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SURFACE WATER SUPPLY
of the UNITED STATES
1928

PART I
NORTH ATLANTIC SLOPE
DRAINAGE BASINS

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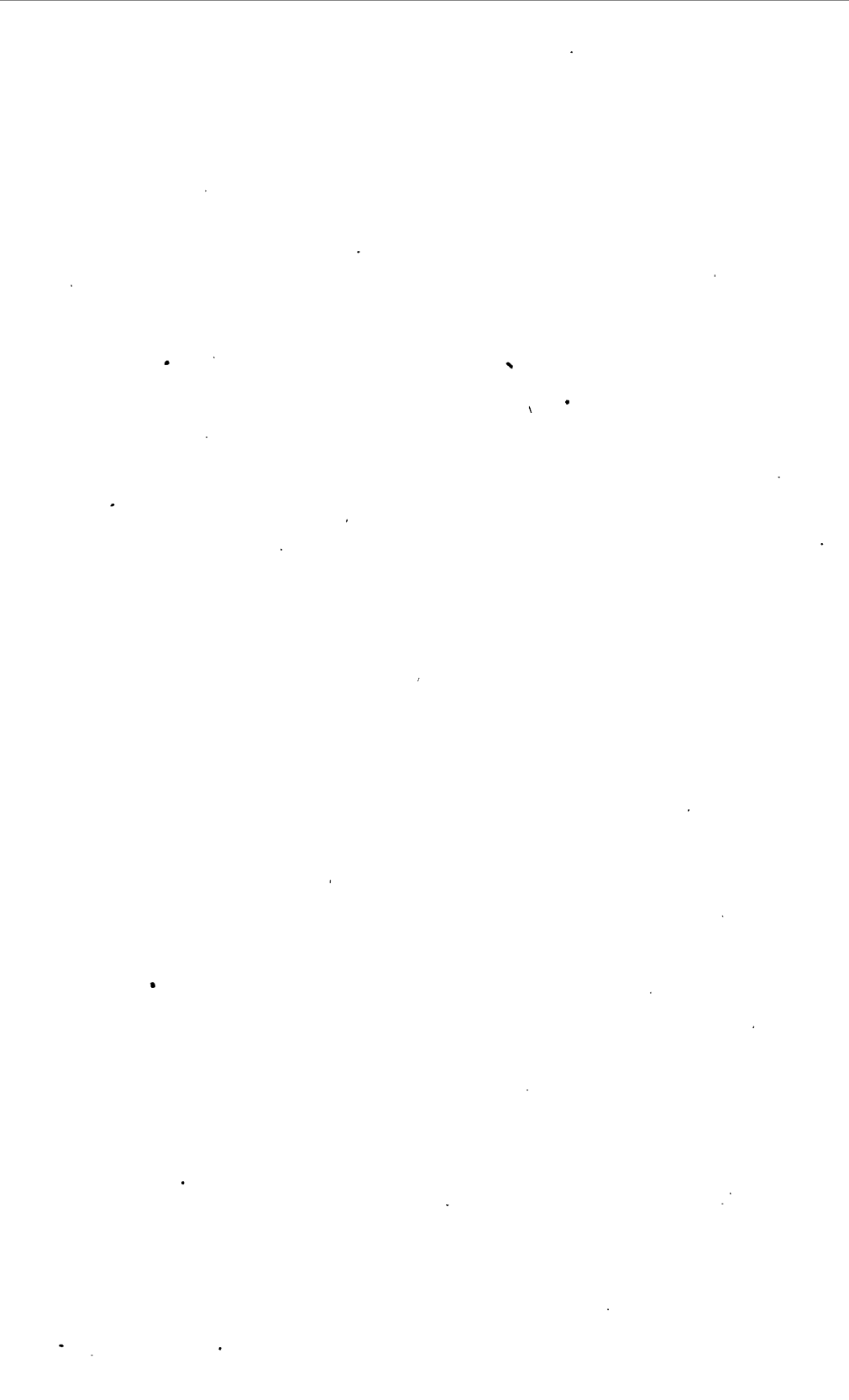
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SURFACE WATER SUPPLY OF NORTH ATLANTIC SLOPE DRAINAGE BASINS, 1928

AUTHORIZATION AND SCOPE OF WORK

This volume is one of a series of 14 reports representing results of measurements of flow made on streams in the United States during the year ending September 30, 1928.

The data presented in these reports were collected by the United States Geological Survey under the following authority contained in the organic law (20 Stat. L., p. 394):

Provided, That this officer [the Director] shall have the direction of the Geological Survey and the classification of public lands and examination of the geological structure, mineral resources, and products of the national domain.

The work was begun in 1888 in connection with special studies relating to irrigation. Since the fiscal year ending June 30, 1895, successive appropriation bills passed by Congress have carried the following items:

For gaging the streams and determining the water supply of the United States, and for the investigation of underground currents and artesian wells, and for the preparation of reports upon the best methods of utilizing the water resources.

Annual appropriations for the fiscal years ending June 30, 1895-1929

1895-----	\$12, 500. 00	1907-----	\$150, 000. 00	1921-1923 -	\$180, 000. 00
1896-----	24, 500. 00	1908-1910 -	100, 000. 00	1924-1925 -	170, 000. 00
1897-1899 ..	50, 000. 00	1911-1917 -	150, 000. 00	1926-----	165, 000. 00
1900-----	70, 000. 00	1918-----	175, 000. 00	1927-----	151, 000. 00
1901-1902 ..	100, 000. 00	1919-----	148, 244. 10	1928-----	147, 000. 00
1903-1906 ..	200, 000. 00	1920-----	175, 000. 00	1929-----	270, 500. 00

In the execution of the work many private and State organizations have cooperated either by furnishing data or by assisting in collecting data. Acknowledgments for cooperation of the first kind are made in connection with the description of each station affected; cooperation of the second kind is acknowledged on page 9.

Measurements of stream flow have been made at about 5,480 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July, 1928, 1,830 gaging stations were being maintained by the Survey and the cooperating organizations. Many miscellaneous discharge measurements were made at other points. In connection with this work data were also collected in regard to precipitation, evaporation, storage reservoirs, river profiles, and water

power in many sections of the country and will be made available in water-supply papers from time to time.

DEFINITION OF TERMS

The volume of water flowing in a stream—the “run-off” or “discharge”—is expressed in various terms, each of which has become associated with a certain class of work. These terms may be divided into two groups—(1) those that represent a rate of flow, as second-feet, gallons per minute, miner’s inches, and discharge in second-feet per square mile, and (2) those that represent the actual quantity of water, as run-off in inches, acre-feet, and millions of cubic feet. The principal terms used in this series of reports are second-feet, second-feet per square mile, run-off in inches, acre-feet, and millions of cubic feet. They may be defined as follows:

“Second-feet” is an abbreviation for “cubic feet per second.” A second-foot is the rate of discharge of water flowing in a channel of rectangular cross section 1 foot wide and 1 foot deep at an average velocity of 1 foot per second. It is generally used as a fundamental unit from which others are computed.

“Second-feet per square mile” is the average number of cubic feet of water flowing per second from each square mile of area drained, on the assumption that the run-off is distributed uniformly both as regards time and area.

“Run-off in inches” is the depth to which an area would be covered if all the water flowing from it in a given period were uniformly distributed on the surface. It is used for comparing run-off with rainfall, which is usually expressed in inches.

An “acre-foot,” equivalent to 43,560 cubic feet, is the quantity required to cover an acre to the depth of 1 foot. The term is commonly used in connection with storage for irrigation.

The following terms not in common use are here defined:

“Stage-discharge relation,” an abbreviation for the term “relation of gage height to discharge.”

“Control,” a term used to designate the natural section or stretch of the channel or artificial structure below the gage which determines the stage-discharge relation at the gage.

EXPLANATION OF DATA

The data presented in this report cover the year beginning October 1, 1927, and ending September 30, 1928. At the beginning of January in most parts of the United States much of the precipitation in the preceding three months is stored in the form of snow or ice, or in ponds, lakes, and swamps, or as underground water, and this stored water passes off in the streams during the spring break-up. At the end of September, on the other hand, the only stored water available

for run-off is possibly a small quantity in the ground; therefore the run-off for the year beginning October 1 is practically all derived from precipitation within that year.

The base data collected at gaging stations consists of records of stage, measurements of discharge, and general information used to supplement the gage heights and discharge measurements in determining the daily flow. The records of stage are obtained either from direct reading on a staff or chain gage or from a water-stage recorder that gives a continuous record of the fluctuations. Measurements of discharge are made with a current meter. The general methods are outlined in standard textbooks on the measurement of river discharge. A typical gaging station, equipped with water-stage recorder and measuring cable and car, is shown in Figure 1.

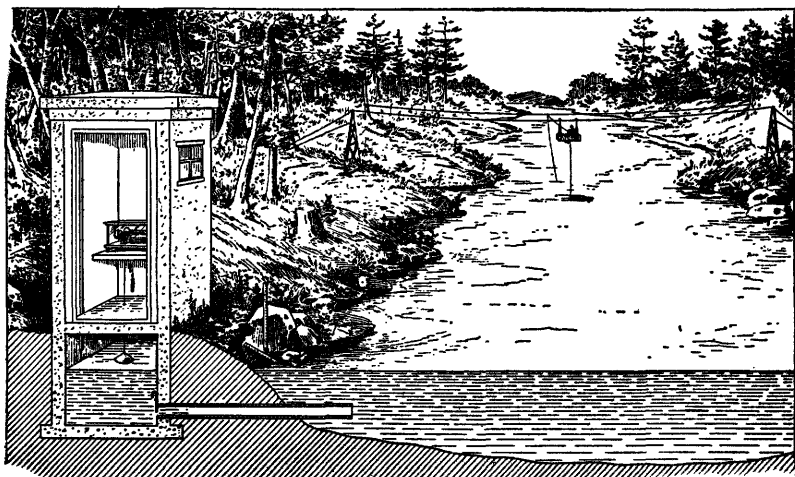


FIGURE 1.—Typical gaging station

From the discharge measurements rating tables are prepared that give the discharge for any stage. The application of the daily gage height to these rating tables gives the daily discharge from which the monthly and yearly mean discharge is computed.

The data presented for each gaging station in the area covered by this report comprise a description of the station, a table showing the daily discharge of the stream, and a table of monthly and yearly discharge and run-off.

The description of the station gives, in addition to statements regarding location and type of gage, information as to diversions that decrease the flow at the gage, artificial regulation, maximum and minimum recorded discharge, and the accuracy of the records. The maximum discharge given under "Extremes" does not represent the crest discharge unless a water-stage recorder was in operation or unless a nonrecording gage was read at the time of the crest.

The table of daily discharge gives, in general, the discharge in second-feet corresponding to the daily gage height which may be a once daily reading or the mean of twice daily readings of a non-recording gage, or the mean daily gage height obtained from a water-stage recorder graph.

At stations on streams subject to sudden or rapid diurnal fluctuation the discharge obtained from the rating table and the mean daily gage height may not be the true mean discharge for the day. If such stations are equipped with water-stage recorders, the mean daily discharge may be obtained by averaging discharge at regular intervals during the day or by using the discharge integrator, an instrument for obtaining mean daily discharge from a continuous gage-height graph and containing as an essential element the rating curve of the station.

In the table of monthly discharge the column headed "Maximum" gives the maximum daily discharge and not the discharge when the water surface was at crest height. Likewise, in the column headed "Minimum" the quantity given is the minimum daily discharge. The column headed "Mean" is the average flow in cubic feet per second during the month. On this average flow are based computations recorded in the remaining columns, which are defined on page 2.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

The accuracy of stream-flow data depends primarily (1) on the permanence of the stage-discharge relation and (2) on the accuracy of observation of stage, measurements of flow, and interpretation of records.

The station description gives a statement in regard to the general accuracy of the records. "Excellent" indicates that records are accurate within 5 per cent; "good," within 10 per cent; "fair," within 15 per cent; and "poor," 20 per cent or more.

The monthly means for any station may represent with high accuracy the quantity of water flowing past the gage, but the figures showing discharge per square mile and depth in inches may be subject to gross errors caused by the inclusion of large noncontributing districts in the measured drainage area, by lack of information concerning water diverted for irrigation or other use, or by inability to interpret the effect of artificial regulation of the flow of the river above the station. "Second-feet per square mile" and "run-off in inches" are therefore not computed if such errors appear probable. The computations are also omitted for stations on streams draining areas in which the annual rainfall is less than 20 inches.

The table of monthly discharge gives a general idea of the flow at the station. The table of daily discharge allows more detailed studies

of the variation in flow. It should be borne in mind, however, that the observations in each succeeding year may be expected to throw new light on data previously published.

Many gaging stations on streams in the irrigated areas of the United States are situated above most of the diversions from those streams, and the discharge recorded does not show the water supply available for further development, as prior appropriations must first be satisfied.

PUBLICATIONS

Investigation of water resources by the United States Geological Survey has consisted in large part of measurements of the volume of flow of streams and studies of the conditions affecting that flow, but it has comprised also investigation of such closely allied subjects as irrigation, water storage, water powers, underground waters, and quality of waters. Most of the results of these investigations have been published in the series of water-supply papers, but some have appeared in the bulletins, professional papers, monographs, and annual reports.

The results of stream-flow measurements are now published annually in 12 parts, each part covering an area whose boundaries coincide with natural drainage features as indicated below:

PART I. North Atlantic slope basins (St. John River to York River).

II. South Atlantic slope and eastern Gulf of Mexico basins (James River to the Mississippi).

III. Ohio River Basin.

IV. St. Lawrence River Basin.

V. Upper Mississippi River and Hudson Bay Basins.

VI. Missouri River Basin.

VII. Lower Mississippi River Basin.

VIII. Western Gulf of Mexico basins.

IX. Colorado River Basin.

X. The Great Basin.

XI. Pacific slope basins in California.

XII. North Pacific slope basins, in three parts.

A, Pacific slope basins in Washington and upper Columbia River Basin.

B, Snake River Basin.

C, Pacific slope basins in Oregon and lower Columbia River Basin.

Water-supply papers and other publications of the United States Geological Survey containing data in regard to the water resources of the United States may be obtained or consulted as indicated below:

1. Copies may be purchased at nominal cost from the Superintendent of Documents, Government Printing Office, Washington, D. C., who will, on application, furnish lists giving prices.

2. Sets of the reports may be consulted in the libraries of the principal cities in the United States.

3. Sets are available for consultation in the local offices of the water-resources branch of the Geological Survey, as follows:

Augusta, Me., Statehouse.
Boston, Mass., 2500 Customhouse.
Hartford, Conn., 60 Washington Street.
Albany, N. Y., 506 Broadway-Arcade Building.
Trenton, N. J., 710 Trenton Trust Building.
Charlottesville, Va., Brooks Museum, University of Virginia.
South Charleston, W. Va., Naval Ordnance Plant.
Asheville, N. C., 210 Post Office Building.
Columbia, S. C., 801 National Loan & Exchange Bank Building.
Ocala, Fla., Post Office Building.
Chattanooga, Tenn., 630 Power Building.
Tuscaloosa, Ala., Post Office Building.
Columbus, Ohio, Engineering Experiment Station, Ohio State University.
Indianapolis, Ind., 315 Federal Building.
Lansing, Mich., M9 State Office Building.
Chicago, Ill., 1503 Consumers Building.
Madison, Wis., 337N State Capitol.
St. Paul, Minn., 202 Old State Capitol.
Topeka, Kans., 23 Federal Building.
Rolla, Mo., Rolla Building, School of Mines and Metallurgy.
Fort Smith, Ark., Post Office Building.
Austin, Tex., State Capitol.
Tucson, Ariz., 210 Post Office Building.
Denver, Colo., 403 Post Office Building.
Salt Lake City, Utah, 313 Federal Building.
Idaho Falls, Idaho, 228 Federal Building.
Boise, Idaho, Federal Building.
Helena, Mont., 416 Power Block.
Tacoma, Wash., 406 Federal Building.
Portland, Oreg., 606 Post Office Building.
San Francisco, Calif., 303 Customhouse.
Los Angeles, Calif., 751 South Figueroa Street, room 510.
Honolulu, Hawaii, Territorial Office Building.

A list of the Geological Survey's publications may be obtained by applying to the Director, United States Geological Survey, Washington, D. C.

Stream-flow records have been obtained at about 5,480 points in the United States, and the data obtained have been published in the reports tabulated below.

Stream-flow data in reports of the United States Geological Survey

[A=Annual Report; B=Bulletin; W=Water-Supply Paper]

Report	Character of data	Year
10th A, pt. 2.....	Descriptive information only.....	
11th A, pt. 2.....	Monthly discharge and descriptive information.....	1884 to Sept., 1890.
12th A, pt. 2.....	do.....	1884 to June 30, 1891.
13th A, pt. 3.....	Mean discharge in second-feet.....	1884 to Dec. 31, 1892.
14th A, pt. 2.....	Monthly discharge (long-time records, 1871 to 1893).....	1888 to Dec. 31, 1893.
B 131.....	Descriptions, measurements, gage heights, and ratings.....	1893 to 1894.
16th A, pt. 2.....	Descriptive information only.....	
B 140.....	Descriptions, measurements, gage heights, ratings, and monthly discharge (also data covering earlier years).....	1895.
W 11.....	Gage heights (also gage heights for earlier years).....	1896.
18th A, pt. 4.....	Descriptions, measurements, ratings, and monthly discharge (also similar data for some earlier years).....	1895 and 1896.
W 15.....	Descriptions, measurements, and gage heights, eastern United States, eastern Mississippi River, and Missouri River above junction with Kansas.....	1897.
W 16.....	Descriptions, measurements, and gage heights, western Mississippi River below junction of Missouri and Platte, and western United States.....	1897.
19th A, pt. 4.....	Descriptions, measurements, ratings, and monthly discharge (also some long-time records).....	1897.
W 27.....	Measurements, ratings, and gage heights, eastern United States, eastern Mississippi River, and Missouri River.....	1898.
W 28.....	Measurements, ratings, and gage heights, Arkansas River and western United States.....	1898.
20th A, pt. 4.....	Monthly discharge (also for many earlier years).....	1898.
W 35 to 39.....	Descriptions, measurements, gage heights, and ratings.....	1899.
21st A, pt. 4.....	Monthly discharge.....	1899.
W 47 to 52.....	Descriptions, measurements, gage heights, and ratings.....	1900.
22d A, pt. 4.....	Monthly discharge.....	1900.
W 65, 66.....	Descriptions, measurements, gage heights, and ratings.....	1901.
W 75.....	Monthly discharge.....	1901.
W 82 to 85.....	Complete data.....	1902.
W 97 to 100.....	do.....	1903.
W 124 to 135.....	do.....	1904.
W 165 to 178.....	do.....	1905.
W 201 to 214.....	do.....	1906.
W 241 to 252.....	do.....	1907 and 1908.
W 261 to 272.....	do.....	1909.
W 281 to 292.....	do.....	1910.
W 301 to 312.....	do.....	1911.
W 321 to 332.....	do.....	1912.
W 351 to 362.....	do.....	1913.
W 381 to 394.....	do.....	1914.
W 401 to 414.....	do.....	1915.
W 431 to 444.....	do.....	1916.
W 451 to 464.....	do.....	1917.
W 471 to 484.....	do.....	1918.
W 501 to 514.....	do.....	1919 and 1920.
W 521 to 534.....	do.....	1921.
W 541 to 554.....	do.....	1922.
W 561 to 574.....	do.....	1923.
W 581 to 594.....	do.....	1924.
W 601 to 614.....	do.....	1925.
W 621 to 634.....	do.....	1926.
W 641 to 654.....	do.....	1927.
W 661 to 674.....	do.....	1928.

The records at most of the stations discussed in these reports extend over a series of years. Miscellaneous measurements at many points other than regular gaging stations have been made each year and are published at the end of each report in the same relative order as the regular gaging stations. An index of reports containing records obtained prior to 1904 was published in Water-Supply Paper 119.

The following table gives, by years and drainage basins, the numbers of the papers on surface water supply published from 1899 to 1928. The data for any particular station will be found in the reports covering the years during which the station was maintained. For example, data from 1910 to 1920 for any station in the area covered by Part III are published in Water-Supply Papers 283, 303, 323, 353, 383, 403, 433, 453, 473, and 503, which contain records for the Ohio River Basin for those years.

Numbers of water-supply papers containing results of stream measurements, 1899-1928

[For basins included see p. 54]

Year	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII-A	XII-B	XII-C
1899 ^a	35	35, 36	36	36	36	36, 37	37	37	37, 38	38, 39	38, 39	38	38	38
1900 ^a	47, 48	48	48, 49	49	49	49, 50	50	50	50	51	51	51	51	51
1901	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1902	82, 92	82, 92	82, 92	82, 92	82, 92	82, 92	82, 92	82, 92	82, 92	83	83	83	83	83
1903	97	97	97	97	97	97	97	97	97	98	98	98	98	98
1904	124, 125	124, 125	124, 125	124, 125	124, 125	124, 125	124, 125	124, 125	124, 125	133	133	133	133	133
1905	165, 166	165, 166	165, 166	165, 166	165, 166	165, 166	165, 166	165, 166	165, 166	176, 177	176, 177	176, 177	176, 177	176, 177
1906	201, 202	201, 202	201, 202	201, 202	201, 202	201, 202	201, 202	201, 202	201, 202	212, 213	212, 213	212, 213	212, 213	212, 213
1907-8	241	241	241	241	241	241	241	241	241	250, 251	250, 251	250, 251	250, 251	250, 251
1909	281	281	281	281	281	281	281	281	281	270, 271	270, 271	270, 271	270, 271	270, 271
1910	301	301	301	301	301	301	301	301	301	310	310	310	310	310
1911	321	321	321	321	321	321	321	321	321	330	330	330	330	330
1912	351	351	351	351	351	351	351	351	351	360	360	360	360	360
1913	381	381	381	381	381	381	381	381	381	390	390	390	390	390
1914	401	401	401	401	401	401	401	401	401	410	410	410	410	410
1915	431	431	431	431	431	431	431	431	431	440	440	440	440	440
1916	451	451	451	451	451	451	451	451	451	460	460	460	460	460
1917	471	471	471	471	471	471	471	471	471	480	480	480	480	480
1918	491	491	491	491	491	491	491	491	491	500	500	500	500	500
1919-20	511	511	511	511	511	511	511	511	511	520	520	520	520	520
1921	531	531	531	531	531	531	531	531	531	540	540	540	540	540
1922	551	551	551	551	551	551	551	551	551	560	560	560	560	560
1923	571	571	571	571	571	571	571	571	571	580	580	580	580	580
1924	591	591	591	591	591	591	591	591	591	600	600	600	600	600
1925	611	611	611	611	611	611	611	611	611	620	620	620	620	620
1926	631	631	631	631	631	631	631	631	631	640	640	640	640	640
1927	651	651	651	651	651	651	651	651	651	660	660	660	660	660
1928	671	671	671	671	671	671	671	671	671	680	680	680	680	680

^a Rating tables and index to Water-Supply Papers 35-39 contained in Water-Supply Paper 39. Tables of monthly discharge for 1899 in Twenty-first Annual Report, Part IV.^b Saline River only.^c Gullatin River.^d Green and Gunnison Rivers and Grand River above junction with Gunnison.^e McInave River only.^f Kings and Kern Rivers and south Pacific slope basins.^g Rating tables and index to Water-Supply Papers 47-52 and data on precipitation, wells, and irrigation in California and Utah contained in Water-Supply Paper 52.^h Tables of monthly discharge for 1900 in Twenty-second Annual Report, Part IV.ⁱ Wisconsin and Schuykill Rivers to James River.^j Salado River.^k Loup and Platte Rivers near Columbus, Nebr., and all tributaries below junction with Platte.^l Tributaries of Mississippi from east.^m Lake Ontario and tributaries to St. Lawrence River proper.ⁿ Hudson Bay only.^o New England rivers only.^p Hudson River to Delaware River inclusive.^q Susquehanna River to Yackin River inclusive.^r Platte River to Carson River.^s Great Basin in California, except Truckee and Carson River Basins.^t Below junction with Gila.^u Rogue, Umpqua, and Siletz Rivers only.

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Records in Maine were obtained in cooperation with the Public Utilities Commission of Maine, Charles E. Gurney, chairman.

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In Vermont the work was carried on in cooperation with the Public Service Commission, Henry B. Shaw, chairman.

In Massachusetts the work was carried on in cooperation with the Department of Public Works, division of waterways and public lands, William F. Williams, chairman, Richard K. Hale, commissioner (waterways) and with the Metropolitan District Water Supply Commission, D. B. Keniston, chairman.

In Connecticut the work was carried on in cooperation with the Attorney General's office, Benjamin W. Alling, Attorney General.

Work in New York was carried on in cooperation with the State Department of Public Works, Frederick Stuart Greene, superintendent.

The work in New Jersey was carried on in cooperation with the State through the Department of Conservation and Development, Dr. Henry B. Kümmel, director, and H. T. Critchlow, chief, division of waters.

The work in Maryland was carried on in cooperation with the Maryland Geological Survey, E. B. Matthews, State geologist.

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DIVISION OF WORK

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The manuscript was reviewed and assembled by P. R. Speer.

GAGING-STATION RECORDS

ST. JOHN RIVER BASIN

ST. JOHN RIVER AT FORT KENT, ME.

LOCATION.—Staff gage at cable ferry between Fort Kent, Aroostook County, and Clair, New Brunswick, a quarter of a mile below mouth of Fish River.

DRAINAGE AREA.—5,690 square miles.

RECORDS AVAILABLE.—October, 1926, to September, 1928.

EXTREMES.—Maximum discharge during year, 90,000 second-feet May 8 (gage height, 20.7 feet); minimum, 1,180 second-feet October 4 (gage height, 1.55 feet).

1926-1928: Maximum discharge, that of May 8, 1928; minimum, that of October 4, 1927.

REMARKS.—Records good. Discharge estimated December 1-4, 10-14, and December 29 to April 13 because of ice.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,250	10,600	13,100	7,740	3,560	2,060	2,100	19,600	51,700	12,800	6,550	3,970
2.....	1,180	9,780	13,400	7,220	3,400	2,030	2,120	25,600	46,500	18,800	5,700	3,800
3.....	1,180	8,970	13,100	7,100	3,290	2,000	2,150	40,300	41,500	16,500	4,890	3,480
4.....	1,180	8,970	11,800	7,450	3,290	1,980	2,270	53,000	35,500	13,100	4,320	3,170
5.....	1,330	26,600	10,900	7,940	3,140	1,920	2,580	65,900	32,000	10,600	5,290	2,870
6.....	1,590	39,500	11,200	7,890	3,100	1,890	2,940	74,100	27,100	8,970	7,940	2,870
7.....	2,230	36,300	11,800	7,400	3,020	1,860	3,610	87,200	22,200	7,940	9,240	2,600
8.....	3,320	30,800	10,600	6,950	2,960	1,840	5,190	90,300	23,100	6,770	7,940	2,470
9.....	4,500	26,600	14,700	6,590	2,920	1,790	7,820	83,700	26,100	5,910	6,990	2,110
10.....	4,890	22,200	17,000	6,220	2,870	1,750	11,000	83,700	25,600	5,090	6,330	2,000
11.....	4,500	18,800	19,000	5,800	2,800	1,720	19,000	84,400	24,100	4,890	5,700	1,890
12.....	3,800	16,500	20,000	5,600	2,730	1,690	27,500	85,100	22,700	4,500	7,690	1,790
13.....	3,320	15,000	19,000	5,090	2,700	1,670	40,000	81,600	20,000	4,140	9,510	1,690
14.....	4,140	15,000	17,200	4,500	2,660	1,660	45,800	72,700	17,600	4,690	9,510	1,890
15.....	8,970	15,000	15,700	4,320	2,600	1,640	42,700	61,100	15,400	5,090	7,690	2,600
16.....	11,200	15,000	14,400	4,060	2,570	1,590	33,200	52,300	13,700	6,120	6,330	10,300
17.....	9,780	20,500	13,700	4,020	2,560	1,590	28,200	45,200	11,800	7,940	5,290	9,610
18.....	7,940	38,400	12,800	4,000	2,540	1,590	26,100	40,900	10,600	7,940	4,500	9,510
19.....	6,770	59,100	12,400	3,900	2,450	1,610	23,100	37,300	8,970	8,970	4,690	8,710
20.....	6,990	57,500	11,800	3,850	2,410	1,660	20,500	35,500	7,690	11,800	5,090	7,450
21.....	13,100	45,800	11,800	3,880	2,350	1,690	18,400	34,900	6,500	10,300	5,700	6,120
22.....	29,400	35,300	11,800	3,830	2,290	1,720	18,800	46,500	5,910	8,500	5,290	5,290
23.....	29,400	29,000	11,800	3,770	2,290	1,740	18,000	47,100	5,490	6,450	4,500	4,890
24.....	24,800	24,800	10,900	3,720	2,290	1,720	16,800	45,800	5,910	5,490	3,800	4,890
25.....	20,000	21,300	10,100	3,720	2,230	1,720	15,000	61,100	5,290	4,320	3,640	4,500
26.....	16,500	18,800	9,240	3,720	2,110	1,680	14,400	71,300	6,770	4,140	3,320	3,970
27.....	14,400	17,200	8,710	3,670	2,150	1,650	16,100	71,300	7,690	3,640	3,170	3,480
28.....	12,400	15,700	8,190	3,610	2,150	1,700	15,700	71,300	7,940	3,480	3,020	3,170
29.....	10,900	14,400	8,060	3,580	2,110	1,880	14,700	71,300	8,450	4,320	3,480	2,870
30.....	11,200	13,100	8,060	3,560	-----	2,000	15,700	67,200	10,100	6,120	3,800	2,730
31.....	11,800	-----	8,060	3,560	-----	2,040	-----	59,700	-----	6,990	4,140	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	29,400	1,180	9,160	1.61	1.86
November.....	59,100	8,970	24,200	4.25	4.74
December.....	20,000	8,060	12,600	2.21	2.55
January.....	7,940	3,560	5,110	.898	1.04
February.....	3,560	2,110	2,670	.469	.51
March.....	2,060	1,590	1,780	.313	.36
April.....	45,800	2,100	17,000	2.99	3.34
May.....	90,000	19,600	60,200	10.60	12.22
June.....	51,700	5,290	18,500	3.25	3.63
July.....	18,800	3,480	7,620	1.34	1.54
August.....	9,510	3,020	5,650	.993	1.14
September.....	10,300	1,690	4,220	.742	.83
The year.....	90,000	1,180	14,100	2.48	33.76

ST. JOHN RIVER AT VAN BUREN, ME.

LOCATION.—Staff gage at international bridge at Van Buren, Aroostook County, 14 miles above Grand Falls.

DRAINAGE AREA.—8,270 square miles.

RECORDS AVAILABLE.—May, 1908, to September, 1928 (discontinued).

EXTREMES.—Maximum discharge during year, 116,000 second-feet May 8 (gage height, 26.4 feet); minimum, 2,440 second-feet October 3.

1908-1928: Maximum discharge, about 134,000 second-feet May 2, 1923 (gage height, 29.0 feet); minimum, estimated 720 second-feet March 18, 1923.

REMARKS.—Records good. Discharge estimated October 1 to April 13 and September 29 and 30 because of ice and backwater, caused by construction of dam at Grand Falls.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,750	16,900	23,100	11,900	6,160	3,240	3,940	33,200	68,400	17,200	11,600	7,030
2	2,590	16,000	26,400	11,600	5,950	3,160	4,040	40,100	65,400	22,600	11,100	6,810
3	2,440	15,100	26,600	11,600	6,160	3,070	4,220	52,500	59,700	24,700	10,300	6,370
4	2,750	15,100	26,600	11,600	6,160	3,070	4,720	65,400	54,000	20,800	8,470	5,740
5	2,910	21,800	25,100	11,900	5,950	3,070	5,530	79,800	49,500	18,200	11,100	5,320
6	3,410	49,500	22,900	13,300	5,740	3,070	7,970	84,200	44,500	15,400	13,300	5,320
7	3,580	53,000	20,200	13,000	5,320	2,990	10,600	103,000	38,600	13,600	14,200	4,920
8	4,320	48,500	20,500	12,800	4,720	2,990	16,000	115,000	35,400	12,800	13,900	4,520
9	5,950	41,000	22,600	11,900	4,520	2,990	27,000	110,000	36,800	11,100	12,200	4,320
10	6,590	35,900	25,900	11,600	4,520	2,990	36,800	107,000	35,900	10,000	11,600	4,130
11	6,810	31,100	29,800	11,400	4,520	2,910	50,000	110,000	35,000	9,240	10,800	3,760
12	7,030	27,400	32,300	11,100	4,520	2,830	58,000	112,000	33,200	8,720	13,900	3,580
13	6,370	25,500	30,200	9,500	4,520	2,750	61,900	110,000	31,100	7,970	15,100	3,410
14	7,490	24,700	28,200	7,730	4,320	2,830	65,400	104,000	28,200	7,970	15,100	3,760
15	9,500	23,600	25,900	7,490	3,940	2,830	56,500	90,100	25,900	11,100	14,500	3,940
16	14,500	24,000	22,200	7,490	3,940	2,830	47,500	77,400	23,600	10,000	12,200	5,120
17	14,800	28,600	22,200	7,490	3,760	2,830	41,000	69,000	21,500	12,800	10,600	12,800
18	13,600	41,000	21,200	7,260	3,760	2,750	38,200	61,400	19,500	13,300	9,500	12,500
19	11,900	70,200	20,200	6,810	3,940	2,750	35,000	58,600	17,200	14,500	9,500	12,200
20	11,600	86,200	18,500	6,810	3,940	2,750	32,800	55,000	15,100	14,500	9,240	10,800
21	12,500	76,200	18,200	6,810	3,940	2,750	29,000	52,000	13,600	16,300	8,980	9,500
22	22,900	61,900	18,500	7,030	3,940	2,830	28,200	55,500	12,800	13,600	9,500	8,220
23	35,000	50,500	18,500	7,030	3,580	2,760	28,200	61,400	11,600	12,200	8,470	7,030
24	32,300	43,000	17,900	6,810	3,580	2,900	27,800	58,000	11,400	10,600	7,730	7,030
25	27,800	37,700	16,600	6,590	3,580	2,850	25,100	64,800	11,600	8,980	7,260	6,810
26	24,400	33,600	13,900	6,590	3,410	2,590	24,700	78,000	11,400	8,220	6,810	6,160
27	21,500	31,100	11,900	6,810	3,410	2,590	24,700	83,600	10,800	7,970	6,370	5,530
28	19,800	29,000	10,600	7,030	3,240	2,910	25,900	83,600	13,600	6,370	6,370	5,530
29	17,900	26,200	10,000	7,030	3,240	3,580	26,600	83,600	13,300	7,260	6,590	5,400
30	17,600	24,400	11,900	6,590	-----	3,670	30,600	85,600	14,500	10,300	6,370	5,300
31	16,900	-----	12,800	6,160	-----	3,760	-----	78,000	-----	11,400	6,590	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	35,000	2,440	12,600	1.52	1.75
November	86,200	15,100	37,000	4.47	4.99
December	32,300	10,000	21,100	2.55	2.94
January	13,300	6,160	8,990	1.09	1.26
February	6,160	3,240	4,420	.634	.58
March	3,760	2,590	2,960	.358	.41
April	65,400	3,940	29,300	3.54	3.95
May	115,000	30,200	78,100	9.44	10.88
June	68,400	10,800	28,800	3.48	3.88
July	24,700	6,370	12,600	1.52	1.75
August	15,100	6,370	10,300	1.25	1.44
September	12,800	3,410	6,430	.778	.87
The year	115,000	2,440	21,100	2.55	34.70

ST. CROIX RIVER BASIN

ST. CROIX RIVER NEAR BAILEYVILLE, ME.

LOCATION.—Water-stage recorder below power house of St. Croix Paper Co. at Grand Falls, Washington County, $3\frac{1}{2}$ miles east of Baileyville.

DRAINAGE AREA.—1,320 square miles.

RECORDS AVAILABLE.—November, 1919, to September, 1928.

EXTREMES.—Maximum discharge during year, 12,000 second-feet April 9 (gage height, 8.19 feet); minimum, 381 second-feet August 26 (gage height, 1.19 feet).

1919-1928: Maximum discharge, about 23,300 second-feet May 1, 1923 (gage height, 13.90 feet); minimum, estimated 100 second-feet December 9, 1923, July 20 and 27, 1924.

REMARKS.—Records good. About 30 billion cubic feet of storage developed above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	1,040	2,300	2,520	4,780	2,750	2,400	1,380	7,800	4,140	1,860	1,540	2,600
2-----	1,190	2,220	2,300	5,640	2,750	2,680	2,100	7,440	3,980	2,200	1,940	1,870
3-----	1,420	2,080	2,220	*8,300	2,680	2,680	2,750	6,900	3,200	2,600	1,770	1,240
4-----	1,530	2,010	*2,000	*4,800	2,900	1,640	2,750	6,540	3,280	1,360	1,490	1,940
5-----	1,550	4,460	*2,400	*4,300	1,840	2,300	2,600	6,540	2,980	2,400	*1,700	1,530
6-----	1,520	6,360	2,450	*4,100	2,600	2,680	2,300	5,820	2,750	2,900	*1,100	1,370
7-----	1,410	6,180	2,380	*5,300	2,600	2,750	2,680	6,000	2,750	2,680	1,060	1,440
8-----	1,380	5,640	3,730	*3,400	2,520	2,750	6,770	5,820	2,750	*1,400	952	1,490
9-----	1,020	4,950	5,120	*4,200	2,520	2,680	11,400	5,120	2,750	*1,700	1,180	1,550
10-----	1,490	3,900	5,640	3,280	2,380	2,680	10,100	4,950	2,450	1,660	1,260	1,460
11-----	1,590	3,280	6,000	3,420	2,380	1,480	8,370	4,950	2,600	1,580	1,110	1,410
12-----	1,840	3,500	6,540	*3,400	*1,800	2,240	7,800	4,950	2,520	1,760	1,410	1,410
13-----	1,830	3,500	5,640	*3,400	*2,600	2,680	7,800	4,260	2,600	2,010	1,330	1,360
14-----	2,080	2,900	4,950	*3,300	1,950	2,750	7,800	4,300	2,380	1,940	1,070	1,380
15-----	2,750	2,820	4,460	*2,400	1,590	2,820	7,800	4,140	2,600	1,340	1,110	1,410
16-----	2,900	2,750	3,740	*2,950	1,580	2,820	8,750	3,260	2,600	1,640	1,340	1,420
17-----	2,190	2,900	3,420	*2,800	2,680	2,820	8,180	2,680	2,080	1,450	1,240	1,510
18-----	1,580	2,980	3,000	*2,800	*2,650	1,530	7,080	2,820	2,520	1,480	1,110	1,450
19-----	2,700	2,980	*3,600	2,820	*1,700	2,080	6,000	2,680	2,380	1,460	4,240	1,530
20-----	5,910	2,900	*3,500	2,820	*2,700	2,750	4,460	1,840	2,600	1,670	7,440	1,520
21-----	7,440	2,900	3,740	2,820	2,750	2,820	4,140	2,350	2,680	1,790	6,540	1,530
22-----	6,540	2,750	3,900	*1,800	2,750	2,680	3,580	2,450	2,470	*1,400	5,120	1,480
23-----	5,200	3,120	3,900	*2,800	2,820	2,680	3,980	2,300	2,820	1,730	3,980	1,520
24-----	4,300	2,750	3,980	2,900	2,750	2,820	4,780	2,220	1,940	1,800	2,900	1,520
25-----	3,740	2,520	3,700	3,350	2,750	1,350	5,460	2,680	2,310	1,750	2,680	1,450
26-----	3,050	2,450	3,820	3,200	1,730	2,260	5,290	3,580	2,750	1,760	2,410	1,410
27-----	2,680	2,300	3,820	2,980	2,450	2,750	5,290	4,060	2,750	1,630	2,390	1,370
28-----	2,520	2,300	3,660	2,960	2,750	2,750	5,290	4,620	2,750	1,730	2,380	1,450
29-----	2,450	2,600	3,820	3,020	2,820	2,820	5,820	4,950	2,600	*1,400	2,220	1,380
30-----	2,460	2,750	4,860	3,500	-----	2,750	7,260	4,950	2,300	1,630	2,220	1,480
31-----	2,450	-----	4,060	3,120	-----	2,680	-----	4,300	-----	1,480	2,520	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October-----	7,440	1,020	2,640	2.00	2.31
November-----	6,360	2,010	3,240	2.45	2.73
December-----	6,540	2,000	3,810	2.89	3.33
January-----	8,300	1,800	3,570	2.70	3.11
February-----	2,900	1,580	2,440	1.85	2.00
March-----	2,820	1,350	2,560	1.89	2.18
April-----	11,400	1,380	5,060	4.29	4.79
May-----	7,800	1,840	4,430	3.36	3.87
June-----	4,140	1,840	2,710	2.05	2.29
July-----	2,900	1,840	2,780	1.85	1.56
August-----	6,540	952	2,280	1.73	1.99
September-----	2,600	1,240	1,520	1.16	1.29
The year-----	11,400	952	3,050	2.31	31.45

* Estimated.

NOTE.—Discharge in second-feet per square mile and run-off in inches do not represent natural flow from basin.

MACHIAS RIVER BASIN

EAST MACHIAS RIVER NEAR EAST MACHIAS, ME.

LOCATION.—Staff gage just below outlet of Hadley Lake and 3 miles above village of East Machias, Washington County. Zero of gage, 36.00 feet above mean sea level.

DRAINAGE AREA.—234 square miles.

RECORDS AVAILABLE.—October, 1926, to September, 1928.

EXTREMES.—Maximum discharge, 1,910 second-feet May 3 (gage height, 5.49 feet); minimum, 93 second-feet September 12 (gage height, 0.91 foot).

1926-1928: Maximum discharge, that of May 3, 1928; minimum, 58 second-feet October 4 and 5, 1926 (gage height, 0.66 foot).

REMARKS.—Records fair. Possibly slight regulation at station. Discharge estimated May 23 to July 3 and September 29 and 30 because of backwater from logs, October 1-9 because of backwater from fish weir, and October 22, April 23, May 1, 2, and August 24 because of missing gage heights.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	230	1,040	844	992	712	491	596	1,650	895	425	167	111
2	230	992	798	1,140	672	458	596	1,790	855	505	158	107
3	200	942	798	1,200	596	458	596	1,910	850	510	158	107
4	200	798	798	1,200	596	396	634	1,790	810	560	150	107
5	205	1,040	798	1,140	560	396	634	1,580	750	525	143	107
6	190	1,090	754	1,090	525	366	712	1,440	720	458	136	104
7	188	1,140	712	992	491	351	708	1,320	690	426	130	104
8	205	1,140	754	942	458	336	992	1,200	655	396	130	100
9	230	1,140	1,200	892	458	322	1,440	1,090	625	366	136	100
10	269	1,090	1,320	892	426	295	1,580	992	630	336	143	96
11	295	1,090	1,380	844	426	282	1,650	892	590	308	136	93
12	295	1,040	1,380	798	396	282	1,720	844	575	282	143	93
13	282	1,040	1,320	754	381	282	1,790	798	540	269	136	96
14	491	942	1,320	798	366	282	1,790	754	520	269	136	104
15	634	942	1,260	754	381	351	1,790	672	515	269	136	104
16	712	892	1,200	712	396	396	1,790	634	495	256	136	104
17	754	844	1,140	712	426	426	1,720	596	470	244	130	104
18	712	798	1,090	672	458	458	1,650	560	415	244	130	107
19	844	844	1,040	634	491	491	1,580	525	395	220	130	107
20	1,090	798	992	634	491	525	1,510	491	370	208	125	107
21	1,320	798	992	634	458	525	1,380	491	340	186	125	111
22	1,380	754	992	560	458	525	1,260	491	320	178	120	115
23	1,440	754	942	560	426	525	1,290	460	295	197	120	115
24	1,440	754	892	525	491	525	1,320	450	275	208	120	111
25	1,440	754	892	560	525	560	1,380	480	265	220	120	111
26	1,380	754	844	672	525	491	1,380	530	255	208	120	120
27	1,320	754	798	712	525	491	1,320	660	240	208	120	130
28	1,200	712	754	754	525	560	1,320	735	235	197	115	143
29	1,200	754	712	798	491	596	1,440	810	220	208	115	140
30	1,140	798	754	754	-----	596	1,510	855	315	186	115	142
31	1,090	-----	798	712	-----	596	-----	880	-----	178	115	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,440	118	729	3.12	3.60
November	1,140	712	908	3.88	4.33
December	1,380	712	976	4.17	4.81
January	1,200	525	808	3.45	3.98
February	712	366	487	2.08	2.24
March	596	282	440	1.88	2.17
April	1,790	596	1,310	5.60	6.25
May	1,910	450	915	3.91	4.51
June	895	220	504	2.15	2.40
July	560	178	298	1.27	1.46
August	167	115	132	.564	.65
September	143	93	110	.470	.52
The year	1,910	93	634	2.71	36.92

PENOBSCOT RIVER BASIN

WEST BRANCH OF PENOBSCOT RIVER AT MILLINOCKET, ME.

LOCATION.—Water-stage recorder at Quakish Lake Dam and Millinocket mill of Great Northern Paper Co., Millinocket, Penobscot County.

DRAINAGE AREA.—1,910 square miles.

RECORDS AVAILABLE.—January, 1901, to September, 1928.

REMARKS.—Flow regulated by storage in North Twin and Ripogenus Lakes, having combined capacity of about 45 billion cubic feet. Discharge is combined flow over dam, and through water wheels, log sluices, and filters. When discharge is less than 3,500 second-feet, all water passes through wheels. Records furnished by Great Northern Paper Co.

Monthly discharge, in second-feet, 1927-28

Month	Observed mean	Corrected for storage		
		Mean	Per square mile	Run-off in inches
October.....	2,600	3,160	1.65	1.90
November.....	2,590	6,300	3.30	3.68
December.....	2,890	3,920	2.05	2.36
January.....	3,550	2,580	1.35	1.56
February.....	3,480	2,170	1.14	1.23
March.....	3,890	929	.486	.56
April.....	3,630	7,480	3.92	4.37
May.....	10,900	12,400	6.49	7.48
June.....	5,940	5,780	3.03	3.38
July.....	3,200	2,260	1.18	1.36
August.....	3,290	2,700	1.41	1.63
September.....	3,280	1,420	.743	.83
The year.....	4,100	4,260	2.23	30.34

WEST BRANCH OF PENOBSCOT RIVER NEAR MEDWAY, ME.

LOCATION.—Water-stage recorder just above Nichatou Rapids, half a mile above mouth of East Branch of Penobscot River and village of Medway, Penobscot County.

DRAINAGE AREA.—2,120 square miles.

RECORDS AVAILABLE.—February, 1916, to September, 1928.

EXTREMES.—Maximum discharge during year, 24,100 second-feet May 27 (gage height, 9.64 feet); minimum, 642 second-feet June 10 (gage height, 1.58 feet).
1916-1928: Maximum discharge, that of May 27, 1928; minimum, estimated 100 second-feet at times during 1923 and 1924.

REMARKS.—Records good. Flow regulated by storage reservoirs above station. Discharge estimated December 23, 24, and January 3 to March 31 because of ice.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,440	3,340	3,540	3,440	4,100	4,050	4,860	5,270	18,700	3,540	3,340	3,650
2	3,060	3,340	3,340	3,650	3,980	3,980	3,850	5,420	15,300	3,540	3,440	3,760
3	3,150	3,440	3,340	5,770	3,980	4,080	4,100	5,270	11,200	3,980	3,540	2,660
4	3,440	4,100	2,890	5,860	4,080	3,500	4,210	5,860	12,800	2,890	3,650	3,400
5	3,240	7,440	3,540	4,140	3,760	3,440	4,340	7,270	12,000	4,100	3,490	3,760
6	3,340	4,970	3,440	3,480	3,650	3,440	4,720	6,310	11,200	4,100	3,540	3,760
7	3,340	4,210	3,340	3,560	3,460	3,520	4,990	10,000	10,400	3,980	3,340	3,650
8	3,340	3,980	3,540	3,240	3,370	3,850	4,560	12,000	8,680	3,680	3,540	3,540
9	3,070	3,870	3,980	3,300	4,050	3,610	4,990	12,600	8,860	3,760	3,650	3,440
10	3,240	3,760	3,870	3,320	4,030	3,890	5,420	15,700	5,840	3,650	3,870	3,650
11	3,240	3,760	3,540	3,690	4,050	3,500	5,270	15,700	5,860	3,540	3,870	3,340
12	2,970	3,760	3,540	3,740	3,340	3,420	5,130	17,000	4,860	3,980	3,650	3,540
13	3,060	3,540	3,980	3,720	3,580	3,540	5,270	18,300	4,990	3,650	3,440	3,870
14	3,340	3,650	4,100	3,740	3,850	4,100	5,420	18,300	4,990	3,870	3,540	3,980
15	3,650	3,650	3,980	3,340	3,980	4,380	4,860	16,500	5,420	3,720	3,650	3,870
16	2,770	3,650	3,760	3,360	4,030	4,410	4,990	13,600	6,460	3,540	3,650	3,540
17	2,970	3,650	3,870	3,380	3,960	4,440	5,710	10,800	5,130	3,650	3,870	3,540
18	3,440	3,870	3,440	3,690	3,910	3,830	5,680	5,860	5,860	3,760	4,210	3,650
19	3,540	4,210	3,650	3,780	3,500	3,560	5,420	8,140	6,310	3,980	4,210	3,760
20	3,870	3,760	3,540	3,740	3,230	3,980	4,990	8,500	4,990	3,760	4,100	3,760
21	4,340	3,650	3,760	3,740	3,460	4,280	4,990	4,600	4,990	3,870	3,980	3,900
22	3,980	3,760	3,870	3,540	3,830	4,310	3,980	5,210	5,130	3,490	4,100	4,000
23	3,440	3,980	3,800	3,500	3,850	4,280	3,870	10,400	5,130	3,440	3,980	3,670
24	3,440	3,760	3,760	3,520	3,870	4,030	4,590	11,600	4,060	3,650	3,760	3,440
25	3,540	3,760	2,860	4,070	3,890	3,610	4,720	16,500	4,340	3,650	3,760	3,650
26	3,440	3,980	2,890	4,070	3,420	3,540	4,590	20,500	4,100	3,650	3,520	3,540
27	3,340	3,850	3,540	4,070	3,440	4,210	4,720	21,400	4,210	3,650	3,760	3,820
28	3,440	3,540	3,650	4,030	3,650	4,910	4,990	23,700	4,210	3,650	3,440	3,650
29	3,440	3,540	3,650	3,690	4,000	6,680	4,340	22,700	4,100	3,650	3,540	3,650
30	2,600	3,440	3,650	3,460	-----	6,460	4,590	20,000	4,100	3,440	3,760	3,130
31	2,970	-----	3,540	3,830	-----	6,400	-----	19,600	-----	3,440	3,980	-----

Month	Observed			Corrected for storage		
	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October	4,340	2,600	3,340	3,900	1.84	2.12
November	7,440	3,340	3,890	7,590	3.58	3.99
December	4,100	2,890	3,590	4,620	2.18	2.51
January	5,860	3,240	3,800	2,830	1.33	1.53
February	4,100	3,230	3,780	2,470	1.17	1.26
March	6,680	3,420	4,180	1,220	.575	.66
April	5,710	3,650	4,780	8,640	4.08	4.55
May	23,700	4,600	12,900	14,600	6.89	7.94
June	18,700	4,060	7,140	6,970	3.29	3.67
July	4,100	2,890	3,680	2,730	1.29	1.49
August	4,210	3,340	3,720	3,130	1.48	1.71
September	4,000	2,660	3,620	1,760	.830	.93
The year	23,700	2,600	4,870	5,040	2.38	32.36

PENOBSCOT RIVER AT WEST ENFIELD, ME.

LOCATION.—Water-stage recorder at highway bridge 1,000 feet below mouth of Piscataquis River and 3 miles west of Enfield, Penobscot County.

DRAINAGE AREA.—6,600 square miles.

RECORDS AVAILABLE.—November, 1901, to September, 1928.

EXTREMES.—Maximum discharge during year, 60,800 second-feet November 6 (gage height, 14.2 feet); minimum, 4,630 second-feet October 3 (gage height, 2.52 feet).

1902-1928: Maximum discharge, 153,000 second-feet May 1, 1923 (gage height, 25.15 feet); minimum, 1,470 second-feet October 29, 1905 (gage height, 1.0 foot).

REMARKS.—Records good. Flow regulated by storage on West Branch. Discharge December 4-8, December 25 to January 6, and January 14 to April 8 estimated because of ice effect. Gage-height record and results of discharge measurements furnished by Thomas W. Clark, hydraulic engineer, Old Town.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	5,400	13,600	18,600	14,500	12,400	8,300	13,200	32,400	38,900	10,900	6,710	7,470
2.....	5,180	12,200	20,300	17,500	11,700	8,140	12,500	34,700	35,300	10,900	6,960	6,960
3.....	4,850	11,500	17,300	18,800	10,900	8,000	12,000	35,900	29,100	10,600	6,960	6,840
4.....	5,520	13,200	13,200	19,400	10,200	7,730	13,100	37,100	26,500	9,410	6,840	5,860
5.....	6,840	41,400	11,200	18,400	9,610	7,240	14,100	38,300	24,500	9,700	6,840	6,580
6.....	6,960	58,700	12,200	16,000	9,030	7,080	16,900	37,700	22,000	10,000	7,210	6,840
7.....	6,960	46,100	12,000	14,300	8,610	7,110	22,000	37,700	21,600	8,830	7,210	6,580
8.....	6,580	39,500	18,600	14,300	8,190	7,080	34,100	39,500	21,600	8,000	7,210	6,460
9.....	6,340	34,100	32,900	13,900	8,380	7,210	45,500	37,100	20,700	7,210	7,210	5,980
10.....	5,980	29,600	34,700	13,200	8,830	7,210	47,500	37,100	20,700	7,470	7,730	5,640
11.....	6,220	26,000	30,200	12,500	8,890	7,080	42,500	36,500	16,200	7,210	8,000	5,860
12.....	5,980	23,500	27,000	12,600	8,830	6,580	39,500	34,100	16,200	6,960	8,270	5,750
13.....	6,220	22,000	24,500	11,900	8,000	6,580	39,500	34,700	15,000	7,210	7,730	6,220
14.....	9,640	20,700	21,600	10,700	8,000	7,060	39,500	32,900	13,600	6,960	7,210	7,210
15.....	12,500	18,600	19,000	9,700	8,490	8,000	40,700	31,300	13,600	8,000	6,960	8,000
16.....	10,900	17,300	14,600	9,060	8,690	8,690	41,900	24,500	14,600	8,270	6,710	8,000
17.....	8,550	16,200	13,200	8,720	8,750	9,120	40,100	20,700	13,600	7,730	6,340	8,000
18.....	8,550	17,300	14,300	8,490	8,750	9,120	35,300	17,700	12,900	7,730	6,960	9,410
19.....	11,200	26,000	13,900	8,380	8,660	8,410	32,400	16,500	13,200	7,730	13,600	10,000
20.....	30,400	26,500	13,900	8,300	8,160	8,140	29,600	15,800	13,200	7,730	13,600	9,410
21.....	41,900	23,000	15,800	8,240	7,950	8,550	26,000	15,400	12,200	7,210	12,500	8,830
22.....	35,300	21,200	16,500	8,160	8,110	8,690	23,500	15,800	11,900	6,960	10,900	8,830
23.....	28,000	20,700	16,200	8,140	8,350	8,380	21,200	19,400	11,200	6,460	9,410	8,550
24.....	23,500	20,300	14,600	8,220	8,630	8,140	21,200	26,000	10,900	6,220	8,830	8,270
25.....	20,700	19,000	12,000	8,440	8,920	7,600	21,200	41,800	10,300	6,460	8,270	8,270
26.....	16,900	17,700	11,200	11,200	8,920	6,960	21,600	51,700	10,900	6,580	8,270	8,270
27.....	15,000	16,500	10,900	14,400	8,580	7,600	22,000	51,000	10,300	6,580	8,000	8,550
28.....	13,600	15,400	11,900	14,400	8,440	10,000	22,500	52,400	9,700	6,580	8,270	9,120
29.....	15,000	15,400	12,200	14,300	8,380	12,100	26,000	49,600	9,410	7,210	7,470	8,830
30.....	15,800	16,200	13,200	13,900	-----	14,300	29,100	44,900	9,700	7,210	7,470	8,270
31.....	14,300	-----	13,200	13,000	-----	13,700	-----	40,100	-----	6,960	7,470	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	41,900	4,850	13,300	2.02	2.33
November.....	58,700	11,500	23,300	3.53	3.94
December.....	34,700	10,900	17,100	2.59	2.99
January.....	19,400	8,140	12,400	1.88	2.17
February.....	12,400	7,950	8,940	1.35	1.46
March.....	14,300	6,580	8,380	1.27	1.46
April.....	47,500	12,000	28,200	4.27	4.76
May.....	52,400	15,400	33,600	5.09	5.87
June.....	38,900	9,410	17,000	2.58	2.88
July.....	10,900	6,220	7,840	1.19	1.37
August.....	13,600	6,340	8,160	1.24	1.43
September.....	10,000	5,640	7,630	1.16	1.29
The year.....	58,700	4,850	15,500	2.35	31.93

EAST BRANCH OF PENOBSCOT RIVER AT GRINDSTONE, ME.

LOCATION.—Chain gage at Bangor & Aroostook Railroad bridge half a mile south of Grindstone, Penobscot County, and $9\frac{1}{2}$ miles above confluence with West Branch.

DRAINAGE AREA.—1,070 square miles; includes approximately 240 square miles of Chamberlain Lake drainage through Telos Canal.

RECORDS AVAILABLE.—October, 1902, to September, 1928.

EXTREMES.—Maximum discharge during year, 21,300 second-feet November 5 (gage height, 13.29 feet); minimum, 345 second-feet September 11 (gage height, 4.45 feet).

1902-1928: Maximum discharge, 35,100 second-feet April 30, 1923 (gage height, 16.5 feet); minimum, estimated 30 second-feet February 28, 1904.

REMARKS.—Records good. Flow regulated by dams at outlets of a number of lakes and ponds: Discharge estimated December 5-7, 16-20, and December 27 to April 8 because of ice.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	520	2,320	3,320	2,460	1,400	770	1,210	5,790	6,730	2,400	770	520
2.....	520	2,180	3,160	3,000	1,350	755	1,060	6,730	6,490	2,550	770	490
3.....	490	2,100	2,700	2,970	1,410	730	1,050	7,220	6,250	2,180	770	460
4.....	550	3,490	2,700	3,160	1,160	705	1,200	7,990	5,790	1,950	770	520
5.....	810	18,300	2,920	3,350	1,270	670	1,370	7,990	5,330	1,950	810	520
6.....	690	13,500	3,240	3,440	1,240	675	2,850	8,790	5,100	1,600	975	460
7.....	585	9,340	3,580	3,350	1,090	640	5,560	9,060	5,100	1,480	890	430
8.....	550	7,220	4,050	2,680	1,090	640	7,730	7,990	5,330	1,360	850	400
9.....	520	6,250	7,730	2,480	1,080	660	10,800	7,220	5,330	1,300	850	345
10.....	520	5,560	5,560	2,260	1,090	660	10,800	6,970	5,100	1,250	850	370
11.....	490	4,870	4,870	2,130	1,100	605	9,340	6,490	4,870	1,200	850	345
12.....	490	4,650	4,440	2,130	1,040	580	8,250	6,490	4,050	1,200	850	400
13.....	490	4,240	3,860	2,040	965	580	7,990	5,790	3,670	1,160	810	460
14.....	2,250	4,050	3,320	1,810	930	585	7,990	5,560	3,490	1,160	730	1,420
15.....	1,480	3,670	3,160	1,750	880	635	8,250	4,240	3,320	1,300	690	730
16.....	1,200	3,490	3,100	1,840	905	690	8,520	3,320	3,320	1,300	655	730
17.....	930	3,320	3,000	1,710	920	640	7,470	3,320	3,320	1,160	585	690
18.....	850	3,860	2,980	1,700	905	655	6,020	3,320	3,160	1,060	655	770
19.....	1,360	6,730	3,000	1,850	900	660	5,560	3,320	3,320	1,020	1,160	690
20.....	4,650	5,330	3,030	1,750	800	655	5,100	3,320	3,000	1,020	930	585
21.....	5,560	4,440	3,000	1,730	785	640	4,440	3,490	3,490	930	810	550
22.....	4,440	3,860	3,000	1,730	755	640	4,440	3,670	3,320	930	690	550
23.....	3,490	3,490	2,850	1,740	730	620	4,650	3,670	1,950	890	585	520
24.....	3,160	3,490	2,700	1,870	770	590	4,440	4,650	1,950	890	585	550
25.....	2,850	3,320	2,550	1,540	880	590	4,240	6,490	2,850	850	585	550
26.....	2,700	3,000	2,550	1,810	875	590	4,050	7,730	2,700	810	655	520
27.....	2,550	2,850	2,640	2,010	850	650	3,860	9,060	2,400	810	585	550
28.....	2,400	2,700	2,550	1,890	825	930	3,490	7,990	2,250	850	520	550
29.....	2,850	2,700	2,400	1,780	800	1,250	4,050	7,990	2,100	1,200	585	550
30.....	2,700	2,850	2,080	1,670	-----	1,240	4,870	7,470	2,180	1,060	620	520
31.....	2,400	-----	2,180	1,540	-----	1,220	-----	6,970	-----	975	585	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	5,560	490	1,780	1.66	1.91
November.....	18,300	2,100	4,910	4.59	5.12
December.....	7,730	2,080	3,300	3.08	3.55
January.....	3,440	1,540	2,170	2.03	2.34
February.....	1,410	730	993	.928	1.00
March.....	1,250	580	715	.668	.77
April.....	10,800	1,050	5,360	5.01	5.59
May.....	9,060	3,320	6,140	5.74	6.62
June.....	6,730	1,950	3,910	3.65	4.07
July.....	2,550	810	1,280	1.20	1.38
August.....	1,160	520	743	.694	.80
September.....	1,420	345	558	.521	.58
The year.....	18,300	345	2,650	2.48	33.73

SURFACE WATER SUPPLY, 1928, PART I

MATTAWAMKEAG RIVER AT MATTAWAMKEAG, ME.

LOCATION.—Chain gage at Maine Central Railroad bridge at Mattawamkeag, Penobscot County, half a mile above mouth of river.

DRAINAGE AREA.—1,500 square miles.

RECORDS AVAILABLE.—August, 1902, to September, 1928.

EXTREMES.—Maximum discharge during year, 16,900 second-feet November 6 (gage height, 11.20 feet); minimum, 436 second-feet October 3 (gage height, 3.92 feet).

1902-1928: Maximum discharge, 43,900 second-feet May 1, 1923 (gage height, 19.55 feet); minimum, 86 second-feet October 4-12, 1905, September 19 and October 6, 1906, September 24-29, 1908, and October 14-17, 1910.

REMARKS.—Records good. Flow regulated by dams at outlets of several large lakes and ponds. Discharge estimated December 4-8 and December 18 to April 7 because of ice, and May 7-18 and May 24 to June 9 because of back-water from Penobscot River.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	460	3,040	4,600	3,800	1,800	1,190	2,350	10,800	4,300	1,190	820	1,380
2-----	460	2,870	5,020	4,200	1,750	1,190	2,410	11,300	3,960	1,310	820	1,380
3-----	436	2,700	4,400	5,460	1,690	1,120	2,460	11,600	3,360	1,310	770	1,310
4-----	484	2,700	4,040	5,150	1,650	1,040	2,530	11,600	3,230	1,250	770	1,190
5-----	675	9,690	3,760	5,110	1,610	1,020	2,650	11,600	2,900	1,140	870	1,080
6-----	920	16,900	3,840	5,150	1,580	1,080	3,040	11,000	2,820	1,020	675	970
7-----	1,080	15,800	4,200	5,550	1,560	1,090	5,910	10,300	2,780	920	1,440	870
8-----	1,020	15,100	5,020	3,740	1,470	1,080	9,420	9,560	2,750	870	1,380	770
9-----	1,080	13,800	7,860	3,420	1,390	1,040	12,500	8,380	2,800	870	1,500	770
10-----	1,020	11,600	9,160	3,230	1,350	1,000	13,800	6,850	3,420	820	1,700	675
11-----	970	9,960	9,420	2,960	1,430	940	14,100	6,070	3,040	722	1,830	630
12-----	920	8,640	7,860	2,870	1,380	950	14,100	5,170	2,870	675	1,830	630
13-----	770	7,600	7,350	2,680	1,310	930	14,100	4,730	2,530	585	1,830	675
14-----	1,310	6,850	6,610	2,380	1,290	940	14,100	4,300	2,380	542	1,640	770
15-----	2,230	6,140	6,140	2,200	1,320	990	14,400	3,800	2,530	542	1,310	920
16-----	2,530	5,240	5,460	2,150	1,260	1,010	14,100	3,230	2,380	585	1,140	970
17-----	2,230	4,810	5,240	2,090	1,310	1,050	14,100	2,820	2,230	675	870	1,020
18-----	1,960	4,810	4,640	2,040	1,310	1,080	13,400	2,550	2,530	675	675	1,310
19-----	2,090	5,910	4,420	1,990	1,320	1,100	11,900	2,230	2,380	770	1,570	1,830
20-----	2,530	6,850	4,400	1,930	1,340	1,100	10,500	1,830	1,700	870	3,420	1,960
21-----	4,810	6,850	4,140	1,880	1,310	1,080	9,420	1,830	970	770	4,200	1,830
22-----	5,910	6,610	3,610	1,870	1,290	1,050	8,120	2,380	770	722	3,800	1,640
23-----	6,140	5,910	3,420	1,840	1,260	1,040	7,350	2,530	1,080	722	2,870	1,570
24-----	5,680	5,460	3,140	1,860	1,260	1,020	6,850	2,550	1,570	675	2,230	1,440
25-----	5,020	5,240	3,040	1,900	1,310	1,010	6,610	3,310	1,960	870	1,700	1,310
26-----	4,400	4,600	3,230	1,960	1,310	1,020	6,370	4,040	1,570	820	1,310	1,310
27-----	3,610	4,200	3,190	2,050	1,310	1,050	6,140	4,540	1,310	722	1,640	1,440
28-----	2,700	4,000	3,360	2,150	1,270	1,440	6,370	4,940	1,020	630	1,640	1,440
29-----	2,700	4,000	3,230	2,060	1,240	1,830	7,600	4,870	870	675	1,570	1,440
30-----	3,230	4,400	3,040	1,960	-----	2,190	9,420	4,420	970	722	1,570	1,310
31-----	3,230	-----	3,040	1,880	-----	2,280	-----	4,340	-----	770	1,380	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October-----	6,140	436	2,340	1.56	1.80
November-----	16,900	2,700	7,080	4.72	5.27
December-----	9,420	3,040	4,850	3.22	3.71
January-----	5,550	1,840	2,890	1.93	2.22
February-----	1,800	1,240	1,400	.933	1.01
March-----	2,280	930	1,160	.773	.89
April-----	14,400	2,350	8,870	5.91	6.59
May-----	11,600	1,830	5,790	3.86	4.45
June-----	4,300	770	2,300	1.53	1.71
July-----	1,310	542	.821	.547	.63
August-----	4,200	675	1,640	1.09	1.26
September-----	1,960	630	1,190	.793	.88
The year-----	16,900	436	3,350	2.23	30.42

PISCATAQUIS RIVER NEAR FOXCROFT, ME.

LOCATION.—Staff gage at Lows Bridge, three-quarters of a mile above mouth of Black Stream and $4\frac{1}{2}$ miles above Foxcroft, Piscataquis County.

DRAINAGE AREA.—286 square miles.

RECORDS AVAILABLE.—August, 1902, to September, 1928.

EXTREMES.—Maximum discharge during year, 9,860 second-feet October 20 (gage height, 11.20 feet); minimum, 26 second-feet August 5 (gage height, 1.6 feet).

1902-1928: Maximum discharge, 21,700 second-feet September 29, 1909; minimum, 5 second-feet August 6, 1905, and November 22, 1908.

REMARKS.—Records fair. Flow regulated by operation of power plants. Discharge estimated December 17 to April 1 because of ice.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	44	800	1,650	500	360	250	460	2,150	1,750	940	80	62
2.....	34	730	1,360	535	330	230	460	2,560	1,360	800	87	45
3.....	82	835	940	630	350	114	590	2,890	1,360	520	96	66
4.....	102	1,650	905	590	305	230	800	3,240	1,100	320	62	74
5.....	294	5,320	800	540	330	305	905	2,890	695	400	27	107
6.....	229	3,240	765	515	370	164	1,650	3,000	765	325	124	64
7.....	191	2,050	695	480	280	166	4,200	3,000	1,180	191	74	63
8.....	114	1,450	1,550	460	310	108	6,740	2,450	1,360	144	72	63
9.....	114	1,180	4,200	450	305	176	5,830	2,050	870	254	96	45
10.....	141	1,020	2,250	420	315	110	3,240	1,850	1,180	184	93	63
11.....	82	905	1,650	390	220	205	2,350	1,550	980	167	50	98
12.....	82	835	1,360	345	305	245	2,150	1,270	765	147	147	114
13.....	191	940	1,140	335	280	192	1,950	980	695	160	202	384
14.....	1,550	870	940	295	270	198	1,750	695	555	177	93	448
15.....	835	800	835	300	210	295	2,450	660	555	384	80	424
16.....	555	765	800	340	295	620	2,350	625	424	395	72	406
17.....	460	730	765	270	345	540	1,750	454	424	356	72	520
18.....	418	1,360	730	370	240	490	1,450	412	454	299	68	460
19.....	2,350	2,250	680	385	315	495	1,450	272	394	241	136	418
20.....	8,950	1,360	645	395	290	430	1,270	267	412	217	237	335
21.....	6,610	1,100	640	295	250	420	1,140	1,360	400	76	177	340
22.....	3,120	940	630	425	260	295	1,180	1,650	400	76	151	406
23.....	1,950	1,140	575	400	250	260	1,180	1,450	272	198	138	314
24.....	1,550	1,270	520	370	370	320	1,180	3,720	280	157	117	406
25.....	1,180	1,060	490	480	285	320	1,270	7,520	520	76	82	345
26.....	1,020	905	460	1,750	400	330	1,180	4,450	490	85	187	294
27.....	905	800	435	1,360	345	430	1,270	4,570	418	93	267	460
28.....	870	835	420	940	295	585	1,450	3,600	520	78	112	406
29.....	1,360	870	405	660	295	680	1,750	2,670	418	58	112	237
30.....	1,140	1,060	405	515	-----	590	2,050	2,250	555	195	109	249
31.....	980	-----	420	390	-----	520	-----	1,950	-----	96	64	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	8,950	34	1,210	4.23	4.88
November.....	5,320	730	1,300	4.55	5.08
December.....	4,200	405	970	3.39	3.91
January.....	1,750	270	522	1.83	2.11
February.....	400	210	302	1.06	1.14
March.....	680	108	333	1.16	1.34
April.....	6,740	460	1,910	6.68	7.45
May.....	7,520	267	2,210	7.73	8.91
June.....	1,750	272	718	2.51	2.80
July.....	940	58	252	.881	1.02
August.....	267	27	112	.392	.45
September.....	520	45	257	.899	1.00
The year.....	8,950	27	842	2.94	40.09

PISCATAQUIS RIVER AT MEDFORD, ME.

LOCATION.—Staff gage at lower ferry in Medford, Piscataquis County, $1\frac{3}{4}$ miles above Schoodic Stream and 14 miles above confluence with Penobscot River.

DRAINAGE AREA.—1,170 square miles.

RECORDS AVAILABLE.—June, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, 24,600 second-feet October 21 (gage height, 12.40 feet); minimum, 595 second-feet October 3 (gage height, 2.76 feet).

1924-1928: Maximum discharge, that of October 21, 1927; minimum, 172 second-feet November 10, 1924 (gage height, 1.82 feet).

Maximum known stage, 20.8 feet May 1, 1923.

REMARKS.—Records good. Discharge estimated December 4-6 and December 18 to April 7 because of ice.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	1,420	3,710	5,440	2,260	2,040	1,400	1,300	7,360	7,110	2,730	900	900
2-----	740	2,580	5,230	2,800	1,840	1,330	1,300	8,400	5,890	3,360	900	780
3-----	630	2,580	3,890	2,910	1,850	1,280	1,370	8,960	5,230	2,730	820	820
4-----	740	3,530	3,530	2,760	1,840	1,230	1,460	10,700	4,450	2,040	860	900
5-----	1,320	15,500	3,360	2,330	1,710	1,170	2,170	10,400	3,710	2,170	1,020	940
6-----	1,240	14,500	3,200	2,170	1,650	1,180	3,440	10,700	3,200	1,790	940	900
7-----	1,060	9,800	3,040	2,070	1,710	1,130	6,860	11,000	3,360	1,510	900	780
8-----	820	7,620	4,450	1,950	1,520	1,120	12,200	9,520	4,260	1,100	820	780
9-----	820	6,130	14,800	1,900	1,550	1,110	16,200	7,620	3,710	1,020	780	700
10-----	940	4,830	11,300	1,840	1,560	1,090	13,200	6,860	3,710	1,060	860	700
11-----	940	4,260	8,140	1,790	1,580	1,070	10,100	6,130	3,040	980	860	820
12-----	820	3,710	7,360	1,680	1,590	1,060	9,800	5,030	2,730	940	860	820
13-----	900	4,260	6,130	1,590	1,540	1,080	9,800	4,450	2,730	980	860	980
14-----	3,040	3,890	5,230	1,520	1,560	1,100	8,960	3,890	2,170	980	860	1,460
15-----	3,040	2,730	4,260	1,490	1,560	1,180	10,100	3,530	2,170	1,320	820	1,620
16-----	1,910	2,440	3,710	1,510	1,580	1,320	10,400	2,730	2,440	1,560	700	1,320
17-----	1,370	2,440	3,040	1,510	1,600	1,450	8,680	2,440	2,170	1,460	700	1,510
18-----	1,320	3,360	2,960	1,440	1,560	1,370	7,110	2,550	2,040	1,420	740	1,910
19-----	3,200	8,400	2,880	1,460	1,420	1,270	6,610	2,440	2,040	1,320	3,710	1,670
20-----	17,500	6,860	2,840	1,550	1,400	1,270	5,440	2,300	1,910	1,140	2,730	1,460
21-----	23,600	5,440	2,820	1,590	1,390	1,240	4,450	3,040	1,670	1,020	2,040	1,510
22-----	15,800	5,030	2,800	1,640	1,380	1,170	3,710	5,660	2,170	1,020	1,240	1,510
23-----	10,700	4,440	2,730	1,690	1,420	1,020	3,530	5,660	1,910	860	980	1,370
24-----	8,140	4,830	2,510	1,800	1,520	950	3,530	10,400	1,280	900	940	1,560
25-----	6,610	4,450	2,470	2,250	1,560	950	3,530	21,800	1,370	900	980	1,620
26-----	4,450	4,070	2,370	2,730	1,510	1,100	4,260	20,700	1,670	780	1,190	1,510
27-----	3,530	4,070	2,270	4,260	1,480	1,280	4,830	17,200	1,790	740	1,370	1,790
28-----	3,530	3,360	2,200	3,640	1,490	1,440	5,030	14,800	1,370	940	1,320	2,040
29-----	5,660	3,040	2,050	2,730	1,440	1,690	6,610	12,200	1,560	1,140	1,240	2,170
30-----	5,890	3,710	2,130	2,500	-----	1,500	7,360	9,240	2,040	1,100	1,020	1,560
31-----	4,830	-----	2,160	2,050	-----	1,400	-----	7,620	-----	1,060	980	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October-----	23,600	630	4,400	3.76	4.34
November-----	15,500	2,440	5,190	4.44	4.95
December-----	14,800	2,090	4,240	3.62	4.17
January-----	4,260	1,440	2,110	1.80	2.08
February-----	2,040	1,380	1,580	1.35	1.46
March-----	1,690	950	1,220	1.04	1.20
April-----	16,200	1,300	6,440	5.50	6.14
May-----	21,800	2,300	8,240	7.04	8.12
June-----	7,110	1,280	2,830	2.42	2.70
July-----	3,360	740	1,360	1.16	1.34
August-----	3,710	700	1,130	.966	1.11
September-----	2,170	700	1,280	1.09	1.22
The year-----	23,600	630	3,340	2.85	38.83

SEBEC RIVER AT SEBEC, ME.

LOCATION.—Water-stage recorder 1,000 feet below highway bridge and dam at outlet of Sebec Lake, Sebec, Piscataquis County.

DRAINAGE AREA.—344 square miles.

RECORDS AVAILABLE.—October, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, 3,630 second-feet May 28 (gage height, 7.20 feet); minimum, 95 second-feet March 27 (gage height, 1.88 feet).

1924-1928: Maximum discharge, 3,670 second-feet November 16, 1925 (gage height, 7.25 feet); minimum, 20 second-feet January 25, 1925 (gage height, 1.36 feet).

REMARKS.—Records good. Flow ordinarily regulated completely by dams and storage reservoirs.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	260	775	945	715	695	505	200	1,620	2,130	1,210	280	340
2.	210	360	980	850	685	505	320	1,760	1,960	1,260	290	240
3.	335	265	990	855	690	510	300	2,010	1,650	995	290	235
4.	290	570	900	790	695	320	295	2,770	1,350	835	270	325
5.	275	1,580	975	785	585	420	295	2,400	1,300	705	235	325
6.	295	2,800	975	785	670	500	295	1,950	950	600	320	320
7.	275	2,600	970	785	660	480	290	1,870	950	430	310	335
8.	265	2,510	1,380	695	650	470	210	1,450	950	225	290	340
9.	225	1,980	2,510	760	655	400	540	1,450	800	280	295	265
10.	335	1,620	2,900	735	640	340	1,850	1,450	1,050	285	300	340
11.	335	1,590	2,770	755	645	240	2,850	1,450	1,050	285	280	355
12.	325	1,720	2,730	745	535	335	3,100	1,350	945	300	225	340
13.	310	1,800	2,210	760	655	380	3,210	950	630	310	300	365
14.	315	875	1,900	735	650	355	3,060	700	495	260	310	365
15.	285	500	1,380	680	610	330	2,910	700	500	220	310	325
16.	230	490	1,070	745	625	310	2,910	700	485	310	310	285
17.	310	500	740	725	635	320	2,790	800	465	290	320	375
18.	295	735	740	725	645	220	2,630	800	520	300	280	370
19.	290	1,220	790	705	545	400	2,340	800	520	300	230	410
20.	930	1,180	800	710	660	360	1,790	500	540	300	320	395
21.	1,840	1,240	795	715	670	360	855	835	525	270	320	400
22.	2,700	1,250	795	595	600	315	315	910	530	225	310	355
23.	2,650	1,240	795	665	635	290	455	1,430	480	290	325	310
24.	2,750	1,170	810	660	650	290	390	2,670	400	290	330	45
25.	1,500	1,230	770	670	650	198	430	3,470	490	315	270	45
26.	1,150	1,190	785	675	500	330	1,230	3,540	495	315	255	45
27.	1,150	1,120	795	705	600	300	1,100	3,560	510	315	320	60
28.	2,250	965	820	710	535	260	1,530	3,560	490	280	355	1,000
29.	2,150	885	805	615	515	320	1,230	3,360	775	220	355	900
30.	2,090	885	790	700	310	1,350	2,700	1,090	295	350	850	---
31.	1,560	---	780	705	270	---	2,430	---	290	---	---	---

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,750	210	909	2.64	3.04
November	2,800	295	1,230	3.58	3.99
December	2,900	740	1,210	3.52	4.06
January	855	595	724	2.10	2.42
February	695	500	627	1.82	1.96
March	510	198	353	1.03	1.19
April	3,210	200	1,370	3.98	4.44
May	3,560	500	1,800	5.23	6.03
June	2,130	400	834	2.42	2.70
July	1,260	220	413	1.20	1.38
August	370	225	301	.875	1.01
September	1,000	235	413	1.20	1.34
The year	3,560	198	849	2.47	33.56

* Estimated.

NOTE.—Discharge in second-feet per square mile and run-off in inches do not represent natural flow from basin.

PLEASANT RIVER AT MILO, ME.

LOCATION.—Chain gage at Snows Bridge in Milo, Piscataquis County, and 6¼ miles above confluence with Piscataquis River.

DRAINAGE AREA.—325 square miles.

RECORDS AVAILABLE.—June, 1920, to September, 1928.

EXTREMES.—Maximum discharge during year, 7,000 second-feet April 9; minimum, 110 second-feet October 2 (gage height, 2.48 feet).

1920-1928: Maximum discharge, 24,400 second-feet April 30, 1923 (gage height, 14.33 feet); minimum 22 second-feet July 29, August 2, and September 11, 1921 (gage height, 2.10 feet).

REMARKS.—Records good. Flow partly regulated by power development at Brownville and by storage dams. Discharge estimated December 16 to April 11 because of ice effect.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	193	1,040	1,820	745	480	330	430	1,900	1,740	1,040	290	361
2	142	1,040	1,740	1,020	430	330	425	2,260	1,440	920	271	335
3	296	1,100	1,370	860	355	295	415	2,660	2,660	670	246	348
4	416	1,660	1,270	690	335	270	470	3,060	1,100	522	354	375
5	522	6,260	1,140	620	240	270	505	3,060	800	505	452	375
6	468	6,500	1,020	610	235	285	1,300	3,260	745	468	445	296
7	342	5,780	1,000	590	235	270	1,740	3,700	860	468	416	234
8	259	2,360	2,460	520	235	255	4,100	3,480	1,170	430	309	269
9	416	1,660	5,540	445	330	245	7,000	2,660	1,040	445	309	253
10	382	1,300	3,920	460	320	260	6,260	2,460	1,510	416	296	204
11	348	1,100	2,860	460	320	260	4,770	1,990	1,170	396	204	175
12	259	701	2,260	395	320	255	2,260	1,580	860	445	396	187
13	438	734	1,580	410	335	295	2,080	1,370	920	396	335	328
14	1,820	712	1,580	380	330	375	1,990	1,240	690	548	284	460
15	1,300	920	1,370	360	335	395	2,560	1,170	920	860	277	460
16	640	920	1,300	390	360	395	2,360	860	1,100	660	253	148
17	175	920	1,210	390	350	395	1,900	690	1,440	670	277	445
18	259	1,510	1,170	390	330	410	1,510	860	1,040	582	335	522
19	1,740	3,260	1,170	395	310	415	1,440	712	920	548	1,440	490
20	4,820	2,560	1,240	390	235	300	1,300	1,240	800	482	1,100	445
21	5,540	1,740	1,240	360	260	235	1,240	1,580	920	430	620	539
22	4,140	1,580	1,240	415	295	220	1,240	1,740	1,440	409	354	522
23	2,660	1,740	1,130	500	370	215	1,300	1,660	1,300	416	328	498
24	2,080	2,860	980	490	340	205	1,170	4,360	259	389	328	582
25	1,740	2,660	885	640	320	205	1,100	6,260	416	342	375	539
26	1,040	2,460	800	1,440	295	220	980	5,540	490	234	438	522
27	860	1,040	745	1,250	295	275	980	5,540	778	265	490	548
28	1,040	860	745	955	295	355	1,170	3,920	490	309	505	522
29	1,440	860	755	735	295	410	1,580	1,820	530	590	452	610
30	1,300	1,300	710	480	-----	430	1,740	2,170	650	573	396	322
31	1,170	-----	710	480	-----	430	-----	1,820	-----	430	382	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	5,540	142	1,230	3.78	4.36
November	6,500	701	1,970	6.06	6.76
December	5,540	710	1,510	4.65	5.36
January	1,440	360	589	1.81	2.09
February	480	235	317	.975	1.05
March	430	205	307	.945	1.09
April	7,000	415	1,910	5.88	6.56
May	6,260	690	2,470	7.60	8.76
June	2,660	259	1,010	3.11	3.47
July	1,040	234	512	1.58	1.82
August	1,440	204	418	1.29	1.49
September	610	148	397	1.22	1.36
The year	7,000	142	1,060	3.26	44.17

PASSADUMKEAG RIVER AT LOWELL, ME.

LOCATION.—Water-stage recorder half a mile below dam and highway bridge at Lowell, Penobscot County, and 10 miles above mouth of river.

DRAINAGE AREA.—301 square miles.

RECORDS AVAILABLE.—October, 1915, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,790 second-feet April 14 (gage height, 4.78 feet); minimum, 123 second-feet October 2 and 3 (gage height, 1.24 feet).

1916-1928: Maximum discharge, 5,680 second-feet May 2, 1923; minimum, estimated 5 second-feet several times in July and August, 1921.

REMARKS.—Records good. Discharge estimated December 4-8 and December 18 to March 12 because of ice effect. Distribution of flow affected by storage reservoirs.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	132	472	800	750	470	290	630	1,400	1,040	536	300	549
2.....	123	408	925	980	445	290	558	1,430	1,010	540	306	432
3.....	125	373	980	1,250	485	280	516	1,550	925	544	312	291
4.....	136	440	850	1,160	475	275	512	1,460	850	544	319	214
5.....	146	1,160	775	985	455	255	554	1,400	825	580	325	230
6.....	158	1,400	735	900	455	270	675	1,310	800	630	328	235
7.....	163	1,460	725	790	470	260	1,010	1,250	775	580	322	356
8.....	172	1,580	825	695	490	255	1,400	1,130	725	528	312	319
9.....	172	1,580	1,250	615	485	260	1,620	1,130	700	492	306	262
10.....	178	1,550	1,370	550	470	255	1,650	1,100	700	456	303	260
11.....	176	1,460	1,160	510	470	255	1,650	1,130	675	416	303	260
12.....	176	1,370	1,220	470	470	235	1,550	1,130	675	280	312	262
13.....	186	1,310	1,220	445	460	230	1,550	1,100	675	368	319	276
14.....	224	1,220	1,190	410	440	232	1,580	1,070	775	235	319	297
15.....	251	1,130	1,160	380	410	262	1,620	1,010	675	331	309	312
16.....	265	1,040	1,130	345	380	254	1,520	980	675	385	294	319
17.....	271	952	925	325	355	359	1,430	875	652	366	271	322
18.....	271	980	865	315	340	384	1,340	775	630	342	265	338
19.....	282	1,040	840	310	345	388	1,280	750	630	332	483	352
20.....	380	1,010	825	310	325	392	1,190	725	430	319	971	356
21.....	608	952	815	310	315	380	1,070	750	472	306	800	356
22.....	775	925	815	310	310	370	980	775	549	294	750	352
23.....	875	800	825	320	310	359	925	775	532	282	775	348
24.....	900	725	810	380	315	309	875	825	488	276	750	348
25.....	875	675	795	490	310	276	850	875	480	274	725	352
26.....	800	492	755	650	305	274	850	980	468	271	700	345
27.....	725	554	725	775	305	297	875	1,070	472	265	652	359
28.....	700	608	660	765	295	376	925	1,160	472	262	608	369
29.....	675	630	655	675	295	456	1,040	1,160	472	265	608	373
30.....	675	675	675	570	-----	468	1,220	1,100	500	274	652	362
31.....	572	-----	710	510	-----	576	-----	1,070	-----	291	630	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	900	123	392	1.30	1.50
November.....	1,580	373	966	3.21	3.58
December.....	1,370	655	904	3.00	3.46
January.....	1,250	310	589	1.96	2.26
February.....	490	295	395	1.31	1.41
March.....	576	230	317	1.05	1.21
April.....	1,650	512	1,110	3.69	4.12
May.....	1,550	725	1,070	3.55	4.09
June.....	1,040	430	658	2.19	2.44
July.....	630	235	383	1.27	1.46
August.....	971	265	472	1.57	1.81
September.....	549	214	327	1.09	1.22
The year.....	1,650	123	632	2.10	28.56

KENNEBEC RIVER BASIN

MOOSEHEAD LAKE AT EAST OUTLET, ME.

LOCATION.—Staff gage at wharf at east outlet of lake, at Moosehead, Piscataquis County. Zero of gage is 1,011.20 feet above mean sea level.

DRAINAGE AREA.—1,240 square miles.

RECORDS AVAILABLE.—April, 1895, to September, 1928.

REMARKS.—Lake is regulated to capacity of 23,735 million cubic feet. Records show only fluctuations in lake level and are used in studies of regulation of lake and in computing natural flow of Kennebec River at The Forks. Record furnished by Hollingsworth & Whitney Co.

Daily gage height, in feet, 1927-28

[illegible]

KENNEBEC RIVER AT MOOSEHEAD, ME.

LOCATION.—Water-stage recorder about one-eighth mile below east outlet dam on Moosehead Lake and half a mile northwest of Moosehead, Piscataquis County.

DRAINAGE AREA.—1,240 square miles.

RECORDS AVAILABLE.—October, 1919, to September, 1928.

EXTREMES.—Maximum discharge during year, 13,000 second-feet May 31 (gauge height, 9.0 feet); minimum, 208 second-feet October 19 (gauge height, 2.38 feet).

1919-1928: Maximum discharge, about 13,400 second-feet May 12 and 13, 1920; minimum, about 62 second-feet April 7-15, 1923.

REMARKS.—Records good. Leakage and occasional opening of gates in west outlet dam diverts some water down west channel. Flow regulated by operation of gates at Moosehead Lake.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,430	278	3,410	2,010	2,070	3,090	1,150	5,360	12,800	2,160	3,100	2,089
2	1,490	273	3,070	1,920	2,150	3,030	1,060	4,610	6,860	1,870	3,000	1,940
3	1,550	268	3,170	1,670	2,400	2,980	555	4,150	5,880	1,850	2,720	1,960
4	1,400	278	3,470	1,660	2,380	2,950	370	4,190	7,210	1,840	2,740	1,989
5	1,240	286	3,470	1,660	2,350	2,910	370	5,040	8,880	1,840	2,770	1,980
6	1,060	282	3,470	1,660	2,320	2,860	375	5,680	8,820	1,840	2,740	2,000
7	1,150	291	3,820	1,660	2,300	2,830	385	5,810	6,360	1,920	2,640	1,980
8	1,300	296	5,790	1,660	2,290	2,820	400	5,910	8,570	2,130	2,560	1,970
9	1,390	300	7,540	1,660	2,340	2,770	400	6,430	9,180	2,320	2,560	2,030
10	1,460	305	6,960	1,660	2,360	2,720	395	6,820	4,370	2,360	2,560	2,070
11	1,510	320	5,290	1,660	2,340	2,700	395	6,850	2,170	2,440	2,470	2,070
12	1,500	335	3,360	1,670	2,150	2,640	400	6,820	1,990	2,480	2,300	1,680
13	830	345	2,020	2,000	1,740	2,610	406	6,770	1,130	2,480	2,220	705
14	247	1,000	1,550	2,000	1,720	2,480	412	6,720	2,040	2,470	2,200	484
15	247	2,440	1,710	1,690	1,710	2,140	424	5,450	1,880	2,190	2,200	478
16	247	3,100	2,240	1,670	1,700	2,120	424	2,770	2,710	1,970	1,160	478
17	243	3,740	2,520	1,670	1,700	1,900	424	1,080	3,110	2,210	1,410	484
18	231	5,720	3,280	1,670	1,900	1,880	430	418	3,430	2,500	2,120	490
19	215	7,290	3,960	1,670	2,220	1,820	430	846	3,410	2,500	1,840	720
20	215	5,710	4,280	2,070	2,200	1,840	436	2,370	2,760	2,480	1,840	840
21	219	2,480	4,250	2,260	2,200	2,040	436	6,290	1,830	2,480	1,970	710
22	223	1,960	3,790	2,240	2,460	2,040	1,310	4,270	1,830	2,470	1,970	710
23	219	4,670	3,500	2,370	2,750	2,030	1,960	5,080	1,880	2,460	1,970	830
24	223	5,680	3,290	2,470	2,740	1,980	2,300	9,130	1,990	2,440	1,970	1,310
25	227	4,840	2,560	2,230	2,700	1,960	4,820	10,100	2,000	2,440	2,110	1,530
26	231	3,690	1,960	2,090	2,910	1,960	5,380	9,760	2,070	2,420	2,200	1,210
27	251	3,030	1,640	1,720	3,190	1,710	5,360	11,000	1,980	2,410	2,180	1,020
28	260	2,770	1,640	1,610	3,140	1,260	5,360	12,300	1,950	2,410	2,200	1,320
29	273	2,770	1,660	1,800	3,120	1,010	5,360	12,300	1,588	2,410	2,200	1,390
30	278	3,050	1,650	2,060	-----	960	5,360	12,200	2,140	2,380	2,200	1,760
31	278	-----	1,650	1,980	-----	880	-----	12,500	-----	2,650	2,220	-----
Month	Maximum					Minimum		Mean		Per square mile	Run-off in inches.	
October	1,550					215		698		0.563	0.65	
November	7,290					268		2,260		1.82	2.03	
December	7,540					1,550		3,290		2.65	3.06	
January	2,470					1,610		1,870		1.51	1.74	
February	3,190					1,700		2,330		1.88	2.03	
March	3,090					880		2,220		1.79	2.06	
April	5,380					370		1,880		1.27	1.42	
May	12,500					418		6,420		5.18	5.97	
June	12,800					1,130		4,090		3.30	3.68	
July	2,650					1,840		2,280		1.84	2.12	
August	3,100					1,160		2,270		1.83	2.11	
September	2,080					478		1,340		1.08	1.20	
The year	12,800					215		2,560		2.06	28.07	

NOTE.—Discharge in second-feet per square mile and run-off in inches do not represent natural flow from basin. Estimated discharge of water released in west channel when gates were open and not included in the above records are as follows: Oct. 1-13, 390 to 350 second-feet; June 1-30, 180 second-feet; July 1 to Sept. 13, 240 to 140 second-feet.

KENNEBEC RIVER AT THE FORKS, ME.

LOCATION.—Water-stage recorder half a mile above highway bridge and 1 mile above mouth of Dead River at The Forks, Somerset County.

DRAINAGE AREA.—1,570 square miles.

RECORDS AVAILABLE.—September, 1901, to September, 1928.

EXTREMES.—Maximum discharge during year, 16,400 second-feet May 28 (gage height, 8.65 feet); minimum, 594 second-feet October 18 (gage height, 2.02 feet).

1901-1928: Maximum discharge, about 23,700 second-feet June 18, 1917 (gage height, 10.1 feet); minimum, 215 second-feet October 27, 1911 (gage height, 0.3 foot).

REMARKS.—Records good. Flow regulated by storage in Moosehead Lake. Discharge estimated December 25 to March 11 because of ice effect.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	2,030	860	3,700	2,230	2,350	3,250	1,290	7,280	15,100	3,180	3,370	2,370
2.....	2,110	850	3,600	2,480	2,130	3,170	1,410	7,560	10,700	2,640	3,440	2,460
3.....	2,110	1,540	3,900	2,320	2,700	3,150	1,290	7,280	7,010	2,930	3,210	2,460
4.....	2,190	2,550	3,700	2,160	2,700	3,130	1,180	7,280	8,120	2,190	3,120	2,550
5.....	1,950	5,680	3,720	2,170	2,630	3,070	1,120	7,840	9,560	2,340	3,060	2,280
6.....	1,660	4,930	3,900	2,190	2,720	3,070	1,230	9,560	9,560	2,420	2,660	2,280
7.....	1,540	3,530	4,080	2,210	2,740	3,070	2,190	9,270	8,120	2,190	3,060	2,550
8.....	1,660	2,640	6,340	2,060	2,820	3,010	4,930	8,400	9,270	2,420	2,820	2,460
9.....	1,800	2,030	9,850	2,080	2,680	2,990	6,200	8,120	10,700	2,790	2,950	2,550
10.....	1,800	1,180	9,560	2,010	3,010	2,930	5,430	8,980	7,390	2,780	2,950	2,640
11.....	1,950	1,070	7,560	1,970	2,950	2,870	4,200	8,690	3,430	3,010	2,860	2,640
12.....	1,870	1,020	5,180	2,110	2,930	2,930	3,130	7,840	2,800	3,070	2,700	2,550
13.....	1,950	1,020	3,330	2,060	2,680	2,840	2,280	7,840	1,870	3,080	2,540	1,660
14.....	1,410	1,020	2,640	2,260	2,410	2,840	2,740	7,560	2,210	2,920	2,560	1,000
15.....	1,070	2,370	2,550	2,210	2,300	2,550	2,640	6,470	2,460	2,740	2,440	840
16.....	820	3,430	2,370	2,530	2,240	2,370	2,280	3,970	3,660	2,530	2,530	940
17.....	698	4,320	2,030	2,610	2,240	2,280	2,030	1,950	3,470	2,580	2,640	900
18.....	622	5,680	4,680	2,550	2,170	2,030	1,900	1,410	4,080	2,830	2,460	1,120
19.....	1,120	8,400	4,320	2,500	2,330	2,190	1,730	1,180	3,860	2,940	2,370	1,070
20.....	4,680	8,120	5,180	2,170	2,410	1,950	1,600	1,790	2,460	2,880	2,030	1,410
21.....	7,010	5,180	2,580	2,460	2,480	2,110	1,470	6,110	2,470	2,860	2,190	1,290
22.....	5,180	2,190	4,440	2,630	2,530	2,190	1,410	6,360	2,190	2,790	2,190	1,120
23.....	3,430	4,320	4,440	3,010	2,910	2,190	2,460	5,580	1,990	2,980	2,190	1,230
24.....	2,460	6,470	4,080	3,210	2,930	2,190	2,930	11,600	2,330	3,030	2,190	1,350
25.....	1,660	6,470	3,490	3,150	2,950	2,190	4,680	16,100	2,650	3,070	2,280	1,800
26.....	1,070	5,180	2,850	3,050	3,010	2,550	6,470	15,100	2,510	3,020	2,550	1,800
27.....	930	4,440	2,190	2,660	3,310	2,550	6,200	15,100	2,430	2,940	2,460	1,470
28.....	910	3,230	2,090	2,480	3,310	2,190	6,470	16,400	2,590	3,070	2,460	1,540
29.....	1,070	3,130	2,060	2,190	3,310	1,540	6,470	15,500	2,080	3,100	2,460	1,660
30.....	1,120	3,330	2,030	2,440	-----	1,540	6,740	15,100	2,890	3,160	2,460	1,800
31.....	1,020	-----	2,060	2,190	-----	1,290	-----	14,800	-----	3,270	2,460	-----

Month	Observed			Corrected for storage		
	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October.....	7,010	622	1,960	3,270	2.08	2.40
November.....	8,400	850	3,540	5,400	3.44	3.84
December.....	9,850	2,030	4,090	4,090	2.61	3.01
January.....	3,210	1,970	2,400	2,340	1.49	1.72
February.....	3,310	2,130	2,690	1,530	.975	1.05
March.....	3,250	1,290	2,520	920	.586	.68
April.....	6,740	1,120	3,200	7,690	4.90	5.47
May.....	16,400	1,180	8,650	10,300	6.56	7.56
June.....	15,100	1,870	5,000	4,770	3.04	3.39
July.....	3,270	2,190	2,830	1,280	.815	.94
August.....	3,440	2,030	2,630	920	.586	.68
September.....	2,640	840	1,790	791	.504	.56
The year.....	16,400	622	3,450	3,610	2.30	31.30

KENNEBEC RIVER AT WATERVILLE, ME.

LOCATION.—Rod gages and water-stage recorder at dam of Hollingsworth & Whitney Co. at Waterville, Kennebec County, 2 miles above Sebasticook River.

DRAINAGE AREA.—4,270 square miles.

RECORDS AVAILABLE.—March, 1892, to September, 1928.

REMARKS.—Discharge computed from flow over dam, and through logway and water wheels of mill. When flow is less than about 3,500 second-feet practically all passes through wheels. Numerous power plants and much storage above station; results not corrected for storage. Records furnished by Hollingsworth & Whitney Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.-----	2,140	5,440	13,700	9,820	5,110	4,250	5,240	29,300	33,100	8,080	3,610	2,850
2.-----	1,990	5,690	14,200	9,530	4,520	4,210	5,300	33,000	24,900	9,810	3,710	2,510
3.-----	2,490	7,960	12,600	7,850	4,450	3,960	5,380	35,400	23,700	7,960	3,830	2,700
4.-----	2,840	14,800	10,100	6,860	3,790	3,780	6,650	35,400	21,100	7,540	3,560	2,900
5.-----	3,310	76,800	11,100	6,480	3,490	3,980	10,700	35,200	20,000	6,200	4,190	3,320
6.-----	3,180	63,300	10,500	5,650	4,060	4,160	13,900	37,000	19,200	5,290	4,220	3,330
7.-----	3,320	40,900	11,700	5,780	4,000	3,850	34,400	38,800	19,300	4,460	4,260	3,160
8.-----	2,760	24,000	25,800	6,560	3,980	3,700	61,900	35,100	21,100	2,740	3,530	2,190
9.-----	2,160	16,800	31,900	6,540	3,830	3,790	87,200	31,100	22,100	3,670	3,610	2,100
10.-----	3,150	14,200	25,200	6,810	3,930	3,300	58,800	29,200	22,800	5,290	3,620	2,920
11.-----	3,200	10,300	21,600	6,350	3,650	3,180	42,000	28,800	20,600	4,050	4,210	3,080
12.-----	2,750	9,960	18,500	5,980	4,230	4,080	35,300	27,900	13,600	3,940	4,500	3,630
13.-----	3,020	9,140	12,100	5,380	4,430	3,890	30,900	26,800	12,100	3,850	4,870	5,860
14.-----	8,770	9,570	11,100	5,980	4,410	4,960	25,000	24,800	10,700	3,140	4,450	7,190
15.-----	8,130	8,950	8,820	7,080	4,210	4,900	24,600	20,800	11,200	3,430	3,790	5,950
16.-----	6,550	9,970	8,340	6,150	4,600	5,450	28,200	19,500	10,800	4,760	3,600	4,600
17.-----	4,870	10,500	6,560	5,310	4,830	5,060	24,400	14,800	8,680	4,050	3,660	6,020
18.-----	3,300	13,500	7,460	3,960	4,850	4,720	19,400	11,600	9,040	4,000	2,910	6,370
19.-----	5,390	20,000	9,600	4,360	3,780	4,910	14,900	9,900	8,720	4,150	2,140	5,460
20.-----	43,000	19,800	9,370	4,120	4,390	4,420	16,900	5,560	9,040	3,990	4,200	4,640
21.-----	45,800	16,800	10,500	3,630	3,810	4,280	15,600	12,500	6,920	5,150	3,630	4,800
22.-----	70,000	13,700	11,600	2,790	3,900	4,180	13,800	18,800	6,490	2,100	3,210	4,490
23.-----	25,500	9,950	9,640	3,920	4,060	4,060	16,500	17,300	6,180	3,880	3,340	3,600
24.-----	19,100	13,700	8,880	4,100	4,030	3,570	19,500	32,400	4,680	4,160	3,170	4,750
25.-----	16,500	14,200	5,840	5,380	4,490	3,630	18,900	79,200	6,970	3,470	2,580	4,560
26.-----	9,600	13,500	7,330	7,260	4,040	4,410	23,200	66,200	7,540	3,480	2,130	4,480
27.-----	8,300	13,300	7,300	6,330	4,190	5,340	24,500	56,300	7,140	3,670	3,120	5,520
28.-----	5,700	13,300	7,390	7,210	4,400	6,380	26,300	49,400	4,440	3,780	3,800	4,650
29.-----	7,790	11,200	6,920	6,020	4,280	6,930	29,200	45,700	5,300	3,520	3,400	4,160
30.-----	7,760	12,300	6,610	5,790	-----	6,560	30,200	40,400	4,990	4,040	3,480	2,810
31.-----	7,350	-----	5,970	5,130	-----	5,720	-----	33,700	-----	4,110	3,170	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October-----	70,000	1,990	11,000	2.58	2.97
November-----	76,800	5,440	17,500	4.10	4.57
December-----	31,900	5,840	11,900	2.79	3.22
January-----	9,820	2,790	5,940	1.39	1.60
February-----	5,110	3,490	4,200	.984	1.06
March-----	6,930	3,180	4,500	1.05	1.21
April-----	87,200	5,240	25,600	6.00	6.69
May-----	79,200	5,580	31,700	7.42	8.55
June-----	33,100	4,440	13,400	3.14	3.50
July-----	9,810	2,100	4,570	1.07	1.23
August-----	4,870	2,130	3,600	.843	.97
September-----	7,190	2,100	4,150	.972	1.08
The year-----	87,200	1,990	11,500	2.69	36.65

NOTE.—Discharge in second-feet per square mile and run-off in inches do not represent natural flow from basin.

DEAD RIVER AT THE FORKS, ME.

LOCATION.—Water-stage recorder $1\frac{1}{2}$ miles west of The Forks, Somerset County.

DRAINAGE AREA.—878 square miles.

RECORDS AVAILABLE.—September, 1901, to August, 1907; March, 1910, to September, 1928.

EXTREMES.—Maximum discharge during year, 16,000 second-feet May 21 (gage height, 8.36 feet); minimum, 248 second-feet September 11 (gage height, 1.88 feet).

1901-1907, 1910-1928: Maximum discharge, 23,800 second-feet April 30, 1923; minimum gage height, 0.2 foot September 12, 13, 17, 1918 (discharge not determined).

REMARKS.—Records good. Some storage on lakes. Discharge estimated December 17-21 and December 24 to March 25 because of ice effect.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	346	1,580	2,050	1,130	980	610	1,590	2,660	3,900	1,350	402	386
2.....	323	1,210	2,260	1,140	920	590	1,410	5,110	3,900	1,300	386	437
3.....	281	1,270	2,260	1,170	850	580	1,250	5,330	4,140	1,320	370	419
4.....	316	5,000	2,050	1,140	780	570	1,210	6,240	2,930	1,100	419	338
5.....	500	14,100	1,740	1,080	700	565	1,420	6,100	3,280	944	346	362
6.....	600	13,100	1,800	1,000	660	545	2,610	7,730	1,420	640	354	338
7.....	572	12,800	1,720	970	660	525	4,630	7,820	2,860	600	446	402
8.....	482	10,600	2,440	930	650	510	10,000	7,290	3,260	581	378	459
9.....	410	6,580	3,780	895	650	500	11,800	6,520	3,570	536	446	450
10.....	378	3,500	4,500	850	650	500	10,300	5,920	5,980	473	437	483
11.....	386	2,010	4,140	835	640	500	10,000	5,140	3,030	437	428	461
12.....	378	2,210	2,830	895	640	500	8,780	4,720	2,850	446	464	500
13.....	428	2,350	2,440	825	1,100	520	5,650	4,430	2,260	428	437	1,140
14.....	1,200	2,350	2,350	800	1,250	535	3,220	3,140	2,050	446	378	1,290
15.....	1,410	2,440	1,980	790	1,240	580	3,030	3,420	1,800	500	394	1,230
16.....	824	2,440	1,520	780	1,140	600	3,400	2,120	1,280	527	378	1,570
17.....	1,240	2,260	1,510	735	1,070	610	2,760	1,300	1,310	518	362	1,480
18.....	1,620	2,260	1,500	700	980	630	1,830	1,420	1,140	509	473	1,210
19.....	1,500	2,630	1,480	650	930	630	3,220	1,820	756	509	473	1,180
20.....	5,800	2,730	1,460	600	910	640	3,000	1,620	745	464	437	944
21.....	9,690	2,630	1,460	555	850	650	2,600	3,620	723	428	410	960
22.....	7,580	2,350	1,460	545	765	660	2,230	3,960	734	402	482	917
23.....	6,040	2,240	1,440	570	735	660	2,320	3,890	734	378	394	877
24.....	3,670	2,350	1,350	725	710	650	1,420	7,970	756	419	464	775
25.....	2,630	2,260	1,270	1,130	690	640	2,760	10,600	824	419	394	854
26.....	1,770	2,630	1,180	1,310	670	620	1,540	10,000	824	378	386	826
27.....	1,480	2,540	1,180	1,300	660	767	1,980	9,690	872	378	378	856
28.....	2,190	2,170	1,200	1,280	640	1,090	2,090	8,780	944	437	402	779
29.....	2,130	2,000	1,070	1,250	630	1,450	1,710	7,880	1,070	419	386	812
30.....	1,770	1,800	1,030	1,170	-----	1,780	2,160	6,450	1,240	410	378	800
31.....	1,700	-----	1,030	1,080	-----	1,850	-----	5,910	-----	402	536	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	9,690	281	1,920	2.19	2.52
November.....	14,100	1,210	3,880	4.42	4.93
December.....	4,500	1,030	1,920	2.19	2.52
January.....	1,310	545	930	1.06	1.22
February.....	1,250	630	819	.932	1.01
March.....	1,850	500	712	.811	.94
April.....	11,800	1,210	3,720	4.24	4.73
May.....	10,600	1,300	5,440	6.20	7.15
June.....	5,380	723	2,000	2.28	2.54
July.....	1,350	378	584	.665	.77
August.....	482	346	413	.470	.54
September.....	1,570	338	788	.897	1.00
The year.....	14,100	281	1,930	2.20	29.87

CARRABASSETT RIVER NEAR NORTH ANSON, ME.

LOCATION.—Water-stage recorder 3 miles above North Anson, Somerset County.

DRAINAGE AREA.—351 square miles.

RECORDS AVAILABLE.—August, 1925, to September, 1928. November, 1901, to May, 1907, at site 1 mile upstream.

EXTREMES.—Maximum discharge during year, 18,600 second-feet November 4 (gage height, 17.83 feet); minimum, 30 second-feet September 11 (gage height, 2.26 feet).

1925-1928: Maximum discharge, that of November 4, 1927; minimum, 25 second-feet September 15, 1926 (gage height, 2.18 feet).

REMARKS.—Records good. Flow regulated by operation of power plant. Discharge estimated December 15 to April 7 because of ice effect, November 23-28 when recorder was not operating, and October 1-3 because of back-water.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	114	620	1,570	565	470	285	620	2,040	1,700	1,650	166	160
2.....	114	440	1,450	740	430	280	550	3,040	1,730	1,530	146	94
3.....	118	610	1,090	660	400	275	540	3,100	1,390	1,130	148	140
4.....	205	7,960	880	620	380	265	745	3,400	1,030	663	156	245
5.....	435	9,590	859	605	370	265	915	2,860	764	415	112	235
6.....	359	3,920	810	580	365	245	2,040	3,520	719	290	300	190
7.....	216	2,420	693	575	340	235	5,840	2,860	1,450	328	198	134
8.....	260	1,410	2,820	555	340	235	9,730	1,990	1,760	216	260	148
9.....	164	1,020	4,300	540	345	230	7,140	1,530	1,220	244	184	63
10.....	330	880	2,420	480	345	225	3,160	1,750	1,580	213	280	210
11.....	197	693	1,840	460	330	225	2,200	1,490	1,250	192	285	118
12.....	194	745	1,330	460	320	220	1,990	1,940	1,070	213	290	285
13.....	750	873	915	450	315	240	1,750	1,250	840	216	360	1,220
14.....	2,720	784	859	425	305	305	1,490	915	614	245	250	1,410
15.....	1,660	719	765	440	320	485	2,250	784	632	712	160	1,020
16.....	1,170	700	705	445	420	620	2,140	915	585	485	170	880
17.....	680	771	670	470	440	555	1,490	885	784	350	142	784
18.....	410	1,930	630	490	380	485	1,330	880	605	360	150	668
19.....	1,680	2,300	610	445	355	475	1,170	945	354	604	295	570
20.....	8,800	1,570	585	420	330	435	1,090	890	311	430	390	668
21.....	6,680	1,330	580	430	310	400	950	2,880	337	172	285	817
22.....	3,510	1,250	560	450	295	355	1,210	2,180	311	172	194	700
23.....	2,090	1,340	520	440	305	330	1,290	2,250	265	203	158	516
24.....	1,250	1,400	520	415	330	305	1,060	7,100	255	189	170	485
25.....	771	1,150	530	405	330	310	1,330	10,600	609	190	210	420
26.....	668	920	555	1,250	315	355	1,130	5,260	490	154	116	401
27.....	598	860	570	1,020	305	485	1,290	4,600	480	144	365	363
28.....	587	825	565	565	300	700	1,750	3,130	880	154	290	363
29.....	810	810	540	780	290	950	2,049	2,470	592	122	205	278
30.....	745	1,170	505	630	-----	880	1,990	2,160	1,020	310	190	263
31.....	693	-----	495	520	-----	695	-----	1,810	-----	174	-----	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	8,800	114	1,260	3.59	4.14
November.....	9,590	440	1,700	4.84	5.40
December.....	4,300	495	1,020	2.91	3.36
January.....	1,250	405	569	1.62	1.87
February.....	470	290	348	.991	1.07
March.....	950	220	398	1.13	1.30
April.....	9,730	540	2,070	5.90	6.58
May.....	10,600	784	2,630	7.49	8.64
June.....	1,760	255	854	2.43	2.71
July.....	1,650	122	403	1.15	1.33
August.....	390	112	219	.624	.72
September.....	1,410	63	465	1.32	1.47
The year	10,600	63	995	2.83	38.59

SURFACE WATER SUPPLY, 1928, PART I

COBBOSSECONTEE STREAM AT GARDINER, ME.

LOCATION.—Staff gage at dam of Gardiner Water Power Co. in Gardiner, Kennebec County.

DRAINAGE AREA.—220 square miles.

RECORDS AVAILABLE.—June, 1890, to September, 1928.

REMARKS.—Discharge determined from flow over dam, through gates and waterwheels, and leakage. Daily discharge computed from tables based on coefficients and experiments. Flow regulated by numerous lakes in basin. Daily-discharge record furnished by S. D. Warren Co., Cumberland Mills, Me.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	270	270	290	220	805	296	355	1,480	945	13	270	270
2.....	190	270	290	425	805	296	400	1,480	701	270	270	13
3.....	270	270	290	423	610	296	340	1,460	630	270	270	105
4.....	270	270	13	420	395	300	290	1,090	460	140	270	185
5.....	270	270	290	410	290	296	360	747	425	140	13	270
6.....	270	13	290	410	290	296	615	748	445	270	270	270
7.....	270	270	290	405	290	296	835	705	495	270	270	270
8.....	230	270	290	210	290	290	1,020	495	510	13	270	270
9.....	13	270	545	340	290	290	1,220	505	495	270	270	13
10.....	190	270	955	290	290	290	1,180	485	410	270	270	270
11.....	270	270	1,060	290	290	13	1,560	420	360	270	270	270
12.....	270	270	915	290	13	290	1,380	355	310	270	13	270
13.....	270	13	555	290	290	290	1,370	125	305	270	270	270
14.....	270	290	398	290	290	290	1,220	370	296	270	270	280
15.....	270	290	395	13	290	350	845	346	285	13	270	290
16.....	13	290	392	290	290	430	1,000	355	270	270	270	13
17.....	270	290	392	290	290	445	781	390	13	270	270	290
18.....	270	290	380	290	290	425	609	315	270	270	270	290
19.....	270	290	420	290	180	475	609	315	270	270	13	290
20.....	270	13	755	290	395	465	460	60	270	270	270	290
21.....	270	290	1,100	290	437	445	300	395	270	270	270	290
22.....	270	290	1,120	13	430	425	150	395	270	13	270	290
23.....	13	290	785	290	465	405	350	325	270	270	270	13
24.....	270	150	449	290	655	340	605	1,520	13	270	270	280
25.....	270	290	400	290	802	290	975	2,560	270	270	270	270
26.....	270	290	425	525	725	350	1,280	2,560	270	270	13	280
27.....	270	13	415	780	515	420	1,190	2,500	270	270	270	290
28.....	270	290	350	815	290	615	810	2,320	270	270	270	290
29.....	270	290	290	785	290	785	1,020	1,980	270	13	270	290
30.....	13	290	290	825	-----	665	1,480	1,620	270	270	270	13
31.....	270	-----	290	810	-----	401	-----	1,400	-----	270	270	-----
Month												
	Maximum	Minimum	Mean	Per square mile	Run-off in inches							
October.....	270	13	230	1.05	1.21							
November.....	290	13	241	1.10	1.23							
December.....	1,120	13	488	2.22	2.56							
January.....	825	13	384	1.75	2.02							
February.....	805	13	399	1.81	1.95							
March.....	785	13	373	1.70	1.96							
April.....	1,560	150	820	3.73	4.16							
May.....	2,560	60	962	4.37	5.04							
June.....	945	13	354	1.61	1.80							
July.....	270	13	220	1.00	1.15							
August.....	270	13	237	1.08	1.24							
September.....	290	13	227	1.03	1.15							
The year.....	2,560	13	411	1.87	25.47							

NOTE.—Discharge in second-feet per square mile and run-off in inches do not represent natural flow from the basin.

ANDROSCOGGIN RIVER BASIN

ANDROSCOGGIN RIVER AT RUMFORD, ME.

LOCATION.—One gage in pond above each of two dams and in tailrace of power station of Rumford Falls Power Co., at Rumford, Oxford County.

DRAINAGE AREA.—2,090 square miles.

RECORDS AVAILABLE.—May, 1892, to September, 1928.

REMARKS.—Discharge computed from flow over dam and through wheels. Regulations from about 29.6 billion cubic feet storage in Rangeley system of lakes. Records furnished by Rumford Falls Power Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,990	2,920	6,970	3,970	3,770	3,410	3,360	7,100	11,700	4,430	2,350	2,420
2	1,830	2,580	6,470	3,960	3,670	3,440	3,570	8,430	11,100	3,760	2,370	2,040
3	2,220	3,260	5,540	3,390	3,590	3,400	3,780	8,460	9,330	2,950	2,350	3,050
4	3,250	27,600	3,670	3,600	3,560	2,870	4,330	8,430	7,750	3,000	2,550	2,780
5	3,720	39,100	3,820	3,770	3,340	3,580	5,900	9,270	6,570	3,140	2,930	2,560
6	2,750	15,200	4,460	3,510	3,790	3,240	10,800	10,400	6,100	2,790	3,870	2,500
7	2,150	9,780	4,360	3,720	3,430	3,260	17,700	9,960	6,920	2,680	3,480	2,560
8	2,230	7,470	9,230	3,550	3,330	3,140	21,600	8,720	6,520	2,220	2,950	2,230
9	2,430	5,630	11,000	3,770	3,260	3,350	17,200	8,460	5,790	2,800	3,630	2,310
10	2,390	4,420	6,050	3,600	3,350	3,560	10,800	8,410	5,380	2,570	3,670	2,920
11	2,020	4,050	5,490	3,820	3,350	2,960	9,230	8,650	5,750	2,940	3,080	2,620
12	2,220	4,040	6,410	3,690	3,050	3,410	8,726	8,416	4,886	2,850	2,536	4,120
13	8,050	3,810	6,140	3,750	3,440	3,400	8,500	7,320	4,150	2,460	3,040	5,220
14	8,860	4,250	4,970	3,570	3,340	3,240	7,600	7,225	4,670	3,010	2,550	4,350
15	4,910	3,900	4,690	3,290	3,550	3,530	7,000	6,770	3,950	3,360	2,510	2,920
16	3,490	3,650	4,110	3,320	3,800	3,600	7,050	6,670	3,430	3,180	2,490	3,310
17	3,210	3,680	3,920	3,240	3,870	3,410	5,570	6,180	2,850	2,980	2,640	3,500
18	2,720	9,170	3,550	3,410	3,770	3,230	4,840	5,930	3,410	2,610	2,500	2,940
19	5,820	8,580	3,650	3,520	3,200	3,460	4,760	6,070	3,070	2,750	2,070	2,940
20	10,300	5,700	3,850	3,190	3,580	3,380	4,850	8,180	3,160	2,490	2,780	2,850
21	9,480	4,980	4,190	3,380	3,450	3,220	4,490	11,400	2,950	2,480	2,640	3,320
22	5,940	4,400	4,260	2,850	3,520	3,120	4,210	10,100	2,990	2,090	2,470	3,130
23	3,880	4,390	4,150	3,450	3,480	3,290	4,990	10,300	2,860	2,700	2,520	2,430
24	4,060	4,630	3,210	3,660	3,710	3,130	4,630	14,600	2,910	2,480	2,520	3,130
25	3,280	4,760	2,960	4,330	3,670	3,320	4,550	19,000	3,770	2,480	2,550	2,500
26	3,280	2,900	3,190	4,990	3,240	4,150	4,800	16,400	3,250	2,430	2,190	2,490
27	3,080	4,450	3,430	4,410	3,550	5,590	4,910	14,500	3,210	2,370	3,060	3,170
28	3,000	5,270	3,840	4,250	3,490	6,780	4,936	14,900	3,130	2,620	2,640	2,690
29	2,980	4,830	3,990	3,660	3,340	5,660	4,730	13,600	3,090	2,640	2,590	2,850
30	2,370	5,400	4,050	4,000	-----	4,750	6,290	12,800	4,690	3,010	2,490	2,400
31	2,950	-----	4,010	3,920	-----	3,890	-----	12,100	-----	2,510	2,490	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	10,300	1,830	3,900	1.87	2.16
November	39,100	2,580	7,230	3.46	3.86
December	11,000	2,960	4,830	2.31	2.66
January	4,990	2,850	3,690	1.77	2.04
February	3,870	3,050	3,500	1.67	1.80
March	6,780	2,870	3,670	1.76	2.03
April	21,600	3,360	7,190	3.44	3.84
May	19,000	5,930	9,960	4.77	5.50
June	11,700	2,850	4,980	2.38	2.66
July	4,430	2,090	2,800	1.34	1.54
August	3,870	2,070	2,730	1.31	1.51
September	5,220	2,040	2,970	1.42	1.58
The year	39,100	1,830	4,780	2.29	31.18

NOTE.—Discharge in second-feet per square mile and run-off in inches do not represent natural flow from basin.

SURFACE WATER SUPPLY, 1928, PART I

MAGALLOWAY RIVER AT AZISCOHOS DAM, ME.

LOCATION.—Staff gage at Aziscohos Dam, Oxford County, 15 miles above mouth.
DRAINAGE AREA.—233 square miles.

RECORDS AVAILABLE.—January, 1912, to September, 1928.

REMARKS.—Discharge determined from readings of gate openings. Storage of about 9,593 million cubic feet is completely regulated. Discharge records furnished by Union Water Power Co., Lewiston, Me.

Monthly discharge, 1927-28

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	629	27	132	0.566	0.65
November.....	35	30	33.0	.142	.16
December.....	74	35	44.6	.191	.22
January.....	76	74	75.5	.324	.37
February.....	1,320	76	616	2.64	2.85
March.....	1,590	32	1,030	4.42	5.10
April.....	36	32	34.6	.148	.16
May.....	2,410	37	1,420	6.09	7.02
June.....	1,913	39	693	2.97	3.31
July.....	1,300	38	518	2.22	2.56
August.....	1,180	37	503	2.16	2.49
September.....	1,310	35	534	2.29	2.56
The year.....	2,410	27	471	2.02	27.45

NOTE.—Monthly discharge in second-feet per square mile and run-off in inches do not represent natural flow from basin.

PRESUMPSCOT RIVER BASIN

PRESUMPSCOT RIVER AT OUTLET OF SEBAGO LAKE, ME.

LOCATION.—An outlet dam at Sebago Lake and hydroelectric plant at Eel Weir Falls, 1 mile below lake outlet, Cumberland County.

DRAINAGE AREA.—436 square miles.

RECORDS AVAILABLE.—January, 1887, to September, 1928.

REMARKS.—Discharge computed from flow through wheels measured by Allen meters and water wasted at regulating gates. About 18 second-feet diverted by Portland Water District and leakage through dam not included in discharge. Flow completely regulated by Sebago Lake (area, 46 square miles). Record furnished by S. D. Warren Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	382	654	620	10	794	822	12	1,130	1,470	265	827	309
2	218	583	612	135	829	820	741	1,130	1,460	831	806	216
3	539	590	618	760	822	746	824	892	1,380	846	652	195
4	600	461	82	815	763	288	826	832	984	241	358	765
5	600	436	612	802	336	822	818	585	887	829	63	826
6	617	10	630	780	819	831	772	452	1,320	800	672	823
7	659	625	595	744	832	831	0	798	1,170	279	734	832
8	277	579	509	10	834	830	239	858	845	93	829	442
9	410	601	451	679	833	830	732	859	738	772	807	225
10	547	582	132	818	795	767	785	859	473	776	805	768
11	634	450	10	759	806	361	790	848	781	830	315	832
12	633	147	540	735	279	815	767	791	888	827	210	778
13	604	7	557	773	830	829	608	870	889	832	763	808
14	621	571	598	676	834	751	232	884	889	389	799	772
15	337	597	589	146	778	818	0	886	889	100	815	387
16	169	595	579	781	790	779	747	887	123	767	819	273
17	551	592	261	816	768	742	832	850	499	814	797	743
18	557	549	70	780	735	187	829	851	832	810	342	806
19	653	558	656	788	269	774	827	27	862	843	156	838
20	572	76	635	801	811	830	772	624	890	790	775	816
21	599	596	656	774	814	800	312	1,550	889	215	830	830
22	0	618	638	140	785	808	106	1,390	725	50	826	944
23	147	640	688	806	725	795	723	1,950	371	767	835	324
24	572	171	190	798	785	763	818	2,370	100	827	770	755
25	637	569	10	757	742	225	1,090	1,700	819	840	342	835
26	621	565	10	743	217	806	1,120	1,830	861	836	234	834
27	592	55	650	780	825	821	1,120	1,060	858	720	730	815
28	635	636	694	701	822	804	1,310	1,150	859	271	815	817
29	185	596	705	128	822	813	1,400	1,990	839	119	834	246
30	3	595	705	704	772	772	1,180	2,020	54	769	833	180
31	557	664	710	710	339	339	1,540	778	778	764	764	764

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	659	0	475	1.09	1.26
November	654	7	476	1.09	1.22
December	705	10	496	1.11	1.28
January	818	10	634	1.45	1.67
February	834	217	727	1.67	1.80
March	831	187	717	1.64	1.89
April	1,400	0	711	1.63	1.82
May	2,370	27	1,110	2.55	2.94
June	1,470	54	821	1.88	2.10
July	846	50	611	1.40	1.61
August	835	63	650	1.62	1.87
September	944	180	634	1.45	1.62
The year	2,370	0	671	1.54	21.08

NOTE.—Monthly discharge in second-feet per square mile and run-off in inches do not represent natural flow from basin.

SACO RIVER BASIN

SACO RIVER AT CORNISH, ME.

LOCATION.—Water-stage recorder just above highway bridge at Cornish, York County, and half a mile below mouth of Ossipee River.

DRAINAGE AREA.—1,300 square miles.

RECORDS AVAILABLE.—June, 1916, to September, 1928.

EXTREMES.—Maximum discharge during year, 13,600 second-feet April 11 (gage height, 10.0 feet); minimum, 740 second-feet October 2 (gage height, 2.20 feet).

1916–1928: Maximum discharge, 23,000 second-feet May 2, 1923 (gage height, 14.72 feet); minimum, 90 second-feet October 1, 1921 (gage height, 0.03 foot).

REMARKS.—Records good. Flow somewhat regulated by power development at Great Falls. Discharge estimated December 12–16 and December 24 to April 6 because of ice effect, and June 12–16 and June 23 to July 9 because of backwater from bridge construction.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	946	1,840	4,330	2,980	2,940	2,600	4,140	6,640	8,600	3,070	2,230	1,790
2	815	1,740	4,330	3,280	2,850	2,490	4,040	6,640	8,200	3,380	2,060	1,740
3	895	1,680	4,420	3,530	2,670	2,400	4,040	7,020	7,600	3,400	1,960	1,740
4	954	3,480	4,240	3,240	2,550	2,340	4,210	7,200	7,210	3,370	2,120	1,740
5	1,020	5,380	3,990	2,840	2,450	2,270	4,580	7,210	6,640	3,300	2,060	1,680
6	1,330	8,680	3,880	2,540	2,400	2,210	5,570	7,600	6,450	3,120	2,290	1,680
7	1,340	10,800	3,680	2,360	2,370	2,180	7,210	8,000	6,450	2,960	2,410	1,620
8	1,370	10,200	4,500	2,250	2,330	2,140	8,800	8,000	6,070	2,730	2,530	1,570
9	1,310	9,200	5,350	2,230	2,310	2,110	10,600	8,200	5,710	2,670	2,470	1,520
10	1,310	8,000	5,350	2,240	2,300	2,100	13,000	8,200	5,710	2,470	2,410	1,470
11	1,210	7,020	5,350	2,310	2,310	2,100	13,600	7,600	5,530	2,350	2,350	1,430
12	1,160	6,260	5,690	2,360	2,310	2,100	12,600	7,210	5,170	2,290	2,530	1,680
13	1,250	5,530	6,450	2,390	2,310	2,100	11,600	6,640	4,870	2,120	2,450	1,960
14	1,570	5,010	7,120	2,400	2,360	2,150	10,600	6,450	4,480	2,060	2,370	2,060
15	2,180	4,500	6,870	2,350	2,580	2,250	10,000	6,260	4,130	2,180	2,280	2,060
16	2,230	4,080	6,150	2,300	2,570	2,350	9,400	5,710	3,850	2,230	2,200	2,060
17	2,230	3,830	5,010	2,280	2,520	2,450	8,600	5,350	3,460	2,290	2,120	2,010
18	2,180	4,240	5,010	2,250	2,520	2,480	8,000	4,840	2,970	2,180	2,070	2,180
19	2,120	4,500	5,180	2,250	2,420	2,510	7,400	4,670	2,710	2,060	2,020	2,060
20	2,230	4,840	4,670	2,270	2,400	2,510	7,020	4,840	2,590	2,010	1,970	2,060
21	2,530	5,010	4,240	2,270	2,400	2,510	6,450	5,350	2,530	1,960	1,900	2,180
22	2,840	5,180	4,240	2,270	2,450	2,520	6,260	5,530	2,060	1,940	1,790	2,010
23	3,040	5,180	3,990	2,250	2,470	2,540	6,260	6,070	2,050	1,900	1,740	1,960
24	2,970	5,010	3,680	2,250	2,550	2,580	6,260	6,830	2,090	1,790	1,680	1,960
25	2,900	4,840	3,520	2,280	2,590	2,700	6,260	8,200	2,180	1,790	1,680	1,840
26	2,710	4,500	3,110	2,430	2,700	2,870	6,260	8,200	2,180	1,740	1,900	1,790
27	2,530	4,240	2,700	2,580	2,780	3,100	6,260	8,600	2,310	1,620	2,010	1,680
28	2,350	4,160	2,520	2,700	2,800	3,460	6,260	9,200	2,360	1,790	1,960	1,620
29	2,180	4,160	2,850	2,850	2,790	3,800	6,640	9,400	2,450	1,960	1,960	1,520
30	2,010	4,240	2,300	3,000	-----	4,230	6,830	9,400	2,870	2,060	1,900	1,450
31	1,960	-----	2,470	3,000	-----	4,230	-----	9,200	-----	2,120	1,900	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,040	815	1,860	1.43	1.65
November	10,800	1,680	5,240	4.03	4.50
December	7,120	2,300	4,410	3.39	3.91
January	3,530	2,230	2,530	1.95	2.25
February	2,940	2,300	2,520	1.94	2.09
March	4,230	2,100	2,590	1.99	2.29
April	13,600	4,040	7,620	5.86	6.54
May	9,400	4,670	7,110	5.47	6.31
June	8,600	2,050	4,380	3.37	3.76
July	3,400	1,620	2,350	1.81	2.09
August	2,530	1,680	2,110	1.62	1.87
September	2,180	1,430	1,800	1.38	1.54
The year	13,600	815	3,710	2.85	38.80

SACO RIVER AT WEST BUXTON, ME.

LOCATION.—Gages in pond above dam and in tailrace at hydroelectric plant of Cumberland County Power & Light Co., at West Buxton, York County.

DRAINAGE AREA.—1,550 square miles.

RECORDS AVAILABLE.—October, 1907, to September, 1916; January, 1919, to September, 1928.

REMARKS.—Discharge over dam and through wheels of power plant determined by means of hourly gage readings. Flow somewhat regulated by power developments above gage. Records furnished by Cumberland County Power & Light Co., Portland, Me.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	650	2,020	5,180	2,980	3,100	2,850	4,480	8,280	8,080	2,890	2,080	1,860
2.....	978	1,910	5,020	3,960	3,000	2,650	4,780	7,820	8,070	3,690	2,290	1,500
3.....	1,260	1,940	4,760	3,620	2,910	2,290	4,680	7,960	8,610	3,400	2,080	1,600
4.....	1,190	2,810	4,620	2,870	2,300	2,660	5,030	7,640	7,790	3,570	2,000	2,080
5.....	1,360	6,650	4,700	2,390	2,600	3,260	5,210	7,790	6,960	3,680	1,690	1,780
6.....	1,540	8,370	4,120	2,480	3,820	2,310	6,390	8,240	6,580	3,340	2,800	1,650
7.....	1,470	10,700	5,990	2,060	2,650	2,390	7,640	8,380	6,610	3,190	2,960	1,620
8.....	1,760	10,500	3,850	2,890	2,460	2,320	8,490	8,170	6,240	2,640	2,630	1,740
9.....	1,100	9,260	6,470	3,450	2,550	2,280	9,780	8,240	5,670	3,200	2,600	1,240
10.....	1,620	8,520	6,340	2,900	2,610	1,800	13,400	8,200	6,150	2,640	2,610	1,400
11.....	1,260	7,160	6,200	3,540	2,040	1,630	10,600	7,510	5,780	2,560	2,180	1,620
12.....	1,310	6,550	6,970	3,050	1,720	2,700	13,600	7,600	5,340	2,490	1,920	751
13.....	1,410	5,770	7,050	3,520	3,110	2,150	12,800	7,570	4,720	2,630	2,870	2,450
14.....	1,700	5,790	8,060	2,730	2,230	2,460	11,200	7,050	4,700	1,990	2,680	2,260
15.....	1,840	5,100	8,150	3,140	2,900	2,490	10,800	6,710	4,400	1,640	2,290	2,140
16.....	2,160	4,770	7,720	3,760	3,140	3,110	10,400	6,360	4,240	2,560	2,440	1,650
17.....	3,040	4,370	6,470	2,960	3,640	3,090	9,440	5,690	4,120	2,530	2,230	2,770
18.....	2,780	4,640	5,450	2,610	3,220	2,890	8,690	5,190	3,630	2,360	2,200	2,370
19.....	2,440	4,800	5,430	2,970	3,110	3,380	8,600	4,810	3,240	2,450	1,660	2,040
20.....	2,440	5,420	5,060	2,460	2,790	2,990	7,100	4,870	2,800	2,160	2,740	2,410
21.....	2,790	5,910	5,010	1,880	3,240	3,040	6,900	5,560	2,310	1,990	2,050	2,270
22.....	3,050	5,810	5,050	1,730	2,420	3,100	6,390	5,780	2,360	1,160	2,010	2,300
23.....	3,240	5,860	4,860	2,630	3,500	2,700	6,950	6,150	2,150	1,970	1,760	1,850
24.....	3,830	5,550	4,500	2,270	3,040	2,610	7,500	7,170	1,480	1,790	1,890	2,600
25.....	3,340	5,820	3,100	2,720	3,620	2,980	7,840	9,180	2,490	1,770	1,640	2,000
26.....	3,450	5,330	3,640	3,030	2,850	3,630	7,800	9,260	2,360	1,720	1,530	1,950
27.....	2,990	4,600	3,840	3,320	4,130	4,080	7,710	9,440	2,410	1,750	2,260	1,880
28.....	2,750	5,340	2,860	3,710	3,260	4,710	7,690	9,710	2,760	1,620	2,450	1,700
29.....	2,140	4,870	2,310	3,060	3,020	4,590	8,170	9,800	2,680	1,800	2,190	1,780
30.....	2,140	5,170	2,870	4,150	-----	5,140	8,880	9,940	2,830	2,790	2,110	1,270
31.....	2,710	-----	2,840	3,420	-----	5,010	-----	9,500	-----	2,320	2,100	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	3,830	650	2,120	1.37	1.58
November.....	10,700	1,910	5,710	3.68	4.11
December.....	8,150	2,310	5,110	3.30	3.80
January.....	4,150	1,730	2,980	1.92	2.21
February.....	4,130	1,720	2,930	1.89	2.04
March.....	5,140	1,630	3,010	1.94	2.24
April.....	13,600	4,480	8,300	5.35	5.97
May.....	9,940	4,810	7,600	4.90	5.65
June.....	8,980	1,480	4,620	2.98	3.32
July.....	3,690	1,160	2,460	1.59	1.83
August.....	2,960	1,530	2,220	1.43	1.65
September.....	2,770	751	1,880	1.21	1.35
The year.....	13,600	650	4,070	2.63	35.75

OSSISPEE RIVER AT CORNISH, ME.

LOCATION.—Chain gage at highway bridge in Cornish, York County, $1\frac{1}{4}$ miles above confluence with Saco River.

DRAINAGE AREA.—455 square miles.

RECORDS AVAILABLE.—July, 1916, to September, 1928.

EXTREMES.—Maximum discharge during year, 4,120 second-feet April 9 (gage height, 6.00 feet); minimum, 127 second-feet October 3 (gage height, 0.88 foot).

1916-1928: Maximum discharge, 6,740 second-feet April 30, 1923 (gage height, 8.76 feet); minimum, 66 second-feet October 18, 1923 (gage height, 0.15 foot).

REMARKS.—Records good. Flow regulated by storage in Great Ossipee Lake and by power developments at Kezar Falls. Discharge estimated December 22 to January 6, January 19, January 22 to February 17, and February 22 to March 20 because of ice effect.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	290	360	1,260	870	1,060	820	1,190	2,320	1,820	930	755	518
2	279	340	1,260	995	985	790	1,190	2,320	1,660	930	672	518
3	268	360	1,260	1,150	930	750	1,190	2,410	1,580	930	618	540
4	320	1,420	1,190	1,130	900	790	1,340	2,410	1,500	870	645	590
5	340	1,900	1,190	1,060	880	740	1,500	2,320	1,420	810	618	565
6	380	2,230	1,120	925	850	770	2,060	2,230	1,340	782	645	565
7	380	2,140	1,120	800	895	760	2,770	2,230	1,420	728	618	540
8	425	1,900	1,340	770	880	720	3,580	2,060	1,420	700	618	518
9	470	1,660	1,820	770	835	710	4,030	1,900	1,340	672	645	495
10	448	1,500	1,080	770	825	680	3,940	1,660	1,420	618	618	495
11	425	1,340	1,900	770	810	620	3,670	1,420	1,340	590	618	495
12	495	1,190	1,820	770	860	590	3,310	1,340	1,340	590	590	540
13	520	1,120	1,740	770	835	600	3,040	1,260	1,260	540	590	590
14	470	980	1,740	770	800	680	2,860	1,190	1,120	495	565	565
15	320	920	1,820	770	1,020	745	2,770	1,120	1,050	565	565	518
16	300	860	1,660	860	1,020	735	2,590	1,050	990	590	565	518
17	300	980	1,660	920	955	775	2,410	1,050	870	565	540	518
18	300	1,260	1,420	920	1,050	770	2,230	990	618	565	565	645
19	320	1,420	1,340	920	980	740	1,980	990	590	540	672	590
20	470	1,500	1,260	900	860	715	1,900	1,050	618	518	590	565
21	520	1,500	1,190	870	740	680	1,900	1,340	645	518	540	645
22	495	1,420	1,120	840	855	680	1,900	1,340	645	518	540	565
23	470	1,340	1,080	860	885	650	1,900	1,340	645	540	540	540
24	380	1,190	1,040	870	995	770	1,980	1,580	618	495	540	518
25	380	1,190	1,060	1,020	860	860	1,980	2,320	672	472	540	495
26	380	1,120	975	1,030	830	920	1,980	2,140	645	472	672	472
27	380	1,120	920	1,190	790	1,050	1,880	2,230	672	472	672	450
28	360	1,120	835	1,260	760	1,120	2,060	2,230	672	540	618	450
29	360	1,190	775	1,260	825	1,120	2,230	2,230	645	645	590	410
30	360	1,260	770	1,250	-----	1,190	2,410	2,140	930	618	590	410
31	360	-----	770	1,120	-----	1,260	-----	2,060	-----	645	565	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	520	268	386	0.848	0.98
November	2,230	340	1,260	2.77	3.09
December	1,980	770	1,300	2.86	3.30
January	1,260	770	941	2.07	2.39
February	1,060	740	861	1.96	2.11
March	1,260	590	800	1.76	2.03
April	4,030	1,190	2,330	5.12	5.71
May	2,410	990	1,750	3.85	4.44
June	1,820	590	1,050	2.31	2.58
July	930	472	628	1.38	1.69
August	755	540	604	1.33	1.53
September	645	410	528	1.16	1.29
The year	4,030	268	1,040	2.29	31.04

MERRIMACK RIVER BASIN

PEMIGEWASSET RIVER AT PLYMOUTH, N. H.

LOCATION.—Water-stage recorder at bridge in Plymouth, Grafton County, three-quarters of a mile below mouth of Bakers River.

DRAINAGE AREA.—615 square miles.

RECORDS AVAILABLE.—January, 1886, to September, 1928; gage heights only prior to 1903.

EXTREMES.—Maximum discharge during year, 60,000 second-feet November 4 (gage height, 27.4 feet); minimum, 100 second-feet October 2 (gage height, 0.18 foot).

1903-1928: Maximum discharge, that of November 4, 1927; minimum, 45 second-feet several times during August, September, and October, 1923.

REMARKS.—Records good. Discharge estimated December 23-30 and January 3 to March 27 because of ice.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	214	630	3,640	2,380	740	555	2,600	3,260	2,740	5,190	721	547
2.....	194	595	2,700	2,700	740	525	2,020	4,300	2,410	2,600	754	453
3.....	200	3,080	2,240	2,180	700	495	1,960	4,100	2,340	1,700	746	501
4.....	1,830	40,100	1,800	1,920	662	468	2,280	4,300	1,960	1,370	812	762
5.....	1,570	23,440	1,690	1,690	700	468	3,690	4,490	1,700	1,370	1,480	588
6.....	836	5,330	1,640	1,300	700	468	8,500	4,900	2,020	1,090	1,580	494
7.....	542	3,780	1,420	1,320	625	468	12,000	4,300	2,670	874	1,140	435
8.....	482	2,830	6,360	1,300	625	440	14,900	3,190	2,410	778	1,060	395
9.....	488	2,310	9,010	1,200	740	440	10,600	3,060	2,020	668	2,860	453
10.....	395	2,050	3,400	1,050	740	440	4,900	2,800	2,800	602	1,890	349
11.....	386	1,920	2,440	950	700	495	3,580	3,000	2,340	588	2,220	308
12.....	368	2,240	2,120	820	590	440	3,580	3,000	1,890	560	2,280	770
13.....	3,980	2,380	1,860	860	590	440	3,550	2,340	1,580	547	1,480	2,020
14.....	4,460	1,860	2,500	860	590	525	3,060	1,960	1,330	682	1,110	1,280
15.....	2,000	1,690	2,440	950	780	1,250	3,260	1,760	1,520	1,000	865	893
16.....	1,360	1,580	1,860	662	1,320	1,150	2,860	1,700	1,310	721	616	830
17.....	1,070	1,520	1,740	820	1,150	780	2,410	1,760	1,100	630	574	903
18.....	923	7,880	1,640	700	950	625	2,080	1,820	960	527	729	804
19.....	878	5,960	1,420	780	820	590	2,020	2,150	848	482	990	690
20.....	1,640	3,090	1,250	700	700	555	2,220	3,710	786	488	721	560
21.....	3,890	2,310	1,150	555	625	495	1,890	4,490	737	447	602	574
22.....	2,360	1,960	1,100	525	590	440	2,020	2,930	705	507	540	581
23.....	1,600	2,180	950	495	662	415	2,020	3,380	645	668	660	534
24.....	1,320	2,700	740	495	1,050	415	2,080	4,620	812	574	721	464
25.....	1,100	2,180	625	740	1,200	555	2,020	5,480	1,480	501	754	482
26.....	950	1,800	625	2,380	860	1,580	2,080	3,970	1,170	378	1,260	453
27.....	878	1,740	590	1,580	780	6,040	1,960	3,580	1,150	494	1,580	560
28.....	836	2,570	590	1,050	700	9,480	2,150	3,840	1,020	1,390	1,140	520
29.....	804	2,570	555	860	625	6,480	2,670	3,710	848	1,270	874	534
30.....	732	3,090	551	820	-----	4,620	2,860	2,930	3,000	821	668	470
31.....	665	-----	1,000	820	-----	3,450	-----	2,800	-----	812	652	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	4,460	194	1,260	2.05	2.36
November.....	40,100	595	4,580	7.45	8.31
December.....	9,010	555	1,990	3.24	3.74
January.....	2,700	495	1,140	1.85	2.13
February.....	1,320	500	767	1.25	1.35
March.....	9,480	415	1,470	2.39	2.76
April.....	14,900	1,890	3,800	6.18	6.90
May.....	5,480	1,700	3,350	5.45	6.28
June.....	3,000	645	1,610	2.62	2.92
July.....	5,190	378	978	1.69	1.83
August.....	2,860	540	1,100	1.79	2.06
September.....	2,020	308	640	1.04	1.16
The year.....	40,100	194	1,890	3.07	41.80

SURFACE WATER SUPPLY, 1928, PART I

MERRIMACK RIVER AT FRANKLIN JUNCTION, N. H.

LOCATION.—Water-stage recorder at railroad bridge 1 mile below confluence of Pemigewasset and Winnepesaukee Rivers, at Franklin Junction, Merrimack County. Zero of gage is 250.4 feet above mean sea level.

DRAINAGE AREA.—1,460 square miles.

RECORDS AVAILABLE.—July, 1903, to September, 1928.

EXTREMES.—Maximum discharge during year, 67,000 second-feet November 5 (gage height, 30.85 feet); minimum, 726 second-feet October 2 (gage height, 3.56 feet).

1903-1928: Maximum discharge, that of November 5, 1927; minimum, 250 second-feet October 4, 1903.

REMARKS.—Records good. Discharge estimated December 19-30, January 3 to February 1, February 4, 9-15, 20-29, and March 1-14 because of ice. Seasonal storage in Winnepesaukee, Squam, and Newfound Lakes.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,110	1,740	6,050	3,140	2,080	1,910	4,320	7,130	5,300	7,180	1,800	1,800
2	880	1,740	5,740	4,010	1,960	1,860	3,210	7,900	4,800	5,300	1,640	1,440
3	1,010	1,860	4,640	2,430	1,910	1,800	3,560	8,100	4,640	3,710	1,640	1,440
4	1,390	33,600	3,640	2,130	1,860	1,690	4,160	8,100	4,160	2,940	1,860	1,860
5	2,080	48,400	3,490	2,080	1,800	1,590	5,500	8,100	3,860	2,610	2,250	1,910
6	2,190	15,200	3,710	2,080	2,020	1,540	11,300	8,100	4,160	2,430	2,550	1,740
7	1,740	8,300	3,350	2,080	2,130	1,440	18,000	8,100	5,300	2,130	3,000	1,540
8	1,490	6,560	6,800	2,080	1,960	1,390	22,400	6,560	4,800	1,800	2,430	1,540
9	1,240	5,130	17,400	2,080	1,740	1,340	20,400	5,820	4,320	1,800	2,740	1,210
10	1,340	4,480	8,230	2,130	1,640	1,340	10,500	5,470	5,130	1,800	3,710	1,390
11	1,390	3,860	5,820	2,130	1,590	1,340	7,130	5,470	4,800	1,490	2,800	1,340
12	1,390	3,860	4,800	2,130	1,540	1,300	6,560	5,300	4,160	1,800	3,560	1,640
13	1,940	4,010	4,480	2,080	1,540	1,300	7,130	4,480	3,640	1,740	2,740	2,940
14	8,430	3,560	5,130	2,080	1,540	1,860	6,000	4,010	3,280	1,800	2,250	2,610
15	4,150	3,350	6,110	1,860	2,190	3,000	6,180	3,640	3,280	1,960	2,080	2,080
16	2,760	3,210	4,480	1,740	3,210	3,210	5,820	3,420	3,000	2,080	1,910	1,690
17	2,250	3,070	4,010	1,860	3,140	2,870	5,130	3,140	2,680	1,910	1,800	1,860
18	2,190	7,090	3,560	1,960	2,680	2,610	4,480	3,140	2,370	1,800	1,800	1,960
19	2,130	12,500	3,280	1,910	2,310	2,370	4,010	3,280	2,430	1,740	1,690	1,910
20	2,530	6,570	3,070	1,910	2,080	2,370	4,160	4,640	2,190	1,690	1,860	1,800
21	5,560	4,800	3,000	1,800	2,020	2,190	3,860	7,050	2,020	1,690	1,740	1,740
22	4,760	4,160	2,940	1,640	1,960	2,080	3,710	5,130	1,910	1,440	1,690	1,690
23	3,370	4,010	2,740	1,640	1,960	2,020	4,160	4,640	1,800	1,740	1,740	1,440
24	2,700	4,480	2,310	1,640	2,250	2,080	4,640	6,640	1,690	1,910	1,690	1,640
25	2,560	4,320	2,130	2,130	2,430	2,430	4,800	5,680	2,370	1,740	1,800	1,690
26	2,370	3,780	2,080	3,710	2,370	3,560	5,130	7,730	2,490	1,590	2,130	1,690
27	2,250	3,560	2,020	3,420	2,190	2,980	4,960	6,750	2,370	1,590	2,940	1,590
28	2,130	4,320	2,020	3,000	2,080	5,400	5,300	6,940	2,370	2,020	2,490	1,640
29	2,020	4,960	2,020	2,610	2,020	6,660	6,180	7,510	2,250	2,430	2,250	1,540
30	1,740	6,000	2,020	2,370	-----	5,130	7,320	6,000	3,500	2,490	2,130	1,300
31	1,690	-----	2,550	2,250	-----	4,160	-----	5,300	-----	2,080	1,960	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	8,430	880	2,420	1.66	1.91
November	48,400	1,740	7,420	5.08	5.67
December	17,400	2,020	4,310	2.95	3.40
January	4,010	1,640	2,260	1.55	1.79
February	3,210	1,540	2,080	1.42	1.53
March	6,660	1,300	2,480	1.70	1.96
April	22,400	3,210	7,000	4.79	5.34
May	8,680	3,140	6,020	4.12	4.75
June	5,300	1,690	3,370	2.31	2.58
July	7,180	1,440	2,270	1.55	1.79
August	3,710	1,640	2,220	1.52	1.75
September	2,940	1,210	1,720	1.18	1.32
The year	48,400	880	3,620	2.48	33.79

MERRIMACK RIVER AT MANCHESTER, N. H.

LOCATION.—At dam of Amoskeag Manufacturing Co. in Manchester, Hillsborough County, 2 miles above Piscataquog River.

DRAINAGE AREA.—2,840 square miles.

RECORDS AVAILABLE.—January, 1924, to September, 1928.

REMARKS.—Discharge obtained from flow over dam and through the various wheels and gates. Some regulation from storage in Lake Winnepesaukee and other reservoirs; diurnal regulation by power plants upstream. Daily-discharge record furnished by Amoskeag Manufacturing Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	1,470	2,070	9,660	5,600	4,110	4,130	6,810	16,400	8,880	5,120	3,640	3,030
2-----	1,010	2,720	9,620	6,120	3,610	3,890	6,180	16,600	8,420	8,310	3,220	2,930
3-----	1,240	2,560	8,550	5,960	3,510	3,570	6,180	16,600	7,590	6,430	2,480	2,930
4-----	1,570	22,800	7,120	4,250	3,380	3,530	7,060	15,800	7,200	4,830	2,240	4,480
5-----	3,150	56,000	6,370	4,480	3,880	3,420	9,070	15,000	6,390	4,240	2,930	4,700
6-----	3,460	37,500	6,420	3,880	3,400	3,360	13,800	13,600	6,280	3,640	3,660	4,340
7-----	2,500	19,600	6,290	3,970	3,580	3,350	21,100	13,500	9,230	2,980	4,460	3,660
8-----	1,970	11,400	8,420	4,090	3,500	3,230	27,100	11,700	9,680	2,540	3,590	2,740
9-----	1,410	10,600	20,900	4,210	3,790	3,450	28,800	9,870	8,840	2,920	3,240	2,190
10-----	1,920	7,430	16,700	4,880	3,440	2,670	22,200	8,650	8,550	2,250	5,470	2,590
11-----	1,760	6,870	11,600	5,020	3,550	2,280	15,000	8,330	9,060	2,210	3,770	2,310
12-----	1,460	6,860	9,500	5,010	3,590	2,980	12,000	7,680	7,700	2,350	3,420	2,400
13-----	2,230	7,180	8,950	4,880	3,280	3,630	12,500	6,500	6,290	2,530	3,900	3,360
14-----	7,690	5,640	8,990	4,760	3,500	4,240	11,400	5,960	5,730	2,290	3,110	3,190
15-----	6,080	5,290	12,100	4,600	5,630	5,860	11,200	5,570	5,630	3,070	2,790	2,880
16-----	3,830	4,500	10,500	3,540	7,860	5,800	11,800	5,400	5,410	3,600	2,500	2,400
17-----	3,770	4,260	7,670	3,400	8,060	4,970	10,000	5,200	4,940	3,200	2,320	2,970
18-----	2,980	11,100	7,440	3,950	7,360	5,210	8,660	4,910	4,570	2,840	2,370	3,270
19-----	2,980	14,300	6,150	3,910	6,730	5,090	7,190	4,830	4,300	2,310	1,820	3,190
20-----	3,830	12,400	6,750	3,730	5,670	4,610	6,840	6,000	3,840	2,550	2,840	3,180
21-----	6,840	8,770	6,850	2,830	5,940	4,450	6,060	9,190	3,620	2,250	2,460	3,210
22-----	7,100	7,260	6,460	3,620	4,590	3,880	6,380	10,200	3,460	1,740	2,250	2,990
23-----	5,360	6,680	5,570	3,400	4,940	3,800	8,100	8,700	3,080	2,190	2,240	2,770
24-----	4,570	6,160	3,440	3,560	6,360	3,980	9,460	5,540	2,820	2,570	2,050	2,930
25-----	3,890	6,980	3,640	4,930	6,320	4,770	12,300	13,700	3,790	3,100	2,280	2,520
26-----	3,690	5,860	3,870	6,860	5,260	6,940	10,900	15,100	4,250	2,430	5,340	2,460
27-----	3,520	5,670	4,210	7,840	4,960	11,100	12,400	12,900	4,140	2,510	5,500	2,800
28-----	3,060	7,280	4,360	6,210	4,550	13,800	11,500	13,100	3,880	4,050	5,790	2,550
29-----	2,900	8,110	4,200	6,190	4,460	13,500	12,100	13,200	3,780	6,110	4,960	2,260
30-----	1,830	9,460	4,550	4,400	-----	10,800	16,400	11,300	4,660	5,450	4,420	1,720
31-----	2,530	-----	4,940	4,640	-----	8,160	-----	9,750	-----	4,390	3,640	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October-----	7,690	1,010	3,280	1.15	1.33
November-----	56,000	2,070	10,800	3.80	4.24
December-----	20,900	3,440	7,800	2.75	3.17
January-----	7,840	2,830	4,670	1.64	1.89
February-----	8,060	3,280	4,790	1.69	1.82
March-----	13,800	2,280	5,300	1.87	2.16
April-----	28,800	6,060	12,000	4.23	4.72
May-----	16,600	4,830	10,500	3.70	4.27
June-----	9,680	2,820	5,870	2.07	2.31
July-----	8,310	1,740	3,450	1.21	1.40
August-----	5,790	1,820	3,390	1.19	1.37
September-----	4,700	1,720	2,990	1.05	1.17
The year-----	56,000	1,010	6,220	2.19	29.85

MERRIMACK RIVER AT LAWRENCE, MASS.

LOCATION.—At dam of Essex Co., in Lawrence, Essex County.

DRAINAGE AREA.—Total above Lawrence, 4,663 square miles; net, exclusive of diverted parts of South Branch of Nashua and Sudbury Rivers and Lake Cochituate Basin, 4,452 square miles.

RECORDS AVAILABLE.—January, 1880, to September, 1928.

REMARKS.—Discharge obtained from flow over dam and through the various wheels and gates. It includes water wasted from the areas of South Branch of Nashua and Sudbury Rivers and Lake Cochituate Basin, the flow from which is diverted out of the Merrimack River Basin by the Metropolitan Water District of Boston. Wasted water is deducted from observed flow to give the discharge from net drainage area. Flow regulated to some extent by operation of power plants and storage in Lake Winnepesaukee and other reservoirs. Entire record furnished by R. A. Hale, chief engineer of the Essex Co.; estimate of quantities wasted into Merrimack furnished by Metropolitan Water and Sewerage Board of Boston.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,097	5,224	14,847	10,869	8,296	8,431	11,039	23,949	13,186	9,249	7,800	8,465
2	875	4,883	14,457	10,549	7,660	7,826	10,817	22,522	12,636	13,200	6,943	6,817
3	3,140	4,587	14,358	12,279	7,170	7,626	9,793	21,632	11,231	12,714	6,211	6,137
4	3,346	11,722	12,437	10,665	6,832	6,884	10,282	19,760	11,440	9,576	5,793	8,332
5	3,410	50,775	12,242	9,370	6,995	7,862	11,331	18,407	10,734	8,986	5,668	9,674
6	4,064	66,625	10,964	8,385	8,029	6,809	13,106	16,752	10,830	8,630	7,222	9,380
7	4,740	41,319	11,279	8,481	7,275	6,225	18,476	16,847	12,327	8,263	8,515	8,430
8	4,003	26,011	11,900	8,234	7,194	5,956	24,448	15,734	14,072	6,838	9,525	7,225
9	2,270	19,459	18,210	9,185	8,400	5,682	28,553	14,132	13,354	7,622	8,760	6,155
10	4,396	16,176	27,390	8,870	8,510	6,114	27,118	12,681	13,252	6,405	8,065	6,574
11	4,111	14,539	18,815	9,077	8,250	4,436	18,172	11,912	15,077	5,714	8,914	6,377
12	1,586	13,316	16,830	9,071	7,277	7,018	14,839	11,703	14,505	5,269	7,084	5,391
13	4,268	12,067	15,282	9,099	8,085	6,997	13,910	10,889	12,703	4,834	8,051	6,649
14	6,797	12,096	15,591	9,296	6,982	7,238	14,281	10,640	11,202	4,404	7,300	6,407
15	13,548	11,639	18,095	8,846	9,012	9,339	13,516	9,256	10,630	5,778	6,230	8,052
16	9,686	10,705	18,984	8,960	14,903	10,606	14,215	8,833	10,411	7,644	5,761	6,052
17	8,800	10,195	17,310	7,786	15,220	10,321	13,535	8,487	9,253	7,282	4,787	6,404
18	7,791	11,301	14,549	7,430	13,710	9,410	12,450	8,071	9,851	6,747	4,292	6,432
19	6,876	17,307	13,846	7,537	11,036	10,406	10,471	8,020	8,996	6,246	4,837	6,276
20	7,069	20,334	13,257	7,852	10,527	10,004	10,249	8,787	8,807	5,257	5,806	7,107
21	8,542	16,416	13,822	6,264	9,150	9,276	10,050	12,161	8,517	4,849	5,064	7,449
22	12,049	13,623	13,043	6,058	7,640	8,736	10,059	14,687	8,704	4,760	4,549	7,599
23	10,544	12,604	12,342	7,322	9,290	8,531	11,917	13,421	8,589	7,102	4,336	6,967
24	9,588	11,189	10,060	6,677	10,712	8,359	15,631	13,539	7,660	7,368	4,145	7,087
25	8,405	12,374	6,855	9,468	12,678	8,345	18,040	15,949	8,810	7,057	3,779	6,866
26	7,392	12,379	8,867	11,156	11,194	11,714	18,166	17,126	8,420	6,881	5,291	6,175
27	6,962	11,131	9,751	13,527	11,080	13,958	17,595	16,164	8,845	5,997	11,013	5,540
28	6,563	11,892	8,924	12,898	9,710	16,044	17,437	15,650	8,615	7,036	12,064	5,131
29	6,356	12,087	8,941	10,716	8,727	16,929	19,107	15,675	7,644	9,835	10,514	5,686
30	5,340	13,859	9,466	10,079	-----	15,124	23,935	15,229	7,814	10,135	9,151	3,501
31	5,890	-----	9,991	8,774	-----	13,409	-----	14,462	-----	9,093	8,408	-----

Month	Observed	Wasted into Merrimack	Corrected for net area	Per square mile (corrected)	Run-off in inches (corrected)	Rainfall in inches (mean of 34 stations)
October	6,145	112	6,033	1.355	1.562	4.75
November	16,958	337	16,621	3.733	4.166	7.27
December	13,636	215	13,421	3.015	3.476	5.03
January	9,186	109	9,077	2.039	2.351	2.61
February	9,364	152	9,212	2.069	2.232	3.22
March	9,213	94	9,119	2.048	2.361	2.00
April	15,417	115	15,302	3.437	3.836	4.67
May	14,293	224	14,069	3.160	3.643	3.00
June	10,604	366	10,238	2.300	2.587	5.47
July	7,444	160	7,284	1.636	1.886	4.92
August	6,994	64	6,930	1.550	1.787	4.98
September	6,715	66	6,679	1.500	1.674	3.56
The year	10,482	167	10,315	2.317	31.541	51.48

SMITH RIVER NEAR BRISTOL, N. H.

LOCATION.—Staff gage at highway bridge in South Alexandria, 3 miles southwest of Bristol, Grafton County.

DRAINAGE AREA.—78.5 square miles.

RECORDS AVAILABLE.—May, 1918, to September, 1928.

EXTREMES.—Maximum discharge during year, 5,800 second-feet November 4 (gage height, 7.02 feet); minimum, 3 second-feet October 2 (gage height, 0.48 foot).

1918-1928: Maximum discharge, that of November 4, 1927; minimum, that of October 2, 1927.

REMARKS.—Records good. Discharge estimated December 16-30 and January 3 to March 27 because of ice.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	11	70	362	315	73	73	286	554	198	398	41	41
2-----	4	62	272	362	65	63	247	554	186	234	35	26
3-----	14	164	198	286	68	56	346	494	153	142	30	63
4-----	80	3, 210	175	234	66	50	380	417	132	112	41	66
5-----	112	1, 460	175	198	68	50	640	330	132	83	44	50
6-----	71	822	186	164	66	41	968	259	222	65	142	33
7-----	48	494	175	132	63	38	1, 120	222	286	48	122	31
8-----	41	300	417	122	63	37	1, 120	186	210	42	73	28
9-----	30	247	514	108	68	36	870	175	198	40	80	25
10-----	26	186	398	98	76	38	596	153	247	35	66	28
11-----	25	175	300	87	70	36	346	153	210	40	56	25
12-----	22	186	247	81	62	42	362	132	153	70	38	89
13-----	198	164	222	74	54	56	417	122	122	51	40	122
14-----	346	142	315	71	56	87	417	110	99	90	32	78
15-----	198	132	346	66	122	153	398	110	94	92	29	58
16-----	98	122	259	63	198	142	330	101	80	57	26	51
17-----	78	112	222	58	175	132	272	92	66	42	21	51
18-----	68	417	186	57	132	122	210	87	56	36	26	78
19-----	122	380	164	56	107	112	210	175	54	30	38	65
20-----	362	272	142	51	94	107	234	286	54	35	29	65
21-----	398	198	132	50	85	90	198	315	52	57	28	73
22-----	286	198	122	48	80	80	222	222	57	48	21	58
23-----	164	186	110	46	99	65	272	247	52	112	24	45
24-----	132	175	103	45	122	71	300	362	76	94	35	41
25-----	122	164	94	132	132	112	315	514	108	57	36	36
26-----	122	164	89	164	122	175	380	398	101	37	87	44
27-----	107	198	83	142	108	330	362	330	108	28	122	54
28-----	92	286	80	122	83	1, 900	380	398	83	108	81	54
29-----	85	300	76	99	78	1, 020	417	315	89	107	51	45
30-----	74	380	74	87	-----	684	514	247	222	65	76	32
31-----	71	-----	234	81	-----	455	-----	210	-----	60	58	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October-----	398	4	116	1. 48	1. 71
November-----	3, 210	62	379	4. 83	5. 39
December-----	514	74	209	2. 66	3. 07
January-----	362	45	119	1. 52	1. 75
February-----	198	54	91. 6	1. 17	1. 26
March-----	1, 900	36	208	2. 65	3. 06
April-----	1, 120	198	438	5. 58	6. 23
May-----	554	87	267	3. 40	3. 92
June-----	286	52	130	1. 66	1. 85
July-----	398	28	81. 1	1. 03	1. 19
August-----	142	21	52. 5	. 669	. 77
September-----	122	25	51. 6	. 657	. 73
The year-----	3, 210	4	178	2. 27	30. 93

NUBANUSIT BROOK NEAR PETERBORO, N. H.

LOCATION.—Water-stage recorder at highway bridge $1\frac{1}{2}$ miles above Peterboro, Hillsborough County.

DRAINAGE AREA.—48.1 square miles (revised).

RECORDS AVAILABLE.—November, 1920, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,010 second-feet November 4 (gage height, 5.40 feet); minimum, 2.6 second-feet November 2 (gage height, 1.72 feet).

1920-1928: Maximum discharge, 1,050 second-feet March 10, 1921 (gage height, 5.4 feet); minimum, 0.4 second-foot August 15, 1926.

REMARKS.—Records good except for low water and for periods of ice effect, December 24-28, January 3-6, 16, 17, 19-31, February 1-22, 25-29 and March 1-13, which are fair. Discharge estimated November 20, 21, March 27-29, April 3-13, and August 27. Flow regulated by several storage reservoirs.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	10	46	170	182	86	52	138	346	140	75	139	156
2.....	3	50	161	244	80	48	123	357	155	84	113	128
3.....	41	55	147	212	74	44	130	310	136	88	100	205
4.....	41	715	144	168	86	40	140	272	112	80	109	320
5.....	39	890	137	132	74	38	155	236	124	72	125	286
6.....	45	580	125	106	66	36	170	224	169	76	166	216
7.....	45	393	126	92	62	32	180	196	222	67	158	174
8.....	20	240	219	86	68	30	165	160	204	58	141	150
9.....	3	180	302	102	80	28	155	152	183	85	132	141
10.....	42	136	268	110	94	26	140	146	156	56	120	130
11.....	44	122	210	107	70	24	125	133	138	50	92	116
12.....	42	110	182	80	54	32	130	122	138	48	101	96
13.....	58	108	174	108	48	48	150	122	102	46	102	144
14.....	38	108	236	114	44	82	144	118	89	30	86	162
15.....	18	90	254	112	54	102	174	90	86	48	97	116
16.....	14	86	225	100	72	96	159	90	96	60	88	98
17.....	66	80	191	92	54	93	129	88	108	47	62	90
18.....	46	219	200	86	48	102	120	72	109	40	38	100
19.....	58	258	222	84	46	92	125	90	103	48	83	108
20.....	51	190	202	80	42	90	122	118	112	46	90	142
21.....	64	170	144	80	40	83	106	136	116	24	58	156
22.....	76	150	136	78	40	88	108	148	104	6	58	128
23.....	59	134	128	78	204	78	126	163	104	48	60	111
24.....	72	115	116	80	150	82	170	172	102	44	58	101
25.....	46	137	108	136	96	122	187	162	104	42	42	86
26.....	45	120	100	216	78	204	190	146	96	46	150	81
27.....	45	133	92	142	68	190	207	158	88	58	420	92
28.....	46	160	84	110	60	175	238	153	74	110	322	74
29.....	24	162	76	102	54	165	260	153	66	214	242	65
30.....	8	168	95	92	-----	157	298	150	84	217	191	54
31.....	54	-----	100	90	-----	142	-----	148	-----	169	192	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	76	3	40.7	0.846	0.98
November.....	890	46	204	4.24	4.73
December.....	302	76	164	3.41	3.93
January.....	244	78	116	2.41	2.78
February.....	204	40	72.1	1.50	1.62
March.....	204	24	84.5	1.76	2.03
April.....	298	106	159	3.31	3.69
May.....	357	72	166	3.45	3.98
June.....	222	66	121	2.52	2.81
July.....	217	6	70.4	1.46	1.68
August.....	420	38	127	2.64	3.04
September.....	320	54	134	2.79	3.11
The year.....	890	3	121	2.52	34.38

NORTH BRANCH OF CONTOOCCOOK RIVER NEAR ANTRIM, N. H.

LOCATION.—Slope gage at North Branch, Hillsborough County, 4 miles northwest of Antrim and 6 miles above confluence with Contoocook River.

DRAINAGE AREA.—54.5 square miles (revised).

RECORDS AVAILABLE.—August, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, 2,100 second-feet November 5 (gage height, 6.30 feet); minimum, 11 second-feet October 1-3 (gage height, 0.61 foot).

1924-1928: Maximum discharge, that of November 5, 1927; minimum, 4 second-feet September 26 and 29, 1925 (gage height, 0.40 foot).

REMARKS.—Records fair. Discharge estimated November 6-17 because of shifting control and December 18-28, January 2-11, and January 16 to March 22 because of ice. Small storage regulation by Long Pond and several other small storage ponds.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	45	193	193	89	73	193	376	224	84	111	136
2	11	40	186	186	78	68	193	490	224	84	94	111
3	11	68	186	164	78	68	178	490	208	78	78	123
4	13	1,380	157	136	78	64	193	522	224	78	73	178
5	22	1,880	136	123	73	64	264	430	224	100	64	178
6	19	1,160	157	117	73	64	352	352	284	106	94	157
7	18	334	193	117	73	64	490	306	306	100	111	136
8	18	136	224	117	73	59	556	264	284	94	117	117
9	17	119	306	117	73	59	556	244	264	89	106	106
10	18	100	306	117	68	55	402	224	244	78	94	89
11	16	90	264	117	68	55	352	193	224	89	100	84
12	15	80	244	117	64	64	306	178	208	100	106	78
13	42	70	224	123	64	68	264	157	193	84	106	68
14	71	66	264	123	59	94	244	143	186	78	100	89
15	62	62	264	123	117	111	264	123	193	73	94	78
16	42	61	264	117	130	111	244	117	186	59	84	68
17	33	60	244	106	117	111	224	106	171	51	68	64
18	32	244	224	100	59	111	208	94	157	41	68	68
19	35	328	208	94	84	106	193	136	143	32	68	64
20	85	328	186	89	84	100	186	178	143	28	59	73
21	119	306	171	84	78	94	171	193	130	28	51	84
22	119	284	164	84	78	89	178	193	123	28	51	84
23	107	264	150	78	89	84	186	224	117	38	51	68
24	107	244	136	78	100	84	193	264	117	41	46	68
25	96	224	123	123	89	111	208	264	111	32	64	64
26	85	193	111	130	84	150	224	264	106	24	117	59
27	80	186	106	123	78	224	224	264	100	49	208	64
28	71	208	100	111	78	264	244	264	78	193	208	59
29	62	208	117	106	78	264	244	264	73	178	193	64
30	54	208	130	106	-----	224	284	244	89	150	178	84
31	48	-----	143	89	-----	208	-----	244	-----	123	164	-----
Month	Maximum			Minimum			Mean			Per square mile	Run-off in inches	
October	119			11			49.6			0.910	1.05	
November	1,880			40			299			5.49	6.12	
December	306			100			190			3.49	4.02	
January	193			78			116			2.13	2.46	
February	130			59			81.2			1.49	1.61	
March	264			55			109			2.00	2.31	
April	556			171			267			4.90	5.47	
May	522			94			252			4.62	5.33	
June	306			73			178			3.27	3.65	
July	193			24			77.7			1.43	1.65	
August	208			46			101			1.85	2.13	
September	178			59			92.1			1.69	1.89	
The year	1,880			11			151			2.77	37.69	

BLACKWATER RIVER NEAR CONTOOCOOCK, N. H.

LOCATION.—Chain gage at highway bridge, 150 feet north of Webster-Hopkinton town line, and $3\frac{1}{2}$ miles from Contoocook, Merrimack County.

DRAINAGE AREA.—131 square miles.

RECORDS AVAILABLE.—May, 1918, to September, 1920; February, 1927, to September, 1928.

EXTREMES.—Maximum discharge during year, 2,620 second-feet November 5 (gage height, 14.50 feet); minimum, 41 second-feet October 2 and 3 (gage height, 2.32 feet).

1918-1920, 1927-28: Maximum discharge, 2,730 second-feet March 29, 1920 (gage height, 15.0 feet); minimum, 20 second-feet August 4, 1919 (gage height, 1.90 feet).

REMARKS.—Records fair. Discharge estimated December 24-29, January 3-7, 15-25, 31, February 1-6, 13, 14, 22, 26-29, and March 1-24. Slight diurnal regulation and small seasonal storage in Pleasant Pond.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	43	124	594	330	184	148	418	990	374	287	131	148
2.....	41	116	528	418	174	131	352	1,030	330	418	109	140
3.....	41	175	418	308	174	124	308	1,010	308	352	102	140
4.....	55	1,190	352	224	165	109	396	880	266	245	95	194
5.....	124	2,380	245	194	165	102	572	704	245	174	95	214
6.....	184	2,460	330	184	165	102	836	550	287	148	140	184
7.....	148	1,630	308	184	165	95	1,190	440	440	131	245	148
8.....	124	902	352	204	184	95	1,430	374	528	116	266	124
9.....	95	572	660	214	204	95	1,390	308	440	102	214	102
10.....	74	418	836	245	214	95	1,120	287	396	95	165	95
11.....	66	330	858	256	204	95	792	256	418	95	148	88
12.....	64	308	550	256	184	95	594	234	352	109	124	88
13.....	88	287	440	224	174	95	594	224	266	194	109	88
14.....	234	256	462	224	156	124	616	194	245	214	102	88
15.....	352	234	616	224	352	245	594	184	224	224	95	102
16.....	266	224	704	214	638	330	572	184	194	214	88	95
17.....	184	224	506	174	770	330	528	174	174	165	88	88
18.....	148	506	550	156	682	287	396	165	148	131	88	102
19.....	140	726	572	148	528	266	330	204	140	109	82	102
20.....	194	770	594	140	396	214	308	287	140	102	82	116
21.....	374	550	462	140	308	156	330	396	140	102	82	131
22.....	528	374	352	131	256	140	330	418	140	109	88	131
23.....	484	330	287	131	287	140	396	418	140	131	82	116
24.....	308	287	256	131	352	140	528	440	131	174	82	102
25.....	224	266	234	214	396	287	638	572	165	184	82	95
26.....	194	256	214	462	287	528	704	638	194	148	116	88
27.....	174	266	214	550	224	770	704	594	184	124	204	88
28.....	156	330	214	484	184	968	726	550	184	165	224	95
29.....	156	462	214	374	156	902	792	572	174	214	174	109
30.....	140	550	214	224	-----	748	902	550	214	204	140	102
31.....	124	-----	224	194	-----	550	-----	418	-----	165	140	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	528	41	178	1.36	1.57
November.....	2,460	116	583	4.45	4.96
December.....	858	214	431	3.29	3.79
January.....	550	131	244	1.86	2.14
February.....	770	156	287	2.19	2.36
March.....	968	95	274	2.09	2.41
April.....	1,430	308	646	4.93	5.50
May.....	1,030	165	460	3.51	4.05
June.....	528	131	253	1.93	2.15
July.....	418	95	172	1.31	1.51
August.....	82	-----	128	.977	1.13
September.....	214	88	117	.893	1.00
The year.....	2,460	41	314	2.40	32.57

SOUHEGAN RIVER AT MERRIMACK, N. H.

LOCATION.—Water-stage recorder at head of Atherton Falls, Merrimack, Hillsborough County, and 1½ miles above confluence with Merrimack River.

DRAINAGE AREA.—168 square miles.

RECORDS AVAILABLE.—July, 1909, to September, 1928.

EXTREMES.—Maximum discharge during year, 6,650 second-feet November 5 (gage height, 9.73 feet); minimum, 35 second-feet October 3 (gage height, 2.20 feet).

1909-1928: Maximum discharge, 10,400 second-feet April 8, 1924 (gage height, 11.82 feet); minimum, 13 second-feet September 9, 1926 (gage height, 1.88 feet).

REMARKS.—Records good. Discharge estimated December 6, 12-14, January 14-17, 29-31, February 1-6, 18-21, May 5-9, August 27-29, 31, September 1-4, and 21-30.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	78	120	489	920	270	242	351	1,670	384	560	278	384
2.....	55	116	393	802	260	225	319	1,260	347	580	284	295
3.....	43	118	496	483	250	213	331	920	359	398	246	560
4.....	57	2,690	483	311	290	172	355	720	315	274	222	1,160
5.....	78	4,200	429	256	250	192	474	620	319	253	216	616
6.....	86	1,400	400	242	230	182	550	560	605	402	550	398
7.....	80	920	429	256	213	168	570	500	920	434	660	327
8.....	64	682	638	284	216	165	510	450	621	267	465	278
9.....	49	560	1,630	339	375	155	470	400	438	219	371	216
10.....	55	470	980	343	351	145	371	359	748	185	295	210
11.....	86	447	720	315	278	122	327	343	626	165	288	190
12.....	84	456	620	307	228	158	343	311	438	160	299	168
13.....	110	380	560	303	213	213	496	284	339	150	242	170
14.....	501	351	1,000	320	216	359	424	281	288	195	190	575
15.....	307	327	1,300	330	1,040	585	545	256	375	638	162	393
16.....	204	299	830	320	1,510	416	540	228	351	363	152	274
17.....	165	292	890	300	748	347	398	219	256	236	128	242
18.....	158	720	860	264	500	371	335	213	236	180	122	242
19.....	160	920	830	225	350	335	307	299	225	150	128	242
20.....	355	570	704	219	270	308	327	530	292	130	116	384
21.....	483	456	474	192	240	292	303	748	380	142	138	692
22.....	367	393	452	165	242	260	355	515	307	152	116	442
23.....	260	371	411	204	319	253	748	483	267	367	112	278
24.....	219	434	560	225	670	260	1,040	682	270	398	114	278
25.....	195	447	565	530	670	802	1,130	565	460	260	114	232
26.....	165	447	267	950	380	1,100	1,040	478	363	185	515	295
27.....	148	429	253	605	307	980	950	575	295	160	1,510	350
28.....	138	535	264	323	281	775	1,010	530	242	682	775	280
29.....	130	540	284	310	239	520	1,470	575	207	1,130	488	200
30.....	104	600	692	300	-----	447	1,590	470	748	648	343	150
31.....	104	-----	585	280	-----	367	-----	429	-----	393	456	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	501	43	164	0.976	1.13
November.....	4,200	116	689	4.10	4.57
December.....	1,630	253	629	3.74	4.31
January.....	950	165	362	2.15	2.48
February.....	1,510	213	393	2.34	2.52
March.....	1,100	122	359	2.14	2.47
April.....	1,590	303	599	3.57	3.98
May.....	1,670	213	531	3.16	3.64
June.....	920	207	401	2.39	2.67
July.....	1,130	130	337	2.01	2.32
August.....	1,510	112	326	1.94	2.24
September.....	1,160	150	351	2.09	2.33
The year.....	4,200	43	428	2.55	34.66

SURFACE WATER SUPPLY, 1928, PART I

SOUTH BRANCH OF NASHUA RIVER AT CLINTON, MASS.

LOCATION.—At Wachusett Dam, 1 mile south of Clinton, Worcester County.

DRAINAGE AREA.—108.84 square miles since 1914.

RECORDS AVAILABLE.—July, 1896, to September, 1928.

REMARKS.—Flow regulated by storage in Wachusett Reservoir and other ponds. The outflow from Wachusett Reservoir, except for small amount wasted into river below dam, is diverted into Sudbury Reservoir. Discharge corrected for storage. Record furnished by water division of the Metropolitan District Commission.

Monthly discharge and rainfall, 1927-28

Month	Run-off in million gallons	Discharge per square mile		Run-off in inches	Rainfall in inches
		Million gallons per day	Second-feet		
October.....	3,023.0	1.297	2.006	2.313	5.10
November.....	9,082.6	4.026	6.229	6.950	8.21
December.....	6,443.9	2.764	4.277	4.931	5.61
January.....	5,026.3	1.490	2.365	2.657	3.03
February.....	5,701.5	1.806	2.795	3.014	3.92
March.....	4,332.9	1.284	1.987	2.291	2.08
April.....	6,958.9	2.134	3.302	3.679	5.30
May.....	5,571.5	1.651	2.555	2.946	2.92
June.....	6,762.3	2.071	3.204	3.575	6.64
July.....	3,076.7	.912	1.411	1.627	4.75
August.....	2,230.7	.661	1.023	1.179	5.07
September.....	2,112.2	.646	1.000	1.117	3.83
The year.....	60,322.5	1.514	2.343	36.279	56.46

SUDBURY RIVER AT FRAMINGHAM CENTER, MASS.

LOCATION.—At dam of Framingham Reservoir No. 1 half a mile above outlet of Farm Pond, three-fourths mile southwest of Framingham Center, Middlesex County.

DRAINAGE AREA.—75.2 square miles since 1881.

RECORDS AVAILABLE.—January, 1875, to September, 1928.

REMARKS.—Discharge corrected for storage and diversions. Municipal water supplies of surrounding towns are diverted from reservoirs upstream. Outflow (exclusive of waste) of Wachusett Reservoir on South Branch of Nashua River is diverted into Sudbury Reservoir. Records furnished by water division of the Metropolitan District Commission.

Monthly discharge and rainfall, 1927-28

Month	Run-off in million gallons	Discharge per square mile		Run-off in inches	Rainfall in inches
		Million gallons per day	Second-feet		
October.....	3,023.0	1.297	2.006	2.313	5.10
November.....	9,082.6	4.026	6.229	6.950	8.21
December.....	6,443.9	2.764	4.277	4.931	5.61
January.....	3,042.0	1.305	2.019	2.328	2.69
February.....	3,588.5	1.645	2.546	2.746	3.62
March.....	2,971.3	1.275	1.972	2.274	1.96
April.....	3,965.1	1.760	2.723	3.035	5.44
May.....	3,296.8	1.414	2.188	2.523	2.47
June.....	3,576.3	1.585	2.453	2.736	6.36
July.....	2,836.0	1.217	1.882	2.170	5.46
August.....	1,282.0	.550	.851	.981	4.50
September.....	1,341.1	.594	.918	1.026	3.84
The year.....	44,448.6	1.615	2.498	34.013	55.26

LAKE COCHITUATE AT COCHITUATE, MASS.

LOCATION.—At outlet three-eighths of a mile north of Cochituate railroad station, Middlesex County, and $1\frac{1}{4}$ miles above confluence with Sudbury River.

DRAINAGE AREA.—17.58 square miles since 1911.

RECORDS AVAILABLE.—January, 1863, to September, 1928.

REMARKS.—Discharge corrected for storage and diversions. Municipal water supplies of surrounding towns are diverted from lake. Records furnished by water division of the Metropolitan District Commission.

Monthly discharge and rainfall, 1927-28

Month	Run-off in million gallons	Discharge per square mile		Run-off in inches	Rainfall in inches
		Million gallons per day	Second- feet		
October.....	631.6	1.159	1.793	2.07	4.61
November.....	873.4	1.656	2.562	2.86	4.62
December.....	1,273.9	2.338	3.617	4.17	5.60
January.....	669.1	1.228	1.900	2.19	2.26
February.....	835.9	1.640	2.537	2.74	3.58
March.....	602.0	1.105	1.709	1.97	2.01
April.....	882.9	1.676	2.591	2.89	5.27
May.....	673.0	1.235	1.911	2.20	2.39
June.....	714.3	1.354	2.096	2.34	5.75
July.....	586.9	1.077	1.666	1.92	4.98
August.....	302.5	.555	.859	.99	3.94
September.....	306.6	.581	.898	1.00	3.89
The year.....	8,352.1	1.298	2.008	27.34	48.90

TAUNTON RIVER BASIN

WADING RIVER NEAR NORTON, MASS.

LOCATION.—Vertical staff gage at highway bridge three-fourths of a mile above confluence with Rumford River and $1\frac{1}{2}$ miles southeast of Norton, Bristol County.

DRAINAGE AREA.—42.4 square miles.

RECORDS AVAILABLE.—June, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, 270 second-feet December 9 (gage height, 6.53 feet); minimum, 8.5 second-feet September 18 (gage height, 4.23 feet).

1925-1928: Maximum discharge, 350 second-feet March 8, 1926 (gage height, 6.95 feet); minimum, 0.3 second-foot September 10, 1926.

REMARKS.—Records good. Some regulation from power plants and week-end storage. Entire record prior to September 30, 1927, and gage-height record prior to May 31, 1928, furnished by R. Loring Haywood, civil engineer, Taunton, Mass.

Daily discharge, in second-feet, of Wading River near Norton, Mass., 1925-1928

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1925					1925				
1-----	57	12	17	2.0	16-----	12	3.9	5.8	28
2-----	68	12	17	2.0	17-----	12	12	6.0	49
3-----	64	12	9.2	2.0	18-----	12	3.6	6.0	19
4-----	61	14	9.2	11	19-----	17	3.0	6.0	21
5-----	56	13	9.6	9.2	20-----	13	3.0	6.0	16
6-----	51	12	10	6.9	21-----	9.6	3.6	6.0	2.4
7-----	21	10	12	7.2	22-----	11	3.4	6.0	1.6
8-----	23	16	16	8.9	23-----	12	14	4.8	2.4
9-----	24	11	12	8.6	24-----	14	14	6.2	20
10-----	26	9.2	5.5	16	25-----	14	12	5.8	12
11-----	18	4.5	5.8	16	26-----	16	11	5.8	6.9
12-----	17	3.0	6.2	12	27-----	13	29	3.4	1.6
13-----	21	2.3	6.9	10	28-----	12	17	2.0	1.0
14-----	16	3.0	12	23	29-----	11	12	2.0	1.0
15-----	16	3.2	6.2	17	30-----	11	10	2.0	1.6
					31-----		12	2.0	

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1925-26												
1-----	1.6	6.2	78	42	60	229	197	61	75	21	15	12
2-----	1.6	13	68	35	64	248	178	51	68	22	10	10
3-----	5.2	23	105	33	72	253	152	92	57	20	18	11
4-----	8.6	20	165	44	67	252	162	105	47	18	30	4.3
5-----	12	26	196	44	85	216	182	67	21	17	20	5.8
6-----	12	19	194	52	67	168	149	56	20	12	19	6.9
7-----	14	22	194	53	67	198	152	57	75	12	17	10
8-----	12	20	181	40	111	344	165	28	49	13	8.0	4.8
9-----	17	19	189	44	92	293	196	27	22	11	32	.4
10-----	18	25	158	38	73	274	160	54	44	11	17	.3
11-----	19	28	126	64	64	244	149	55	53	12	20	.9
12-----	16	22	158	47	68	214	158	51	20	12	17	5.8
13-----	6.2	79	88	57	57	173	152	49	21	8.6	19	5.2
14-----	6.9	40	92	44	56	142	125	68	21	7.5	17	5.0
15-----	8.6	98	96	44	126	158	120	21	53	7.7	12	4.5
16-----	8.6	152	83	35	152	136	126	47	42	1.4	17	5.8
17-----	15	165	79	27	146	149	81	136	24	7.5	26	5.2
18-----	7.7	136	68	38	131	101	73	158	42	5.2	21	9.2
19-----	8.0	130	57	212	152	142	101	136	28	12	22	6.2
20-----	8.0	114	47	197	155	111	123	105	19	6.2	12	4.3
21-----	37	35	130	168	131	152	89	86	21	7.5	18	4.8
22-----	16	42	162	184	144	158	83	59	21	7.7	12	5.0
23-----	11	146	142	112	157	165	95	61	21	6.9	6.6	4.3
24-----	16	118	146	142	152	172	47	94	36	13	6.9	4.8
25-----	20	71	73	139	147	168	92	101	21	6.2	20	11
26-----	16	22	75	101	223	179	108	92	19	6.9	13	12
27-----	9.2	42	101	86	229	155	117	67	21	7.7	14	3.9
28-----	10	67	94	89	248	165	117	59	19	7.7	20	8.0
29-----	12	61	56	86	-----	175	94	26	19	10	9.2	6.2
30-----	8.6	94	52	55	-----	157	105	27	20	27	1.6	5.8
31-----	5.2	-----	42	46	-----	146	-----	32	-----	20	12	-----

Daily discharge, in second-feet, of Wading River near Norton, Mass., 1925-1928—
Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1926-27												
1	6.0	98	131	101	173	181	68	59	59	19	23	235
2	5.8	20	130	89	164	162	59	88	22	21	44	308
3	5.2	19	114	136	133	142	45	24	22	20	46	258
4	5.8	56	60	125	136	140	75	49	21	16	40	221
5	6.2	30	55	114	105	105	53	35	22	10	26	189
6	6.9	24	64	100	100	98	64	47	83	12	23	152
7	6.9	13	101	86	114	117	114	35	53	44	21	103
8	6.2	24	89	85	105	136	73	17	42	12	21	101
9	6.2	26	75	68	105	165	62	26	40	8.0	23	79
10	5.5	89	75	83	95	165	52	33	37	8.0	18	49
11	4.3	59	45	53	86	147	78	46	18	8.0	35	59
12	1.6	71	59	57	59	49	71	36	17	12	29	152
13	1.6	51	95	73	57	126	64	37	17	12	16	125
14	2.6	16	71	71	123	146	67	57	85	10	9.2	105
15	2.4	73	73	78	79	147	53	27	24	13	44	83
16	2.3	47	85	89	100	146	35	30	53	19	60	89
17	2.3	44	89	120	85	123	40	14	21	12	49	56
18	2.0	40	44	147	94	101	67	16	22	16	56	51
19	2.6	125	57	100	71	85	56	40	19	10	40	53
20	18	178	47	146	57	83	67	22	19	16	21	86
21	12	146	61	194	162	123	33	35	19	15	21	111
22	13	130	20	200	116	152	47	19	19	9.2	27	94
23	13	105	49	212	105	162	26	53	18	12	28	81
24	21	86	66	189	120	140	37	62	17	21	140	53
25	56	49	32	181	120	114	49	32	18	40	226	40
26	47	92	36	155	165	111	49	59	16	15	157	40
27	75	79	55	123	223	83	51	130	18	20	197	19
28	61	72	64	120	205	94	56	73	19	20	264	19
29	35	116	155	114	-----	83	47	42	19	18	293	44
30	26	111	155	126	-----	83	59	29	20	12	248	28
31	16	-----	105	146	-----	81	-----	17	-----	18	220	-----
1927-28												
1	27	74	64	134	80	102	96	172	85	69	30	23
2	27	69	96	120	85	102	102	127	53	85	29	19
3	55	51	120	96	62	90	102	120	55	53	50	23
4	62	102	108	96	50	74	85	127	58	28	22	30
5	20	148	134	96	64	85	80	127	127	28	24	30
6	56	156	127	96	74	90	74	96	148	96	51	33
7	29	141	114	74	55	90	57	120	156	127	29	30
8	28	102	127	74	96	64	55	127	127	120	29	27
9	32	85	270	96	180	69	69	108	74	108	23	25
10	85	114	196	96	134	56	96	120	80	64	25	22
11	96	96	164	102	108	59	52	120	69	90	27	16
12	50	74	180	108	96	80	102	74	96	69	25	12
13	85	69	180	114	96	80	102	69	96	48	53	11
14	120	96	188	96	148	108	85	114	85	60	31	24
15	114	85	196	90	180	134	62	96	96	69	25	22
16	96	74	188	108	148	120	85	108	55	74	29	16
17	90	74	223	108	134	96	80	85	28	90	28	13
18	102	102	214	96	134	114	80	85	34	96	30	9.5
19	90	156	172	96	114	156	85	50	96	30	27	14
20	50	141	164	102	102	134	56	64	102	34	25	30
21	59	134	127	85	96	114	37	127	80	36	22	33
22	55	120	156	96	120	114	36	120	80	50	15	27
23	53	120	156	90	156	102	80	114	28	85	15	17
24	74	80	102	69	180	90	164	120	34	96	27	28
25	85	96	96	69	141	80	180	90	42	80	25	31
26	102	108	96	85	120	96	134	80	46	69	23	34
27	90	85	96	96	120	80	120	96	90	37	16	30
28	64	108	120	85	108	69	180	127	34	22	16	28
29	64	102	120	74	108	96	232	108	64	22	22	27
30	54	96	120	80	-----	69	196	57	74	64	13	24
31	59	-----	134	85	-----	114	-----	80	-----	51	25	-----

Monthly discharge, in second-feet, of Wading River near Norton, Mass., 1925-1928

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
1925					
June.....	68	9.6	24.3	0.573	0.64
July.....	29	2.3	9.70	.229	.26
August.....	17	2.0	7.43	.175	.20
September.....	49	1.0	11.2	.264	.29
1925-26					
October.....	37	1.6	11.8	.278	.32
November.....	165	6.2	61.8	1.46	1.63
December.....	196	42	113	2.67	3.08
January.....	212	27	77.4	1.83	2.11
February.....	248	56	118	2.78	2.90
March.....	344	101	188	4.43	5.11
April.....	197	47	128	3.02	3.37
May.....	158	21	66.7	1.57	1.81
June.....	75	19	34.0	.802	.89
July.....	27	1.4	11.5	.271	.31
August.....	32	1.6	16.2	.382	.44
September.....	12	.3	6.11	.144	.16
The year.....	344	.3	69.1	1.63	22.13
1926-27					
October.....	75	1.6	15.3	.361	.42
November.....	178	13	69.6	1.64	1.83
December.....	155	20	76.0	1.79	2.06
January.....	212	53	119	2.81	3.24
February.....	223	57	116	2.74	2.85
March.....	181	49	122	2.88	3.32
April.....	114	26	57.2	1.35	1.51
May.....	130	14	41.6	.981	1.13
June.....	85	16	29.3	.691	.77
July.....	44	8.0	16.1	.380	.44
August.....	293	9.2	79.5	1.88	2.17
September.....	308	19	103	2.43	2.71
The year.....	308	1.6	70.1	1.65	22.45
1927-28					
October.....	120	20	66.9	1.58	1.82
November.....	156	51	102	2.41	2.69
December.....	270	64	147	3.47	4.00
January.....	134	69	93.9	2.21	2.55
February.....	180	50	113	2.67	2.88
March.....	156	56	94.4	2.23	2.57
April.....	232	36	98.8	2.33	2.60
May.....	172	50	104	2.45	2.82
June.....	156	28	76.4	1.80	2.01
July.....	127	22	66.4	1.57	1.81
August.....	53	13	26.8	.632	.73
September.....	34	9.5	23.6	.557	.62
The year.....	270	9.5	84.4	1.99	27.10

PROVIDENCE RIVER BASIN

BLACKSTONE RIVER AT WORCESTER, MASS.

LOCATION.—Water-stage recorder at Webster Street bridge, Worcester, Worcester County, three-fourths mile above Tatnuck Brook.

DRAINAGE AREA.—31.5 square miles.

RECORDS AVAILABLE.—August, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year, 790 second-feet November 4 (gage height, 4.95 feet); minimum, 5.0 second-feet September 29 and 30 (gage height, 0.40 foot).

1923–1928: Maximum discharge, that of November 4, 1927; minimum, 0.3 second-foot November 12 and 13, 1926.

REMARKS.—Records good. Discharge estimated June 2–9. Diversions from about 7.0 square miles of drainage area above station. Flow regulated by storage reservoirs.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept
1.....	12	20	106	106	37	37	35	166	42	59	20	60
2.....	8.0	26	74	102	35	37	37	128	37	67	39	24
3.....	16	38	56	75	31	31	32	114	34	51	35	26
4.....	14	551	54	60	28	27	34	98	36	29	19	53
5.....	13	437	70	50	34	27	37	83	39	39	33	51
6.....	11	134	61	44	36	22	42	86	45	57	35	44
7.....	12	111	54	40	30	22	40	66	62	74	46	30
8.....	9.6	93	207	48	72	22	43	55	58	52	45	27
9.....	10	84	385	53	149	23	45	53	52	54	45	17
10.....	13	79	166	50	98	24	37	44	110	44	47	32
11.....	17	79	116	48	64	22	34	40	111	46	42	22
12.....	17	76	101	45	48	28	39	35	79	44	20	15
13.....	65	77	105	46	43	34	36	26	62	46	37	27
14.....	179	62	200	50	36	55	45	25	54	44	21	17
15.....	111	53	222	59	206	52	59	30	73	40	17	13
16.....	87	41	114	50	180	43	64	30	67	65	29	13
17.....	54	40	224	41	121	34	48	30	48	47	42	13
18.....	42	94	190	42	94	39	40	30	42	47	33	13
19.....	45	112	120	39	80	48	31	29	94	44	17	15
20.....	64	86	94	42	71	50	38	34	164	47	14	39
21.....	71	70	82	39	62	44	30	66	133	49	12	59
22.....	53	60	77	32	54	41	37	57	96	30	11	42
23.....	47	48	72	31	87	41	85	47	81	48	10	19
24.....	37	52	65	28	186	37	154	47	76	47	17	38
25.....	26	67	64	153	144	40	182	68	79	42	19	31
26.....	26	63	59	161	96	47	120	38	68	36	27	20
27.....	25	68	53	100	74	45	88	46	67	18	27	16
28.....	31	67	42	72	42	45	149	44	55	17	24	28
29.....	31	66	44	63	39	38	312	57	57	19	34	17
30.....	28	79	83	53	-----	34	222	48	60	26	23	9.5
31.....	21	-----	91	41	-----	37	-----	54	-----	28	55	-----

Month	Observed			Corrected for diversions
	Maximum	Minimum	Mean	
October.....	179	8.0	38.6	48.1
November.....	551	20	97.8	107
December.....	385	42	111	120
January.....	161	28	60.1	69.3
February.....	206	28	78.5	88.9
March.....	55	22	36.3	46.5
April.....	312	30	73.2	83.4
May.....	166	25	57.2	67.9
June.....	164	34	69.4	80.5
July.....	74	17	43.7	55.1
August.....	55	10	28.9	40.7
September.....	60	9.5	27.7	39.3
The year.....	551	8.0	60.0	70.4

THAMES RIVER BASIN

QUINEBAUG RIVER AT JEWETT CITY, CONN.

LOCATION.—Water-stage recorder at Jewett City, New London County, 1,000 feet below railroad bridge and 570 feet downstream from outlet of canal from Slater Mills (mouth of Pachaug River). Zero of gage is 63.21 feet above mean sea level.

DRAINAGE AREA.—712 square miles.

RECORDS AVAILABLE.—July, 1918, to September, 1928.

EXTREMES.—Maximum discharge during year, about 12,500 second-feet November 5 (gage height, 16.6 feet); minimum, 74 second-feet September 17 (gage height, 3.92 feet).

1918-1928: Maximum discharge, that of November 5, 1927; minimum, 30 second-feet August 23, 1919.

REMARKS.—Records good except those for extremely low and high stages, which are fair. Flow regulated by numerous storage reservoirs. Discharge estimated January 28, to February 4 and September 1-5 because of missing gage-height record.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	216	968	1,980	2,270		1,700	1,720	3,440	1,210	715	709	
2.....	135	906	1,860	2,460		1,630	1,870	2,860	929	1,090	704	
3.....	392	851	2,120	2,100	1,170	1,400	1,760	2,500	537	1,080	703	920
4.....	471	7,430	2,010	1,770		1,010	1,570	2,210	1,070	658	583	
5.....	598	10,900	2,320	1,560	912	1,420	1,550	1,820	1,220	810	295	
6.....	569	7,100	2,240	1,450	1,280	1,380	1,380	1,500	1,590	1,470	684	924
7.....	551	5,010	2,060	1,240	1,350	1,210	1,370	1,760	1,920	2,140	890	816
8.....	450	3,600	3,240	1,080	2,010	1,220	1,130	1,670	1,720	1,430	836	682
9.....	351	3,070	6,330	1,580	3,800	1,190	1,380	1,590	1,310	1,400	876	361
10.....	817	2,640	5,410	1,740	3,250	1,080	1,530	1,470	944	1,250	876	563
11.....	966	2,320	4,050	1,630	2,400	763	1,420	1,440	1,430	1,100	1,040	672
12.....	642	2,300	3,830	1,580	1,670	1,220	1,390	1,270	1,460	948	1,030	596
13.....	1,710	2,060	3,640	1,570	1,740	1,510	1,500	800	1,240	943	952	545
14.....	3,950	2,180	4,240	1,310	1,650	1,930	1,220	1,260	1,140	850	976	500
15.....	3,000	1,710	4,630	1,160	2,820	2,120	1,060	1,340	1,050	1,220	798	446
16.....	1,970	1,700	4,140	1,440	3,980	1,920	1,490	1,090	1,050	1,530	588	287
17.....	1,840	1,730	4,480	1,560	3,320	1,570	1,550	1,100	732	1,400	610	438
18.....	1,520	2,790	4,250	1,480	2,550	1,290	1,300	1,110	1,080	1,190	636	634
19.....	1,420	3,890	3,600	1,440	2,020	1,590	1,320	1,020	1,170	1,030	590	632
20.....	1,480	3,190	3,040	1,680	2,070	1,920	1,280	868	1,290	927	781	820
21.....	1,390	2,900	2,630	1,560	1,810	1,770	1,040	1,520	1,440	718	871	1,250
22.....	1,120	2,430	2,390	932	1,550	1,650	847	1,700	1,370	878	774	813
23.....	928	2,180	2,220	1,340	2,140	1,610	1,630	1,530	1,170	1,300	656	528
24.....	1,090	1,800	1,870	1,410	4,230	1,350	2,890	1,390	747	1,460	554	701
25.....	1,150	1,960	1,370	2,220	3,490	1,150	3,590	1,320	1,140	1,380	464	772
26.....	936	1,800	1,500	3,110	2,510	1,630	3,020	1,060	1,140	1,170	312	692
27.....	969	1,580	1,590	2,570	2,360	1,800	2,540	902	994	1,020	570	606
28.....	889	1,980	1,570		2,080	1,730	2,690	1,410	950	727	784	650
29.....	721	2,180	1,540		1,840	1,660	3,940	1,370	906	554	774	614
30.....	556	2,110	2,080	1,590		1,720	4,030	894	882	910	652	312
31.....	750		2,120			2,150		1,170		932	778	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	3,950	135	1,080	1.52	1.75
November.....	10,900	851	2,910	4.09	4.56
December.....	6,330	1,370	2,910	4.09	4.72
January.....	3,110	932	1,660	2.33	2.69
February.....	4,230	912	2,190	3.08	3.32
March.....	2,150	763	1,540	2.16	2.49
April.....	4,030	847	1,840	2.58	2.88
May.....	3,440	800	1,500	2.11	2.43
June.....	1,920	537	1,160	1.63	1.82
July.....	2,140	554	1,100	1.54	1.78
August.....	1,040	295	721	1.01	1.16
September.....	1,250	287	682	.968	1.07
The year.....	10,900	135	1,600	2.25	30.67

CONNECTICUT RIVER BASIN

SECOND CONNECTICUT LAKE NEAR PITTSBURG, N. H.

LOCATION.—Staff gage at Second Lake outlet dam of Upper Connecticut River & Lake Improvement Co., 12 miles northeast of Pittsburg, Coos County. Zero of gage is 1,858.2 feet above mean sea level.

DRAINAGE AREA.—41.5 square miles.

RECORDS AVAILABLE.—October, 1922, to September, 1928.

EXTREMES.—Maximum stage during year, 14.6 feet November 5 (contents, 946.6 million cubic feet); minimum, 2.05 feet March 11–14 and 21–25 (contents, 94.4 million cubic feet).

1922–1928: Maximum stage, 15.8 feet September 11, 1924 (contents, 1,045 million cubic feet); minimum, 0.7 foot February 1 to March 19, 1923 (contents, 30.3 million cubic feet).

REMARKS.—Normal capacity of lake is 979 million cubic feet at gage height, 15.0 feet.

Daily gage height, in feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	11.4	11.45	12.65	12.7	3.2	2.25	2.95	3.35	12.7	12.0	10.0	4.65
2.....	11.35	11.4	12.8	12.7	3.1	2.25	2.95	3.55	12.6	12.0	9.95	4.25
3.....	11.35	11.55	12.7	12.7	2.9	2.2	2.85	3.85	12.9	12.0	9.9	3.9
4.....	11.5	12.1	12.5	12.7	2.8	2.2	2.85	4.4	13.15	12.0	10.0	3.95
5.....	11.85	14.6	12.25	12.75	2.75	2.15	2.95	4.9	13.15	11.95	10.2	4.0
6.....	11.95	13.85	12.05	12.75	2.7	2.15	3.2	6.25	13.15	11.85	10.25	4.0
7.....	12.0	12.9	11.85	12.75	2.65	2.15	3.6	7.2	13.3	11.75	10.25	4.05
8.....	12.1	12.6	12.0	12.1	2.6	2.1	5.4	7.6	13.15	11.65	10.2	4.1
9.....	12.0	12.4	12.5	11.15	2.6	2.1	7.3	7.95	12.85	11.6	10.35	4.15
10.....	12.2	12.2	12.7	10.7	2.55	2.1	7.8	8.5	12.7	11.5	10.4	4.15
11.....	12.2	12.0	12.8	10.75	2.55	2.05	7.55	9.05	12.8	11.45	10.65	4.2
12.....	12.2	11.95	12.9	10.8	2.5	2.05	7.3	9.7	12.8	11.35	10.95	4.35
13.....	12.4	12.4	12.95	10.85	2.5	2.05	6.9	9.6	12.8	11.25	11.1	5.35
14.....	12.85	12.65	12.95	10.4	2.45	2.05	6.45	9.1	12.8	11.2	11.15	6.1
15.....	12.85	12.75	13.0	9.8	2.4	2.1	6.0	8.55	12.8	11.15	11.15	6.5
16.....	12.4	12.95	13.05	9.5	2.45	2.1	5.6	8.75	12.8	11.1	11.1	6.95
17.....	12.2	12.95	13.0	9.3	2.45	2.1	5.25	9.3	12.8	11.05	11.05	7.25
18.....	11.95	13.2	13.0	8.25	2.4	2.1	4.95	9.9	12.75	11.0	11.05	7.5
19.....	11.65	13.5	13.0	7.15	2.4	2.1	4.65	10.45	12.7	11.0	11.05	7.65
20.....	11.55	13.6	13.0	6.3	2.35	2.1	4.45	11.1	12.6	11.0	11.0	7.6
21.....	12.1	13.65	13.0	5.35	2.35	2.05	4.25	12.0	12.5	10.9	10.95	7.55
22.....	12.4	13.6	13.0	4.45	2.35	2.05	4.05	12.55	12.4	10.8	10.9	7.45
23.....	12.6	13.75	13.0	3.6	2.35	2.05	3.9	12.85	12.3	10.7	10.35	7.35
24.....	12.5	13.85	12.95	3.4	2.3	2.05	3.75	13.1	12.25	10.6	9.8	7.15
25.....	12.35	13.6	12.9	3.4	2.3	2.05	3.65	13.0	12.2	10.5	9.3	7.15
26.....	12.15	13.3	12.85	3.5	2.3	2.1	3.55	12.65	12.15	10.4	8.4	7.2
27.....	12.0	13.0	12.8	3.5	2.3	2.15	3.5	12.7	12.1	10.35	7.55	7.25
28.....	11.85	12.7	12.75	3.45	2.3	2.45	3.45	12.85	12.05	10.3	6.75	7.4
29.....	11.7	12.45	12.7	3.4	2.25	2.7	3.4	12.85	12.0	10.25	6.05	7.7
30.....	11.5	12.2	12.65	3.4	-----	2.85	3.35	12.75	11.95	10.2	5.5	7.75
31.....	11.5	-----	12.7	3.35	-----	2.9	-----	12.65	-----	10.15	5.05	-----

FIRST CONNECTICUT LAKE NEAR PITTSBURG, N. H.

LOCATION.—Staff gage at First Lake outlet dam of Upper Connecticut River & Lake Improvement Co., 6 miles northeast of Pittsburg, Coos County. Zero of gage is 1,609.9 feet above mean sea level.

DRAINAGE AREA.—81.4 square miles.

RECORDS AVAILABLE.—October, 1916, to September, 1928.

EXTREMES.—Maximum stage during year, 25.85 feet December 5, January 11, and 13 (contents, 2,869 million cubic feet); minimum, 3.95 feet March 25 and 26 (contents, 413.6 million cubic feet).

1916–1928: Maximum stage, 26.2 feet June 5 and 6, 1926 (contents, 2,916 million cubic feet); minimum, 2.1 feet February 17, 1917, May 6 and 7, 1922 (contents, 252.5 million cubic feet).

REMARKS.—Capacity of lake, 3,026 million cubic feet at gage height 27 feet.

Daily gage height, in feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	10.25	15.85	25.6	25.55	21.55	6.15	4.5	14.6	25.25	25.3	23.8	24.25
2.....	10.15	16.05	25.8	25.6	20.75	5.9	4.5	14.75	25.15	25.2	23.5	24.35
3.....	10.05	16.2	25.8	25.65	19.85	5.75	4.5	15.2	25.1	25.15	23.25	24.4
4.....	10.15	16.8	25.8	25.65	18.9	5.5	4.55	15.55	24.95	25.15	23.0	24.45
5.....	10.15	18.0	25.85	25.7	18.0	5.25	4.6	16.0	24.85	25.15	22.85	24.4
6.....	10.15	19.1	25.8	25.7	17.25	5.1	4.9	16.8	24.85	25.15	22.6	24.35
7.....	10.05	19.9	25.8	25.7	16.85	4.95	5.45	17.45	24.8	25.15	22.55	24.3
8.....	10.0	20.3	25.75	25.8	15.9	4.8	6.5	18.1	25.1	25.15	22.55	24.25
9.....	12.15	20.55	25.8	25.8	15.2	4.7	7.75	18.7	25.3	25.15	22.7	24.05
10.....	9.55	20.8	25.75	25.8	14.9	4.6	8.5	19.4	25.4	25.2	22.75	23.75
11.....	9.85	21.0	25.75	25.85	14.4	4.5	9.2	20.05	25.15	25.2	22.8	23.4
12.....	9.75	21.1	25.7	25.8	13.6	4.4	9.17	20.75	25.05	25.2	22.85	23.05
13.....	9.75	21.2	25.7	25.85	12.8	4.3	10.25	21.4	24.95	25.2	22.9	23.25
14.....	10.15	21.3	25.7	25.8	12.25	4.2	10.65	22.0	24.85	25.2	22.95	23.4
15.....	10.4	21.4	25.7	25.65	11.6	4.3	11.15	22.45	24.85	25.25	23.0	23.5
16.....	10.75	21.5	25.65	25.55	11.65	4.25	11.65	22.55	24.95	25.25	23.0	23.55
17.....	11.05	21.6	25.7	25.15	11.4	4.2	11.9	22.45	25.0	25.25	23.0	23.6
18.....	11.3	21.75	25.7	24.8	11.0	4.2	12.05	22.4	25.05	25.25	23.05	23.6
19.....	11.5	22.0	25.65	24.25	10.65	4.15	12.3	22.25	25.15	25.3	23.05	23.55
20.....	11.8	22.2	25.65	24.05	10.3	4.15	12.6	22.05	25.05	25.3	23.05	23.6
21.....	12.4	22.3	25.65	24.1	9.75	4.1	12.85	22.3	25.0	25.3	23.1	23.65
22.....	12.9	22.45	25.65	24.15	9.2	4.05	13.1	22.5	25.05	25.25	22.85	23.7
23.....	13.3	22.6	25.65	24.1	8.7	4.0	13.25	22.75	25.1	25.25	22.8	23.75
24.....	13.7	23.1	25.65	24.0	8.25	4.0	13.45	23.6	25.15	25.25	22.65	23.8
25.....	14.1	23.65	25.65	23.9	7.85	3.95	13.65	24.55	25.2	25.2	22.6	23.8
26.....	14.35	24.0	25.65	24.1	7.45	3.95	13.85	24.95	25.25	25.2	22.9	23.8
27.....	14.65	24.3	25.65	24.25	7.1	4.0	14.0	25.0	25.3	25.2	23.25	23.8
28.....	14.95	24.65	25.55	24.1	6.7	4.15	14.15	25.0	25.35	25.05	23.5	23.75
29.....	15.25	24.95	25.55	23.65	6.45	4.3	14.3	25.0	25.4	24.7	23.75	23.75
30.....	15.45	25.2	25.55	23.05	-----	4.4	14.45	25.0	25.35	24.4	23.9	23.7
31.....	15.6	-----	25.5	22.35	-----	4.45	-----	25.1	-----	24.1	24.1	-----

CONNECTICUT RIVER AT FIRST CONNECTICUT LAKE, NEAR PITTSBURG, N. H.

LOCATION.—Water-stage recorder one-fourth mile below dam at First Connecticut Lake and 6 miles northeast of Pittsburg, Coos County.

DRAINAGE AREA.—81.4 square miles.

RECORDS AVAILABLE.—April, 1917, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,580 second-feet February 2 (gage height, 3.88 feet); minimum, 7.4 second-feet April 6 (gage height, 1.50 feet).

1917-1928: Maximum discharge, that of February 2, 1928 (discharge of 7,820 second-feet for May 5, 1925 as published in previous water-supply papers is much too large; recent information indicates that the high stage on that date was due to backwater during logging operations); minimum, 3 second-feet during several days in April, 1917.

REMARKS.—Records good. 4.1 billion cubic feet of storage developed above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	148	17	201	85	608	338	111	31	609	368	535	77
2	148	17	392	85	1,310	315	111	31	547	174	528	77
3	148	18	448	87	1,530	294	114	31	526	108	520	77
4	148	40	394	90	1,390	283	130	34	625	64	503	77
5	148	26	371	95	1,230	258	78	36	334	64	535	80
6	148	28	362	98	1,130	239	9.4	40	586	64	293	77
7	144	34	303	226	1,070	220	13	44	222	64	66	75
8	144	36	219	569	1,020	203	17	47	215	61	64	204
9	144	36	215	581	850	159	12	51	295	61	64	535
10	144	39	191	64	561	143	13	53	433	64	64	542
11	144	42	191	64	949	148	15	57	413	64	61	528
12	144	39	191	64	1,070	140	14	59	350	64	64	266
13	78	36	186	251	991	134	15	61	338	66	64	572
14	12	36	186	512	242	58	17	59	261	68	64	572
15	12	36	186	520	135	57	18	173	57	70	64	73
16	12	37	186	670	199	100	21	286	57	70	64	73
17	11	37	186	906	535	98	20	294	55	68	64	73
18	11	40	186	1,190	512	98	20	420	55	70	64	73
19	12	40	162	922	505	100	21	567	295	70	64	73
20	12	40	148	448	726	100	21	278	174	70	64	75
21	12	40	148	258	815	100	22	53	57	159	298	75
22	14	40	148	291	746	98	23	49	57	73	542	75
23	15	42	148	354	672	98	23	49	57	70	542	73
24	15	47	148	425	572	95	23	51	57	70	535	73
25	15	49	148	154	528	95	25	424	57	70	304	75
26	15	53	148	37	482	95	25	699	55	70	66	75
27	15	55	148	182	438	98	26	699	57	288	68	75
28	15	59	121	556	400	103	26	699	57	524	70	75
29	16	59	105	910	356	103	27	690	178	542	75	75
30	17	59	100	1,020	-----	105	28	474	239	542	75	75
31	17	-----	89	1,130	-----	111	-----	437	-----	535	75	-----

Month	Observed			Gain or loss in storage (millions of cubic feet)	Corrected for storage		
	Maximum	Minimum	Mean		Mean	Per square mile	Run-off in inches
October	148	11	67.0	+566.8	279	3.43	3.95
November	59	17	39.2	+1,234.8	516	6.34	7.07
December	448	89	205	+79.7	235	2.89	3.33
January	1,190	37	414	-1,041.6	25.4	.312	.36
February	1,530	135	744	-1,828.0	14.3	.176	.19
March	338	57	148	-151.5	91.4	1.12	1.29
April	130	9.4	34.6	+1,037.8	435	5.34	5.96
May	699	31	225	+1,925.8	944	1.16	1.34
June	625	55	244	-21.8	236	2.90	3.24
July	542	61	152	-300.9	39.8	.489	.56
August	542	61	208	-344.2	79.8	.980	1.13
September	572	73	165	+120.2	211	2.59	2.89
The year	1,530	9.4	219	+1,277.2	259	3.18	31.31

CONNECTICUT RIVER AT WATERFORD, VT.

LOCATION.—Chain gage at bridge at Waterford, Caldonia County, 10 miles above mouth of Passumpsic River. Gage reads elevation above mean sea level.

DRAINAGE AREA.—1,600 square miles.

RECORDS AVAILABLE.—March, 1927, to September, 1928.

EXTREMES.—Maximum discharge during year, 43,800 second-feet April 9 (gage height, 667.45 feet); minimum, 365 second-feet July 10 (gage height, 654.46 feet).

1927-1928: Maximum discharge, that of April 9, 1928; minimum, 231 second-feet August 8, 1927 (gage height, 654.18 feet).

REMARKS.—Records good. Slight diurnal regulation. 4,100 million cubic feet of storage developed above station. Gage-height record furnished by New England Power Construction Co.

Daily and monthly discharge, in second-feet, of Connecticut River at Waterford, Vt., 1927-28

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
1927							
1		3,470	4,040	3,470	890	730	1,030
2		2,770	3,650	3,650	980	980	1,510
3		* 2,870	3,290	3,650	* 890	850	1,180
4		2,770	3,290	2,940	690	810	1,230
5		4,040	3,650	* 2,840	1,510	730	1,280
6		5,320	4,440	3,840	1,390	730	1,450
7		6,050	4,440	4,440	1,030	* 680	1,390
8		5,560	* 3,780	3,650	1,130	365	1,180
9		3,290	3,840	2,940	2,030	510	1,080
10		* 2,920	3,650	2,460	* 2,050	690	1,130
11		2,610	3,650	1,030	1,390	615	890
12		2,460	4,240	* 1,760	1,450	480	935
13		2,940	4,040	2,610	890	545	1,340
14		2,940	4,870	2,310	1,030	* 480	1,280
15		2,610	* 4,600	2,170	980	2,310	1,180
16		2,610	4,870	1,890	810	3,650	1,230
17		* 3,610	4,870	1,630	* 1,160	2,610	1,180
18	9,160	6,300	4,440	1,510	1,280	2,080	1,130
19	11,100	9,160	6,050	* 1,270	1,280	1,630	1,080
20	* 11,700	10,400	6,830	1,080	935	1,180	1,630
21	11,100	12,900	7,100	1,340	980	* 1,210	1,630
22	9,160	13,300	* 6,920	1,080	850	1,180	1,390
23	5,800	12,900	6,560	1,080	770	730	1,130
24	4,650	* 12,400	7,380	850	* 510	650	1,080
25	4,040	10,100	* 6,160	935	510	980	1,080
26	3,650	7,380	5,320	* 905	850	1,180	1,030
27	* 3,220	6,050	5,560	770	770	1,030	1,230
28	2,940	6,050	4,440	890	980	* 1,210	1,030
29	2,940	5,090	* 4,290	890	890	1,450	1,080
30	2,460	4,440	* 4,050	935	1,030	2,310	980
31	2,460	-----	3,650	-----	* 900	2,610	-----

* Estimated because of ice or missing gage heights.

Daily and monthly discharge, in second-feet, of Connecticut River at Waterford, Vt., 1927-28—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1927-28												
1	980	2,030	9,160	3,110	2,170	1,180	4,780	6,300	7,660	2,310	1,030	850
2	1,010	1,760	10,200	4,240	2,310	1,130	3,840	8,550	7,660	2,310	1,130	714
3	730	2,310	9,160	3,650	2,310	1,130	3,470	9,780	7,090	1,890	1,030	790
4	2,310	16,900	5,800	2,460	2,460	1,130	4,240	9,780	5,800	1,540	980	770
5	4,870	26,600	3,230	2,170	2,610	1,030	5,800	10,800	4,650	1,030	1,890	935
6	3,650	30,200	4,240	1,890	2,460	980	11,100	12,500	4,240	980	4,240	730
7	2,460	21,000	4,240	1,760	2,460	935	17,300	14,100	4,650	810	3,470	890
8	1,890	10,100	6,830	1,890	2,460	850	34,900	12,900	6,050	730	2,170	730
9	2,970	6,050	12,600	2,030	2,310	850	43,800	9,780	5,560	690	2,030	650
10	2,940	4,870	11,500	2,170	2,030	850	34,400	8,250	4,850	770	4,440	392
11	2,170	4,040	8,500	2,310	1,760	810	21,800	7,660	4,040	730	3,470	850
12	1,760	3,650	6,300	1,890	1,760	770	11,500	7,950	3,470	850	3,470	2,770
13	2,460	4,240	5,320	1,890	1,630	980	9,470	6,830	3,110	770	3,110	7,560
14	10,100	4,650	5,090	1,630	1,630	980	7,950	4,870	2,610	770	1,450	7,950
15	8,250	3,650	4,650	1,510	2,030	1,390	7,900	4,240	2,460	800	1,510	7,380
16	4,440	3,470	3,290	1,510	2,030	1,760	9,160	3,470	2,310	810	1,230	4,240
17	3,470	3,110	2,460	1,510	1,890	1,890	6,830	3,290	1,930	980	1,030	4,240
18	2,770	4,240	2,310	1,510	1,510	1,780	5,560	3,290	1,510	935	1,230	3,840
19	2,310	7,380	2,310	2,030	1,390	1,630	5,090	3,290	1,510	690	1,380	3,110
20	2,940	7,180	2,460	2,170	1,230	1,510	5,090	4,690	1,510	850	1,450	2,310
21	8,550	4,440	2,460	2,030	810	1,450	4,870	5,560	1,390	890	1,340	1,890
22	11,800	3,650	2,460	1,890	1,280	1,340	4,390	5,800	1,340	714	1,030	1,630
23	10,400	4,040	2,460	1,760	1,510	1,340	4,440	5,090	1,230	450	980	1,450
24	6,830	6,830	2,030	1,390	1,760	1,230	4,650	9,160	1,230	890	1,230	1,340
25	4,870	7,380	1,630	1,630	1,630	1,420	4,650	13,700	1,230	690	1,450	1,340
26	3,840	5,800	1,510	2,170	1,510	1,760	4,440	14,500	1,450	650	1,760	1,280
27	3,290	5,220	1,510	2,310	1,390	4,040	4,240	12,600	1,340	580	1,030	1,280
28	2,770	4,440	1,630	2,310	1,280	7,660	3,840	10,800	1,180	580	1,280	1,450
29	2,460	4,650	1,890	2,030	1,280	7,950	4,150	9,160	1,130	730	1,080	2,030
30	2,010	6,050	2,170	2,030	-----	7,100	4,870	7,950	1,230	980	1,030	2,080
31	2,170	-----	2,460	2,030	-----	5,800	-----	7,380	-----	1,130	890	-----

Month	Observed			Gain or loss in storage (millions of cubic-feet)	Corrected for storage		
	Maximum	Minimum	Mean		Mean	Per square mile	Run-off in inches
1927							
April	13,300	2,460	5,840	+1,212.5	6,310	3.94	4.40
May	7,380	3,290	4,770	+1,140.2	5,200	3.25	3.75
June	4,440	770	2,030	+401.7	2,180	1.36	1.52
July	2,050	510	1,060	+150.4	1,120	.700	.81
August	3,650	365	1,200	-645.8	957	.598	.69
September	1,630	890	1,200	-1,175.2	745	.466	.52
1927-28							
October	11,800	730	3,980	+566.8	4,190	2.62	3.02
November	30,200	1,760	7,330	+1,234.8	7,810	4.88	5.44
December	12,600	1,510	4,580	+79.7	4,610	2.84	3.32
January	4,240	1,390	2,090	-1,041.6	1,700	1.06	1.22
February	2,610	810	1,820	-1,828.0	1,090	.681	.73
March	7,950	770	2,090	-151.5	2,030	1.27	1.46
April	43,800	3,470	9,950	+1,037.8	10,400	6.50	7.25
May	14,500	3,290	8,190	+1,925.8	8,910	5.57	6.42
June	7,660	1,130	3,180	-21.8	3,170	1.98	2.21
July	2,310	450	953	-300.9	840	.525	.61
August	4,440	890	1,790	-344.2	1,660	1.04	1.20
September	7,950	392	2,180	+120.2	2,230	1.39	1.55
The year	43,800	392	4,010	+1,277.2	4,050	2.53	34.43

* Estimated because of ice or missing gage heights.

CONNECTICUT RIVER AT SOUTH NEWBURY, VT.

LOCATION.—Chain gage at highway bridge at South Newbury, Orleans County, 4 miles above mouth of Waits River.

DRAINAGE AREA.—2,830 square miles.

RECORDS AVAILABLE.—July, 1918, to September, 1928.

EXTREMES.—Maximum discharge during year, 78,000 second-feet November 5 (gage height, 35.4 feet); minimum, 770 second-feet September 11 (gage height, 1.16 feet).

1918-1928: Maximum discharge, that of November 5, 1927; minimum, 460 second-feet September 24, 1921 (gage height, 0.30 foot).

REMARKS.—Records good. Discharge estimated December 19 to April 5 because of ice. Slight diurnal regulation. 4,100 million cubic feet of storage developed above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	June	May	July	Aug.	Sept.
1	1,070	3,300	13,200	5,100	3,250	2,020	8,750	10,700	12,400	4,660	1,640	1,540
2	1,100	3,010	15,200	6,920	3,250	2,100	7,520	12,500	11,600	4,120	1,540	1,190
3	980	4,450	13,800	6,440	3,160	1,940	7,280	14,100	10,900	3,620	1,570	1,320
4	1,200	42,900	10,200	5,980	3,250	1,940	9,010	14,600	9,140	3,070	1,980	1,190
5	6,420	70,800	8,120	5,540	3,340	1,780	11,700	15,200	7,880	2,180	2,100	1,570
6	6,190	51,800	6,440	5,210	3,250	1,640	21,600	16,500	7,640	1,980	4,120	1,430
7	4,320	38,400	7,520	5,210	3,250	1,710	30,400	17,600	9,530	1,740	5,320	1,040
8	3,010	26,100	11,400	5,320	3,160	1,600	41,000	17,100	9,920	1,360	3,920	1,070
9	4,980	20,400	23,200	5,100	3,070	1,640	57,000	15,000	9,400	1,400	5,650	920
10	5,030	10,400	18,600	4,770	2,890	1,570	53,300	11,700	8,490	1,460	4,660	920
11	3,800	8,360	14,100	4,440	2,710	1,600	39,100	10,900	7,400	1,190	5,760	800
12	3,010	8,120	11,000	4,220	2,530	1,570	26,100	10,400	6,440	1,130	5,540	1,600
13	4,540	8,240	9,530	4,020	2,530	1,640	19,600	9,660	5,540	1,640	4,880	6,920
14	13,400	8,000	9,010	3,820	2,710	2,020	44,800	8,120	4,770	1,220	3,820	8,360
15	13,200	7,400	10,300	3,620	2,890	3,430	14,700	6,560	4,330	1,500	2,710	9,400
16	9,430	6,800	9,010	3,620	3,250	4,020	17,000	5,760	4,020	1,710	2,100	7,400
17	6,300	6,030	8,000	3,820	3,250	3,920	12,300	5,430	3,620	1,820	1,740	5,870
18	4,650	10,200	5,210	3,820	2,890	3,820	9,920	5,100	3,160	1,400	1,860	5,100
19	3,700	13,400	4,770	3,720	2,440	3,620	9,140	5,430	2,800	1,260	2,100	4,550
20	4,430	11,700	4,550	4,020	2,350	3,430	8,360	8,000	2,710	1,160	2,180	3,720
21	12,100	9,140	4,550	4,120	2,020	3,250	8,120	9,660	2,530	1,360	1,980	2,800
22	15,300	7,160	4,660	4,120	2,020	2,980	8,000	9,270	2,350	1,500	1,820	2,710
23	13,500	7,400	4,660	3,920	3,250	2,890	8,880	9,010	2,180	1,430	1,640	2,260
24	10,800	8,490	4,770	3,820	2,890	3,070	9,140	14,400	2,350	1,070	1,600	1,940
25	7,860	9,140	4,650	4,220	2,980	4,220	9,400	19,200	2,530	1,400	1,460	1,780
26	5,860	9,920	4,660	5,210	2,710	5,980	8,890	19,800	2,620	1,360	2,440	1,740
27	5,200	7,880	4,470	5,100	2,440	14,400	8,240	18,700	2,440	1,040	2,620	1,860
28	4,540	5,540	4,220	4,770	2,180	14,800	7,520	17,100	2,350	1,010	2,260	2,100
29	4,100	7,880	4,440	4,220	2,180	13,200	7,880	16,400	2,350	1,130	1,600	2,800
30	3,300	10,000	4,440	3,250	-----	12,100	9,010	13,000	2,980	1,430	1,800	3,070
31	3,500	-----	4,550	3,250	-----	10,000	-----	12,100	-----	1,680	1,710	-----

Month	Observed			Gain or loss in storage (millions of cubic-feet)	Corrected for storage		
	Maximum	Minimum	Mean		Mean	Per square mile	Run-off in inches
October	15,300	980	6,030	+566.8	6,240	2.20	2.54
November	70,800	3,010	14,700	+1,234.8	15,200	5.37	5.99
December	23,200	4,220	8,490	+79.7	8,520	3.01	3.47
January	6,920	3,250	4,540	-1,041.6	4,150	1.47	1.70
February	3,340	2,020	2,830	-1,828.0	2,100	.742	.80
March	14,800	1,570	4,320	-151.5	4,260	1.51	1.74
April	57,000	7,280	16,800	+1,037.8	17,200	6.08	6.78
May	19,800	5,100	12,200	+1,925.8	12,900	4.56	5.23
June	12,400	2,180	5,550	-21.8	5,540	1.96	2.19
July	4,660	1,010	1,740	-300.9	1,630	.576	.63
August	5,760	1,460	2,780	-344.2	2,660	.940	1.03
September	9,400	800	2,970	+120.2	3,020	1.07	1.19
The year	70,800	800	6,910	+1,277.2	6,950	2.46	33.47

CONNECTICUT RIVER AT WHITE RIVER JUNCTION, VT.

LOCATION.—Chain gage on railroad bridge at White River Junction, Windsor County, immediately below mouth of White River. Zero of gage is 321.59 feet above mean sea level.

DRAINAGE AREA.—4,120 square miles.

RECORDS AVAILABLE.—November, 1911, to September, 1928.

EXTREMES.—Maximum discharge during year, 148,000 second-feet November 4 (gage height, 35.0 feet); minimum, 1,290 second-feet September 9–11.

1912–1928: Maximum discharge, that of November 4, 1927; minimum, 560 second-feet September 8, 1913 (gage height, 2.8 feet).

REMARKS.—Records good except for period of ice effect, December 18* to March 16, which are fair. Flow regulated by reservoirs above station. Gage-height record furnished by New England Power Construction Co.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,770	5,290	21,500	7,800	5,100	3,250	13,100	18,500	18,200	8,000	2,450	2,610
2.....	1,770	5,090	22,200	10,500	5,100	3,350	11,300	20,000	17,100	8,000	2,300	1,870
3.....	1,660	17,200	20,700	9,800	4,950	3,150	11,000	21,500	15,700	6,770	2,300	2,010
4.....	5,290	129,000	16,400	9,200	5,100	3,100	13,400	22,200	13,700	5,630	3,120	2,010
5.....	9,040	87,800	13,100	8,500	5,200	2,850	17,400	22,200	11,900	4,790	3,660	2,300
6.....	8,240	70,500	11,300	8,000	5,100	2,650	33,700	23,800	13,100	4,020	4,790	2,150
7.....	6,540	55,900	11,300	8,000	5,100	2,750	47,200	23,800	16,400	3,660	7,250	2,010
8.....	5,490	40,700	27,000	8,100	4,900	2,600	56,900	23,000	15,700	2,940	6,070	1,740
9.....	5,490	25,400	36,300	7,900	4,750	2,650	63,200	20,700	14,400	2,450	6,070	1,290
10.....	6,540	17,400	28,200	7,400	4,500	2,500	64,300	17,100	14,400	2,610	7,010	1,290
11.....	5,690	15,000	23,000	6,900	4,250	2,600	53,900	15,000	12,200	2,450	7,500	1,290
12.....	4,490	15,000	18,900	6,600	4,000	2,550	40,700	14,400	10,700	2,300	7,250	1,740
13.....	8,770	13,700	16,400	6,200	3,950	2,650	31,100	13,400	9,580	2,450	7,010	7,500
14.....	17,000	13,100	17,100	5,950	4,250	3,250	23,000	11,900	8,500	2,610	5,850	9,580
15.....	17,700	12,500	17,800	5,650	4,500	5,400	24,600	10,200	8,500	2,610	4,390	10,400
16.....	14,300	11,300	13,400	5,650	5,100	6,300	23,000	8,760	7,750	2,300	3,480	9,580
17.....	10,100	10,400	11,900	5,950	5,100	6,070	20,000	8,500	6,530	2,610	2,940	7,500
18.....	7,480	17,100	8,100	5,950	4,500	6,300	16,000	7,750	5,850	2,940	2,610	7,010
19.....	6,110	21,500	7,500	5,850	3,850	5,630	14,400	10,200	5,200	2,300	2,300	7,010
20.....	8,500	18,500	7,100	6,300	3,750	5,200	14,400	15,400	4,790	2,300	2,940	5,850
21.....	15,000	15,000	7,100	6,450	3,250	4,790	13,100	15,700	4,590	2,300	3,120	4,790
22.....	19,000	12,500	7,200	6,450	3,250	4,790	13,400	14,400	4,390	2,300	2,940	3,840
23.....	18,700	12,200	7,200	6,100	5,100	4,790	13,700	15,000	4,390	2,610	2,940	3,300
24.....	16,300	11,900	7,450	5,950	4,500	4,790	14,700	20,000	4,020	2,610	2,610	3,300
25.....	11,900	13,100	7,250	6,600	4,650	6,770	15,000	25,400	4,590	2,300	2,610	2,610
26.....	9,040	15,700	7,250	8,000	4,250	10,200	15,000	27,400	5,200	2,300	3,120	2,770
27.....	7,730	14,000	6,950	7,900	3,850	21,500	13,700	26,200	5,200	2,300	4,200	2,770
28.....	7,000	16,000	6,600	7,450	3,450	22,200	13,100	25,400	4,590	2,010	4,020	2,940
29.....	6,540	15,700	6,850	6,600	3,450	20,000	13,700	23,000	4,020	2,010	3,480	3,300
30.....	5,690	17,400	6,900	5,100	-----	18,200	15,700	20,000	7,010	2,010	2,940	3,660
31.....	5,490	-----	7,050	5,100	-----	15,000	-----	18,200	-----	2,300	2,610	-----

Month	Observed			Gain or loss in storage (millions of cubic-feet)	Corrected for storage		
	Maximum	Minimum	Mean		Mean	Per square mile	Run-off in inches
October.....	19,000	1,660	8,850	+566.8	9,060	2.20	2.54
November.....	129,000	5,090	24,900	+1,234.8	25,300	6.14	6.85
December.....	36,300	6,600	13,800	+79.7	13,800	3.35	3.86
January.....	10,500	5,100	7,030	-1,041.6	6,640	1.61	1.86
February.....	5,200	3,250	4,440	-1,828.0	3,710	.900	.97
March.....	22,200	2,500	6,700	-151.5	6,650	1.61	1.86
April.....	64,300	11,000	24,500	+1,037.8	24,900	6.04	6.74
May.....	27,400	7,750	18,000	+1,925.8	18,800	4.56	5.26
June.....	18,200	4,020	9,270	-21.8	9,260	2.25	2.51
July.....	8,000	2,010	3,190	-300.9	3,070	.745	.86
August.....	7,500	2,300	4,060	-344.2	3,930	.954	1.10
September.....	10,400	1,290	4,000	+120.2	4,050	.983	1.10
The year.....	129,000	1,290	10,700	+1,277.2	10,700	2.60	35.51

CONNECTICUT RIVER AT TURNERS FALLS, MASS.

LOCATION.—At dam of Turners Falls Power & Electric Co., Turners Falls, Franklin County, just above mouth of Falls River.

DRAINAGE AREA.—7,250 square miles.

RECORDS AVAILABLE.—January, 1915, to September, 1928.

REMARKS.—Record is summation of discharge over and through dam, discharge of corporation along the canal and of power stations No. 1 and 2 of Turners Falls Power & Electric Co., by whom record is furnished. Diurnal regulation. Little seasonal storage before October 1, 1916. Monthly discharge since then corrected for storage in First and Second Connecticut Lakes.

Daily and monthly discharge, in second-feet, of Connecticut River at Turners Falls, Mass., 1915-1928

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1915									
1.....	2,450	3,960	31,400	6,020	21,100	5,710	3,940	15,700	5,530
2.....	2,660	3,390	25,100	5,450	22,700	4,330	11,100	12,900	8,830
3.....	476	4,320	20,000	7,980	21,600	4,620	16,700	12,900	7,150
4.....	1,870	4,420	16,600	6,120	19,400	4,620	14,900	26,300	3,740
5.....	2,170	4,890	12,500	7,250	15,800	4,500	11,000	33,300	1,460
6.....	1,930	3,460	11,300	7,750	14,000	1,570	11,400	23,400	2,390
7.....	4,270	3,450	11,400	7,120	12,500	4,660	10,000	21,600	5,340
8.....	5,050	6,330	11,400	9,640	11,900	3,530	21,800	18,300	4,930
9.....	5,920	6,780	9,790	14,000	11,800	3,380	52,800	15,500	4,560
10.....	7,000	7,380	9,960	16,600	12,200	3,570	43,200	15,000	4,290
11.....	7,750	6,600	9,680	39,300	12,000	3,160	36,800	15,800	3,620
12.....	5,040	4,370	9,780	50,500	11,000	2,670	30,900	16,000	2,110
13.....	4,660	4,260	9,770	52,400	10,100	710	25,100	17,000	4,410
14.....	4,960	2,140	4,750	43,900	9,530	2,960	12,100	17,700	3,430
15.....	4,360	6,110	8,260	38,500	8,120	3,110	11,200	12,000	3,200
16.....	4,920	8,400	7,380	32,900	7,960	3,630	11,200	11,800	4,230
17.....	1,690	12,900	6,570	25,100	8,060	4,750	12,500	12,500	4,060
18.....	9,160	12,300	7,780	21,200	5,500	5,240	7,870	10,500	3,750
19.....	14,200	10,200	7,530	20,600	5,410	5,170	8,640	8,950	1,320
20.....	16,200	9,370	5,190	19,500	8,690	3,490	17,600	7,260	3,650
21.....	14,600	8,280	3,660	18,500	8,810	5,950	17,300	6,640	4,010
22.....	11,800	6,850	6,260	16,100	4,730	7,580	13,900	13,500	5,480
23.....	9,710	8,230	5,610	16,700	934	6,580	12,000	13,800	5,220
24.....	7,100	9,880	5,120	16,000	6,450	4,590	14,800	9,850	4,730
25.....	8,270	59,300	8,590	7,690	6,140	4,900	13,100	15,200	7,300
26.....	8,090	65,600	10,200	10,600	6,400	3,860	5,390	12,500	3,920
27.....	8,180	56,800	11,100	16,000	4,970	1,380	13,100	14,300	5,880
28.....	7,010	41,200	8,140	20,100	5,360	3,970	11,800	9,300	4,740
29.....	6,700	-----	9,710	20,800	5,340	3,450	8,490	6,610	7,680
30.....	5,140	-----	7,790	19,800	1,470	3,400	14,300	8,190	6,330
31.....	2,270	-----	7,400	-----	3,860	-----	12,700	7,930	-----

CONNECTICUT RIVER BASIN

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Daily and monthly discharge, in second-feet, of Connecticut River at Turners Falls, Mass., 1915-1928—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1915-16												
1.	4,510	5,060	7,660	11,900	27,500	17,700	54,900	28,300	12,300	13,200	6,710	4,790
2.	4,620	5,390	8,840	5,770	29,500	17,200	64,300	25,900	13,200	6,290	5,600	4,300
3.	1,390	5,850	9,120	9,170	26,200	11,800	57,500	24,700	14,800	12,600	4,950	1,380
4.	5,120	5,800	7,240	11,000	19,900	15,200	48,900	24,300	13,300	14,700	5,090	1,880
5.	5,580	5,700	2,380	9,330	15,600	6,260	42,300	23,100	12,600	14,200	3,770	4,600
6.	4,720	7,470	7,350	11,900	14,400	8,270	39,100	22,800	16,600	18,000	918	4,320
7.	6,090	3,070	6,000	12,300	16,900	10,200	34,700	17,700	19,900	16,900	4,920	3,550
8.	5,370	5,330	4,950	11,700	11,600	9,310	30,200	16,400	18,800	14,300	4,170	2,970
9.	6,870	4,420	4,560	7,460	9,150	9,350	25,700	18,500	18,800	10,400	6,530	2,570
10.	3,620	4,330	4,490	9,750	11,900	8,260	26,000	18,000	21,200	10,200	8,670	1,020
11.	7,310	5,050	5,090	8,740	11,400	6,920	25,000	15,600	19,900	9,180	10,600	3,780
12.	5,020	5,100	1,590	10,500	10,100	3,540	27,800	14,300	21,600	8,910	17,100	3,840
13.	4,260	4,840	3,310	8,010	5,660	7,250	29,500	13,200	22,200	7,790	11,400	3,950
14.	4,600	2,310	3,700	8,970	8,400	7,350	30,100	4,500	18,800	8,760	8,300	3,460
15.	5,310	5,220	3,140	8,880	6,180	7,290	28,900	10,800	14,300	7,690	7,950	7,160
16.	4,680	5,950	3,110	2,430	7,620	6,450	28,800	10,100	14,300	4,530	5,690	9,500
17.	5,020	8,770	3,010	7,430	9,040	8,000	31,900	24,700	20,200	7,880	5,370	7,980
18.	5,260	9,320	7,060	9,070	9,910	5,970	33,000	37,800	21,100	8,260	5,850	5,410
19.	4,570	6,580	5,450	5,000	7,430	1,720	33,900	38,500	21,800	6,470	4,950	6,500
20.	5,500	9,370	6,750	5,370	2,520	6,540	35,600	34,500	21,600	6,770	1,340	5,500
21.	4,970	6,700	8,040	7,160	5,510	6,550	34,400	29,500	22,100	8,800	4,020	5,480
22.	6,120	7,420	9,470	8,860	5,880	6,520	33,000	24,200	19,000	8,200	3,880	6,790
23.	4,300	8,970	8,220	9,850	7,580	6,880	37,300	19,100	17,100	4,010	3,850	4,150
24.	1,630	7,850	7,810	11,600	5,500	7,720	50,700	19,100	15,800	8,480	3,850	3,290
25.	4,200	6,580	6,890	13,200	10,400	5,970	47,000	18,400	9,880	8,730	4,100	5,910
26.	3,770	6,930	29,200	13,400	31,000	2,400	42,700	16,200	12,300	10,900	3,740	5,380
27.	4,360	8,440	33,500	23,000	34,000	7,750	39,200	15,900	12,900	13,100	1,100	5,090
28.	4,710	2,450	30,200	31,400	29,200	11,400	35,300	7,110	12,300	13,000	3,840	4,900
29.	5,840	5,570	23,300	38,100	22,700	15,900	31,300	9,580	11,600	12,200	4,190	4,870
30.	4,880	6,720	17,900	32,700	-----	26,900	28,300	11,700	10,600	5,680	4,980	9,720
31.	1,750	-----	14,500	25,800	-----	39,400	-----	10,600	-----	9,070	4,440	-----
1916-17												
1.	9,760	5,670	24,200	3,760	5,430	10,100	32,000	23,400	13,400	13,700	3,090	10,700
2.	8,610	4,300	29,600	5,190	6,030	9,170	38,000	27,700	20,000	15,700	3,180	7,980
3.	9,340	4,320	25,500	5,200	5,060	9,180	38,900	30,800	5,350	15,400	4,800	8,040
4.	8,010	5,510	20,900	5,280	999	4,340	41,800	28,900	12,100	11,000	6,410	7,760
5.	6,620	4,430	15,600	6,810	5,220	6,790	41,500	27,100	14,600	9,240	533	8,090
6.	6,620	7,080	14,300	5,250	5,030	5,740	38,500	26,800	18,900	10,200	2,660	8,190
7.	4,480	5,780	14,200	6,800	4,690	5,720	37,000	26,400	16,300	8,840	4,100	7,490
8.	2,570	5,000	13,800	7,760	4,660	5,530	37,800	24,300	17,600	3,310	3,920	4,720
9.	6,050	4,790	15,100	8,620	4,350	6,840	36,300	26,300	18,800	7,210	3,630	1,350
10.	5,030	5,370	11,900	7,120	3,330	7,280	30,700	23,100	16,800	5,800	4,690	4,160
11.	4,820	6,500	11,800	7,010	1,560	2,760	27,700	21,000	22,700	5,760	4,900	4,530
12.	2,850	2,130	10,900	7,170	4,760	5,950	19,500	21,800	38,500	5,380	1,700	4,580
13.	5,040	5,120	9,940	5,090	3,960	6,450	19,000	21,400	45,100	5,320	6,460	4,280
14.	3,650	6,570	9,040	4,650	3,840	7,390	22,200	16,000	41,200	7,480	5,880	4,530
15.	1,020	6,420	8,470	9,580	4,800	7,240	17,200	19,600	36,100	2,050	4,370	3,240
16.	4,360	5,520	5,340	8,970	4,510	7,180	17,100	18,900	28,200	7,030	6,460	1,320
17.	5,160	6,780	1,200	9,780	3,210	5,920	17,700	17,800	24,000	7,190	6,980	4,520
18.	4,850	4,690	4,700	9,250	1,070	3,540	17,900	16,200	28,100	6,800	8,810	4,140
19.	5,400	967	5,720	8,990	4,400	7,250	21,200	19,400	36,500	6,350	7,160	4,000
20.	6,960	6,400	6,230	8,920	4,510	6,420	30,100	13,300	36,400	6,740	10,800	3,770
21.	8,820	5,660	6,660	3,220	4,470	6,590	45,700	14,000	28,400	9,130	12,000	3,510
22.	7,060	5,380	5,500	6,380	3,220	7,170	49,200	15,700	28,000	2,430	10,300	1,930
23.	9,290	5,100	8,740	6,670	4,170	7,140	54,100	17,700	20,900	5,680	13,700	558
24.	8,630	10,200	6,960	6,060	3,470	13,500	50,900	17,500	18,800	6,310	12,500	2,900
25.	7,240	18,600	7,270	5,510	1,110	21,500	45,900	15,700	20,200	6,120	11,500	2,910
26.	7,400	11,500	7,450	5,460	3,860	32,100	42,400	17,400	17,000	6,570	10,300	2,810
27.	6,040	10,900	6,630	5,400	6,490	32,000	36,600	10,200	16,100	6,620	11,700	3,000
28.	4,130	11,500	6,990	2,460	9,300	47,200	31,600	13,100	13,400	4,620	10,200	3,230
29.	3,800	11,700	7,420	6,010	-----	54,800	27,400	20,500	11,700	1,470	9,150	2,620
30.	6,130	15,400	6,350	5,460	-----	45,500	16,900	14,500	7,100	3,540	8,600	757
31.	6,000	-----	3,020	5,530	-----	34,900	-----	17,200	-----	3,430	9,680	-----

Daily and monthly discharge, in second-feet, of Connecticut River at Turners Falls, Mass., 1915-1928—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1917-18												
1	3,250	40,200	3,320	2,430	3,650	12,500	43,600	27,900	8,500	5,230	3,420	768
2	3,580	35,000	1,010	3,510	2,680	13,100	51,000	34,500	4,820	5,230	3,290	630
3	3,390	27,000	4,100	3,890	866	10,400	61,800	34,400	9,060	5,990	2,260	2,120
4	3,900	19,600	4,120	3,700	1,250	9,450	56,500	32,000	9,070	2,470	670	2,420
5	6,000	16,300	4,740	2,440	3,100	9,960	46,700	25,600	8,520	6,780	2,940	2,680
6	6,110	14,500	5,590	813	3,040	9,360	40,100	19,000	7,530	4,560	2,760	3,210
7	4,200	12,700	6,240	4,140	3,020	10,000	34,700	15,900	5,670	2,090	2,710	2,970
8	9,320	10,900	4,720	3,480	3,140	10,100	32,400	14,600	4,090	5,060	2,620	1,000
9	8,630	8,510	1,820	3,170	2,360	10,100	33,300	14,300	2,660	5,640	2,940	3,900
10	8,380	8,020	4,780	3,130	908	3,410	36,900	16,200	9,060	3,770	6,440	3,450
11	7,900	2,850	4,900	2,840	1,040	7,910	33,900	20,100	9,600	4,310	9,790	3,170
12	6,380	6,100	4,730	1,870	3,080	7,350	30,000	16,300	8,100	3,460	9,530	2,630
13	5,330	7,130	4,390	833	2,720	7,180	29,300	16,200	10,000	3,190	7,740	2,900
14	2,980	7,150	3,820	3,070	2,630	7,110	20,300	27,000	10,300	3,500	5,380	1,870
15	7,270	7,000	2,740	3,460	2,930	8,140	30,800	29,700	9,370	6,960	5,290	815
16	7,070	6,900	893	3,050	2,630	7,030	32,300	29,400	2,990	6,240	5,840	2,830
17	7,440	5,460	3,060	4,660	1,240	3,370	35,200	25,700	8,300	7,560	4,980	3,210
18	8,080	2,200	3,120	2,510	3,160	8,470	30,300	20,000	7,730	8,420	1,850	4,140
19	8,350	6,460	3,180	2,370	5,890	9,250	34,300	14,300	7,600	8,970	3,960	5,450
20	6,920	6,260	3,580	1,690	8,480	12,900	30,000	13,100	7,030	4,440	3,910	5,130
21	1,960	6,450	4,660	3,160	10,600	20,000	27,200	14,700	5,540	1,790	3,840	8,400
22	6,940	5,750	6,080	2,820	9,660	26,800	33,000	10,700	4,500	5,110	3,750	10,100
23	7,490	6,610	1,570	3,490	8,450	35,200	32,600	9,400	9,060	3,940	3,130	13,000
24	6,710	6,640	3,770	3,660	5,280	31,300	31,900	9,720	10,100	3,980	1,520	12,000
25	10,400	2,740	2,200	3,880	9,950	32,400	30,400	10,500	9,680	4,030	552	10,800
26	8,670	6,580	4,300	3,060	9,570	28,800	30,200	3,460	9,390	3,980	2,390	22,300
27	9,820	5,990	4,790	1,150	13,500	25,000	28,500	7,030	10,300	2,420	2,390	26,200
28	8,050	5,020	4,830	1,460	13,900	23,700	15,900	8,310	9,890	582	2,460	31,100
29	10,200	2,310	3,350	4,360	-----	22,500	20,900	9,640	5,750	3,380	2,440	25,800
30	31,400	3,560	1,580	4,110	-----	22,700	23,200	3,840	2,150	3,850	2,390	20,700
31	26,000	-----	4,660	4,190	-----	32,600	-----	8,690	-----	3,520	1,770	-----
1918-19												
1	15,400	31,900	8,020	8,670	9,480	15,700	28,700	15,800	6,180	7,490	1,880	418
2	14,000	35,600	8,900	14,900	3,730	13,400	23,300	18,600	7,340	6,650	1,340	2,430
3	10,300	42,800	7,770	14,300	7,220	16,300	17,700	21,800	8,460	6,390	1,193	4,420
4	9,610	28,800	7,420	15,700	6,790	14,000	20,800	19,700	7,950	2,040	2,040	6,450
5	10,600	19,300	9,420	5,900	6,640	13,800	22,700	24,400	8,240	2,010	1,870	6,010
6	7,200	14,900	8,410	8,840	6,740	20,000	14,800	20,300	8,550	1,810	2,420	3,160
7	25,600	13,000	5,860	8,570	6,310	19,200	25,100	21,100	4,770	4,650	2,640	193
8	31,700	12,600	2,270	9,430	5,660	16,800	32,100	22,200	3,580	4,470	3,040	2,070
9	31,400	13,700	5,990	9,680	2,560	18,000	34,700	18,100	5,180	4,060	2,010	4,200
10	28,500	8,150	7,610	9,430	6,500	16,100	36,400	18,400	8,800	3,250	193	5,280
11	18,900	9,020	7,200	8,840	6,540	22,000	33,900	15,800	10,400	3,750	2,360	4,930
12	14,900	8,970	6,380	5,510	5,260	16,100	38,200	16,700	10,500	2,390	2,250	6,420
13	7,360	9,600	6,620	7,740	3,940	12,800	37,400	13,200	8,750	588	2,230	16,200
14	10,700	10,100	8,380	7,120	4,530	11,600	48,000	14,500	5,626	3,530	2,210	10,300
15	10,800	10,400	13,900	7,640	4,360	12,500	46,900	11,400	2,010	3,490	2,080	13,400
16	9,660	8,470	16,000	7,800	1,920	9,180	44,800	9,550	5,250	3,530	1,360	10,500
17	9,100	5,150	16,100	8,240	5,400	11,900	40,100	18,000	5,780	3,280	193	9,760
18	9,620	10,900	13,400	8,200	4,560	10,300	36,600	26,900	5,450	3,230	2,310	7,240
19	7,360	23,400	10,300	4,870	5,790	16,300	33,100	23,100	5,190	2,160	2,190	5,680
20	7,980	23,200	8,710	7,950	4,260	13,400	28,800	20,200	6,670	300	2,040	4,980
21	12,900	20,300	9,530	7,070	4,260	33,400	24,100	21,900	7,090	2,910	2,500	1,760
22	10,900	19,300	7,040	6,840	3,320	34,800	22,500	42,700	3,780	3,310	2,860	4,760
23	12,900	19,600	15,200	7,210	2,100	30,800	21,900	56,400	5,620	4,780	1,600	3,540
24	11,600	10,700	20,700	9,980	5,300	28,800	19,400	47,400	5,500	3,620	1,680	3,730
25	10,700	13,700	33,100	12,600	5,460	25,100	20,700	36,500	5,400	3,060	3,030	4,500
26	10,400	11,200	33,400	9,620	5,390	22,900	22,800	30,300	4,720	1,770	3,150	5,030
27	7,840	9,370	22,000	12,000	4,070	22,800	11,500	25,000	3,820	208	2,710	5,340
28	11,100	6,510	22,100	8,450	5,450	60,400	17,300	19,500	2,850	2,870	2,000	1,940
29	11,600	8,570	7,280	9,580	-----	70,500	15,800	17,400	1,580	2,330	1,900	6,600
30	13,000	13,400	9,240	9,480	-----	56,600	15,100	14,400	7,840	2,400	2,280	5,740
31	19,800	-----	9,260	9,770	-----	38,800	-----	10,500	-----	2,150	1,800	-----

Daily and monthly discharge, in second-feet, of Connecticut River at Turners Falls, Mass., 1915-1923—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1919-20												
1	5,560	15,300	23,400	5,700	430	2,950	55,400	51,400	9,880	4,430	433	3,500
2	5,160	25,200	24,700	4,670	4,010	3,230	59,100	41,000	9,950	5,420	3,050	3,650
3	3,540	26,800	18,800	3,080	3,630	3,000	54,700	39,200	10,400	5,690	5,280	3,140
4	2,350	24,700	11,700	241	3,610	3,220	53,600	37,500	10,000	5,940	5,730	2,590
5	2,200	24,500	8,930	4,620	2,980	3,670	57,100	32,100	7,710	5,260	4,740	1,080
6	8,810	14,900	9,270	3,910	3,780	3,920	60,300	27,600	5,310	8,360	4,100	2,260
7	7,970	14,900	5,220	4,030	2,870	2,280	52,300	24,300	11,100	6,340	2,120	3,280
8	8,840	15,700	10,900	3,700	407	6,690	43,700	26,500	11,900	6,200	241	3,720
9	9,950	8,850	12,800	4,010	3,240	6,930	34,400	25,100	12,000	5,920	3,340	4,780
10	8,400	14,000	12,900	3,060	3,710	6,900	35,100	29,200	11,600	4,340	3,830	5,900
11	8,470	11,600	15,400	780	3,100	7,220	33,000	31,000	11,300	2,160	4,600	4,610
12	6,980	13,100	13,000	5,010	3,210	6,720	22,000	28,400	7,340	5,380	5,360	2,100
13	10,900	25,800	18,100	4,230	2,900	10,600	42,400	24,800	2,180	5,500	5,300	5,410
14	10,900	27,100	18,100	4,170	2,550	14,000	72,100	20,900	6,540	5,690	6,540	6,200
15	9,510	29,800	13,600	4,250	250	20,200	60,600	21,600	4,900	5,400	5,000	9,830
16	8,780	26,300	11,000	4,130	3,460	19,300	58,200	17,700	5,460	5,670	9,370	8,930
17	6,940	17,000	10,300	2,570	3,470	19,300	56,700	17,600	6,840	3,050	9,300	8,900
18	9,020	14,900	8,760	850	2,740	25,200	52,000	16,900	11,400	2,020	10,000	6,410
19	5,760	12,300	7,460	5,580	3,370	21,900	48,900	14,700	11,500	5,310	9,000	1,770
20	9,110	10,500	6,780	4,870	3,670	19,200	44,100	14,900	3,360	5,390	6,430	5,670
21	7,550	9,740	3,110	3,500	2,950	18,800	45,800	20,600	8,040	6,180	4,350	7,430
22	6,450	9,460	7,110	3,550	590	15,000	60,700	28,400	8,760	6,220	1,320	8,150
23	7,770	7,900	6,900	3,410	3,060	15,100	70,000	25,500	7,550	6,750	3,340	5,150
24	9,610	11,300	8,020	2,670	3,400	22,600	70,800	20,600	6,560	5,760	3,750	4,980
25	8,740	10,600	3,890	1,200	3,220	31,400	64,100	19,400	7,110	1,920	3,500	3,050
26	5,810	17,000	7,420	4,520	3,240	40,900	50,200	16,300	4,390	5,500	3,350	434
27	9,220	23,500	4,950	3,690	3,240	65,200	44,100	15,100	1,800	5,090	2,910	5,620
28	8,560	13,600	1,920	3,440	2,300	75,700	48,800	14,600	4,640	4,980	2,240	4,780
29	10,900	18,700	6,010	3,490	241	74,200	57,600	10,600	4,720	4,620	635	3,060
30	9,650	21,100	5,550	3,810	-----	73,300	53,600	12,800	4,360	4,580	3,230	6,460
31	12,700	-----	6,090	2,970	-----	71,300	-----	8,780	-----	2,440	3,650	-----
1920-21												
1	30,500	8,360	7,850	8,900	4,920	6,630	61,800	45,700	5,640	11,800	2,880	2,720
2	32,800	8,550	7,540	6,860	5,430	9,390	50,600	29,000	4,590	8,040	3,960	2,820
3	24,800	15,100	14,800	10,500	5,430	10,600	41,700	23,500	3,970	7,610	4,090	1,760
4	19,600	11,700	14,300	11,100	5,300	12,700	33,300	21,100	2,930	5,830	3,940	1,196
5	13,900	15,000	26,800	13,300	3,840	11,900	38,600	18,000	1,740	6,300	3,740	196
6	7,960	12,900	33,500	11,400	2,600	12,200	24,200	20,600	3,140	5,770	2,270	2,770
7	10,700	9,000	38,200	10,700	7,210	22,600	18,200	15,900	3,680	4,330	168	2,400
8	10,000	10,300	33,600	8,380	7,810	23,500	20,300	4,720	4,000	4,150	3,500	1,970
9	7,200	9,040	25,200	8,340	6,590	37,300	21,600	10,200	4,270	2,660	3,730	1,760
10	2,330	8,640	22,600	9,230	6,220	76,000	21,200	10,600	3,580	5,190	2,890	1,350
11	6,110	9,870	16,000	8,570	7,360	60,000	21,400	10,000	3,230	16,800	2,630	295
12	4,280	9,690	12,400	7,340	4,020	51,000	19,900	9,370	1,820	8,900	2,820	1,810
13	5,400	9,090	12,500	11,000	1,920	48,500	19,000	10,600	3,960	8,640	2,190	1,980
14	4,710	3,100	30,000	7,740	5,100	52,500	16,600	11,300	3,980	5,460	763	1,970
15	4,740	6,990	70,600	7,000	5,380	46,600	13,300	7,050	4,330	5,560	4,820	1,650
16	3,640	6,340	64,900	9,450	5,000	51,500	22,400	11,300	4,380	4,700	5,000	1,890
17	1,520	7,320	41,600	10,900	5,500	57,600	10,300	9,220	4,180	3,020	5,020	1,350
18	4,580	9,160	30,700	11,300	6,040	51,600	22,200	9,580	2,850	7,090	4,920	1,196
19	4,730	7,400	25,600	8,960	5,240	42,100	25,100	9,190	1,790	4,690	5,620	1,620
20	5,150	8,280	19,400	7,030	4,470	36,200	23,300	8,830	4,150	4,690	3,650	1,620
21	5,430	4,470	14,500	5,770	5,360	49,900	21,000	4,440	4,200	4,580	1,640	1,640
22	4,990	8,680	13,300	6,910	5,220	61,900	18,500	2,280	3,840	4,490	5,630	1,510
23	4,370	8,870	11,900	13,500	6,520	54,000	17,800	7,340	2,410	3,040	5,220	1,540
24	303	9,840	11,900	8,530	6,390	47,800	23,800	7,910	1,760	1,240	4,920	1,260
25	5,330	6,780	9,120	7,000	6,590	50,700	21,800	8,300	936	4,970	5,000	1,196
26	4,730	10,500	4,900	5,420	3,730	53,600	22,000	8,260	462	3,900	4,330	2,150
27	4,730	10,600	5,840	5,270	1,900	49,900	18,500	8,240	1,930	3,930	1,860	1,600
28	4,900	5,120	5,070	4,700	4,700	46,600	16,400	5,960	2,110	4,000	148	1,630
29	6,350	7,360	6,600	3,690	-----	47,800	15,200	4,000	2,980	3,350	2,520	1,460
30	5,800	8,260	8,210	1,910	-----	45,000	29,200	2,140	13,300	2,100	2,820	1,530
31	3,700	-----	9,840	5,940	-----	42,700	-----	5,700	-----	322	2,800	-----

Daily and monthly discharge, in second-feet, of Connecticut River at Turners Falls, Mass., 1915-1928—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1921-22												
1.....	1,370	3,400	7,470	2,350	5,210	5,630	42,400	18,500	7,780	36,000	3,740	7,920
2.....	1,196	3,280	11,200	4,080	5,400	5,450	36,000	15,700	7,210	33,100	3,550	3,700
3.....	2,110	4,330	16,400	6,120	5,050	5,470	31,100	14,100	4,550	23,800	3,430	485
4.....	2,180	5,540	13,600	5,660	5,660	3,900	29,400	13,800	19,200	25,800	5,120	2,520
5.....	2,780	3,370	15,100	5,360	2,260	1,630	30,200	35,600	15,700	23,400	5,600	6,510
6.....	2,630	541	13,900	5,470	6,280	5,110	28,600	34,000	15,200	19,700	1,770	4,840
7.....	2,520	4,160	11,200	6,590	6,370	9,770	35,100	36,280	14,100	16,300	4,610	4,950
8.....	1,520	4,320	10,300	2,260	6,180	19,200	44,000	30,800	13,100	14,100	5,310	5,420
9.....	1,670	4,550	9,620	6,160	6,870	28,700	63,100	31,100	12,300	12,400	7,920	2,610
10.....	1,970	5,140	5,460	5,960	6,490	28,500	73,400	28,800	8,360	11,000	9,210	216
11.....	2,000	3,690	2,560	6,830	4,130	26,100	93,500	24,700	10,400	11,000	9,260	4,120
12.....	2,000	3,920	10,200	6,050	561	25,000	114,000	20,600	14,200	10,600	7,150	4,060
13.....	3,880	857	8,240	5,890	4,880	23,400	110,000	20,300	12,300	9,230	2,130	4,630
14.....	3,980	4,090	7,750	3,770	4,690	23,400	93,600	13,600	10,600	9,210	4,720	4,620
15.....	5,050	4,240	6,660	1,210	5,140	30,700	79,400	14,500	11,300	6,620	4,630	4,930
16.....	1,960	5,220	6,080	5,010	5,240	28,200	70,800	13,300	11,200	2,080	3,890	5,180
17.....	6,720	6,120	4,140	4,490	4,580	27,700	63,700	10,600	8,220	6,320	3,860	4,610
18.....	5,950	6,540	8,270	4,870	2,340	22,000	62,900	10,900	8,750	5,320	3,890	9,780
19.....	4,630	9,940	22,600	5,200	216	24,500	59,500	24,100	23,000	5,230	2,320	8,450
20.....	4,510	16,600	16,400	4,750	4,670	20,600	57,300	24,900	24,700	7,040	210	6,530
21.....	3,560	23,400	14,900	3,260	4,860	20,300	52,700	21,700	34,100	8,010	5,630	5,960
22.....	2,590	25,500	12,500	383	3,400	21,500	48,100	16,400	44,100	5,080	5,840	5,060
23.....	236	22,100	9,350	5,340	5,470	19,800	39,900	14,500	48,200	2,130	7,000	2,890
24.....	4,770	15,800	5,830	5,210	5,540	18,300	34,700	14,000	39,800	4,300	7,110	5,562
25.....	6,320	15,000	5,180	4,960	3,860	19,500	29,400	13,200	34,300	5,640	5,460	4,230
26.....	5,130	9,200	4,900	4,990	1,340	22,400	22,100	9,640	31,500	6,250	3,850	4,500
27.....	4,950	3,470	7,840	3,910	5,850	38,200	15,800	8,370	23,500	7,310	2,690	3,860
28.....	4,570	7,000	6,840	2,290	5,590	48,400	20,000	3,290	15,600	6,080	8,470	3,590
29.....	3,040	7,340	7,240	216	68,700	21,400	7,000	17,700	5,150	9,760	3,810	
30.....	338	7,040	7,420	4,570	70,900	18,700	5,710	34,600	1,940	8,790	2,200	
31.....	3,890	-----	5,640	4,800	55,000	-----	8,810	-----	4,600	7,410	-----	
1922-23												
1.....	226	5,060	4,080	3,580	4,960	5,230	11,900	68,000	8,120	1,420	4,320	3,030
2.....	2,400	4,190	2,320	11,500	5,320	4,550	10,800	70,600	5,560	4,450	3,200	225
3.....	3,990	4,480	304	13,100	4,250	3,220	14,800	61,500	821	4,570	2,990	216
4.....	3,220	3,100	4,020	13,100	4,358	988	20,800	53,000	7,810	1,980	2,020	2,400
5.....	3,290	276	4,490	14,100	6,110	4,470	31,500	44,200	6,230	4,750	274	2,900
6.....	2,900	6,110	4,720	9,600	6,160	5,990	73,100	33,000	6,090	4,310	2,240	2,580
7.....	2,040	6,280	4,440	6,760	4,940	6,150	71,200	29,900	6,300	5,110	2,650	2,920
8.....	1,070	5,190	3,730	9,190	4,180	7,030	68,700	25,500	13,100	434	2,560	2,380
9.....	5,140	5,390	1,640	6,720	5,320	6,050	70,200	23,800	18,300	3,910	3,180	678
10.....	4,990	5,670	216	7,080	2,880	4,470	56,400	35,900	14,800	3,020	861	1,900
11.....	5,060	3,320	2,570	7,070	216	1,030	46,700	27,200	12,200	1,630	1,060	2,030
12.....	5,300	1,310	3,170	7,090	6,220	6,900	45,100	22,600	12,900	4,710	241	2,380
13.....	8,160	6,140	2,590	3,700	5,020	6,500	44,400	22,900	11,700	4,110	2,570	2,350
14.....	6,550	5,830	2,930	1,490	4,900	5,620	39,400	20,800	10,300	2,280	2,870	2,650
15.....	2,190	5,900	3,070	7,240	5,180	5,490	31,800	21,200	9,510	219	2,420	2,660
16.....	4,770	5,240	1,780	6,730	4,910	5,320	34,100	19,200	5,510	4,710	2,430	582
17.....	4,230	5,390	240	5,600	2,020	5,690	22,100	20,900	2,710	5,540	2,340	2,070
18.....	3,970	3,400	2,810	5,880	266	5,280	27,600	21,000	6,360	4,490	1,320	2,250
19.....	4,130	380	3,970	4,730	4,880	12,900	21,900	19,600	5,160	4,410	228	2,040
20.....	4,480	6,530	3,360	3,240	5,240	11,100	20,000	15,000	5,860	4,250	1,940	2,640
21.....	3,020	4,910	2,910	1,790	4,410	8,810	24,500	16,200	5,130	2,230	2,330	3,220
22.....	239	6,820	2,880	7,840	4,110	10,200	36,400	16,300	5,500	226	2,400	2,440
23.....	3,820	5,810	1,930	7,700	5,260	13,100	43,700	16,100	4,040	2,770	1,890	940
24.....	3,730	6,300	406	8,340	2,460	25,400	45,800	14,500	307	3,310	1,860	2,900
25.....	3,040	4,790	1,160	8,000	358	27,200	46,800	15,800	6,090	3,760	1,160	4,680
26.....	4,820	337	4,220	9,270	5,640	25,000	45,200	10,800	4,060	3,170	216	4,040
27.....	6,780	6,570	3,190	5,320	4,990	24,000	35,500	7,010	4,620	2,760	1,610	4,950
28.....	6,700	5,630	4,510	2,240	5,130	22,600	33,600	12,600	2,970	3,440	2,190	3,510
29.....	2,730	3,860	4,330	8,220	-----	15,100	52,600	10,200	2,900	1,750	1,880	3,200
30.....	4,500	1,010	2,910	6,720	-----	14,100	70,100	5,330	3,050	3,120	4,090	215
31.....	4,750	-----	216	5,840	-----	12,500	-----	8,120	-----	3,200	3,760	-----

Daily and monthly discharge, in second-feet, of Connecticut River at Turners Falls, Mass., 1915-1928—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1923-24												
1.....	2,900	6,440	41,300	7,610	8,290	4,670	17,000	46,000	7,090	5,000	3,910	1,640
2.....	2,920	6,850	44,300	6,530	7,290	2,890	14,500	53,000	9,300	5,240	3,100	3,110
3.....	3,050	4,370	29,100	7,050	4,580	5,100	13,500	49,900	6,960	5,590	584	3,910
4.....	2,210	3,420	27,800	7,460	8,260	4,580	13,600	44,600	6,890	2,470	3,000	3,890
5.....	3,300	6,480	28,300	10,000	7,070	5,440	17,700	49,500	7,900	2,610	2,680	4,950
6.....	3,380	5,250	21,600	4,340	5,850	6,030	28,000	45,200	8,660	1,920	2,740	3,750
7.....	216	6,090	41,500	7,630	5,460	7,460	49,100	39,200	7,460	4,110	2,980	3,440
8.....	2,270	8,920	33,500	6,400	6,160	6,590	56,200	34,800	2,750	4,080	7,060	9,190
9.....	2,220	10,700	27,100	7,860	6,810	4,380	46,300	33,500	6,510	3,900	7,630	10,000
10.....	2,300	9,180	28,800	7,600	4,000	7,940	42,000	34,400	6,420	4,250	6,500	21,400
11.....	3,320	7,790	20,300	15,100	6,000	7,100	40,600	35,100	6,580	4,180	7,760	31,900
12.....	2,080	9,620	16,100	27,100	5,940	7,420	39,500	35,100	6,340	4,190	4,420	35,800
13.....	1,630	8,450	15,000	26,400	4,660	8,100	34,300	42,000	5,320	3,550	4,210	37,000
14.....	216	6,080	14,100	23,000	4,610	7,200	44,300	37,400	4,320	5,890	3,880	36,800
15.....	2,440	5,310	17,300	19,300	5,780	5,180	48,200	31,300	2,260	5,990	3,570	27,800
16.....	2,290	4,530	11,600	16,100	4,160	2,240	37,800	32,400	7,200	5,060	1,840	17,200
17.....	1,900	3,960	14,000	23,400	2,930	6,970	34,600	31,900	7,210	4,130	1,930	14,800
18.....	1,840	3,170	11,800	25,500	6,210	5,660	33,000	17,600	6,460	4,410	2,820	13,300
19.....	1,720	6,280	20,300	3,380	5,380	6,530	49,600	18,400	5,600	2,910	3,050	10,400
20.....	1,420	5,420	6,520	19,300	5,450	5,580	63,100	17,900	5,520	4,690	2,600	5,540
21.....	216	4,860	9,590	13,600	4,830	6,080	53,200	17,000	5,190	7,130	2,900	2,890
22.....	2,140	4,750	12,300	10,500	3,940	5,980	50,200	16,600	2,430	6,250	3,580	4,630
23.....	2,280	4,050	10,500	9,460	4,210	5,250	58,000	16,500	5,880	5,760	3,190	5,070
24.....	17,200	8,840	9,840	9,670	2,690	11,600	49,300	14,100	5,010	5,220	1,960	5,790
25.....	18,300	25,100	12,200	10,300	5,560	14,400	42,400	4,870	5,010	3,900	3,870	7,440
26.....	18,700	27,600	10,300	8,640	5,200	14,200	42,300	13,400	5,160	2,900	6,840	6,530
27.....	13,000	29,800	11,400	4,390	4,910	14,000	37,000	14,700	4,550	837	6,700	4,370
28.....	7,460	26,900	10,700	7,640	4,940	11,900	37,000	13,000	5,820	3,610	3,770	2,160
29.....	9,440	22,300	7,480	7,270	5,810	14,400	33,700	13,700	3,320	3,590	3,490	5,530
30.....	7,960	24,800	3,790	6,510	-----	15,200	33,300	11,000	5,700	3,520	2,000	6,330
31.....	6,930	-----	9,400	7,420	-----	18,200	-----	12,200	-----	4,780	227	-----
1924-25												
1.....	10,500	3,600	7,560	3,490	463	12,400	58,300	19,400	8,270	17,000	10,200	2,070
2.....	12,700	1,250	6,570	3,130	3,310	13,400	52,900	19,800	10,500	14,700	4,940	2,380
3.....	13,200	4,420	6,120	1,660	3,990	11,300	44,800	16,900	11,200	12,000	7,200	2,560
4.....	11,300	3,700	6,520	140	3,380	12,000	38,000	14,100	12,000	9,620	7,120	2,430
5.....	6,370	4,190	6,380	3,940	3,820	11,900	34,300	16,200	11,400	6,280	6,780	2,900
6.....	6,970	3,490	5,270	4,170	2,570	11,100	28,400	16,100	7,880	7,860	7,050	1,140
7.....	6,040	4,080	3,510	3,950	1,100	12,600	26,000	17,600	2,010	7,480	7,370	2,340
8.....	5,600	3,210	8,890	3,550	419	12,900	23,000	17,400	4,440	7,980	6,380	3,980
9.....	5,060	1,370	16,500	4,580	4,290	13,100	20,400	16,900	5,780	7,600	2,230	2,190
10.....	5,570	3,370	19,700	3,370	3,400	15,100	18,300	13,800	7,120	10,400	5,830	2,840
11.....	3,850	3,130	16,200	1,440	6,690	18,900	15,000	13,300	8,160	7,630	6,280	2,460
12.....	3,120	3,690	13,300	4,170	29,300	28,500	13,800	14,000	7,570	4,370	5,020	2,170
13.....	4,170	3,560	11,400	4,180	45,600	30,500	19,900	14,300	6,510	5,230	5,990	2,310
14.....	5,790	4,680	5,980	3,810	46,600	32,700	20,100	14,300	1,870	5,850	7,000	12,000
15.....	3,570	3,160	6,220	3,780	29,600	39,800	22,000	14,300	5,710	4,970	2,930	12,800
16.....	4,170	355	6,080	4,880	33,500	30,200	21,800	12,700	5,590	5,200	696	12,700
17.....	5,740	3,520	5,130	2,660	24,300	25,000	27,000	6,380	4,780	8,500	4,100	12,700
18.....	3,450	4,170	5,280	286	22,400	22,500	20,700	12,000	4,570	7,220	3,820	12,600
19.....	782	3,690	7,210	3,800	19,800	25,600	13,600	12,200	6,040	2,490	4,180	12,100
20.....	4,260	3,200	7,590	3,840	17,100	34,600	17,400	13,100	4,640	4,720	3,620	6,170
21.....	4,240	3,550	3,780	3,020	11,700	32,700	19,300	12,500	916	4,390	3,930	7,240
22.....	3,920	3,270	5,740	3,500	12,500	26,400	21,100	11,100	4,550	5,280	3,040	6,160
23.....	3,890	9,740	4,850	3,900	18,300	28,700	32,600	9,630	4,550	12,500	606	8,140
24.....	3,830	21,400	5,620	1,550	17,100	25,000	35,100	3,910	4,720	14,200	3,470	9,600
25.....	3,800	29,400	2,400	140	25,800	22,900	29,800	7,660	4,960	6,530	3,140	9,800
26.....	1,960	26,700	5,950	3,210	23,300	24,300	28,900	8,240	5,710	3,850	2,740	5,730
27.....	5,120	24,700	3,260	3,290	16,000	22,500	22,700	8,580	5,070	11,000	2,950	2,890
28.....	4,610	17,900	679	3,350	13,800	39,300	21,700	9,120	8,790	17,900	2,530	5,770
29.....	3,860	14,600	4,510	3,740	-----	83,000	19,700	8,920	18,200	17,900	1,340	5,040
30.....	3,840	9,250	4,940	3,710	-----	86,600	18,500	4,210	20,400	15,900	2,738	5,550
31.....	4,170	-----	5,260	1,970	-----	71,700	-----	4,990	-----	14,900	2,190	-----

Daily and monthly discharge, in second-feet, of Connecticut River at Turners Falls, Mass., 1915-1928—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1925-26												
1.....	6,130	8,650	8,450	2,820	7,310	11,800	12,200	37,500	9,420	5,750	209	5,160
2.....	6,350	10,700	7,560	2,800	5,800	5,950	10,400	30,400	3,950	5,020	3,990	5,000
3.....	5,880	9,470	10,400	2,150	5,550	4,490	10,000	41,500	11,400	7,250	3,920	5,130
4.....	4,110	8,200	16,900	7,400	4,820	4,720	5,890	49,900	11,600	2,160	3,680	5,440
5.....	10,200	7,380	21,300	5,330	4,560	5,880	12,600	51,300	10,500	1,240	4,960	1,650
6.....	11,800	8,670	29,500	4,950	5,730	3,510	11,800	50,500	7,510	4,260	4,790	659
7.....	13,000	8,940	27,100	4,590	2,760	2,290	12,000	48,500	9,590	4,460	4,290	5,340
8.....	10,800	8,300	23,100	7,430	6,200	5,590	15,100	41,600	9,100	4,660	323	4,140
9.....	9,980	20,200	20,200	6,270	6,220	6,930	19,400	35,300	8,120	5,990	4,770	3,530
10.....	11,700	22,300	15,500	1,470	4,690	7,430	29,100	32,600	7,920	5,370	4,370	5,270
11.....	4,580	23,560	13,800	4,960	5,720	7,650	29,700	28,000	8,940	12,100	4,340	2,050
12.....	10,300	22,300	10,200	5,390	6,150	7,220	28,700	26,700	8,930	19,400	4,070	850
13.....	11,100	31,200	5,030	5,670	3,300	6,540	27,900	23,500	3,100	16,900	3,540	4,610
14.....	11,800	33,800	10,400	4,680	870	3,080	30,900	24,500	6,200	13,900	3,370	5,230
15.....	9,850	29,400	8,650	4,730	5,690	6,270	35,600	19,500	9,380	12,000	635	4,840
16.....	12,400	36,000	8,290	3,010	4,780	6,330	33,400	17,200	17,100	9,620	4,600	4,360
17.....	13,700	40,700	8,680	1,690	4,430	6,390	34,700	20,100	22,800	8,070	4,470	4,440
18.....	15,700	37,300	8,160	6,440	5,200	5,770	24,800	18,700	22,500	1,940	3,040	1,890
19.....	21,200	34,400	7,470	13,100	5,960	7,150	25,900	15,900	19,300	5,580	3,310	903
20.....	20,900	30,400	5,440	16,400	3,880	7,580	23,900	18,700	12,200	4,590	2,890	3,760
21.....	18,200	23,200	9,180	15,200	2,200	3,240	29,100	18,100	11,100	4,960	3,070	4,860
22.....	15,700	21,000	9,900	14,000	6,380	6,930	34,200	18,600	9,420	3,800	625	4,740
23.....	14,400	25,600	11,000	10,900	5,480	9,210	53,600	14,400	8,320	3,820	3,140	4,590
24.....	12,000	16,900	11,000	5,970	5,240	10,500	70,900	15,200	7,720	3,760	3,800	3,720
25.....	9,770	15,500	6,000	7,840	5,390	13,400	71,800	13,600	6,400	2,040	3,90	3,150
26.....	21,400	9,730	5,880	7,460	5,320	14,600	73,600	12,700	5,990	4,400	3,160	140
27.....	19,700	13,600	2,000	7,350	5,690	21,900	66,000	12,600	3,770	4,460	3,630	6,230
28.....	18,000	13,600	6,850	7,280	4,590	12,500	54,800	12,400	7,060	4,280	2,940	7,480
29.....	16,400	12,200	5,820	6,760	-----	12,300	60,800	12,000	6,270	4,350	871	6,820
30.....	15,200	9,710	5,970	6,760	-----	12,400	43,400	6,370	5,520	3,830	5,380	6,820
31.....	13,200	-----	6,590	2,140	-----	12,200	-----	7,850	-----	1,790	5,840	-----
1926-27												
1.....	6,550	9,680	17,000	5,150	7,090	5,080	15,100	8,820	12,400	3,730	4,360	8,410
2.....	4,420	12,200	16,300	5,160	5,670	5,430	15,800	13,100	10,900	4,740	4,870	8,000
3.....	405	11,600	15,100	4,440	8,050	5,670	14,900	10,300	9,210	985	5,490	8,480
4.....	4,850	10,700	9,980	4,440	6,840	6,110	15,600	10,700	9,400	2,470	5,520	6,430
5.....	5,380	11,500	2,290	4,050	8,870	4,520	15,100	9,830	6,620	3,770	4,380	3,330
6.....	5,580	9,530	5,630	5,600	5,230	2,510	15,000	12,400	9,330	3,840	4,230	4,150
7.....	6,100	6,060	5,270	4,880	5,710	5,530	14,900	11,900	8,350	3,390	1,480	4,490
8.....	11,700	7,390	6,810	4,950	5,870	5,070	15,800	10,900	8,230	3,470	4,350	4,080
9.....	11,600	10,800	7,550	1,970	5,540	9,290	14,100	11,700	10,200	4,700	3,190	5,400
10.....	9,890	18,400	8,280	5,480	5,680	9,640	14,000	11,400	9,690	1,110	3,640	3,580
11.....	9,370	24,500	8,950	4,830	6,620	8,190	14,600	12,700	10,000	5,440	3,750	623
12.....	6,490	21,200	6,660	4,070	4,890	10,800	12,100	13,500	6,260	4,960	3,970	4,720
13.....	6,880	19,600	7,740	4,260	2,240	13,200	12,600	12,900	8,350	4,760	5,440	4,580
14.....	6,210	15,500	8,300	3,840	6,040	21,800	13,400	12,300	6,370	3,930	373	3,890
15.....	6,780	13,600	8,130	3,500	5,590	37,200	13,800	9,020	6,180	6,500	3,700	3,790
16.....	8,450	14,500	7,320	2,410	5,110	46,400	13,200	15,100	6,830	6,600	3,600	4,100
17.....	3,060	21,600	7,110	6,050	4,870	43,300	6,930	16,500	5,990	3,080	4,340	2,820
18.....	5,500	23,600	6,760	5,080	6,240	53,200	13,900	17,500	6,440	5,470	5,620	720
19.....	6,480	29,600	3,150	5,000	5,350	60,600	18,000	16,000	1,160	7,020	6,120	4,500
20.....	7,970	27,900	6,640	6,050	1,310	55,500	21,400	16,700	5,260	5,120	4,700	3,400
21.....	7,820	23,300	5,610	7,190	4,640	49,600	23,300	19,000	4,540	4,940	898	3,390
22.....	6,870	20,900	5,310	8,630	3,670	43,000	27,600	17,800	4,440	5,260	4,230	4,120
23.....	7,400	18,500	6,450	7,230	4,860	35,400	28,100	16,800	4,060	3,460	4,060	4,750
24.....	4,320	15,900	7,310	8,120	5,340	28,500	30,700	16,300	4,210	844	3,660	3,490
25.....	11,900	12,700	4,230	8,950	6,930	21,600	27,400	19,400	3,390	5,000	3,420	1,320
26.....	21,900	12,600	2,030	7,260	7,810	18,200	22,800	17,600	1,090	4,000	2,650	4,610
27.....	18,100	15,100	4,820	7,050	2,640	17,200	20,000	18,800	4,110	3,910	4,220	4,860
28.....	15,900	16,300	5,100	7,320	5,140	16,900	18,300	17,100	4,260	3,230	325	4,800
29.....	14,900	16,600	5,900	8,380	-----	16,200	17,400	15,400	4,230	3,170	4,680	2,820
30.....	13,600	16,960	5,200	4,310	-----	17,100	14,600	13,800	3,920	2,680	4,790	2,070
31.....	5,310	-----	5,220	8,310	-----	15,400	-----	11,300	-----	2,400	7,290	-----

Daily and monthly discharge, in second-feet, of Connecticut River at Turners Falls, Mass., 1915-1928—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1927-28												
1	1,530	6,880	31,000	22,700	9,790	8,380	21,800	35,900	25,000	18,000	5,430	9,560
2	140	6,760	31,900	17,300	9,210	8,970	20,600	39,200	24,600	13,900	5,060	4,280
3	2,420	20,900	32,300	15,600	10,400	7,580	16,900	37,900	23,000	13,000	5,290	7,730
4	6,250	127,000	24,900	15,300	9,240	3,480	19,300	36,500	21,500	10,300	5,680	11,200
5	7,920	152,000	20,100	13,700	7,890	6,690	35,200	34,000	18,700	9,910	5,120	10,500
6	10,400	114,000	17,400	11,900	10,900	5,990	53,500	32,700	21,100	8,360	12,300	8,940
7	9,820	70,900	17,200	11,100	9,560	5,680	68,700	32,800	29,200	9,720	12,200	6,800
8	8,950	53,000	41,200	10,900	8,560	4,440	74,100	29,700	26,600	2,660	13,100	6,870
9	3,490	40,800	58,700	14,300	9,820	7,070	68,000	27,100	26,000	6,900	10,700	1,120
10	6,770	31,400	50,300	15,800	9,730	5,860	65,500	24,400	26,500	6,040	9,780	6,150
11	6,770	24,700	32,200	15,200	9,520	2,510	61,500	23,700	24,300	5,250	9,810	4,120
12	6,560	19,800	33,100	13,300	6,600	5,100	52,300	18,400	21,300	3,740	9,960	3,450
13	11,300	17,300	30,500	12,600	9,570	7,380	43,700	16,400	18,300	5,990	10,700	3,730
14	19,600	18,500	32,300	13,700	7,690	11,300	41,900	18,600	13,800	9,680	9,880	11,700
15	21,300	18,700	33,600	12,500	14,000	12,900	38,700	15,700	15,400	2,990	8,380	10,600
16	19,000	16,500	26,400	12,000	16,000	12,600	31,700	13,100	14,400	7,100	7,860	7,030
17	17,200	19,800	23,600	8,100	16,200	11,800	25,200	12,000	10,800	5,820	7,550	10,500
18	12,200	26,200	26,200	9,440	13,700	8,770	24,800	12,300	12,100	5,480	8,100	9,290
19	8,720	37,400	15,800	10,800	9,030	12,600	22,000	12,100	12,400	4,790	128	11,400
20	11,600	31,300	14,300	8,690	11,700	10,600	23,300	23,100	8,270	6,470	6,440	11,800
21	17,600	23,400	15,900	10,400	8,480	9,790	19,300	26,800	8,240	6,130	4,720	10,300
22	23,000	22,100	13,800	4,390	7,620	9,110	18,000	22,600	9,550	140	5,810	7,540
23	22,400	19,200	13,600	8,170	9,590	8,350	23,300	24,900	9,000	8,250	5,000	1,890
24	19,500	23,500	13,400	9,650	11,800	8,750	27,200	32,700	4,300	6,980	5,750	6,080
25	17,000	21,900	8,140	16,000	11,400	16,600	27,400	33,700	10,700	6,400	7,620	6,780
26	15,700	23,500	8,190	17,200	8,930	23,900	27,700	35,800	9,190	6,360	12,700	5,000
27	13,100	24,200	9,760	16,700	9,580	37,600	26,800	34,600	9,630	6,580	13,900	4,370
28	11,000	24,700	10,600	15,700	8,840	44,300	27,100	35,500	10,700	7,820	13,900	5,720
29	8,850	31,600	11,900	10,100	8,400	34,100	27,000	32,600	10,700	8,190	11,100	6,190
30	5,590	36,400	15,700	11,400	29,200	29,200	31,400	30,400	13,400	7,610	8,820	1,180
31	7,430	18,100	10,200	29,200	29,200	29,200	26,600	26,600	7,260	10,400	10,400	-----
Month					Maximum	Minimum	Mean	Per square mile	Run-off in inches			
1915												
January					15,200	476	6,280	0.866	1.00			
February					65,600	2,140	13,600	1.68	1.96			
March					31,400	3,660	10,300	1.42	1.64			
April					52,400	5,450	19,800	2.73	3.05			
May					22,700	934	9,800	1.35	1.56			
June					7,580	710	4,030	.656	.62			
July					52,800	3,940	16,400	2.28	2.61			
August					33,300	6,610	14,300	1.97	2.27			
September					8,830	1,320	4,580	.632	.71			
1915-16												
October					7,310	1,390	4,620	.637	.73			
November					9,370	2,310	6,090	.840	.94			
December					33,500	1,590	9,480	1.81	1.51			
January					38,100	2,480	12,600	1.74	2.01			
February					34,000	2,520	14,200	1.96	2.11			
March					39,400	1,720	10,100	1.39	1.60			
April					64,300	25,000	36,900	5.09	5.68			
May					38,500	4,500	19,500	2.69	3.10			
June					22,200	9,880	16,700	2.80	2.57			
July					18,000	4,010	9,970	1.88	1.59			
August					17,100	918	5,540	.764	.88			
September					9,720	1,020	4,800	.662	.74			
The year					64,300	918	12,500	1.72	23.46			

*Daily and monthly discharge, in second-feet, of Connecticut River at Turners Falls,
Mass., 1915-1928—Continued*

Month	Observed			Gain or loss in storage (millions of cubic-feet)	Corrected for storage		
	Maximum	Minimum	Mean		Mean	Per square mile	Run-off in inches
1916-17							
October	9,760	1,020	5,980	-284.2	5,870	0.810	0.93
November	18,600	967	6,980	-371.1	6,830	.942	1.05
December	29,600	1,200	10,700	-264.6	10,600	1.46	1.68
January	9,780	2,460	6,450	-249.1	6,360	.877	1.01
February	9,300	999	4,200	-91.1	4,160	.574	.60
March	54,800	2,760	14,000	+56.1	14,000	1.93	2.22
April	54,100	16,900	32,800	+448.2	32,900	4.54	5.06
May	30,800	10,200	20,100	+1,655.3	20,700	2.86	3.30
June	45,100	5,350	22,400	-44.5	22,400	3.09	3.45
July	15,700	1,470	6,980	-144	6,930	.956	1.10
August	13,700	533	7,100	+118.8	7,150	.986	1.14
September	10,700	558	4,390	-223.4	4,300	.593	.66
The year	54,800	533	11,800	+606.4	11,900	1.64	22.20
1917-18							
October	36,400	1,960	8,130	-555.8	7,930	1.09	1.26
November	40,200	2,200	10,100	+421.5	10,200	1.41	1.57
December	6,240	893	3,750	-772.3	3,460	.477	.55
January	4,660	813	2,980	-615.0	2,750	.379	.44
February	13,900	866	4,950	-215.9	4,870	.672	.70
March	35,200	3,370	15,400	-29.1	15,400	2.12	2.44
April	61,800	15,900	33,900	+838.6	34,200	4.72	5.27
May	34,500	3,460	17,500	+934.2	17,800	2.46	2.84
June	10,300	2,150	7,550	-266.6	7,440	1.03	1.15
July	8,970	582	4,500	+156.6	4,550	.628	.72
August	9,790	552	3,710	-754.7	3,430	.473	.55
September	31,100	630	7,850	-201.7	7,770	1.07	1.19
The year	61,800	552	10,000	-1,060.2	9,980	1.38	18.68
1918-19							
October	31,700	7,200	13,700	+1,103.3	14,100	1.94	2.24
November	42,800	5,150	15,800	+377.5	15,900	2.19	2.44
December	33,400	2,270	12,000	+25.6	12,100	1.67	1.91
January	15,700	4,870	9,090	-341.6	8,970	1.24	1.43
February	9,480	1,920	5,130	-1,104.9	4,670	.644	.67
March	70,500	9,180	23,400	-194.6	23,300	3.21	3.70
April	48,000	11,500	27,800	+922.6	28,200	3.89	4.34
May	56,400	9,550	22,300	+389.4	22,500	3.10	3.57
June	10,500	1,580	6,090	-541.8	5,880	.811	.90
July	7,490	208	3,180	-651.1	2,930	.404	.47
August	3,150	193	2,020	-384.0	1,880	.259	.30
September	16,200	193	5,570	-23.6	5,560	.767	.86
The year	70,500	193	12,200	-428.2	12,200	1.68	22.83
1919-20							
October	12,700	2,200	7,930	+307.1	8,040	1.11	1.28
November	29,800	7,900	17,200	+752.1	17,500	2.41	2.69
December	24,700	1,920	10,400	+143.0	10,400	1.43	1.65
January	5,700	241	3,540	-1,454.7	3,000	.414	.48
February	4,010	241	2,750	-451.8	2,570	.354	.38
March	75,700	2,280	22,900	+92.3	22,900	3.16	3.64
April	72,100	22,000	52,000	+1,220.0	52,500	7.24	8.08
May	51,400	8,780	23,700	+884.7	24,000	3.31	3.82
June	12,000	1,800	7,620	-548.4	7,410	1.02	1.14
July	8,360	1,920	5,080	+241.8	5,170	.713	.82
August	10,000	241	4,390	-742.1	4,120	.568	.65
September	9,830	434	4,760	-588.3	4,530	.625	.70
The year	75,700	241	13,500	-144.3	13,500	1.86	25.33

Daily and monthly discharge, in second-feet, of Connecticut River at Turners Falls, Mass., 1915-1928—Continued

Month	Observed			Gain or loss in storage (millions of cubic-feet)	Corrected for storage		
	Maximum	Minimum	Mean		Mean	Per square mile	Run-off in inches
1920-21							
October.....	32,800	303	8,230	-210.1	8,160	1.13	1.30
November.....	15,100	3,100	8,880	+276.7	8,980	1.24	1.38
December.....	70,600	4,900	20,900	+474.9	21,100	2.91	3.36
January.....	13,500	1,910	8,280	+100.6	8,320	1.15	1.33
February.....	7,810	1,900	5,210	-427.6	5,030	.694	.72
March.....	76,000	6,630	41,000	+1,380.7	41,500	5.72	6.60
April.....	61,800	10,300	24,300	+26.7	24,300	3.35	3.74
May.....	45,700	2,140	11,600	-749.6	11,300	1.56	1.80
June.....	13,300	462	3,540	-155.7	3,480	.480	.54
July.....	16,800	322	5,390	-153.9	5,330	.735	.85
August.....	5,620	148	3,400	-944.8	3,050	.421	.49
September.....	2,820	196	1,560	-149.8	1,500	.207	.23
The year.....	76,000	148	11,900	-531.9	11,900	1.64	22.34
1921-22							
October.....	6,720	196	3,190	+179.0	3,260	.450	.52
November.....	25,500	541	7,860	+420.6	8,020	1.11	1.24
December.....	22,600	2,560	9,510	+36.4	9,520	1.31	1.51
January.....	6,830	216	4,480	-540.2	4,280	.590	.68
February.....	6,870	216	4,580	-265.6	4,470	.617	.64
March.....	70,900	1,630	24,800	+310.1	24,900	3.43	3.95
April.....	114,000	18,700	50,800	+1,942.3	51,500	7.10	7.92
May.....	36,200	3,290	18,000	+637.9	18,300	2.52	2.90
June.....	48,200	4,550	19,200	+241.1	19,300	2.66	2.97
July.....	36,000	1,940	11,100	-128	11,100	1.53	1.76
August.....	9,760	210	5,300	+1.4	5,300	.731	.84
September.....	9,780	216	4,440	-1,062.8	4,030	.556	.62
The year.....	114,000	196	13,600	+1,772.2	13,700	1.89	25.55
1922-23							
October.....	8,160	226	3,940	-1,142.7	3,510	.484	.56
November.....	6,820	276	4,510	-378.8	4,360	.601	.67
December.....	4,720	216	2,750	+82.3	2,780	.383	.44
January.....	14,100	1,490	7,060	+87.4	7,090	.978	1.13
February.....	6,220	216	4,130	-487.9	3,930	.542	.56
March.....	27,200	988	10,100	-64.1	10,000	1.38	1.59
April.....	73,100	10,800	39,900	+1,418.4	40,400	5.57	6.21
May.....	70,600	5,330	25,400	+1,346.6	25,900	3.57	4.12
June.....	18,300	307	6,930	-87.7	6,900	.952	1.06
July.....	5,540	219	3,210	-407.2	3,060	.422	.49
August.....	4,320	216	2,100	-682.5	1,850	.255	.29
September.....	4,950	215	2,370	-954.6	2,000	.276	.31
The year.....	73,100	215	9,360	-1,270.8	9,320	1.29	17.43
1923-24							
October.....	18,700	216	4,750	-109.8	4,710	.650	.75
November.....	29,800	3,170	10,200	+339.3	10,400	1.43	1.60
December.....	44,300	3,790	18,500	+493.9	18,600	2.57	2.96
January.....	27,100	4,340	12,400	+227.8	12,500	1.72	1.98
February.....	8,290	2,690	5,410	-780.1	5,100	.703	.76
March.....	18,200	2,240	8,010	-334.8	7,880	1.09	1.26
April.....	63,100	13,500	38,600	+557.3	38,900	5.37	5.99
May.....	53,000	4,870	28,300	+2,061.8	29,000	4.00	4.61
June.....	9,300	2,260	5,830	-949.1	5,460	.753	.84
July.....	7,130	837	4,250	+120.4	4,290	.592	.68
August.....	7,760	193	3,650	-282.1	3,540	.488	.56
September.....	37,000	1,640	11,600	+683.7	11,800	1.63	1.82
The year.....	63,100	193	12,600	+2,078.3	12,700	1.75	23.81

Daily and monthly discharge, in second-feet, of Connecticut River at Turners Falls, Mass., 1915-1928—Continued

Month	Observed			Gain or loss in storage (millions of cubic-feet)	Corrected for storage		
	Maximum	Minimum	Mean		Mean	Per square mile	Run-off in inches
1924-25							
October	13, 200	782	5, 340	-850	5, 020	.692	.80
November	29, 400	355	7, 540	-488.6	7, 360	1.02	1.14
December	19, 700	679	7, 050	+83.4	7, 080	.977	1.13
January	4, 880	140	3, 100	-1, 243	2, 640	.364	.42
February	46, 600	419	15, 700	+292.6	15, 800	2.18	2.27
March	86, 600	11, 100	28, 300	+646.5	28, 500	3.93	4.53
April	58, 300	13, 600	26, 200	+1, 228.6	26, 700	3.68	4.11
May	19, 800	3, 910	12, 400	-97.0	12, 300	1.70	1.96
June	20, 400	916	7, 130	+464.7	7, 310	1.01	1.13
July	17, 900	2, 490	9, 060	+32.2	9, 070	1.25	1.44
August	10, 200	606	4, 370	-307.3	4, 250	.586	.68
September	12, 800	1, 140	5, 960	-129.7	5, 910	.815	.91
The year	86, 600	140	11, 000	-367.6	11, 000	1.52	20.52
1925-26							
October	21, 400	4, 110	12, 700	+800.2	13, 000	1.79	2.06
November	40, 700	7, 380	19, 800	+259.0	19, 900	2.74	3.06
December	29, 500	2, 000	11, 200	-110.0	11, 100	1.53	1.76
January	16, 400	1, 470	6, 560	-51.7	6, 540	.902	1.04
February	7, 310	870	5, 000	-612.7	4, 740	.654	.68
March	21, 900	2, 290	8, 120	-1, 952.9	7, 390	1.02	1.18
April	73, 600	5, 890	32, 700	+242.4	32, 800	4.52	5.04
May	51, 300	6, 370	25, 000	+2, 324.7	25, 900	3.57	4.12
June	22, 800	3, 100	9, 880	+65.6	9, 910	1.37	1.53
July	19, 400	1, 240	6, 190	-78.2	6, 160	.850	.98
August	5, 840	209	3, 410	-560.0	3, 190	.410	.51
September	7, 480	140	4, 090	-1, 728.9	3, 320	.458	.51
The year	73, 600	140	12, 100	-1, 432.5	12, 000	1.66	22.47
1926-27							
October	21, 900	405	8, 440	+382.6	8, 580	1.18	1.36
November	29, 600	6, 060	16, 300	+536.9	16, 500	2.28	2.54
December	17, 000	2, 030	7, 170	+32.3	7, 180	.990	1.14
January	8, 950	1, 970	5, 620	-1, 024.5	5, 240	.723	.83
February	8, 870	1, 310	5, 600	-732	5, 300	.731	.76
March	60, 600	2, 510	22, 200	+219.3	22, 300	3.08	3.55
April	30, 700	6, 930	17, 300	+1, 212.5	17, 800	2.46	2.74
May	19, 400	8, 820	14, 100	+1, 140.2	14, 500	2.00	2.31
June	12, 400	1, 090	6, 510	+401.7	6, 670	.920	1.03
July	7, 020	844	4, 000	+150.4	4, 060	.560	.65
August	7, 290	325	3, 980	-645.8	3, 740	.516	.59
September	8, 480	623	4, 190	-1, 175.2	3, 740	.516	.58
The year	60, 600	325	9, 630	+498.4	9, 650	1.33	18.08
1927-28							
October	23, 000	140	11, 400	+566.8	11, 600	1.60	1.84
November	152, 000	6, 760	36, 800	+1, 234.8	37, 300	5.14	5.74
December	58, 700	8, 140	23, 600	+79.7	23, 600	3.26	3.76
January	22, 700	4, 390	12, 700	-1, 041.6	12, 300	1.70	1.96
February	16, 200	6, 600	10, 100	-1, 828.0	9, 400	1.30	1.40
March	44, 300	2, 510	13, 200	-151.5	13, 200	1.82	2.10
April	74, 100	16, 900	35, 500	+1, 037.8	35, 900	4.95	5.52
May	39, 200	12, 000	26, 800	+1, 925.8	27, 600	3.81	4.39
June	29, 200	4, 300	16, 300	-21.8	16, 300	2.25	2.51
July	15, 000	110	7, 350	-300.9	7, 240	.999	1.15
August	13, 900	128	8, 490	-344.2	8, 360	1.15	1.33
September	118, 000	1, 120	7, 060	+120.2	7, 110	.981	1.09
The year	152, 000	128	17, 400	+1, 277.2	17, 500	2.41	32.79

CONNECTICUT RIVER AT SUNDERLAND, MASS.

LOCATION.—Water-stage recorder at highway bridge at Sunderland, Franklin County, and 8 miles below mouth of Deerfield River. Zero of gage is 99.00 feet above mean sea level.

DRAINAGE AREA.—8,000 square miles.

RECORDS AVAILABLE.—March, 1904, to September, 1928.

EXTREMES.—Maximum discharge, 165,000 second-feet November 5 (gage height, 34.08 feet); minimum, 550 second-feet October 3 (gage height, 0.20 foot).

1904-1928: Maximum discharge, that of November 5, 1927; minimum, 450 second-feet August 29, 1921 (gage height, 0.00 foot).

REMARKS.—Records fair. Flow regulated by storage reservoirs above station. Discharge December 22 to January 7 and January 20 to March 11 estimated because of ice effect.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.-----	2,720	8,960	36,000	26,000	13,200	12,200	25,300	39,900	29,400	19,900	7,910	13,200
2.-----	1,340	8,420	35,200	22,000	12,900	12,600	22,800	43,100	28,700	18,500	6,270	8,690
3.-----	1,730	11,600	36,800	20,600	13,800	11,900	22,000	42,700	27,500	17,100	5,830	8,160
4.-----	5,620	100,000	30,900	19,500	12,600	6,490	18,500	39,900	25,700	12,600	5,830	15,800
5.-----	8,160	160,000	27,200	18,500	11,000	9,240	28,300	37,700	23,800	12,900	5,300	13,800
6.-----	10,700	144,000	25,700	16,400	14,400	8,160	39,100	37,200	25,700	10,700	13,500	12,600
7.-----	11,600	104,000	20,600	14,400	13,200	7,420	60,100	36,400	34,400	11,000	16,800	9,520
8.-----	11,900	71,400	33,500	13,200	12,900	6,490	70,400	37,200	32,900	5,830	15,400	7,910
9.-----	8,420	50,700	62,700	15,800	13,800	8,420	74,600	32,500	30,200	7,420	15,100	5,100
10.-----	6,950	41,500	61,000	17,800	13,500	9,520	73,000	30,900	34,000	6,720	12,900	6,950
11.-----	8,420	29,000	40,700	17,400	12,600	6,050	67,800	27,500	30,900	6,490	11,000	8,160
12.-----	8,420	29,800	39,900	17,100	10,400	7,910	60,600	28,700	26,000	5,300	11,900	5,300
13.-----	12,900	19,900	36,400	16,400	12,600	12,200	54,400	17,400	23,800	6,490	12,600	5,620
14.-----	18,800	19,500	36,000	15,800	11,600	15,100	47,100	19,500	19,900	8,160	11,600	8,420
15.-----	24,600	21,000	40,700	16,800	17,100	16,800	40,300	19,500	17,400	6,490	11,000	16,100
16.-----	21,700	20,600	36,400	15,400	19,200	14,800	37,900	15,100	19,500	8,160	8,690	8,960
17.-----	19,900	20,200	31,700	12,600	18,800	14,800	35,600	11,900	13,800	7,910	8,960	12,900
18.-----	17,100	30,200	27,500	11,000	17,100	12,200	35,200	13,000	14,100	6,490	8,690	12,900
19.-----	12,600	35,200	24,900	13,200	12,600	13,200	27,900	13,800	14,400	6,050	4,900	11,900
20.-----	11,900	35,600	21,300	11,300	14,400	15,100	26,400	27,000	14,400	4,400	5,830	15,800
21.-----	15,400	29,800	19,200	11,600	11,900	12,200	27,900	30,000	10,100	5,830	7,150	15,800
22.-----	22,000	25,700	19,900	10,400	11,900	11,600	24,900	26,000	10,100	3,760	5,410	11,300
23.-----	24,200	22,000	17,800	11,000	14,800	11,600	25,700	28,500	12,900	7,420	6,270	6,270
24.-----	23,800	21,300	17,100	15,800	16,100	8,960	28,800	37,000	5,830	9,520	6,490	6,490
25.-----	21,700	27,200	11,600	19,200	13,800	15,100	32,100	38,000	10,400	7,660	8,160	8,690
26.-----	18,100	26,400	11,900	19,900	12,600	23,800	31,700	39,500	11,900	7,420	18,500	7,420
27.-----	15,800	28,300	13,800	18,500	12,900	31,700	31,300	39,000	10,400	7,660	28,700	6,270
28.-----	13,200	30,600	15,100	17,400	11,900	42,300	32,500	37,900	11,300	10,100	19,200	6,490
29.-----	12,200	34,000	17,100	13,500	11,300	40,300	33,300	36,800	11,900	11,900	15,800	7,150
30.-----	6,050	37,200	19,900	13,500	-----	35,600	35,200	34,000	16,100	11,000	11,600	5,410
31.-----	10,700	-----	23,100	13,200	-----	31,700	-----	30,200	-----	8,960	11,600	-----

Month	Observed			Gain or loss in storage (millions of cubic-feet)	Corrected for storage		
	Maximum	Minimum	Mean		Mean	Per square mile	Run-off in inches
October.-----	24,600	1,340	13,200	+845	13,500	1.69	1.95
November.-----	160,000	8,420	41,500	+4,180	43,100	5.39	6.01
December.-----	62,700	11,600	28,800	-444	28,600	3.58	4.13
January.-----	26,000	10,400	16,000	-2,587	15,000	1.88	2.17
February.-----	19,200	10,400	13,600	-3,706	12,100	1.51	1.63
March.-----	42,300	6,050	15,700	-767	15,400	1.92	2.21
April.-----	74,600	18,500	39,100	+3,894	40,600	5.08	5.67
May.-----	46,100	11,900	30,600	+4,226	32,200	4.02	4.64
June.-----	34,400	5,830	19,900	-158	19,900	2.49	2.78
July.-----	19,900	3,760	9,630	-574	8,810	1.10	1.27
August.-----	28,700	4,990	10,900	-661	10,800	1.35	1.56
September.-----	16,100	5,100	9,640	-1,031	9,240	1.16	1.29
The year.-----	160,000	1,340	20,600	+3,417	20,700	2.59	35.31

SURFACE WATER SUPPLY, 1928, PART I

CONNECTICUT RIVER AT THOMPSONVILLE, CONN.

LOCATION.—Water-stage recorder in pool above Enfield Dam 1 mile below Thompsonville, Hartford County. Zero of gage is 38.48 feet above mean sea level.

DRAINAGE AREA.—9,740 square miles.

RECORDS AVAILABLE.—July to September, 1928.

EXTREMES.—Maximum stage known, 12.3 feet November 4, 1927.

REMARKS.—Records good. Seasonal storage in Connecticut Lakes, Somerset and Davis Bridge Reservoirs, Mascoma and Sunapee Lakes. Monthly table corrected for storage in all except last two lakes.

Daily and monthly discharge, in second-feet, 1928

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1.	-----	10,900	15,800	11.	-----	13,400	8,740	21.	9,100	8,740	16,700
2.	-----	9,560	13,300	12.	-----	12,100	8,600	22.	6,570	7,880	14,500
3.	-----	9,340	12,100	13.	-----	13,800	7,880	23.	8,840	7,980	9,640
4.	-----	8,440	21,900	14.	-----	12,900	8,040	24.	11,700	8,110	8,840
5.	-----	6,210	19,500	15.	12,300	11,800	11,900	25.	11,200	8,090	9,480
6.	-----	11,500	17,200	16.	11,100	10,600	12,300	26.	9,920	22,600	10,000
7.	-----	19,300	14,900	17.	11,000	9,760	11,400	27.	9,000	39,200	9,260
8.	-----	18,100	11,900	18.	9,760	9,560	14,000	28.	13,500	27,500	7,980
9.	-----	17,500	9,850	19.	8,070	8,580	12,900	29.	15,400	22,000	7,900
10.	-----	14,700	8,470	20.	8,180	7,990	15,100	30.	13,800	17,700	6,180
								31.	12,100	15,800	-----

Month	Observed			Gain or loss in storage (millions of cubic-feet)	Corrected for storage		
	Maximum	Minimum	Mean		Mean	Per square mile	Run-off in inches
July 15-31.	15,400	6,570	10,700	-----	-----	-----	-----
August.	39,200	6,210	13,600	-461	13,400	1.38	1.59
September.	21,900	6,180	11,900	-1,031	11,500	1.18	1.32

MOOSE RIVER AT ST. JOHNSBURY, VT.

LOCATION.—Chain gage at highway bridge three-fourths mile above mouth of river in St. Johnsbury, Caledonia County.

DRAINAGE AREA.—112 square miles.

RECORDS AVAILABLE.—August and September, 1928.

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1928

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1		74	11	138	62	21	50	93
2		43	12	234	530	22	43	80
3		41	13	107	760	23	37	80
4		45	14	66	868	24	52	69
5		36	15	48	485	25	48	65
6		28	16	39	247	26	165	55
7	54	22	17	32	165	27	93	86
8	86	21	18	52	234	28	80	138
9	234	14	19	154	165	29	54	165
10	222	27	20	93	114	30	107	114
						31	114	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
August 7-31	234	32	96.1	0.858	0.80
September	868	14	164	1.46	1.63

SURFACE WATER SUPPLY, 1928, PART I

MASCOMA RIVER AT MASCOMA, N. H.

LOCATION.—Water-stage recorder 250 feet below railroad bridge and 1,500 feet below outlet of Mascoma Lake, in Mascoma, Grafton County.

DRAINAGE AREA.—148 square miles.

RECORDS AVAILABLE.—August, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year, 3,230 second-feet November 5 (gage height, 5.94 feet); minimum, 2.8 second-feet October 2 (gage height, 1.18 feet).

1923-1928: Maximum discharge, 3,700 second-feet March 30, 1925 (gage height, 6.25 feet); minimum, 1.2 second-feet June 28, 1925 (gage height, 1.03 feet).

REMARKS.—Records good. Discharge estimated January 2-4, 16-18, 22-25, 27, 28, 30, 31, February 1, and 3. Flow regulated by 1.5 billion cubic feet of storage developed above gage.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	82	113	558	237	189	203	351	670	426	206	125	123
2.....	58	114	548	299	175	200	296	706	389	244	125	123
3.....	81	126	462	279	153	194	289	720	354	209	125	127
4.....	81	894	358	237	170	191	343	688	318	175	125	142
5.....	91	3,060	310	203	164	189	484	649	285	158	125	142
6.....	91	2,320	292	183	164	186	825	600	305	151	127	140
7.....	91	1,220	286	170	161	183	1,500	548	362	142	127	140
8.....	82	730	444	172	167	180	1,980	484	397	142	127	137
9.....	73	493	853	194	178	178	2,040	417	373	140	127	135
10.....	89	397	1,000	214	178	178	1,540	366	358	135	127	133
11.....	85	343	748	220	178	178	956	322	358	131	129	131
12.....	69	321	574	220	178	175	718	285	318	131	129	131
13.....	96	317	475	217	178	172	688	265	275	129	131	131
14.....	102	289	439	214	172	172	682	247	238	131	131	131
15.....	85	256	518	214	186	172	643	235	201	131	131	131
16.....	75	237	493	200	266	172	600	204	188	129	131	131
17.....	107	228	409	186	317	172	493	165	173	129	131	131
18.....	106	328	358	183	313	175	426	168	165	127	137	129
19.....	106	523	317	189	286	175	377	175	160	127	147	129
20.....	109	638	289	191	279	175	373	221	156	127	145	129
21.....	105	508	275	172	253	172	373	351	151	127	145	127
22.....	98	393	266	159	231	172	381	409	149	127	142	125
23.....	95	336	253	164	226	172	409	413	147	127	142	125
24.....	114	336	234	183	220	172	457	558	145	127	142	123
25.....	114	324	226	223	217	175	480	730	145	127	137	121
26.....	114	303	217	296	217	178	484	868	145	127	137	121
27.....	113	299	205	317	214	205	475	804	147	125	142	121
28.....	110	381	203	310	208	306	475	706	147	127	142	121
29.....	105	467	189	262	205	538	503	616	147	127	142	121
30.....	97	528	200	226	-----	538	606	528	151	127	142	121
31.....	112	-----	200	200	-----	439	-----	462	-----	125	135	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	114	58	94.7	0.640	0.74
November.....	3,060	113	560	3.78	4.22
December.....	1,000	189	394	2.66	3.07
January.....	317	159	217	1.47	1.70
February.....	317	153	208	1.41	1.52
March.....	538	172	216	1.46	1.68
April.....	2,040	289	675	4.56	5.09
May.....	868	165	470	3.18	3.67
June.....	426	145	242	1.64	1.83
July.....	244	125	142	.959	1.11
August.....	147	125	134	.905	1.04
September.....	142	121	129	.872	.97
The year.....	3,060	58	289	1.95	26.64

OTTAUQUECHEE RIVER AT WOODSTOCK, VT.

LOCATION.—Chain gage in Woodstock, Windsor County, half a mile above mouth of South Branch of Ottauquechee River. Zero of gage is 705.408 feet above mean sea level.

DRAINAGE AREA.—126 square miles.

RECORDS AVAILABLE.—June to September, 1928.

EXTREMES.—Maximum stage known, about 20.1 feet during November, 1927.

REMARKS.—Records fair. Discharge estimated September 30. Some diurnal regulation. Small seasonal storage in reservoir at Plymouth. Gage-height record furnished by town of Woodstock.

Daily and monthly discharge, in second-feet, 1928

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1.....		385	49	108	16.....	187	88	67	97
2.....		248	48	94	17.....	150	70	56	106
3.....		187	50	97	18.....	142	60	94	114
4.....		150	300	127	19.....	133	63	86	103
5.....	320	150	89	106	20.....	127	59	78	94
6.....	540	123	248	88	21.....	123	97	32	103
7.....	600	108	150	56	22.....	116	84	60	90
8.....	430	97	121	70	23.....	118	146	108	80
9.....	385	116	92	63	24.....	146	92	112	86
10.....	510	86	92	73	25.....	162	78	92	73
11.....	362	84	162	73	26.....	174	57	187	92
12.....	282	94	187	86	27.....	162	57	174	105
13.....	248	78	116	129	28.....	135	150	133	133
14.....	215	97	103	114	29.....	265	89	129	110
15.....	200	108	78	96	30.....	880	70	116	100
					31.....		62	142	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
June 5-30.....	880	116	274	2.17	2.10
July.....	385	57	111	.881	1.02
August.....	300	32	115	.913	1.05
September.....	133	56	95.5	.758	.85

SUGAR RIVER AT CLAREMONT, N. H.

LOCATION.—Chain gage at highway bridge at edge of Claremont, Sullivan County, and just above mouth of Stevens Brook.

DRAINAGE AREA.—258 square miles.

RECORDS AVAILABLE.—May to December, 1928 (discontinued).

REMARKS.—Records poor. Diurnal regulation. Seasonal storage in Sunapee Lake.

Daily and monthly discharge, in second-feet, 1928

Day	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1		696	322	106	322	159	188	159
2		616	295	127	199	127	178	142
3		576	282	150	210	134	178	199
4		464	221	168	322	94	168	210
5		538	244	134	308	106	178	210
6		776	210	500	256	106	210	221
7		900	188	382	188	120	178	188
8		776	159	322	168	188	168	199
9		616	199	221	142	127	188	159
10		776	188	210	199	120	199	188
11		736	168	142	188	127	178	178
12		616	188	159	142	134	159	178
13		538	322	232	142	88	159	159
14		398	351	188	142	100	178	168
15		430	282	120	106	188	159	106
16		382	295	88	168	127	159	142
17		322	142	168	221	120	150	188
18		295	159	168	221	127	150	414
19		188	142	159	210	336	210	-----
20		210	178	199	150	269	308	-----
21		188	221	134	142	221	308	-----
22		210	199	134	188	210	256	-----
23		232	322	199	150	199	244	-----
24		221	464	188	113	282	178	-----
25		1,030	282	398	168	282	168	-----
26		900	256	142	244	221	199	-----
27		900	322	199	398	142	188	-----
28		816	282	127	322	178	168	-----
29		858	295	282	210	127	188	-----
30		696	500	256	244	142	178	-----
31		696	210	244	-----	188	-----	-----

Month	Maximum	Minimum	Mean	Month	Maximum	Minimum	Mean
May 25-31	1,030	696	842	September	322	106	183
June	900	188	455	October	336	88	168
July	464	127	237	November	308	127	186
August	500	88	208	December 1-18	414	106	189

ASHUELOT RIVER NEAR GILSUM, N. H.

LOCATION.—Water-stage recorder at stone-arch highway bridge on Keene-Newport road, 1 mile below Gilsum, Cheshire County.

DRAINAGE AREA.—71.1 square miles (revised).

RECORDS AVAILABLE.—August, 1922, to September, 1928.

EXTREMES.—Maximum discharge during year, 2,760 second-feet November 4 (gage height, 11.34 feet); minimum, 15 second-feet July 19 (gage height, 1.26 feet).

1922-1928: Maximum discharge, that of November 4, 1927; minimum, approximately 1 second-foot October 6, 1922, and July 10, 1923.

REMARKS.—Records good. Discharge estimated December 4-10, 19-31, January 3-8, 16-31, February 1-14, March 1-22 and April 7-13 because of ice or missing gage-height record.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	40	72	308	388	64	45	218	556	278	175	81	157
2.....	32	70	242	346	62	45	191	648	278	158	78	121
3.....	32	238	215	172	61	43	196	578	245	121	55	178
4.....	99	2,340	194	100	60	42	268	502	199	97	73	289
5.....	105	1,340	180	90	59	40	451	442	196	97	68	216
6.....	71	775	172	85	58	38	672	388	346	81	169	158
7.....	53	502	166	80	56	37	630	338	405	64	175	125
8.....	52	362	171	79	55	37	560	278	330	47	134	99
9.....	42	278	512	127	54	36	440	234	289	37	110	81
10.....	38	209	423	134	53	35	320	199	330	34	92	69
11.....	39	183	362	131	53	36	270	173	278	37	315	60
12.....	39	171	300	121	52	37	280	158	218	44	268	59
13.....	111	148	256	121	52	51	310	136	172	28	152	67
14.....	235	133	315	132	51	346	300	124	236	62	103	92
15.....	141	124	330	126	315	278	315	116	379	71	73	76
16.....	82	112	278	120	396	172	289	102	268	50	55	59
17.....	77	143	227	114	322	120	234	94	189	35	44	69
18.....	66	696	204	110	244	120	194	100	147	28	65	110
19.....	73	624	202	105	180	121	185	308	143	23	118	104
20.....	151	442	180	100	94	104	182	379	152	24	99	100
21.....	266	330	155	95	59	97	165	388	150	29	67	99
22.....	188	268	134	91	44	88	171	330	127	34	54	88
23.....	109	224	126	85	41	85	191	370	112	69	93	78
24.....	108	200	117	82	85	104	236	432	127	52	70	77
25.....	122	183	109	85	76	179	268	370	155	34	85	69
26.....	118	162	104	108	52	379	300	330	138	28	308	83
27.....	108	224	101	97	49	672	322	315	134	147	442	95
28.....	99	308	100	86	48	600	338	300	121	414	322	86
29.....	87	315	109	75	47	423	362	322	113	289	222	75
30.....	73	338	120	67	-----	338	396	315	172	158	179	72
31.....	74	-----	180	68	-----	268	-----	308	-----	105	180	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	266	32	94.5	1.33	1.53
November.....	2,340	70	384	5.40	6.02
December.....	512	100	222	3.12	3.60
January.....	388	67	120	1.69	1.96
February.....	396	41	98.0	1.38	1.49
March.....	672	35	162	2.28	2.63
April.....	672	165	308	4.33	4.83
May.....	648	94	311	4.37	5.04
June.....	405	112	214	3.01	3.36
July.....	414	23	86.2	1.21	1.40
August.....	442	44	140	1.97	2.27
September.....	289	59	104	1.46	1.63
The year.....	2,340	23	187	2.63	35.75

ASHUELOT RIVER AT HINSDALE, N. H.

LOCATION.—Chain gage at highway bridge in Hinsdale, Cheshire County, a quarter of a mile below dam and 1½ miles above mouth of river.

DRAINAGE AREA.—420 square miles (revised).

RECORDS AVAILABLE.—February, 1907, to December, 1909; July, 1914, to September, 1928.

EXTREMES.—Maximum discharge during year, 6,690 second-feet November 4; minimum, 23 second-feet October 2 (gage height, 2.29 feet).
1907–1909; 1914–1928: Maximum discharge, 8,940 second-feet March 29, 1920 (gage height, 9.98 feet); minimum, 5 second-feet August 12, 1923 (gage height, 1.87 feet).

REMARKS.—Records good. Flow, somewhat regulated by storage reservoir.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	112	228	1,560	1,100	442	200	905	2,370	1,150	697	660	1,690
2	26	275	1,150	1,560	167	775	2,510	1,150	735	627	1,000	
3	89	470	952	1,150	500	167	735	2,370	1,210	697	500	1,440
4	284	5,210	860	860	442	167	905	1,500	1,100	470	530	2,370
5	470	6,590	815	735	415	167	1,150	735	952	415	415	2,230
6	365	5,960	775	627	470	137	1,440	697	1,260	500	1,320	1,500
7	255	4,160	735	595	342	137	1,820	1,380	2,370	470	1,690	1,050
8	302	2,090	1,260	660	365	137	1,950	1,150	1,620	390	1,380	815
9	91	1,440	3,260	735	390	137	1,950	952	1,690	311	952	735
10	243	1,100	2,810	735	342	137	1,690	952	1,690	311	775	660
11	228	905	2,090	660	342	137	1,260	815	1,620	293	697	595
12	187	952	1,620	660	275	137	1,100	815	1,320	365	860	470
13	214	815	1,500	660	275	390	1,260	660	952	275	697	365
14	1,050	775	1,820	815	275	660	1,260	595	775	306	530	952
15	860	735	2,230	697	815	1,260	1,260	660	1,500	365	293	952
16	500	627	2,090	627	1,560	905	1,620	530	1,620	415	342	627
17	415	627	1,690	562	1,100	735	1,210	530	1,150	275	320	595
18	342	1,820	1,320	530	952	660	1,000	627	1,100	251	320	1,050
19	302	3,260	1,000	500	660	660	905	775	697	255	365	1,100
20	415	2,660	815	500	530	562	905	1,380	775	187	595	1,050
21	905	1,820	775	470	415	562	815	1,560	735	228	470	1,000
22	905	1,380	735	470	342	562	952	1,320	627	137	415	775
23	735	1,100	697	470	320	500	1,260	1,320	595	530	415	660
24	530	1,000	660	470	735	470	1,620	1,320	697	595	442	627
25	415	1,150	660	500	735	905	1,820	1,620	775	415	390	562
26	390	1,210	660	660	390	1,500	1,820	1,380	697	342	1,820	562
27	365	1,050	660	660	320	2,090	1,820	1,210	595	306	2,960	562
28	365	1,440	660	530	235	2,370	1,820	1,210	627	1,690	2,810	530
29	320	1,560	775	442	200	1,820	1,950	1,260	562	1,950	1,820	500
30	259	1,690	905	500	-----	1,380	2,370	1,320	660	1,820	1,620	390
31	280	-----	1,000	500	-----	1,000	-----	1,320	-----	1,000	1,620	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,050	26	394	0.938	1.08
November	6,590	228	1,800	4.29	4.79
December	3,260	660	1,240	2.95	3.40
January	1,560	442	666	1.59	1.83
February	1,560	200	505	1.20	1.29
March	2,370	137	672	1.60	1.84
April	2,370	735	1,380	3.29	3.67
May	2,510	530	1,190	2.83	3.26
June	2,370	562	1,080	2.57	2.87
July	1,950	137	548	1.30	1.50
August	2,960	293	924	2.20	2.54
September	2,370	365	914	2.18	2.43
The year	6,590	26	941	2.24	30.50

* Estimated because of ice.

OTTER BROOK NEAR KEENE, N. H.

LOCATION.—Water-stage recorder at bridge on Keene-Sullivan highway, $3\frac{1}{2}$ miles northeast of Keene, Cheshire County, and $3\frac{1}{2}$ miles above confluence with Minnewawa Brook.

DRAINAGE AREA.—41.8 square miles (revised).

RECORDS AVAILABLE.—October, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year, 2,000 second-feet November 4 (gage height, 6.87 feet); minimum, 6.8 second-feet October 3 (gage height, 2.12 feet).

1923-1928: Maximum discharge, that of November 4, 1927; minimum, 2 second-feet several days in August and November, 1924.

REMARKS.—Records good, except for periods of ice effect, December 5-7, 19-22, 25-29, January 3-9, and January 16 to March 12, which are poor. Little if any utilization of storage above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	28	126	238	58	30	68	326	144	74	43	93
2	12	32	103	160	58	27	68	368	156	82	40	69
3	7.6	147	95	89	54	26	81	286	129	64	38	174
4	52	1,550	82	80	56	24	119	224	112	43	57	213
5	31	670	74	72	51	24	199	176	127	42	36	138
6	20	321	66	66	50	23	262	149	268	39	156	98
7	17	209	61	62	49	21	258	132	345	31	119	72
8	44	148	317	61	52	20	224	114	204	22	87	54
9	18	121	341	235	54	19	176	100	166	24	66	46
10	19	113	216	72	50	19	129	90	184	26	49	40
11	23	97	148	59	48	18	103	82	149	27	47	34
12	16	87	121	55	47	28	107	75	116	25	34	33
13	98	71	121	56	47	72	121	61	92	24	32	38
14	93	68	219	61	47	311	114	61	107	31	28	52
15	71	64	185	52	287	296	144	57	191	20	20	43
16	47	61	140	49	156	224	121	52	134	24	22	35
17	38	71	117	47	78	191	98	50	90	25	174	39
18	34	506	121	45	55	156	84	52	78	24	22	50
19	45	295	136	43	45	164	87	132	74	23	59	50
20	100	173	126	42	38	129	92	152	75	24	54	56
21	163	130	111	41	36	106	78	152	71	25	38	62
22	105	113	103	40	34	87	89	121	64	12	30	50
23	74	105	98	39	95	57	116	181	58	33	52	44
24	58	89	93	39	197	49	134	171	65	30	40	43
25	49	92	89	86	52	100	149	140	78	24	46	39
26	43	81	86	65	42	188	154	123	68	22	175	48
27	39	133	84	58	38	348	168	112	72	68	250	54
28	33	146	87	56	35	236	186	154	66	251	180	50
29	31	160	101	55	32	144	202	188	62	156	123	44
30	30	150	95	55	-----	105	221	142	78	89	100	41
31	29	-----	93	55	-----	86	-----	154	-----	55	123	-----
Month												
	Maximum			Minimum			Mean			Per square mile		Run-off in inches
October	163			7.6			47.1			1.13		1.20
November	1,550			28			201			4.81		5.37
December	341			61			128			3.06		3.53
January	238			39			72.0			1.72		1.98
February	287			32			66.9			1.60		1.73
March	348			18			107			2.56		2.95
April	262			68			138			3.30		3.63
May	368			50			141			3.37		3.88
June	345			58			121			2.89		3.22
July	251			12			47.1			1.13		1.30
August	250			20			75.5			1.81		2.00
September	213			33			63.4			1.62		1.70
The year	1,550			7.6			101			2.42		32.73

SOUTH BRANCH OF ASHUELOT RIVER AT WEBB, NEAR MARLBORO, N. H.

LOCATION.—Water-stage recorder at bridge one-fourth mile from Webb railroad station, Marlboro, Cheshire County.

DRAINAGE AREA.—36.6 square miles.

RECORDS AVAILABLE.—November, 1920, to September, 1928.

EXTREMES.—Maximum discharge during year, 3,560 second-feet November 4 (gage height, 7.15 feet); minimum, 1.2 second-feet October 1 (gage height, 0.91 foot).

1920-1928: Maximum discharge, that of November 4, 1927; minimum, 0.4 second-foot September 15-17, 1926.

REMARKS.—Records fair except for ice-affected periods, December 3, 4, 19-21, 24-29, January 3-8, and January 16 to March 19, which are poor. Flow regulated by several small storage ponds above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1.2	46	122	320	27	24	50	382	77	47	62	161
2.....	57	28	106	182	27	24	60	333	81	72	78	119
3.....	34	247	100	97	28	24	62	256	100	50	62	275
4.....	36	2,260	92	60	26	23	76	223	96	42	91	404
5.....	34	556	84	54	25	22	100	160	115	42	74	180
6.....	26	237	90	50	26	21	116	115	180	76	302	135
7.....	19	198	88	48	22	20	121	103	220	50	176	120
8.....	6.3	138	520	46	23	20	116	84	135	34	112	107
9.....	8.6	119	370	92	23	19	97	82	97	32	83	100
10.....	20	99	215	97	22	19	73	76	153	29	65	90
11.....	22	104	140	65	22	19	60	79	106	34	76	67
12.....	18	100	134	63	22	20	65	65	84	34	101	68
13.....	154	84	144	61	22	30	78	70	72	26	54	94
14.....	151	82	324	84	21	190	81	69	100	25	48	158
15.....	65	76	229	74	120	150	135	68	217	74	60	90
16.....	36	72	168	58	170	92	102	67	112	47	49	112
17.....	35	88	156	55	130	64	74	64	79	34	44	110
18.....	38	904	146	52	100	64	66	57	70	22	42	200
19.....	52	337	140	50	70	65	64	92	70	20	64	128
20.....	82	184	130	47	47	51	66	115	84	20	53	137
21.....	123	128	120	45	20	45	64	112	78	18	32	125
22.....	82	117	105	44	25	40	71	85	75	23	21	86
23.....	39	104	91	42	24	36	102	122	70	92	41	116
24.....	42	105	86	41	52	52	127	123	54	75	34	114
25.....	50	160	80	43	50	174	127	96	70	58	36	84
26.....	44	111	77	57	30	218	129	104	58	58	624	76
27.....	44	148	74	54	26	250	137	104	53	135	394	79
28.....	42	154	73	46	25	140	188	112	44	440	206	72
29.....	20	169	80	38	24	78	229	119	46	392	153	44
30.....	11	150	189	28	-----	71	249	73	56	144	394	88
31.....	31	-----	155	29	-----	58	-----	88	-----	96	440	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	154	1.2	45.9	1.25	1.44
November.....	2,260	28	244	6.67	7.44
December.....	520	73	149	4.07	4.69
January.....	320	28	68.5	1.87	2.16
February.....	170	21	43.4	1.19	1.28
March.....	250	19	68.5	1.87	2.16
April.....	249	50	103	2.81	3.14
May.....	382	57	119	3.25	3.75
June.....	220	44	95.1	2.60	2.90
July.....	440	18	75.5	2.06	2.38
August.....	624	21	131	3.58	4.13
September.....	404	38	123	3.36	3.75
<i>the year</i>	2,260	1.2	105	2.87	39.22

MILLERS RIVER NEAR WINCHENDON, MASS.

LOCATION.—Water-stage recorder at Nolan's Bridge, half a mile below mouth of Sip Pond Brook and 2 miles west of Winchendon, Worcester County.

DRAINAGE AREA.—80 square miles.

RECORDS AVAILABLE.—June, 1916, to September, 1928.

EXTREMES.—Maximum discharge, 1,520 second-feet November 4 (gage height, 8.30 feet); minimum 30 second-feet October 13 (gage height, 2.82 feet).

1916-1928: Maximum discharge, 1,760 second-feet June 25, 1922 (gage height, 8.65 feet); practically no flow September 20, 1918, and January 14, 1925.

REMARKS.—Records good except those for periods of ice effect, January 2-7, 28-31, February 1-6, 19-22, and 25-27, and for May, which are fair. Discharge estimated October 18, 19, November 30, December 1-3, March 3-11, April 19-21, and July 16-20. Flow regulated by storage in Lake Monomona and other reservoirs.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	55	100	310	295	126	172	102	532	114	103	261	228
2.....	46	116	340	224	132	121	149	488	125	155	230	159
3.....	112	140	330	222	127	120	140	410	101	139	182	271
4.....	136	808	180	248	127	89	143	388	167	94	176	422
5.....	99	837	252	180	103	94	151	354	200	129	137	350
6.....	79	645	299	143	163	100	155	356	368	189	226	319
7.....	71	510	281	117	251	115	182	253	399	165	242	313
8.....	61	404	406	93	257	105	157	190	337	126	241	218
9.....	37	296	420	167	250	100	218	194	228	175	219	156
10.....	94	245	375	231	134	89	234	162	486	193	170	209
11.....	87	213	365	245	117	70	219	182	442	194	183	232
12.....	88	186	396	225	130	128	175	136	390	171	145	206
13.....	164	133	405	163	164	163	123	118	297	112	198	197
14.....	210	168	564	149	221	238	117	165	220	140	208	121
15.....	159	121	516	99	346	191	132	118	254	117	209	134
16.....	107	185	414	156	277	151	186	120	204	175	180	116
17.....	151	213	476	221	147	131	206	102	129	160	180	155
18.....	180	333	384	210	167	112	218	129	143	150	162	215
19.....	150	365	375	200	110	163	200	120	152	120	84	212
20.....	164	262	285	196	131	116	180	107	162	150	141	251
21.....	160	289	262	131	145	112	150	233	180	125	143	193
22.....	143	293	235	83	180	113	128	260	158	110	171	166
23.....	102	300	218	177	226	118	248	241	134	352	193	84
24.....	144	194	203	250	228	126	285	244	110	369	191	160
25.....	108	234	114	332	127	143	324	177	196	311	149	186
26.....	108	182	146	355	108	282	312	142	237	244	565	181
27.....	20	181	189	257	149	322	309	105	207	153	705	182
28.....	118	420	163	146	209	260	323	181	180	196	650	134
29.....	76	373	299	87	202	173	439	142	88	278	519	97
30.....	52	340	405	160	-----	168	482	90	149	289	373	49
31.....	106	-----	300	124	-----	122	-----	164	-----	272	271	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	210	37	112	1.40	1.61
November.....	837	100	302	3.78	4.22
December.....	564	114	320	4.00	4.61
January.....	355	83	190	2.38	2.74
February.....	346	103	174	2.18	2.35
March.....	322	70	145	1.81	2.09
April.....	482	102	213	2.66	2.97
May.....	532	90	213	2.66	3.07
June.....	486	88	219	2.74	3.06
July.....	369	94	182	2.28	2.63
August.....	705	84	249	3.11	3.58
September.....	422	49	197	2.46	2.74
The year.....	837	37	210	2.62	35.67

MILLERS RIVER AT ERVING, MASS.

LOCATION.—Water-stage recorder one-fourth mile below dam at Erving, Franklin County, 8 miles above mouth and below all large tributaries.

DRAINAGE AREA.—372 square miles.

RECORDS AVAILABLE.—August, 1914, to September, 1928.

EXTREMES.—Maximum discharge during year, 6,350 second-feet November 4 (gage height, 5.85 feet); minimum, 10 second-feet October 3 (gage height, 1.02 feet).

1914-1928: Maximum discharge, that of November 4, 1927; minimum, practically no flow at times during 1915 and 1916.

REMARKS.—Records good except those for estimated periods, which are fair.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	184	292	1,440	1,830	* 550	554	529	2,040	628	* 550	874	1,160
2.....	17	309	1,320	1,190	* 530	510	734	1,950	662	* 630	739	1,670
3.....	214	795	1,460	* 1,260	* 510	510	556	1,660	459	* 690	638	2,340
4.....	274	5,180	1,380	* 1,020	* 510	308	595	1,370	* 540	* 630	1,050	2,020
5.....	431	5,760	1,190	* 905	* 420	372	686	1,210	734	* 450	932	1,660
6.....	244	4,450	1,160	* 720	* 480	378	828	1,140	* 1,050	* 660	1,100	* 1,400
7.....	314	3,020	1,110	* 645	508	468	860	962	* 1,800	* 900	1,230	* 1,280
8.....	278	2,130	1,760	602	606	399	905	926	* 1,800	* 600	1,210	* 950
9.....	74	1,570	2,590	814	769	394	1,030	717	* 1,650	* 520	1,140	824
10.....	414	1,200	2,040	802	738	334	903	642	* 1,950	482	910	872
11.....	315	1,040	1,850	872	640	252	856	552	* 1,660	468	* 960	816
12.....	182	916	1,770	796	320	370	807	581	* 1,360	478	* 880	786
13.....	684	642	1,650	738	* 420	501	800	352	* 940	388	* 800	* 660
14.....	1,080	755	2,230	853	516	912	826	561	* 760	562	* 520	* 500
15.....	1,060	718	2,580	570	1,240	1,180	790	444	* 1,220	670	428	* 495
16.....	634	602	2,320	742	1,450	915	938	381	* 1,200	784	478	492
17.....	722	779	2,210	638	1,170	758	880	390	* 1,180	710	320	668
18.....	599	1,730	1,930	731	836	555	786	388	* 1,000	596	444	804
19.....	522	2,080	1,590	674	724	730	757	583	922	* 380	319	964
20.....	621	1,720	1,400	* 580	742	570	781	500	774	* 310	338	1,250
21.....	718	1,460	1,310	* 480	918	572	692	804	767	* 285	434	1,290
22.....	799	1,280	1,130	* 330	741	542	733	882	* 720	290	402	1,080
23.....	448	1,180	996	* 470	896	517	352	932	* 680	1,040	346	811
24.....	662	964	950	506	1,090	546	1,720	1,050	* 520	1,280	384	700
25.....	414	1,120	638	1,270	1,010	814	1,910	832	* 880	1,110	469	758
26.....	383	1,050	648	1,600	* 910	1,410	1,780	784	824	855	2,420	640
27.....	314	1,020	703	1,460	* 800	1,640	1,600	576	740	684	* 3,000	715
28.....	436	1,470	726	1,220	679	1,490	1,720	714	* 620	995	3,470	568
29.....	386	1,670	806	* 990	624	1,250	2,020	826	* 430	1,440	* 2,800	592
30.....	235	1,630	1,280	* 720	-----	946	2,000	554	* 690	1,230	* 2,020	394
31.....	242	-----	1,600	* 620	-----	784	-----	738	-----	1,050	1,560	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,080	17	448	1.20	1.38
November.....	5,750	292	1,620	4.35	4.85
December.....	2,590	638	1,480	3.98	4.59
January.....	1,830	330	869	2.34	2.70
February.....	1,450	320	736	1.98	2.14
March.....	1,640	252	693	1.86	2.14
April.....	2,020	352	1,010	2.72	3.04
May.....	2,040	352	840	2.26	2.61
June.....	1,950	430	972	2.61	2.91
July.....	1,440	285	701	1.88	2.17
August.....	3,470	319	1,050	2.82	3.25
September.....	2,340	394	972	2.61	2.91
The year.....	5,750	17	948	2.55	34.69

* Estimated because of ice or missing gage heights.

SIP POND BROOK NEAR WINCHENDON, MASS.

LOCATION.—Water-stage recorder one-fourth mile below Massachusetts-New Hampshire State line, 1½ miles below outlet of Sip Pond, and 3 miles northwest of Winchendon, Worcester County.

DRAINAGE AREA.—18.8 square miles.

RECORDS AVAILABLE.—May, 1916, to September, 1928.

EXTREMES.—Maximum discharge during year, 340 second-feet November 4 (gage height, 9.62 feet); minimum, 7.2 second-feet October 2, 3, and 6-8 (gage height, 5.41 feet).

1916-1928: Maximum discharge, that of November 4, 1927; minimum, 0.1 second-foot August 24, 1924.

REMARKS.—Records good. Discharge estimated because of ice or missing record February 10, 11, 20-23, and March 4, 18-24, April 29, 30, May 1, 2, and August 19. Flow regulated by storage in Pearly and Sip Ponds.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	9.8	18	71	88	36	22	32	160	38	32	42	85
2.....	7.5	17	60	88	28	21	36	140	36	31	38	75
3.....	9.8	28	64	68	32	18	32	124	33	24	35	85
4.....	13	242	55	55	32	16	29	98	36	18	35	151
5.....	15	269	54	44	12	14	35	83	35	25	30	146
6.....	13	178	49	37	28	16	52	73	54	26	52	111
7.....	7.2	133	42	28	25	14	62	69	80	25	80	83
8.....	9.5	99	57	26	20	13	60	57	74	22	74	66
9.....	8.2	78	105	38	22	13	62	51	61	28	58	43
10.....	15	68	103	34	18	14	51	42	78	21	42	42
11.....	14	60	87	34	15	8.2	44	36	80	20	66	34
12.....	9.8	53	78	32	17	14	38	35	62	18	74	34
13.....	28	45	74	30	27	19	40	32	41	18	62	32
14.....	28	45	100	32	23	26	40	36	45	26	44	38
15.....	44	42	120	32	32	26	46	28	60	38	36	48
16.....	42	37	106	36	45	34	57	28	60	50	34	42
17.....	35	36	101	32	40	33	49	23	50	37	29	40
18.....	28	74	86	29	38	35	43	24	40	28	28	44
19.....	30	101	75	27	32	50	35	30	38	25	35	49
20.....	36	87	64	25	29	65	38	41	37	25	32	54
21.....	39	71	55	38	29	55	41	48	37	24	24	60
22.....	42	57	44	20	29	50	41	42	36	22	24	53
23.....	34	53	41	28	29	40	66	45	32	51	26	40
24.....	32	48	46	23	32	30	81	51	30	63	22	38
25.....	26	54	42	43	40	26	93	51	36	53	26	32
26.....	25	54	37	59	36	71	97	45	36	38	98	28
27.....	21	56	34	52	30	85	100	42	29	34	187	28
28.....	19	69	26	50	28	72	111	45	27	49	146	27
29.....	19	72	34	36	22	54	120	43	23	74	107	26
30.....	14	74	46	42	-----	43	140	40	33	66	82	20
31.....	20	-----	62	35	-----	40	-----	42	-----	48	84	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	44	7.2	22.4	1.19	1.37
November.....	269	17	77.3	4.11	4.59
December.....	120	26	65.1	3.46	3.99
January.....	88	20	40.0	2.13	2.46
February.....	45	12	28.5	1.52	1.64
March.....	85	8.2	33.5	1.78	2.05
April.....	140	29	59.0	3.14	3.50
May.....	160	23	55.0	2.93	3.38
June.....	80	23	45.2	2.40	2.68
July.....	74	18	34.2	1.82	2.10
August.....	187	22	56.5	3.01	3.47
September.....	151	20	55.1	2.93	3.27
The year.....	269	7.2	47.6	2.53	34.50

SURFACE WATER SUPPLY, 1928, PART I

PRIEST BROOK NEAR WINCHENDON, MASS.

LOCATION.—Staff gage at highway bridge 3 miles above confluence with Millers River and $3\frac{1}{2}$ miles west of Winchendon, Worcester County.

DRAINAGE AREA.—18.8 square miles.

RECORDS AVAILABLE.—May, 1916, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,000 second-feet November 4 (gage height, 6.8 feet); minimum, 5.3 second-feet October 1 (gage height, 2.57 feet).

1916-1928: Maximum discharge, that of November 4, 1927; minimum, 0.4 second-foot several times during 1921, 1924, and 1925.

REMARKS.—Records good except for ice-affected periods, December 17-28, January 2-6, and January 16 to March 12, which are fair.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.3	15	76	127	22	21	30	160	39	26	55	76
2	7.9	15	66	94	19	19	27	143	33	32	34	117
3	6.0	82	66	87	21	20	24	127	33	36	25	86
4	22	790	58	47	19	13	32	106	33	27	46	164
5	19	726	50	26	24	10	44	94	36	22	34	147
6	9.1	256	43	30	13	16	64	65	66	34	54	124
7	6.5	169	36	32	13	22	76	64	100	49	106	62
8	11	113	76	33	14	20	76	58	100	41	143	49
9	14	65	160	26	19	22	71	49	87	27	106	43
10	19	40	169	29	22	20	60	41	100	21	66	30
11	15	47	120	32	22	20	43	37	87	18	39	27
12	13	49	87	27	24	10	37	34	66	18	61	28
13	37	41	65	26	10	16	50	32	36	19	41	29
14	82	34	94	30	31	26	48	26	24	20	27	37
15	82	33	127	39	52	46	60	16	87	71	22	36
16	65	33	100	40	52	41	63	16	82	76	17	36
17	51	39	87	28	39	43	61	21	76	55	16	30
18	41	100	66	26	26	30	46	22	62	37	16	49
19	32	188	54	35	21	21	44	34	46	24	30	55
20	26	160	46	32	24	34	42	54	39	21	27	62
21	47	100	39	27	26	44	43	82	21	20	33	66
22	57	63	34	13	26	36	54	66	26	21	18	52
23	51	51	27	15	32	49	66	60	29	57	13	41
24	36	44	25	21	35	56	100	71	29	76	16	30
25	20	51	23	45	44	49	100	56	46	65	16	27
26	18	55	22	54	25	76	100	46	39	43	143	27
27	18	71	22	46	22	100	100	40	26	32	352	34
28	18	106	21	36	25	100	100	40	24	49	234	24
29	18	87	27	29	22	87	127	44	24	143	147	25
30	16	100	61	26	-----	52	143	40	42	143	110	18
31	16	-----	61	26	-----	39	-----	40	-----	106	86	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	82	5.3	28.3	1.51	1.74
November	790	15	124	6.60	7.36
December	169	21	64.8	3.45	3.98
January	127	13	38.2	2.03	2.34
February	52	10	25.7	1.37	1.48
March	100	10	37.4	1.99	2.29
April	143	24	64.4	3.43	3.83
May	160	16	57.5	3.06	3.53
June	100	21	51.3	2.73	3.05
July	143	18	46.1	2.45	2.82
August	352	13	68.8	3.66	4.22
September	164	18	54.4	2.89	3.22
The year	790	5.3	55.0	2.93	39.86

EAST BRANCH OF TULLY RIVER NEAR ATHOL, MASS.

LOCATION.—Staff gage at highway bridge half a mile below mouth of Lawrence Brook and $3\frac{1}{2}$ miles north of Athol, Worcester County.

DRAINAGE AREA.—50.2 square miles.

RECORDS AVAILABLE.—June, 1916, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,610 second-feet November 4 (gage height, 5.10 feet); minimum, 11 second-feet October 3 and 4 (gage height, 0.62 foot).

1916–1928: Maximum discharge, that of November 4, 1927; minimum, 2.0 second-feet September 16, 1926 (gage height, 0.20 foot).

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	15	32	221	305	62	47	81	322	122	76	175	234
2.....	13	33	209	500	54	42	67	340	116	86	146	209
3.....	11	131	209	209	48	39	76	275	109	92	146	234
4.....	15	1,070	197	146	47	34	86	234	97	81	221	400
5.....	42	1,090	155	109	50	33	109	197	97	76	186	380
6.....	39	685	146	97	54	29	71	175	155	92	197	290
7.....	32	440	146	86	44	24	146	155	234	92	247	221
8.....	27	308	197	81	48	24	155	137	234	86	234	155
9.....	24	247	360	86	67	24	155	122	209	58	209	122
10.....	35	197	275	92	67	29	130	109	275	45	165	103
11.....	34	165	234	86	62	23	103	97	275	48	165	86
12.....	29	146	209	86	58	26	92	97	209	50	186	81
13.....	81	137	209	81	50	46	97	86	155	45	130	76
14.....	197	116	261	86	54	58	62	81	137	67	103	71
15.....	175	97	340	103	109	155	137	76	186	186	76	71
16.....	130	92	290	81	175	130	146	71	234	175	62	71
17.....	103	92	275	86	130	116	122	67	234	116	50	71
18.....	86	247	234	86	109	109	109	67	137	81	49	97
19.....	67	420	197	71	86	86	103	92	122	58	62	122
20.....	76	322	155	76	86	76	109	122	116	44	76	146
21.....	97	247	146	67	86	67	109	146	109	50	71	165
22.....	97	209	130	62	67	62	130	137	97	71	62	137
23.....	92	175	130	58	81	58	165	146	92	165	54	109
24.....	81	155	103	62	109	58	247	146	92	247	54	92
25.....	62	165	92	71	116	165	261	165	103	175	58	76
26.....	54	175	81	81	97	247	261	137	92	130	305	71
27.....	46	186	76	165	76	340	275	130	86	109	835	67
28.....	43	209	71	130	62	380	305	130	76	165	568	62
29.....	39	221	92	103	50	186	305	137	67	360	400	58
30.....	36	261	155	86	-----	146	322	130	81	305	290	58
31.....	34	-----	186	71	-----	103	-----	130	-----	247	-----	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	197	11	61.7	1.23	1.42
November.....	1,090	32	269	5.36	5.98
December.....	360	71	186	3.71	4.28
January.....	500	58	113	2.25	2.59
February.....	175	44	76	1.51	1.63
March.....	380	23	95.5	1.90	2.19
April.....	322	62	151	3.01	3.36
May.....	340	67	144	2.87	3.31
June.....	275	67	145	2.89	3.22
July.....	360	44	119	2.37	2.73
August.....	835	49	188	3.75	4.32
September.....	400	58	138	2.75	3.07
The year.....	1,090	11	140	2.79	38.10

MOSS BROOK AT WENDELL DEPOT, MASS.

LOCATION.—Staff gage one-fourth mile above confluence with Millers River and one-fourth mile north of Wendell Depot, Franklin County.

DRAINAGE AREA.—12.2 square miles.

RECORDS AVAILABLE.—June, 1916, to September, 1928.

EXTREMES.—Maximum discharge during year, 775 second-feet November 4 (gage height, 5.2 feet); minimum, 1.8 second-feet October 2 (gage height, 1.11 feet).

1916-1928: Maximum discharge, that of November 4, 1927; minimum, 0.6 second-foot September 17 and 20, 1926 (gage height, 0.89 foot).

REMARKS.—Records good. Discharge estimated December 23-29, January 2-6, 18, 20-31, February 1-7, 9-13, 19-22, 25-29, March 1 and 3-12 because of ice, and September 30 because of missing record.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	2.7	8.0	51	88	15	17	23	112	32	32	37	39
2.....	2.5	7.2	62	88	14	14	21	88	28	21	29	30
3.....	2.7	49	82	76	14	14	20	67	24	16	17	82
4.....	14	574	60	60	14	13	27	57	21	14	24	146
5.....	14	525	47	46	14	12	29	49	31	15	30	70
6.....	9.9	247	36	35	14	13	33	39	49	27	33	48
7.....	8.0	132	28	28	16	12	39	35	64	23	36	37
8.....	6.3	51	30	21	18	12	39	32	59	17	29	28
9.....	6.3	39	112	19	18	11	36	31	44	11	18	22
10.....	9.7	35	62	18	15	11	37	29	162	11	16	18
11.....	8.0	28	44	19	16	11	38	27	88	16	16	16
12.....	6.8	27	37	18	16	12	38	22	62	13	16	14
13.....	78	24	46	21	19	16	39	20	42	11	13	14
14.....	68	21	73	24	20	29	44	19	45	23	11	16
15.....	48	19	82	28	41	36	62	18	139	22	9.4	17
16.....	21	18	88	30	51	41	55	17	82	15	7.6	14
17.....	16	24	75	27	34	37	41	16	59	7.6	6.7	18
18.....	14	94	58	20	32	25	35	16	51	5.6	7.6	16
19.....	12	82	48	16	27	25	32	33	94	3.5	7.6	23
20.....	16	62	39	14	21	25	35	42	100	7.2	7.0	45
21.....	27	51	35	14	19	21	33	38	59	17	5.6	47
22.....	29	41	32	14	20	20	36	38	37	46	4.9	33
23.....	22	33	30	14	47	17	64	60	33	50	8.3	29
24.....	16	33	27	16	37	22	106	94	35	39	7.6	17
25.....	14	33	25	39	30	36	94	58	32	30	6.3	15
26.....	11	32	24	42	18	52	82	39	28	20	340	13
27.....	9.9	51	22	35	16	74	82	42	28	13	207	12
28.....	9.4	44	22	29	16	60	100	36	26	70	100	12
29.....	8.9	58	21	26	16	49	132	42	30	82	66	11
30.....	9.4	56	21	20	-----	35	125	39	31	75	58	10
31.....	8.7	-----	30	18	-----	27	-----	35	-----	52	47	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	78	2.5	17.1	1.40	1.61
November.....	574	7.2	83.3	6.83	7.62
December.....	112	21	46.7	3.83	4.42
January.....	88	14	31.1	2.55	2.94
February.....	51	14	22.3	1.83	1.97
March.....	74	11	25.8	2.11	2.43
April.....	132	20	52.6	4.31	4.81
May.....	112	16	41.6	3.41	3.93
June.....	162	21	53.8	4.41	4.92
July.....	82	3.5	26.0	2.13	2.46
August.....	340	4.9	39.4	3.23	3.72
September.....	146	10	30.4	2.49	2.78
The year.....	574	2.5	39.2	3.21	43.61

DEERFIELD RIVER AT CHARLEMONT, MASS.

LOCATION.—Water-stage recorder 1 mile below Charlemont, Franklin County.

DRAINAGE AREA.—362 square miles.

RECORDS AVAILABLE.—June, 1913, to September, 1928.

EXTREMES.—Maximum discharge during year, 36,000 second-feet November 3 (gage height, 13.33 feet); minimum, 74 second-feet October 2 (gage height, 1.53 feet).

1913-1928: Maximum discharge, 50,600 second-feet July 8, 1913 (gage height, 15.7 feet); practically no flow June 17, 1921 (gage height, 0.70 foot).

REMARKS.—Records good except those estimated for period, May 12-16, which are fair. Flow regulated by Somerset and Davis Bridge Reservoirs.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	424	1,060	1,680	2,670	1,940	1,660	484	2,520	1,030	844	1,140	744
2.....	192	1,050	1,710	1,870	1,820	1,730	1,036	2,560	1,390	964	981	358
3.....	828	9,410	1,610	1,940	1,950	1,630	1,170	2,030	1,320	964	814	655
4.....	1,110	16,800	1,220	1,930	1,760	982	1,540	1,800	836	466	662	1,130
5.....	880	2,870	1,330	1,850	1,170	1,390	2,340	1,410	1,370	858	393	1,220
6.....	696	986	1,536	1,990	1,310	1,460	2,890	1,090	2,890	1,050	1,350	1,190
7.....	778	1,430	1,560	1,960	1,610	1,560	2,690	998	3,910	680	1,160	1,170
8.....	558	1,360	4,790	1,330	1,920	1,370	2,640	942	2,290	316	1,110	966
9.....	132	1,270	3,770	1,500	2,160	1,210	1,900	879	2,400	817	1,040	644
10.....	820	1,200	2,300	1,650	1,820	1,180	1,350	683	3,240	1,110	1,080	1,090
11.....	971	1,110	1,730	1,640	1,550	456	1,260	676	1,930	1,130	830	1,140
12.....	547	805	1,780	1,610	975	1,080	1,320	440	1,400	1,040	288	1,230
13.....	2,200	462	2,160	1,800	1,280	1,150	1,160	320	1,320	1,000	718	1,160
14.....	1,290	806	4,000	1,680	1,480	1,330	1,060	400	1,140	786	977	958
15.....	552	1,080	3,450	1,170	2,450	1,280	1,110	580	1,080	272	1,030	941
16.....	248	975	2,510	1,430	1,890	1,000	1,000	640	702	702	1,070	464
17.....	719	1,080	2,000	1,700	1,560	689	972	500	350	1,030	1,080	684
18.....	832	2,960	1,290	1,880	1,230	447	942	619	851	1,070	1,080	1,280
19.....	956	1,440	1,720	1,800	936	920	629	1,160	1,250	972	420	1,120
20.....	974	688	1,770	1,790	1,170	990	772	1,140	1,200	1,090	930	1,240
21.....	968	998	1,710	1,750	1,650	1,040	726	714	1,170	965	1,080	1,150
22.....	565	1,230	1,680	1,520	1,730	1,170	601	696	1,170	754	1,040	1,110
23.....	368	1,180	1,710	1,810	1,780	1,150	1,160	1,200	838	1,240	1,150	1,090
24.....	714	888	1,590	1,960	2,030	1,190	1,110	1,200	430	1,100	1,030	1,100
25.....	826	1,400	1,130	3,620	1,680	1,460	1,070	1,300	1,130	1,120	1,110	1,220
26.....	835	852	1,300	2,390	1,160	2,050	1,050	1,040	1,000	1,090	3,530	1,190
27.....	906	1,730	1,450	2,050	1,330	2,670	1,170	866	895	1,170	2,190	1,210
28.....	970	1,970	1,530	1,610	1,560	2,060	1,170	1,030	1,030	1,540	1,420	1,190
29.....	460	2,100	2,530	1,110	1,580	1,600	1,130	1,340	1,290	1,010	1,260	1,080
30.....	148	1,860	2,240	1,410	-----	1,240	1,420	798	1,290	997	1,020	813
31.....	664	-----	2,040	1,700	-----	897	-----	1,030	-----	1,140	1,170	-----

Month	Observed			Gain or loss in storage (millions of cubic-feet)	Corrected for storage		
	Maximum	Minimum	Mean		Mean	Per square mile	Run-off in inches
October.....	2,200	132	746	+278	850	2.35	2.71
November.....	16,800	462	2,100	+2,945	3,240	8.95	9.99
December.....	4,790	1,130	2,030	-524	1,830	5.06	5.83
January.....	3,620	1,110	1,810	-1,545	1,230	3.40	3.92
February.....	2,450	936	1,600	-1,878	853	2.36	2.54
March.....	2,670	447	1,290	-616	1,060	2.93	3.38
April.....	2,890	484	1,300	+2,856	2,400	6.63	7.40
May.....	2,560	320	1,050	+2,301	1,910	5.28	6.09
June.....	3,910	350	1,410	-136	1,360	3.76	4.20
July.....	1,540	272	946	-273	844	2.33	2.69
August.....	3,530	288	1,100	-117	1,060	2.93	3.38
September.....	1,280	358	1,020	-1,151	574	1.59	1.77
The year.....	16,800	132	1,360	+2,140	1,430	3.95	53.90

SURFACE WATER SUPPLY, 1928, PART I

WARE RIVER AT COLDBROOK, MASS.

LOCATION.—Water-stage recorder at bridge at White Valley 1 mile west of Coldbrook, Worcester County. Zero of gage is at 631.91 feet above mean sea level.

DRAINAGE AREA.—98.2 square miles.

RECORDS AVAILABLE.—January to September, 1928.

EXTREMES.—Maximum discharge known, 1,300 second-feet November 4, 1927 (crest of flood).

REMARKS.—Records good. Discharge estimated January 31, February 1-14, 18-29, and March 1-10 because of ice, and September 10-30 because of by-passed water. Some discharge measurements furnished by Metropolitan District Water Supply Commission.

Daily and monthly discharge, in second-feet, 1928

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		183	118	183	733	219	257	122	233
2		168	108	165	667	222	261	136	168
3		168	96	165	549	199	212	120	219
4		138	91	155	431	177	171	112	335
5		122	86	168	361	273	148	106	294
6		131	84	196	307	357	165	118	233
7		118	72	186	277	383	158	127	193
8		145	76	233	261	340	131	131	158
9		253	74	249	233	307	114	124	138
10		199	77	189	215	695	104	110	120
11		183	153	174	209	785	108	108	110
12		177	91	174	205	648	108	100	91
13		171	116	186	196	444	100	84	96
14		136	186	177	171	290	215	76	102
15		384	209	222	163	361	366	74	102
16		438	177	212	150	345	307	69	100
17		335	163	189	143	312	222	66	104
18		273	165	171	148	249	165	71	110
19		209	141	153	168	307	136	84	114
20		199	143	148	241	340	131	72	143
21		189	141	143	372	330	177	66	138
22		180	141	180	335	307	160	65	116
23		171	131	345	312	265	277	63	106
24		245	145	563	307	273	286	63	96
25		226	281	742	273	273	229	65	91
26		186	330	733	245	245	177	431	87
27		160	366	520	261	215	145	603	91
28		138	307	499	257	186	180	492	91
29		122	269	667	277	180	209	372	87
30	170		226	733	265	245	160	265	82
31	183		202		241		138	273	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
February	438	118	198	2.02	2.18
March	366	72	160	1.63	1.88
April	742	143	294	2.99	3.34
May	733	143	289	2.94	3.39
June	785	177	326	3.32	3.70
July	366	100	184	1.87	2.16
August	603	63	154	1.57	1.81
September	335	82	138	1.41	1.57

WARE RIVER AT GIBBS CROSSING, MASS.

LOCATION.—Water-stage recorder at Gibbs Crossing, Hampshire County, three-fourths mile above mouth of Beaver Brook.

DRAINAGE AREA.—199 square miles (revised determination).

RECORDS AVAILABLE.—August, 1912, to September, 1928.

EXTREMES.—Maximum discharge during year, 2,840 second-feet November 4 (gage height, 6.23 feet); minimum, 38 second-feet October 2 (gage height, 1.58 feet).

1912-1928: Maximum discharge, 2,950 second-feet April 8, 1924 (gage height, 6.25 feet); minimum, 5 second-feet October 26, 1914.

REMARKS.—Records good except those for periods of ice effect, January 17-25, 29-31 February 1-8, 21, 22, 27, 28, and March 5-9, which are fair.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	92	240	518	818	322	295	347	1,220	357	459	228	443
2.....	99	178	480	715	288	286	372	1,100	309	545	217	342
3.....	181	209	661	605	284	228	318	945	309	423	225	433
4.....	209	2,110	626	464	189	209	304	818	337	286	195	782
5.....	188	2,500	551	407	265	195	304	699	367	304	202	605
6.....	217	2,040	507	357	312	183	328	605	563	347	273	486
7.....	174	1,420	470	328	269	162	357	593	619	314	295	402
8.....	121	945	915	347	382	148	387	513	534	236	273	328
9.....	155	675	1,560	418	791	127	443	456	470	352	252	269
10.....	277	518	1,050	407	545	118	397	428	1,070	265	225	304
11.....	269	486	915	367	387	149	328	392	1,220	181	174	286
12.....	192	459	925	347	337	236	328	372	905	232	146	225
13.....	286	423	855	347	352	252	367	314	654	217	217	213
14.....	755	428	1,220	372	309	428	347	377	529	309	213	198
15.....	612	387	1,370	407	1,080	491	402	342	647	661	135	206
16.....	518	367	1,070	402	987	387	464	282	619	569	135	171
17.....	428	357	1,150	337	661	332	392	261	513	433	132	181
18.....	337	715	987	327	513	318	352	236	459	332	85	174
19.....	318	966	791	308	402	352	273	228	502	252	92	198
20.....	387	800	675	314	314	332	314	382	587	252	195	357
21.....	470	691	619	218	297	290	240	683	545	347	178	433
22.....	423	557	557	212	279	295	295	557	507	314	152	367
23.....	357	475	518	298	475	286	739	480	454	443	137	236
24.....	352	418	428	255	747	260	1,220	480	454	518	101	286
25.....	309	587	392	895	593	480	1,320	433	518	428	121	282
26.....	265	551	392	925	459	640	1,160	377	449	342	1,100	244
27.....	228	545	407	633	399	668	956	407	377	248	1,600	209
28.....	244	633	372	470	352	647	925	459	347	290	1,020	202
29.....	165	626	418	322	332	545	1,270	428	277	372	723	225
30.....	168	605	764	322	-----	454	1,270	382	387	352	534	143
31.....	256	-----	668	322	-----	407	-----	377	-----	382	529	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	755	92	292	1.47	1.79
November.....	2,500	178	730	3.67	4.16
December.....	1,560	372	736	3.70	4.27
January.....	925	212	428	2.15	2.48
February.....	1,030	189	444	2.23	2.40
March.....	668	118	330	1.66	1.91
April.....	1,320	240	551	2.77	3.09
May.....	1,220	228	504	2.53	2.92
June.....	1,220	277	530	2.66	2.96
July.....	661	181	355	1.78	2.05
August.....	1,600	85	326	1.64	1.89
September.....	782	143	308	1.55	1.73
The year.....	2,500	85	461	2.31	31.50

SURFACE WATER SUPPLY, 1928, PART I

CHICOPEE RIVER AT BIRCHAM BEND, MASS.

LOCATION.—Water-stage recorder at dam at Bircham Bend, Hampden County, three-fourths mile below Higher Brook.

DRAINAGE AREA.—704 square miles.

RECORDS AVAILABLE.—August to September, 1928.

REMARKS.—Records good. Some discharge measurements furnished by Metropolitan District Water Supply Commission.

Daily and monthly discharge, in second-feet, 1928

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1.-----		1,560	11.-----	911	1,000	21.-----	617	1,220
2.-----		1,260	12.-----	680	784	22.-----	480	920
3.-----		1,460	13.-----	1,020	766	23.-----	495	902
4.-----		2,390	14.-----	746	782	24.-----	526	1,080
5.-----	824	2,260	15.-----	654	689	25.-----	233	802
6.-----	1,230	2,000	16.-----	648	515	26.-----	2,200	770
7.-----	1,270	1,580	17.-----	458	917	27.-----	3,490	796
8.-----	1,210	1,260	18.-----	354	840	28.-----	3,100	650
9.-----	1,070	1,020	19.-----	396	866	29.-----	2,460	681
10.-----	890	1,300	20.-----	830	1,090	30.-----	1,950	449
						31.-----	1,950	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
August 5-31.-----	3,490	233	1,140	1.62	1.63
September-----	2,390	449	1,090	1.55	1.73

SWIFT RIVER AT WEST WARE, MASS.

LOCATION.—Water-stage recorder 1,000 feet below West Ware railroad station, Hampshire County, and 3 miles below confluence of East and West Branches.

DRAINAGE AREA.—186 square miles.

RECORDS AVAILABLE.—July, 1910, to September, 1928.

EXTREMES.—Maximum discharge during year, 2,230 second-feet November 6 (gage height, 8.60 feet); minimum, 103 second-feet October 3 (gage height, 2.29 feet).

1910-1928: Maximum discharge, 2,390 second-feet April 7, 1923 (gage height, 9.08 feet); minimum, 22 second-feet September 22, 1924.

REMARKS.—Records good. Discharge estimated because of missing gage heights December 26-30, February 18, 19, and March 25 to April 1, and because of ice January 21-25, 29-31, and February 1-5. Numerous lakes, ponds, and reservoirs above have considerable storage.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	112	162	629	800	298	301	420	1,020	401	414	314	526
2.....	107	167	684	800	274	281	483	992	388	414	298	441
3.....	100	236	674	705	262	262	428	768	388	375	267	512
4.....	131	1,260	705	584	262	229	375	674	362	328	252	705
5.....	180	2,140	669	540	286	231	334	599	388	284	252	752
6.....	169	2,090	614	455	291	202	349	540	375	286	311	644
7.....	160	1,510	555	428	286	197	375	483	629	272	362	555
8.....	167	1,060	690	414	375	193	414	441	614	252	349	455
9.....	178	784	928	414	483	191	414	414	584	233	326	375
10.....	193	644	1,020	441	469	189	401	388	832	215	288	316
11.....	195	570	928	414	441	193	388	362	1,160	229	267	272
12.....	189	512	832	401	388	200	375	362	1,120	269	255	250
13.....	284	455	784	388	326	252	428	336	864	245	236	236
14.....	483	414	896	414	308	388	455	318	690	291	206	233
15.....	570	401	1,020	428	555	512	497	296	659	414	184	233
16.....	497	375	1,020	414	705	512	497	286	720	401	167	229
17.....	428	375	992	388	674	469	455	274	752	349	153	222
18.....	349	614	928	375	560	414	401	272	659	281	147	238
19.....	306	896	800	362	460	362	362	301	599	233	149	255
20.....	308	896	720	362	388	336	336	375	584	238	138	306
21.....	324	784	644	257	324	316	331	455	555	264	131	334
22.....	331	674	584	238	326	301	388	469	512	250	136	324
23.....	314	614	540	257	414	311	629	455	469	316	131	306
24.....	284	526	483	267	555	314	896	469	469	388	127	269
25.....	264	555	414	540	540	430	1,020	441	469	388	153	238
26.....	243	570	410	629	497	570	992	414	469	336	570	222
27.....	220	599	390	690	455	650	864	414	441	276	1,020	215
28.....	204	629	390	584	401	680	896	414	401	334	1,060	211
29.....	191	644	470	497	328	610	992	469	362	455	896	206
30.....	175	659	540	388	-----	500	1,060	469	388	428	705	200
31.....	160	-----	629	324	-----	450	-----	441	-----	362	599	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	570	105	252	1.35	1.56
November.....	2,140	162	727	3.91	4.36
December.....	1,020	390	693	3.73	4.30
January.....	800	238	458	2.46	2.84
February.....	705	262	411	2.21	2.38
March.....	680	189	356	1.91	2.20
April.....	1,060	331	542	2.91	3.25
May.....	1,020	272	465	2.50	2.88
June.....	1,160	362	577	3.10	3.46
July.....	455	215	317	1.70	1.96
August.....	1,060	127	337	1.81	2.09
September.....	752	200	343	1.84	2.05
The year.....	2,140	105	456	2.45	33.33

SURFACE WATER SUPPLY, 1928, PART I

QUABOAG RIVER AT WEST BRIMFIELD, MASS.

LOCATION.—Water-stage recorder at highway bridge at West Brimfield, Hampden County, one-third mile above mouth of Blodgett Mill Brook.

DRAINAGE AREA.—150 square miles.

RECORDS AVAILABLE.—August, 1909, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,180 second-feet November 4 (gage height, 4.88 feet); minimum, 26 second-feet August 24 (gage height, 1.83 feet).

1909–1928: Maximum discharge, 1,980 second-feet March 17, 1920 (gage height, 5.3 feet); minimum, 2.5 second-feet September 17 and 18, 1910 (gage height, 1.40 feet).

REMARKS.—Record good except those for periods of ice effect, December 26, 27, January 3–6, 23, 24, 29–31, February 1–4, 6, 7, and 26–29, which are fair.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	128	205	430	550	374	333	297	660	262	326	151	265
2.....	130	220	465	460	340	300	294	644	274	288	158	252
3.....	138	245	515	424	300	280	278	594	257	244	138	320
4.....	154	935	485	405	300	243	277	562	234	216	151	344
5.....	152	780	485	389	320	251	274	538	294	210	164	308
6.....	156	750	465	379	324	238	265	487	336	311	179	293
7.....	156	730	460	370	330	285	246	456	340	252	184	268
8.....	158	705	710	360	440	204	258	421	311	222	184	264
9.....	158	680	710	370	505	208	240	388	342	201	164	242
10.....	180	625	670	355	480	178	234	363	474	189	232	224
11.....	156	600	675	345	440	217	247	327	426	171	246	213
12.....	172	555	720	330	405	210	253	280	416	162	233	204
13.....	345	510	720	320	305	242	250	252	401	156	224	193
14.....	350	480	850	300	355	294	249	244	390	266	196	182
15.....	335	455	810	300	680	283	254	231	450	308	211	170
16.....	330	430	830	295	605	287	241	206	405	234	198	168
17.....	330	415	835	285	582	290	234	197	371	228	123	164
18.....	320	650	780	280	551	313	224	206	342	199	116	164
19.....	325	540	725	285	494	280	229	222	394	187	130	172
20.....	325	525	700	285	480	272	183	316	388	200	126	236
21.....	320	525	680	176	346	274	194	373	383	243	107	215
22.....	305	505	630	225	435	286	254	342	363	222	106	197
23.....	310	485	580	230	480	266	354	353	364	244	106	189
24.....	305	467	470	240	526	291	455	346	374	224	106	184
25.....	280	485	465	520	439	319	454	324	355	206	130	175
26.....	270	460	455	355	415	324	448	332	323	189	408	169
27.....	260	470	444	420	400	325	444	346	292	182	318	188
28.....	250	465	430	495	385	296	607	343	266	208	276	150
29.....	230	475	450	465	375	305	662	342	234	202	250	146
30.....	220	465	480	435	-----	331	656	312	298	172	255	134
31.....	220	-----	485	413	-----	293	-----	296	-----	157	298	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	350	128	241	1.61	1.86
November.....	935	205	528	3.52	3.93
December.....	850	430	600	4.00	4.61
January.....	550	176	357	2.38	2.74
February.....	680	300	430	2.87	3.10
March.....	333	178	275	1.83	2.11
April.....	662	183	318	2.12	2.36
May.....	660	197	365	2.43	2.80
June.....	474	234	345	2.30	2.57
July.....	326	156	220	1.47	1.70
August.....	408	106	189	1.26	1.45
September.....	344	134	213	1.42	1.58
The year.....	935	106	339	2.26	30.83

WESTFIELD RIVER AT KNIGHTVILLE, MASS.

LOCATION.—Chain gage on Pitcher Bridge in Knightville, Hampshire County, 3 miles above mouth of Middle Branch.

DRAINAGE AREA.—162 square miles.

RECORDS AVAILABLE.—August, 1909, to September, 1928.

EXTREMES.—Maximum discharge during year, 16,000 second-feet November 3 (gage height, 15.2 feet); minimum, 34 second-feet October 1 (gage height, 1.10 feet).

1909–1928: Maximum discharge, that of November 3, 1927; minimum, 4 second-feet August 10, 1913 (gage height, 0.60 foot).

REMARKS.—Records good except those for periods of ice effect, January 17–24, 28–31, February 1–5, 13, 14, 20–22, 26–29, and March 1–11, which are fair.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35	142	622	1,340	146	203	360	1,910	382	1,100	191	288
2	36	133	545	495	136	188	300	1,610	472	705	267	274
3	38	3,650	1,030	340	132	174	382	1,100	622	472	191	1,610
4	1,010	8,590	472	288	149	156	520	890	316	320	188	1,030
5	408	2,240	472	260	162	144	705	760	382	218	472	570
6	189	1,260	450	240	179	136	1,030	650	1,340	428	960	340
7	135	820	382	302	209	129	760	545	1,260	320	570	281
8	97	622	2,920	340	260	132	1,260	472	650	231	360	260
9	128	570	1,100	360	382	127	622	405	1,340	194	316	215
10	124	495	760	382	405	125	428	382	2,020	320	306	200
11	53	428	622	267	340	122	360	340	820	340	234	191
12	41	405	760	309	288	176	570	340	695	264	168	174
13	3,470	382	890	382	405	302	820	295	428	206	136	152
14	1,010	360	2,690	428	218	820	505	267	382	428	118	182
15	496	360	1,100	316	2,240	678	705	260	1,030	320	105	191
16	311	320	760	265	760	472	472	221	520	231	82	174
17	209	360	960	234	495	405	382	197	382	171	73	146
18	286	2,240	760	218	428	428	320	273	309	125	64	340
19	573	960	495	203	320	295	340	760	820	103	191	284
20	661	595	450	182	234	247	320	760	595	98	165	570
21	741	520	382	156	159	200	288	622	495	234	152	405
22	435	472	340	149	149	209	495	382	405	306	122	267
23	328	450	295	159	405	244	1,340	820	428	960	154	203
24	282	678	267	203	960	240	1,180	760	545	472	118	174
25	255	1,030	240	1,910	495	760	960	960	520	264	303	154
26	221	595	228	622	306	1,260	890	760	382	182	4,500	132
27	192	1,180	215	428	270	1,430	890	570	320	264	1,450	142
28	181	960	200	340	237	760	545	450	277	1,340	678	185
29	173	1,180	320	250	215	595	1,430	705	352	520	495	174
30	165	760	472	179	-----	495	1,520	472	1,030	360	340	156
31	151	-----	820	156	-----	428	-----	545	-----	264	309	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,470	35	401	2.48	2.86
November	8,590	133	1,090	6.73	7.51
December	2,920	200	710	4.38	5.05
January	1,910	149	377	2.33	2.69
February	2,240	132	382	2.36	2.54
March	1,430	122	390	2.41	2.78
April	1,520	288	695	4.29	4.79
May	1,910	197	626	3.86	4.45
June	2,020	277	648	4.00	4.46
July	1,340	98	379	2.34	2.70
August	4,500	64	444	2.74	3.16
September	1,610	132	315	1.94	2.16
The year	8,590	35	537	3.31	45.15

WESTFIELD RIVER NEAR WESTFIELD, MASS.

LOCATION.—Water-stage recorder 1 mile below mouth of Big Brook and 3 miles east of Westfield, Hampden County.

DRAINAGE AREA.—496 square miles.

RECORDS AVAILABLE.—June, 1914, to September, 1928.

EXTREMES.—Maximum discharge during year, 42,500 second-feet November 4 (gauge height, 25.41 feet); minimum, 218 second-feet October 2 and 3 (gauge height, 3.55 feet).

1914-1928: Maximum discharge, that of November 4, 1927; minimum, 9 second-feet October 2, 1921 (gauge height, 2.78 feet).

REMARKS.—Records good except those for periods of ice effect, January 2-5, 21, 22, 27-31, February 1-4, 6, 7, 20-22, 26, and 27, which are fair. Water is diverted from Westfield Little River for Springfield water supply.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	263	633	1,820	2,910	611	764	1,100	5,290	1,170	2,600	617	1,240
2	279	650	1,660	1,660	611	694	1,060	4,300	1,060	1,820	802	1,030
3	243	4,660	2,700	1,100	512	628	1,140	3,020	1,030	1,280	676	3,350
4	1,740	33,900	1,820	828	664	512	1,310	2,360	893	926	611	3,580
5	1,500	8,210	1,580	732	926	628	1,900	2,000	1,170	860	664	1,860
6	830	3,820	1,540	802	815	496	2,260	1,700	2,910	1,280	1,660	1,310
7	633	2,700	1,420	893	634	502	2,130	1,540	2,800	1,140	2,130	1,170
8	530	2,180	5,810	995	926	486	2,000	1,840	1,740	790	1,780	1,030
9	475	1,860	4,420	1,060	1,950	491	1,700	1,200	1,700	732	1,240	860
10	764	1,620	2,220	1,100	1,660	480	1,310	1,140	6,350	676	893	822
11	677	1,700	1,860	960	1,170	496	1,100	1,060	2,700	1,100	1,100	751
12	475	1,620	2,130	893	893	582	1,340	960	1,780	926	828	713
13	5,570	1,380	2,400	860	790	732	2,260	860	1,380	764	700	713
14	3,580	1,280	5,420	1,030	783	1,900	1,620	860	1,240	822	571	745
15	1,780	1,200	3,580	995	6,160	2,220	1,660	777	2,700	1,170	582	726
16	1,240	1,140	2,450	926	2,600	1,240	1,380	738	1,740	926	528	512
17	1,060	1,200	2,700	828	1,620	995	1,140	726	1,240	634	491	658
18	960	6,070	1,950	828	1,380	1,140	995	713	1,100	486	496	796
19	2,080	3,130	1,620	777	1,060	995	960	1,280	1,380	373	960	893
20	2,600	2,040	1,460	751	960	893	960	2,180	1,580	544	664	1,420
21	2,260	1,660	1,420	623	777	809	860	1,820	1,310	893	567	1,420
22	1,580	1,500	1,310	640	640	770	1,060	1,340	1,140	646	480	960
23	1,170	1,380	1,240	688	1,200	860	3,350	1,580	1,200	1,140	926	688
24	1,060	1,310	960	664	2,400	926	4,060	1,860	1,200	1,140	860	738
25	895	2,450	764	4,180	1,660	2,910	3,240	2,040	1,340	770	893	646
26	862	1,780	893	2,400	995	3,460	2,700	1,580	1,100	577	12,300	560
27	800	2,130	860	1,380	893	3,820	2,500	1,580	995	528	5,030	528
28	758	2,360	893	1,030	893	2,310	3,240	1,380	926	2,820	2,600	517
29	710	2,450	1,060	926	764	1,580	4,060	1,580	960	1,860	1,900	523
30	638	2,310	2,400	738	-----	1,460	3,940	1,310	2,130	1,100	1,500	470
31	677	-----	1,820	676	-----	1,380	-----	1,460	-----	770	1,580	-----

Month	Observed			Diversion from Westfield Little River (millions of gallons)	Corrected for diversion		
	Maximum	Minimum	Mean		Mean	Per square mile	Run-off in inches
October	5,570	243	1,250	466.71	1,270	2.56	2.95
November	33,900	633	3,340	445.65	3,360	6.77	7.55
December	5,810	764	2,070	461.74	2,090	4.21	4.85
January	4,180	623	1,120	472.89	1,140	2.30	2.65
February	6,160	512	1,270	442.48	1,290	2.60	2.80
March	3,820	480	1,200	465.12	1,220	2.46	2.84
April	4,060	860	1,940	440.49	1,960	3.95	4.41
May	5,290	713	1,660	459.49	1,680	3.39	3.91
June	6,350	893	1,660	452.37	1,680	3.39	3.78
July	3,820	373	1,080	476.78	1,100	2.22	2.56
August	12,300	480	1,500	499.55	1,520	3.06	3.53
September	3,580	470	1,040	485.89	1,060	2.14	2.39
The year	33,900	243	1,590	5,568.96	1,610	3.25	44.22

MIDDLE BRANCH OF WESTFIELD RIVER AT GOSS HEIGHTS, MASS.

LOCATION.—Water-stage recorder at highway bridge in Goss Heights, Hampshire County, and half a mile above mouth.

DRAINAGE AREA.—53 square miles.

RECORDS AVAILABLE.—July, 1910, to September, 1928.

EXTREMES.—Maximum discharge during year, 5,860 second-feet November 3 (gage height, 8.26 feet); minimum, 14 second-feet October 2 (gage height, 0.76 foot).

1910–1928: Maximum discharge, that of November 3, 1927; practically no flow October 26 and 27, 1914.

REMARKS.—Records good except those for periods of ice effect or missing gage-height records.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	140	188	371	• 50	• 65	106	685	103	344	• 90	118
2	14	142	192	170	• 40	• 60	106	555	111	183	• 90	93
3	15	2,450	269	130	• 40	• 55	123	374	95	130	• 80	455
4	358	2,220	172	111	• 40	• 55	177	284	90	95	• 75	293
5	128	531	161	• 105	• 50	• 50	269	• 235	166	78	88	154
6	66	323	150	• 105	• 55	• 50	275	188	420	130	196	121
7	46	230	138	• 110	• 70	• 45	223	159	287	93	215	110
8	53	188	825	115	• 95	• 45	217	142	170	• 85	159	93
9	64	166	382	120	• 135	• 40	163	125	516	• 80	110	91
10	86	147	208	125	• 110	• 40	130	118	615	• 110	101	91
11	59	149	184	104	• 90	• 40	111	108	248	101	116	90
12	53	138	217	104	• 80	93	212	101	174	91	• 75	90
13	1,150	128	269	104	• 80	144	242	• 100	137	• 75	• 70	91
14	371	120	774	113	• 90	272	177	• 96	159	• 110	• 65	91
15	220	116	374	• 90	615	194	179	• 94	320	106	• 60	93
16	178	113	269	• 70	219	132	142	• 92	159	• 80	• 55	98
17	166	165	278	• 55	157	113	121	• 100	123	• 70	• 50	98
18	166	782	200	• 50	135	111	104	• 88	101	• 65	• 50	120
19	421	302	188	• 45	• 100	93	104	206	190	• 60	• 80	98
20	380	186	175	• 40	• 80	88	98	272	165	• 60	• 75	165
21	333	157	165	• 40	• 65	88	90	186	133	• 75	• 70	123
22	228	149	152	• 35	• 55	88	163	140	123	• 90	• 65	96
23	184	140	128	• 40	183	90	416	228	126	192	101	96
24	169	176	123	• 100	260	165	413	204	132	99	• 85	95
25	159	272	161	533	• 150	399	320	202	120	• 80	• 145	95
26	147	184	194	215	• 95	459	296	163	98	• 70	1,640	95
27	145	320	226	150	• 85	420	293	161	• 73	• 210	455	93
28	147	260	221	• 95	• 80	215	402	142	• 66	515	242	93
29	147	320	305	• 75	• 70	156	448	150	• 126	172	192	95
30	138	254	296	• 65	-----	142	491	126	212	104	152	95
31	140	-----	251	• 55	-----	125	-----	135	-----	• 80	149	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,150	14	192	3.62	4.17
November	2,450	113	366	6.91	7.71
December	825	123	253	4.77	5.50
January	533	35	117	2.21	2.55
February	615	40	116	2.19	2.36
March	459	40	133	2.51	2.89
April	491	90	220	4.15	4.63
May	685	88	192	3.62	4.17
June	615	66	185	3.49	3.89
July	515	60	124	2.34	2.70
August	1,640	50	168	3.17	3.66
September	455	90	121	2.28	2.54
The year	2,450	14	182	3.43	46.77

• Estimated because of ice or missing gage-height record.

NORTHERN CONNECTICUT POWER CO.'S CANAL AT THOMPSONVILLE, CONN.

LOCATION.—Water-stage recorder 300 feet below intake at Enfield Dam on Connecticut River and 1 mile below Thompsonville, Hartford County. Zero of gage is 35.49 feet above mean sea level.

RECORDS AVAILABLE.—July to September, 1928.

EXTREMES.—Maximum discharge, 1,710 second-feet September 17 (gage height, 4.71 feet).

REMARKS.—Records good. Water used for navigation and for power by manufacturing plants along canal at Windsor Locks.

Daily and monthly discharge, in second-feet, 1928

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1.....		1,460	1,090	12.....	1,380	475	1,460	21.....	1,380	1,460	1,460
2.....		1,460	544	13.....	1,420	1,220	1,420	22.....	877	1,420	1,260
3.....		1,460	416	14.....	1,340	1,340	1,460	23.....	1,260	1,460	1,561
4.....		1,160	1,260	15.....	698	1,300	1,340	24.....	1,460	1,460	1,260
5.....			1,380	16.....	1,260	1,300	544	25.....	1,460	1,300	1,460
6.....			1,380	17.....	1,340	1,420	1,220	26.....	1,420	658	1,500
7.....			1,380	18.....	1,340	1,380	1,460	27.....	1,420	1,170	1,460
8.....			1,260	19.....	1,420	635	1,420	28.....	1,380	1,340	1,460
9.....	1,260		594	20.....	1,460	1,340	1,460	29.....	718	1,380	1,380
10.....	1,380		1,260					30.....	1,340	1,340	615
11.....	1,420		1,460					31.....	1,500	1,130	-----

Month				Maximum	Minimum	Mean
July 9-31.....				1,500	677	1,290
August.....				1,460	9	972
September.....				1,500	416	1,210

SCANTIC RIVER AT BROAD BROOK, CONN.

LOCATION.—Water-stage recorder 300 feet above highway bridge, 1 mile southwest of Broad Brook, Hartford County, half a mile below confluence with Broad Brook, and $5\frac{1}{2}$ miles above mouth.

DRAINAGE AREA.—98.7 square miles.

RECORDS AVAILABLE.—August to September, 1928.

EXTREMES.—Maximum discharge during period, 359 second-feet August 27 (gage height, 3.3 feet); minimum, 47 second-feet September 30 (gage height, 0.23 foot).

REMARKS.—Records good except those for periods of missing gage heights, September 16, 19, 20, and 24–30, which are fair. Extreme low-water gage-height record partly estimated owing to faulty operation of intake pipe. Low-water flow affected by operation of a few small reservoirs upstream.

Daily and monthly discharge, in second-feet, 1928

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1.....		186	11.....		133	21.....	157	146
2.....		146	12.....		125	22.....	124	135
3.....		253	13.....		114	23.....	143	97
4.....		310	14.....		124	24.....	118	
5.....		264	15.....	139	104	25.....	129	
6.....		203	16.....	128	60	26.....	200	110
7.....		168	17.....	119	104	27.....	307	
8.....		142	18.....	108	118	28.....	320	
9.....		116	19.....	114	150	29.....	239	
10.....		156	20.....	184	165	30.....	202	50
						31.....	256	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
August 15–31.....	320	108	176	1.78	1.13
September.....	310	50	141	1.43	1.60

SURFACE WATER SUPPLY, 1928, PART I

FARMINGTON RIVER NEAR NEW BOSTON, MASS.

LOCATION.—Water-stage recorder at highway bridge a quarter of a mile below Clam River and 1 mile south of New Boston, Berkshire County.

DRAINAGE AREA.—92.7 square miles.

RECORDS AVAILABLE.—May, 1913, to September, 1928.

EXTREMES.—Maximum discharge during year, 7,900 second-feet November 3 (gage height, 9.42 feet); minimum, 52 second-feet September 28 (gage height, 2.98 feet).

1913-1928: Maximum discharge, that of November 3, 1927; minimum, 4.4 second-feet August 27, 1913 (gage height, 2.22 feet).

REMARKS.—Records fair. Flow regulated by storage in Otis Reservoir, capacity 880,000,000 cubic feet.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	99	185	477	• 700	• 165	• 120	162	945	253	197	162	• 305
2	98	185	477	• 430	• 170	• 115	152	740	238	238	162	210
3	100	2, 810	600	• 335	• 150	• 110	152	600	197	210	162	927
4	523	4, 580	477	• 300	• 140	• 105	185	500	185	162	244	740
5	319	2, 000	435	• 270	• 150	105	253	435	302	152	805	• 410
6	238	1, 180	415	• 255	• 145	102	319	395	500	238	875	• 320
7	151	854	415	• 250	• 140	100	337	356	477	185	770	• 280
8	151	704	1, 270	• 320	• 160	162	356	319	375	141	550	• 250
9	173	630	770	• 300	356	319	269	302	439	122	337	238
10	238	496	575	• 300	238	337	210	238	• 900	122	• 328	224
11	197	419	500	• 240	197	117	185	197	• 480	173	319	224
12	173	477	525	• 250	173	108	253	• 170	• 360	152	224	253
13	1, 690	455	477	• 240	141	197	269	• 160	• 265	120	197	173
14	740	415	979	• 240	257	375	238	• 155	• 310	173	173	122
15	435	375	650	• 280	805	224	238	• 150	• 560	210	152	122
16	319	356	500	• 240	356	162	197	• 140	285	141	131	112
17	253	508	415	• 230	253	154	162	• 130	238	122	110	141
18	224	1, 400	269	• 230	210	152	152	• 125	197	• 115	• 100	210
19	343	770	238	224	173	131	152	• 300	224	• 110	• 300	197
20	435	600	269	210	173	122	141	• 400	269	• 105	• 270	210
21	415	500	253	185	141	115	131	• 320	253	• 105	• 260	131
22	337	455	210	• 170	• 130	117	210	• 260	238	• 200	• 220	122
23	302	435	197	• 165	• 240	131	525	• 400	269	• 210	253	117
24	302	455	185	• 160	356	278	770	• 350	253	• 180	210	114
25	253	550	• 180	818	269	525	650	• 300	210	• 150	367	110
26	238	455	• 168	253	• 195	525	575	253	185	• 130	2, 100	84
27	224	600	• 160	210	• 150	525	477	269	162	• 190	1, 550	53
28	210	550	• 156	162	• 130	319	600	238	131	• 191	740	• 65
29	210	600	• 250	152	• 120	224	770	302	152	600	• 500	86
30	185	525	• 600	• 150	• 120	210	875	269	197	302	• 550	110
31	185	-----	• 500	• 160	-----	185	-----	285	-----	173	• 450	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1, 690	98	314	3.39	3.91
November	4, 580	185	817	8.81	9.83
December	1, 270	156	438	4.72	5.44
January	818	150	272	2.93	3.38
February	805	120	217	2.34	2.52
March	525	100	209	2.25	2.59
April	875	131	332	3.58	3.99
May	945	125	323	3.48	4.01
June	900	131	303	3.27	3.65
July	910	105	204	2.20	2.54
August	2, 100	100	438	4.72	5.44
September	927	53	222	2.39	2.67
The year	4, 580	53	341	3.68	49.97

• Estimated because of ice or missing record.

FARMINGTON RIVER AT TARIFFVILLE, CONN.

LOCATION.—Water-stage recorder at Tariffville, Hartford County, between upper and lower highway bridges, half a mile above Hartford Electric Light Co.'s plant, and 12 miles above mouth.

DRAINAGE AREA.—569 square miles.

RECORDS AVAILABLE.—August to September, 1928.

EXTREMES.—Maximum discharge during period, 7,220 second-feet August 27 (gage height, 7.3 feet); minimum, 414 second-feet August 22 (gage height, 1.46 feet).

REMARKS.—Records good. Discharge based on operating records from Hartford Electric Light Co.'s plant August 13 and 15–26. Backwater from dam at plant of Hartford Electric Light Co. occurs intermittently but may be accurately corrected for. City of Hartford diverts approximately 18,000,000 gallons a day for domestic water supply from Nepaug River near Collinsville. During low water this diversion is compensated for by release of stored flood water from a reservoir on East Branch of Farmington River near New Hartford; also some regulation at Otis Reservoir, in Massachusetts.

Daily and monthly discharge, in second-feet, 1928

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1.....		2,330	11.....		995	21.....	560	1,340
2.....		1,460	12.....		962	22.....	490	995
3.....		1,460	13.....	1,460	930	23.....	550	768
4.....		3,640	14.....	930	1,100	24.....	950	716
5.....		3,010	15.....	735	995	25.....	820	735
6.....		2,130	16.....	670	768	26.....	3,840	696
7.....		1,750	17.....	580	598	27.....	6,650	658
8.....		1,460	18.....	600	800	28.....	6,110	658
9.....		1,060	19.....	590	930	29.....	4,050	664
10.....		865	20.....	540	1,420	30.....	2,720	508
						31.....	2,600	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
August 13 to 31.....	6,650	490	1,870	3.29	2.32
September.....	3,640	508	1,210	2.13	2.38

HOCKANUM RIVER NEAR EAST HARTFORD, CONN.

LOCATION.—Water-stage recorder at Case & Marshall paper mill, $1\frac{1}{2}$ miles below confluence with South Branch of Hockanum River, $2\frac{3}{4}$ miles east of East Hartford, Hartford County.

DRAINAGE AREA.—75.5 square miles.

RECORDS AVAILABLE.—September, 1919, to September, 1921; July to September, 1928.

EXTREMES.—Maximum discharge during year, 305 second-feet August 15 (gage height, 3.25 feet); minimum, 6.2 second-feet July 26, 27, August 2 and 3 (gage height, 0.82 foot).

1919-1921, 1928: Maximum discharge, 1,450 second-feet March 13, 1920 (gage height, 8.1 feet); minimum, practically no flow at times when water was held back by dams.

REMARKS.—Records excellent. Discharge estimated September 8-18. Distribution of flow affected by storage in Shenipsit Lake and other smaller reservoirs above station.

Daily and monthly discharge, in second-feet, 1928

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1-----		126	77	11-----	137	119		21-----	65	141	92
2-----		30	29	12-----	92	148		22-----	28	134	49
3-----		24	81	13-----	78	240		23-----	154	106	32
4-----		67	184	14-----	87	172		24-----	153	66	138
5-----		39	142	15-----	126	162	• 100	25-----	139	57	148
6-----		149	141	16-----	221	142		26-----	42	32	144
7-----	159	162	122	17-----	165	93		27-----	37	149	97
8-----	98	139		18-----	158	21		28-----	66	149	74
9-----	192	100	• 100	19-----	90	56	134	29-----	34	146	47
10-----	153	107		20-----	84	193	121	30-----	117	96	9
								31-----	138	74	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-of in inches
July 7-31-----	221	28	113	1.50	1.39
August-----	240	21	111	1.47	1.70
September-----	184	9	98.7	1.31	1.46

• Mean discharge, Sept. 8-18.

SALMON RIVER NEAR EAST HAMPTON, CONN.

LOCATION.—Water-stage recorder (installed August 15, 1928) at Comstock Bridge, on Hartford-Middlesex County line, $3\frac{1}{2}$ miles southeast of East Hampton, Middlesex County.

DRAINAGE AREA.—105 square miles.

RECORDS AVAILABLE.—July to September, 1928. Station at Leesville, $3\frac{1}{2}$ miles downstream, from April, 1905, to March, 1906.

EXTREMES.—Maximum discharge during year 335 second-feet sometime between August 17 and 23 (gage height, 1.67 feet); minimum, 34 second-feet September 10 (gage height, 0.53 foot).

REMARKS.—Records excellent except those for estimated periods, August 9–31, September 1–7, and 18–30, which are fair. Discharge based on twice daily staff gage readings July 20 to August 8.

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1.....		52	55	11.....			38	21.....	89		
2.....		55		12.....			38	22.....	82	75	
3.....		47		13.....		85	36	23.....	191		* 80
4.....		69		14.....			57	24.....	167	82	
5.....		58	65	15.....		71	51	25.....	120		
6.....		247		16.....		55	43	26.....	89		
7.....		244	61	17.....			42	27.....	68		45
8.....		148	54	18.....		75	41	28.....	102	70	
9.....		112	46	19.....			29	29.....	85		
10.....		85	40	20.....	97			30.....	68		50
								31.....	58		

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
July 20–31.....	191	58	101	0.962	0.43
August.....	247	47	86.5	.824	.95
September.....		36	56.1	.534	.60

* Mean discharge, Sept. 19–24.

HOUSATONIC RIVER BASIN

HOUSATONIC RIVER NEAR GREAT BARRINGTON, MASS.

LOCATION.—Staff gage at highway bridge at Van Deusenville, just above Williams River and 2 miles north of Great Barrington, Berkshire County.

DRAINAGE AREA.—280 square miles.

RECORDS AVAILABLE.—May, 1913, to September, 1928.

EXTREMES.—Maximum discharge during year, about 5,690 second-feet November 5 (gage height, about 10 feet); minimum, 84 second-feet October 3 (gage height, 1.22 feet).

1913-1928: Maximum discharge, that of November 5, 1927; no flow recorded at times.

REMARKS.—Records fair. Discharge estimated March 29 and 30. Considerable diurnal regulation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	130	365	1,450	1,780	466	563	466	1,970	766	1,840	856	1,310
2.....	120	390	1,510	1,450	489	512	489	2,040	563	1,250	796	1,250
3.....	105	2,030	1,510	1,250	512	466	648	1,970	358	1,120	766	2,110
4.....	240	5,280	1,250	1,120	406	512	538	1,840	648	736	706	1,780
5.....	750	5,620	1,380	1,050	379	466	619	1,780	1,310	677	677	1,640
6.....	810	4,670	1,310	1,050	421	444	736	1,310	1,840	736	919	1,640
7.....	440	3,350	856	984	444	466	919	1,120	1,910	619	1,050	1,450
8.....	342	2,240	1,180	766	677	538	736	1,120	1,580	444	856	1,050
9.....	492	1,910	1,120	984	984	421	856	919	1,180	299	677	648
10.....	492	1,510	984	919	1,180	379	706	856	1,180	256	796	619
11.....	342	1,310	1,120	919	1,180	444	648	856	1,050	421	706	466
12.....	365	1,310	1,250	736	1,120	512	736	736	736	489	648	489
13.....	870	1,180	1,910	766	706	619	706	856	538	466	563	489
14.....	1,070	1,120	2,040	736	706	677	648	796	984	444	538	563
15.....	1,000	984	2,580	736	1,180	736	677	677	1,120	400	466	538
16.....	810	619	2,580	856	1,380	648	736	538	796	489	489	538
17.....	630	677	2,450	736	1,250	444	856	538	919	512	421	512
18.....	690	2,310	1,710	706	856	489	677	512	1,050	466	538	856
19.....	300	2,380	1,120	706	736	591	648	619	1,180	512	444	984
20.....	750	1,780	1,120	512	648	563	677	648	1,180	338	466	856
21.....	1,140	1,580	1,050	512	706	538	856	919	984	299	512	677
22.....	720	1,450	1,050	358	766	706	984	856	1,050	299	538	591
23.....	575	1,310	1,984	400	856	677	1,250	856	1,120	280	766	563
24.....	320	1,380	796	512	796	563	1,710	1,250	619	299	648	538
25.....	365	1,510	619	489	1,250	1,250	1,580	1,180	591	318	796	591
26.....	575	1,310	563	1,380	796	1,510	1,510	984	538	421	2,180	538
27.....	575	1,380	489	1,310	766	1,510	1,250	919	796	459	2,650	512
28.....	390	1,510	648	856	619	1,310	1,510	766	856	1,840	2,110	358
29.....	276	1,910	856	591	512	984	1,780	856	766	1,840	1,840	318
30.....	264	1,910	984	1,120	-----	736	1,910	919	856	1,510	1,910	338
31.....	320	-----	1,120	766	-----	591	-----	919	-----	1,120	1,710	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,140	105	525	1.87	2.16
November.....	5,620	365	1,880	6.71	7.49
December.....	2,580	489	1,280	4.57	5.27
January.....	1,780	358	873	3.12	3.60
February.....	1,380	379	788	2.81	3.03
March.....	1,510	379	673	2.40	2.77
April.....	1,710	466	935	3.34	3.73
May.....	2,040	512	1,040	3.71	4.28
June.....	1,910	358	969	3.46	3.86
July.....	1,840	256	685	2.45	2.82
August.....	2,650	421	937	3.35	3.86
September.....	2,110	318	827	2.95	3.29
The year.....	5,620	105	949	3.39	46.16

HOUSATONIC RIVER AT FALLS VILLAGE, CONN.

LOCATION.—Water-stage recorder at Falls Village, Litchfield County, half a mile below power plant of Connecticut Power Co. and 6 miles below Blackberry River.

DRAINAGE AREA.—644 square miles.

RECORDS AVAILABLE.—July, 1912, to September, 1928.

EXTREMES.—Maximum discharge during year, about 11,700 second-feet November 5 (gage height, 15.7 feet); minimum, 65 second-feet October 1 (gage height, 0.92 foot).

1912–1928: Maximum discharge, that of November 5, 1927; no flow at times.

REMARKS.—Records good except those for extremely high and low stages, which are fair. Low-water flow is completely regulated by power plant at Falls Village. Discharge estimated October 10 and December 25–27 because of missing record and January 4, 5, and 28 because of ice.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	410	683	2,920	2,200	1,210	922	1,250	3,150	1,130	1,260	2,020	2,710
2.....	179	811	2,640	2,080	1,080	920	1,180	3,150	1,060	1,770	1,640	2,050
3.....	313	1,690	2,780	1,770	999	806	1,120	2,990	912	1,670	1,600	1,890
4.....	1,040	9,620	2,780	1,600	918	658	1,090	2,780	800	1,110	1,590	2,780
5.....	1,610	11,500	2,430	1,500	964	608	1,160	2,410	1,060	916	1,450	2,850
6.....	1,300	11,100	2,160	1,450	894	599	1,410	2,050	1,700	1,320	2,160	2,440
7.....	949	8,980	1,980	1,370	805	664	1,570	1,800	1,790	1,350	2,850	2,050
8.....	849	6,110	3,080	1,150	1,360	634	1,650	1,720	1,800	896	3,070	1,890
9.....	891	4,430	4,350	1,170	1,970	592	1,660	1,540	1,800	761	2,570	1,610
10.....	740	3,400	4,030	1,290	2,440	567	1,640	1,350	2,640	686	1,920	1,340
11.....	822	2,780	3,710	1,260	2,190	581	1,410	1,240	2,780	972	1,930	1,190
12.....	703	2,750	3,390	1,200	1,670	517	1,460	1,190	2,570	882	1,930	1,140
13.....	2,110	2,540	3,190	1,120	1,140	706	1,720	916	2,360	757	1,500	1,080
14.....	3,470	2,100	3,630	1,250	1,140	1,290	1,750	928	1,860	898	1,270	1,250
15.....	2,800	1,870	4,030	1,120	2,730	1,640	1,660	946	2,030	932	1,090	1,140
16.....	2,220	1,780	3,950	961	3,150	1,380	1,490	901	2,480	782	947	816
17.....	1,790	1,740	3,740	1,160	2,850	1,120	1,400	906	2,350	815	770	900
18.....	1,500	3,580	3,150	828	2,290	776	1,300	792	2,000	740	938	744
19.....	1,640	4,430	2,360	894	1,600	973	1,150	1,130	1,790	732	1,130	1,170
20.....	1,870	4,270	2,160	925	1,250	806	1,070	1,190	1,830	798	1,240	1,220
21.....	1,970	3,760	1,980	688	1,200	842	1,050	1,340	1,690	802	967	1,120
22.....	2,010	3,150	1,800	678	1,060	803	1,130	1,300	1,610	733	989	924
23.....	1,850	2,640	1,700	891	1,440	834	1,770	1,260	1,450	1,360	1,310	729
24.....	1,550	2,270	1,320	726	2,460	972	2,740	1,410	1,270	1,180	1,560	915
25.....	1,350	2,360	1,250	2,020	2,200	1,670	3,150	1,420	1,200	1,170	1,350	662
26.....	1,230	2,480	1,260	2,330	1,700	2,070	2,850	1,510	1,270	948	3,360	601
27.....	1,080	2,470	1,240	1,920	1,490	2,600	2,500	1,280	1,060	1,120	4,940	670
28.....	1,020	2,640	1,210	1,520	1,410	2,640	2,570	1,340	996	3,360	4,760	457
29.....	624	2,920	1,180	1,360	1,120	2,440	3,070	1,330	953	4,430	4,510	558
30.....	765	3,070	1,600	1,270	-----	1,990	3,150	1,210	1,390	3,630	3,710	490
31.....	720	-----	1,900	1,240	-----	1,730	-----	1,180	-----	2,780	3,150	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	3,470	179	1,340	2.08	2.40
November.....	11,500	683	3,800	5.90	6.58
December.....	4,350	1,180	2,550	3.96	4.56
January.....	2,330	678	1,320	2.05	2.36
February.....	3,150	805	1,610	2.50	2.70
March.....	2,640	517	1,140	1.77	2.04
April.....	3,150	1,050	1,740	2.70	3.01
May.....	3,150	792	1,540	2.39	2.76
June.....	2,780	800	1,650	2.56	2.86
July.....	4,430	686	1,340	2.08	2.40
August.....	4,940	770	2,070	3.22	3.71
September.....	2,850	457	1,310	2.03	2.26
The year.....	11,500	179	1,780	2.76	37.64

HOUSATONIC RIVER AT STEVENSON, CONN.

LOCATION.—Water-stage recorder a quarter of a mile below Stevenson Dam of Connecticut Light & Power Co., 7 miles above Derby, New Haven County, and the junction with Naugatuck River.

DRAINAGE AREA.—1,550 square miles.

RECORDS AVAILABLE.—August to September, 1928.

EXTREMES.—Maximum discharge during period of record, 7,910 second-feet September 4 (gage height, 8.8 feet); minimum, less than 100 second-feet, occurs frequently during low flow, owing to operation of power plant above.

REMARKS.—Records good. Gage-height record partly estimated during low flow because intake was not quite low enough to take extremely low stage following plant shutdowns. Low flow completely regulated at power plant above gage. Further regulation provided at the Rocky River development upstream, which comprises a storage reservoir with a useful capacity of 5,900,000,000 cubic feet.

Daily and monthly discharge, in second-feet, 1928

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1.....		6,030	11.....		2,940	21.....		2,910
2.....		4,930	12.....		2,870	22.....		2,250
3.....		5,320	13.....		2,540	23.....		2,100
4.....		6,970	14.....		2,720	24.....		2,060
5.....		6,190	15.....		2,810	25.....		1,830
6.....		5,400	16.....		1,430	26.....		1,500
7.....		4,960	17.....		2,140	27.....		1,550
8.....		4,250	18.....		2,000	28.....		1,620
9.....		3,860	19.....		2,470	29.....		2,090
10.....		3,530	20.....		2,830	30.....		476
						31.....	6,840	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
September.....	6,970	476	3,150	2.03	2.26

HUDSON RIVER BASIN

HUDSON RIVER NEAR NEWCOMB, N. Y.

LOCATION.—Staff gage at highway bridge half a mile downstream from outlet of Harris Lake and 2 miles east of Newcomb, Essex County.

DRAINAGE AREA.—192 square miles.

RECORDS AVAILABLE.—September, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, 6,080 second-feet April 9 (gage height, 8.0 feet); minimum, 50 second-feet October 1 (gage height, 1.49 feet).

1925-1928: Maximum discharge, that of April 9, 1928; minimum, that of October 1, 1927.

REMARKS.—Records good except those for periods of backwater from ice or logs, December 21-30, January 4-7, 18-23, 31, February 1-8, and March 4-15, and September 12-30, which are fair. Slight regulation by small storage reservoirs on headwaters.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	51	161	2,280	398	160	155	710	742	742	650	155	207
2-----	58	146	2,820	568	160	149	595	1,050	710	595	139	172
3-----	62	212	2,280	540	150	144	489	1,440	650	514	155	139
4-----	87	681	1,520	460	150	140	466	1,700	568	442	292	141
5-----	146	1,410	1,120	400	150	140	577	2,280	514	398	568	149
6-----	191	1,360	910	360	150	130	1,120	2,600	622	398	650	139
7-----	172	1,200	710	320	150	130	2,390	2,490	840	357	710	121
8-----	172	710	840	281	150	130	4,820	2,180	840	311	650	114
9-----	228	622	1,200	314	172	130	5,640	1,790	710	252	595	109
10-----	234	489	1,440	296	191	120	3,780	1,520	650	231	489	114
11-----	197	420	1,200	277	204	120	2,380	1,200	595	238	420	123
12-----	166	466	980	267	210	120	1,700	1,120	514	224	357	220
13-----	224	595	775	267	204	130	1,360	980	442	200	285	600
14-----	540	595	775	259	207	140	1,050	775	398	224	224	600
15-----	595	540	910	259	214	180	980	650	378	378	207	550
16-----	466	489	910	245	231	194	910	568	318	398	191	460
17-----	420	672	775	234	252	207	840	540	288	357	166	380
18-----	357	2,050	710	220	242	217	710	568	267	311	146	340
19-----	311	2,930	622	220	224	210	710	680	281	274	136	280
20-----	307	2,080	540	220	214	204	775	910	314	256	126	220
21-----	338	1,440	480	200	197	197	775	1,050	292	252	114	190
22-----	357	1,050	440	200	184	191	710	1,050	259	224	133	200
23-----	338	980	390	200	178	181	680	980	231	217	161	190
24-----	303	1,280	320	204	178	175	680	910	210	245	133	180
25-----	288	1,360	300	210	178	204	775	710	245	259	109	160
26-----	252	1,120	280	224	172	267	710	622	300	217	105	150
27-----	224	980	260	217	172	442	680	595	420	200	210	140
28-----	207	980	260	210	166	742	650	595	378	188	178	150
29-----	197	1,050	260	200	161	980	622	622	357	191	155	170
30-----	188	1,280	260	191	-----	1,050	595	622	442	197	161	160
31-----	172	-----	281	180	-----	910	-----	622	-----	175	184	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October-----	595	51	253	1.32	1.52
November-----	2,930	146	978	5.09	5.68
December-----	2,820	260	866	4.51	5.20
January-----	568	180	279	1.45	1.67
February-----	252	150	185	.964	1.04
March-----	1,050	120	272	1.42	1.64
April-----	5,640	466	1,300	6.77	7.55
May-----	2,600	540	1,100	5.73	6.61
June-----	840	210	459	2.39	2.67
July-----	650	175	302	1.57	1.81
August-----	710	105	268	1.40	1.61
September-----	600	109	229	1.19	1.33
The year-----	5,640	51	541	2.82	38.33

HUDSON RIVER AT GOOLEY, NEAR INDIAN LAKE, N. Y.

LOCATION.—Water-stage recorder half a mile above Gooley, Essex County, 1½ miles below mouth of Cedar River, and 5 miles northeast of Indian Lake village, Hamilton County.

DRAINAGE AREA.—420 square miles (revised).

RECORDS AVAILABLE.—August, 1916, to September, 1928.

EXTREMES.—Maximum discharge during year occurred April 8 or 9 during period of no record; minimum, 92 second-feet October 1 and 2 (gage height, 1.57 feet).

1916-1928: Maximum discharge, 13,900 second-feet April 12, 1922 (gage height, 10.0 feet); minimum, 44 second-feet August 22 and 23, 1923 (gage height, 1.38 feet).

REMARKS.—Records fair. Flow slightly regulated by storage. Discharge estimated December 25 to January 1 and February 1-29 because of ice, October 1 to November 3 and June 27 to September 30 because of backwater from logs, and January 8-31, March 2-9, March 28 to April 12, and April 18 to June 26 because of missing record.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	95	650	4,280	1,100	380	340				1,300	420	280
2	110	380	4,850	1,180	380					1,100	320	260
3	220	400	4,180	929	360					950	300	240
4	260	1,690	2,900	825	360					850	460	240
5	420	2,240	2,170	748	360					750	700	240
6						300						
7	360	2,170	1,760	680	360		4,600			1,100	800	220
8	320	1,700	1,490	642	360					650	900	220
9	320	1,340	3,110		360					500	850	200
10	850	1,060	3,780		380					420	750	190
11	650	889	3,110		420	280				380	650	180
12	480	801	2,500		460	280				400	550	220
13	340	857	1,990		440	260				360	480	340
14	500	1,050	1,760		420	280	2,690			440	460	800
15	900	1,020	1,870		440	340	2,170		950	1,300	420	900
16	900	954	2,050		460	420	2,170			850	360	750
17	800	897	1,930		500	460	2,050	2,100		650	320	650
18	650	1,060	1,760		550	480	1,760			550	300	550
19	600	5,750	1,540		500	480				480	260	500
20	550	5,210	1,440	500	480	500				460	240	420
21	550	4,020	1,290		460	480				850	240	360
22	650	2,900	1,140		420	440				950	320	340
23	900	2,170	1,070		400	440				1,100	320	320
24	750	1,990	937		380	420				900	280	320
25	600	2,560	793		400	440	1,500			500	280	300
26	500	2,500	700		400	600				400	280	280
27	450	2,170	650		380	900				340	340	280
28	420	1,930	600		360	1,600			800	320	340	260
29	380	2,170	600		360	2,200			700	400	300	280
30	400	2,300	600		360	2,400			650	440	260	300
31	950	2,690	700			2,000			950	400	240	300
32	850		850			1,700				500	260	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	950	95	540	1.29	1.49
November	5,750	380	1,920	4.57	5.10
December	4,850	600	1,880	4.48	5.16
January	1,180		584	1.39	1.60
February	550	360	410	.976	1.05
March	2,400	260	650	1.55	1.79
April			2,850	6.79	7.58
May			2,100	5.00	5.76
June		650	927	2.21	2.47
July	1,300	320	664	1.58	1.82
August	900	240	419	.998	1.15
September	900	180	358	.852	.95
The year		95	1,110	2.64	35.92

HUDSON RIVER BASIN

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HUDSON RIVER AT NORTH CREEK, N. Y.

LOCATION.—Chain gage at highway bridge in North Creek, Warren County, 100 feet above mouth of North Creek.

DRAINAGE AREA.—792 square miles.

RECORDS AVAILABLE.—September, 1907, to September, 1928.

EXTREMES.—Maximum discharge during year, 18,900 second-feet April 8 (gage height, 9.8 feet); minimum, 148 second-feet October 1 (gage height, 1.85 feet).

1907-1928: Maximum discharge, 30,000 second-feet March 27, 1913 (gage height, 12.0 feet); minimum, 128 second-feet September 2, 1923 (gage height, 1.92 feet).

REMARKS.—Records good except those for period of ice effect, December 27, 28, January 17-31, February 1-15, 25-29, and March 1-11, which are fair. Flow regulated by numerous lakes and ponds in basin.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	148	1,080	6,370	1,890	1,700	1,400	2,190	2,440	1,960	2,270	795	490
2	840	750	6,930	1,820	1,700	1,400	1,890	4,450	2,610	1,960	670	555
3	1,030	812	5,570	1,880	1,600	1,300	1,680	4,690	1,890	1,610	750	1,080
4	1,240	3,950	4,090	1,610	1,600	1,300	1,940	5,180	1,540	1,420	980	1,180
5	980	4,810	3,260	1,360	1,600	1,300	3,930	6,230	1,540	1,300	1,130	1,180
6	750	3,660	2,700	1,360	1,600	1,300	8,080	6,510	2,270	1,610	1,240	1,130
7	520	2,880	2,230	1,240	1,600	1,300	12,400	6,510	2,980	1,180	1,360	1,130
8	490	2,190	5,840	1,240	1,600	1,300	15,400	6,230	2,790	885	1,300	1,080
9	930	1,610	6,930	1,180	1,600	1,200	16,100	5,180	2,790	885	1,130	1,080
10	885	1,360	5,050	1,240	1,700	1,200	9,730	3,980	2,270	795	980	1,030
11	930	1,240	3,870	1,300	1,700	1,200	6,230	3,760	2,270	750	885	1,130
12	885	1,180	3,070	1,240	1,700	1,180	4,690	3,360	1,960	710	885	1,180
13	1,300	1,610	2,700	1,180	1,700	1,240	3,760	3,160	1,820	680	885	1,820
14	1,680	1,360	2,880	1,180	1,600	1,300	3,160	2,440	1,680	1,480	1,130	1,960
15	1,420	1,300	3,070	1,240	1,700	1,360	3,360	2,120	1,680	1,610	1,480	1,890
16	1,080	1,240	2,880	1,240	1,240	1,480	3,360	1,890	1,480	1,180	1,420	1,680
17	930	1,330	2,520	1,200	885	1,480	2,610	2,270	1,130	1,080	1,360	1,640
18	840	8,150	2,190	1,200	840	1,480	2,120	1,540	1,080	950	1,300	1,420
19	795	8,110	2,040	1,100	750	1,420	2,440	1,540	1,180	930	1,300	1,300
20	1,030	5,830	1,890	1,100	750	1,360	2,610	2,980	1,240	980	1,240	1,240
21	1,130	4,090	1,820	1,100	1,480	1,300	2,610	3,360	1,080	1,360	1,240	1,180
22	1,240	3,070	1,610	1,400	1,610	1,300	2,610	3,180	980	1,420	1,480	1,180
23	1,130	2,700	1,420	1,900	1,680	1,240	2,440	2,980	980	1,420	1,360	1,130
24	930	3,660	1,300	2,000	1,610	1,240	2,790	2,790	930	980	1,300	1,130
25	795	3,660	1,130	1,700	1,500	1,610	2,980	2,610	980	710	1,300	1,080
26	750	3,070	1,030	1,100	1,500	1,680	2,440	2,120	1,240	670	1,360	1,080
27	670	2,880	950	750	1,500	2,880	2,120	1,890	1,360	680	1,360	1,030
28	590	3,460	900	700	1,400	3,460	2,120	2,610	1,240	710	1,300	1,030
29	590	3,660	950	1,200	1,400	3,460	2,120	2,610	1,180	750	1,240	1,080
30	930	4,330	950	1,700	-----	3,070	2,270	1,890	1,960	670	1,180	1,080
31	1,240	-----	1,030	1,700	-----	2,880	-----	2,440	-----	710	710	-----
Month	Maximum					Minimum	Mean		Per square mile	Run-off in inches		
October	1,680					148	926		1.17	1.35		
November	8,150					750	2,970		3.75	4.18		
December	6,930					900	2,880		3.64	4.20		
January	2,000					700	1,350		1.70	1.96		
February	1,700					750	1,480		1.87	2.02		
March	3,460					1,180	1,630		2.06	2.38		
April	18,400					1,680	4,470		5.64	6.29		
May	6,510					1,540	3,380		4.27	4.92		
June	2,980					930	1,670		2.11	2.35		
July	2,270					630	1,100		1.39	1.60		
August	1,480					670	1,160		1.46	1.66		
September	1,960					490	1,210		1.53	1.71		
The year	18,400					148	2,020		2.55	34.64		

NOTE.—Discharge in second-feet per square mile and run-off in inches do not represent natural flow from basin.

HUDSON RIVER AT HADLEY, N. Y.

LOCATION.—Water-stage recorder at Hadley, Saratoga County, a quarter of a mile above mouth of Sacandaga River and just below Lake Luzerne outlet.

DRAINAGE AREA.—1,660 square miles.

RECORDS AVAILABLE.—July, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, 23,800 second-feet April 9 (gage height, 15.4 feet); minimum mean daily, about 750 second-feet October 1, 1921–1928: Maximum discharge, 33,100 second-feet April 12, 1922 (gage height, 19.71 feet); minimum, 362 second-feet September 3, 1923 (gage height, 1.19 feet).

REMARKS.—Records in general good. Flow slightly regulated by storage reservoirs. Discharge estimated October 1 to April 5 and July 23 to September 30 because of backwater from flashboards on dam.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	750	1,900	9,500	4,400	2,600	2,400	5,000	6,670	3,920	4,880	1,500	1,000
2.....	1,000	1,500	10,000	4,000	2,800	2,400	4,400	7,600	4,420	4,240	1,500	900
3.....	1,400	1,800	9,500	3,200	2,600	2,400	4,200	8,030	3,920	3,700	1,500	1,200
4.....	1,800	6,000	8,000	3,200	2,800	2,200	4,800	8,200	3,400	3,320	1,600	1,600
5.....	1,800	7,500	7,000	3,200	2,600	2,200	7,000	9,050	3,250	3,110	1,700	1,600
6.....	1,600	7,000	6,000	2,800	2,600	2,000	11,800	9,900	3,990	2,970	1,900	1,600
7.....	1,300	6,000	5,500	2,800	2,400	2,000	15,700	10,100	5,200	3,040	2,000	1,500
8.....	1,200	4,800	12,000	2,800	2,800	2,000	20,200	9,560	4,880	2,390	2,000	1,500
9.....	1,400	3,800	14,000	3,200	2,800	2,000	22,800	8,540	5,040	2,150	1,900	1,400
10.....	1,500	3,400	11,000	3,200	3,000	1,900	18,400	7,350	4,400	1,980	1,800	1,400
11.....	1,500	3,200	9,000	3,200	3,000	1,900	14,000	6,500	4,240	1,920	1,600	1,400
12.....	1,600	3,000	8,000	3,200	3,000	1,900	11,300	5,840	3,920	1,860	1,600	1,600
13.....	2,000	3,000	7,000	3,000	2,800	2,000	9,560	5,520	3,620	1,600	1,600	1,900
14.....	2,400	3,000	7,000	3,000	2,600	2,600	8,370	5,100	3,400	2,050	1,700	2,400
15.....	2,400	2,800	7,000	3,000	3,200	2,600	9,050	4,100	3,250	3,250	2,000	2,400
16.....	2,200	2,800	6,500	2,400	3,400	3,000	8,540	3,920	2,970	2,510	2,000	2,200
17.....	1,900	3,000	6,000	2,400	2,800	2,800	7,350	3,920	2,700	2,270	1,900	2,000
18.....	1,700	8,000	5,500	2,800	2,400	2,800	6,500	3,770	2,450	2,090	1,900	1,900
19.....	1,600	11,000	5,000	2,800	2,200	2,600	6,160	3,470	2,390	1,980	1,800	1,800
20.....	1,900	9,000	4,800	2,600	1,900	2,600	6,500	4,500	2,580	1,980	1,800	1,700
21.....	2,200	7,000	4,600	2,200	1,900	2,600	6,330	4,880	2,330	2,330	1,700	1,600
22.....	2,000	6,000	4,400	2,200	2,400	2,600	6,160	4,880	2,150	2,510	1,900	1,600
23.....	1,900	5,500	4,000	2,600	2,600	2,600	6,330	4,880	2,090	2,900	1,900	1,500
24.....	1,900	6,000	3,400	3,400	3,000	2,600	6,840	4,720	2,150	2,700	1,900	1,500
25.....	1,800	6,000	2,800	3,800	2,800	3,000	6,840	4,560	2,210	2,030	1,900	1,500
26.....	1,700	5,500	2,600	3,400	2,600	4,400	6,330	4,240	2,330	1,760	1,900	1,400
27.....	1,600	5,500	2,600	2,600	2,600	6,500	5,840	3,840	2,580	1,660	1,900	1,400
28.....	1,400	6,000	2,800	2,200	2,400	6,500	5,520	3,770	2,510	1,700	1,900	1,400
29.....	1,300	7,000	2,800	2,000	2,400	6,000	5,680	5,000	2,390	1,700	1,900	1,400
30.....	1,500	8,000	3,000	2,600	-----	6,000	5,840	3,840	4,100	1,600	2,000	1,500
31.....	2,000	-----	3,000	2,800	-----	5,500	-----	4,400	-----	1,500	1,700	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	2,400	750	1,690	1.02	1.18
November.....	11,000	1,500	5,170	3.11	3.47
December.....	14,000	2,600	6,270	3.78	4.36
January.....	4,400	2,000	2,930	1.77	2.04
February.....	3,400	1,900	2,660	1.60	1.73
March.....	6,500	1,900	3,070	1.85	2.13
April.....	22,800	4,200	8,780	5.29	5.90
May.....	10,100	3,470	5,840	3.52	4.06
June.....	5,200	2,090	3,290	1.98	2.21
July.....	4,880	1,500	2,440	1.47	1.70
August.....	2,000	1,500	1,800	1.08	1.24
September.....	2,400	900	1,590	.958	1.07
The year.....	22,800	750	3,790	2.28	31.09

NOTE.—Discharge in second-feet per square mile and run-off in inches do not represent natural flow from basin.

HUDSON RIVER AT MECHANICVILLE, N. Y.

LOCATION.—Water-stage recorder at Duncan Dam of West Virginia Pulp & Paper Co. in Mechanicville, Saratoga County.

DRAINAGE AREA.—4,600 square miles.

RECORDS AVAILABLE.—October, 1887, to September, 1928.

EXTREMES.—Maximum daily discharge during year, 70,000 second-feet November 4; minimum daily discharge, 933 second-feet October 2.

1887-1928: Maximum discharge, 120,000 second-feet March 28, 1913; practically no flow at times when plant is shut down.

REMARKS.—Discharge computed from flow over spillway, through wheels and through lock of Champlain Canal. Comparative studies with flow at gaging stations above Mechanicville indicate that the record as published below is low by varying amounts, the maximum difference being about 15 per cent low and the yearly average about 5 per cent. Flow regulated by storage above station. Water is diverted through Glen Falls feeder into Lake Champlain, for which no correction is made. Records of discharge over spillway and through wheels furnished by West Virginia Pulp & Paper Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,380	4,210	24,400	17,400	5,650	5,770	14,100	15,700	10,300	17,800	4,330	4,060
2.....	933	3,900	25,700	14,200	5,460	5,300	13,100	17,400	10,000	12,700	4,260	3,980
3.....	1,080	24,700	25,900	11,500	5,520	4,950	11,800	18,000	10,400	11,800	3,840	2,200
4.....	3,170	70,000	21,000	12,100	5,230	4,260	12,200	17,700	9,510	10,100	5,860	5,270
5.....	4,070	38,700	18,400	12,700	4,480	5,060	16,100	17,900	8,640	8,420	4,880	4,730
6.....	3,110	24,800	16,600	10,500	5,950	5,260	23,200	19,800	10,500	7,130	8,600	4,490
7.....	3,340	21,600	15,800	8,420	5,220	4,780	30,700	19,100	13,900	6,850	6,450	4,190
8.....	2,520	17,100	34,700	8,660	5,610	4,220	40,800	18,000	14,000	5,630	5,850	3,670
9.....	2,080	14,800	33,900	9,880	8,360	4,000	46,600	16,400	13,000	5,880	6,110	3,400
10.....	2,420	12,200	27,100	9,420	7,740	3,450	41,100	14,600	13,700	5,320	5,740	2,330
11.....	3,170	11,200	25,200	8,600	6,480	2,290	31,400	12,500	12,400	4,520	4,980	3,600
12.....	3,300	10,100	22,900	8,140	5,920	3,730	26,400	11,400	10,600	4,260	3,560	3,290
13.....	9,800	9,630	21,500	8,230	6,120	5,600	23,100	10,600	9,000	4,280	3,060	3,250
14.....	8,180	7,670	24,300	9,020	6,440	8,920	20,400	10,100	9,120	3,360	3,840	3,520
15.....	7,610	7,600	21,000	7,930	17,100	9,330	21,900	8,840	9,540	3,640	3,190	3,910
16.....	6,700	7,340	19,900	6,930	11,200	8,370	20,400	8,030	8,200	5,910	3,040	2,680
17.....	5,860	8,190	19,100	6,670	9,620	7,570	18,400	7,200	6,760	4,910	3,480	3,260
18.....	5,340	16,300	16,800	6,260	8,110	7,290	16,000	6,670	7,050	4,120	3,220	3,830
19.....	4,960	21,700	15,100	7,260	6,680	7,170	15,300	6,290	7,350	3,680	3,790	3,370
20.....	6,310	19,600	13,100	6,410	6,650	7,090	15,300	6,900	5,110	3,600	2,750	3,490
21.....	8,570	16,700	12,500	5,840	5,620	6,890	14,800	11,400	5,130	3,140	3,330	3,370
22.....	6,660	14,200	11,600	3,880	5,610	6,640	16,900	10,000	6,150	3,430	3,380	2,590
23.....	4,870	13,300	10,400	4,570	7,770	6,660	17,500	11,600	4,950	6,360	3,690	1,530
24.....	5,690	14,000	8,810	6,160	12,000	7,400	18,200	12,500	4,680	6,810	4,180	2,190
25.....	5,500	15,900	6,850	14,300	8,190	10,200	17,800	11,900	6,580	5,570	3,570	2,990
26.....	5,040	14,700	6,860	10,600	5,870	13,900	16,800	10,800	7,390	5,060	5,980	2,780
27.....	4,460	18,100	7,720	8,290	6,360	20,700	15,500	9,900	7,760	4,940	6,540	2,640
28.....	4,570	18,800	6,680	7,440	6,050	18,700	15,500	10,200	6,740	9,000	4,740	2,570
29.....	3,590	21,600	8,820	5,060	6,070	17,200	16,300	10,200	6,880	7,650	5,030	2,150
30.....	2,820	22,900	10,400	5,450	-----	17,100	15,300	9,890	9,570	5,150	4,440	1,420
31.....	3,330	-----	11,500	5,680	-----	15,200	-----	10,200	-----	7,840	5,140	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	9,800	933	4,530	1.01	1.16
November.....	70,000	3,900	17,400	3.87	4.32
December.....	34,700	6,680	17,600	3.91	4.51
January.....	17,400	3,880	8,630	1.92	2.21
February.....	17,100	4,480	7,140	1.59	1.72
March.....	20,700	2,290	8,230	1.83	2.11
April.....	46,600	11,800	20,800	4.62	5.16
May.....	19,800	6,290	12,300	2.73	3.15
June.....	14,000	4,680	8,830	1.96	2.19
July.....	17,800	3,140	6,410	1.42	1.64
August.....	8,600	2,750	4,540	1.01	1.16
September.....	5,270	1,420	3,220	.716	.80
The year.....	70,000	933	9,950	2.21	30.13

NOTE.—Discharge in second-feet per square mile and run-off in inches do not represent natural flow from

INDIAN LAKE RESERVOIR NEAR INDIAN LAKE, N. Y.

LOCATION.—Chain gage at Indian Lake Dam, 2 miles south of Indian Lake village, Hamilton County, and $7\frac{1}{2}$ miles above mouth of Indian River.

DRAINAGE AREA.—131 square miles.

RECORDS AVAILABLE.—July, 1900, to September, 1928.

EXTREMES.—Maximum stage during year, 35.5 feet January 8 and May 7; minimum, 14.3 feet March 25.

1900–1928: Maximum stage, 38.8 feet March 28, 1913; minimum, 2.0 feet March 9–18, 1907, and January 3–17, 1910.

REMARKS.—Storage capacity of reservoir about 4.7 billion cubic feet.

Daily gage height, in feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15.4	16.8	27.0	34.9	32.0	22.3	16.9	31.9	34.4	34.6	34.5	27.6
2	15.2	16.8	27.6	35.0	31.8	21.9	17.2	32.5	34.4	34.6	34.5	27.3
3	14.9	16.8	27.9	35.2	31.0	21.4	17.3	33.0	34.4	34.7	34.5	26.8
4	14.9	17.4	28.1	35.3	30.7	21.0	17.5	33.7	34.4	34.7	34.5	26.4
5	15.0	17.9	28.4	35.3	30.2	20.6	18.1	34.4	34.4	34.7	34.4	26.0
6	15.0	18.2	28.4	35.4	29.6	20.2	19.2	35.2	34.5	34.7	34.3	25.6
7	15.2	18.4	28.5	35.4	29.2	19.8	20.9	35.5	34.5	34.7	34.3	25.2
8	15.2	18.5	29.7	35.5	28.9	19.4	23.3	35.4	34.6	34.7	34.3	24.9
9	15.2	18.7	30.9	35.4	28.3	19.0	24.5	35.3	34.7	34.7	34.3	24.5
10	15.3	18.8	31.4	35.3	27.9	18.7	25.3	35.2	34.7	34.7	34.3	24.0
11	15.1	18.9	31.7	35.3	27.4	18.4	25.7	35.1	34.7	34.7	34.3	23.7
12	15.0	19.0	31.9	35.2	27.0	18.0	26.0	34.9	34.6	34.7	34.2	23.4
13	15.0	19.1	32.2	35.1	26.6	17.7	26.3	34.8	34.5	34.6	34.1	23.2
14	15.1	19.2	32.5	35.1	26.2	17.3	26.7	34.8	34.5	34.9	33.8	22.8
15	15.2	19.4	32.9	35.0	25.8	17.0	27.2	34.7	34.4	34.9	33.3	22.4
16	15.3	19.6	33.1	35.0	25.8	16.7	27.5	34.6	34.2	34.9	32.9	22.0
17	15.4	19.8	33.3	35.0	25.9	16.4	27.8	34.5	34.1	34.9	32.4	21.9
18	15.5	21.0	33.5	35.0	26.0	16.1	28.0	34.5	34.0	34.8	32.0	21.4
19	15.6	21.8	33.6	34.9	26.0	15.8	28.3	34.6	34.0	34.7	31.6	21.0
20	15.7	22.2	33.8	34.9	26.2	15.5	28.8	34.8	34.0	34.6	31.1	20.8
21	15.9	22.5	33.8	34.9	25.9	15.5	29.1	35.0	34.0	34.6	30.8	20.4
22	16.0	22.6	33.9	34.7	25.6	15.3	29.5	35.0	34.0	34.6	30.4	20.2
23	16.1	22.9	34.0	34.0	24.9	14.9	29.8	35.0	34.0	34.6	30.0	19.6
24	16.3	23.2	34.1	33.7	24.5	14.4	30.0	34.9	34.0	34.6	29.6	19.4
25	16.5	23.7	34.4	33.5	24.1	14.3	30.4	34.8	34.0	34.6	29.3	19.0
26	16.7	24.0	34.4	33.5	23.7	14.5	30.6	34.7	34.1	34.6	28.9	18.7
27	16.7	24.2	34.6	33.5	23.4	15.4	30.8	34.5	34.2	34.5	28.5	18.4
28	16.7	24.8	34.6	33.5	23.0	15.8	31.0	34.5	34.3	34.5	28.1	18.1
29	16.7	25.4	34.6	33.2	22.7	16.1	31.3	34.5	34.3	34.6	27.9	17.7
30	16.7	26.4	34.6	32.9	-----	16.4	31.4	34.4	34.5	34.6	27.5	17.3
31	16.7	-----	34.6	32.4	-----	16.6	-----	34.4	-----	34.6	27.6	-----

INDIAN RIVER NEAR INDIAN LAKE, N. Y.

LOCATION.—Water-stage recorder three-quarters of a mile below Indian Lake Dam and 2 miles south of Indian Lake village, Hamilton County.

DRAINAGE AREA.—132 square miles.

RECORDS AVAILABLE.—July, 1912, to June, 1914; June, 1915, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,160 second-feet January 22 and 23 (gage height, 4.25 feet); practically no flow at times.

1912-1928: Maximum discharge, 3,460 second-feet March 28, 1913 (gage height, 7.8 feet); practically no flow at times.

REMARKS.—Records fair. Flow regulated by storage in Indian Lake Dam.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	591	0.8	7.9	62	*1,120	*872	} 11	} 9.5	287	126	157	148
2.....	700	1.0	3.9	132	*1,120	*872			284	126	284	706
3.....	680	4.2	3.2	172	1,090	*850			281	126	372	*895
4.....	325	14	2.7	181	1,090	*850			281	128	283	*872
5.....	4.6	7.9	2.7	191	*1,090	*828			281	130	179	*872
6.....	2.9	5.2	2.7	198	1,090	*805	*14	*82	284	134	177	*872
7.....	3.2	3.6	2.9	*198	1,090	*805	*15	*569	284	132	177	*850
8.....	3.6	2.7	35	195	1,060	*805	*17	*957	284	132	174	*850
9.....	3.6	2.3	13	262	1,040	*782	*20	*805	300	130	174	*850
10.....	124	2.1	11	347	*1,020	*782	*14	*805	462	132	174	*828
11.....	414	1.8	12	354	*990	*760	*9	*805	542	130	273	*828
12.....	414	1.6	12	334	*990	*760	*8	782	542	128	372	*828
13.....	208	2.1	13	331	*965	740	*7	696	542	128	486	*805
14.....	3.6	1.8	14	320	*965	740		580	542	175	1,040	805
15.....	2.5	1.6	15	312	*529	*720		490	386	281	*1,040	805
16.....	2.1	*2.9	17	303	*12	720		344	303	307	*1,020	782
17.....	1.8	*13	*20	301	*12	700		292	301	326	1,020	*782
18.....	1.8	13	21	292	12	700		205	243	323	*990	*760
19.....	2.3	4.6	22	284	12	680		*159	142	213	*990	*760
20.....	3.2	2.9	22	287	373	680		*186	142	138	*990	*760
21.....	3.6	2.5	22	542	965	*660	} 8.5	*385	132	138	*965	*740
22.....	3.2	*2.9	23	1,140	940	*640		*550	124	138	*965	*740
23.....	2.7	*5.9	24	1,060	940	640		*660	124	138	*965	*720
24.....	2.3	4.6	25	760	940	620		680	124	138	940	*720
25.....	2.1	2.9	26	593	*918	503		660	124	146	940	*720
26.....	1.6	2.7	27	78	*918	*13		569	124	166	*940	*700
27.....	1.4	4.6	26	43	*895	*10		460	124	163	*918	*700
28.....	1.2	4.6	26	*400	*895	*10		426	124	161	*918	*680
29.....	1.0	7.1	26	*1,120	*872	*10		426	128	159	*918	*680
30.....	1.0	5.5	28	*1,120		*10		337	130	159	*443	*660
31.....	1.0		32	*1,120		*10		287		159	114	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	700	1.0	113	0.856	0.99
November.....	14	.8	4.41	.033	.04
December.....	35	2.7	17.4	.132	.15
January.....	1,140	43	420	3.18	3.67
February.....	1,120	12	826	6.26	6.75
March.....	872	10	599	4.54	5.23
April.....	20	7	10.1	.077	.09
May.....	957		427	3.23	3.72
June.....	542	124	266	2.02	2.26
July.....	326	126	165	1.26	1.44
August.....	1,040	114	626	4.74	5.46
September.....	895	148	757	5.73	6.39
The year.....	1,140	.8	351	2.66	36.18

* Estimated.

NOTE.—Net increase in storage in Indian Lake Reservoir during year was 240,000,000 cubic feet—equivalent to mean discharge of 7.6 second-feet.

NORTH CREEK AT NORTH CREEK, N. Y.

LOCATION.—Staff gage 125 feet below abandoned dam in North Creek, Warren County, and 1,000 feet above mouth.

DRAINAGE AREA.—21.8 square miles.

RECORDS AVAILABLE.—July, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, 910 second-feet April 5 (gage height, 4.5 feet); minimum, 3.9 second-feet October 1 (gage height, 1.24 feet).

1924-1928: Maximum discharge, that of April 5, 1928; minimum, 0.3 second-foot September 1, 1926, and September 26, 1927.

REMARKS.—Records good except those for periods of backwater from ice, January 4-8, 16-31, February 1-14, 19-29, and March 1-13, or from Hudson River, November 18, 19, December 8, 9, and April 6-11, which are fair.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.9	14	218	180	16	16	46	146	38	98	6.9	7.9
2	8.8	12	117	88	15	15	51	157	28	47	6.6	7.9
3	7.2	22	80	46	13	15	54	136	27	26	6.9	9.6
4	72	340	47	32	15	14	188	146	26	17	10	11
5	56	213	48	24	17	14	310	157	46	22	11	11
6	32	108	42	24	16	13	750	146	77	27	12	9.2
7	16	61	43	26	15	13	500	108	66	24	16	7.9
8	12	38	650	28	16	13	550	97	61	20	16	7.2
9	12	37	360	32	18	12	260	73	57	17	12	6.6
10	12	39	157	30	20	12	120	56	52	16	10	18
11	11	31	136	29	19	12	120	46	43	14	27	20
12	11	24	91	28	17	11	100	42	38	11	18	24
13	108	17	59	27	18	14	85	37	32	9.9	12	25
14	62	19	117	29	19	43	75	29	27	36	9.9	15
15	31	22	82	30	27	48	92	26	21	59	8.2	12
16	25	20	73	28	25	50	100	26	20	35	7.2	10
17	25	58	56	26	23	46	82	25	18	20	6.6	9.6
18	27	200	46	26	21	43	76	27	18	24	7.2	8.8
19	31	100	40	26	19	33	77	66	22	43	6.6	8.2
20	61	69	39	24	18	27	77	81	21	50	6.6	7.9
21	55	46	36	22	16	22	69	68	20	30	5.6	7.5
22	22	41	32	20	15	20	68	53	18	26	5.9	7.2
23	9.2	40	30	20	17	18	69	48	20	23	11	7.5
24	16	63	27	22	20	56	100	41	20	15	14	7.5
25	20	69	24	34	20	108	81	39	20	8.5	14	7.2
26	18	69	23	32	19	186	86	36	95	6.9	12	7.5
27	17	68	22	28	18	457	90	37	41	20	10	8.8
28	16	80	24	22	17	168	92	39	31	31	9.9	9.6
29	16	146	25	20	16	108	96	37	78	11	9.2	8.2
30	14	157	27	19	-----	86	94	34	334	8.2	8.5	7.2
31	14	-----	46	18	-----	70	-----	46	-----	7.5	8.5	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	108	3.9	27.1	1.24	1.43
November	340	12	74.1	3.40	3.79
December	650	22	90.9	4.17	4.81
January	180	18	33.5	1.54	1.78
February	27	13	18.1	.830	.90
March	457	11	56.9	2.61	3.01
April	750	46	152	6.97	7.78
May	157	25	67.9	3.11	3.68
June	334	18	47.2	2.17	2.42
July	98	6.9	25.9	1.19	1.37
August	27	5.6	10.5	.482	.56
September	25	6.6	10.5	.482	.54
The year	750	3.9	51.2	2.35	31.97

SCHROON RIVER AT RIVERBANK, N. Y.

LOCATION.—Water-stage recorder at Riverbank, Warren County, 9 miles below Schroon Lake Reservoir and 13 miles above mouth.

DRAINAGE AREA.—528 square miles (revised).

RECORDS AVAILABLE.—September, 1907, to September, 1928.

EXTREMES.—Maximum discharge during year, 5,840 second-feet April 9 (gage height, 8.2 feet); minimum, 161 second-feet October 3 (gage height, 1.42 feet).

1907–1928: Maximum discharge, about 13,500 second-feet March 28, 1913 (gage height, 10.7 feet); minimum, 28 second-feet October 17, 1909 (gage height, 0.85 foot).

REMARKS.—Records excellent except those for periods of ice effect, January 3, 4, 22–31, February 1–7, 13, 14, 19–29, and March 4–11, and for estimated period, June 4–10, which are fair. Flow regulated somewhat by storage.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	169	453	2,290	1,220	750	580	1,840	2,200	1,400	1,040	470	276
2	172	437	2,560	1,260	700	555	1,800	2,290	1,320	1,180	461	259
3	166	559	2,660	1,200	700	546	1,720	2,290	1,290	1,220	433	262
4	329	1,000	2,560	1,200	650	550	1,800	2,340	1,200	1,180	417	272
5	478	1,410	2,380	1,120	650	500	2,060	2,380	1,200	1,120	425	266
6	445	1,680	2,290	1,080	650	500	2,660	2,470	1,300	1,040	441	262
7	425	1,760	2,110	1,080	650	500	3,640	2,560	1,400	975	445	259
8	417	1,720	2,680	1,080	630	480	4,870	2,470	1,500	910	441	256
9	401	1,640	3,460	1,040	655	480	5,720	2,340	1,500	880	433	243
10	369	1,560	3,670	1,040	655	460	5,480	2,160	1,500	820	437	240
11	361	1,480	3,560	1,040	655	460	4,880	2,020	1,440	792	453	253
12	334	1,400	3,360	1,010	655	457	4,220	1,880	1,400	710	453	256
13	391	1,320	3,060	1,010	650	465	3,780	1,760	1,290	630	449	262
14	474	1,260	2,960	975	650	550	3,460	1,640	1,220	630	441	266
15	496	1,220	2,760	975	710	580	3,260	1,520	1,180	655	425	272
16	483	1,180	2,560	940	765	580	3,060	1,400	1,120	682	401	262
17	483	1,150	2,470	910	765	630	2,860	1,320	1,010	682	397	266
18	510	1,400	2,290	880	765	655	2,660	1,260	975	655	389	266
19	524	1,760	2,110	850	750	655	2,470	1,260	940	655	381	262
20	555	1,880	1,980	850	700	655	2,380	1,320	880	630	373	262
21	510	1,880	1,800	820	700	655	2,290	1,360	765	630	353	259
22	437	1,840	1,680	800	700	655	2,200	1,360	738	605	322	253
23	547	1,800	1,560	750	700	655	2,200	1,320	710	630	322	243
24	605	1,840	1,440	750	650	655	2,240	1,320	710	630	311	240
25	557	1,880	1,320	750	650	710	2,240	1,360	710	605	304	243
26	555	1,840	1,260	800	650	880	2,240	1,360	738	580	300	237
27	542	1,800	1,180	850	650	1,260	2,200	1,360	765	580	311	231
28	524	1,840	1,150	850	600	1,520	2,160	1,360	765	580	307	231
29	506	1,930	1,120	800	600	1,720	2,110	1,360	765	550	300	228
30	488	2,060	1,080	800	-----	1,840	2,160	1,360	880	542	290	225
31	470	-----	1,080	750	-----	1,880	-----	1,400	-----	514	286	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	605	166	443	0.839	0.97
November	2,060	437	1,500	2.84	3.17
December	3,670	1,080	2,210	4.19	4.83
January	1,260	750	951	1.80	2.08
February	765	600	678	1.28	1.38
March	1,880	457	751	1.42	1.64
April	5,720	1,720	2,890	5.47	6.10
May	2,560	1,260	1,740	3.30	3.80
June	1,500	710	1,090	2.06	2.30
July	1,220	514	759	1.44	1.66
August	470	286	386	.731	.84
September	276	225	254	.481	.54
The year	5,720	166	1,140	2.16	29.31

NOTE.—Discharge in second-feet per square mile and run-off in inches do not represent natural flow from basin.

SACANDAGA RIVER NEAR HOPE, N. Y.

LOCATION.—Staff gage $1\frac{1}{2}$ miles below junction of East and West Branches, $4\frac{1}{2}$ miles above Hope, Hamilton County, and $11\frac{1}{2}$ miles above Northville.

DRAINAGE AREA.—494 square miles.

RECORDS AVAILABLE.—September, 1911, to September, 1928.

EXTREMES.—Maximum discharge during year, 14,400 second-feet April 7 and 8 (gage height, 8.2 feet); minimum, 159 second-feet October 1 (gage height, 1.76 feet).

1911–1928: Maximum stage, 11.7 feet during flood of March 25–30, 1913 (discharge not determined); minimum discharge, about 16 second-feet September 30, 1913 (gage height, 1.17 feet).

REMARKS.—Records fair except those for estimated periods, which are poor.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	159	440	° 5,500	3,380	° 650		1,630	2,320		2,480	361	
2....	162	440	° 5,000	2,990	° 600		1,510	3,790		° 2,600	315	
3....	162	948	° 4,400	2,640			1,510	3,580		° 2,000	412	
4....	468	2,030	4,010	2,320			1,960	3,180	° 1,200	1,230	665	
5....	440	4,010	4,010	1,890			° 5,780	3,180			740	
6....	440		3,790	1,510			11,900	3,790			740	
7....	412		3,580	1,390		° 480	14,200	° 3,500				° 400
8....	386			1,180	° 600		° 14,400	° 3,200	1,510			
9....	361			1,040			° 12,400	° 2,600	1,630			
10....	315	° 1,700		820			° 7,260	2,030	1,760		° 750	
11....	294		° 4,800	665			° 5,500		1,630	° 650		
12....				665			3,580		1,280		468	
13....		665		740			2,990		990		440	
14....		665		948			2,640		905		412	
15....	° 1,300	630	4,460	905			2,810	° 1,000	780			440
16....			3,580	862	° 1,150		2,640		702			361
17....	595		3,180	820			2,480		630			294
18....	° 700		2,480	820		° 925	2,480		530			208
19....	° 800		2,170				2,640		702	361		192
20....	948	° 1,800	1,890				2,810		665	386	° 280	176
21....			1,630				2,640	° 1,300	665	386		192
22....			1,390				2,810		702			225
23....			1,180			562	2,810		665			315
24....		° 850	820		° 850	665	2,810		780			294
25....			665	° 875		1,230	2,640		1,130	° 700		294
26....			° 650				2,480		2,170			273
27....		° 3,000	° 650				2,320		2,030		412	315
28....	440		° 650			° 3,200	2,170	° 1,100	1,890	740	412	315
29....	468		665				2,170		° 2,000	595	440	315
30....	468		1,080				2,170		° 2,400	530	530	294
31....	468		° 1,600							386	° 550	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....		159	675	1.37	1.58
November.....	4,010	440	1,900	3.85	4.30
December.....	5,500	650	2,990	6.05	6.98
January.....	3,380		1,190	2.41	2.78
February.....			802	1.62	1.75
March.....			1,170	2.37	2.73
April.....	14,400	1,510	4,270	8.64	9.64
May.....	3,790		1,770	3.58	4.13
June.....	2,400	530	1,220	2.47	2.76
July.....	2,600	361	806	1.63	1.88
August.....			452	.915	1.05
September.....		176	337	.682	.76
The year.....	14,400	159	1,460	2.96	40.34

° Estimated.

SACANDAGA RIVER AT HADLEY, N. Y.

LOCATION.—Water-stage recorder half a mile west of Hadley, Saratoga County, and 1 mile above mouth.

DRAINAGE AREA.—1,060 square miles.

RECORDS AVAILABLE.—January, 1911, to September, 1928.

EXTREMES.—Maximum discharge during year, 20,400 second-feet April 9 (gage height, 10.2 feet); minimum, 323 second-feet October 3 (gage height, 2.88 feet).

1911-1928: Maximum discharge, about 35,500 second-feet March 28, 1913 (gage height, 12.36 feet); minimum, about 61 second-feet September 16, 1913 (gage height, 2.25 feet).

REMARKS.—Records good except those for periods of ice effect, January 28 to February 15 and March 1-12, which are fair. Discharge estimated September 9 because of missing gage-height record.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	353	961	9,310	3,370	1,400	1,300	5,160	5,160	2,690	5,160	1,030	1,110.
2.....	335	925	10,000	4,320	1,300	1,200	4,670	5,540	2,440	5,280	898	925
3.....	341	1,340	9,310	4,200	1,300	1,200	4,320	5,800	2,270	4,790	808	800
4.....	966	4,690	7,410	3,870	1,200	1,100	4,440	5,670	2,040	3,980	1,140	1,100
5.....	1,750	6,350	6,350	3,450	1,200	1,000	5,420	5,540	1,890	3,250	1,670	1,280
6.....	1,510	7,100	5,540	2,960	1,200	950	7,620	5,670	2,640	2,960	1,500	1,020
7.....	1,270	6,500	4,790	2,780	1,200	950	11,700	5,670	3,870	2,440	1,570	856
8.....	1,150	5,540	7,460	2,780	1,200	900	16,800	5,540	4,090	1,890	1,960	744
9.....	1,220	4,550	9,670	2,690	1,300	900	20,400	5,030	3,760	1,490	1,890	706
10.....	1,070	3,450	10,000	2,600	1,500	950	16,900	4,550	3,980	1,260	1,570	657
11.....	916	2,870	9,670	2,350	1,500	1,000	12,600	3,980	3,870	1,200	1,320	601
12.....	800	2,440	8,240	2,270	1,400	950	10,000	3,450	3,350	1,070	1,060	629
13.....	1,470	2,040	6,940	2,040	1,400	988	8,240	2,780	2,690	925	925	720
14.....	3,160	1,820	6,500	2,040	1,400	1,500	7,100	2,350	2,270	1,010	808	792
15.....	2,870	1,610	6,940	2,120	2,000	2,040	7,250	1,960	1,890	1,570	720	720
16.....	2,350	1,490	6,790	2,040	2,780	2,350	7,670	1,700	1,610	1,500	643	643
17.....	1,890	1,520	6,070	1,890	2,870	2,440	7,250	1,480	1,380	1,200	567	528
18.....	1,750	3,890	5,030	1,960	2,690	2,440	6,500	1,360	1,220	1,020	560	455
19.....	1,740	5,410	4,440	1,890	2,350	2,190	5,940	1,480	1,230	898	534	419
20.....	1,890	5,540	3,870	1,660	2,190	2,040	5,670	2,450	1,500	848	497	413
21.....	2,350	5,160	3,450	1,360	1,960	1,820	5,670	3,250	1,490	856	461	395
22.....	2,440	4,550	3,060	1,260	1,750	1,720	5,540	3,350	1,390	898	425	413
23.....	2,120	3,980	2,600	1,300	1,750	1,610	5,940	3,350	1,380	1,420	431	503
24.....	1,820	3,980	1,890	1,390	1,890	1,610	5,940	3,160	1,500	2,120	491	554
25.....	1,550	4,320	1,520	1,820	2,040	2,040	6,070	2,870	1,890	1,820	541	541
26.....	1,350	4,320	1,500	2,350	1,890	3,250	5,940	2,690	2,440	1,460	699	567
27.....	1,180	4,550	1,380	2,690	1,720	4,670	5,540	2,440	3,250	1,230	800	554
28.....	1,060	5,030	1,430	2,400	1,600	5,410	5,160	2,440	2,870	1,370	744	528
29.....	988	6,210	1,500	2,000	1,480	6,210	5,030	2,440	2,520	1,560	872	554
30.....	997	7,740	1,750	1,800	-----	6,500	4,910	2,600	4,280	1,430	1,100	567
31.....	979	-----	2,520	1,600	-----	5,940	-----	2,690	-----	1,170	1,120	-----
Month	Maximum					Minimum		Mean		Per square mile		Run-off in inches
October.....	3,160					335		1,470		1.39		1.60
November.....	7,740					925		4,000		3.77		4.21
December.....	10,000					1,380		5,380		5.08		5.86
January.....	4,320					1,260		2,380		2.25		2.59
February.....	2,870					1,200		1,710		1.61		1.74
March.....	6,500					900		2,230		2.10		2.42
April.....	20,400					4,320		7,700		7.26		8.10
May.....	5,800					1,360		3,500		3.30		3.80
June.....	4,290					1,220		2,460		2.32		2.59
July.....	5,280					848		1,910		1.80		2.08
August.....	1,960					425		947		.893		1.03
September.....	1,280					395		676		.638		.71
The year.....	20,400					335		2,860		2.70		36.73

GLENS FALLS FEEDER AT GLENS FALLS, N. Y.

LOCATION.—Slope station at upper end of feeder canal at Glens Falls, Warren County. Water-stage recorders determine slope just below point of diversion from Hudson River at feeder dam.

RECORDS AVAILABLE.—May, 1927, to September, 1928. Discharge measurements only from 1895 to 1918.

REMARKS.—Daily discharge determined by use of Chezy formula, variations in coefficient "C" throughout the season being computed from current-meter measurements. Records generally good except those for periods, October 1, 8-22, and 26-29, which are fair. Spillways automatically divert excess flow between gages; also some leakage. Flow regulated by demands of Champlain Canal and for floating logs.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	May	June	July	Aug.	Sept.
1	178	159	155	163	146	174	189	219
2	171	159	160	138	167	190	217	
3	199	137	171	155	161	186	220	
4	151	132	190	149	153	186	253	
5	157	123	188	146	151	189	240	
6	165	130	184	152	153	186	247	
7	151	134	185	191	153	189	241	
8		131	133	184	155	192	236	
9		139	145	172	156	194	208	
10		159	179	148	162	189	237	
11		165	173	135	172	193	236	
12		156	159	144	180	189	230	
13		153	151	153	190	190	241	
14		153	164	151	180	192	246	
15		165	157	173	182	195	230	
16	160	179	158	186	183	203	234	
17		158	160	164	190	193	222	
18		153	154	181	193	216	221	
19		156	150	160	199	208	223	
20		156	168	157	186	224	219	
21		155	161	160	167	215	209	
22		153	163	169	183	212	234	
23		146	167	150	178	223	238	
24		163	169	160	185	225	229	
25		163	159	161	185	223	229	
26		166	156	166	184	220	226	
27		162	169	166	186	221	227	
28		165	166	168	184	215	221	
29		162	161	167	188	216	222	
30		158	150	164	181	215	226	
31		161	126	188	218	218	226	

Month	Maximum	Minimum	Mean	Month	Maximum	Minimum	Mean
October	178	151	161	July	199	151	176
November	179	123	148	August	225	186	203
May	190	126	163	September	253	208	229
June	191	135	161				

NOTE.—No record for months omitted.

BATTEN KILL AT BATTENVILLE, N. Y.

LOCATION.—Water-stage recorder 1 mile southwest of Battenville, Washington County, 2½ miles below Whitaker Brook, and 11 miles above mouth.

DRAINAGE AREA.—397 square miles.

RECORDS AVAILABLE.—October, 1922, to September, 1928.

EXTREMES.—Maximum discharge during year, 21,300 second-feet November 4 (gage height, 17.7 feet); minimum, 47 second-feet October 1 (gage height, 1.82 feet).

1922-1928: Maximum discharge, that of November 4, 1927; minimum, 36 second-feet August 24, 1927 (gage height, 1.77 feet).

REMARKS.—Records good except those for periods of ice effect, December 25-29, January 2-10, January 16 to February 8, and February 27 to March 8, which are fair. Discharge estimated November 4.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	95	345	2,560	2,630	460	480	962	1,350	1,040	1,350	300	435
2.....	88	330	2,210	2,000	460	460	859	1,620	1,090	985	286	353
3.....	104	2,300	2,260	1,400	440	440	866	1,620	1,130	824	282	338
4.....	288	18,000	1,810	1,000	460	420	888	1,580	918	720	530	630
5.....	504	10,200	1,580	850	550	400	1,360	1,620	910	668	474	462
6.....	291	5,100	1,480	800	480	360	2,010	1,660	1,250	592	594	378
7.....	232	3,520	1,360	800	460	360	2,560	1,440	1,810	508	754	333
8.....	233	2,480	3,540	850	460	340	3,060	1,170	1,500	457	544	328
9.....	277	1,910	4,190	850	1,000	343	2,950	1,020	1,270	425	435	314
10.....	227	1,530	3,100	900	961	336	1,920	902	1,350	425	358	282
11.....	199	1,350	2,390	831	623	310	1,310	831	1,180	404	338	246
12.....	176	1,310	2,060	810	556	310	1,440	768	1,000	419	353	254
13.....	1,180	1,130	1,910	817	502	511	1,620	694	866	399	314	238
14.....	1,580	992	2,420	1,020	490	1,800	1,440	636	782	373	282	515
15.....	987	918	2,380	918	2,880	1,430	1,850	598	1,030	393	264	291
16.....	702	838	1,960	700	2,000	774	1,620	556	782	368	225	264
17.....	590	867	1,760	700	962	642	1,400	526	656	314	230	251
18.....	560	1,880	1,480	650	747	598	1,190	502	592	291	286	297
19.....	524	1,710	1,270	600	630	544	1,170	550	562	282	343	310
20.....	730	1,400	1,190	550	556	496	1,230	828	544	273	353	305
21.....	1,120	1,190	1,100	460	532	474	1,060	994	520	286	277	222
22.....	930	1,120	1,010	440	538	479	1,230	754	484	273	238	218
23.....	722	1,120	948	420	927	496	1,350	900	484	438	370	198
24.....	620	1,350	803	440	1,970	681	1,350	1,540	484	393	455	210
25.....	560	1,530	650	1,700	1,170	1,440	1,310	1,620	562	314	377	198
26.....	508	1,310	600	1,500	668	1,760	1,230	1,350	675	277	592	191
27.....	470	1,670	550	900	600	2,530	1,100	1,160	761	255	642	191
28.....	448	2,410	600	700	550	2,360	1,140	1,130	734	735	468	198
29.....	420	2,510	650	600	500	1,620	1,270	1,090	586	673	399	238
30.....	376	2,620	839	590	-----	1,270	1,180	978	1,120	440	368	210
31.....	365	-----	1,270	480	-----	1,060	-----	1,020	-----	343	514	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,580	88	520	1.31	1.51
November.....	18,000	330	2,500	6.30	7.03
December.....	4,190	550	1,680	4.23	4.88
January.....	2,630	420	897	2.26	2.61
February.....	2,880	440	798	2.01	2.17
March.....	2,530	310	823	2.07	2.39
April.....	3,060	859	1,460	3.68	4.11
May.....	1,660	502	1,060	2.67	3.08
June.....	1,810	484	889	2.24	2.50
July.....	1,350	255	481	1.21	1.40
August.....	754	225	393	.990	1.14
September.....	630	191	290	.730	.81
The year.....	18,000	88	980	2.47	33.63

KAYADEROSSERAS CREEK NEAR WEST MILTON, N. Y.

LOCATION.—Water-stage recorder 500 feet below mouth of Glowegee Creek and 1 mile east of West Milton, Saratoga County.

DRAINAGE AREA.—89 square miles.

RECORDS AVAILABLE.—July, 1927, to September, 1928.

EXTREMES.—Maximum discharge during period of record, 1,650 second-feet August 29, 1927 (gage height, 6.4 feet); minimum, 6.1 second-feet August 23, 1927 (gage height, 0.86 foot).

REMARKS.—Records good except those for periods of ice effect, December 4–7, 16–30, January 2–7, January 21 to February 7, and February 25 to March 13, which are fair. Discharge estimated November 10–12, January 30 to February 4, and February 12–17.

Daily discharge, in second-feet, 1927–28

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1927											
1.....		197	136	11.....		50	66	21.....		24	44
2.....		134	163	12.....		45	61	22.....		46	47
3.....		74	188	13.....		43	50	23.....		22	49
4.....		62	106	14.....		48	59	24.....		13	33
5.....		56	87	15.....		45	44	25.....		38	51
6.....		25	86	16.....		48	49	26.....		45	32
7.....		65	62	17.....		27	49	27.....		36	41
8.....		52	34	18.....		60	39	28.....		178	22
9.....		80	49	19.....		59	129	29.....		919	50
10.....		50	50	20.....		28	87	30.....	47	373	36
								31.....	76	212	

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1927–28												
1.....	36	74	417	561	95	80	220	266	181	466	94	112
2.....	57	72	288	220	95	80	208	222	240	322	112	47
3.....	18	443	246	140	95	75	220	188	193	274	99	112
4.....	511	1,060	200	110	100	75	265	175	154	184	214	178
5.....	258	570	190	100	120	75	379	167	177	167	173	111
6.....	134	309	180	100	110	65	447	310	469	204	250	81
7.....	76	216	180	110	85	70	420	227	535	147	210	74
8.....	101	171	820	158	75	65	433	171	287	99	186	71
9.....	89	149	607	227	177	65	324	152	216	86	135	69
10.....	73	140	327	212	196	60	231	138	253	108	105	42
11.....	60	130	276	181	154	60	198	149	196	141	120	57
12.....	61	120	264	171	120	65	220	129	156	103	72	61
13.....	415	127	340	171	95	95	233	87	132	76	61	63
14.....	282	136	689	235	90	604	192	112	127	196	64	36
15.....	159	114	475	233	450	484	386	107	112	202	38	76
16.....	106	98	280	169	300	311	281	95	92	140	70	59
17.....	117	141	220	152	260	271	212	101	76	107	75	43
18.....	145	472	190	152	224	242	176	99	99	63	79	34
19.....	129	309	180	140	164	198	208	164	143	59	72	72
20.....	190	202	170	132	130	161	214	386	136	76	87	41
21.....	200	182	160	120	120	158	177	279	107	99	79	35
22.....	147	162	160	100	120	160	248	198	116	143	36	70
23.....	104	171	150	100	141	147	433	177	127	288	184	59
24.....	104	197	130	95	255	198	520	160	152	256	110	54
25.....	87	312	110	380	160	378	392	316	210	228	103	24
26.....	86	235	110	280	120	521	288	196	194	156	92	72
27.....	68	414	100	180	95	672	240	174	177	128	110	45
28.....	68	386	110	130	95	427	276	220	145	282	84	60
29.....	80	545	120	100	85	290	353	251	174	264	200	50
30.....	72	505	160	95	-----	251	297	213	680	156	130	57
31.....	74	-----	290	90	-----	229	-----	253	-----	92	133	-----

*Monthly discharge, in second-feet, of Kayaderosseras Creek near West Milton, N. Y.,
1927-28*

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
1927					
August.....	919	13	102	1.15	1.33
September.....	188	22	66.6	.748	.83
1927-28					
October.....	511	18	132	1.48	1.71
November.....	1,060	72	272	3.06	3.41
December.....	820	100	263	2.96	3.41
January.....	501	90	172	1.93	2.22
February.....	450	75	149	1.67	1.80
March.....	672	60	214	2.40	2.77
April.....	520	176	290	3.26	3.64
May.....	386	87	190	2.13	2.46
June.....	680	76	202	2.27	2.53
July.....	466	59	171	1.92	2.21
August.....	250	36	115	1.29	1.49
September.....	178	24	65.5	.736	.82
The year.....	1,060	18	186	2.09	23.47

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HOOSIC RIVER NEAR EAGLE BRIDGE, N. Y.

LOCATION.—Water-stage recorder half a mile below mouth of Walloomsac River and 1½ miles southeast of Eagle Bridge, Rensselaer County.

DRAINAGE AREA.—512 square miles.

RECORDS AVAILABLE.—August, 1910, to March, 1922; July, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year 29,800 second-feet November 4 (gage height, 18.8 feet); minimum, 68 second-feet October 2 (gage height 2.16 feet).

1910-1922, 1923-1928: Maximum discharge, that of November 4, 1927; practically no flow September 14, 1913 (gage height, 6.1 feet, old datum).

REMARKS.—Records good except those for periods of ice effect, December 25-27, January 4-6, 22, 23, 31, February 1, 2, 18-21, 27-29, and March 1-11, which are fair.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	127	421	2,630	4,890	800	700	1,150	2,190	1,300	2,620	864	1,020
2.....	116	380	2,360	2,650	800	650	1,050	2,780	1,460	1,730	864	840
3.....	128	7,500	2,990	2,100	811	600	1,080	2,420	1,300	1,350	797	1,360
4.....	1,010	26,000	2,100	1,700	872	550	1,200	2,290	1,050	1,070	1,610	1,820
5.....	825	9,430	1,970	1,400	1,170	550	2,180	1,970	1,240	952	1,220	1,200
6.....	394	4,570	1,850	1,300	866	500	3,040	1,910	2,510	872	2,850	970
7.....	311	3,290	1,760	1,350	816	480	3,220	1,620	2,980	768	1,740	872
8.....	354	2,560	5,750	1,400	1,090	480	3,350	1,350	2,030	644	1,350	792
9.....	398	2,160	4,300	1,450	2,170	460	2,430	1,190	1,670	604	1,070	692
10.....	338	1,850	2,560	1,450	1,580	440	1,670	1,060	2,470	546	880	671
11.....	299	1,790	2,220	1,250	1,080	440	1,400	988	1,790	527	848	561
12.....	273	1,730	2,420	1,160	961	525	1,900	907	1,400	734	768	543
13.....	2,670	1,450	2,620	1,160	889	761	2,160	800	1,200	549	664	549
14.....	1,980	1,300	4,610	1,400	925	1,710	1,790	752	1,320	527	579	611
15.....	1,030	1,220	3,380	1,300	4,820	1,290	2,130	678	1,560	624	477	465
16.....	760	1,170	2,630	1,060	2,130	800	1,670	650	1,110	513	454	454
17.....	730	1,220	2,420	1,030	1,400	713	1,400	604	925	426	438	523
18.....	884	4,010	2,030	979	1,100	752	1,250	604	824	384	664	873
19.....	650	2,640	1,790	925	950	713	1,210	926	969	350	618	624
20.....	1,010	1,970	1,670	916	900	630	1,300	1,350	1,040	365	513	513
21.....	1,460	1,670	1,500	681	850	592	1,070	1,280	856	423	438	483
22.....	1,030	1,560	1,400	650	872	598	1,350	979	752	475	416	460
23.....	792	1,670	1,300	650	1,740	728	1,850	1,900	784	1,650	1,140	400
24.....	734	1,860	1,100	848	2,970	1,120	2,130	2,100	931	884	768	432
25.....	628	2,440	1,000	4,360	1,410	2,770	1,910	2,240	1,080	604	926	395
26.....	580	1,910	950	2,420	961	3,280	1,670	1,670	961	495	2,890	406
27.....	536	3,720	900	1,600	850	4,440	1,560	1,500	1,270	715	3,390	395
28.....	495	3,580	1,070	1,350	800	2,940	1,900	1,560	1,080	3,260	1,740	386
29.....	469	3,610	1,860	1,150	750	1,840	2,160	1,560	977	3,040	1,530	361
30.....	390	3,140	2,930	988	-----	1,620	1,970	1,300	2,130	1,470	1,170	348
31.....	430	-----	2,460	900	-----	1,350	-----	1,400	-----	1,060	1,400	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	2,670	116	698	1.36	1.57
November.....	26,000	380	3,390	6.62	7.39
December.....	5,750	900	2,280	4.45	5.13
January.....	4,890	650	1,500	2.93	3.38
February.....	4,820	750	1,290	2.52	2.72
March.....	4,440	440	1,130	2.21	2.55
April.....	3,350	1,050	1,800	3.52	3.93
May.....	2,780	604	1,440	2.81	3.24
June.....	2,980	752	1,370	2.68	2.99
July.....	3,260	350	975	1.90	2.19
August.....	3,390	416	1,130	2.21	2.55
September.....	1,820	348	667	1.30	1.45
The year.....	26,000	116	1,470	2.87	39.09

MOHAWK RIVER BELOW DELTA DAM, NEAR ROME, N. Y.

LOCATION.—Staff gage 1 mile below Delta Dam and 5 miles above Rome, Oneida County.

DRAINAGE AREA.—151 square miles.

RECORDS AVAILABLE.—October, 1927, to September, 1928.

EXTREMES.—Maximum discharge during year, about 2,930 second-feet April 8 (gage height, 6.9 feet); minimum, 89 second-feet October 24 and 25 (gage height, 1.04 feet).

Maximum discharge recorded since December, 1919, 4,210 second-feet March 9, 1921. (See report of State engineer and surveyor, New York.)

REMARKS.—Records good. During canal season water is diverted into Delta Reservoir (Mohawk Basin) from Black River (St. Lawrence Basin) through Forestport feeder and Black River Canal flowing south. Flow is completely regulated at Delta Dam.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	296	293	2,280	930	515	830	475	830	368	156	196	307
2.....	316	293	1,540	880	515	830	495	830	368	146	196	307
3.....	285	307	736	880	515	830	495	830	368	191	196	307
4.....	234	165	282	880	515	830	625	830	368	229	196	307
5.....	146	128	463	686	515	830	735	830	368	229	196	307
6.....	128	143	658	535	515	830	800	830	384	229	196	307
7.....	128	206	936	515	515	830	1,400	598	384	257	196	307
8.....	137	206	1,430	515	515	830	2,580	384	368	307	196	307
9.....	128	206	1,600	515	515	623	1,750	384	368	307	196	307
10.....	128	206	1,080	515	535	475	1,100	384	368	307	196	307
11.....	137	206	456	515	515	475	836	368	368	307	196	307
12.....	233	206	541	535	515	475	729	368	368	307	196	307
13.....	193	206	797	535	515	475	690	368	368	307	196	307
14.....	146	233	1,180	555	515	410	705	368	368	307	196	307
15.....	185	293	968	535	515	279	1,020	368	368	307	241	307
16.....	185	279	673	515	535	253	892	368	368	307	328	307
17.....	185	258	589	515	515	253	735	368	368	307	475	307
18.....	185	206	759	515	515	241	690	368	368	307	426	307
19.....	131	185	1,120	515	515	229	690	368	368	307	307	307
20.....	97	185	1,130	555	515	503	690	401	368	307	307	307
21.....	90	244	253	515	592	735	790	384	368	307	307	307
22.....	90	293	253	515	855	450	855	384	368	307	307	307
23.....	90	219	397	515	855	229	855	384	368	245	307	307
24.....	90	126	880	515	855	229	855	368	368	196	307	307
25.....	179	156	880	515	855	266	830	368	368	196	307	307
26.....	279	185	880	515	855	307	830	368	313	196	307	265
27.....	279	279	880	515	855	352	830	368	266	196	307	229
28.....	279	206	880	515	855	382	830	368	266	206	307	229
29.....	355	663	880	515	830	495	830	368	204	206	307	229
30.....	385	1,680	880	515	-----	495	830	368	185	196	307	229
31.....	293	-----	930	515	-----	475	-----	368	-----	196	307	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	385	90	194	1.28	1.43
November.....	1,680	126	282	1.87	2.09
December.....	2,280	253	876	5.80	6.69
January.....	930	515	574	3.80	4.38
February.....	855	515	615	4.07	4.39
March.....	830	229	508	3.36	3.87
April.....	2,580	475	882	5.84	6.52
May.....	830	368	469	3.11	3.58
June.....	384	185	349	2.31	2.58
July.....	307	146	254	1.68	1.94
August.....	475	196	265	1.75	2.02
September.....	307	229	295	1.95	2.18
The year.....	2,580	90	463	3.07	41.72

NOTE.—Net gain in storage in Delta Reservoir during year was 465 million cubic feet, equivalent to a mean yearly discharge of 14.7 second-feet.

MOHAWK RIVER NEAR LITTLE FALLS, N. Y.

LOCATION.—Water-stage recorder 1,800 feet below Rocky Rift Dam, 2 miles above East Canada Creek and $4\frac{1}{2}$ miles southeast of Little Falls, Herkimer County. Elevation of zero of gage, 310.0 feet, Barge Canal datum.

DRAINAGE AREA.—1,390 square miles.

RECORDS AVAILABLE.—October, 1927, to September, 1928.

EXTREMES.—Maximum discharge during year, 19,200 second-feet November 30 (gage height, 14.2 feet); minimum, 785 second-feet November 2 (gage height, 5.20 feet).

REMARKS.—Records good except those for periods of ice effect January 22 to March 3, March 11, 12, and 15–21, which are fair. Water is diverted during navigation season from Black River (St. Lawrence Basin) through Forestport feeder, Black River Canal (flowing south) and Lansing Kill into Delta Reservoir; from West Canada Creek through Ninemile feeder and Ninemile Creek to the summit level of Barge Canal. Small amount of water may be received from Oswego Basin through summit level, although it is possible that water thus gained is equal to the amount similarly lost from Mohawk Basin. At Rocky Rift Dam water is diverted during canal season into Barge Canal for lockage and power use at Lock 16 near St. Johnsville. Seasonal distribution of flow affected by storage in Delta and Hinckley Reservoirs.

Daily discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,100	1,440	15,700	10,500	2,400	2,600	4,030	6,500	1,860	3,660	1,240	1,780
2.....	1,050	1,340	12,600	8,160	2,400	2,600	4,680	5,730	1,870	2,770	1,060	1,590
3.....	980	1,920	8,200	5,730	2,400	2,600	5,550	5,920	1,760	2,070	1,140	1,450
4.....	2,270	7,220	4,860	4,350	2,600	2,530	7,100	5,440	1,760	1,710	1,480	1,660
5.....	2,010	5,920	4,030	3,730	3,200	2,470	7,720	6,180	1,760	1,570	2,810	1,620
6.....	1,340	4,190	4,510	3,300	2,800	2,650	7,730	7,730	2,700	1,440	3,230	1,440
7.....	1,100	3,030	4,030	2,960	2,400	2,650	6,900	7,100	3,660	1,180	2,900	1,440
8.....	1,350	2,410	12,000	3,370	2,600	2,470	8,380	5,440	2,580	1,020	2,710	1,390
9.....	1,260	2,290	12,100	3,730	3,200	2,530	8,160	3,550	2,290	1,100	2,350	1,450
10.....	1,180	2,120	9,520	3,580	4,600	2,290	8,820	3,300	2,350	1,140	1,730	1,340
11.....	1,060	2,470	5,200	3,440	3,600	2,200	6,070	3,030	2,070	1,340	1,500	1,390
12.....	1,000	2,960	5,020	3,370	3,000	2,400	4,740	2,770	1,800	1,220	1,400	1,250
13.....	3,830	2,360	6,690	3,670	2,800	2,940	4,350	2,470	1,570	1,180	1,260	1,100
14.....	3,460	2,070	11,300	4,680	2,600	8,360	4,030	2,410	1,620	1,640	1,100	1,150
15.....	1,860	2,020	9,760	4,940	5,500	4,600	5,920	2,120	1,660	1,300	1,100	1,050
16.....	1,520	2,020	6,930	3,880	3,800	3,200	6,500	1,830	1,570	1,140	1,020	1,110
17.....	1,450	3,930	4,810	3,100	3,000	3,400	5,190	1,760	1,390	1,140	1,300	1,080
18.....	1,660	8,730	3,620	3,030	2,400	3,400	3,880	1,910	1,350	1,140	1,390	1,140
19.....	3,040	4,900	3,580	2,900	2,400	3,000	3,660	2,490	1,440	1,100	1,480	1,050
20.....	4,190	2,790	3,660	2,900	2,800	2,800	3,660	4,760	1,390	1,100	1,440	990
21.....	3,380	2,960	3,730	2,470	2,800	2,800	4,190	4,920	1,390	1,220	1,480	990
22.....	2,420	3,030	3,760	2,400	3,200	3,030	4,850	3,580	1,390	1,710	1,480	1,050
23.....	1,940	4,860	2,900	2,400	3,200	3,230	6,700	2,840	1,440	4,570	1,570	948
24.....	1,740	7,440	2,710	2,400	3,600	4,420	7,100	2,290	1,520	2,600	1,520	1,060
25.....	1,560	8,310	3,370	4,200	4,200	10,600	5,920	2,020	1,900	1,510	1,850	1,050
26.....	1,520	5,960	3,440	3,200	3,200	13,200	4,850	1,870	2,410	1,340	1,860	1,020
27.....	1,480	11,800	3,370	2,800	2,800	14,300	3,880	1,710	1,760	1,340	1,710	1,060
28.....	1,570	11,300	3,030	2,600	2,800	9,610	3,880	1,660	1,570	1,900	1,620	1,140
29.....	1,480	14,100	3,620	2,600	2,600	6,760	5,980	1,760	1,660	2,040	1,760	1,140
30.....	1,440	16,500	6,110	2,600	-----	5,020	7,290	1,760	3,700	1,860	1,850	1,100
31.....	1,480	-----	7,230	2,400	-----	4,350	-----	2,020	-----	1,540	2,100	-----

Monthly discharge, in second-feet, of Mohawk River near Little Falls, N. Y., 1927-28

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	4,190	980	1,830	1.32	1.52
November.....	16,500	1,340	5,080	3.65	4.07
December.....	15,700	2,710	6,170	4.44	5.12
January.....	10,500	2,400	3,720	2.68	3.09
February.....	5,500	2,400	3,070	2.21	2.38
March.....	14,300	2,200	4,480	3.22	3.71
April.....	8,820	3,660	5,720	4.12	4.60
May.....	7,730	1,660	3,510	2.53	2.92
June.....	3,700	1,350	1,910	1.37	1.53
July.....	4,570	1,020	1,660	1.19	1.37
August.....	3,230	1,020	1,690	1.22	1.41
September.....	1,780	948	1,240	.892	1.00
The year.....	16,500	948	3,340	2.40	32.72

NOTE.—Discharge in second-feet per square mile and run-off in inches do not represent natural flow from basin.

Daily diversion, in second-feet, from Mohawk River near Little Falls, N. Y., through Lock 16, St. Johnsville, N. Y., 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	47	52	18			0	0	36	46	24	35	40
2.....	20	58	18			0	0	20	35	31	46	25
3.....	32	65	30			0	0	23	60	70	30	32
4.....	32	3	90			0	1	73	32	31	31	43
5.....	32	7	106			1	1	42	54	58	19	72
6.....	62	28	21			1	0	34	32	70	35	36
7.....	43	44	18			1	0	24	16	42	32	52
8.....	68	55	14			1	0	13	36	69	63	42
9.....	41	71	14			1	1	47	43	42	54	24
10.....	41	90	14			0	5	43	64	19	77	40
11.....	48	26	36			0	5	32	36	39	55	25
12.....	63	62	18			1	9	42	28	35	35	47
13.....	48	64	14			1	40	41	51	42	70	47
14.....	20	41	18			1	42	46	23	28	31	44
15.....	40	48	14		0	1	20	43	20	34	66	37
16.....	44	28	14	0			28	25	46	70	20	29
17.....	44	30	14			1	20	43	40	35	40	32
18.....	40	14	18				32	9	48	35	12	41
19.....	29	18	11				17	43	31	31	77	58
20.....	21	71	1				62	30	35	24	24	49
21.....	25	33	1				70	51	54	28	29	25
22.....	25	56					40	31	52	58	47	44
23.....	40	37					20	51	24	31	44	46
24.....	82	25				0	21	17	45	24	40	14
25.....	92	21					13	47	63	36	12	39
26.....												
27.....	41	29	0				36	51	56	19	40	28
28.....	61	14					47	35	42	69	40	43
29.....	39	14					47	35	12	42	69	36
30.....	44	14					28	47	63	43	46	29
31.....	38	14					32	28	54	31	43	41
	65							59		74	43	

NOTE.—About 12 second-feet leakage not included in table. Discharge estimated Apr. 4-6 and June 24 to July 7.

MOHAWK RIVER AT COHOES, N. Y.

LOCATION.—Water-stage recorder 50 feet below School Street plant of New York Power & Light Corporation at Cohoes, Albany County.

DRAINAGE AREA.—3,500 square miles.

RECORDS AVAILABLE.—October, 1925, to September, 1928, at present location. From December, 1917, to July, 1925, at Crescent Dam, 2 miles upstream. From July to October, 1925, records of discharge were determined from gage heights above New York Power & Light Corporation Dam in conjunction with operating records at School Street plant. These records are directly comparable with records at present site.

EXTREMES.—Maximum discharge during year, 54,800 second-feet December 9 (gage height, 16.8 feet); minimum, 22 second-feet October 2 (gage height, 3.83 feet).

1925-1928: Maximum discharge, 54,800 second-feet March 15 and December 9, 1927 (gage height, 16.8 feet); minimum, that of October 2, 1927.

REMARKS.—Records excellent except those estimated for December 4 and 5, and those for extremely low stages, which are good. Diversions at Crescent Dam through Lock No. 6 for use in Barge Canal during navigation seasons, and for municipal supply from Schoharie Creek and from Mohawk River just above station, some of which is returned to river above measuring section. Considerable amount of water is received into Delta Reservoir from Black River Basin, through Black River Canal (flowing south) and Lansing Kill, through feeders from the upper Chenango Basin, and during navigation season, from Oswego Basin through the summit level of the Barge Canal, which partly compensate for diversions. Flow regulated by storage reservoirs above station.

Daily discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,850	2,910	32,000	27,900	4,180	4,490	8,190	19,900	5,180	26,500	3,640	2,890
2	880	2,940	24,600	21,100	4,110	4,490	8,140	15,600	4,390	12,500	3,140	3,110
3	2,050	6,580	17,300	12,000	3,620	4,340	9,310	13,900	4,440	7,800	2,890	2,490
4	3,960	44,900	14,100	8,480	3,310	4,050	11,400	13,000	3,970	6,170	2,700	2,590
5	6,000	37,600	9,180	6,350	3,740	3,640	16,400	11,100	5,270	4,810	5,300	2,650
6		3,510	16,400	9,500	5,800	3,380	18,100	15,900	12,200	4,230	7,620	2,560
7		3,380	11,400	8,860	5,800	5,120	3,640	16,500	20,200	6,280	5,750	2,640
8		3,140	8,080	31,600	4,640	3,640	23,900	11,300	8,960	2,580	5,330	2,420
9		1,810	6,490	42,700	6,740	5,510	3,640	23,000	8,530	7,050	2,910	4,940
10		2,420	5,860	21,100	8,030	9,020	3,850	17,700	6,050	7,930	3,020	4,190
11		2,860	5,280	13,300	7,580	8,500	2,530	11,000	6,540	7,650	3,260	3,640
12		2,900	8,150	10,400	7,520	6,350	3,380	6,920	6,160	5,210	2,910	2,710
13		9,340	5,740	17,400	6,890	5,280	3,640	8,470	4,030	4,320	2,690	2,730
14		10,600	3,950	29,900	8,440	4,490	9,780	7,050	3,830	3,820	2,630	2,520
15		5,820	3,600	28,700	10,300	8,520	18,200	11,200	3,460	3,880	2,490	2,200
16		1,970	4,890	18,500	9,360	13,900	13,600	12,300	3,090	4,930	3,190	2,340
17		3,610	3,740	13,100	6,540	11,100	10,100	10,300	3,260	2,780	3,120	2,400
18		4,730	24,300	11,000	5,980	8,260	8,500	7,360	3,140	3,290	2,900	1,300
19		8,580	22,800	8,210	5,980	5,770	6,870	7,190	3,510	3,170	2,500	548
20		21,400	10,800	8,390	5,800	4,490	5,820	7,190	4,970	4,010	2,450	1,900
21		21,600	6,790	8,100	4,740	4,190	5,940	8,600	10,100	4,100	2,110	2,340
22		11,500	8,040	9,770	3,950	3,910	5,620	8,240	7,000	2,660	1,980	2,380
23		8,370	8,860	10,800	3,020	3,910	5,580	16,400	7,020	2,910	11,000	2,320
24		5,060	15,100	6,670	3,320	6,550	6,480	25,700	5,930	2,220	7,030	2,500
25		5,550	23,600	4,490	6,920	10,300	20,700	18,500	5,980	3,000	4,190	1,960
26		4,540	14,700	4,050	8,400	5,810	30,200	13,900	5,280	6,770	3,510	1,490
27		4,050	22,300	4,180	6,160	4,640	32,000	9,900	2,760	7,090	3,510	2,720
28		3,910	29,200	4,890	5,800	4,580	24,900	9,780	3,090	5,290	5,260	1,630
29		5,280	27,500	5,970	5,050	4,590	16,000	15,800	6,340	4,520	6,740	4,010
30		3,740	30,200	9,330	4,510	-----	12,000	19,200	4,670	20,100	4,380	694
31		2,610	14,600	4,010	-----	10,000	-----	5,170	-----	4,380	3,170	-----

Monthly discharge, in second-feet, of Mohawk River at Cohoes, N. Y., 1927-28

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	21,600	880	5,710	1.63	1.88
November.....	44,900	2,910	14,100	4.03	4.50
December.....	42,700	4,050	14,600	4.17	4.81
January.....	27,900	3,020	7,700	2.20	2.54
February.....	13,900	3,310	6,010	1.72	1.86
March.....	32,000	2,530	9,390	2.68	3.09
April.....	25,700	6,920	13,000	3.71	4.14
May.....	19,900	2,760	7,650	2.19	2.52
June.....	20,200	2,220	6,040	1.73	1.93
July.....	26,500	1,980	5,130	1.47	1.70
August.....	7,620	548	3,130	.894	1.03
September.....	3,110	694	1,920	.549	.61
The year.....	44,900	548	7,870	2.25	30.61

Daily diversion, in second-feet, from Mohawk River through Barge Canal at Lock No. 6, at Crescent Dam, N. Y., 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	71	129	50				6	73	130	67	89	118
2.....	117	100	38				6	54	130	89	107	89
3.....	88	95	37				6	66	95	130	113	101
4.....	94	45	60				6	118	113	171	72	136
5.....	60	38	84				6	95	142	159	84	113
6.....	95	54	89				122	60	72	107	136	124
7.....	130	95	153				12	60	73	148	148	142
8.....	129	113	119				18	72	78	193	107	83
9.....	129	118	39				12	118	124	118	113	124
10.....	101	136	55				23	147	107*	107	89	129
11.....	83	142	93				58	94	113	118	124	94
12.....	59	130	47				12	77	118	95	148	129
13.....	101	107	23				18	100	171	100	147	135
14.....	78	83	12				64	100	89	123	106	83
15.....	130	124	12		6	6	66	65	101	94	94	100
16.....	60	88	12	6		6	107	49	113	95	83	107
17.....	136	84	12				78	107	130	101	100	118
18.....	113	73	12				112	107	100	136	77	117
19.....	95	44	29				88	107	112	113	129	112
20.....	55	66	12				77	118	100	100	124	112
21.....	55	72					78	113	71	123	107	123
22.....	95	89					66	89	100	66	112	77
23.....	113	84					107	113	141	90	100	77
24.....	60	84					61	72	112	78	123	100
25.....	130	50					66	101	113	118	117	106
26.....	124	43	6				95	130	89	113	165	106
27.....	124	44					130	112	101	95	101	77
28.....	95	55					101	113	78	107	113	106
29.....	129	44					95	107	60	124	118	59
30.....	77	38					43	107	85	148	148	59
31.....	94							89		95	78	

WEST CANADA CREEK AT HINCKLEY, N. Y.

LOCATION.—Water-stage recorder 1 mile below Hinckley Dam at Hinckley, Oneida County, and 4 miles above Trenton Falls.

DRAINAGE AREA.—373 square miles.

RECORDS AVAILABLE.—June, 1919, to September, 1928.

EXTREMES.—Maximum discharge during year, 5,860 second-feet November 30 (gage height, 7.2 feet); minimum, 576 second-feet June 22 (gage height, 4.06 feet).

1919-1928: Maximum discharge, 10,800 second-feet April 12, 1922 (gage height, 8.93 feet); practically no flow August 31, 1924 (gage height, 2.50 feet).

REMARKS.—Records excellent. Flow regulated by storage reservoirs. Small diversion from Hinckley Reservoir for water supply of Utica.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	685	762	5,620	1,280	1,040	1,060	1,500	1,780	842	1,640	645	993
2-----	677	753	4,080	2,600	1,030	1,070	1,480	2,740	851	1,330	629	993
3-----	669	744	2,510	2,010	1,040	1,070	1,480	3,160	860	982	677	993
4-----	669	753	1,860	1,570	1,040	1,060	1,470	3,350	824	851	1,150	993
5-----	669	770	1,560	1,340	1,050	1,050	1,520	4,430	779	788	2,170	971
6-----	669	779	1,270	1,130	1,050	1,050	1,640	5,040	842	728	2,010	960
7-----	661	779	1,080	1,080	1,050	1,040	1,780	4,430	993	653	1,780	960
8-----	661	788	2,350	1,070	1,060	1,030	2,010	3,110	1,020	605	1,570	960
9-----	661	797	4,810	1,070	1,070	1,030	4,350	2,170	940	598	1,290	960
10-----	661	833	3,090	1,070	1,080	1,020	4,470	2,090	920	605	993	950
11-----	661	842	1,860	1,070	1,110	1,030	3,300	1,860	890	605	880	779
12-----	653	851	1,710	1,080	1,110	1,360	2,690	1,640	806	598	842	661
13-----	661	851	1,860	1,080	1,080	1,490	2,420	1,520	736	598	744	661
14-----	661	842	2,700	1,090	1,070	1,500	2,260	1,410	645	598	702	653
15-----	669	842	3,160	1,080	1,070	1,490	3,170	1,120	605	598	694	637
16-----	677	833	2,510	1,080	1,070	1,470	3,480	1,000	605	605	685	629
17-----	677	842	1,780	1,110	1,070	1,430	2,780	860	605	605	677	629
18-----	677	860	1,480	1,120	1,080	1,410	2,090	833	598	598	852	629
19-----	677	920	1,370	1,110	1,080	1,390	1,940	978	598	598	982	621
20-----	677	971	1,440	1,090	1,080	1,350	2,610	2,470	591	598	960	621
21-----	710	982	1,150	1,090	1,090	1,350	2,600	2,780	591	598	960	621
22-----	779	982	1,060	1,080	1,070	1,350	2,420	2,040	583	598	960	621
23-----	779	993	1,040	1,070	1,070	1,310	2,170	1,490	591	598	960	621
24-----	779	1,030	1,040	1,060	1,060	1,270	2,010	1,170	591	605	950	621
25-----	779	1,660	1,030	1,060	1,060	1,250	1,940	960	598	605	982	621
26-----	770	2,090	1,020	1,060	1,060	1,240	1,780	880	598	598	993	621
27-----	762	2,380	1,020	1,050	1,070	1,310	1,670	815	591	598	1,000	621
28-----	770	3,850	1,020	1,060	1,060	1,400	1,480	762	591	613	993	613
29-----	779	4,690	1,000	1,070	1,050	1,470	1,440	762	642	838	993	613
30-----	779	5,620	1,000	1,060	1,060	1,480	1,470	788	1,130	900	993	613
31-----	770	822	1,050	1,050	1,500	824	824	744	993	993	993	993

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October-----	779	653	704	1.89	2.18
November-----	5,620	744	1,360	3.65	4.07
December-----	2,600	822	1,910	5.12	5.90
January-----	2,600	1,050	1,190	3.19	3.68
February-----	1,110	1,030	1,070	2.87	3.10
March-----	1,500	1,020	1,270	3.40	3.92
April-----	4,470	1,440	2,240	0.01	6.70
May-----	5,040	762	1,910	5.12	5.90
June-----	1,130	583	735	1.87	2.20
July-----	1,640	598	712	1.91	2.20
August-----	2,170	629	1,020	2.73	3.15
September-----	993	613	748	2.01	2.24
• The year-----	5,620	583	1,240	3.32	45.24

NOTE.—No loss or gain in storage in Hinckley Reservoir during year.

WEST CANADA CREEK AT KAST BRIDGE, N. Y.

LOCATION.—Water-stage recorder 600 feet below highway bridge at Kast Bridge, Herkimer County, and 4 miles above mouth at Herkimer.

DRAINAGE AREA.—575 square miles.

RECORDS AVAILABLE.—May, 1905, to December, 1909; January, 1912, to December, 1913; October, 1920, to September, 1928.

EXTREMES.—Maximum discharge during year, 10,400 second-feet November 30 (gauge height, 5.9 feet); minimum, 355 second-feet June 17 (gauge height, 1.60 feet).

1920-1928: Maximum discharge, about 16,500 second-feet June 21, 1922 (gauge height, 7.3 feet); minimum, about 50 second-feet October 27, 1924 (gauge height, 0.95 foot).

REMARKS.—Records good except those for periods of ice effect, December 20, 24-27, January 23, 24, 27-31, February 1-9, 13, 14, 27-29, and March 1-4, or of no record, November 19-26, December 11-17, January 18-21, 26, 27, February 6-10, 20-24, 27-29, March 1, 2, July 9-13, and August 6-9, which are fair. Diversions for Utica water supply and during navigation season through Ninemile feeder and Ninemile Creek into Barge Canal above station. Flow regulated by storage reservoirs, principally at Hinckley.

Daily discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	746	948	7,630	3,880	1,300	1,200	2,030	2,270	1,050	2,020	717	973
2	664	928	5,560	3,370	1,200	1,200	2,420	3,040	1,140	1,700	685	974
3	717	1,450	3,280	2,740	1,200	1,200	2,580	3,600	1,070	1,250	777	907
4	1,540	2,420	2,540	2,180	1,300	1,200	3,310	3,720	1,110	1,090	1,010	1,040
5	832	1,740	2,180	1,760	1,500	1,260	3,600	4,690	1,050	968	2,360	936
6	721	1,400	2,020	1,440	1,300	1,210	3,370	5,730	1,540	920	2,450	896
7	751	1,280	1,730	1,410	1,200	1,110	3,260	5,160	1,470	722	2,270	921
8	955	1,130	5,000	1,660	1,500	1,230	3,400	3,890	1,230	704	2,060	933
9	776	1,140	6,030	1,710	2,000	1,140	4,080	2,500	1,350	635	1,710	877
10	716	1,120	4,440	1,580	1,920	1,200	5,020	2,360	1,310	665	1,150	929
11	720	1,300	2,540	1,560	1,590	1,220	3,720	2,180	1,180	675	1,000	833
12	688	1,280	2,450	1,530	1,400	1,460	2,840	1,940	1,050	645	909	666
13	2,550	1,110	3,040	1,880	1,300	1,820	2,540	1,730	960	665	838	668
14	1,140	1,140	4,220	2,030	1,300	3,760	2,500	1,790	971	1,030	709	638
15	978	1,140	5,020	2,140	2,550	2,600	3,870	1,370	808	657	668	681
16	898	1,080	3,960	1,510	1,780	1,980	3,960	1,250	814	716	772	643
17	980	2,560	2,640	1,460	1,500	2,020	3,040	1,080	675	632	725	609
18	1,060	2,420	1,940	1,390	1,340	2,000	2,360	1,120	824	640	668	598
19	1,310	1,320	1,640	1,380	1,160	1,770	2,390	1,470	803	650	960	562
20	1,300	1,810	1,700	1,380	1,310	1,680	2,740	3,260	770	660	955	583
21	1,120	1,310	1,490	1,380	1,240	1,580	2,840	3,260	768	674	970	582
22	1,050	1,310	1,360	1,340	1,140	1,580	2,940	2,540	832	1,730	987	546
23	1,040	2,200	1,260	1,300	1,120	1,570	3,040	1,900	738	1,090	975	650
24	1,030	2,740	1,200	1,300	1,310	2,390	2,940	1,540	816	821	918	572
25	991	3,370	1,200	2,210	1,470	3,630	2,450	1,280	1,060	750	1,270	576
26	976	3,480	1,200	1,450	1,230	4,580	2,180	1,140	1,260	678	1,020	586
27	970	4,500	1,200	1,400	1,200	4,310	1,890	1,020	848	779	972	578
28	955	4,580	1,280	1,400	1,200	2,450	1,900	1,050	810	974	1,020	683
29	952	7,120	1,980	1,300	1,200	2,050	2,360	1,040	1,120	1,050	1,080	628
30	932	5,810	1,990	1,300	-----	2,050	2,460	984	2,070	1,070	1,230	556
31	948	-----	3,000	1,300	-----	1,890	-----	1,140	-----	877	1,070	-----

Monthly discharge, in second-feet, of West Canada Creek at Kast Bridge, N. Y., 1927-28

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	2,550	664	1,000	1.74	2.01
November.....	8,310	928	2,260	3.93	4.38
December.....	7,630	1,200	2,800	4.87	5.62
January.....	3,880	1,300	1,730	3.01	3.47
February.....	2,550	1,120	1,410	2.45	2.64
March.....	4,580	1,110	1,950	3.39	3.91
April.....	5,020	1,890	2,930	5.10	5.69
May.....	5,730	984	2,290	3.98	4.59
June.....	2,070	675	1,050	1.83	2.04
July.....	2,020	632	908	1.68	1.82
August.....	2,450	668	1,130	1.97	2.27
September.....	1,040	546	728	1.27	1.42
The year.....	8,310	546	1,690	2.94	39.86

NOTE.—Discharge in second-feet per square mile and run-off in inches do not represent natural flow from basin.

NINEMILE FEEDER NEAR HOLLAND PATENT, N. Y.

LOCATION.—Water-stage recorder at mouth of feeder, 4 miles east of Holland Patent, Oneida County, and 6 miles below intake.

RECORDS AVAILABLE.—June, 1919, to September, 1928, during navigation seasons.

REMARKS.—Records good. Gage-height record incomplete or missing June 26 to July 3, and September 22-29; discharge estimated. No diversion during year except on days for which discharge is given.

Daily and monthly discharge, in second-feet, 1927-28

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.	
1.....	0	50	81	117	16.....	0	79	98	115	
2.....	0		81	117	17.....	0	79	112	113	
3.....	0		81	118	18.....	0	80	114	114	
4.....	0		49	84	118	19.....	0	80	116	114
5.....	0		49	90	117	20.....	0	81	116	114
6.....	0	48	90	117	21.....	0.5	80	116	115	
7.....	0	77	90	117	22.....	1.3	84	117		
8.....	0	79	88	117	23.....	1.5	82	116		
9.....	0	79	86	116	24.....	2.2	81	116	115	
10.....	0	79	85	117	25.....	3.8	80	119		
11.....	0	79	83	115	26.....	8.0	81	117		
12.....	0	79	83	115	27.....	50	84	117	115	
13.....	0	79	82	114	28.....		85	117		
14.....	0	79	81	113	29.....		83	117		
15.....	0	79	81	114	30.....		83	117		
					31.....		81	117		
Month	Maximum	Minimum	Mean	Month	Maximum	Minimum	Mean			
June 21-30.....		0.5	21.7	August.....	119	81	100			
July.....	85	48	74.5	September.....	118	113	115			

EAST CANADA CREEK AT DOLGEVILLE, N. Y.

LOCATION.—Water-stage recorder at Dolgeville, Herkimer County, 100 feet below lower highway bridge and 1 mile below Spruce Creek. Elevation of zero of gage, 750.00 feet sea level datum.

DRAINAGE AREA.—261 square miles.

RECORDS AVAILABLE.—October, 1927, to September, 1928. September, 1898, to December, 1909, and January to November, 1912, for station at High Falls, 1 mile downstream; records comparable.

EXTREMES.—Maximum discharge during year, 8,500 second-feet April 8 (gage height, 11.2 feet); minimum, 32 second-feet August 20 (gage height, 5.64 feet).

REMARKS.—Records fair. City of Little Falls diverts about 5 second-feet for water supply. Flow regulated by storage reservoirs on Big Sprite Creek. Discharge estimated December 5-7, 21-28, and January 16 to March 13 because of ice, and February 14-17, April 8-13, July 8-14, and July 29 to August 4 because of missing record.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	128	214	4,160	3,010	240	290	711	1,740	712	1,530	220	393
2.....	94	239	2,390	1,660	240	300	814	2,020	736	967	240	297
3.....	140	483	1,370	1,140	240	290	952	2,260	631	685	320	254
4.....	621	3,000	803	772	340	280	1,670	1,940	871	542	1,000	357
5.....	511	2,340	650	610	400	260	3,310	2,030	716	606	868	306
6.....	325	1,220	550	511	400	250	5,300	2,060	1,310	618	623	276
7.....	220	842	600	492	300	240	6,370	1,440	1,690	447	625	226
8.....	442	684	2,810	525	320	240	7,500	1,010	1,141	328	716	255
9.....	416	576	2,360	617	650	230	4,500	866	1,100	262	500	185
10.....	363	500	1,490	588	700	230	2,500	755	1,440	300	364	210
11.....	299	586	1,110	566	550	240	1,800	698	853	350	317	269
12.....	243	643	1,040	596	420	280	1,500	606	647	350	284	222
13.....	1,050	623	1,670	586	400	480	1,400	461	588	400	312	244
14.....	984	595	3,490	707	440	746	1,590	448	618	950	298	260
15.....	630	549	2,750	830	1,100	957	3,240	452	579	745	226	192
16.....	447	544	1,570	750	900	772	1,920	423	362	464	208	205
17.....	397	977	1,130	600	750	746	1,270	408	202	335	189	244
18.....	501	4,390	908	550	600	630	1,040	470	174	353	227	267
19.....	556	2,260	700	480	480	532	1,720	741	526	283	136	190
20.....	698	1,130	557	440	400	530	2,230	1,310	582	286	177	197
21.....	726	815	460	400	380	495	1,540	1,000	412	176	196	164
22.....	572	737	400	340	360	486	1,460	766	471	603	214	141
23.....	423	1,300	340	360	400	512	1,810	784	436	1,140	130	148
24.....	350	2,750	260	420	480	608	1,970	594	427	713	126	152
25.....	308	2,880	220	800	400	988	1,370	563	770	490	248	126
26.....	269	1,640	180	750	340	1,800	1,090	561	1,710	389	308	129
27.....	244	2,810	190	550	340	2,660	883	411	1,420	385	226	116
28.....	238	3,240	300	440	340	2,080	950	501	936	553	172	156
29.....	220	4,810	702	360	320	1,570	1,210	832	927	500	520	180
30.....	208	5,060	1,350	300	-----	1,160	1,250	917	2,370	420	584	160
31.....	202	-----	1,370	260	-----	854	-----	1,010	-----	250	644	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,050	94	414	1.59	1.83
November.....	5,060	214	1,610	6.17	6.88
December.....	4,160	180	1,220	4.67	5.38
January.....	3,010	260	678	2.60	3.00
February.....	1,100	240	456	1.75	1.89
March.....	2,660	230	701	2.69	3.10
April.....	7,500	711	2,160	8.28	9.24
May.....	2,260	408	970	3.72	4.29
June.....	2,370	174	835	3.20	3.57
July.....	1,530	176	530	2.03	2.34
August.....	1,000	126	362	1.39	1.60
September.....	393	116	217	.831	.93
The year.....	7,500	94	845	3.24	44.05

NOTE.—Storage in reservoirs at end of year was practically same as at beginning of year.

SCHOHARIE CREEK AT MIDDLEBURG, N. Y.

LOCATION.—Staff gage at Middleburg, Schoharie County, 7 miles above Fox Creek and 20 miles below Gilboa Reservoir.

DRAINAGE AREA.—532 square miles.

RECORDS AVAILABLE.—July, 1927, to September, 1928.

EXTREMES.—Maximum discharge during period, 17,000 second-feet November 4, 1927 (gage height, 10.5 feet); minimum 13 second-feet August 20–26, 1927 (gage height, 0.50 foot).

REMARKS.—Records good except those for periods of ice effect, January 5–7, January 27 to February 8, and March 3–12, which are fair. Entire low-water flow diverted and regulated by city of New York at Gilboa Reservoir, 20 miles upstream.

Daily discharge, in second-feet, 1927–28

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1927				1927				1927			
1.....	77	46	153	11.....	56	56	229	21.....	22	13	77
2.....	56	77	139	12.....	37	46	330	22.....	77	13	66
3.....	56	56	125	13.....	37	37	153	23.....	88	13	56
4.....	56	56	88	14.....	37	37	125	24.....	56	13	56
5.....	46	46	77	15.....	37	22	125	25.....	46	13	56
6.....	37	37	77	16.....	37	22	100	26.....	37	13	56
7.....	37	46	66	17.....	30	22	100	27.....	37	26	58
8.....	37	56	56	18.....	22	22	100	28.....	37	778	46
9.....	56	77	56	19.....	22	22	77	29.....	22	1,020	37
10.....	56	77	55	20.....	22	13	77	30.....	22	465	37
								31.....	30	268	-----

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1927–28												
1.....	37	572	1,760	3,020	180	415	457	6,290	750	5,880	366	120
2.....	22	440	1,740	2,520	150	366	415	5,290	690	2,940	415	93
3.....	75	2,900	3,020	2,290	120	300	415	4,560	572	1,960	415	81
4.....	1,700	14,200	2,520	1,860	120	260	457	3,900	630	1,860	318	69
5.....	691	6,930	2,290	1,500	150	200	828	3,440	990	1,570	296	58
6.....	465	3,560	2,070	1,100	140	170	850	4,140	2,890	1,660	296	47
7.....	366	2,890	1,840	800	140	150	850	2,760	3,440	1,660	390	58
8.....	318	2,520	12,000	990	300	140	755	2,180	2,520	1,140	318	69
9.....	236	2,180	5,320	1,140	990	110	1,890	1,860	2,140	850	276	47
10.....	201	1,860	2,890	990	850	95	1,480	1,860	3,060	690	236	47
11.....	184	1,480	2,290	990	630	95	990	1,480	2,290	572	182	38
12.....	162	990	3,020	920	390	110	750	1,480	1,760	545	166	28
13.....	1,810	780	3,410	750	296	1,200	660	1,300	1,480	490	150	22
14.....	1,660	630	6,630	690	268	1,080	465	1,140	1,300	767	120	16
15.....	1,300	465	5,680	780	1,260	660	1,090	850	1,140	990	106	16
16.....	710	440	5,100	630	850	341	1,060	660	990	720	93	16
17.....	572	728	3,900	518	780	217	850	518	850	440	69	16
18.....	850	7,520	3,160	465	720	200	850	390	720	296	93	22
19.....	3,310	4,070	2,640	415	690	276	850	236	572	229	81	28
20.....	7,600	2,400	1,860	390	600	236	850	1,520	490	690	69	28
21.....	6,290	2,190	1,480	341	465	217	774	1,560	572	850	58	16
22.....	4,560	901	1,390	318	415	200	1,430	1,480	690	1,250	47	16
23.....	3,300	750	1,300	296	366	217	3,020	1,860	630	3,780	69	16
24.....	2,760	1,660	1,140	255	1,660	903	4,920	1,860	660	2,430	69	28
25.....	2,070	2,520	780	802	1,300	2,300	4,390	1,760	750	1,570	93	16
26.....	1,480	1,860	630	690	990	2,270	3,900	1,570	990	799	182	22
27.....	990	2,070	545	500	720	2,520	3,160	1,300	1,390	797	182	28
28.....	990	2,070	490	340	572	2,070	2,520	1,300	1,960	1,810	150	28
29.....	850	2,520	1,430	260	465	1,760	2,880	1,140	2,500	1,860	135	16
30.....	780	2,070	2,520	220	-----	990	6,510	920	8,870	1,090	93	16
31.....	720	-----	3,020	200	-----	780	-----	850	-----	465	81	-----

Monthly discharge, in second-feet, of Schoharie Creek at Middleburg, N. Y., 1927-28

Month	Observed			Corrected for storage and diversion		
	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
1927						
July.....	88	22	42.7	150	0.282	0.33
August.....	1,020	13	113	332	.624	.72
September.....	330	37	95.1	551	1.04	1.16
1927-28						
October.....	7,600	22	1,520	2,260	4.25	4.90
November.....	14,200	440	2,540	2,860	5.38	6.00
December.....	12,000	490	2,830	2,830	5.32	6.13
January.....	3,020	200	870	1,000	1.88	2.17
February.....	1,660	120	572	1,280	2.41	2.60
March.....	2,520	95	673	1,380	2.59	2.99
April.....	6,510	415	1,680	2,110	3.97	4.43
May.....	6,290	236	1,980	2,030	3.82	4.40
June.....	8,870	490	1,610	1,650	3.10	3.46
July.....	5,880	229	1,370	1,500	2.82	3.25
August.....	415	47	181	464	.872	1.01
September.....	120	16	37.4	200	.376	.42
The year.....	14,200	16	1,320	1,630	3.06	41.76

FOX CREEK AT WEST BERNE, N. Y.

LOCATION.—Staff gage 500 feet above highway bridge in West Berne, Albany County, and $1\frac{1}{4}$ miles below mouth of Switz Kill.

DRAINAGE AREA.—66 square miles.

RECORDS AVAILABLE.—August, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, 3,750 second-feet November 3 (gage height, 7.4 feet); minimum, 3.5 second-feet September 27 and 28 (gage height, 1.52 feet).

1924-1928: Maximum discharge, that of November 3, 1927; minimum, 0.9 second-foot several times August 31 to September 4, 1926 (gage height, 1.40 feet).

REMARKS.—Records good except those for periods of ice effect, December 25-27, January 21-24 and January 29 to February 15, and for period of backwater from weeds August 11 to September 30, which are fair.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	67	440	185	40	54	142	514	82	1,430	64	24
2	11	66	395	362	36	43	108	350	71	434	60	22
3	11	2,230	350	233	34	36	156	233	54	350	67	34
4	270	2,850	329	132	50	31	269	200	54	251	60	36
5	142	1,080	269	78	55	27	350	156	108	269	64	30
6	117	612	200	57	50	23	350	216	416	216	64	24
7	64	350	170	57	50	21	329	170	485	185	82	19
8	51	233	1,650	74	65	25	288	142	440	127	71	17
9	43	185	550	78	360	29	233	132	350	78	60	13
10	38	142	440	71	240	33	156	117	233	74	43	10
11	33	132	395	71	140	33	142	86	122	64	30	9
12	29	122	372	74	110	49	170	74	94	51	26	8
13	916	122	639	78	85	458	156	60	74	43	22	8
14	406	122	812	94	85	585	142	57	71	43	19	7
15	329	122	462	86	1,600	372	127	51	82	43	18	7
16	288	117	216	74	1,320	122	117	46	57	38	15	6
17	233	134	200	64	170	74	94	43	60	33	15	7
18	233	855	170	60	142	60	86	43	86	25	13	9
19	1,520	810	170	60	117	60	82	43	185	23	13	9
20	1,570	510	156	57	90	60	78	46	132	79	13	9
21	762	216	142	44	71	67	78	57	108	94	10	9
22	395	156	132	40	212	82	142	216	90	108	16	8
23	269	142	122	36	803	78	436	258	86	316	26	5
24	216	308	108	70	695	995	780	251	78	142	22	4
25	156	308	85	606	485	1,090	560	233	99	78	24	5
26	132	233	70	322	308	780	350	200	216	57	80	4
27	112	591	55	124	137	560	269	170	156	136	65	4
28	99	522	60	71	94	185	288	132	127	462	42	4
29	94	510	156	55	60	170	613	94	337	268	30	7
30	90	485	170	50	-----	156	892	94	1,200	86	22	8
31	78	-----	185	42	-----	142	-----	90	-----	67	24	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,570	11	281	4.26	4.91
November	2,850	66	478	7.24	8.08
December	1,650	55	312	4.73	5.45
January	606	36	113	1.71	1.97
February	1,600	34	266	4.03	4.35
March	1,090	21	210	3.18	3.67
April	892	78	266	4.03	4.50
May	514	43	148	2.24	2.58
June	1,700	54	208	3.15	3.51
July	1,430	23	183	2.77	3.19
August	82	10	38.1	.577	.67
September	36	4	12.2	.185	.21
The year	2,850	4	209	3.17	43.09

POESTEN KILL NEAR TROY, N. Y.

LOCATION.—Water-stage recorder 500 feet below highway bridge on Troy-Eagle Mills road, 3 miles east of Troy, Rensselaer County, and $4\frac{1}{2}$ miles above mouth.

DRAINAGE AREA.—88 square miles.

RECORDS AVAILABLE.—July, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year, 7,030 second-feet November 4 (gage height, 8.4 feet); minimum, not determined.

1923-1928: Maximum discharge, that of November 4, 1927; minimum, 4.5 second-feet July 23 and 24, 1923 (gage height, 0.89 foot).

REMARKS.—Records good except those for periods of ice effect, December 25-28, January 22-24, January 28 to February 18, and March 8-12, and for estimated periods which are fair. Practically entire low-water flow of Quaken Kill (about 5 second-feet) diverted for municipal uses above station. Flow regulated by storage reservoirs.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept
1.....		50		820	* 95		178	314	133	930		138
2.....		46		498	90			277	202	442		101
3.....		2,340		316	85			240	181	287		297
4.....		5,580		205	90			203	128	201		385
5.....	* 65	1,730	* 500	167	100	* 75		178	196	156		212
6.....		756		159	95			291	559	142		
7.....		513		156	90			242	546	105		
8.....		382	900	161	200	48	* 380	184	328	80		
9.....		318	600	164	360	50		148	277	66		
10.....	64	255	356	184	260	60		126	343	64		
11.....	49	240	281	164	190	60		112	247	63		
12.....	38	222	314	150	160	70		99	181	90		
13.....	962	196	335	143	* 150	173		82	133	60		
14.....	543	170	661	167	* 160	230		77	277	55		
15.....	292	140	498	173	* 800	188	348	64	443	67	* 180	
16.....	195	126	369	137	* 500	138	262	61	266	46		
17.....	176	203	330	136	* 240	114	209	53	173	39		
18.....	165	644	266	121	* 200	112	170	59	130	37		
19.....	169	436	209	110	167	107	159	88	273	35		
20.....	278	297	190	116	155	92	148	146	225	48		
21.....	391	233	178	78	123	84	128	136	156	59		
22.....	251	200	159	75	124	82	263	107	133	108		
23.....	178	206	150	70	265	95	396	426	126	340		
24.....	142	285	109	80	469	251	490	357	124			
25.....	118	365	85	448	274	526	378	343	180			
26.....	98	300	80	452	* 200	602	297	274	433			
27.....	86	538	75	300	* 140	738	255	233	473			
28.....	76	* 495	85	180	* 120	466	351	240	350			
29.....	67	* 700	211	140	* 100	294	387	200	325			
30.....	60	* 800	490	* 110		244	360	167	542		236	
31.....	54		454	* 100		212		175		128	206	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	962	38	162	1.84	2.12
November.....	5,580	46	626	7.11	7.93
December.....	900	75	351	3.99	4.60
January.....	820	70	203	2.31	2.66
February.....	800	85	207	2.35	2.53
March.....	738	48	179	2.03	2.34
April.....	490	128	324	3.68	4.11
May.....	426	53	184	2.09	2.41
June.....	559	124	269	3.06	3.41
July.....	930	35	167	1.90	2.19
August.....			183	2.08	2.40
September.....	385		121	1.38	1.54
The year.....	5,580		247	2.81	38.24

* Estimated because of missing record.

RONDOUT CREEK AT ROSENDALE, N. Y.

LOCATION.—Water-stage recorder 150 feet above highway bridge in Rosendale, Ulster County, and 3 miles above junction with Wallkill River.

DRAINAGE AREA.—386 square miles.

RECORDS AVAILABLE.—July, 1901, to November, 1903; January, 1906, to December, 1913; August, 1926, to September, 1928.

EXTREMES.—Maximum discharge during year, 27,300 second-feet August 27 (gage height, 21.9 feet); minimum, 82 second-feet October 4 (gage height, 1.95 feet).

1926-1928: Maximum discharge, that of August 27, 1928; minimum, 30 second-feet July 21, 1927 (gage height, 1.60 feet).

REMARKS.—Records good except those for period of ice effect, December 25-29, January 2-8, 17-25, and January 28 to February 8, which are fair. Discharge estimated November 16-18 because of missing record.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	221	501	1,410	1,800	600	641	1,080	2,980	692	6,320	515	1,380
2.....	221	473	1,760	850	600	571	948	2,190	641	3,380	536	1,100
3.....	148	5,090	3,140	700	550	529	895	1,660	571	2,140	508	3,210
4.....	1,560	9,230	1,870	600	500	427	850	1,370	515	1,410	536	3,350
5.....	930	4,600	1,580	550	950	444	932	1,180	2,540	1,460	406	1,790
6.....	543	2,640	1,450	500	700	374	955	1,140	3,250	4,750	484	1,300
7.....	412	1,750	1,330	550	650	336	992	1,030	2,510	2,140	1,340	1,180
8.....	368	1,410	6,480	600	1,500	438	1,550	858	1,580	1,490	945	1,020
9.....	980	1,220	4,080	627	4,040	368	1,370	768	1,260	1,180	880	915
10.....	304	1,100	2,280	655	2,460	362	1,140	692	1,840	992	578	754
11.....	338	1,030	1,660	571	1,290	434	895	634	1,220	948	685	663
12.....	315	1,030	2,100	550	895	347	1,570	606	992	865	518	600
13.....	3,700	835	2,600	536	738	830	1,620	529	805	805	310	537
14.....	1,860	745	5,040	592	760	1,620	1,300	480	790	1,850	374	516
15.....	1,100	722	3,300	585	5,480	1,320	1,900	459	1,070	1,840	338	474
16.....	895	641	2,290	494	2,070	902	1,330	432	708	1,070	304	384
17.....	775	1,350	2,210	480	1,290	738	1,100	412	560	782	423	278
18.....	1,480	7,060	1,490	460	1,140	685	948	504	515	655	2,680	390
19.....	5,440	3,480	1,290	460	865	662	872	1,260	1,140	536	1,080	418
20.....	4,740	2,100	1,150	480	835	564	790	2,230	1,550	501	752	689
21.....	2,880	1,530	1,030	460	678	599	700	1,570	955	515	557	646
22.....	1,780	1,290	910	420	700	700	1,440	1,140	1,140	445	646	509
23.....	1,330	1,140	872	420	1,620	888	3,480	2,080	1,330	480	1,140	377
24.....	1,100	1,140	782	420	2,990	983	4,760	1,580	1,440	508	805	284
25.....	992	1,580	700	3,200	1,450	1,620	3,090	1,260	1,640	412	893	340
26.....	865	1,180	650	1,370	992	1,660	2,040	1,030	3,330	362	6,380	320
27.....	768	1,310	600	932	940	1,800	1,490	918	3,340	1,430	18,200	295
28.....	670	1,450	600	700	820	1,290	3,210	902	2,190	3,540	6,320	281
29.....	648	1,940	750	600	715	992	4,220	880	3,280	1,350	4,300	286
30.....	537	1,620	1,200	550	-----	1,400	3,570	738	9,910	872	2,720	263
31.....	466	-----	1,030	550	-----	1,330	-----	828	-----	585	2,020	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	5,440	148	1,220	3.16	3.64
November.....	9,230	473	2,060	5.34	5.96
December.....	6,480	600	1,860	4.82	5.56
January.....	3,200	420	718	1.86	2.14
February.....	5,480	500	1,340	3.47	3.74
March.....	1,800	336	834	2.16	2.49
April.....	4,760	700	1,700	4.40	4.91
May.....	2,980	412	1,120	2.90	3.34
June.....	9,910	515	1,780	4.61	5.14
July.....	6,320	470	1,470	3.81	4.39
August.....	18,200	304	1,880	4.87	5.62
September.....	3,350	263	818	2.12	2.36
The year.....	18,200	148	1,400	3.63	49.29

WALLKILL RIVER AT PELLETS ISLAND MOUNTAIN, N. Y.

LOCATION.—Chain gage at highway bridge in Pellets Island Mountain, Orange County, and 9½ miles below mouth of Pochuck Creek.

DRAINAGE AREA.—385 square miles.

RECORDS AVAILABLE.—December, 1919, to September, 1928.

EXTREMES.—Maximum discharge, during year, 4,020 second-feet November 6 (gage height, 10.2 feet); minimum, 136 second-feet several times October 1-3.

1919-1928: Maximum discharge, 8,350 second-feet March 16, 1920 (gage height, 20.7 feet); minimum, 17 second-feet August 11 and 12, 1926 (gage height, 2.30 feet).

REMARKS.—Records good. Flow regulated by natural storage in swamps. Discharge estimated December 19-28, January 3-6, 27, 28, and February 20-22 because of ice effect and August 11 because of unreliable gage reading.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	136	765	1,280	855	393	1,040	1,780	2,140	300	1,660	531	1,430
2	136	725	1,480	685	393	945	1,660	1,900	272	1,430	460	1,280
3	147	1,080	1,480	550	330	810	1,480	1,540	219	1,280	377	1,180
4	219	2,820	1,480	500	330	685	1,280	1,280	245	1,130	300	1,230
5	685	3,860	1,330	440	460	606	1,130	1,180	568	1,230	300	1,080
6	645	3,940	1,330	400	606	495	1,040	1,040	1,180	2,960	286	1,080
7	531	3,620	1,280	361	568	426	945	945	1,330	3,780	393	945
8	460	2,960	1,840	393	531	361	945	810	1,230	3,860	426	810
9	361	2,470	2,960	460	1,080	346	900	765	1,130	3,620	393	725
10	300	1,960	2,260	568	1,230	330	810	645	1,720	3,030	426	645
11	232	1,660	2,400	531	1,130	330	685	568	1,600	2,470	420	568
12	170	1,660	2,400	460	945	377	900	495	1,280	1,960	765	460
13	460	1,330	2,400	460	900	606	1,130	426	1,080	1,660	725	377
14	725	1,130	2,610	495	765	945	1,130	377	990	2,080	645	315
15	855	1,040	2,610	568	1,660	1,040	1,180	330	1,040	2,540	568	286
16	810	945	2,400	531	2,140	900	1,130	330	945	2,400	426	245
17	900	945	2,020	495	1,960	810	990	300	725	2,080	361	219
18	1,430	2,140	1,660	426	1,660	725	900	300	606	1,720	645	219
19	2,140	2,890	1,400	393	1,080	685	810	393	810	1,540	900	232
20	3,100	2,820	1,300	460	1,000	685	645	460	1,230	1,380	855	377
21	3,620	2,750	1,100	460	950	685	495	606	1,180	1,130	810	495
22	3,540	2,540	1,000	361	900	810	725	606	1,130	990	855	426
23	2,960	2,080	900	393	1,080	855	1,080	568	1,130	945	1,040	346
24	2,540	1,780	700	393	2,020	810	1,380	531	1,130	810	990	272
25	2,080	1,660	650	495	2,080	945	1,430	460	1,130	725	990	232
26	1,540	1,430	650	765	1,780	990	1,330	393	1,040	685	1,230	206
27	1,380	1,430	600	650	1,720	1,040	945	361	990	568	1,780	194
28	1,130	1,430	600	550	1,380	990	1,540	393	945	685	1,960	170
29	1,040	1,480	568	495	1,230	900	2,020	361	900	725	1,840	170
30	945	1,330	685	460	-----	1,230	2,140	300	1,380	685	1,660	158
31	855	-----	725	460	-----	1,900	-----	272	-----	606	1,540	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,620	136	1,160	3.01	3.47
November	3,940	725	1,960	5.09	5.68
December	2,960	568	1,490	3.87	4.46
January	855	361	500	1.80	1.50
February	2,140	330	1,110	2.88	3.11
March	1,900	330	784	2.04	2.35
April	2,140	495	1,150	2.99	3.34
May	2,140	272	680	1.77	2.04
June	1,720	219	982	2.55	2.84
July	3,860	568	1,600	4.39	5.06
August	1,960	286	803	2.09	2.41
September	1,430	158	546	1.42	1.68
The year	3,940	136	1,070	2.78	37.84

WALKILL RIVER AT GARDINER, N. Y.

LOCATION.—Water-stage recorder 500 feet below mouth of Shawangunk Kill and three-quarters of a mile northwest of Gardiner, Ulster County.

DRAINAGE AREA.—716 square miles.

RECORDS AVAILABLE.—September, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, 11,400 second-feet November 3 (gage height, 11.7 feet); minimum, 201 second-feet October 2 (gage height, 2.79 feet).

1924-1928: Maximum discharge, 12,900 second-feet September 2, 1927 (gage height, 12.6 feet); minimum, 26 second-feet July 26, 1926 (gage height, 1.95 feet).

REMARKS.—Records good except those for period of ice effect, December 27-29, January 3-8, 23, and January 29 to February 15, and for estimated periods, October 4, 5, 13, 14, November 20, 21, December 4, 5, 10-14, 18-20, 24-27, January 2, 3, 5, 6, April 7, 8, and May 19-26, which are fair.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	278	1,020	2,120	2,160	750	1,440	2,950	3,250	466	4,850	862	2,120
2.....	234	912	2,330	1,000	700	1,310	2,470	2,830	440	3,360	758	1,850
3.....	271	5,640	3,860	900	700	1,130	2,180	2,350	432	2,530	671	2,710
4.....	1,620	9,660	2,770	800	650	955	1,960	1,960	438	1,850	504	3,130
5.....	1,480	6,310	2,180	750	800	900	1,800	1,690	1,810	2,100	497	2,180
6.....	1,060	5,340	2,120	700	1,100	719	1,640	1,540	3,110	6,370	647	1,740
7.....	871	4,790	2,240	700	1,000	637	1,490	1,380	2,910	5,340	980	1,540
8.....	731	4,140	6,590	800	1,100	549	1,740	1,200	2,070	4,660	824	1,320
9.....	655	3,370	5,100	1,100	2,400	538	1,490	1,050	1,690	4,270	1,310	1,160
10.....	595	2,770	3,780	1,240	2,400	446	1,250	938	2,610	3,750	786	989
11.....	452	2,410	3,370	1,020	1,900	539	1,090	879	2,350	3,250	758	887
12.....	448	2,240	3,750	877	1,700	641	2,000	735	1,850	2,890	1,110	754
13.....	1,930	1,900	4,120	801	1,400	1,310	2,180	671	1,490	2,240	1,010	637
14.....	1,870	1,690	6,160	865	2,000	2,240	1,850	648	1,320	4,230	894	581
15.....	1,350	1,490	4,750	1,020	5,500	1,900	2,180	545	1,590	5,120	813	424
16.....	1,170	1,370	3,880	970	3,250	1,490	1,850	482	1,330	3,750	707	451
17.....	1,080	2,060	3,750	860	2,830	1,260	1,540	457	1,060	2,890	792	451
18.....	2,010	7,690	2,710	755	2,520	1,250	1,330	586	871	2,410	2,300	388
19.....	5,890	4,810	2,240	749	1,670	1,150	1,210	1,010	966	2,020	1,590	399
20.....	6,210	4,140	1,900	1,110	1,430	1,200	1,060	1,100	2,260	1,690	1,240	613
21.....	5,200	3,620	1,760	684	1,200	1,330	929	1,300	1,850	1,490	1,030	795
22.....	4,530	3,370	1,600	640	1,080	1,430	2,060	1,300	1,850	1,360	1,340	668
23.....	4,010	2,890	1,460	700	2,790	1,640	3,080	1,200	2,070	1,300	2,220	602
24.....	3,370	2,590	980	799	5,240	1,660	3,740	1,000	2,020	1,230	1,700	566
25.....	2,770	2,650	938	3,470	3,300	1,960	2,710	800	1,900	1,030	1,750	406
26.....	2,240	2,180	895	1,600	2,230	2,020	2,180	650	1,740	887	4,010	384
27.....	1,850	2,560	850	1,240	2,110	2,070	1,850	648	1,990	1,160	7,190	349
28.....	1,590	2,950	850	1,030	1,850	1,640	3,930	695	1,550	2,990	5,600	334
29.....	1,390	3,130	800	900	1,600	1,390	4,880	579	1,820	1,620	4,110	296
30.....	1,230	2,530	1,150	800	-----	2,560	3,750	500	4,960	1,200	2,950	267
31.....	1,120	-----	1,350	800	-----	3,830	-----	552	-----	963	2,530	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	6,210	234	1,920	2.68	3.09
November.....	9,660	912	3,410	4.76	5.31
December.....	6,160	800	2,660	3.72	4.29
January.....	3,470	640	1,030	1.44	1.66
February.....	5,500	650	1,970	2.75	2.97
March.....	3,830	446	1,390	1.91	2.24
April.....	4,880	929	2,150	3.00	3.35
May.....	3,250	457	1,110	1.55	1.79
June.....	4,960	432	1,760	2.46	2.74
July.....	6,370	887	2,740	3.83	4.42
August.....	7,190	497	1,730	2.42	2.79
September.....	3,130	267	966	1.35	1.51
The year.....	9,660	234	1,900	2.65	36.16

SHAWANGUNK KILL AT PINE BUSH, N. Y.

LOCATION.—Staff gage at Hardenburg Bridge, half a mile northeast of Pine Bush, Orange County, and 5½ miles below Platte Kill.

DRAINAGE AREA.—103 square miles.

RECORDS AVAILABLE.—September, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, about 2,810 second-feet November 3 (gage height, 7.5 feet); minimum, 30 second-feet October 3 (gage height, 1.00 foot).

1924-1928: Maximum discharge, 4,310 second-feet September 1, 1927 (gage height, 10.5 feet); minimum, 7.5 second-feet July 27 and 28, 1926 (gage height, 0.70 foot).

REMARKS.—Records good except those for period of ice effect, December 26-30, January 2-9, 22-24, and January 28 to February 9, which are fair.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	91	280	540	70	116	265	378	85	875	73	166
2	34	83	528	280	75	95	235	280	73	465	65	142
3	34	1,780	853	170	70	75	220	220	63	296	61	722
4	906	1,890	540	130	70	45	206	179	130	206	55	566
5	372	1,060	361	110	75	45	192	154	976	300	187	206
6	131	465	361	95	140	67	192	154	713	1,060	178	206
7	100	344	515	100	110	73	193	129	469	316	231	192
8	91	280	2,090	120	160	67	342	112	265	250	142	154
9	81	220	881	140	300	63	220	100	220	179	154	129
10	61	206	465	166	265	71	154	93	220	154	100	106
11	57	192	395	154	179	83	170	87	192	206	104	97
12	83	166	643	131	108	154	528	79	112	235	85	87
13	802	154	1,060	127	85	296	344	75	100	265	57	81
14	395	142	1,290	206	676	465	250	69	93	1,060	49	79
15	220	142	739	142	1,220	250	378	65	87	785	45	71
16	123	131	508	116	366	154	235	61	79	395	41	69
17	116	674	499	108	235	142	154	57	71	179	272	65
18	637	1,740	344	100	192	127	131	110	63	142	661	63
19	1,470	620	312	85	102	123	112	250	392	112	286	79
20	972	412	250	129	87	154	100	265	556	104	166	154
21	620	280	206	63	93	179	129	250	344	95	85	127
22	378	235	206	95	100	206	537	265	312	97	140	89
23	280	235	192	120	977	250	992	250	296	114	290	73
24	250	312	131	180	954	265	896	179	296	95	179	59
25	206	361	191	1,330	312	312	413	129	328	73	200	55
26	179	312	120	334	179	280	280	104	395	65	1,440	53
27	154	547	120	220	154	312	291	106	823	266	1,670	49
28	142	965	120	140	142	220	1,010	102	412	661	1,710	45
29	118	920	130	100	131	179	781	97	550	206	1,370	41
30	108	540	180	85	-----	533	540	91	1,840	127	697	41
31	100	-----	325	70	-----	466	-----	108	-----	100	265	-----
Month	Maximum				Minimum		Mean		Per square mile	Run-off in inches		
October	1,470				34		299		2.90	3.34		
November	1,890				83		517		5.02	5.60		
December	2,090				120		477		4.63	5.34		
January	1,330				63		190		1.84	2.12		
February	1,230				70		263		2.55	2.75		
March	533				45		189		1.83	2.11		
April	1,010				100		350		3.40	3.79		
May	378				57		148		1.44	1.66		
June	1,840				63		352		3.42	3.82		
July	1,060				65		306		2.97	3.42		
August	1,710				41		357		3.47	4.00		
September	722				41		136		1.32	1.47		
The year	2,090				34		298		2.89	39.42		

* Estimated.

HACKENSACK RIVER BASIN

HACKENSACK RIVER AT NEW MILFORD, N. J.

LOCATION.—Water-stage recorder at pumping plant of Hackensack Water Co., New Milford, Bergen County, $3\frac{1}{2}$ miles below mouth of Dwars Kill.

DRAINAGE AREA.—113 square miles.

RECORDS AVAILABLE.—October, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, about 4,000 second-feet July 6 (gage height, 4.55 feet).

1921–1928: Maximum discharge, about 4,000 second-feet September 2, 1927, and July 6, 1928; maximum gage height, 4.58 feet September 2, 1927.

REMARKS.—Records good. Flow regulated by storage in Oradell Reservoir. Water diverted for municipal use at New Milford. Record of diversions furnished by Hackensack Water Co.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	2	97	228	258	167	172	289	325	56	490	195	176
2.....	4	131	228	268	163	176	175	228	56	151	176	185
3.....	3	462	308	263	130	176	126	228	58	68	141	209
4.....	9	1,220	376	263	88	181	181	180	58	47	109	268
5.....	2	1,000	314	207	90	181	238	112	227	52	87	200
6.....	125	752	284	81	87	132	201	116	439	1,420	97	167
7.....	209	602	301	78	142	93	112	112	326	1,200	141	185
8.....	224	462	497	75	438	93	93	109	158	561	145	167
9.....	238	298	707	72	636	90	90	109	111	382	141	141
10.....	195	218	600	75	460	144	90	105	406	732	178	116
11.....	112	350	452	78	268	248	93	89	200	721	315	98
12.....	40	379	362	102	268	243	187	54	136	191	243	81
13.....	490	238	315	181	195	297	243	52	82	606	141	72
14.....	727	193	448	176	106	412	243	47	61	781	112	66
15.....	401	154	536	176	650	374	195	47	464	535	90	56
16.....	176	175	536	172	893	289	112	42	546	354	75	52
17.....	173	223	489	176	479	289	109	39	268	259	90	52
18.....	808	544	412	176	357	289	92	508	243	233	181	56
19.....	1,290	584	293	150	330	284	56	447	494	238	163	583
20.....	1,310	319	181	161	204	284	52	105	782	238	105	509
21.....	664	167	181	273	150	264	38	140	403	264	81	204
22.....	440	206	185	263	154	218	42	214	326	281	116	97
23.....	321	278	185	172	695	223	348	214	369	214	258	34
24.....	303	278	185	76	1,250	218	744	177	412	209	218	32
25.....	234	236	153	379	650	223	637	112	412	161	289	24
26.....	172	194	78	512	412	218	394	109	246	75	960	40
27.....	172	238	78	326	339	218	243	112	105	40	1,020	81
28.....	215	228	78	276	253	163	727	112	105	82	751	120
29.....	268	228	122	185	227	109	797	82	167	434	306	128
30.....	190	228	230	128	-----	437	503	58	432	227	172	124
31.....	97	-----	258	94	-----	584	-----	58	-----	134	130	-----

Month	Observed			Corrected for storage and diversion		
	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October.....	1,310	2	310	370	3.27	3.77
November.....	1,220	97	356	392	3.47	3.87
December.....	707	78	510	360	3.19	3.68
January.....	512	72	189	232	2.05	2.36
February.....	1,260	87	355	400	3.54	3.82
March.....	554	90	236	261	2.49	2.87
April.....	797	38	248	305	2.70	3.01
May.....	508	39	143	206	1.82	2.10
June.....	782	56	275	316	2.80	3.12
July.....	1,420	40	367	437	3.87	4.46
August.....	1,020	75	233	281	2.49	2.87
September.....	583	24	144	181	1.60	1.78
The year.....	1,420	2	263	313	2.77	37.71

PASSAIC RIVER BASIN

PASSAIC RIVER NEAR MILLINGTON, N. J.

LOCATION.—Water-stage recorder at Davis Bridge, 1 mile above Millington, Somerset County, and 1½ miles below mouth of Black Brook.

DRAINAGE AREA.—55 square miles.

RECORDS AVAILABLE.—November, 1921, to September, 1928. At Millington, three-fourths mile downstream, from November, 1903, to July, 1906.

EXTREMES.—Maximum discharge during year, 700 second-feet February 24 (gage height, 6.93 feet); minimum, 18 second-feet June 3 (gage height, 3.99 feet).

1903–1906, 1921–1928: Maximum discharge, 2,000 second-feet March 8, 1904 (gage height, 7.50 feet); minimum, 2.5 second-feet October 18, 1923.

REMARKS.—Records excellent. Discharge estimated December 31 to January 2 because of ice and December 25–29, January 3–6, 23–27, February 19–29, March 1–6, 18–23, April 3–13, and August 5–10 because of missing gage-height record.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	23	61	81	100	47	120	185	256	30	78	102	280
2.....	21	59	96	100	46	110	146	174	27	70	83	196
3.....	21	93	154	90	40	110	120	134	24	75	71	164
4.....	54	208	150	75	39	95	100	114	24	75	64	154
5.....	93	231	126	55	67	85	85	103	38	112	60	138
6.....	80	208	174	50	73	70	75	94	83	518	65	130
7.....	64	185	196	51	61	60	65	86	108	565	70	152
8.....	51	154	400	55	262	60	60	78	91	460	65	150
9.....	48	132	490	61	430	55	55	73	67	386	60	132
10.....	63	113	372	64	345	48	50	70	71	293	60	114
11.....	64	102	293	63	256	61	50	67	64	231	60	98
12.....	58	93	256	63	174	83	60	66	47	208	61	80
13.....	93	84	256	64	126	154	75	61	36	231	60	83
14.....	125	77	293	67	111	208	75	54	35	293	49	144
15.....	113	70	280	66	466	208	80	48	60	400	39	154
16.....	100	67	243	63	386	185	67	44	67	358	34	125
17.....	91	70	243	58	306	150	59	41	52	263	51	106
18.....	243	126	208	58	231	120	58	49	37	243	128	88
19.....	595	154	174	64	190	130	46	69	40	196	128	88
20.....	665	126	144	152	170	130	37	71	69	154	103	152
21.....	595	114	113	185	160	120	34	70	75	126	83	164
22.....	460	105	103	108	170	110	108	61	83	106	108	144
23.....	345	94	94	75	260	110	219	54	105	111	208	125
24.....	256	90	83	65	550	105	525	46	134	125	219	106
25.....	196	88	75	100	400	100	460	38	146	110	196	88
26.....	148	81	65	300	220	100	332	38	125	96	208	78
27.....	120	75	65	220	150	98	219	44	93	83	532	70
28.....	100	75	60	91	140	88	386	51	64	142	665	64
29.....	86	83	75	67	130	80	460	49	52	196	665	60
30.....	77	84	91	59	-----	154	372	39	70	154	525	60
31.....	67	-----	95	48	-----	219	-----	33	-----	121	386	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	665	21	165	3.00	3.46
November.....	231	59	110	2.00	2.23
December.....	490	60	179	3.25	3.75
January.....	300	48	88.3	1.61	1.86
February.....	550	39	207	3.76	4.06
March.....	219	48	114	2.07	2.39
April.....	525	34	155	2.82	3.15
May.....	256	33	73.4	1.33	1.53
June.....	146	24	67.2	1.22	1.36
July.....	565	70	213	3.87	4.46
August.....	665	34	168	3.05	3.52
September.....	280	60	123	2.24	2.50
The year.....	665	21	139	2.53	34.27

PASSAIC RIVER AT PATERSON, N. J.

LOCATION.—At hydroelectric power plant of the Society for Establishing Useful Manufactures in Paterson, Passaic County.

DRAINAGE AREA.—785 square miles.

RECORDS AVAILABLE.—January, 1898, to September, 1928.

REMARKS.—Flow regulated by storage in Newark and Jersey City Reservoirs and Greenwood Lake. Diversions for municipal uses above station. Base data furnished by John H. Cook, deputy governor, The Society for Establishing Useful Manufactures; Passaic Consolidated Water Co.; Newark Waterworks; Jersey City Waterworks; Commonwealth Water Co.; East Orange Waterworks; and North Jersey District Water Supply Commission. Daily discharge represents total flow just above Great Falls.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	385	1,333	1,987	1,690	1,289	2,527	2,119	4,070	531	1,570	1,359	3,079
2	129	1,326	2,120	1,121	1,106	2,284	1,958	3,353	526	1,403	1,345	2,793
3	335	2,211	2,710	1,126	895	1,917	1,849	2,902	490	1,328	1,239	2,584
4	860	4,760	2,582	1,039	962	1,415	1,722	2,481	386	1,245	1,020	2,819
5	1,231	5,735	2,574	1,028	1,065	1,489	1,578	2,158	785	1,551	971	2,403
6	843	5,122	2,579	911	1,248	1,335	1,413	1,895	1,582	3,119	902	2,234
7	759	4,149	2,715	780	1,220	1,164	1,325	1,684	1,627	3,225	986	2,049
8	650	3,520	4,256	749	1,988	1,039	1,261	1,478	1,450	2,866	1,024	1,836
9	555	3,141	5,129	906	2,430	992	1,014	1,341	1,402	2,579	888	1,637
10	643	2,947	4,662	853	2,391	1,019	961	1,281	1,600	2,468	916	1,472
11	739	2,745	4,363	894	2,201	1,168	1,022	1,072	1,459	2,366	945	1,351
12	601	2,605	4,279	849	1,993	1,184	1,306	998	1,328	2,277	1,152	1,282
13	1,750	2,351	4,238	835	1,948	1,593	1,514	815	1,004	2,449	898	1,019
14	1,996	2,123	4,463	834	2,340	2,065	1,443	748	1,056	2,477	692	891
15	1,547	1,858	4,302	833	3,891	2,113	1,363	649	1,856	2,597	573	906
16	1,360	1,771	4,150	798	4,099	1,965	1,291	612	1,522	2,329	441	798
17	1,503	2,023	3,867	730	3,662	1,948	1,069	557	1,309	2,126	686	784
18	3,372	4,795	3,470	740	3,398	2,077	1,011	907	1,122	1,963	1,277	699
19	5,194	4,090	2,960	935	3,054	2,027	910	1,289	1,190	1,964	1,306	793
20	5,784	4,697	2,683	1,335	2,814	1,859	833	1,276	1,732	1,779	1,149	1,259
21	5,965	3,150	2,464	843	2,412	1,788	751	1,293	1,569	1,699	1,062	1,333
22	5,002	2,980	2,271	1,051	2,364	1,694	1,178	1,168	1,624	1,649	1,279	1,114
23	4,168	2,840	2,174	1,138	3,661	1,677	1,979	1,031	1,681	1,659	1,536	1,045
24	3,656	2,710	1,868	1,293	4,211	1,557	3,767	914	1,757	1,558	1,605	984
25	3,241	2,581	1,566	1,985	3,960	1,557	2,897	744	1,738	1,434	1,990	812
26	2,860	2,462	1,497	1,804	3,631	1,530	2,787	690	1,608	1,352	2,845	628
27	2,469	2,404	1,348	1,490	3,418	1,453	3,019	621	1,478	1,320	4,319	530
28	2,198	2,326	1,162	1,497	3,142	1,369	3,940	603	1,402	1,883	4,370	494
29	1,887	2,242	1,172	1,333	2,902	1,335	4,391	649	1,379	1,925	4,341	454
30	1,633	2,118	1,328	1,336	-----	1,986	4,396	635	1,488	1,537	4,017	462
31	1,394	-----	1,485	1,402	-----	2,290	-----	583	-----	1,391	3,551	-----

Month	Observed			Corrected for storage and diversion		
	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October	5,965	129	2,090	2,490	3.17	3.66
November	5,735	1,326	2,970	3,270	4.17	4.65
December	5,129	1,162	2,850	3,130	3.99	4.60
January	1,985	730	1,100	1,430	1.82	2.10
February	4,211	895	2,540	2,840	3.62	3.90
March	2,527	992	1,660	1,980	2.52	2.90
April	4,396	751	1,870	2,430	3.10	3.46
May	4,070	557	1,310	1,680	2.14	2.47
June	1,856	386	1,320	1,820	2.32	2.59
July	3,225	1,245	1,970	2,460	3.13	3.61
August	4,370	441	1,630	2,150	2.74	3.16
September	3,079	454	1,350	1,690	2.15	2.40
The year	5,965	129	1,890	2,280	2.90	39.50

PASSAIC RIVER BASIN

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ROCKAWAY RIVER AT BOONTON, N. J.

LOCATION.—Water-stage recorder at dam of the Jersey City waterworks at Boonton, Morris County.

DRAINAGE AREA.—119 square miles.

RECORDS AVAILABLE.—January, 1906, to September, 1928.

REMARKS.—Records good. Flow is regulated by storage in reservoir. Water is diverted from reservoir one-fourth mile above gage to Jersey City. Daily-discharge table indicates only flow over dam and through waste gates. Discharge estimated May 12-18 and September 11-14.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1.0	144	249	249	94	262	343	472	52	343	177	385
2.....	.9	208	249	249	80	249	275	413	52	275	166	329
3.....	1.4	343	357	166	68	212	224	343	30	200	144	357
4.....	26	770	371	122	65	166	188	288	35	144	110	343
5.....	188	793	371	81	110	155	70	249	92	166	134	275
6.....	144	692	357	76	144	144	42	224	262	666	212	236
7.....	83	564	357	78	116	120	40	200	262	828	262	249
8.....	44	472	598	85	224	110	62	177	177	564	212	224
9.....	44	413	864	108	442	116	120	155	128	413	155	177
10.....	74	385	659	128	357	128	180	144	200	302	116	144
11.....	58	357	595	116	262	118	329	128	212	249	130	110
12.....	38	329	564	112	200	134	329	104	166	224	116	90
13.....	144	316	564	108	155	200	184	90	122	262	85	80
14.....	316	316	565	102	155	302	5	83	144	371	59	80
15.....	224	329	564	89	472	343	12	78	302	442	40	81
16.....	144	343	533	83	595	275	96	70	236	385	29	76
17.....	126	316	502	83	472	224	144	65	130	329	62	70
18.....	355	644	472	70	442	212	130	96	78	249	472	57
19.....	768	980	357	81	343	224	155	212	78	166	442	76
20.....	980	900	329	212	329	200	63	236	188	134	288	188
21.....	793	725	316	155	249	177	80	212	224	120	177	212
22.....	659	595	262	85	188	177	155	155	236	110	188	144
23.....	564	502	236	80	329	177	329	126	262	262	413	100
24.....	442	442	200	80	725	155	564	92	249	329	442	74
25.....	357	413	114	224	595	144	564	71	236	212	442	62
26.....	302	357	166	288	413	144	413	60	224	130	725	47
27.....	249	329	144	224	371	155	357	65	188	96	1,060	47
28.....	212	316	134	166	302	134	502	90	155	385	1,020	32
29.....	200	316	155	87	275	106	659	90	155	595	793	29
30.....	188	302	212	87	-----	236	564	62	262	385	627	30
31.....	166	-----	236	106	-----	413	-----	53	-----	249	502	-----

Month	Observed			Corrected for storage and diversion		
	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October.....	980	0.9	255	360	3.03	3.49
November.....	980	144	464	538	4.52	5.04
December.....	864	114	377	474	3.98	4.59
January.....	288	70	128	229	1.92	2.21
February.....	725	65	296	398	3.34	3.60
March.....	413	106	191	286	2.40	2.77
April.....	659	5	239	358	3.01	3.36
May.....	472	53	158	243	2.04	2.35
June.....	302	30	171	265	2.23	2.49
July.....	828	96	309	408	3.43	3.95
August.....	1,060	29	316	425	3.57	4.12
September.....	385	29	147	243	2.04	2.28
The year.....	1,060	.9	254	352	2.96	40.25

BEAVER BROOK AT OUTLET OF SPLITROCK POND, N. J.

LOCATION.—Water-stage recorder 50 feet below Splitrock Pond, 2 miles north-east of Hibernia, Morris County, and $3\frac{1}{2}$ miles above mouth of Hibernia Brook.

DRAINAGE AREA.—5.5 square miles.

RECORDS AVAILABLE.—October, 1925, to September, 1928.

REMARKS.—Records good. Discharge estimated October 4, 6, and 9, 1925.

Flow is completely regulated by operation of sluice gate in Splitrock Pond Dam. Gage-height record furnished by Jersey City Water Department.

Daily discharge, in second-feet, of Beaver Brook at outlet of Splitrock Pond, N. J., 1925-1928

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1925-26												
1.-----	2.6	1.81	6.4	6.9	6.5	22	16.4	3.0	2.6	2.7	3.1	3.9
2.-----	2.6	1.72	6.2	6.6	6.5	27	21	2.9	2.6	2.5	3.1	3.3
3.-----	2.7	1.72	13.3	6.5	6.6	30	21	2.8	2.6	2.7	3.0	3.2
4.-----	2.7	1.72	32	6.5	6.8	30	21	2.9	2.7	2.5	3.0	3.3
5.-----	2.8	1.81	45	6.5	6.8	30	21	2.9	2.6	2.4	3.2	3.5
6.-----	2.4	1.72	52	6.5	6.6	30	21	2.6	2.5	2.6	3.3	10.0
7.-----	1.89	1.81	52	6.4	6.6	30	21	2.6	2.6	2.7	3.1	23
8.-----	1.81	6.6	51	6.2	6.8	30	21	2.6	2.6	2.9	2.9	35
9.-----	1.72	16.4	31	6.1	13.7	30	24	2.5	2.6	3.0	3.0	39
10.-----	1.64	16.0	19.4	6.1	25	24	25	2.4	2.7	3.1	3.0	39
11.-----	1.48	16.0	19.4	6.2	25	20	26	2.3	2.8	3.3	3.1	13.3
12.-----	1.48	16.0	19.4	6.4	25	20	26	2.3	3.0	3.3	3.1	8.0
13.-----	1.48	23	19.4	6.4	25	19.9	26	2.2	3.3	3.2	3.0	7.5
14.-----	1.56	39	10.6	6.4	25	13.3	13.7	2.2	3.4	3.1	2.9	7.5
15.-----	1.48	41	8.2	6.2	25	9.1	9.3	2.2	3.5	2.8	3.1	4.6
16.-----	1.48	41	8.1	6.2	24	8.7	9.1	2.3	3.2	2.5	3.3	3.3
17.-----	1.64	49	8.1	6.1	24	8.5	9.0	2.2	3.0	2.6	4.1	3.1
18.-----	1.64	53	8.1	6.1	10.6	8.5	9.0	2.2	3.0	2.7	32	2.9
19.-----	1.64	52	8.0	6.1	6.9	8.5	9.0	2.3	3.0	2.8	43	2.7
20.-----	1.64	36	7.8	6.1	6.9	8.5	9.0	2.3	3.0	2.8	31	2.8
21.-----	1.72	22	7.8	6.1	6.9	8.5	9.0	2.4	3.0	3.0	12.4	2.6
22.-----	1.72	9.3	7.7	6.2	7.0	8.7	8.8	2.4	3.3	3.1	8.4	2.5
23.-----	1.64	6.6	7.5	6.2	7.1	8.8	8.7	2.7	2.7	3.2	8.1	2.6
24.-----	1.64	6.6	7.5	6.5	7.1	9.1	8.8	2.9	2.4	3.3	8.1	2.7
25.-----	1.64	6.5	7.5	6.5	7.3	21	8.2	2.9	2.3	3.4	8.2	2.9
26.-----	1.64	6.5	7.5	6.5	13.7	31	4.3	2.9	2.2	3.1	8.4	3.0
27.-----	1.72	6.5	7.4	6.5	22	31	3.2	2.9	2.3	3.0	6.8	3.0
28.-----	1.81	6.5	7.3	6.5	22	31	3.0	2.8	2.3	2.9	5.8	2.8
29.-----	1.81	6.5	7.1	6.5	-----	16.8	3.0	2.7	2.5	2.9	6.0	2.8
30.-----	1.81	6.5	7.1	6.5	-----	9.8	3.1	2.6	2.5	2.9	5.7	2.7
31.-----	1.81	-----	7.1	6.5	-----	9.8	-----	2.6	-----	2.9	5.6	-----

Daily discharge, in second-feet, of Beaver Brook at outlet of Splitrock Pond, N. J.,
1925-1928—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1926-27												
1	2.6	14	34	7.4	17	22	6.1	16	7.8	2.6	4.0	25
2	2.5	16	26	7.5	9.0	22	5.5	16	7.4	2.2	14	8.1
3	2.7	16	11	7.5	9.0	22	5.5	10	5.4	2.2	18	5.1
4	2.7	16	7.4	7.5	9.0	22	5.5	7.1	4.8	2.2	17	3.4
5	2.7	11	7.3	7.4	9.0	13	15	7.1	5.6	1.8	17	2.7
6	2.8	7.4	7.1	7.5	9.0	7.1	20	7.1	5.6	1.8	12	2.9
7	2.7	7.4	7.3	7.5	9.0	7.1	20	13	5.5	1.8	8.8	3.6
8	2.7	7.4	7.4	7.7	7.1	6.9	13	17	5.6	1.8	8.1	4.3
9	2.6	7.1	7.4	7.7	7.1	6.9	6.2	16	3.6	1.8	7.8	4.6
10	2.6	7.1	7.4	7.5	7.1	6.9	6.2	16	2.7	1.8	7.5	4.9
11	2.6	17	7.5	7.5	7.1	19	6.2	16	2.7	1.8	5.8	6.1
12	2.5	23	7.5	7.5	7.1	35	6.1	16	2.6	1.8	4.6	6.2
13	2.5	23	7.5	7.5	7.1	41	6.1	14	2.6	1.8	4.6	6.9
14	2.5	14	7.5	7.7	7.1	40	4.8	12	2.6	1.8	4.9	7.8
15	2.5	7.7	7.5	7.8	7.1	39	4.0	12	2.6	1.8	5.2	8.4
16	2.4	16	7.5	7.5	7.1	39	4.0	12	2.4	2.1	5.2	7.4
17	2.4	46	7.5	7.5	7.1	39	4.0	12	2.4	2.3	5.3	7.4
18	2.4	63	7.4	7.5	7.1	37	4.1	12	2.4	2.3	16	5.0
19	2.3	63	7.4	7.5	15	34	4.1	8.8	2.1	2.3	21	3.7
20	2.3	45	7.4	7.7	20	34	4.2	7.0	12	2.3	9.7	3.7
21	2.2	35	7.4	7.7	20	34	4.4	7.0	18	2.3	3.7	3.6
22	2.2	26	7.4	7.8	20	32	4.5	7.0	18	2.5	3.7	3.5
23	2.2	14	7.4	8.0	22	16	4.4	7.0	9.7	2.8	3.9	3.4
24	2.2	9.1	7.4	8.1	22	6.2	4.5	15	6.4	2.8	4.0	3.4
25	24	9.0	7.4	8.4	22	6.2	4.5	25	6.4	3.3	4.2	3.4
26	38	9.0	7.4	8.5	22	6.4	4.5	28	6.2	3.4	4.9	3.3
27	46	8.4	7.4	8.5	22	6.4	4.6	28	6.2	3.4	15	3.2
28	22	7.7	7.4	24	22	6.4	4.6	30	5.8	3.4	21	2.7
29	8.2	7.7	7.4	33	-----	6.4	12	31	3.9	3.4	31	3.0
30	8.2	25	7.4	33	-----	8.2	16	23	2.8	3.9	46	3.0
31	8.2	-----	7.5	33	-----	6.1	-----	12	-----	4.0	50	-----
1927-28												
1	3.0	20	8.2	8.7	8.5	23	29	13.3	4.5	28	10.2	14.4
2	3.0	15.5	15.4	8.7	8.5	17.9	21	8.5	4.3	26	10.0	11.1
3	2.9	19.4	21	8.7	8.5	14.4	21	8.5	4.1	25	9.8	10.9
4	3.0	28	23	8.7	8.5	14.4	13.4	8.5	4.1	17.3	10.0	10.9
5	2.8	39	24	8.7	8.5	14.4	8.7	18.2	4.2	10.1	10.2	10.9
6	2.8	44	24	8.7	8.5	14.4	8.7	23	4.2	26	9.8	10.4
7	2.7	43	24	8.7	8.5	14.4	8.5	23	4.3	26	9.5	9.8
8	2.7	43	33	8.7	9.0	16.2	8.4	23	4.3	28	9.5	9.7
9	2.7	42	42	8.7	9.3	16.0	8.2	14.9	17.9	14.9	9.7	9.7
10	2.7	22	43	8.7	9.3	14.4	8.1	9.1	37	10.0	9.3	9.5
11	2.7	15.2	42	8.7	9.3	14.4	8.0	9.0	11.2	9.8	8.5	9.5
12	2.6	10.6	42	8.7	9.3	14.4	7.7	8.8	25	9.8	6.9	9.7
13	2.9	5.1	42	8.7	9.1	14.4	7.5	8.7	21	19.0	6.5	9.8
14	3.1	5.0	42	8.7	9.1	14.4	16.0	8.5	17.0	40	6.4	9.4
15	3.1	4.8	41	8.7	31	14.4	23	8.4	13.0	43	6.5	9.1
16	3.7	4.5	41	8.7	47	14.4	14.0	7.6	12.7	18.9	6.6	9.3
17	3.5	12.7	40	8.5	50	11.0	9.0	7.1	12.7	11.1	7.3	9.3
18	33	35	33	8.5	50	8.5	8.8	7.1	12.4	10.9	8.5	9.0
19	48	51	31	8.5	49	8.5	8.7	7.0	12.0	10.9	17.8	6.3
20	78	56	33	8.5	31	8.5	8.5	7.0	21	10.6	22	3.5
21	89	55	32	8.5	21	8.5	8.5	6.9	30	9.7	22	3.4
22	48	33	32	8.5	15.8	8.5	8.5	6.9	34	9.7	31	3.4
23	26	18.6	24	8.5	12.7	8.5	8.5	6.8	29	10.0	35	3.5
24	11.9	18.6	9.1	8.2	13.0	8.5	30	6.8	26	9.8	35	3.6
25	5.8	18.6	9.0	8.5	19.2	8.5	41	6.8	28	9.8	35	4.1
26	5.8	19.0	8.8	8.5	23	8.5	41	6.8	32	9.5	34	4.2
27	10.7	19.0	8.8	8.5	23	8.5	40	6.8	33	9.4	58	4.3
28	13.7	19.0	8.7	8.5	23	8.5	46	6.9	29	9.8	70	4.3
29	13.2	12.1	8.7	8.5	23	8.5	50	5.9	28	10.0	68	4.3
30	21	8.4	8.7	8.5	-----	28	32	5.0	28	10.0	44	4.2
31	20	-----	8.7	8.5	-----	40	-----	4.6	-----	10.0	24	-----

Monthly discharge, in second-feet, of Beaver Brook at outlet of Splitrock Pond, N. J., 1925-1928

Month	Maximum	Minimum	Mean	Month	Maximum	Minimum	Mean
1925-26							
October.....	2.8	1.48	1.85	May.....	31	7.0	1.48
November.....	53	1.72	16.7	June.....	18	2.1	5.73
December.....	52	6.2	16.4	July.....	4.0	1.8	2.44
January.....	6.9	6.1	6.35	August.....	50	3.7	12.4
February.....	25	6.5	13.7	September.....	25	2.7	5.32
March.....	31	8.5	19.1				
April.....	26	3.0	14.0	The year.....	63	1.8	10.5
May.....	3.0	2.2	2.56				
June.....	3.5	2.2	2.76	1927-28			
July.....	3.4	2.4	2.90	October.....	89	2.6	15.3
August.....	43	2.9	7.83	November.....	56	4.5	24.6
September.....	39	2.5	8.22	December.....	43	8.2	25.9
				January.....	8.7	8.2	8.59
The year.....	53	1.48	9.31	February.....	50	8.5	19.2
				March.....	40	8.5	13.8
1926-27				April.....	50	7.5	18.4
October.....	46	2.2	6.92	May.....	23	4.6	9.66
November.....	63	7.1	19.3	June.....	37	4.1	18.1
December.....	34	7.1	8.98	July.....	43	9.4	16.5
January.....	33	7.4	10.7	August.....	70	6.4	21.0
February.....	22	7.1	12.7	September.....	14.4	3.4	7.72
March.....	41	6.1	20.2				
April.....	20	4.0	7.15	The year.....	89	2.6	16.5

WHIPPANY RIVER AT MORRISTOWN, N. J.

LOCATION.—Staff gage at Morristown sewage disposal plant, three-fourths mile below Morristown, Morris County, and 8 miles above mouth.

DRAINAGE AREA.—29 square miles.

RECORDS AVAILABLE.—August, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, about 1,100 second-feet August 26 (gage height, 7.3 feet); minimum, 22 second-feet several times in October (gage height, 1.06 feet).

1921-1928: Maximum discharge, that of August 26, 1928; minimum, 6.3 second-feet October 5 and 7, 1921 (gage height, 0.80 foot).

REMARKS.—Records good. Discharge estimated because of ice January 2-6, 29-31, and February 1-3. Gage-height record furnished by commissioner of Department of Public Works of Morristown.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	22	42	60	76	42	86	92	110	35	70	56	122
2.....	22	43	65	65	44	76	65	98	33	46	60	110
3.....	23	245	110	60	46	70	60	86	30	40	56	178
4.....	129	230	65	55	48	65	60	81	30	40	52	122
5.....	55	104	86	50	86	65	57	76	65	50	50	86
6.....	35	81	86	45	53	49	54	81	136	580	142	98
7.....	30	70	81	45	43	35	51	70	55	185	81	122
8.....	28	65	360	42	309	55	58	65	46	110	60	76
9.....	41	65	170	55	129	55	50	70	36	92	54	65
10.....	46	65	110	51	76	57	47	65	35	86	53	55
11.....	37	60	110	48	60	60	47	57	33	92	70	65
12.....	33	57	136	47	47	76	104	59	32	81	52	60
13.....	122	54	149	45	35	110	60	54	28	149	41	60
14.....	59	52	156	45	70	129	56	51	35	142	41	110
15.....	39	50	110	43	326	86	58	48	185	129	40	60
16.....	32	48	110	39	104	65	51	47	65	116	40	58
17.....	34	70	129	46	81	65	47	46	48	142	136	56
18.....	261	215	86	45	86	70	45	53	36	86	230	60
19.....	326	104	76	76	81	76	46	76	35	70	122	70
20.....	178	86	76	163	49	70	42	70	52	70	60	156
21.....	104	65	76	51	55	65	59	57	41	60	41	81
22.....	76	59	70	46	70	65	110	49	65	60	70	60
23.....	65	59	70	43	394	65	129	44	70	230	129	58
24.....	65	70	65	43	245	65	293	43	122	98	70	50
25.....	59	65	65	122	142	65	116	39	65	70	86	50
26.....	57	60	60	86	129	60	92	39	47	60	394	60
27.....	53	60	56	60	86	60	104	49	41	65	760	48
28.....	50	70	52	47	86	50	293	47	39	215	326	41
29.....	48	70	70	44	81	49	200	42	37	76	215	40
30.....	46	60	81	42	-----	215	110	39	86	70	185	40
31.....	44	-----	76	40	-----	110	-----	40	-----	60	149	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	326	22	71.6	2.47	2.85
November.....	245	42	81.5	2.81	3.14
December.....	360	52	99.1	3.42	3.94
January.....	163	39	56.9	1.96	2.26
February.....	394	35	107	3.69	3.98
March.....	215	35	73.8	2.54	2.93
April.....	293	42	88.5	3.05	3.40
May.....	110	39	59.7	2.06	2.38
June.....	185	28	55.4	1.91	2.13
July.....	580	40	111	3.83	4.42
August.....	760	40	126	4.34	5.00
September.....	178	40	77.2	2.66	2.97
The year.....	760	22	84.0	2.90	39.40

RAMAPO RIVER NEAR MAHWAH, N. J.

LOCATION.—Water-stage recorder at highway bridge 1 mile west of Mahwah, Bergen County, three-fourths mile below mouth of Mahwah River.

DRAINAGE AREA.—118 square miles.

RECORDS AVAILABLE.—February, 1903, to July, 1914; September, 1922, to September, 1928. Gage heights only, 1907 to 1914.

EXTREMES.—Maximum discharge during year, about 2,240 second-feet November 4 (gage height, 7.50 feet); minimum, 45 second-feet October 3 (gage height, 2.08 feet).

1922-1928: Maximum discharge, 2,760 second-feet September 2, 1927 (gage height, 8.23 feet); minimum, 11 second-feet September 20, 1923 (gage height, 1.57 feet).

REMARKS.—Records good. Discharge estimated February 12-17 and April 21-27, when recorder was not operating.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	62	171	291	348	185	304	498	738	118	345	160	237
2.....	61	166	309	234	209	271	394	585	115	276	166	196
3.....	71	865	528	195	172	247	340	474	93	230	142	358
4.....	265	2,190	428	154	165	209	313	404	111	197	147	387
5.....	222	1,760	408	138	256	202	291	346	374	197	144	283
6.....	138	1,170	379	139	257	179	272	305	583	846	283	232
7.....	112	738	345	141	203	169	257	272	469	1,130	279	210
8.....	93	564	1,220	149	401	163	266	237	334	644	228	181
9.....	98	476	1,350	186	616	163	252	218	293	397	198	153
10.....	127	415	802	188	524	176	209	204	488	306	221	140
11.....	99	400	617	174	379	160	206	186	373	295	440	127
12.....	80	371	646	162	260	183	334	180	279	244	341	118
13.....	638	308	605	159	200	271	365	152	231	286	219	112
14.....	592	274	776	161	200	404	310	146	342	335	170	100
15.....	313	258	687	159	900	367	308	140	934	376	142	93
16.....	218	246	572	153	900	281	252	132	455	258	123	88
17.....	204	298	572	143	650	237	225	127	311	204	178	93
18.....	605	757	455	141	497	261	202	194	245	174	369	90
19.....	1,500	830	370	140	425	266	193	255	416	168	255	115
20.....	1,650	538	329	232	376	247	177	235	658	179	179	254
21.....	1,030	424	307	176	320	244	180	215	464	191	150	195
22.....	658	369	294	168	281	265	400	185	451	173	208	134
23.....	493	334	271	135	653	276	600	174	435	222	489	107
24.....	414	321	236	127	1,050	284	1,000	164	438	175	436	95
25.....	347	342	237	481	690	313	1,000	143	430	154	409	86
26.....	296	294	190	384	483	322	600	141	357	146	519	85
27.....	263	309	179	283	404	320	400	133	327	165	838	78
28.....	239	331	172	226	347	280	763	149	282	590	629	75
29.....	217	326	186	213	314	246	1,220	146	284	419	487	77
30.....	194	304	227	225	-----	445	991	125	389	237	370	62
31.....	183	-----	249	196	-----	695	-----	140	-----	183	295	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,650	61	370	3.14	3.62
November.....	2,190	166	538	4.56	5.09
December.....	1,350	172	459	3.89	4.43
January.....	481	127	197	1.67	1.92
February.....	1,050	165	425	3.60	3.88
March.....	695	160	272	2.31	2.66
April.....	1,220	177	427	3.62	4.04
May.....	738	125	224	1.98	2.28
June.....	934	93	369	3.13	3.49
July.....	1,130	146	314	2.66	3.07
August.....	858	123	297	2.52	2.90
September.....	387	62	152	1.29	1.44
The year.....	2,190	61	337	2.86	38.87

RAMAPO RIVER AT POMPTON LAKES, N. J.

LOCATION.—Water-stage recorders at hydroelectric plant in Pompton Lakes, Passaic County, $1\frac{1}{2}$ miles above mouth of Ramapo River.

DRAINAGE AREA.—160 square miles.

RECORDS AVAILABLE.—October, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, 3,930 second-feet, flow through turbines not included, November 4 (gage height, 1.90 feet).

1921-1928: Maximum discharge, about 7,220 second-feet, flow through turbines not included, September 2, 1927 (gage height, 2.68 feet).

REMARKS.—Records good. Flow regulated by storage in pond. Daily discharge includes flow over spillway and through turbines. Discharge over spillway estimated December 24-31, January 1-5, 31, February 1-6, and April 15-24. Records of stage and gate openings furnished by Jersey Central Power & Light Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	74	220	366	440	200	458	822	1,130	239	474	193	390
2.....	70	208	506	300	240	419	635	885	251	372	209	317
3.....	86	679	676	240	200	362	558	720	264	308	189	442
4.....	269	3,370	601	200	200	302	513	624	30	240	151	609
5.....	310	2,840	551	170	280	292	480	548	386	196	121	436
6.....	180	1,650	520	166	340	253	427	494	760	1,050	185	369
7.....	135	985	458	165	254	233	422	437	688	1,440	272	348
8.....	114	705	1,460	171	494	226	404	396	500	1,010	237	298
9.....	100	655	2,080	216	804	217	389	366	379	584	192	257
10.....	147	580	1,210	218	721	238	362	356	563	376	162	227
11.....	119	532	835	200	548	233	343	342	539	347	398	220
12.....	89	492	840	191	407	239	450	332	381	339	437	192
13.....	660	389	835	187	350	370	548	294	306	379	291	191
14.....	859	340	1,090	200	357	592	484	283	322	484	228	178
15.....	437	321	1,000	186	1,940	577	440	268	1,300	568	191	175
16.....	264	307	826	191	1,650	444	400	257	706	393	171	116
17.....	238	343	845	167	948	375	360	254	459	304	186	114
18.....	986	867	663	168	737	377	340	344	359	259	347	164
19.....	2,180	1,100	528	181	562	405	300	472	480	230	360	76
20.....	2,370	750	434	297	503	373	300	420	935	200	250	198
21.....	1,600	564	376	221	453	368	300	389	677	242	208	209
22.....	985	485	348	160	369	369	400	343	647	212	197	197
23.....	685	429	326	188	910	400	850	323	639	295	475	132
24.....	566	403	300	159	1,960	390	1,200	294	617	237	527	129
25.....	471	428	320	566	1,120	416	1,050	286	603	177	531	129
26.....	395	366	280	557	710	444	794	269	517	163	685	71
27.....	346	378	240	364	590	430	651	265	426	161	1,910	123
28.....	311	424	220	289	493	425	1,130	267	378	708	1,230	146
29.....	303	421	220	225	465	396	1,750	268	348	615	831	167
30.....	252	395	260	251	690	1,490	265	511	338	628	160	160
31.....	236		340	240		1,050		264		249	493	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	2,370	70	511	3.19	3.68
November.....	3,370	208	721	4.51	5.03
December.....	2,080	220	631	3.94	4.54
January.....	566	159	241	1.51	1.74
February.....	1,960	200	648	4.05	4.37
March.....	1,050	217	399	2.49	2.87
April.....	1,750	300	620	3.88	4.33
May.....	1,130	254	402	2.51	2.89
June.....	1,300	30	507	3.17	3.54
July.....	1,440	161	417	2.61	3.01
August.....	1,910	121	403	2.52	2.90
September.....	609	71	226	1.41	1.57
The year.....	3,370	30	476	2.98	40.47

GREENWOOD LAKE AT THE GLENS, N. J.

LOCATION.—Staff gage on Erie Railroad bridge 100 feet above dam at The Glens, Passaic County.

DRAINAGE AREA.—27 square miles.

RECORDS AVAILABLE.—June, 1898, to November, 1903; June, 1907, to September, 1928.

EXTREMES.—Maximum stage during year, 100.6 feet July 6 and 7; minimum, 94.55 feet October 1–4.

1898–1903, 1907–1928: Maximum stage, about 104.0 feet October 9–14, 1903; minimum, 93.25 feet several days in November, 1900.

REMARKS.—Greenwood Lake Dam provides storage for Morris Canal. Navigation in canal was abandoned by act of State legislature March 13, 1924. Very little regulation of lake subsequent to this date. Records furnished by Morris Canal & Banking Co.

Daily gage height, in feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	94.55	97.15	97.75	97.5	98.15	98.05	98.25	99.15	98.98	100.25	100.1	100.1
2.....	94.55	97.1	97.7	97.52	98.05	97.95	98.4	99.1	99.0	100.22	100.1	100.05
3.....	94.55	97.3	97.65	97.55	98.0	97.92	98.5	99.05	98.95	100.2	100.1	100.05
4.....	94.55	98.25	97.65	97.55	97.95	97.85	98.5	99.05	99.0	100.2	100.05	100.08
5.....	94.95	98.4	97.75	97.6	97.95	97.85	98.45	99.0	99.15	100.2	100.05	100.1
6.....	94.95	98.4	97.75	97.65	97.95	97.85	98.4	98.95	99.65	100.6	100.05	100.1
7.....	94.95	98.3	97.75	97.7	97.95	97.85	98.3	98.85	99.7	100.6	100.05	100.08
8.....	95.0	98.25	97.75	97.75	98.0	98.1	98.25	98.65	99.75	100.45	100.02	100.05
9.....	95.0	98.2	97.8	97.75	98.15	98.05	98.2	98.55	99.8	100.35	100.02	100.0
10.....	95.05	98.1	97.85	97.8	98.15	98.05	98.2	98.45	99.85	100.2	99.95	100.0
11.....	95.05	98.0	98.0	97.82	98.2	98.05	98.15	98.45	99.9	100.2	100.1	100.0
12.....	95.05	97.95	98.0	97.85	98.15	98.0	98.15	98.45	99.95	100.2	100.1	100.0
13.....	95.35	97.75	98.0	97.85	98.15	98.0	98.1	98.45	100.0	100.15	100.1	100.0
14.....	95.55	97.65	97.75	97.85	98.3	97.95	98.1	98.55	100.0	100.15	100.1	99.95
15.....	95.55	97.55	97.75	97.9	98.45	97.9	98.15	98.45	100.0	100.15	100.05	99.95
16.....	95.65	97.45	97.75	97.95	98.5	97.85	98.15	98.45	100.0	100.1	100.0	99.95
17.....	95.65	97.5	97.75	98.0	98.4	97.85	98.1	98.5	100.0	100.1	100.0	99.9
18.....	95.75	97.75	97.75	98.05	98.35	97.85	98.1	98.55	99.98	100.1	100.25	99.9
19.....	96.55	98.35	97.75	98.05	98.25	97.85	98.05	98.65	99.98	100.05	100.25	99.9
20.....	97.15	98.35	97.72	98.08	98.2	97.85	98.05	98.7	100.15	100.05	100.25	99.95
21.....	97.35	98.3	97.72	98.1	98.15	97.85	98.05	98.75	100.15	100.05	100.2	100.0
22.....	97.45	98.25	97.7	98.05	98.05	97.85	98.05	98.8	100.15	100.05	100.2	100.0
23.....	97.4	98.15	97.65	98.05	98.1	97.9	98.15	98.82	100.15	100.0	100.3	100.0
24.....	97.35	98.05	97.6	98.25	98.25	97.9	98.3	98.85	100.2	100.0	100.35	99.95
25.....	97.3	98.0	97.55	98.35	98.25	97.95	98.45	98.85	100.22	100.0	100.35	99.95
26.....	97.25	97.95	97.55	98.35	98.22	98.05	98.55	98.85	100.25	100.0	100.4	99.9
27.....	97.25	97.9	97.45	98.3	98.22	98.1	98.6	98.85	100.25	100.0	100.4	99.9
28.....	97.15	97.85	97.45	98.25	98.2	98.1	98.75	98.88	100.25	100.1	100.4	99.88
29.....	97.15	97.8	97.4	98.25	98.1	98.1	98.95	98.9	100.25	100.15	100.35	99.85
30.....	97.15	97.75	97.45	98.2	-----	98.05	99.05	98.92	100.26	100.15	100.3	99.85
31.....	97.15	-----	97.5	98.15	-----	98.05	-----	98.95	-----	100.15	100.2	-----

WANAUKE RIVER AT GREENWOOD LAKE, N. J.

LOCATION.—Water-stage recorder 600 feet downstream from dam at outlet of Greenwood Lake, at The Glens, Passaic County.

DRAINAGE AREA.—27 square miles.

RECORDS AVAILABLE.—May, 1919, to September, 1928.

EXTREMES.—Maximum discharge during year, 320 second-feet May 10 (gage height, 2.86 feet).

1919–1928: Maximum discharge, about 600 second-feet April 7, 1924 (gage height, 3.72 feet); minimum discharge occurs at times gates at Greenwood Lake are closed and no water is passing over spillway.

REMARKS.—Records good. Flow regulated by storage in lake. Discharge estimated July 30 to August 4. Recorder operated by North Jersey District Water Supply Commission. See record of Greenwood Lake at The Glens.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.5	97	136	0.3	86	103	75	97	1.4	122	65	66
2.....	.4	91	136	.3	86	77	75	103	1.4	116	48	47
3.....	.4	116	136	.3	86	47	86	97	1.4	91	36	46
4.....	.5	189	136	.2	75	6.5	91	97	1.4	75	28	62
5.....	.5	206	136	.2	75	6.5	103	97	1.4	62	24	62
6.....	.5	206	136	.2	56	6.2	97	97	1.4	109	28	50
7.....	.6	198	129	.2	32	13	97	91	1.3	300	36	47
8.....	.6	181	150	.2	35	31	97	86	1.2	261	34	43
9.....	.6	173	166	.2	57	41	91	189	1.2	215	31	37
10.....	.6	166	166	.1	86	72	91	184	10	158	28	32
11.....	.6	158	158	.1	91	86	91	22	21	97	68	25
12.....	.6	150	158	.1	91	80	86	9.1	25	80	91	22
13.....	1.1	143	158	.1	103	80	91	9.1	28	70	66	20
14.....	.8	136	158	.1	103	75	91	27	29	62	50	20
15.....	.6	129	158	.1	166	75	91	2.6	34	80	41	16
16.....	.5	122	158	.1	206	75	86	2.6	31	91	35	13
17.....	.5	122	150	.1	206	55	69	2.4	24	75	29	12
18.....	21	173	150	.1	198	36	57	2.3	20	62	70	12
19.....	66	189	143	.1	189	42	37	2.3	22	50	103	13
20.....	97	189	129	4.4	189	43	24	2.1	58	46	86	19
21.....	110	181	116	12	181	30	23	2.1	66	47	66	20
22.....	116	181	103	22	181	24	24	1.9	66	43	50	22
23.....	116	173	91	22	173	26	34	1.9	75	38	104	20
24.....	110	166	80	22	173	26	43	1.7	80	39	129	16
25.....	110	158	75	30	166	26	45	1.6	103	35	122	13
26.....	103	150	75	62	158	27	47	1.6	103	29	122	9.5
27.....	97	150	62	75	158	27	47	1.6	97	22	136	10
28.....	44	143	23	80	150	28	62	1.7	91	22	272	5.9
29.....	1.2	143	1.2	80	90	28	91	1.6	80	66	261	6.8
30.....	.8	136	.8	80	-----	38	97	1.7	103	80	198	4.7
31.....	37	-----	.8	80	-----	68	-----	1.6	-----	80	166	-----

Month	Maximum	Minimum	Mean	Month	Maximum	Minimum	Mean
October.....	116	0.4	33.5	May.....	189	1.6	40.0
November.....	206	91	157	June.....	103	1.2	39.3
December.....	166	.8	115	July.....	300	22	87.8
January.....	80	.1	18.5	August.....	272	24	84.6
February.....	206	32	126	September.....	66	4.7	26.4
March.....	103	6.2	45.1				
April.....	103	23	71.3	The year.....	300	.1	70.2

WANAUKE RIVER AT WANAUKE, N. J.

LOCATION.—Water-stage recorder 100 feet below Erie Railroad bridge and 400 feet below highway bridge in Wanaque, Passaic County.

DRAINAGE AREA.—91 square miles.

RECORDS AVAILABLE.—December, 1903, to December, 1905; May, 1912, to May, 1915; May, 1919, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,610 second-feet November 4 (gage height, 4.91 feet); minimum, 1 second-foot April 5 (gage height, 0.16 foot).

1903–1905, 1912–1915, 1919–1928: Maximum stage, 8.35 feet July 22 or 23, 1919 (discharge not determined); minimum discharge, that of November 4, 1927.

REMARKS.—Records good. Flow regulated by storage in Wanaque Reservoir since March 23 and Greenwood Lake. Subsequent to May 19 water is diverted from Post Brook into Wanaque Reservoir. Discharge estimated January 3–6, because of ice, and June 3 to September 30, because of grass. Recorder operated by North Jersey District Water Supply Commission.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	45	173	305	219	224	266	50	72	39	32	26	26
2.....	42	195	305	101	210	238	50	72	38	30	26	26
3.....	42	455	444	80	195	224	51	72	37	29	26	27
4.....	248	1,440	354	75	170	178	46	72	37	29	27	27
5.....	112	1,040	354	75	181	144	31	72	37	29	27	27
6.....	78	690	329	80	178	128	26	72	37	30	27	27
7.....	63	545	305	84	154	111	30	68	37	29	27	27
8.....	58	478	841	91	224	98	30	52	37	29	27	27
9.....	56	412	810	104	329	88	28	42	38	29	27	27
10.....	68	382	556	86	329	124	30	42	38	28	27	27
11.....	59	354	478	74	292	238	28	42	38	26	27	27
12.....	51	354	478	32	252	189	31	42	37	25	26	27
13.....	269	329	444	14	238	224	31	42	37	25	26	27
14.....	224	305	545	44	252	238	31	42	35	29	26	27
15.....	134	292	545	58	478	224	32	42	32	29	26	27
16.....	104	279	510	72	545	195	33	40	31	29	27	27
17.....	102	329	444	84	510	276	33	40	31	29	27	27
18.....	423	770	329	80	510	279	32	44	31	28	26	27
19.....	1,170	650	305	76	478	224	32	44	32	28	26	27
20.....	1,100	478	329	100	444	195	32	44	32	28	26	27
21.....	650	412	292	93	412	189	33	44	32	27	26	27
22.....	444	382	279	104	444	175	33	42	32	27	26	28
23.....	382	354	266	100	478	115	33	38	32	28	26	28
24.....	329	354	210	102	478	37	39	38	32	27	26	28
25.....	305	354	195	285	478	39	60	38	32	25	27	28
26.....	292	329	195	305	444	40	64	38	32	25	28	28
27.....	266	329	184	266	412	42	64	38	32	26	27	28
28.....	238	329	159	238	382	44	68	38	32	26	27	28
29.....	149	329	138	210	354	45	72	38	32	25	27	28
30.....	121	305	157	224	-----	46	72	38	32	28	27	28
31.....	109	-----	159	224	-----	48	-----	38	-----	25	27	-----

Month	Maximum	Minimum	Mean	Month	Maximum	Minimum	Mean
October.....	1,170	42	249	May.....	72	38	47.6
November.....	1,440	173	448	June.....	39	31	34.4
December.....	841	138	363	July.....	32	25	27.7
January.....	305	14	122	August.....	28	26	26.6
February.....	545	153	347	September.....	28	26	27.2
March.....	276	37	152				
April.....	72	26	40.8	The year.....	1,440	14	156

PEQUANNOCK RIVER AT MACOPIN INTAKE DAM, N. J.

LOCATION.—Water-stage recorder at Macopin intake dam of the Newark waterworks, about 3 miles above Butler, Morris County.

DRAINAGE AREA.—63.7 square miles.

RECORDS AVAILABLE.—January, 1892, to September, 1928.

REMARKS.—Water is diverted at intake dam only. Flow regulated by several reservoirs. Station operated and base data furnished by Bureau of Water, city of Newark.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	4.8	149	133	0	124	138	270	0	189	0	155
2	0	15	155	15	0	115	114	237	0	114	0	90
3	0	254	263	36	0	69	95	177	0	63	0	73
4	53	605	250	10	0	32	86	144	0	38	0	69
5	65	569	212	3.7	3.9	27	73	128	30	77	0	42
6	15	417	177	1.1	13	17	73	114	182	318	1.9	32
7	0	263	177	.3	11	7.1	77	97	206	393	0	35
8	0	149	385	0	93	3.4	90	82	144	290	0	19
9	0	128	497	0	206	10	73	73	128	138	0	9.0
10	0	128	385	8.2	177	37	53	37	160	114	0	1.5
11	0	128	317	3.4	124	49	61	8.2	128	95	0	0
12	0	128	308	1.1	124	53	128	5.6	77	65	0	0
13	56	119	305	0	86	90	160	3.6	38	86	0	0
14	42	84	312	0	133	165	160	0	28	160	0	0
15	49	53	290	0	471	138	155	0	25	200	0	0
16	24	61	305	0	424	81	119	0	17	128	0	0
17	24	723	277	0	270	56	97	0	0	61	0	0
18	171	1,410	231	0	228	56	82	7.1	0	28	0	0
19	559	936	212	0	215	53	56	16	1.7	9.0	0	0
20	632	551	189	22	189	49	32	7.1	73	.8	0	0
21	447	362	99	0	160	49	35	22	65	.3	0	0
22	312	297	69	0	155	49	95	19	77	0	15	0
23	212	290	69	1.7	297	49	204	10	86	28	52	0
24	177	283	69	0	431	49	263	2.6	114	20	81	0
25	138	270	73	56	393	61	243	0	90	7.1	155	0
26	73	228	65	2.2	340	73	182	0	73	0	277	0
27	46	212	49	0	194	73	194	0	73	0	416	0
28	46	222	35	0	128	45	318	0	56	87	416	0
29	39	212	51	1.5	119	56	362	0	86	133	333	0
30	28	182	73	3.4	-----	244	310	0	195	49	270	0
31	14	-----	90	0	-----	182	-----	0	-----	0	218	-----

Month	Observed			Corrected for storage and diversion		
	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October	632	0	104	225	3.53	4.07
November	1,410	4.8	309	404	6.34	7.07
December	497	35	198	277	4.35	5.02
January	133	0	9.63	101	1.59	1.83
February	471	0	172	260	4.08	4.40
March	244	3.4	69.7	160	2.51	2.89
April	362	32	138	226	3.55	3.96
May	270	0	47.1	127	1.99	2.29
June	206	0	71.8	165	2.59	2.89
July	393	0	93.3	180	2.83	3.26
August	416	0	72.1	164	2.57	2.96
September	155	0	17.5	85.6	1.34	1.50
The year	1,410	0	108	197	3.09	42.14

SADDLE RIVER AT LODI, N. J.

LOCATION.—Water-stage recorder at highway bridge 1 mile above Lodi, Bergen County, and $2\frac{3}{4}$ miles above mouth.

DRAINAGE AREA.—55 square miles.

RECORDS AVAILABLE.—September, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year, 829 second-feet July 7 (gage height, 4.83 feet); minimum, 35 second-feet October 3 (gage height, 1.87 feet).
1923-1928: Maximum discharge, 1,630 second-feet September 2, 1927 (gage height, 6.82 feet); minimum, 5.3 second-feet November 22, 1923 (gage height, 1.49 feet).

REMARKS.—Records fair. Discharge estimated December 24-27, January 2-5, 21, 22, 28-31, February 1-3, 6, and 7 because of ice.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	65	104	124	178	75	134	190	178	84	144	90	115
2	62	106	124	130	75	134	124	155	72	113	96	100
3	61	144	178	110	70	124	110	124	65	90	95	134
4	124	531	215	85	83	113	103	115	62	80	81	268
5	228	492	155	80	111	106	100	108	95	84	75	228
6	144	296	166	81	100	98	96	103	190	282	89	134
7	86	215	166	84	100	93	90	101	254	686	124	144
8	75	166	228	90	166	92	92	103	144	340	115	144
9	83	155	450	103	325	93	90	98	90	166	95	113
10	111	144	241	119	228	96	83	101	134	134	83	98
11	98	144	166	108	144	103	80	96	178	155	103	92
12	80	155	166	103	113	117	110	96	100	166	190	86
13	172	144	202	104	100	190	155	86	78	166	113	81
14	437	134	228	108	100	228	115	80	78	268	67	75
15	254	120	296	111	380	241	103	80	134	282	56	72
16	134	119	215	103	370	178	90	78	241	254	49	74
17	108	120	202	93	202	134	80	78	120	155	61	74
18	215	190	215	93	166	134	75	100	81	110	144	87
19	691	296	155	100	144	166	71	202	108	95	202	111
20	686	190	137	166	134	166	68	241	215	90	92	166
21	386	134	124	140	124	144	64	178	268	117	61	215
22	254	124	124	120	113	134	103	124	166	124	68	134
23	202	122	124	98	254	134	202	93	178	124	134	89
24	166	119	100	84	618	124	355	87	190	166	144	78
25	155	124	110	202	310	117	340	84	178	122	122	72
26	134	124	95	296	178	119	166	100	134	90	355	71
27	134	120	90	155	155	115	113	150	101	80	450	68
28	124	134	90	100	134	104	202	120	87	124	450	65
29	120	144	98	70	134	95	450	100	86	418	254	61
30	120	144	134	75	-----	155	268	140	120	228	166	68
31	113	-----	155	80	-----	310	-----	95	-----	115	134	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	691	61	188	3.42	3.94
November	531	104	175	3.18	3.55
December	450	90	170	3.09	3.56
January	296	70	115	2.09	2.41
February	618	70	180	3.27	3.55
March	310	92	138	2.51	2.85
April	450	64	143	2.60	2.90
May	241	78	116	2.11	2.45
June	268	62	134	2.44	2.72
July	686	80	180	3.27	3.77
August	450	49	141	2.56	2.95
September	268	61	111	2.02	2.25
The year	691	49	149	2.71	36.90

ELIZABETH RIVER BASIN

ELIZABETH RIVER AT ELIZABETH, N. J.

LOCATION.—Water-stage recorder just above Westfield Avenue Bridge in Elizabeth, Union County, and 2½ miles above mouth.

DRAINAGE AREA.—20 square miles.

RECORDS AVAILABLE.—October, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,770 second-feet July 6 (gage height, 8.82 feet).

1921-1928: Maximum discharge, 2,640 second-feet September 1, 1927 (gage height, 9.71 feet).

REMARKS.—Records fair. Diversions above station by Elizabethtown Water Co. Discharge estimated September 11-13.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	17	17	23	13	27	18	31	8.9	11	20	15
2	30	18	74	11	15	18	15	23	9.1	7.9	11	13
3	20	110	33	9.0	9.3	16	14	19	9.8	5.7	9.5	112
4	112	94	22	7.9	10	16	13	17	17	13	8.7	21
5	7.7	21	41	7.4	27	14	14	15	28	200	7.1	15
6	7.8	29	39	7.0	11	12	13	14	134	581	19	43
7	11	28	56	6.5	21	12	14	15	18	74	8.7	22
8	14	14	202	9.0	166	12	18	18	13	40	7.9	15
9	99	20	44	9.0	51	13	10	20	46	29	7.9	15
10	29	28	28	7.4	27	22	10	14	30	167	26	15
11	26	20	33	7.9	21	20	12	13	11	51	31	15
12	25	13	35	7.9	21	62	34	14	9.8	4	9.5	15
13	181	13	45	9.6	16	27	13	12	13	201	7.9	60
14	32	34	66	10	67	27	22	10	23	78	5.7	17
15	16	23	28	13	135	20	16	9.1	18	38	5.7	12
16	18	10	71	12	36	18	13	9.9	8.2	27	5.7	12
17	76	12	45	10	29	17	9.5	9.2	9.3	23	47	14
18	413	92	28	8.4	42	53	7.1	52	9.1	20	12	10
19	317	26	24	109	31	28	6.4	15	89	18	9.5	79
20	103	22	18	58	27	20	6.4	15	32	20	7.9	78
21	68	20	16	12	20	17	12	12	23	14	6.4	19
22	30	20	15	14	17	20	91	10	45	15	98	13
23	36	16	16	12	365	17	105	9.9	22	110	27	13
24	26	23	12	15	83	15	159	9.2	72	14	16	11
25	17	18	13	173	43	18	38	8.6	25	11	74	10
26	11	18	12	22	32	16	23	15	23	11	191	20
27	34	20	12	18	25	15	36	16	10	102	218	10
28	20	32	9.4	17	22	16	259	12	7.1	119	40	9.5
29	24	24	21	16	20	14	70	8.9	35	18	42	7.9
30	19	16	16	24	-----	98	41	12	27	14	23	26
31	12	-----	19	18	-----	25	-----	9.9	-----	12	20	-----

Month	Observed			Corrected for diversion		
	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October	413	7.7	60.1	67.4	3.37	3.88
November	110	10	28.4	36.1	1.80	2.01
December	202	9.4	35.8	43.9	2.20	2.54
January	173	6.5	22.1	30.9	1.54	1.78
February	365	9.3	48.4	57.5	2.88	3.11
March	98	12	23.4	32.5	1.62	1.87
April	259	6.4	37.1	46.6	2.33	2.60
May	52	8.6	15.1	24.6	1.23	1.42
June	134	7.1	27.5	37.4	1.87	2.09
July	581	5.7	67.5	78.6	3.93	4.53
August	218	5.7	33.0	45.4	2.27	2.62
September	112	7.9	24.6	36.2	1.81	2.02
The year	581	5.7	35.2	44.7	2.24	30.47

RAHWAY RIVER BASIN

RAHWAY RIVER AT RAHWAY, N. J.

LOCATION.—Staff gage at Church Street Bridge in Rahway, Union County, half a mile above mouth of Robinsons Branch of Rahway River.

DRAINAGE AREA.—41 square miles.

RECORDS AVAILABLE.—July, 1908, to April, 1915; October, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, about 1,310 second-feet July 6 (gage height, 5.05 feet); minimum, 12 second-feet September 11 and 12 (gage height, 0.63 foot).

1908-1915, 1921-1928: Maximum discharge, about 1,740 second-feet August 2, 1927 (gage height, 6.00 feet); minimum stage, zero December 1, 1912 (discharge not determined).

REMARKS.—Records good. Diversions aggregating about 17 second-feet made above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	15	31	32	89	31	68	58	83	29	30	32	33
2.....	15	32	51	29	28	54	47	64	22	35	30	30
3.....	15	67	133	29	24	47	39	51	19	23	32	122
4.....	142	218	62	23	24	39	37	46	19	20	34	73
5.....	60	107	99	23	71	38	34	42	65	172	30	38
6.....	23	65	104	24	44	31	32	38	255	1,260	42	46
7.....	22	47	97	26	40	29	32	40	96	755	32	70
8.....	22	37	401	31	325	30	34	33	38	162	29	40
9.....	80	35	325	31	310	33	28	40	30	58	38	34
10.....	77	34	89	32	99	35	30	42	83	67	29	26
11.....	31	33	43	31	65	35	25	38	30	76	43	18
12.....	23	37	85	31	53	73	47	40	23	58	29	17
13.....	255	28	82	32	43	117	34	31	28	162	22	20
14.....	206	26	172	31	39	102	31	33	22	355	20	104
15.....	54	28	93	32	325	74	37	29	58	162	21	30
16.....	32	26	79	30	172	57	29	28	23	67	19	25
17.....	47	30	107	39	83	50	26	29	19	47	31	24
18.....	717	162	70	33	96	80	25	67	18	39	53	21
19.....	942	55	53	34	68	88	25	83	58	33	31	76
20.....	534	37	57	183	60	68	21	54	117	31	20	162
21.....	206	32	44	79	51	53	22	40	47	32	18	68
22.....	94	31	42	28	54	46	89	31	62	32	64	34
23.....	73	30	40	31	605	48	162	31	67	133	117	28
24.....	58	32	37	29	680	40	401	29	121	55	44	24
25.....	48	32	30	218	172	43	194	25	61	32	43	22
26.....	46	29	30	101	76	40	73	30	35	32	183	30
27.....	43	29	29	53	62	40	61	31	28	97	605	22
28.....	39	40	30	39	58	35	370	30	23	162	433	21
29.....	39	46	34	38	53	31	310	25	42	64	91	22
30.....	35	35	50	37	-----	152	110	24	65	37	57	32
31.....	32	-----	53	30	-----	133	-----	23	-----	28	47	-----

Month	Observed			Corrected for diversion		
	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October.....	942	15	130	147	3.59	4.14
November.....	218	26	49.0	65.5	1.60	1.78
December.....	401	29	85.6	103.	2.51	2.89
January.....	218	23	48.3	65.6	1.60	1.84
February.....	680	24	131	149	3.63	3.92
March.....	152	29	58.4	75.3	1.84	2.12
April.....	401	21	82.1	98.1	2.39	2.67
May.....	83	23	39.7	56.3	1.37	1.58
June.....	255	18	53.4	69.8	1.70	1.90
July.....	1,260	20	139	156	3.80	4.38
August.....	605	18	74.8	91.6	2.23	2.57
September.....	162	17	43.7	62.7	1.53	1.71
The year.....	1,260	15	77.9	94.8	2.31	31.50

RARITAN RIVER BASIN

SOUTH BRANCH OF RARITAN RIVER NEAR HIGH BRIDGE, N. J.

LOCATION.—Water-stage recorder 1 mile above High Bridge, Hunterdon County, and 4 miles above mouth of Spruce Run.

DRAINAGE AREA.—65 square miles.

RECORDS AVAILABLE.—February, 1919, to September, 1928.

EXTREMES.—Maximum discharge during year, 2,570 second-feet November 18 (gage height, 10.85 feet); minimum, 48 second-feet January 2 (gage height, 5.35 feet).

1919–1928: Maximum discharge, about 3,600 second-feet February 2, 1922 (gage height, 10.97 feet); minimum, 9 second-feet October 3, 1921 (gage height, 4.80 feet).

REMARKS.—Records good. Discharge estimated because of ice January 1–7, 21–23, 27–31, and February 1–5, and because of missing record November 27 to December 2. Recorder operated by Taylor-Wharton Iron & Steel Co.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	86	158	220	150	75	180	170	252	98	140	180	226
2	79	150	600	60	80	160	150	202	96	116	180	202
3	93	894	335	60	90	150	140	191	90	103	160	239
4	313	856	211	70	110	137	137	180	94	102	150	226
5	167	425	221	80	160	138	135	160	160	227	232	191
6	128	338	222	100	138	128	132	160	321	785	335	214
7	110	289	216	110	130	125	126	150	160	280	214	239
8	110	262	896	138	657	123	140	137	126	202	180	191
9	128	249	409	150	325	125	137	140	123	170	160	170
10	174	235	290	148	202	123	132	140	137	160	150	160
11	115	222	296	136	170	123	126	133	111	183	156	150
12	110	212	356	139	150	163	200	137	100	314	140	140
13	550	194	333	135	135	252	187	123	97	239	126	168
14	240	181	423	132	284	280	177	118	124	673	116	214
15	180	178	283	127	847	191	214	114	160	368	113	150
16	161	174	299	119	266	160	150	113	100	239	109	140
17	175	341	323	119	214	150	140	114	91	202	339	140
18	772	1,240	233	120	202	170	132	148	88	180	461	126
19	967	414	201	132	150	160	118	180	104	170	191	140
20	545	325	198	238	170	150	106	180	135	170	150	214
21	432	290	198	90	150	150	108	150	109	160	138	160
22	326	269	195	95	140	140	215	180	160	160	574	132
23	292	249	189	110	674	138	310	133	140	539	472	121
24	267	259	176	120	523	135	406	121	160	226	266	116
25	239	250	150	395	266	150	239	111	132	170	543	111
26	228	216	164	157	202	150	191	114	123	150	475	114
27	218	200	159	120	191	150	191	150	125	170	510	108
28	210	460	154	100	180	128	510	160	111	770	405	100
29	193	280	200	90	170	123	405	123	171	280	325	104
30	176	240	227	85	---	326	295	109	223	214	295	109
31	172	---	225	75	---	241	---	113	---	191	266	---

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	967	79	257	3.95	4.55
November	1,240	150	335	5.15	5.75
December	896	150	277	4.26	4.91
January	395	60	126	1.94	2.24
February	847	75	244	3.75	4.04
March	326	123	162	2.49	2.87
April	510	106	194	2.98	3.32
May	252	109	146	2.25	2.59
June	321	88	132	2.03	2.26
July	785	102	260	4.00	4.61
August	574	109	262	4.03	4.65
September	239	100	160	2.46	2.74
The year	1,240	60	213	3.28	44.53

SOUTH BRANCH OF RARITAN RIVER AT STANTON, N. J.

LOCATION.—Water-stage recorder at highway bridge near railroad station in Stanton, Hunterdon County, and half a mile above mouth of Prescott Brook.

DRAINAGE AREA.—147 square miles.

RECORDS AVAILABLE.—July, 1903, to December, 1906; July, 1919, to September, 1928.

EXTREMES.—Maximum discharge during year, about 4,300 second-feet February 15 (gage height, 8.57 feet); minimum, 68 second-feet January 2 (gage height 2.23 feet).

1903-1906, 1919-1928: Maximum stage, 10.5 feet October 9, 1903 (discharge not determined); minimum, about 21 second-feet October 1, 1925 (gage height, 1.76 feet).

REMARKS.—Records good. Discharge estimated December 26, 27, January 1-9, 22, 23, 29-31, and February 1-4, because of ice, and March 6, because of missing record.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	98	282	346	380	200	367	307	483	169	234	268	364
2.	95	271	564	200	200	329	271	423	150	190	268	326
3.	103	1,960	678	200	220	306	254	384	150	169	231	384
4.	427	1,970	481	200	220	263	247	345	167	169	211	423
5.	192	887	585	220	439	279	237	326	268	345	289	307
6.	133	708	525	240	339	270	227	326	595	1,370	483	364
7.	119	588	526	240	267	219	211	289	326	483	345	423
8.	109	525	2,380	240	1,990	218	254	261	237	364	264	307
9.	160	404	928	260	775	201	231	271	326	307	224	264
10.	197	459	665	273	462	218	205	268	364	271	199	240
11.	142	428	664	250	370	218	190	247	254	289	215	224
12.	117	399	753	252	317	347	307	254	218	526	251	211
13.	1,120	364	730	250	291	443	307	221	190	483	178	268
14.	404	345	929	253	595	548	264	224	211	1,570	155	345
15.	265	327	607	238	2,070	384	326	205	404	795	144	221
16.	216	322	691	222	559	307	237	190	202	503	140	202
17.	219	723	722	217	450	289	221	193	172	423	670	205
18.	2,050	2,440	507	221	448	364	215	257	167	364	845	187
19.	2,480	798	511	258	362	326	202	345	224	326	345	218
20.	1,200	618	526	510	362	307	190	307	261	307	247	364
21.	900	541	413	262	326	289	175	268	208	289	211	247
22.	659	519	406	240	301	271	404	326	307	271	845	193
23.	556	472	380	240	1,770	271	695	240	289	645	845	172
24.	497	469	345	256	1,180	244	1,000	208	364	345	463	167
25.	437	475	327	769	598	254	526	193	271	264	795	158
26.	401	396	320	334	448	264	423	181	254	224	845	158
27.	374	386	300	289	433	257	404	268	237	240	745	158
28.	354	420	301	259	379	231	1,310	326	208	1,240	670	144
29.	330	412	371	240	359	199	795	224	268	463	503	132
30.	309	368	438	230	-----	548	548	193	423	326	463	164
31.	297	-----	414	220	-----	443	-----	193	-----	268	443	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.	2,480	95	483	3.29	3.79
November.	2,440	271	646	4.39	4.90
December.	2,380	300	590	4.01	4.62
January.	769	200	273	1.86	2.14
February.	2,070	200	578	3.93	4.24
March.	548	199	306	2.08	2.40
April.	1,310	175	373	2.54	2.82
May.	483	181	272	1.85	2.12
June.	595	150	263	1.79	2.00
July.	1,570	169	454	3.09	3.50
August.	845	140	413	2.81	3.24
September.	423	132	249	1.69	1.82
The year.	2,480	95	408	2.78	37.74

RARITAN RIVER AT MANVILLE, N. J.

LOCATION.—Water-stage recorder at highway bridge between Manville and Finderne, Somerset County, $1\frac{1}{4}$ miles above mouth of Millstone River.

DRAINAGE AREA.—490 square miles.

RECORDS AVAILABLE.—June, 1903, to March, 1907; August, 1908, to April, 1915; August, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, about 19,000 second-feet October 19 (gage height, 14.1 feet); minimum, 199 second-feet October 3 (gage height, 3.82 feet).

1903-1907, 1921-1928: Maximum discharge, about 25,000 second-feet October 10, 1903 (gage height, 15.9 feet); minimum, about 36 second-feet September 19, 1923 (gage height, 3.24 feet).

REMARKS.—Records fair. About 2 second-feet diverted above station. Discharge affected by ice December 22-24, 26-28, January 29-31, February 1 and 2.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	217	551	910	1,660	500	1,180	1,130	1,660	432	789	590	960
2	210	524	1,760	551	500	1,020	1,020	1,360	402	580	640	860
3	210	4,190	2,660	789	560	960	1,180	359	533	533	960	960
4	1,020	7,460	1,480	671	620	800	800	1,080	359	432	472	1,020
5	551	2,920	3,020	660	1,300	800	746	960	551	568	472	767
6	304	2,250	3,070	681	1,020	681	692	910	3,080	5,370	910	910
7	259	1,730	2,700	703	1,540	671	620	860	1,300	1,950	860	1,420
8	259	1,420	10,200	767	8,680	640	660	756	789	1,180	560	960
9	340	1,300	4,170	660	2,760	640	620	736	960	960	472	800
10	580	1,180	2,360	736	1,540	650	524	756	1,920	800	515	703
11	359	1,080	1,990	610	1,180	650	489	671	778	860	524	630
12	284	1,020	2,250	580	1,100	1,180	692	692	580	1,500	580	590
13	2,840	910	2,260	570	960	1,860	860	590	489	5,650	394	560
14	1,420	800	3,180	560	958	1,920	630	515	481	4,660	327	910
15	767	778	2,150	560	6,410	1,480	910	489	1,420	4,630	304	600
16	610	767	2,150	533	2,390	1,080	620	464	590	1,860	294	542
17	630	1,080	2,650	489	1,540	1,080	524	456	440	1,360	1,300	506
18	7,200	9,360	1,600	498	1,600	1,300	533	600	402	1,080	2,760	498
19	14,800	2,860	1,390	551	1,300	1,480	515	910	498	910	910	533
20	5,540	1,990	1,230	1,990	1,180	1,080	464	800	1,080	910	590	1,420
21	3,210	1,660	1,160	800	1,020	960	440	746	560	778	489	910
22	2,120	1,480	950	860	960	860	1,020	1,300	824	703	2,590	620
23	1,600	1,300	800	860	6,990	860	2,680	725	960	1,300	3,080	524
24	1,360	1,180	650	860	5,170	767	6,400	570	1,460	1,080	1,420	481
25	1,130	1,180	515	2,760	2,370	756	2,590	489	960	692	1,480	432
26	960	960	500	1,080	1,540	778	1,600	472	703	580	2,370	456
27	860	910	550	960	1,480	746	1,300	600	600	560	3,360	416
28	789	1,130	650	714	1,240	660	5,670	746	524	2,660	2,120	402
29	725	1,130	756	550	1,130	600	3,280	580	551	1,560	1,540	373
30	660	1,020	1,180	550	-----	1,920	2,120	489	1,410	800	1,300	448
31	580	-----	1,020	550	-----	1,990	-----	472	-----	640	1,180	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	14,800	210	1,700	3.47	4.00
November	9,360	524	1,870	3.82	4.26
December	10,200	500	2,000	4.08	4.70
January	2,760	489	816	1.67	1.92
February	8,680	500	2,050	4.18	4.51
March	1,990	600	1,030	2.10	2.42
April	6,400	440	1,370	2.80	3.12
May	1,660	456	732	1.56	1.80
June	3,080	359	849	1.73	1.93
July	5,650	432	1,550	3.16	3.64
August	3,360	294	1,130	2.31	2.66
September	1,420	373	707	1.44	1.61
The year	14,800	210	1,320	2.69	36.57

NORTH BRANCH OF RARITAN RIVER NEAR FAR HILLS, N. J.

LOCATION.—Water-stage recorder at dam of Somerset Lake and Game Club, 2 miles north of Far Hills, Somerset County, and 2 miles above Peapack Brook.

DRAINAGE AREA.—26 square miles.

RECORDS AVAILABLE.—February, 1922, to September, 1928.

EXTREMES.—Maximum discharge during year, about 1,850 second-feet November 18 (gage height, 4.64 feet); minimum, 21 second-feet October 2 and 3 (gage height, 2.08 feet).

1922-1928: Maximum stage, estimated 5.1 feet March 7, 1922 (discharge, not determined); minimum discharge, 4 second-feet August 27, 1923 (gage height, 1.79 feet).

REMARKS.—Records good. Daily-discharge table corrected for about 2 second-feet diversion above station. Discharge estimated October 14-18 and February 19 and 20.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	68	68	114	52	75	71	136	30	45	62	86
2	21	65	118	45	52	68	65	122	28	38	62	81
3	21	410	110	45	52	62	62	110	27	32	55	106
4	117	359	78	41	49	59	62	93	28	28	49	85
5	34	187	106	45	75	55	62	78	45	304	45	71
6	27	154	97	49	45	49	65	71	105	623	129	97
7	24	131	93	52	67	49	68	65	45	187	68	86
8	24	126	384	52	355	49	75	62	38	140	55	68
9	29	126	149	55	106	49	59	65	49	114	49	58
10	40	122	118	52	75	52	55	62	49	102	45	55
11	27	114	122	49	68	47	55	62	43	142	55	52
12	24	106	140	47	59	85	97	55	41	141	45	49
13	144	97	131	49	52	128	75	49	41	140	40	85
14	55	93	177	47	78	110	75	47	102	265	38	80
15	30	97	126	45	323	75	78	47	107	158	38	49
16	30	89	154	43	93	62	59	47	41	122	36	49
17	100	235	140	45	78	62	55	49	34	110	218	47
18	300	1,130	102	45	81	75	52	71	30	89	117	43
19	293	177	89	62	75	68	45	75	40	78	62	68
20	149	122	85	106	65	62	43	65	43	75	49	118
21	114	106	85	38	55	59	52	55	36	68	47	59
22	89	97	85	38	55	59	122	47	59	90	215	49
23	81	122	81	43	431	59	143	41	47	228	119	45
24	75	198	68	41	167	55	250	36	96	81	89	43
25	71	144	62	235	114	65	122	34	49	75	122	43
26	68	89	62	59	81	71	102	36	41	71	207	43
27	68	93	59	49	81	68	111	45	36	68	261	41
28	68	102	56	45	78	55	334	41	32	223	154	40
29	71	97	81	45	71	62	192	36	61	75	126	40
30	65	75	89	41	-----	172	149	32	68	62	114	45
31	68	-----	93	52	-----	97	-----	34	-----	55	102	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	300	21	75.8	2.92	3.37
November	1,130	65	170	6.54	7.30
December	384	59	110	4.23	4.83
January	235	38	57.2	2.20	2.54
February	431	45	105	4.04	4.33
March	172	47	69.8	2.68	3.09
April	334	43	95.2	3.66	4.09
May	136	32	60.3	2.32	2.63
June	107	27	49.7	1.91	2.13
July	623	28	130	5.00	5.73
August	261	36	92.7	3.57	4.12
September	118	40	62.8	2.42	2.77
The year	1,130	21	90.0	3.46	47.0*

NORTH BRANCH OF RARITAN RIVER AT MILLTOWN, N. J.

LOCATION.—Staff gage at Milltown, Somerset County, 1½ miles above junction of North and South Branches of Raritan River.

DRAINAGE AREA.—190 square miles.

RECORDS AVAILABLE.—June, 1923, to September, 1928.

EXTREMES.—Maximum stage during year, 10.00 feet November 3 (discharge not determined); minimum discharge, 72 second-feet January 26 (gage height, 2.25 feet).

1923-1928: Maximum stage, that of November 3, 1927; minimum discharge, about 22 second-feet December 2, 1924 (gage height, 1.95 feet).

REMARKS.—Records good. Slight diurnal fluctuations due to operation of small water-power plants upstream. Discharge December 26-28, January 2-10, 22-24, 28-31, and February 1-5 affected by ice.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	90	241	386	670	110	405	367	580	142	262	273	411
2	82	230	895	380	100	331	325	500	142	209	279	307
3	84	3,690	760	280	100	301	380	430	123	190	220	465
4	760	1,960	500	260	100	235	296	380	126	167	220	349
5	153	895	1,460	280	200	262	268	343	241	392	199	307
6	138	760	760	280	119	209	262	331	1,300	3,340	417	405
7	119	670	625	280	230	209	262	301	625	625	307	500
8	130	540	4,250	280	6,580	194	268	268	301	465	241	290
9	190	500	1,090	280	1,350	209	220	273	262	411	220	307
10	220	430	805	260	500	241	204	273	500	355	540	273
11	138	380	715	262	417	199	209	251	230	367	273	262
12	123	380	850	251	349	465	301	273	194	670	268	251
13	1,300	343	760	246	319	500	331	220	167	990	190	220
14	343	319	1,190	251	355	625	296	204	153	1,700	167	367
15	241	307	715	241	1,350	430	301	190	251	1,040	153	241
16	209	307	715	209	670	367	235	190	199	670	142	235
17	204	1,350	850	220	500	361	209	171	167	540	1,190	220
18	3,690	3,170	540	230	580	580	215	241	138	465	1,040	209
19	6,800	940	540	209	331	430	194	296	194	392	355	230
20	1,140	805	540	715	465	367	142	262	331	361	296	760
21	895	715	430	307	715	331	167	241	241	313	268	290
22	670	625	424	260	417	285	670	367	580	262	1,190	241
23	540	540	392	240	5,270	307	715	257	417	625	1,040	220
24	465	540	355	340	1,190	285	1,960	209	895	307	540	209
25	405	540	257	1,460	670	296	805	171	355	307	670	199
26	355	430	260	700	580	290	625	134	251	307	715	215
27	331	430	280	355	540	285	465	171	126	290	1,350	181
28	307	540	300	180	405	235	2,240	171	171	940	805	181
29	285	500	331	140	392	215	940	142	225	367	670	167
30	262	411	405	130	-----	1,090	670	171	500	296	540	215
31	251	-----	411	120	-----	580	-----	171	-----	273	500	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	6,800	82	675	3.55	4.09
November	3,690	230	783	4.12	4.60
December	4,250	260	735	3.87	4.46
January	1,460	120	333	1.75	2.02
February	6,580	100	859	4.52	4.88
March	1,090	194	359	1.89	2.18
April	2,240	142	485	2.55	2.84
May	580	134	264	1.39	1.60
June	1,300	123	318	1.67	1.86
July	3,340	167	577	3.04	3.50
August	1,350	142	493	2.59	2.99
September	760	167	291	1.53	1.71
The year	6,800	82	513	2.70	36.73

BLACK RIVER NEAR POTTERSVILLE, N. J.

LOCATION.—Water-stage recorder 1 mile above highway bridge at Pottersville, Somerset County, and 8 miles above mouth of Rockaway Creek.

DRAINAGE AREA.—33 square miles.

RECORDS AVAILABLE.—June, 1922, to September, 1928; at Pottersville, 1 mile downstream, November, 1921, to June, 1922.

EXTREMES.—Maximum discharge during year, about 1,600 second-feet November 17 (gage height, 4.75 feet); minimum, 21 second-feet September 14 (gage height, 1.21 feet).

1921-1928: Maximum discharge, that of November 17, 1927; minimum, 4 second-feet August 4, 1924 (gage height, 0.79 foot).

REMARKS.—Records good. Discharge estimated December 25-27, January 2-7, 30, 31, and February 1-3 because of ice and January 20, 21, March 26-31, May 8-12, and September 17-20 because of missing gage heights.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	70	116	136	65	104	98	136	42	57	106	146
2	25	69	145	90	60	92	99	123	38	52	96	136
3	24	191	146	75	60	84	94	110	38	49	86	136
4	62	270	123	70	60	78	86	96	40	43	78	123
5	45	224	125	65	79	72	78	86	53	60	75	114
6	42	210	136	85	75	66	72	79	101	116	104	125
7	47	183	134	65	94	63	69	76	81	98	87	125
8	52	158	295	67	254	58	67	75	79	125	83	114
9	58	136	210	73	170	58	65	70	81	125	86	104
10	54	123	196	78	136	51	62	70	83	119	89	99
11	44	114	183	79	123	60	60	65	63	151	91	94
12	39	106	196	81	104	89	86	65	53	146	81	89
13	44	98	183	79	91	117	79	63	47	125	70	117
14	91	94	210	76	180	117	87	62	60	185	65	97
15	81	91	183	75	224	114	92	59	66	146	58	84
16	81	89	170	72	146	112	83	57	45	125	55	81
17	92	276	170	72	146	106	76	55	40	119	170	80
18	262	338	146	67	136	101	69	66	36	108	158	75
19	270	270	125	66	101	94	62	75	39	94	103	90
20	210	270	114	73	92	86	55	75	43	81	104	110
21	196	224	114	146	79	81	54	78	45	76	104	86
22	183	183	110	116	79	76	95	89	63	84	236	83
23	158	158	106	89	283	75	129	78	65	125	183	76
24	136	158	98	69	224	72	170	66	66	94	146	75
25	116	146	85	158	170	70	146	57	58	104	183	73
26	103	136	80	92	146	70	136	54	53	123	196	69
27	92	125	75	80	125	70	125	58	47	111	239	65
28	86	136	73	75	112	65	183	60	40	170	210	60
29	81	125	91	70	104	65	158	60	63	112	196	57
30	78	121	106	65	-----	75	146	55	81	103	183	55
31	73	-----	119	65	-----	110	-----	46	-----	104	170	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	270	24	95.2	2.88	3.32
November	338	69	163	4.94	5.51
December	295	73	141	4.27	4.92
January	158	65	82.2	2.49	2.87
February	283	60	128	3.88	4.18
March	117	51	82.3	2.49	2.87
April	183	54	96.0	2.91	3.25
May	136	46	73.0	2.21	2.55
June	101	36	57.0	1.73	1.93
July	185	43	107	3.24	3.74
August	239	55	126	3.82	4.49
September	146	55	94.6	2.87	3.20
The year	338	24	104	3.15	42.74

MILLSTONE RIVER AT BLACKWELLS MILLS, N. J.

LOCATION.—Staff gage at highway bridge in Blackwells Mills, Somerset County, a quarter of a mile below mouth of Middlebrush Brook.

DRAINAGE AREA.—258 square miles.

RECORDS AVAILABLE.—August, 1921, to September, 1928. June, 1903, to December, 1904; June, 1912, to April, 1915, at Millstone $1\frac{1}{4}$ miles downstream.

EXTREMES.—Maximum discharge during year, about 7,000 second-feet October 18 (gage height, 10.4 feet); minimum, 95 second-feet October 1, 2, and 3 (gage height, 1.10 feet).

1921-1928: Maximum discharge, that of October 18, 1927; minimum about 5 second-feet September 16, 1923 (gage height, zero).

REMARKS.—Records fair. Delaware & Raritan Canal parallels Raritan River for some distance; some seepage and waste water from canal enters river above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	97	251	434	775	223	479	550	830	176	367	388	233
2.....	95	251	885	725	203	479	434	600	149	326	346	213
3.....	97	251	1,340	411	213	434	388	525	149	251	306	233
4.....	269	1,340	830	210	223	346	346	456	149	207	269	233
5.....	230	830	2,000	179	479	306	346	367	207	1,010	216	216
6.....	154	600	2,890	185	479	306	306	326	1,610	3,410	185	269
7.....	126	525	2,100	216	411	288	269	288	1,260	2,260	200	456
8.....	120	434	3,600	223	2,500	269	269	251	550	1,120	233	367
9.....	213	388	2,200	223	2,320	269	269	288	434	725	226	346
10.....	479	388	1,060	269	1,380	346	233	346	525	525	194	288
11.....	288	367	940	269	885	367	233	306	346	388	269	233
12.....	233	326	775	269	600	675	346	269	306	306	269	210
13.....	1,090	306	725	269	434	940	338	251	288	1,850	269	188
14.....	775	288	1,120	251	434	775	338	230	251	1,750	269	167
15.....	525	251	775	251	1,950	625	367	220	775	1,430	233	157
16.....	411	251	940	269	1,150	525	306	213	411	940	200	149
17.....	456	251	1,090	251	940	479	269	194	346	525	216	152
18.....	2,570	1,180	725	251	885	575	269	213	306	411	388	147
19.....	6,330	725	550	269	830	775	233	306	288	346	306	176
20.....	4,100	575	725	1,010	575	575	213	367	326	346	288	525
21.....	2,320	525	434	456	479	434	197	346	306	456	251	411
22.....	1,060	411	367	456	479	434	388	288	326	388	479	367
23.....	830	367	346	346	2,570	434	940	251	346	367	625	326
24.....	650	326	550	226	2,730	388	2,730	216	502	675	326	269
25.....	502	326	550	1,010	1,180	346	2,000	185	456	434	411	216
26.....	434	326	200	575	775	346	1,010	200	326	367	600	213
27.....	367	306	191	525	575	306	725	200	269	306	346	197
28.....	326	456	200	479	479	306	2,320	233	251	2,050	326	182
29.....	288	600	346	600	434	269	2,200	223	269	1,120	288	176
30.....	288	502	367	326	-----	675	1,180	210	388	830	251	251
31.....	269	-----	411	233	-----	775	-----	191	-----	525	251	-----

Month	Maximum	Minimum	Mean	Month	Maximum	Minimum	Mean
October.....	6,330	95	838	May.....	830	185	303
November.....	1,340	251	464	June.....	1,610	149	410
December.....	3,600	191	957	July.....	3,410	207	889
January.....	1,010	179	387	August.....	625	185	304
February.....	2,730	203	925	September.....	525	147	252
March.....	940	269	469	The year.....	6,330	95	568
April.....	2,730	197	670				

GREEN BROOK AT BOUNDBROOK, N. J.

LOCATION.—Staff gage near State highway bridge at Boundbrook, Middlesex County, half a mile above mouth.

DRAINAGE AREA.—49 square miles.

RECORDS AVAILABLE.—June, 1923, to September, 1928.

REMARKS.—Monthly records fair; daily discharge not sufficiently accurate for publication. Flow regulated by water-power plants upstream. Diversions by pumping from well fields above station. Plainfield sewage empties into brook 3 miles above station.

Monthly discharge, in second-feet, 1927-28

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,100	45	156	3.18	3.67
November.....	294	52	88.3	1.80	2.01
December.....	480	42	123	2.51	2.89
January.....	161	45	63.8	1.30	1.50
February.....	800	56	147	3.00	3.24
March.....	172	56	96.0	1.96	2.26
April.....	480	35	118	2.41	2.69
May.....	88	42	53.4	1.09	1.26
June.....	150	59	99.6	2.03	2.26
July.....	1,500	59	185	3.78	4.36
August.....	206	56	78.1	1.59	1.83
September.....	130	42	81.5	1.66	1.85
The year.....	1,500	35	107	2.18	29.82

NOTE.—Discharge per square mile and run-off in inches do not represent natural flow from basin.

LAWRENCE BROOK AT FARRINGTON DAM, N. J.

LOCATION.—Water-stage recorder at Farrington Dam, half a mile southwest of Milltown, Middlesex County, and 4½ miles above mouth.

DRAINAGE AREA.—34 square miles.

RECORDS AVAILABLE.—May, 1927, to September, 1928. At Patricks Corner, 2¾ miles upstream June, 1922, to December, 1926.

EXTREMES.—Maximum discharge during year, about 1,900 second-feet July 6 (gage height, 1.84 feet); discharge, 8 second-feet April 19 (gage height, 0.45 foot).

REMARKS.—Records fair. Discharge estimated November 27–30, December 1, 2, 20–30, April 12–14, and June 23–25. Recorder operated by city engineer of New Brunswick.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	12	36	48	74	-----	-----	62	56	16	51	41	29
2.....	12	26	200	51	22	-----	46	46	12	25	41	25
3.....	12	80	170	-----	22	-----	36	36	11	19	36	36
4.....	74	142	87	-----	-----	-----	36	36	14	22	32	46
5.....	51	94	344	-----	-----	-----	32	32	36	122	32	36
6.....	32	68	279	-----	-----	-----	29	29	164	1,130	51	47
7.....	19	56	180	-----	-----	-----	25	29	80	262	51	87
8.....	22	51	350	-----	-----	-----	25	25	41	109	41	62
9.....	76	51	156	-----	-----	-----	25	29	35	74	32	41
10.....	109	51	87	-----	-----	-----	22	32	87	56	62	32
11.....	51	46	80	46	-----	-----	25	29	41	46	180	29
12.....	32	46	94	46	-----	-----	80	25	25	48	125	25
13.....	336	41	94	46	-----	-----	46	22	22	297	80	22
14.....	134	36	142	46	-----	-----	22	22	33	347	56	19
15.....	74	36	94	46	-----	-----	19	22	160	180	41	16
16.....	51	36	104	41	-----	-----	22	19	56	102	36	16
17.....	109	41	142	41	-----	-----	25	19	29	68	46	19
18.....	1,160	152	80	41	-----	-----	22	25	22	56	87	19
19.....	720	87	62	57	-----	80	16	36	34	46	56	58
20.....	290	62	60	122	-----	62	14	32	74	51	41	125
21.....	151	51	60	51	-----	51	16	32	46	56	36	62
22.....	109	46	60	-----	-----	46	51	29	46	46	41	41
23.....	87	41	55	-----	-----	46	155	22	46	61	68	32
24.....	68	46	50	-----	180	41	365	19	46	170	51	25
25.....	56	46	42	142	87	41	109	16	90	80	46	25
26.....	51	41	40	-----	-----	41	68	19	29	56	36	29
27.....	46	40	42	-----	-----	32	56	25	25	46	46	29
28.....	41	75	42	-----	-----	25	310	25	19	275	41	25
29.....	41	100	65	-----	-----	32	160	22	29	117	36	25
30.....	41	60	70	-----	-----	122	76	19	62	74	36	51
31.....	36	-----	68	-----	-----	94	-----	16	-----	51	32	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,160	12	132	3.88	4.47
November.....	152	36	59.8	1.76	1.96
December.....	350	40	111	3.26	3.76
April.....	365	14	66.5	1.96	2.19
May.....	56	16	27.3	.803	.93
June.....	164	11	47.7	1.40	1.56
July.....	1,130	19	134	3.94	4.54
August.....	180	32	52.8	1.55	1.79
September.....	125	16	37.6	1.11	1.24

NAVESINK RIVER BASIN

SWIMMING RIVER NEAR RED BANK, N. J.

LOCATION.—Water-stage recorder at dam of Monmouth Consolidated Water Co., 3 miles above mouth of river at Red Bank, Monmouth County.

DRAINAGE AREA.—48 square miles.

RECORDS AVAILABLE.—July, 1922, to September, 1928.

EXTREMES.—Maximum discharge during year, over spillway only, 1,000 second-feet October 18 (gage height, 4.04 feet).

1922-1928: Maximum discharge over spillway, about 2,590 second-feet February 25, 1926 (gage height, 3.42 feet).

REMARKS.—Records good. Table of daily discharge corrected for diversion for municipal uses above station. Recorder operated and record of diversion furnished by Monmouth Consolidated Water Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....		95	101	* 139	114	130	105	143	64	90	82	* 79
2.....		91	128	* 123	110	121	94	130	62	82	82	68
3.....		123	290	* 111	94	114	90	118	55	78	80	81
4.....		263	* 148	* 104	78	109	87	110	58	72	72	85
5.....		173	* 200	* 99	133	110	83	106	137	85	90	67
6.....	* 75	130	* 295	* 95	106	98	83	102	296	544	80	107
7.....		111	* 190	* 95	86	102	76	102	178	260	88	* 154
8.....		103	* 318	94	371	106	86	99	105	121	88	100
9.....		106	* 236	94	242	113	76	110	89	99	79	81
10.....		101	* 143	90	144	134	70	130	165	* 99	70	* 75
11.....		98	130	90	117	121	79	106	105	* 116	220	* 70
12.....	42	98	149	87	106	139	134	102	89	* 107	156	* 66
13.....	328	94	149	86	94	134	107	88	82	* 347	108	* 66
14.....	170	90	173	89	102	117	87	84	93	* 407	83	62
15.....	92	90	139	87	373	106	* 92	85	239	242	76	58
16.....	75	90	169	79	177	97	* 83	84	114	155	71	55
17.....	122	98	* 215	83	133	97	* 78	79	82	124	* 74	56
18.....	801	364	* 144	78	* 153	136	* 73	87	76	109	* 132	52
19.....	741	188	* 120	86	154	144	* 68	94	90	105	93	112
20.....	382	122	112	130	119	106	* 68	* 108	173	175	75	295
21.....	217	110	111	72	107	93	72	* 94	* 108	151	70	150
22.....	165	102	110	94	94	98	125	* 84	* 113	115	71	89
23.....	141	98	110	106	297	102	247	* 79	122	201	92	78
24.....	128	101	104	110	224	89	378	* 75	117	171	86	70
25.....	* 121	102	87	152	114	89	183	* 69	194	111	71	67
26.....	112	93	94	134	* 106	88	130	* 78	94	99	89	86
27.....	108	93	91	106	122	82	122	* 88	84	92	100	76
28.....	104	127	91	106	127	78	473	* 89	75	150	82	64
29.....	103	148	106	84	122	78	270	* 80	96	120	68	64
30.....	99	113	130	102	-----	150	* 168	* 65	146	88	66	103
31.....	96	-----	125	114	-----	152	-----	71	-----	81	* 117	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	801	-----	160	3.33	3.84
November.....	364	90	124	2.58	2.88
December.....	318	87	152	3.17	3.66
January.....	152	72	101	2.10	2.42
February.....	373	78	149	3.10	3.34
March.....	152	78	111	2.31	2.66
April.....	473	68	130	2.71	5.02
May.....	143	65	94.8	1.97	2.27
June.....	296	55	117	2.44	2.72
July.....	544	72	155	3.23	3.72
August.....	220	66	90.7	1.89	2.18
September.....	295	52	87.9	1.83	2.04
The year.....	801	-----	123	2.56	34.75

* Estimated.

MULLICA RIVER BASIN

BATSTO RIVER AT BATSTO, N. J.

LOCATION.—Water-stage recorder 300 feet below highway bridge in Batsto, Burlington County, and 1 mile above confluence with Mullica River.

DRAINAGE AREA.—70 square miles.

RECORDS AVAILABLE.—October, 1927, to September, 1928.

REMARKS.—Records good. About 6 second-feet diverted just above gage included in table of daily discharge. Slight regulation due to storage in small pond upstream. Discharge estimated November 21–28 and March 4–9.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	74	151	112	123	118	159	123	301	118	141	82	129
2.....	72	161	107	123	112	147	118	245	118	147	78	124
3.....	70	99	123	118	112	141	129	217	112	135	72	141
4.....	71	115	159	112	107	140	123	178	107	135	65	124
5.....	76	126	197	107	123	130	123	165	112	129	76	124
6.....	79	142	252	92	135	130	107	153	129	112	76	159
7.....	72	142	281	97	159	130	102	141	135	102	70	195
8.....	70	136	266	107	197	130	102	135	135	97	65	301
9.....	86	136	252	107	252	130	97	141	135	97	72	273
10.....	102	122	266	102	296	129	97	141	153	97	75	231
11.....	125	116	224	118	281	135	107	147	204	102	82	204
12.....	153	118	210	147	266	159	107	141	245	97	144	144
13.....	164	114	224	107	238	141	107	141	231	92	129	141
14.....	170	111	224	107	197	141	107	172	165	97	129	135
15.....	198	135	165	107	210	147	112	135	178	124	118	147
16.....	186	105	171	102	252	135	112	129	147	159	97	129
17.....	186	86	153	102	252	135	107	124	129	165	102	124
18.....	220	118	153	97	266	153	102	129	124	135	112	112
19.....	268	135	147	97	252	165	97	141	112	112	141	241
20.....	304	159	147	97	238	184	92	153	107	97	147	243
21.....	304	150	141	112	210	178	97	172	102	92	118	280
22.....	268	140	135	107	184	165	123	217	107	97	97	285
23.....	232	140	129	97	197	153	178	273	112	97	92	236
24.....	232	130	129	107	197	141	296	301	129	92	92	204
25.....	220	120	123	107	224	141	356	245	159	87	92	133
26.....	186	110	112	107	224	123	326	204	135	87	112	136
27.....	164	110	107	112	210	123	281	191	124	82	147	124
28.....	142	110	107	107	178	118	326	178	107	95	153	112
29.....	127	112	102	107	159	118	361	159	102	97	165	101
30.....	148	112	112	112	-----	118	331	147	112	97	165	129
31.....	153	-----	123	118	-----	112	-----	141	-----	87	140	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	304	70	159	2.27	2.62
November.....	161	86	125	1.79	2.00
December.....	281	102	166	2.37	2.73
January.....	147	92	108	1.54	1.78
February.....	296	107	202	2.89	3.12
March.....	184	112	140	2.00	2.31
April.....	361	92	162	2.31	2.58
May.....	301	124	176	2.51	2.89
June.....	245	102	136	1.94	2.16
July.....	165	82	109	1.56	1.80
August.....	165	65	107	1.53	1.76
September.....	301	101	172	2.46	2.74
The year.....	361	65	147	2.10	28.49

ABSECON CREEK BASIN

ABSECON CREEK AT ABSECON, N. J.

LOCATION.—Weir and water-stage recorders at dam of Atlantic City Water Department, 1 mile west of Absecon, Atlantic County, and 3 miles above mouth.

DRAINAGE AREA.—16.6 square miles.

RECORDS AVAILABLE.—December, 1923, to September, 1928.

REMARKS.—Records fair. Discharge includes flow over dam and through pipe line and sluice gates and an estimated diversion to duck farm just above station. Recorders operated by Atlantic City water department..

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a 20	25	33	25	23	31	24	45	29	28	23	25
2	22	25	29	25	22	27	24	42	30	28	23	26
3	20	26	45	25	22	30	24	36	29	27	23	25
4	22	27	48	a 26	23	23	25	37	36	27	24	24
5	23	25	48	a 26	27	32	24	39	37	26	25	22
6	23	26	37	a 26	31	24	24	35	37	29	25	22
7	23	a 26	32	25	30	23	24	33	34	27	24	34
8	a 22	a 24	37	25	38	24	25	33	30	a 27	25	34
9	a 22	a 24	39	26	48	26	24	43	29	a 27	26	30
10	a 22	a 24	27	26	40	33	22	45	38	a 27	25	28
11	a 22	a 24	17	26	32	31	25	41	33	a 28	23	27
12	a 22	a 24	18	27	30	35	30	39	33	a 28	23	27
13	a 24	24	19	27	28	32	30	29	31	a 28	40	26
14	a 25	24	19	27	32	33	25	26	32	27	43	26
15	a 24	24	20	26	47	31	a 31	28	39	29	36	25
16	a 24	24	20	25	39	27	a 23	30	32	28	36	25
17	a 24	23	20	25	33	a 29	a 22	30	30	27	38	25
18	a 34	25	20	25	40	36	a 22	31	29	27	a 40	30
19	a 44	42	21	27	36	39	a 22	33	29	25	33	67
20	a 48	52	a 21	a 29	35	32	a 23	44	28	25	27	79
21	a 44	58	21	a 28	24	32	a 22	44	27	25	26	53
22	a 36	61	21	a 25	26	26	30	40	28	26	26	45
23	30	61	21	26	32	a 29	41	37	28	26	26	35
24	28	52	21	21	36	a 25	48	35	29	27	26	35
25	27	41	22	23	31	27	39	30	29	26	25	31
26	26	27	23	22	27	28	31	34	27	26	25	32
27	26	16	24	21	26	34	28	32	27	25	25	27
28	26	18	a 27	21	25	24	63	32	26	25	24	28
29	26	18	25	22	26	24	64	34	26	26	25	27
30	25	17	a 26	23		a 26	44	31	28	25	25	35
31	25		a 26	23		a 35		33		23	25	

Month	Observed			Corrected for storage		
	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October	48	20	26.7	28.8	1.73	1.99
November	61	16	30.2	22.3	1.34	1.50
December	48	17	26.7	32.7	1.97	2.27
January	29	21	25.0	27.3	1.64	1.89
February	48	22	31.3	32.0	1.93	2.08
March	39	23	29.3	29.0	1.75	2.02
April	68	22	30.3	31.1	1.87	2.09
May	45	26	35.5	35.1	2.11	2.43
June	39	26	30.5	30.3	1.83	2.04
July	29	23	26.6	25.4	1.53	1.76
August	43	23	27.7	28.4	1.71	1.97
September	79	22	32.5	33.5	2.02	2.25
The year	79	16	29.3	29.6	1.78	24.29

a Partly estimated.

GREAT EGG RIVER BASIN

GREAT EGG RIVER AT FOLSOM, N. J.

LOCATION.—Water-stage recorder at highway bridge 1 mile southwest of Folsom, Atlantic County, and 2½ miles above mouth of Pennypot Stream.

DRAINAGE AREA.—56 square miles.

RECORDS AVAILABLE.—September, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, 195 second-feet April 29 and 30 (gage height, 5.23 feet); minimum, 38 second-feet October 2, 3, and August 6, 7, and 10; minimum gage height, 2.77 feet August 6.

1925-1928: Maximum discharge, that of April 29 and 30, 1928; minimum, 26 second-feet August 4, 1926 (gage height, 2.59 feet).

REMARKS.—Records excellent.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	64	64	80	74	107	89	188	77	95	57	101
2	38	62	64	83	74	101	89	181	72	89	52	107
3	38	62	80	80	72	101	77	167	60	120	50	107
4	44	72	95	72	72	101	74	153	57	89	44	101
5	42	80	114	64	83	95	67	133	67	70	42	95
6	44	89	140	60	95	89	72	120	80	67	38	101
7	44	89	153	57	101	83	70	107	95	62	38	133
8	44	89	167	57	120	83	70	101	101	57	40	167
9	62	83	167	57	140	83	67	95	101	52	40	167
10	83	80	167	62	153	95	67	101	107	52	38	167
11	95	77	160	60	160	101	67	101	133	72	44	153
12	101	72	153	60	167	114	74	101	153	72	95	127
13	114	70	146	60	160	127	83	101	153	74	140	101
14	120	67	140	62	153	133	89	89	140	80	160	95
15	133	64	140	67	153	127	89	80	127	107	160	89
16	140	62	127	67	153	120	80	83	114	133	153	77
17	140	62	120	62	160	114	72	89	101	146	146	74
18	133	77	114	62	167	114	67	83	83	140	146	70
19	127	89	114	62	167	114	67	89	70	101	160	89
20	133	89	101	74	167	120	64	95	64	67	153	127
21	146	89	95	77	153	127	64	95	64	60	146	153
22	153	83	89	74	146	127	83	89	64	64	133	160
23	146	74	83	70	140	114	114	83	72	72	114	160
24	140	70	77	67	140	101	153	70	80	67	83	146
25	133	67	74	74	140	95	174	64	83	60	72	127
26	114	62	67	89	140	89	181	70	83	54	89	101
27	89	60	64	89	140	89	174	89	72	52	107	80
28	77	62	62	89	127	83	181	95	60	70	107	72
29	70	64	62	80	120	72	188	107	70	83	107	74
30	70	64	70	83	-----	72	188	89	89	80	101	83
31	67	-----	74	80	-----	80	-----	83	-----	64	95	-----
Month	Maximum			Minimum			Mean		Per square mile		Run-off in inches	
October	153			38			94.3		1.68		1.94	
November	89			60			73.1		1.31		1.46	
December	167			62			108		1.93		2.22	
January	89			57			70.3		1.26		1.45	
February	167			72			132		2.36		2.54	
March	133			72			102		1.82		2.10	
April	188			64			99.8		1.78		1.99	
May	188			64			103		1.84		2.12	
June	153			57			89.7		1.60		1.78	
July	146			52			79.7		1.42		1.64	
August	160			38			95.2		1.70		1.96	
September	167			70			113		2.02		2.25	
The year	188			38			96.6		1.72		23.45	

DELAWARE RIVER BASIN

EAST BRANCH OF DELAWARE RIVER AT FISHES EDDY, N. Y.

LOCATION.—Water-stage recorder installed September 27, 1928, at railroad bridge in Fishes Eddy, Delaware County, $4\frac{1}{2}$ miles downstream from mouth of Beaver Kill. Prior to that date a staff gage at same site was used.

DRAINAGE AREA.—785 square miles.

RECORDS AVAILABLE.—November, 1912, to September, 1928.

EXTREMES.—Maximum discharge during year, 25,200 second-feet December 8 (gage height, 14.4 feet); minimum, 252 second-feet October 3 (gage height, 2.55 feet).

1912-1928: Maximum discharge, about 45,000 second-feet September 30, 1924 (gage height, 19.0 feet); minimum, 97 second-feet October 12, 14, and 15, 1914, and November 18, 1924; minimum gage height, 1.64 feet October 12, 14, and 15, 1914.

REMARKS.—Records good except those for period of ice effect, December 26-28, January 22-31, February 1-15, 20, and March 5-12, which are fair.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	306	1,160	4,520	5,410	700	1,160	1,990	6,700	1,800	10,000	1,460	1,460
2.....	269	1,090	3,840	3,370	700	1,020	1,800	5,870	1,620	5,870	1,710	1,230
3.....	269	3,640	5,870	2,310	700	825	1,890	4,700	1,460	4,000	1,300	1,890
4.....	7,410	15,900	4,170	1,890	700	678	1,890	4,170	1,380	2,810	1,160	1,890
5.....	3,470	9,380	3,520	1,800	850	600	2,810	3,520	3,780	2,430	1,160	1,380
6.....	1,870	6,280	2,940	1,710	800	550	3,520	5,630	10,700	4,000	1,460	1,230
7.....	1,400	4,700	2,540	1,710	800	550	3,630	4,340	8,500	3,080	1,090	1,160
8.....	1,450	3,680	17,700	1,710	1,500	500	5,340	3,840	5,870	1,890	1,620	1,090
9.....	1,320	2,540	11,200	1,540	3,000	500	4,170	2,940	4,700	1,540	1,540	955
10.....	1,090	2,300	6,280	1,460	1,900	500	3,220	2,310	6,700	1,380	1,230	825
11.....	950	2,800	4,700	1,300	1,700	500	2,680	1,990	4,340	1,800	1,800	765
12.....	890	2,940	5,670	1,230	1,400	550	3,370	1,800	3,220	1,690	1,380	705
13.....	8,590	2,420	6,000	1,090	1,200	1,890	3,080	1,540	2,550	1,020	1,160	678
14.....	6,130	2,190	11,300	1,300	1,300	3,840	3,160	1,380	2,090	2,660	1,020	595
15.....	3,840	1,970	7,950	1,160	8,000	1,890	5,800	1,230	1,990	2,810	890	622
16.....	3,080	1,870	6,280	1,020	2,940	1,300	4,000	1,160	1,620	1,800	825	570
17.....	2,800	2,310	5,470	1,020	1,990	1,160	3,080	1,090	1,460	1,380	765	545
18.....	5,870	16,900	3,840	955	1,800	1,160	2,430	1,300	1,230	1,160	1,160	595
19.....	12,200	9,100	2,810	890	1,300	1,090	2,090	2,550	1,800	1,160	890	570
20.....	12,600	5,870	2,550	890	1,100	955	1,890	5,670	2,200	1,160	705	545
21.....	9,750	4,340	2,310	382	890	890	1,620	4,520	1,540	1,090	622	570
22.....	6,830	3,520	1,990	700	825	890	2,200	3,720	1,800	1,160	735	520
23.....	4,700	2,940	1,710	650	1,530	825	6,070	7,680	1,710	2,680	825	472
24.....	4,000	2,670	1,540	700	4,990	1,150	8,750	5,080	1,620	1,620	705	426
25.....	3,080	3,520	1,300	3,000	2,720	4,070	6,490	4,000	1,710	1,230	781	403
26.....	2,540	2,540	1,100	1,500	1,710	5,270	4,890	3,080	3,610	1,090	2,090	403
27.....	2,080	4,170	1,000	950	1,540	7,580	3,840	2,550	3,370	1,690	3,470	390
28.....	1,770	5,080	950	850	1,300	4,520	4,520	2,810	2,680	4,740	2,090	390
29.....	1,580	5,470	1,420	800	1,230	3,370	4,700	2,430	4,540	2,900	1,620	382
30.....	1,400	4,890	2,610	750	-----	3,080	5,080	2,090	14,900	1,890	1,300	356
31.....	1,240	-----	2,920	700	-----	2,680	-----	1,990	-----	1,540	2,090	-----
Month					Maximum	Minimum	Mean	Per square mile		Run-off in inches		
October.....					12,600	269	3,700	4.71		5.43		
November.....					16,900	1,090	4,610	5.87		6.55		
December.....					17,700	950	4,450	5.67		6.54		
January.....					5,410	382	1,440	1.84		2.12		
February.....					8,000	700	1,760	2.24		2.42		
March.....					7,580	500	1,790	2.28		2.63		
April.....					8,750	1,620	3,670	4.68		5.22		
May.....					7,680	1,090	3,340	4.25		4.90		
June.....					14,900	1,230	3,550	4.52		5.04		
July.....					10,000	1,020	2,390	3.04		3.50		
August.....					3,470	622	1,310	1.67		1.92		
September.....					1,890	356	787	1.00		1.12		
The year.....					17,700	269	2,740	3.49		47.39		

DELAWARE RIVER AT PORT JERVIS, N. Y.

LOCATION.—Water-stage recorder installed August 14, 1928, at highway bridge at Port Jervis, Orange County, $1\frac{1}{2}$ miles above mouth of Neversink River and 6 miles below Mongaup River. Prior to that date chain and staff gages at same site were used.

DRAINAGE AREA.—3,070 square miles.

RECORDS AVAILABLE.—October, 1904, to September, 1928.

EXTREMES.—Maximum discharge during year, 62,700 second-feet October 19 (gage height, 12.4 feet); minimum, 1,060 second-feet October 3 (gage height, 1.8 feet).

1904-1928: Maximum discharge, 92,700 second-feet March 28, 1914 (gage height, 16.0 feet); minimum, 175 second-feet September 22 and 23, 1908 (gage height, 0.60 foot).

Highest known stage, 23.3 feet October 10 and 11, 1903 (discharge, about 155,000 second-feet).

REMARKS.—Records good except those for estimated periods, December 1-4, 7-10, 12, 13, 16-18, January 1, 2, and February 23-26, which are fair. Flow slightly regulated by storage reservoirs and during low water by operation of power plants on tributaries.

Daily discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,250	4,500	15,500	13,500	2,970	4,800	9,220	27,600	5,420	35,500	4,500	6,280
2.....	1,180	4,500	13,500	12,500	3,200	4,500	7,950	24,100	5,100	26,900	4,800	4,500
3.....	1,060	9,020	15,500	8,800	3,200	3,690	7,200	18,800	4,800	17,600	5,420	6,240
4.....	2,750	25,200	17,000	7,200	3,080	2,970	7,200	16,400	4,220	13,500	4,220	10,100
5.....	13,200	36,800	14,000	6,460	2,970	2,970	6,820	16,400	8,100	11,500	3,690	7,580
6.....	7,500	24,100	12,000	6,460	2,540	2,750	7,950	17,600	18,500	21,300	4,500	5,760
7.....	4,800	20,600	10,500	6,460	2,440	2,540	10,100	16,400	32,900	17,600	6,820	4,950
8.....	3,950	15,200	24,000	6,820	3,200	2,340	12,000	12,000	22,000	11,500	7,260	4,500
9.....	3,690	10,600	44,500	7,200	9,220	2,240	10,600	9,660	15,200	7,980	5,760	3,950
10.....	3,690	10,100	30,000	5,760	7,580	2,750	9,660	8,380	15,200	7,580	6,100	3,950
11.....	3,200	9,220	22,700	5,100	6,460	2,750	8,800	7,200	15,800	7,200	6,100	3,690
12.....	2,860	8,380	16,000	4,500	5,760	2,970	12,000	6,460	11,500	6,100	7,200	3,110
13.....	6,670	7,980	17,000	4,500	4,800	5,100	12,500	5,420	9,220	5,760	6,820	2,840
14.....	20,100	7,580	30,400	4,220	4,220	9,220	12,000	5,420	7,980	9,220	5,420	3,060
15.....	11,500	6,460	28,300	4,220	15,200	8,800	11,500	4,800	7,200	16,500	4,360	3,130
16.....	10,600	5,760	23,000	4,220	21,300	7,580	11,500	4,220	6,460	10,100	3,950	2,670
17.....	10,100	7,120	19,000	3,950	17,000	5,420	10,600	3,950	5,100	7,580	3,950	2,580
18.....	14,900	43,800	16,000	3,690	7,980	5,420	9,220	3,690	4,220	5,760	5,100	2,770
19.....	54,600	41,300	14,000	3,440	7,580	5,100	8,380	4,800	5,100	5,100	4,800	2,790
20.....	56,900	25,800	13,000	3,200	6,820	4,220	7,580	10,600	10,100	4,500	4,500	2,900
21.....	41,900	26,000	11,500	2,970	5,100	3,690	6,820	15,200	8,380	4,220	3,690	2,950
22.....	26,900	15,800	10,100	2,540	3,690	3,690	7,580	11,500	9,660	3,690	3,560	2,950
23.....	18,800	12,000	9,220	2,540	7,000	3,950	20,000	13,500	10,600	3,690	3,950	2,360
24.....	15,800	12,000	7,580	2,340	12,000	4,500	33,200	20,000	8,380	6,100	3,820	2,230
25.....	11,500	11,500	5,760	3,200	15,000	13,500	29,000	13,000	8,800	5,420	3,560	2,460
26.....	9,660	11,000	4,800	7,980	9,000	17,600	20,000	10,100	13,000	4,220	4,250	2,500
27.....	7,980	12,000	3,950	5,420	6,100	18,800	15,200	8,800	14,600	3,950	16,000	2,460
28.....	6,820	20,200	3,440	3,950	5,420	17,600	17,000	7,980	14,000	10,100	12,000	2,460
29.....	5,760	20,600	3,950	3,690	4,800	15,800	23,400	7,580	11,000	11,000	8,590	2,460
30.....	5,100	19,400	6,100	3,440	-----	14,000	30,400	6,460	43,800	6,820	6,280	2,010
31.....	4,500	-----	10,100	3,200	-----	12,500	-----	6,100	-----	5,420	6,280	-----

Monthly discharge, in second-feet, of Delaware River at Port Jervis, N. Y., 1927-28

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	56,900	1,060	12,600	4.10	4.73
November	43,800	4,500	16,000	5.21	5.81
December	44,500	3,440	15,200	4.95	5.71
January	13,500	2,340	5,270	1.72	1.98
February	21,300	2,440	7,090	2.31	2.49
March	18,800	2,240	6,900	2.25	2.59
April	33,200	6,820	13,200	4.30	4.80
May	27,600	3,690	11,100	3.62	4.17
June	43,800	4,220	11,900	3.88	4.33
July	35,500	3,690	10,100	3.29	3.79
August	16,600	3,560	5,740	1.87	2.16
September	10,100	2,010	3,740	1.22	1.36
The year	56,900	1,060	9,900	3.22	43.92

DELAWARE RIVER AT BELVIDERE, N. J.

LOCATION.—Staff gage at Belvidere, Warren County, just below mouth of Pequest River.

DRAINAGE AREA.—4,540 square miles.

RECORDS AVAILABLE.—October, 1922, to September, 1928.

EXTREMES.—Maximum discharge during year, about 84,400 second-feet October 20 (gage height, 16.80 feet); minimum, 2,010 second-feet October 3 (gage height, 3.40 feet).

1922-1928: Maximum discharge, about 118,000 second-feet October 1, 1924 (gage height, 19.3 feet); minimum, 895 second-feet in July and August, 1923 (gage height, 2.45 feet).

REMARKS.—Records excellent.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept
1	2,363	7,610	21,000	16,400	5,690	8,680	15,900	32,200	7,960	63,200	7,610	10,200
2	2,360	6,940	18,400	18,400	5,690	8,320	13,200	32,200	7,610	39,200	7,270	10,200
3	2,180	10,600	21,000	13,700	5,400	7,960	12,300	25,600	6,940	24,400	7,270	10,600
4	3,370	37,700	23,300	9,050	5,120	6,300	11,900	21,600	6,300	18,900	7,610	17,900
5	15,900	55,200	18,400	8,320	5,990	5,690	11,400	18,400	8,320	16,400	6,940	15,000
6	12,300	37,000	16,400	7,960	6,620	5,400	11,900	16,400	19,400	30,100	7,270	11,900
7	7,610	25,600	15,000	8,320	6,940	5,120	13,200	17,900	37,700	27,500	8,680	10,200
8	6,300	21,000	27,500	9,430	8,320	4,850	15,000	16,900	30,100	18,900	11,400	9,050
9	5,690	16,900	64,000	9,430	9,050	5,120	18,900	14,600	20,500	14,600	9,430	8,320
10	5,120	14,600	41,300	9,810	13,700	4,580	16,400	12,800	19,400	12,800	8,320	6,940
11	4,850	13,700	28,100	9,050	13,200	4,580	14,100	11,000	21,600	11,900	11,400	6,620
12	4,070	13,200	23,300	7,960	9,810	4,580	13,200	10,200	15,900	11,000	12,800	6,300
13	6,620	13,700	22,700	7,270	7,610	5,690	17,400	9,050	13,200	11,400	9,430	5,690
14	22,100	11,400	30,800	6,940	6,940	7,960	15,900	7,610	11,400	17,400	7,960	5,990
15	18,900	11,400	40,600	7,610	15,000	16,400	19,900	7,270	10,600	26,900	7,270	5,990
16	13,700	10,600	31,500	6,940	29,400	13,700	22,700	7,270	10,200	20,500	5,690	5,400
17	11,000	10,600	26,200	6,940	17,900	10,200	17,400	6,940	8,320	15,500	6,940	4,580
18	14,100	30,100	22,100	5,990	13,700	8,680	14,600	6,300	7,610	11,900	10,600	4,850
19	50,800	58,800	17,400	5,990	11,900	7,960	14,100	7,610	7,270	10,200	10,200	4,550
20	84,000	35,600	15,500	6,940	9,050	7,960	11,000	12,300	10,600	9,050	7,960	4,550
21	58,800	25,000	14,100	5,400	8,680	7,270	10,200	16,900	12,800	7,270	6,940	5,400
22	40,600	19,900	12,800	4,320	6,620	7,270	11,900	15,900	12,800	7,610	7,960	4,850
23	28,100	17,900	12,300	4,320	9,430	7,270	17,900	14,600	14,100	10,200	7,610	4,580
24	21,600	15,900	11,300	4,070	15,000	6,940	32,800	25,600	14,100	12,800	7,270	3,830
25	17,400	15,900	9,050	8,680	22,100	9,810	37,000	17,400	13,200	10,600	6,940	4,000
26	15,000	16,900	7,270	13,200	15,000	19,400	26,200	13,700	20,500	7,610	9,050	4,000
27	13,200	15,500	6,940	11,400	10,600	21,600	21,600	11,400	21,600	7,610	25,000	4,070
28	11,900	18,400	7,270	7,610	9,810	24,400	21,600	10,200	21,000	9,810	25,000	3,830
29	10,600	22,700	7,960	5,120	9,050	17,900	29,400	10,200	17,900	15,900	17,900	3,830
30	8,680	23,800	8,680	5,400	-----	15,900	32,200	9,050	43,600	11,400	14,100	3,830
31	7,610	-----	10,600	5,690	-----	17,400	-----	8,320	-----	9,430	11,400	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	84,000	2,180	17,000	3.74	4.31
November	58,800	6,940	21,100	4.65	5.19
December	64,000	6,940	20,400	4.49	5.18
January	18,400	4,070	8,310	1.83	2.11
February	29,400	5,120	10,800	2.38	2.57
March	24,400	4,580	9,840	2.17	2.50
April	37,000	10,200	18,000	3.96	4.42
May	32,200	6,300	14,400	3.17	3.66
June	43,600	6,300	15,800	3.48	3.88
July	63,200	7,270	16,800	3.70	4.27
August	25,000	5,690	10,000	2.20	2.54
September	17,900	3,830	6,910	1.52	1.70
The year	84,000	2,180	14,100	3.10	42.33

DELAWARE RIVER AT RIEGELSVILLE, N. J.

LOCATION.—Water-stage recorder at suspension bridge at Riegelsville, Warren County, 600 feet above Musconetcong River.

DRAINAGE AREA.—6,190 square miles.

RECORDS AVAILABLE.—July, 1906, to September, 1928.

EXTREMES.—Maximum discharge during year, 107,000 second-feet October 20 (gage height, 21.3 feet); minimum, not including flow in Pennsylvania Canal, 2,520 second-feet October 3 (gage height, 2.70 feet).

1906-1928: Maximum discharge, about 144,000 second-feet March 28, 1913 (gage height, 25 feet); minimum, not including flow in canal, 870 second-feet September 20, 1908 (gage height, 1.55 feet).

Highest known stage, 35.9 feet October 10-11, 1903 (discharge about 275,000 second-feet).

REMARKS.—Records good. Delaware division of the Pennsylvania Canal diverted about 230 second-feet above station October 1 to November 19 and March 26 to September 30. Daily discharge table not corrected for diversion.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,040	10,000	25,900	20,400	8,080	12,500	24,500	43,300	10,000	78,000	10,800	14,100
2	2,930	9,390	23,600	21,200	7,760	11,800	19,900	42,200	9,390	50,000	10,000	12,500
3	2,720	13,800	27,400	16,500	7,440	11,100	17,700	35,100	8,740	35,300	9,700	12,500
4	5,260	38,300	29,900	11,100	7,440	9,700	16,100	29,400	8,080	26,900	9,700	20,400
5	15,600	59,800	26,400	9,700	9,700	9,070	15,700	25,400	10,400	24,000	9,700	19,400
6	15,300	45,100	24,500	10,000	10,800	8,080	15,700	22,600	24,100	39,800	11,800	15,700
7	10,000	33,300	22,200	10,800	9,390	7,760	17,300	24,300	44,300	40,000	12,900	13,300
8	7,760	26,400	41,900	11,800	15,000	7,440	19,000	22,600	38,000	28,400	13,700	11,800
9	7,120	22,200	78,200	12,200	17,300	7,440	23,600	19,000	27,900	21,700	12,200	10,800
10	6,800	19,400	57,400	12,200	17,700	6,800	22,200	16,900	26,900	18,600	11,100	9,390
11	6,170	17,300	39,300	11,800	17,300	7,120	18,100	14,900	26,900	16,900	12,500	8,740
12	5,560	16,500	33,500	11,100	13,700	7,440	18,100	13,700	21,700	15,700	10,000	8,410
13	11,500	16,900	31,400	9,700	10,800	8,740	21,700	12,200	17,700	16,500	12,200	7,440
14	25,200	14,900	38,200	9,390	10,700	12,200	22,600	10,800	15,700	28,800	10,400	7,760
15	25,000	13,700	48,000	9,390	26,800	19,800	25,900	10,400	15,700	42,000	9,070	7,120
16	17,700	12,900	41,000	9,390	37,000	18,800	28,900	9,390	13,700	32,400	7,760	7,120
17	5,560	13,300	36,700	9,070	26,900	13,700	24,000	9,070	11,400	23,600	10,200	6,480
18	17,600	41,300	31,900	8,740	19,900	12,200	20,400	8,740	10,000	18,600	16,500	6,170
19	57,900	71,000	25,400	8,080	16,100	11,100	17,700	10,400	10,000	15,300	14,100	6,170
20	102,000	47,600	22,200	10,400	13,300	10,800	15,700	14,500	12,500	13,700	11,400	6,800
21	75,400	34,400	19,900	7,760	11,800	10,000	14,100	19,900	15,700	12,200	9,720	7,120
22	53,600	28,400	18,100	5,860	9,700	9,700	14,900	19,900	15,700	11,100	10,400	6,800
23	39,200	24,500	16,900	5,860	17,800	10,000	22,200	17,300	17,700	16,500	11,100	6,480
24	29,900	21,700	15,300	6,170	28,400	10,400	37,500	27,400	18,100	14,100	10,000	5,860
25	24,500	20,800	12,500	13,700	27,900	12,300	43,900	21,700	16,500	14,100	10,000	5,260
26	20,400	21,700	10,800	15,600	22,900	22,600	34,500	16,900	23,400	11,800	12,200	5,260
27	17,700	19,400	10,000	14,500	16,500	25,900	28,400	14,900	29,900	11,100	24,200	5,260
28	15,300	21,700	10,400	11,100	14,500	28,900	30,900	12,900	27,900	14,500	31,900	5,260
29	13,700	26,400	11,400	7,760	13,300	23,100	38,400	12,500	25,500	19,000	23,600	4,960
30	12,200	27,900	12,500	7,440	-----	21,200	42,700	11,400	62,500	15,700	19,000	4,960
31	10,800	15,300	7,760	-----	-----	28,400	-----	10,800	-----	12,500	15,300	-----

Month	Observed			Corrected for diversion		
	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October	102,000	2,720	21,700	21,900	3.54	4.08
November	71,000	9,390	26,300	26,500	4.28	4.78
December	78,200	10,000	27,700	27,700	4.47	5.15
January	21,200	5,860	10,900	10,900	1.76	2.03
February	37,000	7,440	16,100	16,100	2.60	2.80
March	28,900	6,800	13,400	13,500	2.18	2.51
April	43,900	14,100	23,700	24,000	3.88	4.33
May	43,300	8,740	18,700	18,900	3.05	3.52
June	62,500	8,080	20,500	20,800	3.36	3.75
July	78,000	11,100	23,800	24,100	3.89	4.48
August	31,900	7,760	13,200	13,400	2.16	2.49
September	20,400	4,960	8,980	9,210	1.49	1.66
The year	102,000	2,720	18,800	18,900	3.05	41.58

DELAWARE RIVER AT TRENTON, N. J.

LOCATION.—Chain gage on Calhoun Street Bridge, Trenton, Mercer County, half a mile above Assunpink Creek.

DRAINAGE AREA.—6,800 square miles.

RECORDS AVAILABLE.—February, 1913, to September, 1928.

EXTREMES.—Maximum discharge during year, not including flow in canals, 116,000 second-feet October 20 (gage height, 10.91 feet); minimum, not including canals, 2,860 second-feet October 3 (gage height, 0.42 foot).

1913-1928: Maximum discharge, not including flow in canals, about 160,000 second-feet March 28 and 29, 1913 (gage height, 13.3 feet); minimum, not including canals, 1,240 second-feet, several times in October and November, 1914 (gage height, —0.40 foot).

REMARKS.—Records fair. Pennsylvania Canal diverts about 20 second-feet above station from about March 31 to December 15; the Delaware and Raritan Canal feeder diverts about 130 second-feet from about March 1 to December 31, and Trenton power canal diverts about 250 second-feet daily. Discharge estimated February 8 and 9 because of ice and December 28, January 5-13, 22-25, 29-31, and February 1-7 because of missing record. Gage readings furnished by United States Weather Bureau.

Daily discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	3,180	10,400	27,400	18,900	9,000	11,600	26,500	44,500	11,600	40,900	11,600	14,400
2.....	3,020	10,400	22,900	21,300	9,000	13,000	21,300	45,700	11,000	59,700	11,000	13,700
3.....	3,020	13,000	27,400	20,500	9,500	9,150	19,700	36,500	10,400	39,800	9,150	13,700
4.....	4,600	34,400	29,400	16,500	10,000	11,000	16,500	32,400	8,600	29,400	9,750	16,500
5.....	12,300	59,700	31,400	12,000	13,000	9,150	15,800	26,500	9,150	23,800	10,400	22,100
6.....	18,100	49,300	28,400	12,000	14,000	8,100	15,100	24,700	22,900	34,400	10,400	17,300
7.....	12,300	35,400	23,800	13,000	12,000	8,100	14,400	22,100	37,600	46,900	13,700	15,800
8.....	11,000	28,400	33,400	14,000	16,000	7,600	16,500	24,700	40,900	33,400	14,400	15,100
9.....	12,300	23,800	76,200	15,000	20,000	7,100	21,300	20,500	30,400	24,700	13,700	13,700
10.....	7,600	20,500	67,800	15,000	21,300	11,000	22,900	18,100	26,500	19,700	9,750	11,000
11.....	7,100	18,900	42,100	14,000	20,500	7,100	19,700	17,300	26,500	18,100	11,600	9,750
12.....	7,100	17,300	34,400	12,000	16,500	7,600	22,100	14,400	24,700	16,500	13,000	9,150
13.....	15,100	18,100	32,400	10,000	12,300	7,100	20,500	13,000	19,700	13,900	11,000	8,600
14.....	29,400	16,500	35,400	9,750	10,400	11,600	22,900	12,300	16,500	19,700	11,000	8,100
15.....	29,400	15,100	46,900	10,400	22,100	15,100	24,700	11,000	15,800	23,800	10,400	7,600
16.....	18,900	14,400	45,700	10,400	30,400	22,100	28,400	9,750	15,100	37,600	9,150	7,600
17.....	12,300	14,400	37,600	8,600	30,400	15,100	27,400	9,750	15,100	26,500	5,800	7,100
18.....	31,400	37,600	33,400	9,750	21,300	13,700	21,300	10,400	11,000	21,300	20,500	6,650
19.....	57,100	74,800	27,400	8,600	18,100	13,700	19,700	9,750	9,750	16,500	15,800	7,100
20.....	106,000	54,500	22,900	10,400	15,100	12,300	16,500	10,400	11,600	15,800	14,400	7,600
21.....	89,300	37,600	21,300	9,750	13,000	11,600	16,500	18,900	15,100	13,700	11,000	7,600
22.....	61,000	30,400	18,900	8,500	12,300	12,300	20,500	22,100	16,500	13,000	9,750	7,100
23.....	42,100	26,500	17,300	7,000	18,100	10,400	22,900	18,100	16,500	11,600	12,300	8,600
24.....	32,400	20,500	16,500	8,000	32,400	10,400	40,900	18,900	19,700	11,000	9,150	7,100
25.....	26,500	22,100	15,100	10,000	29,400	11,000	44,500	24,700	18,900	13,700	11,000	5,400
26.....	22,100	21,300	13,700	17,300	28,400	17,300	37,600	18,900	18,100	13,700	11,600	5,000
27.....	18,900	21,300	11,000	16,500	19,700	24,700	30,400	16,500	30,400	11,000	15,100	5,000
28.....	16,500	20,500	11,000	15,800	15,800	27,400	33,400	14,400	27,400	18,900	35,400	5,000
29.....	15,100	26,500	11,600	10,000	14,400	25,600	38,700	13,000	23,800	21,300	25,600	5,000
30.....	13,700	26,500	13,700	9,000	-----	20,500	43,300	11,600	32,400	18,900	20,500	5,000
31.....	12,300	-----	11,400	9,000	-----	27,400	-----	11,600	-----	13,700	16,500	-----

Monthly discharge, in second-feet, of Delaware River at Trenton, N. J., 1927-28

Month	Observed			Corrected for diversion		
	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October.....	106,000	3,620	24,200	24,600	3.62	4.17
November.....	74,800	10,400	27,300	27,700	4.07	4.54
December.....	76,200	11,000	28,700	29,100	4.28	4.93
January.....	21,300	7,000	12,400	12,600	1.85	2.13
February.....	32,400	9,000	17,700	18,000	2.65	2.86
March.....	27,400	7,100	13,500	13,900	2.04	2.35
April.....	44,500	14,400	24,700	25,100	3.69	4.12
May.....	45,700	9,750	19,400	19,800	2.91	3.36
June.....	40,900	8,600	19,800	20,200	2.97	3.31
July.....	59,700	11,000	23,500	23,900	3.51	4.05
August.....	35,400	5,800	13,400	13,800	2.03	2.34
September.....	22,100	5,000	9,780	10,200	1.50	1.67
The year.....	106,000	3,620	19,500	19,900	2.93	39.83

BEAVER KILL AT COOKS FALLS, N. Y.

LOCATION.—Staff gage at highway bridge in Cooks Falls, Delaware County, $5\frac{1}{2}$ miles below mouth of Willowemoc Creek.

DRAINAGE AREA.—241 square miles.

RECORDS AVAILABLE.—July, 1913, to September, 1928.

EXTREMES.—Maximum discharge during year, 7,560 second-feet December 8 (gage height, 11.2 feet); minimum, 122 second-feet October 3 (gage height, 1.55 feet).

1913–1928: Maximum discharge, about 14,600 second-feet November 16, 1926 (gage height, 16.0 feet); minimum, about 23 second-feet September 14–16, 1913 (gage height, 0.60 foot).

REMARKS.—Records good except for periods of ice effect December 20, 25–28, January 28 to February 4, February 19, 20, and March 6–11, which are fair. Discharge estimated October 16, November 9, 10, 14–16, 27, December 7, January 22, March 4, June 10 and 17.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	138	398	1,180	2,300	240	270	655	2,150	610	2,400	470	770
2.	130	382	940	1,060	220	246	610	1,800	570	1,540	382	610
3.	122	3,810	1,730	655	220	202	745	1,480	570	1,180	336	1,350
4.	3,190	4,460	1,300	570	220	192	940	940	632	745	336	840
5.	980	2,230	1,060	490	212	183	1,660	786	2,650	1,320	322	655
6.	610	1,560	840	490	202	180	1,800	1,720	3,280	2,080	490	530
7.	470	1,000	840	490	183	170	1,540	1,240	2,690	1,480	450	470
8.	415	655	6,010	530	461	180	2,580	1,060	1,540	745	415	415
9.	382	630	3,200	610	655	170	1,730	940	1,480	610	322	382
10.	336	600	2,750	490	398	160	1,240	840	2,010	570	295	351
11.	295	890	1,670	415	322	260	1,060	700	1,600	490	282	322
12.	280	1,000	1,240	398	270	488	1,480	570	1,060	415	270	295
13.	4,010	655	2,650	450	246	1,280	1,060	530	840	382	258	282
14.	1,710	580	4,210	490	234	1,180	1,880	490	700	1,610	246	270
15.	1,060	530	2,340	415	1,880	655	2,360	450	655	852	234	258
16.	940	500	1,660	308	890	610	1,540	415	610	610	212	258
17.	1,590	1,970	1,480	366	610	570	1,240	382	530	490	212	246
18.	2,870	5,430	1,120	322	570	490	940	890	450	415	351	234
19.	4,120	2,480	745	295	500	432	840	2,090	745	366	295	223
20.	3,420	1,540	700	295	440	366	655	2,640	655	351	246	223
21.	2,530	1,120	610	295	398	322	655	1,480	570	336	234	223
22.	1,800	940	570	295	470	308	1,180	1,390	655	351	246	212
23.	1,420	840	570	282	1,230	351	2,420	2,640	655	382	295	192
24.	1,180	790	490	420	840	387	3,080	1,660	610	336	295	164
25.	940	1,000	420	2,010	530	2,060	2,080	1,420	932	270	322	164
26.	700	745	380	840	415	1,720	1,540	1,180	2,120	246	2,100	156
27.	610	1,200	340	382	366	1,580	1,300	1,240	1,420	430	2,530	156
28.	570	1,420	320	300	351	1,300	1,240	1,060	1,000	745	1,300	147
29.	530	1,660	336	280	295	1,180	1,630	790	1,850	470	890	147
30.	470	1,480	351	240	-----	1,060	1,600	610	4,450	382	745	147
31.	432	-----	2,210	240	-----	840	-----	530	-----	382	896	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	4,120	122	1,230	5.10	5.88
November	5,430	382	1,420	5.89	6.57
December	6,010	320	1,430	5.93	6.84
January	2,300	240	549	2.28	2.63
February	1,880	183	478	1.98	2.14
March	2,060	160	626	2.60	3.00
April	3,080	610	1,440	5.98	6.67
May	2,640	382	1,160	4.81	5.54
June	4,450	450	1,270	5.27	5.88
July	2,400	246	741	3.07	3.54
August	2,530	212	525	2.18	2.51
September	1,350	147	356	1.48	1.65
The year	6,010	122	937	3.89	52.85

LITTLE BEAVER KILL NEAR LIVINGSTON MANOR, N. Y.

LOCATION.—Staff gage $2\frac{1}{2}$ miles southeast of Livingston Manor, Sullivan County, and 3 miles above Cattail Brook.

DRAINAGE AREA.—19.8 square miles.

RECORDS AVAILABLE.—July, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year 3,420 second-feet August 26 (gage height, 8.7 feet); minimum, 7.7 second-feet October 3 (gage height, 1.00 foot).

1924-1928: Maximum discharge, that of August 26, 1928; minimum, 2.7 second-feet several times August 11 to September 5, 1924 (gage height, 0.68 foot).

REMARKS.—Records fair. Discharge estimated because of ice December 19-29, January 3-6, 16, 21-23, 27-31, February 1-8, 12, 13, 19-28, March 3-12 and 19-21.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	9.0	24	75	160	20	18	48	195	24	173	18	52
2.	8.4	24	75	66	17	17	54	120	36	93	21	40
3.	16	695	120	55	16	15	45	82	25	50	15	86
4.	307	409	75	48	16	14	68	75	32	42	14	70
5.	68	170	54	44	34	13	100	75	218	194	12	42
6.	34	100	50	36	20	11	100	120	258	230	21	36
7.	26	62	48	35	13	11	94	62	160	76	50	36
8.	26	46	570	29	42	11	218	44	68	48	24	33
9.	24	41	172	29	130	10	82	37	70	36	17	25
10.	21	36	100	21	40	10	49	33	100	32	14	23
11.	17	50	80	20	25	11	40	29	52	30	21	25
12.	32	41	130	18	20	14	160	25	36	25	14	19
13.	427	32	212	20	19	234	100	21	29	24	13	18
14.	120	26	397	21	18	206	170	18	32	108	10	17
15.	70	23	150	21	193	57	195	16	31	42	10	16
16.	43	22	100	19	54	42	100	16	22	27	9.1	18
17.	90	298	80	18	35	33	64	15	20	20	76	14
18.	323	540	62	16	31	24	42	94	18	17	76	16
19.	609	160	46	13	28	22	44	282	68	17	25	18
20.	300	100	36	13	22	19	36	220	40	17	17	23
21.	187	70	30	13	19	18	29	110	28	14	14	17
22.	120	61	32	12	28	16	90	108	66	17	19	14
23.	76	44	28	13	260	18	238	240	58	18	19	13
24.	64	67	24	21	170	132	270	120	68	15	17	12
25.	52	72	24	160	85	133	160	62	88	12	30	11
26.	43	50	20	58	48	191	120	54	258	10	772	13
27.	39	134	19	36	38	170	78	54	140	116	494	11
28.	35	100	19	30	30	82	140	42	66	106	173	12
29.	30	150	55	26	24	44	150	35	360	30	109	11
30.	27	100	110	24	—	52	232	37	434	19	69	10
31.	26	—	160	20	—	42	—	40	—	17	73	—

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	609	8.4	105	5.30	6.11
November	695	22	125	6.31	7.04
December	570	19	102	5.15	5.94
January	160	12	36.0	1.82	2.10
February	260	13	51.6	2.61	2.82
March	234	10	54.5	2.75	3.17
April	270	29	111	5.61	6.26
May	282	15	80.0	4.04	4.66
June	434	18	96.8	4.89	5.46
July	230	10	54.0	2.73	3.15
August	772	9.1	73.1	3.69	4.25
September	86	10	25.0	1.26	1.41
The year	772	8.4	76.1	3.84	52.37

WEST BRANCH OF DELAWARE RIVER AT HALE EDDY, N. Y.

LOCATION.—Water-stage recorder installed September 8, 1928, in Hale Eddy, Delaware County, 9 miles above confluence with East Branch. Prior to that date a staff gage at same site was used.

DRAINAGE AREA.—603 square miles.

RECORDS AVAILABLE.—November, 1912, to September, 1928.

EXTREMES.—Maximum discharge during year, 14,000 second-feet October 19 (gage height, 11.6 feet); minimum, 123 second-feet September 19 (gage height, 1.69 feet).

1912-1928: Maximum discharge, about 26,500 second-feet September 30, 1924 (gage height, 15.8 feet); minimum, 34 second-feet September 21, 1913 (gage height, 1.0 foot).

Highest known stage, 20.3 feet October 10, 1903 (discharge, about 46,000 second-feet).

REMARKS.—Records good except those for period of ice effect, January 19-31 and February 21, which are fair. Operation of power plant above station causes some regulation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	136	742	3,240	2,360	610	800	1,530	4,860	830	5,140	830	488
2	136	635	2,890	1,880	560	715	1,370	3,740	742	2,670	1,660	398
3	157	1,250	2,780	1,700	510	688	1,370	2,890	715	2,260	1,010	398
4	1,880	4,550	2,560	1,530	535	635	1,370	2,260	1,060	2,060	1,290	660
5	1,880	3,120	2,260	1,370	610	635	1,370	1,880	2,300	1,700	1,080	488
6	1,370	2,670	1,970	1,220	535	585	1,370	2,260	7,450	2,060	1,230	377
7	770	2,260	2,270	1,080	585	585	1,610	2,260	5,330	1,530	1,700	356
8	742	2,260	9,090	1,080	1,010	488	1,700	1,880	3,360	1,450	1,530	369
9	635	2,260	6,340	1,220	1,220	442	2,460	1,700	2,560	1,220	1,880	352
10	585	2,260	4,710	1,080	1,080	398	1,880	1,370	4,370	1,220	1,450	324
11	585	2,260	3,870	1,010	1,000	398	1,700	1,220	3,360	1,080	2,520	301
12	740	2,060	2,360	950	1,010	398	1,880	1,150	2,260	1,010	1,880	279
13	3,020	1,880	3,740	950	800	950	1,880	950	1,790	1,060	1,370	258
14	2,670	1,700	7,320	950	936	4,330	1,790	800	1,530	2,050	1,060	251
15	1,880	1,530	6,000	860	3,340	2,460	2,260	688	1,370	1,510	830	258
16	1,700	1,530	4,140	950	2,230	1,220	1,880	688	1,150	950	715	219
17	1,700	3,020	3,120	830	1,220	950	1,700	635	950	742	660	213
18	4,860	10,400	2,560	742	950	860	1,530	660	660	635	660	204
19	11,400	7,600	2,360	750	890	800	1,370	1,030	1,080	535	585	187
20	10,500	4,000	2,260	800	800	742	1,220	2,010	1,700	585	510	187
21	9,000	2,460	1,880	950	750	635	1,080	1,880	1,610	535	465	195
22	6,000	2,260	1,530	600	742	635	1,780	1,700	1,450	635	510	190
23	3,870	2,260	1,220	550	912	860	3,750	2,880	1,530	1,530	488	179
24	2,670	2,460	1,080	600	5,770	2,160	5,480	2,670	1,530	1,530	465	176
25	2,080	2,850	950	1,900	3,610	5,010	4,000	2,460	1,530	950	465	171
26	1,790	2,850	860	1,600	1,790	4,710	3,120	1,880	1,530	688	535	169
27	1,450	3,700	770	950	1,290	3,870	2,360	1,370	2,060	1,100	715	166
28	1,220	6,300	715	800	1,010	3,600	2,160	1,220	2,460	2,060	535	171
29	950	5,170	950	750	890	2,670	2,890	1,080	3,280	1,370	465	171
30	860	3,870	2,850	700	-----	2,060	3,120	1,010	9,250	950	420	166
31	800	-----	2,780	650	-----	1,700	-----	800	-----	830	488	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	11,400	136	2,520	4.18	4.82
November	10,400	635	3,070	5.09	5.08
December	9,090	715	2,980	4.94	5.70
January	2,360	550	1,070	1.77	2.04
February	5,770	510	1,230	2.14	2.31
March	5,010	398	1,500	2.49	2.87
April	5,480	1,080	2,100	3.48	3.88
May	4,860	635	1,740	2.89	3.33
June	9,250	660	2,360	3.91	4.36
July	5,140	535	1,410	2.64	2.70
August	2,520	420	970	1.61	1.86
September	660	166	277	.459	.51
The year	11,400	136	1,770	2.94	40.06

WALLENPAUPACK CREEK AT WILSONVILLE, PA.

LOCATION.—At hydroelectric plant of Pennsylvania Power & Light Co. with dam at Wilsonville, 1½ miles south of Hawley, Wayne County.

DRAINAGE AREA.—227 square miles.

RECORDS AVAILABLE.—October, 1918, to September, 1921; June, 1926, to September, 1928.

REMARKS.—Records good. Flow computed from output of generators and discharge over spillway. Daily discharge not corrected for storage. Records of operation of power plant and elevations of water surface in reservoir and tailrace furnished by Pennsylvania Power & Light Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	161	498	1,060	557	490	534	174	1,580	503	1,670	586	418
2	123	531	1,100	547	481	626	473	1,600	349	1,670	526	31
3	416	796	947	600	533	393	402	1,620	217	1,700	622	126
4	360	864	386	711	591	112	561	1,590	418	1,680	436	500
5	437	783	908	730	168	525	314	1,210	276	1,630	260	677
6	248	268	565	577	552	521	160	743	447	1,670	745	591
7	527	706	549	702	573	467	210	1,380	399	1,680	682	552
8	506	635	585	374	412	385	112	1,100	630	1,680	666	372
9	382	608	651	700	579	414	139	871	492	1,680	630	105
10	382	584	747	701	410	522	328	754	135	1,580	698	503
11	347	481	932	610	108	51	450	670	461	880	105	379
12	418	487	827	482	144	406	489	567	369	770	57	416
13	326	141	863	411	374	372	376	319	370	794	774	485
14	363	775	1,240	657	520	369	1,360	540	399	1,250	776	506
15	311	590	1,080	201	448	381	411	474	355	728	258	562
16	460	652	978	719	492	387	419	756	166	918	536	92
17	348	790	970	548	491	331	574	160	181	873	566	514
18	351	1,120	722	438	592	170	645	664	311	613	598	467
19	363	1,620	982	703	140	464	637	535	395	623	144	449
20	375	1,620	960	634	622	533	470	245	224	664	525	612
21	593	1,580	803	307	316	483	665	574	1,140	249	463	704
22	471	1,630	878	159	104	692	1,240	565	1,450	220	438	625
23	251	1,560	888	345	114	627	755	563	1,200	609	463	52
24	509	1,130	930	609	285	405	1,480	574	213	700	507	660
25	609	1,360	321	456	197	292	925	616	526	608	542	611
26	577	1,300	288	591	114	325	657	396	640	641	84	677
27	458	1,170	775	563	271	489	736	174	851	624	467	681
28	601	1,370	837	456	189	317	1,310	628	859	190	432	676
29	212	1,170	760	199	448	340	1,150	281	996	148	506	610
30	32	1,150	601	652	-----	681	1,590	203	1,630	599	493	143
31	528	-----	703	580	-----	378	-----	376	-----	578	520	-----

Month	Observed			Corrected for storage		
	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October	609	32	389	1,226	5.40	6.23
November	1,630	141	932	901	3.97	4.43
December	1,240	288	801	791	3.48	4.01
January	730	159	533	259	1.14	1.31
February	622	104	371	505	2.22	2.39
March	692	51	419	527	2.32	2.68
April	1,590	112	640	993	4.37	4.88
May	1,620	160	720	524	2.31	2.66
June	1,630	135	553	925	4.07	4.54
July	1,700	148	965	743	3.27	3.77
August	776	57	487	358	1.58	1.82
September	704	31	460	108	.476	.53
The year	1,700	31	607	655	2.89	39.25

FLAT BROOK NEAR FLATBROOKVILLE, N. J.

LOCATION.—Water-stage recorder 1 mile above Flatbrookville, Sussex County, and 1½ miles above mouth.

DRAINAGE AREA.—65 square miles.

RECORDS AVAILABLE.—July, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,730 second-feet December 8 (gage height, 5.86 feet); minimum, 17 second-feet October 12 (gage height, 1.62 feet).

1923–1928: Maximum discharge, about 2,350 second-feet April 7, 1924, and February 11, 1925 (gage height, 7.1 feet); minimum, 4 second-feet September 6 and 7, 1923 (gage height, 1.35 feet).

REMARKS.—Records good. Discharge affected by ice January 3–5, 31, and February 1–3.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	° 34	99	184	250	100	166	286	383	° 90	509	91	158
2.....	° 34	97	200	138	100	143	233	305	° 80	344	91	140
3.....	° 40	383	383	100	95	132	200	250	75	250	83	204
4.....	° 130	1,060	286	95	97	113	184	216	80	200	76	235
5.....	69	588	233	90	132	113	169	200	322	403	102	151
6.....	53	403	233	92	120	95	160	200	487	1,380	123	135
7.....	° 40	305	224	99	113	90	154	178	383	643	107	140
8.....	° 40	250	1,160	110	169	92	184	154	250	383	93	128
9.....	44	216	832	120	216	90	172	143	151	286	81	111
10.....	42	200	466	117	178	88	148	138	487	251	76	100
11.....	40	200	383	103	140	84	135	127	305	235	235	91
12.....	37	184	363	101	120	95	184	120	216	204	145	85
13.....	247	166	344	97	99	146	233	110	° 180	235	100	80
14.....	181	154	444	103	129	200	216	103	° 180	900	81	78
15.....	99	143	363	99	532	169	305	99	° 180	931	74	74
16.....	75	° 140	324	86	286	127	233	90	° 160	487	67	74
17.....	72	° 360	383	84	° 240	117	200	90	° 140	344	172	70
18.....	364	° 700	286	86	° 200	120	169	117	° 140	268	534	68
19.....	891	° 440	233	86	° 170	115	157	° 120	° 240	219	251	70
20.....	801	° 324	216	175	° 150	103	140	° 140	° 360	204	167	87
21.....	477	268	200	108	140	105	130	° 150	° 300	181	125	83
22.....	323	233	184	120	127	113	233	° 170	268	175	169	68
23.....	250	° 240	175	88	378	127	444	172	216	183	235	62
24.....	204	° 240	154	95	575	160	424	146	286	153	161	56
25.....	178	° 260	132	387	344	233	286	120	268	133	145	52
26.....	° 150	250	138	250	233	216	233	110	344	121	330	52
27.....	° 140	200	117	200	216	216	200	122	363	123	688	56
28.....	° 130	233	115	172	184	172	363	113	268	204	424	56
29.....	° 120	216	132	146	172	149	487	99	444	135	° 320	53
30.....	115	200	146	122	-----	317	466	° 100	938	121	° 260	55
31.....	105	-----	154	110	-----	444	-----	° 100	-----	107	° 220	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	891	34	178	2.74	3.16
November.....	1,060	97	292	4.49	5.01
December.....	1,160	115	296	4.55	5.25
January.....	387	84	130	2.00	2.31
February.....	575	95	198	3.05	3.29
March.....	444	84	150	2.31	2.66
April.....	487	130	238	3.66	4.08
May.....	383	90	151	2.32	2.68
June.....	938	75	273	4.20	4.69
July.....	1,380	107	333	5.12	5.90
August.....	688	67	188	2.89	3.33
September.....	235	52	95.7	1.47	1.64
The year.....	1,380	34	210	3.23	44.00

° Estimated.

PAULINS KILL AT BLAIRSTOWN, N. J.

LOCATION.—Water-stage recorder at highway bridge in Blairstown, Warren County, 200 feet above mouth of Blairs Creek.

DRAINAGE AREA.—128 square miles.

RECORDS AVAILABLE.—October, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,590 second-feet July 15 (gage height, 6.94 feet); minimum, 26 second-feet September 27 (gage height, 1.73 feet).

1921-1928: Maximum discharge, about 1,800 second-feet March 8, 1922, and February 12, 1925 (gage height, 7.05 feet); minimum, about 2.8 second-feet November 1, 1922 (gage height, 1.34 feet).

REMARKS.—Records good. Flow regulated by storage in Swartswood Lake and by power plants above station. Discharge estimated because of ice January 1-5 and because of missing record February 27-29.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	76	208	319	260	157	268	569	546	100	448	240	460
2-----	74	186	348	200	139	256	482	460	95	338	242	376
3-----	68	452	524	180	136	232	402	402	76	271	216	375
4-----	143	1,180	460	160	130	208	360	319	85	234	226	431
5-----	143	1,000	402	150	199	197	332	293	269	232	227	341
6-----	114	760	374	148	192	175	306	280	485	509	363	290
7-----	96	593	374	152	162	164	280	256	421	431	324	286
8-----	86	503	974	162	328	154	268	220	271	312	270	269
9-----	80	460	968	186	490	154	256	208	241	238	231	246
10-----	84	402	671	190	362	154	232	197	420	222	212	223
11-----	82	374	569	174	250	154	220	186	286	284	301	206
12-----	80	360	569	168	206	154	220	175	214	243	251	189
13-----	315	319	569	169	182	244	280	154	187	435	223	188
14-----	306	293	700	176	192	319	268	144	175	987	185	188
15-----	232	268	618	168	442	319	319	133	217	1,410	160	155
16-----	164	256	569	160	524	268	293	133	176	925	153	150
17-----	144	333	593	149	374	232	244	114	143	644	254	146
18-----	506	906	503	148	319	220	220	133	126	495	855	148
19-----	1,240	760	402	157	256	220	197	154	188	435	593	150
20-----	1,310	618	374	266	244	208	186	175	315	367	431	176
21-----	1,000	503	332	179	208	208	164	175	260	310	331	186
22-----	760	460	332	174	197	232	220	154	314	294	380	162
23-----	593	402	306	150	374	244	374	154	331	397	524	141
24-----	482	402	280	135	792	268	460	144	417	374	467	119
25-----	402	431	232	354	592	280	431	114	380	282	436	122
26-----	346	374	244	287	406	293	346	114	354	226	546	129
27-----	319	374	220	213	320	280	306	114	329	251	790	105
28-----	293	374	208	185	300	256	431	114	273	600	790	96
29-----	268	346	220	157	280	232	644	114	349	524	671	103
30-----	244	332	256	184	-----	335	644	114	582	405	618	103
31-----	220	-----	293	180	-----	700	-----	114	-----	283	524	-----
Month					Maximum		Minimum		Mean		Per square mile	Run-off in inches
October-----					1,310		68		331		2.58	2.97
November-----					1,180		186		474		3.70	4.13
December-----					974		208		445		3.48	4.01
January-----					354		135		185		1.45	1.67
February-----					792		130		302		2.36	2.54
March-----					700		154		246		1.92	2.21
April-----					644		164		332		2.59	2.89
May-----					546		114		197		1.54	1.78
June-----					582		76		269		2.10	2.34
July-----					1,410		222		432		3.38	3.50
August-----					855		153		388		3.03	3.49
September-----					460		96		208		1.62	1.81
The year-----					1,410		68		318		2.48	33.74

PEQUEST RIVER AT PEQUEST, N. J.

LOCATION.—Water-stage recorder at Pequest, Warren County, 100 feet above Lehigh & Hudson River Railroad bridge, and 300 feet below Furnace Brook.

DRAINAGE AREA.—108 square miles.

RECORDS AVAILABLE.—November, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, 735 second-feet August 27 (gage height, 3.04 feet); minimum, 58 second-feet October 1 (gage height, 0.78 foot).

1921-1928: Maximum discharge, that of August 27, 1928; minimum, 16 second-feet September 20 and 21, 1924, and August 7, 1926 (gage height, 0.31 foot).

REMARKS.—Records excellent. Discharge estimated October 2-4, 6-15, 17-22, 24-27, November 3-8, December 11-14, 19, 25, 26, and January 8.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	68	221	248	196	140	277	354	378	109	196	309	527
2.....	70	208	298	172	129	248	293	360	100	172	277	508
3.....	70	260	378	208	119	234	277	309	100	150	248	508
4.....	90	440	360	196	129	208	248	262	91	140	248	451
5.....	129	550	309	184	196	196	221	234	181	240	277	396
6.....	110	550	309	172	196	172	208	221	343	414	442	378
7.....	100	550	312	172	172	161	196	208	277	396	432	360
8.....	90	550	532	170	405	161	196	196	234	343	396	309
9.....	85	565	508	184	432	150	184	184	196	262	426	277
10.....	85	527	463	184	396	150	172	172	248	208	309	248
11.....	85	489	440	172	314	150	161	172	221	196	262	234
12.....	85	451	420	172	248	184	184	161	184	208	234	208
13.....	90	414	440	172	208	248	184	150	161	208	208	221
14.....	220	360	480	172	236	262	196	140	150	467	196	234
15.....	180	309	527	161	489	262	208	140	150	527	172	221
16.....	161	262	527	161	432	221	184	129	129	489	161	196
17.....	150	288	489	161	432	208	172	129	119	470	293	184
18.....	200	513	470	161	414	221	161	140	109	451	565	172
19.....	700	470	400	161	328	221	150	161	119	414	470	172
20.....	650	451	378	221	277	208	140	184	150	343	414	184
21.....	650	451	360	140	208	208	140	196	150	277	360	184
22.....	650	451	309	119	196	208	196	221	172	259	491	172
23.....	645	451	309	150	436	221	262	172	184	432	565	160
24.....	600	432	293	140	527	208	326	150	262	432	508	140
25.....	550	414	260	217	484	196	309	129	221	396	565	129
26.....	500	378	240	221	451	196	248	129	196	343	645	129
27.....	460	360	234	172	414	196	221	129	172	309	735	129
28.....	414	326	221	161	378	184	372	140	161	378	690	129
29.....	378	309	277	109	312	172	414	129	184	378	645	119
30.....	309	277	277	129	-----	290	396	109	234	360	645	119
31.....	262	-----	293	150	-----	360	-----	119	-----	343	605	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	700	68	285	2.64	3.04
November.....	565	208	409	3.79	4.23
December.....	532	221	366	3.39	3.91
January.....	221	119	170	1.57	1.81
February.....	527	119	314	2.91	3.14
March.....	360	150	212	1.96	2.26
April.....	414	140	232	2.15	2.40
May.....	378	109	182	1.69	1.95
June.....	343	91	177	1.64	1.83
July.....	527	140	329	3.05	3.52
August.....	735	161	409	3.79	4.37
September.....	527	119	246	2.28	2.54
The year.....	735	68	278	2.57	35.00

BEAVER BROOK NEAR BELVIDERE, N. J.

LOCATION.—Water-stage recorder 500 feet above mouth of brook and 2 miles east of Belvidere, Warren County.

DRAINAGE AREA.—36 square miles.

RECORDS AVAILABLE.—May, 1922, to September, 1928.

EXTREMES.—Maximum discharge during year, 826 second-feet July 15 (gage height, 3.92 feet); minimum, 14 second-feet October 2 (gage height, 1.57 feet). 1922-1928: Maximum discharge, that of July 15, 1928; minimum, 3.1 second-feet September 4, 5, and October 18, 1923 (gage height, 1.21 feet).

REMARKS.—Records good. Discharge January 2, 3, 21, 22, 26-31 and February 1-3 estimated because of ice.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	18	65	65	98	48	97	112	134	33	65	134	204
2.....	15	60	64	70	46	86	102	115	31	59	130	174
3.....	17	128	128	80	44	76	98	100	27	55	110	160
4.....	43	298	112	55	42	66	89	89	28	49	93	132
5.....	36	298	106	46	55	64	82	81	66	89	112	121
6.....	26	250	112	45	57	57	75	80	108	130	169	110
7.....	23	214	106	46	47	54	72	74	95	132	177	108
8.....	21	174	201	50	93	53	75	68	74	102	141	95
9.....	22	149	344	57	119	52	68	62	70	84	121	82
10.....	23	130	254	56	100	48	62	59	106	81	102	75
11.....	20	115	195	53	82	49	60	56	82	86	89	68
12.....	18	102	201	53	72	60	68	54	72	89	82	62
13.....	78	86	218	52	62	78	68	49	66	108	74	60
14.....	74	75	269	50	82	76	65	46	64	367	65	61
15.....	49	69	221	48	183	72	74	43	69	740	54	57
16.....	41	69	198	46	149	65	62	42	55	512	49	54
17.....	39	102	201	43	108	60	57	39	48	319	115	50
18.....	104	214	171	44	97	64	55	50	45	235	304	48
19.....	284	228	137	47	72	64	52	60	54	177	277	47
20.....	481	183	123	80	72	61	48	60	68	141	198	53
21.....	368	146	115	60	59	62	46	55	55	115	149	50
22.....	273	125	110	50	60	62	68	54	65	125	190	46
23.....	211	115	100	44	152	62	88	49	65	451	269	42
24.....	171	110	89	44	298	60	102	45	84	395	246	39
25.....	141	121	75	98	198	60	93	40	84	258	214	36
26.....	121	100	69	60	144	62	84	37	78	192	319	36
27.....	102	95	64	50	123	61	80	39	70	163	512	34
28.....	89	89	61	44	106	57	137	41	60	224	604	33
29.....	82	84	74	40	98	57	160	37	72	242	452	31
30.....	75	78	89	44	-----	97	146	34	88	192	344	32
31.....	69	-----	88	55	-----	132	-----	39	-----	154	258	-----

	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	481	15	101	2.81	3.24
November.....	298	60	136	3.78	4.22
December.....	344	61	141	3.92	4.52
January.....	98	40	55.1	1.53	1.76
February.....	298	42	98.9	2.75	2.97
March.....	132	48	66.9	1.86	2.14
April.....	160	46	81.6	2.27	2.53
May.....	134	34	59.1	1.64	1.89
June.....	108	27	66.1	1.84	2.05
July.....	740	49	198	5.50	6.34
August.....	604	49	198	5.50	6.34
September.....	204	31	73.3	2.04	2.28
The year.....	740	15	106	2.94	40.28

MUSCONETCONG RIVER AT OUTLET OF LAKE HOPATCONG, N. J.

LOCATION.—Water-stage recorder at highway bridge 300 feet downstream from dam at outlet of Lake Hopatcong Landing, Morris County.

DRAINAGE AREA.—255 square miles.

RECORDS AVAILABLE.—July to September, 1928.

EXTREMES.—Maximum discharge during period, 344 second-feet August 27 (gage height, 2.61 feet); minimum, 14.2 second-feet July 3 (gage height, 0.67 foot).

REMARKS.—Records good. Flow regulated by storage in Lake Hopatcong. Station built and maintained by Morris Canal & Banking Co.

Daily and monthly discharge, in second-feet, 1928

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1.....	97	110	148	11.....	127	67	44	21.....	52	118	44
2.....	66	127	89	12.....	118	74	44	22.....	31	118	40
3.....	14.2	127	105	13.....	118	67	44	23.....	84	118	31
4.....	15.1	89	101	14.....	137	67	44	24.....	94	118	31
5.....	21	127	67	15.....	157	67	43	25.....	90	163	30
6.....	60	144	59	16.....	147	45	43	26.....	56	282	30
7.....	66	138	45	17.....	120	60	43	27.....	43	344	29
8.....	70	81	45	18.....	52	112	43	28.....	104	316	29
9.....	88	67	44	19.....	23	118	44	29.....	178	302	29
10.....	137	67	44	20.....	38	118	44	30.....	167	302	29
								31.....	147	209	-----

Month	Observed			Corrected for storage		
	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
July.....	178	14.2	87.7	87.7	3.51	4.05
August.....	344	45	137	126	5.04	5.81
September.....	148	29	50.1	24.1	.96	1.07

MUSCONETCONG RIVER NEAR HACKETTSTOWN, N. J.

LOCATION.—Water-stage recorder 500 feet above Delaware, Lackawanna & Western Railroad bridge, and 3 miles above Hackettstown, Warren County.

DRAINAGE AREA.—70 square miles.

RECORDS AVAILABLE.—September, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, about 840 second-feet November 4 (gage height, 4.94 feet); minimum, 12 second-feet December 23 (gage height, 1.28 feet).

1921-1928: Maximum discharge, about 1,080 second-feet February 12, 1925 (gage height, 5.12 feet); minimum, about 2 second-feet July 8, 1927 (gage height, 1.02 feet).

REMARKS.—Records good. Flow regulated by storage at Lake Hopatcong. Discharge estimated January 2-5, 27-31, and February 1-3, because of ice.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	61	182	490	214	70	248	236	373	54	236	283	360
2.....	60	162	480	120	70	225	236	346	52	214	271	308
3.....	70	368	550	80	75	182	192	260	51	152	248	283
4.....	125	840	520	75	108	162	182	214	49	100	248	295
5.....	116	775	520	75	152	152	182	162	116	152	295	248
6.....	93	675	520	78	172	143	152	172	271	346	401	203
7.....	79	640	351	75	152	100	152	162	283	320	401	203
8.....	79	580	343	78	260	100	134	125	214	271	320	172
9.....	79	550	430	78	346	108	134	93	162	225	236	152
10.....	79	520	346	78	295	116	125	93	225	236	203	143
11.....	74	490	320	78	260	108	108	100	225	260	182	134
12.....	79	460	300	79	236	116	116	100	214	260	203	134
13.....	172	401	283	79	225	162	125	93	162	236	203	136
14.....	182	248	308	79	236	192	125	79	108	354	172	172
15.....	152	172	295	79	490	182	143	65	86	460	162	134
16.....	143	162	283	75	401	162	143	59	74	387	143	116
17.....	143	172	295	72	333	152	134	60	67	346	182	108
18.....	210	508	283	72	320	143	116	71	93	248	373	100
19.....	481	610	290	76	308	143	93	125	86	182	320	108
20.....	610	580	271	108	295	143	86	172	93	134	271	134
21.....	580	550	225	85	283	134	79	172	125	134	236	125
22.....	520	520	214	76	260	125	116	152	182	152	254	116
23.....	490	490	106	66	308	125	192	152	192	248	490	100
24.....	448	490	225	65	430	116	283	134	214	236	430	86
25.....	460	490	248	152	387	125	295	93	182	214	430	79
26.....	430	460	236	134	320	125	283	79	125	192	550	79
27.....	281	490	156	90	295	134	271	79	125	172	610	79
28.....	182	490	134	80	271	125	401	100	143	395	675	75
29.....	172	490	172	75	260	125	430	108	134	460	610	79
30.....	295	490	192	80	-----	225	387	79	225	401	580	78
31.....	214	-----	192	75	-----	271	-----	69	-----	346	490	-----

Month	Observed			Corrected for storage		
	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October.....	610	60	231	246	3.51	4.05
November.....	840	162	468	430	6.14	6.85
December.....	550	106	309	302	4.31	4.97
January.....	214	65	88.0	113	1.61	1.86
February.....	490	70	263	251	3.59	3.87
March.....	271	100	151	159	2.27	2.62
April.....	430	79	188	214	3.06	3.41
May.....	373	59	134	129	1.84	2.12
June.....	283	49	144	151	2.16	2.41
July.....	460	100	260	260	3.71	4.28
August.....	675	143	341	330	4.71	5.43
September.....	360	75	151	125	1.79	2.00
The year.....	840	49	227	226	3.23	43.87

MUSCONETCONG RIVER NEAR BLOOMSBURY, N. J.

LOCATION.—Water-stage recorder at highway bridge 1½ miles above Bloomsbury, Hunterdon County, and 9 miles above mouth.

DRAINAGE AREA.—143 square miles.

RECORDS AVAILABLE. July, 1903, to March, 1907; and from July, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, about 1,500 second-feet February 23 (gage height, 4.80 feet); minimum, 73 second-feet October 7 (gage height, 1.08 feet).

1903–1907, 1921–1928: Maximum stage, 8.0 feet (old datum) on October 10 or 11, 1903 (discharge not determined); minimum discharge, 21 second-feet November 19, 1921.

REMARKS.—Records good. Flow regulated by several small water-power plants above station and by operation of sluice gates at Lake Hopatcong. Discharge estimated January 3, 4, 22, and 23, because of ice.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	117	302	610	443	205	433	400	604	173	397	520	651
2	123	269	687	311	196	410	380	563	163	361	468	554
3	123	667	754	200	186	359	358	498	187	319	449	547
4	252	1, 150	704	245	218	329	326	410	172	247	403	504
5	224	1, 160	689	241	353	319	320	376	228	383	510	462
6	182	1, 000	695	246	303	296	306	329	481	717	656	435
7	155	887	592	233	297	259	272	326	436	581	635	432
8	150	823	873	236	1, 060	244	288	301	385	471	528	378
9	158	769	798	252	625	245	260	271	316	413	437	348
10	163	724	657	237	506	259	252	252	345	393	379	326
11	151	682	618	230	444	248	236	256	347	458	344	307
12	147	661	633	233	408	309	271	260	323	505	340	294
13	501	633	591	232	376	373	261	247	302	444	351	314
14	374	509	658	226	569	385	272	236	281	1, 040	318	352
15	288	363	575	220	1, 080	367	282	219	281	886	292	361
16	239	333	598	215	665	328	281	204	198	715	276	271
17	230	429	589	210	557	305	264	198	179	642	518	260
18	699	906	524	210	519	313	249	235	188	540	618	250
19	1, 120	950	475	228	479	305	220	262	231	439	525	268
20	1, 140	861	529	285	463	296	202	345	224	369	448	315
21	996	796	448	211	419	287	198	349	237	334	396	285
22	813	754	429	195	404	276	288	387	316	341	732	258
23	747	716	372	190	1, 060	273	384	307	322	584	795	246
24	680	690	358	194	786	260	526	284	408	454	679	234
25	636	693	421	411	663	266	492	255	348	399	835	216
26	618	654	414	306	526	275	453	218	291	378	915	214
27	546	662	374	264	479	266	443	256	270	375	1, 000	211
28	381	690	301	221	456	252	712	254	261	921	1, 050	203
29	334	667	377	205	437	246	712	247	315	765	960	206
30	347	638	408	227	-----	408	643	223	360	660	915	211
31	364	-----	404	218	-----	440	-----	209	-----	580	795	-----

Month	Observed			Corrected for storage		
	Maximum	Minimum	Mean	Mean	Per square mile	Run-off in inches
October	1, 140	117	419	435	3.04	3.50
November	1, 180	269	701	663	4.64	5.18
December	1, 873	301	553	546	3.82	4.40
January	443	190	246	271	1.90	2.19
February	1, 080	186	508	497	3.48	3.75
March	440	244	311	319	2.23	2.57
April	712	198	352	377	2.64	2.94
May	604	198	303	298	2.08	2.40
June	481	167	284	291	2.03	2.26
July	1, 040	247	520	520	3.64	4.20
August	1, 050	276	583	572	4.00	4.61
September	651	203	328	292	2.04	2.28
The year	1, 160	117	425	424	2.97	40.28

ASSUNPINK CREEK AT TRENTON, N. J.

LOCATION.—Water-stage recorder at Chambers Street Bridge in Trenton, Mercer County, $1\frac{1}{2}$ miles above mouth.

DRAINAGE AREA.—89 square miles.

RECORDS AVAILABLE.—July, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,560 second-feet October 19 (gage height, 6.90 feet); minimum, 11 second-feet October 1 and 2 (gage height, 1.89 feet).

1923-1928: Maximum discharge, 2,400 second-feet April 7, 1924 (gage height, 7.84 feet); minimum, 2 second-feet June 30, 1927 (gage height, 1.69 feet).

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	95	147	192	79	156	185	226	66	118	164	76
2	21	94	216	129	76	142	153	203	50	172	105	69
3	54	181	292	114	71	133	129	168	49	115	81	80
4	147	290	252	93	79	123	102	136	64	76	59	90
5	93	231	672	82	158	118	93	120	75	103	56	92
6	75	206	718	71	172	102	86	108	262	339	80	96
7	70	186	561	69	156	100	79	105	210	323	77	179
8	58	163	780	76	574	98	86	92	190	251	128	153
9	103	159	520	86	535	102	76	105	166	201	111	169
10	140	147	344	89	419	122	77	116	155	160	86	141
11	99	134	280	91	290	148	71	109	113	114	72	114
12	99	125	266	97	227	211	123	116	98	92	86	90
13	239	110	245	102	182	222	150	103	89	241	88	78
14	239	108	284	98	176	203	147	94	85	373	88	78
15	236	105	244	106	391	178	172	82	107	410	63	39
16	190	106	256	104	390	151	133	75	110	270	59	50
17	190	119	286	98	307	137	102	71	140	200	107	76
18	681	247	238	95	291	183	89	74	106	145	174	56
19	1,380	198	203	100	253	174	78	131	94	118	162	66
20	1,150	202	179	164	234	172	73	154	88	86	155	76
21	710	204	167	106	202	166	66	156	75	70	117	190
22	445	185	151	87	161	141	131	116	103	80	118	171
23	305	153	135	90	471	123	315	89	110	94	125	155
24	246	128	124	87	415	105	725	78	155	91	100	135
25	211	128	97	196	311	100	458	69	154	92	86	106
26	182	110	95	133	226	102	285	64	129	86	107	85
27	152	106	92	123	191	94	218	70	117	104	93	86
28	109	159	89	114	164	83	429	81	93	280	92	63
29	106	181	97	93	141	81	425	81	87	213	72	60
30	109	170	134	92	197	350	76	105	216	83	83	84
31	105	144	82	207	76	196	76	196	94	196	94	196

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,380	16	257	2.89	3.33
November	290	94	158	1.78	1.97
December	780	89	268	3.01	3.47
January	196	69	105	1.18	1.31
February	574	71	253	2.84	3.06
March	222	81	141	1.58	1.82
April	725	66	187	2.10	2.34
May	226	64	108	1.21	1.49
June	262	49	115	1.29	1.44
July	410	70	175	1.97	2.27
August	174	56	99.6	1.12	1.29
September	190	39	100	1.12	1.25
The year	1,380	16	164	1.84	25.02

NORTH BRANCH OF RANOCAS CREEK AT PEMBERTON, N. J.

LOCATION.—Water-stage recorder near highway bridge at Pemberton, Burlington County, 11 miles above confluence with South Branch.

DRAINAGE AREA.—111 square miles.

RECORDS AVAILABLE.—September, 1921, to September, 1928.

REMARKS.—Records fair. Discharge estimated October 22–24 and September 25.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.		
1	84	192	172	202	202	271	192	410	163	259	112	163		
2	70	192	202	182	202	192	182	380	154	247	105	163		
3	74	235	247	172	192	271	172	365	120	323	112	163		
4	98	235	247	163	182	224	163	284	128	310	105	154		
5	136	235	485	154	259	202	163	213	136	224	128	145		
6	91	259	485	154	284	182	154	271	213	610	120	271		
7	80	247	440	154	271	192	154	247	310	455	128	395		
8	88	224	570	163	455	172	154	310	310	271	120	380		
9	202	224	515	154	485	235	172	284	192	284	112	284		
10	365	213	425	163	590	213	154	259	297	271	91	235		
11	365	163	336	154	500	284	163	310	365	247	105	192		
12	284	192	395	154	365	284	224	323	425	247	172	213		
13	336	192	380	154	350	297	213	365	336	247	224	98		
14	365	120	380	154	323	271	213	323	259	271	154	102		
15	395	145	380	145	485	271	202	235	259	336	120	112		
16	350	145	350	154	455	259	182	172	224	323	105	128		
17	365	136	284	136	500	213	172	213	259	271	145	102		
18	610	297	259	145	310	259	172	284	247	213	182	102		
19	1, 130	297	271	154	365	310	182	213	284	182	213	192		
20	1, 310	310	259	163	395	310	172	224	172	172	154	395		
21	1, 110	259	235	154	365	259	192	213	154	213	136	500		
22	650	259	224	163	247	235	213	192	247	202	120	365		
23	360	213	213	120	410	235	336	172	395	192	105	259		
24	500	202	202	136	500	213	590	163	570	172	105	235		
25	570	192	192	224	410	213	570	136	271	154	105	235		
26	247	154	182	213	440	192	470	145	323	145	136	235		
27	172	154	163	213	336	192	365	172	202	128	145	182		
28	247	172	163	172	284	172	515	271	182	112	284	120		
29	284	182	182	163	259	154	650	284	224	145	284	145		
30	192	172	192	202		172	650	213	235	128	192	259		
31	192		192	202		202		163		120	192			
Month					Maximum		Minimum		Mean		Per square mile		Run-off in inches	
October					1, 310		70		365		3. 29		3. 79	
November					310		120		207		1. 86		2. 08	
December					570		163		297		2. 68		3. 09	
January					224		120		166		1. 50		1. 73	
February					590		182		359		3. 23		3. 48	
March					310		154		231		2. 08		2. 40	
April					650		154		270		2. 43		2. 71	
May					410		136		252		2. 27		2. 62	
June					570		120		255		2. 30		2. 57	
July					610		112		241		2. 17		2. 50	
August					284		91		146		1. 32		1. 52	
September					500		98		217		1. 95		2. 18	
The year					1, 310		70		250		2. 25		30. 67	

SUSQUEHANNA RIVER BASIN

SUSQUEHANNA RIVER AT COLLIERSVILLE, N. Y.

LOCATION.—Water-stage recorder half a mile north of Colliersville, Otsego County, and $1\frac{1}{4}$ miles above mouth of Schenevus Creek.

DRAINAGE AREA.—353 square miles.

RECORDS AVAILABLE.—July, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, 3,460 second-feet March 27 (gage height, 5.8 feet); minimum, 19 second-feet July 15 (gage height, 1.27 feet).

1924-1928: Maximum discharge, 4,580 second-feet March 15, 1927 (gage height, 6.6 feet); minimum, about 8 second-feet August 21, 1926 (gage height, 1.09 feet).

REMARKS.—Records good. Flow regulated by storage above station. Discharge estimated January 30 to February 3.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	135	590	2,440	2,130	650	512	1,550	2,100	488	1,450	297	152
2	176	553	2,280	1,980	390	543	1,540	1,960	653	777	254	42
3	153	899	2,050	1,200	480	469	1,490	1,670	415	659	308	104
4	442	2,050	1,720	1,170	449	417	1,510	1,460	581	572	411	289
5	256	2,400	1,880	1,030	607	437	1,740	1,390	514	675	289	257
6	231	1,840	1,590	1,010	640	367	1,820	1,420	1,190	422	386	266
7	222	1,650	1,560	1,020	469	389	1,790	1,450	1,410	400	579	140
8	276	1,400	2,430	1,090	581	410	1,710	1,280	1,440	296	450	66
9	126	1,290	2,990	1,110	1,070	364	1,880	870	1,100	359	394	56
10	208	1,170	2,010	1,060	940	336	1,550	1,040	1,300	301	388	85
11	186	1,280	1,770	878	614	285	1,430	722	1,100	279	435	117
12	119	1,680	2,020	843	586	442	1,310	722	1,000	229	92	163
13	882	1,280	2,070	837	519	582	1,270	508	836	239	398	150
14	635	1,460	2,530	1,120	601	1,840	1,200	544	687	896	271	165
15	398	1,090	2,420	1,030	1,210	1,710	1,140	393	609	336	229	105
16	263	1,040	2,020	914	1,170	793	1,250	377	629	292	141	30
17	410	1,130	1,920	820	743	730	999	351	629	239	216	248
18	1,070	1,630	1,610	730	705	692	1,060	614	659	187	136	230
19	1,370	1,690	1,510	820	578	662	779	404	659	120	53	200
20	2,090	1,280	1,370	666	525	613	839	723	588	505	210	157
21	2,140	1,410	1,340	527	447	598	681	612	373	345	274	191
22	1,690	1,220	1,300	516	457	595	890	536	472	459	242	162
23	1,210	1,200	1,150	589	698	536	1,290	808	420	1,910	187	32
24	1,030	1,280	860	643	1,430	857	1,610	666	374	848	202	142
25	858	1,750	753	823	953	2,350	1,630	570	389	700	154	244
26	722	1,640	856	931	665	3,130	1,560	521	680	233	47	136
27	624	1,720	772	601	593	3,120	1,420	436	625	882	190	167
28	624	2,400	669	645	606	2,650	1,400	539	631	564	219	110
29	611	2,370	1,020	584	604	1,970	1,480	865	499	343	265	110
30	555	2,380	1,450	590	-----	1,890	1,620	602	499	360	182	26
31	629	-----	1,610	620	-----	1,720	-----	721	1,620	317	181	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,140	119	656	1.86	2.14
November	2,400	553	1,490	4.22	4.71
December	2,990	669	1,680	4.76	5.49
January	2,130	516	920	2.61	3.01
February	1,430	390	689	1.95	2.10
March	3,130	285	1,030	2.92	3.37
April	1,880	681	1,380	3.91	4.36
May	2,100	351	867	2.46	2.84
June	1,620	243	726	2.06	2.30
July	1,910	120	522	1.48	1.71
August	579	47	261	.739	.85
September	289	26	145	.411	.46
The year	3,130	26	864	2.45	33.34

SUSQUEHANNA RIVER BASIN

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SUSQUEHANNA RIVER AT CONKLIN, N. Y.

LOCATION.—Water-stage recorder at highway bridge just below Conklin, Broome County, and 3½ miles below Pennsylvania State line.

DRAINAGE AREA.—2,350 square miles.

RECORDS AVAILABLE.—November, 1912, to September, 1928.

EXTREMES.—Maximum discharge during year, 43,500 second-feet October 19 (gage height, 16.9 feet); minimum, 480 second-feet September 27 and 28 (gage height, 2.39 feet).

1912-1928: Maximum discharge, 52,000 second-feet March 28, 1913 (gage height, 18.3 feet); minimum, 106 second-feet September 16, 1913 (gage height, 1.32 feet).

REMARKS.—Records good except those for periods of ice effect, December 26-29, January 6-8, and January 28 to February 5, which are fair. Discharge estimated because of faulty or missing record February 26 to April 7, April 12-16, 23-30, May 1, 2, 20, 21, 23, June 5, 6, 10, 11, and 30.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	646	2,600	14,100	12,100	1,900			18,000	2,530	17,000	2,460	1,240
2	620	2,390	12,700	12,100	1,900			14,200	2,250	10,000	2,820	1,180
3	518	2,460	11,900	8,740	1,800			10,500	2,250	6,370	2,680	1,040
4	1,480	7,920	10,000	6,810	1,860		8,500	7,980	2,120	4,690	2,320	1,000
5	1,870	15,300	8,220	5,090	2,600			6,590	6,040	4,020	2,820	1,020
6		2,320	12,700	7,740	4,600	3,390		6,150	17,100	4,890	2,820	1,120
7		1,570	9,480	7,270	4,400	2,980		6,370	11,300	3,560	3,650	1,030
8		1,330	7,500	16,000	5,000	3,060	9,870	5,510	7,980	2,680	5,510	966
9		1,160	6,370	21,100	5,720	5,330	9,740	4,490	6,590	2,180	5,090	866
10		1,140	5,720	15,600	5,720	6,370	7,740	3,830	12,700	1,980	4,200	772
11		1,010	5,930	9,480	4,990	5,200	6,260	3,480	8,480	1,980	4,400	686
12		1,030	8,220	8,960	4,300	3,830	6,100	3,060	5,930	1,860	3,830	632
13		5,410	7,980	11,000	3,830	3,140	6,150	2,680	4,590	1,680	2,820	639
14		5,510	6,370	16,900	4,020	3,430	6,020	2,390	3,830	2,840	2,250	626
15		4,490	5,720	18,000	4,690	8,960	7,040	1,980	3,650	4,200	2,050	576
16		2,980	4,890	13,500	4,400	10,300	6,070	1,980	3,480	3,270	1,740	570
17		2,820	6,730	13,000	3,740	6,810	5,510	1,680	2,820	1,860	1,520	588
18		9,760	18,000	10,800	3,300	4,690	4,590	1,680	2,460	1,620	1,400	588
19		36,500	18,000	7,740	3,140	3,390	4,110	2,050	3,920	1,400	1,400	576
20		34,500	12,400	7,040	3,140	2,980	3,650	5,020	5,930	1,220	1,280	576
21		26,300	8,700	6,590	2,530	2,680	3,300	6,150	4,890	1,230	1,100	613
22		17,600	7,270	6,150	1,800	2,320	4,860	4,590	4,990	2,180	1,250	626
23		12,100	6,590	5,510	2,120	3,350		6,150	5,510	4,650	1,330	600
24		8,460	6,590	4,790	2,600	10,400		4,990	4,790	11,900	1,280	588
25		6,590	10,000	3,830	4,300	10,500		3,920	4,200	6,390	1,170	576
26		5,300	10,000	3,400	5,200	7,040		3,140	4,790	3,920	1,180	524
27		4,400	10,800	3,200	3,920	3,920	11,500	2,680	6,810	3,140	1,340	496
28		3,830	16,600	3,000	3,000	2,600		2,390	5,930	4,740	1,280	518
29		3,390	19,000	3,600	2,400	2,050		2,390	5,740	5,720	1,200	576
30		2,980	16,200	7,890	2,200			2,680	16,000	3,740	1,100	570
31		2,680		10,000	2,000			2,600		2,900	1,240	

Month	Maximum	Minimum	Mean	Per square miles	Run-off in inches
October	36,500	518	6,780	2.89	3.33
November	19,000	2,390	9,280	3.95	4.41
December	21,100	3,000	9,650	4.11	4.74
January	12,100	1,800	4,580	1.95	2.25
February	10,500	1,800	4,440	1.89	2.04
March			7,100	3.02	3.48
April		3,300	8,080	3.44	3.84
May	18,000	1,680	4,880	2.08	2.40
June	17,100	2,120	5,990	2.55	2.84
July	17,000	1,220	4,190	1.78	2.05
August	5,510	1,100	2,280	.970	1.12
September	1,240	496	733	.312	.35
The year	36,500	496	5,670	2.41	32.85

SUSQUEHANNA RIVER AT HARRISBURG, PA.

LOCATION.—Chain gage at Walnut Street Bridge, Harrisburg, Dauphin County.
DRAINAGE AREA.—24,100 square miles.

RECORDS AVAILABLE.—January, 1891, to September, 1928. All records prior to October 1, 1923, have been revised in connection with the power project at Conowingo, Md. A complete set of the revised records is on file at the United States Geological Survey, Washington, D. C., and also at the Department of Forests and Waters, Water Resources Service, Harrisburg, Pa.

EXTREMES.—Maximum discharge during year, 252,400 second-feet May 2 (gage height, 14.65 feet); minimum, 4,190 second-feet October 3 (gage height, 3.21 feet).

1891-1928: Maximum discharge, about 613,000 second-feet May 22, 1894 (gage height, 25.7 feet); minimum, about 2,300 second-feet, including about 360 second-feet in Pennsylvania Canal September 28 and 29, 1900 (gage height, -0.04 foot).

REMARKS.—Records good. Discharge estimated January 2-6, 20-31, and February 1-15 because of ice. Records furnished by Pennsylvania State Department of Forests and Waters.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	4,280	22,500	132,600	29,300	18,000	33,000	139,200	200,200	20,900	156,800	22,500	10,200
2-----	4,280	20,900	117,200	28,000	16,000	33,000	112,900	246,700	20,900	132,600	20,900	10,900
3-----	4,190	20,200	126,000	28,000	15,000	31,100	86,400	197,600	20,200	84,200	20,200	10,900
4-----	7,800	22,500	112,800	28,000	17,000	27,500	71,000	141,400	19,400	75,400	20,200	10,900
5-----	10,900	53,500	86,400	28,000	20,000	24,100	62,200	104,000	20,200	62,200	20,900	10,900
6-----	14,300	84,200	73,200	30,000	26,000	20,900	62,200	84,200	34,900	99,600	17,200	10,900
7-----	10,900	79,800	64,400	29,300	30,000	20,200	62,200	68,800	150,200	132,600	17,900	9,600
8-----	9,600	68,800	66,600	29,300	34,000	20,200	68,800	57,800	161,300	88,600	18,600	8,400
9-----	9,600	55,600	128,200	29,300	40,000	19,400	104,000	49,300	110,600	68,800	24,100	8,400
10-----	9,600	47,200	141,400	31,100	46,000	17,900	117,200	45,100	86,400	51,400	25,800	7,800
11-----	9,600	40,900	115,000	31,100	44,000	17,900	97,400	40,900	84,200	49,300	24,100	7,800
12-----	9,000	36,900	90,800	29,300	40,000	17,200	79,800	36,900	84,200	49,300	24,100	7,200
13-----	20,900	34,900	77,600	29,300	40,000	17,900	75,400	33,000	68,800	53,500	22,500	7,200
14-----	36,900	38,900	82,000	27,500	38,000	27,500	73,200	29,300	68,800	53,500	20,900	7,080
15-----	34,900	40,900	121,600	25,800	40,000	47,200	84,200	25,800	43,000	68,800	19,400	6,480
16-----	31,100	26,900	150,200	25,800	88,600	75,400	90,800	24,100	36,900	62,200	17,200	6,120
17-----	31,100	34,900	148,000	25,800	101,800	75,400	82,000	22,500	31,100	45,100	15,000	5,900
18-----	34,900	73,800	154,600	25,800	88,600	64,400	73,200	20,900	29,300	36,900	13,600	5,600
19-----	71,000	130,400	130,400	24,100	64,400	51,400	62,200	20,900	25,800	31,100	12,900	5,500
20-----	192,500	187,000	97,400	22,000	51,400	43,000	53,500	27,500	25,800	29,300	11,600	5,600
21-----	246,700	101,800	75,400	20,000	43,000	36,900	47,200	29,300	29,300	29,300	10,900	6,360
22-----	208,000	77,600	62,200	19,000	33,000	36,900	45,100	36,900	36,900	27,500	10,900	6,960
23-----	139,200	62,200	55,600	19,000	34,900	40,900	55,600	47,200	49,300	33,000	10,900	6,720
24-----	93,000	53,500	47,200	20,000	40,900	53,500	104,000	43,000	55,600	36,900	11,600	6,480
25-----	68,800	49,300	40,900	22,000	57,800	62,200	139,200	38,900	55,600	29,300	12,200	6,000
26-----	53,500	47,200	36,900	26,000	68,800	93,000	132,600	36,900	60,000	29,300	12,900	5,800
27-----	43,000	64,400	33,000	30,000	55,600	128,200	108,400	31,100	75,400	34,900	12,900	5,600
28-----	36,900	66,600	29,300	30,000	47,200	139,200	112,800	27,500	84,200	31,100	12,200	5,500
29-----	31,100	97,400	27,500	28,000	38,900	134,800	150,200	24,100	84,200	27,500	10,900	5,500
30-----	29,300	137,000	27,500	24,000	-----	112,800	168,200	22,500	117,200	27,500	10,900	5,500
31-----	25,800	-----	29,300	20,000	-----	134,800	-----	20,900	-----	22,500	10,900	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October-----	246,700	4,190	49,400	2.05	2.36
November-----	137,000	20,200	61,500	2.55	2.84
December-----	154,600	27,500	86,500	3.59	4.14
January-----	31,100	19,000	26,300	1.09	1.26
February-----	101,800	15,000	44,100	1.83	1.97
March-----	139,200	17,200	53,500	2.22	2.56
April-----	168,200	45,100	90,700	3.76	4.20
May-----	246,700	20,900	59,200	2.46	2.84
June-----	161,300	19,400	59,200	2.46	2.74
July-----	156,800	22,500	56,800	2.36	2.72
August-----	25,800	10,900	16,700	.693	.80
September-----	10,900	5,500	7,460	.310	.35
The year-----	246,700	4,190	50,900	2.11	28.78

UNADILLA RIVER NEAR NEW BERLIN, N. Y.

LOCATION.—Staff gage a quarter of a mile below mouth of Shawler Brook and 1½ miles north of New Berlin, Chenango County.

DRAINAGE AREA.—192 square miles.

RECORDS AVAILABLE.—July, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, 3,000 second-feet March 25 (gage height, 7.0 feet); minimum, 19 second-feet October 1 (gage height, 1.19 feet).

1924-1928: Maximum discharge, 4,030 second-feet March 14, 1927 (gage height, 7.8 feet); minimum, 18 second-feet September 1, 1924.

REMARKS.—Records good, except for periods of ice effect, December 20-28, January 3-7, 22, 23, 27-31, February 1-4, 18-22, 26-29, and March 1-11, and of aquatic growth, July 6 to September 30, which are fair.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	218	1,600	1,670	200	220	535	1,300	144	368	90	46
2	44	207	1,300	815	200	200	570	950	142	255	90	50
3	38	314	1,050	600	190	190	650	770	129	184	170	48
4	196	1,050	860	500	190	190	815	610	122	162	130	50
5	218	950	815	440	338	180	1,050	535	309	140	90	42
6	136	770	770	440	353	170	1,050	535	500	150	180	60
7	118	650	717	440	242	160	905	465	416	120	180	55
8	110	570	2,110	535	432	150	1,000	384	309	95	280	60
9	106	535	1,670	570	815	140	770	338	255	90	220	50
10	92	500	770	535	650	140	570	282	338	90	180	44
11	100	860	860	432	465	140	465	282	255	85	180	42
12	90	1,000	950	416	368	149	465	230	196	75	140	46
13	512	730	1,150	432	324	390	432	218	173	65	110	28
14	432	570	1,540	535	282	1,680	432	207	184	95	95	22
15	268	535	1,200	535	1,200	1,480	610	184	184	48	75	22
16	196	465	1,000	416	860	663	465	173	147	70	50	26
17	207	1,010	905	368	535	500	384	160	136	60	48	26
18	450	2,480	730	368	380	384	338	207	127	48	48	42
19	1,350	1,600	570	353	260	338	324	242	184	48	46	40
20	1,780	1,050	480	353	220	324	309	338	127	100	36	32
21	1,200	815	400	196	200	309	242	282	131	100	60	28
22	1,000	770	360	200	260	282	399	242	173	200	90	30
23	730	815	320	220	416	255	770	184	184	420	80	70
24	570	1,100	280	255	1,150	718	1,000	184	173	240	75	42
25	465	1,300	260	465	650	2,330	815	162	207	160	75	30
26	399	1,000	260	570	400	2,730	730	153	309	120	65	32
27	368	1,610	260	480	300	2,770	610	140	242	120	50	55
28	324	1,750	280	340	260	1,640	610	149	184	120	60	48
29	282	1,740	416	260	240	1,000	730	153	242	200	55	44
30	242	1,540	860	240	-----	905	1,050	131	570	200	60	60
31	230	-----	1,100	220	-----	650	-----	140	-----	120	80	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,780	22	396	2.06	2.38
November	2,480	207	950	4.95	5.52
December	2,110	260	834	4.34	5.00
January	1,670	196	458	2.39	2.76
February	1,200	190	427	2.22	2.39
March	2,770	140	686	3.57	4.12
April	1,050	242	636	3.31	3.69
May	1,300	131	333	1.73	1.99
June	570	122	226	1.18	1.32
July	420	48	140	.729	.84
August	280	36	103	.536	.62
September	70	22	42.3	.220	.25
The year	2,770	22	436	2.27	30.88

CHENANGO RIVER NEAR CHENANGO FORKS, N. Y.

LOCATION.—Water-stage recorder $1\frac{1}{2}$ miles below Chenango Forks, Broome County, and confluence with Tioughnioga River, and 12 miles above Binghamton.

DRAINAGE AREA.—1,490 square miles.

RECORDS AVAILABLE.—November, 1912, to September, 1928.

EXTREMES.—Maximum discharge during year, 24,500 second-feet October 19 (gage height, 11.3 feet); minimum, 218 second-feet October 2 and 3 (gage height, 2.47 feet).

1912-1928: Maximum discharge, 35,500 second-feet March 27, 1913 (gage height, 13.7 feet); minimum, 92 second-feet several times in August and September, 1913 (gage height, 2.20 feet).

REMARKS. Records good except those for estimated periods, which are fair. Small amount of water diverted into Mohawk River Basin.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb	Mar.	Apr.	May	June	July	Aug.	Sept.
1	241	1,400		11,400	*1,500	*1,600	4,310	13,800	1,440	6,990	1,200	706
2	230	1,330		*7,000	*1,500	*1,500	4,530	10,100	1,380	4,420	1,410	628
3	241	2,510		*4,800	*1,500	*1,300	4,530	6,720	1,440	3,270	1,200	573
4	718	5,330		*3,800	*1,400	*1,300	5,440	5,210	1,310	2,710	1,080	573
5	1,010	5,800		*3,200	*2,400	*1,200	6,180	4,310	2,280	2,440	1,090	582
6	695	4,530		*3,200	*2,800	*1,200	6,180	4,200	4,090	2,280	1,030	564
7	528	3,780		*3,400	*1,900	*1,100	6,050	3,570	4,420	1,800	1,690	528
8	478	3,270		3,670	*3,400	*1,100	7,220	2,980	3,270	1,640	1,860	494
9	502	2,980		*4,000	*6,500	*1,000	5,680	2,620	2,620	1,340	1,580	470
10	462	2,710		*3,800	*5,000	*950	4,310	2,360	4,860	1,190	1,520	446
11	423	4,030		*3,400	*3,600	*1,000	3,670	2,100	3,080	1,720	1,560	430
12	409	5,560		*3,200	*3,000	1,220	3,670	1,940	2,280	1,450	1,560	416
13	4,400	4,420		*3,200	*2,600	4,330	3,670	1,680	1,830	1,180	1,200	402
14	3,780	3,470		*3,600	*2,400	11,700	3,470	1,540	1,860	1,200	1,050	360
15	2,020	2,980		3,370	8,800	8,850	5,560	1,440	2,190	1,200	970	334
16	1,470	2,710	*6,000	*3,000	4,980	5,210	4,200	1,330	1,670	1,010	910	367
17	1,270	4,760		*3,000	3,780	4,090	3,370	1,250	*1,340	866	833	334
18	3,510	14,500		*3,000	2,800	2,710	2,890	1,290	1,240	788	790	374
19	19,500	9,910		*3,000	*2,000	2,530	2,620	1,860	2,490	698	748	381
20	19,700	5,920		*2,800	*1,800	2,190	2,360	3,550	3,900	686	706	381
21	12,800	4,640		*1,500	*1,700	2,190	2,100	3,080	2,440	1,060	676	360
22	8,180	4,200		*1,600	*1,700	2,100	3,060	2,560	3,180	1,070	833	340
23	6,050	3,980		*1,800	*2,000	2,190	6,770	2,980	3,880	6,760	1,200	334
24	4,530	6,190		2,440	*8,500	2,720	10,400	2,100	2,880	4,180	1,050	321
25	3,570	10,700		3,370	*5,000	15,200	8,800	1,780	4,920	2,300	922	314
26	2,890	7,000		3,470	*2,400	16,600	6,720	1,600	7,880	1,640	899	347
27	2,530	12,500		3,080	*1,900	16,200	5,320	1,470	5,680	1,340	855	347
28	2,190	17,700		2,190	*1,700	12,500	5,210	1,340	4,640	1,750	788	340
29	1,940	14,800		*1,940	*1,600	9,440	6,180	1,310	4,550	1,580	686	328
30	1,700	11,400		*1,700	-----	6,440	8,340	1,310	10,100	1,760	686	334
31	1,520	-----		*1,600	-----	4,750	-----	1,560	-----	1,330	726	-----
Month				Maximum	Minimum	Mean	Per square mile	Run-off in inches				
October				19,700	230	3,530	2.37	2.73				
November				17,700	1,330	6,170	4.14	4.62				
December				-----	-----	6,000	4.03	4.65				
January				11,400	1,500	3,370	2.26	2.61				
February				8,800	1,400	3,110	2.09	2.25				
March				16,600	950	4,730	3.17	3.66				
April				10,400	2,100	5,100	3.42	3.82				
May				13,800	1,250	3,060	2.05	2.36				
June				10,100	1,230	3,310	2.22	2.48				
July				6,990	686	2,060	1.38	1.59				
August				1,860	676	1,070	.718	.83				
September				706	314	424	.285	.32				
The year				19,700	230	3,490	2.34	31.92				

* Estimated because of ice or missing record.

TIOGA RIVER NEAR ERWINS, N. Y.

LOCATION.—Chain gage at highway bridge half a mile below Erwins, Steuben County, and 3 miles above confluence with Cohocton River.

DRAINAGE AREA.—1,320 square miles.

RECORDS AVAILABLE.—July, 1918, to September, 1928.

EXTREMES.—Maximum discharge during year, 39,300 second-feet December 1 (gage height, 15.0 feet); minimum, 57 second-feet October 2 (gage height, 0.78 foot).

1918–1928: Maximum discharge, about 46,700 second-feet, May 22, 1919 (gage height, 16.4 feet); minimum, 31 second-feet August 22, 1923 (gage height, 0.62 foot).

REMARKS.—Records good except those for estimated periods, which are fair.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60	464	21,500	2,850	* 360	850	3,180	14,500	762	2,820	265	155
2	57	619	8,470	850	* 340	720	2,460	7,010	565	1,830	261	149
3	64	7,560	4,680	720	* 320	640	2,680	4,280	496	1,230	243	140
4	82	10,100	3,490	* 700	* 340	565	4,890	3,030	916	985	214	137
5	214	6,880	2,740	* 650	* 600	464	4,150	2,200	5,050	1,770	198	125
6	183	4,340	2,600	* 700	* 750	* 433	3,810	1,830	14,600	4,240	344	120
7	122	2,880	2,460	720	* 650	* 404	4,020	1,600	8,420	1,710	3,650	120
8	105	2,250	9,840	805	* 600	* 375	10,100	1,330	4,570	1,080	* 2,200	112
9	96	1,830	4,140	805	* 1,200	* 375	5,230	1,130	3,920	805	* 1,080	112
10	91	1,830	2,380	805	* 1,000	* 375	3,440	985	5,500	1,100	565	105
11	80	3,810	2,330	720	* 800	* 433	2,740	850	2,740	1,230	496	100
12	89	3,980	2,740	680	* 650	565	2,600	762	1,950	805	464	98
13	854	2,600	3,830	720	565	4,140	3,030	640	1,490	680	375	89
14	899	1,830	13,900	1,180	530	8,650	2,200	602	1,230	985	298	89
15	433	1,490	5,860	985	11,700	4,340	* 3,440	530	1,230	1,080	243	87
16	274	1,380	8,310	1,080	3,180	1,950	2,330	496	895	680	226	78
17	239	10,500	9,460	805	1,950	1,380	2,070	464	805	530	198	82
18	248	25,800	4,100	720	* 1,200	* 1,180	1,830	496	640	433	210	91
19	3,980	6,740	2,460	680	* 950	1,030	1,600	1,080	640	404	198	89
20	13,700	3,650	2,200	* 600	* 750	1,030	1,280	2,760	940	375	256	100
21	5,360	3,030	2,070	* 550	* 700	985	1,180	1,950	940	375	186	105
22	2,740	2,460	1,710	* 600	* 650	1,130	3,160	1,280	2,720	348	736	108
23	1,710	2,200	1,600	* 650	762	2,750	9,880	1,600	1,710	716	640	125
24	1,380	3,590	1,280	* 550	* 5,000	5,810	7,500	1,130	1,790	937	433	131
25	1,080	6,520	895	* 550	2,070	11,300	* 4,180	850	3,080	1,600	322	91
26	805	3,650	* 800	* 500	* 1,600	8,100	3,030	762	2,460	1,090	274	87
27	680	9,460	* 750	* 480	1,230	* 6,030	2,460	640	1,600	905	230	96
28	640	10,900	805	* 460	850	4,870	2,330	602	1,230	1,000	214	96
29	565	9,700	895	* 440	762	3,330	3,140	762	* 2,300	464	194	89
30	530	6,830	1,950	* 400	3,330	16,500	805	3,980	348	381	169	100
31	464	-----	2,740	* 380	-----	3,980	-----	985	-----	298	206	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	13,700	57	1,220	0.924	1.07
November	25,800	464	5,300	4.02	4.48
December	21,500	750	4,240	3.25	3.75
January	2,850	380	753	.570	.66
February	11,700	320	1,450	1.10	1.19
March	11,300	375	2,630	1.99	2.29
April	16,500	1,180	4,010	3.04	3.39
May	14,500	464	1,870	1.42	1.64
June	14,600	496	2,400	2.00	2.23
July	4,240	298	1,060	.803	.93
August	3,650	169	503	.381	.44
September	155	78	107	.081	.09
The year	25,800	57	2,150	1.63	22.16

* Estimated because of ice or missing gage heights.

CHEMUNG RIVER AT CHEMUNG, N. Y.

LOCATION.—Chain-and-reel gage at highway bridge at Chemung, Chemung County, half a mile above State line.

DRAINAGE AREA.—2,440 square miles.

RECORDS AVAILABLE.—September, 1903, to September, 1928.

EXTREMES.—Maximum discharge during year, 45,400 second-feet December 2 (gage height, 14.9 feet); minimum, 124 second-feet October 3 (gage height, 1.58 feet).

1903-1928: Maximum discharge, about 67,000 second-feet March 15, 1918 (gage height, 17.96 feet); minimum, 49 second-feet August 14, 1911 (gage height, 1.47 feet).

REMARKS.—Records good except those for periods of ice effect, December 26, 27, January 4-6, January 26 to February 5, February 27-29, and March 8-11, which are fair.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	132	810	31,200	6,290	800	1,550	5,490	32,900	1,610	6,130	600	420
2.....	136	810	33,800	3,020	800	1,210	4,540	15,500	1,320	3,740	560	420
3.....	124	5,780	13,100	1,670	800	1,100	4,330	9,580	1,160	2,690	525	420
4.....	182	22,900	8,830	1,300	850	1,100	6,720	6,890	1,000	2,070	490	390
5.....	155	14,200	7,150	1,200	1,000	1,050	7,150	5,190	6,260	2,740	455	360
6.....	305	9,130	8,260	1,300	1,940	900	6,380	4,130	21,200	6,540	680	360
7.....	283	6,130	5,980	1,610	1,500	765	5,890	3,370	16,900	3,520	6,230	360
8.....	261	4,540	14,400	1,800	1,610	750	11,500	2,850	8,920	2,220	4,320	360
9.....	231	3,740	10,700	1,930	1,800	700	10,000	2,370	5,920	1,670	1,800	332
10.....	182	3,190	5,190	1,800	2,370	700	7,370	2,070	9,020	1,430	1,430	332
11.....	182	3,710	4,970	1,670	1,610	800	6,610	1,800	5,810	1,930	2,620	305
12.....	178	6,510	4,970	1,610	1,320	950	4,130	1,670	3,740	1,550	1,910	305
13.....	408	4,540	6,060	1,550	1,050	8,240	4,970	1,430	2,850	1,320	1,320	272
14.....	776	3,370	16,900	1,670	1,050	16,500	3,930	1,320	2,370	1,670	1,050	240
15.....	821	2,850	13,500	1,930	19,800	7,850	5,440	1,210	2,220	2,220	855	245
16.....	560	2,530	11,700	2,220	8,010	3,930	4,130	1,100	1,930	1,430	765	240
17.....	455	6,060	21,300	1,550	3,930	2,850	3,370	1,050	1,550	1,100	680	226
18.....	560	41,000	10,400	1,610	3,020	2,370	3,020	1,050	1,380	1,000	680	256
19.....	7,870	16,900	6,130	1,380	2,070	1,670	2,690	1,490	1,320	855	640	250
20.....	25,100	8,830	4,970	1,380	1,550	1,930	2,220	7,580	1,800	810	680	250
21.....	14,900	6,630	4,540	1,160	1,320	1,800	1,930	5,650	1,800	765	600	266
22.....	6,380	5,190	3,930	855	1,210	1,800	4,030	3,400	4,790	765	1,160	272
23.....	3,930	4,540	3,550	1,210	1,550	2,530	15,100	3,020	4,730	810	1,610	305
24.....	2,690	5,010	3,020	1,260	9,840	8,830	14,200	2,370	3,290	1,320	1,100	272
25.....	2,220	11,900	2,220	1,260	5,860	18,500	8,830	1,930	3,850	2,070	855	261
26.....	1,670	7,690	1,900	1,100	2,220	14,600	6,130	1,610	5,190	1,550	720	240
27.....	1,430	11,100	1,700	1,000	1,800	19,700	4,970	1,490	3,870	1,490	640	226
28.....	1,260	21,700	1,800	1,000	1,600	13,700	4,750	1,880	2,850	1,670	600	240
29.....	1,100	19,000	1,930	950	1,500	6,890	5,780	1,430	2,700	1,100	490	221
30.....	950	13,500	2,530	900	-----	5,740	21,600	1,490	6,350	855	490	221
31.....	900	-----	4,670	850	-----	9,310	-----	1,670	-----	640	490	-----

Month	Maximum	Minimum	Mean	Per square mile	Rnn-off in inches
October.....	25,100	124	2,460	1.01	1.16
November.....	41,000	810	9,130	3.74	4.17
December.....	33,800	1,700	8,750	3.59	4.14
January.....	6,290	850	1,610	.660	.76
February.....	19,800	800	2,890	1.18	1.27
March.....	19,700	700	5,170	2.12	2.44
April.....	21,600	1,930	6,570	2.69	3.00
May.....	32,900	1,050	4,190	1.72	1.98
June.....	21,200	1,000	4,590	1.88	2.10
July.....	6,540	640	1,920	.787	.9
August.....	6,230	455	1,200	.492	.57
September.....	420	221	296	.121	.14
The year.....	41,000	124	4,060	1.66	22.6

SUSQUEHANNA RIVER BASIN

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CANACADEA CREEK AT HORNELL, N. Y.

LOCATION.—Staff gage at Seneca Street Bridge in Hornell, Steuben County, half a mile above confluence with Canisteo River.

DRAINAGE AREA.—59 square miles.

RECORDS AVAILABLE.—October, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, 4,610 second-feet November 30 (gage height, 10.2 feet); minimum, 3.0 second-feet September 7 (gage height, 0.98 foot).

1924-1928: Maximum discharge, that of November 30, 1927; minimum, about 2.7 second-feet November 4, 1924 (gage height, 0.98 foot).

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.3	13	579	° 166	° 18	° 20	86	119	18	27	9.6	° 7.3
2	7.3	17	188	° 90	° 17	° 17	62	92	18	24	8.3	° 7.3
3	8.9	154	117	° 60	° 16	° 15	202	79	18	18	6.8	7.3
4	19	174	92	° 48	° 17	° 14	195	71	19	13	7.3	6.8
5	12	151	78	° 40	° 30	° 13	142	54	34	18	21	6.0
6	10	107	62	° 42	° 40	° 12	123	41	° 175	14	27	4.8
7	15	95	64	° 55	° 34	° 12	357	36	° 123	12	50	3.2
8	12	81	209	52	° 32	° 12	494	29	83	11	18	4.1
9	10	64	72	46	° 80	° 12	127	25	81	12	14	4.8
10	8.9	128	58	32	° 60	° 12	90	24	85	12	12	6.4
11	8.9	282	52	30	° 48	° 13	67	23	48	12	12	6.4
12	11	86	76	29	° 38	° 20	101	20	49	14	12	6.0
13	38	58	279	56	° 32	° 150	79	18	39	17	12	6.4
14	14	44	364	69	41	° 300	66	18	37	16	12	° 6.4
15	13	46	172	142	238	° 200	62	18	32	13	11	6.4
16	12	° 192	321	79	97	° 158	48	15	26	12	15	6.4
17	11	1,560	169	61	64	42	39	14	24	12	12	6.4
18	12	492	85	46	42	42	32	15	26	12	12	7.3
19	67	182	71	42	° 34	41	32	18	92	12	12	7.3
20	216	58	67	° 34	° 28	36	30	48	71	12	12	8.3
21	64	48	56	° 28	° 24	33	30	48	202	12	16	7.3
22	33	46	° 48	° 30	° 20	34	256	35	229	12	17	6.4
23	27	123	41	° 46	° 24	128	238	21	126	12	12	6.4
24	22	275	° 34	° 48	° 65	366	176	18	64	12	12	6.4
25	16	158	° 28	° 38	° 55	360	111	17	39	12	11	8.3
26	13	89	° 24	° 34	° 34	341	79	18	28	12	11	° 7.5
27	13	654	° 22	° 30	° 26	438	64	18	21	13	9.6	6.8
28	13	278	° 32	° 24	° 24	112	61	17	18	18	8.3	9.6
29	12	360	141	° 22	° 24	67	381	18	29	12	7.3	9.6
30	12	1,470	207	° 20	-----	64	330	19	32	12	7.3	8.3
31	12	-----	212	° 20	-----	64	-----	20	-----	11	7.3	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	216	7.3	24.2	0.410	0.47
November	1,560	13	249	4.22	4.71
December	579	22	130	2.20	2.54
January	160	20	50.1	.849	.98
February	238	16	44.9	.761	.82
March	438	12	102	1.73	1.96
April	494	30	139	2.36	2.63
May	119	14	33.1	.561	.65
June	229	18	62.9	1.07	1.19
July	27	11	13.9	.236	.27
August	50	6.8	13.4	.227	.26
September	9.6	3.2	6.73	.114	.13
The year	1,560	3.2	72.0	1.22	16.64

• Estimated because of ice or missing gage heights.

COHOCTON RIVER NEAR CAMPBELL, N. Y.

LOCATION.—Chain gage at highway bridge 2 miles above Campbell, Steuben County, and 10½ miles above confluence with Tioga River.

DRAINAGE AREA.—478 square miles.

RECORDS AVAILABLE.—July, 1918, to September, 1928.

EXTREMES.—Maximum discharge during year, 12,900 second-feet December 1 (gage height, 8.9 feet); minimum, 24 second-feet September 17 (gage height, 0.65 foot).

1918-1928: Maximum discharge, that of December 1, 1927; minimum, 13 second-feet October 7, 1921 (gage height, 0.68 foot).

REMARKS.—Records fair. Discharge estimated January 3-5, 20-31, February 1-14, 20-23, 27-29, and March 1-12 because of ice effect.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	42	199	9,750	960	170	320	845	3,000	268	635	100	85
2.....	40	210	4,530	570	160	240	808	2,340	247	540	110	85
3.....	50	1,810	3,280	460	160	200	770	1,650	234	455	100	80
4.....	160	2,220	2,100	400	170	190	1,170	1,260	230	400	90	70
5.....	100	1,870	1,760	380	220	180	1,080	1,000	638	385	80	65
6.....	60	1,550	1,550	455	200	170	1,080	845	1,290	400	180	65
7.....	42	1,170	1,350	510	190	160	1,260	770	882	365	1,400	65
8.....	40	920	2,110	482	200	160	1,350	668	700	336	480	65
9.....	50	770	1,350	455	360	150	1,170	540	570	322	320	65
10.....	55	735	1,170	400	280	150	960	455	668	336	340	60
11.....	60	845	1,000	380	240	180	770	375	570	299	850	55
12.....	60	770	2,860	400	240	220	770	322	428	336	460	50
13.....	240	700	4,040	455	220	1,080	735	317	370	290	340	46
14.....	170	635	3,000	510	280	2,050	688	336	400	260	44	
15.....	130	635	2,220	482	3,340	1,170	700	277	290	341	200	36
16.....	100	510	1,980	455	1,760	770	570	263	247	280	150	28
17.....	95	2,730	1,650	400	735	540	510	263	251	200	150	24
18.....	100	4,200	1,550	380	540	428	482	277	234	170	140	60
19.....	550	2,600	1,260	360	400	455	455	352	385	170	130	50
20.....	2,080	1,760	1,080	340	360	428	395	1,350	455	190	120	60
21.....	1,260	1,260	1,000	300	320	428	428	700	1,010	160	110	55
22.....	845	1,080	882	260	250	455	920	510	1,390	170	360	44
23.....	700	960	735	280	700	735	1,660	428	1,440	190	300	46
24.....	570	960	602	360	1,260	882	1,550	365	1,260	280	220	42
25.....	455	1,510	570	340	602	1,350	1,300	341	1,260	260	180	42
26.....	375	1,400	540	300	482	1,760	1,040	303	1,080	200	140	46
27.....	322	3,160	540	260	400	3,480	845	277	882	200	110	48
28.....	281	3,580	540	240	340	1,660	808	290	700	220	100	46
29.....	243	3,280	668	220	320	1,260	917	341	700	160	90	46
30.....	238	4,300	845	200	-----	1,000	2,810	317	700	140	85	46
31.....	222	-----	1,170	190	-----	920	-----	350	-----	110	90	-----
Month	Maximum					Minimum		Mean		Per square mile	Run-off in inches	
October.....	2,080					40		314		0.657	0.76	
November.....	4,300					199		1,610		3.37	3.76	
December.....	9,750					540		1,860		3.89	4.48	
January.....	960					190		393		.822	.95	
February.....	3,340					160		515		1.08	1.16	
March.....	3,480					150		747		1.56	1.80	
April.....	2,810					395		962		2.01	2.24	
May.....	3,000					263		672		1.41	1.62	
June.....	1,440					230		657		1.37	1.55	
July.....	635					110		288		.603	.70	
August.....	1,400					80		251		.525	.61	
September.....	85					24		54.0		.113	.15	
The year.....	9,750					24		693		1.45	19.75	

DEER CREEK AT ROCKS, MD.

LOCATION.—Water-stage recorder one-fourth mile below Maryland & Pennsylvania Railroad bridge, and 1 mile below Rocks, Harford County.

DRAINAGE AREA.—94.8 square miles.

RECORDS AVAILABLE.—October, 1926, to September, 1928.

EXTREMES.—Maximum stage during year, 11.08 feet August 17 (discharge not determined); minimum discharge, 35 second-feet October 1 (gage height, 1.55 feet).

1926-1928: Maximum stage, 15.53 feet November 16, 1926 (discharge not determined); minimum discharge, that of October 1, 1927.

REMARKS.—Records good. Discharge estimated because of ice effect December 19, 20, January 2-8, 22-24, 28-31, and February 1-6.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	67	70	103	110	136	116	260	109	165	112	189
2	44	66	230	95		124	114	226	107	145	113	178
3	50	82	197			122	114	206	101	136	107	277
4	316	96	120			114	109	192	109	134	101	209
5	63	78	127			114	107	184	134	155	99	181
6	54	71	122	85	105	105	189	758	140	146	276	
7	53	70	134		109	107	101	181	145	122	136	279
8	62	67	459		757	107	118	165	120	116	107	226
9	72	71	181		394	131	107	165	135	114	161	203
10	68	68	150		78	235	158	103	170	359	116	302
11	58	70	129	77	165	152	107	158	138	124	288	184
12	280	67	138	76	143	162	192	165	127	200	680	175
13	427	66	131	74	129	152	134	150	122	309	232	189
14	92	64	122	76	979	143	138	145	233	283	152	181
15	72	63	109	74	572	129	136	140	175	152	134	168
16	67	63	129	76	242	129	118	140	118	129	136	168
17	68	360	124	72	200	140	112	136	109	122	2,800	165
18	186	420	101	72	226	186	112	138	107	114	625	160
19	418	114	99	88	175	170	107	186	181	112	299	186
20	178	88	98	131	155	165	101	162	136	112	235	248
21	122	87	97	82	136	170	107	150	131	112	226	178
22	92	80	92	125	140	160	152	308	465	695	488	162
23	83	76	88		417	148	250	152	192	379	232	158
24	78	72	87		212	150	311	131	245	152	212	155
25	74	74	92		162	162	136	178	124	184	131	489
26	72	70	94	90	145	134	152	129	417	122	418	165
27	68	67	99	85	145	127	176	138	214	311	267	148
28	67	80	99	80	136	118	1,230	131	152	347	232	148
29	67	80	96		134	118	446	122	407	131	200	178
30	66	72	99		136	136	308	116	214	122	229	203
31	67	103	103		103	127	127	114	114	112	112	226

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	427	44	114	1.20	1.38
November	420	63	95.6	1.01	1.13
December	499	70	131	1.38	1.59
January	162	72	92.3	.974	1.12
February	979	105	233	2.46	2.65
March	186		138	1.46	1.68
April	1,230	101	189	1.99	2.22
May	308	114	164	1.73	1.99
June	758	101	205	2.16	2.41
July	695	112	181	1.91	2.20
August	2,800	99	327	3.45	3.98
September	279	148	190	2.00	2.23
The year	2,800	44	171	1.80	24.58

GUNPOWDER RIVER BASIN

LITTLE GUNPOWDER FALLS AT LAUREL BROOK, MD.

LOCATION.—Water-stage recorder half a mile southwest of town of Laurel Brook, Harford County, and 700 feet above mouth of Laurel Brook.

DRAINAGE AREA.—35.7 square miles.

RECORDS AVAILABLE.—December, 1926, to September, 1928.

EXTREMES.—Maximum stage during year, 9.64 feet June 14 (discharge not determined); minimum discharge, 12 second-feet October 1 (gage height, 0.85 foot).

1926-1928: Maximum stage, that of June 14, 1928; minimum discharge, 12 second-feet September 28 and October 1, 1927 (gage height, 0.85 foot).

REMARKS.—Records good except those for period of missing gage-height record, January 30 to March 6, and for discharge above 250 second-feet, which are fair. Discharge estimated because of ice December 25-27, January 2-5, 22, and 29.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	24	26	31			41	66	42	51	40	76
2	16	24	141				42	59	42	46	44	70
3	18	34	68				40	56	39	43	38	109
4	131	40	44			45	41	57	44	44	50	80
5	21	30	54				38	58	51	45	34	72
6	18	27	52	28			35	61	440	43	77	144
7	18	25	70	31		39	36	57	58	39	61	140
8	24	26	182	30		38	38	54	44	38	39	100
9	32	27	51	31		68	36	62	321	37	36	83
10	25	26	44	29		72	35	59	153	40	36	73
11	21	26	39	28		57	33	54	56	64	68	70
12	118	24	44	26		56	87	57	47	184	382	69
13	242	24	41	26		51	49	50	44	120	100	66
14	56	24	38	26		48	45	48	414	244	70	64
15	30	23	34	26	85	45	42	47	138	58	44	60
16	26	24	42	25		47	38	47	58	42	47	63
17	26	168	38	26		55	37	46	47	38	943	61
18	54	144	33	25		83	36	48	44	34	389	59
19	177	41	29	38		73	36	77	226	31	114	81
20	59	35	35	48		66	34	60	75	30	83	121
21	39	31	31	33		57	37	56	80	30	74	69
22	34	31	31	30		53	55	51	161	152	336	61
23	31	29	30	28		51	87	59	73	124	95	59
24	27	28	28	31		49	94	46	96	51	81	56
25	26	28		70		49	52	44	80	46	126	57
26	26	27	28	34		46	45	49	197	43	314	60
27	25	26		34		43	79	55	79	102	197	56
28	24	31	31	20		40	432	53	57	152	117	53
29	25	31	34			41	110	54	129	47	86	74
30	24	28	34	20		46	76	45	61	43	86	89
31	24		36			44		44		40	105	
Month					Maximum	Minimum	Mean	Per square mile	Run-off in inches			
October					242	16	45.6	1.28				1.48
November					168	23	36.9	1.03				1.15
December					182	26	46.6	1.31				1.51
January					70		30.1	.843				.97
February							85	2.38				2.57
March					83	38	51.2	1.43				1.65
April					432	34	63.0	1.76				1.96
May					77	44	54.2	1.52				1.75
June					440	39	113	3.17				3.54
July					244	30	67.8	1.90				2.19
August					943	34	139	3.89				4.48
September					169	53	78.5	2.20				2.46
The year					943	16	67.4	1.89				25.71

PATAPSCO RIVER BASIN

NORTH BRANCH OF PATAPSCO RIVER NEAR REISTERSTOWN, MD.

LOCATION.—Water-stage recorder on Louisville-Delight road, 600 feet above Cook Branch, and 3½ miles southwest of Reisterstown, Baltimore County.

DRAINAGE AREA.—91 square miles.

RECORDS AVAILABLE.—June, 1927, to September, 1928.

EXTREMES.—Maximum discharge during period, about 1,830 second-feet July 12 (gage height, 6.18 feet); minimum, 35 second-feet October 1-3 (gage height, 1.35 feet).

1927, 1928: Maximum discharge, that of July 12, 1928; minimum discharge, 33 second-feet September 16 and 17, 1927 (gage height, 1.33 feet).

REMARKS.—Records good. Discharge estimated because of ice December 19 to January 10 and January 22 to February 6.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	37	70	70	75	100	131	120	237	88	151	85	88
2.	36	70	206			118	118	204	88	133	85	87
3.	38	71	226			114	112	184	82	120	85	156
4.	472	101	138			104	110	171	93	122	85	151
5.	68	80	171			106	106	166	110	135	82	101
6.	53	72	168	80	186	97	101	168	553	120	80	177
7.	49	68	168			101	99	168	174	108	77	154
8.	52	66	434			702	99	108	149	526	102	77
9.	61	74	197			314	108	97	144	214	97	104
10.	57	70	171			194	191	91	147	198	101	97
11.	50	68	144	93	156	166	95	149	112	379	76	88
12.	50	68	151	82	140	154	237	158	106	452	238	83
13.	500	64	142	83	122	138	158	147	102	418	142	82
14.	108	64	133	85	492	129	122	140	257	271	91	83
15.	79	64	114	83	444	122	131	131	144	168	82	80
16.	66	65	133	80	223	114	122	122	102	142	83	79
17.	71	403	131	80	184	135	112	118	93	125	708	76
18.	399	287	108	77	202	158	106	118	90	110	156	76
19.	773	110		141	166	178	104	202	351	106	116	80
20.	317	90		172	140	168	101	156	156	104	99	171
21.	176	83		131	120	204	97	147	140	99	97	95
22.	133	82			118	184	140	114	421	106	281	83
23.	114	77			299	164	246	110	202	122	125	80
24.	101	76			215	149	286	101	289	191	112	79
25.	90	72	85		156	142	168	99	176	142	104	77
26.	85	70		80	133	138	144	108	445	129	108	77
27.	82	70			138	131	189	110	268	152	101	79
28.	77	77			129	122	1,040	106	176	206	112	76
29.	76	77			125	118	405	99	292	95	90	80
30.	72	72				120	277	93	178	88	88	102
31.	71					125		93		85	112	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	773	36	142	1.56	1.80
November	403	64	92.7	1.02	1.14
December	434	70	135	1.48	1.71
January	172		85.7	.942	1.09
February	702		196	2.15	2.32
March	204	97	136	1.49	1.72
April	1,040	91	178	1.96	2.19
May	237	93	141	1.55	1.79
June	553	82	208	2.28	2.54
July	452	85	157	1.72	1.98
August	708	74	127	1.40	1.61
September	177	76	98.7	1.08	1.20
The year	1,040	36	141	1.55	21.09

PATUXENT RIVER BASIN

PATUXENT RIVER NEAR BURTONSVILLE, MD.

LOCATION.—Water-stage recorder at Columbia Turnpike Bridge, $1\frac{1}{2}$ miles northeast of Burtonsville, Montgomery County, and 4 miles northwest of Laurel.

DRAINAGE AREA.—127 square miles.

RECORDS AVAILABLE.—July, 1911, to June, 1912; July 1913, to September, 1928, EXTREMES.—Maximum discharge, about 4,500 second-feet June 19 (gage height, 15.31 feet); minimum, 34 second-feet October 1-3 (gage height, 1.99 feet).

1911-12, 1913-1928: Maximum discharge, about 4,500 second-feet September 5, 1926, and June 19, 1928 (gage height, 15.3 feet); minimum, 6 second-feet August 25, 1911 (gage height, 0.18 foot).

REMARKS.—Records good except those for periods of missing gage-height records, October 27 to December 19, May 21 to June 1, August 19, and 20, which are fair. Discharge estimated because of ice December 26-28, January 2-7, 28-31, and February 1-7.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	35			145		152	135	232	105	180	83	120
2.....	34					140	152	200	108	155	83	112
3.....	104					136	142	182	101	147	83	207
4.....	622					128	135	173	108	142	85	136
5.....	96			85	110	131	183	165	128	158	88	114
6.....	73					122	127	168	924	148	86	261
7.....	68					122	127	161	250	131	80	241
8.....	85			125	542	125	160	150	172	127	79	201
9.....	101			128	346	181	131	211	163	115	78	162
10.....	55		200	128	226	251	128	194	368	115	73	135
11.....	75			112	181	167	138	160	158	122	88	138
12.....	195			98	165	171	302	160	150	249	693	131
13.....	516			98	148	153	165	144	149	147	405	119
14.....	130			101	428	150	140	133	461	205	143	106
15.....	95			98	656	140	133	131	1,010	143	117	100
16.....	83			98	241	147	122	130	218	115	114	100
17.....	79			94	201	176	122	128	180	106	1,070	94
18.....	172			90	251	224	120	131	163	106	224	92
19.....	635			127	189	241	117	157	1,240	101	150	107
20.....	416		130	257	169	226	112	136	941	95	130	187
21.....	209		127	119	150	199	115		271	95	122	125
22.....	110		120	125	150	180	153		335	125	449	106
23.....	90		115	133	292	167	201		271	117	165	98
24.....			112	127	230	157	324		530	109	138	94
25.....			107	207	174	153	171		318	96	172	90
26.....				131	152	150	143	130	747	90	147	94
27.....		80	110	125	164	142	158		251	90	307	90
28.....					152	133	1,280		203	270	158	88
29.....			117	80	148	133	503		296	103	125	89
30.....			127			142	287		203	90	120	117
31.....			130			142				85	127	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	635	34	153	1.20	1.38
November.....			100	.787	.88
December.....			168	1.32	1.52
January.....	257		113	.890	1.03
February.....	656		211	1.66	1.79
March.....	251	122	161	1.27	1.46
April.....	1,280	112	206	1.62	1.81
May.....			151	1.19	1.37
June.....	1,240	101	351	2.76	3.08
July.....	270	85	132	1.04	1.20
August.....	1,070	73	193	1.52	1.75
September.....	261	88	128	1.01	1.13
The year.....	1,280	34	172	1.35	18.40

POTOMAC RIVER BASIN

POTOMAC RIVER AT SHEPHERDSTOWN, W. VA.

LOCATION.—Water-stage recorder at highway toll bridge at Shepherdstown, Jefferson County, and 3.3 miles above Antietam Creek. Zero of gage, 281.00 feet above mean sea level.

DRAINAGE AREA.—5,970 square miles.

RECORDS AVAILABLE.—August to September, 1928.

EXTREMES.—Maximum discharge during period, 7,500 second-feet August 22 (gage height, 4.59 feet); minimum, 1,260 second-feet September 16 (gage height, 2.07 feet).

Highest stage known, 39.2 feet May 31 to June 1, 1889.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1.....		2,670	11.....		2,180	21.....	3,870	4,120
2.....		2,270	12.....		2,000	22.....	5,900	6,760
3.....		2,180	13.....		1,840	23.....	5,470	6,040
4.....		2,350	14.....		1,750	24.....	4,000	4,120
5.....		2,060	15.....		1,670	25.....	3,250	3,130
6.....		2,200	16.....		1,540	26.....	3,250	2,630
7.....		3,370	17.....		1,570	27.....	3,870	2,220
8.....		3,370	18.....		1,570	28.....	3,250	2,040
9.....		2,750	19.....		1,570	29.....	3,030	1,880
10.....		2,440	20.....	4,250	1,590	30.....	3,130	1,820
						31.....	3,060	-----
Month			Maximum	Minimum	Mean	Per square mile	Run-off in inches	
August 20-31.....			5,900	3,030	3,860	0.647	0.29	
September.....			6,760	1,540	2,590	.434	.48	

POTOMAC RIVER AT POINT OF ROCKS, MD.

LOCATION.—Chain gage at highway bridge at Point of Rocks, Frederick County, one-third mile below Catoctin Creek and 6 miles above Monocacy River.

DRAINAGE AREA.—9,650 square miles.

RECORDS AVAILABLE.—February, 1895, to September, 1928.

EXTREMES.—Maximum discharge during year, 144,000 second-feet May 2 (gage height, 21.20 feet); minimum, 970 second-feet October 1 and 2 (gage height, 0.68 foot).

1895-1928: Maximum discharge, 258,000 second-feet May 13, 1924 (gage height, 32.2 feet); minimum, 540 second-feet September 10, 1914 (gage height, 0.38 foot).

Highest known stage, 40.2 feet in 1889 (discharge, about 320,000 second-feet).

REMARKS.—Records good. Discharge estimated because of ice January 5 and 6. The Chesapeake & Ohio Canal diverts 75 to 100 second-feet.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	970	5,370	6,130	6,130	5,370	8,130	14,500	123,000	6,900	15,000	2,920	4,630
2	970	4,630	6,130	5,750	6,130	7,300	15,000	144,000	6,510	14,000	2,600	5,000
3	1,140	4,270	6,900	4,630	6,510	6,510	14,500	74,700	5,370	11,600	2,290	5,370
4	11,600	3,920	10,300	3,580	6,130	6,510	13,100	37,400	5,370	12,100	1,990	5,750
5	6,510	3,580	11,600	3,200	6,130	7,300	10,300	31,100	5,750	11,600	1,700	6,130
6	5,750	3,580	13,100	3,200	6,130	7,710	10,300	25,500	8,550	10,300	2,290	6,510
7	4,630	7,300	13,500	8,130	6,130	8,550	10,300	20,200	8,980	8,980	5,370	6,900
8	3,410	6,900	14,500	7,300	8,130	7,300	10,700	18,100	9,410	8,130	8,980	6,510
9	2,600	6,130	29,400	6,510	8,980	6,900	15,000	16,000	9,850	6,510	8,130	6,130
10	2,290	5,370	28,800	5,750	9,410	6,900	15,000	13,500	8,980	6,130	5,000	5,750
11	1,990	5,370	21,200	5,370	10,300	6,510	14,500	12,100	8,550	14,500	4,090	5,000
12	1,700	5,000	17,600	5,000	9,850	8,550	15,000	11,200	7,710	14,000	11,200	4,630
13	4,630	5,370	15,500	5,000	9,410	10,700	25,000	10,700	7,300	15,500	8,980	4,270
14	8,980	6,130	16,000	5,370	11,200	11,600	26,600	10,300	10,700	15,500	7,300	3,920
15	18,600	5,750	17,000	5,000	13,500	12,100	23,900	8,980	9,410	27,200	6,130	3,580
16	13,100	5,370	14,500	4,630	21,200	11,200	19,600	8,550	8,130	16,500	5,000	3,580
17	8,550	5,000	12,600	4,270	22,800	10,300	16,500	8,550	6,510	11,200	4,630	3,250
18	11,200	18,600	12,100	3,920	21,800	11,600	14,500	8,130	6,130	8,980	6,130	3,580
19	44,900	24,400	11,200	3,580	18,600	13,500	13,100	7,710	12,600	8,130	6,900	3,920
20	71,500	20,700	10,300	3,580	15,500	14,500	11,600	7,300	24,400	6,510	7,710	5,000
21	42,100	18,500	9,850	5,000	11,600	16,000	10,700	6,900	14,500	5,750	8,550	6,900
22	29,400	15,000	8,980	8,980	9,410	18,100	11,200	6,900	33,600	5,750	8,980	13,500
23	19,600	12,600	8,550	9,410	9,850	22,300	11,600	8,130	40,700	5,370	10,300	11,200
24	14,500	11,600	7,710	9,850	10,300	39,400	20,700	7,300	22,800	5,370	9,850	8,980
25	11,600	8,980	7,300	9,850	10,700	37,400	35,500	6,900	31,100	5,000	8,980	7,300
26	9,410	7,710	6,510	9,410	9,410	30,600	26,100	6,510	49,900	4,630	8,550	5,750
27	8,130	7,300	6,130	8,980	8,980	25,000	20,700	6,130	32,900	4,630	6,130	5,370
28	7,300	6,900	5,750	8,550	8,980	20,200	28,300	5,750	30,600	4,630	6,510	5,000
29	6,130	6,510	5,370	7,300	8,550	18,600	69,100	5,370	26,100	5,000	5,750	4,630
30	5,750	6,130	6,130	6,130	-----	16,500	94,200	6,130	23,900	4,630	5,370	5,000
31	5,750	-----	6,130	5,750	-----	13,500	-----	6,510	-----	3,250	5,000	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	71,500	970	12,400	1.28	1.48
November	24,400	3,580	8,400	.870	.97
December	29,400	5,370	11,800	1.22	1.41
January	9,850	3,200	6,100	.632	.73
February	22,800	5,370	10,700	1.11	1.20
March	39,400	6,510	14,200	1.47	1.70
April	94,200	10,300	21,200	2.20	2.46
May	144,000	5,370	21,600	2.24	2.58
June	49,900	6,130	16,100	1.67	1.86
July	27,200	3,250	9,560	.991	1.14
August	11,200	1,700	6,240	.647	.74
September	13,500	3,250	5,770	.598	.67
The year	144,000	970	12,000	1.24	16.94

SOUTH BRANCH OF POTOMAC RIVER NEAR PETERSBURG, W. VA.

LOCATION.—Staff gage, 1.2 miles below North Fork of South Branch of Potomac River and 2½ miles west of Petersburg, Grant County.

DRAINAGE AREA.—642 square miles.

RECORDS AVAILABLE.—June to September, 1928.

EXTREMES.—Maximum discharge during period, 2,030 second-feet August 17 (gage height, 4.90 feet); minimum, 147 second-feet August 1 and September 19 (gage height, 1.90 feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1		854	150	378	16		321	277	167
2		737	155	326	17		277	1,700	172
3		782	161	301	18		251	1,120	153
4		632	155	317	19		230	830	167
5		545	251	273	20		213	622	480
6		490	285	270	21		220	490	470
7		428	326	293	22		209	470	334
8		378	305	266	23		200	432	268
9		364	240	230	24		197	347	220
10		330	575	203	25		181	400	194
11		330	530	187	26	1,200	169	347	175
12		343	405	178	27	985	169	616	169
13		317	378	172	28	812	209	704	161
14		450	301	167	29	704	209	545	155
15		418	244	181	30	872	172	450	187
					31		155	410	-----
Month				Maximum	Minimum	Mean	Per square mile	Run-off in inches	
June 26-30.....				1,200	704	915	1.43	0.27	
July.....				854	155	348	.542	.62	
August.....				1,700	150	459	.715	.82	
September.....				480	153	240	.374	.42	

SOUTH BRANCH OF POTOMAC RIVER NEAR SPRINGFIELD, W. VA.

LOCATION.—Water-stage recorder 2 miles east of Springfield, Hampshire County, and 13 miles above confluence with North Branch of Potomac River. Prior to September 6 chain gage at same site was used. Zero of gage 562.00 feet above mean sea level.

DRAINAGE AREA.—1,470 square miles.

RECORDS AVAILABLE.—August to September, 1928.

EXTREMES.—Maximum discharge, about 3,650 second-feet August 17–18 (gage height, about 4.75 feet); minimum, 267 second-feet September 19 (gage height, 1.34 feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1-----		564	11-----	1,520	352	21-----	1,010	2,020
2-----		515	12-----	855	318	22-----	837	1,370
3-----		492	13-----	980	298	23-----	700	884
4-----		446	14-----	1,000	279	24-----	674	657
5-----		446	15-----	674	279	25-----	700	523
6-----		446	16-----	539	380	26-----	639	454
7-----		446	17-----	580	366	27-----	580	395
8-----	589	446	18-----	3,100	285	28-----	912	359
9-----	548	431	19-----	1,970	298	29-----	1,020	332
10-----	564	388	20-----	1,420	665	30-----	809	325
						31-----	657	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
August 8-31-----	3,100	539	953	0.648	0.58
September-----	2,020	279	515	.350	.39

SOUTH FORK OF SOUTH BRANCH OF POTOMAC RIVER NEAR MOOREFIELD, W. VA.

LOCATION.—Chain gage at highway bridge 5 miles south of Moorefield, Hardy County, and 2 miles above Stoney Creek.

DRAINAGE AREA.—271 square miles.

RECORDS AVAILABLE.—June to September, 1928.

EXTREMES.—Maximum discharge during period, about 1,460 second-feet September 20 (gage height, 4.54 feet); minimum, 27 second-feet July 31, August 1 and 2 (gage height, 2.13 feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1.....		248	30	87	16.....		132	176	36
2.....		214	28	76	17.....		102	910	39
3.....		198	31	80	18.....		85	780	42
4.....		176	42	80	19.....		73	626	49
5.....		141	41	71	20.....		63	312	796
6.....		122	111	71	21.....		56	230	700
7.....		111	234	67	22.....		50	183	374
8.....		89	202	67	23.....		47	148	265
9.....		82	144	62	24.....	284	50	135	198
10.....		76	426	60	25.....	413	46	116	158
11.....		76	332	54	26.....	700	39	128	128
12.....		100	303	49	27.....	522	49	116	108
13.....		89	625	44	28.....	396	42	151	94
14.....		108	332	39	29.....	312	56	122	80
15.....		172	214	44	30.....	284	35	105	85
					31.....		28	97	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
June 24-30.....	700	284	416	1.54	0.40
July.....	248	28	94.7	.349	.40
August.....	910	28	240	.886	1.02
September.....	796	36	137	.506	.56

TOWN CREEK NEAR OLDTOWN, MD.

LOCATION.—Chain gage at highway bridge 2 miles above Sawpit Run and 3 miles northeast of Oldtown, Allegany County.

DRAINAGE AREA.—136 square miles.

RECORDS AVAILABLE.—July to September, 1928.

EXTREMES.—Maximum stage during period, 12.56 feet July 14 (discharge not determined); minimum discharge, 11 second-feet September 15 (gage height, 1.92 feet).

REMARKS.—Records fair except those for July 13–15, which are poor.

Daily and monthly discharge, in second-feet, 1928

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1.....		32	23	11.....		32	19	21.....	96	30	160
2.....		54	32	12.....	80	30	19	22.....	87	236	84
3.....		47	30	13.....	1,560	27	14	23.....	87	103	42
4.....		36	23	14.....	3,270	27	14	24.....	87	54	32
5.....		27	25	15.....	1,040	19	11	25.....	64	505	32
6.....		23	36	16.....	470	16	16	26.....	59	150	23
7.....		22	30	17.....	272	27	16	27.....	59	90	23
8.....		34	23	18.....	191	32	16	28.....	117	67	22
9.....		67	22	19.....	150	49	19	29.....	64	32	16
10.....		42	19	20.....	135	34	38	30.....	28	36	28
								31.....	34	38	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
July 12-31.....	3,270	28	398	2.93	2.18
August.....	505	16	65.1	.479	.55
September.....	160	11	30.2	.222	.25

CACAPON RIVER NEAR GREAT CACAPON, W. VA.

LOCATION.—Staff gage at Rock Ford, 6½ miles above Great Cacapon, Morgan County, and mouth of river.

DRAINAGE AREA.—670 square miles.

RECORDS AVAILABLE.—December, 1922, to September, 1928.

EXTREMES.—Maximum discharge during year, 28,300 second-feet May 1 (gage height, 17.38 feet); minimum, 40 second-feet October 1 (gage height, 0.38 foot).

1922-1928: Maximum discharge, about 34,000 second-feet May 12, 1924 (gage height, 19.32 feet); minimum, 40 second-feet, revised, July 28, 1923, September 25, 1925, and October 1, 1927 (gage height, 0.38 foot).

REMARKS.—Records fair. Discharge estimated because of ice, December 20-25, January 2-7, 20-31, and February 1-8.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	40	150	670	342		259	618	27,100	342	725	160	192
2.....	51	131	119			291	670	8,150	308	594	150	181
3.....	51	140	181			275	725	4,220	230	546	102	259
4.....	51	170	324			275	618	2,720	244	479	93	378
5.....	65	181	501	200	160	230	594	1,970	259	546	87	342
6.....		87	217	546		204	501	1,650	725	479	96	378
7.....	105	170	119			217	397	1,340	1,890	397	115	569
8.....	131	160	725	230		217	546	1,130	1,130	342	160	378
9.....	110	150	1,200	181	291	204	950	618	835	181	342	308
10.....	84	119	1,410	204	437	230	1,070	378	670	170	359	117
11.....	63	110	1,130	190	523	308	1,010	458	725	230	244	131
12.....	81	102	780	181	725	417	1,200	725	501	217	131	217
13.....	131	131	725	181	224	523	1,970	670	417	217	93	204
14.....	1,490	150	670	181	546	437	2,150	618	437	230	170	131
15.....	1,130	160	618	204	569	378	1,570	546	397	204	230	115
16.....	523	122	670	230	378	378	1,130	458	523	181	324	119
17.....	217	140	670	170	324	397	1,010	417	569	192	479	140
18.....	359	259	523	160	1,130	501	618	417	397	181	618	108
19.....	6,480	378	397	181	725	670	670	437	618	140	417	244
20.....	5,160	119			546	725	523	437	1,010	140	308	890
21.....	2,820	291			479	835	523	417	1,410	170	308	2,060
22.....	1,650	437	240		397	1,130	546	397	1,970	230	359	2,240
23.....	950	275			437	4,350	780	217	3,740	275	1,130	725
24.....	618	119			437	4,610	3,380	308	2,330	230	378	546
25.....	437	244		180	397	3,500	2,330	324	1,810	140	378	417
26.....	324	244	160		378	2,150	1,650	378	1,810	117	670	308
27.....	291	291	181		324	1,340	1,270	397	1,810	140	458	259
28.....	244	546	501		291	1,070	1,410	397	2,330	181	275	230
29.....	204	204	275		259	397	3,740	359	1,650	259	378	181
30.....	181	594	230			378	12,000	359	1,270	204	291	204
31.....	170		244			437		308		131	244	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	6,480	40	783	1.17	1.35
November.....	594	102	217	.324	.36
December.....	1,410		484	.722	.83
January.....	342		193	.288	.33
February.....	1,130		386	.576	.62
March.....	4,610	204	882	1.32	1.52
April.....	12,000	397	1,540	2.30	2.57
May.....	27,100	217	1,880	2.81	3.24
June.....	3,740	230	1,080	1.61	1.80
July.....	725	117	273	.407	.47
August.....	1,130	87	308	.460	.53
September.....	2,240	108	419	.625	.70
The year.....	27,100	40	703	1.05	14.32

BACK CREEK NEAR HEDGESVILLE, W. VA.

LOCATION.—Staff gage at bridge on Martinsburg-Berkeley Springs highway, 1.3 miles west of Hedgesville, Berkeley County, and 4 miles above Tilhance Creek.

DRAINAGE AREA.—252 square miles.

RECORDS AVAILABLE.—July to September, 1928.

EXTREMES.—Maximum discharge during period, 1,170 second-feet September 20 (gage height, 4.24 feet); minimum, 28 second-feet September 18 and 19.

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1928

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1.....		45	71	11.....	51	120	80	21.....	44	73	555
2.....	234	62	54	12.....	136	69	67	22.....	94	430	292
3.....	184	49	53	13.....	292	67	62	23.....	85	292	192
4.....	146	53	58	14.....	120	88	37	24.....	80	120	113
5.....	149	53	54	15.....	80	69	40	25.....	54	226	96
6.....	126	85	177	16.....	69	69	35	26.....	47	180	80
7.....	94	238	718	17.....	60	91	32	27.....	69	120	62
8.....	67	206	254	18.....	45	104	28	28.....	60	96	54
9.....	56	170	166	19.....	40	153	30	29.....	56	382	47
10.....	49	94	107	20.....	36	96	635	30.....	54	146	54
								31.....	45	96	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
July 2-31.....	292	36	90.7	0.360	0.40
August.....	430	45	134	.532	.61
September.....	718	28	143	.567	.63

CONOCOCHEAQUE CREEK AT FAIRVIEW, MD.

LOCATION.—Chain gage at highway bridge half a mile southeast of Fairview, Washington County, and 1 mile above Rockdale Run.

DRAINAGE AREA.—502 square miles.

RECORDS AVAILABLE.—June to September, 1928.

EXTREMES.—Maximum discharge during period, 7,580 second-feet June 26 (gage height, 11.10 feet); minimum, 202 second-feet September 18 (gage height, 2.16 feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1		2,380	540	262	16		1,300	336	271
2		1,820	540	253	17		1,370	336	240
3		1,440	512	308	18		985	512	210
4		1,440	457	336	19		1,020	355	244
5		1,440	457	262	20		882	336	317
6		1,200	430	317	21	1,370	751	322	457
7		916	457	380	22	4,590	1,520	1,260	327
8		848	512	303	23	2,620	1,370	540	285
9		751	484	271	24	1,900	916	430	271
10		689	404	271	25	4,680	751	404	253
11		1,900	404	249	26	6,480	658	355	253
12		5,310	380	227	27	4,230	751	355	253
13		3,060	380	236	28	2,460	916	346	244
14		2,300	350	244	29	3,510	658	336	227
15		1,670	317	210	30	4,050	569	290	290
					31		512	280	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
June 21-30	6,480	1,370	3,590	7.15	2.66
July	5,310	512	1,360	2.71	3.12
August	1,260	280	433	.863	.99
September	457	210	276	.550	.61

ANTIETAM CREEK NEAR SHARPSBURG, MD.

LOCATION.—Staff gage at Burnside Bridge on Antietam Battlefield 1 mile south-east of Sharpsburg, Washington County, and $4\frac{1}{4}$ miles above Sharmans Branch. Elevation of zero of gage, 311.00 feet above mean sea level.

DRAINAGE AREA.—280 square miles.

RECORDS AVAILABLE.—August to September, 1928. June, 1897, to August, 1905, at Middle Bridge 1 mile above present site.

EXTREMES.—Maximum discharge during year, 550 second-feet September 4 (gage height, 3.28 feet); minimum, 184 second-feet September 28 and 29 (gage height, 2.00 feet).

Maximum known stage, 11.9 feet July, 1928.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1.....		207	11.....		244	21.....	231	296
2.....		207	12.....		219	22.....	480	231
3.....		256	13.....		244	23.....	309	207
4.....		435	14.....		231	24.....	269	207
5.....		244	15.....		219	25.....	256	207
6.....		350	16.....		207	26.....	244	207
7.....		364	17.....		207	27.....	244	196
8.....		296	18.....		207	28.....	231	196
9.....		256	19.....		219	29.....	231	184
10.....		256	20.....		336	30.....	231	207
						31.....	231	-----
Month			Maximum	Minimum	Mean	Per square mile	Run-off in inches	
August 21-31.....			480	231	269	0.961	0.39	
September.....			435	184	245	.875	.98	

NORTH RIVER NEAR BURKETOWN, VA.

LOCATION.—Staff gage 2 miles northwest of Burkettown, Augusta County, and 7 miles above confluence with Middle River.

DRAINAGE AREA.—381 square miles.

RECORDS AVAILABLE.—June, 1926, to September, 1928.

EXTREMES.—Maximum discharge during year, 6,400 second-feet May 1 (gage height, 9.10 feet); minimum, 69 second-feet October 2 and 3 (gage height, 1.41 feet).

1926-1928: Maximum discharge, 7,370 second-feet November 16, 1926 (gage height, 10.17 feet); minimum, 56 second-feet July 21, 23, 29, August 12 and 13, 1926 (gage height, 1.37 feet).

REMARKS.—Records good. Low-water flow regulated by operation of mills above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	93	203	203	225	308	348	433	5,260	259	404	143	573
2.....	73	178	283	225	283	308	440	2,850	259	362	193	492
3.....	73	193	433	225	265	283	404	1,730	214	296	158	536
4.....	193	193	448	362	248	265	376	1,150	225	320	143	506
5.....	115	198	492	320	231	271	362	875	225	296	124	448
6.....	115	183	573	225	248	248	348	760	314	231	193	536
7.....	97	203	647	209	225	231	348	647	722	188	242	536
8.....	89	193	1,650	188	390	231	610	573	647	173	237	529
9.....	89	203	1,650	225	348	237	836	521	521	178	178	462
10.....	93	193	1,150	193	355	214	760	462	440	242	173	412
11.....	89	193	836	198	348	259	684	419	390	259	209	362
12.....	124	193	760	183	327	259	1,230	376	334	1,070	1,650	320
13.....	3,450	193	610	183	334	214	1,230	334	376	1,070	1,230	277
14.....	1,230	214	536	163	355	188	1,070	320	376	914	760	248
15.....	722	214	469	163	684	193	875	302	296	573	536	269
16.....	492	203	455	183	760	188	684	283	253	448	2,420	271
17.....	404	573	433	163	722	183	610	271	225	348	4,310	248
18.....	448	1,560	390	163	647	203	506	271	214	283	2,590	760
19.....	647	1,150	369	183	573	214	448	248	237	259	1,480	269
20.....	836	836	348	271	506	209	390	259	369	231	836	521
21.....	798	647	334	341	433	248	362	271	499	203	760	760
22.....	722	573	327	412	390	320	334	348	521	193	573	610
23.....	573	462	290	412	433	573	376	302	448	198	521	462
24.....	462	397	271	383	448	836	477	308	477	183	448	376
25.....	348	362	248	521	433	875	492	320	610	183	477	320
26.....	314	314	248	506	419	836	499	334	536	168	404	283
27.....	271	277	237	484	419	722	536	296	477	163	484	248
28.....	248	265	225	462	397	610	760	320	404	163	573	237
29.....	225	248	220	404	376	521	1,480	283	448	143	492	225
30.....	193	237	225	390	-----	521	3,370	283	448	153	433	242
31.....	183	-----	248	334	-----	469	-----	271	-----	129	521	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	3,450	73	445	1.17	1.35
November.....	1,560	178	368	.966	1.08
December.....	1,650	203	503	1.32	1.52
January.....	521	163	287	.753	.87
February.....	760	225	411	1.08	1.16
March.....	875	183	364	.955	1.10
April.....	3,370	334	711	1.87	2.09
May.....	5,260	248	685	1.80	2.08
June.....	722	214	392	1.03	1.15
July.....	1,070	129	323	.848	.98
August.....	4,310	124	758	1.99	2.29
September.....	760	225	411	1.08	1.20
The year.....	5,260	73	472	1.24	16.87

SOUTH FORK OF SHENANDOAH RIVER NEAR LURAY, VA.

LOCATION.—Chain gage at highway bridge 4 miles southwest of Luray, Page County, and 2 miles below mouth of Stony Run.

DRAINAGE AREA.—1,380 square miles.

RECORDS AVAILABLE.—April, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, 15,100 second-feet September 20 (gage height, 11.10 feet); minimum, 207 second-feet October 3 (gage height, 2.26 feet).

1925-1928: Maximum discharge, 15,100 second-feet November 17, 1926, and September 20, 1928 (gage height, 11.10 feet); minimum, 74 second-feet September 28, 1925 (gage height, 1.78 feet).

REMARKS.—Records good for medium and high stages, fair for low. Low-water flow regulated by a low dam three-fourths mile above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	300	820	865	1,000	1,040	1,180	1,480	12,100	780	1,100	360	3,490
2-----	310	740	2,920	1,000	910	1,090	1,380	8,280	820	910	360	2,260
3-----	264	780	3,500	1,000	910	1,040	1,280	5,090	740	740	562	1,910
4-----	3,200	780	3,000	1,100	820	980	1,180	3,490	760	702	415	1,910
5-----	2,140	780	2,260	1,200	820	955	1,090	2,650	820	1,090	780	1,690
6-----	865	740	2,140	1,000	820	910	1,090	2,650	740	820	955	1,690
7-----	702	702	2,390	910	820	865	1,040	2,390	740	595	595	3,490
8-----	562	820	5,090	820	1,140	865	1,480	2,140	1,230	530	1,090	2,780
9-----	562	740	7,420	820	1,800	865	1,910	2,020	1,090	530	665	1,910
10-----	630	740	4,250	865	1,690	820	1,910	2,140	910	470	1,000	1,910
11-----	595	702	3,200	820	1,480	820	1,800	1,910	910	910	890	1,580
12-----	388	665	2,650	780	1,380	865	3,490	1,690	820	820	5,100	1,380
13-----	8,280	680	2,620	780	1,380	865	4,090	1,480	820	2,650	4,250	1,380
14-----	7,420	702	2,020	740	1,280	780	3,490	1,280	820	2,020	1,230	1,140
15-----	2,520	665	1,800	740	2,260	740	2,500	1,280	770	1,700	1,380	1,000
16-----	1,800	702	1,800	665	2,650	702	2,140	1,280	665	1,280	4,800	1,100
17-----	1,500	702	1,690	702	2,390	780	1,690	1,180	630	1,000	10,500	1,090
18-----	2,140	6,420	1,480	665	2,920	820	1,690	1,090	595	865	7,010	820
19-----	4,090	4,000	1,380	702	1,800	820	1,580	1,140	595	740	4,740	1,000
20-----	3,640	2,920	1,230	1,000	1,580	800	1,280	1,100	1,380	702	2,920	7,630
21-----	2,780	2,140	1,280	1,090	1,480	910	1,200	1,090	1,090	680	2,140	7,210
22-----	2,140	1,910	1,230	1,000	1,280	1,090	1,180	1,480	1,090	530	1,690	3,790
23-----	1,910	1,580	1,180	1,040	1,380	1,140	1,280	1,040	1,090	562	1,480	2,620
24-----	1,480	1,480	1,140	1,090	1,280	1,580	1,480	1,000	1,040	562	1,480	2,020
25-----	1,280	1,280	1,000	1,140	1,300	2,020	1,690	1,000	1,480	415	1,380	1,690
26-----	1,180	1,180	1,000	1,480	1,380	2,020	2,020	1,140	1,140	550	2,000	1,480
27-----	1,000	1,090	955	1,580	2,020	1,800	3,060	1,090	1,090	500	2,140	1,280
28-----	865	1,040	910	1,500	1,280	1,580	3,500	1,090	910	335	2,520	1,280
29-----	910	1,000	910	1,480	1,180	1,140	4,090	1,000	865	360	1,800	1,180
30-----	880	865	950	1,180	-----	1,380	10,500	865	1,000	360	1,480	1,140
31-----	865	-----	1,000	1,090	-----	1,480	-----	865	-----	360	1,380	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October-----	8,280	264	1,840	1.33	1.53
November-----	6,420	665	1,310	.949	1.06
December-----	7,420	865	2,100	1.52	1.75
January-----	1,580	665	999	.724	.83
February-----	2,920	820	1,460	1.06	1.14
March-----	2,020	702	1,060	.790	.91
April-----	10,500	1,040	2,250	1.63	1.82
May-----	12,100	865	2,200	1.59	1.83
June-----	1,480	595	914	.662	.74
July-----	2,650	335	819	.593	.67
August-----	10,500	360	2,230	1.62	1.87
September-----	7,630	820	2,170	1.57	1.75
The year-----	12,100	264	1,620	1.17	15.91

• Estimated.

SHENANDOAH RIVER AT MILLVILLE, W. VA.

LOCATION.—Water-stage recorder half a mile below Cattail Run, three-quarters of a mile above Millville, Jefferson County, and 5 miles above mouth.

DRAINAGE AREA.—3,040 square miles.

RECORDS AVAILABLE.—August to September, 1928. April, 1895, to March, 1909, three-quarters of a mile below present site.

EXTREMES.—Maximum discharge during year, about 12,800 second-feet September 21 (gage height, 7.93 feet); minimum, 944 second-feet September 18 (gage height, 1.96 feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1.-----		2,180	11.-----		2,660	21.-----		7,900
2.-----		2,660	12.-----		2,510	22.-----		9,200
3.-----		3,200	13.-----		2,120	23.-----	3,330	5,680
4.-----		2,660	14.-----		1,860	24.-----	2,960	4,080
5.-----		2,450	15.-----		1,740	25.-----	2,880	3,260
6.-----		2,590	16.-----		1,630	26.-----	2,730	2,730
7.-----		2,520	17.-----		1,580	27.-----	2,520	2,380
8.-----		3,330	18.-----		1,430	28.-----	2,960	2,120
9.-----		3,570	19.-----		1,580	29.-----	3,330	1,980
10.-----		3,100	20.-----		3,190	30.-----	2,960	1,920
						31.-----	2,520	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
August 23-31.-----	3,330	2,520	2,910	0.957	0.32
September-----	9,200	1,430	2,990	.983	1.10

MIDDLE RIVER NEAR GROTTOS, VA.

LOCATION.—Chain gage at highway bridge at Mount Meridan, Augusta County, 1½ miles above confluence with North River and 3 miles west of Grottoes.

DRAINAGE AREA.—360 square miles.

RECORDS AVAILABLE.—February, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, 4,080 second-feet August 17 (gage height, 12.20 feet); minimum, 62 second-feet October 2 (gage height, 2.42 feet).

1925-1928: Maximum discharge, that of August 17, 1928; minimum, 29 second-feet July 3, 1926 (gage height, 2.05 feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	84	135	170	278	231	231	372	1,930	190	231	112	1,120
2	67	135	231	190	200	220	330	1,120	180	200	112	680
3	105	143	1,080	190	200	210	290	800	170	210	112	640
4	640	170	680	210	180	200	254	602	170	220	105	602
5	170	180	530	254	200	190	242	464	180	220	402	496
6	120	143	720	266	200	190	220	464	161	170	254	1,120
7	98	135	840	231	190	180	210	432	161	161	266	960
8	105	152	1,840	220	402	180	254	402	161	143	220	720
9	127	161	1,340	231	566	170	290	432	161	190	190	566
10	127	161	800	210	464	180	290	387	152	402	143	496
11	120	143	566	190	402	180	303	330	161	372	242	432
12	112	152	496	190	330	170	1,040	303	170	316	1,520	372
13	1,390	143	464	180	303	170	720	278	161	1,480	1,160	330
14	432	143	402	170	303	161	566	266	152	530	566	316
15	254	143	358	170	640	161	432	254	143	344	372	303
16	200	135	272	170	530	170	358	242	135	266	760	316
17	220	640	358	170	464	170	316	242	135	210	3,230	316
18	566	1,750	330	170	432	190	278	242	143	200	1,390	278
19	720	800	290	242	344	210	254	242	464	180	880	290
20	432	496	266	278	316	200	231	210	344	161	566	2,160
21	303	387	254	278	278	266	220	210	266	152	464	1,000
22	254	316	242	170	266	278	220	290	220	200	387	680
23	220	290	242	242	290	372	242	220	180	161	380	530
24	200	254	231	220	316	464	464	266	190	143	372	464
25	200	231	210	330	278	402	530	242	344	135	358	402
26	190	210	200	330	278	344	387	278	303	127	1,040	344
27	170	200	200	290	266	303	358	254	231	112	1,120	330
28	161	200	210	303	254	266	566	231	210	135	880	316
29	161	190	190	180	242	242	1,620	210	190	120	566	303
30	152	180	231	266	278	278	2,240	200	387	112	464	358
31	143	231	231	242	496	496	190	190	112	1,160	1,160	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,390	67	266	0.739	0.85
November	1,750	135	284	.789	.88
December	1,840	170	470	1.31	1.51
January	330	170	228	.633	.73
February	640	180	323	.897	.97
March	496	161	240	.667	.77
April	2,240	210	470	1.31	1.46
May	1,930	190	395	1.10	1.27
June	464	135	207	.575	.64
July	1,480	112	249	.692	.80
August	3,230	105	638	1.77	2.04
September	2,160	278	575	1.60	1.78
The year	3,230	67	362	1.01	13.70

SOUTH RIVER AT HARRISTON, VA.

LOCATION.—Chain gage at highway bridge at Harriston, Augusta County, 7 miles above confluence with Middle River.

DRAINAGE AREA.—222 square miles.

RECORDS AVAILABLE.—February, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, 5,990 second-feet September 20 (gage height, 11.90 feet); minimum, 59 second-feet October 1 (gage height, 3.06 feet).

1925-1928: Maximum discharge, that of September 20, 1928; minimum, 27 second-feet August 12, 1926 (gage height, 2.83 feet).

REMARKS.—Records good. Low-water flow slightly regulated by operation of mill above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	68	160	160	198	169	205	172	1,780	138	108	67	338
2	75	160	266	160	179	195	188	1,160	152	94	70	295
3	71	149	703	149	155	179	155	850	158	104	70	338
4	850	176	645	179	146	198	163	674	119	91	75	338
5	430	172	506	138	146	172	146	560	128	98	94	274
6	212	138	506	163	152	152	141	533	133	84	96	732
7	144	128	533	166	158	155	152	454	133	81	84	910
8	141	144	2,370	158	242	155	406	430	126	81	84	674
9	146	149	1,360	176	338	166	316	480	119	88	80	430
10	185	138	910	160	316	172	295	506	110	114	75	383
11	158	149	703	155	295	166	360	454	119	227	160	316
12	360	128	616	144	258	166	970	430	144	192	454	242
13	2,300	141	533	149	220	160	732	383	128	160	338	220
14	970	126	454	136	258	158	560	360	116	266	212	205
15	588	128	406	121	616	131	430	316	102	242	169	182
16	430	119	406	144	506	136	383	274	96	185	179	192
17	406	166	406	110	430	138	338	250	102	169	1,570	172
18	970	1,160	383	124	383	166	274	230	98	141	790	176
19	1,290	790	316	141	316	160	270	242	274	138	506	254
20	970	533	274	192	274	152	242	216	166	114	338	5,030
21	732	430	258	179	234	185	216	220	133	110	258	2,220
22	506	383	258	160	227	238	242	209	126	119	227	1,160
23	383	316	234	160	295	282	242	192	110	104	176	790
24	316	274	227	163	265	266	338	160	128	92	166	588
25	295	227	198	295	295	270	295	169	119	102	172	506
26	266	238	185	295	242	238	295	250	126	83	360	406
27	227	198	169	242	246	234	338	230	124	81	430	360
28	205	205	172	227	234	195	588	185	102	78	295	338
29	205	198	195	198	220	176	732	160	116	72	242	338
30	202	172	212	205	-----	188	1,640	160	114	78	254	338
31	212	-----	205	172	-----	179	-----	133	-----	72	250	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,300	68	462	2.08	2.40
November	1,160	119	253	1.14	1.27
December	2,370	160	476	2.14	2.47
January	295	110	173	.779	.90
February	616	146	271	1.22	1.32
March	270	131	184	.829	.96
April	1,640	141	387	1.74	1.94
May	1,780	133	408	1.84	2.12
June	274	96	129	.581	.65
July	266	72	122	.550	.63
August	1,570	67	269	1.22	1.41
September	5,030	172	625	2.82	3.15
The year	5,030	67	313	1.41	19.22

NORTH FORK OF SHENANDOAH RIVER AT COOTES STORE, VA.

LOCATION.—Chain gage at highway bridge at Cootes Store, Rockingham County, 1 mile below Brocks Gap and 3½ miles above Linville Creek.

DRAINAGE AREA.—215 square miles.

RECORDS AVAILABLE.—February, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, 5,030 second-feet April 30 (gage height, 10.50 feet); minimum, 3.5 second-feet October 1-3 (gage height, 2.20 feet).

1925-1928: Maximum discharge, 7,190 second-feet November 16, 1926 (gage height, 12.87 feet); minimum, 1.5 second-feet September 27 to October 2, 1925 (gage height, 2.10 feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.5	44	68	57	168	109	170	3,110	76	131	8.5	44
2	3.5	44	68	53	134	100	151	1,690	65	112	8.5	42
3	16	44	68	53	114	95	132	900	61	94	8.5	39
4	93	43	116	50	102	91	116	610	58	79	8.5	36
5	68	39	217	50	100	86	109	460	54	64	8.5	32
6	50	36	322	48	97	78	104	380	610	53	19	30
7	46	35	360	48	93	73	116	322	400	45	30	28
8	39	35	1,690	48	93	64	542	269	286	40	24	28
9	30	34	1,020	44	86	64	460	220	220	37	18	27
10	29	28	700	42	82	61	380	184	159	37	16	26
11	21	24	520	39	82	61	1,020	159	126	31	32	26
12	109	22	380	39	82	57	960	146	103	27	1,200	25
13	1,550	21	322	36	78	57	900	126	86	54	269	24
14	542	19	251	34	234	57	800	108	117	59	126	23
15	341	19	251	30	610	57	610	94	126	54	103	21
16	251	19	304	30	542	57	440	90	103	48	205	20
17	234	19	251	30	440	57	304	90	85	39	610	19
18	251	565	211	30	286	86	268	86	66	34	420	17
19	1,480	565	182	30	251	104	234	86	54	30	220	16
20	1,140	520	168	268	211	100	179	124	190	26	141	750
21	565	420	151	286	173	124	151	86	268	24	131	500
22	360	251	119	304	134	610	132	565	220	20	220	341
23	251	170	78	322	119	1,140	217	269	184	20	141	269
24	179	134	63	322	102	960	520	168	322	17	99	136
25	156	114	53	542	100	750	400	136	500	16	79	90
26	142	91	41	440	151	610	400	136	480	13	68	66
27	119	80	34	341	153	440	440	136	565	11	54	57
28	78	78	34	322	140	341	655	131	341	16	66	48
29	56	71	53	268	124	286	1,760	112	269	12	69	43
30	49	68	64	234	-----	251	3,910	99	205	10	56	42
31	44	-----	58	198	-----	211	-----	88	-----	8.5	50	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,550	3.5	268	1.25	1.44
November	565	19	122	.567	.63
December	1,690	34	265	1.23	1.42
January	542	30	150	.698	.80
February	610	78	175	.814	.88
March	140	57	233	1.08	1.24
April	3,910	104	553	2.57	2.87
May	3,110	86	361	1.68	1.94
June	610	54	214	.995	1.11
July	131	8.5	40.7	.189	.22
August	1,200	8.5	145	.674	.78
September	750	16	95.5	.444	.50
The year	3,910	3.5	219	1.02	13.86

NORTH FORK OF SHENANDOAH RIVER NEAR STRASBURG, VA.

LOCATION.—Chain gage at highway bridge 2 miles east of Strasburg, Shenandoah County, and 9 miles above confluence with South Fork.

DRAINAGE AREA.—772 square miles.

RECORDS AVAILABLE.—March, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, 12,600 second-feet May 1 (gage height, 14.85 feet); minimum, 78 second-feet September 17 (gage height, 1.97 feet).

1925-1928: Maximum discharge, that of May 1, 1928; minimum, 34 second-feet September 21, 1927 (gage height, 1.79 feet).

REMARKS.—Records good. Discharge estimated because of ice January 1-8.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	* 130	268	281		463	470	470	11,000	359	579	131	251
2.....	148	256	306		470	414	463	5,600	352	470	112	227
3.....	195	251	421		442	400	442	3,600	319	731	131	239
4.....	346	222	579		373	* 383	421	2,330	274	542	156	* 245
5.....	346	210	692	270	313	366	400	1,650	319	470	* 154	251
6.....	332	251	654		332	326	373	1,330	890	442	152	239
7.....	268	190	* 1,490		313	319	380	1,170	1,410	319	135	205
8.....	294	233	2,330		332	332	407	970	692	245	233	205
9.....	281	239	3,140	294	373	373	731	930	542	251	205	274
10.....	185	233	1,650	306	470	400	770	* 811	506	245	144	185
11.....	170	216	1,170	306	428	428	731	692	456	239	135	251
12.....	180	205	970	* 289	400	346	810	654	435	222	190	216
13.....	2,960	195	850	* 273	373	339	1,730	579	393	200	1,410	152
14.....	2,060	175	731	256	442	319	1,490	542	386	256	692	185
15.....	930	190	654	227	1,090	306	1,170	506	506	* 284	373	160
16.....	319	195	* 598	233	1,490	294	930	506	506	313	319	* 128
17.....	442	300	542	233	1,090	300	770	456	373	268	274	96
18.....	616	1,890	506	256	890	339	654	449	287	222	1,250	123
19.....	1,650	1,810	470	268	692	393	579	442	306	216	890	180
20.....	2,330	1,330	506	268	654	428	542	435	654	180	616	227
21.....	1,730	930	470	352	* 598	506	506	470	850	170	470	393
22.....	1,090	* 736	* 449	407	542	616	470	442	770	233	506	731
23.....	692	542	428	428	506	1,410	579	449	579	222	579	* 556
24.....	* 546	463	414	506	542	1,970	654	692	579	160	442	380
25.....	400	393	421	* 638	542	1,490	770	506	1,410	* 140	470	326
26.....	386	380	359	770	542	1,250	850	442	1,490	127	449	274
27.....	366	326	300	731	506	890	1,490	442	1,250	135	373	245
28.....	* 342	300	313	579	506	654	1,970	414	970	144	326	239
29.....	319	300	306	506	* 488	654	3,320	414	850	180	332	239
30.....	268	294	319	386	616	7,940	400	770	123	326	300	
31.....	262		319	579		579		386		175	274	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	2,960	130	664	0.860	0.99
November.....	1,890	175	451	.584	.65
December.....	3,140	281	730	.946	1.09
January.....	770		363	.470	.54
February.....	1,490	313	559	.724	.78
March.....	1,970	294	578	.749	.86
April.....	7,940	373	1,090	1.41	1.57
May.....	11,000	386	1,280	1.66	1.91
June.....	1,490	274	649	.841	.94
July.....	731	123	274	.355	.41
August.....	1,410	112	395	.512	.59
September.....	731	96	257	.333	.37
The year.....	11,000	96	608	.788	10.70

* Interpolated.

CATOCTIN CREEK NEAR JEFFERSON, MD.

LOCATION.—Staff gage at bridge on Frederick-Harpers Ferry road, 2 miles west of Jefferson, Frederick County, and half a mile below Broad Run.

DRAINAGE AREA.—111 square miles.

RECORDS AVAILABLE.—June to September, 1928.

EXTREMES.—Maximum stage during period, 11.30 feet June 19 (discharge not determined). Minimum discharge, 28 second-feet September 19; minimum gage height, 1.40 feet August 11.

REMARKS.—Records fair. Discharge estimated September 30.

Daily and monthly discharge, in second-feet, 1928

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1.-----		244	63	54	16.-----	68	220	56	40
2.-----		197	115	46	17.-----	51	186	197	35
3.-----		186	63	208	18.-----	208	164	115	31
4.-----		322	63	269	19.-----	2,820	148	96	29
5.-----		220	70	48	20.-----	830	135	66	131
6.-----		154	104	350	21.-----	410	135	50	119
7.-----	115	127	65	186	22.-----	1,130	197	308	83
8.-----	90	107	54	137	23.-----	440	154	197	66
9.-----	87	98	50	109	24.-----	380	121	125	62
10.-----	186	125	38	89	25.-----	870	98	133	56
11.-----	70	119	30	74	26.-----	640	89	105	62
12.-----	66	950	365	65	27.-----	440	102	89	50
13.-----	66	535	125	58	28.-----	244	111	81	41
14.-----	500	336	68	51	29.-----	570	71	68	40
15.-----	111	256	52	42	30.-----	282	65	60	48
					31.-----		62	62	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
June 7-30.-----	2,820	51	445	4.01	3.58
July.-----	950	62	195	1.76	2.03
August.-----	365	30	101	.910	1.05
September.-----	350	29	89.3	.805	.90

MONOCACY RIVER NEAR FREDERICK, MD.

LOCATION.—Chain gage at Ceresville Bridge, 3 miles northeast of Frederick, Frederick County, and 300 feet below mouth of Tuscarora Creek.

DRAINAGE AREA.—665 square miles.

RECORDS AVAILABLE.—August, 1896, to September, 1928.

EXTREMES.—Maximum discharge during year, 13,800 second-feet October 19 (gage height, 21.65 feet); minimum stage, 76 second-feet October 3 (gage height, 4.13 feet).

1896-1928: Maximum discharge, about 20,000 second-feet November 16, 1926 (gage height, about 28 feet); minimum, 15 second-feet several days in October, 1910 (gage height, 3.54 feet).

REMARKS.—Records fair. Discharge January 2-7, 29-31, and February 1-5, estimated because of ice.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	82	390	550	320		685	1,100	4,190	305	1,530	305	305
2.....	86	372	880			640	880	2,780	290	1,290	305	243
3.....	76	355	5,360		480	550	685	2,360	275	1,060	305	228
4.....	4,640	450	2,150			530	595	1,940	372	960	305	214
5.....	1,350	390	830	350		510	530	1,660	355	1,710	305	214
6.....	530	372	2,080		550	470	450	2,080	2,850	1,530	620	160
7.....	392	355	1,730		430	450	430	1,870	1,660	1,410	530	2,710
8.....	289	338	5,900	430	1,210	410	1,590	1,450	510	860	430	1,530
9.....	490	320	2,640	410	3,330	390	640	985	410	620	860	665
10.....	358	320	1,390	372	1,870	685	595	790	372	620	575	620
11.....	228	320	1,270	355	1,590	730	550	595	390	620	340	530
12.....	186	320	1,210	355	830	1,210	2,570	685	390	1,950	575	450
13.....	8,280	320	1,100	355	685	2,930	2,220	640	355	12,200	410	410
14.....	2,290	320	1,040	355	595	1,150	2,360	595	338	6,350	392	322
15.....	860	320	985	355	11,900	1,100	3,740	550	338	3,650	340	289
16.....	552	320	930	320	3,090	930	1,730	530	305	2,430	358	243
17.....	430	320	1,660	305	1,870	1,040	640	490	245	810	620	228
18.....	1,710	5,540	1,100	305	1,660	1,660	550	470	218	810	1,530	186
19.....	13,800	1,390	830	430	1,270	1,800	470	450	12,000	760	1,470	289
20.....	10,900	880	830	2,360	1,040	2,150	510	450	1,950	760	1,230	620
21.....	3,330	685	780	930	880	2,570	640	595	10,900	710	710	663
22.....	1,660	640	730	685	730	3,090	1,040	595	7,010	665	620	552
23.....	1,660	595	595	550	1,150	4,370	1,210	510	5,810	620	3,250	410
24.....	1,040	595	550	550	2,220	3,010	6,440	450	4,820	620	1,590	358
25.....	830	550	490	1,520	1,660	2,640	2,010	450	4,100	530	620	289
26.....	780	530	450	685	985	2,010	1,210	410	2,150	470	530	243
27.....	640	490	410	550	830	1,210	1,150	372	2,710	358	470	200
28.....	550	470	355	490	830	1,040	12,900	372	2,360	340	450	186
29.....	470	450	320		730	930	7,010	338	3,740	358	430	163
30.....	450	470	305	375		1,330	6,170	320	1,950	340	392	322
31.....	410		355			1,210		320		340	340	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	13,800	76	1,910	2.87	3.31
November.....	5,540	320	640	.962	1.07
December.....	5,900	305	1,280	1.92	2.21
January.....	2,360		523	.786	.91
February.....	11,900		1,530	2.30	2.48
March.....	4,370	390	1,400	2.11	2.43
April.....	12,900	430	2,090	3.14	3.50
May.....	4,190	320	977	1.47	1.70
June.....	12,000	218	2,320	3.49	3.89
July.....	12,200	340	1,530	2.30	2.65
August.....	3,250	305	684	1.03	1.19
September.....	2,710	160	461	.693	.77
The year.....	13,800	76	1,280	1.92	26.11

GREAT SENECA CREEK NEAR GAITHERSBURG, MD.

LOCATION.—Chain gage at bridge on Frederick pike 2 miles northwest of Gaithersburg, Montgomery County, and just below Whetstone Run.

DRAINAGE AREA.—41.0 square miles.

RECORDS AVAILABLE.—March, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, about 726 second-feet June 14 (gage height, 8.70 feet); minimum, 13 second-feet October 1-3 (gage height, 1.44 feet).

1925-1928: Maximum discharge, about 800 second-feet, revised, November 16, 1927 (gage height, 8.80 feet); minimum, 5.7 second-feet August 13 and 14, 1926 (gage height, 1.44 feet).

REMARKS.—Records good. Discharge estimated December 20, 26-28, January 1-8, 22, 28-31, and February 1-5, because of ice.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	13	25	26			44	44	67	27	56	25	33
2.....	13	25	170			40	40	58	29	51	26	32
3.....	19	27	80		28	39	38	54	24	48	26	76
4.....	90	37	54			37	37	50	29	48	25	37
5.....	22	28	91	28		38	36	46	30	48	26	36
6.....	22	26	69		41	34	34	52	330	45	35	106
7.....	16	26	68		40	34	34	47	32	44	26	56
8.....	18	26	121		190	34	44	42	22	41	25	48
9.....	17	28	57	32	88	107	34	74	21	37	24	43
10.....	16	27	44	30	60	59	32	56	18	41	23	40
11.....	18	26	45	29	55	53	40	45	16	40	29	36
12.....	18	26	52	30	52	55	82	45	16	47	294	34
13.....	86	24	45	30	39	45	48	39	18	44	66	34
14.....	29	24	42	30	105	44	42	37	320	59	41	32
15.....	24	24	38	29	102	40	37	37	107	40	34	32
16.....	22	25	52	29	73	50	35	35	66	38	39	32
17.....	24	102	45	28	60	60	35	35	53	35	299	32
18.....	76	74	37	26	89	60	34	37	48	33	64	31
19.....	165	40	34	54	73	68	33	37	221	33	47	41
20.....	92	33	34	66	51	68	31	34	67	33	40	64
21.....	44	33	34	47	40	60	37	90	75	34	36	40
22.....	34	32	34	35	44	56	47	36	92	40	184	29
23.....	30	29	32	31	119	52	98	32	60	37	53	28
24.....	29	28	30	30	63	48	76	31	88	32	47	27
25.....	27	27	29	50	52	47	48	31	153	31	48	26
26.....	27	25		35	51	44	42	36	151	29	44	29
27.....	26	26	30	29	51	42	50	53	81	32	42	30
28.....	26	28			44	40	242	34	62	42	39	29
29.....	26	27	34		44	37	113	32	113	30	34	32
30.....	24	26	34	25		43	83	31	60	27	34	44
31.....	22		42			45		29		26	35	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	165	13	36.0	0.878	1.01
November.....	102	24	31.8	.776	.87
December.....	170	26	50.4	1.23	1.42
January.....	66		32.1	.783	.90
February.....	190		60.9	1.49	1.61
March.....	107	34	49.1	1.20	1.38
April.....	242	31	54.2	1.32	1.47
May.....	90	29	43.9	1.07	1.23
June.....	330	16	81.0	1.98	2.21
July.....	59	26	39.4	.961	1.11
August.....	299	23	58.4	1.42	1.64
September.....	106	26	39.6	.966	1.08
The year.....	330	13	48.0	1.17	15.93

NORTHWEST BRANCH OF ANACOSTIA RIVER NEAR COLESVILLE, MD.

LOCATION.—Staff gage at bridge at site of old Northwest Mills, $1\frac{1}{2}$ miles southwest of Colesville, Montgomery County, and 3 miles above Burnt Mills.

DRAINAGE AREA.—21.3 square miles.

RECORDS AVAILABLE.—February, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, about 1,210 second-feet October 3 or 4 (gage height, about 6.5 feet); minimum, 5 second-feet October 1-3 (gage height, 1.36 feet).

1924-1928: Maximum discharge, about 1,600 second-feet, April 6, 1924 (gage height, 7.87 feet); minimum discharge, 2.0 second-feet July 20, 1925.

REMARKS.—Records good. Discharge estimated January 2-8, 21, 28-31, February 1-6, 26, and 27 because of ice.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	5	12	14	20		20	17	24	19	14	7	12
2.....	5	13	108			19	22	20	17	13	9	11
3.....	53	14	50			18	18	20	19	12	8	40
4.....	149	14	45		17	17	17	19	20	11	7	14
5.....	18	14	154	15		17	17	17	19	11	6	16
6.....	10	14	51			17	16	19	16	10	6	77
7.....	9	14	97		23	17	16	17	14	10	6	27
8.....	20	19	103		227	18	16	16	13	10	6	17
9.....	26	15	25	17	38	82	16	58	14	9	6	15
10.....	14	14	23	17	27	29	16	26	15	8	6	14
11.....	11	14	21	16	25	71	29	20	14	9	8	13
12.....	58	14	24	15	22	29	57	31	14	9	108	12
13.....	259	13	22	15	20	23	20	19	21	15	29	11
14.....	25	13	21	15	362	21	19	17	126	34	13	10
15.....	13	13	19	15	50	20	18	17	34	11	12	10
16.....	13	14	24	15	29	24	16	16	16	9	25	10
17.....	12	168	20	15	26	26	16	16	14	9	420	10
18.....	66	140	19	14	56	121	16	17	12	21	23	10
19.....	225	22	18	31	30	121	16	19	14	12	15	14
20.....	31	19	17	26	23	33	15	19	16	9	13	23
21.....	19	17	17	22	23	26	17	20	17	8	14	13
22.....	17	16	16	19	29	23	20	19	25	10	33	11
23.....	16	14	15	17	82	23	48	16	38	10	14	11
24.....	19	14	15	25	36	20	38	14	17	10	13	11
25.....	18	15	15	44	26	20	22	21	16	8	16	11
26.....	15	15	15	24	20	19	20	21	14	8	23	11
27.....	14	14	16	23	20	17	34	34	14	8	21	10
28.....	13	14	17		20	17	173	19	21	8	14	10
29.....	12	15	19		20	17	42	57	34	8	13	11
30.....	12	15	23	18		19	28	33	15	7	12	13
31.....	12		27			17				6	13	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	258	5	38.3	1.80	2.08
November.....	168	12	24.1	1.13	1.26
December.....	154	14	34.5	1.62	1.87
January.....	44		18.8	.883	1.02
February.....	362		46.1	2.16	2.33
March.....	121	17	31.0	1.46	1.68
April.....	173	15	27.8	1.31	1.46
May.....	58	14	22.6	1.06	1.22
June.....	126	12	21.9	1.03	1.15
July.....	34	6	10.9	.512	.59
August.....	420	6	29.6	1.39	1.60
September.....	77	10	15.9	.746	.83
The year.....	420	5	26.7	1.25	17.09

RAPPAHANNOCK RIVER BASIN

RAPPAHANNOCK RIVER AT KELLYS FORD, VA.

LOCATION.—Chain gage at highway bridge at Kellys Ford, Culpeper County, 2 miles above mouth of Mountain Run and 5 miles south of Remington.

DRAINAGE AREA.—641 square miles.

RECORDS AVAILABLE.—February, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, 13,200 second-feet August 12 (gage height, 16.37 feet); minimum, 49 second-feet October 2 (gage height, 1.95 feet).

1925-1928: Maximum discharge, 15,200 second-feet November 17, 1926 (gage height, 18.00 feet); minimum, 15 second-feet September 9, 1925 (gage height, 1.50 feet).

REMARKS.—Records good. Discharge estimated because of ice January 3-7 and because of erroneous readings December 24-26.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	58	330	418	418	467	571	467	2,250	372	372	114	606
2	53	330	886	394	442	544	467	1,820	330	372	492	578
3	54	330	2,320	350	442	492	442	1,470	330	394	255	721
4	5,970	394	1,680	310	394	442	418	1,200	330	291	238	870
5	1,010	418	1,610	290	518	442	394	1,080	394	310	238	721
6	467	310	1,680	260	442	418	372	1,010	467	272	222	1,650
7	350	291	1,610	260	394	418	372	948	518	222	739	1,440
8	310	291	3,020	350	1,080	418	948	826	330	220	768	930
9	372	330	1,960	467	948	418	626	1,010	310	170	372	606
10	492	330	1,400	442	571	571	518	1,010	291	222	255	551
11	330	291	1,270	372	571	518	518	768	291	222	206	498
12	291	291	1,140	372	518	492	1,750	739	310	200	8,060	448
13	5,450	255	1,010	350	467	467	1,140	710	310	1,080	7,840	448
14	1,400	255	886	350	1,010	418	948	598	330	826	1,860	424
15	886	255	768	330	3,650	394	768	544	310	571	1,170	402
16	654	255	710	310	1,610	418	654	544	272	238	1,050	380
17	598	310	710	310	1,270	654	626	518	222	188	7,620	360
18	1,540	1,610	710	330	1,200	1,200	598	518	200	170	2,420	340
19	3,470	1,960	654	571	886	1,140	544	598	222	143	1,440	472
20	2,400	1,400	544	1,010	768	886	467	598	238	141	1,110	2,420
21	1,540	1,010	598	654	710	886	467	544	330	136	870	1,580
22	1,146	886	544	350	626	826	768	826	571	141	2,070	1,050
23	768	768	492	442	1,075	739	1,270	544	467	571	1,300	810
24	654	598	460	518	1,075	682	1,680	442	467	238	930	721
25	626	518	420	1,010	826	654	1,010	442	467	182	930	606
26	544	544	400	682	632	626	768	682	598	146	930	551
27	492	492	467	598	626	571	768	598	571	136	810	498
28	442	492	492	544	654	518	9,600	518	372	141	750	472
29	418	467	544	442	598	467	5,450	492	442	154	606	448
30	394	418	467	418	-----	492	2,780	418	948	150	551	448
31	350	-----	442	492	-----	544	-----	394	-----	117	634	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	5,970	53	1,080	1.68	1.94
November	1,960	255	548	1.855	.95
December	3,020	-----	1,010	1.58	1.82
January	1,010	-----	451	1.704	.81
February	3,650	394	846	1.32	1.42
March	1,200	394	561	1.22	1.06
April	9,600	372	1,250	1.95	2.18
May	2,250	394	795	1.24	1.43
June	2,448	200	387	1.604	.67
July	1,080	117	281	1.438	.50
August	8,060	114	1,510	2.36	2.71
September	2,420	340	735	1.15	1.28
The year	9,600	53	788	1.23	16.77

RAPPAHANNOCK RIVER NEAR FREDERICKSBURG, VA.

LOCATION.—Water-stage recorder $1\frac{1}{2}$ miles above dam of Virginia Electric & Power Co. and $3\frac{1}{2}$ miles above Fredericksburg, Spottsylvania County.

DRAINAGE AREA.—1,590 square miles.

RECORDS AVAILABLE.—September, 1907, to September, 1928.

EXTREMES.—Maximum discharge during year, 39,400 second-feet August 12 (gage height, 11.66 feet); minimum, estimated 170 second-feet October 1, 1907–1928: Maximum discharge, about 66,000 second-feet May 13, 1924 (gage height, 16.5 feet); minimum, 64 second-feet September 15, 1925 (gage height, 0.28 foot).

REMARKS.—Records excellent except those for estimated periods, October 1–9, November 27 to December 9, January 3–8, April 30 to May 4, August 12–24, September 7, 20, and 21, which are fair.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	170	786	980	1,350	1,280	1,500	1,250	5,300	857	1,360	295	3,300
2.....	180	768	2,500	1,180	1,390	1,420	1,150	4,600	796	920	2,200	1,730
3.....	200	768	5,500	960	1,340	1,310	1,200	3,800	777	836	1,390	1,470
4.....	17,500	796	4,000	790	1,130	1,240	1,110	3,000	739	942	796	1,930
5.....	11,200	1,010	4,500	750	1,230	1,180	1,080	2,490	777	712	510	1,390
6.....	4,000	846	4,100	720	1,310	1,140	1,050	2,240	920	857	510	6,800
7.....	1,040	720	4,000	700	1,160	1,080	1,010	2,160	920	619	595	6,340
8.....	760	694	10,500	740	2,550	1,080	1,220	1,910	796	540	1,200	3,250
9.....	1,340	739	7,400	986	3,440	1,130	1,850	2,830	739	474	910	2,190
10.....	1,090	868	3,620	1,070	2,160	1,480	1,430	3,320	768	467	488	1,790
11.....	964	768	2,930	997	1,760	1,410	1,490	2,160	815	448	3,690	1,490
12.....	748	730	2,750	931	1,560	1,250	4,460	1,820	836	448	13,700	1,290
13.....	9,600	694	2,490	888	1,390	1,270	3,310	1,630	815	1,260	23,800	1,180
14.....	5,210	652	2,320	846	1,860	1,180	2,400	1,450	836	2,790	13,400	1,100
15.....	2,320	627	2,000	806	10,100	1,100	2,000	1,360	1,180	2,040	3,000	1,040
16.....	1,670	619	1,970	777	4,720	1,050	1,780	1,290	878	953	2,500	910
17.....	1,360	1,650	2,160	748	3,210	1,100	1,600	1,250	652	686	20,600	953
18.....	2,200	13,700	1,860	739	9,020	2,030	1,490	1,230	555	579	11,700	1,510
19.....	6,400	6,130	1,620	796	2,660	3,790	1,380	1,250	532	525	8,900	1,060
20.....	5,890	3,210	1,420	1,810	2,000	2,750	1,310	1,310	587	460	6,000	7,600
21.....	3,410	2,400	1,380	1,630	1,850	2,320	1,240	1,310	942	422	2,600	5,300
22.....	2,400	2,000	1,360	952	1,630	2,030	1,280	1,560	1,200	385	4,000	3,020
23.....	1,880	1,760	1,310	805	2,390	1,820	1,850	1,340	1,200	2,520	2,800	2,320
24.....	1,570	1,550	1,220	1,040	3,120	1,690	4,780	1,130	1,120	986	1,700	1,940
25.....	1,340	1,390	1,090	2,390	2,240	1,590	3,140	997	878	422	2,080	1,670
26.....	1,180	1,290	1,070	2,240	1,830	1,590	2,240	1,340	1,150	328	2,400	1,500
27.....	1,050	1,200	1,050	1,490	1,700	1,490	2,970	1,960	1,500	275	1,880	1,390
28.....	986	1,120	1,160	1,310	1,620	1,360	22,400	1,280	920	495	1,720	1,310
29.....	942	1,040	1,200	1,140	1,590	1,240	11,200	1,130	758	759	1,490	1,250
30.....	888	1,000	1,200	1,010	-----	1,250	8,200	975	1,220	441	1,250	1,340
31.....	815	-----	1,190	1,390	-----	1,340	-----	899	-----	333	2,000	-----

Month	Maximum	Minimum	Mean	Per square mile	Rnn-off in inches
October.....	17,500	170	2,910	1.83	2.11
November.....	13,700	619	1,720	1.08	1.20
December.....	10,500	980	2,650	1.65	1.90
January.....	2,390	700	1,100	.692	.80
February.....	10,100	1,130	2,320	1.46	1.58
March.....	3,790	1,050	1,530	.962	1.11
April.....	22,400	1,010	3,100	1.95	2.18
May.....	5,300	899	1,950	1.23	1.42
June.....	1,500	532	889	.559	.62
July.....	2,790	275	815	.513	.59
August.....	23,800	295	4,520	2.84	3.27
September.....	7,600	910	2,310	1.45	1.62
The year.....	23,800	170	2,150	1.35	18.40

RAPIDAN RIVER AT RAPIDAN, VA.

LOCATION.—Staff gage 1,000 feet below highway bridge in Rapidan, Culpeper County, and 2 miles below mouth of Robinson Branch.

DRAINAGE AREA.—446 square miles.

RECORDS AVAILABLE.—February, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, 11,200 second-feet October 4 (gage height, 15.37 feet); minimum, 36 second-feet October 1 (gage height, 0.72 foot).

1925-1928: Maximum discharge, 12,400 second-feet November 16, 1926 (gage height, 16.66 feet); minimum, 17 second-feet August 29, 1925 (gage height, 0.31 foot).

REMARKS.—Records good. Discharge estimated because of ice January 3-8 and gage not read September 15. Low-water flow regulated by small mill above gage.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	51	258	363	402	363	422	326	1,440	242	344	88	1,160
2.....	39	274	940	274	344	382	363	1,210	242	291	692	598
3.....	47	258	1,560	260	308	363	326	1,050	227	598	308	788
4.....	6,000	326	1,100	240	291	344	308	888	227	242	153	692
5.....	552	274	1,600	230	308	344	308	788	258	363	291	575
6.....	308	242	1,380	230	308	308	291	740	242	198	184	2,530
7.....	227	242	1,210	230	308	308	291	692	212	184	326	1,380
8.....	212	258	2,600	250	838	308	644	598	212	158	464	992
9.....	308	382	1,620	308	788	326	464	838	198	153	227	788
10.....	326	291	1,210	326	598	344	464	692	198	153	575	644
11.....	227	258	1,050	291	530	344	508	575	212	242	1,050	575
12.....	212	258	940	274	486	326	1,880	552	227	151	4,450	508
13.....	3,700	242	838	258	422	308	838	464	212	1,210	2,600	464
14.....	1,050	227	740	242	992	291	692	443	227	598	1,050	530
15.....	692	242	644	242	2,300	274	644	422	242	382	692	466
16.....	530	242	692	274	1,160	291	530	402	171	242	740	402
17.....	552	2,380	644	242	940	326	486	382	156	184	6,540	598
18.....	1,100	4,790	552	242	888	598	443	382	156	158	2,680	644
19.....	1,760	1,620	508	291	486	692	422	363	198	158	1,440	740
20.....	1,260	1,100	464	464	598	575	382	344	242	146	1,050	2,680
21.....	940	692	443	308	552	508	382	692	308	125	788	1,320
22.....	740	788	422	308	486	443	402	382	291	144	692	992
23.....	575	644	402	308	888	422	740	344	198	308	598	788
24.....	530	575	382	291	598	402	1,210	291	291	127	552	692
25.....	443	530	344	838	598	402	788	274	291	112	940	598
26.....	402	464	363	508	530	402	692	838	464	94	530	552
27.....	363	443	363	422	508	382	1,100	344	291	112	552	486
28.....	344	402	402	402	486	344	4,880	308	242	212	486	443
29.....	308	382	363	308	443	344	1,690	308	291	130	402	443
30.....	274	382	363	508	-----	363	1,880	291	530	96	402	552
31.....	291	-----	382	363	-----	363	-----	274	-----	88	1,440	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	6,000	39	786	1.76	2.03
November.....	4,790	227	649	1.46	1.63
December.....	2,600	344	799	1.79	2.06
January.....	838	230	327	.733	.85
February.....	2,300	291	633	1.42	1.53
March.....	692	274	382	.857	.99
April.....	4,880	291	779	1.75	1.95
May.....	1,440	274	568	1.27	1.46
June.....	530	156	250	.561	.63
July.....	1,210	88	243	.556	.64
August.....	6,540	88	1,060	2.38	2.74
September.....	2,680	402	821	1.84	2.05
The year.....	6,540	39	609	1.37	18.56

YORK RIVER BASIN

NORTH ANNA RIVER NEAR HEWLETTS, VA.

LOCATION.—Chain gage at bridge on Chilesburg-Hewletts highway, Hanover County, 17 miles above mouth of Little River.

DRAINAGE AREA.—424 square miles.

RECORDS AVAILABLE.—March, 1926, to August, 1928 (discontinued).

EXTREMES.—Maximum discharge during year, 6,240 second-feet April 28 (gage height, 15.11 feet); minimum, 40 second-feet October 1 and 2 (gage height, 3.68 feet).

1926-1928: Maximum discharge, 6,720 second-feet November 17, 1926 (gage height, 15.73 feet); minimum, 31 second-feet September 30, 1927 (gage height, 3.60 feet).

REMARKS.—Records good. Discharge affected by ice December 24-28 and January 4-9.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1	40	120	172	• 460	304	250	• 271	350	172	• 158	145
2	• 40	120	326	• 300	304	240	260	326	154	136	210
3	43	136	1,770	145	304	230	210	350	• 150	128	448
4	920	184	• 1,950		282	• 220	181	326	145	• 124	172
5	422	190	802		• 340	210	230	304	172	120	• 134
6	200	• 180	1,120	• 160	422	210	220	• 293	145	112	96
7	128	163	880		282	210	210	282	145	112	120
8	112	136	1,950		880	220	• 215	260	136	• 102	2,070
9	• 110	190	1,670		1,080	220	220	624	128	92	448
10	220	181	474	282	500	326	282	1,040	• 146	• 100	186
11	163	181	• 410	• 240	374	• 340	304	398	163	• 100	2,010
12	128	163	350	220	• 350	350	1,220	326	200	181	
13	1,830	• 150	326	210	326	271	840	• 358	210	422	
14	840	136	326	200	282	240	398	190	374	2,570	
15	240	145	326	• 190	3,690	230	• 351	200	304	• 1,770	
16	• 200	145	398	190	1,080	271	304	230	271	• 970	
17	163	145	500	181	528	282	260	220	• 204	181	
18	154	4,080	• 400	190	448	• 980	240	210	136	• 158	
19	282	1,320	304	210	• 600	1,670	230	200	145	136	
20	448	• 760	220	326	374	880	230	• 200	200	128	
21	260	271	240	260	326	558	220	200	200	136	
22	190	181	240	• 220	• 320	422	• 280	210	350	• 150	
23	• 170	220	210	200	326	350	600	220	181	163	
24	145	• 210		200	528	304	1,890	190	• 1,000	163	
25	136	190		692	350	• 293	764	200	398	142	
26	120	181	• 190	590	• 340	282	398	181	304	120	
27	128	• 176		326	326	260	• 1,420	• 186	398	112	
28	120	172		304	282	240	6,240	190	230	422	
29	120	172		• 340	260	230	• 3,660	190	200	• 284	
30	• 116	163		230	374	250	1,080	• 186	181	145	
31	112		260	326		282		181		120	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,830	40	268	0.632	0.78
November	4,080	120	358	.844	.94
December	1,950		549	1.29	1.49
January	692		262	.618	.71
February	3,690	260	545	1.29	1.39
March	1,670	210	365	.861	.99
April	6,240	181	771	1.82	2.03
May	1,040	181	281	.663	.76
June	1,000	128	238	.561	.63
July	2,570	92	315	.743	.86

• Estimated or interpolated.

SOUTH ANNA RIVER AT VONTAY, VA.

LOCATION.—Chain gage at bridge on Vontay-Montpelier highway, 1,000 feet below Turkey Creek and 1 mile north of Vontay, Hanover County.

DRAINAGE AREA.—332 square miles.

RECORDS AVAILABLE.—December, 1926, to September, 1928.

EXTREMES.—Maximum discharge during year, 4,150 second-feet August 15 (gage height, 22.83 feet); minimum, 29 second-feet October 2 and 3 (gage height, 2.15 feet).

1926-1928: Maximum discharge, that of August 15, 1928; minimum, that of October 2 and 3, 1927.

REMARKS.—Records good. Discharge estimated because of ice December 22-28 and January 3-7.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	33	76	117	300	180	180	194	1,100	100	95	40	1,120
2.....	30	76	460	252	222	180	167	428	90	84	79	1,220
3.....	30	76	1,220	332	332	154	180	332	90	74	100	575
4.....	293	98	1,380	268	160	167	268	90	69	268	460	
5.....	1,140	109	872	100	268	154	160	252	90	69	112	548
6.....	642	109	782		300	148	141	222	90	69	90	1,280
7.....	131	86	890		300	148	141	208	95	64	194	1,860
8.....	99	81	818	135	548	141	148	194	84	62	117	2,330
9.....	104	98	1,100	180	628	154	180	364	79	50	64	1,240
10.....	120	139	548	222	548	208	208	642	79	50	194	412
11.....	136	139	316	222	348	222	396	444	90	50	1,000	284
12.....	126	103	292	194	284	180	717	268	100	90	3,670	222
13.....	1,000	86	268	167	237	194	628	208	100	90	3,930	208
14.....	1,200	86	252	154	364	180	252	180	106	237	4,050	180
15.....	287	81	237	148	1,100	154	268	160	90	614	2,810	167
16.....	152	81	348	135	1,340	154	222	154	95	208	1,160	154
17.....	115	406	548	129	475	167	194	148	79	106	872	141
18.....	103	1,300	348	123	428	717	180	135	74	74	1,750	194
19.....	194	1,690	268	167	490	1,200	167	117	95	69	2,280	428
20.....	371	1,100	208	284	300	908	167	129	74	74	1,380	944
21.....	255	661	180	364	252	444	167	123	300	62	284	890
22.....	146	222		180	237	332	208	117	148	47	208	348
23.....	109	194		141	252	268	428	106	300	45	167	237
24.....	103	167		180	364	237	1,200	112	562	43	141	194
25.....	92	154	130	396	332	208	717	106	348	45	252	154
26.....	81	141		687	252	208	364	112	237	41	396	154
27.....	81	135		332	194	194	717	117	180	41	818	141
28.....	86	129		237	194	180	1,820	112	208	52	396	135
29.....	76	123	141	194	167	160	2,060	106	129	44	208	154
30.....	76	123	167	240		194	2,110	106	129	37	141	222
31.....	76		208	208		252		106		41	268	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,200	30	242	0.729	0.84
November.....	1,690	76	269	.810	.90
December.....	1,380		415	1.25	1.44
January.....	687		209	.630	.73
February.....	1,340	167	386	1.16	1.25
March.....	1,200	141	270	.813	.94
April.....	2,110	141	489	1.47	1.64
May.....	1,100	106	231	.696	.80
June.....	562	74	144	.434	.48
July.....	614	37	90.2	.272	.31
August.....	4,050	40	885	2.67	3.08
September.....	2,330	135	553	1.67	1.86
The year.....	4,050	30	348	1.05	14.27

MISCELLANEOUS DISCHARGE MEASUREMENTS

In addition to the records of flow obtained at the gaging stations and reported in the preceding pages, measurements were made at other points, as shown by the following table:

Miscellaneous discharge measurements in north Atlantic slope drainage basins during the year ending September 30, 1928

Date	Stream	Tributary to or diverting from—	Locality	Gage height	Discharge
				<i>Feet</i>	<i>Sec.-ft.</i>
Mar. 21.	Moose River.....	Kennebec River.....	Rockwood, Me.....	2.96	^a 241
Do.....	do.....	do.....	do.....	2.82	^a 176
May 24.	do.....	do.....	do.....	7.45	^a 4,630
Aug. 6.	do.....	do.....	do.....	4.19	^a 875
Aug. 7.	do.....	do.....	do.....	4.88	^a 1,540
Aug. 8.	do.....	do.....	do.....	5.80	^a 2,740
Mar. 17.	West Outlet Stream.....	do.....	Somerset Junction, Me.....	85	^b 61
Aug. 22.	do.....	do.....	do.....		^b 160
Oct. 30.	Glens Falls feeder.....	Hudson River.....	Gage No. 1, Glens Falls, N. Y.	280.96	153
May 24.	do.....	do.....	do.....	280.32	174
June 15.	do.....	do.....	do.....	280.39	156
July 27.	do.....	do.....	do.....	281.32	159
Sept. 7.	do.....	do.....	do.....	281.98	234
Oct. 30.	do.....	do.....	Gage No. 2, Glens Falls, N. Y.	280.01	133
May 24.	do.....	do.....	do.....	279.62	178
June 15.	do.....	do.....	do.....	279.65	163
July 27.	do.....	do.....	do.....	280.58	167
Sept. 7.	do.....	do.....	do.....	280.84	219
Oct. 30.	do.....	do.....	Gage No. 3, Glens Falls, N. Y.	279.70	146
May 24.	do.....	do.....	do.....	279.26	179
June 15.	do.....	do.....	do.....	279.30	162
July 27.	do.....	do.....	do.....	279.86	179
Sept. 7.	do.....	do.....	do.....	279.48	209
Oct. 29.	do.....	do.....	Dunhams Basin, N. Y.	147.78	119
May 24.	do.....	do.....	do.....		85.7
June 15.	do.....	do.....	do.....	146.61	128
July 27.	do.....	do.....	do.....	147.53	110
Sept. 7.	do.....	do.....	do.....	147.00	111
July 18.	Lackawaxen River.....	Delaware River.....	West Hawley, Pa.....	2.43	441
Do.....	Bushkill Creek.....	do.....	Former gaging station near Shoemakers, Pa.	2.75	496
July 12.	Perkiomen Creek.....	Schuylkill River.....	Graters Ford, Pa.....	2.08	348
Aug. 16.	do.....	do.....	do.....	1.50	100
May 16.	South River.....	South Fork of Shenandoah River.....	1 mile above Waynesboro, Va.		170
Sept. 20.	do.....	do.....	Highway bridge at Waynesboro, Va.		4,190
May 15.	do.....	do.....	1½ miles below Waynesboro, Va.		215
May 16.	Koiner Spring.....	South River.....	Near Waynesboro, Va.....		3.7
Aug. 13.	do.....	do.....	do.....		3.5
May 16.	Baker Spring.....	do.....	do.....		10.8
June 28.	do.....	do.....	do.....		9.3
July 31.	do.....	do.....	do.....	1.58	10.6
Aug. 13.	do.....	do.....	do.....	1.47	^a 8.0
June 28.	Loth Spring.....	do.....	do.....		.78

^a Staff gage about one-third of a mile below Brassua Lake Dam.

^b Leakage through west outlet dam.

^c Part of flow diverted around measuring section.

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