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1930

PART 1

NORTH ATLANTIC SLOPE
DRAINAGE BASINS

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ILLUSTRATION

FIGURE 1. Typical river-measurement station showing concrete well and house for water-stage recorder and staff gages, cable, and car.

SURFACE WATER SUPPLY OF NORTH ATLANTIC SLOPE DRAINAGE BASINS, 1930

AUTHORIZATION AND SCOPE OF WORK

This volume is one of a series of 14 reports presenting results of measurements of flow made on streams in the United States during the year ending September 30, 1930.

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, 1895-1931

| | | | | | |
|-------------|---------------|-------------|----------------|-----------|----------------|
| 1895----- | \$12, 500. 00 | 1908-1910 - | \$100, 000. 00 | 1926----- | \$165, 000. 00 |
| 1896----- | 24, 500. 00 | 1911-1917 - | 150, 000. 00 | 1927----- | 151, 000. 00 |
| 1897-1899 | 50, 000. 00 | 1918----- | 175, 000. 00 | 1928----- | 147, 000. 00 |
| 1900----- | 70, 000. 00 | 1919----- | 148, 244. 10 | 1929----- | 270, 500. 00 |
| 1901-2----- | 100, 000. 00 | 1920----- | 175, 000. 00 | 1930----- | 275, 000. 00 |
| 1903-1906 - | 200, 000. 00 | 1921-1923 - | 180, 000. 00 | 1931----- | 565, 000. 00 |
| 1907----- | 150, 000. 00 | 1924-25 --- | 170, 000. 00 | | |

In this work many private and State organizations have cooperated, either by furnishing records 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 6,070 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July, 1930, 2,430 gaging stations were being maintained by the Geological 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 the 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, and acre-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, 1929, and ending September 30, 1930. 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 consist 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 readings 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 by the general methods 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.

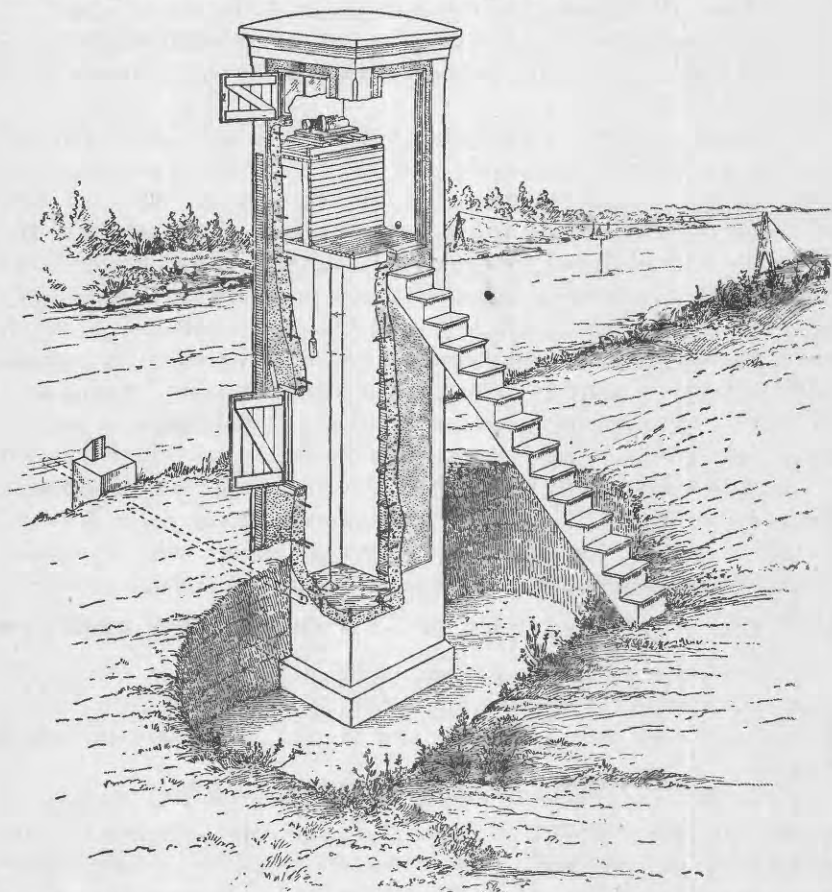


FIGURE 1.—Typical river-measurement station showing concrete well and house for water-stage recorder and staff gages, cable, and car

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 and a table showing the daily discharge of the stream and the 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 discharges, 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 nonrecording 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 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 permanency 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," within 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 compu-

tations are also omitted for stations on streams draining areas in which the annual rainfall is less than 20 inches.

The table of monthly discharges 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 below the stations 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 1. North Atlantic slope basins (St. John River to York River).

2. South Atlantic slope and eastern Gulf of Mexico basins (James River to the Mississippi).
3. Ohio River Basin.
4. St. Lawrence River Basin.
5. Hudson Bay and Upper Mississippi River Basin.
6. Missouri River Basin.
7. Lower Mississippi River Basin.
8. Western Gulf of Mexico basins.
9. Colorado River Basin.
10. The Great Basin.
11. Pacific slope basins in California.
12. North Pacific slope drainage 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., 318 State Office Building.
 Albany, N. Y., 506 Broadway-Arcade Building.
 Trenton, N. J., 710 Trenton Trust Building.
 Harrisburg, Pa., Claster Building.
 Charlottesville, Va., Brooks Museum, University of Virginia.
 South Charleston, W. Va., Naval Ordnance Plant.
 Asheville, N. C., 220 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 Univeristy.
 Indianapolis, Ind., 319 Federal 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.
 Santa Fe, N. Mex., 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 6,070 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..... | 1894 to September, 1890. |
| 12th A, pt. 2..... | do..... | 1894 to June 30, 1891. |

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

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

| Report | Character of data | Year |
|---------------|--|------------------------|
| 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 and 1894. |
| 16th A, pt. 2 | Descriptive information only | |
| B 140 | Descriptions, measurements, gage heights, ratings, and monthly discharge (also many 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). | 1896 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, 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. |
| 23d 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 | 1917. |
| W 501 to 514 | do | 1918. |
| W 521 to 534 | do | 1919 and 1920. |
| W 541 to 554 | do | 1921. |
| W 561 to 574 | do | 1922. |
| W 581 to 594 | do | 1923. |
| W 601 to 614 | do | 1924. |
| W 621 to 634 | do | 1925. |
| W 641 to 654 | do | 1926. |
| W 661 to 674 | do | 1927. |
| W 681 to 694 | do | 1928. |
| W 696 to 709 | do | 1930. |

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 under "Miscellaneous discharge measurements" at the end of each report in the same relative order as the regular gaging stations. An index of the reports containing records obtained prior to 1904 has been 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 1930. 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 3 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 these years.

Number of water-supply papers containing results of stream measurements, 1899-1930

[For basins included, see p. 5]

| Year | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12-A | 12-B | 12-C |
|---------|--------------------------|------------|----------|--------|-----------------|------------|--------------|--------|------------|------------|----------|--------|--------|------------|
| 1899 a | 35 | b 35, 36 | 36 | 36 | 36 | c 36, 37 | 37 | 37 | d 37, 38 | 38, e 39 | 38, f 39 | 38 | 38 | 38 |
| 1900 a | 48, A 48 | 48 | 48, f 49 | 49 | 49 | 49, f 50 | 50 | 50 | 50 | 51 | 51 | 51 | 51 | 51 |
| 1901 | 65, 75 | 65, 75 | 65, 75 | 65, 75 | k 65, 66, 75 | 66, 75 | k 65, 66, 75 | 66, 75 | 66, 75 | 66, 75 | 66, 75 | 66, 75 | 66, 75 | 66, 75 |
| 1902 | 82, 83 | b 82, 83 | 83 | 83 | k 83, 85 | 84 | k 83, 84 | 84 | 85 | 85 | 85 | 85 | 85 | 85 |
| 1903 | 97 | b 97, 98 | 98 | 97 | k 98, 99, m 100 | 99 | k 98, 99 | 99 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1904 | n 124, o 125, p 126, 127 | 126, 127 | 128 | 129 | k 128, 130 | 130, e 128 | k 128, 131 | 132 | 133 | 133, f 134 | 134 | 135 | 135 | 135 |
| 1905 | n 165, p 167 | p 167, 168 | 169 | 170 | 171 | 172 | k 160, 173 | 174 | 175, e 177 | 176, f 177 | 177 | 178 | 178 | e 177, 178 |
| 1906 | n 201, o 202, p 203 | p 203, 204 | 205 | 206 | 207 | 208 | k 205, 209 | 210 | 211, e 213 | 211, f 213 | 213 | 214 | 214 | 214 |
| 1907-8 | 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250, f 251 | 251 | 252 | 252 | 252 |
| 1909 | 261 | 262 | 263 | 264 | 265 | 266 | 267 | 268 | 269 | 270, f 271 | 271 | 272 | 272 | 272 |
| 1910 | 281 | 282 | 283 | 284 | 285 | 286 | 287 | 288 | 289 | 290 | 291 | 292 | 292 | 292 |
| 1911 | 301 | 302 | 303 | 304 | 305 | 306 | 307 | 308 | 309 | 310 | 311 | 312 | 312 | 312 |
| 1912 | 321 | 322 | 323 | 324 | 325 | 326 | 327 | 328 | 329 | 330 | 331 | 332-A | 332-B | 332-C |
| 1913 | 351 | 352 | 353 | 354 | 355 | 356 | 357 | 358 | 359 | 360 | 361 | 362-A | 362-B | 362-C |
| 1914 | 381 | 382 | 383 | 384 | 385 | 386 | 387 | 388 | 389 | 390 | 391 | 392 | 393 | 394 |
| 1915 | 401 | 402 | 403 | 404 | 405 | 406 | 407 | 408 | 409 | 410 | 411 | 412 | 413 | 414 |
| 1916 | 431 | 432 | 433 | 434 | 435 | 436 | 437 | 438 | 439 | 440 | 441 | 442 | 443 | 444 |
| 1917 | 451 | 452 | 453 | 454 | 455 | 456 | 457 | 458 | 459 | 460 | 461 | 462 | 463 | 464 |
| 1918 | 471 | 472 | 473 | 474 | 475 | 476 | 477 | 478 | 479 | 480 | 481 | 482 | 483 | 484 |
| 1919-20 | 501 | 502 | 503 | 504 | 505 | 506 | 507 | 508 | 509 | 510 | 511 | 512 | 513 | 514 |
| 1921 | 521 | 522 | 523 | 524 | 525 | 526 | 527 | 528 | 529 | 530 | 531 | 532 | 533 | 534 |
| 1922 | 541 | 542 | 543 | 544 | 545 | 546 | 547 | 548 | 549 | 550 | 551 | 552 | 553 | 554 |
| 1923 | 561 | 562 | 563 | 564 | 565 | 566 | 567 | 568 | 569 | 570 | 571 | 572 | 573 | 574 |
| 1924 | 581 | 582 | 583 | 584 | 585 | 586 | 587 | 588 | 589 | 590 | 591 | 592 | 593 | 594 |
| 1925 | 601 | 602 | 603 | 604 | 605 | 606 | 607 | 608 | 609 | 610 | 611 | 612 | 613 | 614 |
| 1926 | 621 | 622 | 623 | 624 | 625 | 626 | 627 | 628 | 629 | 630 | 631 | 632 | 633 | 634 |
| 1927 | 641 | 642 | 643 | 644 | 645 | 646 | 647 | 648 | 649 | 650 | 651 | 652 | 653 | 654 |
| 1928 | 661 | 662 | 663 | 664 | 665 | 666 | 667 | 668 | 669 | 670 | 671 | 672 | 673 | 674 |
| 1929 | 681 | 682 | 683 | 684 | 685 | 686 | 687 | 688 | 689 | 690 | 691 | 692 | 693 | 694 |
| 1930 | 696 | 697 | 698 | 699 | 700 | 701 | 702 | 703 | 704 | 705 | 706 | 707 | 708 | 709 |

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 4.

b James River only.

c Gila River.

d Green and Gunnison Rivers and Colorado River above junction with Gunnison.

e Mohave 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 Wissahickon and Schuylkill Rivers to James River.

j Scioto River.

i Loup and Platte Rivers near Columbus, Nebr., and all tributaries below junction with Platte.

j Tributaries of Mississippi from east.

k Lake Ontario and tributaries to St. Lawrence River proper.

m Hudson Bay only.

n New England rivers only.

o Hudson River to Delaware Elver, inclusive.

p Susquehanna River to Yackin River, inclusive.

q Platte and Kansas Rivers.

r Great Basin in California except Truckee and Carson River Basins.

s Below junction with Gila.

t Rogue, Umpqua, and Siletz Rivers only.

COOPERATION

The work in the several States was done under cooperative agreements as follows: In Maine with the Public Utilities Commission, Albert J. Stearns, chairman; in New Hampshire with the Public Service Commission, Mayland H. Morse, Fred H. Brown, and H. Styles Bridges, commissioners; in Vermont with the Public Service Commission, Henry B. Shaw, chairman; in Massachusetts with the Department of Public Works, Frank E. Lyman, chairman, Richard K. Hale, commissioner (waterways), and with Metropolitan District Water Supply Commission, D. B. Keniston, chairman; in Connecticut with the State Water Commission, George T. Kimball, chairman, and Sanford H. Wadhams, director; in New York with the State Department of Public Works, Frederick Stuart Greene, superintendent, the Hudson River Regulating District, and the city of Albany Board of Water Supply; in New Jersey with the State Water Policy Commission, Morris R. Sherrerd, chief engineer, and H. T. Critchlow, division engineer; in Maryland with the Maryland Geological Survey, Dr. E. B. Mathews, State geologist; the State Department of Health, Abel Wolman, chief engineer, the city of Baltimore City Water Department, Edward G. Rost, water engineer, the city of Salisbury, F. H. Dryden, city engineer, and the Washington Suburban Sanitary District, Robert B. Morse, chief engineer; in West Virginia with the West Virginia Geological and Economic Survey, James D. Sisler, State geologist, and the Public Service Commission, I. Wade Coffman, chairman; in Virginia with the Conservation and Development Commission of Virginia, W. E. Carson, chairman; in the District of Columbia with the Public Buildings and Public Parks of the National Capital, Lieut. Col. U. S. Grant, III, director.

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In New Jersey assistance was rendered by the Hackensack Water Co., the Society for Establishing Useful Manufactures, city of Jersey City, town of Morristown, Jersey Central Power & Light Co., North Jer-

sey District Water Supply Commission, city of Newark, Taylor-Wharton Iron & Steel Co., city of New Brunswick, Monmouth Consolidated Water Co., Morris Canal & Banking Co., and the Warren Manufacturing Co.

In Pennsylvania assistance was rendered by the Pennsylvania Power & Light Co. and Susquehanna Power Co.

In West Virginia assistance was rendered by the Potomac Edison Co., and in Virginia by the Virginia Electric & Power Co. and Du Pont engineers.

DIVISION OF WORK

The data for stations in Maine, for the station on Androscoggin River near Gorham, N. H., and for the station on Saco River near Conway, N. H., were collected and prepared for publication under the direction of M. R. Stackpole, district engineer, assisted by L. W. Furness, W. A. Bowmaster, A. O. Patterson, jr., Alice L. Barentzen, and Frances F. Giddings.

The data for stations in New Hampshire (except those mentioned in preceding paragraph), Vermont, Massachusetts, Rhode Island, and for the station on Connecticut River at Thompsonville, Conn., were collected and prepared for publication under the direction of H. B. Kinnison, district engineer, assisted by J. H. Morgan, J. H. Foster, G. K. Wood, E. H. Curtis, A. A. Fischback, jr., Lillian H. Finnerty, and Miss T. V. Larson.

Data for stations in Connecticut, except the one on Connecticut River at Thompsonville, were collected and prepared for publication under the direction of Burke L. Bigwood, district engineer, assisted by Edward B. Rice and Catherine M. Johnson.

Data for stations in New York were collected and prepared for publication under the direction of Arthur W. Harrington, district engineer, assisted by J. L. Lamson, H. F. Hill, jr., F. C. Christopher-son, J. V. B. Wells, W. B. Hanlon, Kyle Forrest, Miss A. D. Buchanan, and Miss E. L. Connors.

Data for stations in New Jersey and Pennsylvania were collected and prepared for publication under the direction of O. W. Hartwell, district engineer, assisted by Otto Lauterhahn, R. E. Marsh, W. L. Heckler, E. G. Barron, and Mrs. A. B. Savidge.

Data for stations in Maryland, District of Columbia, and the Potomac River Basin in West Virginia were collected and prepared for publication under the direction of A. H. Horton, district engineer, assisted by J. W. Mangan, K. F. Schumacher, W. D. Mitchell, R. H. Brigham, and R. O. Martin.

Data for stations in Virginia were collected and prepared for publication under the direction of J. J. Dirzulaitis, district engineer, assisted by O. D. Mussey, A. R. Green, R. W. Sundstrom, F. F. Schrader, T. F. Hanly, P. N. Shackelford, A. D. Ash, and Sue F. Norris.

The records were reviewed and the manuscript assembled by F. F. LeFever.

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, one-fourth mile below mouth of Fish River.

DRAINAGE AREA.—5,690 square miles.

RECORDS AVAILABLE.—October, 1926, to September, 1930.

EXTREMES.—Maximum discharge during year, 96,300 second-feet May 4, 5 (gage height, 21.6 feet); minimum, 1,500 second-feet Sept. 13, 14 (gage height, 2.00 feet).

1926-1930: Maximum discharge, that of May 4, 5, 1930; minimum, 1,180 second-feet Oct. 4, 1927 (gage height, 1.55 feet).

REMARKS.—Records good except those for period of ice effect, Nov. 24 to Apr. 23, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------------|---------|-------|-------|---------|-------|-------|--------|--------|--------|-----------------|--------|-------------------|
| 1..... | 1,790 | 5,090 | 2,730 | 1,690 | 2,860 | 2,350 | 2,930 | 33,200 | 28,700 | 15,000 | 3,800 | 3,480 |
| 2..... | 1,790 | 4,890 | 2,650 | 1,690 | 2,720 | 2,520 | 3,050 | 40,300 | 28,200 | 13,700 | 3,480 | 3,480 |
| 3..... | 1,890 | 5,290 | 2,570 | 1,680 | 2,630 | 2,560 | 3,160 | 59,700 | 24,600 | 14,400 | 3,170 | 3,480 |
| 4..... | 3,020 | 7,220 | 2,510 | 1,670 | 2,510 | 2,560 | 3,220 | 94,200 | 19,600 | 14,400 | 3,170 | 3,170 |
| 5..... | 8,450 | 7,690 | 2,430 | 1,670 | 2,410 | 2,510 | 3,340 | 96,300 | 15,700 | 12,100 | 3,640 | 2,870 |
| 6..... | 11,800 | 7,450 | 2,390 | 1,680 | 2,310 | 2,480 | 3,480 | 89,300 | 16,800 | 9,780 | 5,290 | 3,020 |
| 7..... | 11,800 | 6,990 | 2,330 | 1,720 | 2,230 | 2,350 | 3,560 | 85,800 | 14,700 | 8,450 | 6,330 | 2,470 |
| 8..... | 9,510 | 6,550 | 2,280 | 1,960 | 2,230 | 2,290 | 3,970 | 93,500 | 19,600 | 9,780 | 5,700 | 2,350 |
| 9..... | 8,190 | 6,550 | 2,230 | 2,520 | 2,210 | 2,290 | 6,330 | 92,100 | 22,700 | 12,800 | 5,090 | 2,110 |
| 10..... | 7,450 | 6,330 | 2,180 | 3,320 | 2,080 | 2,290 | 6,550 | 81,000 | 23,600 | 12,800 | 5,090 | 2,000 |
| 11..... | 6,330 | 6,120 | 2,150 | 3,800 | 2,010 | 2,240 | 6,750 | 70,600 | 22,700 | 10,300 | 8,710 | 1,790 |
| 12..... | 5,290 | 5,700 | 2,100 | 6,590 | 1,970 | 2,350 | 6,920 | 59,700 | 20,500 | 8,450 | 9,780 | 1,590 |
| 13..... | 4,690 | 5,700 | 2,070 | 6,550 | 1,970 | 2,360 | 8,450 | 51,000 | 16,500 | 8,190 | 8,450 | 1,500 |
| 14..... | 4,320 | 5,910 | 2,030 | 6,510 | 1,990 | 2,410 | 11,400 | 45,200 | 13,700 | 7,940 | 6,990 | 1,500 |
| 15..... | 4,140 | 6,330 | 2,000 | 6,400 | 1,920 | 2,420 | 19,000 | 40,900 | 11,200 | 8,190 | 5,910 | 1,890 |
| 16..... | 3,970 | 6,770 | 1,960 | 6,160 | 1,820 | 2,430 | 20,000 | 37,300 | 11,800 | 12,400 | 5,490 | 3,480 |
| 17..... | 3,800 | 8,710 | 1,920 | 5,990 | 1,760 | 2,460 | 21,200 | 33,800 | 8,970 | 13,400 | 7,940 | 6,330 |
| 18..... | 3,970 | 9,510 | 1,900 | 5,800 | 1,760 | 2,460 | 21,800 | 31,500 | 8,970 | 11,200 | 11,200 | 6,550 |
| 19..... | 4,500 | 7,690 | 1,880 | 5,530 | 1,750 | 2,470 | 21,500 | 28,700 | 10,600 | 8,450 | 14,000 | 7,940 |
| 20..... | 5,910 | 7,450 | 1,870 | 5,310 | 1,740 | 2,470 | 20,900 | 27,100 | 14,400 | 8,970 | 13,700 | 6,770 |
| 21..... | 5,910 | 6,550 | 1,860 | 5,010 | 1,730 | 2,450 | 23,300 | 26,100 | 15,700 | 11,200 | 12,400 | 6,770 |
| 22..... | 5,910 | 4,890 | 1,830 | 4,910 | 1,730 | 2,390 | 30,400 | 27,100 | 18,500 | 10,600 | 9,510 | 6,550 |
| 23..... | 5,910 | 3,800 | 1,820 | 4,690 | 1,730 | 2,360 | 29,500 | 26,100 | 18,500 | 8,710 | 7,940 | 6,990 |
| 24..... | 5,700 | 3,540 | 1,820 | 4,190 | 1,740 | 2,300 | 29,200 | 22,200 | 19,200 | 7,220 | 6,990 | 6,550 |
| 25..... | 5,490 | 3,420 | 1,810 | 3,850 | 1,840 | 2,270 | 26,100 | 20,500 | 17,600 | 6,120 | 6,120 | 6,120 |
| 26..... | 5,490 | 3,260 | 1,800 | 3,780 | 1,990 | 2,370 | 24,100 | 18,000 | 15,000 | 5,090 | 5,490 | 5,700 |
| 27..... | 5,700 | 3,140 | 1,770 | 3,560 | 2,090 | 2,560 | 22,200 | 18,000 | 10,600 | 4,690 | 4,890 | 5,700 |
| 28..... | 5,700 | 3,020 | 1,760 | 3,480 | 2,220 | 2,610 | 22,200 | 22,700 | 9,510 | 4,500 | 4,500 | 5,290 |
| 29..... | 5,700 | 2,920 | 1,740 | 3,240 | ----- | 2,660 | 24,100 | 26,100 | 12,400 | 4,500 | 3,970 | 5,090 |
| 30..... | 5,910 | 2,830 | 1,720 | 3,100 | ----- | 2,790 | 28,200 | 24,100 | 16,100 | 4,140 | 3,800 | 5,090 |
| 31..... | 5,700 | ----- | 1,700 | 2,990 | ----- | 2,840 | ----- | 25,600 | ----- | 3,970 | 3,800 | ----- |
| Month | Maximum | | | Minimum | | | Mean | | | Per square mile | | Run-off in inches |
| October..... | 11,800 | | | 1,790 | | | 5,660 | | | 0.995 | | 1.15 |
| November..... | 9,510 | | | 2,830 | | | 5,710 | | | 1.00 | | 1.12 |
| December..... | 2,730 | | | 1,700 | | | 2,060 | | | .362 | | .42 |
| January..... | 6,590 | | | 1,670 | | | 3,900 | | | .685 | | .79 |
| February..... | 2,860 | | | 1,730 | | | 2,070 | | | .364 | | .38 |
| March..... | 2,840 | | | 2,240 | | | 2,450 | | | .431 | | .50 |
| April..... | 30,400 | | | 2,930 | | | 15,200 | | | 2.67 | | 2.98 |
| May..... | 96,300 | | | 18,000 | | | 46,700 | | | 8.21 | | 9.46 |
| June..... | 28,700 | | | 8,970 | | | 16,900 | | | 2.97 | | 3.31 |
| July..... | 15,000 | | | 3,970 | | | 9,400 | | | 1.65 | | 1.90 |
| August..... | 14,000 | | | 3,170 | | | 6,660 | | | 1.17 | | 1.35 |
| September..... | 7,940 | | | 1,500 | | | 4,250 | | | .747 | | .83 |
| The year..... | 96,300 | | | 1,500 | | | 10,100 | | | 1.78 | | 24.19 |

FISH RIVER NEAR FORT KENT, ME.

LOCATION.—Water-stage recorder 300 feet above highway bridge at Fort Kent Mills, 2 miles above confluence with St. John River and 2 miles south of Fort Kent, Aroostook County.

DRAINAGE AREA.—867 square miles.

RECORDS AVAILABLE.—September, 1929, to September, 1930. At site 10 miles above, July, 1903, to December, 1908; May to November, 1911.

EXTREMES.—Maximum discharge during year, 9,380 second-feet May 8 (gage height, 9.86 feet); minimum, 139 second-feet Oct. 2 (gage height, 2.82 feet).

REMARKS.—Records good except those for period of ice effect, Nov. 28 to Apr. 5, which are fair. Large lake area above station has not yet been developed for storage purposes.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|------|-------|------|------|-------|------|-------|-------|-------|-------|-------|-------|
| 1..... | | 142 | 385 | 425 | 235 | 350 | 365 | 625 | 4,600 | 3,280 | 2,030 | 892 | 784 |
| 2..... | | 139 | 410 | 405 | 270 | 350 | 385 | 665 | 5,110 | 3,200 | 1,970 | 846 | 770 |
| 3..... | | 277 | 490 | 390 | 270 | 350 | 400 | 715 | 6,490 | 3,060 | 1,970 | 797 | 751 |
| 4..... | | 420 | 490 | 370 | 250 | 350 | 400 | 770 | 7,700 | 2,900 | 1,910 | 797 | 719 |
| 5..... | | 308 | 480 | 360 | 235 | 340 | 405 | 845 | 8,400 | 2,760 | 1,860 | 804 | 738 |
| 6..... | | 290 | 490 | 340 | 270 | 335 | 410 | 932 | 8,750 | 2,550 | 1,800 | 758 | 744 |
| 7..... | | 277 | 496 | 325 | 270 | 335 | 410 | 948 | 9,100 | 2,550 | 1,800 | 718 | 689 |
| 8..... | | 400 | 501 | 315 | 275 | 330 | 425 | 1,190 | 9,280 | 3,130 | 1,740 | 706 | 647 |
| 9..... | | 395 | 506 | 305 | 280 | 340 | 475 | 1,380 | 9,280 | 3,360 | 1,690 | 718 | 611 |
| 10..... | | 370 | 496 | 285 | 355 | 350 | 530 | 1,580 | 8,750 | 3,680 | 1,690 | 295 | 569 |
| 11..... | | 360 | 490 | 280 | 490 | 345 | 490 | 1,860 | 8,400 | 3,360 | 1,740 | 932 | 540 |
| 12..... | | 350 | 485 | 270 | 605 | 335 | 505 | 2,150 | 8,050 | 3,440 | 1,740 | 900 | 518 |
| 13..... | | 331 | 485 | 265 | 715 | 325 | 505 | 2,550 | 7,700 | 3,360 | 1,740 | 884 | 490 |
| 14..... | | 331 | 485 | 250 | 740 | 325 | 490 | 3,130 | 7,180 | 3,130 | 1,690 | 846 | 501 |
| 15..... | | 345 | 501 | 245 | 715 | 320 | 415 | 3,440 | 6,830 | 2,830 | 1,740 | 825 | 545 |
| 16..... | 197 | 355 | 518 | 240 | 655 | 320 | 500 | 3,680 | 6,490 | 2,620 | 1,690 | 825 | 633 |
| 17..... | 189 | 355 | 523 | 235 | 590 | 330 | 490 | 3,920 | 6,140 | 2,620 | 1,640 | 846 | 707 |
| 18..... | 174 | 360 | 518 | 230 | 520 | 340 | 490 | 4,090 | 5,800 | 2,550 | 1,530 | 884 | 707 |
| 19..... | 159 | 375 | 528 | 230 | 455 | 335 | 505 | 4,260 | 5,460 | 2,620 | 1,380 | 1,140 | 659 |
| 20..... | 166 | 385 | 545 | 230 | 410 | 320 | 505 | 4,430 | 5,110 | 2,550 | 1,430 | 1,190 | 671 |
| 21..... | 210 | 380 | 540 | 240 | 405 | 325 | 490 | 4,600 | 4,940 | 2,620 | 1,380 | 1,140 | 713 |
| 22..... | 201 | 380 | 540 | 250 | 405 | 330 | 430 | 4,600 | 4,600 | 2,620 | 1,380 | 1,100 | 758 |
| 23..... | 186 | 375 | 540 | 260 | 400 | 335 | 470 | 4,600 | 4,430 | 2,620 | 1,330 | 1,100 | 777 |
| 24..... | 174 | 380 | 540 | 270 | 400 | 345 | 470 | 4,600 | 4,090 | 2,550 | 1,280 | 1,050 | 758 |
| 25..... | 159 | 395 | 534 | 285 | 400 | 340 | 470 | 4,600 | 3,760 | 2,480 | 1,190 | 1,030 | 758 |
| 26..... | 149 | 420 | 523 | 270 | 390 | 345 | 505 | 4,430 | 3,600 | 2,410 | 1,140 | 1,000 | 758 |
| 27..... | 146 | 415 | 506 | 270 | 375 | 360 | 565 | 4,260 | 3,520 | 2,340 | 1,140 | 972 | 758 |
| 28..... | 146 | 400 | 485 | 250 | 355 | 360 | 565 | 4,260 | 3,520 | 2,220 | 1,100 | 916 | 744 |
| 29..... | 156 | 390 | 465 | 240 | 350 | ----- | 575 | 4,260 | 3,440 | 2,090 | 1,140 | 876 | 713 |
| 30..... | 149 | 385 | 445 | 240 | 345 | ----- | 580 | 4,430 | 3,360 | 2,090 | 1,050 | 846 | 770 |
| 31..... | ----- | 385 | ----- | 255 | 345 | ----- | 595 | ----- | 3,360 | ----- | 972 | 818 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------------|---------|---------|-------|--------------------|----------------------|
| 1929 | | | | | |
| September 16-30..... | 210 | 146 | 171 | 0.197 | 0.11 |
| 1929-30 | | | | | |
| October..... | 420 | 139 | 351 | .405 | .47 |
| November..... | 545 | 385 | 498 | .574 | .64 |
| December..... | 425 | 230 | 285 | .326 | .38 |
| January..... | 740 | 235 | 412 | .475 | .55 |
| February..... | 360 | 320 | 338 | .390 | .41 |
| March..... | 595 | 365 | 480 | .554 | .64 |
| April..... | 4,600 | 625 | 2,930 | 3.38 | 3.77 |
| May..... | 9,280 | 3,360 | 6,040 | 6.97 | 8.04 |
| June..... | 3,680 | 2,090 | 2,790 | 3.22 | 3.59 |
| July..... | 2,030 | 972 | 1,540 | 1.73 | 2.05 |
| August..... | 1,190 | 295 | 886 | 1.02 | 1.18 |
| September..... | 784 | 501 | 685 | .790 | .88 |
| The year..... | 9,280 | 139 | 1,440 | 1.66 | 22.60 |

AROOSTOOK RIVER AT WASHBURN, ME.

LOCATION.—Chain gage on Bangor & Aroostook Railroad bridge 1 mile south of railroad station at Washburn, Aroostook County, and one-tenth mile below mouth of Salmon Brook.

DRAINAGE AREA.—1,620 square miles.

RECORDS AVAILABLE.—August to September, 1930.

EXTREMES.—Maximum discharge during period, 1,720 second-feet Sept. 18 (gage height, 4.52 feet); minimum, 260 second-feet Sept. 1 (gage height 2.40 feet).

REMARKS.—Records fair. Approximately 2.5 billion cubic feet of storage in Squapan Lake.

Daily and monthly discharge, in second-feet, 1930

| Day | Aug. | Sept. | Day | Aug. | Sept. | Day | Aug. | Sept. |
|---------|------|-------|---------|-------|-------|---------|------|------------------|
| 1..... | 465 | 260 | 11..... | 1,050 | 274 | 21..... | 910 | 910 |
| 2..... | 435 | 303 | 12..... | 660 | 274 | 22..... | 660 | 910 |
| 3..... | 388 | 368 | 13..... | 500 | 274 | 23..... | 500 | 910 |
| 4..... | 368 | 660 | 14..... | 435 | 303 | 24..... | 465 | 780 |
| 5..... | 465 | 780 | 15..... | 410 | 303 | 25..... | 388 | 560 |
| 6..... | 660 | 560 | 16..... | 435 | 368 | 26..... | 350 | 560 |
| 7..... | 660 | 465 | 17..... | 660 | 560 | 27..... | 334 | 560 |
| 8..... | 500 | 388 | 18..... | 780 | 1,720 | 28..... | 318 | ^a 500 |
| 9..... | 500 | 334 | 19..... | 1,050 | 1,540 | 29..... | 303 | ^a 480 |
| 10..... | 910 | 303 | 20..... | 1,050 | 1,210 | 30..... | 288 | ^a 465 |
| | | | | | | 31..... | 274 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| August..... | 1,050 | 274 | 554 | 0.342 | 0.394 |
| September..... | 1,720 | 260 | 596 | .368 | .411 |

^a Estimated.

ST. CROIX RIVER BASIN

ST. CROIX RIVER AT VANCEBORO, ME.

LOCATION.—Water-stage recorder at international bridge 400 feet below outlet of Spednic Lake, Vanceboro, Washington County.

DRAINAGE AREA.—435 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,270 second-feet May 7 (gage height, 6.13 feet); minimum, 137 second-feet Oct. 13 (gage height, 3.34 feet).

1928-1930: Maximum discharge, 1,870 second-feet May 13, 1929 (gage height, 7.07 feet); minimum, that of Oct. 13, 1929.

REMARKS.—Records good. Flow regulated by storage.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-------|-------|------|------|-------|
| 1..... | 154 | 152 | 424 | 638 | 755 | 452 | 372 | 217 | 1,190 | 855 | 322 | 304 |
| 2..... | 152 | 154 | 420 | 638 | 730 | 456 | 350 | 530 | 1,150 | 855 | 318 | 300 |
| 3..... | 154 | 155 | 660 | 638 | 730 | 460 | 356 | 1,020 | 1,190 | 855 | 318 | 300 |
| 4..... | 154 | 155 | 830 | 638 | 730 | 464 | 360 | 992 | 1,190 | 855 | 318 | 300 |
| 5..... | 152 | 154 | 805 | 638 | 705 | 464 | 364 | 992 | 1,160 | 830 | 322 | 300 |
| 6..... | 152 | 152 | 805 | 615 | 705 | 464 | 368 | 1,100 | 1,130 | 830 | 322 | 300 |
| 7..... | 151 | 154 | 805 | 615 | 705 | 464 | 332 | 1,240 | 1,070 | 830 | 318 | 300 |
| 8..... | 152 | 152 | 780 | 615 | 682 | 468 | 336 | 1,210 | 1,070 | 805 | 314 | 300 |
| 9..... | 152 | 154 | 780 | 745 | 682 | 489 | 350 | 1,190 | 1,050 | 805 | 311 | 300 |
| 10..... | 150 | 152 | 780 | 882 | 660 | 498 | 356 | 1,190 | 1,050 | 805 | 314 | 300 |
| 11..... | 148 | 152 | 755 | 882 | 660 | 507 | 342 | 1,190 | 1,050 | 715 | 314 | 297 |
| 12..... | 145 | 280 | 755 | 882 | 660 | 525 | 318 | 1,160 | 1,050 | 805 | 314 | 297 |
| 13..... | 142 | 436 | 755 | 882 | 638 | 548 | 325 | 1,160 | 1,020 | 780 | 311 | 297 |
| 14..... | 152 | 436 | 730 | 882 | 595 | 566 | 249 | 1,160 | 1,020 | 780 | 311 | 297 |
| 15..... | 152 | 440 | 730 | 882 | 260 | 570 | 224 | 1,160 | 1,020 | 780 | 311 | 297 |
| 16..... | 151 | 444 | 705 | 882 | 187 | 592 | 224 | 1,160 | 992 | 780 | 314 | 297 |
| 17..... | 152 | 428 | 705 | 882 | 345 | 592 | 224 | 1,160 | 992 | 780 | 314 | 297 |
| 18..... | 152 | 424 | 705 | 855 | 452 | 455 | 224 | 1,160 | 992 | 570 | 318 | 297 |
| 19..... | 152 | 428 | 705 | 855 | 456 | 300 | 222 | 1,150 | 965 | 294 | 318 | 300 |
| 20..... | 151 | 440 | 705 | 855 | 460 | 311 | 224 | 1,130 | 965 | 300 | 318 | 300 |
| 21..... | 151 | 436 | 682 | 855 | 464 | 322 | 219 | 1,130 | 965 | 290 | 318 | 297 |
| 22..... | 151 | 436 | 682 | 830 | 464 | 328 | 217 | 1,130 | 938 | 290 | 311 | 297 |
| 23..... | 151 | 432 | 682 | 830 | 464 | 336 | 217 | 1,100 | 938 | 290 | 311 | 300 |
| 24..... | 152 | 432 | 682 | 830 | 468 | 339 | 217 | 1,100 | 938 | 290 | 311 | 690 |
| 25..... | 154 | 436 | 660 | 805 | 480 | 350 | 217 | 1,130 | 910 | 290 | 311 | 922 |
| 26..... | 154 | 428 | 660 | 805 | 489 | 372 | 215 | 1,160 | 910 | 290 | 311 | 992 |
| 27..... | 154 | 428 | 660 | 805 | 468 | 388 | 215 | 1,160 | 910 | 290 | 308 | 992 |
| 28..... | 155 | 432 | 638 | 780 | 448 | 384 | 215 | 1,190 | 910 | 294 | 308 | 992 |
| 29..... | 154 | 432 | 638 | 780 | ----- | 364 | 212 | 1,190 | 882 | 290 | 308 | 1,020 |
| 30..... | 152 | 424 | 638 | 780 | ----- | 372 | 215 | 1,190 | 882 | 314 | 308 | 1,020 |
| 31..... | 152 | ----- | 638 | 755 | ----- | 380 | ----- | 1,190 | ----- | 322 | 308 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|--------------------|----------------------|
| October..... | 155 | 142 | 152 | 0.349 | 0.40 |
| November..... | 444 | 152 | 325 | .747 | .83 |
| December..... | 830 | 420 | 697 | 1.60 | 1.84 |
| January..... | 882 | 615 | 782 | 1.80 | 2.08 |
| February..... | 755 | 187 | 555 | 1.28 | 1.33 |
| March..... | 592 | 300 | 438 | 1.01 | 1.16 |
| April..... | 372 | 212 | 276 | .634 | .71 |
| May..... | 1,240 | 217 | 1,090 | 2.51 | 2.89 |
| June..... | 1,190 | 882 | 1,020 | 2.34 | 2.61 |
| July..... | 855 | 290 | 586 | 1.35 | 1.56 |
| August..... | 322 | 308 | 314 | .722 | .83 |
| September..... | 1,020 | 297 | 452 | 1.04 | 1.16 |
| The year..... | 1,240 | 142 | 558 | 1.28 | 17.40 |

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, 1930.

EXTREMES.—Maximum discharge during year, 10,300 second-feet Apr. 9 (gage height, 7.30 feet); minimum, 270 second-feet Oct. 13 (gage height, 1.17 feet).

1919-1930: Maximum discharge, about 23,300 second-feet May 1, 1923 (gage height, 13.90 feet); minimum (estimated), 100 second-feet Dec. 9, 1923, July 20, 27, 1924.

REMARKS.—Records good except those for days of log effect, June 16 to July 3, and days of estimated discharge, which are fair. About 30 billion cubic feet of storage developed above station.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 1,140 | 935 | 800 | 1,120 | 1,390 | 1,650 | 3,450 | 2,200 | 3,140 | 1,730 | 1,650 | 735 |
| 2 | 1,160 | 1,030 | 1,220 | 1,040 | 950 | 1,830 | 3,240 | 2,200 | 3,320 | 1,730 | 1,780 | 1,850 |
| 3 | 1,210 | 810 | 1,200 | 1,040 | 1,310 | 2,490 | 3,720 | 2,270 | 3,090 | 1,780 | 985 | 1,330 |
| 4 | 1,230 | 1,100 | 1,220 | 1,210 | 1,360 | 2,860 | 4,060 | 1,270 | 2,940 | 977 | 1,220 | 1,840 |
| 5 | 1,220 | 1,100 | 1,240 | 810 | 1,430 | 2,790 | 4,230 | 1,840 | 2,790 | 1,510 | 1,300 | 1,400 |
| 6 | 909 | 1,080 | 1,270 | 1,010 | 1,460 | 2,860 | 3,850 | 1,760 | 2,490 | 1,060 | 1,400 | 1,260 |
| 7 | 1,100 | 961 | 1,200 | 1,010 | 1,460 | 2,860 | 6,140 | 2,490 | 2,490 | 1,670 | 1,320 | 785 |
| 8 | 1,170 | 1,040 | 810 | 1,030 | 1,430 | 2,940 | 8,180 | 2,560 | 1,270 | 1,850 | 1,350 | 1,270 |
| 9 | 1,170 | 1,010 | 1,040 | 798 | 910 | 3,170 | 9,510 | 2,640 | 1,490 | 1,990 | 1,470 | 1,230 |
| 10 | 1,140 | 690 | 1,000 | 974 | 1,400 | 4,230 | 8,560 | 2,560 | 1,650 | 1,990 | 845 | 1,380 |
| 11 | 1,140 | 909 | 1,200 | 1,150 | 1,460 | 4,400 | 7,440 | 1,400 | 1,650 | 1,850 | 1,350 | 1,320 |
| 12 | 1,220 | 1,040 | 1,110 | 915 | 1,440 | 6,360 | 6,360 | 1,980 | 1,780 | 1,990 | 1,300 | 1,350 |
| 13 | 883 | 870 | 1,100 | 1,220 | 1,440 | 7,990 | 4,940 | 2,560 | 1,920 | 935 | 1,420 | 1,360 |
| 14 | 1,050 | 846 | 1,160 | 1,440 | 1,460 | 8,370 | 5,640 | 2,420 | 1,780 | 1,800 | 1,310 | 870 |
| 15 | 1,050 | 883 | 961 | 1,670 | 1,650 | 7,990 | 4,920 | 1,990 | 1,010 | 1,990 | 1,430 | 1,320 |
| 16 | 935 | 909 | 1,090 | 1,570 | 930 | 7,280 | 4,570 | 1,720 | 1,490 | 1,990 | 1,290 | 1,320 |
| 17 | 974 | 822 | 1,080 | 1,680 | 1,260 | 6,520 | 3,460 | 1,720 | 1,700 | 1,990 | 860 | 1,300 |
| 18 | 987 | 1,050 | 1,070 | 1,570 | 1,350 | 5,640 | 2,420 | 965 | 1,750 | 2,060 | 1,220 | 1,180 |
| 19 | 1,010 | 922 | 1,070 | 1,070 | 1,400 | 4,740 | 2,490 | 1,440 | 2,000 | 2,060 | 1,460 | 1,100 |
| 20 | 834 | 1,130 | 1,060 | 1,200 | 1,430 | 3,890 | 1,390 | 1,650 | 1,750 | 1,190 | 1,290 | 1,130 |
| 21 | 1,010 | 1,160 | 1,100 | 1,720 | 1,390 | 3,640 | 2,490 | 1,920 | 1,840 | 1,680 | 1,430 | 800 |
| 22 | 987 | 1,040 | 975 | 1,560 | 1,380 | 3,240 | 2,060 | 1,990 | 1,060 | 1,720 | 1,200 | 1,350 |
| 23 | 1,010 | 1,270 | 1,150 | 1,510 | 965 | 1,920 | 1,920 | 2,420 | 1,550 | 1,720 | 1,400 | 1,250 |
| 24 | 948 | 961 | 1,000 | 1,580 | 1,360 | 2,720 | 2,360 | 2,420 | 1,920 | 1,650 | 785 | 1,220 |
| 25 | 987 | 1,170 | 900 | 1,470 | 1,510 | 2,860 | 2,640 | 1,280 | 1,740 | 1,720 | 1,360 | 1,360 |
| 26 | 1,080 | 1,130 | 1,300 | 1,080 | 1,650 | 2,860 | 2,640 | 1,790 | 1,740 | 1,920 | 1,220 | 1,250 |
| 27 | 858 | 961 | 1,000 | 1,470 | 1,780 | 3,090 | 1,420 | 2,790 | 1,950 | 1,110 | 1,460 | 1,270 |
| 28 | 1,060 | 1,030 | 1,170 | 1,420 | 1,640 | 3,980 | 2,060 | 3,320 | 1,740 | 1,670 | 1,270 | 840 |
| 29 | 1,040 | 858 | 909 | 1,380 | ----- | 4,400 | 2,200 | 3,980 | 1,200 | 1,780 | 1,430 | 1,200 |
| 30 | 1,000 | 987 | 1,060 | 1,350 | ----- | 3,610 | 2,270 | 4,400 | 1,600 | 1,650 | 1,270 | 1,320 |
| 31 | 1,090 | ----- | 1,040 | 1,380 | ----- | 4,230 | ----- | 3,980 | ----- | 1,650 | 825 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 1,230 | 834 | 1,050 | 0.755 | 0.92 |
| November | 1,270 | 690 | 990 | .750 | .84 |
| December | 1,300 | 800 | 1,080 | .81° | .94 |
| January | 1,680 | 798 | 1,270 | .962 | 1.11 |
| February | 1,780 | 910 | 1,380 | 1.05 | 1.09 |
| March | 8,370 | 1,650 | 4,110 | 3.11 | 3.58 |
| April | 9,510 | 1,390 | 4,020 | 3.05 | 3.40 |
| May | 4,400 | 965 | 2,260 | 1.71 | 1.97 |
| June | 3,320 | 1,010 | 1,930 | 1.46 | 1.63 |
| July | 2,060 | 935 | 1,690 | 1.28 | 1.48 |
| August | 1,780 | 785 | 1,290 | .977 | 1.13 |
| September | 1,400 | 735 | 1,200 | .969 | 1.01 |
| The year | 9,510 | 690 | 1,860 | 1.41 | 19.10 |

* Estimated.

GRAND LAKE STREAM AT GRAND LAKE STREAM, ME.

LOCATION.—Water-stage recorder at Big Falls, half a mile below outlet dam of Grand Lake, Grand Lake Stream Plantation, Washington County.

DRAINAGE AREA.—249 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,430 second-feet July 23 (gage height, 4.62 feet); minimum 35 second-feet Dec. 10-13.

1928-1930: Maximum discharge, 1,520 second-feet May 7, 8, 1929 (gage height, 4.74 feet); minimum, that of Dec. 10-13, 1929.

REMARKS.—Records good. Discharge Dec. 5-13, 16-18, Jan. 4-5, Jan. 16 to Mar. 23, Mar. 26-31 determined from gage heights corrected for ice effect. Flow regulated by storage in Grand Lake.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|-------|-------|-------|
| 1..... | 354 | 470 | 37 | 565 | 47 | 36 | 52 | 55 | 176 | 157 | 1,210 | 710 |
| 2..... | 351 | 470 | 37 | 552 | 47 | 36 | 58 | 55 | 171 | 159 | 1,180 | 700 |
| 3..... | 358 | 470 | 37 | 552 | 47 | 36 | 58 | 57 | 164 | 164 | 1,140 | 696 |
| 4..... | 354 | 462 | 37 | 542 | 47 | 36 | 57 | 57 | 161 | 161 | 1,110 | 691 |
| 5..... | 361 | 457 | 37 | 529 | 47 | 36 | 57 | 108 | 159 | 129 | 1,100 | 673 |
| 6..... | 358 | 448 | 37 | 516 | 47 | 36 | 59 | 330 | 164 | 105 | 1,070 | 664 |
| 7..... | 354 | 444 | 37 | 511 | 47 | 36 | 78 | 406 | 166 | 107 | 1,060 | 660 |
| 8..... | 425 | 430 | 36 | 506 | 47 | 36 | 78 | 386 | 166 | 111 | 1,020 | 650 |
| 9..... | 606 | 426 | 36 | 520 | 47 | 36 | 67 | 372 | 171 | 109 | 1,000 | 642 |
| 10..... | 592 | 414 | 35 | 524 | 47 | 36 | 60 | 365 | 171 | 105 | 1,000 | 624 |
| 11..... | 588 | 406 | 35 | 425 | 47 | 36 | 59 | 358 | 174 | 109 | 1,000 | 610 |
| 12..... | 578 | 406 | 35 | 304 | 47 | 36 | 60 | 354 | 176 | 109 | 978 | 596 |
| 13..... | 565 | 398 | 35 | 304 | 47 | 37 | 62 | 190 | 176 | 109 | 960 | 588 |
| 14..... | 560 | 402 | 215 | 104 | 47 | 37 | 64 | 100 | 179 | 109 | 936 | 578 |
| 15..... | 547 | 330 | 414 | 43 | 47 | 37 | 59 | 98 | 176 | 113 | 918 | 570 |
| 16..... | 538 | 138 | 410 | 43 | 48 | 36 | 60 | 101 | 169 | 107 | 918 | 560 |
| 17..... | 534 | 40 | 410 | 44 | 48 | 36 | 63 | 103 | 164 | 107 | 912 | 556 |
| 18..... | 529 | 40 | 444 | 44 | 48 | 38 | 66 | 101 | 161 | 105 | 895 | 556 |
| 19..... | 516 | 40 | 578 | 45 | 49 | 38 | 67 | 117 | 161 | 107 | 880 | 547 |
| 20..... | 506 | 40 | 570 | 45 | 49 | 39 | 68 | 440 | 166 | 100 | 870 | 534 |
| 21..... | 498 | 40 | 565 | 45 | 49 | 40 | 69 | 825 | 169 | 485 | 860 | 520 |
| 22..... | 488 | 40 | 556 | 46 | 51 | 41 | 360 | 815 | 171 | 720 | 840 | 520 |
| 23..... | 488 | 40 | 552 | 46 | 51 | 42 | 184 | 610 | 171 | 1,180 | 820 | 516 |
| 24..... | 506 | 39 | 547 | 46 | 51 | 43 | 535 | 307 | 169 | 1,410 | 810 | 498 |
| 25..... | 502 | 39 | 542 | 47 | 51 | 43 | 465 | 176 | 169 | 1,380 | 785 | 488 |
| 26..... | 498 | 39 | 529 | 47 | 48 | 45 | 96 | 250 | 169 | 1,360 | 780 | 484 |
| 27..... | 498 | 39 | 516 | 47 | 46 | 46 | 81 | 735 | 164 | 1,340 | 770 | 470 |
| 28..... | 516 | 39 | 560 | 47 | 37 | 47 | 62 | 740 | 161 | 1,310 | 760 | 462 |
| 29..... | 506 | 38 | 583 | 47 | ----- | 47 | 57 | 360 | 154 | 1,280 | 745 | 452 |
| 30..... | 488 | 37 | 588 | 47 | ----- | 48 | 55 | 171 | 154 | 1,250 | 735 | 444 |
| 31..... | 480 | ----- | 574 | 47 | ----- | 49 | ----- | 176 | ----- | 1,230 | 725 | ----- |

| Month | Maximum | Minimum | Mean | Pe ² square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------------------|-------------------|
| October..... | 606 | 351 | 485 | 1.95 | 2.25 |
| November..... | 470 | 37 | 237 | .952 | 1.06 |
| December..... | 588 | 35 | 310 | 1.24 | 1.43 |
| January..... | 565 | 43 | 235 | .944 | 1.09 |
| February..... | 51 | 37 | 47.5 | .191 | .20 |
| March..... | 49 | 36 | 39.4 | .158 | .18 |
| April..... | 535 | 52 | 107 | .430 | .48 |
| May..... | 825 | 55 | 300 | 1.20 | 1.38 |
| June..... | 179 | 154 | 167 | .671 | .75 |
| July..... | 1,410 | 100 | 494 | 1.98 | 2.28 |
| August..... | 1,210 | 725 | 928 | 3.73 | 4.30 |
| September..... | 710 | 444 | 575 | 2.31 | 2.58 |
| The year..... | 1,410 | 35 | 320 | 1.33 | 17.98 |

MACHIAS RIVER BASIN

MACHIAS RIVER AT WHITNEYVILLE, ME.

LOCATION.—Water-stage recorder 800 feet below highway bridge at Whitneyville.
DRAINAGE AREA.—465 square miles.

RECORDS AVAILABLE.—October, 1903, to September, 1921; September, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 5,530 second-feet Mar. 13 (by current-meter measurement); minimum, 77 second-feet Oct. 19 (gage height, 3.09 feet).

1903-1921, 1929-30: Maximum discharge, about 11,100 second-feet Sept. 30, 1909 (gage height, 14.7 feet); minimum, about 10 second-feet Oct. 6, 1906 (gage height, 2.5 feet).

REMARKS.—Records good except those for period of ice effect, Dec. 1 to Mar. 14, and for estimated days, which are fair. Some storage on lakes.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|-------|------|-------|-------|--------|--------|-------|-------|------|------|-------|
| 1 | | 107 | 299 | 275 | 330 | 330 | 1,110 | *2,840 | 709 | 709 | 294 | 219 | 198 |
| 2 | | 118 | 299 | 280 | 320 | 320 | 780 | *2,880 | 942 | 625 | 258 | 215 | 194 |
| 3 | | 211 | 332 | 240 | 405 | 315 | 880 | *3,240 | 975 | 619 | 245 | 203 | 194 |
| 4 | | 511 | 346 | 235 | 595 | 315 | 940 | *3,200 | 878 | 523 | 254 | 198 | 224 |
| 5 | | 535 | 336 | 210 | 655 | 315 | 800 | *3,200 | 780 | 464 | 267 | 194 | 304 |
| 6 | | 395 | 317 | 198 | 605 | 310 | 635 | *3,240 | 691 | 420 | 276 | 186 | 290 |
| 7 | | 336 | 290 | 198 | 615 | 300 | 565 | *3,700 | 728 | 385 | 322 | 186 | 232 |
| 8 | | 317 | 215 | 194 | 745 | 295 | 655 | *4,040 | 1,040 | 356 | 313 | 203 | 236 |
| 9 | | 215 | 182 | 178 | 1,360 | 290 | 2,300 | *4,090 | 1,080 | 380 | 304 | 228 | 276 |
| 10 | | 194 | 194 | 210 | 1,940 | 280 | 3,700 | 4,290 | 942 | 395 | 294 | 236 | 245 |
| 11 | | 170 | 194 | 166 | 1,860 | 275 | 3,520 | 3,330 | 942 | 395 | 285 | 219 | 207 |
| 12 | | 143 | 194 | 166 | 1,530 | 270 | 3,560 | 2,380 | 661 | 385 | 351 | 211 | 162 |
| 13 | | 136 | 203 | 162 | 1,110 | 275 | 5,530 | 1,860 | 709 | 380 | 436 | 198 | 162 |
| 14 | | 132 | 232 | 150 | 878 | 620 | 6,410 | 1,700 | 878 | 365 | 470 | 190 | 170 |
| 15 | | 128 | 448 | 162 | 715 | 1,180 | *5,110 | 1,700 | 1,040 | 336 | 601 | 186 | 170 |
| 16 | | 125 | 722 | 182 | 595 | 1,390 | *4,840 | 1,900 | 1,180 | 327 | 800 | 178 | 162 |
| 17 | | 125 | 679 | 186 | 555 | 1,390 | *4,540 | 2,300 | 1,420 | 317 | 613 | 178 | 162 |
| 18 | | 136 | 559 | 182 | 525 | 1,110 | *4,190 | 2,220 | 1,560 | 294 | 464 | 186 | 162 |
| 19 | | 132 | 910 | 190 | 485 | 1,100 | *3,790 | 2,300 | 1,640 | 304 | 380 | 198 | 158 |
| 20 | | 100 | 1,220 | 230 | 460 | 1,100 | *3,520 | 2,300 | 1,640 | 332 | 332 | 290 | 162 |
| 21 | 322 | 121 | 975 | 420 | 435 | 1,100 | *3,280 | 2,300 | 1,820 | 304 | 299 | 370 | 158 |
| 22 | 263 | 121 | 673 | 535 | 420 | 1,090 | *3,100 | 2,300 | 1,700 | 245 | 281 | 336 | 143 |
| 23 | 186 | 121 | 505 | 525 | 405 | 845 | *2,880 | 2,220 | 1,360 | 370 | 263 | 317 | 132 |
| 24 | 154 | 415 | 448 | 420 | 400 | 765 | *2,660 | 2,140 | 1,080 | 426 | 250 | 294 | 139 |
| 25 | 166 | 1,080 | 420 | 380 | 385 | 955 | *2,540 | 2,060 | 845 | 410 | 241 | 276 | 143 |
| 26 | 132 | 910 | 395 | 330 | 380 | 1,120 | *2,710 | 1,740 | 697 | 375 | 228 | 304 | 136 |
| 27 | 125 | 691 | 370 | 315 | 370 | 1,130 | *2,880 | 1,180 | 942 | 332 | 224 | 304 | 139 |
| 28 | 118 | 529 | 380 | 315 | 355 | 1,130 | *2,970 | 910 | 1,560 | 317 | 219 | 267 | 136 |
| 29 | 107 | 453 | 385 | 320 | 350 | ----- | *2,970 | 703 | 1,460 | 267 | 224 | 245 | 136 |
| 30 | 104 | 395 | 332 | 340 | 345 | ----- | *2,880 | 703 | 1,110 | 313 | 224 | 224 | 136 |
| 31 | ----- | 327 | ----- | 380 | 335 | ----- | *2,840 | ----- | 878 | ----- | 219 | 186 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------------|---------|---------|-------|-----------------|-------------------|
| 1929 | | | | | |
| September 21-30 | 322 | 104 | 168 | 0.361 | 0.13 |
| 1929-30 | | | | | |
| October | 1,080 | 100 | 304 | .654 | .75 |
| November | 1,220 | 182 | 435 | .935 | 1.04 |
| December | 535 | 150 | 264 | .568 | .65 |
| January | 1,940 | 320 | 660 | 1.42 | 1.64 |
| February | 1,390 | 270 | 711 | 1.53 | 1.59 |
| March | 5,530 | 565 | 2,840 | 6.11 | 7.04 |
| April | 4,290 | 703 | 2,430 | 5.23 | 5.84 |
| May | 1,820 | 661 | 1,090 | 2.34 | 2.70 |
| June | 709 | 245 | 389 | .837 | .93 |
| July | 800 | 219 | 330 | .710 | .82 |
| August | 370 | 178 | 233 | .501 | .58 |
| September | 304 | 132 | 186 | .391 | .44 |
| The year | 5,530 | 100 | 824 | 1.77 | 24.02 |

* Estimated.

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 is 36.00 feet above mean sea level.

DRAINAGE AREA.—234 square miles.

RECORDS AVAILABLE.—October, 1926, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,060 second-feet Mar. 15 (gage height, 5.78 feet); minimum, 25 second-feet Sept. 20, 21, 24.
1926-1930: Maximum discharge, 2,140 second-feet May 23, 24, 1929; minimum, that of Sept. 21, 1930.

REMARKS.—Records good except those for periods of estimated discharge, which are fair. Possibly slight regulation at station.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|
| 1..... | 143 | 183 | 272 | 306 | 272 | 585 | 1,410 | 795 | 483 | a 132 | a 134 | a 42 |
| 2..... | a 148 | 188 | 261 | 306 | 261 | 585 | 1,350 | 750 | 480 | a 128 | a 124 | a 41 |
| 3..... | 152 | 188 | 250 | 318 | 261 | 625 | 1,410 | 750 | a 450 | a 126 | a 118 | a 41 |
| 4..... | 160 | a 188 | 240 | 344 | 250 | 625 | 1,410 | 705 | a 420 | a 124 | a 112 | 56 |
| 5..... | 165 | 188 | 221 | 372 | 250 | 625 | 1,410 | 665 | a 395 | a 114 | a 108 | 45 |
| 6..... | 165 | a 186 | 213 | 387 | a 240 | 585 | 1,350 | 625 | a 385 | a 114 | a 104 | 43 |
| 7..... | 165 | 183 | a 210 | 418 | a 240 | 585 | 1,460 | 625 | a 355 | a 122 | a 102 | 42 |
| 8..... | 170 | 178 | 205 | 450 | 230 | 625 | 1,690 | 585 | a 335 | a 124 | a 100 | 41 |
| 9..... | 160 | 178 | 199 | 585 | 221 | 930 | 1,810 | 510 | a 310 | a 126 | a 96 | 40 |
| 10..... | 160 | 174 | 193 | 625 | 221 | 1,190 | 1,750 | 516 | a 290 | a 126 | a 92 | 36 |
| 11..... | 156 | 170 | 188 | 665 | 221 | 1,240 | 1,810 | 483 | a 275 | a 150 | a 86 | 32 |
| 12..... | 152 | 170 | 183 | 665 | 213 | 1,570 | 1,750 | 450 | a 270 | 170 | a 85 | 30 |
| 13..... | 147 | 165 | 183 | 665 | a 245 | 1,870 | 1,690 | 418 | a 250 | 170 | a 81 | 29 |
| 14..... | 147 | 170 | a 180 | 665 | a 290 | 1,990 | 1,690 | 387 | a 230 | 177 | a 70 | 31 |
| 15..... | 143 | 182 | 178 | 625 | 331 | 2,060 | 1,570 | 358 | a 220 | a 184 | a 66 | 29 |
| 16..... | 143 | 199 | 174 | 585 | a 410 | 1,990 | 1,570 | 372 | a 210 | a 220 | a 66 | 29 |
| 17..... | 139 | 205 | 174 | 550 | 483 | 1,930 | 1,460 | 358 | a 200 | a 220 | a 64 | 28 |
| 18..... | 139 | 221 | 178 | 516 | 550 | 1,810 | 1,410 | 344 | a 196 | a 245 | a 58 | a 28 |
| 19..... | 135 | 306 | 188 | 516 | 550 | 1,810 | 1,350 | 318 | a 194 | a 240 | a 56 | 27 |
| 20..... | 135 | 372 | 193 | 516 | 585 | 1,690 | 1,350 | 318 | a 186 | a 250 | a 51 | 25 |
| 21..... | 131 | 387 | 213 | 483 | 585 | 1,690 | 1,300 | 331 | a 178 | a 225 | a 49 | 25 |
| 22..... | 131 | 418 | 230 | a 450 | 585 | 1,520 | 1,190 | 331 | a 176 | a 210 | a 48 | 27 |
| 23..... | 131 | 402 | 240 | 418 | 585 | 1,410 | 1,190 | 318 | a 168 | a 200 | a 44 | 27 |
| 24..... | 147 | 387 | 261 | 402 | 585 | 1,300 | 1,080 | 318 | a 162 | a 190 | a 48 | 25 |
| 25..... | 156 | a 360 | 283 | 372 | 585 | 1,190 | 1,030 | 318 | a 158 | a 182 | a 44 | 26 |
| 26..... | 165 | 344 | 233 | 344 | 585 | 1,350 | 980 | 306 | a 154 | a 174 | a 45 | 26 |
| 27..... | 178 | 331 | 306 | 331 | 625 | 1,460 | 980 | 344 | a 150 | a 174 | a 45 | 27 |
| 28..... | 183 | 331 | 306 | 318 | 585 | 1,460 | 930 | 387 | a 146 | a 174 | a 44 | 27 |
| 29..... | 183 | 318 | 306 | 306 | ----- | 1,520 | 855 | 418 | a 142 | a 166 | a 44 | 27 |
| 30..... | 183 | 294 | 306 | 294 | ----- | 1,520 | 840 | 450 | a 136 | a 162 | a 43 | 27 |
| 31..... | 183 | ----- | 318 | 283 | ----- | 1,460 | ----- | 483 | ----- | a 154 | a 43 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 183 | 131 | 155 | 0.662 | 0.76 |
| November..... | 418 | 165 | 252 | 1.08 | 1.20 |
| December..... | 318 | 174 | 230 | 1.983 | 1.13 |
| January..... | 665 | 283 | 454 | 1.94 | 2.24 |
| February..... | 625 | 213 | 394 | 1.68 | 1.75 |
| March..... | 2,060 | 585 | 1,320 | 5.64 | 6.60 |
| April..... | 1,810 | 840 | 1,370 | 5.85 | 6.53 |
| May..... | 795 | 306 | 464 | 1.98 | 2.28 |
| June..... | 483 | 136 | 257 | 1.10 | 1.23 |
| July..... | 250 | 114 | 170 | .725 | .84 |
| August..... | 134 | 43 | 73.2 | .313 | .36 |
| September..... | 56 | 25 | 52.6 | .139 | .15 |
| The year..... | 2,060 | 25 | 430 | 1.84 | 24.97 |

a Estimated.

UNION RIVER BASIN

WEST BRANCH OF UNION RIVER AT AMHERST, ME.

LOCATION.—Water-stage recorder 200 feet above site of old tannery dam one mile north of Amherst, Hancock County.

DRAINAGE AREA.—139 square miles.

RECORDS AVAILABLE.—July, 1929, to September, 1930; July, 1909, to September, 1919, at site 1 mile below.

EXTREMES.—Maximum discharge during year, 1,580 second-feet Apr. 7 (gage height, 6.84 feet); minimum, 8 second-feet Aug. 26 (gage height, 3.05 feet). 1929-30: Maximum discharge, that of Apr. 7, 1930; minimum, that of Aug. 26, 1930.

REMARKS.—Records good except those for period of ice effect, Nov. 28 to Mar. 10, which are fair. Some storage on lakes.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | 11 | 82 | 64 | 47 | 132 | 465 | 560 | 356 | 231 | 34 | 22 | 11 |
| 2..... | 12 | 85 | 56 | 52 | 122 | 510 | 666 | 344 | 228 | 39 | 22 | 11 |
| 3..... | 28 | 80 | 47 | 62 | 114 | 525 | 742 | 326 | 210 | 39 | 22 | 14 |
| 4..... | 22 | 78 | 40 | 78 | 110 | 505 | 715 | 312 | 194 | 33 | 21 | 12 |
| 5..... | 17 | 75 | 37 | 106 | 106 | 490 | 715 | 295 | 183 | 30 | 20 | 10 |
| 6..... | 15 | 73 | 34 | 122 | 100 | 480 | 742 | 281 | 170 | 30 | 18 | 11 |
| 7..... | 14 | 70 | 26 | 140 | 94 | 485 | 1,130 | 268 | 157 | 33 | 16 | 14 |
| 8..... | 14 | 68 | 22 | 172 | 92 | 495 | 1,410 | 252 | 150 | 31 | 16 | 11 |
| 9..... | 13 | 64 | 24 | 245 | 90 | 525 | 1,410 | 237 | 140 | 27 | 17 | 10 |
| 10..... | 12 | 60 | 21 | 290 | 87 | 555 | 1,480 | 225 | 131 | 25 | 18 | 10 |
| 11..... | 12 | 59 | 24 | 350 | 82 | 605 | 1,480 | 210 | 123 | 26 | 18 | 10 |
| 12..... | 11 | 58 | 32 | 360 | 78 | 1,130 | 1,440 | 191 | 118 | 28 | 15 | 10 |
| 13..... | 13 | 56 | 32 | 370 | 82 | 1,100 | 1,300 | 180 | 110 | 25 | 15 | 10 |
| 14..... | 13 | 67 | 32 | 365 | 128 | 1,040 | 1,200 | 178 | 102 | 28 | 14 | 10 |
| 15..... | 13 | 87 | 24 | 340 | 210 | 1,040 | 1,130 | 165 | 94 | 48 | 14 | 10 |
| 16..... | 13 | 94 | 22 | 330 | 275 | 1,040 | 1,010 | 165 | 87 | 34 | 15 | 10 |
| 17..... | 14 | 92 | 22 | 310 | 310 | 1,010 | 915 | 155 | 80 | 30 | 15 | 12 |
| 18..... | 19 | 98 | 29 | 305 | 335 | 945 | 825 | 150 | 78 | 30 | 14 | 15 |
| 19..... | 20 | 138 | 38 | 290 | 335 | 945 | 770 | 140 | 78 | 30 | 15 | 11 |
| 20..... | 18 | 143 | 38 | 270 | 335 | 885 | 715 | 148 | 72 | 29 | 15 | 10 |
| 21..... | 18 | 138 | 37 | 245 | 310 | 770 | 671 | 160 | 70 | 28 | 14 | 10 |
| 22..... | 20 | 136 | 37 | 235 | 290 | 715 | 616 | 157 | 68 | 27 | 14 | 12 |
| 23..... | 43 | 143 | 40 | 220 | 280 | 632 | 595 | 155 | 80 | 26 | 12 | 11 |
| 24..... | 104 | 160 | 52 | 210 | 270 | 565 | 555 | 152 | 65 | 24 | 12 | 10 |
| 25..... | 75 | 127 | 54 | 196 | 285 | 510 | 524 | 148 | 59 | 24 | 12 | 10 |
| 26..... | 70 | 129 | 47 | 188 | 305 | 632 | 492 | 160 | 52 | 22 | 11 | 10 |
| 27..... | 73 | 110 | 46 | 178 | 350 | 693 | 466 | 210 | 48 | 27 | 11 | 11 |
| 28..... | 78 | 96 | 46 | 170 | 385 | 622 | 438 | 225 | 44 | 25 | 10 | 10 |
| 29..... | 76 | 85 | 44 | 162 | ----- | 590 | 406 | 225 | 40 | 25 | 10 | 10 |
| 30..... | 75 | 73 | 47 | 154 | ----- | 570 | 378 | 228 | 37 | 24 | 15 | 10 |
| 31..... | 75 | ----- | 46 | 146 | ----- | 555 | ----- | 234 | ----- | 23 | 13 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 104 | 11 | 32.6 | 0.235 | 0.27 |
| November..... | 160 | 56 | 94.1 | .677 | .76 |
| December..... | 64 | 21 | 37.4 | .269 | .31 |
| January..... | 370 | 47 | 216 | 1.55 | 1.79 |
| February..... | 385 | 78 | 203 | 1.46 | 1.52 |
| March..... | 1,130 | 465 | 698 | 5.02 | 5.79 |
| April..... | 1,480 | 378 | 850 | 6.12 | 6.83 |
| May..... | 356 | 140 | 214 | 1.54 | 1.78 |
| June..... | 231 | 37 | 110 | .79 | .88 |
| July..... | 48 | 22 | 29.2 | .210 | .24 |
| August..... | 22 | 10 | 15.4 | .111 | .13 |
| September..... | 15 | 10 | 10.9 | .078 | .09 |
| The year..... | 1,480 | 10 | 209 | 1.50 | 20.39 |

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, 1930.

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, 1929-30

| Month | Observed mean | Corrected for storage | | |
|----------------|---------------|-----------------------|-----------------|-------------------|
| | | Mean | Per square mile | Run-off in inches |
| October..... | 3,310 | 1,490 | 0.780 | 0.90 |
| November..... | 3,160 | 1,060 | .555 | .62 |
| December..... | 2,440 | 513 | .269 | .31 |
| January..... | 2,190 | 199 | .104 | .12 |
| February..... | 2,070 | 1,020 | .534 | .66 |
| March..... | 2,330 | 1,630 | .853 | .98 |
| April..... | 3,420 | 9,080 | 4.75 | 5.30 |
| May..... | 3,240 | 10,500 | 5.50 | 6.34 |
| June..... | 3,210 | 4,020 | 2.10 | 2.34 |
| July..... | 2,950 | 2,440 | 1.28 | 1.48 |
| August..... | 2,920 | 1,520 | .796 | .92 |
| September..... | 3,030 | 922 | .483 | .54 |
| The year..... | 2,860 | 2,870 | 1.50 | 20.41 |

WEST BRANCH OF PENOBSCOT RIVER NEAR MEDWAY, ME.

LOCATION.—Water-stage recorder just above Nichatou Rapids and 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, 1930.

EXTREMES.—Maximum discharge during year, 6,380 second-feet Apr. 15 (gauge height, 5.23 feet); minimum, 535 second-feet Sept. 14 (gauge height, 1.24 feet).

1916-1930: Maximum discharge, 24,100 second-feet May 27, 1928 (gauge height, 9.64 feet); minimum (estimated), 100 second-feet at times during 1923 and 1924.

REMARKS.—Records good. Flow regulated by storage reservoirs above station. Discharge Nov. 18-22, Dec. 23-29, Jan. 6-13, Jan. 20 to Mar. 10, June 16 to July 31 determined from gauge heights corrected for effect of ice and timberland debris.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 3,290 | 3,700 | 2,750 | 2,590 | 2,380 | 2,540 | 4,020 | 4,720 | 4,130 | 3,410 | 3,490 | 2,230 |
| 2 | 3,490 | 3,600 | 2,840 | 2,670 | 2,070 | 2,360 | 4,130 | 4,470 | 3,910 | 4,000 | 3,390 | 2,830 |
| 3 | 3,910 | 3,490 | 2,920 | 2,750 | 2,580 | 2,820 | 4,020 | 4,470 | 3,800 | 4,000 | 3,010 | 3,200 |
| 4 | 3,490 | 3,290 | 2,840 | 2,590 | 2,220 | 3,010 | 3,800 | 3,830 | 4,130 | 2,040 | 2,870 | 3,200 |
| 5 | 3,600 | 3,490 | 2,750 | 2,440 | 2,130 | 2,840 | 3,800 | 3,910 | 4,240 | 3,200 | 3,290 | 3,290 |
| 6 | 3,290 | 3,390 | 2,750 | 2,580 | 2,240 | 2,750 | 3,600 | 4,130 | 4,130 | 2,940 | 3,390 | 3,200 |
| 7 | 3,010 | 3,600 | 2,670 | 2,530 | 2,170 | 2,780 | 4,020 | 3,970 | 4,020 | 2,960 | 3,290 | 2,810 |
| 8 | 3,390 | 3,600 | 2,450 | 2,700 | 2,340 | 2,960 | 5,370 | 4,240 | 3,530 | 3,200 | 3,390 | 3,100 |
| 9 | 3,600 | 3,700 | 2,590 | 2,920 | 2,520 | 2,770 | 5,240 | 4,240 | 3,700 | 3,570 | 3,390 | 3,100 |
| 10 | 3,990 | 2,910 | 2,750 | 2,700 | 2,300 | 3,310 | 4,970 | 4,020 | 3,700 | 3,530 | 2,920 | 3,290 |
| 11 | 3,600 | 3,290 | 2,920 | 2,850 | 2,300 | 3,200 | 4,720 | 3,700 | 3,600 | 3,550 | 3,210 | 3,290 |
| 12 | 3,290 | 3,600 | 2,590 | 2,240 | 2,130 | 3,600 | 4,720 | 3,700 | 4,020 | 3,530 | 3,390 | 3,490 |
| 13 | 3,100 | 3,700 | 3,010 | 2,700 | 2,380 | 3,490 | 4,240 | 3,910 | 4,130 | 2,690 | 3,390 | 3,600 |
| 14 | 3,010 | 3,800 | 2,920 | 2,750 | 2,370 | 3,490 | 4,590 | 4,020 | 3,600 | 3,210 | 3,290 | 2,790 |
| 15 | 3,200 | 3,800 | 2,370 | 2,840 | 2,200 | 3,490 | 5,800 | 4,240 | 3,280 | 3,600 | 3,290 | 3,200 |
| 16 | 3,800 | 3,910 | 2,590 | 2,840 | 2,340 | 3,010 | 5,370 | 3,910 | 3,700 | 3,330 | 3,390 | 3,490 |
| 17 | 4,130 | 3,390 | 2,670 | 2,300 | 2,370 | 3,390 | 5,240 | 3,800 | 3,700 | 3,370 | 2,730 | 3,700 |
| 18 | 3,910 | 3,370 | 3,010 | 2,370 | 2,300 | 3,490 | 5,240 | 3,700 | 4,130 | 3,310 | 3,100 | 3,700 |
| 19 | 4,020 | 3,680 | 2,750 | 2,300 | 2,620 | 3,290 | 5,240 | 3,700 | 4,350 | 3,100 | 3,390 | 3,700 |
| 20 | 3,290 | 3,830 | 2,840 | 2,650 | 2,240 | 3,290 | 4,720 | 4,130 | 4,350 | 2,800 | 3,490 | 3,290 |
| 21 | 3,290 | 3,760 | 2,750 | 2,440 | 2,400 | 3,290 | 4,130 | 4,470 | 4,350 | 3,270 | 3,490 | 2,920 |
| 22 | 3,600 | 3,600 | 2,520 | 2,240 | 2,170 | 3,200 | 5,240 | 4,240 | 3,700 | 3,490 | 3,290 | 3,010 |
| 23 | 3,600 | 3,390 | 2,580 | 2,300 | 2,400 | 3,200 | 5,100 | 4,240 | 3,010 | 3,310 | 3,290 | 3,290 |
| 24 | 3,910 | 3,100 | 2,850 | 2,400 | 2,530 | 3,290 | 4,970 | 4,020 | 3,700 | 3,330 | 2,840 | 3,390 |
| 25 | 3,800 | 3,290 | 2,150 | 2,400 | 2,750 | 3,490 | 4,970 | 3,060 | 4,020 | 3,490 | 3,010 | 3,490 |
| 26 | 3,700 | 3,290 | 2,620 | 2,100 | 2,360 | 4,130 | 4,720 | 3,910 | 3,800 | 3,310 | 3,600 | 3,600 |
| 27 | 3,390 | 3,100 | 2,850 | 2,560 | 2,690 | 4,240 | 4,470 | 4,970 | 3,700 | 2,700 | 3,100 | 3,490 |
| 28 | 3,010 | 3,390 | 2,670 | 2,270 | 2,370 | 4,350 | 3,910 | 5,100 | 3,600 | 3,140 | 3,390 | 3,290 |
| 29 | 3,800 | 3,390 | 2,440 | 2,190 | ----- | 4,240 | 4,350 | 4,720 | 3,200 | 3,250 | 3,290 | 3,200 |
| 30 | 3,600 | 3,200 | 2,750 | 2,240 | ----- | 3,700 | 5,100 | 4,590 | 3,100 | 3,140 | 3,490 | 3,390 |
| 31 | 3,700 | ----- | 2,670 | 2,300 | ----- | 3,600 | ----- | 4,470 | ----- | 3,140 | 3,100 | ----- |

| Month | Observed | | | Corrected for storage | | |
|-----------|----------|---------|-------|-----------------------|-----------------|-------------------|
| | Maximum | Minimum | Mean | Mean | Per square mile | Run-off in inches |
| October | 4,130 | 3,010 | 3,540 | 1,720 | 0.811 | 0.94 |
| November | 3,910 | 2,910 | 3,490 | 1,390 | .656 | .73 |
| December | 3,010 | 2,150 | 2,700 | 770 | .363 | .42 |
| January | 2,920 | 2,100 | 2,510 | 520 | .245 | .28 |
| February | 2,750 | 2,070 | 2,350 | 1,300 | .613 | .64 |
| March | 4,350 | 2,360 | 3,310 | 2,610 | 1.23 | 1.42 |
| April | 5,800 | 3,600 | 4,660 | 10,300 | 4.86 | 5.42 |
| May | 5,100 | 3,060 | 4,150 | 11,400 | 5.38 | 6.20 |
| June | 4,350 | 3,010 | 3,810 | 4,620 | 2.18 | 2.43 |
| July | 4,000 | 2,040 | 3,260 | 2,750 | 1.30 | 1.50 |
| August | 3,600 | 2,730 | 3,260 | 1,860 | .877 | 1.01 |
| September | 3,700 | 2,230 | 3,250 | 1,140 | .537 | .60 |
| The year | 5,800 | 2,040 | 3,360 | 3,370 | 1.59 | 21.59 |

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, 1930.

EXTREMES.—Maximum discharge during year, 50,300 second-feet Apr. 9 (gage height, 12.68 feet); minimum, 3,460 second-feet Dec. 8.

1902-1930: Maximum discharge, 153,000 second-feet May 1, 1923 (gage height, 25.15 feet); minimum, 1,470 second-feet Oct. 29, 1905 (gage height, 1.0 foot).

REMARKS.—Records good. Flow regulated by storage on West Branch. Discharge Nov. 25 to Apr. 14 determined from gage height corrected for ice effect, Oct. 1-28, July 15 to Sept. 30 from gage heights corrected for effect of aquatic vegetation. Gage height record and results of discharge measurements furnished by Thomas W. Clark, hydraulic engineer, O'd Town.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | |
|-----------|-------|-------|-------|---------|-------|---------|--------|--------|--------|-----------------|-------|-------------------|--|
| 1 | 4,170 | 5,980 | 4,420 | 4,210 | 4,850 | 9,240 | 17,700 | 22,000 | 21,200 | 6,710 | 5,200 | 4,940 | |
| 2 | 4,190 | 5,860 | 4,550 | 4,320 | 4,630 | 8,890 | 17,800 | 22,000 | 19,400 | 7,730 | 5,520 | 4,810 | |
| 3 | 4,460 | 5,980 | 4,420 | 4,560 | 4,520 | 8,550 | 18,100 | 25,500 | 17,300 | 11,200 | 5,270 | 4,720 | |
| 4 | 5,400 | 6,100 | 4,550 | 4,630 | 4,520 | 8,830 | 18,600 | 28,000 | 16,900 | 10,600 | 5,000 | 5,290 | |
| 5 | 5,400 | 5,860 | 4,420 | 4,670 | 4,670 | 8,800 | 20,700 | 26,000 | 16,200 | 8,000 | 4,850 | 5,160 | |
| 6 | 4,960 | 5,750 | 4,380 | 5,180 | 4,590 | 8,500 | 21,600 | 24,500 | 14,600 | 8,270 | 5,160 | 5,290 | |
| 7 | 5,140 | 5,520 | 4,000 | 5,750 | 4,760 | 8,300 | 26,500 | 23,000 | 13,200 | 7,210 | 5,340 | 5,160 | |
| 8 | 4,460 | 5,520 | 3,460 | 6,030 | 4,570 | 8,800 | 44,300 | 23,500 | 11,900 | 7,730 | 5,220 | 4,810 | |
| 9 | 4,550 | 5,400 | 3,900 | 7,890 | 4,230 | 11,500 | 48,200 | 22,500 | 11,200 | 8,550 | 5,270 | 4,920 | |
| 10 | 4,670 | 5,180 | 3,750 | 9,940 | 4,700 | 16,000 | 43,100 | 20,300 | 12,200 | 8,550 | 5,290 | 4,760 | |
| 11 | 4,850 | 4,740 | 3,900 | 9,700 | 4,210 | 19,500 | 40,700 | 18,200 | 11,900 | 8,270 | 5,090 | 5,000 | |
| 12 | 4,520 | 5,070 | 4,040 | 9,580 | 4,340 | 21,000 | 38,900 | 16,900 | 11,200 | 7,730 | 5,360 | 4,940 | |
| 13 | 4,190 | 5,180 | 4,320 | 9,210 | 4,340 | 31,700 | 40,100 | 16,200 | 11,200 | 7,730 | 5,180 | 4,830 | |
| 14 | 4,500 | 5,520 | 4,210 | 9,120 | 4,740 | 34,900 | 40,700 | 15,800 | 10,900 | 6,960 | 5,360 | 4,810 | |
| 15 | 4,270 | 6,580 | 4,000 | 8,830 | 5,520 | 32,500 | 41,900 | 15,400 | 10,000 | 7,250 | 5,540 | 4,740 | |
| 16 | 4,190 | 7,730 | 4,170 | 8,030 | 5,660 | 30,200 | 40,100 | 14,300 | 9,410 | 7,840 | 5,540 | 4,670 | |
| 17 | 4,630 | 8,000 | 3,590 | 7,770 | 5,840 | 25,600 | 35,900 | 14,600 | 9,410 | 7,180 | 5,660 | 5,070 | |
| 18 | 5,070 | 7,210 | 3,900 | 7,290 | 5,860 | 22,500 | 32,900 | 14,300 | 9,120 | 6,840 | 5,570 | 5,570 | |
| 19 | 5,960 | 7,730 | 3,830 | 6,740 | 5,860 | 20,000 | 30,700 | 13,600 | 8,830 | 6,580 | 6,240 | 5,610 | |
| 20 | 4,980 | 8,270 | 4,210 | 6,510 | 5,980 | 18,600 | 29,100 | 14,300 | 9,410 | 5,860 | 6,340 | 5,540 | |
| 21 | 4,780 | 8,000 | 4,520 | 6,840 | 5,910 | 17,000 | 28,000 | 16,500 | 9,410 | 5,680 | 6,200 | 4,940 | |
| 22 | 4,590 | 7,210 | 4,000 | 6,540 | 5,960 | 16,300 | 28,000 | 17,300 | 9,700 | 5,770 | 6,120 | 4,980 | |
| 23 | 5,070 | 6,340 | 3,790 | 6,220 | 6,240 | 14,900 | 28,000 | 15,400 | 9,410 | 6,030 | 5,680 | 4,670 | |
| 24 | 6,880 | 5,750 | 3,790 | 6,150 | 6,960 | 13,700 | 26,000 | 14,600 | 8,830 | 5,700 | 5,640 | 4,760 | |
| 25 | 8,350 | 5,450 | 3,790 | 5,980 | 7,370 | 12,600 | 25,500 | 13,200 | 8,830 | 5,640 | 5,400 | 4,920 | |
| 26 | 8,550 | 5,300 | 4,000 | 5,750 | 8,410 | 12,000 | 24,500 | 12,200 | 8,830 | 5,660 | 5,290 | 4,740 | |
| 27 | 7,810 | 5,180 | 3,900 | 5,520 | 8,860 | 18,100 | 23,000 | 15,500 | 8,000 | 5,520 | 5,890 | 4,810 | |
| 28 | 6,840 | 5,050 | 4,210 | 5,290 | 9,470 | 23,800 | 21,600 | 27,000 | 7,730 | 5,380 | 5,340 | 4,520 | |
| 29 | 6,340 | 4,940 | 4,000 | 5,180 | ----- | 23,000 | 22,000 | 27,500 | 7,470 | 5,610 | 5,290 | 4,720 | |
| 30 | 6,340 | 4,800 | 4,100 | 5,030 | ----- | 21,000 | 21,600 | 24,500 | 7,210 | 5,570 | 5,540 | 4,380 | |
| 31 | 6,100 | ----- | 4,320 | 4,850 | ----- | 17,500 | ----- | 22,000 | ----- | 5,540 | ----- | ----- | |
| Month | | | | Maximum | | Minimum | | Mean | | Per square mile | | Run-off in inches | |
| October | | | | 8,550 | | 4,170 | | 5,330 | | 0.808 | | 0.93 | |
| November | | | | 8,270 | | 4,740 | | 6,040 | | .915 | | 1.02 | |
| December | | | | 4,550 | | 3,460 | | 4,080 | | .618 | | .71 | |
| January | | | | 9,940 | | 4,210 | | 6,560 | | .994 | | 1.15 | |
| February | | | | 9,470 | | 4,210 | | 5,630 | | .853 | | .89 | |
| March | | | | 34,900 | | 8,300 | | 17,500 | | 2.65 | | 3.06 | |
| April | | | | 48,200 | | 17,700 | | 29,900 | | 4.53 | | 5.05 | |
| May | | | | 28,000 | | 12,200 | | 19,200 | | 2.91 | | 3.36 | |
| June | | | | 21,200 | | 7,210 | | 11,400 | | 1.73 | | 1.93 | |
| July | | | | 11,200 | | 5,380 | | 7,060 | | 1.07 | | 1.23 | |
| August | | | | 6,340 | | 4,850 | | 5,480 | | .830 | | .96 | |
| September | | | | 5,610 | | 4,380 | | 4,940 | | .748 | | .83 | |
| The year | | | | 48,200 | | 3,460 | | 10,300 | | 1.56 | | 21.12 | |

EAST BRANCH OF PENOBSCOT RIVER AT GRINDSTONE, ME.

LOCATION.—Water-stage recorder 500 feet below Bangor & Aroostook Railroad bridge half a mile south of Grindstone, Penobscot County, and 9½ 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, 1930.

EXTREMES.—Maximum discharge during year, 9,670 second-feet May 4 (gage height, 9.33 feet); minimum, 192 second-feet Dec. 11.

1902–1930: Maximum discharge, 35,100 second-feet Apr. 30, 1923 (gage height, 16.5 feet); minimum (estimated), 30 second-feet Feb. 28, 1904.

REMARKS.—Records good except those for period of ice effect, Nov. 24 to Mar. 22, which are fair. Flow regulated by dams at outlets of several lakes and ponds.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 200 | 444 | 290 | 265 | 530 | 555 | 2,330 | 5,320 | 5,040 | 1,740 | 676 | 910 |
| 2..... | 200 | 444 | 270 | 270 | 500 | 550 | 2,160 | 6,730 | 4,910 | 3,890 | 660 | 892 |
| 3..... | 426 | 460 | 250 | 285 | 480 | 535 | 2,160 | 9,360 | 4,550 | 3,700 | 660 | 901 |
| 4..... | 740 | 460 | 235 | 315 | 465 | 530 | 2,160 | 9,360 | 4,320 | 2,680 | 692 | 874 |
| 5..... | 585 | 430 | 230 | 335 | 445 | 515 | 2,080 | 8,130 | 4,100 | 1,840 | 748 | 829 |
| 6..... | 456 | 430 | 220 | 345 | 425 | 500 | 2,330 | 7,550 | 3,890 | 1,480 | 740 | 788 |
| 7..... | 396 | 400 | 215 | 350 | 395 | 500 | 2,860 | 8,130 | 3,690 | 1,870 | 684 | 740 |
| 8..... | 353 | 370 | 205 | 390 | 380 | 520 | 6,470 | 8,130 | 3,400 | 2,080 | 652 | 700 |
| 9..... | 330 | 370 | 196 | 755 | 370 | 1,040 | 7,840 | 7,270 | 3,310 | 1,690 | 660 | 652 |
| 10..... | 305 | 360 | 196 | 1,130 | 350 | 1,420 | 6,730 | 6,730 | 3,130 | 1,450 | 804 | 608 |
| 11..... | 285 | 345 | 192 | 945 | 320 | 2,000 | 6,730 | 6,210 | 2,590 | 1,290 | 756 | 585 |
| 12..... | 272 | 320 | 196 | 890 | 315 | 2,240 | 6,210 | 5,690 | 2,160 | 1,220 | 668 | 564 |
| 13..... | 262 | 345 | 200 | 900 | 315 | 3,040 | 7,000 | 5,560 | 2,000 | 1,170 | 630 | 529 |
| 14..... | 258 | 370 | 205 | 875 | 335 | 3,040 | 7,550 | 5,300 | 2,160 | 1,120 | 592 | 543 |
| 15..... | 254 | 550 | 205 | 845 | 350 | 2,630 | 7,550 | 4,910 | 2,240 | 1,190 | 608 | 571 |
| 16..... | 244 | 810 | 205 | 790 | 370 | 2,380 | 7,000 | 4,910 | 2,240 | 1,190 | 910 | 585 |
| 17..... | 249 | 730 | 196 | 730 | 350 | 2,230 | 6,210 | 4,910 | 2,000 | 1,120 | 1,260 | 660 |
| 18..... | 325 | 620 | 196 | 715 | 325 | 2,030 | 5,690 | 4,790 | 1,920 | 1,056 | 1,280 | 772 |
| 19..... | 402 | 585 | 196 | 715 | 305 | 1,870 | 5,560 | 4,430 | 2,080 | 1,046 | 1,240 | 660 |
| 20..... | 402 | 620 | 196 | 700 | 290 | 1,690 | 6,470 | 4,430 | 2,000 | 1,000 | 1,280 | 585 |
| 21..... | 438 | 490 | 196 | 700 | 295 | 1,590 | 6,730 | 4,790 | 1,900 | 928 | 1,230 | 557 |
| 22..... | 489 | 320 | 196 | 700 | 305 | 1,480 | 6,470 | 4,670 | 1,970 | 866 | 1,180 | 536 |
| 23..... | 515 | 295 | 196 | 690 | 335 | 1,420 | 6,210 | 4,320 | 1,900 | 826 | 1,140 | 515 |
| 24..... | 764 | 305 | 196 | 675 | 335 | 1,350 | 5,560 | 4,100 | 1,970 | 788 | 1,150 | 496 |
| 25..... | 829 | 310 | 196 | 650 | 450 | 1,280 | 5,170 | 3,690 | 1,840 | 756 | 1,160 | 489 |
| 26..... | 724 | 315 | 196 | 630 | 650 | 1,460 | 4,790 | 3,400 | 1,750 | 732 | 1,100 | 482 |
| 27..... | 684 | 320 | 196 | 620 | 660 | 3,040 | 4,790 | 6,210 | 1,680 | 746 | 1,070 | 476 |
| 28..... | 645 | 320 | 205 | 600 | 585 | 3,400 | 5,040 | 7,550 | 1,720 | 786 | 1,030 | 463 |
| 29..... | 557 | 310 | 220 | 585 | ----- | 3,220 | 5,300 | 6,210 | 1,700 | 772 | 1,000 | 450 |
| 30..... | 496 | 305 | 240 | 565 | ----- | 2,860 | 5,430 | 5,560 | 1,590 | 746 | 1,000 | 432 |
| 31..... | 463 | ----- | 255 | 550 | ----- | 2,590 | ----- | 5,300 | ----- | 700 | 955 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 829 | 200 | 437 | 0.408 | 0.47 |
| November..... | 810 | 295 | 425 | .397 | .44 |
| December..... | 290 | 192 | 212 | .198 | .23 |
| January..... | 1,130 | 265 | 629 | .578 | .68 |
| February..... | 660 | 290 | 401 | .375 | .39 |
| March..... | 3,400 | 500 | 1,730 | 1.62 | 1.87 |
| April..... | 7,840 | 2,080 | 5,290 | 4.9 | 5.51 |
| May..... | 9,360 | 3,400 | 5,940 | 5.55 | 6.40 |
| June..... | 5,040 | 1,590 | 2,660 | 2.49 | 2.78 |
| July..... | 3,890 | 700 | 1,370 | 1.27 | 1.48 |
| August..... | 1,280 | 592 | 910 | .879 | .98 |
| September..... | 910 | 432 | 628 | .577 | .65 |
| The year..... | 9,360 | 192 | 1,720 | 1.61 | 21.88 |

* Estimated.

MATTAWAMKEAG RIVER NEAR MATTAWAMKEAG, ME.

LOCATION.—Water-stage recorder at Gordon Falls, 3 miles above Mattawamkeag, Penobscot County.

DRAINAGE AREA.—1,500 square miles.

RECORDS AVAILABLE.—August, 1902, to September, 1930.

EXTREMES.—Maximum discharge during year, 13,600 second-feet Apr. 11, 15, 16 (gage height, 8.9 feet); minimum, 120 second-feet Oct. 2 (chain-gage height, 3.50 feet).

1902-1930: Maximum discharge, 43,900 second-feet May 1, 1923 (gage height, 19.55 feet); minimum, 86 second-feet Oct. 4-12, 1905, Sept. 19, Oct. 6, 1906, Sept. 24-29, 1908, Oct. 14-17, 1910.

REMARKS.—Records good except those for period of ice effect, Nov. 30 to Mar. 12, which are fair. Chain gage at former site 3 miles downstream used Oct. 1-4. Some storage on lakes.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|------|-------|-------|-------|--------|-------|-------|-------|------|-------|
| 1..... | 132 | 884 | 820 | 415 | 900 | 2,050 | 5,330 | 5,530 | 5,960 | 544 | 323 | 151 |
| 2..... | 120 | 820 | 800 | 430 | 875 | 2,040 | 5,330 | 5,330 | 5,330 | 537 | 307 | 147 |
| 3..... | 132 | 836 | 780 | 430 | 845 | 2,020 | 5,530 | 5,330 | 5,140 | 642 | 307 | 151 |
| 4..... | 295 | 844 | 760 | 440 | 820 | 1,940 | 5,960 | 5,530 | 4,780 | 1,090 | 318 | 155 |
| 5..... | 355 | 812 | 750 | 475 | 820 | 1,850 | 5,960 | 5,960 | 4,130 | 1,250 | 318 | 166 |
| 6..... | 440 | 768 | 740 | 500 | 800 | 1,740 | 6,400 | 5,960 | 3,280 | 1,250 | 297 | 194 |
| 7..... | 428 | 730 | 720 | 520 | 770 | 1,720 | 7,520 | 5,960 | 2,650 | 1,110 | 288 | 214 |
| 8..... | 399 | 692 | 705 | 600 | 760 | 1,730 | 10,200 | 5,530 | 2,410 | 1,020 | 293 | 218 |
| 9..... | 355 | 600 | 690 | 745 | 760 | 2,430 | 12,300 | 5,330 | 2,350 | 1,060 | 288 | 222 |
| 10..... | 318 | 482 | 680 | 1,070 | 745 | 3,420 | 13,400 | 4,610 | 2,180 | 1,340 | 293 | 190 |
| 11..... | 274 | 518 | 665 | 1,440 | 745 | 4,080 | 13,600 | 3,830 | 2,020 | 1,390 | 288 | 155 |
| 12..... | 252 | 628 | 650 | 2,020 | 745 | 5,050 | 13,400 | 3,410 | 2,290 | 1,490 | 284 | 136 |
| 13..... | 239 | 670 | 635 | 2,290 | 770 | 7,520 | 13,400 | 3,150 | 2,410 | 1,390 | 302 | 132 |
| 14..... | 227 | 876 | 620 | 2,320 | 820 | 7,520 | 13,400 | 2,830 | 2,350 | 1,300 | 366 | 132 |
| 15..... | 227 | 1,160 | 605 | 2,220 | 800 | 7,750 | 13,600 | 2,260 | 2,240 | 1,250 | 388 | 155 |
| 16..... | 222 | 1,590 | 595 | 2,080 | 1,250 | 7,750 | 13,600 | 2,120 | 1,850 | 1,130 | 404 | 235 |
| 17..... | 214 | 1,850 | 580 | 1,950 | 1,340 | 7,290 | 13,100 | 1,590 | 1,640 | 940 | 399 | 279 |
| 18..... | 235 | 1,900 | 565 | 1,830 | 1,420 | 6,840 | 12,000 | 1,640 | 1,440 | 828 | 394 | 323 |
| 19..... | 265 | 1,800 | 550 | 1,670 | 1,440 | 6,400 | 10,700 | 1,800 | 1,340 | 670 | 410 | 344 |
| 20..... | 313 | 1,850 | 530 | 1,590 | 1,450 | 6,180 | 9,690 | 2,180 | 1,300 | 579 | 360 | 344 |
| 21..... | 355 | 1,800 | 525 | 1,450 | 1,450 | 5,330 | 9,180 | 2,590 | 1,250 | 530 | 279 | 339 |
| 22..... | 388 | 1,490 | 510 | 1,390 | 1,430 | 4,780 | 8,930 | 2,890 | 924 | 488 | 235 | 318 |
| 23..... | 434 | 1,200 | 500 | 1,340 | 1,430 | 4,440 | 8,680 | 2,890 | 836 | 428 | 202 | 293 |
| 24..... | 1,120 | 1,110 | 480 | 1,290 | 1,480 | 4,130 | 8,440 | 2,650 | 1,020 | 422 | 194 | 270 |
| 25..... | 2,120 | 1,070 | 470 | 1,240 | 1,540 | 3,540 | 7,750 | 2,350 | 1,020 | 399 | 182 | 265 |
| 26..... | 2,240 | 972 | 460 | 1,190 | 1,740 | 3,540 | 7,060 | 2,240 | 868 | 355 | 170 | 261 |
| 27..... | 2,020 | 916 | 450 | 1,130 | 1,940 | 4,440 | 6,400 | 2,770 | 752 | 307 | 159 | 252 |
| 28..... | 1,690 | 916 | 440 | 1,080 | 2,040 | 5,330 | 5,960 | 4,440 | 685 | 323 | 155 | 243 |
| 29..... | 1,390 | 868 | 420 | 1,030 | ----- | 5,740 | 5,740 | 5,740 | 635 | 323 | 151 | 235 |
| 30..... | 1,160 | 845 | 420 | 980 | ----- | 5,740 | 5,530 | 6,400 | 579 | 323 | 155 | 227 |
| 31..... | 980 | ----- | 420 | 940 | ----- | 5,530 | ----- | 6,400 | ----- | 318 | 151 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 2,240 | 120 | 624 | 0.416 | 0.48 |
| November..... | 1,900 | 482 | 1,050 | .700 | .78 |
| December..... | 820 | 420 | 598 | .399 | .46 |
| January..... | 2,320 | 415 | 1,230 | .820 | .95 |
| February..... | 2,040 | 745 | 1,150 | .767 | .80 |
| March..... | 7,750 | 1,720 | 4,510 | 3.01 | 3.47 |
| April..... | 13,600 | 5,330 | 9,270 | 6.18 | 6.90 |
| May..... | 6,400 | 1,590 | 3,910 | 2.61 | 3.01 |
| June..... | 5,960 | 579 | 2,200 | 1.47 | 1.64 |
| July..... | 1,490 | 307 | 807 | .538 | .62 |
| August..... | 410 | 151 | 279 | .186 | .21 |
| September..... | 344 | 132 | 225 | .150 | .17 |
| The year..... | 13,600 | 120 | 2,150 | 1.43 | 19.49 |

PISCATAQUIS RIVER NEAR FOXCROFT, ME.

LOCATION.—Water-stage recorder installed July 20, 1930, at Low^r Bridge, three-fourths mile above mouth of Black Stream and 4½ miles above Foxcroft, Piscataquis County. Prior to that date staff gage at same site and datum was used.

DRAINAGE AREA.—286 square miles.

RECORDS AVAILABLE.—August, 1902, to September, 1930.

EXTREMES.—Maximum discharge during year, 7,520 second-feet Apr. 8 (gage height, 9.40 feet); minimum, 34 second-feet Dec. 15, Aug. 10.
1902-1930: Maximum discharge, 21,700 second-feet Sept. 29, 1909; minimum, 5 second-feet Aug. 6, 1905, Nov. 22, 1908.

REMARKS.—Records fair. Flow regulated by operation of power plants. Discharge estimated Dec. 1-5, Dec. 25 to Apr. 7 because of ice effect.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|------|-------|
| 1..... | 45 | 76 | 62 | 140 | 72 | 310 | 610 | 1,750 | 655 | 244 | 95 | 132 |
| 2..... | 44 | 136 | 64 | 200 | 114 | 235 | 605 | 2,050 | 620 | 1,150 | 55 | 78 |
| 3..... | 78 | * 295 | 64 | 180 | 156 | 260 | 730 | 2,350 | 585 | 942 | 38 | 99 |
| 4..... | * 210 | * 345 | 64 | 184 | 140 | 260 | 780 | 2,150 | 486 | 456 | 114 | 76 |
| 5..... | * 180 | * 126 | 64 | 215 | 114 | 235 | 925 | 1,650 | 426 | 306 | 93 | 132 |
| 6..... | 64 | * 104 | 68 | 280 | 140 | 210 | 1,040 | 1,450 | 398 | 263 | 52 | 79 |
| 7..... | * 85 | * 166 | * 63 | 220 | 114 | 220 | 3,360 | 1,350 | 329 | 329 | 55 | 36 |
| 8..... | * 114 | * 91 | * 58 | 166 | 112 | 82 | 6,740 | 1,150 | 518 | 345 | 106 | 85 |
| 9..... | * 120 | 63 | 54 | 172 | 104 | 750 | 4,080 | 980 | 518 | 329 | 58 | 83 |
| 10..... | * 114 | 69 | 66 | 345 | 128 | 1,070 | 2,780 | 760 | 830 | 274 | 34 | 58 |
| 11..... | * 96 | 66 | 62 | 335 | 91 | 1,040 | 2,450 | 830 | 760 | 274 | 120 | 64 |
| 12..... | 48 | 69 | 48 | 430 | 128 | 1,550 | 2,670 | 620 | 690 | 255 | 75 | 63 |
| 13..... | 49 | 58 | 52 | 450 | 172 | 2,400 | 3,360 | 550 | 655 | 205 | 146 | 84 |
| 14..... | 56 | 58 | 53 | 400 | 240 | 1,750 | 3,240 | 550 | 486 | 259 | 112 | 69 |
| 15..... | 47 | 70 | 34 | 345 | 260 | 940 | 3,120 | 550 | 371 | 486 | 134 | 99 |
| 16..... | 53 | * 405 | 41 | 270 | 335 | 785 | 2,450 | 620 | 350 | 350 | 128 | 78 |
| 17..... | 72 | * 400 | 40 | 184 | 390 | 695 | 1,950 | 725 | 324 | 292 | 210 | 122 |
| 18..... | 100 | * 380 | 43 | 80 | 310 | 645 | 1,850 | 585 | 324 | 247 | 225 | 120 |
| 19..... | 100 | * 355 | 52 | 172 | 250 | 575 | 1,750 | 518 | 868 | 147 | 100 | 82 |
| 20..... | 91 | * 250 | 48 | 250 | 250 | 570 | 2,150 | 690 | 620 | 190 | 152 | 99 |
| 21..... | 78 | * 450 | 43 | 120 | 180 | 500 | 2,150 | 1,150 | 456 | 172 | 134 | 58 |
| 22..... | 82 | * 440 | 41 | 184 | 220 | 305 | 2,050 | 868 | 371 | 110 | 134 | 100 |
| 23..... | 102 | * 425 | 44 | 110 | 210 | 300 | 1,750 | 690 | 371 | 132 | 93 | 80 |
| 24..... | * 350 | 68 | 52 | 114 | 280 | 300 | 1,450 | 518 | 306 | 106 | 50 | 78 |
| 25..... | * 260 | 114 | 57 | 50 | 240 | 290 | 1,250 | 456 | 345 | 132 | 126 | 74 |
| 26..... | 50 | 191 | 72 | 91 | 420 | 800 | 1,350 | 550 | 296 | 66 | 82 | 71 |
| 27..... | 64 | 60 | 72 | 210 | 405 | 2,280 | 1,250 | 2,450 | 296 | 52 | 90 | 82 |
| 28..... | 138 | 69 | 91 | 144 | 395 | 1,500 | 1,550 | 2,350 | 301 | 132 | 78 | 56 |
| 29..... | 114 | 70 | 102 | 148 | ----- | 890 | 1,550 | 1,550 | 244 | 88 | 122 | 108 |
| 30..... | 60 | 58 | 102 | 148 | ----- | 730 | 1,750 | 1,100 | 266 | 118 | 98 | 80 |
| 31..... | 60 | ----- | 104 | 140 | ----- | 625 | ----- | 868 | ----- | 84 | 44 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 350 | 44 | 101 | 0.353 | 0.41 |
| November..... | 450 | 58 | 184 | .643 | .72 |
| December..... | 104 | 34 | 60.6 | .212 | .24 |
| January..... | 450 | 50 | 209 | .731 | .84 |
| February..... | 420 | 72 | 213 | .745 | .78 |
| March..... | 2,400 | 82 | 745 | 2.60 | 3.00 |
| April..... | 6,740 | 605 | 2,090 | 7.31 | 8.16 |
| May..... | 2,450 | 456 | 1,110 | 3.88 | 4.47 |
| June..... | 868 | 244 | 471 | 1.65 | 1.84 |
| July..... | 1,150 | 52 | 275 | .962 | 1.11 |
| August..... | 225 | 34 | 102 | .357 | .41 |
| September..... | 132 | 36 | 84.2 | .294 | .33 |
| The year..... | 6,740 | 34 | 470 | 1.64 | 22.31 |

* Estimated.

PISCATAQUIS RIVER AT MEDFORD, ME.

LOCATION.—Water-stage recorder $1\frac{1}{4}$ miles above lower ferry in Medford, Piscataquis County, and $3\frac{1}{2}$ miles below Pleasant River.

DRAINAGE AREA.—1,170 square miles.

RECORDS AVAILABLE.—June, 1924, to September, 1930.

EXTREMES.—Maximum discharge during year, 19,400 second-feet Apr. 8 (gage height, 8.97 feet); minimum, 251 second-feet Oct. 23 (gage height, 1.60 feet).
1924-1930: Maximum discharge, 27,600 second-feet May 4, 1929; minimum, 172 second-feet Nov. 10, 1924.

Maximum known stage, 20.8 feet at lower ferry gage May 1, 1923.

REMARKS.—Records good except those for periods of ice effect, Nov. 26, Nov. 29 to Mar. 24, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|-------|-------|-------|--------|-------|-------|-------|------|-------|
| 1..... | 330 | 335 | 360 | 360 | 475 | 1,460 | 3,440 | 4,740 | 4,620 | 1,020 | 794 | 605 |
| 2..... | 330 | 408 | 360 | 385 | 465 | 1,400 | 3,440 | 5,380 | 3,880 | 1,460 | 858 | 613 |
| 3..... | 420 | 575 | 356 | 395 | 460 | 1,400 | 4,000 | 7,280 | 2,950 | 2,420 | 717 | 708 |
| 4..... | 505 | 676 | 340 | 415 | 465 | 1,370 | 4,240 | 7,920 | 2,860 | 1,960 | 659 | 708 |
| 5..... | 461 | 669 | 325 | 440 | 485 | 1,350 | 4,360 | 6,820 | 2,680 | 1,640 | 643 | 684 |
| 6..... | 461 | 526 | 335 | 615 | 505 | 1,310 | 5,250 | 5,800 | 2,420 | 1,130 | 651 | 676 |
| 7..... | 448 | 448 | 345 | 820 | 505 | 1,300 | 8,916 | 4,620 | 1,820 | 1,200 | 667 | 651 |
| 8..... | 420 | 431 | 350 | 1,080 | 505 | 1,540 | 17,700 | 4,740 | 1,750 | 1,686 | 628 | 643 |
| 9..... | 381 | 392 | 355 | 1,540 | 505 | 2,770 | 14,900 | 4,490 | 2,180 | 1,890 | 605 | 628 |
| 10..... | 376 | 381 | 370 | 1,820 | 505 | 4,120 | 11,600 | 3,370 | 2,680 | 1,720 | 659 | 643 |
| 11..... | 345 | 317 | 375 | 1,680 | 525 | 4,240 | 10,600 | 3,340 | 2,680 | 1,260 | 628 | 667 |
| 12..... | 345 | 294 | 370 | 1,540 | 545 | 5,120 | 10,200 | 3,440 | 2,680 | 1,100 | 628 | 613 |
| 13..... | 312 | 312 | 360 | 1,470 | 575 | 6,080 | 11,300 | 3,240 | 2,420 | 1,260 | 643 | 613 |
| 14..... | 317 | 474 | 355 | 1,500 | 820 | 5,910 | 11,300 | 3,040 | 2,180 | 1,120 | 667 | 605 |
| 15..... | 322 | 667 | 345 | 1,570 | 1,020 | 5,660 | 11,300 | 3,340 | 1,960 | 1,460 | 717 | 561 |
| 16..... | 326 | 1,170 | 345 | 1,320 | 1,080 | 5,800 | 9,900 | 3,240 | 1,720 | 1,430 | 957 | 636 |
| 17..... | 317 | 905 | 335 | 1,020 | 1,120 | 5,120 | 8,250 | 3,550 | 1,750 | 1,240 | 820 | 717 |
| 18..... | 340 | 759 | 330 | 750 | 1,150 | 4,320 | 7,600 | 3,240 | 1,470 | 1,030 | 776 | 725 |
| 19..... | 322 | 936 | 370 | 575 | 1,080 | 3,880 | 6,670 | 3,040 | 1,430 | 968 | 915 | 717 |
| 20..... | 290 | 1,070 | 375 | 455 | 1,020 | 3,840 | 6,080 | 3,340 | 1,960 | 877 | 868 | 667 |
| 21..... | 274 | 839 | 405 | 460 | 1,060 | 3,400 | 6,080 | 4,740 | 1,820 | 926 | 839 | 621 |
| 22..... | 278 | 733 | 460 | 465 | 1,080 | 3,590 | 6,220 | 4,000 | 2,040 | 978 | 811 | 621 |
| 23..... | 326 | 803 | 410 | 480 | 1,140 | 3,400 | 6,080 | 2,770 | 2,040 | 868 | 768 | 605 |
| 24..... | 785 | 621 | 380 | 480 | 1,270 | 3,140 | 5,250 | 2,420 | 1,890 | 848 | 733 | 605 |
| 25..... | 848 | 442 | 375 | 465 | 1,310 | 2,110 | 6,670 | 2,040 | 1,580 | 848 | 708 | 598 |
| 26..... | 811 | 436 | 375 | 410 | 1,350 | 2,340 | 6,370 | 1,890 | 1,220 | 839 | 700 | 431 |
| 27..... | 622 | 420 | 375 | 460 | 1,460 | 5,800 | 4,990 | 4,990 | 1,150 | 803 | 717 | 420 |
| 28..... | 461 | 386 | 375 | 480 | 1,540 | 6,370 | 5,800 | 9,240 | 1,340 | 794 | 667 | 425 |
| 29..... | 403 | 375 | 370 | 485 | ----- | 5,120 | 5,800 | 7,120 | 1,060 | 811 | 676 | 345 |
| 30..... | 381 | 370 | 345 | 480 | ----- | 4,240 | 4,620 | 5,660 | 1,040 | 848 | 839 | 326 |
| 31..... | 335 | ----- | 335 | 475 | ----- | 3,880 | ----- | 4,620 | ----- | 820 | 676 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 848 | 274 | 416 | 0.356 | 0.41 |
| November..... | 1,170 | 294 | 572 | .489 | .55 |
| December..... | 460 | 325 | 363 | .310 | .36 |
| January..... | 1,820 | 360 | 803 | .686 | .79 |
| February..... | 1,540 | 460 | 858 | .733 | .76 |
| March..... | 6,370 | 1,300 | 3,590 | 3.07 | 3.54 |
| April..... | 17,700 | 3,440 | 7,060 | 6.55 | 7.31 |
| May..... | 9,240 | 1,890 | 4,440 | 3.79 | 4.37 |
| June..... | 4,620 | 1,040 | 2,110 | 1.80 | 2.01 |
| July..... | 2,420 | 794 | 1,200 | 1.03 | 1.19 |
| August..... | 957 | 605 | 730 | .624 | .72 |
| September..... | 725 | 326 | 603 | .515 | .57 |
| The year..... | 17,700 | 274 | 1,950 | 1.67 | 22.58 |

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, 1930.

EXTREMES.—Maximum discharge during year, 3,150 second-feet Apr. 10–13 (gage height, 6.6 feet); minimum, 53 second-feet Oct. 24 (gage height, 1.63 feet).

1924–1930: Maximum discharge, 3,870 second-feet May 6, 1929 (gage height, 7.49 feet); minimum, 20 second-feet Jan. 25, 1925 (gage height, 1.36 feet).

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

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|-------|-------|-------|-------|------|------|-------|
| 1..... | 174 | 120 | 77 | 100 | 100 | 285 | 740 | 710 | 1,320 | 325 | 320 | 300 |
| 2..... | 168 | 137 | 77 | 100 | 97 | 200 | 855 | 900 | 1,420 | 320 | 315 | 405 |
| 3..... | 181 | 140 | 77 | 100 | 95 | 285 | 1,160 | 1,340 | 1,420 | 330 | 255 | 380 |
| 4..... | 193 | 143 | 79 | 102 | 97 | 310 | 965 | 1,430 | 1,030 | 300 | 350 | 375 |
| 5..... | 187 | 146 | 79 | 102 | 100 | 310 | 832 | 1,560 | 980 | 305 | 350 | 405 |
| 6..... | 172 | 129 | 79 | 93 | 100 | 280 | 1,010 | 1,540 | 885 | 300 | 330 | 375 |
| 7..... | 184 | 129 | 81 | 81 | 100 | 300 | 1,300 | 1,250 | 790 | 360 | 350 | 270 |
| 8..... | 200 | 95 | 83 | 83 | 100 | 270 | 1,640 | 1,110 | 910 | 400 | 345 | 410 |
| 9..... | 205 | 62 | 83 | 110 | 110 | 176 | 2,220 | 1,130 | 942 | 395 | 335 | 450 |
| 10..... | 190 | 61 | 83 | 85 | 100 | 210 | 3,150 | 1,300 | 1,010 | 375 | 250 | 415 |
| 11..... | 154 | 66 | 83 | 97 | 97 | 270 | 3,150 | 1,360 | 1,040 | 385 | 345 | 400 |
| 12..... | 146 | 70 | 83 | 100 | 100 | 280 | 3,150 | 1,400 | 1,040 | 345 | 345 | 485 |
| 13..... | 140 | 75 | 83 | 102 | 102 | 320 | 3,150 | 1,360 | 1,040 | 305 | 335 | 385 |
| 14..... | 140 | 72 | 83 | 105 | 102 | 730 | 3,070 | 1,440 | 880 | 375 | 315 | 265 |
| 15..... | 126 | 72 | 83 | 107 | 97 | 2,000 | 3,070 | 1,440 | 975 | 390 | 330 | 470 |
| 16..... | 123 | 72 | 81 | 107 | 95 | 2,590 | 3,070 | 1,670 | 925 | 400 | 295 | 415 |
| 17..... | 129 | 72 | 79 | 102 | 95 | 2,430 | 2,960 | 1,600 | 965 | 395 | 245 | 450 |
| 18..... | 140 | 70 | 81 | 100 | 97 | 2,190 | 2,830 | 1,460 | 330 | 385 | 340 | 450 |
| 19..... | 120 | 77 | 81 | 97 | 100 | 1,990 | 1,440 | 1,420 | 350 | 365 | 350 | 440 |
| 20..... | 110 | 77 | 134 | 105 | 123 | 1,780 | 579 | 1,390 | 355 | 265 | 340 | 580 |
| 21..... | 105 | 77 | 250 | 107 | 170 | 1,670 | 750 | 1,360 | 310 | 320 | 335 | 265 |
| 22..... | 100 | 77 | 146 | 110 | 164 | 1,830 | 1,000 | 790 | 265 | 310 | 345 | 485 |
| 23..... | 105 | 75 | 95 | 112 | 250 | 1,360 | 1,180 | 360 | 330 | 320 | 340 | 485 |
| 24..... | 129 | 75 | 90 | 126 | 285 | 1,050 | 1,840 | 330 | 325 | 330 | 255 | 540 |
| 25..... | 140 | 75 | 88 | 100 | 275 | 610 | 2,990 | 265 | 330 | 320 | 375 | 186 |
| 26..... | 129 | 75 | 90 | 100 | 280 | 680 | 2,970 | 380 | 335 | 360 | 365 | 131 |
| 27..... | 58 | 79 | 95 | 100 | 290 | 690 | 2,670 | 630 | 340 | 330 | 360 | 123 |
| 28..... | 129 | 77 | 100 | 100 | 270 | 775 | 2,510 | 995 | 310 | 385 | 395 | 118 |
| 29..... | 131 | 77 | 100 | 102 | ----- | 790 | 1,530 | 1,090 | 250 | 395 | 390 | 118 |
| 30..... | 120 | 77 | 97 | 100 | ----- | 755 | 690 | 1,130 | 300 | 370 | 315 | 126 |
| 31..... | 118 | ----- | 97 | 100 | ----- | 820 | ----- | 1,390 | ----- | 350 | 265 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 205 | 58 | 143 | 0.416 | 0.48 |
| November..... | 146 | 61 | 88.3 | .257 | .29 |
| December..... | 250 | 77 | 94.1 | .274 | .32 |
| January..... | 126 | 81 | 101 | .294 | .34 |
| February..... | 290 | 95 | 143 | .416 | .43 |
| March..... | 2,590 | 176 | 901 | 2.62 | 3.02 |
| April..... | 3,150 | 579 | 1,950 | 5.67 | 6.33 |
| May..... | 1,670 | 265 | 1,150 | 3.34 | 3.85 |
| June..... | 1,420 | 250 | 710 | 2.06 | 2.30 |
| July..... | 400 | 265 | 349 | 1.01 | 1.16 |
| August..... | 395 | 245 | 328 | .953 | 1.10 |
| September..... | 580 | 118 | 357 | 1.04 | 1.16 |
| The year..... | 3,150 | 58 | 527 | 1.53 | 20.78 |

PLEASANT RIVER AT MILO, ME.

LOCATION.—Water-stage recorder 2 miles above Snows Bridge, in Milo, Piscataquis County, and $8\frac{1}{4}$ miles above confluence with Piscataquis River.

DRAINAGE AREA.—322 square miles.

RECORDS AVAILABLE.—June, 1929, to September, 1930. June, 1920, to May, 1929, at site 2 miles below.

EXTREMES.—Maximum discharge during year, 5,650 second-feet Apr. 8 (gage height, 6.16 feet); minimum, 39 second-feet Oct. 2 (gage height, 1.39 feet).

1920-1930: Maximum discharge, 24,400 second-feet Apr. 30, 1923; minimum, 22 second-feet July 29, Aug. 2, Sept. 11, 1921.

REMARKS.—Records good except those for period of ice effect, Nov. 29 to Apr. 5, which are fair. Flow partly regulated by power development at Brownville and by storage dams.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|-------|-------|-------|-------|------|------|-------|
| 1 | 85 | 97 | 200 | 182 | 210 | 335 | 810 | 2,000 | 1,620 | 345 | 226 | 223 |
| 2 | 71 | 118 | 186 | 210 | 210 | 320 | 810 | 2,420 | 1,080 | 511 | 215 | 226 |
| 3 | 130 | 204 | 172 | 250 | 205 | 315 | 810 | 3,560 | 490 | 819 | 234 | 223 |
| 4 | 162 | 215 | 162 | 290 | 196 | 305 | 720 | 3,740 | 819 | 696 | 248 | 208 |
| 5 | 136 | 186 | 152 | 315 | 190 | 300 | 830 | 2,890 | 891 | 560 | 239 | 200 |
| 6 | 124 | 172 | 142 | 335 | 186 | 305 | 1,160 | 2,130 | 688 | 370 | 193 | 179 |
| 7 | 122 | 155 | 136 | 360 | 182 | 310 | 2,930 | 1,740 | 403 | 511 | 182 | 172 |
| 8 | 119 | 149 | 126 | 370 | 176 | 330 | 5,250 | 2,270 | 451 | 972 | 182 | 176 |
| 9 | 116 | 142 | 126 | 560 | 168 | 900 | 3,830 | 1,940 | 765 | 936 | 179 | 182 |
| 10 | 105 | 130 | 126 | 530 | 168 | 1,080 | 2,970 | 1,400 | 810 | 801 | 186 | 172 |
| 11 | 92 | 136 | 126 | 485 | 164 | 790 | 2,730 | 1,070 | 729 | 370 | 186 | 165 |
| 12 | 103 | 124 | 126 | 370 | 164 | 1,390 | 2,730 | 1,150 | 640 | 360 | 176 | 155 |
| 13 | 95 | 139 | 126 | 320 | 162 | 1,800 | 3,300 | 999 | 477 | 408 | 172 | 136 |
| 14 | 111 | 257 | 126 | 460 | 265 | 1,480 | 3,390 | 963 | 432 | 356 | 172 | 136 |
| 15 | 105 | 355 | 134 | 490 | 330 | 1,040 | 3,220 | 738 | 425 | 712 | 179 | 146 |
| 16 | 100 | 497 | 158 | 330 | 355 | 1,030 | 2,650 | 801 | 316 | 490 | 226 | 152 |
| 17 | 95 | 252 | 172 | 210 | 360 | 900 | 2,060 | 819 | 325 | 360 | 270 | 172 |
| 18 | 103 | 239 | 186 | 168 | 355 | 810 | 1,740 | 765 | 335 | 280 | 252 | 176 |
| 19 | 103 | 345 | 196 | 142 | 340 | 830 | 1,620 | 819 | 490 | 266 | 270 | 158 |
| 20 | 82 | 270 | 210 | 142 | 305 | 785 | 2,200 | 1,110 | 624 | 298 | 293 | 136 |
| 21 | 98 | 212 | 215 | 142 | 310 | 720 | 2,500 | 1,510 | 632 | 325 | 275 | 124 |
| 22 | 98 | 262 | 225 | 142 | 325 | 600 | 2,420 | 1,180 | 891 | 298 | 266 | 136 |
| 23 | 142 | 600 | 220 | 142 | 360 | 600 | 2,130 | 927 | 900 | 284 | 239 | 127 |
| 24 | 420 | 375 | 225 | 142 | 505 | 575 | 1,610 | 1,070 | 656 | 280 | 234 | 124 |
| 25 | 340 | 345 | 200 | 152 | 425 | 575 | 1,400 | 835 | 525 | 270 | 234 | 124 |
| 26 | 275 | 355 | 186 | 164 | 385 | 990 | 1,250 | 738 | 350 | 212 | 223 | 119 |
| 27 | 252 | 298 | 176 | 205 | 490 | 2,270 | 1,150 | 2,400 | 345 | 212 | 212 | 116 |
| 28 | 142 | 262 | 164 | 250 | 490 | 1,740 | 1,250 | 4,100 | 386 | 230 | 208 | 105 |
| 29 | 108 | 230 | 162 | 240 | ----- | 1,340 | 1,400 | 2,650 | 464 | 239 | 200 | 127 |
| 30 | 105 | 220 | 162 | 225 | ----- | 1,130 | 1,740 | 2,220 | 350 | 244 | 200 | 149 |
| 31 | 92 | ----- | 168 | 215 | ----- | 970 | ----- | 1,720 | ----- | 234 | 200 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 420 | 71 | 136 | 0.422 | 0.49 |
| November | 600 | 97 | 245 | .761 | .85 |
| December | 225 | 126 | 167 | .519 | .60 |
| January | 560 | 142 | 275 | .854 | .98 |
| February | 505 | 162 | 285 | .885 | .92 |
| March | 2,270 | 300 | 867 | 2.69 | 3.10 |
| April | 5,250 | 720 | 2,090 | 6.49 | 7.24 |
| May | 4,100 | 738 | 1,700 | 5.28 | 6.09 |
| June | 1,620 | 316 | 610 | 1.89 | 2.11 |
| July | 872 | 212 | 428 | 1.33 | 1.53 |
| August | 293 | 172 | 213 | .677 | .78 |
| September | 226 | 105 | 158 | .491 | .56 |
| The year | 5,250 | 71 | 599 | 1.86 | 25.24 |

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 confluence with Penobscot River.

DRAINAGE AREA.—301 square miles.

RECORDS AVAILABLE.—October, 1915, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,110 second-feet Apr. 18 (gage height, 5.23 feet); minimum, 78 second-feet Sept. 30 (gage height, 0.95 foot).
1915-1930: Maximum discharge, 5,680 second-feet May 2, 1923; minimum (estimated), 5 second-feet several times in July and August, 1921.

REMARKS.—Records good except those for period of ice effect, Nov. 29 to Mar. 24, which are fair. Distribution of flow affected by storage reservoirs.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|-------|-------|-------|-------|------|------|-------|
| 1..... | 82 | 188 | 138 | 140 | 235 | 510 | 860 | 835 | 935 | 261 | 136 | 88 |
| 2..... | 79 | 172 | 130 | 144 | 230 | 490 | 885 | 785 | 885 | 252 | 128 | 86 |
| 3..... | 86 | 163 | 126 | 150 | 230 | 470 | 960 | 785 | 785 | 247 | 116 | 105 |
| 4..... | 110 | 161 | 122 | 154 | 225 | 450 | 1,020 | * 830 | 665 | 241 | 111 | 120 |
| 5..... | 134 | 156 | 120 | 154 | 225 | 430 | 1,050 | * 960 | 598 | 227 | 102 | 120 |
| 6..... | 156 | 150 | 118 | 150 | 220 | 425 | 1,080 | * 930 | 548 | 216 | 100 | 116 |
| 7..... | 156 | 142 | 116 | 148 | 220 | 420 | 1,260 | * 920 | 516 | 206 | 96 | 120 |
| 8..... | 152 | 134 | 114 | 146 | 215 | 420 | 1,620 | * 880 | 503 | 200 | 94 | 113 |
| 9..... | 142 | 121 | 112 | 154 | 215 | 540 | 1,830 | * 880 | 490 | 200 | 91 | 105 |
| 10..... | 127 | 113 | 112 | 225 | 215 | 725 | 1,900 | * 850 | 490 | 198 | 90 | 102 |
| 11..... | 118 | 108 | 112 | 380 | 215 | 780 | 1,900 | * 840 | 494 | 193 | 90 | 97 |
| 12..... | 105 | 103 | 116 | 345 | 215 | 980 | 1,830 | 835 | 530 | 190 | 90 | 96 |
| 13..... | 102 | 100 | 130 | 330 | 220 | 1,210 | 1,830 | 785 | 490 | 188 | 90 | 92 |
| 14..... | 98 | 102 | 150 | 320 | 280 | 1,280 | 1,690 | 785 | 508 | 188 | 90 | 91 |
| 15..... | 94 | 120 | 168 | 305 | 375 | 1,250 | 1,690 | 760 | 539 | 188 | 91 | 91 |
| 16..... | 91 | 165 | 166 | 300 | 360 | 1,200 | 1,620 | 735 | 424 | 176 | 96 | 90 |
| 17..... | 88 | 219 | 162 | 295 | 345 | 1,150 | 1,500 | 710 | 376 | 169 | 98 | 107 |
| 18..... | 91 | 257 | 158 | 290 | 345 | 1,070 | 1,560 | 735 | 346 | 167 | 98 | 136 |
| 19..... | 96 | 282 | 152 | 280 | 390 | 1,000 | 1,320 | 688 | 335 | 165 | 104 | 134 |
| 20..... | 103 | 303 | 148 | 280 | 390 | 915 | 1,200 | 620 | 328 | 160 | 104 | 128 |
| 21..... | 111 | 319 | 146 | 275 | 390 | 865 | 1,170 | 665 | 328 | 156 | 104 | 114 |
| 22..... | 116 | 319 | 146 | 275 | 410 | 815 | 1,140 | 1,230 | 342 | 153 | 102 | 107 |
| 23..... | 127 | 294 | 146 | 270 | 430 | 750 | 1,110 | 1,140 | 353 | 153 | 98 | 98 |
| 24..... | 194 | 262 | 148 | 270 | 470 | 675 | 1,050 | 552 | 360 | 153 | 97 | 92 |
| 25..... | 279 | 227 | 150 | 260 | 510 | 688 | 990 | 490 | 360 | 149 | 92 | 88 |
| 26..... | 380 | 201 | 150 | 260 | 545 | 688 | 935 | 735 | 350 | 147 | 90 | 85 |
| 27..... | 416 | 84 | 150 | 255 | 545 | 785 | 935 | 1,080 | 335 | 153 | 88 | 82 |
| 28..... | 396 | 169 | 148 | 250 | 530 | 885 | 860 | 1,110 | 314 | 151 | 86 | 82 |
| 29..... | 342 | 160 | 146 | 250 | 500 | 910 | 860 | 1,080 | 301 | 145 | 85 | 80 |
| 30..... | 276 | 154 | 144 | 245 | ----- | 885 | 885 | 1,020 | 279 | 142 | 90 | 78 |
| 31..... | 222 | ----- | 142 | 240 | ----- | 885 | ----- | 960 | ----- | 140 | 90 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 416 | 79 | 164 | 0.545 | 0.63 |
| November..... | 319 | 84 | 182 | .605 | .68 |
| December..... | 168 | 112 | 138 | .458 | .53 |
| January..... | 380 | 140 | 243 | .807 | .93 |
| February..... | 545 | 215 | 328 | 1.09 | 1.14 |
| March..... | 1,280 | 420 | 792 | 2.63 | 3.03 |
| April..... | 1,900 | 860 | 1,280 | 4.25 | 4.74 |
| May..... | 1,230 | 490 | 845 | 2.81 | 3.24 |
| June..... | 935 | 279 | 470 | 1.56 | 1.74 |
| July..... | 261 | 140 | 183 | .608 | .70 |
| August..... | 136 | 85 | 98.0 | .326 | .38 |
| September..... | 136 | 78 | 101 | .336 | .37 |
| The year..... | 1,900 | 78 | 402 | 1.34 | 18.11 |

* Estimated.

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, 1930.

REMARKS.—Lake 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. Record furnished by Hollingsworth & Whitney Co.

Daily gage height, in feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | | 12.95 | | 12.35 | | | | | | | 16.60 | 15.40 |
| 2 | 14.05 | | 12.80 | | | | 11.70 | 14.55 | 17.40 | 17.45 | | |
| 3 | | | | 12.35 | 12.15 | 11.50 | | | | | | 15.50 |
| 4 | 14.05 | 12.90 | 12.70 | | | | 11.75 | | 17.30 | 17.50 | 16.40 | |
| 5 | | | | | 12.10 | 11.45 | | 15.20 | | | | 15.45 |
| 6 | | 12.90 | 12.70 | 12.25 | | | | | 17.30 | | 16.30 | |
| 7 | 13.90 | | | | 12.00 | 11.40 | 11.90 | 15.60 | | 17.40 | | |
| 8 | | 12.95 | | 12.25 | | | | | | | 16.20 | 15.30 |
| 9 | 13.80 | | 12.60 | | | | 12.15 | 16.00 | 17.40 | 17.40 | | |
| 10 | | | | 12.25 | 12.00 | 11.50 | | | | | | 15.25 |
| 11 | 13.65 | 13.00 | 12.55 | | | | 12.35 | | 17.50 | 17.35 | 16.10 | |
| 12 | | | | | 11.90 | 11.60 | | 16.50 | | | | 15.15 |
| 13 | | 13.00 | 12.50 | 12.30 | | | | 17.50 | | | 16.00 | |
| 14 | 13.55 | | | | 11.90 | 11.70 | 12.70 | 16.75 | | 17.20 | | |
| 15 | | 13.05 | | 12.30 | | | | | | | 16.90 | 15.00 |
| 16 | 13.45 | | 12.45 | | | | 12.90 | 17.05 | 17.45 | 17.25 | | |
| 17 | | | | 12.30 | 11.90 | 11.65 | | | | | | 15.05 |
| 18 | 13.40 | 13.10 | 12.45 | | | | 13.10 | | 17.45 | 17.20 | 15.80 | |
| 19 | | | | | 11.75 | 11.65 | | 17.30 | | | | 15.00 |
| 20 | | 13.15 | 12.60 | 12.30 | | | | | 17.45 | | 15.75 | |
| 21 | 13.40 | | | | 11.70 | 11.60 | 13.40 | 17.40 | | 17.20 | | |
| 22 | | 13.10 | | 12.30 | | | | | | | 15.70 | 14.90 |
| 23 | 13.25 | | 12.45 | | | | 13.65 | 17.40 | 17.50 | 17.10 | | |
| 24 | | | | 12.30 | 11.60 | 11.50 | | | | | | 14.75 |
| 25 | 13.20 | 13.00 | 12.45 | | | | 13.80 | | 17.50 | 17.00 | 15.60 | |
| 26 | | | | | 11.60 | 11.60 | | 17.35 | | | | 14.65 |
| 27 | | 12.95 | 12.45 | 12.25 | | | | 17.40 | | | 15.55 | |
| 28 | 13.15 | | | | 11.50 | 11.65 | 14.05 | 17.45 | | 16.85 | | |
| 29 | | 12.90 | | 12.25 | | | | | | | 15.50 | 14.50 |
| 30 | 13.05 | | 12.40 | | | | 14.30 | 17.50 | 17.35 | 16.75 | | |
| 31 | | | | 12.20 | | 11.70 | | | | | | |

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, 1930.

EXTREMES.—Maximum discharge during year, 6,980 second-feet May 29–31 (gage height, 6.83 feet); minimum, 90 second-feet Mar. 14 (gage height, 2.00 feet).

1919–1930: Maximum discharge, 13,600 second-feet May 9, 1929 (gage height, 9.19 feet); minimum, about 62 second-feet Apr. 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, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 1,830 | 1,550 | 1,210 | 1,070 | 1,220 | 1,580 | 1,100 | 548 | 5,590 | 1,860 | 4,540 | 1,790 |
| 2..... | 1,840 | 1,550 | 1,210 | 1,070 | 1,330 | 1,610 | 760 | 562 | 5,500 | 1,480 | 4,540 | 1,960 |
| 3..... | 1,750 | 1,840 | 1,260 | 1,050 | 1,350 | 1,660 | 625 | 583 | 6,290 | 1,750 | 2,890 | 1,940 |
| 4..... | 1,700 | 2,160 | 1,320 | 1,040 | 1,360 | 1,740 | 500 | 583 | 3,390 | 1,800 | 2,700 | 1,870 |
| 5..... | 1,710 | 1,260 | 1,320 | 1,030 | 1,360 | 1,800 | 555 | 606 | 3,250 | 1,930 | 2,400 | 2,240 |
| 6..... | 1,710 | 1,400 | 1,290 | 1,030 | 1,380 | 1,830 | 345 | 622 | 2,310 | 2,040 | 2,600 | 2,160 |
| 7..... | 1,710 | 1,430 | 1,300 | 1,020 | 1,420 | 1,800 | 350 | 638 | 1,740 | 2,150 | 2,580 | 1,770 |
| 8..... | 1,740 | 1,300 | 1,320 | 1,030 | 1,430 | 1,870 | 365 | 755 | 1,980 | 2,410 | 2,690 | 1,890 |
| 9..... | 1,780 | 1,320 | 1,320 | 885 | 1,430 | 1,530 | 375 | 686 | 2,460 | 2,490 | 2,740 | 1,720 |
| 10..... | 1,780 | 1,300 | 1,330 | 654 | 1,450 | 580 | 380 | 820 | 2,260 | 2,410 | 2,750 | 1,790 |
| 11..... | 1,790 | 1,180 | 1,340 | 606 | 1,460 | 550 | 390 | 945 | 3,100 | 2,480 | 2,590 | 1,880 |
| 12..... | 1,780 | 1,100 | 1,330 | 768 | 1,460 | 535 | 395 | 702 | 3,080 | 2,820 | 2,420 | 1,820 |
| 13..... | 1,730 | 1,340 | 1,180 | 813 | 1,460 | 300 | 406 | 1,010 | 2,880 | 2,690 | 2,540 | 2,180 |
| 14..... | 1,750 | 1,270 | 1,030 | 903 | 1,470 | 300 | 424 | 718 | 1,980 | 2,500 | 2,620 | 2,490 |
| 15..... | 1,720 | 900 | 1,030 | 921 | 1,460 | 545 | 430 | 734 | 1,850 | 2,220 | 2,590 | 2,640 |
| 16..... | 1,750 | 514 | 1,040 | 840 | 1,440 | 1,220 | 436 | 742 | 1,880 | 2,080 | 2,350 | 2,280 |
| 17..... | 1,760 | 605 | 1,050 | 849 | 1,430 | 1,540 | 442 | 1,160 | 1,750 | 2,200 | 2,230 | 1,830 |
| 18..... | 1,750 | 759 | 1,060 | 885 | 1,450 | 1,700 | 448 | 786 | 2,290 | 2,200 | 2,240 | 1,600 |
| 19..... | 1,670 | 550 | 1,050 | 940 | 1,490 | 1,800 | 454 | 1,080 | 2,430 | 2,670 | 2,240 | 1,520 |
| 20..... | 1,650 | 685 | 1,030 | 912 | 1,520 | 1,920 | 466 | 2,040 | 2,400 | 2,550 | 2,110 | 1,480 |
| 21..... | 1,640 | 903 | 1,030 | 912 | 1,540 | 1,880 | 472 | 2,320 | 2,080 | 2,370 | 2,040 | 1,580 |
| 22..... | 1,640 | 980 | 1,030 | 950 | 1,510 | 1,780 | 484 | 2,620 | 2,200 | 1,150 | 1,830 | 1,890 |
| 23..... | 1,520 | 1,070 | 1,040 | 1,020 | 1,460 | 1,720 | 490 | 2,460 | 2,660 | 2,580 | 1,740 | 2,040 |
| 24..... | 1,320 | 1,330 | 1,100 | 1,020 | 1,290 | 1,710 | 490 | 2,320 | 2,150 | 3,120 | 2,180 | 2,140 |
| 25..... | 1,250 | 1,350 | 1,100 | 1,060 | 1,140 | 1,740 | 502 | 2,260 | 2,400 | 3,100 | 2,200 | 2,050 |
| 26..... | 1,340 | 1,340 | 1,080 | 1,160 | 1,350 | 1,310 | 508 | 2,570 | 2,310 | 3,540 | 2,080 | 1,760 |
| 27..... | 1,470 | 1,340 | 1,080 | 1,210 | 1,540 | 300 | 514 | 4,750 | 2,350 | 3,420 | 2,070 | 1,930 |
| 28..... | 1,540 | 1,290 | 1,080 | 1,210 | 1,580 | 305 | 520 | 6,020 | 2,050 | 2,910 | 2,300 | 2,110 |
| 29..... | 1,720 | 1,280 | 1,080 | 1,200 | ----- | 560 | 527 | 6,740 | 2,040 | 2,910 | 2,120 | 2,170 |
| 30..... | 1,540 | 1,250 | 1,070 | 1,180 | ----- | 930 | 541 | 6,980 | 2,030 | 3,370 | 1,810 | 2,160 |
| 31..... | 1,570 | ----- | 1,070 | 1,160 | ----- | 1,100 | ----- | 6,930 | ----- | 4,580 | 1,650 | ----- |

| 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..... | 1,840 | 1,250 | 1,660 | -4,349 | 40 | 0.072 | 0.04 |
| November..... | 2,160 | 514 | 1,200 | -2,113 | 385 | .372 | .35 |
| December..... | 1,340 | 1,030 | 1,150 | -1,451 | 609 | .490 | .56 |
| January..... | 1,210 | 606 | 981 | -538 | 780 | .629 | .73 |
| February..... | 1,580 | 1,140 | 1,420 | -2,235 | 495 | .396 | .42 |
| March..... | 1,920 | 300 | 1,280 | +741 | 1,560 | 1.26 | 1.45 |
| April..... | 1,100 | 345 | 490 | +12,504 | 5,430 | 4.38 | 4.89 |
| May..... | 6,980 | 548 | 2,010 | +13,643 | 7,100 | 5.73 | 6.61 |
| June..... | 6,290 | 1,740 | 2,660 | +367 | 2,800 | 2.26 | 2.52 |
| July..... | 4,580 | 1,150 | 2,510 | -3,295 | 1,280 | 1.03 | 1.19 |
| August..... | 4,540 | 1,650 | 2,460 | -6,932 | 240 | .134 | .22 |
| September..... | 2,640 | 1,480 | 1,960 | -4,106 | 380 | .376 | .34 |
| The year..... | 6,980 | 300 | 1,650 | +3,534 | 1,760 | 1.42 | 19.32 |

NOTE.—No correction for evaporation. Diversion at west outlet dam, which is not included in above table, consists of leakage estimated at 10 to 100 second-feet, and on days gates were open discharges estimated as follows: Oct. 1–18, 125 second-feet; May 2–16, 200 to 500 second-feet; June 18 to July 4, 245 second-feet; July 7 to Sept. 30, 120 to 240 second-feet.

KENNEBEC RIVER AT THE FORKS, ME.

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

DRAINAGE AREA.—1,570 square miles.

RECORDS AVAILABLE.—September, 1901, to September, 1930.

EXTREMES.—Maximum discharge during year, 8,690 second-feet May 30, 31 (gage height, 6.1 feet); minimum, 690 second-feet Nov. 20 (gage height, 2.15 feet).

1901-1930: Maximum discharge, about 23,700 second-feet June 18, 1917 (gage height, 10.1 feet); minimum, 215 second-feet Oct. 27, 1911 (gage height, 0.3 foot).

REMARKS.—Records good. Flow regulated by storage in Moosehead Lake. Discharge Nov. 29 to Mar. 24 determined from gage heights corrected for ice effect.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 2,280 | 1,660 | 1,450 | 1,180 | 1,330 | 1,840 | 1,600 | 3,230 | 7,330 | 2,460 | 4,930 | 1,800 |
| 2..... | 2,290 | 1,660 | 1,330 | 1,200 | 1,410 | 2,110 | 1,540 | 3,530 | 6,350 | 2,190 | 4,930 | 2,030 |
| 3..... | 2,280 | 1,720 | 1,370 | 1,160 | 1,500 | 2,160 | 1,070 | 4,800 | 7,350 | 2,260 | 4,420 | 2,110 |
| 4..... | 2,030 | 1,710 | 1,430 | 1,150 | 1,500 | 2,130 | 900 | 5,330 | 4,300 | 2,540 | 3,290 | 2,030 |
| 5..... | 2,110 | 1,010 | 1,430 | 1,150 | 1,510 | 2,260 | 1,070 | 4,440 | 4,150 | 2,330 | 3,180 | 2,190 |
| 6..... | 2,110 | 1,440 | 1,400 | 1,180 | 1,540 | 2,350 | 920 | 4,090 | 3,370 | 2,630 | 2,840 | 2,460 |
| 7..... | 2,030 | 1,440 | 1,420 | 1,180 | 1,560 | 2,440 | 1,350 | 3,640 | 2,250 | 2,500 | 2,930 | 2,280 |
| 8..... | 2,030 | 1,620 | 1,430 | 1,160 | 1,600 | 2,550 | 2,280 | 3,230 | 2,450 | 2,740 | 2,840 | 2,640 |
| 9..... | 2,110 | 1,430 | 1,430 | 1,120 | 1,630 | 2,930 | 2,640 | 3,230 | 3,450 | 2,960 | 3,030 | 2,460 |
| 10..... | 2,110 | 1,480 | 1,460 | 1,030 | 1,630 | 1,920 | 2,460 | 2,500 | 3,550 | 2,770 | 3,130 | 2,280 |
| 11..... | 2,110 | 1,710 | 1,460 | 920 | 1,570 | 1,330 | 2,370 | 2,550 | 4,250 | 2,910 | 3,030 | 2,370 |
| 12..... | 2,030 | 1,510 | 1,450 | 1,000 | 1,560 | 1,300 | 2,550 | 2,860 | 4,810 | 3,510 | 2,740 | 2,460 |
| 13..... | 2,110 | 1,920 | 1,310 | 1,120 | 1,560 | 1,270 | 3,130 | 2,360 | 3,370 | 3,270 | 2,840 | 2,550 |
| 14..... | 2,030 | 1,700 | 1,240 | 1,180 | 1,570 | 1,100 | 3,970 | 2,000 | 3,150 | 3,010 | 2,930 | 2,460 |
| 15..... | 1,950 | 1,470 | 1,120 | 1,190 | 1,590 | 1,300 | 4,440 | 2,120 | 2,350 | 3,010 | 2,840 | 3,030 |
| 16..... | 2,030 | 1,020 | 1,140 | 1,130 | 1,560 | 1,770 | 3,750 | 1,660 | 2,620 | 2,730 | 2,740 | 2,930 |
| 17..... | 2,110 | 793 | 1,200 | 1,080 | 1,560 | 2,370 | 3,230 | 2,200 | 2,250 | 2,880 | 2,550 | 2,640 |
| 18..... | 2,030 | 802 | 1,210 | 1,050 | 1,570 | 3,010 | 2,550 | 1,820 | 2,350 | 2,860 | 2,460 | 2,030 |
| 19..... | 1,950 | 1,010 | 1,220 | 1,040 | 1,610 | 2,950 | 2,190 | 1,350 | 3,760 | 2,690 | 2,460 | 1,870 |
| 20..... | 1,800 | 784 | 1,230 | 1,010 | 1,650 | 2,550 | 2,370 | 2,930 | 2,820 | 3,810 | 2,460 | 1,730 |
| 21..... | 1,800 | 1,020 | 1,240 | 940 | 1,680 | 2,030 | 2,840 | 3,140 | 2,530 | 3,190 | 2,280 | 1,800 |
| 22..... | 1,870 | 1,120 | 1,240 | 1,000 | 1,650 | 2,080 | 3,130 | 4,600 | 3,060 | 2,990 | 2,190 | 1,950 |
| 23..... | 1,800 | 1,180 | 1,250 | 1,060 | 1,630 | 2,330 | 2,930 | 3,340 | 3,550 | 3,130 | 1,870 | 2,280 |
| 24..... | 1,600 | 1,350 | 1,330 | 1,140 | 1,590 | 2,480 | 2,190 | 3,090 | 3,300 | 3,530 | 2,110 | 2,370 |
| 25..... | 1,470 | 1,600 | 1,270 | 1,150 | 1,550 | 2,460 | 2,460 | 3,020 | 2,840 | 3,530 | 2,460 | 2,460 |
| 26..... | 1,410 | 1,540 | 1,270 | 1,240 | 1,570 | 2,550 | 1,950 | 3,220 | 2,760 | 3,640 | 2,370 | 2,110 |
| 27..... | 1,540 | 1,540 | 1,270 | 1,300 | 1,720 | 1,230 | 2,370 | 7,470 | 3,180 | 4,440 | 2,280 | 2,110 |
| 28..... | 1,660 | 1,470 | 1,230 | 1,350 | 1,830 | 890 | 2,550 | 8,400 | 2,580 | 3,530 | 2,370 | 2,190 |
| 29..... | 1,600 | 1,470 | 1,210 | 1,300 | ----- | 890 | 2,280 | 8,400 | 2,370 | 3,530 | 2,460 | 2,370 |
| 30..... | 1,800 | 1,460 | 1,180 | 1,340 | ----- | 1,290 | 2,370 | 8,400 | 2,370 | 3,530 | 2,190 | 2,370 |
| 31..... | 1,730 | ----- | 1,170 | 1,350 | ----- | 1,600 | ----- | 8,690 | ----- | 4,680 | 1,870 | ----- |

| Month | Observed | | | Corrected for storage | | |
|----------------|----------|---------|-------|-----------------------|-----------------|-------------------|
| | Maximum | Minimum | Mean | Mean | Per square mile | Run-off in inches |
| October..... | 2,280 | 1,410 | 1,930 | 310 | 0.197 | 0.23 |
| November..... | 1,920 | 784 | 1,390 | 574 | .366 | .41 |
| December..... | 1,460 | 1,120 | 1,300 | 759 | .483 | .56 |
| January..... | 1,350 | 920 | 1,140 | 939 | .598 | .69 |
| February..... | 1,830 | 1,330 | 1,580 | 655 | .417 | .43 |
| March..... | 3,010 | 890 | 1,980 | 2,260 | 1.44 | 1.66 |
| April..... | 4,440 | 900 | 2,380 | 7,320 | 4.66 | 5.20 |
| May..... | 8,690 | 1,350 | 3,690 | 8,960 | 5.72 | 6.60 |
| June..... | 7,390 | 2,200 | 3,480 | 3,620 | 2.31 | 2.53 |
| July..... | 4,680 | 2,190 | 3,090 | 1,860 | 1.18 | 1.36 |
| August..... | 4,930 | 1,870 | 2,810 | 590 | .376 | .43 |
| September..... | 3,030 | 1,730 | 2,280 | 700 | .446 | .50 |
| The year..... | 8,690 | 784 | 2,280 | 2,390 | 1.52 | 20.65 |

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, 1930.

EXTREMES.—Maximum discharge during year, 12,800 second-feet May 17 (gauge height, 7.43 feet); minimum, 156 second-feet Oct. 2 (gauge height, 1.72 feet).
1901–1907, 1910–1930: Maximum discharge, 23,800 second-feet Apr. 30, 1923; minimum stage, 0.2 foot Sept. 12, 13, 17, 1918 (discharge not determined).

REMARKS.—Records good. Some storage on lakes. Discharge Nov. 25 to Apr. 8 determined from gauge heights corrected for ice effect.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|-------|-------|--------|-------|------|-------|-------|
| 1 | 200 | 316 | 260 | 210 | 300 | 990 | 980 | 5,960 | 3,670 | 715 | 380 | 1,040 |
| 2 | 242 | 446 | 260 | 200 | 295 | 885 | 955 | 7,150 | 2,830 | 818 | 365 | 995 |
| 3 | 267 | 554 | 255 | 235 | 280 | 825 | 910 | 11,400 | 3,490 | 842 | 440 | 750 |
| 4 | 288 | 536 | 255 | 260 | 290 | 735 | 885 | 10,800 | 3,240 | 854 | 505 | 655 |
| 5 | 248 | 491 | 250 | 250 | 275 | 690 | 835 | 10,500 | 2,330 | 770 | 355 | 430 |
| 6 | 267 | 437 | 250 | 275 | 255 | 630 | 825 | 9,430 | 1,950 | 737 | 260 | 414 |
| 7 | 281 | 386 | 240 | 330 | 260 | 590 | 2,440 | 9,080 | 2,580 | 630 | 215 | 398 |
| 8 | 274 | 346 | 240 | 355 | 265 | 555 | 4,380 | 7,880 | 1,630 | 620 | 410 | 382 |
| 9 | 242 | 316 | 240 | 410 | 255 | 590 | 5,910 | 7,000 | 1,320 | 506 | 410 | 375 |
| 10 | 254 | 302 | 235 | 590 | 250 | 580 | 5,650 | 5,590 | 2,350 | 406 | 570 | 360 |
| 11 | 260 | 274 | 235 | 745 | 235 | 640 | 5,000 | 3,120 | 2,930 | 322 | 259 | 322 |
| 12 | 267 | 274 | 230 | 835 | 230 | 725 | 4,630 | 3,710 | 2,540 | 352 | 245 | 301 |
| 13 | 267 | 267 | 240 | 920 | 225 | 765 | 5,130 | 3,230 | 868 | 533 | 380 | 294 |
| 14 | 309 | 295 | 250 | 860 | 225 | 745 | 6,040 | 2,940 | 1,500 | 595 | 400 | 315 |
| 15 | 295 | 446 | 250 | 825 | 225 | 725 | 6,580 | 3,020 | 1,500 | 690 | 490 | 382 |
| 16 | 305 | 650 | 250 | 765 | 220 | 690 | 6,320 | 3,380 | 1,160 | 715 | 252 | 479 |
| 17 | 295 | 723 | 240 | 690 | 220 | 660 | 5,390 | 3,460 | 1,050 | 655 | 287 | 726 |
| 18 | 330 | 670 | 250 | 630 | 210 | 620 | 4,380 | 2,200 | 1,120 | 715 | 338 | 1,220 |
| 19 | 325 | 600 | 250 | 580 | 210 | 590 | 3,450 | 2,840 | 1,200 | 695 | 301 | 1,060 |
| 20 | 425 | 536 | 250 | 535 | 220 | 555 | 2,460 | 2,180 | 1,400 | 266 | 301 | 916 |
| 21 | 437 | 509 | 250 | 465 | 235 | 520 | 4,590 | 3,080 | 1,230 | 345 | 720 | 737 |
| 22 | 473 | 518 | 250 | 430 | 255 | 480 | 4,580 | 2,800 | 1,330 | 505 | 775 | 590 |
| 23 | 491 | 455 | 255 | 420 | 315 | 455 | 4,630 | 3,200 | 1,420 | 252 | 585 | 497 |
| 24 | 491 | 378 | 255 | 420 | 475 | 430 | 2,890 | 2,260 | 1,850 | 315 | 690 | 446 |
| 25 | 482 | 355 | 275 | 395 | 620 | 410 | 3,240 | 2,130 | 1,800 | 227 | 840 | 390 |
| 26 | 455 | 315 | 255 | 380 | 870 | 545 | 1,480 | 2,350 | 1,560 | 385 | 765 | 368 |
| 27 | 428 | 310 | 235 | 345 | 1,040 | 800 | 1,540 | 4,480 | 1,270 | 505 | 630 | 338 |
| 28 | 386 | 295 | 235 | 340 | 1,080 | 910 | 3,450 | 6,550 | 942 | 480 | 830 | 322 |
| 29 | 354 | 275 | 230 | 330 | ----- | 1,000 | 5,000 | 5,390 | 854 | 340 | 1,050 | 315 |
| 30 | 330 | 265 | 230 | 315 | ----- | 1,090 | 6,210 | 5,000 | 671 | 325 | 990 | 301 |
| 31 | 316 | ----- | 225 | 310 | ----- | 1,040 | ----- | 5,340 | ----- | 500 | 995 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-------------------|-------------------|
| October | 491 | 200 | 332 | 0.37 ² | 0.44 |
| November | 723 | 265 | 418 | .476 | .53 |
| December | 275 | 225 | 246 | .289 | .32 |
| January | 920 | 200 | 473 | .539 | .62 |
| February | 1,080 | 210 | 351 | .407 | .42 |
| March | 1,090 | 410 | 692 | .78 ⁸ | .91 |
| April | 6,580 | 825 | 3,690 | 4.20 | 4.69 |
| May | 11,400 | 2,130 | 5,080 | 5.79 | 6.68 |
| June | 3,670 | 671 | 1,790 | 2.04 | 2.28 |
| July | 854 | 227 | 536 | .617 | .70 |
| August | 1,050 | 215 | 517 | .589 | .68 |
| September | 1,220 | 294 | 537 | .612 | .68 |
| The year | 11,400 | 200 | 1,220 | 1.39 | 18.95 |

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, 1930. November, 1901, to May, 1907, at site 1 mile upstream.

EXTREMES.—Maximum discharge during year, 11,800 second-feet Apr. 7 (gauge height, 13.11 feet); minimum, 18 second-feet Oct. 29 (gauge height, 2.02 feet).

1925-1930: Maximum discharge, 18,600 second-feet Nov. 4, 1927 (gauge height, 17.83 feet); minimum, that of Oct. 29, 1929.

REMARKS.—Records good. Flow affected by power plant. Discharge Nov. 29 to Dec. 6, Dec. 11 to Mar. 31 determined from gauge heights corrected for ice effect.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|-------|-------|-------|-------|-------|------|-------|
| 1..... | 62 | 124 | 96 | 122 | 170 | 280 | 834 | 2,200 | 1,000 | 310 | 122 | 133 |
| 2..... | 72 | 182 | 94 | 116 | 154 | 250 | 965 | 3,400 | 930 | 1,940 | 110 | 118 |
| 3..... | 110 | 194 | 92 | 110 | 156 | 235 | 1,040 | 4,440 | 769 | 1,520 | 98 | 116 |
| 4..... | 140 | 215 | 100 | 128 | 154 | 186 | 1,040 | 2,800 | 653 | 847 | 98 | 108 |
| 5..... | 110 | 154 | 92 | 140 | 144 | 166 | 1,310 | 1,890 | 561 | 420 | 102 | 102 |
| 6..... | 91 | 148 | 98 | 136 | 146 | 182 | 1,690 | 1,570 | 512 | 305 | 98 | 94 |
| 7..... | 89 | 134 | 96 | 186 | 140 | 205 | 6,780 | 2,090 | 425 | 400 | 98 | 84 |
| 8..... | 75 | 110 | 90 | 174 | 132 | 280 | 8,290 | 1,750 | 588 | 455 | 91 | 84 |
| 9..... | 68 | 116 | 96 | 205 | 130 | 620 | 4,720 | 1,190 | 756 | 545 | 94 | 90 |
| 10..... | 81 | 90 | 114 | 365 | 130 | 1,120 | 2,920 | 930 | 1,190 | 370 | 106 | 84 |
| 11..... | 74 | 89 | 110 | 300 | 130 | 1,080 | 2,420 | 1,070 | 965 | 219 | 131 | 84 |
| 12..... | 77 | 102 | 104 | 250 | 120 | 1,330 | 2,470 | 717 | 1,040 | 340 | 122 | 85 |
| 13..... | 50 | 102 | 99 | 225 | 120 | 1,550 | 4,040 | 930 | 860 | 345 | 108 | 84 |
| 14..... | 66 | 138 | 97 | 220 | 122 | 1,250 | 3,780 | 1,310 | 678 | 345 | 98 | 74 |
| 15..... | 74 | 265 | 94 | 230 | 124 | 1,020 | 3,650 | 930 | 490 | 678 | 106 | 87 |
| 16..... | 65 | 460 | 92 | 225 | 124 | 680 | 2,800 | 1,270 | 380 | 653 | 156 | 106 |
| 17..... | 84 | 365 | 90 | 225 | 136 | 610 | 1,940 | 1,190 | 289 | 480 | 216 | 126 |
| 18..... | 76 | 295 | 106 | 215 | 136 | 540 | 1,480 | 1,190 | 415 | 228 | 171 | 146 |
| 19..... | 71 | 350 | 102 | 215 | 136 | 510 | 1,620 | 965 | 1,620 | 204 | 176 | 128 |
| 20..... | 68 | 385 | 92 | 205 | 128 | 460 | 2,360 | 1,000 | 1,440 | 184 | 176 | 106 |
| 21..... | 78 | 280 | 116 | 190 | 138 | 410 | 2,640 | 1,190 | 1,310 | 171 | 204 | 90 |
| 22..... | 76 | 205 | 82 | 190 | 156 | 355 | 2,420 | 1,190 | 930 | 164 | 174 | 91 |
| 23..... | 138 | 152 | 100 | 190 | 240 | 320 | 1,840 | 1,040 | 847 | 156 | 135 | 94 |
| 24..... | 335 | 142 | 126 | 182 | 270 | 290 | 1,270 | 895 | 710 | 142 | 148 | 90 |
| 25..... | 230 | 156 | 118 | 178 | 365 | 280 | 1,150 | 691 | 539 | 133 | 266 | 85 |
| 26..... | 164 | 140 | 110 | 174 | 410 | 950 | 1,070 | 845 | 435 | 124 | 195 | 81 |
| 27..... | 100 | 154 | 130 | 174 | 385 | 2,640 | 1,270 | 3,190 | 340 | 128 | 148 | 81 |
| 28..... | 110 | 134 | 97 | 172 | 320 | 1,750 | 1,570 | 2,470 | 430 | 158 | 124 | 80 |
| 29..... | 94 | 116 | 102 | 170 | ----- | 1,290 | 2,040 | 1,840 | 385 | 161 | 116 | 75 |
| 30..... | 114 | 100 | 104 | 186 | ----- | 915 | 2,140 | 1,620 | 305 | 151 | 116 | 77 |
| 31..... | 118 | ----- | 97 | 172 | ----- | 865 | ----- | 1,480 | ----- | 135 | 161 | ----- |

| Month | Maximum | Minimum | Mean | Pe ² square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------------------|-------------------|
| October..... | 335 | 50 | 102 | 0.291 | 0.34 |
| November..... | 460 | 89 | 187 | .533 | .59 |
| December..... | 130 | 82 | 101 | .288 | .33 |
| January..... | 365 | 110 | 193 | .550 | .63 |
| February..... | 410 | 120 | 179 | .510 | .53 |
| March..... | 2,640 | 166 | 730 | 2.08 | 2.40 |
| April..... | 8,290 | 834 | 2,450 | 6.98 | 7.79 |
| May..... | 4,440 | 691 | 1,590 | 4.53 | 5.22 |
| June..... | 1,520 | 289 | 723 | 2.06 | 2.30 |
| July..... | 1,940 | 124 | 400 | 1.14 | 1.31 |
| August..... | 266 | 91 | 138 | .393 | .45 |
| September..... | 146 | 74 | 96.1 | .274 | .31 |
| The year..... | 8,290 | 50 | 574 | 1.64 | 22.20 |

SANDY RIVER NEAR MERCER, ME.

LOCATION.—Water-stage recorder at Davis Ferry, 3 miles north of Mercer, Somerset County.

DRAINAGE AREA.—534 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 15,100 second-feet Apr. 8 (gage height, 10.96 feet); minimum, 35 second-feet Oct. 6 (gage height, 2.05 feet).
1928-1930: Maximum discharge, that of Apr. 8, 1930; minimum, that of Oct. 6, 1929.

REMARKS.—Records good except those for period of ice effect, Dec. 1 to Mar. 17, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|--------|--------|---------|--------|--------|--------|------|-------|
| 1 | 58 | 110 | 98 | 126 | 152 | 685 | 1, 650 | 1, 820 | 1, 460 | 465 | 268 | 283 |
| 2 | 60 | 124 | 87 | 130 | 158 | 605 | 1, 960 | 2, 560 | 1, 260 | 1, 050 | 261 | 276 |
| 3 | 74 | 177 | 94 | 168 | 144 | 550 | 3, 960 | 3, 960 | 1, 090 | 1, 909 | 235 | 264 |
| 4 | 48 | 239 | 96 | 126 | 140 | 470 | 2, 030 | 2, 740 | 902 | 722 | 214 | 242 |
| 5 | 41 | 207 | 90 | 130 | 130 | 455 | 2, 560 | 1, 760 | 768 | 544 | 221 | 246 |
| 6 | 37 | 171 | 102 | 140 | 122 | 435 | 3, 000 | 1, 460 | 678 | 482 | 210 | 242 |
| 7 | 41 | 146 | 90 | 230 | 116 | 420 | 8, 310 | 1, 640 | 614 | 760 | 210 | 221 |
| 8 | 49 | 132 | 94 | 265 | 120 | 460 | 12, 500 | 1, 520 | 593 | 768 | 193 | 203 |
| 9 | 57 | 119 | 85 | 305 | 122 | 1, 149 | 6, 440 | 1, 180 | 614 | 579 | 203 | 207 |
| 10 | 57 | 110 | 83 | 335 | 126 | 1, 820 | 3, 960 | 970 | 865 | 494 | 214 | 200 |
| 11 | 58 | 96 | 85 | 385 | 152 | 2, 480 | 3, 460 | 842 | 1, 010 | 430 | 197 | 141 |
| 12 | 60 | 102 | 96 | 375 | 146 | 3, 180 | 3, 760 | 760 | 1, 310 | 544 | 193 | 180 |
| 13 | 63 | 96 | 96 | 345 | 156 | 3, 560 | 5, 100 | 722 | 1, 090 | 586 | 193 | 152 |
| 14 | 47 | 122 | 89 | 295 | 138 | 2, 820 | 5, 100 | 865 | 820 | 600 | 210 | 141 |
| 15 | 43 | 177 | 87 | 260 | 138 | 2, 060 | 5, 420 | 970 | 649 | 1, 220 | 224 | 130 |
| 16 | 49 | 397 | 81 | 235 | 136 | 1, 740 | 3, 460 | 1, 260 | 530 | 872 | 352 | 130 |
| 17 | 58 | 440 | 98 | 215 | 132 | 1, 490 | 2, 300 | 1, 310 | 476 | 593 | 649 | 132 |
| 18 | 60 | 352 | 94 | 215 | 132 | 1, 180 | 2, 170 | 1, 050 | 544 | 465 | 506 | 135 |
| 19 | 57 | 388 | 85 | 215 | 130 | 1, 050 | 2, 100 | 872 | 1, 620 | 411 | 450 | 174 |
| 20 | 55 | 470 | 96 | 176 | 144 | 1, 130 | 3, 000 | 842 | 1, 460 | 357 | 537 | 174 |
| 21 | 45 | 392 | 102 | 186 | 194 | 1, 020 | 2, 820 | 1, 260 | 1, 360 | 327 | 621 | 135 |
| 22 | 54 | 299 | 116 | 200 | 255 | 1, 030 | 2, 480 | 1, 220 | 1, 360 | 319 | 482 | 155 |
| 23 | 68 | 253 | 102 | 180 | 440 | 895 | 2, 170 | 1, 010 | 1, 360 | 327 | 388 | 122 |
| 24 | 152 | 200 | 114 | 170 | 820 | 798 | 1, 700 | 865 | 1, 090 | 311 | 425 | 117 |
| 25 | 327 | 183 | 122 | 170 | 860 | 656 | 1, 410 | 752 | 910 | 287 | 600 | 117 |
| 26 | 228 | 183 | 100 | 138 | 1, 030 | 1, 780 | 1, 310 | 722 | 768 | 249 | 512 | 117 |
| 27 | 180 | 183 | 114 | 112 | 1, 010 | 4, 260 | 1, 460 | 2, 640 | 656 | 249 | 411 | 102 |
| 28 | 168 | 174 | 120 | 144 | 870 | 2, 910 | 1, 700 | 2, 820 | 670 | 253 | 340 | 110 |
| 29 | 127 | 122 | 108 | 138 | ----- | 2, 170 | 1, 700 | 1, 890 | 635 | 291 | 311 | 117 |
| 30 | 114 | 102 | 104 | 136 | ----- | 1, 760 | 1, 700 | 1, 760 | 530 | 311 | 283 | 92 |
| 31 | 105 | ----- | 152 | 144 | ----- | 1, 760 | ----- | 2, 030 | ----- | 303 | 280 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|--------|------------------|-------------------|
| October | 327 | 37 | 85.2 | 0.160 | 0.18 |
| November | 470 | 96 | 209 | .3 ³¹ | .44 |
| December | 152 | 81 | 99.4 | .186 | .21 |
| January | 385 | 112 | 206 | .3 ³⁶ | .44 |
| February | 1, 030 | 116 | 293 | .549 | .57 |
| March | 4, 260 | 420 | 1, 510 | 2.83 | 3.26 |
| April | 12, 500 | 1, 310 | 3, 290 | 6.16 | 6.87 |
| May | 3, 960 | 722 | 1, 490 | 2.73 | 3.22 |
| June | 1, 520 | 476 | 920 | 1.72 | 1.92 |
| July | 1, 220 | 249 | 524 | .9 ³¹ | 1.13 |
| August | 649 | 193 | 335 | .67 | .72 |
| September | 283 | 92 | 169 | .316 | .35 |
| The year | 12, 500 | 37 | 760 | 1.4 ² | 19.31 |

• Estimated.

SEBASTICOOK RIVER NEAR PITTSFIELD, ME.

LOCATION.—Water-stage recorder $1\frac{1}{4}$ miles above mouth of Twentyfivemile stream and 4 miles south of Pittsfield, Somerset County.

DRAINAGE AREA.—598 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 6,180 second-feet Apr. 11 (gage height, 7.92 feet); minimum, 20 second-feet May 9 (gage height, 0.80 foot).

1928-1930: Maximum discharge, 7,440 second-feet Apr. 20, 1929 (gage height, 8.81 feet); minimum, that of May 9, 1930.

REMARKS.—Records good except those for period of ice effect, Jan. 1 to Mar. 22, which are fair. Distribution of flow affected by storage and pondage.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|-------|-------|-------|-------|------|------|-------|
| 1..... | 126 | 104 | 45 | 136 | 255 | 665 | 2,410 | 950 | 2,150 | 340 | 230 | 245 |
| 2..... | 38 | 116 | 290 | 44 | 54 | 645 | 2,300 | 690 | 1,960 | 144 | 140 | 240 |
| 3..... | 255 | 36 | 205 | 150 | 305 | 740 | 2,410 | 450 | 1,640 | 144 | 180 | 210 |
| 4..... | 110 | 94 | 37 | 104 | 265 | 680 | 2,520 | 350 | 1,380 | 158 | 146 | 245 |
| 5..... | 37 | 132 | 38 | 44 | 225 | 615 | 2,520 | 325 | 1,140 | 158 | 235 | 240 |
| 6..... | 116 | 116 | 39 | 138 | 200 | 565 | 2,580 | 255 | 955 | 152 | 146 | 245 |
| 7..... | 36 | 132 | 39 | 275 | 260 | 540 | 3,000 | 245 | 730 | 330 | 230 | 75 |
| 8..... | 132 | 102 | 41 | 180 | 200 | 590 | 4,120 | 220 | 670 | 320 | 150 | 210 |
| 9..... | 124 | 38 | 79 | 245 | 220 | 1,540 | 5,350 | 164 | 770 | 285 | 230 | 225 |
| 10..... | 36 | 38 | 94 | 275 | 275 | 2,410 | 5,900 | 31 | 630 | 285 | 180 | 220 |
| 11..... | 130 | 176 | 34 | 435 | 210 | 3,070 | 6,040 | 32 | 570 | 360 | 200 | 240 |
| 12..... | 36 | 37 | 64 | 340 | 265 | 4,120 | 5,620 | 250 | 510 | 164 | 170 | 230 |
| 13..... | 118 | 37 | 69 | 360 | 265 | 4,590 | 5,210 | 330 | 410 | 57 | 165 | 230 |
| 14..... | 37 | 162 | 34 | 355 | 225 | 5,070 | 4,660 | 260 | 320 | 285 | 205 | 148 |
| 15..... | 140 | 37 | 34 | 275 | 260 | 4,940 | 4,120 | 184 | 265 | 345 | 260 | 230 |
| 16..... | 38 | 102 | 56 | 245 | 270 | 4,800 | 3,740 | 395 | 420 | 58 | 315 | 225 |
| 17..... | 130 | 90 | 50 | 250 | 415 | 4,770 | 3,250 | 360 | 320 | 295 | 140 | 220 |
| 18..... | 122 | 95 | 62 | 275 | 430 | 4,770 | 2,820 | 440 | 295 | 280 | 315 | 255 |
| 19..... | 90 | 140 | 70 | 92 | 360 | 4,120 | 2,410 | 460 | 260 | 140 | 245 | 570 |
| 20..... | 36 | 126 | 144 | 142 | 470 | 3,000 | 2,140 | 460 | 265 | 78 | 320 | 265 |
| 21..... | 94 | 126 | 128 | 160 | 365 | 2,760 | 1,850 | 550 | 78 | 250 | 250 | 295 |
| 22..... | 88 | 44 | 60 | 128 | 305 | 2,520 | 1,590 | 535 | 132 | 255 | 260 | 180 |
| 23..... | 156 | 104 | 62 | 192 | 280 | 2,360 | 1,440 | 515 | 330 | 110 | 180 | 23 |
| 24..... | 124 | 40 | 59 | 196 | 390 | 2,140 | 1,500 | 410 | 300 | 136 | 75 | 81 |
| 25..... | 106 | 98 | 49 | 142 | 650 | 1,810 | 1,540 | 335 | 290 | 225 | 290 | 24 |
| 26..... | 134 | 40 | 45 | 54 | 720 | 2,000 | 1,470 | 470 | 290 | 144 | 200 | 184 |
| 27..... | 39 | 104 | 70 | 365 | 720 | 2,550 | 1,400 | 955 | 285 | 180 | 180 | 215 |
| 28..... | 37 | 39 | 78 | 305 | 690 | 2,770 | 1,350 | 1,450 | 98 | 240 | 210 | 34 |
| 29..... | 130 | 106 | 53 | 240 | ----- | 2,640 | 1,240 | 1,920 | 170 | 108 | 225 | 270 |
| 30..... | 132 | 110 | 51 | 180 | ----- | 2,520 | 1,150 | 2,220 | 325 | 170 | 250 | 210 |
| 31..... | 124 | ----- | 87 | 188 | ----- | 2,520 | ----- | 2,250 | ----- | 156 | 200 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 255 | 36 | 98.4 | 0.165 | 0.19 |
| November..... | 176 | 36 | 90.7 | .152 | .17 |
| December..... | 290 | 34 | 73.1 | .122 | .14 |
| January..... | 435 | 44 | 210 | .351 | .40 |
| February..... | 720 | 54 | 341 | .570 | .59 |
| March..... | 5,070 | 540 | 2,540 | 4.25 | 4.90 |
| April..... | 6,040 | 1,150 | 2,920 | 4.88 | 5.44 |
| May..... | 2,250 | 31 | 596 | .997 | 1.15 |
| June..... | 2,150 | 78 | 599 | 1.00 | 1.12 |
| July..... | 360 | 57 | 205 | .343 | .40 |
| August..... | 320 | 75 | 210 | .351 | .40 |
| September..... | 570 | 23 | 209 | .349 | .39 |
| The year..... | 6,040 | 23 | 674 | 1.13 | 15.29 |

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, 1930.

REMARKS.—Discharge determined from flow over dam, through gates and water wheels, and from 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., Cumber'and Mills, Me.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1 | 190 | 190 | 13 | 230 | 260 | 260 | 1,200 | 290 | 340 | 270 | 270 | 100 |
| 2 | 190 | 190 | 260 | 230 | 13 | 13 | 785 | 290 | 415 | 270 | 240 | 185 |
| 3 | 190 | 13 | 260 | 230 | 260 | 290 | 495 | 290 | 415 | 270 | 13 | 270 |
| 4 | 190 | 190 | 260 | 230 | 260 | 290 | 615 | 13 | 360 | 140 | 180 | 270 |
| 5 | 190 | 200 | 260 | 13 | 260 | 290 | 625 | 270 | 290 | 13 | 270 | 270 |
| 6 | 13 | 210 | 260 | 230 | 260 | 290 | 550 | 270 | 270 | 13 | 270 | 270 |
| 7 | 130 | 210 | 260 | 230 | 260 | 290 | 600 | 270 | 270 | 140 | 270 | 13 |
| 8 | 160 | 210 | 13 | 230 | 260 | 290 | 1,360 | 250 | 140 | 270 | 270 | 185 |
| 9 | 160 | 210 | 210 | 245 | 13 | 13 | 2,070 | 270 | 270 | 270 | 270 | 270 |
| 10 | 160 | 13 | 210 | 260 | 260 | 400 | 2,040 | 270 | 270 | 270 | 13 | 270 |
| 11 | 160 | 210 | 210 | 260 | 260 | 445 | 1,680 | 13 | 270 | 270 | 185 | 270 |
| 12 | 130 | 210 | 210 | 13 | 230 | 840 | 1,320 | 270 | 270 | 270 | 270 | 270 |
| 13 | 13 | 210 | 210 | 260 | 220 | 2,420 | 310 | 270 | 270 | 13 | 270 | 240 |
| 14 | 135 | 210 | 210 | 260 | 260 | 1,760 | 310 | 270 | 270 | 180 | 270 | 13 |
| 15 | 160 | 210 | 13 | 260 | 260 | 1,180 | 347 | 270 | 13 | 270 | 270 | 180 |
| 16 | 160 | 210 | 210 | 260 | 13 | 845 | 395 | 270 | 270 | 270 | 240 | 270 |
| 17 | 160 | 13 | 210 | 260 | 260 | 600 | 400 | 270 | 270 | 270 | 13 | 240 |
| 18 | 160 | 210 | 210 | 260 | 260 | 485 | 397 | 13 | 270 | 270 | 180 | 210 |
| 19 | 133 | 210 | 210 | 13 | 260 | 565 | 397 | 270 | 270 | 270 | 270 | 210 |
| 20 | 13 | 210 | 210 | 260 | 260 | 648 | 360 | 270 | 270 | 13 | 270 | 182 |
| 21 | 120 | 210 | 210 | 260 | 260 | 631 | 405 | 270 | 270 | 170 | 270 | 13 |
| 22 | 160 | 210 | 13 | 260 | 260 | 555 | 390 | 270 | 13 | 270 | 270 | 155 |
| 23 | 160 | 210 | 210 | 260 | 13 | 13 | 290 | 270 | 270 | 270 | 270 | 210 |
| 24 | 160 | 13 | 210 | 260 | 260 | 310 | 290 | 270 | 270 | 270 | 13 | 210 |
| 25 | 160 | 210 | 110 | 260 | 260 | 310 | 290 | 13 | 270 | 270 | 185 | 210 |
| 26 | 135 | 235 | 110 | 13 | 260 | 530 | 290 | 270 | 270 | 270 | 270 | 210 |
| 27 | 13 | 260 | 210 | 260 | 260 | 1,320 | 13 | 270 | 270 | 13 | 270 | 210 |
| 28 | 190 | 260 | 210 | 260 | 260 | 1,920 | 290 | 270 | 270 | 175 | 270 | 13 |
| 29 | 190 | 260 | 13 | 260 | ----- | 1,520 | 290 | 270 | 13 | 270 | 270 | 210 |
| 30 | 190 | 260 | 220 | 260 | ----- | 1,260 | 290 | 140 | 270 | 270 | 240 | 210 |
| 31 | 190 | ----- | 230 | 260 | ----- | 1,260 | ----- | 270 | ----- | 270 | 13 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 190 | 13 | 144 | 0.655 | 0.76 |
| November | 260 | 13 | 189 | .856 | .96 |
| December | 260 | 13 | 182 | .827 | .95 |
| January | 260 | 13 | 221 | 1.00 | 1.15 |
| February | 260 | 13 | 222 | 1.01 | 1.05 |
| March | 2,420 | 13 | 705 | 3.20 | 3.69 |
| April | 2,070 | 13 | 636 | 2.89 | 3.22 |
| May | 290 | 13 | 235 | 1.07 | 1.23 |
| June | 415 | 13 | 256 | 1.16 | 1.29 |
| July | 270 | 13 | 211 | .958 | 1.11 |
| August | 270 | 13 | 214 | .973 | 1.12 |
| September | 270 | 13 | 195 | .886 | .99 |
| The year | 2,420 | 13 | 284 | 1.29 | 17.52 |

ANDROSCOGGIN RIVER BASIN

ANDROSCOGGIN RIVER NEAR GORHAM, N. H.

LOCATION.—Water-stage recorder at Pulsifer Rips, 2 miles below mouth of Dead River and 4 miles above Gorham, Coos County.

DRAINAGE AREA.—1,390 square miles.

RECORDS AVAILABLE.—March, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 10,100 second-feet May 27 (gage height, 7.26 feet); minimum, about 958 second-feet Jan. 10 (gage height, 2.32 feet).

1928-1930: Maximum discharge, 13,900 second-feet May 4, 1929 (gage height, 8.38 feet); minimum, that of Jan. 10, 1930.

REMARKS.—Records good. Regulation from about 29.6 billion cubic feet of storage in Rangeley system of lakes.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 1,760 | 1,620 | 1,660 | 1,440 | 1,400 | 1,520 | 1,760 | 2,530 | 4,020 | 2,050 | 1,930 | 1,760 |
| 2..... | 1,760 | 1,660 | 1,710 | 1,440 | 1,360 | 1,440 | 1,870 | 3,820 | 3,730 | 2,380 | 1,870 | 1,760 |
| 3..... | 1,760 | 1,660 | 1,760 | 1,520 | 1,400 | 1,440 | 1,870 | 6,580 | 3,730 | 2,110 | 1,870 | 1,760 |
| 4..... | 1,760 | 1,660 | 1,760 | 1,570 | 1,360 | 1,480 | 1,770 | 7,960 | 3,360 | 2,050 | 1,930 | 1,710 |
| 5..... | 1,760 | 1,620 | 1,710 | 1,480 | 1,360 | 1,520 | 1,930 | 7,680 | 2,850 | 1,990 | 1,870 | 1,710 |
| 6..... | 1,660 | 1,620 | 1,710 | 1,520 | 1,360 | 1,520 | 1,930 | 5,830 | 2,690 | 1,990 | 1,820 | 1,760 |
| 7..... | 1,710 | 1,620 | 1,620 | 1,480 | 1,360 | 1,570 | 4,020 | 5,160 | 2,310 | 2,240 | 1,820 | 1,710 |
| 8..... | 1,710 | 1,570 | 1,620 | 1,570 | 1,360 | 1,620 | 5,380 | 4,740 | 2,380 | 2,460 | 1,820 | 1,710 |
| 9..... | 1,660 | 1,620 | 1,660 | 1,820 | 1,360 | 1,660 | 3,450 | 4,640 | 4,420 | 2,050 | 1,870 | 1,710 |
| 10..... | 1,660 | 1,570 | 1,620 | 1,440 | 1,360 | 1,660 | 2,380 | 3,450 | 6,850 | 2,050 | 1,870 | 1,760 |
| 11..... | 1,660 | 1,620 | 1,620 | 1,300 | 1,400 | 1,660 | 2,310 | 2,930 | 8,530 | 2,050 | 1,930 | 1,710 |
| 12..... | 1,710 | 1,570 | 1,620 | 1,520 | 1,400 | 1,760 | 2,690 | 2,380 | 7,960 | 2,110 | 1,820 | 1,760 |
| 13..... | 1,660 | 1,570 | 1,660 | 1,620 | 1,400 | 1,760 | 4,420 | 2,310 | 7,400 | 2,110 | 1,820 | 1,710 |
| 14..... | 1,660 | 1,620 | 1,660 | 1,480 | 1,360 | 1,710 | 6,070 | 2,180 | 4,840 | 2,110 | 1,820 | 1,710 |
| 15..... | 1,710 | 1,660 | 1,620 | 1,400 | 1,400 | 1,620 | 6,850 | 2,310 | 2,460 | 2,110 | 1,820 | 1,760 |
| 16..... | 1,660 | 1,760 | 1,620 | 1,360 | 1,400 | 1,620 | 5,830 | 2,530 | 2,460 | 2,110 | 1,870 | 1,710 |
| 17..... | 1,660 | 1,660 | 1,620 | 1,400 | 1,440 | 1,660 | 4,950 | 2,530 | 2,530 | 1,930 | 2,050 | 1,930 |
| 18..... | 1,660 | 1,660 | 1,620 | 1,400 | 1,400 | 1,660 | 4,320 | 2,180 | 2,530 | 1,930 | 1,990 | 1,990 |
| 19..... | 1,660 | 1,660 | 1,660 | 1,360 | 1,360 | 1,660 | 4,420 | 2,050 | 2,690 | 1,630 | 1,870 | 1,660 |
| 20..... | 1,660 | 1,660 | 1,620 | 1,400 | 1,360 | 1,710 | 4,640 | 2,460 | 2,380 | 1,990 | 1,870 | 1,710 |
| 21..... | 1,660 | 1,660 | 1,520 | 1,360 | 1,400 | 1,710 | 4,220 | 3,010 | 2,930 | 1,990 | 1,990 | 1,660 |
| 22..... | 1,660 | 1,660 | 1,570 | 1,360 | 1,360 | 1,660 | 3,920 | 2,850 | 4,640 | 1,930 | 1,760 | 1,710 |
| 23..... | 1,710 | 1,620 | 1,570 | 1,360 | 1,330 | 1,660 | 3,730 | 2,240 | 5,600 | 1,930 | 1,760 | 1,710 |
| 24..... | 1,710 | 1,660 | 1,570 | 1,330 | 1,570 | 1,710 | 3,010 | 2,110 | 6,850 | 1,930 | 1,710 | 1,760 |
| 25..... | 1,710 | 1,660 | 1,570 | 1,360 | 1,760 | 1,760 | 2,380 | 2,240 | 6,070 | 1,990 | 1,760 | 1,710 |
| 26..... | 1,660 | 1,660 | 1,570 | 1,360 | 1,620 | 1,990 | 2,240 | 4,420 | 3,640 | 1,930 | 1,710 | 1,710 |
| 27..... | 1,620 | 1,710 | 1,520 | 1,400 | 1,620 | 1,870 | 2,110 | 8,820 | 2,850 | 2,050 | 1,660 | 1,710 |
| 28..... | 1,660 | 1,620 | 1,520 | 1,400 | 1,620 | 1,760 | 2,460 | 8,820 | 2,460 | 2,050 | 1,710 | 1,710 |
| 29..... | 1,620 | 1,620 | 1,440 | 1,400 | ----- | 1,870 | 2,770 | 7,400 | 2,610 | 2,050 | 1,760 | 1,710 |
| 30..... | 1,620 | 1,570 | 1,440 | 1,400 | ----- | 1,820 | 2,690 | 5,270 | 2,380 | 1,930 | 1,760 | 1,660 |
| 31..... | 1,620 | ----- | 1,440 | 1,400 | ----- | 1,870 | ----- | 4,840 | ----- | 1,820 | 1,760 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|--------------------|----------------------|
| October..... | 1,760 | 1,620 | 1,680 | 1.21 | 1.40 |
| November..... | 1,760 | 1,570 | 1,640 | 1.18 | 1.32 |
| December..... | 1,760 | 1,440 | 1,610 | 1.16 | 1.34 |
| January..... | 1,820 | 1,300 | 1,440 | 1.04 | 1.20 |
| February..... | 1,760 | 1,330 | 1,420 | 1.02 | 1.06 |
| March..... | 1,990 | 1,440 | 1,680 | 1.21 | 1.40 |
| April..... | 6,850 | 1,760 | 3,420 | 2.46 | 2.74 |
| May..... | 8,820 | 2,050 | 4,140 | 2.98 | 3.44 |
| June..... | 8,530 | 2,310 | 4,000 | 2.88 | 3.21 |
| July..... | 2,460 | 1,820 | 2,040 | 1.47 | 1.70 |
| August..... | 2,050 | 1,660 | 1,830 | 1.32 | 1.52 |
| September..... | 1,990 | 1,660 | 1,740 | 1.25 | 1.40 |
| The year..... | 8,820 | 1,300 | 2,220 | 1.60 | 21.73 |

ANDROSCOGGIN RIVER AT RUMFORD, ME.

LOCATION.—Gages 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, 1930.

REMARKS.—Discharge computed from flow over dams and through wheels.

Regulation from about 29.6 billion cubic feet of storage in Rangeley system of lakes. Records furnished by Rumford Falls Power Co.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------------|---------|-------|-------|---------|-------|-------|--------|--------|--------|-----------------|-------|-------------------|
| 1..... | 2,080 | 1,840 | 1,270 | 1,610 | 1,590 | 2,580 | 3,050 | 6,510 | 6,940 | 3,300 | 2,280 | 2,380 |
| 2..... | 2,240 | 2,080 | 1,700 | 1,640 | 1,240 | 1,960 | 3,080 | 9,910 | 6,250 | 4,860 | 2,120 | 2,470 |
| 3..... | 2,310 | 1,750 | 1,750 | 1,730 | 1,600 | 2,210 | 3,230 | 12,600 | 5,620 | 3,830 | 2,290 | 2,150 |
| 4..... | 2,120 | 2,170 | 1,940 | 2,010 | 1,600 | 1,810 | 3,150 | 11,400 | 5,680 | 3,010 | 2,590 | 2,150 |
| 5..... | 2,220 | 1,930 | 1,880 | 1,740 | 1,590 | 2,070 | 3,490 | 10,700 | 4,040 | 2,860 | 2,250 | 2,010 |
| 6..... | 1,820 | 1,880 | 1,830 | 1,730 | 1,540 | 1,930 | 4,660 | 9,750 | 4,140 | 2,820 | 2,190 | 1,800 |
| 7..... | 1,980 | 1,840 | 1,810 | 1,810 | 1,540 | 2,270 | 20,200 | 9,100 | 3,790 | 3,130 | 1,780 | 2,350 |
| 8..... | 1,980 | 1,880 | 1,680 | 1,990 | 1,530 | 2,470 | 20,600 | 7,610 | 3,270 | 3,510 | 2,370 | 1,940 |
| 9..... | 1,820 | 1,840 | 1,730 | 3,940 | 1,040 | 2,710 | 10,900 | 6,860 | 4,440 | 3,210 | 2,350 | 2,140 |
| 10..... | 1,820 | 1,440 | 1,720 | 3,310 | 1,560 | 3,040 | 6,890 | 5,910 | 12,100 | 2,480 | 2,850 | 2,010 |
| 11..... | 1,800 | 1,800 | 1,700 | 2,430 | 1,590 | 2,890 | 5,960 | 4,660 | 12,500 | 2,680 | 2,960 | 1,930 |
| 12..... | 1,930 | 1,940 | 1,640 | 1,430 | 1,520 | 3,310 | 7,090 | 4,340 | 11,800 | 2,660 | 2,500 | 2,000 |
| 13..... | 1,700 | 1,910 | 1,680 | 1,840 | 1,640 | 3,560 | 11,000 | 3,710 | 9,330 | 3,220 | 2,220 | 1,790 |
| 14..... | 1,790 | 1,940 | 1,890 | 2,370 | 1,660 | 3,430 | 13,800 | 3,660 | 7,810 | 3,840 | 2,200 | 2,100 |
| 15..... | 1,900 | 1,860 | 2,020 | 1,980 | 1,650 | 2,820 | 13,700 | 3,670 | 5,100 | 3,420 | 2,240 | 2,000 |
| 16..... | 1,900 | 2,660 | 1,990 | 1,846 | 990 | 2,280 | 10,400 | 4,500 | 3,850 | 3,050 | 2,730 | 2,240 |
| 17..... | 1,980 | 2,100 | 1,790 | 1,890 | 1,660 | 2,630 | 8,500 | 4,110 | 3,730 | 2,750 | 3,550 | 1,940 |
| 18..... | 1,900 | 2,320 | 1,860 | 1,900 | 1,550 | 2,520 | 8,020 | 3,880 | 3,700 | 2,440 | 3,320 | 2,500 |
| 19..... | 1,910 | 2,080 | 1,890 | 1,430 | 1,550 | 2,490 | 8,840 | 3,430 | 7,400 | 2,090 | 3,010 | 2,160 |
| 20..... | 1,600 | 2,000 | 1,910 | 1,670 | 1,660 | 2,330 | 9,440 | 3,810 | 5,680 | 2,740 | 2,760 | 1,630 |
| 21..... | 1,809 | 2,060 | 2,550 | 1,640 | 1,920 | 2,430 | 8,430 | 5,330 | 4,820 | 2,740 | 2,890 | 1,900 |
| 22..... | 1,980 | 1,970 | 2,350 | 1,700 | 2,490 | 2,170 | 7,630 | 5,140 | 6,090 | 2,550 | 2,860 | 2,060 |
| 23..... | 2,830 | 1,720 | 1,830 | 1,680 | 2,170 | 1,650 | 6,880 | 4,140 | 6,940 | 2,460 | 1,970 | 1,850 |
| 24..... | 3,240 | 1,460 | 1,720 | 1,670 | 2,910 | 2,270 | 5,920 | 3,500 | 7,580 | 2,480 | 3,630 | 1,780 |
| 25..... | 2,400 | 1,950 | 1,430 | 1,660 | 3,850 | 2,690 | 4,870 | 3,520 | 7,650 | 2,300 | 3,260 | 2,210 |
| 26..... | 2,050 | 1,930 | 1,830 | 1,120 | 3,700 | 3,390 | 4,370 | 8,160 | 5,630 | 2,380 | 2,800 | 1,850 |
| 27..... | 1,750 | 1,900 | 1,760 | 1,650 | 2,910 | 5,910 | 4,390 | 14,600 | 4,210 | 2,790 | 2,230 | 1,830 |
| 28..... | 2,320 | 2,320 | 1,920 | 1,610 | 2,620 | 4,380 | 4,920 | 14,300 | 3,570 | 3,610 | 2,220 | 1,910 |
| 29..... | 1,960 | 1,550 | 1,980 | 1,560 | 3,580 | 5,170 | 11,400 | 11,400 | 3,080 | 3,110 | 2,120 | 1,910 |
| 30..... | 1,950 | 1,340 | 1,610 | 1,600 | 3,080 | 5,790 | 9,860 | 3,630 | 2,960 | 2,270 | 1,830 | 1,830 |
| 31..... | 1,810 | 1,710 | 1,710 | 1,630 | 3,200 | | 7,910 | | 2,650 | 1,950 | | |
| Month | Maximum | | | Minimum | | | Mean | | | Per square mile | | Run-off in inches |
| October..... | 3,240 | | | 1,600 | | | 2,030 | | | 0.97 | | 1.12 |
| November..... | 2,600 | | | 1,340 | | | 1,920 | | | .919 | | 1.03 |
| December..... | 2,550 | | | 1,270 | | | 1,820 | | | .87 | | 1.00 |
| January..... | 3,940 | | | 1,120 | | | 1,860 | | | .890 | | 1.03 |
| February..... | 3,850 | | | 990 | | | 1,890 | | | .90 | | .94 |
| March..... | 5,910 | | | 1,650 | | | 2,780 | | | 1.33 | | 1.53 |
| April..... | 20,600 | | | 3,050 | | | 7,810 | | | 3.74 | | 4.17 |
| May..... | 14,600 | | | 3,430 | | | 7,030 | | | 3.36 | | 3.87 |
| June..... | 12,500 | | | 3,080 | | | 6,010 | | | 2.88 | | 3.21 |
| July..... | 4,860 | | | 2,090 | | | 2,930 | | | 1.40 | | 1.41 |
| August..... | 3,630 | | | 1,780 | | | 2,540 | | | 1.22 | | 1.41 |
| September..... | 2,500 | | | 1,680 | | | 2,030 | | | .97 | | 1.08 |
| The year..... | 20,600 | | | 990 | | | 3,390 | | | 1.62 | | 22.00 |

ANDROSCOGGIN RIVER NEAR AUBURN, ME.

LOCATION.—Water-stage recorder $1\frac{1}{2}$ miles below mouth of Little Androscoggin River, in Auburn, Androscoggin County.

DRAINAGE AREA.—3,260 square miles.

RECORDS AVAILABLE.—November, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 41,900 second-feet Apr. 7 (gage height, 12.28 feet); minimum (estimated), 660 second-feet Dec. 15.

1928-1930: Maximum discharge, that of Apr. 7, 1930; minimum, 634 second-feet Sept. 2, 1929 (gage height, 0.91 foot).

REMARKS.—Records good except those for days of estimated discharge, which are fair. Regulation from about 29.6 billion cubic feet of storage in Rangeley system of lakes and by operation of power plants above.

Daily and monthly discharge, in second-feet. 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|--------|--------|--------|--------|-------|-------|-------|
| 1..... | 2,150 | 2,290 | 830 | 2,310 | 1,500 | 4,630 | 7,460 | 8,020 | 11,800 | 5,660 | 3,960 | 1,360 |
| 2..... | 2,210 | 1,470 | 2,320 | 2,320 | 685 | 3,720 | 7,340 | 8,900 | 10,500 | 4,980 | 2,720 | 3,600 |
| 3..... | 2,250 | 1,140 | 2,100 | 2,340 | 2,440 | 4,660 | 7,500 | 13,100 | 9,270 | 6,300 | 1,060 | 4,040 |
| 4..... | 2,330 | 2,650 | 2,120 | 1,480 | 2,320 | 3,690 | 7,550 | 14,300 | 8,380 | 4,830 | 3,300 | 3,570 |
| 5..... | 1,530 | 2,310 | 2,160 | 780 | 2,260 | 3,480 | 7,280 | 12,400 | 7,710 | 4,750 | 3,590 | 3,150 |
| 6..... | 1,000 | 2,250 | 2,200 | 2,550 | 2,280 | 3,680 | 8,220 | 12,800 | 7,050 | 4,240 | 3,120 | 1,720 |
| 7..... | 2,710 | 2,130 | 2,100 | 2,410 | 2,190 | 3,710 | 21,700 | 12,400 | 5,200 | 4,430 | 3,210 | 735 |
| 8..... | 2,330 | 2,160 | 790 | 2,460 | 1,410 | 4,510 | 19,700 | 11,200 | 5,240 | 4,930 | 2,740 | 3,020 |
| 9..... | 2,290 | 1,510 | 2,200 | 2,990 | 675 | 7,060 | 24,600 | 10,200 | 5,100 | 5,020 | 2,180 | 2,740 |
| 10..... | 2,350 | 1,310 | 2,180 | 4,080 | 2,400 | 8,030 | 19,400 | 9,270 | 6,660 | 4,910 | 810 | 2,750 |
| 11..... | 2,260 | 1,660 | 2,150 | 3,830 | 2,220 | 7,770 | 14,900 | 7,660 | 13,300 | 4,940 | 3,120 | 2,790 |
| 12..... | 1,440 | 2,360 | 2,150 | 2,670 | 2,240 | 10,400 | 13,700 | 7,800 | 13,800 | 4,140 | 3,320 | 2,710 |
| 13..... | 720 | 2,150 | 2,220 | 2,930 | 2,260 | 11,400 | 14,900 | 7,110 | 13,000 | 1,870 | 3,650 | 1,960 |
| 14..... | 2,330 | 2,210 | 1,410 | 2,490 | 2,210 | 11,200 | 17,000 | 4,360 | 11,800 | 3,150 | 3,130 | 885 |
| 15..... | 2,270 | 2,430 | 660 | 3,310 | 1,510 | 9,230 | 19,700 | 4,510 | 7,980 | 4,020 | 3,400 | 2,630 |
| 16..... | 2,230 | 2,050 | 2,310 | 3,540 | 705 | 7,590 | 18,400 | 5,810 | 7,390 | 4,030 | 4,040 | 2,410 |
| 17..... | 2,250 | 1,590 | 2,240 | 2,860 | 2,480 | 6,430 | 13,600 | 7,250 | 6,250 | 4,300 | 3,840 | 2,450 |
| 18..... | 2,240 | 3,120 | 2,340 | 1,570 | 2,160 | 5,600 | 13,600 | 5,680 | 6,660 | 4,270 | 5,790 | 2,380 |
| 19..... | 1,380 | 3,590 | 2,340 | 905 | 2,180 | 5,610 | 12,900 | 6,520 | 6,520 | 3,620 | 5,350 | 2,580 |
| 20..... | 665 | 2,920 | 2,260 | 2,830 | 2,440 | 5,400 | 12,600 | 6,000 | 9,680 | 2,280 | 4,470 | 2,160 |
| 21..... | 2,520 | 2,480 | 1,680 | 2,530 | 2,930 | 5,000 | 13,700 | 5,680 | 8,700 | 3,680 | 4,330 | 1,340 |
| 22..... | 2,290 | 2,250 | 760 | 2,420 | 3,040 | 4,370 | 12,400 | 7,090 | 6,510 | 4,330 | 4,740 | 2,770 |
| 23..... | 2,350 | 2,030 | 2,900 | 2,340 | 1,260 | 3,410 | 11,600 | 6,680 | 8,340 | 3,520 | 4,660 | 2,920 |
| 24..... | 2,410 | 990 | 2,390 | 2,170 | 3,190 | 4,220 | 10,900 | 6,290 | 8,310 | 3,290 | 3,370 | 2,840 |
| 25..... | 3,510 | 2,510 | 670 | 1,460 | 3,680 | 4,210 | 9,400 | 4,590 | 8,590 | 3,230 | 5,220 | 2,420 |
| 26..... | 2,660 | 2,260 | 2,370 | 745 | 5,780 | 8,830 | 8,220 | 6,130 | 9,170 | 2,160 | 4,920 | 2,430 |
| 27..... | 1,040 | 2,380 | 2,280 | 2,780 | 5,060 | 11,500 | 6,820 | 14,100 | 9,040 | 1,060 | 4,490 | 1,410 |
| 28..... | 2,430 | 835 | 1,400 | 2,300 | 5,280 | 11,800 | 7,880 | 18,700 | 6,090 | 3,240 | 4,350 | 1,460 |
| 29..... | 2,310 | 2,600 | 765 | 2,270 | ----- | 9,580 | 7,880 | 15,700 | 3,310 | 4,990 | 4,090 | 2,630 |
| 30..... | 2,320 | 2,500 | 2,540 | 2,270 | ----- | 7,160 | 7,400 | 14,600 | 5,250 | 4,280 | 3,360 | 2,530 |
| 31..... | 2,280 | ----- | 2,310 | 2,210 | ----- | 7,320 | ----- | 14,200 | ----- | 4,040 | 1,480 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|--------|-----------------|-------------------|
| October..... | 3,510 | 665 | 2,100 | 0.644 | 0.74 |
| November..... | 3,590 | 835 | 2,140 | .656 | .73 |
| December..... | 2,900 | 660 | 1,900 | .583 | .67 |
| January..... | 4,030 | 745 | 2,390 | .733 | .85 |
| February..... | 5,780 | 675 | 2,460 | .755 | .79 |
| March..... | 11,800 | 3,410 | 6,620 | 2.03 | 2.34 |
| April..... | 24,600 | 6,820 | 12,700 | 3.90 | 4.35 |
| May..... | 18,700 | 4,360 | 9,290 | 2.85 | 3.29 |
| June..... | 13,800 | 3,310 | 8,220 | 2.52 | 2.81 |
| July..... | 6,300 | 1,060 | 4,020 | 1.23 | 1.42 |
| August..... | 5,790 | 810 | 3,610 | 1.11 | 1.28 |
| September..... | 4,040 | 735 | 2,410 | .739 | .82 |
| The year..... | 24,600 | 660 | 4,820 | 1.48 | 20.09 |

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, 1930.

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, in second-feet, 1929-30

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 664 | 28 | 467 | 2.00 | 2.31 |
| November..... | 1,020 | 0 | 446 | 1.91 | 2.13 |
| December..... | 839 | 214 | 448 | 1.92 | 2.21 |
| January..... | 574 | 0 | 157 | .674 | .73 |
| February..... | 736 | 0 | 448 | 1.93 | 2.00 |
| March..... | 687 | 0 | 215 | .923 | 1.06 |
| April..... | 431 | 0 | 78.0 | .335 | .37 |
| May..... | 1,390 | 0 | 305 | 1.31 | 1.51 |
| June..... | 317 | 0 | 12.4 | .053 | .06 |
| July..... | 598 | 100 | 240 | 1.03 | 1.19 |
| August..... | 602 | 10 | 279 | 1.20 | 1.38 |
| September..... | 902 | 0 | 674 | 2.80 | 3.22 |
| The year..... | 1,390 | 0 | 313 | 1.34 | 18.22 |

SWIFT RIVER NEAR ROXBURY, ME.

LOCATION.—Water-stage recorder $2\frac{1}{2}$ miles below Roxbury, Oxford County, and 6 miles above confluence with Androscoggin River.

DRAINAGE AREA.—86 square miles.

RECORDS AVAILABLE—June, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 4,570 second-feet Apr. 7 (gage height, 7.52 feet); minimum, 7 second-feet Oct. 1 (gage height, 1.00 foot).

1929-30: Maximum discharge, that of Apr. 7, 1930; minimum (estimated), 6.0 second-feet Aug. 2, 3, 1929.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----------|---------|-------|------|---------|-------|------|-------|-------|-------|-----------------|------|-------------------|
| 1 | 7.0 | 31 | 24 | 14 | 26 | 98 | 106 | 1,000 | 357 | 330 | 30 | 29 |
| 2 | 7.8 | 98 | 21 | 14 | 25 | 96 | 126 | 1,750 | 326 | 550 | 26 | 26 |
| 3 | 21 | 76 | 20 | 20 | 24 | 94 | 135 | 1,640 | 230 | 204 | 25 | 42 |
| 4 | 45 | 47 | 19 | 37 | 24 | 100 | 137 | 825 | 178 | 129 | 39 | 45 |
| 5 | 33 | 37 | 18 | 94 | 22 | 92 | 192 | 610 | 148 | 96 | 32 | 28 |
| 6 | 20 | 30 | 18 | 68 | 21 | 85 | 318 | 698 | 126 | 180 | 25 | 25 |
| 7 | 16 | 26 | 18 | 45 | 21 | 73 | 2,670 | 798 | 129 | 325 | 20 | 22 |
| 8 | 15 | 23 | 16 | 39 | 21 | 106 | 1,540 | 530 | 146 | 151 | 18 | 19 |
| 9 | 14 | 21 | 16 | 183 | 20 | 298 | 693 | 352 | 137 | 135 | 45 | 18 |
| 10 | 13 | 20 | 16 | 160 | 19 | 181 | 446 | 282 | 352 | 106 | 91 | 16 |
| 11 | 12 | 19 | 14 | 116 | 18 | 131 | 482 | 223 | 379 | 92 | 70 | 16 |
| 12 | 12 | 19 | 14 | 75 | 18 | 236 | 900 | 186 | 339 | 165 | 39 | 16 |
| 13 | 12 | 18 | 14 | 67 | 18 | 170 | 1,210 | 189 | 195 | 116 | 29 | 16 |
| 14 | 11 | 52 | 15 | 58 | 18 | 149 | 1,420 | 204 | 137 | 215 | 24 | 16 |
| 15 | 11 | 170 | 16 | 55 | 20 | 230 | 1,000 | 204 | 108 | 261 | 27 | 17 |
| 16 | 11 | 173 | 15 | 48 | 19 | 195 | 585 | 298 | 83 | 124 | 160 | 47 |
| 17 | 13 | 85 | 15 | 46 | 19 | 148 | 456 | 230 | 70 | 87 | 260 | 89 |
| 18 | 16 | 64 | 15 | 45 | 19 | 73 | 442 | 189 | 210 | 67 | 100 | 62 |
| 19 | 16 | 59 | 15 | 42 | 19 | 72 | 660 | 151 | 469 | 61 | 85 | 36 |
| 20 | 14 | 48 | 16 | 41 | 20 | 118 | 852 | 261 | 474 | 52 | 96 | 26 |
| 21 | 15 | 31 | 18 | 38 | 47 | 92 | 698 | 415 | 392 | 46 | 112 | 22 |
| 22 | 16 | 46 | 16 | 36 | 250 | 223 | 644 | 286 | 460 | 46 | 65 | 20 |
| 23 | 78 | 33 | 13 | 35 | 176 | 216 | 428 | 207 | 275 | 39 | 47 | 18 |
| 24 | 108 | 26 | 13 | 33 | 186 | 59 | 318 | 165 | 198 | 31 | 102 | 17 |
| 25 | 49 | 28 | 13 | 31 | 250 | 54 | 264 | 146 | 155 | 28 | 76 | 16 |
| 26 | 37 | 27 | 13 | 30 | 186 | 682 | 290 | 730 | 116 | 26 | 52 | 16 |
| 27 | 29 | 26 | 13 | 29 | 148 | 775 | 428 | 1,220 | 108 | 66 | 39 | 16 |
| 28 | 26 | 24 | 13 | 27 | 122 | 243 | 565 | 605 | 176 | 70 | 31 | 20 |
| 29 | 21 | 20 | 13 | 26 | ----- | 137 | 595 | 420 | 120 | 67 | 27 | 20 |
| 30 | 20 | 20 | 13 | 26 | ----- | 122 | 742 | 610 | 85 | 52 | 51 | 18 |
| 31 | 19 | ----- | 13 | 26 | ----- | 110 | ----- | 510 | ----- | 36 | 42 | ----- |
| Month | Maximum | | | Minimum | | | Mean | | | Per square mile | | Run-off in inches |
| October | 108 | | | 7.0 | | | 23.8 | | | 0.277 | | 0.32 |
| November | 173 | | | 18 | | | 46.6 | | | .542 | | .60 |
| December | 24 | | | 13 | | | 15.7 | | | .183 | | .21 |
| January | 183 | | | 14 | | | 51.7 | | | .601 | | .69 |
| February | 250 | | | 18 | | | 63.4 | | | .737 | | .77 |
| March | 775 | | | 54 | | | 176 | | | 2.05 | | 2.36 |
| April | 2,670 | | | 106 | | | 645 | | | 7.50 | | 8.37 |
| May | 1,750 | | | 146 | | | 516 | | | 6.00 | | 6.92 |
| June | 474 | | | 70 | | | 223 | | | 2.59 | | 2.89 |
| July | 550 | | | 26 | | | 128 | | | 1.49 | | 1.72 |
| August | 260 | | | 18 | | | 60.8 | | | .707 | | .82 |
| September | 89 | | | 16 | | | 26.5 | | | .308 | | .34 |
| The year | 2,670 | | | 7.0 | | | 165 | | | 1.92 | | 26.01 |

PRESUMPSCOT RIVER BASIN

PRESUMPSCOT RIVER AT OUTLET OF SEBAGO LAKE, ME.

LOCATION.—At 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, 1930.

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., Cumberland Mills, Me.

Daily and monthly discharge, in second-feet 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 745 | 660 | 275 | 698 | 644 | 522 | 457 | 590 | 92 | 525 | 418 | 46 |
| 2..... | 748 | 657 | 770 | 704 | 336 | 177 | 511 | 590 | 466 | 536 | 0 | 708 |
| 3..... | 724 | 312 | 658 | 692 | 721 | 521 | 482 | 0 | 418 | 567 | 49 | 732 |
| 4..... | 751 | 702 | 657 | 670 | 719 | 579 | 417 | 189 | 488 | 0 | 414 | 629 |
| 5..... | 765 | 659 | 659 | 339 | 713 | 636 | 463 | 641 | 475 | 0 | 583 | 705 |
| 6..... | 403 | 677 | 659 | 699 | 677 | 625 | 117 | 623 | 464 | 262 | 527 | 0 |
| 7..... | 745 | 682 | 640 | 694 | 681 | 625 | 308 | 504 | 56 | 548 | 530 | 163 |
| 8..... | 745 | 680 | 292 | 705 | 668 | 281 | 375 | 519 | 11 | 540 | 472 | 446 |
| 9..... | 762 | 670 | 743 | 609 | 302 | 0 | 363 | 616 | 472 | 516 | 307 | 826 |
| 10..... | 757 | 312 | 698 | 634 | 707 | 386 | 399 | 228 | 495 | 533 | 213 | 691 |
| 11..... | 765 | 709 | 692 | 595 | 666 | 534 | 481 | 0 | 495 | 590 | 366 | 625 |
| 12..... | 763 | 679 | 660 | 175 | 715 | 426 | 412 | 510 | 465 | 270 | 575 | 0 |
| 13..... | 314 | 664 | 658 | 664 | 677 | 347 | 115 | 528 | 459 | 178 | 514 | 0 |
| 14..... | 740 | 673 | 644 | 661 | 644 | 423 | 560 | 527 | 55 | 494 | 521 | 424 |
| 15..... | 727 | 632 | 322 | 657 | 671 | 523 | 547 | 527 | 13 | 515 | 546 | 404 |
| 16..... | 727 | 648 | 706 | 641 | 188 | 115 | 563 | 547 | 674 | 549 | 0 | 820 |
| 17..... | 725 | 353 | 707 | 663 | 732 | 571 | 657 | 147 | 464 | 606 | 152 | 671 |
| 18..... | 723 | 651 | 718 | 641 | 741 | 579 | 558 | 9 | 428 | 287 | 356 | 668 |
| 19..... | 692 | 612 | 679 | 338 | 716 | 424 | 0 | 516 | 539 | 237 | 522 | 540 |
| 20..... | 438 | 659 | 737 | 685 | 675 | 424 | 289 | 525 | 0 | 183 | 465 | 147 |
| 21..... | 705 | 657 | 700 | 649 | 679 | 434 | 647 | 522 | 0 | 445 | 495 | 0 |
| 22..... | 726 | 659 | 244 | 650 | 625 | 533 | 655 | 522 | 131 | 520 | 0 | 408 |
| 23..... | 718 | 642 | 780 | 661 | 378 | 113 | 588 | 523 | 469 | 574 | 0 | 747 |
| 24..... | 708 | 272 | 809 | 662 | 595 | 596 | 567 | 0 | 477 | 537 | 374 | 622 |
| 25..... | 667 | 696 | 180 | 647 | 487 | 509 | 593 | 97 | 475 | 313 | 406 | 630 |
| 26..... | 707 | 676 | 784 | 378 | 518 | 275 | 560 | 505 | 507 | 160 | 599 | 497 |
| 27..... | 291 | 677 | 815 | 712 | 532 | 335 | 133 | 395 | 528 | 114 | 493 | 0 |
| 28..... | 724 | 357 | 686 | 659 | 531 | 378 | 664 | 310 | 67 | 449 | 511 | 0 |
| 29..... | 703 | 643 | 253 | 695 | ----- | 416 | 614 | 330 | 10 | 514 | 620 | 432 |
| 30..... | 702 | 645 | 710 | 796 | ----- | 110 | 589 | 0 | 492 | 518 | 149 | 742 |
| 31..... | 667 | ----- | 693 | 650 | ----- | 546 | ----- | 0 | ----- | 523 | 0 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 765 | 291 | 680 | 1.56 | 1.80 |
| November..... | 709 | 272 | 607 | 1.29 | 1.55 |
| December..... | 815 | 180 | 620 | 1.42 | 1.64 |
| January..... | 796 | 175 | 623 | 1.43 | 1.65 |
| February..... | 741 | 188 | 605 | 1.29 | 1.45 |
| March..... | 636 | 0 | 418 | 1.09 | 1.11 |
| April..... | 664 | 0 | 456 | 1.05 | 1.17 |
| May..... | 641 | 0 | 372 | 1.03 | 1.08 |
| June..... | 674 | 0 | 340 | 1.00 | 1.07 |
| July..... | 606 | 0 | 406 | 1.00 | 1.07 |
| August..... | 620 | 0 | 361 | 1.00 | 1.05 |
| September..... | 826 | 0 | 444 | 1.02 | 1.14 |
| The year..... | 826 | 0 | 494 | 1.13 | 15.38 |

SACO RIVER BASIN

SACO RIVER NEAR CONWAY, N. H.

LOCATION.—Water-stage recorder at Odell Falls, 1 mile below mouth of Swift River and Conway, Carroll County.

DRAINAGE AREA.—385 square miles.

RECORDS AVAILABLE.—February, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, about 15,800 second-feet Apr. 7 (gage height, 10.05 feet); minimum, 82 second-feet Dec. 12 (gage height, 1.99 feet).

1929-30: Maximum stage, 12.97 feet May 3, 1929 (discharge not determined); minimum discharge, 69 second-feet Sept. 4, 1929 (gage height, 1.92 feet).

REMARKS.—Records good except those for period of ice effect, Jan. 9 to Mar. 21, and days of estimated discharge, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 99 | 244 | • 168 | 203 | 235 | 600 | 840 | 2,100 | 1,130 | 592 | 319 | 397 |
| 2..... | 106 | 266 | • 162 | 216 | | | 938 | 3,980 | 1,090 | 1,190 | 284 | 397 |
| 3..... | 296 | 292 | • 156 | 335 | | | 525 | 912 | 4,480 | 920 | 749 | 262 |
| 4..... | 364 | 266 | • 156 | 566 | | | 480 | 864 | 2,570 | 872 | 611 | 244 |
| 5..... | 258 | 244 | • 154 | 368 | | | 475 | 983 | 1,980 | 770 | 520 | 237 |
| 6..... | 200 | 220 | • 150 | 368 | 245 | 535 | 1,190 | 2,160 | 700 | 525 | 234 | 300 |
| 7..... | 173 | 213 | • 154 | 389 | | 480 | 9,890 | 2,640 | 756 | 693 | 200 | 296 |
| 8..... | 162 | 203 | • 154 | 554 | | 720 | 7,700 | 2,290 | 840 | 525 | 187 | 270 |
| 9..... | 156 | 194 | • 156 | | | 1,480 | 3,700 | 1,800 | 864 | 525 | 281 | 255 |
| 10..... | 146 | 187 | • 162 | | | 1,220 | 2,500 | 1,480 | 6,770 | 508 | 447 | 240 |
| 11..... | 135 | 184 | 167 | 290 | 260 | 1,020 | 2,290 | 1,240 | 4,480 | 410 | 482 | 234 |
| 12..... | 130 | 181 | 135 | | | 1,420 | 2,720 | 1,100 | 3,360 | 397 | 331 | 234 |
| 13..... | 125 | 178 | 173 | | | 1,240 | 3,790 | 1,060 | 2,160 | 376 | 255 | 223 |
| 14..... | 123 | 206 | 181 | | | 1,140 | 4,810 | 1,380 | 1,640 | 424 | 237 | 223 |
| 15..... | 120 | 335 | 187 | | | 855 | 4,480 | 1,190 | 1,330 | 216 | 615 | 223 |
| 16..... | 118 | 572 | 146 | 235 | 295 | 870 | 2,800 | 1,690 | 1,120 | 477 | 2,490 | 226 |
| 17..... | 116 | 406 | 153 | | | 765 | 2,220 | 1,330 | 965 | 372 | 1,940 | 300 |
| 18..... | 118 | 364 | 167 | | | 730 | 2,100 | 1,120 | 1,680 | 331 | 1,060 | 292 |
| 19..... | 120 | 428 | 240 | | | 255 | 2,950 | 929 | 4,460 | 315 | 956 | 237 |
| 20..... | 118 | 447 | 579 | | | 605 | 3,190 | 1,330 | 2,570 | 292 | 1,010 | 203 |
| 21..... | 130 | 364 | 419 | 785 | 604 | 600 | 2,500 | 1,480 | 1,860 | 277 | 1,480 | 203 |
| 22..... | 156 | 323 | 292 | | | 492 | 2,290 | 1,280 | 1,640 | 288 | 956 | 187 |
| 23..... | 1,720 | 251 | 216 | | | 721 | 1,920 | 1,120 | 1,330 | 335 | 756 | 173 |
| 24..... | 1,280 | 213 | 255 | | | 637 | 1,580 | 1,010 | 1,240 | 331 | 1,330 | 173 |
| 25..... | 598 | 262 | 248 | | | 604 | 1,430 | 880 | 1,060 | 251 | 1,060 | 181 |
| 26..... | 424 | 230 | 262 | 230 | 880 | 1,860 | 1,380 | 1,640 | 872 | 244 | 798 | 190 |
| 27..... | 352 | 262 | 248 | | | 2,220 | 1,330 | 2,100 | 805 | 570 | 686 | 213 |
| 28..... | 311 | 255 | 236 | | | 1,380 | 1,480 | 1,740 | 812 | 651 | 560 | 216 |
| 29..... | 281 | 181 | 230 | | | 1,060 | 1,480 | 1,430 | 735 | 554 | 537 | 194 |
| 30..... | 254 | • 176 | 225 | | | 929 | 1,580 | 1,640 | 624 | 566 | 525 | 178 |
| 31..... | 244 | ----- | 216 | | | 880 | ----- | 1,330 | ----- | 389 | 442 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 1,720 | 99 | 288 | 0.748 | 0.86 |
| November..... | 572 | 176 | 272 | .706 | .79 |
| December..... | 579 | 135 | 211 | .548 | .63 |
| January..... | ----- | ----- | 384 | .997 | 1.15 |
| February..... | ----- | ----- | 401 | 1.04 | 1.08 |
| March..... | 2,220 | 475 | 898 | 2.33 | 2.69 |
| April..... | 9,890 | 840 | 2,590 | 6.73 | 7.51 |
| May..... | 4,480 | 880 | 1,730 | 4.49 | 5.18 |
| June..... | 6,770 | 624 | 1,650 | 4.29 | 4.79 |
| July..... | 1,190 | 216 | 468 | 1.22 | 1.41 |
| August..... | 2,490 | 187 | 684 | 1.78 | 2.05 |
| September..... | 397 | 173 | 250 | .649 | .72 |
| The year..... | 9,890 | 99 | 818 | 2.12 | 28.86 |

• Estimated.

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, 1930.

EXTREMES.—Maximum discharge during year, 9,550 second-feet Apr. 11 (gage height, 8.35 feet); minimum, 144 second-feet Oct. 2 (gage height, 1.90 feet).

1916-1930: Maximum discharge, 23,000 second-feet May 2, 1923 (gage height, 14.72 feet); minimum, 90 second-feet Oct. 1, 1921 (gage height, 0.03 foot).

REMARKS.—Records good except those for period of ice effect, Dec. 2 to Mar. 10, for period of backwater from logs, May 3-13, and for days of estimated discharge, which are fair. Flow partly regulated by power development at Great Falls.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|---------|------|-------|-------|-------|---------|-------|-------|-------|-------|-------|
| 1 | 580 | 895 | 752 | 610 | 950 | 2,520 | 4,950 | 3,660 | 3,160 | 2,360 | 1,120 | 1,720 |
| 2 | 515 | 873 | 660 | 620 | 915 | 2,520 | 4,790 | 3,520 | 3,160 | 2,230 | 1,070 | 1,570 |
| 3 | 675 | 710 | 550 | 730 | 985 | 2,580 | 4,490 | 3,400 | 3,000 | 2,160 | 990 | 1,470 |
| 4 | 670 | 685 | 495 | 680 | 985 | 2,480 | 4,340 | 3,280 | 2,710 | 2,160 | 825 | 1,370 |
| 5 | 610 | 730 | 495 | 630 | 985 | 2,400 | 4,340 | 3,220 | 2,500 | 1,970 | 690 | 1,270 |
| 6 | 620 | 640 | 525 | 670 | 970 | 2,330 | 4,190 | 3,230 | 2,360 | 1,780 | 760 | 1,240 |
| 7 | 640 | 621 | 550 | 775 | 960 | 2,280 | 5,940 | 3,340 | 2,160 | 1,780 | 792 | 1,160 |
| 8 | 585 | 612 | 540 | 850 | 915 | 2,530 | 6,790 | 3,300 | 2,040 | 1,720 | 814 | 1,110 |
| 9 | 660 | 575 | 575 | 915 | 915 | 3,200 | 7,810 | 3,280 | 1,970 | 1,660 | 847 | 1,060 |
| 10 | 595 | 608 | 565 | 1,100 | 930 | 4,100 | 5,850 | 3,290 | 2,040 | 1,580 | 814 | 1,020 |
| 11 | 605 | 621 | 560 | 1,410 | 930 | 4,790 | 9,370 | 3,320 | 2,860 | 1,540 | 847 | 979 |
| 12 | 610 | 680 | 550 | 1,460 | 930 | 5,600 | 9,200 | 3,290 | 3,760 | 1,440 | 814 | 957 |
| 13 | 655 | 630 | 530 | 1,460 | 940 | 5,770 | 8,670 | 3,160 | 4,150 | 1,350 | 814 | 924 |
| 14 | 775 | 610 | 525 | 1,460 | 1,060 | 5,770 | 5,330 | 3,070 | 4,310 | 1,320 | 814 | 847 |
| 15 | 620 | 625 | 495 | 1,460 | 995 | 5,430 | 7,980 | 2,860 | 4,150 | 1,320 | 957 | 957 |
| 16 | 680 | 531 | 720 | 1,460 | 1,050 | 5,430 | 7,810 | 2,930 | 4,000 | 1,320 | 1,510 | 924 |
| 17 | 815 | " 550 | 700 | 1,460 | 1,080 | 5,430 | 7,810 | 2,860 | 3,830 | 1,320 | 2,360 | 913 |
| 18 | 625 | " 1,000 | 680 | 1,470 | 1,120 | 5,110 | 7,640 | 2,790 | 3,910 | 1,280 | 3,080 | 902 |
| 19 | 605 | " 990 | 585 | 1,460 | 1,160 | 5,110 | 7,300 | 2,720 | 3,880 | 1,210 | 3,160 | 814 |
| 20 | 590 | 972 | 585 | 1,430 | 1,160 | 4,790 | 6,960 | 2,720 | 3,910 | 1,090 | 3,080 | 770 |
| 21 | 700 | 895 | 650 | 1,400 | 1,160 | 4,340 | 6,450 | 2,720 | 4,070 | 1,110 | 3,000 | 792 |
| 22 | 585 | 840 | 700 | 1,310 | 1,170 | 3,890 | 6,280 | 2,650 | 4,150 | 1,000 | 3,000 | 924 |
| 23 | 635 | " 820 | 730 | 1,250 | 1,280 | 3,520 | 6,110 | 2,650 | 4,150 | 1,000 | 2,930 | 913 |
| 24 | 730 | " 800 | 850 | 1,250 | 1,440 | 3,140 | 5,770 | 2,580 | 4,070 | 1,010 | 2,930 | 913 |
| 25 | 1,200 | " 780 | 805 | 1,200 | 1,800 | 3,140 | 5,600 | 2,520 | 3,830 | 990 | 2,930 | 902 |
| 26 | 1,160 | " 760 | 805 | 1,160 | 2,160 | 4,950 | 5,270 | 2,720 | 3,460 | 913 | 2,930 | 880 |
| 27 | 1,130 | 730 | 820 | 1,130 | 2,320 | 5,600 | " 4,930 | 2,930 | 3,300 | 968 | 2,730 | 880 |
| 28 | 1,100 | " 750 | 785 | 1,080 | 2,410 | 5,600 | " 4,580 | 3,000 | 3,160 | 1,010 | 2,500 | 792 |
| 29 | 1,020 | " 800 | 750 | 1,050 | ----- | 5,430 | " 4,240 | 3,070 | 2,930 | 1,100 | 2,230 | 836 |
| 30 | 961 | " 800 | 700 | 995 | ----- | 5,110 | 3,890 | 3,220 | 2,640 | 1,150 | 2,040 | 803 |
| 31 | 917 | ----- | 640 | 960 | ----- | 4,950 | ----- | 3,290 | ----- | 1,140 | 1,780 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 1,200 | 515 | 737 | 0.567 | 0.65 |
| November | 1,000 | 531 | 739 | .563 | .63 |
| December | 850 | 495 | 642 | .494 | .57 |
| January | 1,470 | 610 | 1,130 | .869 | 1.00 |
| February | 2,410 | 915 | 1,200 | .923 | .96 |
| March | 5,770 | 2,290 | 4,190 | 3.22 | 3.71 |
| April | 9,370 | 3,890 | 6,360 | 4.59 | 5.46 |
| May | 3,660 | 2,520 | 3,050 | 2.35 | 2.71 |
| June | 4,310 | 1,970 | 3,320 | 2.55 | 2.84 |
| July | 2,360 | 913 | 1,420 | 1.09 | 1.26 |
| August | 3,160 | 690 | 1,780 | 1.37 | 1.58 |
| September | 1,720 | 770 | 1,020 | .785 | .88 |
| The year | 9,370 | 495 | 2,130 | 1.64 | 22.25 |

* Estimated.

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, 1930.

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

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 835 | 923 | 364 | 757 | 1,260 | 2,940 | 3,960 | 3,540 | 3,780 | 3,100 | 1,200 | 1,660 |
| 2..... | 893 | 1,020 | 936 | 746 | 650 | 3,150 | 3,950 | 3,390 | 3,940 | 2,780 | 1,350 | 1,800 |
| 3..... | 800 | 627 | 684 | 768 | 1,300 | 4,070 | 3,860 | 3,200 | 3,780 | 2,380 | 766 | 1,890 |
| 4..... | 930 | 934 | 550 | 970 | 1,300 | 3,440 | 3,770 | 2,690 | 3,480 | 1,660 | 1,210 | 1,520 |
| 5..... | 907 | 803 | 584 | 442 | 1,190 | 3,220 | 3,450 | 3,530 | 3,380 | 2,540 | 1,110 | 1,550 |
| 6..... | 137 | 971 | 572 | 973 | 1,210 | 2,660 | 2,820 | 3,220 | 2,960 | 2,140 | 930 | 1,640 |
| 7..... | 1,160 | 690 | 844 | 974 | 1,260 | 2,840 | 4,870 | 4,090 | 2,830 | 2,180 | 867 | 1,110 |
| 8..... | 741 | 718 | 622 | 1,080 | 990 | 3,980 | 6,480 | 3,670 | 1,770 | 2,200 | 728 | 1,700 |
| 9..... | 849 | 738 | 1,260 | 1,360 | 1,030 | 6,080 | 6,680 | 3,310 | 2,930 | 1,840 | 737 | 1,120 |
| 10..... | 837 | 199 | 833 | 1,630 | 1,330 | 6,170 | 7,620 | 2,760 | 2,090 | 1,980 | 676 | 1,330 |
| 11..... | 671 | 919 | 718 | 1,820 | 1,090 | 6,020 | 8,200 | 2,440 | 2,620 | 1,840 | 950 | 1,140 |
| 12..... | 886 | 752 | 608 | 1,390 | 1,130 | 7,210 | 7,740 | 3,500 | 3,740 | 1,680 | 1,000 | 1,090 |
| 13..... | 333 | 798 | 745 | 1,910 | 1,040 | 7,040 | 6,870 | 3,780 | 4,460 | 1,600 | 1,040 | 1,010 |
| 14..... | 883 | 803 | 573 | 1,710 | 1,210 | 6,060 | 6,970 | 3,210 | 4,250 | 1,710 | 998 | 647 |
| 15..... | 847 | 770 | 578 | 1,730 | 1,230 | 5,720 | 6,630 | 3,240 | 4,200 | 1,430 | 1,170 | 996 |
| 16..... | 814 | 341 | 862 | 1,820 | 1,270 | 4,760 | 6,180 | 3,020 | 4,860 | 1,430 | 1,430 | 1,020 |
| 17..... | 842 | 586 | 849 | 1,710 | 1,330 | 5,220 | 6,180 | 2,700 | 4,730 | 1,350 | 1,940 | 1,190 |
| 18..... | 876 | 1,180 | 787 | 1,710 | 1,430 | 4,710 | 6,050 | 2,870 | 4,380 | 1,500 | 3,440 | 975 |
| 19..... | 811 | 1,080 | 716 | 1,110 | 1,470 | 4,710 | 5,620 | 3,740 | 4,310 | 1,540 | 3,520 | 1,080 |
| 20..... | 302 | 852 | 667 | 1,820 | 1,330 | 4,750 | 5,050 | 3,510 | 4,350 | 746 | 3,270 | 987 |
| 21..... | 818 | 1,730 | 1,020 | 1,640 | 1,400 | 4,020 | 5,030 | 2,780 | 4,330 | 1,860 | 3,370 | 781 |
| 22..... | 850 | 945 | 537 | 1,510 | 1,270 | 3,510 | 4,580 | 3,220 | 4,270 | 1,100 | 3,060 | 1,240 |
| 23..... | 888 | 1,210 | 1,030 | 1,440 | 1,440 | 2,290 | 4,490 | 3,260 | 4,580 | 917 | 3,450 | 1,120 |
| 24..... | 1,010 | 779 | 1,010 | 1,450 | 1,810 | 3,400 | 4,340 | 2,720 | 4,480 | 1,150 | 2,570 | 1,190 |
| 25..... | 1,100 | 1,180 | 600 | 1,480 | 2,420 | 3,470 | 4,300 | 2,610 | 4,320 | 1,160 | 3,540 | 1,280 |
| 26..... | 1,190 | 1,170 | 1,120 | 1,030 | 2,500 | 4,170 | 3,870 | 3,390 | 4,000 | 1,000 | 3,380 | 1,230 |
| 27..... | 1,110 | 1,060 | 872 | 1,400 | 2,800 | 5,700 | 3,130 | 3,670 | 3,710 | 1,130 | 3,260 | 1,180 |
| 28..... | 1,290 | 609 | 925 | 1,310 | 2,890 | 5,100 | 4,050 | 3,710 | 3,570 | 1,120 | 3,120 | 723 |
| 29..... | 1,070 | 950 | 595 | 1,240 | ----- | 4,540 | 3,860 | 3,760 | 2,840 | 1,290 | 2,680 | 1,070 |
| 30..... | 1,130 | 1,190 | 1,050 | 1,260 | ----- | 3,780 | 3,860 | 3,860 | 3,300 | 1,310 | 2,680 | 1,140 |
| 31..... | 1,250 | ----- | 872 | 1,160 | ----- | 4,220 | ----- | 3,890 | ----- | 1,320 | 1,510 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 1,290 | 137 | 873 | 0.563 | 0.65 |
| November..... | 1,230 | 199 | 868 | .560 | .62 |
| December..... | 1,260 | 364 | 774 | .499 | .58 |
| January..... | 1,910 | 442 | 1,330 | .858 | .99 |
| February..... | 2,890 | 650 | 1,450 | .935 | .97 |
| March..... | 7,210 | 2,290 | 4,480 | 2.89 | 3.33 |
| April..... | 8,200 | 2,820 | 5,150 | 3.32 | 3.70 |
| May..... | 4,090 | 2,440 | 3,300 | 2.13 | 2.46 |
| June..... | 4,860 | 1,770 | 3,740 | 2.41 | 2.69 |
| July..... | 3,100 | 746 | 1,640 | 1.06 | 1.22 |
| August..... | 3,540 | 676 | 1,970 | 1.27 | 1.46 |
| September..... | 1,890 | 647 | 1,210 | .781 | .87 |
| The year..... | 8,200 | 137 | 2,230 | 1.44 | 19.54 |

OSSISPEE RIVER AT CORNISH, ME.

LOCATION.—Water-stage recorder at highway bridge in Cornish, York County, 1¼ miles above confluence with Saco River.

DRAINAGE AREA.—455 square miles.

RECORDS AVAILABLE.—July, 1916, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,370 second-feet Apr. 9 (gauge height, 5.05 feet); minimum, 37 second-feet Oct. 2 (gauge height, -0.29 foot).

1916-1930: Maximum discharge, 6,740 second-feet Apr. 30, 1923 (gauge height, 8.76 feet); minimum, 28 second-feet Sept. 7, 1929 (gauge height, -0.40 foot).

REMARKS.—Records good except those for periods of ice effect, Nov. 2^d to Dec. 1, Dec. 6 to Mar. 10, and for days of estimated discharge, which are fair. Flow affected by storage in Great Ossipee Lake and by power development at Kezar Falls.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|-------|-------|-----|-------|------|-------|-------|
| 1..... | 150 | 272 | 250 | 250 | 360 | 990 | 1,940 | 730 | 635 | 570 | 349 | 625 |
| 2..... | 152 | 265 | 246 | 250 | 450 | 1,000 | 1,890 | 625 | 600 | 545 | 333 | 585 |
| 3..... | 186 | 235 | 249 | 260 | 480 | 1,020 | 1,810 | 580 | 565 | 520 | 321 | 545 |
| 4..... | 243 | 210 | 249 | 225 | 465 | 960 | 1,720 | 630 | 525 | 486 | 306 | 525 |
| 5..... | 199 | 181 | 262 | 168 | 465 | 925 | 1,700 | 635 | 486 | 464 | 292 | 486 |
| 6..... | 204 | 199 | 275 | 245 | 465 | 895 | 2,070 | 630 | 468 | 454 | 281 | 490 |
| 7..... | 207 | 210 | 270 | 320 | 445 | 875 | 2,690 | 656 | 464 | 510 | 325 | 468 |
| 8..... | 181 | 178 | 270 | 335 | 430 | 1,020 | 3,120 | 650 | 454 | 515 | 321 | 441 |
| 9..... | 178 | 189 | 270 | 405 | 445 | 1,260 | 3,370 | 650 | 454 | 486 | 353 | 410 |
| 10..... | 168 | 194 | 270 | 355 | 455 | 1,500 | 3,170 | 620 | 530 | 456 | 369 | 385 |
| 11..... | 202 | 202 | 270 | 310 | 460 | 1,890 | 2,880 | 595 | 755 | 436 | 341 | 365 |
| 12..... | 182 | 221 | 275 | 325 | 475 | 2,510 | 2,690 | 590 | 1,010 | 423 | 314 | 349 |
| 13..... | 215 | 204 | 290 | 315 | 485 | 2,510 | 2,420 | 570 | 1,080 | 401 | 288 | 337 |
| 14..... | 333 | 223 | 285 | 305 | 505 | 2,510 | 2,420 | 555 | 1,040 | 405 | 275 | 341 |
| 15..... | 337 | 246 | 260 | 315 | 510 | 2,280 | 2,280 | 560 | 1,010 | 414 | 389 | 410 |
| 16..... | 337 | 249 | 245 | 340 | 620 | 2,120 | 2,160 | 635 | 910 | 410 | 672 | 389 |
| 17..... | 337 | 235 | 245 | 350 | 620 | 1,940 | 1,980 | 615 | 845 | 401 | 1,080 | 385 |
| 18..... | 318 | 258 | 270 | 375 | 620 | 1,810 | 1,940 | 595 | 845 | 381 | 1,420 | 381 |
| 19..... | 288 | 337 | 285 | 395 | 570 | 1,850 | 1,760 | 570 | 910 | 365 | 1,420 | 373 |
| 20..... | 265 | 318 | 285 | 420 | 565 | 1,850 | 1,680 | 635 | 975 | 345 | 1,380 | 365 |
| 21..... | 262 | 281 | 280 | 420 | 565 | 1,680 | 1,550 | 662 | 975 | 325 | 1,300 | 357 |
| 22..... | 255 | 258 | 275 | 425 | 570 | 1,460 | 1,500 | 635 | 975 | 305 | 1,220 | 357 |
| 23..... | 272 | 243 | 345 | 430 | 590 | 1,420 | 1,460 | 615 | 910 | 365 | 1,150 | 357 |
| 24..... | 310 | 249 | 370 | 420 | 680 | 1,180 | 1,380 | 585 | 845 | 365 | 1,150 | 349 |
| 25..... | 337 | 258 | 345 | 415 | 870 | 1,180 | 1,260 | 575 | 785 | 355 | 1,120 | 349 |
| 26..... | 341 | 255 | 355 | 400 | 940 | 2,160 | 1,180 | 730 | 730 | 321 | 1,040 | 337 |
| 27..... | 337 | 235 | 315 | 415 | 975 | 2,600 | 1,120 | 755 | 689 | 385 | 975 | 353 |
| 28..... | 333 | 235 | 285 | 410 | 1,000 | 2,420 | 1,120 | 730 | 730 | 385 | 875 | 329 |
| 29..... | 318 | 240 | 270 | 375 | ----- | 2,330 | 1,010 | 689 | 662 | 395 | 815 | 310 |
| 30..... | 288 | 245 | 260 | 375 | ----- | 2,200 | 910 | 730 | 605 | 385 | 730 | 292 |
| 31..... | 278 | ----- | 255 | 375 | ----- | 2,070 | ----- | 684 | ----- | 375 | 667 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 341 | 150 | 258 | 0.577 | 0.65 |
| November..... | 337 | 178 | 238 | .573 | .58 |
| December..... | 370 | 245 | 280 | .615 | .71 |
| January..... | 430 | 168 | 346 | .779 | .88 |
| February..... | 1,000 | 360 | 574 | 1.27 | 1.31 |
| March..... | 2,600 | 875 | 1,690 | 3.71 | 4.28 |
| April..... | 3,370 | 910 | 1,940 | 4.26 | 4.75 |
| May..... | 755 | 555 | 636 | 1.47 | 1.61 |
| June..... | 1,080 | 454 | 749 | 1.65 | 1.84 |
| July..... | 570 | 306 | 418 | .919 | 1.06 |
| August..... | 1,420 | 275 | 706 | 1.55 | 1.79 |
| September..... | 625 | 292 | 402 | .894 | .99 |
| The year..... | 3,370 | 150 | 686 | 1.51 | 20.45 |

* Estimated

SALMON FALLS RIVER BASIN

SALMON FALLS RIVER NEAR LEBANON, ME.

LOCATION.—Water-stage recorder at Stair Falls, 1½ miles south of South Lebanon, in township of Lebanon, York County.

DRAINAGE AREA.—147 square miles.

RECORDS AVAILABLE.—November, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,430 second-feet Mar. 27 (gage height, 5.84 feet); minimum, 7 second-feet Oct. 20 (gage height, 1.00 foot).
1928-1930: Maximum discharge, that of Mar. 27, 1930; minimum, that of Oct. 20, 1929.

REMARKS.—Records good. Dams at outlet of several ponds above control flow to large extent.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1 | 70 | 73 | 33 | 85 | 46 | 118 | 385 | 240 | 28 | 172 | 144 | 16 |
| 2 | 82 | 46 | 92 | 93 | 28 | 110 | 375 | 240 | 144 | 131 | 92 | 112 |
| 3 | 90 | 27 | 78 | 110 | 188 | 250 | 335 | 200 | 144 | 123 | 28 | 114 |
| 4 | 87 | 90 | 77 | 60 | 164 | 181 | 285 | 150 | 146 | 20 | 136 | 102 |
| 5 | 66 | 78 | 78 | 28 | 156 | 175 | 270 | 240 | 142 | 58 | 110 | 93 |
| 6 | 19 | 73 | 76 | 104 | 132 | 181 | 275 | 230 | 148 | 20 | 105 | 36 |
| 7 | 100 | 71 | 44 | 104 | 116 | 190 | 685 | 225 | 110 | 152 | 102 | 15 |
| 8 | 70 | 74 | 27 | 122 | 78 | 460 | 1,520 | 240 | 19 | 134 | 100 | 128 |
| 9 | 80 | 38 | * 90 | 180 | 28 | 770 | 1,080 | 230 | 184 | 134 | 88 | 110 |
| 10 | 73 | 13 | * 82 | 156 | 150 | 748 | 555 | 170 | 187 | 131 | 20 | 113 |
| 11 | 72 | 19 | 80 | 78 | 132 | 805 | 410 | 25 | 230 | 126 | 130 | 102 |
| 12 | 56 | 74 | 80 | 31 | 126 | 960 | 260 | 152 | 251 | 96 | 113 | 92 |
| 13 | 17 | 68 | 78 | 118 | 136 | 864 | 275 | 164 | 195 | 28 | 110 | 47 |
| 14 | 80 | 74 | 54 | 100 | 150 | 700 | 290 | 160 | 124 | 156 | 102 | 18 |
| 15 | 67 | 87 | 27 | 104 | 108 | 400 | 310 | 169 | 43 | 134 | 105 | 124 |
| 16 | 75 | 44 | 94 | 108 | 55 | 283 | 300 | 172 | 180 | 145 | 61 | 118 |
| 17 | 72 | 38 | 88 | 106 | 186 | 325 | 290 | 104 | 178 | 143 | 40 | 113 |
| 18 | 68 | 164 | 90 | 53 | 158 | 340 | 270 | 30 | 215 | 140 | 132 | 102 |
| 19 | 63 | 156 | 92 | 21 | 154 | 640 | 250 | 142 | 244 | 108 | 118 | 94 |
| 20 | 13 | 96 | 102 | 122 | 181 | 565 | 235 | 169 | 205 | 21 | 118 | 38 |
| 21 | 86 | 92 | 71 | 128 | 201 | 395 | 245 | 154 | 154 | 184 | 118 | 22 |
| 22 | 70 | 91 | 52 | 122 | 150 | 330 | 245 | 128 | 36 | 175 | 104 | 136 |
| 23 | 91 | 52 | 102 | 122 | 93 | 250 | 265 | 124 | 205 | 169 | 48 | 118 |
| 24 | 97 | 27 | 95 | 118 | 350 | 270 | 247 | 92 | 181 | 169 | 31 | 110 |
| 25 | 75 | 96 | 20 | 76 | 335 | 385 | 245 | 21 | 175 | 166 | 142 | 90 |
| 26 | 65 | 85 | 60 | 20 | 247 | 1,720 | 205 | 196 | 175 | 118 | 118 | 99 |
| 27 | 16 | 87 | 69 | 130 | 219 | 2,280 | 170 | 154 | 181 | 54 | 110 | 46 |
| 28 | 84 | 19 | 26 | 100 | 198 | 700 | 245 | 154 | 152 | 191 | 113 | 21 |
| 29 | 60 | 66 | 19 | 96 | ----- | 490 | 230 | 134 | 24 | 175 | 100 | 132 |
| 30 | 72 | 55 | 78 | 100 | ----- | 348 | 235 | 63 | 174 | 166 | 34 | 113 |
| 31 | 67 | ----- | 90 | 99 | ----- | 358 | ----- | 71 | ----- | 169 | 20 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 100 | 13 | 67.8 | 0.461 | 0.53 |
| November | 164 | 13 | 69.1 | .470 | .52 |
| December | 102 | 19 | 69.2 | .471 | .54 |
| January | 180 | 20 | 96.6 | .657 | .76 |
| February | 350 | 28 | 152 | 1.03 | 1.07 |
| March | 2,280 | 110 | 535 | 3.64 | 4.20 |
| April | 1,520 | 170 | 367 | 2.50 | 2.79 |
| May | 240 | 21 | 153 | 1.04 | 1.20 |
| June | 251 | 19 | 151 | 1.03 | 1.15 |
| July | 191 | 20 | 126 | .857 | .99 |
| August | 144 | 20 | 93.3 | .635 | .73 |
| September | 136 | 15 | 85.8 | .584 | .65 |
| The year | 2,280 | 13 | 164 | 1.12 | 15.13 |

* Estimated.

MERRIMACK RIVER BASIN

EAST BRANCH OF PEMIGEWASSET RIVER NEAR LINCOLN, N. H.

LOCATION.—Water-stage recorder $1\frac{1}{8}$ miles below Hancock Branch and $2\frac{3}{4}$ miles northeast of Lincoln, Grafton County.

DRAINAGE AREA.—103 square miles.

RECORDS AVAILABLE.—November, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 4,080 second-feet Apr. 17 (gage height, 5.63 feet); minimum, 43 second-feet Oct. 1, 2 (gage height, 1.51 feet).

1928-1930: Maximum discharge, 8,000 second-feet May 3, 1929 (gage height, 7.47 feet); minimum, 40 second-feet Mar. 8, 1929 (gage height, 1.47 feet).

REMARKS.—Records good. Corrections for ice effect applied Nov. 22 to Mar. 8.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------------|---------|-------|------|---------|-------|------|-------|-------|-------|-----------------|-------------------|-------|
| 1..... | 44 | 101 | 68 | 128 | 135 | 114 | 153 | 973 | 524 | 335 | 131 | 117 |
| 2..... | 49 | 159 | 71 | 133 | 133 | 81 | 157 | 1,900 | 465 | 388 | 120 | 120 |
| 3..... | 122 | 133 | 72 | 180 | 131 | 111 | 153 | 1,700 | 435 | 295 | 111 | 127 |
| 4..... | 97 | 113 | 73 | 162 | 131 | 92 | 146 | 1,020 | 405 | 245 | 98 | 114 |
| 5..... | 73 | 103 | 75 | 149 | 126 | 81 | 157 | 922 | 372 | 212 | 98 | 92 |
| 6..... | 62 | 95 | 79 | 159 | 124 | 98 | 265 | 1,220 | 340 | 310 | 82 | 88 |
| 7..... | 59 | 93 | 76 | 285 | 120 | 300 | 2,540 | 1,370 | 356 | 330 | 79 | 90 |
| 8..... | 63 | 84 | 73 | 1,620 | 117 | 990 | 1,470 | 1,120 | 335 | 245 | 77 | 82 |
| 9..... | 56 | 83 | 72 | 1,700 | 117 | 947 | 785 | 889 | 703 | 231 | 199 | 79 |
| 10..... | 52 | 78 | 71 | 692 | 117 | 295 | 593 | 700 | 1,440 | 195 | 280 | 77 |
| 11..... | 51 | 78 | 70 | 468 | 115 | 208 | 593 | 579 | 948 | 161 | 199 | 75 |
| 12..... | 50 | 79 | 70 | 364 | 115 | 236 | 841 | 504 | 722 | 155 | 127 | 71 |
| 13..... | 51 | 79 | 68 | 329 | 115 | 203 | 1,120 | 517 | 558 | 134 | 104 | 70 |
| 14..... | 50 | 115 | 68 | 329 | 115 | 178 | 1,370 | 524 | 472 | 217 | 104 | 71 |
| 15..... | 48 | 241 | 68 | 320 | 115 | 174 | 1,120 | 510 | 411 | 245 | 320 | 70 |
| 16..... | 47 | 238 | 70 | 307 | 113 | 169 | 769 | 537 | 366 | 155 | 621 | 92 |
| 17..... | 62 | 164 | 79 | 245 | 113 | 174 | 642 | 453 | 330 | 120 | 498 | 142 |
| 18..... | 64 | 162 | 103 | 194 | 113 | 178 | 685 | 405 | 756 | 111 | 340 | 90 |
| 19..... | 55 | 149 | 863 | 185 | 115 | 169 | 1,210 | 361 | 1,160 | 92 | 310 | 71 |
| 20..... | 72 | 135 | 558 | 182 | 133 | 134 | 999 | 517 | 825 | 95 | 345 | 68 |
| 21..... | 90 | 124 | 344 | 182 | 177 | 117 | 801 | 491 | 685 | 84 | 423 | 65 |
| 22..... | 78 | 97 | 228 | 175 | 200 | 161 | 730 | 429 | 649 | 86 | 290 | 62 |
| 23..... | 454 | 83 | 172 | 169 | 126 | 161 | 586 | 417 | 537 | 150 | 241 | 57 |
| 24..... | 232 | 76 | 142 | 164 | 1,310 | 161 | 491 | 383 | 478 | 86 | 361 | 56 |
| 25..... | 154 | 73 | 128 | 162 | 857 | 182 | 435 | 383 | 417 | 75 | 260 | 57 |
| 26..... | 128 | 71 | 124 | 159 | 491 | 832 | 394 | 517 | 361 | 70 | 208 | 57 |
| 27..... | 115 | 70 | 137 | 157 | 270 | 459 | 400 | 1,040 | 340 | 406 | 174 | 65 |
| 28..... | 105 | 70 | 142 | 154 | 157 | 265 | 441 | 753 | 325 | 241 | 153 | 63 |
| 29..... | 90 | 68 | 140 | 149 | ----- | 199 | 472 | 656 | 285 | 341 | 146 | 57 |
| 30..... | 81 | 68 | 135 | 140 | ----- | 174 | 593 | 708 | 250 | 245 | 138 | 56 |
| 31..... | 79 | ----- | 126 | 137 | ----- | 161 | ----- | 607 | ----- | 161 | 127 | ----- |
| Month | Maximum | | | Minimum | | | Mean | | | Per square mile | Run-off in inches | |
| October..... | 454 | | | 44 | | | 91.4 | | | 0.877 | 1.02 | |
| November..... | 241 | | | 68 | | | 109 | | | 1.03 | 1.18 | |
| December..... | 863 | | | 68 | | | 147 | | | 1.43 | 1.65 | |
| January..... | 1,700 | | | 128 | | | 319 | | | 3.10 | 3.57 | |
| February..... | 1,310 | | | 113 | | | 214 | | | 2.03 | 2.12 | |
| March..... | 990 | | | 81 | | | 252 | | | 2.45 | 2.82 | |
| April..... | 2,540 | | | 146 | | | 704 | | | 6.83 | 7.62 | |
| May..... | 1,900 | | | 361 | | | 745 | | | 7.23 | 8.34 | |
| June..... | 1,440 | | | 250 | | | 542 | | | 5.23 | 5.87 | |
| July..... | 409 | | | 70 | | | 200 | | | 1.91 | 2.24 | |
| August..... | 621 | | | 77 | | | 218 | | | 2.12 | 2.44 | |
| September..... | 142 | | | 56 | | | 80.0 | | | .777 | .87 | |
| The year..... | 2,540 | | | 44 | | | 302 | | | 2.93 | 39.74 | |

PEMIGEWASSET RIVER AT PLYMOUTH, N. H.

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

DRAINAGE AREA.—615 square miles.

RECORDS AVAILABLE.—January, 1886, to September, 1930; gage heights only prior to 1903.

EXTREMES.—Maximum discharge during year, 16,500 second-feet Apr. 8 (gage height, 13.14 feet); minimum, 62 second-feet July 26 (gage height, 0.30 foot).

1903-1930: Maximum discharge, 60,000 second-feet Nov. 4, 1927 (gage height, 27.4 feet); minimum, 45 second-feet several times during August, September, October, 1923.

REMARKS.—Records good. Corrections for ice effect applied Nov. 25 to Dec. 12, Dec. 24-31, Jan. 5-7, Jan. 11 to Mar. 7.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 1..... | 232 | 475 | 388 | 729 | 510 | 1,600 | 1,300 | 1,980 | 1,500 | 673 | 525 | 363 |
| 2..... | 246 | 920 | 408 | 729 | 510 | 1,400 | 1,500 | 3,410 | 1,350 | 1,100 | 408 | 401 |
| 3..... | 328 | 992 | 388 | 866 | 503 | 1,220 | 1,400 | 5,100 | 1,190 | 875 | 363 | 401 |
| 4..... | 548 | 804 | 375 | 1,600 | 496 | 1,050 | 1,350 | 2,700 | 1,120 | 705 | 310 | 375 |
| 5..... | 562 | 665 | 363 | 1,250 | 482 | 965 | 1,550 | 2,160 | 992 | 609 | 316 | 322 |
| 6..... | 408 | 705 | 351 | 1,880 | 461 | 992 | 2,040 | 2,280 | 884 | 593 | 300 | 288 |
| 7..... | 316 | 548 | 346 | 1,880 | 454 | 974 | 10,200 | 2,760 | 965 | 1,010 | 261 | 278 |
| 8..... | 316 | 532 | 316 | 1,300 | 447 | 2,220 | 12,300 | 2,580 | 1,170 | 754 | 256 | 256 |
| 9..... | 328 | 486 | 300 | 5,430 | 461 | 6,180 | 4,900 | 2,100 | 1,370 | 593 | 328 | 241 |
| 10..... | 288 | 454 | 288 | 5,470 | 447 | 4,340 | 2,890 | 1,760 | 6,940 | 562 | 721 | 222 |
| 11..... | 251 | 434 | 278 | 2,400 | 420 | 3,540 | 2,700 | 1,500 | 4,200 | 454 | 1,030 | 217 |
| 12..... | 232 | 427 | 272 | 2,040 | 401 | 6,080 | 3,410 | 1,350 | 3,020 | 414 | 585 | 212 |
| 13..... | 227 | 427 | 310 | 1,760 | 388 | 4,590 | 4,480 | 1,290 | 2,040 | 322 | 414 | 208 |
| 14..... | 222 | 570 | 375 | 1,600 | 375 | 2,520 | 5,180 | 1,350 | 1,550 | 585 | 369 | 204 |
| 15..... | 212 | 1,400 | 440 | 1,500 | 375 | 1,660 | 4,890 | 1,280 | 1,060 | 1,060 | 1,380 | 204 |
| 16..... | 204 | 1,710 | 408 | 1,820 | 369 | 1,500 | 2,760 | 1,400 | 1,130 | 715 | 3,850 | 217 |
| 17..... | 204 | 1,180 | 388 | 1,300 | 375 | 1,210 | 2,220 | 1,280 | 974 | 440 | 2,680 | 363 |
| 18..... | 246 | 1,060 | 454 | 1,010 | 394 | 1,210 | 3,220 | 1,150 | 1,700 | 454 | 1,550 | 394 |
| 19..... | 300 | 1,400 | 1,580 | 893 | 414 | 1,240 | 3,060 | 1,040 | 5,350 | 382 | 1,210 | 272 |
| 20..... | 256 | 1,260 | 3,540 | 813 | 427 | 1,100 | 3,220 | 1,400 | 4,960 | 272 | 1,030 | 232 |
| 21..... | 272 | 974 | 2,280 | 754 | 532 | 1,010 | 2,460 | 1,760 | 2,700 | 328 | 1,400 | 195 |
| 22..... | 382 | 857 | 1,550 | 745 | 1,240 | 813 | 2,280 | 1,450 | 2,400 | 328 | 1,050 | 195 |
| 23..... | 2,180 | 617 | 1,180 | 729 | 1,600 | 1,010 | 2,040 | 1,250 | 1,930 | 261 | 796 | 199 |
| 24..... | 2,040 | 540 | 965 | 689 | 3,020 | 866 | 1,760 | 1,120 | 1,600 | 334 | 830 | 191 |
| 25..... | 1,150 | 496 | 830 | 665 | 5,180 | 1,090 | 1,600 | 1,010 | 1,400 | 283 | 839 | 187 |
| 26..... | 920 | 468 | 762 | 641 | 3,800 | 5,320 | 1,600 | 1,300 | 1,170 | 261 | 673 | 187 |
| 27..... | 770 | 503 | 745 | 617 | 2,400 | 4,370 | 1,600 | 2,440 | 1,030 | 793 | 570 | 191 |
| 28..... | 665 | 482 | 745 | 601 | 1,880 | 2,280 | 1,660 | 2,760 | 992 | 1,280 | 503 | 212 |
| 29..... | 578 | 388 | 737 | 609 | ----- | 1,760 | 1,600 | 1,880 | 884 | 875 | 427 | 187 |
| 30..... | 496 | 351 | 721 | 585 | ----- | 1,500 | 1,710 | 1,980 | 754 | 1,100 | 414 | 183 |
| 31..... | 482 | ----- | 721 | 518 | ----- | 1,400 | ----- | 1,820 | ----- | 665 | 394 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 2,180 | 204 | 512 | 0.833 | 0.96 |
| November..... | 1,710 | 351 | 738 | 1.20 | 1.34 |
| December..... | 3,540 | 272 | 736 | 1.20 | 1.38 |
| January..... | 5,470 | 518 | 1,400 | 2.28 | 2.63 |
| February..... | 5,180 | 369 | 1,010 | 1.64 | 1.71 |
| March..... | 6,180 | 813 | 2,160 | 4.98 | 4.05 |
| April..... | 12,300 | 1,300 | 3,060 | 3.07 | 5.56 |
| May..... | 5,100 | 1,010 | 1,890 | 3.07 | 3.54 |
| June..... | 6,940 | 754 | 1,950 | 3.17 | 3.54 |
| July..... | 1,280 | 261 | 616 | 1.00 | 1.15 |
| August..... | 3,850 | 256 | 832 | 1.35 | 1.56 |
| September..... | 401 | 183 | 253 | .411 | .46 |
| The year..... | 12,300 | 183 | 1,260 | 2.05 | 27.88 |

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, 1930.

EXTREMES.—Maximum discharge during year, 23,300 second-feet Apr. 8 (gage height, 16.14 feet); minimum, 685 second-feet Sept. 28 (gage height, 3.56 feet).

1903-1930: Maximum discharge, 67,000 second-feet Nov. 5, 1927 (gage height, 30.85 feet); minimum, 250 second-feet Oct. 4, 1903.

REMARKS.—Records good. Corrections for ice effect applied Dec. 11-13, 23-28, Jan. 21 to Feb. 1, Feb. 5, 8-19. Storage in Winnepesaukee, Squam, and Newfound Lakes.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 1..... | 975 | 1,120 | 940 | 1,120 | 1,370 | 2,860 | 3,070 | 2,800 | 2,350 | 1,370 | 1,280 | 1,010 |
| 2..... | 1,040 | 1,200 | 1,080 | 1,040 | 1,200 | 2,170 | 3,210 | 3,860 | 2,230 | 1,510 | 1,200 | 1,160 |
| 3..... | 1,200 | 1,460 | 1,160 | 1,120 | 1,280 | 2,860 | 3,350 | 5,820 | 2,170 | 1,820 | 1,080 | 1,280 |
| 4..... | 1,330 | 1,370 | 1,160 | 1,370 | 1,280 | 2,040 | 3,070 | 4,640 | 1,880 | 1,460 | 1,160 | 1,200 |
| 5..... | 1,370 | 1,370 | 1,120 | 1,200 | 1,280 | 1,820 | 3,000 | 3,420 | 1,880 | 1,370 | 1,120 | 1,200 |
| 6..... | 1,040 | 1,240 | 1,120 | 1,240 | 1,280 | 1,710 | 3,420 | 3,280 | 1,710 | 1,240 | 1,080 | 1,200 |
| 7..... | 1,010 | 1,240 | 1,120 | 1,370 | 1,280 | 1,820 | 10,100 | 3,860 | 1,710 | 1,330 | 1,040 | 1,240 |
| 8..... | 1,040 | 1,240 | 872 | 1,660 | 1,240 | 2,800 | 18,700 | 3,860 | 1,460 | 1,660 | 1,080 | 1,280 |
| 9..... | 1,200 | 1,200 | 975 | 2,860 | 1,160 | 4,960 | 12,300 | 3,640 | 1,880 | 1,370 | 1,040 | 1,330 |
| 10..... | 1,080 | 1,040 | 1,010 | 5,820 | 1,240 | 5,820 | 7,900 | 2,930 | 6,690 | 1,340 | 1,080 | 1,160 |
| 11..... | 975 | 1,040 | 975 | 3,560 | 1,240 | 4,320 | 4,800 | 2,470 | 6,750 | 1,250 | 1,660 | 1,160 |
| 12..... | 905 | 1,080 | 975 | 2,470 | 1,240 | 5,130 | 5,130 | 2,170 | 5,820 | 1,160 | 1,560 | 1,080 |
| 13..... | 785 | 1,120 | 940 | 2,230 | 1,280 | 6,000 | 6,000 | 2,040 | 4,160 | 1,040 | 1,280 | 1,040 |
| 14..... | 905 | 1,200 | 840 | 2,350 | 1,330 | 4,800 | 6,940 | 1,990 | 3,070 | 1,400 | 1,200 | 1,010 |
| 15..... | 1,010 | 1,610 | 812 | 2,290 | 1,280 | 3,420 | 7,130 | 2,110 | 2,290 | 2,090 | 1,610 | 1,080 |
| 16..... | 975 | 2,600 | 905 | 2,290 | 1,240 | 2,930 | 5,300 | 2,230 | 2,110 | 1,790 | 4,010 | 1,080 |
| 17..... | 975 | 2,110 | 975 | 2,040 | 1,280 | 2,800 | 4,160 | 2,110 | 1,820 | 1,420 | 4,960 | 1,120 |
| 18..... | 975 | 1,820 | 1,110 | 1,820 | 1,330 | 2,470 | 4,010 | 1,820 | 1,820 | 1,200 | 3,000 | 1,200 |
| 19..... | 975 | 2,170 | 1,200 | 1,660 | 1,330 | 2,960 | 4,160 | 1,880 | 5,130 | 1,120 | 2,410 | 1,120 |
| 20..... | 905 | 2,110 | 2,230 | 1,710 | 1,370 | 2,800 | 3,490 | 1,940 | 6,560 | 905 | 2,170 | 1,080 |
| 21..... | 905 | 1,940 | 3,140 | 1,770 | 1,420 | 2,470 | 4,160 | 2,730 | 4,800 | 1,080 | 2,170 | 1,120 |
| 22..... | 1,010 | 1,770 | 1,990 | 1,710 | 1,710 | 2,040 | 3,860 | 2,600 | 3,860 | 1,120 | 2,170 | 1,040 |
| 23..... | 1,420 | 1,510 | 1,560 | 1,660 | 2,350 | 1,710 | 3,710 | 2,170 | 3,350 | 1,120 | 1,940 | 1,010 |
| 24..... | 4,010 | 975 | 1,240 | 1,560 | 3,140 | 1,940 | 3,210 | 1,820 | 2,730 | 1,040 | 1,560 | 975 |
| 25..... | 2,170 | 1,200 | 1,080 | 1,460 | 5,470 | 2,660 | 2,860 | 1,610 | 2,410 | 1,040 | 1,710 | 975 |
| 26..... | 1,660 | 1,330 | 1,280 | 1,370 | 5,470 | 7,510 | 2,470 | 1,880 | 2,170 | 1,010 | 1,660 | 975 |
| 27..... | 1,240 | 1,330 | 1,200 | 1,420 | 4,160 | 9,700 | 2,410 | 2,470 | 1,990 | 1,200 | 1,460 | 975 |
| 28..... | 1,280 | 1,120 | 1,160 | 1,460 | 3,640 | 5,470 | 2,410 | 4,320 | 2,040 | 1,820 | 1,420 | 975 |
| 29..... | 1,240 | 1,010 | 1,030 | 1,420 | ----- | 4,160 | 2,600 | 3,280 | 1,660 | 1,820 | 1,370 | 975 |
| 30..... | 1,160 | 1,040 | 1,200 | 1,420 | ----- | 3,350 | 2,600 | 3,000 | 1,710 | 1,820 | 1,370 | 975 |
| 31..... | 1,120 | ----- | 1,200 | 1,420 | ----- | 3,140 | ----- | 2,860 | ----- | 1,610 | 1,010 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-------------------|-------------------|
| October..... | 4,010 | 785 | 1,220 | 0.83 ^a | 0.96 |
| November..... | 2,600 | 975 | 1,420 | .973 | 1.09 |
| December..... | 3,140 | 812 | 1,210 | .82 ^a | .96 |
| January..... | 5,820 | 1,040 | 1,870 | 1.28 | 1.48 |
| February..... | 5,470 | 1,160 | 1,890 | 1.29 | 1.34 |
| March..... | 9,700 | 1,710 | 3,570 | 2.45 | 2.82 |
| April..... | 18,700 | 2,410 | 4,980 | 3.41 | 3.80 |
| May..... | 5,820 | 1,610 | 2,830 | 1.94 | 2.24 |
| June..... | 6,750 | 1,460 | 3,010 | 2.06 | 2.30 |
| July..... | 2,090 | 905 | 1,370 | .93 ^a | 1.08 |
| August..... | 4,960 | 1,010 | 1,710 | 1.17 | 1.35 |
| September..... | 1,330 | 975 | 1,100 | .753 | .84 |
| The year..... | 18,700 | 785 | 2,180 | 1.49 | 20.26 |

^a Estimated.

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, 1930.

REMARKS.—Discharge obtained from flow over dam and through various wheels and gates. Some 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, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|-------|
| 1 | 983 | 1,360 | 931 | 1,410 | 3,010 | 6,610 | 11,800 | 3,780 | 3,010 | 2,120 | 1,690 | 893 |
| 2 | 1,150 | 534 | 1,600 | 1,440 | 1,470 | 3,820 | 11,700 | 4,390 | 3,090 | 1,680 | 1,690 | 1,500 |
| 3 | 1,280 | 2,430 | 1,330 | 1,640 | 1,770 | 4,890 | 6,320 | 8,240 | 3,060 | 2,150 | 962 | 1,040 |
| 4 | 1,360 | 1,770 | 1,350 | 2,150 | 1,860 | 4,230 | 6,820 | 7,310 | 2,920 | 1,960 | 1,500 | 1,710 |
| 5 | 1,220 | 1,740 | 1,390 | 1,800 | 1,850 | 3,740 | 8,120 | 4,940 | 2,680 | 2,120 | 1,450 | 1,240 |
| 6 | 1,110 | 1,600 | 1,370 | 1,640 | 1,720 | 3,940 | 11,300 | 4,340 | 2,380 | 1,730 | 1,400 | 1,800 |
| 7 | 1,260 | 1,680 | 2,160 | 1,890 | 1,920 | 3,210 | 8,760 | 4,180 | 2,980 | 2,410 | 1,380 | 1,020 |
| 8 | 1,170 | 1,460 | 984 | 2,530 | 2,640 | 5,600 | 24,000 | 5,180 | 1,820 | 1,810 | 1,080 | 1,680 |
| 9 | 1,380 | 2,220 | 1,240 | 4,130 | 1,380 | 16,400 | 18,700 | 4,460 | 2,710 | 1,850 | 1,840 | 1,690 |
| 10 | 1,280 | 1,050 | 1,010 | 5,120 | 1,700 | 15,600 | 13,200 | 4,400 | 6,320 | 1,810 | 965 | 1,440 |
| 11 | 1,140 | 920 | 1,270 | 7,650 | 1,510 | 13,200 | 9,840 | 3,780 | 10,400 | 1,830 | 1,620 | 1,340 |
| 12 | 818 | 1,530 | 914 | 2,650 | 1,530 | 11,600 | 10,300 | 3,830 | 8,090 | 1,920 | 1,860 | 1,330 |
| 13 | 604 | 1,400 | 920 | 3,840 | 1,580 | 12,600 | 9,950 | 2,950 | 6,380 | 1,060 | 1,540 | 2,050 |
| 14 | 1,070 | 1,160 | 2,240 | 3,900 | 1,820 | 7,090 | 10,300 | 2,840 | 5,490 | 1,690 | 1,440 | 761 |
| 15 | 1,080 | 1,180 | 764 | 4,000 | 2,880 | 7,800 | 11,900 | 3,280 | 3,200 | 1,720 | 1,630 | 1,310 |
| 16 | 1,180 | 3,050 | 974 | 3,890 | 1,580 | 5,820 | 10,200 | 3,190 | 3,140 | 1,760 | 3,520 | 1,170 |
| 17 | 1,030 | 1,870 | 1,140 | 3,990 | 1,640 | 6,870 | 7,690 | 3,790 | 2,910 | 2,060 | 5,750 | 1,240 |
| 18 | 1,030 | 2,960 | 1,360 | 4,230 | 1,750 | 11,500 | 7,300 | 2,680 | 2,420 | 1,970 | 3,920 | 1,320 |
| 19 | 727 | 2,560 | 1,510 | 2,270 | 1,870 | 5,550 | 7,790 | 3,350 | 2,820 | 2,120 | 2,990 | 1,310 |
| 20 | 669 | 2,900 | 2,150 | 2,600 | 2,200 | 6,760 | 7,500 | 2,970 | 8,530 | 1,130 | 2,200 | 1,680 |
| 21 | 919 | 2,960 | 4,130 | 2,310 | 2,520 | 5,240 | 7,220 | 3,940 | 7,820 | 1,400 | 2,750 | 916 |
| 22 | 1,170 | 2,410 | 2,870 | 3,100 | 3,340 | 4,980 | 6,340 | 4,250 | 5,470 | 1,140 | 1,950 | 1,540 |
| 23 | 1,430 | 3,180 | 2,200 | 2,300 | 3,380 | 3,800 | 5,860 | 3,710 | 4,180 | 1,260 | 3,540 | 1,200 |
| 24 | 3,300 | 1,730 | 1,750 | 3,030 | 6,030 | 3,760 | 5,440 | 3,540 | 3,750 | 1,320 | 1,560 | 1,190 |
| 25 | 3,160 | 1,810 | 1,230 | 3,000 | 8,220 | 5,190 | 4,280 | 2,480 | 3,240 | 1,500 | 2,060 | 1,120 |
| 26 | 1,680 | 1,530 | 2,290 | 1,740 | 9,910 | 17,500 | 5,080 | 3,470 | 3,080 | 2,010 | 2,030 | 756 |
| 27 | 1,720 | 1,710 | 1,860 | 1,810 | 8,310 | 22,500 | 5,360 | 2,902 | 2,720 | 940 | 1,900 | 1,020 |
| 28 | 1,720 | 1,360 | 2,140 | 1,940 | 7,440 | 12,800 | 3,540 | 5,210 | 2,720 | 1,840 | 1,820 | 612 |
| 29 | 2,140 | 1,400 | 1,220 | 1,990 | ----- | 14,400 | 3,510 | 4,650 | 1,850 | 2,160 | 1,840 | 1,360 |
| 30 | 2,140 | 2,370 | 1,720 | 1,960 | ----- | 11,100 | 3,760 | 3,740 | 2,710 | 2,370 | 1,940 | 1,210 |
| 31 | 1,900 | ----- | 1,740 | 2,070 | ----- | 12,600 | ----- | 3,810 | ----- | 2,110 | 1,240 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 3,300 | 604 | 1,380 | 0.486 | 0.58 |
| November | 3,180 | 534 | 1,860 | .655 | .73 |
| December | 4,130 | 764 | 1,600 | .563 | .65 |
| January | 7,650 | 1,410 | 2,840 | 1.00 | 1.15 |
| February | 9,910 | 1,380 | 3,100 | 1.09 | 1.14 |
| March | 22,500 | 3,210 | 8,730 | 3.07 | 3.54 |
| April | 24,000 | 2,480 | 8,800 | 3.10 | 3.65 |
| May | 8,240 | 2,480 | 4,050 | 1.43 | 1.60 |
| June | 10,400 | 1,820 | 4,060 | 1.43 | .72 |
| July | 2,410 | 940 | 1,770 | .623 | .82 |
| August | 5,750 | 962 | 2,030 | .715 | .82 |
| September | 2,050 | 612 | 1,280 | .451 | .50 |
| The year | 24,000 | 534 | 3,460 | 1.22 | 16.52 |

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 Nashua and Sudbury Rivers and Lake Cochituate Basin, 4,452 square miles.

RECORDS AVAILABLE.—January, 1880, to September, 1930.

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

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|-------|-------|--------|--------|--------|-------|-------|-------|-------|-------|
| 1 | 1,606 | 1,905 | 1,484 | 1,629 | 1,946 | 8,330 | 9,036 | 4,796 | 4,952 | 3,049 | 2,235 | 1,410 |
| 2 | 1,596 | 1,429 | 2,969 | 2,706 | 1,245 | 7,395 | 8,670 | 4,864 | 5,175 | 3,163 | 1,438 | 2,291 |
| 3 | 1,870 | 402 | 2,282 | 2,740 | 3,252 | 6,529 | 8,052 | 5,779 | 5,016 | 2,461 | 786 | 2,635 |
| 4 | 2,588 | 2,114 | 2,113 | 3,051 | 3,074 | 5,289 | 7,967 | 7,312 | 4,054 | 1,467 | 2,546 | 2,412 |
| 5 | 1,772 | 2,389 | 2,110 | 1,971 | 2,807 | 5,600 | 6,977 | 7,990 | 4,231 | 2,377 | 2,611 | 2,172 |
| 6 | 552 | 2,288 | 2,021 | 3,700 | 2,920 | 4,917 | 6,600 | 6,262 | 2,758 | 2,143 | 2,155 | 1,537 |
| 7 | 1,980 | 2,472 | 1,229 | 3,238 | 2,789 | 4,644 | 8,680 | 5,366 | 2,159 | 3,351 | 2,281 | 481 |
| 8 | 2,121 | 3,276 | 381 | 3,403 | 1,809 | 4,502 | 16,005 | 5,544 | 1,904 | 3,264 | 2,383 | 2,063 |
| 9 | 2,070 | 1,596 | 2,267 | 4,966 | 904 | 11,700 | 25,085 | 6,787 | 3,056 | 3,022 | 1,416 | 2,300 |
| 10 | 2,053 | 545 | 2,470 | 6,530 | 3,221 | 17,857 | 17,145 | 6,254 | 3,922 | 3,045 | 262 | 2,206 |
| 11 | 1,779 | 511 | 2,163 | 6,231 | 3,148 | 16,237 | 12,587 | 5,259 | 7,167 | 2,759 | 2,124 | 2,224 |
| 12 | 1,220 | 2,130 | 2,145 | 6,539 | 2,692 | 13,845 | 9,871 | 5,284 | 9,336 | 1,425 | 2,145 | 1,945 |
| 13 | 432 | 2,252 | 1,994 | 5,722 | 2,543 | 13,091 | 9,417 | 5,067 | 8,266 | 429 | 2,150 | 1,469 |
| 14 | 1,886 | 2,204 | 1,077 | 5,278 | 2,573 | 13,030 | 10,461 | 4,430 | 6,881 | 2,679 | 1,966 | 579 |
| 15 | 2,153 | 2,339 | 329 | 5,161 | 2,608 | 10,876 | 10,955 | 3,927 | 4,693 | 2,854 | 2,097 | 1,975 |
| 16 | 1,829 | 1,513 | 1,750 | 5,406 | 2,372 | 8,679 | 10,680 | 3,982 | 4,538 | 2,862 | 1,433 | 2,106 |
| 17 | 1,440 | 903 | 2,010 | 4,697 | 4,188 | 8,267 | 9,121 | 4,221 | 4,237 | 2,783 | 3,014 | 1,894 |
| 18 | 1,476 | 3,990 | 2,143 | 4,693 | 3,663 | 7,132 | 8,280 | 4,150 | 3,512 | 2,574 | 5,188 | 1,926 |
| 19 | 1,265 | 4,583 | 2,222 | 3,728 | 3,187 | 7,205 | 7,642 | 4,517 | 3,607 | 1,732 | 4,259 | 1,673 |
| 20 | 302 | 3,969 | 2,500 | 4,520 | 3,437 | 8,519 | 7,602 | 5,072 | 6,356 | 3,795 | 3,790 | 1,438 |
| 21 | 1,459 | 3,707 | 2,345 | 3,841 | 4,204 | 8,639 | 8,327 | 4,935 | 8,110 | 2,701 | 2,920 | 453 |
| 22 | 1,612 | 3,584 | 3,620 | 3,680 | 5,296 | 7,776 | 7,712 | 5,331 | 6,262 | 2,782 | 2,380 | 1,855 |
| 23 | 1,641 | 2,908 | 4,533 | 3,305 | 6,288 | 6,612 | 7,391 | 5,512 | 5,371 | 2,567 | 2,688 | 1,812 |
| 24 | 1,880 | 1,466 | 3,400 | 3,066 | 7,528 | 6,487 | 6,942 | 4,585 | 5,123 | 2,343 | 2,282 | 1,556 |
| 25 | 3,034 | 3,253 | 1,824 | 3,101 | 10,050 | 6,084 | 6,460 | 3,744 | 4,399 | 2,337 | 2,978 | 1,590 |
| 26 | 3,248 | 3,063 | 2,781 | 2,487 | 12,010 | 10,645 | 5,885 | 4,107 | 3,832 | 1,525 | 2,780 | 1,641 |
| 27 | 1,105 | 2,595 | 2,456 | 4,202 | 11,274 | 22,020 | 5,502 | 4,870 | 3,735 | 547 | 2,726 | 1,312 |
| 28 | 2,987 | 913 | 1,963 | 3,634 | 9,292 | 21,916 | 5,157 | 4,755 | 3,163 | 1,825 | 2,576 | 256 |
| 29 | 2,994 | 2,003 | 2,292 | 2,840 | ----- | 16,139 | 5,112 | 6,697 | 2,434 | 2,443 | 2,343 | 1,583 |
| 30 | 2,476 | 1,703 | 3,085 | 2,752 | ----- | 12,340 | 4,940 | 6,011 | 3,034 | 2,682 | 1,255 | 1,249 |
| 31 | 2,168 | ----- | 2,744 | 2,574 | ----- | 10,699 | ----- | 5,289 | ----- | 2,615 | 692 | ----- |

| Month | Observed | Wasted into Merrimack | Corrected for net area | Per square mile (corrected) | Run-off in inches (corrected) | Rainfall in inches (mean of 33 stations) |
|-----------|----------|-----------------------|------------------------|-----------------------------|-------------------------------|--|
| October | 1,826 | 8 | 1,818 | 0.408 | 0.470 | 2.67 |
| November | 2,237 | 15 | 2,222 | .499 | .457 | 2.73 |
| December | 2,214 | 41 | 2,173 | .488 | .563 | 3.33 |
| January | 3,910 | 73 | 3,832 | .861 | .993 | 2.32 |
| February | 4,297 | 117 | 4,224 | .949 | .928 | 1.83 |
| March | 10,067 | 78 | 9,980 | 2.242 | 2.585 | 4.05 |
| April | 9,140 | 78 | 9,062 | 2.035 | 2.271 | 4.80 |
| May | 5,248 | 29 | 5,219 | 1.172 | 1.351 | 3.14 |
| June | 4,709 | 14 | 4,695 | 1.055 | 1.177 | 2.94 |
| July | 2,330 | 9 | 2,321 | .521 | .691 | 4.43 |
| August | 2,319 | 6 | 2,313 | .520 | .690 | 2.49 |
| September | 1,688 | 6 | 1,682 | .378 | .422 | 1.34 |
| The year | 4,164 | 40 | 4,124 | .926 | 12.578 | 33.07 |

BAKERS RIVER NEAR RUMNEY, N. H.

LOCATION.—Water-stage recorder 150 feet above mouth of Eastman Brook and 1½ miles upstream from Rumney Depot, Grafton County.

DRAINAGE AREA.—140 square miles.

RECORDS AVAILABLE.—November, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 7,500 second-feet Apr. 7 (gage height, 9.32 feet); minimum, 22 second-feet, Sept. 25–27 (gage height, 1.22 feet).

1928–1930: Maximum discharge, that of Apr. 7, 1930; minimum, that of Sept. 25–27, 1930.

Maximum stage known, 17.4 feet Nov. 3, 1927.

REMARKS.—Records excellent. Corrections for ice effect applied Mar. 22.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | 43 | 81 | 76 | 86 | 86 | 271 | 288 | 305 | 248 | 90 | 53 | 44 |
| 2..... | 43 | 143 | 74 | 85 | 85 | 245 | 391 | 450 | 212 | 121 | 44 | 60 |
| 3..... | 75 | 132 | 72 | 119 | 84 | 173 | 348 | 590 | 181 | 96 | 41 | 52 |
| 4..... | 86 | 110 | 72 | 138 | 82 | 161 | 328 | 362 | 153 | 79 | 40 | 41 |
| 5..... | 74 | 102 | 69 | 108 | 79 | 148 | 399 | 277 | 130 | 69 | 38 | 37 |
| 6..... | 60 | 97 | 68 | 111 | 78 | 154 | 614 | 294 | 114 | 78 | 34 | 34 |
| 7..... | 54 | 91 | 67 | 110 | 75 | 159 | 4,450 | 319 | 195 | 114 | 30 | 31 |
| 8..... | 67 | 81 | 65 | 300 | 72 | 590 | 2,110 | 308 | 192 | 85 | 30 | 29 |
| 9..... | 61 | 78 | 62 | 960 | 71 | 1,030 | 1,010 | 268 | 590 | 71 | 53 | 28 |
| 10..... | 54 | 75 | 57 | 517 | 71 | 561 | 661 | 212 | 1,550 | 68 | 136 | 26 |
| 11..... | 50 | 72 | 51 | 236 | 72 | 468 | 661 | 190 | 950 | 60 | 136 | 26 |
| 12..... | 46 | 74 | 48 | 217 | 71 | 960 | 840 | 174 | 637 | 60 | 76 | 25 |
| 13..... | 45 | 72 | 57 | 206 | 71 | 609 | 1,010 | 161 | 388 | 56 | 58 | 24 |
| 14..... | 44 | 130 | 61 | 228 | 71 | 460 | 1,070 | 158 | 271 | 74 | 48 | 23 |
| 15..... | 43 | 274 | 68 | 259 | 71 | 329 | 812 | 166 | 201 | 146 | 161 | 24 |
| 16..... | 43 | 277 | 58 | 290 | 71 | 280 | 504 | 201 | 158 | 79 | 661 | 34 |
| 17..... | 55 | 183 | 58 | 150 | 71 | 222 | 399 | 179 | 151 | 61 | 348 | 71 |
| 18..... | 75 | 193 | 68 | 130 | 71 | 209 | 454 | 151 | 274 | 50 | 171 | 53 |
| 19..... | 62 | 287 | 265 | 126 | 76 | 209 | 585 | 132 | 895 | 45 | 119 | 35 |
| 20..... | 58 | 228 | 329 | 123 | 85 | 178 | 513 | 337 | 980 | 41 | 106 | 30 |
| 21..... | 68 | 169 | 183 | 119 | 128 | 164 | 395 | 330 | 614 | 38 | 163 | 29 |
| 22..... | 64 | 132 | 134 | 115 | 233 | 126 | 384 | 236 | 585 | 35 | 110 | 26 |
| 23..... | 511 | 91 | 97 | 113 | 290 | 171 | 384 | 179 | 373 | 40 | 81 | 24 |
| 24..... | 296 | 101 | 99 | 111 | 963 | 156 | 312 | 148 | 288 | 38 | 90 | 23 |
| 25..... | 178 | 104 | 108 | 108 | 1,030 | 343 | 288 | 136 | 224 | 31 | 90 | 23 |
| 26..... | 141 | 90 | 99 | 104 | 660 | 1,750 | 291 | 271 | 174 | 30 | 72 | 22 |
| 27..... | 115 | 91 | 99 | 101 | 443 | 1,070 | 301 | 558 | 148 | 112 | 60 | 26 |
| 28..... | 99 | 92 | 97 | 99 | 319 | 572 | 294 | 576 | 136 | 123 | 50 | 29 |
| 29..... | 86 | 65 | 97 | 96 | ----- | 414 | 268 | 395 | 114 | 112 | 45 | 28 |
| 30..... | 78 | 69 | 94 | 91 | ----- | 340 | 268 | 426 | 98 | 114 | 45 | 25 |
| 31..... | 75 | ----- | 90 | 90 | ----- | 308 | ----- | 319 | ----- | 69 | 42 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|--------------------|----------------------|
| October..... | 511 | 43 | 91.9 | 0.656 | 0.76 |
| November..... | 287 | 65 | 126 | .900 | 1.00 |
| December..... | 329 | 48 | 94.9 | .678 | .78 |
| January..... | 960 | 85 | 182 | 1.30 | 1.50 |
| February..... | 1,030 | 71 | 199 | 1.42 | 1.48 |
| March..... | 1,750 | 126 | 414 | 2.96 | 3.41 |
| April..... | 4,450 | 268 | 688 | 4.91 | 5.48 |
| May..... | 590 | 132 | 284 | 2.03 | 2.34 |
| June..... | 1,550 | 98 | 374 | 2.67 | 2.98 |
| July..... | 146 | 30 | 73.7 | .526 | .61 |
| August..... | 661 | 30 | 104 | .743 | .86 |
| September..... | 71 | 22 | 32.7 | .234 | .26 |
| The year..... | 4,450 | 22 | 221 | 1.58 | 21.46 |

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, 1930.

EXTREMES.—Maximum discharge during year, 1,070 second-feet Mar. 9 (gage height, 3.94 feet); minimum, 1.9 second-feet several times in September (gage height, 0.43 foot).

1918-1930: Maximum discharge, 5,800 second-feet Nov. 4, 1927 (gage height, 7.02 feet); minimum, 1.9 second-feet several times in September, 1930 (gage height, 0.43 foot).

REMARKS.—Records good. Corrections for ice effect applied Nov. 2-25, Nov. 29 to Dec. 19, Dec. 21 to Mar. 8.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1 | 19 | 29 | 44 | 76 | 33 | 234 | 198 | 90 | 96 | 28 | 23 | 33 |
| 2 | 15 | 35 | 48 | 85 | 33 | 272 | 247 | 89 | 90 | 32 | 19 | 37 |
| 3 | 14 | 34 | 49 | 94 | 35 | 234 | 234 | 96 | 87 | 40 | 19 | 37 |
| 4 | 26 | 34 | 46 | 101 | 35 | 198 | 210 | 98 | 81 | 30 | 18 | 25 |
| 5 | 22 | 35 | 44 | 99 | 35 | 142 | 234 | 92 | 65 | 31 | 17 | 22 |
| 6 | 18 | 31 | 42 | 92 | 34 | 116 | 259 | 83 | 48 | 41 | 18 | 15 |
| 7 | 18 | 29 | 39 | 89 | 31 | 164 | 822 | 81 | 50 | 51 | 17 | 18 |
| 8 | 18 | 26 | 35 | 222 | 33 | 398 | 776 | 153 | 45 | 41 | 13 | 20 |
| 9 | 18 | 28 | 32 | 640 | 33 | 1,070 | 596 | 132 | 94 | 29 | 20 | 14 |
| 10 | 17 | 24 | 28 | 436 | 29 | 918 | 362 | 122 | 272 | 26 | 26 | 15 |
| 11 | 16 | 26 | 25 | 198 | 34 | 596 | 272 | 99 | 259 | 25 | 25 | 7.5 |
| 12 | 16 | 26 | 23 | 153 | 26 | 596 | 259 | 87 | 222 | 20 | 23 | 14 |
| 13 | 16 | 28 | 25 | 132 | 29 | 494 | 259 | 80 | 153 | 32 | 18 | 7.5 |
| 14 | 16 | 42 | 28 | 132 | 58 | 380 | 247 | 74 | 112 | 33 | 17 | 13 |
| 15 | 14 | 80 | 28 | 132 | 56 | 247 | 234 | 105 | 87 | 68 | 153 | 6.8 |
| 16 | 14 | 94 | 28 | 153 | 60 | 210 | 186 | 122 | 68 | 45 | 222 | 15 |
| 17 | 13 | 72 | 31 | 114 | 52 | 210 | 164 | 103 | 56 | 26 | 132 | 6.8 |
| 18 | 13 | 68 | 175 | 83 | 39 | 186 | 164 | 85 | 107 | 26 | 105 | 7.5 |
| 19 | 15 | 153 | 222 | 67 | 42 | 210 | 164 | 73 | 222 | 23 | 85 | 15 |
| 20 | 11 | 124 | 330 | 58 | 58 | 210 | 153 | 186 | 164 | 17 | 80 | 19 |
| 21 | 14 | 87 | 222 | 49 | 103 | 175 | 132 | 198 | 112 | 17 | 62 | 1.9 |
| 22 | 14 | 62 | 132 | 45 | 186 | 164 | 142 | 142 | 94 | 18 | 48 | 11 |
| 23 | 107 | 50 | 64 | 38 | 330 | 122 | 164 | 105 | 76 | 18 | 40 | 3.7 |
| 24 | 108 | 52 | 67 | 36 | 554 | 132 | 142 | 99 | 68 | 17 | 73 | 7.5 |
| 25 | 61 | 55 | 72 | 36 | 870 | 164 | 132 | 81 | 58 | 13 | 68 | 11 |
| 26 | 50 | 73 | 70 | 34 | 822 | 822 | 122 | 132 | 50 | 11 | 48 | 2.2 |
| 27 | 40 | 49 | 67 | 34 | 554 | 730 | 112 | 132 | 45 | 46 | 35 | 17 |
| 28 | 31 | 46 | 66 | 38 | 330 | 514 | 107 | 132 | 85 | 50 | 26 | 5.4 |
| 29 | 29 | 44 | 68 | 34 | ----- | 300 | 94 | 132 | 51 | 52 | 28 | 12 |
| 30 | 24 | 44 | 70 | 36 | ----- | 234 | 92 | 132 | 36 | 65 | 33 | 6.1 |
| 31 | 20 | ----- | 73 | 34 | ----- | 210 | ----- | 122 | ----- | 38 | 20 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 108 | 11 | 26.7 | 0.347 | 0.39 |
| November | 153 | 24 | 52.7 | .671 | .75 |
| December | 330 | 23 | 74.0 | .943 | 1.09 |
| January | 640 | 34 | 115 | 1.46 | 1.68 |
| February | 870 | 26 | 162 | 2.06 | 2.14 |
| March | 1,070 | 116 | 344 | 4.38 | 5.05 |
| April | 822 | 92 | 243 | 3.10 | 3.46 |
| May | 198 | 73 | 112 | 1.43 | 1.65 |
| June | 272 | 36 | 102 | 1.30 | 1.45 |
| July | 68 | 11 | 32.5 | .414 | .48 |
| August | 222 | 13 | 49.4 | .623 | .73 |
| September | 37 | 1.9 | 14.2 | .18 | .20 |
| The year | 1,070 | 1.9 | 110 | 1.40 | 19.07 |

CONTOOCOOK RIVER AT PENACOOK, N. H.

LOCATION.—Water-stage recorder in Penacook, Merrimack County, half a mile above mouth of river.

DRAINAGE AREA.—763 square miles.

RECORDS AVAILABLE.—November, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 5,600 second-feet Mar. 27 (gage height, 4.87 feet); minimum, 120 second-feet Oct. 21 (gage height, 1.00 foot).
1928-1930: Maximum discharge, 8,330 second-feet Mar. 24, 1929 (gage height, 5.70 feet); minimum, 70 second-feet Sept. 28, 1929.

REMARKS.—Records excellent except those for periods of ice effect, Dec. 10-13, 16, 21-27, Jan. 16 to Feb. 20, which are good.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|---------|-------|-------|-------|-------|-------|------|------|-------|
| 1..... | 188 | 237 | 275 | 452 | 452 | 1,580 | 2,010 | 880 | 782 | 350 | 233 | 285 |
| 2..... | 178 | 225 | 249 | 415 | 445 | 1,460 | 1,850 | 870 | 681 | 562 | 225 | 295 |
| 3..... | 194 | 249 | 267 | 415 | 445 | 1,570 | 1,770 | 900 | 706 | 528 | 233 | 275 |
| 4..... | 214 | 290 | 218 | 554 | 438 | 1,580 | 1,680 | 870 | 724 | 460 | 245 | 261 |
| 5..... | 194 | 265 | 229 | 1,550 | 438 | 1,400 | 1,550 | 800 | 638 | 336 | 233 | 261 |
| 6..... | 211 | 300 | 241 | 1,240 | 422 | 1,150 | 1,370 | 850 | 622 | 270 | 208 | 305 |
| 7..... | 225 | 290 | 222 | 528 | 415 | 1,100 | 1,720 | 810 | 562 | 265 | 197 | 310 |
| 8..... | 218 | 257 | 214 | 840 | 408 | 1,540 | 2,700 | 820 | 415 | 265 | 222 | 280 |
| 9..... | 218 | 218 | 233 | 1,320 | 400 | 4,650 | 3,090 | 1,010 | 400 | 452 | 229 | 249 |
| 10..... | 218 | 214 | 233 | 1,700 | 400 | 4,650 | 2,690 | 1,070 | 706 | 477 | 225 | 237 |
| 11..... | 218 | 211 | 293 | * 1,610 | 385 | 4,520 | 2,150 | 954 | 1,030 | 452 | 214 | 237 |
| 12..... | 200 | 225 | 245 | * 1,400 | 371 | 3,500 | 1,820 | 791 | 1,230 | 422 | 204 | 245 |
| 13..... | 180 | 197 | 245 | * 1,270 | 378 | 3,090 | 1,610 | 744 | 1,270 | 350 | 190 | 305 |
| 14..... | 211 | 218 | 275 | * 1,140 | 422 | 2,790 | 1,510 | 772 | 998 | 290 | 188 | 280 |
| 15..... | 194 | 233 | 275 | 1,020 | 604 | 2,240 | 1,550 | 791 | 800 | 261 | 197 | 261 |
| 16..... | 208 | 300 | 270 | 932 | 690 | 1,800 | 1,430 | 870 | 672 | 343 | 218 | 245 |
| 17..... | 200 | 350 | 270 | 880 | 630 | 1,580 | 1,350 | 870 | 647 | 415 | 295 | 233 |
| 18..... | 204 | 445 | 265 | 830 | 554 | 1,580 | 1,310 | 800 | 734 | 400 | 392 | 237 |
| 19..... | 188 | 630 | 408 | 772 | 502 | 1,780 | 1,260 | 744 | 965 | 364 | 357 | 257 |
| 20..... | 185 | 744 | 570 | 715 | 638 | 1,990 | 1,130 | 976 | 1,090 | 261 | 322 | 249 |
| 21..... | 208 | 698 | 520 | 690 | 1,170 | 1,940 | 1,060 | 1,340 | 965 | 261 | 385 | 245 |
| 22..... | 185 | 613 | 460 | 647 | 1,470 | 1,680 | 1,180 | 1,310 | 830 | 233 | 378 | 233 |
| 23..... | 200 | 511 | 408 | 613 | 1,580 | 1,400 | 1,200 | 1,120 | 744 | 233 | 350 | 208 |
| 24..... | 245 | 438 | 364 | 588 | 2,020 | 1,270 | 1,180 | 910 | 690 | 322 | 350 | 204 |
| 25..... | 350 | 400 | 364 | 562 | 2,410 | 1,530 | 1,040 | 800 | 647 | 315 | 371 | 190 |
| 26..... | 357 | 305 | 371 | 528 | 2,690 | 3,930 | 1,040 | 800 | 630 | 261 | 310 | 194 |
| 27..... | 315 | 300 | 385 | 511 | 2,410 | 5,460 | 921 | 910 | 622 | 275 | 300 | 197 |
| 28..... | 295 | 329 | 422 | 486 | 1,970 | 4,920 | 810 | 998 | 570 | 285 | 310 | 200 |
| 29..... | 245 | 329 | 400 | 477 | ----- | 3,500 | 890 | 1,060 | 392 | 265 | 336 | 208 |
| 30..... | 241 | 350 | 408 | 468 | ----- | 2,600 | 921 | 1,040 | 343 | 245 | 310 | 200 |
| 31..... | 225 | ----- | 378 | 460 | ----- | 2,150 | ----- | 900 | ----- | 245 | 315 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 357 | 178 | 223 | 0.292 | 0.34 |
| November..... | 744 | 197 | 346 | .453 | .51 |
| December..... | 570 | 214 | 319 | .418 | .48 |
| January..... | 1,700 | 415 | 828 | 1.09 | 1.26 |
| February..... | 2,690 | 371 | 898 | 1.18 | 1.23 |
| March..... | 5,460 | 1,100 | 2,450 | 3.21 | 3.70 |
| April..... | 3,090 | 810 | 1,530 | 2.01 | 2.24 |
| May..... | 1,340 | 744 | 915 | 1.20 | 1.38 |
| June..... | 1,270 | 343 | 737 | .966 | 1.08 |
| July..... | 562 | 233 | 338 | .443 | .51 |
| August..... | 392 | 188 | 276 | .362 | .42 |
| September..... | 310 | 190 | 246 | .322 | .36 |
| The year..... | 5,460 | 178 | 758 | .993 | 13.51 |

* Estimated.

NUBANUSIT BROOK NEAR PETERBORO, N. H.

LOCATION.—Water-stage recorder at highway bridge $1\frac{1}{4}$ miles above Peterboro, Hillsborough County.

DRAINAGE AREA.—48.1 square miles.

RECORDS AVAILABLE.—November, 1920, to September, 1930.

EXTREMES.—Maximum discharge during year not recorded; minimum, 1.0 second-foot Nov. 7 (gage height 1.60 feet).

1920-1930: Maximum discharge, 1,050 second-feet Mar. 10, 1921 (gage height, 5.4 feet); minimum, 0.4 second-foot Aug. 15, 1926.

REMARKS.—Records good except those for estimated periods, which are poor. Flow regulated by several storage reservoirs.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------------|---------|------|---------|------|-------|-------|------------------|------|-------------------|-------|-------|-------|
| 1..... | 4.0 | 47 | 11 | 4.4 | * 32 | * 100 | * 73 | * 45 | * 35 | * 38 | 15 | * 23 |
| 2..... | 47 | 4.7 | 48 | 45 | * 6.0 | * 90 | * 70 | * 47 | 54 | * 35 | 10 | * 24 |
| 3..... | 42 | 6.2 | 50 | 45 | * 34 | * 130 | * 76 | * 51 | 44 | * 30 | 2.0 | * 25 |
| 4..... | 48 | 5.4 | 54 | 28 | * 36 | * 112 | * 82 | * 49 | 40 | * 8.4 | 26 | * 25 |
| 5..... | 4.1 | 5.4 | 13 | 5.0 | * 35 | * 100 | * 72 | 58 | * 38 | * 26 | 16 | 14 |
| 6..... | 4.1 | 5.4 | 7.0 | 40 | * 34 | * 88 | * 62 | * 48 | * 35 | * 33 | 17 | 6.0 |
| 7..... | 3.5 | 7.0 | 4.4 | * 73 | * 34 | * 89 | * 130 | 38 | * 4.0 | 29 | 16 | 2.5 |
| 8..... | 3.2 | 5.0 | 4.1 | * 77 | * 30 | * 120 | * 157 | * 48 | * 3.0 | 20 | 18 | 38 |
| 9..... | 43 | 5.4 | 48 | * 75 | * 5.0 | * 210 | * 155 | * 60 | * 50 | 15 | 17 | 42 |
| 10..... | 45 | 5.4 | 46 | 71 | * 28 | * 195 | * 138 | * 46 | 50 | 17 | 1.5 | 32 |
| 11..... | 45 | 5.4 | 52 | 45 | * 30 | * 181 | * 96 | * 25 | 85 | 16 | 17 | 16 |
| 12..... | 3.2 | 45 | 14 | 5.0 | * 32 | * 162 | * 59 | 58 | * 80 | 14 | 44 | 9.0 |
| 13..... | 3.5 | 47 | 2.0 | 45 | * 31 | * 140 | * 50 | * 55 | * 67 | 12 | 43 | 2.2 |
| 14..... | 4.1 | 39 | 5.0 | 48 | * 31 | * 113 | 67 | 46 | * 52 | 24 | 36 | 2.2 |
| 15..... | 3.8 | 4.0 | 5.0 | 53 | * 39 | * 88 | 54 | * 40 | * 15 | 48 | 18 | * 37 |
| 16..... | * 45 | 4.7 | 48 | 52 | * 5.0 | * 66 | * 57 | * 42 | * 43 | 46 | 11 | 40 |
| 17..... | * 45 | 4.4 | 56 | 46 | * 38 | 61 | * 64 | * 43 | 48 | 41 | 2.7 | 40 |
| 18..... | 46 | 52 | 44 | 40 | * 34 | * 69 | * 70 | * 24 | 48 | 15 | 37 | * 40 |
| 19..... | * 5.0 | 52 | 40 | 5.0 | * 39 | * 72 | * 71 | * 35 | 88 | 9.0 | 42 | 40 |
| 20..... | * 5.0 | 44 | 6.0 | 35 | * 44 | * 71 | * 53 | * 60 | 108 | 1.6 | 40 | * 15 |
| 21..... | * 5.0 | 44 | 7.0 | 42 | * 110 | * 69 | 68 | * 90 | 88 | 16 | 4.0 | * 2.2 |
| 22..... | 5.0 | 5.0 | 5.0 | 42 | * 240 | * 58 | * 56 | * 87 | 57 | 15 | 7.0 | * 40 |
| 23..... | 45 | 8.0 | 5.0 | 41 | * 230 | * 44 | 47 | * 80 | 51 | 9.0 | 5.0 | 40 |
| 24..... | 44 | 7.0 | * 5.0 | 39 | * 212 | 49 | * 42 | * 72 | 50 | 9.0 | 1.9 | * 40 |
| 25..... | 46 | 48 | * 5.0 | 37 | * 200 | * 70 | * 40 | * 25 | 40 | 14 | 38 | * 25 |
| 26..... | 12 | 50 | * 50 | 5.0 | * 170 | * 178 | * 40 | 56 | 18 | * 15 | 39 | * 5.0 |
| 27..... | 2.3 | 48 | 84 | * 34 | * 140 | * 190 | * 32 | 48 | 18 | * 2.0 | 40 | * 2.2 |
| 28..... | 2.6 | 6.0 | 40 | * 38 | * 120 | * 162 | 58 | * 50 | 17 | * 4.0 | * 32 | * 2.2 |
| 29..... | 2.6 | 7.8 | 4.7 | * 38 | | * 132 | 44 | * 52 | 16 | 9.0 | * 20 | * 36 |
| 30..... | 46 | 8.2 | 5.5 | * 38 | | * 100 | 43 | * 51 | * 39 | 16 | * 7.0 | 40 |
| 31..... | 42 | | 3.2 | * 37 | | 86 | | * 50 | | 16 | * 4.0 | |
| Month | Maximum | | Minimum | | Mean | | Per square mile | | Run-off in inches | | | |
| October..... | 48 | | 2.3 | | 22.6 | | 0.470 | | 0.54 | | | |
| November..... | 52 | | 4.0 | | 20.9 | | .43 ⁸ | | .49 | | | |
| December..... | 84 | | 2.0 | | 24.9 | | .518 | | .60 | | | |
| January..... | 77 | | 4.4 | | 39.6 | | .823 | | .95 | | | |
| February..... | 240 | | 5.0 | | 72.1 | | 1.50 | | 1.56 | | | |
| March..... | 210 | | 44 | | 110 | | 2.29 | | 2.64 | | | |
| April..... | 157 | | 32 | | 70.9 | | 1.47 | | 1.64 | | | |
| May..... | 90 | | 24 | | 50.9 | | 1.06 | | 1.22 | | | |
| June..... | 108 | | 3.0 | | 46.0 | | .95 ⁸ | | 1.07 | | | |
| July..... | 48 | | 1.6 | | 19.5 | | .40 ⁵ | | .47 | | | |
| August..... | 44 | | 1.5 | | 20.2 | | .42 ⁰ | | .48 | | | |
| September..... | 42 | | 2.2 | | 23.5 | | .48 ⁹ | | .55 | | | |
| The year..... | 240 | | 1.5 | | 43.2 | | .89 ⁷ | | 12.21 | | | |

* Estimated.

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

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

DRAINAGE AREA.—54.5 square miles.

RECORDS AVAILABLE.—August, 1924, to September, 1930.

EXTREMES.—Maximum discharge during year, 302 second-feet Mar. 9, 26; minimum, 4.5 second-feet Oct. 1, 2 (gage height, 0.40 foot).

1924-1930: Maximum discharge, 2,100 second-feet Nov. 5, 1927 (gage height, 6.30 feet); minimum, 4 second-feet Sept. 26, 29, 1925 (gage height, 0.40 foot).

REMARKS.—Records good. Corrections for ice effect applied Nov. 24-26, Nov. 28 to Dec. 27, Jan. 12 to Feb. 24. Small storage regulation by Long Pond and others.

Daily and monthly discharge. in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 4.5 | 23 | 7.6 | 22 | 41 | 179 | 203 | 54 | 71 | 17 | 17 | 16 |
| 2..... | 5.2 | 24 | 7.2 | 21 | 41 | 163 | 156 | 58 | 66 | 24 | 16 | 16 |
| 3..... | 9.0 | 26 | 6.1 | 27 | 37 | 141 | 148 | 84 | 62 | 24 | 15 | 16 |
| 4..... | 15 | 26 | 5.8 | 34 | 33 | 128 | 141 | 80 | 62 | 20 | 14 | 18 |
| 5..... | 19 | 27 | 5.5 | 32 | 32 | 114 | 128 | 76 | 54 | 22 | 14 | 16 |
| 6..... | 24 | 26 | 5.5 | 30 | 30 | 98 | 121 | 71 | 50 | 21 | 13 | 13 |
| 7..... | 31 | 24 | 5.5 | 36 | 30 | 94 | 163 | 66 | 39 | 19 | 14 | 14 |
| 8..... | 37 | 20 | 5.5 | 68 | 29 | 156 | 203 | 80 | 31 | 18 | 16 | 12 |
| 9..... | 37 | 20 | 5.2 | 117 | 29 | 302 | 195 | 98 | 37 | 21 | 20 | 12 |
| 10..... | 35 | 20 | 5.2 | 130 | 28 | 281 | 203 | 98 | 54 | 24 | 18 | 11 |
| 11..... | 35 | 18 | 4.9 | 136 | 28 | 262 | 203 | 94 | 89 | 22 | 16 | 10 |
| 12..... | 33 | 18 | 4.9 | 136 | 28 | 281 | 187 | 80 | 84 | 20 | 15 | 9.9 |
| 13..... | 32 | 17 | 5.2 | 150 | 29 | 281 | 171 | 71 | 80 | 18 | 14 | 9.0 |
| 14..... | 32 | 16 | 5.8 | 150 | 47 | 244 | 163 | 62 | 66 | 18 | 12 | 9.0 |
| 15..... | 31 | 19 | 6.8 | 136 | 55 | 227 | 148 | 58 | 54 | 20 | 15 | 8.8 |
| 16..... | 30 | 22 | 8.7 | 123 | 49 | 227 | 134 | 66 | 42 | 20 | 20 | 8.2 |
| 17..... | 28 | 22 | 11 | 111 | 45 | 187 | 121 | 71 | 37 | 17 | 22 | 8.8 |
| 18..... | 27 | 30 | 14 | 100 | 45 | 171 | 114 | 62 | 58 | 15 | 21 | 8.5 |
| 19..... | 26 | 64 | 18 | 89 | 49 | 156 | 108 | 54 | 98 | 12 | 20 | 8.2 |
| 20..... | 24 | 55 | 28 | 78 | 59 | 148 | 103 | 84 | 108 | 12 | 17 | 8.2 |
| 21..... | 24 | 34 | 24 | 73 | 68 | 141 | 94 | 108 | 94 | 12 | 20 | 7.8 |
| 22..... | 23 | 26 | 22 | 68 | 94 | 134 | 98 | 103 | 80 | 16 | 20 | 7.4 |
| 23..... | 37 | 18 | 21 | 64 | 123 | 128 | 98 | 98 | 58 | 18 | 21 | 6.9 |
| 24..... | 41 | 16 | 18 | 59 | 178 | 98 | 89 | 84 | 46 | 17 | 27 | 6.9 |
| 25..... | 34 | 13 | 18 | 55 | 264 | 121 | 84 | 89 | 38 | 16 | 28 | 6.5 |
| 26..... | 31 | 13 | 19 | 51 | 264 | 281 | 76 | 94 | 36 | 15 | 23 | 6.5 |
| 27..... | 28 | 11 | 20 | 49 | 244 | 281 | 66 | 89 | 31 | 18 | 19 | 7.6 |
| 28..... | 26 | 9.8 | 20 | 47 | 224 | 262 | 66 | 89 | 26 | 23 | 18 | 8.2 |
| 29..... | 24 | 9.0 | 21 | 45 | ----- | 262 | 62 | 89 | 24 | 21 | 16 | 7.6 |
| 30..... | 23 | 8.3 | 22 | 41 | ----- | 227 | 58 | 84 | 20 | 20 | 15 | 7.2 |
| 31..... | 22 | ----- | 22 | 41 | ----- | 211 | ----- | 80 | ----- | 18 | 14 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 41 | 4.5 | 26.7 | 0.490 | 0.56 |
| November..... | 64 | 8.3 | 22.5 | .413 | .46 |
| December..... | 28 | 4.9 | 12.7 | .233 | .27 |
| January..... | 150 | 21 | 74.8 | 1.37 | 1.58 |
| February..... | 264 | 28 | 79.4 | 1.46 | 1.52 |
| March..... | 302 | 94 | 193 | 3.54 | 4.08 |
| April..... | 203 | 58 | 130 | 2.39 | 2.67 |
| May..... | 108 | 54 | 79.8 | 1.46 | 1.68 |
| June..... | 108 | 20 | 56.5 | 1.04 | 1.16 |
| July..... | 24 | 12 | 18.6 | .341 | .39 |
| August..... | 28 | 12 | 17.7 | .325 | .37 |
| September..... | 18 | 6.5 | 10.2 | .187 | .21 |
| The year..... | 302 | 4.5 | 60.1 | 1.10 | 14.95 |

BLACKWATER RIVER NEAR CONTOOCOOK, 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.—134 square miles (revised).

RECORDS AVAILABLE.—May, 1918, to September, 1920; February, 1927, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,500 second-feet Mar. 11 (gage height, 9.35 feet); minimum, 22 second-feet Sept. 28 (gage height, 1.98 feet). 1918–1920, 1927–1930: Maximum discharge, 2,730 second-feet Mar. 29, 1920 (gage height, 15.0 feet); minimum, 20 second-feet Aug. 4, 1919 (gage height, 1.90 feet).

REMARKS.—Records good. Corrections for ice effect applied Nov. 30 to Dec. 5, Dec. 8–27, Jan. 4–6, Jan. 12 to Feb. 24. Slight diurnal regulation and small seasonal storage in Pleasant Pond.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1 | 29 | 35 | 45 | 73 | 73 | 484 | 322 | 136 | 136 | 82 | 51 | 88 |
| 2 | 28 | 36 | 44 | 72 | 75 | 374 | 322 | 136 | 119 | 76 | 47 | 88 |
| 3 | 30 | 36 | 43 | 76 | 74 | 374 | 322 | 146 | 111 | 76 | 47 | 88 |
| 4 | 30 | 40 | 43 | 82 | 66 | 352 | 322 | 146 | 96 | 74 | 45 | 88 |
| 5 | 39 | 42 | 44 | 95 | 67 | 266 | 301 | 146 | 88 | 72 | 42 | 82 |
| 6 | 41 | 41 | 50 | 102 | 63 | 224 | 280 | 136 | 82 | 69 | 39 | 76 |
| 7 | 38 | 40 | 48 | 116 | 64 | 204 | 386 | 119 | 82 | 59 | 37 | 70 |
| 8 | 35 | 37 | 42 | 131 | 65 | 352 | 628 | 119 | 96 | 60 | 38 | 67 |
| 9 | 34 | 34 | 40 | 245 | 65 | 980 | 870 | 155 | 111 | 61 | 36 | 63 |
| 10 | 34 | 32 | 38 | 506 | 70 | 1,390 | 716 | 186 | 196 | 60 | 38 | 60 |
| 11 | 32 | 32 | 36 | 682 | 62 | 1,410 | 452 | 165 | 280 | 58 | 40 | 59 |
| 12 | 30 | 32 | 28 | 528 | 63 | 980 | 343 | 136 | 301 | 53 | 41 | 56 |
| 13 | 30 | 31 | 35 | 352 | 64 | 848 | 322 | 128 | 270 | 51 | 41 | 54 |
| 14 | 29 | 34 | 39 | 245 | 65 | 672 | 301 | 111 | 217 | 52 | 39 | 51 |
| 15 | 33 | 38 | 41 | 224 | 76 | 496 | 280 | 111 | 165 | 48 | 41 | 46 |
| 16 | 28 | 52 | 44 | 224 | 88 | 364 | 270 | 136 | 119 | 51 | 45 | 40 |
| 17 | 30 | 73 | 45 | 184 | 88 | 322 | 248 | 165 | 103 | 55 | 165 | 37 |
| 18 | 29 | 88 | 49 | 148 | 82 | 280 | 238 | 146 | 103 | 55 | 165 | 34 |
| 19 | 28 | 109 | 62 | 124 | 82 | 322 | 228 | 128 | 165 | 52 | 128 | 34 |
| 20 | 28 | 140 | 76 | 116 | 88 | 322 | 217 | 165 | 238 | 41 | 111 | 32 |
| 21 | 26 | 131 | 102 | 102 | 116 | 322 | 206 | 238 | 238 | 33 | 111 | 31 |
| 22 | 26 | 109 | 102 | 102 | 184 | 280 | 196 | 270 | 186 | 33 | 88 | 28 |
| 23 | 32 | 82 | 76 | 95 | 266 | 259 | 206 | 228 | 146 | 35 | 76 | 26 |
| 24 | 49 | 68 | 68 | 88 | 418 | 228 | 217 | 175 | 119 | 37 | 70 | 26 |
| 25 | 74 | 60 | 63 | 82 | 726 | 259 | 206 | 146 | 103 | 37 | 76 | 25 |
| 26 | 70 | 57 | 60 | 76 | 880 | 804 | 196 | 155 | 96 | 36 | 88 | 24 |
| 27 | 72 | 53 | 63 | 76 | 880 | 1,220 | 186 | 175 | 82 | 41 | 76 | 28 |
| 28 | 62 | 52 | 66 | 82 | 682 | 1,290 | 146 | 186 | 82 | 38 | 82 | 22 |
| 29 | 46 | 45 | 66 | 88 | ----- | 892 | 146 | 175 | 103 | 51 | 88 | 24 |
| 30 | 38 | 45 | 70 | 82 | ----- | 540 | 146 | 165 | 103 | 59 | 103 | 24 |
| 31 | 35 | ----- | 73 | 76 | ----- | 386 | ----- | 155 | ----- | 56 | 96 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 74 | 26 | 37.6 | 0.281 | 0.32 |
| November | 140 | 31 | 56.8 | .424 | .47 |
| December | 102 | 28 | 54.9 | .410 | .47 |
| January | 682 | 72 | 170 | 1.27 | 1.46 |
| February | 880 | 62 | 200 | 1.49 | 1.55 |
| March | 1,410 | 204 | 565 | 4.22 | 4.86 |
| April | 870 | 146 | 307 | 2.29 | 2.56 |
| May | 270 | 111 | 158 | 1.18 | 1.36 |
| June | 301 | 82 | 145 | 1.08 | 1.20 |
| July | 82 | 33 | 53.6 | .400 | .46 |
| August | 165 | 36 | 70.6 | .527 | .61 |
| September | 88 | 22 | 49.0 | .366 | .41 |
| The year | 1,410 | 22 | 155 | 1.16 | 15.73 |

SUNCOOK RIVER AT NORTH CHICHESTER, N. H.

LOCATION.—Water-stage recorder 500 feet from Chichester depot, North Chichester, Merrimack County, and 2½ miles above mouth of Little Suncook River.

DRAINAGE AREA.—157 square miles.

RECORDS AVAILABLE.—May, 1918, to September, 1920; June, 1921, to November, 1927; November, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,020 second-feet Mar. 26 (gage height, 8.44 feet); minimum, 3.0 second-feet Nov. 29 (gage height, 0.98 foot). 1918-1920, 1921-1927, 1928-1930: Maximum discharge, 4,300 second-feet Apr. 7, 1923 (gage height, 13.0 feet); minimum, 0.4 second-foot Sept. 4, 1926 (gage height, 0.82 foot).

REMARKS.—Records good except those for periods of ice effect, Dec. 3-7, 9-14, 21-26, Jan. 5-7, Jan. 10 to Feb. 23, which are fair. Flow regulated by storage.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | 7.1 | 16 | 16 | 32 | 60 | 386 | 400 | 154 | 30 | 144 | 126 | 10 |
| 2..... | 16 | 23 | 43 | 102 | 25 | 384 | 381 | 153 | 180 | 150 | 79 | 10 |
| 3..... | 28 | 13 | 45 | 129 | 80 | 438 | 354 | 92 | 150 | 145 | 18 | 10 |
| 4..... | 10 | 36 | 45 | 150 | 72 | 345 | 328 | 95 | 158 | 18 | 92 | 10 |
| 5..... | 9.5 | 49 | 46 | 38 | 62 | 328 | 280 | 196 | 134 | 13 | 71 | 10 |
| 6..... | 7.1 | 15 | 48 | 24 | 60 | 299 | 282 | 148 | 130 | 17 | 64 | 12 |
| 7..... | 6.0 | 10 | 33 | 25 | 53 | 308 | 630 | 156 | 84 | 146 | 69 | 14 |
| 8..... | 14 | 19 | 19 | 163 | 46 | 413 | 840 | 142 | 19 | 124 | 76 | 72 |
| 9..... | 17 | 35 | 39 | 378 | 27 | 1,090 | 654 | 160 | 148 | 144 | 76 | 82 |
| 10..... | 8.3 | 8.9 | 44 | 260 | 18 | 974 | 486 | 69 | 162 | 129 | 18 | 72 |
| 11..... | 7.1 | 6.0 | 40 | 180 | 17 | 773 | 410 | 25 | 184 | 140 | 100 | 73 |
| 12..... | 26 | 6.7 | 35 | 130 | 65 | 720 | 364 | 153 | 274 | 84 | 70 | 24 |
| 13..... | 30 | 7.1 | 42 | 217 | 100 | 700 | 345 | 149 | 222 | 19 | 83 | 39 |
| 14..... | 22 | 9.5 | 47 | 153 | 115 | 612 | 322 | 152 | 130 | 142 | 75 | 17 |
| 15..... | 13 | 12 | 17 | 178 | 110 | 496 | 286 | 154 | 111 | 141 | 110 | 56 |
| 16..... | 14 | 11 | 11 | 165 | 80 | 420 | 262 | 162 | 180 | 119 | 78 | 64 |
| 17..... | 10 | 9.5 | 12 | 159 | 102 | 380 | 246 | 73 | 144 | 142 | 19 | 60 |
| 18..... | 11 | 65 | 23 | 92 | 109 | 374 | 236 | 23 | 148 | 131 | 104 | 25 |
| 19..... | 10 | 61 | 28 | 40 | 111 | 592 | 242 | 165 | 169 | 18 | 72 | 59 |
| 20..... | 10 | 96 | 38 | 25 | 145 | 572 | 250 | 192 | 160 | 79 | 74 | 36 |
| 21..... | 7.7 | 54 | 50 | 108 | 200 | 482 | 245 | 184 | 89 | 135 | 80 | 16 |
| 22..... | 12 | 62 | 35 | 105 | 310 | 372 | 232 | 162 | 38 | 64 | 56 | 41 |
| 23..... | 16 | 88 | 37 | 100 | 400 | 316 | 222 | 138 | 167 | 130 | 46 | 20 |
| 24..... | 9.5 | 16 | 57 | 93 | 788 | 291 | 236 | 126 | 142 | 142 | 20 | 38 |
| 25..... | 11 | 58 | 42 | 87 | 900 | 462 | 216 | 27 | 136 | 131 | 133 | 44 |
| 26..... | 22 | 49 | 35 | 30 | 718 | 1,770 | 176 | 155 | 140 | 78 | 65 | 46 |
| 27..... | 8.3 | 49 | 58 | 82 | 566 | 1,680 | 178 | 168 | 154 | 24 | 77 | 40 |
| 28..... | 6.7 | 15 | 56 | 81 | 474 | 1,090 | 216 | 172 | 85 | 138 | 68 | 13 |
| 29..... | 10 | 27 | 42 | 80 | ----- | 701 | 171 | 198 | 17 | 137 | 82 | 22 |
| 30..... | 9.5 | 28 | 237 | 77 | ----- | 548 | 160 | 99 | 142 | 139 | 38 | 30 |
| 31..... | 8.3 | ----- | 93 | 70 | ----- | 446 | ----- | 85 | ----- | 132 | 13 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 30 | 6.0 | 12.8 | 0.082 | 0.09 |
| November..... | 96 | 6.0 | 31.8 | .208 | .23 |
| December..... | 237 | 11 | 45.6 | .290 | .33 |
| January..... | 378 | 24 | 115 | .732 | .84 |
| February..... | 900 | 17 | 208 | 1.32 | 1.38 |
| March..... | 1,770 | 291 | 605 | 3.85 | 4.44 |
| April..... | 840 | 160 | 322 | 2.05 | 2.29 |
| May..... | 198 | 23 | 132 | .841 | .97 |
| June..... | 274 | 17 | 134 | .854 | .95 |
| July..... | 150 | 13 | 106 | .675 | .78 |
| August..... | 133 | 13 | 69.4 | .442 | .51 |
| September..... | 82 | 10 | 35.5 | .226 | .25 |
| The year..... | 1,770 | 6.0 | 151 | .962 | 13.06 |

SOUHEGAN RIVER AT MERRIMACK, N. H.

LOCATION.—Water-stage recorder at head of Atherton Falls Merrimack, Hillsborough County, $1\frac{1}{2}$ miles above confluence with Merrimack River.

DRAINAGE AREA.—168 square miles.

RECORDS AVAILABLE.—July, 1909, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,760 second-feet Mar. 9 (gage height, 6.78 feet); minimum, 14 second-feet Oct. 17 (gage height, 1.89 feet).

1909-1930: Maximum discharge, 10,400 second-feet Apr. 8, 1924 (gage height, 11.82 feet); minimum, 13 second-feet Sept. 9, 1926 (gage height, 1.88 feet).

REMARKS.—Records good. Corrections for ice effect applied Dec. 10-13, Jan. 21-27, 30, 31, Feb. 1, 5-8, 15-18.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|-------|-------|-----|-------|-------|------|-------|
| 1..... | 18 | 28 | 33 | 54 | 66 | 253 | 375 | 162 | 165 | 90 | 35 | 21 |
| 2..... | 20 | 37 | 29 | 60 | 66 | 236 | 343 | 180 | 158 | 108 | 33 | 21 |
| 3..... | 29 | 29 | 35 | 78 | 82 | 260 | 331 | 216 | 142 | 122 | 26 | 21 |
| 4..... | 34 | 29 | 33 | 162 | 64 | 207 | 307 | 188 | 116 | 104 | 21 | 27 |
| 5..... | 43 | 38 | 38 | 120 | 60 | 175 | 270 | 170 | 106 | 102 | 23 | 27 |
| 6..... | 37 | 40 | 36 | 102 | 57 | 175 | 228 | 158 | 96 | 60 | 34 | 23 |
| 7..... | 27 | 35 | 40 | 128 | 54 | 170 | 754 | 148 | 76 | * 60 | 41 | 28 |
| 8..... | 30 | 36 | 36 | 207 | 52 | 596 | 1,040 | 166 | 57 | * 70 | 33 | 26 |
| 9..... | 26 | 35 | 29 | 384 | 52 | 2,310 | 610 | 384 | 66 | * 160 | 35 | 27 |
| 10..... | 25 | 29 | 27 | 359 | 76 | 1,010 | 456 | 303 | 190 | * 105 | 33 | 20 |
| 11..... | 25 | 25 | 26 | 192 | 60 | 632 | 388 | 201 | 411 | * 99 | 23 | 21 |
| 12..... | 26 | 25 | 25 | 135 | 57 | 610 | 335 | 185 | 339 | * 96 | 28 | 21 |
| 13..... | 29 | 25 | 29 | 125 | 70 | 535 | 288 | 170 | 232 | * 70 | 29 | 22 |
| 14..... | 22 | 25 | 33 | 188 | 80 | 429 | 307 | 155 | 172 | * 59 | 46 | 23 |
| 15..... | 22 | 27 | 34 | 213 | 160 | 327 | 274 | 160 | 116 | * 75 | 32 | 22 |
| 16..... | 21 | 28 | 38 | 253 | 160 | 295 | 242 | 299 | 120 | 90 | 33 | 22 |
| 17..... | 15 | 51 | 42 | 192 | 120 | 311 | 219 | 267 | 106 | 80 | 33 | 21 |
| 18..... | 19 | 52 | 48 | 140 | 114 | 295 | 232 | 190 | 114 | 70 | 31 | 22 |
| 19..... | 17 | 170 | 64 | 120 | 132 | 420 | 288 | 180 | 182 | 52 | 46 | 19 |
| 20..... | 22 | 150 | 96 | 112 | 162 | 474 | 264 | 204 | 185 | 33 | 43 | 21 |
| 21..... | 19 | 94 | 102 | 104 | 501 | 411 | 246 | 267 | 135 | 33 | 37 | 25 |
| 22..... | 23 | 64 | 72 | 100 | 775 | 315 | 236 | 228 | 104 | 43 | 38 | 28 |
| 23..... | 16 | 55 | 55 | 94 | 616 | 260 | 253 | 182 | 110 | 45 | 38 | 23 |
| 24..... | 25 | 37 | 51 | 90 | 704 | 260 | 232 | 145 | 96 | 52 | 33 | 21 |
| 25..... | 45 | 37 | 45 | 84 | 692 | 295 | 210 | 106 | 76 | 55 | 27 | 20 |
| 26..... | 33 | 46 | 51 | 80 | 515 | 1,710 | 192 | 170 | 72 | 51 | 35 | 21 |
| 27..... | 33 | 37 | 54 | 80 | 384 | 1,330 | 165 | 210 | 64 | 42 | 33 | 24 |
| 28..... | 29 | 42 | 52 | 90 | 295 | 775 | 170 | 207 | 74 | 48 | 33 | 23 |
| 29..... | 29 | 40 | 46 | 100 | ----- | 560 | 172 | 250 | 78 | 78 | 33 | 19 |
| 30..... | 29 | 34 | 52 | 84 | ----- | 465 | 160 | 270 | 68 | 52 | 20 | 20 |
| 31..... | 25 | ----- | 52 | 74 | ----- | 438 | ----- | 222 | ----- | 52 | 20 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|------------------|-------------------|
| October..... | 45 | 15 | 26.2 | 0.153 | 0.18 |
| November..... | 170 | 25 | 46.7 | .27 ² | .31 |
| December..... | 102 | 25 | 45.1 | .26 ³ | .31 |
| January..... | 384 | 54 | 139 | .527 | .95 |
| February..... | 775 | 52 | 222 | 1.32 | 1.38 |
| March..... | 2,310 | 170 | 533 | 3.17 | 3.66 |
| April..... | 1,040 | 160 | 320 | 1.90 | 2.12 |
| May..... | 384 | 106 | 204 | 1.21 | 1.40 |
| June..... | 411 | 57 | 134 | .79 ² | .89 |
| July..... | 122 | 33 | 70.8 | .42 ¹ | .49 |
| August..... | 46 | 20 | 32.4 | .19 ² | .22 |
| September..... | 28 | 19 | 22.6 | .13 ² | .15 |
| The year..... | 2,310 | 15 | 149 | .88 ⁷ | 12.06 |

* Estimated.

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, 1930.

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

Monthly discharge and rainfall, 1929-30

| Month | Run-off in million gallons | Discharge per square mile | | Run-off in inches | Rainfall in inches |
|----------------|----------------------------|---------------------------|-------------|-------------------|--------------------|
| | | Million gallons per day | Second-feet | | |
| October..... | 807.2 | 0.239 | 0.370 | 0.427 | 3.12 |
| November..... | 1,192.6 | .365 | .565 | .630 | 3.14 |
| December..... | 1,397.7 | .414 | .641 | .739 | 3.80 |
| January..... | 2,185.8 | .648 | 1.002 | 1.156 | 2.11 |
| February..... | 2,641.1 | .867 | 1.341 | 1.396 | 2.20 |
| March..... | 4,059.0 | 1.203 | 1.861 | 2.146 | 3.65 |
| April..... | 3,113.1 | .955 | 1.477 | 1.646 | 1.88 |
| May..... | 1,966.0 | .583 | .902 | 1.039 | 2.77 |
| June..... | 1,462.3 | .448 | .693 | .773 | 2.96 |
| July..... | 1,527.9 | .453 | .701 | .808 | 5.72 |
| August..... | 754.3 | .224 | .346 | .399 | 1.69 |
| September..... | 767.9 | .235 | .364 | .406 | 1.91 |
| The year..... | 21,875.0 | .551 | .852 | 11.565 | 34.45 |

SUDBURY RIVER AT FRAMINGHAM CENTER, MASS.

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

DRAINAGE AREA.—75.2 square miles since 1881.

RECORDS AVAILABLE.—January, 1875, to September, 1930.

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

Monthly discharge and rainfall, 1929-30

| Month | Run-off in million gallons | Discharge per square mile | | Run-off in inches | Rainfall in inches |
|----------------|----------------------------|---------------------------|-------------|-------------------|--------------------|
| | | Million gallons per day | Second-feet | | |
| October..... | 126.8 | 0.054 | 0.084 | 0.097 | 2.85 |
| November..... | 573.5 | .254 | .393 | .439 | 2.97 |
| December..... | 823.0 | .353 | .546 | .630 | 4.08 |
| January..... | 1,454.2 | .624 | .965 | 1.113 | 2.62 |
| February..... | 1,980.1 | .940 | 1.455 | 1.515 | 2.52 |
| March..... | 3,377.1 | 1.449 | 2.241 | 2.584 | 3.84 |
| April..... | 2,232.9 | .991 | 1.533 | 1.709 | 2.06 |
| May..... | 943.1 | .405 | .626 | .722 | 3.07 |
| June..... | 101.2 | .045 | .069 | .077 | 1.62 |
| July..... | —54.3 | — .023 | — .036 | — .041 | 4.08 |
| August..... | —192.6 | — .083 | — .128 | — .147 | 2.49 |
| September..... | —408.7 | — .181 | — .280 | — .313 | .81 |
| The year..... | 10,956.3 | .399 | .617 | 8.385 | 33.01 |

LAKE COCHITUATE AT COCHITUATE, MASS.

LOCATION.—At outlet three-eighths 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, 1930.

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

Monthly discharge and rainfall, 1929-30

| Month | Run-off in million gallons | Discharge per square mile | | Run-off in inches | Rainfall in inches |
|----------------|----------------------------------|-------------------------------|-----------------|----------------------|-----------------------|
| | | Million gallons per day | Second- feet | | |
| October..... | 52.7 | 0.097 | 0.150 | 0.17 | 2.97 |
| November..... | 109.1 | .207 | .320 | .36 | 3.04 |
| December..... | 251.2 | .461 | .713 | .82 | 4.30 |
| January..... | 429.6 | .788 | 1.220 | 1.41 | 2.70 |
| February..... | 505.4 | 1.027 | 1.589 | 1.65 | 2.48 |
| March..... | 658.8 | 1.209 | 1.870 | 2.16 | 3.57 |
| April..... | 445.4 | .846 | 1.308 | 1.46 | 1.94 |
| May..... | 162.4 | .298 | .461 | .53 | 2.67 |
| June..... | 64.0 | .121 | .188 | .2 | 2.38 |
| July..... | 32.1 | .059 | .091 | .11 | 3.32 |
| August..... | -34.4 | -.063 | -.098 | -.11 | 2.02 |
| September..... | -26.4 | -.050 | -.077 | -.08 | .78 |
| The year..... | 2,649.9 | .413 | .639 | 8.62 | 32.17 |

IPSWICH RIVER BASIN

IPSWICH RIVER AT WILLOWDALE, MASS.

LOCATION.—Water-stage recorder 200 feet below Willowdale Dam, 1½ miles below Howlett Brook, and 4 miles above Ipswich, Essex County, Mass.

DRAINAGE AREA.—122 square miles.

RECORDS AVAILABLE.—June to September, 1930.

EXTREMES.—Maximum discharge, 76 second-feet June 20; minimum, 1.9 second-feet Sept. 30 (gage height, 2.34 feet).

REMARKS.—Records good except those estimated, which are fair. Diversion above station for municipal uses.

Daily and monthly discharge, in second-feet, 1930

| Day | June | July | Aug. | Sept. | Day | June | July | Aug. | Sept. |
|---------|------|------|------|--------|---------|------|------|--------|-------|
| 1..... | | 12.6 | 24 | * 14.2 | 16..... | | 22 | 21 | * 4.0 |
| 2..... | | 11.0 | 17.1 | * 12.7 | 17..... | 53 | 20 | 22 | * 4.0 |
| 3..... | | 13.1 | 13.8 | * 10.7 | 18..... | 54 | 18.4 | 20 | * 3.3 |
| 4..... | | 13.8 | 13.8 | * 8.9 | 19..... | 67 | 14.4 | 19.7 | 2.6 |
| 5..... | | 13.1 | 11.5 | * 7.0 | 20..... | 76 | 12.6 | 19.0 | 2.6 |
| 6..... | | 13.8 | 8.9 | * 5.8 | 21..... | 68 | 11.5 | * 14.2 | 2.9 |
| 7..... | | 15.7 | 7.3 | * 5.4 | 22..... | 64 | 11.5 | * 11.3 | 3.2 |
| 8..... | | 15.1 | 10.4 | * 5.8 | 23..... | 54 | 11.5 | * 12.7 | 3.6 |
| 9..... | | 15.7 | 13.8 | * 4.8 | 24..... | 44 | 12.6 | * 14.2 | 4.2 |
| 10..... | | 15.1 | 14.4 | * 4.8 | 25..... | 32 | 20 | * 16.0 | 3.6 |
| 11..... | | 14.4 | 14.4 | * 4.5 | 26..... | 26 | 21 | * 14.2 | 2.7 |
| 12..... | | 14.4 | 12.6 | * 4.5 | 27..... | 21 | 38 | * 14.2 | 3.4 |
| 13..... | | 13.8 | 11.0 | * 4.2 | 28..... | 19.7 | 49 | * 12.7 | 2.9 |
| 14..... | | 16.4 | 9.4 | * 3.7 | 29..... | 20 | 46 | * 12.7 | 2.2 |
| 15..... | | 22 | 12.6 | * 4.2 | 30..... | 17.1 | 40 | * 14.2 | 2.0 |
| | | | | | 31..... | | 33 | * 14.2 | ----- |

| Month | Observed | | | Diversion in mil- lions of gallons | Corrected for diversion | | |
|----------------|--------------|--------------|------|---|----------------------------|-----------------------|----------------------|
| | Maxi- mum | Mini- mum | Mean | | Mean | Per square mile | Run-off in inches |
| July..... | 49 | 11 | 19.4 | 65.4 | 22.7 | 0.186 | 0.21 |
| August..... | 24 | 7.3 | 14.4 | 54.8 | 17.2 | .141 | .16 |
| September..... | 14.2 | 2.0 | 4.95 | 52.7 | 7.66 | .063 | .07 |

* Estimated.

TAUNTON RIVER BASIN

WADING RIVER NEAR NORTON, MASS.

LOCATION.—Vertical staff gage at highway bridge three-fourths 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, 1930.

EXTREMES.—Maximum discharge during year, 336 second-feet Feb. 14 (gage height, 6.85 feet); minimum (estimated), 0.4 second-foot July 20 (gage height, estimated, 3.82 feet).

1925-1930: Maximum discharge, 480 second-feet Mar. 7, 1929 (gage height, 7.40 feet); minimum, 0.3 second-foot Sept. 10, 1926.

REMARKS.—Records good. Some diurnal regulation from power plants and week-end storage.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1 | 3.0 | 5.8 | 11 | 69 | 50 | 102 | 90 | 55 | 45 | 28 | 8.2 | 1.8 |
| 2 | 3.0 | 6.4 | 11 | 74 | 50 | 90 | 85 | 35 | 42 | 27 | 3.0 | 2.6 |
| 3 | 5.2 | 6.1 | 11 | 69 | 85 | 114 | 80 | 39 | 38 | 21 | 1.1 | 2.3 |
| 4 | 4.7 | 13 | 11 | 74 | 55 | 85 | 69 | 30 | 31 | 20 | 2.3 | 1.1 |
| 5 | 8.2 | 21 | 12 | 64 | 60 | 90 | 69 | 32 | 32 | 17 | 1.8 | 1.8 |
| 6 | 20 | 27 | 12 | 69 | 53 | 74 | 46 | 30 | 25 | 9.1 | 1.8 | 1.8 |
| 7 | 17 | 29 | 12 | 80 | 57 | 74 | 108 | 25 | 23 | 9.5 | 2.6 | 2.6 |
| 8 | 6.9 | 19 | 11 | 64 | 51 | 108 | 108 | 30 | 21 | 8.8 | 3.0 | 2.6 |
| 9 | 8.8 | 34 | 3.0 | 64 | 62 | 148 | 96 | 35 | 33 | 6.4 | 1.1 | 2.6 |
| 10 | 6.9 | 20 | 3.0 | 50 | 69 | 134 | 85 | 39 | 21 | 2.6 | 2.6 | 2.3 |
| 11 | 7.5 | 15 | 2.6 | 42 | 64 | 114 | 85 | 31 | 33 | 2.6 | 4.3 | 1.4 |
| 12 | 6.9 | 14 | 5.8 | 62 | 46 | 108 | 64 | 30 | 30 | 2.6 | 4.7 | 1.1 |
| 13 | 6.4 | 13 | 6.9 | 60 | 57 | 108 | 60 | 39 | 23 | 3.6 | 3.0 | 1.1 |
| 14 | 6.4 | 13 | 30 | 64 | 250 | 90 | 80 | 30 | 24 | 3.0 | 2.6 | 1.1 |
| 15 | 5.2 | 14 | 27 | 114 | 180 | 85 | 64 | 32 | 22 | 4.3 | 3.0 | 1.1 |
| 16 | 5.0 | 17 | 33 | 134 | 108 | 85 | 74 | 37 | 23 | 3.0 | 3.6 | 1.4 |
| 17 | 6.4 | 12 | 39 | 120 | 108 | 96 | 50 | 32 | 23 | 3.0 | 4.7 | 1.8 |
| 18 | 6.1 | 16 | 42 | 108 | 102 | 85 | 64 | 32 | 32 | 2.6 | 2.6 | 1.4 |
| 19 | 5.2 | 21 | 85 | 127 | 96 | 85 | 63 | 50 | 35 | 1.1 | 23 | 2.3 |
| 20 | 5.0 | 21 | 114 | 120 | 108 | 108 | 62 | 50 | 25 | .4 | 21 | 2.6 |
| 21 | 5.2 | 27 | 90 | 120 | 120 | 96 | 62 | 46 | 21 | .9 | 14 | 2.6 |
| 22 | 4.7 | 23 | 69 | 108 | 127 | 85 | 63 | 42 | 21 | 2.6 | 12 | 2.6 |
| 23 | 6.1 | 28 | 64 | 102 | 120 | 74 | 62 | 28 | 33 | 4.7 | 11 | 2.3 |
| 24 | 5.8 | 16 | 64 | 96 | 127 | 85 | 64 | 20 | 30 | 28 | 0.1 | 1.8 |
| 25 | 6.4 | 16 | 57 | 46 | 120 | 80 | 45 | 22 | 35 | 20 | 2.6 | 1.4 |
| 26 | 6.1 | 17 | 48 | 74 | 127 | 96 | 42 | 39 | 32 | 2.6 | 1.8 | 2.1 |
| 27 | 4.7 | 16 | 40 | 85 | 114 | 127 | 28 | 40 | 25 | 2.6 | 1.4 | .8 |
| 28 | 6.4 | 15 | 45 | 60 | 108 | 102 | 50 | 39 | 21 | 3.0 | 1.4 | .8 |
| 29 | 5.8 | 16 | 60 | 53 | ----- | 90 | 39 | 55 | 28 | 3.0 | 1.1 | .8 |
| 30 | 5.8 | 13 | 62 | 46 | ----- | 74 | 62 | 29 | 28 | 3.0 | 1.1 | .8 |
| 31 | 6.1 | ----- | 64 | 40 | ----- | 85 | ----- | 34 | ----- | 3.6 | 1.8 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 20 | 3.0 | 6.67 | 0.157 | 0.18 |
| November | 34 | 5.8 | 17.6 | .415 | .46 |
| December | 114 | 2.6 | 36.9 | .870 | 1.00 |
| January | 134 | 40 | 79.3 | 1.87 | 2.16 |
| February | 250 | 46 | 95.5 | 2.25 | 2.34 |
| March | 148 | 74 | 96.0 | 2.26 | 2.61 |
| April | 108 | 28 | 67.3 | 1.56 | 1.77 |
| May | 55 | 20 | 35.5 | .837 | .96 |
| June | 45 | 21 | 28.5 | .672 | .75 |
| July | 28 | .4 | 8.05 | .190 | .22 |
| August | 23 | 1.1 | 5.07 | .120 | .14 |
| September | 2.6 | .8 | 1.76 | .042 | .05 |
| The year | 250 | .4 | 39.5 | .932 | 12.64 |

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, 1930.

EXTREMES.—Maximum discharge during year, 116 second-feet⁺ Mar. 9 (gage height, 2.02 feet); minimum, 0.8 second-foot Sept. 29 (gage height, 0.09 foot). 1924-1930: Maximum discharge, 790 second-feet Nov. 4, 1927 (gage height, 4.95 feet); minimum, 0.3 second-foot Nov. 12, 13, 1926.

REMARKS.—Records good. Diversions from about 7.0 square miles of drainage area above station. Flow regulated by storage reservoirs.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 5.2 | 10 | 9.5 | 14 | 17 | 30 | 37 | 28 | 6.6 | 14 | 3.4 | 12 |
| 2..... | 3.5 | 6.6 | 8.9 | 30 | 11 | 27 | 32 | 28 | 15 | 18 | 3.2 | 4.2 |
| 3..... | 18 | 12 | 8.3 | 42 | 18 | 36 | 32 | 24 | 16 | 18 | 4.8 | 7.7 |
| 4..... | 18 | 19 | 8.3 | 38 | 17 | 35 | 30 | 11 | 10 | 9.2 | 6.9 | 9.2 |
| 5..... | 11 | 15 | 8.3 | 23 | 19 | 34 | 24 | 24 | 6.6 | 8.3 | 1.4 | 6.3 |
| 6..... | 8.9 | 13 | 8.3 | 27 | 15 | 34 | 16 | 22 | 5.0 | 9.2 | 5.2 | 3.5 |
| 7..... | 7.7 | 11 | 13 | 22 | 13 | 30 | 52 | 26 | 3.2 | 20 | 2.4 | 4.2 |
| 8..... | 6.6 | 10 | 18 | 18 | 11 | 52 | 61 | 22 | 2.8 | 10 | 2.2 | 4.2 |
| 9..... | 5.8 | 11 | 18 | 22 | 11 | 100 | 49 | 19 | 6.6 | 8.9 | 3.2 | 7.2 |
| 10..... | 5.5 | 10 | 15 | 26 | 16 | 85 | 43 | 12 | 14 | 19 | 2.4 | 4.5 |
| 11..... | 6.3 | 8.9 | 16 | 17 | 14 | 59 | 34 | 6.9 | 25 | 4.0 | 9.9 | 3.2 |
| 12..... | 6.9 | 8.3 | 18 | 15 | 12 | 49 | 25 | 8.9 | 21 | 8.6 | 11 | 4.2 |
| 13..... | 7.4 | 8.0 | 12 | 22 | 28 | 44 | 23 | 9.8 | 13 | 6.3 | 9.7 | 1.4 |
| 14..... | 6.9 | 8.9 | 16 | 41 | 89 | 39 | 33 | 15 | 13 | 19 | 8.6 | 1.4 |
| 15..... | 5.2 | 12 | 18 | 58 | 52 | 34 | 29 | 22 | 6.6 | 26 | 4.6 | 6.9 |
| 16..... | 5.8 | 12 | 18 | 56 | 27 | 20 | 29 | 23 | 12 | 19 | 11 | 8.9 |
| 17..... | 6.3 | 9.5 | 18 | 49 | 30 | 52 | 28 | 17 | 16 | 8.6 | 12 | 7.4 |
| 18..... | 6.3 | 32 | 20 | 35 | 31 | 34 | 30 | 10 | 24 | 5.2 | 8.4 | 7.2 |
| 19..... | 5.8 | 44 | 43 | 20 | 36 | 43 | 30 | 9.8 | 24 | 9.8 | 13 | 7.4 |
| 20..... | 6.0 | 32 | 36 | 32 | 50 | 41 | 19 | 11 | 22 | 6.0 | 12 | 1.2 |
| 21..... | 12 | 24 | 26 | 17 | 57 | 38 | 29 | 11 | 13 | 5.2 | 8.4 | 1.0 |
| 22..... | 11 | 19 | 19 | 14 | 50 | 26 | 31 | 11 | 6.3 | 5.8 | 6.0 | 4.5 |
| 23..... | 12 | 15 | 14 | 30 | 48 | 20 | 30 | 8.9 | 7.2 | 4.5 | 4.8 | 6.3 |
| 24..... | 15 | 13 | 16 | 19 | 58 | 34 | 30 | 4.8 | 14 | 7.7 | 5.5 | 5.8 |
| 25..... | 12 | 12 | 12 | 18 | 53 | 37 | 30 | 5.2 | 11 | 5.8 | 9.5 | 6.9 |
| 26..... | 11 | 11 | 26 | 13 | 58 | 64 | 22 | 16 | 5.2 | 2.0 | 5.5 | 6.3 |
| 27..... | 9.5 | 11 | 23 | 15 | 43 | 76 | 12 | 18 | 11 | 4.6 | 3.2 | 1.8 |
| 28..... | 7.4 | 12 | 22 | 16 | 32 | 57 | 20 | 22 | 11 | 3.6 | 4.2 | 1.8 |
| 29..... | 6.0 | 11 | 14 | 13 | ----- | 39 | 28 | 28 | 4.5 | 5.8 | 1.8 | 2.6 |
| 30..... | 8.6 | 10 | 24 | 16 | ----- | 38 | 28 | 18 | 9.8 | 6.4 | 2.0 | 5.5 |
| 31..... | 11 | ----- | 15 | 11 | ----- | 47 | ----- | 12 | ----- | 3.1 | 2.5 | ----- |

| Month | Observed | | | Mean, corrected for diversion |
|----------------|----------|---------|------|-------------------------------|
| | Maximum | Minimum | Mean | |
| October..... | 18 | 3.5 | 8.66 | 13.1 |
| November..... | 44 | 6.6 | 14.4 | 18.2 |
| December..... | 43 | 8.3 | 17.5 | 21.7 |
| January..... | 58 | 11 | 25.5 | 33.8 |
| February..... | 89 | 11 | 32.7 | 42.5 |
| March..... | 100 | 20 | 43.0 | 51.2 |
| April..... | 61 | 12 | 30.5 | 38.5 |
| May..... | 28 | 4.8 | 16.3 | 24.2 |
| June..... | 25 | 2.8 | 11.8 | 17.3 |
| July..... | 26 | 2.0 | 9.73 | 14.3 |
| August..... | 13 | 1.4 | 6.09 | 9.47 |
| September..... | 12 | 1.0 | 5.16 | 8.99 |
| The year..... | 100 | 1.0 | 18.4 | 24.3 |

BLACKSTONE RIVER AT WOONSOCKET, R. I.

LOCATION.—Water-stage recorder in Woonsocket, Providence County, 50 feet below mouth of Peters River.

DRAINAGE AREA.—415 square miles.

RECORDS AVAILABLE.—February, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,970 second-feet Mar. 9 (gage height, 4.78 feet); minimum not determined.

1929-30: Maximum discharge, 4,570 second-feet Mar. 7 (gage height, 7.05 feet); minimum not determined.

Flood of November, 1927, discharge, about 22,200 second-feet (gage height 14.0 feet).

REMARKS.—Records fair. Storage at headwaters for water supply at Worcester. Records of daily discharge not corrected for water by-passed around gage in Woonsocket Mills pipe line or for diversion from Nashua River Basin at Worcester, Mass. Discharge estimated Dec. 16-24, April 19-21.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1 | 219 | 100 | 88 | 356 | 357 | 602 | 675 | 442 | 190 | 162 | 71 | 62 |
| 2 | 257 | 122 | 190 | 483 | 216 | 611 | 634 | 384 | 295 | 125 | 54 | 52 |
| 3 | 438 | 144 | 204 | 610 | 316 | 672 | 616 | 306 | 262 | 121 | 48 | 148 |
| 4 | 491 | 262 | 190 | 654 | 448 | 626 | 564 | 241 | 257 | 107 | 45 | 135 |
| 5 | 327 | 332 | 154 | 437 | 477 | 582 | 456 | 343 | 218 | 85 | 109 | 117 |
| 6 | 138 | 218 | 114 | 510 | 386 | 594 | 420 | 438 | 183 | 60 | 136 | 117 |
| 7 | 264 | 226 | 146 | 546 | 299 | 585 | 1,110 | 351 | 113 | 123 | 125 | 97 |
| 8 | 327 | 126 | 116 | 544 | 270 | 803 | 1,360 | 331 | 110 | 257 | 94 | 136 |
| 9 | 224 | 222 | 216 | 584 | 168 | 1,790 | 974 | 318 | 234 | 181 | 57 | 236 |
| 10 | 192 | 140 | 322 | 530 | 324 | 1,440 | 808 | 208 | 250 | 164 | 49 | 246 |
| 11 | 126 | 103 | 242 | 443 | 350 | 1,100 | 724 | 150 | 318 | 108 | 101 | 201 |
| 12 | 136 | 274 | 216 | 279 | 303 | 1,050 | 600 | 290 | 291 | 98 | 177 | 113 |
| 13 | 142 | 210 | 142 | 448 | 468 | 930 | 524 | 310 | 188 | 89 | 201 | 134 |
| 14 | 224 | 194 | 146 | 701 | 1,160 | 774 | 672 | 268 | 145 | 171 | 199 | 101 |
| 15 | 182 | 94 | 146 | 996 | 1,210 | 674 | 598 | 302 | 101 | 259 | 115 | 77 |
| 16 | 191 | 305 | 243 | 944 | 772 | 562 | 575 | 304 | 152 | 206 | 90 | 137 |
| 17 | 176 | 581 | 333 | 753 | 682 | 631 | 544 | 234 | 194 | 160 | 77 | 147 |
| 18 | 86 | 546 | 300 | 652 | 652 | 657 | 636 | 215 | 249 | 127 | 203 | 123 |
| 19 | 82 | 490 | 410 | 516 | 666 | 748 | 577 | 315 | 260 | 75 | 218 | 107 |
| 20 | 88 | 324 | 492 | 577 | 838 | 792 | 522 | 370 | 210 | 95 | 179 | 105 |
| 21 | 192 | 172 | 527 | 564 | 931 | 668 | 590 | 332 | 132 | 129 | 200 | 101 |
| 22 | 272 | 168 | 498 | 538 | 1,000 | 540 | 670 | 286 | 76 | 109 | 163 | 113 |
| 23 | 240 | 212 | 455 | 490 | 840 | 456 | 631 | 230 | 174 | 153 | 147 | 145 |
| 24 | 228 | 214 | 412 | 456 | 936 | 548 | 604 | 180 | 170 | 181 | 119 | 153 |
| 25 | 189 | 221 | 364 | 427 | 979 | 628 | 516 | 158 | 188 | 149 | 148 | 179 |
| 26 | 186 | 92 | 338 | 262 | 916 | 1,160 | 486 | 314 | 162 | 84 | 199 | 111 |
| 27 | 124 | 226 | 456 | 358 | 823 | 1,330 | 302 | 400 | 128 | 49 | 191 | 107 |
| 28 | 204 | 96 | 422 | 488 | 692 | 950 | 394 | 403 | 64 | 135 | 164 | 42 |
| 29 | 166 | 130 | 297 | 470 | ----- | 738 | 510 | 382 | 44 | 155 | 105 | 87 |
| 30 | 161 | 165 | 460 | 448 | ----- | 620 | 460 | 322 | 67 | 160 | 115 | 261 |
| 31 | 140 | ----- | 527 | 348 | ----- | 680 | ----- | 268 | ----- | 141 | 87 | ----- |

| Month | Observed | | | Mean, corrected for diversion* |
|-----------|----------|---------|------|--------------------------------|
| | Maximum | Minimum | Mean | |
| October | 491 | 82 | 207 | 184 |
| November | 581 | 92 | 224 | 192 |
| December | 527 | 88 | 293 | 279 |
| January | 996 | 262 | 529 | 520 |
| February | 1,210 | 168 | 624 | 617 |
| March | 1,790 | 456 | 792 | 778 |
| April | 1,360 | 302 | 625 | 625 |
| May | 442 | 150 | 303 | 284 |
| June | 318 | 44 | 181 | 142 |
| July | 259 | 49 | 136 | 117 |
| August | 218 | 45 | 129 | 106 |
| September | 261 | 42 | 130 | 87.0 |
| The year | 1,790 | 42 | 349 | 326 |

* Corrected for diversion from Nashua River Basin at Worcester but not corrected for amount by-passed around gage in Woonsocket Mills pipe line.

THAMES RIVER BASIN

QUINEBAUG RIVER AT PUTNAM, CONN.

LOCATION.—Water-stage recorder in Putnam, Windham County, 600 feet below outlet of Woodstock Pond and 3 miles below junction of Quinebaug and French Rivers.

DRAINAGE AREA.—332 square miles.

RECORDS AVAILABLE.—December, 1929, to September, 1930.

EXTREMES.—Maximum discharge during period, 1,330 second-feet Mar. 26 (gage height, 5.05 feet); minimum, 12 second-feet Sept. 20, 21, 28, 29 (gage height, 1.44 feet).

REMARKS.—Records excellent. Flow regulated by numerous storage reservoirs.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | | 256 | 198 | 475 | 680 | 344 | 316 | 124 | 127 | 20 |
| 2..... | | 360 | 46 | 360 | 664 | 344 | 361 | 112 | 83 | 110 |
| 3..... | | 472 | 292 | 500 | 654 | 325 | 320 | 140 | 17 | 70 |
| 4..... | | 340 | 342 | 518 | 596 | 222 | 264 | 30 | 112 | 70 |
| 5..... | | 313 | 267 | 435 | 470 | 292 | 252 | 47 | 96 | 86 |
| 6..... | | 335 | 282 | 420 | 308 | 342 | 230 | 48 | 100 | 67 |
| 7..... | | 396 | 272 | 434 | 723 | 350 | 142 | 170 | 94 | 29 |
| 8..... | | 390 | 166 | 544 | 1,030 | 304 | 19 | 172 | 96 | 100 |
| 9..... | | 380 | 90 | 750 | 984 | 245 | 217 | 168 | 69 | 82 |
| 10..... | | 429 | 259 | 884 | 852 | 202 | 251 | 128 | 19 | 176 |
| 11..... | | 304 | 267 | 904 | 782 | 104 | 268 | 183 | 95 | 120 |
| 12..... | | 177 | 245 | 808 | 530 | 274 | 252 | 140 | 101 | 102 |
| 13..... | | 478 | 449 | 772 | 540 | 224 | 301 | 21 | 98 | 50 |
| 14..... | | 566 | 924 | 527 | 568 | 217 | 252 | 108 | 67 | 16 |
| 15..... | | 770 | 728 | 542 | 584 | 229 | 90 | 133 | 76 | 82 |
| 16..... | | 834 | 456 | 386 | 515 | 306 | 178 | 144 | 47 | 66 |
| 17..... | | 653 | 568 | 442 | 438 | 208 | 202 | 152 | 23 | 34 |
| 18..... | | 541 | 426 | 533 | 444 | 182 | 315 | 157 | 87 | 55 |
| 19..... | | 263 | 447 | 572 | 548 | 302 | 290 | 92 | 117 | 94 |
| 20..... | | 433 | 592 | 648 | 393 | 306 | 303 | 27 | 120 | 44 |
| 21..... | | 511 | 518 | 584 | 694 | 311 | 214 | 143 | 114 | 15 |
| 22..... | 192 | 385 | 748 | 414 | 536 | 314 | 52 | 125 | 65 | 122 |
| 23..... | 307 | 312 | 529 | 305 | 418 | 286 | 236 | 112 | 45 | 102 |
| 24..... | 412 | 268 | 782 | 412 | 504 | 173 | 218 | 128 | 66 | 102 |
| 25..... | 88 | 206 | 862 | 498 | 399 | 103 | 182 | 126 | 102 | 97 |
| 26..... | 140 | 168 | 830 | 959 | 336 | 388 | 138 | 85 | 78 | 74 |
| 27..... | 235 | 328 | 708 | 1,160 | 272 | 374 | 213 | 21 | 88 | 44 |
| 28..... | 202 | 360 | 516 | 998 | 297 | 400 | 130 | 130 | 67 | 11 |
| 29..... | 134 | 260 | ----- | 853 | 428 | 531 | 24 | 137 | 72 | 86 |
| 30..... | 249 | 232 | ----- | 674 | 438 | 237 | 152 | 126 | 76 | 66 |
| 31..... | 223 | 236 | ----- | 711 | ----- | 308 | ----- | 126 | 21 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|---------------------|---------|---------|------|-----------------|-------------------|
| December 22-31..... | 412 | 88 | 218 | 0.657 | 0.24 |
| January..... | 834 | 168 | 386 | 1.16 | 1.34 |
| February..... | 924 | 46 | 457 | 1.38 | 1.44 |
| March..... | 1,160 | 305 | 613 | 1.85 | 2.13 |
| April..... | 1,030 | 272 | 554 | 1.67 | 1.86 |
| May..... | 531 | 103 | 282 | .849 | .98 |
| June..... | 361 | 19 | 216 | .651 | .73 |
| July..... | 183 | 21 | 114 | .343 | .40 |
| August..... | 127 | 17 | 77.8 | .234 | .27 |
| September..... | 176 | 14 | 72.3 | .218 | .24 |

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 below outlet of canal from Slater Mills (mouth of Pachaug River).

DRAINAGE AREA.—712 square miles.

RECORDS AVAILABLE.—July, 1918, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,210 second-feet Feb. 14 (gage height, 9.2 feet); minimum, 26 second-feet Sept. 28, 29 (gage height, 3.62 feet).

1918-1930: Maximum discharge, about 12,500 second-feet Nov. 5, 1927 (gage height, 16.6 feet); minimum, that of Sept. 28, 29, 1930.

REMARKS.—Records good. Flow regulated by numerous storage reservoirs.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|------|-------|-------|-------|-------|-------|-----|------|------|------|-------|
| 1 | 231 | 260 | 146 | 554 | 479 | 1,090 | 1,340 | 858 | 608 | 247 | 62 | 30 |
| 2 | 238 | 55 | 338 | 798 | 280 | 876 | 1,300 | 823 | 796 | 284 | 50 | 154 |
| 3 | 245 | 86 | 348 | 1,020 | 596 | 1,140 | 1,250 | 699 | 674 | 397 | 42 | 182 |
| 4 | 236 | 332 | 358 | 1,180 | 785 | 1,190 | 1,200 | 508 | 530 | 188 | 232 | 194 |
| 5 | 136 | 254 | 274 | 654 | 905 | 1,070 | 1,050 | 686 | 642 | 45 | 272 | 185 |
| 6 | 140 | 396 | 252 | 964 | 830 | 1,010 | 714 | 752 | 372 | 47 | 259 | 44 |
| 7 | 331 | 350 | 82 | 890 | 756 | 942 | 1,420 | 750 | 414 | 262 | 286 | 39 |
| 8 | 306 | 342 | 126 | 934 | 586 | 1,210 | 2,230 | 710 | 116 | 393 | 64 | 197 |
| 9 | 284 | 125 | 280 | 877 | 345 | 2,140 | 2,030 | 768 | 462 | 400 | 58 | 200 |
| 10 | 256 | 92 | 322 | 942 | 546 | 2,240 | 1,810 | 440 | 550 | 396 | 44 | 171 |
| 11 | 236 | 100 | 312 | 754 | 714 | 1,930 | 1,600 | 297 | 500 | 382 | 218 | 200 |
| 12 | 54 | 308 | 350 | 522 | 660 | 1,820 | 1,280 | 531 | 639 | 98 | 181 | 195 |
| 13 | 53 | 286 | 380 | 842 | 751 | 1,660 | 920 | 685 | 496 | 43 | 138 | 52 |
| 14 | 229 | 309 | 225 | 1,250 | 2,470 | 1,520 | 1,300 | 470 | 421 | 398 | 218 | 34 |
| 15 | 222 | 277 | 200 | 1,680 | 2,380 | 1,110 | 1,250 | 500 | 252 | 390 | 135 | 198 |
| 16 | 216 | 87 | 482 | 1,830 | 1,200 | 888 | 1,120 | 518 | 410 | 332 | 72 | 187 |
| 17 | 215 | 102 | 636 | 1,530 | 1,400 | 1,090 | 1,060 | 532 | 394 | 274 | 48 | 200 |
| 18 | 217 | 354 | 656 | 1,200 | 1,050 | 1,160 | 854 | 248 | 567 | 278 | 200 | 170 |
| 19 | 50 | 656 | 1,260 | 874 | 1,100 | 1,210 | 1,180 | 521 | 671 | 74 | 212 | 212 |
| 20 | 74 | 542 | 1,330 | 1,100 | 1,280 | 1,290 | 1,130 | 714 | 659 | 48 | 182 | 107 |
| 21 | 227 | 512 | 1,010 | 1,200 | 1,630 | 1,290 | 1,120 | 690 | 285 | 286 | 195 | 33 |
| 22 | 203 | 416 | 662 | 1,100 | 1,430 | 1,030 | 1,390 | 582 | 408 | 297 | 193 | 186 |
| 23 | 283 | 341 | 756 | 846 | 1,400 | 720 | 1,120 | 346 | 406 | 278 | 95 | 168 |
| 24 | 213 | 135 | 676 | 700 | 1,550 | 914 | 982 | 430 | 478 | 265 | 35 | 180 |
| 25 | 300 | 320 | 482 | 550 | 1,840 | 1,020 | 992 | 410 | 390 | 214 | 211 | 181 |
| 26 | 105 | 370 | 475 | 357 | 1,820 | 1,740 | 763 | 688 | 370 | 55 | 179 | 169 |
| 27 | 74 | 394 | 544 | 700 | 1,690 | 2,390 | 608 | 923 | 400 | 32 | 186 | 49 |
| 28 | 330 | 140 | 501 | 950 | 1,480 | 2,130 | 808 | 824 | 200 | 224 | 174 | 28 |
| 29 | 240 | 310 | 412 | 750 | 1,680 | 828 | 872 | 150 | 220 | 184 | 174 | 174 |
| 30 | 244 | 198 | 712 | 700 | 1,290 | 884 | 907 | 550 | 196 | 119 | 176 | 176 |
| 31 | 224 | 802 | 638 | 1,340 | 550 | 350 | 31 | 22 | 22 | 31 | 22 | 22 |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 331 | 50 | 207 | 0.291 | 0.34 |
| November | 656 | 55 | 282 | .396 | .44 |
| December | 1,330 | 82 | 496 | .697 | .80 |
| January | 1,530 | 357 | 932 | 1.31 | 1.51 |
| February | 2,470 | 280 | 1,140 | 1.60 | 1.67 |
| March | 2,390 | 720 | 1,360 | 1.91 | 2.20 |
| April | 2,230 | 608 | 1,180 | 1.66 | 1.85 |
| May | 923 | 248 | 620 | .871 | 1.00 |
| June | 796 | 116 | 460 | .645 | .72 |
| July | 400 | 32 | 238 | .33 | .39 |
| August | 286 | 31 | 151 | .212 | .24 |
| September | 212 | 28 | 143 | .20 | .22 |
| The year | 2,470 | 28 | 598 | .84 | 11.38 |

* Estimated.

SHETUCKET RIVER AT SOUTH WINDHAM, CONN.

LOCATION.—Water-stage recorder at highway bridge at South Windham, Windham County, 4 miles below Willimantic and confluence of Willimantic and Natchaug Rivers.

DRAINAGE AREA.—406 square miles.

RECORDS AVAILABLE.—November, 1919, to September, 1921; September, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,710 second-feet Mar. 26 (gage height, 6.2 feet); minimum, about 40 second-feet July 27, Sept. 7.

1919-1921, 1928-1930: Maximum discharge, 8,900 second-feet Dec. 15, 1920 (gage height, 9.0 feet); minimum, 25 second-feet Sept. 27, 1920, Sept. 10, 1921 (gage height, 1.45 feet).

REMARKS.—Records good except those for periods of ice effect, Dec. 11-13, 22-26, Jan. 19 to Feb. 11, Feb. 16-19, and those for days during which discharge was below 175 second-feet (gage heights at such times partly estimated), which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| 1..... | 103 | 142 | 128 | 426 | 240 | 656 | 792 | 402 | 456 | 191 | 194 | 60 |
| 2..... | 116 | 174 | 170 | 432 | 280 | 676 | 746 | 394 | 386 | 200 | 182 | 114 |
| 3..... | 174 | 160 | 152 | 568 | 280 | 633 | 705 | 439 | 358 | 212 | 164 | 118 |
| 4..... | 199 | 298 | 145 | 826 | 280 | 549 | 668 | 344 | 296 | 194 | 176 | 110 |
| 5..... | 152 | 302 | 152 | 636 | 260 | 514 | 576 | 403 | 259 | 222 | 146 | 109 |
| 6..... | 94 | 214 | 151 | 558 | 240 | 500 | 572 | 338 | 248 | 193 | 132 | 72 |
| 7..... | 170 | 207 | 142 | 438 | 220 | 474 | 1,350 | 352 | 219 | 236 | 130 | 62 |
| 8..... | 214 | 166 | 179 | 454 | 220 | 812 | 2,040 | 316 | 212 | 288 | 70 | 110 |
| 9..... | 141 | 142 | 181 | 446 | 220 | 1,800 | 1,380 | 274 | 242 | 218 | 66 | 119 |
| 10..... | 124 | 174 | 166 | 442 | 240 | 1,300 | 1,090 | 290 | 360 | 237 | 119 | 117 |
| 11..... | 106 | 150 | 140 | 374 | 240 | 1,030 | 880 | 268 | 420 | 210 | 141 | 128 |
| 12..... | 89 | 152 | 140 | 324 | 272 | 1,000 | 807 | 228 | 394 | 211 | 100 | 124 |
| 13..... | 62 | 136 | 140 | 458 | 327 | 962 | 732 | 257 | 441 | 222 | 102 | 114 |
| 14..... | 108 | 143 | 254 | 594 | 1,300 | 788 | 706 | 249 | 396 | 234 | 97 | 81 |
| 15..... | 90 | 164 | 384 | 1,500 | 1,200 | 671 | 675 | 293 | 239 | 324 | 110 | 132 |
| 16..... | 103 | 122 | 364 | 1,270 | 750 | 556 | 592 | 385 | 226 | 306 | 158 | 128 |
| 17..... | 157 | 174 | 323 | 774 | 600 | 588 | 568 | 296 | 223 | 233 | 199 | 126 |
| 18..... | 199 | 314 | 432 | 634 | 550 | 616 | 615 | 282 | 306 | 194 | 167 | 120 |
| 19..... | 110 | 660 | 957 | 500 | 600 | 728 | 974 | 287 | 520 | 170 | 180 | 156 |
| 20..... | 169 | 505 | 1,100 | 420 | 674 | 791 | 1,060 | 326 | 457 | 180 | 190 | 168 |
| 21..... | 152 | 258 | 746 | 380 | 956 | 677 | 784 | 324 | 337 | 222 | 136 | 77 |
| 22..... | 144 | 227 | 550 | 340 | 1,010 | 530 | 698 | 308 | 264 | 225 | 150 | 102 |
| 23..... | 206 | 218 | 460 | 300 | 876 | 466 | 663 | 257 | 289 | 178 | 177 | 103 |
| 24..... | 302 | 200 | 380 | 250 | 1,020 | 490 | 579 | 234 | 244 | 160 | 181 | 123 |
| 25..... | 297 | 186 | 320 | 260 | 1,200 | 567 | 564 | 346 | 260 | 104 | 152 | 122 |
| 26..... | 160 | 182 | 300 | 260 | 1,170 | 2,570 | 516 | 1,000 | 239 | 58 | 148 | 126 |
| 27..... | 166 | 236 | 282 | 260 | 1,030 | 2,600 | 438 | 878 | 220 | 47 | 142 | 136 |
| 28..... | 150 | 160 | 258 | 280 | 796 | 1,550 | 452 | 584 | 194 | 85 | 130 | 166 |
| 29..... | 142 | 182 | 343 | 260 | ----- | 1,200 | 462 | 668 | 189 | 84 | 124 | 112 |
| 30..... | 150 | 160 | 462 | 240 | ----- | 995 | 413 | 806 | 247 | 84 | 88 | 126 |
| 31..... | 120 | ----- | 468 | 240 | ----- | 865 | ----- | 634 | ----- | 160 | 77 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 302 | 62 | 151 | 0.372 | 0.43 |
| November..... | 660 | 122 | 217 | .534 | .60 |
| December..... | 1,100 | 128 | 334 | .823 | .95 |
| January..... | 1,500 | 240 | 489 | 1.20 | 1.38 |
| February..... | 1,300 | 220 | 609 | 1.50 | 1.56 |
| March..... | 2,600 | 466 | 908 | 2.24 | 2.58 |
| April..... | 2,040 | 413 | 770 | 1.90 | 2.12 |
| May..... | 1,000 | 228 | 401 | .988 | 1.14 |
| June..... | 520 | 189 | 303 | .746 | .83 |
| July..... | 324 | 47 | 190 | .468 | .54 |
| August..... | 199 | 66 | 140 | .345 | .40 |
| September..... | 168 | 60 | 115 | .283 | .32 |
| The year..... | 2,600 | 47 | 384 | .946 | 12.85 |

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 1,858.2 feet above mean sea level.

DRAINAGE AREA.—41.5 square miles.

RECORDS AVAILABLE.—October, 1922, to September, 1930.

EXTREMES.—Maximum stage during year, 11.20 feet May 27, June 23 (contents, 500 million cubic feet) minimum, 1.85 feet Feb. 15 (contents, 73.2 million cubic feet).

1922–1930: Maximum stage, 15.8 feet Sept. 11, 1924 (contents 732 million cubic feet, revised); minimum, 0.7 foot Feb. 1 to Mar. 19, 1923 (contents, 31.5 million cubic feet, revised).

REMARKS.—Maximum allowable stage of lake (since 1930) is 11.3 feet (capacity, 506 million cubic feet from revised table).

Daily gage height, in feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|------|------|------|------|------|------|-------|-------|------|------|-------|
| 1 | 2.65 | 7.8 | 8.9 | 5.8 | 1.95 | 2.4 | 1.95 | 5.6 | | 8.9 | 9.1 | |
| 2 | | 8.3 | | | | | | | | | | |
| 3 | | | | | | | | 8.0 | | | | |
| 4 | | | 8.85 | 4.35 | | 2.45 | | | 10.2 | | | |
| 5 | 3.3 | | | | | | 1.85 | | | 9.4 | | |
| 6 | | | | | | | | 9.65 | | | | 8.1 |
| 7 | | | 8.3 | | | | | 10.55 | 10.15 | | | |
| 8 | | | | 3.3 | 1.9 | 2.2 | | 11.1 | | | | |
| 9 | | 9.75 | | | | 2.2 | | 10.35 | | | 8.5 | |
| 10 | | | | | | | | 9.35 | | | | |
| 11 | | | | 4.5 | | | | 8.6 | | | | |
| 12 | 4.4 | | | | | | 4.4 | 8.25 | | 9.5 | | 7.95 |
| 13 | | | | | | | | | | | | |
| 14 | | | 8.2 | | | | | | 10.0 | | 8.45 | 7.95 |
| 15 | | 10.5 | | | 1.85 | 2.1 | | | | | | |
| 16 | | 10.5 | | | | | | | | | 8.4 | |
| 17 | | | | | | | | 9.6 | | | | |
| 18 | | | | 2.25 | | | | | | | | 9.3 |
| 19 | 5.2 | | | | | | 5.0 | | | 9.65 | 8.4 | 9.45 |
| 20 | | | | | | 2.05 | | | | | | |
| 21 | | | 8.1 | | | | | 10.4 | 9.7 | | | |
| 22 | | | | | 1.9 | 1.95 | 5.15 | | | | | |
| 23 | | 9.3 | | 2.25 | | 1.95 | | | 11.2 | | 8.35 | 9.5 |
| 24 | 6.75 | | | | 1.9 | | | 10.3 | | | | |
| 25 | | | | 2.2 | | | | | | | | |
| 26 | 7.0 | | | | | 1.95 | 4.8 | 11.15 | | 9.35 | | |
| 27 | | | | | | | | 11.2 | | | | |
| 28 | | | 8.3 | | | | | | 9.4 | | | |
| 29 | | | | | | 1.95 | | 10.55 | | | | |
| 30 | | 8.9 | | | | | | | | | | 9.55 |
| 31 | | | | | | | | 10.65 | | 9.1 | 8.1 | |

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 1,609.9 feet above mean sea level.

DRAINAGE AREA.—82.5 square miles (revised).

RECORDS AVAILABLE.—October, 1916, to September, 1930.

EXTREMES.—Maximum stage during year, 21.0 feet June 28 (contents, 2,159 million cubic feet); minimum, 4.2 feet Oct. 21 (contents, 373 million cubic feet).

1917-1930: Maximum stage, 26.2 feet June 5, 6, 1926 (contents, 2,813 million cubic feet, revised); minimum, 2.1 feet Feb. 17, 1917, May 6, 7, 1922 (contents, 168 million cubic feet, revised).

REMARKS.—Crest of outlet dam (since 1930), 30.1 feet above zero of gage (capacity of lake, 3,337 million cubic feet).

Daily gage height, in feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-------|-------|-------|-------|-------|
| 1 | 5.6 | 4.75 | 8.15 | 6.4 | 8.2 | 5.0 | 6.0 | 14.4 | 19.25 | 20.1 | 19.3 | 18.65 |
| 2 | 5.5 | 4.9 | 8.2 | 6.55 | 7.85 | 5.15 | 6.1 | 14.95 | 19.3 | 19.75 | 19.25 | 18.65 |
| 3 | 5.4 | 5.0 | 8.2 | 6.7 | 7.5 | 5.3 | 6.2 | 16.0 | 19.25 | 19.35 | 19.25 | 18.65 |
| 4 | 5.3 | 5.1 | 8.2 | 6.75 | 7.15 | 5.4 | 6.25 | 16.95 | 19.3 | 19.2 | 19.25 | 18.65 |
| 5 | 5.25 | 5.20 | 8.2 | 6.8 | 6.85 | 5.25 | 6.3 | 17.6 | 19.3 | 19.2 | 19.25 | 18.65 |
| 6 | 5.15 | 5.35 | 8.1 | 6.75 | 6.55 | 5.15 | 6.35 | 18.3 | 19.35 | 19.15 | 19.25 | 18.6 |
| 7 | 5.05 | 5.45 | 8.0 | 6.75 | 6.3 | 5.05 | 6.65 | 18.8 | 19.35 | 19.15 | 19.25 | 18.6 |
| 8 | 5.0 | 5.4 | 7.9 | 6.75 | 6.05 | 5.05 | 7.3 | 19.0 | 19.45 | 19.15 | 19.25 | 18.6 |
| 9 | 4.9 | 5.4 | 7.8 | 7.1 | 5.8 | 4.95 | 7.8 | 19.35 | 19.45 | 19.15 | 19.3 | 18.55 |
| 10 | 4.8 | 5.45 | 7.7 | 7.45 | 5.65 | 5.05 | 8.25 | 19.5 | 19.55 | 19.1 | 19.35 | 18.5 |
| 11 | 4.7 | 5.5 | 7.6 | 7.75 | 5.45 | 5.2 | 8.65 | 19.4 | 19.55 | 19.1 | 19.35 | 18.5 |
| 12 | 4.6 | 5.55 | 7.5 | 8.0 | 5.3 | 5.35 | 8.75 | 19.3 | 19.6 | 19.1 | 19.3 | 18.45 |
| 13 | 4.55 | 5.55 | 7.35 | 8.25 | 5.15 | 5.45 | 9.05 | 19.4 | 19.55 | 19.1 | 19.3 | 18.45 |
| 14 | 4.5 | 5.55 | 7.25 | 8.5 | 5.0 | 5.5 | 9.7 | 19.6 | 19.55 | 19.15 | 19.3 | 18.45 |
| 15 | 4.4 | 5.75 | 7.15 | 8.7 | 4.9 | 5.55 | 10.15 | 19.55 | 19.5 | 19.35 | 19.2 | 18.45 |
| 16 | 4.35 | 6.0 | 7.0 | 8.85 | 4.8 | 5.6 | 10.65 | 19.55 | 19.5 | 19.35 | 19.1 | 18.4 |
| 17 | 4.3 | 6.35 | 6.9 | 8.95 | 4.7 | 5.6 | 11.0 | 19.65 | 19.45 | 19.35 | 19.0 | 18.55 |
| 18 | 4.3 | 6.7 | 6.75 | 9.1 | 4.55 | 5.7 | 11.35 | 19.65 | 19.45 | 19.35 | 18.9 | 18.55 |
| 19 | 4.25 | 7.0 | 6.7 | 9.25 | 4.45 | 5.8 | 11.7 | 19.65 | 19.45 | 19.4 | 18.8 | 18.6 |
| 20 | 4.25 | 7.2 | 6.6 | 9.4 | 4.35 | 5.85 | 12.05 | 19.8 | 19.4 | 19.4 | 18.75 | 18.6 |
| 21 | 4.2 | 7.4 | 6.5 | 9.55 | 4.3 | 5.9 | 12.45 | 19.85 | 19.45 | 19.4 | 18.75 | 18.65 |
| 22 | 4.25 | 7.55 | 6.4 | 9.7 | 4.25 | 5.9 | 12.85 | 19.85 | 19.65 | 19.4 | 18.75 | 18.7 |
| 23 | 4.3 | 7.65 | 6.3 | 9.85 | 4.25 | 5.85 | 13.2 | 19.9 | 19.9 | 19.4 | 18.75 | 18.7 |
| 24 | 4.25 | 7.75 | 6.25 | 9.8 | 4.25 | 5.6 | 13.4 | 19.9 | 20.25 | 19.35 | 18.7 | 18.7 |
| 25 | 4.35 | 7.85 | 6.15 | 9.7 | 4.45 | 5.45 | 13.6 | 19.9 | 20.6 | 19.35 | 18.7 | 18.7 |
| 26 | 4.4 | 7.9 | 6.05 | 9.5 | 4.65 | 5.3 | 13.7 | 20.1 | 20.9 | 19.35 | 18.65 | 18.75 |
| 27 | 4.45 | 7.95 | 5.95 | 9.35 | 4.75 | 5.5 | 13.95 | 20.15 | 20.95 | 19.35 | 18.65 | 18.8 |
| 28 | 4.5 | 8.0 | 5.9 | 9.2 | 4.85 | 5.7 | 13.9 | 19.85 | 21.0 | 19.35 | 18.65 | 18.8 |
| 29 | 4.55 | 8.05 | 6.0 | 9.0 | ----- | 5.8 | 14.0 | 19.55 | 20.8 | 19.35 | 18.65 | 18.8 |
| 30 | 4.6 | 8.1 | 6.1 | 8.75 | ----- | 5.9 | 14.1 | 19.4 | 20.5 | 19.35 | 18.65 | 18.85 |
| 31 | 4.65 | ----- | 6.25 | 8.55 | ----- | 5.95 | ----- | 19.2 | ----- | 19.35 | 18.65 | ----- |

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.—82.5 square miles (revised).

RECORDS AVAILABLE.—April, 1917, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,840 second-feet May 27 (gauge height, 4.02 feet); minimum, 4.2 second-feet several times during year (gauge height, 1.43 feet).

1917-1930: Maximum discharge, 1,580 second-feet Feb. 2, 1928; maximum gauge height, 6.35 feet May 5, 1925, caused by backwater during logging operations; minimum, 2.8 second-feet Mar. 16, 1929 (gauge height, 1.40 feet).

REMARKS.—Records good. 3,840 million cubic feet (revised) of storage developed above station.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-------|-------|------|------|-------|
| 1 | 169 | 4.2 | 51 | 192 | 503 | 4.6 | 5.4 | 25 | 436 | 794 | 107 | 37 |
| 2 | 161 | 4.2 | 49 | 192 | 496 | 4.6 | 5.4 | 28 | 436 | 688 | 71 | 37 |
| 3 | 158 | 4.2 | 49 | 192 | 483 | 4.6 | 5.4 | 34 | 330 | 477 | 46 | 39 |
| 4 | 154 | 4.2 | 63 | 192 | 436 | 136 | 5.4 | 37 | 287 | 169 | 46 | 37 |
| 5 | 150 | 4.2 | 192 | 192 | 347 | 224 | 5.8 | 40 | 212 | 165 | 46 | 37 |
| 6 | 142 | 4.6 | 200 | 192 | 356 | 205 | 6.2 | 335 | 187 | 165 | 44 | 37 |
| 7 | 139 | 4.6 | 196 | 192 | 327 | 162 | 8.2 | 867 | 187 | 161 | 44 | 37 |
| 8 | 135 | 4.6 | 196 | 152 | 310 | 178 | 7.6 | 930 | 187 | 161 | 44 | 37 |
| 9 | 131 | 4.6 | 196 | 6.2 | 298 | 108 | 7.6 | 950 | 187 | 161 | 44 | 37 |
| 10 | 128 | 4.6 | 196 | 5.8 | 275 | 4.2 | 8.2 | 950 | 187 | 177 | 46 | 37 |
| 11 | 124 | 4.6 | 192 | 6.2 | 244 | 4.2 | 8.2 | 930 | 187 | 116 | 46 | 37 |
| 12 | 117 | 21 | 187 | 6.6 | 214 | 4.2 | 9.4 | 318 | 187 | 178 | 44 | 37 |
| 13 | 111 | 44 | 187 | 7.6 | 196 | 4.2 | 11 | 58 | 187 | 178 | 46 | 37 |
| 14 | 107 | 24 | 196 | 8.2 | 187 | 4.2 | 11 | 262 | 187 | 178 | 155 | 37 |
| 15 | 104 | 5.0 | 196 | 7.6 | 182 | 4.6 | 13 | 208 | 187 | 178 | 234 | 131 |
| 16 | 97 | 5.0 | 196 | 11 | 169 | 4.2 | 14 | 165 | 187 | 178 | 234 | 229 |
| 17 | 94 | 5.0 | 196 | 8.2 | 154 | 6.2 | 15 | 169 | 187 | 178 | 234 | 234 |
| 18 | 94 | 5.0 | 192 | 8.8 | 135 | 5.0 | 16 | 169 | 182 | 178 | 230 | 113 |
| 19 | 92 | 5.0 | 192 | 9.4 | 131 | 5.0 | 19 | 95 | 178 | 154 | 166 | 37 |
| 20 | 89 | 5.0 | 192 | 9.4 | 124 | 42 | 19 | 186 | 174 | 178 | 44 | 39 |
| 21 | 89 | 5.0 | 187 | 10 | 121 | 65 | 19 | 275 | 174 | 158 | 44 | 39 |
| 22 | 89 | 5.0 | 192 | 10 | 117 | 71 | 143 | 275 | 182 | 154 | 44 | 39 |
| 23 | 89 | 21 | 192 | 47 | 114 | 160 | 117 | 275 | 192 | 154 | 42 | 39 |
| 24 | 32 | 49 | 187 | 182 | 52 | 281 | 228 | 270 | 205 | 154 | 39 | 37 |
| 25 | 4.2 | 49 | 187 | 270 | 5.0 | 249 | 231 | 345 | 210 | 117 | 39 | 40 |
| 26 | 4.2 | 49 | 192 | 304 | 4.6 | 100 | 23 | 1,020 | 397 | 111 | 39 | 40 |
| 27 | 4.2 | 51 | 196 | 304 | 4.6 | 5.0 | 179 | 1,730 | 510 | 111 | 37 | 40 |
| 28 | 4.2 | 51 | 187 | 292 | 4.6 | 5.0 | 312 | 1,520 | 701 | 77 | 37 | 40 |
| 29 | 4.2 | 51 | 187 | 287 | ----- | 5.4 | 243 | 1,000 | 800 | 83 | 39 | 40 |
| 30 | 4.2 | 51 | 182 | 333 | ----- | 5.4 | 325 | 770 | 790 | 71 | 37 | 39 |
| 31 | 4.2 | ----- | 192 | 436 | ----- | 5.4 | ----- | 497 | ----- | 111 | 37 | ----- |

| 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 | 169 | 4.2 | 91.1 | +60.6 | 114 | 1.38 | 1.59 |
| November | 51 | 4.2 | 18.3 | +375.8 | 163 | 1.98 | 2.21 |
| December | 200 | 49 | 174 | -277.3 | 70.5 | .855 | .99 |
| January | 436 | 5.8 | 131 | +99.5 | 168 | 2.04 | 2.35 |
| February | 503 | 4.6 | 214 | -347.4 | 70.3 | .852 | .89 |
| March | 281 | 4.2 | 67.6 | +96.2 | 104 | 1.26 | 1.45 |
| April | 325 | 5.4 | 67.4 | +918.1 | 422 | 5.12 | 5.71 |
| May | 1,730 | 25 | 475 | +815.6 | 780 | 9.45 | 10.90 |
| June | 800 | 174 | 288 | +76.0 | 317 | 3.84 | 4.28 |
| July | 724 | 71 | 176 | -135.6 | 125 | 1.52 | 1.75 |
| August | 234 | 37 | 77.9 | -130.5 | 29.2 | .354 | .41 |
| September | 234 | 37 | 59.9 | +91.6 | 95.2 | 1.15 | 1.28 |
| The year | 1,730 | 4.2 | 153 | +1,642.6 | 205 | 2.48 | 33.81 |

CONNECTICUT RIVER AT NORTH STRATFORD, N. H.

LOCATION.—Water-stage recorder in North Stratford, Coos County, 400 feet below mouth of Nulhegan River. Zero of gage 880.00 feet above mean sea level.

DRAINAGE AREA.—797 square miles.

RECORDS AVAILABLE.—August to September, 1930.

EXTREMES.—Maximum discharge during year, 4,420 second-feet Sept. 17 (gage height, 6.67 feet); minimum, 51 second-feet Sept. 11 (gage height, 2.19 feet).

REMARKS.—Records excellent. Flow regulated by storage in First and Second Connecticut Lakes, combined capacity, 3,840 million cubic feet.

Daily and monthly discharge, in second-feet, 1930

| Day | Aug. | Sept. | Day | Aug. | Sept. | Day | Aug. | Sept. |
|---------|------|-------|---------|------|-------|---------|------|-------|
| 1..... | | 230 | 11..... | | 150 | 21..... | 624 | 700 |
| 2..... | | 222 | 12..... | | 176 | 22..... | 488 | 658 |
| 3..... | | 322 | 13..... | 342 | 155 | 23..... | 372 | 459 |
| 4..... | | 404 | 14..... | 303 | 189 | 24..... | 283 | 398 |
| 5..... | | 279 | 15..... | 293 | 168 | 25..... | 274 | 420 |
| 6..... | | 202 | 16..... | 500 | 707 | 26..... | 242 | 387 |
| 7..... | | 234 | 17..... | 798 | 3,990 | 27..... | 222 | 372 |
| 8..... | | 182 | 18..... | 760 | 3,300 | 28..... | 209 | 372 |
| 9..... | | 197 | 19..... | 700 | 1,480 | 29..... | 201 | 372 |
| 10..... | | 179 | 20..... | 584 | 978 | 30..... | 179 | 342 |
| | | | | | | 31..... | 210 | ----- |

| 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 |
| September..... | 3,990 | 150 | 607 | +91.6 | 643 | 0.807 | 0.90 |

CONNECTICUT RIVER AT WATERFORD, VT.

LOCATION.—Chain gage at bridge at Waterford, Caledonia 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, 1930.

EXTREMES.—Maximum discharge during year, 16,900 second-feet Apr. 9 (gage height, 661.8 feet); minimum, 270 second-feet Sept. 15 (gage height, 654.0 feet).

1927-1930: Maximum discharge, 43,800 second-feet Apr. 9, 1928 (gage height, 667.45 feet); minimum, 231 second-feet Aug. 8, 1927 (gage height, 654.18 feet).

REMARKS.—Records good. Correction for ice effect applied Dec. 3-17, 22-29, Jan. 5, 6, Jan. 17 to Feb. 20. Slight diurnal regulation. 3,840 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, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|-------|-------|
| 1..... | 780 | 1,130 | 820 | 1,340 | 1,080 | 3,650 | 2,370 | 6,160 | 8,570 | 2,82C | 1,230 | 604 |
| 2..... | 604 | 1,340 | 604 | 1,340 | 1,080 | 2,980 | 2,370 | 8,010 | 6,380 | 2,98C | 1,030 | 635 |
| 3..... | 780 | 2,980 | 940 | 1,510 | 1,130 | 2,670 | 2,670 | 12,100 | 5,720 | 2,98C | 940 | 742 |
| 4..... | 860 | 2,980 | 940 | 1,570 | 1,130 | 2,230 | 2,520 | 15,300 | 4,840 | 2,67C | 860 | 705 |
| 5..... | 1,230 | 2,370 | 860 | 1,690 | 1,130 | 1,820 | 2,980 | 14,500 | 3,650 | 1,95C | 940 | 742 |
| 6..... | 1,400 | 2,230 | 900 | 1,820 | 1,130 | 1,820 | 3,300 | 10,700 | 3,140 | 1,82C | 900 | 780 |
| 7..... | 1,400 | 2,090 | 780 | 2,090 | 1,030 | 1,820 | 6,600 | 8,570 | 2,670 | 2,09C | 780 | 900 |
| 8..... | 1,340 | 1,690 | 820 | 2,820 | 985 | 2,090 | 15,300 | 8,290 | 2,370 | 2,37C | 705 | 572 |
| 9..... | 1,280 | 1,450 | 742 | 6,380 | 940 | 3,300 | 16,900 | 7,500 | 2,670 | 1,95C | 1,130 | 544 |
| 10..... | 1,340 | 1,400 | 780 | 8,570 | 940 | 3,650 | 12,800 | 6,160 | 3,650 | 1,82C | 1,450 | 544 |
| 11..... | 1,230 | 1,080 | 705 | 7,270 | 900 | 3,300 | 8,010 | 5,060 | 3,830 | 1,82C | 1,280 | 544 |
| 12..... | 1,180 | 1,340 | 705 | 4,420 | 860 | 2,980 | 7,040 | 4,420 | 3,470 | 1,57C | 1,180 | 515 |
| 13..... | 940 | 1,230 | 780 | 3,470 | 940 | 2,980 | 9,750 | 3,830 | 2,670 | 1,40C | 1,080 | 515 |
| 14..... | 742 | 1,340 | 860 | 3,140 | 860 | 2,820 | 12,800 | 3,300 | 2,370 | 1,45C | 900 | 544 |
| 15..... | 985 | 2,230 | 900 | 2,980 | 860 | 2,370 | 14,200 | 3,830 | 1,950 | 2,67C | 860 | 365 |
| 16..... | 860 | 4,840 | 985 | 2,820 | 940 | 2,090 | 12,800 | 3,830 | 1,690 | 3,30C | 940 | 572 |
| 17..... | 900 | 4,630 | 1,080 | 2,370 | 940 | 1,820 | 8,860 | 3,470 | 1,570 | 2,37C | 1,450 | 1,820 |
| 18..... | 1,130 | 3,300 | 1,180 | 2,090 | 940 | 1,690 | 6,820 | 3,300 | 1,570 | 1,82C | 1,950 | 5,720 |
| 19..... | 1,400 | 2,820 | 1,510 | 1,820 | 1,030 | 1,570 | 7,040 | 3,140 | 1,820 | 1,45C | 1,820 | 4,220 |
| 20..... | 1,280 | 2,670 | 2,090 | 1,400 | 1,080 | 1,400 | 8,860 | 3,140 | 2,230 | 1,23C | 1,690 | 2,370 |
| 21..... | 1,230 | 2,230 | 2,370 | 1,340 | 1,180 | 1,340 | 9,150 | 4,020 | 2,370 | 1,28C | 1,570 | 1,450 |
| 22..... | 1,950 | 1,950 | 1,950 | 1,230 | 1,950 | 1,340 | 8,010 | 4,840 | 4,840 | 1,51C | 1,570 | 1,340 |
| 23..... | 1,950 | 1,400 | 1,450 | 1,180 | 2,670 | 1,340 | 7,500 | 4,420 | 5,940 | 1,34C | 1,450 | 1,180 |
| 24..... | 1,820 | 1,130 | 1,280 | 1,130 | 4,420 | 1,180 | 6,380 | 3,650 | 5,940 | 1,080 | 1,080 | 940 |
| 25..... | 1,820 | 1,180 | 1,230 | 1,080 | 8,010 | 1,230 | 5,280 | 3,140 | 4,420 | 1,03C | 705 | 860 |
| 26..... | 1,690 | 1,280 | 1,180 | 1,030 | 7,750 | 2,370 | 4,630 | 4,020 | 3,300 | 1,03C | 860 | 780 |
| 27..... | 1,820 | 1,280 | 1,180 | 1,030 | 6,380 | 4,020 | 4,420 | 11,100 | 2,670 | 1,57C | 860 | 820 |
| 28..... | 1,570 | 1,400 | 1,180 | 1,180 | 4,630 | 4,420 | 4,220 | 15,300 | 2,670 | 2,09C | 820 | 742 |
| 29..... | 1,570 | 1,230 | 1,180 | 1,130 | ----- | 3,650 | 4,840 | 16,500 | 2,520 | 2,09C | 780 | 488 |
| 30..... | 1,400 | 985 | 1,180 | 1,080 | ----- | 2,980 | 5,280 | 13,800 | 2,980 | 2,09C | 742 | 820 |
| 31..... | 1,280 | ----- | 1,280 | 1,080 | ----- | 2,670 | ----- | 10,100 | ----- | 1,57C | 604 | ----- |

| Month | Observed | | | Gain or loss in storage (millions of cubic feet) | Corrected for storage | | |
|----------------|--------------|--------------|-------|--|-----------------------|---|-------------------------|
| | Maxi- mum | Mini- mum | Mean | | Mean | Per square mi ¹ / ₂ | Run-off in inches |
| October..... | 1,950 | 604 | 1,280 | +60.6 | 1,310 | 0.819 | 0.94 |
| November..... | 4,840 | 985 | 1,970 | +375.8 | 2,120 | 1.32 | 1.47 |
| December..... | 2,370 | 604 | 1,110 | -277.3 | 1,010 | .631 | .73 |
| January..... | 8,570 | 1,030 | 2,370 | +99.5 | 2,400 | 1.50 | 1.73 |
| February..... | 8,010 | 860 | 2,030 | -347.4 | 1,890 | 1.18 | 1.23 |
| March..... | 4,420 | 1,180 | 2,440 | +96.2 | 2,470 | 1.54 | 1.78 |
| April..... | 16,900 | 2,370 | 7,460 | +918.1 | 7,810 | 4.88 | 5.44 |
| May..... | 16,500 | 3,140 | 7,270 | +815.6 | 7,580 | 4.74 | 5.46 |
| June..... | 8,570 | 1,570 | 3,480 | +76.0 | 3,510 | 2.19 | 2.44 |
| July..... | 3,300 | 1,030 | 1,910 | -135.6 | 1,860 | 1.16 | 1.34 |
| August..... | 1,950 | 604 | 1,100 | -130.5 | 1,050 | .656 | .76 |
| September..... | 5,720 | 365 | 1,110 | +91.6 | 1,150 | .719 | .80 |
| The year..... | 16,900 | 365 | 2,790 | +1,642.6 | 2,860 | 1.78 | 24.12 |

CONNECTICUT RIVER AT SOUTH NEWBURY, VT.

LOCATION.—Chain gage until Sept. 15, 1930, and water-stage recorder thereafter 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 December, 1921; August, 1922, to September, 1930.

EXTREMES.—Maximum discharge during year, 25,000 second-feet Apr. 8 (gage height, 19.68 feet); minimum, 490 second-feet Sept. 8 (gage height, 0.40 foot).

1918-1930: Maximum discharge, 78,000 second-feet Nov. 5, 1927 (gage height, 35.4 feet); minimum, 460 second-feet Sept. 24, 1921 (gage height, 0.30 foot).

REMARKS.—Records good. Corrections for ice effect applied Nov. 29 to Mar. 25. Slight diurnal regulation. Flow regulated by storage in first and second Connecticut lakes and in pond behind dam at Fifteenmile Falls, filling of which began in August, 1930.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|--------|--------|--------|--------|-------|-------|-------|
| 1..... | 680 | 1,640 | 1,540 | 1,740 | 1,980 | 5,430 | 5,250 | 8,100 | 12,900 | 3,840 | 2,360 | 600 |
| 2..... | 980 | 1,500 | 1,320 | 1,710 | 2,020 | 4,660 | 5,140 | 10,300 | 10,400 | 6,540 | 1,840 | 690 |
| 3..... | 1,010 | 2,350 | 1,220 | 1,740 | 2,020 | 4,020 | 5,470 | 15,600 | 8,700 | 5,470 | 1,150 | 1,210 |
| 4..... | 1,100 | 3,620 | 1,460 | 2,350 | 1,860 | 3,620 | 5,140 | 18,700 | 7,260 | 4,590 | 1,120 | 1,030 |
| 5..... | 1,250 | 3,250 | 1,320 | 2,020 | 1,900 | 3,160 | 5,550 | 18,500 | 6,300 | 3,940 | 1,560 | 1,090 |
| 6..... | 1,570 | 2,710 | 1,360 | 2,020 | 1,940 | 2,980 | 6,660 | 16,200 | 5,360 | 3,040 | 1,630 | 1,030 |
| 7..... | 1,600 | 2,440 | 1,400 | 2,350 | 1,710 | 2,890 | 13,200 | 4,590 | 3,240 | 1,350 | 1,350 | 900 |
| 8..... | 1,640 | 2,180 | 1,460 | 3,250 | 1,940 | 3,430 | 23,500 | 12,100 | 4,260 | 3,440 | 1,210 | 600 |
| 9..... | 1,570 | 1,980 | 1,320 | 7,400 | 1,780 | 5,320 | 23,800 | 11,400 | 4,150 | 3,240 | 1,350 | 1,210 |
| 10..... | 1,460 | 1,710 | 1,290 | 9,920 | 1,640 | 5,980 | 20,900 | 9,480 | 7,980 | 2,950 | 1,840 | 1,090 |
| 11..... | 1,460 | 1,570 | 1,360 | 8,620 | 1,780 | 5,540 | 15,800 | 7,860 | 7,380 | 2,770 | 2,360 | 840 |
| 12..... | 1,290 | 1,430 | 1,070 | 7,040 | 1,640 | 5,760 | 12,700 | 6,780 | 7,260 | 2,360 | 2,280 | 960 |
| 13..... | 1,160 | 1,500 | 1,190 | 5,100 | 1,640 | 5,980 | 14,300 | 6,180 | 5,700 | 2,200 | 1,840 | 900 |
| 14..... | 1,100 | 1,540 | 1,250 | 4,660 | 1,740 | 5,430 | 18,000 | 5,470 | 4,480 | 2,280 | 1,700 | 1,090 |
| 15..... | 890 | 2,350 | 1,250 | 4,440 | 1,570 | 4,330 | 20,300 | 5,470 | 4,480 | 3,540 | 1,420 | 960 |
| 16..... | 1,220 | 5,100 | 1,190 | 4,440 | 1,600 | 3,620 | 19,000 | 5,940 | 3,840 | 4,260 | 1,700 | 660 |
| 17..... | 1,070 | 6,200 | 1,070 | 3,820 | 1,640 | 3,070 | 15,200 | 5,580 | 2,860 | 3,940 | 1,910 | 1,120 |
| 18..... | 1,190 | 4,880 | 1,460 | 3,070 | 1,740 | 3,070 | 11,800 | 5,030 | 2,950 | 3,140 | 1,420 | 2,050 |
| 19..... | 1,400 | 4,550 | 1,860 | 2,620 | 1,860 | 2,710 | 11,300 | 4,700 | 4,040 | 2,360 | 2,050 | 1,910 |
| 20..... | 1,600 | 4,120 | 2,980 | 2,350 | 1,820 | 2,350 | 12,900 | 4,920 | 5,140 | 2,050 | 2,050 | 1,600 |
| 21..... | 1,500 | 3,520 | 3,160 | 2,260 | 2,020 | 2,350 | 13,400 | 6,300 | 5,360 | 1,980 | 1,980 | 1,180 |
| 22..... | 1,600 | 2,860 | 2,710 | 2,260 | 2,020 | 1,980 | 12,500 | 7,260 | 6,660 | 2,050 | 1,840 | 1,320 |
| 23..... | 2,530 | 2,260 | 2,180 | 2,100 | 3,520 | 1,860 | 12,000 | 6,540 | 7,860 | 2,280 | 1,150 | 1,120 |
| 24..... | 3,070 | 1,760 | 1,900 | 2,020 | 6,200 | 1,820 | 10,400 | 5,700 | 8,100 | 2,860 | 960 | 995 |
| 25..... | 2,620 | 1,570 | 1,860 | 2,020 | 9,140 | 2,100 | 8,460 | 5,030 | 7,620 | 1,770 | 780 | 840 |
| 26..... | 2,350 | 1,640 | 1,780 | 1,980 | 9,790 | 9,530 | 7,500 | 6,060 | 5,700 | 1,490 | 1,090 | 1,350 |
| 27..... | 2,180 | 1,740 | 1,900 | 1,740 | 8,620 | 15,500 | 7,020 | 12,000 | 5,030 | 1,490 | 1,420 | 1,910 |
| 28..... | 2,020 | 1,820 | 2,020 | 2,020 | 7,040 | 11,400 | 6,780 | 18,800 | 4,040 | 3,440 | 1,350 | 1,560 |
| 29..... | 1,900 | 1,710 | 1,860 | 2,350 | ----- | 8,960 | 7,140 | 19,300 | 3,640 | 3,740 | 1,210 | 1,460 |
| 30..... | 1,820 | 1,570 | 1,740 | 2,020 | ----- | 7,260 | 7,380 | 18,200 | 3,540 | 4,150 | 1,210 | 690 |
| 31..... | 1,640 | ----- | 1,780 | 1,940 | ----- | 5,940 | ----- | 15,800 | ----- | 4,150 | 1,030 | ----- |

| Month | Observed | | | Gain or loss in storage (millions of cubic feet) | Corrected for storage | | |
|----------------|--------------|--------------|--------|---|-----------------------|-----------------------|-------------------------|
| | Maxi- mum | Mini- mum | Mean | | Mean | Per square mile | Run-off in inches |
| October..... | 3,070 | 680 | 1,560 | +60.6 | 1,590 | 0.562 | 0.65 |
| November..... | 6,200 | 1,430 | 2,870 | +375.8 | 2,720 | .961 | 1.07 |
| December..... | 3,160 | 1,070 | 1,650 | -277.3 | 1,550 | .548 | .63 |
| January..... | 9,920 | 1,710 | 3,330 | +99.5 | 3,370 | 1.19 | 1.37 |
| February..... | 9,790 | 1,570 | 3,040 | -347.4 | 2,900 | 1.03 | 1.07 |
| March..... | 15,500 | 1,820 | 4,900 | +96.2 | 4,940 | 1.75 | 2.02 |
| April..... | 23,800 | 5,140 | 11,900 | +918.1 | 12,300 | 4.35 | 4.85 |
| May..... | 19,300 | 4,700 | 10,100 | +815.6 | 10,400 | 3.67 | 4.23 |
| June..... | 12,900 | 2,860 | 5,920 | +76.0 | 5,950 | 2.10 | 2.34 |
| July..... | 6,540 | 1,490 | 3,180 | -135.6 | 3,130 | 1.11 | 1.28 |
| August..... | 2,360 | 780 | 1,560 | +614.4 | 1,790 | .633 | .73 |
| September..... | 2,050 | 600 | 1,130 | +1,049.9 | 1,540 | .544 | .61 |
| The year..... | 23,800 | 600 | 4,240 | +3,345.8 | 4,340 | 1.53 | 20.85 |

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 321.59 feet above mean sea level.

DRAINAGE AREA.—4,120 square miles.

RECORDS AVAILABLE.—November, 1911, to September, 1930.

EXTREMES.—Maximum discharge during year, 33,100 second-feet Apr. 8 (gage height, 15.6 feet); minimum, 880 second-feet Sept. 14 (gage height, 4.01 feet).

1912-1930: Maximum discharge, 148,000 second-feet Nov. 4, 1927 (gage height, 35.0 feet); minimum, 560 second-feet Sept. 8, 1913 (gage height, 2.8 feet).

REMARKS.—Records good except those for period of ice effect, Nov. 30 to Feb. 28, 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, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|
| 1..... | 1,420 | 2,520 | 2,370 | 3,130 | 3,300 | 9,460 | 8,150 | 9,730 | 15,600 | 4,600 | 3,480 | 1,520 |
| 2..... | 1,320 | 2,370 | 2,370 | 3,130 | 3,300 | 8,400 | 8,660 | 10,800 | 13,200 | 7,180 | 2,820 | 1,320 |
| 3..... | 1,850 | 2,670 | 2,370 | 3,300 | 3,300 | 7,420 | 9,190 | 15,900 | 10,800 | 7,420 | 2,220 | 1,320 |
| 4..... | 2,220 | 4,020 | 2,370 | 3,300 | 3,130 | 6,260 | 8,150 | 19,600 | 9,190 | 8,400 | 1,730 | 1,620 |
| 5..... | 2,090 | 4,400 | 2,370 | 3,300 | 3,130 | 5,820 | 8,400 | 20,300 | 8,150 | 5,610 | 1,730 | 1,320 |
| 6..... | 1,970 | 4,020 | 2,370 | 3,480 | 3,130 | 5,200 | 9,730 | 18,900 | 6,720 | 4,600 | 1,970 | 1,420 |
| 7..... | 2,370 | 3,660 | 2,370 | 5,000 | 3,130 | 5,400 | 17,900 | 14,400 | 6,260 | 4,600 | 1,970 | 1,320 |
| 8..... | 2,370 | 3,480 | 2,370 | 13,800 | 2,970 | 7,660 | 33,100 | 14,400 | 5,610 | 4,800 | 1,730 | 1,140 |
| 9..... | 2,370 | 3,300 | 2,370 | 14,400 | 2,970 | 12,900 | 30,900 | 13,500 | 6,230 | 4,600 | 1,620 | 960 |
| 10..... | 2,220 | 2,670 | 2,370 | 13,800 | 2,970 | 11,100 | 26,800 | 12,000 | 10,800 | 4,210 | 2,220 | 1,420 |
| 11..... | 2,090 | 2,520 | 2,370 | 12,000 | 2,970 | 10,800 | 21,800 | 10,000 | 12,000 | 3,840 | 2,820 | 1,320 |
| 12..... | 2,090 | 2,370 | 2,220 | 9,460 | 2,970 | 12,600 | 18,200 | 8,660 | 10,600 | 3,480 | 1,970 | 1,050 |
| 13..... | 1,850 | 2,370 | 2,220 | 8,150 | 2,970 | 11,400 | 18,900 | 7,660 | 8,660 | 3,130 | 2,520 | 1,140 |
| 14..... | 1,730 | 2,370 | 2,220 | 6,950 | 2,970 | 10,300 | 21,800 | 7,180 | 6,950 | 3,130 | 2,370 | 960 |
| 15..... | 1,730 | 2,970 | 2,220 | 6,490 | 2,970 | 8,660 | 24,800 | 6,490 | 6,040 | 3,130 | 2,220 | 1,140 |
| 16..... | 1,620 | 5,610 | 2,220 | 6,040 | 2,970 | 7,660 | 23,300 | 7,180 | 5,610 | 5,000 | 2,220 | 1,320 |
| 17..... | 1,850 | 7,660 | 2,220 | 5,610 | 2,970 | 6,720 | 20,000 | 7,180 | 4,600 | 5,000 | 2,520 | 2,220 |
| 18..... | 1,850 | 7,180 | 2,220 | 5,400 | 2,970 | 5,820 | 15,900 | 6,720 | 4,600 | 5,000 | 2,220 | 2,520 |
| 19..... | 1,850 | 7,180 | 4,600 | 5,200 | 3,130 | 5,820 | 14,400 | 6,260 | 6,720 | 3,480 | 2,520 | 2,820 |
| 20..... | 2,090 | 6,720 | 5,820 | 5,000 | 3,300 | 5,400 | 15,600 | 7,180 | 8,150 | 2,820 | 2,670 | 2,520 |
| 21..... | 2,220 | 5,610 | 6,040 | 4,800 | 4,210 | 5,200 | 16,300 | 8,150 | 8,660 | 2,520 | 2,820 | 2,090 |
| 22..... | 2,370 | 4,800 | 4,800 | 4,600 | 6,040 | 4,400 | 15,600 | 8,660 | 8,920 | 2,520 | 2,820 | 1,520 |
| 23..... | 3,130 | 3,840 | 4,210 | 4,400 | 9,730 | 4,210 | 15,000 | 8,660 | 9,190 | 2,820 | 2,090 | 1,140 |
| 24..... | 4,020 | 2,520 | 3,840 | 4,210 | 12,600 | 3,840 | 12,860 | 7,420 | 9,730 | 2,820 | 1,520 | 1,320 |
| 25..... | 4,020 | 2,970 | 3,480 | 4,020 | 15,000 | 4,800 | 11,700 | 6,490 | 9,460 | 2,520 | 1,520 | 1,230 |
| 26..... | 3,660 | 2,370 | 3,480 | 3,840 | 15,000 | 13,200 | 10,300 | 9,190 | 7,900 | 2,090 | 1,320 | 1,050 |
| 27..... | 3,300 | 2,970 | 3,300 | 3,840 | 12,900 | 18,900 | 9,190 | 11,400 | 6,950 | 2,090 | 1,520 | 1,730 |
| 28..... | 3,130 | 2,970 | 3,300 | 3,660 | 11,100 | 14,400 | 8,660 | 19,600 | 5,820 | 3,300 | 1,730 | 2,220 |
| 29..... | 2,970 | 2,370 | 3,130 | 3,660 | ----- | 11,100 | 8,660 | 21,800 | 5,000 | 4,800 | 1,620 | 1,730 |
| 30..... | 2,820 | 2,370 | 3,130 | 3,480 | ----- | 9,190 | 8,920 | 21,100 | 4,600 | 5,400 | 1,420 | 1,050 |
| 31..... | 2,670 | ----- | 3,130 | 3,480 | ----- | 8,400 | ----- | 18,900 | ----- | 4,600 | 1,420 | ----- |

| 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..... | 4,020 | 1,320 | 2,360 | +60.6 | 2,390 | 0.580 | 0.67 |
| November..... | 7,660 | 2,370 | 3,760 | +375.8 | 3,910 | .949 | 1.06 |
| December..... | 6,040 | 2,220 | 3,030 | +277.3 | 2,920 | .709 | .82 |
| January..... | 14,400 | 3,130 | 5,840 | +99.5 | 5,870 | 1.42 | 1.64 |
| February..... | 15,000 | 2,970 | 5,290 | -347.4 | 5,150 | 1.25 | 1.30 |
| March..... | 18,900 | 3,840 | 8,470 | +96.2 | 8,500 | 2.06 | 2.38 |
| April..... | 33,100 | 8,150 | 15,800 | +918.1 | 16,100 | 3.91 | 4.36 |
| May..... | 21,800 | 6,260 | 11,800 | +815.6 | 12,100 | 2.94 | 3.39 |
| June..... | 15,600 | 4,600 | 8,090 | +76.0 | 8,120 | 1.97 | 2.20 |
| July..... | 8,400 | 2,090 | 4,180 | -135.6 | 4,130 | 1.00 | 1.15 |
| August..... | 3,480 | 1,320 | 2,160 | +614.4 | 2,390 | .580 | .67 |
| September..... | 2,820 | 960 | 1,520 | +1,049.9 | 1,920 | .466 | .52 |
| The year..... | 33,100 | 960 | 6,010 | +3,345.8 | 6,120 | 1.49 | 20.16 |

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, 1930.

REMARKS.—Record is summation of discharge over and through dam, discharge of corporation along canal and of power stations Nos. 1 and 2 of Turners Falls Power & Electric Co., by whom record is furnished. Diurnal regulation. Seasonal flow regulated by storage reservoirs above station.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|
| 1..... | 2,260 | 3,960 | 1,000 | 4,850 | 4,710 | 17,300 | 13,700 | 11,700 | 19,800 | 6,550 | 6,130 | 505 |
| 2..... | 3,310 | 4,290 | 3,350 | 4,310 | 3,950 | 15,200 | 16,500 | 13,500 | 17,200 | 10,400 | 4,500 | 2,310 |
| 3..... | 3,300 | 2,050 | 3,350 | 5,760 | 5,700 | 14,000 | 16,800 | 16,900 | 14,900 | 8,480 | 1,250 | 1,980 |
| 4..... | 3,660 | 5,650 | 3,520 | 7,160 | 5,190 | 10,100 | 15,800 | 20,500 | 13,600 | 6,950 | 3,160 | 2,500 |
| 5..... | 4,390 | 5,340 | 2,680 | 4,970 | 4,020 | 9,840 | 14,800 | 24,000 | 8,890 | 8,630 | 3,050 | 2,480 |
| 6..... | 2,310 | 5,510 | 4,580 | 4,890 | 4,850 | 10,100 | 12,600 | 22,000 | 9,820 | 3,130 | 3,070 | 2,770 |
| 7..... | 3,350 | 4,980 | 3,440 | 6,760 | 4,850 | 10,200 | 29,900 | 18,900 | 9,020 | 6,670 | 2,570 | 745 |
| 8..... | 4,350 | 4,880 | 1,920 | 13,600 | 4,920 | 19,700 | 40,900 | 19,900 | 6,860 | 7,120 | 2,000 | 2,800 |
| 9..... | 3,860 | 4,960 | 3,900 | 29,000 | 1,680 | 35,100 | 44,000 | 17,200 | 12,100 | 6,840 | 2,080 | 2,420 |
| 10..... | 4,250 | 2,140 | 3,710 | 27,800 | 4,470 | 25,000 | 36,800 | 16,700 | 17,300 | 7,050 | 2,670 | 2,460 |
| 11..... | 3,550 | 4,570 | 2,620 | 20,000 | 4,580 | 22,300 | 32,000 | 13,600 | 24,400 | 6,210 | 4,570 | 2,160 |
| 12..... | 4,840 | 4,380 | 1,910 | 15,500 | 4,010 | 25,800 | 31,100 | 11,700 | 18,100 | 5,090 | 3,880 | 1,840 |
| 13..... | 1,170 | 4,310 | 1,640 | 14,700 | 4,010 | 22,700 | 23,900 | 9,980 | 15,500 | 3,140 | 3,560 | 2,660 |
| 14..... | 3,800 | 3,310 | 3,640 | 14,600 | 5,460 | 20,100 | 26,200 | 9,510 | 14,100 | 5,990 | 3,340 | 713 |
| 15..... | 3,580 | 4,420 | 1,760 | 14,400 | 4,800 | 17,200 | 30,800 | 8,380 | 7,290 | 5,490 | 4,480 | 2,040 |
| 16..... | 2,770 | 8,270 | 3,290 | 14,900 | 3,720 | 14,100 | 27,000 | 10,400 | 9,020 | 5,730 | 4,250 | 1,870 |
| 17..... | 2,650 | 8,480 | 5,040 | 11,400 | 4,540 | 13,400 | 26,800 | 11,300 | 8,500 | 6,170 | 2,430 | 2,980 |
| 18..... | 2,110 | 11,400 | 5,840 | 6,860 | 5,240 | 12,400 | 21,800 | 8,390 | 7,770 | 6,340 | 4,520 | 3,550 |
| 19..... | 2,230 | 11,300 | 11,700 | 6,530 | 4,290 | 12,900 | 19,500 | 8,660 | 11,300 | 6,090 | 3,750 | 3,730 |
| 20..... | 1,380 | 11,600 | 10,900 | 8,260 | 6,080 | 14,200 | 19,900 | 11,500 | 18,600 | 3,260 | 3,780 | 4,310 |
| 21..... | 2,880 | 7,120 | 9,390 | 6,920 | 12,300 | 13,000 | 19,600 | 12,300 | 16,700 | 4,690 | 3,830 | 2,220 |
| 22..... | 4,170 | 7,040 | 3,480 | 6,170 | 16,900 | 9,650 | 19,400 | 12,300 | 12,000 | 3,690 | 3,910 | 3,300 |
| 23..... | 4,710 | 7,220 | 4,920 | 7,110 | 14,600 | 6,640 | 18,900 | 11,800 | 12,500 | 3,630 | 6,350 | 2,920 |
| 24..... | 7,140 | 1,800 | 6,440 | 6,310 | 22,000 | 10,300 | 17,800 | 11,000 | 12,100 | 3,370 | 418 | 2,550 |
| 25..... | 8,720 | 4,480 | 2,090 | 7,040 | 30,400 | 16,700 | 17,100 | 9,190 | 11,900 | 2,140 | 2,940 | 2,510 |
| 26..... | 5,430 | 4,420 | 4,890 | 4,210 | 26,600 | 37,800 | 18,200 | 14,000 | 11,400 | 3,450 | 3,260 | 2,100 |
| 27..... | 2,990 | 5,090 | 5,300 | 5,070 | 23,700 | 37,300 | 12,700 | 15,800 | 9,610 | 3,760 | 3,480 | 1,570 |
| 28..... | 5,310 | 2,940 | 5,410 | 4,820 | 20,400 | 29,400 | 7,990 | 22,800 | 8,610 | 4,490 | 2,570 | 373 |
| 29..... | 4,700 | 5,190 | 3,990 | 5,350 | ----- | 24,100 | 11,400 | 27,900 | 5,800 | 5,400 | 2,360 | 1,960 |
| 30..... | 3,140 | 2,770 | 4,410 | 5,240 | ----- | 18,600 | 12,400 | 25,100 | 5,990 | 5,960 | 2,120 | 2,300 |
| 31..... | 2,580 | ----- | 3,970 | 5,390 | ----- | 17,000 | ----- | 22,400 | ----- | 6,520 | 1,270 | ----- |

| 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..... | 8,720 | 1,170 | 3,710 | -156.3 | 3,650 | 0.503 | 0.58 |
| November..... | 11,600 | 1,800 | 5,460 | +407.1 | 5,620 | .775 | .86 |
| December..... | 11,700 | 1,000 | 4,330 | -380.9 | 4,180 | .577 | .67 |
| January..... | 29,000 | 4,210 | 9,670 | +513.6 | 9,870 | 1.36 | 1.57 |
| February..... | 30,400 | 1,680 | 9,210 | +25.4 | 9,220 | 1.27 | 1.32 |
| March..... | 37,800 | 6,640 | 18,100 | +634.5 | 18,400 | 2.54 | 2.93 |
| April..... | 44,000 | 7,990 | 21,900 | +1,183.6 | 22,300 | 3.08 | 3.44 |
| May..... | 27,900 | 8,380 | 15,100 | +887.3 | 15,500 | 2.14 | 2.47 |
| June..... | 24,400 | 5,800 | 12,400 | -197.2 | 12,300 | 1.70 | 1.90 |
| July..... | 10,400 | 2,140 | 5,560 | -444.6 | 5,400 | .745 | .86 |
| August..... | 6,350 | 418 | 3,280 | +469.4 | 3,450 | .476 | .55 |
| September..... | 4,310 | 373 | 2,290 | +711.6 | 2,560 | .353 | .39 |
| The year..... | 44,000 | 373 | 9,240 | +3,653.5 | 9,350 | 1.29 | 17.54 |

CONNECTICUT RIVER AT MONTAGUE, MASS.

LOCATION.—Water-stage recorder in Montague, Franklin County, 607 feet below mouth of Deerfield River. Zero of gage 100.00 feet above mean sea level.

DRAINAGE AREA.—7,950 square miles.

RECORDS AVAILABLE.—October, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 50,600 second-feet Apr. 9 (gage height, 21.80 feet); minimum, 413 second-feet Aug. 31 (gage height, 3.61 feet).

Maximum stage known, 42.70 feet Nov. 5, 1927 (discharge, 165,000 second-feet).

REMARKS.—Records excellent except those for periods of ice effect, Dec. 20 to Jan. 7, Jan. 19 to Feb. 24, and those estimated, which are good. Flow regulated by storage in reservoirs above station.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|
| 1..... | *3,140 | 4,730 | 1,340 | 5,180 | 6,100 | 21,100 | 16,300 | 13,300 | 21,700 | 7,070 | 7,800 | 1,140 |
| 2..... | *4,050 | 5,260 | 4,090 | 6,270 | 5,100 | 18,000 | 15,800 | 13,700 | 19,900 | 11,000 | 5,460 | 3,260 |
| 3..... | *4,250 | 2,290 | 4,520 | 7,180 | 6,800 | 18,000 | 18,100 | 18,700 | 16,800 | 10,300 | 2,020 | 2,930 |
| 4..... | *4,600 | 5,820 | 4,400 | 8,700 | 6,500 | 13,600 | 18,500 | 20,000 | 15,200 | 8,650 | 4,120 | 3,720 |
| 5..... | *5,050 | 6,900 | 3,780 | 6,020 | 5,350 | 12,900 | 16,500 | 24,500 | 12,000 | 9,360 | 4,460 | 3,610 |
| 6..... | *2,900 | 6,400 | 4,490 | 6,300 | 6,100 | 11,400 | 14,300 | 24,000 | 11,500 | 6,100 | 4,410 | 3,630 |
| 7..... | *3,850 | 5,850 | 4,330 | 9,570 | 6,300 | 11,700 | 26,700 | 21,300 | 10,600 | 7,680 | 3,930 | 1,340 |
| 8..... | *5,200 | 5,350 | 2,360 | 12,400 | 6,460 | 15,900 | 44,500 | 20,000 | 7,890 | 7,410 | 3,410 | 3,650 |
| 9..... | *4,800 | 5,720 | 4,400 | 27,900 | 3,500 | 32,200 | 48,500 | 19,000 | 12,300 | 8,740 | 2,960 | 3,800 |
| 10..... | *5,400 | 2,490 | 4,860 | 34,200 | 5,270 | 30,100 | 40,600 | 17,800 | 17,700 | 8,200 | 2,390 | 3,240 |
| 11..... | *4,900 | 5,200 | 3,740 | 24,900 | 6,220 | 26,000 | 34,500 | 15,500 | 28,400 | 7,820 | 5,630 | 3,160 |
| 12..... | *5,600 | 5,000 | 3,350 | 21,500 | 5,200 | 28,600 | 30,900 | 14,400 | 24,100 | 5,550 | 5,160 | 2,570 |
| 13..... | *2,720 | 5,090 | 2,640 | 15,100 | 5,050 | 27,800 | 29,400 | 11,600 | 17,900 | 4,180 | 5,090 | 3,230 |
| 14..... | *4,100 | 4,010 | 4,430 | 17,200 | 6,550 | 23,700 | 24,500 | 11,500 | 16,100 | 6,660 | 4,830 | 1,380 |
| 15..... | *4,650 | 4,810 | 2,730 | 17,200 | 6,250 | 20,200 | 30,800 | 10,700 | 11,400 | 7,370 | 6,060 | 2,800 |
| 16..... | *4,100 | 6,490 | 4,090 | 16,700 | 5,500 | 17,700 | 31,500 | 11,400 | 9,050 | 6,830 | 5,080 | 2,590 |
| 17..... | *3,100 | 8,840 | 4,740 | 16,300 | 5,600 | 16,300 | 28,500 | 12,800 | 9,990 | 7,720 | 3,830 | 2,720 |
| 18..... | *2,650 | 11,300 | 5,450 | 11,500 | 7,050 | 14,000 | 25,200 | 10,500 | 9,460 | 7,740 | 5,650 | 4,230 |
| 19..... | *2,350 | 12,700 | 14,100 | 7,820 | 5,850 | 15,800 | 22,600 | 10,700 | 11,200 | 6,950 | 5,000 | 4,830 |
| 20..... | *1,800 | 12,900 | 13,200 | 9,400 | 9,220 | 15,600 | 21,000 | 11,900 | 11,900 | 3,690 | 5,220 | 4,640 |
| 21..... | *2,770 | 10,400 | 12,000 | 8,900 | 16,300 | 15,900 | 21,000 | 13,600 | 17,500 | 6,020 | 5,360 | 1,890 |
| 22..... | *4,320 | 7,840 | 5,100 | 7,500 | 19,400 | 11,800 | 21,900 | 14,100 | 13,700 | 4,610 | 4,990 | 3,910 |
| 23..... | *5,450 | 7,230 | 5,950 | 8,300 | 17,800 | 7,880 | 21,400 | 13,600 | 13,900 | 5,400 | 6,880 | 3,740 |
| 24..... | *7,850 | 2,810 | 7,650 | 7,800 | 25,200 | 12,200 | 20,400 | 13,000 | 12,600 | 4,870 | 1,600 | 3,250 |
| 25..... | *9,320 | 5,410 | 3,850 | 8,100 | 34,800 | 15,100 | 18,600 | 10,500 | 13,000 | 3,650 | 3,910 | 3,440 |
| 26..... | *6,300 | 5,350 | 5,600 | 5,300 | 33,300 | 40,500 | 18,100 | 14,600 | 13,100 | 4,680 | 4,320 | 2,860 |
| 27..... | *3,250 | 5,790 | 6,700 | 6,500 | 28,700 | 42,300 | 18,900 | 17,500 | 10,900 | 4,480 | 4,250 | 1,060 |
| 28..... | *5,450 | 3,510 | 5,860 | 6,900 | 24,800 | 33,900 | 10,500 | 19,400 | 9,930 | 5,970 | 3,560 | 958 |
| 29..... | *5,400 | 6,240 | 4,650 | 6,850 | ----- | 26,300 | 11,800 | 29,400 | 7,720 | 6,540 | 3,700 | 2,550 |
| 30..... | *4,100 | 3,630 | 5,500 | 6,600 | ----- | 19,500 | 13,200 | 27,500 | 7,560 | 7,600 | 2,820 | 3,100 |
| 31..... | *3,190 | ----- | 5,350 | 6,640 | ----- | 18,700 | ----- | 23,900 | ----- | 7,370 | 1,610 | ----- |

| Month | Observed | | | Gain or loss in storage (millions of cubic feet) | Corrected for storage | | |
|----------------|--------------|--------------|--------|---|--------------------------|-----------------------|----------------------|
| | Maxi- mum | Mini- mum | Mean | | Mean | Per square mile | Run-off in inches |
| October..... | 9,320 | 1,800 | 4,400 | -1,120.3 | 3,990 | 0.502 | 0.58 |
| November..... | 12,900 | 2,290 | 6,180 | +640.1 | 6,430 | .809 | .90 |
| December..... | 14,100 | 1,340 | 5,330 | -329.9 | 5,210 | .655 | .76 |
| January..... | 34,200 | 5,180 | 11,600 | +720.6 | 11,900 | 1.50 | 1.73 |
| February..... | 34,800 | 3,500 | 11,400 | -181.6 | 11,400 | 1.43 | 1.40 |
| March..... | 42,300 | 7,880 | 20,500 | +1,882.5 | 21,000 | 2.64 | 3.04 |
| April..... | 48,500 | 10,500 | 23,800 | +2,603.6 | 24,800 | 3.12 | 3.48 |
| May..... | 29,400 | 10,500 | 16,500 | +1,701.3 | 17,100 | 2.15 | 2.48 |
| June..... | 28,400 | 7,560 | 14,000 | +132.8 | 14,100 | 1.77 | 1.98 |
| July..... | 11,000 | 3,650 | 6,780 | -1,229.6 | 6,320 | .795 | .92 |
| August..... | 7,800 | 1,600 | 4,370 | -643.6 | 4,130 | .519 | .60 |
| September..... | 4,830 | 958 | 2,970 | +19.6 | 2,980 | .375 | .42 |
| The year..... | 48,500 | 958 | 10,600 | +3,695.5 | 10,800 | 1.36 | 18.38 |

* Estimated.

CONNECTICUT RIVER AT SUNDERLAND, MASS.

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

DRAINAGE AREA.—8,000 square miles.

RECORDS AVAILABLE.—March, 1904, to September, 1930.

EXTREMES.—Maximum discharge during year 49,900 second-feet Apr. 9 (gage height, 16.60 feet); minimum, 1,000 second-feet (estimated), Sept. 29.

1904-1930: Maximum discharge, 165,000 second-feet Nov. 5, 1927 (gage height, 34.08 feet); minimum, 450 second-feet Aug. 29, 1921 (gage height, 0.0 foot).

REMARKS.—Records fair. Flow regulated by storage reservoirs above station. Corrections for ice effect applied Dec. 5, Dec. 12 to Jan. 8, Jan. 19 to Feb. 20.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|
| 1 | 3,200 | 3,020 | 2,320 | 5,400 | 6,150 | 23,100 | 18,100 | 13,800 | 21,700 | 7,420 | 7,910 | 1,730 |
| 2 | 4,100 | 4,600 | 3,330 | 6,400 | 5,800 | 19,900 | 17,100 | 13,500 | 19,900 | 17,100 | 6,950 | 2,450 |
| 3 | 4,300 | 2,520 | 4,400 | 7,200 | 6,850 | 19,200 | 19,500 | 18,100 | 17,100 | 11,900 | 3,760 | 2,940 |
| 4 | 4,650 | 3,760 | 4,300 | 8,700 | 6,550 | 15,800 | 19,200 | 19,200 | 15,100 | 8,690 | 4,500 | 2,940 |
| 5 | 5,100 | 6,490 | 3,950 | 6,500 | 5,800 | 14,100 | 17,800 | 23,800 | 12,600 | 9,520 | 4,120 | 3,330 |
| 6 | 3,000 | 5,410 | 4,030 | 6,600 | 6,150 | 12,200 | 15,800 | 24,200 | 10,700 | 8,960 | 4,210 | 3,170 |
| 7 | 3,900 | 5,200 | 4,190 | 9,000 | 6,350 | 12,600 | 22,400 | 22,400 | 13,500 | 6,490 | 3,850 | 2,140 |
| 8 | 5,250 | 4,500 | 2,580 | 12,500 | 6,510 | 15,100 | 30,900 | 19,900 | 10,400 | 8,160 | 3,330 | 2,870 |
| 9 | 4,650 | 4,890 | 4,030 | 29,400 | 4,500 | 28,300 | 45,500 | 19,500 | 10,700 | 8,960 | 2,940 | 4,120 |
| 10 | 5,450 | 2,650 | 4,990 | 30,900 | 5,320 | 28,300 | 35,600 | 18,100 | 15,800 | 8,420 | 2,320 | 3,170 |
| 11 | 4,950 | 3,850 | 4,210 | 26,400 | 6,270 | 26,400 | 33,600 | 16,100 | 24,600 | 8,690 | 4,400 | 3,100 |
| 12 | 5,650 | 3,940 | 3,500 | 24,200 | 5,250 | 27,200 | 30,600 | 15,100 | 24,600 | 6,490 | 5,620 | 2,520 |
| 13 | 2,870 | 4,300 | 2,800 | 17,100 | 5,100 | 27,000 | 29,800 | 12,200 | 19,200 | 5,620 | 4,890 | 2,650 |
| 14 | 3,420 | 3,580 | 4,500 | 17,800 | 6,620 | 26,000 | 25,300 | 11,600 | 16,400 | 6,490 | 4,890 | 2,650 |
| 15 | 4,030 | 3,170 | 2,950 | 17,800 | 6,300 | 26,400 | 29,400 | 10,700 | 12,900 | 7,910 | 5,200 | 2,720 |
| 16 | 4,210 | 5,100 | 4,300 | 17,400 | 5,550 | 20,200 | 30,900 | 11,000 | 8,960 | 6,950 | 5,300 | 2,650 |
| 17 | 3,170 | 7,910 | 4,850 | 18,100 | 5,750 | 18,800 | 28,700 | 12,900 | 9,810 | 7,420 | 3,580 | 2,650 |
| 18 | 2,790 | 10,100 | 5,750 | 13,500 | 7,300 | 17,100 | 26,000 | 11,000 | 9,520 | 7,910 | 5,620 | 3,580 |
| 19 | 2,450 | 12,200 | 14,200 | 9,000 | 6,300 | 18,100 | 23,500 | 10,700 | 10,400 | 7,660 | 5,300 | 4,590 |
| 20 | 1,960 | 12,200 | 13,600 | 9,450 | 9,270 | 18,100 | 21,300 | 11,300 | 17,800 | 4,990 | 4,210 | 4,500 |
| 21 | 2,450 | 10,400 | 12,500 | 8,950 | 17,800 | 18,100 | 21,700 | 13,200 | 18,500 | 6,270 | 5,100 | 3,170 |
| 22 | 3,420 | 7,180 | 6,100 | 7,550 | 26,400 | 15,100 | 22,000 | 13,800 | 15,100 | 4,990 | 4,590 | 3,670 |
| 23 | 5,300 | 6,950 | 6,900 | 8,350 | 28,300 | 11,300 | 22,000 | 13,500 | 14,400 | 5,410 | 5,410 | 4,400 |
| 24 | 7,180 | 3,760 | 8,000 | 7,850 | 29,800 | 13,200 | 21,300 | 12,900 | 13,500 | 4,990 | 3,760 | 3,760 |
| 25 | 8,960 | 3,850 | 5,500 | 8,150 | 37,200 | 14,800 | 19,500 | 10,700 | 13,500 | 4,120 | 2,940 | 3,250 |
| 26 | 6,490 | 4,590 | 6,200 | 6,350 | 34,800 | 33,600 | 18,800 | 13,800 | 13,800 | 4,210 | 4,500 | 2,720 |
| 27 | 3,940 | 4,210 | 6,750 | 6,550 | 30,200 | 39,500 | 19,900 | 17,100 | 12,600 | 3,580 | 3,940 | 1,840 |
| 28 | 4,120 | 3,670 | 6,100 | 6,950 | 27,200 | 32,100 | 12,200 | 18,500 | 10,700 | 6,050 | 3,420 | 1,560 |
| 29 | 5,410 | 5,100 | 5,300 | 6,850 | 28,700 | 11,900 | 27,500 | 9,520 | 6,490 | 6,490 | 3,250 | 2,140 |
| 30 | 4,210 | 4,120 | 5,550 | 6,650 | 22,400 | 13,200 | 26,400 | 8,420 | 7,180 | 2,380 | 2,870 | |
| 31 | 2,580 | | 5,500 | 6,690 | 20,200 | | 24,200 | | 6,950 | 2,020 | | |

| 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 | 8,960 | 1,960 | 4,300 | -1,120.3 | 3,880 | 0.485 | 0.56 |
| November | 12,200 | 2,520 | 5,440 | +640.1 | 5,680 | .710 | .79 |
| December | 14,200 | 2,320 | 5,590 | -329.9 | 5,460 | .682 | .78 |
| January | 30,900 | 5,400 | 12,100 | +720.6 | 12,300 | 1.54 | 1.78 |
| February | 37,200 | 4,500 | 17,700 | -181.6 | 12,600 | 1.58 | 1.64 |
| March | 39,500 | 11,300 | 21,400 | +1,382.5 | 21,900 | 2.74 | 3.16 |
| April | 45,500 | 11,900 | 23,400 | +2,606.6 | 24,500 | 3.06 | 3.44 |
| May | 27,500 | 10,700 | 16,300 | +1,701.3 | 17,000 | 2.12 | 2.44 |
| June | 24,600 | 8,420 | 14,400 | +132.8 | 14,400 | 1.80 | 2.01 |
| July | 11,900 | 3,580 | 7,060 | -1,229.6 | 6,600 | .825 | .95 |
| August | 7,910 | 2,020 | 4,330 | -643.6 | 4,090 | .511 | .59 |
| September | 4,590 | 1,560 | 2,980 | +19.6 | 2,990 | .374 | .42 |
| The year | 45,500 | 1,560 | 10,800 | +3,695.5 | 10,900 | 1.36 | 18.54 |

* Estimated.

CONNECTICUT RIVER AT THOMPSONVILLE, CONN.

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

DRAINAGE AREA.—9,740 square miles.

RECORDS AVAILABLE.—July, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 57,600 second-feet Apr. 9; minimum, 1,580 second-feet Sept. 2.

1928-1930: Maximum discharge, 84,800 second-feet Mar. 25, 1929; minimum, 970 second-feet Sept. 29, 1929.

Maximum stage known, 12.3 feet Nov. 4, 1927 (discharge not determined).

REMARKS.—Records good. Seasonal storage in lakes and reservoirs above.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|
| 1..... | 4,500 | 4,860 | 3,500 | 5,610 | 7,350 | 25,600 | 21,600 | 15,200 | 25,900 | 8,747 | 5,840 | 1,670 |
| 2..... | 4,980 | 4,130 | 3,570 | 7,480 | 5,940 | 23,100 | 19,100 | 14,600 | 23,500 | 8,657 | 6,850 | 2,300 |
| 3..... | 5,320 | 4,000 | 5,110 | 8,340 | 7,370 | 20,800 | 21,000 | 17,900 | 20,900 | 11,200 | 5,020 | 3,530 |
| 4..... | 5,320 | 4,380 | 5,060 | 8,700 | 8,150 | 19,100 | 21,000 | 21,000 | 17,700 | 9,569 | 4,840 | 4,160 |
| 5..... | 4,980 | 6,610 | 5,150 | 9,560 | 7,700 | 14,500 | 21,000 | 25,600 | 15,900 | 8,557 | 5,920 | 4,130 |
| 6..... | 3,220 | 7,330 | 5,060 | 10,300 | 7,660 | 14,000 | 17,800 | 27,200 | 12,200 | 9,569 | 5,260 | 3,800 |
| 7..... | 3,720 | 6,870 | 4,630 | 8,420 | 7,060 | 13,000 | 21,500 | 25,700 | 12,600 | 8,890 | 4,960 | 2,370 |
| 8..... | 4,790 | 6,550 | 3,560 | 9,740 | 7,020 | 15,300 | 46,500 | 22,400 | 10,900 | 9,237 | 4,900 | 2,610 |
| 9..... | 4,950 | 6,280 | 4,130 | 20,400 | 5,640 | 30,500 | 55,400 | 22,300 | 11,200 | 8,269 | 3,880 | 3,680 |
| 10..... | 5,410 | 4,840 | 5,100 | 40,800 | 6,460 | 39,900 | 51,400 | 20,000 | 19,000 | 8,789 | 2,610 | 4,950 |
| 11..... | 5,020 | 6,100 | 5,410 | 35,000 | 6,920 | 34,200 | 42,700 | 18,400 | 27,200 | 8,400 | 2,510 | 4,900 |
| 12..... | 4,630 | 6,210 | 5,750 | 26,800 | 6,640 | 31,800 | 37,300 | 16,400 | 32,700 | 7,000 | 4,630 | 4,670 |
| 13..... | 3,920 | 5,330 | 4,500 | 21,800 | 7,110 | 35,800 | 37,800 | 15,200 | 23,700 | 5,220 | 5,660 | 4,070 |
| 14..... | 4,020 | 5,280 | 3,840 | 19,200 | 7,770 | 30,200 | 46,300 | 12,800 | 19,400 | 7,357 | 5,510 | 2,560 |
| 15..... | 4,830 | 5,190 | 2,800 | 20,300 | 8,180 | 25,800 | 32,000 | 13,100 | 16,500 | 8,347 | 6,490 | 2,570 |
| 16..... | 5,100 | 4,990 | 2,430 | 20,900 | 7,140 | 23,100 | 36,000 | 13,500 | 12,100 | 7,817 | 6,100 | 3,980 |
| 17..... | 5,320 | 5,580 | 4,980 | 19,700 | 7,640 | 20,900 | 33,500 | 13,900 | 9,630 | 7,420 | 5,640 | 4,630 |
| 18..... | 4,830 | 10,900 | 5,510 | 16,500 | 8,030 | 19,100 | 30,700 | 13,500 | 10,700 | 7,790 | 4,700 | 3,430 |
| 19..... | 4,270 | 16,100 | 10,700 | 11,600 | 8,270 | 17,800 | 27,400 | 12,200 | 11,700 | 6,389 | 6,240 | 3,270 |
| 20..... | 2,900 | 15,200 | 20,400 | 9,190 | 8,570 | 19,100 | 24,400 | 12,300 | 15,300 | 5,860 | 6,100 | 3,870 |
| 21..... | 2,680 | 13,700 | 20,600 | 10,800 | 11,000 | 19,100 | 24,300 | 14,400 | 20,000 | 5,820 | 5,970 | 2,390 |
| 22..... | 3,830 | 10,600 | 18,100 | 10,900 | 18,900 | 16,500 | 24,500 | 15,300 | 17,100 | 7,037 | 5,620 | 2,890 |
| 23..... | 6,320 | 8,380 | 22,100 | 9,180 | 24,500 | 12,600 | 24,500 | 15,000 | 15,300 | 6,227 | 5,080 | 3,720 |
| 24..... | 8,420 | 6,090 | 14,400 | 8,690 | 25,000 | 10,500 | 23,800 | 14,100 | 14,500 | 6,437 | 4,500 | 3,840 |
| 25..... | 9,060 | 6,260 | 8,200 | 9,020 | 31,900 | 14,200 | 21,700 | 13,600 | 13,700 | 6,489 | 4,400 | 4,060 |
| 26..... | 8,710 | 6,700 | 6,800 | 8,690 | 36,800 | 35,000 | 20,100 | 14,900 | 13,800 | 5,020 | 5,280 | 3,870 |
| 27..... | 5,630 | 6,310 | 6,570 | 8,460 | 33,500 | 53,300 | 21,700 | 19,000 | 13,300 | 3,457 | 5,240 | 3,360 |
| 28..... | 5,920 | 4,740 | 7,180 | 8,080 | 30,300 | 46,400 | 17,700 | 19,700 | 10,800 | 5,120 | 5,060 | 2,120 |
| 29..... | 6,680 | 5,080 | 6,000 | 8,190 | ----- | 36,600 | 12,600 | 27,900 | 9,200 | 6,970 | 4,390 | 2,430 |
| 30..... | 6,150 | 6,250 | 7,130 | 8,490 | ----- | 29,100 | 13,700 | 31,400 | 8,860 | 7,889 | 3,360 | 3,400 |
| 31..... | 5,830 | ----- | 7,820 | 9,190 | ----- | 17,000 | ----- | 28,900 | ----- | 6,659 | 2,300 | ----- |

| 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..... | 9,060 | 2,680 | 5,200 | -1,120.3 | 4,780 | 0.491 | 0.57 |
| November..... | 16,100 | 4,000 | 7,030 | +640.1 | 7,270 | .746 | .83 |
| December..... | 22,100 | 2,430 | 7,620 | -329.9 | 7,490 | .769 | .89 |
| January..... | 40,800 | 5,610 | 13,900 | +720.6 | 14,100 | 1.45 | 1.67 |
| February..... | 36,800 | 5,640 | 12,800 | -181.6 | 12,700 | 1.30 | 1.35 |
| March..... | 53,300 | 10,500 | 24,600 | +1,382.5 | 25,200 | 2.59 | 2.99 |
| April..... | 55,400 | 12,600 | 28,300 | +2,603.6 | 29,300 | 3.01 | 3.36 |
| May..... | 31,400 | 12,200 | 18,300 | +1,701.3 | 18,900 | 1.94 | 2.24 |
| June..... | 32,700 | 8,860 | 16,200 | +132.8 | 16,200 | 1.66 | 1.85 |
| July..... | 11,200 | 3,450 | 7,420 | -1,229.6 | 6,960 | .715 | .82 |
| August..... | 6,850 | 2,300 | 5,000 | -643.6 | 4,760 | .489 | .56 |
| September..... | 4,950 | 1,670 | 3,440 | +19.6 | 3,450 | .354 | .40 |
| The year..... | 55,400 | 1,670 | 12,500 | +3,695.5 | 12,600 | 1.29 | 17.53 |

PASSUMPSIC RIVER AT PASSUMPSIC, VT.

LOCATION.—Water-stage recorder 1 mile below dam at Passumpsic, Caledonia County.

DRAINAGE AREA.—423 square miles.

RECORDS AVAILABLE.—November, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 5,940 second-feet Apr. 8 (gage height, 9.38 feet); minimum, 10 second-feet Sept. 25 (gage height, 1.00 foot).

REMARKS.—Records good. Corrections for ice effect applied Nov. 26, 29, Dec. 9-17, Jan. 6, Jan. 9 to Mar. 7, Mar. 26.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| 1..... | 120 | 263 | 213 | 437 | 297 | 730 | 832 | 1,390 | 1,040 | 804 | 296 | 134 |
| 2..... | 144 | 610 | 312 | 449 | 282 | 670 | 1,420 | 2,040 | 889 | 1,110 | 247 | 158 |
| 3..... | 168 | 694 | 297 | 634 | 297 | 514 | 1,030 | 2,980 | 743 | 734 | 222 | 165 |
| 4..... | 251 | 478 | 287 | 754 | 263 | 375 | 1,060 | 2,340 | 630 | 441 | 236 | 157 |
| 5..... | 356 | 386 | 287 | 574 | 237 | 322 | 1,400 | 1,580 | 508 | 366 | 338 | 144 |
| 6..... | 246 | 437 | 272 | 272 | 228 | 338 | 1,820 | 1,330 | 494 | 455 | 238 | 118 |
| 7..... | 228 | 343 | 268 | 604 | 230 | 312 | 4,040 | 1,180 | 442 | 733 | 188 | 107 |
| 8..... | 213 | 287 | 220 | 2,190 | 198 | 1,740 | 5,060 | 1,060 | 421 | 518 | 168 | 134 |
| 9..... | 194 | 259 | 209 | 3,680 | 190 | 2,340 | 2,740 | 943 | 666 | 434 | 460 | 114 |
| 10..... | 174 | 246 | 190 | 2,260 | 190 | 1,730 | 1,690 | 782 | 1,720 | 418 | 515 | 111 |
| 11..... | 155 | 254 | 171 | 1,560 | 144 | 1,530 | 1,680 | 684 | 1,180 | 316 | 509 | 160 |
| 12..... | 158 | 241 | 146 | 1,250 | 129 | 2,180 | 2,420 | 628 | 798 | 302 | 308 | 120 |
| 13..... | 111 | 232 | 129 | 1,250 | 129 | 1,710 | 3,240 | 602 | 554 | 249 | 242 | 119 |
| 14..... | 187 | 592 | 165 | 1,180 | 144 | 1,340 | 3,860 | 612 | 478 | 680 | 206 | 62 |
| 15..... | 174 | 1,390 | 152 | 1,180 | 161 | 946 | 3,120 | 600 | 388 | 1,040 | 252 | 153 |
| 16..... | 158 | 1,390 | 158 | 1,280 | 152 | 838 | 2,040 | 688 | 364 | 576 | 310 | 266 |
| 17..... | 168 | 855 | 174 | 556 | 164 | 715 | 1,560 | 637 | 386 | 365 | 628 | 1,890 |
| 18..... | 277 | 748 | 254 | 550 | 118 | 721 | 1,600 | 600 | 426 | 280 | 436 | 958 |
| 19..... | 259 | 952 | 658 | 538 | 201 | 690 | 1,850 | 542 | 702 | 280 | 404 | 438 |
| 20..... | 220 | 766 | 888 | 544 | 272 | 530 | 1,890 | 1,120 | 562 | 285 | 326 | 292 |
| 21..... | 302 | 544 | 772 | 466 | 550 | 535 | 1,600 | 1,180 | 1,080 | 322 | 414 | 229 |
| 22..... | 277 | 449 | 580 | 443 | 1,250 | 366 | 1,700 | 838 | 1,420 | 267 | 304 | 240 |
| 23..... | 414 | 386 | 532 | 431 | 1,250 | 440 | 1,500 | 676 | 995 | 354 | 214 | 200 |
| 24..... | 472 | 292 | 443 | 409 | 2,500 | 434 | 1,160 | 588 | 804 | 270 | 198 | 180 |
| 25..... | 375 | 425 | 431 | 386 | 2,500 | 604 | 1,050 | 538 | 616 | 196 | 191 | 128 |
| 26..... | 409 | 403 | 478 | 364 | 1,890 | 4,630 | 1,100 | 1,360 | 466 | 199 | 174 | 166 |
| 27..... | 317 | 386 | 437 | 359 | 1,250 | 3,070 | 1,130 | 1,770 | 404 | 952 | 152 | 156 |
| 28..... | 302 | 490 | 455 | 333 | 952 | 1,460 | 1,160 | 1,790 | 484 | 899 | 140 | 170 |
| 29..... | 282 | 403 | 403 | 322 | ----- | 1,010 | 1,130 | 1,250 | 398 | 1,070 | 142 | 172 |
| 30..... | 250 | 333 | 466 | 297 | ----- | 896 | 1,190 | 1,460 | 338 | 754 | 130 | 156 |
| 31..... | 220 | ----- | 449 | 297 | ----- | 865 | ----- | 1,320 | ----- | 442 | 128 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 472 | 111 | 245 | 0.579 | 0.67 |
| November..... | 1,390 | 232 | 518 | 1.22 | 1.36 |
| December..... | 888 | 129 | 351 | 0.830 | .96 |
| January..... | 3,680 | 272 | 834 | 1.97 | 2.27 |
| February..... | 2,500 | 118 | 577 | 1.36 | 1.42 |
| March..... | 4,630 | 312 | 1,120 | 2.65 | 3.06 |
| April..... | 5,060 | 832 | 1,900 | 4.49 | 5.01 |
| May..... | 2,980 | 538 | 1,130 | 2.67 | 3.08 |
| June..... | 1,720 | 338 | 680 | 1.61 | 1.80 |
| July..... | 1,110 | 196 | 520 | 1.23 | 1.42 |
| August..... | 628 | 128 | 281 | .664 | .77 |
| September..... | 1,890 | 62 | 253 | .598 | .67 |
| The year..... | 5,060 | 62 | 700 | 1.65 | 22.49 |

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, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,660 second-feet Apr. 8 (gage height, 6.03 feet); minimum, 13 second-feet Sept. 16 (gage height, 1.96 feet).
1928-1930: Maximum discharge, 5,720 second-feet Apr. 30, 1929 (gage height, 8.09 feet); minimum, 10 second-feet Sept. 3-5, 1929 (gage height, 1.86 feet).

REMARKS.—Records fair. Corrections for ice effect applied Nov. 29 to Jan. 8, Jan. 16 to Mar. 5.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-------|-------|--------------------------------|------|-------|
| 1..... | 13 | 43 | 58 | 74 | 54 | 185 | 247 | 485 | 404 | 114 | 197 | 26 |
| 2..... | 15 | 59 | 55 | 86 | 51 | 138 | 304 | 608 | 304 | 3 ³ / ₄ | 114 | 27 |
| 3..... | 18 | 185 | 51 | 100 | 48 | 107 | 274 | 830 | 210 | 4 ¹ / ₄ | 86 | 27 |
| 4..... | 23 | 93 | 48 | 107 | 46 | 80 | 247 | 1,250 | 165 | 3 ³ / ₄ | 80 | 21 |
| 5..... | 58 | 58 | 46 | 114 | 46 | 67 | 247 | 1,080 | 122 | 146 | 107 | 27 |
| 6..... | 41 | 60 | 46 | 114 | 45 | 60 | 530 | 530 | 107 | 173 | 107 | 21 |
| 7..... | 40 | 67 | 46 | 122 | 44 | 114 | 1,440 | 424 | 93 | 3 ³ / ₄ | 56 | 18 |
| 8..... | 36 | 58 | 46 | 165 | 44 | 197 | 1,660 | 351 | 86 | 424 | 29 | 18 |
| 9..... | 33 | 53 | 44 | 795 | 44 | 210 | 1,340 | 289 | 234 | 424 | 146 | 18 |
| 10..... | 28 | 48 | 43 | 760 | 44 | 197 | 728 | 197 | 580 | 120 | 185 | 16 |
| 11..... | 24 | 47 | 44 | 695 | 44 | 260 | 555 | 173 | 508 | 1 ¹ / ₄ | 197 | 15 |
| 12..... | 20 | 46 | 43 | 580 | 45 | 304 | 905 | 146 | 334 | 3 | 114 | 14 |
| 13..... | 19 | 52 | 43 | 444 | 46 | 274 | 795 | 130 | 210 | 21 ¹ / ₄ | 74 | 14 |
| 14..... | 20 | 80 | 43 | 247 | 46 | 210 | 1,340 | 114 | 122 | 31 ¹ / ₄ | 43 | 15 |
| 15..... | 19 | 173 | 43 | 210 | 46 | 107 | 1,550 | 114 | 93 | 368 | 38 | 14 |
| 16..... | 18 | 424 | 44 | 185 | 46 | 100 | 1,550 | 122 | 86 | 234 | 47 | 13 |
| 17..... | 20 | 635 | 47 | 165 | 47 | 86 | 1,030 | 122 | 107 | 146 | 59 | 334 |
| 18..... | 48 | 165 | 68 | 154 | 48 | 80 | 555 | 114 | 130 | 8 ¹ / ₄ | 80 | 424 |
| 19..... | 44 | 165 | 100 | 154 | 52 | 74 | 635 | 130 | 146 | 74 | 93 | 260 |
| 20..... | 39 | 165 | 165 | 154 | 55 | 69 | 665 | 260 | 173 | 74 | 138 | 173 |
| 21..... | 60 | 122 | 210 | 146 | 60 | 59 | 695 | 351 | 274 | 65 | 138 | 74 |
| 22..... | 65 | 107 | 138 | 130 | 67 | 53 | 635 | 247 | 404 | 57 | 100 | 42 |
| 23..... | 80 | 93 | 100 | 114 | 138 | 74 | 608 | 173 | 424 | 68 | 67 | 33 |
| 24..... | 100 | 80 | 86 | 100 | 485 | 130 | 485 | 138 | 289 | 58 | 48 | 30 |
| 25..... | 100 | 74 | 80 | 86 | 404 | 424 | 368 | 122 | 173 | 49 | 35 | 33 |
| 26..... | 100 | 74 | 80 | 80 | 351 | 665 | 304 | 351 | 130 | 43 | 32 | 37 |
| 27..... | 69 | 80 | 74 | 74 | 304 | 464 | 289 | 555 | 114 | 74 | 27 | 41 |
| 28..... | 58 | 74 | 74 | 69 | 260 | 404 | 304 | 905 | 146 | 114 | 20 | 36 |
| 29..... | 54 | 68 | 74 | 64 | ----- | 289 | 351 | 608 | 146 | 247 | 17 | 29 |
| 30..... | 43 | 62 | 74 | 58 | ----- | 222 | 424 | 608 | 86 | 304 | 18 | 26 |
| 31..... | 36 | ----- | 69 | 55 | ----- | 185 | ----- | 580 | ----- | 274 | 22 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 100 | 13 | 43.3 | 0.387 | 0.45 |
| November..... | 635 | 43 | 117 | 1.04 | 1.16 |
| December..... | 210 | 43 | 70.4 | .629 | .73 |
| January..... | 795 | 55 | 206 | 1.84 | 2.12 |
| February..... | 485 | 44 | 108 | .964 | 1.00 |
| March..... | 665 | 53 | 190 | 1.70 | 1.96 |
| April..... | 1,660 | 247 | 702 | 6.27 | 7.00 |
| May..... | 1,250 | 114 | 389 | 3.47 | 4.00 |
| June..... | 580 | 86 | 213 | 1.90 | 2.12 |
| July..... | 424 | 43 | 188 | 1.68 | 1.94 |
| August..... | 197 | 17 | 81.1 | .724 | .83 |
| September..... | 424 | 13 | 62.5 | .558 | .62 |
| The year..... | 1,660 | 13 | 197 | 1.76 | 23.93 |

WHITE RIVER AT WEST HARTFORD, VT.

LOCATION.—Water-stage recorder 500 feet above highway bridge at West Hartford, Windsor County, and 7 miles above mouth of river. Zero of gage 374.22 feet above mean sea level.

DRAINAGE AREA.—687 square miles.

RECORDS AVAILABLE.—June, 1915, to October, 1927; October, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 12,600 second-feet Jan. 9 (gage height, 10.68 feet); minimum, 113 second-feet Sept. 14 (gage height, 2.88 feet).

1915-1927, 1928-1930: Maximum discharge, 140,000 second-feet Nov. 4, 1927 (gage height, 29.3 feet); minimum, 19 second-feet June 27, 1923 (gage height, 2.05 feet).

REMARKS.—Records excellent except those for period of ice effect, Dec. 14-16, 25-31, Jan. 21-23, 25, 26, 28-30, Feb. 1-3, 5, 6, 8-11.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| 1 | " 240 | 364 | 408 | 636 | 604 | 1,610 | 1,660 | 1,200 | 1,370 | 536 | 306 | 259 |
| 2 | " 260 | 392 | 496 | 649 | 610 | 1,660 | 2,440 | 1,320 | 1,200 | 740 | 270 | 327 |
| 3 | " 300 | 542 | 484 | 852 | 610 | 1,240 | 2,110 | 2,060 | 1,040 | 642 | 255 | 297 |
| 4 | " 370 | 548 | 456 | 1,610 | 616 | 1,160 | 1,930 | 1,610 | 895 | 513 | 263 | 241 |
| 5 | " 475 | 507 | 434 | 1,040 | 604 | 1,040 | 1,930 | 1,320 | 789 | 451 | 238 | 215 |
| 6 | " 360 | 490 | 413 | 727 | 591 | 1,200 | 2,300 | 1,160 | 701 | 462 | 241 | 202 |
| 7 | " 340 | 445 | 424 | 1,120 | 567 | 1,160 | 7,780 | 1,120 | 688 | 662 | 218 | 190 |
| 8 | " 310 | 424 | 387 | 2,800 | 567 | 3,370 | 8,460 | 1,280 | 662 | 548 | 221 | 185 |
| 9 | " 280 | 392 | 382 | 9,700 | 567 | 4,820 | 4,540 | 1,200 | 1,080 | 484 | 285 | 174 |
| 10 | " 260 | 377 | 336 | 4,920 | 560 | 2,370 | 3,110 | 995 | 3,030 | 502 | 462 | 163 |
| 11 | " 240 | 373 | 336 | 2,300 | 554 | 2,240 | 2,880 | 902 | 3,030 | 445 | 502 | 176 |
| 12 | " 235 | 364 | 282 | 1,660 | 548 | 3,370 | 3,280 | 824 | 2,180 | 408 | 341 | 135 |
| 13 | " 235 | 354 | 266 | 1,560 | 548 | 2,580 | 4,000 | 768 | 1,510 | 364 | 282 | 166 |
| 14 | " 235 | 392 | 278 | 1,710 | 754 | 2,180 | 4,360 | 720 | 1,200 | 490 | 252 | 132 |
| 15 | " 255 | 708 | 285 | 1,610 | 955 | 1,560 | 3,730 | 768 | 995 | 902 | 341 | 135 |
| 16 | " 270 | 1,120 | 297 | 1,820 | 734 | 1,560 | 2,580 | 1,080 | 838 | 585 | 245 | 368 |
| 17 | " 295 | 817 | 310 | 1,420 | 610 | 1,460 | 2,110 | 955 | 789 | 429 | 310 | 1,030 |
| 18 | " 320 | 859 | 519 | 1,040 | 591 | 1,370 | 2,110 | 852 | 995 | 336 | 319 | 734 |
| 19 | " 345 | 1,460 | 1,760 | 995 | 688 | 1,460 | 2,240 | 768 | 2,240 | 314 | 408 | 434 |
| 20 | " 370 | 1,240 | 1,660 | 948 | 1,080 | 1,280 | 2,240 | 1,510 | 2,050 | 289 | 364 | 341 |
| 21 | " 395 | 948 | 1,080 | 918 | 3,640 | 1,280 | 1,870 | 1,760 | 2,370 | 266 | 354 | 259 |
| 22 | " 420 | 796 | 810 | 880 | 3,640 | 995 | 1,820 | 1,280 | 2,050 | 259 | 306 | 215 |
| 23 | " 530 | 604 | 747 | 845 | 2,950 | 1,120 | 1,820 | 1,080 | 1,510 | 310 | 263 | 228 |
| 24 | " 590 | 554 | 560 | 803 | 6,100 | 1,120 | 1,560 | 895 | 1,200 | 323 | 263 | 206 |
| 25 | 560 | 656 | 560 | 754 | 4,920 | 1,560 | 1,460 | 1,040 | 1,080 | 259 | 293 | 187 |
| 26 | 525 | 579 | 567 | 714 | 3,370 | 5,900 | 1,420 | 2,950 | 895 | 221 | 270 | 179 |
| 27 | 484 | 610 | 573 | 675 | 2,240 | 4,090 | 1,320 | 2,300 | 796 | 456 | 238 | 193 |
| 28 | 445 | 642 | 579 | 656 | 1,820 | 2,370 | 1,280 | 2,240 | 701 | 598 | 209 | 212 |
| 29 | 408 | 479 | 585 | 636 | ----- | 1,870 | 1,200 | 1,870 | 630 | 490 | 202 | 199 |
| 30 | 377 | 392 | 598 | 616 | ----- | 1,660 | 1,200 | 1,710 | 554 | 694 | 224 | 185 |
| 31 | 368 | ----- | 616 | 604 | ----- | 1,660 | ----- | 1,560 | ----- | 429 | 255 | ----- |

| Month | Maximum | Minimum | Mean | Per square mi. | Run-off in inches |
|-----------|---------|---------|-------|----------------|-------------------|
| October | 590 | 235 | 358 | 0.521 | 0.60 |
| November | 1,460 | 354 | 614 | .894 | 1.00 |
| December | 1,760 | 266 | 564 | .821 | .95 |
| January | 9,700 | 604 | 1,520 | 2.21 | 2.55 |
| February | 6,100 | 548 | 1,490 | 2.17 | 2.26 |
| March | 5,900 | 995 | 2,010 | 2.93 | 3.38 |
| April | 8,460 | 1,200 | 2,690 | 3.92 | 4.37 |
| May | 2,950 | 720 | 1,330 | 1.94 | 2.24 |
| June | 3,030 | 554 | 1,300 | 1.89 | 2.11 |
| July | 902 | 221 | 465 | .677 | .78 |
| August | 502 | 202 | 294 | .428 | .49 |
| September | 1,030 | 132 | 266 | .387 | .43 |
| The year | 9,700 | 132 | 1,070 | 1.56 | 21.16 |

• Estimated.

MASCOMA RIVER AT MASCOMA, N. H.

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

DRAINAGE AREA.—148 square miles.

RECORDS AVAILABLE.—August, 1923, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,330 second-feet Apr. 9 (gage height, 4.51 feet); minimum, 1.4 second-feet Oct. 19, 20 (gage height, 1.02 feet).

1923-1930: Maximum discharge, 3,700 second-feet Mar. 30, 1925 (gage height, 6.25 feet); minimum, 1.2 second-feet June 28, 1925 (gage height 1.03 feet).

REMARKS.—Records good. Estimated discharges based on record of gate openings in dam above. Flow regulated by 1.5 billion cubic feet of storage developed above station.

Daily and monthly discharge, in second-feet, 1923-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|-------|-------|-------|------|-------|-----|-------|-------|-------|-------|
| 1 | 121 | 92 | • 75 | • 70 | 117 | 174 | 319 | 153 | 246 | • 118 | • 119 | 125 |
| 2 | 119 | 86 | • 101 | • 94 | 103 | 188 | 311 | 169 | 196 | 132 | 119 | • 118 |
| 3 | 117 | 70 | • 101 | • 94 | 121 | 202 | 323 | 174 | 166 | 127 | • 110 | • 117 |
| 4 | 117 | 97 | • 101 | • 85 | 121 | 185 | 303 | 180 | 148 | 109 | • 116 | • 116 |
| 5 | 105 | 96 | • 101 | • 71 | 121 | 174 | 288 | 180 | 136 | 115 | • 115 | • 116 |
| 6 | 94 | 97 | • 100 | • 94 | 119 | 148 | 292 | 169 | 125 | 113 | 121 | • 112 |
| 7 | 109 | 101 | • 89 | • 95 | 117 | 156 | 443 | 161 | 121 | 127 | 117 | • 106 |
| 8 | 107 | 99 | • 72 | • 95 | 109 | 222 | 882 | 182 | 161 | 127 | 117 | • 113 |
| 9 | 107 | 90 | • 94 | • 101 | 96 | 550 | 1,260 | 194 | • 239 | 127 | • 109 | • 112 |
| 10 | 107 | 72 | • 93 | • 106 | 109 | 882 | 896 | 212 | • 378 | 127 | 127 | • 111 |
| 11 | 103 | 72 | • 92 | • 98 | 109 | 775 | 630 | 191 | 524 | 125 | 115 | • 110 |
| 12 | 97 | 99 | • 91 | • 82 | 109 | 646 | 519 | 169 | 448 | 123 | 113 | • 108 |
| 13 | 86 | 103 | • 91 | • 112 | 107 | 619 | 488 | 153 | 361 | 111 | • 112 | • 106 |
| 14 | 99 | 103 | • 80 | • 112 | 107 | 582 | 483 | 151 | 281 | 125 | • 111 | • 100 |
| 15 | 99 | 105 | • 66 | • 113 | 96 | 483 | 488 | 139 | 215 | 125 | • 112 | • 106 |
| 16 | 97 | 96 | • 87 | • 114 | 86 | 400 | 438 | 127 | 182 | 130 | 117 | • 113 |
| 17 | 96 | 76 | • 87 | • 115 | 102 | 348 | 369 | 117 | 169 | 127 | 109 | • 112 |
| 18 | 94 | 76 | 80 | • 104 | 100 | 311 | 319 | 109 | 161 | 127 | 123 | • 111 |
| 19 | 64 | 73 | • 85 | • 86 | 103 | 292 | 296 | 121 | 199 | 115 | 123 | • 109 |
| 20 | 24 | • 100 | • 90 | • 117 | 101 | 277 | 292 | 136 | 263 | 105 | 123 | • 104 |
| 21 | 96 | • 100 | • 81 | • 117 | 101 | 256 | 281 | 180 | 315 | 119 | • 123 | • 97 |
| 22 | 94 | • 101 | • 67 | • 117 | 99 | 222 | 260 | 202 | 386 | 119 | • 123 | 109 |
| 23 | 94 | • 91 | • 93 | • 117 | 86 | 199 | 256 | 164 | 361 | 117 | 119 | 109 |
| 24 | 96 | • 76 | • 94 | • 116 | 111 | 164 | 249 | 139 | 307 | 123 | 113 | 109 |
| 25 | 99 | • 101 | • 95 | • 116 | 119 | 222 | 232 | 134 | 249 | 130 | 121 | 105 |
| 26 | 96 | • 101 | • 94 | 127 | 130 | 483 | 215 | 151 | 212 | 117 | • 122 | 103 |
| 27 | 86 | • 101 | • 94 | 130 | 136 | 828 | 202 | 166 | 164 | 113 | • 121 | 105 |
| 28 | 96 | • 101 | • 84 | 127 | 141 | 815 | 188 | 292 | 132 | 121 | 123 | 94 |
| 29 | 92 | • 100 | • 70 | 125 | ----- | 619 | 180 | 361 | • 139 | 123 | 121 | 109 |
| 30 | 94 | • 91 | • 94 | 125 | ----- | 458 | 171 | 340 | • 125 | 123 | 130 | 113 |
| 31 | 92 | ----- | • 93 | 125 | ----- | 369 | ----- | 281 | ----- | • 119 | 125 | ----- |

| 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 | 121 | 24 | 96.7 | -165.9 | 34.7 | 0.234 | 0.27 |
| November | 105 | 70 | 92.2 | +99.3 | 130 | .878 | .98 |
| December | 101 | 66 | 88.2 | -35.6 | 74.9 | .506 | .58 |
| January | 130 | 70 | 106 | +193.1 | 179 | 1.21 | 1.40 |
| February | 141 | 86 | 110 | +185.8 | 187 | 1.26 | 1.31 |
| March | 882 | 148 | 395 | +204.3 | 471 | 3.18 | 3.67 |
| April | 1,260 | 171 | 396 | -84.5 | 428 | 2.89 | 3.22 |
| May | 361 | 109 | 181 | +144.7 | 235 | 1.59 | 1.83 |
| June | 524 | 121 | 237 | +14.8 | 243 | 1.64 | 1.83 |
| July | 132 | 105 | 121 | -172.0 | 57.0 | .385 | .44 |
| August | 130 | 109 | 118 | -60.0 | 96.0 | .649 | .75 |
| September | 125 | 94 | 109 | -202.3 | 31.2 | .211 | .24 |
| The year | 1,260 | 24 | 171 | +290.7 | 180 | 1.22 | 16.52 |

• Estimated

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 670.60 feet above mean sea level.

DRAINAGE AREA.—126 square miles.

RECORDS AVAILABLE.—June, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 8,450 second-feet Feb. 24 (gage height, 8.74 feet); minimum, 14 second-feet Aug. 9 (gage height, 2.59 feet). 1928-1930: Maximum discharge, that of Feb. 24, 1930; minimum, 11 second-feet Sept. 5, 1929 (gage height, 2.60 feet).

Maximum stage known, about 20.1 feet November, 1927.

REMARKS.—Records good except those for periods of ice effect, Nov. 24 to Jan. 8, Jan. 12, 13, 16, Jan. 18 to Feb. 23, which are fair. Some diurnal regulation. Small seasonal storage in reservoir at Plymouth.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|-------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | 52 | 94 | 142 | 94 | 140 | 305 | 345 | 228 | 277 | 75 | 39 | 38 |
| 2..... | 68 | 108 | 77 | 99 | 137 | 289 | 615 | 281 | 246 | 69 | 31 | 70 |
| 3..... | 146 | 150 | 70 | 265 | 133 | 214 | 558 | 408 | 218 | 70 | 25 | 49 |
| 4..... | 120 | 125 | 67 | 230 | 129 | 281 | 480 | 297 | 191 | 66 | 22 | 36 |
| 5..... | 106 | 121 | 67 | 58 | 125 | 265 | 408 | 232 | 154 | 63 | 20 | 28 |
| 6..... | 90 | 118 | 60 | 38 | 125 | 250 | 430 | 221 | 130 | 63 | 39 | 24 |
| 7..... | 96 | 108 | 59 | 162 | 120 | 243 | 3,470 | 214 | 142 | 80 | 29 | 30 |
| 8..... | 118 | 103 | 59 | 730 | 106 | 805 | 1,930 | 325 | 178 | 82 | 34 | 56 |
| 9..... | 89 | 92 | 57 | 2,300 | 80 | 675 | 910 | 289 | 197 | 75 | 30 | 56 |
| 10..... | 64 | 86 | 65 | 1,370 | 74 | 480 | 645 | 235 | 1,160 | 75 | 98 | 40 |
| 11..... | 84 | 90 | 70 | 300 | 97 | 408 | 615 | 208 | 910 | 60 | 49 | 42 |
| 12..... | 69 | 92 | 70 | 282 | 60 | 840 | 705 | 182 | 505 | 48 | 32 | 40 |
| 13..... | 74 | 90 | 77 | 282 | 59 | 530 | 875 | 145 | 385 | 67 | 29 | 28 |
| 14..... | 74 | 103 | 78 | 300 | 187 | 455 | 910 | 154 | 297 | 55 | 104 | 27 |
| 15..... | 72 | 174 | 69 | 362 | 146 | 258 | 738 | 182 | 273 | 106 | 70 | 25 |
| 16..... | 58 | 248 | 52 | 282 | 103 | 325 | 505 | 211 | 208 | 60 | 62 | 66 |
| 17..... | 62 | 187 | 36 | 265 | 82 | 289 | 430 | 178 | 208 | 54 | 59 | 178 |
| 18..... | 59 | 265 | 129 | 230 | 82 | 305 | 430 | 160 | 281 | 38 | 54 | 123 |
| 19..... | 59 | 480 | 600 | 200 | 78 | 408 | 455 | 145 | 385 | 27 | 53 | 67 |
| 20..... | 64 | 300 | 455 | 187 | 362 | 325 | 430 | 455 | 345 | 23 | 53 | 47 |
| 21..... | 70 | 215 | 430 | 174 | 660 | 293 | 365 | 325 | 289 | 39 | 67 | 36 |
| 22..... | 74 | 187 | 300 | 174 | 630 | 214 | 345 | 258 | 258 | 47 | 54 | 50 |
| 23..... | 230 | 146 | 230 | 174 | 455 | 265 | 345 | 225 | 208 | 54 | 43 | 30 |
| 24..... | 187 | 120 | 162 | 174 | 5,550 | 261 | 301 | 172 | 169 | 31 | 56 | 35 |
| 25..... | 125 | 96 | 120 | 174 | 1,570 | 408 | 293 | 385 | 151 | 24 | 54 | 26 |
| 26..... | 118 | 106 | 114 | 174 | 738 | 1,460 | 265 | 558 | 133 | 27 | 45 | 30 |
| 27..... | 89 | 80 | 112 | 162 | 430 | 805 | 246 | 455 | 116 | 87 | 39 | 31 |
| 28..... | 89 | 92 | 108 | 162 | 408 | 505 | 232 | 490 | 95 | 39 | 39 | 32 |
| 29..... | 90 | 106 | 106 | 150 | ----- | 430 | 214 | 505 | 87 | 77 | 39 | 38 |
| 30..... | 83 | 142 | 103 | 150 | ----- | 385 | 228 | 408 | 80 | 72 | 35 | 28 |
| 31..... | 80 | ----- | 97 | 144 | ----- | 345 | ----- | 325 | ----- | 27 | 40 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 230 | 52 | 92.2 | 0.732 | 0.84 |
| November..... | 480 | 80 | 147 | 1.17 | 1.30 |
| December..... | 600 | 36 | 137 | 1.09 | 1.26 |
| January..... | 2,300 | 38 | 318 | 2.52 | 2.90 |
| February..... | 5,550 | 59 | 460 | 3.65 | 3.80 |
| March..... | 1,460 | 214 | 430 | 3.41 | 3.93 |
| April..... | 3,470 | 214 | 624 | 4.95 | 5.52 |
| May..... | 558 | 145 | 284 | 2.25 | 2.59 |
| June..... | 1,160 | 80 | 276 | 2.19 | 2.44 |
| July..... | 106 | 23 | 57.4 | .456 | .53 |
| August..... | 104 | 20 | 46.5 | .369 | .43 |
| September..... | 178 | 24 | 46.9 | .372 | .42 |
| The year..... | 5,550 | 20 | 241 | 1.91 | 25.96 |

SUGAR RIVER AT WEST CLAREMONT, N. H.

LOCATION.—Water-stage recorder at West Claremont, Sullivan County, two-tenths mile below Redwater Brook.

DRAINAGE AREA.—270 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,520 second-feet Mar. 8 (gage height, 5.20 feet); minimum, 12 second-feet Sept. 25 (gage height, 0.69 foot).

1928-1930: Maximum discharge, that of Mar. 8, 1930; minimum, that of Sept. 25, 1930.

REMARKS.—Records good except those estimated, which are poor. Corrections for ice effect, Jan. 28 to Feb. 20. Flow partly regulated by storage in Lake Sunapee.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|---------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | 81 | 82 | 80 | * 162 | 133 | 476 | 455 | 218 | 264 | 91 | 74 | 84 |
| 2..... | 78 | 77 | 93 | * 130 | 116 | 477 | 518 | 202 | 239 | 102 | 68 | 103 |
| 3..... | 93 | 87 | 87 | * 198 | 130 | 451 | 490 | 272 | 203 | 100 | 60 | 89 |
| 4..... | 100 | 124 | 78 | * 225 | 113 | 382 | 450 | 276 | 185 | 87 | 76 | 80 |
| 5..... | 104 | 108 | 87 | * 177 | 120 | 319 | 430 | 249 | 162 | 80 | 78 | 72 |
| 6..... | 92 | 96 | 93 | * 165 | 118 | 287 | 455 | 220 | 148 | 91 | 67 | 68 |
| 7..... | 106 | 85 | 91 | * 322 | 113 | 298 | 1,150 | 211 | 165 | 102 | 66 | 68 |
| 8..... | 94 | 86 | 82 | * 576 | 95 | 1,280 | 1,440 | 312 | 162 | 87 | 74 | 69 |
| 9..... | 90 | 81 | 91 | * 1,390 | 87 | 2,460 | 1,040 | 391 | 206 | 91 | 83 | 68 |
| 10..... | 89 | 83 | 80 | * 950 | 102 | 1,390 | 737 | 303 | 426 | 98 | 70 | 54 |
| 11..... | 88 | 98 | 84 | * 648 | 106 | 1,090 | 618 | 246 | 414 | 80 | 89 | 60 |
| 12..... | 64 | 92 | 79 | * 340 | 106 | 1,200 | 546 | 238 | 339 | 71 | 80 | 62 |
| 13..... | 77 | 87 | 86 | * 363 | 109 | 974 | 524 | 205 | 252 | 59 | 71 | 50 |
| 14..... | 92 | 98 | 86 | * 376 | 138 | 808 | 529 | 184 | 195 | 90 | 75 | 51 |
| 15..... | 89 | 135 | 80 | * 381 | 143 | 582 | 490 | 192 | 168 | 104 | 173 | 64 |
| 16..... | 78 | 190 | 98 | * 372 | 130 | 475 | 430 | 243 | 156 | 93 | 218 | 62 |
| 17..... | 71 | 157 | 91 | * 358 | 130 | 445 | 390 | 207 | 127 | 80 | 264 | 60 |
| 18..... | 74 | 215 | 141 | * 332 | 128 | 435 | 381 | 195 | 143 | 75 | 230 | 57 |
| 19..... | 68 | 310 | 291 | * 288 | 141 | 540 | 376 | 186 | 226 | 70 | 168 | 58 |
| 20..... | 71 | 235 | 308 | * 242 | 222 | 496 | 358 | 361 | 216 | 68 | 134 | 58 |
| 21..... | 82 | 174 | 220 | * 213 | 534 | 470 | 322 | 429 | 191 | 75 | 136 | 51 |
| 22..... | 79 | 146 | 187 | * 192 | 624 | 349 | 327 | 324 | 157 | 72 | 129 | 59 |
| 23..... | 102 | 116 | * 180 | * 177 | 723 | 341 | 345 | 257 | 166 | 74 | 101 | 61 |
| 24..... | 151 | 116 | * 171 | * 177 | 1,190 | 318 | 304 | 219 | 139 | 68 | 116 | 53 |
| 25..... | 119 | 128 | * 168 | * 177 | 1,240 | 1,160 | 296 | 210 | 128 | 64 | 132 | 38 |
| 26..... | 100 | 111 | * 165 | * 174 | 958 | 2,530 | 268 | 356 | 117 | 60 | 98 | 35 |
| 27..... | 84 | 118 | * 171 | * 180 | 730 | 1,600 | 242 | 426 | 116 | 85 | 89 | 52 |
| 28..... | 100 | 109 | * 152 | 177 | 564 | 982 | 250 | 565 | 142 | 100 | 83 | 46 |
| 29..... | 86 | 93 | * 138 | 165 | ----- | 716 | 230 | 471 | 109 | 90 | 77 | 60 |
| 30..... | 82 | 72 | * 120 | 168 | ----- | 564 | 220 | 376 | 109 | 81 | 90 | 60 |
| 31..... | 78 | ----- | * 116 | 165 | ----- | 512 | ----- | 314 | ----- | 83 | 93 | ----- |

| Month | Observed | | | Gain or loss in storage (millions of cubic feet) | Corrected for storage | | |
|----------------|--------------|--------------|------|---|-----------------------|-----------------------|----------------------|
| | Maxi- mum | Mini- mum | Mean | | Mean | Per square mile | Run-off in inches |
| October..... | 151 | 64 | 89.1 | -51 | 70.1 | 0.260 | 0.30 |
| November..... | 310 | 72 | 124 | -68 | 97.4 | .361 | .40 |
| December..... | 308 | 78 | 129 | -68 | 103 | .381 | .44 |
| January..... | 1,390 | 130 | 321 | +221 | 404 | 1.50 | 1.73 |
| February..... | 1,240 | 87 | 323 | +187 | 400 | 1.48 | 1.54 |
| March..... | 2,530 | 287 | 787 | +334 | 912 | 3.38 | 3.90 |
| April..... | 1,440 | 220 | 487 | +181 | 557 | 2.06 | 2.30 |
| May..... | 565 | 184 | 286 | -73 | 258 | .956 | 1.10 |
| June..... | 426 | 109 | 192 | -288 | 81.2 | .301 | .34 |
| July..... | 104 | 59 | 82.9 | -137 | 31.8 | .118 | .14 |
| August..... | 264 | 60 | 108 | -85 | 76.7 | .284 | .33 |
| September..... | 103 | 35 | 61.7 | -136 | 9.27 | .084 | .04 |
| The year..... | 2,530 | 35 | 249 | +17 | 250 | .936 | 12.56 |

* Estimated.

BLACK RIVER AT NORTH SPRINGFIELD, VT.

LOCATION.—Water-stage recorder in North Springfield, Windsor County, 1,300 feet above two nameless tributaries entering together from right bank.

DRAINAGE AREA.—163 square miles.

RECORDS AVAILABLE.—November, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,650 second-feet Apr. 7 (gage height, 8.98 feet); minimum, 22 second-feet Sept. 22 (gage height, 2.01 feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|------|-------|-------|-------|-------|-----|-------|------|------|-------|
| 1 | | 59 | 128 | 113 | 315 | 370 | 210 | 249 | 146 | 57 | 34 |
| 2 | | 62 | 140 | 110 | 321 | 494 | 214 | 228 | 134 | 54 | 65 |
| 3 | | 103 | 177 | 127 | 258 | 455 | 209 | 195 | 114 | 47 | 59 |
| 4 | | 101 | 203 | 122 | 245 | 425 | 228 | 163 | 98 | 35 | 62 |
| 5 | | 101 | 108 | 123 | 231 | 415 | 213 | 136 | 90 | 50 | 54 |
| 6 | | 118 | 164 | 106 | 242 | 482 | 198 | 114 | 96 | 54 | 35 |
| 7 | | 90 | 168 | 113 | 262 | 2,340 | 193 | 172 | 107 | 46 | 32 |
| 8 | | 50 | 552 | 92 | 944 | 1,880 | 280 | 212 | 104 | 57 | 27 |
| 9 | | 83 | 1,320 | 105 | 1,240 | 970 | 257 | 723 | 84 | 69 | 48 |
| 10 | | 88 | 905 | 121 | 631 | 656 | 212 | 1,360 | 128 | 57 | 45 |
| 11 | | 88 | 425 | 140 | 564 | 573 | 183 | 2,010 | 108 | 71 | 45 |
| 12 | | 64 | 323 | 132 | 1,130 | 588 | 180 | 970 | 74 | 69 | 63 |
| 13 | | 86 | 352 | 147 | 689 | 646 | 160 | 603 | 73 | 56 | 50 |
| 14 | | 63 | 311 | 205 | 556 | 688 | 143 | 431 | 102 | 58 | 48 |
| 15 | | 53 | 395 | 184 | 407 | 686 | 202 | 339 | 110 | 106 | 32 |
| 16 | | 86 | 445 | 142 | 371 | 526 | 241 | 247 | 92 | 104 | 28 |
| 17 | | 108 | 260 | 143 | 361 | 411 | 199 | 218 | 69 | 103 | 106 |
| 18 | | 255 | 213 | 178 | 379 | 397 | 172 | 376 | 74 | 65 | 65 |
| 19 | | 607 | 201 | 184 | 499 | 300 | 176 | 620 | 72 | 71 | 49 |
| 20 | | 437 | 233 | 393 | 409 | 251 | 362 | 777 | 50 | 83 | 45 |
| 21 | | 223 | 204 | 938 | 393 | 280 | 312 | 418 | 38 | 79 | 32 |
| 22 | | 183 | 201 | 825 | 304 | 317 | 244 | 323 | 63 | 68 | 25 |
| 23 | | 124 | 179 | 743 | 300 | 328 | 196 | 282 | 64 | 62 | 27 |
| 24 | | 143 | 143 | 1,210 | 291 | 280 | 178 | 223 | 57 | 49 | 33 |
| 25 | | 153 | 144 | 1,040 | 643 | 262 | 312 | 198 | 63 | 52 | 47 |
| 26 | 52 | 148 | 117 | 736 | 1,870 | 249 | 537 | 168 | 60 | 66 | 49 |
| 27 | 169 | 148 | 138 | 500 | 929 | 227 | 437 | 150 | 81 | 56 | 45 |
| 28 | 149 | 135 | 159 | 374 | 534 | 228 | 398 | 136 | 67 | 65 | 36 |
| 29 | 110 | 111 | 148 | | 446 | 224 | 510 | 107 | 79 | 64 | 32 |
| 30 | 67 | 127 | 127 | | 398 | 222 | 397 | 110 | 69 | 49 | 33 |
| 31 | | 137 | 117 | | 392 | | 312 | | 67 | 63 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| December | 607 | 50 | 140 | 0.859 | 0.99 |
| January | 1,320 | 103 | 281 | 1.72 | 1.98 |
| February | 1,210 | 92 | 334 | 2.05 | 2.14 |
| March | 1,870 | 231 | 536 | 3.29 | 3.79 |
| April | 2,340 | 222 | 539 | 3.31 | 3.69 |
| May | 537 | 143 | 262 | 1.61 | 1.86 |
| June | 2,010 | 107 | 409 | 2.51 | 2.80 |
| July | 146 | 38 | 84.9 | .521 | .60 |
| August | 106 | 35 | 64.0 | .393 | .45 |
| September | 106 | 25 | 45.0 | .276 | .31 |

WEST RIVER AT NEWFANE, VT.

LOCATION.—Chain gage at highway bridge $1\frac{1}{4}$ miles northeast of Newfane, Windham County.

DRAINAGE AREA.—310 square miles.

RECORDS AVAILABLE.—September, 1919, to September, 1923; October, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 5,430 second-feet Apr. 7 (gage height, 8.91 feet); minimum, 19 second-feet Sept. 22 (gage height, 3.74 feet). 1919–1923, 1928–1930: Maximum discharge, 8,600 second-feet Mar. 23, 1929; minimum, that of Sept. 22, 1930.

Maximum known discharge, 45,000 second-feet Nov. 3, 1927 (gage height, 23.0 feet).

REMARKS.—Records good. Corrections for ice effect, applied Nov. 29 to Dec. 17, Dec. 24–27, Jan. 4–6, 12, Jan. 19 to Feb. 19.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| 1 | 43 | 146 | 183 | 492 | 218 | 525 | 600 | 318 | 492 | 110 | 63 | 54 |
| 2 | 48 | 183 | 157 | 429 | 218 | 600 | 803 | 353 | 387 | 120 | 56 | 60 |
| 3 | 215 | 208 | 124 | 600 | 218 | 460 | 845 | 460 | 332 | 120 | 48 | 68 |
| 4 | 281 | 255 | 130 | 721 | 203 | 460 | 719 | 492 | 208 | 117 | 47 | 107 |
| 5 | 215 | 208 | 122 | 460 | 183 | 525 | 677 | 370 | 219 | 104 | 36 | 72 |
| 6 | 176 | 186 | 130 | 429 | 170 | 429 | 761 | 308 | 183 | 99 | 41 | 60 |
| 7 | 136 | 146 | 141 | 936 | 166 | 398 | 3,980 | 272 | 173 | 113 | 45 | 58 |
| 8 | 110 | 140 | 106 | 2,030 | 166 | 845 | 3,100 | 294 | 235 | 160 | 52 | 47 |
| 9 | 123 | 133 | 103 | 3,240 | 170 | 2,550 | 1,560 | 677 | 290 | 140 | 107 | 47 |
| 10 | 104 | 123 | 108 | 3,380 | 176 | 1,450 | 1,030 | 392 | 2,150 | 323 | 107 | 38 |
| 11 | 88 | 120 | 106 | 1,230 | 170 | 1,180 | 890 | 318 | 3,240 | 215 | 117 | 36 |
| 12 | 77 | 126 | 103 | 1,030 | 163 | 2,960 | 1,030 | 264 | 1,280 | 153 | 90 | 36 |
| 13 | 72 | 123 | 127 | 936 | 150 | 1,560 | 1,130 | 255 | 761 | 166 | 68 | 34 |
| 14 | 77 | 153 | 138 | 1,180 | 234 | 1,230 | 1,030 | 264 | 525 | 143 | 63 | 26 |
| 15 | 72 | 247 | 144 | 1,080 | 342 | 677 | 1,030 | 318 | 342 | 247 | 90 | 38 |
| 16 | 72 | 638 | 144 | 1,130 | 318 | 600 | 719 | 803 | 264 | 156 | 332 | 41 |
| 17 | 75 | 359 | 170 | 677 | 318 | 677 | 600 | 562 | 204 | 117 | 211 | 45 |
| 18 | 96 | 525 | 845 | 600 | 250 | 936 | 562 | 387 | 281 | 90 | 120 | 63 |
| 19 | 110 | 1,670 | 2,960 | 492 | 230 | 1,450 | 600 | 313 | 600 | 63 | 88 | 47 |
| 20 | 93 | 677 | 1,790 | 460 | 1,130 | 890 | 562 | 1,130 | 2,030 | 58 | 65 | 35 |
| 21 | 88 | 429 | 890 | 398 | 3,830 | 600 | 525 | 719 | 1,130 | 54 | 48 | 33 |
| 22 | 88 | 353 | 677 | 318 | 3,100 | 353 | 364 | 525 | 600 | 50 | 75 | 22 |
| 23 | 719 | 239 | 525 | 318 | 1,790 | 398 | 638 | 460 | 460 | 60 | 102 | 24 |
| 24 | 638 | 186 | 492 | 318 | 3,240 | 429 | 460 | 348 | 308 | 54 | 143 | 25 |
| 25 | 304 | 204 | 492 | 318 | 2,410 | 719 | 429 | 359 | 255 | 52 | 204 | 26 |
| 26 | 219 | 215 | 460 | 294 | 2,030 | 2,410 | 370 | 1,790 | 204 | 54 | 123 | 24 |
| 27 | 176 | 223 | 460 | 318 | 1,080 | 2,280 | 381 | 1,180 | 166 | 180 | 93 | 45 |
| 28 | 150 | 231 | 429 | 294 | 719 | 1,280 | 353 | 890 | 150 | 260 | 60 | 56 |
| 29 | 146 | 238 | 381 | 272 | ----- | 845 | 318 | 1,340 | 130 | 126 | 45 | 60 |
| 30 | 143 | 207 | 337 | 238 | ----- | 677 | 304 | 845 | 113 | 72 | 54 | 47 |
| 31 | 136 | ----- | 323 | 222 | ----- | 677 | ----- | 638 | ----- | 68 | 43 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 719 | 43 | 164 | 0.529 | 0.61 |
| November | 1,670 | 120 | 296 | .955 | 1.07 |
| December | 2,960 | 103 | 429 | 1.38 | 1.59 |
| January | 3,380 | 222 | 801 | 2.58 | 2.97 |
| February | 3,830 | 150 | 835 | 2.69 | 2.80 |
| March | 2,960 | 353 | 1,000 | 3.23 | 3.72 |
| April | 3,980 | 304 | 879 | 2.84 | 3.17 |
| May | 1,790 | 255 | 569 | 1.84 | 2.12 |
| June | 3,240 | 113 | 592 | 1.91 | 2.13 |
| July | 323 | 50 | 124 | .400 | .46 |
| August | 332 | 36 | 91.5 | .295 | .34 |
| September | 107 | 22 | 45.8 | .148 | .17 |
| The year | 3,980 | 22 | 483 | 1.56 | 21.15 |

ASHUELOT RIVER NEAR GILSUM, N. H.

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

DRAINAGE AREA.—71.1 square miles (revised).

RECORDS AVAILABLE.—August, 1922, to September, 1930.

EXTREMES.—Maximum discharge during year, 826 second-feet Mar. 9 (gauge height, 6.19 feet); minimum, 5.1 second-feet Oct. 29 (gauge height, 0.61 foot).
1922–1930: Maximum discharge, 2,760 second-feet Nov. 4, 1927 (gauge height, 11.34 feet); minimum, approximately 1 second-foot Oct. 6, 1922, July 10, 1923.

REMARKS.—Records good. Corrections for ice effect applied Nov. 29 to Dec. 1, Dec. 4–26, Jan. 3–31, Feb. 4–25.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1 | 20 | 9.0 | 9.1 | 14 | * 18 | 207 | 174 | 67 | 96 | 13 | 29 | 17 |
| 2 | 14 | 9.6 | 8.7 | 16 | * 17 | 176 | 184 | 76 | 81 | 28 | 39 | 25 |
| 3 | 19 | 20 | 8.7 | 20 | * 18 | 162 | 181 | 121 | 73 | 19 | 25 | 28 |
| 4 | 16 | 24 | 8.2 | 27 | 17 | 148 | 165 | 120 | 63 | 13 | 29 | 24 |
| 5 | 19 | 23 | 7.7 | 79 | 16 | 130 | 161 | 102 | 27 | 15 | 32 | 24 |
| 6 | 20 | 26 | 9.2 | 46 | 16 | 100 | 164 | 92 | 37 | 14 | 29 | 17 |
| 7 | 15 | 15 | 8.0 | 20 | 16 | 97 | 316 | 84 | 24 | 18 | 30 | 20 |
| 8 | 12 | 14 | 7.1 | 49 | 16 | 358 | 512 | 116 | 24 | 11 | 44 | 21 |
| 9 | 17 | 21 | 6.4 | 144 | 16 | 722 | 451 | 132 | 51 | 15 | 44 | 15 |
| 10 | 14 | 14 | 6.1 | 112 | 17 | 534 | 346 | 118 | 107 | 32 | 34 | 16 |
| 11 | 12 | 14 | 6.0 | 82 | 16 | 388 | 278 | 104 | 172 | 16 | 25 | 17 |
| 12 | 12 | 10 | 5.9 | 64 | 16 | 414 | 221 | 90 | 171 | 12 | 27 | 19 |
| 13 | 14 | 10 | 5.8 | 52 | 18 | 379 | 200 | 81 | 139 | 24 | 23 | 15 |
| 14 | 15 | 9.9 | 6.5 | 43 | 19 | 322 | 188 | 70 | 109 | 16 | 29 | 20 |
| 15 | 11 | 12 | 12 | 71 | 26 | 289 | 176 | 74 | 81 | 42 | 85 | 12 |
| 16 | 13 | 14 | 10 | 77 | 23 | 211 | 161 | 71 | 66 | 18 | 97 | 14 |
| 17 | 15 | 14 | 8.7 | 99 | 22 | 174 | 146 | 87 | 46 | 16 | 95 | 17 |
| 18 | 11 | 18 | 12 | 69 | 24 | 164 | 139 | 71 | 58 | 19 | 56 | 14 |
| 19 | 8.4 | 29 | 23 | 52 | 29 | 194 | 136 | 62 | 136 | 9.1 | 45 | 13 |
| 20 | 7.5 | 26 | 51 | 45 | 41 | 176 | 134 | 133 | 157 | 6.8 | 44 | 13 |
| 21 | 9.6 | 31 | 53 | 41 | 58 | 162 | 124 | 155 | 129 | 12 | 54 | 14 |
| 22 | 7.5 | 17 | 45 | 43 | 79 | 129 | 121 | 141 | 95 | 11 | 31 | 13 |
| 23 | 11 | 22 | 35 | 32 | 120 | 118 | 129 | 119 | 77 | 12 | 42 | 9.1 |
| 24 | 18 | 16 | 26 | 28 | 255 | 100 | 114 | 100 | 46 | 11 | 37 | 13 |
| 25 | 20 | 12 | 21 | 26 | 432 | 254 | 100 | 97 | 38 | 14 | 41 | 10 |
| 26 | 14 | 12 | 16 | 23 | 396 | 672 | 100 | 129 | 24 | 26 | 29 | 12 |
| 27 | 11 | 11 | 14 | 23 | 346 | 624 | 95 | 140 | 24 | 85 | 20 | 15 |
| 28 | 10 | 10 | 14 | 23 | 278 | 442 | 81 | 141 | 20 | 54 | 22 | 12 |
| 29 | 7.4 | 9.7 | 14 | 24 | ----- | 322 | 57 | 136 | 17 | 47 | 23 | 13 |
| 30 | 7.8 | 9.5 | 14 | 20 | ----- | 259 | 73 | 132 | 20 | 44 | 16 | 15 |
| 31 | 7.7 | ----- | 14 | 18 | ----- | 198 | ----- | 116 | ----- | 36 | 27 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 20 | 7.4 | 13.2 | 0.186 | 0.21 |
| November | 31 | 9.0 | 16.1 | .226 | .25 |
| December | 53 | 5.8 | 15.7 | .221 | .25 |
| January | 144 | 14 | 47.8 | .672 | .77 |
| February | 432 | 16 | 84.6 | 1.19 | 1.24 |
| March | 722 | 97 | 276 | 3.88 | 4.47 |
| April | 512 | 57 | 181 | 2.55 | 2.84 |
| May | 155 | 62 | 106 | 1.49 | 1.72 |
| June | 172 | 17 | 73.6 | 1.04 | 1.16 |
| July | 85 | 6.8 | 22.9 | .322 | .37 |
| August | 97 | 16 | 38.8 | .546 | .63 |
| September | 28 | 9.1 | 16.2 | .228 | .25 |
| The year | 722 | 5.8 | 74.2 | 1.04 | 14.16 |

* Estimated.

ASHUELOT RIVER AT HINSDALE, N. H.

LOCATION.—Chain gage at highway bridge in Hinsdale, Cheshire County, one-fourth 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, 1930.

EXTREMES.—Maximum discharge during year, 2,960 second-feet Mar. 26 (gage height, 5.98 feet); minimum, 2.0 second-feet Sept. 17, 28 (gage height, 2.18 feet).

1907–1909, 1914–1930: Maximum discharge, 8,940 second-feet Mar. 29, 1920 (gage height, 9.98 feet); minimum, that of Sept. 17, 28, 1930.

REMARKS.—Records good. Corrections for ice effect applied Dec. 10–12, 23–26, Jan. 19–31, Feb. 1, 6–8, 11, 12, 17, 18. Flow partly regulated by storage reservoir.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|-------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | 65 | 126 | 81 | 101 | 245 | 815 | 815 | 326 | 470 | 157 | 157 | 45 |
| 2..... | 119 | 122 | 65 | 157 | 200 | 595 | 815 | 442 | 405 | 292 | 164 | 107 |
| 3..... | 170 | 16 | 144 | 167 | 160 | 595 | 775 | 735 | 309 | 268 | 36 | 81 |
| 4..... | 151 | 119 | 110 | 261 | 245 | 562 | 775 | 735 | 318 | 264 | 138 | 95 |
| 5..... | 138 | 113 | 113 | 292 | 170 | 530 | 697 | 562 | 313 | 218 | 126 | 148 |
| 6..... | 30 | 58 | 52 | 326 | 245 | 442 | 627 | 442 | 253 | 288 | 151 | 113 |
| 7..... | 113 | 177 | 185 | 207 | 218 | 442 | 905 | 420 | 237 | 292 | 138 | 84 |
| 8..... | 90 | 95 | 3.5 | 335 | 167 | 562 | 1,500 | 470 | 230 | 230 | 78 | 132 |
| 9..... | 63 | 164 | 78 | 595 | 144 | 2,230 | 1,620 | 562 | 326 | 192 | 141 | 122 |
| 10..... | 107 | 65 | 92 | 1,050 | 126 | 2,370 | 1,260 | 627 | 375 | 215 | 65 | 116 |
| 11..... | 119 | 92 | 78 | 697 | 164 | 1,820 | 1,000 | 500 | 595 | 215 | 164 | 122 |
| 12..... | 101 | 107 | 67 | 500 | 203 | 1,560 | 860 | 470 | 530 | 218 | 122 | 69 |
| 13..... | 17 | 113 | 69 | 365 | 177 | 1,500 | 735 | 390 | 500 | 69 | 84 | 15 |
| 14..... | 48 | 78 | 90 | 415 | 230 | 1,320 | 775 | 410 | 410 | 132 | 126 | 23 |
| 15..... | 113 | 84 | 27 | 442 | 326 | 1,000 | 697 | 380 | 284 | 234 | 141 | 101 |
| 16..... | 84 | 56 | 126 | 470 | 318 | 815 | 595 | 442 | 326 | 268 | 222 | 41 |
| 17..... | 65 | 237 | 41 | 442 | 318 | 815 | 627 | 442 | 276 | 237 | 218 | 37 |
| 18..... | 69 | 237 | 135 | 361 | 313 | 775 | 562 | 410 | 245 | 200 | 284 | 98 |
| 19..... | 60 | 237 | 292 | 395 | 292 | 952 | 595 | 385 | 318 | 154 | 215 | 15 |
| 20..... | 11 | 268 | 500 | 420 | 268 | 952 | 595 | 410 | 500 | 41 | 185 | 30 |
| 21..... | 48 | 257 | 470 | 326 | 390 | 815 | 595 | 697 | 500 | 144 | 222 | 34 |
| 22..... | 39 | 222 | 309 | 288 | 595 | 697 | 530 | 595 | 380 | 177 | 177 | 76 |
| 23..... | 126 | 200 | 339 | 268 | 815 | 660 | 562 | 470 | 348 | 101 | 200 | 46 |
| 24..... | 129 | 19 | 292 | 288 | 1,210 | 562 | 530 | 420 | 292 | 78 | 9.8 | 65 |
| 25..... | 110 | 107 | 249 | 241 | 1,560 | 660 | 442 | 400 | 272 | 144 | 207 | 37 |
| 26..... | 151 | 107 | 284 | 280 | 1,500 | 2,810 | 470 | 500 | 200 | 65 | 119 | 8.2 |
| 27..... | 92 | 110 | 177 | 326 | 1,210 | 2,810 | 400 | 660 | 222 | 90 | 177 | 2.5 |
| 28..... | 90 | 31 | 215 | 284 | 952 | 2,370 | 500 | 595 | 207 | 230 | 132 | 2.0 |
| 29..... | 122 | 95 | 164 | 264 | ----- | 1,560 | 335 | 595 | 63 | 218 | 126 | 87 |
| 30..... | 67 | 129 | 196 | 292 | ----- | 1,100 | 344 | 530 | 148 | 222 | 119 | 154 |
| 31..... | 144 | ----- | 107 | 322 | ----- | 1,150 | ----- | 442 | ----- | 192 | 87 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 170 | 11 | 92.0 | 0.219 | 0.25 |
| November..... | 268 | 16 | 128 | .305 | .34 |
| December..... | 500 | 3.5 | 166 | .395 | .46 |
| January..... | 1,050 | 101 | 361 | .860 | .99 |
| February..... | 1,560 | 126 | 456 | 1.09 | 1.14 |
| March..... | 2,810 | 442 | 1,160 | 2.76 | 3.18 |
| April..... | 1,620 | 335 | 718 | 1.71 | 1.91 |
| May..... | 735 | 326 | 499 | 1.19 | 1.37 |
| June..... | 595 | 63 | 328 | .781 | .87 |
| July..... | 292 | 41 | 189 | .450 | .52 |
| August..... | 284 | 9.8 | 146 | .348 | .40 |
| September..... | 154 | 2.0 | 70.2 | .167 | .19 |
| The year..... | 2,810 | 2.0 | 359 | .855 | 11.62 |

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, 1930.

EXTREMES.—Maximum discharge during year not determined; minimum, 1.9 second-feet Oct. 14, 15 (gage height, 1.76 feet).

1923-1930: Maximum discharge, 2,000 second-feet Nov. 4, 1927 (gage height, 6.87 feet); minimum, that of Oct. 14, 15, 1929.

REMARKS.—Records excellent except those for periods of ice effect, Nov. 30, Dec. 1, 3-7, 10-14, 19-21, 24, Jan. 3-5, 8-17, Jan. 19 to Feb. 23, and those estimated, which are fair. Little if any utilization of storage above station.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----------|---------|-------|---------|------|-------|-------|-----------------|-----|-------------------|------|------|-------|
| 1 | 20 | 8.0 | 4.5 | 7.2 | 21 | 73 | 100 | 44 | 46 | 17 | 17 | 7.8 |
| 2 | 4.2 | 5.0 | 4.2 | 8.5 | 23 | 67 | 102 | 78 | 38 | 26 | 10 | 8.5 |
| 3 | 7.2 | 5.2 | 5.2 | 12 | 19 | 63 | 93 | 100 | 34 | 19 | 9.4 | 25 |
| 4 | 6.0 | 8.5 | 6.5 | 29 | 18 | 62 | 85 | 78 | 43 | 15 | 9.4 | 13 |
| 5 | 4.2 | 9.0 | 6.8 | 20 | 17 | 65 | 76 | 63 | 35 | 12 | 9.4 | 9.8 |
| 6 | 3.2 | 8.0 | 7.5 | 15 | 14 | 54 | 73 | 55 | 32 | 12 | 10 | 9.0 |
| 7 | 2.6 | 7.5 | 8.0 | 17 | 13 | 51 | 186 | 52 | 31 | 14 | 10 | 8.0 |
| 8 | 2.8 | 7.0 | 7.5 | 44 | 12 | * 134 | 229 | 90 | 23 | 17 | 17 | 8.8 |
| 9 | 2.6 | 7.0 | 4.2 | 79 | 12 | * 575 | 157 | 181 | 36 | 14 | 12 | 7.8 |
| 10 | 2.3 | 9.4 | 4.2 | 65 | 16 | * 265 | 117 | 121 | 60 | 22 | 9.4 | 7.0 |
| 11 | 2.2 | 5.5 | 4.2 | 31 | 14 | * 189 | 102 | 92 | 84 | 15 | 8.5 | 6.8 |
| 12 | 2.0 | 6.5 | 4.2 | 23 | 14 | * 162 | 95 | 74 | 79 | 13 | 7.8 | 6.8 |
| 13 | 2.0 | 6.0 | 6.5 | 19 | 17 | * 138 | 90 | 65 | 60 | 12 | 7.8 | 7.0 |
| 14 | 1.9 | 6.8 | 8.2 | 26 | 28 | * 117 | 87 | 57 | 45 | 20 | 7.2 | 7.0 |
| 15 | 2.0 | 11 | 8.8 | 34 | 33 | * 90 | 80 | 61 | 37 | 24 | 42 | 7.0 |
| 16 | 3.8 | 11 | 5.8 | 35 | 25 | * 82 | 72 | 70 | 32 | 14 | 43 | 6.8 |
| 17 | 2.2 | 7.0 | 5.0 | 23 | 18 | 82 | 66 | 74 | 29 | 12 | 40 | 10 |
| 18 | 4.2 | 10 | 12 | 12 | 13 | 80 | 66 | 62 | 48 | 11 | 22 | 9.8 |
| 19 | 3.5 | * 44 | 44 | 8.5 | 12 | 106 | 66 | 57 | 66 | 9.8 | 17 | 8.0 |
| 20 | 2.2 | * 38 | 30 | 14 | 20 | 98 | 66 | 117 | 85 | 9.4 | 12 | 7.8 |
| 21 | 2.1 | * 28 | 22 | 14 | 44 | 84 | 61 | 102 | 59 | 8.8 | 12 | 7.2 |
| 22 | 2.8 | * 19 | 17 | 14 | 60 | 68 | 61 | 82 | 47 | 10 | * 11 | 7.0 |
| 23 | 18 | * 16 | 13 | 17 | 117 | 66 | 63 | 65 | 38 | 11 | * 12 | 6.5 |
| 24 | 11 | * 11 | 12 | 16 | * 176 | 55 | 56 | 48 | 23 | 10 | * 12 | 6.5 |
| 25 | 9.4 | * 10 | 11 | 12 | * 173 | * 67 | 54 | 53 | 20 | 13 | * 12 | 6.5 |
| 26 | 7.5 | * 9.4 | 9.4 | 11 | * 150 | * 436 | 51 | 76 | 17 | 10 | * 11 | 8.0 |
| 27 | 6.0 | 8.8 | 8.8 | 9.4 | * 109 | * 356 | 47 | 79 | 17 | 33 | 11 | 10 |
| 28 | 6.2 | 6.5 | 8.0 | 30 | 87 | * 217 | 44 | 74 | 17 | 24 | 9.8 | 9.8 |
| 29 | 7.0 | 5.2 | 7.8 | 20 | ----- | * 162 | 41 | 66 | 15 | 24 | 8.8 | 8.0 |
| 30 | 6.5 | 5.0 | 7.5 | 15 | ----- | 134 | 40 | 61 | 13 | 20 | 13 | 8.5 |
| 31 | 6.2 | ----- | 7.2 | 15 | ----- | 115 | ----- | 53 | ----- | 18 | 8.0 | ----- |
| Month | Maximum | | Minimum | | Mean | | Per square mile | | Run-off in inches | | | |
| October | 20 | | 1.9 | | 5.28 | | 0.126 | | 0.15 | | | |
| November | 44 | | 5.0 | | 11.3 | | .270 | | .30 | | | |
| December | 44 | | 4.2 | | 10.0 | | .239 | | .28 | | | |
| January | 79 | | 7.2 | | 22.4 | | .536 | | .62 | | | |
| February | 176 | | 12 | | 45.5 | | 1.09 | | 1.14 | | | |
| March | 575 | | 51 | | 139 | | 3.33 | | 3.84 | | | |
| April | 229 | | 40 | | 84.2 | | 2.01 | | 2.24 | | | |
| May | 181 | | 44 | | 75.8 | | 1.81 | | 2.09 | | | |
| June | 85 | | 13 | | 40.3 | | .964 | | 1.08 | | | |
| July | 33 | | 8.8 | | 15.8 | | .378 | | .44 | | | |
| August | 43 | | 7.2 | | 14.2 | | .340 | | .39 | | | |
| September | 25 | | 6.5 | | 8.66 | | .207 | | .23 | | | |
| The year | 575 | | 1.9 | | 39.4 | | .943 | | 12.80 | | | |

* Estimated.

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

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, 1930.

EXTREMES.—Maximum discharge during year, 535 second-feet Mar. 26 (gage height, 3.90 feet); minimum, 0.6 second-foot Dec. 1 (gage height, 1.12 feet).

1920-1930: Maximum discharge, 3,560 second-feet Nov. 4, 1927 (gage height, 7.15 feet); minimum, 0.4 second-foot Sept. 15-17, 1926.

REMARKS.—Records good except those for periods of ice effect, Dec. 14 to Mar. 8, which are fair. Flow regulated by several small storage ponds above station.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 11 | 11 | 6.4 | 6.0 | 14 | 52 | 70 | 26 | 36 | 7.4 | 9.0 | 6.6 |
| 2..... | 9.8 | 7.8 | 7.8 | 10 | 8.0 | 37 | 86 | 118 | 36 | 38 | 18 | 8.0 |
| 3..... | 12 | 1.3 | 8.8 | 21 | 13 | 61 | 89 | 186 | 24 | 32 | 1.7 | 1.5 |
| 4..... | 12 | 10 | 1.1 | 40 | 15 | 47 | 54 | 114 | 18 | 26 | 2.7 | 16 |
| 5..... | 14 | 9.6 | 1.1 | 14 | 15 | 42 | 46 | 74 | 20 | 10 | 8.9 | 6.2 |
| 6..... | 2.6 | 26 | 1.1 | 20 | 14 | 40 | 41 | 46 | 6.8 | 10 | 1.3 | 1.2 |
| 7..... | 24 | 9.0 | 6.8 | 30 | 13 | 41 | 151 | 52 | 23 | 6.7 | 1.9 | 1.1 |
| 8..... | 15 | 10 | 1.1 | 50 | 12 | 95 | 176 | 62 | 12 | 20 | 11 | 2.0 |
| 9..... | 5.1 | 6.3 | 1.1 | 100 | 5.0 | 320 | 122 | 104 | 26 | 18 | 1.4 | 3.0 |
| 10..... | 14 | 1.1 | 1.2 | 70 | 11 | 132 | 100 | 66 | 57 | 28 | 7.4 | 2.4 |
| 11..... | 7.8 | 5.0 | 10 | 36 | 13 | 96 | 89 | 57 | 42 | 15 | 7.4 | 2.4 |
| 12..... | 5.2 | 3.8 | 1.3 | 51 | 15 | 136 | 85 | 50 | 46 | 16 | 1.5 | 2.4 |
| 13..... | 1.0 | 4.0 | 1.0 | 42 | 16 | 126 | 76 | 50 | 29 | 14 | 1.0 | 2.5 |
| 14..... | .9 | 7.0 | 5.0 | 43 | 22 | 98 | 84 | 40 | 20 | 33 | 1.2 | 2.3 |
| 15..... | 8.8 | 10 | 6.0 | 52 | 39 | 116 | 71 | 54 | 16 | 41 | 16 | 2.3 |
| 16..... | 12 | 17 | 1.5 | 60 | 22 | 106 | 66 | 50 | 9.3 | 42 | 12 | 6.0 |
| 17..... | 6.0 | 11 | 7.0 | 47 | 28 | 103 | 50 | 54 | 9.6 | 12 | 6.2 | 1.2 |
| 18..... | .9 | 25 | 7.0 | 36 | 29 | 89 | 70 | 46 | 38 | 14 | 14 | 1.1 |
| 19..... | 3.8 | 48 | 33 | 20 | 35 | 122 | 68 | 44 | 58 | 7.8 | 16 | 2.0 |
| 20..... | 1.0 | 34 | 32 | 33 | 63 | 80 | 58 | 92 | 55 | 12 | 7.5 | 2.4 |
| 21..... | 1.1 | 13 | 27 | 28 | 130 | 68 | 69 | 78 | 37 | 16 | 1.6 | 2.4 |
| 22..... | 4.9 | 10 | 21 | 25 | 165 | 50 | 60 | 47 | 20 | 30 | 3.0 | 7.4 |
| 23..... | 10 | 13 | 16 | 22 | 144 | 58 | 52 | 36 | 22 | 22 | 6.8 | 1.1 |
| 24..... | 14 | 4.2 | 14 | 20 | 154 | 47 | 46 | 30 | 17 | 18 | 1.4 | 1.0 |
| 25..... | 20 | 11 | 12 | 18 | 152 | 168 | 42 | 35 | 24 | 9.4 | 1.2 | 6.2 |
| 26..... | 6.6 | 9.2 | 11 | 10 | 142 | 445 | 32 | 72 | 13 | 14 | 2.4 | 1.1 |
| 27..... | 5.1 | 5.6 | 10 | 16 | 116 | 197 | 34 | 64 | 7.3 | 29 | 2.4 | 5.0 |
| 28..... | 1.2 | 6.0 | 9.0 | 17 | 83 | 122 | 36 | 64 | 14 | 40 | 2.2 | 1.1 |
| 29..... | 75 | 12 | 9.0 | 18 | ----- | 75 | 36 | 76 | 13 | 25 | 2.4 | 1.0 |
| 30..... | 49 | .8 | 10 | 17 | ----- | 73 | 26 | 60 | 12 | 8.8 | 2.4 | 1.0 |
| 31..... | 20 | ----- | 14 | 15 | ----- | 76 | ----- | 42 | ----- | 2.8 | 2.6 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 75 | 0.9 | 12.1 | 0.331 | 0.38 |
| November..... | 48 | .8 | 11.4 | .311 | .35 |
| December..... | 33 | 1.0 | 9.46 | .258 | .30 |
| January..... | 100 | 6.0 | 31.8 | .869 | 1.00 |
| February..... | 165 | 5.0 | 53.1 | 1.45 | 1.51 |
| March..... | 445 | 37 | 108 | 2.95 | 3.40 |
| April..... | 176 | 26 | 69.5 | 1.90 | 2.12 |
| May..... | 186 | 26 | 64.2 | 1.75 | 2.02 |
| June..... | 58 | 6.8 | 25.4 | .694 | .77 |
| July..... | 42 | 2.8 | 19.9 | .544 | .63 |
| August..... | 18 | 1.0 | 5.63 | .154 | .18 |
| September..... | 16 | 1.0 | 3.33 | .091 | .10 |
| The year..... | 445 | .8 | 34.4 | .940 | 12.76 |

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, 1930.

EXTREMES.—Maximum discharge, 414 second-feet Mar. 26 (gage height, 5.16 feet); minimum, 4.5 second-feet Sept. 25 (gage height, 2.45 feet).

1916-1930: Maximum discharge, 1,760 second-feet, June 25, 1922 (gage height, 8.65 feet); practically no flow Sept. 20, 1918, Jan. 14, 1925.

REMARKS.—Records good except those for periods of ice effect, Dec. 4-7, 11-15, 23-26, Jan. 16 to Feb. 22, which are fair. Flow regulated by storage in Lake Monomona and other reservoirs.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1 | 35 | 36 | 14 | 33 | 45 | 89 | 152 | 94 | 35 | 66 | 39 | 23 |
| 2 | 54 | 25 | 34 | 44 | 30 | 48 | 164 | 92 | 80 | 86 | 24 | 39 |
| 3 | 44 | 46 | 34 | 82 | 36 | 96 | 126 | 102 | 83 | 111 | 20 | 42 |
| 4 | 33 | 35 | 37 | 33 | 42 | 98 | 110 | 49 | 86 | 42 | 43 | 40 |
| 5 | 26 | 37 | 34 | 18 | 46 | 104 | 80 | 122 | 69 | 42 | 34 | 34 |
| 6 | 17 | 37 | 30 | 58 | 51 | 86 | 38 | 100 | 66 | 47 | 34 | 21 |
| 7 | 22 | 40 | 25 | 52 | 53 | 73 | 160 | 82 | 46 | 155 | 39 | 12 |
| 8 | 30 | 42 | 14 | 71 | 50 | 178 | 266 | 104 | 27 | 126 | 43 | 40 |
| 9 | 29 | 32 | 22 | 124 | 45 | 140 | 248 | 83 | 60 | 79 | 28 | 38 |
| 10 | 38 | 20 | 42 | 94 | 57 | 254 | 190 | 59 | 102 | 65 | 21 | 50 |
| 11 | 33 | 16 | 30 | 66 | 44 | 174 | 154 | 36 | 128 | 62 | 45 | 39 |
| 12 | 36 | 40 | 35 | 31 | 60 | 176 | 108 | 82 | 127 | 52 | 43 | 32 |
| 13 | 16 | 43 | 39 | 112 | 70 | 127 | 82 | 66 | 85 | 26 | 38 | 16 |
| 14 | 19 | 44 | 30 | 66 | 74 | 106 | 160 | 94 | 59 | 68 | 34 | 10 |
| 15 | 30 | 49 | 17 | 89 | 63 | 100 | 114 | 93 | 28 | 87 | 40 | 18 |
| 16 | 46 | 48 | 33 | 65 | 46 | 61 | 126 | 68 | 74 | 68 | 35 | 29 |
| 17 | 35 | 16 | 37 | 72 | 62 | 91 | 106 | 57 | 60 | 46 | 20 | 29 |
| 18 | 32 | 83 | 34 | 48 | 78 | 110 | 114 | 28 | 65 | 34 | 26 | 26 |
| 19 | 25 | 66 | 72 | 42 | 98 | 155 | 72 | 48 | 81 | 38 | 27 | 25 |
| 20 | 16 | 46 | 50 | 54 | 118 | 103 | 62 | 71 | 78 | 24 | 22 | 16 |
| 21 | 33 | 48 | 34 | 66 | 142 | 122 | 130 | 71 | 68 | 40 | 24 | 9.0 |
| 22 | 27 | 48 | 20 | 70 | 127 | 86 | 118 | 48 | 42 | 46 | 30 | 34 |
| 23 | 40 | 38 | 33 | 74 | 98 | 54 | 128 | 53 | 82 | 74 | 24 | 30 |
| 24 | 38 | 18 | 43 | 66 | 228 | 80 | 119 | 50 | 73 | 47 | 16 | 12 |
| 25 | 35 | 31 | 38 | 35 | 190 | 156 | 87 | 27 | 84 | 39 | 25 | 20 |
| 26 | 24 | 27 | 46 | 25 | 172 | 298 | 66 | 90 | 68 | 28 | 49 | 12 |
| 27 | 15 | 30 | 42 | 50 | 158 | 269 | 41 | 78 | 70 | 24 | 59 | 11 |
| 28 | 28 | 16 | 42 | 58 | 121 | 222 | 86 | 92 | 56 | 53 | 53 | 9.0 |
| 29 | 38 | 27 | 23 | 69 | ----- | 162 | 94 | 112 | 25 | 39 | 37 | 9.5 |
| 30 | 34 | 26 | 66 | 63 | ----- | 75 | 95 | 47 | 62 | 39 | 26 | 16 |
| 31 | 37 | ----- | 35 | 57 | ----- | 126 | ----- | 52 | ----- | 47 | 18 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 54 | 15 | 31.1 | 0.389 | 0.45 |
| November | 83 | 16 | 37.0 | .462 | .52 |
| December | 72 | 14 | 35.0 | .438 | .50 |
| January | 124 | 18 | 60.9 | .761 | .88 |
| February | 228 | 30 | 85.9 | 1.07 | 1.11 |
| March | 298 | 48 | 130 | 1.62 | 1.87 |
| April | 266 | 38 | 120 | 1.50 | 1.67 |
| May | 122 | 27 | 72.6 | .908 | 1.05 |
| June | 128 | 25 | 69.0 | .862 | .96 |
| July | 155 | 24 | 58.1 | .726 | .84 |
| August | 59 | 16 | 32.8 | .410 | .47 |
| September | 50 | 9.0 | 24.7 | .309 | .34 |
| The year | 298 | 9.0 | 62.9 | .786 | 10.66 |

* Estimated.

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 important tributaries

DRAINAGE AREA.—372 square miles.

RECORDS AVAILABLE.—August, 1914, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,840 second-feet Mar. 27 (gage height, 3.90 feet); minimum, 16 second-feet Oct. 7 (gage height, 1.02 feet). 1914-1930: Maximum discharge, 6,350 second-feet Nov. 4, 1927 (gage height, 5.85 feet); practically no flow at times during 1915 and 1916.

REMARKS.—Records good except those for periods of ice effect, Jan. 20, 25-27, 31, Feb. 1, 3-8, 11, 12, 14-20, and those estimated, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|-------|-------|-------|-------|-------|-----|-------|------|------|-------|
| 1 | 78 | 133 | 66 | * 201 | 180 | 570 | 696 | 440 | 240 | 276 | 166 | 48 |
| 2 | 132 | 98 | 105 | * 258 | 142 | 469 | 670 | 424 | 338 | 208 | 96 | 105 |
| 3 | 104 | 25 | 36 | * 310 | 215 | 528 | 720 | 585 | 285 | 414 | 104 | 142 |
| 4 | 114 | 116 | 48 | * 240 | 230 | 370 | 680 | 504 | 280 | 256 | 158 | 116 |
| 5 | * 84 | 138 | 68 | * 130 | 200 | 414 | 640 | 555 | 300 | 312 | 146 | 124 |
| 6 | * 64 | 174 | 110 | * 400 | 275 | 398 | 620 | 466 | 256 | 138 | 98 | 131 |
| 7 | * 100 | 80 | 62 | * 480 | 270 | 348 | 784 | 431 | 160 | 581 | 108 | 63 |
| 8 | * 124 | * 170 | 92 | * 550 | 205 | 671 | 1,200 | 375 | 147 | 604 | 81 | 102 |
| 9 | * 112 | * 110 | 70 | * 575 | 166 | 1,200 | 1,240 | 430 | 360 | 400 | 92 | 101 |
| 10 | * 120 | * 92 | 70 | * 438 | 256 | 1,010 | 1,060 | 393 | 281 | 402 | 62 | 94 |
| 11 | * 116 | * 178 | 168 | * 320 | 267 | 1,010 | 914 | 255 | 446 | 242 | 159 | 102 |
| 12 | 28 | * 160 | 86 | * 150 | 280 | 936 | 678 | 272 | 400 | 202 | 114 | 92 |
| 13 | 30 | * 160 | 96 | * 500 | 230 | 885 | 554 | 335 | 394 | 304 | 116 | 76 |
| 14 | 114 | * 185 | 100 | * 380 | 325 | 702 | 680 | 321 | 319 | 262 | 126 | 63 |
| 15 | 39 | * 208 | 135 | 410 | 395 | 634 | 654 | 416 | 105 | 353 | 90 | 102 |
| 16 | 88 | * 150 | 222 | 412 | 330 | 455 | 537 | 294 | 263 | 344 | 100 | 101 |
| 17 | 84 | * 75 | 222 | 420 | 400 | 478 | 502 | 513 | 154 | 273 | 79 | 94 |
| 18 | 66 | 250 | 204 | 300 | 515 | 500 | 561 | 127 | 260 | 254 | 139 | 101 |
| 19 | 74 | 318 | 222 | * 240 | 300 | 591 | 566 | 286 | 328 | 154 | 146 | 92 |
| 20 | 44 | 277 | 222 | 290 | 275 | 714 | 496 | 306 | 448 | 125 | 137 | 76 |
| 21 | 54 | 205 | * 220 | 320 | 618 | 592 | 584 | 414 | 453 | 208 | 105 | 26 |
| 22 | 77 | 174 | * 120 | 280 | 596 | 473 | 577 | 369 | 280 | 232 | 104 | 119 |
| 23 | 114 | 86 | * 200 | 310 | 840 | 380 | 563 | 267 | 254 | 188 | 148 | 108 |
| 24 | 118 | 108 | * 182 | 290 | 1,040 | 446 | 538 | 227 | 226 | 250 | 64 | 105 |
| 25 | 109 | 178 | * 204 | 260 | 1,040 | 489 | 457 | 152 | 167 | 242 | 72 | 88 |
| 26 | 98 | 104 | * 194 | 160 | 1,150 | 454 | 434 | 418 | 224 | 137 | 87 | 86 |
| 27 | 26 | 77 | * 190 | 250 | 840 | 1,080 | 288 | 392 | 200 | 252 | 76 | 50 |
| 28 | 138 | 76 | * 200 | 262 | 674 | 1,400 | 371 | 412 | 144 | 204 | 72 | 24 |
| 29 | 96 | 126 | * 130 | 258 | ----- | 1,070 | 336 | 536 | 168 | 245 | 87 | 82 |
| 30 | 79 | 115 | * 258 | 258 | ----- | 740 | 348 | 424 | 212 | 224 | 53 | 104 |
| 31 | 162 | ----- | * 210 | 230 | ----- | 766 | ----- | 366 | ----- | 213 | 49 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 162 | 26 | 89.5 | 0.241 | 0.28 |
| November | 318 | 25 | 145 | .390 | .44 |
| December | 258 | 36 | 146 | .392 | .45 |
| January | 575 | 130 | 319 | .858 | .99 |
| February | 1,150 | 142 | 438 | 1.18 | 1.23 |
| March | 1,680 | 348 | 689 | 1.85 | 2.13 |
| April | 1,240 | 288 | 632 | 1.70 | 1.90 |
| May | 585 | 127 | 378 | 1.02 | 1.18 |
| June | 463 | 105 | 268 | .720 | .80 |
| July | 604 | 125 | 274 | .737 | .85 |
| August | 166 | 49 | 104 | .280 | .32 |
| September | 142 | 24 | 90.6 | .244 | .27 |
| The year | 1,680 | 24 | 297 | .798 | 10.84 |

* Estimated.

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 north-west of Winchendon, Worcester County.

DRAINAGE AREA.—18.8 square miles.

RECORDS AVAILABLE.—May, 1916, to September, 1930.

EXTREMES.—Maximum discharge during year, 95 second-feet Mar. 27 (gage height, 7.08 feet); minimum, 1.8 second-feet Nov. 11–13 (gage height, 4.89 feet).

1916–1930: Maximum discharge, 340 second-feet Nov. 4, 1927 (gage height, 9.62 feet); minimum, 0.1 second-foot Aug. 25, 1924.

REMARKS.—Records good. Corrections for ice effect applied Dec. 21, 25, 26, Jan. 5, 11, Jan. 17 to Feb. 1, Feb. 5, 12–15, 17–20. Flow regulated by storage in Pearly and Sip Ponds.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|-------|-------|-------|------|-------|------|-------|------|-------|-------|
| 1 | 2.2 | 2.2 | 2.8 | 5.4 | 5.7 | 30 | * 32 | 19 | 13 | 11 | 8.1 | 6.2 |
| 2 | 2.2 | 2.2 | 4.0 | 6.8 | 5.2 | 23 | 32 | 22 | 15 | 14 | 7.4 | 7.2 |
| 3 | 2.5 | 2.2 | 2.8 | 6.3 | 7.0 | 31 | 31 | 22 | 13 | 9.7 | 6.7 | 6.7 |
| 4 | 2.4 | 2.5 | 2.6 | 4.4 | 6.5 | 24 | 28 | 17 | 13 | 7.7 | 12 | 5.0 |
| 5 | 2.3 | 2.3 | 3.4 | 3.4 | 5.4 | 24 | 26 | 23 | 13 | 14 | 7.0 | 4.7 |
| 6 | 2.9 | 2.1 | 4.2 | 3.8 | * 4.2 | 22 | 20 | 21 | 11 | 14 | 6.8 | 5.2 |
| 7 | 2.9 | 2.0 | 2.9 | 4.4 | * 4.6 | 19 | 42 | 19 | 7.4 | 25 | 7.2 | 5.4 |
| 8 | 4.0 | 2.0 | 2.6 | 10 | * 5.2 | 32 | 60 | 21 | 6.0 | 23 | 7.6 | 4.8 |
| 9 | 2.5 | 1.9 | 2.6 | 13 | 3.6 | 47 | 57 | 19 | 11 | 20 | 8.3 | 4.2 |
| 10 | 2.5 | 1.9 | 2.6 | 12 | 6.0 | 72 | 43 | 21 | 13 | 18 | 5.8 | 5.1 |
| 11 | 2.5 | 1.8 | 2.6 | 10 | 6.5 | 55 | 39 | 28 | 16 | 16 | 7.7 | 4.2 |
| 12 | 2.5 | 1.8 | 2.6 | 7.6 | 5.6 | 50 | 32 | 26 | 20 | 13 | 7.7 | 4.1 |
| 13 | 2.5 | 1.8 | 3.4 | 12 | 9.0 | 51 | 26 | 19 | 18 | 7.0 | 6.0 | 4.6 |
| 14 | 2.5 | 1.9 | 2.6 | 13 | 9.2 | 45 | 32 | 18 | 13 | 12 | 8.6 | 3.8 |
| 15 | 2.5 | 2.5 | 2.6 | 15 | 9.0 | 37 | 27 | 21 | 10 | 16 | 8.6 | 4.6 |
| 16 | 2.5 | 2.5 | 2.8 | 14 | 6.7 | 24 | 26 | 18 | 14 | 11 | 7.0 | 4.0 |
| 17 | 2.5 | 2.2 | 2.6 | 12 | 7.6 | 34 | 27 | 18 | 12 | 11 | 7.7 | 4.0 |
| 18 | 2.5 | 3.4 | 5.8 | 8.3 | 8.6 | 28 | 26 | 12 | 19 | 12 | * 8.0 | 3.3 |
| 19 | 2.5 | 6.0 | 6.3 | 6.7 | 9.7 | 33 | 28 | 19 | 22 | 14 | 8.1 | 2.7 |
| 20 | 1.9 | 3.6 | 4.7 | 8.1 | 11 | 33 | 25 | 19 | 30 | 7.4 | 7.0 | 2.5 |
| 21 | 1.9 | * 3.3 | 4.3 | 7.4 | 13 | 30 | 30 | 20 | 24 | 13 | 7.6 | 2.4 |
| 22 | 1.9 | * 3.1 | * 3.8 | 7.0 | 13 | 30 | 28 | 20 | 16 | 11 | * 7.7 | 2.3 |
| 23 | 2.6 | * 3.0 | * 4.3 | 6.7 | 12 | * 27 | 27 | 18 | 17 | 9.9 | 8.1 | 2.4 |
| 24 | 2.3 | * 2.9 | * 4.2 | 6.3 | 24 | * 27 | 24 | 18 | 12 | 7.4 | 6.2 | 2.5 |
| 25 | 2.2 | * 2.8 | 4.1 | * 6.0 | 26 | * 29 | 26 | 9.5 | 12 | 8.6 | 6.0 | 2.5 |
| 26 | 2.0 | * 2.8 | 4.0 | * 4.3 | * 4.0 | * 75 | 24 | * 21 | 9.2 | 10 | 5.2 | 2.5 |
| 27 | 2.0 | 2.8 | 5.4 | 4.8 | 41 | 90 | 15 | 21 | 14 | 11 | 6.5 | 2.8 |
| 28 | 2.0 | 2.8 | 7.7 | 7.9 | * 34 | 72 | 19 | 20 | 11 | 12 | 6.3 | 2.6 |
| 29 | 2.0 | 3.0 | 4.2 | 7.6 | ----- | 55 | 18 | 21 | 3.6 | 8.6 | 6.2 | 2.5 |
| 30 | 2.0 | 2.8 | 3.5 | 6.8 | ----- | * 41 | 19 | 14 | 8.6 | 8.3 | 5.0 | 2.4 |
| 31 | 2.1 | ----- | 5.8 | 6.2 | ----- | * 35 | ----- | 24 | ----- | 7.2 | 3.8 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 4.0 | 1.9 | 2.38 | 0.127 | 0.15 |
| November | 6.0 | 1.8 | 2.60 | .138 | .15 |
| December | 7.7 | 2.6 | 3.80 | .202 | .23 |
| January | 15 | 3.4 | 7.97 | .424 | .49 |
| February | 41 | 3.6 | 12.1 | .644 | .67 |
| March | 90 | 19 | 39.5 | 2.10 | 2.42 |
| April | 60 | 15 | 29.6 | 1.57 | 1.75 |
| May | 28 | 9.5 | 19.6 | 1.04 | 1.20 |
| June | 30 | 3.6 | 13.9 | .739 | .82 |
| July | 25 | 7.0 | 12.3 | .654 | .75 |
| August | 12 | 3.8 | 7.16 | .381 | .44 |
| September | 7.2 | 2.3 | 3.91 | .208 | .23 |
| The year | 90 | 1.8 | 12.9 | .686 | 9.30 |

* Estimated.

CONNECTICUT RIVER BASIN

97

PRIEST BROOK NEAR WINCHENDON, MASS.

LOCATION.—Staff gage at highway bridge 3 miles above confluence with Millers River and 3½ miles west of Winchendon, Worcester County.

DRAINAGE AREA.—18.8 square miles.

RECORDS AVAILABLE.—May, 1916, to September, 1930.

EXTREMES.—Maximum discharge during year, 136 second-feet Mar. 27 (gage height, 4.13 feet); minimum, 0.7 second-foot Oct. 1 (gage height, 2.28 feet). 1916-1930: Maximum discharge, 1,000 second-feet Nov. 4, 1927 (gage height, 6.8 feet); minimum, 0.08 second-foot several times during September, 1929 (gage height, 2.18 feet).

REMARKS.—Records good. Corrections for ice effect applied Nov. 30 to Dec. 14, Dec. 22, 24-26, Jan. 21 to Feb. 21, Mar. 1, 5, 6, 15.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1 | 0.7 | 7.0 | 3.4 | 5.6 | 4.8 | 49 | 38 | 11 | 13 | 9.0 | 4.3 | 2.8 |
| 2 | 1.5 | 7.0 | 3.3 | 6.1 | 4.8 | 38 | 38 | 20 | 13 | 12 | 2.8 | 2.8 |
| 3 | 3.3 | 7.0 | 3.1 | 8.6 | 4.8 | 30 | 37 | 31 | 13 | 17 | 4.7 | 2.8 |
| 4 | 3.6 | 9.2 | 2.9 | 11 | 4.8 | 25 | 33 | 29 | 12 | 14 | 4.3 | 2.8 |
| 5 | 2.9 | 6.1 | 2.4 | 8.0 | 4.8 | 23 | 26 | 26 | 11 | 10 | 2.8 | 2.8 |
| 6 | 3.3 | 5.1 | 2.8 | 7.0 | 5.1 | 21 | 20 | 22 | 10 | 16 | 2.8 | 2.8 |
| 7 | 2.9 | 4.4 | 2.9 | 11 | 5.4 | 19 | 46 | 17 | 8.7 | 22 | 2.8 | 2.8 |
| 8 | 2.4 | 4.4 | 2.9 | 18 | 5.6 | 33 | 74 | 16 | 8.2 | 20 | 2.8 | 2.8 |
| 9 | 2.4 | 4.8 | 2.9 | 22 | 5.8 | 100 | 78 | 19 | 11 | 16 | 3.8 | 2.8 |
| 10 | 1.9 | 3.3 | 3.3 | 14 | 5.8 | 107 | 46 | 24 | 11 | 13 | 3.8 | 2.8 |
| 11 | 2.4 | 3.3 | 3.4 | 9.2 | 5.8 | 64 | 31 | 22 | 12 | 12 | 3.8 | 3.4 |
| 12 | 2.4 | 3.3 | 3.4 | 9.2 | 6.1 | 69 | 28 | 19 | 11 | 10 | 3.8 | 3.0 |
| 13 | 2.4 | 3.3 | 3.6 | 7.0 | 7.0 | 64 | 24 | 18 | 11 | 13 | 3.8 | 2.8 |
| 14 | 2.4 | 3.6 | 3.6 | 9.2 | 8.3 | 56 | 23 | 17 | 9.5 | 13 | 5.1 | 2.8 |
| 15 | 2.4 | 5.6 | 4.4 | 13 | 10 | 46 | 22 | 17 | 8.7 | 16 | 7.4 | 2.8 |
| 16 | 2.4 | 8.6 | 4.4 | 14 | 8.9 | 28 | 18 | 19 | 8.5 | 13 | 9.5 | 3.2 |
| 17 | 2.4 | 5.6 | 4.4 | 13 | 7.0 | 25 | 18 | 15 | 15 | 9.5 | 7.4 | 4.7 |
| 18 | 2.4 | 13 | 5.6 | 9.2 | 6.4 | 25 | 23 | 16 | 25 | 9.0 | 5.1 | 4.5 |
| 19 | 2.4 | 13 | 12 | 8.0 | 6.1 | 25 | 24 | 16 | 38 | 6.9 | 4.3 | 3.8 |
| 20 | 2.4 | 8.0 | 11 | 5.6 | 8.6 | 25 | 23 | 16 | 45 | 6.5 | 3.8 | 2.8 |
| 21 | 2.4 | 6.1 | 9.2 | 5.4 | 13 | 24 | 23 | 15 | 50 | 4.7 | 4.7 | 2.8 |
| 22 | 2.4 | 5.6 | 7.0 | 4.8 | 18 | 19 | 22 | 13 | 21 | 5.8 | 4.7 | 3.8 |
| 23 | 10 | 8.9 | 5.6 | 4.8 | 31 | 18 | 18 | 12 | 15 | 6.9 | 4.3 | 3.8 |
| 24 | 9.2 | 8.6 | 5.1 | 4.8 | 56 | 18 | 17 | 9.5 | 13 | 6.9 | 3.8 | 4.7 |
| 25 | 5.6 | 8.0 | 4.8 | 4.8 | 69 | 38 | 14 | 9.5 | 11 | 6.9 | 3.2 | 5.1 |
| 26 | 3.6 | 6.1 | 4.6 | 4.8 | 69 | 94 | 13 | 11 | 11 | 6.9 | 2.8 | 3.2 |
| 27 | 3.6 | 5.6 | 4.4 | 4.8 | 60 | 128 | 14 | 15 | 10 | 17 | 2.8 | 5.1 |
| 28 | 3.3 | 5.1 | 5.1 | 4.8 | 56 | 88 | 13 | 17 | 12 | 14 | 2.8 | 2.8 |
| 29 | 3.3 | 3.6 | 4.4 | 4.8 | ----- | 83 | 12 | 19 | 7.4 | 12 | 2.8 | 3.0 |
| 30 | 3.3 | 3.6 | 4.4 | 4.8 | ----- | 45 | 11 | 18 | 6.9 | 9.0 | 3.8 | 3.0 |
| 31 | 3.6 | ----- | 4.4 | 4.8 | ----- | 40 | ----- | 15 | ----- | 6.9 | 2.8 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 10 | 0.7 | 3.20 | 0.170 | 0.20 |
| November | 13 | 3.3 | 6.23 | .331 | .37 |
| December | 12 | 2.4 | 4.67 | .248 | .29 |
| January | 22 | 4.8 | 8.45 | .449 | .52 |
| February | 69 | 4.8 | 17.8 | .947 | .99 |
| March | 128 | 18 | 47.3 | 2.52 | 2.90 |
| April | 78 | 11 | 27.6 | 1.47 | 1.64 |
| May | 31 | 9.5 | 17.5 | .931 | 1.07 |
| June | 50 | 6.9 | 15.1 | .803 | .90 |
| July | 22 | 4.7 | 11.4 | .606 | .70 |
| August | 9.5 | 2.8 | 4.11 | .219 | .25 |
| September | 5.1 | 2.8 | 3.30 | .176 | .20 |
| The year | 128 | .7 | 13.9 | .739 | 10.03 |

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, 1930.

EXTREMES.—Maximum discharge during year, 332 second-feet Mar. 26, 27 (gage height, 2.84 feet); minimum, 1.7 second-foot Sept. 20–22 (gage height, 0.20 foot).

1916–1930: Maximum discharge, 1,610 second-feet Nov. 4, 1927 (gage height, 5.10 feet); minimum, 1.4 second-feet Sept. 4–7, 1927 (gage height, 0.20 foot).

REMARKS.—Records fair. Corrections for ice effect applied Feb. 15–20.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1 | 2.5 | 5.5 | 6.6 | 14 | 16 | 88 | 94 | 39 | 33 | 26 | 3.1 | 4.3 |
| 2 | 3.5 | 6.6 | 6.3 | 17 | 17 | 77 | 94 | 45 | 34 | 58 | 2.6 | 4.1 |
| 3 | 5.7 | 9.6 | 6.3 | 21 | 17 | 72 | 88 | 39 | 34 | 77 | 6.8 | 3.9 |
| 4 | 6.3 | 13 | 5.7 | 30 | 17 | 68 | 88 | 108 | 25 | 53 | 13 | 4.8 |
| 5 | 5.5 | 12 | 5.2 | 29 | 17 | 52 | 82 | 82 | 17 | 33 | 12 | 6.3 |
| 6 | 5.2 | 11 | 5.7 | 26 | 16 | 48 | 77 | 88 | 15 | 125 | 9.5 | 5.4 |
| 7 | 4.7 | 9.3 | 6.0 | 29 | 16 | 46 | 94 | 54 | 16 | 116 | 6.8 | 5.4 |
| 8 | 4.5 | 8.3 | 6.0 | 47 | 16 | 88 | 174 | 52 | 18 | 68 | 6.1 | 5.0 |
| 9 | 4.0 | 8.6 | 5.7 | 76 | 16 | 196 | 163 | 45 | 18 | 45 | 6.6 | 4.8 |
| 10 | 3.5 | 9.3 | 5.7 | 82 | 14 | 220 | 116 | 43 | 16 | 42 | 6.1 | 4.3 |
| 11 | 3.3 | 8.3 | 5.5 | 72 | 13 | 196 | 94 | 40 | 16 | 23 | 5.4 | 3.7 |
| 12 | 3.3 | 6.9 | 4.7 | 62 | 14 | 174 | 101 | 34 | 27 | 17 | 5.0 | 3.5 |
| 13 | 3.3 | 6.3 | 4.7 | 54 | 22 | 163 | 82 | 32 | 36 | 20 | 4.6 | 3.5 |
| 14 | 3.3 | 5.7 | 5.7 | 54 | 38 | 143 | 77 | 28 | 33 | 36 | 4.3 | 3.5 |
| 15 | 3.1 | 6.9 | 6.0 | 58 | 38 | 108 | 77 | 27 | 22 | 56 | 5.4 | 3.5 |
| 16 | 3.1 | 10 | 6.3 | 58 | 36 | 88 | 72 | 32 | 16 | 44 | 19 | 3.3 |
| 17 | 3.1 | 16 | 7.7 | 54 | 33 | 77 | 68 | 39 | 18 | 30 | 35 | 3.1 |
| 18 | 2.9 | 23 | 10 | 44 | 31 | 88 | 68 | 36 | 51 | 20 | 26 | 3.1 |
| 19 | 2.9 | 42 | 28 | 41 | 29 | 101 | 68 | 38 | 88 | 18 | 19 | 2.8 |
| 20 | 2.9 | 34 | 50 | 41 | 35 | 108 | 68 | 40 | 82 | 14 | 15 | 2.1 |
| 21 | 2.9 | 26 | 44 | 33 | 62 | 88 | 72 | 44 | 68 | 11 | 11 | 1.7 |
| 22 | 4.5 | 20 | 34 | 32 | 94 | 72 | 68 | 40 | 47 | 11 | 8.6 | 3.5 |
| 23 | 7.2 | 14 | 27 | 33 | 140 | 63 | 63 | 33 | 31 | 11 | 8.0 | 5.0 |
| 24 | 12 | 13 | 22 | 26 | 197 | 57 | 59 | 33 | 22 | 16 | 7.3 | 4.3 |
| 25 | 10 | 11 | 21 | 23 | 220 | 116 | 55 | 35 | 19 | 20 | 6.3 | 3.9 |
| 26 | 8.6 | 10 | 19 | 22 | 208 | 271 | 53 | 39 | 14 | 20 | 6.1 | 3.5 |
| 27 | 7.2 | 11 | 16 | 21 | 176 | 300 | 58 | 46 | 15 | 33 | 5.8 | 4.3 |
| 28 | 6.0 | 10 | 15 | 20 | 123 | 220 | 45 | 46 | 16 | 63 | 5.2 | 5.2 |
| 29 | 5.2 | 8.3 | 15 | 20 | ----- | 163 | 42 | 46 | 12 | 63 | 4.1 | 4.8 |
| 30 | 5.0 | 7.4 | 15 | 20 | ----- | 232 | 40 | 46 | 13 | 29 | 3.5 | 4.1 |
| 31 | 5.5 | ----- | 14 | 18 | ----- | 116 | ----- | 39 | ----- | 9.2 | 3.9 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 12 | 2.5 | 4.86 | 0.097 | 0.11 |
| November | 42 | 5.5 | 12.8 | .255 | .28 |
| December | 50 | 4.7 | 13.9 | .277 | .32 |
| January | 82 | 14 | 38.0 | .757 | .87 |
| February | 220 | 13 | 59.7 | 1.19 | 1.24 |
| March | 300 | 46 | 126 | 2.51 | 2.89 |
| April | 174 | 40 | 80 | 1.59 | 1.77 |
| May | 108 | 27 | 44.8 | .892 | 1.03 |
| June | 88 | 12 | 29.1 | .580 | .65 |
| July | 125 | 9.2 | 38.9 | .775 | .89 |
| August | 35 | 2.6 | 9.07 | .181 | .21 |
| September | 6.3 | 1.7 | 4.02 | .080 | .09 |
| The year | 300 | 1.7 | 38.3 | .763 | 10.35 |

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, 1930.

EXTREMES.—Maximum discharge during year, 154 second-feet Mar. 26 (gage height, 3.22 feet); minimum, 0.3 second-foot Sept. 16 (gage height, 0.92 foot).
1916-1930: Maximum discharge, 775 second-feet Nov. 4, 1927 (gage height, 5.2 feet); minimum, 0.2 second-foot Sept. 4, 5, 1929 (gage height, 0.90 foot).

REMARKS.—Records good. Corrections for ice effect applied Dec. 11-16, 22-26, Jan. 11 to Feb. 19.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1 | 1.2 | 3.9 | 2.4 | 5.9 | 3.1 | 28 | 28 | 10 | 18 | 10 | 3.8 | 2.8 |
| 2 | 1.3 | 3.6 | 2.6 | 5.6 | 2.9 | 26 | 27 | 12 | 14 | 21 | 3.4 | 1.5 |
| 3 | 2.7 | 4.2 | 2.4 | 7.0 | 2.8 | 21 | 26 | 17 | 10 | 11 | 3.2 | 1.2 |
| 4 | 3.1 | 4.7 | 2.6 | 7.6 | 2.8 | 23 | 25 | 18 | 10 | 9.1 | 2.9 | 1.0 |
| 5 | 2.9 | 4.5 | 2.4 | 14 | 2.7 | 18 | 21 | 18 | 9.1 | 8.0 | 2.4 | .9 |
| 6 | 2.4 | 3.9 | 2.4 | 11 | 2.7 | 14 | 20 | 16 | 7.6 | 14 | 1.9 | .8 |
| 7 | 1.9 | 3.4 | 2.1 | 6.5 | 2.7 | 14 | 27 | 14 | 9.4 | 45 | 1.7 | 2.1 |
| 8 | 1.7 | 3.1 | 2.4 | 9.4 | 2.6 | 33 | 88 | 14 | 8.8 | 27 | 2.4 | 1.5 |
| 9 | 1.8 | 2.6 | 2.9 | 21 | 2.6 | 76 | 76 | 11 | 13 | 14 | 2.1 | 1.2 |
| 10 | 1.8 | 2.4 | 2.6 | 24 | 2.5 | 47 | 35 | 9.7 | 18 | 14 | 1.9 | 1.1 |
| 11 | 1.3 | 2.1 | 2.4 | 16 | 2.5 | 33 | 30 | 7.6 | 18 | 10 | 1.7 | 1.0 |
| 12 | 1.2 | 2.1 | 2.2 | 14 | 2.4 | 33 | 64 | 7.4 | 16 | 8.6 | 1.5 | .7 |
| 13 | 1.3 | 2.1 | 2.1 | 14 | 3.5 | 23 | 26 | 7.2 | 12 | 7.6 | 1.2 | .8 |
| 14 | 1.3 | 2.5 | 2.1 | 14 | 2.6 | 19 | 25 | 6.7 | 13 | 11 | .7 | .8 |
| 15 | 1.3 | 3.4 | 2.2 | 14 | 2.4 | 26 | 21 | 12 | 11 | 11 | 1.6 | .6 |
| 16 | 1.5 | 4.2 | 2.5 | 17 | 2.1 | 21 | 20 | 14 | 7.2 | 9.1 | 3.4 | .7 |
| 17 | 1.3 | 5.6 | 3.1 | 15 | 2.1 | 23 | 19 | 12 | 5.9 | 7.0 | 2.8 | 1.5 |
| 18 | 1.2 | 9.4 | 5.0 | 11 | 3.5 | 33 | 22 | 9.7 | 6.3 | 5.7 | 2.6 | 1.3 |
| 19 | 1.2 | 9.4 | 19 | 8.8 | 5.9 | 27 | 24 | 9.4 | 6.3 | 5.4 | 2.6 | .8 |
| 20 | 1.2 | 7.2 | 24 | 8.0 | 9.4 | 28 | 22 | 11 | 7.8 | 4.2 | 2.6 | .8 |
| 21 | 1.0 | 6.1 | 20 | 7.8 | 18 | 32 | 21 | 14 | 7.6 | 4.4 | 2.2 | 1.0 |
| 22 | 1.2 | 6.3 | 14 | 7.6 | 56 | 23 | 19 | 11 | 7.0 | 6.1 | 2.0 | 1.3 |
| 23 | 2.2 | 4.5 | 11 | 7.6 | 41 | 18 | 18 | 9.4 | 6.3 | 5.9 | 1.8 | 1.2 |
| 24 | 4.9 | 4.1 | 8.6 | 6.7 | 67 | 16 | 17 | 8.6 | 5.6 | 5.4 | 1.8 | 1.2 |
| 25 | 4.4 | 4.1 | 7.4 | 5.2 | 56 | 33 | 16 | 13 | 4.7 | 7.2 | 1.4 | .8 |
| 26 | 3.1 | 4.4 | 6.5 | 4.2 | 44 | 154 | 15 | 13 | 4.1 | 6.7 | 1.5 | 1.2 |
| 27 | 2.9 | 3.9 | 6.3 | 3.9 | 44 | 139 | 14 | 15 | 4.2 | 16.0 | 1.2 | 1.3 |
| 28 | 2.5 | 4.2 | 7.0 | 3.8 | 42 | 125 | 13 | 18 | 4.5 | 11 | 1.0 | 1.1 |
| 29 | 2.4 | 3.9 | 7.0 | 3.6 | ----- | 37 | 11 | 21 | 4.1 | 8.0 | .8 | .7 |
| 30 | 2.5 | 3.1 | 6.5 | 3.4 | ----- | 36 | 11 | 25 | 3.5 | 5.9 | 1.0 | .7 |
| 31 | 3.8 | ----- | 5.9 | 3.2 | ----- | 35 | ----- | 21 | ----- | 5.0 | .7 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 4.9 | 1.0 | 2.08 | 0.17C | 0.20 |
| November | 9.4 | 2.1 | 4.30 | .35C | .39 |
| December | 24 | 2.1 | 6.12 | .50C | .58 |
| January | 24 | 3.2 | 9.70 | .79C | .92 |
| February | 67 | 2.1 | 15.4 | 1.26 | 1.31 |
| March | 154 | 14 | 39.2 | 3.21 | 3.70 |
| April | 88 | 11 | 26.7 | 2.19 | 2.44 |
| May | 25 | 6.7 | 13.1 | 1.07 | 1.23 |
| June | 18 | 3.5 | 9.10 | .74C | .83 |
| July | 45 | 4.2 | 10.8 | .88C | 1.02 |
| August | 3.8 | .7 | 1.99 | .16C | .19 |
| September | 2.8 | .6 | 1.12 | .09C | .10 |
| The year | 154 | .6 | 11.6 | .951 | 12.91 |

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, 1930.

EXTREMES.—Maximum discharge during year, 4,400 second-feet Mar. 26 (gage height, 5.42 feet); minimum, 30 second-feet Sept. 22 (gage height, 1.40 feet).

1913-1930: Maximum discharge, 50,600 second-feet July 8, 1915 (gage height, 15.7 feet); practically no flow June 17, 1921 (gage height, 0.70 foot).

REMARKS.—Records excellent except those for periods of ice effect, Jan. 26 to Feb. 14, Feb. 16-18, and those estimated, which are good. Flow regulated by Somerset and Davis Bridge Reservoirs.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| 1 | 536 | 394 | 210 | 427 | 1,010 | 701 | 596 | 512 | 238 | 619 | 696 | 185 |
| 2 | 558 | 194 | 692 | 657 | 585 | 483 | 692 | 458 | 462 | 454 | 400 | 248 |
| 3 | 581 | 110 | 594 | 1,000 | 562 | 738 | 627 | 524 | 426 | 506 | 274 | 368 |
| 4 | 561 | 438 | 484 | 788 | 1,000 | 820 | 614 | 530 | 416 | 208 | 530 | 520 |
| 5 | 348 | 428 | 480 | 255 | 1,100 | 1,120 | 454 | 598 | 456 | 185 | 776 | 486 |
| 6 | 132 | 463 | 476 | 642 | 1,010 | 1,130 | 297 | 504 | 638 | 175 | 801 | 272 |
| 7 | 495 | 294 | 234 | 1,130 | 1,120 | 1,130 | 1,910 | 486 | 219 | 588 | 866 | 129 |
| 8 | 627 | 401 | 116 | 1,680 | 1,180 | 1,710 | 1,890 | 454 | 194 | 639 | 749 | 706 |
| 9 | 673 | 186 | 408 | 1,940 | 967 | 1,010 | 1,070 | 483 | 666 | 472 | 466 | 742 |
| 10 | 811 | 92 | 636 | 1,600 | 1,150 | 1,070 | 734 | 403 | 1,190 | 570 | 169 | 697 |
| 11 | 971 | 84 | 491 | 777 | 971 | 1,080 | 602 | 140 | 1,490 | 555 | 553 | 475 |
| 12 | 624 | 254 | 495 | 456 | 1,090 | 1,690 | 745 | 428 | 905 | 274 | 736 | 454 |
| 13 | 466 | 244 | 606 | 906 | 966 | 1,340 | 428 | 444 | 608 | 188 | 788 | 338 |
| 14 | 570 | 230 | 257 | 1,170 | 1,340 | 896 | 664 | 387 | 308 | 662 | 787 | 402 |
| 15 | 928 | 234 | 238 | 1,150 | 1,180 | 682 | 770 | 542 | 195 | 721 | 828 | 394 |
| 16 | 868 | 206 | 470 | 950 | 774 | 398 | 765 | 532 | 456 | 748 | 472 | 309 |
| 17 | 581 | 190 | 640 | 673 | 1,020 | 780 | 676 | 256 | 619 | 627 | 188 | 359 |
| 18 | 527 | 582 | 748 | 674 | 1,260 | 1,020 | 621 | 198 | 940 | 506 | 488 | 297 |
| 19 | 421 | 808 | 1,560 | 435 | 1,150 | 1,270 | 450 | 526 | 736 | 200 | 624 | 328 |
| 20 | 180 | 594 | 1,050 | 882 | 1,270 | 1,150 | 348 | 817 | 524 | 90 | 609 | 217 |
| 21 | 424 | 273 | 510 | 1,270 | 1,650 | 892 | 548 | 658 | 269 | 521 | 604 | 45 |
| 22 | 581 | 240 | 334 | 1,270 | 1,400 | 624 | 704 | 468 | 254 | 764 | 642 | 248 |
| 23 | 884 | 236 | 538 | 1,220 | 918 | 413 | 618 | 428 | 559 | 949 | 320 | 398 |
| 24 | 814 | 171 | 472 | 1,370 | 1,430 | 791 | 593 | 311 | 546 | 816 | 234 | 376 |
| 25 | 499 | 363 | 210 | 1,050 | 1,610 | 2,080 | 505 | 522 | 619 | 700 | 470 | 357 |
| 26 | 118 | 532 | 580 | 384 | 1,440 | 2,990 | 304 | 1,140 | 534 | 430 | 653 | 132 |
| 27 | 84 | 508 | 584 | 675 | 1,000 | 1,610 | 220 | 786 | 562 | 296 | 476 | * 104 |
| 28 | 488 | 180 | 354 | 1,120 | 888 | 1,190 | 452 | 744 | 394 | 634 | 440 | * 52 |
| 29 | 524 | 364 | 351 | 1,120 | ----- | 686 | 449 | 832 | 174 | 760 | 380 | * 235 |
| 30 | 482 | 267 | 560 | 1,030 | ----- | 394 | 564 | 324 | 461 | 646 | 104 | * 361 |
| 31 | 460 | ----- | 869 | 1,080 | ----- | 614 | ----- | 336 | ----- | 637 | 165 | ----- |

| 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 | 971 | 84 | 542 | -964 | 183 | 0.506 | 0.58 |
| November | 808 | 84 | 319 | +233 | 409 | 1.13 | 1.26 |
| December | 1,560 | 116 | 524 | +51 | 543 | 1.50 | 1.73 |
| January | 1,940 | 255 | 957 | +207 | 1,080 | 2.85 | 3.29 |
| February | 1,650 | 562 | 1,110 | -207 | 1,020 | 2.82 | 2.94 |
| March | 2,990 | 394 | 1,050 | +748 | 1,330 | 3.67 | 4.23 |
| April | 1,910 | 220 | 664 | +1,420 | 1,210 | 3.34 | 3.73 |
| May | 1,140 | 140 | 509 | +814 | 813 | 2.25 | 2.59 |
| June | 1,490 | 174 | 535 | +330 | 663 | 1.83 | 2.04 |
| July | 949 | 90 | 521 | -785 | 227 | .627 | .72 |
| August | 866 | 104 | 525 | -1,113 | 110 | .304 | .35 |
| September | 742 | 45 | 341 | -692 | 74.2 | .205 | .23 |
| The year | 2,990 | 45 | 631 | +42 | 632 | 1.75 | 23.69 |

* Estimated.

WARE RIVER AT COLD BROOK, MASS.

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

DRAINAGE AREA.—98.2 square miles.

RECORDS AVAILABLE.—January, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 425 second-feet Mar. 26 (gage height, 4.22 feet).

1928-1930: Maximum discharge, 990 second-feet Mar. 16, 1929.

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

REMARKS.—Records good. Daily discharge during ice period assumed same as discharge obtained by daily measurement. Daily record includes water pumped from tunnel under construction. Station maintained in cooperation with Metropolitan District Water Supply Commission.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1 | 23 | 25 | 24 | 39 | 27 | 111 | 163 | 79 | 82 | 30 | 46 | 19 |
| 2 | 24 | 26 | 24 | 39 | 26 | 113 | 140 | 85 | 68 | 111 | 40 | 20 |
| 3 | 31 | 26 | 24 | 48 | 26 | 92 | 153 | 129 | 59 | 174 | 36 | 20 |
| 4 | 32 | 35 | 26 | 70 | 27 | 83 | 140 | 127 | 55 | 124 | 30 | 18 |
| 5 | 27 | 33 | 26 | 60 | 27 | 75 | 129 | 107 | 48 | 79 | 29 | 18 |
| 6 | 25 | 30 | 26 | 57 | 29 | 73 | 131 | 96 | 43 | 71 | 27 | 18 |
| 7 | 24 | 28 | 26 | 56 | 30 | 72 | 262 | 91 | 40 | 171 | 26 | 26 |
| 8 | 24 | 27 | 27 | 72 | 29 | 163 | 375 | 87 | 57 | 140 | 25 | 30 |
| 9 | 26 | 28 | 25 | 140 | 27 | 356 | 323 | 83 | 63 | 87 | 29 | 31 |
| 10 | 26 | 27 | 25 | 129 | 26 | 254 | 269 | 83 | 92 | 159 | 60 | 26 |
| 11 | 26 | 26 | 25 | 81 | 26 | 195 | 230 | 83 | 100 | 140 | 47 | 26 |
| 12 | 25 | 25 | 21 | 82 | 26 | 198 | 202 | 79 | 101 | 120 | 30 | 25 |
| 13 | 26 | 25 | 21 | 75 | 28 | 183 | 189 | 75 | 91 | 92 | 26 | 25 |
| 14 | 25 | 26 | 23 | 72 | 74 | 166 | 177 | 71 | 75 | 79 | 23 | 24 |
| 15 | 23 | 32 | 25 | 124 | 85 | 140 | 169 | 72 | 62 | 96 | 23 | 23 |
| 16 | 23 | 43 | 27 | 127 | 64 | 122 | 153 | 82 | 51 | 87 | 26 | 23 |
| 17 | 23 | 39 | 27 | 89 | 58 | 106 | 143 | 82 | 44 | 68 | 26 | 23 |
| 18 | 22 | 56 | 33 | 72 | 53 | 118 | 143 | 76 | 67 | 54 | 25 | 22 |
| 19 | 23 | 89 | 53 | 63 | 56 | 156 | 163 | 69 | 101 | 48 | 21 | 22 |
| 20 | 22 | 75 | 68 | 55 | 79 | 145 | 156 | 82 | 96 | 44 | 19 | 22 |
| 21 | 21 | 57 | 54 | 53 | 138 | 133 | 127 | 82 | 81 | 40 | 19 | 22 |
| 22 | 20 | 44 | 51 | 52 | 159 | 107 | 122 | 78 | 68 | 43 | 19 | 27 |
| 23 | 30 | 34 | 41 | 46 | 171 | 103 | 122 | 78 | 54 | 62 | 22 | 23 |
| 24 | 40 | 36 | 36 | 42 | 241 | 91 | 109 | 71 | 45 | 76 | 24 | 21 |
| 25 | 33 | 34 | 37 | 39 | 248 | 120 | 101 | 60 | 40 | 202 | 27 | 21 |
| 26 | 28 | 30 | 34 | 37 | 214 | 370 | 100 | 67 | 37 | 143 | 28 | 22 |
| 27 | 26 | 33 | 33 | 35 | 161 | 370 | 91 | 71 | 37 | 140 | 28 | 22 |
| 28 | 26 | 34 | 37 | 33 | 122 | 287 | 98 | 68 | 42 | 96 | 25 | 22 |
| 29 | 24 | 28 | 37 | 33 | ----- | 230 | 81 | 100 | 37 | 78 | 22 | 18 |
| 30 | 25 | 25 | 37 | 33 | ----- | 189 | 79 | 122 | 31 | 68 | 20 | 18 |
| 31 | 25 | ----- | 37 | 31 | ----- | 189 | ----- | 96 | ----- | 55 | 18 | ----- |

| Month | Observed | | | Pumpage from tunnel (second-feet) | Corrected for pumpage | | |
|-----------|----------|---------|------|-----------------------------------|-----------------------|-----------------|-------------------|
| | Maximum | Minimum | Mean | | Mean | Per square mile | Run-off in inches |
| October | 40 | 20 | 25.7 | 1.7 | 24.0 | 0.244 | 0.28 |
| November | 89 | 25 | 35.9 | 2.4 | 33.5 | .341 | .38 |
| December | 68 | 21 | 32.6 | 2.6 | 30.0 | .395 | .35 |
| January | 140 | 31 | 64.0 | 1.8 | 62.2 | .633 | .73 |
| February | 248 | 26 | 81.3 | 2.0 | 79.3 | .898 | .84 |
| March | 370 | 72 | 165 | 2.0 | 163 | 1.66 | 1.91 |
| April | 375 | 79 | 161 | 2.0 | 159 | 1.62 | 1.81 |
| May | 129 | 60 | 84.9 | 2.0 | 82.9 | .844 | .97 |
| June | 101 | 31 | 62.2 | 2.0 | 60.2 | .613 | .68 |
| July | 202 | 30 | 96.0 | 2.0 | 94 | .957 | 1.10 |
| August | 60 | 18 | 27.9 | 2.5 | 25.4 | .259 | .30 |
| September | 31 | 18 | 22.6 | 2.5 | 20.1 | .255 | .23 |
| The year | 375 | 18 | 71.5 | 2.12 | 69.4 | .777 | 9.58 |

WARE RIVER AT GIBBS CROSSING, MASS.

LOCATION.—Water-stage recorder at Gibbs Crossing, Hampshire County, three-fourths mile above mouth of Beaver Brook and 3 miles below Ware.

DRAINAGE AREA.—199 square miles.

RECORDS AVAILABLE.—August, 1912, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,040 second-feet July 7; minimum, 8.8 second-feet Sept. 22.

1912-1930: Maximum discharge, 2,950 second-feet Apr. 8, 1924 (gage height, 6.25 feet); minimum, 5 second-feet Oct. 26, 1914.

REMARKS.—Records good. Corrections for ice effect applied Jan. 23 to Feb. 1, Feb. 7.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 97 | 52 | 47 | 75 | 44 | 195 | 360 | 148 | 160 | 90 | 113 | 12 |
| 2..... | 111 | 53 | 72 | 111 | 52 | 215 | 295 | 160 | 206 | 168 | 104 | 42 |
| 3..... | 89 | 53 | 111 | 246 | 119 | 265 | 290 | 170 | 197 | 282 | 59 | 42 |
| 4..... | 127 | 72 | 70 | 223 | 152 | 245 | 310 | 224 | 118 | 213 | 140 | 48 |
| 5..... | 99 | 157 | 68 | 182 | 93 | 200 | 225 | 244 | 100 | 184 | 104 | 55 |
| 6..... | 35 | 99 | 41 | 257 | 74 | 160 | 220 | 218 | 71 | 244 | 96 | 57 |
| 7..... | 68 | 57 | 65 | 203 | 105 | 175 | 425 | 180 | 66 | 696 | 85 | 26 |
| 8..... | 67 | 72 | 49 | 203 | 80 | 220 | 620 | 166 | 132 | 466 | 34 | 86 |
| 9..... | 76 | 70 | 171 | 226 | 68 | 600 | 550 | 162 | 220 | 307 | 24 | 60 |
| 10..... | 68 | 36 | 52 | 302 | 118 | 510 | 455 | 93 | 190 | 255 | 19 | 60 |
| 11..... | 53 | 30 | 67 | 194 | 119 | 420 | 400 | 118 | 210 | 260 | 84 | 56 |
| 12..... | 50 | 47 | 54 | 154 | 96 | 410 | 335 | 196 | 207 | 230 | 80 | 56 |
| 13..... | 41 | 66 | 58 | 246 | 117 | 365 | 310 | 167 | 149 | 169 | 82 | 46 |
| 14..... | 38 | 78 | 60 | 250 | 470 | 355 | 350 | 140 | 146 | 228 | 64 | 23 |
| 15..... | 61 | 88 | 37 | 262 | 284 | 265 | 300 | 144 | 128 | 266 | 57 | 60 |
| 16..... | 76 | 75 | 59 | 333 | 186 | 245 | 270 | 141 | 175 | 207 | 60 | 71 |
| 17..... | 62 | 40 | 102 | 294 | 249 | 300 | 250 | 51 | 160 | 184 | 34 | 69 |
| 18..... | 66 | 198 | 127 | 186 | 211 | 270 | 240 | 108 | 181 | 85 | 84 | 43 |
| 19..... | 52 | 277 | 209 | 189 | 187 | 255 | 234 | 192 | 184 | 106 | 56 | 39 |
| 20..... | 26 | 194 | 288 | 286 | 230 | 295 | 262 | 170 | 149 | 98 | 92 | 45 |
| 21..... | 35 | 192 | 217 | 185 | 413 | 280 | 288 | 138 | 162 | 158 | 49 | 19 |
| 22..... | 62 | 105 | 206 | 117 | 395 | 205 | 260 | 150 | 142 | 84 | 50 | 60 |
| 23..... | 78 | 76 | 269 | 91 | 389 | 175 | 228 | 143 | 197 | 124 | 52 | 64 |
| 24..... | 91 | 35 | 178 | 82 | 517 | 240 | 232 | 46 | 162 | 158 | 18 | 43 |
| 25..... | 105 | 141 | 74 | 57 | 513 | 290 | 212 | 116 | 154 | 286 | 60 | 40 |
| 26..... | 81 | 108 | 88 | 56 | 472 | 655 | 104 | 229 | 108 | 324 | 46 | 44 |
| 27..... | 47 | 101 | 101 | 136 | 380 | 775 | 140 | 232 | 41 | 215 | 53 | 51 |
| 28..... | 70 | 65 | 95 | 115 | 315 | 560 | 227 | 182 | 29 | 268 | 59 | 16 |
| 29..... | 67 | 101 | 53 | 100 | ----- | 445 | 215 | 186 | 38 | 246 | 54 | 62 |
| 30..... | 62 | 95 | 155 | 56 | ----- | 365 | 168 | 106 | 95 | 132 | 22 | 42 |
| 31..... | 52 | ----- | 121 | 74 | ----- | 395 | ----- | 204 | ----- | 121 | 12 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 127 | 26 | 68.1 | 0.342 | 0.39 |
| November..... | 277 | 30 | 94.4 | .474 | .53 |
| December..... | 288 | 37 | 109 | .548 | .63 |
| January..... | 333 | 56 | 177 | .889 | 1.02 |
| February..... | 517 | 44 | 230 | 1.16 | 1.21 |
| March..... | 775 | 160 | 334 | 1.68 | 1.94 |
| April..... | 620 | 104 | 292 | 1.47 | 1.64 |
| May..... | 244 | 46 | 159 | .799 | .92 |
| June..... | 220 | 29 | 143 | .749 | .80 |
| July..... | 696 | 84 | 221 | 1.11 | 1.28 |
| August..... | 140 | 12 | 62.8 | .316 | .36 |
| September..... | 86 | 12 | 47.9 | .241 | .27 |
| The year..... | 775 | 12 | 161 | .809 | 10.99 |

CHICOPEE RIVER AT BIRCHAM BEND, MASS.

LOCATION.—Water-stage recorder at dam at Bircham Bend, Hampden County, three-fourths mile below Higher Brook and 5½ miles above mouth.

DRAINAGE AREA.—704 square miles.

RECORDS AVAILABLE.—August, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,010 second-feet Mar. 27 (gauge height, 3.78 feet); minimum, 16 second-feet several times during year (leakage through wheels).

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

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| 1 | 299 | 219 | 47 | 203 | 153 | 1,020 | 1,410 | 694 | 599 | 494 | 428 | 45 |
| 2 | 352 | 137 | 253 | 801 | 140 | 970 | 1,270 | 556 | 900 | 488 | 222 | 127 |
| 3 | 332 | 49 | 498 | 740 | 376 | 1,260 | 1,170 | 659 | 690 | 513 | 132 | 184 |
| 4 | 469 | 372 | 442 | 877 | 638 | 929 | 1,160 | 710 | 636 | 554 | 250 | 177 |
| 5 | 385 | 474 | 362 | 673 | 494 | 828 | 784 | 1,080 | 583 | 389 | 298 | 178 |
| 6 | 16 | 349 | 350 | 912 | 514 | 802 | 934 | 891 | 474 | 265 | 288 | 137 |
| 7 | 452 | 338 | 122 | 802 | 503 | 770 | 1,480 | 743 | 291 | 1,150 | 291 | 47 |
| 8 | 379 | 499 | 59 | 790 | 296 | 864 | 1,820 | 671 | 66 | 1,120 | 332 | 157 |
| 9 | 302 | 198 | 201 | 783 | 51 | 1,720 | 1,770 | 674 | 802 | 746 | 374 | 246 |
| 10 | 216 | 64 | 377 | 892 | 414 | 1,950 | 1,620 | 462 | 687 | 656 | 168 | 209 |
| 11 | 271 | 91 | 366 | 752 | 502 | 1,710 | 1,440 | 324 | 650 | 594 | 101 | 193 |
| 12 | 53 | 336 | 329 | 586 | 444 | 1,550 | 1,270 | 843 | 637 | 557 | 317 | 241 |
| 13 | 179 | 256 | 386 | 1,050 | 577 | 1,500 | 1,160 | 658 | 638 | 234 | 456 | 136 |
| 14 | 196 | 280 | 124 | 942 | 1,040 | 1,390 | 1,430 | 566 | 551 | 774 | 282 | 47 |
| 15 | 293 | 323 | 84 | 1,120 | 1,170 | 1,100 | 1,200 | 535 | 218 | 670 | 292 | 163 |
| 16 | 275 | 228 | 211 | 1,230 | 613 | 975 | 1,070 | 540 | 693 | 609 | 323 | 222 |
| 17 | 256 | 310 | 382 | 988 | 755 | 1,290 | 1,010 | 390 | 680 | 552 | 122 | 258 |
| 18 | 183 | 417 | 389 | 778 | 784 | 1,110 | 918 | 173 | 536 | 373 | 365 | 303 |
| 19 | 69 | 736 | 687 | 682 | 720 | 1,060 | 814 | 781 | 542 | 380 | 371 | 174 |
| 20 | 86 | 729 | 1,010 | 752 | 901 | 1,130 | 995 | 641 | 564 | 171 | 305 | 140 |
| 21 | 276 | 735 | 874 | 811 | 1,240 | 1,090 | 1,250 | 600 | 484 | 331 | 222 | 47 |
| 22 | 229 | 605 | 568 | 713 | 1,260 | 884 | 1,050 | 586 | 354 | 644 | 176 | 191 |
| 23 | 236 | 386 | 882 | 620 | 1,420 | 677 | 914 | 513 | 690 | 461 | 128 | 205 |
| 24 | 310 | 49 | 486 | 460 | 1,780 | 1,140 | 922 | 388 | 660 | 465 | 16 | 185 |
| 25 | 287 | 621 | 381 | 241 | 1,840 | 1,030 | 802 | 185 | 462 | 400 | 160 | 179 |
| 26 | 172 | 429 | 640 | 237 | 1,760 | 1,820 | 716 | 1,110 | 490 | 247 | 194 | 181 |
| 27 | 16 | 600 | 600 | 590 | 1,620 | 2,460 | 437 | 958 | 459 | 235 | 213 | 147 |
| 28 | 403 | 16 | 350 | 633 | 1,340 | 2,210 | 1,040 | 791 | 146 | 723 | 192 | 16 |
| 29 | 372 | 604 | 238 | 535 | ----- | 1,830 | 750 | 887 | 67 | 662 | 172 | 149 |
| 30 | 225 | 189 | 698 | 463 | ----- | 1,540 | 738 | 566 | 473 | 528 | 123 | 207 |
| 31 | 277 | ----- | 621 | 522 | ----- | 1,640 | ----- | 882 | ----- | 442 | 16 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 469 | 16 | 254 | 0.361 | 0.42 |
| November | 736 | 16 | 355 | .564 | .56 |
| December | 1,010 | 47 | 420 | .567 | .69 |
| January | 1,230 | 203 | 715 | 1.02 | 1.18 |
| February | 1,840 | 51 | 834 | 1.18 | 1.23 |
| March | 2,460 | 677 | 1,300 | 1.85 | 2.13 |
| April | 1,820 | 437 | 1,110 | 1.58 | 1.76 |
| May | 1,110 | 173 | 647 | .919 | 1.06 |
| June | 900 | 66 | 524 | .744 | .83 |
| July | 1,150 | 171 | 530 | .753 | .87 |
| August | 456 | 16 | 236 | .335 | .39 |
| September | 303 | 16 | 163 | .232 | .26 |
| The year | 2,460 | 16 | 589 | .837 | 11.38 |

SWIFT RIVER AT WEST WARE, MASS.

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

DRAINAGE AREA.—186 square miles.

RECORDS AVAILABLE.—July, 1910, to September, 1930.

EXTREMES.—Maximum discharge during year, 720 second-feet Mar. 27 (gage height, 4.63 feet); minimum, 8.5 second-feet Sept. 26 (gage height, 1.81 feet).

1910-1930: Maximum discharge, 2,390 second-feet Apr. 7, 1923 (gage height, 9.08 feet); minimum, that of Sept. 26, 1930.

REMARKS.—Records excellent except those for periods of ice effect, Nov. 30, Dec. 1, 4, 5, 12, 21-26, Jan. 6, 7, 12, 17-27, 29-31, Feb. 1, 5-18, and for March to May, which are good. Numerous lakes, ponds, and reservoirs above have considerable storage.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 70 | 70 | 83 | 118 | 101 | 274 | 333 | 174 | 199 | 91 | 89 | 42 |
| 2..... | 70 | 74 | 83 | 123 | 103 | 262 | 305 | 172 | 164 | 133 | 81 | 46 |
| 3..... | 107 | 83 | 85 | 167 | 103 | 238 | 289 | 219 | 147 | 130 | 76 | 47 |
| 4..... | 90 | 98 | 85 | 215 | 101 | 217 | 276 | 236 | 130 | 116 | 72 | 44 |
| 5..... | 57 | 96 | 87 | 175 | 101 | 189 | 259 | 219 | 113 | 107 | 64 | 40 |
| 6..... | 65 | 85 | 81 | 167 | 101 | 182 | 254 | 199 | 107 | 121 | 60 | 42 |
| 7..... | 65 | 81 | 81 | 169 | 101 | 173 | 302 | 184 | 113 | 169 | 57 | 51 |
| 8..... | 65 | 79 | 76 | 175 | 98 | 257 | 388 | 176 | 128 | 147 | 53 | 62 |
| 9..... | 59 | 76 | 72 | 238 | 98 | 441 | 414 | 164 | 128 | 130 | 51 | 62 |
| 10..... | 57 | 76 | 65 | 281 | 98 | 483 | 401 | 157 | 162 | 140 | 51 | 55 |
| 11..... | 54 | 74 | 63 | 226 | 96 | 428 | 362 | 147 | 189 | 152 | 49 | 49 |
| 12..... | 54 | 72 | 65 | 211 | 96 | 414 | 318 | 137 | 216 | 154 | 47 | 46 |
| 13..... | 52 | 76 | 63 | 208 | 127 | 401 | 292 | 126 | 189 | 140 | 46 | 46 |
| 14..... | 52 | 79 | 65 | 213 | 107 | 362 | 276 | 121 | 164 | 140 | 44 | 42 |
| 15..... | 50 | 83 | 72 | 233 | 96 | 318 | 256 | 123 | 142 | 186 | 47 | 42 |
| 16..... | 50 | 105 | 74 | 248 | 94 | 294 | 239 | 149 | 125 | 154 | 58 | 46 |
| 17..... | 52 | 101 | 74 | 173 | 94 | 267 | 222 | 145 | 113 | 135 | 60 | 51 |
| 18..... | 52 | 134 | 101 | 158 | 140 | 248 | 214 | 137 | 159 | 121 | 57 | 49 |
| 19..... | 52 | 186 | 178 | 151 | 180 | 274 | 232 | 133 | 204 | 109 | 46 | 39 |
| 20..... | 50 | 186 | 291 | 149 | 208 | 296 | 234 | 147 | 199 | 102 | 40 | 39 |
| 21..... | 50 | 160 | 206 | 147 | 274 | 288 | 229 | 149 | 184 | 91 | 40 | 37 |
| 22..... | 50 | 138 | 167 | 145 | 349 | 257 | 226 | 135 | 164 | 93 | 40 | 46 |
| 23..... | 72 | 125 | 140 | 145 | 388 | 233 | 224 | 128 | 147 | 104 | 39 | 51 |
| 24..... | 92 | 114 | 134 | 142 | 455 | 222 | 222 | 123 | 125 | 104 | 39 | 44 |
| 25..... | 81 | 105 | 131 | 142 | 497 | 245 | 216 | 130 | 111 | 128 | 39 | 39 |
| 26..... | 76 | 96 | 129 | 129 | 497 | 526 | 214 | 202 | 102 | 123 | 37 | 34 |
| 27..... | 76 | 98 | 129 | 120 | 414 | 690 | 202 | 214 | 107 | 135 | 37 | 37 |
| 28..... | 72 | 98 | 120 | 116 | 336 | 629 | 192 | 204 | 130 | 137 | 35 | 35 |
| 29..... | 68 | 90 | 118 | 109 | ----- | 555 | 184 | 224 | 128 | 123 | 34 | 34 |
| 30..... | 65 | 83 | 118 | 107 | ----- | 469 | 174 | 249 | 98 | 111 | 37 | 35 |
| 31..... | 65 | ----- | 123 | 103 | ----- | 388 | ----- | 226 | ----- | 100 | 42 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 107 | 50 | 64.2 | 0.345 | 0.40 |
| November..... | 186 | 70 | 101 | .543 | .61 |
| December..... | 291 | 63 | 108 | .581 | .67 |
| January..... | 281 | 103 | 168 | .903 | 1.04 |
| February..... | 497 | 94 | 195 | 1.05 | 1.09 |
| March..... | 690 | 173 | 339 | 1.82 | 2.10 |
| April..... | 414 | 174 | 265 | 1.42 | 1.58 |
| May..... | 249 | 121 | 169 | .909 | 1.05 |
| June..... | 216 | 89 | 146 | .785 | .88 |
| July..... | 186 | 91 | 127 | .683 | .79 |
| August..... | 89 | 34 | 50.5 | .272 | .31 |
| September..... | 62 | 34 | 44.4 | .239 | .27 |
| The year..... | 690 | 34 | 148 | .796 | 10.79 |

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, 1930.

EXTREMES.—Maximum discharge during year, 556 second-feet Mar. 26 (gage height, 3.73 feet); minimum, 3.7 second-feet Aug. 22 (gage height, 1.54 feet).

1909-1930: Maximum discharge, 1,980 second-feet Mar. 17, 1920 (gage height, 5.3 feet); minimum, 2.5 second-feet Sept. 17, 18, 1910 (gage height, 1.40 feet).

REMARKS.—Records excellent except those for periods corrected for ice effect, Nov. 29, Dec. 2, 11-13, 22-24, 27, Jan. 12 to Feb. 21, and those estimated, which are good.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----------|---------|-------|-------|---------|-------|------|-------|------|-------|-----------------|------|-------------------|
| 1 | 46 | 42 | * 36 | 136 | 26 | 255 | 293 | 132 | 108 | 48 | 48 | 19 |
| 2 | 57 | 40 | 55 | 129 | 19 | 249 | 248 | 127 | 102 | * 48 | 31 | 36 |
| 3 | 88 | 44 | 71 | 116 | 50 | 183 | 259 | 143 | 98 | 48 | 40 | 27 |
| 4 | * 85 | 89 | 94 | 161 | 66 | 166 | 254 | 138 | 80 | 42 | 34 | 20 |
| 5 | * 75 | * 70 | 92 | 156 | 66 | 210 | 243 | 141 | 80 | 42 | 47 | 18 |
| 6 | * 40 | 51 | 88 | 204 | 60 | 161 | 239 | 147 | 81 | 44 | 37 | 26 |
| 7 | * 56 | 56 | 41 | 133 | 49 | 163 | 329 | 135 | 59 | 58 | 36 | 42 |
| 8 | * 69 | 48 | 76 | 148 | 24 | 262 | 348 | 129 | 74 | 94 | 34 | 70 |
| 9 | * 67 | 42 | 129 | 155 | 24 | 293 | 331 | 124 | 86 | 76 | 26 | 40 |
| 10 | * 58 | 49 | 99 | 143 | 58 | 293 | 337 | 110 | 80 | 82 | * 38 | 33 |
| 11 | * 52 | 52 | 64 | 124 | 65 | 295 | 329 | 112 | 83 | 80 | 49 | 27 |
| 12 | 45 | 56 | 52 | 120 | 64 | 309 | 319 | 94 | 80 | 75 | 32 | 28 |
| 13 | 36 | 38 | 50 | 107 | 111 | 295 | 305 | 85 | 86 | 72 | 24 | 15 |
| 14 | 76 | 43 | 48 | 124 | 157 | 228 | 258 | 75 | 60 | 74 | 33 | 16 |
| 15 | 45 | 46 | 59 | 133 | 158 | 246 | 239 | 92 | 72 | 74 | 24 | 50 |
| 16 | 56 | 35 | * 81 | 129 | 116 | 250 | 230 | 85 | 70 | * 70 | 24 | 32 |
| 17 | 55 | 27 | 102 | 126 | 154 | 214 | 214 | 80 | 74 | 66 | 32 | 25 |
| 18 | 38 | 113 | 65 | 127 | 153 | 206 | 202 | 84 | 84 | 64 | 38 | 40 |
| 19 | 25 | 103 | * 101 | 131 | 155 | 216 | 238 | 87 | 86 | 56 | 36 | 20 |
| 20 | * 19 | 80 | 141 | 135 | 181 | 210 | 227 | * 85 | 92 | 54 | 34 | 14 |
| 21 | 64 | 78 | 162 | 134 | 223 | 181 | 212 | 83 | 74 | 54 | 33 | 12 |
| 22 | 40 | 73 | 154 | 134 | 259 | 170 | 204 | 94 | 76 | 51 | 24 | 46 |
| 23 | 68 | * 65 | 140 | 133 | 266 | 154 | 180 | 98 | 80 | 52 | 16 | 16 |
| 24 | 64 | 71 | 123 | 130 | 313 | 197 | 171 | 73 | 61 | 56 | 14 | 29 |
| 25 | 66 | 88 | * 108 | 124 | 308 | 211 | 183 | 99 | 55 | 50 | 58 | 19 |
| 26 | 36 | 79 | * 97 | 115 | 305 | 334 | 183 | 126 | 65 | 30 | 26 | 20 |
| 27 | 50 | 67 | 86 | 112 | 294 | 360 | 164 | 89 | * 50 | 48 | 25 | 24 |
| 28 | 53 | 44 | 74 | 103 | 280 | 348 | 153 | 102 | 36 | 34 | 25 | 18 |
| 29 | 51 | 40 | 80 | 81 | ----- | 365 | 144 | 138 | 42 | * 31 | 24 | 20 |
| 30 | 41 | * 35 | 86 | 66 | ----- | 356 | 134 | 127 | 52 | 28 | 20 | 19 |
| 31 | 57 | ----- | 98 | 48 | ----- | 307 | ----- | 124 | ----- | 22 | 14 | ----- |
| Month | Maximum | | | Minimum | | | Mean | | | Per square mile | | Run-off in inches |
| October | 88 | | | 19 | | | 54.1 | | | 0.361 | | 0.42 |
| November | 113 | | | 27 | | | 58.8 | | | .392 | | .44 |
| December | 162 | | | 36 | | | 88.8 | | | .592 | | .68 |
| January | 204 | | | 48 | | | 126 | | | .846 | | .97 |
| February | 313 | | | 19 | | | 143 | | | .953 | | .99 |
| March | 365 | | | 154 | | | 248 | | | 1.65 | | 1.90 |
| April | 348 | | | 134 | | | 239 | | | 1.59 | | 1.77 |
| May | 147 | | | 73 | | | 108 | | | .726 | | .83 |
| June | 108 | | | 36 | | | 74.2 | | | .495 | | .55 |
| July | 94 | | | 22 | | | 55.6 | | | .377 | | .43 |
| August | 58 | | | 14 | | | 31.5 | | | .210 | | .24 |
| September | 70 | | | 12 | | | 27.4 | | | .183 | | .20 |
| The year | 365 | | | 12 | | | 104 | | | .698 | | 9.42 |

* Estimated.

WESTFIELD RIVER AT KNIGHTVILLE, MASS.

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

DRAINAGE AREA.—162 square miles.

RECORDS AVAILABLE.—August, 1909, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,570 second-feet June 11 (gage height, 5.17 feet); minimum, 20 second-feet Oct. 11 (gage height, 0.75 foot).
1909-1930: Maximum discharge, 16,000 second-feet Nov. 3, 1927 (gage height, 15.2 feet); minimum, 4 second-feet Aug. 10, 1913 (gage height, 0.60 foot).

REMARKS.—Records good except those for periods of ice effect, Nov. 29 to Dec. 17, Dec. 24-29, Jan. 6, Jan. 17 to Feb. 21, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | 25 | 55 | 88 | 182 | 103 | 257 | 291 | 144 | 203 | 129 | 56 | 52 |
| 2..... | 31 | 65 | 75 | 162 | 103 | 298 | 360 | 228 | 176 | 360 | 52 | 120 |
| 3..... | 120 | 82 | 53 | 264 | 111 | 234 | 277 | 405 | 134 | 154 | 37 | 68 |
| 4..... | 66 | 168 | 47 | 340 | 105 | 188 | 264 | 291 | 107 | 176 | 34 | 52 |
| 5..... | 40 | 107 | 50 | 257 | 103 | 154 | 247 | 212 | 88 | 113 | 33 | 43 |
| 6..... | 34 | 68 | 47 | 250 | 88 | 182 | 224 | 182 | 75 | 107 | 31 | 42 |
| 7..... | 30 | 62 | 64 | 277 | 90 | 191 | 1,710 | 159 | 215 | 129 | 30 | 54 |
| 8..... | 27 | 59 | 53 | 622 | 86 | 1,340 | 1,030 | 146 | 174 | 111 | 29 | 73 |
| 9..... | 24 | 56 | 48 | 760 | 88 | 1,180 | 595 | 129 | 450 | 129 | 30 | 50 |
| 10..... | 22 | 54 | 43 | 650 | 100 | 595 | 495 | 116 | 1,430 | 118 | 28 | 42 |
| 11..... | 20 | 49 | 39 | 291 | 94 | 595 | 405 | 103 | 1,810 | 96 | 27 | 34 |
| 12..... | 21 | 47 | 36 | 221 | 82 | 960 | 428 | 92 | 595 | 68 | 27 | 31 |
| 13..... | 27 | 54 | 53 | 306 | 90 | 545 | 450 | 86 | 340 | 60 | 27 | 30 |
| 14..... | 24 | 44 | 59 | 450 | 215 | 382 | 382 | 86 | 257 | 86 | 25 | 29 |
| 15..... | 21 | 88 | 73 | 472 | 247 | 277 | 320 | 302 | 191 | 200 | 98 | 30 |
| 16..... | 21 | 80 | 92 | 495 | 159 | 291 | 306 | 428 | 154 | 118 | 149 | 28 |
| 17..... | 21 | 79 | 96 | 247 | 118 | 264 | 288 | 257 | 129 | 65 | 80 | 39 |
| 18..... | 21 | 340 | 281 | 191 | 122 | 340 | 320 | 182 | 116 | 52 | 144 | 44 |
| 19..... | 22 | 520 | 1,030 | 171 | 159 | 705 | 360 | 171 | 194 | 50 | 98 | 36 |
| 20..... | 21 | 295 | 960 | 162 | 224 | 495 | 306 | 244 | 340 | 66 | 65 | 31 |
| 21..... | 22 | 176 | 405 | 194 | 705 | 340 | 237 | 206 | 206 | 52 | 58 | 30 |
| 22..... | 31 | 144 | 270 | 179 | 705 | 291 | 274 | 188 | 165 | 54 | 49 | 58 |
| 23..... | 1,340 | 116 | 139 | 188 | 650 | 244 | 306 | 162 | 136 | 120 | 56 | 37 |
| 24..... | 306 | 111 | 132 | 174 | 820 | 200 | 244 | 139 | 125 | 75 | 129 | 34 |
| 25..... | 149 | 109 | 127 | 162 | 705 | 428 | 212 | 277 | 120 | 450 | 94 | 30 |
| 26..... | 82 | 109 | 129 | 152 | 760 | 2,020 | 200 | 545 | 98 | 132 | 77 | 28 |
| 27..... | 62 | 103 | 142 | 149 | 960 | 820 | 188 | 340 | 144 | 200 | 65 | 28 |
| 28..... | 55 | 98 | 185 | 152 | 291 | 520 | 194 | 298 | 120 | 176 | 54 | 29 |
| 29..... | 50 | 90 | 197 | 136 | ----- | 405 | 176 | 360 | 86 | 116 | 43 | 30 |
| 30..... | 43 | 71 | 203 | 118 | ----- | 340 | 165 | 274 | 70 | 79 | 36 | 30 |
| 31..... | 48 | ----- | 176 | 107 | ----- | 313 | ----- | 224 | ----- | 62 | 33 | ----- |

| Month | Maximum | Minimum | Mean | Per square rule | Run-off in inches |
|----------------|---------|---------|------|--------------------|----------------------|
| October..... | 1,340 | 20 | 91.2 | 0.563 | 0.65 |
| November..... | 520 | 44 | 117 | .722 | .81 |
| December..... | 1,030 | 36 | 174 | 1.07 | 1.23 |
| January..... | 760 | 107 | 274 | 1.69 | 1.95 |
| February..... | 960 | 82 | 289 | 1.78 | 1.85 |
| March..... | 2,020 | 154 | 497 | 3.07 | 3.54 |
| April..... | 1,710 | 165 | 375 | 2.31 | 2.58 |
| May..... | 545 | 86 | 225 | 1.39 | 1.60 |
| June..... | 1,810 | 70 | 282 | 1.74 | 1.94 |
| July..... | 450 | 50 | 126 | .778 | .90 |
| August..... | 149 | 25 | 57.9 | .357 | .41 |
| September..... | 120 | 28 | 42.1 | .260 | .29 |
| The year..... | 2,020 | 20 | 212 | 1.31 | 17.75 |

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, 1930.

EXTREMES.—Maximum discharge during year, 7,870 second-feet Mar. 8 (gauge height, 11.10 feet); minimum, 76 second-feet Sept. 27 (gauge height, 3.23 feet).
1914-1930: Maximum discharge, 42,500 second-feet Nov. 4, 1927 (gauge height, 25.41 feet); minimum, 9 second-feet Oct. 2, 1921 (gauge height, 2.78 feet).

REMARKS.—Records good. Corrections for ice effect applied Dec. 26, Jan. 6, 20-27, 29-31, Feb. 1, 6-8, 17, 18. Water diverted from Westfield Little River for Springfield water supply.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| 1..... | 109 | 206 | 192 | 425 | 290 | 893 | 874 | 490 | 570 | 383 | 170 | 140 |
| 2..... | 192 | 158 | 184 | 486 | 290 | 893 | 874 | 495 | 532 | 359 | 178 | 146 |
| 3..... | 355 | 246 | 238 | 777 | 378 | 828 | 841 | 874 | 455 | 549 | 153 | 140 |
| 4..... | 283 | 445 | 206 | 1,060 | 341 | 738 | 774 | 810 | 341 | 495 | 170 | 167 |
| 5..... | 145 | 369 | 216 | 507 | 324 | 523 | 720 | 668 | 297 | 43 | 143 | 192 |
| 6..... | 171 | 294 | 220 | 475 | 286 | 658 | 657 | 516 | 276 | 363 | 206 | 137 |
| 7..... | 168 | 238 | 234 | 599 | 268 | 544 | 3,500 | 470 | 570 | 774 | 156 | 160 |
| 8..... | 117 | 212 | 238 | 1,060 | 253 | 3,230 | 3,240 | 455 | 559 | 609 | 185 | 163 |
| 9..... | 117 | 184 | 268 | 1,700 | 272 | 4,380 | 1,900 | 421 | 975 | 42 | 163 | 199 |
| 10..... | 136 | 220 | 242 | 1,380 | 324 | 1,940 | 1,400 | 364 | 2,310 | 383 | 156 | 163 |
| 11..... | 139 | 184 | 231 | 860 | 268 | 1,520 | 1,200 | 310 | 3,020 | 383 | 150 | 124 |
| 12..... | 112 | 184 | 209 | 628 | 268 | 2,220 | 1,200 | 319 | 1,860 | 302 | 150 | 118 |
| 13..... | 145 | 202 | 216 | 713 | 346 | 1,770 | 1,240 | 297 | 1,200 | 272 | 140 | 185 |
| 14..... | 126 | 206 | 257 | 1,030 | 594 | 1,320 | 1,120 | 272 | 841 | 341 | 140 | 134 |
| 15..... | 114 | 223 | 272 | 1,310 | 658 | 975 | 1,010 | 657 | 613 | 592 | 181 | 130 |
| 16..... | 120 | 411 | 355 | 1,380 | 475 | 908 | 874 | 1,360 | 613 | 42 | 228 | 121 |
| 17..... | 109 | 350 | 332 | 828 | 425 | 908 | 780 | 780 | 445 | 323 | 293 | 150 |
| 18..... | 95 | 710 | 480 | 404 | 406 | 908 | 874 | 522 | 726 | 289 | 319 | 118 |
| 19..... | 104 | 1,700 | 2,440 | 507 | 440 | 1,440 | 1,010 | 554 | 1,360 | 217 | 217 | 130 |
| 20..... | 109 | 893 | 2,800 | 475 | 550 | 1,200 | 908 | 554 | 1,320 | 20 | 174 | 109 |
| 21..... | 136 | 646 | 1,460 | 460 | 1,580 | 975 | 780 | 624 | 841 | 185 | 178 | 100 |
| 22..... | 120 | 460 | 960 | 440 | 1,950 | 708 | 762 | 597 | 619 | 22 | 160 | 121 |
| 23..... | 2,500 | 341 | 611 | 420 | 1,620 | 565 | 810 | 402 | 554 | 217 | 163 | 112 |
| 24..... | 1,140 | 268 | 480 | 406 | 1,950 | 662 | 756 | 341 | 445 | 319 | 185 | 118 |
| 25..... | 599 | 346 | 480 | 392 | 1,900 | 1,050 | 668 | 455 | 412 | 436 | 210 | 118 |
| 26..... | 332 | 350 | 480 | 378 | 1,950 | 4,230 | 635 | 1,480 | 402 | 450 | 196 | 100 |
| 27..... | 242 | 268 | 502 | 378 | 1,310 | 2,400 | 586 | 1,010 | 388 | 302 | 199 | 86 |
| 28..... | 264 | 286 | 491 | 392 | 995 | 1,560 | 613 | 738 | 412 | 470 | 115 | 121 |
| 29..... | 168 | 272 | 491 | 364 | ----- | 1,240 | 516 | 1,200 | 336 | 383 | 103 | 115 |
| 30..... | 168 | 234 | 539 | 332 | ----- | 1,050 | 511 | 942 | 364 | 332 | 167 | 94 |
| 31..... | 192 | ----- | 480 | 298 | ----- | 1,010 | ----- | 703 | ----- | 244 | 185 | ----- |

| Month | Observed | | | Diversion in millions of gallons | Corrected for diversion | | |
|----------------|--------------|--------------|-------|--|-------------------------|-----------------------|----------------------|
| | Maxi- mum | Mini- mum | Mean | | Mean | P'r square m'le | Run-off in inches |
| October..... | 2,500 | 95 | 285 | 552.95 | 312 | 0.629 | 0.73 |
| November..... | 1,700 | 158 | 370 | 508.84 | 396 | .798 | .89 |
| December..... | 2,800 | 184 | 542 | 531.36 | 569 | 1.15 | 1.33 |
| January..... | 1,700 | 298 | 681 | 495.50 | 705 | 1.42 | 1.64 |
| February..... | 1,950 | 253 | 740 | 450.75 | 765 | 1.54 | 1.60 |
| March..... | 4,380 | 523 | 1,400 | 483.99 | 1,420 | 2.86 | 3.30 |
| April..... | 3,500 | 511 | 1,050 | 467.59 | 1,080 | 2.18 | 2.43 |
| May..... | 1,480 | 272 | 635 | 543.71 | 662 | 1.33 | 1.53 |
| June..... | 3,020 | 276 | 789 | 550.21 | 817 | 1.65 | 1.84 |
| July..... | 774 | 185 | 377 | 601.21 | 407 | .821 | .95 |
| August..... | 319 | 103 | 178 | 528.13 | 205 | .413 | .48 |
| September..... | 199 | 86 | 133 | 564.48 | 162 | .327 | .36 |
| The year..... | 4,380 | 86 | 597 | 6,278.72 | 624 | 1.26 | 17.08 |

MIDDLE BRANCH OF WESTFIELD RIVER AT GOSS HEIGHTS, MASS.

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

DRAINAGE AREA.—53 square miles.

RECORDS AVAILABLE.—July, 1910, to September, 1930.

EXTREMES.—Maximum discharge during year, 990 second-feet Mar. 26 (gage height, 4.33 feet); minimum not determined.

1910-1930: Maximum discharge, 5,860 second-feet Nov. 3, 1927 (gage height, 8.26 feet); practically no flow Oct. 26, 27, 1914.

REMARKS.—Records poor. Discharge estimated Oct. 1-23, Nov. 23 to Feb. 28.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1 | 6.2 | 19 | 22 | 52 | 34 | 99 | 104 | 46 | 42 | 29 | 12 | 7.5 |
| 2 | 12 | 21 | 18 | 52 | 35 | 104 | 111 | 60 | 32 | 62 | 12 | 9.7 |
| 3 | 36 | 24 | 16 | 81 | 38 | 86 | 84 | 139 | 25 | 46 | 10 | 9.4 |
| 4 | 26 | 33 | 14 | 110 | 36 | 80 | 93 | 98 | 21 | 77 | 9.7 | 8.4 |
| 5 | 7.8 | 41 | 13 | 66 | 34 | 72 | 84 | 69 | 14 | 37 | 8.4 | 7.5 |
| 6 | 6.5 | 29 | 14 | 65 | 32 | 70 | 74 | 55 | 28 | 33 | 6.9 | 7.2 |
| 7 | 5.7 | 22 | 15 | 78 | 30 | 65 | 493 | 51 | 67 | 60 | 8.8 | 7.8 |
| 8 | 5.4 | 19 | 14 | 120 | 28 | 558 | 336 | 47 | 38 | 36 | 8.1 | 8.8 |
| 9 | 5.3 | 18 | 13 | 220 | 27 | 415 | 198 | 43 | 176 | 27 | 7.5 | 7.8 |
| 10 | 5.2 | 17 | 12 | 175 | 34 | 200 | 151 | 37 | 263 | 33 | 6.7 | 6.7 |
| 11 | 5.2 | 16 | 11 | 130 | 30 | 169 | 133 | 34 | 317 | 25 | 6.5 | 5.6 |
| 12 | 5.5 | 16 | 11 | 70 | 27 | 268 | 143 | 27 | 141 | 21 | 6.7 | 5.1 |
| 13 | 5.4 | 16 | 14 | 93 | 31 | 184 | 143 | 26 | 94 | 10 | 6.5 | 5.5 |
| 14 | 5.2 | 16 | 22 | 135 | 49 | 143 | 128 | 24 | 66 | 40 | 6.2 | 5.6 |
| 15 | 5.0 | 33 | 30 | 147 | 74 | 108 | 108 | 122 | 51 | 52 | 10 | 5.6 |
| 16 | 4.9 | 74 | 32 | 152 | 50 | 96 | 94 | 115 | 36 | 29 | 24 | 6.0 |
| 17 | 4.8 | 50 | 35 | 110 | 45 | 93 | 88 | 62 | 31 | 20 | 20 | 6.9 |
| 18 | 4.7 | 167 | 94 | 80 | 41 | 102 | 102 | 46 | 94 | 16 | 16 | 8.4 |
| 19 | 4.9 | 193 | 350 | 54 | 44 | 187 | 113 | 42 | 111 | 14 | 11 | 7.5 |
| 20 | 5.6 | 107 | 200 | 51 | 49 | 122 | 101 | 70 | 70 | 13 | 10 | 6.5 |
| 21 | 6.6 | 75 | 105 | 53 | 187 | 99 | 85 | 62 | 49 | 11 | 9.7 | 5.8 |
| 22 | 9.0 | 59 | 64 | 54 | 220 | 76 | 91 | 41 | 44 | 10 | 7.8 | 7.2 |
| 23 | 265 | 36 | 54 | 52 | 190 | 73 | 94 | 35 | 37 | 27 | 8.1 | 8.1 |
| 24 | 113 | 28 | 50 | 49 | 230 | 66 | 80 | 27 | 29 | 22 | 16 | 6.7 |
| 25 | 60 | 36 | 47 | 47 | 210 | 241 | 74 | 78 | 30 | 107 | 17 | 6.2 |
| 26 | 37 | 37 | 48 | 46 | 225 | 629 | 70 | 113 | 25 | 42 | 12 | 5.6 |
| 27 | 30 | 28 | 49 | 45 | 140 | 247 | 66 | 73 | 42 | 41 | 9.4 | 5.5 |
| 28 | 24 | 35 | 50 | 45 | 102 | 172 | 59 | 59 | 33 | 41 | 8.8 | 5.5 |
| 29 | 20 | 29 | 57 | 45 | ----- | 141 | 53 | 122 | 27 | 31 | 6.7 | 5.3 |
| 30 | 19 | 25 | 56 | 37 | ----- | 124 | 49 | 78 | 21 | 22 | 6.7 | 5.3 |
| 31 | 19 | ----- | 54 | 33 | ----- | 115 | ----- | 53 | ----- | 17 | 6.4 | ----- |

| Month | Maximum | Minimum | Mean | Per square mi's | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 265 | 4.7 | 24.8 | 0.468 | 0.54 |
| November | 193 | 16 | 44.0 | .830 | .93 |
| December | 350 | 11 | 51.1 | .964 | 1.11 |
| January | 220 | 33 | 82.2 | 1.55 | 1.79 |
| February | 230 | 27 | 81.1 | 1.53 | 1.69 |
| March | 629 | 65 | 168 | 3.17 | 3.66 |
| April | 493 | 49 | 120 | 2.26 | 2.52 |
| May | 139 | 24 | 62.9 | 1.19 | 1.37 |
| June | 317 | 14 | 68.5 | 1.29 | 1.44 |
| July | 107 | 10 | 34.2 | .645 | .74 |
| August | 24 | 6.2 | 10.2 | .192 | .22 |
| September | 9.7 | 5.1 | 6.82 | .129 | .14 |
| The year | 629 | 4.7 | 62.7 | 1.18 | 16.05 |

WESTFIELD LITTLE RIVER NEAR WESTFIELD, MASS.

LOCATION.—Water-stage recorder at diversion dam in Russell, 3 miles below confluence of Pebble and Borden Brooks and 3 miles west of Westfield, Hampden County.

DRAINAGE AREA.—48.5 square miles.

RECORDS AVAILABLE.—July, 1905, to September, 1930.

REMARKS.—Water diverted at station for municipal supply of Springfield included in records as published. Records also corrected for storage in Borden Brook Reservoir. Records furnished by board of water commissioners. Springfield, Mass.

Monthly discharge, in second-feet, 1929-30

| Month | Mean | Per square mile | Run-off in inches | Month | Mean | Per square mile | Run-off in inches |
|---------------|------|-----------------|-------------------|----------------|------|-----------------|-------------------|
| October..... | 35.3 | 0.728 | 0.84 | May..... | 72.4 | 1.49 | 1.72 |
| November..... | 44.8 | .924 | 1.03 | June..... | 80.7 | 1.66 | 1.85 |
| December..... | 71.0 | 1.46 | 1.68 | July..... | 23.1 | .476 | .55 |
| January..... | 82.4 | 1.70 | 1.96 | August..... | 10.2 | .210 | .24 |
| February..... | 77.3 | 1.59 | 1.66 | September..... | 9.68 | .200 | .22 |
| March..... | 156 | 3.22 | 3.71 | | | | |
| April..... | 118 | 2.43 | 2.71 | The year..... | 65.0 | 1.34 | 18.17 |

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 35.49 feet above mean sea level.

RECORDS AVAILABLE.—July, 1928, to September, 1930.

REMARKS.—Records excellent except those for periods of ice effect, Dec. 13, 24, 26, 27, Jan. 14–17, Jan. 20 to Feb. 15, and those estimated, which are good. Canal used for navigation and for power by manufacturing plants along canal at Windsor Locks.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|---------|---------|-------|-------|---------|---------|---------|-------|
| 1----- | 1,500 | 1,500 | 782 | 1,130 | 1,380 | * 1,170 | 1,340 | 1,300 | 698 | * 1,340 | * 1,130 | 486 |
| 2----- | 1,500 | 1,300 | 1,250 | 1,300 | 760 | 801 | 1,380 | 1,340 | 1,170 | * 1,340 | * 946 | 1,050 |
| 3----- | 1,500 | 650 | 1,550 | 1,340 | 1,260 | 1,190 | 1,420 | 946 | 1,340 | * 1,380 | * 25 | 1,380 |
| 4----- | 1,500 | 1,220 | 1,500 | 1,300 | 1,460 | 1,380 | 1,420 | 698 | 1,300 | * 884 | * 25 | 1,500 |
| 5----- | 1,380 | 1,500 | 1,460 | 698 | 1,380 | 1,340 | 1,380 | 1,220 | 1,260 | * 739 | * 25 | 1,500 |
| 6----- | 700 | 1,500 | 1,500 | 1,170 | 1,340 | 1,340 | 801 | 1,340 | 1,170 | * 698 | * 25 | 1,260 |
| 7----- | 1,290 | 1,500 | 1,380 | 1,420 | 1,300 | 1,300 | 1,220 | 1,340 | 967 | * 1,170 | * 25 | 503 |
| 8----- | 1,500 | 1,500 | 703 | 1,500 | 1,260 | 1,260 | 1,460 | 1,420 | 677 | * 1,340 | * 25 | 1,130 |
| 9----- | 1,550 | 1,340 | 1,300 | 1,420 | 698 | 814 | 1,380 | 1,340 | 1,130 | * 1,340 | * 25 | 1,420 |
| 10----- | 1,550 | 650 | 1,500 | 1,220 | 1,340 | 1,220 | 1,380 | 987 | 1,260 | * 1,380 | 312 | 1,550 |
| 11----- | 1,500 | 1,340 | 1,420 | 1,260 | 1,420 | 1,300 | 1,420 | 718 | 1,340 | * 1,090 | 1,090 | 1,500 |
| 12----- | 1,420 | 1,500 | 1,420 | 884 | 1,460 | 1,300 | 1,130 | 1,220 | 1,420 | * 1,030 | 1,340 | 1,500 |
| 13----- | 847 | 1,550 | 1,500 | 1,500 | 1,420 | 1,340 | 780 | 1,340 | 1,380 | * 677 | 1,420 | 1,170 |
| 14----- | 1,300 | 1,500 | 1,300 | 1,500 | 1,380 | 1,340 | 1,260 | 1,340 | 1,050 | * 1,170 | 1,420 | 557 |
| 15----- | 1,500 | 1,500 | 635 | 1,340 | 1,260 | 1,380 | 1,460 | 1,260 | 718 | * 1,340 | 1,380 | 1,130 |
| 16----- | 1,500 | 1,300 | 1,170 | 1,340 | * 822 | 821 | 1,460 | 1,220 | 1,220 | * 1,340 | 1,050 | 1,380 |
| 17----- | 1,500 | 700 | 1,380 | 1,260 | * 1,170 | 1,260 | 1,420 | 863 | 1,300 | * 1,380 | 1,260 | 1,340 |
| 18----- | 1,500 | 1,250 | 1,420 | 1,260 | * 1,340 | 1,420 | 987 | 635 | 1,340 | * 1,170 | 1,220 | 1,300 |
| 19----- | 1,340 | 1,500 | 1,500 | 594 | * 1,420 | 1,420 | 842 | 1,130 | 1,340 | * 1,010 | 1,420 | 1,130 |
| 20----- | 645 | 1,550 | 1,380 | 1,380 | * 1,420 | 1,420 | 718 | 1,340 | 1,220 | * 677 | 1,340 | 1,010 |
| 21----- | 1,170 | 1,500 | 1,010 | 1,460 | * 1,420 | 1,420 | 1,300 | 1,340 | 1,050 | * 1,170 | 1,380 | 395 |
| 22----- | 1,420 | 1,500 | 416 | 1,460 | * 1,170 | 1,300 | 1,460 | 1,340 | 677 | * 1,340 | 1,380 | 1,130 |
| 23----- | 1,500 | 1,380 | 1,130 | 1,460 | * 842 | 760 | 1,460 | 1,300 | 1,220 | * 1,340 | 1,300 | 1,340 |
| 24----- | 1,500 | 657 | 1,340 | 1,460 | * 1,340 | 1,220 | 1,460 | 1,130 | 1,380 | * 1,380 | 677 | 1,380 |
| 25----- | 1,500 | 1,340 | 565 | 1,380 | * 1,420 | 1,300 | 1,420 | 698 | 1,380 | * 1,170 | 1,260 | 1,340 |
| 26----- | 1,310 | 1,590 | 1,300 | 801 | * 1,460 | 1,300 | 1,130 | 1,220 | 1,380 | * 1,030 | 1,550 | 1,050 |
| 27----- | 638 | 1,550 | 1,460 | 1,460 | * 1,420 | 1,300 | 718 | 1,340 | 1,170 | * 677 | 1,550 | 1,010 |
| 28----- | 1,220 | 1,130 | 1,420 | 1,460 | * 1,380 | 1,380 | 1,260 | 1,340 | * 1,050 | * 1,070 | 1,500 | 507 |
| 29----- | 1,500 | 1,190 | 760 | 1,420 | ----- | 1,340 | 1,420 | 1,300 | * 698 | * 1,340 | 1,460 | 1,010 |
| 30----- | 1,500 | 1,260 | 1,300 | 1,420 | ----- | 904 | 1,380 | 884 | * 1,220 | * 1,340 | 760 | 1,220 |
| 31----- | 1,550 | ----- | 1,500 | 1,380 | ----- | 1,170 | ----- | 739 | ----- | * 1,340 | 478 | ----- |

| Month | Maximum | Minimum | Mean | Month | Maximum | Minimum | Mean |
|---------------|---------|---------|-------|----------------|---------|---------|-------|
| October----- | 1,550 | 638 | 1,350 | May----- | 1,420 | 635 | 1,150 |
| November----- | 1,590 | 650 | 1,310 | June----- | 1,420 | 677 | 1,150 |
| December----- | 1,550 | 416 | 1,230 | July----- | 1,380 | 677 | 1,150 |
| January----- | 1,500 | 594 | 1,290 | August----- | 1,550 | 25 | 929 |
| February----- | 1,460 | 698 | 1,280 | September----- | 1,550 | 395 | 1,140 |
| March----- | 1,420 | 760 | 1,230 | | | | |
| April----- | 1,460 | 718 | 1,260 | The year----- | 1,590 | 25 | 1,210 |

* Estimated.

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 5½ miles above mouth.

DRAINAGE AREA.—98.7 square miles.

RECORDS AVAILABLE.—August, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 378 second-feet Feb. 12 (gauge height, 3.45 feet); minimum, 17 second-feet Sept. 8 (gauge height 0.27 foot). 1928-1930: Maximum discharge, 1,190 second-feet Mar. 6, 1929 (gauge height, 8.3 feet); minimum, that of Sept. 8, 1930.

REMARKS.—Records fair prior to May 9, when semiartificial control was completed; records good May 10 to Sept. 30. Stage-discharge relation affected by ice Jan. 17 to Feb. 19. Low-water flow affected by operation of a few small reservoirs above.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1 | 35 | 35 | 25 | 118 | 50 | 106 | 137 | 87 | 121 | 61 | 78 | 18 |
| 2 | 40 | 50 | 35 | 109 | 35 | 109 | 140 | 82 | 117 | 65 | 59 | 19 |
| 3 | 60 | 40 | 58 | 176 | 45 | 148 | 121 | 75 | 94 | 56 | 28 | 45 |
| 4 | 80 | 40 | 65 | 180 | 45 | 103 | 133 | 70 | 90 | 52 | 26 | 44 |
| 5 | 75 | 65 | 45 | 151 | 45 | 102 | 105 | 95 | 76 | 31 | 47 | 23 |
| 6 | 50 | 70 | 35 | 123 | 35 | 112 | 96 | 90 | 65 | 28 | 44 | 19 |
| 7 | 40 | 70 | 30 | 97 | 40 | 101 | 167 | 90 | 54 | 30 | 40 | 18 |
| 8 | 70 | 70 | 25 | 107 | 45 | 152 | 204 | 85 | 40 | 57 | 43 | 19 |
| 9 | 75 | 55 | 40 | 94 | 30 | 146 | 189 | 70 | 73 | 68 | 31 | 39 |
| 10 | 50 | 35 | 47 | 113 | 46 | 214 | 162 | 63 | 108 | 75 | 26 | 39 |
| 11 | 40 | 40 | 64 | 76 | 44 | 160 | 129 | 46 | 103 | 56 | 22 | 24 |
| 12 | 45 | 55 | 35 | 60 | 48 | 166 | 126 | 62 | 94 | 33 | 21 | 22 |
| 13 | 35 | 60 | 30 | 110 | 110 | 153 | 124 | 85 | 78 | 26 | 25 | 19 |
| 14 | 40 | 45 | 25 | 132 | 170 | 150 | 147 | 82 | 58 | 26 | 43 | 18 |
| 15 | 45 | 35 | 25 | 227 | 160 | 140 | 116 | 94 | 44 | 57 | 48 | 19 |
| 16 | 60 | 30 | 45 | 195 | 60 | 80 | 121 | 95 | 74 | 60 | 36 | 42 |
| 17 | 65 | 30 | 45 | 120 | 75 | 130 | 93 | 61 | 84 | 54 | 36 | 56 |
| 18 | 55 | 40 | 92 | 75 | 80 | 102 | 106 | 35 | 118 | 44 | 29 | 28 |
| 19 | 35 | 110 | 208 | 70 | 110 | 136 | 147 | 52 | 100 | 27 | 48 | 21 |
| 20 | 30 | 100 | 277 | 80 | 134 | 138 | 153 | 86 | 86 | 25 | 51 | 20 |
| 21 | 35 | 90 | 198 | 75 | 176 | 134 | 154 | 82 | 65 | 21 | 53 | 19 |
| 22 | 45 | 75 | 142 | 70 | 152 | 99 | 120 | 78 | 44 | 41 | 46 | 26 |
| 23 | 55 | 55 | 107 | 75 | 135 | 67 | 126 | 73 | 58 | 46 | 26 | 41 |
| 24 | 90 | 35 | 108 | 70 | 174 | 117 | 105 | 52 | 82 | 46 | 25 | 25 |
| 25 | 60 | 40 | 66 | 70 | 178 | 123 | 102 | 74 | 78 | 38 | 24 | 24 |
| 26 | 35 | 55 | 35 | 40 | 177 | 279 | 109 | 134 | 66 | 27 | 36 | 21 |
| 27 | 30 | 60 | 45 | 35 | 152 | 310 | 75 | 165 | 62 | 66 | 40 | 36 |
| 28 | 35 | 50 | 60 | 60 | 140 | 242 | 93 | 155 | 40 | 95 | 42 | 20 |
| 29 | 55 | 35 | 84 | 60 | ----- | 170 | 114 | 153 | 33 | 85 | 25 | 19 |
| 30 | 60 | 30 | 140 | 50 | ----- | 150 | 92 | 150 | 47 | 86 | 22 | 20 |
| 31 | 50 | ----- | 120 | 55 | ----- | 167 | ----- | 157 | ----- | 84 | 18 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 90 | 30 | 50.8 | 0.515 | 0.59 |
| November | 110 | 30 | 53.3 | .540 | .60 |
| December | 277 | 25 | 76.3 | .773 | .89 |
| January | 227 | 35 | 99.1 | 1.01 | 1.15 |
| February | 178 | 30 | 96.1 | .974 | 1.01 |
| March | 310 | 67 | 145 | 1.47 | 1.70 |
| April | 204 | 75 | 127 | 1.29 | 1.44 |
| May | 165 | 35 | 89.6 | .938 | 1.05 |
| June | 121 | 33 | 75.1 | .731 | .85 |
| July | 95 | 21 | 50.8 | .515 | .59 |
| August | 78 | 18 | 36.7 | .372 | .43 |
| September | 56 | 18 | 26.8 | .272 | .30 |
| The year | 310 | 18 | 77.2 | .773 | 10.60 |

• Estimated.

FARMINGTON RIVER NEAR NEW BOSTON, MASS.

LOCATION.—Water-stage recorder at highway bridge one-fourth 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, 1930.

EXTREMES.—Maximum discharge during year, 1,100 second-feet Mar. 8 (gage height, 5.60 feet); minimum, 9.6 second-feet Oct. 18 (gage height, 2.50 feet).

1913-1930: Maximum discharge, 7,900 second-feet Nov. 3, 1927 (gage height, 9.42 feet); minimum, 4.4 second-feet Aug. 27, 1913 (gage height, 2.22 feet).

REMARKS.—Records fair. Corrections for ice effect applied Nov. 24, Dec. 1-19, 24-27, Jan. 4-6, 11-17, Feb. 8-14, 22, 23. Flow regulated by storage in Otis Reservoir, capacity 880 million cubic feet.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June | July | Aug. | Sept. |
|-----|------|-------|------|-------|-------|-------|------|-------|-------|-------|------|-------|
| 1 | 109 | 98 | 51 | 72 | • 66 | 186 | 141 | 76 | • 87 | • 48 | • 28 | 77 |
| 2 | 124 | 98 | 51 | 98 | • 78 | 168 | 141 | 106 | • 60 | • 74 | • 50 | 69 |
| 3 | 100 | 152 | 56 | 196 | • 81 | 143 | 127 | 194 | • 45 | • 58 | • 55 | 60 |
| 4 | 41 | 149 | 57 | 113 | • 78 | 147 | 119 | 146 | • 40 | • 44 | • 75 | 56 |
| 5 | 52 | 79 | 60 | 124 | • 70 | 152 | 102 | 112 | • 87 | • 35 | • 77 | 21 |
| 6 | 100 | 58 | 71 | 130 | • 63 | 124 | 100 | 94 | • 60 | • 120 | • 72 | 33 |
| 7 | 109 | 52 | 61 | • 164 | • 57 | 112 | 570 | 83 | 107 | • 70 | • 68 | 71 |
| 8 | 107 | 43 | 70 | • 208 | 62 | 732 | 476 | 80 | 119 | • 47 | • 22 | 76 |
| 9 | 107 | 44 | 80 | • 190 | 71 | 668 | 303 | 81 | 2•8 | • 80 | • 33 | 71 |
| 10 | 62 | 38 | 74 | • 147 | 69 | 400 | 217 | 72 | • 331 | • 64 | • 47 | 68 |
| 11 | 16 | 36 | 62 | 115 | 66 | 322 | 186 | 63 | • 426 | • 50 | • 69 | 63 |
| 12 | 41 | 36 | 62 | 98 | 83 | 413 | 206 | 54 | • 2•8 | • 40 | • 74 | 18 |
| 13 | 100 | 83 | 88 | 132 | 140 | 314 | 200 | 44 | • 189 | • 80 | • 85 | 30 |
| 14 | 100 | 85 | 120 | 185 | 125 | 236 | 184 | 44 | 127 | • 114 | • 50 | 66 |
| 15 | 98 | 103 | 168 | 265 | • 100 | 200 | 159 | 88 | 72 | • 92 | • 88 | 65 |
| 16 | 96 | • 85 | 105 | 190 | • 90 | 174 | 141 | • 142 | 54 | • 68 | • 70 | 69 |
| 17 | 50 | • 140 | 102 | 165 | • 99 | 161 | 135 | • 60 | 54 | • 54 | • 60 | 84 |
| 18 | 25 | • 265 | 185 | • 135 | • 122 | 168 | 166 | • 58 | 76 | • 45 | • 57 | 61 |
| 19 | 90 | • 220 | 400 | • 115 | • 160 | 262 | 181 | • 82 | 171 | • 37 | • 51 | 25 |
| 20 | 91 | • 160 | 518 | • 103 | • 200 | 197 | 157 | • 64 | 152 | • 31 | • 44 | 33 |
| 21 | 91 | 112 | 295 | • 95 | • 290 | 164 | 133 | • 63 | 100 | • 42 | • 32 | 72 |
| 22 | 262 | 85 | 231 | • 86 | 270 | • 119 | 141 | 58 | 76 | • 56 | • 25 | 74 |
| 23 | 338 | 69 | 179 | • 79 | 250 | • 105 | 133 | 56 | 61 | • 68 | • 50 | 73 |
| 24 | 147 | 62 | 165 | • 75 | 386 | • 102 | 117 | 57 | 52 | • 97 | • 69 | 72 |
| 25 | 93 | 56 | 155 | • 72 | 348 | • 340 | 110 | 96 | 47 | • 65 | • 70 | 66 |
| 26 | 69 | • 47 | 158 | • 70 | 351 | • 355 | 105 | • 200 | 38 | • 52 | • 68 | • 21 |
| 27 | 54 | 52 | 162 | • 76 | 252 | • 246 | 96 | • 115 | 73 | • 32 | • 69 | 40 |
| 28 | 46 | 64 | 126 | • 86 | 209 | • 210 | 92 | • 190 | • 41 | • 90 | • 74 | 61 |
| 29 | 39 | 58 | 110 | • 80 | — | 186 | 84 | • 165 | • 37 | • 75 | • 78 | 61 |
| 30 | 35 | 48 | 86 | • 69 | — | 168 | 76 | 135 | • 38 | • 84 | • 31 | 61 |
| 31 | 39 | — | 77 | • 63 | — | 146 | — | 131 | — | • 78 | • 56 | — |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 338 | 16 | 91.3 | 0.985 | 1.14 |
| November | 265 | 36 | 89.2 | .962 | 1.07 |
| December | 518 | 51 | 135 | 1.46 | 1.68 |
| January | 265 | 63 | 122 | 1.32 | 1.62 |
| February | 386 | 57 | 151 | 1.63 | 1.70 |
| March | 732 | 102 | 239 | 2.58 | 2.97 |
| April | 570 | 76 | 170 | 1.83 | 2.04 |
| May | 200 | 44 | 97.1 | 1.05 | 1.21 |
| June | 426 | 37 | 109 | 1.18 | 1.32 |
| July | 120 | 31 | 64.2 | .693 | .80 |
| August | 88 | 22 | 57.9 | .625 | .72 |
| September | 84 | 18 | 57.2 | .617 | .60 |
| The year | 732 | 16 | 115 | 1.24 | 16.86 |

• Estimated.

FARMINGTON RIVER AT RIVERTON, CONN.

LOCATION.—Water-stage recorder one fourth mile below mouth of Still River, 1 mile below Riverton, Litchfield County, and 4 miles northeast of Winsted.

DRAINAGE AREA.—217 square miles.

RECORDS AVAILABLE.—September, 1929, to September, 1930.

EXTREMES.—Maximum discharge during period, 1,990 second-feet Mar. 8, 1930 (gage height, 4.5 feet); maximum stage, 5.57 feet Dec. 19, 1929, during ice jam; minimum discharge, 17 second-feet Sept. 28, 1929 (gage height, 0.64 foot).

REMARKS.—Records good except those for periods of ice effect, Nov. 29 to Dec. 19, Dec. 24–27, Jan. 19, to Feb. 24, and those estimated, which are fair. Seasonal regulation afforded at Otis Reservoir.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|------|------|-------|------|------|-------|-------|-----|------|------|------|-------|
| 1 | | 108 | 132 | 95 | 200 | 130 | 325 | 330 | 204 | 204 | 100 | 85 | 92 |
| 2 | | 152 | 134 | 100 | 229 | 150 | 332 | 336 | 209 | 178 | 180 | 55 | 138 |
| 3 | | 200 | 208 | 110 | 440 | 170 | 312 | 330 | 402 | 139 | 141 | 70 | 100 |
| 4 | | 96 | 182 | 100 | 406 | 170 | 292 | 306 | 288 | 127 | 120 | 90 | 84 |
| 5 | | 64 | 170 | 120 | 314 | 170 | 246 | 283 | 250 | 104 | 88 | 95 | 68 |
| 6 | | 88 | 128 | 100 | 346 | 150 | 248 | 254 | 210 | 92 | 84 | 100 | 46 |
| 7 | | 130 | 97 | 75 | 279 | 130 | 235 | 1,370 | 196 | 142 | 216 | 100 | 63 |
| 8 | | 112 | 92 | 95 | 358 | 120 | 1,230 | 1,150 | 200 | 185 | 144 | 80 | 98 |
| 9 | | 115 | 81 | 120 | 415 | 110 | 1,300 | 704 | 203 | 420 | 112 | 50 | 96 |
| 10 | | 104 | 64 | 130 | 364 | 140 | 747 | 522 | 164 | 607 | 146 | 75 | 94 |
| 11 | | 53 | 75 | 110 | 254 | 140 | 575 | 452 | 133 | 834 | 126 | 85 | 98 |
| 12 | | 34 | 66 | 95 | 228 | 130 | 812 | 437 | 133 | 538 | 112 | 90 | 68 |
| 13 | | 77 | 86 | 120 | 314 | 150 | 610 | 424 | 125 | 366 | 82 | 95 | 38 |
| 14 | | 112 | 113 | 140 | 440 | 400 | 494 | 414 | 118 | 256 | 127 | 130 | 72 |
| 15 | | 108 | 129 | 180 | 635 | 380 | 382 | 374 | 280 | 176 | 199 | 95 | 82 |
| 16 | | 110 | 200 | 170 | 540 | 260 | 337 | 340 | 343 | 154 | 140 | 65 | 94 |
| 17 | | 100 | 159 | 150 | 327 | 190 | 341 | 315 | 222 | 130 | 102 | 80 | 196 |
| 18 | | 55 | 474 | 260 | 319 | 170 | 350 | 392 | 160 | 325 | 85 | 110 | 138 |
| 19 | | 66 | 476 | 650 | 280 | 200 | 600 | 430 | 157 | 419 | 72 | 105 | 78 |
| 20 | | 98 | 304 | 1,120 | 260 | 300 | 468 | 361 | 207 | 499 | 68 | 105 | 60 |
| 21 | | 97 | 235 | 580 | 240 | 480 | 387 | 324 | 192 | 298 | 62 | 100 | 79 |
| 22 | 76 | 123 | 173 | 424 | 220 | 460 | 294 | 334 | 168 | 210 | 72 | 85 | 95 |
| 23 | 100 | 868 | 131 | 322 | 200 | 380 | 246 | 336 | 179 | 168 | 82 | 55 | 95 |
| 24 | 94 | 340 | 120 | 280 | 170 | 650 | 260 | 291 | 135 | 137 | 90 | 75 | 94 |
| 25 | 106 | 211 | 135 | 260 | 160 | 616 | 443 | 281 | 354 | 111 | 129 | 90 | 86 |
| 26 | 100 | 120 | 116 | 260 | 150 | 664 | 1,210 | 264 | 488 | 92 | 86 | 95 | 71 |
| 27 | 48 | 102 | 112 | 240 | 160 | 480 | 734 | 227 | 335 | 178 | 100 | 100 | 42 |
| 28 | 31 | 88 | 126 | 260 | 200 | 389 | 525 | 228 | 270 | 142 | 120 | 100 | 82 |
| 29 | 84 | 82 | 95 | 246 | 190 | | 418 | 210 | 468 | 97 | 110 | 104 | 96 |
| 30 | 119 | 68 | 60 | 240 | 150 | | 356 | 198 | 343 | 90 | 120 | 144 | 93 |
| 31 | | 65 | | 218 | 140 | | 351 | | 262 | | 110 | 74 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-------------------|-------------------|
| October | 868 | 34 | 134 | 0.61 ² | 0.71 |
| November | 476 | 60 | 159 | .733 | .82 |
| December | 1,120 | 75 | 238 | 1.10 | 1.27 |
| January | 635 | 140 | 288 | 1.33 | 1.53 |
| February | 664 | 110 | 281 | 1.28 | 1.34 |
| March | 1,300 | 235 | 499 | 2.30 | 2.65 |
| April | 1,370 | 198 | 407 | 1.88 | 2.10 |
| May | 488 | 118 | 239 | 1.10 | 1.27 |
| June | 834 | 90 | 247 | 1.14 | 1.27 |
| July | 216 | 62 | 114 | .525 | .61 |
| August | 144 | 50 | 89.7 | .413 | .48 |
| September | 196 | 38 | 87.9 | .405 | .45 |
| The year | 1,370 | 34 | 232 | 1.07 | 14.50 |

• Estimated.

FARMINGTON RIVER AT TARIFFVILLE, CONN.

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

DRAINAGE AREA.—569 square miles.

RECORDS AVAILABLE.—August, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,250 second-feet Mar. 9 (gage height, 4.8 feet); maximum stage, 6.15 feet Dec. 22 (ice jam); minimum discharge, 164 second-feet Aug. 11 (gage height, 0.84 foot).

1928-1930: Maximum discharge, 7,220 second-feet Aug. 27, 1928, Apr. 22, 1929 (gage height, 7.3 feet); minimum, that of Aug. 11, 1930.

REMARKS.—Records good. Discharge based on operating records from Hartford Electric Light Co.'s plant, Dec. 21-28 (ice jam), May 5, 6, Sept. 11-30. Backwater from Hartford Electric Light Co.'s dam occurs intermittently, but accurate correction is applied. About 18 million gallons per day diverted from Nepaug River for Hartford water supply. Flow affected by storage in reservoir on East Branch of Farmington River near New Hartford and in Otis Reservoir.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| 1 | 192 | 313 | 233 | 652 | 369 | 832 | 962 | 571 | 606 | 383 | 244 | 202 |
| 2 | 287 | 342 | 195 | 562 | 364 | 832 | 995 | 551 | 474 | 478 | 275 | 198 |
| 3 | 640 | 304 | 299 | 946 | 364 | 865 | 995 | 592 | 452 | 481 | 237 | 267 |
| 4 | 555 | 407 | 326 | 1,200 | 425 | 832 | 995 | 670 | 443 | 380 | 195 | 285 |
| 5 | 396 | 561 | 328 | 800 | 419 | 832 | 800 | 595 | 387 | 326 | 189 | 267 |
| 6 | 259 | 396 | 317 | 768 | 419 | 768 | 658 | 590 | 354 | 283 | 226 | 233 |
| 7 | 199 | 335 | 326 | 832 | 414 | 609 | 1,670 | 532 | 331 | 313 | 237 | 195 |
| 8 | 294 | 352 | 255 | 832 | 383 | 1,220 | 2,770 | 522 | 356 | 501 | 247 | 185 |
| 9 | 266 | 283 | 274 | 962 | 373 | 3,010 | 1,930 | 530 | 617 | 448 | 251 | 219 |
| 10 | 259 | 244 | 354 | 962 | 287 | 2,180 | 1,500 | 474 | 1,100 | 369 | 202 | 244 |
| 11 | 255 | 218 | 304 | 728 | 383 | 1,500 | 1,380 | 388 | 1,880 | 369 | 182 | 275 |
| 12 | 255 | 313 | 271 | 480 | 359 | 1,420 | 1,340 | 388 | 1,620 | 364 | 195 | 275 |
| 13 | 212 | 310 | 291 | 544 | 542 | 1,500 | 1,340 | 404 | 1,270 | 313 | 212 | 245 |
| 14 | 192 | 308 | 317 | 836 | 1,130 | 1,270 | 1,300 | 378 | 1,030 | 247 | 222 | 220 |
| 15 | 205 | 322 | 446 | 1,500 | 930 | 1,160 | 1,130 | 626 | 683 | 393 | 240 | 205 |
| 16 | 237 | 309 | 468 | 1,420 | 604 | 1,060 | 1,100 | 930 | 494 | 393 | 332 | 215 |
| 17 | 240 | 247 | 479 | 883 | 470 | 1,030 | 1,030 | 756 | 525 | 384 | 233 | 295 |
| 18 | 244 | 489 | 578 | 800 | 440 | 1,030 | 995 | 556 | 720 | 326 | 212 | 325 |
| 19 | 233 | 1,100 | 1,330 | 690 | 533 | 1,200 | 1,060 | 502 | 930 | 300 | 283 | 375 |
| 20 | 195 | 800 | 2,180 | 832 | 690 | 1,340 | 1,200 | 586 | 995 | 215 | 267 | 270 |
| 21 | 192 | 592 | 1,600 | 658 | 996 | 1,130 | 1,030 | 575 | 995 | 202 | 263 | 195 |
| 22 | 214 | 419 | 1,000 | 610 | 1,200 | 962 | 995 | 533 | 678 | 283 | 263 | 175 |
| 23 | 912 | 409 | 550 | 610 | 630 | 800 | 995 | 490 | 484 | 317 | 251 | 215 |
| 24 | 1,170 | 382 | 650 | 502 | 995 | 768 | 930 | 458 | 492 | 300 | 215 | 240 |
| 25 | 606 | 242 | 650 | 479 | 1,240 | 959 | 832 | 545 | 455 | 283 | 185 | 250 |
| 26 | 449 | 349 | 600 | 425 | 1,270 | 2,590 | 709 | 1,130 | 413 | 279 | 192 | 245 |
| 27 | 383 | 349 | 600 | 373 | 1,200 | 2,440 | 556 | 1,030 | 446 | 226 | 233 | 240 |
| 28 | 225 | 332 | 650 | 440 | 930 | 1,580 | 562 | 768 | 484 | 205 | 244 | 190 |
| 29 | 317 | 226 | 588 | 502 | ----- | 1,200 | 634 | 832 | 433 | 247 | 251 | 180 |
| 30 | 308 | 291 | 640 | 452 | ----- | 962 | 569 | 838 | 345 | 267 | 251 | 190 |
| 31 | 279 | ----- | 628 | 388 | ----- | 865 | ----- | 690 | ----- | 271 | 237 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 1,170 | 192 | 344 | 0.605 | 0.70 |
| November | 1,100 | 218 | 385 | .677 | .76 |
| December | 2,180 | 195 | 572 | 1.01 | 1.16 |
| January | 1,500 | 373 | 731 | 1.28 | 1.43 |
| February | 1,270 | 287 | 667 | 1.17 | 1.22 |
| March | 3,010 | 609 | 1,250 | 2.20 | 2.54 |
| April | 2,770 | 556 | 1,100 | 1.93 | 2.15 |
| May | 1,130 | 378 | 616 | 1.08 | 1.24 |
| June | 1,880 | 331 | 683 | 1.20 | 1.34 |
| July | 501 | 202 | 327 | .575 | .66 |
| August | 332 | 182 | 234 | .411 | .47 |
| September | 375 | 175 | 238 | .418 | .47 |
| The year | 3,010 | 175 | 595 | 1.05 | 14.19 |

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 and $2\frac{3}{4}$ miles east of East Hartford, Hartford County.

DRAINAGE AREA.—75.5 square miles.

RECORDS AVAILABLE.—September, 1919, to September, 1921; July, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 390 second-feet Jan. 15 (gage height, 3.6 feet); minimum, 2.8 second-feet Oct. 21, Nov. 4 (gage height, 0.73 foot).

1919-1921, 1928-1930: Maximum discharge, 1,450 second-feet Mar. 13, 1920 (gage height, 8.1 feet); practically no flow at times when water was held back by dams.

REMARKS.—Records excellent. Stage-discharge relation affected by ice Jan. 26, 27, Feb. 16, 17. Distribution of flow affected by storage in Shenipsit Lake and other smaller reservoirs above station.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 64 | 75 | 12 | 82 | 19 | 54 | 154 | 98 | 9.3 | 63 | 20 | 11 |
| 2..... | 74 | 74 | 39 | 116 | 17 | 33 | 142 | 43 | 101 | 64 | 11 | 15 |
| 3..... | 94 | 21 | 52 | 143 | 73 | 223 | 132 | 65 | 135 | 42 | 6.4 | 40 |
| 4..... | 92 | 50 | 53 | 96 | 83 | 111 | 46 | 11 | 104 | 8.9 | 22 | 48 |
| 5..... | 74 | 77 | 53 | 18 | 148 | 94 | 45 | 71 | 79 | 9.8 | 26 | 17 |
| 6..... | 33 | 65 | 52 | 129 | 96 | 98 | 50 | 94 | 26 | 9.3 | 25 | 46 |
| 7..... | 20 | 57 | 33 | 110 | 86 | 96 | 166 | 74 | 13 | 57 | 22 | 15 |
| 8..... | 39 | 73 | 17 | 98 | 21 | 75 | 166 | 67 | 8.4 | 73 | 11 | 37 |
| 9..... | 62 | 38 | 43 | 80 | 17 | 88 | 145 | 47 | 48 | 73 | 7.6 | 42 |
| 10..... | 70 | 18 | 52 | 87 | 116 | 228 | 144 | 53 | 64 | 73 | 7.2 | 40 |
| 11..... | 52 | 46 | 52 | 36 | 95 | 134 | 90 | 8.9 | 64 | 37 | 17 | 17 |
| 12..... | 31 | 59 | 52 | 23 | 93 | 155 | 107 | 82 | 69 | 23 | 19 | 18 |
| 13..... | 19 | 59 | 44 | 175 | 105 | 114 | 53 | 99 | 58 | 8.0 | 27 | 18 |
| 14..... | 48 | 58 | 24 | 140 | 185 | 121 | 143 | 96 | 30 | 7.2 | 33 | 17 |
| 15..... | 63 | 56 | 12 | 282 | 66 | 151 | 139 | 95 | 7.2 | 37 | 29 | 33 |
| 16..... | 66 | 34 | 35 | 176 | 38 | 40 | 129 | 80 | 66 | 58 | 60 | 40 |
| 17..... | 65 | 15 | 48 | 164 | 150 | 69 | 103 | 31 | 69 | 50 | 8.4 | 39 |
| 18..... | 58 | 35 | 49 | 42 | 94 | 108 | 38 | 8.0 | 69 | 28 | 77 | 30 |
| 19..... | 42 | 69 | 99 | 33 | 91 | 165 | 59 | 71 | 70 | 22 | 93 | 27 |
| 20..... | 9.2 | 79 | 162 | 205 | 119 | 109 | 28 | 92 | 47 | 13 | 92 | 25 |
| 21..... | 24 | 75 | 67 | 89 | 115 | 98 | 181 | 58 | 8.6 | 28 | 52 | 18 |
| 22..... | 33 | 54 | 35 | 61 | 62 | 41 | 162 | 64 | 5.9 | 36 | 49 | 35 |
| 23..... | 78 | 26 | 95 | 63 | 98 | 34 | 133 | 53 | 52 | 42 | 12 | 40 |
| 24..... | 94 | 9.3 | 80 | 66 | 225 | 148 | 123 | 21 | 66 | 35 | 6.4 | 37 |
| 25..... | 89 | 40 | 31 | 22 | 131 | 139 | 98 | 11 | 69 | 66 | 45 | 42 |
| 26..... | 53 | 57 | 63 | 15 | 102 | 199 | 41 | 114 | 68 | 23 | 47 | 40 |
| 27..... | 12 | 57 | 74 | 65 | 138 | 220 | 9.3 | 122 | 26 | 9.3 | 37 | 23 |
| 28..... | 37 | 19 | 37 | 98 | 131 | 113 | 113 | 91 | 11 | 60 | 25 | 17 |
| 29..... | 83 | 14 | 28 | 95 | ----- | 93 | 103 | 31 | 14 | 70 | 12 | 13 |
| 30..... | 63 | 18 | 105 | 76 | ----- | 70 | 95 | 39 | 49 | 67 | 11 | 9.8 |
| 31..... | 78 | ----- | 87 | 70 | ----- | 233 | ----- | 69 | ----- | 31 | 11 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 94 | 9.2 | 55.5 | 0.735 | 0.85 |
| November..... | 79 | 9.3 | 47.6 | .630 | .70 |
| December..... | 162 | 12 | 54.4 | .721 | .83 |
| January..... | 282 | 15 | 95.3 | 1.26 | 1.45 |
| February..... | 225 | 17 | 96.9 | 1.28 | 1.33 |
| March..... | 233 | 33 | 118 | 1.56 | 1.80 |
| April..... | 181 | 9.3 | 105 | 1.39 | 1.55 |
| May..... | 122 | 8.0 | 63.2 | .837 | .96 |
| June..... | 135 | 5.9 | 50.2 | .665 | .74 |
| July..... | 73 | 7.2 | 39.5 | .523 | .60 |
| August..... | 93 | 6.4 | 29.7 | .393 | .45 |
| September..... | 48 | 9.8 | 28.3 | .375 | .42 |
| The year..... | 282 | 5.9 | 65.1 | .862 | 11.68 |

SALMON RIVER NEAR EAST HAMPTON, CONN.

LOCATION.—Water-stage recorder at Comstock Bridge, on Hartford-Middlesex County line $3\frac{1}{2}$ miles southeast of East Hampton, Middlesex County, and $7\frac{1}{2}$ miles above mouth.

DRAINAGE AREA.—105 square miles.

RECORDS AVAILABLE.—July, 1928, to September, 1930. April, 1905, to March, 1906, at Leesville, $3\frac{1}{2}$ miles downstream.

EXTREMES.—Maximum discharge during year, 940 second-feet Mar. 26 (gage height, 2.60 feet); minimum, about 1 second-foot Oct. 13.

1928-1930: Maximum discharge, 3,700 second-feet Mar. 5, 1929 (gage height, 4.4 feet); minimum, that of Oct. 13, 1929.

REMARKS.—Records good except those for periods of ice effect, Jan. 14 to Feb. 12, Feb. 16-18, and those estimated, Oct. 1 to Jan. 15, July 18 to Sept. 27, which are based on operating records from Leesville plant of Central Connecticut Power & Light Co. and are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 6 | 16 | 17 | 154 | 55 | 178 | 172 | 93 | 118 | 47 | 11 | 9 |
| 2..... | 26 | 21 | 15 | 170 | 55 | 188 | 172 | 89 | 98 | 48 | 10 | 10 |
| 3..... | 56 | 36 | 18 | 223 | 55 | 166 | 163 | 89 | 82 | 50 | 7 | 15 |
| 4..... | 40 | 70 | 20 | 236 | 65 | 145 | 149 | 82 | 69 | 100 | 11 | 11 |
| 5..... | 20 | 50 | 14 | 131 | 160 | 135 | 141 | 73 | 67 | 70 | 11 | 10 |
| 6..... | 15 | 35 | 20 | 114 | 150 | 125 | 138 | 70 | 59 | 63 | 10 | 6 |
| 7..... | 17 | 30 | 13 | 101 | 110 | 120 | 462 | 74 | 52 | 111 | 9 | 2 |
| 8..... | 11 | 27 | 24 | 124 | 75 | 342 | 393 | 111 | 53 | 77 | 8 | 16 |
| 9..... | 2 | 19 | 29 | 118 | 70 | 502 | 261 | 137 | 93 | 54 | 8 | 12 |
| 10..... | 13 | 24 | 28 | 100 | 70 | 311 | 205 | 98 | 154 | 46 | 7 | 10 |
| 11..... | 9 | 22 | 26 | 79 | 70 | 242 | 182 | 80 | 154 | 46 | 10 | 10 |
| 12..... | 4 | 18 | 22 | 82 | 75 | 261 | 176 | 72 | 137 | 82 | 10 | 8 |
| 13..... | 1 | 20 | 22 | 233 | 205 | 230 | 172 | 66 | 126 | 60 | 10 | 4 |
| 14..... | 11 | 18 | 80 | 285 | 573 | 188 | 163 | 61 | 94 | 92 | 10 | 2 |
| 15..... | 11 | 26 | 172 | 415 | 368 | 163 | 146 | 131 | 72 | 125 | 9 | 10 |
| 16..... | 4 | 19 | 146 | 276 | 140 | 152 | 136 | 158 | 61 | 66 | 6 | 10 |
| 17..... | 6 | 22 | 70 | 149 | 110 | 146 | 136 | 116 | 57 | 46 | 33 | 10 |
| 18..... | 4 | 161 | 128 | 192 | 120 | 149 | 172 | 91 | 180 | 36 | 26 | 8 |
| 19..... | 2 | 205 | 379 | 170 | 150 | 202 | 286 | 89 | 172 | 24 | 18 | 8 |
| 20..... | 2 | 110 | 368 | 150 | 226 | 182 | 230 | 112 | 139 | 22 | 17 | 2 |
| 21..... | 15 | 55 | 193 | 130 | 282 | 155 | 176 | 92 | 95 | 26 | 15 | 2 |
| 22..... | 12 | 45 | 120 | 110 | 238 | 126 | 176 | 76 | 78 | 26 | 11 | 9 |
| 23..... | 110 | 36 | 61 | 100 | 212 | 116 | 160 | 67 | 64 | 27 | 6 | 6 |
| 24..... | 69 | 31 | 78 | 95 | 272 | 113 | 141 | 56 | 52 | 27 | 3 | 4 |
| 25..... | 40 | 27 | 58 | 85 | 277 | 181 | 128 | 247 | 102 | 25 | 12 | 4 |
| 26..... | 26 | 29 | 48 | 75 | 307 | 810 | 123 | 356 | 73 | 19 | 11 | 4 |
| 27..... | 23 | 33 | 59 | 70 | 261 | 493 | 113 | 215 | 74 | 16 | 10 | 2 |
| 28..... | 16 | 31 | 64 | 85 | 214 | 312 | 106 | 152 | 93 | 16 | 10 | 1.4 |
| 29..... | 17 | 23 | 98 | 70 | ----- | 242 | 100 | 195 | 64 | 15 | 9 | 7.8 |
| 30..... | 12 | 16 | 144 | 60 | ----- | 209 | 95 | 198 | 53 | 14 | 6 | 2.4 |
| 31..... | 14 | ----- | 122 | 60 | ----- | 192 | ----- | 152 | ----- | 15 | 3 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 110 | 1 | 19.8 | 0.189 | 0.22 |
| November..... | 205 | 16 | 42.5 | .405 | .45 |
| December..... | 379 | 13 | 85.7 | .816 | .94 |
| January..... | 415 | 60 | 143 | 1.36 | 1.57 |
| February..... | 573 | 55 | 177 | 1.69 | 1.75 |
| March..... | 810 | 113 | 228 | 2.17 | 2.50 |
| April..... | 462 | 95 | 179 | 1.70 | 1.90 |
| May..... | 356 | 56 | 119 | 1.13 | 1.30 |
| June..... | 180 | 52 | 92.8 | .884 | .99 |
| July..... | 125 | 14 | 48.1 | .458 | .53 |
| August..... | 33 | 3 | 10.9 | .104 | .12 |
| September..... | 16 | 1.4 | 7.19 | .068 | .08 |
| The year..... | 810 | 1 | 95.7 | .911 | 12.35 |

HOUSATONIC RIVER BASIN

HOUSATONIC RIVER NEAR GREAT BARRINGTON, MASS.

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

DRAINAGE AREA.—280 square miles.

RECORDS AVAILABLE.—May, 1913, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,840 second-feet Mar. 10 (gage height, 4.67 feet); minimum, about 31 second-feet July 10 (gage height, 1.06 feet).

1913-1930: Maximum discharge, about 5,690 second-feet Nov. 5, 1927 (gage height, about 10 feet); no flow at times.

REMARKS.—Records fair. Considerable diurnal regulation.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1 | 145 | 140 | 299 | 260 | 280 | 512 | 648 | 230 | 222 | 241 | 318 | 245 |
| 2 | 150 | 166 | 213 | 318 | 67 | 466 | 706 | 277 | 358 | 167 | 318 | 253 |
| 3 | 207 | 161 | 188 | 379 | 318 | 318 | 648 | 234 | 318 | 191 | 199 | 277 |
| 4 | 197 | 148 | 177 | 421 | 128 | 379 | 591 | 238 | 297 | 222 | 97 | 318 |
| 5 | 191 | 133 | 161 | 379 | 177 | 400 | 736 | 277 | 318 | 158 | 297 | 318 |
| 6 | 161 | 131 | 122 | 358 | 117 | 358 | 706 | 195 | 214 | 154 | 358 | 338 |
| 7 | 145 | 124 | 135 | 338 | 183 | 379 | 706 | 170 | 421 | 114 | 297 | 338 |
| 8 | 138 | 106 | 253 | 421 | 177 | 421 | 796 | 128 | 512 | 78 | 277 | 318 |
| 9 | 122 | 88 | 200 | 512 | 150 | 677 | 648 | 199 | 444 | 101 | 214 | 245 |
| 10 | 119 | 62 | 183 | 338 | 204 | 1,710 | 706 | 297 | 677 | 61 | 318 | 277 |
| 11 | 124 | 65 | 220 | 318 | 253 | 1,580 | 856 | 257 | 538 | 78 | 253 | 297 |
| 12 | 126 | 80 | 260 | 358 | 280 | 1,580 | 766 | 230 | 358 | 95 | 195 | 253 |
| 13 | 131 | 80 | 358 | 318 | 358 | 1,450 | 677 | 318 | 207 | 115 | 177 | 358 |
| 14 | 131 | 86 | 338 | 379 | 257 | 1,050 | 619 | 338 | 174 | 154 | 207 | 318 |
| 15 | 94 | 133 | 280 | 379 | 338 | 1,050 | 648 | 318 | 199 | 297 | 257 | 338 |
| 16 | 96 | 260 | 229 | 338 | 648 | 919 | 736 | 318 | 297 | 338 | 400 | 277 |
| 17 | 92 | 338 | 161 | 338 | 358 | 796 | 856 | 358 | 379 | 297 | 277 | 195 |
| 18 | 109 | 379 | 200 | 280 | 207 | 796 | 736 | 297 | 318 | 318 | 230 | 277 |
| 19 | 122 | 400 | 677 | 250 | 226 | 856 | 648 | 318 | 489 | 338 | 297 | 379 |
| 20 | 122 | 379 | 736 | 299 | 260 | 766 | 563 | 297 | 358 | 421 | 177 | 379 |
| 21 | 117 | 318 | 796 | 338 | 466 | 706 | 648 | 277 | 277 | 318 | 245 | 338 |
| 22 | 102 | 338 | 706 | 299 | 736 | 796 | 619 | 297 | 400 | 257 | 230 | 297 |
| 23 | 145 | 421 | 648 | 338 | 706 | 766 | 648 | 318 | 338 | 297 | 358 | 208 |
| 24 | 106 | 400 | 563 | 197 | 919 | 619 | 706 | 318 | 379 | 379 | 297 | 154 |
| 25 | 100 | 318 | 512 | 180 | 984 | 856 | 563 | 338 | 297 | 421 | 277 | 119 |
| 26 | 106 | 246 | 466 | 104 | 919 | 856 | 444 | 421 | 203 | 338 | 338 | 128 |
| 27 | 96 | 257 | 489 | 563 | 856 | 591 | 338 | 591 | 238 | 444 | 203 | 184 |
| 28 | 102 | 260 | 648 | 379 | 856 | 619 | 230 | 591 | 297 | 379 | 143 | 222 |
| 29 | 117 | 280 | 421 | 299 | ----- | 619 | 230 | 648 | 241 | 421 | 167 | 177 |
| 30 | 124 | 280 | 260 | 260 | ----- | 619 | 238 | 619 | 238 | 297 | 210 | 222 |
| 31 | 150 | ----- | 226 | 250 | ----- | 563 | ----- | 199 | ----- | 379 | 238 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 207 | 92 | 129 | 0.461 | 0.53 |
| November | 421 | 62 | 219 | .782 | .87 |
| December | 796 | 122 | 359 | 1.28 | 1.48 |
| January | 512 | 104 | 329 | 1.18 | 1.36 |
| February | 984 | 67 | 408 | 1.46 | 1.52 |
| March | 1,710 | 318 | 777 | 2.78 | 3.20 |
| April | 856 | 230 | 622 | 2.22 | 2.48 |
| May | 648 | 128 | 320 | 1.14 | 1.31 |
| June | 677 | 174 | 334 | 1.10 | 1.33 |
| July | 444 | 61 | 254 | .807 | 1.05 |
| August | 400 | 97 | 254 | .807 | 1.05 |
| September | 379 | 119 | 268 | .857 | 1.07 |
| The year | 1,710 | 61 | 355 | 1.27 | 17.25 |

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.

DRAINAGE AREA.—644 square miles.

RECORDS AVAILABLE.—July, 1912, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,890 second-feet June 11 (gage height, 6.4 feet); minimum, 39 second-feet May 17 (gage height, 0.60 foot).

1912-1930: Maximum discharge, about 11,700 second-feet Nov. 5, 1927 (gage height, 15.7 feet); no flow at times.

REMARKS.—Records excellent except those for periods of ice effect, Dec. 12, 13, 22-29, Jan. 18 to Feb. 22, and those estimated, which are based on operating records from plant of Connecticut Power Co. and are fair. Low-water flow completely regulated at Connecticut Power Co.'s plant.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----------|---------|-------|-------|---------|-------|-------|-------|-------|-------|-----------------|------|-------------------|
| 1 | 194 | 221 | * 205 | 427 | 440 | 1,300 | 1,300 | 580 | 577 | 376 | 288 | 216 |
| 2 | 276 | 341 | * 256 | 610 | 240 | 1,080 | 1,150 | 592 | 363 | 600 | 322 | 298 |
| 3 | 263 | 213 | 230 | 561 | 340 | 1,070 | 1,060 | 808 | 526 | 646 | 111 | 284 |
| 4 | 253 | 294 | 218 | 1,030 | 440 | 926 | 1,020 | 782 | 508 | 688 | 185 | 270 |
| 5 | 276 | 323 | 215 | 590 | 260 | 868 | 932 | 661 | 389 | 488 | 195 | 279 |
| 6 | 110 | 250 | 252 | 633 | 260 | 848 | 828 | 761 | 440 | 391 | 250 | 210 |
| 7 | 156 | 226 | 216 | 608 | 280 | 798 | 1,280 | 644 | 570 | 592 | 204 | 140 |
| 8 | 160 | 274 | 130 | 662 | 360 | 1,330 | 1,730 | 583 | 426 | 904 | 242 | 301 |
| 9 | 202 | 313 | 280 | 662 | 170 | 2,410 | 1,840 | 602 | 667 | 597 | 263 | 272 |
| 10 | 152 | 206 | 216 | 671 | 280 | 2,400 | 1,780 | 572 | 1,690 | 746 | 164 | 288 |
| 11 | 156 | 141 | 198 | 668 | 300 | 2,320 | 1,490 | 361 | 2,610 | 621 | 236 | 228 |
| 12 | 120 | 235 | 190 | 602 | 280 | 2,170 | 1,210 | 412 | 2,570 | 542 | 175 | 298 |
| 13 | 100 | 254 | 220 | 685 | 550 | 2,030 | 1,230 | 356 | 1,920 | 432 | 172 | 118 |
| 14 | 158 | 177 | 368 | 661 | 600 | 1,840 | 1,160 | 449 | 1,350 | 548 | 277 | 49 |
| 15 | 155 | 252 | 409 | 1,130 | 550 | 1,700 | 1,200 | 491 | * 910 | 670 | 409 | 62 |
| 16 | 148 | 348 | 330 | 1,060 | 400 | 1,320 | 1,070 | 421 | * 730 | 626 | 226 | 139 |
| 17 | 142 | 365 | 368 | 904 | 360 | 1,160 | 939 | 446 | 791 | 536 | 208 | 396 |
| 18 | 138 | 512 | 593 | 600 | 500 | 1,280 | 902 | 372 | 938 | 500 | 288 | 214 |
| 19 | 142 | 689 | 1,410 | 600 | 480 | 1,460 | 1,060 | 486 | 1,170 | 480 | 260 | 220 |
| 20 | 101 | 663 | 1,710 | 550 | 600 | 1,480 | 894 | 396 | 1,110 | 324 | 405 | 206 |
| 21 | 125 | 616 | 1,530 | 500 | 900 | 1,480 | 844 | 524 | 894 | 338 | 354 | 103 |
| 22 | 148 | 522 | 950 | 550 | 1,100 | 1,190 | 858 | 521 | 693 | 360 | 290 | 158 |
| 23 | 497 | 366 | 800 | 550 | 1,230 | 816 | 943 | 476 | 706 | 378 | 295 | 219 |
| 24 | 368 | 279 | 650 | 460 | 1,440 | 870 | 812 | 484 | 575 | 353 | 78 | 149 |
| 25 | 426 | 300 | 650 | 440 | 1,580 | 1,160 | 746 | 526 | 532 | 266 | 215 | 154 |
| 26 | 378 | 310 | 600 | 460 | 1,700 | 1,790 | 772 | 800 | 494 | 380 | 248 | 144 |
| 27 | 220 | 263 | 600 | 300 | 1,730 | 2,200 | 627 | 753 | 539 | 344 | 240 | 142 |
| 28 | 278 | 238 | 550 | 550 | 1,510 | 2,180 | 636 | 789 | 501 | 356 | 224 | 62 |
| 29 | 334 | 244 | 460 | 440 | ----- | 1,930 | 502 | 936 | 486 | 362 | 488 | 155 |
| 30 | 162 | 208 | 398 | 420 | ----- | 1,650 | 568 | 1,050 | 422 | 363 | 466 | 158 |
| 31 | 149 | ----- | 515 | 340 | ----- | 1,240 | ----- | 948 | ----- | 452 | 252 | ----- |
| Month | Maximum | | | Minimum | | | Mean | | | Per square mile | | Run-off in inches |
| October | 497 | | | 100 | | | 209 | | | 0.325 | | 0.37 |
| November | 689 | | | 141 | | | 321 | | | .498 | | .56 |
| December | 1,710 | | | 130 | | | 507 | | | .787 | | .91 |
| January | 1,130 | | | 300 | | | 610 | | | .947 | | 1.09 |
| February | 1,730 | | | 170 | | | 674 | | | 1.05 | | 1.09 |
| March | 2,410 | | | 798 | | | 1,490 | | | 2.31 | | 2.66 |
| April | 1,840 | | | 502 | | | 1,050 | | | 1.63 | | 1.82 |
| May | 1,050 | | | 356 | | | 599 | | | .990 | | 1.07 |
| June | 2,610 | | | 363 | | | 870 | | | 1.35 | | 1.51 |
| July | 904 | | | 266 | | | 492 | | | .764 | | .88 |
| August | 488 | | | 78 | | | 259 | | | .402 | | .46 |
| September | 396 | | | 49 | | | 198 | | | .307 | | .34 |
| The year | 2,610 | | | 49 | | | 606 | | | .941 | | 12.76 |

* Estimated.

HOUSATONIC RIVER AT STEVENSON, CONN.

LOCATION.—Water-stage recorder in New Haven County one-fourth mile below dam of Connecticut Light & Power Co. at Stevenson, Fairfield County.

DRAINAGE AREA.—1,550 square miles.

RECORDS AVAILABLE.—August, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 5,530 second-feet Mar. 10 (gage height, 7.5 feet); minimum, less than 100 second-feet frequently, owing to power plant operation during low flow.

1928-1930: Maximum discharge, 12,900 second-feet Mar. 6, 1929 (gage height, 10.9 feet); minimum, less than 100 second-feet frequently, owing to power plant operation during low flow.

REMARKS.—Records good. Discharge for estimated period based on operating records from power plant above. Low flow completely regulated at power plant above gage. Further regulation provided at Rocky River development upstream which comprises storage reservoir with useful capacity of 5.9 billion cubic feet.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------------|---------|-------|-------|---------|-------|-------|-------|-------|-------|-----------------|-------|-------------------|
| 1..... | 513 | 1,010 | 400 | 1,600 | 1,220 | 3,890 | 2,750 | 1,250 | 594 | 1,140 | 679 | 620 |
| 2..... | 720 | 771 | 830 | 1,870 | 801 | 3,040 | 2,940 | 1,450 | 1,980 | 2,270 | 609 | 834 |
| 3..... | 640 | 591 | 735 | 2,240 | 2,020 | 2,450 | 2,760 | 1,550 | 1,580 | 1,990 | 222 | 561 |
| 4..... | 576 | 1,290 | 644 | 2,470 | 1,500 | 2,860 | 2,710 | 572 | 492 | 1,370 | * 630 | 590 |
| 5..... | 488 | 749 | 628 | 1,840 | 2,230 | 2,750 | 2,680 | 1,840 | 634 | 2,200 | * 550 | 604 |
| 6..... | 272 | 740 | 628 | 1,670 | 2,160 | 2,370 | 1,840 | 1,600 | 962 | 1,160 | * 520 | 462 |
| 7..... | 682 | 562 | 615 | 2,020 | 1,250 | 2,340 | 3,330 | 1,260 | 1,040 | 2,160 | * 480 | 228 |
| 8..... | 442 | 556 | 487 | 1,860 | 1,080 | 2,840 | 4,990 | 1,260 | 1,120 | 1,950 | * 440 | 541 |
| 9..... | 564 | 570 | 847 | 1,750 | 651 | 5,180 | 4,550 | 2,020 | 2,640 | 1,560 | * 320 | 552 |
| 10..... | 490 | 344 | 974 | 1,930 | 1,750 | 5,180 | 3,870 | 1,620 | 3,530 | 1,400 | * 220 | 488 |
| 11..... | 346 | 715 | 713 | 1,810 | 974 | 4,720 | 3,730 | 674 | 3,850 | 1,750 | * 440 | 556 |
| 12..... | 384 | 638 | 565 | 1,760 | 927 | 4,930 | 3,880 | 1,780 | 4,060 | 1,310 | * 460 | 457 |
| 13..... | 180 | 736 | 1,270 | 2,010 | 2,280 | 4,670 | 2,720 | 1,220 | 4,020 | 920 | 457 | 509 |
| 14..... | 344 | 624 | 1,300 | 2,510 | 3,160 | 4,080 | 3,400 | 1,070 | 3,250 | 1,620 | 482 | 210 |
| 15..... | 478 | 822 | 1,810 | 4,270 | 2,670 | 3,860 | 3,340 | 841 | 1,410 | 1,160 | 484 | 502 |
| 16..... | 234 | 686 | 998 | 3,800 | 974 | 2,970 | 3,310 | 1,250 | 1,750 | 1,660 | 552 | 502 |
| 17..... | 364 | 430 | 1,930 | 3,100 | 1,420 | 3,140 | 3,010 | 1,520 | 1,710 | 1,320 | 166 | 1,020 |
| 18..... | 414 | 2,020 | 2,540 | 2,400 | 946 | 3,110 | 2,800 | 666 | 2,560 | 976 | 466 | 1,760 |
| 19..... | 334 | 3,720 | 3,910 | 2,250 | 1,410 | 3,810 | 3,110 | 1,520 | 2,710 | 1,170 | 501 | 837 |
| 20..... | 167 | 3,030 | 5,210 | 2,070 | 2,490 | 3,370 | 1,520 | 1,300 | 2,510 | 763 | 478 | 473 |
| 21..... | 399 | 1,270 | 4,230 | 2,400 | 3,160 | 3,620 | 2,770 | 1,040 | 2,690 | 748 | 691 | 246 |
| 22..... | 775 | 522 | 3,770 | 1,970 | 3,430 | 3,040 | 2,590 | 976 | 924 | 666 | 680 | 470 |
| 23..... | 1,590 | 356 | 1,960 | 1,550 | 2,220 | 1,590 | 2,750 | 1,320 | 2,130 | 700 | 694 | 572 |
| 24..... | 1,240 | 46 | 2,130 | 1,510 | 3,410 | 2,470 | 2,460 | 1,060 | 1,130 | 827 | 611 | 577 |
| 25..... | 1,560 | 458 | 1,680 | 950 | 3,870 | 2,640 | 2,310 | 1,390 | 1,360 | 790 | 506 | 489 |
| 26..... | 808 | 460 | 2,010 | 1,550 | 4,570 | 4,440 | 2,500 | 1,880 | 1,410 | 790 | 493 | 534 |
| 27..... | 204 | 500 | 1,620 | 1,790 | 4,180 | 4,560 | 1,080 | 1,600 | 1,860 | 632 | 496 | 442 |
| 28..... | 530 | 756 | 2,370 | 1,600 | 3,920 | 4,040 | 2,950 | 1,740 | 2,470 | 800 | 484 | 224 |
| 29..... | 846 | 932 | 1,880 | 1,860 | ----- | 3,860 | 3,700 | 2,090 | 1,040 | 642 | 599 | 516 |
| 30..... | 958 | 594 | 1,920 | 1,750 | ----- | 3,800 | 1,360 | 1,500 | 1,420 | 740 | 523 | 487 |
| 31..... | 1,040 | ----- | 1,890 | 1,840 | ----- | 3,010 | ----- | 1,510 | ----- | 650 | 366 | ----- |
| Month | Maximum | | | Minimum | | | Mean | | | Per square mile | | Run-off in inches |
| October..... | 1,590 | | | 167 | | | 599 | | | 0.386 | | 0.44 |
| November..... | 3,720 | | | 46 | | | 883 | | | 1.10 | | .64 |
| December..... | 5,210 | | | 400 | | | 1,700 | | | 1.10 | | 1.27 |
| January..... | 4,270 | | | 950 | | | 2,060 | | | 1.33 | | 1.53 |
| February..... | 4,570 | | | 651 | | | 2,170 | | | 1.40 | | 1.46 |
| March..... | 5,180 | | | 1,590 | | | 3,500 | | | 2.26 | | 2.61 |
| April..... | 4,990 | | | 1,080 | | | 2,920 | | | 1.88 | | 2.10 |
| May..... | 2,090 | | | 572 | | | 1,370 | | | .824 | | 1.02 |
| June..... | 4,060 | | | 594 | | | 1,960 | | | 1.26 | | 1.41 |
| July..... | 2,270 | | | 632 | | | 1,220 | | | .787 | | .91 |
| August..... | 694 | | | 166 | | | 494 | | | .319 | | .37 |
| September..... | 1,760 | | | 210 | | | 561 | | | .362 | | .40 |
| The year..... | 5,210 | | | 46 | | | 1,620 | | | 1.05 | | 14.16 |

* Estimated.

TENMILE RIVER NEAR GAYLORDSVILLE, CONN.

LOCATION.—Water-stage recorder 1 mile above Connecticut-New York State line, 1½ miles above confluence with Housatonic River, and 2½ miles northwest of Gaylordsville, Litchfield County.

DRAINAGE AREA.—204 square miles.

RECORDS AVAILABLE.—December, 1929, to September, 1930.

EXTREMES.—Maximum discharge during period, 980 second-feet Mar. 9 (gauge height, 3.9 feet); minimum, 19 second-feet Aug. 13 (gauge height, 0.67 foot).

REMARKS.—Records excellent except those for periods of ice effect, Jan. 6, Jan. 17 to Feb. 13, Feb. 17–20, which are fair.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | | 230 | 95 | 403 | 286 | 161 | 123 | 144 | 39 | 30 |
| 2..... | | 235 | 110 | 420 | 239 | 163 | 106 | 257 | 34 | 33 |
| 3..... | | 301 | 110 | 379 | 286 | 185 | 95 | 252 | 38 | 36 |
| 4..... | | 307 | 110 | 320 | 266 | 175 | 86 | 194 | 32 | 37 |
| 5..... | | 206 | 100 | 265 | 249 | 155 | 77 | 167 | 30 | 31 |
| 6..... | | 180 | 95 | 274 | 238 | 144 | 68 | 155 | 26 | 29 |
| 7..... | | 210 | 95 | 269 | 583 | 140 | 72 | 171 | 26 | 29 |
| 8..... | | 230 | 100 | 614 | 605 | 155 | 95 | 139 | 25 | 34 |
| 9..... | | 246 | 110 | 855 | 464 | 155 | 157 | 121 | 25 | 42 |
| 10..... | | 238 | 110 | 645 | 413 | 139 | 228 | 135 | 21 | 37 |
| 11..... | | 174 | 100 | 585 | 393 | 123 | 357 | 131 | 20 | 29 |
| 12..... | | 192 | 100 | 690 | 427 | 114 | 283 | 114 | 20 | 26 |
| 13..... | | 212 | 180 | 605 | 403 | 109 | 222 | 103 | 20 | 27 |
| 14..... | | 307 | 508 | 537 | 396 | 103 | 183 | 111 | 20 | 36 |
| 15..... | | 427 | 261 | 449 | 360 | 121 | 159 | 144 | 29 | 47 |
| 16..... | | 369 | 161 | 427 | 325 | 133 | 139 | 114 | 45 | 64 |
| 17..... | | 240 | 140 | 410 | 313 | 126 | 121 | 93 | 58 | 531 |
| 18..... | | 200 | 130 | 410 | 332 | 116 | 192 | 78 | 64 | 215 |
| 19..... | | 180 | 170 | 534 | 332 | 112 | 238 | 75 | 52 | 131 |
| 20..... | | 170 | 320 | 464 | 304 | 124 | 215 | 67 | 42 | 106 |
| 21..... | | 160 | 453 | 410 | 274 | 119 | 179 | 59 | 39 | 92 |
| 22..... | | 150 | 369 | 344 | 272 | 105 | 150 | 55 | 35 | 81 |
| 23..... | | 140 | 338 | 295 | 249 | 106 | 131 | 59 | 33 | 68 |
| 24..... | | 130 | 424 | 298 | 233 | 88 | 114 | 64 | 39 | 59 |
| 25..... | 252 | 120 | 517 | 353 | 228 | 133 | 104 | 64 | 40 | 49 |
| 26..... | 220 | 110 | 692 | 525 | 220 | 192 | 99 | 56 | 37 | 49 |
| 27..... | 208 | 110 | 506 | 435 | 205 | 173 | 148 | 51 | 33 | 50 |
| 28..... | 205 | 120 | 445 | 376 | 192 | 132 | 146 | 52 | 30 | 47 |
| 29..... | 249 | 110 | ----- | 347 | 179 | 139 | 112 | 51 | 27 | 46 |
| 30..... | 246 | 110 | ----- | 335 | 171 | 159 | 96 | 48 | 30 | 41 |
| 31..... | 230 | 100 | ----- | 319 | ----- | 144 | ----- | 42 | 31 | ----- |

| Month | Maximum | Minimum | Mean | Per square mille | Run-off in inches |
|---------------------|---------|---------|------|---------------------|----------------------|
| December 25–31..... | 252 | 205 | 230 | 1.13 | 0.29 |
| January..... | 427 | 100 | 200 | .980 | 1.13 |
| February..... | 692 | 95 | 245 | 1.20 | 1.25 |
| March..... | 855 | 265 | 438 | 2.15 | 2.48 |
| April..... | 605 | 171 | 316 | 1.55 | 1.73 |
| May..... | 192 | 88 | 137 | .672 | .77 |
| June..... | 357 | 68 | 150 | .735 | .82 |
| July..... | 257 | 42 | 109 | .534 | .62 |
| August..... | 64 | 20 | 33.5 | .164 | .19 |
| September..... | 531 | 26 | 71.1 | .348 | .39 |

NAUGATUCK RIVER NEAR NAUGATUCK, CONN.

LOCATION.—Water-stage recorder one-fifth mile above Beacon Hill Brook, 1.3 miles below Naugatuck, New Haven County, and 12 miles above mouth.

DRAINAGE AREA.—247 square miles.

RECORDS AVAILABLE.—June, 1918, to September, 1921; September, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,500 second-feet Mar. 8 (gage height, 4.45 feet); minimum not determined.

1918-1921, 1928-1930: Maximum stage, 8.0 feet Mar. 13, 1920 (discharge uncertain; previously published figure probably too low); minimum discharge, about 34 second-feet Aug. 31, 1921.

REMARKS.—Records good except those for periods of ice effect, Dec. 2-6, 11-13, Jan. 18 to Feb. 3, Feb. 17, 18, and those estimated, which are fair. Slight effect on distribution of flow produced by operation of several small reservoirs upstream.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | ° 74 | ° 140 | 105 | 333 | 150 | 442 | 456 | 246 | 207 | 143 | 82 | ° 75 |
| 2..... | 183 | ° 130 | 100 | 333 | 150 | 437 | 461 | 249 | 186 | 231 | ° 78 | 117 |
| 3..... | 342 | ° 225 | 100 | 502 | 180 | 446 | 432 | 302 | 166 | 197 | ° 77 | 105 |
| 4..... | 182 | ° 300 | 100 | 588 | 277 | 362 | 401 | 273 | 146 | 148 | ° 83 | 91 |
| 5..... | 134 | ° 250 | 100 | 325 | 461 | 318 | 362 | 255 | 138 | 136 | 82 | 80 |
| 6..... | ° 103 | ° 150 | 110 | 310 | 280 | 306 | 341 | 214 | 127 | 149 | 80 | ° 74 |
| 7..... | ° 102 | ° 130 | 129 | 304 | 223 | 298 | 1,470 | 207 | 125 | 258 | 87 | ° 70 |
| 8..... | ° 97 | ° 120 | 143 | 329 | 198 | 1,350 | 1,360 | 254 | 177 | 184 | ° 85 | ° 78 |
| 9..... | ° 95 | ° 115 | 172 | 375 | 169 | 1,630 | 815 | 310 | 325 | 188 | ° 75 | 85 |
| 10..... | ° 93 | ° 115 | 164 | 375 | 175 | 800 | 602 | 236 | 684 | 236 | ° 72 | 80 |
| 11..... | ° 91 | ° 110 | 130 | 287 | 168 | 660 | 558 | 198 | 995 | 160 | ° 76 | 80 |
| 12..... | ° 93 | ° 105 | 100 | 284 | 156 | 898 | 614 | 195 | 579 | 138 | 82 | ° 75 |
| 13..... | ° 91 | ° 125 | 110 | 401 | 780 | 732 | 575 | 178 | 371 | 127 | ° 80 | ° 72 |
| 14..... | ° 90 | ° 130 | 272 | 880 | 671 | 602 | 553 | 169 | 269 | 140 | ° 90 | ° 69 |
| 15..... | ° 95 | ° 160 | 366 | 1,350 | 343 | 475 | 480 | 299 | 214 | 216 | 106 | ° 81 |
| 16..... | ° 93 | 138 | 310 | 801 | 210 | 451 | 428 | 383 | 189 | 153 | 120 | 88 |
| 17..... | ° 92 | 114 | 266 | 475 | 190 | 456 | 423 | 284 | 172 | 137 | 93 | 155 |
| 18..... | ° 92 | 455 | 507 | 360 | 180 | 456 | 485 | 229 | 284 | 112 | 94 | 135 |
| 19..... | ° 91 | 496 | 1,460 | 300 | 302 | 650 | 597 | 226 | 446 | 91 | 90 | 95 |
| 20..... | ° 90 | 284 | 1,320 | 260 | 486 | 578 | 500 | 262 | 436 | ° 74 | 145 | ° 77 |
| 21..... | ° 93 | 220 | 678 | 220 | 558 | 475 | 419 | 269 | 324 | ° 90 | 137 | ° 74 |
| 22..... | ° 121 | 195 | 437 | 200 | 451 | 388 | 423 | 239 | 220 | 104 | 90 | ° 77 |
| 23..... | 819 | 164 | 341 | 190 | 463 | 333 | 428 | 214 | 195 | 99 | 87 | ° 77 |
| 24..... | 343 | 146 | 306 | 180 | 666 | 341 | 371 | 172 | 164 | 106 | 86 | ° 74 |
| 25..... | 195 | 151 | 280 | 160 | 661 | 615 | 341 | 373 | 146 | 102 | 94 | ° 77 |
| 26..... | ° 135 | 151 | 259 | 160 | 1,010 | 1,990 | 306 | 514 | 134 | 96 | 86 | ° 75 |
| 27..... | ° 120 | 156 | 262 | 150 | 667 | 1,050 | 291 | 324 | 387 | ° 77 | 84 | ° 70 |
| 28..... | ° 110 | 151 | 294 | 160 | 505 | 726 | 287 | 259 | 307 | 103 | 78 | ° 65 |
| 29..... | ° 105 | 146 | 405 | 160 | ----- | 586 | 266 | 347 | 188 | 101 | 89 | ° 70 |
| 30..... | ° 100 | 112 | 414 | 160 | ----- | 536 | 255 | 310 | 159 | 93 | 86 | ° 70 |
| 31..... | ° 110 | ----- | 341 | 150 | ----- | 500 | ----- | 252 | ----- | 90 | ° 77 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 819 | 74 | 148 | 0.598 | 0.69 |
| November..... | 496 | 105 | 179 | .725 | .81 |
| December..... | 1,460 | 100 | 325 | 1.32 | 1.52 |
| January..... | 1,350 | 150 | 357 | 1.45 | 1.67 |
| February..... | 1,010 | 150 | 383 | 1.55 | 1.61 |
| March..... | 1,950 | 298 | 642 | 2.60 | 3.00 |
| April..... | 1,470 | 255 | 511 | 2.07 | 2.31 |
| May..... | 514 | 169 | 266 | 1.08 | 1.24 |
| June..... | 985 | 125 | 282 | 1.14 | 1.27 |
| July..... | 258 | 74 | 138 | .556 | .64 |
| August..... | 148 | 72 | 89.4 | .362 | .42 |
| September..... | 155 | 65 | 83.7 | .338 | .38 |
| The year..... | 1,960 | 65 | 283 | 1.15 | 15.56 |

° Estimated.

HUDSON RIVER BASIN

HUDSON RIVER NEAR NEWCOMB, N. Y.

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

DRAINAGE AREA.—192 square miles.

RECORDS AVAILABLE.—September, 1925, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,740 second-feet Apr. 14 (gage height, 5.55 feet); minimum, 43 second-feet Sept. 13 (gage height, 1.43 feet).

1925-1930: Maximum discharge, 6,250 second-feet (revised) Apr. 9, 1928 (gage height, 8.0 feet); minimum, that of Sept. 13, 1930.

REMARKS.—Records good except those for period of ice effect, Jan. 21 to Feb. 19, and for periods of backwater from logs, Oct. 1 to Nov. 3, which are fair. Slight regulation by small storage reservoirs on headwaters.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|-------|-------|------|-------|-------|-------|------|------|-------|
| 1..... | 60 | 160 | 197 | 217 | 170 | 514 | 311 | 742 | 840 | 338 | 242 | 71 |
| 2..... | 70 | 200 | 191 | 210 | 160 | 442 | 338 | 1,100 | 910 | 489 | 200 | 81 |
| 3..... | 160 | 400 | 181 | 217 | 160 | 378 | 357 | 1,670 | 980 | 489 | 128 | 83 |
| 4..... | 300 | 442 | 178 | 258 | 160 | 338 | 398 | 1,860 | 840 | 398 | 105 | 85 |
| 5..... | 320 | 398 | 178 | 256 | 160 | 307 | 420 | 1,490 | 710 | 357 | 102 | 85 |
| 6..... | 280 | 318 | 175 | 238 | 140 | 288 | 449 | 1,040 | 595 | 311 | 100 | 87 |
| 7..... | 280 | 259 | 161 | 277 | 140 | 281 | 959 | 1,140 | 442 | 277 | 92 | 85 |
| 8..... | 300 | 224 | 152 | 453 | 130 | 338 | 2,000 | 1,220 | 378 | 259 | 78 | 78 |
| 9..... | 300 | 204 | 149 | 1,100 | 120 | 466 | 2,000 | 1,300 | 378 | 242 | 68 | 73 |
| 10..... | 240 | 191 | 139 | 2,010 | 120 | 489 | 1,570 | 1,220 | 622 | 224 | 71 | 62 |
| 11..... | 220 | 178 | 133 | 1,950 | 120 | 514 | 1,220 | 910 | 1,140 | 210 | 98 | 50 |
| 12..... | 190 | 191 | 123 | 1,570 | 120 | 540 | 1,306 | 742 | 1,220 | 210 | 92 | 44 |
| 13..... | 190 | 178 | 123 | 1,140 | 130 | 540 | 1,750 | 680 | 1,140 | 231 | 70 | 44 |
| 14..... | 190 | 204 | 126 | 910 | 130 | 489 | 2,470 | 622 | 1,060 | 274 | 51 | 47 |
| 15..... | 200 | 300 | 126 | 910 | 130 | 420 | 2,580 | 595 | 980 | 338 | 73 | 55 |
| 16..... | 200 | 622 | 123 | 980 | 120 | 378 | 2,150 | 680 | 420 | 303 | 118 | 70 |
| 17..... | 180 | 595 | 121 | 910 | 110 | 357 | 1,750 | 650 | 540 | 267 | 133 | 109 |
| 18..... | 160 | 540 | 144 | 710 | 110 | 357 | 1,390 | 595 | 680 | 238 | 128 | 164 |
| 19..... | 150 | 622 | 247 | 568 | 110 | 378 | 1,140 | 622 | 775 | 210 | 123 | 155 |
| 20..... | 140 | 622 | 534 | 466 | 128 | 420 | 1,220 | 650 | 808 | 172 | 112 | 109 |
| 21..... | 130 | 540 | 945 | 400 | 149 | 378 | 1,220 | 742 | 808 | 136 | 96 | 102 |
| 22..... | 120 | 466 | 858 | 340 | 194 | 357 | 980 | 840 | 1,060 | 118 | 83 | 89 |
| 23..... | 170 | 357 | 650 | 320 | 263 | 318 | 840 | 840 | 980 | 102 | 78 | 81 |
| 24..... | 220 | 338 | 514 | 280 | 357 | 303 | 650 | 910 | 710 | 90 | 79 | 78 |
| 25..... | 280 | 311 | 420 | 260 | 514 | 292 | 568 | 1,060 | 568 | 85 | 83 | 75 |
| 26..... | 260 | 274 | 357 | 240 | 650 | 318 | 514 | 1,300 | 420 | 90 | 85 | 78 |
| 27..... | 240 | 252 | 318 | 220 | 710 | 420 | 489 | 1,390 | 357 | 107 | 87 | 81 |
| 28..... | 220 | 238 | 285 | 200 | 595 | 442 | 540 | 1,300 | 318 | 136 | 85 | 81 |
| 29..... | 200 | 224 | 263 | 200 | ----- | 398 | 595 | 1,220 | 311 | 178 | 81 | 81 |
| 30..... | 190 | 210 | 245 | 200 | ----- | 357 | 650 | 1,140 | 296 | 210 | 76 | 78 |
| 31..... | 170 | ----- | 231 | 190 | ----- | 318 | ----- | 980 | ----- | 234 | 75 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 320 | 60 | 204 | 1.06 | 1.22 |
| November..... | 622 | 160 | 335 | 1.74 | 1.94 |
| December..... | 945 | 121 | 277 | 1.44 | 1.66 |
| January..... | 2,010 | 190 | 586 | 3.05 | 3.52 |
| February..... | 710 | 110 | 218 | 1.14 | 1.19 |
| March..... | 540 | 281 | 391 | 2.04 | 2.35 |
| April..... | 2,580 | 311 | 1,090 | 5.68 | 6.34 |
| May..... | 1,860 | 595 | 1,010 | 5.26 | 6.06 |
| June..... | 1,220 | 296 | 710 | 3.70 | 4.13 |
| July..... | 489 | 85 | 236 | 1.23 | 1.42 |
| August..... | 242 | 51 | 99.7 | .519 | .60 |
| September..... | 164 | 44 | 82.0 | .427 | .48 |
| The year..... | 2,580 | 44 | 437 | 2.28 | 30.91 |

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

LOCATION.—Water-stage recorder half a mile above Gooley, Essex County, 1 mile above mouth of Indian River, and 5 miles northeast of Indian Lake village, Hamilton County.

DRAINAGE AREA.—420 square miles.

RECORDS AVAILABLE.—August, 1916, to September, 1930.

EXTREMES.—Maximum discharge during year, 5,760 second-feet Apr. 15; minimum, 97 second-feet Sept. 14 (gage height, 1.57 feet).

1916-1930: Maximum discharge, 13,900 second-feet Apr. 12, 1922 (gage height, 10.0 feet); minimum, 44 second-feet Aug. 22, 23, 1923.

REMARKS.—Records good except those for periods of ice effect, Nov. 24 to Dec. 20, Dec. 24 to Jan. 9, Jan. 18 to Apr. 4, and those estimated, which are fair. Seasonal flow only slightly regulated by storage.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|---------|------|-------|
| 1 | 129 | 368 | 1,000 | 600 | 380 | 1,000 | 750 | 1,440 | 1,540 | * 650 | 283 | 129 |
| 2 | 143 | 379 | 1,000 | 600 | 380 | 900 | 900 | 1,870 | 1,350 | * 1,000 | 254 | 162 |
| 3 | 533 | 516 | 900 | 700 | 380 | 800 | 1,000 | 3,640 | 1,440 | * 1,000 | 221 | 174 |
| 4 | 688 | 650 | 750 | 850 | 360 | 750 | 900 | 3,470 | 1,370 | * 750 | 217 | 178 |
| 5 | 658 | 621 | 420 | 800 | 340 | 700 | 929 | 2,170 | 1,100 | * 650 | 208 | 170 |
| 6 | 572 | 551 | 380 | 750 | 320 | 650 | 1,090 | 1,700 | 873 | * 550 | 187 | 155 |
| 7 | 516 | 482 | 440 | 700 | 300 | 550 | 3,080 | 1,700 | 1,220 | * 500 | 178 | 162 |
| 8 | 544 | 430 | 600 | 1,400 | 280 | 700 | 5,210 | 1,930 | 1,540 | * 460 | 187 | 136 |
| 9 | 523 | 384 | 1,100 | 4,000 | 300 | 1,200 | 4,340 | 2,050 | 1,590 | * 460 | 182 | 125 |
| 10 | 450 | 351 | 850 | 4,340 | 300 | 1,300 | 3,180 | 1,870 | 1,540 | * 650 | 187 | 112 |
| 11 | 402 | 304 | 440 | 3,940 | 300 | 1,200 | 2,360 | 1,590 | 2,050 | * 750 | 178 | 105 |
| 12 | 362 | 299 | 360 | 3,040 | 300 | 1,300 | 2,900 | 1,250 | 1,810 | * 850 | 170 | 102 |
| 13 | 357 | 294 | 320 | 2,308 | 320 | 1,300 | 4,020 | 1,100 | 1,390 | 1,100 | 158 | 102 |
| 14 | 443 | 354 | 260 | 1,810 | 300 | 1,100 | 5,030 | 979 | 1,090 | 1,390 | 147 | 102 |
| 15 | 450 | 551 | 280 | 1,700 | 320 | 900 | 5,390 | 970 | 849 | 1,190 | 139 | 102 |
| 16 | 436 | 801 | 280 | 1,810 | 900 | 800 | 4,680 | 1,170 | 695 | 1,050 | 166 | 112 |
| 17 | 419 | 849 | 320 | 1,810 | 1,000 | 750 | 3,250 | 1,130 | 672 | 523 | 191 | 182 |
| 18 | 379 | 862 | 380 | 1,400 | 700 | 800 | 2,500 | 1,010 | 929 | 373 | 187 | 244 |
| 19 | 345 | 1,250 | 650 | 1,100 | 500 | 1,100 | 2,430 | 897 | 1,530 | 319 | 195 | 217 |
| 20 | 849 | 1,130 | 1,600 | 950 | 360 | 1,000 | 2,500 | 1,300 | 1,170 | 273 | 200 | 187 |
| 21 | 755 | 979 | 2,360 | 800 | 550 | 900 | 2,300 | 1,540 | 1,020 | 230 | 195 | 166 |
| 22 | 658 | 857 | 2,300 | 700 | 750 | 800 | 2,050 | 1,440 | 1,220 | 226 | 174 | 143 |
| 23 | 584 | 755 | 1,870 | 650 | 800 | 750 | 1,540 | 1,440 | 1,290 | 212 | 151 | 136 |
| 24 | 607 | 650 | 1,500 | 600 | 1,100 | 700 | 1,300 | 1,340 | 1,060 | 195 | 151 | 125 |
| 25 | 586 | 600 | 1,200 | 550 | 1,500 | 650 | 1,140 | 1,540 | 841 | 178 | 170 | 119 |
| 26 | 544 | 500 | 1,100 | 500 | 1,700 | 700 | 1,050 | 2,170 | 778 | 170 | 155 | 136 |
| 27 | 495 | 460 | 900 | 460 | 1,600 | 950 | 1,070 | 2,360 | 841 | 182 | 143 | 139 |
| 28 | 469 | 420 | 800 | 440 | 1,300 | 1,000 | 1,170 | 2,050 | 778 | 221 | 139 | 158 |
| 29 | 430 | 400 | 750 | 440 | ----- | 950 | 1,210 | 2,110 | * 650 | 254 | 129 | 139 |
| 30 | 413 | 380 | 650 | 420 | ----- | 900 | 1,280 | 1,990 | * 600 | 362 | 129 | 132 |
| 31 | 379 | ----- | 650 | 400 | ----- | 800 | ----- | 1,700 | ----- | 330 | 119 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 849 | 129 | 488 | 1.16 | 1.34 |
| November | 1,250 | 294 | 581 | 1.38 | 1.54 |
| December | 2,360 | 260 | 852 | 2.03 | 2.34 |
| January | 4,340 | 400 | 1,310 | 3.12 | 3.60 |
| February | 1,700 | 280 | 630 | 1.50 | 1.56 |
| March | 1,300 | 550 | 900 | 2.14 | 2.47 |
| April | 5,390 | 750 | 2,350 | 5.60 | 6.25 |
| May | 3,640 | 897 | 1,710 | 4.07 | 4.69 |
| June | 2,050 | 600 | 1,160 | 2.76 | 3.08 |
| July | 1,390 | 170 | 550 | 1.31 | 1.51 |
| August | 283 | 119 | 177 | .421 | .49 |
| September | 244 | 102 | 145 | .345 | .38 |
| The year | 5,390 | 102 | 905 | 2.15 | 29.25 |

* Estimated.

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, 1930.

EXTREMES.—Maximum discharge during year, 9,390 second-feet Apr. 8 (gage height, 6.9 feet); minimum, 478 second-feet July 26 (gage height, 2.6 feet). 1907-1930: Maximum discharge, 30,000 second-feet Mar. 27, 1913 (gage height, 12.0 feet); minimum, 128 second-feet Sept. 2, 1923 (gage height, 1.92 feet).

REMARKS.—Records good except those for periods of ice effect, Dec. 1-16, Jan. 1-9, Jan. 20 to Feb. 17, and for days of considerable range in stage, which are fair. Flow partly regulated by storage in Indian Lake Reservoir and by numerous lakes and ponds in basin.*

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----------|---------|-------|---------|-------|-------|-------|-----------------|-------|-------------------|-------|-------|-------|
| 1 | 795 | 665 | 1,100 | 850 | 600 | 1,860 | 1,780 | 2,340 | 2,510 | 1,280 | 1,060 | 788 |
| 2 | 885 | 665 | 1,400 | 800 | 1,300 | 1,430 | 2,090 | 2,690 | 2,170 | 1,840 | 1,120 | 840 |
| 3 | 1,320 | 840 | 1,300 | 850 | 1,500 | 1,300 | 2,340 | 5,100 | 2,170 | 1,500 | 1,060 | 840 |
| 4 | 1,130 | 1,030 | 1,100 | 1,100 | 1,500 | 1,120 | 1,710 | 5,130 | 2,090 | 1,240 | 1,060 | 840 |
| 5 | 980 | 1,030 | 750 | 1,100 | 1,400 | 1,060 | 1,500 | 3,560 | 2,170 | 1,000 | 1,060 | 840 |
| 6 | 795 | 932 | 600 | 1,000 | 1,400 | 1,000 | 2,100 | 3,070 | 1,780 | 1,430 | 1,000 | 788 |
| 7 | 705 | 840 | 550 | 1,000 | 1,300 | 895 | 6,920 | 2,880 | 1,500 | 1,640 | 1,000 | 788 |
| 8 | 795 | 750 | 700 | 2,000 | 1,300 | 1,190 | 8,500 | 3,480 | 2,010 | 1,570 | 1,000 | 788 |
| 9 | 885 | 690 | 900 | 6,500 | 1,300 | 2,020 | 6,960 | 3,690 | 2,090 | 1,500 | 1,060 | 737 |
| 10 | 795 | 642 | 1,300 | 6,680 | 1,300 | 2,170 | 5,090 | 3,670 | 3,380 | 1,570 | 1,000 | 690 |
| 11 | 625 | 599 | 1,200 | 5,610 | 1,300 | 1,940 | 4,130 | 2,880 | 4,360 | 1,210 | 1,000 | 642 |
| 12 | 590 | 950 | 600 | 4,360 | 1,400 | 2,340 | 5,350 | 2,340 | 3,480 | 1,010 | 950 | 642 |
| 13 | 625 | 950 | 550 | 3,270 | 1,400 | 2,340 | 7,240 | 2,010 | 2,690 | 1,500 | 950 | 642 |
| 14 | 750 | 1,060 | 550 | 2,880 | 1,400 | 2,090 | 8,440 | 1,780 | 2,170 | 1,900 | 895 | 642 |
| 15 | 1,080 | 950 | 650 | 2,880 | 1,300 | 1,570 | 8,640 | 1,780 | 1,860 | 1,570 | 950 | 642 |
| 16 | 1,180 | 1,120 | 700 | 2,880 | 1,500 | 1,430 | 6,690 | 2,170 | 1,500 | 1,500 | 950 | 642 |
| 17 | 1,180 | 1,180 | 690 | 2,510 | 1,900 | 1,300 | 5,090 | 2,010 | 1,570 | 1,370 | 950 | 737 |
| 18 | 795 | 1,290 | 895 | 2,090 | 2,010 | 1,300 | 4,130 | 1,780 | 2,170 | 772 | 895 | 788 |
| 19 | 625 | 2,110 | 1,240 | 1,710 | 1,570 | 1,430 | 3,690 | 1,570 | 2,940 | 846 | 1,000 | 737 |
| 20 | 1,130 | 1,940 | 2,710 | 1,500 | 1,430 | 1,500 | 3,690 | 2,010 | 2,340 | 1,180 | 1,000 | 737 |
| 21 | 1,080 | 1,860 | 3,270 | 1,300 | 1,710 | 1,430 | 3,480 | 2,690 | 2,010 | 1,180 | 950 | 690 |
| 22 | 1,290 | 1,300 | 3,270 | 1,200 | 2,170 | 1,360 | 3,270 | 2,690 | 2,170 | 1,180 | 950 | 642 |
| 23 | 1,530 | 1,060 | 2,510 | 1,100 | 2,510 | 1,180 | 2,510 | 2,510 | 2,010 | 1,120 | 895 | 599 |
| 24 | 1,130 | 1,060 | 2,090 | 950 | 2,880 | 1,000 | 2,170 | 2,340 | 1,710 | 1,060 | 895 | 599 |
| 25 | 980 | 895 | 1,940 | 850 | 3,070 | 1,000 | 1,940 | 2,760 | 1,430 | 620 | 895 | 599 |
| 26 | 932 | 840 | 1,640 | 750 | 2,880 | 1,240 | 1,780 | 3,550 | 1,300 | 618 | 895 | 599 |
| 27 | 795 | 788 | 1,500 | 750 | 2,690 | 1,430 | 1,860 | 4,140 | 1,300 | 1,060 | 840 | 599 |
| 28 | 750 | 737 | 1,240 | 750 | 2,340 | 1,570 | 2,010 | 3,690 | 1,240 | 1,120 | 840 | 599 |
| 29 | 705 | 642 | 1,120 | 750 | ----- | 1,430 | 2,010 | 3,690 | 1,180 | 1,180 | 788 | 556 |
| 30 | 750 | 556 | 950 | 700 | ----- | 1,940 | 2,170 | 3,480 | 1,060 | 1,300 | 788 | 556 |
| 31 | 705 | ----- | 895 | 600 | ----- | 2,010 | ----- | 2,880 | ----- | 1,000 | 788 | ----- |
| Month | Maximum | | Minimum | | Mean | | Per square mile | | Run-off in inches | | | |
| October | 1,530 | | 590 | | 913 | | 1.15 | | 1.33 | | | |
| November | 2,110 | | 556 | | 999 | | 1.26 | | 1.41 | | | |
| December | 3,270 | | 550 | | 1,290 | | 1.63 | | 1.88 | | | |
| January | 6,680 | | 600 | | 1,900 | | 2.50 | | 2.88 | | | |
| February | 3,070 | | 600 | | 1,730 | | 2.18 | | 2.27 | | | |
| March | 2,340 | | 895 | | 1,510 | | 1.91 | | 2.20 | | | |
| April | 8,400 | | 1,500 | | 3,990 | | 5.04 | | 5.62 | | | |
| May | 5,130 | | 1,570 | | 2,900 | | 3.66 | | 4.22 | | | |
| June | 4,360 | | 1,060 | | 2,080 | | 2.63 | | 2.93 | | | |
| July | 1,900 | | 618 | | 1,250 | | 1.58 | | 1.82 | | | |
| August | 1,120 | | 788 | | 951 | | 1.20 | | 1.38 | | | |
| September | 840 | | 556 | | 694 | | .876 | | .98 | | | |
| The year | 8,800 | | 550 | | 1,690 | | 2.13 | | 28.92 | | | |

* Estimated.

HUDSON RIVER AT HADLEY, N. Y.

LOCATION.—Water-stage recorder at Hadley, Saratoga County, one-fourth mile above mouth of Sacandaga River and 400 feet below mouth of Lake Luzerne outlet.

DRAINAGE AREA.—1,660 square miles.

RECORDS AVAILABLE.—July, 1921, to September, 1930.

EXTREMES.—Maximum discharge during year, 16,700 second-feet Apr. 8 (gage height, 12.1 feet); minimum, 784 second-feet Sept. 30 (gage height, 2.09 feet).
1921–1930: Maximum discharge, 33,100 second-feet Apr. 12, 1922 (gage height, 19.71 feet); minimum, 362 second-feet Sept. 3, 1923 (gage height, 1.19 feet).

REMARKS.—Records good except those for periods of backwater from ice or from flashboards on dam, Oct. 1 to Jan. 9, Jan. 20 to Mar. 20, which are fair. Flow partly regulated by storage in Indian Lake and other reservcirs.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 1 | 1,000 | 1,100 | 1,200 | 1,500 | 1,600 | 3,800 | 4,560 | 4,080 | 4,880 | 2,210 | 1,360 | 1,120 |
| 2 | 1,200 | 1,100 | 1,800 | 1,400 | 1,700 | 3,400 | 5,200 | 4,560 | 4,400 | 3,040 | 1,500 | 1,160 |
| 3 | 1,900 | 1,200 | 1,900 | 1,600 | 2,400 | 3,000 | 5,360 | 6,160 | 4,000 | 2,900 | 1,500 | 1,200 |
| 4 | 2,200 | 1,400 | 1,700 | 1,900 | 2,400 | 2,800 | 5,040 | 7,520 | 3,840 | 2,510 | 1,500 | 1,160 |
| 5 | 1,600 | 1,500 | 1,500 | 1,500 | 2,400 | 2,600 | 4,720 | 6,330 | 3,700 | 2,210 | 1,500 | 1,160 |
| 6 | 1,300 | 1,400 | 1,200 | 1,700 | 2,200 | 2,400 | 5,200 | 5,200 | 3,400 | 2,150 | 1,460 | 1,120 |
| 7 | 1,200 | 1,300 | 1,000 | 1,500 | 2,000 | 2,600 | 10,900 | 4,880 | 2,970 | 2,640 | 1,410 | 1,070 |
| 8 | 1,200 | 1,200 | 1,100 | 3,600 | 2,000 | 3,200 | 15,900 | 5,200 | 3,180 | 2,580 | 1,500 | 1,060 |
| 9 | 1,300 | 1,100 | 1,300 | 9,000 | 2,000 | 5,000 | 13,700 | 5,680 | 3,620 | 2,450 | 1,550 | 1,020 |
| 10 | 1,200 | 1,000 | 1,600 | 9,220 | 2,000 | 5,500 | 11,500 | 5,520 | 6,420 | 2,390 | 1,460 | 955 |
| 11 | 1,100 | 1,000 | 1,700 | 8,200 | 2,000 | 6,000 | 9,900 | 5,040 | 8,540 | 2,210 | 1,460 | 932 |
| 12 | 1,000 | 1,100 | 1,400 | 7,180 | 2,000 | 6,000 | 10,100 | 4,400 | 7,180 | 1,700 | 1,410 | 911 |
| 13 | 1,000 | 1,300 | 1,100 | 6,330 | 2,000 | 6,000 | 11,700 | 3,840 | 5,840 | 2,090 | 1,360 | 897 |
| 14 | 1,100 | 1,400 | 1,000 | 5,680 | 2,200 | 5,500 | 13,400 | 3,540 | 4,880 | 2,510 | 1,320 | 897 |
| 15 | 1,300 | 1,500 | 1,100 | 5,520 | 2,000 | 4,800 | 13,900 | 3,540 | 4,080 | 2,580 | 1,360 | 876 |
| 16 | 1,600 | 1,600 | 1,100 | 5,840 | 1,900 | 4,600 | 12,200 | 4,080 | 3,620 | 2,330 | 1,460 | 1,060 |
| 17 | 1,600 | 1,700 | 1,200 | 4,880 | 1,800 | 4,200 | 10,400 | 3,920 | 3,250 | 2,210 | 1,410 | 1,320 |
| 18 | 1,400 | 2,200 | 1,400 | 4,240 | 2,200 | 4,200 | 8,880 | 3,620 | 3,970 | 1,860 | 1,410 | 1,200 |
| 19 | 1,100 | 3,200 | 2,000 | 3,770 | 2,400 | 4,800 | 8,030 | 3,400 | 7,690 | 1,320 | 1,360 | 1,160 |
| 20 | 1,200 | 3,200 | 3,400 | 3,400 | 2,200 | 4,800 | 7,860 | 4,000 | 5,840 | 1,650 | 1,410 | 1,060 |
| 21 | 1,600 | 2,800 | 4,800 | 3,200 | 2,600 | 4,880 | 7,350 | 4,720 | 4,880 | 1,760 | 1,360 | 992 |
| 22 | 1,700 | 2,400 | 4,800 | 2,800 | 3,200 | 4,000 | 6,840 | 4,720 | 4,400 | 1,760 | 1,280 | 970 |
| 23 | 2,600 | 1,800 | 4,400 | 2,600 | 4,000 | 3,770 | 6,800 | 4,720 | 4,240 | 1,700 | 1,280 | 918 |
| 24 | 2,400 | 1,700 | 3,600 | 2,400 | 5,000 | 3,620 | 5,360 | 4,400 | 3,770 | 1,650 | 1,280 | 883 |
| 25 | 1,800 | 1,600 | 3,200 | 2,200 | 6,000 | 3,540 | 4,880 | 4,400 | 3,320 | 1,460 | 1,320 | 848 |
| 26 | 1,500 | 1,500 | 2,800 | 2,200 | 5,500 | 4,520 | 4,400 | 5,680 | 2,900 | 1,080 | 1,320 | 869 |
| 27 | 1,300 | 1,400 | 2,600 | 2,000 | 5,000 | 5,360 | 4,240 | 5,840 | 2,770 | 1,410 | 1,200 | 897 |
| 28 | 1,300 | 1,400 | 2,400 | 1,900 | 4,400 | 4,880 | 4,240 | 6,160 | 2,700 | 1,650 | 1,160 | 836 |
| 29 | 1,200 | 1,200 | 2,000 | 1,800 | ----- | 4,560 | 4,080 | 6,000 | 2,450 | 1,650 | 1,120 | 829 |
| 30 | 1,200 | 1,100 | 1,800 | 1,700 | ----- | 4,400 | 4,080 | 6,000 | 2,210 | 1,650 | 1,080 | 829 |
| 31 | 1,200 | ----- | 1,600 | 1,600 | ----- | 4,560 | ----- | 5,520 | ----- | 1,760 | 1,080 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 2,600 | 1,000 | 1,430 | 0.861 | 0.99 |
| November | 3,200 | 1,000 | 1,580 | .952 | 1.06 |
| December | 4,800 | 1,000 | 2,050 | 1.23 | 1.42 |
| January | 9,220 | 1,400 | 3,640 | 2.19 | 2.52 |
| February | 6,000 | 1,600 | 2,750 | 1.66 | 1.73 |
| March | 6,000 | 2,400 | 4,300 | 2.59 | 2.99 |
| April | 15,900 | 4,080 | 8,000 | 4.82 | 5.38 |
| May | 7,520 | 3,400 | 4,920 | 2.96 | 3.41 |
| June | 8,540 | 2,210 | 4,300 | 2.59 | 2.89 |
| July | 3,040 | 1,080 | 2,030 | 1.22 | 1.41 |
| August | 1,550 | 1,060 | 1,360 | .819 | .94 |
| September | 1,320 | 829 | 1,010 | .608 | .68 |
| The year | 15,900 | 829 | 3,110 | 1.87 | 25.42 |

• Estimated

HUDSON RIVER AT MECHANICVILLE, N. Y.

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

DRAINAGE AREA.—4,500 square miles.

RECORDS AVAILABLE.—October, 1887, to September, 1930.

EXTREMES.—Maximum daily discharge during year, 23,600 second-feet Apr. 8; minimum, 805 second-feet Sept. 1.

1887-1930: Maximum discharge, 120,000 second-feet Mar. 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 gaging stations above Mechanicville indicate that mean monthly discharges as published below are low by varying amounts, the maximum being about 25 per cent, with a yearly average of about 10 per cent low. Flow slightly regulated by storage prior to Mar. 27 but considerably more subsequently by Sacandaga Reservoir. Water is diverted through Glens 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, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|--------|--------|--------|--------|--------|-------|--------|-------|-------|-------|
| 1..... | 2,210 | 2,750 | 2,000 | 5,050 | 3,370 | 13,000 | 7,586 | 5,290 | 8,080 | 3,440 | 3,600 | 805 |
| 2..... | 2,670 | 2,530 | 2,020 | 4,850 | 2,500 | 13,100 | 7,150 | 5,630 | 7,360 | 3,440 | 4,360 | 1,860 |
| 3..... | 3,020 | 1,760 | 3,090 | 7,570 | 3,180 | 12,300 | 8,160 | 6,860 | 6,020 | 4,340 | 1,220 | 3,680 |
| 4..... | 3,750 | 2,390 | 2,780 | 6,290 | 4,720 | 10,300 | 7,940 | 9,600 | 5,320 | 3,590 | 1,380 | 3,160 |
| 5..... | 4,600 | 3,470 | 2,790 | 4,710 | 4,850 | 9,720 | 7,760 | 9,230 | 5,020 | 4,260 | 2,880 | 3,040 |
| 6..... | 3,000 | 2,670 | 2,770 | 5,450 | 4,880 | 9,320 | 7,140 | 7,407 | 5,190 | 2,790 | 2,530 | 2,610 |
| 7..... | 3,030 | 2,960 | 2,410 | 6,240 | 4,780 | 9,380 | 15,100 | 6,620 | 6,450 | 2,140 | 2,580 | 1,850 |
| 8..... | 3,600 | 2,730 | 1,960 | 9,570 | 3,560 | 15,500 | 23,600 | 6,280 | 4,370 | 3,240 | 2,680 | 2,050 |
| 9..... | 3,060 | 2,320 | 2,390 | 12,300 | 2,113 | 17,900 | 18,600 | 6,240 | 6,160 | 3,890 | 2,410 | 3,430 |
| 10..... | 2,760 | 1,080 | 2,580 | 13,600 | 4,480 | 15,000 | 15,600 | 6,120 | 11,200 | 3,500 | 1,630 | 3,220 |
| 11..... | 2,800 | 2,760 | 2,340 | 12,200 | 4,530 | 14,800 | 13,300 | 6,650 | 13,100 | 4,010 | 1,550 | 2,740 |
| 12..... | 2,300 | 3,090 | 2,740 | 11,600 | 4,210 | 18,500 | 12,800 | 6,460 | 11,000 | 3,980 | 2,900 | 2,940 |
| 13..... | 1,100 | 2,870 | 2,760 | 12,200 | 4,490 | 17,000 | 15,300 | 5,850 | 9,050 | 2,410 | 2,900 | 2,930 |
| 14..... | 1,520 | 2,900 | 2,020 | 11,600 | 5,520 | 15,700 | 16,300 | 4,560 | 7,320 | 3,410 | 2,870 | 2,030 |
| 15..... | 2,620 | 3,170 | 1,190 | 12,800 | 4,790 | 14,000 | 16,700 | 4,650 | 5,700 | 3,880 | 2,620 | 1,320 |
| 16..... | 2,430 | 3,550 | 3,640 | 11,800 | 2,860 | 13,400 | 15,400 | 5,200 | 5,980 | 3,650 | 2,560 | 3,040 |
| 17..... | 2,670 | 3,350 | 2,970 | 10,600 | 4,590 | 12,900 | 12,900 | 4,790 | 5,210 | 3,280 | 1,330 | 3,090 |
| 18..... | 2,920 | 6,040 | 3,810 | 9,250 | 4,640 | 15,200 | 11,300 | 3,970 | 4,540 | 3,230 | 2,160 | 3,550 |
| 19..... | 2,430 | 6,900 | 7,310 | 9,890 | 4,420 | 16,200 | 10,100 | 5,360 | 6,410 | 2,470 | 2,920 | 3,200 |
| 20..... | 929 | 6,940 | 9,170 | 9,720 | 6,950 | 14,200 | 9,980 | 5,580 | 8,320 | 2,210 | 2,780 | 2,600 |
| 21..... | 2,180 | 7,140 | 9,150 | 8,980 | 11,100 | 13,200 | 9,740 | 5,940 | 7,630 | 2,580 | 2,740 | 1,570 |
| 22..... | 3,020 | 7,190 | 10,000 | 8,260 | 11,100 | 12,600 | 8,660 | 6,150 | 6,120 | 3,090 | 2,570 | 1,250 |
| 23..... | 3,530 | 6,020 | 9,340 | 7,630 | 11,500 | 10,700 | 7,930 | 5,880 | 5,820 | 2,660 | 2,150 | 3,990 |
| 24..... | 4,700 | 3,550 | 8,860 | 7,030 | 17,400 | 10,500 | 7,550 | 5,710 | 5,500 | 2,480 | 1,330 | 3,060 |
| 25..... | 4,920 | 5,500 | 8,660 | 6,790 | 17,000 | 11,000 | 7,170 | 4,850 | 5,380 | 2,700 | 1,780 | 2,580 |
| 26..... | 4,230 | 6,150 | 8,250 | 5,550 | 17,100 | 13,300 | 5,560 | 9,780 | 4,840 | 2,900 | 2,990 | 2,400 |
| 27..... | 2,990 | 4,540 | 7,930 | 6,050 | 15,700 | 13,400 | 4,950 | 9,740 | 4,280 | 1,880 | 2,620 | 2,210 |
| 28..... | 3,830 | 3,690 | 7,220 | 5,880 | 14,100 | 10,400 | 6,560 | 9,980 | 4,550 | 1,700 | 2,630 | 1,620 |
| 29..... | 3,330 | 3,440 | 6,980 | 5,740 | ----- | 8,190 | 6,170 | 9,710 | 2,920 | 3,160 | 2,770 | 1,560 |
| 30..... | 2,850 | 3,190 | 6,250 | 4,980 | ----- | 7,380 | 5,270 | 8,700 | 3,320 | 3,000 | 2,660 | 3,580 |
| 31..... | 2,900 | ----- | 5,950 | 4,820 | ----- | 7,430 | ----- | 8,260 | ----- | 3,000 | 1,290 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|--------|-----------------|-------------------|
| October..... | 4,920 | 929 | 2,960 | 0.658 | 0.76 |
| November..... | 7,190 | 1,680 | 3,910 | .869 | .97 |
| December..... | 10,000 | 1,190 | 4,880 | 1.08 | 1.24 |
| January..... | 13,600 | 4,710 | 8,350 | 1.86 | 2.14 |
| February..... | 17,400 | 2,110 | 7,160 | 1.59 | 1.66 |
| March..... | 18,500 | 7,380 | 12,800 | 2.84 | 3.27 |
| April..... | 23,600 | 4,950 | 10,700 | 2.38 | 2.66 |
| May..... | 9,980 | 3,970 | 6,680 | 1.48 | 1.71 |
| June..... | 13,100 | 2,920 | 6,410 | 1.42 | 1.58 |
| July..... | 4,340 | 1,700 | 3,110 | .691 | .80 |
| August..... | 4,360 | 1,220 | 2,430 | .540 | .62 |
| September..... | 3,990 | 805 | 2,570 | .571 | .64 |
| The year..... | 23,600 | 805 | 5,990 | 1.33 | 18.05 |

INDIAN LAKE RESERVOIR NEAR INDIAN LAKE, N. Y.

LOCATION.—Chain gage at Indian Lake Dam, 2 miles south of Indian Lake village, Hamilton County.

DRAINAGE AREA.—131 square miles.

RECORDS AVAILABLE.—July, 1900, to September, 1930.

EXTREMES.—Maximum stage during year, 35.3 feet June 12-14; minimum, 10.1 feet Sept. 30.

1900-1930: Maximum stage, 38.8 feet Mar. 28, 1913; minimum, 2.0 feet Mar. 9-18, 1907, Jan. 3-17, 1910.

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

Daily gage height, in feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|------|-------|------|------|-------|
| 1 | 15.9 | 15.7 | 16.6 | 19.8 | 27.1 | 21.7 | 24.4 | 34.0 | 35.0 | 34.3 | 27.9 | 17.4 |
| 2 | 15.6 | 15.7 | 16.6 | 19.8 | 26.8 | 21.8 | 24.2 | 34.2 | 34.9 | 34.3 | 27.5 | 17.2 |
| 3 | 15.8 | 15.7 | 16.7 | 19.9 | 26.6 | 21.9 | 24.0 | 34.7 | 34.9 | 34.3 | 27.0 | 16.8 |
| 4 | 16.1 | 15.6 | 16.7 | 20.0 | 26.4 | 21.9 | 24.1 | 35.0 | 34.9 | 34.4 | 26.7 | 16.6 |
| 5 | 16.3 | 15.6 | 16.7 | 20.0 | 26.2 | 22.1 | 24.1 | 35.1 | 34.8 | 34.3 | 26.3 | 16.3 |
| 6 | 16.4 | 15.5 | 16.7 | 20.1 | 26.0 | 22.2 | 24.2 | 35.2 | 34.7 | 34.0 | 26.0 | 16.1 |
| 7 | 16.5 | 15.5 | 16.7 | 20.3 | 25.8 | 22.3 | 25.4 | 35.2 | 34.7 | 33.7 | 25.6 | 15.6 |
| 8 | 16.4 | 15.5 | 16.7 | 20.6 | 24.3 | 22.4 | 26.6 | 35.2 | 34.6 | 33.3 | 25.3 | 15.3 |
| 9 | 16.4 | 15.4 | 16.7 | 21.8 | 24.1 | 22.6 | 27.2 | 35.2 | 34.6 | 33.0 | 24.7 | 15.0 |
| 10 | 16.4 | 15.4 | 16.7 | 23.0 | 23.7 | 22.8 | 27.5 | 35.1 | 34.7 | 32.7 | 24.5 | 14.6 |
| 11 | 16.4 | 15.3 | 16.7 | 23.6 | 23.3 | 22.9 | 27.8 | 35.0 | 35.1 | 32.7 | 24.2 | 14.4 |
| 12 | 16.5 | 15.1 | 16.7 | 24.0 | 23.0 | 23.2 | 28.3 | 35.0 | 35.3 | 32.7 | 23.7 | 14.1 |
| 13 | 16.6 | 14.8 | 16.8 | 24.4 | 22.7 | 23.4 | 29.1 | 35.0 | 35.3 | 32.7 | 23.5 | 13.9 |
| 14 | 16.4 | 14.7 | 16.8 | 24.9 | 22.4 | 23.6 | 30.0 | 35.0 | 35.3 | 32.7 | 23.2 | 13.6 |
| 15 | 16.2 | 14.7 | 16.7 | 25.3 | 22.0 | 23.6 | 30.9 | 35.0 | 35.2 | 32.7 | 22.9 | 13.3 |
| 16 | 16.0 | 14.7 | 16.6 | 25.5 | 21.7 | 23.7 | 31.3 | 35.0 | 35.2 | 32.6 | 22.5 | 13.2 |
| 17 | 15.8 | 14.7 | 16.5 | 25.7 | 21.4 | 23.8 | 31.6 | 35.0 | 35.1 | 32.3 | 22.2 | 13.1 |
| 18 | 15.7 | 15.0 | 16.6 | 25.8 | 21.1 | 24.0 | 31.8 | 35.0 | 35.1 | 32.3 | 21.8 | 12.9 |
| 19 | 15.6 | 15.7 | 16.7 | 26.0 | 20.7 | 24.2 | 32.2 | 35.0 | 35.0 | 32.0 | 21.5 | 12.7 |
| 20 | 15.6 | 15.9 | 16.8 | 26.1 | 20.4 | 24.4 | 32.4 | 35.0 | 35.0 | 31.5 | 21.2 | 12.6 |
| 21 | 15.5 | 16.1 | 17.5 | 26.2 | 20.1 | 24.6 | 32.7 | 35.2 | 35.0 | 31.2 | 20.8 | 12.2 |
| 22 | 15.2 | 16.2 | 18.6 | 26.4 | 20.1 | 24.6 | 32.8 | 35.2 | 35.0 | 30.9 | 20.5 | 11.9 |
| 23 | 15.3 | 16.3 | 18.8 | 26.6 | 20.0 | 24.6 | 33.0 | 35.2 | 34.9 | 30.5 | 20.1 | 11.7 |
| 24 | 15.4 | 16.4 | 19.0 | 26.6 | 20.0 | 24.7 | 33.1 | 35.2 | 34.9 | 30.1 | 19.9 | 11.4 |
| 25 | 15.5 | 16.4 | 19.1 | 26.6 | 20.5 | 24.8 | 33.2 | 35.2 | 34.8 | 30.0 | 19.6 | 11.2 |
| 26 | 15.5 | 16.5 | 19.2 | 26.7 | 21.0 | 24.9 | 33.3 | 35.2 | 34.8 | 29.8 | 19.1 | 11.0 |
| 27 | 15.6 | 16.5 | 19.4 | 26.8 | 21.3 | 25.0 | 33.4 | 35.1 | 34.7 | 29.5 | 19.0 | 10.8 |
| 28 | 15.6 | 16.5 | 19.5 | 26.9 | 21.5 | 25.1 | 33.5 | 35.0 | 34.6 | 29.0 | 18.7 | 10.5 |
| 29 | 15.7 | 16.5 | 19.5 | 27.0 | ----- | 25.1 | 33.6 | 35.0 | 34.5 | 28.7 | 18.4 | 10.3 |
| 30 | 15.6 | 16.5 | 19.6 | 27.1 | ----- | 24.9 | 33.8 | 35.0 | 34.4 | 28.3 | 18.0 | 10.1 |
| 31 | 15.6 | ----- | 19.7 | 27.2 | ----- | 24.7 | ----- | 35.0 | ----- | 28.1 | 17.8 | ----- |

INDIAN RIVER NEAR INDIAN LAKE, N. Y.

LOCATION.—Water-stage recorder three-fourths 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, 1930.

EXTREMES.—Maximum discharge during year, 895 second-feet July 5 (gage height, 3.7 feet); minimum, about 4.6 second-feet Feb. 16 (gage height, about 0.25 foot).

1912-1914, 1915-1930: Maximum discharge, about 3,460 second-feet Mar. 28, 1913 (gage height, 7.8 feet); practically no flow at times.

REMARKS —Records good. Flow regulated by storage in Indian Lake Reservoir.

Daily and monthly discharge, in second-feet, 1929-37

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1 | 560 | 101 | 98 | 41 | * 458 | 43 | 760 | 84 | 291 | 292 | 805 | 600 |
| 2 | 560 | 135 | 98 | 41 | * 850 | 42 | 760 | 84 | 254 | 190 | 805 | 600 |
| 3 | 254 | 170 | 98 | 42 | * 850 | 42 | 431 | 82 | 252 | 133 | 782 | 580 |
| 4 | 38 | 170 | 98 | 42 | * 828 | 42 | 68 | 104 | 249 | 135 | 782 | 580 |
| 5 | 39 | 170 | 98 | 42 | * 828 | 42 | 68 | 265 | 183 | 483 | 760 | 580 |
| 6 | 39 | 170 | 98 | 41 | * 805 | 42 | 72 | 352 | 133 | 872 | 760 | 580 |
| 7 | * 80 | 170 | 98 | 41 | * 805 | 42 | 87 | 349 | 133 | 872 | 760 | 560 |
| 8 | * 192 | 172 | 98 | 59 | * 805 | 46 | 74 | 386 | 133 | 872 | 740 | 560 |
| 9 | * 192 | 172 | 98 | 53 | * 805 | 48 | 73 | 393 | 135 | 872 | 740 | 542 |
| 10 | * 126 | 172 | 98 | 49 | * 782 | 43 | 73 | 380 | 139 | 433 | 740 | 542 |
| 11 | 79 | 373 | 98 | 46 | 782 | 46 | 76 | 358 | 191 | 137 | 720 | 525 |
| 12 | 79 | 560 | 98 | 43 | 782 | 48 | 82 | 325 | 314 | 137 | 720 | 525 |
| 13 | 78 | 560 | 98 | 43 | 782 | 45 | 82 | 271 | 419 | 137 | 720 | 508 |
| 14 | * 268 | 321 | 148 | 43 | * 760 | 45 | 84 | 244 | 396 | 135 | 700 | 508 |
| 15 | * 600 | 138 | 187 | 47 | * 760 | 43 | 85 | 244 | 371 | 135 | 700 | 508 |
| 16 | * 600 | 93 | 187 | 46 | * 618 | 43 | 87 | 254 | 343 | 492 | 700 | 490 |
| 17 | * 366 | 93 | 187 | 47 | * 740 | 42 | 88 | 260 | 328 | 409 | 700 | 490 |
| 18 | 183 | 96 | 138 | 48 | * 740 | 43 | 88 | 249 | 325 | 286 | 700 | 473 |
| 19 | 183 | 98 | 41 | 48 | * 720 | 42 | 88 | 247 | 319 | 850 | 680 | 473 |
| 20 | 181 | 96 | 41 | 47 | * 720 | 42 | 88 | 287 | 316 | 850 | 680 | 473 |
| 21 | 354 | 96 | 41 | 47 | * 720 | 43 | 88 | 369 | 307 | 828 | 660 | 456 |
| 22 | 508 | 98 | 40 | 46 | * 720 | 43 | 88 | 409 | 298 | 828 | 660 | 456 |
| 23 | 287 | 98 | 40 | 46 | * 720 | 42 | 87 | 406 | 277 | 828 | 660 | 439 |
| 24 | 100 | 98 | 40 | 47 | * 355 | 42 | 85 | 387 | 267 | 510 | 640 | 439 |
| 25 | 100 | 98 | 40 | 47 | * 43 | 41 | 85 | 509 | 265 | 312 | 640 | 439 |
| 26 | 100 | 98 | 40 | 47 | * 43 | 46 | 85 | 720 | 249 | 758 | 640 | 439 |
| 27 | 100 | 98 | 40 | 46 | * 43 | 43 | 87 | 680 | 221 | 828 | 640 | 422 |
| 28 | 98 | 98 | 41 | 45 | 43 | 45 | 87 | 660 | 250 | 828 | 620 | 419 |
| 29 | 140 | 98 | 41 | 45 | ----- | 259 | 87 | 640 | 292 | 805 | 620 | 409 |
| 30 | 156 | 98 | 41 | 45 | ----- | 782 | 87 | 418 | 290 | 715 | 620 | 406 |
| 31 | 101 | ----- | 41 | 46 | ----- | 782 | ----- | 298 | ----- | 444 | 620 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 600 | 38 | 217 | 1.64 | 1.89 |
| November | 560 | 93 | 167 | 1.27 | 1.42 |
| December | 187 | 40 | 85.4 | .647 | .75 |
| January | 59 | 41 | 45.7 | .346 | .40 |
| February | 850 | 43 | 640 | 4.85 | 5.05 |
| March | 782 | 41 | 98.0 | .742 | .86 |
| April | 760 | 68 | 139 | 1.05 | 1.17 |
| May | 720 | 82 | 346 | 2.62 | 3.02 |
| June | 419 | 133 | 265 | 2.01 | 2.24 |
| July | 872 | 133 | 529 | 4.01 | 4.62 |
| August | 805 | 620 | 700 | 5.30 | 6.11 |
| September | 600 | 406 | 501 | 3.80 | 4.24 |
| The year | 872 | 38 | 309 | 2.34 | 31.77 |

* Estimated.

NOTE.—Net loss in storage in Indian Lake Reservoir during year, 840,000,000 cub'c feet, equivalent to mean discharge of 26.6 second-feet.

NORTH CREEK AT NORTH CREEK, N. Y.

LOCATION.—Staff gage 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, 1930.

EXTREMES.—Maximum discharge during year, about 1,690 second-feet Apr. 7 (gage height, 5.55 feet); minimum, 3.3 second-feet Sept. 24 (gage height, 1.20 feet).

1924-1930: Maximum discharge, that of Apr. 7, 1930; minimum, 0.3 second-foot Sept. 1, 1926, Sept. 26, 1927.

REMARKS.—Records good except those for periods of ice effect, Dec. 1-8, 12-13, 23-26, Jan. 11 to Feb. 18, Mar. 3-5, and for periods of backwater from Hudson River, Apr. 7-8, 13-15, which are fair. Intentional or accidental closure of small spillway notch in old dam above gage produces marked effect on low-water discharge over periods of a few days.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 4.6 | 26 | 12 | 21 | 20 | 50 | 48 | 53 | 40 | 11 | 5.0 | 5.4 |
| 2..... | 28 | 24 | 11 | 21 | 22 | 45 | 98 | 53 | 36 | 22 | 5.0 | 7.0 |
| 3..... | 70 | 21 | 11 | 52 | 22 | 42 | 90 | 48 | 33 | 19 | 7.3 | 8.2 |
| 4..... | 37 | 18 | 11 | 43 | 19 | 40 | 85 | 50 | 27 | 14 | 6.6 | 6.6 |
| 5..... | 24 | 17 | 10 | 37 | 16 | 38 | 73 | 50 | 22 | 12 | 5.0 | 5.4 |
| 6..... | 16 | 16 | 10 | 33 | 14 | 37 | 108 | 47 | 17 | 14 | 4.1 | 4.8 |
| 7..... | 15 | 14 | 11 | 43 | 13 | 35 | 1,100 | 45 | 14 | 15 | 6.0 | 4.4 |
| 8..... | 14 | 14 | 13 | 300 | 12 | 69 | 280 | 41 | 14 | 14 | 7.3 | 4.1 |
| 9..... | 14 | 13 | 14 | 475 | 12 | 63 | 142 | 39 | 19 | 12 | 5.7 | 3.9 |
| 10..... | 12 | 13 | 12 | 152 | 12 | 59 | 126 | 33 | 381 | 11 | 5.7 | 3.7 |
| 11..... | 12 | 12 | 11 | 85 | 12 | 49 | 146 | 31 | 276 | 9.9 | 4.8 | 3.7 |
| 12..... | 11 | 13 | 11 | 55 | 12 | 86 | 205 | 28 | 97 | 10 | 4.4 | 3.7 |
| 13..... | 14 | 14 | 11 | 55 | 14 | 78 | 220 | 25 | 84 | 11 | 3.9 | 3.7 |
| 14..... | 13 | 15 | 10 | 60 | 13 | 81 | 150 | 21 | 57 | 12 | 4.4 | 3.9 |
| 15..... | 14 | 22 | 11 | 95 | 14 | 56 | 120 | 64 | 40 | 11 | 7.6 | 3.9 |
| 16..... | 13 | 20 | 11 | 100 | 14 | 50 | 117 | 58 | 32 | 9.2 | 11 | 4.6 |
| 17..... | 11 | 23 | 14 | 100 | 13 | 53 | 108 | 57 | 31 | 8.2 | 10 | 18 |
| 18..... | 9.2 | 54 | 22 | 70 | 12 | 58 | 96 | 53 | 75 | 7.6 | 8.8 | 11 |
| 19..... | 8.5 | 108 | 41 | 55 | 16 | 60 | 97 | 41 | 146 | 6.6 | 7.6 | 7.3 |
| 20..... | 8.5 | 54 | 61 | 44 | 41 | 51 | 92 | 108 | 66 | 6.0 | 6.6 | 5.2 |
| 21..... | 8.5 | 64 | 66 | 40 | 136 | 45 | 72 | 78 | 46 | 5.4 | 5.7 | 5.0 |
| 22..... | 8.8 | 46 | 52 | 38 | 180 | 40 | 58 | 68 | 38 | 6.3 | 6.0 | 4.6 |
| 23..... | 84 | 31 | 44 | 34 | 146 | 36 | 54 | 55 | 30 | 6.6 | 6.0 | 3.9 |
| 24..... | 53 | 29 | 38 | 32 | 168 | 36 | 52 | 44 | 22 | 6.0 | 17 | 3.5 |
| 25..... | 33 | 24 | 34 | 30 | 168 | 35 | 48 | 84 | 18 | 6.0 | 12 | 4.6 |
| 26..... | 29 | 22 | 30 | 28 | 117 | 147 | 48 | 84 | 16 | 5.2 | 8.8 | 5.4 |
| 27..... | 20 | 25 | 28 | 28 | 84 | 100 | 48 | 71 | 14 | 6.6 | 7.6 | 5.4 |
| 28..... | 18 | 18 | 26 | 26 | 68 | 75 | 48 | 66 | 12 | 7.6 | 6.6 | 5.2 |
| 29..... | 16 | 16 | 24 | 26 | ----- | 61 | 47 | 62 | 12 | 6.6 | 5.7 | 4.4 |
| 30..... | 20 | 14 | 23 | 30 | ----- | 54 | 49 | 56 | 11 | 6.0 | 5.0 | 3.7 |
| 31..... | 27 | ----- | 22 | 22 | ----- | 48 | ----- | 46 | ----- | 5.4 | 5.0 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 84 | 4.6 | 21.5 | 0.986 | 1.14 |
| November..... | 108 | 12 | 26.7 | 1.22 | 1.36 |
| December..... | 66 | 10 | 22.7 | 1.04 | 1.20 |
| January..... | 475 | 21 | 71.9 | 3.30 | 3.80 |
| February..... | 180 | 12 | 19.6 | 2.28 | 2.37 |
| March..... | 147 | 35 | 57.3 | 2.63 | 3.03 |
| April..... | 1,100 | 47 | 134 | 6.15 | 6.96 |
| May..... | 108 | 21 | 53.5 | 2.45 | 2.82 |
| June..... | 381 | 11 | 57.5 | 2.64 | 2.94 |
| July..... | 22 | 5.2 | 9.78 | .449 | .52 |
| August..... | 17 | 3.9 | 6.85 | .314 | .36 |
| September..... | 18 | 3.5 | 5.47 | .261 | .28 |
| The year..... | 1,100 | 3.5 | 42.9 | 1.97 | 26.68 |

SCHROON RIVER AT RIVERBANK, N. Y.

LOCATION.—Water-stage recorder at highway bridge at Riverbank, Warren County, 9 miles below Schroon Lake Reservoir.

DRAINAGE AREA.—528 square miles.

RECORDS AVAILABLE.—September, 1907, to September, 1930.

EXTREMES.—Maximum discharge during year, 4,220 second-feet Apr. 9 (gage height, 6.8 feet); minimum, 110 second-feet Sept. 30 (gage height, 1.20 feet). 1907-1930: Maximum discharge, about 13,500 second-feet Mar. 28, 1913 (gage height, 10.7 feet); minimum, 28 second-feet Oct. 17, 1909 (gage height, 0.85 foot).

REMARKS.—Records good except those for periods of ice effect, Nov. 30, Dec. 8-27, Jan. 4-13, 17-19, Jan. 23 to Feb. 18, and those estimated, which are fair. Flow partly regulated by storage in Schroon and Brant Lakes.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| 1..... | 151 | 222 | 318 | 385 | 650 | 1,320 | 1,520 | 1,360 | 1,489 | * 700 | 290 | 188 |
| 2..... | 166 | 225 | 307 | 385 | 650 | 1,320 | 1,560 | 1,360 | 1,407 | * 700 | 290 | 190 |
| 3..... | 210 | 222 | 307 | 409 | 600 | 1,320 | 1,600 | 1,440 | 1,320 | * 700 | 279 | 190 |
| 4..... | 202 | 231 | 304 | 420 | 600 | 1,260 | 1,680 | 1,520 | 1,220 | * 650 | 276 | 182 |
| 5..... | 190 | 216 | 296 | 420 | 600 | 1,180 | 1,720 | 1,520 | 1,150 | * 650 | 272 | 177 |
| 6..... | 182 | 216 | 293 | 420 | 600 | 1,150 | 1,800 | 1,480 | 1,089 | * 682 | 266 | 174 |
| 7..... | 179 | 219 | 293 | 420 | 550 | 1,120 | 2,420 | 1,480 | 1,019 | 655 | 269 | 169 |
| 8..... | 177 | 213 | 280 | 500 | 550 | 1,180 | 3,520 | 1,560 | 947 | 555 | 269 | 164 |
| 9..... | 177 | 207 | 280 | 700 | 550 | 1,400 | 4,110 | 1,600 | 1,017 | 537 | 269 | 156 |
| 10..... | 182 | 204 | 280 | 850 | 500 | 1,480 | 4,000 | 1,600 | 1,260 | 514 | 269 | 151 |
| 11..... | 216 | 202 | 280 | 1,100 | 500 | 1,560 | 3,780 | 1,520 | 1,489 | 496 | 262 | 144 |
| 12..... | 210 | 204 | 280 | 1,200 | 500 | 1,800 | 3,670 | 1,440 | 1,560 | 488 | 262 | 139 |
| 13..... | 204 | 204 | 260 | 1,300 | 480 | 1,930 | 3,670 | 1,360 | 1,600 | 470 | 256 | 137 |
| 14..... | 204 | 210 | 260 | 1,290 | 460 | 1,980 | 3,890 | 1,260 | 1,520 | 478 | 246 | 134 |
| 15..... | 210 | 231 | 260 | 1,320 | 460 | 1,930 | 4,000 | 1,260 | 1,407 | 465 | 246 | 132 |
| 16..... | 207 | 234 | 260 | 1,360 | 440 | 1,840 | 3,890 | 1,290 | 1,290 | 453 | 243 | 144 |
| 17..... | 202 | 240 | 260 | 1,400 | 440 | 1,800 | 3,560 | 1,290 | 1,220 | 441 | 237 | 166 |
| 18..... | 193 | 269 | 280 | 1,400 | 420 | 1,720 | 3,360 | 1,290 | 1,220 | 425 | 237 | 164 |
| 19..... | 182 | 326 | 300 | 1,300 | 421 | 1,720 | 2,960 | 1,260 | 1,489 | 409 | 234 | 154 |
| 20..... | 182 | 345 | 320 | 1,290 | 417 | 1,640 | 2,760 | 1,320 | 1,520 | 389 | 231 | 149 |
| 21..... | 182 | 357 | 360 | 1,220 | 433 | 1,560 | 2,560 | 1,360 | 1,489 | 385 | 225 | 144 |
| 22..... | 177 | 353 | 400 | 1,150 | 492 | 1,440 | 2,380 | 1,400 | 1,440 | 369 | 219 | 137 |
| 23..... | 231 | 349 | 420 | 1,100 | 605 | 1,360 | 2,240 | 1,400 | 1,360 | 357 | 222 | 137 |
| 24..... | 240 | 345 | 460 | 1,000 | 738 | 1,290 | 2,060 | 1,320 | 1,260 | 345 | 219 | 132 |
| 25..... | 237 | 345 | 460 | 950 | 910 | 1,260 | 1,930 | 1,320 | 1,150 | 337 | 210 | 130 |
| 26..... | 243 | 341 | 460 | 900 | 1,080 | 1,400 | 1,800 | 1,400 | 1,089 | 334 | 213 | 128 |
| 27..... | 237 | 337 | 440 | 850 | 1,220 | 1,600 | 1,680 | 1,440 | 975 | 337 | 210 | 125 |
| 28..... | 237 | 341 | 421 | 800 | 1,290 | 1,680 | 1,560 | 1,440 | 917 | 330 | 204 | 119 |
| 29..... | 228 | 326 | 413 | 750 | ----- | 1,680 | 1,480 | 1,480 | * 820 | 311 | 199 | 114 |
| 30..... | 231 | 320 | 401 | 750 | ----- | 1,600 | 1,400 | 1,520 | * 757 | 307 | 196 | 110 |
| 31..... | 225 | ----- | 393 | 700 | ----- | 1,560 | ----- | 1,520 | ----- | 300 | 185 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 243 | 151 | 203 | 0.384 | 0.44 |
| November..... | 357 | 202 | 268 | 5.08 | .57 |
| December..... | 460 | 260 | 334 | .663 | .73 |
| January..... | 1,400 | 385 | 904 | 1.71 | 1.97 |
| February..... | 1,290 | 417 | 613 | 1.16 | 1.21 |
| March..... | 1,980 | 1,120 | 1,520 | 2.88 | 3.32 |
| April..... | 4,110 | 1,400 | 2,620 | 4.96 | 5.53 |
| May..... | 1,600 | 1,260 | 1,410 | 2.67 | 3.08 |
| June..... | 1,600 | 750 | 1,250 | 2.37 | 2.64 |
| July..... | 700 | 300 | 470 | .890 | 1.03 |
| August..... | 290 | 185 | 242 | .458 | .53 |
| September..... | 190 | 110 | 149 | .282 | .31 |
| The year..... | 4,110 | 110 | 831 | 1.57 | 21.36 |

* Estimated.

SACANDAGA RIVER NEAR HOPE, N. Y.

LOCATION.—Water-stage recorder $1\frac{1}{2}$ miles below junction of East and West Branches of Sacandaga River and $4\frac{1}{2}$ miles above Hope, Hamilton County.

DRAINAGE AREA.—494 square miles.

RECORDS AVAILABLE.—September, 1911, to September, 1930.

EXTREMES.—Maximum discharge during year, 11,800 second-feet Jan. 9 (gage height, 7.2 feet); minimum, 62 second-feet Sept. 11, 12 (gage height, 1.35 feet).

1911–1930: Maximum gage height, 11.7 feet during flood of Mar. 25–30, 1913 (discharge not determined); minimum discharge, about 16 second-feet Sept. 30, 1913 (gage height, 1.17 feet).

REMARKS.—Records good except those for periods of ice effect, Dec. 2–18, Dec. 22 to Jan. 1, Jan. 6, Jan. 18 to Feb. 21, and those estimated, which are fair.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------------------|--------------------|-------|------------------|------------------|-------|-------|-------|------------------|------|------|-------|
| 1. | 361 | ^a 600 | 423 | 600 | ^a 500 | 2,000 | 997 | 1,280 | 1,130 | 272 | 95 | 81 |
| 2. | 449 | ^a 607 | 500 | 646 | ^a 500 | 1,750 | 1,640 | 1,260 | 964 | 532 | 92 | 95 |
| 3. | 1,470 | 646 | 550 | 757 | ^a 500 | 1,340 | 1,580 | 1,530 | 812 | 417 | 89 | 129 |
| 4. | 1,200 | 646 | 500 | 910 | ^a 460 | 1,210 | 1,530 | 1,550 | 628 | 327 | 84 | 129 |
| 5. | 809 | 638 | 550 | 757 | 460 | 1,040 | 1,550 | 1,390 | 350 | 274 | 81 | 106 |
| 6. | 638 | 607 | 500 | 700 | ^a 440 | 1,010 | 2,290 | 1,330 | 357 | 305 | 78 | 92 |
| 7. | 584 | 568 | 500 | 870 | ^a 440 | 910 | 8,850 | 1,250 | 373 | 333 | 76 | 86 |
| 8. | 680 | 539 | 480 | 4,530 | ^a 420 | 1,670 | 6,340 | 1,230 | 338 | 361 | 76 | 76 |
| 9. | 638 | 568 | 480 | 9,250 | 440 | 2,480 | 4,340 | 1,150 | 367 | 392 | 86 | 73 |
| 10. | 576 | 568 | 460 | 6,420 | 460 | 1,860 | 3,410 | 1,040 | 1,910 | 561 | 78 | 69 |
| 11. | ^a 607 | 525 | 440 | 4,390 | 480 | 1,770 | 3,230 | 964 | 3,690 | 496 | 76 | 65 |
| 12. | ^a 518 | 496 | 440 | 2,490 | 500 | 2,400 | 4,540 | 880 | 2,140 | 449 | 71 | 62 |
| 13. | 546 | 476 | 400 | 3,290 | 500 | 2,080 | 5,290 | 821 | 1,500 | 417 | 73 | 65 |
| 14. | 671 | 525 | 420 | 3,100 | 550 | 1,790 | 5,400 | 730 | 1,260 | 392 | 73 | 71 |
| 15. | 630 | 952 | 440 | 3,590 | 500 | 1,500 | 4,940 | 1,130 | 975 | 367 | 76 | 76 |
| 16. | 576 | ^a 1,130 | 440 | 3,250 | 440 | 1,350 | 3,830 | 1,490 | 803 | 316 | 110 | 170 |
| 17. | 539 | ^a 1,100 | 500 | 2,480 | 420 | 1,220 | 3,200 | 1,330 | 776 | 279 | 100 | 1,160 |
| 18. | 489 | ^a 1,130 | 1,600 | 2,000 | 420 | 1,400 | 2,740 | 1,130 | 978 | 239 | 97 | 512 |
| 19. | 462 | ^a 1,380 | 3,390 | 1,600 | 420 | 1,730 | 2,740 | 1,060 | 1,760 | 220 | 103 | 327 |
| 20. | 436 | ^a 2,400 | 4,020 | 1,300 | 480 | 1,480 | 2,740 | 2,340 | 1,490 | 211 | 126 | 258 |
| 21. | 361 | ^a 3,390 | 3,120 | 1,100 | 850 | 1,400 | 2,400 | 2,160 | 1,260 | 198 | 132 | 207 |
| 22. | 308 | ^a 2,080 | 2,400 | 900 | 2,000 | 1,150 | 2,240 | 1,790 | 986 | 190 | 129 | 169 |
| 23. | 1,410 | ^a 1,150 | 1,700 | 800 | 2,310 | 1,070 | 1,930 | 1,550 | 785 | 173 | 97 | 139 |
| 24. | 1,160 | 821 | 1,300 | 750 | 3,380 | 997 | 1,650 | 1,290 | 607 | 165 | 154 | 126 |
| 25. | 931 | 739 | 950 | 700 | 3,590 | 953 | 1,640 | 1,410 | 510 | 158 | 132 | 119 |
| 26. | 812 | 630 | 750 | ^a 650 | 3,490 | 1,420 | 1,520 | 1,960 | ^a 429 | 136 | 116 | 116 |
| 27. | 705 | 646 | 700 | ^a 600 | 2,830 | 1,750 | 1,420 | 1,960 | ^a 367 | 132 | 110 | 119 |
| 28. | 615 | 671 | 650 | ^a 550 | 2,320 | 1,490 | 1,420 | 1,690 | 310 | 122 | 100 | 129 |
| 29. | ^a 539 | 496 | 600 | ^a 550 | ----- | 1,310 | 1,480 | 1,780 | 274 | 110 | 95 | 110 |
| 30. | ^a 500 | 417 | 600 | ^a 550 | ----- | 1,280 | 1,430 | 1,560 | 253 | 103 | 86 | 103 |
| 31. | ^a 550 | ----- | 600 | ^a 500 | ----- | 1,040 | ----- | 1,340 | ----- | 100 | 78 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 1,470 | 308 | 670 | 1.36 | 1.57 |
| November | 3,390 | 417 | 905 | 1.83 | 2.04 |
| December | 4,020 | 400 | 981 | 1.99 | 2.29 |
| January | 9,250 | 500 | 1,990 | 4.03 | 4.65 |
| February | 3,590 | 420 | 1,080 | 2.19 | 2.28 |
| March | 2,480 | 910 | 1,480 | 3.00 | 3.46 |
| April | 8,850 | 997 | 2,940 | 5.95 | 6.64 |
| May | 2,340 | 730 | 1,400 | 2.83 | 3.26 |
| June | 3,690 | 253 | 946 | 1.91 | 2.13 |
| July | 561 | 100 | 282 | .571 | .66 |
| August | 154 | 71 | 95.8 | .194 | .22 |
| September | 1,160 | 62 | 168 | .340 | .38 |
| The year | 9,250 | 62 | 1,080 | 2.19 | 29.58 |

SACANDAGA RESERVOIR AT CONKLINGVILLE, N. Y.

LOCATION.—Water-stage recorder installed Apr. 23, 1930, at Conklingville, Saratoga County, 800 feet above right end of Conklingville Dam; prior to that date, staff gage in outlet channel was used.

DRAINAGE AREA.—1,040 square miles.

RECORDS AVAILABLE.—January to September, 1930.

EXTREMES.—Maximum stage during period, 760.03 feet July 7; minimum, 715.8 feet Feb. 19.

REMARKS.—Flow completely regulated after gates were closed on Mar. 27, 1930; slight regulation prior to that date due to restricted flow through gates. Capacity of reservoir at elevation of spillway crest (771 feet), 37.8 billion cubic feet. Available capacity (above 740 feet), 30 billion cubic feet. Area of water surface of full reservoir, 41.7 square miles. Records furnished by Hudson River Regulating District.

Daily elevation, in feet, 1930

| Day | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|---------|---------|---------|-------|-------|-------|-------|-------|-------|
| 1 | * 21.0 | 17.6 | 28.85 | 30.45 | 49.32 | 55.53 | 59.93 | 58.81 | 56.24 |
| 2 | 20.15 | * 17.35 | 28.5 | 31.05 | 49.51 | 55.51 | 59.98 | 58.71 | 56.10 |
| 3 | 19.8 | 17.1 | 28.1 | 31.65 | 49.79 | 55.64 | 59.92 | 58.65 | 56.06 |
| 4 | 19.8 | 17.1 | 27.25 | 32.15 | 49.80 | 55.74 | 59.93 | 58.61 | 55.87 |
| 5 | * 19.65 | 16.95 | 26.4 | 32.75 | 50.01 | 55.78 | 59.94 | 58.51 | 55.81 |
| 6 | 19.5 | 16.6 | 25.5 | 33.6 | 50.17 | 55.84 | 60.00 | 58.38 | 55.55 |
| 7 | 19.35 | 16.6 | 24.55 | 34.8 | 50.29 | 55.95 | 60.03 | 58.24 | 55.50 |
| 8 | 19.85 | 16.4 | 24.05 | 38.1 | 50.46 | 56.02 | 60.01 | 58.16 | 55.38 |
| 9 | * 22.75 | * 16.4 | * 24.85 | 39.2 | 50.57 | 56.10 | 60.01 | 58.10 | 55.23 |
| 10 | 25.7 | 16.4 | 25.65 | 40.05 | 50.68 | 56.41 | 59.97 | 58.06 | 55.06 |
| 11 | 29.0 | 16.3 | 26.35 | 40.65 | 50.80 | 57.20 | 59.95 | 57.98 | 54.91 |
| 12 | 30.3 | * 16.2 | 26.95 | 41.4 | 50.94 | 57.74 | 59.88 | 57.85 | 54.72 |
| 13 | 30.5 | 16.0 | 27.4 | 42.4 | 51.08 | 58.05 | 59.88 | 57.72 | 54.70 |
| 14 | 30.6 | 16.0 | 27.4 | 43.55 | 51.07 | 58.26 | 59.94 | 57.61 | 54.51 |
| 15 | 30.7 | 16.0 | 27.55 | 44.15 | 51.21 | 58.40 | 59.91 | 57.52 | 54.45 |
| 16 | 31.0 | * 16.0 | 27.1 | 44.85 | 51.56 | 58.51 | 59.91 | 57.46 | 54.34 |
| 17 | 30.95 | 16.0 | 26.75 | 45.45 | 51.79 | 58.58 | 59.89 | 57.43 | 54.35 |
| 18 | 30.45 | 15.9 | 26.3 | 45.85 | 51.90 | 58.73 | 59.83 | 57.37 | 54.28 |
| 19 | * 29.9 | 15.8 | 26.5 | 46.35 | 52.03 | 59.16 | 59.78 | 57.26 | 54.10 |
| 20 | 29.35 | 16.1 | 26.6 | 46.7 | 52.50 | 59.50 | 59.69 | 57.14 | 53.94 |
| 21 | 28.5 | 17.4 | 26.7 | 47.05 | 52.86 | 59.69 | 59.67 | 57.03 | 53.89 |
| 22 | 27.55 | 19.85 | 26.35 | 47.4 | 53.14 | 59.80 | 59.66 | 56.91 | 53.82 |
| 23 | 26.7 | 21.65 | * 25.65 | 47.72 | 53.39 | 59.89 | 59.57 | 56.75 | 53.61 |
| 24 | 25.8 | 23.0 | 24.95 | 48.06 | 53.58 | 59.92 | 59.49 | 56.82 | 53.44 |
| 25 | 24.5 | 24.75 | 24.25 | 48.21 | 53.79 | 59.93 | 59.41 | 56.76 | 53.30 |
| 26 | * 23.45 | 26.7 | 24.6 | 48.44 | 54.11 | 59.89 | 59.29 | 56.66 | 53.13 |
| 27 | 22.4 | 27.95 | 25.0 | 48.67 | 54.45 | 59.98 | 59.31 | 56.54 | 53.06 |
| 28 | 21.15 | * 28.45 | 27.25 | 48.74 | 54.66 | 59.93 | 59.26 | 56.44 | 52.98 |
| 29 | 20.3 | ----- | 28.45 | 48.98 | 54.91 | 59.92 | 59.18 | 56.37 | 52.84 |
| 30 | 19.1 | ----- | 29.3 | 49.15 | 55.12 | 59.91 | 59.07 | 56.24 | 52.66 |
| 31 | 18.15 | ----- | 29.95 | ----- | 55.26 | ----- | 58.94 | 56.19 | ----- |

* Estimated.

NOTE.—Add 700 feet to obtain elevation above mean sea level.

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, 1930.

EXTREMES.—Maximum discharge during year, 6,640 second-feet Jan. 17 (gage height, 6.8 feet); minimum, 21 second-feet June 30 (gage height, 1.35 feet).

1911-1930: Maximum discharge, about 35,500 second-feet Mar. 28, 1913 (gage height, 12.36 feet); minimum, that of June 30, 1930.

REMARKS.—Records good except those for periods of ice effect, Dec. 7-31, Jan. 5-7, 25-28, Feb. 2-19, which are fair. Flow subsequent to Mar. 27 completely regulated by storage in Sacandaga Reservoir.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| 1. | 629 | 1,070 | 1,010 | 2,520 | 1,510 | 5,160 | 99 | 587 | 45 | 474 | 1,240 | 36 |
| 2. | 650 | 1,060 | 1,020 | 2,120 | 1,300 | 5,030 | 112 | 610 | 42 | 879 | 1,300 | 1,880 |
| 3. | 997 | 1,090 | 1,070 | 1,890 | 1,200 | 5,160 | 103 | 260 | 38 | 1,030 | 44 | 1,820 |
| 4. | 1,890 | 1,190 | 1,200 | 1,960 | 1,100 | 4,790 | 103 | 643 | 33 | 40 | 1,280 | 1,860 |
| 5. | 2,040 | 1,200 | 1,260 | 2,200 | 950 | 4,440 | 101 | 262 | 30 | 443 | 1,210 | 1,870 |
| 6. | 1,820 | 1,180 | 1,200 | 2,000 | 900 | 3,980 | 99 | 147 | 35 | 35 | 1,200 | 1,800 |
| 7. | 1,550 | 1,120 | 1,100 | 1,800 | 850 | 3,560 | 231 | 184 | 38 | 532 | 1,200 | 48 |
| 8. | 1,310 | 1,040 | 1,100 | 2,040 | 850 | 3,560 | 152 | 93 | 29 | 583 | 1,200 | 1,870 |
| 9. | 1,200 | 997 | 1,100 | 3,060 | 850 | 3,760 | 103 | 135 | 54 | 442 | 1,200 | 1,900 |
| 10. | 1,100 | 988 | 1,000 | 4,320 | 850 | 4,090 | 99 | 42 | 247 | 1,110 | 46 | 1,830 |
| 11. | 988 | 979 | 1,000 | 5,540 | 900 | 4,320 | 99 | 131 | 96 | 1,310 | 1,230 | 1,830 |
| 12. | 916 | 934 | 950 | 6,500 | 950 | 4,550 | 103 | 32 | 52 | 1,190 | 1,260 | 1,860 |
| 13. | 880 | 907 | 850 | 6,350 | 950 | 4,670 | 105 | 28 | 39 | 145 | 1,380 | 1,880 |
| 14. | 925 | 925 | 850 | 6,350 | 950 | 4,910 | 105 | 27 | 36 | 596 | 1,250 | 48 |
| 15. | 1,030 | 1,160 | 900 | 6,210 | 850 | 5,030 | 96 | 49 | 34 | 606 | 1,280 | 1,870 |
| 16. | 892 | 1,670 | 1,000 | 6,350 | 800 | 4,790 | 112 | 55 | 33 | 556 | 1,180 | 1,900 |
| 17. | 885 | 1,890 | 1,100 | 6,640 | 750 | 4,570 | 94 | 48 | 38 | 496 | 48 | 1,950 |
| 18. | 770 | 1,960 | 1,100 | 6,500 | 800 | 4,440 | 94 | 42 | 48 | 1,050 | 1,140 | 1,870 |
| 19. | 755 | 2,520 | 1,500 | 6,350 | 900 | 4,440 | 99 | 40 | 86 | 1,800 | 1,320 | 1,850 |
| 20. | 1,050 | 3,060 | 1,900 | 5,940 | 1,110 | 4,550 | 96 | 66 | 49 | 46 | 1,200 | 2,040 |
| 21. | 889 | 3,250 | 2,200 | 5,540 | 1,530 | 4,440 | 94 | 49 | 56 | 559 | 1,330 | 166 |
| 22. | 736 | 3,350 | 2,800 | 5,160 | 2,270 | 4,440 | 94 | 110 | 36 | 734 | 1,330 | 1,810 |
| 23. | 1,190 | 3,160 | 3,200 | 4,790 | 2,870 | 4,090 | 92 | 40 | 28 | 963 | 1,220 | 1,910 |
| 24. | 1,960 | 2,960 | 3,000 | 4,440 | 3,350 | 3,760 | 89 | 129 | 1,040 | 1,360 | 43 | 1,910 |
| 25. | 2,120 | 2,690 | 3,000 | 3,800 | 3,870 | 3,560 | 110 | 240 | 1,070 | 1,420 | 1,160 | 1,860 |
| 26. | 2,040 | 2,350 | 3,000 | 3,400 | 4,670 | 3,450 | 158 | 72 | 562 | 1,240 | 1,230 | 1,840 |
| 27. | 1,890 | 2,040 | 3,000 | 3,000 | 5,160 | 2,710 | 175 | 194 | 587 | 48 | 1,260 | 1,800 |
| 28. | 1,630 | 1,890 | 2,800 | 2,600 | 5,280 | 159 | 161 | 101 | 32 | 1,230 | 1,340 | 44 |
| 29. | 1,330 | 1,550 | 2,800 | 2,350 | ----- | ----- | 94 | 157 | 53 | 22 | 1,270 | 1,260 |
| 30. | 1,200 | 1,100 | 2,800 | 2,040 | ----- | ----- | 99 | 300 | 40 | 453 | 1,190 | 1,190 |
| 31. | 1,110 | ----- | 2,800 | 1,720 | ----- | ----- | 99 | ----- | 78 | ----- | 1,250 | 55 |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|------------|---------|---------|-------|-----------------|-------------------|
| October. | 2,120 | 629 | 1,240 | 1.17 | 1.35 |
| November. | 3,350 | 907 | 1,710 | 1.61 | 1.80 |
| December. | 3,200 | 850 | 1,730 | 1.63 | 1.88 |
| January. | 6,640 | 1,720 | 4,050 | 3.82 | 4.40 |
| February. | 5,280 | 750 | 1,730 | 1.63 | 1.70 |
| March. | 5,160 | 94 | 3,760 | 3.55 | 4.09 |
| April. | 300 | 89 | 121 | .114 | .13 |
| May. | 643 | 27 | 148 | .140 | .16 |
| June. | 1,070 | 22 | 166 | .157 | .18 |
| July. | 1,800 | 35 | 794 | .749 | .86 |
| August. | 1,380 | 43 | 1,050 | .991 | 1.14 |
| September. | 2,040 | 36 | 1,570 | 1.48 | 1.65 |
| The year. | 6,640 | 22 | 1,510 | 1.42 | 13.34 |

* Estimated.

NOTE.—Net gain in storage in Sacandaga Reservoir during year 18.26 billion cubic feet, equivalent to mean discharge of 579 second-feet.

GLENS FALLS FEEDER AT GLENS FALLS, N. Y.

LOCATION.—Slope station at upper end of feeder canal at Glens Falls, Warren County. Three water-stage recorders determine slope from point of diversion from Hudson River at feeder dam to point near first lock (No. 13) below.

RECORDS AVAILABLE.—May, 1927, to September, 1930.

REMARKS.—Records fair. Daily discharge determined by use of Chezy formula, variations in coefficient "C" throughout season being computed from current-meter measurements. Flow regulated by demands of Champlain Canal and for floating logs.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|------|------|-----|------|------|------|-------|
| 1 | 233 | 166 | | 149 | 138 | 164 | 186 | 191 |
| 2 | 233 | 166 | | 162 | 153 | 160 | 183 | 196 |
| 3 | 232 | 166 | | 152 | 150 | 174 | 185 | 194 |
| 4 | 232 | 166 | | 160 | 153 | 176 | 186 | 200 |
| 5 | 233 | 165 | | 135 | 144 | 183 | 185 | 202 |
| 6 | 232 | 164 | | 131 | 149 | 162 | 187 | 199 |
| 7 | 232 | 162 | | 133 | 151 | 167 | 186 | 203 |
| 8 | 233 | 165 | | 146 | 143 | 182 | 186 | 205 |
| 9 | 231 | 166 | | 155 | 147 | 179 | 189 | 210 |
| 10 | 231 | 166 | | 148 | 136 | 182 | 183 | 207 |
| 11 | 232 | 165 | | 144 | 134 | 191 | 184 | 209 |
| 12 | 230 | 163 | | 143 | 128 | 184 | 182 | 205 |
| 13 | 232 | 164 | | 112 | 131 | 179 | 180 | 206 |
| 14 | 166 | 165 | | 138 | 131 | 195 | 182 | 213 |
| 15 | 166 | 162 | | 152 | 137 | 197 | 182 | 205 |
| 16 | 166 | 160 | | 172 | 154 | 196 | 174 | 210 |
| 17 | 164 | 158 | | 141 | 149 | 197 | 178 | 209 |
| 18 | 164 | 160 | | 131 | 149 | 184 | 179 | 207 |
| 19 | 164 | 161 | | 128 | 149 | 182 | 178 | 208 |
| 20 | 165 | 158 | | 144 | 150 | 181 | 182 | 207 |
| 21 | 165 | 159 | | 150 | 150 | 181 | 181 | 212 |
| 22 | 165 | 160 | | 160 | 152 | 184 | 183 | 208 |
| 23 | 164 | | | 166 | 164 | 184 | 188 | 210 |
| 24 | 166 | | | 164 | 177 | 185 | 183 | 210 |
| 25 | 166 | | 150 | 149 | 179 | 174 | 184 | 196 |
| 26 | 165 | | 165 | 140 | 172 | 162 | 190 | 202 |
| 27 | 164 | | 179 | 148 | 172 | 161 | 190 | 194 |
| 28 | 165 | | 158 | 149 | 172 | 161 | 191 | 194 |
| 29 | 166 | | 158 | 142 | 174 | 163 | 196 | 189 |
| 30 | 166 | | 165 | 146 | 172 | 164 | 192 | 192 |
| 31 | 166 | | | 139 | | 176 | 189 | |

| Month | Maximum | Minimum | Mean | Month | Maximum | Minimum | Mean |
|---------------|---------|---------|------|-----------|---------|---------|------|
| October | 233 | 164 | 193 | June | 179 | 128 | 152 |
| November 1-22 | 166 | 158 | 163 | July | 197 | 160 | 178 |
| April 25-30 | 179 | 150 | 162 | August | 192 | 174 | 184 |
| May | 172 | 112 | 146 | September | 213 | 189 | 201 |

* Estimated.

NOTE.—Canal not in operation Dec. 9 to Apr. 10; practically no flow during that period.

BATTEN KILL AT ARLINGTON, VT.

LOCATION.—Chain gage on bridge at Arlington, Bennington County, 0.9 mile below mouth of Warm Brook.

DRAINAGE AREA.—151 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,310 second-feet Feb. 24 (gage height, 5.17 feet); minimum, 50 second-feet Sept. 24 (gage height, 1.84 feet).

1928-1930: Maximum discharge, 2,850 second-feet Apr. 26, 1929 (gage height, 7.14 feet); minimum, that of Sept. 24, 1930.

REMARKS.—Records good. Corrections for ice effect applied Nov. 30 to Dec. 2, Dec. 12-26, Jan. 18-20, 24, 26, 31, Feb. 1, 4-8, 12-18.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 101 | 139 | 159 | 232 | 206 | 442 | 352 | 288 | 352 | 120 | 79 | 73 |
| 2..... | 101 | 159 | 159 | 288 | 206 | 423 | 498 | 405 | 304 | 149 | 71 | 85 |
| 3..... | 170 | 181 | 159 | 498 | 194 | 352 | 423 | 578 | 274 | 120 | 70 | 170 |
| 4..... | 232 | 206 | 159 | 423 | 194 | 336 | 387 | 387 | 259 | 110 | 73 | 98 |
| 5..... | 159 | 194 | 149 | 259 | 181 | 304 | 370 | 304 | 232 | 110 | 67 | 76 |
| 6..... | 130 | 159 | 149 | 288 | 181 | 304 | 423 | 274 | 206 | 139 | 64 | 73 |
| 7..... | 120 | 139 | 149 | 304 | 181 | 304 | 1,070 | 259 | 288 | 139 | 66 | 71 |
| 8..... | 170 | 130 | 139 | 618 | 170 | 800 | 1,190 | 336 | 259 | 159 | 85 | 67 |
| 9..... | 139 | 120 | 130 | 1,130 | 170 | 750 | 750 | 352 | 352 | 139 | 90 | 61 |
| 10..... | 110 | 120 | 120 | 1,190 | 181 | 479 | 538 | 288 | 705 | 336 | 82 | 59 |
| 11..... | 110 | 130 | 120 | 750 | 170 | 442 | 479 | 246 | 800 | 170 | 83 | 55 |
| 12..... | 110 | 130 | 130 | 518 | 170 | 750 | 578 | 246 | 578 | 159 | 71 | 56 |
| 13..... | 110 | 130 | 139 | 660 | 246 | 538 | 618 | 219 | 387 | 130 | 70 | 59 |
| 14..... | 110 | 232 | 159 | 618 | 518 | 479 | 618 | 219 | 304 | 206 | 70 | 57 |
| 15..... | 101 | 538 | 159 | 705 | 319 | 405 | 618 | 274 | 246 | 219 | 405 | 59 |
| 16..... | 98 | 518 | 120 | 660 | 246 | 387 | 460 | 336 | 232 | 139 | 194 | 120 |
| 17..... | 120 | 319 | 149 | 442 | 232 | 387 | 423 | 319 | 206 | 120 | 120 | 110 |
| 18..... | 120 | 442 | 900 | 387 | 259 | 800 | 423 | 259 | 274 | 101 | 93 | 79 |
| 19..... | 110 | 660 | 1,190 | 370 | 246 | 900 | 498 | 232 | 259 | 99 | 83 | 66 |
| 20..... | 101 | 423 | 1,010 | 387 | 387 | 618 | 423 | 498 | 370 | 93 | 80 | 58 |
| 21..... | 101 | 304 | 518 | 352 | 750 | 538 | 387 | 370 | 288 | 91 | 88 | 55 |
| 22..... | 98 | 259 | 405 | 319 | 750 | 423 | 387 | 319 | 259 | 96 | 77 | 55 |
| 23..... | 442 | 206 | 288 | 304 | 660 | 387 | 352 | 274 | 219 | 101 | 67 | 52 |
| 24..... | 288 | 206 | 304 | 288 | 1,250 | 370 | 319 | 232 | 194 | 83 | 130 | 51 |
| 25..... | 194 | 219 | 288 | 288 | 955 | 518 | 304 | 538 | 170 | 87 | 96 | 57 |
| 26..... | 170 | 194 | 274 | 274 | 900 | 800 | 288 | 850 | 159 | 79 | 76 | 62 |
| 27..... | 139 | 194 | 288 | 274 | 618 | 750 | 304 | 578 | 159 | 232 | 70 | 139 |
| 28..... | 130 | 219 | 304 | 259 | 460 | 578 | 288 | 618 | 149 | 149 | 62 | 98 |
| 29..... | 120 | 159 | 274 | 232 | ----- | 442 | 274 | 660 | 130 | 101 | 59 | 71 |
| 30..... | 120 | 159 | 259 | 219 | ----- | 405 | 274 | 479 | 120 | 91 | 83 | 66 |
| 31..... | 120 | ----- | 246 | 206 | ----- | 387 | ----- | 423 | ----- | 79 | 64 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 442 | 98 | 143 | 0.947 | 1.09 |
| November..... | 660 | 120 | 240 | 1.59 | 1.77 |
| December..... | 1,190 | 120 | 290 | 1.92 | 2.21 |
| January..... | 1,190 | 206 | 443 | 2.93 | 3.38 |
| February..... | 1,250 | 170 | 393 | 2.60 | 2.71 |
| March..... | 900 | 304 | 510 | 3.38 | 3.90 |
| April..... | 1,190 | 274 | 477 | 3.16 | 3.53 |
| May..... | 850 | 219 | 376 | 2.49 | 2.87 |
| June..... | 800 | 120 | 291 | 1.93 | 2.15 |
| July..... | 336 | 79 | 134 | .887 | 1.02 |
| August..... | 405 | 59 | 93.2 | .617 | .71 |
| September..... | 170 | 51 | 75.3 | .499 | .56 |
| The year..... | 1,250 | 51 | 288 | 1.9' | 23.90 |

BATTEN KILL AT BATTENVILLE, N. Y.

LOCATION.—Water-stage recorder 1 mile southwest of Battenville, Washington County.

DRAINAGE AREA.—397 square miles.

RECORDS AVAILABLE.—October, 1922, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,950 second-feet Feb. 24 (gage height, 5.8 feet); minimum, 42 second-feet Sept. 26 (gage height, 1.78 feet).
1922-1930: Maximum discharge, 21,300 second-feet Nov. 4, 1927 (gage height, 17.7 feet); minimum, 36 second-feet Aug. 24, 1927 (gage height, 1.77 feet).

REMARKS.—Records good except those for periods of ice effect, Dec. 25-28, Jan. 20 to Feb. 5, Feb. 8-9, 17-19, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| 1..... | 204 | 195 | 312 | 493 | 440 | 1,110 | 888 | 446 | 859 | 219 | 137 | 104 |
| 2..... | 208 | 219 | 313 | 618 | 420 | 1,130 | 965 | 560 | 740 | 247 | 132 | 108 |
| 3..... | 251 | 234 | 313 | 1,650 | 400 | 996 | 955 | * 780 | 642 | 242 | 124 | 142 |
| 4..... | 318 | 273 | 328 | 1,070 | 380 | 879 | 852 | 668 | 556 | 221 | 118 | 169 |
| 5..... | 323 | 260 | 299 | 759 | 360 | 796 | 782 | * 538 | 490 | 212 | 121 | 142 |
| 6..... | 271 | 244 | 282 | 823 | 348 | 796 | 775 | 474 | 492 | 202 | 120 | 115 |
| 7..... | 242 | 224 | 286 | 890 | 343 | 838 | 1,320 | 440 | 610 | 246 | 118 | 106 |
| 8..... | 256 | 205 | 282 | 1,380 | 340 | 1,390 | 2,010 | 479 | 562 | 246 | 118 | 104 |
| 9..... | 252 | 205 | 291 | 2,270 | 360 | 2,100 | 1,670 | 538 | 664 | 232 | 136 | 101 |
| 10..... | 220 | 208 | 278 | 2,090 | 353 | 1,550 | 1,230 | 479 | 1,320 | 354 | 136 | 88 |
| 11..... | 267 | 264 | 274 | 1,550 | 358 | 1,406 | 1,090 | 425 | 1,390 | 314 | 137 | 86 |
| 12..... | 205 | 197 | 262 | 1,270 | 333 | 1,906 | 1,110 | 388 | 1,256 | 251 | 133 | 86 |
| 13..... | 263 | 193 | 226 | 1,270 | 524 | 1,840 | 1,170 | 373 | 940 | 231 | 119 | 86 |
| 14..... | 199 | 244 | 291 | 1,350 | 1,370 | 1,540 | 1,110 | 348 | 754 | 234 | 116 | 84 |
| 15..... | 195 | 454 | 313 | 1,720 | 1,270 | 1,270 | 1,090 | 368 | 649 | 328 | 166 | 83 |
| 16..... | 189 | 781 | 313 | 1,780 | 787 | 1,190 | 932 | 484 | 550 | 264 | 339 | 93 |
| 17..... | 190 | 523 | 282 | 1,260 | 566 | 1,110 | 810 | 484 | 496 | 217 | 215 | 129 |
| 18..... | 200 | 518 | 1,360 | 1,096 | 500 | 1,610 | 782 | 446 | 568 | 197 | 172 | 159 |
| 19..... | 192 | 909 | 2,410 | 1,010 | 600 | 2,510 | 810 | 440 | 550 | 179 | 149 | 112 |
| 20..... | 193 | 742 | 2,480 | 900 | 1,450 | 2,100 | 761 | 559 | 586 | 152 | 127 | 98 |
| 21..... | 174 | 570 | 1,670 | 850 | 2,640 | 1,730 | 688 | 612 | 538 | 149 | 125 | 91 |
| 22..... | 188 | 488 | 1,180 | 750 | 2,450 | 1,350 | 662 | 496 | 484 | 146 | 122 | 84 |
| 23..... | 250 | 412 | 811 | 700 | 2,020 | 1,180 | 656 | 457 | * 435 | 148 | 118 | 84 |
| 24..... | 397 | 371 | 643 | 700 | 2,740 | 1,096 | 598 | 399 | * 383 | 155 | 104 | 82 |
| 25..... | 291 | 381 | 600 | 600 | 2,550 | 1,170 | 568 | 531 | 338 | 139 | 128 | 80 |
| 26..... | 252 | 351 | 550 | 550 | 2,250 | 1,720 | 544 | 1,330 | 305 | 132 | 124 | 82 |
| 27..... | 234 | 351 | 550 | 550 | 1,670 | 1,710 | 508 | 1,230 | 300 | 165 | 102 | 101 |
| 28..... | 209 | 361 | 550 | 556 | 1,280 | 1,370 | 496 | 1,030 | 282 | 260 | 105 | 145 |
| 29..... | 195 | 328 | 564 | 550 | ----- | 1,170 | 479 | 1,220 | 260 | 198 | 97 | 134 |
| 30..... | 192 | 268 | 528 | 560 | ----- | 1,040 | 452 | 1,120 | 235 | 165 | 102 | 108 |
| 31..... | 188 | ----- | 504 | 460 | ----- | 970 | ----- | 1,000 | ----- | 146 | 107 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 397 | 174 | 229 | 6.577 | 0.67 |
| November..... | 909 | 193 | 364 | .917 | 1.02 |
| December..... | 2,480 | 226 | 624 | 1.57 | 1.81 |
| January..... | 2,270 | 460 | 1,010 | 2.54 | 2.93 |
| February..... | 2,740 | 333 | 1,050 | 2.64 | 2.75 |
| March..... | 2,510 | 796 | 1,370 | 3.45 | 3.98 |
| April..... | 2,010 | 452 | 892 | 2.25 | 2.51 |
| May..... | 1,330 | 348 | 617 | 1.55 | 1.79 |
| June..... | 1,390 | 235 | 605 | 1.52 | 1.70 |
| July..... | 354 | 132 | 213 | .537 | .62 |
| August..... | 339 | 97 | 134 | .338 | .39 |
| September..... | 169 | 80 | 106 | .267 | .30 |
| The year..... | 2,740 | 80 | 599 | 1.51 | 20.47 |

* Estimated.

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, 1930.

EXTREMES.—Maximum discharge during year, 1,600 second-feet Mar. 8 (gage height, 6.0 feet); minimum, 9.6 second-feet Aug. 31 (gage height, 0.99 foot).
1927–1930: Maximum discharge, about 2,350 second-feet Mar. 16, 1929 (gage height, 7.5 feet); minimum, 6.1 second-feet Aug. 23, 1927 (gage height, 0.86 foot).

REMARKS.—Records good except those for periods of ice effect, Dec. 1–14, 24, 25, Jan. 1, 5–7, Jan. 18 to Feb. 19, and those estimated, which are fair.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|------|------|------|------|---------|------|-----|------|------|------|-------|
| 1 | 39 | 69 | | 110 | 70 | 200 | 171 | 90 | 73 | 41 | 24 | 24 |
| 2 | 47 | 80 | | 120 | 65 | 234 | 213 | 115 | 70 | 48 | 24 | 31 |
| 3 | 92 | 86 | | 194 | 70 | 200 | 196 | 151 | 68 | 42 | 24 | 34 |
| 4 | 100 | 93 | | 207 | 70 | 173 | 175 | 125 | 58 | 41 | 25 | 32 |
| 5 | 76 | 86 | | 120 | 65 | 153 | 173 | 98 | 50 | 37 | 27 | 25 |
| 6 | 63 | 73 | a 55 | 110 | 65 | a 160 | 173 | 89 | 48 | 37 | 24 | 23 |
| 7 | 63 | 66 | | 120 | 65 | a 290 | 583 | 81 | 72 | 41 | 22 | 28 |
| 8 | 58 | 60 | | 175 | 65 | a 1,200 | 628 | 89 | 58 | 41 | 23 | 28 |
| 9 | 51 | 59 | | 573 | 65 | 1,080 | 360 | 84 | 156 | 39 | 24 | 23 |
| 10 | 49 | 59 | | 377 | 70 | 500 | 255 | 77 | 342 | 41 | 23 | 21 |
| 11 | 49 | 60 | | 268 | 65 | 405 | 213 | 70 | 522 | 35 | 24 | 21 |
| 12 | 48 | 63 | | 257 | 65 | 518 | 220 | 61 | 235 | 41 | 23 | 20 |
| 13 | 49 | 66 | 48 | 196 | 65 | 405 | 211 | 59 | 138 | 32 | 22 | 20 |
| 14 | 53 | 97 | 55 | 222 | 110 | 343 | 194 | 54 | 105 | 52 | 21 | 21 |
| 15 | 51 | 190 | 70 | 489 | 120 | 265 | 171 | 147 | 87 | 58 | 25 | 29 |
| 16 | 52 | 161 | 78 | 429 | 95 | 238 | 157 | 211 | 73 | 41 | 29 | 30 |
| 17 | 48 | 112 | 70 | 238 | 75 | 227 | 149 | 138 | 63 | 35 | 29 | 75 |
| 18 | 38 | 265 | 357 | 170 | 80 | 400 | 161 | 103 | 127 | 32 | 24 | 41 |
| 19 | 42 | 337 | 377 | 140 | 95 | 587 | 161 | 100 | 198 | 30 | 22 | 35 |
| 20 | 41 | 198 | 303 | 120 | 232 | 343 | 148 | 329 | 134 | 30 | 23 | 27 |
| 21 | 41 | 157 | 220 | 100 | 697 | 265 | 129 | 213 | 92 | 28 | 23 | 23 |
| 22 | 47 | 129 | 190 | 90 | 612 | 194 | 144 | 151 | 76 | 30 | 21 | 22 |
| 23 | 236 | a 87 | 167 | 85 | 481 | 177 | 149 | 151 | 64 | 33 | 21 | 20 |
| 24 | 166 | a 90 | 150 | 80 | 841 | 173 | 131 | 101 | 55 | 31 | 23 | 20 |
| 25 | 107 | 89 | 130 | 75 | 725 | 198 | 122 | 128 | 53 | 27 | 29 | 21 |
| 26 | 86 | a 80 | 120 | 70 | 582 | 442 | 118 | 192 | 53 | 24 | 30 | 25 |
| 27 | 77 | a 74 | 113 | 70 | 346 | 405 | 106 | 157 | 53 | 51 | 23 | 38 |
| 28 | 69 | a 69 | 108 | 75 | 245 | 272 | 101 | 118 | 47 | 44 | 22 | 19 |
| 29 | 65 | a 64 | 106 | 80 | | 220 | 97 | 108 | 42 | 34 | 20 | 22 |
| 30 | 60 | a 63 | 105 | 75 | | 196 | 90 | 97 | 34 | 29 | 25 | 21 |
| 31 | 58 | | 106 | 70 | | 183 | | 87 | | 25 | 22 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 236 | 38 | 68.4 | 0.766 | 0.89 |
| November | 337 | 59 | 106 | 1.19 | 1.33 |
| December | 377 | 48 | 114 | 1.28 | 1.48 |
| January | 573 | 70 | 178 | 2.00 | 2.31 |
| February | 841 | 65 | 221 | 2.48 | 2.58 |
| March | 1,200 | 153 | 342 | 3.84 | 4.43 |
| April | 628 | 90 | 197 | 2.21 | 2.47 |
| May | 329 | 54 | 122 | 1.37 | 1.58 |
| June | 522 | 34 | 108 | 1.21 | 1.35 |
| July | 58 | 24 | 37.1 | .417 | .48 |
| August | 30 | 20 | 23.9 | .269 | .31 |
| September | 75 | 19 | 27.3 | .307 | .34 |
| The year | 1,200 | 19 | 128 | 1.44 | 19.55 |

a Estimated.

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, 1930.

EXTREMES.—Maximum discharge during year, 5,380 second-feet Mar. 8 (gage height, 8.3 feet); minimum, about 54 second-feet Oct. 13.

1910-1922, 1923-1930: Maximum discharge, 29,800 second-feet Nov. 4, 1927 (gage height, 18.8 feet); practically no flow Sept. 14, 1913 (gage height, 6.1 feet, old datum).

REMARKS.—Records excellent except those for periods of ice effect, Nov. 30, Dec. 11-13, 25-28, Jan. 20 to Feb. 12, Feb. 17-19, and those estimated, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| 1..... | 126 | 145 | 189 | 409 | 480 | 1,140 | 1,000 | 506 | 800 | 214 | 150 | 130 |
| 2..... | 126 | 138 | 210 | 603 | 440 | 1,250 | 1,120 | 737 | 746 | 380 | 152 | 194 |
| 3..... | 137 | 165 | 199 | 1,090 | 420 | 1,030 | 1,010 | 1,090 | 616 | 332 | 148 | 224 |
| 4..... | 158 | 231 | 189 | 1,020 | 460 | 1,000 | 921 | 860 | 536 | 270 | 162 | 197 |
| 5..... | 148 | 220 | 192 | 575 | 400 | 894 | 842 | 731 | 433 | 256 | 142 | 168 |
| 6..... | 99 | 199 | 171 | 705 | 380 | 876 | 834 | 645 | 426 | 208 | 148 | 135 |
| 7..... | 160 | 189 | 157 | 682 | 360 | 921 | 1,780 | 631 | 408 | 439 | 136 | 136 |
| 8..... | 171 | 171 | 160 | 943 | 340 | 2,510 | 2,260 | 582 | 365 | 456 | 134 | 172 |
| 9..... | 153 | 138 | 220 | 1,670 | 340 | 3,540 | 1,520 | 596 | 492 | 368 | 132 | 168 |
| 10..... | 138 | 152 | 195 | 1,840 | 340 | 1,950 | 1,230 | 492 | 1,060 | 408 | 129 | 140 |
| 11..... | 123 | 174 | 170 | 1,120 | 340 | 1,670 | 1,160 | 473 | 897 | 313 | 138 | 140 |
| 12..... | 120 | 168 | 160 | 966 | 340 | 2,460 | 1,220 | 471 | 710 | 283 | 154 | 112 |
| 13..... | 86 | 146 | 190 | 1,420 | 523 | 2,010 | 1,230 | 370 | 562 | 247 | 122 | 98 |
| 14..... | 143 | 174 | 231 | 1,670 | 1,360 | 1,670 | 1,180 | 409 | 418 | 342 | 129 | 115 |
| 15..... | 144 | 278 | 292 | 1,950 | 994 | 1,360 | 1,100 | 415 | 387 | 538 | 177 | 142 |
| 16..... | 136 | 386 | 311 | 1,720 | 631 | 1,250 | 966 | 536 | 354 | 354 | 357 | 128 |
| 17..... | 118 | 278 | 252 | 1,130 | 500 | 1,230 | 876 | 480 | 308 | 279 | 229 | 128 |
| 18..... | 122 | 370 | 820 | 994 | 500 | 1,820 | 930 | 403 | 365 | 251 | 185 | 126 |
| 19..... | 119 | 723 | 2,250 | 850 | 600 | 2,210 | 948 | 405 | 542 | 230 | 165 | 109 |
| 20..... | 80 | 469 | 1,840 | 750 | 1,110 | 1,600 | 842 | 751 | 492 | 194 | 155 | 116 |
| 21..... | 140 | 360 | 1,130 | 700 | 2,010 | 1,390 | 778 | 645 | 415 | 220 | 164 | 99 |
| 22..... | 142 | 301 | 868 | 650 | 2,380 | 1,050 | 784 | 523 | 360 | 200 | 152 | 139 |
| 23..... | 283 | 227 | 645 | 600 | 2,010 | 930 | 800 | 461 | 404 | 214 | 146 | 141 |
| 24..... | 355 | 217 | 575 | 600 | 2,960 | 948 | 705 | 410 | 318 | 194 | 139 | 117 |
| 25..... | 220 | 260 | 500 | 550 | 2,510 | 1,450 | 698 | 788 | 285 | 197 | 160 | 119 |
| 26..... | 146 | 224 | 480 | 500 | 2,260 | 2,930 | 648 | 1,950 | 298 | 201 | 170 | 114 |
| 27..... | 160 | 220 | 460 | 500 | 1,670 | 1,990 | 638 | 1,450 | 265 | 270 | 134 | 150 |
| 28..... | 157 | 213 | 460 | 500 | 1,310 | 1,470 | 636 | 1,270 | 302 | 386 | 129 | 181 |
| 29..... | 154 | 213 | 486 | 550 | ----- | 1,310 | 549 | 1,420 | 238 | 255 | 137 | 172 |
| 30..... | 142 | 200 | 486 | 500 | ----- | 1,170 | 558 | 1,140 | 230 | 210 | 112 | 137 |
| 31..... | 157 | ----- | 449 | 500 | ----- | 1,110 | ----- | 939 | ----- | 177 | 101 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 355 | 80 | 150 | 0.293 | 0.34 |
| November..... | 723 | 138 | 245 | .479 | .53 |
| December..... | 2,250 | 157 | 482 | .941 | 1.08 |
| January..... | 1,950 | 409 | 912 | 1.78 | 2.05 |
| February..... | 2,960 | 340 | 999 | 1.95 | 2.03 |
| March..... | 3,540 | 876 | 1,550 | 3.03 | 3.49 |
| April..... | 2,260 | 549 | 993 | 1.94 | 2.16 |
| May..... | 1,950 | 370 | 728 | 1.42 | 1.64 |
| June..... | 1,060 | 230 | 468 | .914 | 1.02 |
| July..... | 538 | 177 | 287 | .561 | .65 |
| August..... | 337 | 101 | 154 | .301 | .35 |
| September..... | 224 | 98 | 142 | .277 | .31 |
| The year..... | 3,540 | 80 | 591 | 1.15 | 15.65 |

* Estimated.

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

LOCATION.—Staff gage 1 mile below Delta Dam and 4 miles north of Rome, Oneida County.

DRAINAGE AREA.—151 square miles.

RECORDS AVAILABLE.—October, 1927, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,600 second-feet Jan. 15 (gage height, 4.9 feet); minimum, 134 second-feet Dec. 11 (gage height, 1.4 feet).

1927-1930: Maximum discharge, 2,930 second-feet Apr. 8, 1928 (gage height, 6.9 feet); minimum, 89 second-feet Oct. 24, 25, 1927 (gage height, 1.04 feet).

Reports of State engineer and surveyor record maximum discharge of 4,210 second-feet Mar. 9, 1921.

REMARKS.—Records good. During navigation season water diverted into Delta Reservoir (Mohawk Basin) from Black River (St. Lawrence Basin) through Forestport feeder and Black River Canal flowing south. Flow almost completely regulated at Delta Dam.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|-------|------|---------|-------|---------|-------|------|-------|------|-------|
| 1 | 300 | 266 | * 900 | 317 | 1,360 | * 248 | 1,000 | 287 | 248 | 383 | 224 | 191 |
| 2 | 300 | 181 | 613 | 349 | 1,300 | * 248 | 1,020 | 287 | 248 | 330 | 224 | 191 |
| 3 | 240 | * 191 | 302 | 349 | 788 | * 248 | 1,000 | 287 | 248 | 260 | 224 | 191 |
| 4 | 150 | 212 | 302 | 333 | 817 | * 306 | 1,000 | 287 | 248 | 309 | 224 | 191 |
| 5 | 190 | 212 | 302 | 333 | 349 | 260 | 1,000 | 287 | 248 | 383 | 224 | 191 |
| 6 | | * 280 | 326 | 302 | 317 | 290 | 1,000 | 287 | 248 | 383 | 224 | 191 |
| 7 | | 280 | 535 | 226 | 329 | 260 | 1,120 | 287 | 316 | 383 | 224 | 191 |
| 8 | | 280 | * 535 | 162 | 501 | * 236 | 1,020 | 287 | 383 | 383 | 224 | 191 |
| 9 | | 280 | 535 | 162 | 583 | * 224 | 1,020 | 287 | 383 | 383 | 224 | 191 |
| 10 | | 260 | 535 | 162 | 817 | 224 | 1,020 | 287 | 283 | 383 | 224 | 191 |
| 11 | | 300 | * 535 | 373 | * 1,240 | 224 | 260 | 1,000 | 336 | 212 | 383 | 212 |
| 12 | | 380 | * 407 | 391 | * 1,570 | 224 | 260 | 1,000 | 419 | 212 | 383 | 212 |
| 13 | | * 380 | * 212 | 235 | * 1,570 | 224 | 260 | 1,000 | 419 | 229 | 383 | 212 |
| 14 | | 380 | * 212 | 235 | * 1,570 | 224 | 260 | 1,000 | 419 | 336 | 304 | 212 |
| 15 | | 380 | * 182 | 235 | 1,600 | 224 | 260 | 1,000 | 342 | * 419 | 248 | 212 |
| 16 | | 380 | 152 | 235 | 1,570 | 224 | 260 | 1,000 | 287 | 386 | 248 | 212 |
| 17 | | 380 | 162 | 200 | 1,570 | * 224 | 260 | 1,000 | 287 | 260 | 248 | 212 |
| 18 | | 440 | 162 | 181 | 1,540 | 224 | 287 | 975 | 287 | 274 | 248 | 212 |
| 19 | | 480 | 171 | 262 | 1,540 | 224 | 260 | 975 | 376 | 287 | 248 | 212 |
| 20 | | 480 | 152 | 205 | 1,540 | 224 | 260 | 775 | 350 | 256 | 248 | 212 |
| 21 | | 480 | 160 | 171 | 1,540 | 235 | 324 | 838 | 260 | 235 | 248 | 212 |
| 22 | | 460 | 515 | 171 | 1,510 | 260 | 495 | 335 | 260 | * 235 | 248 | 212 |
| 23 | | 460 | 515 | 171 | 1,510 | 260 | 495 | 495 | 260 | 224 | 248 | * 188 |
| 24 | | 460 | 476 | 171 | 1,510 | 287 | 495 | 495 | 260 | 224 | 248 | * 162 |
| 25 | | 460 | 476 | 171 | 1,540 | 260 | 495 | 495 | 274 | 224 | 248 | 191 |
| 26 | | 460 | 390 | 241 | 1,480 | 260 | 535 | 369 | 260 | 310 | 248 | 191 |
| 27 | | 457 | * 317 | 317 | 1,450 | 260 | 495 | 287 | 260 | 383 | 248 | 191 |
| 28 | | 457 | 317 | 317 | 1,420 | 248 | 495 | 287 | 260 | 383 | 248 | 191 |
| 29 | | 457 | 317 | 317 | 1,420 | ----- | * 716 | 287 | 260 | 383 | 240 | 191 |
| 30 | | 457 | * 596 | 317 | 1,420 | ----- | * 1,000 | 287 | 260 | 383 | 235 | 191 |
| 31 | | 457 | ----- | 317 | 1,360 | ----- | 1,000 | ----- | 248 | ----- | 235 | 191 |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 480 | 150 | 374 | 2.48 | 2.86 |
| November | 596 | 152 | 332 | 2.20 | 2.46 |
| December | 900 | 162 | 281 | 1.86 | 2.14 |
| January | 1,600 | 317 | 1,150 | 7.62 | 8.78 |
| February | 1,360 | 224 | 345 | 2.28 | 2.37 |
| March | 1,000 | 248 | 386 | 2.56 | 2.95 |
| April | 1,120 | 287 | 817 | 5.41 | 6.04 |
| May | 419 | 248 | 299 | 1.98 | 2.28 |
| June | 419 | 212 | 290 | 1.92 | 2.14 |
| July | 383 | 235 | 297 | 1.97 | 2.27 |
| August | 224 | 162 | 209 | 1.38 | 1.59 |
| September | 212 | 191 | 192 | 1.27 | 1.42 |
| The year | 1,600 | 150 | 415 | 2.75 | 37.30 |

* Estimated.

NOTE.—Net loss in storage in Delta Reservoir during year, 160 million cubic feet, equivalent to mean discharge of 5.1 second-feet.

MOHAWK RIVER NEAR LITTLE FALLS, N. Y.

LOCATION.—Water-stage recorder 1,800 feet above "Rocky Rift" Dam, 2 miles above mouth of 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, 1930.

EXTREMES.—Maximum discharge during year, 24,000 second-feet Jan. 10 (gage height, 15.5 feet); minimum not determined.

1927–1930: Maximum discharge, 27,600 second-feet Mar. 15, 1929 (gage height, 16.4 feet); minimum not determined.

REMARKS.—Records good except those for periods of ice effect, Dec. 12, 13, Feb. 7–11, and those estimated, which are fair. Water diverted during navigation season from Black River into Delta Reservoir and from West Canada Creek to summit level of Barge Canal. Some water may be received from Oswego Basin through summit level, and some may be similarly lost from Mohawk Basin. Water diverted at Rocky Rift Dam into Barge Canal for lockage and power use at Lock 16 included in table which follows. Distribution of flow affected by storage in Delta and Hinckley Reservoir.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|---------|---------|---------|--------|-------|-------|---------|---------|-------|-------|
| 1..... | 1,280 | 1,640 | 2,230 | 2,870 | 3,070 | 3,150 | 3,840 | 2,470 | 1,720 | * 1,200 | 918 | |
| 2..... | 1,950 | 1,920 | 2,180 | 4,020 | 3,070 | 3,660 | 4,730 | 3,080 | 1,650 | * 1,300 | | |
| 3..... | 4,710 | 2,070 | 2,230 | 7,150 | 3,140 | 3,580 | 5,300 | 4,920 | 1,390 | * 1,400 | | |
| 4..... | 3,980 | 1,980 | 1,840 | 6,290 | 2,930 | 3,410 | 4,360 | 5,090 | 1,280 | * 1,300 | | |
| 5..... | 2,570 | 1,810 | 1,550 | 4,240 | 2,230 | 3,100 | 3,920 | 3,520 | 1,180 | * 1,230 | | |
| 6..... | 2,100 | 1,730 | 1,670 | 3,910 | 1,940 | 2,660 | 3,540 | 2,710 | * 1,200 | 1,330 | | |
| 7..... | 2,030 | 1,710 | 1,710 | 6,410 | 1,900 | 2,870 | 7,970 | 2,420 | * 1,170 | 1,440 | | |
| 8..... | 2,530 | 1,820 | 1,710 | 15,400 | 1,800 | 12,400 | 7,850 | 2,170 | 1,210 | 1,420 | | * 675 |
| 9..... | 1,950 | 1,900 | 1,890 | 20,000 | 1,800 | 11,900 | 6,130 | 1,990 | 1,190 | 1,200 | | |
| 10..... | 1,770 | 1,820 | 2,270 | 22,100 | 1,800 | 9,700 | 4,820 | 2,050 | 1,400 | 1,190 | | |
| 11..... | 1,650 | 2,030 | 2,030 | 14,500 | 1,800 | 7,490 | 4,420 | 1,800 | 1,480 | 1,250 | | |
| 12..... | 1,630 | 2,360 | 1,900 | 9,450 | 1,730 | 6,540 | 4,690 | 1,880 | 1,310 | 1,170 | | |
| 13..... | 1,820 | 2,160 | 1,800 | 9,220 | 1,890 | 5,910 | 4,300 | 1,730 | 1,220 | 1,110 | | |
| 14..... | 2,020 | 2,570 | 1,790 | 10,600 | 2,460 | 4,360 | 4,010 | 1,810 | 1,170 | 1,150 | | |
| 15..... | 1,920 | 4,180 | * 2,170 | 13,200 | 2,540 | 3,360 | 5,220 | 2,050 | 1,120 | 1,230 | | 884 |
| 16..... | 1,780 | 4,330 | 2,180 | 10,600 | * 2,400 | 3,230 | 5,900 | 2,070 | 1,080 | 1,110 | * 710 | 966 |
| 17..... | 1,690 | 2,910 | 2,150 | * 7,860 | * 2,300 | 3,420 | 4,490 | 1,910 | 1,220 | 1,030 | | 1,460 |
| 18..... | 1,610 | 4,120 | 2,950 | * 5,670 | * 2,300 | 5,760 | 4,220 | 1,530 | 1,670 | 1,020 | | 1,240 |
| 19..... | 1,680 | 5,710 | 6,720 | | * 2,300 | 6,260 | 4,030 | 1,690 | 2,040 | 1,020 | | 915 |
| 20..... | 1,710 | 3,790 | 8,520 | | * 2,800 | 4,770 | 4,160 | 2,930 | 2,010 | 952 | | 884 |
| 21..... | 1,660 | 2,700 | 6,080 | | * 7,500 | 4,530 | 4,060 | 3,030 | 1,850 | 923 | | |
| 22..... | 1,700 | 2,380 | 4,170 | | * 7,000 | 3,620 | 4,250 | 2,680 | 1,470 | 954 | | 897 |
| 23..... | 1,860 | 2,290 | * 3,210 | | 7,480 | 3,460 | 3,760 | 2,580 | 1,280 | 884 | | |
| 24..... | 1,780 | 2,140 | * 2,610 | | 9,330 | 3,220 | 3,050 | 2,180 | * 1,220 | 957 | | |
| 25..... | 1,730 | 2,150 | * 2,410 | * 3,600 | 7,720 | 3,270 | 2,640 | 2,270 | * 1,190 | 974 | | * 850 |
| 26..... | 1,800 | 2,070 | 2,260 | | 6,150 | 4,550 | 2,820 | 2,660 | * 1,190 | 907 | | |
| 27..... | 1,730 | 2,060 | 2,650 | | 4,740 | 5,100 | 2,500 | 2,220 | * 1,210 | 1,060 | | 939 |
| 28..... | 1,730 | 2,130 | 2,730 | | 3,930 | 4,200 | 2,660 | 2,150 | * 1,180 | 874 | | 918 |
| 29..... | 1,600 | 2,090 | 2,670 | | | 3,270 | 2,400 | 2,030 | * 1,170 | 976 | | * 910 |
| 30..... | 1,600 | 2,000 | 2,520 | | | 2,990 | 2,290 | 2,090 | * 1,150 | 1,000 | | 904 |
| 31..... | 1,590 | | 2,690 | | | 3,940 | | 1,900 | | 919 | | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|--------------------|----------------------|
| October..... | 4,710 | 1,280 | 1,970 | 1.42 | 1.64 |
| November..... | 5,710 | 1,640 | 2,490 | 1.79 | 2.00 |
| December..... | 8,520 | 1,550 | 2,850 | 2.05 | 2.36 |
| January..... | 22,100 | 2,870 | 7,110 | 5.12 | 5.90 |
| February..... | 9,330 | 1,730 | 3,570 | 2.57 | 2.68 |
| March..... | 12,400 | 2,660 | 4,830 | 3.47 | 4.00 |
| April..... | 7,970 | 2,290 | 4,280 | 3.08 | 3.44 |
| May..... | 5,090 | 1,530 | 2,440 | 1.76 | 2.03 |
| June..... | 2,040 | 1,080 | 1,350 | .971 | 1.08 |
| July..... | 1,440 | 874 | 1,110 | .799 | .92 |
| August..... | | | 717 | .516 | .59 |
| September..... | 1,460 | | 821 | .591 | .66 |
| The year..... | 22,100 | | 2,800 | 2.01 | 27.30 |

* Estimated.

MOHAWK RIVER AT COHOES, N. Y.

LOCATION.—Water-stage recorder at School Street plant of New York Power & Light Corporation, in Cohoes, Albany County.

DRAINAGE AREA.—3,500 square miles.

RECORDS AVAILABLE.—October, 1925, to September, 1930, at present location. From December, 1917, to July, 1925, at Crescent Dam, 2 miles upstream. From July to October, 1925, records of discharge determined from gage heights above New York Power & Light Corporation dam in conjunction with operating records at School Street plant. These records comparable with records from present location.

EXTREMES.—Maximum discharge during year, 38,500 second-feet Mar. 9 (gage height, 15.4 feet); minimum, about 28 second-feet Aug. 24 (gage height, 3.57 feet).

1925-1930: Maximum discharge, 72,000 second-feet Mar. 16, 1929 (gage height, 18.3 feet); minimum, 22 second-feet Oct. 2, 1927 (gage height, 3.83 feet).

REMARKS.—Records good except those estimated and those for extremely low stages, which are fair. Water diverted at Crescent Dam through Lock No. 6 for use in Barge Canal during navigation season. Daily record of amount of this diversion follows table of monthly discharge for this station. Diversion made from Schoharie Creek for municipal supply. During navigation season a considerable amount of water received into Delta Reservoir from Black River Basin, through Black River Canal (flowing south) and Lansing Kill, and from Oswego River drainage through summit level of Barge Canal, which partly compensate for diversions. Flow partly regulated by storage reservoirs.

Daily discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|--------|---------|---------|--------|---------|--------|-------|-------|-------|-------|-------|
| 1 | 1,830 | 2,660 | 2,330 | 4,420 | *4,200 | 7,360 | 4,250 | 3,660 | 2,760 | 1,600 | 945 | 301 |
| 2 | 2,100 | 2,950 | 2,580 | 5,260 | *4,500 | 7,030 | 5,030 | 3,740 | 2,970 | 1,630 | 893 | 893 |
| 3 | 5,140 | 1,660 | 2,580 | *7,700 | 3,850 | 7,210 | 6,050 | 5,160 | 2,540 | 2,130 | 705 | 1,430 |
| 4 | 5,640 | 3,130 | 3,330 | *12,100 | 3,880 | 5,940 | 6,280 | 6,950 | 2,680 | 1,400 | 956 | 1,230 |
| 5 | 4,270 | 3,270 | 2,670 | 9,420 | *4,100 | 5,580 | 5,490 | 6,270 | 2,110 | 1,720 | 1,060 | 1,050 |
| 6 | 3,240 | 3,340 | 2,770 | 6,050 | *3,800 | 5,150 | 4,070 | 4,610 | 2,180 | 1,320 | 1,120 | 671 |
| 7 | 3,420 | 3,310 | 3,000 | 7,000 | *3,600 | 4,940 | 11,500 | 3,260 | 1,240 | 1,680 | 1,050 | 229 |
| 8 | 3,040 | 3,460 | 3,820 | 17,000 | *2,900 | 11,300 | 23,400 | 3,210 | 790 | 1,830 | 1,010 | 746 |
| 9 | 3,370 | 2,700 | 3,620 | 33,800 | 2,600 | *35,000 | 13,000 | 3,080 | 2,010 | 2,070 | 669 | 1,170 |
| 10 | 3,510 | 1,530 | 6,780 | 33,800 | 2,910 | *19,000 | 9,480 | 2,660 | 2,410 | 1,950 | 581 | 1,340 |
| 11 | 2,640 | 2,540 | 5,740 | 24,900 | 3,170 | 15,600 | 7,530 | 1,690 | 3,600 | 1,730 | 899 | 988 |
| 12 | 2,160 | 2,600 | 4,100 | 15,700 | 3,170 | 15,100 | 7,710 | 2,420 | 3,440 | 940 | 994 | 755 |
| 13 | 1,240 | 3,090 | 3,340 | 14,300 | 3,000 | 14,300 | 11,300 | 2,610 | 3,110 | 883 | 974 | 388 |
| 14 | 2,190 | 3,340 | 3,070 | 16,800 | 3,200 | 11,400 | 9,830 | 2,610 | 2,980 | 1,770 | 1,130 | 424 |
| 15 | 3,080 | 5,280 | 2,940 | *26,600 | 3,150 | 8,370 | 8,140 | 2,620 | 1,010 | 1,460 | 927 | 1,010 |
| 16 | 3,030 | 6,510 | 2,950 | *23,400 | 3,870 | 6,630 | 8,980 | 2,820 | 1,960 | 1,730 | 500 | 1,270 |
| 17 | 3,130 | 5,990 | *3,600 | *14,800 | 3,790 | 6,050 | 8,630 | 3,100 | 1,770 | 1,720 | 420 | 1,650 |
| 18 | 2,660 | 5,500 | *4,500 | 9,520 | 3,340 | 6,620 | 6,660 | 3,180 | 1,670 | 1,370 | 745 | 1,500 |
| 19 | 2,180 | 15,700 | *10,000 | 6,710 | 3,080 | 15,400 | 5,920 | 3,060 | 2,310 | 1,280 | 1,000 | 1,760 |
| 20 | 1,070 | 9,490 | *14,900 | *3,890 | 3,800 | 13,000 | 6,010 | 3,380 | 2,660 | 679 | 821 | 1,050 |
| 21 | 2,490 | 5,760 | *15,200 | *4,300 | 11,900 | 9,690 | 6,110 | 5,270 | 2,290 | 1,340 | 922 | 736 |
| 22 | 2,360 | 5,140 | *10,500 | *5,100 | 16,200 | 7,670 | 6,230 | 5,430 | 1,210 | 1,320 | 866 | 868 |
| 23 | 3,170 | 4,080 | *6,070 | *4,700 | 15,300 | 5,940 | 6,190 | 4,080 | 2,170 | 1,310 | 811 | 888 |
| 24 | 2,900 | 3,790 | 4,090 | 4,580 | 15,200 | 5,390 | 5,590 | 3,760 | 1,880 | 1,080 | 253 | 1,320 |
| 25 | 3,100 | 3,440 | 3,680 | 4,200 | 19,100 | 5,040 | 4,330 | 3,720 | 1,780 | 1,060 | 869 | 1,340 |
| 26 | 3,000 | 3,250 | *3,000 | *4,200 | 16,900 | 4,710 | 4,140 | 3,486 | 1,950 | 920 | 1,160 | 1,320 |
| 27 | 2,850 | 3,070 | *3,900 | 3,730 | 13,100 | 6,230 | 3,900 | 4,090 | 1,560 | 780 | 1,390 | 1,130 |
| 28 | 2,850 | 2,860 | *5,500 | 3,396 | 9,220 | 7,120 | 3,610 | 3,500 | 1,470 | 1,120 | 1,320 | 550 |
| 29 | 2,010 | 3,520 | 4,780 | *3,800 | ----- | 3,520 | 4,130 | 3,340 | 746 | 1,330 | 1,260 | 980 |
| 30 | 2,660 | 3,760 | 4,000 | *4,300 | ----- | 5,110 | 3,830 | 3,180 | 1,280 | 1,280 | 838 | 1,210 |
| 31 | 2,560 | ----- | 4,210 | *4,400 | ----- | 4,340 | ----- | 3,200 | ----- | 1,430 | 510 | ----- |

Monthly discharge, in second-feet, of Mohawk River at Cohoes, N. Y. 1929-30

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|--------|-----------------|-------------------|
| October..... | 5,640 | 1,070 | 2,870 | 0.820 | 0.95 |
| November..... | 15,700 | 1,530 | 4,220 | 1.21 | 1.35 |
| December..... | 15,200 | 2,330 | 4,950 | 1.41 | 1.63 |
| January..... | 33,800 | 3,390 | 11,000 | 3.14 | 3.62 |
| February..... | 19,100 | 2,600 | 6,670 | 1.91 | 1.99 |
| March..... | 35,000 | 3,520 | 9,220 | 2.63 | 3.03 |
| April..... | 23,400 | 3,610 | 7,240 | 2.07 | 2.31 |
| May..... | 6,950 | 1,690 | 3,650 | 1.04 | 1.20 |
| June..... | 3,600 | 746 | 2,080 | .594 | .66 |
| July..... | 2,130 | 679 | 1,420 | .406 | .47 |
| August..... | 1,390 | 258 | 890 | .254 | .29 |
| September..... | 1,760 | 229 | 1,010 | .289 | .32 |
| The year..... | 35,000 | 229 | 4,590 | 1.31 | 17.82 |

Daily diversion, in second-feet, from Mohawk River through Barge Canal at Lock No. 6 at Crescent Dam, N. Y., 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | | | |
|---------|------|------|------|------|------|------|------|-----|------|------|------|-------|-----|-----|-----|
| 1..... | 122 | 99 | 29 | | | | 64 | 127 | 110 | 139 | 133 | 122 | | | |
| 2..... | 87 | 81 | 47 | | | | 52 | 132 | 145 | 168 | 104 | 99 | | | |
| 3..... | 151 | 104 | 41 | | | | 69 | 103 | 139 | 104 | 157 | 128 | | | |
| 4..... | 104 | 104 | 53 | | | | 64 | 104 | 157 | 81 | 128 | 138 | | | |
| 5..... | 151 | 99 | 29 | | | | 58 | 110 | 116 | 163 | 139 | 116 | | | |
| 6..... | 99 | 168 | 18 | | | | 52 | 138 | 151 | 87 | 163 | 157 | | | |
| 7..... | 139 | 133 | 18 | | | | 99 | 179 | 116 | 128 | 87 | 116 | | | |
| 8..... | 122 | 139 | 18 | | | | 76 | 86 | 110 | 139 | 98 | 139 | | | |
| 9..... | 128 | 139 | 29 | | | | 81 | 104 | 133 | 180 | 150 | 110 | | | |
| 10..... | 122 | 116 | 23 | | | | 151 | 133 | 128 | 139 | 121 | 87 | | | |
| 11..... | 104 | 122 | 23 | | | a 4 | 163 | 104 | 186 | 128 | 179 | 109 | | | |
| 12..... | 104 | 104 | 6 | | | | 93 | 110 | 104 | 110 | 121 | 156 | | | |
| 13..... | 104 | 110 | 6 | | | | 110 | 128 | 139 | 133 | 132 | 180 | | | |
| 14..... | 133 | 133 | 6 | | | | 81 | 157 | 128 | 104 | 156 | 133 | | | |
| 15..... | 122 | 99 | a 5 | | | | 104 | 122 | 110 | 128 | 156 | 138 | | | |
| 16..... | 139 | 93 | | a 4 | | | 145 | 122 | 145 | 139 | 109 | 99 | | | |
| 17..... | 133 | 133 | | | | | | | | 139 | 81 | 104 | 133 | 168 | 110 |
| 18..... | 110 | 99 | | | | | | | | 116 | 151 | 110 | 128 | 151 | 110 |
| 19..... | 122 | 88 | | | | | | | | 87 | 139 | 110 | 116 | 98 | 128 |
| 20..... | 99 | 100 | | | | | | | | 99 | 133 | 128 | 157 | 138 | 168 |
| 21..... | 128 | 110 | | | | | 110 | 145 | 122 | 122 | 109 | 139 | | | |
| 22..... | 157 | 186 | | | | | 93 | 104 | 128 | 122 | 139 | 116 | | | |
| 23..... | 168 | 99 | | | | | 122 | 110 | 133 | 110 | 128 | 163 | | | |
| 24..... | 93 | 198 | | | | | 99 | 145 | 180 | 138 | 116 | 104 | | | |
| 25..... | 133 | 122 | | | | | 52 | 99 | 104 | 163 | 121 | 168 | | | |
| 26..... | 133 | 157 | | | | | 110 | 104 | 116 | 133 | 144 | 116 | | | |
| 27..... | 133 | 157 | | | | | 64 | 92 | 133 | 133 | 133 | 133 | 122 | | |
| 28..... | 133 | 128 | | | | | 93 | 92 | 99 | 128 | 104 | 151 | 139 | | |
| 29..... | 116 | 93 | | | | | 52 | 138 | 110 | 151 | 133 | 122 | 133 | | |
| 30..... | 122 | 52 | | | | | 52 | 109 | 151 | 127 | 174 | 122 | 104 | | |
| 31..... | 99 | | | | | | 52 | | 133 | | 110 | 192 | | | |

WEST CANADA CREEK AT HINCKLEY, N. Y.

LOCATION.—Water-stage recorder 1 mile below Hinckley Dam, at Hinckley, Oneida County, and $1\frac{1}{4}$ miles east of Prospect.

DRAINAGE AREA.—373 square miles.

RECORDS AVAILABLE.—June, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 10,400 second-feet Jan. 9 (gage height, 8.8 feet); minimum, 368 second-feet Aug. 21-22 (gage height, 3.73 feet).

1919-1930: Maximum discharge, 10,800 second-feet Apr. 12, 1922 (gage height, 8.93 feet); practically no flow Aug. 31, 1924 (gage height, 2.50 feet).

REMARKS.—Records excellent except those from Apr. 1 to June 30 (during which period some staff-gage readings were used), which are good. Flow regulated by storage in Hinckley Reservoir. Small diversion from Hinckley Reservoir for Utica water supply.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| 1 | 779 | 842 | 920 | 1,050 | 1,080 | 1,290 | 1,470 | 1,780 | 860 | 613 | 533 | 390 |
| 2 | 797 | 870 | 890 | 1,050 | 1,080 | 1,290 | 1,480 | 2,170 | 779 | 605 | 513 | 390 |
| 3 | 815 | 890 | 851 | 1,050 | 1,070 | 1,290 | 1,480 | 3,250 | 694 | 605 | 507 | 395 |
| 4 | 815 | 890 | 842 | 1,050 | 1,060 | 1,290 | 1,480 | 3,060 | 621 | 605 | 507 | 384 |
| 5 | 815 | 890 | 842 | 1,050 | 1,050 | 1,290 | 1,470 | 2,010 | 605 | 613 | 507 | 390 |
| 6 | 815 | 890 | 842 | 1,050 | 1,040 | 1,270 | 1,490 | 1,570 | 605 | 621 | 500 | 395 |
| 7 | 815 | 890 | 842 | 1,050 | 1,030 | 1,270 | 1,710 | 1,350 | 605 | 621 | 500 | 395 |
| 8 | 815 | 890 | 842 | 1,080 | 1,020 | 1,300 | 1,940 | 1,110 | 598 | 613 | 500 | 390 |
| 9 | 815 | 900 | 842 | 7,650 | 1,020 | 1,390 | 1,860 | 1,070 | 598 | 613 | 500 | 390 |
| 10 | 833 | 951 | 833 | 8,340 | 1,000 | 1,470 | 1,360 | 1,180 | 598 | 605 | 461 | 401 |
| 11 | 860 | 1,080 | 815 | 5,970 | 993 | 1,520 | 1,240 | 1,180 | 598 | 605 | 401 | 436 |
| 12 | 870 | 1,090 | 797 | 4,200 | 1,000 | 1,520 | 1,170 | 1,130 | 605 | 605 | 379 | 455 |
| 13 | 870 | 1,090 | 788 | 3,350 | 1,070 | 1,520 | 1,140 | 1,090 | 605 | 605 | 379 | 461 |
| 14 | 860 | 1,090 | 788 | 3,160 | 1,190 | 1,520 | 1,570 | 1,020 | 605 | 605 | 374 | 467 |
| 15 | 860 | 1,090 | 788 | 3,160 | 1,190 | 1,500 | 3,450 | 890 | 605 | 605 | 374 | 461 |
| 16 | 860 | 1,090 | 779 | 3,160 | 1,190 | 1,520 | 3,160 | 860 | 598 | 605 | 374 | 474 |
| 17 | 860 | 1,090 | 779 | 2,490 | 1,180 | 1,520 | 2,420 | 870 | 598 | 605 | 374 | 467 |
| 18 | 860 | 1,080 | 779 | 2,010 | 1,180 | 1,500 | 2,090 | 860 | 605 | 605 | 374 | 467 |
| 19 | 860 | 1,090 | 806 | 1,710 | 1,150 | 1,480 | 2,170 | 860 | 605 | 605 | 374 | 467 |
| 20 | 860 | 1,120 | 851 | 1,470 | 1,130 | 1,480 | 2,510 | 930 | 605 | 605 | 374 | 500 |
| 21 | 851 | 1,120 | 890 | 1,400 | 1,120 | 1,500 | 2,340 | 1,520 | 605 | 605 | 368 | 533 |
| 22 | 851 | 1,120 | 910 | 1,380 | 1,130 | 1,520 | 2,090 | 1,710 | 605 | 621 | 368 | 526 |
| 23 | 851 | 1,050 | 910 | 1,320 | 1,140 | 1,530 | 1,710 | 1,490 | 605 | 645 | 384 | 526 |
| 24 | 851 | 960 | 960 | 1,250 | 1,190 | 1,500 | 1,340 | 1,230 | 605 | 653 | 406 | 526 |
| 25 | 851 | 950 | 1,040 | 1,210 | 1,210 | 1,490 | 1,130 | 1,120 | 605 | 645 | 406 | 526 |
| 26 | 851 | 940 | 1,040 | 1,190 | 1,240 | 1,520 | 1,250 | 1,190 | 605 | 645 | 406 | 526 |
| 27 | 851 | 930 | 1,050 | 1,170 | 1,260 | 1,530 | 1,440 | 1,190 | 605 | 645 | 406 | 526 |
| 28 | 842 | 930 | 1,050 | 1,140 | 1,270 | 1,530 | 1,380 | 1,120 | 605 | 645 | 401 | 526 |
| 29 | 842 | 920 | 1,050 | 1,120 | ----- | 1,530 | 1,340 | 1,070 | 605 | 637 | 401 | 526 |
| 30 | 842 | 920 | 1,050 | 1,090 | ----- | 1,520 | 1,480 | 1,040 | 605 | 637 | 395 | 520 |
| 31 | 842 | ----- | 1,050 | 1,080 | ----- | 1,500 | ----- | 960 | ----- | 591 | 390 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 870 | 779 | 841 | 2.25 | 2.59 |
| November | 1,120 | 842 | 988 | 2.65 | 2.96 |
| December | 1,050 | 779 | 888 | 2.38 | 2.74 |
| January | 8,340 | 1,050 | 2,210 | 5.92 | 6.82 |
| February | 1,270 | 993 | 1,120 | 3.00 | 3.12 |
| March | 1,530 | 1,270 | 1,450 | 3.89 | 4.48 |
| April | 3,450 | 1,130 | 1,740 | 4.66 | 5.20 |
| May | 3,250 | 860 | 1,350 | 3.62 | 4.17 |
| June | 860 | 598 | 621 | 1.66 | 1.85 |
| July | 653 | 605 | 617 | 1.65 | 1.90 |
| August | 533 | 368 | 424 | 1.14 | 1.31 |
| September | 533 | 384 | 461 | 1.24 | 1.38 |
| The year | 8,340 | 368 | 1,060 | 2.84 | 38.52 |

NOTE.—Net loss in storage in Hinckley Reservoir during year 820 million cubic feet, equivalent to mean discharge of 26.0 second-feet.

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, 1930.

EXTREMES.—Maximum discharge during year, 12,500 second-feet Jan. 9 (gage height, 6.5 feet); minimum, 140 second-feet Sept. 4 (gage height, 1.26 feet).
1920-1930: Maximum discharge, about 16,500 second-feet June 21, 1922 (gage height, 7.3 feet); minimum, about 20 second-feet, Sept. 3, 1929 (gage height, 0.90 foot).

REMARKS.—Records good. Flow regulated by storage in Hinckley Reservoir. During canal season Ninemile feeder diverts water from West Canada Creek at Trenton Falls.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|-------|--------|-------|-------|-------|-------|-------|------|------|-------|
| 1 | 796 | 894 | 1,090 | 1,490 | 1,360 | 1,710 | 2,000 | 1,860 | 1,010 | 703 | 479 | 314 |
| 2 | 1,400 | 1,180 | 1,150 | 2,020 | 1,370 | 1,910 | 3,100 | 2,610 | 949 | 810 | 457 | 341 |
| 3 | 1,770 | 1,260 | 1,120 | 2,270 | 1,400 | 1,780 | 2,180 | 3,850 | 842 | 670 | 423 | 381 |
| 4 | 1,200 | 1,190 | 1,080 | 1,690 | 1,640 | 2,120 | 3,910 | 744 | 603 | 371 | 335 | |
| 5 | 1,030 | 1,120 | 1,090 | 1,390 | 1,640 | 2,030 | 2,480 | 712 | 628 | 442 | 327 | |
| 6 | 962 | 1,090 | 1,170 | 1,480 | 1,300 | 1,630 | 2,070 | 2,030 | 673 | 686 | 408 | 309 |
| 7 | 1,140 | 1,060 | 1,090 | 3,060 | 1,740 | 3,740 | 1,650 | 730 | 674 | 412 | 377 | |
| 8 | 1,070 | 1,040 | 1,140 | 8,320 | 5,570 | 2,620 | 1,410 | 677 | 623 | 403 | 302 | |
| 9 | 967 | 1,040 | 1,280 | 8,450 | 1,370 | 3,230 | 2,290 | 1,330 | 699 | 581 | 433 | 330 |
| 10 | 940 | 1,070 | 1,400 | 10,400 | 1,340 | 2,120 | 1,970 | 1,330 | 751 | 578 | 454 | 315 |
| 11 | 994 | 1,310 | 1,080 | 7,080 | 1,270 | 2,200 | 1,850 | 1,300 | 729 | 603 | 376 | 336 |
| 12 | 957 | 1,320 | 1,470 | 4,750 | 1,320 | 2,290 | 1,930 | 1,370 | 633 | 620 | 305 | 387 |
| 13 | 1,230 | 1,310 | 1,490 | 3,860 | 1,490 | 2,110 | 1,760 | 1,220 | 660 | 530 | 294 | 412 |
| 14 | 1,160 | 1,700 | 4,430 | 4,430 | 1,730 | 2,040 | 1,750 | 1,200 | 653 | 589 | 305 | 452 |
| 15 | 961 | 2,080 | 1,200 | 5,020 | 1,620 | 1,830 | 3,570 | 1,220 | 566 | 589 | 293 | 470 |
| 16 | 985 | 1,680 | 1,090 | 3,740 | 1,530 | 1,780 | 4,000 | 1,070 | 610 | 550 | 331 | 518 |
| 17 | 1,020 | 1,450 | 1,170 | 2,660 | 1,540 | 1,820 | 2,800 | 1,040 | 673 | 567 | 357 | 841 |
| 18 | 949 | 2,370 | 3,470 | 2,030 | 1,650 | 2,530 | 2,540 | 975 | 836 | 548 | 257 | 522 |
| 19 | 1,020 | 2,100 | 2,160 | 2,000 | 1,600 | 2,310 | 2,380 | 1,110 | 810 | 614 | 292 | 481 |
| 20 | 996 | 1,600 | 3,300 | 1,900 | 2,150 | 2,030 | 2,660 | 1,630 | 810 | 510 | 302 | 412 |
| 21 | 944 | 1,480 | 1,530 | 1,800 | 3,010 | 2,120 | 2,650 | 1,450 | 764 | 542 | 269 | 465 |
| 22 | 1,010 | 1,420 | 1,420 | 1,700 | 2,780 | 1,860 | 2,660 | 1,810 | 603 | 556 | 292 | 421 |
| 23 | 1,050 | 1,380 | 1,120 | 1,600 | 3,060 | 1,680 | 2,160 | 1,650 | 696 | 554 | 311 | 449 |
| 24 | 1,020 | 1,170 | 1,080 | 1,600 | 3,590 | 1,780 | 1,740 | 1,420 | 636 | 647 | 497 | 421 |
| 25 | 1,060 | 1,240 | 1,440 | 1,520 | 2,470 | 1,910 | 1,520 | 1,430 | 582 | 506 | 323 | 490 |
| 26 | 1,010 | 1,160 | 1,510 | 1,120 | 2,290 | 2,760 | 1,480 | 1,420 | 600 | 579 | 331 | 425 |
| 27 | 1,010 | 1,330 | 1,520 | 1,400 | 1,820 | 2,160 | 1,540 | 1,370 | 643 | 520 | 330 | 559 |
| 28 | 1,060 | 1,270 | 1,520 | 1,490 | 1,680 | 1,980 | 1,750 | 1,290 | 646 | 645 | 312 | 464 |
| 29 | 977 | 1,200 | 1,460 | 1,440 | 2,030 | 1,560 | 1,280 | 571 | 550 | 591 | 320 | 450 |
| 30 | 1,040 | 1,180 | 1,380 | 1,360 | 2,130 | 1,660 | 1,180 | 590 | 591 | 332 | 455 | |
| 31 | 974 | ----- | 1,530 | 1,300 | ----- | 2,120 | ----- | 1,160 | ----- | 585 | 351 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 1,770 | 796 | 1,050 | 1.83 | 2.11 |
| November | 2,370 | 894 | 1,360 | 2.37 | 2.64 |
| December | 3,470 | 1,080 | 1,400 | 2.43 | 2.80 |
| January | 10,400 | 1,120 | 3,040 | 5.29 | 6.10 |
| February | 3,590 | 1,270 | 1,780 | 3.10 | 3.23 |
| March | 5,570 | 1,630 | 2,150 | 3.74 | 4.31 |
| April | 4,000 | 1,480 | 2,270 | 3.95 | 4.41 |
| May | 3,910 | 975 | 1,610 | 2.80 | 3.23 |
| June | 1,010 | 566 | 703 | 1.22 | 1.36 |
| July | 810 | 506 | 598 | 1.04 | 1.20 |
| August | 497 | 257 | 357 | .621 | .72 |
| September | 841 | 302 | 425 | .739 | .82 |
| The year | 10,400 | 257 | 1,400 | 2.43 | 32.93 |

* Estimated.

NINEMILE FEEDER NEAR HOLLAND PATENT, N. Y.

LOCATION.—Water-stage recorder at mouth of feeder, half a mile below highway bridge 3 miles east of Holland Patent, Oneida County, and 6 miles below intake.

RECORDS AVAILABLE.—June, 1919, to September, 1930, during navigation seasons.

REMARKS.—Records good. Intake on West Canada Creek at Trenton Falls. Water used for navigation in Barge Canal. Records discontinued Oct. 12 to May 22; no flow during period until shortly before May 22.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | May | June | July | Aug. | Sept. | Day | Oct. | May | June | July | Aug. | Sept. |
|--------------|------|-----|--------------|--------------|------|-------|-----------|------|-----|--------------|--------------|------|-------|
| 1 | 2 | | 83 | 109 | 109 | 105 | 16 | | | 110 | 109 | 106 | 105 |
| 2 | 15 | | 82 | 111 | 109 | 105 | 17 | | | 113 | 109 | 105 | 103 |
| 3 | 16 | | 81 | 110 | 109 | 103 | 18 | | | 111 | 109 | 105 | 101 |
| 4 | 6 | | 80 | 109 | 109 | 103 | 19 | | | 111 | 109 | 105 | 101 |
| 5 | 4 | | 80 | 110 | 109 | 101 | 20 | | | 110 | 109 | 105 | 101 |
| 6 | 3 | | 79 | 111 | 109 | 101 | 21 | | | 109 | 109 | 105 | 101 |
| 7 | 9 | | 79 | 111 | 109 | 101 | 22 | | 89 | 109 | 109 | 105 | 101 |
| 8 | 4 | | 79 | 109 | 109 | 101 | 23 | | 87 | 109 | 110 | 100 | 101 |
| 9 | 3 | | 79 | 109 | 109 | 101 | 24 | | 86 | 109 | 111 | 57 | 101 |
| 10 | 2 | | 81 | 109 | 108 | 101 | 25 | | 89 | 109 | 110 | 107 | 101 |
| 11 | 2 | | 80 | 109 | 106 | 101 | 26 | | 87 | 109 | 111 | 107 | 100 |
| 12 | | | 79 | 109 | 105 | 102 | 27 | | 85 | 110 | 111 | 105 | 101 |
| 13 | | | 80 | 109 | 106 | 102 | 28 | | 85 | 109 | 111 | 105 | 99 |
| 14 | | | 82 | 109 | 106 | 104 | 29 | | 85 | 108 | 110 | 105 | 100 |
| 15 | | | 109 | 109 | 106 | 102 | 30 | | 85 | 108 | 110 | 105 | 100 |
| | | | | | | | 31 | | 84 | | 110 | 105 | |
| Month | | | Maxi- mum | Mini- mum | Mean | | Month | | | Maxi- mum | Mini- mum | Mean | |
| October 1-11 | | | 16 | 2 | 6.00 | | July | | | 111 | 109 | 110 | |
| May 22-31 | | | 89 | 84 | 86.2 | | August | | | 109 | 57 | 105 | |
| June | | | 113 | 79 | 95.9 | | September | | | 105 | 99 | 102 | |

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.

DRAINAGE AREA.—261 square miles.

RECORDS AVAILABLE.—October, 1927, to September, 1930. Comparable records from station at High Falls, 1 mile downstream, September, 1898, to December, 1909; January to November, 1912.

EXTREMES.—Maximum discharge during year, 7,800 second-feet Jan. 9 (gage height, 10.9 feet); minimum, 4 second-feet frequently July to September (gage height, 5.50 feet).

1927-1930: Maximum discharge, 8,500 second-feet April 8, 1928 (gage height, 11.2 feet); minimum, that of July to September, 1930.

REMARKS.—Records fair except those for periods of ice effect, Nov. 30 to Dec. 17, Dec. 24-28, Feb. 2-22, which are poor. Flow partly regulated by storage in Canada Lakes, which have an aggregate capacity of 441,000,000 cubic feet.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|---------|-------|-------|-------|-------|-------|------|------|-------|
| 1..... | 214 | 321 | 340 | 311 | 259 | 780 | 480 | 677 | 240 | 164 | 66 | 100 |
| 2..... | 344 | 584 | 300 | 360 | 240 | 665 | 899 | 633 | 272 | 293 | * 89 | 123 |
| 3..... | 900 | 741 | 280 | 518 | 220 | 456 | 812 | 1,020 | 292 | 192 | 124 | 133 |
| 4..... | 860 | 593 | 260 | 491 | 220 | 427 | 756 | 774 | 278 | 141 | 116 | 111 |
| 5..... | 656 | 515 | 240 | 362 | 220 | 412 | 733 | 552 | 244 | 113 | 73 | 96 |
| 6..... | 465 | 427 | 240 | 363 | 220 | 412 | 983 | 472 | * 220 | 188 | 73 | 90 |
| 7..... | 470 | 419 | 220 | 432 | 240 | 466 | 4,710 | 403 | * 212 | 200 | 79 | 94 |
| 8..... | 515 | 410 | 240 | 3,330 | 240 | 1,720 | 4,360 | 414 | 165 | 152 | 97 | 80 |
| 9..... | 382 | 391 | 360 | 6,830 | 220 | 2,150 | 2,340 | * 360 | 138 | 140 | 63 | 71 |
| 10..... | 318 | 350 | 340 | 4,900 | 200 | 1,320 | 1,200 | * 319 | 279 | 140 | 72 | 69 |
| 11..... | 327 | 347 | 300 | 2,280 | 240 | 1,020 | 963 | 326 | 418 | 161 | 98 | 88 |
| 12..... | 244 | 445 | 220 | * 1,200 | 240 | 1,090 | 2,150 | 265 | 260 | 172 | 129 | 79 |
| 13..... | 392 | 394 | 340 | * 1,800 | 320 | 910 | 3,300 | 283 | 183 | 133 | 132 | 87 |
| 14..... | 474 | 532 | 360 | * 2,200 | 400 | 801 | 2,250 | 235 | * 187 | 134 | 136 | 102 |
| 15..... | 404 | 1,090 | 340 | * 2,400 | 340 | 610 | 2,200 | 548 | 138 | 123 | 103 | 147 |
| 16..... | 365 | 1,140 | 360 | * 2,400 | 240 | 523 | 1,420 | 674 | 161 | 133 | 80 | 206 |
| 17..... | 376 | 796 | 500 | * 1,600 | 220 | 556 | 932 | 523 | 172 | 144 | 67 | 587 |
| 18..... | 329 | 1,430 | 1,850 | * 1,000 | 200 | 1,100 | 800 | 367 | 172 | 157 | 79 | 258 |
| 19..... | 294 | 2,500 | 2,800 | * 800 | 320 | 1,700 | 890 | 382 | 253 | 132 | 90 | 159 |
| 20..... | 286 | 1,530 | 3,960 | * 600 | 480 | 1,200 | 870 | 1,370 | 273 | 126 | 93 | 138 |
| 21..... | 264 | 912 | 2,140 | * 400 | 850 | 900 | 850 | 1,080 | 280 | 152 | 89 | 132 |
| 22..... | 246 | 702 | 1,340 | * 380 | 1,000 | 601 | 780 | 820 | 183 | 158 | 69 | 114 |
| 23..... | 560 | 482 | 716 | * 360 | 1,190 | 417 | 649 | 666 | 189 | 141 | 77 | 101 |
| 24..... | 610 | 427 | 6.0 | * 320 | 2,100 | 442 | 552 | 523 | 266 | 132 | 116 | 119 |
| 25..... | 491 | 442 | 600 | * 300 | 2,460 | 478 | 532 | 646 | 203 | 162 | 95 | 93 |
| 26..... | 426 | 404 | 550 | 270 | 2,540 | 873 | 575 | 576 | 151 | 96 | 103 | 101 |
| 27..... | 346 | 360 | 550 | 252 | 1,680 | 771 | 450 | 472 | 145 | 110 | 92 | 147 |
| 28..... | 305 | 442 | 550 | 185 | 1,150 | 652 | 561 | 401 | 148 | 116 | 103 | 144 |
| 29..... | 261 | 390 | 506 | 230 | ----- | 609 | 528 | 391 | 98 | 94 | 81 | 152 |
| 30..... | 311 | 360 | 298 | 264 | ----- | 490 | 596 | 373 | 121 | 83 | 70 | 128 |
| 31..... | 314 | ----- | 312 | 278 | ----- | 488 | ----- | 325 | ----- | 85 | 108 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 900 | 214 | 411 | 1.57 | 1.81 |
| November..... | 2,500 | 321 | 663 | 2.54 | 2.83 |
| December..... | 3,960 | 220 | 712 | 2.73 | 3.15 |
| January..... | 6,830 | 185 | 1,210 | 4.64 | 5.35 |
| February..... | 2,540 | 200 | 652 | 2.50 | 2.60 |
| March..... | 2,150 | 412 | 803 | 3.10 | 3.57 |
| April..... | 4,710 | 450 | 1,300 | 4.98 | 5.56 |
| May..... | 1,370 | 235 | 544 | 2.08 | 2.40 |
| June..... | 418 | 98 | 210 | .805 | .90 |
| July..... | 293 | 83 | 144 | .552 | .64 |
| August..... | 136 | 63 | 92.3 | .354 | .41 |
| September..... | 587 | 69 | 135 | .517 | .58 |
| The year..... | 6,830 | 63 | 573 | 2.20 | 29.80 |

* Estimated.

SCHOHARIE CREEK AT MIDDLEBURG, N. Y.

LOCATION.—Staff gage at highway bridge in Middleburg, Schoharie County, 20 miles below Gilboa Reservoir.

DRAINAGE AREA.—532 square miles.

RECORDS AVAILABLE.—July, 1927, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,390 second-feet Mar. 19 (gage height, 3.3 feet); minimum, 2.1 second-feet Aug. 16 (gage height, 0.22 foot).

1927-1930: Maximum discharge, 17,000 second-feet Nov. 4, 1927 (gage height, 10.5 feet); minimum, that of Aug. 16, 1930.

REMARKS.—Records fair except those for periods of ice effect, Nov. 30, Dec. 11-14, 23-25, Jan. 18 to Feb. 20 which are poor. Entire flow diverted by city of New York at Gilboa Reservoir. Correction for storage and diversion based on data furnished by New York City Board of Water Supply.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|-------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1 | 6.8 | 84 | 100 | 415 | 130 | 415 | 178 | 115 | 184 | 32 | 7.5 | 8.2 |
| 2 | 184 | 79 | 95 | 516 | 120 | 518 | 296 | 122 | 165 | 105 | 6.1 | 8.2 |
| 3 | 415 | 100 | 91 | 572 | 120 | 440 | 276 | 255 | 142 | 69 | 6.1 | 8.2 |
| 4 | 341 | 110 | 88 | 545 | 110 | 390 | 244 | 175 | 133 | 52 | 5.8 | 9.0 |
| 5 | 255 | 115 | 84 | 296 | 100 | 366 | 215 | 142 | 115 | 39 | 5.4 | 10 |
| 6 | 100 | 110 | 82 | 415 | 95 | 341 | 201 | 122 | 95 | 34 | 4.8 | 9.7 |
| 7 | 95 | 108 | 77 | 490 | 90 | 296 | 565 | 120 | 108 | 38 | 4.8 | 6.5 |
| 8 | 91 | 100 | 79 | 545 | 85 | 742 | 660 | 115 | 84 | 32 | 4.8 | 6.1 |
| 9 | 73 | 93 | 153 | 490 | 80 | 792 | 490 | 115 | 168 | 27 | 4.8 | 5.4 |
| 10 | 57 | 88 | 150 | 341 | 75 | 660 | 440 | 95 | 404 | 26 | 3.4 | 4.8 |
| 11 | 53 | 86 | 120 | 248 | 70 | 780 | 465 | 91 | 318 | 24 | 3.4 | 4.4 |
| 12 | 53 | 84 | 110 | 490 | 65 | 1,220 | 545 | 86 | 211 | 23 | 3.2 | 4.1 |
| 13 | 33 | 82 | 100 | 939 | 80 | 920 | 440 | 77 | 159 | 20 | 3.2 | 4.1 |
| 14 | 33 | 77 | 130 | 990 | 80 | 990 | 415 | 77 | 142 | 21 | 3.2 | 4.1 |
| 15 | 30 | 105 | 276 | 990 | 75 | 720 | 366 | 122 | 120 | 26 | 3.4 | 4.1 |
| 16 | 30 | 105 | 276 | 990 | 70 | 545 | 341 | 136 | 95 | 24 | 2.9 | 8.2 |
| 17 | 28 | 112 | 276 | 440 | 65 | 572 | 296 | 122 | 88 | 21 | 6.1 | 9.0 |
| 18 | 27 | 812 | 627 | 380 | 65 | 1,130 | 296 | 95 | 82 | 17 | 6.1 | 8.2 |
| 19 | 27 | 955 | 1,220 | 340 | 85 | 1,300 | 276 | 95 | 151 | 15 | 6.1 | 9.0 |
| 20 | 24 | 690 | 1,140 | 320 | 220 | 1,220 | 251 | 168 | 168 | 13 | 5.4 | 6.1 |
| 21 | 28 | 600 | 990 | 300 | 690 | 780 | 244 | 159 | 154 | 12 | 5.1 | 5.1 |
| 22 | 378 | 490 | 390 | 280 | 600 | 545 | 240 | 153 | 68 | 12 | 4.8 | 5.1 |
| 23 | 366 | 440 | 320 | 260 | 660 | 518 | 215 | 110 | 52 | 19 | 9.0 | 4.4 |
| 24 | 276 | 390 | 300 | 240 | 690 | 440 | 201 | 118 | 48 | 21 | 27 | 3.4 |
| 25 | 240 | 318 | 280 | 220 | 600 | 465 | 187 | 225 | 41 | 15 | 36 | 3.4 |
| 26 | 115 | 255 | 255 | 200 | 750 | 518 | 178 | 215 | 34 | 14 | 21 | 3.4 |
| 27 | 115 | 222 | 276 | 200 | 630 | 465 | 159 | 194 | 63 | 13 | 13 | 5.4 |
| 28 | 95 | 198 | 276 | 190 | 440 | 415 | 145 | 175 | 57 | 11 | 11 | 15 |
| 29 | 93 | 181 | 248 | 180 | ----- | 366 | 131 | 341 | 43 | 11 | 9.7 | 17 |
| 30 | 91 | 150 | 222 | 160 | ----- | 341 | 122 | 276 | 34 | 11 | 7.5 | 12 |
| 31 | 86 | ----- | 191 | 150 | ----- | 318 | ----- | 225 | ----- | 9.0 | 6.5 | ----- |

| Month | Observed | | | Corrected for storage and diversion | | |
|-----------|----------|---------|------|-------------------------------------|-----------------|-------------------|
| | Maximum | Minimum | Mean | Mean | Per square mile | Run-off in inches |
| October | 415 | 6.8 | 124 | 774 | 1.45 | 1.67 |
| November | 955 | 77 | 245 | 692 | 1.30 | 1.45 |
| December | 1,220 | 77 | 291 | 790 | 1.48 | 1.71 |
| January | 990 | 150 | 424 | 1,070 | 2.01 | 2.32 |
| February | 750 | 65 | 248 | 707 | 1.33 | 1.38 |
| March | 1,300 | 296 | 630 | 1,810 | 3.40 | 3.92 |
| April | 660 | 122 | 303 | 965 | 1.81 | 2.02 |
| May | 341 | 77 | 150 | 451 | .848 | .98 |
| June | 404 | 34 | 124 | 614 | 1.15 | 1.28 |
| July | 105 | 9.0 | 26.0 | 96.5 | .181 | .21 |
| August | 36 | 2.9 | 7.97 | 38.2 | .072 | .08 |
| September | 17 | 3.4 | 7.05 | 34.8 | .065 | .07 |
| The year | 1,300 | 2.9 | 215 | 671 | 1.26 | 17.09 |

^a Estimated.

FOX CREEK AT WEST BERNE, N. Y.

LOCATION.—Staff gage 500 feet above highway bridge in West Berne, Albany County, and 1¼ miles below mouth of Switz Kill.

DRAINAGE AREA.—66 square miles.

RECORDS AVAILABLE.—August, 1924, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,560 second-feet Mar. 8 (gage height, 5.1 feet); minimum, 1.6 second-feet frequently during August and September.

1924-1930: Maximum discharge, 4,190 second-feet Apr. 21, 1929 (gage height, 7.8 feet); minimum, 0.9 second-foot several times Aug. 31 to Sept. 4, 1926 (gage height, 1.40 feet).

REMARKS.—Records good except those for period of ice effect and backwater from tree on control, Nov. 21 to Mar. 7, and for period of backwater from weeds, Aug. 3 to Sept. 30, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 2.5 | 37 | 18 | 55 | 22 | 190 | 82 | 37 | 37 | 53 | 4.7 | 2.1 |
| 2..... | 8.4 | 36 | 16 | 110 | 20 | 150 | 78 | 36 | 30 | 42 | 4.4 | 2.1 |
| 3..... | 38 | 42 | 13 | 200 | 19 | 90 | 72 | 76 | 23 | 30 | 3.8 | 1.9 |
| 4..... | 27 | 60 | 13 | 180 | 18 | 85 | 67 | 51 | 19 | 22 | 3.8 | 1.9 |
| 5..... | 18 | 67 | 12 | 120 | 17 | 90 | 64 | 37 | 15 | 19 | 3.8 | 1.7 |
| 6..... | 15 | 56 | 12 | 85 | 17 | 95 | 66 | 32 | 15 | 21 | 3.0 | 1.7 |
| 7..... | 13 | 51 | 12 | 110 | 15 | 220 | 798 | 30 | 15 | 20 | 3.0 | 1.7 |
| 8..... | 10 | 49 | 13 | 240 | 13 | 893 | 564 | 27 | 14 | 15 | 2.5 | 1.7 |
| 9..... | 9.7 | 43 | 14 | 280 | 13 | 845 | 288 | 27 | 43 | 13 | 2.1 | 1.9 |
| 10..... | 9.2 | 36 | 13 | 160 | 12 | 500 | 185 | 26 | 208 | 10 | 1.9 | 1.9 |
| 11..... | 9.2 | 31 | 12 | 90 | 11 | 612 | 170 | 21 | 534 | 11 | 1.6 | 1.7 |
| 12..... | 9.7 | 29 | 11 | 85 | 10 | 810 | 216 | 18 | 200 | 9.7 | 1.7 | 1.7 |
| 13..... | 9.7 | 28 | 13 | 180 | 8 | 722 | 185 | 18 | 117 | 9.2 | 1.6 | 1.7 |
| 14..... | 9.2 | 27 | 15 | 360 | 9 | 440 | 170 | 20 | 101 | 26 | 1.6 | 1.9 |
| 15..... | 8.7 | 30 | 17 | 400 | 8 | 251 | 156 | 23 | 84 | 21 | 1.6 | 1.9 |
| 16..... | 7.7 | 50 | 20 | 240 | 8 | 185 | 140 | 27 | 51 | 14 | 2.1 | 1.9 |
| 17..... | 7.2 | 91 | 28 | 160 | 7 | 156 | 124 | 35 | 42 | 10 | 1.9 | 2.1 |
| 18..... | 6.3 | 374 | 44 | 110 | 8 | 200 | 115 | 31 | 67 | 8.2 | 1.7 | 1.9 |
| 19..... | 5.9 | 395 | 80 | 70 | 26 | 170 | 106 | 35 | 56 | 8.2 | 1.6 | 1.6 |
| 20..... | 5.9 | 395 | 170 | 55 | 180 | 170 | 94 | 56 | 42 | 8.2 | 1.6 | 1.6 |
| 21..... | 6.3 | 300 | 130 | 50 | 400 | 170 | 88 | 37 | 35 | 7.2 | 1.6 | 1.6 |
| 22..... | 68 | 180 | 55 | 46 | 240 | 185 | 78 | 31 | 27 | 13 | 1.6 | 1.6 |
| 23..... | 368 | 80 | 46 | 40 | 220 | 200 | 74 | 26 | 22 | 14 | 2.5 | 1.6 |
| 24..... | 200 | 65 | 40 | 34 | 240 | 200 | 67 | 23 | 19 | 11 | 3.0 | 1.6 |
| 25..... | 90 | 55 | 40 | 34 | 380 | 185 | 59 | 47 | 16 | 9.7 | 2.5 | 2.3 |
| 26..... | 71 | 50 | 38 | 34 | 300 | 185 | 50 | 72 | 14 | 10 | 2.1 | 2.3 |
| 27..... | 46 | 46 | 38 | 32 | 260 | 156 | 44 | 62 | 18 | 11 | 1.9 | 6.7 |
| 28..... | 37 | 40 | 38 | 28 | 240 | 115 | 42 | 50 | 19 | 8.7 | 1.9 | 5.9 |
| 29..... | 31 | 28 | 36 | 26 | ----- | 94 | 37 | 67 | 22 | 7.2 | 1.9 | 4.7 |
| 30..... | 33 | 30 | 36 | 26 | ----- | 86 | 37 | 60 | 28 | 5.9 | 1.9 | 4.7 |
| 31..... | 36 | ----- | 38 | 24 | ----- | 84 | ----- | 47 | ----- | 5.5 | 1.9 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 368 | 2.5 | 39.2 | 0.594 | 0.68 |
| November..... | 395 | 27 | 93.4 | 1.42 | 1.58 |
| December..... | 170 | 11 | 34.9 | .529 | .61 |
| January..... | 400 | 24 | 118 | 1.79 | 2.06 |
| February..... | 400 | 7 | 97.2 | 1.47 | 1.53 |
| March..... | 893 | 84 | 275 | 4.17 | 4.81 |
| April..... | 798 | 37 | 144 | 2.18 | 2.43 |
| May..... | 76 | 18 | 38.2 | .579 | .67 |
| June..... | 534 | 14 | 64.4 | .976 | 1.09 |
| July..... | 53 | 5.5 | 15.3 | .232 | .27 |
| August..... | 4.7 | 1.6 | 2.35 | .036 | .04 |
| September..... | 6.7 | 1.6 | 2.32 | .035 | .04 |
| The year..... | 893 | 1.6 | 76.9 | 1.17 | 15.81 |

POESTEN KILL NEAR TROY, N. Y.

LOCATION.—Water-stage recorder 500 feet below bridge on Troy-Fagle Mills road, 3 miles east of Troy, Rensselaer County, and 4½ miles above mouth.

DRAINAGE AREA.—88 square miles.

RECORDS AVAILABLE.—July, 1923, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,990 second-feet June 10 (gage height, 5.35 feet); minimum, 1.9 second-feet Sept. 24 (gage height, 0.80 foot).

1923-1930: Maximum discharge, about 7,030 second-feet Nov. 4, 1927 (gage height, 8.4 feet); minimum, that of Sept. 24, 1930.

REMARKS.—Records good except those for periods of ice effect, Dec. 10-13, 24-31, Jan. 5-7, Jan. 20 to Feb. 20, which are fair, and those estimated, which are poor. Practically entire low-water flow of Quaken Kill (about 5 second-feet) diverted for municipal uses.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 8.5 | 6.4 | 8.5 | 46 | 40 | 146 | 95 | 44 | 95 | 3C | * 7 | 5.8 |
| 2..... | 12 | 7.1 | 10 | 203 | 36 | 166 | 110 | 76 | 73 | 45 | * 6 | 9.9 |
| 3..... | 19 | 9.8 | 9.4 | 298 | 36 | 132 | 100 | 150 | 56 | 37 | * 6 | 10 |
| 4..... | 27 | 19 | 11 | 216 | 36 | 123 | 91 | 115 | 45 | 3C | * 5 | 12 |
| 5..... | 20 | 21 | 10 | 100 | 34 | 102 | 78 | 76 | 37 | 27 | * 5 | 13 |
| 6..... | 16 | 20 | 11 | 95 | 32 | 100 | 74 | 61 | 28 | 28 | * 5 | 12 |
| 7..... | 13 | 14 | 12 | 95 | 32 | 110 | 254 | 53 | 26 | 41 | * 4 | 9.0 |
| 8..... | 9.8 | 12 | 11 | 138 | 34 | 509 | 428 | 45 | 34 | 3C | * 4 | 9.0 |
| 9..... | 9.0 | 10 | 13 | 155 | 34 | 805 | 294 | 41 | 73 | 22 | * 3 | 9.0 |
| 10..... | 7.4 | 9.8 | 9 | 149 | 36 | 458 | 215 | 35 | 918 | 22 | * 5 | 9.0 |
| 11..... | 6.4 | 9.8 | 8 | 97 | 34 | 370 | 182 | 31 | 634 | * 1C | * 12 | 8.0 |
| 12..... | 5.4 | 9.4 | 7 | 100 | 32 | 580 | 185 | 27 | 305 | * 16 | * 7 | 8.0 |
| 13..... | 5.4 | 7.1 | 8 | 241 | 46 | 499 | 195 | 32 | 185 | * 13 | * 6 | 7.6 |
| 14..... | 5.0 | 7.4 | 21 | 298 | 120 | 419 | 166 | 34 | 120 | * 30 | * 5 | 8.0 |
| 15..... | 5.0 | 19 | 39 | 436 | 100 | 287 | 132 | 53 | 84 | * 50 | * 4 | 7.6 |
| 16..... | 4.8 | 43 | 25 | 320 | 60 | 232 | 113 | 66 | 61 | * 2* | * 6 | 8.3 |
| 17..... | 4.2 | 33 | 27 | 185 | 48 | 205 | 100 | 51 | 49 | * 16 | * 4 | 9.3 |
| 18..... | 4.0 | 64 | 140 | 129 | 46 | 287 | 118 | 41 | 45 | * 10 | 3.8 | 8.0 |
| 19..... | 4.2 | 89 | 267 | 86 | 75 | 381 | 115 | 40 | 60 | * 8 | 3.6 | 6.9 |
| 20..... | 4.0 | 56 | 217 | 70 | 240 | 273 | 95 | 89 | 68 | * 8 | 3.4 | 4.4 |
| 21..... | 7.4 | 41 | 112 | 60 | 494 | 211 | 80 | 69 | 49 | * 7 | 3.0 | 3.2 |
| 22..... | 8.5 | 30 | 97 | 55 | 432 | 138 | 84 | 49 | 40 | * 7 | 3.6 | 2.7 |
| 23..... | 9.4 | 24 | 34 | 50 | 441 | 120 | 84 | 45 | 33 | * 6 | 7.3 | 2.3 |
| 24..... | 21 | 21 | 26 | 46 | 512 | 102 | 73 | 34 | 27 | * 6 | 13 | 2.1 |
| 25..... | 14 | 19 | 22 | 44 | 401 | 159 | 69 | 86 | 23 | * 6 | 15 | 2.3 |
| 26..... | 12 | 14 | 22 | 42 | 298 | 305 | 68 | 232 | 26 | * 5 | 16 | 2.5 |
| 27..... | 9.8 | 15 | 22 | 42 | 218 | 242 | 64 | 334 | 43 | * 10 | 17 | 4.4 |
| 28..... | 8.2 | 15 | 26 | 46 | 175 | 172 | 56 | 238 | 41 | * 17 | 16 | 11 |
| 29..... | 7.1 | 11 | 28 | 50 | ----- | 144 | 49 | 256 | 37 | * 12 | 13 | 7.3 |
| 30..... | 6.4 | 9.0 | 32 | 48 | ----- | 123 | 44 | 202 | 32 | * 9 | 7.3 | 5.2 |
| 31..... | 6.4 | ----- | 38 | 42 | ----- | 105 | ----- | 132 | ----- | * 8 | 4.1 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 27 | 4.0 | 9.69 | 0.110 | 0.13 |
| November..... | 89 | 6.4 | 22.4 | .255 | .28 |
| December..... | 267 | 7 | 43.0 | .489 | .56 |
| January..... | 436 | 42 | 129 | 1.47 | 1.70 |
| February..... | 512 | 32 | 147 | 1.67 | 1.74 |
| March..... | 805 | 100 | 258 | 2.93 | 3.38 |
| April..... | 428 | 44 | 127 | 1.44 | 1.61 |
| May..... | 334 | 27 | 91.5 | 1.04 | 1.20 |
| June..... | 918 | 23 | 112 | 1.27 | 1.42 |
| July..... | * 50 | * 5 | 19.5 | .222 | .26 |
| August..... | 17 | 3.0 | 7.10 | .081 | .09 |
| September..... | 13 | 2.1 | 7.26 | .082 | .09 |
| The year..... | 918 | 2.1 | 80.7 | 0.917 | 12.46 |

* Estimated.

KINDERHOOK CREEK AT ROSSMAN, N. Y.

LOCATION.—Water-stage recorder at highway bridge in Rossman, Columbia County, 1 mile above confluence with Claverack Creek.

DRAINAGE AREA.—330 square miles.

RECORDS AVAILABLE.—March, 1906, to December, 1909; January, 1911, to May, 1914; July, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,770 second-feet June 10 (gage height, 5.2 feet); minimum, 17 second-feet Sept. 29 (gage height, 0.36 foot). 1906–1914, 1928–1930: Maximum discharge, about 11,070 second-feet Jan. 22, 1910; minimum, 16 second-feet Sept. 6, 7, 1929 (gage height, 0.35 foot).

REMARKS.—Records good except those for periods of ice effect, Dec. 11–12, 24–27, Jan. 19 to Feb. 19, and those estimated, which are fair.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----------|---------|-------|------|-------|---------|-------|-------|-----|-----------------|------|-------------------|-------|
| 1 | 40 | 76 | 93 | 227 | 190 | 649 | 569 | 253 | 302 | 170 | 94 | a 30 |
| 2 | 52 | 66 | 127 | 330 | 200 | 690 | 551 | 308 | 261 | 254 | 73 | a 55 |
| 3 | 94 | 52 | 89 | 642 | 200 | 634 | 539 | 392 | 230 | 244 | 38 | a 89 |
| 4 | 60 | 14 | 94 | 690 | 200 | 600 | 485 | 394 | 156 | 189 | 72 | 48 |
| 5 | 38 | 82 | 94 | a 400 | 200 | 507 | 440 | 328 | 209 | 146 | 68 | 27 |
| 6 | 52 | 82 | 92 | a 200 | 200 | 527 | 393 | 302 | 187 | 129 | 61 | 55 |
| 7 | 54 | 84 | 72 | a 220 | 200 | 533 | 683 | 289 | 141 | 819 | 48 | 36 |
| 8 | 60 | 82 | 68 | a 260 | 190 | 1,340 | 1,060 | 253 | 150 | 527 | 64 | 57 |
| 9 | 44 | 92 | 107 | a 320 | 200 | 2,400 | 812 | 253 | 200 | 393 | 40 | 38 |
| 10 | 60 | 83 | 92 | a 280 | 190 | 1,500 | 722 | 234 | 1,710 | 332 | 32 | 48 |
| 11 | 44 | 67 | 80 | a 200 | 180 | 1,290 | 664 | 174 | 1,810 | 298 | 38 | 37 |
| 12 | 40 | 57 | 70 | a 190 | 180 | 1,620 | 638 | 194 | 1,230 | 228 | 65 | 36 |
| 13 | 33 | 79 | 77 | a 240 | 200 | 1,520 | 664 | 209 | 838 | 182 | 44 | 30 |
| 14 | 57 | 84 | 105 | a 480 | 340 | 1,290 | 612 | 161 | 616 | 281 | 34 | 28 |
| 15 | 40 | 89 | 119 | a 700 | 280 | 1,010 | 521 | 242 | 403 | 419 | 45 | 35 |
| 16 | 46 | 112 | 156 | a 600 | 240 | 872 | 479 | 174 | 354 | 310 | 46 | 39 |
| 17 | 43 | 166 | 153 | a 480 | 220 | 805 | 440 | 194 | 277 | 234 | 79 | 36 |
| 18 | 32 | 185 | 218 | 368 | 220 | 888 | 457 | 176 | 285 | 186 | 112 | 34 |
| 19 | 36 | 288 | 666 | 340 | 300 | 1,080 | 429 | 199 | 328 | 180 | 64 | 32 |
| 20 | 27 | 264 | 835 | 320 | 503 | 904 | 404 | 231 | 298 | 136 | 69 | 29 |
| 21 | 44 | 230 | 563 | 280 | 972 | 777 | 386 | 248 | 245 | 163 | 59 | 23 |
| 22 | 32 | 176 | 441 | 280 | 1,240 | 619 | 360 | 212 | 223 | 100 | 27 | 22 |
| 23 | 91 | 160 | 364 | 280 | 1,190 | 550 | 364 | 209 | 219 | 132 | 23 | 23 |
| 24 | 82 | 140 | 280 | 260 | 1,350 | 545 | 350 | 210 | 212 | 162 | 23 | 23 |
| 25 | 128 | 145 | 240 | 260 | 1,190 | 748 | 337 | 147 | 195 | 143 | 32 | 32 |
| 26 | 49 | 138 | 240 | 260 | 1,180 | 1,380 | 315 | 396 | 172 | 99 | a 40 | 31 |
| 27 | 52 | 138 | 240 | 260 | 888 | 1,060 | 273 | 388 | 176 | 98 | 22 | 22 |
| 28 | 59 | 138 | 265 | 240 | 725 | 858 | 279 | 373 | 181 | 128 | 20 | 20 |
| 29 | 57 | 102 | 248 | 260 | ----- | 728 | 293 | 429 | 147 | 141 | 21 | 21 |
| 30 | 55 | 60 | 242 | 240 | ----- | 657 | 249 | 435 | 135 | 116 | 28 | 28 |
| 31 | 88 | ----- | 227 | 200 | ----- | 624 | ----- | 360 | ----- | 89 | ----- | ----- |
| Month | Maximum | | | | Minimum | | Mean | | Per square mile | | Run-off in inches | |
| October | 128 | | | | 27 | | 55.5 | | 0.168 | | 0.19 | |
| November | 288 | | | | 52 | | 120 | | .364 | | .41 | |
| December | 835 | | | | 68 | | 218 | | .661 | | .76 | |
| January | 700 | | | | a 190 | | 332 | | 1.01 | | 1.16 | |
| February | 1,350 | | | | 180 | | 477 | | 1.45 | | 1.51 | |
| March | 2,400 | | | | 507 | | 944 | | 2.86 | | 3.30 | |
| April | 1,060 | | | | 249 | | 492 | | 1.49 | | 1.66 | |
| May | 435 | | | | 147 | | 270 | | .818 | | .94 | |
| June | 1,810 | | | | 135 | | 396 | | 1.20 | | 1.34 | |
| July | 819 | | | | 89 | | 227 | | .688 | | .79 | |
| August | 112 | | | | 27 | | 52.6 | | .159 | | .18 | |
| September | a 89 | | | | 20 | | 35.5 | | .108 | | .12 | |
| The year | 2,400 | | | | 20 | | 301 | | .912 | | 12.36 | |

a Estimated.

CATSKILL CREEK AT OAK HILL, N. Y.

LOCATION.—Water-stage recorder installed Aug. 4, 1930, just below highway bridge in southernmost part of Oak Hill, Greene County, and 1 mile above mouth of Tenmile Creek. Prior to that date chain gage at same site and datum.

DRAINAGE AREA.—97 square miles.

RECORDS AVAILABLE.—March, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,560 second-feet Mar. 8 (gage height, 8.1 feet); minimum 0.3 second-foot Aug. 12, 13 (gage height, 2.76 feet).

1929-30: Maximum discharge, about 4,910 second-feet Apr. 20, 1929 (gage height, 10.1 feet); minimum, about 0.05 second-foot Sept. 6, 7, 1929 (gage height, 2.65 feet).

REMARKS.—Records good except those for periods of ice effect, Dec. 1-13, 22-29, Jan. 18 to Feb. 20, and for periods of extremely low discharge, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | 2.5 | 75 | 42 | 83 | 46 | 200 | 142 | 47 | 69 | 9.8 | 2.0 | 3.0 |
| 2..... | 25 | 75 | 38 | 145 | 44 | 279 | 172 | 47 | 59 | 54 | 2.0 | 2.9 |
| 3..... | 111 | 101 | 34 | 400 | 42 | 172 | 138 | 116 | 50 | 29 | 2.0 | 2.2 |
| 4..... | 71 | 126 | 30 | 262 | 40 | 142 | 120 | 69 | 41 | 21 | 1.8 | 1.8 |
| 5..... | 44 | 111 | 26 | 133 | 38 | 131 | 116 | 55 | 33 | 15 | 1.7 | 1.7 |
| 6..... | 30 | 94 | 24 | 150 | 32 | 120 | 122 | 50 | 29 | 12 | 1.2 | 1.7 |
| 7..... | 27 | 83 | 22 | 230 | 26 | 131 | 716 | 43 | 31 | 14 | 1.1 | 1.6 |
| 8..... | 23 | 75 | 24 | 296 | 24 | 1,630 | 432 | 41 | 27 | 11 | 1.1 | 1.6 |
| 9..... | 20 | 71 | 24 | 370 | 22 | 600 | 279 | 36 | 90 | 9.5 | .9 | 1.4 |
| 10..... | 18 | 65 | 22 | 296 | 22 | 500 | 230 | 33 | 483 | 9.5 | .6 | 1.3 |
| 11..... | 16 | 61 | 20 | 150 | 22 | 500 | 246 | 29 | 359 | 7.8 | .4 | 1.2 |
| 12..... | 14 | 59 | 16 | 164 | 21 | 650 | 390 | 27 | 172 | 7.8 | .3 | 1.1 |
| 13..... | 14 | 54 | 42 | 410 | 32 | 550 | 279 | 23 | 120 | 7.1 | .3 | 1.1 |
| 14..... | 14 | 54 | 83 | 550 | 70 | 500 | 262 | 23 | 96 | 11 | .6 | 1.6 |
| 15..... | 14 | 80 | 111 | 525 | 46 | 332 | 230 | 55 | 66 | 11 | 1.2 | 1.6 |
| 16..... | 12 | 83 | 80 | 351 | 28 | 246 | 189 | 50 | 50 | 7.8 | 1.3 | 1.6 |
| 17..... | 12 | 75 | 75 | 170 | 24 | 230 | 167 | 39 | 47 | 7.8 | .9 | 2.0 |
| 18..... | 10 | 610 | 197 | 130 | 24 | 600 | 167 | 31 | 55 | 4.8 | 1.0 | 1.2 |
| 19..... | 9.7 | 477 | 262 | 110 | 34 | 525 | 154 | 36 | 55 | 4.8 | .5 | 1.0 |
| 20..... | 9.7 | 314 | 363 | 100 | 140 | 390 | 142 | 82 | 41 | 4.3 | .5 | .8 |
| 21..... | 9.7 | 246 | 197 | 90 | 500 | 314 | 120 | 53 | 33 | 3.6 | .8 | .8 |
| 22..... | 10 | 197 | 150 | 85 | 332 | 194 | 116 | 53 | 29 | 5.4 | .7 | .7 |
| 23..... | 510 | 133 | 120 | 75 | 262 | 167 | 99 | 63 | 21 | 4.8 | 2.6 | .6 |
| 24..... | 296 | 122 | 90 | 70 | 314 | 162 | 90 | 43 | 17 | 4.8 | 4.6 | .6 |
| 25..... | 215 | 111 | 70 | 60 | 314 | 189 | 90 | 96 | 15 | 4.3 | 3.4 | .6 |
| 26..... | 164 | 101 | 65 | 60 | 454 | 411 | 82 | 109 | 12 | 3.6 | 3.2 | .6 |
| 27..... | 126 | 101 | 65 | 55 | 296 | 246 | 74 | 85 | 33 | 4.1 | 3.0 | 1.2 |
| 28..... | 98 | 101 | 70 | 60 | 215 | 194 | 66 | 74 | 17 | 3.6 | 2.9 | 1.1 |
| 29..... | 83 | 61 | 75 | 55 | 55 | 167 | 55 | 167 | 12 | 3.4 | 2.7 | .9 |
| 30..... | 75 | 28 | 83 | 50 | ----- | 154 | 53 | 116 | 9.5 | 2.7 | 2.7 | .9 |
| 31..... | 75 | ----- | 92 | 48 | ----- | 142 | ----- | 90 | ----- | 2.4 | 2.6 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 510 | 2.5 | 69.6 | 0.78 | 0.83 |
| November..... | 610 | 28 | 131 | 1.35 | 1.51 |
| December..... | 363 | 16 | 84.3 | .869 | 1.00 |
| January..... | 550 | 48 | 185 | 1.9 | 2.20 |
| February..... | 500 | 22 | 124 | 1.23 | 1.33 |
| March..... | 1,630 | 120 | 347 | 3.53 | 4.13 |
| April..... | 716 | 53 | 185 | 1.9 | 2.13 |
| May..... | 167 | 23 | 60.7 | .626 | .72 |
| June..... | 483 | 9.5 | 72.4 | .746 | .83 |
| July..... | 54 | 2.4 | 9.73 | .100 | .12 |
| August..... | 4.6 | .3 | 1.63 | .07 | .02 |
| September..... | 3.0 | .6 | 1.35 | .074 | .02 |
| The year..... | 1,630 | .3 | 106 | 1.09 | 14.84 |

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, 1930.

EXTREMES.—Maximum discharge during year, 8,010 second-feet Mar. 8 (gage height, 9.65 feet); minimum, 9 second-feet Aug. 12 (gage height, 1.53 feet). 1926-1930: Maximum discharge, 27,300 second-feet Aug. 27, 1928 (gage height, 21.9 feet); minimum, about 7 second-feet Aug. 9, 1929 (gage height, 1.50 feet).

REMARKS.—Records good except those for periods of ice effect, Nov. 30 to Dec. 7, Dec. 23-26, Jan. 19 to Feb. 23, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | 45 | 224 | 360 | 597 | 340 | 1,190 | 800 | 371 | 271 | 229 | 76 | 73 |
| 2..... | 258 | 281 | 360 | 632 | 320 | 1,190 | 702 | 390 | 251 | 315 | 67 | 77 |
| 3..... | 860 | 325 | 340 | 1,030 | 340 | 1,030 | 660 | 409 | 261 | 261 | 50 | 112 |
| 4..... | 419 | 590 | 340 | 1,030 | 340 | 800 | 611 | 377 | 242 | 237 | 62 | 102 |
| 5..... | 271 | 450 | 320 | 674 | 340 | 732 | 541 | 281 | 229 | 203 | 44 | 80 |
| 6..... | 165 | 352 | 340 | 659 | 320 | 667 | 478 | 296 | 216 | 195 | 62 | 82 |
| 7..... | 112 | 307 | 320 | 625 | 300 | 660 | 2,560 | 286 | 368 | 264 | 61 | 68 |
| 8..... | 156 | 296 | 318 | 695 | 300 | 4,730 | 2,410 | 291 | 276 | 220 | 48 | 115 |
| 9..... | 133 | 276 | 429 | 830 | 280 | 5,410 | 1,470 | 281 | 392 | 185 | 53 | 155 |
| 10..... | 105 | 219 | 384 | 740 | 280 | 2,700 | 1,150 | 251 | 2,910 | 186 | 54 | 128 |
| 11..... | 110 | 172 | 330 | 562 | 280 | 1,940 | 995 | 237 | 3,500 | 220 | 45 | 99 |
| 12..... | 104 | 203 | 377 | 541 | 260 | 2,860 | 1,110 | 160 | 1,700 | 184 | 36 | 77 |
| 13..... | 96 | 195 | 380 | 943 | 300 | 1,850 | 1,030 | 199 | 1,030 | 155 | 51 | 85 |
| 14..... | 84 | 251 | 1,800 | 1,470 | 340 | 1,470 | 1,110 | 242 | 838 | 148 | 48 | 102 |
| 15..... | 86 | 486 | 1,680 | 1,600 | 340 | 1,150 | 905 | 788 | 625 | 195 | 56 | 99 |
| 16..... | 86 | 762 | 1,150 | 1,310 | 280 | 1,030 | 785 | 925 | 520 | 165 | 74 | 124 |
| 17..... | 89 | 499 | 1,090 | 907 | 240 | 1,070 | 725 | 611 | 478 | 154 | 104 | 610 |
| 18..... | 87 | 2,330 | 2,340 | 762 | 240 | 1,190 | 860 | 402 | 718 | 131 | 100 | 307 |
| 19..... | 82 | 2,900 | 4,090 | 650 | 280 | 1,470 | 800 | 364 | 770 | 125 | 62 | 186 |
| 20..... | 78 | 1,540 | 2,760 | 550 | 800 | 1,110 | 688 | 562 | 562 | 120 | 77 | 164 |
| 21..... | 83 | 1,030 | 1,600 | 500 | 1,600 | 995 | 618 | 499 | 436 | 106 | 58 | 125 |
| 22..... | 78 | 830 | 1,230 | 460 | 1,700 | 785 | 667 | 409 | 362 | 80 | 51 | 91 |
| 23..... | 1,860 | 681 | 1,000 | 440 | 1,500 | 681 | 618 | 390 | 237 | 138 | 117 | 108 |
| 24..... | 882 | 562 | 900 | 420 | 1,390 | 695 | 555 | 324 | 281 | 148 | 428 | 111 |
| 25..... | 590 | 548 | 800 | 400 | 1,440 | 1,500 | 534 | 459 | 281 | 138 | 222 | 106 |
| 26..... | 390 | 485 | 750 | 380 | 3,370 | 2,330 | 520 | 576 | 266 | 99 | 162 | 83 |
| 27..... | 478 | 464 | 695 | 360 | 2,140 | 1,470 | 402 | 415 | 415 | 100 | 121 | 84 |
| 28..... | 215 | 436 | 646 | 380 | 1,520 | 1,190 | 365 | 371 | 358 | 85 | 121 | 89 |
| 29..... | 222 | 396 | 688 | 380 | ----- | 995 | 402 | 492 | 256 | 63 | 122 | 78 |
| 30..... | 216 | 380 | 625 | 360 | ----- | 860 | 377 | 436 | 165 | 88 | 81 | 78 |
| 31..... | 220 | ----- | 590 | 360 | ----- | 860 | ----- | 358 | ----- | 89 | 70 | ----- |

| Month | Maximum | Minimum | Mean | Persquare mile | Run-off in inches |
|----------------|---------|---------|-------|-------------------|----------------------|
| October..... | 1,860 | 45 | 279 | 0.723 | 0.83 |
| November..... | 2,800 | 172 | 612 | 1.59 | 1.77 |
| December..... | 4,090 | 318 | 937 | 2.43 | 2.80 |
| January..... | 1,600 | 360 | 685 | 1.77 | 2.04 |
| February..... | 3,370 | 240 | 756 | 1.96 | 2.04 |
| March..... | 5,410 | 660 | 1,510 | 3.91 | 4.51 |
| April..... | 2,560 | 365 | 848 | 2.20 | 2.46 |
| May..... | 925 | 160 | 402 | 1.04 | 1.20 |
| June..... | 3,500 | 165 | 640 | 1.66 | 1.85 |
| July..... | 315 | 63 | 161 | .417 | .48 |
| August..... | 428 | 36 | 89.8 | .233 | .27 |
| September..... | 610 | 68 | 127 | .329 | .37 |
| The year..... | 5,410 | 36 | 586 | 1.52 | 20.62 |

WALKILL RIVER AT PELLETS ISLAND MOUNTAIN, N. Y.

LOCATION.—Chain gage at highway bridge in Pellets Island Mountain, Orange County, 4½ miles south of Middletown.

DRAINAGE AREA.—385 square miles.

RECORDS AVAILABLE.—December, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,330 second-feet Mar. 10 (gage height, 7.3 feet); minimum, 23 second-feet Aug. 12, 13 (gage height, 2.21 feet).

1919-1930: Maximum discharge, 8,350 second-feet Mar. 16, 1920 (gage height, 20.7 feet, old datum); minimum, 17 second-feet Aug. 11, 12, 1926 (gage height, 2.30 feet).

REMARKS.—Records good except those for periods of ice effect, Nov. 30 to Dec. 8, Dec. 13, Dec. 22 to Jan. 7, Jan. 20 to Feb. 25, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | 46 | 292 | 200 | 420 | 260 | 1,220 | 408 | 246 | 177 | 374 | 42 | 68 |
| 2..... | 89 | 292 | 180 | 420 | 260 | 1,050 | 357 | 246 | 164 | 324 | 38 | 57 |
| 3..... | 646 | 340 | 170 | 550 | 280 | 940 | 357 | 357 | 133 | 324 | 34 | 51 |
| 4..... | 750 | 462 | 160 | 600 | 280 | 750 | 357 | 324 | 115 | 276 | 29 | 104 |
| 5..... | 620 | 500 | 150 | 480 | 280 | 620 | 324 | 261 | 106 | 204 | 28 | 88 |
| 6..... | 408 | 391 | 150 | 480 | 260 | 540 | 292 | 232 | 98 | 190 | 26 | 66 |
| 7..... | 276 | 324 | 170 | 500 | 260 | 540 | 500 | 218 | 90 | 190 | 26 | 62 |
| 8..... | 204 | 308 | 200 | 540 | 260 | 1,030 | 940 | 204 | 70 | 177 | 29 | 62 |
| 9..... | 164 | 276 | 276 | 660 | 240 | 2,120 | 940 | 177 | 90 | 152 | 23 | 62 |
| 10..... | 133 | 276 | 276 | 660 | 240 | 2,260 | 940 | 177 | 263 | 142 | 26 | 60 |
| 11..... | 113 | 246 | 204 | 580 | 240 | 2,120 | 840 | 147 | 903 | 164 | 25 | 55 |
| 12..... | 104 | 232 | 177 | 462 | 220 | 2,120 | 705 | 140 | 940 | 150 | 23 | 52 |
| 13..... | 100 | 232 | 150 | 540 | 240 | 1,980 | 660 | 119 | 990 | 117 | 23 | 46 |
| 14..... | 86 | 218 | 261 | 795 | 280 | 1,770 | 620 | 110 | 795 | 100 | 27 | 55 |
| 15..... | 86 | 232 | 620 | 1,220 | 260 | 1,460 | 620 | 164 | 620 | 92 | 39 | 70 |
| 16..... | 104 | 246 | 705 | 1,220 | 240 | 1,280 | 580 | 357 | 426 | 113 | 41 | 113 |
| 17..... | 88 | 276 | 620 | 995 | 220 | 1,160 | 620 | 324 | 292 | 104 | 46 | 324 |
| 18..... | 81 | 620 | 569 | 940 | 220 | 1,050 | 795 | 246 | 261 | 84 | 45 | 308 |
| 19..... | 70 | 1,130 | 1,370 | 620 | 240 | 940 | 840 | 204 | 308 | 70 | 38 | 177 |
| 20..... | 66 | 1,100 | 1,520 | 500 | 440 | 890 | 750 | 261 | 276 | 63 | 52 | 130 |
| 21..... | 70 | 940 | 1,280 | 420 | 800 | 750 | 660 | 324 | 204 | 57 | 55 | 108 |
| 22..... | 158 | 750 | 950 | 380 | 800 | 620 | 580 | 261 | 164 | 42 | 62 | 84 |
| 23..... | 771 | 580 | 750 | 360 | 700 | 308 | 540 | 218 | 133 | 54 | 152 | 73 |
| 24..... | 940 | 444 | 600 | 340 | 850 | 444 | 444 | 177 | 124 | 57 | 391 | 62 |
| 25..... | 940 | 408 | 500 | 320 | 1,500 | 540 | 408 | 204 | 110 | 81 | 444 | 70 |
| 26..... | 890 | 357 | 440 | 300 | 1,580 | 890 | 391 | 324 | 104 | 86 | 340 | 98 |
| 27..... | 705 | 357 | 400 | 280 | 1,100 | 840 | 357 | 292 | 360 | 73 | 218 | 150 |
| 28..... | 660 | 357 | 440 | 280 | 995 | 705 | 340 | 232 | 660 | 62 | 150 | 104 |
| 29..... | 391 | 340 | 460 | 280 | ----- | 540 | 292 | 246 | 620 | 57 | 126 | 73 |
| 30..... | 308 | 240 | 460 | 280 | ----- | 500 | 292 | 292 | 500 | 46 | 98 | 60 |
| 31..... | 276 | ----- | 440 | 260 | ----- | 462 | ----- | 232 | ----- | 46 | 84 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 940 | 46 | 334 | 0.868 | 1.00 |
| November..... | 1,130 | 218 | 426 | 1.11 | 1.24 |
| December..... | 1,520 | 150 | 479 | 1.24 | 1.43 |
| January..... | 1,220 | 260 | 538 | 1.40 | 1.61 |
| February..... | 1,580 | 220 | 484 | 1.26 | 1.31 |
| March..... | 2,260 | 308 | 1,050 | 2.73 | 3.15 |
| April..... | 940 | 292 | 558 | 1.45 | 1.62 |
| May..... | 357 | 110 | 236 | .613 | .71 |
| June..... | 940 | 70 | 333 | .865 | .97 |
| July..... | 374 | 42 | 131 | .340 | .39 |
| August..... | 444 | 23 | 89.8 | .233 | .27 |
| September..... | 324 | 46 | 96.4 | .250 | .28 |
| The year..... | 2,260 | 23 | 366 | 1.03 | 13.98 |

WALLKILL RIVER AT GARDINER, N. Y.

LOCATION.—Water-stage recorder at highway bridge 500 feet below mouth of Shawangunk Kill and three-fourths mile northwest of Gardiner, Ulster County.

DRAINAGE AREA.—716 square miles.

RECORDS AVAILABLE.—September, 1924, to September, 1930.

EXTREMES.—Maximum discharge during year, 5,970 second-feet Sept. 17 (gage height, 8.05 feet); minimum, 26 second-feet Aug. 11 (gage height, 2.17 feet).
1924-1930: Maximum discharge, 12,900 second-feet Sept. 2, 1927 (gage height, 12.6 feet); minimum, 26 second-feet July 26, 1926, Aug. 11, 1930.

REMARKS.—Records good except those for period of backwater from temporary dam on control, Oct. 1 to Nov. 28, for periods of ice effect, Nov. 29 to Dec. 19, Dec. 24 to Jan. 7, Jan. 20 to Feb. 24, and those estimated, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-------|------|-------|
| 1..... | 65 | 380 | 380 | 700 | 500 | 2,020 | 900 | 413 | 337 | * 500 | 69 | 128 |
| 2..... | 200 | 420 | 320 | 750 | 500 | 1,900 | 715 | 425 | 323 | * 440 | 63 | 146 |
| 3..... | 750 | 500 | 300 | 1,000 | 500 | 1,600 | 650 | 474 | 280 | * 420 | 53 | 134 |
| 4..... | 1,200 | 950 | 280 | 1,100 | 550 | 1,260 | 635 | 512 | 239 | * 419 | 59 | 117 |
| 5..... | 950 | 900 | 280 | 900 | 550 | 1,010 | 540 | 476 | 219 | 364 | 70 | 139 |
| 6..... | 750 | 800 | 280 | 800 | 500 | 930 | 547 | 392 | 204 | 318 | 58 | 134 |
| 7..... | 600 | 650 | 300 | 800 | 500 | 910 | 1,080 | 347 | 173 | 348 | 56 | 122 |
| 8..... | 400 | 550 | 320 | 860 | 500 | 3,530 | 1,660 | 308 | 146 | 303 | 59 | 131 |
| 9..... | 300 | 420 | 500 | 1,040 | 480 | 4,740 | 1,550 | 299 | 222 | 268 | 51 | 134 |
| 10..... | 260 | 440 | 500 | 1,140 | 460 | 3,420 | 1,330 | 289 | 551 | 259 | 37 | 107 |
| 11..... | 240 | 480 | 420 | 930 | * 440 | 2,960 | 1,240 | 250 | 1,270 | 234 | 36 | 95 |
| 12..... | 170 | 400 | 380 | 794 | * 440 | 3,550 | 1,160 | 280 | 1,310 | 223 | 60 | 103 |
| 13..... | 180 | 400 | 500 | 1,030 | * 500 | 2,900 | 1,070 | 238 | 1,130 | 215 | 57 | 97 |
| 14..... | 180 | 380 | 1,000 | 1,940 | * 550 | 2,440 | 1,130 | 229 | 980 | 230 | 52 | 106 |
| 15..... | 170 | 440 | 1,600 | 2,840 | * 500 | 2,080 | 1,060 | 625 | 794 | 228 | 60 | 116 |
| 16..... | 140 | 500 | 1,900 | 2,200 | 460 | 1,840 | 950 | 658 | 605 | 190 | 63 | 347 |
| 17..... | 140 | 480 | 1,600 | 1,580 | 440 | 1,720 | 880 | 620 | * 450 | 179 | 40 | 4,020 |
| 18..... | 130 | 1,500 | 2,400 | 1,270 | 440 | 1,660 | 1,130 | 486 | * 480 | 165 | 80 | 1,460 |
| 19..... | 90 | 2,400 | 4,600 | 785 | 440 | 2,020 | 1,300 | 425 | * 500 | 149 | 137 | 701 |
| 20..... | 95 | 1,800 | 3,540 | 700 | 1,300 | 1,550 | 1,200 | 491 | * 440 | 136 | 77 | 425 |
| 21..... | 120 | 1,500 | 2,220 | 650 | 2,400 | 1,310 | 1,060 | 533 | * 390 | 122 | 62 | 342 |
| 22..... | 140 | 1,200 | 1,500 | 650 | 1,800 | 1,040 | 930 | 486 | 289 | 142 | 77 | 313 |
| 23..... | 750 | 950 | 1,010 | 600 | 1,600 | 830 | 850 | 431 | 285 | 133 | 110 | 226 |
| 24..... | 1,400 | 800 | 900 | 600 | 1,600 | 758 | 767 | 337 | * 190 | 115 | 400 | 184 |
| 25..... | 1,300 | 750 | 850 | 600 | 3,010 | 1,680 | 715 | 419 | * 170 | 92 | 650 | 158 |
| 26..... | 1,200 | 650 | 800 | 550 | 3,290 | 2,410 | 635 | 561 | * 150 | 112 | 526 | 158 |
| 27..... | 1,000 | 550 | 750 | 550 | 2,510 | 1,780 | 582 | 540 | * 360 | 134 | 336 | 218 |
| 28..... | 850 | 550 | 800 | 550 | 2,320 | 1,500 | 547 | 419 | * 699 | 137 | 294 | 215 |
| 29..... | 650 | 500 | 850 | 550 | ----- | 1,210 | 512 | 431 | 715 | 132 | 200 | 219 |
| 30..... | 500 | 480 | 850 | 550 | ----- | 1,050 | 436 | 448 | 666 | 115 | 166 | 151 |
| 31..... | 460 | ----- | 750 | 500 | ----- | 1,000 | ----- | 436 | ----- | 107 | 161 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 1,400 | 65 | 496 | 0.693 | 0.80 |
| November..... | 2,400 | 380 | 757 | 1.06 | 1.18 |
| December..... | 4,600 | 280 | 1,060 | 1.47 | 1.70 |
| January..... | 2,840 | 500 | 952 | 1.33 | 1.53 |
| February..... | 3,290 | 440 | 1,040 | 1.45 | 1.51 |
| March..... | 4,740 | 758 | 1,890 | 2.64 | 3.04 |
| April..... | 1,660 | 436 | 925 | 1.29 | 1.44 |
| May..... | 658 | 229 | 428 | .598 | .69 |
| June..... | 1,310 | 146 | 486 | .679 | .76 |
| July..... | * 500 | 92 | 224 | .313 | .36 |
| August..... | 650 | 36 | 136 | .190 | .22 |
| September..... | 4,020 | 95 | 365 | .510 | .57 |
| The year..... | 4,740 | 36 | 728 | 1.02 | 13.80 |

* Estimated.

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, 1930.

EXTREMES.—Maximum discharge during year, 1,660 second-feet Mar. 8 (gage height, 5.2 feet); minimum, 2.8 second-feet Aug. 5 (gage height, 0.37 foot).

1924-1930: Maximum discharge, about 4,310 second-feet Sept. 1, 1927 (gage height, 10.5 feet); minimum, that of Aug. 5, 1930.

REMARKS.—Records fair. Periods of ice effect, Nov. 29 to Dec. 13, Dec. 23-27, Jan. 1-4, 11, 12, Jan. 20 to Feb. 20.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1 | 11 | 36 | 50 | 150 | 60 | 250 | 112 | 49 | 47 | 20 | 9.6 | 21 |
| 2 | 62 | 42 | 40 | 150 | 65 | 220 | 104 | 53 | 40 | 65 | 9.6 | 22 |
| 3 | 171 | 109 | 40 | 150 | 65 | 179 | 95 | 75 | 30 | 51 | 9.2 | 21 |
| 4 | 95 | 235 | 38 | 140 | 70 | 142 | 89 | 61 | 27 | 41 | 8.8 | 17 |
| 5 | 54 | 109 | 42 | 109 | 65 | 112 | 85 | 49 | 22 | 27 | 3.3 | 19 |
| 6 | 54 | 72 | 55 | 107 | 65 | 87 | 96 | 45 | 19 | 28 | 6.0 | 21 |
| 7 | 51 | 58 | 65 | 113 | 65 | 135 | 402 | 40 | 18 | 71 | 6.0 | 19 |
| 8 | 33 | 51 | 75 | 122 | 60 | 1,280 | 287 | 36 | 18 | 41 | 6.4 | 18 |
| 9 | 19 | 44 | 75 | 126 | 60 | 1,050 | 192 | 36 | 36 | 55 | 6.4 | 16 |
| 10 | 18 | 40 | 70 | 120 | 60 | 465 | 131 | 38 | 555 | 49 | 6.4 | 14 |
| 11 | 18 | 38 | 65 | 120 | 65 | 280 | 123 | 41 | 380 | 36 | 6.4 | 12 |
| 12 | 18 | 37 | 55 | 110 | 60 | 476 | 118 | 41 | 154 | 24 | 6.0 | 12 |
| 13 | 18 | 40 | 240 | 171 | 75 | 344 | 114 | 41 | 104 | 21 | 6.0 | 14 |
| 14 | 17 | 44 | 662 | 341 | 85 | 220 | 118 | 43 | 73 | 59 | 6.0 | 18 |
| 15 | 17 | 85 | 420 | 449 | 75 | 192 | 123 | 252 | 59 | 55 | 12 | 22 |
| 16 | 16 | 111 | 315 | 280 | 65 | 154 | 116 | 265 | 65 | 28 | 12 | 214 |
| 17 | 13 | 88 | 315 | 195 | 55 | 154 | 127 | 112 | 91 | 21 | 12 | 692 |
| 18 | 13 | 348 | 460 | 137 | 50 | 166 | 142 | 71 | 166 | 19 | 14 | 160 |
| 19 | 12 | 460 | 684 | 116 | 95 | 179 | 154 | 102 | 104 | 17 | 16 | 89 |
| 20 | 13 | 208 | 368 | 100 | 320 | 192 | 131 | 154 | 65 | 16 | 15 | 44 |
| 21 | 13 | 137 | 280 | 95 | 1,160 | 129 | 116 | 131 | 45 | 13 | 14 | 33 |
| 22 | 123 | 107 | 221 | 85 | 620 | 104 | 108 | 104 | 38 | 14 | 18 | 37 |
| 23 | 358 | 85 | 180 | 80 | 540 | 100 | 97 | 85 | 32 | 15 | 61 | 27 |
| 24 | 122 | 74 | 170 | 75 | 465 | 120 | 91 | 89 | 23 | 16 | 128 | 21 |
| 25 | 72 | 72 | 160 | 70 | 361 | 710 | 83 | 91 | 24 | 24 | 62 | 18 |
| 26 | 54 | 68 | 150 | 65 | 328 | 509 | 75 | 104 | 29 | 19 | 33 | 44 |
| 27 | 44 | 66 | 150 | 65 | 312 | 235 | 67 | 81 | 55 | 16 | 21 | 31 |
| 28 | 33 | 64 | 160 | 65 | 250 | 179 | 61 | 89 | 47 | 12 | 18 | 23 |
| 29 | 29 | 60 | 195 | 65 | ----- | 142 | 57 | 89 | 41 | 12 | 16 | 20 |
| 30 | 29 | 55 | 208 | 65 | ----- | 131 | 53 | 67 | 36 | 11 | 15 | 17 |
| 31 | 32 | ----- | 195 | 60 | ----- | 120 | ----- | 59 | ----- | 10 | 18 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 358 | 11 | 52.6 | 0.511 | 0.59 |
| November | 460 | 36 | 101 | .981 | 1.09 |
| December | 684 | 38 | 200 | 1.94 | 2.24 |
| January | 449 | 60 | 132 | 1.28 | 1.48 |
| February | 1,160 | 50 | 201 | 1.95 | 2.03 |
| March | 1,280 | 87 | 282 | 2.74 | 3.16 |
| April | 402 | 53 | 122 | 1.18 | 1.32 |
| May | 265 | 36 | 83.6 | .812 | .94 |
| June | 555 | 18 | 81.4 | .790 | .88 |
| July | 71 | 10 | 29.2 | .283 | .33 |
| August | 128 | 3.3 | 18.7 | .182 | .21 |
| September | 692 | 12 | 57.9 | .562 | .63 |
| The year | 1,280 | 3.3 | 113 | 1.10 | 14.90 |

WAPPINGER CREEK NEAR WAPPINGER FALLS, N. Y.

LOCATION.—Water-stage recorder $2\frac{1}{2}$ miles above Wappinger Falls, Dutchess County.

DRAINAGE AREA.—186 square miles.

RECORDS AVAILABLE.—May, 1903, to June, 1905, at station half a mile downstream; August, 1928, to September, 1930, at present site.

EXTREMES.—Maximum discharge during year, 1,200 second-feet Mar. 9; minimum, 9.3 second-feet Aug. 6.

1928-1930: Maximum discharge, 2,630 second-feet Mar. 6, 1929 (gage height, 7.0 feet); minimum, that of Aug. 6, 1930.

REMARKS.—Records good except those for periods of ice effect, Nov. 29 to Dec. 6, Dec. 12, 13, 24-26, Jan. 6, 12, Jan. 18 to Feb. 13, Feb. 17-19, and for periods of backwater from temporary dam, Oct. 1-9, July 6 to Sept. 10, which are fair.

Daily and monthly discharge, in second-feet, 1928-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1 | 20 | 42 | 55 | 232 | 80 | 497 | 253 | 113 | 84 | 66 | 24 | 17 |
| 2 | 34 | 43 | 55 | 229 | 90 | 515 | 246 | 122 | 72 | 84 | 18 | 20 |
| 3 | 55 | 42 | 50 | 290 | 90 | 470 | 236 | 131 | 65 | 97 | 14 | 28 |
| 4 | 65 | 74 | 50 | 298 | 90 | 376 | 216 | 129 | 58 | 79 | 10 | 30 |
| 5 | 50 | 81 | 50 | 200 | 85 | 335 | 200 | 111 | 54 | 70 | 10 | 26 |
| 6 | 42 | 69 | 55 | 160 | 85 | 327 | 188 | 105 | 52 | 60 | 10 | 22 |
| 7 | 36 | 61 | 61 | 183 | 80 | 319 | 333 | 99 | 50 | 70 | 10 | 18 |
| 8 | 34 | 56 | 63 | 203 | 80 | 612 | 434 | 115 | 50 | 65 | 10 | 13 |
| 9 | 34 | 54 | 66 | 236 | 80 | 1,110 | 327 | 101 | 66 | 60 | 10 | 24 |
| 10 | 32 | 48 | 67 | 229 | 85 | 845 | 267 | 93 | 153 | 55 | 12 | 24 |
| 11 | 35 | 48 | 53 | 174 | 80 | 700 | 256 | 84 | 245 | 55 | 11 | 26 |
| 12 | 38 | 46 | 48 | 160 | 75 | 795 | 283 | 79 | 210 | 55 | 11 | 22 |
| 13 | 30 | 45 | 55 | 206 | 130 | 678 | 283 | 76 | 150 | 42 | 11 | 23 |
| 14 | 28 | 43 | 117 | 283 | 513 | 590 | 275 | 72 | 113 | 60 | 11 | 17 |
| 15 | 30 | 46 | 194 | 461 | 298 | 474 | 249 | 95 | 95 | 75 | 16 | 16 |
| 16 | 28 | 63 | 187 | 416 | 174 | 443 | 216 | 124 | 81 | 70 | 18 | 52 |
| 17 | 29 | 64 | 174 | 283 | 130 | 420 | 203 | 105 | 72 | 60 | 17 | 946 |
| 18 | 30 | 132 | 335 | 220 | 120 | 398 | 219 | 88 | 79 | 50 | 28 | 400 |
| 19 | 31 | 222 | 901 | 190 | 160 | 493 | 225 | 82 | 97 | 48 | 30 | 210 |
| 20 | 31 | 180 | 855 | 160 | 528 | 434 | 210 | 97 | 88 | 46 | 32 | 140 |
| 21 | 30 | 147 | 529 | 150 | 787 | 366 | 188 | 97 | 79 | 44 | 32 | 107 |
| 22 | 33 | 129 | 407 | 130 | 665 | 302 | 174 | 84 | 74 | 50 | 28 | 90 |
| 23 | 58 | 108 | 310 | 120 | 434 | 275 | 169 | 79 | 74 | 46 | 38 | 76 |
| 24 | 85 | 97 | 260 | 110 | 560 | 267 | 160 | 74 | 66 | 42 | 48 | 65 |
| 25 | 66 | 97 | 240 | 100 | 603 | 306 | 150 | 86 | 62 | 42 | 50 | 62 |
| 26 | 56 | 93 | 220 | 90 | 942 | 538 | 143 | 120 | 64 | 42 | 46 | 59 |
| 27 | 45 | 93 | 222 | 90 | 655 | 443 | 138 | 95 | 77 | 38 | 40 | 54 |
| 28 | 43 | 95 | 219 | 100 | 560 | 371 | 133 | 82 | 99 | 34 | 34 | 48 |
| 29 | 49 | 85 | 255 | 100 | ----- | 323 | 122 | 101 | 77 | 34 | 32 | 46 |
| 30 | 40 | 65 | 246 | 90 | ----- | 298 | 115 | 120 | 66 | 30 | 32 | 49 |
| 31 | 42 | ----- | 222 | 85 | ----- | 279 | ----- | 103 | ----- | 28 | 22 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 85 | 20 | 40.6 | 0.218 | 0.25 |
| November | 222 | 42 | 82.3 | .442 | .49 |
| December | 901 | 48 | 214 | 1.15 | 1.33 |
| January | 461 | 85 | 193 | 1.04 | 1.20 |
| February | 942 | 75 | 297 | 1.60 | 1.67 |
| March | 1,110 | 267 | 470 | 2.53 | 2.92 |
| April | 434 | 115 | 220 | 1.18 | 1.32 |
| May | 131 | 72 | 98.8 | .531 | .61 |
| June | 245 | 50 | 89.1 | .479 | .53 |
| July | 97 | 28 | 54.7 | .294 | .34 |
| August | 50 | 10 | 23.1 | .124 | .14 |
| September | 946 | 13 | 91.0 | .489 | .55 |
| The year | 1,110 | 10 | 155 | .833 | 11.35 |

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, 1930.

EXTREMES.—Maximum discharge during year, 857 second-feet Mar. 8 (gage height, 2.79 feet).

1921-1930: Maximum discharge, about 4,000 second-feet Sept. 2, 1927, July 6, 1928; maximum gage height, 4.58 feet Sept. 2, 1927.

REMARKS.—Records excellent. Flow regulated by storage in Oradell Reservoir, 1 mile above gage. Water diverted at New Milford. Record of diversions and part of equipment furnished by Hackensack Water Co.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|-------|-------|
| 1. | 2 | 40 | 3 | 136 | 34 | 132 | 38 | 72 | 45 | 14 | 2 | 2 |
| 2. | 2 | 40 | 4.5 | 141 | 38 | 154 | 36 | 75 | 32 | 14 | • 2 | 2 |
| 3. | 2 | 42 | 10 | 145 | 40 | 141 | 34 | 75 | 21 | 9 | • 2 | 2 |
| 4. | 2 | 56 | 7 | 154 | 61 | 112 | 32 | 57 | 12 | 11 | • 2 | 2 |
| 5. | 2 | 81 | 5.5 | 112 | 295 | 90 | 45 | 14 | 3.7 | 6.2 | • 2 | 2 |
| 6. | 14 | 84 | 4.5 | 90 | 180 | 84 | 145 | 2 | 8.5 | 18 | • 2 | 2 |
| 7. | 243 | 84 | 6.5 | 87 | 72 | 81 | 447 | 2 | 23 | 21 | • 2 | 2 |
| 8. | 490 | 84 | 8.5 | 81 | 87 | 531 | 570 | 2 | 12 | 18 | • 2 | 2 |
| 9. | 277 | 78 | 11 | 81 | 75 | 503 | 322 | 2 | 18 | 14 | • 2.4 | 2 |
| 10. | 4 | 45 | 14 | 87 | 63 | 107 | 207 | 11 | 21 | 14 | 2 | 2 |
| 11. | 2 | 25 | 14 | 78 | 56 | 105 | 145 | 3.8 | 81 | 12 | 2 | 2 |
| 12. | 2 | 29 | 12 | 69 | 54 | 228 | 145 | 2.9 | 72 | 12 | 2 | 2 |
| 13. | 2 | 29 | 14 | 112 | 112 | 204 | 145 | 2.3 | 56 | 14 | 2 | 2 |
| 14. | 2 | 29 | 64 | 188 | 157 | 172 | 141 | 10 | 40 | 16 | 2.7 | 2 |
| 15. | 2 | 29 | 136 | 472 | 145 | 141 | 136 | 5 | 23 | 12 | 2 | 2 |
| 16. | 2 | 30 | 48 | 397 | 112 | 120 | 177 | 6.3 | 7.5 | 12 | 2 | 2.6 |
| 17. | 2 | 36 | 101 | 137 | 93 | 109 | 306 | 45 | 6.8 | 13 | 2 | 2 |
| 18. | 2 | 83 | 105 | 140 | 84 | 105 | 361 | 78 | 12 | 2.7 | 2.2 | 2 |
| 19. | 2 | 159 | 486 | 218 | 78 | 105 | 214 | 97 | 18 | 2 | 3.8 | 2 |
| 20. | 2 | 97 | 492 | 154 | 128 | 97 | 164 | 105 | 21 | 8.3 | 2.2 | 2 |
| 21. | 2 | 101 | 276 | 141 | 158 | 97 | 93 | 81 | 11 | 2 | 2.4 | 2 |
| 22. | 2 | 79 | 214 | 128 | 185 | 87 | 130 | 66 | 2 | 2 | 2 | 2 |
| 23. | 3 | 61 | 214 | 93 | 190 | 78 | 144 | 52 | 8.7 | 4.2 | 2 | 2 |
| 24. | 2 | 63 | 177 | 72 | 200 | 50 | 94 | 42 | 2 | 2.7 | 2 | 2 |
| 25. | 2 | 43 | 109 | 69 | 214 | 65 | 64 | 91 | 2 | 2 | 2 | 2 |
| 26. | 2 | 7 | 90 | 58 | 238 | 463 | 45 | 63 | 8.2 | 2 | 2 | 2.4 |
| 27. | 2 | 4.8 | 72 | 54 | 274 | 546 | 40 | 58 | 14 | 2 | 2 | 2 |
| 28. | 2 | 6.5 | 72 | 52 | 213 | 231 | 48 | 56 | 22 | 2 | 2 | 2.4 |
| 29. | 2 | 3.5 | 75 | 52 | ----- | 78 | 72 | 90 | 21 | 2 | 2 | 2 |
| 30. | 20 | 4 | 75 | 45 | ----- | 42 | 69 | 84 | 11 | 2 | 2 | 2 |
| 31. | 40 | ----- | 101 | 34 | ----- | 38 | ----- | 61 | ----- | 2 | 2 | ----- |

| Month | Observed | | | Corrected for storage and diversion | | |
|-----------|----------|---------|------|-------------------------------------|------------------|-------------------|
| | Maximum | Minimum | Mean | Mean | Per square mile | Run-off in inches |
| October | 490 | 2 | 36.7 | 115 | 1.02 | 1.18 |
| November | 159 | 3.5 | 51.8 | 108 | .95 ^a | 1.07 |
| December | 492 | 3 | 97.5 | 174 | 1.54 | 1.78 |
| January | 472 | 34 | 125 | 180 | 1.59 | 1.88 |
| February | 295 | 34 | 130 | 189 | 1.67 | 1.74 |
| March | 546 | 38 | 164 | 210 | 1.86 | 2.14 |
| April | 570 | 32 | 154 | 208 | 1.84 | 2.05 |
| May | 105 | 2 | 45.5 | 111 | .98 ^a | 1.13 |
| June | 81 | 2 | 21.2 | 76.9 | .68 ^a | .76 |
| July | 21 | 2 | 8.64 | 52.7 | .46 ^a | .54 |
| August | 3.8 | 2 | 2.12 | 59.4 | .52 ^a | .61 |
| September | 2.6 | 2 | 2.05 | 43.3 | .383 | .43 |
| The year | 570 | 2 | 69.5 | 127 | 1.12 | 15.26 |

^a Estimated.

PASSAIC RIVER BASIN

PASSAIC RIVER NEAR MILLINGTON, N. J.

LOCATION.—Water-stage recorder at Davis Bridge, 1 mile upstream from Millington, Somerset County, and 1½ miles below mouth of Black Brook.

DRAINAGE AREA.—55 square miles.

RECORDS AVAILABLE.—November, 1921, to September, 1930. At Millington, three-fourths mile downstream, November, 1903, to July, 1906.

EXTREMES.—Maximum discharge, 565 second-feet Mar. 8 (gauge height, 6.54 feet); minimum, 3.0 second-feet Sept. 12 (gauge height, 3.66 feet).

1903-1906, 1922-1930: Maximum discharge, 2,000 second-feet Mar. 8, 1904 (gauge height, 7.50 feet); minimum, 2.5 second-feet Oct. 18, 1923.

REMARKS.—Records excellent except those for periods of ice effect, Dec. 21-24, Jan. 5, 19, 20, 26, Mar. 3-5, and those estimated, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | |
|----------------|------|-------|------|---------|-------|---------|-------|------|-------|-----------------|------|-------------------|--|
| 1..... | 6.4 | 26 | * 26 | 98 | 21 | 174 | 38 | 33 | 15 | 20 | 7.4 | 6.4 | |
| 2..... | 33 | 25 | * 22 | 91 | 21 | 126 | 40 | 42 | 16 | 80 | 8.6 | 9.6 | |
| 3..... | 102 | 75 | * 18 | 105 | 25 | 120 | 35 | 37 | 11 | 50 | 8.6 | 6.0 | |
| 4..... | 83 | 164 | * 15 | 110 | 36 | 100 | 35 | 30 | 12 | 27 | 8.6 | 6.9 | |
| 5..... | 49 | 138 | * 15 | 85 | 116 | 95 | 35 | 25 | 12 | 20 | 7.8 | 6.4 | |
| 6..... | 35 | 108 | * 16 | 54 | 110 | 73 | 34 | 23 | 11 | 16 | 6.9 | 6.4 | |
| 7..... | 17 | 80 | 18 | * 55 | * 75 | 432 | 114 | 22 | 9.1 | 16 | 6.0 | 6.0 | |
| 8..... | 22 | 58 | 28 | * 60 | * 55 | 525 | 140 | 24 | 12 | 15 | 5.6 | 6.4 | |
| 9..... | 16 | 47 | 38 | * 75 | * 44 | * 400 | 108 | 36 | 17 | 14 | 5.6 | 6.0 | |
| 10..... | 15 | 36 | 31 | * 55 | 37 | * 200 | 78 | 30 | 154 | 31 | 5.6 | 5.6 | |
| 11..... | 14 | 32 | 25 | 50 | 34 | * 120 | 60 | 23 | 293 | 24 | 4.8 | 6.9 | |
| 12..... | 13 | 29 | * 19 | * 48 | 31 | * 170 | 54 | 20 | 219 | 18 | 4.8 | 3.3 | |
| 13..... | 14 | 30 | * 19 | * 46 | 59 | * 154 | 55 | 18 | 174 | 15 | 3.9 | 5.2 | |
| 14..... | 10 | 30 | 56 | * 46 | 152 | * 120 | 64 | 17 | 138 | 14 | 5.2 | 108 | |
| 15..... | 12 | 35 | 84 | * 46 | 118 | * 110 | 58 | 36 | 91 | 17 | 5.6 | 150 | |
| 16..... | 14 | 38 | 80 | * 54 | 67 | * 100 | 71 | 37 | 59 | 14 | 11 | 110 | |
| 17..... | 9.1 | 36 | 58 | 67 | * 50 | 91 | 103 | 27 | 42 | 9.1 | 6.9 | 75 | |
| 18..... | 12 | 102 | 164 | 130 | * 50 | 81 | 105 | 24 | 39 | 12 | 8.6 | 47 | |
| 19..... | 7.4 | 174 | 460 | 150 | * 55 | 83 | 103 | 27 | 36 | 6.9 | 4.3 | 30 | |
| 20..... | 11 | 134 | 430 | 120 | * 85 | 83 | 90 | 30 | 28 | 11 | 6.4 | 21 | |
| 21..... | 11 | 108 | 340 | 93 | * 120 | 71 | 67 | 27 | 23 | 11 | 6.9 | 19 | |
| 22..... | 27 | 81 | 240 | 75 | 134 | 60 | 64 | 22 | 20 | 11 | 6.9 | 16 | |
| 23..... | 100 | 60 | 110 | 59 | 134 | 51 | 60 | 22 | 20 | 41 | 19 | 15 | |
| 24..... | 93 | 50 | 80 | 52 | 140 | 49 | 51 | 18 | 16 | 43 | 29 | 12 | |
| 25..... | 64 | 46 | 73 | 42 | 154 | 55 | 47 | 24 | 15 | 43 | 15 | 12 | |
| 26..... | 48 | 46 | 55 | 30 | 243 | 75 | 43 | 25 | 14 | 33 | 12 | 14 | |
| 27..... | 36 | * 42 | 50 | 25 | 319 | 66 | 39 | 20 | 29 | 26 | 6.9 | 9.6 | |
| 28..... | 25 | * 38 | 54 | 25 | 268 | 55 | 36 | 21 | 21 | 21 | 9.6 | 9.1 | |
| 29..... | 23 | * 34 | 77 | 27 | ----- | 49 | 35 | 23 | 14 | 15 | 5.6 | 9.1 | |
| 30..... | 17 | 29 | 93 | 26 | ----- | 46 | 32 | 21 | 14 | 14 | 6.4 | 8.6 | |
| 31..... | 25 | ----- | 98 | 22 | ----- | 42 | ----- | 18 | ----- | 11 | 6.4 | ----- | |
| Month | | | | Maximum | | Minimum | | Mean | | Per square mile | | Run-off in inches | |
| October..... | | | | 102 | | 6.4 | | 31.4 | | 0.571 | | 0.66 | |
| November..... | | | | 174 | | 25 | | 64.4 | | 1.17 | | 1.30 | |
| December..... | | | | 460 | | 15 | | 93.3 | | 1.70 | | 1.96 | |
| January..... | | | | 150 | | 22 | | 65.2 | | 1.19 | | 1.37 | |
| February..... | | | | 319 | | 21 | | 98.3 | | 1.79 | | 1.86 | |
| March..... | | | | 525 | | 42 | | 128 | | 2.33 | | 2.69 | |
| April..... | | | | 140 | | 32 | | 63.1 | | 1.15 | | 1.28 | |
| May..... | | | | 42 | | 17 | | 25.9 | | .471 | | .54 | |
| June..... | | | | 293 | | 9.1 | | 52.5 | | .955 | | 1.07 | |
| July..... | | | | 80 | | 6.9 | | 22.5 | | .409 | | .47 | |
| August..... | | | | 29 | | 3.9 | | 8.25 | | .150 | | .17 | |
| September..... | | | | 150 | | 3.3 | | 24.9 | | .453 | | .51 | |
| The year..... | | | | 525 | | 3.3 | | 56.2 | | 1.02 | | 13.88 | |

* Estimated.

ROCKAWAY RIVER AT BOONTON, N. J.

LOCATION.—Water-stage recorder below dam of Jersey City waterworks at Boonton, Morris County.

DRAINAGE AREA.—119 square miles.

RECORDS AVAILABLE.—January, 1906, to September, 1930.

REMARKS.—Records good except those estimated, which are fair. Daily-discharge table indicates flow over dam and through waste gates. Water for Jersey City water supply diverted from Boonton Reservoir, one-fourth mile above gage. Flow regulated by storage in reservoir.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|------|------|------|------|------|------|-----|------|------|------|-------|
| 1..... | 0.7 | 4.2 | 3.5 | 1.0 | 23 | 155 | 89 | 281 | 0.9 | | | |
| 2..... | 2.1 | 4.2 | 3.9 | 1.0 | 18 | 144 | 85 | 200 | .8 | | | |
| 3..... | 1.0 | 5.5 | 4.2 | 1.7 | 24 | 116 | 73 | 184 | .8 | | | |
| 4..... | .8 | 4.8 | 4.2 | 1.4 | 45 | 90 | 70 | 179 | .8 | | | |
| 5..... | .9 | 4.5 | 3.9 | 1.2 | 130 | 90 | 65 | 107 | .8 | | | |
| 6..... | .9 | 4.5 | 3.5 | 1.2 | 162 | 96 | 49 | .9 | .8 | | | |
| 7..... | .9 | 4.2 | 3.2 | 1.4 | 102 | 80 | 166 | .7 | 1.2 | | | |
| 8..... | .9 | 4.2 | 3.0 | 1.2 | 66 | 275 | 368 | .9 | 1.2 | | | |
| 9..... | .9 | 3.9 | 3.0 | 1.2 | 44 | 627 | 297 | 1.0 | 2.5 | | | |
| 10..... | .9 | 3.9 | 3.0 | 1.4 | 44 | 487 | 234 | 1.0 | 6.5 | | | |
| 11..... | .9 | 3.9 | 2.8 | .9 | 35 | 399 | 191 | 1.0 | 11 | | | |
| 12..... | .8 | 3.9 | 2.8 | .9 | 38 | 399 | 157 | 1.0 | 302 | | | |
| 13..... | .8 | 3.9 | 3.0 | 1.4 | 46 | 377 | 151 | 1.0 | 262 | | | |
| 14..... | .8 | 3.9 | 3.9 | 3.2 | 114 | 316 | 182 | 1.2 | 175 | | | |
| 15..... | .8 | 4.5 | 4.2 | 5.5 | 98 | 262 | 153 | 1.2 | 114 | | | |
| 16..... | 1.0 | 4.8 | 3.9 | 9.7 | 60 | 222 | 155 | .9 | 73 | .8 | .8 | .8 |
| 17..... | 1.9 | 4.8 | 3.5 | 142 | 44 | 200 | 188 | .9 | 38 | | | |
| 18..... | 2.1 | 7.8 | 8.4 | 235 | 52 | 173 | 229 | .9 | 56 | | | |
| 19..... | 2.5 | 5.8 | 4.8 | 195 | 54 | 179 | 224 | 1.2 | 62 | | | |
| 20..... | 3.0 | 4.8 | 2.1 | 173 | 68 | 170 | 200 | .9 | 49 | | | |
| 21..... | 3.2 | 4.2 | .9 | 159 | 110 | 144 | 168 | .9 | 35 | | | |
| 22..... | 4.8 | 3.9 | .8 | 130 | 126 | 126 | 162 | 1.0 | 19 | | | |
| 23..... | 2.8 | 3.2 | .7 | 94 | 122 | 90 | 151 | 1.2 | 13 | | | |
| 24..... | 2.3 | 3.0 | .6 | 47 | 138 | 80 | 128 | 1.4 | 11 | | | |
| 25..... | 2.1 | 3.0 | .6 | 65 | 159 | 98 | 108 | 1.2 | 6.5 | | | |
| 26..... | 2.3 | 3.2 | .6 | 45 | 179 | 170 | 94 | 1.0 | 9.7 | | | |
| 27..... | 2.8 | 3.2 | .9 | 35 | 217 | 155 | 83 | .9 | 20 | | | |
| 28..... | 4.8 | 3.2 | 1.4 | 49 | 186 | 120 | 119 | 1.2 | 14 | | | |
| 29..... | 5.5 | 3.2 | 2.3 | 49 | | 87 | 212 | 1.0 | .9 | | | |
| 30..... | 5.5 | 3.2 | 1.4 | 42 | | 92 | 259 | 1.0 | .4 | | | |
| 31..... | 4.5 | | 1.0 | 29 | | 85 | | .9 | | | | |

| Month | Observed | | | Corrected for storage and diversion | | Run-off in inches |
|----------------|----------|---------|------|-------------------------------------|-----------------|-------------------|
| | Maximum | Minimum | Mean | Mean | Per square mile | |
| October..... | 5.5 | 0.7 | 2.10 | 92.8 | 0.780 | 0.90 |
| November..... | 7.8 | 3.0 | 4.18 | 118 | .992 | 1.11 |
| December..... | 8.4 | .6 | 2.77 | 173 | 1.45 | 1.67 |
| January..... | 235 | .9 | 49.1 | 205 | 1.72 | 1.98 |
| February..... | 217 | 18 | 89.4 | 185 | 1.55 | 1.61 |
| March..... | 627 | 80 | 197 | 281 | 2.36 | 2.72 |
| April..... | 368 | 49 | 160 | 236 | 1.98 | 2.21 |
| May..... | 281 | .7 | 31.5 | 105 | .882 | 1.02 |
| June..... | 302 | .8 | 43.3 | 149 | 1.25 | 1.40 |
| July..... | | | .8 | 58.3 | .490 | .56 |
| August..... | | | .8 | 37.3 | .313 | .36 |
| September..... | | | .8 | 27.5 | .23 | .26 |
| The year..... | 627 | | 48.1 | 139 | 1.17 | 15.80 |

• Estimated.

BEAVER BROOK AT OUTLET OF SPLITROCK POND, N. J.

LOCATION.—Water-stage recorder 50 feet below Splitrock Pond, 2 miles northeast of Hibernia, Morris County, and 3½ miles above mouth of Hibernia Brook.

DRAINAGE AREA.—5.5 square miles.

RECORDS AVAILABLE.—October, 1925, to September, 1930.

REMARKS.—Records good. Entire flow regulated by operation of sluice gate in Splitrock Pond Dam. Water-stage recorder operated by Jersey City Water Department.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------|--------------|--------------|-------|-----------|-------|------|-------|--------------|--------------|------|------|-------|
| 1 | 0.18 | 0.52 | 3.7 | 7.4 | 3.7 | 16.4 | 14.8 | 1.40 | 1.56 | 2.7 | 2.3 | 0 |
| 2 | .18 | .52 | 3.7 | 7.4 | 3.7 | 16.0 | 14.4 | 1.40 | 1.72 | 2.9 | 2.3 | .33 |
| 3 | .11 | .64 | 3.7 | 7.5 | 3.7 | 15.6 | 14.4 | 1.40 | 1.89 | 2.9 | 2.4 | .76 |
| 4 | .11 | .76 | 3.7 | 7.5 | 3.7 | 15.6 | 14.4 | 1.40 | 1.98 | 3.1 | 2.4 | .47 |
| 5 | .15 | .83 | 3.7 | 7.7 | 3.9 | 15.2 | 6.9 | 1.40 | 1.98 | 3.3 | 2.5 | .32 |
| 6 | .15 | .89 | 3.7 | 7.7 | 4.0 | 15.2 | .89 | 1.40 | 2.1 | 3.6 | 2.6 | .32 |
| 7 | .18 | 10.6 | 3.7 | 7.5 | 4.0 | 15.2 | 1.18 | 1.48 | 2.2 | 3.7 | 10.2 | .27 |
| 8 | .18 | 17.2 | 3.7 | 7.5 | 4.1 | 25 | 17.8 | 1.48 | 2.2 | 3.9 | 13.7 | .18 |
| 9 | .18 | 16.8 | 3.7 | 7.4 | 4.2 | 36 | 27 | 1.48 | 2.2 | 3.9 | 15.9 | .11 |
| 10 | .18 | 9.9 | 3.7 | 7.4 | 4.2 | 36 | 27 | 1.40 | 16.8 | 3.4 | 17.6 | .11 |
| 11 | .15 | 4.1 | 3.7 | 12.2 | 4.2 | 36 | 26 | 1.32 | 27 | 2.7 | 17.2 | .11 |
| 12 | .15 | 4.0 | 3.7 | 15.2 | 4.2 | 36 | 19.2 | 1.32 | 27 | 2.6 | 16.8 | .11 |
| 13 | .15 | 4.0 | 3.7 | 15.2 | 4.2 | 35 | 14.0 | 1.32 | 27 | 2.7 | 17.6 | .15 |
| 14 | .18 | 4.0 | 3.9 | 15.6 | 4.3 | 35 | 14.0 | 1.25 | 16.3 | 2.9 | 18.6 | .18 |
| 15 | .15 | 4.0 | 4.0 | 29 | 11.9 | 22 | 14.0 | .83 | 8.0 | 2.9 | 19.0 | .18 |
| 16 | .15 | 4.0 | 4.1 | 36 | 16.8 | 13.3 | 14.0 | .89 | 8.0 | 2.9 | 19.4 | .23 |
| 17 | .11 | 4.0 | 4.1 | 35 | 16.8 | 7.6 | 14.0 | 5.9 | 8.0 | 3.0 | 17.6 | .27 |
| 18 | .11 | 3.7 | 4.3 | 35 | 16.4 | 3.7 | 14.0 | 9.0 | 7.4 | 3.0 | 12.7 | .27 |
| 19 | .11 | 11.4 | 28 | 20 | 8.3 | 3.7 | 21 | 18.8 | 7.3 | 3.1 | 8.4 | .27 |
| 20 | .11 | 16.4 | 36 | 13.0 | 4.4 | 3.7 | 27 | 15.7 | 7.3 | 3.1 | 10.4 | .27 |
| 21 | .15 | 16.4 | 35 | 13.0 | 4.5 | 3.6 | 19.0 | 8.8 | 5.2 | 3.1 | 14.4 | .27 |
| 22 | .23 | 16.0 | 35 | 6.2 | 4.6 | 3.2 | 14.4 | 8.3 | 3.5 | 3.2 | 8.6 | .27 |
| 23 | .41 | 8.8 | 34 | 3.5 | 11.2 | 3.1 | 14.4 | 8.0 | 3.3 | 3.0 | 0 | .27 |
| 24 | .47 | 3.7 | 19.3 | 3.5 | 16.8 | 2.5 | 14.4 | 4.2 | 3.2 | 2.8 | 0 | .27 |
| 25 | .52 | 3.7 | 6.9 | 3.6 | 16.8 | 2.6 | 14.0 | 1.25 | 3.0 | 2.8 | 0 | .27 |
| 26 | .52 | 3.7 | 6.9 | 3.7 | 17.2 | 2.6 | 6.9 | 1.25 | 2.8 | 2.6 | 0 | .27 |
| 27 | .52 | 3.7 | 6.9 | 3.7 | 17.2 | 2.7 | 1.40 | 1.32 | 2.7 | 2.8 | 0 | .27 |
| 28 | .52 | 3.7 | 7.0 | 3.7 | 16.4 | 2.7 | 1.40 | 1.48 | 2.7 | 2.6 | 0 | .23 |
| 29 | .52 | 3.7 | 7.1 | 3.7 | ----- | 9.8 | 1.40 | 1.56 | 2.5 | 2.6 | 0 | .23 |
| 30 | .47 | 3.7 | 7.3 | 3.7 | ----- | 14.8 | 1.40 | 1.64 | 2.5 | 2.4 | 0 | .23 |
| 31 | .47 | ----- | 7.3 | 3.7 | ----- | 14.8 | ----- | 1.56 | ----- | 2.3 | 0 | ----- |
| Month | Maxi- mum | Mini- mum | Mean | Month | | | | Maxi- mum | Mini- mum | Mean | | |
| October | 0.52 | 0.11 | 0.251 | May | ----- | 18.8 | ----- | 18.8 | 0.83 | 3.55 | | |
| November | 17.2 | .52 | 6.18 | June | ----- | 27 | ----- | 27 | 1.56 | 6.98 | | |
| December | 36 | 3.7 | 9.85 | July | ----- | 3.9 | ----- | 3.9 | 2.3 | 2.98 | | |
| January | 36 | 3.5 | 11.4 | August | ----- | 19.4 | ----- | 19.4 | 0 | 8.15 | | |
| February | 17.2 | 3.7 | 8.41 | September | ----- | .76 | ----- | .76 | 0 | .250 | | |
| March | 36 | 2.5 | 15.0 | The year | | | | 36 | 0 | 7.20 | | |
| April | 27 | .89 | 13.5 | | | | | | | | | |

WHIPPANY RIVER AT MORRISTOWN, N. J.

LOCATION.—Water-stage recorder at Morristown sewage disposal plant, three-fourths mile below Morristown, Morris County, and 8 miles above mouth of river. Staff gage in use to July 16, 1930.

DRAINAGE AREA.—29 square miles.

RECORDS AVAILABLE.—August, 1921, to September, 1930.

EXTREMES.—Maximum discharge during year, about 466 second-feet Mar. 8 (gage height, 4.2 feet); minimum, 7 second-feet several times in August and September (gage height, 0.83 foot).

1921-1930: Maximum discharge, about 1,100 second-feet Aug. 26, 1928 (gage height, 7.30 feet); minimum, 6.3 second-feet Oct. 5, 7, 1921 (gage height, 0.80 foot).

REMARKS.—Records excellent except those estimated, which are good. Gage-height record furnished by commissioner of department of public works of Morristown.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 12 | 18 | 20 | 40 | 36 | 42 | 35 | 35 | 22 | 14 | 12 | 10 |
| 2..... | 104 | 18 | 21 | 40 | 36 | 46 | 34 | 47 | 18 | 52 | 11 | 11 |
| 3..... | 200 | 65 | 21 | 55 | 35 | 45 | 35 | 40 | 16 | 24 | 10 | 11 |
| 4..... | 39 | 54 | 28 | 42 | 36 | 43 | 34 | 35 | 12 | 21 | 10 | 9 |
| 5..... | 19 | 30 | 29 | 41 | 122 | 36 | 33 | 33 | 12 | 18 | 9 | 9 |
| 6..... | 17 | 24 | 24 | 30 | 58 | 36 | 33 | 33 | 12 | 22 | 8 | 9 |
| 7..... | 16 | 20 | 21 | 30 | 41 | 40 | 122 | 37 | 13 | 18 | 8 | 11 |
| 8..... | 14 | 20 | 21 | 31 | 40 | 261 | 76 | 36 | 12 | 16 | 9 | 11 |
| 9..... | 14 | 18 | 21 | 34 | 40 | 129 | 43 | 33 | 25 | 16 | 9 | 10 |
| 10..... | 13 | 17 | 21 | 30 | 36 | 81 | 42 | 31 | 245 | 24 | 9 | 9 |
| 11..... | 13 | 17 | 21 | 25 | 35 | 70 | 41 | 32 | 116 | 18 | 10 | 9 |
| 12..... | 12 | 16 | 20 | 25 | 33 | 104 | 40 | 32 | 40 | 16 | 8 | 8 |
| 13..... | 12 | 16 | 21 | 41 | 60 | 70 | 48 | 33 | 33 | 13 | 8 | 9 |
| 14..... | 12 | 20 | 39 | 65 | 76 | 59 | 50 | 33 | 30 | 20 | 9 | 78 |
| 15..... | 12 | 18 | 40 | 92 | 34 | 52 | 43 | 54 | 28 | 15 | 20 | 22 |
| 16..... | 11 | 18 | 30 | 52 | 31 | 54 | 60 | 38 | 22 | 14 | 15 | 17 |
| 17..... | 14 | 20 | 26 | 40 | 31 | 56 | 60 | 38 | 20 | 14 | 12 | 19 |
| 18..... | 12 | 185 | 58 | 60 | 30 | 52 | 60 | 35 | 33 | 13 | 11 | 14 |
| 19..... | 12 | 76 | 230 | 52 | 33 | 65 | 56 | 47 | 24 | 13 | 10 | 12 |
| 20..... | 11 | 39 | 86 | 46 | 40 | 50 | 48 | 47 | 22 | 11 | 16 | 12 |
| 21..... | 11 | 30 | 56 | 41 | 48 | 49 | 43 | 38 | 20 | 12 | 11 | a 12 |
| 22..... | 13 | 25 | 40 | 39 | 48 | 43 | 50 | 33 | 18 | 14 | 10 | a 11 |
| 23..... | 104 | 22 | 35 | 38 | 50 | 41 | 45 | 30 | 17 | 16 | 57 | a 11 |
| 24..... | 31 | 18 | 33 | 38 | 53 | 47 | 41 | 28 | 16 | 20 | 25 | a 11 |
| 25..... | 22 | 18 | 32 | 39 | 52 | 60 | 41 | 38 | a 16 | 20 | 15 | a 10 |
| 26..... | 18 | 18 | 30 | 37 | 98 | 59 | 38 | 27 | a 16 | 14 | 12 | a 10 |
| 27..... | 18 | 18 | 30 | 38 | 65 | 48 | 36 | 22 | 53 | 12 | 12 | a 10 |
| 28..... | 15 | 20 | 32 | 38 | 52 | 41 | 35 | 29 | 17 | 12 | 11 | a 9 |
| 29..... | 15 | 19 | 40 | 40 | ----- | 40 | 33 | 28 | 16 | 13 | 10 | 9 |
| 30..... | 16 | 20 | 42 | 38 | ----- | 40 | 33 | 24 | 14 | 14 | 10 | 9 |
| 31..... | 18 | ----- | 38 | 38 | ----- | 39 | ----- | 22 | ----- | 12 | 10 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 200 | 11 | 27.4 | 0.945 | 1.09 |
| November..... | 185 | 16 | 30.6 | 1.06 | 1.18 |
| December..... | 230 | 20 | 38.9 | 1.34 | 1.54 |
| January..... | 92 | 25 | 41.8 | 1.44 | 1.66 |
| February..... | 122 | 30 | 48.2 | 1.66 | 1.73 |
| March..... | 261 | 36 | 61.2 | 2.11 | 2.43 |
| April..... | 122 | 33 | 46.3 | 1.60 | 1.78 |
| May..... | 54 | 22 | 34.5 | 1.19 | 1.37 |
| June..... | 245 | 12 | 31.9 | 1.10 | 1.23 |
| July..... | 52 | 11 | 17.1 | .590 | .68 |
| August..... | 57 | 8 | 12.8 | .441 | .51 |
| September..... | 78 | 8 | 13.4 | .462 | .52 |
| The year..... | 261 | 8 | 33.6 | 1.16 | 15.72 |

* Estimated.

RAMAPO RIVER NEAR MAHWAH, N. J.

LOCATION.—Water-stage recorder at highway bridge 1 mile west of Mahwah, Bergen County, and three-fourths mile below mouth of Mahwah River.

DRAINAGE AREA.—118 square miles.

RECORDS AVAILABLE.—February, 1903, to July, 1914; September, 1922, to September, 1930. Gage heights only 1907 and 1914.

EXTREMES.—Maximum discharge during year, 1,390 second-feet Mar. 9 (gage height, 6.27 feet); minimum, 9.6 second-feet Aug. 11, 13 (gage height, 1.69 feet).

1922-1930: Maximum discharge, about 2,760 second-feet Sept. 2, 1927 (gage height, 8.23 feet); minimum daily discharge, about 8 second-feet Aug. 25, 1929.

REMARKS.—Records excellent except those for Oct. 1-16 and those estimated, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|-------|-------|-------|-------|------|------|-------|
| 1..... | 19 | 79 | 78 | 242 | 111 | 256 | 157 | 129 | 100 | 98 | 32 | 27 |
| 2..... | 83 | 78 | 82 | 239 | 111 | 259 | 160 | 135 | 88 | 259 | 36 | 33 |
| 3..... | 194 | 100 | 84 | 269 | 117 | 241 | 155 | 137 | 82 | 212 | 27 | 40 |
| 4..... | 136 | 161 | 79 | 266 | 131 | 209 | 142 | 123 | 74 | 155 | 25 | 31 |
| 5..... | 90 | 131 | 84 | 205 | 229 | 184 | 133 | 111 | 67 | 120 | 20 | 30 |
| 6..... | 60 | 116 | 77 | 183 | 180 | 176 | 130 | 103 | 66 | 148 | 20 | 29 |
| 7..... | 67 | 104 | 74 | 176 | 144 | 175 | 686 | 113 | 55 | 161 | 21 | 34 |
| 8..... | 62 | 98 | 84 | 188 | 128 | 733 | 691 | 117 | 46 | 120 | 22 | 25 |
| 9..... | 39 | 88 | 101 | 195 | 118 | 1,300 | 485 | 111 | 76 | 96 | 26 | 23 |
| 10..... | 36 | 80 | 95 | 182 | 116 | 747 | 373 | 92 | 219 | 68 | 15 | 21 |
| 11..... | 34 | 75 | 90 | 153 | 105 | 545 | 360 | 82 | 250 | 73 | 16 | 17 |
| 12..... | 34 | 86 | 77 | 168 | 99 | 560 | 292 | 85 | 162 | 70 | 18 | 19 |
| 13..... | 30 | 79 | 85 | 226 | 128 | 470 | 288 | * 85 | 123 | 60 | 18 | 15 |
| 14..... | 30 | 73 | 166 | 323 | 231 | 373 | 310 | * 90 | 103 | 75 | 17 | 18 |
| 15..... | 28 | 83 | 210 | 581 | 181 | 310 | 267 | * 220 | 88 | 76 | 21 | 41 |
| 16..... | 28 | 68 | 185 | 457 | 146 | 283 | 266 | * 340 | 78 | 68 | 22 | 40 |
| 17..... | 28 | 78 | 163 | 320 | 124 | 273 | 278 | * 170 | 74 | 61 | 20 | 42 |
| 18..... | 31 | 219 | 276 | 321 | 127 | 264 | 316 | * 120 | 115 | 39 | 29 | 33 |
| 19..... | 35 | 300 | 870 | 297 | 132 | 263 | 293 | 142 | 118 | 38 | 25 | 28 |
| 20..... | 26 | 237 | 778 | 246 | 202 | 229 | 266 | 171 | 92 | 42 | 26 | 18 |
| 21..... | 32 | 194 | 503 | 223 | 282 | 207 | 227 | 141 | 75 | 35 | 29 | 24 |
| 22..... | 54 | 159 | 358 | 210 | 303 | 178 | 225 | 115 | 60 | 33 | 29 | 30 |
| 23..... | 528 | 134 | 294 | 201 | 284 | 165 | 210 | 113 | 65 | 35 | 66 | 27 |
| 24..... | 396 | 122 | 266 | 172 | 312 | 155 | 189 | 106 | 61 | 44 | 144 | 25 |
| 25..... | 207 | 123 | 228 | 163 | 311 | 221 | 175 | 151 | 39 | 94 | 98 | 28 |
| 26..... | 146 | 125 | 206 | 151 | 328 | 334 | 165 | 163 | 39 | 68 | 75 | 46 |
| 27..... | 120 | 115 | 184 | 139 | 323 | 254 | 158 | 127 | 276 | 45 | 61 | 32 |
| 28..... | 106 | 113 | 215 | 144 | 290 | 214 | 148 | 119 | 228 | 57 | 51 | 31 |
| 29..... | 89 | 104 | 313 | 139 | ----- | 194 | 138 | 167 | 139 | 40 | 34 | 31 |
| 30..... | 79 | 88 | 295 | 130 | ----- | 188 | 130 | 143 | 100 | 32 | 29 | 29 |
| 31..... | 82 | ----- | 255 | 119 | ----- | 169 | ----- | 118 | ----- | 33 | 32 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 528 | 19 | 94.5 | 0.801 | 0.92 |
| November..... | 300 | 68 | 120 | 1.02 | 1.14 |
| December..... | 870 | 74 | 221 | 1.87 | 2.16 |
| January..... | 581 | 119 | 227 | 1.92 | 2.21 |
| February..... | 328 | 99 | 189 | 1.60 | 1.67 |
| March..... | 1,300 | 155 | 327 | 2.77 | 3.19 |
| April..... | 691 | 130 | 260 | 2.20 | 2.46 |
| May..... | 340 | 82 | 134 | 1.14 | 1.31 |
| June..... | 276 | 39 | 105 | .890 | .99 |
| July..... | 259 | 32 | 82.4 | .698 | .80 |
| August..... | 144 | 15 | 35.6 | .302 | .35 |
| September..... | 46 | 15 | 28.7 | .243 | .27 |
| The year..... | 1,300 | 15 | 152 | 1.29 | 17.47 |

* Estimated.

RAMAPO RIVER AT POMPTON LAKES, N. J.

LOCATION.—Water-stage recorder at hydroelectric plant, borough of Pompton Lakes, Passaic County, 1½ miles above mouth of Ramapo River.

DRAINAGE AREA.—160 square miles.

RECORDS AVAILABLE.—October, 1921, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,560 second-feet (flow through turbines not included) Mar. 9 (gage height, 1.13 feet).

1921-1930: Maximum discharge, about 7,220 second-feet (flow through turbines not included) Sept. 2, 1927 (gage height, 2.68 feet).

REMARKS.—Records good. Table of daily and monthly discharge includes flow over spillway and through turbines. Flow regulated by storage in pond. Gage-height and power-house records furnished by Jersey Central Power & Light Co.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|---------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| 1..... | 10 | 104 | 231 | 340 | 175 | • 320 | 240 | • 190 | 120 | • 140 | 57 | 44 |
| 2..... | 134 | 116 | 231 | 334 | 158 | 315 | 237 | • 190 | 145 | • 320 | 44 | 57 |
| 3..... | 354 | 154 | 130 | 355 | 162 | 280 | 230 | 194 | 85 | • 290 | 18 | 57 |
| 4..... | 281 | 190 | 128 | 370 | 181 | 245 | 201 | 160 | 96 | • 240 | 70 | 50 |
| 5..... | 170 | 229 | 115 | 315 | 318 | 223 | 183 | 139 | 70 | 169 | 5 | 37 |
| 6..... | 148 | 160 | 90 | 282 | 298 | 212 | 162 | 153 | 111 | 186 | 63 | 57 |
| 7..... | 98 | 100 | 125 | 273 | 230 | 212 | 704 | 109 | 82 | 247 | 5 | 5 |
| 8..... | 104 | 160 | • 160 | 278 | 205 | 850 | 905 | 153 | • 70 | 183 | 5 | 57 |
| 9..... | 104 | 160 | • 200 | 282 | 160 | 1,650 | 630 | 147 | • 120 | 119 | 102 | 15 |
| 10..... | 10 | 117 | • 170 | 282 | 176 | 1,120 | 470 | 119 | • 250 | 135 | 5 | 16 |
| 11..... | 105 | 104 | • 150 | 256 | 178 | 750 | 430 | 98 | • 300 | 117 | 5 | 48 |
| 12..... | 98 | 104 | • 140 | 247 | 133 | 750 | 377 | 113 | • 240 | 99 | 76 | 16 |
| 13..... | 10 | 122 | • 180 | 309 | 170 | 645 | • 380 | 78 | • 210 | 82 | 5 | 18 |
| 14..... | 98 | 148 | 251 | 387 | 286 | 520 | • 380 | 97 | 169 | 97 | 5 | 16 |
| 15..... | 10 | 122 | 334 | 725 | 274 | 433 | • 340 | 185 | 119 | 82 | 63 | 39 |
| 16..... | 72 | 160 | 315 | 622 | 214 | 390 | • 360 | 287 | 114 | 87 | 37 | 73 |
| 17..... | 72 | 54 | 282 | 444 | • 190 | 370 | • 400 | 218 | 107 | 87 | 5 | 77 |
| 18..... | 10 | 248 | • 400 | 422 | • 180 | 360 | • 500 | • 170 | 166 | 81 | 63 | 44 |
| 19..... | 98 | 403 | • 1,200 | • 380 | • 200 | 360 | 460 | • 190 | 166 | 82 | 37 | 44 |
| 20..... | 10 | 340 | • 900 | • 340 | 242 | 324 | 411 | • 220 | 152 | 31 | 24 | 50 |
| 21..... | 10 | 298 | 700 | • 280 | 304 | 292 | 370 | 167 | 117 | 84 | 82 | 57 |
| 22..... | 122 | 260 | 514 | • 240 | 340 | 258 | 339 | 176 | • 100 | 37 | 5 | 5 |
| 23..... | 569 | 237 | 411 | • 220 | • 340 | 239 | 340 | 162 | 97 | 37 | 106 | 5 |
| 24..... | 568 | • 220 | 377 | • 200 | • 360 | 228 | 309 | 152 | 82 | 37 | 172 | 89 |
| 25..... | 340 | • 200 | 334 | • 200 | • 360 | 286 | 293 | 175 | 98 | 109 | 160 | 5 |
| 26..... | 247 | • 220 | 309 | • 190 | • 420 | 420 | 269 | 232 | 84 | 70 | 97 | 5 |
| 27..... | 176 | 196 | 293 | • 200 | • 400 | 370 | • 240 | 181 | 263 | 103 | 78 | 98 |
| 28..... | 167 | 164 | 298 | 132 | • 360 | 315 | • 220 | 152 | 334 | 24 | 68 | 5 |
| 29..... | 162 | 208 | 386 | 184 | ----- | 287 | • 240 | 220 | • 280 | 71 | 63 | 91 |
| 30..... | 160 | 180 | 420 | 220 | ----- | 269 | • 200 | 189 | • 140 | 70 | 82 | 5 |
| 31..... | 141 | ----- | 362 | 146 | ----- | 256 | ----- | 183 | ----- | 18 | 5 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 569 | 10 | 150 | 0.938 | 1.08 |
| November..... | 403 | 54 | 185 | 1.16 | 1.29 |
| December..... | 1,200 | 90 | 327 | 2.04 | 2.35 |
| January..... | 725 | 146 | 308 | 1.92 | 2.21 |
| February..... | 420 | 133 | 250 | 1.56 | 1.62 |
| March..... | 1,650 | 212 | 437 | 2.73 | 3.15 |
| April..... | 905 | 162 | 361 | 2.26 | 2.52 |
| May..... | 287 | 78 | 168 | 1.05 | 1.21 |
| June..... | 334 | 70 | 150 | .938 | 1.05 |
| July..... | 320 | 18 | 114 | .712 | .82 |
| August..... | 172 | 5 | 52.6 | .329 | .38 |
| September..... | 98 | 5 | 39.2 | .245 | .27 |
| The year..... | 1,650 | 5 | 212 | 1.32 | 17.95 |

• Discharge over spillway estimated.

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, 1930.

EXTREMES.—Maximum stage during year, 100.4 feet Oct. 24; minimum, 99.6 feet Aug. 9–15.

1898–1903, 1907–1930: Maximum stage, about 104.0 feet Oct. 9–14, 1903; minimum, 93.25 feet several days in November, 1900.

REMARKS.—Greenwood Lake Dam constructed to provide storage for Morris Canal. Navigation in canal abandoned by act of State legislature Mar. 13, 1924. Very little regulation of lake subsequent to this date. Records furnished by Morris Canal & Banking Co.

Daily gage height, in feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|--------|--------|--------|--------|--------|-------|--------|--------|-------|-------|
| 1..... | 99.7 | 100.1 | 100.0 | 100.05 | 100.1 | 100.2 | 99.9 | 100.0 | 100.0 | 100.1 | 99.8 | 99.85 |
| 2..... | 99.7 | 100.1 | 100.0 | 100.05 | 100.1 | 100.2 | 99.9 | 100.0 | 100.0 | 100.1 | 99.7 | 99.85 |
| 3..... | 99.7 | 100.1 | 100.0 | 100.05 | 100.1 | 100.2 | 99.95 | 99.95 | 100.05 | 100.1 | 99.7 | 99.9 |
| 4..... | 99.9 | 100.0 | 100.1 | 100.05 | 100.1 | 100.2 | 99.95 | 99.95 | 100.05 | 100.1 | 99.7 | 99.9 |
| 5..... | 100.0 | 100.0 | 100.1 | 100.04 | 100.05 | 100.2 | 99.95 | 99.95 | 100.1 | 100.1 | 99.7 | 99.9 |
| 6..... | 100.0 | 100.0 | 100.1 | 100.04 | 100.05 | 100.25 | 99.95 | 99.95 | 100.1 | 100.05 | 99.7 | 99.9 |
| 7..... | 100.0 | 100.0 | 100.1 | 100.04 | 100.1 | 100.25 | 99.95 | 99.95 | 100.2 | 100.05 | 99.7 | 99.85 |
| 8..... | 99.95 | 100.0 | 100.0 | 100.05 | 100.1 | 100.25 | 100.0 | 99.95 | 100.25 | 100.05 | 99.7 | 99.85 |
| 9..... | 99.95 | 100.0 | 100.0 | 100.1 | 100.15 | 100.25 | 100.0 | 99.9 | 100.2 | 100.0 | 99.6 | 99.85 |
| 10..... | 99.95 | 100.0 | 100.0 | 100.1 | 100.15 | 100.3 | 100.0 | 99.9 | 100.2 | 100.0 | 99.6 | 99.8 |
| 11..... | 99.9 | 100.0 | 100.0 | 100.1 | 100.15 | 100.3 | 100.05 | 99.9 | 100.2 | 100.0 | 99.6 | 99.8 |
| 12..... | 99.9 | 99.9 | 100.0 | 100.1 | 100.15 | 100.3 | 100.05 | 99.9 | 100.2 | 100.0 | 99.6 | 99.8 |
| 13..... | 99.9 | 99.9 | 100.0 | 100.1 | 100.1 | 100.3 | 100.0 | 99.9 | 100.2 | 100.0 | 99.6 | 99.8 |
| 14..... | 99.9 | 100.0 | 100.0 | 100.2 | 100.1 | 100.3 | 100.0 | 99.95 | 100.2 | 99.95 | 99.6 | 99.85 |
| 15..... | 99.9 | 100.0 | 100.0 | 100.2 | 100.1 | 100.25 | 100.05 | 99.95 | 100.2 | 99.95 | 99.6 | 99.85 |
| 16..... | 99.9 | 100.0 | 100.05 | 100.2 | 100.1 | 100.2 | 100.05 | 99.95 | 100.2 | 99.95 | 99.65 | 99.8 |
| 17..... | 99.9 | 100.0 | 100.05 | 100.2 | 100.1 | 100.2 | 100.05 | 99.95 | 100.2 | 99.95 | 99.65 | 99.8 |
| 18..... | 99.8 | 100.1 | 100.05 | 100.1 | 100.1 | 100.15 | 100.1 | 99.9 | 100.25 | 99.95 | 99.65 | 99.7 |
| 19..... | 99.8 | 100.1 | 100.05 | 100.1 | 100.1 | 100.1 | 100.1 | 99.9 | 100.2 | 99.95 | 99.65 | 99.7 |
| 20..... | 99.8 | 100.1 | 100.0 | 100.1 | 100.1 | 100.1 | 100.1 | 99.9 | 100.2 | 99.9 | 99.65 | 99.7 |
| 21..... | 99.8 | 100.1 | 100.0 | 100.1 | 100.1 | 100.1 | 100.05 | 99.95 | 100.2 | 99.9 | 99.7 | 99.7 |
| 22..... | 99.8 | 100.1 | 100.0 | 100.1 | 100.1 | 100.05 | 100.05 | 99.95 | 100.2 | 99.9 | 99.7 | 99.7 |
| 23..... | 100.3 | 100.0 | 100.05 | 100.1 | 100.1 | 100.05 | 100.05 | 99.95 | 100.15 | 99.9 | 99.7 | 99.7 |
| 24..... | 100.4 | 100.0 | 100.05 | 100.1 | 100.15 | 100.05 | 100.05 | 100.0 | 100.15 | 99.9 | 99.7 | 99.85 |
| 25..... | 100.3 | 100.0 | 100.05 | 100.1 | 100.15 | 100.0 | 100.05 | 100.0 | 100.15 | 99.9 | 99.7 | 99.85 |
| 26..... | 100.3 | 100.1 | 100.05 | 100.15 | 100.15 | 100.0 | 100.0 | 100.0 | 100.1 | 99.85 | 99.8 | 99.85 |
| 27..... | 100.2 | 100.1 | 100.0 | 100.15 | 100.15 | 99.95 | 100.0 | 100.0 | 100.1 | 99.85 | 99.8 | 99.7 |
| 28..... | 100.2 | 100.0 | 100.0 | 100.15 | 100.2 | 99.95 | 100.0 | 99.95 | 100.1 | 99.85 | 99.8 | 99.7 |
| 29..... | 100.1 | 100.0 | 100.0 | 100.1 | ----- | 99.95 | 100.0 | 99.95 | 100.1 | 99.85 | 99.8 | 99.7 |
| 30..... | 100.1 | 100.0 | 100.05 | 100.1 | ----- | 99.95 | 100.0 | 99.95 | 100.1 | 99.8 | 99.85 | 99.7 |
| 31..... | 100.1 | ----- | 100.05 | 100.1 | ----- | 99.9 | ----- | 100.0 | ----- | 99.8 | 99.85 | ----- |

WANAQUE 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, 1930.

EXTREMES.—Maximum discharge during year, 206 second-feet Mar. 9 (gage height, 2.30 feet).

1919-1930: Maximum discharge, about 600 second-feet Apr. 7, 1924 (gage height, 3.72 feet); minimum stage occurs at times gates at Greenwood Lake are closed and no water is passing over spillway.

REMARKS.—Records excellent except those for estimated periods, which are good; Flow regulated by storage in lake. Water-stage recorder operated by North Jersey District Water Supply Commission. See record of Greenwood Lake at The Glens.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 0 | 43 | * 24 | 65 | 26 | 73 | 30 | 24 | 16 | 65 | 0.5 | 12 |
| 2..... | 14 | 41 | * 22 | 63 | 24 | 71 | 35 | 26 | 14 | 93 | 0 | 13 |
| 3..... | 50 | 54 | * 24 | 63 | 24 | 65 | 29 | 32 | 13 | 81 | 0 | 15 |
| 4..... | 50 | 58 | 24 | 61 | 24 | 58 | 30 | 28 | 12 | 64 | 0 | 10 |
| 5..... | 41 | 55 | 21 | 54 | 35 | 51 | 24 | 20 | 10 | 51 | 0 | 5.6 |
| 6..... | 33 | 47 | 20 | 48 | * 36 | 56 | 24 | 24 | 9.0 | 54 | 0 | 4.2 |
| 7..... | 29 | 44 | 20 | 44 | * 34 | 60 | 92 | 23 | 8.4 | 51 | 0 | 3.9 |
| 8..... | 24 | 43 | 21 | 44 | * 30 | 129 | 129 | 25 | 8.2 | 41 | 0 | 5.0 |
| 9..... | 17 | 41 | 22 | 44 | 28 | 189 | 130 | 22 | 14 | 33 | 0 | 1.9 |
| 10..... | 13 | 37 | 22 | 39 | 26 | 167 | 110 | 17 | 82 | 38 | 0 | 1.3 |
| 11..... | 10 | 33 | 23 | 33 | 24 | 158 | 97 | 12 | 152 | 30 | 0 | .3 |
| 12..... | 7.7 | 30 | 20 | 41 | 21 | 162 | 87 | 8.7 | 136 | 26 | 0 | .2 |
| 13..... | 7.2 | 28 | 25 | 46 | 24 | 148 | 80 | 8.7 | 111 | 17 | 0 | .5 |
| 14..... | 6.8 | 28 | 34 | 53 | 36 | 135 | 82 | 9.0 | 91 | 22 | 0 | 2.4 |
| 15..... | 7.2 | 29 | 39 | 80 | 38 | 111 | 73 | 17 | 73 | 18 | 0 | 2.4 |
| 16..... | 6.2 | 26 | 41 | 87 | 39 | 96 | 69 | 16 | 58 | 14 | 0 | 3.9 |
| 17..... | 7.8 | 24 | 39 | 79 | 35 | 84 | 70 | 14 | 53 | 11 | 0 | 7.2 |
| 18..... | 4.2 | 48 | 49 | 86 | 32 | 74 | 74 | 13 | 61 | 8.7 | 0 | 6.4 |
| 19..... | .8 | 63 | 106 | 86 | 30 | 74 | 75 | 16 | 54 | 7.4 | 0 | 3.3 |
| 20..... | .6 | 64 | 136 | 74 | 37 | 60 | 67 | 21 | 45 | 7.7 | 0 | 1.9 |
| 21..... | 1.0 | 60 | 129 | 64 | 54 | 55 | 56 | 18 | 36 | 5.9 | 0 | 1.4 |
| 22..... | 23 | 53 | 116 | 59 | 67 | 45 | 56 | 16 | 31 | 5.6 | 0 | 1.3 |
| 23..... | 173 | 50 | 104 | 54 | 73 | 36 | 50 | 16 | 24 | 5.3 | 10 | 1.1 |
| 24..... | 184 | 46 | 91 | 48 | 80 | 28 | 44 | 14 | 18 | 8.6 | 28 | .1 |
| 25..... | 146 | 44 | 78 | 44 | 80 | 35 | 39 | 32 | 17 | 15 | 36 | 3.2 |
| 26..... | 111 | 39 | 67 | 39 | 89 | 40 | 35 | 28 | 31 | 11 | 35 | 10 |
| 27..... | 87 | 36 | 59 | 36 | 90 | 37 | 30 | 23 | 103 | 9.5 | 30 | 9.0 |
| 28..... | 74 | 36 | 60 | 36 | 81 | 35 | 29 | 22 | 93 | 5.9 | 24 | 5.3 |
| 29..... | 57 | 31 | 71 | 34 | ----- | 34 | 25 | 26 | 70 | 4.2 | 19 | 3.1 |
| 30..... | 46 | 26 | 73 | 32 | ----- | 34 | 24 | 24 | 56 | 3.3 | 18 | 2.1 |
| 31..... | 43 | ----- | 70 | 29 | ----- | 34 | ----- | 22 | ----- | 1.2 | 13 | ----- |

| Month | Maximum | Minimum | Mean | Month | Maximum | Minimum | Mean |
|---------------|---------|---------|------|----------------|---------|---------|------|
| October..... | 184 | 0 | 41.1 | May..... | 32 | 8.7 | 19.9 |
| November..... | 64 | 24 | 41.9 | June..... | 152 | 8.2 | 50.0 |
| December..... | 136 | 20 | 53.2 | July..... | 93 | 1.2 | 26.1 |
| January..... | 87 | 29 | 53.7 | August..... | 36 | 0 | 6.89 |
| February..... | 90 | 21 | 43.5 | September..... | 15 | .1 | 4.57 |
| March..... | 189 | 28 | 78.5 | | | | |
| April..... | 130 | 24 | 59.8 | The year..... | 189 | 0 | 39.9 |

* Estimated.

WANAQUE RIVER AT WANAQUE, N. J.

LOCATION.—Water-stage recorder 100 feet below Erie Railroad bridge and 500 feet below Wanaque Reservoir in Wanaque, Passaic County.

DRAINAGE AREA.—94 square miles (increased from 91 square miles by diverting of Post Brook into Wanaque Reservoir).

RECORDS AVAILABLE.—December, 1903, to December, 1905; May, 1912, to May, 1915; May, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 855 second-feet Mar. 9 (gage height, 3.36 feet); minimum, 14 second-feet Oct. 8, 17 (gage height, 0.48 foot). 1903-1905, 1912-1915, 1919-1930: Maximum stage, 8.35 feet July 22 or 23, 1919 (discharge not determined); minimum discharge, 1 second-foot Apr. 5, 1928 (gage height, 0.16 foot).

REMARKS.—Records good. Diversion from Wanaque Reservoir began in March, 1930. Flow regulated by storage in Wanaque Reservoir and in Greenwood Lake, 11 miles upstream. Water-stage recorder operated by North Jersey District Water Supply Commission.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1 | 72 | 35 | 31 | 210 | 88 | 224 | 102 | 80 | 48 | 91 | 31 | 80 |
| 2 | 74 | 35 | 31 | 210 | 91 | 238 | 138 | 86 | 37 | 93 | 31 | 61 |
| 3 | 74 | 33 | 33 | 224 | 91 | 192 | 88 | 84 | 35 | 102 | 33 | 44 |
| 4 | 74 | 33 | 35 | 227 | 102 | 164 | 144 | 66 | 35 | 107 | 33 | 42 |
| 5 | 72 | 33 | 33 | 159 | 164 | 154 | 58 | 45 | 33 | 114 | 42 | 42 |
| 6 | 72 | 31 | 33 | 154 | 157 | 151 | 68 | 45 | 32 | 114 | 59 | 42 |
| 7 | 72 | 28 | 33 | 149 | 144 | 154 | 349 | 46 | 31 | 100 | 59 | 42 |
| 8 | 50 | 27 | 36 | 146 | 128 | 526 | 444 | 50 | 32 | 63 | 59 | 42 |
| 9 | 23 | 26 | 35 | 151 | 111 | 770 | 354 | 74 | 33 | 48 | 50 | 40 |
| 10 | 27 | 27 | 32 | 195 | 104 | 510 | 305 | 70 | 207 | 61 | 35 | 40 |
| 11 | 27 | 28 | 51 | 104 | 91 | 412 | 279 | 54 | 412 | 33 | 32 | 40 |
| 12 | 28 | 28 | 39 | 124 | 91 | 444 | 252 | 35 | 329 | 38 | 33 | 40 |
| 13 | 28 | 29 | 31 | 167 | 100 | 382 | 252 | 39 | 279 | 35 | 50 | 58 |
| 14 | 27 | 29 | 50 | 257 | 134 | 329 | 252 | 37 | 224 | 31 | 51 | 70 |
| 15 | 27 | 30 | 93 | 444 | 144 | 266 | 224 | 63 | 178 | 31 | 51 | 74 |
| 16 | 27 | 30 | 116 | 382 | 141 | 238 | 238 | 70 | 136 | 31 | 52 | 78 |
| 17 | 22 | 30 | 114 | 305 | 109 | 224 | 238 | 58 | 136 | 31 | 52 | 80 |
| 18 | 24 | 30 | 222 | 329 | 107 | 224 | 252 | 51 | 167 | 31 | 52 | 80 |
| 19 | 27 | 30 | 545 | 305 | 109 | 238 | 266 | 70 | 159 | 31 | 61 | 80 |
| 20 | 27 | 31 | 545 | 252 | 121 | 181 | 238 | 78 | 118 | 31 | 80 | 80 |
| 21 | 28 | 31 | 444 | 238 | 175 | 224 | 195 | 64 | 84 | 31 | 80 | 80 |
| 22 | 31 | 31 | 354 | 224 | 210 | 151 | 210 | 56 | 61 | 31 | 80 | 80 |
| 23 | 36 | 31 | 329 | 210 | 210 | 80 | 178 | 50 | 46 | 31 | 84 | 80 |
| 24 | 36 | 31 | 292 | 178 | 238 | 61 | 154 | 56 | 39 | 31 | 84 | 80 |
| 25 | 36 | 30 | 238 | 151 | 252 | 98 | 116 | 104 | 48 | 31 | 51 | 80 |
| 26 | 36 | 30 | 210 | 144 | 266 | 175 | 102 | 149 | 51 | 31 | 32 | 80 |
| 27 | 36 | 29 | 195 | 131 | 266 | 164 | 100 | 93 | 121 | 31 | 33 | 80 |
| 28 | 35 | 32 | 195 | 138 | 238 | 151 | 100 | 42 | 164 | 31 | 33 | 80 |
| 29 | 35 | 31 | 266 | 136 | ----- | 118 | 86 | 86 | 136 | 31 | 66 | 80 |
| 30 | 35 | 31 | 266 | 114 | ----- | 102 | 80 | 86 | 104 | 31 | 80 | 63 |
| 31 | 35 | ----- | 254 | 95 | ----- | 107 | ----- | 63 | ----- | 31 | 80 | ----- |

| Month | Observed | | | Corrected for storage and diversion | | |
|-----------|----------|---------|------|-------------------------------------|-----------------|--------------------|
| | Maximum | Minimum | Mean | Mean | Per square mile | Run-off in. inches |
| October | 74 | 22 | 40.4 | 123 | 1.31 | 1.51 |
| November | 35 | 25 | 30.3 | 112 | 1.19 | 1.33 |
| December | 545 | 31 | 167 | 196 | 2.09 | 2.41 |
| January | 444 | 95 | 202 | 198 | 2.11 | 2.43 |
| February | 266 | 88 | 149 | 158 | 1.68 | 1.75 |
| March | 770 | 61 | 240 | 223 | 2.48 | 2.86 |
| April | 444 | 58 | 195 | 219 | 2.33 | 2.60 |
| May | 149 | 35 | 66.1 | 83.7 | .890 | 1.03 |
| June | 412 | 31 | 117 | 148 | 1.57 | 1.75 |
| July | 114 | 31 | 50.2 | 40.5 | .431 | .50 |
| August | 84 | 31 | 53.2 | 32.2 | .343 | .40 |
| September | 80 | 40 | 64.6 | 4.83 | .051 | .06 |
| The year | 770 | 22 | 115 | 129 | 1.37 | 18.63 |

* Estimated.

PEQUANNOCK RIVER AT MACOPIN INTAKE DAM, N. J.

LOCATION.—Water-stage recorder at Macopin intake dam of Newark water-works, 3 miles above Butler, Morris County.

DRAINAGE AREA.—63.7 square miles.

RECORDS AVAILABLE.—January, 1892, to September, 1930.

REMARKS.—Table of daily discharge indicates flow over intake dam only. Water diverted at intake dam. Flow regulated by several reservoirs. Station operated and base data furnished by Newark Bureau of Water.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Dec. | Jan. | Mar. | Apr. | May | June | Day | Dec. | Jan. | Mar. | Apr. | May | June |
|-----|------|------|------|------|-----|------|-----|------|------|------|-------|-----|-------|
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 69 | 0 | 0 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 99 | 0 | 0 |
| 3 | 0 | 0 | 0 | 0 | 17 | 0 | 18 | 0 | 0 | 0 | 128 | 0 | 0 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 32 | 0 | 0 | 114 | 0 | 0 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 7.6 | 0 | 0 | 86 | 0 | 0 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 0 | 0 | 73 | 0 | 0 |
| 7 | 0 | 0 | 0 | 95 | 0 | 0 | 22 | 0 | 0 | 0 | 73 | 0 | 0 |
| 8 | 0 | 0 | 80 | 35 | 0 | 0 | 23 | 0 | 0 | 0 | 61 | 0 | 0 |
| 9 | 0 | 0 | 120 | 3.9 | 0 | 0 | 24 | 0 | 0 | 0 | 35 | 0 | 0 |
| 10 | 0 | 0 | 42 | 0 | 0 | 53 | 25 | 0 | 0 | 0 | 14 | 0 | 0 |
| 11 | 0 | 0 | 32 | 0 | 0 | 95 | 26 | 0 | 0 | 0 | 11 | 0 | 0 |
| 12 | 0 | 0 | 25 | 0 | 0 | 38 | 27 | 0 | 0 | 0 | 7.7 | 0 | 0 |
| 13 | 0 | 0 | 3.9 | 0 | 0 | 7.4 | 28 | 0 | 0 | 0 | 2.2 | 0 | 0 |
| 14 | 0 | 22 | 0 | 32 | 0 | 0 | 29 | 0 | 0 | 0 | .3 | 0 | 0 |
| 15 | 0 | 35 | 0 | 53 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | 31 | 0 | 0 | 0 | ----- | 0 | ----- |

| Month | Observed | | | Corrected for storage and diversion | | |
|-----------|----------|---------|------|-------------------------------------|-----------------|-------------------|
| | Maximum | Minimum | Mean | Mean | Per square mile | Run-off in inches |
| October | 0 | 0 | 0 | 83.3 | 1.31 | 1.51 |
| November | 0 | 0 | 0 | 89.4 | 1.40 | 1.56 |
| December | 32 | 0 | 1.3 | 118 | 1.85 | 2.13 |
| January | 35 | 0 | 1.8 | 128 | 2.01 | 2.32 |
| February | 0 | 0 | 0 | 116 | 1.82 | 1.90 |
| March | 120 | 0 | 9.8 | 202 | 3.17 | 3.66 |
| April | 128 | 0 | 33.1 | 161 | 2.53 | 2.82 |
| May | 17 | 0 | .5 | 70.1 | 1.10 | 1.27 |
| June | 95 | 0 | 6.4 | 104 | 1.63 | 1.82 |
| July | 0 | 0 | 0 | 32.8 | .515 | .59 |
| August | 0 | 0 | 0 | 23.4 | .367 | .42 |
| September | 0 | 0 | 0 | 10.3 | .162 | .18 |
| The year | 128 | 0 | 4.4 | 94.8 | 1.43 | 20.18 |

NOTE.—No flow during months omitted.

SADDLE RIVER AT LODI, N. J.

LOCATION.—Water-stage recorder at highway bridge 1 mile above Lodi, Bergen County, and 2¼ miles above mouth of river.

DRAINAGE AREA.—55 square miles.

RECORDS AVAILABLE.—September, 1923, to September, 1930.

EXTREMES.—Maximum discharge during year, 418 second-feet Apr. 8 (gage height, 3.66 feet); minimum stage, 1.66 feet Aug. 4 (discharge not determined).

1923-1930: Maximum discharge, about 1,630 second-feet Sept. 2, 1927 (gage height, 6.82 feet); minimum not determined.

REMARKS.—Records good except those for periods of ice effect, Jan. 23-27, Feb. 16, 17, and those affected by backwater from temporary dam, June 20 to Sept. 30, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 30 | 39 | 35 | 86 | 57 | 90 | 69 | 59 | 41 | 35 | 18 | 18 |
| 2..... | 72 | 39 | 35 | 78 | 56 | 89 | 69 | 68 | 37 | 53 | 16 | 22 |
| 3..... | 155 | 61 | 34 | 86 | 64 | 86 | 67 | 65 | 34 | 49 | 17 | 36 |
| 4..... | 144 | 87 | 37 | 96 | 80 | 74 | 64 | 54 | 32 | 54 | 6 | 31 |
| 5..... | 55 | 65 | 36 | 71 | 166 | 67 | 60 | 48 | 31 | 34 | 15 | 23 |
| 6..... | 40 | 49 | 38 | 60 | 166 | 62 | 61 | 46 | 32 | 29 | 19 | 22 |
| 7..... | 34 | 41 | 37 | 59 | 104 | 69 | 178 | 45 | 34 | 39 | 7 | 20 |
| 8..... | 31 | 40 | 42 | 64 | 75 | 166 | 355 | 47 | 31 | 26 | 7 | 23 |
| 9..... | 28 | 38 | 53 | 69 | 67 | 325 | 190 | 48 | 36 | 20 | 12 | 27 |
| 10..... | 26 | 36 | 48 | 69 | 68 | 215 | 98 | 45 | 84 | 20 | 12 | 20 |
| 11..... | 26 | 35 | 42 | 60 | 64 | 115 | 86 | 41 | 155 | 19 | 12 | 19 |
| 12..... | 27 | 34 | 39 | 61 | 60 | 124 | 81 | 41 | 83 | 14 | 12 | 18 |
| 13..... | 21 | 34 | 42 | 103 | 72 | 120 | 81 | 40 | 51 | 11 | 14 | 14 |
| 14..... | 25 | 37 | 90 | 119 | 134 | 98 | 98 | 41 | 46 | 17 | 7 | 23 |
| 15..... | 24 | 41 | 111 | 215 | 95 | 84 | 96 | 100 | 40 | 23 | 35 | 29 |
| 16..... | 30 | 44 | 81 | 202 | 65 | 78 | 90 | 155 | 35 | 20 | 37 | 27 |
| 17..... | 29 | 44 | 62 | 98 | 65 | 78 | 134 | 77 | 32 | 13 | 27 | 33 |
| 18..... | 30 | 84 | 83 | 103 | 68 | 78 | 144 | 55 | 46 | 18 | 49 | 28 |
| 19..... | 31 | 124 | 202 | 144 | 77 | 86 | 124 | 62 | 71 | 20 | 45 | 24 |
| 20..... | 29 | 84 | 268 | 144 | 93 | 84 | 104 | 84 | 55 | 13 | 26 | 23 |
| 21..... | 30 | 60 | 144 | 89 | 104 | 74 | 86 | 65 | 35 | 19 | 21 | 22 |
| 22..... | 34 | 51 | 83 | 80 | 110 | 67 | 87 | 53 | 29 | 24 | 23 | 18 |
| 23..... | 111 | 47 | 65 | 75 | 104 | 64 | 86 | 47 | 27 | 23 | 64 | 20 |
| 24..... | 134 | 45 | 69 | 70 | 104 | 61 | 74 | 41 | 22 | 18 | 166 | 24 |
| 25..... | 71 | 44 | 64 | 65 | 113 | 101 | 69 | 62 | 18 | 38 | 111 | 26 |
| 26..... | 50 | 42 | 57 | 65 | 124 | 202 | 65 | 74 | 21 | 29 | 54 | 39 |
| 27..... | 41 | 45 | 57 | 60 | 124 | 144 | 65 | 50 | 100 | 20 | 42 | 32 |
| 28..... | 37 | 42 | 61 | 59 | 108 | 96 | 64 | 48 | 83 | 17 | 36 | 26 |
| 29..... | 34 | 41 | 100 | 65 | ----- | 81 | 61 | 74 | 45 | 14 | 34 | 20 |
| 30..... | 33 | 35 | 122 | 59 | ----- | 78 | 60 | 61 | 29 | 29 | 28 | 23 |
| 31..... | 35 | ----- | 98 | 61 | ----- | 74 | ----- | 48 | ----- | 16 | 21 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 155 | 21 | 48.3 | 0.878 | 1.01 |
| November..... | 124 | 34 | 50.3 | .915 | 1.02 |
| December..... | 268 | 34 | 75.3 | 1.37 | 1.58 |
| January..... | 215 | 59 | 88.2 | 1.60 | 1.84 |
| February..... | 166 | 56 | 92.4 | 1.68 | 1.75 |
| March..... | 325 | 61 | 104 | 1.89 | 2.18 |
| April..... | 355 | 60 | 98.9 | 1.80 | 2.01 |
| May..... | 155 | 40 | 59.5 | 1.08 | 1.24 |
| June..... | 155 | 18 | 47.2 | .858 | .96 |
| July..... | 54 | 11 | 25.0 | .455 | .52 |
| August..... | 166 | 6 | 32.0 | .582 | .67 |
| September..... | 39 | 14 | 24.3 | .442 | .49 |
| The year..... | 355 | 6 | 62.0 | 1.13 | 15.27 |

ELIZABETH RIVER BASIN

ELIZABETH RIVER AT ELIZABETH, N. J.

LOCATION.—Water-stage recorder at dam 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, 1930.

EXTREMES.—Maximum discharge during year, 860 second-feet Mar. 8 (gage height, 7.57 feet).

1921-1930: Maximum discharge, about 2,640 second-feet, Sept. 1, 1927 (gage height, 9.71 feet).

REMARKS.—Records good. About 6 second-feet diverted above station by Elizabethtown Water Co.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1 | 10 | 9.4 | 7.6 | 12 | 7.7 | 15 | 14 | 11 | 7.1 | 10 | 1.5 | 2.7 |
| 2 | 282 | 9.4 | 8.2 | 11 | 12 | 18 | 12 | 15 | 7.6 | 6.8 | 1.5 | 3.6 |
| 3 | 28 | 74 | 8.2 | 18 | 12 | 13 | 9.5 | 14 | 7.6 | 4.0 | 2.0 | 4.7 |
| 4 | 11 | 20 | 8.2 | 10 | 28 | 11 | 10 | 4.4 | 7.1 | 4.0 | 2.2 | 3.6 |
| 5 | 2.1 | 12 | 8.2 | 8.4 | 82 | 9.5 | 8.7 | 3.8 | 6.6 | 4.0 | 1.5 | 2.7 |
| 6 | 2.0 | 11 | 8.9 | 8.4 | 14 | 9.5 | 14 | 5.0 | 8.2 | 24 | 1.5 | 2.7 |
| 7 | 2.0 | 9.4 | 11 | 8.4 | 12 | 12 | 136 | 8.2 | 9.0 | 3.7 | 1.5 | 3.6 |
| 8 | 2.0 | 8.1 | 14 | 9.1 | 10 | 234 | 21 | 13 | 4.7 | 2.5 | 1.5 | 5.3 |
| 9 | 4.0 | 7.4 | 9.6 | 9.1 | 9.4 | 48 | 16 | 5.7 | 25 | 2.5 | 1.5 | 2.7 |
| 10 | 9.4 | 7.4 | 8.2 | 9.1 | 8.6 | 28 | 13 | 3.8 | 115 | 12 | 1.5 | 2.2 |
| 11 | 9.4 | 7.4 | 8.2 | 8.4 | 7.9 | 26 | 12 | 3.2 | 9.7 | 2.6 | 1.5 | 1.6 |
| 12 | 9.4 | 7.4 | 7.5 | 32 | 7.2 | 24 | 11 | 3.2 | 6.6 | 2.6 | 1.5 | 1.5 |
| 13 | 7.9 | 11 | 24 | 12 | 92 | 16 | 21 | 3.2 | 6.6 | 2.5 | 1.5 | 1.6 |
| 14 | 8.6 | 11 | 30 | 68 | 38 | 13 | 15 | 30 | 6.6 | 8.3 | 1.5 | 134 |
| 15 | 8.5 | 20 | 12 | 21 | 16 | 12 | 9.5 | 70 | 5.6 | 2.6 | 40 | 8.6 |
| 16 | 24 | 7.4 | 11 | 15 | 12 | 12 | 36 | 24 | 5.6 | 2.5 | 2.2 | 20 |
| 17 | 7.9 | 25 | 12 | 11 | 10 | 14 | 19 | 11 | 18 | 2.5 | 2.2 | 22 |
| 18 | 7.9 | 79 | 104 | 88 | 12 | 12 | 17 | 4.5 | 23 | 2.5 | 1.5 | 3.1 |
| 19 | 7.2 | 15 | 52 | 20 | 18 | 68 | 17 | 25 | 7.2 | 2.5 | 1.5 | 3.1 |
| 20 | 7.2 | 10 | 22 | 12 | 16 | 4.4 | 12 | 7.6 | 5.2 | 2.5 | 1.5 | 1.9 |
| 21 | 8.6 | 10 | 14 | 11 | 14 | .4 | 10 | 5.7 | 4.7 | 2.5 | 1.9 | 1.6 |
| 22 | 114 | 8.9 | 12 | 11 | 14 | .1 | 18 | 5.4 | 4.4 | 52 | 2.7 | 1.5 |
| 23 | 130 | 8.1 | 12 | 9.9 | 16 | .1 | 8.7 | 5.7 | 4.0 | 20 | 152 | 1.9 |
| 24 | 12 | 9.7 | 12 | 8.4 | 22 | .1 | 7.9 | 5.4 | 4.0 | 114 | 7.3 | 3.1 |
| 25 | 9.4 | 8.9 | 10 | 7.7 | 20 | 69 | 8.7 | 44 | 4.0 | 12 | 4.1 | 3.6 |
| 26 | 8.6 | 8.1 | 9.6 | 7.0 | 86 | 18 | 7.9 | 7.1 | 21 | 2.5 | 4.1 | 3.6 |
| 27 | 8.6 | 8.1 | 9.6 | 7.7 | 22 | 13 | 7.9 | 7.1 | 62 | 2.5 | 3.6 | 3.1 |
| 28 | 10 | 9.7 | 20 | 12 | 18 | 14 | 7.9 | 26 | 6.1 | 2.5 | 2.7 | 2.2 |
| 29 | 10 | 7.4 | 34 | 9.9 | ----- | 15 | 7.9 | 10 | 5.2 | 2.5 | 2.2 | 1.9 |
| 30 | 14 | 5.4 | 14 | 8.4 | ----- | 14 | 7.9 | 7.6 | 4.7 | 2.5 | 3.1 | 3.6 |
| 31 | 12 | ----- | 12 | 7.7 | ----- | 13 | ----- | 6.6 | ----- | 1.5 | 2.7 | ----- |

| Month | Observed | | | Corrected for diversion | | Run-off in inches |
|-----------|----------|---------|------|-------------------------|-----------------|-------------------|
| | Maximum | Minimum | Mean | Mean | Per square mile | |
| October | 282 | 2.0 | 25.4 | 31.7 | 1.58 | 1.82 |
| November | 79 | 5.4 | 14.9 | 21.2 | 1.06 | 1.18 |
| December | 104 | 7.5 | 17.2 | 24.5 | 1.22 | 1.41 |
| January | 88 | 7.0 | 15.9 | 23.5 | 1.18 | 1.36 |
| February | 92 | 7.2 | 22.7 | 30.0 | 1.50 | 1.56 |
| March | 234 | .1 | 24.4 | 30.6 | 1.53 | 1.76 |
| April | 136 | 7.9 | 17.2 | 23.4 | 1.17 | 1.30 |
| May | 70 | 3.2 | 12.8 | 18.9 | .945 | 1.09 |
| June | 115 | 4.0 | 10.7 | 19.8 | .990 | 1.10 |
| July | 114 | 1.5 | 13.3 | 15.3 | .765 | .88 |
| August | 152 | 1.5 | 8.31 | 13.1 | .655 | .76 |
| September | 134 | 1.5 | 8.58 | 13.3 | .665 | .74 |
| The year | 282 | .1 | 15.9 | 22.1 | 1.10 | 14.96 |

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, 1930.

EXTREMES.—Maximum discharge during year, 500 second-feet Mar. 8; minimum, 2 second-feet July 18.

1908–1915, 1921–1930: Maximum discharge, about 1,740 second-feet Aug. 2, 1927 (gage height, 6.0 feet); minimum stage, 0.00 foot Dec. 1, 1912 (discharge not determined).

REMARKS.—Records good. Diversions aggregating about 17 second-feet made above station.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|------|------|------|------|------|------|-----|------|------|------|-------|
| 1 | 10 | 17 | 12 | 40 | 20 | 50 | 23 | 22 | 10 | 6 | 10 | 5 |
| 2 | 133 | 15 | 16 | 31 | 21 | 58 | 23 | 38 | 11 | 24 | 7 | 7 |
| 3 | 133 | 47 | 13 | 37 | 26 | 46 | 21 | 31 | 9 | 7 | 6 | 7 |
| 4 | 26 | 60 | 12 | 31 | 30 | 32 | 23 | 24 | 8 | 5 | 8 | 6 |
| 5 | 15 | 24 | 13 | 24 | 183 | 32 | 21 | 21 | 6 | 10 | 7 | 4 |
| 6 | 12 | 19 | 13 | 21 | 58 | 34 | 22 | 21 | 6 | 30 | 6 | 4 |
| 7 | 13 | 16 | 12 | 21 | 31 | 30 | 194 | 19 | 8 | 17 | 5 | 4 |
| 8 | 11 | 13 | 20 | 24 | 29 | 433 | 96 | 22 | 7 | 8 | 5 | 7 |
| 9 | 9 | 13 | 19 | 25 | 28 | 401 | 47 | 32 | 18 | 5 | 4 | 6 |
| 10 | 10 | 13 | 16 | 23 | 28 | 102 | 35 | 18 | 82 | 29 | 4 | 4 |
| 11 | 9 | 13 | 16 | 22 | 24 | 65 | 30 | 17 | 44 | 23 | 5 | 4 |
| 12 | 10 | 14 | 15 | 30 | 22 | 86 | 22 | 18 | 12 | 5 | 7 | 4 |
| 13 | 8 | 13 | 21 | 39 | 73 | 57 | 38 | 17 | 11 | 7 | 5 | 3 |
| 14 | 11 | 15 | 53 | 80 | 133 | 43 | 43 | 14 | 11 | 10 | 4 | 206 |
| 15 | 8 | 21 | 35 | 94 | 57 | 38 | 31 | 73 | 11 | 7 | 5 | 34 |
| 16 | 22 | 19 | 26 | 50 | 35 | 38 | 55 | 31 | 7 | 5 | 17 | 7 |
| 17 | 11 | 16 | 21 | 32 | 46 | 34 | 46 | 21 | 8 | 14 | 5 | 9 |
| 18 | 8 | 91 | 42 | 93 | 29 | 32 | 54 | 15 | 13 | 3 | 9 | 14 |
| 19 | 9 | 60 | 242 | 99 | 37 | 48 | 53 | 22 | 11 | 4 | 6 | 4 |
| 20 | 7 | 28 | 94 | 42 | 53 | 33 | 40 | 24 | 8 | 4 | 6 | 11 |
| 21 | 5 | 23 | 40 | 33 | 58 | 30 | 33 | 16 | 7 | 3 | 5 | 4 |
| 22 | 5 | 19 | 30 | 31 | 55 | 28 | 43 | 17 | 7 | 3 | 5 | 7 |
| 23 | 142 | 21 | 25 | 26 | 55 | 28 | 31 | 12 | 7 | 39 | 13 | 3 |
| 24 | 26 | 16 | 25 | 23 | 68 | 28 | 26 | 13 | 7 | 22 | 46 | 4 |
| 25 | 11 | 19 | 22 | 26 | 64 | 62 | 26 | 42 | 5 | 80 | 14 | 5 |
| 26 | 16 | 16 | 22 | 31 | 162 | 60 | 24 | 18 | 3 | 18 | 11 | 5 |
| 27 | 13 | 16 | 22 | 22 | 133 | 37 | 23 | 13 | 33 | 6 | 7 | 3 |
| 28 | 12 | 15 | 24 | 22 | 70 | 31 | 22 | 11 | 9 | 19 | 6 | 5 |
| 29 | 11 | 16 | 57 | 21 | 24 | 22 | 25 | 5 | 12 | 6 | 4 | 4 |
| 30 | 8 | 18 | 50 | 20 | 26 | 21 | 19 | 7 | 10 | 6 | 4 | 4 |
| 31 | 14 | 35 | 17 | 24 | 24 | 24 | 10 | 10 | 12 | 5 | 5 | 4 |

| Month | Observed | | | Corrected for diversion | | Run-off in inches |
|-----------|----------|---------|------|-------------------------|-----------------|-------------------|
| | Maximum | Minimum | Mean | Mean | Per square mile | |
| October | 142 | 5 | 23.8 | 42.5 | 1.04 | 1.20 |
| November | 91 | 13 | 23.5 | 41.0 | 1.00 | 1.12 |
| December | 242 | 12 | 34.3 | 51.6 | 1.26 | 1.45 |
| January | 99 | 17 | 36.5 | 54.6 | 1.33 | 1.53 |
| February | 183 | 20 | 58.1 | 76.2 | 1.86 | 1.94 |
| March | 433 | 24 | 66.8 | 84.9 | 2.07 | 2.39 |
| April | 194 | 21 | 39.6 | 58.1 | 1.42 | 1.58 |
| May | 73 | 10 | 22.2 | 41.9 | 1.02 | 1.18 |
| June | 82 | 3 | 13.0 | 32.7 | .798 | .89 |
| July | 80 | 3 | 14.4 | 34.5 | .841 | .97 |
| August | 46 | 4 | 8.23 | 27.0 | .659 | .76 |
| September | 206 | 3 | 13.1 | 31.6 | .771 | .86 |
| The year | 433 | 3 | 29.3 | 47.9 | 1.17 | 15.87 |

BARITAN RIVER BASIN

SOUTH BRANCH OF BARITAN 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, 1930.

EXTREMES.—Maximum discharge during year, 720 second-feet Mar. 8 (gage height, 7.80 feet); minimum, 12 second-feet Sept. 11, 13.

1919-1930: Maximum discharge, about 3,600 second-feet Feb. 2, 1922 (gage height, 10.97 feet); minimum, 9 second-feet Oct. 3, 1921.

REMARKS.—Records good except those for periods of ice effect, Nov. 3¹, Dec. 1-9, Jan. 18-26, Feb. 1, 2, 8-12, 17, 18, those for period during which concrete control was being erected, Sept. 4-27, and those estimated, which are fair. Recorder operated by Taylor-Wharton Iron & Steel Co.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 36 | 48 | 55 | 101 | 90 | 128 | 89 | 88 | 52 | 50 | 36 | 28 |
| 2..... | 164 | 61 | 55 | 110 | 95 | 128 | 90 | 101 | 50 | 51 | 31 | 30 |
| 3..... | 166 | 105 | 55 | 118 | • 100 | 118 | 89 | 95 | 52 | 44 | 24 | 34 |
| 4..... | 75 | 118 | 55 | 110 | • 140 | 110 | 86 | 86 | 43 | 44 | 30 | 24 |
| 5..... | 57 | 72 | 55 | 80 | • 260 | 101 | 82 | 80 | 44 | 43 | 29 | 26 |
| 6..... | 47 | 60 | 50 | 88 | • 150 | 101 | 85 | 79 | 42 | 41 | 28 | 28 |
| 7..... | 45 | 57 | 50 | 83 | • 110 | 110 | 428 | 71 | 43 | 43 | 28 | 29 |
| 8..... | 44 | 54 | 60 | 90 | 90 | 524 | 216 | 79 | 43 | 42 | 28 | 27 |
| 9..... | 43 | 50 | 70 | 90 | 85 | 311 | 148 | 85 | 48 | 40 | 30 | 25 |
| 10..... | 40 | 47 | 64 | 88 | 80 | 191 | 128 | 71 | 397 | 56 | 22 | 29 |
| 11..... | 43 | 47 | 58 | 72 | 80 | 191 | 118 | 65 | 176 | 48 | 27 | 24 |
| 12..... | 41 | 49 | 62 | 78 | 70 | 239 | 110 | 66 | 92 | 43 | 26 | 27 |
| 13..... | 36 | 48 | 73 | 110 | 152 | 180 | 118 | 65 | 76 | 35 | 27 | 25 |
| 14..... | 38 | 50 | 92 | 186 | 198 | 158 | 137 | 70 | 70 | 38 | 26 | 34 |
| 15..... | 43 | 56 | 110 | 250 | 118 | 137 | 118 | 110 | 61 | 46 | 32 | 40 |
| 16..... | 38 | 58 | 82 | 137 | 90 | 137 | 148 | 89 | 61 | 40 | 36 | 36 |
| 17..... | 38 | 50 | 73 | 101 | 85 | 137 | 158 | 76 | 51 | 37 | 29 | 36 |
| 18..... | 39 | 174 | 214 | 100 | 85 | 137 | 158 | 62 | 71 | 38 | 30 | 35 |
| 19..... | 37 | 134 | 432 | 100 | 98 | 169 | 148 | 83 | 71 | 31 | 30 | 27 |
| 20..... | 36 | 80 | 236 | 100 | 158 | 137 | 128 | 98 | 56 | 32 | 28 | 26 |
| 21..... | 37 | 75 | 137 | 100 | 180 | 118 | 110 | 76 | 49 | 33 | 27 | 26 |
| 22..... | 79 | 64 | 118 | 100 | 148 | 110 | 110 | 65 | 45 | 38 | 29 | 27 |
| 23..... | 197 | 60 | 98 | 100 | 137 | 110 | 110 | 62 | 50 | 38 | 78 | 26 |
| 24..... | 78 | 57 | • 95 | 95 | 158 | 110 | 100 | 58 | 42 | 44 | 66 | 25 |
| 25..... | 59 | 62 | • 90 | 90 | 148 | 128 | 98 | 88 | 45 | 39 | 36 | 24 |
| 26..... | 53 | 54 | • 90 | 90 | 214 | 137 | 94 | 79 | 45 | 34 | 36 | 24 |
| 27..... | 46 | 61 | 88 | • 90 | 191 | 110 | 94 | 59 | 54 | 33 | 33 | 25 |
| 28..... | 49 | 57 | 110 | • 90 | 148 | 110 | 92 | 58 | 48 | 31 | 30 | 25 |
| 29..... | 44 | 56 | 148 | • 90 | ----- | 101 | 86 | 70 | 44 | 36 | 32 | 26 |
| 30..... | 48 | 55 | 128 | • 90 | ----- | 100 | 85 | 62 | 42 | 33 | 28 | 27 |
| 31..... | 51 | ----- | 110 | • 90 | ----- | 95 | ----- | 57 | ----- | 35 | 28 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 197 | 36 | 59.6 | 0.97 | 1.06 |
| November..... | 174 | 47 | 67.0 | 1.03 | 1.15 |
| December..... | 432 | 50 | 104 | 1.60 | 1.84 |
| January..... | 250 | 72 | 104 | 1.60 | 1.84 |
| February..... | 260 | 70 | 131 | 2.02 | 2.10 |
| March..... | 524 | 95 | 151 | 2.32 | 2.68 |
| April..... | 428 | 82 | 125 | 1.92 | 2.14 |
| May..... | 110 | 57 | 75.9 | 1.17 | 1.35 |
| June..... | 397 | 42 | 68.8 | 1.06 | 1.18 |
| July..... | 59 | 31 | 40.1 | .617 | .71 |
| August..... | 78 | 22 | 32.3 | .467 | .57 |
| September..... | 40 | 24 | 28.2 | .474 | .48 |
| The year..... | 524 | 22 | 81.9 | 1.26 | 17.10 |

• Estimated.

SOUTH BRANCH OF RARITAN RIVER AT STANTON, N. J.

LOCATION.—Water-stage recorder at highway bridge near railroad station in Stanton, Hunterdon County, half a mile above mouth of Prescott Brook.

DRAINAGE AREA.—147 square miles.

RECORDS AVAILABLE.—July, 1903, to December, 1906; July, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,630 second-feet Mar. 8 (gage height, 6.80 feet); minimum, 17 second-feet Sept 11 (gage height, 1.74 feet).

1903–1906, 1919–1930: Maximum stage, 10.5 feet Oct. 9, 1903 (discharge not determined); minimum discharge, that of Sept. 11, 1930.

REMARKS.—Records good. Discharge estimated because of ice Nov. 30, Dec. 1–9, 24, 25, Jan. 29, 30, Feb. 1, 17–20.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | 83 | 142 | 140 | 251 | 200 | 326 | 181 | 169 | 99 | 169 | 44 | 44 |
| 2..... | 745 | 110 | 140 | 247 | 199 | 326 | 181 | 196 | 93 | 115 | 48 | 53 |
| 3..... | 503 | 548 | 140 | 289 | 205 | 307 | 181 | 187 | 91 | 89 | 43 | 60 |
| 4..... | 237 | 423 | 150 | 264 | 218 | 271 | 167 | 167 | 86 | 63 | 53 | 43 |
| 5..... | 167 | 261 | 140 | 202 | 548 | 254 | 161 | 153 | 89 | 69 | 39 | 44 |
| 6..... | 144 | 227 | 140 | 211 | 307 | 247 | 167 | 150 | 87 | 71 | 45 | 44 |
| 7..... | 153 | 190 | 140 | 196 | 224 | 251 | 982 | 142 | 88 | 79 | 38 | 41 |
| 8..... | 124 | 184 | 160 | 202 | 205 | 1,950 | 483 | 144 | 68 | 69 | 43 | 56 |
| 9..... | 113 | 172 | 190 | 208 | 199 | 888 | 364 | 144 | 79 | 38 | 42 | 29 |
| 10..... | 106 | 132 | 150 | 196 | 190 | 572 | 307 | 130 | 572 | 130 | 38 | 46 |
| 11..... | 110 | 144 | 127 | 167 | 187 | 526 | 264 | 115 | 345 | 87 | 38 | 36 |
| 12..... | 93 | 153 | 161 | 181 | 172 | 595 | 254 | 132 | 161 | 62 | 42 | 41 |
| 13..... | 104 | 147 | 172 | 234 | 364 | 443 | 261 | 127 | 132 | 62 | 36 | 44 |
| 14..... | 95 | 147 | 215 | 423 | 463 | 384 | 289 | 115 | 117 | 68 | 41 | 51 |
| 15..... | 101 | 161 | 234 | 526 | 271 | 345 | 247 | 271 | 113 | 65 | 59 | 54 |
| 16..... | 89 | 153 | 184 | 326 | 211 | 326 | 307 | 178 | 96 | 63 | 59 | 54 |
| 17..... | 91 | 134 | 175 | 254 | 190 | 326 | 345 | 144 | 9 | 59 | 49 | 59 |
| 18..... | 101 | 526 | 595 | 307 | 190 | 307 | 345 | 127 | 117 | 47 | 51 | 54 |
| 19..... | 85 | 384 | 1,020 | 326 | 200 | 384 | 271 | 161 | 12 | 49 | 39 | 44 |
| 20..... | 79 | 237 | 595 | 289 | 260 | 307 | 237 | 181 | 93 | 51 | 48 | 42 |
| 21..... | 95 | 224 | 364 | 271 | 364 | 271 | 251 | 147 | 87 | 56 | 41 | 42 |
| 22..... | 289 | 199 | 326 | 244 | 326 | 247 | 237 | 137 | 83 | 104 | 43 | 50 |
| 23..... | 526 | 178 | 289 | 244 | 307 | 234 | 227 | 108 | 95 | 106 | 172 | 42 |
| 24..... | 205 | 175 | 260 | 227 | 345 | 237 | 211 | 104 | 89 | 288 | 130 | 39 |
| 25..... | 153 | 187 | 240 | 237 | 326 | 264 | 208 | 167 | 76 | 167 | 68 | 42 |
| 26..... | 142 | 164 | 247 | 234 | 526 | 289 | 199 | 158 | 74 | 66 | 54 | 41 |
| 27..... | 113 | 172 | 218 | 218 | 483 | 240 | 193 | 117 | 93 | 60 | 47 | 42 |
| 28..... | 122 | 164 | 271 | 215 | 364 | 224 | 187 | 122 | 74 | 68 | 47 | 39 |
| 29..... | 117 | 158 | 345 | 200 | | 211 | 181 | 127 | 65 | 59 | 50 | 48 |
| 30..... | 124 | 150 | 307 | 200 | | 205 | 169 | 120 | 66 | 59 | 45 | 34 |
| 31..... | 142 | | 257 | 196 | | 193 | | 108 | | 55 | 40 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 745 | 79 | 173 | 1.18 | 1.36 |
| November..... | 548 | 110 | 212 | 1.44 | 1.61 |
| December..... | 1,020 | 127 | 261 | 1.78 | 2.05 |
| January..... | 526 | 167 | 251 | 1.71 | 1.97 |
| February..... | 548 | 172 | 287 | 1.95 | 2.03 |
| March..... | 1,950 | 193 | 385 | 2.62 | 3.02 |
| April..... | 983 | 161 | 289 | 1.83 | 2.04 |
| May..... | 271 | 104 | 147 | 1.00 | 1.15 |
| June..... | 572 | 65 | 118 | .803 | .90 |
| July..... | 268 | 47 | 83.6 | .569 | .66 |
| August..... | 172 | 36 | 52.6 | .358 | .41 |
| September..... | 60 | 29 | 45.3 | .308 | .34 |
| The year..... | 1,950 | 29 | 190 | 1.29 | 17.54 |

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, 1930.

EXTREMES.—Maximum discharge during year, about 11,300 second-feet Mar. 8 (gage height, 11.93 feet); minimum, about 25 second-feet Aug. 8 (gage height, 3.23 feet).

1903-1907, 1921-1930: Maximum discharge, about 25,000 second-feet Oct. 10, 1903 (gage height, 15.9 feet); minimum, that of Aug. 8, 1930.

REMARKS.—Records fair. About 2 second-feet diverted above station and not included in records. Discharge estimated because of ice effect Dec. 1, 2, 4, 5, 12, Jan. 25-27, Feb. 17, 18.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|-------|-------|-------|-------|-------|-----|-------|------|------|-------|
| 1 | 167 | 304 | 300 | 910 | 533 | 1,080 | 489 | 400 | 210 | 237 | 86 | 71 |
| 2 | 1,860 | 279 | 320 | 767 | 489 | 1,080 | 481 | 400 | 182 | 580 | 76 | 80 |
| 3 | 2,650 | 1,690 | 327 | 1,020 | 416 | 860 | 456 | 400 | 179 | 203 | 76 | 91 |
| 4 | 910 | 2,150 | 300 | 1,020 | 630 | 725 | 448 | 340 | 176 | 237 | 68 | 95 |
| 5 | 551 | 1,080 | 300 | 692 | 2,600 | 630 | 424 | 340 | 170 | 170 | 68 | 87 |
| 6 | 424 | 778 | 299 | 650 | 1,350 | 610 | 416 | 315 | 167 | 192 | 64 | 84 |
| 7 | 373 | 610 | 321 | 620 | 671 | 580 | 1,870 | 304 | 167 | 173 | 62 | 76 |
| 8 | 315 | 506 | 366 | 610 | 640 | 7,730 | 1,530 | 299 | 158 | 155 | 48 | 71 |
| 9 | 259 | 432 | 570 | 660 | 506 | 4,350 | 960 | 304 | 161 | 134 | 59 | 82 |
| 10 | 233 | 387 | 402 | 640 | 498 | 910 | 789 | 289 | 1,540 | 294 | 56 | 87 |
| 11 | 221 | 366 | 333 | 506 | 431 | 1,730 | 703 | 259 | 1,240 | 229 | 50 | 71 |
| 12 | 221 | 333 | 320 | 515 | 416 | 1,990 | 640 | 250 | 448 | 167 | 42 | 73 |
| 13 | 213 | 333 | 352 | 692 | 1,440 | 1,420 | 640 | 241 | 310 | 131 | 50 | 69 |
| 14 | 210 | 346 | 703 | 1,400 | 2,100 | 1,180 | 714 | 241 | 284 | 129 | 50 | 185 |
| 15 | 196 | 387 | 860 | 2,380 | 960 | 1,020 | 660 | 515 | 259 | 137 | 50 | 139 |
| 16 | 213 | 387 | 620 | 1,360 | 614 | 960 | 703 | 432 | 221 | 127 | 78 | 112 |
| 17 | 189 | 352 | 489 | 910 | 600 | 910 | 1,020 | 321 | 199 | 117 | 105 | 109 |
| 18 | 173 | 2,340 | 2,280 | 1,580 | 600 | 910 | 960 | 259 | 225 | 112 | 64 | 117 |
| 19 | 179 | 1,920 | 5,090 | 1,810 | 650 | 1,080 | 1,020 | 264 | 289 | 105 | 73 | 101 |
| 20 | 176 | 1,080 | 2,450 | 1,080 | 789 | 910 | 767 | 352 | 229 | 99 | 56 | 93 |
| 21 | 173 | 860 | 1,360 | 960 | 1,020 | 800 | 714 | 315 | 189 | 84 | 62 | 82 |
| 22 | 237 | 671 | 1,080 | 778 | 1,020 | 703 | 692 | 259 | 179 | 254 | 80 | 124 |
| 23 | 1,730 | 551 | 960 | 671 | 1,020 | 650 | 610 | 245 | 164 | 481 | 206 | 74 |
| 24 | 600 | 498 | 860 | 515 | 1,240 | 640 | 542 | 210 | 161 | 373 | 346 | 82 |
| 25 | 394 | 498 | 800 | 460 | 1,420 | 692 | 498 | 245 | 161 | 714 | 142 | 82 |
| 26 | 327 | 440 | 681 | 460 | 2,410 | 860 | 472 | 310 | 173 | 173 | 103 | 82 |
| 27 | 299 | 424 | 746 | 440 | 2,250 | 692 | 464 | 259 | 203 | 129 | 86 | 86 |
| 28 | 264 | 424 | 630 | 448 | 1,360 | 620 | 440 | 229 | 192 | 112 | 122 | 82 |
| 29 | 237 | 380 | 1,080 | 524 | ----- | 580 | 400 | 254 | 158 | 99 | 69 | 74 |
| 30 | 237 | 289 | 1,080 | 610 | ----- | 570 | 400 | 250 | 155 | 99 | 76 | 74 |
| 31 | 284 | ----- | 860 | 610 | ----- | 533 | ----- | 233 | ----- | 95 | 73 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 2,656 | 167 | 468 | 0.953 | 1.10 |
| November | 2,340 | 279 | 703 | 1.43 | 1.60 |
| December | 5,090 | 300 | 875 | 1.79 | 2.06 |
| January | 2,380 | 440 | 848 | 1.73 | 1.99 |
| February | 2,600 | 416 | 1,020 | 2.08 | 2.17 |
| March | 7,730 | 533 | 1,230 | 2.51 | 2.89 |
| April | 1,870 | 400 | 697 | 1.42 | 1.58 |
| May | 515 | 210 | 301 | 0.614 | .71 |
| June | 1,540 | 155 | 285 | 0.582 | .65 |
| July | 714 | 84 | 205 | 0.418 | .48 |
| August | 346 | 42 | 85.4 | 0.174 | .20 |
| September | 185 | 69 | 91.2 | 0.186 | .21 |
| The year | 7,730 | 42 | 565 | 1.15 | 15.64 |

• Estimated.

NESHANIC RIVER AT REAVILLE, N. J.

LOCATION.—Water-stage recorder at highway bridge half a mile southwest of Reaville, Hunterdon County.

DRAINAGE AREA.—26 square miles.

RECORDS AVAILABLE.—June to September, 1930.

EXTREMES.—Maximum discharge during period of record, 276 second-feet July 24 (gage height, 3.76 feet); minimum, 0.3 second-foot Aug. 12-14, Sept. 29 (gage height, 1.23 feet).

REMARKS.—Records excellent.

Daily and monthly discharge, in second-feet, 1930

| Day | June | July | Aug. | Sept. | Day | June | July | Aug. | Sept. |
|---------|------|------|------|-------|---------|------|------|------|-------|
| 1..... | | 18 | 1.4 | 0.9 | 16..... | 2.8 | 1.8 | 1.4 | 1.0 |
| 2..... | | 6.7 | 1.2 | .9 | 17..... | 3.1 | 1.5 | 1.2 | .9 |
| 3..... | | 2.9 | 1.1 | 1.1 | 18..... | 4.0 | 1.5 | .9 | .8 |
| 4..... | | 2.3 | 1.1 | 1.4 | 19..... | 9.7 | 1.4 | .7 | .7 |
| 5..... | | 1.8 | .9 | .9 | 20..... | 4.3 | 1.2 | .9 | .7 |
| 6..... | | 4.6 | .9 | .9 | 21..... | 3.1 | 1.2 | .8 | .7 |
| 7..... | | 2.5 | .8 | .8 | 22..... | 2.5 | 2.5 | .8 | .7 |
| 8..... | | 1.8 | .7 | .8 | 23..... | 2.3 | 6.4 | 30 | .5 |
| 9..... | | 1.7 | .7 | .8 | 24..... | 2.1 | 37 | 5.8 | .5 |
| 10..... | 29 | 49 | .5 | .7 | 25..... | 2.0 | 11.2 | 2.1 | .5 |
| 11..... | 9.1 | 5.8 | .5 | .5 | 26..... | 3.1 | 3.1 | 1.7 | .7 |
| 12..... | 5.1 | 4.0 | .4 | .5 | 27..... | 7.3 | 2.1 | 1.7 | .7 |
| 13..... | 4.8 | 2.9 | .3 | .5 | 28..... | 2.8 | 2.0 | 1.4 | .5 |
| 14..... | 4.3 | 2.5 | .3 | 1.0 | 29..... | 2.0 | 2.0 | 1.1 | .4 |
| 15..... | 2.9 | 2.3 | .9 | 1.1 | 30..... | 1.7 | 2.9 | 1.0 | .4 |
| | | | | | 31..... | | 1.8 | 1.0 | ---- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------------|---------|---------|------|--------------------|----------------------|
| June 10-30..... | 29 | 1.7 | 5.14 | 1.98 | 1.55 |
| July..... | 49 | 1.2 | 6.08 | .234 | .27 |
| August..... | 30 | .3 | 2.07 | .080 | .09 |
| September..... | 1.4 | .4 | .750 | .029 | .03 |

NORTH BRANCH OF RARITAN RIVER NEAR FAR HILLS, N. J.

LOCATION.—Water-stage recorder at dam of Somerset Lake & Game Club, 2 miles north of Far Hills, Somerset County, and 2 miles above mouth of Peapack Brook.

DRAINAGE AREA.—26 square miles.

RECORDS AVAILABLE.—February, 1922, to September, 1930.

EXTREMES.—Maximum discharge during year, 615 second-feet Mar. 8 (gage height, 3.29 feet); minimum, 5.4 second-feet Aug. 13 (gage height, 1.82 feet).

1922-1930: Maximum stage (estimated), 5.1 feet Mar. 7, 1922 (discharge not determined); minimum discharge, 4 second-feet Aug. 27, 1923 (gage height, 1.79 feet).

REMARKS.—Records excellent except those estimated, which are fair. 2 second-feet diverted by small turbine at dam included in records.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----------|---------|-------|------|---------|-------|------|-------|-----|-------|-----------------|------|-------------------|
| 1 | 9.5 | 16 | 13 | 36 | *24 | 49 | 45 | 34 | 18 | 76 | 10 | 7.6 |
| 2 | 74 | 16 | 15 | 32 | *24 | 52 | 43 | 41 | 18 | 45 | 9.5 | 8.5 |
| 3 | 51 | 57 | 16 | 43 | *24 | 47 | 43 | 36 | 17 | 41 | 9.5 | 11 |
| 4 | 23 | 45 | 16 | 38 | *24 | 43 | 40 | 29 | 16 | 34 | 8.9 | 8.5 |
| 5 | 16 | 26 | 17 | 27 | *136 | 41 | 38 | 28 | 15 | 25 | 8.9 | 7.1 |
| 6 | 14 | 21 | 18 | 28 | *45 | 41 | 40 | 28 | 15 | 25 | 8.5 | 7.1 |
| 7 | 13 | 18 | 18 | 30 | *28 | 43 | 143 | 28 | 16 | 24 | 7.6 | 7.1 |
| 8 | 11 | 17 | 24 | 30 | *25 | 306 | 71 | 29 | 16 | 21 | 7.6 | 7.6 |
| 9 | 10 | 16 | 28 | 32 | *24 | 118 | 49 | 29 | 20 | 19 | 7.6 | 7.1 |
| 10 | 9.5 | 15 | 22 | 30 | 30 | 89 | 49 | 25 | 200 | 36 | 6.7 | 6.7 |
| 11 | 9.5 | 15 | 19 | 25 | 26 | 93 | 49 | 24 | 60 | 24 | 5.8 | 6.7 |
| 12 | 10 | 17 | 14 | 29 | 27 | 106 | 49 | 24 | 32 | 20 | 5.8 | 6.7 |
| 13 | 10 | 16 | 21 | 38 | 80 | 75 | 55 | 24 | 28 | 18 | 5.4 | 7.1 |
| 14 | 10 | 16 | 38 | 81 | 70 | 68 | 59 | 24 | 25 | 18 | 5.8 | 23 |
| 15 | 9.5 | 18 | 40 | 78 | 41 | 62 | 41 | 45 | 23 | 19 | 11 | 16 |
| 16 | 11 | 18 | 29 | 45 | 30 | 65 | 55 | 36 | 21 | 16 | 13 | 11 |
| 17 | 10 | 17 | 25 | 38 | *28 | 68 | 59 | 28 | 20 | 15 | 11 | 13 |
| 18 | 8.5 | 94 | 101 | 67 | *30 | 65 | 62 | 24 | 34 | 14 | 9.5 | 11 |
| 19 | 8.5 | 65 | 131 | 49 | *40 | 65 | 59 | 28 | 27 | 14 | 8.5 | 8.9 |
| 20 | 8.9 | 30 | 55 | 40 | 47 | 55 | 47 | 32 | 21 | 13 | 8.5 | 8.0 |
| 21 | 11 | 26 | 38 | *34 | 49 | 52 | 45 | 25 | 18 | 13 | 10 | 8.0 |
| 22 | 43 | 23 | 32 | *29 | 45 | 47 | 47 | 23 | 17 | 16 | 8.5 | 8.0 |
| 23 | 78 | 21 | 32 | *28 | 45 | 47 | 43 | 21 | 16 | 21 | 36 | 8.0 |
| 24 | 26 | 20 | 32 | *26 | 52 | 49 | 40 | 20 | 16 | 17 | 24 | 7.6 |
| 25 | 19 | 20 | 29 | *25 | 52 | 71 | 38 | 38 | 17 | 16 | 13 | 7.6 |
| 26 | 16 | 18 | 26 | *25 | 96 | 68 | 38 | 28 | 16 | 13 | 10 | 7.6 |
| 27 | 14 | 18 | 29 | *25 | 71 | 52 | 38 | 22 | 28 | 12 | 9.5 | 7.6 |
| 28 | 13 | 20 | 36 | *26 | 55 | 49 | 36 | 22 | 19 | 11 | 8.5 | 6.7 |
| 29 | 13 | 18 | 47 | *28 | ----- | 49 | 34 | 28 | 14 | 13 | 8.5 | 6.3 |
| 30 | 13 | 12 | 41 | *27 | ----- | 49 | 34 | 24 | 14 | 13 | 8.0 | 5.8 |
| 31 | 15 | ----- | 34 | *25 | ----- | 47 | ----- | 20 | ----- | 11 | 7.6 | ----- |
| Month | Maximum | | | Minimum | | | Mean | | | Per square mile | | Run-off in inches |
| October | 78 | | | 8.5 | | | 19.0 | | | 0.731 | | 0.84 |
| November | 94 | | | 12 | | | 25.0 | | | .962 | | 1.07 |
| December | 131 | | | 13 | | | 33.4 | | | 1.28 | | 1.48 |
| January | 81 | | | 25 | | | 35.9 | | | 1.38 | | 1.59 |
| February | 136 | | | 24 | | | 45.3 | | | 1.74 | | 1.81 |
| March | 306 | | | 41 | | | 68.7 | | | 2.64 | | 3.04 |
| April | 143 | | | 34 | | | 49.6 | | | 1.91 | | 2.13 |
| May | 45 | | | 20 | | | 28.0 | | | 1.06 | | 1.24 |
| June | 200 | | | 14 | | | 27.2 | | | 1.05 | | 1.17 |
| July | 76 | | | 11 | | | 21.7 | | | .835 | | .96 |
| August | 36 | | | 5.4 | | | 10.1 | | | .388 | | .45 |
| September | 23 | | | 5.8 | | | 8.76 | | | .327 | | .38 |
| The year | 306 | | | 5.4 | | | 31.0 | | | 1.15 | | 16.16 |

* Estimated.

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, 1930.

EXTREMES.—Maximum discharge during year, about 7,840 second-feet Mar. 8 (gage height, 7.62 feet); minimum, about 8 second-feet Aug. 14 (gage height, 1.81 feet).

1923-1930: Maximum stage, 10.0 feet Nov. 3, 1927 (discharge not determined); minimum discharge, that of Aug. 14, 1930.

REMARKS.—Records good. Discharge estimated because of ice effect, Jan. 21-24, Feb. 16. Slight diurnal fluctuation caused by operation of small power plants.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | 50 | 97 | 94 | 233 | 107 | 302 | 156 | 134 | 73 | 93 | 45 | 37 |
| 2..... | 800 | 92 | 94 | 248 | 144 | 374 | 163 | 134 | 73 | 196 | 41 | 41 |
| 3..... | 595 | 1,240 | *100 | 388 | 155 | 270 | 142 | 142 | 65 | 115 | 34 | 48 |
| 4..... | 219 | 560 | 104 | 248 | 209 | 270 | 142 | 118 | 63 | 145 | 36 | 41 |
| 5..... | 131 | 259 | 102 | 191 | 755 | 209 | 138 | 112 | 60 | 107 | 32 | 32 |
| 6..... | 124 | 219 | 102 | 155 | 291 | 200 | 175 | 110 | 58 | 98 | 28 | 34 |
| 7..... | 112 | 155 | 107 | 173 | 229 | 219 | 1,040 | 110 | 58 | 88 | 26 | 28 |
| 8..... | 97 | 127 | 137 | 177 | 219 | 4,720 | 376 | 110 | 56 | 67 | 24 | 36 |
| 9..... | 76 | 120 | 169 | 117 | 137 | 940 | 274 | 115 | 65 | 65 | 25 | 26 |
| 10..... | 69 | 110 | 124 | 112 | 155 | 560 | 263 | 104 | 306 | 192 | 24 | 21 |
| 11..... | 69 | 107 | 112 | 102 | 144 | 490 | 242 | 93 | 306 | 112 | 26 | 21 |
| 12..... | 67 | 100 | 74 | 169 | 131 | 490 | 214 | 90 | 167 | 69 | 21 | 21 |
| 13..... | 65 | 97 | 124 | 238 | 525 | 407 | 200 | 88 | 148 | 65 | 14 | 22 |
| 14..... | 67 | 107 | 200 | 455 | 455 | 306 | 224 | 88 | 142 | 67 | 14 | 363 |
| 15..... | 65 | 248 | 83 | 595 | 248 | 295 | 188 | 205 | 128 | 67 | 41 | 69 |
| 16..... | 65 | 349 | 248 | 374 | 180 | 263 | 233 | 142 | 104 | 63 | 65 | 50 |
| 17..... | 65 | 374 | 144 | 107 | 177 | 274 | 284 | 104 | 95 | 56 | 45 | 60 |
| 18..... | 56 | 1,190 | 2,140 | 420 | 186 | 252 | 317 | 101 | 142 | 50 | 45 | 54 |
| 19..... | 56 | 420 | 1,400 | 233 | 195 | 279 | 311 | 107 | 115 | 50 | 34 | 41 |
| 20..... | 56 | 280 | 630 | 270 | 224 | 252 | 284 | 134 | 93 | 48 | 28 | 34 |
| 21..... | 61 | 243 | 349 | 200 | 314 | 263 | 263 | 115 | 81 | 43 | 41 | 34 |
| 22..... | 61 | 233 | 314 | 180 | 259 | 196 | 224 | 98 | 69 | 156 | 36 | 36 |
| 23..... | 400 | 160 | 302 | 150 | 302 | 188 | 206 | 73 | 69 | 188 | 205 | 24 |
| 24..... | 160 | 144 | 314 | 140 | 349 | 209 | 219 | 81 | 67 | 209 | 131 | 25 |
| 25..... | 131 | 155 | 248 | 131 | 388 | 233 | 175 | 121 | 65 | 134 | 88 | 28 |
| 26..... | 117 | 131 | 248 | 117 | 595 | 247 | 167 | 128 | 58 | 71 | 56 | 29 |
| 27..... | 107 | 127 | 109 | 112 | 670 | 233 | 148 | 98 | 145 | 50 | 50 | 26 |
| 28..... | 90 | 127 | 229 | 141 | 381 | 214 | 142 | 88 | 83 | 48 | 58 | 16 |
| 29..... | 78 | 117 | 326 | 141 | ----- | 205 | 142 | 115 | 73 | 50 | 41 | 26 |
| 30..... | 78 | 107 | 314 | 141 | ----- | 171 | 138 | 98 | 60 | 52 | 34 | 21 |
| 31..... | 87 | ----- | 259 | 117 | ----- | 163 | ----- | 88 | ----- | 48 | 32 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 800 | 50 | 138 | 0.726 | 0.84 |
| November..... | 1,240 | 92 | 260 | 1.37 | 1.53 |
| December..... | 2,140 | 74 | 303 | 1.59 | 1.83 |
| January..... | 595 | 102 | 212 | 1.12 | 1.29 |
| February..... | 755 | 107 | 290 | 1.53 | 1.59 |
| March..... | 4,720 | 163 | 442 | 2.33 | 2.69 |
| April..... | 1,040 | 138 | 240 | 1.26 | 1.41 |
| May..... | 205 | 73 | 111 | .584 | .67 |
| June..... | 306 | 56 | 103 | .542 | .60 |
| July..... | 209 | 43 | 92.3 | .486 | .56 |
| August..... | 205 | 14 | 45.8 | .241 | .28 |
| September..... | 363 | 16 | 44.8 | .236 | .26 |
| The year..... | 4,720 | 14 | 190 | 1.00 | 13.55 |

* Estimated.

BLACK RIVER NEAR POTTERSVILLE, N. J.

LOCATION.—Water-stage recorder 1 mile above highway bridge at Fottersville, Somerset County, and 8 miles above mouth of Rockaway Creek.

DRAINAGE AREA.—33 square miles.

RECORDS AVAILABLE.—June, 1922, to September, 1930. At Fottersville, 1 mile downstream, November, 1921, to June, 1922.

EXTREMES.—Maximum discharge during year, 355 second-feet June 10 (gauge height, 2.78 feet); minimum, 2.5 second-feet Sept. 30 (gauge height, 0.73 foot). 1921-1930: Maximum discharge, about 1,600 second-feet Nov. 17, 1927 (gauge height, 4.75 feet); minimum, that of Sept. 30, 1930.

REMARKS.—Records good. Discharge estimated Oct. 25-31, Nov. 1, 2, 6-17, 21-23, Dec. 12, 13, 25-27, Jan. 20, 21, 23-29, because of leaves or ice on control.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|-------|------|-------|------|-------|------|-------|------|------|-------|
| 1. | 7 | 15 | * 20 | 48 | * 36 | 62 | 38 | * 42 | 18 | 23 | 7.0 | 5.8 |
| 2. | 43 | 20 | * 20 | 45 | 36 | 54 | 38 | * 55 | 16 | 25 | 6.3 | 6.6 |
| 3. | 49 | 54 | * 22 | * 60 | 37 | 45 | * 38 | * 50 | 15 | 20 | 5.8 | 8.3 |
| 4. | 37 | 59 | * 22 | * 55 | 47 | 40 | * 38 | 33 | 15 | 16 | 4.8 | 6.6 |
| 5. | 36 | 51 | * 24 | 48 | 89 | 40 | * 36 | 30 | 14 | 13 | 4.6 | 5.8 |
| 6. | 40 | 46 | 24 | 51 | * 55 | 37 | 34 | 28 | 13 | 15 | 4.3 | 5.6 |
| 7. | 35 | 40 | 25 | 32 | * 55 | 39 | 123 | 27 | 13 | 13 | 4.3 | 5.3 |
| 8. | 21 | 34 | 34 | 34 | * 50 | 135 | 98 | 29 | 13 | 11 | 4.3 | * 8.0 |
| 9. | 15 | 28 | 36 | 37 | 47 | 121 | 87 | 30 | 17 | 11 | 4.3 | * 7.0 |
| 10. | 13 | 26 | 30 | 37 | 32 | 116 | 83 | 26 | 142 | 22 | 4.3 | * 6.0 |
| 11. | 13 | 22 | 25 | * 36 | 34 | 119 | 70 | 23 | 103 | 19 | 3.8 | * 5.0 |
| 12. | 13 | 19 | 22 | 35 | 40 | 114 | 53 | 21 | 84 | 15 | 3.3 | * 5.0 |
| 13. | 13 | 18 | 26 | 40 | * 80 | 89 | 52 | 21 | 53 | 12 | 2.9 | * 5.0 |
| 14. | 13 | 18 | 49 | 65 | * 60 | 78 | 55 | 25 | 75 | 12 | 3.1 | 10 |
| 15. | 13 | 18 | 51 | 87 | * 34 | 69 | 54 | 39 | * 65 | 14 | 7.8 | 11 |
| 16. | 13 | 20 | 46 | 78 | * 32 | 60 | 62 | 40 | * 44 | 12 | 10 | 9.0 |
| 17. | 13 | 28 | 38 | 62 | * 32 | 57 | 67 | 33 | * 46 | 11 | 9.0 | 10 |
| 18. | 13 | 76 | 91 | 76 | * 34 | 55 | 73 | 27 | * 55 | 9.7 | 7.0 | 9.0 |
| 19. | 13 | 72 | 146 | 60 | * 40 | 65 | 73 | 32 | 35 | 9.4 | 5.8 | 7.3 |
| 20. | 14 | 65 | 119 | 55 | * 50 | 62 | 67 | 38 | 30 | 8.7 | 5.8 | 6.3 |
| 21. | 14 | 55 | * 100 | 48 | * 60 | 59 | 59 | 35 | 21 | 7.7 | 6.6 | 5.8 |
| 22. | 38 | 48 | 78 | 43 | * 65 | 51 | 52 | 27 | 17 | 8.5 | 6.0 | 5.3 |
| 23. | 62 | 44 | 66 | 44 | * 65 | 44 | 47 | 23 | 15 | 9.7 | 31 | 5.0 |
| 24. | 52 | * 36 | 47 | 42 | * 65 | 43 | 45 | 21 | 15 | 9.9 | 26 | 4.8 |
| 25. | 44 | * 32 | 38 | 40 | * 70 | 49 | 42 | 33 | 15 | 9.7 | 21 | 4.8 |
| 26. | 32 | * 30 | 32 | 40 | * 100 | 54 | 39 | 37 | 18 | 9.4 | 14 | 5.0 |
| 27. | 24 | * 28 | 32 | 38 | 86 | 55 | 38 | 31 | 21 | 8.3 | 9.0 | 5.3 |
| 28. | 17 | * 26 | 42 | 38 | 75 | 51 | * 38 | 26 | 18 | 7.0 | 7.7 | 4.8 |
| 29. | 14 | * 24 | 53 | 38 | ----- | 48 | * 40 | 27 | 14 | 7.0 | 7.0 | 4.3 |
| 30. | 13 | * 20 | 52 | 37 | ----- | 44 | * 40 | 27 | 12 | 9.0 | 7.0 | 12 |
| 31. | 13 | ----- | 49 | * 36 | ----- | 40 | ----- | 22 | ----- | 8.3 | 6.3 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 62 | 7.0 | 24.2 | 0.733 | 0.85 |
| November | 76 | 15 | 35.7 | 1.08 | 1.20 |
| December | 146 | 20 | 47.3 | 1.43 | 1.65 |
| January | 87 | 32 | 47.9 | 1.45 | 1.67 |
| February | * 100 | 32 | 53.8 | 1.63 | 1.70 |
| March | 135 | 37 | 64.4 | 1.95 | 2.25 |
| April | 123 | 34 | 56.0 | 1.70 | 1.90 |
| May | * 55 | 21 | 30.9 | .936 | 1.08 |
| June | 142 | 12 | 35.4 | 1.07 | 1.19 |
| July | 25 | 7.0 | 12.5 | .379 | .44 |
| August | 31 | 2.9 | 8.07 | .246 | .28 |
| September | 12 | 4.3 | 6.66 | .202 | .22 |
| The year | 146 | 2.9 | 35.1 | 1.06 | 14.43 |

* Estimated.

MILLSTONE RIVER AT BLACKWELLS MILLS, N. J.

LOCATION.—Water-stage recorder at highway bridge in Blackwells Mills, Somerset County, one-fourth mile below mouth of Middlebrush Brook.

DRAINAGE AREA.—258 square miles.

RECORDS AVAILABLE.—August, 1921, to September, 1930. June, 1903, to December, 1904, at Millstone, $1\frac{1}{4}$ miles downstream.

EXTREMES.—Maximum discharge during year, about 3,140 second-feet Mar. 8 (gage height, 7.30 feet); minimum, 12 second-feet Sept. 19 (gage height, -0.21 foot).

1921-1930: Maximum discharge, about 7,000 second-feet Oct. 18, 1927; maximum gage height, about 11.0 feet Apr. 7, 1924, Sept. 7, 1926; minimum, about 5 second-feet Sept. 16, 1923.

REMARKS.—Records good. Delaware & Raritan Canal parallels river for some distance; some seepage and waste water from canal enters river above station.

Daily and monthly discharge, in second-feet, 1929-37

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|-------|-------|-------|-------|-------|-----|-------|------|------|-------|
| 1 | 109 | 200 | 109 | 550 | 269 | 502 | 251 | 162 | 105 | 77 | 60 | 36 |
| 2 | 675 | 188 | 251 | 502 | 140 | 434 | 216 | 167 | 99 | 90 | 55 | 32 |
| 3 | 725 | 550 | 230 | 575 | 233 | 367 | 220 | 147 | 99 | 81 | 50 | 32 |
| 4 | 411 | 725 | 203 | 434 | 306 | 306 | 210 | 135 | 102 | 88 | 47 | 29 |
| 5 | 367 | 456 | 173 | 388 | 1,260 | 288 | 210 | 137 | 96 | 95 | 47 | 29 |
| 6 | 269 | 388 | 170 | 326 | 940 | 251 | 200 | 126 | 93 | 112 | 46 | 30 |
| 7 | 191 | 306 | 147 | 288 | 675 | 233 | 456 | 129 | 89 | 118 | 46 | 28 |
| 8 | 154 | 251 | 165 | 288 | 550 | 2,050 | 479 | 131 | 88 | 90 | 43 | 18 |
| 9 | 131 | 216 | 176 | 269 | 456 | 2,320 | 367 | 126 | 96 | 79 | 43 | 19 |
| 10 | 118 | 200 | 226 | 251 | 346 | 1,120 | 306 | 120 | 775 | 118 | 42 | 30 |
| 11 | 114 | 191 | 233 | 223 | 306 | 830 | 251 | 111 | 575 | 140 | 40 | 30 |
| 12 | 111 | 188 | 185 | 230 | 223 | 830 | 233 | 107 | 288 | 129 | 41 | 30 |
| 13 | 103 | 188 | 269 | 251 | 940 | 650 | 251 | 109 | 269 | 112 | 38 | 29 |
| 14 | 99 | 200 | 306 | 575 | 1,850 | 502 | 288 | 111 | 200 | 92 | 38 | 28 |
| 15 | 96 | 213 | 251 | 885 | 1,340 | 434 | 288 | 216 | 140 | 82 | 41 | 19 |
| 16 | 112 | 197 | 251 | 650 | 1,090 | 411 | 306 | 233 | 120 | 77 | 48 | 19 |
| 17 | 112 | 194 | 233 | 550 | 1,220 | 411 | 388 | 203 | 107 | 74 | 50 | 25 |
| 18 | 114 | 575 | 775 | 885 | 885 | 367 | 411 | 160 | 194 | 69 | 52 | 18 |
| 19 | 105 | 775 | 2,150 | 1,010 | 575 | 525 | 411 | 160 | 288 | 65 | 52 | 13 |
| 20 | 95 | 479 | 1,120 | 725 | 600 | 502 | 367 | 182 | 216 | 60 | 49 | 32 |
| 21 | 96 | 388 | 600 | 575 | 650 | 456 | 306 | 162 | 213 | 57 | 49 | 40 |
| 22 | 122 | 306 | 434 | 525 | 625 | 367 | 288 | 140 | 126 | 60 | 46 | 45 |
| 23 | 306 | 251 | 388 | 456 | 625 | 326 | 251 | 129 | 74 | 67 | 87 | 44 |
| 24 | 233 | 233 | 479 | 525 | 725 | 306 | 233 | 114 | 52 | 107 | 93 | 43 |
| 25 | 226 | 223 | 367 | 326 | 775 | 326 | 216 | 122 | 88 | 207 | 75 | 42 |
| 26 | 203 | 216 | 306 | 326 | 1,220 | 388 | 203 | 120 | 65 | 135 | 116 | 45 |
| 27 | 149 | 210 | 233 | 103 | 1,010 | 346 | 194 | 116 | 95 | 133 | 87 | 44 |
| 28 | 126 | 223 | 197 | 92 | 725 | 326 | 182 | 116 | 87 | 131 | 68 | 42 |
| 29 | 120 | 185 | 326 | 88 | ----- | 269 | 179 | 124 | 74 | 102 | 63 | 42 |
| 30 | 133 | 194 | 411 | 176 | ----- | 251 | 170 | 114 | 67 | 72 | 56 | 44 |
| 31 | 185 | ----- | 456 | 388 | ----- | 251 | ----- | 105 | ----- | 63 | 38 | ----- |

| Month | Maximum | Minimum | Mean | Month | Maximum | Minimum | Mean |
|----------|---------|---------|------|-----------|---------|---------|------|
| October | 725 | 95 | 197 | May | 233 | 105 | 140 |
| November | 775 | 185 | 304 | June | 775 | 52 | 166 |
| December | 2,150 | 109 | 381 | July | 207 | 57 | 96.2 |
| January | 1,010 | 88 | 433 | August | 116 | 38 | 55.0 |
| February | 1,850 | 140 | 734 | September | 45 | 13 | 31.9 |
| March | 2,320 | 233 | 547 | | | | |
| April | 479 | 170 | 278 | The year | 2,320 | 13 | 277 |

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, 1930.

REMARKS.—Monthly records poor; 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, 1929-30

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|--------|-----------------|-------------------|
| October..... | 161 | 48 | 73.1 | 1.49 | 1.72 |
| November..... | 120 | 48 | 67.4 | 1.38 | 1.54 |
| December..... | 350 | 52 | 86.7 | 1.77 | 2.04 |
| January..... | 140 | 42 | 64.0 | 1.31 | 1.51 |
| February..... | 218 | 35 | 90.2 | 1.84 | 1.92 |
| March..... | 410 | 56 | 93.0 | 1.99 | 2.19 |
| April..... | 120 | 45 | 60.6 | 1.24 | 1.38 |
| May..... | 59 | 21 | 37.5 | .765 | .88 |
| June..... | 150 | 17 | 36.4 | .743 | .83 |
| July..... | | | * 20.2 | .412 | .48 |
| August..... | 35 | 10 | 16.0 | .327 | .38 |
| September..... | 92 | 6 | 17.5 | .357 | .40 |
| The year..... | 410 | 6 | 55.1 | 1.12 | 15.27 |

* Estimated.

LAWRENCE BROOK AT FARRINGTON DAM, N. J.

LOCATION.—Water-stage recorder at Farrington Dam, half a mile southwest of Milltown, Middlesex County, and $4\frac{1}{4}$ miles above mouth. Gage datum lowered 24 feet Oct. 1, 1929.

DRAINAGE AREA.—34 square miles.

RECORDS AVAILABLE.—May, 1927, to September, 1930. At Patricks Corner, $2\frac{3}{4}$ miles upstream, June, 1922, to December, 1926.

EXTREMES.—Maximum discharge during year, 505 second-feet Feb. 14 (gage height, 25.04 feet).

1927-1930: Maximum discharge, about 1,900 second-feet July 6, 1928 (gage height, 25.84 feet, present datum); practically no flow when gates in dam are closed and there is no flow over spillway.

REMARKS.—Records good except those estimated, which are fair. Discharge through blow-off pipe in dam June 6-9, June 25 to July 11, and July 21 to Sept. 30 included in table of daily discharge. Recorder operated by city engineer of New Brunswick.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|------|-------|------|------|-------|
| 1..... | 12.3 | 29 | a 11 | 51 | 16.3 | 51 | 22 | 16.3 | 8.7 | 15.5 | 14.3 | 8.7 |
| 2..... | 102 | 22 | a 14 | 41 | 16.3 | 46 | 18.9 | 18.9 | 7.5 | 15.5 | 12.8 | 8.6 |
| 3..... | 117 | 51 | a 16 | 51 | 18.9 | 36 | 18.9 | 14.1 | 7.2 | 15.5 | 11.5 | 8.5 |
| 4..... | 46 | 102 | a 11 | 46 | 32 | 32 | 18.9 | 10.8 | 7.2 | 15.5 | 10.7 | 8.2 |
| 5..... | 29 | 51 | a 11 | 32 | 160 | 29 | 16.3 | 10.8 | 7.0 | 15.4 | 9.9 | 7.9 |
| 6..... | 22 | 36 | a 11 | 25 | 80 | 25 | 16.3 | 10.8 | 15.3 | 15.4 | 9.3 | 7.7 |
| 7..... | 18.9 | 29 | a 11 | 25 | 74 | 29 | 62 | 10.8 | a 20 | 15.4 | 8.7 | 7.4 |
| 8..... | 16.3 | 25 | a 11 | 29 | 41 | 299 | 56 | 12.3 | a 30 | 15.4 | 8.2 | 11.8 |
| 9..... | 12.3 | 22 | a 11 | 29 | 29 | 151 | 36 | 10.8 | a 55 | 15.4 | 7.6 | 15.0 |
| 10..... | 10.8 | 22 | a 11 | 29 | 29 | 80 | 29 | 9.6 | a 120 | 15.4 | 7.0 | 15.0 |
| 11..... | 10.8 | 18.9 | a 11 | 22 | 25 | 68 | 25 | 8.0 | 68 | 8.5 | 6.4 | 15.0 |
| 12..... | 9.6 | 16.3 | a 12 | 25 | 25 | 68 | 22 | 8.7 | 36 | 0 | 5.9 | 14.9 |
| 13..... | 9.6 | 16.3 | a 19 | 32 | 177 | 51 | 25 | 8.0 | 25 | .2 | 5.5 | 14.9 |
| 14..... | a 9 | 18.9 | a 24 | 89 | 294 | 36 | 32 | 8.7 | 18.9 | .8 | 5.2 | 14.9 |
| 15..... | a 9 | 25 | a 22 | 134 | 109 | 32 | 29 | 36 | 12.3 | 1.6 | 5.3 | 14.8 |
| 16..... | a 12 | 25 | 22 | 68 | 68 | 32 | 46 | 32 | 8.7 | 2.0 | 5.3 | 14.8 |
| 17..... | a 12 | 25 | 22 | 46 | 68 | 29 | 56 | 18.9 | 7.5 | 2.5 | 5.3 | 14.8 |
| 18..... | a 11 | 87 | 97 | 120 | 68 | 32 | 56 | 16.3 | 8.7 | 2.7 | 5.3 | 14.8 |
| 19..... | 9.6 | 74 | 170 | 109 | 56 | 68 | 56 | 22 | 12.3 | 3.3 | 5.3 | 14.7 |
| 20..... | 9.6 | 41 | 74 | 51 | 68 | 51 | 46 | 36 | 10.8 | 3.5 | 5.2 | 14.7 |
| 21..... | 8.7 | 32 | 36 | 36 | 74 | 36 | 32 | 25 | 8.7 | 11.9 | 5.0 | 14.6 |
| 22..... | 14.1 | 29 | 25 | 32 | 74 | a 24 | 32 | 22 | 8.7 | 18.0 | 10.6 | 14.6 |
| 23..... | 56 | 22 | 22 | 29 | 68 | a 22 | 25 | 18.9 | 7.5 | 19.3 | 10.4 | 14.5 |
| 24..... | 32 | 22 | 22 | 22 | 74 | a 22 | 22 | 12.3 | 7.2 | 18.5 | 8.1 | 14.5 |
| 25..... | 22 | 18.9 | 18.9 | 22 | 80 | a 50 | 22 | 18.9 | 13.5 | 17.8 | 8.4 | 14.5 |
| 26..... | 16.3 | 16.3 | 14.1 | 18.9 | 109 | a 46 | 22 | 16.3 | 20 | 16.7 | 8.6 | 14.4 |
| 27..... | 14.1 | 16.3 | 14.1 | 18.9 | 109 | a 36 | 18.9 | 12.3 | 19.7 | 15.7 | 8.7 | a 14 |
| 28..... | 12.3 | 14.1 | 16.3 | 22 | 68 | a 32 | 16.3 | 12.3 | 18.1 | 15.5 | 8.8 | a 14 |
| 29..... | 12.3 | 12.3 | 36 | 22 | ----- | 29 | 18.9 | 16.3 | 16.7 | 15.4 | 8.9 | a 14 |
| 30..... | 18.9 | 10.8 | 68 | 22 | ----- | 25 | 18.9 | 14.1 | 15.7 | 15.4 | 8.9 | a 14 |
| 31..... | 29 | ----- | 51 | 18.9 | ----- | 22 | ----- | 10.8 | ----- | 15.4 | 8.9 | ----- |

| Month | Observed | | | Corrected for storage | | |
|----------------|----------|---------|------|-----------------------|-----------------|-------------------|
| | Maximum | Minimum | Mean | Mean | Per square mile | Run-off in inches |
| October..... | 117 | 8.7 | 23.4 | 23.7 | 0.697 | 0.80 |
| November..... | 102 | 10.8 | 31.0 | 30.8 | .906 | 1.01 |
| December..... | 170 | a 11 | 29.5 | 29.9 | .879 | 1.01 |
| January..... | 134 | 18.9 | 42.5 | 42.2 | 1.24 | 1.43 |
| February..... | 294 | 16.3 | 75.4 | 75.8 | 2.23 | 2.32 |
| March..... | 299 | 22 | 51.3 | 50.9 | 1.50 | 1.73 |
| April..... | 62 | 16.3 | 30.5 | 30.4 | .894 | 1.00 |
| May..... | 36 | 8.0 | 16.1 | 16.0 | .471 | .54 |
| June..... | a 120 | 7.0 | 20.7 | 19.0 | .559 | .62 |
| July..... | 19.3 | 0 | 11.6 | 10.3 | .303 | .35 |
| August..... | 14.3 | 5.0 | 8.06 | 6.60 | .194 | .22 |
| September..... | 15.0 | 7.4 | 13.0 | 5.40 | .159 | .18 |
| The year..... | 299 | 0 | 29.1 | 28.1 | .826 | 11.21 |

a Estimated.

NAVESINK RIVER BASIN

SWIMMING RIVER NEAR RED BANK, N. J.

LOCATION.—Water-stage recorder above dam of Monmouth Consolidated Water Co. and 3 miles above mouth of river at Red Bank, Monmouth County.

DRAINAGE AREA.—48 square miles.

RECORDS AVAILABLE.—July, 1922, to September, 1930.

EXTREMES.—Maximum discharge over spillway during year, 845 second-feet Feb. 13 (gage height, 3.83 feet).

1922-1930: Maximum discharge over spillway, about 2,590 second-feet Feb. 25, 1926 (gage height, 3.43 feet).

REMARKS.—Records good. Table of daily discharge includes diversion above station for municipal uses. Recorder operated and record of diversion furnished by Monmouth Consolidated Water Co.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------------|---------|-------|------|---------|-------|------|-------|-----|-------|-----------------|------|-------------------|
| 1..... | 55 | 60 | 35 | 62 | 51 | 80 | 63 | 51 | 35 | 28 | 26 | 25 |
| 2..... | 189 | 49 | 40 | 62 | 56 | 84 | 63 | 52 | 36 | 37 | 25 | 29 |
| 3..... | 150 | 67 | 46 | 69 | 84 | 71 | 63 | 46 | 37 | 33 | 23 | 29 |
| 4..... | 61 | 118 | 45 | 72 | 94 | 66 | 63 | 44 | 34 | 45 | 21 | 28 |
| 5..... | 47 | 91 | 39 | 56 | 314 | 66 | 59 | 46 | 31 | 39 | 20 | 25 |
| 6..... | 43 | 62 | 44 | 57 | 120 | 70 | 69 | 47 | 31 | 112 | 19 | 21 |
| 7..... | 41 | 53 | 44 | 60 | 77 | 70 | 151 | 43 | 29 | 199 | 17 | 19 |
| 8..... | 41 | 52 | 41 | 62 | 66 | 264 | 99 | 42 | 39 | 50 | 16 | 20 |
| 9..... | 36 | 50 | 38 | 59 | 59 | 199 | 70 | 42 | 48 | 34 | 14 | 20 |
| 10..... | 36 | 48 | 38 | 56 | 63 | 103 | 63 | 39 | 83 | 72 | 15 | 20 |
| 11..... | 31 | 45 | 38 | 50 | 54 | 95 | 63 | 38 | 98 | 64 | 22 | 20 |
| 12..... | 33 | 45 | 39 | 55 | 54 | 95 | 62 | 37 | 51 | 69 | 19 | 20 |
| 13..... | 32 | 48 | 38 | 69 | 237 | 84 | 65 | 38 | 46 | 45 | 21 | 19 |
| 14..... | 33 | 53 | 62 | 70 | 396 | 77 | 73 | 36 | 42 | 41 | 20 | 18 |
| 15..... | 33 | 55 | 56 | 123 | 131 | 70 | 66 | 96 | 38 | 41 | 24 | 19 |
| 16..... | 51 | 50 | 49 | 83 | 81 | 72 | 72 | 67 | 35 | 37 | 31 | 17 |
| 17..... | 48 | 44 | 45 | 62 | 67 | 73 | 75 | 49 | 33 | 34 | 29 | 16 |
| 18..... | 34 | 58 | 74 | 107 | 89 | 76 | 77 | 40 | 40 | 34 | 27 | 16 |
| 19..... | 32 | 87 | 142 | 165 | 100 | 128 | 80 | 46 | 41 | 33 | 26 | 17 |
| 20..... | 32 | 52 | 79 | 75 | 124 | 94 | 77 | 51 | 35 | 39 | 25 | 20 |
| 21..... | 35 | 18 | 50 | 76 | 111 | 80 | 69 | 45 | 34 | 31 | 24 | 19 |
| 22..... | 75 | 45 | 45 | 72 | 95 | 70 | 65 | 37 | 32 | 27 | 21 | 18 |
| 23..... | 202 | 44 | 53 | 62 | 88 | 65 | 62 | 37 | 33 | 53 | 68 | 18 |
| 24..... | 72 | 47 | 72 | 44 | 95 | 69 | 60 | 33 | 31 | 41 | 97 | 17 |
| 25..... | 56 | 48 | 56 | 54 | 95 | 84 | 57 | 55 | 31 | 43 | 40 | 16 |
| 26..... | 46 | 45 | 51 | 37 | 107 | 89 | 53 | 48 | 30 | 35 | 34 | 14 |
| 27..... | 43 | 47 | 50 | 36 | 123 | 73 | 54 | 39 | 37 | 31 | 31 | 17 |
| 28..... | 42 | 44 | 53 | 63 | 91 | 64 | 51 | 38 | 34 | 23 | 29 | 16 |
| 29..... | 39 | 43 | 78 | 73 | ----- | 65 | 52 | 47 | 30 | 30 | 28 | 18 |
| 30..... | 43 | 31 | 118 | 60 | ----- | 65 | 50 | 44 | 31 | 31 | 27 | 17 |
| 31..... | 60 | ----- | 70 | 48 | ----- | 66 | ----- | 39 | ----- | 23 | 27 | ----- |
| Month | Maximum | | | Minimum | | | Mean | | | Per square mile | | Run-off in inches |
| October..... | 202 | | | 31 | | | 57.1 | | | 1.19 | | 1.37 |
| November..... | 118 | | | 18 | | | 53.3 | | | 1.11 | | 1.24 |
| December..... | 142 | | | 35 | | | 55.7 | | | 1.16 | | 1.34 |
| January..... | 165 | | | 36 | | | 67.7 | | | 1.41 | | 1.63 |
| February..... | 396 | | | 51 | | | 112 | | | 2.33 | | 2.43 |
| March..... | 264 | | | 64 | | | 88.0 | | | 1.83 | | 2.11 |
| April..... | 151 | | | 50 | | | 68.2 | | | 1.42 | | 1.58 |
| May..... | 96 | | | 33 | | | 45.5 | | | .948 | | 1.09 |
| June..... | 98 | | | 29 | | | 39.5 | | | .823 | | .92 |
| July..... | 199 | | | 27 | | | 47.3 | | | .985 | | 1.14 |
| August..... | 97 | | | 14 | | | 27.9 | | | .581 | | .67 |
| September..... | 29 | | | 14 | | | 19.6 | | | .408 | | .46 |
| The year..... | 396 | | | 14 | | | 56.5 | | | 1.18 | | 15.38 |

• Estimated.

TOMS RIVER BASIN

TOMS RIVER NEAR TOMS RIVER, N. J.

LOCATION.—Water-stage recorder 1 mile below mouth of Union Branch and 2½ miles northwest of village of Toms River, Ocean County.

DRAINAGE AREA.—124 square miles.

RECORDS AVAILABLE.—December, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 443 second-feet Mar. 11 (gage height, 6.31 feet); minimum, 70 second-feet Aug. 13, Sept. 29, 30 (gage height, 3.15 feet).

1928-1930: Maximum discharge, 851 second-feet Apr. 18, 1929 (gage height, 8.95 feet); minimum, that of Aug. 13, Sept. 29, 30, 1930.

REMARKS.—Records excellent except those estimated, which are good.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|-------|-------|-------|-------|------|------|-------|
| 1..... | 146 | 190 | 135 | 213 | 179 | * 280 | 179 | * 160 | 130 | 114 | 104 | 89 |
| 2..... | 213 | 190 | 140 | 202 | 179 | * 260 | 179 | * 150 | 130 | 109 | 99 | 89 |
| 3..... | 249 | 202 | 146 | 190 | 179 | * 240 | 168 | * 150 | 146 | 119 | 84 | 94 |
| 4..... | 273 | 249 | 152 | 190 | 190 | 225 | 168 | * 150 | 130 | 124 | 84 | 99 |
| 5..... | 324 | 273 | 146 | 190 | 225 | 202 | 168 | * 140 | 124 | 135 | 79 | 94 |
| 6..... | 324 | 298 | 140 | 179 | 249 | 190 | 168 | * 140 | 114 | 152 | 84 | 84 |
| 7..... | 225 | 298 | 140 | 179 | 273 | 202 | 202 | * 140 | 109 | 140 | 84 | 84 |
| 8..... | 179 | 273 | 146 | 168 | 273 | 249 | 225 | * 140 | 124 | 140 | 79 | 84 |
| 9..... | 168 | 237 | 146 | 168 | 237 | 298 | 249 | * 140 | 140 | 130 | 79 | 84 |
| 10..... | 152 | 213 | 146 | 168 | 213 | 362 | 237 | * 140 | 202 | 157 | 84 | 84 |
| 11..... | 146 | 202 | 146 | 157 | 202 | 429 | 213 | * 140 | 249 | 179 | 74 | 79 |
| 12..... | 135 | 190 | 140 | 157 | 190 | 388 | 202 | 135 | 311 | 190 | 74 | 79 |
| 13..... | 130 | 179 | 140 | 157 | 190 | 311 | 190 | 135 | 375 | 179 | 70 | 79 |
| 14..... | 124 | 179 | 146 | 168 | 249 | 273 | 179 | 146 | 311 | 152 | 74 | 84 |
| 15..... | 119 | 179 | 157 | 190 | 298 | 249 | 179 | 237 | 237 | 146 | 89 | 89 |
| 16..... | 130 | 179 | 152 | 213 | 349 | 237 | 179 | 273 | 202 | 140 | 104 | 84 |
| 17..... | 140 | 179 | 152 | 213 | 362 | 225 | 190 | 324 | 168 | 119 | 109 | 89 |
| 18..... | 140 | 202 | 146 | 225 | 336 | 202 | 202 | 336 | 179 | 104 | 104 | 89 |
| 19..... | 130 | 213 | 168 | 237 | 273 | 213 | 213 | 298 | 168 | 109 | 94 | 84 |
| 20..... | 130 | 225 | 179 | 237 | 273 | 225 | 213 | 261 | 157 | 104 | 89 | 79 |
| 21..... | 124 | 225 | 202 | 273 | 273 | 237 | 202 | 237 | 130 | 94 | 84 | 79 |
| 22..... | 130 | 202 | 179 | 249 | 273 | 225 | 202 | 190 | 135 | 99 | 84 | 74 |
| 23..... | 168 | 190 | 179 | 225 | 261 | 202 | * 190 | 179 | 130 | 124 | 128 | 79 |
| 24..... | 190 | 179 | 190 | 202 | 249 | 202 | * 190 | 168 | 114 | 146 | 179 | 79 |
| 25..... | 213 | 179 | 190 | 190 | 261 | 202 | * 180 | 179 | 119 | 179 | 190 | 74 |
| 26..... | 225 | 168 | 179 | 179 | * 260 | 202 | * 180 | 168 | 109 | 190 | 202 | 79 |
| 27..... | 190 | 157 | 179 | 168 | * 280 | 202 | * 170 | 152 | 124 | 190 | 157 | 79 |
| 28..... | 168 | 157 | 168 | 179 | * 280 | 190 | * 170 | 146 | 140 | 152 | 124 | 79 |
| 29..... | 157 | 152 | 179 | 179 | ----- | 190 | * 160 | 179 | 130 | 130 | 109 | 70 |
| 30..... | 157 | 146 | 190 | 179 | ----- | 179 | * 160 | 168 | 119 | 119 | 99 | * 70 |
| 31..... | 168 | ----- | 213 | 179 | ----- | 179 | ----- | 146 | ----- | 109 | 89 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 324 | 119 | 176 | 1.42 | 1.64 |
| November..... | 298 | 146 | 204 | 1.65 | 1.84 |
| December..... | 213 | 135 | 162 | 1.31 | 1.51 |
| January..... | 273 | 157 | 194 | 1.56 | 1.80 |
| February..... | 362 | 179 | 252 | 2.03 | 2.11 |
| March..... | 429 | 179 | 241 | 1.94 | 2.24 |
| April..... | 249 | * 160 | 190 | 1.53 | 1.71 |
| May..... | 336 | 135 | 182 | 1.47 | 1.70 |
| June..... | 375 | 109 | 165 | 1.33 | 1.48 |
| July..... | 190 | 94 | 138 | 1.11 | 1.28 |
| August..... | 202 | 70 | 103 | .831 | .96 |
| September..... | 99 | 70 | 82.7 | .667 | .74 |
| The year..... | 429 | 70 | 174 | 1.40 | 19.01 |

* Estimated.

MULLICA RIVER BASIN

BATSTO RIVER AT BATSTO, N. J.

LOCATION.—Water-stage recorder 30 feet downstream from 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, 1930.

REMARKS.—Records good. Records of discharge include water diverted just above gage to operate grist mill. Slight regulation due to storage in small pond upstream.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------------|---------|-------|---------|------|-------|------|-----------------|-----|-------------------|------|------|-------|
| 1..... | 79 | 99 | 77 | 85 | 97 | 140 | 84 | 72 | 78 | 79 | 60 | 59 |
| 2..... | 99 | 104 | 79 | 82 | 97 | 128 | 84 | 72 | 72 | 73 | 61 | 55 |
| 3..... | 104 | 104 | 87 | 86 | 97 | 112 | 84 | 72 | 65 | 120 | 59 | 56 |
| 4..... | 115 | 121 | 87 | 86 | 102 | 101 | 84 | 65 | 78 | 123 | 58 | 50 |
| 5..... | 110 | 121 | 83 | 85 | 113 | 107 | 84 | 78 | 72 | 101 | 56 | 50 |
| 6..... | 93 | 155 | 83 | 86 | 118 | 91 | 84 | 72 | 65 | 103 | 55 | 58 |
| 7..... | 88 | 167 | 83 | 86 | 129 | 91 | 101 | 65 | 65 | 103 | 55 | 52 |
| 8..... | 79 | 161 | 80 | 76 | 141 | 135 | 101 | 65 | 65 | 98 | 54 | 54 |
| 9..... | 74 | 127 | 87 | 73 | 135 | 78 | 101 | 65 | 163 | 98 | 51 | 46 |
| 10..... | 68 | 120 | 86 | 75 | 124 | 230 | 96 | 72 | 117 | 93 | 59 | 52 |
| 11..... | 66 | 120 | 79 | 71 | 113 | 230 | 96 | 72 | 147 | 108 | 56 | 52 |
| 12..... | 68 | 104 | 65 | 69 | 108 | 209 | 91 | 65 | 218 | 113 | 53 | 51 |
| 13..... | 70 | 99 | 61 | 71 | 113 | 183 | 91 | 72 | 204 | 98 | 49 | 50 |
| 14..... | 65 | 110 | 63 | 90 | 135 | 170 | 84 | 85 | 153 | 103 | 51 | 59 |
| 15..... | 70 | 110 | 61 | 118 | 165 | 164 | 84 | 102 | 129 | 93 | 59 | 79 |
| 16..... | 72 | 99 | 61 | 113 | 194 | 146 | 85 | 123 | 117 | 79 | 61 | 79 |
| 17..... | 71 | 104 | 59 | 97 | 178 | 128 | 85 | 191 | 101 | 73 | 62 | 73 |
| 18..... | 63 | 111 | 61 | 102 | 161 | 111 | 85 | 224 | 91 | 73 | 61 | 61 |
| 19..... | 69 | 115 | 73 | 102 | 141 | 106 | 97 | 238 | 91 | 66 | 56 | 56 |
| 20..... | 66 | 120 | 69 | 113 | 135 | 106 | 92 | 224 | 59 | 66 | 55 | 55 |
| 21..... | 66 | 120 | 80 | 118 | 135 | 101 | 92 | 184 | 22 | 66 | 55 | 58 |
| 22..... | 72 | 110 | 93 | 118 | 141 | 111 | 92 | 159 | 66 | 66 | 58 | 52 |
| 23..... | 99 | 104 | 98 | 113 | 135 | 101 | 85 | 141 | 66 | 66 | 79 | 53 |
| 24..... | 104 | 99 | 109 | 108 | 129 | 91 | 92 | 108 | 66 | 66 | 79 | 50 |
| 25..... | 104 | 94 | 93 | 102 | 129 | 101 | 78 | 102 | 66 | 66 | 86 | 52 |
| 26..... | 94 | 94 | 87 | 97 | 152 | 101 | 72 | 97 | 66 | 66 | 79 | 54 |
| 27..... | 88 | 94 | 79 | 92 | 149 | 96 | 78 | 85 | 79 | 66 | 73 | 51 |
| 28..... | 78 | 88 | 76 | 97 | 147 | 96 | 78 | 78 | 79 | 66 | 65 | 47 |
| 29..... | 75 | 88 | 84 | 97 | ----- | 96 | 78 | 78 | 86 | 65 | 61 | 47 |
| 30..... | 80 | 84 | 87 | 102 | ----- | 91 | 72 | 85 | 86 | 62 | 62 | 47 |
| 31..... | 94 | ----- | 93 | 102 | ----- | 91 | ----- | 85 | ----- | 59 | 54 | ----- |
| Month | Maximum | | Minimum | | Mean | | Per square mile | | Run-off in inches | | | |
| October..... | 115 | | 63 | | 82.0 | | 1.17 | | 1.35 | | | |
| November..... | 167 | | 84 | | 112 | | 1.60 | | 1.78 | | | |
| December..... | 109 | | 59 | | 79.5 | | 1.14 | | 1.31 | | | |
| January..... | 118 | | 69 | | 93.9 | | 1.34 | | 1.54 | | | |
| February..... | 194 | | 97 | | 133 | | 1.90 | | 1.98 | | | |
| March..... | 230 | | 91 | | 124 | | 1.77 | | 2.04 | | | |
| April..... | 101 | | 72 | | 87.0 | | 1.24 | | 1.38 | | | |
| May..... | 238 | | 65 | | 106 | | 1.51 | | 1.74 | | | |
| June..... | 218 | | 22 | | 94.4 | | 1.35 | | 1.51 | | | |
| July..... | 123 | | 59 | | 83.1 | | 1.19 | | 1.37 | | | |
| August..... | 86 | | 49 | | 60.7 | | .867 | | 1.00 | | | |
| September..... | 79 | | 46 | | 55.3 | | .790 | | .88 | | | |
| The year..... | 238 | | 22 | | 92.3 | | 1.32 | | 17.88 | | | |

GREAT EGG RIVER BASIN

GREAT EGG RIVER AT FOLSOM, N. J.

LOCATION.—Water-stage recorder at highway bridge 1 mile south of Folsom, Atlantic County, and 2 miles above mouth of Pennypot Stream.

DRAINAGE AREA.—56 square miles.

RECORDS AVAILABLE.—September, 1925, to September, 1930.

EXTREMES.—Maximum discharge during year, 160 second-feet Mar. 11 (gage height, 4.60 feet); minimum, 23 second-feet Aug. 9–14.

1925–1930: Maximum discharge, 229 second-feet Apr. 19, 20, 1929 (gage height, 5.28 feet); minimum, that of Aug. 9–14, 1930.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|------|------|------|------|------|------|-----|------|------|------|-------|
| 1 | 42 | 83 | 52 | 80 | 62 | 114 | 62 | 50 | 42 | 40 | 28 | 28 |
| 2 | 72 | 89 | 54 | 77 | 62 | 114 | 62 | 50 | 42 | 40 | 26 | 28 |
| 3 | 89 | 89 | 60 | 74 | 64 | 101 | 62 | 52 | 50 | 40 | 26 | 28 |
| 4 | 101 | 95 | 60 | 80 | 70 | 89 | 62 | 47 | 42 | 40 | 26 | 28 |
| 5 | 114 | 107 | 57 | 77 | 83 | 83 | 60 | 44 | 42 | 40 | 24 | 28 |
| 6 | 120 | 120 | 57 | 74 | 101 | 77 | 60 | 44 | 40 | 40 | 24 | 26 |
| 7 | 114 | 120 | 57 | 67 | 114 | 77 | 72 | 44 | 40 | 50 | 24 | 26 |
| 8 | 80 | 120 | 60 | 64 | 114 | 107 | 83 | 44 | 42 | 52 | 24 | 28 |
| 9 | 60 | 107 | 60 | 62 | 114 | 133 | 89 | 44 | 44 | 47 | 23 | 30 |
| 10 | 52 | 89 | 60 | 60 | 95 | 153 | 89 | 42 | 70 | 50 | 23 | 28 |
| 11 | 50 | 77 | 60 | 54 | 83 | 153 | 74 | 42 | 89 | 42 | 23 | 28 |
| 12 | 50 | 72 | 57 | 54 | 77 | 153 | 67 | 44 | 80 | 40 | 23 | 28 |
| 13 | 47 | 67 | 57 | 54 | 77 | 140 | 64 | 44 | 83 | 38 | 23 | 26 |
| 14 | 47 | 72 | 60 | 60 | 101 | 120 | 62 | 52 | 77 | 38 | 23 | 26 |
| 15 | 44 | 72 | 62 | 80 | 127 | 101 | 60 | 64 | 64 | 36 | 28 | 34 |
| 16 | 47 | 72 | 64 | 89 | 140 | 89 | 60 | 74 | 57 | 36 | 30 | 32 |
| 17 | 52 | 72 | 62 | 95 | 146 | 83 | 57 | 83 | 52 | 34 | 28 | 32 |
| 18 | 50 | 80 | 62 | 101 | 140 | 77 | 57 | 67 | 50 | 34 | 28 | 30 |
| 19 | 50 | 89 | 67 | 101 | 133 | 77 | 60 | 72 | 47 | 34 | 28 | 28 |
| 20 | 47 | 95 | 70 | 101 | 120 | 83 | 62 | 70 | 42 | 32 | 28 | 28 |
| 21 | 47 | 89 | 70 | 107 | 114 | 83 | 67 | 80 | 42 | 30 | 26 | 28 |
| 22 | 47 | 83 | 70 | 107 | 120 | 74 | 70 | 64 | 38 | 30 | 26 | 28 |
| 23 | 60 | 74 | 67 | 95 | 120 | 72 | 57 | 70 | 38 | 30 | 34 | 28 |
| 24 | 67 | 70 | 67 | 83 | 114 | 70 | 54 | 57 | 36 | 30 | 36 | 26 |
| 25 | 72 | 67 | 70 | 72 | 107 | 70 | 62 | 54 | 38 | 34 | 34 | 26 |
| 26 | 64 | 64 | 70 | 67 | 107 | 70 | 54 | 50 | 38 | 32 | 32 | 26 |
| 27 | 62 | 64 | 67 | 62 | 107 | 72 | 52 | 47 | 52 | 30 | 30 | 26 |
| 28 | 60 | 62 | 67 | 62 | 107 | 70 | 50 | 47 | 47 | 28 | 30 | 26 |
| 29 | 52 | 60 | 67 | 62 | 107 | 64 | 52 | 52 | 42 | 28 | 30 | 26 |
| 30 | 50 | 54 | 74 | 64 | 107 | 64 | 50 | 47 | 40 | 28 | 30 | 26 |
| 31 | 74 | 80 | 80 | 64 | 107 | 64 | 50 | 50 | 28 | 28 | 28 | 26 |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 120 | 42 | 64.0 | 1.14 | 1.31 |
| November | 120 | 54 | 82.5 | 1.47 | 1.64 |
| December | 80 | 52 | 63.5 | 1.13 | 1.30 |
| January | 107 | 54 | 75.8 | 1.35 | 1.56 |
| February | 146 | 62 | 104 | 1.86 | 1.94 |
| March | 153 | 64 | 93.5 | 1.67 | 1.92 |
| April | 89 | 50 | 63.1 | 1.13 | 1.26 |
| May | 83 | 42 | 54.5 | .973 | 1.12 |
| June | 89 | 36 | 50.2 | .896 | 1.00 |
| July | 52 | 28 | 36.5 | .652 | .75 |
| August | 36 | 23 | 27.3 | .487 | .56 |
| September | 34 | 26 | 28.1 | .502 | .56 |
| The year | 153 | 23 | 61.6 | 1.10 | 14.92 |

• Estimated.

DELAWARE RIVER BASIN

EAST BRANCH OF DELAWARE RIVER AT FISHS EDDY, N. Y.

LOCATION.—Water stage recorder at railroad bridge in Fishs Eddy, Delaware County, $4\frac{1}{2}$ miles below mouth of Beaver Kill. Zero of gage 950.84 feet above mean sea level.

DRAINAGE AREA.—785 square miles.

RECORDS AVAILABLE.—November, 1912, to September, 1930.

EXTREMES.—Maximum discharge during year, 10,500 second-feet Feb. 26 (gage height, 9.6 feet); minimum, 95 second-feet Aug. 10, 11, 14 (gage height, 1.76 feet).

1912-1930: Maximum discharge, about 45,000 second-feet Sept. 30, 1924 (gage height, 19.0 feet); minimum, that of Aug. 10, 11, 14, 1930.

REMARKS.—Records good except those for periods of ice effect, Dec. 1-6, Jan. 18 to Feb. 23, which are fair. Staff gage used Aug. 3-16, 19-27.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| 1..... | 198 | 825 | 650 | 1,090 | 700 | 3,330 | 1,260 | 795 | 1,200 | 434 | 146 | 172 |
| 2..... | 1,330 | 795 | 700 | 1,230 | 700 | 3,050 | 1,300 | 825 | 1,060 | 490 | 142 | 208 |
| 3..... | 3,330 | 890 | 700 | 1,900 | 750 | 2,540 | 1,260 | 922 | 955 | 438 | 134 | 292 |
| 4..... | 2,040 | 1,340 | 700 | 1,890 | 750 | 2,090 | 1,200 | 825 | 825 | 392 | 132 | 312 |
| 5..... | 1,460 | 1,160 | 700 | 1,300 | 700 | 1,800 | 1,120 | 717 | 765 | 361 | 126 | 228 |
| 6..... | 1,120 | 1,020 | 700 | 1,420 | 700 | 1,760 | 1,060 | 666 | 729 | 358 | 122 | 202 |
| 7..... | 922 | 955 | 759 | 1,500 | 650 | 1,620 | 3,800 | 656 | 795 | 361 | 109 | 186 |
| 8..... | 825 | 890 | 955 | 1,890 | 650 | 6,490 | 4,180 | 666 | 672 | 315 | 107 | 237 |
| 9..... | 705 | 890 | 1,300 | 2,660 | 600 | 7,190 | 3,190 | 650 | 750 | 322 | 103 | 231 |
| 10..... | 617 | 825 | 1,020 | 2,660 | 600 | 4,400 | 2,660 | 590 | 4,990 | 485 | 97 | 197 |
| 11..... | 540 | 795 | 858 | 2,200 | 600 | 4,080 | 2,360 | 550 | 5,840 | 377 | 95 | 175 |
| 12..... | 490 | 795 | 526 | 2,200 | 600 | 5,280 | 2,360 | 515 | 3,200 | 315 | 99 | 157 |
| 13..... | 457 | 765 | 1,010 | 3,590 | 650 | 4,160 | 2,200 | 495 | 2,310 | 282 | 99 | 152 |
| 14..... | 434 | 765 | 2,040 | 4,940 | 700 | 3,890 | 2,660 | 481 | 1,800 | 440 | 99 | 152 |
| 15..... | 399 | 1,210 | 2,310 | 4,760 | 650 | 3,020 | 2,310 | 612 | 1,500 | 500 | 126 | 175 |
| 16..... | 379 | 1,460 | 1,890 | 3,920 | 650 | 2,720 | 2,040 | 759 | 1,260 | 365 | 183 | 593 |
| 17..... | 375 | 1,230 | 2,070 | 2,920 | 600 | 2,850 | 1,940 | 650 | 1,090 | 305 | 154 | 741 |
| 18..... | 359 | 3,320 | 4,720 | 2,200 | 600 | 3,170 | 1,890 | 555 | 1,120 | 265 | 149 | 485 |
| 19..... | 348 | 4,940 | 8,000 | 1,600 | 650 | 5,230 | 1,840 | 535 | 1,260 | 250 | 144 | 336 |
| 20..... | 326 | 3,620 | 7,010 | 1,400 | 750 | 4,240 | 1,620 | 661 | 1,020 | 234 | 129 | 282 |
| 21..... | 306 | 2,860 | 4,780 | 1,300 | 1,600 | 3,540 | 1,460 | 661 | 890 | 208 | 134 | 240 |
| 22..... | 347 | 2,310 | 3,540 | 1,100 | 3,000 | 2,660 | 1,420 | 617 | 765 | 225 | 139 | 214 |
| 23..... | 3,860 | 1,890 | 2,720 | 1,000 | 3,800 | 2,310 | 1,340 | 606 | 672 | 269 | 223 | 197 |
| 24..... | 2,300 | 1,660 | 2,310 | 950 | 4,500 | 2,090 | 1,260 | 570 | 612 | 250 | 887 | 175 |
| 25..... | 1,620 | 1,540 | 2,090 | 900 | 5,380 | 1,940 | 1,200 | 914 | 600 | 216 | 486 | 172 |
| 26..... | 1,340 | 1,340 | 1,840 | 850 | 8,690 | 2,200 | 1,160 | 1,090 | 545 | 199 | 312 | 172 |
| 27..... | 1,160 | 1,260 | 1,620 | 850 | 5,660 | 1,940 | 1,060 | 955 | 858 | 197 | 246 | 175 |
| 28..... | 1,020 | 1,260 | 1,500 | 800 | 4,080 | 1,660 | 955 | 965 | 678 | 191 | 199 | 170 |
| 29..... | 890 | 1,090 | 1,380 | 800 | ----- | 1,540 | 858 | 1,570 | 535 | 178 | 175 | 162 |
| 30..... | 795 | 565 | 1,260 | 750 | ----- | 1,500 | 825 | 1,420 | 457 | 167 | 167 | 152 |
| 31..... | 795 | ----- | 1,160 | 700 | ----- | 1,380 | ----- | 1,300 | ----- | 157 | 154 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 3,860 | 198 | 1,000 | 1.27 | 1.46 |
| November..... | 4,940 | 565 | 1,480 | 1.89 | 2.11 |
| December..... | 8,000 | 526 | 2,080 | 2.59 | 2.99 |
| January..... | 4,940 | 700 | 1,850 | 2.36 | 2.72 |
| February..... | 8,690 | 600 | 1,780 | 2.27 | 2.36 |
| March..... | 7,190 | 1,380 | 3,090 | 3.94 | 4.54 |
| April..... | 4,180 | 825 | 1,700 | 2.28 | 2.54 |
| May..... | 1,570 | 451 | 768 | .978 | 1.13 |
| June..... | 5,840 | 457 | 1,330 | 1.69 | 1.89 |
| July..... | 500 | 157 | 308 | .392 | .45 |
| August..... | 887 | 95 | 181 | .23 | .27 |
| September..... | 741 | 152 | 245 | .312 | .35 |
| The year..... | 8,690 | 95 | 1,320 | 1.68 | 22.81 |

DELAWARE RIVER AT PORT JERVIS, N. Y.

LOCATION.—Water-stage recorder at highway bridge at Port Jervis, Orange County, $1\frac{1}{2}$ miles above mouth of Neversink River. Zero of gage 415.60 feet above mean sea level.

DRAINAGE AREA.—3,070 square miles.

RECORDS AVAILABLE.—October, 1904, to September, 1930.

EXTREMES.—Maximum discharge during year, 29,400 second-feet Mar. 9 (gage height, 8.05 feet); minimum, 498 second-feet Aug. 10 (gage height, 1.21 feet). 1904–1930: Maximum discharge, 92,700 second-feet Mar. 28, 1914 (gage height, 16.0 feet); minimum, 175 second-feet Sept. 22, 23, 1908 (gage height, 0.60 foot).

Maximum discharge known, about 155,000 second-feet Oct. 10–11, 1903 (gage height, 23.3 feet).

REMARKS.—Records good except those for periods of ice effect, Dec. 2–6, 23, 24, Jan. 21 to Feb. 1, Feb. 6–11, 16–18, 22, 23, which are fair. Flow considerably regulated by three storage reservoirs which have an aggregate capacity of 12.2 billion cubic feet.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|--------|--------|--------|--------|--------|--------|-------|--------|-------|-------|-------|
| 1 | 1,110 | 2,350 | 2,320 | 4,040 | 2,800 | 11,000 | 4,640 | 2,930 | 4,000 | 1,960 | 1,080 | 872 |
| 2 | 1,740 | 2,380 | 2,400 | 4,210 | 2,470 | 9,300 | 4,570 | 2,990 | 3,870 | 2,180 | 930 | 1,080 |
| 3 | 9,870 | 2,460 | 2,600 | 5,580 | 2,710 | 8,880 | 4,540 | 2,840 | 3,520 | 2,150 | 1,020 | 1,450 |
| 4 | 9,790 | 3,700 | 2,830 | 7,910 | 3,390 | 7,280 | 4,580 | 2,830 | 3,080 | 1,930 | 647 | 1,300 |
| 5 | 6,240 | 4,100 | 2,800 | 5,810 | 3,180 | 6,720 | 4,200 | 2,860 | 2,800 | 1,750 | 1,050 | 1,370 |
| 6 | 4,360 | 3,470 | 3,000 | 4,850 | 2,800 | 6,100 | 3,560 | 2,740 | 2,620 | 1,640 | 1,000 | 1,470 |
| 7 | 3,630 | 3,130 | 3,050 | 5,040 | 2,690 | 5,840 | 8,480 | 2,610 | 2,580 | 1,700 | 1,080 | 1,160 |
| 8 | 2,960 | 3,080 | 3,200 | 6,130 | 2,400 | 13,100 | 15,200 | 2,800 | 2,580 | 2,080 | 1,290 | 936 |
| 9 | 2,550 | 2,980 | 3,600 | 7,680 | 2,200 | 26,600 | 11,900 | 2,700 | 2,570 | 1,840 | 1,010 | 1,210 |
| 10 | 2,250 | 2,420 | 4,390 | 8,640 | 2,400 | 17,600 | 9,520 | 2,520 | 6,080 | 1,830 | 818 | 1,250 |
| 11 | 2,190 | 2,380 | 4,050 | 7,600 | 2,400 | 13,500 | 8,260 | 2,170 | 17,000 | 2,440 | 662 | 1,250 |
| 12 | 2,100 | 2,583 | 3,390 | 6,160 | 2,260 | 15,300 | 7,280 | 1,940 | 12,100 | 2,100 | 1,150 | 1,170 |
| 13 | 1,560 | 2,580 | 3,040 | 7,740 | 2,360 | 14,600 | 6,720 | 2,080 | 7,960 | 1,790 | 929 | 1,140 |
| 14 | 1,590 | 2,580 | 4,430 | 15,200 | 2,530 | 12,100 | 7,280 | 1,950 | 6,180 | 1,580 | 942 | 1,200 |
| 15 | 1,670 | 3,100 | 9,000 | 15,800 | 2,700 | 10,400 | 7,280 | 2,190 | 5,200 | 2,200 | 1,210 | 968 |
| 16 | 1,570 | 4,900 | 8,680 | 13,600 | 2,600 | 8,370 | 6,540 | 2,720 | 4,420 | 2,690 | 756 | 1,490 |
| 17 | 1,570 | 4,630 | 7,380 | 10,300 | 2,400 | 8,060 | 6,540 | 3,160 | 3,860 | 2,210 | 876 | 3,150 |
| 18 | 1,550 | 7,860 | 10,200 | 8,030 | 2,400 | 8,570 | 6,540 | 2,500 | 3,230 | 1,950 | 857 | 2,710 |
| 19 | 1,450 | 18,800 | 19,700 | 6,400 | 2,350 | 11,200 | 6,180 | 2,220 | 2,960 | 1,690 | 1,400 | 2,010 |
| 20 | 1,210 | 14,600 | 23,200 | 5,300 | 2,890 | 12,800 | 5,500 | 2,690 | 3,040 | 1,460 | 1,280 | 1,550 |
| 21 | 1,140 | 10,600 | 17,900 | 4,800 | 5,520 | 10,400 | 5,020 | 2,860 | 2,770 | 1,390 | 1,220 | 1,400 |
| 22 | 1,500 | 8,470 | 11,300 | 4,400 | 11,000 | 8,680 | 4,720 | 2,920 | 2,580 | 1,860 | 1,310 | 1,020 |
| 23 | 3,430 | 6,790 | 9,000 | 4,000 | 13,000 | 6,720 | 4,910 | 2,590 | 2,280 | 1,730 | 1,670 | 1,310 |
| 24 | 6,730 | 5,260 | 7,500 | 3,600 | 13,400 | 6,360 | 4,720 | 2,470 | 2,260 | 1,850 | 1,990 | 949 |
| 25 | 5,230 | 5,500 | 6,460 | 3,400 | 12,700 | 6,180 | 4,360 | 3,180 | 2,250 | 1,780 | 2,120 | 1,000 |
| 26 | 3,880 | 4,780 | 6,640 | 3,200 | 22,300 | 6,460 | 4,300 | 4,840 | 2,330 | 1,470 | 2,460 | 1,080 |
| 27 | 3,270 | 4,410 | 5,670 | 3,200 | 20,300 | 7,280 | 3,630 | 4,360 | 2,430 | 1,200 | 1,970 | 964 |
| 28 | 3,170 | 3,840 | 5,870 | 3,200 | 13,700 | 6,360 | 3,670 | 4,030 | 2,920 | 1,060 | 1,670 | 886 |
| 29 | 2,680 | 3,960 | 5,290 | 3,400 | ----- | 5,230 | 3,210 | 4,200 | 2,450 | 1,440 | 1,610 | 943 |
| 30 | 2,580 | 3,230 | 5,350 | 3,200 | ----- | 4,720 | 2,940 | 5,180 | 1,950 | 1,250 | 1,530 | 1,160 |
| 31 | 2,490 | ----- | 4,450 | 3,000 | ----- | 4,790 | ----- | 4,570 | ----- | 1,100 | 1,430 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 9,870 | 1,110 | 3,130 | 1.02 | 1.18 |
| November | 18,800 | 2,350 | 5,030 | 1.64 | 1.83 |
| December | 23,200 | 2,320 | 6,730 | 2.10 | 2.52 |
| January | 15,800 | 3,000 | 6,300 | 2.05 | 2.36 |
| February | 22,300 | 2,200 | 5,850 | 1.91 | 1.99 |
| March | 26,600 | 4,720 | 9,690 | 3.16 | 3.64 |
| April | 15,200 | 2,940 | 6,030 | 1.96 | 2.12 |
| May | 5,180 | 1,940 | 2,990 | .974 | 1.12 |
| June | 17,000 | 1,950 | 4,120 | 1.34 | 1.50 |
| July | 2,690 | 1,060 | 1,750 | .580 | .67 |
| August | 2,460 | 647 | 1,260 | .410 | .47 |
| September | 3,150 | 872 | 1,310 | .427 | .48 |
| The year | 26,600 | 647 | 4,510 | 1.47 | 19.95 |

DELAWARE RIVER AT BELVIDERE, N. J.

LOCATION.—Water-stage recorder at Belvidere, Warren County, just below mouth of Pequest River.

DRAINAGE AREA.—4,540 square miles.

RECORDS AVAILABLE.—October, 1922, to September, 1930.

EXTREMES.—Maximum discharge during year, 38,400 second-feet Mar. 9 (gage height, 11.3 feet); minimum, 930 second-feet Aug. 12 (gage height, 2.50 feet).

1922-1930: Maximum discharge, about 118,000 second-feet Oct. 1, 1924 (gage height, 19.3 feet, from high-water marks); minimum, 895 second-feet in July and August, 1923 (gage height, 2.45 feet).

REMARKS.—Records excellent. Discharge estimated Dec. 4-6 because of ice. Part of table of monthly discharge corrected for effect of storage in reservoirs on Wallenpaupack Creek and Mongaup River.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|--------|--------|--------|--------|--------|--------|--------|-------|--------|-------|-------|-------|
| 1 | 1,500 | 3,830 | 4,320 | 6,940 | 5,120 | 15,500 | 7,270 | 4,850 | 5,990 | 2,940 | 1,560 | 1,700 |
| 2 | 2,370 | 3,600 | 3,830 | 6,620 | 4,850 | 13,700 | 6,940 | 5,403 | 5,120 | 3,830 | 1,430 | 1,370 |
| 3 | 7,290 | 4,070 | 3,830 | 6,940 | 4,580 | 12,300 | 6,940 | 5,690 | 5,120 | 3,830 | 1,310 | 1,500 |
| 4 | 14,100 | 4,580 | 4,000 | 9,050 | 4,583 | 11,000 | 6,940 | 5,120 | 4,580 | 3,370 | 1,370 | 1,850 |
| 5 | 10,200 | 5,990 | 4,400 | 9,810 | 5,120 | 9,430 | 6,620 | 4,850 | 4,070 | 2,940 | 1,100 | 1,630 |
| 6 | 7,270 | 5,990 | 4,400 | 7,270 | 4,850 | 8,680 | 5,993 | 4,850 | 3,830 | 2,740 | 1,260 | 1,560 |
| 7 | 5,693 | 5,120 | 4,580 | 6,940 | 4,320 | 8,680 | 9,140 | 4,583 | 3,830 | 2,550 | 1,370 | 1,780 |
| 8 | 4,850 | 4,850 | 4,850 | 7,610 | 4,070 | 12,200 | 23,400 | 4,320 | 3,830 | 2,550 | 1,310 | 1,500 |
| 9 | 4,070 | 4,580 | 4,850 | 8,680 | 4,070 | 33,600 | 18,900 | 4,320 | 3,830 | 2,740 | 1,600 | 1,310 |
| 10 | 3,600 | 4,320 | 5,400 | 10,600 | 3,830 | 28,800 | 15,000 | 4,070 | 6,000 | 2,940 | 1,310 | 1,430 |
| 11 | 3,150 | 3,830 | 5,990 | 10,600 | 3,830 | 20,500 | 12,800 | 3,830 | 20,800 | 2,740 | 1,200 | 1,500 |
| 12 | 3,150 | 3,600 | 5,400 | 9,050 | 3,600 | 20,500 | 11,400 | 3,370 | 21,600 | 3,150 | 970 | 1,560 |
| 13 | 2,940 | 3,830 | 4,580 | 8,680 | 3,600 | 21,000 | 10,600 | 3,370 | 14,100 | 2,740 | 1,370 | 1,500 |
| 14 | 2,550 | 3,830 | 4,850 | 13,100 | 4,320 | 17,900 | 10,600 | 3,370 | 10,600 | 2,460 | 1,260 | 1,500 |
| 15 | 2,360 | 4,070 | 8,490 | 19,900 | 4,320 | 15,500 | 11,000 | 4,070 | 8,680 | 2,460 | 1,310 | 1,560 |
| 16 | 2,460 | 5,120 | 11,930 | 18,400 | 4,320 | 13,200 | 10,630 | 5,120 | 7,270 | 2,940 | 1,560 | 1,370 |
| 17 | 2,360 | 6,620 | 10,600 | 15,000 | 4,070 | 11,400 | 10,200 | 5,400 | 6,300 | 3,150 | 1,260 | 2,060 |
| 18 | 2,360 | 8,770 | 10,200 | 12,300 | 4,320 | 11,400 | 11,000 | 5,120 | 5,990 | 2,740 | 1,260 | 3,830 |
| 19 | 2,270 | 20,300 | 18,000 | 9,430 | 4,320 | 13,200 | 10,600 | 5,400 | 5,400 | 2,460 | 1,200 | 3,150 |
| 20 | 2,180 | 22,100 | 26,200 | 6,620 | 4,850 | 16,400 | 9,810 | 4,580 | 4,850 | 2,180 | 1,700 | 2,460 |
| 21 | 2,010 | 16,900 | 25,000 | 6,620 | 6,620 | 15,000 | 8,680 | 4,850 | 4,580 | 1,930 | 1,630 | 2,010 |
| 22 | 1,930 | 13,200 | 16,900 | 7,610 | 10,600 | 12,800 | 8,320 | 4,580 | 4,320 | 1,560 | 1,560 | 1,780 |
| 23 | 3,863 | 11,000 | 12,800 | 7,610 | 13,000 | 10,600 | 7,960 | 4,580 | 3,830 | 2,180 | 1,850 | 1,560 |
| 24 | 8,320 | 9,050 | 10,200 | 6,940 | 16,900 | 9,050 | 7,610 | 4,070 | 3,600 | 2,180 | 2,550 | 1,560 |
| 25 | 9,430 | 7,960 | 9,050 | 5,690 | 20,900 | 9,050 | 7,270 | 4,850 | 3,370 | 2,360 | 2,940 | 1,430 |
| 26 | 6,940 | 7,960 | 8,320 | 5,400 | 21,000 | 10,200 | 6,940 | 5,690 | 3,370 | 2,360 | 2,740 | 1,430 |
| 27 | 5,400 | 6,940 | 8,320 | 4,850 | 28,100 | 10,600 | 6,620 | 6,940 | 3,600 | 1,930 | 2,740 | 1,560 |
| 28 | 4,850 | 6,620 | 8,320 | 5,120 | 19,900 | 10,600 | 5,690 | 5,990 | 3,830 | 1,700 | 2,360 | 1,370 |
| 29 | 4,580 | 5,990 | 9,050 | 5,690 | ----- | 9,050 | 5,690 | 5,990 | 4,070 | 1,500 | 2,100 | 1,200 |
| 30 | 4,070 | 5,400 | 8,320 | 5,400 | ----- | 7,960 | 5,120 | 6,300 | 3,370 | 1,780 | 1,930 | 1,150 |
| 31 | 4,070 | ----- | 7,960 | 5,120 | ----- | 7,270 | ----- | 6,620 | ----- | 1,630 | 1,850 | ----- |

| Month | Observed | | | Corrected for storage | | |
|-----------|----------|---------|--------|-----------------------|------------------|-------------------|
| | Maximum | Minimum | Mean | Mean | Per square mile | Run-off in inches |
| October | 14,100 | 1,500 | 4,590 | 4,770 | 1.05 | 1.21 |
| November | 22,100 | 3,600 | 7,330 | 7,430 | 1.64 | 1.83 |
| December | 26,200 | 3,830 | 8,870 | 8,800 | 1.94 | 2.24 |
| January | 19,900 | 4,850 | 8,700 | 8,640 | 1.90 | 2.19 |
| February | 28,100 | 3,600 | 8,180 | 8,210 | 1.81 | 1.88 |
| March | 33,600 | 7,270 | 13,800 | 14,300 | 3.15 | 3.63 |
| April | 20,400 | 5,120 | 9,430 | 9,660 | 2.13 | 2.38 |
| May | 6,940 | 3,370 | 4,870 | 4,840 | 1.07 | 1.22 |
| June | 21,600 | 3,370 | 6,320 | 6,590 | 1.45 | 1.63 |
| July | 3,830 | 1,500 | 2,540 | 2,150 | .47 ¹ | .55 |
| August | 2,940 | 970 | 1,640 | 995 | .21 ¹ | .25 |
| September | 3,830 | 1,150 | 1,710 | 1,330 | .29 ¹ | .33 |
| The year | 33,600 | 970 | 6,490 | 6,470 | 1.43 | 19.34 |

DELAWARE RIVER AT RIEGELSVILLE, N. J.

LOCATION.—Water-stage recorder at suspension bridge at Riegelsville, Warren County, 600 feet above mouth of Musconetcong River.

DRAINAGE AREA.—6,190 square miles.

RECORDS AVAILABLE.—July, 1906, to September, 1930.

EXTREMES.—Maximum discharge during year, 43,300 second-feet Mar. 9 (gage height, 12.4 feet); minimum, not including flow in Pennsylvania Canal, 1,350 second-feet Aug. 12, 13 (gage height, 1.90 feet).

1906-1930: Maximum discharge, about 144,000 second-feet Mar. 28, 1913 (gage height, 25 feet); minimum, not including flow in canal, 870 second-feet Sept. 20, 1908 (gage height, 1.55 feet).

Maximum stage known, 35.9 feet Oct. 10-11, 1903 (discharge, about 275,000 second-feet).

REMARKS.—Records good. Pennsylvania Canal diverted about 230 second-feet above station during navigation season, Oct. 1 to Nov. 23, Apr. 1 to Sept. 30. Part of table of monthly discharge corrected for diversion and for effect of storage in reservoirs on Wallenpaupack Creek and Mongaup River.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|
| 1 | 1,760 | 5,260 | 4,960 | 9,700 | 6,170 | 20,400 | 10,200 | 7,170 | 8,480 | 4,280 | 2,140 | 2,320 |
| 2 | 3,990 | 4,960 | 5,560 | 9,070 | 6,170 | 18,100 | 9,840 | 7,820 | 7,490 | 4,710 | 1,990 | 1,900 |
| 3 | 16,800 | 5,260 | 4,960 | 9,390 | 6,800 | 10,100 | 9,500 | 8,480 | 7,170 | 5,920 | 1,900 | 1,970 |
| 4 | 20,400 | 6,480 | 5,260 | 11,400 | 6,480 | 14,500 | 9,500 | 7,660 | 6,380 | 5,160 | 1,940 | 2,180 |
| 5 | 14,900 | 7,440 | 5,560 | 12,900 | 7,440 | 12,500 | 9,160 | 7,170 | 5,920 | 4,710 | 1,800 | 2,200 |
| 6 | 11,100 | 7,440 | 5,860 | 10,000 | 7,120 | 11,800 | 8,480 | 6,850 | 5,460 | 4,140 | 1,640 | 2,010 |
| 7 | 8,410 | 6,800 | 5,860 | 9,700 | 6,170 | 11,100 | 14,300 | 6,700 | 5,610 | 3,880 | 1,900 | 2,210 |
| 8 | 7,120 | 5,860 | 6,480 | 10,000 | 5,860 | 17,200 | 27,400 | 6,380 | 5,610 | 3,760 | 1,800 | 2,110 |
| 9 | 5,860 | 5,860 | 7,120 | 11,400 | 5,560 | 36,200 | 28,200 | 6,230 | 5,760 | 3,880 | 1,990 | 1,990 |
| 10 | 5,260 | 5,560 | 7,120 | 13,300 | 5,560 | 39,300 | 22,100 | 5,920 | 7,920 | 5,610 | 1,850 | 1,970 |
| 11 | 4,680 | 4,960 | 7,440 | 13,300 | 4,960 | 29,300 | 18,400 | 5,610 | 23,600 | 5,310 | 1,690 | 2,080 |
| 12 | 4,400 | 4,680 | 6,170 | 11,800 | 5,260 | 28,200 | 16,300 | 5,310 | 30,100 | 4,860 | 1,550 | 2,090 |
| 13 | 4,120 | 4,680 | 5,260 | 11,400 | 5,560 | 28,800 | 15,000 | 4,710 | 20,200 | 4,420 | 1,520 | 1,850 |
| 14 | 3,860 | 4,680 | 6,480 | 15,200 | 6,800 | 24,500 | 15,000 | 5,010 | 15,000 | 3,880 | 1,720 | 1,900 |
| 15 | 3,380 | 4,960 | 9,390 | 24,500 | 7,120 | 21,100 | 16,000 | 6,850 | 12,000 | 3,630 | 1,820 | 2,060 |
| 16 | 3,380 | 5,860 | 14,500 | 23,600 | 6,170 | 18,400 | 14,600 | 8,480 | 10,200 | 3,880 | 2,130 | 2,080 |
| 17 | 3,150 | 7,760 | 12,900 | 19,900 | 5,560 | 16,300 | 15,400 | 8,150 | 8,820 | 4,420 | 2,010 | 2,440 |
| 18 | 3,150 | 12,500 | 12,500 | 16,100 | 5,560 | 15,800 | 16,300 | 7,660 | 8,150 | 4,010 | 1,740 | 3,880 |
| 19 | 3,040 | 28,000 | 19,800 | 12,200 | 6,480 | 17,500 | 15,800 | 7,170 | 7,660 | 3,510 | 1,770 | 4,010 |
| 20 | 2,930 | 29,900 | 29,900 | 9,390 | 7,120 | 21,100 | 15,000 | 7,170 | 7,010 | 3,280 | 1,990 | 3,280 |
| 21 | 2,820 | 22,600 | 29,900 | 9,070 | 9,700 | 19,700 | 13,500 | 7,170 | 6,540 | 2,940 | 2,140 | 2,630 |
| 22 | 2,720 | 17,300 | 22,000 | 10,400 | 13,300 | 16,700 | 12,400 | 7,010 | 6,080 | 2,840 | 2,090 | 2,250 |
| 23 | 6,240 | 14,500 | 16,500 | 9,700 | 21,000 | 14,200 | 11,600 | 6,700 | 5,610 | 3,160 | 2,300 | 2,140 |
| 24 | 10,800 | 12,200 | 13,300 | 9,070 | 21,700 | 12,400 | 11,200 | 6,230 | 5,010 | 3,630 | 2,940 | 2,060 |
| 25 | 11,800 | 10,400 | 11,400 | 7,760 | 20,600 | 12,400 | 10,500 | 8,480 | 5,010 | 3,510 | 3,760 | 1,900 |
| 26 | 9,070 | 10,400 | 10,400 | 7,440 | 24,100 | 13,500 | 9,840 | 9,500 | 4,710 | 3,390 | 3,280 | 1,740 |
| 27 | 7,120 | 9,070 | 10,800 | 6,800 | 34,000 | 14,200 | 9,500 | 10,200 | 5,160 | 2,840 | 3,630 | 1,920 |
| 28 | 6,480 | 8,740 | 10,800 | 6,800 | 26,900 | 13,900 | 8,820 | 9,160 | 5,460 | 2,440 | 3,160 | 1,820 |
| 29 | 5,860 | 7,760 | 11,800 | 7,760 | ----- | 12,400 | 8,150 | 8,820 | 5,610 | 2,210 | 2,730 | 1,640 |
| 30 | 5,260 | 6,170 | 11,400 | 7,120 | ----- | 10,900 | 7,660 | 8,820 | 4,860 | 2,300 | 2,630 | 1,480 |
| 31 | 4,960 | ----- | 10,800 | 6,800 | ----- | 10,500 | ----- | 9,160 | ----- | 2,340 | 2,440 | ----- |

| Month | Observed | | | Corrected for storage and diversion | | |
|-----------|----------|---------|--------|-------------------------------------|-----------------|-------------------|
| | Maximum | Minimum | Mean | Mean | Per square mile | Run-off in inches |
| October | 20,400 | 1,760 | 6,610 | 7,020 | 1.13 | 1.30 |
| November | 29,900 | 4,680 | 9,600 | 9,870 | 1.59 | 1.77 |
| December | 29,900 | 4,960 | 11,000 | 11,000 | 1.78 | 2.05 |
| January | 24,500 | 6,800 | 11,400 | 11,300 | 1.83 | 2.11 |
| February | 34,000 | 4,960 | 10,500 | 10,600 | 1.71 | 1.78 |
| March | 39,300 | 10,500 | 18,400 | 18,900 | 3.05 | 3.52 |
| April | 28,200 | 7,660 | 13,600 | 14,000 | 2.26 | 2.52 |
| May | 10,200 | 4,710 | 7,350 | 7,540 | 1.22 | 1.41 |
| June | 30,100 | 4,710 | 8,750 | 9,250 | 1.49 | 1.66 |
| July | 5,920 | 2,210 | 3,830 | 3,670 | .593 | .68 |
| August | 3,760 | 1,520 | 2,190 | 1,780 | .288 | .33 |
| September | 4,010 | 1,480 | 2,200 | 2,060 | .333 | .37 |
| The year | 39,300 | 1,480 | 8,780 | 8,900 | 1.44 | 19.50 |

DELAWARE RIVER AT TRENTON, N. J.

LOCATION.—Water-stage recorder 200 feet above Calhoun Street Bridge, Trenton, Mercer County, and half a mile above mouth of Assumpink Creek.

DRAINAGE AREA.—6,800 square miles.

RECORDS AVAILABLE.—February, 1913, to September, 1930.

EXTREMES.—Maximum discharge during year, 47,400 second-feet Mar. 10 (gauge height, 6.08 feet); minimum, not including flow in canals, 1,480 second-feet Aug. 13, 14 (gauge height, -0.25 foot).

1913-1930: Maximum discharge, about 160,000 second-feet Mar. 28-29, 1913 (gauge height, 13.3 feet); minimum, not including flow in canals, 1,240 second-feet several times in October and November, 1914 (gauge height, -0.40 foot).

REMARKS.—Records good. Discharge affected by ice Dec. 2-10, Jan. 24-31, Feb. 1-12, 18. Part of table of monthly discharge corrected for effect of storage on Wallenpaupack Creek and Mongaup River and for diversions by navigation and power canals.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|
| 1..... | 2,480 | 6,010 | 6,760 | 11,500 | 8,000 | 23,900 | 10,600 | 7,560 | 8,850 | 4,890 | 2,580 | 2,640 |
| 2..... | 5,700 | 6,010 | 6,000 | 10,200 | 7,500 | 20,300 | 10,000 | 7,560 | 7,800 | 4,530 | 2,360 | 2,640 |
| 3..... | 19,700 | 7,600 | 6,000 | 10,200 | 8,500 | 18,200 | 10,000 | 8,580 | 7,100 | 5,640 | 2,170 | 2,140 |
| 4..... | 21,300 | 9,600 | 6,500 | 11,500 | 9,000 | 16,500 | 9,700 | 8,310 | 6,660 | 5,840 | 2,070 | 2,120 |
| 5..... | 18,900 | 8,520 | 6,500 | 13,600 | 9,500 | 14,200 | 9,410 | 7,560 | 6,240 | 5,080 | 2,040 | 2,360 |
| 6..... | 13,600 | 8,520 | 7,000 | 12,200 | 9,000 | 12,800 | 9,130 | 7,100 | 5,640 | 4,530 | 1,920 | 2,330 |
| 7..... | 10,200 | 8,030 | 7,000 | 10,200 | 8,000 | 12,500 | 13,800 | 6,870 | 5,450 | 4,180 | 1,730 | 2,140 |
| 8..... | 8,030 | 7,160 | 7,000 | 10,200 | 7,500 | 23,800 | 26,500 | 6,600 | 5,640 | 3,940 | 1,970 | 2,440 |
| 9..... | 7,160 | 6,760 | 7,500 | 11,500 | 7,000 | 35,500 | 30,000 | 6,440 | 5,640 | 4,040 | 1,900 | 2,200 |
| 10..... | 6,380 | 6,380 | 7,500 | 13,600 | 7,000 | 43,000 | 23,900 | 6,240 | 7,230 | 6,650 | 2,040 | 2,090 |
| 11..... | 5,640 | 6,010 | 8,030 | 14,300 | 6,500 | 31,500 | 20,300 | 6,030 | 18,900 | 6,240 | 1,940 | 2,020 |
| 12..... | 5,280 | 5,640 | 7,580 | 12,900 | 6,000 | 28,500 | 17,800 | 5,640 | 31,500 | 5,080 | 1,730 | 2,140 |
| 13..... | 4,920 | 5,640 | 6,380 | 12,200 | 7,160 | 29,500 | 16,100 | 5,080 | 23,000 | 5,080 | 1,650 | 2,140 |
| 14..... | 4,570 | 5,640 | 6,760 | 14,600 | 9,040 | 26,600 | 15,700 | 5,080 | 16,900 | 4,360 | 1,650 | 2,090 |
| 15..... | 4,220 | 6,010 | 8,520 | 25,600 | 8,520 | 22,100 | 16,100 | 5,840 | 13,100 | 4,010 | 1,920 | 2,140 |
| 16..... | 4,050 | 6,010 | 14,300 | 25,600 | 7,580 | 19,900 | 15,700 | 8,310 | 10,900 | 3,940 | 2,020 | 2,250 |
| 17..... | 4,050 | 7,580 | 15,000 | 22,100 | 7,160 | 17,400 | 16,500 | 8,580 | 9,410 | 4,360 | 2,300 | 2,330 |
| 18..... | 3,880 | 12,300 | 15,500 | 18,900 | 7,000 | 16,500 | 17,400 | 8,060 | 8,310 | 4,530 | 2,170 | 2,800 |
| 19..... | 3,710 | 26,500 | 21,300 | 15,000 | 6,760 | 17,400 | 17,800 | 7,560 | 8,060 | 3,980 | 1,900 | 4,710 |
| 20..... | 3,710 | 33,400 | 30,400 | 11,500 | 7,580 | 20,300 | 16,100 | 7,100 | 7,100 | 3,980 | 1,870 | 4,010 |
| 21..... | 3,540 | 25,600 | 31,400 | 9,600 | 9,600 | 21,200 | 14,500 | 7,320 | 6,660 | 3,350 | 2,250 | 3,380 |
| 22..... | 3,710 | 20,500 | 24,700 | 10,800 | 12,900 | 17,800 | 13,400 | 7,100 | 6,240 | 3,100 | 2,250 | 2,820 |
| 23..... | 5,890 | 16,500 | 18,900 | 12,200 | 21,200 | 15,300 | 12,200 | 6,870 | 5,840 | 3,290 | 2,580 | 2,410 |
| 24..... | 10,200 | 14,300 | 15,700 | 11,000 | 22,900 | 13,100 | 11,600 | 6,660 | 5,260 | 3,480 | 2,790 | 2,250 |
| 25..... | 12,900 | 12,200 | 12,900 | 9,500 | 28,800 | 12,500 | 11,200 | 7,100 | 5,080 | 4,580 | 3,480 | 2,200 |
| 26..... | 10,800 | 10,800 | 12,200 | 8,500 | 25,700 | 13,400 | 10,600 | 9,700 | 4,710 | 3,680 | 3,980 | 2,070 |
| 27..... | 8,520 | 10,800 | 11,500 | 8,000 | 36,600 | 14,500 | 10,000 | 10,000 | 4,890 | 3,540 | 3,740 | 1,850 |
| 28..... | 7,160 | 9,600 | 11,500 | 9,000 | 31,500 | 14,500 | 9,700 | 10,000 | 5,080 | 3,040 | 3,770 | 1,990 |
| 29..... | 6,760 | 9,040 | 12,200 | 10,000 | ----- | 13,400 | 8,580 | 8,850 | 5,450 | 2,730 | 3,290 | 1,970 |
| 30..... | 6,380 | 8,030 | 13,600 | 9,500 | ----- | 12,200 | 8,310 | 9,130 | 5,260 | 2,790 | 2,940 | 1,800 |
| 31..... | 6,010 | ----- | 12,200 | 8,500 | ----- | 10,900 | ----- | 9,130 | ----- | 2,700 | 2,730 | ----- |

| Month | Observed | | | Corrected for storage and diversion | | |
|----------------|----------|---------|--------|-------------------------------------|-----------------|-------------------|
| | Maximum | Minimum | Mean | Mean | Per square mile | Run-off in inches |
| October..... | 21,300 | 2,480 | 7,720 | 8,170 | 1.20 | 1.38 |
| November..... | 33,400 | 5,640 | 10,900 | 11,200 | 1.65 | 1.84 |
| December..... | 31,400 | 6,000 | 12,200 | 12,400 | 1.82 | 2.10 |
| January..... | 25,600 | 8,000 | 12,700 | 12,800 | 1.88 | 2.17 |
| February..... | 36,600 | 6,000 | 12,800 | 12,400 | 1.82 | 1.90 |
| March..... | 43,000 | 10,900 | 19,700 | 20,500 | 3.01 | 3.47 |
| April..... | 30,000 | 8,310 | 14,400 | 14,900 | 2.19 | 2.44 |
| May..... | 10,000 | 5,080 | 7,480 | 7,750 | 1.14 | 1.31 |
| June..... | 31,500 | 4,710 | 8,930 | 9,500 | 1.40 | 1.56 |
| July..... | 6,650 | 2,700 | 4,220 | 4,100 | .603 | .70 |
| August..... | 3,980 | 1,650 | 2,380 | 1,930 | .284 | .33 |
| September..... | 4,710 | 1,800 | 2,420 | 2,240 | .329 | .37 |
| The year..... | 43,000 | 1,650 | 9,590 | 9,810 | 1.44 | 19.57 |

BEAVER KILL AT COOKS FALLS, N. Y.

LOCATION.—Staff gage at highway bridge in Cooks Falls, Delaware County, 5½ miles below mouth of Willowemoc Creek.

DRAINAGE AREA.—241 square miles.

RECORDS AVAILABLE.—July, 1913, to September, 1930.

EXTREMES.—Maximum discharge during year, 4,130 second-feet June 10 (gage height, 8.2 feet); minimum, 39 second-feet Aug. 14 (gage height, 0.90 foot).
1913-1930: Maximum discharge, about 14,600 second-feet Nov. 16, 1926 (gage height, about 16.0 feet); minimum, about 23 second-feet Sept. 14-16, 1913 (gage height, 0.60 foot).

REMARKS.—Records good except those for period of ice effect Jan. 18 to Feb. 20, and those estimated, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept |
|---------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-------|------|-------|
| 1..... | 63 | * 240 | 258 | 351 | 170 | 1,240 | 398 | 270 | 322 | * 170 | 58 | 47 |
| 2..... | 571 | * 260 | 258 | 366 | 180 | 1,060 | 450 | 270 | 282 | * 170 | 56 | 85 |
| 3..... | 700 | * 300 | 295 | 490 | 180 | 700 | 398 | 295 | 270 | * 160 | 53 | 85 |
| 4..... | 432 | 450 | 246 | 450 | 170 | 530 | 366 | 258 | 246 | 147 | 49 | 82 |
| 5..... | 282 | 366 | 258 | 366 | 160 | 432 | 351 | 246 | 223 | 147 | 48 | 77 |
| 6..... | 223 | 336 | 270 | 351 | 150 | 450 | 382 | 234 | 212 | 138 | 47 | 75 |
| 7..... | 192 | 322 | 282 | 398 | 140 | 440 | 2,390 | 223 | 202 | 130 | 45 | 72 |
| 8..... | 183 | 295 | 366 | 570 | 140 | 3,000 | 1,520 | 223 | 202 | 122 | 45 | 108 |
| 9..... | 164 | 282 | 336 | 1,240 | 130 | 2,530 | 1,060 | 223 | 246 | 114 | 43 | 99 |
| 10..... | 156 | 270 | 270 | 790 | 130 | 1,300 | 840 | 202 | 2,430 | 165 | 43 | 85 |
| 11..... | 138 | 258 | 202 | 530 | 130 | 1,240 | 700 | 192 | 2,400 | 156 | 42 | 72 |
| 12..... | 130 | 234 | 164 | 570 | 130 | 1,730 | 840 | 183 | 1,180 | 130 | 41 | 60 |
| 13..... | 122 | 234 | 270 | 940 | 130 | 1,240 | 745 | 174 | 745 | 122 | 41 | 58 |
| 14..... | 115 | 223 | 940 | 1,600 | 140 | 1,000 | 890 | 164 | 610 | 130 | 40 | 57 |
| 15..... | 115 | 490 | 700 | 1,420 | 140 | 840 | 745 | 246 | 490 | 122 | 62 | 85 |
| 16..... | 115 | 490 | 610 | 1,000 | 130 | 790 | 655 | 270 | 421 | 114 | 80 | 419 |
| 17..... | 110 | 470 | 890 | 610 | 130 | 1,060 | 610 | 234 | 358 | 102 | 70 | 421 |
| 18..... | 109 | 1,960 | 1,240 | 420 | 120 | 1,180 | 610 | 202 | 358 | 96 | 58 | * 300 |
| 19..... | 102 | 1,540 | 3,080 | 380 | 150 | 1,730 | * 570 | 192 | 438 | 89 | 53 | * 200 |
| 20..... | 100 | 1,510 | 2,150 | 320 | 200 | 1,360 | * 530 | 234 | 358 | 85 | 49 | * 140 |
| 21..... | 96 | 790 | 1,540 | 300 | 774 | 1,000 | * 500 | 223 | 301 | 82 | 47 | * 110 |
| 22..... | 111 | 700 | 1,180 | 260 | 1,000 | 745 | 470 | 212 | 275 | 75 | 46 | 91 |
| 23..... | 2,040 | 570 | 610 | 240 | 1,180 | 610 | 432 | 223 | 227 | 156 | 234 | 84 |
| 24..... | 790 | 470 | 530 | 220 | 1,730 | 490 | 415 | 223 | 216 | 88 | 329 | 75 |
| 25..... | * 500 | 398 | 570 | 220 | 1,820 | 570 | 398 | 295 | 194 | 80 | 165 | 72 |
| 26..... | * 360 | 352 | 530 | 200 | 2,890 | 655 | 366 | 336 | * 300 | 72 | 122 | 70 |
| 27..... | * 300 | 366 | 490 | 200 | 2,310 | 570 | 336 | 308 | * 320 | 86 | 86 | 67 |
| 28..... | * 260 | 351 | 450 | 200 | 1,360 | 530 | 308 | 308 | * 240 | 75 | 77 | 64 |
| 29..... | * 220 | 270 | 415 | 190 | ----- | 450 | 295 | 610 | * 200 | 70 | 67 | 62 |
| 30..... | * 200 | 258 | 382 | 180 | ----- | 432 | 282 | 450 | * 180 | 67 | 58 | 60 |
| 31..... | * 200 | ----- | 351 | 180 | ----- | 432 | ----- | 351 | ----- | 62 | 49 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 2,040 | 63 | 297 | 1.23 | 1.42 |
| November..... | 1,980 | 223 | 504 | 2.09 | 2.33 |
| December..... | 3,080 | 164 | 649 | 2.69 | 3.10 |
| January..... | 1,600 | 180 | 502 | 2.08 | 2.40 |
| February..... | 2,890 | 120 | 572 | 2.37 | 2.47 |
| March..... | 3,000 | 432 | 982 | 4.07 | 4.69 |
| April..... | 2,390 | 282 | 628 | 2.61 | 2.91 |
| May..... | 610 | 164 | 260 | 1.08 | 1.24 |
| June..... | 2,430 | * 180 | 482 | 2.00 | 2.23 |
| July..... | * 170 | 62 | 114 | .473 | .55 |
| August..... | 329 | 40 | 74.3 | .308 | .36 |
| September..... | 421 | 47 | 113 | .469 | .52 |
| The year..... | 3,080 | 40 | 430 | 1.78 | 24.22 |

* Estimated.

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 mouth of Cattail Brook.

DRAINAGE AREA.—19.8 square miles.

RECORDS AVAILABLE.—July, 1924, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,430 second-feet June 10 (gage height, 5.5 feet); minimum, 2.2 second-feet Aug. 9, 10, 12 (gage height, 0.73 foot).

1924-1930: Maximum discharge, 3,420 second-feet Aug. 26, 1928 (gage height, 8.7 feet); minimum, that of Aug. 9, 10, 12, 1930.

REMARKS.—Records fair. Periods of ice effect Nov. 30 to Dec. 6, Dec. 11-13, Jan. 5-7, Jan. 19 to Feb. 22, Mar. 4-6. Diversion from Lily Pond for Liberty water supply.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1. | 4.2 | 23 | 12 | 21 | 15 | 62 | 21 | 16 | 16 | 14 | 3.8 | 8.4 |
| 2. | 83 | 19 | 11 | 26 | 17 | 59 | 29 | 19 | 18 | 16 | 3.4 | 9.7 |
| 3. | 79 | 52 | 11 | 47 | 18 | 45 | 21 | 26 | 12 | 13 | 3.0 | 8.4 |
| 4. | 29 | 56 | 11 | 35 | 16 | 34 | 20 | 16 | 10 | 12 | 3.0 | 7.2 |
| 5. | 17 | 34 | 12 | 26 | 14 | 32 | 18 | 14 | 9.0 | 8.4 | 2.9 | 4.8 |
| 6. | 15 | 25 | 14 | 24 | 14 | 32 | 21 | 13 | 12 | 12 | 2.6 | 6.7 |
| 7. | 13 | 23 | 14 | 28 | 13 | 35 | 315 | 14 | 11 | 13 | 2.4 | 6.2 |
| 8. | 9.4 | 20 | 36 | 72 | 12 | 508 | 119 | 15 | 9.7 | 10 | 2.6 | 13 |
| 9. | 9.1 | 19 | 28 | 97 | 12 | 214 | 62 | 13 | 29 | 7.7 | 2.3 | 7.2 |
| 10. | 8.2 | 18 | 20 | 69 | 13 | 84 | 50 | 11 | 985 | 26 | 2.3 | 5.7 |
| 11. | 8.2 | 17 | 13 | 52 | 12 | 92 | 43 | 9.7 | 220 | 9.7 | 2.4 | 4.8 |
| 12. | 7.0 | 16 | 11 | 42 | 11 | 119 | 46 | 9.4 | 87 | 10 | 2.3 | 4.4 |
| 13. | 7.3 | 16 | 34 | 132 | 14 | 87 | 47 | 8.4 | 56 | 7.2 | 2.4 | 4.8 |
| 14. | 6.7 | 25 | 151 | 151 | 16 | 66 | 62 | 9.4 | 43 | 11 | 2.9 | 6.0 |
| 15. | 6.7 | 107 | 103 | 117 | 13 | 50 | 45 | 23 | 33 | 9.0 | 9.4 | 6.7 |
| 16. | 6.4 | 56 | 61 | 75 | 13 | 45 | 35 | 24 | 26 | 7.2 | 5.7 | 52 |
| 17. | 7.0 | 39 | 157 | 55 | 12 | 47 | 37 | 18 | 23 | 7.2 | 5.7 | 52 |
| 18. | 6.7 | 322 | 235 | 37 | 12 | 57 | 47 | 13 | 45 | 5.7 | 9.7 | 19 |
| 19. | 6.2 | 147 | 282 | 36 | 15 | 98 | 46 | 16 | 37 | 4.8 | 4.8 | 12 |
| 20. | 6.2 | 75 | 208 | 30 | 28 | 59 | 33 | 27 | 24 | 5.7 | 4.8 | 9.4 |
| 21. | 5.7 | 54 | 91 | 28 | 50 | 40 | 27 | 18 | 19 | 4.4 | 3.8 | 8.4 |
| 22. | 32 | 32 | 63 | 26 | 70 | 35 | 30 | 15 | 16 | 8.0 | 3.4 | 7.2 |
| 23. | 186 | 30 | 41 | 24 | 103 | 35 | 29 | 13 | 14 | 7.7 | 118 | 7.7 |
| 24. | 52 | 30 | 48 | 22 | 123 | 32 | 23 | 13 | 11 | 5.7 | 140 | 6.7 |
| 25. | 34 | 25 | 38 | 19 | 309 | 39 | 21 | 53 | 12 | 4.8 | 13 | 6.4 |
| 26. | 22 | 22 | 33 | 19 | 266 | 62 | 20 | 29 | 11 | 4.2 | 8.4 | 7.2 |
| 27. | 21 | 23 | 30 | 19 | 139 | 37 | 18 | 24 | 33 | 4.2 | 6.2 | 6.7 |
| 28. | 18 | 21 | 29 | 18 | 81 | 29 | 17 | 23 | 16 | 4.2 | 4.8 | 5.7 |
| 29. | 16 | 16 | 25 | 18 | ----- | 26 | 16 | 41 | 11 | 4.0 | 4.4 | 5.7 |
| 30. | 14 | 13 | 25 | 16 | ----- | 26 | 15 | 26 | 11 | 3.6 | 4.2 | 5.2 |
| 31. | 18 | ----- | 22 | 16 | ----- | 24 | ----- | 19 | ----- | 3.6 | 4.0 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 186 | 4.2 | 24.3 | 1.23 | 1.42 |
| November | 322 | 13 | 45.8 | 2.31 | 2.58 |
| December | 282 | 11 | 60.3 | 3.05 | 3.52 |
| January | 151 | 16 | 45.1 | 2.28 | 2.63 |
| February | 309 | 11 | 51.1 | 2.58 | 2.69 |
| March | 508 | 24 | 71.3 | 3.60 | 4.15 |
| April | 315 | 15 | 44.4 | 2.24 | 2.50 |
| May | 53 | 8.4 | 19.0 | .960 | 1.11 |
| June | 985 | 9.0 | 62.0 | 3.13 | 3.49 |
| July | 26 | 3.6 | 8.52 | .430 | .50 |
| August | 140 | 2.3 | 12.5 | .631 | .73 |
| September | 52 | 4.4 | 10.5 | .530 | .59 |
| The year | 985 | 2.3 | 37.8 | 1.91 | 25.91 |

WEST BRANCH OF DELAWARE RIVER AT HALE EDDY, N. Y.

LOCATION.—Water-stage recorder at highway bridge in Hale Eddy, Delaware County, 9 miles above confluence with East Branch.

DRAINAGE AREA.—603 square miles.

RECORDS AVAILABLE.—November, 1912, to September, 1930.

EXTREMES.—Maximum discharge during year, 6,520 second-feet Dec. 20 (gage height, 8.3 feet); minimum, 49 second-feet Aug. 13 (gage height, 1.21 feet).

1912-1930: Maximum discharge, about 26,500 second-feet Sept. 30, 1924 (gage height, about 15.8 feet); minimum, 34 second-feet Sept. 21, 1913 (gage height, 1.0 foot).

Maximum discharge known, about 46,000 second-feet Oct. 10, 1903 (gage height, 20.3 feet).

REMARKS.—Records good except those for periods of ice effect, Dec. 2-6, 23-27, Feb. 1, 2, 6-25, and those estimated, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----------|---------|-------|---------|-------|-------|-------|-----------------|-------|-------------------|------|------|-------|
| 1 | 228 | 348 | 444 | 772 | 440 | 2,160 | 829 | 383 | 894 | 243 | 82 | 88 |
| 2 | 1,660 | 356 | 500 | 1,150 | 440 | 2,160 | 858 | 400 | 766 | 300 | 71 | 122 |
| 3 | 3,460 | 474 | 500 | 2,210 | 473 | 1,790 | 840 | 623 | 655 | 356 | 67 | 226 |
| 4 | 2,000 | 660 | 500 | 1,700 | 478 | 1,450 | 754 | 613 | 567 | 256 | 67 | 212 |
| 5 | 1,290 | 613 | 500 | 1,120 | 429 | 1,330 | 698 | 464 | 491 | 215 | 66 | 154 |
| 6 | 990 | 557 | 550 | 1,180 | 440 | 1,260 | 655 | 433 | 455 | 228 | 62 | 124 |
| 7 | 812 | 496 | 582 | 1,450 | 420 | 1,220 | 1,850 | 429 | 634 | 263 | 64 | 110 |
| 8 | 720 | 464 | 789 | 1,700 | 420 | 3,630 | 2,360 | 438 | 538 | 200 | 60 | 122 |
| 9 | 618 | 455 | 1,120 | 2,020 | 420 | 4,420 | 1,970 | 412 | 464 | 183 | 60 | 98 |
| 10 | 519 | 433 | 840 | 2,060 | 400 | 2,890 | 1,700 | 375 | 1,310 | 456 | 55 | 86 |
| 11 | 447 | 425 | 644 | 1,530 | 400 | 2,860 | 1,530 | 341 | 2,020 | 273 | 51 | 77 |
| 12 | 400 | 408 | 429 | 1,570 | 420 | 3,610 | 1,450 | 318 | 1,260 | 228 | 51 | 74 |
| 13 | 375 | 395 | 545 | 2,870 | 440 | 2,060 | 1,410 | 294 | 1,020 | 198 | 50 | 72 |
| 14 | 348 | 408 | 1,120 | 3,870 | 480 | 2,790 | 1,570 | 294 | 846 | 507 | 56 | 75 |
| 15 | 322 | 732 | 1,490 | 3,480 | 460 | 2,060 | 1,290 | 352 | 728 | 433 | 62 | 86 |
| 16 | 300 | 900 | 1,220 | 2,780 | 440 | 1,840 | 1,150 | 501 | 618 | 322 | 68 | 144 |
| 17 | 308 | 766 | 1,220 | 1,970 | 420 | 2,010 | 1,050 | 421 | 533 | 243 | 69 | 124 |
| 18 | 300 | 2,260 | 3,320 | 1,570 | 420 | 2,460 | 1,020 | 348 | 491 | 203 | 66 | 134 |
| 19 | 294 | 3,480 | 4,380 | 1,150 | 440 | 3,480 | 960 | 341 | 533 | 183 | 64 | 113 |
| 20 | 263 | 2,460 | 5,490 | * 950 | 480 | 2,700 | 864 | 421 | 500 | 161 | 67 | 94 |
| 21 | 243 | 1,880 | 3,120 | * 850 | 1,000 | 2,360 | 766 | 421 | 460 | 138 | 66 | 88 |
| 22 | 294 | 1,530 | 2,160 | * 750 | 2,000 | 1,700 | 732 | 400 | 383 | 141 | 64 | 75 |
| 23 | 655 | 1,220 | 1,700 | * 650 | 2,200 | 1,410 | 704 | 364 | 328 | 164 | 134 | 69 |
| 24 | 715 | 1,050 | 1,300 | * 600 | 3,400 | 1,290 | 650 | 352 | 300 | 161 | 237 | 64 |
| 25 | 538 | 960 | 1,200 | * 550 | 2,600 | 1,220 | 629 | 696 | 348 | 154 | 294 | 64 |
| 26 | 478 | 840 | 1,100 | * 500 | 4,560 | 1,450 | 608 | 704 | 300 | 131 | 180 | 60 |
| 27 | 429 | 777 | 1,800 | * 500 | 3,360 | 1,330 | 548 | 639 | 550 | 129 | 131 | 98 |
| 28 | 387 | 772 | 1,120 | * 480 | 2,510 | 1,080 | 491 | 705 | 450 | 122 | 110 | 102 |
| 29 | 348 | 603 | 990 | * 480 | ----- | 1,020 | 438 | 1,330 | 318 | 113 | 94 | 134 |
| 30 | 333 | 330 | 876 | * 460 | ----- | 960 | 395 | 1,180 | 263 | 104 | 86 | 108 |
| 31 | 333 | ----- | 800 | * 460 | ----- | 900 | ----- | 1,020 | ----- | 90 | 83 | ----- |
| Month | Maximum | | Minimum | | Mean | | Per square mile | | Run-off in inches | | | |
| October | 3,460 | | 228 | | 658 | | 1.09 | | 1.26 | | | |
| November | 3,480 | | 330 | | 902 | | 1.50 | | 1.67 | | | |
| December | 5,490 | | 429 | | 1,370 | | 2.27 | | 2.62 | | | |
| January | 3,870 | | * 460 | | 1,400 | | 2.32 | | 2.68 | | | |
| February | 4,560 | | 400 | | 1,090 | | 1.81 | | 1.88 | | | |
| March | 4,420 | | 900 | | 2,060 | | 3.42 | | 3.94 | | | |
| April | 2,360 | | 395 | | 1,030 | | 1.71 | | 1.91 | | | |
| May | 1,330 | | 294 | | 517 | | .857 | | .99 | | | |
| June | 2,020 | | 263 | | 634 | | 1.05 | | 1.17 | | | |
| July | 507 | | 90 | | 223 | | .370 | | .43 | | | |
| August | 294 | | 50 | | 88.3 | | .146 | | .17 | | | |
| September | 226 | | 64 | | 107 | | .177 | | .20 | | | |
| The year | 5,490 | | 50 | | 838 | | 1.39 | | 18.92 | | | |

* Estimated.

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, 1930.

REMARKS.—Records good. Flow computed from output of generator. No discharge over spillway. Daily discharge not corrected for storage. Records of power-plant operation and elevations of water surface in reservoir and tailrace furnished by Pennsylvania Power & Light Co.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1 | 332 | 296 | 367 | 235 | 548 | 407 | 627 | 372 | 10 | 200 | 247 | 88 |
| 2 | 250 | 212 | 491 | 301 | 178 | 140 | 603 | 328 | 360 | 176 | 378 | 254 |
| 3 | 161 | 243 | 487 | 546 | 595 | 505 | 623 | 159 | 274 | 216 | 0 | 353 |
| 4 | 199 | 258 | 545 | 442 | 636 | 331 | 755 | 0 | 322 | 0 | 312 | 294 |
| 5 | 3 | 326 | 544 | 152 | 630 | 382 | 344 | 346 | 305 | 63 | 287 | 404 |
| 6 | 202 | 189 | 515 | 534 | 729 | 457 | 210 | 327 | 260 | 0 | 400 | 255 |
| 7 | 83 | 344 | 521 | 324 | 640 | 606 | 721 | 462 | 234 | 315 | 519 | 96 |
| 8 | 130 | 498 | 92 | 425 | 550 | 361 | 542 | 469 | 0 | 333 | 295 | 239 |
| 9 | 22 | 300 | 516 | 489 | 166 | 188 | 320 | 441 | 248 | 277 | 183 | 406 |
| 10 | 93 | 0 | 636 | 555 | 656 | 324 | 436 | 457 | 273 | 398 | 44 | 428 |
| 11 | 321 | 281 | 649 | 457 | 406 | 621 | 357 | 143 | 402 | 288 | 501 | 371 |
| 12 | 222 | 360 | 666 | 230 | 346 | 572 | 152 | 418 | 372 | 303 | 302 | 426 |
| 13 | 8 | 462 | 541 | 618 | 344 | 609 | 160 | 255 | 129 | 0 | 275 | 351 |
| 14 | 209 | 429 | 394 | 632 | 270 | 309 | 341 | 412 | 52 | 325 | 437 | 97 |
| 15 | 209 | 317 | 315 | 488 | 520 | 240 | 408 | 281 | 51 | 458 | 24 | 323 |
| 16 | 281 | 142 | 582 | 399 | 150 | 168 | 489 | 371 | 94 | 475 | 190 | 371 |
| 17 | 264 | 201 | 425 | 484 | 349 | 229 | 388 | 294 | 119 | 395 | 0 | 264 |
| 18 | 325 | 371 | 494 | 538 | 310 | 413 | 86 | 146 | 25 | 365 | 577 | 369 |
| 19 | 192 | 303 | 583 | 275 | 328 | 376 | 82 | 251 | 65 | 242 | 466 | 286 |
| 20 | 0 | 449 | 479 | 591 | 329 | 354 | 111 | 171 | 105 | 0 | 413 | 208 |
| 21 | 252 | 390 | 459 | 472 | 440 | 377 | 142 | 370 | 94 | 510 | 521 | 57 |
| 22 | 235 | 447 | 314 | 374 | 345 | 140 | 285 | 338 | 28 | 465 | 429 | 462 |
| 23 | 233 | 363 | 660 | 384 | 164 | 147 | 549 | 322 | 184 | 407 | 573 | 215 |
| 24 | 367 | 255 | 337 | 526 | 477 | 317 | 588 | 262 | 109 | 352 | 136 | 184 |
| 25 | 319 | 749 | 243 | 357 | 339 | 331 | 417 | 62 | 150 | 293 | 577 | 187 |
| 26 | 131 | 421 | 70 | 191 | 712 | 464 | 523 | 641 | 220 | 222 | 473 | 120 |
| 27 | 147 | 617 | 449 | 669 | 642 | 533 | 151 | 372 | 620 | 32 | 501 | 79 |
| 28 | 173 | 232 | 493 | 462 | 414 | 393 | 352 | 644 | 163 | 493 | 530 | 70 |
| 29 | 176 | 405 | 283 | 602 | ----- | 104 | 325 | 166 | 10 | 315 | 575 | 289 |
| 30 | 491 | 611 | 394 | 571 | ----- | 158 | 393 | 35 | 216 | 299 | 603 | 270 |
| 31 | 431 | ----- | 126 | 617 | ----- | 344 | ----- | 4 | ----- | 344 | 78 | ----- |

| Month | Observed | | | Corrected for storage | | |
|-----------|----------|---------|------|-----------------------|-----------------|-------------------|
| | Maximum | Minimum | Mean | Mean | Per square mile | Run-off in inches |
| October | 491 | 0 | 208 | 391 | 1.72 | 1.98 |
| November | 749 | 0 | 349 | 404 | 1.78 | 1.99 |
| December | 666 | 70 | 441 | 331 | 1.46 | 1.68 |
| January | 669 | 152 | 450 | 342 | 1.51 | 1.74 |
| February | 729 | 150 | 436 | 282 | 1.24 | 1.29 |
| March | 621 | 104 | 352 | 640 | 2.82 | 3.25 |
| April | 755 | 82 | 383 | 561 | 2.47 | 2.76 |
| May | 644 | 0 | 301 | 234 | 1.03 | 1.19 |
| June | 620 | 0 | 183 | 373 | 1.64 | 1.83 |
| July | 510 | 0 | 276 | 63.4 | .279 | .32 |
| August | 603 | 0 | 350 | -42.7 | -.188 | -.22 |
| September | 462 | 57 | 261 | -3.0 | -.013 | -.01 |
| The year | 755 | 0 | 332 | 298 | 1.31 | 17.80 |

NEVERSINK RIVER AT OAKLAND VALLEY, N. Y.

LOCATION.—Water-stage recorder 250 feet below highway bridge known as Paradise Bridge, Orange County, and three-fourths mile south of Oakland Valley, Sullivan County.

DRAINAGE AREA.—221 square miles.

RECORDS AVAILABLE.—July, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 5,840 second-feet June 10 (gage height, 7.3 feet); minimum, 48 second-feet Oct. 1 (gage height, 1.48 feet).

1928-1930: Maximum discharge, 13,000 second-feet Aug. 26, 1928 (gage height, 10.1 feet); minimum, 42 second-feet Sept. 4, 1929 (gage height, 1.43 feet).

REMARKS.—Records excellent except those for periods of ice effect, Nov. 30 to Dec. 6, Dec. 24, 25, Jan. 5, 6, 11, Jan. 20 to Feb. 24, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | 49 | 222 | 300 | 340 | 260 | 750 | 438 | 269 | 236 | 181 | 92 | 98 |
| 2..... | 105 | 228 | 300 | 336 | 260 | 712 | 443 | 285 | 219 | 251 | 94 | 111 |
| 3..... | 422 | 294 | 300 | 485 | 260 | 610 | 422 | 331 | 203 | 190 | 79 | 115 |
| 4..... | 320 | 480 | 280 | 539 | 260 | 517 | 392 | 305 | 187 | 181 | 77 | 113 |
| 5..... | 190 | 349 | 320 | 340 | 260 | 459 | 359 | 265 | 172 | 163 | 75 | 96 |
| 6..... | 144 | 289 | 340 | 360 | 240 | 464 | 319 | 251 | 169 | 175 | 70 | 88 |
| 7..... | 130 | 259 | 375 | 388 | 220 | 443 | 2,180 | 243 | 298 | 236 | 67 | 81 |
| 8..... | 110 | 249 | 384 | 470 | 220 | 2,620 | 1,540 | 254 | 240 | 190 | 65 | 102 |
| 9..... | 96 | 228 | 469 | 616 | 200 | 2,400 | 928 | 240 | 256 | 155 | 67 | 111 |
| 10..... | 89 | 219 | 328 | 530 | 200 | 1,210 | 736 | 219 | 3,070 | 187 | 65 | 93 |
| 11..... | 84 | 210 | 259 | 420 | 190 | 1,040 | 658 | 203 | 2,530 | 169 | 64 | 84 |
| 12..... | 80 | 200 | 258 | 393 | 190 | 1,450 | 664 | 196 | 1,090 | 142 | 64 | 86 |
| 13..... | 80 | 191 | 390 | 649 | 220 | 1,040 | 664 | 187 | 736 | 134 | 65 | 81 |
| 14..... | 77 | 222 | 1,020 | 990 | 240 | 895 | 712 | 187 | 582 | 147 | 65 | 94 |
| 15..... | 75 | 501 | 783 | 950 | 200 | 700 | 622 | 358 | 480 | 163 | 77 | 102 |
| 16..... | 75 | 520 | 592 | 777 | 180 | 658 | 555 | 478 | 397 | 137 | 84 | 151 |
| 17..... | 72 | 375 | 564 | 521 | 170 | 682 | 533 | 327 | 354 | 115 | 102 | 282 |
| 18..... | 70 | 1,290 | 1,240 | 460 | 170 | 756 | 582 | 258 | 493 | 113 | 94 | 186 |
| 19..... | 70 | 1,400 | 2,330 | 416 | 170 | 1,240 | 599 | 269 | 490 | 107 | 84 | 129 |
| 20..... | 70 | 812 | 1,700 | 380 | 240 | 860 | 544 | 368 | 387 | 100 | 81 | 115 |
| 21..... | 70 | 616 | 1,010 | 360 | 1,000 | 718 | 474 | 318 | 314 | 94 | 75 | 102 |
| 22..... | 148 | 500 | 738 | 340 | 1,000 | 555 | 459 | 265 | 269 | 94 | 75 | 86 |
| 23..... | 2,520 | 425 | 552 | 320 | 900 | 480 | 433 | 240 | 236 | 100 | 102 | 79 |
| 24..... | 814 | 388 | 500 | 300 | 900 | 485 | 397 | 216 | 219 | 134 | 446 | 77 |
| 25..... | 470 | 375 | 480 | 300 | 1,060 | 658 | 373 | 425 | 209 | 120 | 225 | 92 |
| 26..... | 345 | 332 | 470 | 280 | 2,200 | 1,040 | 359 | 401 | 203 | 104 | 142 | 86 |
| 27..... | 285 | 316 | 445 | 280 | 1,250 | 786 | 336 | 297 | 324 | 96 | 137 | 77 |
| 28..... | 242 | 320 | 420 | 280 | 895 | 622 | 309 | 261 | 261 | 88 | 117 | 72 |
| 29..... | 219 | 296 | 420 | 280 | ----- | 550 | 289 | 368 | 203 | 90 | 100 | 69 |
| 30..... | 206 | 300 | 379 | 260 | ----- | 512 | 273 | 323 | 181 | 83 | 94 | 62 |
| 31..... | 197 | ----- | 349 | 260 | ----- | 469 | ----- | 269 | ----- | 79 | 90 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 2,520 | 49 | 256 | 1.16 | 1.34 |
| November..... | 1,400 | 191 | 414 | 1.87 | 2.09 |
| December..... | 2,330 | 258 | 590 | 2.67 | 3.08 |
| January..... | 990 | 260 | 439 | 1.99 | 2.29 |
| February..... | 2,200 | 170 | 481 | 2.18 | 2.27 |
| March..... | 2,620 | 443 | 851 | 3.85 | 4.44 |
| April..... | 2,180 | 273 | 587 | 2.66 | 2.97 |
| May..... | 478 | 187 | 286 | 1.29 | 1.49 |
| June..... | 3,070 | 169 | 500 | 2.26 | 2.52 |
| July..... | 251 | 79 | 139 | .629 | .73 |
| August..... | 446 | 64 | 101 | .457 | .53 |
| September..... | 282 | 62 | 104 | .471 | .53 |
| The year..... | 3,070 | 49 | 395 | 1.79 | 24.28 |

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, 1930.

EXTREMES.—Maximum discharge during year, 527 second-feet June 10 (gage height, 3.68 feet); minimum, 5.7 second-feet Sept. 25 (gage height, 1.66 feet).
1923-1930: Maximum discharge, about 2,350 second-feet Apr. 7, 1924, Feb. 11, 1925 (gage height, 7.1 feet); minimum, 4 second-feet Sept. 6, 7, 1923 (gage height, 1.35 feet).

REMARKS.—Records excellent except those for periods affected by ice, Nov. 30, Dec. 1, 2, 22-26, Jan. 17-31, Feb. 4, 5, 16-18, which are fair. Slight regulation by operation of power plant upstream.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 18.1 | 33 | 44 | 87 | 58 | 127 | 99 | 83 | 69 | 37 | 15.7 | 15.1 |
| 2..... | 49 | 32 | 44 | 89 | 58 | 130 | 97 | 109 | 62 | 58 | 15.1 | 16.3 |
| 3..... | 138 | 37 | 43 | 109 | 58 | 119 | 87 | 130 | 55 | 50 | 15.1 | 32 |
| 4..... | 73 | 58 | 43 | 109 | 60 | 101 | 85 | 104 | 50 | 39 | 14.5 | 22 |
| 5..... | 46 | 50 | 43 | 73 | 55 | 97 | 81 | 87 | 46 | 35 | 14.5 | 17.5 |
| 6..... | 43 | 43 | 42 | 79 | 55 | 94 | 79 | 83 | 46 | 34 | 14.0 | 16.3 |
| 7..... | 43 | 39 | 43 | 83 | 55 | 92 | 227 | 77 | 53 | 33 | 14.0 | 15.7 |
| 8..... | 37 | 36 | 47 | 85 | 53 | 300 | 245 | 75 | 47 | 30 | 13.4 | 18.1 |
| 9..... | 28 | 35 | 50 | 87 | 50 | 366 | 176 | 69 | 57 | 29 | 13.4 | 18.1 |
| 10..... | 25 | 34 | 46 | 81 | 52 | 245 | 144 | 64 | 288 | 36 | 12.9 | 16.9 |
| 11..... | 23 | 33 | 42 | 67 | 50 | 214 | 130 | 60 | 369 | 34 | 12.9 | 15.1 |
| 12..... | 23 | 32 | 34 | 73 | 50 | 282 | 122 | 58 | 201 | 29 | 16.8 | 15.1 |
| 13..... | 23 | 32 | 42 | 97 | 58 | 224 | 124 | 57 | 138 | 26 | 9.1 | 15.1 |
| 14..... | 22 | 32 | 58 | 122 | 97 | 179 | 144 | 55 | 111 | 30 | 12.4 | 18.1 |
| 15..... | 21 | 33 | 87 | 170 | 87 | 155 | 124 | 109 | 89 | 32 | 16.3 | 18.8 |
| 16..... | 21 | 35 | 79 | 135 | 50 | 147 | 135 | 124 | 77 | 26 | 20 | 18.1 |
| 17..... | 21 | 34 | 64 | 90 | 50 | 141 | 161 | 94 | 67 | 24 | 17.5 | 37 |
| 18..... | 20 | 164 | 71 | 75 | 60 | 138 | 211 | 77 | 81 | 23 | 19.5 | 34 |
| 19..... | 20 | 234 | 133 | 65 | 69 | 155 | 179 | 81 | 85 | 21 | 20 | 23 |
| 20..... | 20 | 150 | 122 | 65 | 111 | 135 | 155 | 109 | 65 | 20 | 15.7 | 18.8 |
| 21..... | 19.5 | 114 | 83 | 75 | 205 | 119 | 138 | 89 | 57 | 19.5 | 15.1 | 16.3 |
| 22..... | 26 | 92 | 50 | 70 | 231 | 109 | 135 | 73 | 53 | 20 | 14.5 | 15.7 |
| 23..... | 124 | 81 | 50 | 65 | 192 | 101 | 124 | 67 | 47 | 21 | 36 | 14.5 |
| 24..... | 71 | 77 | 50 | 65 | 176 | 99 | 116 | 62 | 44 | 21 | 89 | 18.1 |
| 25..... | 50 | 71 | 50 | 60 | 161 | 152 | 109 | 138 | 42 | 25 | 36 | 12.9 |
| 26..... | 42 | 65 | 55 | 60 | 167 | 201 | 101 | 133 | 40 | 21 | 24 | 30 |
| 27..... | 36 | 64 | 64 | 60 | 161 | 158 | 97 | 94 | 83 | 18.8 | 20 | 25 |
| 28..... | 32 | 62 | 71 | 65 | 135 | 133 | 92 | 87 | 65 | 18.1 | 18.1 | 19.5 |
| 29..... | 30 | 53 | 106 | 60 | ----- | 119 | 87 | 106 | 46 | 18.1 | 16.9 | 16.9 |
| 30..... | 29 | 44 | 99 | 50 | ----- | 111 | 83 | 92 | 40 | 16.9 | 16.3 | 15.7 |
| 31..... | 33 | ----- | 87 | 45 | ----- | 104 | ----- | 79 | ----- | 16.3 | 15.7 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 138 | 18.1 | 38.9 | 0.598 | 0.69 |
| November..... | 234 | 32 | 63.3 | .974 | 1.09 |
| December..... | 133 | 34 | 62.6 | .953 | 1.11 |
| January..... | 170 | 45 | 81.2 | 1.25 | 1.44 |
| February..... | 231 | 50 | 95.1 | 1.46 | 1.62 |
| March..... | 366 | 92 | 156 | 2.40 | 2.77 |
| April..... | 245 | 79 | 130 | 2.00 | 2.23 |
| May..... | 138 | 55 | 87.9 | 1.35 | 1.66 |
| June..... | 369 | 40 | 85.8 | 1.22 | 1.47 |
| July..... | 58 | 16.3 | 27.8 | .428 | .49 |
| August..... | 89 | 9.1 | 19.5 | .300 | .35 |
| September..... | 37 | 12.9 | 19.5 | .300 | .33 |
| The year..... | 369 | 9.1 | 72.1 | 1.11 | 15.05 |

PAULINS KILL AT BLAIRSTOWN, N. J.

LOCATION.—Water-stage recorder at highway bridge in Blairstown, Warren County, 200 feet above mouth of Blairs Creek and 9 miles above mouth.

DRAINAGE AREA.—128 square miles.

RECORDS AVAILABLE.—October, 1921, to September, 1930.

EXTREMES.—Maximum discharge during year, 700 second-feet Mar. 9 (gage height, 4.80 feet); minimum, 4 second-feet Sept. 23 (gage height, 1.45 feet).
1921-1930: Maximum discharge, about 1,800 second-feet Mar. 8, 1922, Feb. 12, 1925 (gage height, 7.05 feet); minimum, about 28 second-feet Nov. 1, 1922 (gage height, 1.34 feet).

REMARKS.—Records good except those for periods of ice effect, Jan. 20-27, Feb. 6-8, 17, 18, and those estimated, which are fair. Flow regulated by storage in Swartswood Lake and by operation of power plants above station.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 45 | 68 | * 90 | 220 | 131 | 280 | 144 | 124 | 76 | 58 | 22 | 27 |
| 2..... | 69 | 69 | * 90 | 208 | 112 | 268 | 144 | 164 | 73 | 72 | 22 | 34 |
| 3..... | 244 | 95 | * 90 | 220 | 107 | 244 | 131 | 186 | 66 | 64 | 26 | 46 |
| 4..... | 186 | 154 | * 90 | 232 | 111 | 208 | 124 | 154 | 62 | 58 | 24 | 43 |
| 5..... | 131 | 144 | * 90 | 175 | 131 | 186 | 114 | 125 | 59 | 51 | 23 | 39 |
| 6..... | 94 | 114 | * 90 | 154 | 110 | 175 | 112 | 120 | 56 | 55 | 23 | 24 |
| 7..... | 84 | 99 | * 90 | 154 | 95 | 175 | 303 | 112 | 58 | 60 | 24 | 24 |
| 8..... | 76 | 91 | * 90 | 154 | 90 | 463 | 374 | 110 | 60 | 48 | 20 | 28 |
| 9..... | 66 | 86 | * 90 | 186 | 92 | 644 | 280 | 103 | 61 | 48 | 26 | 35 |
| 10..... | 57 | 78 | * 90 | 186 | 99 | 503 | 220 | 93 | 214 | 54 | 19 | 24 |
| 11..... | 56 | 76 | * 85 | 133 | 89 | 431 | 197 | 84 | 402 | 51 | 41 | 24 |
| 12..... | 52 | 78 | * 85 | 144 | 87 | 482 | 186 | 79 | 232 | 48 | 35 | 25 |
| 13..... | 52 | 76 | * 95 | 186 | 99 | 402 | 197 | 76 | 144 | 42 | 5 | 21 |
| 14..... | 51 | 76 | * 120 | 232 | 175 | 332 | 232 | 79 | 124 | 52 | 5 | 32 |
| 15..... | 48 | 81 | * 180 | 402 | 186 | 280 | 208 | 124 | 105 | 51 | 27 | 36 |
| 16..... | 46 | 83 | * 140 | 374 | 144 | 256 | 232 | 144 | 91 | 46 | 36 | 33 |
| 17..... | 45 | 74 | * 120 | 256 | 110 | 244 | 293 | 124 | 82 | 40 | 24 | 43 |
| 18..... | 46 | 220 | 133 | 232 | 110 | 244 | 346 | 107 | 93 | 38 | 30 | 31 |
| 19..... | 34 | 374 | 319 | 197 | 131 | 268 | 319 | 107 | 100 | 32 | 37 | 36 |
| 20..... | 39 | * 260 | 402 | 180 | 232 | 232 | 268 | 131 | 82 | 37 | 33 | 25 |
| 21..... | 40 | * 220 | 256 | 160 | 402 | 208 | 232 | 118 | 72 | 55 | 28 | 21 |
| 22..... | 44 | * 160 | 197 | 150 | 431 | 175 | 220 | 98 | 65 | 24 | 34 | 48 |
| 23..... | 164 | * 140 | 175 | 140 | 360 | 154 | 208 | 89 | 64 | 14 | 60 | 15 |
| 24..... | 175 | * 130 | 144 | 130 | 346 | 154 | 186 | 86 | 54 | 34 | 139 | 13 |
| 25..... | 127 | * 120 | 175 | 130 | 360 | 220 | 175 | 120 | 50 | 37 | 95 | 26 |
| 26..... | 95 | * 110 | 154 | 120 | 374 | 268 | 164 | 133 | 51 | 44 | 61 | 30 |
| 27..... | 81 | * 110 | 144 | 120 | 374 | 220 | 154 | 101 | 158 | 32 | 44 | 40 |
| 28..... | 72 | * 100 | 144 | 125 | 319 | 197 | 144 | 93 | 115 | 36 | 37 | 31 |
| 29..... | 65 | * 95 | 208 | 129 | ----- | 175 | 131 | 116 | 74 | 26 | 31 | 24 |
| 30..... | 62 | * 90 | 220 | 114 | ----- | 164 | 124 | 110 | 62 | 27 | 35 | 20 |
| 31..... | 63 | ----- | 208 | 124 | ----- | 154 | ----- | 93 | ----- | 24 | 24 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 244 | 34 | 80.9 | 0.632 | 0.73 |
| November..... | 374 | 68 | 122 | .953 | 1.06 |
| December..... | 402 | 85 | 149 | 1.16 | 1.34 |
| January..... | 402 | 114 | 183 | 1.43 | 1.65 |
| February..... | 431 | 87 | 193 | 1.51 | 1.57 |
| March..... | 644 | 154 | 271 | 2.12 | 2.44 |
| April..... | 374 | 112 | 205 | 1.60 | 1.78 |
| May..... | 186 | 76 | 113 | .883 | 1.02 |
| June..... | 402 | 50 | 100 | .781 | .87 |
| July..... | 72 | 14 | 43.8 | .342 | .39 |
| August..... | 139 | 5 | 35.2 | .275 | .32 |
| September..... | 48 | 13 | 29.9 | .234 | .26 |
| The year..... | 644 | 5 | 127 | .992 | 13.43 |

* Estimated.

PEQUEST RIVER AT PEQUEST, N. J.

LOCATION.—Water-stage recorder at Pequest, Warren County, 100 feet above Lehigh & Hudson River Railway bridge and 300 feet below mouth of Furnace Brook.

DRAINAGE AREA.—108 square miles.

RECORDS AVAILABLE.—November, 1921, to September, 1930.

EXTREMES.—Maximum discharge during year, 463 second-feet Mar. 9 (gage height, 2.75 feet); minimum, 22 second-feet Sept. 30 (gage height, 1.12 feet). 1921–1930: Maximum discharge, 753 second-feet Aug. 27, 1928 (gage height, 3.04 feet); minimum, 16 second-feet Sept. 20, 21, 1924, Aug. 7, 1926 (gage height, 0.31 foot).

REMARKS.—Records excellent except those for period of back-water from log on control, July 9 to Aug. 12, and those estimated, which are fair.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|-------|-------|------|-------|-----|-------|------|------|-------|
| 1----- | 48 | 70 | 76 | 164 | ° 95 | 223 | 135 | 124 | 76 | 50 | 30 | 32 |
| 2----- | 97 | 68 | ° 75 | 156 | ° 95 | 214 | 133 | 133 | 70 | 52 | 31 | 37 |
| 3----- | 233 | 97 | ° 70 | 172 | ° 95 | 189 | 126 | 133 | 67 | 51 | 31 | 42 |
| 4----- | 172 | 137 | 68 | 172 | ° 190 | 167 | 122 | 124 | 61 | 50 | 29 | 41 |
| 5----- | 124 | 116 | 68 | 126 | 156 | 162 | 118 | 114 | 58 | 48 | 27 | 37 |
| 6----- | 100 | 95 | 70 | 118 | 137 | 156 | 116 | 108 | 56 | 47 | 27 | 36 |
| 7----- | 93 | 86 | 73 | 120 | ° 130 | 156 | 325 | 106 | 55 | 47 | 26 | 35 |
| 8----- | 83 | 80 | 83 | 128 | ° 110 | 373 | 347 | 104 | 55 | 47 | 25 | 35 |
| 9----- | 75 | 75 | 90 | 151 | ° 100 | 458 | 258 | 100 | 58 | 47 | 24 | 34 |
| 10----- | 62 | 72 | 86 | 151 | 104 | 429 | 204 | 95 | 153 | 58 | 25 | 35 |
| 11----- | 62 | 68 | 78 | 118 | 91 | 369 | 184 | 90 | 204 | 61 | 24 | 34 |
| 12----- | 61 | 68 | 51 | 128 | ° 90 | 373 | 169 | 84 | 178 | 56 | 23 | 32 |
| 13----- | 60 | 68 | 70 | 164 | ° 200 | 322 | 169 | 81 | 137 | 51 | 24 | 32 |
| 14----- | 60 | 67 | 97 | 236 | 230 | 279 | 192 | 83 | 108 | 55 | 24 | 34 |
| 15----- | 56 | 72 | 124 | 356 | 192 | 244 | 178 | 99 | 93 | 56 | 30 | 36 |
| 16----- | 52 | 75 | 122 | 276 | 133 | 227 | 192 | 104 | 83 | 52 | 32 | 39 |
| 17----- | 48 | 75 | 110 | 184 | ° 120 | 217 | 230 | 102 | 76 | 48 | 27 | 40 |
| 18----- | 48 | 199 | 146 | 159 | ° 120 | 207 | 254 | 93 | 75 | 46 | 27 | 36 |
| 19----- | 48 | 220 | 295 | 110 | ° 120 | 230 | 233 | 100 | 78 | 43 | 26 | 39 |
| 20----- | 46 | 162 | 276 | 128 | ° 160 | 220 | 207 | 112 | 73 | 41 | 26 | 27 |
| 21----- | 45 | 133 | 167 | ° 130 | ° 240 | 198 | 184 | 106 | 67 | 38 | 27 | 24 |
| 22----- | 64 | 116 | 139 | ° 120 | ° 280 | 172 | 178 | 95 | 62 | 38 | 27 | 26 |
| 23----- | 181 | 106 | 133 | ° 120 | ° 300 | 156 | 169 | 86 | 58 | 40 | 54 | 23 |
| 24----- | 149 | 100 | 104 | ° 110 | ° 300 | 151 | 159 | 83 | 56 | 42 | 67 | 24 |
| 25----- | 116 | 97 | 122 | ° 110 | ° 300 | 178 | 151 | 118 | 55 | 42 | 61 | 24 |
| 26----- | 95 | 93 | 110 | ° 110 | ° 300 | 198 | 146 | 112 | 54 | 41 | 46 | 25 |
| 27----- | 84 | 91 | 120 | ° 100 | ° 260 | 178 | 142 | 97 | 55 | 43 | 38 | 26 |
| 28----- | 75 | 93 | 133 | ° 100 | ° 240 | 169 | 133 | 86 | 55 | 35 | 35 | 25 |
| 29----- | 68 | 86 | 167 | ° 100 | ----- | 159 | 128 | 91 | 54 | 37 | 32 | 24 |
| 30----- | 66 | 46 | 167 | ° 100 | ----- | 146 | 124 | 93 | 51 | 36 | 31 | 22 |
| 31----- | 68 | ----- | 156 | ° 95 | ----- | 137 | ----- | 84 | ----- | 31 | 30 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October----- | 233 | 45 | 85.1 | 0.788 | 0.91 |
| November----- | 220 | 46 | 97.7 | .905 | 1.01 |
| December----- | 295 | 51 | 118 | 1.09 | 1.26 |
| January----- | 356 | 95 | 146 | 1.35 | 1.56 |
| February----- | 300 | 90 | 175 | 1.62 | 1.69 |
| March----- | 458 | 137 | 228 | 2.11 | 2.43 |
| April----- | 347 | 116 | 180 | 1.67 | 1.86 |
| May----- | 133 | 81 | 101 | .935 | 1.03 |
| June----- | 204 | 51 | 79.4 | .735 | .82 |
| July----- | 61 | 31 | 46.1 | .427 | .49 |
| August----- | 67 | 23 | 31.8 | .294 | .34 |
| September----- | 42 | 22 | 31.9 | .295 | .33 |
| The year----- | 458 | 22 | 110 | 1.02 | 13.78 |

• Estimated.

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, 1930.

EXTREMES.—Maximum discharge during year, 218 second-feet Mar. 9 (gage height, 2.84 feet); minimum, 2.2 second-feet Sept. 23, 24, 30 (gage height, 1.21 feet).
1922-1930: Maximum discharge, about 826 second-feet July 15, 1928 (gage height, 3.92 feet); minimum, that of Sept. 23, 24, 30, 1930.

REMARKS.—Records good except those for periods of ice effect, Dec. 12, 13, 22, 24-26, Jan. 19-28, 31, Feb. 1, 2, 17, 18, and those estimated, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 6.3 | 16 | * 34 | 59 | 38 | 84 | 46 | 40 | 19 | 9.1 | 4.0 | 3.7 |
| 2..... | 36 | 16 | * 32 | 56 | 38 | 82 | 45 | 43 | 19 | 11 | 3.5 | 3.7 |
| 3..... | 67 | 23 | * 30 | 60 | 37 | 76 | 43 | 43 | 16 | 10 | 3.3 | * 6 |
| 4..... | 41 | 40 | 29 | 60 | 39 | 72 | 42 | 38 | 15 | * 10 | 3.1 | * 5 |
| 5..... | 33 | 29 | 25 | 54 | 52 | 64 | 35 | 35 | 15 | * 10 | 2.9 | * 4 |
| 6..... | 27 | 26 | 26 | 62 | 50 | 65 | 33 | 33 | 14 | * 10 | 4.9 | * 4 |
| 7..... | 25 | 24 | 26 | 46 | 45 | 64 | 101 | 32 | 13 | * 11 | 3.1 | * 4 |
| 8..... | 20 | 22 | 28 | 49 | 41 | 140 | 97 | 37 | 13 | * 11 | 2.9 | * 4 |
| 9..... | 18 | 22 | 33 | 55 | 38 | 207 | 80 | 33 | 16 | * 13 | 2.7 | * 4 |
| 10..... | 16 | 19 | 29 | 54 | 35 | 177 | 69 | 27 | 53 | * 16 | 2.6 | * 4 |
| 11..... | 15 | 19 | 26 | 47 | * 34 | 157 | 66 | 25 | 57 | * 15 | 2.4 | * 4 |
| 12..... | 15 | 18 | 26 | 47 | * 34 | 157 | 61 | 25 | 38 | * 11 | 2.4 | * 4 |
| 13..... | 15 | 18 | 28 | 62 | * 40 | 137 | 61 | 23 | 30 | 10 | 2.6 | * 5 |
| 14..... | 14 | 18 | 32 | 72 | * 60 | 117 | 69 | 22 | 26 | 10 | 2.6 | 3.5 |
| 15..... | 12 | 19 | 39 | 106 | 56 | 95 | 60 | 37 | 22 | 15 | 5.6 | 3.3 |
| 16..... | 12 | 19 | 41 | 98 | 53 | 91 | 65 | 37 | 19 | 11 | 4.5 | 3.7 |
| 17..... | 11 | 19 | 36 | 86 | 46 | 86 | 76 | 32 | 16 | 8.7 | 3.5 | 5.9 |
| 18..... | 10 | 60 | 50 | 74 | 46 | 82 | 80 | 29 | 17 | 8.0 | 3.5 | 3.7 |
| 19..... | 11 | 88 | 93 | 65 | 48 | 91 | 74 | 35 | 17 | * 7 | 3.3 | 3.3 |
| 20..... | 9.5 | 66 | 88 | 60 | 74 | 81 | 68 | 38 | 14 | * 6 | 4.7 | 2.9 |
| 21..... | 9.5 | 50 | 77 | 55 | 93 | 72 | 62 | 31 | 13 | * 5 | 4.5 | 3.1 |
| 22..... | 14 | 54 | 65 | 50 | 95 | 57 | 61 | 26 | 11 | * 5 | 4.2 | 2.6 |
| 23..... | 46 | 49 | 59 | 50 | 93 | 56 | 59 | 25 | 11 | * 5 | 13 | 2.2 |
| 24..... | 29 | 46 | 44 | 50 | 95 | 57 | 54 | 22 | 10 | * 7 | 13 | 3.1 |
| 25..... | 22 | 46 | 46 | 50 | 93 | 66 | 53 | 43 | 11 | * 8 | 7.7 | 3.3 |
| 26..... | 19 | 43 | 46 | 48 | 100 | 72 | 50 | 36 | 10 | * 6 | 7.8 | 4.0 |
| 27..... | 17 | 41 | 47 | 48 | 104 | 62 | 48 | 29 | 17 | * 4 | 5.6 | 3.3 |
| 28..... | 16 | 41 | 48 | 48 | 93 | 60 | 46 | 26 | 13 | 4.0 | 5.9 | 3.9 |
| 29..... | 14 | * 38 | 61 | 48 | ----- | 56 | 42 | 30 | 10 | 5.3 | 5.1 | 2.6 |
| 30..... | 13 | * 26 | 60 | 45 | ----- | 50 | 40 | 26 | 8.7 | 4.0 | 5.6 | 2.6 |
| 31..... | 16 | ----- | 56 | 42 | ----- | 49 | ----- | 25 | ----- | 3.5 | 4.2 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 67 | 6.3 | 20.3 | 0.564 | 0.65 |
| November..... | 86 | 16 | 34.1 | .947 | 1.06 |
| December..... | 93 | 25 | 43.9 | 1.22 | 1.41 |
| January..... | 106 | 42 | 58.3 | 1.62 | 1.87 |
| February..... | 104 | 34 | 59.8 | 1.66 | 1.73 |
| March..... | 207 | 49 | 89.7 | 2.49 | 2.87 |
| April..... | 101 | 33 | 59.5 | 1.65 | 1.84 |
| May..... | 43 | 22 | 31.7 | .881 | 1.02 |
| June..... | 57 | 8.7 | 18.8 | .522 | .58 |
| July..... | 16 | 3.5 | 8.70 | .242 | .28 |
| August..... | 13 | 2.4 | 4.67 | .130 | .15 |
| September..... | 6.0 | 2.2 | 3.75 | .104 | .12 |
| The year..... | 207 | 2.2 | 36.0 | 1.00 | 13.60 |

* Estimated.

LEHIGH RIVER AT TANNERY, PA.

LOCATION.—Water-stage recorder 600 feet above highway bridge in Tannery, Carbon County.

DRAINAGE AREA.—322 square miles.

RECORDS AVAILABLE.—October, 1919, to September, 1921; October, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,090 second-feet June 11 (gage height, 5.41 feet); minimum, 37 second-feet Sept. 28 (gage height, 1.46 feet). 1919-1921, 1928-1930: Maximum discharge, 6,930 second-feet Mar. 12, 1920 (gage height, 8.10 feet, chain gage datum); minimum, that of Sept. 28, 1930.

REMARKS.—Records good except those for periods of ice effect, Nov. 30, Dec. 1-5, 11-13, 22-26, Jan. 5, 6, 17-31, Feb. 1, 2, 6-17, Mar. 4, 5, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|------|-------|
| 1..... | 138 | 495 | 400 | 558 | 380 | 765 | 590 | 465 | 453 | 355 | 116 | 96 |
| 2..... | 1,170 | 465 | 380 | 590 | 460 | 730 | 611 | 807 | 411 | 1,080 | 135 | 93 |
| 3..... | 2,740 | 590 | 380 | 730 | 435 | 625 | 618 | 709 | 366 | 758 | 130 | 98 |
| 4..... | 1,830 | 765 | 400 | 765 | 350 | 600 | 625 | 716 | 325 | 532 | 124 | 103 |
| 5..... | 1,120 | 695 | 400 | 500 | 350 | 550 | 577 | 611 | 300 | 405 | 121 | 101 |
| 6..... | 800 | 590 | 465 | 500 | 260 | 525 | 564 | 544 | 342 | 361 | 113 | 101 |
| 7..... | 625 | 525 | 405 | 590 | 240 | 525 | 2,060 | 465 | 558 | 345 | 110 | 103 |
| 8..... | 495 | 495 | 525 | 730 | 260 | 1,380 | 2,180 | 435 | 453 | 291 | 110 | 105 |
| 9..... | 405 | 465 | 660 | 870 | 280 | 1,860 | 1,600 | 405 | 489 | 320 | 105 | 103 |
| 10..... | 350 | 435 | 558 | 800 | 280 | 1,350 | 1,300 | 378 | 1,500 | 814 | 103 | 91 |
| 11..... | 320 | 405 | 440 | 660 | 220 | 1,160 | 1,120 | 356 | 2,830 | 625 | 98 | 91 |
| 12..... | 295 | 405 | 380 | 660 | 240 | 1,210 | 982 | 320 | 1,860 | 465 | 98 | 89 |
| 13..... | 277 | 300 | 500 | 765 | 280 | 1,030 | 966 | 305 | 1,210 | 350 | 96 | 89 |
| 14..... | 259 | 330 | 660 | 870 | 320 | 926 | 1,080 | 310 | 918 | 405 | 98 | 127 |
| 15..... | 246 | 525 | 835 | 870 | 300 | 793 | 934 | 604 | 737 | 453 | 108 | 144 |
| 16..... | 238 | 525 | 765 | 765 | 240 | 716 | 1,120 | 674 | 611 | 361 | 121 | 127 |
| 17..... | 226 | 495 | 695 | 600 | 260 | 667 | 1,450 | 513 | 513 | 291 | 110 | 132 |
| 18..... | 218 | 1,570 | 765 | 500 | 300 | 674 | 1,550 | 411 | 495 | 247 | 101 | 130 |
| 19..... | 210 | 2,020 | 1,030 | 460 | 345 | 1,120 | 1,400 | 405 | 483 | 222 | 101 | 121 |
| 20..... | 203 | 1,500 | 1,500 | 460 | 492 | 950 | 1,210 | 465 | 423 | 203 | 98 | 101 |
| 21..... | 200 | 1,120 | 1,030 | 600 | 990 | 793 | 1,010 | 447 | 378 | 196 | 96 | 93 |
| 22..... | 419 | 910 | 500 | 460 | 1,210 | 660 | 910 | 423 | 340 | 188 | 93 | 91 |
| 23..... | 2,130 | 765 | 500 | 400 | 1,120 | 590 | 821 | 388 | 310 | 214 | 108 | 89 |
| 24..... | 1,500 | 695 | 500 | 440 | 1,030 | 584 | 737 | 387 | 291 | 199 | 181 | 89 |
| 25..... | 1,030 | 625 | 500 | 380 | 1,030 | 618 | 674 | 1,090 | 378 | 181 | 141 | 85 |
| 26..... | 765 | 590 | 550 | 400 | 1,120 | 910 | 632 | 950 | 372 | 170 | 130 | 91 |
| 27..... | 625 | 558 | 590 | 460 | 1,030 | 894 | 570 | 737 | 625 | 167 | 138 | 98 |
| 28..... | 558 | 558 | 625 | 500 | 835 | 772 | 538 | 646 | 441 | 160 | 130 | 91 |
| 29..... | 495 | 465 | 695 | 380 | ----- | 702 | 495 | 681 | 340 | 151 | 127 | 91 |
| 30..... | 465 | 440 | 660 | 300 | ----- | 695 | 465 | 604 | 286 | 147 | 110 | 108 |
| 31..... | 465 | ----- | 590 | 340 | ----- | 653 | ----- | 525 | ----- | 138 | 96 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|------------------|-------------------|
| October..... | 2,740 | 138 | 672 | 2.09 | 2.41 |
| November..... | 2,020 | 300 | 677 | 2.10 | 2.34 |
| December..... | 1,500 | 380 | 609 | 1.89 | 2.18 |
| January..... | 870 | 300 | 578 | 1.80 | 2.08 |
| February..... | 1,210 | 220 | 523 | 1.62 | 1.69 |
| March..... | 1,860 | 525 | 840 | 2.61 | 3.01 |
| April..... | 2,180 | 465 | 980 | 3.04 | 3.39 |
| May..... | 1,090 | 305 | 541 | 1.68 | 1.94 |
| June..... | 2,830 | 286 | 635 | 1.97 | 2.20 |
| July..... | 1,080 | 138 | 348 | 1.08 | 1.24 |
| August..... | 181 | 93 | 114 | .35 ^A | .41 |
| September..... | 144 | 85 | 102 | .317 | .35 |
| The year..... | 2,830 | 85 | 551 | 1.71 | 23.24 |

LEHIGH RIVER AT BETHLEHEM, PA.

LOCATION.—Water-stage recorder 1,500 feet above Minsi Trail Bridge, Bethlehem, Northampton County, and 2,000 feet below Monocacy Creek.

DRAINAGE AREA.—1,280 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1930. At News Street Bridge, half a mile upstream October, 1918, to September, 1921.

EXTREMES.—Maximum discharge during year, 12,400 second-feet Oct. 3 (gage height, 6.50 feet); minimum, not including flow in canal, 314 second-feet Sept. 28 (gage height, 1.64 feet).

1928-1930: Maximum discharge, 18,400 second-feet Mar. 6, 1929 (gage height, 7.80 feet); minimum, that of Sept. 28, 1930.

REMARKS.—Records good. Table of daily and monthly discharge includes flow in Lehigh Canal.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| 1..... | 723 | 1,620 | 1,640 | 2,310 | 1,280 | 3,040 | 2,130 | 1,960 | 2,090 | 1,120 | 619 | 494 |
| 2..... | 2,980 | 1,540 | 1,760 | 2,260 | 1,420 | 2,850 | 2,080 | 2,180 | 1,940 | 1,440 | 577 | 529 |
| 3..... | 10,100 | 1,780 | 1,840 | 2,430 | 1,630 | 2,710 | 1,980 | 2,450 | 1,770 | 2,010 | 569 | 544 |
| 4..... | 6,050 | 2,340 | 1,540 | 2,620 | 1,630 | 2,510 | 1,950 | 2,120 | 1,660 | 1,590 | 598 | 529 |
| 5..... | 4,240 | 2,110 | 1,440 | 2,360 | 1,830 | 2,420 | 1,920 | 2,020 | 1,540 | 1,300 | 675 | 501 |
| 6..... | 3,270 | 1,950 | 1,540 | 2,220 | 1,610 | 2,420 | 1,790 | 1,880 | 1,500 | 1,190 | 553 | 457 |
| 7..... | 2,720 | 1,830 | 1,560 | 2,300 | 1,340 | 2,310 | 5,880 | 1,790 | 1,700 | 1,200 | 549 | 470 |
| 8..... | 2,330 | 1,770 | 1,750 | 2,320 | 1,380 | 4,520 | 6,820 | 1,680 | 1,750 | 1,020 | 537 | 617 |
| 9..... | 2,060 | 1,670 | 2,070 | 2,570 | 1,320 | 5,560 | 5,440 | 1,590 | 1,910 | 1,160 | 512 | 590 |
| 10..... | 1,820 | 1,580 | 1,890 | 2,570 | 1,360 | 4,850 | 4,480 | 1,500 | 2,850 | 2,380 | 488 | * 545 |
| 11..... | 1,580 | 1,560 | 1,630 | 2,270 | 1,190 | 4,320 | 4,000 | 1,440 | 5,590 | 1,990 | 546 | * 462 |
| 12..... | 1,490 | 1,500 | 1,340 | 2,200 | 1,150 | 4,850 | 3,540 | 1,420 | 4,450 | 1,500 | 522 | * 441 |
| 13..... | 1,450 | 1,410 | 1,400 | 2,540 | 1,380 | 4,060 | 3,430 | 1,350 | 3,370 | 1,230 | 597 | * 469 |
| 14..... | 1,390 | 1,340 | 1,840 | 2,940 | 1,950 | 3,720 | 3,650 | 1,400 | 2,810 | 1,190 | 524 | * 655 |
| 15..... | 1,320 | 1,360 | 2,350 | 3,360 | 1,830 | 3,360 | 3,260 | 2,960 | 2,400 | 1,210 | 551 | * 699 |
| 16..... | 1,230 | 1,470 | 2,350 | 3,210 | 1,440 | 3,120 | 3,330 | 3,180 | 2,140 | 1,150 | 626 | 652 |
| 17..... | 1,180 | 1,390 | 2,150 | 2,850 | 1,280 | 2,920 | 4,090 | 2,660 | 1,930 | 1,020 | 603 | 681 |
| 18..... | 1,110 | 5,000 | 2,250 | 2,540 | 1,410 | 2,820 | 4,350 | 2,290 | 1,860 | 939 | 582 | 642 |
| 19..... | 1,040 | 8,180 | 2,900 | 2,220 | 1,470 | 3,360 | 4,220 | 2,360 | 1,790 | 859 | 531 | 567 |
| 20..... | 1,030 | 5,740 | 4,020 | 2,150 | 1,950 | 3,220 | 3,890 | 2,500 | 1,660 | 808 | 516 | 550 |
| 21..... | 1,060 | 4,490 | 3,600 | 2,330 | 3,040 | 2,830 | 3,510 | 2,260 | 1,530 | 812 | 509 | 461 |
| 22..... | 1,200 | 3,680 | 2,960 | 2,370 | 3,550 | 2,540 | 3,320 | 2,120 | 1,420 | 817 | 470 | 542 |
| 23..... | 3,740 | 3,140 | 2,790 | 2,100 | 3,480 | 2,300 | 3,060 | 2,010 | 1,380 | 832 | 544 | 480 |
| 24..... | 3,440 | 2,850 | 2,440 | 1,700 | 3,390 | 2,260 | 2,830 | 2,040 | 1,290 | 953 | 603 | 453 |
| 25..... | 2,650 | 2,740 | 2,460 | 1,780 | 3,210 | 2,300 | 2,660 | 4,030 | 1,300 | 835 | 676 | 465 |
| 26..... | 2,180 | 2,480 | 2,350 | 1,680 | 3,570 | 2,740 | 2,540 | 3,760 | 1,320 | 764 | 563 | 435 |
| 27..... | 1,910 | 2,360 | 2,280 | 1,600 | 4,010 | 2,920 | 2,360 | 3,160 | 1,420 | 702 | 601 | 448 |
| 28..... | 1,750 | 2,320 | 2,310 | 1,780 | 3,480 | 2,620 | 2,180 | 2,860 | 1,510 | 715 | 546 | 402 |
| 29..... | 1,570 | 2,150 | 2,780 | 1,820 | ----- | 2,440 | 2,100 | 2,810 | 1,280 | 707 | 549 | 446 |
| 30..... | 1,520 | 1,540 | 2,580 | 1,550 | ----- | 2,300 | 2,000 | 2,570 | 1,170 | 668 | 524 | 464 |
| 31..... | 1,620 | ----- | 2,340 | 1,360 | ----- | 2,300 | ----- | 2,320 | ----- | 625 | 477 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 10,100 | 723 | 2,310 | 1.80 | 2.08 |
| November..... | 8,180 | 1,340 | 2,500 | 1.95 | 2.18 |
| December..... | 4,020 | 1,340 | 2,200 | 1.72 | 1.98 |
| January..... | 3,360 | 1,360 | 2,270 | 1.77 | 2.04 |
| February..... | 4,010 | 1,150 | 2,060 | 1.61 | 1.68 |
| March..... | 5,560 | 2,260 | 3,110 | 2.43 | 2.80 |
| April..... | 6,820 | 1,790 | 3,290 | 2.57 | 2.87 |
| May..... | 4,030 | 1,350 | 2,280 | 1.78 | 2.05 |
| June..... | 5,590 | 1,170 | 2,010 | 1.57 | 1.75 |
| July..... | 2,380 | 625 | 1,120 | .875 | 1.01 |
| August..... | 676 | 470 | 553 | .434 | .50 |
| September..... | 699 | 402 | 528 | .400 | .46 |
| The year..... | 10,100 | 402 | 2,020 | 1.58 | 21.40 |

* Estimated.

MUSCONETCONG RIVER AT OUTLET OF LAKE HOPATCONG, N. J.

LOCATION.—Water-stage recorder at highway bridge 300 feet downstream from Lake Hopatcong Dam, in Landing, Morris County.

DRAINAGE AREA.—25.4 square miles.

RECORDS AVAILABLE.—July, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 62 second-feet Feb. 22 to Mar. 6 (gage height, 1.29 feet); minimum, 10.4 second-feet Mar. 11–18 (gage height, 0.58 foot).

1928–1930: Maximum discharge, 344 second-feet Aug. 27, 1928 (gage height, 2.61 feet); minimum, that of Mar. 11–18, 1930.

REMARKS.—Records excellent. Flow regulated by storage in Lake Hopatcong. Station built and maintained by Morris Canal & Banking Co.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|------|-------|------|------|-------|
| 1 | 29 | 28 | 29 | 29 | 32 | 62 | 11.2 | 31 | 12.0 | 14.6 | 13.3 | 11.6 |
| 2 | 29 | 29 | 29 | 29 | 31 | 62 | 11.2 | 34 | 12.0 | 16.4 | 13.3 | 25 |
| 3 | 31 | 30 | 29 | 29 | 31 | 62 | 11.2 | 34 | 11.6 | 16.0 | 13.3 | 29 |
| 4 | 32 | 31 | 29 | 29 | 31 | 62 | 11.2 | 31 | 11.6 | 15.5 | 12.9 | 30 |
| 5 | 31 | 32 | 29 | 29 | 31 | 62 | 11.2 | 26 | 11.6 | 13.7 | 12.9 | 30 |
| 6 | 31 | 31 | 29 | 29 | 31 | 41 | 11.6 | 24 | 11.6 | 14.2 | 12.9 | 31 |
| 7 | 31 | 31 | 29 | 29 | 31 | 33 | 11.6 | 24 | 11.6 | 13.7 | 12.9 | 31 |
| 8 | 31 | 31 | 29 | 29 | 31 | 32 | 11.6 | 25 | 12.0 | 12.9 | 12.0 | 31 |
| 9 | 30 | 31 | 29 | 29 | 31 | 32 | 11.6 | 25 | 12.0 | 12.5 | 12.0 | 31 |
| 10 | 30 | 30 | 29 | 29 | 31 | 17.9 | 11.6 | 22 | 35 | 16.0 | 12.0 | 31 |
| 11 | 30 | 30 | 29 | 29 | 31 | 10.8 | 13.7 | 19.2 | 55 | 13.7 | 12.0 | 31 |
| 12 | 30 | 30 | 29 | 29 | 31 | 10.4 | 14.6 | 16.0 | 60 | 13.3 | 12.0 | 31 |
| 13 | 30 | 30 | 29 | 29 | 31 | 10.4 | 17.3 | 15.5 | 57 | 12.0 | 12.0 | 31 |
| 14 | 30 | 30 | 29 | 30 | 31 | 10.4 | 24 | 19.5 | 53 | 14.2 | 12.0 | 31 |
| 15 | 30 | 30 | 29 | 48 | 31 | 10.4 | 27 | 20.0 | 48 | 13.7 | 12.0 | 31 |
| 16 | 30 | 30 | 29 | 57 | 31 | 10.4 | 35 | 17.3 | 41 | 12.9 | 12.0 | 30 |
| 17 | 30 | 29 | 29 | 58 | 31 | 11.2 | 45 | 16.4 | 40 | 12.0 | 12.0 | 20 |
| 18 | 30 | 29 | 29 | 58 | 31 | 11.2 | 50 | 16.9 | 47 | 11.6 | 12.0 | 11.6 |
| 19 | 30 | 30 | 29 | 58 | 42 | 11.2 | 54 | 17.8 | 47 | 11.6 | 12.0 | 22 |
| 20 | 30 | 30 | 29 | 58 | 61 | 11.2 | 53 | 17.8 | 41 | 11.6 | 12.0 | 31 |
| 21 | 30 | 29 | 29 | 58 | 61 | 11.2 | 52 | 16.0 | 36 | 11.6 | 12.0 | 31 |
| 22 | 30 | 29 | 29 | 58 | 61 | 11.2 | 51 | 15.1 | 30 | 11.6 | 12.0 | 31 |
| 23 | 30 | 29 | 29 | 58 | 62 | 11.2 | 48 | 14.6 | 25 | 11.6 | 12.0 | 31 |
| 24 | 29 | 29 | 28 | 58 | 62 | 11.2 | 43 | 16.4 | 21 | 12.0 | 12.0 | 31 |
| 25 | 29 | 29 | 28 | 58 | 62 | 11.2 | 41 | 18.8 | 21 | 12.0 | 11.6 | 31 |
| 26 | 29 | 29 | 28 | 58 | 62 | 11.2 | 39 | 16.0 | 18.8 | 12.0 | 11.6 | 31 |
| 27 | 29 | 29 | 28 | 58 | 62 | 11.2 | 37 | 13.7 | 21 | 12.0 | 11.6 | 31 |
| 28 | 29 | 29 | 29 | 57 | 62 | 11.2 | 36 | 13.7 | 18.8 | 11.6 | 11.6 | 31 |
| 29 | 29 | 29 | 29 | 57 | ----- | 11.2 | 33 | 14.2 | 16.9 | 11.6 | 11.6 | 31 |
| 30 | 29 | 29 | 29 | 56 | ----- | 11.2 | 31 | 13.7 | 14.2 | 11.6 | 11.6 | 33 |
| 31 | 29 | ----- | 29 | 40 | ----- | 11.2 | ----- | 13.3 | ----- | 12.9 | 11.6 | ----- |

| Month | Maximum | Minimum | Mean | Month | Maximum | Minimum | Mean |
|----------|---------|---------|------|-----------|---------|---------|------|
| October | 32 | 29 | 29.9 | May | 34 | 13.3 | 19.9 |
| November | 32 | 28 | 29.7 | June | 60 | 11.6 | 28.4 |
| December | 29 | 28 | 28.9 | July | 16.4 | 11.6 | 13.0 |
| January | 58 | 29 | 43.9 | August | 13.3 | 11.6 | 12.2 |
| February | 62 | 31 | 41.3 | September | 33 | 11.6 | 28.7 |
| March | 62 | 10.4 | 22.5 | The year | 62 | 10.4 | 27.1 |
| April | 54 | 11.2 | 28.6 | | | | |

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, 1930.

EXTREMES.—Maximum discharge during year, 295 second-feet June 11; minimum, 14 second-feet Aug. 21, 22.

1921-1930: Maximum discharge, about 1,080 second-feet Feb. 12, 1925 (gage height, 5.12 feet); minimum, about 2 second-feet July 8, 1927 (gage height, 1.02 feet).

REMARKS.—Records good except those for periods of ice effect, Nov. 28-30, Dec. 3, 4, 12, 23-26, Jan. 21, 22, 24-31, Feb. 1, 6-10, 16, 17, for periods of back-water from temporary dams on control, July 16 to Aug. 6, Aug. 15 to Sept. 30, and those estimated, which are fair. Flow regulated by storage in Lake Hopatcong.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1 | 48 | 64 | 64 | 116 | 85 | 172 | 66 | 93 | 39 | 35 | a 29 | 26 |
| 2 | 91 | 64 | 59 | 116 | 93 | 172 | 66 | 100 | 34 | 40 | 26 | 40 |
| 3 | 143 | 86 | 60 | 116 | 86 | 172 | 67 | 100 | 32 | 40 | 28 | 39 |
| 4 | 100 | 108 | 60 | 116 | 86 | 152 | 65 | 93 | 29 | 39 | 26 | 47 |
| 5 | 79 | 93 | 60 | 108 | 125 | 143 | 60 | 79 | 28 | 42 | 32 | 45 |
| 6 | 70 | 79 | 58 | 100 | 110 | 134 | 60 | 67 | 28 | 39 | 29 | 44 |
| 7 | 71 | 75 | 58 | 100 | 85 | 125 | 172 | 71 | 28 | 38 | 30 | 49 |
| 8 | 71 | 72 | 60 | 100 | 80 | 225 | 214 | 79 | 26 | 33 | a 29 | 49 |
| 9 | 69 | 71 | 66 | 100 | 75 | 271 | 172 | 72 | 32 | 31 | 30 | 46 |
| 10 | 62 | 70 | 65 | 100 | 75 | 260 | 134 | 61 | 172 | 42 | 32 | 42 |
| 11 | 55 | 67 | 65 | 93 | 79 | 214 | 116 | 55 | 260 | 45 | 27 | 39 |
| 12 | 52 | 66 | 65 | 93 | 76 | 225 | 116 | 48 | 203 | 36 | 26 | 35 |
| 13 | 51 | 66 | 66 | 108 | 86 | 192 | 116 | 44 | 172 | 31 | 24 | 34 |
| 14 | 52 | 65 | 75 | 134 | 134 | 172 | 116 | 43 | 152 | 43 | 22 | 60 |
| 15 | 52 | 66 | 86 | 225 | 116 | 143 | 125 | 56 | 134 | 65 | 39 | 58 |
| 16 | 51 | 70 | 79 | 214 | 95 | 134 | 134 | 66 | 108 | 61 | 53 | 48 |
| 17 | 47 | 71 | 78 | 182 | 95 | 125 | 162 | 59 | 86 | 52 | 45 | 59 |
| 18 | 47 | 116 | 106 | 182 | 93 | 116 | 182 | 55 | 100 | 42 | 32 | 100 |
| 19 | 48 | 134 | 225 | 162 | 93 | 125 | 182 | 59 | 108 | 37 | 24 | 100 |
| 20 | 49 | 108 | 225 | 143 | 125 | 125 | 172 | 67 | 93 | 33 | 27 | 93 |
| 21 | 51 | 93 | 192 | 140 | 182 | 108 | 162 | 64 | 79 | 29 | 22 | 62 |
| 22 | 89 | 86 | 130 | 130 | 192 | 93 | 152 | 54 | a 69 | 30 | 23 | 79 |
| 23 | 182 | 79 | 120 | 134 | 192 | 79 | 143 | 48 | 60 | 29 | 79 | 51 |
| 24 | 134 | 76 | 120 | 120 | 192 | 75 | 134 | 45 | 49 | 30 | 116 | 39 |
| 25 | 108 | 74 | 110 | 120 | 203 | 86 | 125 | 65 | 48 | 38 | 93 | 44 |
| 26 | 93 | 72 | 110 | 120 | 203 | 93 | 116 | 71 | 44 | 41 | 70 | 51 |
| 27 | 79 | 72 | 108 | 110 | 214 | 86 | 108 | 55 | 46 | 42 | 52 | 40 |
| 28 | 70 | 70 | 108 | 100 | 192 | 86 | 100 | 48 | 49 | 35 | 38 | 33 |
| 29 | 62 | 70 | 125 | 100 | ----- | 86 | 100 | 54 | 47 | 34 | 29 | 32 |
| 30 | 60 | 65 | 134 | 95 | ----- | 79 | 93 | 54 | 39 | 33 | 25 | 30 |
| 31 | 62 | ----- | 125 | 95 | ----- | 71 | ----- | 47 | ----- | a 32 | 22 | ----- |

| Month | Observed | | | Corrected for storage | | |
|-----------|----------|---------|------|-----------------------|-----------------|-------------------|
| | Maximum | Minimum | Mean | Mean | Per square mile | Run-off in inches |
| October | 182 | 47 | 74.1 | 56.6 | 0.809 | 0.93 |
| November | 134 | 64 | 78.9 | 66.3 | .947 | 1.06 |
| December | 225 | 58 | 98.8 | 113 | 1.61 | 1.86 |
| January | 225 | 93 | 125 | 128 | 1.83 | 2.11 |
| February | 214 | 75 | 124 | 133 | 1.90 | 1.98 |
| March | 271 | 71 | 140 | 188 | 2.69 | 3.10 |
| April | 214 | 60 | 124 | 147 | 2.10 | 2.34 |
| May | 100 | 43 | 63.6 | 56.4 | .806 | .93 |
| June | 260 | 26 | 79.8 | 81.1 | 1.16 | 1.29 |
| July | 65 | 29 | 38.6 | 30.4 | .434 | .50 |
| August | 116 | 22 | 38.0 | 24.1 | .344 | .40 |
| September | 100 | 26 | 50.5 | 18.9 | .270 | .30 |
| The year | 271 | 22 | 86.0 | 86.6 | 1.24 | 16.80 |

a Estimated.

MUSCONETCONG RIVER NEAR BLOOMSBURY, N. J.

LOCATION.—Water-stage recorder at highway bridge $1\frac{1}{2}$ miles above Bloomsbury, Hunterdon County, and 9 miles above mouth.

DRAINAGE AREA.—143 square miles.

RECORDS AVAILABLE.—July, 1903, to March, 1907; July, 1921, to September, 1930.

EXTREMES.—Maximum discharge during year, 715 second-feet Mar. 8 (gage height, 3.00 feet); minimum, 20 second-feet Aug. 29.

1903-1907, 1921-1930: Maximum stage, 8.0 feet (old datum) Oct. 10 or 11, 1903 (discharge not determined); minimum discharge, that of Aug. 29, 1930.

REMARKS.—Records good except those for days of ice effect, Dec. 1, 2, and for period of backwater from obstruction on control, Aug. 13 to Sept. 30, which are fair. Flow regulated by several small water-power plants above station and by storage in Lake Hopatcong.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1 | 92 | 117 | 120 | 209 | 194 | 306 | 172 | 180 | 115 | 134 | 65 | 51 |
| 2 | 248 | 106 | 120 | 211 | 179 | 290 | 169 | 193 | 119 | 107 | 57 | 61 |
| 3 | 253 | 171 | 116 | 216 | 179 | 290 | 169 | 193 | 104 | 99 | 59 | 59 |
| 4 | 189 | 190 | 121 | 216 | 179 | 273 | 162 | 167 | 100 | 99 | 71 | 62 |
| 5 | 136 | 160 | 124 | 191 | 290 | 257 | 156 | 167 | 98 | 96 | 68 | 68 |
| 6 | 124 | 140 | 120 | 182 | 241 | 257 | 152 | 160 | 100 | 104 | 67 | 62 |
| 7 | 128 | 136 | 119 | 180 | 210 | 241 | 433 | 154 | 82 | 100 | 72 | 61 |
| 8 | 130 | 131 | 133 | 187 | 194 | 606 | 350 | 167 | 92 | 95 | 64 | 73 |
| 9 | 117 | 116 | 143 | 191 | 176 | 560 | 283 | 167 | 104 | 92 | 65 | 71 |
| 10 | 107 | 121 | 128 | 186 | 179 | 462 | 251 | 152 | 265 | 113 | 73 | 68 |
| 11 | 108 | 121 | 127 | 171 | 167 | 428 | 221 | 144 | 387 | 100 | 72 | 66 |
| 12 | 98 | 129 | 106 | 178 | 164 | 428 | 207 | 144 | 307 | 102 | 62 | 62 |
| 13 | 97 | 121 | 143 | 205 | 260 | 375 | 221 | 133 | 264 | 93 | 53 | 66 |
| 14 | 105 | 120 | 165 | 314 | 290 | 340 | 236 | 142 | 227 | 101 | 40 | 76 |
| 15 | 104 | 124 | 171 | 383 | 241 | 306 | 221 | 157 | 206 | 107 | 53 | 94 |
| 16 | 95 | 117 | 164 | 341 | 210 | 273 | 251 | 157 | 182 | 101 | 53 | 86 |
| 17 | 97 | 125 | 150 | 298 | 210 | 273 | 267 | 144 | 158 | 94 | 56 | 82 |
| 18 | 85 | 233 | 218 | 292 | 210 | 273 | 283 | 137 | 168 | 94 | 59 | 101 |
| 19 | 88 | 226 | 388 | 291 | 210 | 290 | 283 | 154 | 178 | 76 | 51 | 143 |
| 20 | 92 | 188 | 365 | 293 | 241 | 273 | 267 | 157 | 166 | 78 | 52 | 134 |
| 21 | 99 | 168 | 296 | 264 | 290 | 257 | 251 | 147 | 147 | 82 | 53 | 98 |
| 22 | 171 | 156 | 257 | 253 | 306 | 226 | 236 | 137 | 137 | 97 | 51 | 92 |
| 23 | 271 | 139 | 231 | 236 | 306 | 210 | 236 | 128 | 130 | 100 | 98 | 96 |
| 24 | 212 | 140 | 225 | 244 | 323 | 210 | 221 | 121 | 120 | 145 | 101 | 74 |
| 25 | 166 | 144 | 208 | 230 | 323 | 226 | 207 | 154 | 113 | 82 | 94 | 68 |
| 26 | 142 | 133 | 200 | 220 | 375 | 241 | 207 | 150 | 108 | 70 | 78 | 71 |
| 27 | 132 | 134 | 192 | 220 | 358 | 226 | 193 | 137 | 122 | 73 | 69 | 71 |
| 28 | 127 | 130 | 206 | 228 | 323 | 210 | 193 | 137 | 108 | 78 | 62 | 66 |
| 29 | 113 | 134 | 240 | 214 | ----- | 210 | 193 | 133 | 109 | 72 | 58 | 61 |
| 30 | 110 | 118 | 235 | 204 | ----- | 194 | 180 | 128 | 115 | 74 | 48 | 68 |
| 31 | 120 | ----- | 218 | 196 | ----- | 194 | ----- | 126 | ----- | 70 | 48 | ----- |

| Month | Observed | | | Corrected for storage | | |
|-----------|----------|---------|------|-----------------------|------------------|-------------------|
| | Maximum | Minimum | Mean | Mean | Per square mile | Run-off in inches |
| October | 271 | 85 | 134 | 117 | 0.818 | 0.94 |
| November | 233 | 106 | 143 | 130 | .90 ¹ | 1.01 |
| December | 388 | 106 | 185 | 200 | 1.40 | 1.61 |
| January | 383 | 171 | 234 | 237 | 1.66 | 1.91 |
| February | 375 | 164 | 244 | 253 | 1.77 | 1.84 |
| March | 606 | 194 | 297 | 344 | 2.41 | 2.78 |
| April | 433 | 152 | 229 | 252 | 1.76 | 1.96 |
| May | 193 | 121 | 151 | 143 | 1.00 | 1.15 |
| June | 387 | 82 | 154 | 156 | 1.09 | 1.22 |
| July | 145 | 70 | 94.5 | 86.3 | .60 ² | .70 |
| August | 101 | 40 | 63.6 | 49.6 | .34 ² | .40 |
| September | 143 | 51 | 77.0 | 45.5 | .318 | .35 |
| The year | 606 | 40 | 167 | 167 | 1.17 | 15.87 |

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, 1930.

EXTREMES.—Maximum discharge during year, 815 second-feet Feb. 13 (gage height, 5.18 feet); minimum, 6 second-feet several times in September.

1923-1930: Maximum discharge, 2,400 second-feet Apr. 7, 1924 (gage height, 7.85 feet); minimum, 2 second-feet June 30, 1927, July 21, 22, 1929.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|------|------|------|------|------|------|-----|------|------|------|-------|
| 1..... | 70 | 60 | 47 | 160 | 60 | 194 | 75 | 51 | 26 | 14 | 31 | 15 |
| 2..... | 104 | 64 | 71 | 140 | 68 | 180 | 64 | 48 | 61 | 12 | 28 | 55 |
| 3..... | 197 | 112 | 58 | 136 | 81 | 143 | 67 | 11 | 52 | 84 | 27 | 45 |
| 4..... | 149 | 170 | 60 | 131 | 115 | 117 | 62 | 26 | 19 | 43 | 26 | 22 |
| 5..... | 122 | 140 | 51 | 110 | 366 | 108 | 46 | 57 | 9 | 58 | 24 | 8 |
| 6..... | 120 | 139 | 54 | 102 | 257 | 100 | 61 | 44 | 48 | 50 | 22 | 7 |
| 7..... | 109 | 129 | 21 | 93 | 219 | 99 | 129 | 41 | 27 | 68 | 22 | 8 |
| 8..... | 76 | 107 | 54 | 95 | 167 | 506 | 115 | 43 | 13 | 51 | 20 | 46 |
| 9..... | 59 | 88 | 75 | 91 | 117 | 417 | 116 | 38 | 22 | 45 | 32 | 31 |
| 10..... | 52 | 78 | 68 | 82 | 98 | 300 | 101 | 11 | 298 | 86 | 9 | 8 |
| 11..... | 47 | 73 | 66 | 78 | 87 | 232 | 85 | 9 | 171 | 100 | 47 | 22 |
| 12..... | 20 | 65 | 56 | 78 | 77 | 213 | 66 | 42 | 97 | 97 | 10 | 25 |
| 13..... | 21 | 60 | 65 | 87 | 286 | 172 | 72 | 41 | 99 | 97 | 9 | 8 |
| 14..... | 56 | 65 | 73 | 135 | 596 | 148 | 92 | 60 | 97 | 95 | 42 | 7 |
| 15..... | 54 | 65 | 86 | 240 | 540 | 126 | 86 | 55 | 58 | 71 | 19 | 39 |
| 16..... | 51 | 63 | 87 | 188 | 330 | 115 | 91 | 58 | 64 | 52 | 16 | 19 |
| 17..... | 16 | 74 | 83 | 158 | 198 | 107 | 101 | 44 | 61 | 49 | 11 | |
| 18..... | 52 | 145 | 174 | 250 | 169 | 107 | 101 | 50 | 25 | 39 | 11 | |
| 19..... | 25 | 165 | 367 | 234 | 170 | 162 | 104 | 72 | 18 | 11 | 41 | |
| 20..... | 40 | 146 | 212 | 172 | 171 | 149 | 104 | 50 | 63 | 10 | 12 | |
| 21..... | 65 | 122 | 182 | 170 | 197 | 163 | 97 | 46 | 16 | 43 | 30 | |
| 22..... | 65 | 114 | 151 | 149 | 199 | 142 | 87 | 50 | 21 | 56 | 16 | |
| 23..... | 60 | 102 | 125 | 114 | 189 | 118 | 85 | 49 | 57 | 37 | 56 | |
| 24..... | 70 | 92 | 107 | 88 | 185 | 104 | 78 | 33 | 38 | 21 | 63 | |
| 25..... | 75 | 82 | 89 | 80 | 212 | 102 | 69 | 16 | 9 | 56 | 69 | |
| 26..... | 74 | 72 | 84 | 74 | 215 | 107 | 38 | 50 | 17 | 33 | 55 | |
| 27..... | 77 | 66 | 84 | 72 | 297 | 100 | 51 | 54 | 62 | 46 | 61 | |
| 28..... | 81 | 49 | 86 | 80 | 214 | 93 | 70 | 29 | 40 | 78 | 59 | |
| 29..... | 61 | 62 | 123 | 67 | | 86 | 55 | 40 | 23 | 67 | 55 | 40 |
| 30..... | 63 | 52 | 160 | 80 | | 82 | 52 | 19 | 32 | 49 | 12 | 10 |
| 31..... | 61 | | 158 | 71 | | 86 | | 19 | | 35 | 7 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 197 | 16 | 70.7 | 0.794 | 0.92 |
| November..... | 170 | 49 | 94.0 | 1.06 | 1.18 |
| December..... | 367 | 21 | 102 | 1.15 | 1.33 |
| January..... | 250 | 67 | 123 | 1.38 | 1.59 |
| February..... | 596 | 60 | 210 | 2.36 | 2.46 |
| March..... | 506 | 82 | 157 | 1.76 | 2.03 |
| April..... | 129 | 38 | 80.7 | .907 | 1.01 |
| May..... | 72 | 9 | 40.5 | .455 | .52 |
| June..... | 298 | 9 | 54.8 | .616 | .69 |
| July..... | 100 | 10 | 53.3 | .599 | .69 |
| August..... | 69 | 7 | 30.4 | .342 | .39 |
| September..... | 55 | 7 | 21.8 | .245 | .27 |
| The year..... | 596 | 7 | 85.8 | .964 | 13.06 |

• Estimated

NORTH BRANCH OF RANCOCAS CREEK AT PEMBERTON, N. J.

LOCATION.—Water-stage recorder 600 feet below highway bridge at Pemberton, Burlington County, and 11 miles above confluence with South Branch.

DRAINAGE AREA.—111 square miles.

RECORDS AVAILABLE.—September, 1921, to September, 1930.

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----------|---------|------|------|---------|------|------|------|-----|------|-----------------|-------------------|-------|
| 1 | 135 | 161 | 102 | 180 | 143 | 252 | 230 | 91 | 91 | 88 | 64 | 58 |
| 2 | 264 | 170 | 112 | 160 | 135 | 219 | 127 | 80 | 88 | 120 | 61 | 61 |
| 3 | 336 | 209 | 105 | 150 | 135 | 199 | 98 | 94 | 127 | 120 | 55 | 61 |
| 4 | 336 | 300 | 120 | 160 | 161 | 189 | 80 | 102 | 135 | 112 | 61 | 64 |
| 5 | 219 | 348 | 112 | 152 | 276 | 179 | 74 | 80 | 74 | 152 | 58 | 64 |
| 6 | 170 | 373 | 120 | 152 | 252 | 161 | 67 | 77 | 61 | 161 | 61 | 49 |
| 7 | 127 | 312 | 105 | 189 | 230 | 161 | 105 | 91 | 67 | 179 | 58 | 46 |
| 8 | 161 | 264 | 120 | 70 | 199 | 412 | 152 | 94 | 67 | 170 | 46 | 64 |
| 9 | 112 | 241 | 120 | 127 | 199 | 438 | 152 | 112 | 77 | 135 | 46 | 52 |
| 10 | 98 | 219 | 102 | 112 | 179 | 425 | 170 | 120 | 386 | 120 | 49 | 46 |
| 11 | 120 | 179 | 84 | 112 | 152 | 399 | 161 | 170 | 504 | 143 | 46 | 49 |
| 12 | 120 | 170 | 70 | 120 | 161 | 324 | 143 | 170 | 399 | 127 | 43 | 46 |
| 13 | 112 | 161 | 77 | 127 | 241 | 288 | 135 | 135 | 219 | 112 | 39 | 49 |
| 14 | 105 | 143 | 127 | 143 | 412 | 276 | 120 | 152 | 143 | 112 | 40 | 58 |
| 15 | 98 | 161 | 143 | 189 | 425 | 230 | 135 | 179 | 135 | 98 | 55 | 74 |
| 16 | 112 | 135 | 135 | 179 | 386 | 209 | 127 | 219 | 112 | 91 | 67 | 70 |
| 17 | 112 | 152 | 120 | 152 | 386 | 189 | 135 | 170 | 143 | 88 | 64 | 64 |
| 18 | 98 | 179 | 127 | 241 | 373 | 179 | 143 | 152 | 179 | 84 | 70 | 61 |
| 19 | 94 | 189 | 143 | 219 | 264 | 189 | 135 | 120 | 135 | 70 | 55 | 58 |
| 20 | 98 | 189 | 170 | 219 | 264 | 189 | 152 | 135 | 102 | 67 | 46 | 49 |
| 21 | 112 | 179 | 152 | 199 | 252 | 179 | 143 | 127 | 91 | 84 | 46 | 49 |
| 22 | 161 | 135 | 120 | 189 | 264 | 170 | 127 | 120 | 84 | 70 | 43 | 49 |
| 23 | 179 | 161 | 127 | 189 | 230 | 170 | 120 | 120 | 80 | 67 | 105 | 49 |
| 24 | 189 | 161 | 105 | 170 | 230 | 152 | 120 | 152 | 74 | 84 | 189 | 43 |
| 25 | 152 | 152 | 152 | 152 | 264 | 135 | 102 | 152 | 64 | 64 | 179 | 46 |
| 26 | 152 | 135 | 135 | 143 | 264 | 161 | 112 | 91 | 74 | 67 | 127 | 49 |
| 27 | 143 | 135 | 152 | 120 | 276 | 161 | 105 | 102 | 127 | 67 | 84 | 61 |
| 28 | 179 | 127 | 150 | 143 | 252 | 152 | 105 | 74 | 135 | 77 | 55 | 52 |
| 29 | 161 | 105 | 150 | 161 | | 143 | 120 | 120 | 127 | 70 | 61 | 58 |
| 30 | 143 | 135 | 180 | 152 | | 143 | 84 | 143 | 94 | 74 | 58 | 49 |
| 31 | 189 | | 200 | 152 | | 241 | | 170 | | 67 | 55 | |
| Month | Maximum | | | Minimum | | | Mean | | | Per square mile | Run-off in inches | |
| October | 336 | | | 94 | | | 154 | | | 1.36 | 1.60 | |
| November | 373 | | | 105 | | | 189 | | | 1.70 | 1.90 | |
| December | 200 | | | 70 | | | 127 | | | 1.14 | 1.31 | |
| January | 241 | | | 70 | | | 159 | | | 1.46 | 1.65 | |
| February | 425 | | | 135 | | | 250 | | | 2.25 | 2.34 | |
| March | 438 | | | 135 | | | 223 | | | 2.01 | 2.32 | |
| April | 230 | | | 67 | | | 126 | | | 1.14 | 1.27 | |
| May | 219 | | | 74 | | | 126 | | | 1.14 | 1.31 | |
| June | 504 | | | 61 | | | 140 | | | 1.26 | 1.41 | |
| July | 179 | | | 64 | | | 101 | | | .910 | 1.05 | |
| August | 189 | | | 39 | | | 67.3 | | | .606 | .70 | |
| September | 74 | | | 43 | | | 54.9 | | | .495 | .55 | |
| The year | 504 | | | 39 | | | 142 | | | 1.28 | 17.41 | |

^a Estimated.

WICOMICO RIVER BASIN

EAST BRANCH OF WICOMICO RIVER NEAR SALISBURY, MD.

LOCATION.—Water-stage recorder at Schumaker Dam, 2 miles southeast of Salisbury, Wicomico County. Zero of gage, 17.95 feet above mean sea level.

DRAINAGE AREA.—18.5 square miles.

RECORDS AVAILABLE.—October, 1929, to September, 1930.

EXTREMES.—Maximum discharge during period, 76.1 second-feet Mar. 19 (gage height, 1.76 feet); minimum, 2.4 second-feet Sept. 18, 24, 25, 27–29 (gage height, 1.07 feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1..... | | 7.2 | 7.8 | 12.8 | 16.2 | 15.3 | 9.8 | 7.8 | 6.6 | 6.6 | 5.4 | 2.8 |
| 2..... | | 8.4 | 12.8 | 12.8 | 19.0 | 14.4 | 9.1 | 8.4 | 6.6 | 7.2 | 6.0 | 5.4 |
| 3..... | | 7.8 | 28.3 | 13.6 | 17.1 | 12.8 | 9.8 | 9.1 | 7.8 | 6.0 | 3.8 | 4.8 |
| 4..... | 11.2 | 15.3 | 12.8 | 12.8 | 25.0 | 17.1 | 9.8 | 7.8 | 7.2 | 5.4 | 5.4 | 4.8 |
| 5..... | 8.4 | 18.0 | 17.1 | 12.0 | 31.8 | 13.6 | 8.4 | 9.1 | 7.2 | 6.0 | 7.2 | 3.3 |
| 6..... | 10.5 | 14.4 | 21.0 | 8.4 | 30.6 | 12.8 | 8.4 | 8.4 | 6.6 | 6.0 | 6.6 | 3.8 |
| 7..... | 9.8 | 9.8 | 21.0 | 8.4 | 34.1 | 15.8 | 18.0 | 7.8 | 8.4 | 6.0 | 4.8 | 3.8 |
| 8..... | 9.1 | 12.0 | 17.1 | 13.6 | 23.0 | 50.7 | 20.0 | 8.4 | 8.4 | 7.2 | 4.8 | 4.3 |
| 9..... | 8.4 | 14.4 | 11.2 | 14.4 | 17.1 | 42.8 | 17.1 | 7.8 | 9.1 | 6.0 | 4.3 | 4.3 |
| 10..... | 7.2 | 9.1 | 20.0 | 13.6 | 20.0 | 42.8 | 13.6 | 7.2 | 14.4 | 4.8 | 3.3 | 4.8 |
| 11..... | 6.6 | 11.2 | 16.2 | 12.8 | 20.0 | 30.6 | 14.4 | 7.8 | 10.5 | 7.8 | 3.8 | 4.3 |
| 12..... | 7.2 | 10.5 | 14.4 | 12.0 | 16.2 | 24.0 | 14.4 | 7.2 | 8.4 | 6.6 | 6.0 | 4.3 |
| 13..... | 7.2 | 12.0 | 14.4 | 11.2 | 16.2 | 26.0 | 13.6 | 6.6 | 7.8 | 4.3 | 4.8 | 6.6 |
| 14..... | 9.8 | 11.2 | 13.6 | 12.0 | 20.0 | 24.0 | 11.2 | 10.5 | 7.8 | 3.8 | 3.8 | 4.8 |
| 15..... | 8.4 | 9.8 | 13.6 | 12.8 | 25.0 | 18.0 | 11.2 | 14.4 | 6.6 | 4.8 | 4.3 | 3.8 |
| 16..... | 7.2 | 12.8 | 12.8 | 12.8 | 23.0 | 15.3 | 12.0 | 12.0 | 6.6 | 6.0 | 6.0 | 3.8 |
| 17..... | 6.6 | 9.1 | 12.0 | 12.8 | 17.1 | 16.2 | 10.5 | 9.8 | 9.8 | 6.0 | 4.8 | 2.8 |
| 18..... | 7.2 | 12.0 | 11.2 | 17.1 | 18.0 | 29.4 | 11.2 | 10.5 | 7.8 | 5.4 | 4.3 | 2.8 |
| 19..... | 7.2 | 11.2 | 8.4 | 19.0 | 19.0 | 58.4 | 11.2 | 15.3 | 7.2 | 5.4 | 4.3 | 4.8 |
| 20..... | 6.6 | 9.8 | 9.8 | 20.0 | 16.2 | 39.0 | 12.8 | 12.8 | 6.6 | 4.8 | 5.4 | 4.3 |
| 21..... | 7.2 | 9.1 | 13.6 | 21.0 | 20.0 | 18.0 | 11.2 | 10.5 | 7.2 | 6.6 | 4.3 | 2.8 |
| 22..... | 11.2 | 12.0 | 12.8 | 23.0 | 19.0 | 17.1 | 10.5 | 7.8 | 6.0 | 9.1 | 4.8 | 3.3 |
| 23..... | 12.0 | 14.4 | 14.4 | 24.0 | 21.0 | 16.2 | 11.2 | 7.8 | 5.4 | 6.6 | 6.0 | 2.8 |
| 24..... | 10.5 | 19.0 | 14.4 | 22.0 | 17.1 | 14.4 | 9.1 | 9.1 | 6.0 | 5.4 | | 2.4 |
| 25..... | 6.6 | 15.3 | 14.4 | 21.0 | 13.6 | 10.5 | 9.8 | 8.4 | 9.1 | 6.0 | | 2.8 |
| 26..... | 7.2 | 9.1 | 13.6 | 19.0 | 20.0 | 9.1 | 10.5 | 8.4 | 7.2 | 6.0 | 5.3 | 3.8 |
| 27..... | 6.6 | 12.8 | 14.4 | 17.1 | 16.2 | 8.4 | 12.0 | 7.8 | 7.8 | 4.3 | | 2.4 |
| 28..... | 7.2 | 11.2 | 14.4 | 15.3 | 12.8 | 9.8 | 10.5 | 7.8 | 7.8 | 3.8 | | 2.0 |
| 29..... | 7.2 | 15.3 | 13.6 | 15.3 | | 11.2 | 10.5 | 8.4 | 5.4 | 3.8 | | 2.4 |
| 30..... | 8.4 | 9.8 | 13.6 | 16.2 | | 10.5 | 9.8 | 9.1 | 5.4 | 4.3 | 3.3 | 3.3 |
| 31..... | 9.8 | | 13.6 | 16.2 | | 9.8 | | 7.8 | | 3.8 | 3.3 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-------------------|---------|---------|------|--------------------|----------------------|
| October 4-31..... | 12.0 | 6.6 | 8.30 | 0.449 | 0.47 |
| November..... | 19.0 | 7.2 | 11.8 | .638 | .71 |
| December..... | 28.3 | 7.8 | 14.5 | .784 | .90 |
| January..... | 24.0 | 8.4 | 15.3 | .827 | .95 |
| February..... | 34.1 | 12.8 | 20.2 | 1.09 | 1.14 |
| March..... | 58.4 | 8.4 | 21.1 | 1.14 | 1.31 |
| April..... | 20.0 | 8.4 | 11.7 | .632 | .71 |
| May..... | 15.3 | 6.6 | 9.08 | .491 | .57 |
| June..... | 14.4 | 5.4 | 7.62 | .412 | .46 |
| July..... | 9.1 | 3.8 | 5.67 | .306 | .35 |
| August..... | 7.2 | 3.3 | 4.92 | .266 | .31 |
| September..... | 6.6 | 2.0 | 3.75 | .203 | .23 |

SUSQUEHANNA RIVER BASIN

SUSQUEHANNA RIVER AT COLLIERSVILLE, N. Y.

LOCATION.—Water-stage recorder one-fourth mile below power plant of Associated Gas & Electric System and half a mile north of Colliersville, Otsego County.

DRAINAGE AREA.—353 square miles.

RECORDS AVAILABLE.—July, 1924, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,420 second-feet Jan. 15 (gage height, 5.05 feet); minimum, 15 second-feet Sept. 18 (gage height, 1.28 feet).
1924-1930: Maximum discharge, 5,190 second-feet Mar. 16, 1929 (gage height, 7.1 feet); minimum, about 8 second-feet Aug. 21, 1926 (gage height, 1.09 feet).

REMARKS.—Records good. Daily flow ordinarily completely regulated by power-plant operation.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----------|---------|-------|-------|---------|-------|-------|-------|-----|-------|------------------|-------------------|-------|
| 1 | 88 | 70 | 96 | 416 | 511 | 880 | 334 | 442 | 174 | 194 | 68 | 20 |
| 2 | 238 | 46 | 176 | 988 | 583 | 1,210 | 1,020 | 362 | 300 | 113 | 31 | 38 |
| 3 | 174 | 82 | 245 | 1,200 | 372 | 750 | 398 | 644 | 208 | 96 | 31 | 43 |
| 4 | 86 | 191 | 270 | 1,020 | 275 | 845 | 800 | 176 | 162 | 120 | 91 | 18 |
| 5 | 168 | 214 | 280 | 470 | 408 | 812 | 486 | 392 | 250 | 73 | 135 | 17 |
| 6 | 42 | 187 | 316 | 934 | 379 | 802 | 482 | 243 | 250 | 104 | 61 | 26 |
| 7 | 178 | 98 | 248 | 992 | 270 | 762 | 958 | 436 | 204 | 175 | 63 | 20 |
| 8 | 150 | 138 | 182 | 1,800 | 338 | 1,330 | 1,360 | 230 | 204 | 178 | 68 | 25 |
| 9 | 138 | 170 | 370 | 1,520 | 320 | 1,830 | 1,050 | 166 | 266 | 104 | 41 | 43 |
| 10 | 98 | 156 | 278 | 1,790 | 280 | 1,470 | 1,140 | 414 | 336 | 80 | 28 | 18 |
| 11 | 84 | 114 | 214 | 1,380 | 264 | 1,470 | 878 | 120 | 188 | 108 | 82 | 17 |
| 12 | 78 | 150 | 127 | 1,340 | 307 | 1,790 | 1,060 | 330 | 236 | 80 | 87 | 17 |
| 13 | 94 | 135 | 234 | 1,830 | 420 | 1,700 | 1,100 | 170 | 256 | 48 | 29 | 32 |
| 14 | 146 | 127 | 426 | 1,960 | 280 | 1,600 | 922 | 290 | 76 | 88 | 75 | 18 |
| 15 | 133 | 308 | 400 | 2,260 | 321 | 1,420 | 1,060 | 300 | 243 | 131 | 34 | 18 |
| 16 | 170 | 352 | 448 | 2,260 | 210 | 1,240 | 610 | 224 | 121 | 109 | 32 | 18 |
| 17 | 137 | 264 | 490 | 1,680 | 286 | 1,260 | 872 | 307 | 228 | 101 | 23 | 22 |
| 18 | 72 | 763 | 1,130 | 1,460 | 282 | 1,370 | 804 | 193 | 147 | 113 | 29 | 28 |
| 19 | 88 | 1,080 | 1,610 | 1,150 | 392 | 1,870 | 790 | 280 | 88 | 69 | 59 | 20 |
| 20 | 46 | 644 | 1,560 | 1,300 | 610 | 1,790 | 771 | 410 | 192 | 48 | 33 | 30 |
| 21 | 126 | 432 | 953 | 1,260 | 972 | 1,590 | 532 | 212 | 195 | 113 | 30 | 17 |
| 22 | 148 | 414 | 732 | 1,170 | 1,260 | 1,300 | 736 | 406 | 130 | 159 | 21 | 20 |
| 23 | 106 | 369 | 712 | 974 | 1,120 | 1,220 | 642 | 148 | 144 | 63 | 38 | 42 |
| 24 | 148 | 408 | 514 | 909 | 1,340 | 1,180 | 389 | 308 | 141 | 34 | 22 | 18 |
| 25 | 138 | 348 | 532 | 694 | 1,320 | 1,100 | 718 | 239 | 110 | 43 | 21 | 18 |
| 26 | 89 | 384 | 778 | 706 | 1,320 | 1,260 | 455 | 424 | 104 | 36 | 50 | 18 |
| 27 | 44 | 296 | 780 | 720 | 980 | 1,260 | 570 | 152 | 160 | 36 | 39 | 24 |
| 28 | 131 | 361 | 686 | 585 | 1,060 | 741 | 309 | 414 | 98 | 69 | 20 | 18 |
| 29 | 168 | 278 | 564 | 551 | ----- | 1,090 | 472 | 380 | 115 | 131 | 24 | 17 |
| 30 | 206 | 85 | 604 | 485 | ----- | 866 | 250 | 260 | 97 | 154 | 33 | 19 |
| 31 | 102 | ----- | 624 | 475 | ----- | 859 | ----- | 279 | ----- | 184 | 20 | ----- |
| Month | Maximum | | | Minimum | | | Mean | | | Per square mile | Run-off in inches | |
| October | 238 | | | 42 | | | 123 | | | 0.348 | 0.40 | |
| November | 1,080 | | | 46 | | | 289 | | | .819 | .91 | |
| December | 1,610 | | | 96 | | | 535 | | | 1.52 | 1.75 | |
| January | 2,260 | | | 416 | | | 1,150 | | | 3.2 ^e | 3.76 | |
| February | 1,340 | | | 210 | | | 589 | | | 1.67 | 1.74 | |
| March | 1,870 | | | 741 | | | 1,250 | | | 3.54 | 4.08 | |
| April | 1,360 | | | 250 | | | 732 | | | 2.07 | 2.31 | |
| May | 644 | | | 120 | | | 302 | | | .856 | .99 | |
| June | 336 | | | 76 | | | 181 | | | .513 | .57 | |
| July | 194 | | | 34 | | | 102 | | | .2 ^e | .33 | |
| August | 135 | | | 20 | | | 45.7 | | | .17 ^o | .15 | |
| September | 43 | | | 17 | | | 23.3 | | | .06 ^e | .07 | |
| The year | 2,260 | | | 17 | | | 444 | | | 1.2 ^e | 17.06 | |

SUSQUEHANNA RIVER AT CONKLIN, N. Y.

LOCATION.—Water-stage recorder at highway bridge just below Conklin, Broome County, and $3\frac{1}{2}$ miles below Pennsylvania State line.

DRAINAGE AREA.—2,240 square miles (revised).

RECORDS AVAILABLE.—November, 1912, to September, 1930.

EXTREMES.—Maximum discharge during year, 18,600 second-feet Dec. 20 (gage height, 10.9 feet); minimum, 242 second-feet Sept. 2, 12, 13, 15 (gage height, 1.81 feet).

1912-1930: Maximum discharge, 52,000 second-feet Mar. 28, 1913 (gage height, 18.3 feet); minimum, 106 second-feet Sept. 16, 1913 (gage height, 1.32 feet).

REMARKS.—Records good except those for periods of ice effect, Dec. 2-6, Jan. 21 to Feb. 19, and those for estimated periods, which are fair.

Daily and monthly discharge, in second-feet, 1927-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|--------|--------|--------|--------|-------|-------|-------|------|------|-------|
| 1 | 479 | 746 | 1,300 | 3,140 | 1,400 | 6,590 | 3,480 | 1,680 | 2,750 | 699 | 360 | 260 |
| 2 | 1,880 | 767 | 1,200 | 4,110 | 1,500 | 6,370 | 3,060 | 1,570 | 2,320 | 686 | 360 | 242 |
| 3 | 4,660 | 789 | 1,200 | 8,460 | 1,700 | 6,370 | 3,480 | 2,050 | 1,860 | 907 | 360 | 364 |
| 4 | 3,650 | 1,180 | 1,100 | 8,960 | 1,700 | 4,790 | 3,060 | 2,600 | 1,680 | 858 | 340 | 396 |
| 5 | 2,460 | 1,340 | 1,200 | 6,150 | 1,600 | 4,300 | 2,900 | 2,180 | 1,460 | 719 | 340 | 443 |
| 6 | 1,680 | 1,350 | 1,200 | 4,200 | 1,500 | 4,300 | 2,530 | 1,680 | 1,250 | 673 | 320 | 434 |
| 7 | 1,400 | 1,290 | 1,350 | 4,960 | 1,400 | 4,300 | 5,760 | 1,620 | 1,330 | 726 | 320 | 378 |
| 8 | 1,060 | 1,140 | 1,850 | 6,370 | 1,400 | 7,740 | 9,040 | 1,520 | 1,460 | 617 | 380 | 326 |
| 9 | 984 | 1,050 | 2,180 | 9,480 | 1,400 | 13,800 | 8,700 | 1,570 | 1,340 | 599 | 360 | 282 |
| 10 | 932 | 1,000 | 2,120 | 10,800 | 1,300 | 11,900 | 6,810 | 1,400 | 1,920 | 872 | 320 | 274 |
| 11 | 858 | 992 | 1,920 | 9,900 | 1,300 | 9,480 | 6,150 | 1,240 | 3,480 | 850 | 300 | 256 |
| 12 | 782 | 960 | 1,800 | 6,810 | 1,400 | 10,800 | 5,510 | 1,280 | 2,820 | 680 | 280 | 242 |
| 13 | 667 | 966 | 1,600 | 9,740 | 1,300 | 15,300 | 5,720 | 1,010 | 1,920 | 611 | 280 | 290 |
| 14 | 661 | 950 | 3,480 | 13,800 | 1,300 | 10,000 | 5,510 | 1,100 | 1,920 | 997 | 260 | 297 |
| 15 | 648 | 1,550 | 4,110 | 13,800 | 1,200 | 8,220 | 4,660 | 1,250 | 1,350 | 966 | 260 | 274 |
| 16 | 636 | 2,180 | 4,020 | 13,500 | 1,200 | 6,590 | 4,110 | 1,680 | 1,100 | 760 | 260 | 1,750 |
| 17 | 642 | 2,680 | 3,960 | 10,300 | 1,100 | 6,370 | 3,560 | 1,800 | 1,070 | 732 | 260 | 1,010 |
| 18 | 661 | 5,820 | 7,000 | 6,810 | 1,200 | 7,270 | 3,480 | 1,620 | 1,340 | 686 | 260 | 686 |
| 19 | 699 | 8,960 | 13,300 | 5,360 | 1,500 | 10,500 | 3,480 | 1,460 | 1,570 | 599 | 260 | 588 |
| 20 | 623 | 8,220 | 18,000 | 4,020 | 2,370 | 11,300 | 3,220 | 1,680 | 1,460 | 553 | 274 | 542 |
| 21 | 630 | 5,580 | 14,400 | 3,400 | 5,720 | 8,960 | 2,900 | 2,050 | 1,330 | 521 | 260 | 515 |
| 22 | 565 | 4,200 | 8,960 | 2,800 | 8,960 | 7,040 | 2,600 | 2,050 | 1,180 | 494 | 252 | 480 |
| 23 | 810 | 3,220 | 5,930 | 2,400 | 9,480 | 5,510 | 2,530 | 1,800 | 992 | 515 | 260 | 440 |
| 24 | 950 | 2,600 | 4,110 | 2,200 | 10,000 | 4,690 | 2,530 | 2,090 | 907 | 510 | 363 | 410 |
| 25 | 898 | 2,320 | 3,830 | 2,000 | 12,200 | 4,690 | 2,390 | 3,390 | 834 | 510 | 317 | 380 |
| 26 | 882 | 2,180 | 4,490 | 1,900 | 15,000 | 5,510 | 2,250 | 3,360 | 796 | 480 | 334 | 350 |
| 27 | 842 | 1,980 | 4,490 | 1,700 | 11,300 | 5,930 | 2,320 | 2,980 | 1,030 | 440 | 334 | 320 |
| 28 | 746 | 1,980 | 4,590 | 1,600 | 7,740 | 5,300 | 2,120 | 3,060 | 916 | 420 | 330 | 320 |
| 29 | 642 | 1,980 | 4,110 | 1,600 | ----- | 4,200 | 1,920 | 4,690 | 858 | 400 | 317 | 300 |
| 30 | 544 | 1,590 | 3,560 | 1,500 | ----- | 4,110 | 1,680 | 4,560 | 760 | 380 | 294 | 300 |
| 31 | 654 | ----- | 3,140 | 1,400 | ----- | 3,740 | ----- | 3,480 | ----- | 360 | 338 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 4,690 | 479 | 1,110 | 0.496 | 0.57 |
| November | 8,960 | 746 | 2,380 | 1.06 | 1.18 |
| December | 18,000 | 1,100 | 4,370 | 1.95 | 2.25 |
| January | 13,800 | 1,400 | 5,910 | 2.64 | 3.04 |
| February | 15,000 | 1,100 | 3,900 | 1.74 | 1.81 |
| March | 13,800 | 3,740 | 7,160 | 3.20 | 3.69 |
| April | 9,040 | 1,680 | 3,920 | 1.75 | 1.95 |
| May | 4,690 | 1,010 | 2,110 | .942 | 1.09 |
| June | 3,480 | 760 | 1,490 | .665 | .74 |
| July | 997 | 360 | 639 | .285 | .33 |
| August | 380 | 252 | 308 | .138 | .16 |
| September | 1,750 | 242 | 438 | .196 | .22 |
| The year | 18,000 | 242 | 2,810 | 1.25 | 17.03 |

* Estimated.

OAKS CREEK AT INDEX, N. Y.

LOCATION.—Staff gage at highway bridge at Index, Otsego County, half a mile above mouth and 3 miles southwest of Cooperstown.

DRAINAGE AREA.—102 square miles.

RECORDS AVAILABLE.—November, 1929, to September, 1930.

EXTREMES.—Maximum discharge during period, 710 second-feet Jan. 15 (gage height, 4.0 feet); minimum, 5.6 second-feet frequently July 27 to Aug. 31 (gage height, 0.90 foot).

REMARKS.—Records good except those for periods of ice effect, Dec. 1-3, 23, 24, Jan. 6, Jan. 18 to Feb. 20, Mar. 4-6, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|------|------|------|------|------|-----|------|------|------|-------|
| 1 | | 120 | 229 | 130 | 338 | 240 | 138 | 81 | 13 | 5.6 | 17 |
| 2 | | 110 | 287 | 130 | 325 | 240 | 148 | 76 | 15 | 5.6 | 15 |
| 3 | | 110 | 370 | 140 | 287 | 252 | 167 | 72 | 12 | 5.6 | 13 |
| 4 | | 106 | 325 | 140 | 260 | 240 | 138 | 68 | 11 | 5.6 | 13 |
| 5 | | 105 | 240 | 130 | 240 | 218 | 131 | 65 | 10 | 5.6 | 13 |
| 6 | | 103 | 240 | 120 | 240 | 197 | 129 | 58 | 9.8 | 5.6 | 12 |
| 7 | | 100 | 312 | 110 | 252 | 276 | 120 | 55 | 24 | 5.6 | 11 |
| 8 | | 100 | 450 | 110 | 421 | 325 | 115 | 55 | 17 | 5.6 | 11 |
| 9 | | 95 | 540 | 100 | 421 | 312 | 112 | 57 | 13 | 5.6 | 10 |
| 10 | | 93 | 570 | 100 | 393 | 312 | 103 | 68 | 11 | 5.6 | 9.8 |
| 11 | | 87 | 393 | 100 | 421 | 312 | 98 | 65 | 9.8 | 5.6 | 9.8 |
| 12 | | 87 | 480 | 100 | 540 | 338 | 89 | 54 | 9.8 | 5.6 | 9.8 |
| 13 | | 126 | 570 | 100 | 510 | 325 | 86 | 50 | 9.8 | 5.6 | 9.8 |
| 14 | | 157 | 570 | 90 | 510 | 312 | 81 | 43 | 10 | 5.6 | 11 |
| 15 | | 155 | 710 | 85 | 421 | 300 | 103 | 39 | 12 | 5.6 | 13 |
| 16 | | 153 | 605 | 80 | 421 | 263 | 98 | 32 | 9.8 | 9.8 | 16 |
| 17 | | 140 | 510 | 80 | 393 | 263 | 87 | 31 | 8.3 | 5.6 | 24 |
| 18 | | 468 | 440 | 85 | 450 | 240 | 84 | 31 | 8.3 | 5.6 | 18 |
| 19 | | 421 | 380 | 120 | 570 | 240 | 84 | 39 | 8.3 | 5.6 | 17 |
| 20 | | 450 | 300 | 180 | 510 | 218 | 132 | 33 | 7.6 | 5.6 | 15 |
| 21 | | 287 | 260 | 338 | 450 | 208 | 103 | 32 | 6.9 | 5.6 | 13 |
| 22 | | 252 | 240 | 338 | 393 | 218 | 100 | 25 | 9.0 | 5.6 | 13 |
| 23 | 144 | 220 | 220 | 312 | 393 | 208 | 97 | 22 | 9.8 | 5.6 | 13 |
| 24 | 133 | 220 | 200 | 379 | 379 | 197 | 87 | 20 | 9.0 | 14 | 13 |
| 25 | 134 | 218 | 180 | 352 | 352 | 197 | 103 | 19 | 8.3 | 9.8 | 13 |
| 26 | 127 | 312 | 170 | 365 | 365 | 197 | 100 | 17 | 6.9 | 9.8 | 15 |
| 27 | 129 | 312 | 160 | 365 | 352 | 177 | 90 | 19 | 5.6 | 9.0 | 17 |
| 28 | 138 | 312 | 150 | 352 | 312 | 167 | 84 | 18 | 5.6 | 7.6 | 18 |
| 29 | 134 | 240 | 150 | | 300 | 153 | 101 | 16 | 5.6 | 5.6 | 17 |
| 30 | 124 | 229 | 140 | | 287 | 149 | 92 | 13 | 5.6 | 5.6 | 17 |
| 31 | | 240 | 130 | | 252 | | 87 | | 5.6 | 5.6 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| November 23-30 | 144 | 124 | 133 | 1.30 | 0.39 |
| December | 468 | 87 | 198 | 1.94 | 2.24 |
| January | 710 | 130 | 339 | 3.32 | 3.83 |
| February | 379 | 80 | 180 | 1.76 | 1.83 |
| March | 570 | 240 | 379 | 3.72 | 4.29 |
| April | 338 | 149 | 243 | 2.38 | 2.66 |
| May | 167 | 81 | 106 | 1.04 | 1.20 |
| June | 81 | 13 | 42.4 | .416 | .46 |
| July | 24 | 5.6 | 9.92 | .067 | .11 |
| August | 14 | 5.6 | 6.45 | .063 | .07 |
| September | 24 | 9.8 | 13.9 | .136 | .15 |

CHERRY VALLEY CREEK AT WESTVILLE, N. Y.

LOCATION.—Wire gage at highway bridge one-fourth mile northwest of Westville Otsego County, and 4 miles above mouth.

DRAINAGE AREA.—82 square miles.

RECORDS AVAILABLE.—January to September, 1930.

EXTREMES.—Maximum discharge during period, 932 second-feet Mar. 19 (gage height, 4.75 feet); minimum, 2.6 second-feet Aug. 18, Sept. 24 (gage height, 1.73 feet).

REMARKS.—Records good except those for periods of ice effect, Jan. 18 to Feb. 19 Mar. 1-6, which are fair.

Daily and monthly discharge, in second-feet, 1930

| Day | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | | 46 | 180 | 105 | 54 | 59 | 13 | 4.9 | 6.1 |
| 2..... | | 55 | 180 | 132 | 80 | 52 | 12 | 4.6 | 12 |
| 3..... | | 44 | 150 | 132 | 118 | 47 | 11 | 4.6 | 11 |
| 4..... | | 44 | 140 | 134 | 69 | 43 | 11 | 4.6 | 8.1 |
| 5..... | 150 | 42 | 130 | 126 | 65 | 36 | 10 | 5.3 | 5.8 |
| 6..... | 166 | 40 | 140 | 122 | 46 | 33 | 11 | 4.6 | 5.7 |
| 7..... | 216 | 38 | 179 | 353 | 54 | 33 | 11 | 4.6 | 4.6 |
| 8..... | 368 | 38 | 466 | 400 | 56 | 36 | 11 | 4.3 | 4.3 |
| 9..... | 440 | 36 | 437 | 260 | 52 | 46 | 11 | 4.0 | 4.0 |
| 10..... | 407 | 34 | 400 | 230 | 44 | 78 | 9.3 | 4.6 | 3.7 |
| 11..... | 180 | 36 | 396 | 276 | 36 | 73 | 9.3 | 4.6 | 4.0 |
| 12..... | 210 | 38 | 560 | 362 | 44 | 47 | 10 | 4.0 | 4.3 |
| 13..... | 542 | 36 | 420 | 245 | 40 | 36 | 8.1 | 3.4 | 4.0 |
| 14..... | 460 | 36 | 420 | 197 | 38 | 30 | 10 | 4.0 | 4.3 |
| 15..... | 663 | 32 | 260 | 157 | 69 | 28 | 8.1 | 3.1 | 5.8 |
| 16..... | 468 | 30 | 245 | 148 | 87 | 20 | 8.1 | 4.9 | 4.6 |
| 17..... | 197 | 26 | 260 | 181 | 53 | 23 | 7.0 | 4.6 | 4.0 |
| 18..... | 140 | 30 | 514 | 164 | 50 | 22 | 7.5 | 2.9 | 4.6 |
| 19..... | 120 | 44 | 758 | 157 | 54 | 23 | 7.0 | 3.4 | 4.3 |
| 20..... | 110 | 204 | 381 | 126 | 105 | 40 | 6.1 | 4.3 | 4.6 |
| 21..... | 95 | 577 | 348 | 110 | 75 | 36 | 6.1 | 4.0 | 4.3 |
| 22..... | 85 | 480 | 126 | 148 | 72 | 30 | 7.0 | 4.6 | 4.0 |
| 23..... | 80 | 400 | 157 | 118 | 59 | 23 | 8.1 | 6.1 | 3.1 |
| 24..... | 75 | 460 | 192 | 92 | 56 | 22 | 8.1 | 8.1 | 2.9 |
| 25..... | 70 | 344 | 186 | 106 | 85 | 18 | 7.0 | 6.1 | 3.4 |
| 26..... | 65 | 362 | 260 | 114 | 92 | 13 | 6.1 | 7.0 | 3.1 |
| 27..... | 60 | 230 | 202 | 96 | 94 | 15 | 6.1 | 4.6 | 5.3 |
| 28..... | 55 | 189 | 176 | 82 | 67 | 16 | 5.3 | 4.6 | 4.6 |
| 29..... | 50 | ----- | 143 | 70 | 99 | 12 | 4.9 | 3.4 | 4.3 |
| 30..... | 48 | ----- | 148 | 72 | 77 | 8.7 | 5.3 | 4.3 | 4.6 |
| 31..... | 46 | ----- | 132 | ----- | 69 | ----- | 5.3 | 4.6 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-------------------|---------|---------|------|--------------------|----------------------|
| January 5-31..... | 663 | 46 | 206 | 2.51 | 2.52 |
| February..... | 577 | 26 | 142 | 1.73 | 1.80 |
| March..... | 758 | 126 | 280 | 3.41 | 3.93 |
| April..... | 400 | 70 | 167 | 2.04 | 2.28 |
| May..... | 118 | 36 | 66.4 | .810 | .93 |
| June..... | 78 | 8.7 | 33.3 | .406 | .45 |
| July..... | 13 | 4.9 | 8.41 | .103 | .12 |
| August..... | 8.1 | 2.9 | 4.60 | .056 | .06 |
| September..... | 12 | 2.9 | 4.95 | .060 | .07 |

UNADILLA RIVER NEAR NEW BERLIN, N. Y.

LOCATION.—Staff gage at highway bridge one-fourth 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, 1930.

EXTREMES.—Maximum discharge during year, 2,440 second-feet Dec. 20 (gage height, 6.5 feet); minimum, 14 second-feet Sept. 12, 13, 27.

1924-1930: Maximum discharge, 5,590 second-feet Mar. 15, 1929 (gage height, 8.8 feet); minimum, 10 second-feet Sept. 5, 1929 (gage height, 1.06 feet).

REMARKS.—Records good except those for periods of ice effect, Nov. 30 to Dec. 6, Dec. 12, 23-27, Jan. 20 to Feb. 10, Feb. 15-18, Mar. 4, 5, and those for periods of backwater effect from aquatic growth, July 2 to Sept. 16, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|-------|-------|-------|-------|-------|-----|-------|------|------|-------|
| 1 | 23 | 78 | 110 | 309 | 170 | 465 | 324 | 172 | 172 | 38 | 19 | 34 |
| 2 | 123 | 74 | 100 | 598 | 160 | 535 | 432 | 231 | 159 | 65 | 18 | 30 |
| 3 | 425 | 111 | 95 | 1,110 | 180 | 399 | 384 | 338 | 135 | 46 | 18 | 26 |
| 4 | 353 | 133 | 95 | 849 | 160 | 360 | 324 | 231 | 107 | 50 | 20 | 24 |
| 5 | 231 | 124 | 95 | 465 | 150 | 340 | 282 | 195 | 104 | 40 | 16 | 22 |
| 6 | 160 | 117 | 100 | 570 | 140 | 338 | 282 | 172 | 82 | 38 | 18 | 22 |
| 7 | 130 | 111 | 104 | 802 | 130 | 343 | 941 | 160 | 80 | 38 | 17 | 20 |
| 8 | 160 | 102 | 160 | 1,480 | 130 | 1,140 | 1,050 | 155 | 76 | 34 | 17 | 22 |
| 9 | 137 | 96 | 172 | 1,740 | 130 | 1,360 | 730 | 146 | 86 | 36 | 17 | 24 |
| 10 | 115 | 90 | 135 | 1,460 | 130 | 1,050 | 650 | 133 | 160 | 30 | 17 | 20 |
| 11 | 102 | 86 | 109 | 743 | 124 | 1,050 | 610 | 119 | 195 | 30 | 17 | 16 |
| 12 | 92 | 94 | 95 | 770 | 160 | 1,200 | 610 | 126 | 122 | 32 | 16 | 14 |
| 13 | 84 | 94 | 115 | 1,200 | 119 | 1,000 | 570 | 119 | 94 | 30 | 16 | 14 |
| 14 | 88 | 104 | 183 | 1,390 | 160 | 860 | 500 | 128 | 72 | 32 | 15 | 18 |
| 15 | 109 | 255 | 256 | 1,600 | 140 | 650 | 432 | 195 | 63 | 34 | 16 | 40 |
| 16 | 94 | 256 | 207 | 1,200 | 130 | 570 | 384 | 231 | 58 | 30 | 34 | 55 |
| 17 | 115 | 183 | 232 | 650 | 120 | 570 | 338 | 172 | 67 | 24 | 19 | 60 |
| 18 | 124 | 542 | 1,200 | 535 | 110 | 920 | 353 | 137 | 67 | 24 | 18 | 48 |
| 19 | 104 | 737 | 1,200 | 500 | 115 | 1,330 | 338 | 146 | 86 | 26 | 17 | 33 |
| 20 | 92 | 500 | 2,100 | 440 | 259 | 905 | 296 | 276 | 90 | 24 | 20 | 34 |
| 21 | 82 | 368 | 1,190 | 380 | 770 | 282 | 244 | 78 | 26 | 20 | 31 | |
| 22 | 78 | 309 | 610 | 340 | 950 | 535 | 296 | 183 | 72 | 30 | 17 | 24 |
| 23 | 94 | 207 | 480 | 300 | 1,050 | 465 | 282 | 158 | 56 | 32 | 19 | 22 |
| 24 | 78 | 219 | 440 | 280 | 1,250 | 465 | 269 | 119 | 56 | 24 | 50 | 19 |
| 25 | 78 | 219 | 420 | 260 | 1,000 | 465 | 282 | 256 | 44 | 22 | 38 | 20 |
| 26 | 78 | 183 | 420 | 240 | 905 | 690 | 309 | 282 | 41 | 26 | 34 | 16 |
| 27 | 82 | 195 | 440 | 220 | 650 | 610 | 269 | 207 | 44 | 24 | 32 | 24 |
| 28 | 78 | 219 | 416 | 200 | 465 | 465 | 231 | 183 | 42 | 24 | 28 | 37 |
| 29 | 69 | 146 | 384 | 190 | ----- | 432 | 195 | 298 | 28 | 22 | 20 | 31 |
| 30 | 63 | 120 | 338 | 180 | ----- | 399 | 183 | 256 | 33 | 20 | 20 | 25 |
| 31 | 63 | ----- | 309 | 170 | ----- | 368 | ----- | 207 | ----- | 20 | 20 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 425 | 23 | 119 | 0.620 | 0.71 |
| November | 737 | 74 | 202 | 1.05 | 1.17 |
| December | 2,100 | 95 | 397 | 2.07 | 2.39 |
| January | 1,740 | 170 | 683 | 3.56 | 4.10 |
| February | 1,250 | 110 | 354 | 1.84 | 1.92 |
| March | 1,360 | 338 | 679 | 3.54 | 4.08 |
| April | 1,050 | 183 | 414 | 2.16 | 2.41 |
| May | 338 | 119 | 193 | 1.01 | 1.16 |
| June | 195 | 28 | 85.6 | .446 | .50 |
| July | 65 | 20 | 31.3 | .163 | .19 |
| August | 50 | 15 | 21.4 | .111 | .13 |
| September | 60 | 14 | 27.5 | .143 | .16 |
| The year | 2,100 | 14 | 267 | 1.39 | 18.92 |

UNADILLA RIVER AT ROCKDALE, N. Y.

LOCATION.—Wire gage at highway bridge in Rockdale, Chenango County 5½ miles above mouth.

DRAINAGE AREA.—515 square miles.

RECORDS AVAILABLE.—November, 1929, to September, 1930.

EXTREMES.—Maximum discharge during period, 6,800 second-feet Dec. 20 (gage height, 7.8 feet); minimum, 45 second-feet Aug. 9-14.

REMARKS.—Records good except those for periods of ice effect, Dec. 1-7, 12, 13, 25-27, Jan. 20 to Feb. 9, Feb. 15-18, Mar. 4, and those for period of back-water from temporary dam, Aug. 8 to Sept. 30, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|-------|-------|-------|-------|-----|-------|------|------|-------|
| 1 | | 340 | 1,000 | 400 | 1,260 | 815 | 415 | 530 | 132 | 61 | 63 |
| 2 | | 300 | 1,060 | 400 | 1,440 | 905 | 415 | 457 | 164 | 57 | 110 |
| 3 | | 280 | 2,580 | 420 | 1,160 | 905 | 620 | 388 | 180 | 55 | 160 |
| 4 | | 280 | 2,330 | 460 | 1,000 | 772 | 545 | 344 | 146 | 55 | 125 |
| 5 | | 280 | 1,230 | 420 | 860 | 690 | 435 | 302 | 136 | 55 | 101 |
| 6 | | 280 | 1,370 | 400 | 905 | 642 | 382 | 275 | 132 | 55 | 88 |
| 7 | | 300 | 1,610 | 360 | 1,050 | 1,920 | 356 | 280 | 132 | 51 | 76 |
| 8 | | 415 | 2,960 | 340 | 2,630 | 2,860 | 375 | 253 | 132 | 48 | 71 |
| 9 | | 508 | 4,080 | 360 | 4,450 | 2,010 | 338 | 248 | 139 | 45 | 67 |
| 10 | | 415 | 4,070 | 344 | 3,030 | 1,690 | 314 | 428 | 139 | 45 | 63 |
| 11 | | 362 | 2,440 | 375 | 2,670 | 1,560 | 280 | 590 | 128 | 45 | 65 |
| 12 | | 340 | 1,910 | 375 | 3,310 | 1,620 | 264 | 402 | 119 | 45 | 63 |
| 13 | | 360 | 2,950 | 338 | 2,820 | 1,500 | 264 | 291 | 110 | 45 | 59 |
| 14 | | 522 | 3,580 | 375 | 2,370 | 1,320 | 253 | 248 | 119 | 45 | 55 |
| 15 | | 650 | 4,420 | 360 | 1,690 | 1,050 | 338 | 210 | 128 | 48 | 76 |
| 16 | | 620 | 3,630 | 340 | 1,320 | 905 | 500 | 197 | 119 | 49 | 113 |
| 17 | | 574 | 2,030 | 300 | 1,820 | 860 | 428 | 185 | 101 | 49 | 119 |
| 18 | | 2,850 | 1,380 | 300 | 2,040 | 860 | 344 | 189 | 95 | 51 | 107 |
| 19 | | 4,960 | 1,050 | 326 | 3,760 | 815 | 338 | 350 | 85 | 51 | 101 |
| 20 | | 5,660 | 900 | 650 | 2,640 | 730 | 590 | 286 | 81 | 51 | 90 |
| 21 | | 4,170 | 800 | 1,820 | 2,090 | 650 | 620 | 248 | 76 | 53 | 81 |
| 22 | 860 | 2,320 | 750 | 2,370 | 1,440 | 650 | 500 | 210 | 95 | 49 | 76 |
| 23 | 690 | 1,380 | 700 | 2,670 | 1,620 | 650 | 428 | 193 | 119 | 59 | 71 |
| 24 | 635 | 1,100 | 650 | 3,140 | 1,160 | 650 | 362 | 176 | 101 | 69 | 67 |
| 25 | 598 | 1,000 | 600 | 2,670 | 1,160 | 642 | 730 | 210 | 90 | 78 | 65 |
| 26 | 545 | 1,000 | 550 | 2,520 | 1,440 | 650 | 772 | 176 | 83 | 81 | 63 |
| 27 | 530 | 1,100 | 500 | 1,820 | 1,560 | 628 | 605 | 176 | 98 | 71 | 71 |
| 28 | 590 | 1,100 | 480 | 1,160 | 1,160 | 545 | 566 | 168 | 85 | 78 | 71 |
| 29 | 457 | 1,000 | 460 | ----- | 1,000 | 478 | 953 | 153 | 78 | 71 | 76 |
| 30 | 388 | 905 | 420 | ----- | 1,000 | 442 | 772 | 136 | 71 | 59 | 73 |
| 31 | ----- | 860 | 420 | ----- | 905 | ----- | 650 | ----- | 65 | 55 | ----- |

| Month | Maximum | Minimum | Mean | Per square m. a. | Run-off in inches |
|----------------|---------|---------|-------|---------------------|----------------------|
| November 22-30 | 860 | 388 | 588 | 1.14 | 0.38 |
| December | 5,660 | 280 | 1,170 | 2.27 | 2.62 |
| January | 4,420 | 420 | 1,710 | 3.32 | 3.83 |
| February | 3,140 | 300 | 922 | 1.79 | 1.86 |
| March | 4,450 | 860 | 1,830 | 3.55 | 4.09 |
| April | 2,860 | 442 | 1,010 | 1.96 | 2.19 |
| May | 953 | 253 | 476 | .924 | 1.07 |
| June | 590 | 136 | 277 | .538 | .60 |
| July | 180 | 65 | 112 | .217 | .25 |
| August | 81 | 45 | 55.8 | .108 | .12 |
| September | 160 | 55 | 82.9 | .161 | .18 |

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.

DRAINAGE AREA.—1,490 square miles.

RECORDS AVAILABLE.—November, 1912, to September, 1930.

EXTREMES.—Maximum discharge during year, 15,206 second-feet Mar. 8 (gage height, 8.9 feet); minimum, 170 second-feet Aug. 16–23.

1912–1930: Maximum discharge, 35,500 second-feet Mar. 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 excellent except those for periods of ice effect, Dec. 1–16, 22–27, Jan. 18 to Feb. 19, and those for period of backwater from weeds, July 18 to Sept. 30, which are fair.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|--------|---------|---------|--------|--------|-------|-------|-------|-------|-------|
| 1 | 295 | 748 | 850 | 2,100 | * 1,000 | 3,880 | 2,890 | 1,290 | 1,940 | 779 | 280 | 200 |
| 2 | 738 | 758 | 800 | 3,160 | * 1,000 | 4,090 | 3,470 | 1,530 | 1,600 | 1,190 | 260 | 300 |
| 3 | 5,920 | 970 | 800 | 7,000 | * 1,100 | 3,670 | 3,670 | 1,840 | 1,330 | 1,030 | 280 | 800 |
| 4 | 4,750 | 1,240 | 800 | 5,860 | * 1,100 | 3,270 | 3,080 | 1,720 | 1,140 | 822 | 260 | 850 |
| 5 | 3,270 | 1,150 | 800 | * 2,980 | * 1,000 | 2,980 | 2,710 | 1,370 | 1,010 | 716 | 240 | 550 |
| 6 | 2,190 | 1,180 | 850 | * 3,080 | * 900 | 2,800 | 2,440 | 1,240 | 934 | 638 | 240 | 420 |
| 7 | 1,640 | 1,130 | 900 | 3,830 | 900 | 3,260 | 8,920 | 1,150 | 922 | 648 | 220 | 360 |
| 8 | 1,750 | 1,010 | 1,000 | 8,370 | 900 | 12,900 | 10,400 | 1,130 | 866 | 666 | 220 | 320 |
| 9 | 1,580 | 958 | 1,400 | 11,400 | 900 | 11,400 | 7,280 | 1,110 | 800 | 591 | 200 | 280 |
| 10 | 1,340 | 958 | 1,000 | 9,610 | 850 | 7,880 | 6,050 | 1,040 | 1,280 | 943 | 190 | 260 |
| 11 | 1,130 | 888 | 900 | 5,420 | 850 | 7,580 | 5,320 | 958 | 1,840 | 822 | 190 | 240 |
| 12 | 1,030 | 934 | 850 | 4,750 | 800 | 8,480 | 4,750 | 910 | 1,330 | 676 | 190 | 240 |
| 13 | 958 | 910 | 1,000 | 8,290 | 800 | 7,280 | 4,200 | 888 | 982 | 582 | 180 | 240 |
| 14 | 1,030 | 970 | 1,800 | 9,440 | * 800 | 7,000 | 3,780 | 877 | 833 | 610 | 180 | 240 |
| 15 | 970 | 2,460 | 2,600 | 9,760 | * 800 | 5,100 | 3,180 | 1,580 | 716 | 648 | 180 | 300 |
| 16 | 866 | 2,980 | 2,200 | 7,630 | * 800 | 4,420 | 2,710 | 1,940 | 648 | 610 | 170 | 320 |
| 17 | 877 | 2,100 | 2,440 | 4,860 | * 800 | 5,160 | 2,440 | 1,660 | 600 | 537 | 180 | 360 |
| 18 | 1,230 | 4,710 | 10,500 | 3,600 | 900 | 8,930 | 2,440 | 1,290 | 2,990 | 480 | 170 | 360 |
| 19 | 1,140 | 7,770 | 9,440 | 2,400 | 1,300 | 12,100 | 2,360 | 1,330 | 5,920 | 460 | 170 | 360 |
| 20 | 1,050 | 4,860 | 9,760 | 1,800 | 2,620 | 7,880 | 2,190 | 2,980 | 5,100 | 420 | 170 | 320 |
| 21 | 922 | 3,570 | 5,800 | 1,600 | 6,200 | 6,050 | 1,940 | 2,360 | 3,570 | 380 | * 170 | 280 |
| 22 | 866 | 2,890 | 3,800 | 1,500 | 8,800 | 4,420 | 1,940 | 1,940 | 2,360 | 380 | * 170 | 260 |
| 23 | 1,020 | 2,190 | 2,800 | 1,300 | 8,800 | 3,470 | 2,020 | 1,680 | 1,720 | 440 | * 170 | 240 |
| 24 | 1,040 | 2,020 | 2,200 | 1,300 | 9,440 | 3,370 | 1,860 | 1,490 | 1,400 | 460 | * 260 | 220 |
| 25 | 1,010 | 1,860 | 2,200 | 1,200 | 7,580 | 3,370 | 1,860 | 3,570 | 1,280 | 420 | 260 | 220 |
| 26 | 994 | 1,640 | 2,600 | 1,200 | 8,180 | 6,250 | 1,940 | 2,800 | 1,150 | 360 | 260 | 220 |
| 27 | 934 | 1,600 | 2,800 | 1,200 | 5,680 | 5,920 | 1,940 | 2,360 | 1,080 | 360 | 240 | 277 |
| 28 | 833 | 1,670 | 2,620 | 1,200 | 4,090 | 4,420 | 1,680 | 2,320 | 1,050 | 340 | 220 | 277 |
| 29 | 768 | 1,410 | 2,440 | 1,100 | ----- | 3,780 | 1,480 | 4,310 | 958 | 280 | 200 | 283 |
| 30 | 726 | 970 | 2,190 | * 1,100 | ----- | 3,570 | 1,360 | 3,080 | 822 | 280 | 200 | 289 |
| 31 | 726 | ----- | 2,100 | * 1,000 | ----- | 3,270 | ----- | 2,360 | ----- | 280 | 180 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 5,920 | 295 | 1,410 | 0.946 | 1.09 |
| November | 7,770 | 748 | 1,950 | 1.31 | 1.46 |
| December | 10,500 | 800 | 2,650 | 1.75 | 2.05 |
| January | 11,400 | * 1,000 | 4,160 | 2.75 | 3.22 |
| February | 9,440 | 800 | 2,820 | 1.85 | 1.97 |
| March | 12,900 | 2,800 | 5,740 | 3.85 | 4.44 |
| April | 10,400 | 1,360 | 3,410 | 2.25 | 2.56 |
| May | 4,310 | 877 | 1,800 | 1.21 | 1.40 |
| June | 5,920 | 600 | 1,610 | 1.05 | 1.20 |
| July | 1,190 | 280 | 576 | .387 | .45 |
| August | 280 | 170 | 209 | .140 | .16 |
| September | 850 | 200 | 330 | .221 | .25 |
| The year | 12,900 | 170 | 2,220 | 1.46 | 20.25 |

* Estimated.

TIOUGHENIOLA RIVER AT ITASKA, N. Y.

LOCATION.—Water-stage recorder at Itaska, Broome County, $3\frac{3}{4}$ miles below Whitney Point and mouth of Otselic River and 6 miles above confluence with Chenango River.

DRAINAGE AREA.—738 square miles.

RECORDS AVAILABLE.—October, 1929, to September, 1930.

EXTREMES.—Maximum discharge during period, 9,250 second-feet Mar. 8 (gage height, 7.2 feet); minimum, 89 second-feet Aug. 23.

REMARKS.—Records excellent except those for periods of ice effect, Dec. 1–13, 21–26, Jan. 5, 6, Jan. 18 to Feb. 19, and those for period of backwater from grass, July 18 to Sept. 30, which are fair.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| 1..... | | 485 | 480 | 1,020 | 500 | 1,800 | 1,480 | 705 | 900 | 523 | 190 | 130 |
| 2..... | | 516 | 480 | 1,800 | 500 | 2,040 | 2,100 | 755 | 772 | 690 | 180 | 220 |
| 3..... | | 645 | 460 | 3,840 | 500 | 1,620 | 2,040 | 969 | 652 | 582 | 170 | 550 |
| 4..... | | 742 | 440 | 2,740 | 550 | 1,600 | 1,710 | 839 | 562 | 485 | 170 | 500 |
| 5..... | | 690 | 440 | 1,500 | 480 | 1,420 | 1,480 | 690 | 504 | 436 | 170 | 320 |
| 6..... | | 742 | 440 | 1,600 | 420 | 1,320 | 1,360 | 631 | 467 | 413 | 160 | 240 |
| 7..... | | 682 | 500 | 2,050 | 440 | 1,420 | 5,420 | 589 | 448 | 442 | 160 | 200 |
| 8..... | | 610 | 600 | 5,130 | 460 | 7,000 | 5,660 | 603 | 425 | 479 | 150 | 180 |
| 9..... | | 589 | 800 | 6,390 | 440 | 6,640 | 3,740 | 575 | 419 | 396 | 140 | 170 |
| 10..... | | 575 | 600 | 4,590 | 420 | 4,000 | 3,150 | 510 | 747 | 723 | 130 | 160 |
| 11..... | | 568 | 500 | 2,340 | 400 | 3,820 | 2,780 | 467 | 843 | 549 | 120 | 140 |
| 12..... | | 624 | 380 | 2,700 | 380 | 4,380 | 2,420 | 425 | 582 | 448 | 130 | 140 |
| 13..... | | 582 | 600 | 4,740 | 400 | 3,540 | 2,080 | 407 | 454 | 385 | 120 | 140 |
| 14..... | | 670 | 1,090 | 4,990 | 380 | 3,670 | 1,890 | 390 | 390 | 419 | 110 | 150 |
| 15..... | | 1,710 | 1,270 | 4,950 | 400 | 2,530 | 1,540 | 753 | 348 | 448 | 120 | 190 |
| 16..... | | 1,550 | 1,000 | 3,310 | 400 | 2,280 | 1,370 | 780 | 322 | 407 | 120 | 190 |
| 17..... | | 1,130 | 836 | 2,040 | 400 | 2,860 | 1,240 | 624 | 368 | 348 | 130 | 200 |
| 18..... | | 2,770 | 5,510 | 1,400 | 440 | 5,740 | 1,230 | 523 | 2,840 | 320 | 110 | 220 |
| 19..... | | 3,740 | 4,810 | 1,100 | 550 | 7,050 | 1,200 | 588 | 4,760 | 300 | 110 | 200 |
| 20..... | | 2,340 | 4,590 | 950 | 957 | 4,130 | 1,090 | 1,390 | 4,080 | 280 | 110 | 170 |
| 21..... | | 1,770 | 2,400 | 850 | 2,420 | 3,220 | 960 | 1,010 | 2,710 | 260 | 100 | 150 |
| 22..... | 568 | 1,430 | 1,700 | 800 | 3,720 | 2,200 | 1,050 | 795 | 1,750 | 280 | 100 | 140 |
| 23..... | 694 | 1,170 | 1,300 | 750 | 3,760 | 1,830 | 1,050 | 712 | 1,240 | 340 | 120 | 140 |
| 24..... | 668 | 1,100 | 1,200 | 700 | 4,590 | 1,710 | 987 | 698 | 1,000 | 320 | 170 | 120 |
| 25..... | 645 | 1,020 | 1,100 | 600 | 3,840 | 1,770 | 969 | 1,420 | 918 | 280 | 170 | 130 |
| 26..... | 624 | 918 | 1,200 | 600 | 4,020 | 3,640 | 1,070 | 1,080 | 795 | 260 | 170 | 140 |
| 27..... | 596 | 892 | 1,260 | 600 | 2,580 | 3,340 | 1,020 | 1,000 | 750 | 240 | 150 | 170 |
| 28..... | 536 | 934 | 1,200 | 550 | 1,910 | 2,340 | 900 | 1,100 | 750 | 240 | 130 | 160 |
| 29..... | 504 | 787 | 1,130 | 550 | ----- | 1,960 | 788 | 1,890 | 652 | 220 | 120 | 170 |
| 30..... | 473 | 520 | 1,050 | 500 | ----- | 1,960 | 735 | 1,370 | 562 | 200 | 110 | 160 |
| 31..... | 485 | ----- | 1,000 | 500 | ----- | 1,710 | ----- | 1,080 | ----- | 200 | 110 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|---------------------|---------|---------|-------|--------------------|----------------------|
| October, 22–31..... | 694 | 473 | 579 | 0.785 | 0.29 |
| November..... | 3,740 | 485 | 1,080 | 1.46 | 1.63 |
| December..... | 5,510 | 380 | 1,300 | 1.76 | 2.03 |
| January..... | 6,390 | 500 | 2,130 | 2.89 | 3.33 |
| February..... | 4,590 | 380 | 1,290 | 1.75 | 1.82 |
| March..... | 7,050 | 1,320 | 3,050 | 4.13 | 4.76 |
| April..... | 5,660 | 735 | 1,820 | 2.47 | 2.76 |
| May..... | 1,890 | 390 | 818 | 1.11 | 1.28 |
| June..... | 4,760 | 322 | 1,070 | 1.45 | 1.62 |
| July..... | 723 | 200 | 384 | .520 | .60 |
| August..... | 190 | 100 | 137 | .186 | .21 |
| September..... | 550 | 120 | 196 | .266 | .30 |

OWEGO CREEK NEAR OWEGO, N. Y.

LOCATION.—Water-stage recorder at highway bridge half a mile above confluence with Catatonk Creek and $1\frac{1}{2}$ miles north of Owego, Tioga County.

DRAINAGE AREA.—185 square miles.

RECORDS AVAILABLE.—January to September, 1930.

EXTREMES.—Maximum discharge during period, 3,470 second-feet Mar. 8 (gage height, 5.8 feet); minimum, 13 second-feet Sept. 1 (gage height, 0.58 foot).

REMARKS.—Records good except those for periods of ice effect, Jan. 19 to Feb. 19, Mar. 4-6, and those estimated, which are fair.

Daily and monthly discharge, in second-feet, 1930

| Day | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|---------|-------|-----|-------|------|------|-------|
| 1 | | 85 | 481 | 288 | 116 | 291 | 91 | 31 | 16 |
| 2 | | 80 | 679 | 370 | 120 | 226 | 157 | 29 | 19 |
| 3 | | 75 | 440 | 317 | 143 | 181 | 120 | 28 | 21 |
| 4 | | 75 | 360 | 284 | 114 | 153 | 94 | 27 | 29 |
| 5 | | 70 | 320 | 252 | 98 | 129 | 83 | 26 | 24 |
| 6 | | 60 | 280 | 236 | 91 | 119 | 76 | 26 | 21 |
| 7 | | 60 | • 427 | 1,990 | 85 | 117 | 100 | 24 | 19 |
| 8 | | 55 | 3,070 | 1,300 | 105 | 102 | 76 | 23 | 19 |
| 9 | 852 | 55 | 1,810 | 895 | 90 | 100 | 67 | 20 | 18 |
| 10 | 600 | 55 | • 1,070 | 766 | 81 | 353 | 289 | 19 | • 18 |
| 11 | 418 | 50 | • 1,280 | 638 | 73 | 333 | 162 | 18 | • 18 |
| 12 | 446 | 50 | • 1,460 | 511 | 69 | 167 | 116 | 18 | • 17 |
| 13 | 1,090 | 50 | • 675 | 436 | 62 | 127 | 91 | 17 | 17 |
| 14 | 1,080 | 50 | • 810 | 391 | 66 | 103 | 124 | 16 | 20 |
| 15 | 894 | 44 | • 450 | 325 | 343 | 92 | 112 | 16 | 24 |
| 16 | 621 | 42 | • 361 | 277 | 278 | 83 | 85 | 17 | 24 |
| 17 | 460 | 44 | • 450 | 256 | 195 | 86 | 73 | 16 | • 20 |
| 18 | 333 | 50 | • 500 | 260 | 148 | 761 | 65 | 16 | • 18 |
| 19 | 280 | • 55 | • 992 | 249 | 182 | 804 | 61 | 15 | • 17 |
| 20 | 220 | • 404 | 676 | 219 | 607 | 432 | 58 | 15 | 16 |
| 21 | 200 | • 992 | 550 | 186 | 328 | 329 | 54 | 14 | 15 |
| 22 | 180 | • 918 | 378 | 184 | 252 | 226 | 53 | 14 | 15 |
| 23 | 160 | 758 | 331 | 178 | 201 | 166 | 55 | 17 | 14 |
| 24 | 140 | 814 | 314 | 171 | 295 | 144 | 51 | 19 | • 14 |
| 25 | 130 | 1,250 | 343 | 168 | 682 | 136 | 47 | 18 | • 14 |
| 26 | 120 | 1,410 | 1,040 | 181 | 382 | 133 | 43 | 17 | • 15 |
| 27 | 120 | 797 | 564 | 166 | 313 | 175 | 41 | 15 | 17 |
| 28 | 110 | 555 | 418 | 144 | 550 | 127 | 39 | 15 | 16 |
| 29 | 100 | ----- | 361 | 127 | 928 | 108 | 37 | 14 | 15 |
| 30 | 90 | ----- | 357 | 119 | 481 | 96 | 35 | 14 | 14 |
| 31 | 85 | ----- | 333 | ----- | 374 | ----- | 33 | 14 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|---------------|---------|---------|------|-----------------|-------------------|
| January, 9-31 | 1,090 | 85 | 380 | 2.06 | 1.75 |
| February | 1,410 | 42 | 322 | 1.74 | 1.81 |
| March | 3,070 | 280 | 696 | 3.76 | 4.34 |
| April | 1,990 | 119 | 396 | 2.14 | 2.39 |
| May | 928 | 62 | 253 | 1.37 | 1.58 |
| June | 804 | 83 | 213 | 1.15 | 1.28 |
| July | 289 | 33 | 83.5 | .451 | .52 |
| August | 31 | 14 | 19.0 | .103 | .12 |
| September | 29 | 14 | 18.1 | .098 | .11 |

• Estimated.

CAYUTA CREEK NEAR ALPINE, N. Y.

LOCATION.—Staff gage at highway bridge at outlet of Cayuta Lake, 2½ miles north of Alpine, Schuylar County.

DRAINAGE AREA.—17.6 square miles.

RECORDS AVAILABLE.—November, 1929, to September, 1930.

EXTREMES.—Maximum discharge during period, 185 second-feet June 19; minimum, 0.1 second-foot Sept. 14, 24.

REMARKS.—Records good except those for periods of ice effect. Nov. 23 to Dec. 6, Dec. 22–27, Jan. 19 to Feb. 24, and those for period of backwater from landslide, June 17 to July 11, which are fair. Cayuta Lake furnishes considerable natural storage.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|------|------|------|------|------|-----|------|------|------|-------|
| 1 | | 8 | 17 | 14 | 50 | 36 | 16 | 21 | 32 | 4.0 | 0.4 |
| 2 | | 7 | 21 | 13 | 52 | 35 | 16 | 20 | 30 | 3.6 | .6 |
| 3 | | 7 | 38 | 12 | 50 | 33 | 16 | 19 | 26 | 3.1 | .6 |
| 4 | | 6 | 46 | 12 | 48 | 31 | 16 | 17 | 22 | 2.8 | .5 |
| 5 | | 6 | 42 | 11 | 42 | 28 | 14 | 16 | 20 | 2.5 | .4 |
| 6 | | 6 | 40 | 10 | 40 | 27 | 13 | 15 | 18 | 2.2 | .4 |
| 7 | | 6.7 | 38 | 10 | 38 | 42 | 12 | 14 | 18 | 1.9 | .3 |
| 8 | | 7.2 | 42 | 9 | 62 | 55 | 14 | 13 | 18 | 1.8 | .3 |
| 9 | | 7.4 | 45 | 9 | 80 | 52 | 13 | 13 | 20 | 1.4 | .2 |
| 10 | | 7.2 | 48 | 8 | 84 | 52 | 12 | 14 | 26 | 1.1 | .2 |
| 11 | | 7.4 | 42 | 8 | 84 | 50 | 10 | 15 | 30 | .9 | .2 |
| 12 | | 7.4 | 40 | 7 | 91 | 48 | 9.2 | 16 | 29 | .8 | .2 |
| 13 | | 7.8 | 50 | 7 | 88 | 45 | 8.8 | 14 | 25 | .6 | .2 |
| 14 | | 9.0 | 58 | 7 | 88 | 42 | 8.8 | 13 | 24 | .6 | .1 |
| 15 | | 16 | 65 | 7 | 77 | 39 | 10 | 11 | 22 | .4 | .4 |
| 16 | | 17 | 62 | 7 | 71 | 35 | 11 | 11 | 19 | .6 | .4 |
| 17 | | 17 | 58 | 6 | 68 | 32 | 11 | 40 | 18 | .6 | .6 |
| 18 | 6.5 | 21 | 50 | 5 | 77 | 30 | 11 | 150 | 16 | .6 | .4 |
| 19 | 10 | 25 | 46 | 5 | 91 | 30 | 11 | 180 | 15 | .5 | .4 |
| 20 | 12 | 27 | 42 | 7 | 84 | 29 | 13 | 170 | 13 | .4 | .3 |
| 21 | 13 | 27 | 38 | 12 | 80 | 27 | 14 | 150 | 12 | .4 | .2 |
| 22 | 13 | 26 | 34 | 19 | 68 | 26 | 14 | 130 | 11 | .4 | .2 |
| 23 | 12 | 24 | 30 | 22 | 60 | 23 | 13 | 170 | 11 | .5 | .2 |
| 24 | 11 | 22 | 28 | 26 | 55 | 22 | 13 | 90 | 10 | .6 | .1 |
| 25 | 10 | 22 | 26 | 33 | 52 | 22 | 17 | 75 | 9.0 | .6 | .2 |
| 26 | 10 | 20 | 22 | 58 | 55 | 21 | 18 | 65 | 8.1 | .6 | .2 |
| 27 | 9 | 20 | 22 | 58 | 52 | 21 | 18 | 55 | 7.4 | .6 | .4 |
| 28 | 9 | 19 | 19 | 55 | 50 | 20 | 18 | 48 | 6.5 | .6 | .3 |
| 29 | 9 | 19 | 18 | | 42 | 18 | 22 | 42 | 6.1 | .6 | .2 |
| 30 | 8 | 19 | 16 | | 42 | 17 | 23 | 36 | 5.3 | .6 | .2 |
| 31 | | 18 | 15 | | 39 | | 23 | | 4.5 | .5 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| November 18–30 | 13 | 6.5 | 10.2 | 0.580 | 0.28 |
| December | 27 | 6 | 14.8 | .841 | .97 |
| January | 65 | 15 | 37.3 | 2.12 | 2.44 |
| February | 58 | 5 | 16.3 | .926 | .96 |
| March | 91 | 38 | 63.3 | 3.60 | 4.15 |
| April | 55 | 17 | 32.9 | 1.87 | 2.09 |
| May | 23 | 8.8 | 14.2 | .807 | .93 |
| June | 180 | 11 | 52.1 | 2.96 | 3.30 |
| July | 32 | 4.5 | 17.2 | .977 | 1.13 |
| August | 4.0 | .4 | 1.17 | .066 | .08 |
| September | .6 | .1 | .310 | .018 | .02 |

TIOGA RIVER AT LINDLEY, N. Y.

LOCATION.—Wire gage on highway bridge at Lindley, Steuben County, 6 miles above mouth of Canisteo River.

DRAINAGE AREA.—770 square miles.

RECORDS AVAILABLE.—January to September, 1930.

EXTREMES.—Maximum discharge during period, 8,910 second-feet Mr. 8 (gage height, 10.3 feet); minimum mean daily discharge, 19 second-feet Sept. 11, 12.

REMARKS.—Records good except those for period of ice effect, Jan. 18 to Feb. 21, and those for period of backwater from grass, July 17 to Sept. 30, which are fair.

Daily and monthly discharge, in second-feet, 1930

| Day | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| 1..... | ----- | 190 | 1,340 | 745 | 322 | 262 | 412 | 34 | 24 |
| 2..... | ----- | 180 | 2,210 | 1,070 | 474 | 167 | 1,180 | 32 | 26 |
| 3..... | ----- | 180 | 1,840 | 892 | 417 | 167 | 512 | 22 | 30 |
| 4..... | ----- | 190 | 1,160 | 790 | 379 | 130 | 332 | 26 | 24 |
| 5..... | ----- | 180 | 970 | 675 | 262 | 130 | 262 | 30 | 26 |
| 6..... | ----- | 170 | 855 | 640 | 262 | 130 | 235 | 28 | 22 |
| 7..... | ----- | 160 | 1,270 | 3,900 | 230 | 123 | 1,130 | 24 | 24 |
| 8..... | ----- | 150 | 6,630 | 3,250 | 412 | 141 | 494 | 28 | 22 |
| 9..... | ----- | 140 | 3,960 | 1,920 | 316 | 152 | 301 | 22 | 22 |
| 10..... | ----- | 140 | 2,460 | 1,620 | 262 | 730 | 225 | 26 | 22 |
| 11..... | 1,010 | 150 | 3,250 | 1,300 | 234 | 1,290 | 272 | 24 | 19 |
| 12..... | 1,090 | 160 | 2,990 | 1,170 | 217 | 575 | 253 | 22 | 19 |
| 13..... | 5,160 | 160 | 2,020 | 1,430 | 199 | 412 | 187 | * 22 | 24 |
| 14..... | 5,720 | 160 | 2,460 | 1,300 | 208 | 306 | 234 | * 26 | 46 |
| 15..... | 4,220 | 150 | 1,430 | 1,010 | 1,000 | 243 | 208 | * 32 | 46 |
| 16..... | 2,310 | 140 | 1,430 | 1,010 | 1,170 | 199 | 141 | 28 | 50 |
| 17..... | 1,210 | 130 | 1,620 | 1,500 | 745 | 844 | 130 | 30 | 48 |
| 18..... | 1,750 | 120 | 3,950 | 1,620 | 562 | 2,460 | 110 | 32 | 44 |
| 19..... | 500 | 140 | 4,360 | 1,990 | 549 | 1,540 | 95 | 28 | 36 |
| 20..... | 420 | 460 | 2,240 | 1,430 | 1,010 | 818 | 75 | 28 | 30 |
| 21..... | 360 | 1,600 | 1,920 | 1,170 | 780 | 575 | 90 | 28 | 30 |
| 22..... | 340 | 1,410 | 1,050 | 1,130 | 562 | 434 | 90 | 26 | 28 |
| 23..... | 320 | 1,210 | 892 | 892 | 462 | 332 | 65 | 32 | 26 |
| 24..... | 306 | 1,170 | 930 | 818 | 406 | 281 | 75 | 32 | 26 |
| 25..... | 280 | 3,350 | 930 | 745 | 474 | 277 | 50 | 32 | 30 |
| 26..... | 260 | 5,490 | 2,280 | 675 | 384 | 234 | 65 | 28 | 50 |
| 27..... | 260 | 2,580 | 1,340 | 549 | 281 | 1,450 | 32 | 28 | 90 |
| 28..... | 240 | 1,400 | 1,090 | 474 | 281 | 730 | 42 | 28 | 95 |
| 29..... | 240 | ----- | 970 | 444 | 468 | 439 | 42 | 28 | 60 |
| 30..... | 220 | ----- | 930 | 353 | 395 | 332 | 44 | 24 | 50 |
| 31..... | 200 | ----- | 818 | ----- | 281 | ----- | 30 | 26 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|--------------------|---------|---------|-------|-----------------|-------------------|
| January 11-31..... | 5,720 | 200 | 1,210 | 1.57 | 1.23 |
| February..... | 5,490 | 120 | 774 | 1.01 | 1.05 |
| March..... | 6,630 | 818 | 1,990 | 2.58 | 2.97 |
| April..... | 3,900 | 353 | 1,220 | 1.58 | 1.76 |
| May..... | 1,170 | 199 | 452 | .587 | .68 |
| June..... | 2,460 | 123 | 530 | .688 | .77 |
| July..... | 1,180 | 30 | 239 | .310 | .36 |
| August..... | 34 | 22 | 27.6 | .036 | .04 |
| September..... | 95 | 19 | 36.3 | .047 | .05 |

* Estimated.

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.—1,370 square miles (revised).

RECORDS AVAILABLE.—July, 1918, to September, 1930.

EXTREMES.—Maximum discharge during year, 16,300 second-feet Feb. 26 (gage height, 9.8 feet); minimum, 37 second-feet Sept. 12 (gage height, 0.65 foot).
1918-1930: Maximum discharge, about 46,700 second-feet May 22, 1919 (gage height, 16.4 feet); minimum, 28 second-feet Sept. 4, 1929 (gage height, 0.60 foot).

REMARKS.—Records good except those for periods of ice effect, Nov. 30 to Dec. 6, Dec. 12, 13, 22-27, Jan. 18 to Feb. 23, and those estimated, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----------|---------|-------|-------|---------|--------|--------|-------|-------|-------|-----------------|-------------------|-------|
| 1 | 81 | 493 | 400 | 970 | * 360 | 2,680 | 1,340 | 660 | 590 | 525 | 81 | 48 |
| 2 | * 500 | 461 | 350 | 1,800 | 340 | 3,400 | 2,230 | 660 | 461 | 1,270 | 79 | 48 |
| 3 | * 3,800 | 525 | 360 | 8,300 | * 340 | 2,250 | 1,790 | 810 | 401 | 703 | 79 | 62 |
| 4 | * 4,200 | 625 | 340 | 4,060 | 360 | 1,990 | 1,540 | 660 | 345 | 461 | 72 | 55 |
| 5 | * 1,700 | 590 | 320 | 1,720 | 340 | 1,650 | 1,340 | 590 | 294 | 373 | 70 | 51 |
| 6 | * 1,000 | 525 | 340 | 1,450 | 320 | 1,540 | 1,150 | 493 | 270 | 345 | 66 | 46 |
| 7 | * 750 | 493 | 373 | 1,880 | 300 | 2,230 | 6,300 | 461 | 285 | 1,290 | 64 | 44 |
| 8 | * 550 | 431 | 424 | 3,640 | 260 | 10,300 | 5,710 | 590 | 285 | 640 | 62 | 44 |
| 9 | * 480 | 401 | 1,060 | 6,510 | 240 | 6,860 | 3,170 | 590 | 275 | 431 | 60 | 44 |
| 10 | * 580 | 401 | 704 | 4,040 | 260 | 4,110 | 2,740 | 461 | 1,080 | 345 | 55 | 44 |
| 11 | * 320 | 373 | 493 | 2,070 | 260 | 6,020 | 2,350 | 401 | 2,180 | 373 | 53 | 43 |
| 12 | 285 | 345 | 420 | 1,960 | 280 | 6,450 | 1,990 | 373 | 970 | 320 | 51 | 37 |
| 13 | 247 | 345 | 360 | 8,070 | 300 | 3,860 | 2,230 | 345 | 660 | 280 | 48 | 51 |
| 14 | 256 | 345 | 3,010 | 10,500 | 280 | 4,650 | 2,110 | 345 | 493 | 320 | 48 | 48 |
| 15 | 247 | 702 | 3,430 | 9,120 | 260 | 2,930 | 1,650 | 1,190 | 401 | 345 | 48 | 85 |
| 16 | 243 | 1,500 | 1,870 | 4,300 | 240 | 2,610 | 1,440 | 1,650 | 345 | 275 | 66 | 95 |
| 17 | 230 | 1,060 | 1,440 | 2,110 | 240 | 2,880 | 1,870 | 1,150 | 1,200 | 222 | 72 | 95 |
| 18 | 205 | 6,030 | 3,920 | 1,400 | 220 | 9,840 | 2,230 | 930 | 3,750 | 198 | 64 | 90 |
| 19 | 183 | 6,200 | 3,790 | 900 | 260 | 8,760 | 2,480 | 1,020 | 2,910 | 186 | 55 | 70 |
| 20 | 168 | 3,170 | 5,020 | 750 | 850 | 4,050 | 2,110 | 3,830 | 1,510 | 142 | 58 | 66 |
| 21 | 168 | 2,110 | 1,760 | 650 | 2,400 | 3,320 | 1,760 | 1,950 | 1,060 | 152 | 55 | * 58 |
| 22 | 241 | 1,650 | 1,300 | 600 | 2,400 | 2,110 | 1,850 | 1,340 | 770 | 138 | 53 | 51 |
| 23 | 8,250 | 1,150 | 1,100 | 600 | 2,200 | 1,540 | 1,440 | 1,020 | 590 | 142 | 53 | 45 |
| 24 | 2,550 | 970 | 850 | 550 | 2,120 | 1,650 | 1,290 | 850 | 493 | 148 | * 58 | 48 |
| 25 | 1,540 | 890 | 850 | 500 | 6,240 | 1,540 | 1,200 | * 770 | 525 | 129 | 62 | 55 |
| 26 | 1,150 | 810 | 850 | 480 | 13,900 | 3,180 | 1,150 | 730 | 401 | 118 | 58 | 66 |
| 27 | 1,060 | 730 | 900 | 460 | 4,940 | 2,230 | 1,020 | 625 | 1,950 | 107 | 58 | 135 |
| 28 | 695 | 810 | 970 | 440 | 2,440 | 1,650 | 890 | 590 | 1,060 | 105 | 55 | 145 |
| 29 | 558 | 590 | 970 | 420 | ----- | 1,650 | 730 | 1,210 | 660 | 95 | 51 | 118 |
| 30 | 493 | 460 | 930 | 400 | ----- | 1,440 | 695 | 955 | 493 | 93 | 48 | 97 |
| 31 | 461 | ----- | 890 | * 380 | ----- | 1,390 | ----- | 685 | ----- | 85 | 48 | ----- |
| Month | Maximum | | | Minimum | | | Mean | | | Per square mile | Run-off in inches | |
| October | 8,250 | | | 81 | | | 1,060 | | | 0.774 | 0.89 | |
| November | 6,200 | | | 345 | | | 1,170 | | | .854 | .95 | |
| December | 5,020 | | | 320 | | | 1,290 | | | .942 | .109 | |
| January | 10,500 | | | * 380 | | | 2,610 | | | 1.91 | 2.20 | |
| February | 13,900 | | | 220 | | | 1,530 | | | 1.12 | 1.17 | |
| March | 10,300 | | | 1,390 | | | 3,570 | | | 2.61 | 3.01 | |
| April | 6,300 | | | 695 | | | 1,990 | | | 1.45 | 1.62 | |
| May | 3,830 | | | 345 | | | 901 | | | .658 | .76 | |
| June | 3,750 | | | 270 | | | 890 | | | .650 | .73 | |
| July | 1,290 | | | 85 | | | 334 | | | .244 | .28 | |
| August | 81 | | | 48 | | | 59.8 | | | .044 | .05 | |
| September | 145 | | | 37 | | | 66.2 | | | .048 | .05 | |
| The year | 13,900 | | | 37 | | | 1,290 | | | .942 | 12.80 | |

* Estimated.

CHEMUNG RIVER AT CHEMUNG, N. Y.

LOCATION.—Water-stage recorder installed Jan. 10, 1930, just below highway bridge half a mile southwest of Chemung, Chemung County, and half a mile above State line. Prior to that date chain gage on same bridge was used.

DRAINAGE AREA.—2,530 square miles (revised).

RECORDS AVAILABLE.—September, 1903, to September, 1930.

EXTREMES.—Maximum discharge during year, 26,300 second-feet Feb. 26 (gage height, 11.7 feet); minimum, about 104 second-feet Sept. 13.

1903-1930: Maximum discharge, about 67,000 second-feet Mar. 15, 1918 (gage height, 17.96 feet); minimum, 49 second-feet Aug. 14, 1911 (gage height, 1.47 feet).

REMARKS.—Records good except those for periods of ice effect, Nov. 29 to Dec. 7, Dec. 12, 13, 23-27, Jan. 11-12, Jan. 18 to Feb. 20, and those for period of backwater from weeds, July 22 to Sept. 30, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day* | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|--------|-------|--------|--------|--------|--------|-------|-------|-------|-------|-------|
| 1..... | 177 | 685 | 800 | 1,620 | 750 | 4,700 | 2,660 | 1,250 | 1,480 | 1,050 | 240 | 140 |
| 2..... | 287 | 725 | 750 | 2,140 | 750 | 5,740 | 3,120 | 1,240 | 1,240 | 1,210 | 220 | 140 |
| 3..... | 4,730 | 725 | 750 | 10,800 | 750 | 5,100 | 3,910 | 1,290 | 1,070 | 1,470 | 200 | 140 |
| 4..... | 8,710 | 725 | 750 | 8,520 | 750 | 3,860 | 2,980 | 1,410 | 914 | 1,030 | 200 | 140 |
| 5..... | 3,040 | 950 | 700 | 4,510 | 700 | 3,320 | 2,660 | 1,190 | 795 | 849 | 200 | 140 |
| 6..... | 1,920 | 855 | 700 | 3,590 | 650 | 2,900 | 2,430 | 1,060 | 727 | 752 | 200 | 130 |
| 7..... | 1,360 | 788 | 660 | 3,240 | 600 | 3,850 | 9,700 | 1,010 | 702 | 956 | 180 | 120 |
| 8..... | 1,050 | 685 | 670 | 5,520 | 600 | 18,706 | 12,700 | 1,280 | 702 | 1,350 | 190 | 130 |
| 9..... | 900 | 645 | 932 | 10,100 | 600 | 16,600 | 7,700 | 1,240 | 710 | 932 | 170 | 120 |
| 10..... | 768 | 608 | 1,180 | 8,740 | 600 | 9,540 | 5,970 | 1,110 | 1,090 | 858 | 160 | 120 |
| 11..... | 645 | 608 | 1,030 | 4,600 | 600 | 11,500 | 4,900 | 1,020 | 3,020 | 813 | 150 | 110 |
| 12..... | 608 | 570 | 700 | 3,400 | 600 | 13,700 | 4,320 | 952 | 2,000 | 770 | 140 | 110 |
| 13..... | 608 | 570 | 650 | 9,720 | 650 | 8,230 | 4,040 | 904 | 1,320 | 702 | 150 | 110 |
| 14..... | 535 | 535 | 1,830 | 18,100 | 650 | 11,000 | 4,220 | 914 | 1,070 | 761 | 150 | 130 |
| 15..... | 468 | 1,000 | 5,370 | 17,100 | 650 | 6,930 | 3,500 | 2,090 | 894 | 795 | 150 | 160 |
| 16..... | 468 | 2,300 | 3,590 | 10,400 | 600 | 5,520 | 2,900 | 3,770 | 770 | 736 | 160 | 180 |
| 17..... | 435 | 1,790 | 2,740 | 5,440 | 550 | 5,310 | 2,820 | 2,980 | 1,570 | 630 | 170 | 160 |
| 18..... | 435 | 6,860 | 5,810 | 3,200 | 600 | 13,200 | 3,680 | 2,210 | 8,890 | 562 | 170 | 160 |
| 19..... | 404 | 12,200 | 6,270 | 2,000 | 650 | 18,400 | 3,680 | 2,140 | 8,540 | 527 | 160 | 150 |
| 20..... | 404 | 5,610 | 7,160 | 1,500 | 850 | 9,750 | 3,950 | 7,200 | 4,040 | 499 | 170 | 140 |
| 21..... | 404 | 3,590 | 4,080 | 1,300 | 2,420 | 7,440 | 2,980 | 5,470 | 2,740 | 466 | 150 | 130 |
| 22..... | 404 | 2,900 | 2,280 | 1,200 | 3,500 | 5,100 | 2,740 | 3,410 | 2,000 | 460 | 150 | 120 |
| 23..... | 7,720 | 2,140 | 1,600 | 1,100 | 3,410 | 3,590 | 2,660 | 2,430 | 1,550 | 420 | 150 | 120 |
| 24..... | 4,240 | 1,620 | 1,400 | 1,100 | 3,680 | 3,320 | 2,280 | 2,070 | 1,290 | 400 | 150 | 110 |
| 25..... | 2,190 | 1,560 | 1,200 | 1,000 | 7,180 | 3,160 | 2,140 | 2,280 | 1,160 | 400 | 150 | 110 |
| 26..... | 1,660 | 1,390 | 1,300 | 1,000 | 23,300 | 9,050 | 2,000 | 1,870 | 1,100 | 360 | 150 | 120 |
| 27..... | 1,310 | 1,230 | 1,400 | 950 | 10,700 | 6,660 | 1,870 | 1,540 | 2,460 | 340 | 150 | 150 |
| 28..... | 1,050 | 1,230 | 1,620 | 950 | 5,490 | 4,600 | 1,680 | 1,510 | 2,220 | 300 | 140 | 190 |
| 29..... | 900 | 1,100 | 1,740 | 900 | ----- | 3,680 | 1,490 | 2,740 | 1,480 | 300 | 140 | 220 |
| 30..... | 768 | 900 | 1,620 | 850 | ----- | 3,240 | 1,350 | 2,360 | 1,150 | 260 | 140 | 200 |
| 31..... | 725 | ----- | 1,560 | 800 | ----- | 2,980 | ----- | 1,800 | ----- | 240 | ----- | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 8,710 | 177 | 1,590 | 0.628 | 0.72 |
| November..... | 12,200 | 535 | 1,900 | .751 | .84 |
| December..... | 7,160 | 650 | 2,030 | .802 | .92 |
| January..... | 18,100 | 800 | 4,690 | 1.85 | 2.13 |
| February..... | 23,300 | 550 | 2,600 | 1.03 | 1.07 |
| March..... | 18,700 | 2,900 | 7,440 | 2.94 | 3.39 |
| April..... | 12,700 | 1,350 | 3,770 | 1.49 | 1.66 |
| May..... | 7,200 | 904 | 2,060 | .814 | .94 |
| June..... | 8,890 | 702 | 1,960 | .775 | .86 |
| July..... | 1,470 | 240 | 684 | .270 | .31 |
| August..... | 240 | 140 | 166 | .066 | .08 |
| September..... | 220 | 110 | 140 | .055 | .06 |
| The year..... | 23,300 | 110 | 2,420 | .957 | 12.98 |

CANISTEO RIVER AT WEST CAMERON, N. Y.

LOCATION.—Wire gage on highway bridge at West Cameron, Steuben County, 2 miles above Cameron.

DRAINAGE AREA.—341 square miles.

RECORDS AVAILABLE.—January to September, 1930.

EXTREMES.—Maximum mean daily discharge (estimated), 3,800 second-feet Feb. 26; minimum discharge occurred during estimated period.

REMARKS.—Records Jan. 12 to Mar. 16, July 1 to Sept. 30, fair; others good.

Daily and monthly discharge, in second-feet, 1930

| Day | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|--------------------|---------|---------|---------|-------|-------|------|-----------------|-------------------|-------|
| 1..... | | 100 | 535 | 294 | 162 | 188 | * 70 | * 28 | * 26 |
| 2..... | | 100 | 556 | 960 | 162 | 138 | | | |
| 3..... | | 110 | 437 | 535 | 246 | 120 | | | |
| 4..... | | 110 | 311 | 381 | 202 | 112 | | | |
| 5..... | | 100 | 260 | 328 | 175 | 103 | | | |
| 6..... | | 95 | 311 | 484 | 138 | 89 | | | |
| 7..... | | 90 | 577 | 1,280 | 134 | 112 | | | |
| 8..... | | 80 | 2,470 | 1,000 | 136 | 87 | | | |
| 9..... | | 75 | 826 | 621 | 138 | 81 | | | |
| 10..... | | 70 | 577 | 667 | 131 | 211 | | | |
| 11..... | | 65 | 1,410 | 556 | 138 | 328 | | | |
| 12..... | 577 | 70 | 1,510 | 476 | 134 | 188 | | | |
| 13..... | 2,270 | 85 | 1,080 | 476 | 125 | 170 | | | |
| 14..... | 2,790 | 80 | 1,380 | 437 | 131 | 81 | | | |
| 15..... | 2,540 | 70 | 599 | 400 | 354 | 71 | | | |
| 16..... | 1,170 | 65 | 621 | 294 | 328 | 64 | | | |
| 17..... | 495 | 60 | 1,400 | 278 | 202 | 327 | | | |
| 18..... | 380 | 65 | 2,370 | 363 | 162 | 765 | | | |
| 19..... | 240 | 85 | 1,690 | 418 | 829 | 528 | | | |
| 20..... | 190 | 400 | 898 | 345 | 1,690 | 311 | | | |
| 21..... | 180 | * 667 | 815 | 294 | 715 | 246 | | | |
| 22..... | 170 | * 621 | 345 | 328 | 400 | 162 | | | |
| 23..... | 160 | * 556 | 381 | 328 | 294 | 178 | | | |
| 24..... | 150 | * 535 | 311 | 294 | 246 | 120 | | | |
| 25..... | 140 | * 1,580 | 381 | 278 | 231 | 103 | | | |
| 26..... | 130 | * 3,800 | 621 | 278 | 202 | 103 | | | |
| 27..... | 120 | * 1,260 | 418 | 262 | 162 | 162 | | | |
| 28..... | 120 | * 599 | 345 | 231 | 194 | 162 | | | |
| 29..... | 110 | | 311 | 202 | 542 | 178 | | | |
| 30..... | 110 | | 328 | 175 | 328 | 103 | | | |
| 31..... | 100 | | 294 | | 231 | | | | |
| | | | | | | | | | |
| Month | Maximum | | Minimum | | Mean | | Per square mile | Run-off in inches | |
| January 12-31..... | 2,790 | | 100 | | 607 | | 1.78 | 1.32 | |
| February..... | * 3,800 | | 60 | | 414 | | 1.21 | 1.26 | |
| March..... | 2,370 | | 260 | | 802 | | 2.35 | 2.71 | |
| April..... | 1,280 | | 175 | | 442 | | 1.30 | 1.45 | |
| May..... | 1,690 | | 125 | | 299 | | .877 | 1.01 | |
| June..... | 765 | | 64 | | 183 | | .537 | .60 | |
| July..... | | | | | 70.0 | | .205 | .24 | |
| August..... | | | | | | | .082 | .09 | |
| September..... | | | | | 26.0 | | .076 | .08 | |

* Estimated.

COHOCTON RIVER NEAR CAMPBELL, N. Y.

LOCATION.—Chain gage at highway bridge 2 miles above Campbell, Steuben County.

DRAINAGE AREA.—478 square miles.

RECORDS AVAILABLE.—July, 1918, to September, 1930.

EXTREMES.—Maximum discharge during year, 4,170 second-feet Feb. 25, Mar. 18 (gage height, 5.0 feet); minimum, 36 second-feet Sept. 20, 21, 23, 24.

1918-1930: Maximum discharge, 12,900 second-feet Dec. 1, 1927 (gage height, 8.9 feet); minimum, 13 second-feet Oct. 7, 1921 (gage height, 0.68 foot).

REMARKS.—Records good except those for periods of ice effect, Nov. 28 to Dec. 14, Dec. 22-31, Jan. 18 to Feb. 21, Mar. 4-6, and those for periods of backwater from weeds, Oct. 1, 2, May 27 to Sept. 30, which are fair. Discharge estimated June 26 to July 1. Beginning during year, water was diverted from Mud Creek at outlet of Lamoka Lake for power development on Keuka Lake (Oswego River Basin). Drainage area above diversion 45 square miles.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|------|-------|-------|-------|-------|-------|------------------|------------------|------|-------|
| 1..... | 50 | 120 | 140 | 365 | 140 | 655 | 590 | 280 | 240 | ^a 170 | 70 | 46 |
| 2..... | 240 | 114 | 130 | 825 | 140 | 530 | 720 | 280 | 200 | 140 | 60 | 48 |
| 3..... | 1,240 | 106 | 180 | 1,840 | 150 | 448 | 720 | 345 | 190 | 120 | 60 | 55 |
| 4..... | 828 | 120 | 130 | 1,460 | 160 | 400 | 655 | 284 | 160 | 110 | 60 | 50 |
| 5..... | 590 | 117 | 120 | 1,030 | 150 | 360 | 560 | 259 | 160 | 100 | 55 | 46 |
| 6..... | 395 | 109 | 130 | 755 | 140 | 360 | 622 | 238 | 160 | 100 | 50 | 44 |
| 7..... | 267 | 106 | 140 | 945 | 130 | 709 | 1,690 | 230 | 160 | 140 | 46 | 40 |
| 8..... | 204 | 98 | 150 | 1,300 | 130 | 1,880 | 1,500 | 211 | 150 | 120 | 46 | 40 |
| 9..... | 169 | 98 | 180 | 1,820 | 130 | 1,400 | 1,120 | 200 | 150 | 110 | 40 | 40 |
| 10..... | 150 | 98 | 180 | 1,400 | 130 | 1,210 | 988 | 179 | 240 | 120 | 40 | 40 |
| 11..... | 146 | 98 | 140 | 988 | 130 | 1,710 | 865 | 169 | 280 | 150 | 40 | 38 |
| 12..... | 143 | 90 | 130 | 905 | 130 | 1,820 | 790 | 169 | 200 | 130 | 44 | 38 |
| 13..... | 128 | 93 | 200 | 1,710 | 130 | 1,600 | 755 | 162 | 170 | 110 | 48 | 40 |
| 14..... | 117 | 109 | 650 | 2,280 | 130 | 1,820 | 655 | 162 | 160 | 130 | 46 | 40 |
| 15..... | 117 | 146 | 865 | 2,530 | 120 | 1,400 | 622 | 395 | 150 | 120 | 40 | 46 |
| 16..... | 109 | 165 | 828 | 1,820 | 110 | 1,300 | 530 | 560 | 140 | 110 | 50 | 40 |
| 17..... | 106 | 169 | 790 | 1,300 | 110 | 1,470 | 502 | 420 | 260 | 95 | 55 | 44 |
| 18..... | 100 | 365 | 790 | 800 | 120 | 3,360 | 475 | 345 | 650 | 85 | 46 | 40 |
| 19..... | 98 | 448 | 755 | 460 | 160 | 2,820 | 530 | 686 | 550 | 85 | 44 | 38 |
| 20..... | 98 | 370 | 655 | 340 | 320 | 1,820 | 560 | 1,660 | 460 | 85 | 42 | 36 |
| 21..... | 90 | 320 | 420 | 280 | 650 | 1,500 | 530 | 865 | 440 | 80 | 38 | 36 |
| 22..... | 93 | 234 | 300 | 240 | 905 | 865 | 502 | 622 | 320 | 80 | 38 | 40 |
| 23..... | 189 | 159 | 260 | 220 | 475 | 688 | 420 | 502 | 240 | 95 | 38 | 40 |
| 24..... | 189 | 169 | 240 | 200 | 448 | 655 | 395 | 395 | 300 | 85 | 44 | 40 |
| 25..... | 162 | 193 | 220 | 180 | 1,790 | 655 | 395 | 365 | 280 | 75 | 50 | 48 |
| 26..... | 156 | 182 | 220 | 170 | 2,700 | 1,500 | 370 | 316 | ^a 300 | 70 | 44 | 60 |
| 27..... | 156 | 182 | 240 | 160 | 1,400 | 1,300 | 365 | 260 | ^a 400 | 85 | 44 | 60 |
| 28..... | 146 | 170 | 260 | 160 | 905 | 865 | 325 | 400 | ^a 340 | 75 | 42 | 55 |
| 29..... | 131 | 160 | 280 | 160 | ----- | 688 | 302 | 440 | ^a 280 | 75 | 38 | 55 |
| 30..... | 120 | 150 | 260 | 150 | ----- | 590 | 280 | 340 | ^a 220 | 70 | 44 | 55 |
| 31..... | 114 | ----- | 240 | 150 | ----- | 530 | ----- | 280 | ----- | 70 | 40 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|------------------|---------|-------|-----------------|-------------------|
| October..... | 1,240 | 50 | 221 | 0.462 | 0.53 |
| November..... | 448 | 90 | 169 | .354 | .40 |
| December..... | 865 | 120 | 328 | .686 | .79 |
| January..... | 2,530 | 150 | 869 | 1.82 | 2.10 |
| February..... | 2,760 | 110 | 433 | .906 | .94 |
| March..... | 3,360 | 360 | 1,190 | 2.49 | 2.87 |
| April..... | 1,690 | 280 | 644 | 1.35 | 1.51 |
| May..... | 1,660 | 162 | 388 | .812 | .94 |
| June..... | 650 | 140 | 265 | .554 | .62 |
| July..... | ^a 170 | 70 | 103 | .215 | .25 |
| August..... | 70 | 38 | 46.5 | .097 | .11 |
| September..... | 60 | 36 | 44.6 | .093 | .10 |
| The year..... | 3,360 | 36 | 393 | .822 | 11.16 |

^a Estimated.

CONEWAGO CREEK NEAR MANCHESTER, PA.

LOCATION.—Water-stage recorder 500 feet above Manchester-Yorkhaven highway bridge and $1\frac{1}{2}$ miles north of Manchester, York County.

DRAINAGE AREA.—511 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 13,700 second-feet Oct. 2 (gage height, 12.58 feet); minimum, 2 second-feet Aug. 7, 8 (gage height, 1.16 feet).

1928-1930: Maximum discharge, about 20,300 second-feet Apr. 17, 1929 (gage height, 15.31 feet); minimum, that of Aug. 7, 8, 1930.

REMARKS.—Records excellent except those for periods of ice effect, Dec. 23-26, Jan. 25, 26, Feb. 9-12, those for periods when control was obstructed, Oct. 5-21, July 28-31, and those estimated, which are fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|--------|--------|--------|--------|--------|--------|--------|-----|--------|------|------|-------|
| 1 | 75 | 25 | 184 | 1, 110 | 281 | 900 | *340 | 269 | 88 | 120 | 18 | 19 |
| 2 | 4, 640 | 25 | 211 | 930 | 297 | *700 | *320 | 293 | 84 | 191 | 14 | 62 |
| 3 | 7, 290 | 532 | 204 | 1, 140 | 322 | *650 | *280 | 273 | 73 | 337 | 11 | 28 |
| 4 | 1, 350 | 1, 970 | 211 | 960 | 420 | *550 | *280 | 257 | 84 | 158 | 10 | 32 |
| 5 | 728 | 782 | 241 | 600 | 1, 440 | *500 | 277 | 241 | 68 | 96 | 10 | 35 |
| 6 | 496 | 518 | 234 | 478 | 2, 570 | 487 | 406 | 234 | 73 | 77 | 5 | 26 |
| 7 | 389 | 428 | 238 | 464 | 1, 270 | 492 | 4, 220 | 222 | 77 | 75 | 3 | 21 |
| 8 | 326 | 372 | 310 | 500 | 930 | 6, 960 | 1, 480 | 211 | 88 | 64 | 2 | 20 |
| 9 | 261 | 330 | 464 | 514 | 700 | 2, 760 | 840 | 204 | 79 | 63 | 3 | 17 |
| 10 | 222 | 301 | 381 | 478 | 550 | 1, 360 | 650 | 187 | 129 | 63 | 5 | 13 |
| 11 | 194 | *280 | 301 | 420 | 550 | 1, 110 | 550 | 168 | 496 | 56 | 9 | 12 |
| 12 | 177 | *260 | 226 | 364 | 600 | 1, 320 | 510 | 146 | 230 | 59 | 9 | 10 |
| 13 | 162 | *260 | 261 | 420 | 1, 090 | 930 | 464 | 143 | 143 | 56 | 13 | 20 |
| 14 | 149 | *260 | 368 | 666 | 2, 340 | 728 | 442 | 155 | 116 | 53 | 10 | 20 |
| 15 | 143 | *280 | 575 | 1, 640 | 1, 430 | 625 | 411 | 260 | 94 | 45 | 12 | 11 |
| 16 | 138 | *280 | 532 | 960 | *850 | 575 | 389 | 550 | 70 | 43 | 15 | 17 |
| 17 | 129 | *300 | 415 | 625 | *700 | 541 | 415 | 269 | 241 | 42 | 18 | 91 |
| 18 | 116 | 3, 540 | 394 | *478 | *600 | 532 | 451 | 184 | 1, 600 | 37 | 16 | 197 |
| 19 | 104 | 3, 130 | 720 | 351 | *650 | 904 | 433 | 158 | 848 | 42 | 25 | 95 |
| 20 | 104 | 1, 080 | 675 | *320 | *700 | 802 | 398 | 155 | 549 | 30 | 22 | 50 |
| 21 | 96 | 782 | 433 | *300 | *700 | 546 | 347 | 149 | 234 | 32 | 15 | 37 |
| 22 | 686 | 625 | 289 | *280 | *650 | 469 | 322 | 146 | 168 | 30 | 15 | 30 |
| 23 | 2, 280 | 536 | 280 | *280 | 600 | 411 | 310 | 129 | 126 | 48 | 20 | 26 |
| 24 | 810 | 487 | 280 | *280 | 600 | 402 | 293 | 208 | 113 | 43 | 17 | 16 |
| 25 | 482 | 460 | 280 | 280 | 1, 130 | 442 | 273 | 251 | 116 | 38 | 17 | 26 |
| 26 | 372 | 420 | 300 | 300 | 1, 330 | 870 | 269 | 155 | 235 | 36 | 21 | 23 |
| 27 | 34 | 389 | 351 | 314 | 2, 160 | 650 | 261 | 135 | 180 | 26 | 29 | 20 |
| 28 | 17 | 372 | 372 | 338 | 1, 220 | 482 | 253 | 132 | 140 | 22 | 14 | 15 |
| 29 | 7 | 338 | 810 | 338 | ----- | 424 | 257 | 118 | 124 | 30 | 9 | 25 |
| 30 | 5 | 262 | 1, 620 | 330 | ----- | *400 | 257 | 96 | 77 | 30 | 14 | 21 |
| 31 | 10 | ----- | 810 | 277 | ----- | *380 | ----- | 88 | ----- | 24 | 11 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 7, 290 | 5 | 709 | 1. 89 | 1. 60 |
| November | 3, 540 | 25 | 654 | 1. 28 | 1. 43 |
| December | 1, 020 | 184 | 399 | . 781 | . 90 |
| January | 1, 640 | 277 | 540 | 1. 06 | 1. 22 |
| February | 2, 570 | 281 | 953 | 1. 86 | 1. 94 |
| March | 6, 960 | 380 | 932 | 1. 82 | 2. 10 |
| April | 4, 220 | 253 | 547 | 1. 07 | 1. 19 |
| May | 550 | 88 | 200 | . 391 | . 45 |
| June | 1, 600 | 68 | 225 | . 440 | . 49 |
| July | 337 | 22 | 66. 6 | . 130 | . 15 |
| August | 29 | 2 | 13. 3 | . 026 | . 03 |
| September | 197 | 10 | 34. 5 | . 068 | . 08 |
| The year | 7, 290 | 2 | 437 | . 855 | 11. 58 |

* Estimated.

CONESTOGA CREEK AT LANCASTER, PA.

LOCATION.—Water-stage recorder above diversion dam of city waterworks, three-fourths mile west of Lancaster, Lancaster County.

DRAINAGE AREA.—322 square miles.

RECORDS AVAILABLE.—September, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,680 second-feet Oct. 2 (gage height, 3.00 feet); no flow over dam Aug. 11.

1928-1930: Maximum discharge, about 9,400 second-feet Feb. 28, 1929 (gage height, 6.57 feet); no flow over dam Aug. 11, 1930.

REMARKS.—Records excellent except those for period flashboards were on dam, Aug. 10 to Sept. 30, and those estimated, which are fair. Records, except part of table of monthly discharge, do not include diversion for Lancaster water supply. Station maintained by city of Lancaster.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|------|------|-------|-------|-------|-----|-------|-------|------|-------|
| 1..... | 182 | 157 | 162 | 381 | 297 | 740 | * 340 | 254 | 152 | 187 | 50 | 26 |
| 2..... | 1,040 | 152 | 182 | 362 | 272 | 740 | * 320 | 248 | 172 | 182 | 47 | 31 |
| 3..... | 1,530 | 289 | 182 | 395 | 279 | 652 | * 300 | 237 | 177 | 182 | 39 | 31 |
| 4..... | 494 | 652 | 177 | 423 | 303 | 570 | * 290 | 208 | 152 | 167 | 41 | 44 |
| 5..... | 829 | 297 | 177 | 329 | 761 | 530 | * 280 | 225 | 135 | 152 | 47 | 31 |
| 6..... | 243 | 219 | 177 | 291 | 695 | 530 | * 320 | 214 | 139 | 135 | 41 | 24 |
| 7..... | 248 | 192 | 182 | 291 | 458 | 530 | 1,440 | 202 | 150 | * 120 | 36 | 24 |
| 8..... | 219 | 182 | 202 | 297 | 409 | 1,020 | 832 | 202 | 143 | * 100 | 41 | 22 |
| 9..... | 192 | 167 | 303 | 316 | * 380 | 832 | 530 | 208 | 152 | * 95 | 36 | 28 |
| 10..... | 177 | 143 | 219 | 291 | * 360 | 570 | 494 | 177 | 274 | * 85 | 14 | 24 |
| 11..... | 167 | 172 | 197 | 260 | * 380 | 570 | 458 | 167 | 316 | 90 | 7 | 24 |
| 12..... | 167 | 167 | 177 | 254 | * 420 | 695 | 437 | 157 | 214 | 90 | 20 | 24 |
| 13..... | 143 | 157 | 182 | 348 | * 500 | 570 | 423 | 177 | 182 | 87 | 22 | 24 |
| 14..... | 157 | 152 | 279 | 526 | * 800 | 494 | 423 | 182 | 162 | * 80 | 20 | 225 |
| 15..... | 157 | 157 | 310 | 872 | 652 | 458 | 395 | 276 | 148 | * 70 | 24 | 98 |
| 16..... | 143 | 172 | 291 | 530 | 530 | 451 | 388 | 291 | 152 | * 65 | 38 | 69 |
| 17..... | 118 | 152 | 231 | 409 | 494 | 458 | 437 | 225 | 167 | 66 | 28 | 182 |
| 18..... | 118 | 862 | 219 | 368 | 494 | 451 | 430 | 187 | 162 | 66 | 36 | 118 |
| 19..... | 122 | 865 | 297 | 316 | 530 | 816 | 423 | 214 | 208 | 44 | 26 | 66 |
| 20..... | 94 | 423 | 329 | 362 | 610 | 570 | 375 | 208 | 202 | 41 | 33 | 53 |
| 21..... | 105 | 355 | 248 | 381 | 610 | 494 | 355 | 192 | 148 | 50 | 36 | 44 |
| 22..... | 130 | 310 | 192 | 362 | 530 | 423 | 329 | 177 | 139 | 63 | 31 | 36 |
| 23..... | 219 | 266 | 219 | 348 | 494 | 409 | 316 | 177 | 122 | 60 | 24 | 38 |
| 24..... | 182 | 254 | 208 | 303 | 494 | 423 | 297 | 186 | 143 | 56 | 28 | 36 |
| 25..... | 139 | 272 | 208 | 342 | 1,120 | 423 | 285 | 462 | 135 | 69 | 26 | 36 |
| 26..... | 135 | 243 | 219 | 335 | 880 | 530 | 279 | 310 | 128 | 72 | 31 | 33 |
| 27..... | 109 | 237 | 219 | 381 | 1,220 | 494 | 266 | 219 | 434 | 63 | 31 | 41 |
| 28..... | 122 | 208 | 219 | 388 | 832 | 423 | 272 | 202 | 243 | 60 | 50 | 47 |
| 29..... | 135 | 225 | 362 | 362 | ----- | 388 | 260 | 208 | 187 | 66 | 50 | 33 |
| 30..... | 122 | 152 | 430 | 316 | ----- | 381 | 248 | 214 | 177 | 60 | 41 | 33 |
| 31..... | 139 | ----- | 329 | 285 | ----- | 355 | ----- | 182 | ----- | 56 | 24 | ----- |

| Month | Observed | | | Corrected for diversion | | |
|----------------|----------|---------|------|-------------------------|-----------------|-------------------|
| | Maximum | Minimum | Mean | Mean | Per square mile | Run-off in inches |
| October..... | 1,530 | 94 | 244 | 253 | 0.801 | 0.92 |
| November..... | 865 | 143 | 275 | 288 | .894 | 1.00 |
| December..... | 430 | 162 | 236 | 249 | .773 | .89 |
| January..... | 872 | 254 | 369 | 381 | 1.18 | 1.36 |
| February..... | 1,220 | 272 | 564 | 577 | 1.79 | 1.86 |
| March..... | 1,020 | 355 | 548 | 561 | 1.74 | 2.01 |
| April..... | 1,440 | 248 | 408 | 421 | 1.31 | 1.46 |
| May..... | 452 | 167 | 220 | 234 | .727 | .84 |
| June..... | 434 | 122 | 180 | 195 | .606 | .68 |
| July..... | 187 | 41 | 89.6 | 105 | .326 | .38 |
| August..... | 50 | 7 | 32.8 | 46.8 | .145 | .17 |
| September..... | 225 | 22 | 51.5 | 65.6 | .204 | .23 |
| The year..... | 1,530 | 7 | 266 | 280 | .870 | 11.80 |

* Estimated.

MUDDY CREEK AT CASTLE FIN, PA.

LOCATION.—Water-stage recorder 1 mile downstream from Castle Fin, York County, and 2¼ miles above mouth of creek.

DRAINAGE AREA.—134 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1930.

EXTREMES.—1928-1930: Maximum stage, 8.81 feet Feb. 26, 1929 (discharge not determined); minimum, 0.93 foot Sept. 1, 28, 1930 (discharge not determined).

REMARKS.—Records good except those estimated and those for periods for ice effect, Jan. 30 to Feb. 2, Feb. 13-16, 1929, Jan. 25-27, 1930, which are fair.

Daily and monthly discharge, in second-feet, 1928-1930

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------------|------|-------|------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1928-29 | | | | | | | | | | | | |
| 1..... | | 118 | 180 | 154 | 100 | 385 | 145 | 199 | 162 | *100 | 64 | 64 |
| 2..... | | 122 | 120 | 183 | 100 | 328 | 140 | 199 | 145 | *90 | 86 | 52 |
| 3..... | | 126 | 118 | 105 | 114 | 288 | 126 | 244 | 142 | *85 | 77 | 55 |
| 4..... | | 208 | 103 | 145 | 124 | 384 | 124 | 202 | 142 | *80 | 92 | 54 |
| 5..... | | 164 | 118 | 116 | 109 | 2,620 | 232 | 196 | 138 | *80 | 82 | 52 |
| 6..... | | 126 | 88 | 365 | 118 | 1,310 | 194 | 194 | 138 | *140 | 76 | 94 |
| 7..... | | 124 | 101 | 183 | 1,430 | 558 | 150 | 231 | 129 | 86 | 72 | 66 |
| 8..... | | 124 | 105 | 129 | 202 | 374 | 142 | 186 | 175 | 76 | 66 | 78 |
| 9..... | | *120 | 103 | 172 | 154 | 318 | 140 | 172 | 157 | 101 | 72 | 310 |
| 10..... | | *110 | 99 | 361 | 142 | 269 | 147 | 170 | 136 | 86 | 76 | 153 |
| 11..... | | *110 | 116 | 211 | 129 | 250 | 147 | 164 | 136 | 79 | 60 | 140 |
| 12..... | | *110 | 111 | 167 | 116 | 240 | 177 | 160 | 113 | 81 | 97 | 81 |
| 13..... | | *120 | 103 | 150 | 110 | 237 | 154 | 183 | 120 | 81 | 453 | 76 |
| 14..... | | *120 | 124 | *150 | 110 | 262 | 160 | 180 | 105 | 81 | 134 | 106 |
| 15..... | | 120 | 175 | *150 | 100 | 244 | 154 | 180 | 145 | 79 | 176 | 174 |
| 16..... | | 111 | 126 | *130 | 100 | 237 | 2,280 | 164 | 140 | 81 | 84 | 79 |
| 17..... | 142 | 114 | 124 | *110 | 107 | 211 | 1,400 | 157 | 124 | 79 | 77 | 91 |
| 18..... | 133 | 116 | 118 | *120 | 116 | 199 | 560 | 150 | 120 | 72 | 64 | 109 |
| 19..... | 154 | 118 | 111 | *130 | 105 | 191 | 411 | 528 | 107 | 127 | 76 | 86 |
| 20..... | 145 | 147 | 116 | *140 | 109 | 191 | 346 | 315 | 157 | 84 | 67 | 72 |
| 21..... | 131 | 109 | 99 | 120 | 81 | 180 | 328 | 262 | 122 | 77 | 61 | 60 |
| 22..... | 133 | 111 | 82 | 101 | 114 | 177 | 364 | 228 | 305 | 79 | 69 | 64 |
| 23..... | 129 | 118 | 99 | 118 | 147 | 167 | 278 | 205 | 124 | 86 | 66 | 74 |
| 24..... | 135 | 105 | 114 | 120 | 118 | 167 | 253 | 199 | 124 | 81 | 55 | 72 |
| 25..... | 131 | 107 | 111 | 150 | 138 | 162 | 247 | 244 | 122 | 81 | 64 | 60 |
| 26..... | 124 | 114 | 133 | 154 | 2,060 | 160 | 256 | 191 | 124 | 88 | 66 | 58 |
| 27..... | 124 | 94 | 101 | 131 | 1,890 | 160 | 225 | 183 | 109 | 79 | 49 | 52 |
| 28..... | 124 | 105 | 101 | 138 | 1,240 | 150 | 214 | 172 | 109 | 69 | 101 | 60 |
| 29..... | 133 | 109 | 95 | 122 | ----- | 145 | 219 | 177 | *120 | 67 | 61 | 60 |
| 30..... | 118 | 124 | 90 | 110 | ----- | 142 | 202 | 287 | *110 | 105 | 52 | 132 |
| 31..... | 120 | ----- | 92 | 100 | ----- | 136 | ----- | 167 | ----- | 72 | 67 | ----- |

* Estimated.

Daily and monthly discharge, in second feet, of Muddy Creek at Castle Fin, Pa., 1928-1930—Continued

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------------|-------|-------|------|---------|-------|---------|-------|------|-------|-----------------|------|-------------------|
| 1929-30 | | | | | | | | | | | | |
| 1..... | 177 | 129 | 116 | 126 | 162 | 164 | 147 | 129 | 90 | 70 | 44 | 63 |
| 2..... | 2,340 | 144 | 120 | 124 | 126 | 170 | 145 | 124 | 90 | 124 | 43 | 298 |
| 3..... | 455 | 404 | 136 | 116 | 126 | 162 | 138 | 124 | 86 | 76 | 44 | 81 |
| 4..... | 228 | 294 | 131 | 111 | 150 | 157 | 140 | 118 | 84 | 71 | 44 | 41 |
| 5..... | 177 | 208 | 136 | 100 | 411 | 154 | 136 | 122 | 82 | 69 | 39 | 47 |
| 6..... | 147 | 180 | 124 | 100 | 262 | 160 | 196 | 122 | 83 | 66 | 38 | 36 |
| 7..... | 133 | 162 | 131 | 100 | 199 | 172 | 779 | 116 | 130 | 71 | 39 | 40 |
| 8..... | 120 | 152 | 145 | 110 | 183 | 611 | 288 | 120 | 118 | 67 | 41 | 49 |
| 9..... | 107 | 147 | 122 | 150 | 164 | 311 | 231 | 109 | 122 | 57 | 32 | 39 |
| 10..... | 107 | 138 | 109 | 120 | 162 | 259 | 208 | 109 | 203 | 63 | 35 | 42 |
| 11..... | 99 | 138 | 105 | 100 | 157 | 253 | 196 | 107 | 131 | 57 | 36 | 40 |
| 12..... | 103 | 136 | 105 | 100 | 150 | 256 | 191 | 103 | 95 | 57 | 36 | 37 |
| 13..... | 95 | 136 | 114 | 100 | 267 | 219 | 183 | 105 | 94 | 57 | 38 | 38 |
| 14..... | 90 | 133 | 124 | 140 | 294 | 205 | 180 | 107 | 90 | 51 | 32 | 48 |
| 15..... | 84 | 138 | 114 | 260 | 234 | 194 | 172 | 129 | 90 | 60 | 52 | 42 |
| 16..... | 81 | 131 | 107 | 170 | 208 | 191 | 164 | 131 | 88 | 57 | 46 | 97 |
| 17..... | 97 | 131 | 103 | 140 | 231 | 194 | 172 | 111 | 84 | 51 | 47 | 116 |
| 18..... | 76 | 400 | 111 | 120 | 202 | 194 | 186 | 103 | 152 | 54 | 47 | 40 |
| 19..... | 86 | 219 | 129 | 110 | 202 | 228 | 172 | 105 | 101 | 57 | 44 | 46 |
| 20..... | 86 | 172 | 120 | 110 | 199 | 191 | 162 | 118 | 86 | 47 | 35 | 39 |
| 21..... | 84 | 157 | 101 | 110 | 188 | 180 | 157 | 107 | 81 | 41 | 38 | 38 |
| 22..... | 957 | 147 | 105 | 110 | 180 | 170 | 160 | 99 | 79 | 47 | 43 | 40 |
| 23..... | 387 | 142 | 103 | 110 | 172 | 167 | 150 | 95 | 79 | 54 | 34 | 42 |
| 24..... | 180 | 142 | 136 | 110 | 172 | 167 | 147 | 104 | 88 | 197 | 40 | 35 |
| 25..... | 154 | 140 | 131 | 120 | 183 | 180 | 147 | 173 | 118 | 101 | 34 | 44 |
| 26..... | 142 | 136 | 131 | 120 | 186 | 211 | 142 | 107 | 74 | 57 | 33 | 35 |
| 27..... | 131 | 133 | 114 | 130 | 199 | 167 | 138 | 99 | 99 | 57 | 84 | 43 |
| 28..... | 124 | 126 | 124 | 145 | 172 | 162 | 131 | 99 | 77 | 47 | 102 | 35 |
| 29..... | 118 | 131 | 124 | 147 | ----- | 157 | 131 | 103 | 74 | 63 | 37 | 34 |
| 30..... | 129 | 84 | 150 | 133 | ----- | 154 | 131 | 97 | 70 | 67 | 40 | 37 |
| 31..... | 147 | ----- | 124 | 129 | ----- | 150 | ----- | 94 | ----- | 43 | 37 | ----- |
| Month | | | | Maximum | | Minimum | | Mean | | Per square mile | | Run-off in inches |
| 1928-29 | | | | 154 | | 118 | | 132 | | 0.785 | | 0.55 |
| November..... | | | | 208 | | 94 | | 121 | | .783 | | 1.01 |
| December..... | | | | 180 | | 82 | | 112 | | .786 | | .96 |
| January..... | | | | 365 | | 100 | | 153 | | 1.14 | | 1.31 |
| February..... | | | | 2,060 | | 81 | | 339 | | 2.53 | | 2.64 |
| March..... | | | | 2,620 | | 136 | | 350 | | 2.67 | | 3.01 |
| April..... | | | | 2,280 | | 124 | | 330 | | 2.46 | | 2.74 |
| May..... | | | | 528 | | 150 | | 209 | | 1.56 | | 1.80 |
| June..... | | | | 305 | | 105 | | 137 | | 1.02 | | 1.14 |
| July..... | | | | 140 | | 67 | | 85.5 | | .738 | | .74 |
| August..... | | | | 453 | | 49 | | 89.1 | | .785 | | .77 |
| September..... | | | | 310 | | 52 | | 89.5 | | .788 | | .75 |
| 1929-30 | | | | 2,340 | | 76 | | 240 | | 1.79 | | 2.06 |
| November..... | | | | 404 | | 84 | | 168 | | 1.25 | | 1.40 |
| December..... | | | | 150 | | 101 | | 121 | | .782 | | 1.04 |
| January..... | | | | 260 | | 100 | | 125 | | .783 | | 1.08 |
| February..... | | | | 411 | | 126 | | 198 | | 1.48 | | 1.54 |
| March..... | | | | 611 | | 150 | | 204 | | 1.52 | | 1.75 |
| April..... | | | | 779 | | 131 | | 187 | | 1.40 | | 1.56 |
| May..... | | | | 173 | | 94 | | 113 | | .843 | | .97 |
| June..... | | | | 203 | | 70 | | 97.9 | | .731 | | .82 |
| July..... | | | | 193 | | 40 | | 66.5 | | .496 | | .57 |
| August..... | | | | 102 | | 32 | | 43.0 | | .521 | | .57 |
| September..... | | | | 298 | | 34 | | 55.4 | | .413 | | .46 |
| The year..... | | | | 2,340 | | 32 | | 134 | | 1.07 | | 13.62 |

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, 1930.

EXTREMES.—Maximum discharge during year, about 4,400 second-feet Oct. 22 (gage height, 9.61 feet); minimum, 13 second-feet Sept. 28, 30 (gage height, 1.37 feet).

1926-1930: Maximum stage, 15.53 feet Nov. 16, 1926 (discharge not determined); minimum discharge, that of Sept. 28, 30, 1930.

REMARKS.—Records good. Discharge estimated because of ice effect Nov. 29, 30, Dec. 1-5, 23-27, Jan. 18-31, Feb. 1-4, 16, 17.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|------|------|------|------|------|------|-----|------|------|------|-------|
| 1..... | 133 | 101 | | 116 | | 114 | 103 | 103 | 73 | 61 | 38 | 42 |
| 2..... | 1,410 | 153 | 80 | 114 | 80 | 116 | 103 | 99 | 72 | 75 | 37 | 134 |
| 3..... | 322 | 372 | | 114 | | 107 | 101 | 98 | 69 | 58 | 29 | 44 |
| 4..... | 179 | 210 | | 103 | | 105 | 105 | 94 | 69 | 56 | 40 | 34 |
| 5..... | 137 | 146 | | 89 | 408 | 109 | 99 | 94 | 67 | 57 | 34 | 35 |
| 6..... | 116 | 131 | 109 | 99 | 174 | 107 | 341 | 92 | 138 | 56 | 30 | 34 |
| 7..... | 103 | 120 | 105 | 94 | 135 | 134 | 363 | 90 | 129 | 57 | 31 | 31 |
| 8..... | 94 | 114 | 107 | 96 | 124 | 496 | 194 | 89 | 131 | 52 | 30 | 38 |
| 9..... | 89 | 109 | 98 | 92 | 118 | 199 | 158 | 87 | 114 | 52 | 30 | 32 |
| 10..... | 84 | 103 | 89 | 84 | 118 | 162 | 144 | 85 | 208 | 52 | 22 | 29 |
| 11..... | 82 | 105 | 89 | 85 | 114 | 164 | 139 | 84 | 105 | 51 | 34 | 33 |
| 12..... | 79 | 109 | 85 | 89 | 116 | 169 | 133 | 85 | 85 | 50 | 28 | 32 |
| 13..... | 78 | 99 | 90 | 94 | 159 | 142 | 128 | 82 | 79 | 45 | 28 | 32 |
| 14..... | 78 | 101 | 103 | 109 | 221 | 135 | 128 | 90 | 76 | 51 | 31 | 40 |
| 15..... | 76 | 105 | 90 | 120 | 164 | 128 | 124 | 103 | 73 | 51 | 41 | 38 |
| 16..... | 75 | 98 | 90 | 101 | 120 | 126 | 126 | 92 | 70 | 46 | 43 | 129 |
| 17..... | 75 | 99 | 87 | 90 | 130 | 128 | 133 | 84 | 73 | 47 | 35 | 97 |
| 18..... | 72 | 322 | 90 | 139 | 131 | 151 | 84 | 158 | 47 | 45 | 44 | 44 |
| 19..... | 69 | 153 | 107 | 142 | 158 | 133 | 94 | 85 | 45 | 38 | 37 | 37 |
| 20..... | 69 | 126 | 98 | 139 | 131 | 120 | 99 | 75 | 42 | 36 | 37 | 37 |
| 21..... | 73 | 118 | 84 | 131 | 124 | 120 | 85 | 69 | 43 | 31 | 32 | 32 |
| 22..... | 1,120 | 109 | 80 | 126 | 116 | 120 | 82 | 66 | 45 | 35 | 37 | 37 |
| 23..... | 347 | 101 | 75 | 122 | 116 | 116 | 79 | 65 | 57 | 34 | 31 | 31 |
| 24..... | 148 | 101 | | 122 | 118 | 109 | 157 | 66 | 55 | 30 | 31 | 31 |
| 25..... | 120 | 107 | | 122 | 131 | 109 | 133 | 101 | 55 | 36 | 34 | 34 |
| 26..... | 107 | 98 | | 126 | 151 | 109 | 85 | 69 | 43 | 33 | 31 | 31 |
| 27..... | 101 | 98 | | 135 | 126 | 105 | 82 | 85 | 41 | 34 | 31 | 31 |
| 28..... | 98 | 98 | 114 | 118 | 109 | 105 | 84 | 66 | 46 | 49 | 24 | 24 |
| 29..... | 90 | 95 | 151 | 109 | 103 | 82 | 61 | 40 | 33 | 32 | 32 | 32 |
| 30..... | 96 | 80 | 126 | 107 | 103 | 79 | 61 | 40 | 32 | 26 | 26 | 26 |
| 31..... | 111 | | 118 | 107 | 107 | 73 | | | 35 | 25 | | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 1,410 | 69 | 188 | 1.98 | 2.28 |
| November..... | 372 | 80 | 130 | 1.37 | 1.53 |
| December..... | 151 | 93.1 | 98.2 | .982 | 1.13 |
| January..... | 120 | 83.8 | 88.4 | .884 | 1.02 |
| February..... | 408 | 137 | 1.45 | | 1.51 |
| March..... | 496 | 105 | 141 | 1.49 | 1.72 |
| April..... | 363 | 99 | 138 | 1.46 | 1.63 |
| May..... | 157 | 73 | 91.9 | .969 | 1.12 |
| June..... | 208 | 61 | 88.6 | .935 | 1.04 |
| July..... | 75 | 35 | 50.0 | .527 | .61 |
| August..... | 49 | 22 | 33.9 | .358 | .41 |
| September..... | 134 | 26 | 42.7 | .450 | .50 |
| The year..... | 1,410 | 22 | 101 | 1.07 | 14.50 |

GUNPOWDER RIVER BASIN

LITTLE GUNPOWDER FALLS AT LAUREL BROOK, MD.

LOCATION.—Water-stage recorder 700 feet above mouth of Laurel Brook, half a mile southwest of town of Laurel Brook, Harford County, and 1 mile below Maryland & Pennsylvania Railroad bridge.

DRAINAGE AREA.—35.7 square miles.

RECORDS AVAILABLE.—December, 1926, to September, 1930.

EXTREMES.—Maximum discharge during year, about 1,110 second-feet Oct. 22 (gage height, 5.90 feet); minimum 7.0 second-feet Aug. 11, 31, Sept. 1 (gage height, 0.84 foot).

1926-1930: Maximum stage, 9.64 feet June 14, 1928 (discharge not determined); minimum discharge occurred in 1930.

REMARKS.—Records good. Discharge estimated because of ice effect Nov. 30, Dec. 1-6, 21-26, Jan. 5, 6, 18-31, Feb. 1-4, 16, 17, Mar. 3-5.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | |
|---------|------|-------|------|-------|-------|------|-------|-----|-------|------|------|-------|-----|
| 1..... | 61 | 31 | 25 | 41 | 30 | 39 | 38 | 38 | 26 | 18 | 11 | 8 | |
| 2..... | 434 | 56 | | 40 | | 39 | 38 | 36 | 26 | 19 | 11 | 23 | |
| 3..... | 91 | 134 | | 40 | | 30 | 38 | 35 | 24 | 18 | 10 | 12 | |
| 4..... | 48 | 72 | | 35 | | 39 | 34 | 23 | 17 | 9.1 | 11 | 11 | |
| 5..... | 39 | 41 | | 30 | | 37 | 34 | 23 | 17 | 8.8 | 11 | 11 | |
| 6..... | 35 | 34 | 37 | 30 | 62 | 37 | 106 | 34 | 34 | 18 | 8.4 | 11 | |
| 7..... | 33 | 33 | | 37 | 32 | 42 | 65 | 228 | 34 | 39 | 17 | 8.4 | 11 |
| 8..... | 30 | 31 | | 37 | 33 | 39 | 209 | 69 | 33 | 37 | 16 | 8.4 | 12 |
| 9..... | 28 | 30 | | 34 | 32 | 36 | 69 | 53 | 33 | 30 | 15 | 8.4 | 11 |
| 10..... | 28 | 28 | | 32 | 30 | 40 | 53 | 47 | 33 | 92 | 16 | 8 | 10 |
| 11..... | 27 | 31 | 31 | 28 | 38 | 56 | 45 | 30 | 39 | 15 | 7.4 | 9.9 | |
| 12..... | 27 | 30 | 30 | 30 | 37 | 59 | 43 | 29 | 29 | 15 | 8 | 9.9 | |
| 13..... | 27 | 32 | 35 | 32 | 145 | 48 | 43 | 28 | 28 | 14 | 8.4 | 17 | |
| 14..... | 27 | 34 | 40 | 41 | 103 | 44 | 42 | 29 | 27 | 15 | 9.1 | 15 | |
| 15..... | 28 | 34 | 35 | 43 | 61 | 43 | 40 | 33 | 26 | 14 | 13 | 12 | |
| 16..... | 27 | 32 | 32 | 37 | 40 | 43 | 42 | 30 | 24 | 14 | 12 | 11 | |
| 17..... | 26 | 35 | 31 | 30 | 45 | 42 | 47 | 27 | 25 | 13 | 12 | 20 | |
| 18..... | 24 | 168 | 38 | 25 | 47 | 42 | 64 | 27 | 33 | 14 | 13 | 12 | |
| 19..... | 26 | 54 | 42 | | 49 | 64 | 50 | 40 | 29 | 13 | 11 | 11 | |
| 20..... | 25 | 40 | 34 | | 49 | 45 | 43 | 39 | 24 | 12 | 9.9 | 12 | |
| 21..... | 26 | 38 | 25 | | 20 | 45 | 42 | 42 | 30 | 23 | 12 | 9.9 | 11 |
| 22..... | 361 | 35 | | | | 42 | 40 | 42 | 28 | 22 | 12 | 9.9 | 10 |
| 23..... | 104 | 34 | | 41 | | 40 | 40 | 27 | 20 | 13 | 9.9 | 9.9 | |
| 24..... | 41 | 34 | | 40 | | 40 | 39 | 64 | 21 | 13 | 9.9 | 9.5 | |
| 25..... | 33 | 34 | | 40 | | 48 | 39 | 50 | 23 | 13 | 9.5 | 11 | |
| 26..... | 30 | 32 | 29 | 40 | 44 | 59 | 39 | 31 | 24 | 12 | 8.8 | 10 | |
| 27..... | 27 | 31 | | | 29 | 48 | 44 | 38 | 29 | 26 | 11 | 8.4 | 9.1 |
| 28..... | 27 | 30 | | | 40 | 40 | 40 | 37 | 30 | 20 | 10 | 8.4 | 8.4 |
| 29..... | 26 | 28 | | | 53 | 40 | 40 | 37 | 30 | 20 | 11 | 8 | 8.4 |
| 30..... | 29 | 26 | | | 44 | 40 | 40 | 37 | 28 | 18 | 10 | 7.4 | 9.1 |
| 31..... | 36 | ----- | 43 | ----- | ----- | 39 | ----- | 26 | ----- | 10 | 7.4 | ----- | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 434 | 24 | 59.1 | 1.66 | 1.91 |
| November | 168 | 26 | 43.4 | 1.22 | 1.36 |
| December | 53 | ----- | 32.2 | .90? | 1.04 |
| January | 43 | ----- | 27.9 | .78? | .90 |
| February | 145 | ----- | 50.8 | 1.42 | 1.48 |
| March | 209 | ----- | 50.3 | 1.41 | 1.63 |
| April | 228 | 37 | 51.4 | 1.44 | 1.61 |
| May | 64 | 26 | 33.2 | .93? | 1.07 |
| June | 92 | 18 | 28.5 | .79? | .89 |
| July | 19 | 10 | 14.1 | .39? | .46 |
| August | 13 | 7.4 | 9.45 | .26? | .31 |
| September | 23 | 8.0 | 11.5 | 3.22 | .36 |
| The year | 434 | 7.4 | 34.2 | .95? | 13.02 |

PATAPSCO RIVER BASIN

NORTH BRANCH OF PATAPSCO RIVER NEAR REISTERSTOWN, MD.

LOCATION.—Water-stage recorder at highway bridge on Louisville-Delight road 600 feet above mouth of Cook Branch and $3\frac{1}{2}$ miles southwest of Reisterstown, Baltimore County.

DRAINAGE AREA.—91.0 square miles.

RECORDS AVAILABLE.—June, 1927, to September, 1930.

EXTREMES.—Maximum discharge during year, about 2,500 second-feet Oct. 2 (gage height, about 7.5 feet); minimum, 16 second-feet Aug. 31 (gage height, 1.18 feet).

1927-1930: Maximum discharge, that of Oct. 2, 1929; minimum, that of Aug. 31, 1930.

REMARKS.—Records good. Discharge estimated because of ice effect Nov. 30, Dec. 1-5, 21-27, Jan. 18 to Feb. 4.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | |
|---------|-------|------|------|------|------|------|------|-----|------|------|------|-------|--|
| 1..... | *200 | 75 | 65 | 118 | 70 | 96 | 104 | 90 | 58 | 47 | 32 | 23 | |
| 2..... | 1,100 | 123 | | 108 | | 95 | 102 | 86 | 56 | 91 | 27 | 60 | |
| 3..... | 222 | 346 | | 104 | | 86 | 98 | 84 | 55 | 72 | 25 | 29 | |
| 4..... | 170 | 194 | | 95 | | 84 | 100 | 83 | 53 | 53 | 24 | 24 | |
| 5..... | 122 | 133 | | 81 | | 86 | 100 | 80 | 51 | 46 | 23 | 23 | |
| 6..... | 106 | 112 | 120 | 78 | 323 | 88 | 235 | 80 | 81 | 44 | 20 | 24 | |
| 7..... | 96 | 102 | 131 | 80 | 129 | 109 | 569 | 80 | 139 | 43 | 21 | 21 | |
| 8..... | 86 | 95 | 116 | 80 | 118 | 519 | 358 | 80 | 112 | 40 | 22 | 25 | |
| 9..... | 80 | 90 | 96 | 76 | 106 | 200 | 175 | 76 | 174 | 40 | 22 | 24 | |
| 10..... | 75 | 86 | 88 | 75 | 110 | 158 | 154 | 75 | 303 | 39 | 20 | 21 | |
| 11..... | 72 | 84 | 80 | 70 | 106 | 158 | 142 | 72 | 95 | 38 | 20 | 20 | |
| 12..... | 69 | 84 | 76 | 69 | 102 | 163 | 136 | 72 | 70 | 38 | 19 | 19 | |
| 13..... | 68 | 84 | 81 | 74 | 234 | 138 | 131 | 74 | 65 | 35 | 20 | 26 | |
| 14..... | 63 | 84 | 108 | 95 | 235 | 129 | 129 | 80 | 62 | 34 | 21 | 31 | |
| 15..... | 60 | 86 | 98 | 120 | 173 | 120 | 122 | 95 | 56 | 34 | 33 | 26 | |
| 16..... | 59 | 84 | 88 | 93 | 142 | 118 | 120 | 81 | 56 | 33 | 39 | 126 | |
| 17..... | 58 | 84 | 83 | 78 | 215 | 118 | 136 | 76 | 99 | 32 | 31 | 56 | |
| 18..... | 58 | 212 | 84 | 60 | 152 | 120 | 133 | 75 | 266 | 33 | 37 | 32 | |
| 19..... | 58 | 125 | 98 | | 147 | 173 | 125 | 75 | 75 | 32 | 29 | 28 | |
| 20..... | 59 | 100 | 88 | | 140 | 127 | 114 | 90 | 66 | 32 | 26 | 29 | |
| 21..... | 62 | 93 | 70 | | 129 | 118 | 110 | 81 | 60 | 31 | 26 | 26 | |
| 22..... | 355 | 84 | | | 118 | 110 | 110 | 75 | 56 | 29 | 25 | 25 | |
| 23..... | 136 | 83 | | | 116 | 104 | 102 | 68 | 52 | 28 | 26 | 25 | |
| 24..... | 104 | 81 | | | 114 | 104 | 100 | 70 | 55 | 28 | 25 | 24 | |
| 25..... | 95 | 81 | | | 112 | 142 | 98 | 81 | 66 | 28 | 25 | 26 | |
| 26..... | 88 | 78 | 100 | 140 | 98 | 200 | 95 | 68 | 58 | 28 | 22 | 24 | |
| 27..... | 81 | 76 | | | 122 | 142 | 93 | 65 | 56 | 27 | 25 | 22 | |
| 28..... | 76 | 75 | | | 104 | 120 | 91 | 65 | 47 | 27 | 23 | 20 | |
| 29..... | 70 | 70 | | | 112 | 91 | 69 | 43 | 27 | 21 | 20 | 20 | |
| 30..... | 72 | 60 | | | 110 | 91 | 63 | 46 | 25 | 19 | 20 | 20 | |
| 31..... | 83 | 104 | | | 108 | | 60 | | | 24 | 18 | | |

| Month | Maximum | Minimum | Mean | Pe* square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 1,100 | 58 | 132 | 1.45 | 1.67 |
| November..... | 346 | 60 | 105 | 1.15 | 1.28 |
| December..... | 140 | ----- | 87.4 | .960 | 1.11 |
| January..... | 120 | ----- | 75.3 | .827 | .95 |
| February..... | 559 | ----- | 149 | 1.04 | 1.71 |
| March..... | 519 | 84 | 137 | 1.51 | 1.74 |
| April..... | 569 | 91 | 142 | 1.56 | 1.74 |
| May..... | 95 | 60 | 76.4 | .840 | .97 |
| June..... | 303 | 43 | 84.4 | .927 | 1.03 |
| July..... | 91 | 24 | 37.4 | .411 | .47 |
| August..... | 39 | 18 | 24.7 | .271 | .31 |
| September..... | 126 | 19 | 30.0 | .330 | .37 |
| The year..... | 1,100 | 18 | 89.7 | .986 | 13.35 |

* Estimated.

NORTH BRANCH OF PATAPSCO RIVER NEAR MARIOTTSTVILLE, M.D.

LOCATION.—Water-stage recorder at highway bridge 1.2 miles northeast of Marriottsville, Howard County, and 3 miles above junction with South Branch of Patapsco River.

DRAINAGE AREA.—165 square miles.

RECORDS AVAILABLE.—October, 1929, to September, 1930.

EXTREMES.—Maximum discharge during period, about 2,930 second-feet Apr. 6-7 (gage height, 7.65 feet); minimum, 15 second-feet Sept. 30 (gage height, 2.62 feet).

REMARKS.—Records good. Discharge estimated because of ice Dec. 1-5, 21-27, Jan. 18 to Feb. 4.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|------|------|------|------|-------|-------|-----|------|------|------|-------|
| 1 | | 137 | | 206 | | 186 | 183 | 164 | 102 | 75 | 39 | 27 |
| 2 | | 154 | | 192 | | 189 | 183 | 162 | 102 | 104 | 45 | 75 |
| 3 | | 725 | 110 | 186 | 125 | 173 | 183 | 153 | 98 | 92 | 39 | 44 |
| 4 | | 392 | | 164 | | 170 | 183 | 150 | 94 | 75 | 35 | 35 |
| 5 | | 246 | | 145 | 654 | 164 | 173 | 148 | 89 | 75 | 33 | 36 |
| 6 | | 209 | 145 | 150 | 396 | 173 | 540 | 145 | 115 | 75 | 32 | 34 |
| 7 | | 186 | 170 | 148 | 255 | 232 | 1,200 | 145 | 216 | 76 | 38 | 35 |
| 8 | | 170 | 170 | 148 | 234 | 1,100 | 411 | 137 | 220 | 62 | 34 | 28 |
| 9 | | 164 | 164 | 145 | 209 | 411 | 316 | 134 | 272 | 65 | 30 | 35 |
| 10 | | 153 | | 142 | 213 | 307 | 294 | 130 | 446 | 61 | 34 | 33 |
| 11 | | 148 | | 134 | 202 | 302 | 263 | 124 | 167 | 61 | 31 | 33 |
| 12 | | 145 | | 134 | 183 | 325 | 238 | 127 | 124 | 55 | 30 | 31 |
| 13 | | 142 | | 145 | 430 | 267 | 227 | 130 | 113 | 67 | 31 | 30 |
| 14 | | 145 | *180 | 170 | 456 | 251 | 220 | 130 | 109 | 61 | 31 | 49 |
| 15 | | 145 | | 209 | 312 | 234 | 213 | 176 | 100 | 51 | 36 | 32 |
| 16 | | 150 | | 164 | 246 | 231 | 209 | 142 | 96 | 61 | 49 | 150 |
| 17 | | 145 | | 142 | 224 | 224 | 238 | 132 | 188 | 55 | 49 | 143 |
| 18 | | 372 | | | 251 | 227 | 238 | 130 | 454 | 49 | 41 | 55 |
| 19 | | 216 | 173 | | 255 | 302 | 220 | 142 | 134 | 45 | 40 | 36 |
| 20 | | 170 | 153 | | 246 | 234 | 202 | 162 | 111 | 58 | 36 | 42 |
| 21 | | 164 | | | 224 | 216 | 196 | 137 | 100 | 48 | 34 | 41 |
| 22 | | 150 | | | 209 | 206 | 196 | 127 | 94 | 45 | 41 | 33 |
| 23 | | 150 | | | 206 | 199 | 186 | 115 | 91 | 42 | 30 | 36 |
| 24 | | 148 | | | 206 | 196 | 183 | 127 | 89 | 48 | 42 | 34 |
| 25 | | *147 | 120 | 110 | 209 | 259 | 176 | 150 | 134 | 47 | 29 | 33 |
| 26 | | *143 | | | 213 | 316 | 176 | 120 | 100 | 45 | 30 | 35 |
| 27 | | *139 | | | 231 | 231 | 170 | 115 | 120 | 44 | 31 | 37 |
| 28 | | 120 | 137 | 176 | 199 | 213 | 167 | 117 | 91 | 40 | 32 | 33 |
| 29 | | 117 | 134 | 259 | | 202 | 170 | 120 | 85 | 40 | 35 | 27 |
| 30 | | 124 | 92 | 206 | | 196 | 164 | 115 | 80 | 36 | 30 | 26 |
| 31 | | 153 | | 196 | | 192 | | 109 | | 39 | 32 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|---------------|---------|---------|------|-----------------|-------------------|
| October 28-31 | 153 | 117 | 128 | 0.776 | 0.12 |
| November | 725 | 92 | 191 | 1.16 | 1.29 |
| December | 259 | | 156 | .945 | 1.09 |
| January | 209 | | 138 | .836 | .96 |
| February | 654 | | 249 | 1.51 | 1.57 |
| March | 1,100 | 164 | 262 | 1.59 | 1.83 |
| April | 1,200 | 164 | 257 | 1.56 | 1.74 |
| May | 176 | 109 | 136 | .824 | .95 |
| June | 454 | 80 | 144 | .873 | .97 |
| July | 104 | 36 | 58.0 | .352 | .41 |
| August | 49 | 29 | 35.5 | .215 | .25 |
| September | 150 | 26 | 43.9 | .266 | .30 |

* Estimated.

PATUXENT RIVER BASIN

PATUXENT RIVER NEAR BURTONSVILLE, MD.

LOCATION.—Water-stage recorder at Columbia Turnpike bridge 1½ miles north-east 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, 1930.

EXTREMES.—Maximum discharge, 1,820 second-feet Apr. 7 (gage height, 8.67 feet); minimum, 5.1 second-feet Aug. 6 (gage height, 2.16 feet).

1911-1930: Maximum discharge, about 4,500 second-feet Sept. 5, 1926, June 19, 1928 (gage height, 15.3 feet); minimum, that of Aug. 6, 1930.

REMARKS.—Records good. Discharge estimated because of ice Nov. 30, Dec. 1-5, 22-27, Jan. 18 to Feb. 3.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|------|------|------|------|------|-------|-----|------|------|------|-------|
| 1..... | 63 | 80 | | 110 | | 98 | 89 | 90 | 49 | 29 | 9.5 | 10 |
| 2..... | 610 | 72 | | 106 | 70 | 98 | 87 | 90 | 48 | 46 | 10 | 8.9 |
| 3..... | 419 | 177 | 55 | 101 | | 89 | 89 | 89 | 46 | 34 | 12 | 11 |
| 4..... | 96 | 287 | | 93 | 174 | 87 | 96 | 82 | 43 | 29 | 9.5 | 8.6 |
| 5..... | 76 | 134 | 66 | 82 | 556 | 87 | 89 | 79 | 41 | 27 | 8.6 | 8.1 |
| 6..... | 64 | 108 | 74 | 79 | 270 | 90 | 288 | 79 | 36 | 28 | 7.3 | 6.9 |
| 7..... | 58 | 92 | 82 | 80 | 161 | 146 | 1,010 | 77 | 48 | 28 | 8.3 | 7.3 |
| 8..... | 55 | 86 | 80 | 80 | 140 | 891 | 276 | 76 | 51 | 24 | 8.1 | 8.1 |
| 9..... | 50 | 82 | 76 | 79 | 125 | 256 | 184 | 72 | 64 | 22 | 8.3 | 7.6 |
| 10..... | 49 | 76 | 70 | 77 | 134 | 176 | 154 | 70 | 57 | 22 | 7.3 | 7.6 |
| 11..... | 48 | 74 | 70 | 71 | 136 | 166 | 140 | 68 | 50 | 21 | 6.9 | 7.6 |
| 12..... | 47 | 74 | 69 | 69 | 114 | 198 | 132 | 70 | 45 | 20 | 6.9 | 7.3 |
| 13..... | 47 | 72 | 74 | 72 | 246 | 149 | 127 | 69 | 43 | 20 | 6.9 | 15 |
| 14..... | 46 | 76 | 103 | 84 | 370 | 132 | 121 | 72 | 42 | 20 | 7.8 | 11 |
| 15..... | 47 | 83 | 89 | 119 | 204 | 119 | 117 | 93 | 40 | 20 | 12 | 15 |
| 16..... | 46 | 82 | 79 | 95 | 154 | 116 | 125 | 76 | 38 | 19 | 13 | 10 |
| 17..... | 46 | 76 | 74 | 82 | 147 | 114 | 143 | 68 | 79 | 18 | 12 | 24 |
| 18..... | 43 | 176 | 76 | | 152 | 112 | 154 | 66 | 86 | 18 | 13 | 14 |
| 19..... | 43 | 163 | 98 | | 147 | 127 | 145 | 70 | 54 | 18 | 13 | 9.8 |
| 20..... | 44 | 101 | 92 | | 136 | 110 | 121 | 86 | 42 | 16 | 11 | 9.2 |
| 21..... | 45 | 90 | 72 | | 123 | 108 | 114 | 70 | 38 | 14 | 11 | 9.2 |
| 22..... | 334 | 82 | | | 116 | 96 | 112 | 64 | 37 | 14 | 10 | 8.9 |
| 23..... | 446 | 80 | | | 112 | 95 | 108 | 61 | 34 | 22 | 11 | 8.1 |
| 24..... | 117 | 80 | | 60 | 110 | 98 | 101 | 60 | 38 | 28 | 11 | 8.1 |
| 25..... | 86 | 80 | 65 | | 108 | 117 | 98 | 69 | 49 | 17 | 12 | 7.6 |
| 26..... | 76 | 76 | | | 108 | 143 | 98 | 60 | 39 | 15 | 9.5 | 7.6 |
| 27..... | 70 | 76 | | | 121 | 110 | 95 | 56 | 34 | 13 | 9.5 | 6.9 |
| 28..... | 64 | 74 | | | 103 | 100 | 92 | 55 | 32 | 12 | 14 | 6.4 |
| 29..... | 63 | 70 | 145 | | | 96 | 92 | 54 | 30 | 12 | 15 | 5.9 |
| 30..... | 64 | 53 | 121 | | | 95 | 90 | 53 | 28 | 11 | 16 | 5.5 |
| 31..... | 84 | | 112 | | | 92 | | 51 | | 10 | 12 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 610 | 43 | 111 | 0.874 | 1.01 |
| November..... | 287 | 53 | 97.6 | .709 | .86 |
| December..... | 145 | | 77.7 | .612 | .71 |
| January..... | 119 | | 74.8 | .589 | .68 |
| February..... | 556 | | 160 | 1.26 | 1.31 |
| March..... | 891 | 87 | 145 | 1.14 | 1.31 |
| April..... | 1,010 | 87 | 156 | 1.23 | 1.37 |
| May..... | 93 | 51 | 70.8 | .557 | .64 |
| June..... | 86 | 28 | 45.4 | .357 | .40 |
| July..... | 46 | 10 | 20.9 | .165 | .19 |
| August..... | 16 | 6.9 | 10.4 | .082 | .09 |
| September..... | 24 | 5.5 | 9.37 | .074 | .082 |
| The year..... | 1,010 | 5.5 | 81.0 | .638 | 8.65 |

POTOMAC RIVER BASIN

NORTH BRANCH OF POTOMAC RIVER AT BLOOMINGTON, MD.

LOCATION.—Water-stage recorder at Bloomington, Garrett County, 600 feet above mouth of Savage River and 2 miles above Piedmont, W. Va.

DRAINAGE AREA.—287 square miles.

RECORDS AVAILABLE.—October, 1924, to September, 1927; July, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year (estimated), 6,000 second-feet Oct. 2 (gage height not determined); minimum, 13 second-feet Sept. 29, 30 (gage height, 2.10 feet).

1924-1927, 1929-30: Same as given above.

Maximum known stage, 20.3 feet Mar. 29, 1924.

REMARKS.—Records for October and November fair; others good. Discharge estimated because of ice Nov. 27 to Dec. 6, Dec. 21-27, Jan. 20 to Feb. 1, Feb. 16-18. Low-water flow affected by operation of storage reservoir on Stony River, capacity 265 million cubic feet; contents in reservoir, 76 million cubic feet on Sept. 30, 1929, and 60 million cubic feet on Sept. 30, 1930.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|-------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1 | | 395 | | 580 | 130 | 647 | 338 | 405 | 78 | 58 | 41 | 32 |
| 2 | | 334 | | 741 | 158 | 602 | 578 | 387 | 70 | 57 | 40 | 32 |
| 3 | | 667 | | 859 | 168 | 490 | 659 | 309 | 62 | 65 | 40 | 37 |
| 4 | | 1,240 | 220 | 790 | 270 | 485 | 705 | 266 | 56 | 60 | 40 | 34 |
| 5 | | 753 | | 553 | 859 | 445 | 542 | 246 | 54 | 48 | 41 | 33 |
| 6 | | 575 | | 537 | 537 | 521 | 511 | 245 | 48 | 41 | 42 | 31 |
| 7 | | 470 | 313 | 527 | 404 | 659 | 1,020 | 299 | 48 | 41 | 44 | 30 |
| 8 | | 391 | 1,000 | 490 | 426 | 957 | 1,170 | 292 | 49 | 39 | 46 | 36 |
| 9 | | 352 | 827 | 511 | 341 | 924 | 1,130 | 245 | 65 | 41 | 47 | 35 |
| 10 | | 309 | 591 | 506 | 475 | 891 | 957 | 219 | 1,040 | 50 | 47 | 39 |
| 11 | | 306 | 527 | 440 | 404 | 1,090 | 796 | 200 | 875 | 47 | 47 | 38 |
| 12 | | 309 | 501 | 417 | 387 | 1,020 | 664 | 180 | 364 | 46 | 47 | 35 |
| 13 | | 270 | 808 | 450 | 591 | 859 | 575 | 170 | 286 | 46 | 47 | 42 |
| 14 | | 276 | 1,570 | 404 | 765 | 1,130 | 506 | 163 | 180 | 54 | 47 | 68 |
| 15 | | 373 | 1,340 | 379 | 564 | 891 | 450 | 168 | 144 | 93 | 67 | 52 |
| 16 | 475 | 495 | 957 | 348 | | 753 | 404 | 188 | 117 | 74 | 81 | 50 |
| 17 | | 433 | 753 | 289 | 300 | 723 | 501 | 182 | 110 | 56 | 62 | 57 |
| 18 | | 3,220 | 664 | 279 | | 741 | 485 | 158 | 124 | 48 | 61 | 60 |
| 19 | | 2,150 | 729 | 172 | 475 | 2,250 | 527 | 266 | 106 | 44 | 57 | 48 |
| 20 | | 1,170 | 759 | | 548 | 1,290 | 455 | 267 | 86 | 41 | 49 | 38 |
| 21 | | 827 | | | 602 | 891 | 422 | 198 | 72 | 38 | 40 | 35 |
| 22 | | 664 | | | 537 | 699 | 597 | 163 | 66 | 36 | 37 | 34 |
| 23 | | 548 | | | 501 | 575 | 495 | 139 | 60 | 108 | 36 | 35 |
| 24 | | 485 | 300 | | 542 | 532 | 426 | 124 | 55 | 142 | 36 | 32 |
| 25 | | 435 | | 110 | 1,100 | 495 | 404 | 124 | 370 | 86 | 36 | 33 |
| 26 | | 387 | | | 957 | 495 | 364 | 117 | 195 | 67 | 37 | 36 |
| 27 | | | | | 957 | 435 | 327 | 104 | 131 | 52 | 38 | 37 |
| 28 | | | 668 | | 747 | 379 | 296 | 108 | 101 | 48 | 38 | 33 |
| 29 | | | 924 | | | 413 | 279 | 100 | 81 | 44 | 40 | 21 |
| 30 | | | 664 | | | 417 | 267 | 90 | 66 | 41 | 35 | 31 |
| 31 | | | 591 | | | 372 | | 82 | | 41 | 34 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | | | 475 | 1.66 | 1.91 |
| November | 3,220 | | 630 | 2.20 | 2.46 |
| December | 1,570 | | 568 | 1.98 | 2.28 |
| January | 859 | | 342 | 1.19 | 1.37 |
| February | 1,100 | 130 | 512 | 1.78 | 1.85 |
| March | 2,250 | 372 | 743 | 2.59 | 2.99 |
| April | 1,170 | 257 | 561 | 1.95 | 2.18 |
| May | 405 | 82 | 200 | .697 | .80 |
| June | 1,040 | 48 | 170 | .597 | .66 |
| July | 168 | 36 | 58.5 | .207 | .24 |
| August | 81 | 34 | 45.2 | .157 | .18 |
| September | 68 | 21 | 38.7 | .137 | .15 |
| The year | | 21 | 361 | 1.26 | 17.07 |

NORTH BRANCH OF POTOMAC RIVER NEAR CUMBERLAND, MD.

LOCATION.—Water-stage recorder at Wileys Ford, 2 miles south of Cumberland. Allegany County, and 2 miles below mouth of Wills Creek.

DRAINAGE AREA.—877 square miles.

RECORDS AVAILABLE.—May, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, about 6,800 second-feet Oct. 3 (gage height, about 9.0 feet); minimum, 26 second-feet Aug. 6 (gage height, 2.55 feet).

1929-30: Same as given above.

Maximum known stage, 28.4 feet Mar. 29, 1924.

REMARKS.—Records for estimated periods and for discharges exceeding 3,000 second-feet fair; others good. Periods of ice effect, Nov. 28-30, Dec. 20-27, Jan. 21-31. Record does not include flow in Chesapeake & Ohio Canal, of which about 80 per cent is water diverted from river at head gates 2 miles above station and remainder is sewage from city of Cumberland which receives its water supply from Evitts Creek, the mouth of which is below station.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept |
|-----|-------|-------|-------|-------|-------|-------|-------|-----|-------|------|------|------|
| 1 | 70 | 716 | | 1,470 | 310 | | 695 | 802 | 154 | 135 | 44 | 50 |
| 2 | 1,710 | 660 | | 1,580 | 350 | | 723 | 962 | 144 | 128 | 41 | 45 |
| 3 | | 1,090 | | 1,860 | 400 | | 1,060 | 842 | 128 | 126 | 37 | 47 |
| 4 | | 2,830 | | 1,910 | 506 | 1,200 | 1,070 | 709 | 123 | 116 | 37 | 45 |
| 5 | | 2,130 | 900 | 1,580 | | | 971 | 611 | 123 | 110 | 32 | 42 |
| 6 | 1,870 | 1,580 | | 1,370 | | | 926 | 584 | 120 | 101 | 28 | 37 |
| 7 | | 1,220 | | 1,270 | 1,000 | | 1,580 | 618 | 128 | 96 | 35 | 34 |
| 8 | | 1,010 | | 1,220 | | 1,800 | 2,370 | 660 | 128 | 96 | 48 | 37 |
| 9 | | 866 | 1,520 | 1,120 | | 1,960 | 2,190 | 584 | 131 | 92 | 47 | 37 |
| 10 | | 746 | 1,220 | 1,070 | | 1,910 | 2,020 | 538 | 750 | 81 | 45 | 50 |
| 11 | | 695 | 1,070 | 962 | | 2,080 | 1,860 | 499 | 2,060 | 79 | 41 | 48 |
| 12 | | 674 | 998 | 882 | | 2,370 | 1,580 | 466 | 944 | 81 | 42 | 45 |
| 13 | | 611 | 1,320 | 935 | | 2,080 | 1,370 | 400 | 611 | 88 | 44 | 59 |
| 14 | | 584 | 3,370 | 935 | | 2,250 | 1,070 | 378 | 473 | 90 | 57 | 66 |
| 15 | | 667 | 4,730 | 882 | | 2,130 | 1,060 | 384 | 384 | 96 | 70 | 88 |
| 16 | 310 | 834 | 2,550 | 826 | 900 | 1,800 | 962 | 384 | 315 | 108 | 81 | 81 |
| 17 | | 935 | 2,020 | 730 | | 1,640 | 980 | 400 | 285 | 118 | 123 | 81 |
| 18 | | 2,940 | 1,740 | 716 | | 1,520 | 1,030 | 389 | 295 | 96 | 108 | 77 |
| 19 | | 5,010 | 1,860 | 460 | | 2,520 | 1,050 | 424 | 300 | 79 | 110 | 79 |
| 20 | | 3,370 | | 400 | | 2,550 | 1,020 | 564 | 247 | 72 | 92 | 75 |
| 21 | 238 | 2,430 | | | | 1,910 | 953 | 466 | 202 | 62 | 68 | 59 |
| 22 | 890 | 1,860 | | | | 1,520 | 1,640 | 389 | 177 | 54 | 59 | 48 |
| 23 | 4,310 | 1,520 | 1,000 | | | 1,270 | 1,580 | 372 | 154 | 50 | 62 | 42 |
| 24 | 2,870 | 1,320 | | | 1,600 | 1,120 | 1,420 | 330 | 177 | 94 | 62 | 42 |
| 25 | 1,800 | 1,220 | | | | 1,060 | 1,320 | 281 | 243 | 148 | 60 | 44 |
| 26 | 1,320 | 1,070 | | 300 | | 1,060 | 1,170 | 257 | 532 | 94 | 59 | 42 |
| 27 | 1,010 | 980 | | | | 989 | 1,010 | 220 | 300 | 75 | 54 | 35 |
| 28 | 818 | | 1,370 | | | 858 | 908 | 202 | 234 | 66 | 50 | 34 |
| 29 | 688 | 850 | 2,130 | | | 770 | 834 | 198 | 194 | 59 | 52 | 32 |
| 30 | 639 | | 1,860 | | | 802 | 778 | 182 | 165 | 47 | 50 | 32 |
| 31 | 681 | | 1,640 | | | 770 | | 169 | | 45 | 52 | |

| Month | River | | | Chesapeake & Ohio Canal—mean discharge |
|-----------|---------|---------|-------|--|
| | Maximum | Minimum | Mean | |
| October | | 70 | 1,130 | |
| November | 5,010 | 584 | 1,400 | 30.6 |
| December | 4,730 | | 1,440 | 24.6 |
| January | 1,910 | | 822 | 19.6 |
| February | | | 1,050 | 26.7 |
| March | 2,550 | 770 | 1,520 | 41.6 |
| April | 2,370 | 695 | 1,240 | 34.7 |
| May | 962 | 120 | 460 | 40.1 |
| June | 2,060 | 125 | 341 | 28.9 |
| July | 148 | 45 | 89.7 | 31.3 |
| August | 123 | 28 | 57.7 | 31.4 |
| September | 88 | 32 | 51.1 | 30.7 |
| The year | | 28 | 799 | |

POTOMAC RIVER AT POINT OF ROCKS, MD.

LOCATION.—Water-stage recorder installed Oct. 7, 1929, 20 feet below 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, 1930.

EXTREMES.—Maximum discharge during year, 106,000 second-feet Oct. 23 (gage height, 17.00 feet); minimum, 613 second-feet Aug. 23 (gage height, 0.33 foot).

1895-1930: Maximum discharge, 258,000 second-feet May 13, 1924 (gage height, 32.2 feet); minimum, 540 second-feet Sept. 10, 1914 (gage height, 0.38 foot).

Highest known stage, 40.2 feet in 1889 (discharge, about 320,000 second-feet).

REMARKS.—Records excellent. Chesapeake & Ohio Canal diverts a mean discharge of 75 to 100 second-feet above station.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|---------|--------|--------|--------|--------|--------|--------|-------|-------|-------|------|-------|
| 1 | 1,400 | 6,180 | 6,760 | 15,800 | 3,730 | 7,970 | 5,780 | 5,020 | 1,920 | 1,970 | 762 | 788 |
| 2 | 10,100 | 6,180 | 5,590 | 13,400 | 3,960 | 7,970 | 5,780 | 4,840 | 1,700 | 1,770 | 749 | 842 |
| 3 | 39,400 | 7,560 | 5,400 | 11,900 | 4,550 | 7,360 | 5,400 | 4,730 | 1,670 | 1,560 | 842 | 814 |
| 4 | 49,200 | 12,900 | 5,210 | 11,000 | 5,400 | 6,760 | 5,210 | 4,800 | 1,700 | 1,470 | 856 | 814 |
| 5 | 23,300 | 17,400 | 5,590 | 10,300 | 10,200 | 6,370 | 5,400 | 4,440 | 1,510 | 1,490 | 828 | 736 |
| 6 | 13,400 | 17,900 | 5,780 | 9,640 | 21,100 | 6,180 | 6,180 | 4,240 | 1,470 | 1,340 | 842 | 712 |
| 7 | 9,640 | 13,400 | 5,980 | 8,580 | 21,100 | 6,610 | 8,790 | 3,760 | 2,000 | 1,280 | 933 | 724 |
| 8 | 7,160 | 11,000 | 5,980 | 7,970 | 16,400 | 15,300 | 11,900 | 3,930 | 1,700 | 1,280 | 842 | 901 |
| 9 | 5,980 | 9,210 | 5,980 | 7,560 | 13,400 | 26,600 | 12,600 | 3,820 | 1,560 | 1,240 | 801 | 1,050 |
| 10 | 4,840 | 8,180 | 5,780 | 7,560 | 11,500 | 24,900 | 12,900 | 3,730 | 1,670 | 1,120 | 886 | 1,080 |
| 11 | 4,340 | 7,160 | 6,180 | 6,960 | 10,100 | 20,600 | 11,500 | 3,530 | 1,700 | 1,220 | 828 | 842 |
| 12 | 3,790 | 6,560 | 5,980 | 6,560 | 9,000 | 17,400 | 10,300 | 3,150 | 1,600 | 1,120 | 828 | 775 |
| 13 | 3,930 | 6,180 | 5,590 | 6,370 | 8,580 | 15,800 | 9,420 | 3,150 | 4,070 | 1,080 | 788 | 933 |
| 14 | 3,790 | 5,980 | 5,780 | 5,780 | 8,580 | 14,300 | 8,580 | 2,930 | 4,410 | 965 | 700 | 965 |
| 15 | 2,840 | 5,780 | 6,760 | 6,560 | 8,580 | 12,900 | 7,760 | 3,030 | 3,370 | 949 | 654 | 886 |
| 16 | 2,670 | 5,590 | 9,640 | 6,760 | 8,580 | 11,700 | 7,560 | 3,030 | 2,930 | 1,010 | 643 | 886 |
| 17 | 2,550 | 5,400 | 9,420 | 6,180 | 7,970 | 11,000 | 7,160 | 3,180 | 2,780 | 981 | 724 | 856 |
| 18 | 2,280 | 8,640 | 8,380 | 5,980 | 6,960 | 10,100 | 6,760 | 2,960 | 2,720 | 933 | 762 | 828 |
| 19 | 2,230 | 41,600 | 7,970 | 5,590 | 7,160 | 10,100 | 6,560 | 2,870 | 3,180 | 917 | 736 | 775 |
| 20 | 2,230 | 54,600 | 7,970 | 4,770 | 6,960 | 9,640 | 6,760 | 3,120 | 2,780 | 901 | 712 | 712 |
| 21 | 2,280 | 31,100 | 7,970 | 4,230 | 6,960 | 10,300 | 6,370 | 2,930 | 2,580 | 856 | 676 | 762 |
| 22 | 22,700 | 20,600 | 7,970 | 4,620 | 6,760 | 10,300 | 6,370 | 2,750 | 2,390 | 1,010 | 665 | 775 |
| 23 | 106,000 | 15,300 | 7,760 | 4,840 | 6,760 | 9,000 | 6,560 | 2,930 | 2,070 | 1,080 | 643 | 856 |
| 24 | 49,200 | 12,400 | 7,160 | 4,340 | 6,560 | 8,180 | 7,560 | 2,810 | 2,050 | 842 | 724 | 871 |
| 25 | 28,800 | 11,000 | 6,760 | 4,410 | 6,180 | 7,360 | 7,360 | 2,750 | 1,970 | 749 | 724 | 842 |
| 26 | 19,500 | 9,860 | 6,560 | 4,410 | 6,960 | 7,560 | 6,760 | 2,610 | 1,920 | 814 | 749 | 788 |
| 27 | 13,400 | 8,790 | 6,560 | 4,770 | 8,380 | 7,760 | 6,370 | 2,250 | 2,200 | 949 | 814 | 828 |
| 28 | 10,500 | 8,180 | 6,560 | 4,200 | 8,790 | 7,760 | 5,780 | 2,120 | 2,000 | 814 | 801 | 814 |
| 29 | 8,580 | 7,560 | 8,180 | 4,300 | ----- | 7,160 | 5,400 | 1,900 | 1,650 | 775 | 712 | 788 |
| 30 | 7,360 | 7,160 | 15,300 | 4,160 | ----- | 6,760 | 5,020 | 2,280 | 1,580 | 814 | 901 | 788 |
| 31 | 6,760 | ----- | 17,900 | 3,790 | ----- | 6,180 | ----- | 1,970 | ----- | 788 | 775 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|--------|-----------------|-------------------|
| October | 106,000 | 1,400 | 15,200 | 1.58 | 1.82 |
| November | 54,600 | 5,400 | 13,000 | 1.35 | 1.51 |
| December | 17,900 | 5,210 | 7,430 | .770 | .89 |
| January | 15,800 | 3,790 | 6,880 | .713 | .82 |
| February | 21,100 | 3,730 | 8,970 | .930 | .97 |
| March | 26,600 | 6,180 | 10,900 | 1.13 | 1.30 |
| April | 12,900 | 5,020 | 7,530 | .789 | .87 |
| May | 5,020 | 1,900 | 3,280 | .347 | .39 |
| June | 4,410 | 1,470 | 2,230 | .231 | .26 |
| July | 1,970 | 749 | 1,100 | .114 | .13 |
| August | 933 | 643 | 771 | .089 | .09 |
| September | 1,080 | 712 | 834 | .086 | .10 |
| The year | 106,000 | 643 | 6,490 | .673 | 9.15 |

POTOMAC RIVER NEAR WASHINGTON, D. C.

LOCATION.—Water-stage recorder installed June 7, 1¼ miles southwest of Langley, Fairfax County, Va., 2 miles above District of Columbia boundary line, and 2½ miles above Chain Bridge. Prior to that date staff gage was used. Zero of gage is 38.00 feet above mean sea level.

DRAINAGE AREA.—11,570 square miles.

RECORDS AVAILABLE.—March to September, 1930.

EXTREMES.—Maximum discharge during period, 18,600 second-feet Apr. 7 (gage height, 4.71 feet); minimum mean daily discharge, 448 second-feet Aug. 24 (gage height, 0.48 foot).

Flood of June 2, 1889, reached stage of about 39 feet based on profile study of known maximum stages at points above and below station (discharge about 390,000 second-feet).

REMARKS.—Records good. Records, except last three columns of monthly table do not include water diverted at Great Falls through aqueducts for Washington, D. C., water supply, daily record of which is published on p. 235.

Daily and monthly discharge, in second-feet, 1930

| Day | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|--------|--------|-------|-------|-------|------|-------|
| 1 | | 6,220 | 5,820 | 2,370 | 1,900 | 602 | 665 |
| 2 | | 6,430 | 5,620 | 2,210 | 2,370 | 594 | 594 |
| 3 | | 6,430 | 5,230 | 2,020 | 2,580 | 570 | 665 |
| 4 | | 6,220 | 5,820 | 1,990 | 2,830 | 594 | 654 |
| 5 | | 6,020 | 5,230 | 1,970 | 2,040 | 621 | 594 |
| 6 | | 7,090 | 5,230 | 1,740 | 1,830 | 632 | 578 |
| 7 | | 17,800 | 4,860 | 1,740 | 1,830 | 594 | 562 |
| 8 | | 17,000 | 4,340 | 2,610 | 1,540 | 654 | 546 |
| 9 | | 15,000 | 4,510 | 2,500 | 1,490 | 698 | 578 |
| 10 | | | 4,340 | 2,320 | 1,600 | 610 | 752 |
| 11 | | 15,800 | 4,180 | 2,420 | 1,450 | 610 | 1,020 |
| 12 | | | 4,020 | 2,390 | 1,280 | 610 | 736 |
| 13 | | 10,800 | 3,800 | 2,240 | 1,260 | 578 | 632 |
| 14 | | 10,200 | 3,710 | 4,520 | 1,220 | 562 | 654 |
| 15 | | | 3,860 | 4,860 | 1,160 | 562 | 832 |
| 16 | | 8,300 | 4,020 | 3,860 | 1,010 | 516 | 784 |
| 17 | | | 3,740 | 3,650 | 952 | 495 | 832 |
| 18 | | | 3,600 | 3,680 | 952 | 481 | 832 |
| 19 | | | 3,560 | 3,860 | 970 | 554 | 736 |
| 20 | | 7,800 | 3,560 | 4,680 | 934 | 594 | 676 |
| 21 | | 7,090 | 3,710 | 3,860 | 880 | 546 | 621 |
| 22 | 11,700 | 7,040 | 3,530 | 3,320 | 768 | 509 | 602 |
| 23 | 10,200 | 7,090 | 3,290 | 3,090 | 768 | 495 | 621 |
| 24 | 9,350 | 7,320 | 3,320 | 2,610 | 1,120 | 474 | 643 |
| 25 | 8,550 | 8,050 | 3,260 | 2,660 | 898 | 448 | 676 |
| 26 | 8,900 | 7,560 | 3,120 | 2,720 | 709 | 502 | 709 |
| 27 | 9,080 | 7,090 | 2,940 | 2,800 | 632 | 516 | 698 |
| 28 | 8,850 | 6,860 | 2,660 | 2,770 | 768 | 621 | 594 |
| 29 | 8,050 | 6,220 | 2,580 | 2,660 | 736 | 632 | 676 |
| 30 | 7,560 | 5,820 | 2,660 | 1,900 | 709 | 602 | 602 |
| 31 | 6,860 | | 2,420 | | 632 | 578 | |

| Month | Observed | | | Corrected for diversion | | |
|------------|----------|---------|-------|-------------------------|-----------------|-------------------|
| | Maximum | Minimum | Mean | Mean | Per square mile | Run-off in inches |
| Mar. 22-31 | 11,700 | 6,860 | 8,910 | 9,240 | 0.799 | 0.30 |
| April | 17,800 | 5,820 | 9,200 | 9,540 | .825 | .92 |
| May | 5,820 | 2,420 | 3,950 | 4,280 | .370 | .43 |
| June | 4,860 | 1,740 | 2,870 | 3,180 | .275 | .31 |
| July | 2,830 | 632 | 1,280 | 1,570 | .136 | .16 |
| August | 698 | 448 | 569 | 880 | .076 | .09 |
| September | 1,020 | 546 | 679 | 995 | .086 | .10 |

Daily discharge, in second-feet, of aqueducts at Great Falls, near Washington, D. C., 1930

| Day | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|------|-----|------|------|------|-------|
| 1. | | 355 | 337 | 291 | 289 | 317 | 317 |
| 2. | | 359 | 300 | 313 | 291 | 297 | 324 |
| 3. | | 321 | 330 | 368 | 296 | 304 | 331 |
| 4. | | 310 | 314 | 317 | 282 | 329 | 317 |
| 5. | | 335 | 310 | 306 | 283 | 332 | 320 |
| 6. | | 338 | 326 | 286 | 291 | 316 | 319 |
| 7. | | 361 | 348 | 279 | 296 | 314 | 309 |
| 8. | | 349 | 350 | 284 | 302 | 331 | 321 |
| 9. | | 326 | 330 | 298 | 296 | 320 | 328 |
| 10. | | 350 | 296 | 310 | 206 | 285 | 325 |
| 11. | | 339 | 301 | 305 | 219 | 299 | 333 |
| 12. | | 322 | 302 | 310 | 286 | 322 | 317 |
| 13. | | 345 | 317 | 300 | 292 | 309 | 310 |
| 14. | | 357 | 314 | 295 | 285 | 321 | 298 |
| 15. | | 344 | 309 | 295 | 238 | 307 | 331 |
| 16. | | 348 | 332 | 302 | 302 | 310 | 320 |
| 17. | | 331 | 311 | 321 | 306 | 320 | 307 |
| 18. | | 337 | 350 | 308 | 313 | 329 | 309 |
| 19. | | 350 | 351 | 314 | 310 | 330 | 314 |
| 20. | | 340 | 361 | 306 | 306 | 313 | 310 |
| 21. | | 340 | 352 | 310 | 322 | 325 | 298 |
| 22. | 311 | 344 | 350 | 291 | 302 | 309 | 320 |
| 23. | 338 | 337 | 334 | 317 | 283 | 308 | 329 |
| 24. | 354 | 342 | 314 | 299 | 296 | 316 | 327 |
| 25. | 324 | 330 | 329 | 307 | 32 | 334 | 322 |
| 26. | 295 | 353 | 350 | 309 | 313 | 328 | 297 |
| 27. | 325 | 343 | 309 | 303 | 302 | 307 | 300 |
| 28. | 348 | 339 | 309 | 302 | 318 | 286 | 300 |
| 29. | 330 | 342 | 314 | 295 | 319 | 316 | 306 |
| 30. | 319 | 326 | 298 | 306 | 306 | 317 | 312 |
| 31. | 348 | 350 | 350 | | 312 | 311 | |

SAVAGE RIVER AT BLOOMINGTON, MD.

LOCATION.—Water-stage recorder at Bloomington, Garrett County, three-fourths mile above mouth and 2 miles above Piedmont, W. Va.

DRAINAGE AREA.—114 square miles.

RECORDS AVAILABLE.—May, 1905, to July, 1906; October, 1924, to September, 1927; August, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, about 1,700 second-feet Oct. 2 (gage height, 5.52 feet); minimum, 1.2 second-feet Aug. 7 (gage height, 0.89 foot).

1924-1927, 1929-30: Maximum discharge, 2,730 second-feet Nov. 13, 1925; minimum, that of Aug. 7, 1930.

REMARKS.—Records good except those on days when discharges exceed 250 second-feet, which are fair. Discharge estimated because of ice Nov. 30, Dec. 1-5, 22-26, Jan. 18-31, Feb. 1, 10, 11, 16-18, Mar. 3-5. Some water diverted above station by cities of Piedmont and Westernport for water supply and by Baltimore & Ohio Railroad.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----------|---------|------|---------|------|------|------|------|-----|------|------|------|-------|
| 1 | 13 | 78 | | 232 | 60 | 256 | 70 | 136 | 21 | 11 | 1.8 | 3.1 |
| 2 | 823 | 75 | | 278 | 64 | 232 | 97 | 126 | 18 | 24 | 1.8 | 2.9 |
| 3 | 1,040 | 302 | 65 | 370 | 75 | | 104 | 114 | 16 | 16 | 1.7 | 3.0 |
| 4 | 570 | 530 | | 321 | 99 | 120 | 110 | 99 | 15 | 12 | 1.6 | 2.0 |
| 5 | 360 | 370 | | 252 | 330 | | 106 | 87 | 14 | 10 | 1.4 | 2.4 |
| 6 | 214 | 248 | 96 | 210 | 301 | 164 | 122 | 87 | 14 | 9.4 | 1.5 | 2.2 |
| 7 | 142 | 184 | 136 | 178 | 239 | 207 | 228 | 82 | 14 | 14 | 1.4 | 2.0 |
| 8 | 104 | 145 | 232 | 162 | 162 | 306 | 380 | 75 | 14 | 11 | 2.0 | 1.9 |
| 9 | 78 | 120 | 200 | 150 | 122 | 296 | 370 | 66 | 24 | 8.2 | 2.2 | 1.8 |
| 10 | 64 | 101 | 175 | 131 | 100 | 321 | 340 | 60 | 155 | 8.2 | 2.4 | 2.2 |
| 11 | 54 | 96 | 160 | 110 | 110 | 370 | 292 | 57 | 124 | 7.4 | 2.0 | 2.1 |
| 12 | 48 | 87 | 138 | 106 | 138 | 380 | 228 | 53 | 80 | 5.4 | 1.8 | 1.9 |
| 13 | 43 | 76 | 408 | 116 | 184 | 335 | 181 | 50 | 56 | 5.4 | 1.5 | 2.8 |
| 14 | 38 | 78 | 795 | 112 | 221 | 355 | 157 | 50 | 45 | 12 | 2.6 | 4.1 |
| 15 | 38 | 94 | 652 | 110 | 200 | 311 | 133 | 50 | 34 | 12 | 14 | 6.4 |
| 16 | 36 | 99 | 455 | 102 | | 256 | 114 | 46 | 29 | 8.5 | 8.2 | 5.0 |
| 17 | 58 | 144 | 321 | 90 | 110 | 221 | 110 | 41 | 28 | 7.4 | 9.4 | 8.5 |
| 18 | 45 | 951 | 252 | | | 203 | 104 | 43 | 43 | 6.2 | 18 | 7.4 |
| 19 | 38 | 751 | 265 | | 133 | 239 | 120 | 50 | 30 | 5.2 | 9.4 | 5.0 |
| 20 | 34 | 470 | 235 | | 138 | 203 | 110 | 49 | 23 | 4.5 | 5.9 | 3.6 |
| 21 | 32 | 321 | 178 | | 162 | 184 | 136 | 41 | 20 | 3.8 | 4.3 | 3.4 |
| 22 | 321 | 228 | | | 164 | 160 | 296 | 37 | 18 | 3.9 | 3.9 | 3.3 |
| 23 | 505 | 184 | | | 170 | 142 | 273 | 34 | 16 | 5.4 | 4.3 | 2.9 |
| 24 | 400 | 160 | 100 | 50 | 175 | 131 | 232 | 33 | 16 | 4.3 | 6.2 | 2.4 |
| 25 | 235 | 136 | | | 252 | 122 | 188 | 32 | 41 | 3.8 | 6.6 | 2.4 |
| 26 | 170 | 118 | | | 296 | 114 | 154 | 28 | 23 | 3.3 | 5.2 | 2.6 |
| 27 | 133 | 116 | 116 | | 316 | 97 | 133 | 26 | 18 | 3.1 | 5.0 | 2.2 |
| 28 | 106 | 126 | 203 | | 292 | 86 | 118 | 26 | 16 | 2.9 | 4.8 | 2.0 |
| 29 | 89 | 106 | 301 | | | 84 | 104 | 26 | 14 | 2.6 | 4.8 | 1.9 |
| 30 | 86 | 60 | 278 | | | 81 | 94 | 23 | 12 | 2.4 | 3.9 | 1.9 |
| 31 | 84 | | 248 | | | 74 | | 22 | | 2.0 | 3.4 | |
| Month | Maximum | | Minimum | | Mean | | | | | | | |
| October | 1,040 | | 13 | | 194 | | | | | | | |
| November | 951 | | 60 | | 218 | | | | | | | |
| December | 795 | | | | 215 | | | | | | | |
| January | 370 | | | | 120 | | | | | | | |
| February | 330 | | 60 | | 173 | | | | | | | |
| March | 380 | | 74 | | 202 | | | | | | | |
| April | 380 | | 70 | | 173 | | | | | | | |
| May | 136 | | 22 | | 56.4 | | | | | | | |
| June | 155 | | 12 | | 33.0 | | | | | | | |
| July | 24 | | 2.0 | | 7.59 | | | | | | | |
| August | 18 | | 1.4 | | 4.61 | | | | | | | |
| September | 8.5 | | 1.8 | | 3.17 | | | | | | | |
| The year | 1,040 | | 1.4 | | 116 | | | | | | | |

GEORGES CREEK AT FRANKLIN, MD.

LOCATION.—Water-stage recorder at suspension bridge at Franklin, Allegany County, 1¼ miles above mouth at Westernport.

DRAINAGE AREA.—74.8 square miles.

RECORDS AVAILABLE.—October, 1929, to September, 1930. May, 1905, to July, 1906, at former station "Georges Creek at Westernport, Md.," three-fourths mile downstream; records comparable.

EXTREMES.—Maximum discharge during year, 580 second-feet Oct. 22, Nov. 18 (gage height, 3.95 feet); minimum, 1.6 second-feet Sept. 29, 30 (gage height, 0.93 foot).

REMARKS.—Records good. Discharge estimated because of ice Nov. 28 to Dec. 5, Dec. 21–27, Jan. 18 to Feb. 1, Feb. 8–18, Mar. 3–5.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|------|------|------|------|------|------|-----|------|------|------|-------|
| 1 | | 32 | | 102 | 30 | 73 | 34 | 60 | 15 | 6.8 | 1.9 | 2.3 |
| 2 | | 31 | | 107 | 34 | 72 | 44 | 52 | 14 | 14 | 2.0 | 2.0 |
| 3 | | 126 | 35 | 113 | 36 | | 41 | 47 | 16 | 8.6 | 1.8 | 2.0 |
| 4 | | 231 | | 98 | 54 | 50 | 40 | 42 | 13 | 7.2 | 1.8 | 1.9 |
| 5 | | 84 | | 84 | 110 | | 35 | 39 | 11 | 6.4 | 1.8 | 1.8 |
| 6 | | 71 | 42 | 80 | 63 | 62 | 41 | 43 | 10 | 6.4 | 1.8 | 1.9 |
| 7 | | 60 | 49 | 80 | 54 | 77 | 94 | 43 | 11 | 7.2 | 2.0 | 1.8 |
| 8 | | 51 | 59 | 74 | | 106 | 102 | 46 | 11 | 5.8 | 2.5 | 1.9 |
| 9 | | 45 | 46 | 69 | | 100 | 90 | 39 | 11 | 5.4 | 2.5 | 2.0 |
| 10 | | 40 | 42 | 62 | | 95 | 85 | 35 | 108 | 8.6 | 2.0 | 2.0 |
| 11 | | 42 | 42 | 54 | | 107 | 79 | 32 | 37 | 5.8 | 1.8 | 1.8 |
| 12 | | 37 | 40 | 56 | | 113 | 74 | 30 | 22 | 5.4 | 1.8 | 1.8 |
| 13 | | 34 | 222 | 59 | 35 | 104 | 69 | 29 | 18 | 5.4 | 1.8 | 8.2 |
| 14 | | 37 | 294 | 55 | | 106 | 64 | 28 | 15 | 8.2 | 7.5 | 11 |
| 15 | | 48 | 216 | 50 | | 92 | 60 | 29 | 13 | 6.4 | 8.2 | 5.0 |
| 16 | | 40 | 168 | 46 | | 88 | 55 | 28 | 12 | 5.0 | 4.4 | 4.7 |
| 17 | 22 | 66 | 140 | 40 | | 83 | 61 | 26 | 13 | 4.7 | 10 | 5.8 |
| 18 | 17 | 413 | 132 | | | 83 | 60 | 26 | 16 | 4.7 | 10 | 3.4 |
| 19 | 15 | 247 | 164 | | 50 | 97 | 71 | 34 | 12 | 4.2 | 5.4 | 2.5 |
| 20 | 14 | 168 | 130 | | 54 | 78 | 63 | 35 | 9.7 | 3.9 | 4.2 | 2.3 |
| 21 | 13 | 130 | | | 55 | 66 | 69 | 28 | 9.3 | 3.4 | 3.4 | 2.0 |
| 22 | 184 | 101 | | | 53 | 59 | 120 | 24 | 8.6 | 3.4 | 3.4 | 1.8 |
| 23 | 146 | 86 | | | 54 | 54 | 95 | 22 | 7.8 | 3.6 | 5.8 | 1.8 |
| 24 | 75 | 77 | 50 | 30 | 60 | 54 | 92 | 20 | 12 | 3.1 | 6.1 | 1.8 |
| 25 | 61 | 68 | | | 83 | 53 | 86 | 20 | 20 | 3.1 | 4.2 | 1.9 |
| 26 | 51 | 60 | | | 83 | 56 | 77 | 18 | 10 | 2.8 | 4.4 | 1.9 |
| 27 | 42 | 61 | | | 83 | 49 | 69 | 18 | 9.0 | 2.8 | 6.1 | 1.8 |
| 28 | 36 | | 132 | | 74 | 43 | 64 | 18 | 7.8 | 2.5 | 4.4 | 1.8 |
| 29 | 32 | 45 | 138 | | | 42 | 60 | 18 | 6.8 | 2.3 | 4.2 | 1.6 |
| 30 | 33 | | 112 | | | 40 | 54 | 16 | 6.4 | 2.0 | 3.4 | 1.6 |
| 31 | 35 | | 104 | | | 37 | | 16 | | 1.9 | 2.5 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|---------------|---------|---------|------|-----------------|-------------------|
| October 17–31 | 184 | 13 | 51.7 | 0.651 | 0.39 |
| November | 413 | | 87.4 | 1.17 | 1.30 |
| December | 294 | | 90.2 | 1.21 | 1.40 |
| January | 113 | | 53.2 | .711 | .82 |
| February | 110 | | 50.5 | .675 | .70 |
| March | 113 | 37 | 72.2 | .965 | 1.11 |
| April | 120 | 34 | 68.3 | .913 | 1.02 |
| May | 60 | 16 | 31.0 | .414 | .48 |
| June | 108 | 6.4 | 16.2 | .216 | .24 |
| July | 14 | 1.9 | 5.19 | .069 | .08 |
| August | 10 | 1.8 | 3.97 | .053 | .06 |
| September | 11 | 1.6 | 2.80 | .067 | .04 |

NEW CREEK NEAR KEYSER, W. VA.

LOCATION.—Staff gage along New Creek Drive 2½ miles southwest of Keyser, Mineral County, and ¾ miles above mouth.

DRAINAGE AREA.—46.4 square miles.

RECORDS AVAILABLE.—April to September, 1930.

EXTREMES.—Maximum discharge during period, 86 second-feet June 10 (gage height, 1.96 feet); minimum discharge, 0.7 second-foot Aug. 29-31, Sept. 1-4, 10, 11 (gage height, 1.16 feet).

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1930

| Day | Apr. | May | June | July | Aug. | Sept. | Day | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-----|------|------|------|-------|---------|------|-----|------|------|------|-------|
| 1----- | | 33 | 6.7 | 4.5 | 1.0 | 5.8 | 16----- | | 14 | 11 | 1.7 | 3.2 | 2.4 |
| 2----- | | 27 | 5.8 | 4.1 | 1.0 | 3.2 | 17----- | | 12 | .12 | 1.7 | 4.1 | 2.7 |
| 3----- | | 24 | 5.4 | 3.2 | 1.0 | 2.4 | 18----- | | 15 | 11 | 1.7 | 4.1 | 2.0 |
| 4----- | | 23 | 5.0 | 3.2 | 1.0 | 1.7 | 19----- | 44 | 18 | 6.7 | 1.7 | 2.7 | 1.7 |
| 5----- | | 21 | 5.0 | 3.0 | 1.2 | 1.7 | 20----- | 40 | 14 | 5.4 | 1.4 | 2.2 | 1.7 |
| 6----- | | 21 | 5.4 | 2.7 | 1.2 | 1.7 | 21----- | 46 | 13 | 5.4 | 1.2 | 2.0 | 1.4 |
| 7----- | | 20 | 5.4 | 3.2 | 1.7 | 1.4 | 22----- | 54 | 11 | 5.0 | 1.7 | 2.2 | 1.2 |
| 8----- | | 18 | 5.0 | 2.4 | 1.2 | 2.4 | 23----- | 46 | 11 | 4.5 | 5.4 | 3.6 | 1.4 |
| 9----- | | 18 | 5.8 | 2.2 | 1.2 | 2.2 | 24----- | 42 | 11 | 4.5 | 5.0 | 3.0 | 1.4 |
| 10----- | | 16 | 72 | 2.2 | 1.0 | 2.0 | 25----- | 40 | 11 | 17 | 2.2 | 2.7 | 2.0 |
| 11----- | | 16 | 27 | 2.2 | 1.0 | 2.0 | 26----- | 37 | 8.2 | 7.6 | 2.2 | 2.7 | 2.2 |
| 12----- | | 14 | 18 | 1.7 | 1.2 | 2.0 | 27----- | 34 | 7.6 | 6.7 | 1.7 | 2.4 | 2.2 |
| 13----- | | 13 | 16 | 1.7 | 1.4 | 7.2 | 28----- | 31 | 8.2 | 5.8 | 1.4 | 2.7 | 2.2 |
| 14----- | | 14 | 13 | 2.7 | 4.5 | 3.2 | 29----- | 28 | 7.6 | 4.5 | 1.2 | 2.4 | 2.2 |
| 15----- | | 14 | 11 | 2.4 | 5.8 | 2.4 | 30----- | 25 | 7.6 | 5.0 | 1.0 | 2.2 | 1.7 |
| | | | | | | | 31----- | | 7.2 | | 1.0 | 2.0 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|------------------|---------|---------|------|-----------------|-------------------|
| April 19-30----- | 54 | 25 | 38.9 | 0.838 | 0.37 |
| May----- | 33 | 7.2 | 15.1 | .325 | .37 |
| June----- | 72 | 4.5 | 10.6 | .228 | .25 |
| July----- | 5.4 | 1.0 | 2.37 | .051 | .06 |
| August----- | 5.8 | 1.0 | 2.25 | .048 | .06 |
| September----- | 7.2 | 1.2 | 2.32 | .050 | .06 |

WILLS CREEK NEAR CUMBERLAND, MD.

LOCATION.—Water-stage recorder at Pennsylvania Railroad bridge 2 miles above mouth at Cumberland, Allegany County.

DRAINAGE AREA.—252 square miles.

RECORDS AVAILABLE.—May, 1905, to July, 1906; October, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,280 second-feet Oct. 22 (gage height, 7.02 feet); minimum, 10 second-feet Sept. 30 (gage height, 1.31 feet).

REMARKS.—Records good. Discharge estimated because of ice Nov. 28 to Dec. 5, Dec. 20–27, Jan. 17 to Feb. 2, Feb. 8–12, 16–19, Mar. 3–5.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|------|------|------|------|------|-----|------|------|------|-------|
| 1 | | 160 | 150 | 386 | 90 | 470 | 166 | 238 | 58 | 38 | 15 | 15 |
| 2 | | 156 | | 406 | 100 | 426 | 205 | 210 | 58 | 38 | 15 | 15 |
| 3 | | 584 | | 479 | 127 | | 196 | 191 | 51 | 36 | 15 | 14 |
| 4 | | 720 | | 466 | 160 | 220 | 184 | 175 | 49 | 33 | 14 | 13 |
| 5 | | 551 | | 406 | 314 | | 171 | 164 | 46 | 30 | 13 | 13 |
| 6 | | 422 | 171 | 369 | 258 | 284 | 205 | 162 | 45 | 29 | 13 | 12 |
| 7 | | 330 | 188 | 341 | 225 | 311 | 410 | 160 | 49 | 29 | 13 | 12 |
| 8 | | 275 | 255 | 320 | | 484 | 502 | 156 | 47 | 32 | 14 | 16 |
| 9 | | 235 | 242 | 293 | | 488 | 510 | 141 | 48 | 29 | 13 | 23 |
| 10 | | 200 | 235 | 260 | 190 | 488 | 470 | 129 | 352 | 26 | 13 | 26 |
| 11 | | 198 | 230 | 228 | | 546 | 430 | 121 | 242 | 24 | 12 | 19 |
| 12 | | 177 | 215 | 228 | | 605 | 376 | 118 | 152 | 23 | 12 | 17 |
| 13 | | 160 | 353 | 252 | 284 | 590 | 330 | 115 | 121 | 24 | 12 | 18 |
| 14 | | 166 | 575 | 240 | 358 | 645 | 299 | 114 | 101 | 32 | 15 | 17 |
| 15 | | 215 | 605 | 235 | 308 | 600 | 269 | 115 | 86 | 35 | 17 | 15 |
| 16 | | 203 | 538 | 218 | | 524 | 248 | 114 | 77 | 29 | 14 | 16 |
| 17 | | 342 | 466 | | | 458 | 242 | 105 | .75 | 26 | 23 | 26 |
| 18 | 57 | 1,670 | 438 | | 180 | 442 | 225 | 105 | 84 | 24 | 35 | 20 |
| 19 | 50 | 1,300 | 544 | | | 585 | 230 | 126 | 70 | 22 | 27 | 20 |
| 20 | 48 | 786 | | | 311 | 520 | 203 | 124 | 59 | 21 | 20 | 18 |
| 21 | 46 | 560 | | | 372 | 474 | 233 | 108 | 53 | 20 | 17 | 16 |
| 22 | 1,110 | 430 | | | 386 | 394 | 458 | 95 | 49 | 19 | 17 | 14 |
| 23 | 1,620 | 358 | 280 | 85 | 380 | 341 | 434 | 88 | 47 | 18 | 19 | 14 |
| 24 | 682 | 317 | | | 383 | 308 | 430 | 81 | 54 | 18 | 19 | 13 |
| 25 | 430 | 281 | | | 520 | 299 | 383 | 81 | 97 | 18 | 19 | 13 |
| 26 | 314 | 250 | | | 551 | 302 | 330 | 75 | 66 | 17 | 18 | 13 |
| 27 | 242 | 242 | | | 585 | 250 | 287 | 70 | 53 | 18 | 17 | 12 |
| 28 | 196 | | 402 | | 538 | 220 | 260 | 70 | 48 | 17 | 17 | 12 |
| 29 | 166 | 200 | 454 | | | 205 | 245 | 70 | 44 | 17 | 15 | 12 |
| 30 | 173 | | 434 | | | 191 | 225 | 66 | 41 | 16 | 16 | 11 |
| 31 | 177 | | 414 | | | 177 | | 63 | | 16 | 16 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|---------------|---------|---------|------|-----------------|-------------------|
| October 18–31 | 1,620 | 46 | 379 | 1.50 | 0.78 |
| November | 1,670 | 156 | 396 | 1.57 | 1.75 |
| December | 605 | | 314 | 1.25 | 1.44 |
| January | 479 | | 207 | .821 | .96 |
| February | 585 | | 283 | 1.12 | 1.17 |
| March | 645 | 177 | 396 | 1.57 | 1.81 |
| April | 510 | 166 | 305 | 1.21 | 1.35 |
| May | 238 | 63 | 121 | .489 | .56 |
| June | 352 | 41 | 80.7 | .320 | .86 |
| July | 38 | 16 | 25.0 | .069 | .11 |
| August | 35 | 12 | 16.6 | .066 | .08 |
| September | 26 | 11 | 15.8 | .063 | .07 |

EVITTS CREEK NEAR CUMBERLAND, MD.

LOCATION.—Water-stage recorder installed Oct. 19, 1929, at Cumberland County Club, 2½ miles northeast of Cumberland, Allegany County, and 3 miles above mouth. Prior to that date chain gage was used.

DRAINAGE AREA.—96.0 square miles.

RECORDS AVAILABLE.—August, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,290 second-feet Oct. 22, (gage height, 6.26 feet); minimum 0.9 second-foot Aug. 8, 21, Sept. 3 (gage height, 1.24 feet).

REMARKS.—Records good. Discharge estimated because of ice Nov. 28 to Dec. 4, Dec. 20-26, Jan. 19 to Feb. 3, Mar. 2-5. Water diverted from Evitts Creek at Lake Gordon, 8 miles upstream, for Cumberland city water supply.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|------|------|------|------|------|------|-----|------|------|------|-------|
| 1..... | 12 | 41 | | 82 | | 41 | 36 | 86 | 12 | 12 | 3.9 | 1.6 |
| 2..... | 745 | 39 | | 82 | 30 | | 37 | 76 | 12 | 8.7 | 3.0 | 2.1 |
| 3..... | 209 | 240 | 20 | 78 | | | 36 | 64 | 10 | 7.6 | 2.8 | 1.2 |
| 4..... | 152 | 226 | | 69 | 53 | 35 | 36 | 50 | 6.6 | 8.0 | 2.8 | 2.1 |
| 5..... | 80 | 128 | 22 | 56 | 152 | | 32 | 53 | 7.6 | 8.3 | 3.4 | 1.8 |
| 6..... | 52 | 102 | 32 | 56 | 96 | 38 | 39 | 40 | 8.3 | 6.3 | 1.5 | 3.4 |
| 7..... | 41 | 80 | 30 | 49 | 74 | 45 | 109 | 41 | 9.0 | 5.1 | 2.3 | 1.4 |
| 8..... | 41 | 72 | 36 | 53 | 61 | 118 | 88 | 36 | 10 | 4.9 | 2.5 | 3.7 |
| 9..... | 32 | 60 | 41 | 58 | 50 | 88 | 65 | 34 | 12 | 4.9 | 1.3 | 3.0 |
| 10..... | 22 | 52 | 26 | 48 | 54 | 69 | 53 | 31 | 68 | 6.6 | 1.3 | 1.8 |
| 11..... | 22 | 56 | 32 | 42 | 47 | 68 | 49 | 28 | 25 | 4.9 | 2.8 | 3.9 |
| 12..... | 26 | 48 | 26 | 41 | 41 | 101 | 49 | 32 | 15 | 5.4 | 1.4 | 1.6 |
| 13..... | 19 | 46 | 56 | 53 | 48 | 80 | 47 | 22 | 13 | 5.4 | 1.3 | 4.7 |
| 14..... | 21 | 42 | 76 | 42 | 50 | 82 | 46 | 25 | 12 | 8.0 | 3.4 | 3.9 |
| 15..... | 19 | 55 | 68 | 50 | 37 | 69 | 44 | 24 | 12 | 6.3 | 4.7 | 1.6 |
| 16..... | 19 | 52 | 63 | 36 | | 70 | 42 | 24 | 10 | 5.1 | 2.3 | 2.3 |
| 17..... | 22 | 68 | 52 | 39 | 35 | 70 | 45 | 22 | 12 | 4.9 | 3.7 | 3.2 |
| 18..... | 19 | 362 | 61 | 30 | | 73 | 44 | 22 | 16 | 5.4 | 6.2 | 2.8 |
| 19..... | 18 | 232 | 98 | | 34 | 101 | 48 | 26 | 14 | 8.0 | 3.7 | 1.6 |
| 20..... | 16 | 152 | | | 37 | 79 | 42 | 27 | 10 | 4.9 | 2.3 | 1.4 |
| 21..... | 18 | 126 | | | 42 | 69 | 46 | 23 | 8.0 | 4.2 | 1.4 | 2.3 |
| 22..... | 377 | 101 | | | 32 | 60 | 115 | 19 | 7.6 | 5.4 | 2.8 | 1.6 |
| 23..... | 588 | 85 | 40 | | 32 | 56 | 88 | 17 | 7.0 | 3.2 | 2.5 | 1.4 |
| 24..... | 194 | 79 | | | 42 | 56 | 73 | 16 | 16 | 3.9 | 3.2 | 1.4 |
| 25..... | 122 | 76 | | 20 | 58 | 56 | 70 | 16 | 17 | 6.0 | 1.6 | 3.4 |
| 26..... | 91 | | | | 66 | 70 | 64 | 15 | 4.9 | 3.0 | 1.5 | 2.1 |
| 27..... | 69 | 61 | 56 | | 54 | 63 | 58 | 13 | 7.6 | 2.8 | 2.1 | 2.8 |
| 28..... | 60 | | 118 | | 54 | 50 | 53 | 13 | 6.6 | 4.7 | 2.1 | 1.6 |
| 29..... | 47 | 30 | 132 | | | 46 | 53 | 13 | 6.3 | 3.7 | 1.4 | 1.4 |
| 30..... | 45 | | 104 | | | 44 | 49 | 12 | 9.5 | 2.3 | 2.1 | 1.5 |
| 31..... | 52 | | 86 | | | 40 | | 15 | | 2.5 | 1.5 | |

| Month | Maximum | Minimum | Mean |
|----------------|---------|---------|------|
| October..... | 745 | 12 | 105 |
| November..... | 362 | | 94.2 |
| December..... | 132 | | 50.8 |
| January..... | 82 | | 39.5 |
| February..... | 152 | | 50.3 |
| March..... | 118 | | 62.6 |
| April..... | 115 | 32 | 55.2 |
| May..... | 86 | 12 | 30.2 |
| June..... | 68 | 4.9 | 12.8 |
| July..... | 12 | 2.3 | 5.53 |
| August..... | 6.2 | 1.3 | 2.54 |
| September..... | 4.7 | 1.2 | 2.29 |
| The year..... | 745 | 1.2 | 42.5 |

PATTERSON CREEK AT ALASKA, W. VA.

LOCATION.—Chain gage on highway bridge one-fourth mile north of Alaska, Mineral County, 12 miles south of Cumberland, Md., and 15 miles north of Romney.

DRAINAGE AREA.—249 square miles.

RECORDS AVAILABLE.—June to September, 1930.

EXTREMES.—Maximum discharge during period, about 111 second-feet June 11 (gage height, 1.80 feet); minimum, about 0.4 second-foot Aug. 2-5 (gage height, 0.42 foot).

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

Daily and monthly discharge, in second-feet, 1930

| Day | June | July | Aug. | Sept. | Day | June | July | Aug. | Sept. |
|---------|------|------|------|-------|---------|------|------|------|-------|
| 1..... | | 6.4 | 1.3 | 4.8 | 16..... | 15 | 7.6 | 4.2 | 15 |
| 2..... | | 8.0 | .5 | 5.5 | 17..... | 17 | 7.2 | 4.8 | 33 |
| 3..... | 15 | 10 | .4 | 5.5 | 18..... | 23 | 5.8 | 5.8 | 17 |
| 4..... | 14 | 8.9 | .4 | 3.9 | 19..... | 27 | 4.5 | 8.4 | 14 |
| 5..... | 13 | 6.4 | .4 | 3.0 | 20..... | 17 | 3.6 | 6.1 | 6.8 |
| 6..... | 13 | 9.3 | .6 | 3.3 | 21..... | 12 | 3.3 | 5.2 | 6.4 |
| 7..... | 13 | 8.9 | .7 | 3.3 | 22..... | 12 | 3.0 | 3.9 | 6.1 |
| 8..... | 14 | 8.4 | 1.0 | 3.1 | 23..... | 10 | 2.6 | 5.2 | 4.8 |
| 9..... | 13 | 7.2 | 1.2 | 2.4 | 24..... | 10 | 2.8 | 6.8 | 3.1 |
| 10..... | 42 | 6.4 | 1.2 | 2.1 | 25..... | 10 | 2.3 | 7.6 | 3.1 |
| 11..... | 76 | 6.1 | 1.4 | 3.0 | 26..... | 12 | 3.3 | 8.4 | 4.2 |
| 12..... | 64 | 5.5 | 1.2 | 3.0 | 27..... | 12 | 3.3 | 7.2 | 5.5 |
| 13..... | 39 | 5.8 | 1.3 | 3.1 | 28..... | 10 | 3.3 | 5.8 | 5.8 |
| 14..... | 29 | 6.1 | 2.1 | 62 | 29..... | 8.0 | 3.0 | 5.5 | 4.8 |
| 15..... | 19 | 6.4 | 2.8 | 20 | 30..... | 6.8 | 2.3 | 5.2 | 3.6 |
| | | | | | 31..... | | 1.9 | 4.5 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| June 3-30..... | 76 | 6.8 | 20.2 | 0.081 | 0.08 |
| July..... | 10 | 1.9 | 5.48 | .022 | .02 |
| August..... | 8.4 | .4 | 3.58 | .014 | .02 |
| September..... | 62 | 2.1 | 8.71 | .035 | .04 |

SOUTH BRANCH OF POTOMAC RIVER NEAR PETERSBURG, W. VA.

LOCATION.—Water-stage recorder, 1.2 miles below mouth of North Fork of South Branch of Potomac River and 2½ miles west of Petersburg, Grant County. Zero of gage 962.00 feet above mean sea level.

DRAINAGE AREA.—642 square miles.

RECORDS AVAILABLE.—June, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, about 14,400 second-feet Oct. 22 (gage height, 12.21 feet); minimum, 44 second-feet Sept. 29, 30 (gage height, 1.52 feet).

1928-1930: Extremes for period of record same as given above.

REMARKS.—Records fair October to January; good for remainder of year. Discharge estimated because of ice Nov. 28-30, Dec. 1-4, 19-27, Jan. 20 to Feb. 3.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | |
|---------|-------|-------|------|------|------|-------|-------|-----|------|------|------|-------|----|
| 1----- | 96 | 492 | 400 | 839 | 250 | 579 | 445 | 350 | 137 | 97 | 47 | 56 | |
| 2----- | 1,860 | 455 | | 839 | | 549 | 470 | 336 | 127 | 92 | 47 | 53 | |
| 3----- | 2,200 | 901 | | 860 | | 492 | 503 | 306 | 116 | 96 | 47 | 54 | |
| 4----- | 1,090 | 1,390 | | 846 | | 306 | 455 | 573 | 284 | 109 | 92 | 49 | 52 |
| 5----- | 754 | 1,120 | 430 | 734 | 671 | 430 | 579 | 272 | 112 | 88 | 49 | 52 | |
| 6----- | 535 | 895 | 450 | 685 | 644 | 425 | 592 | 276 | 97 | 83 | 49 | 54 | |
| 7----- | 414 | 706 | 460 | 637 | 549 | 498 | 1,230 | 306 | 105 | 79 | 53 | 52 | |
| 8----- | 330 | 573 | 592 | 611 | 543 | 1,190 | 1,600 | 293 | 107 | 78 | 53 | 54 | |
| 9----- | 273 | 492 | 692 | 585 | 481 | 1,350 | 1,390 | 268 | 123 | 74 | 53 | 57 | |
| 10----- | 244 | 430 | 618 | 543 | 476 | 1,160 | 1,230 | 257 | 346 | 71 | 52 | 58 | |
| 11----- | 216 | 420 | 585 | 503 | 425 | 1,120 | 1,120 | 245 | 561 | 68 | 49 | 60 | |
| 12----- | 197 | 415 | 644 | 470 | 401 | 1,160 | 968 | 253 | 345 | 64 | 48 | 57 | |
| 13----- | 181 | 377 | 832 | 445 | 492 | 1,040 | 853 | 253 | 276 | 64 | 47 | 57 | |
| 14----- | 172 | 368 | 930 | 430 | 445 | 1,120 | 755 | 249 | 221 | 72 | 50 | 58 | |
| 15----- | 164 | 363 | 930 | 435 | 644 | 1,040 | 685 | 249 | 192 | 78 | 62 | 62 | |
| 16----- | 155 | 345 | 832 | 406 | 514 | 1,000 | 618 | 245 | 183 | 84 | 66 | 57 | |
| 17----- | 155 | 345 | 727 | 363 | 476 | 968 | 604 | 249 | 166 | 84 | 64 | 58 | |
| 18----- | 155 | 5,450 | 664 | 345 | 492 | 968 | 561 | 205 | 172 | 79 | 60 | 54 | |
| 19----- | 161 | 3,920 | 470 | 276 | 465 | 1,390 | 537 | 245 | 163 | 72 | 54 | 52 | |
| 20----- | 144 | 2,130 | | 200 | 465 | 1,270 | 498 | 221 | 144 | 66 | 53 | 48 | |
| 21----- | 142 | 1,470 | | | 492 | 1,040 | 455 | 225 | 116 | 60 | 53 | 48 | |
| 22----- | 4,630 | 1,120 | | | 503 | 895 | 450 | 205 | 120 | 57 | 54 | 47 | |
| 23----- | 4,230 | 930 | 470 | 200 | 520 | 755 | 420 | 183 | 105 | 57 | 57 | 47 | |
| 24----- | 1,700 | 825 | | | 618 | 664 | 391 | 180 | 101 | 58 | 58 | 46 | |
| 25----- | 1,120 | 713 | | | 706 | 618 | 372 | 172 | 118 | 58 | 56 | 47 | |
| 26----- | 804 | 624 | 460 | | 748 | 644 | 350 | 169 | 118 | 57 | 54 | 48 | |
| 27----- | 604 | 598 | | | 734 | 585 | 327 | 160 | 109 | 54 | 63 | 47 | |
| 28----- | 486 | 460 | | | 644 | 514 | 310 | 147 | 112 | 53 | 66 | 46 | |
| 29----- | 440 | 1,080 | | | 476 | 492 | 297 | 147 | 109 | 53 | 58 | 44 | 44 |
| 30----- | 440 | | | | | 492 | 297 | 142 | 99 | 50 | 54 | 44 | |
| 31----- | 498 | | | | | 476 | 140 | 140 | 140 | 49 | 52 | 44 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 4,630 | 96 | 798 | 1.24 | 1.43 |
| November..... | 5,450 | 345 | 975 | 1.52 | 1.70 |
| December..... | 1,080 | ----- | 610 | .950 | 1.10 |
| January..... | 860 | ----- | 427 | .665 | .77 |
| February..... | 748 | ----- | 507 | .790 | .82 |
| March..... | 1,390 | 425 | 819 | 1.28 | 1.48 |
| April..... | 1,600 | 297 | 649 | 1.01 | 1.13 |
| May..... | 350 | 140 | 233 | .363 | .42 |
| June..... | 561 | 97 | 164 | .255 | .28 |
| July..... | 97 | 49 | 70.5 | .110 | .13 |
| August..... | 66 | 47 | 54.1 | 0.84 | .10 |
| September..... | 62 | 44 | 52.3 | .081 | .09 |
| The year..... | 5,450 | 44 | 446 | .695 | 9.45 |

SOUTH BRANCH OF POTOMAC RIVER NEAR SPRINGFIELD, W. VA.

LOCATION.—Water-stage recorder at highway bridge 2 miles east of Springfield, Hampshire County, and 13 miles above confluence with North Branch of Potomac River. Zero of gage 562.00 feet above mean sea level.

DRAINAGE AREA.—1,470 square miles.

RECORDS AVAILABLE.—August, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, about 17,400 second-feet Oct. 23 (gage height, 16.33 feet); minimum, 50 second-feet Aug. 5 (gage height, 0.85 foot).

1928-1930: Maximum discharge, about 21,100 second-feet Apr. 17, 1929 (gage height, 19.13 feet); minimum, that of Aug. 5, 1930.

REMARKS.—Records good. Discharge estimated because of ice Nov. 28-30, Dec. 1-4, 20-26, Jan. 21 to Feb. 1.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|--------|-------|-------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | 131 | 932 | 750 | 1,750 | 420 | 970 | 773 | 532 | 200 | 161 | 62 | 87 |
| 2..... | 2,930 | 904 | | 1,550 | 446 | 894 | 728 | 581 | 189 | 157 | 59 | 72 |
| 3..... | 7,800 | 1,050 | | 1,450 | 454 | 856 | 755 | 549 | 189 | 143 | 56 | 69 |
| 4..... | 3,650 | 3,430 | | 1,450 | 485 | 782 | 791 | 508 | 184 | 139 | 56 | 65 |
| 5..... | 2,000 | 2,990 | 791 | 1,350 | 1,240 | 746 | 856 | 469 | 166 | 139 | 56 | 65 |
| 6..... | 1,300 | 2,200 | 810 | 1,180 | 2,050 | 692 | 894 | 462 | 171 | 135 | 56 | 62 |
| 7..... | 951 | 1,700 | 782 | 1,120 | 1,700 | 692 | 1,400 | 462 | 166 | 127 | 59 | 62 |
| 8..... | 746 | 1,350 | 782 | 1,060 | 1,350 | 1,600 | 2,360 | 493 | 161 | 118 | 62 | 80 |
| 9..... | 692 | 1,170 | 922 | 998 | 1,220 | 3,650 | 2,570 | 469 | 161 | 110 | 62 | 76 |
| 10..... | 516 | 1,020 | 970 | 951 | 1,060 | 2,990 | 2,200 | 439 | 447 | 110 | 62 | 72 |
| 11..... | 439 | 922 | 904 | 904 | 970 | 2,360 | 1,900 | 395 | 1,300 | 102 | 59 | 72 |
| 12..... | 388 | 884 | 884 | 847 | 875 | 2,200 | 1,650 | 380 | 998 | 98 | 59 | 76 |
| 13..... | 346 | 856 | 998 | 791 | 810 | 2,050 | 1,450 | 373 | 675 | 98 | 56 | 84 |
| 14..... | 312 | 782 | 1,210 | 764 | 942 | 1,800 | 1,300 | 380 | 508 | 98 | 62 | 95 |
| 15..... | 299 | 728 | 1,350 | 746 | 1,160 | 1,750 | 1,160 | 380 | 410 | 98 | 72 | 80 |
| 16..... | 280 | 692 | 1,300 | 737 | 1,030 | 1,650 | 1,070 | 373 | 339 | 102 | 72 | 84 |
| 17..... | 274 | 728 | 1,180 | 692 | 866 | 1,500 | 1,060 | 366 | 305 | 106 | 87 | 106 |
| 18..... | 255 | 6,400 | 1,080 | 649 | 828 | 1,500 | 1,060 | 373 | 346 | 110 | 95 | 106 |
| 19..... | 243 | 12,200 | 1,040 | 573 | 856 | 1,600 | 970 | 359 | 353 | 110 | 91 | 91 |
| 20..... | 249 | 6,070 | | 462 | 791 | 2,100 | 922 | 353 | 293 | 102 | 91 | 87 |
| 21..... | 243 | 3,760 | 800 | 400 | 773 | 1,800 | 856 | 359 | 262 | 98 | 84 | 84 |
| 22..... | 406 | 2,570 | | | 782 | 1,550 | 847 | 319 | 232 | 95 | 80 | 76 |
| 23..... | 9,390 | 2,000 | | | 791 | 1,350 | 838 | 299 | 200 | 98 | 87 | 72 |
| 24..... | 5,630 | 1,650 | | | 810 | 1,180 | 764 | 286 | 205 | 84 | 91 | 72 |
| 25..... | 2,990 | 1,450 | | | 942 | 1,070 | 719 | 262 | 205 | 80 | 91 | 69 |
| 26..... | 1,950 | 1,260 | | | 1,050 | 1,050 | 666 | 249 | 205 | 70 | 87 | 72 |
| 27..... | 1,450 | 1,140 | 819 | | 1,060 | 1,040 | 623 | 238 | 200 | 80 | 87 | 69 |
| 28..... | 1,150 | | 1,160 | | 1,060 | 942 | 581 | 238 | 180 | 70 | 87 | 69 |
| 29..... | 980 | 900 | 2,260 | | | 856 | 549 | 232 | 175 | 72 | 80 | 62 |
| 30..... | 904 | | 2,520 | | | 791 | 524 | 216 | 166 | 65 | 84 | 62 |
| 31..... | 884 | | 2,100 | | | 801 | | 205 | | 62 | 87 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 9,390 | 131 | 1,610 | 1.10 | 1.27 |
| November..... | 12,200 | | 2,120 | 1.44 | 1.61 |
| December..... | 2,520 | | 1,050 | 1.74 | .82 |
| January..... | 1,750 | | 788 | .536 | .62 |
| February..... | 2,050 | 420 | 958 | .632 | .68 |
| March..... | 3,650 | 692 | 1,450 | .906 | 1.14 |
| April..... | 2,570 | 524 | 1,090 | .741 | .83 |
| May..... | 581 | 205 | 374 | .234 | .29 |
| June..... | 1,300 | 161 | 320 | .218 | .24 |
| July..... | 161 | 62 | 105 | .071 | .08 |
| August..... | 95 | 56 | 73.5 | .070 | .06 |
| September..... | 106 | 62 | 76.6 | .072 | .06 |
| The year..... | 12,200 | 56 | 832 | .566 | 7.70 |

SOUTH FORK OF SOUTH BRANCH OF POTOMAC RIVER NEAR MOOREFIELD, W. VA.

LOCATION.—Chain gage on highway bridge 5 miles south of Moorefield, Hardy County, and 2 miles above Stoney Creek.

DRAINAGE AREA.—271 square miles.

RECORDS AVAILABLE.—June, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, about 7,620 second-feet Oct. 22 (gage height, 8.75 feet); minimum, 8.0 second-feet Aug. 12, 13 (gage height, 1.93 feet).

1928-1930: Extremes same as given above.

REMARKS.—Records good. Discharge estimated because of ice Dec. 1-5, 21-24, Jan. 26 to Feb. 2.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|------|------|------|-------|------|-----|------|------|------|-------|
| 1 | 26 | 124 | 90 | 309 | 70 | 118 | 110 | 74 | 31 | 24 | 9.8 | 13 |
| 2 | 910 | 121 | | 274 | 75 | 121 | 110 | 72 | 28 | 24 | 9.8 | 12 |
| 3 | 1,300 | 618 | | 256 | 82 | 116 | 105 | 68 | 26 | 26 | 9.8 | 10 |
| 4 | 430 | 825 | | 242 | 91 | 110 | 105 | 63 | 24 | 22 | 9.1 | 9.8 |
| 5 | 274 | 510 | | 217 | 510 | 105 | 100 | 63 | 24 | 22 | 9.1 | 12 |
| 6 | 206 | 370 | 108 | 193 | 510 | 105 | 105 | 63 | 24 | 21 | 9.4 | 10 |
| 7 | 168 | 293 | 110 | 178 | 405 | 118 | 138 | 70 | 24 | 19 | 10 | 12 |
| 8 | 135 | 242 | 110 | 171 | 320 | 1,220 | 279 | 66 | 23 | 19 | 9.8 | 14 |
| 9 | 108 | 201 | 108 | 158 | 270 | 962 | 284 | 63 | 24 | 18 | 9.8 | 13 |
| 10 | 100 | 178 | 105 | 154 | 238 | 658 | 251 | 63 | 171 | 18 | 9.8 | 13 |
| 11 | 89 | 175 | 100 | 138 | 212 | 510 | 225 | 56 | 201 | 16 | 8.4 | 12 |
| 12 | 78 | 164 | 105 | 127 | 193 | 424 | 201 | 52 | 145 | 15 | 8.4 | 12 |
| 13 | 71 | 148 | 110 | 121 | 178 | 352 | 182 | 52 | 105 | 15 | 8.4 | 12 |
| 14 | 67 | 138 | 108 | 116 | 186 | 298 | 171 | 54 | 86 | 16 | 9.8 | 14 |
| 15 | 62 | 132 | 110 | 116 | 171 | 251 | 164 | 51 | 72 | 18 | 12 | 14 |
| 16 | 62 | 127 | 113 | 110 | 161 | 234 | 158 | 52 | 66 | 16 | 12 | 14 |
| 17 | 56 | 121 | 113 | 105 | 145 | 217 | 158 | 49 | 63 | 15 | 12 | 16 |
| 18 | 52 | 4,500 | 116 | 103 | 145 | 208 | 217 | 49 | 70 | 15 | 12 | 16 |
| 19 | 47 | 3,760 | 118 | 98 | 138 | 208 | 186 | 49 | 59 | 15 | 12 | 15 |
| 20 | 44 | 916 | 121 | 98 | 135 | 234 | 118 | 49 | 54 | 14 | 12 | 14 |
| 21 | 46 | 581 | 100 | 91 | 127 | 225 | 113 | 48 | 46 | 13 | 12 | 13 |
| 22 | 3,840 | 382 | | 93 | 121 | 204 | 110 | 46 | 43 | 13 | 12 | 12 |
| 23 | 3,200 | 320 | | 86 | 116 | 178 | 103 | 41 | 39 | 14 | 13 | 11 |
| 24 | 869 | 270 | | 86 | 113 | 164 | 93 | 38 | 39 | 13 | 12 | 10 |
| 25 | 456 | 247 | | 72 | 116 | 158 | 91 | 36 | 39 | 11 | 12 | 10 |
| 26 | 314 | 208 | 113 | 65 | 121 | 164 | 86 | 35 | 36 | 12 | 14 | 10 |
| 27 | 238 | 193 | 110 | | 121 | 158 | 82 | 35 | 36 | 12 | 16 | 10 |
| 28 | 197 | 186 | 164 | | 121 | 145 | 78 | 35 | 31 | 10 | 14 | 9.8 |
| 29 | 171 | 182 | 475 | | 130 | 76 | 33 | 28 | 11 | 13 | 9.8 | |
| 30 | 158 | 171 | 475 | | 118 | 76 | 32 | 27 | 10 | 12 | 9.8 | |
| 31 | 138 | 376 | 376 | | 116 | 116 | 31 | 31 | 9.8 | 12 | 12 | 12 |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 3,840 | 26 | 449 | 1.66 | 1.91 |
| November | 4,500 | 121 | 547 | 2.02 | 2.25 |
| December | 475 | 140 | 140 | .517 | .60 |
| January | 309 | | 132 | .487 | .56 |
| February | 510 | 70 | 185 | .683 | .71 |
| March | 1,220 | 105 | 269 | .903 | 1.14 |
| April | 234 | 76 | 142 | .524 | .58 |
| May | 74 | 23 | 51.2 | .189 | .22 |
| June | 201 | 9.8 | 56.1 | .207 | .23 |
| July | 26 | 16.0 | 16.0 | .059 | .07 |
| August | 16 | 8.4 | 11.1 | .041 | .05 |
| September | 16 | 9.8 | 12.1 | .045 | .05 |
| The year | 4,500 | 8.4 | 167 | .616 | 8.32 |

TOWN CREEK NEAR OLDTOWN, MD.

LOCATION.—Chain gage on highway bridge 2 miles above Sawpit Run and 3 miles northeast of Oldtown, Allegany County.

DRAINAGE AREA.—136 square miles.

RECORDS AVAILABLE.—July, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, about 5,530 second-feet Oct. 23 (gage height, 13.40 feet); minimum, 0.9 second-foot Aug. 2, & 7-14 (gage height, 1.41 feet).

1928-1930: Extremes for period same as given above.

REMARKS.—Records fair. Discharge estimated because of ice Nov. 28-30, Dec. 1-6, 20-26, Jan. 19 to Feb. 4.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|------|------|------|------|------|------|-----|------|------|------|-------|
| 1----- | 5.7 | 86 | | 175 | | 88 | 73 | 132 | 15 | 4.7 | 1.1 | 2.6 |
| 2----- | 661 | 75 | | 151 | | 88 | 68 | 136 | 14 | 5.0 | .9 | 3.2 |
| 3----- | 1,270 | 110 | | 142 | 45 | 86 | 66 | 108 | 9.6 | 6.0 | .9 | 3.4 |
| 4----- | 397 | 511 | 40 | 119 | | 86 | 66 | 99 | 8.0 | 5.2 | 1.2 | 3.3 |
| 5----- | 186 | 312 | | 94 | 835 | 71 | 63 | 90 | 7.2 | 4.4 | 1.0 | 3.4 |
| 6----- | 110 | 222 | | 92 | 325 | 74 | 67 | 87 | 6.8 | 3.4 | 1.0 | 2.0 |
| 7----- | 82 | 175 | 64 | 101 | 234 | 78 | 397 | 90 | 6.4 | 3.3 | .9 | 1.6 |
| 8----- | 62 | 142 | 68 | 94 | 153 | 298 | 298 | 80 | 6.4 | 3.3 | .9 | 2.6 |
| 9----- | 52 | 119 | 64 | 93 | 119 | 222 | 222 | 67 | 8.8 | 3.2 | .9 | 3.9 |
| 10----- | 39 | 98 | 55 | 86 | 138 | 175 | 147 | 62 | 50 | 3.0 | .9 | 3.4 |
| 11----- | 32 | 94 | 52 | 70 | 103 | 175 | 134 | 54 | 70 | 3.0 | .9 | 2.8 |
| 12----- | 27 | 93 | 50 | 74 | 90 | 285 | 121 | 48 | 36 | 2.7 | .9 | 2.6 |
| 13----- | 23 | 80 | 67 | 86 | 111 | 222 | 111 | 41 | 23 | 2.2 | .9 | 3.4 |
| 14----- | 21 | 75 | 222 | 87 | 104 | 210 | 98 | 42 | 14 | 2.1 | .9 | 3.7 |
| 15----- | 22 | 87 | 164 | 80 | 93 | 175 | 90 | 47 | 12 | 2.1 | 1.0 | 3.7 |
| 16----- | 22 | 86 | 134 | 77 | 74 | 153 | 80 | 46 | 11 | 2.0 | 1.3 | 3.7 |
| 17----- | 26 | 134 | 117 | 71 | 59 | 145 | 88 | 42 | 12 | 2.0 | 2.6 | 4.7 |
| 18----- | 22 | 995 | 121 | 73 | 82 | 136 | 92 | 35 | 20 | 2.0 | 3.7 | 3.7 |
| 19----- | 17 | 685 | 149 | | 81 | 186 | 92 | 41 | 28 | 2.0 | 3.7 | 3.7 |
| 20----- | 18 | 397 | | | 77 | 142 | 86 | 40 | 20 | 2.0 | 3.7 | 3.7 |
| 21----- | 13 | 285 | | | 75 | 115 | 106 | 29 | 15 | 2.0 | 3.7 | 3.4 |
| 22----- | 150 | 210 | | | 68 | 101 | 198 | 25 | 10 | 1.8 | 3.3 | 3.0 |
| 23----- | 3,480 | 164 | 50 | | 68 | 94 | 210 | 23 | 8.0 | 2.0 | 2.9 | 3.3 |
| 24----- | 545 | 142 | | | 68 | 94 | 186 | 21 | 8.0 | 1.8 | 2.8 | 3.3 |
| 25----- | 325 | 130 | | 20 | 75 | 93 | 145 | 21 | 20 | 1.7 | 3.2 | 2.8 |
| 26----- | 210 | 110 | | | 106 | 119 | 134 | 20 | 14 | 1.4 | 2.8 | 2.3 |
| 27----- | 153 | 99 | 115 | | 106 | 115 | 113 | 19 | 12 | 1.2 | 3.0 | 2.3 |
| 28----- | 126 | | 234 | | 93 | 94 | 98 | 21 | 8.8 | 1.2 | 2.6 | 2.3 |
| 29----- | 103 | 70 | 349 | | | 82 | 96 | 20 | 6.0 | 1.2 | 3.4 | 2.3 |
| 30----- | 93 | | 260 | | | 82 | 92 | 18 | 5.2 | 1.2 | 4.2 | 2.0 |
| 31----- | 92 | | 222 | | | 80 | | 17 | | 1.2 | 2.7 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October----- | 3,480 | 5.7 | 270 | 1.99 | 2.29 |
| November----- | 995 | | 198 | 1.46 | 1.63 |
| December----- | 349 | | 99.9 | .735 | .85 |
| January----- | 175 | | 65.3 | .480 | .55 |
| February----- | 835 | | 126 | .926 | .96 |
| March----- | 298 | 71 | 134 | .985 | 1.14 |
| April----- | 397 | 63 | 128 | .941 | 1.05 |
| May----- | 136 | 17 | 52.3 | .385 | .44 |
| June----- | 70 | 5.2 | 16.2 | .119 | .13 |
| July----- | 6.0 | 1.2 | 2.59 | .019 | .02 |
| August----- | 4.2 | .9 | 2.06 | .015 | .02 |
| September----- | 4.7 | 1.6 | 3.07 | .023 | .03 |
| The year----- | 3,480 | .9 | 91.2 | .671 | 9.10 |

CACAPON RIVER AT CAPON BRIDGE, W. VA.

LOCATION.—Chain gage at highway bridge at Capon Bridge, Hampshire County.

DRAINAGE AREA.—367 square miles.

RECORDS AVAILABLE.—May to September, 1930.

EXTREMES.—Maximum discharge during period, about 251 second-feet June 19 (gage height, 1.56 feet); minimum, 20 second-feet Aug. 1, 11, Sept. 30 (gage height, 0.77 foot).

REMARKS.—Records for days when discharge exceeded 75 second-feet fair; others good.

Daily and monthly discharge, in second-feet, 1930

| Day | May | June | July | Aug. | Sept. | Day | May | June | July | Aug. | Sept. |
|---------|-----|------|------|------|-------|---------|-----|------|------|------|-------|
| 1..... | | 55 | 46 | 23 | 33 | 16..... | | 66 | 30 | 35 | 40 |
| 2..... | | 53 | 44 | 23 | 30 | 17..... | | 88 | 30 | 33 | 61 |
| 3..... | | 55 | 42 | 23 | 25 | 18..... | | 146 | 33 | 33 | 53 |
| 4..... | | 53 | 37 | 23 | 25 | 19..... | | 185 | 32 | 33 | 33 |
| 5..... | | 50 | 37 | 23 | 23 | 20..... | | 216 | 30 | 33 | 33 |
| 6..... | | 53 | 38 | 25 | 23 | 21..... | | 139 | 28 | 32 | 30 |
| 7..... | | 48 | 37 | 25 | 23 | 22..... | | 100 | 25 | 30 | 28 |
| 8..... | | 53 | 35 | 26 | 32 | 23..... | | 83 | 28 | 33 | 26 |
| 9..... | | 61 | 32 | 26 | 42 | 24..... | | 74 | 25 | 33 | 23 |
| 10..... | | 104 | 30 | 23 | 35 | 25..... | | 77 | 23 | 37 | 25 |
| 11..... | | 85 | 30 | 21 | 32 | 26..... | | 74 | 25 | 40 | 23 |
| 12..... | | 193 | 32 | 23 | 33 | 27..... | | 83 | 25 | 38 | 23 |
| 13..... | | 139 | 30 | 21 | 33 | 28..... | | 69 | 25 | 38 | 23 |
| 14..... | | 97 | 32 | 25 | 33 | 29..... | | 61 | 30 | 33 | 21 |
| 15..... | | 77 | 33 | 30 | 35 | 30..... | | 57 | 25 | 33 | 21 |
| | | | | | | 31..... | 57 | | 22 | 33 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|--------------------|----------------------|
| May 31..... | 57 | 57 | 57 | 0.155 | 0.01 |
| June..... | 216 | 48 | 89.8 | .245 | .27 |
| July..... | 46 | 22 | 31.3 | .085 | .10 |
| August..... | 40 | 21 | 29.3 | .080 | .09 |
| September..... | 61 | 21 | 30.7 | .084 | .09 |

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, 1930.

EXTREMES.—Maximum discharge during year, 8,880 second-feet Oct. 3 (gage height, 9.60 feet); minimum, 37 second-feet Aug. 2, 3, 6, 7, 12-14 (gage height, 0.36 foot).

1922-1930: Maximum discharge, about 34,000 second-feet May 12, 1924 (gage height, 19.32 feet); minimum, that of Aug. 2, 3, 6, 7, 12-14, 1930.

REMARKS.—Records fair. Discharge estimated because of ice Nov. 2^d to Dec. 3, Jan. 21 to Feb. 4.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|-------|-------|-------|-------|-------|-----|-------|------|------|-------|
| 1 | 72 | 308 | 270 | 2,240 | 150 | 342 | 246 | 276 | 78 | 82 | 40 | 50 |
| 2 | 1,530 | 260 | | 1,200 | | 291 | 291 | 260 | 85 | 80 | 38 | 45 |
| 3 | 8,330 | 479 | | 1,200 | | 291 | 276 | 246 | 80 | 77 | 37 | 42 |
| 4 | 1,970 | 1,890 | 308 | 397 | 276 | 276 | 232 | 81 | 74 | 40 | 42 | 42 |
| 5 | 1,070 | 1,810 | 308 | 359 | 890 | 260 | 260 | 219 | 77 | 71 | 40 | 42 |
| 6 | 890 | 1,200 | 342 | 437 | 1,970 | 260 | 276 | 206 | 78 | 67 | 37 | 45 |
| 7 | 378 | 950 | 308 | 437 | 1,130 | 260 | 501 | 206 | 88 | 65 | 37 | 48 |
| 8 | 324 | 725 | 291 | 417 | 1,070 | 1,070 | 1,130 | 194 | 92 | 63 | 40 | 50 |
| 9 | 246 | 479 | 324 | 397 | 890 | 2,060 | 1,010 | 194 | 87 | 60 | 42 | 48 |
| 10 | 206 | 417 | 276 | 359 | 670 | 1,810 | 725 | 183 | 143 | 59 | 40 | 47 |
| 11 | 172 | 378 | 291 | 324 | 594 | 1,200 | 618 | 172 | 194 | 58 | 40 | 50 |
| 12 | 152 | 308 | 291 | 324 | 479 | 1,130 | 546 | 162 | 152 | 55 | 37 | 52 |
| 13 | 143 | 324 | 276 | 291 | 437 | 1,010 | 458 | 152 | 143 | 58 | 37 | 52 |
| 14 | 126 | 342 | 291 | 291 | 458 | 835 | 417 | 143 | 143 | 56 | 37 | 55 |
| 15 | 152 | 342 | 359 | 324 | 546 | 670 | 397 | 143 | 118 | 55 | 41 | 63 |
| 16 | 152 | 291 | 359 | 342 | 417 | 594 | 378 | 152 | 106 | 55 | 45 | 59 |
| 17 | 397 | 359 | 308 | 291 | 291 | 546 | 378 | 162 | 95 | 54 | 54 | 68 |
| 18 | 194 | 1,570 | 324 | 232 | 308 | 523 | 417 | 172 | 100 | 52 | 55 | 76 |
| 19 | 134 | 6,320 | 359 | 183 | 324 | 546 | 458 | 152 | 113 | 52 | 55 | 80 |
| 20 | 126 | 2,820 | 397 | 172 | 359 | 569 | 397 | 143 | 134 | 52 | 48 | 78 |
| 21 | 183 | 1,730 | 397 | 140 | 342 | 523 | 397 | 134 | 194 | 52 | 45 | 71 |
| 22 | 1,660 | 1,130 | 378 | | 308 | 417 | 397 | 134 | 172 | 47 | 43 | 63 |
| 23 | 5,010 | 950 | 342 | | 291 | 378 | 437 | 126 | 124 | 50 | 50 | 55 |
| 24 | 3,740 | 950 | 324 | | 291 | 324 | 417 | 116 | 110 | 52 | 51 | 52 |
| 25 | 1,860 | 725 | 291 | | 308 | 276 | 378 | 121 | 116 | 50 | 50 | 51 |
| 26 | 1,010 | 618 | 291 | 140 | 378 | 342 | 359 | 107 | 134 | 46 | 51 | 54 |
| 27 | 890 | 546 | 291 | | 397 | 458 | 342 | 101 | 102 | 43 | 65 | 55 |
| 28 | 479 | 479 | 359 | | 359 | 458 | 308 | 96 | 134 | 42 | 63 | 51 |
| 29 | 397 | 400 | 1,070 | | ----- | 397 | 276 | 88 | 118 | 42 | 55 | 50 |
| 30 | 291 | 350 | 1,270 | | ----- | 359 | 260 | 81 | 89 | 40 | 51 | 42 |
| 31 | 291 | ----- | 1,570 | | ----- | 276 | ----- | 77 | ----- | 38 | 50 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 8,330 | 72 | 1,050 | 1.57 | 1.81 |
| November | 6,320 | 260 | 982 | 1.47 | 1.64 |
| December | 1,570 | ----- | 413 | .616 | .71 |
| January | 2,240 | ----- | 379 | .566 | .65 |
| February | 1,970 | ----- | 504 | .752 | .78 |
| March | 2,060 | 260 | 605 | .905 | 1.04 |
| April | 1,130 | 246 | 434 | .648 | .72 |
| May | 276 | 77 | 160 | .235 | .28 |
| June | 194 | 77 | 116 | .173 | .19 |
| July | 82 | 38 | 56.4 | .084 | .10 |
| August | 65 | 37 | 45.6 | .065 | .08 |
| September | 80 | 42 | 54.5 | .081 | .09 |
| The year | 8,330 | 37 | 399 | .596 | 8.09 |

LICKING CREEK NEAR SYLVAN, PA.

LOCATION.—Chain gage on highway bridge one-tenth mile north of Pennsylvania-Maryland State line, 3 miles south of Sylvan, Franklin County, and 15 miles above mouth.

DRAINAGE AREA.—87.4 square miles.

RECORDS AVAILABLE.—June to September, 1930.

EXTREMES.—Maximum discharge during period, 40 second-feet June 20 (gage height, 1.29 feet); minimum, 1.0 second-foot Aug. 8 (gage height, 0.64 foot).

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1930

| Day | June | July | Aug. | Sept. | Day | June | July | Aug. | Sept. |
|---------|------|------|------|-------|---------|------|------|------|-------|
| 1..... | | 11 | 4.3 | 4.0 | 16..... | 21 | 5.9 | 5.9 | 5.9 |
| 2..... | | 9.2 | 3.7 | 5.4 | 17..... | 24 | 5.4 | 7.3 | 8.7 |
| 3..... | | 9.7 | 3.4 | 5.4 | 18..... | 29 | 5.4 | 7.3 | 7.8 |
| 4..... | 28 | 9.2 | 3.4 | 5.4 | 19..... | 36 | 5.4 | 6.3 | 5.9 |
| 5..... | 29 | 7.8 | 3.0 | 4.0 | 20..... | 39 | 4.6 | 4.9 | 5.4 |
| 6..... | | 7.8 | 3.0 | 4.0 | 21..... | 28 | 4.6 | 4.6 | 5.4 |
| 7..... | 27 | 7.8 | 3.0 | 4.6 | 22..... | 22 | 4.6 | 4.3 | 4.3 |
| 8..... | 27 | 9.7 | 1.3 | 4.6 | 23..... | 19 | 4.6 | 4.9 | 4.3 |
| 9..... | 29 | 11 | 2.1 | 4.0 | 24..... | 19 | 4.0 | 4.9 | 4.3 |
| 10..... | 34 | 12 | 3.7 | 4.0 | 25..... | 19 | 5.4 | 4.9 | 5.9 |
| 11..... | | 9.2 | 3.4 | 4.9 | 26..... | 18 | 5.4 | 4.3 | 6.8 |
| 12..... | 34 | 7.8 | 3.0 | 3.0 | 27..... | 21 | 5.4 | 4.0 | 4.6 |
| 13..... | 29 | 6.3 | 3.7 | 4.9 | 28..... | 18 | 5.4 | 3.7 | 4.9 |
| 14..... | 26 | 9.2 | 3.0 | 5.4 | 29..... | 11 | 5.4 | 3.7 | 4.9 |
| 15..... | 23 | 6.8 | 4.9 | 4.9 | 30..... | 13 | 4.9 | 4.9 | 4.9 |
| | | | | | 31..... | | 4.6 | 4.9 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| June 4-30..... | 39 | 11 | 25.3 | 0.239 | 0.29 |
| July..... | 12 | 4.0 | 6.95 | .080 | .062 |
| August..... | 7.3 | 1.3 | 4.18 | .048 | .055 |
| September..... | 8.7 | 3.0 | 5.08 | .058 | .065 |

BACK CREEK NEAR HEDGESVILLE, W. VA.

LOCATION.—Chain gage at bridge on Martinsburg-Berkeley Springs highway 1.3 miles west of Hedgesville, Berkeley County, and 4 miles above mouth of Tilhance Creek.

DRAINAGE AREA.—252 square miles.

RECORDS AVAILABLE.—July, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, about 13,000 second-feet Oct. 23 (gage height, 16.9 feet); minimum, 0.9 second-foot Aug. 6 (gage height, 0.99 foot).

1928-1930: Extremes for period of record same as occurred in 1930.

REMARKS.—Records fair. Discharge estimated because of ice effect Nov. 30, Dec. 1-5, 22-28, Jan. 21 to Feb. 3.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|------|-------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | 16 | 127 | 50 | 382 | 80 | 82 | 87 | 74 | 13 | 8.7 | 5.3 | 4.8 |
| 2..... | 562 | 124 | | 292 | | 78 | 80 | 78 | 9.6 | 8.7 | 4.4 | 7.0 |
| 3..... | 1,840 | 206 | | 242 | | 72 | 78 | 65 | 11 | 16 | 3.4 | 5.3 |
| 4..... | 336 | 980 | | 190 | | 67 | 78 | 57 | 9.6 | 18 | 2.4 | 3.9 |
| 5..... | 171 | 505 | | 154 | | 69 | 74 | 56 | 9.6 | 13 | 1.7 | 2.9 |
| 6..... | 104 | 382 | 72 | 124 | 980 | 65 | 78 | 54 | 11 | 7.4 | 1.1 | 2.6 |
| 7..... | 44 | 238 | 69 | 127 | 608 | 80 | 800 | 54 | 9.6 | 6.1 | 1.1 | 2.6 |
| 8..... | 65 | 194 | 72 | 122 | 406 | 2,870 | 608 | 56 | 9.6 | 6.6 | 1.7 | 3.6 |
| 9..... | 56 | 164 | 84 | 116 | 292 | 920 | 359 | 59 | 14 | 5.7 | 2.2 | 3.4 |
| 10..... | 29 | 146 | 76 | 110 | 254 | 555 | 258 | 47 | 17 | 3.9 | 1.8 | 2.4 |
| 11..... | 11 | 136 | 76 | 87 | 202 | 406 | 210 | 40 | 50 | 4.8 | 1.8 | 1.9 |
| 12..... | 22 | 130 | 69 | 92 | 146 | 406 | 171 | 37 | 50 | 5.3 | 2.6 | 1.9 |
| 13..... | 32 | 122 | 78 | 92 | 168 | 263 | 150 | 35 | 32 | 3.9 | 2.6 | 2.6 |
| 14..... | 30 | 113 | 154 | 82 | 258 | 202 | 130 | 35 | 30 | 3.4 | 3.4 | 2.6 |
| 15..... | 30 | 104 | 171 | 119 | 210 | 164 | 119 | 36 | 28 | 3.9 | 5.3 | 2.6 |
| 16..... | 30 | 104 | 160 | 110 | 164 | 143 | 104 | 37 | 15 | 3.9 | 5.7 | 3.4 |
| 17..... | 33 | 130 | 133 | 104 | 187 | 143 | 116 | 40 | 21 | 4.8 | 7.0 | 14 |
| 18..... | 35 | 3,180 | 136 | 122 | 146 | 143 | 140 | 36 | 69 | 4.4 | 6.1 | 18 |
| 19..... | 33 | 2,320 | 171 | 127 | 160 | 164 | 130 | 32 | 48 | 4.2 | 4.4 | 27 |
| 20..... | 30 | 505 | 100 | 84 | 140 | 150 | 119 | 35 | 40 | 3.9 | 3.6 | 12 |
| 21..... | 530 | 430 | 116 | 55 | 122 | 119 | 107 | 32 | 30 | 3.6 | 3.2 | 7.0 |
| 22..... | 2,810 | 314 | | | 104 | 102 | 122 | 30 | 22 | 3.6 | 2.9 | 5.7 |
| 23..... | 6,830 | 267 | | | 102 | 87 | 124 | 26 | 18 | 3.2 | 2.6 | 3.6 |
| 24..... | 980 | 226 | | | 113 | 90 | 113 | 23 | 18 | 3.4 | 2.6 | 3.2 |
| 25..... | 455 | 206 | | | 107 | 90 | 102 | 23 | 17 | 3.2 | 2.6 | 2.6 |
| 26..... | 202 | 179 | 70 | 55 | 113 | 124 | 100 | 21 | 13 | 3.6 | 1.8 | 2.6 |
| 27..... | 250 | 154 | | | 102 | 154 | 87 | 20 | 20 | 4.4 | 2.4 | 2.6 |
| 28..... | 164 | 143 | | | 84 | 122 | 80 | 20 | 17 | 4.4 | 2.6 | 1.9 |
| 29..... | 143 | 119 | | | 90 | 90 | 78 | 17 | 25 | 4.4 | 3.2 | 1.8 |
| 30..... | 146 | 90 | | | ----- | 97 | 76 | 16 | 15 | 11 | 4.2 | 1.9 |
| 31..... | 140 | ----- | 530 | ----- | ----- | 87 | ----- | 13 | ----- | 13 | 4.2 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 6,830 | 11 | 525 | 2.08 | 2.40 |
| November..... | 3,180 | 90 | 401 | 1.59 | 1.77 |
| December..... | 980 | ----- | 153 | 0.607 | 0.70 |
| January..... | 382 | ----- | 112 | .444 | .51 |
| February..... | 1,620 | ----- | 264 | 1.05 | 1.09 |
| March..... | 2,870 | 65 | 265 | 1.05 | 1.21 |
| April..... | 800 | 74 | 163 | .647 | .72 |
| May..... | 78 | 13 | 38.8 | .154 | .18 |
| June..... | 69 | 9.6 | 23.1 | .062 | .10 |
| July..... | 18 | 3.2 | 6.27 | .025 | .03 |
| August..... | 7.0 | 1.1 | 3.22 | .013 | .01 |
| September..... | 27 | 1.8 | 5.25 | .021 | .02 |
| The year..... | 6,830 | 1.1 | 163 | .647 | 8.75 |

CONOCOCHEAQUE CREEK AT FAIRVIEW, MD.

LOCATION.—Chain gage on highway bridge half a mile southeast of Fairview, Washington County, and 6½ miles northwest of Hagerstown. Zero of gage 388.92 feet above mean sea level.

DRAINAGE AREA.—502 square miles.

RECORDS AVAILABLE.—June, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 6,880 second-feet Oct. 23 (gage height, 10.45 feet); minimum, 36 second-feet Aug. 11 (gage height, 1.65 feet).

1928-30: Maximum discharge, 7,580 second-feet June 26, 1928 (gage height, 11.10 feet); minimum discharge, that of Aug. 11, 1930.

REMARKS.—Records good. Discharge estimated because of ice Dec. 1-6, 22-27, Jan. 20 to Feb. 2.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----------|---------|-------|---------|------|-------|-------|-----------------|-----|-------------------|------|------|-------|
| 1 | 155 | 600 | | 846 | 325 | 878 | 426 | 354 | 187 | 101 | 50 | 45 |
| 2 | 2,950 | 541 | | 814 | 340 | 783 | 426 | 338 | 159 | 101 | 59 | 52 |
| 3 | 6,300 | 690 | | 783 | 398 | 690 | 398 | 327 | 131 | 101 | 59 | 50 |
| 4 | 2,660 | 1,230 | 330 | 721 | 690 | 600 | 398 | 312 | 116 | 105 | 55 | 59 |
| 5 | 1,230 | 878 | | 600 | 1,600 | 570 | 370 | 297 | 124 | 91 | 42 | 59 |
| 6 | 878 | 752 | | 541 | 1,230 | 570 | 370 | 302 | 112 | 82 | 50 | 43 |
| 7 | 721 | 660 | 398 | 541 | 846 | 570 | 1,170 | 292 | 124 | 101 | 45 | 62 |
| 8 | 600 | 600 | 454 | 541 | 752 | 3,960 | 814 | 276 | 101 | 112 | 50 | 45 |
| 9 | 512 | 541 | 483 | 570 | 512 | 2,460 | 660 | 276 | 139 | 79 | 55 | 52 |
| 10 | 426 | 512 | 398 | 512 | 600 | 1,600 | 570 | 266 | 196 | 75 | 42 | 47 |
| 11 | 398 | 483 | 365 | 483 | 541 | 1,300 | 541 | 248 | 230 | 85 | 38 | 57 |
| 12 | 370 | 483 | 348 | 426 | 454 | 1,230 | 512 | 244 | 151 | 88 | 50 | 47 |
| 13 | 338 | 454 | 348 | 483 | 570 | 1,040 | 483 | 266 | 116 | 64 | 55 | 50 |
| 14 | 316 | 454 | 398 | 512 | 630 | 909 | 483 | 276 | 143 | 59 | 55 | 59 |
| 15 | 287 | 2,330 | 600 | 630 | 541 | 783 | 454 | 338 | 95 | 79 | 50 | 42 |
| 16 | 287 | 454 | 541 | 600 | 426 | 721 | 454 | 398 | 101 | 79 | 50 | 79 |
| 17 | 257 | 426 | 483 | 512 | 483 | 690 | 483 | 276 | 163 | 69 | 69 | 64 |
| 18 | 248 | 2,970 | 512 | 454 | 426 | 660 | 483 | 257 | 348 | 72 | 59 | 69 |
| 19 | 239 | 2,460 | 783 | 359 | 426 | 752 | 454 | 239 | 359 | 75 | 57 | 62 |
| 20 | 230 | 1,520 | 721 | | 483 | 690 | 426 | 248 | 276 | 64 | 59 | 64 |
| 21 | 230 | 1,170 | 570 | | 483 | 600 | 370 | 244 | 159 | 69 | 64 | 64 |
| 22 | 3,200 | 941 | | | 426 | 570 | 483 | 244 | 124 | 72 | 64 | 45 |
| 23 | 6,500 | 846 | | | 426 | 512 | 483 | 217 | 131 | 59 | 62 | 57 |
| 24 | 2,460 | 752 | | | 426 | 512 | 426 | 213 | 147 | 64 | 62 | 55 |
| 25 | 1,520 | 721 | 350 | 300 | 570 | 512 | 426 | 239 | 139 | 57 | 47 | 55 |
| 26 | 1,170 | 660 | | | 941 | 630 | 398 | 230 | 131 | 69 | 55 | 59 |
| 27 | 973 | 630 | | | 1,230 | 600 | 370 | 230 | 116 | 52 | 64 | 59 |
| 28 | 814 | 600 | 483 | | 1,040 | 512 | 359 | 200 | 116 | 50 | 59 | 43 |
| 29 | 690 | 541 | 783 | | | 483 | 365 | 196 | 139 | 57 | 55 | 45 |
| 30 | 630 | 370 | 752 | | | 483 | 365 | 213 | 101 | 57 | 64 | 50 |
| 31 | 630 | | 752 | | | 454 | | 196 | | 59 | 59 | |
| Month | Maximum | | Minimum | | Mean | | Pe- square mile | | Run-off in inches | | | |
| October | 6,500 | 155 | 1,230 | 2.45 | 2.82 | | | | | | | |
| November | 2,970 | 370 | 576 | 1.75 | 1.95 | | | | | | | |
| December | 783 | | 460 | .916 | 1.06 | | | | | | | |
| January | 846 | | 469 | .934 | 1.08 | | | | | | | |
| February | 1,600 | 325 | 636 | 1.27 | 1.32 | | | | | | | |
| March | 3,960 | 454 | 881 | 1.75 | 2.02 | | | | | | | |
| April | 1,170 | 359 | 481 | .958 | 1.07 | | | | | | | |
| May | 398 | 196 | 266 | .530 | .61 | | | | | | | |
| June | 359 | 95 | 156 | .311 | .35 | | | | | | | |
| July | 112 | 50 | 75.7 | .151 | .17 | | | | | | | |
| August | 69 | 38 | 55.0 | .110 | .13 | | | | | | | |
| September | 79 | 42 | 54.6 | .109 | .12 | | | | | | | |
| The year | 6,500 | 38 | 470 | .936 | 12.70 | | | | | | | |

ANTIETAM CREEK NEAR SHARPSBURG, MD.

LOCATION.—Staff gage at Burnside Bridge, 1 mile southeast of Sharpsburg, Washington County, and $4\frac{1}{4}$ miles above Sharmans Branch. Zero of gage 311.00 feet above mean sea level.

DRAINAGE AREA.—280 square miles.

RECORDS AVAILABLE.—August, 1928, to September, 1930. June, 1897, to August, 1905, at Middle Bridge, 1 mile above present site.

EXTREMES.—Maximum discharge during year, about 2,420 second-feet Oct. 23 (gage height, 7.22 feet); minimum, 38 second-feet Sept. 29 (gage height, 1.04 feet).

1928-1930: Maximum discharge, about 3,490 second-feet May 3, 1929 (gage height, 8.80 feet); minimum, that of Sept. 29, 1930.

Maximum known stage, 11.9 feet in July, 1928.

REMARKS.—Records fair except those for July 20 to Sept. 30, which are probably about 25 per cent high owing to diurnal fluctuation caused by power-plant operation. Discharge estimated because of ice Nov. 29 to Dec. 4, Dec. 23-25, Jan. 18 to Feb. 3. About 5 second-feet of sewage from Hagerstown (water supply from Potomac) enters creek above gage.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|------|------|------|------|-------|------|-----|------|------|------|-------|
| 1 | 119 | 251 | 220 | 278 | 170 | 319 | 305 | 238 | 166 | 136 | 90 | 53 |
| 2 | 735 | 238 | | 278 | | 319 | 305 | 238 | 156 | 126 | 95 | 59 |
| 3 | 598 | 333 | | 278 | | 305 | 305 | 226 | 128 | 166 | 88 | 84 |
| 4 | 291 | 376 | | 264 | | 278 | 305 | 305 | 213 | 112 | 118 | 90 |
| 5 | 238 | 305 | 226 | 251 | 437 | 291 | 291 | 201 | 114 | 118 | 87 | 108 |
| 6 | 189 | 278 | 226 | 251 | 406 | 291 | 319 | 213 | 124 | 123 | 87 | 109 |
| 7 | 166 | 264 | 238 | 251 | 362 | 305 | 598 | 201 | 103 | 118 | 90 | 103 |
| 8 | 145 | 264 | 238 | 264 | 362 | 1,160 | 468 | 201 | 114 | 126 | 87 | 99 |
| 9 | 166 | 264 | 238 | 251 | 333 | 775 | 437 | 189 | 156 | 112 | 90 | 96 |
| 10 | 156 | 238 | 226 | 238 | 333 | 632 | 376 | 189 | 166 | 119 | 86 | 106 |
| 11 | 139 | 238 | 213 | 226 | 319 | 565 | 362 | 189 | 139 | 114 | 84 | 92 |
| 12 | 128 | 238 | 226 | 238 | 305 | 565 | 347 | 178 | 156 | 106 | 87 | 101 |
| 13 | 103 | 226 | 226 | 238 | 347 | 500 | 347 | 166 | 137 | 112 | 87 | 96 |
| 14 | 98 | 226 | 238 | 264 | 437 | 468 | 333 | 189 | 124 | 109 | 87 | 123 |
| 15 | 124 | 226 | 226 | 278 | 362 | 437 | 319 | 251 | 123 | 109 | 99 | 107 |
| 16 | 96 | 213 | 213 | 264 | 347 | 406 | 305 | 213 | 136 | 106 | 106 | 93 |
| 17 | 99 | 213 | 213 | 238 | 333 | 406 | 319 | 166 | 128 | 106 | 95 | 123 |
| 18 | 134 | 565 | 226 | 190 | 333 | 406 | 319 | 178 | 333 | 106 | 103 | 88 |
| 19 | 145 | 500 | 238 | | 333 | 406 | 305 | 189 | 291 | 103 | 99 | 98 |
| 20 | 145 | 437 | 226 | | 333 | 406 | 291 | 189 | 178 | 99 | 96 | 106 |
| 21 | 145 | 406 | 213 | | 347 | 406 | 278 | 178 | 145 | 96 | 90 | 101 |
| 22 | 855 | 362 | 201 | 170 | 319 | 376 | 291 | 178 | 141 | 96 | 93 | 90 |
| 23 | 1,590 | 319 | 190 | | 319 | 376 | 278 | 166 | 126 | 96 | 95 | 82 |
| 24 | 565 | 319 | | | 319 | 376 | 264 | 156 | 121 | 99 | 87 | 75 |
| 25 | 437 | 291 | | | 319 | 376 | 251 | 156 | 305 | 99 | 92 | 90 |
| 26 | 347 | 291 | 201 | 190 | 333 | 406 | 251 | 156 | 189 | 99 | 88 | 77 |
| 27 | 305 | 278 | 213 | | 362 | 376 | 238 | 166 | 166 | 106 | 96 | 63 |
| 28 | 278 | 264 | 238 | | 333 | 376 | 238 | 166 | 123 | 95 | 90 | 80 |
| 29 | 264 | 230 | 319 | | 347 | 238 | 178 | 145 | 95 | 85 | 88 | 50 |
| 30 | 251 | 225 | 291 | 170 | 319 | 238 | 166 | 156 | 96 | 86 | 86 | 84 |
| 31 | 264 | 278 | 278 | | 319 | 238 | 166 | 156 | 93 | 61 | 84 | 84 |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 1,590 | 96 | 300 | 1.07 | 1.23 |
| November | 565 | 213 | 296 | 1.06 | 1.13 |
| December | 319 | 227 | .811 | | .94 |
| January | 278 | 217 | .775 | | .89 |
| February | 437 | 326 | 1.16 | | 1.21 |
| March | 1,160 | 291 | 430 | 1.54 | 1.78 |
| April | 598 | 238 | 317 | 1.13 | 1.26 |
| May | 251 | 156 | 189 | .675 | .78 |
| June | 333 | 103 | 157 | .561 | .63 |
| July | 166 | 93 | 110 | .393 | .45 |
| August | 106 | 61 | 90.3 | .322 | .37 |
| September | 123 | 50 | 91.0 | .325 | .36 |
| The year | 1,590 | 50 | 229 | .818 | 11.08 |

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, 1930.

EXTREMES.—Maximum discharge during year, 7,010 second-feet Oct. 22 (gage height, 9.80 feet); minimum, 20 second-feet Sept. 24 (gage height, 1.16 feet).

1926-1930: Maximum discharge, 7,370 second-feet Nov. 16, 1926 (gage height, 10.17 feet); minimum, that of Sept. 24, 1930.

REMARKS.—Records good. Low-water flow regulated by operation of mills above station.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | 76 | 202 | 246 | 496 | 170 | 223 | 212 | 140 | 76 | 72 | 44 | 38 |
| 2..... | 354 | 186 | 268 | 460 | 155 | 223 | 191 | 130 | 76 | 68 | 47 | 32 |
| 3..... | 160 | 316 | 257 | 392 | 186 | 234 | 212 | 125 | 85 | 62 | 44 | 44 |
| 4..... | 110 | 532 | 292 | 379 | 366 | 202 | 191 | 115 | 76 | 56 | 36 | 35 |
| 5..... | 110 | 532 | 280 | 334 | 718 | 202 | 191 | 120 | 76 | 68 | 44 | 32 |
| 6..... | 110 | 460 | 246 | 334 | 680 | 186 | 196 | 120 | 76 | 62 | 50 | 35 |
| 7..... | 120 | 406 | 262 | 328 | 643 | 223 | 240 | 120 | 76 | 62 | 62 | 32 |
| 8..... | 110 | 341 | 223 | 292 | 532 | 873 | 257 | 110 | 68 | 68 | 35 | 35 |
| 9..... | 110 | 292 | 202 | 274 | 460 | 1,070 | 280 | 110 | 76 | 68 | 47 | 32 |
| 10..... | 102 | 257 | 196 | 257 | 440 | 912 | 322 | 110 | 150 | 56 | 32 | 24 |
| 11..... | 102 | 257 | 170 | 262 | 392 | 756 | 310 | 102 | 115 | 56 | 38 | 36 |
| 12..... | 102 | 234 | 191 | 229 | 347 | 718 | 304 | 110 | 102 | 56 | 56 | 32 |
| 13..... | 76 | 212 | 170 | 234 | 373 | 606 | 286 | 102 | 89 | 50 | 50 | 32 |
| 14..... | 106 | 202 | 170 | 240 | 328 | 532 | 292 | 106 | 76 | 50 | 56 | 36 |
| 15..... | 106 | 191 | 170 | 223 | 292 | 496 | 268 | 120 | 76 | 56 | 36 | 35 |
| 16..... | 102 | 176 | 181 | 223 | 268 | 446 | 234 | 110 | 85 | 68 | 56 | 44 |
| 17..... | 97 | 170 | 181 | 202 | 257 | 446 | 251 | 106 | 102 | 50 | 33 | 44 |
| 18..... | 93 | 3,370 | 181 | 202 | 257 | 392 | 223 | 93 | 110 | 44 | 41 | 35 |
| 19..... | 93 | 2,590 | 262 | 170 | 257 | 460 | 223 | 120 | 102 | 56 | 47 | 28 |
| 20..... | 68 | 1,310 | 392 | 181 | 251 | 406 | 246 | 102 | 85 | 50 | 50 | 28 |
| 21..... | 102 | 873 | 406 | 181 | 234 | 379 | 212 | 97 | 85 | 44 | 44 | 35 |
| 22..... | 4,050 | 643 | 392 | 181 | 229 | 366 | 202 | 102 | 85 | 53 | 44 | 28 |
| 23..... | 3,370 | 532 | 406 | 181 | 218 | 341 | 181 | 102 | 85 | 56 | 44 | 38 |
| 24..... | 1,150 | 460 | 354 | 176 | 234 | 334 | 181 | 93 | 85 | 50 | 35 | 22 |
| 25..... | 680 | 426 | 304 | 160 | 229 | 419 | 170 | 89 | 93 | 47 | 53 | 38 |
| 26..... | 460 | 360 | 304 | 160 | 223 | 328 | 160 | 93 | 93 | 50 | 44 | 38 |
| 27..... | 354 | 328 | 292 | 176 | 229 | 304 | 150 | 89 | 102 | 35 | 38 | 35 |
| 28..... | 298 | 322 | 354 | 170 | 223 | 268 | 150 | 93 | 81 | 47 | 32 | 30 |
| 29..... | 257 | 298 | 569 | 170 | ----- | 246 | 145 | 85 | 62 | 50 | 68 | 30 |
| 30..... | 234 | 268 | 606 | 160 | ----- | 234 | 150 | 85 | 93 | 62 | 68 | 44 |
| 31..... | 223 | ----- | 569 | 155 | ----- | 240 | ----- | 85 | ----- | 41 | 38 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 4,050 | 68 | 435 | 1.14 | 1.31 |
| November..... | 3,370 | 170 | 558 | 1.46 | 1.63 |
| December..... | 606 | 170 | 293 | .799 | .89 |
| January..... | 496 | 155 | 245 | .643 | .74 |
| February..... | 718 | 155 | 328 | .861 | .90 |
| March..... | 1,070 | 186 | 421 | 1.10 | 1.27 |
| April..... | 322 | 145 | 221 | .580 | .65 |
| May..... | 140 | 85 | 106 | .278 | .32 |
| June..... | 150 | 62 | 88.0 | .231 | .26 |
| July..... | 72 | 35 | 55.3 | .145 | .17 |
| August..... | 68 | 32 | 45.5 | .119 | .14 |
| September..... | 44 | 22 | 34.2 | .090 | .10 |
| The year..... | 4,050 | 22 | 235 | .617 | 8.38 |

SOUTH FORK OF SHENANDOAH RIVER NEAR LURAY, VA.

LOCATION.—Chain gage at highway bridge 4 miles southwest of Luray, Page County, 2 miles below Stony Run, and 10 miles above Hawksbill Creek.

DRAINAGE AREA.—1,380 square miles.

RECORDS AVAILABLE.—April, 1925, to September, 1930 (discontinued).

EXTREMES.—Maximum discharge during year, 15,800 second-feet Oct. 23 (gage height, 11.40 feet); minimum, 110 second-feet July 28 (gage height, 1.94 feet).

1925-1930: Maximum discharge, 20,300 second-feet Apr. 17, 1929 (gage height, 13.20 feet); minimum, 74 second-feet Sept. 28, 1925 (gage height, 1.78 feet).

REMARKS.—Records good for medium and high stages, fair for low. Low-water flow regulated by low dam three-fourths mile above.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|--------|-------|-------|-------|-------|-------|-------|-----|-------|------|------|-------|
| 1 | 360 | 865 | 955 | 1,800 | 600 | 865 | 780 | 500 | 222 | 374 | 239 | 230 |
| 2 | 1,690 | 910 | 702 | 1,680 | 760 | 910 | 665 | 820 | 388 | 278 | 278 | 256 |
| 3 | 5,850 | 955 | 1,040 | 1,580 | 820 | 955 | 740 | 865 | 360 | 360 | 360 | 222 |
| 4 | 1,480 | 1,000 | 665 | 1,180 | 1,380 | 665 | 665 | 415 | 470 | 230 | 442 | 310 |
| 5 | 1,090 | 1,180 | 1,000 | 955 | 4,740 | 820 | 702 | 595 | 360 | 273 | 256 | 230 |
| 6 | 702 | 1,180 | 1,000 | 1,140 | 3,490 | 740 | 702 | 820 | 296 | 310 | 282 | 415 |
| 7 | 820 | 1,140 | 865 | 1,090 | 2,390 | 702 | 702 | 865 | 301 | 470 | 264 | 282 |
| 8 | 665 | 1,040 | 955 | 1,090 | 2,260 | 4,570 | 1,140 | 388 | 358 | 310 | 256 | 335 |
| 9 | 630 | 955 | 910 | 1,000 | 1,500 | 4,200 | 1,000 | 415 | 415 | 301 | 335 | 388 |
| 10 | 665 | 780 | 865 | 910 | 1,690 | 3,200 | 1,000 | 780 | 530 | 230 | 165 | 256 |
| 11 | 665 | 740 | 820 | 955 | 1,580 | 2,700 | 955 | 226 | 1,090 | 360 | 278 | 310 |
| 12 | 388 | 740 | 820 | 820 | 1,380 | 2,140 | 910 | 470 | 665 | 230 | 260 | 335 |
| 13 | 530 | 740 | 865 | 910 | 1,280 | 1,800 | 520 | 415 | 665 | 243 | 310 | 230 |
| 14 | 530 | 740 | 740 | 865 | 1,230 | 1,580 | 955 | 388 | 470 | 256 | 230 | 214 |
| 15 | 470 | 702 | 740 | 955 | 1,070 | 1,480 | 780 | 415 | 456 | 260 | 230 | 256 |
| 16 | 500 | 740 | 740 | 955 | 910 | 1,380 | 665 | 442 | 442 | 310 | 251 | 256 |
| 17 | 415 | 665 | 910 | 820 | 1,040 | 1,280 | 820 | 500 | 442 | 287 | 141 | 269 |
| 18 | 442 | 1,480 | 955 | 820 | 1,090 | 1,280 | 702 | 230 | 360 | 282 | 256 | 239 |
| 19 | 415 | 7,630 | 910 | 1,090 | 1,000 | 780 | 955 | 562 | 595 | 256 | 247 | 247 |
| 20 | 442 | 3,640 | 665 | 820 | 955 | 780 | 630 | 388 | 415 | 152 | 207 | 247 |
| 21 | 470 | 2,390 | 2,140 | 665 | 955 | 1,090 | 780 | 442 | 500 | 310 | 256 | 207 |
| 22 | 4,740 | 1,800 | 1,000 | 740 | 910 | 1,000 | 301 | 702 | 430 | 310 | 235 | 335 |
| 23 | 12,600 | 1,580 | 1,090 | 702 | 865 | 630 | 665 | 665 | 360 | 388 | 222 | 264 |
| 24 | 4,090 | 1,430 | 1,040 | 865 | 820 | 1,000 | 530 | 296 | 388 | 326 | 214 | 269 |
| 25 | 2,260 | 1,280 | 998 | 780 | 955 | 1,040 | 500 | 268 | 360 | 264 | 278 | 230 |
| 26 | 1,690 | 1,180 | 955 | 700 | 820 | 1,000 | 595 | 239 | 388 | 278 | 222 | 199 |
| 27 | 1,280 | 1,110 | 910 | 610 | 740 | 1,000 | 335 | 388 | 310 | 250 | 251 | 158 |
| 28 | 1,180 | 1,040 | 1,180 | 595 | 910 | 910 | 530 | 360 | 388 | 222 | 301 | 135 |
| 29 | 1,000 | 1,000 | 2,650 | 630 | ----- | 820 | 264 | 630 | 235 | 360 | 226 | 203 |
| 30 | 910 | 955 | 2,260 | 740 | ----- | 820 | 500 | 335 | 470 | 470 | 239 | 171 |
| 31 | 910 | ----- | 2,020 | 660 | ----- | 740 | ----- | 630 | ----- | 214 | 282 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 12,600 | 360 | 1,610 | 1.17 | 1.35 |
| November | 7,630 | 665 | 1,390 | 1.01 | 1.13 |
| December | 2,650 | 665 | 1,080 | .783 | .90 |
| January | 1,800 | 595 | 940 | .681 | .79 |
| February | 4,740 | 600 | 1,370 | .993 | 1.03 |
| March | 4,570 | 630 | 1,380 | 1.00 | 1.15 |
| April | 1,140 | 264 | 710 | .514 | .57 |
| May | 865 | 226 | 499 | .362 | .42 |
| June | 1,090 | 222 | 438 | .317 | .35 |
| July | 470 | 152 | 296 | .214 | .25 |
| August | 442 | 141 | 258 | .187 | .22 |
| September | 415 | 135 | 257 | .186 | .21 |
| The year | 12,600 | 135 | 849 | .615 | 8.37 |

• Estimated.

SHENANDOAH RIVER AT MILLVILLE, W. VA.

LOCATION.—Water-stage recorder half a mile below Cattail Run, three-fourths mile above Millville, Jefferson County, and 5 miles above mouth. Zero of gage 293.00 feet above mean sea level.

DRAINAGE AREA.—3,040 square miles.

RECORDS AVAILABLE.—August, 1928, to September, 1930. April, 1895, to March, 1909, three-fourths mile below present site.

EXTREMES.—Maximum discharge during year, 22,000 second-feet Oct. 24 (gage height, 10.25 feet); minimum, about 62 second-feet July 24 (gage height, 0.40 foot).

1928-1930: Maximum discharge, 39,900 second-feet Apr. 17, 1929 (gage height, 13.70 feet); minimum, that of July 24, 1930.

REMARKS.—Records good. Discharge estimated because of ice Dec. 1-5, 21-28, Jan. 18 to Feb. 1.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|--------|--------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| 1..... | 751 | 2,140 | 1,900 | 4,380 | 1,300 | 1,540 | 1,420 | 1,410 | 681 | 801 | 290 | 439 |
| 2..... | 3,420 | 2,040 | | 3,800 | 1,620 | 1,810 | 1,660 | 1,220 | 600 | 651 | 489 | 405 |
| 3..... | 8,509 | 2,860 | | 3,440 | 1,760 | 1,770 | 1,570 | 1,220 | 702 | 591 | 470 | 386 |
| 4..... | 9,260 | 6,950 | | 3,090 | 1,880 | 1,430 | 1,530 | 1,110 | 566 | 682 | 482 | 295 |
| 5..... | 4,430 | 5,320 | | 2,830 | 4,250 | 1,540 | 1,480 | 1,160 | 328 | 673 | 432 | 284 |
| 6..... | 2,820 | 4,010 | 2,090 | 2,610 | 7,710 | 1,640 | 1,570 | 1,080 | 746 | 525 | 434 | 306 |
| 7..... | 2,080 | 3,430 | 2,060 | 2,440 | 6,290 | 1,570 | 2,700 | 1,130 | 748 | 509 | 333 | 457 |
| 8..... | 1,740 | 2,970 | 1,940 | 2,430 | 4,920 | 4,130 | 2,930 | 1,340 | 572 | 519 | 301 | 612 |
| 9..... | 1,590 | 2,640 | 1,810 | 2,140 | 4,120 | 7,850 | 2,840 | 1,190 | 721 | 470 | 475 | 865 |
| 10..... | 1,400 | 2,380 | 1,620 | 2,150 | 3,570 | 8,220 | 2,530 | 1,130 | 689 | 517 | 429 | 458 |
| 11..... | 1,510 | 2,200 | 1,700 | 2,060 | 3,210 | 6,290 | 2,280 | 1,040 | 653 | 535 | 388 | 373 |
| 12..... | 1,109 | 2,030 | 1,640 | 1,930 | 2,930 | 5,050 | 2,100 | 975 | 787 | 558 | 401 | 524 |
| 13..... | 991 | 1,960 | 1,610 | 1,990 | 2,740 | 4,310 | 2,070 | 1,080 | 1,470 | 508 | 305 | 673 |
| 14..... | 1,180 | 1,850 | 1,640 | 1,640 | 2,760 | 3,790 | 1,980 | 938 | 1,020 | 458 | 313 | 525 |
| 15..... | 1,030 | 1,790 | 1,620 | 1,950 | 2,540 | 3,310 | 1,760 | 923 | 970 | 471 | 278 | 431 |
| 16..... | 860 | 1,730 | 1,730 | 1,900 | 2,520 | 3,020 | 2,010 | 1,030 | 968 | 447 | 465 | 406 |
| 17..... | 1,100 | 1,670 | 1,470 | 1,700 | 2,290 | 2,750 | 1,920 | 1,160 | 942 | 386 | 486 | 372 |
| 18..... | 931 | 2,530 | 1,600 | 2,200 | 2,660 | 1,760 | 939 | 792 | 400 | 424 | 333 | |
| 19..... | 953 | 9,860 | 1,480 | 2,200 | 2,610 | 1,720 | 971 | 1,110 | 420 | 398 | 268 | |
| 20..... | 920 | 11,800 | 1,580 | 2,130 | 2,380 | 1,710 | 1,150 | 886 | 380 | 379 | 369 | |
| 21..... | 770 | 7,240 | 1,500 | 1,200 | 2,060 | 2,350 | 1,680 | 897 | 1,090 | 461 | 311 | 360 |
| 22..... | 7,800 | 5,000 | | | 2,010 | 2,290 | 1,460 | 943 | 933 | 781 | 266 | 396 |
| 23..... | 18,000 | 3,980 | | | 1,990 | 2,150 | 1,660 | 957 | 800 | 375 | 394 | 441 |
| 24..... | 17,800 | 3,420 | | | 1,910 | 2,060 | 1,580 | 1,010 | 881 | 194 | 375 | 400 |
| 25..... | 8,780 | 3,080 | | | 1,630 | 1,850 | 1,500 | 867 | 581 | 226 | 341 | 343 |
| 26..... | 5,320 | 2,850 | 2,890 | 4,520 | 1,980 | 2,060 | 1,380 | 1,020 | 738 | 495 | 381 | 346 |
| 27..... | 3,840 | 2,650 | | | 1,950 | 1,940 | 1,360 | 747 | 691 | 422 | 414 | 377 |
| 28..... | 3,120 | 2,460 | | | 1,690 | 1,990 | 1,210 | 628 | 724 | 381 | 270 | 349 |
| 29..... | 2,630 | 2,340 | | | ----- | 1,870 | 1,230 | 918 | 605 | 360 | 501 | 380 |
| 30..... | 2,380 | 2,150 | | | ----- | 1,810 | 1,290 | 987 | 614 | 341 | 408 | 344 |
| 31..... | 2,240 | ----- | 5,120 | ----- | ----- | 1,680 | ----- | 812 | ----- | 359 | 388 | ----- |

| Month | Maximum | Minimum | Mean | Pe ^r square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------------------|-------------------|
| October..... | 18,000 | 751 | 3,850 | 1.27 | 1.46 |
| November..... | 11,800 | 1,670 | 3,580 | 1.13 | 1.32 |
| December..... | 5,120 | ----- | 1,920 | .632 | .73 |
| January..... | 4,380 | ----- | 1,910 | .628 | .72 |
| February..... | 7,710 | 1,300 | 2,790 | .918 | .96 |
| March..... | 8,220 | 1,430 | 2,890 | .951 | 1.10 |
| April..... | 2,930 | 1,210 | 1,800 | .592 | .66 |
| May..... | 1,410 | 628 | 1,030 | .359 | .39 |
| June..... | 1,470 | 328 | 787 | .258 | .29 |
| July..... | 801 | 194 | 481 | .158 | .18 |
| August..... | 501 | 266 | 388 | .128 | .15 |
| September..... | 865 | 268 | 417 | .137 | .15 |
| The year..... | 18,000 | 194 | 1,810 | .595 | 8.11 |

MIDDLE RIVER NEAR GROTTOS, VA.

LOCATION.—Chain gage at highway bridge at Mount Meridian, Augusta County, 1½ miles above confluence with North River and 3 miles west of Grottoes, Rockingham County.

DRAINAGE AREA.—360 square miles.

RECORDS AVAILABLE.—February, 1925, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,630 second-feet Oct. 2 (gage height, 9.28 feet); minimum, 22 second-feet Sept. 21 (gage height, 1.90 feet).
1925-1930: Maximum discharge, 4,080 second-feet Aug. 17, 1928 (gage height, 12.20 feet); minimum, that of Sept. 21, 1930.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | 143 | 152 | 112 | 432 | 200 | 180 | 143 | 120 | 65 | 85 | 66 | 45 |
| 2..... | 1,520 | 143 | 200 | 358 | 210 | 170 | 143 | 120 | 87 | 70 | 85 | 44 |
| 3..... | 680 | 135 | 330 | 330 | 254 | 170 | 152 | 112 | 87 | 71 | 74 | 45 |
| 4..... | 266 | 152 | 278 | 303 | 840 | 161 | 152 | 120 | 83 | 72 | 38 | 67 |
| 5..... | 200 | 210 | 242 | 242 | 1,620 | 161 | 152 | 112 | 66 | 83 | 44 | 77 |
| 6..... | 170 | 190 | 200 | 231 | 920 | 161 | 143 | 105 | 84 | 57 | 60 | 170 |
| 7..... | 152 | 180 | 190 | 220 | 680 | 278 | 220 | 105 | 105 | 57 | 57 | 190 |
| 8..... | 135 | 161 | 200 | 220 | 566 | 1,300 | 170 | 105 | 105 | 62 | 51 | 77 |
| 9..... | 135 | 152 | 190 | 210 | 432 | 680 | 170 | 105 | 120 | 66 | 56 | 73 |
| 10..... | 127 | 135 | 180 | 200 | 402 | 496 | 161 | 98 | 266 | 56 | 54 | 58 |
| 11..... | 120 | 143 | 170 | 180 | 358 | 372 | 161 | 98 | 152 | 70 | 36 | 52 |
| 12..... | 120 | 143 | 180 | 180 | 330 | 330 | 152 | 98 | 120 | 54 | 62 | 71 |
| 13..... | 120 | 135 | 190 | 180 | 316 | 290 | 152 | 105 | 105 | 52 | 38 | 68 |
| 14..... | 120 | 135 | 170 | 190 | 303 | 254 | 143 | 105 | 84 | 60 | 54 | 74 |
| 15..... | 112 | 127 | 170 | 190 | 278 | 231 | 143 | 120 | 80 | 85 | 71 | 38 |
| 16..... | 112 | 120 | 170 | 180 | 254 | 220 | 143 | 112 | 84 | 37 | 60 | 71 |
| 17..... | 112 | 112 | 170 | 161 | 242 | 220 | 143 | 105 | 105 | 42 | 82 | 59 |
| 18..... | 97 | 1,040 | 170 | 170 | 231 | 210 | 143 | 105 | 135 | 80 | 39 | 70 |
| 19..... | 105 | 1,000 | 210 | 127 | 231 | 210 | 135 | 143 | 112 | 43 | 48 | 68 |
| 20..... | 105 | 602 | 344 | 135 | 220 | 200 | 135 | 127 | 98 | 41 | 78 | 57 |
| 21..... | 105 | 387 | 266 | 170 | 210 | 190 | 127 | 112 | 92 | 41 | 67 | 37 |
| 22..... | 220 | 303 | 254 | 180 | 200 | 180 | 135 | 112 | 91 | 74 | 64 | 37 |
| 23..... | 760 | 278 | 242 | 220 | 190 | 170 | 127 | 105 | 78 | 56 | 74 | 61 |
| 24..... | 344 | 254 | 266 | 190 | 200 | 170 | 120 | 94 | 82 | 60 | 78 | 62 |
| 25..... | 231 | 242 | 254 | 170 | 200 | 170 | 120 | 92 | 80 | 44 | 65 | 44 |
| 26..... | 190 | 210 | 231 | 152 | 190 | 170 | 120 | 76 | 80 | 40 | 71 | 38 |
| 27..... | 161 | 210 | 210 | 152 | 190 | 170 | 120 | 90 | 242 | 46 | 34 | 37 |
| 28..... | 152 | 200 | 464 | 180 | 180 | 161 | 120 | 84 | 98 | 40 | 78 | 49 |
| 29..... | 152 | 190 | 880 | 180 | ----- | 152 | 120 | 80 | 74 | 84 | 48 | 36 |
| 30..... | 152 | 161 | 566 | 152 | ----- | 143 | 112 | 92 | 66 | 56 | 59 | 64 |
| 31..... | 161 | ----- | 496 | 127 | ----- | 152 | ----- | 61 | ----- | 74 | 64 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 1,520 | 97 | 235 | 0.653 | 0.75 |
| November..... | 1,040 | 112 | 253 | .773 | .78 |
| December..... | 880 | 112 | 264 | .733 | .85 |
| January..... | 432 | 127 | 204 | .577 | .65 |
| February..... | 1,620 | 180 | 373 | 1.04 | 1.08 |
| March..... | 1,300 | 143 | 262 | .728 | .84 |
| April..... | 220 | 112 | 143 | .377 | .44 |
| May..... | 143 | 61 | 104 | .279 | .33 |
| June..... | 266 | 65 | 104 | .279 | .32 |
| July..... | 85 | 37 | 59.9 | .176 | .19 |
| August..... | 85 | 34 | 59.8 | .176 | .19 |
| September..... | 190 | 36 | 64.6 | .179 | .20 |
| The year..... | 1,620 | 34 | 176 | .479 | 6.62 |

SOUTH RIVER AT WAYNESBORO, VA.

LOCATION.—Water-stage recorder in Waynesboro, Augusta County.

DRAINAGE AREA.—144 square miles.

RECORDS AVAILABLE.—July, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,770 second-feet Oct. 22 (gage height, 7.90 feet); minimum, 9 second-feet May 17 (gage height, 0.87 foot).

1928-1930: Maximum discharge, 4,660 second-feet Sept. 19, 1928 (gage height, 11.02 feet); minimum, that of May 17, 1930.

REMARKS.—Records good. Du Pont Rayon Co. diverts about 3 second-feet, which is not included in this record.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|------|------|------|------|-------|------|-----|------|------|------|-------|
| 1 | 59 | 125 | 89 | 185 | 128 | 90 | 80 | 63 | 39 | 63 | 24 | 28 |
| 2 | 1,040 | 118 | 99 | 175 | 128 | 89 | 75 | 58 | 37 | 46 | 24 | 28 |
| 3 | 566 | 114 | 128 | 170 | 140 | 85 | 75 | 57 | 36 | 26 | 23 | 30 |
| 4 | 258 | 116 | 115 | 160 | 227 | 85 | 75 | 53 | 35 | 25 | 25 | 31 |
| 5 | 168 | 103 | 104 | 150 | 430 | 84 | 80 | 52 | 34 | 27 | 27 | 29 |
| 6 | 133 | 101 | 101 | 135 | 387 | 83 | 102 | 51 | 34 | 27 | 28 | 36 |
| 7 | 116 | 98 | 105 | 120 | 318 | 555 | 171 | 50 | 40 | 28 | 29 | 33 |
| 8 | 103 | 96 | 107 | 115 | 138 | 1,240 | 145 | 49 | 38 | 28 | 29 | 27 |
| 9 | 93 | 92 | 100 | 110 | 204 | 589 | 118 | 47 | 43 | 27 | 27 | 29 |
| 10 | 87 | 90 | 94 | 105 | 185 | 350 | 116 | 47 | 56 | 27 | 26 | 29 |
| 11 | 83 | 90 | 90 | 105 | 170 | 316 | 103 | 45 | 46 | 26 | 26 | 31 |
| 12 | 79 | 89 | 91 | 120 | 156 | 274 | 98 | 44 | 40 | 27 | 26 | 31 |
| 13 | 77 | 89 | 94 | 110 | 152 | 225 | 93 | 43 | 40 | 26 | 26 | 30 |
| 14 | 76 | 92 | 91 | 115 | 152 | 197 | 90 | 56 | 38 | 26 | 26 | 30 |
| 15 | 74 | 88 | 88 | 124 | 144 | 174 | 86 | 42 | 36 | 27 | 26 | 30 |
| 16 | 71 | 85 | 87 | 117 | 133 | 161 | 83 | 40 | 34 | 25 | 26 | 30 |
| 17 | 69 | 84 | 84 | 114 | 127 | 148 | 81 | 28 | 79 | 26 | 28 | 30 |
| 18 | 66 | 224 | 86 | 110 | 123 | 143 | 81 | 45 | 93 | 23 | 27 | 31 |
| 19 | 66 | 261 | 101 | 106 | 121 | 138 | 78 | 50 | 54 | 24 | 25 | 31 |
| 20 | 65 | 210 | 110 | 104 | 115 | 127 | 75 | 43 | 46 | 24 | 24 | 32 |
| 21 | 67 | 190 | 97 | 105 | 111 | 120 | 72 | 40 | 41 | 24 | 25 | 32 |
| 22 | 1,450 | 170 | 102 | 108 | 108 | 114 | 75 | 39 | 30 | 25 | 25 | 32 |
| 23 | 714 | 160 | 106 | 103 | 105 | 108 | 70 | 42 | 35 | 26 | 26 | 33 |
| 24 | 391 | 150 | 104 | 98 | 106 | 106 | 67 | 42 | 33 | 27 | 26 | 31 |
| 25 | 275 | 145 | 99 | 103 | 102 | 106 | 65 | 42 | 31 | 25 | 27 | 32 |
| 26 | 215 | 140 | 96 | 96 | 99 | 108 | 62 | 43 | 36 | 26 | 26 | 31 |
| 27 | 180 | 130 | 97 | 101 | 95 | 97 | 61 | 42 | 37 | 26 | 26 | 30 |
| 28 | 155 | 123 | 147 | 102 | 93 | 100 | 59 | 41 | 31 | 26 | 29 | 31 |
| 29 | 144 | 107 | 236 | 102 | | 95 | 58 | 41 | 28 | 26 | 36 | 31 |
| 30 | 137 | 94 | 220 | 93 | | 90 | 63 | 42 | 52 | 25 | 29 | 31 |
| 31 | 132 | | 200 | 90 | | 85 | | 43 | | 24 | 26 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 1,450 | 59 | 233 | 1.62 | 1.87 |
| November | 261 | 84 | 126 | .875 | .98 |
| December | 236 | 84 | 112 | .778 | .90 |
| January | 185 | 90 | 118 | .819 | .94 |
| February | 430 | 93 | 164 | 1.14 | 1.19 |
| March | 1,240 | 83 | 204 | 1.42 | 1.64 |
| April | 171 | 58 | 85.2 | .592 | .66 |
| May | 63 | 28 | 45.8 | .318 | .37 |
| June | 93 | 28 | 42.0 | .292 | .33 |
| July | 63 | 24 | 27.8 | .193 | .22 |
| August | 36 | 23 | 26.5 | .184 | .21 |
| September | 36 | 27 | 30.7 | .213 | .24 |
| The year | 1,450 | 23 | 101 | .701 | 9.55 |

* Estimated.

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, 1930.

EXTREMES.—Maximum discharge during year, 4,240 second-feet Oct. 22 (gage height, 9.71 feet); minimum, 23 second-feet Aug. 12 (gage height, 2.74 feet).

1925-1930: Maximum discharge, 5,990 second-feet Sept. 20, 1928 (gage height, 11.90 feet); minimum, that of Aug. 12, 1930.

REMARKS.—Records good. Low-water flow slightly regulated by operation of mill above station.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------------|-------|-------|------|---------|---------|-------|-------|-----------------|-------|-------------------|------|-------|
| 1..... | 98 | 195 | 163 | 316 | 163 | 144 | 128 | 124 | 47 | 59 | 43 | 46 |
| 2..... | 2,000 | 195 | 179 | 316 | 158 | 149 | 144 | 106 | 55 | 55 | 43 | 43 |
| 3..... | 910 | 185 | 195 | 295 | 195 | 141 | 138 | 114 | 55 | 55 | 45 | 52 |
| 4..... | 406 | 160 | 179 | 258 | 274 | 133 | 149 | 98 | 56 | 50 | 38 | 38 |
| 5..... | 262 | 188 | 172 | 234 | 674 | 124 | 133 | 108 | 66 | 47 | 37 | 32 |
| 6..... | 223 | 163 | 169 | 227 | 588 | 124 | 166 | 92 | 50 | 54 | 37 | 51 |
| 7..... | 163 | 166 | 163 | 212 | 454 | 216 | 266 | 94 | 56 | 57 | 45 | 47 |
| 8..... | 163 | 155 | 155 | 205 | 406 | 2,140 | 250 | 94 | 65 | 43 | 38 | 45 |
| 9..... | 136 | 160 | 155 | 192 | 338 | 1,290 | 202 | 100 | 50 | 50 | 38 | 47 |
| 10..... | 126 | 116 | 146 | 179 | 316 | 703 | 179 | 94 | 114 | 43 | 40 | 47 |
| 11..... | 116 | 138 | 128 | 169 | 274 | 560 | 172 | 106 | 94 | 52 | 36 | 45 |
| 12..... | 116 | 136 | 155 | 179 | 266 | 454 | 166 | 90 | 63 | 50 | 36 | 39 |
| 13..... | 133 | 138 | 144 | 166 | 234 | 383 | 152 | 87 | 60 | 45 | 44 | 38 |
| 14..... | 94 | 144 | 138 | 169 | 242 | 338 | 155 | 85 | 50 | 52 | 47 | 29 |
| 15..... | 94 | 144 | 110 | 172 | 227 | 295 | 158 | 96 | 52 | 52 | 40 | 45 |
| 16..... | 78 | 133 | 133 | 166 | 216 | 274 | 152 | 80 | 57 | 43 | 51 | 38 |
| 17..... | 96 | 128 | 128 | 146 | 205 | 266 | 144 | 73 | 108 | 47 | 32 | 43 |
| 18..... | 78 | 560 | 138 | 144 | 192 | 242 | 149 | 59 | 149 | 43 | 40 | 36 |
| 19..... | 83 | 506 | 160 | 128 | 188 | 230 | 152 | 106 | 90 | 50 | 40 | 40 |
| 20..... | 112 | 383 | 160 | 136 | 185 | 227 | 126 | 98 | 76 | 48 | 42 | 38 |
| 21..... | 92 | 295 | 149 | 155 | 179 | 205 | 144 | 76 | 66 | 45 | 46 | 32 |
| 22..... | 3,640 | 266 | 138 | 166 | 160 | 185 | 128 | 68 | 66 | 47 | 52 | 47 |
| 23..... | 1,430 | 242 | 149 | 172 | 160 | 182 | 144 | 66 | 62 | 45 | 50 | 43 |
| 24..... | 732 | 220 | 160 | 179 | 155 | 192 | 126 | 63 | 66 | 45 | 25 | 40 |
| 25..... | 480 | 212 | 155 | 160 | 166 | 182 | 141 | 65 | 52 | 50 | 47 | 40 |
| 26..... | 360 | 198 | 128 | 124 | 166 | 176 | 110 | 63 | 63 | 37 | 66 | 30 |
| 27..... | 295 | 198 | 149 | 146 | 163 | 160 | 114 | 57 | 87 | 35 | 42 | 36 |
| 28..... | 266 | 192 | 198 | 155 | 149 | 172 | 114 | 54 | 52 | 40 | 47 | 35 |
| 29..... | 227 | 172 | 406 | 149 | ----- | 163 | 106 | 55 | 57 | 48 | 48 | 43 |
| 30..... | 216 | 149 | 383 | 128 | ----- | 166 | 96 | 55 | 50 | 36 | 44 | 45 |
| 31..... | 205 | ----- | 360 | 136 | ----- | 138 | ----- | 52 | ----- | 44 | 27 | ----- |
| Month | | | | Maximum | Minimum | | Mean | Per square mile | | Run-off in inches | | |
| October..... | | | | 3,640 | 78 | | 433 | 1.95 | | 2.25 | | |
| November..... | | | | 560 | 116 | | 208 | .937 | | 1.05 | | |
| December..... | | | | 406 | 110 | | 176 | .793 | | .91 | | |
| January..... | | | | 316 | 124 | | 183 | .824 | | .96 | | |
| February..... | | | | 674 | 149 | | 253 | 1.14 | | 1.19 | | |
| March..... | | | | 2,140 | 124 | | 334 | 1.50 | | 1.73 | | |
| April..... | | | | 266 | 96 | | 150 | .676 | | .75 | | |
| May..... | | | | 124 | 52 | | 83.2 | .375 | | .43 | | |
| June..... | | | | 149 | 47 | | 67.8 | .305 | | .34 | | |
| July..... | | | | 59 | 35 | | 47.3 | .213 | | .25 | | |
| August..... | | | | 66 | 25 | | 42.1 | .190 | | .22 | | |
| September..... | | | | 52 | 29 | | 41.0 | .185 | | .21 | | |
| The year..... | | | | 3,640 | 25 | | 168 | .757 | | 10.28 | | |

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 mouth of Linville Creek.

DRAINAGE AREA.—215 square miles.

RECORDS AVAILABLE.—February, 1925, to September, 1930.

EXTREMES.—Maximum discharge during year, 5,840 second-feet Oct. 22 (gage height, 11.40 feet); minimum, 0.3 second-foot Oct. 1, Aug. 27 to Sept. 3 (gage height, 1.94 feet).

1925-1930: Maximum discharge, 9,280 second-feet Apr. 16, 1929 (gage height, 14.98 feet); minimum, that of Oct. 1, 1929, Aug. 27 to Sept. 3, 1930.

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | 0.3 | 122 | a 140 | 322 | 28 | 85 | 58 | 40 | 15 | 13 | 0.9 | 0.3 |
| 2..... | 2,230 | 108 | a 160 | 304 | 28 | 83 | 57 | 39 | 14 | 12 | .8 | .3 |
| 3..... | 1,140 | 1,020 | a 140 | 252 | 26 | 83 | 56 | 37 | 12 | 10 | .7 | .3 |
| 4..... | 322 | 900 | a 160 | 220 | 322 | 79 | 56 | 39 | 10 | 9.0 | .7 | .6 |
| 5..... | 190 | 700 | a 180 | 190 | 800 | 77 | 54 | 39 | 9 | 8.0 | .6 | .7 |
| 6..... | 136 | 520 | a 140 | 168 | 655 | 72 | 54 | 39 | 9 | 7.5 | .6 | .7 |
| 7..... | 88 | 380 | a 160 | 146 | 460 | 71 | 165 | 39 | 8 | 7.0 | .5 | .8 |
| 8..... | 69 | 252 | a 120 | 126 | 304 | 1,270 | 146 | 39 | 8 | 6.4 | .5 | .9 |
| 9..... | 58 | 146 | a 110 | 97 | 236 | 1,140 | 122 | 39 | 7 | 6.0 | .5 | .9 |
| 10..... | 53 | 122 | a 110 | 86 | 220 | 960 | 103 | 38 | 146 | 5.4 | .5 | .9 |
| 11..... | 44 | 112 | a 95 | 83 | 190 | 700 | 94 | 38 | 205 | 4.1 | .5 | .9 |
| 12..... | 33 | 108 | a 100 | 81 | 173 | 480 | 83 | 37 | 126 | 3.4 | .5 | .8 |
| 13..... | 29 | 99 | a 95 | 79 | 159 | 286 | 83 | 37 | 92 | 2.5 | .5 | .7 |
| 14..... | 28 | 88 | a 95 | 76 | 139 | 220 | 79 | 35 | 79 | 1.7 | .5 | .7 |
| 15..... | 24 | 81 | 99 | 72 | 122 | 205 | 72 | 35 | 76 | 1.7 | .5 | .7 |
| 16..... | 21 | 76 | 90 | 66 | 112 | 190 | 69 | 35 | 72 | 1.7 | .5 | .7 |
| 17..... | 19 | 72 | 88 | 59 | 108 | 184 | 65 | 35 | 72 | 1.7 | .5 | .7 |
| 18..... | 17 | 3,510 | 86 | 58 | 101 | 168 | 64 | 35 | 66 | 1.5 | .5 | .7 |
| 19..... | 14 | 1,020 | 122 | 56 | 94 | 152 | 62 | 35 | 61 | 1.5 | .5 | .7 |
| 20..... | 13 | a 700 | 179 | 53 | 90 | 136 | 61 | 32 | 58 | 1.5 | .5 | .6 |
| 21..... | 12 | a 500 | 220 | 51 | 90 | 117 | 58 | 28 | 51 | 1.5 | .5 | .6 |
| 22..... | 2,230 | a 360 | 220 | 46 | 90 | 97 | 58 | 24 | 46 | 1.5 | .4 | .6 |
| 23..... | 2,790 | a 300 | 252 | 45 | 90 | 81 | 56 | 21 | 39 | 1.5 | .4 | .6 |
| 24..... | 655 | a 270 | 269 | 44 | 90 | 72 | 54 | 17 | 33 | 1.5 | .4 | .6 |
| 25..... | 360 | a 240 | 322 | 40 | 88 | 71 | 53 | 15 | 26 | 1.5 | .4 | .6 |
| 26..... | 252 | a 200 | 420 | 39 | 86 | 69 | 51 | 14 | 20 | 1.3 | .4 | .6 |
| 27..... | 236 | a 190 | 565 | 37 | 86 | 66 | 48 | 14 | 17 | 1.3 | .3 | .6 |
| 28..... | 220 | a 190 | 655 | 34 | 85 | 66 | 46 | 13 | 16 | 1.3 | .3 | .6 |
| 29..... | 184 | a 160 | 800 | 31 | ----- | 65 | 44 | 13 | 16 | 1.2 | .3 | .6 |
| 30..... | 159 | a 160 | 610 | 30 | ----- | 65 | 43 | 13 | 14 | 1.1 | .3 | .6 |
| 31..... | 136 | ----- | 542 | 30 | ----- | 64 | ----- | 12 | ----- | 1.1 | .3 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|--------------------|----------------------|
| October..... | 2,790 | 0.3 | 379 | 1.76 | 2.03 |
| November..... | 3,510 | 72 | 424 | 1.97 | 2.20 |
| December..... | 800 | 86 | 237 | 1.10 | 1.27 |
| January..... | 322 | 30 | 87.5 | .453 | .52 |
| February..... | 800 | 26 | 181 | .842 | .88 |
| March..... | 1,270 | 64 | 241 | 1.12 | 1.29 |
| April..... | 165 | 43 | 70.5 | .328 | .37 |
| May..... | 40 | 12 | 20.9 | .139 | .16 |
| June..... | 205 | 7.0 | 47.4 | .220 | .25 |
| July..... | 13 | 1.1 | 3.88 | .018 | .02 |
| August..... | .9 | .3 | .49 | .002 | .002 |
| September..... | .9 | .3 | .65 | .003 | .003 |
| The year..... | 3,510 | .3 | 142 | .660 | 9.00 |

• Estimated.

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 of Shenandoah River.

DRAINAGE AREA.—772 square miles.

RECORDS AVAILABLE.—March, 1925, to September, 1930.

EXTREMES.—Maximum discharge during year, 6,730 second-feet Nov. 19 (gage height, 9.51 feet); minimum, 33 second-feet Sept. 26 (gage height, 1.70 feet).

1925-1930: Maximum discharge, 13,900 second-feet Apr. 17, 1929 (gage height, 15.86 feet); minimum, that of Sept. 26, 1930.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------------------|-------|------------------|------------------|-------|-------|--------|------------------|------|------------------|------|-----------------|
| 1----- | ^a 400 | 300 | 449 | 1,010 | 294 | 319 | 319 | 197 | 100 | 84 | 49 | 84 |
| 2----- | 731 | 319 | 428 | 850 | 313 | 319 | 319 | 220 | 106 | 186 | 54 | ^a 88 |
| 3----- | 4,100 | 542 | 428 | 770 | 346 | 313 | 281 | 208 | 84 | 103 | 56 | 92 |
| 4----- | 1,410 | 2,510 | 400 | 731 | 470 | 294 | 313 | 197 | 100 | 106 | 56 | 71 |
| 5----- | 770 | 1,490 | 380 | 654 | 1,570 | 294 | 294 | 175 | 89 | 111 | 54 | 60 |
| 6----- | | 1,090 | 359 | 579 | 1,650 | 306 | 300 | 153 | 92 | 149 | 49 | 80 |
| 7----- | | 386 | 770 | 380 | 506 | 1,330 | 332 | 380 | 128 | 92 | 100 | 111 |
| 8----- | | 326 | 692 | 352 | 506 | 930 | 2,420 | 470 | 208 | 98 | 115 | 63 |
| 9----- | | 339 | 542 | 346 | 463 | 890 | 2,330 | 463 | 197 | 98 | 111 | 67 |
| 10----- | | 274 | ^a 492 | 332 | 456 | 654 | 1,810 | 428 | 186 | 132 | 89 | 45 |
| 11----- | | 256 | 442 | 339 | 414 | 616 | -1,490 | 400 | 232 | ^a 373 | 95 | 56 |
| 12----- | | 214 | 373 | 332 | 407 | 616 | 970 | 393 | 158 | 449 | 89 | 63 |
| 13----- | | 192 | 373 | 326 | 400 | 579 | 890 | 373 | 164 | 332 | 95 | 58 |
| 14----- | | 180 | 373 | 326 | 393 | 579 | 692 | 346 | 175 | 294 | 92 | 65 |
| 15----- | | 214 | 332 | 332 | 386 | 542 | 579 | 352 | 175 | 153 | 89 | 67 |
| 16----- | | 197 | 346 | 326 | 373 | 542 | 579 | 359 | 208 | 136 | 84 | 56 |
| 17----- | | 186 | ^a 350 | 339 | 352 | 470 | 506 | 346 | 149 | 153 | 76 | 58 |
| 18----- | | 153 | 2,600 | 346 | 359 | 463 | 506 | 313 | 164 | 175 | 80 | 80 |
| 19----- | | 149 | 6,730 | 346 | 380 | 456 | 470 | 326 | 175 | 164 | 92 | 111 |
| 20----- | | 170 | 2,600 | 470 | 654 | 449 | 470 | 319 | 175 | 202 | 89 | 89 |
| 21----- | | 197 | 1,330 | 616 | 359 | 428 | 435 | 300 | 149 | 180 | 80 | 58 |
| 22----- | | 1,170 | 1,170 | 579 | 319 | 400 | 400 | 232 | 153 | 197 | 74 | 63 |
| 23----- | | 6,100 | 890 | 542 | 332 | 393 | 393 | 262 | 140 | 153 | 67 | 60 |
| 24----- | | 1,650 | 810 | 470 | 393 | 366 | 359 | 256 | 119 | 128 | 82 | 63 |
| 25----- | | 1,170 | 654 | ^a 449 | 373 | 373 | 373 | 244 | 124 | 153 | 78 | 67 |
| 26----- | | 731 | 616 | 428 | 359 | 380 | 359 | 232 | 111 | 132 | 71 | 67 |
| 27----- | | 579 | 542 | 414 | 294 | 339 | 359 | ^a 209 | 108 | 145 | 67 | 60 |
| 28----- | | 463 | ^a 496 | 428 | 268 | 332 | 359 | 186 | 111 | 136 | 60 | 111 |
| 29----- | | 470 | 449 | 616 | 281 | ----- | 352 | 244 | 98 | 65 | 56 | 95 |
| 30----- | | 339 | 428 | 1,570 | 274 | ----- | 313 | 208 | 89 | 98 | 63 | 87 |
| 31----- | | 306 | 1,170 | 306 | ----- | ----- | 306 | ----- | 95 | ----- | 61 | 84 |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October----- | 6,100 | 149 | 787 | 1.02 | 1.18 |
| November----- | 6,730 | 300 | 1,020 | 1.32 | 1.47 |
| December----- | 1,570 | 326 | 472 | .611 | .70 |
| January----- | 1,010 | 268 | 458 | .593 | .68 |
| February----- | 1,650 | 294 | 599 | .773 | .81 |
| March----- | 2,420 | 294 | 641 | .830 | .96 |
| April----- | 470 | 186 | 316 | .403 | .46 |
| May----- | 232 | 89 | 159 | .208 | .24 |
| June----- | 449 | 65 | 160 | .207 | .23 |
| July----- | 186 | 56 | 90.1 | .117 | .13 |
| August----- | 111 | 45 | 66.7 | .083 | .10 |
| September----- | 192 | 41 | 72.8 | .094 | .10 |
| The year----- | 6,730 | 41 | 402 | .52 | 7.06 |

^a Estimated.

CATOCTIN CREEK NEAR JEFFERSON, MD.

LOCATION.—Chain and staff gages at bridge on Frederick-Harper's Ferry road two miles west of Jefferson, Frederick County.

DRAINAGE AREA.—111 square miles.

RECORDS AVAILABLE.—June, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, about 1,600 second-feet Oct. 22 (gage height, 5.3 feet); minimum, 0.7 second-foot Aug. 10-14, Sept. 29, 30 (gage height, 0.90 foot).

1928-1930: Maximum stage, 11.30 feet June 19, 1928 (discharge not determined); minimum discharge, that of Aug. 10-14, Sept. 29, 30, 1930.

REMARKS.—Records for days when discharge is above 200 second-feet fair; others good. Discharge estimated because of ice Nov. 30, Dec. 1-5, 22-27, Jan. 18 to Feb. 2.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|------|------|------|------|------|------|-----|------|------|------|-------|
| 1 | 51 | 222 | | 131 | 60 | 127 | 76 | 60 | 23 | 15 | 1.9 | 2.4 |
| 2 | 388 | 129 | | 127 | 75 | 119 | 72 | 59 | 21 | 19 | 1.9 | 2.7 |
| 3 | 123 | 166 | 55 | 123 | 121 | 107 | 72 | 53 | 20 | 16 | 1.9 | 2.2 |
| 4 | 60 | 166 | | 119 | 192 | 107 | 74 | 47 | 19 | 15 | 1.9 | 1.5 |
| 5 | 28 | 138 | | 107 | 368 | 106 | 65 | 45 | 18 | 14 | 1.7 | 1.2 |
| 6 | 28 | 115 | 68 | 102 | 271 | 91 | 95 | 45 | 49 | 13 | 1.7 | 1.2 |
| 7 | 24 | 102 | 83 | 98 | 222 | 410 | 360 | 43 | 48 | 13 | 1.7 | 1.2 |
| 8 | 21 | 93 | 84 | 93 | 192 | 945 | 194 | 41 | 32 | 12 | 1.4 | 2.2 |
| 9 | 19 | 86 | 68 | 90 | 178 | 572 | 152 | 38 | 49 | 11 | 1.2 | 2.2 |
| 10 | 16 | 84 | 58 | 84 | 163 | 402 | 133 | 37 | 39 | 11 | .8 | 1.9 |
| 11 | 14 | 81 | 54 | 76 | 144 | 320 | 123 | 35 | 33 | 9.9 | .7 | 1.7 |
| 12 | 12 | 79 | 50 | 79 | 129 | 301 | 113 | 34 | 26 | 9.5 | .7 | 1.4 |
| 13 | 40 | 76 | 45 | 90 | 206 | 234 | 106 | 35 | 22 | 9.5 | .7 | 1.7 |
| 14 | 36 | 71 | 104 | 123 | 254 | 194 | 104 | 35 | 20 | 9.5 | .7 | 1.9 |
| 15 | 28 | 66 | 81 | 131 | 222 | 165 | 96 | 78 | 18 | 8.6 | 4.9 | 19 |
| 16 | 24 | 65 | 74 | 123 | 206 | 156 | 90 | 55 | 18 | 8.6 | 4.3 | 45 |
| 17 | 21 | 178 | 68 | 107 | 178 | 152 | 111 | 40 | 26 | 7.8 | 6.2 | 15 |
| 18 | 17 | 673 | 76 | | 166 | 145 | 96 | 39 | 53 | 7.2 | 8.2 | 15 |
| 19 | 15 | 254 | 106 | | 153 | 206 | 92 | 41 | 194 | 6.2 | 5.9 | 7.8 |
| 20 | 13 | 166 | 81 | | 140 | 145 | 82 | 44 | 45 | 5.6 | 4.3 | 6.2 |
| 21 | 12 | 151 | 63 | | 125 | 131 | 76 | 38 | 29 | 5.2 | 3.2 | 4.6 |
| 22 | 945 | 144 | | | 117 | 117 | 90 | 33 | 28 | 5.2 | 3.0 | 3.8 |
| 23 | 271 | 138 | | | 111 | 111 | 75 | 29 | 24 | 5.2 | 3.5 | 2.4 |
| 24 | 178 | 111 | | 55 | 129 | 109 | 71 | 29 | 18 | 5.2 | 3.2 | 1.8 |
| 25 | 138 | 104 | 55 | | 125 | 109 | 67 | 30 | 125 | 5.2 | 3.0 | 1.8 |
| 26 | 111 | 91 | | | 121 | 125 | 63 | 27 | 37 | 4.6 | 3.0 | 1.7 |
| 27 | 102 | 88 | | | 153 | 104 | 60 | 26 | 36 | 3.8 | 11 | 1.4 |
| 28 | 93 | 81 | 166 | | 138 | 93 | 60 | 26 | 23 | 3.5 | 5.2 | 1.2 |
| 29 | 84 | 76 | 131 | | | 87 | 60 | 26 | 18 | 3.0 | 3.8 | .7 |
| 30 | 109 | 60 | 178 | | | 84 | 58 | 24 | 17 | 2.2 | 5.6 | .7 |
| 31 | 290 | | 153 | | | 78 | | 24 | | 1.9 | 3.2 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 945 | 12 | 107 | 0.964 | 1.11 |
| November | 673 | 60 | 135 | 1.22 | 1.36 |
| December | 178 | | 77.3 | .696 | .80 |
| January | 131 | | 83 | .748 | .86 |
| February | 368 | 60 | 166 | 1.50 | 1.56 |
| March | 945 | 78 | 198 | 1.78 | 2.06 |
| April | 360 | 58 | 99.5 | .896 | 1.00 |
| May | 78 | 24 | 39.2 | .353 | .41 |
| June | 194 | 17 | 37.6 | .339 | .38 |
| July | 19 | 1.9 | 8.59 | .077 | .09 |
| August | 11 | .7 | 3.24 | .029 | .03 |
| September | 45 | .7 | 5.12 | .046 | .06 |
| The year | 945 | .7 | 79.4 | .715 | 9.70 |

MONOCACY RIVER NEAR FREDERICK, MD.

LOCATION.—Chain gage on Ceresville Bridge, 300 feet below mouth of Tuscarora Creek and 3 miles northeast of Frederick, Frederick County.

DRAINAGE AREA.—665 square miles.

RECORDS AVAILABLE.—August, 1896, to September, 1930.

EXTREMES.—Maximum discharge during year, 14,600 second-feet Oct. 3 (gage height, 22.38 feet); minimum discharge, 20 second-feet July 16 (gage height, 3.55 feet).

1896–1930: Maximum discharge, about 20,000 second-feet Nov. 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 estimated because of ice Nov. 30, Dec. 1–5, 23–26, Jan. 19 to Feb. 3.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | |
|-----|-------|-------|-------|-------|-------|-------|-------|-----|-------|------|------|-------|----|
| 1. | 601 | 422 | 250 | 1,300 | 350 | 690 | 441 | 333 | 137 | 110 | 45 | 40 | |
| 2. | 2,290 | 350 | | 1,200 | | 690 | 441 | 333 | 132 | 119 | 43 | 44 | |
| 3. | 9,290 | 1,140 | | 1,080 | | 690 | 404 | 333 | 132 | 114 | 40 | 45 | |
| 4. | 1,200 | 2,850 | | 1,030 | | 601 | 422 | 316 | 132 | 110 | 37 | 40 | |
| 5. | 1,140 | 1,940 | | 783 | | 4,100 | 601 | 404 | 299 | 123 | 114 | 32 | 35 |
| 6. | 1,360 | 1,470 | 368 | 690 | 4,460 | 559 | 645 | 283 | 119 | 110 | 35 | 37 | |
| 7. | 559 | 1,030 | 422 | 479 | 1,590 | 479 | 5,090 | 267 | 110 | 146 | 31 | 35 | |
| 8. | 350 | 645 | 460 | 645 | 1,250 | 8,370 | 2,080 | 236 | 128 | 123 | 33 | 41 | |
| 9. | 368 | 559 | 350 | 601 | 930 | 5,990 | 1,080 | 222 | 175 | 110 | 37 | 43 | |
| 10. | 333 | 518 | 441 | 590 | 783 | 3,830 | 930 | 236 | 267 | 86 | 31 | 42 | |
| 11. | 316 | 498 | 299 | 518 | 690 | 1,300 | 831 | 222 | 479 | 73 | 34 | 42 | |
| 12. | 299 | 422 | 404 | 480 | 783 | 1,590 | 736 | 207 | 386 | 55 | 29 | 47 | |
| 13. | 299 | 404 | 386 | 559 | 1,300 | 1,470 | 645 | 207 | 236 | 58 | 30 | 50 | |
| 14. | 316 | 460 | 690 | 736 | 3,170 | 1,300 | 601 | 207 | 194 | 44 | 31 | 58 | |
| 15. | 316 | 441 | 880 | 1,940 | 1,590 | 1,140 | 559 | 333 | 162 | 29 | 34 | 121 | |
| 16. | 2,7 | 404 | 690 | 1,450 | 1,20 | 880 | 518 | 404 | 146 | 28 | 28 | 110 | |
| 17. | 236 | 404 | 645 | 880 | 1,030 | 831 | 518 | 299 | 137 | 34 | 33 | 160 | |
| 18. | 207 | 6,080 | 601 | 645 | 930 | 736 | 498 | 267 | 441 | 57 | 50 | 128 | |
| 19. | 172 | 3,570 | 930 | 250 | 1,080 | 1,590 | 386 | 299 | 518 | 58 | 47 | 89 | |
| 20. | 108 | 1,470 | 783 | | 930 | 1,080 | 441 | 283 | 404 | 60 | 44 | 8 | |
| 21. | 125 | 1,030 | 518 | | 783 | 930 | 386 | 252 | 207 | 70 | 43 | 58 | |
| 22. | 236 | 880 | 386 | | 690 | 783 | 479 | 222 | 137 | 44 | 43 | 55 | |
| 23. | 5,270 | 736 | 300 | | 736 | 645 | 422 | 194 | 146 | 50 | 43 | 50 | |
| 24. | 2,290 | 736 | | | 1,300 | 601 | 368 | 194 | 137 | 58 | 44 | 61 | |
| 25. | 1,250 | 559 | | | 1,030 | 518 | 368 | 194 | 479 | 52 | 42 | 50 | |
| 26. | 559 | 498 | | | 880 | 831 | 350 | 180 | 267 | 48 | 47 | 42 | |
| 27. | 498 | 479 | 350 | 250 | 1,660 | 690 | 333 | 170 | 236 | 43 | 47 | 35 | |
| 28. | 460 | 479 | 980 | | 783 | 559 | 333 | 175 | 155 | 47 | 47 | 35 | |
| 29. | 404 | 400 | 1,870 | | ----- | 498 | 333 | 165 | 141 | 44 | 47 | 31 | |
| 30. | 368 | 275 | 1,450 | | ----- | 460 | 333 | 155 | 114 | 42 | 41 | 30 | |
| 31. | 460 | ----- | 1,420 | | ----- | 460 | ----- | 141 | ----- | 44 | 36 | ----- | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 9,290 | 108 | 1,030 | 1.55 | 1.79 |
| November..... | 6,080 | 275 | 1,040 | 1.56 | 1.74 |
| December..... | 1,870 | ----- | 573 | .862 | .99 |
| January..... | 1,940 | ----- | 608 | .914 | 1.05 |
| February..... | 4,460 | ----- | 1,260 | 1.89 | 1.97 |
| March..... | 8,370 | 460 | 1,340 | 2.02 | 2.33 |
| April..... | 5,090 | 333 | 712 | 1.07 | 1.19 |
| May..... | 404 | 141 | 246 | .370 | .43 |
| June..... | 518 | 110 | 219 | .329 | .37 |
| July..... | 146 | 28 | 69.7 | .105 | .12 |
| August..... | 50 | 28 | 38.8 | .058 | .07 |
| September..... | 160 | 30 | 57.4 | .086 | .10 |
| The year..... | 9,290 | 28 | 595 | .895 | 12.15 |

MONOCACY RIVER AT JUG BRIDGE, NEAR FREDERICK, MD.

LOCATION.—At Jug Bridge, 2½ miles east of Frederick, Frederick County, and 6¾ miles below gaging station on Monocacy River at Ceresville Bridge.

DRAINAGE AREA.—817 square miles.

RECORDS AVAILABLE.—November, 1929, to September, 1930.

EXTREMES.—Maximum discharge during period, about 14,900 second-feet Mar. 8 (gage height, 12.47 feet); minimum, 38 second-feet Sept. 30 (gage height, 1.03 feet).

Maximum stage known, about 29 feet in June, 1889.

REMARKS.—Records good except those for September, which are poor. Discharge estimated because of ice Nov. 30, Dec. 1-5, 22-26, Jan. 19 to Feb. 3.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|--------|--------|--------|--------|--------|--------|-----|--------|------|------|-------|
| 1 | | | 2, 140 | | 1, 030 | 545 | 445 | 160 | 134 | 67 | 63 |
| 2 | | | 1, 610 | 450 | 965 | 519 | 431 | 157 | 630 | 68 | 63 |
| 3 | | 300 | 1, 530 | | 898 | 498 | 404 | 152 | 568 | 68 | 65 |
| 4 | | | 1, 330 | 976 | 740 | 504 | 382 | 146 | 210 | 67 | 68 |
| 5 | | | 932 | 4, 010 | 691 | 478 | 348 | 139 | 155 | 62 | 67 |
| 6 | | 478 | 789 | 5, 120 | 685 | 774 | 344 | 144 | 134 | 63 | 62 |
| 7 | | 545 | 758 | 2, 090 | 697 | 5, 920 | 336 | 242 | 126 | 65 | 60 |
| 8 | | 691 | 783 | 1, 570 | 9, 500 | 2, 280 | 320 | 223 | 126 | 63 | 63 |
| 9 | | 715 | 770 | 1, 330 | 6, 140 | 1, 370 | 293 | 262 | 115 | 62 | 60 |
| 10 | | 600 | 733 | 1, 260 | 2, 280 | 1, 140 | 274 | 330 | 108 | 62 | 65 |
| 11 | | 519 | 639 | 1, 260 | 1, 870 | 1, 000 | 260 | 385 | 99 | 62 | 63 |
| 12 | | 478 | 578 | 1, 070 | 2, 140 | 932 | 246 | 250 | 93 | 58 | 56 |
| 13 | | 504 | 656 | 1, 570 | 1, 660 | 866 | 242 | 195 | 91 | 57 | 62 |
| 14 | | 814 | 1, 090 | 3, 420 | 1, 370 | 808 | 250 | 171 | 89 | 60 | 95 |
| 15 | | 865 | 2, 360 | 1, 960 | 1, 180 | 770 | 530 | 163 | 89 | 67 | 142 |
| 16 | | 758 | 1, 490 | 1, 330 | 1, 030 | 721 | 514 | 146 | 91 | 65 | 97 |
| 17 | | 622 | 1, 070 | 1, 110 | 965 | 783 | 344 | 198 | 83 | 76 | 106 |
| 18 | | 611 | 802 | 1, 110 | 932 | 833 | 293 | 533 | 83 | 79 | 110 |
| 19 | | 1, 000 | 500 | 1, 260 | 1, 480 | 783 | 278 | 1, 260 | 81 | 68 | 95 |
| 20 | | 1, 070 | | 1, 370 | 1, 340 | 703 | 308 | 572 | 77 | 70 | 77 |
| 21 | 1, 260 | 680 | | 1, 220 | 965 | 633 | 297 | 282 | 76 | 65 | 70 |
| 22 | 1, 070 | | | 1, 000 | 866 | 611 | 260 | 204 | 70 | 62 | 67 |
| 23 | 932 | | | 898 | 704 | 594 | 233 | 177 | 72 | 62 | 65 |
| 24 | 866 | 400 | | 898 | 746 | 556 | 217 | 166 | 76 | 63 | 65 |
| 25 | 833 | | 300 | 932 | 740 | 514 | 217 | 399 | 76 | 65 | 62 |
| 26 | 758 | | | 1, 000 | 866 | 493 | 213 | 376 | 74 | 63 | 57 |
| 27 | 703 | 524 | | 2, 050 | 866 | 464 | 189 | 213 | 72 | 74 | 52 |
| 28 | 674 | 664 | | 1, 340 | 703 | 450 | 186 | 189 | 70 | 72 | 47 |
| 29 | 605 | 1, 600 | | | 628 | 440 | 189 | 163 | 70 | 77 | 43 |
| 30 | 350 | 1, 700 | | | 600 | 445 | 186 | 142 | 72 | 76 | 39 |
| 31 | | 1, 610 | | | 572 | | 177 | | 68 | 67 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|--------|-----------------|-------------------|
| November 21-30 | 1, 260 | 350 | 805 | 0.985 | 0.37 |
| December | 1, 700 | 663 | 812 | .812 | .94 |
| January | 2, 360 | 779 | .953 | .953 | 1.10 |
| February | 5, 120 | 1, 520 | 1.86 | 1.86 | 1.94 |
| March | 9, 500 | 572 | 1, 480 | 1.81 | 2.09 |
| April | 5, 920 | 440 | 914 | 1.12 | 1.25 |
| May | 530 | 177 | 297 | .364 | .42 |
| June | 1, 260 | 139 | 271 | .332 | .37 |
| July | 630 | 68 | 128 | .157 | .18 |
| August | 79 | 57 | 66.3 | .081 | .09 |
| September | 142 | 39 | 70.2 | .086 | .10 |

GREAT SENECA CREEK NEAR GAITHERSBURG, MD.

LOCATION.—Chain gage on bridge on Frederick pike 2 miles northwest of Gaithersburg, Montgomery County, and just below Whetstone Run. Zero of gage 305.37 feet above mean sea level.

DRAINAGE AREA.—41.0 square miles.

RECORDS AVAILABLE.—March, 1925, to September, 1930.

EXTREMES.—Maximum discharge during year, about 489 second-feet Oct. 22 (gage height, 6.70 feet); minimum, 1.3 second-feet Sept. 23 (gage height, 0.94 foot).

1925-1930: Maximum discharge, about 800 second-feet Nov. 16, 1926 (gage height, 8.80 feet); minimum, that of Sept. 23, 1930.

REMARKS.—Records fair. Discharge estimated because of ice Dec. 23-26, Jan. 18 to Feb. 1, Feb. 16-18.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | Jul ⁷ | Aug. | Sept. |
|-----|------|-------|------|-------|-------|------|------|-------|------|------------------|-------|-------|
| 1 | 28 | 22 | 18 | 29 | 18 | 26 | 25 | 33 | 15 | 9.9 | 2.9 | 2.3 |
| 2 | 350 | 21 | 19 | 34 | 22 | 25 | 24 | 32 | 15 | 10 | 2.9 | 2.3 |
| 3 | 38 | 57 | 21 | 34 | 34 | 24 | 25 | 32 | 15 | 7.4 | 2.7 | 2.3 |
| 4 | 27 | 50 | 19 | 27 | 59 | 22 | 26 | 31 | 14 | 6.8 | 2.4 | 2.2 |
| 5 | 22 | 29 | 21 | 25 | 104 | 20 | 24 | 29 | 13 | 6.6 | 2.3 | 1.9 |
| 6 | 18 | 27 | 23 | 26 | 63 | 23 | 149 | 28 | 13 | 6.6 | 2.3 | 1.9 |
| 7 | 18 | 24 | 24 | 25 | 47 | 29 | 112 | 27 | 16 | 6.2 | 2.3 | 2.0 |
| 8 | 17 | 24 | 24 | 25 | 44 | 122 | 66 | 26 | 27 | 5.4 | 2.4 | 2.3 |
| 9 | 17 | 23 | 23 | 24 | 39 | 55 | 59 | 24 | 20 | 5.4 | 2.3 | 2.3 |
| 10 | 16 | 22 | 22 | 23 | 41 | 45 | 53 | 23 | 19 | 5.2 | 2.2 | 2.1 |
| 11 | 16 | 23 | 21 | 20 | 40 | 48 | 46 | 23 | 15 | 5.1 | 2.0 | 1.9 |
| 12 | 15 | 22 | 20 | 22 | 37 | 46 | 44 | 23 | 13 | 4.9 | 1.8 | 1.8 |
| 13 | 15 | 23 | 27 | 23 | 90 | 39 | 42 | 22 | 13 | 4.8 | 2.0 | 2.3 |
| 14 | 15 | 24 | 31 | 35 | 77 | 35 | 42 | 23 | 13 | 5.2 | 2.4 | 3.2 |
| 15 | 15 | 30 | 26 | 30 | 46 | 34 | 41 | 25 | 13 | 4.8 | 4.4 | 2.2 |
| 16 | 15 | 24 | 26 | 26 | 36 | 33 | 46 | 24 | 11 | 4.4 | 3.5 | 2.2 |
| 17 | 15 | 25 | 24 | 25 | 35 | 34 | 48 | 23 | 15 | 4.6 | 3.2 | 2.2 |
| 18 | 14 | 60 | 24 | 34 | 32 | 48 | 48 | 22 | 23 | 4.4 | 4.0 | 2.2 |
| 19 | 14 | 38 | 26 | 38 | 36 | 44 | 24 | 12 | 4 | 4.4 | 3.2 | 2.2 |
| 20 | 14 | 29 | 20 | 34 | 32 | 45 | 29 | 11 | 4.3 | 2.9 | 2.1 | 2.1 |
| 21 | 15 | 26 | 14 | 34 | 30 | 43 | 22 | 11 | 3.4 | 2.9 | 2.0 | 2.0 |
| 22 | 226 | 24 | 14 | 31 | 28 | 42 | 20 | 11 | 5.4 | 2.9 | 2.0 | 2.0 |
| 23 | 60 | 25 | 15 | 32 | 29 | 41 | 20 | 9.9 | 5.6 | 3.1 | 1.8 | 1.8 |
| 24 | 29 | 26 | | 31 | 28 | 37 | 24 | 11 | 4.4 | 3.1 | 1.7 | 1.7 |
| 25 | 23 | 23 | | 31 | 32 | 36 | 23 | 11 | 4.3 | 2.8 | 1.8 | 1.8 |
| 26 | 20 | 23 | 21 | 32 | 34 | 34 | 20 | 8.6 | 3.8 | 2.5 | 1.9 | 1.9 |
| 27 | 20 | 22 | | 30 | 28 | 34 | 18 | 8.2 | 3.5 | 3.0 | 1.6 | 1.6 |
| 28 | 19 | 21 | | 27 | 27 | 34 | 19 | 7.9 | 3.1 | 2.7 | 1.3 | 1.3 |
| 29 | 19 | 20 | 32 | ----- | 27 | 34 | 18 | 7.9 | 3.0 | 2.8 | 1.5 | 1.5 |
| 30 | 22 | 18 | 34 | ----- | ----- | 34 | 18 | 7.4 | 2.8 | 2.8 | 1.5 | 1.5 |
| 31 | 26 | ----- | 34 | ----- | ----- | 26 | 17 | ----- | 2.6 | 2.5 | ----- | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 350 | 14 | 38.0 | 0.927 | 1.07 |
| November | 60 | 18 | 27.5 | .671 | .75 |
| December | 34 | ----- | 22.5 | .549 | .63 |
| January | 35 | ----- | 21.4 | .522 | .60 |
| February | 104 | 18 | 42.4 | 1.03 | 1.07 |
| March | 122 | 20 | 34.7 | .846 | .98 |
| April | 149 | 24 | 45.9 | 1.12 | 1.25 |
| May | 33 | 17 | 23.9 | .583 | .67 |
| June | 27 | 7.4 | 13.3 | .324 | .36 |
| July | 10 | 2.6 | 5.11 | .125 | .14 |
| August | 4.4 | 1.8 | 2.75 | .067 | .08 |
| September | 3.2 | 1.3 | 2.03 | .050 | .06 |
| The year | 350 | 1.3 | 23.1 | .563 | 7.66 |

ROCK CREEK AT SHERRILL DRIVE, WASHINGTON, D. C.

LOCATION.—Water-stage recorder at Sherrill Drive highway bridge in Rock Creek Park, in Washington, 7½ miles above mouth.

DRAINAGE AREA.—62.2 square miles.

RECORDS AVAILABLE.—October, 1929, to September, 1930.

EXTREMES.—Maximum discharge during period, 1,170 second-feet Apr. 7 (gage height, 5.10 feet); minimum, 0.9 second-foot Sept. 30 (gage height, 1.05 feet).

REMARKS.—Records excellent. Discharge estimated because of ice Nov. 30, Dec. 1-5, 22-26, Jan. 19 to Feb. 1.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|------|------|------|------|------|------|-----|------|------|------|-------|
| 1 | | 30 | 30 | 46 | 35 | 46 | 42 | 42 | 24 | 12 | 2.3 | 2.3 |
| 2 | | 27 | | 42 | 37 | 46 | 40 | 42 | 23 | 12 | 2.3 | 2.0 |
| 3 | | 32 | | 40 | 49 | 42 | 42 | 40 | 23 | 13 | 2.3 | 1.7 |
| 4 | | 83 | | 37 | 122 | 40 | 44 | 39 | 20 | 12 | 2.3 | 1.4 |
| 5 | | 44 | | 35 | 284 | 42 | 42 | 39 | 19 | 11 | 2.3 | 1.4 |
| 6 | | 34 | 30 | 32 | 138 | 42 | 175 | 37 | 18 | 10 | 2.3 | 1.4 |
| 7 | | 31 | 30 | 34 | 74 | 104 | 722 | 37 | 19 | 10 | 1.7 | 1.4 |
| 8 | | 28 | 32 | 34 | 64 | 582 | 130 | 36 | 28 | 10 | 1.4 | 1.4 |
| 9 | | 28 | 31 | 34 | 60 | 121 | 82 | 31 | 25 | 9.4 | 1.4 | 1.4 |
| 10 | | 27 | 28 | 32 | 60 | 76 | 67 | 32 | 25 | 8.5 | 1.1 | 1.4 |
| 11 | | 26 | 28 | 31 | 62 | 72 | 62 | 32 | 23 | 7.7 | 1.1 | 1.4 |
| 12 | | 26 | 27 | 30 | 54 | 89 | 60 | 31 | 19 | 7.7 | 1.4 | 2.0 |
| 13 | | 26 | 28 | 30 | 96 | 65 | 57 | 31 | 18 | 6.9 | 1.4 | 2.7 |
| 14 | | 26 | 40 | 37 | 148 | 58 | 54 | 36 | 17 | 6.9 | 1.4 | 8.5 |
| 15 | | 27 | 36 | 62 | 80 | 54 | 52 | 57 | 17 | 6.9 | 2.0 | 5.1 |
| 16 | | 28 | 32 | 44 | 60 | 52 | 54 | 36 | 16 | 6.3 | 2.0 | 2.7 |
| 17 | | 27 | 30 | 37 | 54 | 52 | 65 | 32 | 46 | 5.7 | 2.0 | 2.3 |
| 18 | | 62 | 34 | 34 | 60 | 50 | 70 | 32 | 57 | 5.7 | 2.3 | 2.3 |
| 19 | | 60 | 42 | 62 | 52 | 69 | 31 | 31 | 31 | 5.7 | 2.3 | 1.7 |
| 20 | | 37 | 43 | 60 | 49 | 58 | 32 | 19 | 5.7 | 2.0 | 1.7 | |
| 21 | | 17 | 32 | 32 | 55 | 48 | 54 | 31 | 17 | 5.1 | 2.0 | 1.7 |
| 22 | | 186 | 31 | | 52 | 46 | 52 | 28 | 16 | 4.6 | 1.7 | 1.7 |
| 23 | | 224 | 30 | | 50 | 44 | 50 | 27 | 16 | 4.6 | 1.4 | 1.7 |
| 24 | | 49 | 30 | 30 | 50 | 43 | 48 | 28 | 19 | 5.7 | 1.4 | 2.7 |
| 25 | | 36 | 30 | | 49 | 52 | 46 | 30 | 23 | 5.1 | 1.1 | 1.7 |
| 26 | | 32 | 28 | | 49 | 58 | 44 | 27 | 16 | 4.6 | 1.1 | 1.7 |
| 27 | | 30 | 28 | | 52 | 49 | 44 | 26 | 18 | 4.1 | 1.1 | 1.4 |
| 28 | | 27 | 28 | | 49 | 44 | 43 | 26 | 14 | 3.6 | 1.1 | .9 |
| 29 | | 26 | 27 | 64 | | 44 | 43 | 25 | 13 | 3.6 | 1.4 | .9 |
| 30 | | 27 | 22 | 55 | | 43 | 43 | 25 | 12 | 3.1 | 1.7 | .7 |
| 31 | | 31 | 50 | | | 42 | | 25 | | 2.7 | 2.0 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|---------------|---------|---------|------|-----------------|-------------------|
| October 21-31 | 224 | 17 | 62.3 | 1.00 | 0.41 |
| November | 83 | 22 | 33.2 | .534 | .60 |
| December | 64 | | 34.1 | .548 | .63 |
| January | 62 | | 34.2 | .550 | .63 |
| February | 284 | 35 | 73.8 | 1.19 | 1.24 |
| March | 582 | 40 | 72.5 | 1.17 | 1.35 |
| April | 722 | 40 | 81.8 | 1.32 | 1.47 |
| May | 57 | 25 | 33.0 | .531 | .61 |
| June | 57 | 12 | 21.7 | .349 | .39 |
| July | 13 | 2.7 | 7.09 | .114 | .13 |
| August | 2.3 | 1.1 | 1.72 | .028 | .03 |
| September | 8.5 | .7 | 2.04 | .033 | .04 |

ROCK CREEK AT Q STREET BRIDGE, WASHINGTON, D. C.

LOCATION.—At Q Street Bridge, Washington, D. C., 1.1 miles above mouth and 6.4 miles below gaging station on Rock Creek at Sherrill Drive.

DRAINAGE AREA.—76.0 square miles.

RECORDS AVAILABLE.—October, 1929, to September, 1930.

EXTREMES.—Maximum discharge during period, 1,300 second-feet Apr. 6 (gage height, 7.66 feet); minimum, 1.0 second-foot Sept. 7 (gage height, 1.65 feet).

REMARKS.—Records good except those for October, August, and September, which are fair. Discharge estimated because of ice Nov. 27–30, Dec. 1–7, 18–26, Jan. 18–31, Feb. 1.

Daily and monthly discharge, in second-feet, 1929–30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------------|---------|------|------|---------|------|------|------|-----|------|-----------------|-------------------|-------|
| 1 | | 31 | | 50 | 38 | 50 | 45 | 51 | 26 | 27 | | 2.8 |
| 2 | | 29 | | 50 | 41 | 51 | 46 | 50 | 27 | 17 | | 3.3 |
| 3 | | 43 | | 48 | 68 | 51 | 52 | 48 | 25 | 21 | | 2.4 |
| 4 | | 85 | | 47 | 161 | 50 | 50 | 47 | 24 | 14 | | 1.8 |
| 5 | | 53 | 35 | 42 | 289 | 51 | 45 | 46 | 23 | 13 | | 1.7 |
| 6 | | 39 | | 39 | 158 | 51 | 300 | 48 | 28 | 13 | | 1.4 |
| 7 | | 35 | | 41 | 82 | 107 | 811 | 43 | 22 | 34 | | 1.2 |
| 8 | | 31 | 32 | 39 | 68 | 598 | 172 | 41 | 38 | 12 | | 2.4 |
| 9 | | 30 | 32 | 40 | 63 | 147 | 98 | 37 | 28 | 11 | | 1.6 |
| 10 | | 30 | 30 | 39 | 60 | 89 | 80 | 37 | 30 | 10 | | 1.2 |
| 11 | | 29 | 30 | 38 | 64 | 99 | 73 | 35 | 24 | 9.6 | | 1.2 |
| 12 | | 29 | 29 | 38 | 57 | 99 | 67 | 34 | 22 | 9.2 | | 2.4 |
| 13 | | 26 | 33 | 42 | 91 | 75 | 64 | 33 | 22 | 8.7 | | 35 |
| 14 | | 28 | 39 | 81 | 158 | 68 | 62 | 70 | 21 | 9.6 | | 12 |
| 15 | | 30 | 39 | 69 | 81 | 63 | 58 | 67 | 21 | 9.2 | | 10 |
| 16 | | 30 | 34 | 55 | 69 | 59 | 58 | 42 | 19 | 9.2 | • 2.7 | 8.7 |
| 17 | | 31 | 31 | 46 | 62 | 63 | 76 | 34 | 138 | 9.6 | | 4.8 |
| 18 | • 27 | 95 | | | 76 | 63 | 81 | 46 | 89 | 9.6 | | 3.8 |
| 19 | • 19 | 72 | | | 68 | 58 | 75 | 34 | 52 | 9.6 | | 3.1 |
| 20 | • 16 | 41 | | | 63 | 55 | 64 | 38 | 28 | 9.6 | | 2.6 |
| 21 | • 18 | 35 | | | 57 | 53 | 59 | 34 | 23 | 9.2 | | 2.4 |
| 22 | 244 | 32 | 30 | | 53 | 52 | 55 | 30 | 22 | 28 | | 2.2 |
| 23 | 254 | 31 | | | 52 | 50 | 54 | 29 | 21 | 9.6 | | 2.0 |
| 24 | 57 | 32 | | 35 | 52 | 50 | 52 | 44 | 59 | 8.3 | | |
| 25 | 40 | 31 | | | 48 | 89 | 50 | 34 | 36 | 8.7 | | |
| 26 | 34 | 30 | | | 50 | 64 | 50 | 30 | 25 | 7.6 | | |
| 27 | 31 | 30 | 35 | | 53 | 54 | 50 | 28 | 24 | 7.0 | | • 1.8 |
| 28 | 30 | 30 | 39 | | 52 | 48 | 51 | 29 | 19 | 6.3 | | |
| 29 | 28 | 29 | 63 | | | 47 | 51 | 29 | 17 | 6.7 | | |
| 30 | 32 | 28 | 63 | | | 47 | 51 | 28 | 16 | 5.7 | | |
| 31 | 32 | | 54 | | | 46 | | 28 | | 4.5 | | |
| Month | Maximum | | | Minimum | | | Mean | | | Per square mile | Run-off in inches | |
| October 18–31 | 254 | | | 16 | | | 61.6 | | | 0.811 | 0.42 | |
| November | 95 | | | 26 | | | 37.5 | | | .493 | .55 | |
| December | 63 | | | | | | 35.4 | | | .466 | .54 | |
| January | 81 | | | | | | 41.7 | | | .549 | .63 | |
| February | 289 | | | 38 | | | 79.8 | | | 1.05 | 1.09 | |
| March | 598 | | | 46 | | | 82.2 | | | 1.08 | 1.24 | |
| April | 811 | | | 45 | | | 96.7 | | | 1.77 | 1.42 | |
| May | 70 | | | 28 | | | 39.5 | | | .520 | .60 | |
| June | 138 | | | 16 | | | 32.3 | | | .425 | .47 | |
| July | 34 | | | 4.5 | | | 11.9 | | | .157 | .18 | |
| August | | | | | | | 2.7 | | | .036 | .04 | |
| September | 35 | | | 1.2 | | | 4.09 | | | .054 | .06 | |

• Estimated.

NORTHWEST BRANCH OF ANACOSTIA RIVER NEAR COLESVILLE, MD.

LOCATION.—Staff gage at bridge $1\frac{1}{2}$ miles southwest of Colesville, Montgomery County, and 3 miles above Burnt Mills. Zero of gage 265.60 feet above mean sea level.

DRAINAGE AREA.—21.3 square miles.

RECORDS AVAILABLE.—February, 1924, to September, 1930.

EXTREMES.—Maximum discharge during year, about 1,080 second-feet Apr. 6 (gage height, about 6.0 feet); minimum, 0.4 second-foot Aug. 11, 12 (gage height, 1.27 feet).

1924-1930: Maximum discharge, about 1,600 second-feet (revised)

Apr. 6, 1924 (gage height, 7.87 feet); minimum, that of Aug. 11, 12, 1930.

REMARKS.—Records fair. Discharge estimated because of ice Nov. 29, 30, Dec. 1-5, 21-27, Jan. 19-31, Feb. 1, 2, 16-18, Mar. 3.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|------|------|------|------|------|------|-----|------|------|------|-------|
| 1..... | 7.7 | 11 | 7 | 15 | 9 | 10 | 13 | 13 | 7.3 | 4.4 | 0.8 | 0.7 |
| 2..... | 173 | 12 | | 14 | 11 | 8.9 | 13 | 13 | 6.4 | 5.2 | .9 | .7 |
| 3..... | 14 | 20 | | 14 | 34 | 8.5 | 14 | 12 | 6.4 | 5.2 | .8 | .7 |
| 4..... | 11 | 26 | | 13 | 86 | 8.9 | 14 | 11 | 6.4 | 4.4 | .8 | .8 |
| 5..... | 8.5 | 14 | | 12 | 123 | 8.9 | 13 | 11 | 6.0 | 4.1 | .6 | .6 |
| 6..... | 7.7 | 12 | 10 | 11 | 29 | 8.1 | 150 | 10 | 6.4 | 4.1 | .6 | .6 |
| 7..... | 7.3 | 11 | 11 | 11 | 19 | 10 | 84 | 10 | 6.8 | 4.4 | .6 | .6 |
| 8..... | 6.8 | 11 | 13 | 11 | 17 | 120 | 31 | 10 | 8.1 | 4.1 | .6 | .6 |
| 9..... | 6.8 | 11 | 11 | 11 | 15 | 42 | 22 | 8.9 | 8.5 | 4.1 | .8 | .7 |
| 10..... | 6.4 | 10 | 11 | 11 | 15 | 21 | 20 | 8.9 | 8.5 | 4.1 | .5 | .8 |
| 11..... | 6.4 | 10 | 10 | 10 | 14 | 34 | 19 | 9.5 | 7.3 | 3.7 | .4 | .8 |
| 12..... | 6.8 | 10 | 10 | 10 | 14 | 24 | 16 | 10 | 7.3 | 3.7 | .4 | .6 |
| 13..... | 7.3 | 11 | 14 | 11 | 86 | 20 | 15 | 10 | 7.3 | 3.4 | .5 | 17 |
| 14..... | 7.3 | 11 | 14 | 22 | 33 | 17 | 15 | 11 | 6.4 | 3.4 | .6 | 2.6 |
| 15..... | 8.1 | 11 | 11 | 25 | 28 | 17 | 14 | 12 | 6.4 | 3.4 | 1.1 | .9 |
| 16..... | 8.9 | 10 | 11 | 14 | 12 | 15 | 19 | 11 | 6.4 | 3.0 | 1.0 | .8 |
| 17..... | 8.9 | 11 | 11 | 13 | 10 | 15 | 26 | 10 | 82 | 2.6 | .6 | 1.0 |
| 18..... | 8.5 | 62 | 13 | 15 | 11 | 16 | 29 | 10 | 11 | 2.3 | 1.0 | .8 |
| 19..... | 8.5 | 19 | 17 | 14 | 17 | 20 | 20 | 10 | 8.9 | 2.3 | .9 | .8 |
| 20..... | 8.1 | 14 | 13 | | 13 | 14 | 19 | 11 | 6.8 | 2.3 | .8 | .8 |
| 21..... | 8.5 | 12 | 8 | 8 | 13 | 14 | 18 | 10 | 6.4 | 1.9 | .7 | .9 |
| 22..... | 94 | 11 | | | 13 | 13 | 16 | 9.5 | 6.4 | 2.6 | .7 | .9 |
| 23..... | 22 | 13 | | | 12 | 13 | 14 | 8.5 | 6.0 | 3.4 | .6 | .9 |
| 24..... | 13 | 11 | | | 11 | 13 | 14 | 8.9 | 5.6 | 2.6 | .6 | .8 |
| 25..... | 11 | 11 | | | 10 | 23 | 14 | 9.5 | 6.8 | 1.9 | .6 | .8 |
| 26..... | 10 | 11 | | | 12 | 24 | 14 | 8.5 | 5.6 | 1.1 | .6 | .9 |
| 27..... | 9.5 | 11 | | | 11 | 17 | 14 | 8.1 | 6.4 | .9 | .6 | 1.1 |
| 28..... | 8.9 | 10 | 22 | | 10 | 14 | 13 | 8.1 | 4.8 | .9 | .5 | .9 |
| 29..... | 8.9 | 8 | 24 | | | 14 | 13 | 7.7 | 4.8 | .9 | 1.1 | .9 |
| 30..... | 12 | 8 | 20 | | | 14 | 13 | 7.3 | 4.4 | .9 | 1.1 | .9 |
| 31..... | 12 | | 19 | | | 13 | | 7.3 | | .8 | | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 173 | 6.4 | 17.3 | 0.812 | 0.94 |
| November..... | 62 | | 13.8 | .648 | .72 |
| December..... | 24 | | 11.5 | .540 | .62 |
| January..... | 25 | | 11.2 | .528 | .61 |
| February..... | 123 | | 24.5 | 1.15 | 1.20 |
| March..... | 120 | 8.1 | 19.6 | .920 | 1.06 |
| April..... | 150 | 13 | 23.6 | 1.11 | 1.24 |
| May..... | 13 | 7.3 | 9.86 | .463 | .53 |
| June..... | 82 | 4.4 | 9.26 | .435 | .49 |
| July..... | 5.2 | .8 | 2.97 | .139 | .16 |
| August..... | 1.1 | .4 | .72 | .034 | .04 |
| September..... | 17 | .6 | 1.40 | .066 | .07 |
| The year..... | 173 | .4 | 12.0 | .563 | 7.68 |

• Estimated.

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, 1930.

EXTREMES.—Maximum discharge during year, 18,600 second-feet Oct. 23 (gage height, 20.65 feet); minimum, 2 second-foot Aug. 21 (gage height, 1.42 feet).
1925-1930: Maximum discharge, that of Oct. 23, 1929; minimum, that of Aug. 21, 1930.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|--------|-------|-------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | 272 | 656 | 535 | 762 | 606 | 340 | 340 | 321 | 153 | 43 | 11 | 3 |
| 2..... | 1,960 | 656 | 558 | 656 | 631 | 380 | 302 | 302 | 115 | 66 | 14 | 11 |
| 3..... | 2,030 | 606 | 582 | 656 | 631 | 380 | 302 | 266 | 137 | 321 | 6 | 12 |
| 4..... | 598 | 762 | 512 | 558 | 1,790 | 340 | 422 | 284 | 142 | 249 | 5 | 30 |
| 5..... | 372 | 762 | 489 | 489 | 3,590 | 340 | 380 | 266 | 120 | 62 | 6 | 43 |
| 6..... | 272 | 656 | 466 | 489 | 2,000 | 360 | 360 | 266 | 110 | 75 | 7 | 58 |
| 7..... | 222 | 582 | 444 | 489 | 1,650 | 582 | 3,320 | 266 | 120 | 62 | 4 | 60 |
| 8..... | 194 | 558 | 444 | 489 | 990 | 4,850 | 1,230 | 266 | 131 | 46 | 4 | 22 |
| 9..... | 170 | 512 | 444 | 466 | 818 | 2,160 | 818 | 284 | 159 | 39 | 4 | 28 |
| 10..... | 159 | 489 | 401 | 466 | 708 | 1,230 | 708 | 266 | 170 | 22 | 4 | 27 |
| 11..... | 151 | 466 | 401 | 422 | 656 | 1,110 | 656 | 232 | 170 | 16 | 3 | 21 |
| 12..... | 146 | 466 | 401 | 444 | 606 | 990 | 606 | 216 | 162 | 14 | 4 | 16 |
| 13..... | 136 | 444 | 422 | 444 | 656 | 818 | 558 | 216 | 153 | 9 | 3 | 16 |
| 14..... | 146 | 444 | 422 | 466 | 708 | 762 | 535 | 216 | 137 | 14 | 3 | 15 |
| 15..... | 138 | 444 | 422 | 656 | 631 | 656 | 512 | 284 | 112 | 18 | 4 | 10 |
| 16..... | 136 | 422 | 401 | 512 | 466 | 606 | 466 | 321 | 98 | 12 | 3 | 8 |
| 17..... | 112 | 466 | 401 | 489 | 535 | 606 | 489 | 266 | 131 | 11 | 3 | 18 |
| 18..... | 114 | 874 | 422 | 489 | 631 | 558 | 558 | 360 | 249 | 24 | 3 | 24 |
| 19..... | 122 | 1,800 | 444 | 340 | 558 | 535 | 512 | 321 | 230 | 22 | 3 | 18 |
| 20..... | 112 | 818 | 422 | 302 | 535 | 535 | 512 | 284 | 220 | 8 | 3 | 16 |
| 21..... | 110 | 656 | 380 | 302 | 512 | 489 | 512 | 266 | 160 | 5 | 2 | 14 |
| 22..... | 11,500 | 606 | 380 | 489 | 466 | 489 | 466 | 232 | 130 | 6 | 3 | 10 |
| 23..... | 14,800 | 558 | 380 | 466 | 466 | 466 | 422 | 194 | 115 | 12 | 4 | 11 |
| 24..... | 2,720 | 535 | 380 | 466 | 466 | 422 | 380 | 284 | 92 | 9 | 3 | 12 |
| 25..... | 1,440 | 535 | 422 | 466 | 466 | 444 | 360 | 656 | 95 | 8 | 3 | 10 |
| 26..... | 1,110 | 535 | 466 | 422 | 444 | 466 | 321 | 302 | 88 | 6 | 3 | 12 |
| 27..... | 874 | 512 | 466 | 422 | 401 | 466 | 340 | 188 | 77 | 6 | 4 | 10 |
| 28..... | 762 | 489 | 606 | 422 | 380 | 422 | 321 | 179 | 70 | 5 | 4 | 6 |
| 29..... | 656 | 444 | 1,050 | 422 | ----- | 401 | 302 | 170 | 62 | 8 | 3 | 4 |
| 30..... | 656 | 401 | 932 | 380 | ----- | 401 | 302 | 162 | 56 | 10 | 3 | 4 |
| 31..... | 762 | ----- | 818 | 512 | ----- | 380 | ----- | 164 | ----- | 6 | 3 | ----- |

| Month | Maximum | Minimum | Mean | Per square to mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------------|----------------------|
| October..... | 14,800 | 110 | 1,390 | 2.17 | 2.50 |
| November..... | 1,300 | 401 | 588 | .917 | 1.02 |
| December..... | 1,050 | 380 | 494 | .771 | .89 |
| January..... | 762 | 302 | 479 | .747 | .86 |
| February..... | 3,590 | 380 | 821 | 1.28 | 1.33 |
| March..... | 4,850 | 340 | 741 | 1.16 | 1.34 |
| April..... | 3,320 | 302 | 577 | .900 | 1.00 |
| May..... | 656 | 162 | 268 | .418 | .48 |
| June..... | 249 | 56 | 132 | .208 | .23 |
| July..... | 321 | 5 | 39.2 | .061 | .07 |
| August..... | 14 | 2 | 4.3 | .007 | .01 |
| September..... | 60 | 3 | 18.3 | .029 | .03 |
| The year..... | 14,800 | 2 | 461 | .718 | 9.76 |

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|--------|-------|-------|-------|--------|-------|--------|-----|-------|------|------|-------|
| 1 | 337 | 1,490 | 669 | 1,720 | 975 | 878 | 964 | 786 | 338 | 137 | 24 | 35 |
| 2 | 4,530 | 1,280 | 644 | 1,520 | 1,390 | 878 | 942 | 777 | 328 | 169 | 58 | 39 |
| 3 | 7,640 | 1,160 | 1,450 | 1,420 | 3,080 | 878 | 942 | 748 | 311 | 333 | 46 | 23 |
| 4 | 2,120 | 1,280 | 1,340 | 1,310 | 6,890 | 846 | 1,090 | 694 | 295 | 215 | 34 | 15 |
| 5 | 1,230 | 1,490 | 1,050 | 1,160 | 12,800 | 826 | 1,140 | 652 | 275 | 163 | 23 | 38 |
| 6 | 868 | 1,200 | 964 | 1,050 | 6,020 | 815 | 2,210 | 644 | 285 | 117 | 18 | 45 |
| 7 | 768 | 1,080 | 975 | 1,040 | 3,410 | 836 | 10,500 | 644 | 467 | 112 | 25 | 48 |
| 8 | 619 | 1,010 | 953 | 1,040 | 2,750 | 8,740 | 3,570 | 678 | 322 | 97 | 23 | 127 |
| 9 | 548 | 953 | 942 | 1,030 | 2,240 | 6,220 | 2,160 | 669 | 333 | 85 | 25 | 85 |
| 10 | 495 | 899 | 857 | 986 | 1,970 | 3,210 | 1,760 | 595 | 373 | 92 | 21 | 71 |
| 11 | 467 | 846 | 796 | 942 | 1,820 | 2,580 | 1,550 | 563 | 409 | 79 | 20 | 81 |
| 12 | 454 | 826 | 786 | 878 | 1,570 | 2,490 | 1,420 | 525 | 403 | 69 | 19 | 67 |
| 13 | 448 | 815 | 786 | 878 | 1,520 | 2,160 | 1,310 | 525 | 350 | 62 | 16 | 60 |
| 14 | 434 | 846 | 826 | 1,080 | 2,160 | 1,840 | 1,240 | 532 | 316 | 59 | 10 | 52 |
| 15 | 434 | 878 | 878 | 2,580 | 1,800 | 1,640 | 1,200 | 571 | 285 | 55 | 12 | 46 |
| 16 | 403 | 826 | 846 | 1,820 | 1,480 | 1,530 | 1,140 | 780 | 255 | 49 | 19 | 48 |
| 17 | 403 | 768 | 796 | 1,390 | 1,220 | 1,490 | 1,110 | 660 | 433 | 46 | 20 | 39 |
| 18 | 391 | 1,540 | 796 | 1,200 | 1,320 | 1,460 | 1,320 | 587 | 610 | 51 | 16 | 42 |
| 19 | 385 | 3,420 | 1,010 | 1,130 | 1,350 | 1,430 | 1,430 | 619 | 972 | 54 | 12 | 51 |
| 20 | 379 | 1,900 | 1,100 | 826 | 1,280 | 1,380 | 1,200 | 815 | 563 | 52 | 12 | 51 |
| 21 | 373 | 1,460 | 942 | 920 | 1,200 | 1,250 | 1,070 | 748 | 322 | 49 | 12 | 42 |
| 22 | 20,600 | 1,240 | 796 | 1,180 | 1,130 | 1,190 | 1,010 | 587 | 250 | 42 | 11 | 46 |
| 23 | 37,100 | 1,160 | 750 | 1,450 | 1,080 | 1,130 | 986 | 470 | 202 | 39 | 22 | 35 |
| 24 | 6,890 | 1,160 | 690 | 1,180 | 1,070 | 1,090 | 920 | 428 | 240 | 34 | 20 | 31 |
| 25 | 3,210 | 1,250 | 730 | 950 | 1,050 | 1,090 | 857 | 748 | 344 | 35 | 17 | 27 |
| 26 | 2,400 | 1,200 | 780 | 1,070 | 1,040 | 1,130 | 846 | 678 | 232 | 29 | 20 | 34 |
| 27 | 1,840 | 1,080 | 940 | 1,110 | 986 | 1,180 | 815 | 454 | 188 | 24 | 21 | 39 |
| 28 | 1,530 | 1,010 | 1,520 | 1,190 | 920 | 1,080 | 806 | 379 | 290 | 21 | 20 | 34 |
| 29 | 1,320 | 953 | 3,020 | 1,450 | ----- | 1,010 | 786 | 361 | 188 | 26 | 15 | 29 |
| 30 | 1,270 | 857 | 2,580 | 1,030 | ----- | 997 | 777 | 355 | 143 | 24 | 20 | 24 |
| 31 | 1,360 | ----- | 1,980 | 850 | ----- | 986 | ----- | 350 | ----- | 17 | 23 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 37,100 | 337 | 3,270 | 2.06 | 2.38 |
| November | 3,420 | 768 | 1,200 | .755 | .84 |
| December | 3,020 | 644 | 1,070 | .673 | .78 |
| January | 2,580 | 826 | 1,210 | .761 | .88 |
| February | 12,800 | 920 | 2,340 | 1.47 | 1.53 |
| March | 8,740 | 815 | 1,750 | 1.10 | 1.27 |
| April | 10,500 | 777 | 1,570 | .987 | 1.10 |
| May | 815 | 350 | 601 | .378 | .44 |
| June | 972 | 143 | 344 | .216 | .24 |
| July | 333 | 17 | 78.6 | .049 | .06 |
| August | 58 | 10 | 21.1 | .013 | .01 |
| September | 127 | 15 | 46.5 | .029 | .03 |
| The year | 37,100 | 10 | 1,120 | .704 | 9.56 |

RAPIDAN RIVER AT RAPIDAN, VA.

LOCATION.—Staff gage 1,000 feet below highway bridge in Rapidan. Culpeper County, and 2 miles below Robinson Branch.

DRAINAGE AREA.—446 square miles.

RECORDS AVAILABLE.—February, 1925, to September, 1930.

EXTREMES.—Maximum discharge during year, 7,800 second-feet Oct. 22 (gage height, 11.95 feet); minimum, 5 second-feet Sept. 3, 4 (gage height, -0.06 foot).

1925-1930: Maximum discharge, 12,400 second-feet Nov. 16, 1926 (gage height, 16.66 feet); minimum, that of Sept. 3, 4, 1930.

REMARKS.—Records good except those for low stages, which are fair, due to regulation by small mill above gage.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1 | 104 | 382 | 227 | 486 | 443 | 242 | 285 | 253 | 108 | 48 | 21 | 9 |
| 2 | 2,760 | 344 | 308 | 443 | 382 | 258 | 253 | 223 | 102 | 70 | 22 | 7 |
| 3 | 1,160 | 326 | 422 | 422 | 644 | 242 | 269 | 223 | 103 | 98 | 18 | 6 |
| 4 | 486 | 382 | 291 | 382 | 2,020 | 227 | 285 | 223 | 105 | 54 | 18 | 6 |
| 5 | 326 | 326 | 274 | 344 | 2,090 | 212 | 269 | 209 | 89 | 62 | 19 | 6 |
| 6 | 258 | 308 | 274 | 344 | 1,160 | 227 | 595 | 195 | 94 | 53 | 13 | 158 |
| 7 | 212 | 291 | 274 | 344 | 838 | 508 | 1,320 | 209 | 134 | 51 | 9 | 46 |
| 8 | 184 | 274 | 274 | 326 | 486 | 2,530 | 640 | 209 | 128 | 41 | 16 | 26 |
| 9 | 136 | 258 | 242 | 291 | 363 | 1,100 | 510 | 182 | 130 | 36 | 10 | 16 |
| 10 | 132 | 242 | 227 | 274 | 530 | 830 | 451 | 158 | 182 | 29 | 11 | 14 |
| 11 | 146 | 242 | 227 | 274 | 464 | 685 | 413 | 182 | 147 | 29 | 9 | 20 |
| 12 | 144 | 227 | 242 | 274 | 422 | 640 | 394 | 158 | 119 | 26 | 9 | 12 |
| 13 | 141 | 227 | 242 | 274 | 443 | 550 | 375 | 147 | 108 | 24 | 9 | 15 |
| 14 | 121 | 258 | 242 | 344 | 443 | 490 | 356 | 158 | 103 | 25 | 7 | 11 |
| 15 | 119 | 227 | 242 | 464 | 382 | 451 | 338 | 195 | 102 | 28 | 8 | 25 |
| 16 | 108 | 227 | 227 | 363 | 344 | 432 | 320 | 170 | 97 | 25 | 9 | 22 |
| 17 | 112 | 227 | 212 | 308 | 382 | 432 | 338 | 158 | 74 | 22 | 10 | 19 |
| 18 | 100 | 788 | 242 | 326 | 326 | 394 | 356 | 209 | 394 | 26 | 9 | 16 |
| 19 | 119 | 530 | 258 | 308 | 326 | 394 | 320 | 285 | 195 | 22 | 10 | 14 |
| 20 | 104 | 486 | 291 | 274 | 308 | 356 | 302 | 253 | 170 | 22 | 9 | 12 |
| 21 | 96 | 402 | 242 | 344 | 291 | 338 | 285 | 158 | 119 | 21 | 7 | 10 |
| 22 | 3,620 | 363 | 242 | 363 | 291 | 338 | 285 | 147 | 102 | 16 | 7 | 14 |
| 23 | 3,060 | 363 | 258 | 422 | 274 | 338 | 269 | 158 | 98 | 14 | 7 | 12 |
| 24 | 1,210 | 363 | 260 | 382 | 291 | 320 | 253 | 119 | 103 | 14 | 9 | 7 |
| 25 | 838 | 344 | 300 | 344 | 274 | 320 | 238 | 195 | 92 | 14 | 8 | 10 |
| 26 | 644 | 308 | 363 | 291 | 274 | 338 | 238 | 143 | 84 | 15 | 7 | 7 |
| 27 | 530 | 308 | 308 | 326 | 242 | 302 | 223 | 113 | 451 | 14 | 8 | 7 |
| 28 | 443 | 291 | 464 | 308 | 242 | 285 | 253 | 110 | 110 | 14 | 19 | 9 |
| 29 | 382 | 274 | 740 | 326 | ----- | 285 | 238 | 108 | 95 | 35 | 9 | 8 |
| 30 | 382 | 242 | 644 | 212 | ----- | 285 | 223 | 105 | 89 | 58 | 7 | 8 |
| 31 | 443 | ----- | 552 | 274 | ----- | 269 | ----- | 113 | ----- | 16 | 9 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 3,620 | 96 | 601 | 1.35 | 1.56 |
| November | 788 | 227 | 328 | .735 | .82 |
| December | 740 | 212 | 310 | .695 | .80 |
| January | 486 | 212 | 337 | .756 | .87 |
| February | 2,090 | 242 | 535 | 1.20 | 1.25 |
| March | 2,530 | 212 | 472 | 1.06 | 1.22 |
| April | 1,320 | 223 | 363 | .814 | .91 |
| May | 285 | 105 | 176 | .395 | .46 |
| June | 451 | 74 | 134 | .306 | .33 |
| July | 98 | 14 | 33.0 | .074 | .09 |
| August | 22 | 7 | 11.1 | .025 | .03 |
| September | 158 | 6 | 18.4 | .041 | .05 |
| The year | 3,620 | 6 | 275 | .617 | 8.39 |

* Estimated.

YORK RIVER BASIN

NORTH ANNA RIVER NEAR DOSWELL, VA.

LOCATION.—Staff gage at old Ox Ford, half a mile above highway bridge on route U. S. No. 1 and 2 miles north of Doswell, Caroline County.

DRAINAGE AREA.—439 square miles.

RECORDS AVAILABLE.—March, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 6,270 second-feet Oct. 24 (gage height, 17.72 feet); minimum, 4 second-feet Aug. 29, Sept. 13 (gage height, 0.18 foot).

1929-30: Maximum discharge, that of Oct. 24, 1929; minimum, that of Aug. 29, Sept. 13, 1930.

REMARKS.—Records good except those for low water, which are fair, due to regulation.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|------|------------------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | 49 | 342 | 178 | 342 | 286 | 248 | 178 | 200 | 93 | 71 | 14 | 6 |
| 2..... | 402 | 314 | 168 | 286 | 328 | 248 | 178 | 189 | 86 | 72 | 9 | 6 |
| 3..... | 1,370 | 286 | 710 | 248 | 466 | 248 | 189 | 168 | 78 | 131 | 47 | 13 |
| 4..... | 406 | 357 | 534 | 248 | 1,210 | 223 | 286 | 158 | 77 | 314 | 51 | 9 |
| 5..... | 149 | 638 | 357 | 211 | 3,670 | 223 | 342 | 149 | 76 | 149 | 38 | 9 |
| 6..... | 108 | 434 | 328 | 178 | 3,470 | 223 | 466 | 140 | 68 | 76 | 18 | 9 |
| 7..... | 93 | 342 | 300 | 189 | 1,110 | 223 | 3,190 | 140 | 211 | 71 | 20 | 10 |
| 8..... | 80 | 314 | 286 | 189 | 674 | 638 | 2,430 | 140 | 372 | 57 | 17 | 9 |
| 9..... | 74 | 300 | 273 | 189 | 534 | 2,620 | 746 | 140 | 123 | 62 | 16 | 7 |
| 10..... | 69 | 273 | 248 | 189 | 466 | 674 | 466 | 131 | 108 | 53 | 14 | 7 |
| 11..... | 67 | 286 | 223 | 178 | 434 | 434 | 372 | 123 | 100 | 56 | 11 | 43 |
| 12..... | 65 | 273 | 211 | 158 | 402 | 402 | 342 | 115 | 100 | 59 | 10 | 7 |
| 13..... | 67 | 286 | 223 | 168 | 372 | 372 | 300 | 115 | 86 | 24 | 12 | 4 |
| 14..... | 69 | 314 | 223 | 248 | 568 | 314 | 273 | 115 | 81 | 44 | 12 | 6 |
| 15..... | 67 | 372 | 223 | 1,140 | 568 | 286 | 286 | 140 | 82 | 25 | 12 | 6 |
| 16..... | 67 | 402 | 223 | 782 | 434 | 273 | 273 | 149 | 77 | 35 | 10 | 9 |
| 17..... | 72 | 314 | 189 | 434 | 357 | 260 | 286 | 131 | 85 | 28 | 12 | 13 |
| 18..... | 67 | 372 | 189 | 500 | 357 | 273 | 372 | 123 | 108 | 41 | 10 | 9 |
| 19..... | 65 | 988 | 434 | 602 | 357 | 273 | 638 | 200 | 149 | 40 | 8 | 6 |
| 20..... | 65 | 602 | 638 | 328 | 342 | 260 | 434 | 248 | 108 | 28 | 7 | 6 |
| 21..... | 67 | 372 | 342 | 357 | 314 | 235 | 314 | 189 | 86 | 46 | 8 | 13 |
| 22..... | 2,320 | 342 | 235 | 434 | 300 | 223 | 286 | 140 | 73 | 44 | 8 | 8 |
| 23..... | 6,030 | 314 | 248 | 926 | 286 | 211 | 260 | 115 | 72 | 21 | 9 | 10 |
| 24..... | 5,510 | 314 | 372 | 534 | 286 | 211 | 235 | 158 | 68 | 20 | 13 | 8 |
| 25..... | 500 | 342 | 300 | 342 | 286 | 223 | 223 | 131 | 100 | 16 | 9 | 7 |
| 26..... | 300 | 342 | 235 | 286 | 286 | 235 | 211 | 158 | 108 | 9 | 9 | 7 |
| 27..... | 260 | 314 | 300 | 300 | 260 | 248 | 211 | 115 | 115 | 13 | 31 | 6 |
| 28..... | 260 | 300 | 434 | 314 | 235 | 211 | 200 | 108 | 115 | 34 | 7 | 6 |
| 29..... | 248 | 260 | 854 | 342 | ----- | 200 | 200 | 100 | 100 | 8 | 4 | 6 |
| 30..... | 235 | 235 | 710 | 300 | ----- | 200 | 200 | 100 | 69 | 7 | 5 | 7 |
| 31..... | 273 | ----- | 466 | ^a 260 | ----- | 189 | ----- | 93 | ----- | 8 | 5 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|--------------------|----------------------|
| October..... | 6,030 | 49 | 630 | 1.44 | 1.66 |
| November..... | 998 | 235 | 365 | .831 | .93 |
| December..... | 854 | 168 | 344 | .784 | .90 |
| January..... | 1,140 | 158 | 361 | .822 | .95 |
| February..... | 3,670 | 235 | 666 | 1.52 | 1.58 |
| March..... | 2,620 | 189 | 358 | .815 | .94 |
| April..... | 3,190 | 178 | 480 | 1.09 | 1.22 |
| May..... | 248 | 93 | 143 | .326 | .38 |
| June..... | 372 | 68 | 106 | .241 | .27 |
| July..... | 314 | 7 | 53.6 | .122 | .14 |
| August..... | 51 | 4 | 14.7 | .033 | .04 |
| September..... | 43 | 4 | 9.1 | .021 | .02 |
| The year..... | 6,030 | 4 | 292 | .665 | 9.03 |

^a Estimated.

SOUTH ANNA RIVER AT VONTAY, VA.

LOCATION.—Chain gage at bridge on Vontay-Montpelier highway 1,000 feet below Turkey Creek and one mile north of Vontay, Hanover County.

DRAINAGE AREA.—332 square miles.

RECORDS AVAILABLE.—December, 1926, to October, 1930 (discontinued).

EXTREMES.—Maximum discharge during period Oct. 1, 1929, to Oct. 23, 1930, 2,260 second-feet Oct. 24, 1929 (gage height, 14.90 feet); minimum, 1 second-foot Sept. 1, 28, 29, Oct. 2, 3, 5, 6, 7, 1930.

1926-1930: Maximum discharge, 4,150 second-feet Aug. 15, 1928 (gage height, 22.83 feet); minimum, that of Sept. 1, 28, 29, Oct. 2, 3, 5, 6, 7, 1930.

REMARKS.—Records good except those for low stages, which are fair, owing to regulation above.

Daily and monthly discharge, in second-feet, 1929-30

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. |
|---------|-------|-------|------|------|-------|-------|-------|-----|-------|------|------|-------|-------|
| 1----- | 142 | 167 | 100 | 300 | 316 | 154 | 117 | 131 | 52 | 99 | 44 | 1 | 3 |
| 2----- | 944 | 167 | 129 | 252 | 316 | 154 | 117 | 131 | 45 | 40 | 39 | 7 | 1 |
| 3----- | 1,200 | 141 | 412 | 222 | 428 | 154 | 129 | 120 | 46 | 126 | 29 | 14 | 1 |
| 4----- | 475 | 332 | 428 | 208 | 1,020 | 141 | 160 | 120 | 61 | 148 | 18 | 13 | 4 |
| 5----- | 154 | 548 | 237 | 180 | 1,540 | 141 | 208 | 104 | 59 | 104 | 28 | 6 | 2 |
| 6----- | 100 | 268 | 208 | 154 | 1,820 | 135 | 575 | 99 | 57 | 61 | 14 | 4 | 1 |
| 7----- | 69 | 180 | 194 | 154 | 1,450 | 141 | 1,380 | 104 | 61 | 48 | 21 | 6 | 1 |
| 8----- | 69 | 148 | 180 | 154 | 534 | 380 | 1,730 | 99 | 45 | 45 | 25 | 5 | 2 |
| 9----- | 60 | 135 | 167 | 154 | 412 | 1,320 | 854 | 94 | 61 | 38 | 21 | 17 | 4 |
| 10----- | 57 | 123 | 154 | 148 | 348 | 1,490 | 338 | 84 | 89 | 42 | 14 | 14 | 2 |
| 11----- | 51 | 117 | 129 | 141 | 300 | 364 | 263 | 79 | 79 | 28 | 4 | 9 | 3 |
| 12----- | 53 | 117 | 129 | 129 | 268 | 316 | 233 | 79 | 70 | 27 | 14 | 9 | 3 |
| 13----- | 47 | 117 | 129 | 123 | 268 | 300 | 219 | 79 | 61 | 29 | 6 | 7 | 5 |
| 14----- | 51 | 129 | 148 | 332 | 348 | 222 | 205 | 79 | 44 | 21 | 9 | 12 | 4 |
| 15----- | 52 | 141 | 160 | 782 | 364 | 194 | 205 | 89 | 47 | 33 | 16 | 3 | 4 |
| 16----- | 55 | 222 | 160 | 628 | 300 | 180 | 192 | 99 | 57 | 33 | 6 | 14 | 10 |
| 17----- | 48 | 167 | 141 | 428 | 237 | 180 | 179 | 99 | 50 | 25 | 10 | 6 | 18 |
| 18----- | 45 | 180 | 154 | 601 | 222 | 167 | 278 | 109 | 52 | 16 | 22 | 9 | 7 |
| 19----- | 50 | 562 | 364 | 588 | 222 | 180 | 401 | 205 | 79 | 16 | 13 | 11 | 6 |
| 20----- | 45 | 380 | 520 | 380 | 208 | 167 | 369 | 323 | 79 | 17 | 11 | 6 | 7 |
| 21----- | 49 | 208 | 237 | 284 | 194 | 154 | 219 | 192 | 53 | 8 | 11 | 4 | 6 |
| 22----- | 1,620 | 160 | 194 | 412 | 194 | 141 | 192 | 109 | 32 | 9 | 13 | 3 | 8 |
| 23----- | 2,060 | 148 | 180 | 717 | 180 | 141 | 179 | 89 | 41 | 12 | 20 | 2 | 9 |
| 24----- | 2,200 | 160 | 268 | 642 | 194 | 129 | 166 | 74 | 48 | 6 | 20 | 3 | ----- |
| 25----- | 2,040 | 194 | 237 | 348 | 194 | 129 | 166 | 126 | 53 | 16 | 16 | 2 | ----- |
| 26----- | 268 | 194 | 194 | 284 | 180 | 141 | 142 | 109 | 57 | 18 | 27 | 5 | ----- |
| 27----- | 180 | 167 | 237 | 268 | 167 | 160 | 131 | 94 | 114 | 11 | 25 | 3 | ----- |
| 28----- | 148 | 154 | 332 | 284 | 167 | 148 | 136 | 79 | 94 | 6 | 17 | 2 | ----- |
| 29----- | 129 | 141 | 628 | 332 | ----- | 129 | 136 | 47 | 46 | 22 | 12 | 1 | ----- |
| 30----- | 123 | 117 | 601 | 316 | ----- | 117 | 131 | 57 | 48 | 61 | 9 | 7 | ----- |
| 31----- | 141 | ----- | 460 | 316 | ----- | 123 | ----- | 61 | ----- | 30 | 7 | ----- | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-------------------|---------|---------|------|------------------|-------------------|
| 1929-30 | | | | | |
| October----- | 2,200 | 45 | 410 | 1.23 | 1.42 |
| November----- | 562 | 117 | 199 | .59 ^a | .67 |
| December----- | 628 | 100 | 252 | .759 | .88 |
| January----- | 782 | 123 | 331 | .99 ^a | 1.15 |
| February----- | 1,820 | 167 | 443 | 1.33 | 1.38 |
| March----- | 1,490 | 117 | 258 | .77 ^a | .90 |
| April----- | 1,730 | 117 | 325 | .979 | 1.09 |
| May----- | 323 | 47 | 108 | .32 ^a | .37 |
| June----- | 114 | 32 | 59.3 | .179 | .20 |
| July----- | 148 | 6 | 38.5 | .116 | .13 |
| August----- | 44 | 4 | 17.5 | .05 ^a | .06 |
| September----- | 17 | 1 | 6.8 | .020 | .02 |
| The year----- | 2,200 | 1 | 203 | .611 | 8.27 |
| 1930 | | | | | |
| October 1-23----- | 18 | 1 | 4.8 | .014 | .01 |

^a Interpolated.

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, 1930

| Date | Stream | Tributary to or diverting from— | Locality | Gage height | Discharge |
|----------------------|--------------------------------|---------------------------------|--|-------------|-----------|
| | | | | Feet | Sec.-ft. |
| July 3 | Kennebec River..... | Atlantic Ocean..... | Augusta, Me..... | 5.67 | 9,240 |
| 9 | do..... | do..... | do..... | 5.20 | 6,840 |
| 16 | do..... | do..... | do..... | 5.31 | 7,540 |
| Aug. 8 | do..... | do..... | do..... | 4.29 | 4,880 |
| Sept. 19 | do..... | do..... | do..... | 3.89 | 3,410 |
| 19 | do..... | do..... | Bingham, Me..... | 6.50 | 2,900 |
| Aug. 26 | Housatonic River..... | do..... | Between dam and power house of Connecticut Power Co., at Falls Village, Conn. | | * 2.1 |
| Nov. 5 | Glens Falls feeder.... | Hudson River..... | Gage No. 1, Glens Falls, N. Y. | 281.21 | 166 |
| Apr. 25 | do..... | do..... | do..... | 280.06 | 152 |
| May 19 | do..... | do..... | do..... | 280.39 | 130 |
| June 11 | do..... | do..... | do..... | 280.96 | 129 |
| July 14 | do..... | do..... | do..... | 281.94 | 187 |
| Aug. 16 | do..... | do..... | do..... | 281.96 | 174 |
| Sept. 7 | do..... | do..... | do..... | 282.02 | 204 |
| 26 | do..... | do..... | do..... | 281.53 | 150 |
| 26 ^b | do..... | do..... | do..... | 281.69 | 215 |
| Nov. 5 | do..... | do..... | Gage No. 2, Glens Falls, N. Y. | 280.06 | 157 |
| Apr. 25 | do..... | do..... | do..... | | 147 |
| May 19 | do..... | do..... | do..... | 279.93 | 129 |
| June 11 | do..... | do..... | do..... | 280.44 | 127 |
| July 14 | do..... | do..... | do..... | 280.84 | 168 |
| Aug. 16 | do..... | do..... | do..... | 280.70 | 170 |
| Sept. 4 ^b | do..... | do..... | do..... | 280.79 | 175 |
| 7 | do..... | do..... | do..... | 280.67 | 192 |
| 26 | do..... | do..... | do..... | 280.47 | 180 |
| 26 ^b | do..... | do..... | do..... | 280.48 | 182 |
| Nov. 5 | do..... | do..... | Gage No. 3, Glens Falls, N. Y. | 279.23 | 160 |
| Apr. 25 | do..... | do..... | do..... | | 143 |
| May 19 | do..... | do..... | do..... | 279.84 | 130 |
| June 11 | do..... | do..... | do..... | 280.19 | 116 |
| July 14 | do..... | do..... | do..... | 279.59 | 138 |
| Aug. 16 | do..... | do..... | do..... | 279.12 | 157 |
| Sept. 4 ^b | do..... | do..... | do..... | 279.71 | 176 |
| 7 | do..... | do..... | do..... | 279.41 | 173 |
| 26 | do..... | do..... | do..... | 279.65 | 167 |
| 26 ^b | do..... | do..... | do..... | 279.73 | 171 |
| May 19 | do..... | do..... | Dunhams Basin, N. Y. | 147.15 | 114 |
| Oct. 3 | Schuylkill River..... | Delaware River..... | Former gaging station above Fairmont Dam, Philadelphia, Pa. | 3.33 | 20,200 |
| 3 | do..... | do..... | do..... | 2.96 | 17,200 |
| 4 | do..... | do..... | do..... | 1.83 | 8,760 |
| 4 | do..... | do..... | do..... | 1.72 | 8,150 |
| 5 | do..... | do..... | do..... | 1.30 | 5,570 |
| 5 | do..... | do..... | do..... | 1.20 | 4,910 |
| 18 | do..... | do..... | do..... | .29 | 1,180 |
| 18 | do..... | do..... | do..... | .27 | 1,090 |
| Nov. 13 | do..... | do..... | do..... | .33 | 1,140 |
| Oct. 22 | Canacadea Creek..... | Canistota River..... | Hornell, N. Y. | .95 | 14.3 |
| 23 | do..... | do..... | do..... | 1.65 | 112 |
| Mar. 15 | do..... | do..... | do..... | 1.86 | 135 |
| Dec. 9 | Chesapeake & Ohio Canal. | North branch of Potomac River. | Gaging station on North Branch of Potomac River near Cumberland ^d , Md. | 7.72 | 27.6 |
| Jan. 10 | do..... | do..... | do..... | 7.60 | 21.0 |
| Mar. 13 | do..... | do..... | do..... | 8.12 | 32.7 |
| Apr. 30 | do..... | do..... | do..... | 7.89 | 28.0 |
| May 27 | do..... | do..... | do..... | 8.33 | 49.8 |
| July 23 | do..... | do..... | do..... | 7.92 | 32.7 |
| Apr. 24 | South branch of Potomac River. | Potomac River..... | Highway bridge 2¾ miles north of Moorefield, W. Va. | 1.78 | 586 |

* Total leakage and seepage losses from fore bay and power canal.

^b Made by engineers of New York State Department of Public Works.

MISCELLANEOUS DISCHARGE MEASUREMENTS—Continued

Miscellaneous discharge measurements in north Atlantic slope drainage basins during the year ending September 30, 1930—Continued

| Date | Stream | Tributary to or diverting from— | Locality | Gage height | Discharge |
|----------|--------------------------------------|---------------------------------|---|-------------|-----------------|
| | | | | <i>Feet</i> | <i>Sec.-ft.</i> |
| Mar. 11 | South branch of Potomac River. | Potomac River..... | Grace Bridge, 2½ miles southwest of Springfield, W. Va. | 8.79 | 2,160 |
| Apr. 18 | Hite's Spring..... | Hawksbill Creek..... | 1½ miles east of Luray, Va. | | 6.6 |
| 18 | Yager's Spring..... | do..... | 1 mile north of Luray, Va. | | 12.1 |
| 18 | Harnsberger Spring Nos. 1, 2. | do..... | South of Luray, Va. | | 1.0 |
| 18 | Harnsberger Spring No. 3. | do..... | do..... | | 0.8 |
| 19 | Price's Spring No. 1. | do..... | 2 miles southwest of Luray, Va. | | 3.1 |
| 19 | Price's Spring No. 2. | do..... | do..... | | 1.4 |
| Sept. 10 | Opequon Creek..... | Potomac River..... | 0.4 mile west of Blairton, W. Va. | | 43.6 |
| June 6 | Chesapeake & Ohio Canal. | do..... | Point of Rocks, Md. | | 83 |
| 30 | Great Seneca Creek... | Seneca Creek..... | Dawsonville, Md. | | 1.6 |
| 30 | Seneca Creek..... | Potomac River..... | Seneca, Md. | | 1.2 |
| 30 | Little Seneca Creek... | Seneca Creek..... | Dawsonville, Md. | | .08 |
| Mar. 25 | Chesapeake & Ohio Canal. | Potomac River..... | Chain Bridge near Washington, D. C. | | 264 |
| June 5 | do..... | do..... | do..... | | 340 |
| July 14 | do..... | do..... | do..... | | 242 |
| 22 | do..... | do..... | do..... | | 306 |
| 29 | do..... | do..... | do..... | | 317 |
| 29 | do..... | do..... | do..... | | 283 |
| Aug. 15 | do..... | do..... | do..... | | 277 |
| 5 | Northwest branch of Anacostia River. | Anacostia River..... | Half a mile above dam at Burnt Mills near Colesville, Md. | | 1.0 |

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