. 2, 1950	8.38	8,200
	Dec. 31, 1942	11.30	14,800		Sept. 13, 1950	9.96	11,200
	Mar. 14, 1943	8.49	8,400	1951	Dec. 5, 1950	14.95	26,100
	Apr. 20, 1943	8.93	9,200		Dec. 8, 1950	15.18	26,900
					June 14, 1951	10.04	11,600

6310. South Fork Shenandoah River at Front Royal, Va.
(Published as "near Front Royal" prior to 1931)

Location.--Lat 38°54'50", long 78°12'40", on left bank at downstream side of highway bridge, 1.0 mile west of Front Royal, Warren County, and 3.5 miles upstream from confluence with North Fork.

Drainage area.--1,638 sq mi.

Gage.--Nonrecording at site 1 mile upstream at different datum June 1899 to July 1906; recording at present site and datum since September 22, 1930. Datum of gage is 469.38 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 5,700 cfs at former site. Defined by current-meter measurements below 92,000 cfs and extended above on basis of slope-area measurement at 130,000 cfs at present site.

Bankfull stage.--7 ft.

Historical data.--Flood of Mar. 18, 1936, reported by local residents to have been highest since at least 1870.

Remarks.--Base for partial-duration series, 8,500 cfs. Only annual peaks are shown prior to 1931.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1900	Jan. 21, 1900	-	a12,800	1933	Jan. 27, 1933	8.55	13,200
1901	Apr. 21, 1901	-	a46,200		Apr. 18, 1933	11.65	21,600
1902	Mar. 1, 1902	23.5	76,800		Aug. 24, 1933	7.03	9,250
1903	Mar. 1, 1903	13.7	22,800	1934	Sept. 18, 1934	7.18	9,620
1904	July 11, 1904	10.2	11,400	1935	Dec. 2, 1934	17.99	47,400
1905	June 25, 1905	9.8	10,400		Mar. 14, 1935	6.66	8,520
1931	Aug. 24, 1931	5.12	5,550		Apr. 9, 1935	6.84	8,750
1932	Mar. 29, 1932	7.85	11,100		Aug. 12, 1935	6.84	8,750
	May 13, 1932	8.23	12,100		Sept. 6, 1935	12.94	27,500
1933	Oct. 18, 1932	10.38	18,100	1936	Jan. 4, 1936	9.27	15,100
	Nov. 10, 1932	8.34	12,400		Jan. 10, 1936	7.14	9,390
					Jan. 20, 1936	7.73	10,800

a Maximum mean daily discharge.

Peak stages and discharges of South Fork Shenandoah River at Front Royal, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Feb. 16, 1936	12.9	27,500	1949	Apr. 15, 1949	9.43	15,700
	Feb. 16, 1936	b13.27	-		June 19, 1949	19.20	52,900
	Feb. 26, 1936	8.40	12,600		Aug. 30, 1949	7.95	11,700
	Mar. 13, 1936	7.26	9,850				
	Mar. 18, 1936	26.01	98,000	1950	Feb. 2, 1950	6.75	8,990
1937	Oct. 18, 1936	8.16	12,200		June 1, 1950	6.63	8,540
	Jan. 21, 1937	11.48	23,200		Sept. 14, 1950	7.89	11,400
	Feb. 23, 1937	11.33	22,400	1951	Dec. 5, 1950	13.64	30,000
	Apr. 27, 1937	18.94	51,500		Dec. 9, 1950	13.29	29,000
1938	Oct. 21, 1937	11.65	23,600		Feb. 8, 1951	-	68,500
	Oct. 29, 1937	10.46	19,500		Apr. 13, 1951	6.59	8,530
1939	Jan. 31, 1939	7.42	10,100		June 14, 1951	8.54	13,100
	Feb. 5, 1939	9.90	17,400	1952	Feb. 5, 1952	9.94	17,300
	July 31, 1939	7.35	10,100		Mar. 12, 1952	11.20	21,600
1940	June 1, 1940	7.05	9,220		Apr. 29, 1952	11.07	21,200
	June 15, 1940	7.62	10,700	1953	Nov. 22, 1952	8.18	12,200
	Aug. 17, 1940	15.86	40,400		Feb. 22, 1953	7.53	10,400
1941	Apr. 6, 1941	6.96	9,220		Mar. 26, 1953	12.44	25,800
1942	May 17, 1942	11.94	24,000	1954	Mar. 2, 1954	10.74	19,900
	May 23, 1942	16.20	41,400	1955	Oct. 16, 1954	10.93	20,700
	Aug. 17, 1942	8.06	12,000		Nov. 21, 1954	7.02	9,270
1943	Oct. 16, 1942	34.8	130,000		Dec. 31, 1954	7.41	10,200
	Dec. 31, 1942	9.66	16,600		Mar. 7, 1955	8.83	14,000
	Mar. 14, 1943	7.00	9,220		Mar. 23, 1955	6.74	8,630
	Apr. 21, 1943	7.90	11,400		Aug. 13, 1955	11.04	21,000
1944	May 8, 1944	8.57	13,400		Aug. 19, 1955	22.54	68,200
	Sept. 20, 1944	10.00	17,600	1956	Mar. 16, 1956	4.69	4,950
1945	Oct. 22, 1944	9.53	16,000	1957	Apr. 6, 1957	10.16	18,200
	Sept. 19, 1945	17.8	49,200	1958	Apr. 1, 1958	7.42	10,200
1946	May 5, 1946	5.94	6,930		Apr. 24, 1958	8.87	14,200
1947	Mar. 15, 1947	8.12	12,000	1959	June 3, 1959	9.50	16,000
1948	Feb. 15, 1948	10.70	19,900	1960	Oct. 1, 1959	9.94	17,300
	Apr. 2, 1948	7.37	10,200		Oct. 25, 1959	8.44	12,800
1949	Oct. 6, 1948	8.42	12,800		Mar. 31, 1960	11.22	21,600
	Nov. 30, 1948	7.24	9,690		Apr. 6, 1960	11.02	20,900
	Dec. 5, 1948	12.31	25,400		May 9, 1960	11.75	23,700
	Dec. 31, 1948	7.42	10,200		May 29, 1960	10.08	17,900
	Jan. 7, 1949	7.10	9,450	1961	Feb. 20, 1961	7.66	11,000
					Feb. 27, 1961	6.87	9,300
					Apr. 14, 1961	9.12	14,800

b Backwater from ice.

c About.

6315. Happy Creek at Front Royal, Va.

Location--Lat 38°54'20", long 78°11'10", on left bank 30 ft upstream from highway bridge, 1.0 mile south of Front Royal, Warren County; 2.3 miles upstream from Leach Run, and 2.9 miles upstream from mouth.

Drainage area--13.8 sq mi.

Gage--Nonrecording at site 0.3 mile downstream at different datum prior to Oct. 1, 1949, recording and concrete control thereafter. Datum of gage is 610.12 ft above mean sea level, datum of 1929, Culpeper supplementary adjustment of 1943.

Stage-discharge relation--For 1949 defined by current-meter measurements below 120 cfs and extended above by logarithmic plotting at former site. For 1950-61, defined by current-meter measurements below 560 cfs and extended above on basis of slope-area measurement at 1,490 cfs, at present site.

Bankfull stage--7 ft.

Remarks--Only annual peaks are shown prior to 1950. Base for partial-duration series, 120 cfs.

Peak stages and discharges of Happy Creek at Front Royal, Va.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Oct. 5, 1948	6.40	2,490	1955	Aug. 18, 1955	6.48	1,750
1950	Mar. 21, 1950	2.82	129	1955	Aug. 22, 1955	3.04	189
	May 31, 1950	3.40	280		Aug. 31, 1955	2.95	166
	June 10, 1950	3.59	356	1956	Apr. 7, 1956	3.06	194
	July 10, 1950	3.36	277		July 20, 1956	3.26	253
1951	Nov. 25, 1950	6.81	1,860		July 23, 1956	2.92	159
	Dec. 4, 1950	7.00	1,920	1957	Oct. 31, 1956	3.05	192
	Dec. 7, 1950	5.75	1,430		Apr. 5, 1957	2.76	124
	Feb. 7, 1951	3.12	211		June 5, 1957	3.25	250
	Mar. 14, 1951	3.33	276		June 6, 1957	4.00	550
	Apr. 12, 1951	3.86	487	1958	Oct. 6, 1957	3.61	384
1952	Dec. 5, 1951	2.93	161		Dec. 26, 1957	3.07	197
	Feb. 3, 1952	3.75	440		Jan. 14, 1958	4.04	568
	Mar. 19, 1952	2.83	139		Feb. 27, 1958	3.28	259
	Apr. 27, 1952	5.10	1,080		Mar. 27, 1958	2.97	171
	Sept. 1, 1952	2.98	173		Apr. 23, 1958	2.84	141
1953	Nov. 21, 1952	5.14	1,100		May 20, 1958	3.72	428
	Dec. 11, 1952	2.95	166		July 12, 1958	2.76	124
	Jan. 10, 1953	2.85	143		July 14, 1958	3.97	536
	Jan. 20, 1953	2.74	120	1959	June 2, 1959	3.02	183
	Mar. 24, 1953	3.79	456		June 3, 1959	4.32	a685
1954	Mar. 1, 1954	4.84	955		Sept. 8, 1959	3.27	a256
					Sept. 30, 1959	2.92	159
1955	Oct. 15, 1954	5.92	1,490	1960	June 13, 1960	5.62	1,330
	Mar. 6, 1955	3.31	268				
	June 8, 1955	2.82	136	1961	Apr. 13, 1961	4.16	618
	Aug. 13, 1955	4.45	755				

a Caused by draining reservoir above gage.

6320. North Fork Shenandoah River at Cootes Store, Va.

Location--Lat 38°38'13", long 78°51'11", on right bank at Cootes Store, Rockingham County, 300 ft upstream from bridge on State Highway 259, and 3.7 miles upstream from Linville Creek.

Drainage area--215 sq mi.

Gage--Nonrecording prior to Nov. 15, 1937; recording thereafter. Datum of gage is 1,051.8 ft above mean sea level (Corps of Engineers bench mark).

Stage-discharge relation--Defined by current-meter measurements below 9,000 cfs and extended above on basis of contracted-opening measurement at 50,000 cfs. A change in relation below gage height 15 ft occurred in October 1942.

Bankfull stage--6 ft.

Historical data--Floods of 1877, 1889, and 1924 are greatest known prior to 1926 according to information from local residents. The flood of October 1942 was the highest in 100 years.

Remarks--Base for partial-duration series, 3,500 cfs. Only annual peaks are shown prior to 1939.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1877	November 1877	20.9	-	1931	Aug. 23, 1931	7.0	1,600
1889	June 1889	18.8	-	1932	Feb. 4, 1932	10.20	4,880
				1933	Apr. 17, 1933	11.7	7,120
				1934	Sept. 16, 1934	8.5	2,860
1924	May 1924	16.7	17,800	1935	Dec. 1, 1934	19.0	24,600
1926	Aug. 25, 1926	9.6	4,230	1936	Mar. 17, 1936	23.25	40,500
1927	Nov. 16, 1926	14.0	11,400	1937	Apr. 25, 1937	17.0	18,600
1928	Apr. 30, 1928	11.0	6,000	1938	Oct. 28, 1937	10.0	4,600
1929	Apr. 16, 1929	15.4	14,600	1939	Jan. 30, 1939	10.90	5,800
1930	Oct. 22, 1929	12.0	7,600				

Peak stages and discharges of North Fork Shenandoah River at Cootes Store, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Feb. 3, 1939	12.84	9,040	1951	Dec. 4, 1950	13.89	11,800
	July 21, 1939	10.18	4,920		Dec. 7, 1950	13.07	10,400
	July 29, 1939	12.60	7,920		Feb. 1, 1951	8.24	3,500
1940	Apr. 20, 1940	9.70	4,310	1952	Feb. 4, 1952	8.62	3,940
	May 31, 1940	11.7	6,800		Mar. 11, 1952	13.01	10,200
1941	Apr. 5, 1941	10.26	5,040		Apr. 28, 1952	11.85	8,280
					May 11, 1952	10.56	6,440
1942	May 16, 1942	13.10	9,600	1953	Nov. 21, 1952	11.14	7,160
	May 22, 1942	16.93	18,300		Mar. 24, 1953	11.93	8,440
1943	Oct. 15, 1942	25.3	50,000		May 5, 1953	8.24	3,500
	Dec. 30, 1942	10.08	5,780		May 15, 1953	9.62	5,140
	Apr. 19, 1943	9.10	4,540	1954	Mar. 1, 1954	11.88	8,440
	Apr. 21, 1943	8.40	3,760				
	May 19, 1943	8.77	4,200	1955	Oct. 15, 1954	15.00	13,900
1944	May 7, 1944	10.48	6,300		Nov. 21, 1954	9.26	4,730
	May 24, 1944	11.45	7,640		Aug. 18, 1955	16.60	17,500
1945	Oct. 21, 1944	9.6	5,140	1956	Aug. 6, 1956	7.86	3,170
	Sept. 18, 1945	15.9	15,800	1957	Apr. 5, 1957	10.59	6,440
	Sept. 27, 1945	14.0	12,000	1958	July 27, 1958	7.54	2,770
1946	May 4, 1946	9.73	5,260	1959	May 13, 1959	8.48	3,830
1947	Mar. 14, 1947	7.28	2,800		June 2, 1959	13.91	11,800
1948	Apr. 14, 1948	9.00	4,420		Sept. 30, 1959	8.64	3,940
	Aug. 11, 1948	9.35	4,900	1960	Oct. 24, 1959	8.78	4,180
1949	Oct. 5, 1948	9.60	5,140		Mar. 30, 1960	12.12	8,760
	Nov. 6, 1948	9.14	4,540		Apr. 5, 1960	9.51	5,020
	Dec. 4, 1948	8.15	3,500		May 8, 1960	14.25	12,400
	June 18, 1949	10.80	6,720		May 28, 1960	11.25	7,320
	June 28, 1949	14.84	13,500	1961	Feb. 19, 1961	9.37	4,900
	July 17, 1949	8.55	3,940		Apr. 13, 1961	9.30	4,780
	July 19, 1949	9.54	5,020				
1950	Sept. 13, 1950	14.36	12,700				

6323. Long Glade Run near Broadway, Va.

Location.--Lat 38°34'43", long 78°45'40", at culvert on State Highway 259, 1½ miles west of Route 11, and 3 miles southeast of Broadway, Rockingham County.

Drainage area.--8.15 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 1,080 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1 cfs and extended above on basis of contracted-opening measurements at 200 and 1,260 cfs. Relation affected by backwater from hay growing in field downstream.

Bankfull stage.--3 ft.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Sept. 13, 1950	3.80	210	1956	1956	-	(a)
1951	Dec. 7, 1950	2.6	55	1957	1957	-	(b)
1952	August 1952	2.98	55	1958	July 27, 1958	3.87	240
1953	May 15, 1953	3.35	100	1959	Sept. 30, 1959	3.98	1,100
1954	Mar. 1, 1954	2.45	18	1960	May 8, 1960	3.00	55
1955	Oct. 15, 1954	4.03	1,260	1961	July 22, 1961	3.00	150

a Peak stage did not reach bottom of gage; discharge less than 50 cfs.

b Peak stage did not reach bottom of gage; discharge less than 40 cfs.

6330. North Fork Shenandoah River at Mount Jackson, Va.

Location.--Lat 38°44'44", long 78°38'21", on downstream side near center of span of bridge on State Highway 698 at Mount Jackson, Shenandoah County, 0.3 mile downstream from Mill Creek.

Drainage area.--509 sq mi.

Gage.--Nonrecording, and since Nov. 22, 1950, crest-stage gage. Datum of gage is 838.55 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 18,000 cfs and extended above on basis of peak runoff for flood in October 1942 for stations at Cootes Stores and near Strasburg.

Bankfull stage.--9 ft.

Remarks.--Subsequent to June 30, 1957, records furnished by Virginia Department of Conservation and Economic Development, Division of Water Resources. Base for partial-duration series, 5,000 cfs. Only annual peaks are shown prior to 1951.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	October 1942	20.2	80,000	1954	Mar. 1, 1954	13.60	11,800
1944	May 7, 1944	11.35	8,100				
1945	Sept. 18, 1945	16.0	19,000	1955	Oct. 16, 1954	16.25	20,000
					Nov. 20, 1954	10.10	6,430
1946	May 4, 1946	10.02	6,800		Mar. 6, 1955	9.93	6,220
1947	Mar. 14, 1947	8.0	3,800		Aug. 13, 1955	10.60	7,080
1948	Feb. 14, 1948	11.30	8,050		Aug. 18, 1955	17.32	30,000
1949	June 28, 1949	12.6	10,000				
1950	Sept. 13, 1950	13.0	10,600	1956	Aug. 6, 1956	7.30	3,300
1951	Dec. 4, 1950	15.2	15,600	1957	Apr. 5, 1957	11.40	8,200
	Dec. 8, 1950	13.86	12,400				
	Feb. 2, 1951	9.60	5,800	1958	Aug. 13, 1958	9.23	5,340
	Mar. 30, 1951	9.67	5,950				
				1959	June 2, 1959	13.98	12,600
1952	Feb. 4, 1952	9.65	5,800				
	Mar. 11, 1952	13.95	12,500	1960	Oct. 1, 1959	14.95	15,000
	Apr. 28, 1952	13.48	11,600		Mar. 30, 1960	10.66	7,210
	May 12, 1952	11.70	9,670		Apr. 5, 1960	12.30	9,550
	July 8, 1952	10.09	6,570		May 8, 1960	14.60	13,800
					May 28, 1960	11.07	7,750
1953	Nov. 21, 1952	13.50	11,600				
	Dec. 11, 1952	9.77	5,840	1961	Feb. 19, 1961	9.28	5,460
	Mar. 24, 1953	13.31	11,200		Feb. 26, 1961	9.10	5,220
	May 15, 1953	11.90	9,200		Apr. 13, 1961	10.83	7,340

6335. Stony Creek at Columbia Furnace, Va.

Location.--Lat 38°51'55", long 78°37'45", on right bank 0.8 mile south of Columbia Furnace, Shenandoah County, 3.6 miles downstream from Little Stony Creek, 4.7 miles northwest of Edinburg, and 6.4 miles upstream from mouth.

Drainage area.--76 sq mi, approximately.

Gage.--Nonrecording, prior to Nov. 21, 1950; nonrecording and crest-stage gage Nov. 21, 1950, to September 30, 1955; crest-stage gage thereafter. Datum of gage is 895.29 ft above mean sea level, datum of 1929, Parkersburg-Uniontown supplementary adjustment of 1944.

Stage-discharge relation.--Defined by current-meter measurements below 1,200 cfs and extended above on basis of slope-area measurement at 4,290 cfs.

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 600 cfs. Only annual peaks are shown prior to 1951 and subsequent to 1955.

Peak stages and discharges of Stony Creek at Columbia Furnace, Va.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	October 1942	11.5	-	1953	Dec. 11, 1952	5.23	1,750
1947	Mar. 14, 1947	a3.30	670	1953	Jan. 10, 1953	3.76	890
1948	Apr. 14, 1948	5.3	1,920	1953	Jan. 24, 1953	3.75	890
1949	May 2, 1949	6.6	3,250	1953	Mar. 24, 1953	6.17	2,530
1950	May 28, 1950	4.40	1,160	1953	May 7, 1953	5.83	2,210
				1953	May 15, 1953	4.40	1,220
1951	Dec. 4, 1950	6.80	3,490	1954	Mar. 1, 1954	6.66	3,370
	Dec. 7, 1950	5.7	2,130				
	Feb. 7, 1951	4.4	1,220	1955	Oct. 15, 1954	7.43	4,290
	Mar. 30, 1951	5.45	1,890	1955	Nov. 21, 1954	4.35	1,200
	Apr. 12, 1951	3.55	790	1955	Mar. 6, 1955	4.41	1,240
	June 13, 1951	4.27	1,160	1955	Mar. 22, 1955	4.42	1,240
1952	Jan. 10, 1952	3.28	645	1955	June 8, 1955	6.29	2,900
	Feb. 4, 1952	4.54	1,300	1955	Aug. 18, 1955	7.97	4,990
	Mar. 11, 1952	5.97	2,590	1956	Mar. 14, 1956	3.65	850
	Mar. 19, 1952	3.31	645	1956	Apr. 7, 1956	3.15	690
	Apr. 28, 1952	5.75	2,390	1957	Apr. 5, 1957	4.80	1,510
	May 12, 1952	5.72	2,290	1958	July 27, 1958	4.88	1,590
	July 8, 1952	5.67	2,290	1959	Sept. 30, 1959	9.20	6,900
	Sept. 1, 1952	3.41	690	1960	May 8, 1960	7.04	3,700
1953	Nov. 20, 1952	6.13	2,450	1961	Apr. 13, 1961	5.03	1,670

a Maximum observed.

6340. North Fork Shenandoah River near Strasburg, Va.

Location.--Lat 38°58'36", long 78°20'11", on right bank at downstream side of bridge on State Highway 55, 1.5 miles southeast of Strasburg, Shenandoah County, 2.2 miles upstream from Cedar Creek, and 10 miles upstream from confluence with South Fork.

Drainage area.--772 sq mi.

Gage.--Nonrecording prior to Sept. 21, 1930; recording thereafter. Datum of gage is 494.03 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 46,000 cfs and extended above by logarithmic plotting.

Bankfull stage.--11 ft.

Remarks.--Base for partial-duration series, 6,000 cfs. Only annual peaks are shown prior to 1931.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Aug. 26, 1926	9.74	7,190	1937	Jan. 21, 1937	11.58	8,500
1927	Nov. 17, 1926	12.11	10,100	1937	Feb. 22, 1937	15.57	14,200
1928	May 1, 1928	15.5	14,200	1937	Apr. 26, 1937	20.93	24,900
1929	Apr. 17, 1929	16.3	15,600	1937	Aug. 27, 1937	9.53	6,270
1930	Nov. 19, 1929	9.9	7,170				
1931	Aug. 23, 1931	5.50	2,780	1938	Oct. 29, 1937	13.48	10,900
1932	Feb. 5, 1932	9.71	6,600	1939	Dec. 10, 1938	9.27	6,040
	Mar. 29, 1932	10.04	6,900	1939	Jan. 31, 1939	11.80	8,740
	May 13, 1932	12.72	9,600	1939	Feb. 4, 1939	15.65	14,200
1933	Nov. 10, 1932	9.28	6,200	1939	July 21, 1939	10.05	6,740
	Jan. 26, 1933	11.45	8,300	1939	July 30, 1939	11.45	8,260
	Apr. 17, 1933	12.60	9,500	1940	June 1, 1940	10.02	6,740
	Apr. 21, 1933	16.65	16,200	1941	Apr. 6, 1941	10.42	7,160
1934	Sept. 17, 1934	9.32	6,200	1942	May 17, 1942	10.70	7,490
1935	Dec. 2, 1934	18.99	20,500	1942	May 23, 1942	19.28	21,400
	Jan. 23, 1935	9.28	6,070	1942	Aug. 17, 1942	13.93	11,700
	Sept. 6, 1935	10.23	6,970	1943	Oct. 16, 1942	31.2	100,000
1936	Feb. 28, 1936	12.78	9,990	1943	Dec. 30, 1942	13.74	11,400
	Mar. 18, 1936	30.21	89,000	1943	Apr. 20, 1943	9.74	6,440

Peak stages and discharges of North Fork Shenandoah River near Strasburg, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	May 7, 1944	11.80	8,810	1953	Dec. 11, 1952	10.10	6,840
1945	Sept. 19, 1945	20.4	24,000		Mar. 25, 1953	13.40	11,000
	Sept. 28, 1945	11.0	7,820		May 15, 1953	11.52	8,420
1946	May 5, 1946	10.02	6,740	1954	Mar. 2, 1954	13.63	11,500
1947	Mar. 15, 1947	7.29	4,040	1955	Oct. 16, 1954	18.25	19,300
1948	Feb. 15, 1948	9.96	6,740		Mar. 7, 1955	9.85	6,840
	Aug. 4, 1948	9.28	6,040		June 8, 1955	9.44	6,380
1949	Oct. 6, 1948	12.50	9,720		Aug. 13, 1955	10.73	7,840
	June 19, 1949	9.59	6,340		Aug. 18, 1955	23.55	36,100
	June 29, 1949	11.98	9,070	1956	Mar. 15, 1956	6.84	3,720
	July 20, 1949	9.54	6,240	1957	Apr. 6, 1957	11.47	8,760
1950	Sept. 14, 1950	10.96	7,820	1958	July 28, 1958	7.44	4,320
1951	Dec. 5, 1950	16.91	16,700	1959	June 3, 1959	14.89	13,400
	Dec. 8, 1950	13.50	11,100	1960	Oct. 1, 1959	15.31	14,100
	Feb. 2, 1951	9.28	6,040		Mar. 31, 1960	10.72	7,800
	Mar. 31, 1951	10.06	6,840		Apr. 5, 1960	13.44	11,200
1952	Mar. 12, 1952	14.20	12,100		May 9, 1960	15.31	14,100
	Apr. 28, 1952	16.24	15,500		May 29, 1960	10.25	7,220
	May 12, 1952	11.74	8,680	1961	Feb. 20, 1961	9.98	7,300
1953	Nov. 22, 1952	14.20	12,100		Feb. 26, 1961	8.97	6,100
					Apr. 13, 1961	11.26	8,890

6345. Cedar Creek near Winchester, Va.

Location.--Lat 39°04'50", long 78°19'45", on left bank 0.2 mile upstream from Fawcett Run, 0.3 mile upstream from bridge on State Highway 628, 1.3 miles downstream from Froman Run, and 11.4 miles southwest of Winchester, Frederick County.

Drainage area.--101 sq mi.

Gage.--Recording. Datum of gage is 647.09 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 15,000 cfs and extended above by logarithmic plotting.

Remarks.--Subsequent to June 30, 1957, records furnished by Virginia Department of Conservation and Economic Development, Division of Water Resources. Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Mar. 17, 1936	a25	18,000	1946	June 2, 1946	8.73	2,230
1938	Oct. 20, 1937	6.67	1,620	1947	May 18, 1947	3.95	526
	Oct. 28, 1937	11.32	3,660	1948	Feb. 14, 1948	5.80	1,130
	May 24, 1938	7.88	2,080		Apr. 14, 1948	6.14	1,240
1939	Jan. 30, 1939	5.75	1,240	1949	Nov. 6, 1948	5.90	1,170
	Feb. 3, 1939	10.38	3,250		Dec. 30, 1948	7.51	1,750
1940	Apr. 17, 1940	7.70	2,040		June 18, 1949	5.94	1,170
	Apr. 20, 1940	6.90	1,700		June 28, 1949	6.94	1,530
	June 12, 1940	9.81	2,980		Aug. 18, 1949	6.98	1,560
1941	Apr. 5, 1941	8.80	2,530	1950	May 18, 1950	6.25	1,270
1942	May 22, 1942	10.45	2,950	1951	Nov. 25, 1950	7.04	1,560
1943	Oct. 15, 1942	27.0	22,000		Dec. 4, 1950	13.97	4,750
	Dec. 30, 1942	9.64	2,600		Dec. 7, 1950	7.39	1,720
1944	May 7, 1944	7.33	1,680		Feb. 1, 1951	5.66	1,150
1945	Sept. 15, 1945	9.04	2,310		Feb. 7, 1951	6.26	1,340
	Sept. 18, 1945	13.37	4,290		Mar. 14, 1951	7.68	1,830
	Sept. 18, 1945	12.76	3,980		Mar. 30, 1951	9.00	2,310
					Apr. 12, 1951	6.43	1,580
					May 11, 1951	15.11	5,470
					June 13, 1951	8.97	2,350

a About, from information by local residents.

Peak stages and discharges of Cedar Creek near Winchester, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Feb. 4, 1952	5.95	1,260	1956	Feb. 2, 1956	5.47	1,110
	Mar. 11, 1952	7.16	1,650		Mar. 14, 1956	6.04	1,260
	Apr. 28, 1952	10.88	3,170		Apr. 7, 1956	5.98	1,260
1953	Nov. 21, 1952	10.1	2,820	1957	Apr. 5, 1957	7.22	1,650
	Dec. 11, 1952	7.53	1,760		Mar. 27, 1958	5.32	1,040
	Jan. 10, 1953	5.84	1,200	1959	June 2, 1959	11.68	3,540
	Jan. 24, 1953	5.85	1,200		Feb. 19, 1960	5.25	1,010
	Mar. 24, 1953	7.50	1,760	1960	Mar. 28, 1960	6.30	1,370
	May 8, 1953	7.22	1,650		Apr. 5, 1960	6.97	1,600
	May 15, 1953	6.02	1,260		May 8, 1960	8.23	2,030
1954	Mar. 1, 1954	13.30	4,340		May 30, 1960	5.52	1,100
					June 15, 1960	6.27	1,370
1955	Oct. 15, 1954	11.17	3,290	1961	Feb. 19, 1961	7.17	1,670
	Mar. 22, 1955	6.71	1,480		Feb. 25, 1961	6.98	1,600
	May 25, 1955	6.01	1,260		Apr. 13, 1961	6.38	1,400
	June 8, 1955	14.63	5,150				
	June 12, 1955	8.25	2,050				
	Aug. 13, 1955	10.84	3,140				
	Aug. 18, 1955	20.49	11,100				

6355. Passage Creek at Buckton, Va.

Location.--Lat 38°57'29", long 78°16'01", on right bank 350 ft upstream from bridge on State Highway 55, 1.2 miles south of Buckton, Warren County, 1.4 miles upstream from mouth, and 4.2 miles west of Riverton.

Drainage area.--87 sq mi, approximately.

Gage.--Nonrecording at site 350 ft downstream at different datum prior to Apr. 4, 1932, to Oct. 7, 1937; recording thereafter. Datum of gage is 525.14 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 3,000 cfs and extended above on basis of gage-height relation curve at former site. Defined by current-meter measurements below 5,200 cfs and extended above by logarithmic plotting at present site.

Remarks.--Subsequent to June 30, 1957, records furnished by Virginia Department of Conservation and Economic Development, Division of Water Resources. Base for partial-duration series, 1,000 cfs. Only annual peaks are shown prior to 1938.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	Apr. 21, 1933	8.0	3,860	1944	Mar. 24, 1944	6.25	1,000
1934	Mar. 3, 1934	4.5	588		May 7, 1944	7.27	1,690
1935	Dec. 1, 1934	10.0	6,800	1945	Aug. 1, 1945	8.00	2,290
1936	Mar. 17, 1936	14.29	17,000		Sept. 18, 1945	9.80	3,900
	Apr. 26, 1937	9.0	5,060	1946	May 4, 1946	7.22	1,650
1938	Oct. 20, 1937	-	1,300		May 1, 1947	5.50	576
	Oct. 28, 1937	7.39	1,810	1948	Feb. 14, 1948	-	1,440
	Mar. 18, 1938	5.53	591		Feb. 14, 1948	a 7.88	-
1939	Dec. 10, 1938	7.94	2,210	1949	Oct. 6, 1948	6.68	1,290
	Jan. 30, 1939	6.94	1,480		Dec. 31, 1948	6.89	1,430
	Feb. 4, 1939	8.37	2,610		Apr. 14, 1949	6.52	1,150
	July 30, 1939	6.45	1,120		July 8, 1949	7.42	1,810
1940	Apr. 17, 1940	6.35	1,060	1950	May 29, 1950	6.68	1,290
	June 12, 1940	8.00	2,290		Dec. 4, 1950	9.60	3,700
1941	Nov. 15, 1940	6.50	1,160	1951	Feb. 2, 1951	6.68	1,290
	Apr. 5, 1941	6.85	1,400		Mar. 14, 1951	6.54	1,180
1942	May 22, 1942	7.76	2,130		Apr. 13, 1951	6.66	1,260
1943	Oct. 15, 1942	15.5	21,000	1952	Mar. 11, 1952	6.60	1,230
	Dec. 30, 1942	7.46	1,850		Apr. 28, 1952	9.12	3,230
	Mar. 17, 1943	6.94	1,440				
	Apr. 20, 1943	6.29	1,030				

a Backwater from ice.

Peak stages and discharges of Passage Creek at Buckton, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Nov. 21, 1952	7.35	1,770	1957	June 5, 1957	6.52	1,160
	Mar. 24, 1953	7.62	1,970				
1954	Mar. 1, 1954	8.80	2,960	1958	Apr. 23, 1958	8.37	2,610
1955	Oct. 16, 1954	9.64	3,740	1959	June 3, 1959	7.36	1,850
	Feb. 7, 1955	7.50	1,890				
	Mar. 7, 1955	8.06	2,340	1960	Mar. 29, 1960	6.28	1,040
	Aug. 13, 1955	8.5	2,690		Apr. 5, 1960	8.17	2,450
	Aug. 18, 1955	14.02	14,700		May 9, 1960	7.27	1,700
1956	Mar. 14, 1956	6.58	1,230		June 3, 1960	6.25	1,010
					June 15, 1960	6.28	1,040
1957	Apr. 5, 1957	6.40	1,090	1961	Feb. 19, 1961	7.36	1,810

6360. North Fork Shenandoah River near Riverton, Va.

Location.--Lat 36°57'30", long 78°13'25", 2 miles northwest of Riverton, Warren County, and 2 miles upstream from confluence with South Fork Shenandoah River.

Drainage area.--1,040 sq mi.

Gage.--Nonrecording. Altitude of gage is 470 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 3,000 cfs and extended above by logarithmic plotting on basis of records for other stations on the Shenandoah River. Change in relation occurred in February 1902.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1900	Mar. 20, 1900	8.8	7,000	1904	Apr. 29, 1904	7.4	2,880
1901	Apr. 21, 1901	18.2	34,000	1905	June 24, 1905	11.8	9,800
1903	June 10, 1903	14.3	19,300	1906 ^a	Dec. 22, 1905	10.4	7,000

^a Period October to July.

6362. Shenandoah River at Riverton, Va.

Location.--Lat 38°56'38", long 78°11'19", near center of span between first and second piers from right bank, on downstream side of Norfolk & Western Railway bridge just downstream from confluence of the North and South Forks at Riverton.

Drainage area.--2,694 sq mi.

Gage.--Nonrecording. Datum of gage is 455.6 ft above mean sea level, datum of 1929.

Bankfull stage.--20 ft.

Remarks.--Records furnished by U.S. Weather Bureau unless noted otherwise. Only annual peak stages are shown.

Peak stages

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1870	Sept. 30, 1870	47.0		1897	Oct. 1, 1896	33.3	
1878	Nov. 24, 1877	41.0		1902	Mar. 1, 1902	27.6	
1889	June 1, 1889	36.0		1903	June 10, 1903	10.0	
1893	May 5, 1893	15.8		1904	(b)	11.0	
1894	Oct. 14, 1893	16.7		1907	Oct. 20, 1906	16.0	
				1908	Jan. 15, 1908	18.0	

^a From records of Corps of Engineers.

^b Mar. 9, 10, 18, 1904.

Peak stages of Shenandoah River at Riverton, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1909	Apr. 15, 1909	9.9		1939	Feb. 4, 1939	13.9	
1910	June 17, 1910	24.8		1940	Aug. 17, 1940	15.6	
1911	Aug. 31, 1911	6.0		1941	Apr. 6, 1941	8.0	
1912	May 13, 1912	14.6		1942	May 23, 1942	20.9	
1913	Mar. 28, 1913	14.6		1943	Oct. 16, 1942	46.0	
1914	Nov. 10, 1913	10.6		1944	May 8, 1944	10.5	
1915	Jan. 8, 1915	13.6		1945	Sept. 19, 1945	22.0	
1916	Mar. 29, 1916	10.2		1946	May 5, 1946	7.6	
1917	Mar. 14, 1917	8.6		1947	Mar. 16, 1947	8.2	
				1948	Feb. 15, 1948	12.1	
1924	May 12, 1924	34.0		1949	June 19, 1949	20.4	
1925	Feb. 12, 1925	12.6		1950	Sept. 14, 1950	10.0	
1926	Sept. 24, 1926	7.2		1951	Dec. 5, 1950	18.1	
1927	Nov. 17, 1926	12.0		1952	Apr. 29, 1952	18.0	
1928	May 1, 1928	13.6		1953	Mar. 26, 1953	15.0	
1929	Apr. 17, 1929	16.9		1954	Mar. 2, 1954	14.5	
				1955	Aug. 19, 1955	29.0	
1931	Jan. 7, 1931	6.7					
1932	May 13, 1932	14.5		1956	Mar. 16, 1956	6.5	
1933	Apr. 21, 1933	16.8		1957	Apr. 5, 1957	12.2	
1934	Aug. 18, 1934	7.2		1958	Apr. 24, 1958	10.3	
1935	Dec. 2, 1934	23.7		1959	June 3, 1959	12.85	
				1960	May 9, 1960	17.9	
1936	Mar. 18, 1936	37.5					
1937	Apr. 27, 1937	27.0		1961	Feb. 20, 1961	14.61	
1938	Oct. 29, 1937	14.4					

6365. Shenandoah River at Millville, W. Va.

Location.--Lat 39°16'55", long 77°47'22", on left bank 0.4 mile downstream from Cattail Run, 1 mile upstream from Millville, Jefferson County, and 5 miles upstream from Harpers Ferry and mouth.

Drainage area.--3,040 sq mi.

Gage.--Nonrecording at site three-quarters of a mile downstream at datum 0.32 ft higher Apr. 15, 1895, to Mar. 31, 1909; recording at present site and datum since Aug. 23, 1928. Datum of gage is 293.00 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--12 ft.

Historical data.--Flood of 1870 reached practically the same stage as flood of Mar. 18, 1936.

Remarks.--Flow partly regulated by hydroelectric plants upstream. Base for partial-duration series, 15,000 cfs. Only annual peaks are shown prior to 1929.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1896	Jan. 25, 1896	6.6	16,900	1929	Mar. 7, 1929	9.85	20,400
1897	Oct. 1, 1896	19.72	105,000		Apr. 17, 1929	13.70	39,900
1898	Aug. 11, 1898	13.0	52,000		May 4, 1929	8.83	16,500
1900	Mar. 3, 1900	7.0	19,200	1930	Oct. 24, 1929	10.25	22,000
1901	Apr. 22, 1901	16.0	74,000	1931	Aug. 24, 1931	6.05	7,710
1903	Jan. 4, 1903	11.0	39,100	1932	Mar. 29, 1932	9.32	18,400
1904	July 11, 1904	6.0	14,200		May 13, 1932	12.72	34,400
1905	June 25, 1905	6.5	16,500				
1906	Aug. 28, 1906	6.1	14,700	1933	Oct. 19, 1932	9.89	20,800
1907	Oct. 20, 1906	13.0	52,000		Nov. 11, 1932	9.96	21,200
1908	Jan. 13, 1908	12.9	51,300		Jan. 27, 1933	10.90	25,200
					Apr. 18, 1933	12.53	33,300
					Apr. 21, 1933	13.67	39,900
1924	May 13, 1924	21.1	119,000		Aug. 24, 1933	9.08	17,600

Peak stages and discharges of Shenandoah River at Millville, W. Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)	
1934	Sept. 18, 1934	7.58	12,300	1949	Nov. 30, 1948	9.08	17,500	
1935	Dec. 2, 1934	17.40	64,800	Dec. 5, 1948	11.86	30,000		
	Jan. 24, 1935	11.26	27,200	Dec. 31, 1948	9.41	18,600		
	Apr. 10, 1935	9.00	17,200	Jan. 7, 1949	8.94	16,700		
	Sept. 7, 1935	12.29	32,300	Apr. 15, 1949	9.97	21,000		
				June 20, 1949	15.92	53,400		
1936	Jan. 5, 1936	10.17	22,200	1950	Feb. 3, 1950	8.76	16,300	
	Feb. 17, 1936	a13.94	19,000	Sept. 14, 1950	8.62	15,600		
	Feb. 28, 1936	11.74	29,200	1951	Nov. 26, 1950	9.00	17,100	
	Mar. 13, 1936	9.53	19,200		Dec. 5, 1950	14.72	45,700	
	Mar. 18, 1936	26.36	151,000		Dec. 9, 1950	13.42	38,200	
1937	Oct. 18, 1936	8.82	16,000	Apr. 14, 1951	8.48	15,100		
	Jan. 22, 1937	12.31	32,300	June 15, 1951	9.04	17,100		
	Feb. 23, 1937	13.25	37,200	1952	Feb. 5, 1952	10.43	22,900	
	Apr. 27, 1937	20.20	87,400		Mar. 13, 1952	11.94	30,200	
	Aug. 27, 1937	8.47	15,400		Apr. 29, 1952	14.24	42,900	
	1938	Oct. 21, 1937	11.76	29,700	May 13, 1952	9.20	17,900	
Oct. 29, 1937		12.72	34,400	1953	Nov. 22, 1952	11.45	27,800	
1939	Feb. 1, 1939	9.58	19,600		Dec. 12, 1952	8.54	15,400	
	Feb. 5, 1939	12.24	31,800		Mar. 27, 1953	13.42	38,300	
	July 31, 1939	9.01	17,200	1954	Mar. 3, 1954	12.12	31,200	
1940	June 2, 1940	8.48	15,400		1955	Oct. 17, 1954	13.41	38,300
	Aug. 18, 1940	13.7	40,100			Jan. 1, 1955	8.49	15,000
1941	Apr. 7, 1941	9.16	18,000	Mar. 7, 1955		10.66	24,000	
1942	May 18, 1942	11.47	28,000	Mar. 24, 1955		8.49	15,000	
	May 24, 1942	16.28	56,100	Aug. 14, 1955		12.35	32,400	
	Aug. 18, 1942	9.84	20,200	Aug. 19, 1955	21.45	99,000		
1943	Oct. 16, 1942	32.4	230,000	1956	Mar. 16, 1956	6.56	9,030	
	Dec. 31, 1942	11.58	28,500	1957	Apr. 7, 1957	11.00	25,500	
	Mar. 15, 1943	8.56	15,600		1958	Apr. 24, 1958	9.50	19,000
	Apr. 21, 1943	9.97	21,000			1959	June 4, 1959	11.86
1944	May 8, 1944	10.13	21,400	1960	Oct. 2, 1959	11.37	27,400	
	Sept. 20, 1944	8.90	16,600		Oct. 26, 1959	8.59	15,400	
1945	Oct. 22, 1944	10.00	21,000		Apr. 1, 1960	11.90	30,000	
	Sept. 20, 1945	17.10	61,800		Apr. 6, 1960	13.19	37,000	
1946	May 6, 1946	7.86	13,200		May 10, 1960	13.35	37,900	
1947	Mar. 16, 1947	8.79	16,400	May 29, 1960	10.69	24,100		
1948	Feb. 16, 1948	11.08	26,000	1961	Feb. 20, 1961	a10.73	24,300	
1949	Oct. 7, 1948	10.34	22,400		Feb. 27, 1961	8.95	16,900	
					Apr. 14, 1961	11.29	27,000	

a Backwater from ice.

6370. Little Catoctin Creek at Harmony, Md.

Location--Lat 39°28'55", long 77°32'17", on right bank at county highway bridge, 0.9 mile southwest of Harmony, Frederick County, and 2.8 miles above mouth.

Drainage area--8.83 sq mi.

Gage--Recording prior to Oct. 31, 1958, crest-stage gage thereafter. Altitude of gage is 540 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 220 cfs and extended on basis of slope-area measurements at 372, 1,260, 2,240 cfs, and contracted-opening measurement at 5,660 cfs.

Bankfull stage--6 ft.

Remarks--Base for partial-duration series, 200 cfs. Only annual peaks are shown subsequent to 1958.

Peak stages and discharges of Little Catoctin Creek at Harmony, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947a	July 21, 1947	4.40	588	1952	May 25, 1952	5.17	997
	Aug. 22, 1947	3.77	344		Aug. 20, 1952	8.49	5,400
					Sept. 1, 1952	5.66	1,300
1948	Feb. 14, 1948	3.29	215				
	Apr. 1, 1948	3.22	203	1953	Nov. 21, 1952	6.36	1,870
	May 7, 1948	3.36	228		June 1, 1953	3.84	368
	June 30, 1948	3.61	271				
1949	Nov. 6, 1948	4.81	784	1954	Mar. 1, 1954	2.86	135
	Dec. 30, 1948	4.03	435				
	Jan. 5, 1949	3.98	417	1955	Oct. 15, 1954	3.42	243
	Jan. 28, 1949	3.61	295		Mar. 4, 1955	3.31	216
	May 2, 1949	5.26	1,040		Aug. 12, 1955	4.18	494
	June 25, 1949	4.13	474		Aug. 18, 1955	4.68	722
	July 12, 1949	6.82	2,240	1956	July 20, 1956	4.18	494
	Sept. 13, 1949	3.87	378				
1950	Mar. 22, 1950	3.87	378	1957	Nov. 1, 1956	7.25	2,940
1951	Nov. 25, 1950	5.58	1,260	1958	Jan. 14, 1958	3.81	357
	Dec. 4, 1950	4.73	758		Jan. 25, 1958	3.88	381
	Dec. 7, 1950	4.32	544		Feb. 27, 1958	3.42	243
	Feb. 7, 1951	4.74	758		July 11, 1958	4.03	435
1952	Dec. 5, 1951	3.38	233	1959	Aug. 8, 1959	3.39	212
	Feb. 3, 1952	3.34	224	1960	June 18, 1960	4.5	590
	Mar. 19, 1952	3.38	233				
	Apr. 28, 1952	3.60	281	1961	Apr. 13, 1961	3.38	210

a Partial year.

6375. Catoctin Creek near Middletown, Md.

Location.--Lat 39°25'35", long 77°33'25", on right bank 300 ft downstream from bridge on State Highway 17, 1.3 miles south of Middletown, Frederick County, and 2½ miles downstream from Little Catoctin Creek.

Drainage area.--66.9 sq mi.

Gage.--Recording. Altitude of gage is 385 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,500 cfs and extended above on basis of slope-area measurements at 7,760 cfs.

Bankfull stage.--6 ft.

Remarks.--Base for partial duration series, 1,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Jan. 1, 1948	5.10	1,700	1953	June 1, 1953	4.17	1,240
	Feb. 14, 1948	a5.19	1,500		July 23, 1953	4.70	1,500
	Aug. 20, 1948	4.57	1,450				
1949	Dec. 30, 1948	6.27	2,350	1954	Aug. 30, 1954	4.26	1,280
	Jan. 5, 1949	4.97	1,650				
	Jan. 28, 1949	4.29	1,300	1955	Mar. 22, 1955	4.20	1,250
	July 12, 1949	10.30	5,910		July 9, 1955	4.23	1,260
	July 18, 1949	11.18	7,760		Aug. 13, 1955	5.50	1,900
					Aug. 18, 1955	6.20	2,290
1950	Mar. 23, 1950	4.07	1,200	1956	Feb. 6, 1956	4.23	1,260
	May 23, 1950	4.62	1,450		July 21, 1956	5.55	1,920
1951	Nov. 25, 1950	8.26	3,690	1957	Nov. 1, 1956	9.56	4,880
	Dec. 4, 1950	8.91	4,210				
	Dec. 7, 1950	6.30	2,350	1958	Dec. 26, 1957	4.33	1,320
	Feb. 7, 1951	6.46	2,470		Jan. 25, 1958	4.41	1,360
	June 13, 1951	4.20	1,250		Feb. 27, 1958	5.25	1,780
1952	Apr. 5, 1952	4.20	1,250	1959	Aug. 8, 1959	3.85	1,090
	Apr. 27, 1952	5.11	1,700				
	May 27, 1952	8.11	3,530	1960	June 18, 1960	5.78	2,040
	Aug. 20, 1952	4.09	1,200				
	Sept. 1, 1952	5.37	1,640	1961	Feb. 19, 1961	a7.02	-
					Apr. 10, 1961	4.20	1,250
1953	Nov. 21, 1952	9.77	5,130		Apr. 13, 1961	4.23	1,260

a Backwater from ice.

6385. Potomac River at Point of Rocks, Md.

Location.--Lat 39°16'25", long 77°32'35", on left bank at downstream side of bridge on U.S. Highway 15 at Point of Rocks, Frederick County, a third of a mile downstream from Catoctin Creek (Virginia), and 6 miles upstream from Monocacy River.

Drainage area.--9,651 sq mi.

Gage.--Nonrecording prior to Oct. 29, 1929; recording thereafter. At datum about 0.45 ft higher prior to Sept. 2, 1902. Datum of gage is 200.54 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 300,000 cfs and extended on basis of adjustment of figure of peak flow of Mar. 19, 1936, at station near Washington for inflow and storage, and slope-area measurement at 480,000 cfs.

Bankfull stage.--About 16 ft.

Remarks.--Annual peaks only are shown prior to 1930. Base for partial-duration series, 35,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1889	June 2, 1889	40.2	460,000	1933	Nov. 21, 1932	8.64	40,000
1895	Mar. 3, 1895	10.7	66,800		Jan. 27, 1933	12.76	70,600
1896	July 26, 1896	9.4	56,000		Mar. 15, 1933	10.06	50,400
1897	Oct. 1, 1896	27.2	204,000		Mar. 22, 1933	12.28	66,700
1898	Aug. 12, 1898	18.0	127,000		Apr. 14, 1933	8.52	39,300
1899	Mar. 6, 1899	18.1	128,000		Apr. 18, 1933	13.95	80,000
1900	Mar. 21, 1900	9.6	57,700		Apr. 21, 1933	19.30	123,000
1901	Apr. 22, 1901	22.0	161,000		May 11, 1933	9.23	44,100
1902	Mar. 2, 1902	29.0	219,000		May 18, 1933	7.98	36,000
1903	Mar. 1, 1903	16.6	110,000		Aug. 25, 1933	11.79	62,900
1904	June 1, 1904	8.6	44,500	1934	Jan. 9, 1934	8.06	36,700
1905	Mar. 11, 1905	11.9	71,400	1935	Dec. 2, 1934	19.78	128,000
1906	Mar. 29, 1906	13.1	81,300		Jan. 24, 1935	12.24	66,000
1907	Mar. 15, 1907	17.6	119,000		Feb. 12, 1935	8.14	36,700
1908	Jan. 13, 1908	21.6	152,000		Feb. 17, 1935	10.58	54,000
1909	Apr. 16, 1909	13.3	83,000		Mar. 15, 1935	8.24	37,300
1910	June 18, 1910	23.5	168,000		Apr. 12, 1935	11.24	58,400
1911	Sept. 1, 1911	16.1	106,000		Sept. 7, 1935	10.76	55,500
1912	Feb. 28, 1912	14.8	95,400	1936	Jan. 5, 1936	10.42	52,600
1913	Mar. 28, 1913	20.0	139,000		Jan. 11, 1936	10.48	53,300
1914	Mar. 19, 1914	12.2	73,900		Feb. 17, 1936	15.9	38,000
1915	June 4, 1915	20.0	139,000		Feb. 28, 1936	18.13	113,000
1916	Mar. 29, 1916	18.3	124,000		Mar. 6, 1936	8.38	38,600
1917	Mar. 13, 1917	18.1	123,000		Mar. 13, 1936	15.42	91,200
1918	Apr. 16, 1918	18.6	127,000		Mar. 19, 1936	41.03	480,000
1919	May 11, 1919	13.0	80,500		Apr. 8, 1936	11.06	57,700
1920	Mar. 6, 1920	16.4	109,000	1937	Jan. 12, 1937	8.41	38,600
1921	May 6, 1921	14.0	88,800		Jan. 23, 1937	14.46	83,900
1922	Mar. 17, 1922	12.8	78,800		Feb. 10, 1937	8.59	40,000
1923	Apr. 16, 1923	8.8	40,700		Feb. 23, 1937	14.87	87,100
1924	May 13, 1924	32.2	277,000		Apr. 27, 1937	33.86	310,000
1925	Feb. 13, 1925	15.0	89,000	1938	Oct. 21, 1937	10.60	54,000
1926	Feb. 27, 1926	11.5	60,500		Oct. 30, 1937	24.93	175,000
1927	Nov. 17, 1926	15.1	89,900	1939	Dec. 11, 1938	9.15	44,100
1928	May 2, 1928	21.3	145,000		Feb. 1, 1939	12.40	67,500
1929	Apr. 18, 1929	24.94	180,000		Feb. 5, 1939	19.39	124,000
1930	Oct. 23, 1929	17.4	110,000		Feb. 13, 1939	8.63	40,000
	Nov. 20, 1929	11.6	61,300		Mar. 2, 1939	11.22	58,400
1931	May 24, 1931	8.16	36,800		Apr. 18, 1939	13.01	72,100
1932	Feb. 6, 1932	13.28	74,400	1940	Mar. 5, 1940	7.86	35,400
	Mar. 30, 1932	11.30	59,200		Apr. 10, 1940	8.57	40,000
	May 14, 1932	23.34	158,000		Apr. 21, 1940	15.67	93,600
1933	Oct. 19, 1932	7.96	36,000		Aug. 18, 1940	8.94	42,000
	Nov. 11, 1932	11.75	62,900	1941	Aug. 31, 1940	9.57	46,900
					Apr. 7, 1941	12.56	69,000
					June 6, 1941	9.10	43,400
				1942	Mar. 11, 1942	9.01	37,000

a Backwater from ice.

Peak stages and discharges of Potomac River at Point of Rocks, Md.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Apr. 11, 1942	8.92	36,400	1952	Jan. 29, 1952	11.28	52,400
	May 18, 1942	11.92	54,400		Feb. 6, 1952	10.65	48,100
	May 24, 1942	21.13	125,000		Mar. 13, 1952	17.12	95,800
1943	Oct. 16, 1942	40.43	418,000		Mar. 25, 1952	8.95	38,500
	Dec. 31, 1942	20.47	126,000		Apr. 29, 1952	20.67	127,000
	Feb. 7, 1943	12.88	63,300	1953	May 13, 1952	11.71	55,000
	Mar. 15, 1943	10.07	45,100		Nov. 23, 1952	19.68	118,000
	Apr. 21, 1943	13.97	71,000		Dec. 13, 1952	10.05	44,800
	May 22, 1943	10.12	45,100		Jan. 12, 1953	10.64	48,300
1944	Mar. 9, 1944	9.04	38,500		Jan. 26, 1953	11.64	54,700
	Mar. 14, 1944	10.34	46,300		Feb. 23, 1953	8.89	37,800
	Mar. 25, 1944	12.40	59,800		Mar. 27, 1953	15.53	83,200
	May 8, 1944	13.92	70,300		June 1, 1953	8.63	36,300
1945	Oct. 23, 1944	9.07	39,100	1954	Mar. 3, 1954	18.65	109,000
	Feb. 18, 1945	8.76	37,300	1955	Oct. 17, 1954	21.02	130,000
	Feb. 28, 1945	11.14	51,200		Jan. 1, 1955	13.18	65,300
	Mar. 8, 1945	10.06	45,100		Mar. 7, 1955	13.10	64,700
	Sept. 20, 1945	21.98	139,000		Mar. 23, 1955	15.62	84,000
1946	Jan. 9, 1946	8.59	36,100		June 10, 1955	11.78	55,600
	June 3, 1946	11.40	53,100		June 13, 1955	9.17	39,500
1947	Mar. 16, 1947	9.65	42,100		Aug. 15, 1955	11.49	53,700
1948	Feb. 16, 1948	13.08	64,700		Aug. 20, 1955	29.08	214,000
	Apr. 15, 1948	16.04	87,000	1956	Feb. 8, 1956	9.58	42,000
1949	Dec. 1, 1948	8.54	35,500		Mar. 16, 1956	11.21	51,900
	Dec. 6, 1948	11.29	52,400		Apr. 9, 1956	12.54	60,800
	Dec. 17, 1948	14.31	73,400	1957	Feb. 11, 1957	12.59	61,100
	Dec. 31, 1948	11.85	55,700		Apr. 7, 1957	13.74	69,200
	Jan. 7, 1949	11.68	55,000	1958	Dec. 28, 1957	8.42	35,000
	Jan. 29, 1949	11.59	54,400		Mar. 1, 1958	-	b43,000
	Apr. 16, 1949	9.47	41,500		Mar. 28, 1958	11.77	55,500
	June 20, 1949	21.20	132,000		Apr. 9, 1958	10.28	46,200
	June 30, 1949	8.85	37,300		Apr. 30, 1958	9.76	43,100
	July 19, 1949	14.59	75,800		May 7, 1958	14.13	72,000
1950	Feb. 3, 1950	13.09	64,700	1959	June 4, 1959	11.80	55,700
	Mar. 25, 1950	10.19	45,700	1960	Oct. 26, 1959	9.08	39,000
	Sept. 15, 1950	8.75	37,300		Apr. 1, 1960	17.35	97,800
1951	Nov. 26, 1950	12.38	59,800		Apr. 6, 1960	18.25	105,000
	Dec. 5, 1950	20.75	128,000		May 10, 1960	20.28	124,000
	Dec. 9, 1950	18.42	107,000		May 30, 1960	10.12	45,200
	Feb. 3, 1951	12.49	60,500	1961	Feb. 21, 1961	17.90	102,000
	Feb. 8, 1951	8.84	37,300		Feb. 27, 1961	16.60	91,800
	Feb. 22, 1951	10.25	45,700		Mar. 26, 1961	9.65	42,400
	Apr. 1, 1951	13.21	65,400		Apr. 14, 1961	15.18	80,400
	Apr. 14, 1951	11.08	51,200		Apr. 18, 1961	13.24	65,700
	June 15, 1951	17.52	99,000				
1952	Jan. 3, 1952	9.97	44,500				

b About.

6390. Monocacy River at Bridgeport, Md.

Location.--Lat 39°40'43", long 77°14'06", on right bank 60 ft downstream from bridge on State Highway 97, at Bridgeport, Carroll County, 0.9 mile upstream from Cattail Branch, 3.4 miles northwest of Taneytown, and 4.8 miles downstream from confluence of Rock and Marsh Creeks at Pennsylvania-Maryland State line.

Drainage area.--173 sq mi.

Gage.--Nonrecording at site 0.3 mile downstream at datum 0.98 ft lower prior to May 3, 1946; recording thereafter. Datum of gage is 340.83 ft above mean sea level (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 6,700 cfs and extended on basis of logarithmic plotting and velocity-area studies.

Bankfull stage.--12 ft.

Historical data.--Flood of Aug. 24, 1933 is greatest known and exceeded that of June 1889, from information by local residents.

Remarks.--Base for partial-duration series, 3,800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	Aug. 24, 1933	ab25	-	1951	Feb. 7, 1951	10.54	5,050
					Feb. 21, 1951	11.74	6,250
1942	Aug. 14, 1942	a13.92	8,830		Mar. 20, 1951	9.49	4,200
					June 10, 1951	9.79	4,440
1943	Oct. 16, 1942	13.75	8,220		June 13, 1951	11.60	6,150
	Oct. 26, 1942	12.84	7,320	1952	Dec. 5, 1951	9.39	4,120
	Dec. 2, 1942	9.89	4,820		Jan. 2, 1952	9.74	4,360
	Dec. 30, 1942	12.94	7,410		Jan. 28, 1952	9.31	4,040
	Feb. 11, 1943	9.30	4,340		Feb. 4, 1952	11.94	6,450
	Mar. 12, 1943	10.96	5,700		Mar. 11, 1952	16.15	11,600
	Apr. 20, 1943	12.33	6,870		Apr. 27, 1952	9.67	4,360
	Apr. 21, 1943	8.59	3,820		July 9, 1952	11.70	6,250
	May 21, 1943	20.53	15,000		Sept. 3, 1952	11.26	5,850
1944	Nov. 9, 1943	18.10	12,400	1953	Nov. 22, 1952	14.36	9,230
	Jan. 4, 1944	14.58	8,940		Dec. 11, 1952	11.18	5,730
	Mar. 13, 1944	12.50	7,050		Jan. 24, 1953	12.92	7,560
	Mar. 17, 1944	8.88	4,030		Mar. 15, 1953	9.24	3,990
	Mar. 23, 1944	11.35	6,060	1954	Mar. 1, 1954	9.28	4,020
1945	Dec. 8, 1944	9.16	4,260		Feb. 7, 1955	9.11	3,890
	Dec. 12, 1944	12.55	7,140		Mar. 5, 1955	11.51	6,060
	Feb. 27, 1945	10.65	5,380	1955	Mar. 22, 1955	13.66	8,390
	Aug. 1, 1945	10.3	5,140		Aug. 13, 1955	11.40	5,950
	Sept. 18, 1945	11.82	6,420		Aug. 18, 1955	10.08	4,670
1946	Nov. 22, 1945	11.58	6,240	1956	Oct. 14, 1955	10.17	4,750
	Nov. 28, 1945	15.33	9,600		Feb. 6, 1956	9.56	4,250
	Dec. 26, 1945	11.86	6,510		Feb. 18, 1956	9.08	3,860
	Dec. 30, 1945	11.82	6,240		Mar. 14, 1956	11.47	6,020
	Feb. 28, 1946	8.55	3,820		July 4, 1956	9.17	3,940
	Mar. 15, 1946	10.26	5,140		July 21, 1956	10.19	4,770
	May 27, 1946	9.17	3,890	1957	Nov. 2, 1956	10.66	5,210
	June 2, 1946	16.01	11,300		Dec. 14, 1956	10.80	5,350
1947	May 22, 1947	12.23	6,770		Jan. 23, 1957	9.07	3,860
1948	Nov. 12, 1947	9.07	3,880		Apr. 5, 1957	10.02	4,620
	Jan. 2, 1948	13.38	8,090	1958	Dec. 21, 1957	14.30	9,160
	Apr. 1, 1948	10.41	4,960		Dec. 26, 1957	13.42	8,110
	Apr. 14, 1948	10.22	4,780		Jan. 15, 1958	9.57	4,280
	May 7, 1948	10.47	5,050		Jan. 22, 1958	9.60	4,280
1949	Nov. 7, 1948	9.02	3,800		Jan. 25, 1958	9.20	3,960
	Dec. 30, 1948	13.79	8,560		Feb. 28, 1958	11.19	5,740
	Jan. 6, 1949	13.52	8,200		Apr. 6, 1958	9.40	4,120
	Jan. 28, 1949	10.44	4,960		May 5, 1958	12.69	7,310
	Apr. 14, 1949	11.17	5,750	1959	Jan. 22, 1959	10.15	4,740
	July 13, 1949	13.24	7,870		Mar. 6, 1959	10.86	5,410
	July 18, 1949	14.12	8,920	1960	Apr. 4, 1960	11.61	6,160
1950	Dec. 27, 1949	10.62	5,150	1961	Feb. 20, 1961	11.67	6,220
	Feb. 15, 1950	9.42	4,120		Feb. 25, 1961	10.64	5,190
	Mar. 23, 1950	12.51	7,100		Apr. 13, 1961	11.71	6,260
	May 19, 1950	11.76	6,350				
1951	Nov. 25, 1950	9.62	4,280				
	Dec. 4, 1950	15.52	10,600				

a Annual peaks only.

b Present site and datum.

6395. Big Pipe Creek at Bruceville, Md.

Location.--Lat 39°36'45", long 77°14'10", on left bank 300 ft downstream from bridge on State Highway 194, 800 ft downstream from Bruceville, Carroll County, and 3½ miles upstream from Detour and confluence with Little Pipe Creek.

Drainage area.--102 sq mi.

Gage.--Recording. Altitude of gage is 340 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,300 cfs and extended on basis of slope-area measurement at 3,780 cfs and slope-conveyance study.

Bankfull stage.--8 ft.

Remarks.--Base for partial-duration series, 1,600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Jan. 1, 1948	8.50	3,870	1955	Feb. 7, 1955	5.77	1,960
	Feb. 14, 1948	87.92	1,900		Mar. 22, 1955	6.60	2,460
	May 7, 1948	5.32	1,680		Aug. 13, 1955	8.23	3,630
	July 14, 1948	5.56	1,860		Aug. 31, 1955	8.97	4,320
1949	Dec. 30, 1948	7.41	3,010	1956	Oct. 14, 1955	6.13	2,180
	Jan. 5, 1949	7.43	3,010		Feb. 6, 1956	5.85	2,010
	Jan. 28, 1949	6.41	2,340		Mar. 14, 1956	5.88	2,030
	July 12, 1949	11.92	9,500		July 21, 1956	6.72	2,530
	July 18, 1949	6.65	2,460	1957	Apr. 6, 1957	4.79	1,380
	July 30, 1949	5.57	1,860				
1950	Mar. 23, 1950	8.38	3,780	1958	Dec. 20, 1957	9.68	5,140
1951					Dec. 26, 1957	7.09	2,790
	Nov. 25, 1950	5.87	2,040		Jan. 22, 1958	5.47	1,780
	Dec. 4, 1950	8.45	3,780		Jan. 25, 1958	5.99	2,090
	Feb. 7, 1951	7.70	3,220		Feb. 27, 1958	5.71	1,930
	June 13, 1951	5.37	1,740		May 5, 1958	5.54	1,820
1952	July 5, 1951	5.50	1,800	1959	Jan. 2, 1959	85.86	-
	Aug. 11, 1951	6.05	2,100		July 14, 1959	4.32	1,130
	Apr. 14, 1952	6.12	2,160	1960	Apr. 4, 1960	5.65	1,890
	Apr. 27, 1952	8.76	4,150		June 18, 1960	5.41	1,750
	May 25, 1952	7.06	2,800		Aug. 10, 1960	5.49	1,790
	Sept. 1, 1952	6.05	2,100	1961	Feb. 19, 1961	87.58	2,000
1953	Nov. 22, 1952	7.73	3,240		Feb. 25, 1961	6.19	2,210
	Dec. 11, 1952	5.7	1,920		Apr. 13, 1961	5.58	1,850
	Aug. 8, 1953	7.89	3,430				
1954	Dec. 7, 1953	7.09	2,790				

a Backwater from ice.

6400. Little Pipe Creek at Avondale, Md.

Location.--Lat 39°33'40", long 77°02'38", at private bridge, 0.1 mile below Copps Branch, ½ mile northwest of Avondale, Carroll County, and 3 miles southwest of Westminster.

Drainage area.--8.10 sq mi.

Gage.--Recording August 1947 to September 30, 1956; crest-stage gage since Oct. 1, 1958. Altitude of gage is 525 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 130 cfs and extended on basis of slope-area measurements at 286 cfs and 687 cfs, and contracted-opening measurement at 1,410 cfs.

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 250 cfs. Only annual peaks are shown since 1958.

Peak stages and discharges of Little Pipe Creek at Avondale, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Jan. 1, 1948	4.37	380	1952	Sept. 1, 1952	7.60	1,480
	May 29, 1948	4.81	480				
	June 19, 1948	3.77	270	1953	Nov. 21, 1952	5.00	532
1949	Jan. 5, 1949	3.78	278		Aug. 9, 1953	3.90	295
	July 12, 1949	4.99	532	1954	July 5, 1954	4.26	361
1950	Mar. 22, 1950	3.85	286	1955	Feb. 7, 1955	3.66	256
1951	Nov. 25, 1950	4.81	480		Aug. 13, 1955	7.05	1,260
	Dec. 4, 1950	5.50	687	1956	July 4, 1956	8.47	1,880
	Feb. 7, 1951	4.21	349		July 21, 1956	7.50	1,440
1952	Apr. 14, 1952	3.65	254	1959	May 19, 1959	3.39	310
	Apr. 27, 1952	4.45	400	1960	Aug. 10, 1960	5.36	640
	May 25, 1952	3.87	290				
	Aug. 31, 1952	4.62	438	1961	Apr. 13, 1961	3.08	167

6405. Owens Creek at Lantz, Md.

Location.--Lat 39°40'36", long 77°27'50", on right bank half a mile west of Lantz Post Office (Deerfield station on Western Maryland Railway), Frederick County, 1½ miles south of Sabillasville, and 4½ miles northwest of Thurmont.

Drainage area.--5.93 sq mi.

Gage.--Recording. Altitude of gage is 965 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 750 cfs and extended on basis of slope-area measurements at 839 and 1,510 cfs.

Bankfull stage.--6 ft.

Remarks.--Base for partial duration series, 120 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	Mar. 28, 1932	2.63	134	1941	Nov. 2, 1940	2.97	120
	May 12, 1932	2.84	169		Apr. 5, 1941	3.52	257
1933	Nov. 1, 1932	2.78	163	1942	May 22, 1942	3.53	260
	Nov. 9, 1932	3.97	455		Aug. 14, 1942	3.46	238
	Mar. 13, 1933	2.62	135	1943	Oct. 16, 1942	3.74	336
	Apr. 17, 1933	2.53	121		May 20, 1943	5.66	1,220
	Aug. 23, 1933	6.52	1,600	1944	Nov. 8, 1943	3.59	282
1934	Sept. 16, 1934	3.68	381		May 7, 1944	3.09	143
	Sept. 29, 1934	4.25	552		June 24, 1944	3.28	187
1935	Dec. 1, 1934	8.4	3,270	1945	Dec. 12, 1944	3.97	428
	July 24, 1935	4.59	675		Sept. 18, 1945	3.59	282
1936	Mar. 11, 1936	4.04	456	1946	Nov. 28, 1945	3.43	229
	Mar. 17, 1936	3.89	396		May 27, 1946	3.53	260
1937	Feb. 21, 1937	5.14	945		June 2, 1946	3.53	260
	Apr. 26, 1937	4.94	845	1947	June 7, 1947	2.97	120
	Apr. 27, 1937	4.06	444	1948	Jan. 1, 1948	3.36	209
	June 3, 1937	3.06	137				
	June 18, 1937	3.60	285	1949	Nov. 6, 1948	3.41	223
	June 21, 1937	3.05	135		Dec. 30, 1948	3.25	180
	July 15, 1937	3.07	139		Jan. 5, 1949	3.17	160
1938	Oct. 28, 1937	3.69	316		July 12, 1949	5.36	1,040
	Nov. 13, 1937	3.54	264		July 17, 1949	3.74	336
1939	Dec. 10, 1938	3.10	145		July 18, 1949	5.59	1,190
	Feb. 3, 1939	3.28	187		Aug. 29, 1949	3.99	436
1940	Apr. 20, 1940	3.00	125	1950	Dec. 27, 1949	2.98	121
	May 27, 1940	3.26	182	1951	Oct. 9, 1950	3.45	235
	Aug. 31, 1940	3.45	235		Nov. 25, 1950	5.30	1,020
	Sept. 25, 1940	3.61	288				

Peak stages and discharges of Owens Creek at Lantz, Md.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Dec. 4, 1950	4.73	745	1955	Mar. 22, 1955	3.22	199
	Dec. 7, 1950	6.16	1,520		Aug. 13, 1955	3.00	152
	Feb. 7, 1951	3.18	163		Aug. 18, 1955	4.34	566
	Feb. 21, 1951	2.99	123	1956	Oct. 14, 1955	3.06	164
	Apr. 12, 1951	3.32	198		Apr. 29, 1956	3.54	284
	June 13, 1951	2.97	141		July 20, 1956	3.29	216
	Aug. 12, 1951	3.04	156				
1952	Dec. 5, 1951	3.04	156	1957	Nov. 1, 1956	5.86	1,350
	Jan. 2, 1952	2.95	137				
	Feb. 4, 1952	3.44	254	1958	January 1958	2.88	129
	Mar. 11, 1952	3.63	311		Feb. 27, 1958	2.85	124
	Apr. 28, 1952	2.96	139		Apr. 6, 1958	2.92	137
	May 25, 1952	3.11	171		May 5, 1958	2.83	129
	June 22, 1952	3.38	238		July 11, 1958	2.84	122
	Sept. 1, 1952	6.30	1,620	1959	Mar. 6, 1959	2.63	87
	Sept. 2, 1952	3.63	311				
1953	Nov. 21, 1952	5.12	930	1960	Mar. 30, 1960	2.99	150
	Jan. 24, 1953	3.07	162		Apr. 3, 1960	2.92	137
	Mar. 24, 1953	2.95	142		May 8, 1960	3.13	179
	July 23, 1953	3.50	272		June 14, 1960	3.01	154
1954	Mar. 1, 1954	3.62	308	1961	Feb. 25, 1961	3.04	160
1955	Dec. 14, 1954	2.94	141		Apr. 12, 1961	2.94	137
	Mar. 4, 1955	3.62	308		Apr. 16, 1961	3.06	162
					May 13, 1961	3.15	183

6410. Hunting Creek at Jimtown, Md.

Location.--Lat 39°35'40", long 77°23'50", on right bank just downstream from highway bridge, 0.4 mile southwest of Jimtown, Frederick County, about 2½ miles southeast of Thurmont, and 2¼ miles upstream from Little Hunting Creek.

Drainage area.--18.4 sq mi.

Gage.--Recording. Altitude of gage is 355 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 500 cfs and extended by logarithmic plotting.

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 450 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Mar. 23, 1950	3.72	395	1955	Mar. 22, 1955	3.33	483
1951	Nov. 25, 1950	4.62	605		Aug. 13, 1955	3.41	514
	Dec. 4, 1950	4.64	618		Aug. 18, 1955	4.62	1,010
	Dec. 7, 1950	4.83	668	1956	July 21, 1956	4.42	918
1952	Dec. 5, 1951	4.28	525	1957	Nov. 1, 1956	4.88	1,140
	Feb. 4, 1952	3.93	722				
	Mar. 11, 1952	4.57	985	1958	May 5, 1958	3.16	422
	Apr. 27, 1952	4.07	778	1959	Mar. 6, 1959	2.73	280
	May 25, 1952	3.83	682				
	Sept. 1, 1952	4.94	1,170	1960	June 17, 1960	3.50	550
	Sept. 2, 1952	4.44	926				
1953	Nov. 21, 1952	4.86	1,130	1961	Apr. 13, 1961	3.37	499
	Mar. 24, 1953	3.95	730		Apr. 16, 1961	3.41	514
	July 23, 1953	4.68	1,040		Sept. 7, 1961	3.89	706
1954	Mar. 1, 1954	2.86	321				

6415. Fishing Creek near Lewistown, Md.

Location.--Lat 39°31'35", long 77°28'00", on left bank immediately upstream from Fishing Creek Reservoir, 50 ft downstream from Little Fishing Creek, and 2.8 miles west of Lewistown, Frederick County.

Drainage area.--7.29 sq mi.

Gage.--Recording. Altitude of gage is 735 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 100 cfs and extended on basis of slope-area measurement at 500 cfs.

Bankfull stage.--4 ft.

Remarks.--Base for partial duration series, 100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	May 7, 1948	2.02	54	1953	July 23, 1953	-	(a)
1949	Dec. 30, 1948	3.01	216	1954	Apr. 17, 1954	2.10	65
	Jan. 5, 1949	2.52	120	1955	Aug. 13, 1955	2.93	242
	July 12, 1949	3.73	500		Aug. 18, 1955	3.51	424
	July 18, 1949	3.50	421				
1950	May 15, 1950	2.15	72	1956	July 20, 1956	2.73	190
1951	Nov. 25, 1950	2.36	108	1957	Nov. 1, 1956	2.70	182
	Dec. 4, 1950	2.66	172	1958	Apr. 1, 1958	2.05	59
	Dec. 7, 1950	2.62	163		Apr. 6, 1958	2.05	59
	June 13, 1951	2.65	170	1959	Mar. 6, 1959	1.88	39
1952	Mar. 11, 1952	2.43	122		Mar. 30, 1960	-	b105
	Apr. 27, 1952	2.81	210		June 17, 1960	2.38	112
	May 25, 1952	2.85	220				
	Sept. 1, 1952	2.38	112	1961	Feb. 25, 1961	2.30	98
1953	Nov. 21, 1952	2.85	220				

a Peak above base, discharge not determined.

b Estimated.

6420. Monocacy River near Frederick, Md.

Location.--Lat 39°27'09", long 77°22'16", near right bank on downstream side of bridge on State Highway 26 at Ceresville, 300 ft downstream from Tuscarora Creek, 1,200 ft upstream from Israel Creek, and 3.3 miles northeast of Frederick, Frederick County.

Drainage area.--665 sq mi.

Gage.--Nonrecording. Datum of gage is 242.45 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 4,700 cfs and extended on basis of flood records for station at Jug Bridge.

Bankfull stage.--17 ft.

Historical data.--Flood of June 1889 is greatest known.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Monocacy River near Frederick, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1889	June 1889	35	46,000	1913	Mar. 27, 1913	26.0	24,000
1897	Feb. 7, 1897	18.5	13,400	1914	Feb. 1, 1914	15.2	9,600
1898	Nov. 2, 1897	18.0	12,900	1915	Jan. 13, 1915	27.2	23,400
1899	Dec. 5, 1898	19.0	14,000	1916	June 17, 1916	23.5	17,300
1900	Feb. 22, 1900	22.1	18,100	1917	Mar. 12, 1917	20.4	12,700
1901	Mar. 11, 1901	23.4	20,000	1918	Feb. 20, 1918	22.1	14,300
1902	Mar. 1, 1902	27.0	25,700	1919	Dec. 23, 1918	18.0	10,500
1903	June 29, 1903	26.5	24,800	1920	Mar. 13, 1920	19.8	12,200
1904	Mar. 8, 1904	23.6	20,300	1921	May 13, 1921	23.0	16,600
1905	Aug. 26, 1905	22.0	18,000	1922	Mar. 8, 1922	16.0	8,650
1906	Apr. 15, 1906	23.5	20,200	1923	July 31, 1923	21.0	14,000
1907	Mar. 14, 1907	19.5	14,500	1924	Jan. 17, 1924	23.5	17,300
1908	Feb. 16, 1908	25.0	22,400	1925	Feb. 12, 1925	21.5	14,600
1909	Feb. 24, 1909	17.0	11,800	1926	Feb. 26, 1926	22.0	15,300
1910	Jan. 22, 1910	24.0	20,900	1927	Nov. 16, 1926	27.0	23,000
1911	Sept. 1, 1911	27.5	26,600	1928	Oct. 19, 1927	26.0	21,200
1912	Sept. 25, 1912	23.9	20,800	1929	May 3, 1929	25.0	19,500
				1930	Oct. 3, 1929	23.0	16,600

a Possible ice jam.

6425. Linganore Creek near Frederick, Md.

Location.--Lat 39°24'55", long 77°20'00", on left bank 2½ miles upstream from mouth and 4 miles east of Frederick, Frederick County.

Drainage area.--82.3 sq mi.

Gage.--Nonrecording at Frederick pumping station 1½ miles downstream at datum about 20 ft lower prior to Sept. 25, 1946; recording at present site and datum thereafter. Altitude of gage is 270 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,500 cfs and extended on basis of slope-area measurement at 3,260 cfs.

Bankfull stage.--9 ft.

Remarks.--Only annual peaks are shown prior to 1939. Base for partial-duration series, 1,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	Aug. 23, 1933	10.5	2,920	1945	Feb. 26, 1945	6.94	1,500
1934	Sept. 16, 1934	10.0	2,720		Aug. 1, 1945	10.60	2,960
1935	Dec. 1, 1934	5.56	1,080	1946	Nov. 28, 1945	7.72	1,800
1936	Feb. 25, 1936	8.4	-		Dec. 6, 1945	6.74	1,420
	Mar. 11, 1936	7.40	1,680		May 28, 1946	6.85	1,460
1937	June 17, 1937	8.30	2,040		June 2, 1946	12.22	3,600
1938	Nov. 13, 1937	8.50	2,120	1947	May 22, 1947	6.55	1,650
1939	Jan. 30, 1939	7.80	1,840		July 21, 1947	6.78	1,750
					Aug. 20, 1947	7.37	2,050
1940	Apr. 20, 1940	8.60	2,160	1948	Jan. 1, 1948	9.19	2,950
	Sept. 25, 1940	9.40	2,480		Feb. 14, 1948	6.99	1,850
1941	Apr. 5, 1941	7.07	1,560		May 7, 1948	6.28	1,480
					June 27, 1948	6.66	1,700
1942	May 22, 1942	10.00	2,720	1949	Dec. 30, 1948	8.13	2,400
	June 13, 1942	10.56	2,960		Jan. 5, 1949	7.68	2,200
	Aug. 9, 1942	7.62	1,760		Jan. 28, 1949	7.19	1,950
	Aug. 13, 1942	8.20	2,000		July 13, 1949	6.87	1,800
	Aug. 14, 1942	11.72	3,400		July 16, 1949	7.87	2,300
1943	Oct. 16, 1942	8.04	1,920	1950	Mar. 23, 1950	8.75	2,750
	Oct. 26, 1942	6.95	1,530				
	Dec. 30, 1942	7.35	1,680	1951	Nov. 25, 1950	10.01	3,350
1944	Nov. 8, 1943	9.80	2,640		Dec. 4, 1950	9.26	3,000
	Jan. 4, 1944	10.68	3,000		Feb. 7, 1951	8.90	2,800
	June 24, 1944	8.48	2,120		June 13, 1951	6.85	1,750

a Backwater from ice.

Peak stages and discharges of Linganore Creek near Frederick, Md.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Aug. 11, 1951	6.48	1,600	1956	Mar. 14, 1956	7.10	1,900
1952	Mar. 11, 1952	7.10	1,900		July 4, 1956	9.03	2,860
	Apr. 14, 1952	8.11	2,400		July 21, 1956	8.68	2,690
	Apr. 27, 1952	11.34	4,100	1957	Apr. 6, 1957	6.52	1,610
	May 25, 1952	10.84	3,800	1958	Dec. 20, 1957	10.74	3,740
	Sept. 1, 1952	8.67	2,680		Dec. 26, 1957	8.10	2,400
1953	Nov. 22, 1952	8.76	2,730		Jan. 14, 1958	8.38	2,540
	May 31, 1953	7.06	1,880		Jan. 22, 1958	6.87	1,780
1954	Dec. 7, 1953	6.50	1,600		Jan. 25, 1958	8.70	2,700
	May 3, 1954	7.67	2,180	1959	Aug. 23, 1959	5.69	1,090
1955	Feb. 7, 1955	8.3	2,500	1960	Sept. 12, 1960	5.79	1,150
	Mar. 22, 1955	7.32	2,010	1961	Feb. 18, 1961	as 9.1	-
	July 8, 1955	6.81	1,760		Feb. 25, 1961	6.50	1,600
	Aug. 13, 1955	11.39	4,130		Apr. 13, 1961	6.90	1,800
	Aug. 31, 1955	8.47	2,580				
1956	Feb. 6, 1956	6.77	1,740				

a Backwater from ice.

6430. Monocacy River at Jug Bridge, near Frederick, Md.

Location.--Lat 39°24'13", long 77°21'58", on right bank a quarter of a mile upstream from Jug Bridge on U.S. Highway 40, 0.35 mile downstream from Linganore Creek, and 2½ miles east of Frederick, Frederick County.

Drainage area.--817 sq mi.

Gage.--Recording. Datum of gage is 231.92 ft above mean sea level (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--10 ft.

Historical data.--Flood of June 1889 is greatest known.

Remarks.--Base for partial-duration series, 8,800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1889	June 1889	30	56,000	1937	Feb. 22, 1937	13.91	15,600
1930	Oct. 3, 1929	-	as 18,500		Apr. 27, 1937	21.7	33,800
	Nov. 18, 1929	-	as 9,100		Aug. 27, 1937	10.75	9,610
	Mar. 8, 1930	12.47	12,500	1938	Oct. 20, 1937	10.94	10,100
1931	Apr. 2, 1931	11.37	10,800		Oct. 24, 1937	12.78	13,500
					Oct. 28, 1937	11.48	11,100
1932	Mar. 29, 1932	11.71	11,300		Nov. 14, 1937	16.75	21,800
	May 13, 1932	13.76	14,900	1939	Dec. 6, 1938	10.82	9,850
1933	Oct. 18, 1932	13.14	14,100		Jan. 31, 1939	12.63	13,100
	Nov. 2, 1932	13.40	14,600		Feb. 4, 1939	14.46	16,800
	Nov. 10, 1932	12.63	13,100		Mar. 1, 1939	12.64	13,100
	Nov. 20, 1932	10.82	9,950	1940	Feb. 20, 1940	11.64	11,100
	Mar. 14, 1933	11.25	10,600		Mar. 4, 1940	12.77	13,300
	Apr. 17, 1933	12.88	13,700		Mar. 15, 1940	10.95	10,000
	Aug. 11, 1933	16.08	20,300		Apr. 9, 1940	14.50	16,700
	Aug. 24, 1933	28.1	51,000		Apr. 21, 1940	17.53	23,400
	Sept. 17, 1933	15.98	20,000		Sept. 1, 1940	17.85	24,100
1934	Sept. 15, 1934	12.67	13,300		Sept. 26, 1940	16.59	21,400
	Sept. 17, 1934	21.6	33,500	1941	Nov. 3, 1940	11.84	11,400
	Sept. 30, 1934	15.38	18,700		Nov. 15, 1940	12.07	12,000
1935	Dec. 2, 1934	17.2	22,800		Apr. 6, 1941	14.35	16,500
1936	Feb. 28, 1936	11.43	11,000	1942	Apr. 3, 1942	11.49	9,900
	Mar. 12, 1936	16.4	20,900		May 22, 1942	17.4	18,100
	Apr. 7, 1936	13.36	14,600		Aug. 14, 1942	20.29	27,900

a Estimated.

Peak stages and discharges of Monocacy River at Jug Bridge, near Frederick, Md.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Oct. 16, 1942	16.97	19,700	1952	Mar. 11, 1952	17.76	21,200
	Oct. 27, 1942	11.87	9,760		Apr. 27, 1952	18.41	22,500
	Dec. 30, 1942	16.57	18,800		May 26, 1952	13.35	12,300
	Apr. 20, 1943	11.20	9,620		Sept. 1, 1952	12.07	10,200
	May 21, 1943	18.74	24,600				
1944	Nov. 9, 1943	18.05	22,900	1953	Nov. 22, 1952	17.73	21,000
	Jan. 4, 1944	19.01	25,300		Dec. 11, 1952	11.25	9,020
	Mar. 13, 1944	12.98	12,600		Jan. 25, 1953	13.67	12,700
	Mar. 24, 1944	13.47	13,500	1954	Mar. 2, 1954	9.37	6,590
1945	Dec. 13, 1944	12.22	10,400	1955	Mar. 5, 1955	11.40	9,230
	Aug. 1, 1945	12.46	10,800		Mar. 23, 1955	16.17	17,700
	Sept. 19, 1945	15.50	16,300		Aug. 13, 1955	15.98	17,300
1946	Nov. 29, 1945	17.15	19,800		Aug. 19, 1955	13.12	12,100
	June 3, 1946	19.27	24,600	1956	Oct. 15, 1955	12.3	10,800
1947	May 22, 1947	12.57	11,000		Feb. 7, 1956	11.6	9,800
1948	Jan. 2, 1948	15.43	16,100		Mar. 15, 1956	13.2	12,200
	May 8, 1948	11.35	9,230		July 21, 1956	13.08	12,000
1949	Dec. 31, 1948	17.14	19,600	1957	Apr. 6, 1957	12.37	11,000
	Jan. 6, 1949	15.66	16,700	1958	Dec. 21, 1957	16.41	18,200
	Jan. 28, 1949	12.90	11,400		Dec. 27, 1957	15.33	16,000
	July 13, 1949	21.30	29,700		Jan. 26, 1958	11.5	9,650
	July 19, 1949	16.07	17,500		Feb. 28, 1958	12.3	10,800
1950	Mar. 23, 1950	15.09	15,500		Mar. 26, 1958	11.40	9,510
1951	Nov. 26, 1950	12.08	10,200		Apr. 7, 1958	10.99	8,340
	Dec. 5, 1950	17.30	20,100	1959	May 6, 1958	13.7	13,000
	Feb. 8, 1951	11.77	9,800		Mar. 7, 1959	9.88	7,510
	Feb. 22, 1951	13.42	12,300	1960	Apr. 5, 1960	13.62	12,900
	June 14, 1951	11.67	9,650	1961	Feb. 20, 1961	12.25	10,800
1952	Jan. 2, 1952	12.44	10,700		Feb. 26, 1961	13.53	12,700
	Feb. 4, 1952	12.32	10,600		Apr. 14, 1961	14.12	13,700

a Estimated.

6435. Bennett Creek at Park Mills, Md.

Location.--Lat 39°17'40", long 77°24'30", 75 ft downstream from highway bridge, 0.2 mile south of Park Mills, Frederick County, 1.8 miles above mouth, and 3.7 miles southwest of Urbana.

Drainage area.--62.8 sq mi.

Gage.--Recording prior to Oct. 31, 1958; crest-stage gage thereafter. Altitude of gage is 240 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,500 cfs and extended on basis of slope-area measurement at 2,390 cfs.

Bankfull stage.--6 ft.

Remarks.--Base for partial-duration series, 1,200 cfs. Only annual peaks are shown since 1959.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Dec. 30, 1948	5.92	1,640	1952	Apr. 14, 1952	5.76	1,600
	Jan. 5, 1949	5.48	1,510		Apr. 27, 1952	6.38	1,810
	July 16, 1949	5.50	1,510		May 25, 1952	5.20	1,420
1950	Mar. 23, 1950	6.82	1,950		Aug. 20, 1952	6.65	1,880
					Sept. 1, 1952	7.26	2,120
1951	Nov. 25, 1950	5.57	1,540	1953	Nov. 21, 1952	10.34	3,230
	Dec. 4, 1950	8.12	2,400		Mar. 24, 1953	4.52	1,220
	Feb. 7, 1951	6.18	1,740		Mar. 26, 1953	5.11	1,390
	June 10, 1951	5.46	1,510		Aug. 8, 1953	9.49	2,890

Peak stages and discharges of Bennett Creek at Park Mills, Md.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	June 26, 1954	4.32	1,150	1957	Apr. 6, 1957	4.42	1,180
1955	Feb. 6, 1955	a6.06	-	1958	Dec. 20, 1957	8.26	2,460
	Feb. 7, 1955	4.85	1,320		Dec. 26, 1957	5.54	1,520
	Mar. 6, 1955	4.89	1,330		Jan. 14, 1958	6.37	1,800
	Mar. 22, 1955	4.56	1,230		Jan. 25, 1958	5.24	1,430
	Aug. 7, 1955	5.31	1,450		July 12, 1958	4.94	1,340
	Aug. 13, 1955	8.65	2,600	1960	Sept. 12, 1960	4.71	1,210
	Aug. 18, 1955	4.76	1,290				
1956	Mar. 14, 1956	4.91	1,330	1961	Apr. 13, 1961	5.34	1,470
	July 4, 1956	8.80	2,650				
	July 21, 1956	7.28	2,120				

a Backwater from ice.

6440. Goose Creek near Leesburg, Va.

Location.--Lat 39°01'10", long 77°34'40", on left bank 400 ft upstream from highway bridge at Evergreen Mills, 1.4 miles downstream from Little River, 6.7 miles south of Leesburg, Loudoun County, and 10.9 miles upstream from mouth.

Drainage area.--338 sq mi.

Gage.--Nonrecording prior to Nov. 29, 1938; recording thereafter. At site 1,000 ft downstream at different datum July 12, 1909, to Dec. 31, 1912, and at site 400 ft downstream at datum 4.20 ft lower Jan. 21, 1930, to Nov. 28, 1938. Datum of gage is 248.93 ft above mean sea level, datum of 1929, Culpeper supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements below 7,500 cfs and extended above on basis of logarithmic plotting and curves of relation at site used 1909-12, 1930-38. Defined by current-meter measurements below 9,400 cfs and extended above on basis of slope-area measurement at 45,000 cfs at present site.

Bankfull stage.--8 ft.

Historical data.--Maximum stage known, that of May or June 1889, from information by local residents.

Remarks.--Base for partial-duration series, 4,000 cfs. Only annual peaks are shown prior to 1939.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1889	May or June 1889	a29	65,000	1944	Jan. 4, 1944	8.00	4,820
1910	Jan. 18, 1910	11.0	4,000	1945	Aug. 1, 1945	14.56	10,600
1911	Sept. 6, 1911	4.0	1,150		Sept. 18, 1945	18.0	18,500
1912	Sept. 24, 1912	20	13,000	1946	May 27, 1946	11.53	7,440
1930	Mar. 8, 1930	11.82	4,800		June 2, 1946	8.78	5,380
1931	Jan. 6, 1931	5.6	1,300	1947	Aug. 4, 1947	7.23	4,220
1932	May 13, 1932	18.45	9,650				
1933	Aug. 23, 1933	21.60	17,000	1948	Feb. 14, 1948	8.49	5,170
1934	Sept. 16, 1934	11.0	4,270		Aug. 4, 1948	8.31	5,030
1935	Dec. 1, 1934	15.0	7,010		Aug. 12, 1948	7.17	4,220
1936	Mar. 17, 1936	13.61	6,010	1949	Nov. 29, 1948	7.79	4,600
1937	Aug. 26, 1937	26.86	45,000		Dec. 4, 1948	7.08	4,290
1938	Oct. 28, 1937	17.0	8,530		Dec. 30, 1948	9.21	5,700
					Jan. 6, 1949	7.79	4,720
1939	Jan. 30, 1939	7.59	4,520	1950	Mar. 23, 1950	7.73	4,650
	Feb. 4, 1939	7.85	4,660		May 19, 1950	10.82	6,880
1940	Feb. 19, 1940	7.53	4,450	1951	Nov. 25, 1950	-	-
1941	Apr. 5, 1941	7.70	4,590		Dec. 4, 1950	18.25	20,800
					Feb. 7, 1951	8.46	5,430
1942	Aug. 9, 1942	6.43	3,560		June 13, 1951	7.74	4,760
1943	Oct. 14, 1942	15.20	11,600	1952	Apr. 14, 1952	7.05	4,220
	Oct. 16, 1942	22.90	45,000		Apr. 29, 1952	14.3	11,700
	Dec. 30, 1942	8.07	4,890		Sept. 1, 1952	7.29	4,440

a About, at site and datum used 1930-38.

Peak stages and discharges of Goose Creek near Leesburg, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Nov. 22, 1952	12.13	8,840	1957	Nov. 1, 1956	7.03	4,220
	Mar. 16, 1953	7.96	5,000				
1954	Apr. 28, 1954	4.82	2,320	1958	Dec. 26, 1957	7.73	4,760
					Jan. 14, 1958	12.50	9,280
1955	Oct. 16, 1954	6.78	4,090		Jan. 25, 1958	8.21	5,160
	Aug. 13, 1955	9.28	6,150		July 23, 1958	8.20	5,160
	Aug. 19, 1955	11.58	8,320	1959	June 3, 1959	9.81	6,600
	Aug. 23, 1955	6.95	4,220				
	Aug. 31, 1955	8.35	5,340	1960	Apr. 5, 1960	8.95	5,880
1956	July 21, 1956	20.9	32,800				
	July 23, 1956	8.42	5,340	1961	Feb. 20, 1961	6.95	4,220
					Apr. 13, 1961	9.41	6,240

6445. Great Seneca Creek near Gaithersburg, Md.

Location--Lat 39°10'01", long 77°13'37", at highway bridge 0.1 mile downstream from Whetstone Run and 2 miles northwest of Gaithersburg, Montgomery County.

Drainage area--41.0 sq mi.

Gage--Nonrecording. Datum of gage is 305.37 ft above mean sea level (Washington Suburban Sanitary Commission bench mark).

Stage-discharge relation--Defined by current-meter measurements.

Bankfull stage--4 ft.

Remarks--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Jan. 18, 1926	a7.20	520	1929	Apr. 16, 1929	b6.45	450
1927	Nov. 16, 1926	b8.80	c800	1930	Oct. 22, 1929	b6.70	489
1928	June 14, 1928	b8.70	c726				

a Observed; probably near peak. Possible ice jam.

b Observed; probably near peak.

c About.

6450. Seneca Creek at Dawsonville, Md.

Location--Lat 39°07'41", long 77°20'13", on right bank 60 ft downstream from bridge on State Highway 28, 150 ft downstream from mouth of Great Seneca Creek, and half a mile east of Dawsonville, Montgomery County.

Drainage area--101 sq mi.

Gage--Nonrecording prior to Nov. 10, 1930; recording thereafter. At site 60 ft upstream prior to Apr. 7, 1934. Datum of gage is 214.15 ft above mean sea level, adjustment of 1912.

Stage-discharge relation--Defined by current-meter measurements below 2,700 cfs and extended above on basis of contracted-opening and flow-over-road measurement at 7,330 cfs.

Bankfull stage--5 ft.

Remarks--Base for partial-duration series, 1,300 cfs.

Peak stages and discharges of Seneca Creek at Dawsonville, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	June 16, 1931	5.28	1,440	1946	Sept. 23, 1946	6.30	1,680
	July 1, 1931	6.08	1,730				
1932	Mar. 28, 1932	5.56	1,380	1947	Aug. 20, 1947	6.75	1,990
1933	Oct. 18, 1932	6.59	1,730	1948	Jan. 1, 1948	5.67	1,350
	Nov. 1, 1932	6.80	1,880		Feb. 14, 1948	6.70	1,950
	May 27, 1933	6.73	1,840		June 30, 1948	6.78	1,990
	July 3, 1933	8.20	3,300	1949	Nov. 29, 1948	5.99	1,510
	Aug. 24, 1933	10.30	9,300		Dec. 4, 1948	6.52	1,810
1934	Mar. 3, 1934	7.30	2,310		Dec. 30, 1948	6.87	2,070
	Sept. 17, 1934	7.3	2,410		Jan. 5, 1949	6.85	2,070
1935	May 7, 1935	6.1	1,420	1950	July 16, 1949	7.03	2,240
1936	Jan. 3, 1936	6.88	2,020		Mar. 23, 1950	7.12	2,280
	Feb. 14, 1936	6.74	1,300		July 15, 1950	6.60	1,880
	Feb. 26, 1936	6.33	1,580	1951	Nov. 25, 1950	-	bl,990
	Aug. 29, 1936	5.55	1,350		Dec. 4, 1950	7.26	2,420
1937	Apr. 26, 1937	6.78	2,030		Feb. 7, 1951	6.98	2,190
	June 4, 1937	5.68	1,370		June 4, 1951	7.21	2,370
	June 18, 1937	7.40	2,560		June 10, 1951	7.02	2,190
	Aug. 23, 1937	6.27	1,680		June 13, 1951	6.26	1,650
	Aug. 27, 1937	7.45	2,610		July 28, 1951	5.85	1,440
1938	Oct. 23, 1937	7.08	2,280	1952	Apr. 27, 1952	7.17	2,190
	Oct. 28, 1937	6.57	1,840		May 26, 1952	5.94	1,440
	Nov. 13, 1937	6.87	2,070		June 10, 1952	7.02	2,070
1939	Jan. 30, 1939	6.93	2,150		Aug. 20, 1952	7.08	2,110
	Feb. 3, 1939	5.81	1,420		Sept. 1, 1952	7.77	2,810
	June 23, 1939	5.57	1,320	1953	Nov. 22, 1952	9.78	7,330
1940	Apr. 9, 1940	5.41	1,250		Mar. 15, 1953	6.25	1,580
	Apr. 20, 1940	6.41	1,740		Mar. 24, 1953	6.07	1,490
	July 24, 1940	5.40	1,250		Mar. 26, 1953	7.56	2,580
1941	June 23, 1941	5.5	1,300		May 31, 1953	6.05	1,480
1942	May 22, 1942	5.86	1,460		Aug. 9, 1953	8.01	3,110
	Sept. 27, 1942	5.83	1,410	1954	Dec. 14, 1953	5.45	1,240
1943	Oct. 14, 1942	6.03	1,510	1955	Feb. 7, 1955	6.1	1,500
	Oct. 16, 1942	8.31	3,620		Aug. 13, 1955	7.6	2,620
	Oct. 26, 1942	6.14	1,560	1956	Mar. 14, 1956	6.05	1,480
	Dec. 30, 1942	6.74	1,990		July 5, 1956	6.59	1,760
1944	Nov. 9, 1943	7.52	2,660		July 21, 1956	12.17	15,000
	Dec. 26, 1943	5.78	1,410	1957	Apr. 5, 1957	4.54	959
	Jan. 4, 1944	7.12	2,280	1958	Dec. 21, 1957	8.35	3,640
1945	Jan. 1, 1945	5.72	1,370		Dec. 26, 1957	6.40	1,650
	June 21, 1945	6.02	1,510		Jan. 14, 1958	7.22	2,240
	Aug. 1, 1945	6.90	2,110		Jan. 25, 1958	6.12	1,510
1946	Nov. 28, 1945	-	bl,550	1959	Aug. 8, 1959	6.9	1,970
	Dec. 6, 1945	6.52	1,810	1960	Feb. 19, 1960	6.3	1,600
	May 18, 1946	5.83	1,410	1961	Apr. 13, 1961	6.71	1,840
	May 21, 1946	7.07	2,240		June 10, 1961	7.98	3,070
	June 2, 1946	7.73	2,940		June 14, 1961	6.01	1,460

a Backwater from ice.

b Estimated.

6457. Difficult Run near Fairfax, Va.

Location.--Lat 38°52'29", long 77°20'18", at bridge on State Highway 665,
2.5 miles northwest of center of Fairfax, Fairfax County.

Drainage area.--4.29 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 310 ft (from topographic map).

Stage-discharge relation.--Defined by contracted-opening measurements at 783 cfs and 470 cfs.

Bankfull stage.--6 ft.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Difficult Run near Fairfax, Va.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	July 16, 1950	7.05	705	1956	Dec. 14, 1955	6.2	530
1951	Dec. 4, 1950	6.21	530	1957	Oct. 22, 1956	6.49	590
1952	Sept. 1, 1952	7.40	783	1958	Dec. 21, 1957	6.98	700
1953	Nov. 21, 1952	5.90	470	1959	Sept. 2, 1959	6.60	270
1954	Dec. 14, 1953	4.10	205	1960	Apr. 5, 1960	5.00	320
1955	Aug. 22, 1955	6.96	690	1961	Apr. 13, 1961	5.6	420

a Estimated.

6460. Difficult Run near Great Falls, Va.

Location.--Lat 38°58'33", long 77°14'46", on right bank 300 ft downstream from Rocky Run, 0.7 mile upstream from mouth, and 1.5 miles southeast of Great Falls, Fairfax County.

Drainage area.--58 sq mi, approximately.

Gage.--Recording. Datum of gage is 151.30 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,100 cfs and extended above by logarithmic plotting.

Bankfull stage.--8 ft.

Remarks.--Subsequent to June 30, 1957, records furnished by Virginia Department of Conservation and Economic Development, Division of Water Resources. Base for partial-duration series, 650 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Sept. 6, 1935	7.03	810	1949	Oct. 6, 1948	7.27	980
1936	June 13, 1936	10.58	2,890		Nov. 7, 1948	6.67	765
1937	Apr. 26, 1937	8.88	1,760		Nov. 29, 1948	7.24	980
1938	Oct. 23, 1937	7.75	1,220		Dec. 4, 1948	7.30	1,000
	Oct. 28, 1937	10.64	2,890		Dec. 30, 1948	6.9	852
	Nov. 13, 1937	9.04	1,820		Jan. 6, 1949	-	-
1939	Jan. 30, 1939	7.36	1,040		Mar. 23, 1949	6.71	782
					May 3, 1949	7.04	906
					May 23, 1949	6.50	715
					July 12, 1949	6.31	650
					July 14, 1949	7.07	906
1940	Apr. 20, 1940	7.71	1,170	1950	Mar. 23, 1950	7.08	924
1941	Apr. 5, 1941	6.49	685		July 16, 1950	8.90	1,760
1942	Mar. 31, 1942	6.24	634		Sept. 11, 1950	8.40	1,500
1943	Oct. 14, 1942	7.81	1,220	1951	Nov. 25, 1950	6.74	800
	Oct. 16, 1942	10.5	2,820		Dec. 4, 1950	8.04	1,300
	Oct. 26, 1942	6.61	748		Feb. 7, 1951	6.89	852
	Dec. 30, 1942	6.91	852		June 10, 1951	6.94	817
					June 14, 1951	8.88	1,660
1944	Nov. 9, 1943	8.5	1,550	1952	Dec. 21, 1951	6.51	715
	Jan. 4, 1944	7.58	1,120		Apr. 25, 1952	7.64	1,120
1945	Dec. 12, 1944	6.76	800		July 8, 1952	7.25	980
	Jan. 2, 1945	7.19	980		Sept. 1, 1952	9.17	1,940
	July 18, 1945	7.37	1,040	1953	Nov. 21, 1952	8.90	1,760
	Aug. 1, 1945	8.26	1,450		Jan. 9, 1953	6.92	852
	Sept. 18, 1945	6.82	817		Mar. 16, 1953	7.21	960
1946	May 18, 1946	7.68	1,170		Mar. 26, 1953	7.28	1,000
	May 27, 1946	7.05	906		May 17, 1953	6.98	888
					Aug. 8, 1953	6.83	834
1947	Aug. 21, 1947	6.42	682	1954	Dec. 14, 1953	6.59	748
1948	Feb. 14, 1948	7.18	960	1955	Aug. 13, 1955	10.70	2,960
	May 13, 1948	6.43	698		Aug. 18, 1955	8.70	1,660
	June 20, 1948	8.05	1,300		Aug. 23, 1955	6.45	698

Peak stages and discharges of Difficult Run near Great Falls, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Mar. 14, 1956	6.81	817	1959	July 1, 1959	6.67	765
	July 5, 1956	6.92	852		Aug. 8, 1959	6.90	852
	July 21, 1956	10.96	3,190		Aug. 23, 1959	6.38	666
	Sept. 28, 1956	6.88	852		Sept. 2, 1959	7.54	1,080
1957	Apr. 5, 1957	6.98	888	1960	Feb. 19, 1960	7.64	1,120
	May 14, 1957	7.85	1,220		Apr. 5, 1960	7.29	1,000
1958	Dec. 21, 1957	9.05	1,820		May 28, 1960	6.40	682
	Dec. 26, 1957	6.94	870		Aug. 5, 1960	8.49	1,550
	Jan. 14, 1958	7.37	1,040	1961	Feb. 19, 1961	7.15	942
	July 9, 1958	7.25	980		Feb. 23, 1961	6.28	650
	July 23, 1958	8.00	1,300		Mar. 23, 1961	6.40	682
1959	May 23, 1959	6.28	650		Apr. 13, 1961	7.60	1,120
					June 10, 1961	6.30	650

6465. Potomac River near Washington, D.C.

Location.--Lat 38°57'36", long 77°08'33", on right bank 1 mile upstream from Little Falls Dam, 1½ miles northeast of Langley, Fairfax County, Va., 2 miles upstream from District of Columbia boundary line, and 2½ miles upstream from Chain Bridge.

Drainage area.--11,560 sq mi.

Gage.--Nonrecording prior to June 7, 1930; recording thereafter. Datum of gage is 37.95 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 45,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1889	June 2, 1889	(a)	-	1938	Oct. 22, 1937	7.90	56,400
1931	Apr. 3, 1931	6.90	37,900	1939	Oct. 30, 1937	15.62	181,000
					Dec. 12, 1938	7.27	48,500
Feb. 6, 1932	b9.40	75,100	Feb. 1, 1939		9.05	71,800	
Mar. 30, 1932	8.56	63,900	Feb. 5, 1939		12.6	129,000	
May 14, 1932	15.25	168,000	Mar. 2, 1939		8.43	63,400	
			Apr. 19, 1939		9.42	77,800	
1933	Oct. 19, 1932	7.54	49,600	1940	Mar. 5, 1940	7.18	47,200
	Nov. 11, 1932	9.43	75,100		Apr. 10, 1940	7.38	49,800
	Jan. 28, 1933	9.39	75,100		Apr. 22, 1940	11.29	107,000
	Mar. 16, 1933	7.87	54,800		June 2, 1940	9.46	79,300
	Mar. 22, 1933	9.42	75,100	1941	Apr. 7, 1941	9.07	73,300
	Apr. 19, 1933	10.15	86,700				
	Apr. 22, 1933	12.8	127,000	1942	May 18, 1942	8.15	60,600
	May 11, 1933	7.54	49,600		May 24, 1942	13.17	139,000
	Aug. 25, 1933	10.57	92,700	1943	Oct. 17, 1942	26.88	447,000
	1934	Sept. 18, 1934	7.8		53,500	Dec. 31, 1942	13.15
					Feb. 8, 1943	9.31	76,300
					Mar. 16, 1943	7.73	53,700
					Apr. 22, 1943	9.75	83,800
					May 22, 1943	8.69	67,600
1935	Dec. 2, 1934	13.5	139,000		1944	Mar. 9, 1944	7.23
	Jan. 24, 1935	8.98	69,500	Mar. 15, 1944		7.94	56,400
	Feb. 17, 1935	8.85	66,700	Mar. 25, 1944		9.12	73,300
	Apr. 12, 1935	8.43	61,300	May 9, 1944		9.43	77,800
	Sept. 8, 1935	7.79	53,500	1945	Mar. 1, 1945	8.88	60,700
					Mar. 9, 1945	8.02	49,000
					Aug. 1, 1945	8.05	49,000
1936	Jan. 5, 1936	b8.42	55,000		Sept. 20, 1945	13.88	138,000
	Jan. 11, 1936	8.08	59,200	1946	June 4, 1946	9.47	69,000
	Feb. 17, 1936	b10.37	45,000				
	Feb. 27, 1936	b14.69	132,000				
	Mar. 13, 1936	11.16	106,000				
	Mar. 19, 1936	28.1	484,000				
	Apr. 8, 1936	8.18	60,600				
				1947	Mar. 17, 1947	7.53	43,900
1937	Jan. 24, 1937	10.50	94,400				
	Feb. 11, 1937	7.42	49,800				
	Feb. 23, 1937	10.58	96,000				
	Apr. 28, 1937	23.3	347,000				
	Aug. 27, 1937	10.10	88,300				

a About same as peak of Mar. 19, 1936.

b Backwater from ice.

Peak stages and discharges of Potomac River near Washington, D. C.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Feb. 16, 1948	b10.69	75,000	1953	Mar. 16, 1953	7.84	48,000
	Apr. 16, 1948	10.69	97,300		Mar. 26, 1953	11.44	99,100
1949	Dec. 6, 1948	8.17	60,600	1954	Mar. 3, 1954	12.47	116,000
	Dec. 18, 1948	9.89	85,300				
	Jan. 1, 1949	9.26	76,300	1955	Oct. 17, 1954	13.30	131,000
	Jan. 7, 1949	8.83	69,000		Jan. 1, 1955	9.56	70,900
	Jan. 29, 1949	8.96	71,800		Mar. 7, 1955	9.96	76,600
	Apr. 16, 1949	7.24	47,200		Mar. 23, 1955	11.47	99,500
	June 20, 1949	13.00	135,000		June 10, 1955	8.78	60,200
	July 15, 1949	8.30	62,000		Aug. 15, 1955	9.02	63,500
	July 19, 1949	10.26	91,300		Aug. 20, 1955	17.60	216,000
1950	Feb. 3, 1950	10.01	77,200	1956	Feb. 8, 1956	8.90	50,100
	Mar. 25, 1950	8.59	57,800		Mar. 16, 1956	9.92	62,000
	May 20, 1950	7.56	45,000		Apr. 9, 1956	10.46	68,600
1951					July 21, 1956	10.75	72,500
	Nov. 26, 1950	9.93	75,800	1957	Feb. 12, 1957	11.10	74,300
	Dec. 6, 1950	13.85	140,000		Apr. 7, 1957	11.40	78,600
	Dec. 9, 1950	12.48	117,000	1958	Mar. 1, 1958	10.18	49,000
	Feb. 3, 1951	9.42	68,700		Mar. 29, 1958	11.19	67,200
	Feb. 8, 1951	7.98	50,000		Apr. 9, 1958	9.95	51,700
	Feb. 22, 1951	8.81	60,500		Apr. 30, 1958	9.66	49,900
	Apr. 1, 1951	9.81	74,400		May 7, 1958	12.02	82,100
	Apr. 14, 1951	8.76	60,500	1959	June 4, 1959	9.61	61,400
	June 15, 1951	12.09	110,000				
1952	Jan. 3, 1952	8.68	59,200				
	Jan. 29, 1952	9.15	66,000				
	Feb. 6, 1952	8.67	59,200	1960	Apr. 1, 1960	12.29	102,000
	Mar. 13, 1952	11.95	108,000		Apr. 6, 1960	13.35	119,000
	Mar. 25, 1952	7.70	46,200		May 10, 1960	13.66	124,000
	Apr. 29, 1952	14.17	148,000		May 30, 1960	8.65	51,300
	May 13, 1952	8.99	63,200	1961	Feb. 21, 1961	13.15	116,000
1953	Nov. 23, 1952	13.76	140,000		Feb. 27, 1961	12.23	101,000
	Dec. 13, 1952	8.17	52,200		Mar. 26, 1961	8.48	49,300
	Jan. 12, 1953	8.85	61,200		Apr. 14, 1961	11.71	92,600
	Jan. 26, 1953	9.08	64,300		Apr. 18, 1961	10.37	73,200

b Backwater from ice.

6470. Little Falls Branch near Bethesda, Md.

Location.--Lat 38°57'27", long 77°06'31", on left bank at downstream side of bridge on Massachusetts Avenue, 2.0 miles southwest of Bethesda, Montgomery County.

Drainage area.--4.1 sq mi, approximately.

Gage.--Recording prior to Oct. 2, 1959; nonrecording thereafter. Datum of gage 169.32 ft (Maryland State Roads Commission bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 630 cfs and extended on basis of slope-area measurements at 1,540 cfs and 2,120 cfs.

Bankfull stage.--7 ft.

Remarks.--Base for partial-duration series, 450 cfs. Only annual peaks are shown since 1959.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944a	June 19, 1944	4.15	935	1947	Apr. 30, 1947	3.94	840
	Aug. 2, 1944	3.76	760		May 22, 1947	3.66	720
1945					July 13, 1947	3.87	800
	July 19, 1945	3.51	660	1948	May 30, 1948	4.24	935
	July 27, 1945	4.70	1,090		June 19, 1948	3.72	740
	July 31, 1945	7.50	2,340		June 24, 1948	3.38	620
	Sept. 18, 1945	3.58	700		Aug. 3, 1948	3.84	800
1946					Aug. 11, 1948	3.54	680
	May 18, 1946	3.32	580	1949	Nov. 6, 1948	3.77	760
	May 28, 1946	5.05	1,180		May 15, 1949	3.52	660
	June 29, 1946	4.16	935				
	July 23, 1946	3.18	520				
	Aug. 6, 1946	3.21	535				

a Partial year.

Peak stages and discharges of Little Falls Branch near Bethesda, Md.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	May 15, 1950	3.42	625	1955	Aug. 7, 1955	3.14	500
	June 10, 1950	5.63	1,510		Aug. 12, 1955	3.42	634
	July 5, 1950	3.63	730		Aug. 22, 1955	5.18	1,340
	Aug. 19, 1950	3.84	810	1956	Oct. 14, 1955	3.68	742
	Aug. 29, 1950	3.10	480		July 20, 1956	3.19	525
	Sept. 10, 1950	4.14	930		Sept. 27, 1956	3.22	540
1951	Nov. 25, 1950	3.24	550	1957	Mar. 15, 1957	3.14	500
	Dec. 4, 1950	4.28	982		Sept. 14, 1957	3.11	485
	Feb. 7, 1951	3.25	555		Sept. 16, 1957	3.11	485
	Apr. 12, 1951	3.15	505	1958	Dec. 20, 1957	3.65	730
	June 3, 1951	4.53	1,080		Dec. 26, 1957	3.18	520
	June 10, 1951	4.57	1,100		July 7, 1958	3.07	465
1952	June 13, 1951	4.46	1,050		July 8, 1958	3.62	718
	June 1, 1952	3.04	450		July 22, 1958	5.43	1,440
	June 17, 1952	4.13	922		Aug. 12, 1958	5.17	1,340
	Aug. 18, 1952	3.26	560	1959	May 23, 1959	4.48	1,060
1953	Sept. 1, 1952	4.28	982		July 1, 1959	4.43	1,040
	Nov. 21, 1952	3.25	555		July 19, 1959	3.10	480
	Mar. 15, 1953	3.43	638		Aug. 8, 1959	5.61	1,510
	May 5, 1953	3.22	540	1960	Aug. 4, 1960	5.92	2,120
	May 6, 1953	3.14	500		Feb. 25, 1961	2.66	-
	May 16, 1953	3.96	854				
	May 17, 1953	3.31	584				
	Aug. 8, 1953	3.22	540				
1954	Aug. 3, 1954	3.48	661				

6480. Rock Creek at Sherrill Drive, Washington, D.C.

Location.--Lat 38°58'21", long 77°02'25", on left bank 125 ft downstream from new Sherrill Drive Bridge in Rock Creek Park in Washington and 7½ miles upstream from mouth.

Drainage area.--62.2 sq mi.

Gage.--Recording. Datum of gage is 148.87 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 4,400 cfs and extended on basis of contracted-opening measurement at 7,220 cfs.

Bankfull stage.--5 ft.

Remarks.--Base for partial-duration series, 800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Mar. 8, 1930	4.18	853	1938	Oct. 23, 1937	8	2,220
	Apr. 7, 1930	5.10	1,170		Oct. 28, 1937	4.31	870
1931	July 21, 1931	3.47	590		Nov. 13, 1937	7.67	2,100
1932	Mar. 28, 1932	4.10	818	1939	Jan. 31, 1939	4.23	852
1933	Nov. 2, 1932	4.85	1,040	1940	Apr. 9, 1940	4.67	1,010
	July 3, 1933	4.53	940		Apr. 20, 1940	4.93	1,080
	Aug. 24, 1933	11.6	4,460	1941	Nov. 27, 1940	3.65	644
1934	Mar. 4, 1934	7.00	1,820	1942	Aug. 9, 1942	3.95	748
	Sept. 17, 1934	5.95	1,460	1943	Oct. 16, 1942	9.71	3,100
1935	Apr. 9, 1935	4.68	1,010		May 12, 1943	4.43	905
	May 7, 1935	6.25	1,540	1944	Nov. 9, 1943	5.68	1,360
1936	Jan. 4, 1936	6.38	1,600		Jan. 4, 1944	5.71	1,360
	Feb. 15, 1936	4.28	870	1945	Jan. 2, 1945	5.63	1,320
	Feb. 26, 1936	4.80	1,040		June 22, 1945	4.19	835
1937	Jan. 21, 1937	4.29	870		July 6, 1945	7.04	1,820
	Apr. 26, 1937	8.15	2,300		July 18, 1945	4.77	1,040
	June 18, 1937	4.67	1,010		July 20, 1945	4.40	905
	Aug. 27, 1937	8.13	2,260		July 27, 1945	6.98	1,820
					Aug. 1, 1945	7.46	2,020

Peak stages and discharges of Rock Creek at Sherrill Drive, Washington, D.C.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	Nov. 29, 1945	4.29	870	1954	Aug. 3, 1954	4.22	846
	Dec. 6, 1945	4.94	1,080	1955	Feb. 7, 1955	4.89	1,040
	May 28, 1946	4.98	1,120		June 23, 1955	4.27	851
1947	Apr. 30, 1947	3.13	476		Aug. 13, 1955	8.57	2,320
	May 1, 1947	3.13	476		Aug. 18, 1955	5.34	1,170
					Aug. 22, 1955	5.88	1,330
1948	Jan. 2, 1948	4.26	852	1956	Oct. 14, 1955	5.67	1,270
	Feb. 15, 1948	4.80	1,040		Mar. 14, 1956	4.25	845
	June 20, 1948	4.95	1,120		July 21, 1956	13.19	7,220
	Aug. 3, 1948	4.40	905		Sept. 27, 1956	4.27	851
1949	Nov. 7, 1948	4.20	835	1957	Apr. 5, 1957	5.46	1,210
	Nov. 29, 1948	4.86	1,080		June 5, 1957	5.28	1,150
	Dec. 30, 1948	4.54	940		Sept. 17, 1957	4.31	863
	Jan. 6, 1949	4.86	1,080	1958	Dec. 21, 1957	5.01	1,070
	May 23, 1949	5.45	1,260		Dec. 26, 1957	5.43	1,200
1950	Mar. 23, 1950	5.17	1,180		Jan. 15, 1958	4.92	1,050
	June 10, 1950	4.33	878		Jan. 25, 1958	4.31	863
	Sept. 10, 1950	4.36	911		Apr. 6, 1958	4.36	878
1951	Nov. 26, 1950	5.69	1,360		July 9, 1958	7.32	1,810
	Dec. 4, 1950	(a)	(a)		July 13, 1958	4.13	809
	Feb. 7, 1951	4.6	990		July 22, 1958	7.04	1,710
	June 10, 1951	5.54	1,290		Aug. 13, 1958	4.21	833
	June 13, 1951	5.99	1,460	1959	July 1, 1959	4.30	857
1952	Apr. 26, 1952	5.66	1,360		July 10, 1959	4.46	905
	July 9, 1952	6.92	1,780		July 20, 1959	4.20	827
	Sept. 1, 1952	9.90	3,220		Aug. 8, 1959	6.93	1,680
					Sept. 2, 1959	4.50	917
1953	Nov. 22, 1952	11.15	5,420	1960	Feb. 19, 1960	5.66	1,200
	Jan. 9, 1953	5.00	1,080		Apr. 5, 1960	4.88	971
	Mar. 16, 1953	5.35	1,180		July 14, 1960	4.55	879
	Mar. 24, 1953	6.10	1,420		Aug. 4, 1960	7.29	1,790
	Mar. 26, 1953	6.90	1,700		Sept. 12, 1960	5.82	1,250
	May 17, 1953	4.48	924	1961	Feb. 19, 1961	4.66	910
	Aug. 8, 1953	9.07	2,720		Feb. 25, 1961	4.86	966
	Sept. 6, 1953	4.57	951		Apr. 13, 1961	7.19	1,750
					Aug. 26, 1961	5.99	1,300
1954	Dec. 14, 1953	4.48	924				
	Apr. 28, 1954	4.51	933				
	June 15, 1954	4.11	811				

a Peak above base; stage and discharge not determined.

6495. Northeast Branch Anacostia River at Riverdale, Md.

Location.--Lat 38°57'37", long 76°55'34", on right bank at downstream side of bridge on Riverdale Road in Riverdale, Prince Georges County, 1½ miles downstream from Indian Creek, and 1¼ miles upstream from confluence with Northwest Branch.

Drainage area.--72.8 sq mi.

Gage.--Nonrecording prior to June 12, 1942; recording thereafter (with crest-stage gage after Aug. 29, 1939). Datum of gage is 14.00 ft above mean sea level (Washington Suburban Sanitary Commission bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 3,000 cfs and extended on basis of velocity-area study.

Bankfull stage.--15 ft.

Remarks.--Base for partial-duration series, 1,250 cfs.

Peak stages and discharges of Northeast Branch Anacostia River at Riverdale, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	Aug. 23, 1933	15.5	10,500	1951	Nov. 25, 1950	9.15	1,900
1939	Jan. 30, 1939	8.53	1,580		June 4, 1951	7.53	1,280
1940	Apr. 8, 1940	7.9	1,590		June 10, 1951	9.27	1,940
	Apr. 20, 1940	10.0	2,350		June 13, 1951	9.39	1,980
	Aug. 31, 1940	8.4	1,740	1952	Apr. 27, 1952	8.86	1,940
1941	July 13, 1941	7.07	1,350		Sept. 1, 1952	10.64	2,770
1942	Aug. 9, 1942	11.47	2,980	1953	Nov. 22, 1952	11.11	3,000
	Aug. 13, 1942	7.3	1,410		Mar. 16, 1953	8.44	1,780
1943	Oct. 16, 1942	12.93	3,660		Mar. 26, 1953	10.50	2,700
	Oct. 26, 1942	7.13	1,350	1954	Dec. 14, 1953	6.10	889
	Dec. 30, 1942	6.76	1,260	1955	Aug. 13, 1955	7.25	3,120
1944	Nov. 9, 1943	9.84	2,280		Aug. 18, 1955	6.00	1,670
	Jan. 4, 1944	7.83	1,560		Aug. 22, 1955	5.67	1,380
	Aug. 3, 1944	7.48	1,470	1956	Oct. 14, 1955	6.38	2,870
1945	Jan. 1, 1945	7.55	1,310		Mar. 14, 1956	5.12	1,270
	July 18, 1945	12.72	3,680	1957	Apr. 5, 1957	4.30	1,020
	July 27, 1945	10.65	2,550	1958	Mar. 20, 1958	4.63	1,530
1946	Dec. 6, 1945	8.65	1,660		July 9, 1958	5.29	2,290
1947	June 14, 1947	9.02	1,820		July 23, 1958	6.10	3,400
1948	May 30, 1948	7.43	1,250		Aug. 25, 1958	4.75	1,700
	June 20, 1948	8.42	1,580	1959	Aug. 8, 1959	5.49	2,470
	Aug. 12, 1948	8.93	1,780	1960	Feb. 19, 1960	4.59	1,370
1949	Nov. 29, 1948	7.52	1,280		Apr. 5, 1960	4.55	1,320
	Jan. 6, 1949	7.41	1,250		Aug. 5, 1960	4.55	1,320
1950	Aug. 20, 1950	8.41	1,580		Sept. 12, 1960	5.75	2,830
	Sept. 11, 1950	9.63	2,060	1961	Apr. 13, 1961	5.44	2,340
					Aug. 26, 1961	4.79	1,490

6505. Northwest Branch Anacostia River near Colesville, Md.

Location.--Lat 39°03'55", long 77°01'48", on right bank 400 ft upstream from bridge on State Highway 183, 1½ miles southwest of Colesville, Montgomery County, 3 miles upstream from Burnt Mills, and 10 miles upstream from Sligo Branch.

Drainage area.--21.3 sq mi.

Gage.--Nonrecording prior to Apr. 12, 1934; recording thereafter. At sites in same general vicinity at different datums prior to Apr. 22, 1932. Datum of gage is 264.85 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 1,200 cfs and extended on basis of contracted-opening and flow-over-road measurement at 4,910 cfs.

Bankfull stage.--6 ft.

Remarks.--Base for partial-duration series, 600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1924	Mar. 29, 1924	6.20	936	1926	July 5, 1926	5.20	724
	Apr. 6, 1924	7.87	2,060		Sept. 6, 1926	5.30	746
	Apr. 18, 1924	5.40	767		Sept. 26, 1926	6.10	1,000
	June 12, 1924	5.40	767	1927	Nov. 9, 1926	4.80	751
	Aug. 25, 1924	7.25	1,500		Nov. 16, 1926	6.50	1,210
	Sept. 29, 1924	7.99	2,230		Nov. 18, 1926	4.70	724
1925	Feb. 8, 1925	5.05	692	1928	Oct. 3, 1927	6.50	1,210
1926	Nov. 13, 1925	5.50	788		Oct. 13, 1927	6.00	1,080
	Jan. 18, 1926	4.90	661		Nov. 17, 1927	5.00	905

Peak stages and discharges of Northwest Branch Anacostia River
near Colesville, Md.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Feb. 14, 1928	5.62	967	1945	June 20, 1945	5.75	718
	Aug. 17, 1928	5.90	1,050		June 21, 1945	6.81	1,050
1929	Apr. 16, 1929	4.80	751		July 18, 1945	7.05	1,160
	June 21, 1929	5.80	913		July 27, 1945	8.37	2,020
	June 25, 1929	4.25	602	1946	Nov. 28, 1945	6.72	1,010
	June 28, 1929	5.30	886		Dec. 6, 1945	6.86	1,070
1930	Mar. 8, 1930	6.00	964		May 28, 1946	7.35	1,320
	Apr. 6, 1930	6.00	964		June 2, 1946	5.32	665
1931	May 31, 1931	5.20	859	1947	Sept. 7, 1947	4.53	500
	July 20, 1931	7.00	1,340	1948	Nov. 8, 1947	5.71	705
1932	Mar. 28, 1932	7.5	1,000		Nov. 12, 1947	5.62	680
	May 12, 1932	5.30	905		Jan. 1, 1948	7.10	1,190
1933	Oct. 17, 1932	5.2	774		Feb. 14, 1948	6.19	840
	Nov. 1, 1932	6.3	1,050		Aug. 11, 1948	5.25	600
	Nov. 9, 1932	5.20	774		Aug. 19, 1948	5.23	600
	Nov. 19, 1932	4.50	625	1949	Nov. 29, 1948	5.80	620
	Jan. 26, 1933	4.50	625		Jan. 6, 1949	6.07	670
	Aug. 23, 1933	9.3	4,500		Mar. 23, 1949	5.78	620
1934	Mar. 3, 1934	6.80	1,230		May 23, 1949	8.80	2,030
	June 19, 1934	4.46	614	1950	Mar. 23, 1950	7.15	970
	July 30, 1934	6.17	1,010		May 31, 1950	6.85	875
	Sept. 16, 1934	6.17	1,010		Sept. 10, 1950	7.75	1,240
	Sept. 30, 1934	5.55	852	1951	Nov. 25, 1950	9.70	3,960
1935	Nov. 30, 1934	4.73	680		Dec. 4, 1950	8.10	1,440
	Apr. 9, 1935	5.57	852		Dec. 8, 1950	6.60	800
	May 7, 1935	7.00	1,340		Feb. 7, 1951	7.16	974
	July 20, 1935	5.20	774		June 4, 1941	6.43	758
	Sept. 5, 1935	4.75	680		June 10, 1951	6.87	881
1936	Nov. 17, 1935	4.48	625		June 13, 1951	6.47	768
	Jan. 3, 1936	6.50	1,110		June 22, 1951	7.27	1,020
	Jan. 9, 1936	4.85	700	1952	Apr. 25, 1952	7.00	920
	Feb. 14, 1936	6.0	964		Apr. 28, 1952	6.7	830
	Feb. 25, 1936	5.80	913		Sept. 1, 1952	9.74	4,110
	Mar. 12, 1936	4.46	614	1953	Nov. 21, 1952	9.33	1,880
	Mar. 17, 1936	4.44	614		Jan. 9, 1953	6.89	818
	Aug. 29, 1936	5.03	742		Mar. 15, 1953	6.63	766
1937	Jan. 20, 1937	5.54	775		Mar. 24, 1953	7.18	884
	Feb. 22, 1937	5.48	775		Mar. 28, 1953	7.58	1,000
	Apr. 26, 1937	7.46	1,780		May 16, 1953	5.88	616
	June 3, 1937	4.45	514		Aug. 8, 1953	10.99	4,910
	June 18, 1937	5.85	860		Sept. 5, 1953	5.95	630
	Aug. 12, 1937	5.54	775	1954	Dec. 14, 1953	6.20	680
	Aug. 23, 1937	5.63	803		Apr. 28, 1954	6.66	772
	Aug. 27, 1937	8.20	2,550	1955	Feb. 7, 1955	6.17	674
1938	Oct. 23, 1937	7.99	2,310		Aug. 13, 1955	8.73	1,470
	Oct. 28, 1937	5.36	748		Aug. 18, 1955	7.14	872
	Nov. 13, 1937	8.14	2,490		Aug. 23, 1955	6.15	670
	Aug. 2, 1938	6.19	990	1956	Oct. 14, 1955	7.81	1,070
1939	Jan. 30, 1939	5.60	680		Mar. 14, 1956	6.47	734
	Feb. 3, 1939	5.54	668		July 21, 1956	8.86	1,550
	Feb. 28, 1939	5.35	620	1957	Apr. 5, 1957	6.63	766
1940	Apr. 8, 1940	5.82	730		May 14, 1957	6.53	746
	Apr. 20, 1940	5.49	725		June 5, 1957	7.37	941
1941	Nov. 27, 1940	5.36	680	1958	Dec. 20, 1957	6.58	756
1942	Aug. 11, 1942	4.21	430		Dec. 26, 1957	7.06	852
1943	Oct. 15, 1942	7.02	1,140		July 9, 1958	8.34	1,290
	Oct. 26, 1942	5.54	742	1959	Aug. 8, 1959	7.37	941
	May 12, 1943	7.06	1,160	1960	Feb. 19, 1960	7.01	842
1944	Nov. 8, 1943	7.37	1,320		Sept. 12, 1960	5.98	636
	Jan. 3, 1944	5.80	730	1961	Feb. 25, 1961	6.37	714
1945	Jan. 1, 1945	7.43	1,360		Apr. 13, 1961	7.75	1,060

6510. Northwest Branch Anacostia River near Hyattsville, Md.

Location.--Lat 38°57'09", long 76°58'00", on right bank at downstream side of bridge on Queens Chapel Road (State Highway 500), 0.8 mile downstream from Sligo Branch, and 1 mile west of Hyattsville, Prince Georges County.

Drainage area.--49.4 sq mi.

Gage.--Nonrecording prior to Oct. 22, 1938; recording Oct. 22, 1938, to Sept. 17, 1951; nonrecording and crest-stage gage Sept. 18, 1951, to Aug. 29, 1952; recording thereafter. Datum of gage is 17.30 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--8 ft.

Historical data.--Flood of Aug. 24, 1933 is maximum known.

Remarks.--Base for partial-duration series, 1,250 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	Aug. 24, 1933	13.5	-	1952	Apr. 25, 1952	7.92	1,620
					June 17, 1952	8.45	1,860
1939	Apr. 26, 1939	6.03	1,880		July 9, 1952	8.04	1,670
					Aug. 20, 1952	9.78	2,520
1940	Apr. 8, 1940	5.45	1,340		Sept. 1, 1952	11.4	3,360
	Apr. 20, 1940	6.48	1,750	1953	Nov. 22, 1952	10.16	2,710
1941	July 13, 1941	5.11	1,050		Mar. 15, 1953	7.86	1,560
					Mar. 24, 1953	8.4	1,830
1942	July 20, 1942	6.06	1,550		Mar. 26, 1953	9.47	2,360
	Aug. 9, 1942	9.52	2,180		May 16, 1953	8.27	1,760
					Aug. 8, 1953	8.98	2,120
1943	Oct. 16, 1942	9.92	2,280		Sept. 5, 1953	7.28	1,270
	Sept. 3, 1943	6.30	1,260	1954	June 15, 1954	10.69	2,980
1944	Nov. 9, 1943	8.82	2,000	1955	June 23, 1955	10.4	2,830
	Jan. 3, 1944	6.52	1,340		July 8, 1955	9.36	2,210
					Aug. 7, 1955	8.71	1,880
1945	Jan. 1, 1945	6.61	1,370		Aug. 13, 1955	10.75	2,900
	July 18, 1945	7.17	1,560		Aug. 18, 1955	9.18	1,810
	July 22, 1945	6.49	1,340		Aug. 22, 1955	11.19	2,930
	July 27, 1945	10.02	2,300	1956	Oct. 14, 1955	11.32	3,010
	July 31, 1945	6.38	1,300		Mar. 14, 1956	8.61	1,520
1946	June 29, 1946	6.41	1,300		July 21, 1956	8.10	1,300
1947	Sept. 6, 1947	6.37	1,300	1957	June 5, 1957	9.16	1,550
1948	May 30, 1948	7.46	1,650	1958	Dec. 20, 1957	8.98	1,500
	June 19, 1948	7.59	1,680		Dec. 26, 1957	9.11	1,560
	June 20, 1948	7.58	1,680		June 21, 1958	9.27	1,640
	Aug. 3, 1948	8.37	1,900		July 8, 1958	10.85	2,720
1949	Nov. 28, 1948	6.55	1,370		July 22, 1958	11.67	3,590
	Jan. 5, 1949	6.62	1,370		Aug. 12, 1958	9.91	1,990
	Mar. 23, 1949	6.49	1,340		Aug. 25, 1958	9.00	1,510
	May 23, 1949	7.48	1,650	1959	July 14, 1959	9.42	1,710
1950	Mar. 23, 1950	6.50	1,340		July 19, 1959	8.97	1,500
	May 15, 1950	6.73	1,400		July 31, 1959	10.24	2,210
	June 10, 1950	6.70	1,400		Aug. 8, 1959	12.12	4,170
	Aug. 20, 1950	8.23	1,850	1960	Feb. 18, 1960	8.50	1,300
	Aug. 29, 1950	7.14	1,530		Aug. 3, 1960	8.84	1,440
	Sept. 10, 1950	9.86	2,280		Aug. 4, 1960	11.31	3,180
					Sept. 12, 1960	9.86	1,960
1951	Nov. 25, 1950	8.98	2,130	1961	Apr. 13, 1961	9.68	2,210
	Dec. 4, 1950	7.29	1,370		Aug. 23, 1961	7.77	1,260
	June 3, 1951	8.34	1,780		Aug. 26, 1961	9.66	2,200
	June 10, 1951	8.04	1,650				
	June 13, 1951	9.03	2,130				
	Aug. 3, 1951	7.95	1,650				
	Aug. 12, 1951	7.30	1,370				

6525. Fourmile Run at Alexandria, Va.

Location.--Lat 38°50'36", long 77°04'46", on right bank at Alexandria, 120 ft downstream from Washington and Old Dominion Railroad bridge, 0.2 mile downstream from State Highway 350, and 2.1 miles upstream from mouth.

Drainage area.--14.4 sq mi.

Gage.--Recording. Datum of gage is 22.55 ft above mean sea level, datum of 1929, Culpeper supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements below 990 cfs and extended above on basis of slope-area measurements at 2,250 cfs and 3,500 cfs through 1953. Slope-area measurement at 2,990 cfs in June 1961 indicates a change in the high-water rating.

Bankfull stage.--6 ft.

Remarks.--Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	June 7, 8, 1947	a7.2	2,250	1956	Oct. 14, 1955	4.95	1,280
1951	June 13, 1951	4.99	b1,300		July 4, 1956	4.67	1,120
1952	Dec. 21, 1951	4.47	1,010		July 22, 1956	5.10	1,350
	May 25, 1952	4.96	1,280		Sept. 27, 1956	4.83	1,220
	July 9, 1952	5.60	1,600	1957	Jan. 23, 1957	4.12	810
	Sept. 1, 1952	5.47	1,550	1958	Dec. 20, 1957	4.73	1,180
1953	Nov. 21, 1952	4.56	1,070		July 8, 1958	5.27	1,450
	Mar. 15, 1953	4.45	1,010		July 22, 1958	4.75	1,180
	Mar. 25, 1953	4.86	1,220	1959	June 12, 1959	4.60	1,100
	May 5, 1953	8.50	3,450		June 13, 1959	4.90	1,250
	July 22, 1953	4.76	1,180		July 12, 1959	c5.00	-
	Aug. 8, 1953	4.71	1,150	1960	June 13, 1960	4.08	810
	Sept. 6, 1953	5.57	1,600	1961	June 10, 1961	6.5	2,940
1954	May 3, 1954	4.22	854		Aug. 23, 1961	-	-
1955	July 8, 1955	6.91	2,120		Aug. 26, 1961	7.0	3,600
	Aug. 12, 1955	6.00	1,760		Sept. 3, 1961	-	-
	Aug. 22, 1955	5.31	1,450				

a Annual peak only.

b Maximum for period May 4 to Sept. 30, 1951.

c Probably affected by cofferdam.

6530. Cameron Run at Alexandria, Va.

Location.--Lat 38°48'23", long 77°06'35", on left bank 25 ft downstream from bridge of Southern Railway at Alexandria, Fairfax County, 800 ft downstream from confluence of Holmes Run and Back Lick Run, and half a mile east of U.S. Army Quartermaster Depot.

Drainage area.--33.7 sq mi.

Gage.--Recording. Datum of gage is 38.85 ft above mean sea level, datum of 1929, supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements below 1,500 cfs and extended above on basis of slope-area measurement at 2,900 cfs prior to Feb. 19, 1961. Defined by current-meter measurements below 1,100 cfs and extended by logarithmic plotting since Feb. 19, 1961.

Remarks.--Base for partial-duration series, 1,000 cfs.

Peak stages and discharges of Cameron Run at Alexandria, Va.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	May 5, 1953	11.9	-	1959	June 12, 1959	7.93	2,900
1955a/	Aug. 12, 1955	9.95	7,620	1959	Sept. 2, 1959	5.77	1,350
	Aug. 18, 1955	7.56	2,090				
1956	July 5, 1956	7.58	2,150	1960	Feb. 18, 1960	5.66	1,300
	July 20, 1956	8.62	3,950		Apr. 5, 1960	5.68	1,300
	July 22, 1956	6.49	1,240		May 30, 1960	5.28	1,100
1957	Apr. 5, 1957	5.50	865	1961	Feb. 25, 1961	4.46	1,100
					Apr. 13, 1961	5.69	2,100
1958	Dec. 20, 1957	6.86	1,490		June 10, 1961	5.05	1,570
	July 8, 1958	7.93	2,600		July 13, 1961	6.62	2,980
	Aug. 25, 1958	7.46	2,000		Aug. 23, 1961	4.74	1,330
					Aug. 26, 1961	7.35	3,820
1959	June 2, 1959	6.91	1,490		Sept. 3, 1961	6.49	2,880

a Period June 25 to Sept. 30.

6535. Henson Creek at Oxon Hill, Md.

Location.--Lat 38°47'05", long 76°58'50", on left bank 100 ft downstream from bridge on Tucker Road, 1.0 mile south of Oxon Hill, Prince Georges County, and 1.4 miles upstream from Carey Branch.

Drainage area.--16.7 sq mi.

Gage.--Recording. Altitude of gage is 62 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 520 cfs and extended on basis of slope-area measurements at 2,200 and 2,920 cfs.

Bankfull stage.--5 ft.

Remarks.--Base for partial-duration series, 400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948a/	Aug. 4, 1948	3.67	527	1954	Oct. 29, 1953	2.77	401
	Aug. 19, 1948	3.41	472		Dec. 14, 1953	3.06	471
1949	Dec. 4, 1948	4.26	745	1955	Aug. 13, 1955	7.33	3,000
	May 2, 1949	3.50	494		Aug. 14, 1955	3.77	664
1950	May 18, 1950	3.20	432		Aug. 18, 1955	3.75	658
	Sept. 11, 1950	6.63	2,200	1956	Oct. 14, 1955	6.02	1,710
1951	Nov. 25, 1950	3.56	602	1957	Nov. 1, 1956	3.15	494
	Dec. 4, 1950	3.02	461				
	June 10, 1951	2.97	449	1958	Dec. 20, 1957	2.91	434
	Sept. 2, 1951	3.09	478		July 9, 1958	4.25	828
1952	Dec. 21, 1951	4.49	916		Aug. 25, 1958	6.07	1,750
	Feb. 4, 1952	2.78	403	1959	June 2, 1959	4.72	1,010
	Apr. 27, 1952	2.98	451				
	July 9, 1952	4.46	904	1960	Feb. 19, 1960	3.65	628
	Sept. 1, 1952	6.26	1,890		Apr. 5, 1960	3.04	466
1953	Nov. 21, 1952	4.58	952		Aug. 31, 1960	2.97	449
	Jan. 24, 1953	3.00	456		Sept. 12, 1960	5.62	1,450
	Mar. 15, 1953	3.75	658	1961	Feb. 25, 1961	3.05	468
	Mar. 26, 1953	4.05	758		Apr. 13, 1961	4.32	852
	May 5, 1953	7.27	2,920		June 10, 1961	3.26	522
	May 31, 1953	2.98	451		Aug. 26, 1961	3.45	572
	June 6, 1953	3.12	486				

a Partial year.

6540. Accotink Creek near Annandale, Va.

Location.--Lat 38°48'40", long 77°13'50", on left bank at upstream side of bridge on State Highway 620, 0.2 mile upstream from Long Branch, and 2.3 miles southwest of Annandale, Fairfax County.

Drainage area.--23.6 sq mi.

Gage.--Nonrecording prior to May 12, 1949; recording thereafter. Datum of gage is 190.91 ft above mean sea level, datum of 1929, Culpeper supplementary adjustment of 1943 (levels by Stone & Webster Engineering Corp.).

Stage-discharge relation.--Defined by current-meter measurements below 1,200 cfs and extended above on basis of indirect measurement at 2,120 cfs.

Bankfull stage.--5 ft.

Remarks.--Subsequent to June 30, 1957, records furnished by Virginia Department of Conservation and Economic Development, Division of Water Resources. Base for partial-duration series, 400 cfs. Only annual peaks are shown prior to 1950.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	June 8, 1947	9.9	3,950	1954	Dec. 14, 1953	4.20	584
1948	June 20, 1948	a5.20	780		May 3, 1954	4.03	551
1949	Dec. 4, 1948	5.8	940				
1950	Mar. 23, 1950	5.62	880	1955	Mar. 6, 1955	3.85	477
	May 19, 1950	3.92	518		Aug. 13, 1955	9.05	2,500
	July 16, 1950	5.54	855		Aug. 18, 1955	7.89	1,640
	Aug. 20, 1950	5.14	764		Aug. 23, 1955	3.93	495
	Sept. 11, 1950	5.74	910	1956	Feb. 6, 1956	3.59	422
	Sept. 12, 1950	4.54	648		Mar. 14, 1956	4.78	686
1951	Oct. 23, 1950	3.65	460		July 5, 1956	4.78	686
	Nov. 25, 1950	4.33	606		July 21, 1956	6.94	1,240
	Dec. 4, 1950	6.73	1,300		July 23, 1956	5.48	840
	Dec. 8, 1950	3.58	448		Sept. 27, 1956	7.05	1,270
	Feb. 7, 1951	4.77	706	1957	Apr. 5, 1957	6.12	990
	Mar. 14, 1951	3.90	518				
	Mar. 20, 1951	3.44	412	1958	Dec. 21, 1957	5.69	865
	Apr. 3, 1951	3.41	400		Dec. 26, 1957	4.63	642
	June 10, 1951	4.35	628		Jan. 14, 1958	4.33	576
	June 13, 1951	6.38	1,170		July 9, 1958	4.69	664
	Sept. 14, 1951	3.81	484		July 23, 1958	3.71	444
1952	Dec. 21, 1951	4.20	584		Aug. 25, 1958	4.50	620
	Mar. 19, 1952	3.62	448	1959	July 12, 1959	4.53	620
	Apr. 25, 1952	5.72	910		Sept. 2, 1959	5.99	965
	May 25, 1952	3.68	472	1960	Feb. 19, 1960	6.62	1,140
	July 8, 1952	4.65	668		Apr. 5, 1960	5.33	796
	Aug. 13, 1952	3.75	484		May 28, 1960	3.73	455
	Sept. 1, 1952	9.10	2,560		May 30, 1960	4.39	598
1953	Nov. 21, 1952	7.03	1,450		Sept. 12, 1960	4.07	521
	Dec. 11, 1952	3.86	506	1961	Jan. 1, 1961	5.90	940
	Jan. 9, 1953	4.60	668		Apr. 13, 1961	6.06	965
	Jan. 24, 1953	3.82	495		July 13, 1961	5.48	840
	Mar. 16, 1953	3.75	484		Aug. 26, 1961	7.77	1,600
	Mar. 24, 1953	5.36	830		Sept. 3, 1961	5.77	915
	Apr. 13, 1953	3.63	460				
	May 5, 1953	8.41	2,120				
	May 14, 1953	3.56	436				

a Maximum observed.

6545. Long Branch near Annandale, Va.
(Published as "Little Run" prior to 1951)

Location.--Lat 38°48'39", long 77°14'07", on left bank at downstream side of bridge on State Highway 620, 0.3 mile upstream from Accotink Creek and 2.5 miles southwest of Annandale, Fairfax County.

Drainage area.--3.71 sq mi, approximately.

Gage.--Nonrecording prior to May 29, 1949, nonrecording and crest-stage gage May 28, 1949, to May 10, 1957, and crest-stage gage thereafter. Prior to Oct. 15, 1947, at upstream side of bridge at datum 0.06 ft higher. Oct. 15, 1947, to May 26, 1949, 150 ft downstream at datum 1.46 ft lower. Datum of gage is 198.15 ft above mean sea level, datum of 1929, Culpeper supplementary adjustment of 1943.

Stage-discharge relation.--Poorly defined for water years 1948-49. Defined by current-meter measurements below 220 cfs for 1947, and since May 1949.

Bankfull stage.-- 6 ft.

Remarks.--Peak for the 1959 water year furnished by Virginia Department of Conservation and Economic Development, Division of Water Resources. Base for partial-duration series, 60 cfs. Only annual peaks are shown prior to 1950, and since 1957.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	June 8, 1947	7.70	1,100	1953	Mar. 24, 1953	3.88	410
1948	May 30, 1948	a4.80	328		May 5, 1953	4.40	510
1949	May 15, 1949	a4.00	250		May 14, 1953	2.80	105
					May 16, 1953	3.20	230
1950	Mar. 23, 1950	3.18	230		May 31, 1953	4.18	470
	Apr. 28, 1950	2.85	116				
	May 15, 1950	2.80	105	1954	May 3, 1954	2.62	80
	May 18, 1950	3.24	245		June 15, 1954	2.67	85
	July 16, 1950	3.17	215				
	Sept. 11, 1950	3.48	310	1955	Mar. 6, 1955	2.50	71
1951	Oct. 23, 1950	2.75	98		Aug. 13, 1955	3.12	206
	Nov. 25, 1950	2.90	130		Aug. 18, 1955	3.41	288
	Dec. 4, 1950	3.80	385	1956	Feb. 6, 1956	2.40	63
	Mar. 14, 1951	2.45	70		Mar. 14, 1956	2.67	85
	Apr. 2, 1951	2.67	88		July 5, 1956	2.63	85
	June 13, 1951	5.20	680		July 21, 1956	3.5	310
	Sept. 14, 1951	2.70	93		Sept. 27, 1956	3.10	200
1952	Dec. 21, 1951	2.90	130	1957	Oct. 23, 1956	2.40	63
	Mar. 19, 1952	2.88	130		Jan. 23, 1957	2.56	76
	Apr. 25, 1952	2.89	130		Feb. 26, 1957	2.40	63
	May 25, 1952	2.90	130		Apr. 5, 1957	3.22	230
	May 31, 1952	2.95	170		May 14, 1957	2.62	80
	July 8, 1952	2.80	105				
	Sept. 1, 1952	a4.80	590	1959	1959	4.21	b470
1953	Nov. 20, 1952	3.50	310	1960	Feb. 18, 1960	2.88	161
	Dec. 11, 1952	2.76	98				
	Jan. 24, 1953	2.64	85	1961	Aug. 26, 1961	5.68	736
	Mar. 15, 1953	3.05	185				

a Maximum observed.

b Maximum for period July 7 to Sept. 10, 1959.

6550. Accotink Creek near Accotink Station, Va.

Location.--Lat 38°45'15", long 77°12'09", on left bank 100 ft upstream from highway bridge, 1.4 miles northwest of Accotink Station, Fairfax County, and 1.6 miles downstream from Calamo Branch.

Drainage area.--37.0 sq mi.

Gage.--Recording. Altitude of gage is 121 ft (by barometer).

Stage-discharge relation.--Defined by current-meter measurements below 910 cfs.

Remarks.--Base for partial-duration series, 600 cfs.

Peak stages and discharges of Accotink Creek near Accotink Station, Va.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	May 16, 1949	8.89	875	1954	Dec. 14, 1953	8.53	720
	May 23, 1949	8.05	600		Apr. 28, 1954	8.49	700
1950	Mar. 23, 1950	9.33	1,000		May 4, 1954	9.84	1,220
	May 19, 1950	7.92	630	1955	Mar. 6, 1955	9.29	1,020
	July 16, 1950	-	1,000		June 12, 1955	8.33	632
	Aug. 20, 1950	8.37	755		July 8, 1955	9.60	1,140
	Sept. 11, 1950	9.12	944		Aug. 13, 1955	14.21	3,120
	Sept. 12, 1950	8.92	888		Aug. 18, 1955	12.76	2,470
1951	Oct. 23, 1950	8.22	704		Aug. 23, 1955	8.96	884
	Dec. 4, 1950	10.24	1,280	1956	Oct. 14, 1955	8.82	820
	Feb. 7, 1951	8.45	755		Feb. 6, 1956	9.16	960
	June 10, 1951	8.28	729		Mar. 14, 1956	9.95	1,300
	June 14, 1951	10.32	1,320		July 5, 1956	9.80	1,220
1952	Dec. 21, 1951	8.61	760		July 21, 1956	11.19	1,780
	Apr. 26, 1952	10.09	1,110		July 22, 1956	11.94	1,900
	May 25, 1952	9.60	984		Sept. 28, 1956	10.98	1,700
	July 8, 1952	8.44	617	1957	Dec. 16, 1956	8.26	600
	Sept. 1, 1952	12.74	2,060		Dec. 23, 1956	8.48	700
1953	Nov. 22, 1952	11.06	1,470		Jan. 23, 1957	8.45	680
	Jan. 9, 1953	8.47	617		Feb. 26, 1957	8.41	660
	Mar. 24, 1953	9.05	770		Apr. 6, 1957	10.22	1,380
	May 6, 1953	11.87	1,760				

6555. Cedar Run near Warrenton, Va.

Location.--Lat 38°44'30", long 77°47'15", on right bank at downstream side of bridge on State Highway 672, 1.9 miles north of Warrenton, Fauquier County, and 14.5 miles upstream from Licking Run.

Drainage area.--13.0 sq mi.

Gage.--Recording. Datum of gage is 319.40 ft above mean sea level, datum of 1929, Culpeper supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements below 570 cfs and extended above on basis of areal study of flood of 1942.

Bankfull stage.--5 ft.

Remarks.--Subsequent to June 30, 1957, records furnished by Virginia Department of Conservation and Economic Development, Division of Water Resources. Base for partial-duration series, 250 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	October 1942	13	-	1956	July 5, 1956	7.76	1,150
1951	Oct. 8, 1950	6.83	515		July 20, 1956	8.84	2,200
	Nov. 25, 1950	6.68	475		July 23, 1956	7.92	1,300
	Dec. 4, 1950	8.42	1,800		Aug. 2, 1956	7.55	950
	Feb. 7, 1951	7.00	560	1957	Nov. 1, 1956	7.67	1,050
	June 10, 1951	7.22	650		Apr. 5, 1957	6.07	325
	June 30, 1951	6.09	335	1958	Dec. 26, 1957	6.72	475
1952	Feb. 3, 1952	6.53	438		Jan. 14, 1958	7.32	720
	Mar. 11, 1952	6.75	488		Jan. 25, 1958	6.43	412
	Mar. 19, 1952	5.51	256		July 23, 1958	5.77	278
	Apr. 28, 1952	5.67	284	1959	June 2, 1959	5.10	184
	Sept. 1, 1952	7.00	560				
1953	Nov. 21, 1952	8.11	1,500	1960	Feb. 18, 1960	7.10	600
	Dec. 11, 1952	6.72	475		Apr. 5, 1960	6.27	373
	Mar. 24, 1953	5.75	305		May 22, 1960	8.11	1,500
	May 15, 1953	7.84	1,250		May 30, 1960	6.00	328
1954	Aug. 20, 1954	5.74	302		June 19, 1960	7.74	1,150
					Sept. 12, 1960	9.16	2,580
1955	Oct. 15, 1954	7.76	1,150	1961	Feb. 19, 1961	5.55	260
	Mar. 6, 1955	5.93	304		Apr. 13, 1961	6.63	462
	May 23, 1955	6.54	435		May 12, 1961	7.30	720
	June 8, 1955	9.59	3,100		June 10, 1961	8.49	1,900
	Aug. 12, 1955	7.18	640		Sept. 8, 1961	8.57	1,950
	Aug. 18, 1955	7.96	1,350				
	Aug. 22, 1955	7.11	605				

6560. Cedar Run near Catlett, Va.

Location.--Lat 38°38'12", long 77°37'31", on right bank at downstream side of bridge on State Highway 233, 0.9 mile downstream from Licking Run, and 1.4 miles southeast of Catlett, Fauquier County.

Drainage area.--93.5 sq mi.

Gage.--Recording. Datum of gage is 199.15 ft above mean sea level, datum of 1929, Culpeper supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements below 5,000 cfs.

Remarks.--Subsequent to June 30, 1957, records furnished by Virginia Department of Conservation and Economic Development, Division of Water Resources. Base for partial-duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Oct. 15, 1942	22	-	1955	Aug. 23, 1955	8.06	1,600
1951	Nov. 25, 1950	8.00	1,570	1956	Feb. 6, 1956	8.34	1,700
	Dec. 4, 1950	14.60	5,570		Mar. 14, 1956	8.77	1,930
	Feb. 7, 1951	9.64	2,380		July 21, 1956	16.50	6,700
	Mar. 20, 1951	9.27	2,220	1957	Apr. 5, 1957	9.32	2,060
	June 10, 1951	13.14	4,520	1958	Dec. 20, 1957	10.45	2,570
	June 13, 1951	9.56	2,380		Dec. 26, 1957	9.80	2,280
	June 22, 1951	10.68	3,040		Jan. 14, 1958	10.18	2,470
1952	Dec. 21, 1951	9.05	2,070		Jan. 25, 1958	9.55	2,190
	Feb. 4, 1952	8.60	1,870		Mar. 20, 1958	9.20	2,010
	Apr. 27, 1952	9.22	2,170		May 4, 1958	9.76	2,280
1953	Nov. 21, 1952	14.17	5,290	1959	Mar. 6, 1959	7.46	1,320
	Jan. 9, 1953	8.72	1,920	1960	Feb. 19, 1960	11.35	3,290
	Mar. 16, 1953	8.10	1,620		Apr. 5, 1960	11.23	3,170
	Mar. 24, 1953	9.53	2,320		May 31, 1960	8.35	1,680
1954	Dec. 14, 1953	7.13	1,180		June 14, 1960	8.46	1,720
1955	Mar. 6, 1955	9.20	2,110		Sept. 12, 1960	9.58	2,260
	May 23, 1955	14.07	4,950	1961	Feb. 19, 1961	10.93	2,990
	June 8, 1955	17.25	7,300		Feb. 23, 1961	8.79	1,860
	June 12, 1955	10.53	2,790		Mar. 22, 1961	8.54	1,720
	Aug. 13, 1955	13.36	4,470		Apr. 10, 1961	8.38	1,680
	Aug. 15, 1955	8.57	1,830		Apr. 13, 1961	9.66	2,310
	Aug. 18, 1955	13.82	4,700				

6562. Broad Run near Warrenton, Va.

Location.--Lat 38°48'25", long 77°48'47", at bridge on State Highway 17, 1½ miles south of Old Tavern and 7 miles north of Warrenton, Fauquier County.

Drainage area.--2.94 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 610 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 22 cfs and extended above by logarithmic plotting.

Bankfull stage.--4 ft.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	July 16, 1950	5.12	70	1956	July 20, 1956	6.46	135
1951	December, 1950	5.73	97	1957	Nov. 2, 1956	5.80	100
1952	Sept. 1, 1952	4.92	63	1958	Jan. 14, 1958	4.47	48
1953	Nov. 21, 1952	5.92	105	1959	June 2, 1959	4.34	44
1954	Apr. 17, 1954	3.10	15	1960	Aug. 15, 1960	5.44	100
1955	June 8, 1955	6.68	150	1961	June 10, 1961	6.61	175

6565. Broad Run at Buckland, Va.

Location.--Lat 38°46'50", long 77°40'22", on right bank at downstream side of bridge on U.S. Highway 29, at Buckland, Prince William County, and 1.1 miles upstream from South Run.

Drainage area.--50.3 sq mi.

Gage.--Recording. Datum of gage is 284.58 ft above mean sea level, datum of 1929, Culpeper supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements below 8,200 cfs and extended above on basis of slope-area measurement at 11,600 cfs.

Remarks.--Subsequent to June 30, 1957, records furnished by Virginia Department of Conservation and Economic Development, Division of Water Resources. Base for partial-duration series, 650 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 25, 1950	5.33	1,200	1955	Aug. 14, 1955	4.66	888
	Dec. 4, 1950	8.97	3,750		Aug. 18, 1955	7.95	2,750
	Feb. 7, 1951	5.39	1,230		Aug. 23, 1955	7.49	2,470
	Mar. 19, 1951	4.41	725				
	Apr. 12, 1951	4.27	658	1956	Feb. 6, 1956	4.21	650
	June 10, 1951	5.40	1,230		Mar. 14, 1956	4.66	882
1952	June 13, 1951	4.58	820		July 5, 1956	6.21	1,740
	Dec. 21, 1951	3.86	742		July 20, 1956	13.08	11,600
	Feb. 4, 1952	4.70	1,100		July 23, 1956	5.28	1,240
	Mar. 11, 1952	4.78	1,140		Sept. 27, 1956	4.43	775
	Mar. 19, 1952	4.11	855	1957	Oct. 22, 1956	4.26	675
	Apr. 28, 1952	5.95	1,700		Nov. 2, 1956	4.39	750
1953	Sept. 1, 1952	4.58	1,060		Apr. 5, 1957	4.39	750
	Nov. 21, 1952	7.28	2,400	1958	Oct. 6, 1957	4.78	965
	Dec. 11, 1952	3.80	720		Dec. 21, 1957	5.40	1,300
	Mar. 24, 1953	4.14	878		Jan. 14, 1958	6.12	1,680
	May 15, 1953	5.59	1,500	1959	June 2, 1959	4.20	650
	May 17, 1953	4.32	940	1960	Feb. 18, 1960	5.36	1,270
1954	June 9, 1953	4.47	1,000		Apr. 5, 1960	5.87	1,360
	July 18, 1954	3.05	348		May 8, 1960	4.62	770
1955	Oct. 15, 1954	4.32	710		May 22, 1960	4.86	882
	Mar. 6, 1955	4.56	833		Aug. 15, 1960	4.98	950
	May 23, 1955	4.75	938	1961	Feb. 19, 1961	5.70	1,310
	June 8, 1955	6.50	1,900		Apr. 10, 1961	4.67	792
	July 8, 1955	4.50	800		Apr. 13, 1961	5.58	1,260
	Aug. 13, 1955	6.16	1,710				

6570. Bull Run near Manassas, Va.

Location.--Lat 38°47'50", long 77°27'30", on left bank at downstream side of bridge on State Highway 616, 0.5 mile downstream from Cub Run and 3.2 miles north of Manassas, Prince William County.

Drainage area.--147 sq mi.

Gage.--Recording. Datum of gage is 138.55 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 6,200 cfs.

Bankfull stage.--9 ft.

Remarks.--Subsequent to June 30, 1957, records furnished by Virginia Department of Conservation and Economic Development, Division of Water Resources. Base for partial-duration series, 2,500 cfs.

Peak stages and discharges of Bull Run near Manassas, Va.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 25, 1950	13.25	5,740	1956	Feb. 7, 1956	10.82	3,220
	Dec. 4, 1950	15.12	8,600		Mar. 14, 1956	12.06	4,510
	Feb. 7, 1951	11.95	4,400		July 5, 1956	16.45	11,200
	Feb. 21, 1951	9.96	2,600		July 21, 1956	15.73	9,800
	Mar. 14, 1951	10.31	2,820		July 23, 1956	11.74	4,070
	Mar. 20, 1951	11.08	3,490		Sept. 27, 1956	10.45	2,900
	Apr. 3, 1951	10.10	2,670				
	June 14, 1951	12.11	4,510	1957	Nov. 2, 1956	10.88	3,310
	July 1, 1951	10.25	2,740		Feb. 26, 1957	10.62	3,060
					Apr. 5, 1957	11.34	3,670
1952	Feb. 4, 1952	10.83	3,220	1958	Oct. 7, 1957	9.90	2,530
	Mar. 11, 1952	10.56	3,060		Dec. 21, 1957	15.10	8,600
	Mar. 19, 1952	10.50	2,980		Dec. 26, 1957	12.33	4,730
	Apr. 26, 1952	12.25	4,620		Jan. 15, 1958	13.36	5,990
	Apr. 28, 1952	10.78	3,220		Jan. 25, 1958	10.64	3,060
	May 12, 1952	10.40	2,900		Feb. 7, 1958	10.02	2,600
	Sept. 1, 1952	10.97	3,400		Mar. 21, 1958	10.65	3,060
1953	Nov. 22, 1952	16.37	11,200		Mar. 23, 1958	10.60	3,060
	Jan. 9, 1953	11.34	3,670		Apr. 7, 1958	10.23	2,740
	Jan. 24, 1953	10.02	2,600		May 7, 1958	10.26	2,820
	Mar. 13, 1953	9.88	2,530	1959	Mar. 6, 1959	10.15	2,740
	Mar. 16, 1953	10.32	2,820		Sept. 2, 1959	13.53	6,120
	Mar. 24, 1953	11.53	3,870	1960	Feb. 19, 1960	13.23	5,760
	May 18, 1953	10.20	2,740		Apr. 5, 1960	13.51	6,150
1954	Dec. 14, 1953	9.02	1,960		May 9, 1960	10.04	2,870
	Mar. 1, 1954	9.01	1,960		May 28, 1960	10.27	2,960
1955	Mar. 7, 1955	10.93	3,340		May 31, 1960	10.21	2,780
	Mar. 22, 1955	10.16	2,710	1961	Feb. 20, 1961	13.78	6,540
	May 23, 1955	10.22	2,760		Feb. 23, 1961	10.47	3,050
	Aug. 13, 1955	16.23	10,900		Mar. 23, 1961	11.04	3,500
	Aug. 15, 1955	10.41	2,910		Apr. 10, 1961	10.13	2,730
	Aug. 18, 1955	14.56	7,640		Apr. 13, 1961	11.86	4,310
	Aug. 23, 1955	11.16	3,540				

6575. Occoquan Creek near Occoquan, Va.

Location.--Lat 38°42'20", long 77°19'35", on left bank 1.6 miles upstream from Sandy Run, 4.8 miles upstream from Occoquan, Prince William County, and 5.9 miles downstream from Bull Run.

Drainage area.--570 sq mi.

Gage.--Nonrecording prior to Apr. 27, 1913; recording thereafter. Datum of gage is 76.21 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 15,000 cfs and extended above by logarithmic plotting.

Bankfull stage.--15 ft.

Remarks.--Base for partial-duration series, 8,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1913	Apr. 13, 1913	19.0	17,200	1939	Jan. 31, 1939	16.78	12,100
1914	Jan. 4, 1914	13.8	9,540		Feb. 4, 1939	14.65	8,990
1915	Jan. 13, 1915	21.2	20,900	1940	Apr. 9, 1940	15.26	9,930
	Feb. 2, 1915	17.67	15,200		Apr. 20, 1940	15.37	10,100
	June 2, 1915	17.55	15,100	1941	Apr. 6, 1941	15.36	10,100
1916	Mar. 28, 1916	15.51	11,900	1942	Aug. 9, 1942	18.56	14,900
1921	May 13, 1921	14.11	9,970	1943	Oct. 16, 1942	27.6	37,000
1922	Feb. 20, 1922	11.30	6,330		Oct. 27, 1942	15.15	9,790
1923	Mar. 17, 1923	11.46	6,520	1944	Nov. 9, 1943	20.42	18,200
					Jan. 4, 1944	16.14	11,000
1937	Apr. 26, 1937	24.87	29,200	1945	Dec. 12, 1944	14.7	9,340
	Aug. 27, 1937	18.40	14,500		July 18, 1945	17.0	12,400
					Aug. 2, 1945	15.6	10,500
1938	Oct. 20, 1937	14.78	9,250		Sept. 19, 1945	21.1	19,600
	Oct. 23, 1937	15.43	10,100				

a Maximum for period Feb. 14 to Sept. 30, 1913.

Peak stages and discharges of Occoquan Creek near Occoquan, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	May 21, 1946	15.5	10,400	1951	Feb. 8, 1951	13.95	8,600
	May 28, 1946	21.34	20,000		Mar. 20, 1951	13.93	8,380
1947	June 15, 1947	11.79	5,940		June 10, 1951	14.1	8,620
					June 14, 1951	15.92	10,900
1948	Apr. 1, 1948	14.80	9,460	1952	Dec. 22, 1951	13.63	8,020
	May 7, 1948	13.82	8,260		Apr. 26, 1952	16.41	11,600
	May 14, 1948	15.61	10,500		Sept. 1, 1952	13.69	8,140
	Aug. 5, 1948	14.92	9,580	1953	Nov. 22, 1952	21.47	20,500
	Aug. 13, 1948	14.52	9,100		Jan. 9, 1953	13.75	8,260
1949	Nov. 29, 1948	16.68	12,000		Mar. 24, 1953	14.37	8,980
	Dec. 4, 1948	20.34	18,000	1954	Dec. 14, 1953	11.31	5,400
	Dec. 31, 1948	15.58	10,500	1955	May 24, 1955	16.08	11,300
	Jan. 6, 1949	14.66	9,340		June 9, 1955	16.76	12,300
	Mar. 23, 1949	14.74	9,340		Aug. 13, 1955	21.34	19,700
1950	Mar. 23, 1950	17.82	13,600		Aug. 19, 1955	21.20	19,600
	May 19, 1950	14.37	8,980		Aug. 23, 1955	13.59	8,110
1951	Nov. 26, 1950	15.33	10,100	1956	Mar. 15, 1956	15.17	b9,790
	Dec. 5, 1950	19.47	16,400				

b Maximum for period Oct. 1 to June 13, 1956.

6580. Mattawoman Creek near Pomonkey, Md.

Location.--Lat 38°35'45", long 77°03'25", on left bank 50 ft downstream from bridge on State Highway 227, 80 ft downstream from Old Womans Run, and 1.2 miles southeast of Pomonkey, Charles County.

Drainage area.--57.7 sq mi.

Gage.--Recording. Altitude of gage is 40 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 6,000 cfs.

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Mar. 24, 1950	4.61	510	1956	Feb. 8, 1956	4.18	470
	May 19, 1950	4.86	640		Mar. 16, 1956	4.29	534
	Sept. 11, 1950	5.88	1,920		July 5, 1956	4.20	480
1951	Dec. 5, 1950	4.41	425	1957	Nov. 1, 1956	4.34	568
1952	Dec. 22, 1951	5.55	1,380		Mar. 2, 1957	4.19	475
	Jan. 29, 1952	4.37	505	1958	Dec. 9, 1957	4.38	486
	Feb. 5, 1952	4.59	615		Dec. 22, 1957	4.51	699
	Apr. 27, 1952	4.95	828		Dec. 28, 1957	4.24	504
	Sept. 1, 1952	5.37	1,170		Jan. 26, 1958	4.18	470
1953	Nov. 22, 1952	5.30	1,100		Feb. 28, 1958	4.57	753
	Dec. 12, 1952	4.20	425		Mar. 21, 1958	5.04	1,300
	Jan. 11, 1953	4.41	525		May 4, 1958	4.09	426
	Feb. 16, 1953	4.16	407		Aug. 26, 1958	4.99	1,230
	Mar. 27, 1953	4.94	821	1959	June 3, 1959	4.13	402
	Apr. 14, 1953	4.33	485	1960	Feb. 20, 1960	4.56	744
1954	Dec. 15, 1953	4.33	485		Apr. 6, 1960	4.70	880
1955	Mar. 8, 1955	4.12	440		Sept. 2, 1960	4.25	510
	June 11, 1955	4.15	455		Sept. 13, 1960	5.60	2,280
	July 24, 1955	4.93	1,150	1961	Jan. 2, 1961	4.36	582
	Aug. 13, 1955	7.52	9,300		Feb. 19, 1961	5.03	1,280
	Aug. 19, 1955	5.06	1,320		Feb. 24, 1961	4.32	554
	Aug. 24, 1955	4.32	554		Mar. 23, 1961	4.38	596
1956	Oct. 14, 1955	5.69	2,480		Apr. 14, 1961	4.93	1,150

6585. South Fork Quantico Creek near Independent Hill, Va.

Location.--Lat 38°35'14", long 77°25'44", on left bank at upstream side of bridge on State Highway 619, 3.4 miles south of Independent Hill, Prince William County, 5.6 miles west of Dumfries, and 6.5 miles upstream from Quantico Creek.

Drainage area.--7.50 sq mi.

Gage.--Recording. Datum of gage is 238.88 ft above mean sea level, datum of 1929, Culpeper supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements below 760 cfs.

Bankfull stage.--5 ft.

Remarks.--Base for partial-duration series, 120 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951a	June 10, 1951	5.92	291	1956	July 23, 1956	5.44	245
	June 13, 1951	5.25	225	1957	Oct. 23, 1956	4.90	166
	June 22, 1951	6.33	339		Feb. 26, 1957	4.95	170
1952	Dec. 21, 1951	6.69	420		Apr. 5, 1957	7.12	495
	Jan. 28, 1952	4.17	129	1958	Oct. 6, 1957	5.30	198
	Feb. 4, 1952	4.55	161		Dec. 20, 1957	7.06	475
	Mar. 19, 1952	4.69	174		Dec. 26, 1957	5.35	202
	Apr. 25, 1952	5.98	302		Jan. 14, 1958	5.94	255
	Sept. 1, 1952	7.98	870		Jan. 25, 1958	4.52	136
1953	Nov. 21, 1952	7.76	800		Mar. 20, 1958	5.03	178
	Jan. 9, 1953	4.22	133		Apr. 23, 1958	4.64	146
	Jan. 24, 1953	4.30	141		Apr. 28, 1958	4.70	150
	Mar. 13, 1953	4.17	129		May 4, 1958	5.93	255
	Mar. 15, 1953	5.84	280		July 27, 1958	4.77	154
	Mar. 24, 1953	5.16	215		Aug. 25, 1958	8.31	1,000
	Apr. 13, 1953	4.70	170	1959	Jan. 2, 1959	4.29	129
	May 20, 1953	4.40	149		Mar. 6, 1959	4.46	141
1954	Dec. 14, 1953	4.80	183		Sept. 2, 1959	4.28	129
	Mar. 1, 1954	4.51	157	1960	Jan. 3, 1960	4.52	145
1955	Mar. 6, 1955	5.48	248		Feb. 18, 1960	6.67	370
	May 23, 1955	7.49	692		Apr. 5, 1960	6.54	352
	June 11, 1955	4.26	138		May 8, 1960	5.93	275
	Aug. 13, 1955	7.37	650		May 28, 1960	4.41	137
	Aug. 15, 1955	4.23	135		June 14, 1960	7.84	775
	Aug. 18, 1955	6.83	460	1961	Jan. 1, 1961	5.68	250
1956	Feb. 6, 1956	5.19	220		Feb. 19, 1961	5.46	226
	Mar. 14, 1956	5.00	201		Mar. 22, 1961	4.93	181
	Apr. 7, 1956	4.53	161		Apr. 13, 1961	5.40	221
	July 5, 1956	7.42	660		Aug. 26, 1961	4.26	126
					Sept. 7, 1961	7.01	450

a Period May 1 to Sept. 30.

6590. North Branch Chopawamsic Creek near Independent Hill, Va.

Location.--Lat 38°33'58", long 77°25'48", on left bank 1.0 mile upstream from Chopawamsic Creek, 4.8 miles south of Independent Hill, Prince William County, and 5.5 miles west of Dumfries.

Drainage area.--5.79 sq mi.

Gage.--Recording. Datum of gage is 216.43 ft above mean sea level (Bureau of Yards and Docks bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 275 cfs.

Bankfull stage.--6 ft.

Remarks.--Base for partial-duration series, 90 cfs.

Peak stages and discharges of North Branch Chopawamsic Creek
near Independent Hill, Va.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951a/	June 10, 1951	5.59	144	1953	May 20, 1953	5.22	122
	June 13, 1951	5.20	122	1954	Dec. 14, 1953	4.95	110
	June 22, 1951	7.69	276		Mar. 1, 1954	4.95	110
1952	Dec. 21, 1951	7.31	248	1955	Mar. 6, 1955	5.39	132
	Jan. 28, 1952	4.70	97		May 24, 1955	7.35	252
	Feb. 4, 1952	4.61	102		June 11, 1955	4.90	107
	Mar. 19, 1952	5.07	114		Aug. 13, 1955	7.74	279
	Apr. 27, 1952	6.25	180		Aug. 15, 1955	7.61	270
	July 17, 1952	4.55	90		Aug. 18, 1955	7.42	256
	Sept. 1, 1952	7.12	234	1956	Feb. 6, 1956	4.95	110
1953	Nov. 21, 1952	8.04	298		Mar. 14, 1956	4.76	102
	Jan. 9, 1953	4.62	92		July 5, 1956	6.08	174
	Jan. 24, 1953	4.86	104	1957b/	Oct. 22, 1956	5.38	132
	Mar. 13, 1953	4.78	102		Feb. 26, 1957	4.70	97
	Mar. 16, 1953	6.42	192		Apr. 5, 1957	7.22	241
	Mar. 24, 1953	5.67	147				
	Apr. 13, 1953	5.21	122				

a Period May 1 to Sept. 30.

b Period Oct. 1 to June 30.

6595. Middle Fork Chopawamsic Creek near Garrisonville, Va.

Location.--Lat 38°33'26", long 77°25'32", on left bank 300 ft upstream from highway culvert, 0.4 mile upstream from confluence with North Branch Chopawamsic Creek, and 5.6 miles north of Garrisonville, Stafford County.

Drainage area.--4.51 sq mi.

Gage.--Recording. Datum of gage is 192.48 ft above mean sea level (Bureau of Yards and Docks bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 200 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 60 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951a/	June 10, 1951	3.98	95	1953	May 20, 1953	3.86	84
	June 22, 1951	4.98	220	1954	Dec. 14, 1953	3.39	47
1952	Dec. 21, 1951	4.48	149		Mar. 22, 1955	4.46	98
	Mar. 19, 1952	3.68	63	1955	May 23, 1955	5.25	190
	Apr. 27, 1952	4.09	106		Aug. 13, 1955	5.80	340
	Sept. 1, 1952	4.14	111		Aug. 18, 1955	5.15	242
1953	Nov. 21, 1952	5.11	235	1956	Feb. 6, 1956	3.54	58
	Mar. 15, 1953	4.29	127		Apr. 5, 1957	4.84	198
	Mar. 24, 1953	3.82	81				
	Apr. 13, 1953	3.63	65				

a Period May 1 to Sept. 30.

b Period Oct. 1 to June 30.

6600. South Branch Chopawamsic Creek near Garrisonville, Va.

Location.--Lat 38°32'22", long 77°25'30", on right bank 1.8 miles upstream from mouth and 4.3 miles north of Garrisonville, Stafford County.

Drainage area.--2.56 sq mi.

Gage.--Recording. Datum of gage is 206.03 ft above mean sea level (Bureau of Yards and Docks bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 150 cfs and extended above by logarithmic plotting.

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 50 cfs.

Peak stages and discharges of South Branch Chopawamsic Creek near Garrisonville, Va.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951a/	June 10, 1951	3.87	70	1953	May 31, 1953	3.56	58
	June 22, 1951	3.53	60		July 8, 1953	3.62	60
1952	Dec. 21, 1951	4.67	102	1954	Oct. 29, 1953	3.99	76
	Mar. 19, 1952	3.62	60		Mar. 1, 1954	3.81	54
	Apr. 25, 1952	3.78	68		May 29, 1954	5.00	126
	July 16, 1952	3.52	56		Aug. 19, 1954	4.06	72
	Sept. 1, 1952	6.50	261	1955	Aug. 12, 1955	3.53	53
1953	Nov. 21, 1952	6.17	234		Aug. 18, 1955	4.72	106
	Mar. 15, 1953	7.07	320	1956	Feb. 6, 1956	3.54	58
	Mar. 24, 1953	4.94	122		Oct. 22, 1956	4.21	80
	Apr. 13, 1953	3.66	62				
	May 20, 1953	4.42	92				

a Period May 2 to Sept. 30.

b Period Oct. 1 to June 30.

6605. Beaverdam Run near Garrisonville, Va.

Location.--Lat 38°30'25", long 77°25'45", on left bank 2.2 miles north of Garrisonville, Stafford County, and 3.4 miles upstream from mouth.

Drainage area.--12.7 sq mi.

Gage.--Recording. Datum of gage is 150.43 ft above mean sea level (Bureau of Yards and Docks bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 790 cfs and extended above by logarithmic plotting.

Bankfull stage.--6 ft.

Remarks.--Base for partial-duration series, 150 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951a/	June 10, 1951	4.24	230	1954	Dec. 14, 1953	3.70	123
	June 22, 1951	4.43	269				
1952	Dec. 21, 1951	4.96	408	1955	May 6, 1955	3.99	180
	Mar. 19, 1952	3.98	178		June 8, 1955	4.61	312
	Apr. 27, 1952	4.75	348		June 11, 1955	4.31	244
	Sept. 1, 1952	4.00	182		Aug. 13, 1955	6.61	1,110
					Aug. 15, 1955	7.03	1,370
					Aug. 18, 1955	6.06	837
1953	Nov. 21, 1952	6.34	975	1956	Feb. 6, 1956	3.91	164
	Mar. 16, 1953	4.87	381		Mar. 14, 1956	3.98	178
	Mar. 24, 1953	4.30	242	1957b/	Apr. 6, 1957	4.17	216
	Apr. 13, 1953	4.29	240				
	May 20, 1953	4.47	278				

a Period May 2 to Sept. 30.

b Period Oct. 1 to June 30.

6610. Chaptico Creek at Chaptico, Md.

Location.--Lat 38°22'45", long 76°46'50", on right bank at downstream side of highway culvert, 0.8 mile north of Chaptico, St. Marys County, and 0.8 mile upstream from Chaptico Bay.

Drainage area.--10.7 sq mi.

Gage.--Recording. Altitude of gage is 15 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 410 cfs and extended on basis of slope-area measurement at 7,600 cfs.

Bankfull stage.--3 ft.

Remarks.--Base for partial-duration series, 160 cfs.

Peak stages and discharges of Chaptico Creek at Chaptico, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Jan. 13, 1948	4.69	198	1957	Dec. 16, 1956	4.34	230
	Aug. 4, 1948	4.94	265		Mar. 9, 1957	3.89	164
1949	Dec. 4, 1948	4.82	230	1958	Oct. 6, 1957	3.93	169
	Jan. 22, 1949	4.81	227		Dec. 9, 1957	4.03	181
	May 3, 1949	5.03	295		Dec. 21, 1957	4.33	228
	May 8, 1949	4.93	262		Jan. 14, 1958	4.47	254
1950	Sept. 10, 1950	8.56	7,800		Jan. 25, 1958	4.42	245
1951	Nov. 25, 1950	4.18	160		Feb. 28, 1958	3.88	163
	Aug. 8, 1951	4.37	177		Mar. 20, 1958	4.87	351
1952	Dec. 21, 1951	5.00	284		Apr. 11, 1958	3.94	170
	Jan. 28, 1952	4.23	164		May 7, 1958	4.10	190
	Feb. 4, 1952	4.18	160		June 26, 1958	3.86	160
	Sept. 1, 1952	5.10	420		July 27, 1958	4.83	339
1953	Nov. 21, 1952	4.60	280		Aug. 17, 1958	4.44	249
	Jan. 9, 1953	4.26	215	1959	Aug. 25, 1958	6.24	1,130
	Jan. 24, 1953	4.70	305		Dec. 30, 1958	4.25	214
	Mar. 16, 1953	4.15	198		June 3, 1959	3.86	160
	Mar. 26, 1953	4.12	193	1960	July 15, 1959	4.56	272
	May 20, 1953	4.21	207		Feb. 19, 1960	4.25	214
1954	Oct. 29, 1953	4.88	354		Apr. 5, 1960	4.51	262
	Dec. 14, 1953	4.15	198	1961	May 31, 1960	3.92	167
1955	Mar. 6, 1955	4.20	205		June 14, 1960	4.48	256
	June 11, 1955	3.86	160		July 30, 1960	4.04	182
	Aug. 12, 1955	6.16	1,050		Aug. 6, 1960	4.04	182
	Aug. 18, 1955	4.73	312		Sept. 12, 1960	4.50	260
1956	June 2, 1956	4.43	247		Jan. 1, 1961	4.36	200
	July 21, 1956	4.79	328		Feb. 19, 1961	4.87	341
					Feb. 23, 1961	4.38	205
					Mar. 22, 1961	4.33	192
					Apr. 13, 1961	4.57	252

6615. St. Marys River at Great Mills, Md.

Location.--Lat 38°14'36", long 76°30'13", on left bank at downstream side of bridge on State Highway 471 in Great Mills, St. Marys County, 0.3 mile downstream from Western Branch.

Drainage area.--24.0 sq mi.

Gage.--Recording. Altitude of gage is 10 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,500 cfs and extended on basis of contracted-opening measurement at 4,900 cfs.

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	Apr. 16, 1947	5.73	420	1951	Aug. 8, 1951	6.63	520
1948	Jan. 13, 1948	8.50	1,040	1952	Dec. 21, 1951	6.39	497
	July 15, 1948	6.57	520		Jan. 29, 1952	7.44	620
	Aug. 2, 1948	6.37	497		Feb. 4, 1952	6.55	520
	Aug. 4, 1948	9.32	1,560		Mar. 24, 1952	6.29	486
1949	Dec. 4, 1948	6.93	556		Apr. 27, 1952	6.22	475
	Jan. 22, 1949	6.30	486	1953	Nov. 21, 1952	5.82	433
	July 16, 1949	9.91	2,020		Feb. 15, 1953	6.87	552
1950	Oct. 31, 1949	7.67	659		Aug. 14, 1953	7.68	656
	Mar. 23, 1950	6.02	453	1954	Jan. 27, 1954	4.55	296
	Aug. 20, 1950	5.71	420				

Peak stages and discharges of St. Marys River at Great Mills, Md.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Aug. 13, 1955	11.77	4,350	1958	Aug. 16, 1958	7.92	786
	Aug. 18, 1955	5.83	434		Aug. 25, 1958	10.87	3,030
1956	June 2, 1956	4.22	263	1959	July 15, 1959	7.09	580
1957	Nov. 2, 1956	10.66	2,780	1960	Apr. 5, 1960	6.72	538
1958	Jan. 14, 1958	7.08	578		July 30, 1960	12.08	4,900
	Mar. 20, 1958	8.14	866		Sept. 12, 1960	9.25	1,520
	Apr. 11, 1958	5.82	433	1961	Jan. 1, 1961	7.66	712
	May 26, 1958	8.24	910		May 11, 1961	6.50	508

RAPPAHANNOCK RIVER BASIN

6620. Rappahannock River near Warrenton, Va.

Location.--Lat 38°41'05", long 77°54'15", on left bank 50 ft downstream from bridge on U.S. Highway 211, 0.9 mile downstream from Carter Run, 6.2 miles southwest of Warrenton, Fauquier County, 15 miles upstream from Hazel River, and at mile 53.0.

Drainage area.--192 sq mi.

Gage.--Nonrecording prior to Dec. 18, 1944; recording thereafter. Datum of gage is 312.57 ft above mean sea level, datum of 1929, Culpeper supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements below 24,000 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 1,800 cfs. Only annual peaks are shown prior to 1945.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Oct. 15, 1942	23.5	32,000	1952	Feb. 4, 1952	8.59	2,720
1944	Jan. 4, 1944	11.0	4,520		Mar. 11, 1952	9.85	3,470
					Apr. 28, 1952	9.38	3,200
1945	Aug. 1, 1945	12.15	5,920	1953	Nov. 22, 1952	14.49	7,640
	Sept. 18, 1945	12.3	6,050		Mar. 24, 1953	7.58	2,200
1946	May 28, 1946	10.1	3,690		May 15, 1953	8.72	2,780
	Aug. 2, 1946	10.8	4,320	1954	Mar. 1, 1954	5.91	1,350
1947	June 14, 1947	6.44	1,600				
1948	Apr. 1, 1948	8.94	2,900	1955	Oct. 15, 1954	7.62	2,210
	July 14, 1948	6.95	1,900		Aug. 13, 1955	12.08	5,220
	Aug. 1, 1948	6.93	1,850		Aug. 18, 1955	16.56	10,500
	Aug. 4, 1948	8.85	2,840		Aug. 23, 1955	7.89	2,340
	Aug. 12, 1948	7.88	2,350	1956	July 21, 1956	13.05	6,050
1949	Oct. 6, 1948	7.85	2,300		July 23, 1956	7.87	2,350
	Nov. 29, 1948	8.21	2,500	1957	Oct. 27, 1956	6.53	1,650
	Dec. 4, 1948	6.92	1,850				
	Dec. 30, 1948	8.67	2,780	1958	Dec. 26, 1957	7.11	1,950
	Jan. 6, 1949	7.28	2,050		Jan. 14, 1958	10.00	3,610
	Mar. 23, 1949	7.02	1,900		Jan. 25, 1958	7.13	1,950
	Apr. 14, 1949	8.81	2,840	1959	June 2, 1959	8.96	2,960
	May 3, 1949	7.92	2,350				
	May 15, 1949	9.88	3,540	1960	Feb. 19, 1960	7.52	2,150
	May 23, 1949	7.02	1,900		Apr. 5, 1960	10.62	4,040
	Aug. 4, 1949	7.25	2,000		May 23, 1960	8.48	2,660
1950	Sept. 13, 1950	9.24	3,080		June 14, 1960	10.77	4,200
1951	Nov. 25, 1950	9.0	2,960	1961	Feb. 25, 1961	8.56	2,720
	Dec. 4, 1950	18.31	14,200		Apr. 13, 1961	11.16	4,520
	Dec. 8, 1950	10.75	4,200		May 13, 1961	11.69	4,920
	Feb. 7, 1951	8.74	2,780		June 11, 1961	8.63	2,720
	Apr. 12, 1951	6.95	1,900				
	June 13, 1951	7.27	2,050				

RAPPAHANNOCK RIVER BASIN

6625. Rush River at Washington, Va.

Location.--Lat 38°43', long 78°09', on left bank 20 ft upstream from bridge on U.S. Highway 211 and 522, half a mile east of Washington, Rappahannock County.

Drainage area.--15.2 sq mi.

Gage.--Recording. Datum of gage is 597.97 ft above mean sea level, datum of 1929, Culpeper supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements below 1,300 cfs.

Bankfull stage.--5 ft.

Remarks.--Subsequent to June 30, 1957, records furnished by Virginia Department of Conservation and Economic Development, Division of Water Resources. Base for partial-duration series, 350 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Mar. 1, 1954	4.30	610	1958	July 14, 1958	3.64	416
1955	Oct. 15, 1954	4.80	765	1959	June 2, 1959	3.89	483
	Aug. 13, 1955	3.89	480		Sept. 30, 1959	5.26	935
	Aug. 18, 1955	8.14	2,500	1960	Oct. 24, 1959	3.72	429
1956	July 20, 1956	4.05	525		May 8, 1960	4.06	525
	July 22, 1956	3.53	588		May 21, 1960	5.43	1,020
					May 30, 1960	3.80	456
1957	May 14, 1957	3.13	282	1961	May 12, 1961	3.73	442

6630. Thornton River near Laurel Mills, Va.

Location.--Lat 38°38', long 78°04', near left bank on downstream side of bridge on State Highway 729, 2 miles southeast of Laurel Mills, Rappahannock County, 3 miles downstream from Battle Run, and 4.5 miles upstream from mouth.

Drainage area.--142 sq mi.

Gage.--Nonrecording and since Nov. 21, 1950, crest-stage gage. Datum of gage is 342.43 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,600 cfs and extended above on basis of slope-area measurement at 26,000 cfs.

Remarks.--Base for partial-duration series, 1,500 cfs. Only annual peaks are shown prior to 1951.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)			
1943	Oct. 15, 1942	26.8	440,000	1952	Feb. 4, 1952	10.15	3,950			
1944	Sept.18, 1944	8.0	2,110		Mar. 11, 1952	11.58	4,990			
1945	Sept.18, 1945	11.30	4,640		Apr. 28, 1952	8.10	2,630			
					Aug. 6, 1952	15.7	10,000			
					Sept. 1, 1952	9.15	3,230			
1946	May 28, 1946	9.08	2,840	1953	Nov. 21, 1952	14.00	7,450			
1947	Aug. 18, 1947	8.2	2,250							
1948	Nov. 3, 1947	14.0	7,500							
1949	Apr. 13, 1949	12.9	6,240							
1950	Sept.12, 1950	10.6	4,030							
1951	Dec. 4, 1950	17.22	13,000	1954	Mar. 2, 1954	10.18	3,950			
	Dec. 8, 1950	-	3,240							
	Feb. 7, 1951	13.85	7,190	1955	Oct. 15, 1954	10.05	3,840			
	Mar. 13, 1951	-	3,240							
	Apr. 12, 1951	9.98	3,590					Aug. 13, 1955	10.5	4,700
	June 13, 1951	-	1,500					Aug. 18, 1955	21.50	26,500
1952	Dec. 5, 1951	7.50	2,270	1956	July 20, 1956	10.30	4,500			
	Dec. 21, 1951	6.80	1,900					July 23, 1956	9.00	3,300

a About.

6635. Hazel River at Rixeyville, Va.

Location.--Lat 38°35'30", long 77°57'55", on right bank at downstream side of bridge on State Highway 229, 0.4 mile upstream from Waterford Run, 1.1 miles northeast of Rixeyville, Culpeper County, 2.8 miles downstream from Thornton River, and 9.1 miles upstream from mouth.

Drainage area.--286 sq mi.

Gage.--Recording. Datum of gage is 288.30 ft above mean sea level, datum of 1929, supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements below 27,000 cfs and extended above by logarithmic plotting.

Bankfull stage.--13 ft.

Remarks.--Base for partial-duration series, 2,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Apr. 26, 1937	28.4	43,500	1951	June 10, 1951	10.93	3,480
					June 13, 1951	10.15	3,090
1942	Aug. 9, 1942	13.75	5,420				
	Sept. 28, 1942	13.24	4,910	1952	Dec. 5, 1951	10.78	3,420
					Dec. 21, 1951	9.14	2,520
1943	Oct. 15, 1942	31.8	60,000		Feb. 4, 1952	14.37	6,020
	Dec. 30, 1942	13.28	4,990		Mar. 11, 1952	15.5	7,420
	Apr. 20, 1943	9.27	2,500		Apr. 28, 1952	12.43	4,370
					Aug. 6, 1952	14.05	5,600
1944	Sept. 19, 1944	9.49	2,720		Sept. 1, 1952	10.64	3,310
1945	Sept. 18, 1945	15.85	7,840	1953	Nov. 22, 1952	18.6	12,700
					Jan. 24, 1953	9.06	2,520
1946	May 28, 1946	13.7	5,330		Mar. 24, 1953	12.63	4,510
					May 15, 1953	13.03	4,790
1947	Aug. 18, 1947	12.5	4,440				
				1954	Mar. 1, 1954	12.80	4,650
1948	Nov. 4, 1947	19.77	15,300				
	Apr. 1, 1948	13.70	5,330	1955	Oct. 16, 1954	14.30	5,910
	Aug. 1, 1948	12.44	4,370		Aug. 13, 1955	14.05	5,650
	Aug. 4, 1948	10.15	3,090		Aug. 18, 1955	25.97	33,700
	Aug. 12, 1948	12.54	4,440				
1949	Oct. 6, 1948	12.06	4,180	1956	July 21, 1956	12.95	4,790
	Nov. 29, 1948	10.10	3,040		July 23, 1956	11.97	4,120
	Dec. 4, 1948	10.81	3,420	1957	Oct. 27, 1956	10.70	3,360
	Dec. 30, 1948	10.48	3,260				
	Mar. 23, 1949	11.91	4,060	1958	Dec. 26, 1957	10.73	3,360
	Apr. 14, 1949	18.40	12,300		Jan. 14, 1958	12.88	4,720
	May 3, 1949	16.24	8,420		July 12, 1958	9.87	2,920
	June 19, 1949	10.49	3,260				
	June 28, 1949	9.62	2,820	1959	June 2, 1959	14.46	6,140
	July 15, 1949	10.80	3,480				
	Aug. 4, 1949	10.90	3,500	1960	Oct. 1, 1959	14.21	5,800
	Aug. 29, 1949	11.55	3,760		Feb. 19, 1960	12.03	4,120
					Apr. 5, 1960	12.25	4,240
1950	June 1, 1950	10.11	3,040		May 8, 1960	11.92	4,060
	Sept. 12, 1950	11.9	4,060		May 21, 1960	11.70	3,940
	Sept. 13, 1950	15.3	7,160				
				1961	Feb. 19, 1961	9.84	3,250
1951	Nov. 25, 1950	10.42	3,200		Feb. 25, 1961	11.52	4,120
	Dec. 4, 1950	21.36	19,300		Apr. 10, 1961	9.17	2,950
	Dec. 8, 1950	15.90	7,980		Apr. 13, 1961	15.00	6,770
	Feb. 7, 1951	10.61	3,310		Apr. 16, 1961	8.72	2,700
	Mar. 14, 1951	10.21	3,090		May 13, 1961	10.69	3,700
	Apr. 12, 1951	11.00	3,530				

a Annual peak only.

6640. Rappahannock River at Remington, Va.

Location.--Lat 38°31'50", long 77°48'50", on left bank 80 ft upstream from bridge on U.S. Highway 29 at Remington, Fauquier County, 0.3 mile upstream from Tinpot Run, 0.4 mile downstream from Ruffans Run, 2.5 miles downstream from Hazel River, and at mile 35.2.

Drainage area.--616 sq mi.

Gage.--Nonrecording prior to Nov. 21, 1951; recording thereafter. Datum of gage is 252.53 ft above mean sea level, datum of 1929, Culpeper supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements below 43,000 cfs and extended above on basis of slope-area measurement at 90,000 cfs.

Bankfull stage.--13 ft.

Remarks.--Base for partial-duration series, 6,000 cfs. Only annual peaks shown prior to 1952.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Oct. 16, 1942	30.0	90,000	1955	Aug. 13, 1955	14.85	10,700
1944	Nov. 8, 1943	12.6	7,480		Aug. 18, 1955	23.52	45,100
1945	July 31, 1945	16.2	13,500				
1946	Aug. 2, 1946	15.45	12,000	1956	July 21, 1956	14.14	9,400
1947	Mar. 14, 1947	8.2	3,450		July 24, 1956	12.63	7,560
1948	Nov. 4, 1947	14.7	10,300	1957	Oct. 27, 1956	11.26	6,200
1949	Dec. 4, 1948	14.9	10,600		Apr. 5, 1957	11.15	6,100
1950	Sept. 13, 1950	14.80	10,500				
1951	Dec. 5, 1950	19.42	27,200	1958	Dec. 26, 1957	11.76	6,700
					Jan. 15, 1958	13.42	8,480
1952	Feb. 4, 1952	13.90	8,620	1959	June 3, 1959	14.23	9,550
	Mar. 12, 1952	14.60	9,600				
	Apr. 28, 1952	14.22	9,030	1960	Feb. 19, 1960	13.94	9,120
1953	Nov. 22, 1952	17.81	18,800		Apr. 5, 1960	14.58	10,200
	Mar. 24, 1953	12.51	6,930		May 9, 1960	11.09	6,000
	May 15, 1953	12.02	6,420	1961	Feb. 20, 1961	12.86	7,890
1954	Mar. 2, 1954	10.41	5,130		Feb. 23, 1961	11.40	6,300
					Feb. 26, 1961	13.09	8,120
1955	Oct. 16, 1954	12.33	7,260		Apr. 13, 1961	15.36	12,000

6645. Rappahannock River at Kellys Ford, Va.

Location.--Lat 38°28'38", long 77°46'53", on right bank 50 ft upstream from highway bridge at Kellys Ford, Culpeper County, 2.6 miles upstream from Mountain Run, 4.3 miles southeast of Remington, and at mile 30.9.

Drainage area.--641 sq mi.

Gage.--Nonrecording prior to Oct. 30, 1934; recording thereafter. Datum of gage is 208.91 ft above mean sea level, datum of 1929, Culpeper supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements below 10,000 cfs and extended above on basis of slope-area measurement at 90,000 cfs.

Bankfull stage.--15 ft.

Historical data.--The flood of Oct. 16, 1942, is reported to have been the highest since at least 1828.

Remarks.--Base for partial-duration series, 6,000 cfs. Only annual peaks shown prior to 1935.

Peak stages and discharges of Rappahannock River at Kellys Ford, Va.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1885	October 1885	22.9	34,500	1942	Sept. 28, 1942	11.83	6,760
1889	June 1889	26.7	50,000	1943	Oct. 16, 1942 Dec. 30, 1942	32.6 13.90	90,000 8,420
1924	May 1924	21.8	29,700	1944	Nov. 9, 1943	12.88	7,630
1925	Feb. 12, 1925	11.63	7,730	1945	July 31, 1945 Sept. 19, 1945	18.1 15.2	13,300 10,100
1926	Sept. 24, 1926	16.35	12,300	1946	May 29, 1946 July 9, 1946 Aug. 2, 1946	16.0 12.4 15.6	11,500 6,940 10,800
1927	Nov. 17, 1926	19.9	22,100	1947	Mar. 14, 1947	8.41	3,740
1928	Aug. 12, 1928	16.37	12,300	1948	Nov. 4, 1947 Apr. 1, 1948 Aug. 2, 1948 Aug. 5, 1948 Aug. 13, 1948	14.38 14.45 13.63 12.78 12.39	8,880 8,880 8,070 7,310 6,940
1929	Apr. 17, 1929	13.9	8,420	1949	Oct. 6, 1948 Nov. 29, 1948 Dec. 4, 1948 Dec. 30, 1948 Jan. 6, 1949 Mar. 23, 1949 Apr. 14, 1949 May 3, 1949 Aug. 4, 1949	12.55 13.36 16.0 13.30 11.28 13.20 14.95 14.87 12.85	7,120 7,880 11,500 7,800 6,060 7,710 9,740 9,580 7,350
1930	Oct. 23, 1929	20.65	24,900	1950	Mar. 23, 1950 Sept. 14, 1950	11.91 14.62	6,540 9,130
1931	Aug. 10, 1931	7.0	3,050	1951	Dec. 5, 1950 Dec. 8, 1950 Feb. 8, 1951 June 10, 1951 June 14, 1951	20.5 13.6 12.06 14.47 11.48	24,500 8,070 6,720 9,000 6,220
1932	May 13, 1932	16.0	11,500	1952	Feb. 4, 1952 Mar. 12, 1952 Apr. 28, 1952	13.23 13.77 13.88	7,710 8,270 8,370
1933	Nov. 10, 1932	18.65	17,800				
1934	Sept. 17, 1934	18.0	16,000				
1935	Dec. 2, 1934 Jan. 23, 1935 Sept. 6, 1935	16.0 11.50 15.35	11,500 6,530 10,400				
1936	Jan. 3, 1936 Mar. 18, 1936	14.90 18.55	9,580 17,800				
1937	Jan. 21, 1937 Feb. 22, 1937 Apr. 26, 1937 Aug. 27, 1937	14.50 12.64 29.22 16.35	8,900 7,390 69,800 11,100				
1938	Oct. 20, 1937 Oct. 28, 1937 Nov. 13, 1937	18.04 12.17 12.24	16,000 7,080 7,080				
1939	Jan. 30, 1939 Feb. 4, 1939	12.22 12.08	7,080 7,000				
1940	May 27, 1940 June 11, 1940	12.04 11.38	6,920 6,450				
1941	Apr. 5, 1941	12.83	7,550				
1942	May 23, 1942 Aug. 9, 1942	11.3 14.66	6,370 9,060				

a Maximum for period Feb. 7 to Sept. 30, 1925.

6647. Browns Run near Bealeton, Va.

Location.--Lat 38°32'37", long 77°43'52", at bridge on State Highway 17, 2.9 miles southeast of Bealeton, Fauquier County.

Drainage area.--7.54 sq mi.

Gage.--Crest-stage gage. Datum of gage is 264.91 ft above mean sea level, datum of 1929, supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements below 560 cfs.

Bankfull stage.--5 ft.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Mar. 1, 1954	4.74	380	1958	July 23, 1958	5.50	760
1955	Aug. 13, 1955	5.38	700	1959	June 2, 1959	5.20	600
				1960	Apr. 5, 1960	5.52	720
1956	Mar. 14, 1956	5.07	520				
1957	Apr. 5, 1957	5.15	570	1961	Apr. 13, 1961	5.48	720

6650. Mountain Run near Culpeper, Va.

Location.--Lat 38°28'50", long 78°03'10", on left bank 30 ft upstream from bridge on State Highway 641, 3 miles west of Culpeper, Culpeper County, and 14.5 miles upstream from Jonas Run.

Drainage area.--14.7 sq mi.

Gage.--Recording. Altitude of gage is 385 ft (by barometer).

Stage-discharge relation.--Defined by current-meter measurements below 910 cfs and extended above on basis of slope-area measurement at 5,440 cfs.

Bankfull stage.--6 ft.

Remarks.--Subsequent to June 30, 1957, records furnished by Virginia Department of Conservation and Economic Development, Division of Water Resources. Base for partial-duration series, 300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Mar. 22, 1950	6.15	301	1955	Aug. 18, 1955	11.00	5,440
	May 31, 1950	7.90	830		July 20, 1956	5.60	380
	Sept. 10, 1950	8.52	1,100		July 21, 1956	6.06	470
	Sept. 13, 1950	10.65	2,650		Sept. 27, 1956	5.89	440
	Sept. 14, 1950	7.56	710	1957	Oct. 27, 1956	6.75	660
1951	Dec. 4, 1950	11.20	3,250		Apr. 5, 1957	5.77	410
	Dec. 7, 1950	6.64	400		Oct. 6, 1957	6.10	480
	Feb. 7, 1951	7.22	570		Dec. 26, 1957	6.05	470
	Mar. 13, 1951	6.52	328		Jan. 14, 1958	6.80	660
	June 10, 1951	8.08	910		Jan. 25, 1958	5.42	345
	June 28, 1951	8.08	910	1958	Apr. 28, 1958	5.19	315
1952	Dec. 21, 1951	6.37	365		June 24, 1958	7.96	1,150
	Feb. 4, 1952	7.98	870		July 12, 1958	6.52	570
	Mar. 11, 1952	6.41	365		Aug. 14, 1958	9.20	2,110
	Apr. 27, 1952	6.95	510	1959	June 2, 1959	5.62	380
	Sept. 1, 1952	8.54	1,150		June 13, 1959	5.38	345
1953	Nov. 21, 1952	10.52	2,550		July 27, 1959	6.32	520
	Dec. 11, 1952	6.38	365		Feb. 18, 1960	5.39	370
	Mar. 15, 1953	7.67	750	1960	Sept. 10, 1960	5.80	438
	Mar. 25, 1953	7.22	570		Apr. 13, 1961	5.38	370
1954	June 9, 1954	5.55	265	1961	Sept. 7, 1961	5.93	465
	Oct. 15, 1954	6.88	684				
1955	Aug. 13, 1955	6.62	606				

6655. Rapidan River near Ruckersville, Va.

Location.--Lat 38°16'50", long 78°20'25", on left bank at upstream side of bridge on U.S. Highway 29, 0.2 mile downstream from Elk Run, 1.7 miles upstream from White Run, 2.1 miles downstream from South River, 3.6 miles northeast of Ruckersville, Greene County, and at mile 63.5.

Drainage area.--111 sq mi.

Gage.--Recording. Datum of gage is 439.44 ft above mean sea level, datum of 1929, Culpeper supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements below 12,000 cfs and extended above on basis of slope-area measurement at gage height 17.78 ft.

Bankfull stage.--9 ft.

Remarks.--Base for partial-duration series, 1,400 cfs.

Peak stages and discharges of Rapidan River near Ruckersville, Va.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Oct. 15, 1942	20.8	30,700	1951	Apr. 12, 1951	7.86	3,000
	Dec. 30, 1942	6.96	2,500		June 10, 1951	-	3,800
	May 26, 1943	5.20	1,430		June 13, 1951	8.80	3,630
	July 12, 1943	7.12	2,570	1952	Feb. 4, 1952	5.40	1,570
1944	Sept. 19, 1944	10.36	4,910		Mar. 11, 1952	8.83	3,630
					June 23, 1952	6.04	1,870
1945	July 29, 1945	7.65	2,940		July 4, 1952	6.94	2,390
	July 31, 1945	11.8	6,290		July 8, 1952	6.36	2,090
	Aug. 1, 1945	10.7	6,180		Sept. 1, 1952	5.72	1,720
	Aug. 6, 1945	5.17	1,460	1953	Nov. 21, 1952	8.31	3,280
	Sept. 18, 1945	6.35	2,110		Jan. 10, 1953	5.64	1,670
1946	June 4, 1946	3.56	735		Jan. 24, 1953	5.38	1,570
					Mar. 15, 1953	6.23	1,970
1947	June 14, 1947	7.00	2,500		Mar. 25, 1953	9.34	4,000
1948	Nov. 3, 1947	7.40	2,790	1954	Mar. 1, 1954	7.95	3,070
	Feb. 14, 1948	5.75	1,760				
	Apr. 1, 1948	9.45	4,520	1955	Oct. 15, 1954	8.43	3,260
	June 27, 1948	6.19	1,990		Dec. 14, 1954	6.79	2,280
1949	Oct. 5, 1948	6.58	2,240		Mar. 5, 1955	6.87	2,330
	Nov. 20, 1948	5.75	1,760		Aug. 13, 1955	6.37	2,050
	Nov. 29, 1948	5.78	1,760		Aug. 18, 1955	17.78	20,100
	Dec. 4, 1948	8.10	3,340	1956	July 21, 1956	5.16	1,450
	Dec. 30, 1948	8.00	3,260				
	Jan. 5, 1949	7.37	2,790	1957	Feb. 26, 1957	5.91	1,450
	Mar. 23, 1949	10.49	4,990				
	Apr. 13, 1949	5.65	1,660	1958	Dec. 26, 1957	6.04	1,490
	May 2, 1949	9.67	4,820				
	June 19, 1949	12.01	6,520	1959	June 2, 1959	7.92	2,530
	July 14, 1949	5.29	1,520		Sept. 30, 1959	11.14	5,310
	July 20, 1949	7.26	2,720	1960	Oct. 24, 1959	5.11	1,400
	Aug. 15, 1949	13.28	8,160		Feb. 18, 1960	8.02	3,000
	Aug. 17, 1949	7.74	3,020		Apr. 5, 1960	5.77	1,750
	Aug. 29, 1949	7.87	3,180		Sept. 20, 1960	6.82	2,290
1950	May 31, 1950	5.96	1,880				
				1961	Feb. 25, 1961	5.92	1,800
1951	Dec. 4, 1950	14.1	9,490		Apr. 13, 1961	6.70	2,240
	Dec. 7, 1950	8.93	3,700		Aug. 5, 1961	16.10	14,700
	Feb. 7, 1951	7.39	2,690		Aug. 25, 1961	9.87	4,230
	Mar. 14, 1951	6.75	2,330		Sept. 8, 1961	5.81	1,750

6665. Robertson River near Locust Dale, Va.

Location.--Lat 38°20', long 78°06', on right bank 100 ft upstream from bridge on State Highway 614, 1 mile upstream from Great Run, 1½ miles east of Locust Dale, Madison County, 1.7 miles upstream from mouth, and 3 miles downstream from Crooked Run.

Drainage area.--180 sq mi.

Gage.--Recording. Datum of gage is 283.70 ft above mean sea level, datum of 1929, Culpeper supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements below 9,100 cfs and extended above on basis of records for other stations in Rappahannock River basin.

Bankfull stage.--12 ft.

Historical data.--Flood of Oct. 15, 1942, was greatest known.

Remarks.--Base for partial-duration series, 1,700 cfs.

Peak stages and discharges of Robertson River near Locust Dale, Va.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Oct. 15, 1942	a23.9	b44,000	1951	July 24, 1951	7.90	2,210
1944	Sept. 13, 1944	6.60	1,720	1952	Dec. 21, 1951	7.38	2,020
	Sept. 19, 1944	13.26	4,940		Feb. 4, 1952	11.19	3,620
1945	July 31, 1945	8.70	2,530		Mar. 11, 1952	10.72	3,390
	Sept. 18, 1945	13.6	4,830		Apr. 28, 1952	7.90	2,210
1946	July 22, 1946	6.11	1,530		July 4, 1952	7.98	2,250
1947	Aug. 4, 1947	7.17	1,950		Sept. 1, 1952	8.59	2,490
1948	Nov. 4, 1947	16.46	9,900	1953	Nov. 21, 1952	13.39	4,720
	Nov. 8, 1947	7.65	2,100		Jan. 10, 1953	6.71	1,760
	Feb. 14, 1948	8.60	2,490		Jan. 24, 1953	6.62	1,720
	Apr. 1, 1948	13.25	4,610		Mar. 15, 1953	8.80	2,570
	May 7, 1948	7.09	1,910		Mar. 24, 1953	10.32	3,210
	Aug. 1, 1948	7.65	2,100		Apr. 13, 1953	7.57	2,190
1949	Oct. 5, 1948	8.20	2,330		Aug. 17, 1953	6.61	1,720
	Nov. 29, 1948	8.84	2,570	1954	Mar. 1, 1954	9.63	2,900
	Dec. 4, 1948	c13.90	4,500	1955	Oct. 16, 1954	10.55	3,320
	Dec. 30, 1948	10.77	3,440		Dec. 14, 1954	7.65	2,110
	Jan. 6, 1949	8.19	2,330		Mar. 6, 1955	8.15	2,310
	Mar. 23, 1949	11.28	3,660		Aug. 13, 1955	13.38	4,760
	Apr. 13, 1949	9.42	2,810		Aug. 18, 1955	19.49	18,600
	May 3, 1949	11.54	3,750	1956	July 22, 1956	7.40	2,010
	June 19, 1949	11.65	3,800	1957	Oct. 27, 1956	9.84	2,720
	July 15, 1949	7.35	2,020		Apr. 5, 1957	7.70	1,920
	July 16, 1949	8.2	2,330	1958	Dec. 26, 1957	8.11	2,060
	Aug. 3, 1949	6.82	1,790		Jan. 14, 1958	7.13	1,700
	Aug. 15, 1949	8.20	2,330	1959	June 2, 1959	12.24	3,920
	Aug. 17, 1949	7.66	2,140	1960	Oct. 1, 1959	10.53	3,020
	Aug. 29, 1949	8.31	2,370		Feb. 19, 1960	11.68	3,640
	Sept. 7, 1949	8.00	2,250		Apr. 5, 1960	9.25	2,480
1950	May 18, 1950	8.70	2,530		May 8, 1960	8.03	2,020
	Sept. 13, 1950	15.1	6,960		May 17, 1960	11.97	3,800
1951	Dec. 4, 1950	16.2	9,140		Sept. 20, 1960	13.36	4,790
	Dec. 8, 1950	11.00	3,520	1961	Feb. 25, 1961	7.25	1,900
	Feb. 7, 1951	8.98	2,650		Apr. 13, 1961	11.51	3,530
	Mar. 14, 1951	7.76	2,170		Aug. 5, 1961	8.65	2,390
	Apr. 12, 1951	8.00	2,250		Aug. 26, 1961	7.06	1,860
	June 10, 1951	11.78	3,900				
	June 13, 1951	10.86	3,480				

a Might have been affected by backwater from Rapidan River.

b About.

c Affected by backwater from Rapidan River.

6670. Rapidan River at Rapidan, Va.

Location.--Lat 38°19', long 78°04', 1,000 ft downstream from bridge on State Highway 615 at Rapidan, Culpeper County, and 2 miles downstream from Robertson River.

Drainage area.--446 sq mi.

Gage.--Nonrecording. U.S. Weather Bureau gage at site 1,000 ft upstream from described site since November 1944. Datum of Weather Bureau gage is 266.5 ft above mean sea level.

Stage-discharge relation.--Defined by current-meter measurements below 6,300 cfs and extended above on basis of slope-area measurement at 58,000 cfs, at site 7 miles downstream. Relation at Weather Bureau site is essentially the same as for the original site.

Bankfull stage.--14 ft.

Remarks.--Base for partial-duration series, 4,200 cfs. Only annual peaks are shown in 1901 and after 1930.

Peak stages and discharges of Rapidan River at Rapidan, Va.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1901	May 1901	23.4	36,000	1930	Mar. 8, 1930	8.5	4,700
1924	Sept. 30, 1924	19.9	23,000	1931	May 23, 1931	-	a1,600
1925	Feb. 12, 1925	8.5	4,700	1936	Mar. 18, 1936	-	a20,000
1926	Nov. 13, 1925	8.0	4,280	1937	Apr. 26, 1937	-	a48,000
	Jan. 19, 1926	11.0	6,900	1943	Oct. 16, 1942	27.6	57,000
	Aug. 25, 1926	10.0	6,000	1944	Sept. 19, 1944	-	a9,000
1927	Nov. 16, 1926	16.8	14,200	1945	July 31, 1945	9.9	5,910
	Nov. 19, 1926	11.5	7,350	1946	Mar. 31, 1946	5.2	2,090
	Dec. 26, 1926	9.5	5,560	1947	Mar. 15, 1947	7.0	3,460
	Apr. 22, 1927	10.0	6,000	1948	Apr. 1, 1948	13.7	9,450
1928	Oct. 4, 1927	16.0	12,500	1949	Dec. 4, 1948	15.5	11,600
	Oct. 13, 1927	11.0	6,900	1950	Sept. 13, 1950	13.8	9,550
	Nov. 18, 1927	13.5	9,250	1951	Dec. 4, 1950	17.5	15,800
	Feb. 14, 1928	8	4,280	1952	Feb. 4, 1952	11.5	7,350
	Apr. 28, 1928	11	6,900	1953	Nov. 22, 1952	13.0	8,750
	Aug. 12, 1928	9	5,130	1954	Mar. 1, 1954	9.5	5,560
	Aug. 17, 1928	13	8,750	1955	Aug. 18, 1955	22.5	32,000
1929	Feb. 28, 1929	8	4,280	1956	Sept. 28, 1956	6.5	3,060
	Apr. 16, 1929	10	6,000	1957	Oct. 27, 1956	9.0	5,130
	June 25, 1929	8.8	4,960	1958	Dec. 27, 1957	9.0	5,130
1930	Oct. 2, 1929	11.5	7,350	1959	June 3, 1959	12.3	8,070
	Oct. 22, 1929	14.5	10,300	1960	Feb. 19, 1960	12.2	7,980
	Feb. 4, 1930	8.0	4,280	1961	Apr. 13, 1961	11.0	6,900

a Estimated.

6675. Rapidan River near Culpeper, Va.

Location.--Lat 38°21'01", long 77°58'31", on left bank 0.7 mile upstream from Cedar Run and bridge on U.S. Highway 552, 8.5 miles south of Culpeper, Culpeper County, and at mile 29.6.

Drainage area.--465 sq mi.

Gage.--Recording. Datum of gage is 241.36 ft above mean sea level, datum of 1929, Culpeper supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements below 28,000 cfs and extended above on basis of slope-area measurement at 58,100 cfs.

Bankfull stage.--12 ft.

Remarks.--Base for partial-duration series, 4,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	May 23, 1931	4.25	1,760	1937	Oct. 17, 1936	9.94	4,630
1932	Mar. 7, 1932	12.03	6,500		Jan. 21, 1937	15.42	10,400
	May 12, 1932	9.77	4,590		Feb. 22, 1937	11.10	5,260
1933	Oct. 18, 1932	15.72	11,400		Apr. 26, 1937	28.03	50,000
	Nov. 1, 1932	10.72	5,430	1938	Oct. 20, 1937	19.41	21,600
	Nov. 10, 1932	14.90	10,000		Oct. 27, 1937	10.72	5,030
	Jan. 26, 1933	11.71	6,230	1939	Feb. 4, 1939	9.69	4,540
	Apr. 17, 1933	16.00	12,000	1940	Aug. 17, 1940	15.36	10,400
	Aug. 24, 1933	9.60	4,500	1941	Apr. 5, 1941	9.56	4,500
1934	Sept. 14, 1934	15.77	11,600	1942	Aug. 9, 1942	15.58	11,200
	Sept. 17, 1934	19.53	21,900	1943	Oct. 16, 1942	30.3	58,100
1935	Dec. 2, 1934	14.77	9,840		Dec. 30, 1942	11.55	7,930
	Jan. 23, 1935	12.76	7,280	1944	Sept. 19, 1944	14.56	10,800
	Sept. 6, 1935	17.53	15,600	1945	July 31, 1945	9.82	6,490
1936	Jan. 3, 1936	14.15	8,280		Aug. 1, 1945	9.00	5,850
	Jan. 19, 1936	9.76	4,590				
	Feb. 15, 1936	9.95	4,680				
	Mar. 18, 1936	19.25	21,000				

Peak stages and discharges of Rapidan River near Culpeper, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Sept. 18, 1945	13.8	9,950	1952	Dec. 21, 1951	7.95	5,100
1946	Dec. 31, 1945	5.73	3,390		Feb. 4, 1952	10.61	7,130
1947	Mar. 14, 1947	5.76	3,460		Mar. 11, 1952	10.0	6,650
1948	Nov. 4, 1947	14.1	10,200		Apr. 28, 1952	7.98	5,100
	Nov. 8, 1947	7.55	4,800	1953	Nov. 22, 1952	12.69	8,880
	Feb. 14, 1948	9.63	6,330		Mar. 16, 1953	8.46	5,480
	Apr. 1, 1948	13.9	10,000		Mar. 25, 1953	10.28	6,890
	Aug. 1, 1948	8.92	5,780	1954	Mar. 1, 1954	8.02	5,100
	Aug. 4, 1948	8.41	5,400	1955	Oct. 16, 1954	8.70	5,620
1949	Oct. 6, 1948	9.00	5,850		Dec. 15, 1954	7.52	4,740
	Nov. 29, 1948	10.10	6,730		Mar. 6, 1955	9.30	6,090
	Dec. 4, 1948	15.62	12,000		Aug. 13, 1955	11.27	7,670
	Dec. 30, 1948	11.53	7,850		Aug. 18, 1955	24.31	33,800
	Jan. 6, 1949	9.53	6,250	1956	July 22, 1956	4.86	2,830
	Mar. 23, 1949	11.13	7,530	1957	Oct. 27, 1956	7.25	4,500
	Apr. 13, 1949	8.81	5,700		Apr. 5, 1957	7.46	4,720
	May 3, 1949	9.74	6,410	1958	Dec. 26, 1957	7.82	4,950
	June 19, 1949	9.47	6,250		Mar. 31, 1958	7.28	4,580
	July 16, 1949	7.26	4,580	1959	June 3, 1959	11.33	7,690
	Aug. 16, 1949	11.08	7,530	1960	Feb. 19, 1960	11.73	8,010
	Aug. 17, 1949	7.97	5,100		Apr. 5, 1960	9.71	6,410
	Aug. 29, 1949	8.28	5,320		May 17, 1960	8.79	5,700
1950	Sept. 10, 1950	7.27	4,580		Sept. 20, 1960	8.82	5,700
	Sept. 13, 1950	13.94	10,000	1961	Feb. 19, 1961	7.97	5,200
1951	Dec. 5, 1950	17.1	14,600		Apr. 13, 1961	10.42	6,970
	Dec. 8, 1950	9.70	6,410		Aug. 5, 1961	8.14	5,270
	Feb. 7, 1951	9.81	6,490				
	Mar. 14, 1951	8.25	5,250				
	Apr. 13, 1951	8.11	5,180				
	June 10, 1951	13.0	9,150				
	June 13, 1951	11.15	7,610				

6680. Rappahannock River near Fredericksburg, Va.

Location.--Lat 38°19'20", long 77°31'05", on right bank 1.6 miles upstream from dam of Virginia Electric & Power Co., 2.2 miles downstream from Motts Run, 3.8 miles upstream from Fredericksburg, Spotsylvania County, and at mile 4.4.

Drainage area.--1,599 sq mi.

Gage.--Nonrecording prior to Jan. 6, 1922; recording thereafter. Datum of gage is 56.18 ft above mean sea level, datum of 1929, Culpeper supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements below 76,000 cfs and extended above on basis of flow-over-dam and slope-area measurements at gage height 25.1 and 25.9 ft.

Bankfull stage.--11 ft.

Historical data.--Flood of Oct. 16, 1942, was probably several feet higher than the flood of June 1889, which was highest known at that time.

Remarks.--Base for partial-duration series, 16,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1908	Dec. 22, 1907	8.0	20,000	1912	Feb. 27, 1912	7.2	16,500
	Jan. 8, 1908	7.3	17,000		Mar. 13, 1912	8.0	20,000
	Jan. 13, 1908	10.0	30,100		Mar. 16, 1912	8.2	20,900
	May 22, 1908	8.7	23,300		Mar. 29, 1912	8.3	21,400
	Aug. 26, 1908	8.4	21,900		May 13, 1912	9.3	26,400
	Sept. 6, 1908	7.5	17,800		May 17, 1912	7.9	19,600
					Sept. 25, 1912	10.1	31,400
1909	Apr. 14, 1909	7.5	17,800	1913	Mar. 15, 1913	8.8	23,800
1910	July 4, 1910	7.3	17,000		Apr. 13, 1913	10.5	33,600
1911	Jan. 4, 1911	6.4	13,200		May 24, 1913	9.7	28,500

Peak stages and discharges of Rappahannock River near Fredericksburg, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	Jan. 4, 1914	9.1	25,700	1939	Jan. 31, 1939	7.63	18,700
	Apr. 26, 1914	7.7	18,700		Feb. 4, 1939	7.84	19,700
1915	Jan. 13, 1915	11.0	36,300	1940	Feb. 12, 1940	10.0	-
	Feb. 2, 1915	10.2	31,200		Feb. 13, 1940	8.8	24,600
	June 3, 1915	9.5	27,400		Feb. 19, 1940	7.28	17,300
	Aug. 5, 1915	8.1	20,500		Apr. 9, 1940	7.49	18,300
1916	Oct. 2, 1915	8.5	22,300		Aug. 17, 1940	7.33	17,300
	June 17, 1916	11.2	37,400		Sept. 1, 1940	7.55	18,700
	July 26, 1916	7.3	17,000	1941	Apr. 6, 1941	8.03	20,600
1917	Mar. 5, 1917	8.5	23,100		Aug. 9, 1942	9.78	29,000
	Apr. 6, 1917	8.3	21,400	1943	Oct. 16, 1942	25.9	140,000
1918	Apr. 10, 1918	13	47,700		Dec. 30, 1942	8.33	21,400
	Apr. 21, 1918	11.0	35,700	1944	Nov. 9, 1943	8.9	24,300
1919	Jan. 3, 1919	7.6	18,200		Sept. 20, 1944	7.06	16,100
1920	July 13, 1920	5.4	9,220	1945	July 31, 1945	9.2	25,800
	May 13, 1921	7.4	17,700		Aug. 1, 1945	8.45	21,900
1922	June 5, 1922	9.30	27,200		Sept. 19, 1945	8.82	23,800
1923	Aug. 1, 1923	6.50	13,700	1946	May 27, 1946	8.23	20,900
	Jan. 17, 1924	9.23	25,800		May 29, 1946	7.24	16,500
1924	Mar. 13, 1924	7.32	17,000		July 9, 1946	7.82	19,100
	Apr. 7, 1924	7.76	19,600		Aug. 2, 1946	7.30	17,000
	May 9, 1924	8.34	22,100	1947	Mar. 15, 1947	5.96	11,600
	May 13, 1924	16.50	66,900		Nov. 5, 1947	7.68	18,700
1925	Oct. 1, 1924	15.1	58,800	1948	Feb. 15, 1948	7.45	17,400
	Sept. 24, 1926	7.93	20,100		Apr. 2, 1948	9.42	26,900
1927	Nov. 17, 1926	11.94	40,400		May 13, 1948	8.58	22,800
	Apr. 22, 1927	7.85	18,800		Aug. 2, 1948	7.70	18,700
1928	Oct. 4, 1927	-	22,000		Aug. 5, 1948	7.65	18,200
	Nov. 18, 1927	7.22	16,100	1949	Oct. 6, 1948	7.3	17,000
	Apr. 28, 1928	8.98	24,800		Nov. 30, 1948	8.40	21,900
	Aug. 12, 1928	11.66	39,400		Dec. 4, 1948	11.34	37,400
	Aug. 17, 1928	9.0	24,800		Dec. 31, 1948	8.45	21,900
1929	Apr. 17, 1929	8.47	22,200		Jan. 6, 1949	7.73	18,700
	Oct. 23, 1929	12.68	44,800		Mar. 23, 1949	8.23	20,900
1931	May 23, 1931	3.77	4,190		Apr. 14, 1949	7.42	17,400
1932	May 13, 1932	8.78	23,800		May 3, 1949	8.19	20,900
1933	Oct. 18, 1932	8.00	19,700	1950	Mar. 23, 1950	7.9	19,600
	Nov. 2, 1932	7.59	17,800		Sept. 14, 1950	9.21	25,800
	Nov. 10, 1932	11.84	39,900	1951	Dec. 5, 1950	12.16	42,800
	Dec. 28, 1932	7.32	16,500		Dec. 8, 1950	7.49	17,800
	Jan. 26, 1933	9.43	26,900		Feb. 8, 1951	7.62	18,200
	Apr. 18, 1933	9.52	27,400		June 10, 1951	9.37	26,900
	Apr. 21, 1933	7.74	18,300		June 14, 1951	7.76	19,100
	Aug. 24, 1933	7.82	18,800	1952	Dec. 21, 1951	7.80	19,100
1934	Mar. 4, 1934	7.3	16,500		Feb. 4, 1952	7.90	20,000
	Sept. 13, 1934	8.41	21,700		Mar. 12, 1952	7.79	19,100
	Sept. 17, 1934	11.07	36,000		Apr. 28, 1952	8.29	21,400
1935	Dec. 1, 1934	9.09	25,300	1953	Nov. 22, 1952	11.12	36,300
	Jan. 23, 1935	8.71	23,300		Mar. 16, 1953	7.08	16,100
	Apr. 8, 1935	7.16	16,100		Mar. 26, 1953	8.08	20,500
	Sept. 6, 1935	10.65	33,300	1954	Mar. 2, 1954	6.36	12,600
1936	Jan. 4, 1936	9.86	29,600	1955	Mar. 7, 1955	7.62	17,800
	Jan. 19, 1936	7.60	17,800		Aug. 13, 1955	9.22	25,700
	Feb. 14, 1936	10.5	20,700		Aug. 19, 1955	17.00	74,500
	Feb. 15, 1936	8.21	42,600	1956	July 21, 1956	6.35	12,600
	Mar. 18, 1936	12.33	42,600		Apr. 5, 1957	8.31	21,000
1937	Jan. 21, 1937	10	30,700	1957	Dec. 27, 1957	7.50	17,200
	Feb. 22, 1937	7.46	18,300		Jan. 15, 1958	7.81	18,600
	Apr. 26, 1937	125.14	134,000	1959	June 3, 1959	8.06	20,000
	Aug. 27, 1937	7.42	17,800		Feb. 19, 1960	9.15	25,600
1938	Oct. 20, 1937	11.90	40,800	1960	Apr. 5, 1960	9.48	27,200
	Oct. 28, 1937	7.70	19,200		Feb. 19, 1961	9.58	27,800
	Nov. 13, 1937	7.65	18,700	1961	Apr. 13, 1961	9.00	24,500

a Estimated.

b Backwater from ice.

6685. Cat Point Creek near Montross, Va.

Location.--Lat 38°02'23", long 76°49'38", on right bank 10 ft upstream from bridge on State Highway 637, 1.7 miles west of Farmers Fork, 3.8 miles south of Montross, Westmoreland County, and 11.4 miles upstream from mouth.

Drainage area.--45 sq mi, approximately.

Gage.--Nonrecording on downstream side of the bridge prior to Aug. 19, 1953; recording thereafter. Altitude of gage is 2 ft (by barometer).

Stage-discharge relation.--Defined by current-meter measurements below 1,350 cfs.

Bankfull stage.--5 ft.

Historical data.--Flood in September 1935 was over bridge floor (elevation, 9.3 ft, gage datum), from information by local residents.

Remarks.--Subsequent to June 30, 1957, records furnished by Virginia Department of Conservation and Economic Development, Division of Water Resources. Base for partial-duration series, 250 cfs. Only annual peaks are shown prior to 1952.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	September 1935	9.3	-	1957	Nov. 2, 1956	5.52	320
1944	Jan. 5, 1944	5.5	267	1958	Oct. 7, 1957	6.80	1,180
1945	July 18, 1945	7.1	1,540		Dec. 10, 1957	5.23	260
					Jan. 15, 1958	5.20	250
1946	Aug. 7, 1946	5.36	280		Jan. 26, 1958	5.22	250
1947	July 21, 1947	4.86	188		Mar. 20, 1958	6.60	980
1948	Aug. 5, 1948	6.40	800		Apr. 11, 1958	5.22	250
1949	Dec. 4, 1948	5.72	290		Apr. 30, 1958	5.35	280
1950	Oct. 31, 1949	6.14	495		May 7, 1958	4.88	255
					May 26, 1958	5.95	495
1951	July 29, 1951	6.6	980		Aug. 26, 1958	6.68	1,080
1952	Dec. 22, 1951	5.55	335	1959	Dec. 30, 1958	5.40	322
	Jan. 29, 1952	5.57	335		July 15, 1959	5.83	445
	Apr. 27, 1952	5.95	495				
1953	Nov. 22, 1952	5.34	280	1960	Apr. 5, 1960	5.91	470
					July 30, 1960	5.32	270
1954	July 20, 1954	5.33	280		Sept. 12, 1960	5.53	335
					Sept. 20, 1960	5.86	445
1955	Aug. 13, 1955	7.56	2,350	1961	Feb. 23, 1961	5.35	280
					Mar. 23, 1961	5.54	335
1956	July 23, 1956	4.73	179		May 13, 1961	6.24	685

6690. Piscataway Creek near Tappahannock, Va.

Location.--Lat 37°52'37", long 76°54'03", on right bank at upstream side of bridge on State Highway 691 (old location of U.S. 360), 0.6 mile south of Henley Fork, 2.3 miles downstream from Sturgeon Swamp, and 4.2 miles southwest of Tappahannock, Essex County.

Drainage area.--28.1 sq mi.

Gage.--Recording. Datum of gage is 2.50 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,340 cfs.

Bankfull stage.--3 ft.

Remarks.--Subsequent to June 30, 1957, records furnished by Virginia Department of Conservation and Economic Development, Division of Water Resources. Base for partial-duration series, 120 cfs.

Peak stages and discharges of Piscataway Creek near Tappahannock, Va.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Dec. 22, 1951	3.47	130	1958	Apr. 11, 1958	3.53	225
	Jen. 29, 1952	3.68	156		Apr. 23, 1958	3.26	171
	Mar. 25, 1952	3.77	164		Apr. 29, 1958	3.03	126
	Apr. 27, 1952	3.62	148		May 7, 1958	3.37	193
	Sept. 1, 1952	3.44	127		May 26, 1958	3.96	316
					Aug. 26, 1958	3.53	225
1953	Nov. 22, 1952	3.68	156				
	Feb. 16, 1953	3.38	120	1959	Oct. 22, 1958	3.58	204
1954	Jan. 28, 1954	2.97	75		Dec. 30, 1958	3.82	259
1955	Aug. 13, 1955	7.07	1,870		Apr. 13, 1959	3.32	183
	Aug. 18, 1955	3.89	184		Apr. 20, 1959	3.15	149
	Sept. 20, 1955	3.87	181		July 15, 1959	4.65	536
					July 21, 1959	3.07	134
1956	Apr. 7, 1956	3.40	122		July 31, 1959	3.32	183
1957	Nov. 2, 1956	4.42	305	1960	Nov. 7, 1959	3.95	291
	Apr. 9, 1957	3.06	120		Nov. 25, 1959	4.10	330
	May 19, 1957	3.21	169		Feb. 19, 1960	3.64	228
1958	Oct. 7, 1957	3.50	207		Apr. 5, 1960	3.90	278
	Dec. 10, 1957	3.42	172		May 9, 1960	3.16	139
	Dec. 21, 1957	3.33	154		May 28, 1960	4.77	542
	Dec. 27, 1957	3.23	134		May 31, 1960	3.30	167
	Jen. 15, 1958	3.35	158		July 30, 1960	3.44	195
	Jan. 25, 1958	3.40	168		Aug. 5, 1960	3.20	147
	Feb. 2, 1958	3.22	132		Aug. 7, 1960	3.09	125
	Feb. 27, 1958	3.35	158		Sept. 13, 1960	3.53	213
	Mar. 20, 1958	4.18	360	1961	Feb. 9, 1961	3.82	259
	Apr. 1, 1958	3.06	132		Feb. 24, 1961	3.91	296
	Apr. 7, 1958	3.27	173		Mar. 23, 1961	3.62	231
					May 12, 1961	3.84	279
					July 7, 1961	3.67	241

PIANKATANK RIVER BASIN

6695. Dragon Run near Church View, Va.

Location.--Lat 37°41'01", long 76°43'37", on left bank 400 ft downstream from bridge on State Highway 602, 0.8 mile upstream from Briery Swamp, 1.9 miles downstream from Tin Branch Swamp, 2.6 miles west of Church View, Middlesex County, and 2.9 miles east of Dragonville.

Drainage area.--86 sq mi, approximately.

Gage.--Recording. Datum of gage is 34.00 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,900 cfs.

Bankfull stage.--5 ft.

Remarks.--Subsequent to June 30, 1957, records furnished by Virginia Department of Conservation and Economic Development, Division of Water Resources. Base for partial-duration series, 600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	September 1935	17	-	1953	Nov. 23, 1952	5.37	311
1944	Mar. 8, 1944	5.48	449	1954	Apr. 20, 1954	4.79	153
1945	July 19, 1945	9.91	3,840	1955	Aug. 15, 1955	6.96	972
	Aug. 2, 1945	6.84	970	1956	Feb. 8, 1956	5.42	204
	Sept. 20, 1945	6.09	612	1957	Nov. 4, 1956	7.80	1,610
1946	Dec. 30, 1945	6.26	656	1958	Dec. 11, 1957	6.49	695
1947	Jan. 17, 1947	4.99	217		Mar. 21, 1958	7.55	1,250
1948	May 28, 1948	6.71	890		May 27, 1958	6.94	965
	Aug. 5, 1948	7.35	1,300	1959	Dec. 30, 1958	6.84	895
1949	July 18, 1949	6.35	746		July 16, 1959	7.09	1,070
1950	Nov. 3, 1949	5.53	354	1960	June 1, 1960	6.90	930
1951	Aug. 15, 1951	5.44	364		Sept. 13, 1960	7.30	1,210
1952	Mar. 26, 1952	6.12	614	1961	Feb. 25, 1961	6.78	860
					May 15, 1961	6.32	605

6700. Beaverdam Swamp near Ark, Va.

Location.--Lat 37°28'15", long 76°33'50", on right bank at downstream side of bridge on State Highway 606, 1.4 miles upstream from Beach Swamp, 2.3 miles north of Ark, Gloucester County, and 4.3 miles northwest of Gloucester.

Drainage area.--7.1 sq mi, approximately.

Gage.--Recording. Datum of gage is 36.43 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 130 cfs and extended above by logarithmic plotting.

Bankfull stage.--3 ft.

Remarks.--Subsequent to June 30, 1957, records furnished by Virginia Department of Conservation and Economic Development, Division of Water Resources. Base for partial-duration series, 50 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	July 17, 1950	3.26	58	1958	May 26, 1958	3.15	64
1951	July 30, 1951	2.99	42		Aug. 26, 1958	3.82	125
1952	Jan. 28, 1952	3.30	61	1959	Oct. 22, 1958	3.21	69
	Feb. 4, 1952	3.13	50		Dec. 30, 1958	4.27	180
1953	Nov. 21, 1952	3.28	57		Apr. 13, 1959	3.13	65
	Aug. 15, 1953	3.42	65		July 11, 1959	2.95	50
1954	Feb. 22, 1954	2.95	40		Sept. 6, 1959	3.10	60
1955	June 12, 1955	3.29	60	1960	Oct. 24, 1959	3.66	103
	July 11, 1955	3.37	67		Feb. 19, 1960	3.20	58
	Aug. 12, 1955	5.72	516		Apr. 5, 1960	3.27	64
	Aug. 18, 1955	3.59	91		May 9, 1960	3.51	96
	Sept. 20, 1955	3.61	102		May 18, 1960	3.18	66
1956	Sept. 27, 1956	3.29	60		May 22, 1960	3.13	62
1957	Oct. 18, 1956	3.14	50		May 28, 1960	3.36	82
	Oct. 31, 1956	3.20	54		May 31, 1960	4.31	185
	Mar. 2, 1957	3.60	92		July 12, 1960	3.13	62
	Apr. 19, 1957	3.34	65		July 30, 1960	4.05	150
1958	Oct. 6, 1957	3.33	64		Aug. 1, 1960	3.45	81
	Dec. 9, 1957	3.32	63		Aug. 6, 1960	4.07	151
	Jan. 14, 1958	3.65	98		Aug. 15, 1960	3.57	99
	Jan. 25, 1958	3.18	66		Sept. 12, 1960	5.88	570
	Feb. 28, 1958	3.06	57	1961	Oct. 28, 1960	3.32	63
	Mar. 20, 1958	3.89	132		Jan. 15, 1961	3.16	55
	Mar. 26, 1958	3.70	113		Feb. 8, 1961	3.56	92
	Apr. 11, 1958	3.42	88		Mar. 23, 1961	3.44	81
	May 7, 1958	3.04	56		May 2, 1961	3.21	63
					May 11, 1961	4.76	270
					May 27, 1961	3.23	71
					July 24, 1961	3.69	112
					Aug. 4, 1961	3.16	65

6710. North Anna River near Doswell, Va.
(Published as "near Hewlett" prior to 1929)

Location.--Lat 37°53'15", long 77°29'15", on left bank 1.5 miles upstream from bridge on U.S. Highway 1, 2.5 miles northwest of Doswell, Hanover County, and 4.4 miles upstream from Bull Run.

Drainage area.--439 sq mi; 424 sq mi prior to 1929.

Gage.--Nonrecording at site 10.2 miles upstream at different datum Mar. 23, 1926, to Aug. 11, 1928, and at present site and datum Mar. 17, 1929, to Nov. 7, 1930; recording thereafter. Datum of gage is 55.66 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,800 cfs prior to 1929. Defined by current-meter measurements below 10,000 cfs and extended above by logarithmic plotting since 1929.

Bankfull stage.--13 ft.

Remarks.--Subsequent to June 30, 1957, records furnished by Virginia Department of Conservation and Economic Development, Division of Water Resources. Base for partial-duration series, 3,000 cfs. Only annual peaks are shown prior to 1930.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Nov. 17, 1926	15.73	6,720	1940	Feb. 20, 1940	10.52	3,410
1928	Aug. 12, 1928	33.7	18,400		Apr. 10, 1940	15.65	6,250
1929	Apr. 17, 1929	11.55	3,830		Apr. 21, 1940	11.00	3,610
					Aug. 17, 1940	10.41	3,320
1930	Oct. 24, 1929	18.0	6,390				
1931	June 2, 1931	6.16	1,730	1941	Nov. 16, 1940	12.86	4,630
					Apr. 6, 1941	12.78	4,580
1932	Mar. 8, 1932	12.49	4,410		July 6, 1941	9.94	3,080
	Mar. 29, 1932	13.41	4,910	1942	Mar. 30, 1942	12.65	4,120
	May 14, 1932	15.00	5,850		July 27, 1942	15.76	5,560
					Aug. 10, 1942	16.55	5,940
1933	Oct. 22, 1932	14.95	5,830				
	Nov. 2, 1932	10.10	3,170	1943	Oct. 17, 1942	24.54	11,600
	Nov. 11, 1932	14.55	5,600		Dec. 31, 1942	10.68	3,330
	Nov. 20, 1932	10.20	3,220		Mar. 7, 1943	10.37	3,210
	Dec. 29, 1932	-	5,800				
	Jan. 27, 1933	16.49	6,730	1944	Nov. 10, 1943	12.06	3,910
	Apr. 18, 1933	13.38	4,910		Jan. 4, 1944	10.28	3,170
	July 12, 1933	11.86	4,080		Aug. 3, 1944	11.40	3,620
	Aug. 25, 1933	12.19	4,250				
1934	Mar. 4, 1934	13.10	-	1945	July 16, 1945	14.9	5,140
	Mar. 5, 1934	12.97	4,690		July 17, 1945	12.2	3,950
	Apr. 17, 1934	9.82	3,040		July 18, 1945	13.1	4,340
	Sept. 8, 1934	11.61	3,930		July 20, 1945	15.2	5,280
	Sept. 18, 1934	15.79	6,310		July 30, 1945	11.5	3,660
					Sept. 20, 1945	15.4	5,370
1935	Dec. 3, 1934	16.02	6,430	1946	Dec. 26, 1945	12.4	4,040
	Jan. 23, 1935	14.96	5,830		Mar. 20, 1946	11.9	3,830
	Mar. 14, 1935	12.27	4,360		May 5, 1946	10.3	3,170
	Apr. 9, 1935	14.13	5,310		May 20, 1946	10.9	3,410
	Sept. 7, 1935	21.19	9,660		May 27, 1946	13.6	4,560
					July 10, 1946	12.3	4,000
1936	Jan. 5, 1936	22.68	10,600				
	Jan. 21, 1936	16.17	6,550	1947	Jan. 4, 1947	9.03	2,690
	Feb. 17, 1936	-	5,600		Mar. 15, 1947	9.03	2,690
	Mar. 13, 1936	9.98	3,130				
	Mar. 19, 1936	13.63	5,020	1948	Jan. 14, 1948	13.57	4,560
					Feb. 15, 1948	12.23	3,950
1937	Jan. 3, 1937	12.38	4,350		Apr. 3, 1948	18.21	6,710
	Jan. 22, 1937	15.60	6,190		May 15, 1948	14.32	4,870
	Apr. 27, 1937	33.58	18,300		Aug. 6, 1948	22.39	10,200
	Sept. 7, 1937	10.20	3,220				
				1949	Nov. 30, 1948	13.29	4,430
1938	Oct. 21, 1937	13.57	5,020		Dec. 5, 1948	22.68	10,400
	Oct. 29, 1937	11.23	3,720		Jan. 1, 1949	13.72	4,610
	Nov. 14, 1937	11.43	3,820		Jan. 7, 1949	12.60	4,120
					Jan. 23, 1949	12.8	4,210
1939	Feb. 5, 1939	12.63	4,460		Mar. 24, 1949	12.93	4,260
	Feb. 12, 1939	14.60	5,600		June 29, 1949	12.95	4,300
	Mar. 1, 1939	10.80	3,510		July 15, 1949	12.79	4,260

a Daily mean discharge.

b Backwater from ice.

Peak stages and discharges of North Anna River near Doswell, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	July 16, 1949	11.46	3,660	1955	Aug. 13, 1955	15.74	5,710
1950	Mar. 25, 1950	13.05	4,300	1955	Aug. 20, 1955	25.58	12,400
	May 20, 1950	14.53	5,030		July 22, 1956	9.50	2,860
	Sept. 10, 1950	10.17	3,130	1957	Oct. 23, 1956	11.75	3,790
1951	Dec. 6, 1950	11.41	3,620		Apr. 7, 1957	12.12	3,910
	June 12, 1951	12.94	4,260	1958	Oct. 8, 1957	12.33	4,000
1952	Dec. 23, 1951	16.80	6,350		Dec. 21, 1957	12.02	3,870
	Jan. 29, 1952	11.93	3,830		Jan. 15, 1958	11.00	3,450
	Mar. 25, 1952	10.30	3,170		Jan. 26, 1958	10.05	3,050
	Apr. 27, 1952	14.39	4,980		Mar. 21, 1958	12.69	4,170
	May 13, 1952	10.29	3,170		Apr. 1, 1958	11.12	3,490
	Sept. 1, 1952	10.81	3,370		Aug. 25, 1958	9.93	3,010
1953	Nov. 22, 1952	18.10	7,180	1959	Dec. 30, 1958	11.86	3,830
	Jan. 25, 1953	11.02	3,450		Feb. 20, 1960	13.38	4,320
	Mar. 27, 1953	11.89	3,830	1960	Apr. 7, 1960	15.05	5,270
	Apr. 14, 1953	13.04	4,300	1961	Feb. 19, 1961	15.53	5,570
1954	Dec. 15, 1953	7.85	2,270		Feb. 24, 1961	11.49	3,360
	Mar. 8, 1955	12.09	3,910		Aug. 26, 1961	11.31	3,280

6715. Hudson Creek near Boswells Tavern, Va.

Location.--Lat 38°02', long 78°11', on right bank at upstream side of bridge on U.S. Highway 15, 2.7 miles south of Boswells Tavern, Louisa County, 4.8 miles north of Zion Crossroads, 5 miles upstream from mouth, and 10 miles west of Louisa.

Drainage area.--4.1 sq mi, approximately.

Gage.--Recording. Altitude of gage is 376 ft (by barometer).

Stage-discharge relation.--Defined by current-meter measurements below 340 cfs and extended above by logarithmic plotting.

Bankfull stage.--5 ft.

Remarks.--Subsequent to June 30, 1957, records furnished by Virginia Department of Conservation and Economic Development, Division of Water Resources. Base for partial-duration series, 240 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Nov. 7, 1948	5.61	274	1955	Aug. 18, 1955	6.00	315
	Dec. 4, 1948	6.44	449	1956	July 20, 1956	4.82	152
	Dec. 30, 1948	5.50	257		Apr. 5, 1957	4.97	166
	July 16, 1949	6.05	362	1958	Oct. 6, 1957	5.02	191
	Aug. 15, 1949	5.45	249		July 24, 1959	4.95	186
1950	May 17, 1950	6.82	532	1960	Feb. 18, 1960	4.72	166
1951	June 10, 1951	7.30	680		Apr. 13, 1961	4.3	163
1952	Dec. 21, 1951	5.41	264	1961	Apr. 13, 1961	4.3	163
1953	Nov. 20, 1952	6.15	345				
1954	Mar. 1, 1954	4.93	166				

6725. South Anna River near Ashland, Va.

Location.-- Lat 37°47'48", long 77°32'57", on right bank at downstream side of bridge on State Highway 54, 4.5 miles northwest of Ashland, Hanover County, and 7.6 miles upstream from Newfound River.

Drainage area.--393 sq mi.

Gage.--Recording. Datum of gage is 83.74 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--12 ft.

Remarks.--Base for partial-duration series, 2,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Aug. 15, 1928	a24	a14,500	1945	July 20, 1945	10.69	3,040
					Sept. 21, 1945	9.43	2,470
1931	May 23, 1931	8.79	2,200	1946	Dec. 28, 1945	9.30	2,430
1932	Jan. 9, 1932	9.32	2,400		May 4, 1946	9.83	2,640
	Mar. 6, 1932	10.25	2,760		May 27, 1946	12.1	3,800
	Mar. 30, 1932	9.50	2,480		June 30, 1946	9.58	2,550
	May 15, 1932	10.46	2,890	1947	Mar. 15, 1947	8.71	2,170
1933	Oct. 6, 1932	9.30	2,400	1948	Jan. 14, 1948	9.37	2,470
	Oct. 20, 1932	9.81	2,600		Feb. 17, 1948	9.65	2,550
	Nov. 12, 1932	9.48	2,480		Apr. 4, 1948	13.66	4,880
	Dec. 31, 1932	10.67	2,970		May 17, 1948	9.54	2,510
	Jan. 28, 1933	11.30	3,230		Aug. 8, 1948	14.38	5,420
	Apr. 20, 1933	9.80	2,600				
	July 25, 1933	9.92	2,640	1949	Dec. 2, 1948	9.56	2,550
	Aug. 23, 1933	8.92	2,240		Dec. 7, 1948	16.00	6,150
1934	Mar. 7, 1934	9.63	2,520		Jan. 2, 1949	10.00	2,730
1935	Dec. 4, 1934	11.48	3,410		Jan. 25, 1949	10.34	2,860
	Jan. 24, 1935	11.04	3,180		Mar. 26, 1949	11.10	3,230
	Mar. 15, 1935	9.44	2,470		July 19, 1949	10.96	3,180
	Apr. 1, 1935	8.95	2,300		Aug. 18, 1949	12.09	3,690
	Apr. 8, 1935	11.73	3,500	1950	Mar. 24, 1950	9.4	2,470
	Sept. 6, 1935	19.04	8,740	1951	June 13, 1951	8.19	1,970
	Sept. 9, 1935	17.02	7,050				
1936	Jan. 3, 1936	13.96	5,100	1952	Dec. 21, 1951	11.61	3,460
	Jan. 6, 1936	15.50	5,380		Dec. 24, 1951	12.10	3,690
	Jan. 22, 1936	12.38	3,040		Jan. 28, 1952	9.90	2,700
	Feb. 15, 1936	b13.0	4,130		Mar. 24, 1952	10.07	2,780
	Mar. 21, 1936	12.79	4,030		Apr. 28, 1952	11.26	3,320
1937	Jan. 3, 1937	10.62	3,000		Sept. 1, 1952	13.92	4,640
	Jan. 20, 1937	11.04	3,180	1953	Nov. 21, 1952	12.95	4,150
	Apr. 28, 1937	22.77	13,700		Nov. 24, 1952	11.92	3,590
	July 22, 1937	9.47	2,510		Jan. 25, 1953	9.22	2,420
	Aug. 13, 1937	9.23	2,380		Mar. 26, 1953	9.71	2,620
	Aug. 25, 1937	8.95	2,300		Apr. 14, 1953	9.31	2,460
	Aug. 31, 1937	11.83	3,550	1954	Mar. 3, 1954	7.83	1,860
1938	Oct. 20, 1937	13.98	4,630	1955	Mar. 7, 1955	8.96	2,300
	Oct. 23, 1937	13.33	4,280		July 12, 1955	11.00	3,120
	Oct. 30, 1937	8.78	2,220		Aug. 13, 1955	17.08	7,120
1939	Feb. 6, 1939	8.75	2,220		Aug. 18, 1955	17.19	7,220
	Feb. 12, 1939	10.95	3,100		Aug. 21, 1955	17.16	7,190
	Mar. 17, 1939	9.25	2,400	1956	July 21, 1956	22.22	12,800
1940	Feb. 11, 1940	b10.5	2,200	1957	Nov. 1, 1956	9.35	2,480
	Apr. 9, 1940	11.08	3,230	1958	Oct. 6, 1957	11.19	3,200
	Apr. 20, 1940	9.53	2,510		Dec. 9, 1957	8.75	2,240
1941	Nov. 17, 1940	8.76	2,220		Dec. 21, 1957	10.97	3,120
	Apr. 8, 1941	9.02	2,300		Mar. 21, 1958	8.99	2,320
1942	Aug. 12, 1942	11.97	3,740		Aug. 25, 1958	11.68	3,400
	Aug. 15, 1942	9.20	2,380	1959	Dec. 29, 1958	9.72	2,600
1943	Oct. 14, 1942	9.55	2,550	1960	Feb. 22, 1960	10.12	2,760
	Oct. 19, 1942	12.43	3,990		Apr. 6, 1960	11.90	3,480
	Feb. 7, 1943	9.50	2,510		Sept. 12, 1960	10.83	3,040
1944	Aug. 2, 1944	11.73	3,560	1961	Feb. 23, 1961	11.55	3,650
	Sept. 22, 1944	8.98	2,300		Mar. 24, 1961	8.50	2,200
1945	July 18, 1945	13.10	4,450		May 13, 1961	8.93	2,380

a Annual peak only, about.

b Backwater from ice.

6730. Pamunkey River near Hanover, Va.

Location.--Lat 37°46'03", long 77°19'57", near center of span on downstream side of bridge on State Highway 614, 0.3 mile upstream from Mechumps Creek, 2.0 miles east of Hanover, Hanover County, and 7.0 miles upstream from Millpond Creek.

Drainage area.--1,072 sq mi.

Gage.--Nonrecording. Datum of gage is 14.72 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--14 ft.

Remarks.--Peak discharges prior to 1958 are computed using rate of change in stage as a factor. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	August 1928	32.6	-	1951	Mar. 22, 1951	16.3	4,700
				1952	Dec. 23, 1951	21.6	11,200
1942	Aug. 11, 1942	20.29	8,660	1953	Nov. 23, 1952	21.9	11,800
1943	Oct. 18, 1942	23.09	15,200	1954	Dec. 16, 1953	14.15	3,310
1944	Mar. 15, 1944	16.64	-	1955	Aug. 20, 1955	26.12	20,900
	Aug. 4, 1944	-	4,260				
1945	July 19, 1945	21.3	10,700	1956	July 21, 1956	17.70	6,280
				1957	Mar. 1, 1957	17.58	5,800
1946	May 29, 1946	19.08	6,900	1958	Mar. 22, 1958	19.60	7,740
1947	Mar. 17, 1947	16.88	4,610	1959	Jan. 1, 1959	20.01	8,220
1948	Aug. 7, 1948	21.73	11,600	1960	Apr. 7, 1960	21.46	10,600
1949	Dec. 6, 1948	24.2	16,300				
1950	Mar. 25, 1950	19.53	7,360	1961	Feb. 21, 1961	21.94	11,400

a Occurred on following day.

6735. Totopotomoy Creek near Atlee, Va.

Location.--Lat 37°40'09", long 77°22'58", on right bank at upstream side of bridge on U.S. Highway 301, 0.7 mile upstream from Opossum Creek, and 1.6 miles northeast of Atlee, Hanover County.

Drainage area.-- 6.0 sq mi, approximately.

Gage.--Recording. Altitude of gage is 113 ft (by barometer).

Stage-discharge relation.--Defined by current-meter measurements below 190 cfs and extended above by logarithmic plotting.

Remarks.--Subsequent to June 30, 1957, records furnished by Virginia Department of Conservation and Economic Development, Division of Water Resources. Base for partial-duration series, 45 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	July 1945	7.5	400	1953	Jan. 24, 1953	4.79	96
					Apr. 13, 1953	3.90	54
1949	Dec. 31, 1948	3.99	52		Sept. 5, 1953	4.15	64
	May 3, 1949	3.81	48	1954	Dec. 14, 1953	3.85	52
	July 16, 1949	4.44	66		Apr. 17, 1954	3.71	46
	Aug. 28, 1949	3.80	49				
1950	Oct. 31, 1949	5.04	82	1955	Aug. 13, 1955	8.62	748
	Mar. 23, 1950	4.18	59		Aug. 18, 1955	6.54	233
1951	June 14, 1951	3.41	39	1956	Oct. 14, 1955	5.85	158
					Feb. 7, 1956	3.97	56
1952	Dec. 21, 1951	4.50	81		May 8, 1956	4.13	63
	Jan. 29, 1952	4.51	81		May 23, 1956	3.81	48
	Mar. 11, 1952	3.85	52		June 2, 1956	5.18	102
	Mar. 24, 1952	5.64	147		July 21, 1956	4.06	54
	Apr. 26, 1952	4.98	108		July 25, 1956	4.43	69
	Sept. 1, 1952	5.16	126		Sept. 2, 1956	5.38	110
1953	Nov. 21, 1952	6.27	192	1957	Dec. 16, 1956	4.23	47

Peak stages and discharges of Totopotomoy Creek near Atlee, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	Feb. 27, 1957	5.30	90	1959	Dec. 29, 1958	4.99	91
	Mar. 1, 1957	4.71	64		Apr. 13, 1959	4.02	47
	Aug. 19, 1957	4.33	50		Apr. 20, 1959	4.05	48
	Aug. 25, 1957	5.27	88		July 1, 1959	4.18	54
1958	Oct. 7, 1957	5.70	116	1960	Nov. 25, 1959	5.23	118
	Dec. 9, 1957	4.72	64		Feb. 19, 1960	5.64	148
	Dec. 21, 1957	6.36	194		Apr. 5, 1960	6.08	194
	Dec. 27, 1957	4.24	51		June 30, 1960	5.18	114
	Jan. 14, 1958	4.20	49		July 31, 1960	4.84	90
	Jan. 25, 1958	4.91	77		Aug. 5, 1960	4.70	79
	Feb. 1, 1958	4.17	48		Aug. 7, 1960	5.30	124
	Feb. 7, 1958	4.10	45		Sept. 12, 1960	4.36	58
	Feb. 27, 1958	4.17	48	1961	Feb. 8, 1961	4.09	47
	Mar. 20, 1958	5.13	98		Feb. 23, 1961	6.23	212
	Apr. 6, 1958	4.03	46		Mar. 23, 1961	4.26	66
	Apr. 11, 1958	4.91	86		Apr. 1, 1961	4.03	58
	May 7, 1958	4.12	49		May 13, 1961	3.74	46
	Aug. 25, 1958	6.07	170				

6740. Mattaponi River near Bowling Green, Va.

Location.--Lat 38°03'42", long 77°23'10", on left bank at downstream side of highway bridge, 0.2 mile upstream from bridge on State Highway 605 (relocated), 2.2 miles northwest of Bowling Green, Caroline County, 2.4 miles upstream from South River and 7.1 miles downstream from confluence of Matta and Poni Rivers.

Drainage area.--251 sq mi.

Gage.--Recording. Datum of gage is 85.14 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 6,200 cfs.

Bankfull stage.--11 ft.

Remarks.--Subsequent to June 30, 1957, records furnished by Virginia Department of Conservation and Economic Development, Division of Water Resources. Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	August 1928	19.5	15,000	1948	Aug. 5, 1948	15.34	6,580
1943	Oct. 17, 1942	17.45	10,400	1949	Dec. 1, 1948	10.63	1,880
	Feb. 8, 1943	9.20	1,440		Dec. 5, 1948	16.21	8,060
	Mar. 9, 1943	8.96	1,390		Jan. 1, 1949	10.28	1,730
	Apr. 22, 1943	9.25	1,440		Jan. 8, 1949	10.05	1,600
1944	Mar. 15, 1944	8.82	1,300		Jan. 24, 1949	12.25	2,930
	Apr. 1, 1944	8.41	1,160		Mar. 25, 1949	9.46	1,590
1945	Dec. 14, 1944	8.15	1,110		May 5, 1949	8.21	1,160
	July 18, 1945	14.23	4,980		July 16, 1949	9.92	1,730
	July 31, 1945	11.30	2,320	1950	Mar. 25, 1950	10.81	2,100
	Aug. 10, 1945	8.02	1,050		May 20, 1950	11.58	2,520
1946	Dec. 9, 1945	8.04	1,040		Sept. 11, 1950	13.78	4,130
	Dec. 28, 1945	10.70	1,940	1951	Dec. 7, 1950	8.58	1,230
	Feb. 22, 1946	8.19	1,100		Mar. 16, 1951	8.54	1,200
	Mar. 22, 1946	9.11	1,410		Mar. 22, 1951	8.67	1,260
	May 7, 1946	9.27	1,480		Apr. 5, 1951	7.96	1,050
	July 12, 1946	9.90	1,700	1952	Dec. 23, 1951	13.14	3,600
1947	Jan. 6, 1947	8.90	1,330		Jan. 30, 1952	10.0	1,710
	Jan. 22, 1947	8.16	1,100		Mar. 22, 1952	7.88	1,020
	Mar. 16, 1947	8.18	1,100		Mar. 28, 1952	9.70	1,600
1948	Jan. 16, 1948	10.77	1,990		Apr. 28, 1952	12.25	2,930
	Feb. 16, 1948	8.73	1,180		Sept. 3, 1952	10.75	2,050
	Mar. 10, 1948	8.48	1,130	1953	Nov. 23, 1952	14.22	4,980
	Apr. 3, 1948	12.37	3,080		Jan. 26, 1953	9.93	1,670
	May 29, 1948	8.15	1,050		Mar. 15, 1953	8.87	1,320
					Mar. 27, 1953	10.50	1,920

Peak stages and discharges of Mattaponi River near Bowling Green, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Apr. 15, 1953	10.48	1,920	1958	Apr. 2, 1958	9.57	1,560
	May 22, 1953	9.45	1,500		May 9, 1958	8.64	1,230
1954	Mar. 4, 1954	6.04	557		Aug. 27, 1958	10.36	1,860
1955	Mar. 9, 1955	9.84	1,650	1959	Jan. 1, 1959	9.87	1,670
	Aug. 15, 1955	12.55	3,240		June 5, 1959	7.98	1,050
	Aug. 20, 1955	15.60	7,060	1960	Feb. 21, 1960	10.25	1,960
1956	Feb. 9, 1956	7.86	990		Mar. 22, 1960	7.79	1,050
					Apr. 7, 1960	12.82	3,560
1957	Nov. 3, 1956	11.70	2,570		May 20, 1960	11.43	2,600
	Mar. 1, 1957	8.83	1,290		Sept. 2, 1960	8.94	1,360
1958	Oct. 8, 1957	9.30	1,460		Sept. 14, 1960	10.61	2,160
	Dec. 11, 1957	9.33	1,460	1961	Jan. 4, 1961	9.5	1,640
	Dec. 22, 1957	10.84	2,050		Feb. 20, 1961	14.03	4,760
	Dec. 28, 1957	8.81	1,290		Feb. 25, 1961	11.28	2,550
	Jan. 17, 1958	9.70	1,600		Mar. 24, 1961	10.76	2,280
	Jan. 27, 1958	9.87	1,670		Apr. 3, 1961	8.90	1,360
	Mar. 1, 1958	9.35	1,500		Apr. 12, 1961	8.30	1,150
	Mar. 22, 1958	12.80	3,420		Apr. 15, 1961	9.27	1,540
	Mar. 29, 1958	8.30	1,140		May 15, 1961	9.25	1,500
					Aug. 28, 1961	8.09	1,140

6742. Reedy Creek near Dawn, Va.

Location--Lat 37°52'55", long 77°21'35", at bridge on U.S. Highway 301, 3.3 miles north of Dawn and 11 miles south of Bowling Green, Caroline County.

Drainage area--16.8 sq mi.

Gage--Crest-stage gage. Altitude of gage is 110 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements.

Bankfull stage--4 ft.

Remarks--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	June 14, 1951	3.64	125	1957	June 1957	4.31	205
1952	Sept. 1, 1952	5.28	310	1958	December 1957	3.99	170
1953	Nov. 21, 1952	5.00	275	1959	Oct. 22, 1958	3.69	140
1954	Apr. 20, 1954	3.26	95	1960	Apr. 5, 1960	4.45	215
1955	Aug. 13, 1955	5.00	275	1961	Feb. 23, 1961	4.16	185
1956	Mar. 14, 1956	4.45	225				

6745. Mattaponi River near Beulahville, Va.

Location.--Lat 37°53'18", long 77°09'48", on right bank at upstream side of highway bridge, 2.4 miles north of Beulahville, King William County, and 2.7 miles downstream from Maracossic Creek.

Drainage area.--619 sq mi.

Gage.--Nonrecording prior to Oct. 14, 1942; recording thereafter. Datum of gage is 12.43 ft above mean sea level, datum of 1929 (levels by Virginia Department of Highways).

Stage-discharge relation.--Defined by current-meter measurements below 7,800 cfs and extended above by logarithmic plotting.

Bankfull stage.--14 ft.

Historical data.--Flood in June 1889 was about 6 ft higher than flood of Oct. 20, 1942, from information by local resident at Reedy Mill, about 16 miles upstream.

Remarks.--Base for partial-duration series, 1,800 cfs. Only annual peaks are shown after September 1953.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	August 1928	a23	12,000	1949	Mar. 28, 1949	12.87	2,410
					July 19, 1949	13.14	2,520
1942	Apr. 4, 1942	11.70	1,860				
	Aug. 14, 1942	13.4	2,700	1950	Nov. 2, 1949	12.66	2,280
					Mar. 27, 1950	13.08	2,520
1943	Oct. 20, 1942	18.65	7,490		May 24, 1950	13.02	2,460
	Feb. 11, 1943	13.20	2,580		Sept. 14, 1950	15.84	4,360
	Apr. 26, 1943	11.83	1,900				
				1951	Mar. 26, 1951	10.86	1,590
1944	Mar. 19, 1944	11.54	1,730				
				1952	Dec. 26, 1951	14.88	3,990
1945	July 20, 1945	20.0	8,700		Feb. 2, 1952	13.11	2,690
	Aug. 3, 1945	14.47	3,340		Mar. 29, 1952	13.0	2,630
					May 1, 1952	16.29	5,210
1946	Jan. 1, 1946	13.6	2,800		Sept. 6, 1952	11.95	2,080
	Mar. 25, 1946	11.74	1,860				
	May 10, 1946	12.12	2,030	1953	Nov. 26, 1952	16.70	5,610
	June 2, 1946	12.37	2,160		Jan. 29, 1953	12.57	2,390
	July 14, 1946	11.82	1,900		Mar. 19, 1953	11.54	1,850
					Mar. 30, 1953	13.35	2,870
1947	Jan. 10, 1947	11.92	1,890		Apr. 18, 1953	13.05	2,630
	July 24, 1947	11.59	1,820				
				1954	Jan. 30, 1954	9.06	1,160
1948	Jan. 19, 1948	12.93	2,410		Aug. 22, 1955	18.62	7,120
	Mar. 13, 1948	11.91	1,940				
	Apr. 7, 1948	14.10	3,120	1956	Oct. 16, 1955	12.14	2,050
	June 1, 1948	12.66	2,310		Mar. 4, 1957	13.19	2,620
	Aug. 8, 1948	16.68	5,130		Mar. 25, 1958	16.10	4,690
					Jan. 4, 1959	12.67	2,350
1949	Dec. 8, 1948	18.82	7,280		Apr. 9, 1960	15.62	4,280
	Jan. 5, 1949	12.80	2,360				
	Jan. 11, 1949	12.42	2,160	1961	Feb. 23, 1961	17.37	5,900
	Jan. 26, 1949	15.01	3,720				

a About, based on comparative stages near Milton and at Reedy Mill.

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