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SURFACE WATER SUPPLY *of the* UNITED STATES 1931

PART 2 SOUTH ATLANTIC SLOPE AND EASTERN GULF OF MEXICO BASINS

NATHAN C. GROVER, Chief Hydraulic Engineer
E. D. BURCHARD, J. J. DIRZULAITIS, A. E. JOHNSON
W. R. KING, C. E. McCASHIN, and D. S. WALLACE
District Engineers

Prepared in cooperation with the States of
ALABAMA, FLORIDA, MISSISSIPPI, NORTH CAROLINA
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Water Resource Branch,
Geological Survey,
Box 3106, Capitol Station
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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.....

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SURFACE WATER SUPPLY OF SOUTH ATLANTIC SLOPE AND EASTERN GULF OF MEXICO BASINS, 1931

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, 1931.

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, 1895-1932

| | | | |
|----------------|---------------|----------------|----------------|
| 1895..... | \$12, 500. 00 | 1920..... | \$175, 000. 00 |
| 1896..... | 24, 500. 00 | 1921-1923..... | 180, 000. 00 |
| 1897-1899..... | 50, 000. 00 | 1924-25..... | 170, 000. 00 |
| 1900..... | 70, 000. 00 | 1926..... | 165, 000. 00 |
| 1901-2..... | 100, 000. 00 | 1927..... | 151, 000. 00 |
| 1903-1906..... | 200, 000. 00 | 1928..... | 147, 000. 00 |
| 1907..... | 150, 000. 00 | 1929..... | 270, 500. 00 |
| 1908-1910..... | 100, 000. 00 | 1930..... | 275, 000. 00 |
| 1911-1917..... | 150, 000. 00 | 1931..... | 565, 000. 00 |
| 1918..... | 175, 000. 00 | 1932..... | 711, 000. 00 |
| 1919..... | 148, 244. 10 | | |

In the execution of the work many private and State organizations have cooperated, either by furnishing data or by assisting in collecting data. Acknowledgments for cooperation of the first kind are made in connection with the description of each station affected; cooperation of the second kind is acknowledged on page 10.

Measurements of stream flow have been made at about 6,270 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July, 1931, 2,660 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 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-foot, gallons per minute, miner’s inches, and discharge in second-foot 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-foot, second-foot per square mile, run-off in inches, and acre-feet. They may be defined as follows:

“Second-foot” 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-foot 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, 1930, and ending September 30, 1931. At the beginning of January in most parts of the United States much of the precipitation in the preceding three months is stored in 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 pos-

sibly 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 deter-

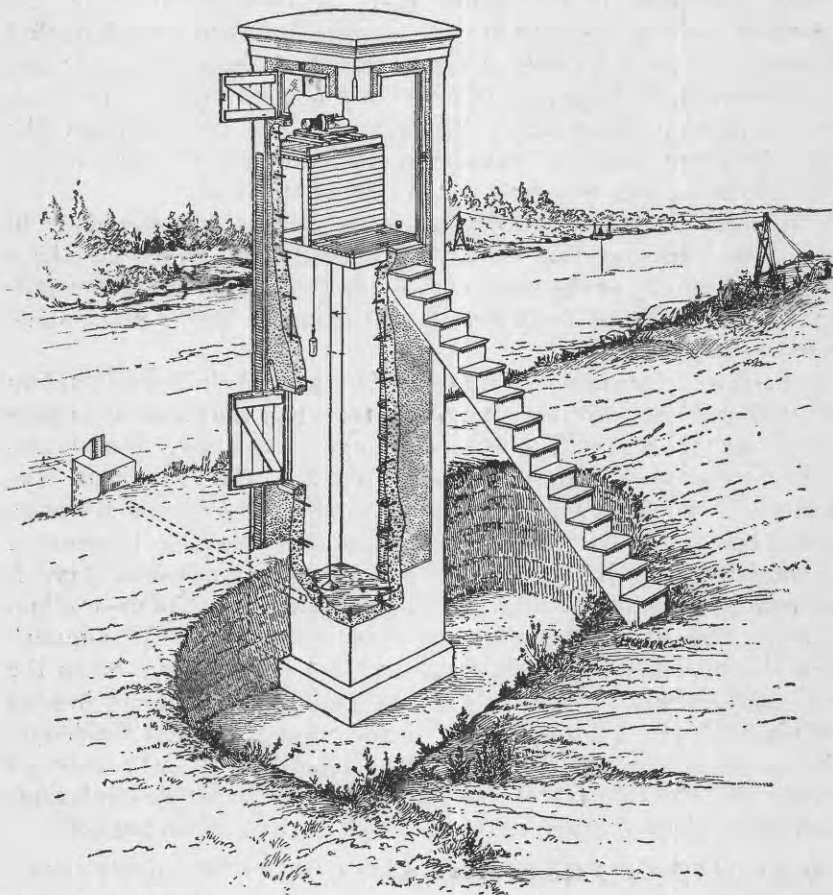


FIGURE 1.—Typical river-measurement station showing concrete well and house for water-stage recorder and staff gages, cable, and car

mining the daily flow. The records of stage are obtained either from direct readings of 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.

Rating tables giving the discharge for any stage are prepared from the discharge measurements. The application of the daily gage

height to these rating tables gives the daily discharge from which the monthly and yearly mean discharge is computed.

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

The description of the station gives, in addition to statements regarding location and type of gage, information as to diversions that decrease the flow at the gage, artificial regulation, maximum and minimum recorded discharge, and the accuracy of the records. The maximum discharge given under "Extremes" does not represent the crest discharge unless a water-stage recorder was in operation or 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 the true mean discharge for the day. If such stations are equipped with water-stage recorders, the mean daily discharge may be obtained by averaging discharge at regular intervals during the day or by using the discharge integrator, an instrument for obtaining mean daily discharge from a continuous gage-height graph and containing as an essential element the rating curve of the station.

In the table of monthly discharge the column headed "Maximum" gives the maximum daily discharge and not the discharge when the water surface was at crest height. Likewise, in the column headed "Minimum" the quantity given is the minimum daily discharge. The column headed "Mean" is the average flow in cubic feet per second during the month. On the 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 run-off in inches may be subject to gross errors caused by the inclusion of large noncontributing

districts in the measured drainage area, by lack of information concerning water diverted for irrigation or other use, or by inability to interpret the effect of artificial regulation of the flow of the river above the station. "Second-feet per square mile" and "run-off in inches" are therefore not computed if such errors appear probable. The computations are also omitted for stations on streams draining areas in which the annual rainfall is less than 20 inches.

The table of monthly discharge gives a general idea of the flow at the station. The table of daily discharge allows more detailed studies of the variation in flow. It should be borne in mind, however, that the observations in each succeeding year may be expected to throw new light on data previously published.

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

3. Ohio River Basin.

4. St. Lawrence River Basin.

5. Hudson Bay and upper Mississippi River Basins.

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., 603 State Public Works Building.
 Trenton, N. J., 710 Trenton Trust Building.
 Harrisburg, Pa., 604 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.
 Tuscaloosa, Ala., Post Office Building.
 Chattanooga, Tenn., 630 Power Building.
 Columbus, Ohio, Engineering Experiment Station, Ohio State University.
 Indianapolis, Ind., 319 Federal Building.
 Urbana, Ill., 302 University New Agricultural 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.
 Sante 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 more than 6,270 points in the United States, and the data obtained have been published in the reports tabulated below.

Stream-flow data reports of the United States Geological Survey

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

| Report | Character of data | Year |
|---------------|--|------------------------|
| 10th A, pt. 2 | Descriptive information only | |
| 11th A, pt. 2 | Monthly discharge and descriptive information | 1884 to Sept., 1890. |
| 12th A, pt. 2 | do | 1891 to June 30, 1891. |
| 13th A, pt. 3 | Mean discharge in second-feet | 1884 to Dec. 31, 1892. |
| 14th A, pt. 2 | Monthly discharge (long-time records, 1871 to 1893) | 1888 to Dec. 31, 1893. |
| B 131 | Descriptions, measurements, gage heights, and ratings | 1893 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) | 1895 and 1896. |
| W 15 | Descriptions, measurements, and gage heights, eastern United States, eastern Mississippi River, and Missouri River above junction with Kansas River. | 1897. |
| W 16 | Descriptions, measurements, and gage heights, western Mississippi River below junction of Missouri and Platte Rivers, and western United States. | 1897. |
| 19th A, pt. 4 | Descriptions, measurements, ratings, and monthly discharge (also some long-time records) | 1897. |
| W 27 | Measurements, ratings, and gage heights, eastern United States, eastern Mississippi River, and Missouri River. | 1898. |
| W 28 | Measurements, ratings, and gage heights, Arkansas River, and western United States. | 1898. |
| 20th A, pt. 4 | Monthly discharge (also for many earlier years) | 1898 |
| W 35 to 39 | Descriptions, measurements, gage heights, and ratings | 1899 |
| 21st A, pt. 4 | Monthly discharge | 1899 |
| W 47 to 52 | Descriptions, measurements, gage heights, and ratings | 1900 |
| 22d A, pt. 4 | Monthly discharge | 1900 |
| W 55, 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 | 1907-8. |
| W 261 to 272 | do | 1909. |
| W 281 to 292 | do | 1910. |
| W 301 to 312 | do | 1911. |
| W 321 to 332 | do | 1912. |
| W 351 to 362 | do | 1913. |
| W 381 to 394 | do | 1914. |
| W 401 to 414 | do | 1915. |
| W 431 to 444 | do | 1916. |
| W 451 to 464 | do | 1917. |
| W 471 to 484 | do | 1918. |
| W 501 to 514 | do | 1919-20. |
| W 521 to 534 | do | 1921. |
| W 541 to 554 | do | 1922. |
| W 561 to 574 | do | 1923. |
| W 581 to 594 | do | 1924. |
| W 601 to 614 | do | 1925. |
| W 621 to 634 | do | 1926. |
| W 641 to 654 | do | 1927. |
| W 661 to 674 | do | 1928. |
| W 681 to 694 | do | 1929. |
| W 696 to 709 | do | 1930. |
| W 711 to 724 | do | 1931. |

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 1931. The data for any particular station will, as a rule, 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 those years.

Numbers of water-supply papers containing results of stream measurements, 1890-1931

[For basins included see p. 5]

| Year | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12-A | 12-B | 12-C |
|--------|--------------|------------|--------|--------|------------|------------|------------|--------|------------|------------|----------|--------|--------|------------|
| 1890 * | 35 | 35, 36 | 36 | 36 | 36 | 36, 37 | 37 | 37 | 37, 38 | 38, * 39 | 38, * 39 | 38 | 38 | 38 |
| 1890 * | 47, 48 | 48 | 48, 49 | 49 | 49 | 49, 50 | 50 | 50 | 50 | 50 | 51 | 51 | 51 | 51 |
| 1891 | 65, 75 | 65, 75 | 65, 75 | 65, 75 | 65, 75 | 66, 75 | 66, 75 | 66, 75 | 66, 75 | 66, 75 | 66, 75 | 66, 75 | 66, 75 | 66, 75 |
| 1892 | 82, 83 | * 82, 83 | 82, 83 | 82, 83 | * 82, 83 | 82, 83 | * 82, 83 | 82, 83 | 82, 83 | 82, 83 | 82, 83 | 82, 83 | 82, 83 | 82, 83 |
| 1893 | 97 | * 97, 98 | 98 | 97 | * 98, 99 | 99 | 98, 99 | 99 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1894 | * 124, * 125 | * 126, 127 | 128 | 129 | * 128, 130 | 130, * 131 | * 128, 131 | 132 | 133 | 133, * 134 | 134 | 135 | 135 | 135 |
| 1895 | * 166, * 167 | * 167, 168 | 169 | 170 | 171 | 172 | * 168, 173 | 174 | 175, * 177 | 176, * 177 | 177 | 178 | 178 | * 177, 178 |
| 1896 | * 201, * 202 | * 203, 204 | 205 | 206 | 207 | 208 | * 206, 209 | 210 | 211, * 213 | 212, * 213 | 213 | 214 | 214 | 214 |
| 1897-8 | 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250, * 251 | 251 | 252 | 252 | 252 |
| 1899 | 281 | 282 | 283 | 284 | 285 | 286 | 287 | 288 | 289 | 290, * 291 | 291 | 292 | 292 | 292 |
| 1900 | 285 | 286 | 287 | 288 | 289 | 290 | 291 | 292 | 293 | 294, * 295 | 295 | 296 | 296 | 296 |
| 1901 | 301 | 302 | 303 | 304 | 305 | 306 | 307 | 308 | 309 | 310 | 311 | 312 | 312 | 312 |
| 1902 | 321 | 322 | 323 | 324 | 325 | 326 | 327 | 328 | 329 | 330 | 331 | 332-A | 332-B | 332-C |
| 1903 | 351 | 352 | 353 | 354 | 355 | 356 | 357 | 358 | 359 | 360 | 361 | 362-A | 362-B | 362-C |
| 1904 | 381 | 382 | 383 | 384 | 385 | 386 | 387 | 388 | 389 | 390 | 391 | 392 | 393 | 394 |
| 1905 | 401 | 402 | 403 | 404 | 405 | 406 | 407 | 408 | 409 | 410 | 411 | 412 | 413 | 414 |
| 1906 | 431 | 432 | 433 | 434 | 435 | 436 | 437 | 438 | 439 | 440 | 441 | 442 | 443 | 444 |
| 1907 | 461 | 462 | 463 | 464 | 465 | 466 | 467 | 468 | 469 | 470 | 471 | 472 | 473 | 474 |
| 1908 | 491 | 492 | 493 | 494 | 495 | 496 | 497 | 498 | 499 | 500 | 501 | 502 | 503 | 504 |
| 1909 | 511 | 512 | 513 | 514 | 515 | 516 | 517 | 518 | 519 | 520 | 521 | 522 | 523 | 524 |
| 1910 | 531 | 532 | 533 | 534 | 535 | 536 | 537 | 538 | 539 | 540 | 541 | 542 | 543 | 544 |
| 1911 | 551 | 552 | 553 | 554 | 555 | 556 | 557 | 558 | 559 | 560 | 561 | 562 | 563 | 564 |
| 1912 | 571 | 572 | 573 | 574 | 575 | 576 | 577 | 578 | 579 | 580 | 581 | 582 | 583 | 584 |
| 1913 | 591 | 592 | 593 | 594 | 595 | 596 | 597 | 598 | 599 | 600 | 601 | 602 | 603 | 604 |
| 1914 | 611 | 612 | 613 | 614 | 615 | 616 | 617 | 618 | 619 | 620 | 621 | 622 | 623 | 624 |
| 1915 | 631 | 632 | 633 | 634 | 635 | 636 | 637 | 638 | 639 | 640 | 641 | 642 | 643 | 644 |
| 1916 | 651 | 652 | 653 | 654 | 655 | 656 | 657 | 658 | 659 | 660 | 661 | 662 | 663 | 664 |
| 1917 | 671 | 672 | 673 | 674 | 675 | 676 | 677 | 678 | 679 | 680 | 681 | 682 | 683 | 684 |
| 1918 | 691 | 692 | 693 | 694 | 695 | 696 | 697 | 698 | 699 | 700 | 701 | 702 | 703 | 704 |
| 1919 | 711 | 712 | 713 | 714 | 715 | 716 | 717 | 718 | 719 | 720 | 721 | 722 | 723 | 724 |

* Rating tables and index to Water-Supply Papers 35-39 contained in Water-Supply Paper 39. Monthly discharge for 1890 in Twenty-first Annual Report, Part 4.

* James River only.

* Gallatin River.

* Great and Gunnison Rivers and Colorado River above junction with Gunnison.

* Mohave River only.

* Kings and Kern Rivers and south Pacific slope basins.

* Reaping 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.

* Monthly discharges for 1900 in Twenty-second Annual Report, Part 4.

* Wisconsin and Sanuykull Rivers to James River.

* Sagdo River.

* Rogue, Umpqua, and Siletz Rivers only.

* Below junction with Gila River.

* The Great Basin in California, except Truckee and Carson River Basins.

* Platte and Kansas Rivers.

* Susquehanna River to Yorkin River, inclusive.

* Hudson River to Delaware River, inclusive.

* New England rivers only.

* Hudson Bay only.

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

* Tributaries of Mississippi River from east.

* Leup and Platte Rivers near Columbus, Nebr., and all tributaries below junction with Platte River.

COOPERATION

The work in the several States was done under cooperative agreements as follows: In Alabama after July 1, 1931, with the Alabama Geological Survey, Walter B. Jones, State geologist; in Florida with the Florida Geological Survey, Herman Gunter, State geologist, the State Road Department, Robert W. Bentley, chairman, and the Okeechobee Flood Control District, A. W. Young, executive secretary; in Mississippi with the Mississippi Geological Survey, E. N. Lowe, director; in North Carolina with the North Carolina Department of Conservation and Development, John W. Harrelson, director; in South Carolina with the South Carolina State Highway Department, Ben M. Sawyer, chief highway commissioner, and the City of Spartanburg Water Works; and in Virginia with the Conservation and Development Commission of Virginia, W. E. Carson, chairman.

Acknowledgment is due also to the Corps of Engineers, United States Army, for financial assistance in collecting records published herein.

Assistance in collecting records was also rendered by the following municipalities, organizations, corporations, and individuals: In Alabama by the Alabama Power Co.; in Florida by the Florida Power Corporation, and J. N. McDonald; in Georgia by the City Council of Augusta, the Columbus Electric & Power Co., Commonwealth & Southern Corporation, Crisp County Power Commission, and Hardaway Contracting Co.; in North Carolina by the cities of Asheville, Burlington, Durham, Graham, Greensboro, High Point, and Raleigh, the Appalachian Electric Power Co., Carolina Power & Light Co., Cliffside Mills, Henry River Manufacturing Co., Roanoke River Power Co., and Virginia-Carolina Power Co.; in South Carolina by the Broad River Power Co., Columbia Railway & Navigation Co., Commonwealth & Southern Corporation, and Lexington Water Power Co.; in Virginia by the Appalachian Electric Power Co., Virginia Electric & Power Co., and Virginia Public Service Co.

DIVISION OF WORK

The data for the stations in the several States were collected and prepared for publication as follows: In Alabama, Georgia (except for the Savannah and Suwannee River Basins), Mississippi, and for the Apalachicola and Choctawhatchee River Basins in Florida by C. E. McCashin, district engineer, assisted by D. M. Corbett, J. L. Saunders, W. S. Eisenlohr, jr., C. H. Prior, E. J. Tripp, I. E. Anderson, and Miss Annie L. Hardin; in Florida (except for the Apalachicola and Choctawhatchee River Basins) and for the Suwannee River Basin in Georgia by D. S. Wallace, district engineer, assisted by V. Alexander and Miss Louis Volland; in North Carolina by E. D. Burchard, dis-

district engineer, assisted by F. M. Bell, R. W. Sundstrom, R. F. Cabell, H. A. Taylor, A. G. Hely, and Mrs. Effie T. Workman; in South Carolina and for the Savannah River Basin in Georgia by Albert E. Johnson, district engineer, assisted by F. W. Wagener and Mrs. Alice E. McCravy, except data for the Savannah River Basin prior to August, 1931, which were collected under the direction of Warren R. King, district engineer; in Virginia by J. J. Dirzulaitis, district engineer, assisted by O. D. Mussey, F. F. Schrader, A. R. Green, T. F. Hanly, A. D. Ash, H. C. Eagle, E. A. Gdaniec, P. N. Shackelford, and Miss Sue F. Norris.

The records were reviewed and the manuscript assembled by F. L. Le Mert.

GAGING-STATION RECORDS

JAMES RIVER BASIN

JACKSON RIVER AT BARBER, VA.

LOCATION.—Chain gage at Smiths highway bridge, half a mile from Barber, Alleghany County, and half a mile below Falling Spring Creek.

DRAINAGE AREA.—409 square miles.

RECORDS AVAILABLE.—April, 1925, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,540 second-feet Apr. 5 (gage height, 7.40 feet); minimum, 58 second-feet Oct. 1-6 (gage height, 2.90 feet).

1925-1931: Maximum discharge, 6,850 second-feet Nov. 16, 1926 (gage height, 10.90 feet); minimum, 58 second-feet at times in September and October, 1930 (gage height, 2.90 feet).

Maximum stage known, about 25.6 feet March, 1913.

REMARKS.—Records good. Discharge estimated for Nov. 28, 29, Dec. 17 to Jan. 5, because of ice.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|-------|-------|-------|-------|------|------|-------|
| 1. | 58 | 68 | 80 | 100 | 106 | 166 | 1,270 | 377 | 328 | 122 | 99 | 146 |
| 2. | 60 | 70 | 80 | 80 | 101 | 296 | 1,430 | 328 | 296 | 113 | 188 | 136 |
| 3. | 58 | 70 | 80 | 80 | 101 | 360 | 880 | 312 | 238 | 108 | 772 | 136 |
| 4. | 60 | 73 | 78 | 100 | 97 | 312 | 1,610 | 281 | 212 | 156 | 411 | 126 |
| 5. | 58 | 75 | 83 | 160 | 88 | 266 | 2,240 | 252 | 200 | 156 | 940 | 121 |
| 6. | 60 | 72 | 115 | 722 | 85 | 225 | 1,610 | 225 | 188 | 126 | 542 | 115 |
| 7. | 61 | 68 | 177 | 502 | 85 | 212 | 1,270 | 266 | 312 | 177 | 360 | 108 |
| 8. | 64 | 68 | 146 | 296 | 85 | 296 | 1,130 | 772 | 360 | 156 | 266 | 97 |
| 9. | 66 | 68 | 115 | 212 | 99 | 411 | 1,130 | 628 | 328 | 212 | 200 | 97 |
| 10. | 64 | 70 | 97 | 177 | 238 | 344 | 1,000 | 502 | 266 | 177 | 177 | 95 |
| 11. | 64 | 70 | 87 | 146 | 296 | 296 | 880 | 446 | 225 | 166 | 166 | 94 |
| 12. | 61 | 70 | 83 | 136 | 238 | 252 | 722 | 446 | 200 | 146 | 166 | 88 |
| 13. | 62 | 82 | 76 | 136 | 200 | 238 | 628 | 428 | 188 | 126 | 156 | 92 |
| 14. | 64 | 85 | 72 | 108 | 188 | 225 | 542 | 446 | 188 | 117 | 146 | 88 |
| 15. | 64 | 76 | 70 | 104 | 188 | 584 | 502 | 502 | 446 | 119 | 126 | 95 |
| 16. | 64 | 78 | 67 | 99 | 188 | 940 | 411 | 446 | 502 | 101 | 121 | 95 |
| 17. | 64 | 80 | 65 | 94 | 344 | 674 | 360 | 411 | 411 | 117 | 113 | 92 |
| 18. | 66 | 82 | 75 | 108 | 722 | 502 | 328 | 377 | 344 | 117 | 106 | 88 |
| 19. | 64 | 78 | 75 | 101 | 628 | 428 | 296 | 344 | 281 | 104 | 108 | 87 |
| 20. | 67 | 73 | 75 | 95 | 483 | 360 | 266 | 328 | 238 | 126 | 108 | 85 |
| 21. | 67 | 78 | 80 | 95 | 377 | 296 | 252 | 428 | 212 | 115 | 106 | 146 |
| 22. | 64 | 70 | 70 | 83 | 296 | 281 | 360 | 584 | 188 | 106 | 146 | 124 |
| 23. | 66 | 67 | 65 | 112 | 252 | 281 | 1,590 | 1,350 | 188 | 122 | 502 | 103 |
| 24. | 70 | 68 | 65 | 90 | 212 | 502 | 1,060 | 1,130 | 188 | 200 | 360 | 117 |
| 25. | 70 | 67 | 60 | 104 | 200 | 502 | 880 | 824 | 177 | 188 | 238 | 122 |
| 26. | 66 | 67 | 60 | 97 | 166 | 628 | 722 | 674 | 146 | 156 | 212 | 200 |
| 27. | 68 | 64 | 135 | 88 | 156 | 584 | 674 | 502 | 146 | 126 | 188 | 238 |
| 28. | 72 | 60 | 200 | 101 | 146 | 502 | 628 | 428 | 146 | 126 | 177 | 177 |
| 29. | 72 | 60 | 150 | 126 | ----- | 2,340 | 502 | 360 | 126 | 122 | 200 | 146 |
| 30. | 72 | 64 | 130 | 136 | ----- | 1,430 | 428 | 328 | 122 | 108 | 177 | 126 |
| 31. | 72 | ----- | 120 | 113 | ----- | 880 | ----- | 296 | ----- | 101 | 156 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 72 | 58 | 64.8 | 0.158 | 0.18 |
| November | 85 | ----- | 71.4 | .175 | .20 |
| December | ----- | ----- | 94.5 | .231 | .27 |
| January | 722 | ----- | 152 | .372 | .43 |
| February | 722 | 85 | 227 | .555 | .58 |
| March | 2,340 | 166 | 504 | 1.23 | 1.42 |
| April | 2,240 | 252 | 847 | 2.07 | 2.31 |
| May | 1,350 | 225 | 485 | 1.19 | 1.37 |
| June | 502 | 122 | 246 | .601 | .67 |
| July | 212 | 101 | 136 | .333 | .38 |
| August | 940 | 99 | 249 | .609 | .70 |
| September | 238 | 85 | 119 | .291 | .32 |
| The year | 2,340 | 58 | 266 | .650 | 8.83 |

JAMES RIVER AT LICK RUN, VA.

LOCATION.—Water-stage recorder at highway bridge at Lick Run, Botetourt County, three-quarters of a mile below junction of Cowpasture and Jackson Rivers.

DRAINAGE AREA.—1,370 square miles.

RECORDS AVAILABLE.—April, 1925, to September, 1931.

EXTREMES.—Maximum discharge during year, 8,890 second-feet Mar. 29 (gage height, 8.32 feet); minimum, 153 second-feet Oct. 11 (gage height, 1.51 feet). 1925–1931: Maximum discharge, 27,200 second-feet Nov. 18, 1929 (gage height, 17.75 feet); minimum, that of Oct. 11, 1930.

Flood of September, 1877, reached a stage of 29.1 feet, and that of March, 1913, reached a stage of 27.2 feet.

REMARKS.—Records excellent. Discharge estimated for Dec. 30 to Jan. 4 because of ice.

Daily and monthly discharge, in second-feet, 1930–31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| 1..... | 165 | 201 | 228 | 290 | 320 | 644 | 4,430 | 1,200 | 1,250 | 378 | 342 | 374 |
| 2..... | 165 | 195 | 228 | 220 | 304 | 938 | 5,960 | 1,080 | 1,300 | 412 | 540 | 355 |
| 3..... | 165 | 201 | 217 | 210 | 300 | 1,110 | 3,630 | 991 | 1,040 | 364 | 2,670 | 437 |
| 4..... | 165 | 210 | 214 | 240 | 296 | 1,050 | 3,380 | 902 | 866 | 364 | 1,300 | 407 |
| 5..... | 162 | 224 | 204 | 828 | 288 | 902 | 6,050 | 812 | 774 | 452 | 1,560 | 351 |
| 6..... | 168 | 217 | 382 | 3,430 | 280 | 774 | 5,000 | 742 | 723 | 432 | 1,720 | 304 |
| 7..... | 168 | 228 | 708 | 2,480 | 272 | 698 | 5,460 | 780 | 853 | 427 | 1,030 | 284 |
| 8..... | 165 | 210 | 593 | 1,350 | 276 | 960 | 4,690 | 4,950 | 983 | 452 | 732 | 269 |
| 9..... | 168 | 201 | 420 | 880 | 312 | 1,550 | 4,370 | 3,890 | 1,040 | 536 | 574 | 253 |
| 10..... | 168 | 204 | 325 | 698 | 514 | 1,400 | 4,050 | 2,570 | 866 | 493 | 483 | 235 |
| 11..... | 162 | 210 | 281 | 574 | 880 | 1,130 | 3,130 | 2,000 | 736 | 644 | 432 | 235 |
| 12..... | 156 | 214 | 261 | 498 | 767 | 938 | 2,570 | 1,820 | 644 | 557 | 417 | 235 |
| 13..... | 159 | 224 | 234 | 467 | 652 | 832 | 2,060 | 1,820 | 580 | 432 | 412 | 235 |
| 14..... | 159 | 231 | 231 | 422 | 597 | 754 | 1,760 | 2,000 | 747 | 364 | 383 | 235 |
| 15..... | 174 | 234 | 224 | 346 | 580 | 812 | 1,550 | 2,000 | 1,600 | 432 | 342 | 238 |
| 16..... | 186 | 238 | 217 | 285 | 574 | 1,560 | 1,350 | 1,760 | 1,710 | 364 | 312 | 238 |
| 17..... | 174 | 238 | 195 | 329 | 825 | 1,600 | 1,190 | 1,500 | 1,420 | 324 | 288 | 250 |
| 18..... | 183 | 249 | 198 | 316 | 2,590 | 1,300 | 1,060 | 1,350 | 1,050 | 372 | 272 | 242 |
| 19..... | 180 | 249 | 198 | 342 | 2,850 | 1,110 | 960 | 1,300 | 839 | 393 | 265 | 235 |
| 20..... | 180 | 234 | 234 | 342 | 2,000 | 975 | 866 | 1,310 | 705 | 522 | 261 | 235 |
| 21..... | 180 | 228 | 201 | 355 | 1,450 | 860 | 799 | 2,920 | 614 | 374 | 272 | 285 |
| 22..... | 183 | 217 | 195 | 351 | 1,110 | 846 | 1,810 | 2,990 | 603 | 320 | 450 | 329 |
| 23..... | 186 | 214 | 192 | 296 | 902 | 1,010 | 6,710 | 5,370 | 749 | 304 | 1,300 | 304 |
| 24..... | 198 | 214 | 189 | 288 | 780 | 2,240 | 4,370 | 4,860 | 980 | 415 | 1,590 | 272 |
| 25..... | 198 | 210 | 183 | 304 | 692 | 2,180 | 3,280 | 3,430 | 705 | 574 | 1,000 | 288 |
| 26..... | 195 | 210 | 201 | 312 | 614 | 2,180 | 2,640 | 2,780 | 597 | 514 | 761 | 353 |
| 27..... | 192 | 207 | 392 | 308 | 546 | 2,000 | 2,240 | 2,180 | 807 | 383 | 650 | 470 |
| 28..... | 198 | 201 | 550 | 316 | 498 | 2,020 | 1,880 | 1,710 | 580 | 338 | 546 | 514 |
| 29..... | 204 | 195 | 582 | 346 | ----- | 7,260 | 1,600 | 1,400 | 504 | 324 | 498 | 374 |
| 30..... | 204 | 207 | 430 | 360 | ----- | 6,090 | 1,400 | 1,200 | 432 | 304 | 447 | 312 |
| 31..... | 204 | ----- | 290 | 338 | ----- | 3,610 | ----- | 1,070 | ----- | 280 | 417 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 204 | 156 | 178 | 0.13 | 0.15 |
| November..... | 249 | 195 | 217 | .15 | .18 |
| December..... | 708 | 183 | 297 | .217 | .25 |
| January..... | 3,430 | ----- | 584 | .42 | .49 |
| February..... | 2,850 | 272 | 788 | .57 | .60 |
| March..... | 7,260 | 644 | 1,660 | 1.21 | 1.40 |
| April..... | 6,710 | 799 | 3,010 | 2.20 | 2.46 |
| May..... | 5,370 | 742 | 2,090 | 1.63 | 1.76 |
| June..... | 1,710 | 432 | 877 | .64 | .71 |
| July..... | 644 | 280 | 415 | .30 | .35 |
| August..... | 2,670 | 261 | 734 | .53 | .62 |
| September..... | 514 | 235 | 305 | .22 | .25 |
| The year..... | 7,260 | 156 | 929 | .67 | 9.22 |

JAMES RIVER AT BUCHANAN, VA.

LOCATION.—Water-stage recorder at highway bridge near Chesapeake & Ohio Railway station, Buchanan, Botetourt County.

DRAINAGE AREA.—2,080 square miles.

RECORDS AVAILABLE.—August, 1895, to September, 1931.

EXTREMES.—Maximum discharge during year, 12,000 second-feet Mar. 30 (gauge height, 8.12 feet); minimum, 265 second-feet Oct. 1-3 (gauge height, 1.60 feet). 1895-1931: Maximum gauge height, 31 feet Mar. 27, 1913 (discharge not determined); minimum discharge, 265 second-feet Sept. 28 to Oct. 3, 1930 (gauge height, 1.60 feet).

REMARKS.—Records excellent.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 268 | 324 | 324 | 490 | 490 | 864 | 6,060 | 1,740 | 1,870 | 656 | 870 | 924 |
| 2..... | 265 | 320 | 340 | 501 | 468 | 1,170 | 9,730 | 1,570 | 2,380 | 612 | 1,860 | 856 |
| 3..... | 265 | 320 | 336 | 395 | 462 | 1,430 | 6,660 | 1,440 | 1,960 | 612 | 2,940 | 766 |
| 4..... | 272 | 344 | 344 | 425 | 446 | 1,410 | 4,720 | 1,310 | 1,570 | 612 | 2,660 | 735 |
| 5..... | 279 | 358 | 354 | 687 | 440 | 1,230 | 6,820 | 1,170 | 1,340 | 612 | 2,080 | 712 |
| 6..... | 276 | 344 | 462 | 5,260 | 435 | 1,070 | 7,000 | 1,080 | 1,220 | 661 | 2,810 | 654 |
| 7..... | 279 | 340 | 906 | 4,770 | 420 | 958 | 8,230 | 1,120 | 1,220 | 735 | 1,860 | 587 |
| 8..... | 282 | 358 | 958 | 2,460 | 420 | 1,130 | 7,240 | 3,010 | 1,680 | 690 | 1,280 | 534 |
| 9..... | 282 | 344 | 712 | 1,520 | 452 | 1,940 | 6,520 | 6,390 | 1,740 | 675 | 989 | 496 |
| 10..... | 286 | 324 | 551 | 1,090 | 534 | 2,010 | 6,060 | 4,100 | 1,650 | 817 | 833 | 479 |
| 11..... | 290 | 328 | 479 | 906 | 798 | 1,620 | 4,720 | 3,080 | 1,260 | 916 | 742 | 452 |
| 12..... | 290 | 336 | 435 | 782 | 958 | 1,350 | 3,960 | 2,750 | 1,100 | 1,040 | 705 | 440 |
| 13..... | 282 | 358 | 410 | 705 | 806 | 1,150 | 3,080 | 2,670 | 982 | 794 | 698 | 435 |
| 14..... | 293 | 367 | 385 | 661 | 742 | 1,030 | 2,600 | 2,670 | 922 | 686 | 661 | 415 |
| 15..... | 293 | 372 | 367 | 593 | 698 | 1,000 | 2,300 | 2,750 | 1,620 | 849 | 619 | 405 |
| 16..... | 316 | 380 | 358 | 490 | 712 | 1,300 | 2,010 | 2,520 | 2,130 | 950 | 557 | 405 |
| 17..... | 316 | 385 | 362 | 484 | 852 | 1,940 | 1,740 | 2,150 | 2,340 | 883 | 512 | 415 |
| 18..... | 296 | 385 | 324 | 528 | 2,220 | 1,670 | 1,570 | 1,940 | 1,710 | 667 | 488 | 420 |
| 19..... | 296 | 385 | 354 | 551 | 3,700 | 1,420 | 1,420 | 1,740 | 1,800 | 864 | 480 | 420 |
| 20..... | 282 | 385 | 362 | 575 | 2,750 | 1,260 | 1,270 | 1,640 | 1,080 | 865 | 701 | 405 |
| 21..... | 282 | 367 | 367 | 581 | 2,080 | 1,130 | 1,160 | 2,960 | 944 | 753 | 623 | 430 |
| 22..... | 282 | 354 | 349 | 581 | 1,590 | 983 | 1,600 | 3,680 | 910 | 640 | 1,810 | 462 |
| 23..... | 296 | 340 | 340 | 545 | 1,280 | 1,270 | 8,910 | 5,980 | 924 | 571 | 4,860 | 496 |
| 24..... | 316 | 332 | 328 | 501 | 1,090 | 2,270 | 6,660 | 7,930 | 1,190 | 657 | 4,790 | 490 |
| 25..... | 320 | 328 | 316 | 496 | 958 | 2,910 | 4,720 | 5,460 | 1,130 | 781 | 2,620 | 446 |
| 26..... | 316 | 324 | 332 | 501 | 856 | 2,830 | 3,800 | 4,400 | 958 | 932 | 2,040 | 530 |
| 27..... | 316 | 320 | 425 | 496 | 774 | 2,670 | 3,160 | 3,560 | 968 | 752 | 1,470 | 652 |
| 28..... | 316 | 316 | 626 | 490 | 720 | 2,440 | 2,670 | 2,670 | 1,020 | 612 | 1,170 | 644 |
| 29..... | 324 | 300 | 758 | 496 | ----- | 7,140 | 2,220 | 2,240 | 844 | 569 | 998 | 664 |
| 30..... | 328 | 312 | 698 | 506 | ----- | 9,780 | 1,940 | 1,920 | 730 | 540 | 968 | 544 |
| 31..... | 324 | ----- | 563 | 506 | ----- | 5,560 | ----- | 1,730 | ----- | 512 | 932 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 328 | 265 | 294 | 0.141 | 0.16 |
| November..... | 385 | 300 | 345 | .166 | .19 |
| December..... | 958 | 316 | 459 | .221 | .25 |
| January..... | 5,260 | 395 | 954 | .459 | .53 |
| February..... | 3,700 | 420 | 1,010 | .486 | .51 |
| March..... | 9,780 | 864 | 2,130 | 1.02 | 1.18 |
| April..... | 9,730 | 1,160 | 4,350 | 2.09 | 2.33 |
| May..... | 7,930 | 1,080 | 2,880 | 1.38 | 1.59 |
| June..... | 2,380 | 730 | 1,350 | .649 | .72 |
| July..... | 1,040 | 512 | 726 | .349 | .40 |
| August..... | 4,860 | 480 | 1,500 | .721 | .83 |
| September..... | 924 | 405 | 544 | .262 | .29 |
| The year..... | 9,780 | 265 | 1,380 | .663 | 8.98 |

JAMES RIVER AT HOLCOMBS ROCK, VA.

LOCATION.—Water-stage recorder at Holcombs Rock, Bedford County, half a mile below Pedlar River.

DRAINAGE AREA.—3,250 square miles.

RECORDS AVAILABLE.—August and September, 1931. January, 1900, to September, 1915 (gage heights only).

EXTREMES.—Maximum discharge during period, 13,100 second-feet Aug. 22 (gage height, 10.81 feet); minimum, 185 second-feet Sept. 12 (gage height, 3.50 feet).

Flood of March, 1913, reached a stage of about 36 feet on present gage.

REMARKS.—Records excellent. Flow regulated by plant of Electro-Metallurgical Co. 400 feet above station.

Daily and monthly discharge, in second-feet, 1931

| Day | Aug. | Sept. | Day | Aug. | Sept. | Day | Aug. | Sept. |
|---------|------|-------|---------|-------|-------|---------|-------|-------|
| 1..... | | 1,170 | 11..... | | 644 | 21..... | 1,820 | 614 |
| 2..... | | 1,600 | 12..... | | 650 | 22..... | 7,560 | 720 |
| 3..... | | 2,620 | 13..... | | 557 | 23..... | 9,190 | 710 |
| 4..... | | 1,350 | 14..... | | 822 | 24..... | 7,540 | 1,070 |
| 5..... | | 1,220 | 15..... | | 536 | 25..... | 4,580 | 727 |
| 6..... | | 1,060 | 16..... | | 669 | 26..... | 3,300 | 916 |
| 7..... | | 957 | 17..... | | 470 | 27..... | 3,170 | 1,590 |
| 8..... | | 932 | 18..... | | 695 | 28..... | 2,190 | 1,050 |
| 9..... | | 918 | 19..... | 1,190 | 572 | 29..... | 1,880 | 1,110 |
| 10..... | | 820 | 20..... | 1,160 | 613 | 30..... | 2,260 | 864 |
| | | | | | | 31..... | 1,410 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-------------------|---------|---------|-------|-----------------|-------------------|
| August 19-31..... | 9,190 | 1,160 | 3,630 | 1.12 | 0.54 |
| September..... | 2,620 | 470 | 942 | .290 | .32 |

JAMES RIVER AT SALT CREEK, VA.

LOCATION.—Water-stage recorder at Bald Eagle dam site, three-quarters of a mile above Salt Creek post office, Amherst County, and 2½ miles below Pedlar River.

DRAINAGE AREA.—3,250 square miles.

RECORDS AVAILABLE.—December, 1926, to June, 1931 (discontinued).

EXTREMES.—Maximum discharge during period, 14,600 second-feet Mar. 30 (gage height, 7.29 feet); minimum, about 251 second-feet Oct. 26 (gage height, 1.29 feet).

1926-1931: Maximum discharge, 55,800 second-feet Aug. 16, 1928 (gage height, 16.8 feet); minimum, about 112 second-feet July 28, 1930 (gage height, 0.89 foot).

Maximum stage known, about 29 feet November, 1877, and March, 1913.

REMARKS.—Records excellent except those below 500 second-feet, which are good. Discharge estimated Nov. 13-18. Flow regulated by operations at numerous dams upstream.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June |
|-----|------|-------|-------|-------|-------|--------|--------|--------|-------|
| 1 | 395 | 535 | 462 | 889 | 732 | 1,260 | 8 990 | 2,680 | 4,160 |
| 2 | 392 | 466 | 452 | 725 | 711 | 1,880 | 12,700 | 2,320 | 3,960 |
| 3 | 436 | 454 | 544 | 719 | 790 | 2,180 | 10,000 | 2,200 | 3,350 |
| 4 | 307 | 524 | 540 | 577 | 655 | 2,290 | 7,050 | 2,120 | 2,640 |
| 5 | 445 | 674 | 539 | 1,450 | 789 | 2,030 | 7,820 | 1,960 | 2,180 |
| 6 | 433 | 563 | 816 | 4,190 | 594 | 1,860 | 9,360 | 1,790 | 2,000 |
| 7 | 440 | 526 | 1,170 | 6,750 | 708 | 1,550 | 10,000 | 1,840 | 1,970 |
| 8 | 384 | 523 | 1,510 | 4,030 | 706 | 1,890 | 9,680 | 4,480 | 3,030 |
| 9 | 443 | 556 | 1,280 | 2,630 | 600 | 2,810 | 8 730 | 7,560 | 2,340 |
| 10 | 440 | 498 | 932 | 1,650 | 832 | 3,130 | 8 420 | 6,130 | 2,240 |
| 11 | 282 | 508 | 807 | 1,400 | 1,100 | 2,640 | 7,050 | 4,760 | ----- |
| 12 | 266 | 490 | 745 | 1,460 | 1,460 | 2,240 | 5 660 | 4,120 | ----- |
| 13 | 520 | 520 | 520 | 1,180 | 1,480 | 1,930 | 4 760 | 4,220 | ----- |
| 14 | 482 | 610 | 712 | 1,120 | 1,370 | 1,800 | 3 940 | 4,340 | ----- |
| 15 | 430 | 490 | 478 | 1,000 | 979 | 1,590 | 3 360 | 4,460 | ----- |
| 16 | 474 | 500 | 568 | 840 | 1,120 | 1,740 | 3 140 | 4,050 | ----- |
| 17 | 404 | 660 | 576 | 844 | 1,350 | 2,210 | 2,600 | 3,380 | ----- |
| 18 | 502 | 650 | 560 | 598 | 1,590 | 2,510 | 2,460 | 3,160 | ----- |
| 19 | 455 | 631 | 568 | 900 | 4,340 | 1,920 | 2,180 | 2,700 | ----- |
| 20 | 414 | 577 | 576 | 915 | 4,360 | 1,950 | 2,310 | 2,570 | ----- |
| 21 | 425 | 546 | 560 | 878 | 3,180 | 1,770 | 2,020 | 4,700 | ----- |
| 22 | 292 | 594 | 560 | 770 | 2,470 | 1,790 | 2,200 | 6,240 | ----- |
| 23 | 482 | 533 | 560 | 877 | 1,980 | 2,050 | 7,740 | 8,510 | ----- |
| 24 | 444 | 508 | 458 | 893 | 1,740 | 2,460 | 8 820 | 10,800 | ----- |
| 25 | 470 | 514 | 493 | 760 | 1,580 | 4,120 | 6 600 | 7,910 | ----- |
| 26 | 474 | 540 | 484 | 702 | 1,480 | 4,280 | 5 130 | 6,140 | ----- |
| 27 | 454 | 462 | 922 | 836 | 1,150 | 3,770 | 4 470 | 5,040 | ----- |
| 28 | 398 | 478 | 888 | 822 | 1,180 | 3,610 | 3,900 | 3,950 | ----- |
| 29 | 590 | 414 | 1,170 | 813 | ----- | 7,000 | 3 440 | 3,220 | ----- |
| 30 | 478 | 536 | 1,150 | 668 | ----- | 12,900 | 2,820 | 2,720 | ----- |
| 31 | 528 | ----- | 998 | 792 | ----- | 8,330 | ----- | 2,570 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 590 | 266 | 432 | 0.133 | 0.15 |
| November | 674 | 414 | 536 | .165 | .18 |
| December | 1,510 | 452 | 729 | .224 | .26 |
| January | 6,750 | 577 | 1,380 | .455 | .49 |
| February | 4,360 | 594 | 1,470 | .452 | .47 |
| March | 12,900 | 1,260 | 3,020 | .929 | 1.07 |
| April | 12,700 | 2,020 | 5,910 | 1.82 | 2.03 |
| May | 10,800 | 1,790 | 4,280 | 1.32 | 1.52 |
| June 1-10 | 4,160 | 1,970 | 2,790 | .858 | .32 |

JAMES RIVER AT BENT CREEK, VA.

LOCATION.—Water-stage recorder at highway bridge at Bent Creek, Appomattox County, 150 feet below Bent Creek and 1 mile below Gladstone.

DRAINAGE AREA.—3,670 square miles.

RECORDS AVAILABLE.—March, 1925, to September, 1931.

EXTREMES.—Maximum discharge during year, 15,200 second-feet Aug. 23 (gage height, 8.21 feet); minimum, 192 second-feet Oct. 13, 14 (gage height, 2.21 feet).

1925-1931: Maximum discharge, 74,000 second-feet Aug. 17, 1928 (gage height, 18.80 feet); minimum, that of Oct. 13, 14, 1930.

REMARKS.—Records good. Discharge estimated for Feb. 24-28.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|--------|--------|--------|-------|-------|--------|-------|
| 1..... | 382 | 528 | 562 | 1,060 | 828 | 1,900 | 9,160 | 3,100 | 4,650 | 985 | 1,080 | 1,880 |
| 2..... | 314 | 536 | 572 | 985 | 779 | 2,080 | 12,900 | 2,900 | 5,210 | 1,120 | 810 | 1,550 |
| 3..... | 344 | 498 | 523 | 928 | 812 | 2,390 | 12,200 | 2,520 | 4,380 | 1,140 | 2,710 | 1,500 |
| 4..... | 334 | 546 | 548 | 777 | 871 | 2,500 | 8,420 | 2,500 | 3,230 | 878 | 3,630 | 1,740 |
| 5..... | 414 | 683 | 584 | 1,230 | 732 | 2,310 | 7,290 | 2,300 | 2,660 | 970 | 3,340 | 1,510 |
| 6..... | 256 | 716 | 710 | 2,700 | 902 | 2,120 | 10,100 | 2,130 | 2,420 | 984 | 2,600 | 1,430 |
| 7..... | 451 | 674 | 1,330 | 6,620 | 640 | 1,990 | 10,100 | 2,080 | 2,120 | 1,730 | 3,160 | 1,290 |
| 8..... | 421 | 452 | 1,420 | 4,730 | 804 | 2,200 | 10,400 | 3,000 | 2,700 | 1,660 | 2,580 | 1,200 |
| 9..... | 428 | 548 | 1,610 | 3,860 | 688 | 2,760 | 9,440 | 7,980 | 3,120 | 1,090 | 1,740 | 1,110 |
| 10..... | 364 | 578 | 1,290 | 2,570 | 751 | 2,910 | 8,800 | 7,170 | 2,600 | 1,190 | 1,250 | 1,060 |
| 11..... | 419 | 521 | 942 | 1,800 | 880 | 3,000 | 7,880 | 5,190 | 2,120 | 1,670 | 1,460 | 1,010 |
| 12..... | 408 | 527 | 906 | 1,510 | 1,200 | 2,730 | 6,460 | 5,280 | 1,910 | 1,700 | 1,500 | 934 |
| 13..... | 222 | 542 | 783 | 1,600 | 1,600 | 2,370 | 5,340 | 5,040 | 1,490 | 1,540 | 1,800 | 852 |
| 14..... | 324 | 649 | 624 | 1,220 | 1,510 | 2,140 | 4,750 | 4,670 | 2,110 | 1,460 | 1,120 | 724 |
| 15..... | 489 | 530 | 738 | 1,110 | 1,340 | 2,030 | 4,180 | 4,570 | 2,530 | 1,460 | 988 | 788 |
| 16..... | 476 | 550 | 588 | 1,070 | 1,170 | 1,780 | 3,770 | 4,300 | 3,230 | 1,400 | 1,000 | 766 |
| 17..... | 486 | 701 | 622 | 901 | 1,210 | 1,980 | 3,280 | 3,930 | 3,190 | 1,400 | 918 | 703 |
| 18..... | 494 | 669 | 654 | 870 | 1,570 | 2,680 | 3,100 | 3,300 | 3,160 | 1,800 | 1,080 | 592 |
| 19..... | 434 | 632 | 652 | 760 | 2,610 | 2,540 | 2,720 | 2,960 | 2,600 | 1,780 | 944 | 748 |
| 20..... | 476 | 626 | 660 | 972 | 4,580 | 2,140 | 2,440 | 2,920 | 2,160 | 1,280 | 1,490 | 684 |
| 21..... | 446 | 615 | 634 | 1,040 | 3,560 | 2,090 | 2,500 | 3,280 | 1,760 | 1,740 | 2,500 | 652 |
| 22..... | 438 | 588 | 632 | 844 | 2,940 | 2,160 | 2,340 | 6,810 | 1,720 | 1,710 | 4,290 | 698 |
| 23..... | 432 | 628 | 618 | 860 | 2,580 | 3,230 | 4,340 | 9,560 | 2,910 | 1,220 | 11,800 | 1,150 |
| 24..... | 384 | 582 | 642 | 934 | 2,050 | 2,840 | 10,600 | 11,200 | 1,970 | 1,100 | 8,490 | 971 |
| 25..... | 496 | 567 | 574 | 995 | 1,850 | 3,790 | 7,230 | 9,380 | 1,460 | 1,580 | 6,020 | 718 |
| 26..... | 489 | 566 | 627 | 772 | 1,700 | 4,460 | 5,890 | 6,580 | 1,580 | 1,370 | 3,690 | 862 |
| 27..... | 488 | 598 | 737 | 783 | 1,500 | 4,400 | 5,220 | 5,700 | 1,130 | 1,420 | 3,360 | 1,160 |
| 28..... | 475 | 496 | 1,130 | 852 | 1,600 | 4,060 | 4,560 | 4,750 | 1,010 | 1,560 | 2,780 | 1,730 |
| 29..... | 522 | 546 | 1,080 | 856 | ----- | 5,220 | 3,810 | 3,900 | 1,180 | 966 | 2,320 | 1,010 |
| 30..... | 496 | 529 | 1,260 | 836 | ----- | 12,400 | 3,460 | 2,970 | 1,080 | 1,000 | 2,440 | 1,030 |
| 31..... | 542 | ----- | 1,260 | 746 | ----- | 10,300 | ----- | 2,740 | ----- | 962 | 1,780 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 542 | 222 | 424 | 0.116 | 0.13 |
| November..... | 716 | 452 | 581 | .158 | .18 |
| December..... | 1,610 | 523 | 823 | .22 | .26 |
| January..... | 6,620 | 746 | 1,510 | .411 | .47 |
| February..... | 4,580 | 640 | 1,540 | .42 | .44 |
| March..... | 12,400 | 1,780 | 3,270 | .89 | 1.03 |
| April..... | 12,900 | 2,340 | 6,420 | 1.75 | 1.95 |
| May..... | 11,200 | 2,080 | 4,670 | 1.27 | 1.46 |
| June..... | 5,210 | 1,010 | 2,440 | .665 | .74 |
| July..... | 1,800 | 878 | 1,350 | .368 | .42 |
| August..... | 11,800 | 810 | 2,710 | .73 | .85 |
| September..... | 1,880 | 592 | 1,070 | .293 | .33 |
| The year..... | 12,900 | 222 | 2,240 | .610 | 8.26 |

JAMES RIVER AT SCOTTSVILLE, VA.

LOCATION.—Water-stage recorder at highway bridge at Scottsville, Albemarle County, 7 miles above Hardware River.

DRAINAGE AREA.—4,570 square miles.

RECORDS AVAILABLE.—February, 1925, to September, 1931.

EXTREMES.—Maximum discharge during year, 21,100 second-feet Aug. 23 (gage height, 10.73 feet); minimum, 265 second-feet Oct. 1 (gage height, 1.46 feet). 1925-1931: Maximum discharge, 75,600 second-feet Aug. 17, 1928 (gage height, 20.92 feet); minimum, that of Oct. 1, 1930.

REMARKS.—Records excellent. Discharge estimated for Dec. 24-27, Jan. 24-26, Feb. 9-12. Flow regulated by operations at numerous dams upstream.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|--------|--------|--------|-------|-------|--------|-------|
| 1..... | 405 | 730 | 750 | 1,580 | 1,040 | 2,150 | 10,700 | 3,860 | 5,990 | 1,770 | 2,080 | 2,210 |
| 2..... | 405 | 641 | 800 | 1,480 | 1,160 | 2,950 | 15,100 | 3,690 | 6,150 | 1,760 | 1,420 | 1,780 |
| 3..... | 366 | 641 | 810 | 1,160 | 1,090 | 2,790 | 15,400 | 3,270 | 6,520 | 1,560 | 1,840 | 1,730 |
| 4..... | 353 | 700 | 710 | 1,180 | 1,070 | 2,950 | 11,300 | 3,030 | 4,550 | 1,460 | 2,840 | 2,220 |
| 5..... | 379 | 916 | 710 | 1,240 | 1,100 | 3,030 | 8,870 | 2,950 | 3,680 | 1,260 | 5,100 | 2,180 |
| 6..... | 472 | 1,030 | 850 | 2,850 | 1,000 | 2,870 | 10,300 | 2,710 | 2,900 | 1,740 | 3,230 | 1,680 |
| 7..... | 366 | 971 | 1,480 | 5,350 | 1,120 | 2,640 | 12,200 | 2,790 | 2,960 | 2,490 | 3,150 | 1,520 |
| 8..... | 450 | 894 | 2,020 | 7,150 | 830 | 2,640 | 11,900 | 4,050 | 2,760 | 2,260 | 3,200 | 1,440 |
| 9..... | 496 | 560 | 1,890 | 4,910 | 1,500 | 3,690 | 10,700 | 6,690 | 3,420 | 1,880 | 2,430 | 1,390 |
| 10..... | 512 | 720 | 1,960 | 3,440 | 1,830 | 3,690 | 9,610 | 9,660 | 3,240 | 1,520 | 1,760 | 1,300 |
| 11..... | 435 | 750 | 1,640 | 2,640 | 1,580 | 4,120 | 9,100 | 6,960 | 2,640 | 2,360 | 1,590 | 1,270 |
| 12..... | 480 | 710 | 1,200 | 2,220 | 1,520 | 3,780 | 7,770 | 5,810 | 2,850 | 2,440 | 1,880 | 1,290 |
| 13..... | 488 | 720 | 1,150 | 2,080 | 2,020 | 3,190 | 6,560 | 5,990 | 1,680 | 2,060 | 1,790 | 1,090 |
| 14..... | 366 | 760 | 971 | 2,080 | 2,020 | 2,710 | 5,810 | 6,180 | 2,650 | 2,110 | 1,570 | 1,050 |
| 15..... | 307 | 894 | 830 | 1,580 | 1,890 | 2,790 | 5,090 | 5,810 | 4,620 | 1,970 | 1,370 | 908 |
| 16..... | 623 | 760 | 949 | 1,640 | 1,760 | 2,640 | 4,460 | 5,270 | 4,440 | 1,880 | 1,280 | 990 |
| 17..... | 569 | 850 | 750 | 1,460 | 1,580 | 2,420 | 4,200 | 5,270 | 4,390 | 1,920 | 1,240 | 1,000 |
| 18..... | 536 | 1,040 | 938 | 1,380 | 1,760 | 2,790 | 3,860 | 4,280 | 4,090 | 2,070 | 1,140 | 970 |
| 19..... | 578 | 971 | 894 | 1,310 | 2,080 | 3,190 | 3,600 | 4,030 | 3,640 | 2,150 | 1,220 | 1,120 |
| 20..... | 450 | 872 | 905 | 1,220 | 4,530 | 2,790 | 3,190 | 3,780 | 3,050 | 2,620 | 1,490 | 1,090 |
| 21..... | 560 | 872 | 872 | 1,400 | 5,090 | 2,710 | 3,110 | 4,200 | 2,460 | 2,580 | 2,760 | 1,020 |
| 22..... | 528 | 861 | 800 | 1,440 | 3,940 | 2,640 | 2,950 | 5,950 | 2,600 | 2,270 | 4,300 | 1,020 |
| 23..... | 520 | 800 | 830 | 1,160 | 3,190 | 4,730 | 3,460 | 10,100 | 3,920 | 1,960 | 16,700 | 1,150 |
| 24..... | 544 | 840 | 860 | 1,280 | 2,790 | 4,550 | 9,020 | 11,300 | 3,780 | 1,580 | 10,900 | 1,450 |
| 25..... | 458 | 770 | 960 | 1,520 | 2,420 | 4,120 | 9,800 | 11,900 | 2,520 | 1,860 | 8,570 | 1,270 |
| 26..... | 614 | 720 | 1,040 | 1,520 | 2,150 | 5,090 | 7,350 | 8,360 | 2,540 | 1,980 | 6,000 | 1,020 |
| 27..... | 632 | 710 | 1,120 | 1,070 | 2,020 | 5,270 | 6,370 | 7,560 | 2,480 | 1,500 | 4,520 | 1,850 |
| 28..... | 578 | 740 | 1,460 | 1,190 | 2,020 | 4,910 | 5,630 | 6,180 | 1,830 | 1,780 | 4,250 | 1,740 |
| 29..... | 650 | 632 | 1,700 | 1,220 | ----- | 6,370 | 4,910 | 5,090 | 2,060 | 1,840 | 2,940 | 1,680 |
| 30..... | 730 | 680 | 1,520 | 1,240 | ----- | 10,300 | 4,370 | 4,390 | 2,140 | 1,260 | 2,700 | 1,230 |
| 31..... | 632 | ----- | 1,580 | 1,180 | ----- | 13,500 | ----- | 3,670 | ----- | 1,680 | 2,270 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 730 | 307 | 499 | 0.109 | 0.13 |
| November..... | 1,040 | 560 | 792 | .173 | .19 |
| December..... | 2,020 | 710 | 1,130 | .247 | .28 |
| January..... | 7,150 | 1,070 | 2,010 | .440 | .61 |
| February..... | 5,090 | 830 | 2,000 | .438 | .46 |
| March..... | 13,500 | 2,150 | 4,000 | .875 | 1.01 |
| April..... | 15,400 | 2,950 | 7,560 | 1.65 | 1.84 |
| May..... | 11,900 | 2,710 | 5,640 | 1.23 | 1.42 |
| June..... | 6,520 | 1,680 | 3,420 | .748 | .83 |
| July..... | 2,620 | 1,260 | 1,920 | .420 | .48 |
| August..... | 16,700 | 1,140 | 3,470 | .759 | .88 |
| September..... | 2,220 | 908 | 1,390 | .304 | .34 |
| The year..... | 16,700 | 307 | 2,820 | .617 | 8.37 |

JAMES RIVER BASIN

19

JAMES RIVER AT CARTERSVILLE, VA.

LOCATION.—Water-stage recorder at highway bridge between Pemberton and Cartersville, Cumberland County, and 1 mile below Willis River.

DRAINAGE AREA.—6,240 square miles.

RECORDS AVAILABLE.—January, 1899, to September, 1931.

EXTREMES.—Maximum discharge during year, 28,400 second-feet Aug. 23 (gauge height, 11.14 feet); minimum, 329 second-feet Oct. 16 (gauge height, 0.12 foot).

1899-1931: Maximum discharge, about 106,000 second-feet Dec. 30, 1901 (gauge height, 26.7 feet); minimum, that of Oct. 16, 1930.

REMARKS.—Records excellent.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|--------|--------|--------|--------|-------|--------|-------|
| 1----- | 405 | 766 | 835 | 2,000 | 1,450 | 2,870 | 14,000 | 4,620 | 10,500 | 2,230 | 3,880 | 2,470 |
| 2----- | 376 | 800 | 907 | 1,770 | 1,300 | 4,530 | 19,500 | 4,170 | 10,800 | 2,380 | 3,010 | 2,630 |
| 3----- | 425 | 709 | 992 | 1,590 | 1,420 | 3,900 | 19,900 | 4,080 | 8,320 | 2,230 | 1,880 | 2,150 |
| 4----- | 386 | 789 | 943 | 1,410 | 1,310 | 3,640 | 15,800 | 3,550 | 6,520 | 1,920 | 2,770 | 2,470 |
| 5----- | 348 | 1,000 | 859 | 1,590 | 1,400 | 3,640 | 11,900 | 3,380 | 5,080 | 1,660 | 4,900 | 3,000 |
| 6----- | 376 | 1,170 | 943 | 2,880 | 1,330 | 3,550 | 12,400 | 3,210 | 4,080 | 1,610 | 6,080 | 2,390 |
| 7----- | 445 | 1,160 | 1,220 | 4,980 | 1,310 | 3,210 | 18,500 | 3,460 | 3,380 | 2,820 | 3,640 | 2,000 |
| 8----- | 435 | 1,090 | 2,070 | 7,790 | 1,340 | 3,210 | 16,100 | 5,720 | 3,340 | 3,730 | 3,810 | 1,720 |
| 9----- | 425 | 931 | 2,230 | 6,460 | 1,300 | 4,350 | 14,500 | 6,900 | 3,550 | 2,710 | 3,210 | 1,640 |
| 10----- | 516 | 709 | 2,150 | 4,460 | 1,770 | 4,530 | 12,200 | 10,600 | 4,260 | 2,470 | 2,390 | 1,560 |
| 11----- | 526 | 835 | 2,000 | 3,550 | 2,150 | 4,800 | 11,100 | 10,000 | 3,380 | 2,580 | 1,920 | 1,470 |
| 12----- | 485 | 847 | 1,650 | 2,790 | 1,920 | 4,530 | 9,880 | 7,910 | 2,790 | 3,120 | 2,230 | 1,380 |
| 13----- | 505 | 859 | 1,370 | 2,550 | 1,920 | 3,990 | 8,330 | 7,700 | 3,160 | 2,870 | 2,470 | 1,400 |
| 14----- | 526 | 883 | 1,330 | 2,470 | 2,310 | 3,460 | 7,100 | 8,760 | 2,300 | 2,550 | 2,070 | 1,170 |
| 15----- | 465 | 919 | 1,170 | 2,310 | 2,310 | 3,210 | 6,310 | 8,330 | 5,430 | 2,470 | 1,920 | 1,130 |
| 16----- | 358 | 1,040 | 1,080 | 1,920 | 2,150 | 3,380 | 5,550 | 7,300 | 7,980 | 2,230 | 1,590 | 1,040 |
| 17----- | 589 | 955 | 1,110 | 2,070 | 2,070 | 3,120 | 4,980 | 6,500 | 6,310 | 2,230 | 1,450 | 1,120 |
| 18----- | 589 | 1,060 | 931 | 1,840 | 2,070 | 3,040 | 4,800 | 6,120 | 5,170 | 4,840 | 1,440 | 1,080 |
| 19----- | 568 | 1,140 | 1,080 | 1,840 | 2,470 | 3,550 | 4,530 | 4,980 | 4,620 | 4,680 | 1,400 | 1,120 |
| 20----- | 589 | 1,110 | 1,170 | 1,770 | 3,120 | 3,640 | 3,990 | 4,530 | 3,900 | 3,040 | 1,430 | 1,370 |
| 21----- | 475 | 992 | 1,160 | 1,770 | 5,740 | 3,210 | 3,550 | 6,080 | 3,380 | 3,340 | 2,260 | 1,260 |
| 22----- | 589 | 1,000 | 1,060 | 1,840 | 4,980 | 3,300 | 3,720 | 7,880 | 3,080 | 2,710 | 4,320 | 1,200 |
| 23----- | 568 | 968 | 1,060 | 1,740 | 4,080 | 5,360 | 3,900 | 15,600 | 4,270 | 2,630 | 19,500 | 1,160 |
| 24----- | 578 | 931 | 1,080 | 1,450 | 3,460 | 7,100 | 6,010 | 15,800 | 5,550 | 2,470 | 18,300 | 1,460 |
| 25----- | 589 | 943 | 1,110 | 1,610 | 2,960 | 5,550 | 12,600 | 14,800 | 4,310 | 4,700 | 12,000 | 1,570 |
| 26----- | 558 | 895 | 1,180 | 1,680 | 2,630 | 5,550 | 9,260 | 11,600 | 3,040 | 4,740 | 8,290 | 1,380 |
| 27----- | 665 | 859 | 1,320 | 1,700 | 2,470 | 6,120 | 7,700 | 10,600 | 3,040 | 2,550 | 6,750 | 1,750 |
| 28----- | 665 | 824 | 1,720 | 1,400 | 2,310 | 5,930 | 6,700 | 8,540 | 3,040 | 2,000 | 5,840 | 2,370 |
| 29----- | 709 | 812 | 2,000 | 1,540 | ----- | 8,320 | 5,930 | 6,900 | 2,150 | 2,150 | 4,740 | 2,100 |
| 30----- | 800 | 732 | 2,000 | 1,510 | ----- | 10,800 | 5,170 | 5,740 | 2,390 | 1,920 | 3,490 | 1,670 |
| 31----- | 824 | ----- | 1,840 | 1,480 | ----- | 16,800 | ----- | 4,680 | ----- | 1,480 | 3,120 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October----- | 824 | 348 | 528 | 0.065 | 0.10 |
| November----- | 1,170 | 709 | 924 | .148 | .17 |
| December----- | 2,230 | 835 | 1,340 | .275 | .25 |
| January----- | 7,790 | 1,400 | 2,440 | .361 | .45 |
| February----- | 5,740 | 1,300 | 2,320 | .372 | .39 |
| March----- | 16,800 | 2,870 | 4,910 | .787 | .91 |
| April----- | 19,900 | 3,550 | 9,530 | 1.53 | 1.71 |
| May----- | 15,800 | 3,210 | 7,420 | 1.16 | 1.37 |
| June----- | 10,800 | 2,150 | 4,640 | .744 | .83 |
| July----- | 4,840 | 1,480 | 2,740 | .459 | .51 |
| August----- | 19,500 | 1,350 | 4,580 | .774 | .85 |
| September----- | 3,000 | 1,040 | 1,670 | .264 | .30 |
| The year----- | 19,900 | 348 | 3,590 | .575 | 7.84 |

WARM SPRING AT WARM SPRINGS, VA.

LOCATION.—Water-stage recorder just above V-shaped weir, about 200 feet below Warm Spring, at Warm Springs, Bath County.

RECORDS AVAILABLE.—June, 1928, to September, 1931.

EXTREMES.—Maximum mean daily discharge during year (estimated), 2.10 second-feet June 14; minimum, 1.35 second-feet Feb. 25, 27.

1928-1931: Maximum mean daily discharge, 5.45 second-feet Nov. 18, 1929 (flow probably increased somewhat by local surface run-off); minimum, that of Feb. 25, 26, 1931.

REMARKS.—Records excellent except those estimated because of débris on the weir, which are fair. Flow from spring basin regulated by flashboards.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------|--------------|--------------|------|-----------|-------|------|-------|--------------|--------------|-------|------|-------|
| 1 | *1.90 | *1.85 | 1.70 | 1.54 | 1.43 | 1.38 | 1.70 | 1.84 | 2.00 | *2.00 | 1.86 | 1.82 |
| 2 | 1.89 | *1.85 | 1.70 | 1.54 | 1.42 | 1.39 | 1.70 | 1.98 | *2.00 | *2.00 | 1.84 | 1.82 |
| 3 | 1.94 | *1.85 | 1.70 | 1.54 | 1.47 | 1.38 | 1.71 | 1.84 | 1.99 | 2.00 | 1.80 | 1.85 |
| 4 | 1.87 | *1.85 | 1.66 | 1.62 | 1.43 | 1.40 | 1.74 | 1.84 | 2.02 | 1.92 | 1.85 | 1.86 |
| 5 | 1.86 | 1.81 | 1.65 | 1.63 | 1.40 | 1.39 | 1.68 | 1.90 | 1.96 | 1.92 | 1.80 | 1.98 |
| 6 | 1.89 | 1.75 | 1.65 | 1.58 | 1.41 | 1.40 | 1.80 | 1.94 | *2.00 | 1.95 | 1.82 | 1.82 |
| 7 | 1.88 | 1.75 | 1.65 | 1.57 | 1.45 | 1.43 | 1.70 | 1.89 | 2.04 | *1.94 | 1.84 | 1.82 |
| 8 | 1.88 | 1.74 | 1.65 | 1.55 | 1.47 | 1.50 | 1.75 | 1.90 | *2.05 | *1.92 | 1.88 | 1.82 |
| 9 | 1.86 | 1.79 | 1.64 | 1.55 | 1.49 | 1.49 | 1.72 | 1.86 | 2.06 | *1.92 | 1.79 | *1.85 |
| 10 | 1.84 | 1.80 | 1.64 | 1.54 | 1.48 | 1.49 | 1.74 | 1.88 | 2.02 | 1.92 | 1.82 | *1.85 |
| 11 | 1.89 | 1.79 | 1.62 | 1.55 | 1.47 | 1.47 | 1.79 | 1.92 | 1.96 | 1.86 | 1.80 | *1.85 |
| 12 | 1.81 | 1.73 | 1.58 | 1.55 | 1.47 | 1.46 | 1.76 | 1.84 | 2.02 | 1.99 | 1.80 | *1.85 |
| 13 | 1.82 | 1.72 | 1.57 | 1.55 | 1.47 | 1.49 | 1.82 | 1.84 | *2.07 | 1.89 | 1.84 | *1.85 |
| 14 | 1.82 | 1.72 | 1.56 | 1.54 | 1.48 | 1.46 | 1.74 | 1.92 | *2.10 | 2.06 | 1.76 | *1.85 |
| 15 | *1.79 | 1.71 | 1.59 | 1.51 | 1.46 | 1.45 | 1.75 | 1.94 | *2.08 | 1.92 | 1.84 | *1.85 |
| 16 | *1.79 | 1.70 | 1.57 | 1.51 | 1.48 | 1.49 | 1.88 | 1.94 | *2.05 | *2.00 | 1.78 | *1.85 |
| 17 | *1.79 | 1.71 | 1.58 | 1.50 | 1.51 | 1.50 | 1.79 | 2.00 | *2.02 | *2.00 | 1.89 | 1.89 |
| 18 | *1.79 | 1.75 | 1.58 | 1.50 | 1.48 | 1.52 | 1.82 | 1.96 | *2.00 | *2.00 | 1.83 | 1.94 |
| 19 | *1.79 | 1.75 | 1.59 | 1.50 | 1.38 | 1.48 | 1.75 | 1.90 | 1.96 | 2.02 | 1.80 | 1.97 |
| 20 | *1.79 | 1.74 | 1.56 | 1.50 | 1.39 | 1.50 | 1.87 | 2.08 | *2.00 | 1.86 | 1.84 | 1.94 |
| 21 | *1.79 | 1.74 | 1.54 | 1.51 | 1.42 | 1.52 | 1.90 | 1.90 | 2.03 | 2.00 | 1.86 | 1.88 |
| 22 | *1.79 | 1.70 | 1.53 | 1.51 | 1.40 | 1.62 | 1.88 | 1.89 | *2.00 | 1.88 | 1.82 | 1.95 |
| 23 | *1.79 | 1.69 | 1.54 | 1.47 | 1.47 | 1.60 | 1.78 | 1.97 | *2.00 | 1.98 | 1.80 | 1.89 |
| 24 | *1.79 | 1.67 | 1.53 | 1.43 | 1.36 | 1.66 | 1.94 | 1.99 | *2.00 | 1.82 | 1.79 | 1.74 |
| 25 | *1.79 | 1.68 | 1.54 | 1.42 | 1.35 | 1.66 | 1.93 | 1.97 | *2.00 | 2.04 | 1.79 | 1.80 |
| 26 | *1.79 | 1.69 | 1.57 | 1.41 | 1.35 | 1.48 | 1.88 | 1.93 | *2.00 | 1.88 | 1.76 | 1.78 |
| 27 | *1.79 | 1.65 | 1.58 | 1.42 | 1.42 | 1.60 | 1.80 | 2.00 | *2.00 | 1.84 | 1.76 | 1.82 |
| 28 | *1.79 | 1.64 | 1.57 | 1.43 | 1.52 | 1.71 | 1.88 | 1.99 | *2.00 | 1.94 | 1.76 | 1.78 |
| 29 | *1.79 | 1.64 | 1.56 | 1.45 | ----- | 1.55 | 1.83 | 2.07 | *2.00 | 1.83 | 1.78 | 1.74 |
| 30 | *1.85 | 1.63 | 1.56 | 1.45 | ----- | 1.54 | 1.83 | 1.99 | *2.00 | 1.90 | 1.80 | 1.76 |
| 31 | *1.85 | ----- | 1.55 | 1.44 | ----- | 1.60 | ----- | 1.95 | ----- | 1.87 | 1.81 | ----- |
| <hr/> | | | | | | | | | | | | |
| Month | Maxi- mum | Mini- mum | Mean | Month | | | | Maxi- mum | Mini- mum | Mean | | |
| October | 1.94 | 1.79 | 1.83 | May | | | | 2.08 | 1.84 | 1.93 | | |
| November | 1.85 | 1.63 | 1.74 | June | | | | ----- | 1.96 | 2.01 | | |
| December | 1.70 | 1.53 | 1.60 | July | | | | 2.06 | 1.82 | 1.94 | | |
| January | 1.63 | 1.41 | 1.51 | August | | | | 1.89 | 1.76 | 1.81 | | |
| February | 1.52 | 1.35 | 1.44 | September | | | | 1.98 | 1.74 | 1.85 | | |
| March | 1.71 | 1.38 | 1.50 | | | | | | | | | |
| April | 1.94 | 1.68 | 1.80 | The year | | | | ----- | 1.85 | 1.75 | | |

* Estimated.

DUNLAP CREEK NEAR COVINGTON, VA.

LOCATION.—Chain gage at highway bridge 3 miles west of Covington, Alleghany County.

DRAINAGE AREA.—166 square miles.

RECORDS AVAILABLE.—December, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,550 second-feet May 8 (gage height, 4.82 feet); minimum (estimated), 10 second-feet Dec. 18–23.

1928–1931: Maximum discharge, about 4,890 second-feet Nov. 18, 1929 (gage height, 9.46 feet); minimum, that of Dec. 18–23, 1930.

REMARKS.—Records good except those for periods of ice effect, Dec. 16–26, Dec. 30 to Jan. 3, Jan. 16, 17, which are fair. Discharge estimated Feb. 14, 15.

Daily and monthly discharge, in second-feet, 1930–31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|-------|-------|-------|-------|------|------|-------|
| 1. | 12 | 20 | 22 | 22 | 22 | 52 | 470 | 101 | 121 | 23 | 27 | 22 |
| 2. | 13 | 20 | 22 | 22 | 20 | 67 | 610 | 92 | 103 | 20 | 37 | 22 |
| 3. | 13 | 20 | 18 | 22 | 21 | 70 | 372 | 83 | 79 | 21 | 152 | 22 |
| 4. | 14 | 23 | 22 | 23 | 20 | 66 | 372 | 76 | 72 | 46 | 104 | 21 |
| 5. | 15 | 23 | 20 | 121 | 20 | 59 | 428 | 67 | 69 | 27 | 89 | 19 |
| 6. | 15 | 23 | 37 | 320 | 20 | 55 | 449 | 63 | 65 | 25 | 66 | 17 |
| 7. | 14 | 21 | 59 | 147 | 20 | 51 | 585 | 84 | 87 | 25 | 49 | 17 |
| 8. | 14 | 21 | 37 | 89 | 20 | 81 | 635 | 1,240 | 114 | 22 | 37 | 16 |
| 9. | 15 | 20 | 29 | 62 | 24 | 150 | 660 | 514 | 104 | 22 | 29 | 15 |
| 10. | 15 | 20 | 25 | 54 | 23 | 127 | 409 | 320 | 83 | 29 | 26 | 15 |
| 11. | 15 | 21 | 25 | 43 | 27 | 103 | 304 | 242 | 70 | 31 | 23 | 15 |
| 12. | 15 | 23 | 23 | 39 | 33 | 86 | 227 | 242 | 59 | 23 | 25 | 13 |
| 13. | 15 | 23 | 22 | 35 | 33 | 76 | 186 | 242 | 51 | 20 | 22 | 13 |
| 14. | 15 | 23 | 22 | 25 | 35 | 70 | 162 | 256 | 46 | 19 | 20 | 13 |
| 15. | 16 | 23 | 20 | 20 | 34 | 92 | 140 | 227 | 59 | 19 | 19 | 14 |
| 16. | 17 | 23 | 15 | 20 | 33 | 162 | 123 | 199 | 51 | 18 | 17 | 15 |
| 17. | 16 | 25 | 12 | 22 | 86 | 143 | 104 | 167 | 44 | 20 | 16 | 14 |
| 18. | 17 | 24 | 10 | 25 | 287 | 110 | 96 | 143 | 38 | 34 | 16 | 14 |
| 19. | 17 | 23 | 10 | 27 | 287 | 96 | 86 | 213 | 35 | 25 | 16 | 13 |
| 20. | 19 | 22 | 10 | 27 | 167 | 83 | 76 | 145 | 31 | 24 | 16 | 15 |
| 21. | 19 | 20 | 10 | 27 | 114 | 70 | 70 | 409 | 29 | 32 | 19 | 16 |
| 22. | 19 | 20 | 10 | 22 | 86 | 73 | 470 | 372 | 31 | 24 | 31 | 16 |
| 23. | 20 | 20 | 10 | 22 | 73 | 112 | 688 | 770 | 30 | 23 | 99 | 14 |
| 24. | 22 | 19 | 12 | 22 | 62 | 320 | 428 | 449 | 27 | 42 | 70 | 15 |
| 25. | 22 | 19 | 15 | 23 | 54 | 304 | 304 | 354 | 25 | 51 | 51 | 15 |
| 26. | 20 | 20 | 20 | 23 | 47 | 287 | 242 | 372 | 23 | 35 | 42 | 25 |
| 27. | 20 | 18 | 27 | 23 | 42 | 227 | 186 | 256 | 23 | 27 | 35 | 27 |
| 28. | 20 | 19 | 33 | 23 | 39 | 227 | 147 | 199 | 25 | 23 | 31 | 20 |
| 29. | 22 | 19 | 35 | 22 | ----- | 1,120 | 125 | 152 | 22 | 21 | 30 | 19 |
| 30. | 22 | 22 | 30 | 22 | ----- | 470 | 112 | 125 | 20 | 19 | 27 | 19 |
| 31. | 21 | ----- | 24 | 22 | ----- | 287 | ----- | 110 | ----- | 17 | 24 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-------------------|-------------------|
| October | 22 | 12 | 17.1 | 0.10 ³ | 0.12 |
| November | 25 | 18 | 21.2 | .12 ³ | .14 |
| December | 59 | ----- | 22.1 | .133 | .15 |
| January | 320 | 20 | 45.7 | .27 ³ | .32 |
| February | 287 | 20 | 62.5 | .377 | .39 |
| March | 1,120 | 51 | 171 | 1.03 | 1.20 |
| April | 688 | 70 | 309 | 1.86 | 2.08 |
| May | 1,240 | 63 | 267 | 1.61 | 1.86 |
| June | 121 | 20 | 54.5 | .32 ³ | .37 |
| July | 51 | 17 | 26.0 | .15 ³ | .18 |
| August | 152 | 16 | 40.8 | .24 ³ | .28 |
| September | 27 | 13 | 17.0 | .10 ³ | .11 |
| The year | 1,240 | ----- | 87.9 | .53 ¹ | 7.20 |

POTTS CREEK NEAR COVINGTON, VA.

LOCATION.—Chain gage at highway bridge a quarter of a mile above Hays Creek and 3 miles southwest of Covington, Alleghany County.

DRAINAGE AREA.—158 square miles.

RECORDS AVAILABLE.—December, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,150 second-feet May 23 (gage height, 3.58 feet); minimum, 13 second-feet Nov. 29 (gage height, 1.30 feet).

1928-1931: Maximum discharge, 3,480 second-feet Nov. 18, 1929 (gage height, 6.27 feet); minimum, that of Nov. 29, 1930.

REMARKS.—Records good except those estimated for periods of ice effect, Dec. 17-25, Dec. 30 to Jan. 3, Jan. 16, which are fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 18 | 28 | 24 | 25 | 32 | 68 | 665 | 120 | 223 | 32 | 52 | 52 |
| 2..... | 18 | 24 | 24 | 25 | 31 | 80 | 630 | 112 | 214 | 33 | 495 | 46 |
| 3..... | 18 | 27 | 24 | 25 | 29 | 68 | 424 | 101 | 162 | 37 | 306 | 51 |
| 4..... | 18 | 29 | 23 | 26 | 27 | 66 | 430 | 91 | 133 | 41 | 109 | 49 |
| 5..... | 18 | 32 | 22 | 144 | 26 | 63 | 495 | 83 | 120 | 44 | 200 | 46 |
| 6..... | 18 | 32 | 46 | 630 | 24 | 57 | 528 | 78 | 118 | 41 | 218 | 40 |
| 7..... | 18 | 32 | 126 | 366 | 26 | 59 | 630 | 630 | 123 | 37 | 109 | 38 |
| 8..... | 18 | 27 | 72 | 137 | 26 | 76 | 735 | 630 | 106 | 32 | 80 | 36 |
| 9..... | 19 | 27 | 44 | 70 | 31 | 133 | 665 | 462 | 94 | 31 | 63 | 33 |
| 10..... | 19 | 27 | 28 | 59 | 32 | 104 | 560 | 379 | 78 | 55 | 55 | 31 |
| 11..... | 19 | 26 | 27 | 41 | 31 | 91 | 462 | 290 | 70 | 106 | 51 | 31 |
| 12..... | 18 | 23 | 24 | 46 | 31 | 89 | 342 | 267 | 66 | 51 | 52 | 29 |
| 13..... | 19 | 26 | 24 | 41 | 33 | 72 | 263 | 233 | 59 | 43 | 46 | 28 |
| 14..... | 19 | 27 | 24 | 34 | 38 | 68 | 214 | 209 | 61 | 38 | 44 | 25 |
| 15..... | 19 | 27 | 22 | 28 | 38 | 88 | 179 | 196 | 78 | 38 | 40 | 26 |
| 16..... | 21 | 26 | 19 | 28 | 38 | 104 | 158 | 175 | 76 | 44 | 34 | 26 |
| 17..... | 21 | 25 | 15 | 31 | 63 | 104 | 133 | 155 | 70 | 32 | 32 | 32 |
| 18..... | 21 | 28 | 15 | 36 | 263 | 96 | 112 | 144 | 59 | 85 | 33 | 28 |
| 19..... | 20 | 26 | 15 | 36 | 233 | 88 | 104 | 120 | 52 | 61 | 31 | 29 |
| 20..... | 20 | 24 | 16 | 34 | 151 | 72 | 96 | 104 | 47 | 49 | 34 | 28 |
| 21..... | 21 | 23 | 16 | 34 | 115 | 70 | 87 | 882 | 41 | 46 | 49 | 29 |
| 22..... | 21 | 24 | 15 | 28 | 36 | 78 | 495 | 700 | 68 | 38 | 144 | 32 |
| 23..... | 21 | 24 | 15 | 29 | 80 | 137 | 735 | 995 | 78 | 40 | 665 | 28 |
| 24..... | 21 | 22 | 16 | 32 | 65 | 284 | 462 | 665 | 55 | 63 | 417 | 36 |
| 25..... | 21 | 22 | 20 | 34 | 63 | 306 | 385 | 528 | 54 | 98 | 214 | 36 |
| 26..... | 25 | 22 | 24 | 33 | 55 | 233 | 306 | 430 | 47 | 61 | 148 | 47 |
| 27..... | 25 | 21 | 40 | 33 | 51 | 187 | 247 | 324 | 43 | 52 | 120 | 63 |
| 28..... | 28 | 21 | 63 | 33 | 47 | 242 | 196 | 238 | 44 | 44 | 91 | 41 |
| 29..... | 29 | 15 | 44 | 34 | ----- | 958 | 158 | 200 | 37 | 41 | 78 | 34 |
| 30..... | 29 | 21 | 30 | 33 | ----- | 560 | 140 | 166 | 33 | 34 | 68 | 32 |
| 31..... | 29 | ----- | 25 | 34 | ----- | 424 | ----- | 137 | ----- | 32 | 59 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|--------------------|----------------------|
| October..... | 29 | 18 | 20.9 | 0.132 | 0.15 |
| November..... | 32 | 15 | 25.3 | .160 | .18 |
| December..... | 126 | ----- | 30.4 | .192 | .22 |
| January..... | 630 | ----- | 71.6 | .453 | .52 |
| February..... | 263 | 24 | 63.4 | .401 | .42 |
| March..... | 958 | 57 | 165 | 1.04 | 1.20 |
| April..... | 735 | 87 | 368 | 2.33 | 2.60 |
| May..... | 995 | 78 | 317 | 2.01 | 2.32 |
| June..... | 223 | 33 | 83.6 | .529 | .59 |
| July..... | 106 | 31 | 47.7 | .302 | .35 |
| August..... | 665 | 31 | 133 | .842 | .97 |
| September..... | 63 | 25 | 36.0 | .228 | .25 |
| The year..... | 995 | ----- | 114 | .722 | 9.77 |

COWPASTURE RIVER NEAR CLIFTON FORGE, VA.

LOCATION.—Chain gage at iron highway bridge $1\frac{1}{2}$ miles above junction with Jackson River and 4 miles southeast of Clifton Forge, Alleghany County.

DRAINAGE AREA.—456 square miles.

RECORDS AVAILABLE.—May, 1907, to August, 1908; March, 1925, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,660 second-feet Mar. 29 (gage height, 5.99 feet); minimum, 42 second-feet Oct. 10–15, 20–23 (gage height, 1.74 feet).

1907–8, 1925–1931: Maximum gage height, 10.0 feet, original datum, June 14, 1907 (discharge not determined); minimum discharge, that of Oct. 10–15, 20–23, 1930.

Maximum stage known, 20.8 feet in March, 1913 (discharge not determined).

REMARKS.—Records good except those estimated for Dec. 23 to Jan. 24. Jan. 28 to Feb. 15, Mar. 8–25, which are fair.

Daily and monthly discharge, in second-feet, 1930–31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | |
|-----|------|------|------|-------|------|-------|-------|-------|------|------|------|-------|----|
| 1 | 48 | 55 | 68 | 75 | 85 | 210 | 1,640 | 348 | 369 | 167 | 112 | 119 | |
| 2 | 48 | 53 | 66 | | | 390 | 1,810 | 308 | 434 | 139 | 137 | 105 | |
| 3 | 46 | 50 | 64 | | | 482 | 960 | 289 | 369 | 132 | 434 | 109 | |
| 4 | 46 | 53 | 62 | | | 482 | 890 | 270 | 328 | 119 | 369 | 119 | |
| 5 | 46 | 56 | 64 | 370 | 227 | 825 | 234 | 289 | 112 | 289 | 126 | | |
| 6 | 46 | 56 | 72 | 800 | 214 | 1,640 | 220 | 270 | 107 | 289 | 121 | | |
| 7 | 45 | 54 | 88 | 650 | 197 | 1,990 | 369 | 270 | 103 | 270 | 114 | | |
| 8 | 44 | 52 | 98 | 335 | 170 | 270 | 1,560 | 671 | 231 | 96 | 270 | 103 | |
| 9 | 44 | 50 | 107 | | | 450 | 1,100 | 1,240 | 214 | 103 | 252 | 98 | |
| 10 | 43 | 48 | 109 | | | 380 | 960 | 792 | 197 | 126 | 185 | 94 | |
| 11 | 42 | 49 | 101 | | | 350 | 792 | 614 | 182 | 148 | 96 | 90 | |
| 12 | 42 | 53 | 96 | 115 | 205 | 671 | 559 | 173 | 170 | 107 | 81 | | |
| 13 | 42 | 58 | 92 | | | 559 | 642 | 167 | 182 | 124 | 77 | | |
| 14 | 42 | 64 | 90 | | | 507 | 700 | 163 | 170 | 101 | 72 | | |
| 15 | 44 | 86 | 86 | | | 500 | 458 | 792 | 700 | 162 | 90 | 69 | |
| 16 | 46 | 83 | 83 | 85 | 825 | 750 | 369 | 671 | 730 | 150 | 84 | 64 | |
| 17 | 45 | 75 | 79 | | | 412 | 600 | 328 | 507 | 586 | 137 | 70 | 64 |
| 18 | 44 | 72 | 75 | | | 890 | 308 | 434 | 369 | 112 | 64 | 70 | |
| 19 | 44 | 75 | 72 | | | 960 | 270 | 390 | 308 | 107 | 69 | 74 | |
| 20 | 43 | 84 | 69 | 85 | 825 | 231 | 348 | 270 | 103 | 81 | 81 | | |
| 21 | 42 | 90 | 68 | 60 | 86 | 350 | 214 | 1,030 | 214 | 98 | 96 | 90 | |
| 22 | 42 | 94 | 64 | | | 792 | 671 | 890 | 191 | 98 | 116 | 105 | |
| 23 | 42 | 96 | | | | 730 | 1,480 | 1,480 | 173 | 119 | 134 | 116 | |
| 24 | 44 | 88 | | | | 270 | 1,100 | 1,640 | 412 | 134 | 182 | 129 | |
| 25 | 44 | 84 | 60 | 86 | 231 | 580 | 960 | 412 | 129 | 252 | 139 | | |
| 26 | 46 | 83 | 160 | 83 | 220 | 671 | 700 | 700 | 328 | 116 | 217 | 148 | |
| 27 | 47 | 79 | | 79 | 210 | 586 | 559 | 559 | 532 | 112 | 197 | 139 | |
| 28 | 48 | 77 | | 250 | 200 | 559 | 458 | 458 | 369 | 107 | 173 | 129 | |
| 29 | 49 | 74 | | 180 | 100 | 2,260 | 412 | 369 | 270 | 101 | 164 | 119 | |
| 30 | 54 | 72 | 120 | 1,810 | | 369 | 328 | 182 | 92 | 153 | 105 | | |
| 31 | 58 | | | | | 1,100 | | 270 | | 94 | 129 | | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 58 | 42 | 45.4 | 0.100 | 0.12 |
| November | 96 | 48 | 68.8 | .151 | .17 |
| December | | | 91.7 | .201 | .23 |
| January | | | 165 | .362 | .42 |
| February | 960 | | 316 | .693 | .72 |
| March | 2,260 | 197 | 522 | 1.14 | 1.31 |
| April | 1,990 | 214 | 826 | 1.81 | 2.02 |
| May | 1,640 | 220 | 616 | 1.35 | 1.56 |
| June | 730 | 153 | 323 | .708 | .79 |
| July | 182 | 92 | 124 | .272 | .31 |
| August | 434 | 64 | 171 | .375 | .43 |
| September | 148 | 64 | 102 | .224 | .25 |
| The year | 2,260 | 42 | 280 | .614 | 8.33 |

CRAIG CREEK AT PARR, VA.

LOCATION.—Chain gage at Chesapeake & Ohio Railway bridge 600 feet from Parr, Botetourt County, and 12 miles above mouth.

DRAINAGE AREA.—331 square miles.

RECORDS AVAILABLE.—April, 1925, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,700 second-feet Aug. 23 (gage height, 7.35 feet); minimum, 29 second-feet Oct. 1, 5 (gage height, 3.42 feet).

1925-1931: Maximum discharge, 16,900 second-feet Aug. 17, 1928 (gage height, 15.60 feet); minimum, that of Oct. 1, 5, 1930.

REMARKS.—Records good except those estimated for period of ice effect, Dec. 21 to Jan. 3, which are fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| 1 | 29 | 40 | 42 | 35 | 76 | 154 | 1,020 | 268 | 488 | 67 | 77 | 125 |
| 2 | 30 | 39 | 42 | 35 | 74 | 223 | 1,550 | 253 | 514 | 66 | 540 | 108 |
| 3 | 31 | 40 | 45 | 45 | 72 | 212 | 980 | 245 | 350 | 64 | 417 | 115 |
| 4 | 30 | 41 | 49 | 69 | 70 | 194 | 790 | 216 | 308 | 69 | 488 | 120 |
| 5 | 30 | 42 | 51 | 105 | 67 | 177 | 902 | 194 | 260 | 103 | 902 | 101 |
| 6 | 32 | 44 | 77 | 1,550 | 66 | 51 | 1,020 | 184 | 241 | 105 | 464 | 88 |
| 7 | 33 | 56 | 249 | 688 | 66 | 142 | 1,450 | 201 | 260 | 97 | 308 | 81 |
| 8 | 33 | 49 | 160 | 372 | 66 | 205 | 1,270 | 1,650 | 329 | 81 | 230 | 70 |
| 9 | 33 | 44 | 97 | 268 | 70 | 268 | 1,100 | 990 | 350 | 72 | 174 | 64 |
| 10 | 33 | 42 | 76 | 216 | 76 | 260 | 940 | 655 | 268 | 194 | 136 | 61 |
| 11 | 33 | 42 | 66 | 157 | 81 | 223 | 720 | 514 | 223 | 288 | 115 | 59 |
| 12 | 33 | 44 | 59 | 133 | 77 | 187 | 568 | 464 | 187 | 142 | 110 | 56 |
| 13 | 34 | 50 | 53 | 130 | 77 | 167 | 464 | 417 | 167 | 101 | 105 | 53 |
| 14 | 34 | 51 | 50 | 110 | 81 | 160 | 394 | 372 | 174 | 82 | 97 | 51 |
| 15 | 34 | 52 | 49 | 77 | 92 | 160 | 350 | 329 | 160 | 257 | 88 | 49 |
| 16 | 36 | 53 | 48 | 59 | 125 | 167 | 308 | 308 | 264 | 288 | 82 | 49 |
| 17 | 36 | 53 | 46 | 97 | 142 | 167 | 288 | 268 | 308 | 184 | 74 | 52 |
| 18 | 34 | 53 | 45 | 101 | 329 | 167 | 260 | 253 | 208 | 268 | 66 | 51 |
| 19 | 34 | 51 | 59 | 92 | 488 | 160 | 234 | 238 | 167 | 329 | 61 | 49 |
| 20 | 33 | 50 | 56 | 103 | 394 | 157 | 216 | 223 | 136 | 223 | 63 | 50 |
| 21 | 33 | 49 | 50 | 115 | 308 | 148 | 201 | 308 | 110 | 167 | 81 | 59 |
| 22 | 33 | 49 | 45 | 105 | 249 | 157 | 329 | 417 | 105 | 148 | 440 | 54 |
| 23 | 36 | 46 | 45 | 84 | 208 | 230 | 1,860 | 1,550 | 208 | 130 | 2,570 | 81 |
| 24 | 39 | 44 | 40 | 77 | 180 | 329 | 902 | 1,100 | 125 | 180 | 1,180 | 49 |
| 25 | 40 | 42 | 40 | 77 | 160 | 417 | 655 | 755 | 110 | 308 | 595 | 50 |
| 26 | 40 | 42 | 50 | 84 | 142 | 394 | 540 | 625 | 120 | 223 | 440 | 56 |
| 27 | 40 | 42 | 55 | 81 | 130 | 350 | 464 | 488 | 105 | 157 | 329 | 81 |
| 28 | 40 | 42 | 50 | 79 | 118 | 372 | 394 | 394 | 97 | 128 | 268 | 88 |
| 29 | 42 | 40 | 45 | 81 | ----- | 1,450 | 329 | 329 | 88 | 112 | 216 | 64 |
| 30 | 42 | 46 | 40 | 81 | ----- | 1,180 | 308 | 308 | 74 | 105 | 184 | 53 |
| 31 | 42 | ----- | 35 | 77 | ----- | 720 | ----- | 440 | ----- | 88 | 148 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 42 | 29 | 34.9 | 0.105 | 0.12 |
| November | 56 | 39 | 45.9 | .139 | .16 |
| December | 249 | ----- | 61.7 | .186 | .21 |
| January | 1,550 | ----- | 174 | .526 | .61 |
| February | 488 | 66 | 146 | .441 | .46 |
| March | 1,450 | 142 | 305 | .921 | 1.06 |
| April | 1,860 | 201 | 604 | 2.10 | 2.34 |
| May | 1,650 | 184 | 482 | 1.46 | 1.68 |
| June | 514 | 74 | 217 | .656 | .73 |
| July | 329 | 64 | 156 | .471 | .54 |
| August | 2,570 | 61 | 356 | 1.06 | 1.24 |
| September | 125 | 49 | 68.6 | .207 | .23 |
| The year | 2,570 | 29 | 229 | .692 | 0.38 |

MEADOW CREEK AT NEWCASTLE, VA.

LOCATION.—Water-stage recorder 500 feet above Newcastle-Salem highway bridge and just outside town limits of Newcastle, Craig County.

DRAINAGE AREA.—13.8 square miles.

RECORDS AVAILABLE.—September, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 130 second-foot Aug. 23 (gage height, 2.71 feet); minimum, 1.7 second foot Oct. 1, 8 (gage height, 0.96 foot).
1929-1931: Maximum discharge, 242 second-foot Oct. 2, 1929 (gage height, 3.64 feet); minimum, 0.8 second-foot Sept. 4, 1930 (gage height, 0.91 foot).

REMARKS.—Records good except those estimated for periods of ice effect, Nov. 27-30, Dec. 15 to Jan. 3, and for periods of no gage heights, Mar. 1-7, Aug. 2-11, which are fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|------|-------|------|------|-------|
| 1..... | 1.7 | 7.2 | 10.1 | 6 | 3.9 | 6 | 45 | 11.6 | 19.8 | 5.5 | 23 | 14.8 |
| 2..... | 2.0 | 7.2 | 10.8 | 8 | 3.6 | 5 | 50 | 11.6 | 15.3 | 6.0 | 35 | 14.4 |
| 3..... | 2.0 | 7.2 | 11.5 | 12 | 3.2 | 5 | 36 | 10.4 | 12.7 | 7.7 | 50 | 15.8 |
| 4..... | 2.2 | 8.8 | 11.5 | 18.2 | 3.0 | 4 | 35 | 9.6 | 11.9 | 7.0 | 70 | 13.5 |
| 5..... | 2.2 | 8.5 | 12.0 | 36 | 3.0 | 4 | 38 | 8.3 | 11.2 | 6.0 | 90 | 12.3 |
| 6..... | 2.2 | 7.2 | 18.8 | 32 | 2.8 | 4 | 38 | 8.0 | 17.1 | 5.8 | 50 | 11.9 |
| 7..... | 2.2 | 7.2 | 12.9 | 15.8 | 2.8 | 4 | 35 | 17.2 | 22 | 5.0 | 30 | 10.8 |
| 8..... | 2.0 | 7.2 | 8.5 | 9.6 | 2.8 | 7.3 | 42 | 30 | 25 | 4.1 | 25 | 10.0 |
| 9..... | 2.0 | 7.2 | 7.2 | 7.3 | 3.6 | 6.3 | 62 | 26 | 20 | 3.9 | 22 | 9.6 |
| 10..... | 2.2 | 7.2 | 6.4 | 5.5 | 3.6 | 5.0 | 46 | 23 | 16.6 | 22 | 18 | 10.0 |
| 11..... | 2.4 | 7.2 | 6.1 | 4.7 | 2.6 | 4.7 | 36 | 19.8 | 14.8 | 12.3 | 17 | 8.9 |
| 12..... | 2.2 | 8.1 | 5.8 | 5.0 | 2.6 | 4.4 | 28 | 18.0 | 13.1 | 9.6 | 15.8 | 8.9 |
| 13..... | 2.2 | 9.1 | 5.5 | 4.7 | 2.6 | 3.9 | 24 | 16.2 | 12.7 | 7.6 | 14.4 | 8.9 |
| 14..... | 2.6 | 8.5 | 6.1 | 3.9 | 3.4 | 4.4 | 20 | 14.4 | 11.6 | 17.4 | 12.3 | 8.6 |
| 15..... | 2.9 | 8.8 | 6 | 7.6 | 3.6 | 5.8 | 18 | 12.7 | 22 | 74 | 11.9 | 8.6 |
| 16..... | 3.4 | 9.4 | 7 | 14.4 | 2.6 | 5.2 | 16.2 | 11.6 | 43 | 34 | 11.6 | 8.6 |
| 17..... | 3.9 | 8.5 | 7 | 4.7 | 8.7 | 3.6 | 14.8 | 11.2 | 19.2 | 43 | 11.2 | 8.6 |
| 18..... | 4.9 | 8.1 | 7 | 3.9 | 12.7 | 3.6 | 14.0 | 10.4 | 15.8 | 55 | 10.0 | 8.0 |
| 19..... | 5.2 | 7.8 | 6 | 5.0 | 11.9 | 3.6 | 13.1 | 9.6 | 13.5 | 31 | 9.6 | 7.3 |
| 20..... | 5.2 | 7.5 | 6 | 5.8 | 10.8 | 3.6 | 11.6 | 10.4 | 11.6 | 23 | 11.2 | 8.6 |
| 21..... | 5.5 | 7.2 | 6 | 4.4 | 8.6 | 3.6 | 10.8 | 12.3 | 10.4 | 20 | 13.6 | 8.0 |
| 22..... | 5.5 | 6.9 | 6 | 5.0 | 7.3 | 4.1 | 26 | 17.6 | 10.8 | 19.8 | 84 | 7.0 |
| 23..... | 6.1 | 6.6 | 5 | 3.4 | 6.6 | 5.2 | 29 | 31 | 10.0 | 17.1 | 122 | 6.6 |
| 24..... | 7.2 | 7.8 | 5 | 3.2 | 6.0 | 8.0 | 25 | 26 | 8.3 | 44 | 79 | 6.6 |
| 25..... | 6.4 | 7.5 | 5 | 3.4 | 5.0 | 14.4 | 22 | 24 | 7.6 | 32 | 47 | 6.0 |
| 26..... | 6.1 | 6.9 | 6 | 4.4 | 4.4 | 14.8 | 20 | 19.8 | 7.6 | 24 | 36 | 14.4 |
| 27..... | 6.1 | 7 | 6 | 4.7 | 4.1 | 13.5 | 16.6 | 16.2 | 7.3 | 19.8 | 29 | 8.6 |
| 28..... | 6.6 | 7 | 6 | 5.0 | 3.6 | 21 | 14.8 | 14.0 | 6.6 | 17.1 | 25 | 7.0 |
| 29..... | 6.9 | 7 | 6 | 5.0 | ----- | 53 | 13.5 | 12.3 | 6.3 | 14.8 | 22 | 6.6 |
| 30..... | 6.9 | 9 | 5 | 5.0 | ----- | 36 | 11.9 | 14.0 | 5.5 | 13.1 | 18.0 | 6.3 |
| 31..... | 7.2 | ----- | 5 | 4.4 | ----- | 27 | ----- | 13.1 | ----- | 11.6 | 15.8 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 7.2 | 1.7 | 4.07 | 0.275 | 0.34 |
| November..... | 9.4 | 6.6 | 7.69 | .537 | .62 |
| December..... | 18.8 | ----- | 7.52 | .545 | .63 |
| January..... | 36 | 3.2 | 8.32 | .603 | .70 |
| February..... | 12.7 | 2.6 | 4.98 | .331 | .38 |
| March..... | 53 | 3.6 | 9.48 | .637 | .79 |
| April..... | 62 | 10.8 | 27.0 | 1.93 | 2.19 |
| May..... | 31 | 8.0 | 15.3 | 1.14 | 1.31 |
| June..... | 43 | 5.5 | 14.3 | 1.01 | 1.16 |
| July..... | 74 | 3.9 | 19.8 | 1.43 | 1.65 |
| August..... | 122 | 9.6 | 33.2 | 2.41 | 2.78 |
| September..... | 15.8 | 6.0 | 9.51 | .609 | .77 |
| The year..... | 122 | 1.7 | 13.5 | .973 | 13.32 |

JOHNS CREEK AT NEWCASTLE, VA.

LOCATION.—Chain gage at highway bridge 500 feet east of town limits of Newcastle, Craig County, and a quarter of a mile above mouth.

DRAINAGE AREA.—106 square miles.

RECORDS AVAILABLE.—April, 1926, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,090 second-feet May 8 (gage height, 6.77 feet); minimum, 8 second-feet Oct. 1 (gage height, 2.31 feet).

1926-1931: Maximum discharge, 3,500 second-feet Aug 16, 1928 (gage height 9.10 feet); minimum, 7 second-feet Aug. 11, Sept. 3, 6, 7, 1930 (gage height, 2.26 feet).

REMARKS.—Records good except those estimated for periods of ice effect, Nov. 26-29, Dec. 2, 3, Dec. 16 to Jan. 3, and for Aug. 13-15, which are fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 8 | 12 | 15 | 10 | 28 | 55 | 561 | 94 | 125 | 17 | 37 | 35 |
| 2..... | 9 | 12 | 15 | 10 | 27 | 73 | 421 | 89 | 132 | 17 | 106 | 32 |
| 3..... | 9 | 11 | 16 | 20 | 26 | 64 | 271 | 84 | 100 | 16 | 191 | 45 |
| 4..... | 9 | 19 | 18 | 39 | 25 | 59 | 271 | 73 | 89 | 17 | 313 | 42 |
| 5..... | 9 | 15 | 59 | 199 | 24 | 55 | 421 | 64 | 78 | 22 | 337 | 31 |
| 6..... | 9 | 15 | 59 | 363 | 23 | 55 | 363 | 68 | 84 | 23 | 167 | 26 |
| 7..... | 9 | 15 | 73 | 138 | 22 | 48 | 421 | 167 | 89 | 25 | 94 | 23 |
| 8..... | 9 | 13 | 36 | 100 | 22 | 55 | 199 | 645 | 89 | 21 | 64 | 20 |
| 9..... | 9 | 12 | 28 | 89 | 25 | 84 | 337 | 271 | 68 | 17 | 50 | 20 |
| 10..... | 10 | 12 | 21 | 73 | 30 | 73 | 271 | 199 | 59 | 68 | 38 | 18 |
| 11..... | 10 | 12 | 20 | 49 | 28 | 64 | 234 | 167 | 48 | 73 | 35 | 18 |
| 12..... | 9 | 14 | 18 | 73 | 28 | 59 | 199 | 152 | 40 | 73 | 32 | 15 |
| 13..... | 9 | 17 | 17 | 43 | 31 | 55 | 160 | 138 | 35 | 94 | 25 | 15 |
| 14..... | 10 | 15 | 15 | 35 | 68 | 50 | 160 | 118 | 37 | 26 | 25 | 15 |
| 15..... | 10 | 17 | 15 | 33 | 59 | 55 | 152 | 118 | 138 | 145 | 25 | 15 |
| 16..... | 10 | 17 | 14 | 51 | 55 | 68 | 112 | 106 | 167 | 118 | 23 | 16 |
| 17..... | 10 | 16 | 13 | 34 | 84 | 89 | 94 | 100 | 94 | 64 | 21 | 14 |
| 18..... | 9 | 17 | 13 | 30 | 199 | 68 | 84 | 89 | 46 | 73 | 20 | 12 |
| 19..... | 9 | 15 | 14 | 34 | 208 | 64 | 84 | 84 | 37 | 73 | 17 | 12 |
| 20..... | 9 | 16 | 15 | 47 | 138 | 59 | 73 | 78 | 30 | 47 | 22 | 15 |
| 21..... | 10 | 15 | 15 | 44 | 106 | 59 | 64 | 118 | 28 | 37 | 51 | 16 |
| 22..... | 9 | 14 | 14 | 39 | 89 | 59 | 291 | 106 | 34 | 42 | 271 | 15 |
| 23..... | 10 | 14 | 13 | 31 | 73 | 73 | 453 | 291 | 37 | 68 | 645 | 13 |
| 24..... | 16 | 14 | 12 | 34 | 59 | 118 | 234 | 337 | 33 | 106 | 252 | 15 |
| 25..... | 12 | 13 | 12 | 34 | 59 | 125 | 191 | 252 | 29 | 94 | 152 | 15 |
| 26..... | 12 | 12 | 15 | 29 | 49 | 112 | 167 | 191 | 26 | 59 | 118 | 26 |
| 27..... | 11 | 11 | 15 | 31 | 49 | 68 | 138 | 152 | 25 | 45 | 112 | 29 |
| 28..... | 11 | 10 | 14 | 32 | 50 | 160 | 118 | 132 | 26 | 35 | 94 | 23 |
| 29..... | 13 | 10 | 13 | 34 | ----- | 523 | 112 | 112 | 21 | 32 | 64 | 17 |
| 30..... | 12 | 15 | 12 | 31 | ----- | 291 | 100 | 112 | 18 | 28 | 51 | 15 |
| 31..... | 12 | ----- | 11 | 27 | ----- | 208 | ----- | 89 | ----- | 28 | 42 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 16 | 8 | 10.1 | 0.095 | 0.11 |
| November..... | 19 | ----- | 14.0 | .132 | .15 |
| December..... | 73 | ----- | 20.6 | .194 | .22 |
| January..... | 363 | ----- | 59.2 | .558 | .64 |
| February..... | 208 | 22 | 60.1 | .567 | .59 |
| March..... | 523 | 48 | 96.3 | .927 | 1.07 |
| April..... | 561 | 64 | 225 | 2.12 | 2.36 |
| May..... | 645 | 64 | 155 | 1.46 | 1.68 |
| June..... | 107 | 16 | 62.1 | .586 | .65 |
| July..... | 145 | 16 | 51.7 | .488 | .56 |
| August..... | 645 | 17 | 113 | 1.07 | 1.23 |
| September..... | 45 | 12 | 20.8 | .196 | .22 |
| The year..... | 645 | 8 | 74.2 | .700 | 9.48 |

CATAWBA CREEK NEAR FINCASTLE, VA.

LOCATION.—Chain gage at highway bridge at Kyles Mills, 4 miles northeast of Fincastle, Botetourt County.

DRAINAGE AREA.—104 square miles.

RECORDS AVAILABLE.—December, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,070 second-feet Aug. 1 (gage height, 8.50 feet); minimum, 5 second-feet Oct. 2-4, 10, Nov. 28 (gage height, 1.94 feet).

1928-1931: Maximum discharge, about 2,100 second-feet Oct. 2, 1929 (gage height, 12.60 feet); minimum, 3 second-feet Aug. 13, Sept. 28, 29, 1930 (gage height, 1.90 feet).

REMARKS.—Records good except those estimated for periods of ice effect, Dec. 17-26, Dec. 29 to Jan. 2, and for Jan. 17-19, Feb. 15, 16, which are fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1 | 6 | 8 | 7 | 15 | 12 | 80 | 766 | 59 | 92 | 16 | 421 | 57 |
| 2 | 5 | 8 | 7 | 15 | 12 | 52 | 328 | 54 | 66 | 12 | 920 | 53 |
| 3 | 5 | 7 | 6 | 16 | 11 | 51 | 205 | 42 | 64 | 10 | 122 | 49 |
| 4 | 5 | 10 | 6 | 16 | 10 | 46 | 179 | 40 | 49 | 18 | 83 | 47 |
| 5 | 6 | 9 | 7 | 544 | 10 | 43 | 357 | 40 | 43 | 21 | 105 | 39 |
| 6 | 7 | 8 | 92 | 455 | 11 | 36 | 357 | 31 | 51 | 19 | 83 | 38 |
| 7 | 6 | 7 | 55 | 179 | 9 | 36 | 272 | 39 | 192 | 19 | 62 | 37 |
| 8 | 6 | 9 | 27 | 134 | 10 | 122 | 244 | 166 | 74 | 16 | 50 | 35 |
| 9 | 6 | 9 | 26 | 65 | 12 | 116 | 205 | 146 | 55 | 12 | 41 | 32 |
| 10 | 5 | 9 | 18 | 53 | 22 | 66 | 179 | 86 | 54 | 69 | 38 | 28 |
| 11 | 6 | 8 | 12 | 50 | 68 | 62 | 134 | 74 | 43 | 69 | 34 | 29 |
| 12 | 7 | 9 | 12 | 48 | 80 | 51 | 116 | 104 | 43 | 43 | 43 | 25 |
| 13 | 7 | 12 | 11 | 42 | 74 | 48 | 104 | 92 | 42 | 31 | 38 | 22 |
| 14 | 8 | 12 | 10 | 30 | 74 | 34 | 86 | 74 | 39 | 258 | 37 | 25 |
| 15 | 8 | 11 | 9 | 21 | 65 | 40 | 80 | 64 | 36 | 86 | 38 | 34 |
| 16 | 13 | 11 | 7 | 16 | 55 | 36 | 74 | 57 | 92 | 80 | 34 | 23 |
| 17 | 10 | 11 | 7 | 30 | 45 | 24 | 61 | 53 | 43 | 58 | 28 | 24 |
| 18 | 6 | 12 | 7 | 35 | 44 | 21 | 47 | 47 | 34 | 43 | 18 | 23 |
| 19 | 6 | 11 | 7 | 30 | 43 | 23 | 52 | 43 | 24 | 39 | 18 | 21 |
| 20 | 7 | 10 | 8 | 32 | 44 | 21 | 52 | 41 | 16 | 18 | 58 | 23 |
| 21 | 8 | 8 | 8 | 29 | 39 | 21 | 41 | 86 | 21 | 16 | 88 | 26 |
| 22 | 8 | 7 | 7 | 25 | 34 | 54 | 98 | 59 | 54 | 13 | 986 | 24 |
| 23 | 8 | 7 | 7 | 22 | 28 | 66 | 179 | 134 | 62 | 13 | 662 | 24 |
| 24 | 6 | 7 | 8 | 18 | 25 | 92 | 179 | 153 | 39 | 134 | 323 | 24 |
| 25 | 7 | 7 | 12 | 21 | 22 | 86 | 134 | 146 | 40 | 36 | 189 | 22 |
| 26 | 8 | 7 | 20 | 19 | 18 | 74 | 110 | 110 | 39 | 18 | 146 | 323 |
| 27 | 8 | 7 | 41 | 18 | 18 | 69 | 92 | 74 | 44 | 12 | 116 | 215 |
| 28 | 8 | 5 | 36 | 17 | 51 | 86 | 74 | 68 | 30 | 13 | 94 | 62 |
| 29 | 8 | 7 | 20 | 16 | ----- | 272 | 67 | 54 | 25 | 12 | 83 | 17 |
| 30 | 8 | 8 | 16 | 15 | ----- | 192 | 62 | 45 | 17 | 32 | 67 | 23 |
| 31 | 7 | ----- | 15 | 12 | ----- | 140 | ----- | 49 | ----- | 12 | 62 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 13 | 5 | 7.1 | 0.068 | 0.08 |
| November | 12 | 5 | 8.7 | .084 | .09 |
| December | 92 | 6 | 17.1 | .164 | .19 |
| January | 544 | 12 | 65.7 | .632 | .73 |
| February | 80 | 9 | 33.8 | .325 | .34 |
| March | 272 | 21 | 69.7 | .670 | .77 |
| April | 766 | 41 | 164 | 1.58 | 1.76 |
| May | 166 | 31 | 75.2 | .723 | .83 |
| June | 192 | 16 | 50.8 | .488 | .54 |
| July | 258 | 10 | 40.3 | .387 | .45 |
| August | 986 | 18 | 164 | 1.58 | 1.82 |
| September | 323 | 17 | 47.5 | .457 | .51 |
| The year | 986 | 5 | 62.2 | .598 | 8.11 |

NORTH RIVER AT GOSHEN, VA.

LOCATION.—Chain gage at highway bridge at Goshen, Rockbridge County, 500 feet below junction of Mill Creek and Calpasture River.

DRAINAGE AREA.—190 square miles.

RECORDS AVAILABLE.—March, 1925, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,720 second-feet Mar. 29 (gage height, 4.80 feet); minimum, 8 second-feet Oct. 1, 2 (gage height, 1.76 feet). 1925-1931: Maximum discharge, 7,310 second-feet Nov. 16, 1926 (gage height, 9.70 feet); minimum, 8 second-feet July 22, 1926, Sept. 4, 5, 28-30, Oct. 1, 2, 1930.

REMARKS.—Records good. Discharge estimated for Dec. 16-18, 22-25, Jan. 1-3, 22, 23 because of ice.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|-------|-------|-------|-------|------|------|-------|
| 1..... | 8 | 14 | 16 | 30 | 23 | 128 | 790 | 136 | 240 | 64 | 87 | 31 |
| 2..... | 9 | 14 | 14 | 30 | 23 | 198 | 790 | 122 | 158 | 56 | 70 | 40 |
| 3..... | 10 | 13 | 14 | 25 | 23 | 198 | 528 | 112 | 115 | 49 | 87 | 47 |
| 4..... | 10 | 13 | 13 | 35 | 23 | 167 | 920 | 102 | 102 | 90 | 106 | 36 |
| 5..... | 10 | 17 | 13 | 64 | 21 | 135 | 1,060 | 93 | 87 | 122 | 87 | 31 |
| 6..... | 10 | 17 | 24 | 550 | 21 | 110 | 820 | 87 | 82 | 122 | 67 | 27 |
| 7..... | 11 | 15 | 41 | 300 | 21 | 104 | 670 | 109 | 93 | 132 | 54 | 22 |
| 8..... | 10 | 14 | 32 | 146 | 24 | 138 | 610 | 528 | 106 | 112 | 43 | 21 |
| 9..... | 11 | 14 | 26 | 104 | 33 | 265 | 850 | 670 | 90 | 80 | 38 | 20 |
| 10..... | 11 | 14 | 23 | 72 | 176 | 245 | 670 | 418 | 74 | 70 | 32 | 18 |
| 11..... | 10 | 13 | 21 | 59 | 146 | 180 | 472 | 310 | 64 | 87 | 32 | 18 |
| 12..... | 10 | 14 | 18 | 57 | 118 | 138 | 335 | 290 | 72 | 84 | 34 | 17 |
| 13..... | 11 | 16 | 18 | 52 | 96 | 118 | 250 | 472 | 70 | 82 | 37 | 16 |
| 14..... | 11 | 16 | 18 | 48 | 90 | 104 | 204 | 640 | 118 | 72 | 30 | 14 |
| 15..... | 12 | 16 | 17 | 46 | 77 | 107 | 183 | 610 | 166 | 62 | 26 | 16 |
| 16..... | 12 | 14 | 16 | 43 | 75 | 107 | 162 | 418 | 143 | 70 | 24 | 17 |
| 17..... | 13 | 14 | 15 | 43 | 99 | 121 | 136 | 310 | 125 | 58 | 21 | 16 |
| 18..... | 13 | 16 | 20 | 33 | 325 | 118 | 122 | 250 | 102 | 47 | 20 | 16 |
| 19..... | 13 | 14 | 20 | 33 | 290 | 110 | 109 | 195 | 72 | 43 | 20 | 14 |
| 20..... | 13 | 13 | 20 | 36 | 212 | 104 | 102 | 174 | 64 | 45 | 23 | 30 |
| 21..... | 13 | 13 | 20 | 33 | 159 | 93 | 93 | 528 | 58 | 51 | 26 | 27 |
| 22..... | 13 | 14 | 18 | 30 | 128 | 93 | 236 | 555 | 143 | 49 | 58 | 24 |
| 23..... | 13 | 13 | 16 | 25 | 114 | 104 | 1,140 | 1,460 | 208 | 62 | 102 | 24 |
| 24..... | 14 | 13 | 15 | 21 | 104 | 212 | 640 | 920 | 136 | 74 | 80 | 24 |
| 25..... | 14 | 13 | 14 | 25 | 96 | 250 | 445 | 555 | 99 | 60 | 67 | 21 |
| 26..... | 14 | 13 | 20 | 25 | 85 | 225 | 330 | 365 | 99 | 52 | 62 | 34 |
| 27..... | 14 | 13 | 36 | 26 | 77 | 198 | 255 | 240 | 183 | 47 | 52 | 37 |
| 28..... | 14 | 13 | 48 | 26 | 68 | 202 | 204 | 200 | 125 | 45 | 51 | 30 |
| 29..... | 15 | 12 | 61 | 25 | ----- | 1,630 | 174 | 158 | 93 | 40 | 49 | 23 |
| 30..... | 15 | 12 | 46 | 23 | ----- | 885 | 154 | 136 | 82 | 36 | 42 | 22 |
| 31..... | 14 | ----- | 39 | 23 | ----- | 528 | ----- | 118 | ----- | 60 | 36 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 15 | 8 | 12.0 | 0.063 | 0.07 |
| November..... | 17 | 12 | 14.0 | .074 | .08 |
| December..... | 61 | 13 | 23.6 | .124 | .14 |
| January..... | 550 | 21 | 67.4 | .355 | .41 |
| February..... | 325 | 21 | 98.1 | .516 | .54 |
| March..... | 1,630 | 93 | 236 | 1.24 | 1.43 |
| April..... | 1,140 | 93 | 448 | 2.36 | 2.63 |
| May..... | 1,460 | 87 | 364 | 1.92 | 2.21 |
| June..... | 240 | 68 | 112 | .589 | .66 |
| July..... | 132 | 36 | 68.5 | .361 | .42 |
| August..... | 106 | 20 | 50.4 | .265 | .31 |
| September..... | 47 | 14 | 24.4 | .128 | .14 |
| The year..... | 1,630 | 8 | 127 | .668 | 9.04 |

JAMES RIVER BASIN

29

NORTH RIVER AT ROCKBRIDGE BATHS, VA.

LOCATION.—Water-stage recorder 700 feet above highway bridge at Rockbridge Baths, Rockbridge County, and 1½ miles above Walker Creek.

DRAINAGE AREA.—329 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,600 second-feet Mar. 29 (gage height, 5.16 feet); minimum, 6 second-feet Nov. 28 (gage height, 0.76 foot). 1928-1931: Maximum discharge, 6,180 second-feet Nov. 18, 1929 (gage height, 8.58 feet); minimum, that of Nov. 28, 1930.

REMARKS.—Records excellent. Discharge estimate for Sept. 14-17.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|-------|-------|-------|-------|------|------|-------|
| 1..... | 12 | 21 | 28 | 60 | 40 | 309 | 1,260 | 216 | 628 | 79 | 107 | 47 |
| 2..... | 13 | 20 | 29 | 60 | 40 | 371 | 1,310 | 206 | 400 | 67 | 95 | 52 |
| 3..... | 12 | 21 | 35 | 47 | 40 | 328 | 881 | 184 | 285 | 61 | 158 | 144 |
| 4..... | 13 | 21 | 34 | 50 | 40 | 281 | 1,110 | 164 | 229 | 87 | 147 | 77 |
| 5..... | 15 | 27 | 35 | 110 | 39 | 229 | 1,350 | 147 | 200 | 123 | 174 | 60 |
| 6..... | 13 | 26 | 53 | 768 | 37 | 187 | 1,120 | 139 | 167 | 153 | 107 | 50 |
| 7..... | 13 | 25 | 95 | 446 | 39 | 170 | 1,120 | 176 | 181 | 158 | 79 | 43 |
| 8..... | 14 | 23 | 60 | 247 | 37 | 384 | 968 | 1,060 | 193 | 139 | 63 | 40 |
| 9..... | 15 | 23 | 45 | 173 | 49 | 501 | 1,160 | 930 | 164 | 100 | 55 | 36 |
| 10..... | 16 | 23 | 39 | 133 | 269 | 380 | 968 | 640 | 139 | 107 | 47 | 34 |
| 11..... | 16 | 23 | 35 | 106 | 266 | 292 | 729 | 473 | 120 | 133 | 45 | 32 |
| 12..... | 16 | 24 | 33 | 95 | 196 | 233 | 540 | 448 | 105 | 120 | 50 | 32 |
| 13..... | 15 | 28 | 31 | 83 | 155 | 196 | 420 | 696 | 95 | 110 | 49 | 29 |
| 14..... | 14 | 28 | 30 | 71 | 150 | 176 | 349 | 923 | 149 | 85 | 43 | 30 |
| 15..... | 15 | 28 | 30 | 75 | 136 | 178 | 304 | 839 | 236 | 90 | 40 | 30 |
| 16..... | 18 | 27 | 27 | 73 | 123 | 178 | 258 | 628 | 196 | 164 | 36 | 35 |
| 17..... | 16 | 27 | 23 | 65 | 172 | 178 | 229 | 490 | 164 | 90 | 33 | 35 |
| 18..... | 17 | 31 | 31 | 57 | 481 | 176 | 206 | 390 | 139 | 79 | 32 | 30 |
| 19..... | 16 | 31 | 31 | 57 | 552 | 173 | 184 | 324 | 112 | 67 | 34 | 28 |
| 20..... | 17 | 28 | 31 | 63 | 405 | 161 | 167 | 334 | 93 | 109 | 40 | 32 |
| 21..... | 16 | 25 | 35 | 58 | 300 | 144 | 153 | 1,820 | 79 | 97 | 43 | 60 |
| 22..... | 17 | 23 | 28 | 49 | 229 | 147 | 456 | 1,260 | 88 | 79 | 214 | 41 |
| 23..... | 19 | 23 | 27 | 52 | 187 | 180 | 1,440 | 2,160 | 184 | 75 | 426 | 35 |
| 24..... | 20 | 22 | 25 | 49 | 167 | 367 | 930 | 1,450 | 206 | 110 | 233 | 34 |
| 25..... | 20 | 21 | 24 | 49 | 144 | 415 | 664 | 968 | 147 | 112 | 147 | 33 |
| 26..... | 19 | 21 | 31 | 46 | 125 | 405 | 529 | 684 | 120 | 88 | 128 | 41 |
| 27..... | 20 | 20 | 60 | 47 | 110 | 358 | 415 | 495 | 164 | 71 | 97 | 65 |
| 28..... | 19 | 20 | 77 | 46 | 100 | 359 | 332 | 371 | 190 | 60 | 77 | 47 |
| 29..... | 21 | 19 | 95 | 46 | ----- | 2,070 | 285 | 296 | 136 | 58 | 75 | 39 |
| 30..... | 22 | 23 | 79 | 45 | ----- | 1,350 | 251 | 247 | 102 | 49 | 65 | 35 |
| 31..... | 21 | ----- | 77 | 42 | ----- | 797 | ----- | 236 | ----- | 42 | 53 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 22 | 12 | 16.5 | 0.050 | 0.06 |
| November..... | 31 | 19 | 24.1 | .073 | .08 |
| December..... | 95 | 23 | 42.4 | .129 | .15 |
| January..... | 708 | 42 | 109 | .331 | .38 |
| February..... | 552 | 37 | 165 | .502 | .52 |
| March..... | 2,070 | 144 | 377 | 1.15 | 1.33 |
| April..... | 1,440 | 153 | 670 | 2.04 | 2.26 |
| May..... | 2,160 | 139 | 626 | 1.90 | 2.19 |
| June..... | 628 | 79 | 180 | .647 | .61 |
| July..... | 164 | 42 | 95.5 | .290 | .33 |
| August..... | 426 | 32 | 96.5 | .293 | .34 |
| September..... | 144 | 28 | 44.2 | .134 | .15 |
| The year..... | 2,160 | 12 | 204 | .620 | 8.42 |

NORTH RIVER NEAR LEXINGTON, VA.

LOCATION.—Water-stage recorder 300 yards above Lime Kiln highway bridge and 2½ miles above Lexington, Rockbridge County.

DRAINAGE AREA.—487 square miles.

RECORDS AVAILABLE.—August, 1925, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,950 second-feet May 21 (gage height, 6.63 feet); minimum, 37 second-feet Dec. 25 (gage height, 1.91 feet).
1925-1931: Maximum discharge, 10,000 second-feet Apr. 16, 1929 (gage height, 11.95 feet); minimum, 34 second-feet Sept. 6, 1930 (gage height, 1.88 feet).

REMARKS.—Records good. Discharge estimated for Oct. 13.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|-------|-------|-------|-------|------|------|-------|
| 1 | 40 | 57 | 70 | 90 | 77 | 339 | 1,540 | 269 | 988 | 132 | 221 | 84 |
| 2 | 41 | 56 | 73 | 90 | 73 | 458 | 1,800 | 255 | 647 | 115 | 238 | 84 |
| 3 | 42 | 54 | 62 | 70 | 73 | 415 | 1,170 | 236 | 494 | 107 | 288 | 417 |
| 4 | 43 | 58 | 58 | 82 | 73 | 357 | 1,160 | 217 | 345 | 120 | 240 | 183 |
| 5 | 43 | 82 | 60 | 142 | 73 | 294 | 1,590 | 193 | 270 | 163 | 330 | 132 |
| 6 | 46 | 73 | 94 | 866 | 75 | 242 | 1,310 | 183 | 252 | 207 | 180 | 118 |
| 7 | 44 | 66 | 160 | 620 | 72 | 217 | 1,390 | 216 | 307 | 230 | 146 | 98 |
| 8 | 44 | 60 | 111 | 321 | 75 | 374 | 1,200 | 1,060 | 422 | 186 | 120 | 82 |
| 9 | 44 | 56 | 86 | 208 | 88 | 620 | 1,310 | 1,070 | 278 | 148 | 107 | 72 |
| 10 | 44 | 56 | 72 | 180 | 272 | 488 | 1,200 | 762 | 220 | 224 | 98 | 66 |
| 11 | 46 | 56 | 68 | 141 | 340 | 370 | 910 | 581 | 196 | 230 | 92 | 62 |
| 12 | 48 | 56 | 68 | 139 | 248 | 298 | 702 | 528 | 178 | 189 | 90 | 73 |
| 13 | 47 | 62 | 63 | 127 | 202 | 252 | 554 | 812 | 163 | 165 | 84 | 73 |
| 14 | 46 | 66 | 62 | 111 | 188 | 220 | 458 | 1,030 | 170 | 141 | 77 | 75 |
| 15 | 48 | 63 | 58 | 88 | 180 | 220 | 392 | 970 | 274 | 144 | 70 | 82 |
| 16 | 54 | 63 | 56 | 90 | 165 | 220 | 340 | 762 | 280 | 210 | 60 | 94 |
| 17 | 51 | 65 | 52 | 102 | 178 | 220 | 298 | 603 | 226 | 146 | 60 | 98 |
| 18 | 48 | 66 | 56 | 96 | 478 | 220 | 269 | 498 | 193 | 134 | 46 | 102 |
| 19 | 44 | 70 | 70 | 92 | 601 | 217 | 242 | 406 | 170 | 107 | 83 | 107 |
| 20 | 46 | 68 | 68 | 96 | 518 | 211 | 226 | 390 | 151 | 556 | 73 | 118 |
| 21 | 46 | 63 | 60 | 98 | 379 | 193 | 208 | 2,320 | 132 | 188 | 82 | 139 |
| 22 | 44 | 60 | 56 | 77 | 290 | 188 | 378 | 1,660 | 223 | 146 | 506 | 113 |
| 23 | 46 | 60 | 57 | 75 | 239 | 202 | 1,630 | 2,580 | 204 | 160 | 798 | 102 |
| 24 | 54 | 58 | 51 | 78 | 211 | 406 | 1,100 | 1,810 | 272 | 252 | 398 | 98 |
| 25 | 56 | 58 | 48 | 84 | 191 | 488 | 790 | 1,200 | 199 | 175 | 231 | 83 |
| 26 | 54 | 56 | 56 | 82 | 165 | 503 | 642 | 880 | 168 | 148 | 175 | 120 |
| 27 | 54 | 56 | 113 | 80 | 148 | 454 | 528 | 630 | 242 | 129 | 148 | 153 |
| 28 | 54 | 48 | 129 | 80 | 139 | 439 | 415 | 478 | 242 | 134 | 129 | 120 |
| 29 | 56 | 54 | 141 | 82 | ----- | 2,020 | 349 | 374 | 198 | 158 | 120 | 102 |
| 30 | 58 | 57 | 124 | 78 | ----- | 1,740 | 305 | 313 | 158 | 102 | 120 | 90 |
| 31 | 58 | ----- | 102 | 78 | ----- | 1,000 | ----- | 360 | ----- | 98 | 98 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 58 | 40 | 48.0 | 0.099 | 0.11 |
| November | 82 | 48 | 60.8 | .125 | .14 |
| December | 160 | 48 | 77.5 | .159 | .18 |
| January | 866 | 70 | 150 | .308 | .36 |
| February | 691 | 72 | 211 | .433 | .45 |
| March | 2,020 | 188 | 448 | .920 | 1.06 |
| April | 1,800 | 208 | 814 | 1.67 | 1.86 |
| May | 2,580 | 183 | 763 | 1.57 | 1.81 |
| June | 988 | 132 | 277 | .569 | .63 |
| July | 556 | 98 | 172 | .353 | .41 |
| August | 798 | 46 | 180 | .370 | .43 |
| September | 417 | 62 | 111 | .228 | .25 |
| The year | 2,580 | 40 | 276 | .567 | 7.69 |

KERRS CREEK NEAR LEXINGTON, VA.

LOCATION.—Chain gage at highway bridge $3\frac{1}{2}$ miles northwest of Lexington, Rockbridge County, and a quarter of a mile above mouth.

DRAINAGE AREA.—34 square miles.

RECORDS AVAILABLE.—January, 1927, to September, 1931 (fragmentary prior to August, 1930).

EXTREMES.—Maximum discharge during year, 1,020 second-feet Aug. 2 (gage height, 7.30 feet); minimum, 5 second-feet Oct. 8, Sept. 25 (gage height, 3.43 feet).

1927-1931: Maximum discharge recorded, 1,560 second-feet Aug. 16, 1928 (gage height, 8.50 feet); minimum, 5 second-feet Aug. 20, 23, 24, Sept. 7, 8, 14, 15, Oct. 8, 1930, Sept. 25, 1931.

REMARKS.—Records good. Discharge estimated for Nov. 27-29, Dec. 21-25, Dec. 29 to Jan. 1 because of ice.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1 | 6 | 7 | 8 | 7 | 6 | 28 | 251 | 17 | 166 | 12 | 6 | 10 |
| 2 | 6 | 8 | 8 | 7 | 6 | 16 | 84 | 17 | 67 | 13 | 309 | 10 |
| 3 | 6 | 8 | 8 | 7 | 6 | 14 | 50 | 16 | 55 | 12 | 35 | 14 |
| 4 | 6 | 8 | 8 | 8 | 5 | 13 | 46 | 14 | 41 | 12 | 22 | 13 |
| 5 | 6 | 10 | 8 | 48 | 6 | 11 | 36 | 15 | 30 | 13 | 13 | 11 |
| 6 | 6 | 10 | 26 | 32 | 6 | 10 | 62 | 13 | 36 | 12 | 13 | 10 |
| 7 | 6 | 8 | 13 | 17 | 6 | 10 | 50 | 20 | 127 | 12 | 10 | 9 |
| 8 | 5 | 8 | 10 | 13 | 6 | 44 | 56 | 48 | 42 | 11 | 8 | 8 |
| 9 | 6 | 8 | 8 | 10 | 10 | 24 | 46 | 29 | 34 | 11 | 8 | 7 |
| 10 | 6 | 8 | 7 | 9 | 9 | 18 | 42 | 24 | 30 | 16 | 10 | 8 |
| 11 | 6 | 8 | 7 | 9 | 7 | 18 | 42 | 23 | 27 | 14 | 11 | 8 |
| 12 | 6 | 8 | 8 | 9 | 6 | 14 | 26 | 24 | 24 | 14 | 10 | 8 |
| 13 | 6 | 8 | 8 | 9 | 7 | 12 | 23 | 92 | 24 | 14 | 9 | 8 |
| 14 | 7 | 8 | 8 | 9 | 8 | 11 | 21 | 52 | 22 | 14 | 9 | 8 |
| 15 | 8 | 8 | 8 | 9 | 8 | 13 | 20 | 48 | 23 | 12 | 8 | 8 |
| 16 | 8 | 10 | 8 | 7 | 7 | 12 | 19 | 37 | 25 | 13 | 8 | 8 |
| 17 | 7 | 9 | 8 | 7 | 14 | 12 | 18 | 32 | 22 | 16 | 7 | 9 |
| 18 | 7 | 8 | 8 | 7 | 22 | 12 | 16 | 24 | 17 | 16 | 8 | 8 |
| 19 | 7 | 8 | 9 | 7 | 18 | 13 | 14 | 22 | 14 | 12 | 16 | 7 |
| 20 | 7 | 8 | 8 | 7 | 15 | 9 | 12 | 19 | 16 | 78 | 14 | 16 |
| 21 | 7 | 7 | 8 | 7 | 13 | 9 | 12 | 200 | 14 | 24 | 15 | 13 |
| 22 | 8 | 8 | 7 | 6 | 11 | 12 | 66 | 104 | 17 | 15 | 324 | 8 |
| 23 | 8 | 8 | 7 | 6 | 10 | 13 | 56 | 146 | 15 | 12 | 97 | 7 |
| 24 | 8 | 8 | 7 | 6 | 8 | 25 | 37 | 87 | 15 | 13 | 43 | 7 |
| 25 | 8 | 8 | 8 | 6 | 8 | 25 | 30 | 70 | 14 | 10 | 24 | 5 |
| 26 | 8 | 8 | 11 | 6 | 6 | 20 | 26 | 50 | 14 | 8 | 21 | 22 |
| 27 | 7 | 7 | 16 | 6 | 7 | 21 | 24 | 40 | 15 | 8 | 17 | 11 |
| 28 | 8 | 7 | 12 | 7 | 7 | 25 | 22 | 33 | 14 | 8 | 15 | 8 |
| 29 | 8 | 8 | 9 | 6 | ----- | 76 | 18 | 30 | 13 | 8 | 13 | 8 |
| 30 | 8 | 8 | 8 | 6 | ----- | 42 | 17 | 26 | 12 | 8 | 11 | 8 |
| 31 | 7 | ----- | 7 | 6 | ----- | 30 | ----- | 25 | ----- | 6 | 11 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 8 | 5 | 6.9 | 0.203 | 0.23 |
| November | 10 | 7 | 8.1 | .238 | .27 |
| December | 26 | 7 | 9.2 | .271 | .31 |
| January | 48 | 6 | 9.9 | .291 | .34 |
| February | 22 | 5 | 8.9 | .262 | .27 |
| March | 76 | 9 | 19.7 | .579 | .67 |
| April | 251 | 12 | 41.7 | 1.23 | 1.37 |
| May | 200 | 13 | 45.1 | 1.33 | 1.53 |
| June | 166 | 12 | 32.8 | .965 | 1.08 |
| July | 78 | 6 | 14.4 | .424 | .49 |
| August | 324 | 6 | 36.3 | 1.07 | 1.23 |
| September | 22 | 5 | 9.5 | .279 | .31 |
| The year | 324 | 5 | 20.3 | .597 | 8.10 |

TYE RIVER AT ROSELAND, VA.

LOCATION.—Chain gage at highway bridge three-quarters of a mile southwest of Roseland, Nelson County, and three-quarters of a mile above Hat Creek.

DRAINAGE AREA.—68 square miles.

RECORDS AVAILABLE.—January, 1927, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,140 second-feet Aug. 22 (gage height, 6.40 feet); minimum, 2 second-feet Oct. 1 (gage height, 2.77 feet).

1927-1931: Maximum discharge, 2,240 second-feet Aug. 16, 1928 (gage height, 8.65 feet); minimum, 2 second-feet Sept. 30, Oct. 1, 1930.

REMARKS.—Records good. Discharge estimated for Dec. 31 to Jan. 3, Apr. 21-23.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|-------|-------|
| 1. | 3 | 19 | 22 | 16 | 18 | 176 | 400 | 72 | 151 | 62 | 59 | 86 |
| 2. | 3 | 18 | 16 | 14 | 17 | 120 | 380 | 74 | 123 | 61 | 50 | 76 |
| 3. | 3 | 20 | 10 | 15 | 14 | 102 | 306 | 66 | 102 | 72 | 48 | 119 |
| 4. | 3 | 26 | 10 | 17 | 17 | 87 | 306 | 59 | 90 | 69 | 41 | 88 |
| 5. | 3 | 35 | 10 | 165 | 18 | 74 | 240 | 53 | 83 | 66 | 66 | 66 |
| 6. | 4 | 15 | 36 | 154 | 17 | 72 | 225 | 52 | 74 | 210 | 45 | 62 |
| 7. | 4 | 10 | 70 | 96 | 17 | 60 | 182 | 96 | 76 | 108 | 40 | 53 |
| 8. | 4 | 8 | 29 | 69 | 17 | 200 | 164 | 225 | 106 | 66 | 35 | 48 |
| 9. | 4 | 8 | 17 | 52 | 34 | 143 | 182 | 169 | 72 | 59 | 30 | 48 |
| 10. | 4 | 8 | 15 | 43 | 72 | 126 | 177 | 151 | 62 | 177 | 30 | 43 |
| 11. | 4 | 7 | 15 | 40 | 48 | 112 | 151 | 130 | 53 | 114 | 45 | 41 |
| 12. | 4 | 8 | 12 | 42 | 41 | 98 | 128 | 154 | 45 | 98 | 53 | 41 |
| 13. | 4 | 10 | 11 | 40 | 41 | 85 | 112 | 174 | 52 | 79 | 45 | 38 |
| 14. | 5 | 11 | 11 | 31 | 53 | 78 | 98 | 210 | 289 | 76 | 48 | 35 |
| 15. | 6 | 10 | 10 | 27 | 42 | 92 | 90 | 182 | 400 | 69 | 45 | 37 |
| 16. | 7 | 12 | 7 | 20 | 40 | 81 | 83 | 161 | 289 | 61 | 37 | 42 |
| 17. | 7 | 18 | 7 | 25 | 56 | 72 | 76 | 144 | 210 | 55 | 30 | 35 |
| 18. | 7 | 17 | 7 | 26 | 58 | 67 | 72 | 130 | 159 | 61 | 29 | 35 |
| 19. | 7 | 14 | 10 | 36 | 56 | 67 | 66 | 112 | 130 | 53 | 50 | 35 |
| 20. | 8 | 11 | 10 | 34 | 56 | 63 | 61 | 108 | 112 | 146 | 102 | 59 |
| 21. | 8 | 10 | 10 | 26 | 53 | 56 | 60 | 240 | 96 | 98 | 110 | 55 |
| 22. | 10 | 8 | 7 | 20 | 50 | 81 | 180 | 182 | 380 | 81 | 1,000 | 35 |
| 23. | 10 | 8 | 8 | 20 | 48 | 96 | 160 | 272 | 306 | 74 | 952 | 37 |
| 24. | 14 | 8 | 10 | 24 | 48 | 96 | 128 | 225 | 174 | 182 | 523 | 42 |
| 25. | 15 | 7 | 15 | 22 | 46 | 108 | 114 | 210 | 137 | 102 | 324 | 31 |
| 26. | 15 | 8 | 25 | 22 | 38 | 106 | 114 | 182 | 123 | 83 | 256 | 67 |
| 27. | 15 | 7 | 78 | 23 | 36 | 102 | 98 | 140 | 130 | 76 | 210 | 58 |
| 28. | 14 | 6 | 42 | 22 | 34 | 154 | 86 | 125 | 96 | 69 | 159 | 40 |
| 29. | 18 | 6 | 35 | 20 | ----- | 316 | 79 | 114 | 85 | 70 | 132 | 35 |
| 30. | 17 | 6 | 20 | 20 | ----- | 240 | 76 | 100 | 74 | 56 | 112 | 32 |
| 31. | 18 | ----- | 20 | 18 | ----- | 182 | ----- | 102 | ----- | 56 | 94 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|------------|---------|---------|------|-----------------|-------------------|
| October. | 18 | 3 | 8.0 | 0.118 | 0.14 |
| November. | 35 | 6 | 12.0 | .176 | .20 |
| December. | 78 | 7 | 19.5 | .287 | .33 |
| January. | 165 | ----- | 38.7 | .569 | .66 |
| February. | 72 | 14 | 38.8 | .571 | .59 |
| March. | 316 | 56 | 113 | 1.66 | 1.91 |
| April. | 400 | ----- | 153 | 2.25 | 2.51 |
| May. | 272 | 52 | 143 | 2.10 | 2.42 |
| June. | 400 | 45 | 143 | 2.10 | 2.34 |
| July. | 210 | 53 | 87.4 | 1.29 | 1.49 |
| August. | 1,000 | 29 | 155 | 2.28 | 2.63 |
| September. | 119 | 31 | 50.6 | .744 | .83 |
| The year. | 1,000 | 3 | 80.3 | 1.18 | 16.05 |

HARDWARE RIVER NEAR SCOTTSVILLE, VA.

LOCATION.—Chain gage at highway bridge on Woodridge-Scottsville road, 3 miles north of Scottsville, Albemarle County, and 9 miles above mouth.

DRAINAGE AREA.—104 square miles.

RECORDS AVAILABLE.—May, 1925, to September, 1931.

EXTREMES.—Maximum discharge during year, 952 second-feet June 1 (gage height, 8.10 feet); minimum, 2 second-feet Oct. 3, 7, 19, 22, Nov. 3, 5.

1925-1931: Maximum discharge, 4,690 second-feet Aug. 26, 1928 (gage height, 16.62 feet); minimum, 2 second-feet several days in 1930.

REMARKS.—Records fair except those for October, November, December, which are poor. Discharge estimated for Oct. 18, Jan. 21, Feb. 2. Low-water flow regulated by dam and gristmill above station.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 16 | 16 | 20 | 21 | 21 | 142 | 220 | 36 | 574 | 35 | 94 | 40 |
| 2..... | 32 | 8 | 21 | 32 | 20 | 88 | 304 | 34 | 155 | 142 | 43 | 88 |
| 3..... | 2 | 2 | 26 | 48 | 18 | 52 | 148 | 33 | 94 | 155 | 36 | 45 |
| 4..... | 32 | 3 | 21 | 21 | 15 | 48 | 118 | 31 | 72 | 53 | 23 | 42 |
| 5..... | 8 | 2 | 26 | 36 | 17 | 40 | 130 | 32 | 62 | 54 | 58 | 36 |
| 6..... | 39 | 19 | 8 | 54 | 22 | 36 | 194 | 31 | 53 | 58 | 37 | 36 |
| 7..... | 2 | 21 | 8 | 48 | 20 | 32 | 234 | 50 | 54 | 94 | 28 | 31 |
| 8..... | 26 | 15 | 32 | 21 | 21 | 155 | 148 | 142 | 58 | 54 | 29 | 28 |
| 9..... | 22 | 3 | 26 | 8 | 36 | 62 | 118 | 62 | 42 | 42 | 25 | 27 |
| 10..... | 19 | 21 | 23 | 16 | 58 | 52 | 94 | 58 | 38 | 31 | 31 | 26 |
| 11..... | 23 | 20 | 26 | 22 | 32 | 42 | 83 | 52 | 33 | 67 | 37 | 26 |
| 12..... | 4 | 3 | 23 | 26 | 30 | 42 | 72 | 51 | 30 | 51 | 38 | 28 |
| 13..... | 3 | 28 | 26 | 26 | 28 | 36 | 62 | 234 | 33 | 40 | 35 | 23 |
| 14..... | 16 | 24 | 10 | 25 | 27 | 35 | 54 | 220 | 708 | 42 | 35 | 26 |
| 15..... | 18 | 5 | 10 | 28 | 26 | 46 | 53 | 112 | 181 | 40 | 39 | 24 |
| 16..... | 8 | 8 | 21 | 21 | 26 | 41 | 52 | 83 | 130 | 40 | 33 | 22 |
| 17..... | 21 | 39 | 5 | 28 | 30 | 38 | 52 | 72 | 136 | 94 | 28 | 26 |
| 18..... | 10 | 32 | 21 | 21 | 37 | 33 | 49 | 62 | 83 | 100 | 24 | 24 |
| 19..... | 2 | 21 | 28 | 30 | 37 | 31 | 48 | 54 | 62 | 49 | 24 | 35 |
| 20..... | 5 | 21 | 21 | 39 | 33 | 38 | 41 | 51 | 54 | 58 | 36 | 32 |
| 21..... | 23 | 18 | 8 | 30 | 39 | 39 | 42 | 136 | 49 | 88 | 67 | 31 |
| 22..... | 2 | 16 | 26 | 23 | 30 | 54 | 39 | 62 | 44 | 46 | 130 | 40 |
| 23..... | 3 | 8 | 23 | 21 | 33 | 194 | 54 | 510 | 142 | 40 | 168 | 32 |
| 24..... | 16 | 25 | 21 | 39 | 31 | 118 | 48 | 106 | 360 | 78 | 130 | 52 |
| 25..... | 14 | 21 | 16 | 21 | 32 | 94 | 42 | 83 | 78 | 46 | 88 | 27 |
| 26..... | 3 | 16 | 26 | 26 | 27 | 72 | 46 | 88 | 58 | 42 | 94 | 35 |
| 27..... | 21 | 24 | 78 | 32 | 29 | 62 | 42 | 118 | 58 | 86 | 112 | 39 |
| 28..... | 20 | 28 | 5 | 26 | 36 | 58 | 39 | 62 | 48 | 33 | 72 | 34 |
| 29..... | 25 | 21 | 3 | 26 | ----- | 390 | 36 | 52 | 40 | 38 | 53 | 36 |
| 30..... | 24 | 14 | 21 | 21 | ----- | 136 | 38 | 47 | 37 | 27 | 46 | 34 |
| 31..... | 23 | ----- | 8 | 20 | ----- | 100 | ----- | 45 | ----- | 30 | 41 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-------------------|-------------------|
| October..... | 39 | 2 | 15.5 | 0.14 ³ | 0.17 |
| November..... | 39 | 2 | 16.6 | .160 | .18 |
| December..... | 78 | 3 | 20.5 | .197 | .23 |
| January..... | 54 | 8 | 27.6 | .265 | .31 |
| February..... | 58 | 15 | 29.0 | .277 | .29 |
| March..... | 390 | 31 | 77.6 | .741 | .86 |
| April..... | 304 | 36 | 90.0 | .865 | .97 |
| May..... | 510 | 31 | 90.6 | .871 | 1.00 |
| June..... | 708 | 30 | 119 | 1.14 | 1.27 |
| July..... | 155 | 27 | 58.2 | .660 | .66 |
| August..... | 168 | 23 | 55.9 | .537 | .62 |
| September..... | 52 | 22 | 32.3 | .311 | .35 |
| The year..... | 708 | 2 | 52.8 | .508 | 6.90 |

SLATE RIVER NEAR ARVONIA, VA.

LOCATION.—Chain gage at Bumpers highway bridge, 2 miles from Arvonias, Buckingham County, and 2 miles above mouth.

DRAINAGE AREA.—235 square miles.

RECORDS AVAILABLE.—April, 1926, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,570 second-feet Aug. 1 (gage height, 7.30 feet); minimum, 2 second-feet Oct. 1, 2 (gage height, 1.40 feet).

1926-1931: Maximum discharge, 5,300 second-feet Aug. 12, 1928 (gage height, 14.12 feet); minimum, 2 second-feet Sept. 28 to Oct. 2, 1930.

REMARKS.—Records good except those for periods of ice effect, Dec. 22-26, Dec. 31 to Jan. 5, Jan. 15-19, which are fair. Operation of gristmill $7\frac{1}{2}$ miles upstream affects low-water flow.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|-------|-------|-----|-------|------|-------|-------|
| 1..... | 2 | 24 | 52 | a 45 | 46 | 478 | 448 | 73 | 1,170 | 39 | 1,170 | 58 |
| 2..... | 2 | 26 | 48 | a 40 | 44 | 279 | 540 | 78 | 756 | 96 | 146 | 53 |
| 3..... | a 3 | 26 | 34 | a 35 | 44 | 170 | 267 | 78 | 315 | 68 | 73 | 78 |
| 4..... | a 3 | 47 | 30 | a 30 | 43 | 123 | 196 | 78 | 170 | 54 | 68 | 73 |
| 5..... | 4 | 90 | 32 | a 50 | 43 | 102 | 256 | 73 | 130 | 96 | 170 | 59 |
| 6..... | 4 | 73 | 68 | 448 | 43 | 96 | 954 | 68 | 109 | 170 | 130 | 55 |
| 7..... | 4 | 45 | 116 | 146 | 43 | 84 | 1,080 | 116 | 96 | 291 | 102 | 56 |
| 8..... | 4 | 31 | 90 | 90 | 45 | 146 | 574 | 508 | 84 | 102 | 90 | 55 |
| 9..... | 6 | 30 | 68 | 78 | 50 | 215 | 303 | 303 | 78 | 68 | 54 | 39 |
| 10..... | 6 | 31 | 54 | 58 | 138 | 130 | 187 | 267 | 73 | 51 | 42 | 34 |
| 11..... | 6 | 34 | 47 | 54 | 96 | 102 | 154 | 138 | 68 | 54 | 109 | 34 |
| 12..... | 8 | 24 | 43 | 68 | 78 | 84 | 138 | 116 | 63 | 53 | 170 | 33 |
| 13..... | 9 | 25 | 36 | 73 | 73 | 78 | 116 | 448 | 63 | 56 | 102 | 37 |
| 14..... | 10 | 35 | 39 | 68 | 63 | 73 | a 108 | 608 | 63 | 340 | 84 | 33 |
| 15..... | 9 | 39 | 42 | a 50 | 61 | 138 | a 100 | 315 | 78 | 78 | 78 | 26 |
| 16..... | 8 | 39 | 45 | a 40 | 61 | 154 | 90 | 170 | 78 | 45 | a 66 | 25 |
| 17..... | 8 | 51 | 37 | a 35 | 63 | 123 | 90 | 146 | 78 | 51 | a 54 | 23 |
| 18..... | 9 | 56 | 29 | a 40 | 96 | 96 | 90 | 154 | 63 | 478 | 43 | 24 |
| 19..... | 12 | 45 | 43 | a 60 | 102 | 116 | 116 | 130 | 57 | 187 | 34 | 28 |
| 20..... | 13 | 43 | 50 | 68 | 90 | 116 | 84 | 123 | 52 | 96 | 58 | 34 |
| 21..... | 11 | 37 | 50 | 60 | a 84 | 102 | 84 | 420 | 49 | 73 | 644 | 59 |
| 22..... | 10 | 42 | a 60 | 56 | 78 | 109 | 96 | 392 | 540 | 68 | 680 | 50 |
| 23..... | 11 | 45 | a 50 | 50 | 73 | 574 | 178 | 794 | 267 | 61 | 1,440 | 55 |
| 24..... | 13 | 45 | a 40 | 49 | 68 | 340 | 109 | 291 | 102 | 56 | 392 | 73 |
| 25..... | 18 | 47 | a 35 | 63 | 68 | 205 | 96 | 187 | 78 | 53 | 187 | 59 |
| 26..... | 30 | 42 | a 45 | 56 | 63 | 138 | 96 | 187 | 68 | 61 | 138 | 63 |
| 27..... | 28 | 35 | 123 | 54 | 60 | 116 | 96 | 996 | 61 | 61 | 102 | 68 |
| 28..... | 15 | 31 | 102 | 51 | 59 | 170 | 84 | 245 | 59 | 46 | 90 | 55 |
| 29..... | 30 | 33 | 78 | 48 | ----- | 680 | 78 | 178 | 52 | 31 | 73 | 36 |
| 30..... | 37 | 37 | 63 | 51 | ----- | a 450 | 73 | 123 | 43 | 30 | 73 | 29 |
| 31..... | 31 | ----- | a 50 | 56 | ----- | 215 | ----- | 123 | ----- | 47 | 68 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 37 | 2 | 11.8 | 0.050 | 0.06 |
| November..... | 90 | 24 | 40.3 | .171 | .19 |
| December..... | 123 | 29 | 54.8 | .233 | .27 |
| January..... | 448 | ----- | 70.0 | .298 | .34 |
| February..... | 138 | 43 | 66.9 | .285 | .30 |
| March..... | 680 | 73 | 194 | .826 | .95 |
| April..... | 1,080 | 73 | 229 | .974 | 1.09 |
| May..... | 996 | 68 | 256 | 1.09 | 1.26 |
| June..... | 1,170 | 43 | 165 | .701 | .78 |
| July..... | 478 | 30 | 98.7 | .420 | .48 |
| August..... | 1,440 | 34 | 217 | .923 | 1.06 |
| September..... | 78 | 23 | 46.8 | .199 | .22 |
| The year..... | 1,440 | 2 | 121 | .515 | 7.00 |

a Estimated.

RIVANNA RIVER BELOW MOORES CREEK, NEAR CHARLOTTESVILLE, VA.

LOCATION.—Water-stage recorder 500 feet above Virginia Public Service Co.'s power plant near Charlottesville, Albemarle County, and 200 feet below Moores Creek.

DRAINAGE AREA.—507 square miles.

RECORDS AVAILABLE.—August, 1925, to September, 1931. February to August, 1925, at station half a mile upstream.

EXTREMES.—Maximum discharge during year, 7,690 second-feet July 25 (gage height, 11.00 feet); minimum, 2 second-feet Oct. 1 (gage height, 1.19 feet).

1925-1931: Maximum discharge, 11,200 second-feet Apr. 16, 1929 (gage height, 14.15 feet); minimum, that of Oct. 1, 1930.

REMARKS.—Records good except those for October, November, December, which are poor.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-------|-------|-------|-------|-------|
| 1 | 4 | 74 | 67 | 70 | 70 | 190 | 1,160 | 164 | 712 | 119 | 536 | 154 |
| 2 | 4 | 70 | 63 | 53 | 66 | 240 | 1,470 | 154 | 441 | 164 | 194 | 144 |
| 3 | 6 | 70 | 37 | 50 | 66 | 209 | 822 | 140 | 306 | 147 | 175 | 328 |
| 4 | 13 | 60 | 43 | 70 | 65 | 178 | 660 | 154 | 242 | 102 | 306 | 222 |
| 5 | 16 | 50 | 51 | 193 | 66 | 153 | 560 | 140 | 202 | 91 | 1,260 | 147 |
| 6 | 20 | 60 | 51 | 476 | 65 | 120 | 536 | 140 | 157 | 144 | 271 | 119 |
| 7 | 22 | 60 | 40 | 240 | 73 | 111 | 635 | 194 | 140 | 560 | 202 | 102 |
| 8 | 22 | 50 | 60 | 163 | 71 | 260 | 585 | 464 | 206 | 194 | 191 | 110 |
| 9 | 25 | 40 | 55 | 105 | 99 | 343 | 512 | 350 | 183 | 147 | 172 | 91 |
| 10 | 27 | 41 | 50 | 80 | 167 | 260 | 464 | 284 | 147 | 202 | 150 | 80 |
| 11 | 27 | 43 | 50 | 60 | 149 | 209 | 418 | 255 | 133 | 328 | 137 | 98 |
| 12 | 27 | 48 | 48 | 65 | 126 | 171 | 350 | 234 | 119 | 164 | 164 | 80 |
| 13 | 28 | 51 | 50 | 70 | 114 | 146 | 328 | 372 | 102 | 147 | 130 | 77 |
| 14 | 31 | 53 | 53 | 92 | 102 | 129 | 284 | 610 | 1,330 | 130 | 172 | 95 |
| 15 | 34 | 50 | 50 | 76 | 88 | 123 | 259 | 418 | 2,670 | 119 | 113 | 74 |
| 16 | 35 | 55 | 43 | 65 | 99 | 143 | 230 | 350 | 940 | 140 | 102 | 93 |
| 17 | 37 | 84 | 27 | 92 | 108 | 139 | 222 | 280 | 512 | 250 | 105 | 72 |
| 18 | 38 | 50 | 38 | 83 | 129 | 120 | 202 | 263 | 372 | 940 | 75 | 102 |
| 19 | 37 | 53 | 63 | 99 | 160 | 126 | 172 | 230 | 284 | 202 | 93 | 110 |
| 20 | 38 | 48 | 74 | 94 | 156 | 143 | 191 | 218 | 226 | 194 | 91 | 82 |
| 21 | 41 | 43 | 50 | 81 | 143 | 120 | 179 | 350 | 175 | 250 | 179 | 110 |
| 22 | 44 | 34 | 40 | 63 | 120 | 143 | 202 | 328 | 536 | 80 | 1,000 | 90 |
| 23 | 48 | 44 | 56 | 59 | 120 | 430 | 306 | 1,000 | 512 | 157 | 2,400 | 100 |
| 24 | 58 | 51 | 37 | 85 | 123 | 364 | 250 | 512 | 585 | 880 | 880 | 120 |
| 25 | 63 | 109 | 33 | 83 | 114 | 322 | 222 | 395 | 250 | 3,210 | 512 | 90 |
| 26 | 58 | 20 | 87 | 81 | 111 | 280 | 218 | 488 | 250 | 500 | 766 | 100 |
| 27 | 60 | 30 | 184 | 81 | 102 | 260 | 222 | 488 | 372 | 250 | 766 | 100 |
| 28 | 58 | 33 | 139 | 81 | 88 | 280 | 179 | 284 | 187 | 150 | 395 | 100 |
| 29 | 65 | 31 | 146 | 76 | ----- | 886 | 175 | 238 | 154 | 110 | 284 | 100 |
| 30 | 72 | 46 | 87 | 76 | ----- | 644 | 164 | 280 | 124 | 119 | 226 | 98 |
| 31 | 72 | ----- | 50 | 73 | ----- | 452 | ----- | 372 | ----- | 488 | 198 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 72 | 4 | 36.5 | 0.072 | 0.08 |
| November | 109 | 20 | 51.7 | .102 | .11 |
| December | 184 | 27 | 62.0 | .122 | .14 |
| January | 476 | 50 | 101 | .199 | .23 |
| February | 167 | 65 | 106 | .209 | .22 |
| March | 886 | 111 | 248 | .489 | .56 |
| April | 1,470 | 164 | 406 | .801 | .89 |
| May | 1,000 | 140 | 327 | .645 | .74 |
| June | 2,670 | 102 | 419 | .826 | .92 |
| July | 3,210 | 80 | 844 | .679 | .78 |
| August | 2,400 | 91 | 395 | .779 | .90 |
| September | 328 | 72 | 113 | .223 | .25 |
| The year | 3,210 | 4 | 218 | .430 | 5.82 |

• Estimated.

WILLIS RIVER AT FLANAGAN MILLS, VA.

LOCATION.—Chain gage at highway bridge at Flanagan Mills, Cumberland County, 3 miles below Reynolds Creek.

DRAINAGE AREA.—247 square miles.

RECORDS AVAILABLE.—April, 1926, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,760 second-feet May 23 (gage height, 13.50 feet); minimum, 2 second-feet Oct. 1, 4, 12.

1926-1931: Maximum discharge, 3,330 second-feet Mar. 7, 1929 (gage height, 19.95 feet); minimum, 2 second-feet Sept. 30, Oct. 1, 4, 12, 1930.

REMARKS.—Records good except those estimated for periods of ice effect, Dec. 3-5, 23-29, Jan. 16-19, 24, which are fair. The flow from Trice Lake, which forms only a small part of total flow at station, is completely regulated during low stages and slightly affects the natural flow at gage.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-------|-------|------|------|-------|
| 1 | 3 | 26 | 28 | 60 | 45 | 193 | 322 | 78 | 146 | 24 | 169 | 54 |
| 2 | 5 | 21 | 34 | 54 | 42 | 336 | 410 | 82 | 457 | 24 | 308 | 48 |
| 3 | 3 | 21 | 30 | 54 | 40 | 322 | 457 | 86 | 410 | 31 | 140 | 38 |
| 4 | 2 | 27 | 25 | 51 | 40 | 181 | 294 | 90 | 181 | 29 | 71 | 169 |
| 5 | 3 | 60 | 25 | 64 | 40 | 130 | 255 | 74 | 109 | 28 | 48 | 169 |
| 6 | 4 | 51 | 35 | 336 | 40 | 100 | 682 | 71 | 104 | 57 | 140 | 71 |
| 7 | 5 | 51 | 51 | 217 | 40 | 95 | 980 | 130 | 74 | 86 | 100 | 45 |
| 8 | 4 | 40 | 86 | 124 | 40 | 95 | 961 | 592 | 68 | 100 | 48 | 40 |
| 9 | 3 | 32 | 78 | 86 | 42 | 193 | 923 | 574 | 68 | 57 | 29 | 35 |
| 10 | 4 | 28 | 64 | 78 | 169 | 181 | 365 | 700 | 60 | 146 | 24 | 29 |
| 11 | 5 | 28 | 42 | 71 | 146 | 124 | 242 | 646 | 51 | 255 | 30 | 28 |
| 12 | 2 | 27 | 40 | 64 | 124 | 95 | 181 | 540 | 45 | 109 | 68 | 26 |
| 13 | 6 | 28 | 40 | 64 | 90 | 82 | 146 | 265 | 45 | 74 | 95 | 26 |
| 14 | 5 | 28 | 40 | 64 | 78 | 74 | 135 | 425 | 42 | 68 | 64 | 23 |
| 15 | 3 | 32 | 40 | 45 | 64 | 100 | 114 | 489 | 48 | 45 | 45 | 22 |
| 16 | 4 | 33 | 35 | 40 | 57 | 146 | 109 | 294 | 64 | 40 | 40 | 22 |
| 17 | 9 | 38 | 33 | 35 | 64 | 157 | 100 | 181 | 71 | 33 | 40 | 21 |
| 18 | 8 | 42 | 34 | 30 | 146 | 114 | 146 | 181 | 60 | 942 | 38 | 21 |
| 19 | 11 | 42 | 45 | 50 | 205 | 100 | 157 | 146 | 45 | 664 | 29 | 32 |
| 20 | 7 | 40 | 48 | 90 | 169 | 100 | 135 | 109 | 38 | 181 | 35 | 24 |
| 21 | 7 | 38 | 51 | 90 | 135 | 100 | 104 | 736 | 34 | 82 | 124 | 26 |
| 22 | 7 | 42 | 60 | 71 | 124 | 130 | 109 | 1,230 | 35 | 54 | 380 | 29 |
| 23 | 8 | 35 | 45 | 57 | 104 | 506 | 205 | 1,690 | 146 | 48 | 506 | 34 |
| 24 | 8 | 33 | 35 | 50 | 86 | 489 | 205 | 1,450 | 64 | 54 | 557 | 36 |
| 25 | 14 | 30 | 30 | 51 | 90 | 395 | 157 | 628 | 42 | 95 | 506 | 30 |
| 26 | 11 | 30 | 25 | 57 | 86 | 205 | 119 | 410 | 35 | 135 | 124 | 40 |
| 27 | 14 | 31 | 40 | 54 | 157 | 140 | 109 | 255 | 40 | 90 | 124 | 51 |
| 28 | 16 | 28 | 105 | 48 | 157 | 157 | 100 | 425 | 33 | 51 | 119 | 35 |
| 29 | 20 | 27 | 90 | 48 | ----- | 523 | 90 | 322 | 28 | 34 | 95 | 38 |
| 30 | 24 | 27 | 74 | 48 | ----- | 574 | 78 | 146 | 27 | 28 | 64 | 26 |
| 31 | 25 | ----- | 57 | 54 | ----- | 489 | ----- | 114 | ----- | 45 | 48 | ----- |

| Month | Maximum | Minimum | Mean | P - square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 25 | 2 | 8.1 | 0.033 | 0.04 |
| November | 60 | 21 | 33.9 | .137 | .15 |
| December | ----- | ----- | 47.3 | .191 | .22 |
| January | 336 | ----- | 74.4 | .301 | .35 |
| February | 205 | 40 | 93.6 | .379 | .40 |
| March | 574 | 74 | 214 | .866 | 1.00 |
| April | 980 | 78 | 280 | 1.13 | 1.26 |
| May | 1,690 | 71 | 425 | 1.72 | 1.98 |
| June | 457 | 27 | 89.0 | .360 | .40 |
| July | 942 | 24 | 120 | .486 | .56 |
| August | 557 | 24 | 136 | .551 | .64 |
| September | 169 | 21 | 42.9 | .174 | .19 |
| The year | 1,690 | 2 | 131 | .530 | 7.19 |

APPOMATTOX RIVER AT FARMVILLE, VA.

LOCATION.—Water-stage recorder at highway bridge 1,000 feet north of Farmville, Prince Edward County, and $1\frac{1}{4}$ miles below Buffalo Creek.

DRAINAGE AREA.—306 square miles.

RECORDS AVAILABLE.—March, 1926, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,660 second-feet May 22 (gauge height, 14.02 feet); minimum, 7 second-feet Sept. 30 (gauge height, 2.61 feet).

1926-1931: Maximum discharge, 6,960 second-feet (revised) Aug. 12, 1928 (gauge height, 21.10 feet); minimum, that of Sept. 30, 1931.

REMARKS.—Records excellent. Discharge estimated July 18-21. Low-water flow regulated by dam above station.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-------|-------|------|-------|-------|
| 1 | 14 | 53 | 81 | 86 | 81 | 357 | 444 | 107 | 240 | 51 | 252 | 67 |
| 2 | 14 | 47 | 76 | 67 | 79 | 425 | 572 | 123 | 303 | 53 | 82 | 56 |
| 3 | 18 | 47 | 51 | 79 | 78 | 258 | 341 | 125 | 162 | 55 | 65 | 385 |
| 4 | 15 | 79 | 60 | 95 | 78 | 185 | 266 | 110 | 121 | 54 | 68 | 221 |
| 5 | 18 | 155 | 77 | 152 | 83 | 150 | 330 | 99 | 108 | 57 | 83 | 124 |
| 6 | 19 | 112 | 90 | 492 | 73 | 130 | 982 | 100 | 96 | 102 | 89 | 90 |
| 7 | 21 | 70 | 175 | 348 | 78 | 121 | 1,430 | 218 | 89 | 179 | 52 | 72 |
| 8 | 19 | 59 | 169 | 185 | 79 | 182 | 839 | 620 | 95 | 92 | 44 | 59 |
| 9 | 23 | 59 | 109 | 124 | 91 | 228 | 422 | 432 | 83 | 65 | 39 | 55 |
| 10 | 21 | 59 | 90 | 106 | 173 | 161 | 292 | 545 | 75 | 68 | 34 | 50 |
| 11 | 24 | 59 | 83 | 103 | 148 | 133 | 234 | 294 | 70 | 68 | 136 | 44 |
| 12 | 22 | 59 | 79 | 129 | 112 | 118 | 203 | 264 | 65 | 68 | 250 | 42 |
| 13 | 22 | 65 | 73 | 125 | 100 | 110 | 179 | 412 | 60 | 59 | 136 | 40 |
| 14 | 26 | 71 | 72 | 107 | 103 | 104 | 161 | 422 | 111 | 72 | 102 | 38 |
| 15 | 29 | 69 | 70 | 61 | 105 | 126 | 150 | 270 | 248 | 72 | 81 | 40 |
| 16 | 32 | 69 | 66 | 81 | 97 | 141 | 142 | 191 | 183 | 56 | 68 | 34 |
| 17 | 34 | 83 | 29 | 103 | 142 | 124 | 143 | 155 | 110 | 57 | 55 | 33 |
| 18 | 29 | 97 | 56 | 119 | 209 | 111 | 352 | 134 | 77 | 600 | 48 | 42 |
| 19 | 28 | 91 | 107 | 144 | 221 | 109 | 234 | 121 | 66 | 300 | 67 | 206 |
| 20 | 28 | 77 | 95 | 150 | 179 | 136 | 161 | 110 | 60 | 150 | 124 | 110 |
| 21 | 27 | 70 | 71 | 122 | 179 | 130 | 144 | 1,590 | 54 | 100 | 483 | 146 |
| 22 | 30 | 67 | 68 | 91 | 155 | 237 | 247 | 2,150 | 344 | 76 | 595 | 65 |
| 23 | 34 | 66 | 74 | 112 | 132 | 489 | 279 | 1,420 | 263 | 57 | 1,220 | 84 |
| 24 | 40 | 65 | 62 | 102 | 120 | 403 | 185 | 723 | 136 | 176 | 530 | 73 |
| 25 | 46 | 66 | 57 | 106 | 111 | 255 | 155 | 348 | 91 | 150 | 201 | 48 |
| 26 | 47 | 61 | 84 | 94 | 103 | 191 | 150 | 264 | 75 | 92 | 120 | 47 |
| 27 | 42 | 61 | 170 | 92 | 98 | 155 | 142 | 278 | 71 | 56 | 296 | 65 |
| 28 | 42 | 49 | 185 | 88 | 98 | 165 | 126 | 166 | 66 | 47 | 198 | 55 |
| 29 | 47 | 44 | 150 | 88 | ----- | 753 | 116 | 134 | 60 | 46 | 116 | 44 |
| 30 | 64 | 66 | 107 | 84 | ----- | 536 | 110 | 118 | 55 | 40 | 90 | 41 |
| 31 | 64 | ----- | 79 | 84 | ----- | 296 | ----- | 114 | ----- | 130 | 76 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 64 | 14 | 30.3 | 0.099 | 0.11 |
| November | 155 | 44 | 69.8 | .228 | .25 |
| December | 185 | 29 | 90.8 | .297 | .34 |
| January | 492 | 61 | 126 | .417 | .48 |
| February | 221 | 73 | 118 | .386 | .40 |
| March | 753 | 104 | 226 | .736 | .85 |
| April | 1,430 | 110 | 318 | 1.04 | 1.16 |
| May | 2,150 | 99 | 392 | 1.28 | 1.48 |
| June | 344 | 54 | 121 | .395 | .44 |
| July | ----- | 40 | 105 | .345 | .40 |
| August | 1,220 | 34 | 187 | .611 | .70 |
| September | 385 | 33 | 82.5 | .277 | .30 |
| The year | 2,150 | 14 | 156 | .517 | 6.91 |

APPOMATTOX RIVER AT MATTOAX, VA.

LOCATION.—Chain gage at Southern Railway bridge at Mattoax. Amelia County, a quarter of a mile above Skinquarter Creek.

DRAINAGE AREA.—745 square miles.

RECORDS AVAILABLE.—August, 1900, to December, 1905; March, 1926, to September, 1931.

EXTREMES.—Maximum discharge during year, 3,450 second-feet May 25 (gage height, 16.75 feet); minimum, 11 second-feet Oct. 2 (gage height, 3.52 feet).

1900-1905, 1926-1931: Maximum discharge, 12,200 second-feet May 25, 1901 (gage height, 24.6 feet, old datum); minimum, that of Oct. 2, 1930.

REMARKS.—Records good except those for October, which are poor. Discharge estimated for Dec. 18.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 23 | 76 | 90 | 147 | 154 | 352 | 706 | 264 | 298 | 95 | 134 | 188 |
| 2..... | 13 | 80 | 128 | 134 | 140 | 862 | 1,040 | 281 | 728 | 90 | 512 | 147 |
| 3..... | 24 | 72 | 90 | 140 | 140 | 862 | 1,160 | 316 | 750 | 80 | 216 | 147 |
| 4..... | 15 | 80 | 85 | 167 | 140 | 554 | 728 | 298 | 430 | 105 | 122 | 298 |
| 5..... | 16 | 116 | 95 | 202 | 134 | 410 | 684 | 264 | 316 | 90 | 105 | 430 |
| 6..... | 17 | 248 | 116 | 334 | 134 | 334 | 1,070 | 232 | 264 | 105 | 216 | 248 |
| 7..... | 19 | 202 | 174 | 772 | 140 | 281 | 2,680 | 450 | 248 | 128 | 181 | 174 |
| 8..... | 18 | 122 | 264 | 554 | 134 | 281 | 2,970 | 1,430 | 202 | 316 | 134 | 140 |
| 9..... | 22 | 95 | 298 | 334 | 140 | 352 | 3,130 | 2,020 | 188 | 202 | 90 | 128 |
| 10..... | 24 | 85 | 202 | 216 | 232 | 410 | 1,790 | 1,910 | 188 | 264 | 64 | 110 |
| 11..... | 30 | 90 | 154 | 188 | 334 | 334 | 772 | 1,070 | 167 | 122 | 90 | 105 |
| 12..... | 20 | 90 | 140 | 216 | 316 | 264 | 596 | 684 | 154 | 147 | 1,100 | 100 |
| 13..... | 32 | 90 | 122 | 248 | 232 | 248 | 512 | 684 | 140 | 128 | 1,400 | 90 |
| 14..... | 32 | 95 | 116 | 232 | 216 | 232 | 450 | 816 | 140 | 85 | 816 | 85 |
| 15..... | 26 | 105 | 116 | 174 | 188 | 248 | 410 | 816 | 232 | 90 | 371 | 80 |
| 16..... | 31 | 105 | 116 | 105 | 202 | 281 | 371 | 575 | 491 | 90 | 316 | 76 |
| 17..... | 28 | 110 | 100 | 116 | 202 | 316 | 334 | 450 | 533 | 95 | 202 | 80 |
| 18..... | 41 | 122 | 72 | 264 | 298 | 281 | 352 | 512 | 298 | 100 | 160 | 68 |
| 19..... | 27 | 128 | 95 | 264 | 618 | 248 | 794 | 334 | 188 | 1,020 | 154 | 72 |
| 20..... | 39 | 134 | 174 | 316 | 533 | 232 | 554 | 281 | 167 | 533 | 122 | 90 |
| 21..... | 32 | 122 | 160 | 334 | 410 | 264 | 410 | 962 | 134 | 202 | 962 | 216 |
| 22..... | 30 | 110 | 116 | 248 | 390 | 298 | 390 | 2,540 | 116 | 134 | 1,670 | 216 |
| 23..... | 41 | 100 | 95 | 188 | 334 | 816 | 618 | 3,170 | 264 | 134 | 2,050 | 147 |
| 24..... | 31 | 100 | 116 | 167 | 281 | 1,250 | 728 | 3,330 | 512 | 174 | 2,300 | 116 |
| 25..... | 41 | 95 | 110 | 202 | 248 | 862 | 512 | 3,410 | 316 | 470 | 1,980 | 202 |
| 26..... | 43 | 100 | 100 | 202 | 232 | 575 | 410 | 862 | 188 | 554 | 596 | 122 |
| 27..... | 44 | 95 | 167 | 181 | 216 | 430 | 371 | 706 | 160 | 264 | 390 | 140 |
| 28..... | 56 | 85 | 248 | 167 | 202 | 352 | 334 | 684 | 140 | 147 | 470 | 140 |
| 29..... | 56 | 76 | 371 | 160 | ----- | 640 | 316 | 450 | 122 | 110 | 684 | 122 |
| 30..... | 72 | 76 | 334 | 154 | ----- | 1,460 | 281 | 352 | 100 | 90 | 334 | 105 |
| 31..... | 72 | ----- | 216 | 164 | ----- | 1,040 | ----- | 298 | ----- | 72 | 232 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 72 | 13 | 32.7 | 0.044 | 0.05 |
| November..... | 248 | 72 | 107 | .144 | .16 |
| December..... | 371 | ----- | 154 | .207 | .24 |
| January..... | 772 | 105 | 235 | .315 | .36 |
| February..... | 618 | 134 | 248 | .333 | .35 |
| March..... | 1,460 | 232 | 496 | .666 | .77 |
| April..... | 3,130 | 281 | 869 | 1.17 | 1.30 |
| May..... | 3,410 | 232 | 982 | 1.32 | 1.52 |
| June..... | 750 | 100 | 272 | .365 | .41 |
| July..... | 1,020 | 72 | 201 | .270 | .31 |
| August..... | 2,300 | 64 | 586 | .787 | .91 |
| September..... | 430 | 68 | 146 | .196 | .22 |
| The year..... | 3,410 | 13 | 362 | .486 | 6.60 |

APPOMATTOX RIVER NEAR PETERSBURG, VA.

LOCATION.—Water-stage recorder half a mile above Wallace Creek, 1½ miles above dam of Virginia Electric & Power Co., and 6 miles west of Petersburg, Dinwiddie County.

DRAINAGE AREA.—1,340 square miles.

RECORDS AVAILABLE.—May, 1927, to September, 1931.

EXTREMES.—Maximum discharge during period, 5,950 second-feet Aug. 13 (gage height, 7.35 feet); minimum, 108 second-feet July 18 (gage height, 1.46 feet).
1927–1931: Maximum discharge, 8,710 second-feet Apr. 30, 1928 (gage height, 9.53 feet); minimum, 35 second-feet Sept. 6, 1930 (gage height, 1.22 feet).

REMARKS.—Records good. Discharge not determined for Oct. 1 to Dec. 20 because of back water.

Daily and monthly discharge, in second-feet, 1930–31

| Day | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | | 285 | 192 | 478 | 1,540 | 492 | 710 | 188 | 243 | 456 |
| 2 | | 245 | 172 | 1,070 | 1,720 | 499 | 1,110 | 174 | 739 | 362 |
| 3 | | 202 | 177 | 1,520 | 1,950 | 572 | 1,280 | 151 | 561 | 295 |
| 4 | | 217 | 168 | 1,260 | 1,590 | 572 | 1,020 | 130 | 307 | 400 |
| 5 | | 239 | 159 | 848 | 1,640 | 521 | 648 | 151 | 193 | 600 |
| 6 | | 474 | 159 | 640 | 3,040 | 470 | 514 | 156 | 295 | 500 |
| 7 | | 818 | 177 | 528 | 4,570 | 849 | 429 | 193 | 402 | 370 |
| 8 | | 994 | 177 | 492 | 5,050 | 2,630 | 375 | 261 | 301 | 300 |
| 9 | | 642 | 172 | 506 | 4,810 | 3,380 | 318 | 436 | 202 | 250 |
| 10 | | 374 | 273 | 550 | 4,090 | 3,970 | 289 | 362 | 139 | 200 |
| 11 | | 268 | 481 | 514 | 1,890 | 3,380 | 283 | 378 | 501 | 180 |
| 12 | | 304 | 517 | 429 | 1,280 | 2,100 | 261 | 318 | 4,370 | 170 |
| 13 | | 329 | 386 | 382 | 998 | 1,410 | 244 | 272 | 5,530 | 160 |
| 14 | | 367 | 335 | 362 | 879 | 1,540 | 228 | 217 | 2,900 | 150 |
| 15 | | 268 | 322 | 375 | 701 | 1,410 | 592 | 188 | 3,190 | 140 |
| 16 | | 233 | 304 | 470 | 670 | 1,230 | 1,500 | 183 | 2,410 | 140 |
| 17 | | 192 | 322 | 528 | 625 | 942 | 2,360 | 174 | 1,110 | 130 |
| 18 | | 233 | 496 | 499 | 655 | 887 | 1,740 | 163 | 550 | 130 |
| 19 | | 393 | 740 | 442 | 974 | 801 | 746 | 1,890 | 442 | 130 |
| 20 | | 454 | 918 | 415 | 1,190 | 610 | 402 | 2,080 | 790 | 130 |
| 21 | 168 | 532 | 710 | 429 | 832 | 1,010 | 307 | 773 | 3,090 | 450 |
| 22 | 177 | 420 | 598 | 541 | 686 | 3,340 | 295 | 356 | 4,090 | 300 |
| 23 | 197 | 298 | 539 | 1,310 | 777 | 4,570 | 1,940 | 272 | 3,970 | 277 |
| 24 | 159 | 233 | 460 | 2,080 | 1,110 | 4,810 | 2,960 | 228 | 3,730 | 249 |
| 25 | 130 | 233 | 393 | 2,040 | 1,010 | 4,450 | 1,560 | 268 | 3,270 | 230 |
| 26 | 134 | 291 | 360 | 1,410 | 762 | 3,060 | 672 | 1,170 | 1,900 | 249 |
| 27 | 172 | 268 | 310 | 974 | 785 | 1,460 | 422 | 809 | 934 | 256 |
| 28 | 294 | 250 | 285 | 701 | 693 | 1,150 | 318 | 369 | 982 | 281 |
| 29 | 546 | 228 | ----- | 1,120 | 595 | 1,010 | 266 | 234 | 1,460 | 245 |
| 30 | 524 | 217 | ----- | 1,900 | 535 | 693 | 234 | 178 | 1,230 | 192 |
| 1 | 400 | 192 | ----- | 2,080 | ----- | 558 | ----- | 151 | 639 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| December 21–31 | 546 | 130 | 264 | 0.197 | 0.08 |
| January | 994 | 192 | 345 | .257 | .30 |
| February | 918 | 159 | 368 | .275 | .29 |
| March | 2,080 | 362 | 868 | .648 | .75 |
| April | 5,050 | 535 | 1,590 | 1.19 | 1.33 |
| May | 4,810 | 470 | 1,750 | 1.31 | 1.51 |
| June | 2,960 | 228 | 801 | .598 | .67 |
| July | 2,080 | 130 | 415 | .310 | .36 |
| August | 5,530 | 139 | 1,630 | 1.22 | 1.41 |
| September | 600 | 130 | 264 | .197 | .22 |

DISMAL SWAMP BASIN

LAKE DRUMMOND IN DISMAL SWAMP, VA.

LOCATION.—Staff gage near lake outlet on county line between Nansemond and Norfolk Counties, 25 miles from Norfolk and 4 miles from North Carolina State line.

RECORDS AVAILABLE.—May, 1926, to September, 1931.

EXTREMES.—Maximum gage height during year, 5.45 feet June 15, 16; minimum, 0.52 foot Dec. 8.

1926-1931: Maximum gage height, 6.09 feet Oct. 7, 1929; minimum, 0.10 foot Dec. 9, 1926.

REMARKS.—Records good. Gage not read Apr. 15, 16.

Daily gage height, in feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept |
|---------|------|-------|------|------|-------|------|-------|------|-------|------|------|-------|
| 1..... | 1.93 | 1.28 | 1.02 | 1.24 | 1.24 | 1.60 | 2.48 | 5.04 | 5.25 | 5.15 | 4.95 | 5.12 |
| 2..... | 1.86 | 1.17 | .99 | 1.24 | 1.24 | 1.56 | 2.52 | 5.00 | 5.28 | 5.12 | 5.02 | 5.15 |
| 3..... | 1.83 | 1.13 | 1.01 | 1.18 | 1.20 | 1.70 | 2.51 | 5.02 | 5.28 | 5.10 | 5.05 | 5.02 |
| 4..... | 1.80 | 1.29 | .92 | 1.15 | 1.16 | 1.74 | 2.58 | 5.04 | 5.25 | 5.08 | 5.08 | 4.88 |
| 5..... | 1.79 | 1.45 | .94 | 1.14 | 1.19 | 1.65 | 2.69 | 5.07 | 5.25 | 5.18 | 5.00 | 4.92 |
| 6..... | 1.75 | 1.41 | .80 | 1.22 | 1.19 | 1.60 | 2.96 | 5.04 | 5.32 | 5.18 | 5.12 | 5.05 |
| 7..... | 1.73 | 1.33 | .77 | 1.20 | 1.19 | 1.62 | 3.25 | 5.00 | 5.35 | 5.20 | 5.20 | 5.10 |
| 8..... | 1.69 | 1.30 | .60 | 1.17 | 1.22 | 1.70 | 3.34 | 4.87 | 5.28 | 5.18 | 5.20 | 5.10 |
| 9..... | 1.65 | 1.27 | 1.02 | 1.12 | 1.22 | 1.75 | 3.47 | 4.90 | 5.30 | 5.18 | 5.15 | 5.08 |
| 10..... | 1.57 | 1.18 | .92 | 1.11 | 1.34 | 1.76 | 3.67 | 5.00 | 5.32 | 5.22 | 5.18 | 5.10 |
| 11..... | 1.49 | 1.07 | .91 | 1.10 | 1.22 | 1.79 | 3.87 | 4.97 | 5.28 | 5.20 | 5.15 | 5.10 |
| 12..... | 1.45 | 1.03 | 1.01 | 1.22 | 1.20 | 1.72 | 4.06 | 4.92 | 5.25 | 5.18 | 4.55 | 5.10 |
| 13..... | 1.41 | 1.21 | .84 | 1.31 | 1.20 | 1.76 | 4.17 | 4.90 | 5.28 | 5.22 | 4.55 | 5.08 |
| 14..... | 1.43 | 1.28 | 1.01 | 1.28 | 1.28 | 1.68 | 4.47 | 4.92 | 5.28 | 5.30 | 4.92 | 5.08 |
| 15..... | 1.49 | 1.30 | 1.05 | 1.32 | 1.28 | 1.72 | ----- | 4.94 | 5.38 | 5.25 | 4.95 | 5.10 |
| 16..... | 1.44 | 1.22 | .93 | 1.30 | 1.30 | 1.78 | ----- | 5.00 | 5.38 | 5.25 | 5.10 | 5.05 |
| 17..... | 1.43 | 1.26 | 1.06 | 1.32 | 1.33 | 1.84 | 4.62 | 4.94 | 5.28 | 5.28 | 5.10 | 5.08 |
| 18..... | 1.41 | 1.20 | 1.12 | 1.30 | 1.31 | 1.78 | 4.67 | 4.97 | 5.28 | 5.12 | 5.18 | 5.10 |
| 19..... | 1.32 | 1.17 | 1.02 | 1.32 | 1.38 | 1.82 | 4.77 | 5.04 | 5.30 | 4.75 | 4.12 | 5.08 |
| 20..... | 1.27 | 1.16 | 1.07 | 1.34 | 1.40 | 1.82 | 4.80 | 4.94 | 5.28 | 4.58 | 4.95 | 5.05 |
| 21..... | 1.13 | 1.13 | 1.02 | 1.40 | 1.47 | 1.80 | 4.82 | 4.92 | 5.30 | 4.38 | 4.42 | 5.05 |
| 22..... | 1.08 | 1.15 | 1.04 | 1.37 | 1.49 | 1.87 | 4.92 | 4.90 | 5.28 | 4.15 | 4.40 | 5.05 |
| 23..... | 1.03 | 1.06 | 1.10 | 1.32 | 1.49 | 2.04 | 5.02 | 4.84 | 5.30 | 4.42 | 4.68 | 5.05 |
| 24..... | 1.12 | 1.06 | 1.14 | 1.34 | 1.48 | 2.00 | 4.97 | 4.94 | 5.30 | 4.50 | 4.95 | 5.10 |
| 25..... | 1.12 | 1.03 | 1.12 | 1.31 | 1.48 | 2.04 | 5.00 | 4.90 | 5.30 | 4.32 | 5.05 | 5.08 |
| 26..... | .88 | 1.02 | 1.12 | 1.28 | 1.51 | 2.18 | 5.00 | 4.94 | 5.28 | 4.45 | 5.10 | 5.08 |
| 27..... | .75 | .82 | 1.18 | 1.33 | 1.50 | 2.10 | 5.10 | 4.98 | 5.22 | 4.62 | 5.15 | 5.20 |
| 28..... | .79 | .95 | 1.17 | 1.31 | 1.50 | 2.07 | 5.04 | 5.05 | 5.22 | 4.72 | 5.18 | 5.18 |
| 29..... | .93 | .94 | 1.19 | 1.30 | ----- | 2.22 | 5.10 | 5.12 | 5.18 | 4.78 | 5.12 | 5.15 |
| 30..... | 1.22 | .92 | 1.18 | 1.29 | ----- | 2.25 | 5.04 | 5.18 | 5.18 | 4.82 | 5.12 | 5.10 |
| 31..... | 1.35 | ----- | 1.15 | 1.30 | ----- | 2.30 | ----- | 5.22 | ----- | 4.88 | 5.15 | ----- |

CHOWAN RIVER BASIN

NOTTOWAY RIVER NEAR STONY CREEK, VA.

LOCATION.—Chain gage at bridge on Petersburg-Emporia road 2 miles above Island Swamp Creek and $3\frac{1}{4}$ miles south of Stony Creek, Sussex County.

DRAINAGE AREA.—586 square miles.

RECORDS AVAILABLE.—March, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 4,010 second-feet Aug. 21 (gage height, 14.80 feet); minimum, 7 second-feet Oct. 11 (gage height, 0.71 foot).

1930-31: Maximum discharge, that of Aug. 21, 1931; minimum, that of Oct. 11, 1930.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 12 | 56 | 56 | 154 | 114 | 238 | 697 | 247 | 202 | 70 | 238 | 162 |
| 2..... | 13 | 56 | 74 | 133 | 107 | 574 | 825 | 411 | 210 | 62 | 672 | 133 |
| 3..... | 12 | 47 | 79 | 114 | 101 | 598 | 672 | 574 | 326 | 59 | 306 | 120 |
| 4..... | 10 | 70 | 62 | 120 | 101 | 389 | 502 | 411 | 238 | 66 | 126 | 133 |
| 5..... | 10 | 90 | 62 | 133 | 101 | 306 | 1,420 | 306 | 177 | 62 | 79 | 177 |
| 6..... | 8 | 154 | 66 | 147 | 95 | 238 | 2,980 | 266 | 154 | 62 | 266 | 147 |
| 7..... | 8 | 185 | 107 | 326 | 95 | 210 | 2,980 | 574 | 133 | 95 | 247 | 114 |
| 8..... | 8 | 120 | 210 | 286 | 95 | 202 | 2,860 | 3,310 | 210 | 84 | 114 | 90 |
| 9..... | 8 | 79 | 210 | 202 | 101 | 210 | 2,050 | 2,110 | 177 | 66 | 74 | 79 |
| 10..... | 8 | 66 | 154 | 147 | 126 | 210 | 904 | 3,440 | 133 | 133 | 70 | 74 |
| 11..... | 8 | 62 | 120 | 147 | 193 | 177 | 672 | 2,820 | 107 | 126 | 101 | 70 |
| 12..... | 8 | 62 | 101 | 185 | 193 | 162 | 550 | 1,990 | 95 | 74 | 2,430 | 66 |
| 13..... | 9 | 62 | 90 | 193 | 162 | 147 | 479 | 825 | 84 | 62 | 2,430 | 66 |
| 14..... | 10 | 66 | 84 | 266 | 147 | 140 | 411 | 672 | 79 | 53 | 3,020 | 59 |
| 15..... | 12 | 70 | 79 | 202 | 162 | 147 | 368 | 598 | 306 | 50 | 1,570 | 56 |
| 16..... | 10 | 70 | 74 | 219 | 202 | 170 | 326 | 502 | 479 | 53 | 1,930 | 53 |
| 17..... | 11 | 70 | 79 | 170 | 185 | 219 | 306 | 389 | 456 | 56 | 722 | 50 |
| 18..... | 17 | 90 | 90 | 162 | 202 | 202 | 286 | 326 | 326 | 475 | 389 | 50 |
| 19..... | 12 | 114 | 59 | 193 | 389 | 177 | 433 | 306 | 202 | 1,100 | 266 | 50 |
| 20..... | 12 | 90 | 62 | 238 | 326 | 177 | 433 | 247 | 133 | 722 | 2,940 | 47 |
| 21..... | 14 | 79 | 114 | 228 | 286 | 238 | 389 | 286 | 95 | 247 | 3,860 | 56 |
| 22..... | 22 | 74 | 126 | 202 | 306 | 389 | 347 | 877 | 90 | 146 | 2,370 | 50 |
| 23..... | 18 | 70 | 114 | 162 | 247 | 1,270 | 411 | 1,960 | 411 | 126 | 1,540 | 50 |
| 24..... | 20 | 70 | 114 | 126 | 210 | 1,240 | 433 | 1,630 | 1,010 | 84 | 1,270 | 59 |
| 25..... | 15 | 66 | 114 | 140 | 193 | 722 | 368 | 985 | 722 | 66 | 773 | 53 |
| 26..... | 12 | 66 | 95 | 140 | 170 | 479 | 389 | 502 | 238 | 62 | 389 | 53 |
| 27..... | 14 | 62 | 170 | 133 | 162 | 368 | 550 | 502 | 147 | 56 | 286 | 147 |
| 28..... | 26 | 59 | 368 | 140 | 147 | 306 | 411 | 502 | 114 | 53 | 368 | 154 |
| 29..... | 20 | 56 | 306 | 126 | ----- | 526 | 326 | 347 | 95 | 56 | 368 | 107 |
| 30..... | 28 | 50 | 266 | 120 | ----- | 931 | 286 | 247 | 79 | 56 | 266 | 90 |
| 31..... | 40 | ----- | 177 | 114 | ----- | 598 | ----- | 210 | ----- | 56 | 210 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 40 | 8 | 14.0 | 0.074 | 0.03 |
| November..... | 185 | 47 | 77.7 | .133 | .15 |
| December..... | 368 | 56 | 125 | .2'3 | .25 |
| January..... | 326 | 114 | 173 | .295 | .34 |
| February..... | 389 | 95 | 176 | .300 | .31 |
| March..... | 1,270 | 140 | 386 | .659 | .76 |
| April..... | 2,980 | 286 | 802 | 1.37 | 1.53 |
| May..... | 3,440 | 210 | 915 | 1.56 | 1.80 |
| June..... | 1,010 | 79 | 241 | .4'1 | .46 |
| July..... | 1,100 | 50 | 145 | .2'7 | .28 |
| August..... | 3,860 | 70 | 958 | 1.63 | 1.88 |
| September..... | 177 | 47 | 87.1 | .149 | .17 |
| The year..... | 3,860 | 8 | 343 | .5'5 | 7.96 |

MEHERRIN RIVER NEAR LAWRENCEVILLE, VA.

LOCATION.—Chain gage at Gholson Bridge, 3 miles southeast of Lawrenceville, Brunswick County.

DRAINAGE AREA.—553 square miles.

RECORDS AVAILABLE.—December, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 4,320 second-feet Apr. 7 (gage height, 15.88 feet); minimum, 6 second-feet Oct. 7, 10 (gage height, 0.80 foot).

1928-1931: Maximum discharge, 7,270 second-feet Oct. 3, 1929 (gage height, 22.66 feet); minimum, that of Oct. 7, 10, 1930.

REMARKS.—Records good. Flow regulated during low water by small dam and mill just above station.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 13 | 108 | 102 | 134 | 114 | 150 | 438 | 158 | 134 | 72 | 182 | 100 |
| 2..... | 11 | 50 | 84 | 96 | 96 | 974 | 696 | 294 | 209 | 155 | 274 | 77 |
| 3..... | 10 | 50 | 84 | 120 | 84 | 438 | 552 | 336 | 236 | 59 | 94 | 66 |
| 4..... | 8 | 142 | 54 | 150 | 102 | 244 | 394 | 274 | 142 | 64 | 100 | 200 |
| 5..... | 7 | 328 | 64 | 108 | 102 | 204 | 1,280 | 191 | 120 | 69 | 77 | 191 |
| 6..... | 7 | 264 | 68 | 214 | 102 | 177 | 3,600 | 174 | 106 | 49 | 100 | 120 |
| 7..... | 7 | 114 | 102 | 372 | 90 | 168 | 3,990 | 294 | 100 | 61 | 77 | 52 |
| 8..... | 7 | 96 | 142 | 306 | 96 | 159 | 1,610 | 2,820 | 150 | 63 | 69 | 69 |
| 9..... | 8 | 90 | 114 | 186 | 90 | 168 | 836 | 1,460 | 88 | 191 | 58 | 65 |
| 10..... | 7 | 90 | 96 | 120 | 114 | 177 | 562 | 2,640 | 77 | 94 | 36 | 63 |
| 11..... | 16 | 84 | 80 | 127 | 127 | 150 | 424 | 1,880 | 77 | 88 | 1,520 | 35 |
| 12..... | 8 | 90 | 90 | 142 | 150 | 142 | 336 | 610 | 72 | 88 | 3,830 | 37 |
| 13..... | 7 | 64 | 84 | 177 | 127 | 134 | 294 | 446 | 77 | 49 | 1,250 | 36 |
| 14..... | 7 | 62 | 77 | 204 | 142 | 127 | 254 | 610 | 72 | 58 | 514 | 38 |
| 15..... | 9 | 69 | 90 | 142 | 168 | 134 | 236 | 562 | 236 | 53 | 1,550 | 22 |
| 16..... | 8 | 59 | 78 | 96 | 186 | 127 | 227 | 380 | 336 | 61 | 490 | 46 |
| 17..... | 7 | 59 | 52 | 142 | 204 | 134 | 200 | 294 | 336 | 68 | 254 | 40 |
| 18..... | 8 | 77 | 36 | 186 | 394 | 134 | 200 | 254 | 142 | 836 | 166 | 12 |
| 19..... | 10 | 108 | 48 | 195 | 438 | 134 | 174 | 227 | 100 | 1,160 | 127 | 41 |
| 20..... | 17 | 72 | 108 | 306 | 254 | 142 | 209 | 200 | 82 | 182 | 127 | 37 |
| 21..... | 9 | 63 | 84 | 306 | 284 | 134 | 182 | 358 | 69 | 113 | 732 | 26 |
| 22..... | 7 | 71 | 80 | 204 | 306 | 234 | 174 | 1,910 | 68 | 120 | 446 | 77 |
| 23..... | 9 | 68 | 96 | 142 | 264 | 1,640 | 236 | 1,400 | 2,270 | 88 | 810 | 67 |
| 24..... | 24 | 62 | 72 | 127 | 224 | 1,030 | 314 | 1,190 | 1,400 | 64 | 610 | 94 |
| 25..... | 35 | 62 | 51 | 134 | 186 | 460 | 209 | 402 | 586 | 52 | 314 | 45 |
| 26..... | 11 | 56 | 108 | 120 | 177 | 350 | 254 | 294 | 200 | 610 | 158 | 27 |
| 27..... | 35 | 46 | 224 | 120 | 150 | 264 | 236 | 380 | 134 | 127 | 127 | 209 |
| 28..... | 13 | 42 | 350 | 120 | 127 | 214 | 218 | 274 | 100 | 77 | 106 | 82 |
| 29..... | 35 | 41 | 394 | 120 | ----- | 696 | 191 | 200 | 88 | 64 | 200 | 69 |
| 30..... | 73 | 68 | 244 | 120 | ----- | 974 | 166 | 166 | 82 | 40 | 166 | 56 |
| 31..... | 96 | ----- | 150 | 114 | ----- | 482 | ----- | 150 | ----- | 52 | 106 | ----- |

| Month | Maximum | Minimum | Mean | Pe- square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 96 | 7 | 17.1 | 0.031 | 0.04 |
| November..... | 328 | 41 | 88.5 | .160 | .18 |
| December..... | 394 | 36 | 113 | .204 | .24 |
| January..... | 372 | 96 | 166 | .300 | .35 |
| February..... | 438 | 84 | 175 | .316 | .33 |
| March..... | 1,640 | 127 | 345 | .624 | .72 |
| April..... | 3,990 | 166 | 623 | 1.13 | 1.26 |
| May..... | 2,820 | 150 | 672 | 1.22 | 1.41 |
| June..... | 2,270 | 68 | 263 | .476 | .53 |
| July..... | 1,160 | 40 | 159 | .288 | .33 |
| August..... | 3,830 | 36 | 473 | .855 | .90 |
| September..... | 209 | 12 | 70.0 | .127 | .14 |
| The year..... | 3,990 | 7 | 264 | .477 | 6.52 |

ROANOKE RIVER BASIN

ROANOKE RIVER AT ROANOKE, VA.

LOCATION.—Chain gage at Walnut Street highway bridge in Roanoke, Roanoke County.

DRAINAGE AREA.—388 square miles.

RECORDS AVAILABLE.—July, 1896, to September, 1931.

EXTREMES.—Maximum discharge during year, 3,220 second-feet Aug. 22 (gage height, 5.25 feet); minimum, 32 second-feet Jan. 1 (gage height, 0.54 foot).

1896-1931: Maximum discharge, 16,900 second-feet Aug. 6 1901 (gage height, 14.34 feet); practically no flow on Dec. 23, 1909, when flow was retarded by freezing (gage height, 0.0 foot).

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|-------|------------------|------------------|------------------|------------------|------------------|------------------|
| 1 | 50 | 66 | 56 | 32 | 60 | 97 | 1,050 | 212 | 850 | 79 | ^a 800 | 141 |
| 2 | 49 | 63 | 66 | 48 | 60 | 97 | 1,530 | 198 | 620 | 66 | 470 | 114 |
| 3 | 52 | 60 | 60 | 63 | 56 | 102 | 1,040 | 183 | ^a 430 | 64 | 422 | 446 |
| 4 | 44 | 88 | 60 | 84 | 48 | 97 | 910 | 144 | 332 | 88 | 376 | 227 |
| 5 | 44 | 185 | 56 | 294 | 50 | 102 | 910 | 144 | 250 | 144 | ^a 600 | 138 |
| 6 | 52 | 102 | 102 | 985 | 56 | 102 | 1,040 | 147 | 242 | 88 | 235 | 109 |
| 7 | 40 | 66 | 398 | 568 | 60 | 102 | 1,110 | 132 | 227 | 79 | 176 | 98 |
| 8 | 44 | 63 | 201 | 466 | 66 | 130 | 975 | 790 | ^a 400 | 63 | 150 | 98 |
| 9 | 52 | 56 | 104 | 256 | 63 | 164 | 850 | 520 | ^a 290 | 63 | 138 | 93 |
| 10 | 55 | 56 | 84 | 158 | 60 | 130 | 620 | 376 | ^a 210 | 545 | 75 | 93 |
| 11 | 52 | 60 | 73 | 144 | 58 | 125 | 545 | 311 | 163 | 205 | 60 | 88 |
| 12 | 53 | 66 | 66 | 116 | 60 | 120 | 470 | 446 | 157 | 176 | 150 | 88 |
| 13 | 53 | 66 | 53 | 136 | 61 | 106 | 446 | 399 | 150 | 150 | 114 | 84 |
| 14 | 70 | 73 | 56 | 123 | 63 | 111 | 422 | 332 | 132 | 126 | 109 | 60 |
| 15 | 66 | 80 | 53 | 104 | 60 | 111 | 332 | ^a 300 | 129 | ^a 250 | 98 | 60 |
| 16 | 64 | 86 | 48 | 102 | 60 | 125 | 311 | ^a 260 | 595 | ^a 150 | 79 | 169 |
| 17 | 61 | 102 | 48 | 97 | 63 | 120 | 270 | ^a 240 | ^a 240 | 109 | 56 | 88 |
| 18 | 61 | 111 | 48 | 93 | 88 | 111 | 235 | ^a 220 | ^a 200 | 104 | 50 | 88 |
| 19 | 53 | 80 | 73 | 95 | 150 | 106 | 183 | ^a 200 | 150 | 98 | 56 | 70 |
| 20 | 48 | 77 | 63 | 97 | 130 | 102 | ^a 170 | 332 | 144 | ^a 100 | 53 | ^a 70 |
| 21 | 50 | 73 | 48 | 75 | 106 | 102 | ^a 160 | 545 | 132 | ^a 100 | 332 | ^a 60 |
| 22 | 56 | 60 | 43 | 60 | 102 | 111 | 332 | 399 | 212 | 88 | 2,200 | ^a 60 |
| 23 | 73 | 60 | 40 | 60 | 93 | 179 | 422 | 910 | 470 | ^a 100 | 1,260 | ^a 80 |
| 24 | 70 | 60 | 40 | 64 | 88 | 334 | 446 | 850 | 311 | ^a 120 | 702 | ^a 100 |
| 25 | 63 | 60 | 38 | 80 | 84 | 376 | 376 | 470 | 194 | ^a 120 | 470 | ^a 80 |
| 26 | 56 | 60 | 36 | 84 | 84 | 376 | 376 | 332 | 150 | ^a 100 | 354 | ^a 180 |
| 27 | 61 | 60 | 61 | 80 | 80 | 398 | 290 | 290 | 126 | ^a 80 | 270 | ^a 200 |
| 28 | 63 | 56 | 120 | 77 | 79 | 398 | 250 | 290 | 111 | ^a 70 | 227 | ^a 100 |
| 29 | 70 | 43 | 93 | 70 | ----- | 1,530 | 250 | 290 | 88 | ^a 80 | 205 | 50 |
| 30 | 56 | 43 | 64 | 66 | ----- | 710 | 235 | 246 | 79 | ^a 80 | 170 | 50 |
| 31 | 75 | ----- | 43 | 60 | ----- | 466 | ----- | 212 | ----- | 150 | 154 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 75 | 40 | 56.6 | 0.146 | 0.17 |
| November | 185 | 43 | 72.7 | .187 | .21 |
| December | 398 | 36 | 77.2 | .199 | .23 |
| January | 985 | 32 | 156 | .402 | .46 |
| February | 150 | 48 | 74.6 | .192 | .20 |
| March | 1,530 | 97 | 234 | .603 | .70 |
| April | 1,530 | ----- | 552 | 1.42 | 1.58 |
| May | 910 | 132 | 346 | .892 | 1.03 |
| June | 850 | 79 | 259 | .668 | .75 |
| July | 545 | 63 | 124 | .320 | .37 |
| August | 2,200 | 50 | 342 | .881 | 1.02 |
| September | 446 | 50 | 111 | .286 | .32 |
| The year | 2,200 | 32 | 201 | .518 | 7.04 |

^a Estimated.

ROANOKE RIVER AT NIAGARA, VA.

LOCATION.—Water-stage recorder 200 feet below power plant of Appalachian Electric Power Co. at Niagara, Roanoke County, and 2 miles below mouth of Tinker Creek.

DRAINAGE AREA.—511 square miles.

RECORDS AVAILABLE.—July, 1926, to September, 1931.

EXTREMES.—Maximum discharge during year not determined; minimum, 27 second-feet Aug. 2 (gage height, 0.70 foot).

1926-1931: Maximum discharge, 16,300 second-feet Aug. 16, 1928 (gage height, 17.36 feet); minimum, 14 second-feet July 11, 1926 (gage height, 0.45 foot).

REMARKS.—Records good. Flow regulated at dam and water-power plant 200 feet above station.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|-------|-------|-------|---------|-------|-------|-------|---------|-------|
| 1 | 78 | 96 | 102 | 136 | 111 | 182 | 1,670 | 284 | 1,040 | 162 | 1,020 | 243 |
| 2 | 80 | 94 | 104 | 129 | 118 | 169 | 1,580 | 246 | 844 | 150 | 597 | 226 |
| 3 | 80 | 86 | 100 | 121 | 126 | 166 | 1,050 | 240 | 532 | 150 | 456 | 421 |
| 4 | 74 | 150 | 98 | 127 | 114 | 162 | 872 | 240 | 464 | 264 | 540 | 286 |
| 5 | 78 | 146 | 104 | 512 | 114 | 139 | * 1,310 | 208 | 394 | 182 | 756 | 220 |
| 6 | 80 | 154 | 363 | 1,370 | 123 | 139 | * 1,840 | 214 | 354 | 234 | 356 | 186 |
| 7 | 80 | 127 | 374 | 750 | 127 | 169 | 1,320 | 310 | 298 | 190 | 247 | 186 |
| 8 | 80 | 84 | 214 | 420 | 110 | 217 | 1,250 | 673 | 543 | 165 | 203 | * 130 |
| 9 | 80 | 89 | 164 | 314 | 126 | 214 | 1,070 | 616 | 384 | 150 | 186 | * 140 |
| 10 | 80 | 91 | 154 | 271 | 132 | 196 | * 880 | 488 | 320 | 706 | 158 | 152 |
| 11 | 80 | 100 | 136 | 256 | 130 | 197 | * 690 | 421 | 288 | 298 | 196 | 140 |
| 12 | 82 | 114 | 134 | 204 | 130 | 164 | 580 | 572 | 244 | 232 | 168 | * 125 |
| 13 | 80 | 118 | 130 | 192 | 117 | 168 | 511 | 598 | 204 | 187 | 204 | * 125 |
| 14 | 101 | 122 | 128 | 188 | 110 | 170 | 458 | 470 | 198 | 247 | 217 | * 125 |
| 15 | 99 | 142 | 121 | 134 | 120 | 192 | 397 | 413 | 387 | 312 | 164 | 126 |
| 16 | 95 | 142 | 108 | 146 | 125 | 174 | 376 | 344 | 640 | 284 | 138 | 125 |
| 17 | 98 | 150 | 110 | 140 | 123 | 200 | 334 | 360 | 310 | 192 | 143 | 172 |
| 18 | 91 | 154 | 116 | 142 | 194 | 150 | 358 | 281 | 286 | 160 | * 140 | 130 |
| 19 | 82 | 141 | 118 | 164 | 192 | 189 | 298 | 309 | 206 | 162 | * 100 | 126 |
| 20 | 75 | 126 | 131 | 166 | 184 | 178 | 272 | 258 | 192 | 150 | * 360 | 122 |
| 21 | 75 | 98 | 119 | 168 | 208 | 156 | 266 | 539 | 195 | 174 | * 390 | 110 |
| 22 | 75 | 104 | 118 | 143 | 164 | 224 | 422 | 564 | 466 | 135 | * 2,400 | 113 |
| 23 | 86 | 106 | 96 | 130 | 157 | 262 | 738 | 976 | 720 | 144 | * 2,600 | 132 |
| 24 | 112 | 96 | 101 | 124 | 142 | 450 | 543 | 820 | 375 | 169 | * 1,350 | 170 |
| 25 | 79 | 102 | 107 | 138 | 154 | 470 | 486 | * 615 | 292 | 172 | * 670 | 127 |
| 26 | 80 | 102 | 119 | 138 | 133 | 520 | 458 | 572 | 248 | 150 | * 590 | 242 |
| 27 | 92 | 96 | 131 | 120 | 138 | 446 | 352 | 502 | 214 | 128 | * 450 | 269 |
| 28 | 95 | 91 | 180 | 113 | 115 | 580 | 375 | 442 | 193 | * 115 | * 360 | 168 |
| 29 | 98 | 89 | 172 | 174 | ----- | 1,160 | 304 | 340 | 197 | 124 | * 310 | * 110 |
| 30 | 102 | 91 | 166 | 114 | ----- | 1,060 | 252 | 352 | 172 | 124 | * 285 | * 120 |
| 31 | 98 | ----- | 126 | 111 | ----- | 744 | ----- | 480 | ----- | 244 | * 250 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 112 | 74 | 86.0 | 0.168 | 0.19 |
| November | 154 | 86 | 114 | .223 | .25 |
| December | 374 | 96 | 143 | .280 | .32 |
| January | 1,370 | 111 | 237 | .464 | .53 |
| February | 208 | 110 | 137 | .268 | .28 |
| March | 1,160 | 139 | 310 | .607 | .70 |
| April | ----- | 252 | 710 | 1.39 | 1.55 |
| May | 976 | 208 | 443 | .867 | 1.00 |
| June | 1,040 | 172 | 373 | .730 | .81 |
| July | 706 | ----- | 201 | .393 | .45 |
| August | ----- | ----- | 516 | 1.01 | 1.16 |
| September | 421 | 110 | 169 | .331 | .37 |
| The year | ----- | 74 | 287 | .562 | 7.61 |

* Estimated.

ROANOKE RIVER NEAR TOSHES, VA.

LOCATION.—Water-stage recorder three-quarters of a mile below Smith Mountain Gap, 3 miles above Pigg River, and 7 miles northwest of Toshes, Pittsylvania County.

DRAINAGE AREA.—1,020 square miles.

RECORDS AVAILABLE.—September, 1925, to September, 1931.

EXTREMES.—Maximum discharge during year, 7,990 second-feet Aug. 22 (gage height, 8.67 feet); minimum, 130 second-feet Oct. 1 (gage height, 1.06 feet).

1925-1931: Maximum discharge, 25,600 second-feet Oct. 2, 1929; minimum, 112 second-feet Sept. 7, 1930 (gage height, 0.95 foot).

REMARKS.—Records good. Discharge estimated for Dec. 18-20, Aug. 24-27, Sept. 11-23.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 130 | 219 | 256 | 375 | 269 | 393 | 2,250 | 515 | 2,060 | 274 | 1,070 | 495 |
| 2..... | 134 | 211 | 246 | 347 | 265 | 436 | 3,320 | 536 | 1,820 | 265 | 3,020 | 412 |
| 3..... | 137 | 206 | 233 | 370 | 269 | 381 | 2,130 | 508 | 1,120 | 274 | 915 | 488 |
| 4..... | 141 | 347 | 224 | 336 | 274 | 359 | 1,640 | 468 | 778 | 336 | 762 | 536 |
| 5..... | 145 | 522 | 237 | 1,610 | 269 | 336 | 1,690 | 455 | 683 | 488 | 1,980 | 508 |
| 6..... | 149 | 381 | 621 | 3,020 | 260 | 310 | 1,960 | 455 | 600 | 347 | 1,150 | 405 |
| 7..... | 157 | 294 | 1,540 | 1,740 | 269 | 310 | 2,620 | 578 | 536 | 399 | 550 | 375 |
| 8..... | 161 | 269 | 786 | 1,060 | 269 | 424 | 2,190 | 1,610 | 536 | 310 | 405 | 353 |
| 9..... | 161 | 228 | 475 | 738 | 265 | 543 | 1,870 | 1,280 | 668 | 289 | 342 | 289 |
| 10..... | 165 | 215 | 375 | 600 | 289 | 482 | 1,600 | 934 | 529 | 676 | 325 | 284 |
| 11..... | 165 | 215 | 353 | 536 | 284 | 405 | 1,330 | 746 | 462 | 1,240 | 396 | 270 |
| 12..... | 165 | 224 | 325 | 522 | 274 | 399 | 1,100 | 691 | 430 | 462 | 536 | 270 |
| 13..... | 161 | 284 | 305 | 482 | 274 | 353 | 917 | 1,120 | 381 | 347 | 482 | 260 |
| 14..... | 185 | 294 | 300 | 442 | 274 | 353 | 826 | 876 | 364 | 300 | 418 | 240 |
| 15..... | 237 | 294 | 294 | 405 | 256 | 381 | 770 | 730 | 364 | 520 | 393 | 230 |
| 16..... | 274 | 364 | 279 | 336 | 265 | 399 | 675 | 668 | 708 | 502 | 331 | 230 |
| 17..... | 219 | 442 | 228 | 418 | 300 | 364 | 637 | 564 | 691 | 375 | 300 | 220 |
| 18..... | 194 | 393 | 270 | 412 | 325 | 375 | 593 | 557 | 418 | 300 | 279 | 230 |
| 19..... | 189 | 342 | 290 | 405 | 381 | 331 | 578 | 482 | 381 | 310 | 274 | 240 |
| 20..... | 177 | 310 | 290 | 399 | 359 | 359 | 536 | 488 | 310 | 284 | 237 | 220 |
| 21..... | 169 | 279 | 289 | 381 | 347 | 342 | 495 | 834 | 289 | 360 | 844 | 200 |
| 22..... | 169 | 251 | 347 | 359 | 336 | 508 | 809 | 976 | 397 | 482 | 4,840 | 210 |
| 23..... | 181 | 246 | 305 | 325 | 320 | 1,330 | 1,380 | 1,380 | 1,190 | 289 | 5,240 | 230 |
| 24..... | 219 | 251 | 242 | 331 | 305 | 1,330 | 1,200 | 1,460 | 1,040 | 256 | 2,810 | 300 |
| 25..... | 237 | 242 | 246 | 331 | 294 | 1,100 | 934 | 1,080 | 508 | 265 | 1,580 | 279 |
| 26..... | 206 | 237 | 353 | 331 | 300 | 926 | 859 | 942 | 418 | 800 | 1,060 | 237 |
| 27..... | 189 | 233 | 482 | 325 | 284 | 884 | 770 | 826 | 381 | 405 | 1,420 | 396 |
| 28..... | 194 | 233 | 543 | 305 | 289 | 865 | 652 | 699 | 336 | 260 | 989 | 405 |
| 29..... | 228 | 242 | 495 | 289 | ----- | 2,460 | 637 | 593 | 305 | 237 | 699 | 289 |
| 30..... | 237 | 274 | 488 | 342 | ----- | 2,320 | 571 | 522 | 294 | 284 | 593 | 228 |
| 31..... | 228 | ----- | 405 | 289 | ----- | 1,510 | ----- | 501 | ----- | 237 | 571 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 274 | 130 | 184 | 0.180 | 0.21 |
| November..... | 522 | 206 | 285 | .276 | .31 |
| December..... | 1,540 | 224 | 391 | .382 | .44 |
| January..... | 3,020 | 289 | 586 | .575 | .66 |
| February..... | 381 | 256 | 292 | .286 | .30 |
| March..... | 2,460 | 310 | 686 | .677 | .78 |
| April..... | 3,320 | 495 | 1,250 | 1.23 | 1.37 |
| May..... | 1,610 | 455 | 777 | .765 | .88 |
| June..... | 2,080 | 289 | 634 | .625 | .69 |
| July..... | 1,240 | 237 | 393 | .385 | .44 |
| August..... | 5,240 | 237 | 1,120 | 1.10 | 1.27 |
| September..... | 536 | ----- | 311 | .305 | .34 |
| The year..... | 5,240 | 130 | 578 | .567 | 7.69 |

ROANOKE RIVER AT ALTAVISTA, VA.

LOCATION.—Water-stage recorder at highway bridge a quarter of a mile south of Altavista, Campbell County.

DRAINAGE AREA.—1, 800 square miles.

RECORDS AVAILABLE.—August, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 15,800 second-feet Aug. 22 (gage height, 18.76 feet); minimum, 222 second-feet Oct. 4 (gage height, 1.99 feet).

1930-31: Maximum discharge, that of Aug. 22, 1931; minimum, about 210 second-feet Sept. 3-5, 29, 30, 1930.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|---------|--------|--------|-------|--------|--------|--------|--------|--------|---------|--------|
| 1..... | * 225 | 420 | 555 | 728 | 591 | 620 | 3, 690 | 950 | 2, 990 | 501 | 456 | 670 |
| 2..... | * 225 | 380 | 578 | 700 | 560 | 838 | 5, 910 | 920 | 3, 870 | 452 | 4, 550 | 630* |
| 3..... | * 225 | * 350 | 510 | 650 | 560 | 810 | 3, 780 | 950 | 2, 060 | 438 | 1, 660 | 695 |
| 4..... | 225 | * 450 | 492 | 755 | 573 | 728 | 2, 730 | 892 | 1, 430 | 596 | 1, 500 | 924 |
| 5..... | * 230 | * 900 | 501 | 1, 240 | 568 | 675 | 2, 510 | 810 | 1, 190 | 980 | 2, 350 | 748 |
| 6..... | * 240 | * 1,100 | 646 | 5, 540 | 550 | 630 | 2, 940 | 755 | 1, 070 | 892 | 2, 190 | 620 |
| 7..... | * 250 | * 800 | 2, 790 | 3, 590 | 555 | 600 | 4, 260 | 1, 060 | 950 | 920 | 1, 120 | 534 |
| 8..... | * 250 | 510 | 1, 990 | 2, 140 | 550 | 782 | 3, 720 | 2, 670 | 838 | 865 | 755 | 502 |
| 9..... | * 260 | * 460 | 1, 180 | 1, 460 | 555 | 1, 070 | 2, 990 | 2, 430 | 980 | 625 | 582 | 502 |
| 10..... | * 270 | * 440 | 892 | 1, 190 | 615 | 980 | 2, 510 | 1, 740 | 920 | 782 | 519 | * 480* |
| 11..... | 276 | * 420 | 755 | 1, 040 | 600 | 865 | 2, 110 | 1, 340 | 810 | 1, 820 | 537 | * 450* |
| 12..... | * 260 | * 450 | 700 | 980 | 555 | 755 | 1, 830 | 1, 160 | 700 | 1, 100 | 1, 020 | 480 |
| 13..... | 280 | 537 | 630 | 1, 010 | 532 | 755 | 1, 570 | 1, 520 | 675 | 675 | 920 | * 440* |
| 14..... | 292 | 605 | 591 | 892 | 546 | 675 | 1, 430 | 1, 460 | 625 | 778 | 838 | * 400* |
| 15..... | * 325 | * 605 | 582 | 782 | 519 | 728 | 1, 320 | 1, 190 | 700 | 700 | 700 | * 350* |
| 16..... | * 475 | 675 | 568 | 650 | 496 | 782 | 1, 220 | 1, 070 | 674 | 1, 200 | 600 | 335 |
| 17..... | * 450 | 920 | 506 | 728 | 514 | 782 | 1, 130 | 950 | 1, 160 | 700 | 573 | 335 |
| 18..... | 360 | 950 | 316 | 865 | 610 | 728 | 1, 100 | 892 | 838 | 600 | 519 | 343 |
| 19..... | 344 | 810 | 662 | 865 | 645 | 700 | 1, 070 | 838 | 635 | 537 | 488 | 379 |
| 20..... | 332 | 675 | 675 | 865 | 700 | 675 | 980 | 755 | 582 | 510 | 465 | 308 |
| 21..... | 316 | 605 | 596 | 782 | 650 | 675 | 950 | 1, 700 | 537 | * 600 | 762 | 308 |
| 22..... | 316 | 578 | 566 | 728 | 620 | 912 | 1, 180 | 1, 870 | 519 | 1, 460 | 7, 110 | 315 |
| 23..... | 316 | 568 | 596 | 700 | 615 | 3, 330 | 3, 110 | 3, 380 | 1, 780 | 866 | 11, 400 | 308. |
| 24..... | 368 | 519 | 555 | 700 | 596 | 3, 680 | 2, 250 | 2, 430 | 1, 870 | 528 | 4, 280 | 423 |
| 25..... | 434 | 532 | 424 | 700 | 586 | 2, 530 | 1, 600 | 1, 770 | 1, 230 | 460 | 2, 370 | 502 |
| 26..... | 420 | 538 | 582 | 675 | 573 | 1, 910 | 1, 430 | 1, 500 | 810 | 784 | 1, 670 | 367 |
| 27..... | 372 | 532 | 924 | 700 | 560 | 1, 640 | 1, 360 | 1, 400 | 650 | 1, 430 | 1, 920 | 371 |
| 28..... | 364 | 496 | 1, 160 | 700 | 514 | 1, 460 | 1, 160 | 1, 220 | 945 | 872 | 2, 150 | 520* |
| 29..... | 400 | 456 | 1, 100 | 700 | ----- | 4, 080 | 1, 100 | 1, 070 | 555 | 519 | 1, 220 | 453 |
| 30..... | 465 | 452 | 980 | 675 | ----- | 4, 240 | 1, 010 | 892 | 514 | 470 | 940 | 315 |
| 31..... | 465 | ----- | 782 | 675 | ----- | 2, 710 | ----- | 920 | ----- | 456 | 802 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|--------|--------------------|----------------------|
| October..... | ----- | 225 | 324 | 0.180 | 0.21 |
| November..... | ----- | 591 | 591 | .328 | .37 |
| December..... | 2, 790 | 316 | 787 | .437 | .50 |
| January..... | 5, 540 | 650 | 1, 110 | .617 | .71 |
| February..... | 700 | 514 | 575 | .319 | .33 |
| March..... | 4, 240 | 600 | 1, 860 | .756 | .87 |
| April..... | 5, 910 | 950 | 2, 130 | 1.18 | 1.32 |
| May..... | 3, 380 | 755 | 1, 370 | .761 | .88 |
| June..... | 3, 870 | 514 | 1, 090 | .606 | .68 |
| July..... | 1, 820 | 438 | 778 | .432 | .50 |
| August..... | 11, 400 | 456 | 1, 840 | 1.02 | 1.18 |
| September..... | 924 | 308 | 467 | .259 | .29 |
| The year..... | 11, 400 | 225 | 1, 040 | .578 | 7.84 |

* Estimated.

ROANOKE RIVER AT BROOKNEAL, VA.

LOCATION.—Water-stage recorder at highway bridge at Virginian Railway station at Brookneal, Campbell County, $2\frac{3}{4}$ miles above Falling River.

DRAINAGE AREA.—2,420 square miles.

RECORDS AVAILABLE.—April, 1923, to September, 1931.

EXTREMES.—Maximum discharge during year, 19,400 second-feet Aug. 23 (gage height, 22.19 feet); minimum, 270 second-feet Oct. 2, 3 (gage height, 2.90 feet).

1923-1931: Maximum discharge, 39,000 second-feet Aug. 12, 1928 (gage height, 37.15 feet); minimum, that of Oct. 2, 3, 1930.

Flood of November, 1877, reached a stage of about 36 feet and flood of Mar. 15, 1923, reached a stage of about 31 feet.

REMARKS.—Records good. Discharge estimated for May 25-27, Aug. 29, 30.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| 1----- | 280 | 580 | 685 | 905 | 850 | 1,120 | 5,050 | 1,400 | 1,810 | 710 | 645 | 1,060 |
| 2----- | 277 | 542 | 765 | 848 | 790 | 1,540 | 7,530 | 1,360 | 4,840 | 660 | 3,890 | 940 |
| 3----- | 274 | 506 | 710 | 792 | 790 | 1,400 | 5,620 | 1,440 | 2,900 | 620 | 3,340 | 1,190 |
| 4----- | 291 | 635 | 635 | 965 | 790 | 1,160 | 3,980 | 1,330 | 1,940 | 645 | 1,820 | 1,260 |
| 5----- | 294 | 1,090 | 635 | 1,360 | 790 | 1,030 | 3,530 | 1,260 | 1,540 | 970 | 2,010 | 1,260 |
| 6----- | 294 | 1,400 | 848 | 6,300 | 790 | 970 | 4,380 | 1,190 | 1,360 | 1,260 | 3,250 | 1,000 |
| 7----- | 305 | 995 | 2,790 | 5,400 | 760 | 910 | 5,500 | 1,450 | 1,260 | 1,330 | 1,790 | 820 |
| 8----- | 309 | 765 | 3,420 | 3,370 | 760 | 1,190 | 5,140 | 2,900 | 1,160 | 1,260 | 1,090 | 735 |
| 9----- | 313 | 660 | 1,820 | 2,380 | 790 | 1,500 | 3,980 | 3,730 | 1,090 | 850 | 850 | 710 |
| 10----- | 329 | 635 | 1,220 | 1,780 | 880 | 1,500 | 3,440 | 2,720 | 1,220 | 850 | 710 | 660 |
| 11----- | 329 | 595 | 1,020 | 1,470 | 910 | 1,260 | 2,990 | 2,020 | 1,060 | 1,550 | 710 | 620 |
| 12----- | 341 | 590 | 905 | 1,360 | 850 | 1,120 | 2,560 | 1,680 | 970 | 1,900 | 1,000 | 655 |
| 13----- | 329 | 635 | 848 | 1,400 | 790 | 1,060 | 2,220 | 1,830 | 910 | 1,090 | 1,400 | 640 |
| 14----- | 341 | 765 | 792 | 1,330 | 790 | 1,000 | 1,980 | 2,350 | 880 | 910 | 1,090 | 600 |
| 15----- | 377 | 820 | 792 | 1,120 | 820 | 1,030 | 1,820 | 1,780 | 1,000 | 1,030 | 970 | 575 |
| 16----- | 560 | 848 | 765 | 962 | 760 | 1,120 | 1,750 | 1,540 | 1,380 | 1,280 | 850 | 560 |
| 17----- | 600 | 1,090 | 710 | 940 | 790 | 1,120 | 1,610 | 1,400 | 1,440 | 1,140 | 735 | 580 |
| 18----- | 533 | 1,360 | 556 | 1,160 | 910 | 1,060 | 1,540 | 1,260 | 1,300 | 790 | 760 | 600 |
| 19----- | 470 | 1,150 | 590 | 1,190 | 1,030 | 1,000 | 1,500 | 1,220 | 910 | 710 | 635 | 590 |
| 20----- | 448 | 965 | 1,020 | 1,160 | 1,060 | 970 | 1,470 | 1,120 | 820 | 685 | 789 | 605 |
| 21----- | 430 | 848 | 848 | 1,120 | 1,000 | 970 | 1,360 | 2,130 | 710 | 760 | 1,190 | 545 |
| 22----- | 425 | 765 | 710 | 1,030 | 940 | 1,090 | 1,440 | 3,170 | 1,200 | 970 | 4,660 | 545 |
| 23----- | 425 | 738 | 738 | 940 | 910 | 3,830 | 3,260 | 5,400 | 2,240 | 1,610 | 16,800 | 550 |
| 24----- | 461 | 685 | 738 | 910 | 880 | 5,240 | 3,220 | 3,980 | 3,340 | 910 | 6,620 | 555 |
| 25----- | 524 | 685 | 685 | 940 | 850 | 3,900 | 2,380 | 2,700 | 1,980 | 760 | 3,800 | 735 |
| 26----- | 570 | 660 | 546 | 940 | 850 | 2,720 | 2,020 | 2,400 | 1,190 | 735 | 2,810 | 710 |
| 27----- | 542 | 635 | 1,150 | 910 | 820 | 2,300 | 1,860 | 2,100 | 1,000 | 1,230 | 3,080 | 590 |
| 28----- | 502 | 605 | 1,700 | 910 | 790 | 2,060 | 1,720 | 1,780 | 970 | 1,520 | 3,890 | 660 |
| 29----- | 515 | 533 | 1,620 | 880 | ----- | 4,040 | 1,540 | 1,580 | 880 | 760 | 2,500 | 735 |
| 30----- | 580 | 542 | 1,360 | 850 | ----- | 5,740 | 1,470 | 1,400 | 735 | 620 | 1,600 | 650 |
| 31----- | 610 | ----- | 1,090 | 880 | ----- | 3,940 | ----- | 1,260 | ----- | 580 | 1,220 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October----- | 610 | 274 | 415 | 0.171 | 0.20 |
| November----- | 1,400 | 506 | 777 | .321 | .36 |
| December----- | 3,420 | 546 | 1,060 | .438 | .50 |
| January----- | 6,300 | 792 | 1,500 | .620 | .71 |
| February----- | 1,060 | 760 | 848 | .350 | .36 |
| March----- | 5,740 | 910 | 1,900 | .785 | .90 |
| April----- | 7,530 | 1,360 | 2,930 | 1.21 | 1.35 |
| May----- | 5,400 | 1,120 | 2,030 | .839 | .97 |
| June----- | 4,840 | 710 | 1,470 | .607 | .68 |
| July----- | 1,900 | 580 | 990 | .409 | .47 |
| August----- | 16,800 | 635 | 2,470 | 1.02 | 1.18 |
| September----- | 1,260 | 545 | 731 | .302 | .34 |
| The year----- | 16,800 | 274 | 1,430 | .591 | 8.02 |

ROANOKE RIVER NEAR CLOVER, VA.

LOCATION.—Water-stage recorder $3\frac{1}{2}$ miles below mouth of Roanoke Creek and 6 miles east of Clover, Halifax County.

DRAINAGE AREA.—3,230 square miles.

RECORDS AVAILABLE.—August, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 17,800 second-feet Aug. 24 (gage height, 15.44 feet); minimum, 324 second-feet Oct. 3 (gage height, 0.81 foot).

1929-1931: Maximum discharge, 34,100 second-feet Oct. 4, 1929 (gage height, 22.90 feet); minimum, 306 second-feet Sept. 9, 1930 (gage height, 0.76 foot).

REMARKS.—Records excellent except those for high stages, Aug. 23, 24, and those estimated for Dec. 21-27, which are good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| 1..... | 340 | 776 | 692 | 1,280 | 1,040 | 1,640 | 4,840 | 1,650 | 2,120 | 855 | 1,090 | 1,420 |
| 2..... | 332 | 713 | 870 | 1,040 | 961 | 2,150 | 8,130 | 1,600 | 4,270 | 805 | 1,360 | 1,240 |
| 3..... | 328 | 665 | 885 | 1,040 | 915 | 2,100 | 7,640 | 1,600 | 4,400 | 762 | 5,240 | 1,290 |
| 4..... | 332 | 741 | 790 | 1,040 | 915 | 1,750 | 5,070 | 1,600 | 2,670 | 727 | 2,450 | 1,900 |
| 5..... | 352 | 1,160 | 748 | 1,370 | 915 | 1,510 | 4,840 | 1,460 | 2,050 | 783 | 2,000 | 1,600 |
| 6..... | 360 | 1,510 | 834 | 4,160 | 922 | 1,330 | 6,910 | 1,380 | 1,750 | 1,170 | 2,740 | 1,420 |
| 7..... | 360 | 1,420 | 1,580 | 7,090 | 915 | 1,240 | 8,470 | 1,950 | 1,560 | 1,720 | 2,680 | 1,160 |
| 8..... | 378 | 1,040 | 3,660 | 4,100 | 892 | 1,380 | 7,510 | 3,680 | 1,420 | 1,600 | 1,610 | 1,000 |
| 9..... | 392 | 863 | 2,560 | 2,700 | 922 | 1,900 | 5,520 | 4,540 | 1,330 | 1,280 | 1,120 | 922 |
| 10..... | 401 | 783 | 1,700 | 2,050 | 1,120 | 1,900 | 4,200 | 4,010 | 1,330 | 1,040 | 885 | 870 |
| 11..... | 416 | 741 | 1,280 | 1,700 | 1,200 | 1,700 | 3,570 | 2,970 | 1,380 | 1,160 | 1,510 | 819 |
| 12..... | 416 | 720 | 1,160 | 1,560 | 1,160 | 1,510 | 3,130 | 2,250 | 1,200 | 2,000 | 1,650 | 783 |
| 13..... | 422 | 734 | 1,080 | 1,600 | 1,040 | 1,380 | 2,700 | 2,250 | 1,120 | 1,610 | 1,700 | 790 |
| 14..... | 411 | 812 | 992 | 1,560 | 1,040 | 1,280 | 2,450 | 2,700 | 1,120 | 1,330 | 1,700 | 748 |
| 15..... | 422 | 938 | 938 | 1,380 | 1,040 | 1,240 | 2,250 | 2,500 | 1,330 | 1,040 | 1,420 | 692 |
| 16..... | 520 | 984 | 922 | 1,160 | 1,000 | 1,380 | 2,100 | 2,000 | 1,560 | 1,120 | 1,160 | 665 |
| 17..... | 686 | 1,080 | 900 | 1,200 | 1,080 | 1,420 | 1,950 | 1,800 | 1,750 | 1,380 | 1,000 | 658 |
| 18..... | 706 | 1,380 | 812 | 1,200 | 1,420 | 1,380 | 1,850 | 1,650 | 1,600 | 1,160 | 907 | 679 |
| 19..... | 606 | 1,460 | 741 | 1,460 | 1,460 | 1,280 | 1,850 | 1,510 | 1,330 | 945 | 938 | 699 |
| 20..... | 520 | 1,240 | 929 | 1,510 | 1,420 | 1,280 | 1,750 | 1,460 | 1,040 | 834 | 1,040 | 727 |
| 21..... | 480 | 1,080 | 1,200 | 1,380 | 1,510 | 1,240 | 1,650 | 4,030 | 953 | 776 | 2,060 | 713 |
| 22..... | 475 | 969 | 1,000 | 1,280 | 1,380 | 1,420 | 1,650 | 5,470 | 1,470 | 1,000 | 4,150 | 665 |
| 23..... | 480 | 922 | 900 | 1,160 | 1,240 | 2,530 | 2,110 | 5,930 | 2,350 | 1,380 | 14,000 | 692 |
| 24..... | 508 | 870 | 900 | 1,120 | 1,160 | 5,570 | 3,900 | 6,750 | 4,040 | 1,510 | 15,200 | 665 |
| 25..... | 574 | 834 | 850 | 1,080 | 1,120 | 4,900 | 2,990 | 3,810 | 2,880 | 1,280 | 5,740 | 679 |
| 26..... | 652 | 826 | 800 | 1,120 | 1,080 | 3,460 | 2,450 | 2,860 | 1,750 | 1,240 | 3,240 | 878 |
| 27..... | 692 | 798 | 1,200 | 1,080 | 1,040 | 2,700 | 2,250 | 2,460 | 1,240 | 1,040 | 2,910 | 855 |
| 28..... | 652 | 748 | 1,750 | 1,080 | 1,040 | 2,400 | 2,050 | 2,200 | 1,120 | 1,600 | 4,120 | 706 |
| 29..... | 638 | 645 | 2,050 | 1,080 | ----- | 3,430 | 1,900 | 1,900 | 1,040 | 1,390 | 3,110 | 826 |
| 30..... | 713 | 632 | 1,760 | 1,000 | ----- | 6,160 | 1,700 | 1,700 | 945 | 878 | 2,100 | 841 |
| 31..... | 790 | ----- | 1,420 | 992 | ----- | 5,250 | ----- | 1,510 | ----- | 911 | 1,650 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 790 | 328 | 495 | 0.153 | 0.18 |
| November..... | 1,510 | 632 | 936 | .290 | .32 |
| December..... | 3,660 | 692 | 1,220 | .378 | .44 |
| January..... | 7,090 | 992 | 1,700 | .526 | .61 |
| February..... | 1,510 | 892 | 1,110 | .344 | .36 |
| March..... | 6,160 | 1,240 | 2,250 | .697 | .80 |
| April..... | 8,470 | 1,650 | 3,650 | 1.13 | 1.26 |
| May..... | 6,750 | 1,380 | 2,680 | .830 | .96 |
| June..... | 4,400 | 945 | 1,800 | .557 | .62 |
| July..... | 2,000 | 727 | 1,170 | .362 | .42 |
| August..... | 15,200 | 855 | 2,980 | .923 | 1.06 |
| September..... | 1,900 | 688 | 920 | .285 | .32 |
| The year..... | 15,200 | 328 | 1,750 | .542 | 7.35 |

ROANOKE RIVER AT OLD GASTON, N. C.

LOCATION.—Water-stage recorder at bridge of Roanoke Railway Co. at Old Gaston, Northampton County, three-quarters of a mile below Indian Creek.

DRAINAGE AREA.—8,350 square miles.

RECORDS AVAILABLE.—December, 1911, to September, 1931.

EXTREMES.—Maximum discharge during year ending Sept. 30, 1931, 41,600 second-feet Aug. 24 (gage height, 8.15 feet); minimum, 650 second-feet several times in October (gage height, 0.60 foot).

1911-1931: Maximum discharge, 210,000 second-feet Mar. 18, 1912 (gage height, 16.6 feet); minimum, that of October, 1930.

REMARKS.—Records good. Record from chain-gage readings Oct. 5 to Nov. 3, Nov. 6-31; recorder not operating. Slight diurnal fluctuation caused by operation of power plant several miles upstream.

Daily and monthly discharge, in second-feet, 1929-1931

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|
| 1929-30 | | | | | | | | | | | | |
| 1----- | 6,800 | 5,680 | 7,100 | 11,800 | 6,890 | 5,480 | 4,740 | 4,420 | 3,510 | 2,720 | 1,440 | 1,020 |
| 2----- | 49,200 | 6,480 | 6,270 | 9,830 | 7,320 | 5,290 | 5,100 | 4,100 | 3,570 | 2,250 | 1,490 | 1,010 |
| 3----- | 71,800 | 6,270 | 10,800 | 8,650 | 9,350 | 5,100 | 4,920 | 4,100 | 3,290 | 2,350 | 1,590 | 855 |
| 4----- | 73,200 | 8,880 | 16,800 | 7,750 | 16,500 | 4,920 | 5,480 | 4,100 | 3,200 | 2,280 | 1,680 | 800 |
| 5----- | 98,600 | 13,200 | 16,200 | 7,530 | 26,400 | 5,100 | 6,070 | 3,950 | 2,770 | 2,740 | 1,630 | 800 |
| 6----- | 94,900 | 12,600 | 11,600 | 7,530 | 32,600 | 5,100 | 6,070 | 3,570 | 2,670 | 2,600 | 1,360 | 800 |
| 7----- | 20,800 | 11,100 | 8,880 | 7,100 | 27,000 | 5,100 | 13,200 | 3,950 | 2,920 | 2,840 | 1,360 | 910 |
| 8----- | 9,120 | 8,420 | 7,970 | 6,890 | 15,000 | 5,480 | 13,700 | 3,770 | 2,770 | 2,040 | 1,300 | 855 |
| 9----- | 7,100 | 7,100 | 7,530 | 6,270 | 12,900 | 15,200 | 11,800 | 3,660 | 3,510 | 1,720 | 1,180 | 800 |
| 10----- | 6,270 | 6,480 | 7,100 | 6,270 | 10,600 | 31,300 | 9,120 | 3,800 | 4,920 | 1,680 | 2,280 | 800 |
| 11----- | 5,680 | 5,870 | 7,100 | 6,070 | 9,350 | 16,600 | 7,320 | 3,660 | 6,680 | 1,630 | 2,970 | 1,160 |
| 12----- | 5,100 | 5,680 | 6,680 | 5,870 | 8,420 | 10,300 | 6,270 | 3,480 | 6,890 | 1,590 | 2,040 | 1,160 |
| 13----- | 4,920 | 6,270 | 6,270 | 5,480 | 7,970 | 8,880 | 5,870 | 3,230 | 6,890 | 1,550 | 1,780 | 910 |
| 14----- | 4,580 | 7,530 | 6,070 | 5,680 | 7,970 | 8,200 | 5,480 | 3,310 | 5,480 | 1,530 | 1,590 | 1,020 |
| 15----- | 4,420 | 7,530 | 6,070 | 8,650 | 9,830 | 7,320 | 5,480 | 3,510 | 3,800 | 1,780 | 1,300 | 1,090 |
| 16----- | 4,580 | 7,530 | 5,870 | 16,200 | 9,590 | 6,680 | 5,680 | 4,100 | 3,200 | 1,810 | 1,070 | 1,160 |
| 17----- | 4,260 | 10,100 | 5,870 | 16,800 | 8,200 | 6,070 | 5,680 | 4,260 | 2,840 | 1,720 | 1,020 | 1,160 |
| 18----- | 4,100 | 10,100 | 5,680 | 15,100 | 7,530 | 6,270 | 5,480 | 4,100 | 3,660 | 1,630 | 1,020 | 1,160 |
| 19----- | 3,950 | 11,400 | 6,070 | 15,600 | 6,890 | 6,480 | 5,480 | 5,870 | 4,580 | 2,650 | 1,020 | 1,020 |
| 20----- | 3,950 | 23,000 | 7,750 | 12,900 | 6,680 | 7,530 | 5,870 | 7,970 | 7,100 | 4,100 | 1,000 | 1,160 |
| 21----- | 3,770 | 15,600 | 8,650 | 10,600 | 6,270 | 7,320 | 5,680 | 8,420 | 6,270 | 4,100 | 956 | 1,160 |
| 22----- | 17,000 | 10,600 | 8,880 | 9,350 | 6,270 | 6,680 | 5,100 | 7,750 | 4,260 | 3,400 | 1,080 | 1,160 |
| 23----- | 22,600 | 9,120 | 7,750 | 10,100 | 6,070 | 6,270 | 5,100 | 5,480 | 3,400 | 2,060 | 1,200 | 1,160 |
| 24----- | 24,200 | 8,420 | 7,320 | 11,600 | 6,070 | 5,680 | 5,100 | 3,950 | 2,820 | 1,830 | 1,150 | 1,320 |
| 25----- | 18,900 | 8,420 | 7,750 | 11,100 | 5,870 | 5,680 | 4,580 | 3,800 | 3,370 | 1,610 | 1,130 | 1,290 |
| 26----- | 10,600 | 9,350 | 6,890 | 9,350 | 6,270 | 5,680 | 4,580 | 3,540 | 3,800 | 1,550 | 1,050 | 1,180 |
| 27----- | 7,750 | 10,800 | 6,480 | 7,970 | 5,870 | 5,680 | 4,420 | 2,920 | 3,260 | 2,330 | 1,020 | 1,150 |
| 28----- | 6,480 | 10,100 | 6,890 | 7,530 | 5,680 | 5,680 | 4,420 | 3,100 | 3,020 | 2,040 | 1,000 | 1,090 |
| 29----- | 5,870 | 9,120 | 8,420 | 7,970 | ----- | 5,480 | 4,100 | 2,840 | 3,660 | 1,610 | 944 | 968 |
| 30----- | 5,680 | 7,970 | 10,800 | 7,750 | ----- | 5,290 | 4,420 | 2,900 | 3,230 | 1,360 | 1,020 | 877 |
| 31----- | 5,480 | ----- | 13,400 | 7,100 | ----- | 4,920 | ----- | 3,150 | ----- | 1,440 | 1,090 | ----- |

Daily and monthly discharge, in second-feet, of Roanoke River at Old Gaston, N. C., 1929-1931—Continued

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | |
|----------------|-------|-------|-------|---------|-------|---------|--------|--------|--------|-----------------|--------|-------------------|--|
| 1930-31 | | | | | | | | | | | | | |
| 1..... | 822 | 1,700 | 1,660 | 4,920 | 2,720 | 3,020 | 13,700 | 4,100 | 3,450 | 2,010 | 2,970 | 4,100 | |
| 2..... | 1,360 | 1,780 | 1,590 | 3,950 | 2,800 | 4,100 | 17,300 | 4,420 | 5,580 | 2,230 | 5,290 | 3,800 | |
| 3..... | 1,130 | 1,860 | 1,760 | 3,290 | 2,570 | 5,290 | 22,500 | 5,290 | 12,600 | 1,780 | 7,120 | 3,740 | |
| 4..... | 866 | 2,230 | 1,760 | 2,900 | 2,470 | 5,290 | 18,700 | 5,100 | 9,590 | 1,740 | 12,400 | 3,660 | |
| 5..... | 690 | 2,060 | 1,990 | 3,230 | 2,540 | 4,740 | 16,400 | 4,420 | 6,270 | 1,630 | 11,300 | 4,740 | |
| 6..... | 680 | 2,970 | 1,990 | 3,630 | 2,600 | 4,100 | 29,900 | 4,420 | 4,260 | 3,340 | 12,900 | 3,950 | |
| 7..... | 660 | 3,230 | 2,250 | 12,800 | 2,570 | 3,660 | 36,000 | 4,260 | 3,630 | 7,320 | 9,590 | 3,710 | |
| 8..... | 650 | 3,230 | 3,940 | 18,000 | 2,400 | 3,480 | 32,600 | 11,900 | 3,450 | 6,070 | 7,100 | 2,800 | |
| 9..... | 650 | 2,970 | 9,830 | 10,600 | 2,600 | 3,660 | 24,500 | 15,100 | 3,020 | 5,290 | 4,420 | 2,600 | |
| 10..... | 660 | 2,470 | 6,890 | 7,100 | 2,600 | 4,420 | 16,800 | 18,600 | 2,870 | 6,270 | 3,130 | 2,210 | |
| 11..... | 680 | 1,990 | 4,740 | 5,480 | 2,840 | 4,740 | 11,800 | 15,600 | 2,640 | 7,100 | 10,300 | 2,010 | |
| 12..... | 680 | 1,760 | 3,540 | 4,580 | 3,150 | 4,420 | 9,120 | 10,100 | 2,520 | 4,740 | 25,500 | 1,940 | |
| 13..... | 690 | 1,760 | 3,020 | 4,580 | 3,200 | 3,800 | 7,530 | 7,100 | 2,570 | 3,660 | 13,900 | 1,810 | |
| 14..... | 760 | 1,650 | 2,800 | 4,920 | 3,100 | 3,510 | 6,890 | 6,070 | 2,500 | 3,370 | 13,600 | 1,740 | |
| 15..... | 800 | 1,650 | 2,500 | 4,740 | 3,070 | 3,370 | 6,270 | 6,270 | 2,640 | 2,870 | 23,000 | 1,660 | |
| 16..... | 800 | 1,850 | 2,330 | 4,420 | 2,970 | 3,230 | 5,480 | 6,270 | 3,680 | 2,720 | 10,600 | 1,550 | |
| 17..... | 840 | 2,230 | 2,300 | 3,430 | 2,840 | 3,200 | 5,100 | 4,920 | 4,580 | 2,230 | 6,070 | 1,550 | |
| 18..... | 840 | 2,470 | 2,010 | 3,310 | 3,150 | 3,450 | 4,740 | 4,420 | 3,570 | 3,230 | 4,100 | 1,380 | |
| 19..... | 950 | 2,970 | 2,450 | 3,660 | 4,260 | 3,340 | 4,420 | 3,770 | 3,180 | 4,100 | 3,510 | 1,360 | |
| 20..... | 1,340 | 4,100 | 2,160 | 5,290 | 4,260 | 3,400 | 4,420 | 3,950 | 2,920 | 2,620 | 3,540 | 1,340 | |
| 21..... | 1,250 | 3,510 | 2,110 | 6,070 | 4,260 | 3,180 | 4,420 | 4,580 | 2,640 | 2,060 | 3,950 | 1,380 | |
| 22..... | 960 | 2,720 | 2,640 | 5,100 | 5,100 | 3,400 | 4,920 | 16,700 | 2,470 | 1,940 | 4,420 | 1,570 | |
| 23..... | 950 | 2,230 | 2,640 | 4,260 | 4,580 | 6,990 | 4,420 | 22,500 | 6,030 | 2,350 | 18,000 | 1,570 | |
| 24..... | 910 | 2,100 | 2,500 | 3,630 | 3,800 | 10,300 | 6,070 | 20,500 | 11,300 | 4,260 | 38,700 | 1,850 | |
| 25..... | 910 | 1,850 | 1,850 | 3,370 | 3,680 | 13,200 | 11,600 | 17,400 | 9,830 | 5,100 | 29,500 | 1,590 | |
| 26..... | 910 | 1,850 | 1,990 | 3,290 | 3,370 | 11,600 | 8,200 | 10,600 | 6,070 | 3,950 | 12,600 | 1,720 | |
| 27..... | 950 | 1,800 | 2,740 | 3,070 | 3,180 | 8,650 | 6,480 | 7,100 | 4,100 | 3,370 | 7,750 | 1,880 | |
| 28..... | 1,050 | 1,760 | 4,340 | 3,150 | 3,070 | 6,680 | 5,680 | 5,680 | 3,050 | 5,480 | 5,870 | 4,100 | |
| 29..... | 1,200 | 1,760 | 6,680 | 3,070 | ----- | 7,100 | 5,290 | 4,740 | 2,520 | 6,680 | 8,200 | 6,480 | |
| 30..... | 1,500 | 1,550 | 7,320 | 3,070 | ----- | 11,700 | 4,740 | 4,420 | 2,280 | 4,260 | 8,200 | 3,570 | |
| 31..... | 1,600 | ----- | 6,270 | 2,970 | ----- | 18,600 | ----- | 3,740 | ----- | 2,870 | 5,480 | ----- | |
| Month | | | | Maximum | | Minimum | | Mean | | Per square mile | | Run-off in inches | |
| 1929-30 | | | | | | | | | | | | | |
| October..... | | | | 98,600 | | 3,770 | | 19,700 | | 2.36 | | 2.72 | |
| November..... | | | | 23,000 | | 5,680 | | 9,360 | | 1.12 | | 1.25 | |
| December..... | | | | 16,800 | | 5,680 | | 8,290 | | .993 | | 1.14 | |
| January..... | | | | 16,800 | | 5,480 | | 9,300 | | 1.11 | | 1.28 | |
| February..... | | | | 32,600 | | 5,680 | | 10,700 | | 1.28 | | 1.33 | |
| March..... | | | | 31,300 | | 4,920 | | 7,640 | | .915 | | 1.05 | |
| April..... | | | | 13,700 | | 4,100 | | 6,210 | | .744 | | .83 | |
| May..... | | | | 8,420 | | 2,840 | | 4,220 | | .505 | | .58 | |
| June..... | | | | 7,100 | | 2,670 | | 4,040 | | .484 | | .54 | |
| July..... | | | | 4,100 | | 1,360 | | 2,150 | | .257 | | .30 | |
| August..... | | | | 2,970 | | 944 | | 1,350 | | .162 | | .19 | |
| September..... | | | | 1,320 | | 800 | | 1,030 | | .123 | | .14 | |
| The year..... | | | | 98,600 | | 800 | | 6,990 | | .837 | | 11.35 | |
| 1930-31 | | | | | | | | | | | | | |
| October..... | | | | 1,600 | | 650 | | 927 | | 0.111 | | 0.13 | |
| November..... | | | | 4,100 | | 1,550 | | 2,270 | | .272 | | .30 | |
| December..... | | | | 9,830 | | 1,590 | | 3,310 | | .396 | | .46 | |
| January..... | | | | 18,000 | | 2,900 | | 5,030 | | .602 | | .69 | |
| February..... | | | | 5,100 | | 2,400 | | 3,210 | | .384 | | .40 | |
| March..... | | | | 18,600 | | 3,020 | | 5,790 | | .693 | | .80 | |
| April..... | | | | 36,000 | | 4,420 | | 11,900 | | 1.43 | | 1.60 | |
| May..... | | | | 22,500 | | 3,740 | | 8,520 | | 1.02 | | 1.18 | |
| June..... | | | | 12,600 | | 2,280 | | 4,530 | | .543 | | .61 | |
| July..... | | | | 7,320 | | 1,630 | | 3,760 | | .450 | | .52 | |
| August..... | | | | 38,700 | | 2,970 | | 10,700 | | 1.28 | | 1.48 | |
| September..... | | | | 6,480 | | 1,340 | | 2,580 | | .309 | | .34 | |
| The year..... | | | | 38,700 | | 650 | | 5,230 | | .626 | | 8.51 | |

NOTE.—Records for year ending Sept. 30, 1930, supersede those published in Water-Supply Paper 697.

ROANOKE RIVER AT ROANOKE RAPIDS, N. C.

LOCATION.—Water-stage recorder $1\frac{1}{2}$ miles downstream from State highway bridge at Roanoke Rapids, Halifax County.

DRAINAGE AREA.—8,410 square miles.

RECORDS AVAILABLE.—February, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 41,900 second-feet Aug. 25 (gage height, 12.75 feet); minimum, 628 second-feet several times in October (gage height, 1.50 feet).

1930-31: Maximum discharge, that of Aug. 25, 1931; minimum, that of October, 1930.

REMARKS.—Records good. Some regulation from power operations above station.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------|-------|--------|--------|-------|-------|-------|-------|-------|
| 1930 | | | | | | | | |
| 1.----- | | 5,430 | 4,700 | 4,470 | 3,350 | 3,070 | 1,570 | 1,050 |
| 2.----- | | 5,430 | 5,180 | 4,260 | 3,550 | 2,220 | 1,320 | 1,040 |
| 3.----- | | 5,180 | 4,810 | 4,150 | 3,260 | 2,220 | 1,570 | 1,020 |
| 4.----- | | 5,050 | 5,430 | 4,050 | 2,980 | 2,140 | 1,470 | 900 |
| 5.----- | | 5,180 | 6,110 | 3,950 | 2,800 | 2,070 | 1,670 | 840 |
| 6.----- | | 5,050 | 6,110 | 3,650 | 2,540 | 3,000 | 1,310 | 840 |
| 7.----- | | 5,050 | 12,300 | 3,750 | 2,710 | 2,890 | 1,120 | 840 |
| 8.----- | | 5,700 | 13,600 | 3,750 | 2,800 | 2,140 | 1,380 | 900 |
| 9.----- | | 13,000 | 12,500 | 3,750 | 3,180 | 1,730 | 1,230 | 840 |
| 10.----- | | 22,900 | 10,000 | 3,750 | 4,930 | 1,550 | 1,650 | 1,040 |
| 11.----- | | 17,800 | 7,850 | 3,550 | 6,810 | 1,490 | 3,160 | 1,130 |
| 12.----- | | 11,100 | 6,530 | 3,550 | 6,950 | 1,490 | 2,230 | 1,190 |
| 13.----- | | 9,410 | 6,110 | 3,160 | 6,950 | 1,420 | 1,730 | 1,000 |
| 14.----- | | 8,450 | 5,430 | 3,260 | 6,110 | 1,440 | 1,670 | 951 |
| 15.----- | | 7,550 | 5,430 | 3,450 | 4,150 | 1,670 | 1,390 | 1,130 |
| 16.----- | | 6,950 | 5,830 | 3,850 | 3,350 | 1,670 | 1,120 | 1,080 |
| 17.----- | | 6,390 | 5,700 | 4,150 | 2,980 | 1,610 | 1,070 | 1,140 |
| 18.----- | 7,550 | 6,250 | 5,560 | 3,950 | 3,650 | 1,540 | 1,090 | 1,090 |
| 19.----- | 7,400 | 6,670 | 5,560 | 5,460 | 4,150 | 2,070 | 1,020 | 1,050 |
| 20.----- | 6,950 | 7,550 | 5,830 | 7,850 | 7,100 | 3,880 | 1,060 | 1,190 |
| 21.----- | 6,670 | 7,850 | 5,700 | 8,450 | 6,810 | 4,050 | 972 | 1,160 |
| 22.----- | 6,530 | 7,100 | 5,180 | 8,150 | 4,360 | 3,650 | 1,100 | 1,190 |
| 23.----- | 6,390 | 6,530 | 5,050 | 5,830 | 3,650 | 2,220 | 1,230 | 1,300 |
| 24.----- | 6,250 | 5,970 | 5,050 | 4,150 | 2,890 | 1,800 | 1,180 | 1,320 |
| 25.----- | 5,830 | 5,560 | 4,580 | 3,750 | 3,160 | 1,610 | 1,170 | 1,350 |
| 26.----- | 6,250 | 5,830 | 4,700 | 3,550 | 4,150 | 1,470 | 1,170 | 1,230 |
| 27.----- | 5,970 | 5,700 | 4,580 | 2,890 | 3,850 | 1,980 | 1,060 | 1,140 |
| 28.----- | 5,830 | 5,830 | 4,580 | 2,890 | 3,070 | 2,070 | 1,070 | 1,080 |
| 29.----- | | 5,560 | 4,150 | 2,800 | 3,550 | 1,730 | 1,040 | 1,010 |
| 30.----- | | 5,300 | 4,580 | 2,710 | 3,650 | 1,290 | 1,050 | 738 |
| 31.----- | | 5,050 | | 3,070 | | 1,310 | 1,080 | ----- |

Daily and monthly discharge, in second-feet, of Roanoke River at Roanoke Rapids, N. C., 1930-31—Continued

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------------------|---------|-------|-------|--------|-------|---------|--------|-----------------|-------------------|-------|--------|-------|
| 1930-31 | | | | | | | | | | | | |
| 1..... | 788 | 1,530 | 1,800 | 5,430 | 2,690 | 3,070 | 14,400 | 4,150 | 3,850 | 2,220 | 3,260 | 4,470 |
| 2..... | 1,090 | 1,590 | 1,610 | 4,050 | 2,800 | 3,550 | 16,400 | 4,360 | 3,980 | 2,140 | 4,780 | 4,050 |
| 3..... | 1,330 | 1,670 | 1,800 | 3,450 | 2,540 | 5,300 | 21,300 | 5,180 | 12,500 | 1,860 | 6,240 | 3,550 |
| 4..... | 818 | 2,070 | 1,800 | 2,980 | 2,290 | 5,560 | 19,000 | 5,430 | 10,900 | 1,800 | 12,000 | 3,260 |
| 5..... | 688 | 2,140 | 1,930 | 3,160 | 2,370 | 5,050 | 16,100 | 4,580 | 7,400 | 1,320 | 10,800 | 4,360 |
| 6..... | 678 | 2,620 | 2,000 | 3,260 | 2,450 | 4,260 | 25,600 | 4,580 | 5,050 | 2,250 | 12,900 | 4,260 |
| 7..... | 648 | 3,550 | 2,220 | 11,400 | 2,450 | 3,750 | 33,700 | 4,470 | 4,360 | 7,100 | 10,700 | 3,950 |
| 8..... | 648 | 3,450 | 2,940 | 18,200 | 2,290 | 3,650 | 33,700 | 9,780 | 4,050 | 6,670 | 9,240 | 3,160 |
| 9..... | 658 | 3,070 | 9,270 | 11,600 | 2,450 | 3,650 | 26,600 | 15,600 | 3,550 | 5,830 | 5,430 | 2,710 |
| 10..... | 648 | 2,540 | 8,220 | 7,940 | 2,540 | 4,470 | 18,400 | 17,000 | 3,260 | 5,940 | 3,890 | 2,450 |
| 11..... | 678 | 2,070 | 5,430 | 5,970 | 2,540 | 5,050 | 13,200 | 17,000 | 3,070 | 7,920 | 7,630 | 2,140 |
| 12..... | 668 | 1,730 | 3,950 | 4,930 | 3,070 | 4,700 | 10,000 | 11,100 | 2,800 | 5,050 | 21,000 | 2,070 |
| 13..... | 668 | 1,730 | 3,260 | 4,580 | 3,160 | 4,150 | 8,450 | 8,150 | 2,890 | 3,850 | 16,200 | 2,000 |
| 14..... | 768 | 1,730 | 2,980 | 5,050 | 3,160 | 3,750 | 7,550 | 6,390 | 2,620 | 3,650 | 12,500 | 1,800 |
| 15..... | 778 | 1,860 | 2,540 | 4,930 | 2,980 | 3,550 | 6,950 | 6,530 | 2,450 | 2,980 | 19,400 | 1,800 |
| 16..... | 768 | 1,860 | 2,370 | 4,580 | 2,980 | 3,350 | 5,830 | 6,670 | 3,450 | 3,070 | 12,400 | 1,730 |
| 17..... | 859 | 2,140 | 2,290 | 3,650 | 2,800 | 3,350 | 5,180 | 5,180 | 4,360 | 2,290 | 7,700 | 1,590 |
| 18..... | 859 | 2,450 | 2,220 | 3,350 | 2,800 | 3,350 | 4,810 | 4,700 | 3,850 | 2,880 | 4,990 | 1,550 |
| 19..... | 1,060 | 3,070 | 2,220 | 3,650 | 4,050 | 3,450 | 4,580 | 3,950 | 3,450 | 4,700 | 4,050 | 1,440 |
| 20..... | 1,200 | 3,850 | 2,370 | 4,810 | 4,260 | 3,450 | 4,470 | 3,950 | 2,980 | 3,270 | 3,850 | 1,470 |
| 21..... | 1,350 | 3,550 | 2,140 | 6,250 | 4,150 | 3,260 | 4,260 | 4,510 | 2,710 | 2,370 | 4,810 | 1,490 |
| 22..... | 1,190 | 2,980 | 2,370 | 5,430 | 5,180 | 3,350 | 4,930 | 14,500 | 2,290 | 2,140 | 4,810 | 1,570 |
| 23..... | 1,010 | 2,710 | 2,890 | 4,580 | 4,810 | 5,990 | 4,580 | 20,600 | 4,950 | 2,290 | 8,690 | 1,730 |
| 24..... | 951 | 2,370 | 2,540 | 3,850 | 3,950 | 10,400 | 5,430 | 20,800 | 11,400 | 3,620 | 27,100 | 1,730 |
| 25..... | 951 | 2,220 | 1,980 | 3,450 | 3,750 | 13,200 | 11,100 | 18,600 | 10,400 | 5,430 | 33,300 | 1,670 |
| 26..... | 962 | 1,860 | 2,070 | 3,350 | 3,450 | 12,200 | 9,090 | 12,200 | 7,440 | 4,470 | 14,600 | 1,670 |
| 27..... | 1,060 | 2,070 | 2,710 | 3,070 | 3,350 | 9,410 | 7,100 | 8,150 | 4,810 | 3,550 | 9,110 | 1,780 |
| 28..... | 1,080 | 1,930 | 3,890 | 3,160 | 2,890 | 7,100 | 6,110 | 6,390 | 3,750 | 4,950 | 6,670 | 2,770 |
| 29..... | 1,290 | 1,800 | 6,530 | 3,160 | ----- | 6,950 | 5,700 | 5,300 | 2,710 | 7,400 | 6,830 | 7,060 |
| 30..... | 1,460 | 1,730 | 7,550 | 3,070 | ----- | 10,900 | 4,930 | 4,700 | 2,450 | 5,180 | 9,410 | 4,150 |
| 31..... | 1,540 | ----- | 6,670 | 3,070 | ----- | 18,600 | ----- | 4,150 | ----- | 3,550 | 6,830 | ----- |
| Month | Maximum | | | | | Minimum | Mean | Per square mile | Run-off in inches | | | |
| 1930 | | | | | | | | | | | | |
| February 18-28..... | 7,550 | | | | | 5,830 | 6,510 | 0.774 | 0.32 | | | |
| March..... | 22,900 | | | | | 5,050 | 7,500 | .892 | 1.03 | | | |
| April..... | 13,600 | | | | | 4,150 | 6,290 | .748 | .83 | | | |
| May..... | 8,450 | | | | | 2,710 | 4,190 | .498 | .57 | | | |
| June..... | 7,100 | | | | | 2,540 | 4,110 | .489 | .55 | | | |
| July..... | 4,050 | | | | | 1,290 | 2,080 | .247 | .28 | | | |
| August..... | 3,160 | | | | | .972 | 1,350 | .161 | .19 | | | |
| September..... | 1,350 | | | | | .738 | 1,060 | .126 | .14 | | | |
| 1930-31 | | | | | | | | | | | | |
| October..... | 1,540 | | | | | 648 | 940 | 0.112 | 0.13 | | | |
| November..... | 3,850 | | | | | 1,530 | 2,330 | .277 | .31 | | | |
| December..... | 9,270 | | | | | 1,610 | 3,370 | .401 | .46 | | | |
| January..... | 18,200 | | | | | 2,980 | 5,140 | .611 | .70 | | | |
| February..... | 5,180 | | | | | 2,290 | 3,150 | .375 | .39 | | | |
| March..... | 18,600 | | | | | 3,070 | 5,870 | .698 | .80 | | | |
| April..... | 33,700 | | | | | 4,260 | 12,000 | 1.43 | 1.60 | | | |
| May..... | 20,800 | | | | | 3,950 | 8,670 | 1.03 | 1.19 | | | |
| June..... | 12,500 | | | | | 2,290 | 4,790 | .570 | .64 | | | |
| July..... | 7,920 | | | | | 1,320 | 3,920 | .466 | .54 | | | |
| August..... | 33,300 | | | | | 3,260 | 10,400 | 1.24 | 1.43 | | | |
| September..... | 7,060 | | | | | 1,440 | 2,650 | .315 | .35 | | | |
| The year..... | 33,700 | | | | | 648 | 5,280 | .628 | 8.54 | | | |

NOTE.—Records Feb. 18 to Sept. 30, 1930, supersede those published in Water-Supply Paper 697.

BLACKWATER RIVER NEAR UNION HALL, VA.

LOCATION.—Water-stage recorder at highway bridge at Kemps Ford, 1½ miles above Gills Creek and 4 miles north of Union Hall, Franklin County.

DRAINAGE AREA.—208 square miles.

RECORDS AVAILABLE.—March, 1925, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,490 second-feet Aug. 22 (gage height, 6.12 feet); minimum, 27 second-feet Oct. 1 (gage height, 1.47 feet).

1925-1931: Maximum discharge, 10,800 second-feet Aug. 11, 1928; minimum, 16 second-feet Sept. 23, 1926 (gage height, 1.32 feet).

REMARKS.—Records good except those estimated, which are fair. Stage-discharge relation affected by ice Nov. 28-30, Dec. 17-27, Dec. 31 to Jan. 3, Jan. 15-17.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------------|---------|-------|-------|---------|-------|------|-------|-----|-------|-----------------|-------|-------------------|
| 1..... | 38 | 51 | 71 | • 110 | 66 | 98 | 536 | 121 | • 500 | 49 | 167 | 95 |
| 2..... | 30 | 49 | 64 | • 100 | 66 | 108 | 504 | 121 | • 250 | 47 | 274 | 92 |
| 3..... | 32 | 47 | 62 | • 100 | 66 | 87 | 294 | 125 | 193 | 67 | 219 | 102 |
| 4..... | 33 | 108 | 62 | 111 | 66 | 79 | 243 | 121 | 154 | 191 | 176 | 128 |
| 5..... | 34 | 177 | 64 | 497 | 66 | 76 | 247 | 114 | 136 | 134 | 520 | 111 |
| 6..... | 34 | 95 | 254 | 746 | 66 | 74 | 316 | 125 | 114 | 92 | 158 | |
| 7..... | 38 | 66 | 519 | 286 | 66 | 74 | 424 | 328 | 105 | 121 | 92 | |
| 8..... | 36 | 58 | 177 | 188 | 66 | 111 | 307 | 373 | 102 | 78 | 67 | |
| 9..... | 34 | 56 | 117 | 154 | 69 | 162 | 255 | 222 | 95 | 75 | 55 | • 75 |
| 10..... | 36 | 56 | 95 | 154 | 74 | 123 | 230 | 193 | 86 | 89 | 51 | |
| 11..... | 38 | 53 | 82 | 130 | 69 | 108 | 201 | 177 | 80 | 204 | 126 | |
| 12..... | 38 | 53 | 82 | 126 | 66 | 101 | 177 | 162 | 75 | 75 | 150 | |
| 13..... | 34 | 66 | 76 | 111 | 64 | 95 | 162 | 146 | 67 | 55 | 146 | |
| 14..... | 51 | 74 | 71 | 104 | 69 | 89 | 150 | 139 | 67 | 57 | 89 | |
| 15..... | 82 | 71 | 71 | • 90 | 69 | 89 | 139 | 128 | 65 | 170 | 78 | • 55 |
| 16..... | 69 | 92 | 69 | • 130 | 66 | 95 | 128 | 121 | 73 | 83 | 78 | |
| 17..... | 51 | 130 | • 60 | • 120 | 76 | 95 | 121 | 114 | 73 | 51 | 70 | |
| 18..... | 45 | 108 | • 70 | 108 | 84 | 89 | 118 | 111 | 62 | 39 | 57 | |
| 19..... | 42 | 82 | • 80 | 98 | 79 | 84 | 114 | 111 | 55 | 37 | 53 | |
| 20..... | 40 | 69 | • 80 | 104 | 71 | 84 | 111 | 118 | 53 | 52 | 55 | |
| 21..... | 40 | 62 | • 80 | 95 | 71 | 79 | 111 | 205 | 49 | 45 | 142 | • 60 |
| 22..... | 42 | • 60 | • 90 | 87 | 66 | 130 | 246 | 248 | 86 | 86 | 1,430 | |
| 23..... | 42 | • 60 | • 80 | 84 | 64 | 312 | 320 | 205 | 167 | 65 | 752 | |
| 24..... | 49 | • 60 | • 70 | 92 | 62 | 346 | 201 | 173 | 131 | 47 | 374 | |
| 25..... | 51 | 58 | • 80 | 84 | 62 | 224 | 166 | 154 | 80 | 41 | 243 | |
| 26..... | 51 | 56 | • 110 | 82 | 60 | 173 | 154 | 162 | 73 | 376 | 189 | • 55 |
| 27..... | 47 | 62 | • 150 | 79 | 60 | 158 | 150 | 166 | 70 | 133 | 300 | • 60 |
| 28..... | 47 | • 70 | 200 | 76 | 62 | 177 | 136 | 143 | 62 | 60 | 181 | • 65 |
| 29..... | 51 | • 80 | 181 | 76 | ----- | 495 | 128 | 132 | 57 | 106 | 136 | • 60 |
| 30..... | 53 | • 90 | 148 | 71 | ----- | 316 | 125 | 125 | 51 | 86 | 118 | • 55 |
| 31..... | 56 | ----- | • 120 | 66 | ----- | 240 | ----- | 125 | ----- | 55 | 108 | ----- |
| Month | Maximum | | | Minimum | | | Mean | | | Per square mile | | Run-off in inches |
| October..... | 82 | | | 30 | | | 44.0 | | | 0.212 | | 0.24 |
| November..... | 177 | | | 47 | | | 74.0 | | | .353 | | .40 |
| December..... | 519 | | | ----- | | | 114 | | | .543 | | .63 |
| January..... | 746 | | | 66 | | | 144 | | | .692 | | .80 |
| February..... | 84 | | | 60 | | | 67.5 | | | .323 | | .34 |
| March..... | 495 | | | 74 | | | 147 | | | .707 | | .82 |
| April..... | 536 | | | 111 | | | 217 | | | 1.04 | | 1.16 |
| May..... | 373 | | | 111 | | | 162 | | | .777 | | .90 |
| June..... | ----- | | | 49 | | | 108 | | | .519 | | .58 |
| July..... | 376 | | | 37 | | | 92.5 | | | .443 | | .51 |
| August..... | 1,430 | | | 51 | | | 215 | | | 1.03 | | 1.19 |
| September..... | 128 | | | ----- | | | 69.8 | | | .333 | | .37 |
| The year..... | 1,430 | | | 30 | | | 122 | | | .587 | | 7.94 |

• Estimated.

PIGG RIVER NEAR TOSHES, VA.

LOCATION.—Water-stage recorder four-tenths of a mile below Fryingpan Creek and 1.7 miles northwest of Toshes, Pittsylvania County.

DRAINAGE AREA.—394 square miles.

RECORDS AVAILABLE.—August, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 4,390 second-feet Aug. 22 (gage height, 12.58 feet); minimum, 56 second-feet Oct. 1 (gage height, 2.45 feet).
1930-31: Maximum discharge, that of Aug. 22, 1931; minimum, 38 second-feet Sept. 6, 1930 (gage height, 2.27 feet).

REMARKS.—Records excellent except those estimated for periods of ice effect, Nov. 29, 30, Dec. 17-29, Dec. 31 to Jan. 3, Jan. 15-17, which are fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| 1..... | 61 | 106 | 152 | 210 | 147 | 272 | 1,110 | 216 | 2,130 | 119 | 247 | 143 |
| 2..... | 66 | 110 | 148 | 200 | 150 | 272 | 1,070 | 235 | 864 | 112 | 430 | 131 |
| 3..... | 62 | 111 | 134 | 200 | 152 | 205 | 585 | 235 | 399 | 139 | 524 | 161 |
| 4..... | 66 | 298 | 130 | 212 | 150 | 185 | 466 | 209 | 302 | 464 | 250 | 200 |
| 5..... | 63 | 406 | 141 | 1,060 | 148 | 168 | 466 | 198 | 250 | 268 | 448 | 169 |
| 6..... | 75 | 235 | 445 | 1,480 | 156 | 160 | 705 | 221 | 231 | 253 | 268 | 131 |
| 7..... | 64 | 152 | 953 | 533 | 152 | 160 | 978 | 322 | 214 | 253 | 161 | 124 |
| 8..... | 76 | 134 | 341 | 365 | 148 | 230 | 604 | 1,200 | 214 | 163 | 130 | 120 |
| 9..... | 67 | 132 | 233 | 282 | 156 | 259 | 482 | 200 | 289 | 111 | 117 | |
| 10..... | 78 | 130 | 187 | 245 | 187 | 207 | 380 | 356 | 187 | 316 | 109 | 115 |
| 11..... | 74 | 129 | 179 | 216 | 160 | 130 | 333 | 267 | 182 | 260 | 138 | 112 |
| 12..... | 69 | 130 | 162 | 230 | 154 | 181 | 295 | 259 | 176 | 191 | 307 | 110 |
| 13..... | 74 | 156 | 158 | 230 | 150 | 170 | 264 | 274 | 161 | 271 | 243 | 102 |
| 14..... | 99 | 183 | 164 | 218 | 152 | 174 | 259 | 247 | 153 | 191 | 200 | 104 |
| 15..... | 100 | 176 | 156 | 180 | 148 | 194 | 242 | 230 | 178 | 189 | 174 | 91 |
| 16..... | 111 | 221 | 160 | 230 | 145 | 194 | 233 | 221 | 217 | 185 | 139 | 105 |
| 17..... | 100 | 300 | 130 | 220 | 164 | 185 | 216 | 212 | 155 | 132 | 119 | 102 |
| 18..... | 92 | 250 | 150 | 212 | 205 | 174 | 223 | 209 | 132 | 112 | 121 | 102 |
| 19..... | 79 | 205 | 160 | 218 | 187 | 164 | 201 | 205 | 135 | 126 | 111 | 94 |
| 20..... | 87 | 162 | 160 | 216 | 166 | 164 | 203 | 205 | 119 | 114 | 125 | 88 |
| 21..... | 89 | 162 | 160 | 198 | 164 | 156 | 205 | 834 | 125 | 204 | 153 | 86 |
| 22..... | 84 | 156 | 170 | 176 | 160 | 316 | 607 | 514 | 215 | 533 | 2,770 | 104 |
| 23..... | 97 | 148 | 160 | 179 | 158 | 977 | 979 | 1,440 | 392 | 206 | 1,310 | 94 |
| 24..... | 113 | 147 | 150 | 183 | 154 | 1,190 | 430 | 466 | 286 | 128 | 469 | 221 |
| 25..... | 121 | 143 | 160 | 183 | 147 | 605 | 333 | 344 | 176 | 142 | 266 | 158 |
| 26..... | 105 | 139 | 210 | 170 | 145 | 450 | 293 | 322 | 155 | 318 | 201 | 91 |
| 27..... | 102 | 132 | 390 | 172 | 145 | 333 | 259 | 295 | 149 | 816 | 404 | 96 |
| 28..... | 110 | 123 | 330 | 168 | 145 | 349 | 240 | 264 | 149 | 214 | 531 | 102 |
| 29..... | 111 | 120 | 280 | 164 | ----- | 1,570 | 228 | 250 | 147 | 147 | 246 | 91 |
| 30..... | 134 | 140 | 247 | 156 | ----- | 704 | 216 | 245 | 137 | 121 | 190 | 87 |
| 31..... | 127 | ----- | 220 | 154 | ----- | 450 | ----- | 218 | ----- | 114 | 159 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 134 | 61 | 88.9 | 0.226 | 0.26 |
| November..... | 406 | 106 | 171 | .434 | .48 |
| December..... | 953 | 130 | 223 | .566 | .65 |
| January..... | 1,480 | 154 | 286 | .726 | .84 |
| February..... | 205 | 145 | 157 | .398 | .41 |
| March..... | 1,570 | 156 | 355 | .901 | 1.04 |
| April..... | 1,110 | 201 | 436 | 1.11 | 1.24 |
| May..... | 1,440 | 198 | 361 | .916 | 1.06 |
| June..... | 2,130 | 119 | 284 | .721 | .80 |
| July..... | 816 | 112 | 229 | .581 | .67 |
| August..... | 2,770 | 109 | 357 | .906 | 1.04 |
| September..... | 221 | 86 | 118 | .299 | .33 |
| The year..... | 2,770 | 61 | 256 | .650 | 8.82 |

GOOSE CREEK NEAR HUDDLESTON, VA.

LOCATION.—Water-stage recorder a quarter of a mile above Haden Bridge, three-eighths of a mile above Rockcastle Creek, and 4 miles above Huddleston, Bedford County.

DRAINAGE AREA.—187 square miles.

RECORDS AVAILABLE.—September, 1930, to September, 1931. March, 1925, to September, 1927 (gage heights only) at a site a quarter of a mile downstream.

EXTREMES.—Maximum gage height during period, 10.05 feet Aug. 22, 1931 (discharge not determined); minimum discharge, 5 second-feet Sept. 29, 1930 (gage height, 0.84 foot).

REMARKS.—Records good except those for high stages and those estimated for periods of ice effect, Dec. 18–25, Dec. 31 to Jan. 3, and for Sept. 13–20, 1931, which are fair.

Daily and monthly discharge, in second-feet, 1930–31

| Day | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|------|------|------|------|------|------|------|-----|------|------|-------|-------|
| 1 | | 21 | 38 | 62 | 65 | 51 | 80 | 328 | 76 | 152 | 25 | 464 | 49 |
| 2 | | 22 | 37 | 55 | 60 | 52 | 72 | 297 | 78 | 102 | 28 | 605 | 50 |
| 3 | | 26 | 45 | 45 | 60 | 51 | 62 | 183 | 72 | 72 | 28 | 142 | 78 |
| 4 | | 26 | 72 | 52 | 67 | 52 | 60 | 152 | 69 | 62 | 33 | 103 | 60 |
| 5 | | 25 | 69 | 57 | 431 | 51 | 55 | 142 | 65 | 59 | 36 | 416 | 46 |
| 6 | | | 33 | 51 | 146 | 419 | 52 | 54 | 192 | 74 | 61 | 126 | 41 |
| 7 | | 25 | 44 | 182 | 186 | 48 | 52 | 238 | 130 | 56 | 132 | 78 | 42 |
| 8 | | 27 | 44 | 83 | 117 | 47 | 82 | 191 | 262 | 64 | 45 | 62 | 38 |
| 9 | | 31 | 31 | 40 | 64 | 99 | 52 | 80 | 163 | 145 | 62 | 58 | 36 |
| 10 | | 31 | 29 | 48 | 58 | 93 | 60 | 70 | 140 | 112 | 54 | 72 | 32 |
| 11 | 33 | 27 | 41 | 57 | 93 | 51 | 64 | 121 | 95 | 49 | 106 | 117 | 35 |
| 12 | 31 | 24 | 45 | 55 | 80 | 49 | 60 | 108 | 118 | 47 | 45 | 137 | 33 |
| 13 | 39 | 34 | 67 | 51 | 80 | 49 | 57 | 99 | 170 | 46 | 53 | 78 | |
| 14 | 78 | 33 | 57 | 49 | 74 | 51 | 57 | 89 | 99 | 46 | 75 | 64 | |
| 15 | 44 | 42 | 54 | 49 | 72 | 48 | 70 | 83 | 87 | 49 | 99 | 62 | |
| 16 | 33 | 52 | 74 | 47 | 68 | 51 | 65 | 80 | 82 | 54 | 55 | 62 | 30 |
| 17 | 89 | 37 | 80 | 31 | 91 | 58 | 58 | 76 | 72 | 49 | 42 | 57 | |
| 18 | 45 | 31 | 62 | 45 | 72 | 65 | 57 | 74 | 70 | 41 | 52 | 51 | |
| 19 | 34 | 28 | 57 | 55 | 74 | 58 | 57 | 72 | 65 | 39 | 52 | 49 | |
| 20 | 36 | 37 | 52 | 55 | 72 | 54 | 55 | 69 | 64 | 36 | 37 | 58 | |
| 21 | 36 | 31 | 51 | 55 | 65 | 52 | 54 | 69 | 137 | 33 | 32 | 97 | 33 |
| 22 | 42 | 33 | 51 | 65 | 64 | 49 | 209 | 171 | 150 | 61 | 163 | 1,410 | 27 |
| 23 | 32 | 38 | 48 | 55 | 65 | 51 | 351 | 218 | 334 | 153 | 85 | 652 | 31 |
| 24 | 31 | 52 | 51 | 45 | 70 | 49 | 196 | 135 | 116 | 62 | 31 | 265 | 58 |
| 25 | 27 | 44 | 48 | 55 | 70 | 49 | 135 | 112 | 93 | 44 | 78 | 128 | 42 |
| 26 | 27 | 37 | 47 | 70 | 58 | 49 | 114 | 106 | 95 | 40 | 49 | 117 | 35 |
| 27 | 26 | 42 | 44 | 126 | 57 | 48 | 97 | 102 | 82 | 37 | 33 | 138 | 88 |
| 28 | 18 | 37 | 51 | 124 | 55 | 49 | 116 | 87 | 70 | 34 | 30 | 65 | 42 |
| 29 | 21 | 42 | 54 | 93 | 55 | | 364 | 82 | 62 | 32 | 28 | 56 | 32 |
| 30 | 22 | 48 | 58 | 59 | 54 | | 199 | 76 | 56 | 30 | 29 | 52 | 30 |
| 31 | | 44 | | 70 | 52 | | 142 | | 52 | | 34 | 49 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| 1930 | | | | | |
| September 9–30 | 89 | 18 | 36.6 | 0.196 | 0.16 |
| 1930–31 | | | | | |
| October | 52 | 21 | 34.1 | .182 | .21 |
| November | 80 | 37 | 52.7 | .282 | .31 |
| December | 182 | 31 | 69.2 | .370 | .43 |
| January | 431 | 52 | 98.0 | .524 | .60 |
| February | 65 | 47 | 51.6 | .276 | .29 |
| March | 364 | 52 | 105 | .561 | .65 |
| April | 328 | 69 | 135 | .722 | .81 |
| May | 334 | 52 | 105 | .561 | .65 |
| June | 153 | 30 | 57.6 | .308 | .34 |
| July | 163 | 25 | 54.2 | .290 | .33 |
| August | 1,410 | 49 | 189 | 1.01 | 1.16 |
| September | 88 | 27 | 39.9 | .213 | .24 |
| The year | 1,410 | 21 | 83.0 | .444 | 6.02 |

OTTER RIVER NEAR ALTAVISTA, VA.

LOCATION.—Water-stage recorder $1\frac{1}{4}$ miles below Flat Creek and 6 miles north of Altavista, Campbell County.

DRAINAGE AREA.—372 square miles.

RECORDS AVAILABLE.—August, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, about 5,290 second-feet Aug. 23 (gage height, 16.98 feet); minimum, 38 second-feet Oct. 1, 2 (gage height, 1.93 feet).

1929-1931: Maximum discharge, about 7,140 second-feet Oct. 2, 1929 (gage height, 21.20 feet); minimum, 32 second-feet Sept. 5, 1930 (gage height, 1.84 feet).

REMARKS.—Records good except those above 2,000 second-feet, which are fair. Discharge estimated Nov. 24-29, Jan. 19-25, Aug. 26 to Sept. 6.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|-------|-------|-------|-------|------|-------|-------|
| 1..... | 42 | 76 | 122 | 101 | 88 | 210 | 1,070 | 161 | 270 | 66 | 212 | 160 |
| 2..... | 40 | 78 | 122 | 84 | 85 | 222 | 943 | 177 | 22 | 60 | 547 | 140 |
| 3..... | 44 | 76 | 86 | 94 | 92 | 163 | 541 | 166 | 170 | 73 | 202 | 180 |
| 4..... | 46 | 122 | 99 | 107 | 83 | 153 | 432 | 150 | 153 | 84 | 347 | 200 |
| 5..... | 48 | 170 | 111 | 394 | 87 | 145 | 418 | 136 | 142 | 70 | 458 | 180 |
| 6..... | 48 | 122 | 174 | 751 | 82 | 125 | 500 | 130 | 133 | 115 | 339 | 170 |
| 7..... | 49 | 97 | 257 | 380 | 89 | 118 | 666 | 359 | 123 | 321 | 249 | 153 |
| 8..... | 50 | 88 | 213 | 251 | 87 | 251 | 458 | 600 | 13 | 108 | 199 | 126 |
| 9..... | 50 | 84 | 161 | 180 | 96 | 268 | 379 | 306 | 123 | 82 | 166 | 107 |
| 10..... | 54 | 83 | 137 | 175 | 125 | 193 | 306 | 251 | 115 | 77 | 132 | 92 |
| 11..... | 52 | 79 | 125 | 138 | 94 | 158 | 266 | 212 | 107 | 167 | 124 | 82 |
| 12..... | 51 | 86 | 119 | 148 | 80 | 145 | 234 | 250 | 105 | 97 | 136 | 72 |
| 13..... | 47 | 119 | 112 | 158 | 85 | 126 | 210 | 486 | 93 | 83 | 140 | 72 |
| 14..... | 56 | 125 | 111 | 131 | 94 | 126 | 200 | 306 | 103 | 82 | 138 | 69 |
| 15..... | 83 | 109 | 106 | 97 | 89 | 153 | 195 | 228 | 130 | 370 | 134 | 64 |
| 16..... | 79 | 131 | 99 | 92 | 83 | 150 | 180 | 200 | 812 | 126 | 128 | 73 |
| 17..... | 68 | 183 | 70 | 142 | 100 | 151 | 166 | 175 | 190 | 92 | 124 | 83 |
| 18..... | 59 | 155 | 123 | 128 | 146 | 137 | 161 | 163 | 143 | 79 | 122 | 71 |
| 19..... | 51 | 132 | 185 | 121 | 143 | 136 | 150 | 154 | 12 | 70 | 117 | 66 |
| 20..... | 51 | 116 | 128 | 119 | 130 | 138 | 142 | 150 | 107 | 114 | 248 | 61 |
| 21..... | 56 | 108 | 99 | 115 | 118 | 126 | 145 | 556 | 93 | 124 | 760 | 62 |
| 22..... | 56 | 102 | 108 | 108 | 104 | 311 | 331 | 630 | 152 | 234 | 2,750 | 63 |
| 23..... | 65 | 106 | 113 | 98 | 103 | 1,010 | 569 | 2,220 | 660 | 103 | 2,480 | 73 |
| 24..... | 88 | 99 | 105 | 90 | 100 | 720 | 290 | 853 | 485 | 82 | 625 | 84 |
| 25..... | 95 | 98 | 105 | 103 | 100 | 500 | 247 | 527 | 163 | 297 | 445 | 59 |
| 26..... | 81 | 97 | 131 | 98 | 93 | 366 | 230 | 354 | 12 | 115 | 340 | 56 |
| 27..... | 76 | 95 | 274 | 94 | 89 | 306 | 226 | 290 | 153 | 90 | 300 | 86 |
| 28..... | 79 | 92 | 240 | 98 | 90 | 276 | 193 | 236 | 115 | 68 | 270 | 70 |
| 29..... | 83 | 90 | 156 | 94 | ----- | 855 | 178 | 210 | 85 | 65 | 240 | 61 |
| 30..... | 81 | 108 | 134 | 93 | ----- | 549 | 168 | 184 | 73 | 53 | 220 | 57 |
| 31..... | 84 | ----- | 89 | 96 | ----- | 392 | ----- | 175 | ----- | 47 | 190 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 95 | 40 | 61.7 | 0.166 | 0.19 |
| November..... | 183 | 76 | 108 | .290 | .32 |
| December..... | 274 | 70 | 136 | .366 | .42 |
| January..... | 751 | 84 | 157 | .422 | .49 |
| February..... | 146 | 80 | 98.4 | .265 | .28 |
| March..... | 1,010 | 118 | 280 | .753 | .87 |
| April..... | 1,070 | 142 | 340 | .914 | 1.02 |
| May..... | 2,220 | 130 | 355 | .954 | 1.10 |
| June..... | 812 | 73 | 187 | .503 | .56 |
| July..... | 370 | 47 | 117 | .315 | .36 |
| August..... | 2,750 | 117 | 416 | 1.12 | 1.29 |
| September..... | ----- | 56 | 96.4 | .259 | .29 |
| The year..... | 2,750 | 40 | 197 | .530 | 7.19 |

FALLING RIVER NEAR NARUNA, VA.

LOCATION.—Chain gage at highway bridge 2 miles above junction with Little Falling River and 2½ miles northeast of Naruna, Campbell County.

DRAINAGE AREA.—172 square miles.

RECORDS AVAILABLE.—July, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,250 second-feet Apr. 1 (gage height, 6.66 feet); minimum, 13 second-feet Oct. 13 (gage height, 2.28 feet). 1929-1931: Maximum discharge, 2,880 second-feet Oct. 2, 1929 (gage height, 11.53 feet); minimum, that of Oct. 13, 1930.

REMARKS.—Records good. Discharge estimated for Dec. 23-28, Dec. 31 to Jan. 3, Jan. 9-11, Sept. 27-29.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-------|-------|------|------|-------|
| 1..... | 14 | 28 | 45 | 50 | 48 | 250 | 1,020 | 66 | 251 | 38 | 266 | 46 |
| 2..... | 23 | 31 | 37 | 45 | 47 | 165 | 416 | 79 | 93 | 38 | 77 | 54 |
| 3..... | 21 | 38 | 30 | 45 | 47 | 198 | 206 | 73 | 70 | 39 | 67 | 221 |
| 4..... | 21 | 75 | 36 | 53 | 45 | 81 | 206 | 62 | 69 | 44 | 42 | 79 |
| 5..... | 15 | 81 | 30 | 165 | 42 | 68 | 167 | 70 | 62 | 45 | 49 | 59 |
| 6..... | 20 | 39 | 40 | 235 | 45 | 68 | 695 | 62 | 59 | 93 | 38 | 50 |
| 7..... | 20 | 34 | 145 | 117 | 38 | 59 | 602 | 142 | 52 | 112 | 33 | 45 |
| 8..... | 18 | 32 | 65 | 75 | 48 | 250 | 250 | 250 | 42 | 46 | 27 | 36 |
| 9..... | 20 | 27 | 53 | 65 | 54 | 142 | 192 | 178 | 45 | 45 | 29 | 36 |
| 10..... | 20 | 36 | 52 | 60 | 86 | 100 | 126 | 220 | 47 | 49 | 34 | 38 |
| 11..... | 30 | 37 | 37 | 55 | 58 | 79 | 133 | 117 | 46 | 41 | 106 | 33 |
| 12..... | 21 | 36 | 37 | 62 | 59 | 72 | 108 | 98 | 47 | 38 | 69 | 39 |
| 13..... | 14 | 45 | 38 | 66 | 47 | 65 | 100 | 310 | 46 | 41 | 44 | 40 |
| 14..... | 21 | 53 | 41 | 68 | 59 | 68 | 94 | 220 | 158 | 42 | 38 | 39 |
| 15..... | 25 | 37 | 40 | 70 | 52 | 59 | 90 | 108 | 99 | 39 | 46 | 34 |
| 16..... | 37 | 41 | 38 | 82 | 65 | 68 | 90 | 152 | 73 | 42 | 36 | 35 |
| 17..... | 26 | 31 | 39 | 81 | 59 | 65 | 81 | 90 | 46 | 40 | 32 | 41 |
| 18..... | 26 | 62 | 98 | 65 | 84 | 66 | 82 | 75 | 41 | 51 | 30 | 41 |
| 19..... | 22 | 45 | 104 | 81 | 77 | 62 | 84 | 66 | 42 | 38 | 67 | 51 |
| 20..... | 24 | 47 | 81 | 59 | 70 | 65 | 81 | 115 | 41 | 36 | 70 | 30 |
| 21..... | 26 | 41 | 48 | 65 | 75 | 62 | 75 | 602 | 36 | 39 | 171 | 41 |
| 22..... | 21 | 46 | 46 | 46 | 64 | 108 | 100 | 295 | 221 | 31 | 169 | 47 |
| 23..... | 32 | 39 | 45 | 49 | 59 | 370 | 117 | 1,080 | 221 | 35 | 298 | 47 |
| 24..... | 39 | 40 | 45 | 52 | 54 | 206 | 92 | 171 | 99 | 47 | 97 | 51 |
| 25..... | 43 | 39 | 50 | 56 | 54 | 160 | 98 | 130 | 86 | 119 | 67 | 33 |
| 26..... | 33 | 36 | 70 | 48 | 54 | 84 | 81 | 119 | 45 | 44 | 145 | 34 |
| 27..... | 30 | 29 | 120 | 53 | 42 | 88 | 84 | 101 | 41 | 34 | 221 | 32 |
| 28..... | 36 | 28 | 95 | 43 | 51 | 82 | 75 | 84 | 49 | 32 | 79 | 28 |
| 29..... | 42 | 20 | 72 | 56 | ----- | 478 | 72 | 70 | 36 | 34 | 51 | 26 |
| 30..... | 48 | 47 | 58 | 48 | ----- | 192 | 56 | 65 | 29 | 31 | 49 | 22 |
| 31..... | 38 | ----- | 55 | 49 | ----- | 206 | ----- | 70 | ----- | 35 | 44 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 48 | 14 | 26.6 | 0.155 | 0.18 |
| November..... | 81 | 20 | 42.3 | .246 | .27 |
| December..... | 145 | 30 | 57.7 | .335 | .39 |
| January..... | 235 | 43 | 69.8 | .406 | .47 |
| February..... | 86 | 42 | 56.5 | .328 | .34 |
| March..... | 478 | 59 | 129 | .750 | .86 |
| April..... | 1,020 | 56 | 189 | 1.10 | 1.23 |
| May..... | 1,080 | 62 | 172 | 1.00 | 1.15 |
| June..... | 251 | 29 | 76.4 | .444 | .50 |
| July..... | 119 | 31 | 46.4 | .270 | .31 |
| August..... | 298 | 27 | 83.6 | .486 | .56 |
| September..... | 221 | 22 | 46.9 | .273 | .30 |
| The year..... | 1,080 | 14 | 83.2 | .484 | 6.56 |

LITTLE FALLING RIVER AT HAT CREEK, VA.

LOCATION.—Chain gage at highway bridge 1 mile northwest of Hat Creek, Campbell County, and 1 mile above junction with Falling River.

DRAINAGE AREA.—43 square miles.

RECORDS AVAILABLE.—July, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 358 second-feet Aug. 22 (gage height, 6.44 feet); minimum, 1 second-foot Oct. 11–13, 18–21, 23.

1929–1931: Maximum discharge, 428 second-feet Oct. 2, 1929 (gage height, 6.90 feet); minimum, 1 second-foot at times in 1930.

REMARKS.—Records fair. Stage-discharge relation affected by ice Dec. 23, 24, Dec. 30 to Jan. 4.

Daily and monthly discharge, in second-feet, 1930–31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------------|---------|-------|---------|------|-------|-------|-----------------|-------|-------------------|------|-------|-------|
| 1..... | * 2 | 2 | 14 | * 8 | * 11 | * 110 | 135 | 25 | 67 | 8 | * 110 | 8 |
| 2..... | 2 | * 5 | * 10 | * 8 | 11 | 34 | 58 | 24 | 25 | 8 | * 32 | 8 |
| 3..... | 2 | 8 | * 10 | * 7 | 11 | 20 | 32 | * 20 | 22 | 8 | 20 | 52 |
| 4..... | 2 | 45 | 17 | * 12 | 11 | 20 | 32 | 17 | 19 | 11 | 20 | 41 |
| 5..... | 2 | 8 | 5 | 185 | 11 | 19 | * 30 | 17 | 19 | * 40 | 14 | 20 |
| 6..... | 8 | 5 | 17 | 47 | 11 | 20 | 226 | 17 | 16 | * 50 | 20 | * 16 |
| 7..... | 2 | 2 | * 40 | 22 | 11 | 12 | 146 | 39 | * 16 | 17 | 11 | 13 |
| 8..... | 2 | 5 | 19 | 19 | * 14 | * 110 | 60 | 111 | 16 | 14 | 8 | 13 |
| 9..... | 2 | * 5 | 17 | 17 | 27 | 27 | 45 | 39 | 16 | 14 | * 8 | 14 |
| 10..... | 2 | 5 | 11 | 17 | 24 | * 20 | * 38 | * 96 | 16 | 15 | 8 | 14 |
| 11..... | 1 | 5 | 11 | * 16 | 20 | 17 | 31 | 25 | 14 | 14 | 99 | 17 |
| 12..... | 1 | 5 | 11 | 20 | 20 | 16 | * 28 | 36 | 14 | * 12 | 24 | 10 |
| 13..... | 1 | 8 | 8 | 24 | 14 | 16 | 27 | 79 | 13 | 11 | 14 | * 10 |
| 14..... | 14 | 8 | * 12 | 17 | 20 | 14 | 27 | 39 | * 70 | 8 | 14 | 8 |
| 15..... | 2 | 5 | 14 | 31 | * 16 | 22 | 24 | 29 | 20 | 11 | 14 | 14 |
| 16..... | 8 | * 6 | 8 | 38 | 14 | 22 | 24 | 25 | 17 | 9 | * 10 | 8 |
| 17..... | 2 | 8 | * 8 | 14 | 24 | 19 | 24 | * 22 | 15 | 8 | 8 | 8 |
| 18..... | 1 | 14 | 30 | * 36 | 24 | 20 | 27 | 19 | 11 | 14 | 14 | 8 |
| 19..... | * 1 | 8 | 31 | 20 | 24 | 14 | * 30 | 19 | 11 | * 10 | 14 | 8 |
| 20..... | 1 | 8 | 17 | 17 | 17 | 14 | 20 | 16 | 11 | 8 | 45 | * 10 |
| 21..... | 1 | 7 | * 14 | 14 | 20 | 14 | 20 | 67 | * 10 | 14 | 27 | 11 |
| 22..... | 2 | 5 | 13 | 17 | * 18 | * 170 | 34 | 36 | * 96 | 14 | 358 | 14 |
| 23..... | 1 | * 5 | * 12 | 20 | 17 | 56 | 27 | 119 | * 96 | 8 | * 130 | 11 |
| 24..... | 2 | 5 | * 10 | 11 | 14 | 34 | 20 | * 60 | 31 | 17 | 27 | 17 |
| 25..... | 2 | 5 | 11 | * 16 | 14 | 20 | 20 | 36 | 27 | 27 | 20 | 8 |
| 26..... | * 2 | 5 | 16 | 20 | 14 | 20 | * 20 | 29 | 24 | * 16 | 218 | 8 |
| 27..... | 2 | 8 | 32 | 14 | 11 | 20 | 20 | 25 | 14 | 11 | 71 | * 8 |
| 28..... | 2 | 5 | 17 | 14 | 14 | 20 | 17 | 22 | * 12 | 11 | 52 | 8 |
| 29..... | 5 | 8 | 13 | 14 | ----- | 119 | 17 | 19 | 11 | 14 | 27 | 8 |
| 30..... | 8 | * 18 | * 12 | 11 | ----- | 41 | 17 | 19 | 8 | 14 | * 20 | 5 |
| 31..... | 5 | ----- | * 10 | 11 | ----- | 27 | ----- | * 110 | ----- | 14 | 14 | ----- |
| Month | Maximum | | Minimum | | Mean | | Per square mile | | Run-off in inches | | | |
| October..... | 14 | | | | 2.9 | | 0.067 | | 0.08 | | | |
| November..... | 45 | | 1 | | 7.9 | | .184 | | .21 | | | |
| December..... | | | 5 | | 15.2 | | .353 | | .41 | | | |
| January..... | 185 | | ----- | | 23.8 | | .553 | | .64 | | | |
| February..... | 27 | | 11 | | 16.3 | | .379 | | .39 | | | |
| March..... | | | 12 | | 35.7 | | .830 | | .96 | | | |
| April..... | 226 | | 17 | | 42.5 | | .988 | | 1.10 | | | |
| May..... | 119 | | 16 | | 40.5 | | .942 | | 1.09 | | | |
| June..... | | | 8 | | 25.2 | | .586 | | .65 | | | |
| July..... | | | 8 | | 14.5 | | .337 | | .39 | | | |
| August..... | 358 | | 8 | | 47.5 | | 1.10 | | 1.27 | | | |
| September..... | 52 | | 5 | | 13.3 | | .309 | | .34 | | | |
| The year..... | 358 | | 1 | | 23.8 | | .553 | | 7.53 | | | |

* Estimated.

DAN RIVER NEAR FRANCISCO, N. C.

LOCATION.—Water-stage recorder at county highway bridge just downstream from Georges Mill, 3 miles east of Francisco, Stokes County, and 7.9 miles downstream from mouth of Little Dan River.

DRAINAGE AREA.—119 square miles.

RECORDS AVAILABLE.—August, 1924, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,820 second-feet Aug. 22 (gage height, 5.09 feet); minimum, 18 second-feet Oct. 11 (gage height, 0.70 foot).
1924-1931: Maximum discharge (estimated), 8,700 second-feet Dec. 8, 1924 (gage height, 10.0 feet); minimum, 13 second-feet July 27, 1930 (due to mill regulation).

REMARKS.—Records good below and fair above 1,500 second-feet. Some regulation from operation of gristmills above station.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----------|---------|-------|------|---------|-------|------|-------|-----|-------|-----------------|-------------------|-------|
| 1 | 36 | 56 | 77 | 111 | 58 | 98 | 359 | 136 | 317 | 77 | 96 | 88 |
| 2 | 36 | 56 | 75 | 120 | 56 | 96 | 331 | 141 | 164 | 56 | 141 | 142 |
| 3 | 38 | 54 | 59 | 111 | 58 | 77 | 250 | 134 | 120 | 170 | 181 | 209 |
| 4 | 38 | 84 | 64 | 92 | 58 | 71 | 260 | 122 | 106 | 148 | 129 | 151 |
| 5 | 38 | 146 | 71 | 451 | 58 | 66 | 306 | 117 | 100 | 297 | 218 | 106 |
| 6 | 39 | 92 | 360 | 356 | 56 | 64 | 288 | 117 | 98 | 353 | 145 | 94 |
| 7 | 39 | 69 | 290 | 174 | 56 | 66 | 264 | 444 | 98 | 191 | 88 | 86 |
| 8 | 39 | 62 | 143 | 131 | 56 | 96 | 247 | 463 | 92 | 129 | 75 | 82 |
| 9 | 42 | 59 | 111 | 106 | 68 | 102 | 215 | 209 | 86 | 90 | 69 | 78 |
| 10 | 42 | 61 | 94 | 106 | 96 | 78 | 188 | 171 | 80 | 101 | 69 | 75 |
| 11 | 42 | 58 | 90 | 88 | 75 | 69 | 174 | 151 | 78 | 111 | 102 | 75 |
| 12 | 38 | 66 | 88 | 98 | 64 | 66 | 164 | 162 | 75 | 78 | 162 | 71 |
| 13 | 40 | 84 | 78 | 96 | 64 | 71 | 151 | 146 | 77 | 73 | 162 | 69 |
| 14 | 53 | 78 | 77 | 82 | 84 | 69 | 146 | 134 | 78 | 88 | 94 | 66 |
| 15 | 188 | 80 | 73 | 73 | 84 | 84 | 138 | 124 | 112 | 117 | 80 | 64 |
| 16 | 93 | 126 | 69 | 94 | 69 | 82 | 131 | 117 | 106 | 98 | 77 | 68 |
| 17 | 58 | 151 | 54 | 100 | 86 | 71 | 161 | 111 | 80 | 73 | 68 | 68 |
| 18 | 50 | 143 | 71 | 86 | 113 | 68 | 167 | 109 | 71 | 136 | 87 | 71 |
| 19 | 47 | 111 | 100 | 88 | 92 | 66 | 138 | 106 | 68 | 98 | 187 | 64 |
| 20 | 44 | 88 | 122 | 84 | 90 | 66 | 129 | 111 | 64 | 73 | 134 | 62 |
| 21 | 45 | 80 | 126 | 73 | 88 | 62 | 148 | 319 | 61 | 193 | 182 | 62 |
| 22 | 48 | 75 | 120 | 61 | 80 | 120 | 484 | 188 | 82 | 194 | 882 | 59 |
| 23 | 50 | 71 | 106 | 62 | 73 | 134 | 374 | 264 | 94 | 96 | 257 | 75 |
| 24 | 66 | 69 | 138 | 71 | 71 | 143 | 218 | 169 | 80 | 78 | 191 | 66 |
| 25 | 62 | 66 | 118 | 71 | 69 | 124 | 191 | 146 | 73 | 86 | 141 | 59 |
| 26 | 54 | 64 | 104 | 68 | 66 | 129 | 180 | 138 | 69 | 225 | 136 | 59 |
| 27 | 54 | 56 | 209 | 68 | 62 | 131 | 171 | 129 | 61 | 156 | 355 | 68 |
| 28 | 53 | 56 | 164 | 66 | 66 | 254 | 151 | 120 | 71 | 109 | 143 | 61 |
| 29 | 88 | 73 | 131 | 62 | ----- | 516 | 143 | 111 | 56 | 92 | 126 | 58 |
| 30 | 75 | 69 | 106 | 61 | ----- | 250 | 136 | 106 | 74 | 86 | 111 | 56 |
| 31 | 62 | ----- | 109 | 59 | ----- | 197 | ----- | 102 | ----- | 92 | 98 | ----- |
| Month | Maximum | | | Minimum | | | Mean | | | Per square mile | Run-off in inches | |
| October | 188 | | | 36 | | | 54.7 | | | 0.460 | 0.53 | |
| November | 151 | | | 54 | | | 80.1 | | | .673 | .75 | |
| December | 360 | | | 54 | | | 116 | | | .975 | 1.12 | |
| January | 451 | | | 59 | | | 109 | | | .916 | 1.06 | |
| February | 113 | | | 56 | | | 72.0 | | | .605 | .63 | |
| March | 516 | | | 62 | | | 116 | | | .975 | 1.12 | |
| April | 484 | | | 129 | | | 213 | | | 1.79 | 2.00 | |
| May | 463 | | | 102 | | | 165 | | | 1.39 | 1.60 | |
| June | 317 | | | 56 | | | 93.0 | | | .782 | .87 | |
| July | 353 | | | 56 | | | 128 | | | 1.08 | 1.24 | |
| August | 882 | | | 68 | | | 161 | | | 1.35 | 1.56 | |
| September | 209 | | | 56 | | | 80.4 | | | .676 | .75 | |
| The year | 882 | | | 36 | | | 116 | | | .975 | 13.23 | |

DAN RIVER AT LEAKSVILLE, N. C.

LOCATION.—Water-stage recorder at covered wagon bridge at Leaksville, Rockingham County, half a mile upstream from mouth of Smith River.

DRAINAGE AREA.—1,150 square miles.

RECORDS AVAILABLE.—July, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 13,300 second-feet Aug. 22 (gage height, 14.37 feet); minimum, 149 second-feet Sept. 20 (gage height, 0.57 foot).

1929-1931: Maximum discharge, 18,500 second-feet Oct. 2, 1929 (gage height, 21.4 feet); minimum, 89 second-feet Sept. 5, 1930 (gage height, 0.23 foot).

REMARKS.—Records excellent except those estimated for Feb. 8-10, Mar. 26-31, May 26-27, which are fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 197 | 375 | 506 | 655 | 457 | 572 | 2,570 | 727 | 1,650 | 269 | 2,390 | 518 |
| 2 | 191 | 308 | 484 | 606 | 479 | 967 | 3,920 | 727 | 1,410 | 322 | 4,140 | 490 |
| 3 | 203 | 299 | 425 | 589 | 457 | 961 | 2,100 | 769 | 763 | 330 | 2,960 | 545 |
| 4 | 206 | 435 | 370 | 628 | 452 | 606 | 1,610 | 715 | 611 | 1,470 | 1,820 | 994 |
| 5 | 206 | 633 | 290 | 2,180 | 452 | 545 | 2,470 | 655 | 577 | 1,450 | 2,930 | 616 |
| 6 | 172 | 644 | 854 | 4,990 | 430 | 545 | 4,190 | 685 | 556 | 1,400 | 1,390 | 490 |
| 7 | 209 | 512 | 3,350 | 1,890 | 440 | 528 | 4,360 | 1,050 | 568 | 1,320 | 925 | 462 |
| 8 | 188 | 385 | 1,400 | 1,180 | 430 | 474 | 2,440 | 3,630 | 512 | 775 | 633 | 420 |
| 9 | 197 | 335 | 835 | 865 | 470 | 622 | 1,750 | 1,790 | 527 | 775 | 501 | 385 |
| 10 | 206 | 330 | 661 | 757 | 550 | 638 | 1,400 | 2,130 | 457 | 518 | 457 | 380 |
| 11 | 206 | 370 | 606 | 721 | 589 | 578 | 1,180 | 1,210 | 435 | 410 | 968 | 345 |
| 12 | 203 | 375 | 550 | 727 | 545 | 518 | 1,050 | 895 | 408 | 415 | 2,040 | 350 |
| 13 | 172 | 425 | 506 | 805 | 512 | 506 | 955 | 1,140 | 385 | 462 | 1,580 | 299 |
| 14 | 230 | 512 | 474 | 769 | 490 | 446 | 865 | 1,050 | 410 | 490 | 1,310 | 312 |
| 15 | 241 | 540 | 490 | 661 | 490 | 457 | 805 | 835 | 430 | 479 | 865 | 304 |
| 16 | 370 | 667 | 446 | 594 | 512 | 501 | 763 | 715 | 435 | 501 | 606 | 273 |
| 17 | 594 | 895 | 372 | 606 | 584 | 550 | 733 | 703 | 556 | 410 | 545 | 304 |
| 18 | 335 | 865 | 317 | 703 | 667 | 540 | 775 | 1,300 | 479 | 390 | 484 | 370 |
| 19 | 234 | 691 | 395 | 745 | 691 | 512 | 1,020 | 685 | 385 | 606 | 628 | 294 |
| 20 | 230 | 611 | 697 | 721 | 655 | 506 | 895 | 722 | 335 | 655 | 703 | 182 |
| 21 | 256 | 506 | 589 | 655 | 633 | 452 | 835 | 3,970 | 335 | 806 | 1,500 | 290 |
| 22 | 230 | 479 | 518 | 606 | 616 | 841 | 1,400 | 3,070 | 312 | 2,610 | 9,390 | 308 |
| 23 | 230 | 430 | 534 | 534 | 562 | 2,180 | 4,280 | 2,980 | 490 | 971 | 4,560 | 308 |
| 24 | 282 | 395 | 462 | 618 | 584 | 1,820 | 1,830 | 1,550 | 577 | 506 | 1,680 | 375 |
| 25 | 335 | 440 | 401 | 518 | 518 | 1,210 | 1,280 | 1,110 | 415 | 2,710 | 1,140 | 415 |
| 26 | 308 | 400 | 518 | 496 | 496 | 1,000 | 1,080 | 955 | 371 | 2,750 | 865 | 1,950 |
| 27 | 299 | 380 | 1,060 | 545 | 496 | 960 | 955 | 835 | 345 | 2,830 | 1,020 | 3,100 |
| 28 | 304 | 375 | 1,500 | 512 | 484 | 1,700 | 895 | 715 | 335 | 835 | 1,860 | 673 |
| 29 | 299 | 322 | 1,180 | 501 | ----- | 5,500 | 775 | 691 | 370 | 562 | 835 | 468 |
| 30 | 370 | 308 | 865 | 484 | ----- | 2,500 | 751 | 628 | 345 | 462 | 709 | 385 |
| 31 | 446 | ----- | 769 | 462 | ----- | 1,800 | ----- | 594 | ----- | 405 | 633 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 594 | 172 | 263 | 0.229 | 0.26 |
| November | 895 | 299 | 475 | .413 | .46 |
| December | 3,350 | 290 | 724 | .630 | .73 |
| January | 4,990 | 462 | 878 | .763 | .88 |
| February | 691 | 430 | 526 | .457 | .48 |
| March | 5,500 | 446 | 998 | .868 | 1.00 |
| April | 4,360 | 733 | 1,660 | 1.44 | 1.61 |
| May | 3,970 | 594 | 1,270 | 1.10 | 1.27 |
| June | 1,650 | 312 | 526 | .457 | .51 |
| July | 2,830 | 269 | 932 | .810 | .93 |
| August | 9,390 | 457 | 1,680 | 1.46 | 1.68 |
| September | 3,100 | 182 | 554 | .482 | .54 |
| The year | 9,390 | 172 | 877 | .763 | 10.35 |

DAN RIVER AT SOUTH BOSTON, VA.

LOCATION.—Water-stage recorder at Norfolk & Western Railway bridge at South Boston, Halifax County, 6 miles above mouth of Banister River.

DRAINAGE AREA.—2,730 square miles (revised).

RECORDS AVAILABLE.—August, 1900, to May, 1907; April, 1923, to September, 1931.

EXTREMES.—Maximum discharge during year, 20,400 second-feet Aug. 24 (gage height, 20.48 feet); minimum, 275 second-feet Oct. 6 (gage height 3.00 feet).
1900–1907, 1923–1931: Maximum discharge, 52,600 second-feet Dec. 31, 1901 (gage height, 25.2 feet, old datum); minimum, 212 second-feet Sept. 5, 1930 (gage height, 2.73 feet).

REMARKS.—Records excellent. Discharge estimated for June 9–11, Aug. 29–31, Sept. 11–15. Water supply for South Boston is taken out just above gage. Dams and mills at Danville regulate low-water flow to some extent.

Daily and monthly discharge, in second-feet, 1930–31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|--------|-------|--------|--------|-------|-------|-------|--------|-------|
| 1----- | 520 | 728 | 752 | 1,860 | 995 | 1,320 | 6,750 | 1,500 | 3,760 | 643 | 1,870 | 1,400 |
| 2----- | 462 | 368 | 670 | 1,460 | 886 | 1,360 | 9,550 | 1,540 | 7,350 | 602 | 4,920 | 1,050 |
| 3----- | 466 | 552 | 867 | 1,360 | 1,020 | 1,780 | 8,350 | 1,540 | 3,450 | 546 | 7,300 | 980 |
| 4----- | 422 | 764 | 856 | 1,380 | 1,050 | 1,690 | 5,060 | 1,560 | 2,040 | 975 | 5,120 | 1,580 |
| 5----- | 414 | 1,230 | 842 | 1,720 | 990 | 1,370 | 7,440 | 1,590 | 1,520 | 3,420 | 6,820 | 1,670 |
| 6----- | 322 | 1,420 | 926 | 7,010 | 953 | 1,310 | 13,100 | 1,330 | 1,180 | 5,520 | 5,170 | 1,400 |
| 7----- | 394 | 1,350 | 2,450 | 10,200 | 1,000 | 1,250 | 15,200 | 3,210 | 1,120 | 3,160 | 3,200 | 975 |
| 8----- | 400 | 1,100 | 6,220 | 4,430 | 1,000 | 1,380 | 11,400 | 5,060 | 1,040 | 2,700 | 1,880 | 989 |
| 9----- | 348 | 856 | 3,200 | 2,610 | 871 | 1,420 | 5,960 | 7,460 | 1,000 | 3,480 | 1,160 | 781 |
| 10----- | 392 | 664 | 2,050 | 2,000 | 1,170 | 1,640 | 3,920 | 5,900 | 1,050 | 4,330 | 876 | 780 |
| 11----- | 475 | 744 | 1,560 | 1,580 | 1,190 | 1,600 | 3,060 | 4,380 | 950 | 2,420 | 3,380 | 740 |
| 12----- | 406 | 725 | 1,300 | 1,590 | 1,210 | 1,380 | 2,540 | 2,660 | 880 | 1,220 | 5,970 | 700 |
| 13----- | 386 | 805 | 1,170 | 1,740 | 1,190 | 1,260 | 2,340 | 2,100 | 691 | 828 | 6,220 | 670 |
| 14----- | 540 | 844 | 1,120 | 1,790 | 1,160 | 1,190 | 2,120 | 2,350 | 826 | 1,160 | 3,960 | 630 |
| 15----- | 482 | 884 | 950 | 1,570 | 1,090 | 1,180 | 1,920 | 2,190 | 776 | 761 | 3,120 | 590 |
| 16----- | 597 | 1,020 | 1,030 | 1,310 | 895 | 991 | 1,660 | 1,630 | 1,100 | 919 | 2,340 | 560 |
| 17----- | 546 | 1,440 | 1,050 | 1,200 | 1,220 | 1,320 | 1,780 | 1,420 | 943 | 839 | 1,620 | 613 |
| 18----- | 770 | 1,820 | 1,070 | 1,140 | 1,350 | 1,190 | 1,550 | 1,310 | 862 | 817 | 1,340 | 536 |
| 19----- | 699 | 1,870 | 840 | 1,790 | 1,420 | 1,230 | 1,550 | 1,620 | 978 | 710 | 1,760 | 566 |
| 20----- | 546 | 1,440 | 976 | 2,240 | 1,570 | 1,190 | 1,920 | 1,460 | 756 | 618 | 1,110 | 666 |
| 21----- | 564 | 1,230 | 1,240 | 1,920 | 1,820 | 1,110 | 1,950 | 3,440 | 662 | 930 | 1,670 | 623 |
| 22----- | 499 | 1,040 | 1,320 | 1,620 | 1,610 | 1,340 | 1,740 | 7,320 | 1,600 | 1,250 | 5,780 | 436 |
| 23----- | 528 | 935 | 1,190 | 1,340 | 1,400 | 2,500 | 3,370 | 8,320 | 3,530 | 3,540 | 17,700 | 476 |
| 24----- | 566 | 726 | 971 | 1,340 | 1,380 | 4,360 | 7,120 | 6,940 | 1,310 | 2,110 | 14,900 | 629 |
| 25----- | 609 | 977 | 968 | 1,160 | 1,340 | 4,230 | 3,510 | 3,760 | 963 | 1,220 | 4,660 | 552 |
| 26----- | 634 | 820 | 994 | 1,150 | 1,020 | 3,110 | 2,440 | 2,360 | 965 | 2,620 | 2,720 | 727 |
| 27----- | 599 | 795 | 1,490 | 1,240 | 1,260 | 2,330 | 2,250 | 1,920 | 746 | 4,720 | 2,180 | 4,460 |
| 28----- | 663 | 791 | 3,200 | 1,200 | 1,130 | 1,990 | 2,000 | 1,640 | 675 | 4,570 | 2,860 | 5,380 |
| 29----- | 622 | 714 | 3,860 | 1,190 | ----- | 3,470 | 1,800 | 1,560 | 553 | 1,680 | 2,300 | 1,700 |
| 30----- | 810 | 712 | 3,050 | 1,120 | ----- | 11,300 | 1,620 | 1,310 | 833 | 1,110 | 1,900 | 889 |
| 31----- | 666 | ----- | 2,300 | 1,120 | ----- | 6,280 | ----- | 1,140 | ----- | 871 | 1,600 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-------------------|-------------------|
| October----- | 810 | 322 | 527 | 0.11 ³ | 0.22 |
| November----- | 1,870 | 552 | 995 | .36 ⁴ | .41 |
| December----- | 6,220 | 670 | 1,630 | .56 ⁷ | .69 |
| January----- | 10,200 | 1,120 | 2,080 | .76 ² | .88 |
| February----- | 1,820 | 871 | 1,190 | .42 ⁶ | .45 |
| March----- | 11,300 | 991 | 2,230 | .81 ⁷ | .94 |
| April----- | 15,200 | 1,550 | 4,500 | 1.6 ⁵ | 1.84 |
| May----- | 8,320 | 1,140 | 2,950 | 1.0 ⁸ | 1.24 |
| June----- | 7,350 | 553 | 1,470 | .53 ⁸ | .60 |
| July----- | 5,520 | 546 | 1,940 | .71 ¹ | .82 |
| August----- | 17,700 | 876 | 4,110 | 1.51 | 1.74 |
| September----- | 5,380 | 436 | 1,120 | .410 | .46 |
| The year----- | 17,700 | 322 | 2,070 | .758 | 10.29 |

MAYO RIVER NEAR PRICE, N. C.

LOCATION.—Water-stage recorder just below Anglins Bridge, three-quarters of a mile downstream from State line, and 4 miles west of Price, Rockingham County.

DRAINAGE AREA.—260 square miles.

RECORDS AVAILABLE.—July, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 3,960 second-feet Aug. 22 (gage height, 5.35 feet); minimum, 60 second-feet Oct. 6 (gage height, 0.68 foot).
1929-1931: Maximum discharge (estimated), 15,900 second-feet Oct. 2, 1929 (gage height, 10.2 feet); minimum, 49 second-feet Sept. 4, 1930 (gage height, 0.56 foot).

REMARKS.—Records good except those above 2,000 second-feet, which are fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|-------|-------|-----|-------|------|-------|-------|
| 1..... | 68 | 108 | 110 | 200 | 124 | 210 | 806 | 197 | 532 | 114 | 692 | 141 |
| 2..... | 82 | 108 | 120 | 183 | 124 | 178 | 632 | 210 | 231 | 102 | 295 | 137 |
| 3..... | 81 | 102 | 118 | 203 | 124 | 162 | 420 | 197 | 175 | 365 | 570 | 233 |
| 4..... | 75 | 150 | 128 | 160 | 124 | 153 | 396 | 183 | 160 | 340 | 846 | 172 |
| 5..... | 68 | 207 | 112 | 703 | 124 | 148 | 455 | 178 | 167 | 481 | 846 | 144 |
| 6..... | 62 | 135 | 549 | 722 | 124 | 144 | 734 | 178 | 162 | 521 | 238 | 135 |
| 7..... | 66 | 118 | 494 | 336 | 126 | 144 | 626 | 299 | 153 | 234 | 172 | 128 |
| 8..... | 74 | 112 | 231 | 249 | 122 | 192 | 450 | 479 | 144 | 279 | 146 | 126 |
| 9..... | 77 | 114 | 180 | 207 | 126 | 175 | 372 | 253 | 137 | 160 | 135 | 120 |
| 10..... | 80 | 106 | 162 | 200 | 170 | 158 | 323 | 217 | 133 | 139 | 135 | 116 |
| 11..... | 80 | 102 | 153 | 180 | 144 | 150 | 289 | 197 | 130 | 148 | 292 | 122 |
| 12..... | 73 | 118 | 144 | 180 | 137 | 146 | 264 | 207 | 128 | 124 | 261 | 110 |
| 13..... | 68 | 146 | 139 | 183 | 130 | 144 | 245 | 210 | 126 | 122 | 469 | 88 |
| 14..... | 92 | 137 | 135 | 167 | 139 | 144 | 234 | 186 | 118 | 144 | 214 | 95 |
| 15..... | 108 | 135 | 112 | 162 | 130 | 150 | 224 | 172 | 104 | 122 | 170 | 88 |
| 16..... | 148 | 180 | 133 | 150 | 128 | 141 | 214 | 165 | 153 | 112 | 150 | 108 |
| 17..... | 108 | 227 | 112 | 207 | 150 | 148 | 207 | 183 | 128 | 104 | 135 | 120 |
| 18..... | 101 | 192 | 195 | 160 | 175 | 139 | 227 | 165 | 120 | 106 | 126 | 102 |
| 19..... | 85 | 165 | 217 | 165 | 158 | 141 | 203 | 158 | 128 | 130 | 122 | 95 |
| 20..... | 73 | 144 | 170 | 165 | 153 | 137 | 194 | 170 | 112 | 119 | 160 | 92 |
| 21..... | 87 | 133 | 139 | 153 | 165 | 130 | 214 | 677 | 81 | 149 | 222 | 90 |
| 22..... | 90 | 130 | 217 | 146 | 148 | 242 | 764 | 318 | 95 | 266 | 2,340 | 124 |
| 23..... | 92 | 128 | 175 | 148 | 144 | 560 | 531 | 710 | 135 | 122 | 521 | 110 |
| 24..... | 104 | 122 | 190 | 139 | 144 | 538 | 327 | 268 | 118 | 108 | 836 | 171 |
| 25..... | 99 | 124 | 175 | 137 | 141 | 332 | 285 | 224 | 101 | 199 | 249 | 106 |
| 26..... | 95 | 122 | 170 | 133 | 139 | 272 | 264 | 200 | 128 | 713 | 214 | 110 |
| 27..... | 90 | 122 | 340 | 139 | 133 | 234 | 242 | 190 | 106 | 295 | 311 | 118 |
| 28..... | 93 | 118 | 345 | 139 | 135 | 362 | 217 | 172 | 99 | 150 | 243 | 99 |
| 29..... | 110 | 118 | 242 | 135 | ----- | 1,360 | 210 | 165 | 90 | 124 | 180 | 95 |
| 30..... | 130 | 130 | 210 | 128 | ----- | 504 | 200 | 155 | 78 | 116 | 170 | 81 |
| 31..... | 110 | ----- | 220 | 128 | ----- | 354 | ----- | 148 | ----- | 208 | 150 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 148 | 62 | 89.3 | 0.343 | 0.40 |
| November..... | 227 | 102 | 135 | .519 | .58 |
| December..... | 549 | 110 | 198 | .762 | .88 |
| January..... | 722 | 128 | 207 | .796 | .92 |
| February..... | 175 | 122 | 139 | .535 | .56 |
| March..... | 1,360 | 130 | 258 | .992 | 1.14 |
| April..... | 806 | 194 | 359 | 1.38 | 1.54 |
| May..... | 710 | 148 | 240 | .923 | 1.06 |
| June..... | 532 | 78 | 142 | .546 | .61 |
| July..... | 713 | 102 | 207 | .796 | .92 |
| August..... | 2,340 | 122 | 358 | 1.38 | 1.59 |
| September..... | 233 | 81 | 119 | .458 | .51 |
| The year..... | 2,340 | 62 | 205 | .788 | 10.71 |

ROANOKE RIVER BASIN

63

NORTH MAYO RIVER NEAR SPENCER, VA.

LOCATION.—Chain gage at highway bridge at Moores Mill, 4 miles southeast of Spencer, Henry County.

DRAINAGE AREA.—108 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,170 second-feet Aug. 22 (gage height, 5.10 feet); minimum, 22 second-feet Oct. 1 (gage height, 2.16 feet).
1928-1931: Maximum discharge, about 3,700 second-feet Oct. 2, 1929 (gage height, 8.08 feet); minimum, 19 second-feet Sept. 2-5, 1930 (gage height, 2.12 feet).

REMARKS.—Records good except those above 700 second-feet, which are fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----------|---------|-------|------|---------|-------|------|-------|-----|-----------------|------|-------------------|-------|
| 1 | 23 | 40 | 58 | 72 | 52 | 119 | 487 | 72 | 48 | 39 | 157 | 84 |
| 2 | 24 | 35 | 58 | 79 | 51 | 110 | 204 | 64 | 48 | 39 | 180 | 84 |
| 3 | 24 | 35 | 55 | 64 | 52 | 100 | 134 | 68 | 44 | 278 | 270 | 95 |
| 4 | 24 | 49 | 52 | 52 | 49 | 96 | 134 | 66 | 40 | 146 | 177 | 108 |
| 5 | 26 | 94 | 55 | 364 | 49 | 83 | 138 | 59 | 48 | 435 | 112 | 92 |
| 6 | 24 | 52 | 220 | 253 | 46 | 83 | 383 | 68 | 104 | 146 | 102 | 88 |
| 7 | 25 | 44 | 168 | 110 | 46 | 79 | 204 | 116 | 71 | 119 | 94 | 88 |
| 8 | 26 | 40 | 131 | 92 | 46 | 112 | 134 | 131 | 60 | 94 | 88 | 82 |
| 9 | 28 | 37 | 114 | 83 | 52 | 107 | 119 | 119 | 54 | 79 | 90 | 80 |
| 10 | 28 | 35 | 105 | 85 | 61 | 96 | 110 | 83 | 40 | 71 | 77 | 75 |
| 11 | 26 | 34 | 96 | 85 | 52 | 88 | 98 | 75 | 36 | 64 | 132 | 71 |
| 12 | 26 | 35 | 92 | 90 | 46 | 83 | 90 | 75 | 33 | 57 | 189 | 67 |
| 13 | 26 | 35 | 88 | 88 | 46 | 72 | 83 | 75 | 30 | 40 | 220 | 46 |
| 14 | 28 | 63 | 83 | 79 | 46 | 61 | 77 | 72 | 37 | 42 | 143 | 36 |
| 15 | 30 | 61 | 77 | 79 | 45 | 90 | 79 | 64 | 44 | 42 | 116 | 33 |
| 16 | 30 | 107 | 70 | 85 | 46 | 90 | 79 | 59 | 42 | 39 | 112 | 33 |
| 17 | 41 | 134 | 72 | 79 | 55 | 79 | 79 | 98 | 39 | 34 | 102 | 33 |
| 18 | 33 | 126 | 63 | 90 | 52 | 68 | 83 | 100 | 39 | 37 | 92 | 30 |
| 19 | 30 | 112 | 85 | 90 | 52 | 61 | 88 | 96 | 39 | 36 | 92 | 30 |
| 20 | 32 | 100 | 100 | 79 | 52 | 55 | 83 | 119 | 34 | 33 | 104 | 33 |
| 21 | 34 | 103 | 107 | 72 | 52 | 53 | 94 | 755 | 39 | 64 | 132 | 38 |
| 22 | 40 | 96 | 100 | 58 | 52 | 131 | 220 | 288 | 39 | 116 | 1,110 | 35 |
| 23 | 42 | 90 | 103 | 52 | 52 | 306 | 160 | 109 | 40 | 172 | 383 | 77 |
| 24 | 44 | 88 | 100 | 52 | 49 | 253 | 110 | 102 | 38 | 172 | 139 | 100 |
| 25 | 42 | 92 | 96 | 58 | 48 | 168 | 94 | 114 | 42 | 116 | 134 | 82 |
| 26 | 42 | 83 | 114 | 55 | 46 | 152 | 88 | 99 | 48 | 179 | 112 | 67 |
| 27 | 40 | 77 | 157 | 55 | 46 | 136 | 92 | 79 | 44 | 170 | 120 | 95 |
| 28 | 40 | 68 | 177 | 52 | 49 | 131 | 85 | 54 | 50 | 124 | 192 | 88 |
| 29 | 55 | 58 | 88 | 52 | ----- | 755 | 79 | 48 | 42 | 174 | 88 | 80 |
| 30 | 49 | 61 | 63 | 52 | ----- | 174 | 77 | 44 | 39 | 88 | 88 | 75 |
| 31 | 42 | ----- | 81 | 51 | ----- | 146 | ----- | 44 | ----- | 176 | 88 | ----- |
| Month | Maximum | | | Minimum | | | Mean | | Per square mile | | Run-off in inches | |
| October | 55 | | | 23 | | | 33.0 | | 0.306 | | 0.35 | |
| November | 134 | | | 34 | | | 69.5 | | .644 | | .72 | |
| December | 220 | | | 52 | | | 97.7 | | .905 | | 1.04 | |
| January | 364 | | | 51 | | | 87.3 | | .808 | | .93 | |
| February | 61 | | | 45 | | | 49.6 | | .459 | | .48 | |
| March | 755 | | | 53 | | | 133 | | 1.23 | | 1.42 | |
| April | 487 | | | 77 | | | 133 | | 1.23 | | 1.37 | |
| May | 755 | | | 44 | | | 110 | | 1.02 | | 1.18 | |
| June | 104 | | | 30 | | | 45.1 | | .418 | | .47 | |
| July | 465 | | | 33 | | | 103 | | .954 | | 1.10 | |
| August | 1,110 | | | 77 | | | 166 | | 1.54 | | 1.78 | |
| September | 108 | | | 30 | | | 67.5 | | .625 | | .70 | |
| The year | 1,110 | | | 23 | | | 91.7 | | .849 | | 11.54 | |

SMITH RIVER AT MARTINSVILLE, VA.

LOCATION.—Water-stage recorder 2 miles south of Martinsville, Henry County, and 3 miles below Grassy Creek.

DRAINAGE AREA.—374 square miles.

RECORDS AVAILABLE.—August, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, about 6,620 second-feet Aug. 22 (gage height, 7.70 feet); minimum, 7 second-feet Feb. 17, Sept. 15 (gage height, 1.30 feet).

1929-1931: Maximum discharge, about 15,200 second-feet Oct. 2, 1929 (gage height, 12.27 feet); minimum, 7 second-feet Aug. 27, 1930, Feb. 17, Sept. 15, 1931.

REMARKS.—Records excellent except those estimated for May 6-13, Aug. 31 to Sept. 5, which are good, and those above 3,000 second-feet, which may be subject to error. Flow partly regulated by small dam and power plant 1,000 feet upstream.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 102 | 109 | 176 | 223 | 132 | 257 | 1,220 | 246 | 1,320 | 112 | 160 | 160 |
| 2 | 106 | 86 | 119 | 190 | 154 | 324 | 963 | 271 | 417 | 104 | 230 | 140 |
| 3 | 103 | 131 | 129 | 166 | 126 | 212 | 602 | 255 | 260 | 316 | 718 | 120 |
| 4 | 120 | 165 | 138 | 209 | 142 | 192 | 512 | 216 | 212 | 418 | 278 | 150 |
| 5 | 88 | 332 | 132 | 1,230 | 143 | 204 | 544 | 212 | 216 | 1,380 | 829 | 130 |
| 6 | 126 | 184 | 809 | 1,190 | 172 | 152 | 762 | 200 | 211 | 646 | 294 | 108 |
| 7 | 102 | 142 | 784 | 510 | 140 | 170 | 820 | 800 | 163 | 336 | 189 | 150 |
| 8 | 93 | 126 | 354 | 360 | 154 | 258 | 560 | 450 | 194 | 276 | 142 | 108 |
| 9 | 97 | 84 | 272 | 317 | 173 | 352 | 451 | 380 | 178 | 150 | 118 | 116 |
| 10 | 96 | 156 | 209 | 277 | 178 | 252 | 383 | 350 | 196 | 172 | 134 | 100 |
| 11 | 82 | 135 | 198 | 182 | 176 | 206 | 342 | 310 | 150 | 228 | 232 | 120 |
| 12 | 64 | 135 | 210 | 260 | 148 | 184 | 311 | 280 | 136 | 149 | 288 | 92 |
| 13 | 116 | 154 | 142 | 214 | 160 | 180 | 280 | 270 | 162 | 153 | 474 | 66 |
| 14 | 89 | 156 | 146 | 235 | 170 | 169 | 270 | 252 | 140 | 92 | 260 | 118 |
| 15 | 101 | 158 | 206 | 112 | 122 | 164 | 262 | 214 | 172 | 170 | 172 | 86 |
| 16 | 147 | 204 | 172 | 140 | 154 | 220 | 242 | 215 | 240 | 123 | 137 | 133 |
| 17 | 132 | 310 | 134 | 218 | 166 | 194 | 230 | 177 | 179 | 154 | 174 | 114 |
| 18 | 86 | 234 | 110 | 255 | 194 | 153 | 214 | 198 | 138 | 84 | 120 | 120 |
| 19 | 57 | 196 | 260 | 204 | 207 | 166 | 237 | 184 | 116 | 106 | 274 | 125 |
| 20 | 120 | 179 | 205 | 234 | 208 | 166 | 224 | 182 | 104 | 103 | 243 | 91 |
| 21 | 108 | 146 | 124 | 215 | 157 | 156 | 224 | 722 | 108 | 147 | 556 | 126 |
| 22 | 100 | 140 | 230 | 162 | 134 | 246 | 960 | 785 | 152 | 436 | 3,480 | 119 |
| 23 | 93 | 140 | 170 | 162 | 176 | 640 | 965 | 1,140 | 172 | 187 | 930 | 122 |
| 24 | 141 | 163 | 150 | 186 | 164 | 758 | 467 | 339 | 149 | 114 | 534 | 159 |
| 25 | 120 | 136 | 148 | 160 | 160 | 452 | 380 | 296 | 146 | 319 | 339 | 124 |
| 26 | 87 | 132 | 174 | 174 | 163 | 361 | 335 | 236 | 167 | 2,250 | 268 | 96 |
| 27 | 122 | 113 | 508 | 185 | 150 | 308 | 314 | 229 | 142 | 536 | 543 | 98 |
| 28 | 112 | 111 | 451 | 188 | 152 | 430 | 281 | 218 | 133 | 241 | 541 | 156 |
| 29 | 144 | 114 | 336 | 178 | ----- | 1,720 | 275 | 181 | 120 | 144 | 258 | 111 |
| 30 | 145 | 90 | 273 | 147 | ----- | 682 | 252 | 197 | 113 | 140 | 216 | 94 |
| 31 | 143 | ----- | 167 | 133 | ----- | 460 | ----- | 164 | ----- | 138 | 190 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 147 | 57 | 108 | 0.289 | 0.33 |
| November | 332 | 84 | 155 | .414 | .46 |
| December | 809 | 110 | 246 | .658 | .76 |
| January | 1,230 | 112 | 280 | .749 | .86 |
| February | 208 | 122 | 160 | .428 | .45 |
| March | 1,720 | 152 | 335 | .896 | 1.03 |
| April | 1,220 | 214 | 463 | 1.24 | 1.38 |
| May | 1,140 | 164 | 328 | .877 | 1.01 |
| June | 1,320 | 104 | 211 | .564 | .63 |
| July | 2,250 | 84 | 321 | .858 | .99 |
| August | 3,480 | 118 | 431 | 1.15 | 1.33 |
| September | ----- | 66 | 119 | .318 | .35 |
| The year | 3,480 | 57 | 264 | .706 | 9.58 |

LEATHERWOOD CREEK NEAR OLD LIBERTY, VA.

LOCATION.—Chain gage at highway bridge $1\frac{1}{2}$ miles above mouth and 3 miles from Old Liberty, Henry County.

DRAINAGE AREA.—68 square miles.

RECORDS AVAILABLE.—September, 1925, to September, 1931.

EXTREMES.—Maximum discharge during year, 545 second-feet May 23, June 1; minimum, 3 second-feet Oct. 1, 2.

1925-1931: Maximum discharge, 2,370 second-feet Aug. 11, 1928 (gage height, 14.37 feet); minimum, 2 second-feet several days in August and September, 1930.

REMARKS.—Records fair. Discharge affected by ice Nov. 28 to Dec. 3, Dec. 17 to Jan. 4, Jan. 15-18.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1. | 3 | 19 | • 28 | • 50 | • 21 | • 70 | 227 | 28 | 545 | 12 | 19 | 12 |
| 2. | 3 | • 18 | • 26 | • 50 | 20 | 59 | 164 | 40 | 95 | 10 | • 75 | 12 |
| 3. | 4 | 21 | • 30 | • 50 | 21 | 46 | 88 | • 53 | 49 | 10 | 325 | 19 |
| 4. | 5 | 65 | 28 | • 50 | 21 | 41 | • 64 | 26 | 37 | • 50 | 46 | 16 |
| 5. | • 6 | 63 | 27 | 156 | 21 | 37 | • 100 | 23 | 30 | • 300 | 46 | 11 |
| 6. | 6 | 30 | 112 | 259 | 20 | 32 | 259 | 25 | 30 | 47 | 24 | • 10 |
| 7. | 6 | 25 | • 80 | 91 | 21 | 31 | 149 | 53 | • 28 | 61 | 16 | • 15 |
| 8. | 6 | 25 | 60 | 64 | • 20 | • 60 | 105 | 149 | 26 | 27 | 13 | 14 |
| 9. | 6 | • 25 | 46 | 52 | 23 | 47 | 74 | 54 | 22 | 18 | • 12 | 9 |
| 10. | 8 | 25 | 43 | 43 | 41 | 39 | 45 | • 46 | 20 | 18 | 11 | 8 |
| 11. | 7 | 23 | 43 | • 43 | 26 | 36 | 51 | 38 | 19 | 17 | 21 | 7 |
| 12. | • 6 | 24 | 34 | 43 | 26 | 32 | • 44 | 33 | 17 | • 15 | 48 | 7 |
| 13. | 6 | 40 | 32 | 41 | 26 | 29 | 38 | 72 | 17 | 13 | 213 | • 7 |
| 14. | 9 | 31 | • 30 | 39 | 26 | 32 | 33 | 40 | • 22 | 12 | 152 | 7 |
| 15. | 14 | 30 | 30 | • 35 | • 25 | • 35 | 33 | 30 | 27 | 12 | 33 | 6 |
| 16. | 12 | • 60 | 29 | • 40 | 24 | 32 | 30 | 26 | 20 | 12 | • 25 | 7 |
| 17. | 11 | 72 | • 25 | • 50 | 31 | 30 | 29 | • 30 | 17 | 10 | 18 | 7 |
| 18. | 11 | 48 | • 50 | • 40 | 41 | 26 | 33 | 25 | 15 | 10 | 15 | 6 |
| 19. | • 10 | 38 | • 45 | 47 | 28 | 26 | • 81 | 23 | 14 | • 15 | 15 | 7 |
| 20. | 10 | 36 | • 40 | 47 | 28 | 28 | 29 | 25 | 13 | 8 | 64 | • 7 |
| 21. | 12 | 31 | • 35 | 31 | 33 | 26 | 27 | 32 | • 14 | 9 | 62 | 7 |
| 22. | 12 | 30 | • 45 | 31 | • 32 | • 100 | 409 | 43 | 16 | 31 | 213 | 9 |
| 23. | 15 | • 30 | • 40 | 29 | • 30 | 307 | 187 | 545 | 50 | 10 | • 175 | 7 |
| 24. | 27 | 28 | • 40 | 27 | 28 | 195 | 74 | • 100 | 26 | 10 | 52 | 11 |
| 25. | 21 | 28 | • 50 | • 28 | 28 | 98 | 54 | 57 | 14 | 24 | 31 | 8 |
| 26. | • 19 | 28 | • 60 | 29 | 26 | 68 | • 46 | 45 | 12 | • 20 | 25 | 6 |
| 27. | 18 | • 25 | • 100 | 27 | 25 | 52 | 38 | 37 | 12 | 16 | 22 | • 15 |
| 28. | 18 | • 20 | • 120 | 26 | 22 | 51 | 30 | 32 | • 12 | 12 | 25 | 8 |
| 29. | 26 | • 20 | • 80 | 24 | ----- | • 350 | 30 | 30 | 12 | 9 | 20 | 6 |
| 30. | 30 | • 30 | • 60 | 22 | ----- | 126 | 29 | • 30 | 13 | 9 | • 17 | 6 |
| 31. | 24 | ----- | • 40 | 22 | ----- | 69 | ----- | • 30 | ----- | 12 | 14 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 30 | 3 | 12.0 | 0.176 | 0.20 |
| November..... | 72 | ----- | 32.9 | .484 | .54 |
| December..... | ----- | ----- | 43.6 | .715 | .82 |
| January..... | 259 | 22 | 51.2 | .753 | .87 |
| February..... | 41 | 20 | 26.2 | .385 | .40 |
| March..... | ----- | 26 | 71.3 | 1.05 | 1.21 |
| April..... | 409 | 27 | 85.0 | 1.25 | 1.40 |
| May..... | 545 | 23 | 58.1 | .854 | .98 |
| June..... | 545 | 12 | 41.5 | .610 | .68 |
| July..... | ----- | 8 | 27.1 | .396 | .46 |
| August..... | 325 | 11 | 59.6 | .876 | 1.01 |
| September..... | 19 | 6 | 9.2 | .136 | .15 |
| The year..... | 545 | 3 | 43.7 | .642 | 8.72 |

• Estimated.

SANDY RIVER NEAR DANVILLE, VA.

LOCATION.—Water-stage recorder 500 feet below highway bridge on road between Callahans Store and Mount Cross and 6 miles northwest of Danville, Pittsylvania County.

DRAINAGE AREA.—113 square miles.

RECORDS AVAILABLE.—November, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, about 6,280 second-feet Aug. 22 (gage height, 9.45 feet); minimum, 4 second-feet Oct. 4 (gage height, 0.43 foot).

1929-1931: Maximum discharge, that of Aug. 22, 1931; minimum, 3 second-feet Sept. 29, 1930 (gage height, 0.40 foot).

REMARKS.—Records good except those for high stages, which are fair. Stage-discharge relation affected by ice Nov. 28-30, Dec. 20-25, Dec. 31 to Jan. 4, Jan. 15-17.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|-------|-------|
| 1..... | 12 | 32 | 37 | * 70 | 48 | 80 | 251 | 54 | 1,110 | 25 | 27 | 26 |
| 2..... | 10 | 30 | 37 | * 70 | 46 | 64 | 188 | 58 | 142 | 25 | 30 | 24 |
| 3..... | 12 | 32 | 39 | * 70 | 46 | 58 | 126 | 56 | 81 | 164 | 35 | 59 |
| 4..... | 10 | 136 | 43 | * 55 | 46 | 58 | 134 | 54 | 64 | 100 | 107 | 43 |
| 5..... | 13 | 76 | 34 | 358 | 46 | 54 | 188 | 52 | 60 | 518 | 180 | * 40 |
| 6..... | 14 | 41 | 180 | 352 | 46 | 52 | 438 | 207 | 51 | 108 | 51 | * 40 |
| 7..... | * 15 | 35 | 152 | 126 | 46 | 52 | 298 | 130 | 45 | 108 | 33 | * 45 |
| 8..... | * 15 | 34 | 70 | 90 | 42 | 73 | 170 | 87 | 47 | 47 | 25 | * 45 |
| 9..... | * 15 | 34 | 55 | 82 | 50 | 62 | 137 | 75 | 45 | 120 | 24 | * 40 |
| 10..... | * 15 | 32 | 48 | 71 | 62 | 60 | 119 | 82 | 43 | 49 | 27 | * 40 |
| 11..... | * 15 | 32 | 44 | 71 | 48 | 56 | 106 | 64 | 43 | 41 | 60 | * 35 |
| 12..... | * 15 | 32 | 44 | 69 | 46 | 54 | 101 | 62 | 37 | 33 | 60 | * 35 |
| 13..... | 15 | 41 | 41 | 66 | 44 | 52 | 92 | 69 | 35 | 32 | 62 | 30 |
| 14..... | 32 | 37 | 41 | 58 | 48 | 50 | 90 | 56 | 57 | 32 | 35 | 28 |
| 15..... | 54 | 41 | 39 | * 50 | 46 | 56 | 84 | 52 | 55 | 30 | 29 | 26 |
| 16..... | 41 | 76 | 39 | * 55 | 44 | 52 | 82 | 46 | 39 | 29 | 27 | 26 |
| 17..... | 22 | 81 | 30 | * 60 | 56 | 50 | 77 | 52 | 41 | 25 | 27 | 28 |
| 18..... | 24 | 50 | 67 | 50 | 58 | 54 | 75 | 50 | 35 | 29 | 24 | 24 |
| 19..... | 22 | 44 | 63 | 62 | 50 | 52 | 69 | 46 | 33 | 41 | 29 | 26 |
| 20..... | 24 | 41 | * 45 | 60 | 54 | 52 | 66 | 48 | 30 | 27 | 95 | 26 |
| 21..... | 24 | 37 | * 40 | 54 | 56 | 52 | 64 | 92 | 32 | 43 | 66 | 54 |
| 22..... | 24 | 37 | * 60 | 54 | 52 | 115 | 96 | 168 | 70 | 151 | 2,850 | 39 |
| 23..... | 26 | 37 | * 50 | 58 | 50 | 242 | 101 | 308 | 120 | 39 | 597 | 28 |
| 24..... | 32 | 37 | * 50 | 52 | 48 | 148 | 71 | 90 | 43 | 37 | 132 | 28 |
| 25..... | 30 | 39 | * 60 | 50 | 48 | 98 | 64 | 71 | 39 | 60 | 61 | 26 |
| 26..... | 28 | 39 | 76 | 50 | 48 | 82 | 62 | 64 | 32 | 39 | 48 | 43 |
| 27..... | 28 | 39 | 125 | 48 | 48 | 73 | 62 | 52 | 32 | 32 | 58 | 52 |
| 28..... | 27 | * 35 | 181 | 48 | 48 | 101 | 56 | 54 | 32 | 29 | 58 | 28 |
| 29..... | 32 | * 35 | 98 | 52 | ----- | 423 | 56 | 48 | 32 | 27 | 30 | 24 |
| 30..... | 41 | * 35 | 71 | 48 | ----- | 144 | 54 | 44 | 25 | 27 | 35 | 24 |
| 31..... | 35 | ----- | * 60 | 48 | ----- | 106 | ----- | 42 | ----- | 27 | 32 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 54 | 10 | 23.3 | 0.206 | 0.24 |
| November..... | 136 | 30 | 44.2 | .391 | .44 |
| December..... | 181 | 30 | 65.1 | .576 | .66 |
| January..... | 358 | 48 | 80.9 | .716 | .83 |
| February..... | 62 | 42 | 48.9 | .433 | .45 |
| March..... | 423 | 50 | 87.9 | .778 | .90 |
| April..... | 438 | 54 | 119 | 1.05 | 1.17 |
| May..... | 308 | 42 | 78.5 | .695 | .80 |
| June..... | 1,110 | 25 | 85.0 | .752 | .84 |
| July..... | 518 | 25 | 67.5 | .697 | .69 |
| August..... | 2,850 | 24 | 160 | 1.42 | 1.64 |
| September..... | 59 | 24 | 34.4 | .304 | .34 |
| The year..... | 2,850 | 10 | 74.8 | .662 | 9.00 |

* Estimated.

BANISTER RIVER AT HALIFAX, VA.

LOCATION.—Water-stage recorder 1 mile north of Halifax, Halifax County, and 10 miles above mouth.

DRAINAGE AREA.—552 square miles.

RECORDS AVAILABLE.—December, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 3,530 second-feet June 24 (gage height, 14.20 feet); minimum, 16 second-feet Oct. 10, 11, June 20.

1928-1931: Maximum discharge, 7,510 second-feet Oct. 3, 1929 (gage height, 24.02 feet); minimum, 14 second-feet July 13, 1930 (gage height, 0.56 foot).

REMARKS.—Records excellent. Flow regulated except for high stages by power plant half a mile upstream.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|-------|-------|-------|-------|------|-------|-------|
| 1 | 19 | 70 | 180 | 189 | 176 | 356 | 1,320 | 213 | 743 | 76 | 805 | 110 |
| 2 | 18 | 78 | 114 | 132 | 122 | 514 | 2,800 | 330 | 1,350 | 121 | 492 | 180 |
| 3 | 17 | 108 | 111 | 215 | 154 | 262 | 1,470 | 101 | 844 | 154 | 528 | 193 |
| 4 | 17 | 340 | 120 | 186 | 161 | 276 | 812 | 216 | 394 | 71 | 296 | 64 |
| 5 | 17 | 590 | 130 | 475 | 180 | 236 | 1,010 | 224 | 227 | 736 | 540 | 171 |
| 6 | 90 | 231 | 414 | 948 | 97 | 250 | 2,040 | 266 | 211 | 771 | 503 | 77 |
| 7 | 42 | 194 | 653 | 815 | 216 | 198 | 2,700 | 578 | 152 | 590 | 286 | 170 |
| 8 | 17 | 92 | 353 | 631 | 132 | 348 | 1,550 | 1,210 | 122 | 322 | 60 | 50 |
| 9 | 17 | 106 | 301 | 259 | 225 | 457 | 884 | 690 | 190 | 289 | 100 | 78 |
| 10 | 16 | 114 | 178 | 257 | 208 | 250 | 693 | 472 | 72 | 250 | 196 | 75 |
| 11 | 16 | 149 | 228 | 213 | 216 | 263 | 590 | 412 | 118 | 445 | 478 | 92 |
| 12 | 18 | 182 | 244 | 361 | 177 | 180 | 278 | 225 | 91 | 25 | 450 | 97 |
| 13 | 19 | 85 | 102 | 163 | 207 | 212 | 442 | 391 | 195 | 204 | 216 | 63 |
| 14 | 20 | 177 | 182 | 380 | 174 | 168 | 238 | 225 | 46 | 288 | 226 | 69 |
| 15 | 20 | 157 | 126 | 122 | 110 | 220 | 402 | 154 | 241 | 76 | 160 | 154 |
| 16 | 34 | 246 | 130 | 129 | 216 | 246 | 220 | 311 | 167 | 142 | 86 | 74 |
| 17 | 24 | 231 | 179 | 168 | 248 | 182 | 286 | 64 | 160 | 152 | 456 | 27 |
| 18 | 20 | 336 | 74 | 296 | 348 | 242 | 324 | 180 | 66 | 145 | 355 | 43 |
| 19 | 20 | 192 | 193 | 294 | 265 | 199 | 150 | 207 | 74 | 20 | 320 | 54 |
| 20 | 20 | 160 | 258 | 290 | 377 | 112 | 449 | 214 | 74 | 19 | 120 | 67 |
| 21 | 20 | 189 | 58 | 319 | 202 | 240 | 120 | 804 | 78 | 150 | 225 | 68 |
| 22 | 20 | 104 | 236 | 190 | 208 | 383 | 304 | 762 | 687 | 564 | 1,270 | 73 |
| 23 | 21 | 165 | 122 | 198 | 214 | 980 | 468 | 717 | 2,800 | 295 | 2,940 | 94 |
| 24 | 22 | 124 | 144 | 197 | 248 | 1,150 | 359 | 652 | 2,670 | 178 | 2,820 | 85 |
| 25 | 56 | 154 | 83 | 175 | 232 | 747 | 336 | 542 | 652 | 148 | 812 | 97 |
| 26 | 22 | 142 | 284 | 226 | 196 | 562 | 286 | 268 | 314 | 105 | 288 | 286 |
| 27 | 58 | 73 | 370 | 175 | 114 | 288 | 244 | 199 | 223 | 63 | 272 | 100 |
| 28 | 55 | 124 | 491 | 198 | 258 | 314 | 256 | 194 | 188 | 92 | 632 | 138 |
| 29 | 80 | 97 | 339 | 223 | ----- | 912 | 200 | 161 | 204 | 280 | 326 | 60 |
| 30 | 102 | 111 | 330 | 85 | ----- | 1,050 | 194 | 170 | 176 | 60 | 152 | 59 |
| 31 | 145 | ----- | 250 | 192 | ----- | 711 | ----- | 65 | ----- | 172 | 199 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 145 | 16 | 34.9 | 0.063 | 0.07 |
| November | 590 | 70 | 171 | .817 | .35 |
| December | 653 | 58 | 225 | .407 | .47 |
| January | 948 | 85 | 281 | .509 | .59 |
| February | 377 | 97 | 208 | .367 | .38 |
| March | 1,150 | 112 | 403 | .737 | .84 |
| April | 2,800 | 120 | 714 | 1.29 | 1.44 |
| May | 1,210 | 64 | 362 | .657 | .76 |
| June | 2,800 | 46 | 451 | .817 | .91 |
| July | 771 | 19 | 226 | .407 | .47 |
| August | 2,940 | 60 | 521 | .944 | 1.09 |
| September | 286 | 27 | 98.9 | .177 | .20 |
| The year | 2,940 | 16 | 308 | .557 | 7.57 |

HYCO RIVER NEAR DENNISTON, VA.

LOCATION.—Chain gage at highway bridge 2 miles east of Denniston, Halifax County, and 8 miles south of South Boston.

DRAINAGE AREA.—219 square miles.

RECORDS AVAILABLE.—July, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,660 second-feet Apr. 7 (gage height, 17.18 feet); minimum, 0.1 second-foot Oct. 7 (gage height, 4.08 feet).

1929-1931: Maximum discharge, that of Apr. 7, 1931; minimum, that of Oct. 7, 1930.

REMARKS.—Records good except those for periods of ice effect, Dec. 23-25, Dec. 28 to Jan. 2, Jan. 13-24, and those estimated for Nov. 2-4, and Feb. 11, which are fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-------|-------|------|-------|-------|
| 1..... | 1.0 | 40 | 21 | 60 | 64 | 191 | 962 | 101 | 192 | 10 | 228 | 56 |
| 2..... | .8 | 50 | 28 | 50 | 60 | 215 | 1,380 | 170 | 170 | 6 | 290 | 46 |
| 3..... | .7 | 80 | 25 | 125 | 56 | 168 | 1,350 | 290 | 101 | 10 | 368 | 45 |
| 4..... | .6 | 130 | 25 | 125 | 48 | 135 | 443 | 303 | 78 | 181 | 96 | 48 |
| 5..... | .5 | 64 | 32 | 179 | 52 | 110 | 1,290 | 170 | 64 | 170 | 616 | 51 |
| 6..... | .4 | 40 | 86 | 712 | 52 | 95 | 2,290 | 137 | 74 | 87 | 252 | 38 |
| 7..... | .3 | 35 | 179 | 770 | 56 | 86 | 2,580 | 514 | 74 | 56 | 87 | 38 |
| 8..... | .6 | 25 | 157 | 390 | 48 | 251 | 2,440 | 1,520 | 52 | 40 | 51 | 32 |
| 9..... | .5 | 20 | 110 | 115 | 64 | 239 | 2,110 | 1,490 | 45 | 664 | 36 | 25 |
| 10..... | .4 | 10 | 77 | 135 | 72 | 135 | 472 | 1,460 | 43 | 159 | 28 | 23 |
| 11..... | .4 | 9 | 60 | 125 | 82 | 115 | 316 | 472 | 38 | 69 | 1,430 | 22 |
| 12..... | .5 | 9 | 48 | 125 | 68 | 100 | 264 | 264 | 34 | 44 | 2,220 | 20 |
| 13..... | .4 | 22 | 39 | 140 | 64 | 90 | 204 | 192 | 31 | 31 | 2,040 | 19 |
| 14..... | .5 | 22 | 37 | 120 | 64 | 82 | 181 | 159 | 38 | 27 | 2,080 | 20 |
| 15..... | .5 | 20 | 37 | 90 | 64 | 86 | 159 | 132 | 26 | 47 | 1,400 | 17 |
| 16..... | .7 | 39 | 25 | 110 | 68 | 90 | 148 | 116 | 44 | 31 | 459 | 10 |
| 17..... | 1.1 | 42 | 32 | 130 | 64 | 86 | 126 | 101 | 35 | 17 | 192 | 13 |
| 18..... | 1.5 | 77 | 29 | 160 | 135 | 72 | 132 | 87 | 29 | 43 | 126 | 18 |
| 19..... | .6 | 56 | 35 | 200 | 135 | 68 | 159 | 82 | 19 | 34 | 181 | 18 |
| 20..... | .9 | 45 | 44 | 180 | 125 | 72 | 192 | 78 | 19 | 22 | 132 | 12 |
| 21..... | .9 | 48 | 95 | 150 | 146 | 64 | 181 | 1,160 | 20 | 17 | 181 | 9 |
| 22..... | .6 | 40 | 72 | 120 | 135 | 377 | 159 | 1,780 | 179 | 18 | 874 | 15 |
| 23..... | 1.0 | 27 | 60 | 110 | 125 | 986 | 303 | 2,150 | 159 | 14 | 1,260 | 19 |
| 24..... | 1.2 | 32 | 40 | 100 | 110 | 513 | 240 | 1,870 | 126 | 26 | 1,010 | 13 |
| 25..... | 1.3 | 22 | 30 | 105 | 95 | 275 | 216 | 472 | 34 | 39 | 381 | 9 |
| 26..... | 2.5 | 25 | 56 | 95 | 82 | 191 | 181 | 240 | 21 | 204 | 181 | 30 |
| 27..... | 9.0 | 22 | 287 | 86 | 72 | 135 | 159 | 170 | 19 | 92 | 132 | 22 |
| 28..... | 9.0 | 22 | 250 | 82 | 110 | 120 | 137 | 132 | 18 | 60 | 303 | 18 |
| 29..... | 12 | 27 | 100 | 68 | ----- | 589 | 116 | 101 | 18 | 33 | 121 | 17 |
| 30..... | 28 | 30 | 110 | 68 | ----- | 485 | 92 | 92 | 16 | 29 | 92 | 16 |
| 31..... | 37 | ----- | 80 | 64 | ----- | 191 | ----- | 78 | ----- | 24 | 69 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 37 | 0.3 | 3.72 | 0.017 | 0.02 |
| November..... | ----- | 9 | 37.7 | .172 | .19 |
| December..... | 287 | 21 | 76.3 | .348 | .40 |
| January..... | 770 | ----- | 164 | .749 | .86 |
| February..... | 146 | 48 | 82.7 | .378 | .39 |
| March..... | 986 | 64 | 207 | .945 | 1.09 |
| April..... | 2,580 | 92 | 633 | 2.89 | 3.22 |
| May..... | 2,150 | 78 | 517 | 2.36 | 2.72 |
| June..... | 192 | 16 | 60.2 | .275 | .31 |
| July..... | 664 | 6 | 74.1 | .338 | .39 |
| August..... | 2,220 | 28 | 546 | 2.49 | 2.87 |
| September..... | 56 | 9 | 24.6 | .112 | .13 |
| The year..... | 2,580 | .3 | 203 | .927 | 12.59 |

TAR RIVER BASIN

TAR RIVER NEAR NASHVILLE, N. C.

LOCATION.—Chain gage at Cockrell Bridge, on Nashville-Wilson road, 5 miles above Sapony Creek and 10 miles south of Nashville, Nash County.

DRAINAGE AREA.—593 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 4,850 second-feet Aug. 13 (gage height, 11.20 feet); minimum, 39 second-feet Oct. 7 (gage height, 1.90 feet).
1928-1931: Maximum discharge, 13,200 second-feet Oct. 6, 1929 (gage height, 16.98 feet); minimum, 29 second-feet Sept. 3, 1930 (gage height, 1.79 feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 73 | 183 | 150 | 434 | 273 | 324 | 890 | 378 | 290 | 211 | 800 | 241 |
| 2..... | 66 | 161 | 241 | 378 | 273 | 473 | 935 | 378 | 273 | 166 | 514 | 241 |
| 3..... | 58 | 145 | 241 | 306 | 257 | 434 | 1,340 | 473 | 257 | 147 | 290 | 241 |
| 4..... | 63 | 147 | 175 | 306 | 241 | 453 | 980 | 800 | 241 | 145 | 514 | 1,380 |
| 5..... | 68 | 226 | 177 | 360 | 226 | 378 | 1,250 | 620 | 273 | 493 | 1,440 | 534 |
| 6..... | 51 | 324 | 183 | 396 | 226 | 341 | 2,740 | 453 | 241 | 514 | 2,440 | 324 |
| 7..... | 44 | 226 | 341 | 534 | 241 | 324 | 3,480 | 415 | 241 | 341 | 3,160 | 241 |
| 8..... | 58 | 161 | 514 | 576 | 241 | 324 | 3,940 | 3,100 | 257 | 257 | 1,340 | 211 |
| 9..... | 66 | 124 | 415 | 378 | 241 | 396 | 4,150 | 4,570 | 341 | 197 | 415 | 211 |
| 10..... | 52 | 129 | 290 | 341 | 290 | 378 | 1,780 | 2,980 | 273 | 197 | 396 | 197 |
| 11..... | 58 | 129 | 241 | 306 | 341 | 396 | 980 | 1,440 | 197 | 257 | 1,740 | 183 |
| 12..... | 56 | 132 | 211 | 360 | 290 | 324 | 800 | 1,020 | 197 | 241 | 4,220 | 183 |
| 13..... | 46 | 145 | 197 | 845 | 257 | 273 | 665 | 890 | 175 | 360 | 4,710 | 177 |
| 14..... | 45 | 150 | 161 | 980 | 273 | 273 | 576 | 755 | 324 | 290 | 4,150 | 172 |
| 15..... | 71 | 158 | 177 | 755 | 360 | 257 | 534 | 576 | 341 | 211 | 2,320 | 161 |
| 16..... | 155 | 150 | 172 | 534 | 324 | 306 | 493 | 473 | 576 | 166 | 2,440 | 139 |
| 17..... | 183 | 155 | 175 | 473 | 324 | 306 | 434 | 378 | 1,250 | 152 | 1,840 | 134 |
| 18..... | 119 | 152 | 177 | 493 | 324 | 306 | 378 | 360 | 980 | 132 | 620 | 145 |
| 19..... | 94 | 145 | 183 | 665 | 434 | 290 | 396 | 324 | 514 | 161 | 415 | 169 |
| 20..... | 92 | 139 | 324 | 800 | 473 | 273 | 378 | 324 | 273 | 180 | 534 | 137 |
| 21..... | 139 | 142 | 415 | 935 | 415 | 273 | 378 | 890 | 241 | 169 | 2,320 | 129 |
| 22..... | 71 | 139 | 378 | 665 | 415 | 396 | 378 | 1,840 | 197 | 378 | 2,860 | 134 |
| 23..... | 79 | 134 | 306 | 493 | 415 | 1,020 | 493 | 3,040 | 161 | 755 | 1,640 | 115 |
| 24..... | 77 | 122 | 241 | 415 | 360 | 1,580 | 534 | 3,420 | 197 | 415 | 1,380 | 115 |
| 25..... | 73 | 129 | 226 | 378 | 324 | 1,250 | 514 | 2,920 | 324 | 890 | 980 | 134 |
| 26..... | 80 | 127 | 241 | 396 | 324 | 710 | 453 | 980 | 211 | 2,560 | 620 | 124 |
| 27..... | 66 | 127 | 755 | 360 | 290 | 534 | 514 | 620 | 183 | 3,550 | 453 | 473 |
| 28..... | 90 | 124 | 1,380 | 341 | 273 | 434 | 576 | 514 | 172 | 2,680 | 378 | 211 |
| 29..... | 88 | 119 | 1,440 | 306 | ----- | 514 | 534 | 415 | 241 | 306 | 341 | 158 |
| 30..... | 105 | 110 | 800 | 290 | ----- | 1,070 | 453 | 341 | 257 | 241 | 290 | 139 |
| 31..... | 163 | ----- | 576 | 290 | ----- | 1,340 | ----- | 324 | ----- | 211 | 273 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|--------------------|----------------------|
| October..... | 183 | 44 | 82.2 | 0.139 | 0.16 |
| November..... | 324 | 110 | 152 | .256 | .29 |
| December..... | 1,440 | 150 | 371 | .626 | .72 |
| January..... | 980 | 290 | 497 | .821 | .95 |
| February..... | 473 | 226 | 312 | .526 | .55 |
| March..... | 1,580 | 257 | 515 | .868 | 1.00 |
| April..... | 4,150 | 378 | 1,060 | 1.79 | 2.00 |
| May..... | 4,570 | 324 | 1,160 | 1.96 | 2.26 |
| June..... | 1,250 | 161 | 323 | .545 | .61 |
| July..... | 3,550 | 132 | 545 | .924 | 1.07 |
| August..... | 4,710 | 273 | 1,480 | 2.50 | 2.88 |
| September..... | 1,380 | 115 | 238 | .401 | .45 |
| The year..... | 4,710 | 44 | 564 | .951 | 12.94 |

FISHING CREEK NEAR ENFIELD, N. C.

LOCATION.—Staff gage at highway bridge 2,000 feet downstream from Atlantic Coast Line Railroad bridge, 2 miles southwest of Enfield, Halifax County, and $4\frac{1}{4}$ miles downstream from mouth of Rocky Creek.

DRAINAGE AREA.—462 square miles.

RECORDS AVAILABLE.—October, 1923, to September, 1931.

EXTREMES.—Maximum discharge during year, 6,180 second-feet Aug. 14 (gage height, 15.50 feet); minimum, 38 second-feet Oct. 11 (gage height, 0.76 foot).

1923–1931: Maximum discharge, 12,300 second-feet Oct. 1, 2, 1924 (gage height, 17.3 feet); minimum, that of Oct. 11, 1930.

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1930–31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|
| 1 | 55 | 78 | 88 | 310 | 215 | 228 | 535 | 254 | 189 | 105 | 100 | 116 |
| 2 | 48 | 88 | 189 | 268 | 215 | 370 | 888 | 282 | 189 | 100 | 100 | 110 |
| 3 | 45 | 94 | 176 | 228 | 202 | 370 | 888 | 340 | 189 | 105 | 100 | 110 |
| 4 | 42 | 100 | 164 | 202 | 202 | 370 | 550 | 355 | 189 | 100 | 176 | 105 |
| 5 | 44 | 254 | 176 | 215 | 189 | 340 | 834 | 340 | 176 | 105 | 310 | 100 |
| 6 | 45 | 385 | 164 | 215 | 189 | 340 | 1,980 | 254 | 146 | 94 | 1,180 | 94 |
| 7 | 43 | 282 | 152 | 215 | 189 | 340 | 2,460 | 282 | 146 | 88 | 980 | 88 |
| 8 | 44 | 164 | 460 | 202 | 176 | 325 | 2,620 | 550 | 146 | 189 | 535 | 83 |
| 9 | 41 | 122 | 430 | 202 | 176 | 310 | 1,980 | 1,540 | 296 | 140 | 340 | 83 |
| 10 | 40 | 105 | 282 | 202 | 176 | 296 | 1,250 | 1,620 | 268 | 116 | 202 | 83 |
| 11 | 39 | 88 | 241 | 202 | 282 | 268 | 726 | 626 | 241 | 116 | 1,000 | 83 |
| 12 | 42 | 88 | 176 | 215 | 254 | 535 | 585 | 490 | 202 | 134 | 2,560 | 78 |
| 13 | 45 | 100 | 146 | 580 | 215 | 228 | 490 | 520 | 176 | 128 | 4,160 | 72 |
| 14 | 46 | 94 | 140 | 960 | 215 | 215 | 400 | 490 | 104 | 122 | 5,900 | 67 |
| 15 | 50 | 88 | 134 | 626 | 254 | 202 | 370 | 475 | 152 | 116 | 4,160 | 62 |
| 16 | 94 | 88 | 128 | 475 | 268 | 202 | 340 | 340 | 215 | 110 | 1,620 | 62 |
| 17 | 88 | 83 | 116 | 296 | 254 | 296 | 340 | 268 | 490 | 110 | 565 | 60 |
| 18 | 94 | 100 | 122 | 355 | 268 | 282 | 296 | 241 | 520 | 105 | 415 | 57 |
| 19 | 94 | 94 | 146 | 415 | 254 | 254 | 282 | 228 | 340 | 105 | 268 | 60 |
| 20 | 78 | 88 | 176 | 490 | 370 | 241 | 254 | 241 | 268 | 100 | 202 | 60 |
| 21 | 67 | 100 | 340 | 535 | 400 | 215 | 282 | 241 | 202 | 105 | 535 | 62 |
| 22 | 62 | 100 | 310 | 445 | 475 | 282 | 254 | 1,140 | 134 | 122 | 1,140 | 62 |
| 23 | 52 | 100 | 296 | 325 | 400 | 1,120 | 176 | 1,860 | 152 | 189 | 610 | 62 |
| 24 | 45 | 100 | 241 | 296 | 340 | 1,430 | 430 | 2,510 | 385 | 110 | 505 | 62 |
| 25 | 43 | 94 | 202 | 268 | 310 | 1,300 | 400 | 2,690 | 370 | 100 | 340 | 67 |
| 26 | 42 | 94 | 176 | 254 | 241 | 726 | 310 | 888 | 370 | 88 | 215 | 72 |
| 27 | 43 | 88 | 726 | 254 | 228 | 475 | 282 | 490 | 122 | 105 | 189 | 62 |
| 28 | 46 | 88 | 1,120 | 241 | 202 | 370 | 254 | 254 | 134 | 105 | 164 | 62 |
| 29 | 47 | 83 | 762 | 228 | ----- | 400 | 228 | 241 | 128 | 105 | 152 | 67 |
| 30 | 72 | 83 | 626 | 228 | ----- | 924 | 254 | 228 | 128 | 100 | 140 | 62 |
| 31 | 72 | ----- | 445 | 228 | ----- | 762 | ----- | 202 | ----- | 100 | 116 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 94 | 39 | 55.1 | 0.119 | 0.14 |
| November | 385 | 78 | 117 | .253 | .28 |
| December | 1,120 | 88 | 292 | .632 | .73 |
| January | 960 | 202 | 328 | .710 | .82 |
| February | 475 | 176 | 256 | .554 | .58 |
| March | 1,430 | 202 | 443 | .959 | 1.11 |
| April | 2,620 | 176 | 696 | 1.51 | 1.68 |
| May | 2,680 | 202 | 660 | 1.43 | 1.65 |
| June | 520 | 122 | 228 | .493 | .55 |
| July | 189 | 88 | 113 | .245 | .28 |
| August | 5,900 | 100 | 934 | 2.02 | 2.33 |
| September | 116 | 57 | 75.8 | .164 | .18 |
| The year | 5,900 | 39 | 351 | .760 | 10.33 |

NEUSE RIVER BASIN

ENO RIVER AT HILLSBORO, N. C.

LOCATION.—Staff gage 1,000 feet below State highway 10 at Hillsboro, Orange County, and 2 miles below Sevenmile Creek.

DRAINAGE AREA.—66.5 square miles.

RECORDS AVAILABLE.—November, 1927, to September, 1931.

EXTREMES.—Maximum discharge during year, 3,880 second-feet May 21 (gage height, 16.26 feet); minimum, 3.8 second-feet several times during October (gage height, 0.63 foot).

1927-1931: Maximum discharge recorded, 4,650 second-feet Oct. 2, 1929 (gage height, estimated, 18.0 feet); minimum, 2.6 second-feet Sept. 6, 7, 1930 (gage height, 0.57 foot).

REMARKS.—Records good below and fair above 500 second-feet. Discharge estimated for Oct. 16-27, Oct. 29 to Nov. 3. Slight diurnal regulation owing to operation of cotton mills upstream.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-------|-------|-------|-------|-------|
| 1 | 4.0 | 7 | 19.6 | 37 | 20 | 32 | 227 | 48 | 30 | 9.9 | 16.5 | 23 |
| 2 | 4.0 | 6 | 19.6 | 30 | 18.5 | 28 | 165 | 54 | 33 | 9.0 | 15.0 | 21 |
| 3 | 4.0 | 6 | 19.6 | 25 | 17.5 | 25 | 74 | 69 | 28 | 86 | 97 | 19.0 |
| 4 | 4.0 | 30 | 19.6 | 23 | 17.5 | 23 | 86 | 58 | 26 | 25 | 33 | 26 |
| 5 | 4.0 | 22 | 22 | 224 | 17.5 | 21 | 302 | 40 | 24 | 17.0 | 165 | 25 |
| 6 | 4.0 | 17.5 | 107 | 140 | 17.5 | 19.0 | 684 | 80 | 22 | 17.0 | 42 | 22 |
| 7 | 4.0 | 14.5 | 121 | 60 | 17.5 | 22 | 339 | 212 | 21 | 25 | 21 | 19.0 |
| 8 | 4.0 | 13.5 | 43 | 43 | 17.5 | 134 | 152 | 389 | 20 | 54 | 17.0 | 17.0 |
| 9 | 3.8 | 12.6 | 23 | 33 | 19.6 | 52 | 103 | 132 | 19.6 | 22 | 15.5 | 15.5 |
| 10 | 4.0 | 12.2 | 19.0 | 28 | 21 | 32 | 80 | 146 | 18.5 | 16.5 | 15.5 | 14.5 |
| 11 | 4.0 | 15.0 | 16.5 | 23 | 20 | 26 | 60 | 61 | 17.5 | 15.5 | 86 | 14.0 |
| 12 | 3.8 | 15.5 | 15.0 | 66 | 18.5 | 23 | 52 | 49 | 17.5 | 13.5 | 140 | 13.5 |
| 13 | 3.8 | 19.0 | 13.0 | 64 | 17.5 | 21 | 44 | 43 | 17.0 | 42 | 49 | 13.5 |
| 14 | 3.8 | 21 | 12.6 | 46 | 24 | 20 | 40 | 38 | 16.0 | 33 | 2,180 | 12.6 |
| 15 | 12.6 | 23 | 11.2 | 41 | 26 | 21 | 37 | 34 | 14.5 | 19.0 | 253 | 12.2 |
| 16 | 8 | 48 | 10.4 | 36 | 28 | 19.6 | 36 | 31 | 21 | 9.4 | 74 | 11.7 |
| 17 | 7 | 80 | 12.6 | 37 | 30 | 19.6 | 34 | 29 | 21 | 21 | 52 | 11.7 |
| 18 | 7 | 50 | 10.4 | 80 | 32 | 18.5 | 37 | 26 | 19.6 | 74 | 40 | 11.7 |
| 19 | 6 | 39 | 15.5 | 91 | 26 | 17.5 | 191 | 24 | 14.5 | 49 | 31 | 10.8 |
| 20 | 6 | 30 | 18.5 | 80 | 25 | 17.5 | 109 | 23 | 13.5 | 17.0 | 327 | 10.4 |
| 21 | 6 | 26 | 22 | 60 | 24 | 17.5 | 59 | 2,240 | 12.2 | 13.0 | 177 | 9.9 |
| 22 | 6 | 23 | 24 | 37 | 23 | 109 | 135 | 415 | 134 | 13.0 | 121 | 9.9 |
| 23 | 6 | 22 | 25 | 31 | 23 | 103 | 103 | 413 | 24 | 10.8 | 139 | 9.0 |
| 24 | 7 | 20 | 27 | 28 | 23 | 47 | 52 | 127 | 16.5 | 8.0 | 121 | 8.6 |
| 25 | 7 | 18.5 | 29 | 27 | 22 | 34 | 61 | 97 | 14.0 | 1,090 | 65 | 8.3 |
| 26 | 7 | 17.5 | 32 | 25 | 20 | 28 | 111 | 62 | 13.0 | 83 | 51 | 8.3 |
| 27 | 7 | 17.5 | 39 | 24 | 18.5 | 25 | 91 | 50 | 14.0 | 29 | 44 | 8.3 |
| 28 | 7.2 | 17.5 | 62 | 23 | 21 | 37 | 53 | 41 | 11.2 | 22 | 38 | 7.6 |
| 29 | 16 | 16.5 | 69 | 23 | ----- | 314 | 43 | 35 | 11.7 | 17.0 | 31 | 7.6 |
| 30 | 7 | 16.5 | 57 | 22 | ----- | 92 | 37 | 32 | 10.8 | 15.5 | 27 | 6.9 |
| 31 | 7 | ----- | 46 | 22 | ----- | 80 | ----- | 29 | ----- | 15.5 | 25 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 16 | 3.8 | 5.97 | 0.090 | 0.10 |
| November | 80 | 6 | 22.7 | .341 | .38 |
| December | 121 | 10.4 | 31.6 | .475 | .55 |
| January | 224 | 22 | 49.3 | .741 | .85 |
| February | 32 | 17.5 | 21.6 | .325 | .34 |
| March | 314 | 17.5 | 49.3 | .741 | .85 |
| April | 684 | 34 | 120 | 1.80 | 2.01 |
| May | 2,240 | 23 | 165 | 2.48 | 2.86 |
| June | 134 | 10.8 | 22.5 | .338 | .38 |
| July | 1,090 | 9.0 | 61.0 | .917 | 1.06 |
| August | 2,180 | 15.0 | 147 | 2.21 | 2.55 |
| September | 26 | 6.9 | 13.6 | .205 | .23 |
| The year | 2,240 | 3.8 | 59.6 | .896 | 12.16 |

NEUSE RIVER NEAR NORTHSIDE, N. C.

LOCATION.—Water-stage recorder at Fishdam Bridge, $1\frac{1}{2}$ miles downstream from Seaboard Air Line Railway bridge and 2 miles south of Northside, Granville County. Zero of gage is 226.32 feet above mean sea level.

DRAINAGE AREA.—574 square miles.

RECORDS AVAILABLE.—July, 1927, to September, 1931.

EXTREMES.—Maximum discharge during year, 5,680 second-feet Apr. 7 (gage height, 17.98 feet); minimum, 10 second-feet Oct. 8 (gage height, 1.02 feet). 1927-1931: Maximum discharge, 26,600 second-feet Oct. 3, 1929 (gage height, 28.64 feet); minimum, that of Oct. 8, 1930.

REMARKS.—Records good to 1,000 second-feet, fair to 2,000 second-feet, and poor beyond and for estimated periods, Mar. 22-27, Apr. 13. Flow regulated by storage at Durham Reservoir.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|
| 1..... | 27 | 33 | 27 | 292 | 148 | 166 | 751 | 364 | 388 | 111 | 174 | 204 |
| 2..... | 43 | 21 | 52 | 204 | 143 | 236 | 1,370 | 300 | 388 | 110 | 308 | 140 |
| 3..... | 41 | 21 | 44 | 201 | 146 | 236 | 829 | 548 | 364 | 105 | 908 | 134 |
| 4..... | 40 | 92 | 41 | 186 | 135 | 201 | 628 | 532 | 332 | 247 | 564 | 124 |
| 5..... | 33 | 236 | 37 | 248 | 135 | 178 | 931 | 436 | 324 | 388 | 2,110 | 118 |
| 6..... | 16 | 119 | 58 | 799 | 126 | 162 | 2,890 | 364 | 268 | 196 | 1,740 | 137 |
| 7..... | 12 | 65 | 472 | 620 | 126 | 158 | 5,250 | 287 | 145 | 148 | 607 | 98 |
| 8..... | 11 | 50 | 484 | 328 | 126 | 275 | 4,650 | 1,290 | 134 | 132 | 372 | 130 |
| 9..... | 13 | 41 | 177 | 236 | 124 | 500 | 2,210 | 1,150 | 143 | 140 | 316 | 122 |
| 10..... | 13 | 34 | 110 | 190 | 154 | 324 | 779 | 836 | 132 | 140 | 190 | 105 |
| 11..... | 11 | 37 | 82 | 196 | 180 | 236 | 612 | 644 | 132 | 89 | 636 | 118 |
| 12..... | 11 | 36 | 62 | 252 | 148 | 193 | 564 | 564 | 116 | 64 | 2,580 | 116 |
| 13..... | 11 | 36 | 58 | 644 | 135 | 177 | 500 | 564 | 121 | 55 | 2,060 | 100 |
| 14..... | 27 | 36 | 53 | 496 | 143 | 164 | 484 | 484 | 126 | 87 | 1,310 | 90 |
| 15..... | 62 | 28 | 49 | 332 | 180 | 154 | 468 | 404 | 119 | 100 | 3,330 | 118 |
| 16..... | 59 | 28 | 61 | 244 | 186 | 148 | 436 | 372 | 148 | 73 | 3,250 | 108 |
| 17..... | 27 | 30 | 67 | 252 | 186 | 161 | 388 | 332 | 148 | 60 | 1,040 | 108 |
| 18..... | 20 | 73 | 82 | 328 | 209 | 148 | 404 | 316 | 134 | 164 | 484 | 102 |
| 19..... | 21 | 86 | 127 | 664 | 212 | 148 | 420 | 356 | 120 | 100 | 404 | 87 |
| 20..... | 17 | 64 | 178 | 776 | 212 | 140 | 612 | 348 | 119 | 122 | 596 | 71 |
| 21..... | 14 | 48 | 276 | 496 | 252 | 132 | 580 | 679 | 106 | 97 | 1,730 | 67 |
| 22..... | 13 | 38 | 260 | 340 | 228 | 750 | 532 | 2,850 | 360 | 148 | 1,100 | 55 |
| 23..... | 13 | 38 | 236 | 284 | 193 | 600 | 836 | 4,110 | 752 | 94 | 1,050 | 43 |
| 24..... | 14 | 34 | 190 | 228 | 180 | 450 | 644 | 3,010 | 286 | 54 | 868 | 35 |
| 25..... | 13 | 40 | 164 | 212 | 170 | 300 | 516 | 1,210 | 148 | 1,070 | 660 | 32 |
| 26..... | 14 | 38 | 238 | 196 | 153 | 230 | 564 | 608 | 132 | 1,570 | 516 | 29 |
| 27..... | 13 | 33 | 971 | 191 | 137 | 200 | 740 | 532 | 116 | 336 | 468 | 23 |
| 28..... | 12 | 30 | 1,350 | 180 | 142 | 180 | 612 | 452 | 94 | 180 | 420 | 26 |
| 29..... | 12 | 20 | 817 | 172 | ----- | 662 | 484 | 420 | 81 | 129 | 356 | 27 |
| 30..... | 31 | 22 | 588 | 168 | ----- | 818 | 420 | 404 | 122 | 97 | 324 | 28 |
| 31..... | 42 | ----- | 476 | 158 | ----- | 436 | ----- | 404 | ----- | 89 | 308 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 62 | 11 | 22.8 | 0.040 | 0.05 |
| November..... | 236 | 20 | 50.2 | .087 | .10 |
| December..... | 1,350 | 27 | 254 | .443 | .51 |
| January..... | 799 | 158 | 326 | .568 | .65 |
| February..... | 252 | 124 | 165 | .287 | .30 |
| March..... | 818 | 132 | 286 | .498 | .57 |
| April..... | 5,250 | 388 | 1,040 | 1.81 | 2.02 |
| May..... | 4,110 | 287 | 812 | 1.41 | 1.63 |
| June..... | 752 | 81 | 204 | .355 | .40 |
| July..... | 1,570 | 54 | 210 | .366 | .42 |
| August..... | 3,330 | 174 | 993 | 1.73 | 1.99 |
| September..... | 204 | 23 | 89.8 | .156 | .17 |
| The year..... | 5,250 | 11 | 373 | .650 | 8.81 |

NEUSE RIVER NEAR CLAYTON, N. C.

LOCATION.—Water-stage recorder at iron bridge 3 miles east of Clayton, Johnson County. Zero of gage is 128.12 feet above mean sea level.

DRAINAGE AREA.—1,180 square miles, revised.

RECORDS AVAILABLE.—July, 1927, to September, 1931.

EXTREMES.—Maximum discharge during year, 11,000 second-feet Aug. 6 (gage height, 14.00 feet); minimum, 87 second-feet Oct. 7.

1927-1931: Maximum discharge, 28,100 second-feet Oct. 3, 1929 (gage height, 21.62 feet); minimum, that of Oct. 7, 1930.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|--------|-------|
| 1..... | 347 | 237 | 265 | 980 | 480 | 480 | 1,220 | 750 | 695 | 2 ¹⁵ | 5,740 | 545 |
| 2..... | 173 | 213 | 401 | 805 | 460 | 500 | 1,750 | 750 | 695 | 2 ¹⁵ | 1,940 | 522 |
| 3..... | 132 | 164 | 296 | 645 | 440 | 522 | 2,190 | 750 | 645 | 2 ¹⁵ | 1,610 | 460 |
| 4..... | 125 | 404 | 280 | 620 | 440 | 545 | 1,610 | 860 | 645 | 8 ¹⁰ | 1,850 | 1,680 |
| 5..... | 125 | 750 | 280 | 620 | 420 | 500 | 2,200 | 860 | 595 | 3, 6 ¹⁰ | 6,400 | 570 |
| 6..... | 98 | 575 | 329 | 805 | 420 | 460 | 4,580 | 750 | 595 | 1, 3 ¹⁰ | 10,600 | 420 |
| 7..... | 87 | 480 | 695 | 1,220 | 420 | 440 | 5,300 | 957 | 570 | 8 ¹⁵ | 8,800 | 382 |
| 8..... | 87 | 364 | 920 | 1,220 | 401 | 480 | 5,300 | 5,470 | 522 | 5 ¹⁰ | 3,080 | 382 |
| 9..... | 118 | 280 | 920 | 860 | 420 | 545 | 5,400 | 3,980 | 440 | 5 ¹⁵ | 1,040 | 346 |
| 10..... | 118 | 250 | 595 | 645 | 522 | 695 | 5,300 | 2,980 | 382 | 5 ¹⁰ | 920 | 346 |
| 11..... | 118 | 312 | 440 | 595 | 480 | 645 | 3,090 | 2,120 | 364 | 5 ¹⁵ | 2,980 | 329 |
| 12..... | 111 | 250 | 382 | 750 | 460 | 522 | 1,350 | 1,680 | 346 | 4 ¹⁰ | 5,500 | 296 |
| 13..... | 116 | 250 | 346 | 1,680 | 440 | 460 | 1,100 | 1,480 | 329 | 1, 0 ¹⁰ | 4,070 | 312 |
| 14..... | 257 | 280 | 280 | 1,610 | 460 | 440 | 920 | 1,280 | 312 | 1, 1 ¹⁰ | 4,160 | 296 |
| 15..... | 299 | 265 | 280 | 1,350 | 500 | 420 | 860 | 1,040 | 312 | 3 ¹⁵ | 4,160 | 280 |
| 16..... | 440 | 237 | 312 | 980 | 480 | 420 | 805 | 860 | 2,060 | 3 ¹⁴ | 3,710 | 265 |
| 17..... | 296 | 202 | 296 | 860 | 480 | 420 | 750 | 750 | 980 | 3 ¹⁹ | 4,070 | 296 |
| 18..... | 237 | 312 | 312 | 860 | 500 | 401 | 750 | 695 | 545 | 3 ¹² | 3,080 | 280 |
| 19..... | 192 | 250 | 420 | 1,100 | 545 | 401 | 750 | 645 | 440 | 4 ¹⁰ | 1,100 | 280 |
| 20..... | 132 | 280 | 595 | 1,540 | 570 | 382 | 805 | 645 | 382 | 3 ¹⁵ | 920 | 265 |
| 21..... | 173 | 312 | 645 | 1,610 | 570 | 364 | 920 | 1,090 | 346 | 6 ¹⁴ | 2,800 | 250 |
| 22..... | 182 | 296 | 695 | 1,180 | 570 | 652 | 980 | 4,250 | 329 | 3,430 | 3,710 | 265 |
| 23..... | 156 | 224 | 695 | 860 | 570 | 2,130 | 1,040 | 4,250 | 382 | 1,350 | 3,300 | 237 |
| 24..... | 156 | 192 | 620 | 750 | 500 | 1,960 | 1,220 | 4,610 | 980 | 5 ¹⁵ | 2,260 | 280 |
| 25..... | 164 | 280 | 500 | 695 | 480 | 1,420 | 1,100 | 4,700 | 645 | 1, 0 ¹⁰ | 1,750 | 265 |
| 26..... | 148 | 237 | 645 | 695 | 460 | 980 | 860 | 3,800 | 382 | 2, 0 ¹⁰ | 1,280 | 265 |
| 27..... | 125 | 213 | 1,870 | 645 | 440 | 750 | 980 | 1,220 | 346 | 3,220 | 920 | 346 |
| 28..... | 164 | 202 | 2,500 | 595 | 420 | 595 | 1,160 | 980 | 312 | 1, 3 ¹⁰ | 805 | 182 |
| 29..... | 213 | 202 | 2,660 | 595 | ----- | 980 | 980 | 860 | 296 | 5 ¹⁵ | 750 | 182 |
| 30..... | 329 | 192 | 1,870 | 522 | ----- | 1,220 | 805 | 750 | 280 | 4 ¹⁰ | 645 | 173 |
| 31..... | 296 | ----- | 1,220 | 500 | ----- | 1,480 | ----- | 750 | ----- | 6 ¹⁵ | 595 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 440 | 87 | 184 | 0.156 | 0.18 |
| November..... | 750 | 164 | 290 | .246 | .27 |
| December..... | 2,660 | 265 | 728 | .617 | .71 |
| January..... | 1,680 | 500 | 914 | .775 | .89 |
| February..... | 570 | 401 | 477 | .404 | .42 |
| March..... | 2,130 | 364 | 716 | .607 | .70 |
| April..... | 5,400 | 750 | 1,870 | 1.58 | 1.76 |
| May..... | 5,470 | 645 | 1,840 | 1.56 | 1.80 |
| June..... | 2,060 | 280 | 538 | .456 | .51 |
| July..... | 3,680 | 265 | 992 | .841 | .97 |
| August..... | 10,600 | 595 | 3,050 | 2.58 | 2.97 |
| September..... | 1,680 | 173 | 367 | .311 | .35 |
| The year..... | 10,600 | 87 | 1,000 | .847 | 11.53 |

NEUSE RIVER NEAR GOLDSBORO, N. C.

LOCATION.—Water-stage recorder a quarter of a mile above highway bridge on State highway 40, 2½ miles upstream from Stoney Creek, and 3 miles south of Goldsboro, Wayne County. Chain gage on Atlantic Coast Line Railroad bridge half a mile downstream used prior to July 23.

DRAINAGE AREA.—2,380 square miles.

RECORDS AVAILABLE.—February, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 11,400 second-feet Aug. 18 (gage height, 17.50 feet); minimum (estimated), 130 second-feet Oct. 9.

1930-31: Maximum discharge, that of Aug. 18, 1931; minimum, that of Oct. 9, 1930.

Maximum stage known, 25.3 feet Oct. 5, 1929 (discharge, 38,600 second-feet).

REMARKS.—Records good except those estimated which are fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 1..... | 210 | 256 | 334 | 3,200 | 1,180 | 930 | 2,780 | 1,780 | 1,380 | 384 | 680 | 1,720 |
| 2..... | 188 | 312 | 384 | 2,380 | 1,080 | 980 | 3,080 | 1,530 | 1,180 | 358 | 2,320 | 1,580 |
| 3..... | | 256 | 412 | 1,930 | 1,030 | 1,180 | 3,020 | 1,480 | 1,130 | 334 | 4,020 | 1,420 |
| 4..... | | 224 | 540 | 1,630 | 980 | 1,330 | 3,500 | 1,630 | 1,080 | 312 | 4,680 | 1,380 |
| 5..... | | 200 | 274 | 506 | 1,430 | 930 | 3,560 | 1,780 | 980 | 610 | 5,330 | 1,710 |
| 6..... | | | 358 | 474 | 1,330 | 930 | 3,800 | 1,780 | 930 | 1,830 | 5,680 | 2,310 |
| 7..... | | | 610 | 506 | 1,330 | 930 | 4,870 | 1,680 | 890 | 3,920 | 5,750 | 1,920 |
| 8..... | | | 574 | 574 | 1,580 | 890 | 5,990 | 1,980 | 890 | 4,040 | 6,310 | 1,820 |
| 9..... | | | 574 | 850 | 1,980 | 890 | 6,550 | 3,080 | 850 | 2,840 | 7,210 | 1,520 |
| 10..... | | | 474 | 1,030 | 1,680 | 890 | 7,110 | 4,660 | 810 | 1,830 | 8,510 | 1,010 |
| 11..... | | | 384 | 980 | 1,430 | 980 | 7,410 | 5,360 | 730 | 1,680 | 9,420 | 830 |
| 12..... | | | 334 | 890 | 1,380 | 1,080 | 7,740 | 6,060 | 650 | 1,580 | 9,780 | 764 |
| 13..... | | | 412 | 730 | 1,730 | 1,180 | 7,830 | 6,550 | 610 | 1,430 | 9,060 | 742 |
| 14..... | | | 384 | 690 | 2,780 | 1,130 | 7,650 | 6,060 | 540 | 1,430 | 8,400 | 640 |
| 15..... | | | 384 | 610 | 3,740 | 1,180 | 890 | 5,990 | 506 | 2,540 | 8,620 | 620 |
| 16..... | | | | | | | | | | | | |
| 17..... | | | 412 | 540 | 3,920 | 1,280 | 850 | 3,080 | 2,900 | 610 | 2,720 | 9,780 |
| 18..... | | | 412 | 574 | 3,320 | 1,380 | 810 | 2,180 | 2,180 | 1,180 | 2,380 | 11,000 |
| 19..... | | | 474 | 358 | 650 | 2,720 | 1,380 | 850 | 1,930 | 3,020 | 1,830 | 11,200 |
| 20..... | | | 358 | 358 | 690 | 2,330 | 1,430 | 810 | 1,430 | 2,780 | 1,180 | 10,400 |
| 21..... | | | 292 | 384 | 810 | 2,330 | 1,430 | 770 | 1,830 | 1,280 | 1,380 | 9,420 |
| 22..... | | | | | | | | | | | | |
| 23..... | | | 274 | 384 | 1,080 | 2,640 | 1,430 | 810 | 1,280 | 1,080 | 1,180 | 8,400 |
| 24..... | | | 224 | 412 | 1,380 | 2,640 | 1,380 | 930 | 1,630 | 770 | 1,330 | 7,580 |
| 25..... | | | 188 | 412 | 1,480 | 2,600 | 1,330 | 1,380 | 3,620 | 610 | 1,180 | 7,480 |
| 26..... | | | 180 | 384 | 1,430 | 2,180 | 1,280 | 2,280 | 4,870 | 540 | 3,570 | 8,290 |
| 27..... | | | 180 | 384 | 1,330 | 1,830 | 1,230 | 3,560 | 2,600 | 5,500 | 574 | 3,570 |
| 28..... | | | | | | | | | | | | |
| 29..... | | | 188 | 334 | 1,230 | 1,630 | 1,080 | 3,740 | 2,660 | 6,200 | 930 | 2,320 |
| 30..... | | | 188 | 334 | 1,380 | 1,480 | 1,030 | 3,320 | 2,380 | 6,550 | 770 | 2,420 |
| 31..... | | | 180 | 334 | 2,330 | 1,430 | 930 | 2,230 | 2,180 | 6,690 | 506 | 3,210 |
| 1..... | | | 188 | 312 | 3,320 | 1,330 | ----- | 1,780 | 2,130 | 6,130 | 474 | 3,150 |
| 2..... | | | 210 | 334 | 3,860 | 1,280 | ----- | 1,830 | 1,930 | 3,500 | 384 | 1,660 |
| 3..... | | | 224 | 3,980 | 1,230 | ----- | 2,230 | ----- | 1,780 | ----- | 852 | 1,980 |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 474 | ----- | 217 | 0.091 | 0.10 |
| November..... | 610 | 224 | 379 | .159 | .18 |
| December..... | 3,980 | 334 | 1,150 | .483 | .56 |
| January..... | 3,920 | 1,230 | 2,070 | .870 | 1.00 |
| February..... | 1,430 | 890 | 1,140 | .479 | .50 |
| March..... | 3,740 | 770 | 1,470 | .618 | .71 |
| April..... | 7,830 | 1,830 | 3,820 | 1.61 | 1.80 |
| May..... | 6,690 | 1,230 | 3,430 | 1.44 | 1.66 |
| June..... | 3,020 | 384 | .972 | .408 | .46 |
| July..... | 4,040 | 312 | 1,900 | .798 | .92 |
| August..... | 11,200 | 680 | 7,280 | 3.06 | 3.53 |
| September..... | 2,310 | 454 | 938 | .394 | .44 |
| The year..... | 11,200 | ----- | 2,080 | .874 | 11.86 |

NEUSE RIVER AT KINSTON, N. C.

LOCATION.—Chain gage on bridge on State highway 12 at Kinston, Lenoir County. Zero of gage is 10.00 feet above mean sea level.

DRAINAGE AREA.—2,700 square miles.

RECORDS AVAILABLE.—February, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 11,600 second-feet Aug. 23 (gage height, 16.00 feet); minimum, 278 second-feet Oct. 13 (gage height, 1.66 feet).

1930-31: Maximum discharge, that of Aug. 23, 1931; minimum, that of Oct. 13, 1930.

Maximum stage known, 24.6 feet in July, 1919 (discharge, about 39,000 second-feet).

REMARKS.—Records fair except those for estimated periods, Jan. 22 to Mar 7, July 5 to Aug. 6, Aug. 8, which are poor.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|
| 1..... | 388 | 440 | 604 | 3, 640 | 1, 400 | 1, 300 | 2, 520 | 2, 130 | 3, 640 | 576 | 2, 700 | 4, 270 |
| 2..... | 362 | 492 | 694 | 3, 520 | | | 3, 000 | 1, 960 | 1, 960 | 546 | | 2, 180 |
| 3..... | 466 | 548 | 664 | 2, 820 | | | 3, 120 | 1, 860 | 1, 520 | 488 | | 1, 820 |
| 4..... | 388 | 576 | 694 | 2, 190 | | | 2, 880 | 1, 760 | 1, 340 | 488 | | 1, 920 |
| 5..... | 440 | 604 | 758 | 2, 140 | | | 3, 060 | 1, 720 | 1, 260 | | | 1, 920 |
| 6..... | 388 | 548 | 758 | 2, 090 | 1, 200 | 1, 390 | 4, 590 | 1, 820 | 1, 260 | 1, 400 | 5, 000 | 1, 660 |
| 7..... | 362 | 520 | 758 | 2, 040 | | | | | | | | 2, 130 |
| 8..... | 338 | 824 | 758 | 2, 040 | | | | | | | | 2, 180 |
| 9..... | 302 | 892 | 790 | 2, 090 | | | | | | | | 1, 960 |
| 10..... | 290 | 790 | 996 | 2, 190 | | | | | | | | 1, 860 |
| 11..... | 338 | 726 | 1, 300 | 2, 240 | 1, 300 | 1, 260 | 6, 270 | 4, 510 | 977 | 2, 700 | 6, 930 | 1, 760 |
| 12..... | 314 | 634 | 1, 300 | 2, 240 | | | | | | | | 1, 720 |
| 13..... | 290 | 604 | 1, 180 | 2, 040 | | | | | | | | 1, 620 |
| 14..... | 314 | 634 | 1, 030 | 2, 090 | | | | | | | | 1, 570 |
| 15..... | 314 | 634 | 996 | 2, 880 | | | | | | | | 1, 480 |
| 16..... | 314 | 604 | 926 | 3, 460 | 1, 020 | 1, 060 | 7, 530 | 5, 650 | 868 | 2, 100 | 10, 800 | 1, 390 |
| 17..... | 314 | 604 | 892 | 3, 700 | | | | | | | | 1, 300 |
| 18..... | 440 | 604 | 1, 070 | 3, 580 | | | | | | | | 1, 260 |
| 19..... | 604 | 576 | 1, 140 | 3, 160 | | | | | | | | 1, 880 |
| 20..... | 548 | 576 | 1, 140 | 2, 660 | | | | | | | | 1, 100 |
| 21..... | 492 | 576 | 1, 180 | 2, 490 | 1, 700 | 1, 020 | 2, 080 | 1, 720 | 940 | 3, 000 | 10, 800 | 1, 020 |
| 22..... | 440 | 604 | 1, 260 | | | | | | | | | 940 |
| 23..... | 388 | 576 | 1, 560 | | | | | | | | | 1, 260 |
| 24..... | 362 | 576 | 1, 650 | | | | | | | | | 799 |
| 25..... | 338 | 604 | 1, 650 | 2, 200 | | | | | | | | 576 |
| 26..... | 338 | 576 | 1, 600 | | 1, 400 | 3, 120 | 2, 760 | 4, 590 | 700 | 8, 000 | 9, 320 | 546 |
| 27..... | 338 | 548 | 1, 740 | | | | | | | | | 668 |
| 28..... | 362 | 520 | 1, 890 | | | | | | | | | 765 |
| 29..... | 388 | 520 | 2, 290 | | | | | | | | | 833 |
| 30..... | 440 | 548 | 2, 820 | 1, 600 | | | | | | | | 868 |
| 31..... | 466 | | 3, 400 | | | 2, 460 | 2, 460 | 5, 750 | | 3, 200 | 6, 710 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|--------|-----------------|-------------------|
| October..... | 604 | 290 | 383 | 0.142 | 0.16 |
| November..... | 892 | 440 | 603 | .223 | .25 |
| December..... | 3, 400 | 604 | 1, 270 | .470 | .64 |
| January..... | 3, 700 | | 2, 440 | .904 | 1.04 |
| February..... | | | 1, 400 | .509 | .64 |
| March..... | | 977 | 1, 600 | .593 | .68 |
| April..... | 7, 910 | 2, 080 | 4, 040 | 1.50 | 1.67 |
| May..... | 6, 270 | 1, 680 | 3, 500 | 1.30 | 1.50 |
| June..... | 3, 640 | 608 | 1, 100 | .407 | .45 |
| July..... | | 488 | 2, 220 | .833 | .95 |
| August..... | 11, 200 | | 7, 060 | 2.94 | 3.41 |
| September..... | 4, 270 | 546 | 1, 470 | .544 | .61 |
| The year..... | 11, 200 | 290 | 2, 350 | .870 | 11.80 |

LOCATION.—Water-stage recorder at head of Durham water-supply pond, 1½ miles upstream from mouth of Dial Creek and county highway bridge at Bahama, Durham County.

RECORDS AVAILABLE.—July, 1925, to September, 1931.

EXTREMES.—Maximum discharge during year, 6,880 second-feet May 21 (gage height, 8.54 feet); minimum, 1.5 second-feet Oct. 29 (gage height, 0.58 foot).

1925-1931: Maximum discharge, 12,500 second-foot Oct. 2, 1929 (gage height, 10.85 feet); minimum, 0.5 second-foot Sept. 27, 30, Oct. 1, 1925 (gage height, 0.50 foot).

REMARKS.—Records good except those for estimated periods, May 8-10, June 5-8, which are fair.

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|------|------|------|------|------|-------|-------|------|------|-------|-------|
| 1 | 4.6 | 2.2 | 7.2 | 52 | 32 | 98 | 849 | 58 | 52 | 15.9 | 26 | 36 |
| 2 | 4.3 | 2.2 | 6.4 | 41 | 32 | 132 | 424 | 438 | 53 | 17.1 | 414 | 35 |
| 3 | 4.2 | 2.5 | 5.7 | 42 | 34 | 78 | 215 | 419 | 48 | 10.1 | 119 | 32 |
| 4 | 4.2 | 5.6 | 5.2 | 36 | 27 | 62 | 240 | 173 | 45 | 11.4 | 71 | 29 |
| 5 | 3.9 | 6.2 | 5.0 | 209 | 29 | 56 | 1,240 | 110 | 37 | 51 | 622 | 27 |
| 6 | 3.5 | 5.7 | 8.3 | 486 | 27 | 48 | 2,400 | 89 | 56 | 32 | 116 | 21 |
| 7 | 3.2 | 7.7 | 149 | 148 | 30 | 46 | 846 | 269 | 50 | 28 | 62 | 27 |
| 8 | 2.9 | 8.3 | 63 | 78 | 23 | 223 | 373 | 1,150 | 43 | 26 | 45 | 19.1 |
| 9 | 2.9 | 8.0 | 37 | 62 | 31 | 161 | 248 | 250 | 37 | 22 | 30 | 17.5 |
| 10 | 2.9 | 7.7 | 27 | 50 | 32 | 86 | 193 | 260 | 30 | 22 | 36 | 17.5 |
| 11 | 2.8 | 6.7 | 20 | 46 | 51 | 63 | 154 | 168 | 27 | 19.1 | 2,480 | 21 |
| 12 | 2.6 | 6.9 | 17.5 | 46 | 40 | 53 | 130 | 123 | 26 | 15.1 | 903 | 20 |
| 13 | 2.5 | 6.4 | 14.7 | 176 | 34 | 47 | 110 | 105 | 21 | 17.5 | 239 | 13.6 |
| 14 | 2.3 | 5.7 | 13.6 | 98 | 40 | 43 | 97 | 87 | 15.9 | 15.5 | 1,870 | 16.3 |
| 15 | 2.8 | 5.7 | 12.5 | 63 | 72 | 42 | 88 | 71 | 21 | 12.8 | 568 | 16.9 |
| 16 | 4.3 | 6.4 | 11.8 | 50 | 54 | 43 | 78 | 63 | 154 | 13.6 | 188 | 11.4 |
| 17 | 2.7 | 6.7 | 12.8 | 51 | 50 | 42 | 70 | 54 | 54 | 15.9 | 119 | 10.8 |
| 18 | 2.2 | 6.0 | 12.0 | 87 | 86 | 42 | 73 | 48 | 33 | 26 | 85 | 12.5 |
| 19 | 1.8 | 11.1 | 12.0 | 308 | 67 | 36 | 89 | 48 | 27 | 24 | 65 | 15.5 |
| 20 | 1.7 | 11.8 | 14.3 | 196 | 56 | 37 | 145 | 46 | 24 | 25 | 86 | 12.0 |
| 21 | 1.8 | 12.0 | 24 | 112 | 77 | 34 | 92 | 3,450 | 17.5 | 15.9 | 182 | 10.4 |
| 22 | 1.8 | 11.1 | 36 | 77 | 66 | 302 | 172 | 653 | 120 | 21 | 386 | 9.8 |
| 23 | 1.7 | 10.1 | 34 | 59 | 52 | 432 | 295 | 1,040 | 147 | 32 | 450 | 11.8 |
| 24 | 1.7 | 8.9 | 32 | 54 | 50 | 180 | 130 | 268 | 44 | 26 | 318 | 72 |
| 25 | 1.7 | 8.0 | 22 | 48 | 42 | 116 | 96 | 180 | 24 | 519 | 138 | 27 |
| 26 | 1.6 | 7.4 | 26 | 46 | 37 | 83 | 132 | 140 | 21 | 68 | 86 | 19.1 |
| 27 | 1.5 | 6.7 | 394 | 46 | 36 | 63 | 145 | 104 | 18.3 | 36 | 68 | 13.9 |
| 28 | 1.5 | 5.7 | 325 | 43 | 36 | 57 | 89 | 81 | 17.9 | 106 | 68 | 12.0 |
| 29 | 1.9 | 5.5 | 130 | 40 | --- | 729 | 73 | 69 | 17.5 | 34 | 52 | 10.4 |
| 30 | 3.3 | 5.7 | 93 | 36 | --- | 215 | 63 | 64 | 14.7 | 30 | 46 | 7.4 |
| 31 | 2.8 | --- | 65 | 36 | --- | 132 | --- | 52 | --- | 32 | 46 | --- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 4.6 | 1.5 | 2.70 | 0.018 | 0.02 |
| November..... | 12.0 | 2.2 | 7.02 | .047 | .05 |
| December..... | 394 | 5.0 | 52.8 | .352 | .41 |
| January..... | 486 | 36 | 94.3 | .629 | .73 |
| February..... | 86 | 23 | 44.4 | .296 | .31 |
| March..... | 729 | 34 | 122 | .813 | .94 |
| April..... | 2,400 | 63 | 312 | 2.08 | 2.32 |
| May..... | 3,450 | 46 | 327 | 2.18 | 2.51 |
| June..... | 154 | 14.7 | 43.2 | .288 | .32 |
| July..... | 519 | 10.1 | 43.2 | .288 | .33 |
| August..... | 2,480 | 26 | 322 | 2.15 | 2.48 |
| September..... | 72 | 7.4 | 20.1 | .134 | .15 |
| The year..... | 3,450 | 1.5 | 117 | .780 | 10.57 |

FLAT RIVER AT DAM NEAR BAHAMA, N. C.

LOCATION.—Water-stage recorder just downstream from new Durham municipal dam at old Tilley mill site, 4 miles above junction with Eno River, and 3 miles southeast of Bahama, Durham County.

DRAINAGE AREA.—171 square miles.

RECORDS AVAILABLE.—August, 1927, to September, 1931.

EXTREMES.—Maximum discharge during year, 3,400 second-feet Aug. 11 (gage height, 9.95 feet); minimum, 0.6 second-foot several times during October and July (gage height, 0.95 foot).

1927-1931: Maximum discharge, 11,400 second-feet Oct. 2, 1929 (gage height, 16.72 feet); minimum, 0.4 second-foot Dec. 21-24, 1928 (gage height, 0.91 foot).

REMARKS.—Records excellent except those for estimated periods, Oct. 6-10, Jan. 12-17, Mar. 29 to Apr. 3, which are good. Flow regulated by storage reservoir. Diversion for Durham water supply above station.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-------|-------|------|-------|-------|
| 1 | 30 | 2.8 | 14 | 54 | 58 | 54 | 205 | 152 | 280 | 82 | 10 | 64 |
| 2 | 30 | 3.2 | 3.2 | 60 | 60 | 64 | 203 | 35 | 253 | 86 | 48 | 66 |
| 3 | 31 | 2.4 | 3.6 | 58 | 56 | 62 | 198 | 88 | 244 | 83 | 189 | 61 |
| 4 | 20 | 1.3 | 3.2 | 56 | 56 | 61 | 240 | 208 | 234 | 69 | 220 | 68 |
| 5 | .7 | 1.1 | 2.0 | 60 | 58 | 61 | 489 | 212 | 232 | 56 | 208 | 57 |
| 6 | .7 | .8 | 2.4 | 40 | 56 | 64 | 2,230 | 134 | 92 | 74 | 224 | 37 |
| 7 | .7 | .8 | .9 | 44 | 52 | 58 | 1,000 | 112 | 50 | 69 | 264 | 63 |
| 8 | .7 | .8 | .9 | 42 | 50 | 54 | 514 | 216 | 62 | 63 | 260 | 65 |
| 9 | .7 | .9 | 5.1 | 38 | 58 | 64 | 356 | 231 | 56 | 69 | 152 | 64 |
| 10 | .7 | .9 | 2.8 | 58 | 72 | 70 | 287 | 217 | 65 | 52 | 45 | 66 |
| 11 | .7 | .9 | .8 | 64 | 58 | 61 | 242 | 252 | 66 | 21 | 612 | 65 |
| 12 | .7 | .9 | .9 | 71 | 63 | 66 | 192 | 262 | 59 | 17 | 1,310 | 67 |
| 13 | .7 | .8 | .8 | 63 | 62 | 64 | 232 | 260 | 77 | 22 | 418 | 55 |
| 14 | .8 | .9 | .8 | 62 | 75 | 64 | 240 | 252 | 59 | 18 | 1,150 | 70 |
| 15 | .7 | .9 | 6.0 | 47 | 53 | 56 | 249 | 210 | 72 | 22 | 939 | 66 |
| 16 | .7 | 1.1 | 26 | 63 | 66 | 66 | 221 | 227 | 66 | 24 | 321 | 68 |
| 17 | .8 | 14 | 18 | 59 | 62 | 65 | 208 | 192 | 70 | 34 | 280 | 68 |
| 18 | .9 | 15 | 80 | 46 | 64 | 65 | 230 | 234 | 71 | 28 | 253 | 62 |
| 19 | .8 | 9.0 | 60 | 62 | 64 | 64 | 194 | 249 | 70 | 21 | 219 | 42 |
| 20 | .8 | 1.3 | 66 | 60 | 61 | 66 | 229 | 268 | 65 | 24 | 232 | 38 |
| 21 | .8 | .7 | 68 | 58 | 57 | 58 | 243 | 669 | 51 | 30 | 220 | 15 |
| 22 | .7 | .7 | 62 | 64 | 52 | 54 | 236 | 1,020 | 67 | 10 | 215 | .9 |
| 23 | .8 | .7 | 62 | 65 | 62 | 62 | 234 | 927 | 65 | .9 | 179 | 1.1 |
| 24 | .9 | .7 | 60 | 55 | 64 | 66 | 238 | 417 | 66 | 1.6 | 272 | 1.3 |
| 25 | .8 | .8 | 60 | 52 | 62 | 62 | 225 | 298 | 67 | 53 | 254 | 1.1 |
| 26 | .8 | .8 | 68 | 58 | 62 | 68 | 192 | 273 | 73 | 71 | 281 | 1.6 |
| 27 | .8 | .8 | 72 | 56 | 63 | 61 | 230 | 274 | 60 | 81 | 278 | 1.3 |
| 28 | .8 | .8 | 100 | 54 | 61 | 64 | 235 | 260 | 36 | 71 | 236 | 1.1 |
| 29 | .9 | .8 | 184 | 58 | ----- | 42 | 222 | 258 | 73 | 39 | 222 | .9 |
| 30 | .9 | .8 | 182 | 59 | ----- | 72 | 214 | 242 | 84 | 37 | 182 | 11 |
| 31 | 1.6 | ----- | 122 | 55 | ----- | 83 | ----- | 289 | ----- | 37 | 204 | ----- |

| Month | Maximum | Minimum | Mean | Month | Maximum | Minimum | Mean |
|----------|---------|---------|------|-----------|---------|---------|------|
| October | 31 | 0.7 | 4.28 | May | 1,020 | 35 | 288 |
| November | 15 | .7 | 2.25 | June | 280 | 36 | 96.2 |
| December | 184 | .8 | 43.1 | July | 86 | .9 | 44.0 |
| January | 71 | 38 | 56.2 | August | 1,310 | 10 | 319 |
| February | 75 | 50 | 60.2 | September | 70 | .9 | 41.6 |
| March | 83 | 42 | 62.6 | | | | |
| April | 2,230 | 192 | 341 | The year | 2,230 | .7 | 114 |

DIAL CREEK NEAR BAHAMA, N. C.¹

LOCATION.—Water-stage recorder three-eighths of a mile upstream from confluence with Flat River and Lake Michie and 1½ miles northeast of Bahama, Durham County.

DRAINAGE AREA.—4.9 square miles.

RECORDS AVAILABLE.—October, 1925, to September, 1931.

EXTREMES.—Maximum discharge during year, 237 second-feet Aug. 11 (gage height, 3.99 feet); practically no flow at times in October (gage height, 0.03 foot).

1925-1931: Maximum discharge, 575 second-feet Apr. 27, 1928 (gage height, 5.60 feet); practically no flow several times in September and October, 1926, and 1930.

REMARKS.—Records good except those above 10 second-feet and those estimated, which are fair. Discharge determined by weir formulae.

Daily and monthly discharge, in second-feet, 1929-1931

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|------|-------|------|------|-------|
| 1929-30 | | | | | | | | | | | | |
| 1..... | 139 | 2.00 | 3.05 | 3.05 | 3.87 | 2.84 | 2.28 | 1.59 | 1.20 | 0.54 | 0.87 | 0 |
| 2..... | 184 | 2.00 | 11.6 | 2.84 | 9.1 | 3.05 | 2.22 | 1.41 | .94 | 1.82 | .50 | 0 |
| 3..... | 13.2 | 6.1 | 12.8 | 2.65 | 15.2 | 2.71 | 3.38 | 1.32 | .84 | .58 | .48 | 0 |
| 4..... | 6.6 | 14.8 | 6.1 | 2.46 | 33 | 2.65 | 3.33 | 1.24 | .74 | .46 | .41 | 0 |
| 5..... | 4.91 | 5.9 | 4.91 | 2.46 | 19.0 | 2.58 | 2.65 | 1.20 | .71 | .39 | .31 | 0 |
| 6..... | 4.46 | 3.95 | 4.46 | 2.40 | 9.6 | 2.46 | 11.2 | 1.36 | .66 | .43 | .41 | 0 |
| 7..... | 3.71 | 3.33 | 4.04 | 2.34 | 7.1 | 6.2 | 6.4 | 1.36 | .84 | .41 | .41 | 0 |
| 8..... | 3.19 | 2.91 | 4.12 | 2.28 | 5.9 | 5.0 | 4.20 | 1.16 | 3.25 | .39 | .43 | .02 |
| 9..... | 2.78 | 2.58 | 3.64 | 2.28 | 5.1 | 3.71 | 3.19 | 1.04 | 2.87 | .33 | .26 | .01 |
| 10..... | 2.58 | 2.34 | 3.33 | 2.22 | 4.82 | 3.12 | 2.78 | *1.0 | 5.3 | .26 | .25 | .01 |
| 11..... | 2.46 | 2.28 | 3.19 | 2.22 | 4.29 | 3.05 | 2.71 | *1.0 | 1.54 | .20 | .15 | .01 |
| 12..... | 2.34 | 6.2 | 2.91 | 2.28 | 3.95 | 2.91 | 2.71 | *1.0 | 1.12 | .16 | .12 | .01 |
| 13..... | 2.22 | 12.9 | 2.84 | 2.58 | 3.95 | 2.65 | 2.58 | *1.0 | 1.12 | 6.2 | .07 | 4.37 |
| 14..... | 2.11 | 5.6 | 2.78 | 4.04 | 6.4 | 2.52 | 2.46 | *1.7 | 1.04 | 2.48 | .05 | 1.46 |
| 15..... | 2.00 | 4.37 | 2.84 | 15.4 | 4.12 | 2.46 | 2.34 | *40 | .87 | 2.56 | .06 | .20 |
| 16..... | 1.94 | 3.64 | 2.78 | 9.0 | 3.87 | 2.52 | 2.22 | *2.8 | .71 | 1.24 | .12 | .10 |
| 17..... | 1.84 | 3.41 | 2.71 | 5.6 | 3.79 | 2.52 | 2.22 | *2.4 | 5.5 | 32 | 2.79 | .06 |
| 18..... | 1.79 | 6.2 | 3.95 | 23 | 3.64 | 2.65 | 3.05 | *2.4 | 8.5 | 7.3 | .60 | .07 |
| 19..... | 1.69 | 3.87 | 4.64 | 10.8 | 3.48 | 6.1 | 3.87 | *20 | 3.71 | 2.34 | .60 | .26 |
| 20..... | 1.79 | 3.26 | 3.48 | 6.9 | 3.33 | 4.20 | 2.98 | *2.5 | 1.74 | 1.59 | .26 | .84 |
| 21..... | 2.11 | 2.98 | 3.26 | 6.0 | 3.26 | 3.19 | 2.52 | *1.7 | 1.41 | 1.04 | .20 | .37 |
| 22..... | 4.64 | 2.84 | 3.19 | 9.1 | 3.19 | 3.05 | 2.28 | *1.4 | 1.16 | .77 | .15 | .25 |
| 23..... | 2.52 | 6.0 | 4.82 | 6.9 | 3.12 | 2.98 | 2.00 | *1.3 | .94 | .66 | .15 | .16 |
| 24..... | 2.16 | 6.6 | 4.64 | 5.2 | 3.05 | 2.98 | 1.89 | 1.32 | .77 | 1.83 | .15 | .14 |
| 25..... | 1.79 | 6.3 | 3.64 | 4.64 | 2.98 | 3.05 | 1.74 | 1.41 | .66 | 4.79 | .11 | .11 |
| 26..... | 1.50 | 14.2 | 3.64 | 4.46 | 2.91 | 3.05 | 1.74 | 1.12 | .79 | 1.04 | .07 | .09 |
| 27..... | 1.50 | 8.0 | 3.79 | 4.20 | 2.84 | 2.65 | 1.94 | 1.01 | 1.45 | .77 | .05 | .06 |
| 28..... | 1.45 | 5.3 | 3.48 | 4.29 | 2.78 | 2.58 | 1.89 | .94 | .66 | .71 | .03 | .04 |
| 29..... | 1.45 | 4.64 | 3.87 | 3.79 | ----- | 2.58 | 1.74 | .87 | .50 | .58 | .03 | .02 |
| 30..... | 2.46 | 3.33 | 3.33 | 4.12 | ----- | 2.52 | 1.69 | 2.46 | .43 | .48 | .01 | .01 |
| 31..... | 2.28 | ----- | 3.19 | 3.79 | ----- | 2.34 | ----- | 1.59 | ----- | 1.08 | 0 | ----- |

¹ Formerly published as Dial Creek at Bahama, N. C.

Daily and monthly discharge, in second-feet, of Dial Creek near Bahama, N. C.,
1929-1931—Continued

| Days | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|------|-------|------|------|-------|
| 1930-31 | | | | | | | | | | | | |
| 1----- | .01 | .16 | .68 | 1.94 | 1.28 | 3.26 | *20 | 2.05 | 1.04 | .37 | 1.88 | .35 |
| 2----- | .00 | .14 | .66 | 2.34 | 1.24 | 2.40 | *10 | 5.0 | .97 | .23 | 2.39 | .31 |
| 3----- | .00 | .13 | .48 | 1.74 | 1.24 | 2.00 | *7 | 3.41 | .80 | .20 | .60 | .31 |
| 4----- | .00 | 3.26 | .43 | 1.74 | 1.20 | 1.84 | 6.8 | 2.40 | .77 | .26 | 4.70 | .33 |
| 5----- | .00 | 1.35 | .43 | 6.7 | 1.20 | 1.79 | 20 | 2.05 | .74 | .30 | 7.5 | .26 |
| 6----- | .00 | .55 | 1.99 | 4.91 | 1.20 | 1.64 | 32 | 1.94 | 2.84 | .26 | .74 | .19 |
| 7----- | .00 | .41 | 4.85 | 2.78 | .97 | 1.84 | 16.5 | 4.07 | .63 | .26 | .43 | .16 |
| 8----- | .00 | .26 | 1.74 | 2.28 | .94 | 6.0 | 8.4 | 5.8 | .50 | .18 | .31 | .13 |
| 9----- | .00 | .28 | 1.12 | 1.84 | 1.08 | 3.05 | 5.8 | 2.84 | .46 | .14 | .35 | *.10 |
| 10----- | .00 | .30 | .90 | 1.69 | 1.59 | 2.22 | 4.37 | 2.46 | .39 | .18 | 1.10 | *.08 |
| 11----- | .00 | .31 | .84 | 1.36 | 1.28 | 1.94 | 3.56 | 1.84 | .37 | .18 | 59 | *.07 |
| 12----- | .01 | .33 | .74 | 2.48 | 1.24 | 1.59 | 3.05 | 2.11 | .35 | .10 | 5.7 | .05 |
| 13----- | .01 | .48 | .63 | 3.48 | 1.16 | 1.41 | 2.71 | 2.52 | .26 | .07 | 2.40 | .04 |
| 14----- | .01 | .60 | .63 | 2.28 | 2.02 | 1.32 | 2.52 | 1.84 | .26 | .05 | 6.1 | .03 |
| 15----- | .02 | .62 | .63 | 1.74 | 1.74 | 1.36 | 2.40 | 1.45 | .23 | .06 | 2.62 | .03 |
| 16----- | .31 | 1.05 | .60 | 1.54 | 1.41 | 1.32 | 2.22 | 1.32 | .46 | .04 | 1.24 | .03 |
| 17----- | .07 | 1.79 | .37 | 1.54 | 1.69 | 1.24 | 2.11 | 1.12 | .41 | .04 | .87 | .03 |
| 18----- | .03 | 1.04 | .84 | 1.59 | 1.79 | 1.20 | 2.65 | 1.12 | .25 | .04 | .68 | .02 |
| 19----- | .03 | .84 | 1.41 | 6.7 | 1.54 | 1.16 | 3.12 | 1.04 | .19 | .04 | .80 | .03 |
| 20----- | .02 | .68 | 1.79 | 3.95 | 1.50 | 1.16 | 2.84 | .97 | .18 | .03 | 3.00 | .03 |
| 21----- | .01 | .63 | 1.69 | 2.91 | 1.69 | 1.08 | 2.28 | 14.5 | .14 | .04 | 4.01 | .03 |
| 22----- | .01 | .55 | 1.64 | 2.22 | 1.36 | *25 | 4.69 | 7.6 | 11.6 | .33 | 3.93 | .03 |
| 23----- | .01 | .55 | 1.64 | 1.84 | 1.28 | *10 | 3.33 | 9.3 | 14.9 | .13 | 3.95 | .03 |
| 24----- | .01 | .50 | 1.59 | 1.69 | 1.28 | *5 | 2.52 | 3.71 | 1.45 | *.7 | 2.34 | *.03 |
| 25----- | .05 | .43 | 1.54 | 1.64 | 1.20 | *3 | 2.58 | 2.65 | .90 | 3.04 | 1.28 | *.03 |
| 26----- | .07 | .37 | 4.77 | 1.64 | 1.12 | *2 | 5.9 | 2.22 | .71 | .39 | .94 | .03 |
| 27----- | .07 | .33 | 10.9 | 1.59 | 1.08 | *1.7 | 3.95 | 1.79 | .60 | .20 | .77 | .02 |
| 28----- | .07 | .31 | 6.8 | 1.50 | 1.12 | 1.69 | 2.84 | 1.45 | .50 | .13 | .68 | .01 |
| 29----- | .16 | .28 | 3.48 | 1.36 | ----- | *8 | 2.46 | 1.24 | .41 | .10 | .60 | .01 |
| 30----- | .87 | .33 | 2.65 | 1.32 | ----- | *5 | 2.11 | 1.08 | .39 | .06 | .55 | .01 |
| 31----- | .31 | ----- | 2.52 | 1.28 | ----- | *4 | ----- | .90 | ----- | .16 | .43 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| 1929-30 | | | | | |
| October----- | 184 | 1.45 | 13.2 | 2.69 | 3.10 |
| November----- | 14.8 | 2.00 | 5.26 | 1.07 | 1.19 |
| December----- | 12.8 | 2.71 | 4.23 | .863 | .99 |
| January----- | 23 | 2.22 | 5.27 | 1.08 | 1.24 |
| February----- | 33 | 2.78 | 6.34 | 1.29 | 1.34 |
| March----- | 6.2 | 2.34 | 3.12 | .637 | .73 |
| April----- | 11.2 | 1.69 | 2.94 | .600 | .67 |
| May----- | 40 | .87 | 3.31 | .676 | .78 |
| June----- | 8.5 | .43 | 1.73 | .353 | .39 |
| July----- | 32 | .16 | 2.43 | .496 | .57 |
| August----- | 2.79 | 0 | .326 | .067 | .08 |
| September----- | 4.37 | 0 | .289 | .059 | .07 |
| The year----- | 184 | 0 | 4.03 | .822 | 11.15 |
| 1930-31 | | | | | |
| October----- | .87 | 0 | .070 | .014 | .02 |
| November----- | 3.26 | .13 | .622 | .127 | .14 |
| December----- | 10.9 | .37 | 1.97 | .402 | .46 |
| January----- | 6.7 | 1.28 | 2.37 | .484 | .56 |
| February----- | 2.02 | .94 | 1.34 | .273 | .28 |
| March----- | 25 | 1.08 | 3.43 | .700 | .81 |
| April----- | 32 | 2.11 | 6.36 | 1.30 | 1.45 |
| May----- | 14.5 | .90 | 3.03 | .618 | .71 |
| June----- | 14.9 | .14 | 1.46 | .298 | .33 |
| July----- | 3.04 | .03 | .268 | .055 | .06 |
| August----- | 59 | .31 | 3.93 | .802 | .92 |
| September----- | .35 | .01 | .094 | .019 | .02 |
| The year----- | 59 | 0 | 2.08 | .424 | 5.76 |

* Estimated.

ROCKY CREEK NEAR BAHAMA, N. C.

LOCATION.—Staff gage $1\frac{1}{4}$ miles upstream from confluence with F^rat River, 2 miles upstream from dam of Durham water supply, and 3 miles east of Bahama, Durham County.

DRAINAGE AREA.—2.7 square miles.

RECORDS AVAILABLE.—October, 1925, to December, 1931 (discontinued).

EXTREMES.—Maximum discharge during period, 89 second-feet Aug. 4 (gage height, 3.40 feet); practically no flow several times in October, 1930, October and November, 1931.

1925-1931: Maximum discharge, 186 second-feet Apr. 27, 1928 (gage height, 4.40 feet); practically no flow several times in 1926, 1930, 1931.

REMARKS.—Records good below and fair above 10 second-feet. Discharge determined by weir formulae.

Daily discharge, in second-feet, 1929-1931

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|------|-------|------|------|-------|
| 1929-30 | | | | | | | | | | | | |
| 1..... | 26 | 0.60 | 0.80 | 0.70 | 1.55 | 0.70 | 0.45 | 0.40 | 0.15 | 0.10 | 0.15 | 0 |
| 2..... | 21 | .60 | 11.9 | .70 | 8.6 | .75 | .45 | .25 | .15 | .30 | .10 | 0 |
| 3..... | 3.80 | 7.8 | 5.8 | .70 | 11.5 | .70 | .60 | .25 | .10 | .15 | .10 | 0 |
| 4..... | 1.80 | 10.8 | 2.30 | .70 | 12.7 | .65 | .85 | .20 | .15 | .10 | .05 | 0 |
| 5..... | 1.40 | 2.65 | 1.80 | .65 | 7.6 | .60 | .60 | .20 | .15 | .10 | .05 | 0 |
| 6..... | 1.15 | 1.35 | 1.45 | .60 | 3.35 | .60 | 4.20 | .20 | .10 | .10 | .05 | 0 |
| 7..... | 1.05 | 1.00 | 1.30 | .65 | 2.40 | 3.05 | 2.20 | .20 | .15 | .05 | .10 | 0 |
| 8..... | 1.00 | .95 | 1.40 | .60 | 1.90 | 2.40 | 1.10 | .20 | .15 | .05 | .10 | 0 |
| 9..... | .95 | .85 | 1.10 | .60 | 1.60 | 1.40 | .70 | .20 | .30 | .05 | .05 | 0 |
| 10..... | .90 | .70 | 1.00 | .60 | 1.75 | .85 | .65 | .15 | .95 | .05 | .05 | 0 |
| 11..... | .90 | .75 | .95 | .50 | 1.85 | .75 | .60 | .15 | .40 | .05 | .05 | 0 |
| 12..... | .85 | 2.50 | .85 | .50 | 1.10 | .75 | .50 | .15 | .25 | .05 | .05 | 0 |
| 13..... | .85 | 4.75 | .80 | .65 | 1.10 | .65 | .50 | .15 | .20 | .95 | 0 | .10 |
| 14..... | .85 | 1.75 | .85 | 1.15 | 1.80 | .60 | .45 | .30 | .20 | 1.80 | 0 | .05 |
| 15..... | .75 | 1.50 | .85 | 6.3 | 1.20 | .55 | .45 | 2.45 | .15 | .35 | 0 | 0 |
| 16..... | .75 | .95 | .75 | 3.50 | 1.25 | .55 | .40 | .45 | .15 | .25 | .05 | 0 |
| 17..... | .70 | .90 | .70 | 1.65 | .95 | .55 | .40 | .30 | 7.0 | 14.9 | 0 | 0 |
| 18..... | .70 | 2.20 | .85 | 24 | .95 | .65 | .70 | .25 | 9.1 | 2.60 | .05 | 0 |
| 19..... | .70 | 1.10 | 1.25 | 4.10 | .95 | 3.35 | 1.80 | 6.0 | 2.00 | .80 | .05 | 0 |
| 20..... | .70 | .75 | .75 | 2.40 | .90 | 1.35 | 1.05 | .60 | .75 | .50 | 0 | 0 |
| 21..... | .70 | .70 | .65 | 1.95 | .85 | .80 | .65 | .30 | .50 | .35 | .05 | 0 |
| 22..... | .90 | .65 | .65 | 7.8 | .75 | .70 | .50 | .20 | .35 | .25 | 0 | 0 |
| 23..... | .75 | 4.45 | 2.70 | 4.30 | .80 | .65 | .45 | .20 | .30 | .25 | 0 | 0 |
| 24..... | .65 | 5.1 | 1.95 | 2.40 | .90 | .65 | .40 | .20 | .25 | .45 | 0 | 0 |
| 25..... | .65 | 2.70 | 1.30 | 1.90 | .80 | .65 | .35 | .15 | .25 | 1.90 | 0 | 0 |
| 26..... | .70 | 13.6 | 1.20 | 1.45 | .70 | .65 | .35 | .15 | .20 | .35 | 0 | 0 |
| 27..... | .60 | 4.05 | 1.60 | 1.35 | .70 | .50 | .35 | .15 | .60 | .25 | 0 | 0 |
| 28..... | .60 | 2.20 | 1.40 | 1.55 | .65 | .45 | .35 | .15 | .20 | .20 | 0 | 0 |
| 29..... | .60 | 1.45 | 1.30 | 1.30 | ----- | .60 | .45 | .15 | .15 | .20 | 0 | 0 |
| 30..... | .65 | 1.05 | 1.00 | 1.50 | ----- | .50 | .50 | .35 | .10 | .15 | 0 | 0 |
| 31..... | .65 | ----- | .85 | 1.45 | ----- | .45 | ----- | .20 | ----- | .25 | 0 | ----- |

Daily discharge, in second-feet, of Rocky Creek near Bahama, N. C., 1922-1931—
Continued

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|---------|-------|------|-------|---------|-------|-------|------|-------|
| 1930-31 | | | | | | | | | | | | |
| 1----- | 0 | 0 | .20 | .50 | .30 | 1.35 | 10.0 | .55 | .30 | .10 | .30 | .25 |
| 2----- | 0 | 0 | .05 | .45 | .25 | .90 | 3.85 | 2.45 | .30 | .10 | .15 | .20 |
| 3----- | 0 | 0 | .05 | .35 | .25 | .70 | 1.45 | 1.30 | .25 | .05 | 3.40 | .20 |
| 4----- | 0 | .95 | 0 | .35 | .25 | .60 | 1.30 | .95 | .25 | .05 | 11.8 | .20 |
| 5----- | 0 | .10 | .05 | .75 | .25 | .65 | 13.1 | .60 | .20 | .20 | 10.6 | .15 |
| 6----- | 0 | .05 | .10 | 3.20 | .25 | .65 | 16.0 | .45 | .20 | .15 | .45 | .15 |
| 7----- | 0 | 0 | .85 | .85 | .20 | .30 | 9.5 | 1.25 | .15 | .15 | .75 | .10 |
| 8----- | 0 | 0 | .20 | .60 | .20 | 3.90 | 3.10 | 5.6 | .15 | .05 | .50 | .10 |
| 9----- | 0 | 0 | .15 | .30 | .20 | 1.05 | 1.95 | 1.25 | .15 | .05 | .35 | .10 |
| 10----- | 0 | 0 | .10 | .45 | .40 | .65 | 1.40 | 1.80 | .10 | .05 | 1.30 | .10 |
| 11----- | 0 | 0 | .05 | .35 | .30 | .50 | 1.10 | .85 | .10 | .10 | 18.5 | .10 |
| 12----- | 0 | 0 | .05 | 5.4 | .25 | .35 | .95 | .70 | .10 | .05 | 4.25 | .10 |
| 13----- | 0 | .05 | .05 | 2.85 | .25 | .30 | .75 | .70 | .15 | 3.80 | 1.50 | .10 |
| 14----- | 0 | .05 | .05 | 1.05 | .60 | .35 | .70 | .65 | .30 | .90 | 2.60 | .10 |
| 15----- | 0 | 0 | .05 | .85 | .45 | .35 | .70 | .40 | .35 | .15 | 1.75 | .05 |
| 16----- | 0 | .05 | .05 | .70 | .30 | .35 | .65 | .30 | .45 | .10 | .70 | .05 |
| 17----- | 0 | .05 | .05 | .75 | .65 | .30 | .60 | .30 | .20 | 2.00 | .45 | .05 |
| 18----- | 0 | .05 | .10 | 1.75 | .85 | .25 | .70 | .25 | .15 | .60 | .40 | .05 |
| 19----- | 0 | 0 | .15 | 5.9 | .60 | .25 | 1.00 | .25 | .10 | .10 | .40 | .05 |
| 20----- | 0 | 0 | .25 | 1.90 | .45 | .25 | .95 | .25 | .10 | .05 | 3.95 | .05 |
| 21----- | 0 | 0 | .50 | 1.25 | .60 | .25 | .85 | 9.6 | .05 | 6.9 | 4.10 | .05 |
| 22----- | 0 | 0 | .50 | .75 | .50 | 12.9 | 6.3 | 3.25 | 11.1 | 1.10 | 10.0 | .05 |
| 23----- | 0 | 0 | .35 | .80 | .40 | 3.10 | 2.70 | 6.8 | 1.70 | .15 | 6.4 | 0 |
| 24----- | 0 | 0 | .20 | .65 | .30 | 1.30 | 1.55 | 1.45 | .50 | 7.4 | 2.10 | 0 |
| 25----- | 0 | 0 | .15 | .50 | .30 | .85 | 1.15 | .95 | .30 | 7.6 | .85 | 0 |
| 26----- | 0 | 0 | 4.15 | .50 | .25 | .60 | 4.20 | .80 | .20 | 1.10 | .55 | 0 |
| 27----- | 0 | 0 | 12.2 | .45 | .25 | .50 | 1.70 | .60 | .15 | .30 | .45 | .05 |
| 28----- | 0 | 0 | 2.30 | .40 | .25 | .45 | 1.10 | .50 | .15 | .20 | .35 | 0 |
| 29----- | .05 | 0 | 1.25 | .35 | ----- | 6.2 | .85 | .40 | .15 | .15 | .35 | .05 |
| 30----- | 0 | 0 | 1.00 | .35 | ----- | 2.40 | .60 | .35 | .15 | .15 | .30 | 0 |
| 31----- | .05 | ----- | .60 | .30 | ----- | 1.70 | ----- | .30 | ----- | .10 | .25 | ----- |
| | | | | | | | | | | | | |
| Day | Oct. | Nov. | Dec. | Day | Oct. | Nov. | Dec. | Day | Oct. | Nov. | Dec. | |
| 1931 | | | | | | | | | | | | |
| 1----- | 0.05 | 0 | 0.05 | 11----- | 0 | 0 | .15 | 21----- | 0 | 0 | .20 | |
| 2----- | 0 | 0 | .05 | 12----- | 0 | 0 | .10 | 22----- | 0 | 0 | .85 | |
| 3----- | 0 | 0 | .05 | 13----- | 0 | 0 | .05 | 23----- | 0 | 0 | .15 | |
| 4----- | 0 | 0 | .30 | 14----- | 0 | 0 | .05 | 24----- | 0 | 0 | .20 | |
| 5----- | 0 | 0 | .05 | 15----- | 0 | 0 | .05 | 25----- | 0 | 0 | .20 | |
| 6----- | 0 | 0 | .05 | 16----- | .05 | 0 | .05 | 26----- | 0 | 0 | .15 | |
| 7----- | 0 | 0 | .05 | 17----- | .05 | 0 | .10 | 27----- | 0 | .05 | .10 | |
| 8----- | 0 | 0 | .05 | 18----- | 0 | 0 | .10 | 28----- | 0 | .05 | .80 | |
| 9----- | 0 | 0 | 1.05 | 19----- | 0 | 0 | .10 | 29----- | .05 | .05 | .55 | |
| 10----- | 0 | 0 | .70 | 20----- | 0 | 0 | .05 | 30----- | 0 | .05 | .20 | |
| | | | | | | | | 31----- | 0 | ----- | .15 | |

Monthly discharge, in second-feet, of Rocky Creek near Bahama, N. C., 1929-1931

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| 1929-30 | | | | | |
| October..... | 26 | 0.60 | 2.40 | 0.889 | 1.02 |
| November..... | 13.6 | .60 | 2.68 | .998 | 1.11 |
| December..... | 11.9 | .65 | 1.68 | .622 | .72 |
| January..... | 24 | .50 | 2.52 | .933 | 1.08 |
| February..... | 12.7 | .65 | 2.54 | .941 | .98 |
| March..... | 3.35 | .45 | .905 | .335 | .39 |
| April..... | 4.20 | .35 | .767 | .284 | .32 |
| May..... | 6.0 | .15 | .492 | .182 | .21 |
| June..... | 9.1 | .10 | .848 | .314 | .35 |
| July..... | 14.9 | .05 | .900 | .333 | .38 |
| August..... | .15 | 0 | .035 | .013 | .02 |
| September..... | .10 | 0 | .005 | .002 | 0 |
| The year..... | 26 | 0 | 1.31 | .485 | 6.58 |
| 1930-31 | | | | | |
| October..... | .05 | 0 | .003 | .001 | 0 |
| November..... | .95 | 0 | .045 | .017 | .02 |
| December..... | 12.2 | 0 | .832 | .308 | .36 |
| January..... | 7.5 | .30 | 1.37 | .507 | .58 |
| February..... | .85 | .20 | .361 | .134 | .14 |
| March..... | 12.9 | .25 | 1.43 | .530 | .61 |
| April..... | 16.0 | .60 | 3.02 | 1.12 | 1.25 |
| May..... | 9.6 | .25 | 1.48 | .548 | .63 |
| June..... | 11.1 | .05 | .617 | .229 | .26 |
| July..... | 7.6 | .05 | 1.10 | .407 | .47 |
| August..... | 18.5 | .15 | 2.90 | 1.07 | 1.23 |
| September..... | .25 | 0 | .082 | .030 | .03 |
| The year..... | 18.5 | 0 | 1.11 | .411 | 5.58 |
| 1931 | | | | | |
| October..... | .05 | 0 | .006 | .002 | 0 |
| November..... | .05 | 0 | .007 | .003 | 0 |
| December..... | 1.05 | .05 | .202 | .075 | .09 |

LITTLE RIVER NEAR PRINCETON, N. C.

LOCATION.—Staff gage a quarter of a mile upstream from county bridge, three quarters of a mile upstream from Little Creek, and 3 miles north of Princeton, Johnston County.

DRAINAGE AREA.—221 square miles.

RECORDS AVAILABLE.—February, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,380 second-feet Aug. 15 (gage height, 10.06 feet); minimum, 7.2 second-feet several times in October (gage height, 0.44 foot).

1930-31: Maximum discharge, that of Aug. 15, 1931; minimum, that of October, 1930.

Maximum stage known, 14.90 feet in September, 1924.

REMARKS.—Records fair. Diurnal regulation from mill operations upstream.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-------|-------|-------|-------|-------|
| 1..... | 21 | 13 | 25 | 170 | 101 | 95 | 196 | 96 | 112 | 2' | 264 | 75 |
| 2..... | 28 | 13 | 33 | 128 | 112 | 136 | 264 | 89 | 76 | 4' | 891 | 68 |
| 3..... | 13 | 14 | 19 | 136 | 95 | 136 | 230 | 112 | 85 | 4' | 1,050 | 67 |
| 4..... | 8.4 | 34 | 55 | 106 | 109 | 136 | 170 | 170 | 60 | 2' | 652 | 71 |
| 5..... | 8.4 | 18 | 49 | 120 | 75 | 128 | 298 | 136 | 61 | 33' | 756 | 402 |
| 6..... | 8.4 | 12 | 28 | 110 | 79 | 112 | 1,110 | 101 | 92 | 1,610 | 1,110 | 945 |
| 7..... | 13 | 38 | 15 | 112 | 93 | 120 | 1,310 | 106 | 27 | 89' | 1,340 | 756 |
| 8..... | 12 | 66 | 96 | 107 | 75 | 102 | 1,050 | 247 | 83 | 26' | 1,160 | 298 |
| 9..... | 9.5 | 18 | 109 | 120 | 109 | 136 | 864 | 678 | 51 | 173 | 518 | 128 |
| 10..... | 8.4 | 35 | 96 | 109 | 81 | 112 | 628 | 1,430 | 55 | 112 | 264 | 89 |
| 11..... | 7.2 | 34 | 68 | 99 | 154 | 107 | 450 | 2,100 | 54 | 247 | 332 | 71 |
| 12..... | 7.2 | 17 | 57 | 145 | 145 | 85 | 315 | 1,580 | 61 | 154 | 1,050 | 67 |
| 13..... | 7.2 | 18 | 49 | 298 | 120 | 86 | 247 | 560 | 61 | 131 | 1,790 | 25 |
| 14..... | 7.2 | 15 | 18 | 421 | 128 | 90 | 213 | 402 | 29 | 753 | 2,280 | 66 |
| 15..... | 7.2 | 12 | 69 | 366 | 145 | 75 | 188 | 281 | 63 | 1,550 | 2,280 | 51 |
| 16..... | 7.8 | 13 | 35 | 315 | 162 | 88 | 162 | 230 | 162 | 990 | 1,280 | 49 |
| 17..... | 7.8 | 88 | 31 | 247 | 136 | 88 | 154 | 179 | 560 | 183 | 704 | 44 |
| 18..... | 7.8 | 32 | 35 | 204 | 154 | 136 | 154 | 154 | 230 | 264 | 440 | 49 |
| 19..... | 12 | 15 | 35 | 230 | 145 | 79 | 136 | 120 | 162 | 42' | 247 | 52 |
| 20..... | 12 | 17 | 104 | 247 | 136 | 79 | 154 | 120 | 128 | 19' | 179 | 25 |
| 21..... | 15 | 36 | 136 | 230 | 162 | 98 | 162 | 154 | 60 | 103 | 402 | 44 |
| 22..... | 13 | 13 | 154 | 213 | 145 | 120 | 154 | 298 | 96 | 230 | 1,140 | 38 |
| 23..... | 13 | 14 | 162 | 204 | 136 | 332 | 196 | 783 | 58 | 653 | 1,520 | 48 |
| 24..... | 12 | 14 | 120 | 162 | 120 | 332 | 188 | 1,080 | 44 | 440 | 999 | 43 |
| 25..... | 20 | 27 | 88 | 145 | 128 | 204 | 188 | 972 | 50 | 403 | 560 | 68 |
| 26..... | 12 | 15 | 136 | 145 | 109 | 213 | 179 | 582 | 48 | 230 | 315 | 79 |
| 27..... | 13 | 13 | 230 | 128 | 89 | 170 | 179 | 213 | 39 | 154 | 213 | 109 |
| 28..... | 25 | 80 | 281 | 136 | 85 | 136 | 170 | 188 | 21 | 112 | 162 | 213 |
| 29..... | 15 | 40 | 281 | 112 | ----- | 162 | 136 | 145 | 19 | 75 | 136 | 128 |
| 30..... | 14 | 15 | 247 | 136 | ----- | 179 | 99 | 120 | 20 | 42 | 104 | 79 |
| 31..... | 14 | ----- | 213 | 120 | ----- | 162 | ----- | 89 | ----- | 6' | 120 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 28 | 7.2 | 12.2 | 0.655 | 0.06 |
| November..... | 88 | 12 | 24.8 | .112 | .12 |
| December..... | 281 | 15 | 99.2 | .449 | .52 |
| January..... | 421 | 99 | 178 | .805 | .93 |
| February..... | 162 | 75 | 119 | .538 | .56 |
| March..... | 332 | 75 | 139 | .629 | .73 |
| April..... | 1,310 | 99 | 332 | 1.50 | 1.67 |
| May..... | 2,100 | 89 | 436 | 1.67 | 2.27 |
| June..... | 560 | 19 | 88.9 | .402 | .45 |
| July..... | 1,610 | 21 | 369 | 1.67 | 1.62 |
| August..... | 2,280 | 104 | 783 | 3.54 | 4.08 |
| September..... | 945 | 25 | 142 | .643 | .72 |
| The year..... | 2,280 | 7.2 | 229 | 1.64 | 14.03 |

CONTENTNEA CREEK NEAR WILSON, N. C.

LOCATION.—Staff gage at municipal power plant at State highway bridge 1 mile upstream from Atlantic Coast Line Railroad and 3 miles southwest of Wilson, Wilson County.

DRAINAGE AREA.—245 square miles.

RECORDS AVAILABLE.—February, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,140 second-feet Aug. 15 (gage height, 7.97 feet); minimum, 1.4 second-feet several times during November (gage height, 0.51 foot).

1930-31: Maximum discharge, that of Aug. 15, 1931; minimum, that of November, 1930.

REMARKS.—Records good. Flow regulated by storage in pond at station.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-------|-------|-------|-------|-------|
| 1..... | 1.6 | 1.6 | 44 | 152 | 75 | 78 | 357 | 50 | 87 | 31 | 286 | 46 |
| 2..... | 1.6 | 1.6 | 1.5 | 70 | 132 | 145 | 247 | 98 | 87 | 4.3 | 357 | 58 |
| 3..... | 1.6 | 1.6 | 44 | 101 | 63 | 239 | 302 | 112 | 87 | 4.3 | 466 | 81 |
| 4..... | 1.6 | 161 | 44 | 63 | 117 | 163 | 194 | 247 | 77 | 208 | 828 | 192 |
| 5..... | 1.6 | 1.6 | 44 | 132 | 94 | 189 | 383 | 55 | 45 | 554 | 735 | 403 |
| 6..... | 1.6 | 1.6 | 72 | 126 | 78 | 140 | 859 | 90 | 35 | 584 | 674 | 1,510 |
| 7..... | 1.6 | 1.6 | 44 | 78 | 94 | 147 | 1,150 | 229 | 42 | 524 | 891 | 1,860 |
| 8..... | 1.6 | 34 | 54 | 92 | 86 | 111 | 1,150 | 357 | 76 | 266 | 1,020 | 644 |
| 9..... | 1.6 | 41 | 89 | 101 | 120 | 119 | 1,090 | 383 | 40 | 148 | 495 | 122 |
| 10..... | 1.6 | 38 | 67 | 86 | 86 | 179 | 859 | 797 | 40 | 46 | 194 | 46 |
| 11..... | 1.6 | 27 | 53 | 63 | 109 | 71 | 554 | 1,290 | 35 | 286 | 383 | 78 |
| 12..... | 1.6 | 38 | 39 | 339 | 163 | 108 | 383 | 923 | 41 | 125 | 735 | 65 |
| 13..... | 1.6 | 23 | 41 | 357 | 117 | 108 | 274 | 495 | 46 | 294 | 1,220 | 46 |
| 14..... | 1.6 | 1.5 | 49 | 383 | 232 | 96 | 195 | 383 | 35 | 309 | 1,900 | 42 |
| 15..... | 1.6 | 1.5 | 39 | 438 | 63 | 49 | 160 | 324 | 4.0 | 766 | 2,020 | 42 |
| 16..... | 1.6 | 17 | 33 | 383 | 189 | 89 | 150 | 148 | 209 | 1.150 | 1,120 | 48 |
| 17..... | 1.6 | 23 | 143 | 239 | 239 | 113 | 156 | 48 | 410 | 466 | 524 | 43 |
| 18..... | 1.6 | 25 | 33 | 324 | 86 | 76 | 215 | 250 | 204 | 178 | 410 | 27 |
| 19..... | 1.6 | 1.5 | 53 | 208 | 247 | 103 | 44 | 1.9 | 72 | 282 | 347 | 125 |
| 20..... | 1.6 | 1.5 | 112 | 201 | 140 | 92 | 129 | 187 | 86 | 246 | 120 | 6.3 |
| 21..... | 1.6 | 27 | 209 | 278 | 232 | 60 | 163 | 94 | 30 | 88 | 278 | 6.3 |
| 22..... | 1.6 | 66 | 179 | 270 | 224 | 255 | 231 | 410 | 51 | 383 | 410 | 52 |
| 23..... | 1.6 | 1.5 | 90 | 117 | 193 | 357 | 152 | 674 | 35 | 383 | 674 | 6.3 |
| 24..... | 1.6 | 44 | 84 | 201 | 124 | 383 | 153 | 1,120 | 34 | 240 | 859 | 177 |
| 25..... | 1.6 | 33 | 76 | 109 | 71 | 383 | 130 | 1,260 | 3.6 | 56 | 644 | 117 |
| 26..... | 1.6 | 44 | 157 | 170 | 131 | 383 | 109 | 828 | 3.6 | 217 | 383 | 50 |
| 27..... | 1.6 | 47 | 261 | 101 | 92 | 198 | 178 | 410 | 68 | 344 | 164 | 363 |
| 28..... | 1.6 | 41 | 357 | 147 | 133 | 178 | 202 | 172 | 63 | 225 | 104 | 614 |
| 29..... | 1.6 | 1.4 | 357 | 140 | ----- | 124 | 60 | 1.6 | 3.4 | 108 | 72 | 438 |
| 30..... | 1.6 | 1.4 | 216 | 94 | ----- | 278 | 162 | 129 | 30 | 20 | 95 | 176 |
| 31..... | 1.6 | ----- | 83 | 158 | ----- | 264 | ----- | 44 | ----- | 89 | 65 | ----- |

| Month | Maximum | Minimum | Mean | P - square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 1.6 | 1.6 | 1.60 | 0.007 | 0.01 |
| November..... | 161 | 1.4 | 25.0 | .102 | .11 |
| December..... | 357 | 1.5 | 102 | .416 | .48 |
| January..... | 438 | 63 | 185 | .755 | .87 |
| February..... | 247 | 63 | 133 | .543 | .57 |
| March..... | 383 | 49 | 170 | .694 | .80 |
| April..... | 1,150 | 44 | 346 | 1.41 | 1.57 |
| May..... | 1,290 | 1.6 | 375 | 1.53 | 1.76 |
| June..... | 410 | 3.4 | 69.3 | .283 | .32 |
| July..... | 1,150 | 4.3 | 278 | 1.13 | 1.30 |
| August..... | 2,020 | 65 | 596 | 2.43 | 2.50 |
| September..... | 1,860 | 6.3 | 249 | 1.02 | 1.14 |
| The year..... | 2,020 | 1.4 | 212 | .865 | 11.73 |

CONTENTNEA CREEK AT HOOKERTON, N. C.

LOCATION.—Staff gage just downstream from East Carolina Railway bridge at Hookerton, Greene County.

DRAINAGE AREA.—691 square miles.

RECORDS AVAILABLE.—November, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,100 second-feet Aug. 20 (gage height, 11.10 feet); minimum, 67 second-feet several times during October (gage height, 1.70 feet).

1928-1931: Maximum discharge, 11,100 second-feet Oct. 6 1929 (gage height, 18.90 feet); minimum, that of October, 1930.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | Jul. | Aug. | Sept. |
|-----|------|-------|------|-------|-------|------|-------|-------|-------|------|-------|-------|
| 1 | 82 | 116 | 97 | 675 | 386 | 318 | 615 | 202 | 695 | 78 | 97 | 497 |
| 2 | 82 | 108 | 108 | 555 | 368 | 334 | 635 | 176 | 440 | 78 | 116 | 440 |
| 3 | 78 | 97 | 124 | 422 | 334 | 802 | 675 | 164 | 334 | 87 | 258 | 386 |
| 4 | 78 | 102 | 134 | 368 | 318 | 272 | 755 | 230 | 244 | 92 | 478 | 334 |
| 5 | 74 | 116 | 124 | 350 | 302 | 334 | 795 | 334 | 202 | 97 | 1,070 | 272 |
| 6 | 70 | 108 | 116 | 318 | 286 | 386 | 1,010 | 535 | 176 | 102 | 1,530 | 244 |
| 7 | 70 | 108 | 124 | 302 | 272 | 459 | 1,300 | 635 | 176 | 108 | 1,600 | 478 |
| 8 | 70 | 116 | 144 | 318 | 272 | 440 | 1,430 | 675 | 188 | 144 | 1,530 | 535 |
| 9 | 70 | 108 | 176 | 302 | 272 | 404 | 1,530 | 835 | 188 | 2 6 | 1,500 | 675 |
| 10 | 70 | 97 | 164 | 286 | 286 | 386 | 1,600 | 1,090 | 188 | 2 8 | 1,460 | 835 |
| 11 | 70 | 87 | 164 | 302 | 286 | 334 | 1,680 | 1,300 | 154 | 404 | 1,760 | 1,120 |
| 12 | 67 | 92 | 164 | 318 | 302 | 334 | 1,800 | 1,360 | 144 | 595 | 1,800 | 984 |
| 13 | 67 | 102 | 164 | 535 | 302 | 318 | 1,840 | 1,330 | 144 | 7 5 | 1,880 | 555 |
| 14 | 70 | 116 | 164 | 755 | 334 | 286 | 1,960 | 1,330 | 144 | 8 7 | 1,880 | 230 |
| 15 | 70 | 116 | 176 | 877 | 386 | 272 | 2,050 | 1,360 | 124 | 5 7 | 1,920 | 164 |
| 16 | 67 | 116 | 176 | 984 | 440 | 258 | 1,800 | 1,070 | 154 | 302 | 1,880 | 154 |
| 17 | 67 | 108 | 188 | 1,030 | 459 | 244 | 1,560 | 795 | 230 | 2 2 | 1,840 | 144 |
| 18 | 67 | 108 | 272 | 1,010 | 478 | 244 | 1,360 | 595 | 286 | 3 6 | 1,920 | 124 |
| 19 | 67 | 108 | 350 | 1,010 | 516 | 230 | 1,210 | 368 | 368 | 2 6 | 1,960 | 144 |
| 20 | 70 | 102 | 404 | 919 | 516 | 244 | 1,050 | 272 | 334 | 124 | 2,050 | 164 |
| 21 | 67 | 97 | 386 | 877 | 478 | 272 | 835 | 230 | 258 | 116 | 1,880 | 164 |
| 22 | 67 | 97 | 368 | 815 | 478 | 334 | 516 | 334 | 144 | 108 | 1,640 | 258 |
| 23 | 67 | 97 | 404 | 755 | 478 | 478 | 404 | 555 | 108 | 97 | 1,680 | 334 |
| 24 | 67 | 97 | 422 | 715 | 478 | 595 | 350 | 695 | 97 | 102 | 1,800 | 202 |
| 25 | 67 | 97 | 440 | 675 | 459 | 715 | 318 | 898 | 87 | 116 | 1,880 | 154 |
| 26 | 67 | 97 | 440 | 555 | 404 | 775 | 286 | 1,140 | 82 | 144 | 1,840 | 144 |
| 27 | 67 | 97 | 478 | 516 | 334 | 795 | 302 | 1,270 | 78 | 2 6 | 1,760 | 272 |
| 28 | 67 | 92 | 535 | 478 | 302 | 795 | 272 | 1,330 | 74 | 2 8 | 1,680 | 350 |
| 29 | 70 | 92 | 555 | 459 | ----- | 815 | 258 | 1,330 | 70 | 188 | 1,560 | 497 |
| 30 | 92 | 92 | 695 | 422 | ----- | 775 | 216 | 1,360 | 70 | 154 | 1,090 | 655 |
| 31 | 124 | ----- | 715 | 404 | ----- | 635 | ----- | 1,050 | ----- | 108 | 635 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 124 | 67 | 72.5 | 0.105 | 0.12 |
| November | 116 | 87 | 103 | .149 | .17 |
| December | 715 | 97 | 293 | .424 | .49 |
| January | 1,030 | 286 | 591 | .855 | .99 |
| February | 516 | 272 | 376 | .544 | .57 |
| March | 815 | 230 | 432 | .625 | .72 |
| April | 2,050 | 216 | 1,010 | 1.46 | 1.63 |
| May | 1,360 | 164 | 802 | 1.16 | 1.34 |
| June | 695 | 70 | 199 | .288 | .32 |
| July | 877 | 78 | 238 | .344 | .40 |
| August | 2,050 | 97 | 1,480 | 2.14 | 2.47 |
| September | 1,120 | 124 | 384 | .556 | .62 |
| The year | 2,050 | 67 | 501 | .725 | 0.84 |

CAPE FEAR RIVER BASIN

HAW RIVER NEAR BENAJA, N. C.

LOCATION.—Water-stage recorder at old High Rock mill site, 500 feet upstream from county road crossing, half a mile upstream from county line, and 6 miles east of Benaja, Rockingham County.

DRAINAGE AREA.—168 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,680 second-feet Aug. 24 (gage height, 7.80 feet); minimum, 13.4 second-feet Oct. 13 (gage height, 0.96 foot).

1928-1931: Maximum discharge, 5,020 second-feet Oct. 3, 1929 (gage height, 13.54 feet); minimum, 8.9 second-feet Sept. 6, 1931 (gage height, 0.83 foot).

REMARKS.—Records good. Slight regulation, owing to operation of gristmills.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|-------|-------|
| 1 | 18.5 | 39 | 51 | 121 | 70 | 108 | 276 | 89 | 89 | 27 | 145 | 127 |
| 2 | 17.0 | 34 | 60 | 101 | 65 | 121 | 256 | 128 | 83 | 23 | 256 | 74 |
| 3 | 20 | 28 | 49 | 118 | 76 | 106 | 256 | 137 | 70 | 21 | 248 | 68 |
| 4 | 17.0 | 63 | 46 | 103 | 69 | 86 | 266 | 111 | 60 | 30 | 248 | 86 |
| 5 | 17.9 | 108 | 51 | 224 | 70 | 98 | 364 | 89 | 58 | 51 | 298 | 106 |
| 6 | 15.0 | 85 | 133 | 276 | 68 | 99 | 620 | 119 | 52 | 38 | 266 | 66 |
| 7 | 15.5 | 59 | 236 | 320 | 71 | 96 | 848 | 216 | 50 | 49 | 205 | 54 |
| 8 | 18.0 | 49 | 287 | 287 | 68 | 118 | 766 | 266 | 44 | 42 | 86 | 52 |
| 9 | 22 | 48 | 286 | 222 | 69 | 123 | 520 | 309 | 48 | 299 | 53 | 42 |
| 10 | 17.0 | 40 | 216 | 143 | 98 | 108 | 386 | 320 | 42 | 222 | 49 | 43 |
| 11 | 15.5 | 48 | 134 | 120 | 89 | 101 | 309 | 266 | 40 | 71 | 296 | 42 |
| 12 | 21 | 48 | 98 | 123 | 80 | 88 | 228 | 236 | 40 | 44 | 398 | 39 |
| 13 | 15.0 | 57 | 77 | 154 | 73 | 82 | 167 | 193 | 42 | 36 | 398 | 48 |
| 14 | 30 | 62 | 71 | 146 | 88 | 76 | 136 | 174 | 40 | 82 | 364 | 33 |
| 15 | 33 | 62 | 69 | 118 | 84 | 82 | 127 | 143 | 36 | 53 | 298 | 36 |
| 16 | 35 | 127 | 71 | 103 | 76 | 82 | 113 | 116 | 59 | 45 | 276 | 33 |
| 17 | 36 | 159 | 73 | 127 | 92 | 83 | 103 | 92 | 74 | 56 | 220 | 36 |
| 18 | 27 | 157 | 84 | 120 | 118 | 73 | 125 | 101 | 46 | 35 | 103 | 36 |
| 19 | 25 | 116 | 120 | 161 | 106 | 76 | 174 | 145 | 34 | 33 | 195 | 36 |
| 20 | 19.5 | 82 | 137 | 174 | 103 | 76 | 188 | 137 | 81 | 33 | 127 | 30 |
| 21 | 25 | 69 | 128 | 155 | 114 | 73 | 174 | 256 | 33 | 33 | 137 | 27 |
| 22 | 23 | 64 | 120 | 121 | 104 | 101 | 180 | 364 | 51 | 44 | 280 | 30 |
| 23 | 23 | 59 | 100 | 104 | 86 | 155 | 199 | 606 | 64 | 42 | 1,100 | 40 |
| 24 | 30 | 55 | 91 | 98 | 89 | 165 | 220 | 659 | 41 | 30 | 1,450 | 33 |
| 25 | 33 | 56 | 88 | 92 | 86 | 139 | 201 | 483 | 39 | 43 | 702 | 32 |
| 26 | 28 | 54 | 109 | 91 | 74 | 109 | 157 | 342 | 37 | 96 | 398 | 33 |
| 27 | 22 | 49 | 214 | 94 | 71 | 99 | 132 | 210 | 33 | 159 | 242 | 53 |
| 28 | 32 | 42 | 248 | 86 | 64 | 113 | 118 | 113 | 28 | 625 | 189 | 35 |
| 29 | 31 | 49 | 180 | 82 | ----- | 238 | 99 | 92 | 28 | 418 | 216 | 36 |
| 30 | 52 | 54 | 172 | 80 | ----- | 246 | 89 | 77 | 33 | 147 | 256 | 33 |
| 31 | 53 | ----- | 152 | 78 | ----- | 254 | ----- | 73 | ----- | 53 | 244 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 53 | 15.0 | 25.4 | 0.151 | 0.17 |
| November | 159 | 28 | 67.4 | .401 | .45 |
| December | 287 | 46 | 127 | .756 | .87 |
| January | 320 | 78 | 140 | .833 | .96 |
| February | 118 | 64 | 82.9 | .493 | .51 |
| March | 254 | 73 | 115 | .685 | .79 |
| April | 848 | 89 | 260 | 1.55 | 1.73 |
| May | 659 | 73 | 215 | 1.23 | 1.48 |
| June | 89 | 28 | 47.5 | .283 | .32 |
| July | 625 | 21 | 96.1 | .572 | .66 |
| August | 1,450 | 49 | 314 | 1.87 | 2.16 |
| September | 127 | 27 | 48.0 | .286 | .32 |
| The year | 1,450 | 15.0 | 129 | .768 | 10.42 |

HAW RIVER AT HAW RIVER, N. C.

LOCATION.—Water-stage recorder 400 feet downstream from Southern Railway bridge at Haw River, Alamance County.

DRAINAGE AREA.—592 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 5,830 second-feet Apr. 6 (gage height, 12.74 feet); minimum, 33 second-feet Oct. 7.

1928-1931: Maximum discharge, 18,400 second-feet Feb. 28, 1929 (gage height, 23.96 feet); minimum, 3 second-feet Sept. 5, 1930.

REMARKS.—Records good except those for estimated period, Aug. 9, 11-24, which are fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 66 | 48 | 163 | 472 | 222 | 284 | 1,370 | 243 | 576 | 120 | 373 | 329 |
| 2..... | 60 | 84 | 147 | 385 | 248 | 359 | 1,310 | 481 | 421 | 117 | 668 | 285 |
| 3..... | 62 | 125 | 142 | 304 | 217 | 317 | 850 | 648 | 305 | 118 | 764 | 234 |
| 4..... | 60 | 142 | 137 | 302 | 315 | 349 | 1,030 | 397 | 264 | 78 | 690 | 269 |
| 5..... | 42 | 213 | 136 | 1,210 | 311 | 259 | 3,170 | 320 | 200 | 283 | 728 | 324 |
| 6..... | 34 | 249 | 390 | 1,720 | 231 | 264 | 5,080 | 409 | 154 | 200 | 488 | 219 |
| 7..... | 36 | 175 | 1,340 | 811 | 170 | 227 | 3,730 | 1,040 | 171 | 162 | 410 | 175 |
| 8..... | 38 | 112 | 851 | 659 | 191 | 411 | 2,380 | 1,080 | 194 | 124 | 259 | 139 |
| 9..... | 36 | 93 | 588 | 623 | 212 | 426 | 1,510 | 817 | 147 | 1,320 | 210 | 113 |
| 10..... | 71 | 145 | 504 | 521 | 222 | 337 | 1,040 | 1,000 | 138 | 863 | 249 | 113 |
| 11..... | 94 | 127 | 425 | 456 | 263 | 370 | 792 | 805 | 137 | 307 | 900 | 115 |
| 12..... | 52 | 122 | 370 | 466 | 243 | 354 | 641 | 583 | 132 | 191 | 3,900 | 107 |
| 13..... | 75 | 123 | 299 | 658 | 238 | 259 | 478 | 504 | 113 | 233 | 1,300 | 133 |
| 14..... | 52 | 162 | 194 | 498 | 224 | 215 | 383 | 488 | 78 | 322 | 3,800 | 95 |
| 15..... | 39 | 175 | 196 | 357 | 304 | 229 | 428 | 456 | 108 | 399 | 4,400 | 101 |
| 16..... | 42 | 281 | 173 | 285 | 288 | 262 | 404 | 410 | 136 | 192 | 2,000 | 121 |
| 17..... | 61 | 488 | 182 | 327 | 267 | 233 | 300 | 304 | 185 | 146 | 950 | 127 |
| 18..... | 98 | 394 | 152 | 422 | 488 | 223 | 338 | 252 | 183 | 146 | 460 | 147 |
| 19..... | 48 | 373 | 188 | 784 | 437 | 202 | 545 | 245 | 140 | 129 | 220 | 95 |
| 20..... | 95 | 318 | 244 | 606 | 313 | 178 | 609 | 238 | 111 | 208 | 100 | 84 |
| 21..... | 61 | 229 | 291 | 588 | 330 | 160 | 472 | 2,140 | 82 | 140 | 800 | 121 |
| 22..... | 39 | 173 | 310 | 472 | 313 | 280 | 831 | 1,450 | 290 | 128 | 2,200 | 119 |
| 23..... | 39 | 169 | 288 | 329 | 289 | 617 | 1,000 | 1,230 | 211 | 130 | 2,500 | 123 |
| 24..... | 40 | 187 | 205 | 294 | 267 | 538 | 571 | 1,320 | 160 | 144 | 2,800 | 121 |
| 25..... | 38 | 150 | 222 | 277 | 336 | 458 | 504 | 993 | 137 | 1,010 | 1,570 | 99 |
| 26..... | 38 | 146 | 406 | 281 | 250 | 425 | 554 | 696 | 168 | 280 | 892 | 71 |
| 27..... | 39 | 98 | 1,480 | 272 | 230 | 370 | 476 | 472 | 214 | 1,290 | 719 | 47 |
| 28..... | 110 | 126 | 1,480 | 262 | 181 | 275 | 358 | 350 | 150 | 1,510 | 559 | 57 |
| 29..... | 121 | 107 | 952 | 246 | ----- | 1,020 | 376 | 332 | 169 | 914 | 571 | 97 |
| 30..... | 101 | 84 | 696 | 252 | ----- | 792 | 281 | 227 | 139 | 440 | 538 | 86 |
| 31..... | 52 | ----- | 554 | 215 | ----- | 571 | ----- | 198 | ----- | 299 | 472 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 121 | 34 | 59.3 | 0.100 | 0.12 |
| November..... | 483 | 48 | 181 | .306 | .34 |
| December..... | 1,480 | 136 | 442 | .747 | .86 |
| January..... | 1,720 | 215 | 498 | .841 | .97 |
| February..... | 488 | 170 | 272 | .459 | .48 |
| March..... | 1,020 | 160 | 364 | .615 | .71 |
| April..... | 5,080 | 281 | 1,060 | 1.79 | 2.00 |
| May..... | 2,140 | 198 | 649 | 1.10 | 1.27 |
| June..... | 576 | 78 | 187 | .316 | .35 |
| July..... | 1,510 | 78 | 385 | .650 | .75 |
| August..... | 4,400 | 100 | 1,180 | 1.99 | 2.29 |
| September..... | 329 | 47 | 142 | .240 | .27 |
| The year..... | 5,080 | 34 | 454 | .767 | 10.41 |

HAW RIVER NEAR PITTSBORO, N. C.

LOCATION.—Water-stage recorder downstream from State highway bridge, 100 feet upstream from Robinsons Creek, and 5 miles east of Pittsboro, Chatham County.

DRAINAGE AREA.—1,340 square miles.

RECORDS AVAILABLE.—November, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 16,000 second-feet May 21 (gage height, 13.38 feet); minimum, 9 second-feet Oct. 13 (gage height, 1.32 feet).

1928-1931: Maximum discharge, 47,300 second-feet Oct. 2, 1929 (gage height, 22.1 feet); minimum, that of Oct. 13, 1930.

Maximum stage known, about 32.1 feet in August, 1903 (estimated discharge, 98,000 second-feet). An old miller states that flood of 1865 was 1 foot higher than that of 1908.

REMARKS.—Records good except those for estimated period, Aug. 15 to Sept. 1, which are fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 1----- | 36 | 146 | 192 | 1,010 | 364 | 384 | 2,430 | 610 | 668 | 208 | 734 | 550 |
| 2----- | 40 | 37 | 132 | 866 | 397 | 682 | 3,430 | 738 | 1,260 | 212 | 1,170 | 496 |
| 3----- | 52 | 111 | 184 | 722 | 390 | 690 | 2,050 | 1,630 | 706 | 237 | 3,970 | 446 |
| 4----- | 102 | 170 | 120 | 562 | 411 | 602 | 1,540 | 1,180 | 546 | 193 | 1,550 | 384 |
| 5----- | 22 | 128 | 184 | 666 | 432 | 618 | 4,170 | 810 | 516 | 157 | 1,340 | 488 |
| 6----- | 45 | 212 | 188 | 4,230 | 467 | 509 | 11,900 | 706 | 404 | 604 | 1,120 | 460 |
| 7----- | 76 | 344 | 1,970 | 2,130 | 370 | 474 | 8,750 | 1,750 | 325 | 460 | 770 | 364 |
| 8----- | 55 | 322 | 1,930 | 1,290 | 261 | 1,100 | 4,950 | 4,170 | 298 | 404 | 594 | 370 |
| 9----- | 41 | 118 | 1,180 | 1,090 | 332 | 1,270 | 3,010 | 2,270 | 364 | 1,200 | 351 | 283 |
| 10----- | 60 | 169 | 826 | 978 | 432 | 850 | 2,150 | 2,000 | 344 | 2,580 | 390 | 222 |
| 11----- | 62 | 132 | 714 | 858 | 397 | 706 | 1,630 | 1,810 | 292 | 932 | 3,560 | 209 |
| 12----- | 27 | 160 | 626 | 898 | 460 | 682 | 1,360 | 1,320 | 230 | 460 | 8,430 | 206 |
| 13----- | 31 | 192 | 516 | 1,630 | 397 | 594 | 1,140 | 1,050 | 202 | 128 | 2,640 | 112 |
| 14----- | 75 | 140 | 432 | 1,360 | 390 | 502 | 890 | 930 | 145 | 477 | 8,140 | 209 |
| 15----- | 45 | 184 | 325 | 970 | 488 | 418 | 810 | 866 | 218 | 650 | 9,500 | 100 |
| 16----- | 128 | 124 | 308 | 738 | 618 | 446 | 834 | 784 | 176 | 586 | 2,800 | 230 |
| 17----- | 51 | 451 | 325 | 650 | 509 | 509 | 754 | 666 | 192 | 411 | 1,200 | 166 |
| 18----- | 58 | 738 | 281 | 778 | 610 | 488 | 650 | 502 | 216 | 270 | 550 | 172 |
| 19----- | 32 | 570 | 320 | 1,430 | 858 | 404 | 890 | 530 | 424 | 152 | 280 | 156 |
| 20----- | 30 | 502 | 351 | 1,860 | 714 | 425 | 1,580 | 474 | 248 | 655 | 220 | 84 |
| 21----- | 100 | 432 | 307 | 1,320 | 706 | 364 | 1,140 | 8,100 | 188 | 425 | 2,300 | 174 |
| 22----- | 47 | 344 | 570 | 1,050 | 690 | 364 | 1,140 | 6,500 | 570 | 862 | 5,000 | 117 |
| 23----- | 78 | 229 | 618 | 810 | 610 | 1,070 | 2,400 | 3,340 | 806 | 404 | 6,500 | 194 |
| 24----- | 109 | 196 | 546 | 642 | 554 | 1,360 | 1,540 | 2,400 | 496 | 358 | 6,500 | 212 |
| 25----- | 63 | 282 | 446 | 562 | 495 | 1,000 | 1,050 | 1,860 | 425 | 990 | 3,700 | 140 |
| 26----- | 32 | 220 | 425 | 554 | 570 | 858 | 1,180 | 1,360 | 344 | 2,580 | 2,000 | 146 |
| 27----- | 59 | 151 | 2,810 | 523 | 474 | 738 | 1,500 | 1,050 | 196 | 570 | 1,200 | 70 |
| 28----- | 94 | 218 | 4,380 | 502 | 358 | 634 | 1,050 | 786 | 96 | 1,860 | 950 | 183 |
| 29----- | 50 | 159 | 2,600 | 488 | ----- | 1,840 | 826 | 634 | 248 | 1,580 | 1,100 | 69 |
| 30----- | 41 | 91 | 1,680 | 453 | ----- | 2,180 | 770 | 610 | 266 | 914 | 950 | 150 |
| 31----- | 105 | ----- | 1,320 | 418 | ----- | 1,270 | ----- | 390 | ----- | 554 | 750 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October----- | 128 | 22 | 59.5 | 0.044 | 0.05 |
| November----- | 738 | 37 | 242 | .181 | .20 |
| December----- | 4,380 | 120 | 865 | .646 | .74 |
| January----- | 4,230 | 418 | 1,030 | .799 | .89 |
| February----- | 858 | 261 | 491 | .366 | .38 |
| March----- | 2,180 | 364 | 775 | .578 | .67 |
| April----- | 11,900 | 650 | 2,250 | 1.68 | 1.87 |
| May----- | 8,100 | 390 | 1,670 | 1.25 | 1.44 |
| June----- | 1,260 | 90 | 380 | .284 | .32 |
| July----- | 2,580 | 128 | 712 | .531 | .61 |
| August----- | 9,500 | 220 | 2,690 | 1.93 | 2.22 |
| September----- | 550 | 69 | 239 | .178 | .20 |
| The year----- | 11,900 | 22 | 948 | .707 | 9.59 |

CAPE FEAR RIVER AT LILLINGTON, N. C.

LOCATION.—Water-stage recorder at highway bridge just downstream from Norfolk Southern Railroad bridge at Lillington, Harnett County, and 1 mile downstream from mouth of Neill Creek. Zero of gage is 105.71 feet above mean sea level.

DRAINAGE AREA.—3,530 square miles.

RECORDS AVAILABLE.—December, 1923, to September, 1931.

EXTREMES.—Maximum discharge during year, 29,200 second-feet Aug. 21 (gage height, 13.75 feet); minimum, 48 second-feet Oct. 4 (gage height, 0.20 foot). 1923-1931: Maximum discharge, 101,000 second-feet Oct. 2, 1929 (gage height, 27.55 feet); minimum, 8 second-feet Oct. 8, 1926 (gage height, 0.01 foot).

REMARKS.—Records good except those for estimated periods, Dec. 27 to Jan. 2, Feb. 23 to Mar. 5, Apr. 18, 19, May 18-22, which are fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|--------|-------|-------|-------|--------|--------|-------|-------|--------|-------|
| 1----- | 64 | 91 | 460 | 2,400 | 1,080 | 1,000 | 4,700 | 2,160 | 1,210 | 387 | 1,210 | 1,280 |
| 2----- | 62 | 145 | 430 | 1,800 | 912 | 1,100 | 1,970 | 1,680 | 1,540 | 271 | 9,160 | 1,130 |
| 3----- | 58 | 161 | 330 | 1,500 | 868 | 1,300 | 3,170 | 3,820 | 1,810 | 180 | 12,500 | 1,180 |
| 4----- | 56 | 316 | 170 | 1,450 | 768 | 1,400 | 4,290 | 4,340 | 1,370 | 340 | 4,940 | 1,150 |
| 5----- | 125 | 290 | 416 | 1,350 | 941 | 1,400 | 7,270 | 2,820 | 996 | 814 | 5,190 | 638 |
| 6----- | 63 | 213 | 455 | 3,990 | 977 | 1,420 | 24,100 | 1,980 | 1,200 | 841 | 5,260 | 762 |
| 7----- | 54 | 405 | 1,300 | 6,080 | 914 | 1,450 | 24,800 | 2,240 | 775 | 1,500 | 3,020 | 668 |
| 8----- | 48 | 468 | 4,950 | 3,750 | 819 | 3,100 | 16,100 | 12,400 | 922 | 884 | 2,770 | 776 |
| 9----- | 156 | 390 | 3,170 | 2,700 | 738 | 4,650 | 9,300 | 11,400 | 710 | 1,150 | 1,480 | 616 |
| 10----- | 176 | 229 | 2,290 | 2,290 | 1,010 | 3,380 | 6,270 | 6,840 | 782 | 3,120 | 1,210 | 604 |
| 11----- | 66 | 292 | 1,340 | 1,840 | 1,000 | 2,430 | 4,430 | 5,880 | 614 | 2,600 | 4,140 | 582 |
| 12----- | 58 | 238 | 1,120 | 2,210 | 841 | 1,960 | 3,310 | 4,030 | 600 | 881 | 19,500 | 482 |
| 13----- | 59 | 346 | 1,050 | 4,970 | 990 | 1,600 | 2,750 | 3,310 | 562 | 934 | 12,700 | 506 |
| 14----- | 67 | 359 | 870 | 5,880 | 989 | 1,420 | 2,480 | 2,680 | 559 | 775 | 9,960 | 422 |
| 15----- | 232 | 295 | 528 | 3,780 | 1,070 | 835 | 2,090 | 2,520 | 528 | 723 | 16,900 | 448 |
| 16----- | 80 | 313 | 456 | 2,730 | 1,150 | 1,380 | 1,910 | 1,760 | 750 | 1,130 | 6,870 | 300 |
| 17----- | 132 | 386 | 758 | 2,160 | 1,590 | 1,130 | 1,790 | 1,640 | 1,430 | 714 | 4,180 | 234 |
| 18----- | 244 | 941 | 852 | 2,030 | 1,440 | 1,030 | 1,700 | 1,500 | 798 | 564 | 2,890 | 420 |
| 19----- | 68 | 822 | 758 | 2,350 | 1,480 | 1,100 | 1,700 | 1,400 | 591 | 424 | 2,010 | 413 |
| 20----- | 55 | 736 | 747 | 4,430 | 1,690 | 1,030 | 4,220 | 1,300 | 554 | 808 | 2,070 | 245 |
| 21----- | 83 | 760 | 1,100 | 3,990 | 1,650 | 864 | 3,880 | 10,000 | 578 | 576 | 20,200 | 206 |
| 22----- | 196 | 755 | 1,280 | 3,050 | 1,690 | 1,610 | 3,450 | 18,000 | 411 | 2,080 | 22,700 | 342 |
| 23----- | 65 | 448 | 1,610 | 2,440 | 1,600 | 3,180 | 5,300 | 21,900 | 1,000 | 2,210 | 21,300 | 360 |
| 24----- | 51 | 549 | 1,510 | 1,890 | 1,500 | 4,970 | 4,650 | 15,500 | 995 | 1,100 | 12,500 | 638 |
| 25----- | 121 | 324 | 1,130 | 1,550 | 1,300 | 3,450 | 3,450 | 6,900 | 796 | 1,020 | 7,020 | 276 |
| 26----- | 62 | 416 | 1,330 | 1,550 | 1,400 | 2,680 | 3,030 | 4,140 | 731 | 3,740 | 4,200 | 698 |
| 27----- | 62 | 455 | 5,000 | 1,170 | 1,200 | 2,030 | 3,520 | 2,890 | 446 | 4,430 | 2,820 | 612 |
| 28----- | 145 | 241 | 11,000 | 1,120 | 1,000 | 1,710 | 3,380 | 2,610 | 299 | 4,420 | 2,420 | 550 |
| 29----- | 91 | 156 | 7,600 | 1,400 | ----- | 2,030 | 2,680 | 1,870 | 250 | 3,010 | 2,750 | 280 |
| 30----- | 250 | 339 | 5,000 | 1,170 | ----- | 5,680 | 2,220 | 1,880 | 540 | 2,130 | 2,420 | 210 |
| 31----- | 93 | ----- | 3,200 | 1,080 | ----- | 4,180 | ----- | 1,270 | ----- | 715 | 1,720 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October----- | 250 | 48 | 101 | 0.039 | 0.05 |
| November----- | 941 | 91 | 396 | .112 | .12 |
| December----- | ----- | 170 | 2,010 | .569 | .66 |
| January----- | 6,080 | 1,080 | 2,580 | .731 | .84 |
| February----- | 1,690 | 738 | 1,160 | .329 | .34 |
| March----- | 5,680 | 835 | 2,150 | .609 | .70 |
| April----- | 24,800 | ----- | 5,460 | 1.55 | 1.73 |
| May----- | 21,900 | 1,270 | 5,240 | 1.48 | 1.71 |
| June----- | 1,810 | 250 | 812 | .230 | .26 |
| July----- | 4,430 | 180 | 1,430 | .405 | .47 |
| August----- | 22,700 | 1,210 | 7,360 | 2.06 | 2.40 |
| September----- | 1,260 | 206 | 567 | .161 | .18 |
| The year----- | 24,800 | 48 | 2,460 | .637 | 9.44 |

CAPE FEAR RIVER AT FAYETTEVILLE, N. C.

LOCATION.—Water-stage recorder at highway bridge just downstream from Cross Creek at Fayetteville, Cumberland County. Zero of gage is 20.23 feet above mean sea level.

DRAINAGE AREA.—4,290 square miles.

RECORDS AVAILABLE.—January, 1889, to May, 1903; September, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 35,300 second-feet Aug. 23 (gage height, 36.76 feet); minimum, 73 second-feet Oct. 6 (gage height, 0.88 foot). 1889–1903, 1928–1931: Maximum discharge, 110,000 second-feet Oct. 4, 1929 (gage height, 63.43 feet); minimum, that of Oct. 6, 1930.

Maximum known discharge (estimated), 133,000 second-feet Aug. 29, 1908 (gage height, about 68.0 feet).

REMARKS.—Records good except those for estimated period, Oct. 6–12, and for September, which are fair. Regulation during low-water periods from operation of Buckhorn Shoals power plant.

Daily and monthly discharge, in second-feet, 1930–31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|--------|-------|-------|-------|--------|--------|-------|-------|--------|-------|
| 1..... | 206 | 720 | 780 | 5,080 | 1,820 | 1,620 | 5,080 | 2,800 | 1,820 | 580 | 1,040 | 2,680 |
| 2..... | 167 | 528 | 1,080 | 3,680 | 1,670 | 1,670 | 8,800 | 2,800 | 1,670 | 528 | 3,620 | 2,120 |
| 3..... | 152 | 545 | 1,120 | 3,100 | 1,670 | 1,820 | 9,000 | 3,200 | 2,120 | 492 | 12,800 | 2,020 |
| 4..... | 149 | 800 | 980 | 2,620 | 1,670 | 2,120 | 6,450 | 5,820 | 1,970 | 440 | 8,200 | 2,220 |
| 5..... | 110 | 1,120 | 860 | 2,440 | 1,520 | 2,220 | 7,150 | 5,080 | 1,720 | 668 | 8,360 | 2,270 |
| 6..... | 200 | 1,080 | 1,000 | 2,680 | 1,620 | 2,170 | 21,400 | 3,680 | 1,420 | 1,170 | 9,350 | 1,670 |
| 7..... | 160 | 900 | 1,420 | 6,550 | 1,620 | 2,120 | 29,300 | 3,100 | 1,470 | 1,220 | 6,730 | 1,520 |
| 8..... | 140 | 1,000 | 4,660 | 6,140 | 1,520 | 2,440 | 22,000 | 8,320 | 1,270 | 1,770 | 5,150 | 1,320 |
| 9..... | 120 | 880 | 4,940 | 4,660 | 1,420 | 5,150 | 14,200 | 14,400 | 1,470 | 1,620 | 3,680 | 1,170 |
| 10..... | 300 | 780 | 3,750 | 3,540 | 1,470 | 5,430 | 10,500 | 9,800 | 1,120 | 2,220 | 2,380 | 1,080 |
| 11..... | 200 | 702 | 2,720 | 3,220 | 1,820 | 4,240 | 7,700 | 8,850 | 1,080 | 3,960 | 4,410 | 960 |
| 12..... | 150 | 668 | 2,120 | 3,220 | 1,920 | 3,280 | 5,680 | 6,850 | 900 | 2,920 | 17,600 | 880 |
| 13..... | 137 | 702 | 1,720 | 5,560 | 1,770 | 2,740 | 4,520 | 5,500 | 820 | 1,820 | 18,200 | 780 |
| 14..... | 158 | 800 | 1,620 | 8,270 | 1,820 | 2,320 | 3,890 | 4,660 | 740 | 1,520 | 10,800 | 720 |
| 15..... | 360 | 860 | 1,320 | 7,370 | 1,870 | 1,820 | 3,280 | 3,990 | 702 | 1,320 | 20,100 | 685 |
| 16..... | 545 | 900 | 1,040 | 5,580 | 1,970 | 1,570 | 2,920 | 3,220 | 760 | 1,370 | 10,800 | 685 |
| 17..... | 422 | 900 | 1,040 | 4,450 | 2,120 | 1,920 | 2,680 | 2,560 | 1,320 | 1,270 | 7,550 | 632 |
| 18..... | 338 | 960 | 1,680 | 3,750 | 2,440 | 1,720 | 2,560 | 2,070 | 1,970 | 1,000 | 4,700 | 492 |
| 19..... | 475 | 1,420 | 1,720 | 3,470 | 2,270 | 1,620 | 2,560 | 1,920 | 1,320 | 920 | 4,520 | 598 |
| 20..... | 349 | 1,320 | 2,170 | 4,520 | 2,320 | 1,620 | 4,170 | 1,720 | 1,170 | 1,000 | 4,520 | 580 |
| 21..... | 262 | 1,220 | 2,320 | 5,660 | 2,380 | 1,570 | 6,940 | 2,760 | 840 | 1,520 | 18,000 | 510 |
| 22..... | 209 | 1,220 | 2,560 | 4,870 | 2,220 | 1,770 | 6,540 | 28,200 | 740 | 1,320 | 34,200 | 440 |
| 23..... | 310 | 1,040 | 2,620 | 4,030 | 2,220 | 3,750 | 6,940 | 30,200 | 685 | 2,440 | 34,700 | 545 |
| 24..... | 276 | 820 | 2,800 | 3,400 | 2,220 | 6,300 | 7,730 | 23,400 | 1,220 | 1,970 | 23,800 | 720 |
| 25..... | 221 | 960 | 2,560 | 2,920 | 2,020 | 6,060 | 6,460 | 13,100 | 1,170 | 1,470 | 14,800 | 685 |
| 26..... | 167 | 740 | 2,440 | 2,440 | 1,720 | 4,800 | 5,150 | 8,550 | 1,040 | 1,560 | 10,300 | 510 |
| 27..... | 197 | 800 | 4,010 | 2,440 | 1,870 | 3,400 | 4,940 | 5,950 | 920 | 4,660 | 7,350 | 545 |
| 28..... | 209 | 740 | 12,300 | 2,120 | 1,620 | 2,860 | 5,010 | 4,380 | 632 | 4,660 | 5,100 | 668 |
| 29..... | 388 | 615 | 10,500 | 1,970 | ----- | 2,620 | 4,380 | 3,280 | 475 | 4,450 | 4,380 | 632 |
| 30..... | 632 | 458 | 7,700 | 2,170 | ----- | 4,730 | 3,400 | 2,560 | 363 | 2,980 | 3,960 | 510 |
| 31..... | 840 | ----- | 5,750 | 1,970 | ----- | 6,220 | ----- | 2,120 | ----- | 2,020 | 3,280 | ----- |

| Month | Maximum | Minimum | Mean | P... square mile | Run-off in inches |
|----------------|---------|---------|--------|------------------|-------------------|
| October..... | 840 | 110 | 276 | 0.064 | 0.07 |
| November..... | 1,420 | 458 | 873 | .203 | .23 |
| December..... | 12,800 | 780 | 3,010 | .702 | .81 |
| January..... | 8,270 | 1,970 | 4,000 | .932 | 1.07 |
| February..... | 2,440 | 1,420 | 1,880 | .438 | .46 |
| March..... | 6,300 | 1,570 | 3,020 | .704 | .81 |
| April..... | 29,300 | 2,560 | 7,710 | 1.80 | 2.01 |
| May..... | 30,200 | 1,720 | 7,250 | 1.69 | 1.95 |
| June..... | 2,120 | 363 | 1,160 | .270 | .30 |
| July..... | 4,660 | 440 | 1,830 | .427 | .48 |
| August..... | 34,700 | 1,040 | 10,500 | 2.45 | 2.82 |
| September..... | 2,680 | 440 | 1,030 | .240 | .27 |
| The year..... | 34,700 | 110 | 3,570 | .832 | 11.28 |

CAPE FEAR RIVER BASIN

91

REEDY FORK NEAR GIBSONVILLE, N. C.

LOCATION.—Water-stage recorder a quarter of a mile downstream from Huffine's mill, 1¼ miles upstream from mouth of Buffalo Creek, and 6 miles northwest of Gibsonville, Guilford County.

DRAINAGE AREA.—133 square miles.

RECORDS AVAILABLE.—September, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,650 second-feet Aug. 11 (gauge height, 6.72 feet); minimum, 1.5 second-feet Oct. 9 (gauge height, 0.45 foot).

1928-1931: Maximum discharge, 4,090 second-feet Oct. 3, 1929 (gauge height, 12.65 feet); minimum, 1.1 second-feet Aug. 24, 1930 (gauge height, 0.41 foot).

REMARKS.—Records good. Regulation at low stages, owing to operation of Greensboro pumping plant at confluence of Horsepen Creek and Reedy Fork, 14 miles upstream. Water supply for city of Greensboro diverted at that point.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----------|------|-------|------|---------|---------|------|-----------------|-------------------|-------|------|------|-------|
| 1 | 13.8 | 20 | 12.8 | 181 | 22 | 41 | 225 | 30 | 61 | 14.0 | 106 | 90 |
| 2 | 15.6 | 12.6 | 20 | 108 | 22 | 38 | 239 | 54 | 53 | 11.1 | 110 | 102 |
| 3 | 10.4 | 17.3 | 15.4 | 38 | 89 | 105 | 218 | 57 | 144 | 11.5 | 51 | 24 |
| 4 | 12.3 | 27 | 12.4 | 33 | 162 | 104 | 229 | 38 | 53 | 14.3 | 36 | 78 |
| 5 | 3.0 | 48 | 18.8 | 135 | 104 | 35 | 397 | 106 | 24 | 8.3 | 70 | 60 |
| 6 | 11.7 | 31 | 101 | 148 | 30 | 29 | 514 | 185 | 21 | 12.9 | 35 | 30 |
| 7 | 8.1 | 19.3 | 205 | 96 | 26 | 28 | 594 | 194 | 15.4 | 14.0 | 26 | 25 |
| 8 | 10.2 | 19.7 | 218 | 164 | 24 | 43 | 530 | 126 | 15.0 | 29 | 73 | 21 |
| 9 | 9.8 | 11.8 | 148 | 187 | 27 | 38 | 376 | 196 | 16.3 | 354 | 146 | 22 |
| 10 | 10.4 | 21 | 177 | 187 | 33 | 106 | 266 | 241 | 13.2 | 109 | 112 | 20 |
| 11 | 10.0 | 21 | 181 | 179 | 29 | 170 | 216 | 218 | 16.1 | 29 | 620 | 16.2 |
| 12 | 5.5 | 43 | 177 | 93 | 25 | 109 | 192 | 156 | 14.4 | 76 | 409 | 16.4 |
| 13 | 13.2 | 107 | 90 | 69 | 26 | 34 | 71 | 177 | 11.4 | 89 | 229 | 10.9 |
| 14 | 9.8 | 39 | 30 | 49 | 31 | 27 | 110 | 192 | 4.5 | 198 | 216 | 16.8 |
| 15 | 9.4 | 25 | 26 | 31 | 70 | 28 | 179 | 183 | 21 | 99 | 209 | 14.0 |
| 16 | 11.9 | 62 | 24 | 30 | 37 | 29 | 110 | 170 | 48 | 30 | 301 | 99 |
| 17 | 15.4 | 74 | 21 | 38 | 106 | 26 | 38 | 56 | 36 | 24 | 220 | 79 |
| 18 | 13.9 | 138 | 21 | 142 | 183 | 27 | 45 | 38 | 23 | 15.4 | 185 | 24 |
| 19 | 9.8 | 168 | 30 | 151 | 124 | 23 | 69 | 29 | 16.9 | 12.6 | 115 | 21 |
| 20 | 20 | 127 | 38 | 143 | 38 | 25 | 68 | 34 | 15.6 | 20 | 164 | 13.4 |
| 21 | 9.4 | 36 | 28 | 187 | 37 | 23 | 120 | 150 | 11.2 | 17.7 | 117 | 17.9 |
| 22 | 10.4 | 24 | 33 | 117 | 29 | 38 | 209 | 207 | 20 | 13.0 | 164 | 13.9 |
| 23 | 10.9 | 20 | 28 | 39 | 30 | 64 | 164 | 361 | 15.8 | 12.2 | 303 | 13.8 |
| 24 | 13.5 | 24 | 24 | 34 | 93 | 123 | 66 | 349 | 20 | 10.4 | 626 | 13.6 |
| 25 | 15.0 | 19.2 | 19.0 | 30 | 103 | 183 | 111 | 246 | 111 | 14.0 | 367 | 15.4 |
| 26 | 11.2 | 20 | 86 | 31 | 33 | 185 | 189 | 185 | 146 | 80 | 234 | 17.2 |
| 27 | 18.6 | 16.1 | 171 | 26 | 26 | 116 | 91 | 128 | 81 | 709 | 185 | 12.0 |
| 28 | 11.0 | 16.9 | 256 | 27 | 26 | 46 | 124 | 138 | 23 | 424 | 248 | 14.2 |
| 29 | 13.5 | 21 | 218 | 24 | ----- | 160 | 89 | 88 | 19.6 | 234 | 239 | 14.3 |
| 30 | 17.5 | 13.8 | 148 | 23 | ----- | 103 | 34 | 28 | 14.3 | 172 | 189 | 8.7 |
| 31 | 15.4 | ----- | 181 | 24 | ----- | 138 | ----- | 26 | ----- | 162 | 119 | ----- |
| Month | Tonh | | | Maximum | Minimum | Mean | Per square mile | Run-off in inches | | | | |
| October | | | | 20 | 3.0 | 12.0 | 0.090 | 0.10 | | | | |
| November | | | | 168 | 11.8 | 41.4 | .311 | .35 | | | | |
| December | | | | 256 | 12.4 | 89.0 | .669 | .77 | | | | |
| January | | | | 187 | 23 | 89.2 | .671 | .77 | | | | |
| February | | | | 183 | 22 | 56.6 | .426 | .44 | | | | |
| March | | | | 185 | 23 | 72.4 | .544 | .63 | | | | |
| April | | | | 594 | 34 | 196 | 1.47 | 1.64 | | | | |
| May | | | | 361 | 26 | 141 | 1.06 | 1.22 | | | | |
| June | | | | 146 | 4.5 | 36.2 | .272 | .30 | | | | |
| July | | | | 709 | 8.3 | 97.4 | .732 | .84 | | | | |
| August | | | | 626 | 26 | 201 | 1.51 | 1.74 | | | | |
| September | | | | 102 | 8.7 | 30.8 | .232 | .26 | | | | |
| The year | | | | 709 | 3.0 | 89.0 | .669 | 9.06 | | | | |

HORSEPEN CREEK AT BATTLE GROUND, N. C.

LOCATION.—Water-stage recorder 1,000 feet upstream from highway bridge, 1 mile northwest of Battle Ground, Guilford County, and $2\frac{1}{2}$ miles upstream from confluence with Reedy Fork.

DRAINAGE AREA.—15.9 square miles.

RECORDS AVAILABLE.—November, 1925, to July, 1931 (discontinued).

EXTREMES.—Maximum discharge during period, 316 second-feet May 21 (gage height, 5.60 feet); minimum, 1.8 second-feet Dec. 17 (caused by ice).

1925-1931: Maximum discharge recorded, 750 second-feet Feb. 28, 1929 (gage height, 7.45 feet); minimum, 0.7 second-foot July 24, 1926.

REMARKS.—Records fair except those above 250 second-feet and those estimated, which are poor. Slight diurnal fluctuation during dry periods caused by transpiration losses.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July |
|-----|------|-------|-------|------|------|------|------|-----|-------|-------|
| 1 | 2.5 | 5.4 | ° 4 | 8.9 | 4.9 | 8.9 | 71 | 7 | 6.3 | ° 3.5 |
| 2 | 2.7 | 6.0 | ° 5 | 15 | 4.9 | 5.8 | 29 | 18 | 4.9 | ° 3.5 |
| 3 | 2.9 | ° 5 | ° 4.5 | 7.3 | 4.9 | 5.6 | 18 | 14 | 4.5 | |
| 4 | 2.9 | ° 20 | | 9.2 | 4.9 | 5.8 | 49 | 9.7 | 4.3 | |
| 5 | 2.9 | ° 15 | | 45 | 4.7 | 5.8 | 110 | 8.6 | 4.1 | |
| 6 | 2.9 | ° 9 | ° 50 | 26 | 4.7 | 5.2 | 185 | 15 | 3.6 | ° 20 |
| 7 | 2.9 | ° 6 | ° 20 | 12 | 4.5 | 5.2 | 80 | 28 | 3.6 | ° 50 |
| 8 | 2.8 | 5.0 | ° 10 | 9.2 | 4.5 | 10 | 32 | 22 | 3.6 | ° 20 |
| 9 | 2.9 | ° 4.5 | 6.0 | 11 | 5.0 | 6.6 | 25 | 27 | 3.6 | ° 10 |
| 10 | 2.9 | | 5.6 | 7.0 | 6.0 | 5.6 | ° 17 | 32 | 3.6 | ° 7 |
| 11 | 2.6 | ° 8 | 4.9 | 7.0 | 5.0 | 5.2 | ° 12 | 14 | 3.2 | 4.7 |
| 12 | 2.6 | | 4.1 | 15 | 4.7 | 5.2 | ° 10 | 11 | 3.2 | 3.7 |
| 13 | 2.8 | | 4.0 | 14 | 4.5 | 5.0 | ° 9 | 15 | 3.3 | 3.1 |
| 14 | 4.3 | | 4.0 | 9.7 | 7.6 | 4.9 | 8.2 | 9.2 | 3.3 | 3.4 |
| 15 | 4.1 | | 4.0 | 11 | 5.6 | 5.4 | 9.2 | 7.6 | 27 | 3.2 |
| 16 | 3.8 | ° 25 | 4.0 | 7.6 | 5.2 | 4.9 | 9.2 | 5.8 | 19 | 3.2 |
| 17 | 3.7 | ° 15 | 3.6 | 7.6 | 8.4 | 4.9 | 11 | 5.6 | 6.3 | 3.1 |
| 18 | 3.6 | ° 10 | 7.3 | 11 | 7.3 | 4.5 | 18 | 5.4 | 4.7 | 19 |
| 19 | 3.7 | ° 6 | 6.0 | 20 | 6.6 | 4.5 | 16 | 5.2 | 4.1 | 8.1 |
| 20 | 3.8 | | 8.0 | 13 | 6.6 | 4.5 | 13 | 16 | 4.0 | 4.0 |
| 21 | 4.0 | | 7.3 | 9.7 | 7.0 | 4.1 | 12 | 159 | 4.5 | 3.8 |
| 22 | 4.1 | ° 4 | 5.8 | 7.9 | 5.8 | 37 | 66 | 33 | 46 | 4.3 |
| 23 | 4.7 | | 5.8 | 7.3 | 5.6 | 24 | 24 | 21 | ° 10 | 3.1 |
| 24 | 5.2 | | 6.0 | 6.6 | 5.4 | 11 | 15 | 13 | ° 5 | 3.1 |
| 25 | 5.0 | | 5.8 | 6.3 | 5.0 | 8.2 | 15 | 10 | | 72 |
| 26 | 4.7 | ° 3.5 | 10 | 6.0 | 4.9 | 9.7 | 14 | 8.2 | ° 3.5 | ° 30 |
| 27 | 4.7 | | 40 | 6.0 | 4.9 | 8.2 | ° 11 | 7.3 | | ° 10 |
| 28 | 4.9 | | 29 | 5.8 | 4.9 | 22 | ° 9 | 6.0 | | ° 5 |
| 29 | 5.2 | | 17 | 5.6 | | 59 | ° 8 | 5.4 | | ° 4.0 |
| 30 | 7.3 | | 15 | 5.6 | | 20 | ° 7 | 4.9 | | ° 3.5 |
| 31 | 5.6 | | 11 | 5.4 | | 15 | | 4.5 | | ° 3.5 |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------|---------|---------|------|-----------------|-------------------|
| October | 7.3 | 2.5 | 3.83 | 0.241 | 0.28 |
| November | 25 | | 7.28 | .458 | .51 |
| December | 50 | 3.6 | 10.2 | .642 | .74 |
| January | 45 | 5.4 | 10.9 | .686 | .79 |
| February | 8.4 | 4.5 | 5.50 | .346 | .36 |
| March | 59 | 4.1 | 10.7 | .673 | .78 |
| April | 185 | | 30.4 | 1.91 | 2.13 |
| May | 159 | 4.5 | 17.7 | 1.11 | 1.28 |
| June | 46 | 3.2 | 6.89 | .433 | .48 |
| July | 72 | 3.1 | 10.4 | .654 | .75 |

° Estimated.

BUFFALO CREEK NEAR GREENSBORO, N. C.

LOCATION.—Water-stage recorder at McConnell road crossing 3 miles east of Greensboro, Guilford County, and 6 miles upstream from confluence with North Buffalo Creek.

DRAINAGE AREA.—32.8 square miles.

RECORDS AVAILABLE.—August, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 845 second-feet July 27 (gage height, 7.37 feet); minimum, 0.2 second-foot Oct. 2.

1928-1931: Maximum discharge, 1,540 second-feet Feb. 28, 1929 (gage height, 8.74 feet); minimum, that of Oct. 2, 1930.

REMARKS.—Records good. Sewage from Greensboro enters just above station.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1 | 0.9 | 1.9 | 6.5 | 18 | 8.3 | 26 | 124 | 12 | 68 | 7.6 | 12 | 5.5 |
| 2 | .8 | .9 | 5.5 | 14 | 8.5 | 20 | 100 | 44 | 16 | 4.8 | 74 | 5.5 |
| 3 | .9 | .8 | 5.2 | 15 | 8.5 | 16 | 33 | 28 | 11 | 3.1 | 283 | 11 |
| 4 | .6 | 16 | 5.2 | 18 | 8.3 | 14 | 74 | 18 | 8.6 | 4.9 | 22 | 32 |
| 5 | .7 | 17 | 4.9 | 71 | 8.3 | 18 | 396 | 14 | 8.1 | 13 | 13 | 8.6 |
| 6 | .6 | 4.8 | 57 | 145 | 8.1 | 15 | 535 | 14 | 7.0 | 7.0 | 32 | 6.4 |
| 7 | 1.2 | 2.2 | 141 | 31 | 7.9 | 14 | 313 | 48 | 6.7 | 26 | 9.0 | 5.7 |
| 8 | 1.6 | 2.2 | 27 | 21 | 7.9 | 30 | 83 | 92 | 6.7 | 14 | 5.7 | 5.4 |
| 9 | 1.4 | 2.2 | 15 | 18 | 11 | 21 | 37 | 28 | 6.2 | 79 | 4.6 | 4.8 |
| 10 | 1.4 | 1.9 | 12 | 19 | 21 | 16 | 28 | 70 | 6.0 | 22 | 7.2 | 4.8 |
| 11 | 1.6 | 2.2 | 11 | 15 | 12 | 14 | 24 | 25 | 5.7 | 7.9 | 153 | 4.3 |
| 12 | 1.0 | 2.8 | 9.8 | 31 | 9.8 | 13 | 21 | 18 | 5.5 | 5.0 | 337 | 4.0 |
| 13 | 1.6 | 11 | 8.6 | 44 | 9.4 | 13 | 19 | 18 | 5.7 | 16 | 51 | 3.6 |
| 14 | 1.4 | 8.5 | 8.1 | 22 | 21 | 12 | 18 | 14 | 5.5 | 100 | 65 | 4.6 |
| 15 | 1.6 | 10 | 7.9 | 16 | 19 | 14 | 16 | 12 | 7.5 | 11 | 41 | 4.4 |
| 16 | 1.6 | 35 | 7.2 | 18 | 14 | 14 | 14 | 10 | 34 | 5.5 | 14 | 3.2 |
| 17 | 1.6 | 25 | 7.4 | 19 | 21 | 13 | 14 | 9.0 | 10 | 4.3 | 9.6 | 3.1 |
| 18 | 1.8 | 12 | 9.0 | 24 | 25 | 12 | 38 | 8.8 | 5.8 | 12 | 7.7 | 3.2 |
| 19 | .9 | 7.6 | 15 | 54 | 20 | 12 | 32 | 8.6 | 4.6 | 27 | 6.5 | 2.8 |
| 20 | 1.0 | 6.0 | 21 | 31 | 20 | 12 | 28 | 11 | 3.7 | 5.7 | 6.5 | 3.0 |
| 21 | 1.9 | 5.2 | 22 | 20 | 25 | 11 | 25 | 96 | 2.8 | 4.2 | 41 | 2.5 |
| 22 | 2.2 | 6.0 | 21 | 15 | 19 | 46 | 56 | 93 | 3.4 | 4.9 | 48 | 4.0 |
| 23 | 3.1 | 5.4 | 15 | 13 | 16 | 90 | 75 | 34 | 3.8 | 3.6 | 35 | 2.8 |
| 24 | 3.4 | 5.2 | 14 | 12 | 14 | 30 | 24 | 15 | 3.4 | 3.0 | 26 | 3.1 |
| 25 | 2.5 | 5.0 | 12 | 11 | 14 | 22 | 21 | 12 | 2.6 | 59 | 13 | 2.5 |
| 26 | 1.6 | 5.0 | 44 | 11 | 12 | 18 | 24 | 10 | 2.8 | 42 | 9.6 | 2.5 |
| 27 | .6 | 4.4 | 175 | 11 | 12 | 15 | 20 | 9.6 | 3.2 | 509 | 12 | 2.4 |
| 28 | 1.4 | 3.7 | 125 | 10 | 11 | 21 | 16 | 11 | 2.8 | 32 | 13 | 2.2 |
| 29 | 3.3 | 3.7 | 38 | 9.6 | ----- | 171 | 14 | 7.4 | 2.8 | 10 | 8.3 | 3.0 |
| 30 | 7.9 | 4.3 | 32 | 9.6 | ----- | 54 | 13 | 6.5 | 5.8 | 16 | 7.0 | 3.0 |
| 31 | 4.4 | ----- | 21 | 9.6 | ----- | 25 | ----- | 6.7 | ----- | 4.3 | 6.4 | ----- |

| Month | Maximum | Minimum | Mean | Month | Maximum | Minimum | Mean |
|----------|---------|---------|------|-----------|---------|---------|------|
| October | 7.9 | 0.6 | 1.82 | May | 96 | 6.5 | 25.9 |
| November | 35 | .8 | 7.26 | June | 63 | 2.6 | 8.86 |
| December | 175 | 4.9 | 29.1 | July | 509 | 3.0 | 34.3 |
| January | 145 | 9.6 | 25.0 | August | 337 | 4.6 | 44.3 |
| February | 25 | 7.9 | 14.0 | September | 32 | 2.2 | 5.13 |
| March | 171 | 11 | 26.5 | The year | 535 | .6 | 24.8 |
| April | 535 | 13 | 74.5 | | | | |

NORTH BUFFALO CREEK NEAR GREENSBORO, N. C.

LOCATION.—Water-stage recorder at county highway bridge 3 miles upstream from junction with Buffalo Creek and 6 miles northwest of Greensboro, Guilford County.

DRAINAGE AREA.—36.4 square miles.

RECORDS AVAILABLE.—August, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 882 second-feet Aug. 11 (gage height, 6.45 feet); minimum, 3.0 second-feet Oct. 12 (gage height, 0.96 foot).
1928-1931: Maximum discharge, 1,620 second-feet Feb. 28, 1929; minimum, that of Oct. 12, 1930.

REMARKS.—Records good except those estimated for Mar. 16-22, which are fair. Sewage from Greensboro and Proximity Mills enters above station.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1..... | 9.9 | 8.0 | 10.0 | 25 | 13.7 | 36 | 138 | 19.7 | | 22 | 23 | 15.2 |
| 2..... | 7.8 | 6.3 | 10.9 | 20 | 13.7 | 24 | 65 | 61 | 26 | 12.3 | 77 | 13.7 |
| 3..... | 6.0 | 6.0 | 11.4 | 18.8 | 17.6 | 22 | 35 | 33 | 22 | 10.0 | 172 | 34 |
| 4..... | 5.1 | 64 | 10.5 | 21 | 17.6 | 24 | 115 | 24 | 18.8 | 13.0 | 39 | 82 |
| 5..... | 5.3 | 25 | 9.5 | 127 | 18.4 | 23 | 376 | 24 | 17.1 | 19.4 | 39 | 16.7 |
| 6..... | 5.4 | 14.9 | 179 | 65 | 16.0 | 17.6 | 454 | 26 | 13.4 | 11.0 | 50 | 12.0 |
| 7..... | 7.7 | 10.0 | 80 | 33 | 14.5 | 18.0 | 215 | 77 | 11.0 | 24 | 20 | 12.3 |
| 8..... | 8.8 | 9.1 | 28 | 28 | 14.5 | 41 | 84 | 101 | 12.3 | 19.8 | 13.0 | 14.5 |
| 9..... | 7.0 | 8.0 | 22 | 24 | 19.8 | 27 | 51 | 40 | 16.0 | 229 | 9.4 | 14.1 |
| 10..... | 5.8 | 8.2 | 18.8 | 23 | 34 | 24 | 39 | 118 | 14.5 | 22 | 25 | 13.4 |
| 11..... | 5.0 | 11.2 | 17.1 | 20 | 21 | 23 | 34 | 35 | 12.7 | 14.1 | 454 | 11.7 |
| 12..... | 4.7 | 12.7 | 13.7 | 46 | 19.7 | 22 | 28 | 30 | 11.4 | 9.7 | 130 | 7.1 |
| 13..... | 6.3 | 28 | 11.7 | 46 | 16.7 | 18.4 | 26 | 31 | 9.1 | 56 | 37 | 6.3 |
| 14..... | 11.6 | 13.6 | 10.7 | 30 | 34 | 16.0 | 28 | 25 | 9.7 | 102 | 61 | 8.5 |
| 15..... | 10.4 | 27 | 10.4 | 30 | 24 | 19.3 | 24 | 21 | 18.0 | 19.3 | 28 | 10.7 |
| 16..... | 8.4 | 69 | 12.1 | 24 | 18.4 | | 24 | 16.7 | 84 | 16.3 | 17.6 | 10.0 |
| 17..... | 6.8 | 30 | 13.0 | 25 | 40 | | 21 | 14.8 | 16.7 | 13.4 | 15.2 | 11.0 |
| 18..... | 5.0 | 22 | 18.6 | 30 | 32 | | 46 | 19.3 | 14.5 | 35 | 150 | 11.0 |
| 19..... | 4.3 | 17.2 | 26 | 68 | 28 | 16 | 42 | 19.3 | 12.3 | 49 | 31 | 6.8 |
| 20..... | 4.1 | 15.1 | 32 | 39 | 28 | | 34 | 32 | 10.0 | 15.2 | 26 | 6.6 |
| 21..... | 7.4 | 14.2 | 28 | 30 | 32 | | 40 | 253 | 9.7 | 15.2 | 32 | 8.0 |
| 22..... | 8.0 | 12.0 | 26 | 25 | 24 | 60 | 94 | 47 | 18.8 | 20 | 118 | 10.7 |
| 23..... | 7.8 | 9.1 | 18.8 | 22 | 22 | 76 | 49 | 31 | 15.6 | 13.7 | 53 | 10.7 |
| 24..... | 8.2 | 9.4 | 16.3 | 20 | 22 | 35 | 30 | 22 | 12.3 | 10.7 | 36 | 11.7 |
| 25..... | 5.3 | 11.3 | 14.1 | 18.4 | 22 | 29 | 28 | 20 | 12.0 | 109 | 22 | 9.7 |
| 26..... | 5.8 | 9.4 | 103 | 18.8 | 18.4 | 25 | 29 | 20 | 12.0 | 173 | 68 | 6.6 |
| 27..... | 6.6 | 7.1 | 136 | 21 | 16.7 | 21 | 26 | 20 | 9.7 | 254 | 54 | 6.0 |
| 28..... | 8.4 | 6.8 | 73 | 21 | 18.0 | 34 | 24 | 17.6 | 8.5 | 26 | 36 | 8.5 |
| 29..... | 13.8 | 7.4 | 38 | 19.7 | | 170 | 22 | 16.0 | 8.8 | 18.0 | 27 | 10.4 |
| 30..... | 22 | 8.0 | 37 | 17.1 | | 40 | 21 | 12.3 | 15.5 | 16.3 | 17.6 | 10.4 |
| 31..... | 10.4 | | 27 | 15.2 | | 32 | | 11.4 | | 14.1 | 14.1 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 22 | 4.1 | 7.71 | 0.212 | 0.24 |
| November..... | 69 | 6.0 | 16.7 | .459 | .51 |
| December..... | 179 | 9.5 | 34.3 | .942 | 1.09 |
| January..... | 127 | 15.2 | 31.3 | .860 | .99 |
| February..... | 40 | 13.7 | 22.0 | .604 | .63 |
| March..... | 170 | 16.0 | 31.4 | .863 | 1.00 |
| April..... | 454 | 21 | 74.7 | 2.05 | 2.29 |
| May..... | 253 | 11.4 | 39.9 | 1.10 | 1.27 |
| June..... | 125 | 8.5 | 19.9 | .547 | .61 |
| July..... | 254 | 9.7 | 44.6 | 1.23 | 1.42 |
| August..... | 454 | 9.4 | 61.1 | 1.68 | 1.94 |
| September..... | 82 | 6.0 | 13.7 | .376 | .42 |
| The year..... | 454 | 4.1 | 33.2 | .912 | 12.41 |

MORGAN CREEK NEAR CHAPEL HILL, N. C.

LOCATION.—Water-stage recorder just downstream from mouth of Neville Creek, 2½ miles southwest of Chapel Hill, Orange County, and 7 miles upstream from mouth.

DRAINAGE AREA.—27 square miles.

RECORDS AVAILABLE.—January, 1923, to September, 1931.

EXTREMES.—Maximum discharge during year, 5,770 second-feet Aug. 20 (gage height, 14.00 feet); minimum mean daily discharge, 1.08 second-foot Oct. 12, 1923–1931: Maximum discharge, about 30,000 second-feet Aug. 4, 1924 (gage height, about 25.0 feet); minimum, 0.47 second-foot Sept. 11, 1925.

REMARKS.—Records good except those estimated for Dec. 17–25, '31, Jan. 1, which are poor. Water diverted above station for water supply of Chapel Hill is included in tables of discharge.

Daily and monthly discharge, in second-feet, 1930–31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|------|-------|------|------|-------|
| 1..... | 1.13 | 4.2 | 5.9 | 17 | 10.2 | 12.9 | 113 | 18.2 | 11.0 | 3.4 | 60 | 9.4 |
| 2..... | 1.12 | 3.1 | 5.3 | 14.2 | 9.8 | 11.6 | 49 | 29 | 9.8 | 3.2 | 136 | 8.5 |
| 3..... | 1.13 | 3.4 | 4.4 | 13.5 | 9.4 | 10.4 | 30 | 24 | 8.8 | 3.3 | 80 | 8.2 |
| 4..... | 1.17 | 18.5 | 4.5 | 15.0 | 9.1 | 10.0 | 28 | 19.0 | 8.2 | 8.5 | 15.6 | 8.2 |
| 5..... | 1.16 | 9.7 | 4.4 | 41 | 9.2 | 9.7 | 142 | 16.2 | 8.4 | 30 | 18.6 | 7.5 |
| 6..... | 1.37 | 5.7 | 33 | 32 | 8.8 | 9.0 | 245 | 21 | 8.5 | 6.7 | 10.4 | 6.8 |
| 7..... | 1.40 | 4.9 | 37 | 19.8 | 8.8 | 11.1 | 124 | 78 | 7.4 | 7.0 | 7.9 | 6.4 |
| 8..... | 1.26 | 4.2 | 14.2 | 16.4 | 8.8 | 38 | 57 | 81 | 6.4 | 7.1 | 6.4 | 6.0 |
| 9..... | 1.35 | 3.8 | 9.8 | 14.8 | 9.7 | 18.6 | 39 | 38 | 5.9 | 5.5 | 6.0 | 5.7 |
| 10..... | 1.34 | 3.8 | 8.2 | 13.1 | 10.8 | 14.2 | 32 | 44 | 6.1 | 4.7 | 5.8 | 5.5 |
| 11..... | 1.23 | 3.8 | 7.1 | 12.4 | 9.1 | 12.2 | 27 | 27 | 6.0 | 4.4 | 48 | 5.3 |
| 12..... | 1.08 | 4.0 | 6.8 | 44 | 8.6 | 12.0 | 24 | 25 | 5.9 | 62 | 23 | 5.0 |
| 13..... | 2.8 | 5.5 | 5.9 | 37 | 8.5 | 10.8 | 21 | 22 | 5.9 | 43 | 15.7 | 4.8 |
| 14..... | 7.6 | 5.4 | 5.8 | 25 | 12.4 | 10.0 | 19.4 | 18.2 | 5.6 | 6.2 | 373 | 4.7 |
| 15..... | 14.5 | 5.3 | 5.5 | 20 | 10.8 | 10.0 | 17.0 | 15.9 | 7.2 | 4.8 | 40 | 4.6 |
| 16..... | 5.9 | 9.2 | 5.1 | 20 | 9.4 | 10.0 | 16.4 | 14.5 | 13.3 | 4.2 | 23 | 4.4 |
| 17..... | 3.8 | 12.0 | 6 | 20 | 10.0 | 9.6 | 15.0 | 13.3 | 7.4 | 3.9 | 15.9 | 4.2 |
| 18..... | 3.5 | 7.1 | 5 | 24 | 11.2 | 8.8 | 14.8 | 13.5 | 5.7 | 4.4 | 12.4 | 4.0 |
| 19..... | 2.6 | 5.9 | 6 | 51 | 10.6 | 8.8 | 109 | 12.2 | 5.2 | 3.9 | 19.6 | 3.8 |
| 20..... | 2.5 | 5.4 | 7 | 30 | 12.0 | 8.8 | 47 | 12.2 | 5.0 | 3.8 | 952 | 3.7 |
| 21..... | 2.4 | 5.1 | 8 | 23 | 18.6 | 8.4 | 34 | 167 | 4.7 | 110 | 254 | 3.7 |
| 22..... | 2.4 | 4.8 | 9 | 19.4 | 13.3 | 32 | 88 | 51 | 4.4 | 56 | 114 | 3.7 |
| 23..... | 2.5 | 4.6 | 9 | 16.7 | 11.8 | 26 | 48 | 48 | 8.9 | 8.5 | 57 | 3.7 |
| 24..... | 2.6 | 4.5 | 10 | 15.3 | 11.2 | 17.4 | 32 | 26 | 6.4 | 5.9 | 37 | 3.7 |
| 25..... | 2.7 | 4.2 | 11 | 14.2 | 10.6 | 14.5 | 30 | 22 | 4.5 | 8.8 | 26 | 3.6 |
| 26..... | 2.6 | 3.8 | 81 | 13.8 | 9.7 | 12.2 | 46 | 17.8 | 4.2 | 86 | 21 | 3.6 |
| 27..... | 2.6 | 3.8 | 119 | 12.7 | 9.2 | 11.4 | 37 | 15.3 | 4.1 | 11.6 | 17.0 | 3.4 |
| 28..... | 2.7 | 3.7 | 49 | 12.0 | 9.0 | 12.7 | 27 | 13.5 | 3.8 | 7.8 | 15.0 | 3.0 |
| 29..... | 5.0 | 3.7 | 31 | 12.0 | ----- | 42 | 23 | 5.3 | 3.7 | 5.9 | 13.3 | 2.7 |
| 30..... | 10.0 | 3.9 | 25 | 11.4 | ----- | 19.4 | 19.8 | 11.0 | 3.4 | 5.1 | 12.4 | 2.7 |
| 31..... | 6.3 | ----- | 20 | 11.0 | ----- | 17.0 | ----- | 10.2 | ----- | 4.7 | 10.8 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 14.5 | 1.08 | 3.22 | 0.115 | 0.14 |
| November..... | 18.5 | 3.1 | 5.57 | .206 | .23 |
| December..... | 119 | 4.4 | 18.0 | .667 | .77 |
| January..... | 51 | 11.0 | 20.7 | .767 | .88 |
| February..... | 18.6 | 8.5 | 10.4 | .385 | .40 |
| March..... | 42 | 8.4 | 14.8 | .545 | .63 |
| April..... | 245 | 14.8 | 51.8 | 1.92 | 2.14 |
| May..... | 167 | 5.3 | 30.0 | 1.11 | 1.28 |
| June..... | 13.3 | 3.4 | 6.53 | .245 | .27 |
| July..... | 110 | 3.2 | 17.1 | .633 | .73 |
| August..... | 952 | 5.8 | 78.9 | 2.92 | 3.37 |
| September..... | 9.4 | 2.7 | 5.02 | .186 | .21 |
| The year..... | 952 | 1.08 | 22.0 | .815 | 11.05 |

WEST FORK OF DEEP RIVER NEAR HIGH POINT, N. C.

LOCATION.—Water-stage recorder a quarter of a mile upstream from State highway crossing at head of High Point Reservoir, 1½ miles northwest of Jamestown, and 3½ miles northeast of High Point, Guilford County.

DRAINAGE AREA.—33 square miles.

RECORDS AVAILABLE.—June, 1923, to September, 1926; July, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 883 second-feet Aug. 11 (gage height, 9.60 feet); minimum, 1.6 second-feet about Sept. 7.
1923-1926, 1928-1931: Maximum discharge, 1,440 second-feet Feb. 28, 1929 (gage height, 12.35 feet); minimum, 0.7 second-foot July 9, 1930.

REMARKS.—Records fair. Discharge estimated for Oct. 1 to Dec. 8. Flow slightly regulated by gristmill 4 miles upstream.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|------|------|------|-------|------|-------|------|-------|------|------|-------|
| 1..... | 3.9 | 4.5 | 5.7 | 14.8 | 9.8 | 24 | 226 | 19.0 | 20 | 6.2 | 32 | 16.2 |
| 2..... | | | | 16.2 | 9.4 | 15.7 | 82 | 38 | 16.6 | 4.0 | 15.7 | 13.9 |
| 3..... | 3.6 | 25 | 5.1 | 15.2 | 9.4 | 12.6 | 44 | 22 | 15.7 | 6.6 | 13.0 | 40 |
| 4..... | | | | 21 | 9.4 | 14.3 | 120 | 16.2 | 16.6 | 29 | 24 | 13.9 |
| 5..... | | 9.0 | | 152 | 9.4 | 17.1 | 242 | 16.2 | 15.2 | 106 | 42 | 8.7 |
| 6..... | 3.5 | 6.0 | 200 | 81 | 8.7 | 12.2 | 292 | 168 | 13.9 | 51 | 11.3 | 8.3 |
| 7..... | | | | 120 | 32 | 8.7 | 12.6 | 156 | 163 | 12.2 | 172 | 6.6 |
| 8..... | | 5.2 | 25 | 21 | 8.7 | 30 | 71 | 88 | 10.2 | 30 | 5.0 | 5.6 |
| 9..... | | | | 17.1 | 17.1 | 11.8 | 19.5 | 48 | 9.8 | 15.2 | 4.3 | 5.6 |
| 10..... | | | 13.9 | 14.8 | 15.2 | 17.1 | 36 | 144 | 9.4 | 13.5 | 6.2 | 5.3 |
| 11..... | 3.7 | | 11.3 | 13.9 | 9.8 | 14.8 | 32 | 48 | 11.3 | 13.5 | 228 | 5.0 |
| 12..... | | | | 10.2 | 43 | 9.0 | 14.3 | 26 | 9.4 | 10.2 | 47 | 4.3 |
| 13..... | | 6.3 | 8.7 | 36 | 9.4 | 13.9 | 22 | 40 | 9.8 | 9.4 | 27 | 4.0 |
| 14..... | | | | 8.3 | 21 | 18.6 | 13.9 | 20 | 27 | 9.4 | 9.8 | 204 |
| 15..... | | 25 | 7.6 | 22 | 12.6 | 17.1 | 17.6 | 24 | 9.4 | 8.7 | 41 | 3.6 |
| 16..... | | 90 | 6.9 | 28 | 11.3 | 14.8 | 16.6 | 21 | 10.9 | 7.9 | 27 | 3.6 |
| 17..... | | 45 | 10.9 | 22 | 25 | 13.0 | 16.2 | 21 | 6.9 | 7.2 | 23 | 4.0 |
| 18..... | 4.5 | 20 | 36 | 22 | 19.5 | 12.6 | 42 | 21 | 6.2 | 9.4 | 21 | 4.3 |
| 19..... | | | 55 | 53 | 18.6 | 13.5 | 77 | 21 | 5.6 | 6.6 | 27 | 3.3 |
| 20..... | | 11 | 49 | 26 | 17.1 | 12.6 | 43 | 51 | 5.0 | 4.6 | 17.6 | 3.3 |
| 21..... | | | 36 | 17.6 | 17.6 | 12.6 | 28 | 395 | 5.0 | 7.2 | 17.1 | 3.8 |
| 22..... | | | 35 | 14.8 | 14.3 | 88 | 68 | 99 | 15.3 | 6.2 | 376 | 3.6 |
| 23..... | | | 32 | 13.5 | 13.5 | 54 | 39 | 75 | 7.2 | 3.8 | 79 | 3.3 |
| 24..... | | | 30 | 12.6 | 12.6 | 30 | 26 | 41 | 6.6 | 5.3 | 52 | 3.3 |
| 25..... | 4.0 | | 33 | 12.6 | 11.8 | 24 | 24 | 31 | 5.6 | 160 | 42 | 3.1 |
| 26..... | | | 123 | 12.2 | 10.5 | 19.0 | 24 | 25 | 5.9 | 23 | 36 | 3.8 |
| 27..... | | | 170 | 11.3 | 10.5 | 19.5 | 20 | 22 | 5.3 | 14.8 | 32 | 3.3 |
| 28..... | 5.2 | 5.7 | 63 | 10.9 | 10.9 | 77 | 18.6 | 20 | 5.0 | 11.8 | 37 | 3.3 |
| 29..... | | | 36 | 10.9 | ----- | 186 | 18.1 | 19.0 | 5.0 | 10.2 | 22 | 3.1 |
| 30..... | 6.5 | | 28 | 10.5 | ----- | 52 | 17.1 | 19.5 | 5.3 | 8.3 | 19.5 | 3.3 |
| 31..... | | | 19.5 | 10.5 | ----- | 36 | ----- | 16.6 | ----- | 7.9 | 18.1 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | ----- | ----- | 4.24 | 0.128 | 0.15 |
| November..... | ----- | ----- | 12.3 | .373 | .42 |
| December..... | ----- | ----- | 3.91 | 1.18 | 1.36 |
| January..... | 152 | 10.5 | 26.1 | .791 | .91 |
| February..... | 25 | 8.7 | 12.6 | .382 | .40 |
| March..... | 186 | 12.2 | 29.5 | .894 | 1.03 |
| April..... | 292 | 16.2 | 63.7 | 1.93 | 2.15 |
| May..... | 395 | 16.2 | 58.4 | 1.77 | 2.04 |
| June..... | 20 | 5.0 | 9.66 | .293 | .33 |
| July..... | 172 | 38 | 25.1 | .761 | .88 |
| August..... | 376 | 4.3 | 50.1 | 1.52 | 1.75 |
| September..... | 40 | 3.1 | 6.65 | .198 | .22 |
| The year..... | 395 | ----- | 28.4 | .861 | 11.64 |

DEEP RIVER NEAR RANDLEMAN, N. C.

LOCATION.—Water-stage recorder 500 feet downstream from county bridge at Coltrane's mill, half a mile south of Guilford County line, and 7 miles north of Randleman, Randolph County. Zero of gage is 638.11 feet above mean sea level.

DRAINAGE AREA.—124 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,930 second-feet Aug. 11 (gage height, 14.05 feet); minimum, 1.1 second-feet Sept. 19.

1928-1931: Maximum discharge, 5,790 second-feet Feb. 28, 1929 (gage height, 23.9 feet); minimum, that of Sept. 19, 1931.

REMARKS.—Records good except those estimated for Nov. 5-9, July 25-31, which are poor. Flow regulated by Coltrane's mill and by storage in High Point municipal reservoir.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|-------|-------|-------|
| 1----- | 3.2 | 6.7 | 24 | 52 | 40 | 77 | 531 | 54 | 60 | 16.7 | 380 | 20 |
| 2----- | 4.2 | 3.4 | 18.0 | 65 | 63 | 79 | 364 | 96 | 44 | 13.2 | 256 | 32 |
| 3----- | 6.3 | 5.4 | 13.4 | 67 | 28 | 56 | 204 | 59 | 50 | 3.7 | 46 | 31 |
| 4----- | 3.4 | 22 | 14.9 | 79 | 37 | 58 | 353 | 97 | 25 | 17.8 | 69 | 82 |
| 5----- | 3.2 | 25 | 16.2 | 471 | 42 | 76 | 1,080 | 81 | 13.9 | 172 | 90 | 36 |
| 6----- | 3.3 | 15 | 339 | 424 | 36 | 41 | 1,300 | 171 | 18.8 | 82 | 82 | 24 |
| 7----- | 5.3 | 10 | 322 | 220 | 28 | 56 | 686 | 700 | 9.2 | 296 | 56 | 28 |
| 8----- | 3.7 | 7 | 100 | 195 | 16 | 111 | 266 | 323 | 52 | 164 | 30 | 19.3 |
| 9----- | 5.4 | 5 | 78 | 185 | 59 | 101 | 192 | 176 | 35 | 135 | 17.8 | 11.8 |
| 10----- | 5.2 | 8.8 | 51 | 116 | 72 | 67 | 98 | 327 | 47 | 62 | 22 | 6.6 |
| 11----- | 6.2 | 8.2 | 39 | 107 | 36 | 68 | 92 | 194 | 37 | 28 | 1,270 | 16.1 |
| 12----- | 3.7 | 6.5 | 31 | 169 | 41 | 61 | 76 | 100 | 22 | 19.0 | 379 | 22 |
| 13----- | 4.4 | 19.2 | 38 | 156 | 43 | 31 | 94 | 133 | 14.5 | 11.2 | 110 | 16.6 |
| 14----- | 5.0 | 14.2 | 15.3 | 111 | 47 | 27 | 96 | 126 | 11.6 | 16.7 | 950 | 7.9 |
| 15----- | 5.7 | 12.9 | 45 | 90 | 62 | 47 | 58 | 38 | 33 | 10.6 | 213 | 10.3 |
| 16----- | 8.4 | 59 | 30 | 122 | 68 | 69 | 66 | 35 | 47 | 11.4 | 89 | 7.5 |
| 17----- | 6.3 | 50 | 12.4 | 114 | 65 | 52 | 56 | 26 | 18.4 | 15.6 | 57 | 6.7 |
| 18----- | 5.3 | 18.1 | 43 | 62 | 85 | 25 | 89 | 37 | 9.4 | 52 | 44 | 5.8 |
| 19----- | 3.4 | 12.8 | 58 | 116 | 65 | 71 | 111 | 58 | 6.8 | 32 | 41 | 6.8 |
| 20----- | 6.2 | 14.1 | 57 | 71 | 71 | 128 | 163 | 48 | 11.2 | 23 | 107 | 6.8 |
| 21----- | 6.9 | 10.2 | 36 | 56 | 78 | 38 | 133 | 728 | 16.1 | 24 | 147 | 5.9 |
| 22----- | 7.7 | 8.1 | 60 | 57 | 60 | 178 | 248 | 312 | 9.5 | 19.0 | 634 | 11.2 |
| 23----- | 6.6 | 5.0 | 48 | 42 | 71 | 239 | 236 | 254 | 8.8 | 14.7 | 312 | 10.6 |
| 24----- | 6.4 | 24 | 43 | 39 | 53 | 162 | 96 | 109 | 28 | 7.0 | 178 | 6.6 |
| 25----- | 5.7 | 14.6 | 41 | 31 | 27 | 77 | 75 | 112 | 64 | 640 | 96 | 6.2 |
| 26----- | 3.4 | 17.5 | 165 | 72 | 59 | 80 | 68 | 67 | 28 | 280 | 39 | 6.6 |
| 27----- | 3.0 | 13.2 | 504 | 53 | 31 | 60 | 82 | 120 | 14.0 | 1,200 | 50 | 5.1 |
| 28----- | 4.0 | 18.0 | 341 | 41 | 24 | 80 | 76 | 61 | 14.7 | 120 | 60 | 1.9 |
| 29----- | 9.6 | 16.6 | 190 | 60 | ----- | 596 | 57 | 59 | 9.4 | 60 | 52 | 32 |
| 30----- | 16.4 | 4.8 | 147 | 34 | ----- | 222 | 53 | 33 | 8.3 | 30 | 21 | 37 |
| 31----- | 12.4 | ----- | 98 | 28 | ----- | 147 | ----- | 24 | ----- | 20 | 37 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October----- | 16.4 | 3.0 | 5.80 | 0.047 | 0.05 |
| November----- | 59 | 3.4 | 15.2 | .123 | .14 |
| December----- | 504 | 12.4 | 97.4 | .785 | .90 |
| January----- | 471 | 28 | 113 | .911 | 1.05 |
| February----- | 85 | 16.0 | 50.2 | .405 | .42 |
| March----- | 596 | 25 | 103 | .831 | .96 |
| April----- | 1,300 | 53 | 237 | 1.91 | 2.13 |
| May----- | 728 | 24 | 153 | 1.23 | 1.42 |
| June----- | 64 | 6.8 | 25.6 | .206 | .23 |
| July----- | ----- | 3.7 | 116 | .935 | 1.08 |
| August----- | 1,270 | 17.8 | 191 | 1.54 | 1.78 |
| September----- | 82 | 1.9 | 17.3 | .140 | .16 |
| The year----- | 1,300 | 1.9 | 94.3 | .760 | 10.32 |

DEEP RIVER AT RAMSEUR, N. C.

LOCATION.—Water-stage recorder 2,000 feet downstream from railroad station at Ramseur, Randolph County, and 1½ miles downstream from mouth of Sandy Creek.

DRAINAGE AREA.—343 square miles.

RECORDS AVAILABLE.—November, 1922, to September, 1931.

EXTREMES.—Maximum discharge during year, 4,620 second-feet Aug. 11 (gage height, 8.42 feet); minimum, 7 second-feet Oct. 23 (gage height, 0.32 foot). 1922-1931: Maximum discharge (estimated), 21,100 second-feet Sept. 19, 1928 (gage height, 25.44 feet); minimum, that of Oct. 23, 1930.

REMARKS.—Records good except those estimated for Mar. 10-13, which are poor. Regulation, owing to operation of power plants and to storage at High Point Reservoir.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 54 | 18 | 72 | 205 | 80 | 144 | 944 | 154 | 237 | 80 | 1,240 | 91 |
| 2 | 50 | 21 | 76 | 144 | 134 | 228 | 928 | 228 | 161 | 84 | 1,480 | 82 |
| 3 | 33 | 20 | 74 | 130 | 115 | 187 | 533 | 280 | 148 | 28 | 287 | 59 |
| 4 | 22 | 24 | 66 | 164 | 105 | 162 | 346 | 212 | 108 | 25 | 136 | 64 |
| 5 | 21 | 48 | 68 | 1,060 | 95 | 174 | 1,440 | 209 | 62 | 17 | 145 | 94 |
| 6 | 20 | 62 | 218 | 1,270 | 54 | 184 | 3,060 | 185 | 68 | 90 | 152 | 58 |
| 7 | 18 | 36 | 1,010 | 524 | 71 | 134 | 1,720 | 1,060 | 50 | 284 | 138 | 104 |
| 8 | 16 | 18 | 320 | 366 | 61 | 452 | 874 | 1,040 | 94 | 254 | 78 | 82 |
| 9 | 14 | 17 | 162 | 324 | 124 | 361 | 576 | 510 | 102 | 172 | 43 | 77 |
| 10 | 13 | 30 | 132 | 264 | 150 | 300 | 406 | 644 | 105 | 196 | 105 | 70 |
| 11 | 11 | 28 | 110 | 210 | 149 | 240 | 268 | 472 | 92 | 88 | 2,100 | 60 |
| 12 | 10 | 28 | 119 | 437 | 115 | 190 | 253 | 304 | 56 | 49 | 1,480 | 20 |
| 13 | 10 | 26 | 71 | 572 | 80 | 150 | 262 | 236 | 40 | 83 | 365 | 21 |
| 14 | 10 | 19 | 32 | 354 | 142 | 114 | 218 | 244 | 36 | 110 | 1,260 | 67 |
| 15 | 10 | 17 | 90 | 224 | 186 | 88 | 240 | 194 | 83 | 63 | 706 | 69 |
| 16 | 10 | 32 | 96 | 172 | 184 | 156 | 142 | 112 | 94 | 71 | 220 | 70 |
| 17 | 9 | 174 | 106 | 194 | 154 | 142 | 176 | 63 | 99 | 25 | 174 | 68 |
| 18 | 9 | 108 | 128 | 217 | 178 | 124 | 228 | 136 | 102 | 22 | 107 | 67 |
| 19 | 8 | 92 | 61 | 444 | 186 | 104 | 308 | 128 | 56 | 83 | 106 | 18 |
| 20 | 8 | 84 | 48 | 367 | 186 | 118 | 416 | 128 | 27 | 120 | 99 | 17 |
| 21 | 8 | 83 | 122 | 213 | 164 | 132 | 335 | 1,770 | 22 | 129 | 281 | 39 |
| 22 | 8 | 39 | 158 | 152 | 164 | 496 | 416 | 1,220 | 81 | 164 | 800 | 43 |
| 23 | 8 | 25 | 140 | 162 | 192 | 662 | 725 | 1,090 | 80 | 92 | 818 | 42 |
| 24 | 16 | 72 | 116 | 96 | 152 | 394 | 364 | 410 | 79 | 61 | 424 | 18 |
| 25 | 15 | 68 | 70 | 119 | 143 | 290 | 276 | 292 | 75 | 876 | 226 | 19 |
| 26 | 17 | 72 | 452 | 161 | 117 | 156 | 318 | 237 | 46 | 783 | 145 | 21 |
| 27 | 27 | 42 | 1,410 | 142 | 91 | 175 | 342 | 229 | 26 | 1,510 | 162 | 17 |
| 28 | 18 | 30 | 1,020 | 130 | 99 | 275 | 248 | 236 | 20 | 223 | 471 | 21 |
| 29 | 16 | 25 | 494 | 116 | ----- | 1,520 | 206 | 124 | 61 | 123 | 104 | 18 |
| 30 | 16 | 20 | 396 | 91 | ----- | 626 | 158 | 109 | 82 | 63 | 89 | 16 |
| 31 | 16 | ----- | 274 | 88 | ----- | 369 | ----- | 80 | ----- | 54 | 110 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 54 | 8 | 16.8 | 0.049 | 0.06 |
| November | 174 | 17 | 45.9 | .134 | .15 |
| December | 1,410 | 32 | 249 | .726 | .84 |
| January | 1,270 | 88 | 294 | .857 | .99 |
| February | 1,192 | 54 | 131 | .382 | .40 |
| March | 1,520 | 88 | 285 | .831 | .96 |
| April | 3,060 | 142 | 558 | 1.63 | 1.82 |
| May | 1,770 | 63 | 398 | 1.16 | 1.34 |
| June | 1,237 | 20 | 79.7 | .232 | .26 |
| July | 1,510 | 17 | 194 | .566 | .65 |
| August | 2,100 | 43 | 453 | 1.32 | 1.52 |
| September | 104 | 16 | 50.6 | .148 | .17 |
| The year | 3,060 | 8 | 231 | .673 | 9.16 |

DEEP RIVER AT MONCURE, N. C.

LOCATION.—Water-stage recorder $1\frac{1}{2}$ miles northwest of Moncure, Chatham County. Zero of gage is 185.88 feet above mean sea level.

DRAINAGE AREA.—1,340 second-feet.

RECORDS AVAILABLE.—May, 1898, to December, 1899; July, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 17,600 second-feet Aug. 22 (gage height, 7.95 feet); minimum, 21 second-feet Nov. 11 (gage height, 0.57 foot).

1898-99, 1930-31: Maximum discharge, 24,600 second-feet Feb. 8, 1899; minimum, that of Nov. 11, 1930.

REMARKS.—Records excellent. Some regulation at low stages from operations at power plants upstream.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|-------|--------|--------|-------|-------|--------|-------|
| 1..... | 24 | 28 | 71 | 962 | 305 | 317 | 1,860 | 606 | 415 | 99 | 2,190 | 468 |
| 2..... | 24 | 26 | 82 | 712 | 311 | 393 | 2,930 | 835 | 438 | 122 | 9,950 | 598 |
| 3..... | 28 | 23 | 64 | 580 | 292 | 649 | 2,460 | 2,740 | 445 | 64 | 7,440 | 267 |
| 4..... | 29 | 25 | 94 | 452 | 330 | 649 | 1,550 | 1,940 | 483 | 84 | 2,030 | 104 |
| 5..... | 31 | 26 | 75 | 390 | 286 | 589 | 4,110 | 1,170 | 337 | 157 | 1,970 | 286 |
| 6..... | 32 | 35 | 58 | 2,090 | 330 | 760 | 11,800 | 984 | 311 | 342 | 1,900 | 224 |
| 7..... | 39 | 35 | 1,520 | 2,400 | 330 | 852 | 11,400 | 1,320 | 273 | 527 | 1,560 | 224 |
| 8..... | 56 | 30 | 2,230 | 1,250 | 286 | 2,520 | 5,850 | 8,900 | 235 | 415 | 1,170 | 224 |
| 9..... | 40 | 27 | 1,020 | 940 | 204 | 2,380 | 2,740 | 5,640 | 251 | 460 | 598 | 218 |
| 10..... | 34 | 23 | 606 | 676 | 317 | 1,460 | 1,830 | 3,460 | 208 | 564 | 344 | 224 |
| 11..... | 33 | 60 | 415 | 600 | 305 | 1,030 | 1,360 | 2,460 | 200 | 324 | 1,540 | 186 |
| 12..... | 32 | 113 | 305 | 550 | 330 | 658 | 1,120 | 1,660 | 200 | 372 | 9,920 | 200 |
| 13..... | 32 | 66 | 365 | 2,000 | 400 | 580 | 1,010 | 1,370 | 208 | 286 | 6,530 | 195 |
| 14..... | 33 | 36 | 203 | 2,600 | 372 | 483 | 940 | 1,110 | 208 | 204 | 4,240 | 163 |
| 15..... | 52 | 115 | 84 | 1,460 | 344 | 372 | 676 | 951 | 208 | 182 | 6,700 | 177 |
| 16..... | 62 | 131 | 184 | 1,050 | 586 | 445 | 694 | 667 | 229 | 135 | 2,510 | 150 |
| 17..... | 43 | 62 | 229 | 907 | 653 | 452 | 667 | 547 | 256 | 172 | 1,170 | 71 |
| 18..... | 38 | 35 | 229 | 708 | 556 | 330 | 606 | 572 | 256 | 146 | 852 | 50 |
| 19..... | 33 | 27 | 208 | 1,270 | 555 | 445 | 785 | 531 | 245 | 229 | 820 | 50 |
| 20..... | 31 | 292 | 309 | 1,950 | 658 | 351 | 1,750 | 555 | 218 | 317 | 1,470 | 168 |
| 21..... | 29 | 229 | 589 | 1,500 | 730 | 311 | 1,360 | 7,540 | 168 | 286 | 15,700 | 116 |
| 22..... | 29 | 200 | 491 | 1,090 | 632 | 445 | 1,460 | 14,100 | 73 | 930 | 16,800 | 138 |
| 23..... | 29 | 182 | 623 | 750 | 623 | 2,220 | 2,060 | 13,700 | 204 | 654 | 14,100 | 168 |
| 24..... | 28 | 73 | 598 | 640 | 539 | 2,180 | 1,860 | 8,140 | 229 | 298 | 4,840 | 73 |
| 25..... | 28 | 163 | 483 | 555 | 452 | 1,290 | 1,290 | 2,360 | 204 | 292 | 1,950 | 142 |
| 26..... | 27 | 157 | 379 | 491 | 452 | 984 | 1,240 | 1,370 | 91 | 789 | 1,270 | 84 |
| 27..... | 26 | 71 | 4,560 | 365 | 344 | 694 | 1,590 | 1,170 | 84 | 2,400 | 962 | 195 |
| 28..... | 25 | 46 | 5,350 | 531 | 337 | 572 | 1,480 | 885 | 138 | 2,390 | 1,040 | 84 |
| 29..... | 26 | 148 | 2,960 | 460 | ----- | 1,090 | 1,090 | 800 | 157 | 918 | 1,240 | 64 |
| 30..... | 29 | 157 | 1,610 | 324 | ----- | 2,910 | 841 | 640 | 73 | 379 | 896 | 79 |
| 31..... | 29 | ----- | 1,190 | 453 | ----- | 1,690 | ----- | 452 | ----- | 204 | 523 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 62 | 24 | 33.3 | 0.025 | 0.03 |
| November..... | 292 | 23 | 87.7 | .065 | .07 |
| December..... | 5,350 | 58 | 877 | .654 | .75 |
| January..... | 2,600 | 324 | 991 | .740 | .85 |
| February..... | 730 | 204 | 424 | .310 | .33 |
| March..... | 2,910 | 311 | 971 | .725 | .84 |
| April..... | 11,800 | 606 | 2,350 | 1.75 | 1.95 |
| May..... | 14,100 | 452 | 2,880 | 2.15 | 2.48 |
| June..... | 483 | 73 | 235 | .175 | .20 |
| July..... | 2,400 | 64 | 476 | .355 | .41 |
| August..... | 16,800 | 344 | 4,010 | 2.99 | 3.45 |
| September..... | 598 | 50 | 179 | .134 | .15 |
| The year..... | 16,800 | 23 | 1,140 | .851 | 11.51 |

EAST FORK OF DEEP RIVER NEAR HIGH POINT, N. C.

LOCATION.—Water-stage recorder at county highway bridge a quarter of a mile upstream from High Point Reservoir and 6 miles northeast of High Point, Guilford County.

DRAINAGE AREA.—13.9 square miles.

RECORDS AVAILABLE.—July, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 656 second-feet Aug. 22 (gauge height, 4.07 feet); minimum, 1.3 second-feet Dec. 17 (gauge height, 0.13 foot).

1928–1931: Maximum discharge, 1,040 second-feet Apr. 15, 1929 (gauge height, 5.45 feet); minimum, that of Dec. 17, 1930.

REMARKS.—Records good except those above 300 second-feet and those estimated for Nov. 9 to Dec. 8, July 8–14, which are poor.

Daily and monthly discharge, in second-feet, 1930–31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------------|------|------|------|---------|---------|------|-----------------|------|-------------------|------|------|-------|
| 1..... | 2.7 | 3.5 | 4 | 7.3 | 5.2 | 11.5 | 80 | 7.3 | 7.8 | 3.8 | 5.4 | 4.4 |
| 2..... | 2.8 | 3.5 | | 6.6 | 5.2 | 7.0 | 27 | 19.1 | 5.7 | 3.5 | 24 | 4.2 |
| 3..... | 2.9 | 3.5 | | 6.7 | 5.2 | 6.1 | 15.0 | 9.8 | 5.3 | 4.5 | 6.1 | 12.6 |
| 4..... | 2.9 | 9.3 | | 10.6 | 5.2 | 7.8 | 63 | 7.6 | 5.3 | 4.0 | 13.4 | 5.0 |
| 5..... | 2.9 | 4.0 | 3.5 | 71 | 5.0 | 7.6 | 111 | 7.0 | 5.2 | 3.7 | 32 | 4.2 |
| 6..... | 2.9 | 3.6 | 150 | 27 | 5.0 | 6.4 | 125 | 83 | 5.0 | 16.9 | 5.5 | 4.1 |
| 7..... | 2.9 | 3.6 | 100 | 12.2 | 5.0 | 7.0 | 68 | 70 | 4.6 | 44 | 4.0 | 4.0 |
| 8..... | 2.9 | 3.6 | 8 | 9.4 | 5.0 | 15.0 | 26 | 37 | 4.6 | | 3.7 | 3.8 |
| 9..... | 2.9 | | 5.7 | 8.2 | 6.1 | 7.8 | 17.5 | 40 | 4.4 | | 3.6 | 3.8 |
| 10..... | 2.9 | 3.0 | 5.2 | 8.1 | 6.1 | 6.4 | 13.0 | 34 | 4.2 | | 4.2 | 3.8 |
| 11..... | 2.8 | | 5.0 | 7.6 | 5.2 | 5.9 | 12.2 | 15.5 | 4.2 | 5 | 118 | 3.8 |
| 12..... | 2.8 | | 4.8 | 24 | 5.2 | 5.7 | 10.2 | 12.6 | 4.1 | | 12.6 | 3.7 |
| 13..... | 2.9 | 3.5 | 4.6 | 16.0 | 5.2 | 5.5 | 9.0 | 17.7 | 4.1 | | 23 | 3.7 |
| 14..... | 3.2 | | 4.4 | 10.6 | 9.6 | 5.5 | 8.7 | 10.2 | 4.1 | | 104 | 3.7 |
| 15..... | 3.1 | 12.0 | 4.4 | 8.0 | 6.1 | 5.9 | 8.1 | 8.4 | 6.6 | 3.5 | 9.8 | 3.7 |
| 16..... | 3.1 | 45 | 4.2 | 8.1 | 5.7 | 5.7 | 7.6 | 7.6 | 4.6 | 3.4 | 5.9 | 3.7 |
| 17..... | 3.0 | 25 | 2.7 | 9.0 | 13.8 | 5.3 | 10.6 | 7.0 | 3.8 | 3.5 | 5.2 | 3.7 |
| 18..... | 2.9 | 7 | 7.3 | 11.7 | 9.0 | 5.3 | 18.9 | 6.7 | 3.7 | 3.5 | 5.5 | 3.7 |
| 19..... | 3.0 | | 6.1 | 28 | 9.0 | 5.3 | 31 | 6.4 | 3.6 | 3.5 | 5.0 | 3.6 |
| 20..... | 3.0 | | 5.9 | 12.6 | 8.7 | 5.2 | 15.5 | 20 | 3.6 | 3.7 | 5.0 | 3.7 |
| 21..... | 3.0 | | 6.1 | 9.0 | 8.7 | 5.2 | 11.4 | 138 | 3.7 | 3.7 | 5.0 | 3.7 |
| 22..... | 3.1 | 4 | 6.1 | 7.6 | 7.0 | 59 | 48 | 33 | 26 | 3.7 | 205 | 3.6 |
| 23..... | 3.2 | | 5.5 | 7.0 | 6.4 | 25 | 18.0 | 24 | 4.6 | 3.5 | 38 | 3.6 |
| 24..... | 3.4 | | 5.0 | 6.7 | 5.9 | 12.2 | 11.8 | 12.6 | 4.2 | 32 | 16.5 | 3.6 |
| 25..... | 3.2 | | 5.0 | 6.4 | 5.7 | 9.0 | 11.0 | 10.2 | 4.1 | 23 | 12.2 | 3.6 |
| 26..... | 3.4 | | 45 | 6.1 | 5.3 | 7.6 | 10.6 | 8.7 | 4.0 | 16.5 | 6.7 | 3.7 |
| 27..... | 3.4 | | 59 | 6.1 | 5.3 | 7.3 | 8.4 | 7.8 | 3.8 | 4.8 | 10.3 | 3.7 |
| 28..... | 3.5 | 4 | 25 | 5.9 | 6.4 | 53 | 7.8 | 7.0 | 3.8 | 4.1 | 6.7 | 3.7 |
| 29..... | 3.8 | | 17.4 | 5.7 | ----- | 55 | 7.0 | 6.7 | 3.7 | 4.0 | 6.7 | 3.7 |
| 30..... | 3.7 | | 13.0 | 5.5 | ----- | 18.0 | 6.7 | 5.9 | 3.8 | 3.8 | 5.7 | 3.6 |
| 31..... | 3.5 | | 8.5 | 5.5 | ----- | 13.0 | ----- | 5.9 | ----- | 3.8 | 4.8 | ----- |
| Month | | | | Maximum | Minimum | Mean | Per square mile | | Run-off in inches | | | |
| October..... | | | | 3.8 | 2.7 | 3.09 | 0.222 | | 0.26 | | | |
| November..... | | | | ----- | ----- | 6.37 | .458 | | .51 | | | |
| December..... | | | | ----- | 2.7 | 17.2 | 1.24 | | 1.43 | | | |
| January..... | | | | 71 | 5.5 | 12.1 | .871 | | 1.00 | | | |
| February..... | | | | 13.8 | 5.0 | 6.47 | .465 | | .48 | | | |
| March..... | | | | 59 | 5.2 | 13.0 | .935 | | 1.08 | | | |
| April..... | | | | 125 | 6.7 | 27.3 | 1.96 | | 2.19 | | | |
| May..... | | | | 138 | 5.9 | 22.2 | 1.60 | | 1.84 | | | |
| June..... | | | | 26 | 3.6 | 5.21 | .375 | | .42 | | | |
| July..... | | | | 44 | 3.4 | 7.72 | .555 | | .64 | | | |
| August..... | | | | 205 | 3.6 | 23.0 | 1.65 | | 1.90 | | | |
| September..... | | | | 12.6 | 3.6 | 4.11 | .296 | | .33 | | | |
| The year..... | | | | 205 | 2.7 | 12.4 | .892 | | 12.08 | | | |

LOWER LITTLE RIVER AT LINDEN, N. C.

LOCATION.—Chain gage at State highway bridge 1 mile west of Linden, Cumberland County, three-quarters of a mile upstream from Stewart Creek, and 3¼ miles upstream from confluence with Cape Fear River. Zero of gage is 71.37 feet above mean sea level.

DRAINAGE AREA.—450 square miles.

RECORDS AVAILABLE.—November, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 4,980 second-feet Aug. 22 (gage height, 14.43 feet); minimum, 53 second-feet Oct. 4 (gage height, 2.34 feet).

1928-1931: Maximum discharge, 10,300 second-feet Oct. 2, 1929; maximum gage height, 35.5 feet Oct. 4, 1929; minimum discharge, that of Oct. 4, 1930.

Maximum stage known, 37.3 feet Sept. 21, 1928 (estimated discharge, 13,000 second-feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-------|-------|------|-------|-------|
| 1..... | 85 | 238 | 202 | 495 | 320 | 350 | 575 | 350 | 350 | 84 | 92 | 350 |
| 2..... | 85 | 179 | 251 | 420 | 306 | 350 | 535 | 455 | 368 | 99 | 85 | 335 |
| 3..... | 86 | 168 | 278 | 455 | 306 | 368 | 655 | 815 | 292 | 82 | 238 | 350 |
| 4..... | 87 | 320 | 292 | 385 | 190 | 350 | 615 | 815 | 251 | 114 | 815 | 695 |
| 5..... | 81 | 335 | 292 | 455 | 158 | 335 | 735 | 735 | 264 | 99 | 1,610 | 575 |
| 6..... | 71 | 292 | 292 | 615 | 292 | 350 | 1,600 | 535 | 202 | 92 | 1,480 | 455 |
| 7..... | 71 | 335 | 420 | 575 | 306 | 350 | 1,700 | 495 | 202 | 114 | 1,520 | 350 |
| 8..... | 92 | 292 | 535 | 535 | 264 | 495 | 1,480 | 815 | 306 | 85 | 735 | 226 |
| 9..... | 99 | 202 | 455 | 535 | 292 | 655 | 815 | 1,140 | 320 | 122 | 455 | 202 |
| 10..... | 99 | 190 | 455 | 495 | 306 | 615 | 735 | 1,380 | 385 | 139 | 368 | 122 |
| 11..... | 92 | 190 | 320 | 455 | 402 | 455 | 775 | 1,020 | 264 | 495 | 320 | 92 |
| 12..... | 61 | 158 | 292 | 495 | 420 | 335 | 575 | 975 | 226 | 292 | 895 | 122 |
| 13..... | 57 | 139 | 278 | 895 | 350 | 350 | 535 | 935 | 214 | 179 | 1,060 | 114 |
| 14..... | 114 | 148 | 226 | 975 | 350 | 335 | 575 | 815 | 168 | 148 | 775 | 84 |
| 15..... | 122 | 168 | 190 | 975 | 350 | 306 | 535 | 695 | 148 | 368 | 385 | 84 |
| 16..... | 130 | 238 | 264 | 775 | 350 | 306 | 495 | 575 | 148 | 251 | 385 | 77 |
| 17..... | 130 | 278 | 202 | 655 | 420 | 292 | 495 | 455 | 202 | 168 | 350 | 122 |
| 18..... | 130 | 264 | 292 | 226 | 350 | 320 | 455 | 335 | 202 | 148 | 368 | 99 |
| 19..... | 122 | 264 | 335 | 655 | 368 | 278 | 695 | 420 | 139 | 214 | 495 | 114 |
| 20..... | 114 | 214 | 575 | 655 | 350 | 264 | 1,140 | 355 | 78 | 402 | 735 | 99 |
| 21..... | 106 | 202 | 655 | 615 | 335 | 264 | 1,300 | 575 | 168 | 292 | 2,420 | 80 |
| 22..... | 99 | 179 | 615 | 575 | 320 | 535 | 1,220 | 1,740 | 92 | 292 | 4,850 | 106 |
| 23..... | 106 | 179 | 535 | 495 | 292 | 815 | 1,140 | 3,100 | 92 | 179 | 4,490 | 71 |
| 24..... | 106 | 202 | 535 | 420 | 292 | 815 | 1,140 | 2,240 | 114 | 202 | 3,360 | 114 |
| 25..... | 106 | 179 | 402 | 385 | 264 | 695 | 975 | 1,520 | 99 | 130 | 2,200 | 99 |
| 26..... | 122 | 190 | 575 | 368 | 238 | 535 | 775 | 775 | 114 | 106 | 1,480 | 114 |
| 27..... | 122 | 179 | 935 | 402 | 226 | 402 | 1,140 | 775 | 139 | 264 | 1,060 | 130 |
| 28..... | 114 | 179 | 895 | 350 | 226 | 385 | 655 | 655 | 99 | 292 | 655 | 122 |
| 29..... | 168 | 158 | 935 | 385 | ----- | 535 | 575 | 402 | 106 | 179 | 655 | 85 |
| 30..... | 320 | 179 | 775 | 350 | ----- | 495 | 535 | 368 | 92 | 85 | 535 | 130 |
| 31..... | 350 | ----- | 615 | 306 | ----- | 455 | ----- | 306 | ----- | 76 | 495 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 350 | 57 | 116 | 0.258 | 0.30 |
| November..... | 335 | 139 | 215 | .478 | .53 |
| December..... | 935 | 190 | 440 | .998 | 1.15 |
| January..... | 975 | 226 | 528 | 1.17 | 1.35 |
| February..... | 420 | 158 | 309 | .687 | .72 |
| March..... | 815 | 264 | 432 | .980 | 1.11 |
| April..... | 1,700 | 455 | 841 | 1.87 | 2.09 |
| May..... | 3,100 | 306 | 858 | 1.91 | 2.20 |
| June..... | 385 | 78 | 195 | .433 | .48 |
| July..... | 495 | 78 | 187 | .416 | .48 |
| August..... | 4,850 | 85 | 1,140 | 2.53 | 2.92 |
| September..... | 695 | 71 | 191 | .424 | .47 |
| The year..... | 4,850 | 57 | 457 | 1.02 | 13.80 |

ROCKFISH CREEK NEAR FAYETTEVILLE, N. C.

LOCATION.—Chain gage at State highway bridge 3 miles upstream from Cape Fear River and 6 miles south of Fayetteville, Cumberland County.

DRAINAGE AREA.—292 square miles.

RECORDS AVAILABLE.—October, 1902, to May, 1903; November, 1928, to December, 1931 (discontinued).

EXTREMES.—Maximum discharge during period (estimated), 4,100 second-feet Aug. 22; minimum (estimated), 30 second-feet Oct. 5, 1930.

1928-1931: Maximum discharge (estimated), 5,200 second-feet Oct. 3, 1929; minimum, 29 second-feet Sept. 28, 1930.

REMARKS.—Records fair except those estimated for periods affected by back-water, which are poor. Regulation, owing to operation of large cotton mills on both forks of creek.

Daily discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|------|---------|---------|-------|------|---------|-------|
| 1930-31 | | | | | | | | | | | | |
| 1----- | 236 | 286 | 152 | 504 | 97 | 46 | 563 | 326 | 266 | 152 | 41 | 326 |
| 2----- | 166 | 134 | 326 | 425 | 256 | 226 | * 500 | 286 | 286 | 174 | 38 | 365 |
| 3----- | 182 | 543 | 246 | 286 | 405 | 445 | * 550 | 61 | 286 | 123 | 1,400 | 385 |
| 4----- | 182 | 405 | 346 | 166 | 405 | 425 | * 500 | 602 | 306 | 97 | 1,460 | 365 |
| 5----- | *32 | 405 | 306 | 226 | 385 | 405 | * 260 | 484 | 306 | 174 | 1,220 | 216 |
| 6----- | 112 | 484 | 207 | 464 | 445 | 405 | * 1,500 | 385 | 146 | 346 | 1,440 | 123 |
| 7----- | 83 | 425 | 166 | 602 | 266 | 266 | * 1,500 | 236 | 53 | 365 | 1,220 | 425 |
| 8----- | 256 | 326 | 445 | 720 | 65 | 88 | * 1,300 | 642 | 425 | 385 | 1,060 | 405 |
| 9----- | 236 | 166 | 642 | 524 | 182 | 661 | * 700 | * 900 | 445 | 602 | 543 | 365 |
| 10----- | 174 | 385 | 246 | 365 | 405 | 661 | * 600 | * 1,100 | 266 | 405 | 346 | 326 |
| 11----- | 123 | 385 | 405 | 123 | 405 | 524 | * 294 | * 900 | 190 | 174 | 583 | 326 |
| 12----- | 97 | 326 | 326 | 563 | 405 | 504 | * 174 | * 750 | 174 | 266 | * 1,000 | 140 |
| 13----- | 123 | 326 | 190 | 800 | 445 | 524 | * 500 | 642 | 118 | 385 | * 1,100 | 53 |
| 14----- | 123 | 326 | 123 | 1,180 | 286 | 256 | 445 | 524 | 41 | 365 | * 900 | 166 |
| 15----- | 236 | 102 | 246 | 1,060 | 102 | 42 | 365 | 425 | 107 | 346 | * 500 | 306 |
| 16----- | 346 | 166 | 445 | 720 | 286 | 198 | 346 | 190 | 306 | 326 | * 400 | 182 |
| 17----- | 207 | 286 | 445 | 661 | 405 | 385 | 286 | 53 | 365 | 326 | * 400 | 182 |
| 18----- | 306 | 385 | 504 | 445 | 425 | 385 | 140 | 326 | 326 | 159 | * 400 | 256 |
| 19----- | 152 | 405 | 405 | 425 | 405 | 365 | 92 | 365 | 346 | 49 | 425 | 112 |
| 20----- | 306 | 365 | 464 | 563 | 405 | 365 | 326 | 346 | 134 | 198 | 464 | 49 |
| 21----- | 326 | 365 | 112 | 622 | 286 | 198 | 880 | 385 | 88 | 326 | 1,680 | 140 |
| 22----- | 306 | 226 | 602 | 583 | 49 | 78 | 920 | * 1,000 | 266 | 346 | * 4,000 | 166 |
| 23----- | 326 | 57 | 405 | 445 | 159 | 246 | 940 | * 2,500 | 306 | 326 | * 3,500 | 146 |
| 24----- | 152 | 198 | 385 | 385 | 346 | 701 | 1,060 | * 2,000 | 266 | 286 | * 2,500 | 226 |
| 25----- | 152 | 385 | 405 | 190 | 445 | 720 | 760 | * 1,500 | 159 | 112 | * 1,500 | 256 |
| 26----- | 33 | 326 | 563 | 306 | 405 | 524 | 405 | * 1,200 | 266 | 49 | * 1,000 | 97 |
| 27----- | 128 | 286 | 543 | 445 | 365 | 484 | 524 | 980 | 46 | 182 | * 800 | 49 |
| 28----- | 236 | 159 | * 800 | 346 | 207 | 286 | 524 | 504 | 34 | 484 | * 600 | 140 |
| 29----- | 182 | 159 | * 800 | 385 | ----- | 88 | 425 | 425 | 140 | 346 | 326 | 159 |
| 30----- | 306 | 53 | * 600 | 286 | ----- | 286 | 405 | 166 | 226 | 286 | 182 | 159 |
| 31----- | 266 | ----- | * 550 | 216 | ----- | 720 | ----- | 65 | ----- | 236 | 207 | ----- |

| Day | Oct. | Nov. | Dec. | Day | Oct. | Nov. | Dec. | Day | Oct. | Nov. | Dec. |
|---------|------|------|-------|---------|------|------|------|---------|------|-------|------|
| 1931 | | | | | | | | | | | |
| 1----- | 159 | 83 | 236 | 11----- | 46 | 107 | 484 | 21----- | 246 | 140 | 286 |
| 2----- | 174 | 207 | 146 | 12----- | 152 | 128 | 484 | 22----- | 159 | 49 | 266 |
| 3----- | 97 | 226 | 246 | 13----- | 159 | 207 | 162 | 23----- | 174 | 226 | 504 |
| 4----- | 49 | 207 | 622 | 14----- | 159 | 146 | 445 | 24----- | 166 | 226 | 681 |
| 5----- | 166 | 236 | 1,180 | 15----- | 166 | 83 | 405 | 25----- | 46 | 246 | 445 |
| 6----- | 306 | 266 | 1,600 | 16----- | 174 | 152 | 385 | 26----- | 159 | 92 | 112 |
| 7----- | 240 | 146 | 1,100 | 17----- | 166 | 216 | 385 | 27----- | 246 | 166 | 140 |
| 8----- | 166 | 46 | 681 | 18----- | 102 | 216 | 425 | 28----- | 174 | 365 | 484 |
| 9----- | 166 | 134 | 622 | 19----- | 190 | 256 | 405 | 29----- | 182 | 88 | 346 |
| 10----- | 92 | 152 | 583 | 20----- | 256 | 216 | 128 | 30----- | 152 | 246 | 326 |
| | | | | | | | | 31----- | 152 | ----- | 216 |

* Estimated.

Monthly discharge, in second-feet, of Rockfish Creek near Fayetteville, N. C., 1930-31

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| 1930-31 | | | | | |
| October..... | 346 | 32 | 196 | 0.671 | 0.77 |
| November..... | 543 | 53 | 295 | 1.01 | 1.13 |
| December..... | 800 | 112 | 406 | 1.39 | 1.60 |
| January..... | 1,180 | 123 | 485 | 1.66 | 1.91 |
| February..... | 445 | 49 | 312 | 1.07 | 1.11 |
| March..... | 720 | 42 | 371 | 1.27 | 1.46 |
| April..... | 1,500 | 92 | 593 | 2.03 | 2.26 |
| May..... | 2,500 | 53 | 654 | 2.24 | 2.58 |
| June..... | 445 | 34 | 223 | .764 | .85 |
| July..... | 602 | 49 | 271 | .928 | 1.07 |
| August..... | 4,000 | 38 | 1,010 | 3.46 | 3.99 |
| September..... | 425 | 49 | 220 | .753 | .84 |
| The year..... | 4,000 | 32 | 421 | 1.44 | 19.57 |
| 1931 | | | | | |
| October..... | 306 | 46 | 163 | .558 | .64 |
| November..... | 365 | 46 | 176 | .603 | .67 |
| December..... | 1,600 | 112 | 468 | 1.60 | 1.84 |

PEE DEE RIVER BASIN

YADKIN RIVER AT WILKESBORO, N. C.

LOCATION.—Water-stage recorder at highway bridge connecting North Wilkesboro and Wilkesboro, Wilkes County, just below mouth of Reddies River.

DRAINAGE AREA.—430 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1931. April, 1903, to June, 1909; October, 1920, to September, 1928, at North Wilkesboro, 1 mile downstream.

EXTREMES.—Maximum discharge during year, 6,030 second-feet Jan. 5 (gage height, 9.09 feet); minimum, 179 second-feet several times in September (gage height, 1.55 feet).

1903-1909, 1920-1931: Maximum discharge, about 33,200 second-feet Oct. 2, 1929 (gage height, 24.0 feet); minimum, 161 second-feet July 25, 1926.

Maximum stage known, 34.5 feet in July, 1916 (discharge not determined).

REMARKS.—Records good. Low-water flow regulated by operation of municipal plant on Reddies River, 1 mile upstream.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| 1..... | 296 | 329 | 396 | 450 | 319 | 450 | 3,680 | 552 | 592 | 369 | 369 | 296 |
| 2..... | 296 | 319 | 364 | 369 | 315 | 390 | 1,770 | 558 | 518 | 354 | 423 | 286 |
| 3..... | 282 | 300 | 349 | 428 | 319 | 354 | 1,120 | 541 | 495 | 478 | 390 | 374 |
| 4..... | 286 | 412 | 334 | 390 | 315 | 349 | 1,210 | 507 | 478 | 518 | 690 | 369 |
| 5..... | 282 | 467 | 354 | 3,100 | 319 | 339 | 1,360 | 473 | 473 | 685 | 1,330 | 305 |
| 6..... | 282 | 369 | 2,720 | 1,820 | 310 | 324 | 1,140 | 501 | 524 | 564 | 856 | 286 |
| 7..... | 300 | 344 | 1,350 | 895 | 305 | 324 | 985 | 1,190 | 655 | 417 | 727 | 277 |
| 8..... | 286 | 354 | 733 | 679 | 305 | 530 | 895 | 1,720 | 507 | 359 | 518 | 268 |
| 9..... | 324 | 339 | 547 | 581 | 329 | 478 | 757 | 865 | 456 | 467 | 385 | 259 |
| 10..... | 296 | 310 | 484 | 524 | 369 | 423 | 685 | 727 | 434 | 823 | 374 | 250 |
| 11..... | 291 | 310 | 439 | 473 | 305 | 401 | 649 | 632 | 417 | 654 | 344 | 246 |
| 12..... | 291 | 334 | 428 | 495 | 305 | 385 | 609 | 638 | 406 | 423 | 355 | 232 |
| 13..... | 277 | 518 | 412 | 490 | 300 | 369 | 570 | 615 | 456 | 385 | 635 | 232 |
| 14..... | 349 | 445 | 390 | 450 | 364 | 369 | 558 | 558 | 575 | 406 | 374 | 228 |
| 15..... | 390 | 518 | 385 | 417 | 329 | 374 | 535 | 530 | 507 | 445 | 349 | 228 |
| 16..... | 364 | 715 | 385 | 390 | 310 | 359 | 530 | 501 | 598 | 390 | 334 | 236 |
| 17..... | 310 | 865 | 286 | 439 | 364 | 349 | 639 | 490 | 450 | 426 | 315 | 236 |
| 18..... | 296 | 649 | 507 | 412 | 385 | 344 | 629 | 484 | 401 | 558 | 300 | 224 |
| 19..... | 291 | 518 | 473 | 439 | 334 | 339 | 564 | 646 | 385 | 735 | 335 | 228 |
| 20..... | 291 | 462 | 396 | 406 | 324 | 334 | 558 | 651 | 374 | 450 | 634 | 228 |
| 21..... | 300 | 423 | 339 | 385 | 324 | 329 | 564 | 2,360 | 359 | 462 | 973 | 224 |
| 22..... | 310 | 401 | 412 | 364 | 305 | 588 | 2,190 | 1,340 | 592 | 688 | 1,790 | 228 |
| 23..... | 300 | 359 | 385 | 359 | 300 | 745 | 1,760 | 1,410 | 647 | 412 | 804 | 241 |
| 24..... | 315 | 349 | 428 | 354 | 296 | 598 | 994 | 895 | 467 | 507 | 541 | 241 |
| 25..... | 315 | 369 | 354 | 349 | 296 | 518 | 775 | 745 | 507 | 434 | 439 | 215 |
| 26..... | 300 | 359 | 518 | 344 | 286 | 473 | 715 | 679 | 434 | 876 | 390 | 309 |
| 27..... | 291 | 339 | 703 | 339 | 277 | 456 | 632 | 621 | 379 | 581 | 412 | 365 |
| 28..... | 319 | 334 | 587 | 339 | 291 | 944 | 587 | 575 | 359 | 406 | 390 | 259 |
| 29..... | 374 | 339 | 518 | 334 | ----- | 1,950 | 558 | 558 | 359 | 359 | 390 | 241 |
| 30..... | 334 | 339 | 484 | 329 | ----- | 1,030 | 558 | 501 | 379 | 354 | 354 | 232 |
| 31..... | 315 | ----- | 412 | 324 | ----- | 855 | ----- | 518 | ----- | 401 | 310 | ----- |

| Month | Maximum | Minimum | Mean | Per square rile | Run-off in inches |
|----------------|---------|---------|------|--------------------|----------------------|
| October..... | 390 | 277 | 308 | 0.642 | 0.74 |
| November..... | 865 | 300 | 416 | .867 | .97 |
| December..... | 2,720 | 286 | 544 | 1.13 | 1.30 |
| January..... | 3,100 | 324 | 563 | 1.17 | 1.35 |
| February..... | 385 | 277 | 318 | .662 | .69 |
| March..... | 1,950 | 324 | 518 | 1.03 | 1.24 |
| April..... | 3,680 | 530 | 958 | 2.00 | 2.23 |
| May..... | 2,360 | 473 | 761 | 1.59 | 1.83 |
| June..... | 655 | 359 | 473 | .985 | 1.10 |
| July..... | 876 | 354 | 496 | 1.03 | 1.19 |
| August..... | 1,790 | 300 | 543 | 1.13 | 1.30 |
| September..... | 374 | 215 | 261 | .544 | .61 |
| The year..... | 3,680 | 215 | 515 | 1.07 | 14.55 |

YADKIN RIVER AT YADKIN COLLEGE, N. C.

LOCATION.—Water-stage recorder at State highway bridge, 1 mile southwest of Yadkin College, Davidson County.

DRAINAGE AREA.—2,250 square miles.

RECORDS AVAILABLE.—July, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 16,600 second-feet Apr. 2 (gage height, 12.78 feet); minimum, 629 second-feet Oct. 14 (gage height, 0.31 foot).

1928-1931: Maximum discharge, 67,800 second-feet Oct. 3, 1929 (gage height, 29.8 feet); minimum, 521 second-feet Aug. 5, 1930 (gage height, 0.19 foot).

REMARKS.—Records good. Slight regulation caused by operation of small power plant 10 miles upstream.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|-------|--------|-------|-------|--------|-------|-------|-------|-------|-------|
| 1. | 827 | 1,010 | 1,040 | 1,800 | 1,340 | 1,480 | 8,430 | 2,030 | 1,780 | 1,320 | 1,680 | 1,340 |
| 2. | 764 | 890 | 1,200 | 1,060 | 1,300 | 1,630 | 12,600 | 2,080 | 1,980 | 1,020 | 3,990 | 1,250 |
| 3. | 755 | 908 | 1,200 | 1,040 | 1,300 | 1,080 | 6,070 | 2,030 | 1,830 | 962 | 5,210 | 1,340 |
| 4. | 746 | 1,060 | 1,120 | 1,830 | 1,300 | 1,580 | 4,490 | 1,930 | 1,580 | 3,200 | 3,480 | 1,730 |
| 5. | 764 | 1,300 | 1,070 | 2,920 | 1,300 | 1,630 | 5,640 | 1,830 | 1,480 | 3,560 | 4,780 | 1,680 |
| 6. | 773 | 1,340 | 1,850 | 10,300 | 1,300 | 1,580 | 6,760 | 1,730 | 1,430 | 3,060 | 4,890 | 1,340 |
| 7. | 791 | 1,200 | 8,360 | 6,010 | 1,300 | 1,480 | 6,520 | 2,160 | 1,480 | 2,380 | 2,960 | 1,160 |
| 8. | 863 | 1,020 | 4,640 | 3,540 | 1,250 | 1,480 | 4,600 | 6,850 | 1,730 | 2,080 | 2,130 | 1,120 |
| 9. | 764 | 980 | 2,680 | 2,730 | 1,300 | 1,630 | 3,630 | 6,080 | 1,580 | 1,480 | 1,730 | 1,050 |
| 10. | 746 | 980 | 2,130 | 2,380 | 1,480 | 1,780 | 3,130 | 4,490 | 1,380 | 1,480 | 1,430 | 1,040 |
| 11. | 845 | 971 | 1,830 | 2,180 | 1,430 | 1,580 | 2,830 | 3,220 | 1,340 | 2,830 | 1,760 | 944 |
| 12. | 827 | 989 | 1,680 | 2,130 | 1,380 | 1,480 | 2,630 | 2,530 | 1,300 | 2,630 | 2,540 | 953 |
| 13. | 782 | 1,200 | 1,580 | 2,330 | 1,250 | 1,430 | 2,380 | 2,830 | 1,200 | 1,480 | 1,930 | 917 |
| 14. | 746 | 1,300 | 1,530 | 2,130 | 1,300 | 1,380 | 2,230 | 2,630 | 1,250 | 1,380 | 2,180 | 890 |
| 15. | 854 | 1,430 | 1,430 | 1,930 | 1,340 | 1,380 | 2,130 | 2,130 | 1,530 | 1,930 | 1,730 | 854 |
| 16. | 1,070 | 1,630 | 1,430 | 1,780 | 1,340 | 1,380 | 2,080 | 1,980 | 1,580 | 1,380 | 1,380 | 854 |
| 17. | 1,030 | 2,280 | 1,270 | 1,730 | 1,380 | 1,380 | 1,980 | 1,830 | 1,730 | 1,300 | 1,250 | 854 |
| 18. | 826 | 2,230 | 872 | 1,830 | 1,580 | 1,340 | 2,280 | 1,830 | 1,430 | 1,120 | 1,160 | 971 |
| 19. | 809 | 1,880 | 1,250 | 1,880 | 1,630 | 1,300 | 2,620 | 1,730 | 1,200 | 2,000 | 1,120 | 890 |
| 20. | 755 | 1,580 | 2,190 | 1,830 | 1,530 | 1,300 | 2,430 | 1,920 | 1,120 | 2,630 | 1,160 | 881 |
| 21. | 719 | 1,280 | 1,680 | 1,780 | 1,480 | 1,250 | 2,230 | 6,450 | 1,070 | 2,360 | 3,220 | 782 |
| 22. | 764 | 1,300 | 1,300 | 1,630 | 1,480 | 1,580 | 2,620 | 9,190 | 1,270 | 3,670 | 8,290 | 827 |
| 23. | 764 | 1,250 | 1,250 | 1,580 | 1,430 | 3,460 | 6,580 | 5,190 | 1,780 | 3,130 | 7,950 | 863 |
| 24. | 881 | 1,200 | 1,200 | 1,530 | 1,380 | 3,730 | 5,420 | 4,330 | 2,080 | 1,630 | 3,580 | 890 |
| 25. | 926 | 1,160 | 1,200 | 1,530 | 1,340 | 2,730 | 3,480 | 3,060 | 1,580 | 2,130 | 2,430 | 1,010 |
| 26. | 917 | 1,070 | 1,340 | 1,480 | 1,300 | 2,180 | 2,930 | 2,630 | 1,300 | 2,930 | 1,980 | 845 |
| 27. | 890 | 1,120 | 2,390 | 1,480 | 1,300 | 1,930 | 2,630 | 2,630 | 1,300 | 3,240 | 1,830 | 2,900 |
| 28. | 863 | 1,050 | 3,200 | 1,480 | 1,300 | 2,150 | 2,430 | 2,530 | 1,160 | 3,250 | 2,530 | 2,060 |
| 29. | 899 | 998 | 2,830 | 1,430 | ----- | 7,830 | 2,230 | 2,090 | 1,070 | 1,580 | 1,980 | 1,160 |
| 30. | 1,070 | 1,120 | 2,380 | 1,380 | ----- | 6,830 | 2,080 | 1,880 | 1,220 | 1,250 | 1,630 | 944 |
| 31. | 1,070 | ----- | 1,980 | 1,380 | ----- | 3,940 | ----- | 1,780 | ----- | 1,120 | 1,430 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 1,070 | 719 | 845 | 0.376 | 0.43 |
| November | 2,280 | 890 | 1,260 | .560 | .62 |
| December | 8,360 | 872 | 1,970 | .876 | 1.01 |
| January | 10,300 | 1,380 | 2,300 | 1.02 | 1.18 |
| February | 1,630 | 1,250 | 1,370 | .609 | .63 |
| March | 7,830 | 1,250 | 2,180 | .960 | 1.12 |
| April | 12,600 | 1,980 | 3,940 | 1.75 | 1.95 |
| May | 9,190 | 1,730 | 3,080 | 1.37 | 1.58 |
| June | 2,080 | 1,070 | 1,460 | .646 | .72 |
| July | 3,670 | 962 | 2,110 | .938 | 1.08 |
| August | 8,290 | 1,120 | 2,750 | 1.22 | 1.41 |
| September | 2,900 | 782 | 1,140 | .507 | .57 |
| The year | 12,600 | 719 | 2,040 | .907 | 12.30 |

PEE DEE RIVER NEAR ROCKINGHAM, N. C.

LOCATION.—Water-stage recorder at State highway bridge 1 mile upstream from Falling Creek, 4 miles downstream from Blewett Falls hydroelectric plant, and 6 miles west of Rockingham, Richmond County. Zero of gage is 82.81 feet above mean sea level.

DRAINAGE AREA.—6,910 square miles.

RECORDS AVAILABLE.—September, 1927, to September, 1931.

EXTREMES.—Maximum discharge during year, 56,700 second-feet May 23 (gage height, 10.05 feet); minimum, 100 second-feet several times during October (gage height, 0.20 foot).

1927-1931: Maximum discharge, 212,000 second-feet Sept. 19, 1928 (gage height, 24.38 feet); minimum, 100 second-feet at times during September and October, 1930 (gage height, 0.20 foot).

REMARKS.—Records excellent except those for minimum flow, which are fair. Flow regulated by a series of storage basins extending from near station to above the forks of Yadkin River.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|--------|--------|-------|-------|--------|--------|-------|-------|--------|-------|
| 1..... | 1,090 | 1,360 | 2,650 | 9,730 | 3,220 | 5,060 | 8,170 | 6,750 | 3,820 | 4,680 | 5,140 | 4,640 |
| 2..... | 401 | 1,100 | 3,740 | 7,700 | 4,620 | 4,030 | 14,600 | 6,200 | 4,420 | 4,520 | 5,040 | 4,830 |
| 3..... | 927 | 1,800 | 2,640 | 6,750 | 5,130 | 3,590 | 11,500 | 6,030 | 6,450 | 5,390 | 5,400 | 3,980 |
| 4..... | 930 | 3,600 | 3,420 | 4,400 | 4,170 | 3,230 | 9,200 | 7,570 | 4,600 | 5,680 | 8,030 | 3,820 |
| 5..... | 936 | 2,660 | 2,040 | 3,140 | 5,670 | 2,500 | 7,660 | 8,770 | 3,620 | 7,470 | 8,470 | 2,700 |
| 6..... | 678 | 3,220 | 2,940 | 7,180 | 5,210 | 3,940 | 18,900 | 8,170 | 4,460 | 5,030 | 7,180 | 805 |
| 7..... | 1,520 | 3,090 | 6,370 | 10,800 | 2,260 | 3,620 | 32,800 | 8,380 | 1,990 | 4,610 | 7,900 | 3,710 |
| 8..... | 1,980 | 2,120 | 9,730 | 7,780 | 160 | 2,580 | 21,100 | 12,200 | 3,320 | 3,340 | 9,250 | 4,650 |
| 9..... | 2,680 | 741 | 7,080 | 6,520 | 3,310 | 3,310 | 14,000 | 12,000 | 3,670 | 3,070 | 5,240 | 4,270 |
| 10..... | 1,940 | 879 | 5,630 | 7,670 | 2,920 | 5,200 | 11,600 | 14,000 | 3,710 | 3,390 | 4,560 | 2,130 |
| 11..... | 843 | 2,010 | 3,860 | 2,810 | 3,780 | 5,000 | 9,350 | 15,000 | 4,370 | 4,580 | 8,580 | 660 |
| 12..... | 314 | 2,480 | 4,820 | 4,120 | 2,610 | 4,840 | 5,080 | 12,200 | 3,910 | 3,660 | 21,300 | 516 |
| 13..... | 1,950 | 3,360 | 4,320 | 10,300 | 2,780 | 3,860 | 8,440 | 11,000 | 4,900 | 3,770 | 17,200 | 211 |
| 14..... | 640 | 2,280 | 1,320 | 13,000 | 3,440 | 4,260 | 8,680 | 10,500 | 1,330 | 3,560 | 11,200 | 1,320 |
| 15..... | 498 | 3,980 | 3,780 | 9,730 | 1,420 | 1,770 | 8,680 | 9,460 | 3,490 | 5,240 | 14,100 | 301 |
| 16..... | 411 | 1,180 | 4,140 | 7,670 | 3,860 | 3,040 | 8,170 | 7,280 | 3,870 | 5,200 | 7,820 | 2,820 |
| 17..... | 1,170 | 4,060 | 4,320 | 7,670 | 3,880 | 5,500 | 7,670 | 2,440 | 4,270 | 4,230 | 2,860 | 2,380 |
| 18..... | 251 | 5,070 | 5,140 | 4,770 | 4,340 | 5,250 | 6,980 | 3,870 | 5,820 | 3,390 | 3,400 | 2,560 |
| 19..... | 585 | 3,550 | 5,970 | 4,040 | 5,800 | 6,230 | 2,300 | 4,440 | 3,880 | 1,030 | 4,460 | 1,610 |
| 20..... | 472 | 3,060 | 5,290 | 6,890 | 4,840 | 5,750 | 3,940 | 5,740 | 1,390 | 5,030 | 6,470 | 463 |
| 21..... | 669 | 3,160 | 4,860 | 8,170 | 3,580 | 4,510 | 7,390 | 7,180 | 536 | 6,080 | 20,100 | 2,890 |
| 22..... | 2,350 | 1,980 | 4,790 | 7,100 | 1,700 | 3,980 | 7,670 | 29,700 | 3,050 | 5,880 | 44,600 | 2,270 |
| 23..... | 2,550 | 810 | 5,080 | 5,160 | 3,600 | 5,160 | 8,680 | 48,100 | 2,810 | 5,820 | 35,100 | 2,530 |
| 24..... | 2,820 | 2,460 | 4,980 | 5,200 | 5,440 | 6,060 | 9,730 | 23,400 | 3,880 | 5,820 | 19,200 | 3,420 |
| 25..... | 4,240 | 1,910 | 4,940 | 1,400 | 6,450 | 6,070 | 8,680 | 14,700 | 1,780 | 5,820 | 12,000 | 4,630 |
| 26..... | 2,500 | 2,220 | 1,520 | 2,560 | 6,360 | 5,460 | 6,800 | 10,600 | 2,790 | 3,890 | 10,800 | 3,810 |
| 27..... | 1,240 | 522 | 12,700 | 5,140 | 6,130 | 5,360 | 8,060 | 10,800 | 1,880 | 5,820 | 9,450 | 270 |
| 28..... | 1,120 | 881 | 17,200 | 5,820 | 5,440 | 3,900 | 8,680 | 9,200 | 2,130 | 5,150 | 6,260 | 3,120 |
| 29..... | 1,630 | 261 | 13,000 | 6,680 | ----- | 3,240 | 8,170 | 8,170 | 4,090 | 5,420 | 3,870 | 3,080 |
| 30..... | 2,030 | 698 | 10,300 | 7,140 | ----- | 4,240 | 7,220 | 4,910 | 5,540 | 5,400 | 443 | 3,390 |
| 31..... | 2,290 | ----- | 9,730 | 6,260 | ----- | 6,520 | ----- | 3,030 | ----- | 5,400 | 2,330 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|--------|-----------------|-------------------|
| October..... | 4,240 | 251 | 1,410 | 0.204 | 0.24 |
| November..... | 5,070 | 261 | 2,220 | .321 | .36 |
| December..... | 17,200 | 1,320 | 5,750 | .832 | .96 |
| January..... | 13,000 | 1,400 | 6,560 | .949 | 1.09 |
| February..... | 6,450 | ----- | 4,000 | .579 | .60 |
| March..... | 6,520 | 1,770 | 4,420 | .640 | .74 |
| April..... | 32,800 | 2,300 | 10,000 | 1.45 | 1.62 |
| May..... | 48,100 | 2,440 | 11,000 | 1.59 | 1.83 |
| June..... | 6,450 | 536 | 3,530 | .511 | .57 |
| July..... | 7,470 | 660 | 4,590 | .664 | .77 |
| August..... | 44,600 | 443 | 10,600 | 1.53 | 1.76 |
| September..... | 4,830 | 211 | 2,590 | .375 | .42 |
| The year..... | 48,100 | ----- | 5,580 | .808 | 10.96 |

FISHER RIVER NEAR DOBSON, N. C.

LOCATION.—Chain gage at Turkey Ford steel highway bridge on Dobson-Ararat highway 2 miles east of Dobson, Surrey County.

DRAINAGE AREA.—109 square miles.

RECORDS AVAILABLE.—September, 1920, to September, 1931.

EXTREMES.—Maximum discharge during year, 3,350 second-feet Apr. 1 (gage height, 5.90 feet); minimum, 21 second-feet Oct. 1 (gage height, 0.10 foot).

1920-1931: Maximum discharge, 8,300 second-feet Oct. 2, 1929 (gage height, estimated, 12.1 feet); minimum, 16 second-feet Aug. 30, 1925 (gage height, 0.03 foot).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|------|-------|------|-------|-----|-------|-------|------|-------|
| 1..... | 23 | 39 | 50 | 90 | 56 | 113 | 1,620 | 121 | 157 | 46 | 124 | 76 |
| 2..... | 26 | 39 | 45 | 76 | 56 | 76 | 365 | 107 | 97 | 48 | 184 | 76 |
| 3..... | 29 | 43 | 43 | 80 | 58 | 71 | 235 | 116 | 88 | 555 | 388 | 113 |
| 4..... | 24 | 67 | 43 | 90 | 56 | 67 | 211 | 107 | 88 | 128 | 129 | 105 |
| 5..... | 27 | 83 | 45 | 807 | 56 | 65 | 223 | 97 | 88 | 116 | 580 | 80 |
| 6..... | 29 | 56 | 1,020 | 320 | 54 | 63 | 320 | 97 | 113 | 170 | 129 | 74 |
| 7..... | 29 | 50 | 215 | 164 | 60 | 58 | 203 | 705 | 110 | 76 | 95 | 63 |
| 8..... | 29 | 46 | 124 | 124 | 56 | 100 | 160 | 320 | 83 | 63 | 80 | 58 |
| 9..... | 26 | 45 | 100 | 107 | 67 | 88 | 141 | 157 | 78 | 67 | 76 | 58 |
| 10..... | 29 | 43 | 90 | 102 | 67 | 74 | 129 | 151 | 78 | 58 | 71 | 60 |
| 11..... | 23 | 45 | 85 | 95 | 60 | 69 | 113 | 135 | 74 | 76 | 71 | 54 |
| 12..... | 23 | 63 | 76 | 105 | 54 | 67 | 107 | 192 | 65 | 52 | 211 | 50 |
| 13..... | 29 | 92 | 74 | 92 | 60 | 65 | 97 | 138 | 69 | 56 | 144 | 50 |
| 14..... | 58 | 67 | 69 | 92 | 65 | 65 | 95 | 126 | 78 | 107 | 83 | 48 |
| 15..... | 67 | 69 | 65 | 105 | 50 | 67 | 92 | 118 | 705 | 85 | 76 | 48 |
| 16..... | 63 | 97 | 63 | 95 | 58 | 60 | 88 | 110 | 110 | 56 | 67 | 48 |
| 17..... | 50 | 116 | 69 | 126 | 85 | 63 | 92 | 100 | 65 | 65 | 65 | 48 |
| 18..... | 39 | 85 | 151 | 74 | 78 | 58 | 100 | 95 | 60 | 105 | 60 | 46 |
| 19..... | 36 | 69 | 110 | 95 | 63 | 58 | 85 | 100 | 56 | 92 | 78 | 43 |
| 20..... | 37 | 63 | 52 | 80 | 80 | 54 | 80 | 102 | 48 | 63 | 580 | 43 |
| 21..... | 39 | 54 | 37 | 74 | 76 | 54 | 76 | 605 | 52 | 255 | 203 | 48 |
| 22..... | 39 | 48 | 85 | 69 | 71 | 110 | 410 | 199 | 56 | 203 | 870 | 43 |
| 23..... | 46 | 48 | 46 | 69 | 65 | 255 | 235 | 192 | 100 | 97 | 199 | 58 |
| 24..... | 56 | 46 | 48 | 67 | 65 | 167 | 178 | 144 | 69 | 83 | 138 | 54 |
| 25..... | 50 | 46 | 60 | 65 | 60 | 124 | 164 | 135 | 65 | 118 | 102 | 37 |
| 26..... | 36 | 48 | 100 | 65 | 50 | 100 | 148 | 124 | 71 | 1,180 | 92 | 255 |
| 27..... | 41 | 41 | 174 | 67 | 58 | 100 | 126 | 121 | 56 | 113 | 342 | 85 |
| 28..... | 46 | 48 | 138 | 63 | 63 | 719 | 113 | 110 | 50 | 85 | 138 | 50 |
| 29..... | 52 | 43 | 124 | 58 | ----- | 744 | 113 | 110 | 46 | 76 | 107 | 45 |
| 30..... | 56 | 48 | 107 | 56 | ----- | 188 | 113 | 105 | 54 | 69 | 95 | 46 |
| 31..... | 46 | ----- | 80 | 58 | ----- | 164 | ----- | 102 | ----- | 78 | 83 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 67 | 23 | 38.8 | 0.356 | 0.41 |
| November..... | 116 | 39 | 58.2 | .534 | .60 |
| December..... | 1,020 | 37 | 116 | 1.06 | 1.22 |
| January..... | 320 | 56 | 117 | 1.07 | 1.23 |
| February..... | 85 | 50 | 62.4 | .672 | .60 |
| March..... | 255 | 54 | 133 | 1.22 | 1.41 |
| April..... | 1,620 | 76 | 208 | 1.91 | 2.13 |
| May..... | 705 | 95 | 166 | 1.52 | 1.75 |
| June..... | 705 | 46 | 97.6 | .895 | 1.00 |
| July..... | 1,180 | 46 | 143 | 1.31 | 1.51 |
| August..... | 870 | 60 | 183 | 1.68 | 1.94 |
| September..... | 255 | 37 | 65.4 | .600 | .67 |
| The year..... | 1,620 | 23 | 116 | 1.06 | 14.47 |

SOUTH YADKIN RIVER AT COOLEEMEE, N. C.

LOCATION.—Water-stage recorder below tailrace of Erwin cotton mills at Cooleemee, Davidson County.

DRAINAGE AREA.—560 square miles.

RECORDS AVAILABLE.—June, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 4,560 second-feet Apr. 2 (gage height, 11.34 feet); minimum, 14 second-feet Oct. 30 (gage height, 0.46 foot).

1928-1931: Maximum discharge (estimated), 24,800 second-feet Oct. 3, 1929 (gage height, 32.25 feet); minimum, 11 second-feet July 26, 1928 (gage height, 0.52 foot).

REMARKS.—Records good except those above 2,000 second-feet and those estimated for Apr. 19 to May 31, June 2-13, which are fair. Flow regulated by Erwin cotton mills.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 152 | 198 | 308 | 404 | 326 | 442 | 2,970 | 440 | 386 | 219 | 94 | 186 |
| 2..... | 172 | 98 | 300 | 365 | 372 | 433 | 4,250 | | 443 | 253 | 247 | 185 |
| 3..... | 147 | 244 | 233 | 328 | 294 | 389 | 2,610 | | 400 | 304 | 439 | 231 |
| 4..... | 94 | 250 | 228 | 430 | 270 | 352 | 1,530 | | 1,670 | 262 | 321 | 168 |
| 5..... | 72 | 314 | 250 | 1,180 | 297 | 428 | 2,360 | | | 1,980 | 501 | |
| 6..... | 216 | 330 | 1,300 | 2,240 | 216 | 483 | 2,640 | 550 | 320 | 1,650 | 602 | 210 |
| 7..... | 165 | 264 | 2,790 | 1,270 | 302 | 363 | 2,180 | | | 549 | 413 | 191 |
| 8..... | 161 | 190 | 1,300 | 718 | 302 | 418 | 1,350 | 1,400 | | 616 | 214 | 226 |
| 9..... | 164 | 112 | 620 | 587 | 362 | 442 | 970 | | | 462 | 266 | 183 |
| 10..... | 174 | 283 | 483 | 519 | 319 | 413 | 783 | 1,700 | 260 | 485 | 289 | 160 |
| 11..... | 98 | 208 | 436 | 478 | 338 | 373 | 690 | | | 343 | 278 | 198 |
| 12..... | 72 | 238 | 402 | 521 | 308 | 364 | 630 | | | 224 | 440 | 138 |
| 13..... | 222 | 258 | 287 | 595 | 231 | 304 | 553 | | | 348 | 501 | 84 |
| 14..... | 167 | 346 | 338 | 503 | 338 | 287 | 512 | | | 298 | 403 | 428 |
| 15..... | 208 | 267 | 380 | 427 | 342 | 350 | 488 | 460 | 178 | 376 | 457 | 203 |
| 16..... | 187 | 527 | 284 | 355 | 370 | 401 | 467 | | | 334 | 238 | 154 |
| 17..... | 96 | 680 | 222 | 372 | 308 | 303 | 450 | | | 357 | 286 | 254 |
| 18..... | 140 | 504 | 139 | 474 | 376 | 301 | 490 | | | 295 | 191 | 204 |
| 19..... | 154 | 421 | 322 | 482 | 380 | 289 | | | | 200 | 145 | 212 |
| 20..... | 234 | 350 | 454 | 473 | 332 | 286 | 550 | 250 | 346 | 258 | 340 | 198 |
| 21..... | 160 | 283 | 344 | 428 | 362 | 234 | | | | 342 | 406 | 201 |
| 22..... | 152 | 219 | 350 | 388 | 346 | 693 | | | | 347 | 1,150 | 169 |
| 23..... | 173 | 253 | 308 | 320 | 382 | 1,070 | | 1,700 | 288 | 429 | 1,090 | 158 |
| 24..... | 222 | 324 | 218 | 374 | 309 | 660 | | | | 378 | 368 | 449 |
| 25..... | 282 | 236 | 304 | 366 | 301 | 543 | 1,400 | 418 | 163 | 320 | 206 | |
| 26..... | 310 | 263 | 399 | 404 | 396 | 464 | | | | | | |
| 27..... | 234 | 126 | 742 | 338 | 290 | 479 | | | | | | |
| 28..... | 177 | 318 | 766 | 322 | 230 | 522 | | | | | | |
| 29..... | 242 | 180 | 606 | 324 | | 1,960 | | | | | | |
| 30..... | 222 | 148 | 526 | 309 | | 1,690 | 440 | 460 | 220 | 207 | 246 | 157 |
| 31..... | 204 | | 433 | 246 | | 875 | | | | | | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|--------------------|----------------------|
| October..... | 310 | 72 | 177 | 0.316 | 0.36 |
| November..... | 680 | 98 | 281 | .502 | .56 |
| December..... | 2,790 | 139 | 518 | .925 | 1.07 |
| January..... | 2,240 | 246 | 534 | .954 | 1.10 |
| February..... | 396 | 216 | 321 | .573 | .60 |
| March..... | 1,960 | 234 | 536 | .957 | 1.10 |
| April..... | 4,250 | 440 | 1,170 | 2.09 | 2.33 |
| May..... | | | 752 | 1.34 | 1.54 |
| June..... | 443 | 175 | 306 | .546 | .61 |
| July..... | 1,980 | 145 | 493 | .880 | 1.01 |
| August..... | 1,150 | 94 | 366 | .654 | .75 |
| September..... | 321 | 84 | 179 | .320 | .36 |
| The year..... | 4,250 | 72 | 470 | .839 | 11.39 |

ROCKY RIVER NEAR NORWOOD, N. C.

LOCATION.—Water-stage recorder at Hyatts Ford, 1,000 feet downstream from mouth of Lanes Creek and 6 miles southwest of Norwood, Stanley County.

DRAINAGE AREA.—1,380 square miles.

RECORDS AVAILABLE.—October, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 23,600 second-feet Aug. 22 (gage height, 17.24 feet); minimum, 22 second-feet Oct. 25 (gage height, 0.12 foot).

1929-1931: Maximum discharge (estimated), 52,500 second-feet Oct. 2, 1929 (gage height, 31.4 feet); minimum, that of Oct. 25, 1930.

Maximum stage known, about 35 feet during flood of August, 1908 (estimated discharge, 60,000 second-feet).

REMARKS.—Records good except those below 70 second-feet, which are fair, and those estimated, which are poor. Some regulation during periods of extremely low flow.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|-------|-------|-------|-------|--------|-------|-------|-------|---------|-------|
| 1 | 51 | 104 | 159 | 972 | 383 | 320 | 8,350 | 347 | 870 | 84 | 251 | 187 |
| 2 | " 46 | 104 | 206 | 804 | 352 | 490 | 7,530 | 2,500 | 1,020 | 76 | " 1,370 | 162 |
| 3 | 31 | 92 | 244 | 654 | 334 | 440 | 2,420 | 3,590 | 464 | 155 | " 1,500 | 147 |
| 4 | 31 | 672 | 200 | 616 | 324 | 405 | 1,430 | 1,170 | 329 | 2,790 | " 500 | 141 |
| 5 | " 46 | 1,660 | 184 | 1,740 | 316 | 1,170 | 3,520 | 677 | 284 | 1,400 | " 300 | 261 |
| 6 | 51 | 635 | 5,390 | 4,720 | 316 | 1,210 | 10,600 | 543 | 296 | 1,090 | " 400 | 190 |
| 7 | 56 | 284 | 8,200 | 1,940 | 303 | 891 | 5,600 | 4,130 | 329 | 781 | " 6,000 | 147 |
| 8 | 51 | 184 | 2,220 | 1,130 | 296 | 762 | 2,650 | 3,810 | 483 | 342 | " 2,000 | 141 |
| 9 | 48 | 144 | 1,040 | 1,580 | 296 | 770 | 1,630 | 2,960 | 307 | 220 | 383 | 112 |
| 10 | 41 | 121 | 694 | 1,250 | 316 | 586 | 1,250 | 4,200 | 234 | 181 | 269 | 109 |
| 11 | 34 | 109 | 536 | 954 | 383 | 483 | 990 | 2,550 | 206 | 171 | 5,900 | 95 |
| 12 | 56 | 101 | 452 | 3,000 | 347 | 399 | 873 | 1,120 | 184 | 281 | 12,600 | 98 |
| 13 | 61 | 355 | 378 | 7,290 | 303 | 356 | 744 | 900 | 168 | 203 | 1,960 | 106 |
| 14 | 58 | 1,050 | 338 | 2,760 | 329 | 329 | 631 | 719 | 165 | 723 | 4,000 | 71 |
| 15 | 46 | 804 | 307 | 1,630 | 685 | 316 | 565 | 565 | 266 | 694 | 3,150 | 95 |
| 16 | 46 | 4,380 | 281 | 1,160 | 572 | 311 | 516 | 446 | 388 | 296 | 774 | 76 |
| 17 | 44 | 4,230 | 238 | 1,020 | 428 | 288 | 470 | 372 | 200 | 203 | 394 | 71 |
| 18 | 34 | 1,430 | 273 | 963 | 434 | 262 | 504 | 324 | 174 | 321 | 548 | 74 |
| 19 | 58 | 702 | 388 | 1,710 | 496 | 255 | 972 | 288 | 150 | 1,180 | 277 | 79 |
| 20 | " 36 | 446 | 1,110 | 1,840 | 496 | 251 | 710 | 303 | 129 | 795 | 2,150 | 79 |
| 21 | 48 | 324 | 1,580 | 1,220 | 422 | 251 | 728 | 3,450 | 124 | 834 | 13,800 | " 63 |
| 22 | 41 | 284 | 1,220 | 918 | 372 | 931 | 804 | 6,140 | 106 | 1,350 | 20,000 | 90 |
| 23 | " 39 | 259 | 981 | 744 | 334 | 2,600 | 1,580 | 7,250 | 184 | 1,210 | 4,840 | " 46 |
| 24 | " 36 | 237 | 646 | 654 | 316 | 1,240 | 918 | 3,020 | 227 | 474 | 1,430 | 71 |
| 25 | 32 | 220 | 434 | 601 | 311 | 778 | 623 | 1,280 | 162 | 266 | 900 | " 51 |
| 26 | 36 | 203 | 2,980 | 558 | 342 | 594 | 662 | 838 | 138 | 1,370 | 536 | 63 |
| 27 | " 41 | 184 | 9,710 | 523 | 329 | 464 | 762 | 976 | 124 | 2,130 | 378 | " 46 |
| 28 | 56 | 171 | 5,260 | 496 | 292 | 422 | 677 | 945 | 106 | 1,120 | 307 | 112 |
| 29 | 51 | 159 | 2,570 | 458 | ----- | 2,390 | 458 | 516 | 84 | 445 | 259 | 121 |
| 30 | 51 | 153 | 1,780 | 423 | ----- | 2,080 | 388 | 394 | 109 | 266 | 230 | " 39 |
| 31 | 68 | ----- | 1,250 | 405 | ----- | 999 | ----- | 329 | ----- | 217 | 206 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 68 | 31 | 45.9 | 0.093 | 0.04 |
| November | 4,380 | 92 | 660 | .478 | .53 |
| December | 9,710 | 159 | 1,650 | 1.20 | 1.38 |
| January | 7,290 | 405 | 1,440 | 1.04 | 1.20 |
| February | 685 | 292 | 372 | .270 | .28 |
| March | 2,600 | 251 | 743 | 5.38 | .62 |
| April | 10,600 | 388 | 1,990 | 1.44 | 1.61 |
| May | 7,250 | 288 | 1,830 | 1.33 | 1.53 |
| June | 1,020 | 84 | 267 | .193 | .22 |
| July | 2,790 | 76 | 699 | .607 | .58 |
| August | 20,000 | 206 | 2,830 | 2.05 | 2.36 |
| September | 261 | 39 | 105 | .071 | .08 |
| The year | 20,000 | 31 | 1,060 | .768 | 10.43 |

• Estimated.

LUMBER RIVER AT BOARDMAN, N. C.

LOCATION.—Staff gage at State highway bridge $1\frac{1}{2}$ miles downstream from Big Swamp and 1 mile downstream from Atlantic Coast Line Railroad bridge at Boardman, Columbus County.

DRAINAGE AREA.—1,240 square miles.

RECORDS AVAILABLE.—September, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 3,110 second-feet Aug. 26-31 (gage height, 7.2 feet); minimum, 132 second-feet Oct. 12.

1929-1931: Maximum discharge, 7,430 second-feet Oct. 9, 1929 (gage height, 9.20 feet); minimum, that of Oct. 12, 1930.

REMARKS.—Records good. Discharge estimated for Oct. 5-13.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 222 | 357 | 802 | 2,260 | 1,360 | 1,040 | 1,240 | 1,080 | 1,360 | 250 | 408 | 2,800 |
| 2..... | 208 | 391 | 832 | 2,150 | 1,300 | 1,040 | 1,240 | 1,080 | 1,360 | 236 | 391 | 2,510 |
| 3..... | 194 | 426 | 894 | 2,050 | 1,300 | 1,040 | 1,240 | 1,040 | 1,300 | 236 | 357 | 2,260 |
| 4..... | 194 | 462 | 962 | 2,050 | 1,240 | 1,040 | 1,300 | 999 | 1,190 | 295 | 357 | 2,050 |
| 5..... | 180 | 540 | 1,040 | 2,050 | 1,190 | 1,040 | 1,360 | 927 | 999 | 357 | 426 | 1,750 |
| 6..... | 168 | 602 | 1,080 | 1,950 | 1,140 | 1,040 | 1,420 | 862 | 832 | 374 | 540 | 1,490 |
| 7..... | 156 | 670 | 1,140 | 1,950 | 1,080 | 1,040 | 1,570 | 802 | 670 | 444 | 602 | 1,360 |
| 8..... | 156 | 720 | 1,190 | 1,850 | 1,040 | 1,080 | 1,660 | 802 | 580 | 462 | 694 | 1,360 |
| 9..... | 144 | 746 | 1,240 | 1,850 | 962 | 1,080 | 1,750 | 832 | 426 | 560 | 802 | 1,300 |
| 10..... | 138 | 774 | 1,300 | 1,750 | 927 | 1,140 | 1,850 | 862 | 481 | 720 | 894 | 999 |
| 11..... | 138 | 774 | 1,300 | 1,750 | 927 | 1,140 | 1,750 | 927 | 462 | 962 | 1,140 | 862 |
| 12..... | 132 | 802 | 1,240 | 1,750 | 894 | 1,140 | 1,750 | 962 | 462 | 1,190 | 1,490 | 802 |
| 13..... | 138 | 832 | 1,240 | 1,850 | 894 | 1,140 | 1,660 | 1,040 | 500 | 1,360 | 1,850 | 746 |
| 14..... | 208 | 832 | 1,240 | 2,050 | 862 | 1,140 | 1,660 | 1,040 | 462 | 1,300 | 2,050 | 670 |
| 15..... | 236 | 862 | 1,240 | 2,260 | 927 | 1,140 | 1,660 | 999 | 408 | 1,240 | 2,260 | 602 |
| 16..... | 265 | 894 | 1,240 | 2,510 | 962 | 1,140 | 1,570 | 999 | 391 | 1,140 | 2,510 | 520 |
| 17..... | 325 | 894 | 1,360 | 2,510 | 999 | 1,080 | 1,490 | 962 | 374 | 962 | 2,510 | 444 |
| 18..... | 325 | 894 | 1,420 | 2,650 | 1,040 | 1,080 | 1,420 | 962 | 374 | 862 | 2,380 | 408 |
| 19..... | 325 | 862 | 1,490 | 2,650 | 1,040 | 1,040 | 1,360 | 927 | 357 | 832 | 2,380 | 374 |
| 20..... | 341 | 862 | 1,660 | 2,510 | 1,080 | 999 | 1,300 | 894 | 357 | 832 | 2,380 | 357 |
| 21..... | 325 | 832 | 1,750 | 2,510 | 1,080 | 962 | 1,240 | 927 | 357 | 774 | 2,510 | 341 |
| 22..... | 310 | 832 | 1,850 | 2,380 | 1,140 | 962 | 1,140 | 1,080 | 357 | 694 | 2,650 | 310 |
| 23..... | 295 | 862 | 1,850 | 2,380 | 1,190 | 999 | 1,140 | 1,240 | 341 | 560 | 2,800 | 295 |
| 24..... | 280 | 894 | 1,850 | 2,260 | 1,140 | 1,040 | 1,080 | 1,300 | 325 | 462 | 2,800 | 295 |
| 25..... | 265 | 894 | 1,850 | 2,150 | 1,080 | 1,080 | 1,040 | 1,300 | 310 | 444 | 2,950 | 280 |
| 26..... | 250 | 894 | 1,850 | 2,050 | 1,080 | 1,140 | 1,080 | 1,360 | 295 | 426 | 3,110 | 280 |
| 27..... | 236 | 862 | 1,950 | 1,950 | 1,080 | 1,140 | 1,140 | 1,360 | 265 | 444 | 3,110 | 265 |
| 28..... | 250 | 832 | 2,050 | 1,850 | 1,040 | 1,140 | 1,140 | 1,300 | 265 | 462 | 3,110 | 265 |
| 29..... | 280 | 774 | 2,150 | 1,660 | ----- | 1,140 | 1,140 | 1,300 | 265 | 500 | 3,110 | 265 |
| 30..... | 295 | 774 | 2,260 | 1,490 | ----- | 1,190 | 1,140 | 1,360 | 265 | 520 | 3,110 | 265 |
| 31..... | 325 | ----- | 2,260 | 1,420 | ----- | 1,190 | ----- | 1,420 | ----- | 444 | 3,110 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|--------------------|----------------------|
| October..... | 341 | 132 | 236 | 0.190 | 0.22 |
| November..... | 894 | 357 | 755 | .609 | .68 |
| December..... | 2,260 | 802 | 1,470 | 1.19 | 1.37 |
| January..... | 2,650 | 1,420 | 2,080 | 1.68 | 1.94 |
| February..... | 1,360 | 862 | 1,070 | .863 | .90 |
| March..... | 1,190 | 962 | 1,080 | .871 | 1.00 |
| April..... | 1,850 | 1,040 | 1,380 | 1.11 | 1.24 |
| May..... | 1,420 | 802 | 1,060 | .855 | .99 |
| June..... | 1,360 | 265 | 546 | .440 | .49 |
| July..... | 1,360 | 236 | 656 | .529 | .61 |
| August..... | 3,110 | 357 | 1,900 | 1.53 | 1.76 |
| September..... | 2,800 | 265 | 884 | .713 | .80 |
| The year..... | 3,110 | 132 | 1,100 | .887 | 12.00 |

LYNCHES RIVER AT EFFINGHAM, S. C.

LOCATION.—Staff gage 100 feet upstream from highway bridge, 150 feet upstream from Atlantic Coast Line Railroad bridge, and 1 mile south of Effingham, Florence County.

DRAINAGE AREA.—1,070 square miles.

RECORDS AVAILABLE.—August, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,330 second-feet Aug. 31 (gage height, 10.40 feet); minimum, 168 second-feet July 3, 4 (gage height, 1.83 feet).

1929–1931: Maximum discharge, 15,200 second-feet Oct. 7, 1929 (gage height, 19.25 feet); minimum discharge, that of July 4, 1931.

Maximum stage known, 20.0 feet Aug. 30, 1908 (discharge not determined).

REMARKS.—Record good for discharges between 150 and 10,000 second-feet, fair above and below.

Daily and monthly discharge, in second-feet, 1930–31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 445 | 400 | 699 | 1,600 | 1,060 | 768 | 842 | 621 | 460 | 190 | 621 | 1,980 |
| 2..... | 415 | 445 | 768 | 1,560 | 976 | 721 | 699 | 639 | 445 | 182 | 678 | 1,360 |
| 3..... | 400 | 491 | 842 | 1,420 | 868 | 658 | 699 | 587 | 400 | 168 | 571 | 678 |
| 4..... | 370 | 571 | 868 | 1,740 | 817 | 678 | 768 | 571 | 340 | 168 | 340 | 475 |
| 5..... | 355 | 621 | 868 | 1,910 | 792 | 699 | 842 | 587 | 325 | 190 | 310 | 480 |
| 6..... | 340 | 604 | 894 | 1,940 | 768 | 744 | 1,180 | 678 | 310 | 220 | 355 | 400 |
| 7..... | 325 | 523 | 1,000 | 1,740 | 768 | 721 | 1,180 | 948 | 295 | 280 | 445 | 385 |
| 8..... | 295 | 523 | 1,040 | 1,420 | 792 | 868 | 1,300 | 1,280 | 280 | 295 | 523 | 385 |
| 9..... | 280 | 571 | 948 | 1,280 | 744 | 792 | 1,460 | 1,420 | 265 | 370 | 491 | 430 |
| 10..... | 280 | 621 | 894 | 1,180 | 678 | 658 | 1,630 | 1,340 | 250 | 523 | 523 | 400 |
| 11..... | 265 | 699 | 842 | 1,180 | 699 | 658 | 1,770 | 1,100 | 250 | 587 | 587 | 340 |
| 12..... | 265 | 792 | 948 | 1,340 | 699 | 658 | 1,660 | 1,340 | 265 | 1,000 | 658 | 325 |
| 13..... | 265 | 842 | 1,000 | 1,800 | 699 | 658 | 1,740 | 1,160 | 250 | 921 | 744 | 295 |
| 14..... | 295 | 699 | 1,220 | 1,980 | 768 | 658 | 1,980 | 1,060 | 235 | 658 | 792 | 280 |
| 15..... | 370 | 604 | 1,280 | 2,050 | 894 | 678 | 1,880 | 948 | 220 | 445 | 744 | 260 |
| 16..... | 325 | 678 | 1,360 | 2,020 | 868 | 639 | 1,700 | 768 | 220 | 430 | 658 | 265 |
| 17..... | 310 | 721 | 1,520 | 1,910 | 894 | 571 | 1,340 | 744 | 220 | 430 | 699 | 250 |
| 18..... | 340 | 699 | 1,660 | 1,910 | 921 | 555 | 1,060 | 678 | 295 | 400 | 792 | 235 |
| 19..... | 370 | 817 | 1,300 | 1,910 | 921 | 604 | 817 | 539 | 310 | 370 | 894 | 220 |
| 20..... | 385 | 894 | 1,280 | 1,840 | 948 | 523 | 744 | 460 | 340 | 370 | 976 | 220 |
| 21..... | 370 | 868 | 1,280 | 2,080 | 948 | 523 | 699 | 460 | 385 | 310 | 948 | 205 |
| 22..... | 340 | 1,060 | 1,280 | 2,160 | 1,000 | 658 | 699 | 460 | 340 | 295 | 587 | 205 |
| 23..... | 310 | 1,120 | 1,400 | 2,120 | 921 | 699 | 721 | 523 | 280 | 310 | 523 | 205 |
| 24..... | 295 | 1,180 | 1,420 | 1,910 | 842 | 639 | 721 | 571 | 265 | 340 | 604 | 190 |
| 25..... | 295 | 1,220 | 1,490 | 1,770 | 792 | 658 | 699 | 639 | 250 | 415 | 792 | 190 |
| 26..... | 280 | 1,280 | 1,460 | 1,520 | 792 | 744 | 792 | 678 | 220 | 491 | 792 | 182 |
| 27..... | 280 | 1,340 | 1,700 | 1,490 | 678 | 744 | 792 | 768 | 205 | 491 | 868 | 175 |
| 28..... | 280 | 1,340 | 1,910 | 1,340 | 721 | 921 | 744 | 817 | 205 | 430 | 948 | 175 |
| 29..... | 310 | 1,000 | 1,910 | 1,300 | ----- | 894 | 699 | 768 | 205 | 475 | 1,420 | 168 |
| 30..... | 355 | 817 | 1,800 | 1,100 | ----- | 1,040 | 658 | 523 | 190 | 523 | 2,260 | 168 |
| 31..... | 370 | ----- | 1,770 | 1,060 | ----- | 948 | ----- | 430 | ----- | 571 | 2,300 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 445 | 265 | 328 | 0.307 | 0.35 |
| November..... | 1,340 | 400 | 801 | .745 | .84 |
| December..... | 1,910 | 699 | 1,250 | 1.17 | 1.35 |
| January..... | 2,160 | 1,060 | 1,660 | 1.55 | 1.79 |
| February..... | 1,060 | 678 | 831 | .777 | .81 |
| March..... | 1,040 | 523 | 709 | .668 | .76 |
| April..... | 1,980 | 658 | 1,080 | 1.01 | 1.13 |
| May..... | 1,420 | 430 | 778 | .727 | .84 |
| June..... | 460 | 190 | 284 | .267 | .30 |
| July..... | 1,000 | 168 | 414 | .387 | .45 |
| August..... | 2,300 | 310 | 788 | .736 | .85 |
| September..... | 1,980 | 168 | 382 | .357 | .40 |
| The year..... | 2,300 | 168 | 777 | .726 | 9.87 |

BLACK RIVER AT KINGSTREE, S. C.

LOCATION.—Tape gage at highway bridge at Kingstree, Williamsburg County.

DRAINAGE AREA.—1,240 square miles.

RECORDS AVAILABLE.—August, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 3,120 second-feet Jan. 20, 21 (gage height, 10.1 feet); minimum, 12 second-feet July 2, Sept. 28, 29 (gage height, 0.50 foot).

1929-1931: Maximum discharge, 6,400 second-feet Jan. 25, 1930 (gage height, 12.2 feet); minimum discharge, that of July 2, Sept. 28, 29, 1931.

REMARKS.—Record good for discharge between 15 and 7,000 second-feet, fair above and below these limits.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|-------|-------|-------|------|-------|-------|-------|------|------|-------|
| 1 | 211 | 223 | 788 | 2,240 | 1,600 | 958 | 743 | 721 | 360 | 15 | 129 | 148 |
| 2 | 273 | 260 | 811 | 2,160 | 1,460 | 958 | 765 | 699 | 329 | 13 | 94 | 129 |
| 3 | 344 | 286 | 859 | 2,070 | 1,330 | 958 | 765 | 699 | 247 | 18 | 68 | 111 |
| 4 | 376 | 300 | 908 | 1,980 | 1,280 | 958 | 721 | 677 | 200 | 38 | 57 | 102 |
| 5 | 461 | 314 | 958 | 1,900 | 1,180 | 933 | 765 | 656 | 178 | 82 | 50 | 94 |
| 6 | 516 | 329 | 958 | 1,820 | 1,100 | 933 | 835 | 635 | 168 | 120 | 44 | 86 |
| 7 | 479 | 344 | 984 | 1,820 | 1,070 | 908 | 908 | 677 | 148 | 120 | 50 | 78 |
| 8 | 409 | 329 | 984 | 1,740 | 1,010 | 933 | 908 | 859 | 129 | 120 | 54 | 64 |
| 9 | 329 | 344 | 958 | 1,600 | 958 | 958 | 933 | 1,140 | 111 | 111 | 78 | 50 |
| 10 | 260 | 360 | 958 | 1,600 | 908 | 958 | 958 | 1,600 | 98 | 148 | 111 | 44 |
| 11 | 223 | 376 | 958 | 1,520 | 859 | 883 | 1,010 | 2,070 | 86 | 223 | 148 | 38 |
| 12 | 178 | 376 | 1,010 | 1,520 | 835 | 811 | 1,070 | 2,160 | 71 | 300 | 168 | 38 |
| 13 | 148 | 409 | 1,040 | 1,900 | 811 | 765 | 1,140 | 3,010 | 57 | 392 | 148 | 44 |
| 14 | 129 | 443 | 1,070 | 2,160 | 811 | 721 | 1,140 | 1,820 | 50 | 554 | 111 | 44 |
| 15 | 138 | 479 | 1,040 | 2,330 | 859 | 699 | 1,100 | 1,600 | 50 | 721 | 90 | 44 |
| 16 | 178 | 554 | 1,010 | 2,420 | 883 | 677 | 1,070 | 1,390 | 50 | 765 | 78 | 44 |
| 17 | 200 | 614 | 1,010 | 2,700 | 908 | 635 | 1,010 | 1,220 | 57 | 811 | 71 | 38 |
| 18 | 200 | 677 | 1,070 | 2,800 | 933 | 594 | 958 | 1,100 | 44 | 811 | 64 | 71 |
| 19 | 168 | 721 | 1,140 | 3,010 | 933 | 554 | 933 | 984 | 71 | 765 | 57 | 31 |
| 20 | 148 | 743 | 1,390 | 3,120 | 933 | 535 | 908 | 883 | 31 | 699 | 50 | 26 |
| 21 | 138 | 765 | 1,670 | 3,120 | 958 | 554 | 859 | 811 | 26 | 635 | 44 | 25 |
| 22 | 111 | 788 | 1,820 | 3,010 | 984 | 635 | 835 | 835 | 24 | 554 | 57 | 21 |
| 23 | 94 | 788 | 1,900 | 2,900 | 984 | 699 | 811 | 859 | 16 | 497 | 78 | 20 |
| 24 | 86 | 765 | 1,980 | 2,800 | 984 | 721 | 811 | 811 | 21 | 409 | 106 | 16 |
| 25 | 78 | 721 | 2,070 | 2,600 | 984 | 721 | 788 | 765 | 21 | 314 | 138 | 16 |
| 26 | 78 | 677 | 2,070 | 2,420 | 984 | 721 | 765 | 635 | 21 | 260 | 168 | 16 |
| 27 | 78 | 677 | 2,070 | 2,240 | 958 | 743 | 765 | 574 | 21 | 223 | 178 | 15 |
| 28 | 78 | 699 | 2,160 | 2,160 | 958 | 765 | 765 | 574 | 16 | 211 | 189 | 12 |
| 29 | 86 | 721 | 2,240 | 2,070 | ----- | 788 | 765 | 535 | 16 | 178 | 178 | 15 |
| 30 | 129 | 765 | 2,330 | 1,900 | ----- | 788 | 743 | 461 | 16 | 168 | 168 | 26 |
| 31 | 189 | ----- | 2,330 | 1,740 | ----- | 765 | ----- | 392 | ----- | 148 | 158 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 516 | 78 | 210 | 0.169 | 0.19 |
| November | 788 | 223 | 528 | .426 | .48 |
| December | 2,330 | 788 | 1,370 | 1.10 | 1.27 |
| January | 3,120 | 1,520 | 2,240 | 1.81 | 2.09 |
| February | 1,600 | 811 | 1,020 | .823 | .86 |
| March | 1,958 | 535 | 782 | .631 | .73 |
| April | 1,140 | 721 | 885 | .714 | .80 |
| May | 3,010 | 392 | 1,080 | .831 | .96 |
| June | 360 | 16 | 91.1 | .073 | .08 |
| July | 811 | 13 | 336 | .271 | .31 |
| August | 189 | 44 | 103 | .083 | .10 |
| September | 148 | 12 | 50.2 | .040 | .04 |
| The year | 3,120 | 12 | 721 | .581 | 7.91 |

SANTEE RIVER BASIN

CATAWBA RIVER NEAR OLD FORT, N. C.

LOCATION.—Staff gage at highway bridge a quarter of a mile upstream from Brevard Creek, 1 mile downstream from Curtis Creek, and 2 miles east of Old Fort, McDowell County.

DRAINAGE AREA.—57.1 square miles.

RECORDS AVAILABLE.—August, 1930, to July, 1931 (discontinued).

EXTREMES.—Maximum discharge during period, 870 second-feet Apr. 4 (gage height, 3.40 feet); minimum, 16 second-feet Oct. 20 (gage height, 0.64 foot).
1930-31: Maximum discharge, that of Apr. 4, 1931; minimum, that of Sept. 3 and Oct. 20, 1930.

REMARKS.—Records fair except those estimated for Jan. 30, Feb. 8, Mar. 1, July 26, 28-31, which are poor. Flow is slightly regulated by mill operation.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|
| 1 | 23 | 20 | 38 | 46 | 39 | 75 | 254 | 86 | 65 | 40 |
| 2 | 18 | 20 | 35 | 38 | 41 | 70 | 240 | 80 | 53 | 34 |
| 3 | 19 | 20 | 32 | 43 | 41 | 59 | 173 | 78 | 50 | 34 |
| 4 | 22 | 28 | 31 | 44 | 38 | 54 | 515 | 75 | 45 | 142 |
| 5 | 19 | 33 | 65 | 318 | 38 | 49 | 354 | 77 | 43 | 72 |
| 6 | 23 | 29 | 270 | 162 | 38 | 48 | 270 | 98 | 43 | 65 |
| 7 | 20 | 22 | 107 | 105 | 38 | 49 | 212 | 162 | 43 | 53 |
| 8 | 22 | 21 | 75 | 82 | 50 | 72 | 188 | 162 | 46 | 43 |
| 9 | 25 | 22 | 61 | 77 | 44 | 58 | 150 | 133 | 40 | 49 |
| 10 | 21 | 23 | 53 | 72 | 40 | 49 | 162 | 114 | 39 | 78 |
| 11 | 20 | 21 | 51 | 66 | 38 | 43 | 150 | 98 | 39 | 47 |
| 12 | 20 | 32 | 46 | 75 | 36 | 44 | 107 | 93 | 38 | 45 |
| 13 | 20 | 44 | 44 | 70 | 38 | 43 | 100 | 86 | 38 | 53 |
| 14 | 21 | 52 | 41 | 64 | 47 | 46 | 92 | 86 | 37 | 78 |
| 15 | 22 | 84 | 38 | 45 | 40 | 46 | 86 | 77 | 53 | 55 |
| 16 | 20 | 160 | 32 | 70 | 39 | 45 | 84 | 74 | 59 | 49 |
| 17 | 19 | 131 | 52 | 57 | 51 | 44 | 77 | 81 | 47 | 45 |
| 18 | 19 | 88 | 173 | 58 | 46 | 41 | 81 | 77 | 39 | 51 |
| 19 | 18 | 61 | 42 | 55 | 40 | 42 | 75 | 66 | 38 | 96 |
| 20 | 18 | 51 | 45 | 53 | 39 | 40 | 75 | 65 | 35 | 65 |
| 21 | 19 | 45 | 40 | 51 | 38 | 42 | 81 | 81 | 33 | 75 |
| 22 | 18 | 40 | 39 | 41 | 37 | 96 | 327 | 73 | 36 | 73 |
| 23 | 20 | 38 | 40 | 48 | 38 | 84 | 188 | 69 | 43 | 53 |
| 24 | 21 | 34 | 38 | 43 | 38 | 88 | 150 | 61 | 38 | 51 |
| 25 | 21 | 32 | 118 | 44 | 65 | 84 | 120 | 61 | 86 | 47 |
| 26 | 19 | 31 | 64 | 45 | 50 | 87 | 110 | 53 | 60 | 56 |
| 27 | 20 | 31 | 55 | 45 | 48 | 92 | 105 | 60 | 43 | 43 |
| 28 | 20 | 31 | 59 | 43 | 51 | 173 | 98 | 54 | 38 | 50 |
| 29 | 25 | 29 | 58 | 43 | ----- | 225 | 102 | 52 | 37 | 44 |
| 30 | 22 | 32 | 52 | 38 | ----- | 198 | 88 | 50 | 37 | 38 |
| 31 | 21 | ----- | 53 | 38 | ----- | 198 | ----- | 69 | ----- | 36 |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------|---------|---------|------|-----------------|-------------------|
| October | 25 | 18 | 20.5 | 0.359 | 0.41 |
| November | 160 | 20 | 43.5 | .762 | .85 |
| December | 270 | 31 | 62.8 | 1.10 | 1.27 |
| January | 318 | 38 | 67.1 | 1.18 | 1.36 |
| February | 65 | 36 | 42.4 | .743 | .77 |
| March | 225 | 40 | 76.9 | 1.35 | 1.56 |
| April | 515 | 75 | 160 | 2.80 | 3.12 |
| May | 162 | 50 | 82.3 | 1.44 | 1.66 |
| June | 86 | 33 | 44.7 | .783 | .87 |
| July | 142 | 34 | 56.8 | .995 | 1.15 |

SANTEE RIVER AT FERGUSON, S. C.

LOCATION.—Water-stage recorder at Ferguson, Orangeburg County, 4 miles downstream from mouth of Eutaw Creek. Zero of gage is 42.88 feet above mean sea level.

DRAINAGE AREA.—14,800 square miles.

RECORDS AVAILABLE.—December, 1907, to September, 1931.

EXTREMES.—Maximum discharge during year, 26,000 second-feet Jan. 19 (gage height, 12.88 feet); minimum, 3,570 second-feet Oct. 29 (gage height, 1.31 feet).

1907-1931: Maximum discharge (estimated), 368,000 second-feet July 22, 1916 (gage height, 24.5 feet); minimum, 2,570 second-feet Sept. 2, 1925 (gage height, -0.75 foot). Minimum stage caused by regulation of storage reservoirs upstream.

REMARKS.—Records good. No daily fluctuations but very distinct weekly fluctuations during medium and low-water periods caused by power plants at Parr Shoals Reservoir on Broad River, Camden Reservoir on Wateree River, and Lake Murray on Saluda River.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1----- | 4,740 | 6,410 | 11,400 | 18,900 | 17,400 | 14,200 | 12,200 | 16,700 | 14,200 | 8,890 | 14,600 | 14,600 |
| 2----- | 5,020 | 5,730 | 8,610 | 19,200 | 15,500 | 12,000 | 14,600 | 17,200 | 10,300 | 11,100 | 12,500 | 15,300 |
| 3----- | 5,320 | 4,920 | 8,890 | 19,500 | 11,800 | 8,190 | 17,600 | 17,600 | 12,300 | 12,300 | 9,490 | 16,100 |
| 4----- | 5,730 | 4,740 | 11,300 | 19,800 | 13,500 | 10,400 | 19,200 | 16,700 | 14,600 | 12,500 | 6,290 | 16,300 |
| 5----- | 5,520 | 4,140 | 12,000 | 18,100 | 16,700 | 12,000 | 20,100 | 14,600 | 15,700 | 11,600 | 6,170 | 16,700 |
| 6----- | 5,320 | 5,080 | 12,700 | 14,600 | 17,800 | 13,300 | 21,300 | 15,500 | 16,500 | 10,900 | 8,750 | 16,700 |
| 7----- | 4,830 | 9,620 | 13,800 | 15,700 | 18,400 | 14,600 | 22,800 | 17,000 | 17,000 | 10,600 | 10,800 | 15,900 |
| 8----- | 4,300 | 12,200 | 15,300 | 17,600 | 18,900 | 15,500 | 23,400 | 17,600 | 16,100 | 12,000 | 12,300 | 14,800 |
| 9----- | 4,920 | 10,900 | 17,400 | 19,200 | 17,800 | 13,600 | 23,400 | 18,400 | 12,500 | 14,200 | 13,100 | 14,800 |
| 10----- | 5,120 | 8,330 | 18,600 | 20,100 | 15,300 | 9,340 | 23,400 | 19,200 | 13,300 | 15,300 | 13,100 | 15,900 |
| 11----- | 5,320 | 5,950 | 19,800 | 20,500 | 15,900 | 10,900 | 22,800 | 19,200 | 15,700 | 15,500 | 9,640 | 16,300 |
| 12----- | 5,420 | 5,420 | 20,100 | 21,300 | 17,400 | 12,500 | 21,700 | 18,600 | 16,500 | 15,500 | 8,750 | 16,300 |
| 13----- | 5,320 | 7,270 | 19,800 | 20,100 | 17,600 | 12,500 | 19,500 | 18,400 | 17,000 | 13,600 | 13,500 | 16,500 |
| 14----- | 4,740 | 9,340 | 19,500 | 20,500 | 17,400 | 12,200 | 16,300 | 18,400 | 17,000 | 12,700 | 17,200 | 15,000 |
| 15----- | 4,470 | 12,300 | 17,200 | 21,700 | 17,400 | 12,000 | 14,200 | 17,800 | 16,100 | 13,300 | 18,100 | 9,340 |
| 16----- | 5,320 | 14,200 | 12,700 | 22,800 | 19,500 | 10,300 | 13,600 | 17,600 | 12,500 | 13,800 | 18,100 | 9,040 |
| 17----- | 5,730 | 15,300 | 13,100 | 24,100 | 10,300 | 7,140 | 13,600 | 17,200 | 12,000 | 14,400 | 18,600 | 11,400 |
| 18----- | 5,620 | 17,200 | 15,500 | 25,000 | 12,300 | 8,610 | 14,000 | 14,800 | 14,400 | 14,400 | 18,900 | 12,000 |
| 19----- | 5,120 | 18,400 | 16,300 | 25,000 | 15,300 | 10,100 | 14,400 | 9,040 | 15,300 | 14,400 | 17,800 | 12,000 |
| 20----- | 4,740 | 19,200 | 17,200 | 22,200 | 15,900 | 10,300 | 13,300 | 11,800 | 15,000 | 12,300 | 17,200 | 12,000 |
| 21----- | 4,380 | 19,800 | 17,000 | 21,300 | 15,900 | 10,600 | 10,900 | 15,700 | 14,600 | 9,040 | 17,800 | 10,600 |
| 22----- | 3,910 | 19,800 | 15,500 | 21,300 | 15,700 | 11,400 | 13,300 | 16,700 | 12,700 | 10,100 | 18,100 | 7,010 |
| 23----- | 3,980 | 19,500 | 15,300 | 21,300 | 13,500 | 10,900 | 15,300 | 17,400 | 9,790 | 13,100 | 18,400 | 6,290 |
| 24----- | 4,060 | 17,600 | 15,000 | 21,300 | 8,750 | 10,300 | 15,900 | 18,400 | 9,950 | 14,200 | 19,200 | 9,950 |
| 25----- | 4,060 | 13,500 | 15,900 | 21,300 | 9,950 | 13,600 | 16,500 | 18,900 | 12,200 | 14,400 | 18,600 | 11,600 |
| 26----- | 3,770 | 12,200 | 16,500 | 19,800 | 13,600 | 15,000 | 17,000 | 18,600 | 13,500 | 14,000 | 17,200 | 12,700 |
| 27----- | 3,980 | 12,900 | 12,700 | 15,700 | 14,800 | 19,000 | 16,700 | 18,100 | 14,000 | 12,700 | 16,500 | 12,700 |
| 28----- | 3,980 | 13,500 | 12,900 | 15,900 | 14,600 | 14,600 | 15,000 | 17,400 | 14,000 | 11,100 | 15,700 | 11,300 |
| 29----- | 3,840 | 13,300 | 16,500 | 17,200 | ----- | 14,000 | 15,500 | 16,500 | 12,200 | 12,500 | 15,700 | 7,010 |
| 30----- | 4,740 | 12,300 | 17,600 | 17,400 | ----- | 12,300 | 16,300 | 16,100 | 8,890 | 14,800 | 16,300 | 6,170 |
| 31----- | 5,730 | ----- | 18,100 | 17,600 | ----- | 10,900 | ----- | 16,100 | ----- | 15,700 | 16,100 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|--------|-----------------|-------------------|
| October----- | 5,730 | 3,770 | 4,810 | 0.325 | 0.37 |
| November----- | 19,800 | 4,140 | 11,700 | .791 | .88 |
| December----- | 20,100 | 8,610 | 15,300 | 1.03 | 1.19 |
| January----- | 25,000 | 14,600 | 19,900 | 1.34 | 1.54 |
| February----- | 18,900 | 8,750 | 15,200 | 1.03 | 1.07 |
| March----- | 15,500 | 7,140 | 11,900 | .804 | .93 |
| April----- | 23,400 | 10,900 | 17,100 | 1.16 | 1.29 |
| May----- | 19,200 | ----- | 16,900 | 1.14 | 1.31 |
| June----- | 17,000 | 8,890 | 13,900 | .939 | 1.05 |
| July----- | ----- | 8,890 | 12,900 | .872 | 1.01 |
| August----- | 19,200 | 6,170 | 14,700 | .993 | 1.14 |
| September----- | 16,700 | 6,170 | 12,700 | .858 | .96 |
| The year----- | 25,000 | 3,770 | 13,900 | .939 | 12.74 |

* Estimated.

MILL CREEK AT OLD FORT, N. C.

LOCATION.—Staff gage at county highway bridge, half a mile upstream from confluence with Catawba River at Old Fort, McDowell County.

DRAINAGE AREA.—20.7 square miles.

RECORDS AVAILABLE.—May to December, 1907; August, 1930, to July, 1931; discontinued.

EXTREMES.—Maximum discharge during period, 248 second-feet Apr. 4 (gage height, 3.08 feet); minimum, 5.0 second-feet Oct. 18 (gage height, 1.10 feet). 1907, 1930-31: Maximum discharge, that of Apr. 4, 1931; minimum, 4.7 second feet Sept. 3, 4, 1930 (gage height, 1.08 feet).

REMARKS.—Records good except those estimated for Feb. 8, July 4, 5, 26, 28, 30, which are fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July |
|---------|------|-------|------|------|-------|------|-------|------|-------|------|
| 1----- | 6.8 | 6.1 | 13.5 | 14.0 | 17.0 | 25 | 85 | 31 | 22 | 13.5 |
| 2----- | 6.3 | 6.1 | 11.5 | 18.0 | 13.5 | 22 | 58 | 30 | 19.0 | 13.0 |
| 3----- | 6.3 | 5.9 | 10.2 | 13.5 | 13.5 | 20 | 48 | 29 | 18.0 | 12.0 |
| 4----- | 6.3 | 11.5 | 10.2 | 14.5 | 13.0 | 18.5 | 207 | 28 | 17.5 | 17 |
| 5----- | 6.1 | 10.5 | 13.5 | 76 | 13.5 | 17.0 | 108 | 34 | 17.0 | 26 |
| 6----- | 6.3 | 7.2 | 79 | 49 | 13.5 | 16.5 | 87 | 37 | 16.5 | 25 |
| 7----- | 6.3 | 6.8 | 34 | 34 | 12.0 | 24 | 67 | 67 | 17.0 | 19.0 |
| 8----- | 7.0 | 7.0 | 25 | 31 | 20 | 22 | 65 | 67 | 16.5 | 17.0 |
| 9----- | 7.9 | 6.8 | 21 | 27 | 17.0 | 19.5 | 63 | 54 | 14.5 | 24 |
| 10----- | 6.8 | 6.8 | 18.5 | 25 | 13.0 | 17.0 | 46 | 37 | 14.0 | 24 |
| 11----- | 6.3 | 6.5 | 17.5 | 24 | 12.5 | 17.0 | 43 | 36 | 13.5 | 20 |
| 12----- | 5.9 | 11.5 | 16.5 | 26 | 12.0 | 16.5 | 37 | 33 | 13.5 | 18.0 |
| 13----- | 5.9 | 17.0 | 15.0 | 24 | 12.0 | 17.5 | 36 | 31 | 13.0 | 34 |
| 14----- | 6.3 | 13.0 | 14.0 | 22 | 15.5 | 17.0 | 33 | 30 | 14.5 | 22 |
| 15----- | 6.5 | 31 | 13.5 | 22 | 12.5 | 16.5 | 30 | 28 | 87 | 24 |
| 16----- | 6.1 | 60 | 13.0 | 23 | 13.0 | 15.5 | 30 | 26 | 19.0 | 18.0 |
| 17----- | 5.9 | 36 | 20 | 19.5 | 17.0 | 15.0 | 29 | 31 | 15.5 | 17.0 |
| 18----- | 5.0 | 36 | 18.0 | 20 | 14.5 | 14.5 | 28 | 26 | 13.5 | 19.0 |
| 19----- | 5.2 | 22 | 14.0 | 19.5 | 14.0 | 14.5 | 28 | 24 | 13.5 | 30 |
| 20----- | 5.4 | 17.0 | 12.5 | 18.0 | 13.5 | 13.5 | 28 | 37 | 12.0 | 29 |
| 21----- | 5.4 | 14.5 | 15.0 | 17.0 | 13.0 | 13.5 | 29 | 28 | 29 | 28 |
| 22----- | 5.7 | 14.0 | 13.5 | 15.5 | 12.5 | 34 | 132 | 29 | 124 | 25 |
| 23----- | 6.1 | 13.5 | 13.5 | 16.5 | 12.0 | 25 | 87 | 25 | 21 | 22 |
| 24----- | 6.8 | 11.5 | 13.5 | 16.0 | 12.0 | 28 | 63 | 24 | 14.5 | 20 |
| 25----- | 6.1 | 10.5 | 29 | 15.5 | 22 | 26 | 46 | 23 | 20 | 19.0 |
| 26----- | 5.9 | 9.8 | 29 | 14.5 | 16.5 | 24 | 44 | 22 | 19.0 | 24 |
| 27----- | 6.1 | 8.8 | 25 | 15.0 | 15.5 | 29 | 39 | 23 | 17.0 | 18.0 |
| 28----- | 5.9 | 10.5 | 20 | 14.5 | 17.0 | 73 | 36 | 21 | 16.0 | 22 |
| 29----- | 11.5 | 10.5 | 20 | 14.0 | ----- | 54 | 34 | 19.5 | 14.5 | 17.0 |
| 30----- | 7.9 | 11.5 | 17.5 | 13.5 | ----- | 42 | 31 | 19.0 | 14.5 | 14 |
| 31----- | 5.9 | ----- | 17.0 | 15.5 | ----- | 54 | ----- | 46 | ----- | 13.0 |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|---------------|---------|---------|------|-------------------|-------------------|
| October----- | 11.5 | 5.0 | 6.38 | 0.30 ^r | 0.36 |
| November----- | 60 | 5.9 | 14.7 | .710 | .78 |
| December----- | 79 | 10.2 | 19.5 | .94 ² | 1.09 |
| January----- | 76 | 13.5 | 22.2 | 1.07 | 1.23 |
| February----- | 22 | 12.0 | 14.4 | .69 ^r | .72 |
| March----- | 73 | 13.5 | 24.6 | 1.19 | 1.37 |
| April----- | 207 | 28 | 56.6 | 2.73 | 3.05 |
| May----- | 67 | 19.0 | 32.1 | 1.55 | 1.79 |
| June----- | 124 | 12.0 | 22.6 | 1.09 | 1.22 |
| July----- | 34 | 12.0 | 20.8 | 1.00 | 1.15 |

LINVILLE RIVER AT BRANCH, N. C.

LOCATION.—Staff gage at steel highway bridge 800 feet from Branch post office, Burke County, a quarter of a mile upstream from Lake James.

DRAINAGE AREA.—65 square miles.

RECORDS AVAILABLE.—June, 1922, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,810 second-feet Apr. 22 (gage height, 4.40 feet); minimum, 18 second-feet several times in October (gage height, 1.56 feet).

1922-1931: Maximum discharge (estimated), 16,800 second-feet Aug. 15, 1928 (gage height, about 12.0 feet); minimum, 7 second-feet Sept. 8, 1925 (gage height, 1.28 feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 26 | 27 | 68 | 66 | 61 | 101 | 417 | 113 | 85 | 47 | 119 | 70 |
| 2..... | 22 | 24 | 74 | 57 | 61 | 119 | 535 | 110 | 76 | 48 | 190 | 74 |
| 3..... | 21 | 27 | 66 | 48 | 57 | 98 | 350 | 108 | 68 | 50 | 119 | 153 |
| 4..... | 21 | 37 | 59 | 61 | 57 | 87 | 868 | 98 | 66 | 48 | 87 | 136 |
| 5..... | 21 | 41 | 57 | 475 | 53 | 81 | 670 | 87 | 64 | 139 | 94 | 87 |
| 6..... | 20 | 34 | 446 | 417 | 52 | 74 | 475 | 92 | 61 | 98 | 133 | 79 |
| 7..... | 19 | 37 | 124 | 235 | 55 | 79 | 361 | 139 | 64 | 72 | 122 | 66 |
| 8..... | 21 | 38 | 170 | 178 | 52 | 124 | 318 | 257 | 62 | 62 | 110 | 62 |
| 9..... | 19 | 41 | 127 | 146 | 61 | 116 | 267 | 167 | 57 | 50 | 94 | 62 |
| 10..... | 22 | 29 | 108 | 124 | 68 | 92 | 231 | 139 | 52 | 87 | 76 | 53 |
| 11..... | 23 | 33 | 92 | 110 | 64 | 85 | 194 | 130 | 50 | 72 | 76 | 48 |
| 12..... | 23 | 41 | 85 | 108 | 62 | 87 | 167 | 119 | 48 | 52 | 70 | 47 |
| 13..... | 22 | 76 | 79 | 101 | 59 | 85 | 150 | 110 | 48 | 48 | 142 | 45 |
| 14..... | 28 | 83 | 74 | 94 | 68 | 79 | 139 | 108 | 105 | 45 | 81 | 44 |
| 15..... | 42 | 83 | 68 | 72 | 70 | 76 | 127 | 98 | 101 | 45 | 72 | 45 |
| 16..... | 59 | 133 | 66 | 66 | 66 | 76 | 113 | 87 | 72 | 76 | 81 | 47 |
| 17..... | 52 | 190 | 76 | 74 | 72 | 72 | 105 | 87 | 66 | 48 | 72 | 37 |
| 18..... | 34 | 139 | 79 | 76 | 76 | 66 | 105 | 92 | 57 | 96 | 61 | 40 |
| 19..... | 34 | 89 | 68 | 85 | 68 | 66 | 101 | 89 | 50 | 389 | 61 | 45 |
| 20..... | 26 | 81 | 68 | 79 | 66 | 66 | 87 | 87 | 48 | 178 | 92 | 35 |
| 21..... | 27 | 70 | 52 | 81 | 64 | 70 | 101 | 116 | 47 | 160 | 213 | 32 |
| 22..... | 21 | 62 | 50 | 83 | 59 | 103 | 825 | 119 | 47 | 127 | 568 | 38 |
| 23..... | 23 | 62 | 53 | 68 | 57 | 94 | 475 | 205 | 76 | 89 | 292 | 98 |
| 24..... | 22 | 52 | 68 | 68 | 61 | 110 | 272 | 133 | 72 | 85 | 194 | 48 |
| 25..... | 22 | 52 | 68 | 64 | 74 | 127 | 231 | 119 | 61 | 89 | 142 | 57 |
| 26..... | 24 | 57 | 74 | 66 | 70 | 113 | 197 | 110 | 53 | 205 | 116 | 47 |
| 27..... | 22 | 52 | 124 | 68 | 66 | 124 | 178 | 101 | 48 | 110 | 105 | 47 |
| 28..... | 32 | 47 | 92 | 66 | 62 | 361 | 160 | 89 | 47 | 85 | 96 | 47 |
| 29..... | 27 | 34 | 87 | 72 | ----- | 535 | 136 | 87 | 47 | 83 | 87 | 37 |
| 30..... | 47 | 42 | 76 | 66 | ----- | 287 | 124 | 79 | 48 | 83 | 89 | 33 |
| 31..... | 30 | ----- | 66 | 64 | ----- | 213 | ----- | 81 | ----- | 81 | 81 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|--------------------|----------------------|
| October..... | 59 | 19 | 27.5 | 0.423 | 0.49 |
| November..... | 190 | 24 | 60.4 | .929 | 1.04 |
| December..... | 446 | 50 | 92.4 | 1.42 | 1.64 |
| January..... | 475 | 48 | 111 | 1.71 | 1.97 |
| February..... | 76 | 52 | 62.9 | .968 | 1.01 |
| March..... | 535 | 66 | 125 | 1.92 | 2.21 |
| April..... | 868 | 87 | 283 | 4.35 | 4.85 |
| May..... | 257 | 79 | 115 | 1.77 | 2.04 |
| June..... | 105 | 47 | 61.5 | .946 | 1.06 |
| July..... | 389 | 45 | 95.1 | 1.46 | 1.68 |
| August..... | 568 | 61 | 127 | 1.95 | 2.25 |
| September..... | 153 | 32 | 58.6 | .902 | 1.01 |
| The year..... | 868 | 19 | 102 | 1.57 | 21.25 |

HENRY FORK NEAR HENRY RIVER, N. C.

LOCATION.—Water-stage recorder at highway bridge at old Link Ford, Catawba County, 2 miles downstream from Henry River, Burke County.

DRAINAGE AREA.—80 square miles.

RECORDS AVAILABLE.—July, 1925, to November, 1931 (discontinued).

EXTREMES.—Maximum discharge during period, 2,750 second-feet May 21 (gage height, 6.54 feet); minimum, 5.6 second-feet Oct. 24, 1931 (gage height, 0.63 foot).

1925-1931: Maximum discharge (estimated), 20,300 second-feet Oct. 2, 1929 (gage height, 18.40 feet); minimum, 4.1 second-feet July 19, 20, 1926 (gage height, 0.49 foot).

REMARKS.—Records fair except those estimated, which are poor. Regulation from power operations 2 miles upstream. About 5 second-feet diverted upstream for water supply for Morganton and State Hospital.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. |
|---------|------|-------|------|------|------|-------|-------|-------|------|-------|-------|-------|------|------|
| 1..... | 26 | 15.0 | 56 | * 55 | 51 | | * 400 | 85 | 92 | * 50 | 45 | * 45 | 28 | 36 |
| 2..... | 26 | 18.5 | 44 | * 55 | 61 | | | 85 | 65 | | | | 37 | 54 |
| 3..... | 9.5 | | 39 | 51 | 46 | * 70 | | 85 | | * 45 | * 150 | | 38 | 37 |
| 4..... | 26 | | 37 | 52 | 46 | | | 75 | | | | | 38 | 34 |
| 5..... | 27 | | 32 | 925 | 49 | | * 480 | 65 | 58 | | | | 52 | 35 |
| 6..... | 27 | | 978 | 388 | 49 | * 60 | | 74 | 58 | * 100 | | * 55 | 38 | 30 |
| 7..... | 29 | | 348 | 167 | 39 | | | 272 | 69 | | * 200 | | 37 | 25 |
| 8..... | 46 | * 35 | 148 | 118 | 45 | | | 374 | 62 | | | | 32 | 32 |
| 9..... | 34 | | 101 | 95 | 57 | | | 158 | 55 | * 60 | 258 | | 37 | 48 |
| 10..... | 33 | | 78 | 83 | 51 | * 85 | * 160 | 118 | | | 218 | | 40 | 31 |
| 11..... | 10.5 | | 68 | | 48 | | | 97 | | * 100 | 64 | | 35 | 30 |
| 12..... | 24 | | 62 | * 80 | 38 | | 104 | 92 | | | 61 | | 42 | 32 |
| 13..... | 41 | | 56 | | 44 | * 65 | 97 | 92 | | | 61 | 37 | 30 | 29 |
| 14..... | 31 | | 55 | | 50 | | 92 | 82 | 59 | * 60 | 61 | 36 | 38 | 37 |
| 15..... | 37 | * 100 | 54 | | 51 | 56 | 85 | 82 | 59 | | 61 | 35 | 36 | 33 |
| 16..... | 32 | | 49 | | 51 | 54 | 82 | 82 | 68 | | 59 | 51 | 37 | 48 |
| 17..... | 11.0 | | 58 | | 50 | 51 | 78 | 77 | 56 | * 60 | 55 | 40 | 37 | 32 |
| 18..... | 24 | 77 | 37 | * 70 | 64 | 47 | 75 | 78 | 56 | | 48 | 32 | 27 | 31 |
| 19..... | 22 | 66 | 64 | | 54 | 49 | 78 | 71 | 50 | | 47 | 20 | 39 | 28 |
| 20..... | 37 | 52 | 56 | | 54 | 49 | 75 | 176 | 42 | * 200 | * 70 | 32 | 28 | 28 |
| 21..... | 30 | 51 | 49 | | 52 | 49 | 85 | 1,160 | | | | | 25 | 32 |
| 22..... | 26 | 49 | 54 | * 65 | 49 | 92 | 220 | 395 | | * 60 | * 300 | * 45 | 23 | 35 |
| 23..... | 25 | 47 | 68 | | 49 | 120 | 236 | 359 | | | | | 23 | 48 |
| 24..... | 26 | 48 | 75 | 64 | 49 | 130 | 144 | 190 | | | 162 | * 65 | 13 | 30 |
| 25..... | 10.5 | 42 | 75 | 64 | 50 | 122 | 122 | 139 | | * 110 | 102 | | 22 | 28 |
| 26..... | 27 | 54 | 82 | 62 | 54 | 106 | 112 | 167 | | | 71 | 210 | 46 | 28 |
| 27..... | 42 | 39 | 130 | 61 | 50 | 90 | 102 | 135 | * 50 | | 61 | 95 | 28 | 28 |
| 28..... | 28 | 37 | | 58 | 49 | 110 | 95 | 95 | | | 54 | 49 | 29 | 37 |
| 29..... | 30 | 21 | * 75 | 62 | | | 88 | 80 | | 42 | 54 | * 40 | 52 | 37 |
| 30..... | 31 | 42 | | 54 | | * 400 | 85 | 69 | | 37 | 50 | | 45 | 52 |
| 31..... | 28 | | | 44 | | | | 68 | | 40 | * 45 | | 36 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| 1930-31 | | | | | |
| October..... | 46 | 9.5 | 27.6 | 0.345 | 0.40 |
| November..... | | 15 | 50.3 | .629 | .70 |
| December..... | 978 | 32 | 105 | 1.31 | 1.51 |
| January..... | 925 | 44 | 110 | 1.38 | 1.59 |
| February..... | 64 | 38 | 50.0 | .625 | .65 |
| March..... | | 47 | 107 | 1.34 | 1.54 |
| April..... | | 75 | 210 | 2.62 | 2.92 |
| May..... | 1,160 | 65 | 167 | 2.09 | 2.41 |
| June..... | 92 | 42 | 57.4 | .71 | .80 |
| July..... | | 37 | 93.0 | 1.16 | 1.34 |
| August..... | | 45 | 123 | 1.54 | 1.78 |
| September..... | 210 | 20 | 52.6 | .658 | .73 |
| The year..... | 1,160 | 9.5 | 96.4 | 1.20 | 16.37 |
| 1931 | | | | | |
| October..... | 52 | 13 | 34.5 | .431 | .50 |
| November..... | 54 | 25 | 34.8 | .431 | .49 |

* Estimated.

LITTLE SUGAR CREEK NEAR CHARLOTTE, N. C.

LOCATION.—Water-stage recorder just upstream from sewage disposal plant of city of Charlotte, a quarter of a mile downstream from mouth of Brier Creek, and 5 miles south of Charlotte, Mecklenburg County.

DRAINAGE AREA.—41.4 square miles.

RECORDS AVAILABLE.—July, 1924, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,260 second-feet Aug. 6 (gage height, 9.60 feet); minimum, 4.6 second-feet several times during October (gage height, 1.63 feet).

1924-1931: Maximum discharge, about 7,030 second-feet Aug. 16, 1928 (gage height, 14.97 feet); minimum, 1.6 second-feet July 30, Aug. 1, 1925.

REMARKS.—Records good except those above 1,000 second-feet and those estimated for June 9-14, 16-21, 24, June 27 to July 2, July 4, 5, Aug. 26-31, which are fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------------|---------|-------|------|---------|-------|------|-------|-----|-----------------|------|-------------------|-------|
| 1..... | 5.0 | 6.3 | 21 | 26 | 16 | 49 | 344 | 21 | 46 | 9.0 | 87 | 9.5 |
| 2..... | 5.0 | 6.3 | 14 | 22 | 16 | 24 | 81 | 78 | 19 | 8.0 | 66 | 9.5 |
| 3..... | 5.0 | 6.3 | 12 | 21 | 16 | 22 | 46 | 33 | 14 | 76 | 16 | 13 |
| 4..... | 5.0 | 136 | 11 | 21 | 16 | 100 | 46 | 22 | 13 | 19 | 14 | 14 |
| 5..... | 5.0 | 30 | 45 | 196 | 16 | 61 | 181 | 21 | 12 | 67 | 16 | 9.5 |
| 6..... | 5.0 | 12 | 344 | 62 | 16 | 38 | 188 | 42 | 18 | 27 | 431 | 9.0 |
| 7..... | 5.3 | 9.0 | 61 | 34 | 16 | 33 | 75 | 69 | 12 | 17 | 117 | 9.5 |
| 8..... | 5.3 | 8.5 | 31 | 44 | 16 | 31 | 52 | 49 | 10 | 12 | 16 | 9.0 |
| 9..... | 5.3 | 8.0 | 21 | 43 | 21 | 24 | 41 | 181 | 9.5 | 11 | 12 | 8.5 |
| 10..... | 5.3 | 8.5 | 18 | 31 | 22 | 22 | 35 | 154 | 9.0 | 11 | 14 | 8.0 |
| 11..... | 5.3 | 8.5 | 16 | 27 | 16 | 20 | 35 | 27 | 8.5 | 10 | 615 | 7.5 |
| 12..... | 5.0 | 24 | 16 | 223 | 16 | 18 | 31 | 23 | 8.0 | 10 | 58 | 7.5 |
| 13..... | 5.6 | 97 | 15 | 88 | 16 | 18 | 27 | 18 | 8.0 | 61 | 20 | 7.5 |
| 14..... | 7.0 | 17 | 14 | 51 | 46 | 17 | 25 | 16 | 13 | 35 | 15 | 7.0 |
| 15..... | 5.6 | 115 | 14 | 37 | 22 | 17 | 25 | 16 | 18 | 101 | 13 | 7.5 |
| 16..... | 6.0 | 175 | 13 | 31 | 17 | 17 | 24 | 16 | 12 | 30 | 12 | 7.0 |
| 17..... | 5.6 | 46 | 13 | 28 | 25 | 17 | 22 | 16 | 11 | 12 | 10 | 7.5 |
| 18..... | 5.3 | 24 | 21 | 35 | 23 | 16 | 38 | 16 | 10 | 14 | 10 | 7.0 |
| 19..... | 5.0 | 17 | 28 | 51 | 20 | 16 | 35 | 16 | 10 | 34 | 12 | 6.7 |
| 20..... | 5.0 | 14 | 38 | 35 | 17 | 16 | 28 | 99 | 10 | 53 | 20 | 6.3 |
| 21..... | 5.6 | 14 | 33 | 28 | 16 | 17 | 34 | 250 | 10 | 53 | 350 | 7.0 |
| 22..... | 5.3 | 13 | 27 | 24 | 16 | 143 | 75 | 92 | 9.5 | 39 | 130 | 7.0 |
| 23..... | 5.6 | 12 | 22 | 23 | 16 | 46 | 34 | 64 | 9.5 | 14 | 24 | 6.3 |
| 24..... | 6.3 | 12 | 17 | 23 | 16 | 30 | 24 | 28 | 9.0 | 12 | 14 | 6.3 |
| 25..... | 6.0 | 12 | 16 | 22 | 40 | 25 | 24 | 22 | 8.5 | 12 | 10 | 5.6 |
| 26..... | 5.6 | 12 | 174 | 21 | 25 | 22 | 27 | 142 | 9.0 | 35 | 10 | 23 |
| 27..... | 5.3 | 11 | 148 | 20 | 17 | 21 | 22 | 38 | 8.0 | 34 | 10 | 7.0 |
| 28..... | 6.7 | 10 | 77 | 19 | 27 | 113 | 20 | 17 | 7.0 | 14 | 10 | 6.0 |
| 29..... | 17 | 10 | 51 | 18 | ----- | 112 | 18 | 14 | 6.3 | 12 | 9.5 | 5.6 |
| 30..... | 12 | 12 | 41 | 17 | ----- | 40 | 17 | 12 | 9.5 | 12 | 9.5 | 5.3 |
| 31..... | 7.0 | ----- | 28 | 17 | ----- | 35 | ----- | 88 | ----- | 13 | 9.5 | ----- |
| Month | Maximum | | | Minimum | | | Mean | | Per square mile | | Run-off in inches | |
| October..... | 17 | | | 4.6 | | | 6.06 | | 0.146 | | 0.17 | |
| November..... | 175 | | | 6.3 | | | 29.5 | | 7.13 | | .80 | |
| December..... | 344 | | | 11 | | | 45.2 | | 1.09 | | 1.26 | |
| January..... | 223 | | | 17 | | | 43.2 | | 1.04 | | 1.20 | |
| February..... | 46 | | | 16 | | | 20.1 | | .486 | | .51 | |
| March..... | 143 | | | 16 | | | 38.1 | | .920 | | 1.06 | |
| April..... | 344 | | | 17 | | | 55.8 | | 1.35 | | 1.51 | |
| May..... | 250 | | | 12 | | | 54.8 | | 1.32 | | 1.52 | |
| June..... | 46 | | | 6.3 | | | 11.9 | | .287 | | .32 | |
| July..... | 101 | | | 8.0 | | | 28.0 | | .676 | | .78 | |
| August..... | 431 | | | 9.5 | | | 69.7 | | 1.68 | | 1.94 | |
| September..... | 23 | | | 5.3 | | | 8.34 | | .201 | | .22 | |
| The year..... | 431 | | | 4.6 | | | 34.4 | | .831 | | 11.29 | |

BROAD RIVER NEAR CHIMNEY ROCK, N. C.

LOCATION.—Water-stage recorder 1,000 feet downstream from Lake Lure dam, 1½ miles upstream from old gaging station at Uree, and 3 miles east of Chimney Rock, Rutherford County.

DRAINAGE AREA.—97 square miles.

RECORDS AVAILABLE.—March, 1927, to September, 1931.

EXTREMES.—Maximum discharge during year, 644 second-feet Apr. 22 (gage height, 2.27 feet); minimum, 1.2 second-feet numerous times during year (gage height, 0.35 foot, caused by regulation).

1927–1931: Maximum discharge (estimated), 20,500 second-feet Aug. 15, 1928 (gage height, 15.0 feet); minimum, 0.7 second-foot Sept. 13, 1928 (gage height, 0.26 foot).

REMARKS.—Records good except those for estimated periods, Nov. 13–17, May 24 to July 4, which are fair. Flow regulated by operation of power plant at dam. Monthly computations are representative of natural flow, as power plant is permitted only 3-inch drawdown on Lake Lure.

Daily and monthly discharge, in second-feet, 1930–31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 2.1 | 74 | 140 | 68 | 1.7 | 127 | 395 | 144 | 231 | 2 | 59 | 74 |
| 2..... | 70 | 2.3 | 1.4 | 66 | 148 | 138 | 312 | 178 | 48 | 73 | 1.4 | 2.9 |
| 3..... | 70 | 77 | 68 | 63 | 74 | 143 | 272 | 1.4 | 2 | 72 | 67 | 73 |
| 4..... | 36 | 74 | 68 | 1.4 | 74 | 70 | 360 | 215 | 145 | 149 | 63 | 72 |
| 5..... | 2.5 | 74 | 72 | 370 | 74 | 68 | 399 | 148 | 73 | 72 | 66 | 72 |
| 6..... | 72 | 72 | 382 | 442 | 76 | 71 | 354 | 141 | 65 | 137 | 1.3 | 1.5 |
| 7..... | 70 | 76 | 185 | 136 | 36 | 67 | 270 | 284 | 2 | 71 | 65 | 71 |
| 8..... | 2.1 | 36 | 282 | 143 | 2.1 | 98 | 240 | 341 | 146 | 74 | 62 | 70 |
| 9..... | 68 | 8.1 | 2.3 | 216 | 150 | 281 | 242 | 262 | 146 | 146 | 1.5 | 70 |
| 10..... | 1.9 | 148 | 142 | 66 | 76 | 71 | 149 | 146 | 2 | 74 | 64 | 1.3 |
| 11..... | 34 | 1.9 | 70 | 1.5 | 52 | 70 | 232 | 243 | 73 | 147 | 65 | 70 |
| 12..... | 1.7 | 70 | 142 | 220 | 64 | 72 | 1.7 | 132 | 72 | 3.1 | 62 | 34 |
| 13..... | 72 | 143 | 66 | 136 | 72 | 71 | 224 | 74 | 65 | 77 | 66 | 1.4 |
| 14..... | 1.5 | 74 | 3.1 | 70 | 34 | 68 | 224 | 144 | 2 | 75 | 30 | 70 |
| 15..... | 72 | 147 | 144 | 69 | 2.3 | 1.5 | 57 | 147 | 227 | 73 | 158 | 1.4 |
| 16..... | 72 | 232 | 68 | 146 | 148 | 150 | 144 | 142 | 73 | 74 | 1.4 | 44 |
| 17..... | 71 | 370 | 2.9 | 68 | 71 | 74 | 75 | 1.5 | 74 | 72 | 139 | 2.9 |
| 18..... | 34 | 230 | 140 | 2.3 | 74 | 74 | 175 | 225 | 73 | 33 | 1.3 | 72 |
| 19..... | 1.5 | 74 | 70 | 146 | 70 | 76 | 72 | 72 | 73 | 2.9 | 66 | 35 |
| 20..... | 71 | 74 | 68 | 72 | 119 | 150 | 223 | 141 | 65 | 72 | 109 | 2.1 |
| 21..... | 74 | 72 | 2.7 | 70 | 68 | 70 | 80 | 142 | 2 | 70 | 196 | 73 |
| 22..... | 1.9 | 145 | 141 | 71 | 1.4 | 2.7 | 430 | 140 | 146 | 72 | 134 | 2.1 |
| 23..... | 76 | 3.3 | 66 | 72 | 144 | 241 | 369 | 141 | 69 | 70 | 48 | 68 |
| 24..... | 1.5 | 146 | 65 | 68 | 71 | 152 | 269 | 2 | 73 | 69 | 176 | 1.5 |
| 25..... | 36 | 1.4 | 1.5 | 1.5 | 74 | 152 | 227 | 183 | 2 | 33 | 69 | 70 |
| 26..... | 2.7 | 70 | 138 | 148 | 138 | 150 | 142 | 73 | 73 | 1.4 | 67 | 34 |
| 27..... | 75 | 70 | 136 | 72 | 71 | 238 | 222 | 143 | 64 | 67 | 1.3 | 1.5 |
| 28..... | 74 | 70 | 67 | 72 | 131 | 317 | 102 | 73 | 2 | 66 | 71 | 70 |
| 29..... | 72 | 67 | 136 | 72 | ----- | 170 | 70 | 146 | 144 | 1.2 | 62 | 1.7 |
| 30..... | 76 | 1.3 | 133 | 144 | ----- | 240 | 142 | 65 | 73 | 67 | 1.4 | 65 |
| 31..... | 1.7 | ----- | 71 | 34 | ----- | 324 | ----- | 2 | ----- | 1.3 | 74 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 76 | 1.5 | 42.5 | 0.438 | 0.50 |
| November..... | 370 | 1.3 | 90.1 | .929 | 1.04 |
| December..... | 382 | 1.4 | 99.2 | 1.02 | 1.18 |
| January..... | 442 | 1.4 | 107 | 1.10 | 1.27 |
| February..... | 150 | 1.4 | 75.6 | .779 | .81 |
| March..... | 324 | 1.5 | 129 | 1.33 | 1.53 |
| April..... | 430 | 1.7 | 216 | 2.23 | 2.49 |
| May..... | 341 | 1.4 | 138 | 1.42 | 1.64 |
| June..... | 231 | 2 | 76.8 | .792 | .88 |
| July..... | 149 | 1.2 | 65.1 | .671 | .77 |
| August..... | 196 | 1.3 | 66.1 | .681 | .79 |
| September..... | 74 | 1.3 | 40.9 | .422 | .47 |
| The year..... | 442 | 1.2 | 95.6 | .986 | 13.37 |

BROAD RIVER NEAR BOILING SPRINGS, N. C.

LOCATION.—Water-stage recorder half a mile upstream from mouth of Sandy Run Creek and $3\frac{1}{2}$ miles southwest of Boiling Springs, Cleveland County.

DRAINAGE AREA.—815 square miles.

RECORDS AVAILABLE.—June, 1925, to September, 1931.

EXTREMES.—Maximum discharge during year, 5,790 second-feet Apr. 1 (gage height, 5.13 feet); minimum, 192 second-feet Oct. 21.

1925-1931: Maximum discharge, 56,800 second-feet Aug. 16, 1928 (gage height, 23.3 feet); minimum, 186 second-feet Sept. 21, 22, 1925.

REMARKS.—Records good except those estimated for Nov. 4-16, which are fair. Some regulation caused by operation of power plants on Second Broad and Green Rivers.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 394 | 562 | 523 | 1,090 | 846 | 1,320 | 4,960 | 1,150 | 695 | 793 | 514 | 584 |
| 2..... | 503 | 455 | 769 | 896 | 695 | 1,210 | 4,500 | 1,580 | 1,290 | 766 | 1,170 | 623 |
| 3..... | 528 | 426 | 668 | 1,050 | 1,170 | 1,360 | 2,480 | 1,250 | 1,060 | 876 | 790 | 602 |
| 4..... | 424 | 700 | 675 | 790 | 922 | 1,360 | 2,850 | 818 | 813 | 1,510 | 680 | 560 |
| 5..... | 330 | | 697 | 2,080 | 902 | 1,200 | 3,130 | 1,340 | 883 | 1,590 | 637 | 455 |
| 6..... | 309 | | 3,210 | 4,310 | 982 | 1,100 | 2,190 | 1,510 | 883 | 1,260 | 2,220 | 425 |
| 7..... | 460 | | 3,400 | 2,240 | 916 | 1,130 | 2,610 | 2,200 | 815 | 1,050 | 1,670 | 364 |
| 8..... | 369 | 680 | 1,590 | 1,920 | 790 | 1,230 | 2,050 | 2,680 | 735 | 820 | 898 | 536 |
| 9..... | 350 | | 1,600 | 1,780 | 695 | 1,080 | 1,780 | 1,990 | 906 | 1,780 | 585 | 596 |
| 10..... | 481 | | 1,130 | 1,690 | 962 | 1,460 | 1,700 | 1,460 | 920 | 1,270 | 640 | 404 |
| 11..... | 336 | | 1,250 | 1,240 | 899 | 1,240 | 1,620 | 1,100 | 764 | 854 | 1,070 | 502 |
| 12..... | 319 | | 1,160 | 1,100 | 886 | 1,190 | 1,330 | 1,520 | 782 | 776 | 650 | 478 |
| 13..... | 308 | | 950 | 1,650 | 859 | 1,120 | 1,000 | 1,490 | 781 | 718 | 838 | 326 |
| 14..... | 499 | 930 | 790 | 1,330 | 695 | 855 | 1,500 | 1,340 | 1,140 | 844 | 738 | 286 |
| 15..... | 510 | | 670 | 1,180 | 620 | 855 | 1,530 | 1,430 | 735 | 784 | 771 | 446 |
| 16..... | 536 | | 928 | 1,140 | 620 | 658 | 1,100 | 1,110 | 1,170 | 772 | 632 | 372 |
| 17..... | 402 | 1,320 | 897 | 1,120 | 932 | 906 | 1,170 | 898 | 922 | 813 | 518 | 472 |
| 18..... | 460 | 1,680 | 1,190 | 1,190 | 930 | 866 | 1,110 | 775 | 812 | 816 | 702 | 328 |
| 19..... | 288 | 1,170 | 1,090 | 968 | 892 | 974 | 1,180 | 1,230 | 774 | 518 | 712 | 416 |
| 20..... | 283 | 854 | 1,080 | 1,350 | 882 | 1,010 | 900 | 1,370 | 784 | 523 | 858 | 269 |
| 21..... | 460 | 831 | 824 | 1,060 | 871 | 888 | 1,480 | 3,260 | 620 | 626 | 2,350 | 289 |
| 22..... | 353 | 728 | 656 | 1,000 | 700 | 1,120 | 2,150 | 3,140 | 565 | 713 | 2,610 | 448 |
| 23..... | 474 | 660 | 1,040 | 1,010 | 638 | 1,220 | 3,460 | 1,900 | 843 | 707 | 1,120 | 480 |
| 24..... | 540 | 556 | 805 | 1,310 | 866 | 1,440 | 2,310 | 1,340 | 836 | 616 | 732 | 322 |
| 25..... | 516 | 741 | 735 | 926 | 905 | 1,240 | 2,060 | 898 | 798 | 996 | 846 | 280 |
| 26..... | 334 | 682 | 765 | 735 | 991 | 1,300 | 1,520 | 1,120 | 694 | 793 | 748 | 398 |
| 27..... | 322 | 631 | 1,880 | 982 | 970 | 1,070 | 1,160 | 1,010 | 718 | 485 | 672 | 322 |
| 28..... | 374 | 496 | 1,430 | 938 | 860 | 1,430 | 1,590 | 1,230 | 485 | 591 | 704 | 280 |
| 29..... | 588 | 650 | 1,130 | 1,020 | ----- | 2,420 | 1,360 | 1,080 | 478 | 632 | 698 | 432 |
| 30..... | 638 | 526 | 1,160 | 1,270 | ----- | 1,680 | 1,050 | 1,140 | 744 | 579 | 550 | 490 |
| 31..... | 604 | ----- | 1,210 | 1,240 | ----- | 1,780 | ----- | 999 | ----- | 397 | 455 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 638 | 283 | 429 | 0.526 | 0.61 |
| November..... | 1,680 | 426 | 769 | 1.944 | 1.05 |
| December..... | 3,400 | 523 | 1,160 | 1.42 | 1.64 |
| January..... | 4,310 | 735 | 1,340 | 1.64 | 1.89 |
| February..... | 4,310 | 620 | 853 | 1.05 | 1.09 |
| March..... | 2,420 | 658 | 1,220 | 1.50 | 1.73 |
| April..... | 4,960 | 900 | 1,960 | 2.40 | 2.68 |
| May..... | 3,260 | 775 | 1,460 | 1.79 | 2.06 |
| June..... | 1,290 | 478 | 816 | 1.00 | 1.12 |
| July..... | 1,780 | 397 | 847 | 1.04 | 1.20 |
| August..... | 2,610 | 455 | 928 | 1.14 | 1.31 |
| September..... | 623 | 269 | 426 | .523 | .58 |
| The year..... | 4,960 | 269 | 1,020 | 1.25 | 16.96 |

BROAD RIVER AT RICHTEX, S. C.

LOCATION.—Water-stage recorder 1 mile upstream from mouth of Little River at Richtex, Fairfield County.

DRAINAGE AREA.—4,800 square miles.

RECORDS AVAILABLE.—November, 1925, to September, 1931.

EXTREMES.—Maximum discharge during year, 23,000 second-feet Dec. 7 (gage height, 7.81 feet); minimum (estimated), 113 second-feet Sept. 21 (gage height, 0.23 foot).

1925-1931: Maximum discharge (estimated), 239,000 second-feet Oct. 3, 1929 (gage height, 30.7 feet); minimum, that of Sept. 21, 1931.

REMARKS.—Records good. Complete regulation from operation of Parr Shoals hydroelectric plant 11 miles upstream.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|--------|--------|--------|-------|-------|--------|--------|-------|-------|--------|-------|
| 1 | 2,060 | 2,180 | 2,900 | 6,760 | 1,200 | 2,080 | 13,300 | 4,690 | 5,050 | 2,700 | 1,820 | 1,630 |
| 2 | 2,040 | 1,150 | 2,970 | 6,640 | 2,840 | 5,830 | 17,900 | 3,240 | 3,580 | 3,050 | 1,260 | 1,870 |
| 3 | 2,190 | 1,780 | 3,240 | 4,360 | 3,560 | 4,540 | 15,200 | 4,570 | 3,180 | 1,980 | 2,420 | 2,850 |
| 4 | 2,310 | 2,780 | 3,340 | 2,720 | 3,620 | 5,200 | 9,640 | 5,880 | 3,840 | 3,040 | 2,160 | 1,700 |
| 5 | 1,040 | 7,420 | 4,170 | 5,540 | 3,640 | 4,940 | 11,000 | 5,040 | 4,300 | 5,460 | 2,210 | 1,810 |
| 6 | 1,770 | 6,360 | 5,080 | 8,690 | 3,890 | 5,850 | 14,600 | 4,530 | 3,040 | 6,280 | 3,720 | 1,650 |
| 7 | 760 | 3,740 | 20,700 | 11,200 | 3,030 | 4,440 | 12,900 | 5,900 | 1,560 | 7,080 | 4,860 | 855 |
| 8 | 1,510 | 2,290 | 17,100 | 9,160 | 1,450 | 2,000 | 10,200 | 7,980 | 2,900 | 5,900 | 5,380 | 2,320 |
| 9 | 1,640 | 1,660 | 10,000 | 8,900 | 3,000 | 5,990 | 8,400 | 10,400 | 3,140 | 3,780 | 2,220 | 2,020 |
| 10 | 1,800 | 1,800 | 6,160 | 7,170 | 3,590 | 4,680 | 7,640 | 8,930 | 3,100 | 5,240 | 2,680 | 2,100 |
| 11 | 2,150 | 1,670 | 6,300 | 6,400 | 3,570 | 4,620 | 6,410 | 8,310 | 3,150 | 6,690 | 5,720 | 2,080 |
| 12 | 1,400 | 4,170 | 5,890 | 6,760 | 3,720 | 4,660 | 6,210 | 6,660 | 3,120 | 5,160 | 13,200 | 1,620 |
| 13 | 1,520 | 6,400 | 4,020 | 15,700 | 3,960 | 4,640 | 5,940 | 5,660 | 2,960 | 3,570 | 8,320 | 1,090 |
| 14 | 1,180 | 8,770 | 2,240 | 11,300 | 3,560 | 3,340 | 4,760 | 5,560 | 1,460 | 3,200 | 3,940 | 1,840 |
| 15 | 1,480 | 7,140 | 4,340 | 8,040 | 1,820 | 2,400 | 5,270 | 5,500 | 3,060 | 4,100 | 12,300 | 875 |
| 16 | 1,420 | 16,600 | 3,300 | 7,020 | 3,540 | 5,100 | 5,440 | 4,000 | 4,780 | 4,120 | 6,750 | 855 |
| 17 | 700 | 18,200 | 4,320 | 4,940 | 3,980 | 3,380 | 4,760 | 945 | 4,580 | 4,320 | 3,260 | 1,200 |
| 18 | 2,010 | 12,900 | 5,180 | 2,740 | 3,620 | 3,600 | 3,940 | 3,800 | 3,340 | 2,540 | 2,600 | 1,240 |
| 19 | 1,460 | 8,620 | 5,340 | 6,300 | 4,200 | 3,520 | 3,090 | 3,770 | 3,600 | 1,460 | 7,830 | 1,340 |
| 20 | 1,650 | 6,260 | 3,080 | 5,740 | 5,000 | 4,540 | 5,450 | 3,360 | 3,260 | 3,100 | 5,900 | 365 |
| 21 | 1,120 | 5,650 | 3,100 | 5,830 | 3,140 | 3,000 | 4,120 | 6,040 | 1,100 | 2,780 | 8,760 | 890 |
| 22 | 1,580 | 3,630 | 5,580 | 6,150 | 1,610 | 4,050 | 4,580 | 17,200 | 2,300 | 3,720 | 14,700 | 1,170 |
| 23 | 1,250 | 2,880 | 4,830 | 5,740 | 2,900 | 9,740 | 5,220 | 18,000 | 1,060 | 3,530 | 11,800 | 1,400 |
| 24 | 1,560 | 3,350 | 2,880 | 3,000 | 3,590 | 6,620 | 6,280 | 11,900 | 2,560 | 3,380 | 6,660 | 1,500 |
| 25 | 2,010 | 3,040 | 1,800 | 1,500 | 4,230 | 6,080 | 6,180 | 7,100 | 2,840 | 2,140 | 4,670 | 1,640 |
| 26 | 1,420 | 3,900 | 4,400 | 4,160 | 3,980 | 5,420 | 5,440 | 5,380 | 2,740 | 3,640 | 3,680 | 1,250 |
| 27 | 1,710 | 3,820 | 12,000 | 4,090 | 3,950 | 5,210 | 5,800 | 5,460 | 1,870 | 4,850 | 4,010 | 385 |
| 28 | 1,240 | 3,180 | 10,300 | 3,880 | 3,420 | 3,800 | 4,300 | 5,200 | 1,700 | 6,780 | 3,750 | 1,900 |
| 29 | 2,140 | 2,800 | 9,200 | 4,080 | ----- | 5,340 | 4,760 | 4,720 | 2,300 | 4,900 | 3,040 | 1,730 |
| 30 | 2,660 | 1,550 | 7,440 | 5,580 | ----- | 6,700 | 4,640 | 3,140 | 2,080 | 3,600 | 755 | 1,680 |
| 31 | 2,120 | ----- | 6,580 | 3,140 | ----- | 6,660 | ----- | 2,320 | ----- | 2,680 | 945 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 2,660 | 700 | 1,640 | 0.342 | 0.39 |
| November | 18,200 | 1,150 | 5,190 | 1.08 | 1.20 |
| December | 20,700 | 1,800 | 6,080 | 1.27 | 1.46 |
| January | 15,700 | 1,500 | 6,230 | 1.30 | 1.50 |
| February | 5,000 | 1,200 | 3,340 | .696 | .72 |
| March | 9,740 | 2,000 | 4,770 | .994 | 1.15 |
| April | 17,900 | 3,090 | 7,450 | 1.55 | 1.73 |
| May | 18,000 | 945 | 6,300 | 1.31 | 1.51 |
| June | 5,050 | 1,060 | 2,900 | .604 | .67 |
| July | 7,080 | 1,460 | 4,020 | .837 | .96 |
| August | 16,200 | 755 | 5,310 | 1.11 | 1.28 |
| September | 2,850 | 365 | 1,500 | .312 | .35 |
| The year | 20,700 | 365 | 4,570 | .952 | 12.92 |

SECOND BROAD RIVER AT CLIFFSIDE, N. C.

LOCATION.—Water-stage recorder at Cliffside, Rutherford County, 2 miles upstream from mouth of river.

DRAINAGE AREA.—230 square miles.

RECORDS AVAILABLE.—June, 1925, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,500 second-feet Apr. 2 (gage height, 3.73 feet); minimum, 24 second-feet Sept. 21.

1925-1931: Maximum discharge, 15,000 second-feet Aug. 16, 1928 (gage height, 17.26 feet); minimum, 9.6 second-feet June 21, 1925.

REMARKS.—Records good except those for estimated periods, which are poor. Flow regulated by operation of Cliffside Mills a quarter of a mile upstream.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|------|------|-------|------|------|-------|-------|------|------|-------|-------|
| 1..... | 143 | 132 | 218 | 250 | 78 | 325 | 1,490 | 222 | 237 | 270 | 116 | 141 |
| 2..... | 174 | 63 | 212 | 243 | 208 | 311 | 1,800 | 154 | 231 | 196 | 410 | 118 |
| 3..... | 129 | 172 | 194 | 254 | 218 | 250 | 662 | 202 | 191 | 196 | 308 | 124 |
| 4..... | 66 | 178 | 176 | 140 | 164 | 260 | 671 | 242 | 206 | 464 | 180 | 148 |
| 5..... | 40 | 191 | 173 | 714 | 175 | 238 | 876 | 234 | 168 | 368 | 109 | 104 |
| 6..... | 124 | 204 | 914 | 1,240 | 186 | 224 | 634 | 202 | 147 | 478 | 1,160 | 52 |
| 7..... | 109 | 194 | 876 | 506 | 141 | 194 | 528 | 442 | 112 | 244 | 689 | 122 |
| 8..... | 122 | 158 | 404 | 388 | 112 | 348 | 436 | 606 | 228 | 168 | 238 | 134 |
| 9..... | 152 | 43 | 306 | 334 | 217 | 328 | 380 | 392 | 229 | 446 | 156 | 130 |
| 10..... | 99 | 170 | 262 | 271 | 201 | 278 | 338 | 240 | 170 | 266 | 374 | 103 |
| 11..... | 86 | 196 | 244 | 260 | 196 | 249 | 335 | 306 | 154 | 166 | 328 | 120 |
| 12..... | 56 | 184 | 230 | 314 | 207 | 234 | 214 | 236 | 162 | 150 | 180 | 79 |
| 13..... | 124 | 220 | 185 | 295 | 198 | 229 | 325 | 229 | 146 | 194 | 236 | 44 |
| 14..... | 132 | 254 | 196 | 254 | 127 | 184 | 254 | 204 | 152 | 220 | | 85 |
| 15..... | 136 | 262 | 232 | 228 | 80 | 206 | 219 | 218 | 212 | 166 | | 102 |
| 16..... | 146 | 506 | 244 | 243 | 204 | 243 | 232 | 144 | 209 | 176 | 220 | 102 |
| 17..... | 184 | 495 | 193 | 160 | 200 | 230 | 230 | 136 | 218 | 146 | | 106 |
| 18..... | 98 | 336 | 192 | 209 | 192 | 172 | 190 | 220 | 154 | 73 | | 102 |
| 19..... | 58 | 240 | 197 | 252 | 204 | 183 | 216 | 222 | 153 | 92 | | 74 |
| 20..... | 132 | 194 | 178 | 233 | 200 | 178 | 262 | 530 | 172 | 146 | 506 | 26 |
| 21..... | 132 | 208 | 177 | 197 | 156 | 140 | 234 | 1,350 | 72 | 138 | 1,050 | 99 |
| 22..... | 114 | 148 | 249 | 191 | 108 | 274 | 512 | 1,260 | 159 | 146 | 898 | 106 |
| 23..... | 158 | 142 | 229 | 206 | 225 | 348 | 912 | 774 | 122 | 134 | 303 | 110 |
| 24..... | 130 | 236 | 135 | 208 | 200 | 270 | 444 | 394 | 158 | 114 | 252 | 105 |
| 25..... | 116 | 190 | 127 | 113 | 188 | 250 | 301 | 317 | 163 | 222 | 208 | 90 |
| 26..... | 36 | 201 | 310 | 240 | 200 | 240 | 296 | 282 | 157 | 128 | | 60 |
| 27..... | 139 | 113 | 484 | 209 | 194 | 208 | 340 | 340 | 148 | 156 | | 26 |
| 28..... | 169 | 172 | 380 | 183 | 148 | 392 | 279 | 294 | 43 | 136 | 130 | 87 |
| 29..... | 128 | 164 | 350 | 210 | | 574 | 219 | 221 | 157 | 122 | | 109 |
| 30..... | 152 | 81 | 282 | 215 | | 464 | 209 | 174 | 17 | 115 | | 118 |
| 31..... | 150 | | 269 | 162 | | 413 | | 191 | | 99 | | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 184 | 36 | 120 | 0.522 | 0.60 |
| November..... | 506 | 43 | 202 | .878 | .98 |
| December..... | 914 | 127 | 284 | 1.23 | 1.42 |
| January..... | 1,240 | 113 | 288 | 1.25 | 1.44 |
| February..... | 225 | 78 | 176 | .765 | .80 |
| March..... | 574 | 140 | 272 | 1.18 | 1.36 |
| April..... | 1,800 | 190 | 468 | 2.03 | 2.26 |
| May..... | 1,350 | 136 | 354 | 1.54 | 1.78 |
| June..... | 237 | 42 | 165 | .717 | .80 |
| July..... | 478 | 73 | 198 | .861 | .99 |
| August..... | 1,160 | 109 | 316 | 1.37 | 1.68 |
| September..... | 148 | 26 | 97.5 | .424 | .47 |
| The year..... | 1,800 | 26 | 246 | 1.07 | 14.48 |

NORTH PACOLET RIVER AT FINGERVILLE, S. C.

LOCATION.—Water-stage recorder about 800 feet downstream from mouth of Obed Creek at McMiller's mill and 1 mile south of Fingerville, Spartanburg County.

DRAINAGE AREA.—116 square miles.

RECORDS AVAILABLE.—November, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 872 second-feet Dec. 7 (gage height, 3.95 feet); minimum, 19 second-feet several times in September (gage height (estimated), 0.10 foot).

1929-1931: Maximum discharge, 1,160 second-feet Mar. 8, 1930 (gage height, 4.57 feet); minimum discharge, that of September, 1931.

REMARKS.—Record good. Discharge estimated for Sept. 26-30. Diurnal fluctuations caused by operation of mills upstream.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1 | 65 | 69 | 158 | 164 | 113 | 292 | 646 | 134 | 97 | 84 | 50 | 64 |
| 2 | 67 | 67 | 133 | 155 | 111 | 214 | 448 | 142 | 97 | 76 | 138 | 63 |
| 3 | 70 | 72 | 120 | 144 | 110 | 183 | 285 | 136 | 90 | 76 | 88 | 66 |
| 4 | 62 | 103 | 113 | 141 | 110 | 174 | 372 | 138 | 87 | 78 | 76 | 71 |
| 5 | 61 | 146 | 132 | 437 | 105 | 158 | 482 | 128 | 84 | 110 | 62 | 63 |
| 6 | 61 | 96 | 628 | 529 | 105 | 144 | 344 | 174 | 118 | 147 | 99 | 63 |
| 7 | 64 | 82 | 603 | 272 | 104 | 162 | 286 | 392 | 98 | 232 | 84 | 57 |
| 8 | 61 | 79 | 276 | 221 | 104 | 251 | 235 | 383 | 99 | 119 | 91 | 60 |
| 9 | 72 | 79 | 210 | 212 | 116 | 183 | 208 | 224 | 86 | 96 | 70 | 58 |
| 10 | 75 | 77 | 180 | 186 | 132 | 168 | 190 | 202 | 81 | 86 | 79 | 58 |
| 11 | 75 | 75 | 166 | 168 | 118 | 154 | 183 | 169 | 81 | 85 | 157 | 57 |
| 12 | 67 | 98 | 157 | 174 | 108 | 146 | 178 | 153 | 81 | 80 | 117 | 55 |
| 13 | 68 | 166 | 146 | 181 | 108 | 136 | 162 | 146 | 79 | 136 | 120 | 54 |
| 14 | 67 | 112 | 140 | 164 | 132 | 141 | 150 | 138 | 116 | 156 | 79 | 60 |
| 15 | 66 | 240 | 132 | 152 | 120 | 134 | 146 | 129 | 92 | 84 | 138 | 62 |
| 16 | 77 | 380 | 129 | 137 | 114 | 126 | 139 | 122 | 92 | 75 | 112 | 54 |
| 17 | 62 | 402 | 122 | 138 | 146 | 127 | 134 | 117 | 81 | 69 | 86 | 55 |
| 18 | 65 | 310 | 158 | 139 | 148 | 121 | 129 | 114 | 76 | 64 | 73 | 53 |
| 19 | 63 | 220 | 140 | 148 | 127 | 122 | 136 | 116 | 72 | 63 | 75 | 46 |
| 20 | 65 | 184 | 138 | 141 | 121 | 116 | 132 | 126 | 72 | 62 | 73 | 47 |
| 21 | 66 | 164 | 131 | 134 | 114 | 116 | 140 | 205 | 72 | 63 | 149 | 46 |
| 22 | 67 | 150 | 128 | 126 | 114 | 248 | 360 | 165 | 97 | 73 | 111 | 44 |
| 23 | 66 | 144 | 123 | 124 | 116 | 210 | 475 | 139 | 77 | 64 | 99 | 46 |
| 24 | 74 | 136 | 121 | 121 | 106 | 170 | 238 | 113 | 112 | 68 | 86 | 49 |
| 25 | 73 | 134 | 120 | 121 | 149 | 154 | 196 | 112 | 91 | 58 | 76 | 45 |
| 26 | 68 | 128 | 226 | 118 | 170 | 140 | 188 | 106 | 84 | 57 | 72 | 65 |
| 27 | 69 | 122 | 390 | 119 | 142 | 138 | 176 | 108 | 82 | 71 | 70 | 55 |
| 28 | 70 | 119 | 265 | 117 | 152 | 243 | 158 | 102 | 77 | 66 | 120 | 46 |
| 29 | 79 | 116 | 222 | 117 | ----- | 420 | 148 | 101 | 73 | 59 | 79 | 50 |
| 30 | 84 | 122 | 196 | 117 | ----- | 260 | 138 | 98 | 84 | 54 | 75 | 46 |
| 31 | 77 | ----- | 177 | 116 | ----- | 268 | ----- | 94 | ----- | 50 | 66 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 84 | 61 | 68.6 | 0.591 | 0.69 |
| November | 402 | 67 | 146 | 1.26 | 1.41 |
| December | 628 | 113 | 196 | 1.69 | 1.95 |
| January | 529 | 116 | 172 | 1.48 | 1.71 |
| February | 170 | 104 | 122 | 1.05 | 1.09 |
| March | 420 | 116 | 181 | 1.56 | 1.80 |
| April | 646 | 129 | 240 | 2.07 | 2.31 |
| May | 392 | 94 | 153 | 1.32 | 1.52 |
| June | 118 | 72 | 87.6 | .755 | .84 |
| July | 232 | 50 | 85.5 | .737 | .85 |
| August | 167 | 50 | 92.7 | .799 | .92 |
| September | 71 | ----- | 55.3 | .477 | .58 |
| The year | 646 | ----- | 133 | 1.15 | 15.66 |

PACOLET RIVER NEAR FINGERVILLE, S. C.

LOCATION.—Water-stage recorder at county highway bridge a quarter of a mile downstream from confluence of North and South Pacolet Rivers and 2½ miles southeast of Fingerville, Spartanburg County.

DRAINAGE AREA.—212 square miles.

RECORDS AVAILABLE.—November, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,020 second-feet Dec. 6 (gage height, 2.68 feet); minimum, 42 second-feet several times in September (gage height, 0.20 foot, caused by shutdown of power plants).

1929-1931: Maximum discharge, 1,660 second-feet Mar. 8, 1930 (gage height, 3.07 feet); minimum, that of September, 1931.

REMARKS.—Records good. Discharge estimated for Oct. 3-11, 13-19. Diurnal fluctuation caused by operation of power plant and mills above station. Diversion upstream for water supply for city of Spartanburg amounts to about 3 million gallons a day.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | Jun. | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1 | 88 | 100 | 240 | 296 | 136 | 340 | 942 | 254 | 222 | 152 | 128 | 132 |
| 2 | 112 | 73 | 174 | 284 | 158 | 336 | 746 | 256 | 192 | 144 | 192 | 128 |
| 3 | 120 | 136 | 162 | 236 | 158 | 310 | 540 | 162 | 20 | 154 | 160 | 122 |
| 4 | 80 | 158 | 182 | 176 | 157 | 296 | 626 | 358 | 162 | 144 | 144 | 126 |
| 5 | 65 | 209 | 226 | 724 | 152 | 279 | 578 | 363 | 162 | 148 | 134 | 118 |
| 6 | 110 | 152 | 839 | 844 | 156 | 244 | 648 | 432 | 202 | 208 | 198 | 106 |
| 7 | 100 | 144 | 663 | 545 | 155 | 218 | 558 | 609 | 151 | 290 | 176 | 120 |
| 8 | 90 | 138 | 525 | 480 | 142 | 288 | 499 | 616 | 184 | 184 | 164 | 113 |
| 9 | 100 | 122 | 476 | 467 | 216 | 291 | 472 | 338 | 171 | 154 | 146 | 110 |
| 10 | 100 | 138 | 409 | 269 | 184 | 278 | 410 | 236 | 142 | 142 | 148 | 106 |
| 11 | 95 | 121 | 280 | 182 | 164 | 263 | 290 | 386 | 149 | 140 | 242 | 104 |
| 12 | 65 | 138 | 266 | 374 | 155 | 263 | 196 | 371 | 144 | 116 | 200 | 54 |
| 13 | 100 | 234 | 193 | 346 | 156 | 257 | 270 | 262 | 149 | 203 | 187 | 53 |
| 14 | 90 | 179 | 164 | 283 | 182 | 227 | 260 | 250 | 172 | 242 | 128 | 96 |
| 15 | 100 | 298 | 242 | 270 | 161 | 179 | 256 | 239 | 182 | 158 | 176 | 104 |
| 16 | 110 | 448 | 209 | 256 | 234 | 247 | 248 | 156 | 152 | 138 | 174 | 96 |
| 17 | 95 | 610 | 231 | 208 | 264 | 237 | 240 | 148 | 142 | 184 | 138 | 95 |
| 18 | 85 | 570 | 270 | 172 | 275 | 260 | 194 | 204 | 134 | 124 | 144 | 98 |
| 19 | 90 | 354 | 250 | 263 | 234 | 260 | 164 | 206 | 122 | 116 | 130 | 48 |
| 20 | 99 | 354 | 204 | 259 | 231 | 218 | 239 | 212 | 124 | 127 | 128 | 51 |
| 21 | 98 | 280 | 168 | 252 | 204 | 190 | 238 | 371 | 124 | 129 | 198 | 81 |
| 22 | 101 | 230 | 216 | 234 | 155 | 278 | 448 | 407 | 162 | 144 | 158 | 84 |
| 23 | 101 | 172 | 210 | 212 | 224 | 336 | 644 | 311 | 144 | 125 | 168 | 74 |
| 24 | 108 | 266 | 204 | 200 | 208 | 293 | 384 | 162 | 174 | 116 | 150 | 81 |
| 25 | 89 | 229 | 152 | 156 | 262 | 258 | 292 | 248 | 154 | 121 | 128 | 83 |
| 26 | 67 | 200 | 332 | 202 | 294 | 214 | 223 | 238 | 148 | 125 | 129 | 65 |
| 27 | 134 | 154 | 490 | 178 | 258 | 224 | 300 | 237 | 132 | 141 | 129 | 57 |
| 28 | 126 | 184 | 318 | 162 | 228 | 290 | 280 | 231 | 138 | 146 | 180 | 74 |
| 29 | 142 | 162 | 366 | 158 | ----- | 456 | 270 | 226 | 135 | 138 | 132 | 51 |
| 30 | 154 | 162 | 331 | 162 | ----- | 392 | 264 | 196 | 147 | 136 | 126 | 80 |
| 31 | 130 | ----- | 310 | 169 | ----- | 408 | ----- | 142 | ----- | 132 | 131 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|------|-----------------|-------------------|
| October | 154 | ----- | 101 | 0.476 | 0.55 |
| November | 610 | 73 | 224 | 1.06 | 1.18 |
| December | 839 | 152 | 300 | 1.42 | 1.64 |
| January | 844 | 156 | 291 | 1.37 | 1.58 |
| February | 294 | 136 | 197 | .929 | .97 |
| March | 456 | 179 | 278 | 1.31 | 1.51 |
| April | 942 | 164 | 391 | 1.84 | 2.05 |
| May | 616 | 142 | 285 | 1.34 | 1.54 |
| June | 222 | 124 | 158 | .745 | .83 |
| July | 290 | 116 | 151 | .712 | .82 |
| August | 242 | 126 | 157 | .741 | .85 |
| September | 132 | 48 | 90.2 | .425 | .47 |
| The year | 942 | 48 | 219 | 1.03 | 13.99 |

SOUTH PACOLET RIVER RESERVOIR NEAR FINGERVILLE, S. C.

LOCATION.—Water-stage recorder at highway bridge across South Pacolet River Reservoir, 1 mile upstream from dam and $1\frac{3}{4}$ miles south of Fingerville, Spartanburg County. Zero of gage is 760 feet above mean sea level.

DRAINAGE AREA.—92 square miles.

RECORDS AVAILABLE.—March, 1930, to September, 1931.

Extremes.—Maximum gage height during year, 15.46 feet Apr. 5; minimum, 2.76 feet Oct. 8.

1930-31: Maximum gage height, that of Apr. 5, 1931; minimum that of Oct. 8, 1930.

REMARKS.—Record good. City of Spartanburg diverts about 3 million gallons daily for water supply from reservoir and also uses water for power purposes. Crest of concrete spillway is 772 feet above mean sea level, with 3 feet of flashboards used to increase storage during periods of low flow. Capacity of reservoir, 117.5 million cubic feet at gage height 15 feet.

Daily gage height, in feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| 1 | 3.89 | 4.84 | 10.99 | 12.56 | 9.69 | 11.13 | 13.30 | 12.40 | 11.72 | 7.30 | 6.67 | 8.18 |
| 2 | 3.56 | 5.51 | 11.09 | 12.25 | 9.85 | 11.48 | 14.03 | 12.16 | 11.27 | 6.86 | 6.67 | 7.85 |
| 3 | 3.14 | 5.56 | 11.18 | 11.97 | 9.97 | 11.42 | 13.75 | 12.38 | 10.90 | 6.44 | 7.20 | 7.45 |
| 4 | 3.08 | 5.68 | 11.15 | 12.20 | 10.09 | 11.30 | 13.57 | 12.25 | 10.57 | 6.14 | 6.92 | 7.18 |
| 5 | 3.72 | 6.43 | 11.08 | 12.63 | 10.23 | 11.14 | 14.95 | 10.94 | 10.36 | 6.96 | 6.61 | 6.85 |
| 6 | 3.55 | 6.61 | 11.89 | 13.61 | 10.39 | 10.91 | 15.18 | 9.87 | 10.35 | 7.68 | 6.52 | 6.52 |
| 7 | 3.13 | 6.60 | 13.93 | 13.47 | 10.53 | 11.05 | 14.82 | 9.54 | 10.47 | 8.83 | 6.81 | 6.08 |
| 8 | 2.94 | 6.54 | 14.72 | 12.66 | 10.78 | 12.01 | 14.12 | 10.77 | 10.41 | 9.53 | 6.58 | 5.51 |
| 9 | 3.12 | 6.64 | 13.80 | 11.82 | 10.63 | 12.27 | 13.27 | 11.74 | 10.21 | 9.48 | 6.22 | 5.04 |
| 10 | 3.26 | 6.50 | 12.72 | 11.39 | 10.70 | 12.12 | 12.32 | 12.41 | 10.09 | 9.50 | 5.99 | 4.58 |
| 11 | 3.55 | 6.45 | 12.12 | 11.80 | 10.84 | 11.93 | 11.97 | 12.34 | 9.98 | 9.55 | 7.30 | 4.08 |
| 12 | 4.21 | 6.68 | 11.73 | 11.79 | 10.98 | 11.69 | 12.33 | 11.30 | 9.84 | 9.65 | 7.61 | 4.22 |
| 13 | 4.25 | 7.95 | 11.40 | 11.09 | 11.13 | 11.40 | 12.54 | 10.81 | 9.74 | 9.68 | 8.48 | 4.68 |
| 14 | 4.43 | 8.68 | 11.63 | 10.87 | 11.44 | 11.22 | 12.31 | 10.48 | 9.94 | 10.46 | 8.65 | 4.55 |
| 15 | 4.44 | 9.72 | 11.44 | 10.59 | 11.83 | 11.41 | 12.05 | 10.11 | 9.98 | 10.82 | 8.94 | 4.44 |
| 16 | 4.55 | 11.74 | 11.01 | 10.26 | 11.64 | 11.24 | 11.78 | 10.11 | 9.89 | 10.92 | 9.24 | 4.24 |
| 17 | 4.59 | 13.41 | 10.73 | 10.05 | 11.45 | 10.88 | 11.47 | 10.42 | 9.79 | 10.86 | 9.42 | 3.92 |
| 18 | 4.74 | 13.28 | 10.34 | 10.40 | 11.41 | 10.55 | 11.29 | 10.32 | 9.70 | 10.75 | 9.39 | 3.54 |
| 19 | 4.99 | 12.94 | 10.00 | 10.41 | 11.18 | 10.21 | 11.68 | 9.98 | 9.62 | 10.60 | 9.20 | 3.72 |
| 20 | 4.78 | 12.56 | 9.74 | 10.04 | 10.93 | 9.88 | 11.69 | 9.69 | 9.54 | 10.45 | 9.05 | 4.27 |
| 21 | 4.74 | 12.10 | 10.02 | 9.59 | 10.72 | 9.63 | 11.41 | 11.87 | 9.49 | 10.22 | 9.11 | 4.38 |
| 22 | 4.67 | 11.78 | 9.95 | 9.11 | 10.91 | 10.48 | 11.74 | 13.73 | 9.39 | 9.99 | 9.77 | 4.10 |
| 23 | 4.66 | 11.92 | 9.77 | 8.81 | 10.73 | 11.06 | 12.85 | 13.64 | 9.19 | 9.82 | 9.84 | 3.93 |
| 24 | 4.75 | 11.66 | 9.51 | 8.68 | 10.43 | 10.89 | 13.13 | 13.83 | 9.00 | 9.61 | 9.71 | 3.82 |
| 25 | 5.06 | 11.16 | 9.64 | 8.94 | 10.27 | 10.62 | 13.11 | 13.88 | 8.83 | 9.38 | 9.62 | 3.61 |
| 26 | 5.63 | 10.91 | 10.00 | 8.84 | 10.38 | 10.50 | 13.50 | 13.55 | 8.67 | 9.07 | 9.47 | 4.13 |
| 27 | 5.55 | 10.99 | 11.19 | 8.75 | 10.22 | 10.40 | 13.61 | 13.19 | 8.51 | 8.83 | 9.27 | 5.50 |
| 28 | 5.11 | 10.81 | 12.54 | 8.93 | 10.19 | 10.74 | 13.36 | 12.81 | 8.29 | 8.52 | 9.02 | 5.76 |
| 29 | 4.93 | 10.80 | 12.96 | 9.13 | ----- | 12.15 | 13.04 | 12.36 | 7.96 | 8.13 | 8.90 | 6.13 |
| 30 | 4.92 | 10.98 | 12.94 | 9.29 | ----- | 12.61 | 12.73 | 11.93 | 7.63 | 7.69 | 8.76 | 6.22 |
| 31 | 4.81 | ----- | 12.79 | 9.43 | ----- | 12.61 | ----- | 11.94 | ----- | 7.20 | 8.50 | ----- |

TIGER RIVER NEAR WOODRUFF, S. C.

LOCATION.—Water-stage recorder at Nesbitts Bridge, half a mile downstream from confluence of North and South Tiger Rivers and $6\frac{1}{2}$ miles east of Woodruff, Spartanburg County.

DRAINAGE AREA.—334 square miles.

RECORDS AVAILABLE.—October, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,430 second-feet May 22 (gauge height, 5.05 feet); minimum, 68 second-feet Sept. 14 (gauge height, 1.74 feet).

1929-1931: Maximum discharge, 2,610 second-feet Nov. 18, 1929 (gauge height, 5.21 feet); minimum discharge, that of Sept. 14, 1931.

Maximum stage known, 14.65 feet during flood of September, 1929 (estimated discharge, 30,100 second-feet).

REMARKS.—Records good between 120 and 15,000 second-feet; fair above and below. Some regulation caused by operation of mills upstream.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|------|-------|------|-------|-------|-------|------|------------------|-------|
| 1..... | 160 | 198 | 240 | 617 | 342 | 638 | 1,220 | 414 | 204 | 152 | 238 | 174 |
| 2..... | 238 | 144 | 325 | 520 | 244 | 524 | 1,040 | 626 | 282 | 153 | 168 | 131 |
| 3..... | 184 | 130 | 323 | 551 | 370 | 591 | 818 | 474 | 264 | 174 | 119 | 134 |
| 4..... | 208 | 350 | 284 | 366 | 326 | 502 | 756 | 366 | 277 | 208 | 228 | 192 |
| 5..... | 130 | 352 | 270 | 458 | 327 | 462 | 1,000 | 472 | 266 | 336 | 234 | 226 |
| 6..... | 116 | 312 | 1,140 | 870 | 323 | 458 | 1,170 | 546 | 285 | 463 | 228 | 146 |
| 7..... | 202 | 271 | 882 | 832 | 329 | 486 | 900 | 844 | 178 | 838 | 298 | 138 |
| 8..... | 178 | 232 | 928 | 656 | 244 | 494 | 676 | 964 | 149 | 460 | 299 | 284 |
| 9..... | 192 | 232 | 712 | 660 | 239 | 479 | 597 | 1,040 | 262 | 378 | 126 | 242 |
| 10..... | 182 | 258 | 564 | 620 | 328 | 554 | 532 | 776 | 241 | 368 | 96 | 192 |
| 11..... | 174 | 424 | 452 | 498 | 320 | 566 | 546 | 620 | 243 | 248 | 417 | 128 |
| 12..... | 130 | 546 | 368 | 642 | 322 | 471 | 358 | 640 | 249 | 354 | 283 | 110 |
| 13..... | 107 | 477 | 380 | 735 | 328 | 478 | 368 | 503 | 186 | 197 | 248 | 84 |
| 14..... | 182 | 1,130 | 282 | 654 | 430 | 443 | 476 | 463 | 156 | 305 | 236 | 80 |
| 15..... | 187 | 1,190 | 294 | 536 | 320 | 319 | 443 | 421 | 161 | 296 | 262 | 153 |
| 16..... | 185 | 1,070 | 351 | 558 | 290 | 310 | 456 | 410 | 294 | 287 | 176 | 140 |
| 17..... | 158 | 1,110 | 325 | 552 | 452 | 400 | 438 | 265 | 274 | 232 | 170 | 128 |
| 18..... | 168 | 877 | 396 | 310 | 414 | 414 | 447 | 232 | 274 | 240 | 336 | 104 |
| 19..... | 128 | 663 | 407 | 400 | 410 | 402 | 306 | 314 | 230 | 164 | 238 | 96 |
| 20..... | 104 | 520 | 459 | 578 | 412 | 322 | 299 | 332 | 203 | 184 | 358 | 100 |
| 21..... | 194 | 470 | 251 | 552 | 463 | 380 | 425 | 1,300 | 145 | 319 | 687 ^a | 92 |
| 22..... | 224 | 439 | 284 | 406 | 329 | 728 | 440 | 1,990 | 127 | 244 | 477 | 168 |
| 23..... | 277 | 278 | 433 | 363 | 324 | 527 | 607 | 1,010 | 272 | 157 | 182 | 129 |
| 24..... | 237 | 240 | 472 | 407 | 409 | 474 | 604 | 473 | 272 | 178 | 132 | 104 |
| 25..... | 219 | 354 | 302 | 284 | 406 | 484 | 477 | 380 | 276 | 161 | 227 | 96 |
| 26..... | 130 | 351 | 378 | 268 | 383 | 468 | 362 | 450 | 380 | 182 | 264 | 206 |
| 27..... | 164 | 290 | 772 | 506 | 382 | 370 | 347 | 430 | 358 | 620 | 222 | 270 |
| 28..... | 242 | 226 | 758 | 391 | 478 | 463 | 470 | 440 | 154 | 716 | 180 | 136 |
| 29..... | 289 | 312 | 744 | 400 | ----- | 588 | 462 | 384 | 111 | 470 | 190 | 262 |
| 30..... | 274 | 190 | 732 | 346 | ----- | 618 | 422 | 374 | 150 | 318 | 126 | 217 |
| 31..... | 227 | ----- | 608 | 418 | ----- | 638 | ----- | 190 | ----- | 256 | 110 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 289 | 104 | 187 | 0.560 | 0.65 |
| November..... | 1,190 | 130 | 455 | 1.36 | 1.52 |
| December..... | 1,140 | 240 | 498 | 1.46 | 1.68 |
| January..... | 870 | 268 | 515 | 1.54 | 1.78 |
| February..... | 478 | 239 | 355 | 1.06 | 1.10 |
| March..... | 728 | 310 | 486 | 1.46 | 1.68 |
| April..... | 1,220 | 299 | 582 | 1.74 | 1.94 |
| May..... | 1,990 | 190 | 585 | 1.75 | 2.02 |
| June..... | 380 | 111 | 231 | .692 | .77 |
| July..... | 838 | 152 | 312 | .934 | 1.08 |
| August..... | 687 | 96 | 244 | .731 | .84 |
| September..... | 284 | 80 | 155 | .464 | .52 |
| The year..... | 1,990 | 80 | 383 | 1.15 | 15.58 |

SANTEE RIVER BASIN

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ENOREE RIVER NEAR ENOREE, S. C.

LOCATION.—Water-stage recorder half a mile upstream from Yarborough's bridge three-quarters of a mile upstream from mouth of Warrior Creek, and 4 miles southeast of Enoree, Spartanburg County.

DRAINAGE AREA.—307 square miles.

RECORDS AVAILABLE.—August, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 3,500 second-feet May 22 (gage height, 3.76 feet); minimum, 50 second-feet Sept. 15 (gage height, 1.54 feet).
1929-1931: Maximum discharge (estimated), 35,800 second-feet Oct. 2, 1929 (gage height, 10.5 feet); minimum, that of Sept. 15, 1931.

REMARKS.—Record good. Diurnal fluctuation caused by operation of power plants upstream.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|------|-------|------|-------|-------|-------|-------|------|-------|
| 1..... | 170 | 182 | 213 | 458 | 256 | 544 | 993 | 329 | 222 | 205 | 207 | 230 |
| 2..... | 146 | 181 | 335 | 406 | 306 | 408 | 739 | 378. | 275 | 175 | 181 | 163 |
| 3..... | 149 | 231 | 266 | 406 | 318 | 449 | 536 | 459 | 273 | 186 | 314 | 162 |
| 4..... | 137 | 268 | 255 | 349 | 278 | 440 | 547 | 395 | 270 | 299 | 192 | 218 |
| 5..... | 134 | 397 | 235 | 421 | 302 | 406 | 858 | 373 | 269 | 566 | 236 | 244 |
| 6..... | 161 | 262 | 1,580 | 685 | 285 | 355 | 802 | 474 | 276 | 1,530 | 676 | 166 |
| 7..... | 171 | 215 | 1,260 | 588 | 301 | 399 | 580 | 657 | 204 | 552 | 350 | 173 |
| 8..... | 195 | 183 | 747 | 487 | 248 | 470 | 487 | 788 | 203 | 395 | 291 | 162 |
| 9..... | 193 | 205 | 502 | 478 | 334 | 449 | 440 | 952 | 242 | 364 | 163 | 170 |
| 10..... | 186 | 244 | 442 | 490 | 333 | 434 | 406 | 647 | 267 | 220 | 183 | 143 |
| 11..... | 220 | 197 | 415 | 419 | 320 | 411 | 456 | 506 | 233. | 306 | 542 | 159 |
| 12..... | 190 | 258 | 347 | 671 | 309 | 361 | 411 | 458 | 241 | 227 | 456 | 122 |
| 13..... | 148 | 528 | 310 | 659 | 260 | 311 | 380 | 421 | 218 | 315 | 266 | 101 |
| 14..... | 133 | 388 | 315 | 522 | 341 | 428 | 383 | 410 | 232 | 225 | 528 | 98 |
| 15..... | 186 | 848 | 320 | 458 | 288 | 324 | 313 | 381 | 297 | 254 | 690 | 206 |
| 16..... | 194 | 947 | 294 | 458 | 313 | 307 | 865 | 305 | 310 | 314 | 282 | 154 |
| 17..... | 195 | 1,240 | 285 | 490 | 338 | 380 | 297 | 518 | 281 | 220 | 234 | 144 |
| 18..... | 183 | 710 | 414 | 348 | 399 | 351 | 358 | 281 | 210 | 195 | 278 | 153 |
| 19..... | 169 | 492 | 342 | 382 | 287 | 335 | 285 | 301 | 195 | 188 | 315 | 123 |
| 20..... | 218 | 391 | 325 | 408 | 316 | 297 | 343 | 352 | 197 | 542 | 282 | 121 |
| 21..... | 111 | 318 | 308 | 366 | 357 | 390 | 352 | 1,450 | 222 | 254 | 633 | 161 |
| 22..... | 187 | 320 | 320 | 310 | 292 | 708 | 342 | 2,000 | 182 | 491 | 382 | 142 |
| 23..... | 194 | 225 | 371 | 329 | 266 | 487 | 525 | 739 | 324 | 220 | 246 | 130 |
| 24..... | 189 | 315 | 308 | 382 | 366 | 440 | 418 | 456 | 245 | 185 | 227 | 112 |
| 25..... | 160 | 291 | 242 | 330 | 339 | 387 | 403 | 390 | 214 | 175 | 188 | 170 |
| 26..... | 120 | 294 | 525 | 315 | 363 | 315 | 299 | 372 | 224 | 915 | 195 | 193 |
| 27..... | 235 | 226 | 844 | 306 | 350 | 323 | 329 | 331 | 204 | 1,230 | 154 | 246 |
| 28..... | 199 | 217 | 830 | 312 | 426 | 402 | 334 | 807 | 173 | 656 | 188 | 279 |
| 29..... | 188 | 237 | 648 | 282 | ----- | 440 | 353 | 843 | 158 | 386 | 135 | 184 |
| 30..... | 260 | 255 | 536 | 312 | ----- | 506 | 274 | 330 | 194 | 218 | 116 | 175 |
| 31..... | 250 | ----- | 478 | 288 | ----- | 468 | ----- | 260 | ----- | 220 | 160 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 260 | 111 | 180 | 0.586 | 0.68 |
| November..... | 1,240 | 181 | 369 | 1.20 | 1.34 |
| December..... | 1,580 | 213 | 471 | 1.53 | 1.76 |
| January..... | 685 | 282 | 421 | 1.37 | 1.58 |
| February..... | 426 | 248 | 318 | 1.04 | 1.08 |
| March..... | 708 | 297 | 412 | 1.34 | 1.54 |
| April..... | 993 | 274 | 454 | 1.48 | 1.65 |
| May..... | 2,000 | 260 | 521 | 1.70 | 1.96 |
| June..... | 324 | 158 | 235 | .765 | .85 |
| July..... | 1,530 | 175 | 394 | 1.28 | 1.48 |
| August..... | 690 | 116 | 298 | .971 | 1.12 |
| September..... | 279 | 98 | 167 | .544 | .61 |
| The year..... | 2,000 | 98 | 354 | 1.15 | 15.65 |

SALUDA RIVER NEAR PELZER, S. C.

LOCATION.—Water-stage recorder half a mile downstream from mouth of Hurricane Creek and 2 miles north of Pelzer, Anderson County.

DRAINAGE AREA.—411 square miles.

RECORDS AVAILABLE.—September, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,750 second-feet May 22 (gage height, 3.90 feet); minimum, 27 second-feet Oct. 20 (gage height, about 0.82 foot).

1929-1931: Maximum discharge, 9,400 second-feet Oct. 2, 1929 (gage height, 6.88 feet); minimum, that of Oct. 20, 1930.

REMARKS.—Records good except those for estimated periods, which are fair. Some regulation caused by operation of power plants at Piedmont and Greenville.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|--------|--------|--------|-------|-------|-------|--------|-------|-------|------|-------|
| 1..... | 234 | 270 | 567 | 636 | 406 | 887 | 1,330 | 636 | 540 | 346 | 362 | 164 |
| 2..... | 171 | 190 | 474 | 523 | 426 | 833 | 987 | 892 | 587 | 289 | 506 | 283 |
| 3..... | 242 | 152 | 368 | *600 | 421 | 690 | 988 | 704 | 446 | 370 | 302 | 280 |
| 4..... | 171 | 305 | *400 | 558 | 402 | 596 | 1,250 | 679 | 434 | 436 | 214 | 313 |
| 5..... | 245 | 332 | 338 | *950 | 431 | 548 | 1,600 | 676 | 398 | 564 | 232 | 180 |
| 6..... | 200 | 351 | 1,010 | *1,400 | 414 | 552 | 1,500 | 748 | 391 | 1,280 | 324 | 261 |
| 7..... | 258 | 317 | 1,380 | 1,110 | 405 | 423 | 1,370 | 1,080 | 468 | 894 | 642 | 262 |
| 8..... | 166 | 247 | *1,100 | *900 | 391 | 888 | 1,260 | 1,620 | 599 | 436 | 476 | 254 |
| 9..... | 288 | 262 | 619 | 775 | 371 | 704 | 936 | *1,090 | 381 | 368 | 298 | 136 |
| 10..... | 261 | 198 | 614 | *700 | 408 | 543 | 822 | 1,140 | 398 | 418 | 294 | 268 |
| 11..... | 330 | 254 | 429 | 687 | 536 | 565 | 868 | 890 | 508 | 458 | 422 | 162 |
| 12..... | 268 | 403 | 486 | 731 | 412 | 464 | 780 | 794 | 429 | 520 | 303 | 174 |
| 13..... | 274 | 907 | 616 | *700 | 408 | 570 | *850 | 708 | 386 | 436 | 570 | 178 |
| 14..... | 201 | 429 | 387 | *650 | 481 | 522 | *750 | 660 | 544 | 870 | 336 | 286 |
| 15..... | 242 | 685 | *420 | *500 | 472 | 452 | *800 | 606 | 540 | 862 | 284 | 309 |
| 16..... | 242 | 1,200 | 408 | *500 | 452 | 382 | *750 | 552 | 386 | 520 | 311 | 162 |
| 17..... | 277 | *1,600 | 446 | *600 | 618 | 442 | *700 | 624 | 364 | 318 | 380 | 271 |
| 18..... | 255 | *1,000 | 594 | 600 | 610 | 395 | *650 | 1,070 | 428 | 304 | 426 | 283 |
| 19..... | *120 | *750 | 498 | *650 | 500 | 404 | 627 | 894 | 372 | 465 | 420 | 190 |
| 20..... | *160 | *550 | 394 | *650 | 573 | 506 | 660 | 638 | 360 | 374 | 298 | 260 |
| 21..... | *260 | *400 | *600 | *500 | 409 | 482 | 576 | 1,940 | 324 | 328 | 402 | 229 |
| 22..... | *240 | *320 | *550 | *440 | 466 | 650 | 971 | 2,050 | 670 | 353 | 273 | 194 |
| 23..... | 170 | *550 | *460 | *500 | 428 | 645 | 1,300 | 1,190 | 473 | 154 | 542 | 200 |
| 24..... | 236 | *420 | 433 | 462 | 478 | 520 | 1,590 | 834 | 454 | 274 | 352 | 206 |
| 25..... | 224 | *550 | 398 | 436 | *500 | 495 | 1,220 | 702 | 290 | 424 | 242 | 196 |
| 26..... | 240 | *500 | *460 | 442 | *550 | 454 | 1,100 | 663 | 513 | 540 | 276 | 451 |
| 27..... | 237 | *300 | *1,100 | 513 | *700 | 462 | 782 | 911 | *393 | 878 | 238 | 648 |
| 28..... | 255 | *550 | 1,310 | 422 | *850 | 690 | 693 | 789 | 352 | 810 | 264 | 262 |
| 29..... | 242 | *260 | 917 | 397 | ----- | 1,060 | 636 | 552 | 336 | 260 | 254 | 199 |
| 30..... | 506 | 294 | 666 | 404 | ----- | 1,210 | 576 | 528 | 434 | 214 | 290 | 148 |
| 31..... | 280 | ----- | 617 | 393 | ----- | 1,310 | ----- | 507 | ----- | 308 | 289 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 506 | ----- | 242 | 0.589 | 0.68 |
| November..... | ----- | 152 | 485 | 1.18 | 1.32 |
| December..... | 1,380 | 338 | 615 | 1.50 | 1.73 |
| January..... | ----- | 387 | 623 | 1.52 | 1.75 |
| February..... | ----- | 371 | 483 | 1.18 | 1.28 |
| March..... | 1,310 | 382 | 623 | 1.52 | 1.75 |
| April..... | 1,600 | 576 | 964 | 2.35 | 2.62 |
| May..... | 2,050 | 507 | 881 | 2.14 | 2.47 |
| June..... | 670 | 290 | 440 | 1.07 | 1.19 |
| July..... | 1,260 | 154 | 486 | 1.18 | 1.36 |
| August..... | 642 | 214 | 348 | .847 | .98 |
| September..... | 648 | 136 | 247 | .601 | .67 |
| The year..... | 2,050 | ----- | 537 | 1.31 | 17.75 |

* Estimated.

SALUDA RIVER AT CHAPPELLS, S. C.

LOCATION.—Water-stage recorder at steel highway bridge at Chappells, Newberry County, $8\frac{1}{4}$ miles upstream from mouth of Little River. Zero of gage is 364.21 feet above mean sea level.

DRAINAGE AREA.—1,290 square miles.

RECORDS AVAILABLE.—May, 1927, to September, 1931.

EXTREMES.—Maximum discharge during year, 5,310 second-feet Apr. 1 (gage height, 12.49 feet); minimum, 256 second-feet Sept. 13 (gage height, 1.16 feet).

1927-1931: Maximum discharge, 63,700 second-feet Oct. 2, 1929 (gage height, 31.5 feet); minimum discharge, 220 second-feet Oct. 3, 1927.

REMARKS.—Records good except those estimated for July 19-21, Aug. 1-4, 7-10, Aug. 24 to Sept. 7, which are fair. Some regulation caused by operation of Ware Shoals power plant.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 544 | 888 | 745 | 1,550 | 999 | 1,590 | 4,870 | 1,350 | 925 | 999 | 650 | 550 |
| 2..... | 544 | 676 | 1,200 | 1,430 | 925 | 2,130 | 4,160 | 1,470 | 1,350 | 780 | 800 | 550 |
| 3..... | 481 | 576 | 1,110 | 1,350 | 1,360 | 2,030 | 2,860 | 1,590 | 1,190 | 745 | 850 | 360 |
| 4..... | 481 | 818 | 1,040 | 1,190 | 1,110 | 1,790 | 2,280 | 1,630 | 1,080 | 758 | 950 | 460 |
| 5..... | 481 | 1,040 | 888 | 1,530 | 1,110 | 1,590 | 2,730 | 1,630 | 999 | 1,190 | 642 | 480 |
| 6..... | 450 | 816 | 1,660 | 2,150 | 1,110 | 1,470 | 3,320 | 1,670 | 999 | 1,670 | 962 | 460 |
| 7..... | 419 | 642 | 3,860 | 2,350 | 1,150 | 1,490 | 3,220 | 1,100 | 852 | 2,240 | 750 | 480 |
| 8..... | 512 | 609 | 3,610 | 2,370 | 1,040 | 1,870 | 2,730 | 2,640 | 609 | 1,790 | 1,200 | 419 |
| 9..... | 450 | 576 | 2,550 | 2,280 | 816 | 1,990 | 2,420 | 2,910 | 1,080 | 1,040 | 1,050 | 481 |
| 10..... | 555 | 450 | 2,150 | 1,950 | 1,370 | 1,980 | 2,150 | 3,220 | 816 | 852 | 700 | 374 |
| 11..... | 569 | 628 | 1,630 | 1,550 | 1,110 | 1,600 | 1,870 | 2,600 | 642 | 1,530 | 1,430 | 419 |
| 12..... | 576 | 712 | 1,270 | 2,670 | 1,080 | 1,430 | 1,750 | 2,110 | 642 | 925 | 2,030 | 450 |
| 13..... | 481 | 1,670 | 1,190 | 4,050 | 1,190 | 1,390 | 1,830 | 1,790 | 816 | 780 | 1,830 | 389 |
| 14..... | 605 | 1,790 | 1,150 | 2,910 | 1,350 | 1,310 | 1,950 | 1,710 | 925 | 1,150 | 1,080 | 359 |
| 15..... | 609 | 2,070 | 962 | 2,070 | 1,270 | 1,270 | 1,590 | 1,550 | 816 | 1,390 | 1,880 | 450 |
| 16..... | 576 | 3,040 | 1,350 | 1,710 | 1,110 | 1,150 | 1,710 | 1,350 | 1,310 | 1,630 | 1,580 | 745 |
| 17..... | 544 | 3,740 | 1,080 | 1,550 | 1,500 | 1,390 | 1,510 | 1,150 | 925 | 1,470 | 780 | 544 |
| 18..... | 481 | 3,410 | 1,110 | 1,510 | 1,510 | 1,190 | 1,470 | 1,150 | 676 | 962 | 1,080 | 576 |
| 19..... | 450 | 2,600 | 1,230 | 2,030 | 1,470 | 1,190 | 1,390 | 1,630 | 780 | 600 | 1,080 | 481 |
| 20..... | 389 | 2,190 | 1,470 | 2,030 | 1,390 | 1,190 | 1,430 | 1,750 | 780 | 900 | 1,190 | 450 |
| 21..... | 450 | 1,990 | 1,310 | 1,590 | 1,310 | 1,230 | 1,710 | 1,430 | 642 | 1,300 | 888 | 359 |
| 22..... | 481 | 1,590 | 1,080 | 1,510 | 1,150 | 2,770 | 1,510 | 3,020 | 642 | 1,080 | 999 | 481 |
| 23..... | 481 | 1,190 | 1,430 | 1,390 | 999 | 2,550 | 1,750 | 4,060 | 1,060 | 1,780 | 925 | 544 |
| 24..... | 450 | 925 | 1,190 | 1,270 | 1,420 | 2,150 | 2,070 | 2,320 | 962 | 924 | 700 | 512 |
| 25..... | 512 | 1,390 | 999 | 1,190 | 1,230 | 1,710 | 2,320 | 1,670 | 888 | 780 | 1,000 | 481 |
| 26..... | 481 | 1,040 | 1,370 | 1,110 | 1,310 | 1,470 | 2,070 | 1,710 | 676 | 2,120 | 800 | 450 |
| 27..... | 374 | 999 | 2,780 | 1,470 | 1,590 | 1,350 | 1,950 | 1,470 | 642 | 1,380 | 550 | 544 |
| 28..... | 389 | 852 | 3,090 | 1,270 | 1,630 | 1,390 | 1,870 | 1,550 | 745 | 2,370 | 480 | 710 |
| 29..... | 609 | 888 | 2,820 | 1,270 | ----- | 1,550 | 1,470 | 1,550 | 642 | 1,790 | 480 | 852 |
| 30..... | 609 | 888 | 2,380 | 1,150 | ----- | 1,910 | 1,430 | 1,430 | 918 | 1,350 | 460 | 642 |
| 31..... | 740 | ----- | 1,790 | 1,150 | ----- | 2,190 | ----- | 1,080 | ----- | 816 | 480 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 740 | 374 | 509 | 0.397 | 0.46 |
| November..... | 3,740 | 450 | 1,360 | 1.05 | 1.17 |
| December..... | 3,860 | 1,110 | 1,660 | 1.29 | 1.49 |
| January..... | 4,050 | 1,110 | 1,760 | 1.36 | 1.57 |
| February..... | 1,630 | 816 | 1,240 | 1.01 | 1.00 |
| March..... | 2,770 | 1,150 | 1,660 | 1.29 | 1.49 |
| April..... | 4,870 | 1,390 | 2,180 | 1.69 | 1.89 |
| May..... | 4,060 | 1,080 | 1,870 | 1.45 | 1.67 |
| June..... | 1,350 | 609 | 868 | .675 | .75 |
| July..... | 2,370 | ----- | 1,260 | .977 | 1.13 |
| August..... | 2,030 | ----- | 977 | .757 | .87 |
| September..... | 852 | 359 | 502 | .385 | .43 |
| The year..... | 4,870 | 359 | 1,320 | 1.07 | 13.92 |

SALUDA RIVER NEAR SILVERSTREET, S. C.

LOCATION.—Water-stage recorder 200 feet upstream from new Higgins ferry bridge, 1 mile downstream from mouth of Little River, and 2½ miles south of Silverstreet, Newberry County. Zero of gage is 345.28 feet above mean sea level.

DRAINAGE AREA.—1,570 square miles.

RECORDS AVAILABLE.—January, 1927, to September, 1931.

EXTREMES.—Maximum discharge during year, 6,180 second-feet Apr. 2 (gage height 12.87 feet); minimum, 353 second-feet Sept. 13 (gage height, 3.78 feet).

1927-1931: Maximum discharge (estimated), 83,800 second-feet Oct. 3, 1929 (gage height, 33.97 feet); minimum, 248 second-feet Sept. 29, 1927 (gage height, 3.45 feet).

REMARKS.—Records good except those estimated for Nov. 6, May 30 to June 30, July 10, 11, 13-16, 22, 23, which are fair. Some regulation from operation of power plants upstream.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 612 | 975 | 875 | 1,740 | 1,160 | 1,740 | 5,140 | 1,400 | 1,000 | 1,180 | 725 | 590 |
| 2..... | 635 | 725 | 1,240 | 1,620 | 1,020 | 2,270 | 5,660 | 1,460 | 1,400 | 850 | 850 | 635 |
| 3..... | 550 | 635 | 1,300 | 1,520 | 1,350 | 2,270 | 3,540 | 1,620 | 1,300 | 775 | 925 | 430 |
| 4..... | 550 | 816 | 1,160 | 1,380 | 1,210 | 1,970 | 2,630 | 1,740 | 1,150 | 800 | 1,050 | 490 |
| 5..... | 550 | 1,350 | 1,050 | 1,680 | 1,180 | 1,790 | 3,140 | 1,620 | 1,050 | 1,100 | 725 | 530 |
| 6..... | 530 | 1,000 | 1,620 | 2,690 | 1,180 | 1,570 | 3,870 | 1,790 | 1,050 | 1,850 | 900 | 510 |
| 7..... | 490 | 800 | 4,480 | 2,630 | 1,180 | 1,570 | 3,730 | 1,910 | 950 | 2,270 | 875 | 550 |
| 8..... | 550 | 680 | 4,710 | 2,690 | 1,160 | 2,150 | 3,210 | 2,950 | 700 | 1,970 | 1,100 | 458 |
| 9..... | 550 | 658 | 3,140 | 2,690 | 875 | 2,150 | 2,760 | 3,210 | 1,200 | 1,130 | 1,300 | 510 |
| 10..... | 584 | 550 | 2,570 | 2,330 | 1,400 | 2,270 | 2,450 | 3,620 | 900 | 950 | 775 | 416 |
| 11..... | 624 | 635 | 1,910 | 1,850 | 1,180 | 1,790 | 2,030 | 3,080 | 700 | 1,700 | 1,210 | 446 |
| 12..... | 612 | 800 | 1,520 | 2,780 | 1,130 | 1,520 | 1,850 | 2,450 | 700 | 1,050 | 2,390 | 466 |
| 13..... | 570 | 2,090 | 1,380 | 5,410 | 1,210 | 1,520 | 1,970 | 1,970 | 900 | 850 | 2,210 | 438 |
| 14..... | 580 | 2,150 | 1,400 | 3,960 | 1,400 | 1,400 | 2,090 | 1,790 | 1,000 | 1,250 | 1,240 | 438 |
| 15..... | 702 | 2,570 | 1,100 | 2,570 | 1,400 | 1,400 | 1,680 | 1,620 | 900 | 1,500 | 1,760 | 420 |
| 16..... | 612 | 4,040 | 1,460 | 2,030 | 1,180 | 1,240 | 1,790 | 1,400 | 1,400 | 1,700 | 1,970 | 711 |
| 17..... | 612 | 4,710 | 1,320 | 1,850 | 1,570 | 1,520 | 1,620 | 1,240 | 1,000 | 1,570 | 925 | 530 |
| 18..... | 570 | 4,260 | 1,300 | 1,680 | 1,620 | 1,270 | 1,570 | 1,080 | 750 | 1,050 | 925 | 570 |
| 19..... | 530 | 3,080 | 1,400 | 2,390 | 1,570 | 1,270 | 1,520 | 1,570 | 850 | 658 | 1,050 | 500 |
| 20..... | 510 | 2,570 | 1,740 | 2,350 | 1,520 | 1,240 | 1,460 | 1,850 | 850 | 975 | 1,180 | 490 |
| 21..... | 470 | 2,270 | 1,680 | 1,910 | 1,400 | 1,270 | 1,790 | 1,460 | 700 | 1,520 | 925 | 438 |
| 22..... | 590 | 1,790 | 1,300 | 1,680 | 1,270 | 3,080 | 1,680 | 2,690 | 700 | 1,200 | 925 | 430 |
| 23..... | 570 | 1,460 | 1,620 | 1,570 | 1,050 | 3,480 | 1,850 | 4,340 | 1,200 | 1,900 | 1,020 | 570 |
| 24..... | 510 | 1,050 | 1,460 | 1,400 | 1,460 | 2,630 | 2,210 | 2,820 | 1,050 | 1,170 | 750 | 530 |
| 25..... | 590 | 1,460 | 1,180 | 1,320 | 1,320 | 2,030 | 2,450 | 1,740 | 900 | 750 | 1,180 | 510 |
| 26..... | 570 | 1,210 | 1,600 | 1,240 | 1,380 | 1,680 | 2,330 | 1,740 | 750 | 2,500 | 925 | 490 |
| 27..... | 510 | 1,100 | 3,400 | 1,620 | 1,620 | 1,520 | 2,090 | 1,570 | 700 | 2,630 | 658 | 570 |
| 28..... | 470 | 1,050 | 3,680 | 1,380 | 1,740 | 1,460 | 2,030 | 1,520 | 800 | 2,920 | 490 | 602 |
| 29..... | 635 | 900 | 3,340 | 1,400 | ----- | 1,790 | 1,570 | 1,520 | 700 | 2,180 | 530 | 869 |
| 30..... | 750 | 1,050 | 2,820 | 1,300 | ----- | 1,970 | 1,520 | 1,600 | 1,000 | 1,460 | 510 | 646 |
| 31..... | 702 | ----- | 2,090 | 1,270 | ----- | 2,450 | ----- | 1,200 | ----- | 975 | 550 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 750 | 470 | 577 | 0.367 | 0.42 |
| November..... | 4,710 | 550 | 1,610 | 1.03 | 1.15 |
| December..... | 4,710 | 875 | 1,960 | 1.25 | 1.44 |
| January..... | 5,410 | 1,240 | 2,070 | 1.32 | 1.62 |
| February..... | 1,740 | 875 | 1,320 | .841 | .98 |
| March..... | 3,480 | 1,240 | 1,850 | 1.18 | 1.36 |
| April..... | 5,660 | 1,460 | 2,440 | 1.55 | 1.73 |
| May..... | 4,340 | 1,080 | 1,990 | 1.27 | 1.46 |
| June..... | ----- | ----- | 942 | .600 | .67 |
| July..... | 2,920 | 658 | 1,430 | .911 | 1.05 |
| August..... | 2,390 | 510 | 1,050 | .669 | .77 |
| September..... | 869 | 416 | 526 | .335 | .37 |
| The year..... | 5,660 | 416 | 1,480 | .943 | 12.82 |

LAKE MURRAY NEAR COLUMBIA, S. C.

LOCATION.—Water-stage recorder in intake tower about 200 feet above dam, 10 miles upstream from mouth of Saluda River, and 11 miles northwest of Columbia, Richland County. Gage set to mean sea level datum.

DRAINAGE AREA.—2,400 square miles.

RECORDS AVAILABLE.—August, 1929, to September, 1931.

EXTREMES.—Maximum gage height during year, 341.75 feet May 12; minimum, 327.44 feet Oct. 3.

1929–1931: Maximum gage height, that of May 12, 1931; minimum,

173.2 feet Aug. 31, 1929, when impounding of water started.

REMARKS.—Record excellent.

Daily gage height, in feet, 1930–31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 327.5 | 328.6 | 333.5 | 337.2 | 338.3 | 334.3 | 336.5 | 340.7 | 341.4 | 337.7 | 336.2 | 335.1 |
| 2..... | 327.5 | 328.6 | 333.6 | 337.2 | 338.2 | 334.4 | 337.0 | 340.7 | 341.2 | 337.5 | 336.2 | 334.6 |
| 3..... | 327.4 | 328.6 | 333.7 | 333.2 | 337.9 | 334.5 | 337.3 | 340.8 | 341.0 | 337.4 | 336.2 | 334.4 |
| 4..... | 327.5 | 328.8 | 333.7 | 337.2 | 337.6 | 334.6 | 337.5 | 340.9 | 340.8 | 337.3 | 336.1 | 334.0 |
| 5..... | 327.5 | 328.8 | 333.8 | 337.1 | 337.2 | 334.6 | 337.9 | 340.9 | 340.6 | 337.4 | 336.0 | 333.8 |
| 6..... | 327.5 | 329.0 | 333.9 | 337.2 | 336.8 | 334.5 | 338.3 | 341.0 | 340.5 | 337.5 | 335.9 | 333.6 |
| 7..... | 327.5 | 329.0 | 334.2 | 337.2 | 336.5 | 334.4 | 338.6 | 341.0 | 340.4 | 337.5 | 335.8 | 333.4 |
| 8..... | 327.5 | 329.1 | 334.5 | 337.2 | 336.2 | 334.6 | 338.8 | 341.0 | 340.3 | 337.4 | 335.7 | 333.0 |
| 9..... | 327.6 | 329.2 | 334.8 | 337.3 | 336.0 | 334.8 | 339.0 | 341.2 | 340.0 | 337.3 | 335.8 | 332.7 |
| 10..... | 327.6 | 329.2 | 335.0 | 337.3 | 335.6 | 334.8 | 339.2 | 341.5 | 339.8 | 337.2 | 335.8 | 332.8 |
| 11..... | 327.7 | 329.3 | 335.1 | 337.4 | 335.3 | 334.8 | 339.3 | 341.7 | 339.5 | 337.1 | 335.8 | 331.9 |
| 12..... | 327.7 | 329.3 | 335.2 | 337.6 | 335.0 | 334.8 | 339.4 | 341.7 | 339.3 | 337.2 | 335.8 | 331.7 |
| 13..... | 327.7 | 329.6 | 335.3 | 338.0 | 334.9 | 334.8 | 339.6 | 341.7 | 339.1 | 337.1 | 336.0 | 331.6 |
| 14..... | 327.8 | 329.8 | 335.4 | 338.3 | 334.9 | 334.8 | 339.6 | 341.6 | 339.1 | 337.0 | 336.0 | 331.5 |
| 15..... | 327.9 | 330.1 | 335.5 | 338.4 | 335.0 | 334.9 | 339.7 | 341.6 | 339.2 | 336.8 | 336.1 | 331.3 |
| 16..... | 328.0 | 330.6 | 335.5 | 338.4 | 335.0 | 335.0 | 339.8 | 341.5 | 339.1 | 336.7 | 336.2 | 331.2 |
| 17..... | 328.0 | 331.3 | 335.5 | 338.4 | 334.9 | 334.9 | 339.8 | 341.6 | 339.1 | 336.6 | 336.2 | 331.1 |
| 18..... | 328.0 | 331.8 | 335.5 | 338.5 | 334.8 | 334.9 | 339.9 | 341.5 | 339.0 | 336.5 | 336.2 | 330.9 |
| 19..... | 328.1 | 332.1 | 335.5 | 338.7 | 334.8 | 334.9 | 340.0 | 341.3 | 338.9 | 336.4 | 336.1 | 330.8 |
| 20..... | 328.1 | 332.4 | 335.6 | 338.8 | 334.7 | 334.9 | 340.1 | 341.0 | 338.9 | 336.3 | 336.1 | 330.8 |
| 21..... | 328.1 | 332.6 | 335.7 | 338.7 | 334.6 | 334.8 | 340.1 | 340.9 | 338.9 | 336.2 | 336.1 | 330.7 |
| 22..... | 328.1 | 332.7 | 335.8 | 338.6 | 334.7 | 335.2 | 340.2 | 340.9 | 338.8 | 336.2 | 336.2 | 330.6 |
| 23..... | 328.1 | 332.8 | 335.9 | 338.6 | 334.7 | 335.5 | 340.2 | 341.0 | 338.7 | 336.2 | 336.2 | 330.4 |
| 24..... | 328.1 | 333.0 | 336.0 | 338.5 | 334.6 | 335.6 | 340.3 | 341.2 | 338.6 | 336.1 | 336.2 | 330.2 |
| 25..... | 328.2 | 333.2 | 336.0 | 338.6 | 334.4 | 335.8 | 340.4 | 341.3 | 338.4 | 336.0 | 336.2 | 330.0 |
| 26..... | 328.2 | 333.2 | 336.2 | 338.6 | 334.4 | 335.8 | 340.6 | 341.2 | 338.3 | 336.1 | 336.2 | 330.0 |
| 27..... | 328.2 | 333.3 | 336.5 | 338.5 | 334.2 | 335.8 | 340.7 | 341.2 | 338.1 | 336.3 | 336.2 | 330.0 |
| 28..... | 328.2 | 333.3 | 336.8 | 338.4 | 334.2 | 335.8 | 340.7 | 341.3 | 338.0 | 336.3 | 336.0 | 329.8 |
| 29..... | 328.3 | 333.4 | 337.0 | 338.4 | ----- | 336.0 | 340.7 | 341.3 | 337.8 | 336.3 | 335.9 | 329.6 |
| 30..... | 328.5 | 333.4 | 337.2 | 338.3 | ----- | 336.1 | 340.7 | 341.3 | 337.8 | 336.3 | 335.7 | 329.4 |
| 31..... | 328.6 | ----- | 337.2 | 338.3 | ----- | 336.2 | ----- | 341.3 | ----- | 336.3 | 335.5 | ----- |

SALUDA RIVER NEAR COLUMBIA, S. C.

LOCATION.—Water-stage recorder a quarter of a mile upstream from site of old Saluda mill and 2 miles upstream from mouth, at Columbia, Richland County. Zero of gage is 150.32 feet above mean sea level.

DRAINAGE AREA.—2,450 square miles.

RECORDS AVAILABLE.—August, 1925, to September, 1931.

EXTREMES.—Maximum discharge during year, 9,590 second-feet Sept. 11 (gage height, 5.86 feet); minimum, 27 second-feet Nov. 11.

1925-1931: Maximum discharge, 67,000 second-feet Oct. 2, 1929 (gage height, 15.22 feet); minimum discharge, 11 second-feet July 13, 1930.

REMARKS.—Records good. Regulation from storage and power plant operations at Lake Murray.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 504 | 57 | 506 | 2,880 | 1,480 | 143 | 1,720 | 1,680 | 3,150 | 3,390 | 1,200 | 6,210 |
| 2..... | 1,150 | 89 | 584 | 2,960 | 5,150 | 1,170 | 937 | 784 | 4,700 | 3,560 | 68 | 5,690 |
| 3..... | 423 | 136 | 616 | 2,580 | 7,460 | 1,580 | 745 | 133 | 4,660 | 3,620 | 1,840 | 5,020 |
| 4..... | 106 | 122 | 593 | 1,510 | 7,460 | 1,750 | 192 | 1,680 | 4,590 | 2,670 | 2,700 | 5,870 |
| 5..... | 66 | 105 | 897 | 2,760 | 7,740 | 3,600 | 331 | 2,160 | 4,200 | 2,030 | 2,440 | 3,450 |
| 6..... | 40 | 70 | 249 | 2,590 | 7,710 | 3,390 | 866 | 2,530 | 2,820 | 2,410 | 2,460 | 2,600 |
| 7..... | 249 | 48 | 144 | 2,840 | 6,340 | 2,050 | 740 | 2,310 | 1,970 | 2,760 | 2,380 | 5,140 |
| 8..... | 94 | 52 | 584 | 3,110 | 4,200 | 133 | 726 | 1,470 | 4,660 | 3,130 | 681 | 5,690 |
| 9..... | 42 | 56 | 672 | 2,810 | 6,660 | 1,110 | 708 | 300 | 5,690 | 3,590 | 70 | 6,270 |
| 10..... | 34 | 38 | 714 | 1,250 | 7,790 | 1,770 | 628 | 201 | 5,230 | 3,460 | 1,900 | 5,880 |
| 11..... | 35 | 30 | 481 | 639 | 6,100 | 1,930 | 167 | 2,650 | 5,490 | 1,890 | 2,080 | 6,360 |
| 12..... | 34 | 48 | 434 | 2,880 | 5,330 | 1,880 | 81 | 3,360 | 4,600 | 844 | 962 | 3,280 |
| 13..... | 32 | 169 | 150 | 3,480 | 5,030 | 1,870 | 487 | 3,660 | 2,000 | 2,860 | 1,800 | 844 |
| 14..... | 99 | 136 | 70 | 3,730 | 2,720 | 1,200 | 781 | 3,680 | 246 | 3,480 | 950 | 2,520 |
| 15..... | 65 | 124 | 547 | 3,190 | 141 | 100 | 789 | 3,530 | 1,960 | 3,500 | 142 | 2,690 |
| 16..... | 47 | 292 | 1,540 | 3,300 | 2,970 | 1,040 | 962 | 1,630 | 1,880 | 3,630 | 285 | 2,770 |
| 17..... | 28 | 267 | 1,700 | 1,700 | 4,060 | 1,850 | 893 | 118 | 1,820 | 3,580 | 2,490 | 2,500 |
| 18..... | 34 | 127 | 1,480 | 178 | 4,020 | 1,870 | 188 | 4,620 | 2,170 | 2,850 | 1,660 | 2,390 |
| 19..... | 35 | 118 | 1,480 | 3,290 | 3,440 | 1,820 | 198 | 6,820 | 2,190 | 2,040 | 1,690 | 946 |
| 20..... | 29 | 79 | 1,350 | 4,110 | 3,350 | 1,910 | 2,090 | 7,290 | 991 | 2,810 | 1,740 | 419 |
| 21..... | 147 | 96 | 438 | 3,990 | 1,840 | 1,190 | 1,910 | 4,150 | 227 | 2,440 | 1,330 | 1,980 |
| 22..... | 65 | 96 | 624 | 3,790 | 119 | 325 | 1,700 | 2,340 | 2,200 | 2,460 | 150 | 2,910 |
| 23..... | 42 | 81 | 948 | 3,120 | 3,040 | 1,160 | 1,030 | 330 | 3,450 | 2,490 | 54 | 2,730 |
| 24..... | 34 | 57 | 532 | 1,560 | 4,170 | 1,760 | 1,380 | 87 | 3,560 | 2,560 | 407 | 2,900 |
| 25..... | 62 | 45 | 395 | 625 | 4,160 | 1,860 | 340 | 1,940 | 3,450 | 1,740 | 611 | 2,580 |
| 26..... | 45 | 68 | 280 | 3,010 | 3,850 | 1,970 | 118 | 3,400 | 3,600 | 646 | 816 | 1,230 |
| 27..... | 28 | 84 | 486 | 3,040 | 4,060 | 1,950 | 1,340 | 3,480 | 3,120 | 2,520 | 1,840 | 59 |
| 28..... | 34 | 54 | 136 | 2,440 | 2,080 | 1,170 | 2,510 | 2,470 | 2,350 | 2,890 | 3,400 | 2,870 |
| 29..... | 45 | 38 | 710 | 3,580 | ----- | 132 | 2,270 | 2,160 | 3,190 | 2,460 | 2,690 | 3,650 |
| 30..... | 92 | 54 | 1,630 | 2,110 | ----- | 1,110 | 1,950 | 454 | 3,450 | 2,400 | 2,820 | 3,700 |
| 31..... | 89 | ----- | 1,650 | 303 | ----- | 1,760 | ----- | 94 | ----- | 2,400 | 6,330 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 1,150 | 28 | 124 | 0.051 | 0.06 |
| November..... | 292 | 30 | 94.5 | .039 | .04 |
| December..... | 1,700 | 70 | 730 | .298 | .34 |
| January..... | 4,110 | 178 | 2,560 | 1.04 | 1.20 |
| February..... | 7,790 | 119 | 4,370 | 1.78 | 1.85 |
| March..... | 3,600 | 100 | 1,500 | .612 | .71 |
| April..... | 2,510 | 81 | 959 | .391 | .44 |
| May..... | 7,290 | 87 | 2,310 | .943 | 1.09 |
| June..... | 5,690 | 227 | 3,120 | 1.27 | 1.42 |
| July..... | 3,630 | 646 | 2,680 | 1.09 | 1.26 |
| August..... | 6,330 | 54 | 1,610 | .657 | .78 |
| September..... | 6,360 | 59 | 3,370 | 1.38 | 1.54 |
| The year..... | 7,790 | 28 | 1,930 | .788 | 10.71 |

NOTE.—The monthly discharge in second-feet per square mile and run-off in inches shown by the table do not represent the natural flow from the basin because of storage in Lake Murray.

REEDY RIVER NEAR PRINCETON, S. C.

LOCATION.—Chain gage at highway bridge 200 feet downstream from National Utilities hydroelectric plant and 5 miles east of Princeton, Laurens County.

DRAINAGE AREA.—215 square miles.

RECORDS AVAILABLE.—October, 1929, to September, 1931 (discontinued).

EXTREMES.—Maximum discharge during year, 1,780 second-feet May 22 (gage height, 8.10 feet); minimum, about 2 second-feet Nov. 3 (gage height, 0.13 foot).

1929-1931: Maximum discharge, 4,840 second-feet Oct. 22, 1929 (gage height, 13.49 feet); minimum, about 2 second-feet July 19, 1930 Nov. 3, 1931.

Maximum stage known, 34.6 feet during flood of August, 1908 (discharge, about 28,000 second-feet).

REMARKS.—Records fair. Discharge estimated for Nov. 16-19. Some regulation caused by operation of power plant above station.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-------|-------|------|-------|-------|
| 1..... | 268 | 62 | 327 | 287 | 158 | 367 | 601 | 166 | 102 | 175 | 108 | 151 |
| 2..... | 268 | 5 | 927 | 249 | 158 | 347 | 492 | 220 | 44 | 34 | 167 | 366 |
| 3..... | 268 | 3 | 327 | 268 | 202 | 268 | 347 | 347 | 23 | 22 | 151 | 35 |
| 4..... | 10 | 4 | 347 | 220 | 202 | 268 | 367 | 166 | 22 | 36 | 159 | 159 |
| 5..... | 17 | 287 | 327 | 268 | 184 | 249 | 691 | 249 | 23 | 406 | 159 | 122 |
| 6..... | 86 | 287 | 808 | 601 | 166 | 220 | 579 | 79 | 32 | 144 | 144 | 34 |
| 7..... | 75 | 287 | 579 | 408 | 104 | 220 | 429 | 513 | 129 | 426 | 366 | 34 |
| 8..... | 75 | 268 | 408 | 327 | 84 | 367 | 347 | 579 | 78 | 309 | 144 | 115 |
| 9..... | 64 | 36 | 287 | 367 | 134 | 347 | 287 | 623 | 22 | 144 | 290 | 46 |
| 10..... | 28 | 492 | 249 | 307 | 220 | 307 | 268 | 450 | 32 | 39 | 72 | 33 |
| 11..... | 80 | 249 | 240 | 268 | 184 | 249 | 287 | 287 | 29 | 271 | 406 | 49 |
| 12..... | 5 | 17 | 230 | 387 | 158 | 240 | 287 | 249 | 18 | 30 | 271 | 175 |
| 13..... | 42 | 367 | 408 | 535 | 175 | 220 | 268 | 64 | 309 | 144 | 235 | 24 |
| 14..... | 39 | 307 | 166 | 327 | 175 | 220 | 327 | 30 | 347 | 28 | 217 | 34 |
| 15..... | 268 | 535 | 367 | 327 | 220 | 166 | 367 | 26 | 51 | 200 | 446 | 347 |
| 16..... | 193 | 550 | 387 | 268 | 579 | 184 | 13 | 104 | 28 | 144 | 144 | 167 |
| 17..... | 166 | 400 | 158 | 268 | 249 | 202 | 175 | 111 | 47 | 35 | 40 | 271 |
| 18..... | 44 | 300 | 158 | 268 | 249 | 184 | 166 | 11 | 46 | 192 | 42 | 235 |
| 19..... | 3 | 200 | 193 | 287 | 249 | 158 | 166 | 8 | 34 | 175 | 446 | 217 |
| 20..... | 71 | 126 | 175 | 287 | 230 | 158 | 166 | 15 | 46 | 406 | 328 | 43 |
| 21..... | 63 | 268 | 166 | 249 | 166 | 184 | 175 | 880 | 39 | 122 | 309 | 41 |
| 22..... | 59 | 268 | 268 | 240 | 158 | 367 | 240 | 1,210 | 144 | 591 | 144 | 39 |
| 23..... | 66 | 193 | 211 | 193 | 111 | 387 | 367 | 549 | 144 | 208 | 36 | 43 |
| 24..... | 19 | 268 | 184 | 193 | 184 | 287 | 268 | 200 | 38 | 108 | 52 | 38 |
| 25..... | 97 | 327 | 118 | 184 | 249 | 249 | 193 | 136 | 27 | 102 | 56 | 34 |
| 26..... | 4 | 347 | 287 | 202 | 287 | 220 | 193 | 54 | 29 | 151 | 175 | 347 |
| 27..... | 68 | 367 | 668 | 249 | 249 | 211 | 158 | 129 | 26 | 528 | 328 | 38 |
| 28..... | 74 | 268 | 645 | 211 | 287 | 211 | 175 | 72 | 47 | 347 | 151 | 235 |
| 29..... | 78 | 327 | 450 | 220 | ----- | 408 | 71 | 62 | 31 | 208 | 115 | 102 |
| 30..... | 79 | 13 | 387 | 184 | ----- | 347 | 56 | 129 | 151 | 108 | 40 | 151 |
| 31..... | 268 | ----- | 287 | 150 | ----- | 307 | ----- | 136 | ----- | 144 | ----- | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 268 | 3 | 95.0 | 0.442 | 0.51 |
| November..... | ----- | 3 | 248 | 1.15 | 1.28 |
| December..... | 808 | 118 | 327 | 1.52 | 1.75 |
| January..... | 601 | 150 | 284 | 1.32 | 1.52 |
| February..... | 579 | 84 | 206 | .958 | 1.00 |
| March..... | 408 | 168 | 262 | 1.22 | 1.41 |
| April..... | 691 | 13 | 284 | 1.32 | 1.47 |
| May..... | 1,210 | 8 | 253 | 1.18 | 1.36 |
| June..... | 347 | 18 | 71.3 | .332 | .37 |
| July..... | 591 | 22 | 202 | .940 | 1.08 |
| August..... | 446 | 36 | 190 | .884 | 1.02 |
| September..... | 366 | 24 | 124 | .577 | .64 |
| The year..... | 1,210 | 3 | 213 | .991 | 13.41 |

EDISTO RIVER BASIN

SOUTH FORK OF EDISTO RIVER NEAR DENMARK, S. C.

LOCATION.—Chain gage at state highway bridge 200 feet downstream from Seaboard Air Line railway bridge, $1\frac{1}{2}$ miles downstream from mouth of Little River, and $4\frac{1}{4}$ miles north of Denmark, Bamberg County.

DRAINAGE AREA.—720 square miles.

RECORDS AVAILABLE.—August to September, 1931.

EXTREMES.—Maximum discharge during period, 575 second-feet Aug. 12, 16–19 (gage height, 5.9 feet); minimum, 265 second-feet Sept. 26 (gage height, 4.10 feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1931

| Day | Aug. | Sept. | Day | Aug. | Sept. | Day | Aug. | Sept. |
|------------------|------|-------|---------|---------|-------|-----------------|-------------------|-------|
| 1..... | | 412 | 11..... | 550 | 300 | 21..... | 491 | 279 |
| 2..... | | 378 | 12..... | 575 | 293 | 22..... | 446 | 286 |
| 3..... | | 354 | 13..... | 550 | 293 | 23..... | 437 | 286 |
| 4..... | 362 | 346 | 14..... | 550 | 300 | 24..... | 428 | 279 |
| 5..... | 346 | 330 | 15..... | 550 | 293 | 25..... | 437 | 279 |
| 6..... | 403 | 323 | 16..... | 575 | 293 | 26..... | 437 | 265 |
| 7..... | 510 | 323 | 17..... | 575 | 300 | 27..... | 446 | 428 |
| 8..... | 530 | 338 | 18..... | 575 | 300 | 28..... | 455 | 437 |
| 9..... | 530 | 323 | 19..... | 575 | 293 | 29..... | 473 | 412 |
| 10..... | 550 | 308 | 20..... | 530 | 279 | 30..... | 473 | 428 |
| | | | | | | 31..... | 446 | ----- |
| Month | | | Maximum | Minimum | Mean | Per square mile | Run-off in inches | |
| August 4–31..... | | | 575 | 346 | 493 | 0.685 | 0.71 | |
| September..... | | | 437 | 265 | 325 | .451 | .50 | |

SAVANNAH RIVER BASIN

SAVANNAH RIVER NEAR CALHOUN FALLS, S. C.

LOCATION.—Water-stage recorder 150 feet above highway bridge, 1 mile below Seaboard Air Line railway bridge, and 3 miles southwest of Calhoun Falls, Abbeville County.

DRAINAGE AREA.—2,876 square miles.

RECORDS AVAILABLE.—August, 1896, to December, 1903; March, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 15,800 second-feet Apr. 23 (gage height, 4.22 feet); minimum, 1,110 second-feet Oct. 13, 21 (gage height, 0.77 foot).

1896-1903, 1930-31: Maximum discharge, about 75,200 second-feet Feb. 14, 1900 (gage height, 19.4 feet, old datum); minimum discharge, 1,100 second-feet Sept. 1, 1930 (gage height, 0.74 foot).

REMARKS.—Slight regulation caused by operation of power plant upstream. Records collected by the Commonwealth & Southern Corporation, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

Daily and monthly discharge, in second-feet, of 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|--------|--------|--------|-------|-------|--------|--------|-------|-------|-------|-------|
| 1..... | 2,140 | 2,260 | 2,530 | 4,430 | 2,450 | 6,260 | 7,720 | 3,700 | 2,340 | 2,220 | 2,450 | 1,570 |
| 2..... | 2,340 | 1,920 | 4,100 | 3,580 | 2,220 | 5,810 | 10,100 | 3,700 | 2,560 | 2,300 | 2,680 | 1,810 |
| 3..... | 2,060 | 1,380 | 3,940 | 3,520 | 2,330 | 5,180 | 6,770 | 4,240 | 3,130 | 2,300 | 1,880 | 1,970 |
| 4..... | 2,260 | 2,450 | 3,630 | 3,200 | 2,820 | 4,770 | 6,500 | 4,050 | 2,910 | 2,180 | 1,700 | 2,430 |
| 5..... | 1,880 | 2,960 | 3,370 | 3,260 | 2,950 | 4,220 | 10,300 | 2,630 | 2,300 | 2,300 | 2,270 | 2,440 |
| 6..... | 1,710 | 2,970 | 8,540 | 10,200 | 2,950 | 4,400 | 7,940 | 5,720 | 2,550 | 2,920 | 2,530 | 2,180 |
| 7..... | 1,550 | 2,540 | 14,900 | 7,480 | 2,690 | 4,220 | 7,370 | 7,290 | 2,450 | 3,860 | 5,820 | 1,350 |
| 8..... | 2,650 | 2,170 | 7,930 | 5,060 | 2,330 | 4,220 | 5,960 | 10,700 | 2,260 | 2,520 | 5,270 | 1,320 |
| 9..... | 2,300 | 1,830 | 5,620 | 4,590 | 2,110 | 4,040 | 5,940 | 8,360 | 2,420 | 2,130 | 3,020 | 2,110 |
| 10..... | 2,620 | 1,650 | 4,970 | 5,390 | 2,330 | 4,040 | 5,760 | 8,170 | 2,570 | 2,560 | 2,000 | 2,970 |
| 11..... | 2,540 | 2,190 | 4,770 | 4,180 | 2,820 | 4,040 | 5,240 | 5,220 | 2,500 | 3,370 | 2,130 | 2,680 |
| 12..... | 2,250 | 2,660 | 4,400 | 4,200 | 3,090 | 3,870 | 4,840 | 4,770 | 2,450 | 3,100 | 3,540 | 2,710 |
| 13..... | 1,400 | 4,540 | 4,220 | 5,760 | 2,950 | 3,540 | 3,590 | 4,770 | 2,740 | 1,900 | 4,850 | 2,150 |
| 14..... | 2,400 | 4,040 | 3,700 | 6,020 | 2,690 | 3,240 | 4,200 | 4,400 | 2,680 | 1,880 | 4,050 | 1,260 |
| 15..... | 2,650 | 5,660 | 3,090 | 5,180 | 2,950 | 1,910 | 4,010 | 4,400 | 2,330 | 6,320 | 4,850 | 1,820 |
| 16..... | 2,540 | 9,440 | 3,090 | 4,170 | 3,240 | 2,740 | 4,220 | 4,400 | 3,020 | 4,690 | 2,620 | 2,540 |
| 17..... | 2,800 | 11,800 | 3,390 | 3,700 | 3,090 | 2,570 | 3,700 | 3,870 | 3,340 | 3,430 | 1,930 | 2,310 |
| 18..... | 2,680 | 8,740 | 3,700 | 3,700 | 3,540 | 2,820 | 4,220 | 3,090 | 3,090 | 2,710 | 2,360 | 2,200 |
| 19..... | 2,370 | 7,620 | 3,870 | 3,700 | 4,220 | 3,390 | 4,040 | 2,950 | 2,720 | 2,890 | 3,250 | 1,850 |
| 20..... | 1,600 | 5,000 | 3,700 | 3,870 | 4,040 | 3,390 | 3,870 | 3,390 | 2,410 | 2,180 | 2,710 | 1,880 |
| 21..... | 1,490 | 4,280 | 3,700 | 3,700 | 3,700 | 3,390 | 4,400 | 3,540 | 2,100 | 2,350 | 2,800 | 1,280 |
| 22..... | 2,560 | 3,330 | 3,390 | 3,700 | 3,700 | 4,040 | 5,600 | 3,700 | 1,930 | 3,480 | 2,730 | 1,170 |
| 23..... | 2,470 | 3,220 | 3,240 | 3,540 | 3,090 | 3,700 | 13,600 | 3,700 | 2,560 | 2,990 | 3,170 | 1,850 |
| 24..... | 2,510 | 2,180 | 3,240 | 3,390 | 2,820 | 3,870 | 9,120 | 3,540 | 2,760 | 2,240 | 3,060 | 2,910 |
| 25..... | 2,380 | 2,790 | 2,750 | 3,090 | 3,390 | 3,540 | 6,720 | 3,090 | 2,620 | 2,340 | 2,180 | 2,780 |
| 26..... | 2,090 | 3,680 | 3,540 | 2,820 | 6,030 | 3,770 | 5,340 | 2,820 | 2,910 | 2,680 | 2,120 | 3,150 |
| 27..... | 2,040 | 3,150 | 9,290 | 2,950 | 4,970 | 2,980 | 4,040 | 3,530 | 3,250 | 3,450 | 2,390 | 2,720 |
| 28..... | 1,900 | 2,600 | 7,960 | 3,090 | 4,970 | 3,640 | 4,770 | 4,410 | 2,450 | 3,360 | 2,170 | 1,550 |
| 29..... | 3,410 | 2,290 | 5,080 | 3,390 | ----- | 6,140 | 4,220 | 3,520 | 1,710 | 2,720 | 2,330 | 1,870 |
| 30..... | 3,240 | 2,980 | 4,430 | 3,390 | ----- | 5,780 | 3,870 | 3,320 | 1,700 | 2,720 | 2,150 | 2,500 |
| 31..... | 2,740 | ----- | 4,430 | 2,990 | ----- | 4,910 | ----- | 2,850 | ----- | 2,460 | 1,470 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 3,410 | 1,400 | 2,310 | 0.803 | 0.93 |
| November..... | 11,800 | 1,380 | 3,790 | 1.33 | 1.47 |
| December..... | 14,900 | 2,630 | 4,790 | 1.67 | 1.92 |
| January..... | 10,200 | 2,820 | 4,240 | 1.47 | 1.70 |
| February..... | 6,030 | 2,110 | 3,230 | 1.12 | 1.17 |
| March..... | 6,260 | 1,910 | 4,010 | 1.39 | 1.60 |
| April..... | 13,600 | 3,590 | 5,930 | 2.07 | 2.30 |
| May..... | 10,700 | 2,820 | 4,500 | 1.56 | 1.80 |
| June..... | 3,340 | 1,700 | 2,570 | .804 | 1.00 |
| July..... | 6,320 | 1,820 | 2,850 | .991 | 1.14 |
| August..... | 5,820 | 1,470 | 2,850 | .991 | 1.14 |
| September..... | 3,150 | 1,170 | 2,110 | .734 | .82 |
| The year..... | 14,900 | 1,170 | 3,600 | 1.25 | 16.99 |

SAVANNAH RIVER AT AUGUSTA, GA.

LOCATION.—Staff gage at Center Street Bridge in Augusta, Richmond County.

Water-stage recorder at same location used prior to Oct. 15, 1930. Zero of gage is 103.83 feet above mean sea level.

DRAINAGE AREA.—7,304 square miles.

RECORDS AVAILABLE.—January, 1884, to December, 1891; January, 1899, to December, 1906; June, 1927, to September, 1931.

EXTREMES.—Maximum discharge during year, 26,100 second-feet Nov. 17 (gage height, 19.9 feet); minimum, 1,000 second-feet Sept. 24 (gage height, 5.3 feet).

1884-1891, 1899-1906, 1927-1931: Maximum discharge, about 350,000 second-feet Oct. 3, 1929; maximum gage height, 46.3 feet Sept. 27, 1929; minimum discharge, 890 second-feet Aug. 29, Sept. 26, 29, 30. Oct. 3, 23, 30, 1927 (gage height, 4.40 feet).

REMARKS.—Slight regulation caused by operation of power plants upstream. Records collected by the Commonwealth & Southern Corporation, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 1..... | 2,950 | 5,000 | 2,870 | 7,700 | 5,000 | 11,500 | 14,500 | 6,610 | 4,500 | 2,500 | 2,990 | 2,500 |
| 2..... | 2,750 | 2,740 | 4,660 | 7,150 | 5,540 | 13,700 | 22,200 | 9,700 | 3,770 | 3,240 | 2,870 | 1,610 |
| 3..... | 2,860 | 1,810 | 7,150 | 6,970 | 5,000 | 13,200 | 20,900 | 6,070 | 3,240 | 4,660 | 4,500 | 2,270 |
| 4..... | 5,050 | 3,110 | 6,250 | 5,900 | 5,000 | 11,500 | 12,800 | 8,960 | 5,000 | 3,240 | 3,240 | 2,500 |
| 5..... | 2,650 | 3,370 | 6,610 | 7,520 | 6,070 | 7,880 | 14,100 | 9,700 | 4,040 | 4,040 | 2,990 | 2,270 |
| 6..... | 2,140 | 4,830 | 8,240 | 8,600 | 5,900 | 7,880 | 21,100 | 12,300 | 3,770 | 4,830 | 3,770 | 3,240 |
| 7..... | 2,590 | 5,000 | 15,900 | 13,400 | 5,720 | 8,240 | 15,600 | 18,000 | 3,510 | 5,360 | 3,770 | 2,500 |
| 8..... | 2,710 | 4,830 | 24,100 | 13,700 | 4,660 | 8,420 | 11,500 | 20,700 | 3,770 | 5,360 | 6,070 | 2,390 |
| 9..... | 2,770 | 3,110 | 14,500 | 11,500 | 5,000 | 10,300 | 11,200 | 20,900 | 3,510 | 3,770 | 7,520 | 1,810 |
| 10..... | 4,200 | 2,270 | 9,700 | 10,800 | 4,340 | 9,700 | 9,700 | 18,900 | 3,370 | 3,640 | 4,660 | 2,030 |
| 11..... | 4,600 | 2,740 | 8,600 | 9,700 | 5,720 | 7,700 | 7,880 | 19,800 | 3,370 | 4,340 | 3,640 | 2,990 |
| 12..... | 3,030 | 3,110 | 8,600 | 8,960 | 6,610 | 6,970 | 7,330 | 12,300 | 4,040 | 7,520 | 3,240 | 3,110 |
| 13..... | 3,280 | 8,240 | 7,330 | 22,600 | 5,720 | 6,070 | 10,800 | 10,800 | 3,510 | 4,660 | 5,360 | 3,240 |
| 14..... | 3,030 | 11,200 | 3,900 | 22,900 | 8,600 | 6,610 | 7,880 | 8,960 | 3,510 | 3,900 | 7,150 | 3,240 |
| 15..... | 3,640 | 11,500 | 4,660 | 15,400 | 10,800 | 6,250 | 6,070 | 6,430 | 3,640 | 3,110 | 5,540 | 2,030 |
| 16..... | 2,990 | 13,000 | 5,000 | 8,240 | 7,150 | 6,430 | 6,610 | 7,150 | 4,340 | 9,140 | 8,960 | 1,810 |
| 17..... | 3,770 | 24,300 | 7,520 | 7,880 | 8,420 | 5,360 | 6,790 | 7,150 | 4,500 | 6,790 | 4,040 | 3,110 |
| 18..... | 4,040 | 25,000 | 8,240 | 9,140 | 7,150 | 5,360 | 6,430 | 6,070 | 5,000 | 5,000 | 3,640 | 2,990 |
| 19..... | 3,640 | 19,600 | 8,780 | 15,200 | 8,060 | 6,070 | 6,790 | 5,000 | 5,000 | 4,040 | 3,770 | 2,500 |
| 20..... | 2,500 | 14,800 | 9,140 | 13,400 | 8,240 | 5,720 | 8,240 | 6,070 | 3,370 | 4,660 | 5,000 | 2,270 |
| 21..... | 2,990 | 9,330 | 6,430 | 11,900 | 6,610 | 6,070 | 6,970 | 7,880 | 3,770 | 4,040 | 5,360 | 2,500 |
| 22..... | 2,390 | 7,150 | 6,790 | 9,330 | 6,790 | 8,780 | 8,960 | 6,970 | 3,240 | 4,040 | 5,720 | 1,920 |
| 23..... | 3,240 | 3,640 | 8,240 | 8,060 | 6,070 | 11,500 | 8,600 | 10,100 | 2,990 | 7,520 | 3,770 | 1,510 |
| 24..... | 3,770 | 5,720 | 9,510 | 7,350 | 5,000 | 10,300 | 17,800 | 6,070 | 2,990 | 5,720 | 3,240 | 1,420 |
| 25..... | 3,900 | 5,180 | 5,720 | 6,070 | 7,700 | 6,790 | 12,800 | 5,000 | 3,900 | 3,770 | 4,340 | 2,990 |
| 26..... | 2,740 | 5,180 | 5,000 | 6,070 | 11,200 | 6,970 | 9,330 | 4,340 | 3,770 | 3,770 | 3,240 | 2,990 |
| 27..... | 2,620 | 6,430 | 10,800 | 6,250 | 11,500 | 6,790 | 10,800 | 5,540 | 2,990 | 4,340 | 2,870 | 3,640 |
| 28..... | 2,990 | 6,430 | 13,000 | 6,610 | 11,500 | 8,240 | 6,070 | 6,610 | 4,660 | 5,000 | 3,110 | 3,770 |
| 29..... | 3,240 | 6,430 | 14,500 | 6,430 | ----- | 5,000 | 6,790 | 6,430 | 3,770 | 5,000 | 3,510 | 2,270 |
| 30..... | 5,360 | 3,770 | 12,300 | 6,790 | ----- | 10,400 | 6,790 | 5,000 | 2,990 | 4,660 | 2,030 | 1,610 |
| 31..... | 5,360 | ----- | 8,600 | 6,430 | ----- | 11,200 | ----- | 4,660 | ----- | 4,660 | 3,510 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|--------|-----------------|-------------------|
| October..... | 5,360 | 2,140 | 3,350 | 0.459 | 0.53 |
| November..... | 25,000 | 1,810 | 7,630 | 1.04 | 1.16 |
| December..... | 24,100 | 2,870 | 8,790 | 1.20 | 1.38 |
| January..... | 22,900 | 5,900 | 9,930 | 1.36 | 1.67 |
| February..... | 11,500 | 4,340 | 6,970 | .954 | .99 |
| March..... | 13,700 | 5,000 | 8,290 | 1.13 | 1.30 |
| April..... | 22,200 | 6,070 | 10,800 | 1.48 | 1.65 |
| May..... | 20,900 | 4,340 | 9,360 | 1.28 | 1.48 |
| June..... | 5,000 | 2,990 | 3,790 | .519 | .58 |
| July..... | 9,140 | 2,500 | 4,720 | .646 | .74 |
| August..... | 8,960 | 2,030 | 4,300 | .589 | .68 |
| September..... | 3,770 | 1,420 | 2,500 | .342 | .38 |
| The year..... | 25,000 | 1,420 | 6,700 | .917 | 12.44 |

BROAD RIVER NEAR BELL, GA.

LOCATION.—Staff gage at bridge on Elberton-Washington road half a mile below mouth of Long Creek and 1 mile southeast of Bell, Elbert County. Zero of gage is 356.30 feet above mean sea level.

DRAINAGE AREA.—1,440 square miles.

RECORDS AVAILABLE.—November, 1926, to September, 1931.

EXTREMES.—Maximum discharge during year, 7,140 second-feet Nov. 17 (gage height, 12.03 feet); minimum, 303 second-feet Sept. 25.

1926–1931: Maximum discharge, about 47,200 second-feet Oct. 2, 1929 (gage height 34.8 feet). Minimum discharge, that of Sept. 25, 1931.

REMARKS.—Records collected by the Commonwealth & Southern Corporation under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

Daily and monthly discharge, in second-feet, 1930–31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 661 | 661 | 1,040 | 1,330 | 1,100 | 3,820 | 3,820 | 1,100 | 850 | 1,440 | 635 | 352 |
| 2..... | 555 | 635 | 1,040 | 1,330 | 1,100 | 2,960 | 4,840 | 1,270 | 1,040 | 1,330 | 661 | 352 |
| 3..... | 555 | 635 | 877 | 1,330 | 1,100 | 2,050 | 2,180 | 1,500 | 931 | 931 | 823 | 377 |
| 4..... | 529 | 635 | 877 | 1,330 | 1,100 | 1,740 | 1,920 | 1,330 | 823 | 661 | 688 | 452 |
| 5..... | 529 | 715 | 1,100 | 1,380 | 1,040 | 1,560 | 3,440 | 1,560 | 769 | 608 | 452 | 452 |
| 6..... | 555 | 688 | 3,040 | 2,960 | 1,040 | 1,440 | 2,450 | 2,730 | 742 | 1,440 | 661 | 452 |
| 7..... | 529 | 688 | 6,120 | 1,980 | 988 | 1,620 | 2,050 | 3,980 | 715 | 1,390 | 1,440 | 452 |
| 8..... | 555 | 688 | 2,810 | 1,800 | 988 | 1,920 | 1,680 | 5,010 | 715 | 796 | 1,220 | 401 |
| 9..... | 555 | 661 | 1,560 | 1,800 | 988 | 1,440 | 1,620 | 2,810 | 715 | 688 | 877 | 377 |
| 10..... | 608 | 661 | 1,390 | 1,560 | 988 | 1,330 | 1,500 | 5,650 | 661 | 769 | 661 | 352 |
| 11..... | 715 | 823 | 1,330 | 1,500 | 988 | 1,330 | 1,440 | 2,590 | 688 | 796 | 796 | 328 |
| 12..... | 635 | 1,220 | 1,270 | 2,520 | 988 | 1,270 | 1,620 | 1,860 | 769 | 688 | 877 | 328 |
| 13..... | 608 | 2,250 | 1,330 | 3,590 | 988 | 1,220 | 1,500 | 1,680 | 931 | 608 | 1,920 | 352 |
| 14..... | 635 | 2,660 | 1,270 | 3,040 | 1,660 | 1,220 | 1,390 | 1,440 | 742 | 555 | 1,560 | 401 |
| 15..... | 635 | 2,520 | 1,270 | 2,380 | 1,620 | 1,160 | 1,330 | 1,270 | 931 | 608 | 1,980 | 582 |
| 16..... | 608 | 5,290 | 1,270 | 2,320 | 1,620 | 1,160 | 1,330 | 1,220 | 1,100 | 715 | 1,160 | 582 |
| 17..... | 582 | 6,600 | 1,270 | 2,180 | 1,860 | 1,100 | 1,270 | 1,160 | 1,860 | 796 | 688 | 401 |
| 18..... | 582 | 4,320 | 1,330 | 2,120 | 1,860 | 1,100 | 1,270 | 1,100 | 988 | 688 | 635 | 352 |
| 19..... | 582 | 2,180 | 1,330 | 1,920 | 1,620 | 1,100 | 1,390 | 1,040 | 742 | 608 | 988 | 352 |
| 20..... | 582 | 1,740 | 1,270 | 1,800 | 1,620 | 1,040 | 1,860 | 1,040 | 715 | 661 | 931 | 426 |
| 21..... | 582 | 1,500 | 1,270 | 1,620 | 1,620 | 1,040 | 1,560 | 1,330 | 661 | 1,160 | 688 | 529 |
| 22..... | 582 | 1,390 | 1,270 | 1,440 | 1,620 | 1,220 | 2,660 | 1,100 | 688 | 2,450 | 478 | 401 |
| 23..... | 582 | 1,220 | 1,270 | 1,440 | 1,390 | 1,390 | 3,900 | 988 | 635 | 1,330 | 635 | 352 |
| 24..... | 582 | 1,040 | 1,390 | 1,330 | 1,330 | 1,440 | 1,920 | 931 | 608 | 1,040 | 688 | 328 |
| 25..... | 582 | 988 | 1,620 | 1,270 | 1,920 | 1,330 | 1,560 | 877 | 635 | 1,220 | 555 | 303 |
| 26..... | 582 | 931 | 1,560 | 1,220 | 3,820 | 1,220 | 1,440 | 823 | 608 | 769 | 555 | 452 |
| 27..... | 582 | 931 | 1,500 | 1,160 | 2,660 | 1,220 | 1,390 | 715 | 608 | 1,220 | 503 | 555 |
| 28..... | 608 | 931 | 1,440 | 1,160 | 2,810 | 1,440 | 1,220 | 877 | 582 | 1,270 | 478 | 426 |
| 29..... | 661 | 877 | 1,390 | 1,160 | ----- | 1,920 | 1,160 | 988 | 582 | 1,980 | 401 | 352 |
| 30..... | 688 | 931 | 1,390 | 1,100 | ----- | 1,620 | 1,100 | 931 | 715 | 1,270 | 377 | 352 |
| 31..... | 715 | ----- | 1,440 | 1,100 | ----- | 2,180 | ----- | 850 | ----- | 661 | 352 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 715 | 529 | 598 | 0.415 | 0.48 |
| November..... | 6,600 | 635 | 1,570 | 1.09 | 1.22 |
| December..... | 6,120 | 877 | 1,560 | 1.08 | 1.24 |
| January..... | 3,590 | 1,100 | 1,770 | 1.23 | 1.42 |
| February..... | 3,820 | 988 | 1,510 | 1.05 | 1.09 |
| March..... | 3,820 | 1,040 | 1,540 | 1.07 | 1.23 |
| April..... | 4,840 | 1,100 | 1,930 | 1.34 | 1.50 |
| May..... | 5,650 | 715 | 1,670 | 1.16 | 1.34 |
| June..... | 1,860 | 582 | 792 | .550 | .61 |
| July..... | 2,450 | 555 | 1,000 | .694 | .80 |
| August..... | 1,980 | 352 | 818 | .568 | .65 |
| September..... | 582 | 303 | 406 | .282 | .31 |
| The year..... | 6,600 | 303 | 1,260 | .875 | 11.89 |

AUGUSTA CANAL NEAR AUGUSTA, GA.

LOCATION.—Two water-stage recorders at upper end of Augusta Canal. Upper gage is 1,000 feet below diversion dam, $1\frac{1}{4}$ miles downstream from Stevens Creek power dam, and $5\frac{1}{2}$ miles northwest of Augusta, Richmond County. Lower gage is $3\frac{1}{2}$ miles downstream from upper gage. Elevation of zero of gages is 46.58 feet (city of Augusta datum).

RECORDS AVAILABLE.—November, 1930, to September, 1931.

EXTREMES.—Maximum mean daily discharge during period, 3,320 second-feet Apr. 29; minimum, 909 second-feet Aug. 16.

REMARKS.—Records fair. This canal diverts water for power and water-supply purposes from the Savannah River at power dam 1 mile downstream from Stevens Creek Dam. Waste water from power houses returns to river by three connections above river station. Water is also pumped from canal for water supply for city of Augusta and a small amount entering Beaverdam Ditch is discharged into river about 13 miles downstream from Augusta.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|---------|---------|---------|-------|-------|-------|-------|-------|-------|---------|-------|
| 1 | | " 2,100 | " 2,800 | 1,460 | 1,800 | 2,930 | 2,970 | 2,720 | 2,300 | 2,190 | 1,700 |
| 2 | | " 2,600 | " 2,800 | 2,690 | 2,730 | 3,190 | 2,220 | 3,040 | 2,890 | 1,520 | 1,230 |
| 3 | | " 2,800 | " 1,800 | 2,980 | 3,010 | 3,080 | 1,470 | 2,940 | 2,630 | 2,620 | 1,390 |
| 4 | | " 2,500 | " 1,530 | 3,050 | 3,220 | 2,350 | 2,620 | 2,960 | 2,020 | 2,400 | 1,780 |
| 5 | | " 2,500 | " 2,920 | 3,070 | 3,220 | 1,800 | 2,670 | 2,890 | 1,950 | 2,120 | 1,460 |
| 6 | | " 2,000 | " 2,710 | 3,070 | 3,150 | 2,670 | 2,700 | 2,430 | 1,760 | 2,450 | 1,200 |
| 7 | | " 2,600 | " 2,720 | 1,850 | 2,260 | 3,010 | 2,760 | 1,500 | 2,100 | " 2,300 | 1,650 |
| 8 | | " 2,800 | " 2,620 | 1,800 | 1,670 | 2,960 | 2,970 | 2,590 | 2,130 | " 1,500 | 1,660 |
| 9 | | " 2,820 | " 2,660 | 2,880 | 2,830 | 2,980 | 2,230 | 2,580 | 1,980 | 973 | 993 |
| 10 | | " 2,870 | " 2,190 | 2,780 | 3,000 | 2,980 | 1,140 | 2,740 | 2,010 | 2,400 | 1,390 |
| 11 | | " 3,090 | " 1,650 | 2,910 | 3,020 | 2,370 | 2,510 | 2,720 | 1,580 | 2,600 | 2,400 |
| 12 | | " 2,940 | " 2,240 | 2,910 | 2,970 | 1,760 | 2,830 | 2,620 | 1,690 | 2,440 | 1,980 |
| 13 | | " 2,140 | " 2,570 | 2,660 | 3,080 | 2,510 | 2,870 | 2,330 | 2,800 | 2,620 | 1,980 |
| 14 | | " 1,640 | " 2,700 | 2,080 | 2,300 | 2,680 | 2,870 | 1,800 | 2,630 | 2,540 | 2,020 |
| 15 | | " 2,800 | " 2,810 | 2,020 | 1,970 | 2,820 | 3,050 | 2,800 | 2,950 | 2,080 | 1,430 |
| 16 | " 1,700 | " 2,860 | " 2,900 | 2,710 | 2,730 | 3,140 | 2,330 | 3,020 | 2,930 | 909 | 1,410 |
| 17 | " 2,800 | " 3,040 | " 1,970 | 2,950 | 2,980 | 3,080 | 1,680 | 2,990 | 3,080 | 2,460 | 2,430 |
| 18 | " 2,600 | " 2,900 | " 1,700 | 2,920 | 3,010 | 2,190 | 2,530 | 2,900 | 2,520 | 2,600 | 2,220 |
| 19 | " 2,600 | " 2,870 | " 2,990 | 2,940 | 3,020 | 1,540 | 3,010 | 2,760 | 1,640 | 2,510 | 1,850 |
| 20 | " 2,850 | " 1,960 | " 2,850 | 2,840 | 3,110 | 2,450 | 3,020 | 2,370 | 2,700 | 2,600 | 1,430 |
| 21 | " 3,000 | " 1,840 | " 2,800 | 2,190 | 2,450 | 2,820 | 3,010 | 1,750 | 2,900 | 2,620 | 2,130 |
| 22 | " 2,400 | " 2,120 | " 2,830 | 1,690 | 1,870 | 2,950 | 3,280 | 2,640 | 2,780 | 2,350 | 1,460 |
| 23 | " 2,050 | " 2,110 | " 2,940 | 2,690 | 2,680 | 3,020 | 2,360 | 2,340 | 2,990 | " 2,000 | 1,090 |
| 24 | " 2,870 | " 1,970 | " 2,200 | 3,060 | 2,960 | 2,990 | 1,890 | 2,690 | 2,880 | " 2,400 | 1,280 |
| 25 | " 3,020 | " 1,790 | " 1,780 | 3,140 | 2,970 | 2,350 | 2,700 | 2,780 | 2,390 | " 2,500 | 2,180 |
| 26 | " 3,150 | " 1,760 | " 2,720 | 2,990 | 2,980 | 1,820 | 2,960 | 2,830 | 1,720 | " 2,600 | 2,140 |
| 27 | " 3,070 | " 1,610 | " 2,880 | 2,920 | 3,030 | 2,640 | 2,950 | 2,200 | 2,590 | " 2,500 | 1,860 |
| 28 | " 2,970 | " 1,900 | " 2,960 | 2,610 | 2,460 | 3,050 | 3,100 | 2,150 | 2,920 | " 2,600 | 2,260 |
| 29 | " 2,320 | " 2,900 | " 2,860 | ----- | 1,540 | 3,320 | 2,950 | 2,700 | 2,030 | " 2,000 | 1,890 |
| 30 | " 1,200 | " 3,000 | " 2,800 | ----- | 2,700 | 3,010 | 2,250 | 2,430 | 3,030 | 950 | 1,340 |
| 31 | " 3,000 | " 2,020 | " 2,020 | ----- | 2,990 | ----- | 1,590 | ----- | 2,700 | 2,070 | ----- |

| Month | Maximum | Minimum | Mean | Month | Maximum | Minimum | Mean |
|----------------|---------|---------|-------|-----------|---------|---------|-------|
| November 16-30 | 3,150 | ----- | 2,570 | May | 3,280 | 1,140 | 2,560 |
| December | 3,090 | 1,260 | 2,400 | June | 3,040 | 1,500 | 2,570 |
| January | 2,990 | 1,530 | 2,510 | July | 3,080 | 1,580 | 2,460 |
| February | 3,140 | 1,460 | 2,640 | August | ----- | 909 | 2,210 |
| March | 3,220 | 1,540 | 2,700 | September | 2,430 | 993 | 1,710 |
| April | 3,320 | 1,540 | 2,680 | | | | |

* Estimated.

ST. MARYS RIVER BASIN

ST. MARYS RIVER NEAR MACCLENNY, FLA.

LOCATION.—Staff gage at Stokes Bridge, 1 mile below junction of North and South Prongs and 6 miles northeast of Macclenny, Baker County. Zero of gage is 40.00 feet above mean sea level.

DRAINAGE AREA.—720 square miles.

RECORDS AVAILABLE.—October, 1926, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,080 second-feet Apr. 7 (gage height, 10.62 feet); minimum, 31 second-feet Sept. 29, 30 (gage height, 1.10 feet).

1926-1931: Maximum discharge, about 16,500 second-feet Sept. 20, 1928 (gage height, 21.9 feet); minimum, 14 second-feet June 4, 5, 1927 (gage height, 0.04 foot).

REMARKS.—Records good. Small diversion at Moniac, Ga., during extremely low stages.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| 1 | 1,180 | 73 | 415 | 1,130 | 780 | 415 | 1,450 | 175 | 135 | 43 | 85 | 240 |
| 2 | 980 | 58 | 535 | 1,000 | 635 | 395 | 1,740 | 155 | 117 | 43 | 109 | 155 |
| 3 | 475 | 58 | 515 | 905 | 575 | 515 | 1,640 | 145 | 101 | 42 | 101 | 117 |
| 4 | 360 | 55 | 435 | 905 | 515 | 980 | 1,360 | 270 | 93 | 41 | 81 | 270 |
| 5 | 225 | 52 | 415 | 1,000 | 455 | 1,130 | 1,360 | 515 | 89 | 35 | 73 | 175 |
| 6 | 210 | 52 | 375 | 1,450 | 415 | 1,030 | 1,710 | 1,160 | 85 | 33 | 69 | 135 |
| 7 | 175 | 55 | 375 | 1,680 | 375 | 905 | 2,080 | 1,480 | 85 | 34 | 61 | 135 |
| 8 | 165 | 55 | 345 | 1,600 | 345 | 1,390 | 2,000 | 1,300 | 85 | 37 | 61 | 135 |
| 9 | 145 | 61 | 315 | 1,390 | 330 | 1,960 | 1,710 | 1,180 | 73 | 34 | 101 | 135 |
| 10 | 135 | 58 | 285 | 1,330 | 880 | 1,920 | 1,640 | 1,130 | 65 | 42 | 97 | 125 |
| 11 | 125 | 58 | 270 | 1,100 | 855 | 1,640 | 1,300 | 1,000 | 61 | 77 | 77 | 109 |
| 12 | 105 | 55 | 240 | 1,030 | 830 | 1,420 | 1,130 | 980 | 58 | 155 | 73 | 109 |
| 13 | 97 | 55 | 240 | 1,420 | 705 | 1,210 | 980 | 955 | 55 | 175 | 65 | 93 |
| 14 | 89 | 55 | 225 | 1,600 | 705 | 1,080 | 830 | 905 | 55 | 175 | 73 | 85 |
| 15 | 85 | 52 | 225 | 2,000 | 830 | 930 | 730 | 615 | 52 | 185 | 65 | 81 |
| 16 | 81 | 85 | 195 | 1,780 | 1,080 | 855 | 730 | 575 | 52 | 155 | 135 | 65 |
| 17 | 77 | 635 | 185 | 1,740 | 1,100 | 730 | 730 | 415 | 52 | 145 | 125 | 61 |
| 18 | 69 | 680 | 185 | 1,510 | 1,000 | 655 | 730 | 395 | 58 | 135 | 101 | 61 |
| 19 | 65 | 805 | 185 | 1,510 | 955 | 595 | 585 | 345 | 65 | 93 | 81 | 55 |
| 20 | 58 | 705 | 315 | 1,600 | 880 | 495 | 535 | 270 | 101 | 77 | 69 | 52 |
| 21 | 58 | 615 | 375 | 1,820 | 780 | 455 | 455 | 345 | 81 | 73 | 61 | 49 |
| 22 | 58 | 555 | 395 | 2,040 | 705 | 415 | 395 | 1,210 | 73 | 77 | 58 | 49 |
| 23 | 58 | 515 | 495 | 2,000 | 615 | 415 | 345 | 1,300 | 73 | 73 | 52 | 43 |
| 24 | 55 | 435 | 535 | 1,960 | 555 | 375 | 315 | 780 | 65 | 61 | 49 | 43 |
| 25 | 58 | 395 | 515 | 1,850 | 515 | 330 | 285 | 495 | 61 | 55 | 49 | 43 |
| 26 | 55 | 375 | 495 | 1,480 | 495 | 315 | 270 | 455 | 61 | 49 | 46 | 39 |
| 27 | 55 | 375 | 475 | 1,330 | 475 | 300 | 270 | 315 | 52 | 46 | 46 | 38 |
| 28 | 55 | 315 | 495 | 1,180 | 435 | 285 | 240 | 255 | 49 | 65 | 43 | 34 |
| 29 | 55 | 315 | 615 | 1,080 | ----- | 285 | 210 | 195 | 43 | 225 | 49 | 31 |
| 30 | 65 | 300 | 1,030 | 930 | ----- | 285 | 185 | 175 | 43 | 225 | 65 | 31 |
| 31 | 73 | ----- | 1,210 | 830 | ----- | 415 | ----- | 145 | ----- | 175 | 165 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 1,180 | 55 | 179 | 0.249 | 0.29 |
| November | 805 | 52 | 265 | .368 | .41 |
| December | 1,210 | 185 | 416 | .578 | .67 |
| January | 2,040 | 830 | 1,420 | 1.97 | 2.27 |
| February | 1,100 | 330 | 672 | .933 | .97 |
| March | 1,960 | 285 | 778 | 1.08 | 1.24 |
| April | 2,080 | 185 | 932 | 1.29 | 1.44 |
| May | 1,480 | 145 | 633 | .879 | 1.01 |
| June | 135 | 43 | 71.3 | .099 | .11 |
| July | 225 | 33 | 92.9 | .129 | .15 |
| August | 165 | 43 | 76.9 | .107 | .12 |
| September | 270 | 31 | 93.1 | .129 | .14 |
| The year | 2,080 | 31 | 469 | .651 | 8.82 |

ST. JOHNS RIVER BASIN

OKLAWAHA RIVER NEAR OCALA, FLA.

LOCATION.—Staff gage at county bridge known as Sharpes Ferry, two miles upstream from Silver River and nine miles east of Ocala, Marion County. Zero of gage is 36.66 feet above mean sea level.

RECORDS AVAILABLE.—February, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,160 second-feet Apr. 5 (gage height, 4.00 feet); minimum discharge, 303 second-feet Sept. 19 (gage height, 1.30 feet).

1930-31: Maximum discharge, that of Apr. 5, 1931; maximum gage height, 4.12 feet Mar. 29, 1930; minimum discharge, that of Sept. 19, 1931.

REMARKS.—Records fair. Some regulation from operation of power plant at Moss Bluff Dam, 12 miles upstream.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|------|------|------|------|------|-------|-----|------|------|------|-------|
| 1..... | 590 | 445 | 495 | 665 | 705 | 625 | 785 | 745 | 665 | 470 | 470 | 445 |
| 2..... | 555 | 445 | 495 | 665 | 705 | 625 | 785 | 745 | 665 | 470 | 470 | 445 |
| 3..... | 555 | 445 | 470 | 665 | 705 | 745 | 785 | 785 | 665 | 445 | 445 | 420 |
| 4..... | 555 | 445 | 470 | 665 | 665 | 785 | 785 | 785 | 625 | 445 | 445 | 420 |
| 5..... | 525 | 445 | 445 | 665 | 665 | 785 | 1,110 | 785 | 625 | 470 | 445 | 420 |
| 6..... | 525 | 445 | 445 | 665 | 665 | 745 | 1,110 | 785 | 625 | 495 | 445 | 445 |
| 7..... | 525 | 445 | 445 | 705 | 625 | 745 | 1,060 | 785 | 590 | 495 | 380 | 470 |
| 8..... | 525 | 445 | 445 | 665 | 665 | 865 | 1,060 | 785 | 625 | 470 | 470 | 470 |
| 9..... | 495 | 445 | 420 | 665 | 665 | 825 | 1,060 | 825 | 625 | 470 | 445 | 445 |
| 10..... | 495 | 445 | 420 | 665 | 665 | 825 | 1,060 | 825 | 590 | 445 | 445 | 445 |
| 11..... | 495 | 445 | 420 | 665 | 665 | 785 | 1,000 | 785 | 550 | 445 | 420 | 445 |
| 12..... | 525 | 445 | 420 | 665 | 625 | 785 | 1,000 | 785 | 550 | 470 | 525 | 445 |
| 13..... | 525 | 445 | 420 | 625 | 625 | 745 | 1,000 | 785 | 590 | 525 | 525 | 445 |
| 14..... | 495 | 445 | 420 | 625 | 665 | 745 | 955 | 785 | 590 | 525 | 470 | 470 |
| 15..... | 495 | 445 | 400 | 625 | 665 | 745 | 1,000 | 785 | 590 | 525 | 625 | 470 |
| 16..... | 495 | 445 | 400 | 625 | 665 | 705 | 1,000 | 785 | 555 | 495 | 625 | 470 |
| 17..... | 495 | 445 | 400 | 625 | 665 | 705 | 1,060 | 745 | 555 | 495 | 625 | 445 |
| 18..... | 495 | 445 | 400 | 625 | 665 | 665 | 1,060 | 745 | 555 | 495 | 625 | 445 |
| 19..... | 495 | 445 | 400 | 625 | 665 | 625 | 1,000 | 745 | 525 | 470 | 555 | 330 |
| 20..... | 470 | 445 | 420 | 665 | 665 | 625 | 1,000 | 705 | 525 | 470 | 555 | 445 |
| 21..... | 470 | 445 | 420 | 705 | 625 | 625 | 955 | 705 | 555 | 470 | 525 | 420 |
| 22..... | 445 | 420 | 470 | 705 | 625 | 665 | 955 | 705 | 555 | 470 | 525 | 420 |
| 23..... | 445 | 420 | 555 | 705 | 590 | 625 | 910 | 705 | 525 | 470 | 495 | 400 |
| 24..... | 445 | 420 | 590 | 665 | 625 | 625 | 910 | 705 | 525 | 445 | 495 | 420 |
| 25..... | 445 | 420 | 590 | 705 | 665 | 625 | 865 | 705 | 495 | 445 | 470 | 420 |
| 26..... | 445 | 420 | 590 | 705 | 625 | 625 | 865 | 705 | 495 | 445 | 445 | 400 |
| 27..... | 445 | 400 | 625 | 705 | 590 | 665 | 825 | 705 | 495 | 445 | 445 | 400 |
| 28..... | 445 | 400 | 665 | 705 | 625 | 590 | 825 | 705 | 470 | 445 | 445 | 400 |
| 29..... | 445 | 400 | 665 | 705 | 590 | 590 | 785 | 665 | 470 | 445 | 445 | 380 |
| 30..... | 470 | 400 | 665 | 705 | 590 | 590 | 785 | 665 | 470 | 445 | 445 | 360 |
| 31..... | 445 | 665 | 705 | 705 | 705 | 705 | 665 | 665 | 445 | 445 | 445 | --- |

| Month | Maxi- mum | Mini- mum | Mean | Month | Maxi- mum | Mini- mum | Mean |
|---------------|--------------|--------------|------|----------------|--------------|--------------|------|
| October..... | 590 | 445 | 493 | May..... | 825 | 665 | 746 |
| November..... | 445 | 400 | 435 | June..... | 695 | 470 | 566 |
| December..... | 665 | 400 | 489 | July..... | 525 | 445 | 470 |
| January..... | 705 | 625 | 670 | August..... | 625 | 380 | 490 |
| February..... | 705 | 590 | 654 | September..... | 470 | 330 | 428 |
| March..... | 865 | 590 | 698 | | | | |
| April..... | 1,110 | 785 | 945 | The year..... | 1,110 | 330 | 590 |

OKLAWAHA RIVER NEAR CONNOR, FLA.

LOCATION.—Staff gage at highway bridge on Ocala-Daytona highway a quarter of a mile downstream from mouth of Silver River and 8 miles east of Ocala, Marion County. Zero of gage is 31.96 feet above mean sea level.

RECORDS AVAILABLE.—February, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,430 second-feet Apr. 6 (gage height, 7.29 feet); minimum, 990 second-feet Sept. 19 (gage height, 5.43 feet).

1930-31: Maximum discharge, that of Apr. 6, 1931; maximum gage height, 7.37 feet Mar. 29, 1930; minimum discharge, that of Sept. 19, 1931.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------|-------|--------------|--------------|-------|-----------|-------|--------------|--------------|-------|-------|-------|-------|
| 1 | 1,620 | 1,460 | 1,460 | 1,560 | 1,680 | 1,680 | 1,860 | 1,800 | 1,740 | 1,430 | 1,360 | 1,260 |
| 2 | 1,620 | 1,410 | 1,410 | 1,560 | 1,680 | 1,860 | 1,860 | 1,800 | 1,740 | 1,410 | 1,310 | 1,260 |
| 3 | 1,620 | 1,410 | 1,410 | 1,560 | 1,680 | 1,860 | 1,860 | 1,800 | 1,740 | 1,410 | 1,360 | 1,210 |
| 4 | 1,620 | 1,410 | 1,410 | 1,560 | 1,740 | 1,860 | 1,860 | 1,860 | 1,740 | 1,410 | 1,310 | 1,210 |
| 5 | 1,620 | 1,410 | 1,360 | 1,560 | 1,680 | 1,860 | 2,280 | 1,860 | 1,680 | 1,410 | 1,310 | 1,210 |
| 6 | 1,560 | 1,410 | 1,360 | 1,620 | 1,680 | 1,800 | 2,430 | 1,860 | 1,680 | 1,410 | 1,360 | 1,210 |
| 7 | 1,560 | 1,410 | 1,360 | 1,560 | 1,740 | 1,860 | 2,280 | 1,860 | 1,680 | 1,410 | 1,310 | 1,260 |
| 8 | 1,560 | 1,410 | 1,360 | 1,560 | 1,740 | 2,000 | 2,210 | 1,860 | 1,680 | 1,410 | 1,310 | 1,260 |
| 9 | 1,560 | 1,410 | 1,360 | 1,560 | 1,680 | 1,930 | 2,210 | 1,860 | 1,680 | 1,410 | 1,310 | 1,210 |
| 10 | 1,560 | 1,410 | 1,360 | 1,560 | 1,740 | 1,860 | 2,140 | 1,860 | 1,680 | 1,410 | 1,310 | 1,210 |
| 11 | 1,510 | 1,410 | 1,360 | 1,560 | 1,740 | 1,930 | 2,140 | 1,800 | 1,680 | 1,410 | 1,360 | 1,210 |
| 12 | 1,510 | 1,410 | 1,360 | 1,560 | 1,740 | 1,860 | 2,070 | 1,860 | 1,680 | 1,410 | 1,360 | 1,160 |
| 13 | 1,510 | 1,410 | 1,360 | 1,560 | 1,740 | 1,800 | 2,070 | 1,860 | 1,620 | 1,410 | 1,360 | 1,210 |
| 14 | 1,510 | 1,410 | 1,360 | 1,560 | 1,740 | 1,800 | 2,000 | 1,800 | 1,680 | 1,460 | 1,360 | 1,210 |
| 15 | 1,510 | 1,410 | 1,360 | 1,560 | 1,740 | 1,800 | 2,070 | 1,800 | 1,680 | 1,460 | 1,510 | 1,210 |
| 16 | 1,510 | 1,410 | 1,310 | 1,560 | 1,740 | 1,800 | 2,140 | 1,800 | 1,620 | 1,460 | 1,460 | 1,210 |
| 17 | 1,510 | 1,410 | 1,310 | 1,560 | 1,740 | 1,800 | 2,140 | 1,800 | 1,620 | 1,490 | 1,460 | 1,160 |
| 18 | 1,510 | 1,410 | 1,310 | 1,560 | 1,680 | 1,740 | 2,140 | 1,800 | 1,620 | 1,410 | 1,410 | 1,160 |
| 19 | 1,510 | 1,410 | 1,360 | 1,620 | 1,680 | 1,740 | 2,070 | 1,800 | 1,620 | 1,410 | 1,410 | 1,080 |
| 20 | 1,510 | 1,410 | 1,360 | 1,620 | 1,680 | 1,740 | 2,070 | 1,800 | 1,620 | 1,410 | 1,410 | 1,120 |
| 21 | 1,510 | 1,410 | 1,360 | 1,680 | 1,680 | 1,740 | 2,070 | 1,800 | 1,560 | 1,410 | 1,360 | 1,120 |
| 22 | 1,460 | 1,410 | 1,410 | 1,680 | 1,680 | 1,740 | 2,000 | 1,800 | 1,560 | 1,410 | 1,360 | 1,120 |
| 23 | 1,460 | 1,360 | 1,460 | 1,680 | 1,680 | 1,740 | 2,000 | 1,800 | 1,560 | 1,410 | 1,360 | 1,160 |
| 24 | 1,460 | 1,360 | 1,460 | 1,680 | 1,680 | 1,740 | 2,000 | 1,740 | 1,510 | 1,360 | 1,310 | 1,160 |
| 25 | 1,460 | 1,360 | 1,510 | 1,680 | 1,680 | 1,740 | 1,930 | 1,740 | 1,510 | 1,360 | 1,310 | 1,160 |
| 26 | 1,460 | 1,360 | 1,510 | 1,680 | 1,680 | 1,680 | 1,930 | 1,740 | 1,510 | 1,360 | 1,310 | 1,160 |
| 27 | 1,410 | 1,360 | 1,560 | 1,680 | 1,620 | 1,680 | 1,860 | 1,740 | 1,510 | 1,360 | 1,310 | 1,160 |
| 28 | 1,410 | 1,310 | 1,560 | 1,680 | 1,680 | 1,680 | 1,860 | 1,740 | 1,460 | 1,360 | 1,310 | 1,160 |
| 29 | 1,460 | 1,310 | 1,620 | 1,740 | ----- | 1,680 | 1,860 | 1,740 | 1,460 | 1,360 | 1,310 | 1,160 |
| 30 | 1,460 | 1,310 | 1,560 | 1,680 | ----- | 1,680 | 1,860 | 1,740 | 1,460 | 1,360 | 1,310 | 1,160 |
| 31 | 1,460 | ----- | 1,560 | 1,680 | ----- | 1,800 | ----- | 1,740 | ----- | 1,360 | 1,310 | ----- |
| | | | | | | | | | | | | |
| Month | | Maxi- mum | Mini- mum | Mean | Month | | Maxi- mum | Mini- mum | Mean | | | |
| October | | 1,620 | 1,410 | 1,520 | May | | 1,860 | 1,740 | 1,800 | | | |
| November | | 1,460 | 1,310 | 1,390 | June | | 1,740 | 1,460 | 1,620 | | | |
| December | | 1,620 | 1,310 | 1,420 | July | | 1,460 | 1,360 | 1,410 | | | |
| January | | 1,740 | 1,560 | 1,610 | August | | 1,510 | 1,310 | 1,350 | | | |
| February | | 1,740 | 1,620 | 1,700 | September | | 1,260 | 1,080 | 1,180 | | | |
| March | | 2,000 | 1,680 | 1,780 | | | | | | | | |
| April | | 2,430 | 1,860 | 2,040 | | | | | | | | |
| | | | | | The year | | 2,430 | 1,080 | 1,570 | | | |

OKLAWAHA RIVER AT EUREKA, FLA.

LOCATION.—Staff gage at county highway bridge at Eureka, Marion County, 3 miles downstream from mouth of Eaton Creek.

RECORDS AVAILABLE.—February, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 3,030 second-feet Apr. 7 (gage height, 7.88 feet); minimum, 1,160 second-feet Sept. 24, 30 (gage height, 5.54 feet).

1930-31: Maximum discharge, 3,400 second-feet Mar. 31, 1930 (gage height, 8.02 feet); minimum, that of Sept. 24, 30, 1931.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 1,640 | 1,420 | 1,480 | 1,720 | 1,720 | 1,640 | 1,800 | 1,890 | 1,720 | 1,420 | 1,420 | 1,340 |
| 2 | 1,640 | 1,420 | 1,560 | 1,720 | 1,720 | 1,640 | 1,890 | 1,890 | 1,720 | 1,420 | 1,420 | 1,340 |
| 3 | 1,640 | 1,420 | 1,560 | 1,720 | 1,720 | 1,890 | 1,890 | 1,890 | 1,720 | 1,340 | 1,340 | 1,340 |
| 4 | 1,640 | 1,420 | 1,560 | 1,720 | 1,720 | 1,980 | 1,890 | 1,980 | 1,720 | 1,340 | 1,340 | 1,280 |
| 5 | 1,640 | 1,420 | 1,560 | 1,720 | 1,640 | 2,160 | 2,160 | 2,070 | 1,640 | 1,340 | 1,340 | 1,280 |
| 6 | 1,640 | 1,420 | 1,560 | 1,720 | 1,720 | 2,160 | 2,460 | 2,160 | 1,640 | 1,340 | 1,340 | 1,340 |
| 7 | 1,560 | 1,420 | 1,480 | 1,720 | 1,720 | 2,070 | 3,030 | 2,160 | 1,640 | 1,340 | 1,340 | 1,340 |
| 8 | 1,560 | 1,420 | 1,480 | 1,880 | 1,720 | 2,070 | 2,910 | 2,070 | 1,640 | 1,340 | 1,420 | 1,420 |
| 9 | 1,560 | 1,420 | 1,420 | 1,720 | 1,720 | 2,260 | 2,680 | 2,070 | 1,640 | 1,340 | 1,480 | 1,420 |
| 10 | 1,560 | 1,420 | 1,420 | 1,720 | 1,720 | 2,260 | 2,460 | 2,070 | 1,640 | 1,420 | 1,420 | 1,340 |
| 11 | 1,560 | 1,420 | 1,420 | 1,720 | 1,720 | 2,160 | 2,360 | 2,070 | 1,640 | 1,420 | 1,420 | 1,340 |
| 12 | 1,490 | 1,420 | 1,420 | 1,720 | 1,720 | 2,070 | 2,160 | 1,980 | 1,640 | 1,420 | 1,560 | 1,340 |
| 13 | 1,490 | 1,420 | 1,420 | 1,720 | 1,640 | 1,980 | 2,160 | 1,980 | 1,640 | 1,420 | 1,560 | 1,340 |
| 14 | 1,560 | 1,420 | 1,420 | 1,720 | 1,720 | 1,890 | 2,070 | 1,980 | 1,720 | 1,420 | 1,560 | 1,420 |
| 15 | 1,560 | 1,420 | 1,420 | 1,640 | 1,720 | 1,890 | 2,160 | 1,980 | 1,720 | 1,480 | 1,640 | 1,340 |
| 16 | 1,560 | 1,420 | 1,340 | 1,640 | 1,720 | 1,890 | 2,260 | 1,890 | 1,640 | 1,480 | 1,720 | 1,340 |
| 17 | 1,560 | 1,480 | 1,340 | 1,640 | 1,720 | 1,800 | 2,460 | 1,890 | 1,640 | 1,420 | 1,720 | 1,340 |
| 18 | 1,480 | 1,480 | 1,340 | 1,640 | 1,720 | 1,800 | 2,460 | 1,890 | 1,640 | 1,420 | 1,720 | 1,340 |
| 19 | 1,480 | 1,480 | 1,420 | 1,640 | 1,720 | 1,720 | 2,460 | 1,800 | 1,560 | 1,420 | 1,720 | 1,280 |
| 20 | 1,480 | 1,480 | 1,420 | 1,640 | 1,640 | 1,720 | 2,360 | 1,800 | 1,560 | 1,420 | 1,560 | 1,280 |
| 21 | 1,480 | 1,480 | 1,420 | 1,800 | 1,640 | 1,720 | 2,260 | 1,890 | 1,560 | 1,420 | 1,560 | 1,220 |
| 22 | 1,480 | 1,420 | 1,420 | 1,800 | 1,640 | 1,720 | 2,260 | 1,890 | 1,560 | 1,420 | 1,480 | 1,220 |
| 23 | 1,480 | 1,420 | 1,480 | 1,890 | 1,640 | 1,720 | 2,160 | 1,890 | 1,560 | 1,420 | 1,480 | 1,220 |
| 24 | 1,480 | 1,420 | 1,560 | 1,890 | 1,640 | 1,720 | 2,160 | 1,890 | 1,560 | 1,420 | 1,420 | 1,160 |
| 25 | 1,480 | 1,420 | 1,560 | 1,890 | 1,640 | 1,720 | 2,070 | 1,800 | 1,560 | 1,340 | 1,420 | 1,280 |
| 26 | 1,420 | 1,420 | 1,560 | 1,800 | 1,640 | 1,720 | 2,070 | 1,800 | 1,480 | 1,340 | 1,420 | 1,280 |
| 27 | 1,420 | 1,420 | 1,640 | 1,800 | 1,640 | 1,640 | 2,070 | 1,720 | 1,480 | 1,340 | 1,420 | 1,280 |
| 28 | 1,420 | 1,340 | 1,640 | 1,720 | 1,640 | 1,640 | 1,980 | 1,720 | 1,420 | 1,420 | 1,420 | 1,220 |
| 29 | 1,420 | 1,340 | 1,720 | 1,720 | ----- | 1,640 | 1,980 | 1,720 | 1,420 | 1,420 | 1,420 | 1,220 |
| 30 | 1,480 | 1,340 | 1,720 | 1,720 | ----- | 1,640 | 1,980 | 1,720 | 1,420 | 1,420 | 1,480 | 1,160 |
| 31 | 1,480 | ----- | 1,720 | 1,720 | ----- | 1,720 | ----- | 1,720 | ----- | 1,340 | 1,420 | ----- |

| Month | Maximum | Minimum | Mean | Month | Maximum | Minimum | Mean |
|----------|---------|---------|-------|-----------|---------|---------|-------|
| October | 1,640 | 1,420 | 1,530 | May | 2,160 | 1,720 | 1,910 |
| November | 1,480 | 1,340 | 1,420 | June | 1,720 | 1,420 | 1,600 |
| December | 1,720 | 1,340 | 1,500 | July | 1,480 | 1,340 | 1,400 |
| January | 1,890 | 1,640 | 1,730 | August | 1,720 | 1,340 | 1,480 |
| February | 1,720 | 1,640 | 1,690 | September | 1,420 | 1,160 | 1,300 |
| March | 2,260 | 1,640 | 1,860 | The year | 3,030 | 1,160 | 1,640 |
| April | 3,030 | 1,800 | 2,230 | | | | |

OKLAWAHA RIVER NEAR ORANGE SPRINGS, FLA.

LOCATION.—Staff gage a quarter of a mile downstream from Jordars Ferry and mouth of Orange Creek and 2½ miles east of Orange Springs, Marion County.

RECORDS AVAILABLE.—February, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 3,860 second-feet Apr. 8, 9; maximum gage height, 8.04 feet Apr. 9; minimum discharge, 1,200 second-feet Sept. 30 (gage height, 4.89 feet).

1930-31: Maximum discharge, 3,860 second-feet Mar. 31, 1930, Apr. 8, 9, 1931; maximum gage height, 8.64 feet Mar. 31, 1930; minimum discharge, that of Sept. 30, 1931.

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------|-------|-------|
| 1 | 2,110 | 1,710 | 1,710 | 2,250 | 2,040 | 2,320 | 2,670 | 2,530 | 2,040 | 1,45 ^a | 1,520 | 1,450 |
| 2 | 2,110 | 1,710 | 1,780 | 2,180 | 2,040 | 2,320 | 2,740 | 2,460 | 1,970 | 1,45 ^a | 1,520 | 1,450 |
| 3 | 2,110 | 1,640 | 1,780 | 2,180 | 1,970 | 2,530 | 2,740 | 2,530 | 1,900 | 1,35 ^a | 1,520 | 1,380 |
| 4 | 2,110 | 1,640 | 1,780 | 2,110 | 1,970 | 2,740 | 2,810 | 2,530 | 1,900 | 1,35 ^a | 1,450 | 1,380 |
| 5 | 2,040 | 1,640 | 1,780 | 2,180 | 1,970 | 2,810 | 3,100 | 2,530 | 1,900 | 1,35 ^a | 1,380 | 1,380 |
| 6 | 2,040 | 1,580 | 1,780 | 2,180 | 1,900 | 2,950 | 3,410 | 2,600 | 1,900 | 1,35 ^a | 1,380 | 1,380 |
| 7 | 1,970 | 1,580 | 1,710 | 2,180 | 1,900 | 3,100 | 3,580 | 2,670 | 1,840 | 1,35 ^a | 1,380 | 1,380 |
| 8 | 1,970 | 1,640 | 1,710 | 2,180 | 1,900 | 3,170 | 3,860 | 2,670 | 1,840 | 1,35 ^a | 1,450 | 1,380 |
| 9 | 1,970 | 1,640 | 1,640 | 2,180 | 1,900 | 3,170 | 3,860 | 2,670 | 1,840 | 1,35 ^a | 1,520 | 1,380 |
| 10 | 1,970 | 1,640 | 1,640 | 2,180 | 1,900 | 3,170 | 3,760 | 2,670 | 1,840 | 1,35 ^a | 1,520 | 1,380 |
| 11 | 1,900 | 1,640 | 1,580 | 2,110 | 1,900 | 3,250 | 3,580 | 2,600 | 1,780 | 1,450 | 1,520 | 1,380 |
| 12 | 1,900 | 1,580 | 1,580 | 2,110 | 1,900 | 3,170 | 3,410 | 2,600 | 1,840 | 1,52 ^a | 1,580 | 1,380 |
| 13 | 1,840 | 1,580 | 1,580 | 2,180 | 1,900 | 3,100 | 3,250 | 2,600 | 1,780 | 1,52 ^a | 1,580 | 1,380 |
| 14 | 1,840 | 1,580 | 1,580 | 2,180 | 2,040 | 3,020 | 3,170 | 2,600 | 1,840 | 1,520 | 1,640 | 1,450 |
| 15 | 1,840 | 1,580 | 1,520 | 2,110 | 2,110 | 2,950 | 3,170 | 2,530 | 1,970 | 1,520 | 1,780 | 1,450 |
| 16 | 1,840 | 1,580 | 1,520 | 2,110 | 2,180 | 2,810 | 3,170 | 2,460 | 1,970 | 1,640 | 1,780 | 1,380 |
| 17 | 1,840 | 1,640 | 1,520 | 2,040 | 2,250 | 2,740 | 3,250 | 2,460 | 1,900 | 1,640 | 1,780 | 1,380 |
| 18 | 1,840 | 1,710 | 1,520 | 2,040 | 2,180 | 2,740 | 3,330 | 2,390 | 1,900 | 1,640 | 1,780 | 1,380 |
| 19 | 1,840 | 1,710 | 1,580 | 1,970 | 2,180 | 2,670 | 3,250 | 2,320 | 1,900 | 1,58 ^a | 1,780 | 1,320 |
| 20 | 1,780 | 1,710 | 1,710 | 2,040 | 2,250 | 2,600 | 3,250 | 2,320 | 1,900 | 1,58 ^a | 1,780 | 1,320 |
| 21 | 1,780 | 1,640 | 1,780 | 2,110 | 2,180 | 2,600 | 3,170 | 2,320 | 1,780 | 1,52 ^a | 1,710 | 1,320 |
| 22 | 1,780 | 1,640 | 1,840 | 2,180 | 2,180 | 2,600 | 3,170 | 2,390 | 1,780 | 1,52 ^a | 1,710 | 1,260 |
| 23 | 1,710 | 1,640 | 1,900 | 2,250 | 2,180 | 2,600 | 3,100 | 2,320 | 1,710 | 1,52 ^a | 1,640 | 1,260 |
| 24 | 1,710 | 1,640 | 1,900 | 2,250 | 2,180 | 2,530 | 2,950 | 2,320 | 1,710 | 1,450 | 1,580 | 1,260 |
| 25 | 1,710 | 1,640 | 1,900 | 2,250 | 2,180 | 2,460 | 2,880 | 2,250 | 1,640 | 1,450 | 1,520 | 1,260 |
| 26 | 1,710 | 1,580 | 1,970 | 2,250 | 2,250 | 2,460 | 2,810 | 2,180 | 1,640 | 1,450 | 1,520 | 1,260 |
| 27 | 1,640 | 1,580 | 2,040 | 2,250 | 2,250 | 2,460 | 2,740 | 2,110 | 1,640 | 1,450 | 1,450 | 1,260 |
| 28 | 1,640 | 1,520 | 2,040 | 2,180 | 2,250 | 2,460 | 2,670 | 2,110 | 1,580 | 1,52 ^a | 1,450 | 1,260 |
| 29 | 1,640 | 1,520 | 2,110 | 2,110 | ----- | 2,460 | 2,670 | 2,040 | 1,520 | 1,58 ^a | 1,520 | 1,260 |
| 30 | 1,780 | 1,520 | 2,180 | 2,110 | ----- | 2,390 | 2,530 | 2,040 | 1,520 | 1,58 ^a | 1,520 | 1,200 |
| 31 | 1,780 | ----- | 2,180 | 2,040 | ----- | 2,600 | ----- | 2,040 | ----- | 1,52 ^a | 1,520 | ----- |

| Month | Maximum | Minimum | Mean | Month | Maximum | Minimum | Mean |
|----------|---------|---------|-------|-----------|---------|---------|-------|
| October | 2,110 | 1,640 | 1,860 | May | 2,670 | 2,040 | 2,410 |
| November | 1,710 | 1,520 | 1,620 | June | 2,040 | 1,520 | 1,810 |
| December | 2,180 | 1,520 | 1,770 | July | 1,640 | 1,380 | 1,490 |
| January | 2,250 | 1,970 | 2,150 | August | 1,780 | 1,380 | 1,570 |
| February | 2,250 | 1,900 | 2,070 | September | 1,450 | 1,200 | 1,350 |
| March | 3,250 | 2,320 | 2,740 | The year | | | |
| April | 3,860 | 2,530 | 3,140 | | | | |

LAKE OKEECHOBEE BASIN

KISSIMMEE RIVER NEAR OKEECHOBEE, FLA.

LOCATION.—Staff gage at highway bridge on State highway 8, 10 miles west of Okeechobee, Okeechobee County. Zero of gage is at mean sea level, Okeechobee flood control district datum.

RECORDS AVAILABLE.—October, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 4,800 second-feet Oct. 5-7 (gage height, 26.65 feet); minimum discharge, 1,120 second-feet Aug. 6-9, 24; minimum gage height, 23.06 feet Aug. 25, 26.

REMARKS.—Records good. Gage-height record and results of many discharge measurements furnished by Okeechobee flood control district.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 4,660 | 4,280 | 2,720 | 2,720 | 3,120 | 2,500 | 2,370 | 3,490 | 1,870 | 1,440 | 1,150 | 1,210 |
| 2..... | 4,660 | 4,150 | 2,720 | 2,720 | 3,120 | 2,720 | 2,310 | 3,300 | 1,830 | 1,420 | 1,140 | 1,210 |
| 3..... | 4,660 | 4,030 | 2,720 | 2,720 | 3,120 | 2,870 | 2,310 | 3,210 | 1,830 | 1,400 | 1,130 | 1,210 |
| 4..... | 4,660 | 3,910 | 2,720 | 2,640 | 3,120 | 3,040 | 2,250 | 3,040 | 1,830 | 1,400 | 1,130 | 1,210 |
| 5..... | 4,800 | 3,800 | 2,640 | 2,640 | 3,120 | 3,210 | 2,250 | 2,950 | 1,790 | 1,400 | 1,130 | 1,240 |
| 6..... | 4,800 | 3,690 | 2,720 | 2,790 | 3,040 | 3,490 | 2,200 | 2,870 | 1,790 | 1,380 | 1,120 | 1,220 |
| 7..... | 4,800 | 3,690 | 2,720 | 2,790 | 2,950 | 3,690 | 2,250 | 2,720 | 1,760 | 1,380 | 1,120 | 1,240 |
| 8..... | 4,660 | 3,690 | 2,640 | 2,720 | 2,950 | 3,910 | 2,250 | 2,640 | 1,720 | 1,360 | 1,120 | 1,240 |
| 9..... | 4,660 | 3,800 | 2,640 | 2,720 | 2,950 | 3,910 | 2,200 | 2,570 | 1,720 | 1,340 | 1,120 | 1,250 |
| 10..... | 4,280 | 3,690 | 2,500 | 2,720 | 2,950 | 3,910 | 2,200 | 2,570 | 1,690 | 1,320 | 1,130 | 1,250 |
| 11..... | 4,280 | 3,590 | 2,570 | 2,720 | 2,790 | 3,800 | 2,140 | 2,500 | 1,690 | 1,300 | 1,140 | 1,240 |
| 12..... | 4,400 | 3,590 | 2,500 | 2,720 | 2,790 | 3,800 | 2,140 | 2,370 | 1,660 | 1,280 | 1,140 | 1,240 |
| 13..... | 4,400 | 3,490 | 2,500 | 2,720 | 2,790 | 3,800 | 2,140 | 2,310 | 1,660 | 1,260 | 1,140 | 1,260 |
| 14..... | 4,400 | 3,300 | 2,440 | 2,720 | 2,720 | 3,690 | 2,140 | 2,250 | 1,630 | 1,250 | 1,140 | 1,320 |
| 15..... | 4,400 | 3,400 | 2,440 | 2,720 | 2,640 | 3,590 | 2,500 | 2,200 | 1,600 | 1,250 | 1,140 | 1,340 |
| 16..... | 4,280 | 3,300 | 2,500 | 2,720 | 2,640 | 3,400 | 2,500 | 2,140 | 1,760 | 1,220 | 1,150 | 1,360 |
| 17..... | 4,150 | 3,300 | 2,500 | 2,720 | 2,640 | 3,300 | 2,640 | 2,090 | 1,720 | 1,220 | 1,150 | 1,360 |
| 18..... | 4,400 | 3,210 | 2,500 | 2,720 | 2,640 | 3,210 | 2,790 | 2,090 | 1,690 | 1,210 | 1,140 | 1,360 |
| 19..... | 4,400 | 3,120 | 2,500 | 2,790 | 2,640 | 3,120 | 3,040 | 2,040 | 1,660 | 1,210 | 1,150 | 1,360 |
| 20..... | 4,400 | 2,950 | 2,500 | 2,870 | 2,640 | 3,040 | 3,400 | 2,040 | 1,660 | 1,210 | 1,140 | 1,340 |
| 21..... | 4,400 | 2,870 | 2,720 | 3,040 | 2,640 | 2,950 | 3,490 | 2,090 | 1,630 | 1,240 | 1,140 | 1,320 |
| 22..... | 4,400 | 3,040 | 2,720 | 2,950 | 2,570 | 2,870 | 3,590 | 2,090 | 1,630 | 1,250 | 1,140 | 1,320 |
| 23..... | 4,400 | 3,040 | 2,720 | 2,950 | 2,500 | 2,790 | 3,690 | 2,090 | 1,600 | 1,240 | 1,130 | 1,320 |
| 24..... | 4,400 | 2,950 | 2,720 | 2,950 | 2,500 | 2,640 | 3,690 | 2,040 | 1,580 | 1,240 | 1,120 | 1,320 |
| 25..... | 4,660 | 2,870 | 2,720 | 3,040 | 2,570 | 2,640 | 3,800 | 2,000 | 1,580 | 1,220 | 1,130 | 1,340 |
| 26..... | 4,660 | 2,870 | 2,720 | 3,040 | 2,500 | 2,500 | 3,800 | 2,000 | 1,550 | 1,200 | 1,140 | 1,320 |
| 27..... | 4,660 | 2,870 | 2,790 | 3,040 | 2,440 | 2,500 | 3,690 | 1,950 | 1,520 | 1,190 | 1,150 | 1,310 |
| 28..... | 4,660 | 2,790 | 2,720 | 3,040 | 2,370 | 2,440 | 3,690 | 1,950 | 1,520 | 1,180 | 1,180 | 1,310 |
| 29..... | 4,530 | 2,720 | 2,790 | 3,120 | ----- | 2,440 | 3,800 | 1,910 | 1,480 | 1,170 | 1,180 | 1,280 |
| 30..... | 4,530 | 2,720 | 2,720 | 3,210 | ----- | 2,370 | 3,690 | 1,910 | 1,480 | 1,160 | 1,180 | 1,260 |
| 31..... | 4,400 | ----- | 2,640 | 3,210 | ----- | 2,250 | ----- | 1,870 | ----- | 1,160 | 1,180 | ----- |

| Month | Maximum | Minimum | Mean | Month | Maximum | Minimum | Mean |
|---------------|---------|---------|-------|----------------|---------|---------|-------|
| October..... | 4,800 | 4,150 | 4,510 | May..... | 3,490 | 1,870 | 2,360 |
| November..... | 4,280 | 2,720 | 3,360 | June..... | 1,870 | 1,480 | 1,670 |
| December..... | 2,790 | 2,440 | 2,630 | July..... | 1,440 | 1,160 | 1,270 |
| January..... | 3,210 | 2,640 | 2,840 | August..... | 1,180 | 1,120 | 1,140 |
| February..... | 3,120 | 2,370 | 2,770 | September..... | 1,360 | 1,210 | 1,290 |
| March..... | 3,910 | 2,250 | 3,110 | The year..... | 4,800 | 1,120 | 2,480 |
| April..... | 3,800 | 2,140 | 2,830 | | | | |

ST. LUCIE CANAL AT LOCK NO. 1, AT LAKE OKEECHOBEE, FLA.

LOCATION.—Staff gage in sec. 22, T. 40 S., R. 37 E., a quarter of a mile below Lock No. 1, at Lake Okeechobee. Zero of gage is at mean sea level, Okeechobee flood control district datum.

RECORDS AVAILABLE.—April to September, 1931.

EXTREMES.—Maximum discharge during period, 4,990 second-feet Apr. 1 (gage height, 16.40 feet); minimum, 2,740 second-feet Sept. 6 (gage height, 12.66 feet).

REMARKS.—Records excellent. Gage-height record and results of discharge measurements furnished by Okeechobee flood control district.

Daily and monthly discharge, in second-feet, 1931

| Day | Apr. | May | June | July | Aug. | Sept. | Day | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|---------|-------|-------|-------|-------|-------|-------|
| 1----- | 4,990 | 4,510 | 4,330 | 3,640 | 3,280 | 2,890 | 16----- | 4,570 | 4,510 | 3,940 | 3,430 | 3,070 | 2,890 |
| 2----- | 4,540 | 4,540 | 4,270 | 3,670 | 3,250 | 2,890 | 17----- | 4,420 | 4,480 | 3,970 | 3,400 | 3,070 | 2,830 |
| 3----- | 4,480 | 4,630 | 4,150 | 3,640 | 3,250 | 2,950 | 18----- | 4,450 | 4,450 | 3,970 | 3,400 | 3,130 | 2,830 |
| 4----- | 4,480 | 4,570 | 4,120 | 3,700 | 3,250 | 2,890 | 19----- | 4,480 | 4,360 | 3,910 | 3,400 | 3,130 | 2,830 |
| 5----- | 4,510 | 4,600 | 4,090 | 3,670 | 3,220 | 2,860 | 20----- | 4,510 | 4,390 | 3,880 | 3,340 | 3,130 | 2,770 |
| 6----- | 4,570 | 4,660 | 4,120 | 3,730 | 3,220 | 2,740 | 21----- | 4,540 | 4,420 | 3,880 | 3,370 | 3,100 | 2,770 |
| 7----- | 4,510 | 4,630 | 4,120 | 3,700 | 3,220 | 2,860 | 22----- | 4,600 | 4,450 | 3,820 | 3,400 | 3,100 | 2,770 |
| 8----- | 4,480 | 4,630 | 4,210 | 3,580 | 3,190 | 2,830 | 23----- | 4,570 | 4,450 | 3,790 | 3,520 | 3,040 | 2,830 |
| 9----- | 4,450 | 4,600 | 4,120 | 3,580 | 3,220 | 2,860 | 24----- | 4,510 | 4,240 | 3,760 | 3,400 | 3,010 | 2,860 |
| 10----- | 4,420 | 4,630 | 3,970 | 3,550 | 3,220 | 2,830 | 25----- | 4,690 | 4,300 | 3,700 | 3,400 | 2,980 | 2,860 |
| 11----- | 4,390 | 4,630 | 3,970 | 3,520 | 3,280 | 2,890 | 26----- | 4,630 | 4,300 | 3,730 | 3,310 | 2,950 | 2,830 |
| 12----- | 4,360 | 4,690 | 3,970 | 3,490 | 3,190 | 2,830 | 27----- | 4,600 | 4,300 | 3,730 | 3,310 | 2,950 | 2,860 |
| 13----- | 4,360 | 4,660 | 4,000 | 3,520 | 3,160 | 2,770 | 28----- | 4,540 | 4,210 | 3,730 | 3,310 | 2,950 | 2,860 |
| 14----- | 4,330 | 4,600 | 3,910 | 3,430 | 3,130 | 2,830 | 29----- | 4,510 | 4,180 | 3,730 | 3,280 | 2,950 | 2,810 |
| 15----- | 4,420 | 4,540 | 3,910 | 3,460 | 3,070 | 2,860 | 30----- | 4,540 | 4,270 | 3,670 | 3,250 | 2,920 | 2,770 |
| | | | | | | | 31----- | 4,270 | | | 3,250 | 2,950 | ----- |

| Month | Maximum | Minimum | Mean | Month | Maximum | Minimum | Mean |
|------------|---------|---------|-------|----------------|---------|---------|-------|
| April----- | 4,990 | 4,330 | 4,520 | July----- | 3,730 | 3,250 | 3,470 |
| May----- | 4,690 | 4,180 | 4,470 | August----- | 3,280 | 2,920 | 3,120 |
| June----- | 4,330 | 3,670 | 3,950 | September----- | 2,950 | 2,740 | 2,840 |

FISHEATING CREEK AT PALMDALE, FLA.

LOCATION.—Staff gage at highway bridge 1 mile south of Palmdale, Glades County, Florida. Zero of gage is 37.00 feet above mean sea level, Okeechobee flood control district datum.

RECORDS AVAILABLE.—April to September, 1931.

EXTREMES.—Maximum discharge during period, 470 second-feet Apr. 22 (gage height, 6.00 feet); minimum, 0.09 second-foot July 16 (gage height, 1.88 feet).

REMARKS.—Records good between 10 and 150 second-feet; fair above and below these limits. Discharge estimated for June 11–23. Gage height record and results of discharge measurements furnished by Okeechobee flood control district.

Daily and monthly discharge, in second-feet, of Fisheating Creek at Palmdale, Fla., 1931

| Day | Apr. | May | June | July | Aug. | Sept. | Day | Apr. | May | June | July | Aug. | Sept. |
|-------------|------|-----|--------------|--------------|------|-----------|-----|------|--------------|--------------|-------|------|-------|
| 1 | | 245 | 59 | 0.6 | 0.4 | 4.1 | 16 | | 110 | 10 | 0.2 | 26 | 59 |
| 2 | | 260 | 47 | .5 | .3 | 10 | 17 | | 114 | | .3 | 18 | 56 |
| 3 | | 305 | 41 | .5 | .3 | 20 | 18 | | 106 | | .3 | 12 | 53 |
| 4 | | 320 | 34 | .4 | .6 | 26 | 19 | | 94 | | .3 | 8.8 | 56 |
| 5 | | 290 | 28 | .3 | .6 | 24 | 20 | | 87 | | .3 | 6.4 | 59 |
| 6 | | 290 | 23 | .3 | .5 | 15 | 21 | | 87 | 7.0 | .3 | 5.4 | 59 |
| 7 | | 350 | 18 | .3 | .4 | 23 | 22 | 470 | 87 | 5.0 | .3 | 4.2 | 56 |
| 8 | | 335 | 14 | .3 | .4 | 26 | 23 | 452 | 87 | 3.5 | .3 | 3.4 | 53 |
| 9 | | 305 | 12 | .2 | 2.0 | 27 | 24 | 400 | 94 | 2.9 | .8 | 3.0 | 53 |
| 10 | | 275 | 10 | .2 | 2.1 | 87 | 25 | 382 | 110 | 2.4 | 1.0 | 2.6 | 50 |
| 11 | | 245 | 8.5 | .2 | 5.8 | 110 | 26 | 365 | 114 | 1.7 | .9 | 2.8 | 50 |
| 12 | | 215 | | .2 | 34 | 102 | 27 | 335 | 110 | 1.2 | .7 | 2.4 | 62 |
| 13 | | 185 | | .2 | 66 | 90 | 28 | 305 | 102 | 1.0 | .6 | 2.0 | 90 |
| 14 | | 160 | | .2 | 56 | 84 | 29 | 290 | 90 | .8 | .6 | 1.9 | 143 |
| 15 | | 143 | | .1 | 41 | 70 | 30 | 260 | 80 | .7 | .5 | 2.0 | 152 |
| | | | | | | | 31 | | 70 | | .4 | 2.3 | |
| Month | | | Maxi- mum | Mini- mum | Mean | Month | | | Maxi- mum | Mini- mum | Mean | | |
| April 22-30 | | | 470 | 260 | 362 | July | | | 1.0 | 0.1 | 0.397 | | |
| May | | | 350 | 70 | 176 | August | | | 66 | .3 | 10.1 | | |
| June | | | 59 | .7 | 13.5 | September | | | 152 | 4.1 | 59.0 | | |

INDIAN PRAIRIE CANAL NEAR LAKEPORT, FLA.

LOCATION.—Staff gage in T. 39 S., R. 33 E., 4 miles upstream from Lake Okeechobee, 8 miles southeast of Brighton, and 12 miles northeast of Lakeport. Zero of gage is at mean sea level, Okeechobee flood control district datum.

RECORDS AVAILABLE.—April to September, 1931.

EXTREMES.—Maximum discharge during period, 608 second-feet Apr. 18-21 (gage height, 19.84 feet); minimum discharge, 8.2 second-feet July 30; minimum gage height, 14.44 feet Aug. 22, 23.

REMARKS.—Records poor. Gage-height record and results of discharge measurements furnished by Okeechobee flood control district.

Daily and monthly discharge, in second-feet, 1931

| Day | Apr. | May | June | July | Aug. | Sept. | Day | Apr. | May | June | July | Aug. | Sept. |
|-----------------|-------|-----|--------------|--------------|------|----------------|---------|------|--------------|--------------|------|------|-------|
| 1----- | ----- | 334 | 91 | 20 | 12 | 13 | 16----- | 528 | 156 | 50 | 19 | 30 | 75 |
| 2----- | ----- | 348 | 87 | 19 | 10 | 14 | 17----- | 592 | 147 | 54 | 17 | 24 | 64 |
| 3----- | ----- | 405 | 91 | 21 | 10 | 15 | 18----- | 608 | 147 | 54 | 33 | 20 | 57 |
| 4----- | ----- | 390 | 83 | 13 | 12 | 15 | 19----- | 608 | 156 | 46 | 19 | 21 | 54 |
| 5----- | 247 | 362 | 75 | 19 | 12 | 15 | 20----- | 608 | 147 | 43 | 9.4 | 20 | 43 |
| 6----- | 307 | 334 | 75 | 17 | 12 | 14 | 21----- | 608 | 147 | 36 | 18 | 12 | 41 |
| 7----- | 282 | 307 | 68 | 11 | 15 | 15 | 22----- | 560 | 138 | 33 | 18 | 11 | 39 |
| 8----- | 282 | 294 | 64 | 9.4 | 14 | 13 | 23----- | 528 | 138 | 23 | 14 | 9.4 | 39 |
| 9----- | 270 | 270 | 64 | 9.4 | 19 | 19 | 24----- | 465 | 147 | 16 | 12 | 13 | 34 |
| 10----- | 258 | 258 | 64 | 11 | 28 | 20 | 25----- | 420 | 138 | 16 | 24 | 14 | 50 |
| 11----- | 247 | 236 | 68 | 10 | 26 | 19 | 26----- | 405 | 116 | 15 | 19 | 15 | 79 |
| 12----- | 236 | 216 | 68 | 10 | 25 | 18 | 27----- | 376 | 116 | 18 | 12 | 14 | 91 |
| 13----- | 226 | 196 | 54 | 15 | 37 | 17 | 28----- | 362 | 116 | 19 | 12 | 13 | 91 |
| 14----- | 216 | 176 | 57 | 13 | 36 | 57 | 29----- | 362 | 107 | 18 | 10 | 13 | 71 |
| 15----- | 512 | 166 | 50 | 13 | 33 | 68 | 30----- | 348 | 111 | 19 | 8.2 | 13 | 46 |
| | | | | | | | 31----- | | 99 | | 13 | 13 | ----- |
| Month | | | Maxi- mum | Mini- mum | Mean | Month | | | Maxi- mum | Mini- mum | Mean | | |
| April 5-30----- | | | 608 | 216 | 402 | July----- | | | 33 | 8.2 | 15.1 | | |
| May----- | | | 405 | 99 | 207 | August----- | | | 37 | 9.4 | 17.9 | | |
| June----- | | | 91 | 15 | 50.6 | September----- | | | 91 | 13 | 40.2 | | |

PEACE CREEK BASIN

PEACE CREEK AT ARCADIA, FLA.

LOCATION.—Water-stage recorder at highway bridge on State highway 18, half a mile west of Arcadia, DeSoto County. Staff gage used prior to July 19, 1931.

RECORDS AVAILABLE.—April to September, 1931.

EXTREMES.—Maximum discharge during period, 5,930 second-feet Apr. 20 (gage height, 9.68 feet); minimum, 125 second-feet July 3-5 (gage height, 0.68 foot).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1931

| Day | Apr. | May | June | July | Aug. | Sept. | Day | Apr. | May | June | July | Aug. | Sept. |
|----------|-------|-------|------|-------|-------|-------|----------|-------|-------|-------|------|-------|-------|
| 1. | ----- | 1,240 | 810 | 136 | 595 | 435 | 16. | 3,040 | 720 | 400 | 901 | 1,170 | 1,220 |
| 2. | ----- | 1,120 | 720 | 129 | 655 | 463 | 17. | 4,400 | 615 | 293 | 781 | 1,240 | 1,170 |
| 3. | ----- | 990 | 595 | 125 | 535 | 483 | 18. | 5,430 | 535 | 230 | 675 | 1,240 | 1,120 |
| 4. | ----- | 1,200 | 511 | 125 | 459 | 635 | 19. | 5,830 | 433 | 222 | 615 | 1,200 | 1,060 |
| 5. | ----- | 1,530 | 443 | 127 | 404 | 1,120 | 20. | 5,930 | 459 | 216 | 615 | 1,120 | 990 |
| 6. | ----- | 1,700 | 396 | 148 | 365 | 1,320 | 21. | 5,630 | 463 | 228 | 635 | 1,010 | 922 |
| 7. | 2,280 | 1,480 | 362 | 219 | 435 | 1,320 | 22. | 4,940 | 765 | 214 | 565 | 855 | 832 |
| 8. | 2,030 | 1,320 | 330 | 389 | 720 | 1,200 | 23. | 4,220 | 1,270 | 194 | 555 | 720 | 765 |
| 9. | 1,580 | 1,220 | 303 | 354 | 675 | 1,080 | 24. | 3,600 | 1,580 | 176 | 515 | 615 | 1,080 |
| 10. | 1,270 | 1,170 | 272 | 266 | 615 | 1,580 | 25. | 2,960 | 1,920 | 168 | 515 | 535 | 1,640 |
| 11. | 1,120 | 1,100 | 251 | 248 | 615 | 1,800 | 26. | 2,420 | 2,090 | 162 | 635 | 479 | 1,640 |
| 12. | 1,040 | 1,010 | 242 | 306 | 922 | 1,480 | 27. | 2,030 | 1,970 | 162 | 698 | 435 | 1,700 |
| 13. | 945 | 968 | 260 | 675 | 922 | 1,200 | 28. | 1,750 | 1,750 | 230 | 742 | 451 | 1,920 |
| 14. | 900 | 900 | 242 | 1,200 | 945 | 1,100 | 29. | 1,640 | 1,420 | 170 | 720 | 595 | 1,750 |
| 15. | 1,160 | 832 | 303 | 1,160 | 1,060 | 1,320 | 30. | 1,420 | 1,160 | 148 | 720 | 515 | 1,530 |
| | | | | | | | 31. | ----- | 968 | ----- | 655 | 447 | ----- |

| Month | Maximum | Minimum | Mean | Month | Maximum | Minimum | Mean |
|------------------|---------|---------|-------|-----------------|---------|---------|-------|
| April 7-30. | 5,930 | 900 | 1,820 | July. | 1,200 | 125 | 522 |
| May. | 2,090 | 459 | 1,160 | August. | 1,240 | 365 | 727 |
| June. | 810 | 148 | 308 | September. | 1,920 | 435 | 1,200 |

HILLSBORO RIVER BASIN**SULPHUR SPRING AT TAMPA, FLA.**

LOCATION.—In sec. 25, T. 28 S., R. 18 E., at Sulphur Springs, in Tampa.

RECORDS AVAILABLE.—Discharge measurements from February to September, 1931. Single measurements only during 1917, 1929, and 1930.

Discharge measurements, in second-feet, 1917 and 1929-1931

| 1917 | | 1931 | | 1931 | |
|--------------|------|--------------|------|---------------|------|
| Feb. 24..... | 35.5 | Feb. 6..... | 46.1 | July 17..... | 31.0 |
| | | Mar. 18..... | 80.0 | Aug. 8..... | 40.5 |
| Feb. 6..... | 25.8 | Apr. 6..... | 69.8 | Sept. 3..... | 38.4 |
| | | May 6..... | 72.0 | Sept. 13..... | 51.4 |
| May 9..... | 92.3 | June 24..... | 54.2 | | |

WEEKIWACHEE RIVER BASIN**WEEKIWACHEE SPRING NEAR BROOKSVILLE, FLA.**

LOCATION.—Staff gage in sec. 2, T. 23 S., R. 17 E., at source of Weekiwachee River, about 12 miles southwest of Brooksville.

RECORDS AVAILABLE.—Discharge measurements from February to September, 1931. Single measurements only during 1917, 1929, and 1930.

Discharge measurements, in second-feet, 1917 and 1929-1931

| 1917 | | 1931 | | 1931 | |
|--------------|-----|--------------|-----|--------------|-----|
| Feb. 23..... | 145 | Feb. 6..... | 165 | July 17..... | 148 |
| | | Mar. 18..... | 178 | Aug. 7..... | 146 |
| Feb. 4..... | 163 | Apr. 6..... | 228 | Sept. 2..... | 143 |
| | | May 6..... | 231 | | |
| Aug. 21..... | 178 | June 25..... | 184 | | |

WITHLACOOCHEE RIVER BASIN

WITHLACOOCHEE RIVER NEAR DADE CITY, FLA.

LOCATION.—Staff gage Lanier Bridge, 4 miles east of Dade City, Pasco County.
RECORDS AVAILABLE.—February, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,070 second-feet Apr. 21 (gage height, 11.26 feet); minimum, 5 second-feet July 4 (gage height, 5.00 feet).

1930-31: Maximum discharge, 1,960 second-feet Apr. 2, 1930 (gage height, 12.35 feet); minimum, that of July 4, 1931.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 665 | 100 | 68 | 535 | 404 | 93 | 264 | 505 | 100 | 19 | 74 | 382 |
| 2..... | 595 | 100 | 68 | 565 | 382 | 140 | 340 | 453 | 107 | 11 | 80 | 340 |
| 3..... | 555 | 93 | 66 | 565 | 360 | 186 | 404 | 428 | 107 | 7 | 83 | 282 |
| 4..... | 505 | 90 | 66 | 565 | 320 | 248 | 479 | 404 | 107 | 5 | 86 | 264 |
| 5..... | 479 | 86 | 66 | 565 | 300 | 300 | 595 | 382 | 107 | 35 | 98 | 232 |
| 6..... | 428 | 83 | 63 | 565 | 300 | 360 | 705 | 340 | 107 | 35 | 93 | 232 |
| 7..... | 404 | 80 | 63 | 565 | 264 | 453 | 705 | 340 | 107 | 35 | 86 | 216 |
| 8..... | 382 | 86 | 63 | 535 | 264 | 595 | 750 | 320 | 100 | 81 | 83 | 200 |
| 9..... | 340 | 83 | 60 | 535 | 232 | 665 | 750 | 340 | 100 | 29 | 80 | 200 |
| 10..... | 320 | 83 | 58 | 535 | 216 | 750 | 750 | 340 | 100 | 27 | 74 | 200 |
| 11..... | 300 | 80 | 58 | 535 | 200 | 750 | 750 | 340 | 86 | 27 | 80 | 186 |
| 12..... | 264 | 80 | 56 | 505 | 186 | 750 | 750 | 320 | 80 | 27 | 90 | 160 |
| 13..... | 232 | 80 | 56 | 505 | 172 | 705 | 665 | 320 | 80 | 29 | 100 | 160 |
| 14..... | 216 | 77 | 56 | 505 | 160 | 665 | 630 | 320 | 77 | 29 | 107 | 160 |
| 15..... | 200 | 77 | 53 | 479 | 150 | 630 | 750 | 300 | 74 | 27 | 115 | 172 |
| 16..... | 186 | 74 | 53 | 453 | 140 | 595 | 750 | 282 | 68 | 27 | 140 | 186 |
| 17..... | 172 | 74 | 58 | 479 | 140 | 535 | 795 | 264 | 58 | 26 | 216 | 216 |
| 18..... | 160 | 74 | 56 | 453 | 131 | 505 | 845 | 248 | 56 | 22 | 282 | 264 |
| 19..... | 150 | 74 | 56 | 428 | 123 | 453 | 960 | 232 | 53 | 21 | 360 | 282 |
| 20..... | 140 | 74 | 56 | 404 | 123 | 404 | 1,010 | 216 | 46 | 24 | 595 | 320 |
| 21..... | 131 | 74 | 60 | 404 | 115 | 360 | 1,070 | 186 | 41 | 27 | 705 | 320 |
| 22..... | 123 | 74 | 71 | 404 | 107 | 340 | 1,010 | 172 | 39 | 31 | 795 | 340 |
| 23..... | 115 | 71 | 90 | 404 | 107 | 320 | 1,010 | 160 | 39 | 31 | 895 | 340 |
| 24..... | 123 | 68 | 93 | 404 | 100 | 300 | 895 | 150 | 43 | 43 | 845 | 382 |
| 25..... | 123 | 68 | 115 | 404 | 100 | 282 | 845 | 140 | 43 | 46 | 845 | 382 |
| 26..... | 115 | 68 | 140 | 428 | 100 | 248 | 750 | 131 | 46 | 41 | 795 | 382 |
| 27..... | 115 | 66 | 200 | 453 | 93 | 232 | 705 | 115 | 43 | 36 | 705 | 382 |
| 28..... | 107 | 66 | 282 | 453 | 93 | 200 | 630 | 107 | 43 | 46 | 630 | 360 |
| 29..... | 107 | 66 | 360 | 428 | ----- | 200 | 565 | 100 | 43 | 56 | 565 | 340 |
| 30..... | 107 | 68 | 453 | 428 | ----- | 186 | 505 | 90 | 39 | 56 | 505 | 360 |
| 31..... | 100 | ----- | 505 | 428 | ----- | 216 | ----- | 93 | ----- | 66 | 479 | ----- |

| Month | Maximum | Minimum | Mean | Month | Maximum | Minimum | Mean |
|---------------|---------|---------|------|----------------|---------|---------|------|
| October..... | 665 | 100 | 258 | May..... | 505 | 93 | 262 |
| November..... | 100 | 66 | 78 | June..... | 107 | 39 | 71 |
| December..... | 505 | 53 | 115 | July..... | 68 | 5 | 32 |
| January..... | 565 | 404 | 481 | August..... | 895 | 74 | 345 |
| February..... | 404 | 93 | 192 | September..... | 382 | 160 | 274 |
| March..... | 750 | 93 | 409 | The year..... | 1,070 | 5 | 270 |
| April..... | 1,070 | 264 | 721 | | | | |

WITHLACOCHEE RIVER AT TRILBY, FLA.

LOCATION.—Staff gage at highway bridge 1 mile north of Trilby, Pasco County.

DRAINAGE AREA.—710 square miles.

RECORDS AVAILABLE.—August, 1928, to February, 1929; February, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,590 second-feet Apr. 19 (gage height, 10.75 feet); minimum discharge, 73 second-feet Dec. 18; minimum gage height, 1.11 feet July 18.

1928-29, 1930-31: Maximum discharge, 3,340 second-feet Oct. 3, 4, 1928 (gage height, 15.35 feet); minimum discharge, that of Dec. 18, 1930; minimum gage height, that of July 18, 1931.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-------|-------|------|------|-------|
| 1..... | 697 | 218 | 98 | 339 | 577 | 229 | 516 | 1,150 | 220 | 92 | 124 | 655 |
| 2..... | 740 | 207 | 98 | 408 | 564 | 240 | 540 | 1,050 | 210 | 88 | 140 | 655 |
| 3..... | 755 | 196 | 94 | 468 | 564 | 262 | 552 | 990 | 192 | 84 | 132 | 642 |
| 4..... | 770 | 186 | 94 | 516 | 564 | 317 | 590 | 950 | 183 | 84 | 132 | 642 |
| 5..... | 770 | 176 | 90 | 528 | 564 | 372 | 642 | 890 | 174 | 84 | 124 | 603 |
| 6..... | 755 | 166 | 90 | 590 | 552 | 396 | 725 | 815 | 165 | 116 | 116 | 590 |
| 7..... | 740 | 166 | 90 | 642 | 540 | 420 | 910 | 770 | 165 | 132 | 124 | 590 |
| 8..... | 725 | 156 | 86 | 669 | 516 | 432 | 990 | 725 | 165 | 124 | 124 | 564 |
| 9..... | 697 | 156 | 86 | 669 | 504 | 504 | 1,010 | 669 | 165 | 116 | 132 | 540 |
| 10..... | 669 | 166 | 82 | 683 | 492 | 552 | 1,030 | 642 | 156 | 116 | 140 | 516 |
| 11..... | 642 | 156 | 82 | 683 | 468 | 629 | 1,030 | 616 | 156 | 116 | 132 | 492 |
| 12..... | 616 | 156 | 79 | 666 | 444 | 683 | 1,030 | 577 | 156 | 108 | 165 | 468 |
| 13..... | 590 | 146 | 79 | 683 | 420 | 711 | 1,030 | 552 | 148 | 100 | 220 | 444 |
| 14..... | 564 | 146 | 82 | 697 | 396 | 755 | 1,010 | 540 | 156 | 96 | 306 | 420 |
| 15..... | 564 | 136 | 82 | 683 | 396 | 785 | 1,050 | 516 | 148 | 84 | 396 | 432 |
| 16..... | 540 | 131 | 76 | 669 | 372 | 800 | 1,200 | 492 | 156 | 84 | 456 | 444 |
| 17..... | 504 | 131 | 76 | 669 | 361 | 815 | 1,410 | 468 | 156 | 77 | 492 | 456 |
| 18..... | 492 | 126 | 73 | 655 | 350 | 815 | 1,530 | 456 | 148 | 77 | 468 | 444 |
| 19..... | 468 | 126 | 76 | 642 | 328 | 800 | 1,590 | 444 | 148 | 80 | 432 | 432 |
| 20..... | 420 | 121 | 79 | 629 | 306 | 770 | 1,560 | 432 | 148 | 88 | 396 | 444 |
| 21..... | 396 | 116 | 82 | 642 | 295 | 755 | 1,530 | 408 | 140 | 92 | 372 | 384 |
| 22..... | 372 | 111 | 106 | 642 | 284 | 740 | 1,500 | 396 | 124 | 92 | 384 | 372 |
| 23..... | 339 | 106 | 126 | 642 | 273 | 725 | 1,470 | 372 | 116 | 92 | 408 | 372 |
| 24..... | 317 | 106 | 146 | 642 | 251 | 697 | 1,410 | 361 | 116 | 88 | 432 | 372 |
| 25..... | 306 | 102 | 156 | 642 | 240 | 669 | 1,410 | 339 | 108 | 84 | 468 | 384 |
| 26..... | 295 | 102 | 156 | 629 | 240 | 629 | 1,350 | 317 | 108 | 84 | 504 | 396 |
| 27..... | 284 | 102 | 176 | 616 | 240 | 590 | 1,300 | 306 | 100 | 92 | 540 | 408 |
| 28..... | 273 | 98 | 196 | 603 | 229 | 564 | 1,280 | 295 | 104 | 108 | 577 | 420 |
| 29..... | 251 | 94 | 240 | 603 | ----- | 540 | 1,280 | 273 | 100 | 116 | 616 | 420 |
| 30..... | 240 | 94 | 262 | 590 | ----- | 516 | 1,220 | 262 | 96 | 116 | 629 | 430 |
| 31..... | 229 | ----- | 295 | 590 | ----- | 492 | ----- | 240 | ----- | 124 | 642 | ----- |

| Month | Maximum | Minimum | Mean | Month | Maximum | Minimum | Mean |
|---------------|---------|---------|-------|----------------|---------|---------|------|
| October..... | 770 | 229 | 517 | May..... | 1,150 | 240 | 558 |
| November..... | 218 | 94 | 140 | June..... | 220 | 96 | 148 |
| December..... | 295 | 73 | 117 | July..... | 132 | 77 | 97.9 |
| January..... | 697 | 339 | 614 | August..... | 642 | 116 | 333 |
| February..... | 577 | 229 | 405 | September..... | 655 | 372 | 481 |
| March..... | 815 | 229 | 590 | | | | |
| April..... | 1,590 | 516 | 1,120 | The year..... | 1,590 | 73 | 427 |

WITHLACOOCHEE RIVER NEAR HOLDER, FLA.

LOCATION.—Water-stage recorder at Stokes Ferry Bridge, $4\frac{1}{2}$ miles northeast of Holder, Citrus County.

RECORDS AVAILABLE.—August, 1928, to February, 1929; August to September, 1931.

EXTREMES.—Maximum discharge during period, 1,210 second-feet Sept. 19 (gage height, 4.36 feet); minimum, 862 second-feet Sept. 2 (gage height, 3.34 feet). 1928-29, 1931: Maximum discharge, 5,830 second-feet Oct. 16, 1928 (gage height, 11.26 feet); minimum, 783 second-feet Feb. 15, 1929 (gage height, 2.88 feet).

REMARKS.—Records excellent. Present gage datum 2 feet lower than that of 1928-29.

Daily and monthly discharge, in second-feet, 1931

| Day | Aug. | Sept. | Day | Aug. | Sept. | Day | Aug. | Sept. |
|-----|------|-------|-----|------|-------|-----|------|-------|
| 1 | | 890 | 11 | | 1,080 | 21 | | 1,140 |
| 2 | | 862 | 12 | | 1,110 | 22 | | 1,140 |
| 3 | | 890 | 13 | | 1,080 | 23 | | 1,110 |
| 4 | | 890 | 14 | | 1,080 | 24 | | 1,110 |
| 5 | | 949 | 15 | | 1,110 | 25 | | 1,110 |
| 6 | | 979 | 16 | | 1,140 | 26 | | 1,110 |
| 7 | | 1,010 | 17 | | 1,140 | 27 | | 1,110 |
| 8 | | 1,040 | 18 | | 1,180 | 28 | | 1,080 |
| 9 | | 1,040 | 19 | | 1,210 | 29 | 919 | 1,080 |
| 10 | | 1,080 | 20 | | 1,180 | 30 | 919 | 1,040 |
| | | | | | | 31 | 890 | |

| Month | Maximum | Minimum | Mean |
|--------------|---------|---------|-------|
| August 29-31 | 919 | 890 | 909 |
| September | 1,210 | 862 | 1,070 |

WITHLACOOCHEE-HILLSBORO OVERFLOW NEAR RICHLAND, FLA.

LOCATION.—Staff gage in sec. 34, T. 25 S., R. 22 E., at highway bridge on Dade City-Lakeland highway about 3 miles east of Richland.

RECORDS AVAILABLE.—April, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 430 second-feet Apr. 19 (gage height, 6.68 feet); no flow at numerous times.

1930-31: Maximum discharge, 615 second-feet, Apr. 2, 1930 (gage height, 7.25 feet); no flow on numerous days each year.

REMARKS.—Records good except those below 10 second-feet, which are fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1 | 158 | 0.7 | 0.4 | 180 | 58 | 3.1 | 70 | 53 | 0.1 | 0.2 | 0.4 | 29 |
| 2 | 130 | .5 | 0.4 | 180 | 45 | 21 | 118 | 43 | .2 | .1 | .3 | 21 |
| 3 | 102 | .4 | 0.4 | 169 | 38 | 29 | 138 | 50 | .2 | 0 | .2 | 22 |
| 4 | 91 | .4 | 0.4 | 158 | 33 | 50 | 148 | 36 | .2 | 0.0 | .1 | 11 |
| 5 | 64 | .4 | 0.4 | 169 | 26 | 114 | 205 | 31 | .2 | 0 | .1 | 9.4 |
| 6 | 53 | .4 | 0.4 | 158 | 22 | 180 | 230 | 36 | .2 | .1 | 0.0 | 14 |
| 7 | 45 | .8 | 0.4 | 158 | 21 | 230 | 260 | 38 | .2 | .1 | 0 | 11 |
| 8 | 34 | 1.1 | 0.4 | 148 | 17 | 290 | 275 | 40 | .2 | 0.0 | 0.0 | 9.4 |
| 9 | 28 | 1.2 | 0.4 | 148 | 16 | 290 | 275 | 45 | .2 | 0 | 0.0 | 8.6 |
| 10 | 23 | 1.3 | 0.4 | 148 | 14 | 290 | 260 | 45 | .2 | .1 | 0.0 | 5.6 |
| 11 | 18 | 1.1 | .4 | 138 | 12 | 275 | 230 | 36 | .1 | .2 | 0 | 4.2 |
| 12 | 16 | .9 | 0.4 | 138 | 10 | 245 | 205 | 34 | 0 | .4 | .2 | 3.5 |
| 13 | 12 | .7 | 0.3 | 134 | 8.6 | 218 | 169 | 31 | .1 | .3 | .3 | 3.5 |
| 14 | 12 | .5 | .3 | 118 | 7.0 | 192 | 134 | 28 | .2 | .3 | .4 | 6.3 |
| 15 | 8.6 | .5 | .3 | 102 | 7.0 | 158 | 180 | 25 | .2 | .2 | 1.1 | 12 |
| 16 | 7.0 | .5 | 0.3 | 87 | 5.6 | 134 | 260 | 22 | .2 | .1 | 1.0 | 23 |
| 17 | 4.9 | 0.4 | 0.3 | 74 | 5.6 | 110 | 360 | 17 | .2 | 0 | .74 | 38 |
| 18 | 4.0 | .4 | 0.3 | 70 | 4.9 | 80 | 412 | 14 | .1 | 0 | 180 | 50 |
| 19 | 3.1 | .4 | 0.6 | 74 | 4.2 | 64 | 430 | 11 | .1 | 0.0 | 260 | 58 |
| 20 | 1.9 | .4 | 1.8 | 53 | 3.5 | 48 | 412 | 8.6 | .1 | 0 | 325 | 61 |
| 21 | 1.5 | .4 | 3.1 | 58 | 3.1 | 40 | 395 | 9.4 | 0 | 0.0 | 360 | 61 |
| 22 | 1.1 | 0.4 | 11 | 64 | 2.7 | 33 | 360 | 7.0 | 0 | 0 | 325 | 64 |
| 23 | .7 | .4 | 10 | 77 | 2.3 | 26 | 325 | 6.3 | .1 | 0.0 | 325 | 61 |
| 24 | 1.5 | .4 | 12 | 87 | 2.7 | 22 | 275 | 3.5 | .1 | 0.0 | 290 | 60 |
| 25 | 1.5 | .4 | 10 | 98 | 3.1 | 18 | 230 | 2.3 | .1 | 0.0 | 260 | 58 |
| 26 | 1.2 | .4 | 15 | 114 | 2.7 | 16 | 205 | 1.3 | .2 | 0.0 | 230 | 50 |
| 27 | .9 | 0.4 | 48 | 110 | 2.7 | 13 | 158 | .9 | .4 | 0.0 | 180 | 56 |
| 28 | .5 | .3 | 87 | 102 | 2.7 | 11 | 122 | .7 | .5 | 0.0 | 148 | 50 |
| 29 | 1.1 | .3 | 138 | 94 | ----- | 9.4 | 94 | .4 | .4 | .1 | 98 | 53 |
| 30 | 1.1 | 0.4 | 158 | 80 | ----- | 7.8 | 77 | .2 | .2 | .2 | 74 | 56 |
| 31 | .9 | ----- | 169 | 69 | ----- | 36 | ----- | .2 | ----- | .3 | 48 | ----- |

| Month | Maximum | Minimum | Mean | Month | Maximum | Minimum | Mean |
|----------|---------|---------|------|-----------|---------|---------|-------|
| October | 158 | 0.5 | 26.7 | May | 53 | 0.2 | 218 |
| November | 1.3 | .3 | 560 | June | .5 | 0 | .173 |
| December | 169 | .3 | 216 | July | .4 | 0 | .0871 |
| January | 180 | 53 | 115 | August | 360 | 0 | 103 |
| February | 58 | 2.3 | 13.6 | September | 64 | 3.5 | 32.3 |
| March | 290 | 3.1 | 105 | The year | 430 | 0 | 476 |
| April | 430 | 70 | 234 | | | | |

* Estimated.

BLUE SPRINGS NEAR DUNNELLON, FLA.

LOCATION.—Water-stage recorder in sec. 12, T. 16 S., R. 18 E., 4 miles northeast of Dunnellon.

RECORDS AVAILABLE.—Discharge measurements from February to September, 1931. Single measurements only during 1917, 1929, 1930.

REMARKS.—Discharge measurements made at highway bridge 5 miles below springs. Measured discharge is practically all spring flow, as surface run-off is negligible except after heavy rains.

Discharge measurements, in second-feet, 1917 and 1929-1931

| 1917 | | 1931 | | 1931—Continued | |
|--------------|-----|--------------|-----|----------------|-----|
| Feb. 21..... | 738 | Feb. 9..... | 701 | July 16..... | 728 |
| | | Mar. 16..... | 799 | July 21..... | 656 |
| | | Apr. 6..... | 857 | Aug. 7..... | 704 |
| Feb. 1..... | 838 | May 6..... | 808 | Sept. 2..... | 617 |
| | | June 26..... | 788 | | |
| | | | | | |
| Oct. 8..... | 837 | | | | |

117283—33—11

SUWANNEE RIVER BASIN

SUWANNEE RIVER AT FARGO, GA.

LOCATION.—Staff gage at Georgia Southern & Florida Railway bridge at Fargo, Clinch County, 12 miles below Mixons Ferry dam site. Zero of gage is 92.90 feet above mean sea level.

DRAINAGE AREA.—1,050 square miles.

RECORDS AVAILABLE.—January, 1921, to September, 1923; January, 1927, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,460 second-feet Oct. 3 (gage height, 10.38 feet); minimum, 1.4 second-feet Sept. 30 (gage height, -0.38 foot).

1927-1931: Maximum discharge, 12,700 second-feet Oct. 3, 1929 (gage height, 18.6 feet); minimum, that of Sept. 30, 1931.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----------|---------|-------|---------|-------|-------|-------|-----------------|-------|-------------------|------|------|-------|
| 1 | 1,960 | 424 | 2,030 | 1,660 | 2,030 | 1,040 | 1,040 | 580 | 356 | 76 | 6.0 | 53 |
| 2 | 2,240 | 400 | 2,030 | 1,660 | 2,030 | 1,020 | 1,130 | 565 | 324 | 71 | 5.7 | 51 |
| 3 | 2,380 | 389 | 1,960 | 1,610 | 1,900 | 1,100 | 1,160 | 535 | 304 | 62 | 4.5 | 55 |
| 4 | 2,380 | 378 | 1,900 | 1,610 | 1,840 | 1,100 | 1,220 | 580 | 284 | 58 | 3.6 | 52 |
| 5 | 2,380 | 367 | 1,900 | 1,660 | 1,780 | 1,100 | 1,300 | 815 | 264 | 46 | 3.0 | 48 |
| 6 | 2,310 | 345 | 1,900 | 1,660 | 1,660 | 1,100 | 1,380 | 890 | 254 | 39 | 3.6 | 40 |
| 7 | 2,310 | 334 | 1,780 | 1,660 | 1,660 | 1,130 | 1,460 | 1,190 | 254 | 39 | 6.0 | 26 |
| 8 | 2,170 | 324 | 1,780 | 1,660 | 1,560 | 1,260 | 1,460 | 1,190 | 264 | 36 | 8.0 | 22 |
| 9 | 2,170 | 314 | 1,660 | 1,610 | 1,510 | 1,340 | 1,420 | 1,070 | 214 | 55 | 9.2 | 21 |
| 10 | 2,030 | 314 | 1,610 | 1,560 | 1,510 | 1,340 | 1,380 | 990 | 204 | 53 | 10 | 27 |
| 11 | 1,960 | 304 | 1,560 | 1,560 | 1,460 | 1,340 | 1,380 | 940 | 194 | 47 | 9.2 | 26 |
| 12 | 1,900 | 304 | 1,460 | 1,510 | 1,460 | 1,340 | 1,380 | 915 | 174 | 56 | 8.4 | 30 |
| 13 | 1,780 | 294 | 1,420 | 1,780 | 1,420 | 1,300 | 1,220 | 940 | 174 | 48 | 7.6 | 31 |
| 14 | 1,720 | 294 | 1,340 | 1,900 | 1,380 | 1,260 | 1,160 | 915 | 164 | 42 | 6.8 | 23 |
| 15 | 1,610 | 294 | 1,260 | 1,960 | 1,460 | 1,190 | 1,160 | 890 | 154 | 34 | 10 | 21 |
| 16 | 1,510 | 294 | 1,190 | 1,960 | 1,420 | 1,160 | 1,160 | 865 | 154 | 33 | 12 | 19 |
| 17 | 1,420 | 595 | 1,160 | 1,960 | 1,420 | 1,100 | 1,220 | 840 | 174 | 22 | 14 | 17 |
| 18 | 1,300 | 890 | 1,160 | 2,100 | 1,380 | 1,070 | 1,220 | 730 | 194 | 22 | 13 | 14 |
| 19 | 1,160 | 1,160 | 1,160 | 2,170 | 1,380 | 990 | 1,160 | 690 | 174 | 18 | 10 | 12 |
| 20 | 990 | 1,460 | 1,190 | 2,240 | 1,340 | 965 | 1,130 | 670 | 154 | 17 | 10 | 12 |
| 21 | 890 | 1,510 | 1,260 | 2,310 | 1,300 | 915 | 1,100 | 655 | 144 | 16 | 12 | 8.4 |
| 22 | 815 | 1,660 | 1,220 | 2,380 | 1,220 | 890 | 1,070 | 640 | 125 | 20 | 13 | 6.8 |
| 23 | 690 | 1,780 | 1,260 | 2,380 | 1,160 | 890 | 990 | 610 | 116 | 19 | 11 | 4.8 |
| 24 | 640 | 1,840 | 1,300 | 2,380 | 1,160 | 865 | 940 | 595 | 112 | 14 | 10 | 4.2 |
| 25 | 565 | 1,900 | 1,300 | 2,380 | 1,100 | 840 | 890 | 580 | 107 | 12 | 16 | 4.2 |
| 26 | 520 | 1,960 | 1,300 | 2,310 | 1,070 | 815 | 840 | 565 | 107 | 11 | 20 | 3.0 |
| 27 | 484 | 1,960 | 1,340 | 2,310 | 1,040 | 790 | 790 | 535 | 102 | 10 | 22 | 2.6 |
| 28 | 448 | 1,960 | 1,380 | 2,240 | 1,040 | 790 | 750 | 484 | 102 | 8.8 | 22 | 2.4 |
| 29 | 424 | 2,030 | 1,460 | 2,240 | ----- | 790 | 670 | 448 | 94 | 7.6 | 44 | 2.0 |
| 30 | 426 | 2,030 | 1,560 | 2,170 | ----- | 770 | 610 | 412 | 84 | 6.0 | 55 | 1.6 |
| 31 | 448 | ----- | 1,610 | 2,100 | ----- | 940 | ----- | 378 | ----- | 6.4 | 60 | ----- |
| Month | Maximum | | Minimum | | Mean | | Per square mile | | Run-off in inches | | | |
| October | 2,380 | | 424 | | 1,420 | | 1.35 | | 1.56 | | | |
| November | 2,030 | | 294 | | 937 | | .892 | | 1.00 | | | |
| December | 2,030 | | 1,160 | | 1,500 | | 1.43 | | 1.65 | | | |
| January | 2,380 | | 1,510 | | 1,960 | | 1.87 | | 2.16 | | | |
| February | 2,030 | | 1,040 | | 1,450 | | 1.38 | | 1.44 | | | |
| March | 1,340 | | 770 | | 1,050 | | 1.00 | | 1.15 | | | |
| April | 1,460 | | 610 | | 1,130 | | 1.08 | | 1.20 | | | |
| May | 1,190 | | 378 | | 732 | | .697 | | .80 | | | |
| June | 356 | | 84 | | 184 | | .175 | | .20 | | | |
| July | 76 | | 6.0 | | 32.5 | | .0310 | | .04 | | | |
| August | 60 | | 3.0 | | 14.4 | | .0137 | | .02 | | | |
| September | 55 | | 1.6 | | 21.3 | | .0203 | | .02 | | | |
| The year | 2,380 | | 1.6 | | 867 | | .826 | | 11.24 | | | |

SUWANNEE RIVER AT WHITE SPRINGS, FLA.

LOCATION.—Staff gage at highway bridge in White Springs, Hamilton County, 500 feet upstream from large spring (White Spring).

DRAINAGE AREA.—2,160 square miles.

RECORDS AVAILABLE.—May, 1906, to December, 1908; February, 1927, to September, 1931.

EXTREMES.—Maximum discharge during year, 4,280 second-feet Jan. 24, 25 (gage height, 15.0 feet); minimum, 9 second-feet Sept. 29, 30 (gage height, 1.90 feet).

1906–1908, 1927–1931: Maximum discharge, 20,600 second-feet Sept. 30, Oct. 1, 1928 (gage height, 33.9 feet); minimum, that of Sept. 29, 30, 1931.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930–31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| 1----- | 2,200 | 450 | 2,380 | 2,490 | 3,390 | 1,570 | 2,530 | 942 | 475 | 120 | 78 | 82 |
| 2----- | 2,350 | 450 | 2,420 | 2,420 | 3,280 | 1,640 | 2,560 | 840 | 425 | 96 | 64 | 82 |
| 3----- | 2,490 | 425 | 2,420 | 2,380 | 3,100 | 1,780 | 2,380 | 774 | 400 | 91 | 61 | 78 |
| 4----- | 2,670 | 400 | 2,380 | 2,460 | 2,960 | 2,020 | 2,240 | 976 | 375 | 82 | 44 | 61 |
| 5----- | 2,820 | 375 | 2,380 | 2,600 | 2,780 | 1,990 | 2,350 | 1,120 | 350 | 68 | 40 | 64 |
| 6----- | 2,890 | 375 | 2,350 | 2,740 | 2,600 | 1,880 | 2,820 | 1,500 | 325 | 64 | 40 | 82 |
| 7----- | 2,890 | 325 | 2,280 | 2,740 | 2,460 | 1,880 | 2,820 | 1,740 | 300 | 64 | 40 | 78 |
| 8----- | 2,820 | 325 | 2,240 | 2,640 | 2,310 | 2,600 | 2,670 | 1,880 | 280 | 68 | 40 | 61 |
| 9----- | 2,740 | 312 | 2,130 | 2,530 | 2,240 | 3,030 | 2,600 | 1,820 | 270 | 73 | 40 | 50 |
| 10----- | 2,640 | 312 | 2,060 | 2,460 | 2,380 | 2,890 | 2,490 | 1,740 | 250 | 68 | 64 | 47 |
| 11----- | 2,490 | 325 | 1,960 | 2,380 | 2,310 | 2,740 | 2,350 | 1,680 | 240 | 78 | 64 | 44 |
| 12----- | 2,380 | 325 | 1,850 | 2,380 | 2,240 | 2,530 | 2,200 | 1,570 | 220 | 104 | 64 | 40 |
| 13----- | 2,280 | 300 | 1,780 | 3,030 | 2,130 | 2,380 | 2,060 | 1,460 | 200 | 120 | 68 | 40 |
| 14----- | 2,100 | 300 | 1,680 | 3,500 | 2,170 | 2,240 | 1,960 | 1,400 | 200 | 140 | 78 | 40 |
| 15----- | 1,960 | 300 | 1,600 | 3,500 | 2,530 | 2,100 | 1,880 | 1,320 | 200 | 136 | 180 | 35 |
| 16----- | 1,780 | 300 | 1,540 | 3,500 | 2,600 | 2,020 | 1,880 | 1,220 | 190 | 120 | 375 | 32 |
| 17----- | 1,640 | 530 | 1,460 | 3,540 | 2,490 | 1,880 | 1,920 | 1,180 | 180 | 120 | 280 | 32 |
| 18----- | 1,500 | 1,260 | 1,460 | 3,690 | 2,350 | 1,780 | 1,880 | 1,120 | 190 | 116 | 240 | 32 |
| 19----- | 1,290 | 1,680 | 1,460 | 3,720 | 2,240 | 1,680 | 1,880 | 1,040 | 200 | 96 | 180 | 32 |
| 20----- | 1,260 | 1,850 | 1,540 | 3,840 | 2,170 | 1,600 | 1,820 | 976 | 190 | 82 | 160 | 32 |
| 21----- | 1,150 | 1,920 | 1,570 | 4,060 | 2,060 | 1,540 | 1,740 | 942 | 180 | 78 | 124 | 29 |
| 22----- | 976 | 2,020 | 1,570 | 4,210 | 1,960 | 1,500 | 1,680 | 874 | 180 | 68 | 110 | 26 |
| 23----- | 840 | 2,060 | 1,640 | 4,240 | 1,880 | 1,460 | 1,600 | 840 | 160 | 64 | 86 | 26 |
| 24----- | 806 | 2,170 | 1,640 | 4,280 | 1,850 | 1,460 | 1,500 | 840 | 140 | 64 | 73 | 26 |
| 25----- | 680 | 2,170 | 1,600 | 4,280 | 1,880 | 1,400 | 1,400 | 774 | 136 | 64 | 68 | 14 |
| 26----- | 590 | 2,170 | 1,680 | 4,210 | 1,710 | 1,290 | 1,320 | 742 | 130 | 56 | 50 | 14 |
| 27----- | 560 | 2,200 | 1,880 | 4,130 | 1,680 | 1,260 | 1,260 | 710 | 130 | 56 | 47 | 14 |
| 28----- | 530 | 2,240 | 1,820 | 4,060 | 1,570 | 1,260 | 1,180 | 650 | 120 | 64 | 47 | 14 |
| 29----- | 475 | 2,240 | 2,170 | 3,910 | ----- | 1,320 | 1,120 | 590 | 120 | 96 | 82 | 9 |
| 30----- | 475 | 2,240 | 2,380 | 3,760 | ----- | 1,260 | 1,040 | 590 | 130 | 124 | 100 | 9 |
| 31----- | 475 | ----- | 2,530 | 3,610 | ----- | 1,680 | ----- | 530 | ----- | 96 | 82 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October----- | 2,890 | 475 | 1,700 | 0.737 | 0.91 |
| November----- | 2,240 | 300 | 1,080 | .570 | .56 |
| December----- | 2,530 | 1,460 | 1,930 | .894 | 1.03 |
| January----- | 4,280 | 2,380 | 3,330 | 1.54 | 1.78 |
| February----- | 3,390 | 1,570 | 2,330 | 1.07 | 1.12 |
| March----- | 3,030 | 1,260 | 1,860 | .831 | .99 |
| April----- | 2,820 | 1,040 | 1,970 | .972 | 1.02 |
| May----- | 1,880 | 530 | 1,110 | .514 | .59 |
| June----- | 475 | 120 | 230 | .196 | .12 |
| July----- | 140 | 56 | 88.1 | .071 | .05 |
| August----- | 375 | 40 | 98.7 | .075 | .05 |
| September----- | 82 | 9 | 40.8 | .079 | .02 |
| The year----- | 4,280 | 9 | 1,310 | .606 | 8.24 |

SUWANNEE RIVER AT ELLAVILLE, FLA.

LOCATION.—Staff gage in sec. 24, T. 1 S., R. 11 E., at old highway bridge at Ellaville, 200 feet above Seaboard Air Line Railway bridge, and 200 feet below mouth of Withlacoochee River.

DRAINAGE AREA.—6,840 square miles.

RECORDS AVAILABLE.—January, 1927, to September, 1931.

EXTREMES.—Maximum discharge during year, 9,730 second-feet Jan. 25-27 (gage height, 10.7 feet); minimum, 1,460 second-feet Sept. 26-30 (gage height, 2.5 feet).

1927-1931: Maximum discharge, 73,000 second-feet Aug. 20, 1928 (gage height, 37.1 feet); minimum discharge, 1,120 second-feet Nov. 21 to Dec. 2, 1927; minimum gage height, 2.29 feet Dec. 1, 1927.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 4,200 | 2,380 | 4,560 | 6,200 | 8,700 | 6,200 | 6,200 | 4,320 | 3,220 | 1,900 | 1,740 | 2,500 |
| 2..... | 4,440 | 2,380 | 4,680 | 6,200 | 8,380 | 6,300 | 6,780 | 4,200 | 3,100 | 1,900 | 1,740 | 2,380 |
| 3..... | 4,560 | 2,260 | 4,680 | 6,200 | 8,140 | 6,400 | 7,140 | 3,960 | 2,980 | 1,900 | 1,740 | 2,260 |
| 4..... | 4,680 | 2,260 | 4,800 | 6,200 | 7,980 | 6,500 | 7,230 | 4,080 | 2,860 | 1,840 | 1,790 | 2,260 |
| 5..... | 4,800 | 2,260 | 4,800 | 6,200 | 7,820 | 6,690 | 7,320 | 4,080 | 2,860 | 1,790 | 1,790 | 2,140 |
| 6..... | 4,920 | 2,260 | 4,920 | 6,300 | 7,500 | 6,690 | 7,580 | 4,200 | 2,740 | 1,790 | 1,790 | 2,140 |
| 7..... | 4,920 | 2,140 | 5,030 | 6,400 | 7,230 | 6,780 | 7,740 | 4,320 | 2,620 | 1,790 | 1,790 | 2,140 |
| 8..... | 4,920 | 2,140 | 5,030 | 6,600 | 6,960 | 7,140 | 7,820 | 4,680 | 2,500 | 1,740 | 1,790 | 2,020 |
| 9..... | 4,920 | 2,140 | 5,030 | 6,690 | 6,870 | 7,660 | 7,820 | 4,920 | 2,500 | 1,740 | 1,790 | 1,900 |
| 10..... | 4,800 | 2,140 | 4,920 | 6,780 | 6,780 | 7,980 | 7,740 | 5,030 | 2,500 | 1,740 | 1,790 | 1,900 |
| 11..... | 4,680 | 2,020 | 4,920 | 6,780 | 6,780 | 8,060 | 7,660 | 5,140 | 2,500 | 1,740 | 1,900 | 1,840 |
| 12..... | 4,560 | 2,020 | 4,800 | 6,870 | 6,780 | 8,060 | 7,500 | 5,360 | 2,380 | 1,740 | 1,900 | 1,840 |
| 13..... | 4,320 | 2,020 | 4,680 | 7,140 | 6,780 | 7,980 | 7,320 | 5,470 | 2,380 | 1,790 | 1,900 | 1,790 |
| 14..... | 4,320 | 2,020 | 4,560 | 7,660 | 6,690 | 7,820 | 7,230 | 5,580 | 2,260 | 1,790 | 2,020 | 1,790 |
| 15..... | 4,200 | 2,020 | 4,440 | 8,540 | 6,780 | 7,740 | 7,140 | 5,690 | 2,260 | 1,840 | 2,260 | 1,740 |
| 16..... | 3,960 | 2,020 | 4,200 | 8,380 | 7,140 | 7,580 | 6,960 | 5,800 | 2,260 | 1,840 | 2,500 | 1,680 |
| 17..... | 3,840 | 2,260 | 4,200 | 8,540 | 7,320 | 7,230 | 6,370 | 5,800 | 2,260 | 1,900 | 2,740 | 1,680 |
| 18..... | 3,720 | 3,340 | 4,200 | 8,700 | 7,410 | 7,050 | 6,690 | 5,900 | 2,140 | 1,900 | 2,980 | 1,620 |
| 19..... | 3,720 | 4,440 | 4,200 | 8,940 | 7,410 | 6,600 | 6,500 | 5,900 | 2,140 | 1,840 | 3,220 | 1,620 |
| 20..... | 3,600 | 4,560 | 4,200 | 9,100 | 7,410 | 6,400 | 6,200 | 5,900 | 2,140 | 1,900 | 3,470 | 1,620 |
| 21..... | 3,340 | 4,680 | 4,440 | 9,280 | 7,320 | 6,100 | 6,000 | 5,800 | 2,020 | 1,900 | 3,960 | 1,570 |
| 22..... | 3,100 | 4,680 | 4,800 | 9,370 | 7,230 | 6,000 | 5,800 | 5,580 | 2,020 | 1,900 | 4,440 | 1,570 |
| 23..... | 2,980 | 4,500 | 4,920 | 9,460 | 7,140 | 5,690 | 5,580 | 5,360 | 2,020 | 2,020 | 4,920 | 1,570 |
| 24..... | 2,980 | 4,680 | 5,140 | 9,640 | 6,870 | 5,470 | 5,360 | 5,140 | 2,020 | 2,020 | 5,030 | 1,570 |
| 25..... | 2,740 | 4,680 | 5,360 | 9,730 | 6,780 | 5,360 | 5,140 | 4,680 | 2,020 | 1,900 | 4,800 | 1,520 |
| 26..... | 2,620 | 4,800 | 5,360 | 9,730 | 6,600 | 5,140 | 5,140 | 4,200 | 2,020 | 1,840 | 4,200 | 1,460 |
| 27..... | 2,620 | 4,800 | 5,360 | 9,730 | 6,500 | 5,030 | 5,030 | 3,960 | 1,900 | 1,840 | 3,600 | 1,460 |
| 28..... | 2,620 | 4,680 | 5,580 | 9,640 | 6,300 | 4,920 | 4,800 | 3,720 | 1,900 | 1,790 | 3,100 | 1,460 |
| 29..... | 2,620 | 4,560 | 5,900 | 9,370 | ----- | 5,030 | 4,680 | 3,470 | 1,900 | 1,740 | 2,980 | 1,460 |
| 30..... | 2,500 | 4,440 | 6,000 | 9,020 | ----- | 5,140 | 4,560 | 3,340 | 1,900 | 1,740 | 2,740 | 1,460 |
| 31..... | 2,380 | ----- | 6,200 | 8,940 | ----- | 5,470 | ----- | 3,220 | ----- | 1,740 | 2,620 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 4,920 | 2,350 | 3,830 | 0.560 | 0.65 |
| November..... | 4,800 | 2,020 | 3,200 | .468 | .52 |
| December..... | 6,200 | 4,200 | 4,900 | .716 | .83 |
| January..... | 9,730 | 6,200 | 8,010 | 1.17 | 1.35 |
| February..... | 8,700 | 6,300 | 7,200 | 1.05 | 1.09 |
| March..... | 8,060 | 4,920 | 6,520 | .953 | 1.10 |
| April..... | 7,820 | 4,560 | 6,520 | .953 | 1.06 |
| May..... | 7,900 | 3,220 | 4,800 | .702 | .81 |
| June..... | 3,220 | 1,900 | 2,340 | .342 | .38 |
| July..... | 2,020 | 1,740 | 1,830 | .268 | .31 |
| August..... | 5,030 | 1,740 | 2,740 | .401 | .46 |
| September..... | 2,500 | 1,460 | 1,800 | .263 | .29 |
| The year..... | 9,730 | 1,460 | 4,460 | .652 | 8.85 |

SUWANNEE RIVER AT LURAVILLE, FLA.

LOCATION.—Staff gage at highway bridge 1 mile south of Luraville, Suwannee County, and 3 miles above Grants Ferry Shoals. A large spring discharges into river 500 feet above bridge on left bank.

DRAINAGE AREA.—7,360 square miles.

RECORDS AVAILABLE.—February, 1927, to September, 1931.

EXTREMES.—Maximum discharge during year, 9,810 second-feet Jan. 26-28 (gage height, 9.8 feet); minimum, 1,950 second-feet Sept. 27-30 (gage height, 2.1 feet).

1927-1931: Maximum discharge, about 66,000 second-feet Aug. 24, 1928 (gage height, 33.7 feet); minimum discharge, 1,630 second-feet Nov. 30 to Dec. 7, 1927; minimum gage height, 1.70 feet Dec. 5, 1927.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1. | 4,250 | 3,150 | 4,950 | 6,050 | 9,210 | 6,450 | 5,750 | 5,050 | 4,050 | 2,460 | 2,280 | 3,090 |
| 2. | 4,550 | 3,090 | 4,950 | 6,150 | 8,980 | 6,450 | 6,250 | 4,950 | 3,850 | 2,460 | 2,190 | 3,000 |
| 3. | 4,750 | 3,090 | 4,950 | 6,150 | 8,760 | 6,450 | 6,070 | 4,850 | 3,750 | 2,370 | 2,190 | 2,910 |
| 4. | 4,850 | 3,180 | 5,050 | 6,150 | 8,540 | 6,560 | 6,890 | 4,750 | 3,650 | 2,370 | 2,190 | 2,820 |
| 5. | 4,850 | 3,180 | 5,050 | 6,150 | 8,320 | 6,670 | 7,110 | 4,750 | 3,550 | 2,370 | 2,190 | 2,730 |
| 6. | 4,950 | 3,180 | 5,050 | 6,150 | 7,990 | 6,780 | 7,220 | 4,650 | 3,450 | 2,370 | 2,280 | 2,640 |
| 7. | 5,050 | 3,180 | 5,150 | 6,250 | 7,770 | 6,780 | 7,440 | 4,650 | 3,360 | 2,280 | 2,190 | 2,550 |
| 8. | 5,150 | 3,090 | 5,150 | 6,450 | 7,550 | 7,000 | 7,680 | 4,550 | 3,270 | 2,280 | 2,190 | 2,550 |
| 9. | 5,150 | 3,090 | 5,250 | 6,450 | 7,330 | 7,220 | 7,770 | 5,050 | 3,270 | 2,280 | 2,190 | 2,460 |
| 10. | 5,150 | 3,090 | 5,250 | 6,560 | 7,110 | 7,660 | 7,770 | 5,250 | 3,180 | 2,280 | 2,190 | 2,460 |
| 11. | 5,050 | 3,090 | 5,150 | 6,560 | 7,000 | 7,880 | 7,770 | 5,350 | 3,090 | 2,280 | 2,190 | 2,370 |
| 12. | 5,050 | 3,000 | 5,150 | 6,670 | 7,000 | 7,990 | 7,770 | 5,450 | 3,090 | 2,280 | 2,190 | 2,370 |
| 13. | 4,950 | 2,910 | 5,050 | 6,670 | 7,000 | 8,100 | 7,550 | 5,550 | 3,000 | 2,280 | 2,280 | 2,280 |
| 14. | 4,850 | 2,910 | 4,950 | 7,110 | 7,110 | 8,100 | 7,440 | 5,650 | 2,910 | 2,370 | 2,280 | 2,280 |
| 15. | 4,750 | 2,910 | 4,850 | 7,550 | 6,890 | 7,990 | 7,330 | 5,650 | 2,910 | 2,280 | 2,370 | 2,190 |
| 16. | 4,650 | 2,910 | 4,750 | 7,880 | 7,110 | 7,880 | 7,220 | 5,750 | 2,910 | 2,280 | 2,640 | 2,190 |
| 17. | 4,450 | 3,090 | 4,750 | 8,210 | 7,330 | 7,660 | 7,110 | 5,850 | 2,820 | 2,370 | 3,000 | 2,190 |
| 18. | 4,350 | 3,360 | 4,650 | 8,430 | 7,330 | 7,440 | 7,000 | 5,850 | 2,820 | 2,370 | 3,270 | 2,110 |
| 19. | 4,250 | 4,050 | 4,650 | 8,650 | 7,440 | 7,220 | 6,890 | 5,950 | 2,730 | 2,370 | 3,360 | 2,110 |
| 20. | 4,050 | 4,550 | 4,650 | 8,870 | 7,440 | 7,000 | 6,070 | 5,950 | 2,730 | 2,370 | 3,450 | 2,110 |
| 21. | 3,850 | 4,750 | 4,850 | 9,090 | 7,550 | 6,670 | 6,450 | 5,950 | 2,730 | 2,370 | 3,750 | 2,110 |
| 22. | 3,750 | 4,950 | 4,950 | 9,330 | 7,440 | 6,560 | 6,250 | 5,950 | 2,640 | 2,370 | 4,050 | 2,030 |
| 23. | 3,650 | 4,950 | 5,150 | 9,450 | 7,330 | 6,250 | 6,050 | 5,850 | 2,640 | 2,460 | 4,450 | 2,030 |
| 24. | 3,650 | 5,050 | 5,150 | 9,570 | 7,220 | 6,050 | 5,850 | 5,850 | 2,640 | 2,460 | 4,650 | 2,030 |
| 25. | 3,550 | 5,050 | 5,250 | 9,690 | 7,110 | 5,950 | 5,750 | 5,450 | 2,550 | 2,370 | 4,750 | 2,030 |
| 26. | 3,550 | 5,050 | 5,350 | 9,810 | 6,890 | 5,750 | 5,650 | 5,050 | 2,550 | 2,370 | 4,750 | 2,030 |
| 27. | 3,450 | 5,050 | 5,450 | 9,810 | 6,560 | 5,550 | 5,450 | 4,850 | 2,550 | 2,280 | 4,350 | 1,950 |
| 28. | 3,450 | 5,050 | 5,550 | 9,810 | 6,450 | 5,550 | 5,350 | 4,550 | 2,550 | 2,280 | 4,350 | 1,950 |
| 29. | 3,360 | 5,050 | 5,650 | 9,690 | ----- | 5,450 | 5,250 | 4,450 | 2,460 | 2,280 | 3,650 | 1,950 |
| 30. | 3,360 | 4,950 | 5,750 | 9,570 | ----- | 5,450 | 5,150 | 4,250 | 2,550 | 2,280 | 3,360 | 1,950 |
| 31. | 3,270 | ----- | 5,950 | 9,450 | ----- | 5,550 | ----- | 4,150 | ----- | 2,280 | 3,180 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 5,150 | 3,270 | 4,320 | 0.587 | 0.68 |
| November | 5,050 | 2,910 | 3,800 | .513 | .58 |
| December | 5,950 | 4,650 | 5,110 | .694 | .80 |
| January | 9,810 | 6,050 | 7,880 | 1.07 | 1.23 |
| February | 9,210 | 6,450 | 7,490 | 1.02 | 1.06 |
| March | 8,100 | 5,450 | 6,780 | .927 | 1.06 |
| April | 7,770 | 5,150 | 6,480 | .907 | 1.01 |
| May | 5,950 | 4,150 | 5,220 | .707 | .82 |
| June | 4,050 | 2,460 | 3,010 | .407 | .46 |
| July | 2,460 | 2,280 | 2,340 | .317 | .37 |
| August | 4,750 | 2,190 | 3,050 | .414 | .48 |
| September | 3,090 | 1,950 | 2,320 | .315 | .35 |
| The year | 9,810 | 1,950 | 4,820 | .655 | 8.90 |

SUWANNEE RIVER AT BRANFORD, FLA.

LOCATION.—Chain gage on highway bridge in Branford, Suwannee County.

RECORDS AVAILABLE.—July to September, 1931.

EXTREMES.—Maximum discharge during period, 4,520 second-feet Aug. 25, 26 (gage height, 7.47 feet); minimum, 2,420 second-feet Sep^r. 28–30 (gage height 4.0 feet).

REMARKS.—Records excellent.

Daily and monthly discharge, in second-feet, 1930–31

| Day | July | Aug. | Sept. | Day | July | Aug. | Sept. | Day | July | Aug. | Sept. |
|----------------|-------|-------|-------|---------|-------|-------|-------|---------|---------|-------|-------|
| 1..... | | 2,780 | 3,560 | 11..... | 2,960 | 2,780 | 2,900 | 21..... | 2,960 | 3,860 | 2,540 |
| 2..... | | 2,780 | 3,380 | 12..... | 2,960 | 2,840 | 2,840 | 22..... | 2,960 | 4,100 | 2,540 |
| 3..... | | 2,780 | 3,380 | 13..... | 2,960 | 2,840 | 2,780 | 23..... | 2,960 | 4,280 | 2,540 |
| 4..... | | 2,780 | 3,260 | 14..... | 2,960 | 2,960 | 2,780 | 24..... | 3,020 | 4,460 | 2,480 |
| 5..... | | 2,780 | 3,200 | 15..... | 2,900 | 2,960 | 2,780 | 25..... | 2,960 | 4,520 | 2,480 |
| 6..... | | 2,780 | 3,140 | 16..... | 2,900 | 3,020 | 2,720 | 26..... | 2,960 | 4,520 | 2,480 |
| 7..... | | 2,780 | 3,080 | 17..... | 2,900 | 3,260 | 2,660 | 27..... | 2,900 | 4,340 | 2,480 |
| 8..... | | 2,780 | 3,020 | 18..... | 2,900 | 3,500 | 2,660 | 28..... | 2,900 | 3,980 | 2,420 |
| 9..... | 2,960 | 2,780 | 2,960 | 19..... | 2,900 | 3,620 | 2,660 | 29..... | 2,840 | 3,980 | 2,420 |
| 10..... | 2,960 | 2,780 | 2,900 | 20..... | 2,960 | 3,740 | 2,600 | 30..... | 2,840 | 3,740 | 2,420 |
| | | | | | | | | 31..... | 2,840 | 3,620 | ----- |
| Month | | | | | | | | Maximum | Minimum | Mean | |
| July 9–31..... | | | | | | | | 3,020 | 2,840 | 2,930 | |
| August..... | | | | | | | | 4,520 | 2,780 | 3,380 | |
| September..... | | | | | | | | 3,560 | 2,420 | 2,800 | |

SUWANNEE RIVER NEAR WILCOX, FLA.

LOCATION.—Water-stage recorder 300 feet below bridge on State highway 19, 2 miles south of Wilcox, Gilchrist County. Staff gage at bridge used prior to July 4, 1931.

RECORDS AVAILABLE.—October, 1930, to September, 1931.

EXTREMES.—Maximum mean daily discharge during year, 14,500 second-feet Jan. 29 to Feb. 3 (gage height, 6.6 feet); minimum, 4,670 second-feet Sept. 30 (gage height, 2.24 feet).

Maximum stage known, about 20.0 feet in August, 1928.

REMARKS.—Records fair except those below 9,000 second-feet, which are poor.

Discharge estimated because of tide effect for Oct. 28 to Nov. 12, Jan. 3-17, June 7 to July 14, Aug. 2-15, Sept. 23-28.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|--------|--------|--------|--------|-------|-------|-------|-------|-------|
| 1----- | 7,930 | 7,250 | 8,900 | 8,680 | 14,500 | 11,100 | 11,100 | 9,160 | 8,680 | 6,600 | 6,200 | 7,100 |
| 2----- | 7,790 | 7,150 | 8,200 | 8,570 | 14,500 | 11,100 | 10,500 | 9,320 | 8,330 | 6,600 | 6,000 | 7,100 |
| 3----- | 7,930 | 7,050 | 8,070 | 8,900 | 14,500 | 10,800 | 10,500 | 9,160 | 8,070 | 6,600 | 6,000 | 6,890 |
| 4----- | 8,070 | 7,100 | 8,200 | 9,050 | 14,200 | 10,800 | 11,100 | 9,020 | 7,790 | 6,550 | 6,050 | 6,890 |
| 5----- | 7,930 | 7,900 | 8,450 | 9,200 | 13,800 | 10,500 | 11,400 | 9,020 | 7,790 | 6,500 | 6,050 | 6,440 |
| 6----- | 8,200 | 7,000 | 8,680 | 9,300 | 13,100 | 10,800 | 11,400 | 9,020 | 7,640 | 6,400 | 6,050 | 6,200 |
| 7----- | 8,330 | 6,950 | 8,680 | 9,400 | 12,800 | 11,700 | 11,400 | 8,790 | 7,450 | 6,350 | 6,100 | 5,720 |
| 8----- | 9,020 | 6,800 | 8,330 | 9,450 | 12,400 | 12,000 | 11,100 | 8,570 | 7,400 | 6,300 | 6,100 | 5,720 |
| 9----- | 9,020 | 6,950 | 8,330 | 9,550 | 11,700 | 11,700 | 11,700 | 8,570 | 7,250 | 6,250 | 6,100 | 5,960 |
| 10----- | 9,020 | 7,050 | 8,200 | 9,650 | 11,700 | 11,400 | 11,700 | 8,570 | 7,200 | 6,200 | 6,150 | 6,200 |
| 11----- | 8,790 | 7,100 | 8,200 | 9,750 | 11,100 | 11,700 | 11,700 | 8,450 | 7,100 | 6,200 | 6,200 | 6,440 |
| 12----- | 8,450 | 6,890 | 8,330 | 9,800 | 10,800 | 11,700 | 11,400 | 8,450 | 7,100 | 6,200 | 6,300 | 5,960 |
| 13----- | 8,330 | 6,890 | 8,200 | 9,950 | 10,800 | 12,000 | 11,700 | 8,570 | 7,100 | 6,200 | 6,400 | 5,960 |
| 14----- | 8,450 | 6,890 | 8,200 | 10,000 | 11,100 | 12,000 | 11,700 | 8,790 | 7,000 | 6,200 | 6,450 | 5,960 |
| 15----- | 8,450 | 6,890 | 8,330 | 10,400 | 10,800 | 12,400 | 11,700 | 8,570 | 7,000 | 6,200 | 6,450 | 5,960 |
| 16----- | 8,450 | 6,890 | 8,200 | 10,700 | 11,100 | 12,800 | 11,700 | 8,790 | 7,000 | 6,440 | 6,440 | 5,720 |
| 17----- | 8,450 | 7,480 | 8,200 | 11,100 | 11,100 | 12,000 | 11,700 | 9,020 | 6,950 | 6,440 | 6,440 | 5,480 |
| 18----- | 8,200 | 7,930 | 8,200 | 11,700 | 11,700 | 12,000 | 11,700 | 9,160 | 6,950 | 6,440 | 6,440 | 5,480 |
| 19----- | 8,070 | 7,480 | 8,330 | 12,400 | 11,700 | 12,000 | 11,700 | 9,320 | 6,900 | 6,440 | 6,890 | 5,250 |
| 20----- | 7,930 | 7,300 | 8,200 | 12,800 | 11,700 | 12,000 | 11,400 | 9,320 | 6,900 | 6,200 | 7,300 | 5,480 |
| 21----- | 7,930 | 7,640 | 8,330 | 12,800 | 11,400 | 12,000 | 11,100 | 9,320 | 6,900 | 5,960 | 7,480 | 5,250 |
| 22----- | 7,930 | 7,640 | 8,330 | 12,400 | 11,400 | 12,400 | 10,800 | 9,160 | 6,900 | 5,960 | 7,300 | 5,720 |
| 23----- | 7,930 | 7,930 | 8,070 | 12,400 | 11,700 | 11,400 | 10,200 | 9,020 | 6,800 | 5,960 | 7,100 | 5,500 |
| 24----- | 8,200 | 8,070 | 8,070 | 13,100 | 11,700 | 10,500 | 9,950 | 8,680 | 6,750 | 6,200 | 7,300 | 5,450 |
| 25----- | 7,930 | 8,330 | 8,200 | 13,400 | 11,700 | 10,200 | 9,700 | 8,680 | 6,700 | 5,960 | 7,640 | 5,350 |
| 26----- | 7,930 | 8,680 | 8,330 | 13,800 | 11,100 | 10,200 | 9,700 | 8,570 | 6,600 | 5,720 | 7,790 | 5,250 |
| 27----- | 7,790 | 8,200 | 8,330 | 13,800 | 10,800 | 9,700 | 9,500 | 8,680 | 6,600 | 6,440 | 7,930 | 5,150 |
| 28----- | 7,750 | 8,070 | 8,330 | 14,200 | 10,800 | 9,950 | 9,500 | 8,570 | 6,600 | 6,440 | 7,790 | 5,050 |
| 29----- | 7,700 | 7,930 | 8,330 | 14,500 | ----- | 10,200 | 9,160 | 8,450 | 6,600 | 6,200 | 7,790 | 4,890 |
| 30----- | 7,600 | 8,330 | 8,450 | 14,500 | ----- | 10,200 | 9,020 | 8,450 | 6,600 | 6,200 | 7,480 | 4,670 |
| 31----- | 7,400 | ----- | 8,680 | 14,500 | ----- | 10,500 | ----- | 8,570 | ----- | 5,960 | 7,300 | ----- |

| Month | Maximum | Minimum | Mean | Month | Maximum | Minimum | Mean |
|---------------|---------|---------|--------|----------------|---------|---------|-------|
| October----- | 9,020 | 7,400 | 8,160 | May----- | 9,320 | 8,450 | 8,830 |
| November----- | 8,680 | 6,800 | 7,430 | June----- | 8,680 | 6,600 | 7,160 |
| December----- | 8,900 | 8,070 | 8,320 | July----- | 6,600 | 5,720 | 6,270 |
| January----- | 14,500 | 8,570 | 11,300 | August----- | 7,930 | 6,000 | 6,740 |
| February----- | 14,500 | 10,800 | 12,000 | September----- | 7,100 | 4,670 | 5,810 |
| March----- | 12,800 | 9,700 | 11,300 | | | | |
| April----- | 11,700 | 9,020 | 10,900 | The year----- | 14,500 | 4,670 | 8,660 |

ALAPAHA RIVER AT MAYDAY, GA.

LOCATION.—Chain gage at highway bridge 500 feet upstream from Georgia Southern & Florida Railway bridge and half a mile west of Mayday, Echols County.

DRAINAGE AREA.—1,300 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 3,370 second-feet May 19 (gage height, 16.62 feet); minimum, 40 second-feet July 6-12 (gage height 4.63 feet); 1928-1931: Maximum discharge, 14,200 second-feet Mar. 22, 1929; minimum, that of July 7, 1931.

Maximum stage known, 29.12 feet May 1, 1928 (discharge, 15,100 second-feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| 1 | 362 | 51 | 216 | 1,020 | 1,210 | 920 | 970 | 622 | 268 | 51 | 83 | 464 |
| 2 | 304 | 51 | 233 | 1,020 | 1,120 | 970 | 1,040 | 598 | 250 | 48 | 78 | 402 |
| 3 | 286 | 48 | 250 | 970 | 1,040 | 1,020 | 1,070 | 552 | 208 | 48 | 74 | 322 |
| 4 | 250 | 48 | 322 | 920 | 970 | 1,070 | 1,020 | 486 | 199 | 45 | 65 | 304 |
| 5 | 216 | 48 | 402 | 895 | 895 | 1,070 | 1,070 | 442 | 182 | 42 | 61 | 268 |
| 6 | 190 | 48 | 486 | 895 | 820 | 1,040 | 1,120 | 574 | 172 | 40 | 61 | 250 |
| 7 | 166 | 48 | 552 | 945 | 770 | 1,120 | 1,120 | 530 | 166 | 40 | 58 | 216 |
| 8 | 136 | 45 | 552 | 1,040 | 720 | 1,330 | 1,150 | 530 | 150 | 40 | 65 | 199 |
| 9 | 122 | 48 | 530 | 1,040 | 695 | 1,390 | 1,150 | 574 | 129 | 40 | 65 | 182 |
| 10 | 110 | 45 | 486 | 1,020 | 745 | 1,450 | 1,120 | 598 | 116 | 40 | 65 | 172 |
| 11 | 104 | 45 | 442 | 995 | 720 | 1,420 | 1,100 | 795 | 110 | 40 | 122 | 166 |
| 12 | 93 | 48 | 442 | 1,040 | 720 | 1,390 | 1,120 | 945 | 104 | 40 | 65 | 150 |
| 13 | 88 | 45 | 464 | 1,390 | 695 | 1,240 | 1,150 | 1,120 | 88 | 74 | 74 | 143 |
| 14 | 88 | 48 | 486 | 1,540 | 770 | 1,270 | 1,120 | 1,360 | 83 | 58 | 190 | 136 |
| 15 | 83 | 48 | 530 | 1,600 | 820 | 1,240 | 1,120 | 1,660 | 93 | 98 | 422 | 122 |
| 16 | 78 | 48 | 552 | 1,760 | 870 | 1,120 | 1,120 | 2,320 | 83 | 83 | 422 | 104 |
| 17 | 74 | 166 | 552 | 1,730 | 970 | 1,040 | 1,040 | 2,650 | 83 | 110 | 598 | 93 |
| 18 | 69 | 442 | 598 | 1,700 | 1,020 | 945 | 970 | 3,170 | 74 | 150 | 870 | 88 |
| 19 | 69 | 464 | 670 | 1,730 | 995 | 845 | 920 | 3,370 | 74 | 129 | 1,100 | 83 |
| 20 | 65 | 598 | 745 | 1,730 | 970 | 770 | 795 | 3,210 | 74 | 110 | 1,570 | 78 |
| 21 | 61 | 646 | 820 | 1,760 | 970 | 745 | 695 | 2,690 | 74 | 116 | 2,180 | 74 |
| 22 | 61 | 574 | 870 | 1,800 | 945 | 720 | 720 | 2,080 | 65 | 104 | 2,810 | 74 |
| 23 | 61 | 530 | 895 | 1,760 | 945 | 670 | 720 | 1,450 | 65 | 88 | 2,970 | 69 |
| 24 | 58 | 442 | 870 | 1,700 | 895 | 622 | 745 | 1,100 | 65 | 93 | 2,770 | 65 |
| 25 | 54 | 382 | 845 | 1,660 | 870 | 574 | 770 | 795 | 61 | 110 | 1,980 | 65 |
| 26 | 54 | 342 | 870 | 1,600 | 845 | 530 | 770 | 622 | 61 | 122 | 1,210 | 58 |
| 27 | 54 | 304 | 895 | 1,540 | 820 | 508 | 720 | 530 | 61 | 122 | 870 | 58 |
| 28 | 54 | 268 | 920 | 1,510 | 870 | 574 | 670 | 442 | 58 | 104 | 720 | 54 |
| 29 | 54 | 233 | 970 | 1,450 | ----- | 622 | 670 | 382 | 54 | 104 | 670 | 51 |
| 30 | 61 | 216 | 995 | 1,360 | ----- | 622 | 646 | 322 | 54 | 104 | 598 | 51 |
| 31 | 54 | ----- | 1,020 | 1,270 | ----- | 720 | ----- | 304 | ----- | 93 | 530 | ----- |

| Month | Maximum | Minimum | Mean | For square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 362 | 54 | 115 | 0.088 | 0.10 |
| November | 646 | 45 | 212 | .163 | .18 |
| December | 1,020 | 216 | 628 | .493 | .56 |
| January | 1,800 | 895 | 1,370 | 1.05 | 1.21 |
| February | 1,210 | 695 | 882 | .678 | .71 |
| March | 1,450 | 508 | 954 | .734 | .85 |
| April | 1,150 | 646 | 947 | .728 | .81 |
| May | 3,370 | 304 | 1,190 | .915 | 1.05 |
| June | 268 | 54 | 111 | .085 | .10 |
| July | 150 | 40 | 80.2 | .062 | .07 |
| August | 2,970 | 58 | 755 | .581 | .67 |
| September | 464 | 51 | 152 | .117 | .13 |
| The year | 3,370 | 40 | 617 | .475 | 6.44 |

WITHLACOOCHIEE RIVER AT BLUE SPRINGS, GA.

LOCATION.—Chain gage at highway bridge on Valdosta-Quitman road 500 feet downstream from Atlantic Coast Line Railroad bridge and a quarter of a mile east of Blue Springs, Brooks County.

DRAINAGE AREA.—1,500 square miles.

RECORDS AVAILABLE.—October, 1920, to March, 1921; September, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 2,760 second-feet Aug. 21, 22 (gage height, 14.65 feet); minimum discharge, 14 second-feet Sept. 30; minimum gage height, 6.81 feet Nov. 7, 9-13.

1928-1931: Maximum discharge, 23,600 second-feet Mar. 20, 1929 (gage height, 29.8 feet); minimum discharge, that of Sept. 30, 1931; minimum gage height, that of Nov. 7, 9-13, 1930.

Maximum stage known, 33.34 feet Aug. 17, 1929 (discharge, 42,200 second-feet).

REMARKS.—Records good. Discharge estimated for Dec. 2-4.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------------|---------|-------|-------|---------|-------|-------|-------|-------|-------|-----------------|-------|-------------------|
| 1..... | 240 | 28 | 270 | 1,030 | 995 | 995 | 1,400 | 365 | 78 | 60 | 85 | 130 |
| 2..... | 225 | 22 | 330 | 960 | 925 | 1,140 | 1,560 | 300 | 72 | 34 | 240 | 115 |
| 3..... | 198 | 22 | 435 | 890 | 855 | 1,240 | 1,560 | 255 | 65 | 21 | 315 | 95 |
| 4..... | 207 | 20 | 540 | 855 | 785 | 1,280 | 1,520 | 285 | 58 | 24 | 255 | 90 |
| 5..... | 225 | 20 | 645 | 855 | 750 | 1,320 | 1,640 | 255 | 62 | 24 | 210 | 75 |
| 6..... | 171 | 20 | 680 | 1,100 | 680 | 1,360 | 1,760 | 270 | 62 | 27 | 180 | 65 |
| 7..... | 132 | 16 | 680 | 1,170 | 645 | 1,360 | 1,720 | 400 | 58 | 24 | 148 | 70 |
| 8..... | 110 | 20 | 645 | 1,240 | 610 | 1,800 | 1,640 | 575 | 52 | 46 | 112 | 60 |
| 9..... | 92 | 16 | 610 | 1,320 | 645 | 1,880 | 1,560 | 505 | 52 | 27 | 118 | 50 |
| 10..... | 80 | 16 | 575 | 1,320 | 785 | 1,880 | 1,520 | 610 | 48 | 21 | 82 | 50 |
| 11..... | 78 | 16 | 505 | 1,280 | 800 | 1,880 | 1,760 | 809 | 40 | 27 | 240 | 50 |
| 12..... | 62 | 16 | 435 | 1,320 | 960 | 1,840 | 1,480 | 1,060 | 44 | 21 | 122 | 50 |
| 13..... | 52 | 16 | 418 | 1,120 | 960 | 1,680 | 1,440 | 1,170 | 44 | 42 | 225 | 46 |
| 14..... | 52 | 20 | 400 | 2,200 | 960 | 1,480 | 1,360 | 1,240 | 44 | 55 | 540 | 46 |
| 15..... | 52 | 20 | 400 | 2,200 | 1,280 | 1,320 | 1,240 | 1,320 | 48 | 42 | 855 | 46 |
| 16..... | 48 | 22 | 382 | 2,200 | 1,280 | 1,170 | 1,140 | 1,240 | 46 | 34 | 1,100 | 42 |
| 17..... | 40 | 470 | 382 | 2,240 | 1,360 | 1,060 | 960 | 1,030 | 48 | 38 | 1,320 | 38 |
| 18..... | 40 | 1,760 | 470 | 2,360 | 1,440 | 925 | 785 | 750 | 58 | 42 | 1,600 | 38 |
| 19..... | 36 | 1,200 | 610 | 2,480 | 1,480 | 820 | 645 | 540 | 58 | 174 | 1,960 | 34 |
| 20..... | 36 | 925 | 855 | 2,440 | 1,480 | 680 | 540 | 382 | 48 | 198 | 2,360 | 30 |
| 21..... | 34 | 785 | 995 | 2,480 | 1,440 | 610 | 470 | 285 | 38 | 418 | 2,760 | 42 |
| 22..... | 30 | 715 | 1,060 | 2,480 | 1,360 | 540 | 400 | 240 | 36 | 382 | 2,760 | 27 |
| 23..... | 30 | 680 | 1,100 | 2,480 | 1,240 | 540 | 365 | 189 | 30 | 315 | 2,280 | 24 |
| 24..... | 28 | 610 | 1,100 | 2,280 | 1,140 | 540 | 382 | 153 | 30 | 240 | 1,640 | 24 |
| 25..... | 27 | 540 | 1,060 | 2,200 | 1,060 | 470 | 435 | 138 | 30 | 198 | 1,030 | 21 |
| 26..... | 27 | 435 | 1,100 | 2,000 | 960 | 470 | 452 | 120 | 34 | 159 | 645 | 21 |
| 27..... | 26 | 348 | 1,140 | 1,800 | 855 | 452 | 435 | 112 | 30 | 128 | 452 | 24 |
| 28..... | 24 | 285 | 1,100 | 1,560 | 820 | 540 | 418 | 110 | 30 | 118 | 330 | 18 |
| 29..... | 38 | 240 | 1,140 | 1,400 | ----- | 750 | 435 | 92 | 30 | 122 | 240 | 15 |
| 30..... | 44 | 207 | 1,140 | 1,240 | ----- | 855 | 400 | 95 | 30 | 102 | 192 | 14 |
| 31..... | 40 | ----- | 1,100 | 1,100 | ----- | 995 | ----- | 88 | ----- | 88 | 150 | ----- |
| Month | Maximum | | | Minimum | | | Mean | | | Per square mile | | Run-off in inches |
| October..... | 240 | | | 24 | | | 81.4 | | | 0.054 | | 0.06 |
| November..... | 1,760 | | | 16 | | | 317 | | | .211 | | .24 |
| December..... | 1,140 | | | 270 | | | 719 | | | .479 | | .55 |
| January..... | 2,480 | | | 855 | | | 1,700 | | | 1.13 | | 1.30 |
| February..... | 1,480 | | | 610 | | | 1,020 | | | .680 | | .71 |
| March..... | 1,880 | | | 452 | | | 1,090 | | | .727 | | .84 |
| April..... | 1,760 | | | 365 | | | 1,040 | | | .693 | | .77 |
| May..... | 1,320 | | | 88 | | | 486 | | | .324 | | .37 |
| June..... | 78 | | | 30 | | | 46.8 | | | .031 | | .03 |
| July..... | 418 | | | 21 | | | 105 | | | .070 | | .08 |
| August..... | 2,760 | | | 82 | | | 792 | | | .528 | | .61 |
| September..... | 130 | | | 14 | | | 48.3 | | | .032 | | .04 |
| The year..... | 2,760 | | | 14 | | | 620 | | | .413 | | 5.60 |

SANTA FE RIVER NEAR HIGH SPRINGS, FLA.

LOCATION.—Staff gage at highway bridge on State highway 5A, 150 feet upstream from Atlantic Coast Line Railroad bridge and 2 miles northwest of High Springs, Alachua County.

RECORDS AVAILABLE.—January to September, 1931.

EXTREMES.—Maximum discharge during period, 1,480 second-feet Apr. 9–11 (gage height, 3.8 feet); minimum, 277 second-feet Sept. 29, 30 (gage height, 1.34 feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1931

| Day | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | | 1,130 | 880 | 855 | 780 | 655 | 435 | 371 | 400 |
| 2..... | | 1,080 | 880 | 930 | 755 | 655 | 430 | 371 | 390 |
| 3..... | | 1,030 | 880 | 1,030 | 730 | 605 | 430 | 371 | 390 |
| 4..... | | 1,000 | 905 | 1,100 | 755 | 595 | 430 | 371 | 380 |
| 5..... | | 955 | 955 | 1,180 | 755 | 580 | 425 | 366 | 380 |
| 6..... | | 905 | 1,030 | 1,260 | 880 | 570 | 415 | 362 | 371 |
| 7..... | | 880 | 1,100 | 1,330 | 780 | 560 | 395 | 362 | 371 |
| 8..... | | 855 | 1,160 | 1,380 | 780 | 565 | 390 | 358 | 371 |
| 9..... | | 855 | 1,160 | 1,480 | 805 | 535 | 395 | 353 | 371 |
| 10..... | | 830 | 1,200 | 1,480 | 805 | 530 | 390 | 358 | 353 |
| 11..... | | 830 | 1,260 | 1,480 | 780 | 520 | 390 | 385 | 344 |
| 12..... | 1,160 | 805 | 1,280 | 1,430 | 780 | 520 | 415 | 390 | 344 |
| 13..... | 1,100 | 830 | 1,280 | 1,380 | 755 | 515 | 400 | 395 | 344 |
| 14..... | 1,100 | 855 | 1,280 | 1,330 | 755 | 510 | 410 | 415 | 340 |
| 15..... | 1,100 | 855 | 1,230 | 1,280 | 755 | 500 | 410 | 480 | 335 |
| 16..... | 1,160 | 930 | 1,180 | 1,230 | 730 | 500 | 410 | 490 | 331 |
| 17..... | 1,200 | 1,000 | 1,130 | 1,180 | 730 | 495 | 400 | 560 | 327 |
| 18..... | 1,200 | 1,080 | 1,080 | 1,130 | 730 | 500 | 410 | 625 | 319 |
| 19..... | 1,200 | 1,130 | 1,030 | 1,100 | 730 | 470 | 425 | 655 | 303 |
| 20..... | 1,200 | 1,180 | 980 | 1,080 | 705 | 470 | 390 | 630 | 283 |
| 21..... | 1,230 | 1,100 | 955 | 1,060 | 705 | 470 | 390 | 610 | 283 |
| 22..... | 1,280 | 1,080 | 930 | 1,000 | 680 | 470 | 390 | 560 | 283 |
| 23..... | 1,330 | 1,080 | 880 | 955 | 680 | 465 | 385 | 520 | 283 |
| 24..... | 1,380 | 1,030 | 880 | 955 | 655 | 465 | 376 | 505 | 323 |
| 25..... | 1,380 | 1,000 | 855 | 905 | 655 | 470 | 371 | 475 | 295 |
| 26..... | 1,380 | 955 | 830 | 880 | 680 | 470 | 371 | 455 | 289 |
| 27..... | 1,380 | 930 | 780 | 855 | 705 | 460 | 376 | 430 | 289 |
| 28..... | 1,330 | 930 | 805 | 830 | 730 | 460 | 371 | 400 | 286 |
| 29..... | 1,280 | ----- | 780 | 805 | 730 | 455 | 366 | 400 | 277 |
| 30..... | 1,200 | ----- | 755 | 780 | 730 | 440 | 366 | 400 | 277 |
| 31..... | 1,180 | ----- | 830 | ----- | 705 | ----- | 371 | 400 | ----- |

| Month | Maximum | Minimum | Mean | Month | Maximum | Minimum | Mean |
|--------------------|---------|---------|-------|----------------|---------|---------|------|
| January 12-31..... | 1,380 | 1,100 | 1,240 | June..... | 655 | 440 | 516 |
| February..... | 1,130 | 805 | 967 | July..... | 435 | 366 | 398 |
| March..... | 1,280 | 755 | 1,010 | August..... | 655 | 353 | 446 |
| April..... | 1,480 | 780 | 1,120 | September..... | 400 | 277 | 332 |
| May..... | 880 | 655 | 740 | | | | |

ICHATUCKNEE SPRINGS NEAR HILDRETH, FLA.

LOCATION.—In sec. 23, T. 6 S., R. 15 E., at bridge on State highway 5A, 1 mile east of Hildreth.

RECORDS AVAILABLE.—Discharge measurements from January to September, 1931. Single measurements only during 1917, 1929, and 1930.

Discharge measurements, in second-feet, 1917 and 1929-1931

| 1917 | | 1931 | | 1931—Continued | |
|--------------|-----|--------------|-----|----------------|-----|
| Feb. 19..... | 342 | Jan. 23..... | 394 | June 19..... | 392 |
| | | Feb. 11..... | 385 | July 10..... | 362 |
| | | Mar. 14..... | 428 | Aug. 17..... | 350 |
| Jan. 30..... | 467 | Apr. 13..... | 423 | Sept. 11..... | 320 |
| | | May 14..... | 405 | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Aug. 20..... | 416 | | | | |

ST. MARKS RIVER BASIN**WAKULLA SPRING NEAR CRAWFORDVILLE, FLA.**

LOCATION.—Water-stage recorder at head of spring in sec. 11, T. 3 S., R. 1 W., 6 miles northeast of Crawfordville, Wakulla County.

RECORDS AVAILABLE.—Discharge measurements from February to September, 1931. Single measurements only during 1929 and 1930.

REMARKS.—Discharge measurements made at bridge 3 miles below spring. During periods following heavy rainfall the discharge at bridge includes some surface run-off as well as the discharge of Wakulla Spring.

Discharge measurements, in second-feet, 1929-1931

| 1929 | | 1931 | | 1931—Continued | |
|--------------|-----|--------------|------|----------------|------|
| Jan. 23..... | 163 | Feb. 28..... | 203 | July 17..... | 91.6 |
| | | Apr. 22..... | 172 | Aug. 14..... | 105 |
| | | June 18..... | 25.2 | Sept. 15..... | 79.8 |
| Aug. 12..... | 150 | | | | |

OCHLOCKONEE RIVER BASIN

OCHLOCKONEE RIVER NEAR HAYANA, FLA.

LOCATION.—Chain gage at bridge on State highway 1, three-quarters of a mile above Georgia, Florida & Alabama Railway and 5 miles southeast of Havana, Gadsden County.

DRAINAGE AREA.—1,020 square miles.

RECORDS AVAILABLE.—December, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 3,190 second-feet May 9 (gage height, 23.10 feet); minimum discharge, 49 second-feet July 6; minimum gage height, 12.15 feet Sept. 30.

1928-1931: Maximum discharge, 14,200 second-feet Mar. 19, 1929 (gage height, 30.3 feet); minimum discharge and gage height, those of 1931.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| 1..... | 922 | 88 | 779 | 1,020 | 898 | 994 | 1,280 | 281 | 193 | 60 | 338 | 193 |
| 2..... | 641 | 86 | 1,040 | 898 | 802 | 1,110 | 1,400 | 263 | 177 | 58 | 245 | 177 |
| 3..... | 572 | 81 | 1,160 | 850 | 779 | 1,260 | 1,550 | 227 | 177 | 54 | 185 | 161 |
| 4..... | 503 | 81 | 1,380 | 826 | 710 | 1,210 | 1,580 | 227 | 161 | 52 | 146 | 146 |
| 5..... | 459 | 77 | 1,310 | 874 | 687 | 1,230 | 1,550 | 300 | 146 | 50 | 125 | 139 |
| 6..... | 377 | 74 | 1,140 | 1,070 | 664 | 1,140 | 1,450 | 1,260 | 132 | 45 | 118 | 125 |
| 7..... | 319 | 70 | 922 | 1,280 | 641 | 1,040 | 1,400 | 1,060 | 125 | 58 | 125 | 118 |
| 8..... | 263 | 68 | 874 | 1,660 | 641 | 1,280 | 1,330 | 2,600 | 112 | 75 | 125 | 118 |
| 9..... | 227 | 68 | 779 | 1,700 | 618 | 1,430 | 1,280 | 3,190 | 105 | 81 | 118 | 105 |
| 10..... | 193 | 66 | 756 | 1,400 | 710 | 1,520 | 1,160 | 3,130 | 98 | 80 | 139 | 105 |
| 11..... | 185 | 64 | 710 | 1,230 | 850 | 1,520 | 1,040 | 2,370 | 89 | 71 | 503 | 86 |
| 12..... | 161 | 68 | 710 | 1,140 | 1,020 | 1,380 | 898 | 1,720 | 87 | 61 | 826 | 82 |
| 13..... | 146 | 68 | 618 | 1,310 | 1,040 | 1,260 | 802 | 1,480 | 98 | 75 | 1,190 | 77 |
| 14..... | 139 | 68 | 618 | 1,500 | 1,040 | 1,040 | 733 | 1,330 | 89 | 112 | 1,450 | 80 |
| 15..... | 132 | 79 | 595 | 1,660 | 1,140 | 946 | 687 | 1,110 | 72 | 98 | 1,400 | 98 |
| 16..... | 125 | 112 | 595 | 1,780 | 1,280 | 826 | 664 | 874 | 77 | 92 | 994 | 92 |
| 17..... | 112 | 850 | 595 | 1,920 | 1,430 | 756 | 595 | 710 | 84 | 135 | 946 | 105 |
| 18..... | 98 | 1,640 | 664 | 1,960 | 1,480 | 710 | 572 | 595 | 84 | 263 | 1,110 | 154 |
| 19..... | 91 | 2,060 | 756 | 1,850 | 1,400 | 664 | 526 | 503 | 86 | 218 | 1,430 | 169 |
| 20..... | 88 | 2,500 | 994 | 1,820 | 1,280 | 641 | 481 | 459 | 118 | 185 | 1,430 | 132 |
| 21..... | 88 | 2,800 | 1,160 | 1,850 | 1,140 | 572 | 438 | 377 | 125 | 215 | 994 | 112 |
| 22..... | 79 | 2,750 | 1,260 | 1,850 | 1,020 | 572 | 417 | 338 | 112 | 169 | 687 | 92 |
| 23..... | 79 | 2,210 | 1,330 | 1,760 | 922 | 572 | 377 | 319 | 105 | 139 | 526 | 84 |
| 24..... | 72 | 1,700 | 1,280 | 1,600 | 850 | 549 | 377 | 300 | 98 | 118 | 459 | 73 |
| 25..... | 72 | 1,210 | 1,210 | 1,400 | 826 | 572 | 357 | 281 | 98 | 112 | 377 | 69 |
| 26..... | 70 | 970 | 1,190 | 1,260 | 802 | 572 | 357 | 245 | 98 | 139 | 338 | 65 |
| 27..... | 68 | 850 | 1,090 | 1,160 | 802 | 549 | 319 | 218 | 84 | 154 | 281 | 63 |
| 28..... | 68 | 756 | 1,140 | 1,070 | 802 | 572 | 300 | 218 | 78 | 161 | 245 | 62 |
| 29..... | 79 | 641 | 1,190 | 994 | ----- | 664 | 300 | 218 | 67 | 193 | 227 | 58 |
| 30..... | 84 | 850 | 1,210 | 756 | ----- | 779 | 300 | 210 | 63 | 281 | 218 | 54 |
| 31..... | 84 | ----- | 1,110 | 898 | ----- | 946 | ----- | 210 | ----- | 377 | ----- | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 922 | 68 | 213 | 0.200 | 0.24 |
| November..... | 2,800 | 64 | 767 | .752 | .84 |
| December..... | 1,380 | 505 | 973 | .954 | 1.10 |
| January..... | 1,960 | 756 | 1,370 | 1.34 | 1.54 |
| February..... | 1,480 | 618 | 938 | .900 | .96 |
| March..... | 1,520 | 549 | 935 | .917 | 1.06 |
| April..... | 1,580 | 300 | 817 | .801 | .89 |
| May..... | 3,190 | 210 | 888 | .871 | 1.00 |
| June..... | 193 | 63 | 108 | .100 | .12 |
| July..... | 377 | 49 | 129 | .120 | .15 |
| August..... | 1,450 | 118 | 565 | .554 | .64 |
| September..... | 193 | 54 | 106 | .704 | .12 |
| The year..... | 3,190 | 49 | 650 | .637 | 8.66 |

OCHLOCKONEE RIVER NEAR BLOXHAM, FLA.

LOCATION.—Water-stage recorder 1,000 feet below dam and 1 mile west of Bloxham, Leon County.

DRAINAGE AREA.—1,660 square miles.

RECORDS AVAILABLE.—June, 1926, to September, 1931.

EXTREMES.—Maximum discharge during year, 4,200 second-feet Nov. 18 (gage height, 10.60 feet); no flow on numerous days.

1926-1931: Maximum discharge, 19,900 second-feet Aug. 19, 1928 (gage height, 21.4 feet); no flow Sept. 21, 22, 1929, and on numerous days in 1931.

REMARKS.—Records fair. Flow regulated by operation of power plant 1,000 feet above gage. No record from recorder Feb. 16-22; hourly readings of tail-water at power plant used.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| 1..... | 969 | 342 | 2,200 | 2,510 | 1,600 | 1,690 | 1,090 | 380 | 1,260 | 2.0 | 157 | 964 |
| 2..... | 1,190 | 92 | 1,640 | 2,620 | 1,510 | 1,460 | 1,890 | 643 | 1,580 | 2.0 | 511 | 359 |
| 3..... | 1,080 | 35 | 2,530 | 2,790 | 1,820 | 1,670 | 1,800 | 508 | 1,720 | 2.0 | 368 | 188 |
| 4..... | 1,050 | 75 | 2,790 | 1,870 | 1,580 | 1,920 | 2,000 | 778 | 928 | 92 | 252 | 148 |
| 5..... | 644 | 90 | 2,120 | 2,290 | 1,190 | 2,110 | 1,800 | 822 | 1,480 | 28 | 540 | 90 |
| 6..... | 1,200 | 15 | 2,720 | 2,330 | 1,620 | 1,940 | 2,220 | 393 | 603 | 79 | 405 | 408 |
| 7..... | 1,460 | 162 | 1,620 | 2,320 | 738 | 1,510 | 2,780 | 552 | 435 | 114 | 33 | 94 |
| 8..... | 1,420 | 151 | 1,860 | 2,320 | 1,420 | 1,220 | 2,020 | 759 | 289 | 115 | 8.8 | 73 |
| 9..... | 1,380 | 349 | 1,920 | 2,260 | 867 | 1,350 | 1,780 | 814 | 15 | 130 | 2.3 | 1,350 |
| 10..... | 1,370 | 209 | 1,690 | 2,220 | 1,020 | 1,920 | 1,800 | 1,020 | 70 | 188 | 2.0 | 1,060 |
| 11..... | 1,270 | 491 | 1,860 | 1,070 | 942 | 2,110 | 1,910 | 1,030 | 3.0 | 3.0 | 476 | 829 |
| 12..... | 448 | 760 | 2,100 | 2,030 | 701 | 2,100 | 800 | 1,700 | 3.0 | 155 | 275 | 1,030 |
| 13..... | 1,200 | 789 | 1,980 | 2,230 | 905 | 2,010 | 1,630 | 1,270 | 7.8 | 22 | 833 | 69 |
| 14..... | 1,040 | 390 | 1,140 | 1,280 | 1,040 | 1,960 | 1,870 | 596 | 460 | 1.0 | 957 | 591 |
| 15..... | 690 | 531 | 1,440 | 1,440 | 1,460 | 1,410 | 2,100 | 615 | 492 | 1.0 | 1,260 | 246 |
| 16..... | 100 | 662 | 1,050 | 1,560 | 1,270 | 1,080 | 1,920 | 840 | 87 | 135 | 883 | 470 |
| 17..... | 107 | 1,880 | 1,250 | 2,200 | 1,900 | 1,030 | 1,940 | 552 | 225 | 79 | 915 | 391 |
| 18..... | 30 | 2,680 | 1,630 | 1,820 | 1,100 | 1,020 | 1,660 | 1,020 | 504 | 9.0 | 918 | 226 |
| 19..... | 88 | 3,510 | 1,410 | 2,160 | 1,110 | 1,040 | 1,620 | 1,230 | 21 | 429 | 1,020 | 335 |
| 20..... | 1,400 | 2,340 | 1,740 | 2,740 | 1,040 | 903 | 1,490 | 1,580 | 3.0 | 3.0 | 1,210 | 45 |
| 21..... | 1,640 | 1,950 | 1,600 | 2,750 | 1,330 | 674 | 1,520 | 1,540 | 129 | 138 | 1,360 | 11 |
| 22..... | 1,540 | 1,740 | 1,680 | 2,680 | 1,760 | 847 | 1,800 | 1,730 | 480 | 390 | 1,260 | 1.0 |
| 23..... | 706 | 1,180 | 1,650 | 2,800 | 887 | 801 | 1,640 | 1,300 | 201 | 330 | 481 | 1.0 |
| 24..... | 1,280 | 1,440 | 1,960 | 2,700 | 1,080 | 806 | 413 | 556 | 27 | 474 | 1,080 | 1.0 |
| 25..... | 1,510 | 1,400 | 1,250 | 2,440 | 1,180 | 724 | 442 | 1,090 | 115 | 118 | 1,160 | 1.0 |
| 26..... | 480 | 1,800 | 2,230 | 2,120 | 1,420 | 1,100 | 480 | 1,150 | 3.0 | 123 | 1,030 | 1.0 |
| 27..... | 288 | 1,130 | 2,460 | 1,070 | 1,530 | 1,450 | 657 | 1,290 | 45 | 374 | 888 | 147 |
| 28..... | 315 | 1,240 | 2,620 | 1,250 | 2,130 | 2,060 | 642 | 1,220 | 215 | 476 | 832 | 1.4 |
| 29..... | 364 | 1,270 | 2,600 | 1,610 | ----- | 1,520 | 277 | 1,340 | 153 | 400 | 1,230 | 1.0 |
| 30..... | 324 | 770 | 2,720 | 1,480 | ----- | 1,330 | 434 | 1,090 | 88 | 231 | 438 | 1.0 |
| 31..... | 541 | ----- | 2,970 | 1,620 | ----- | 1,440 | ----- | 601 | ----- | 369 | 985 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 1,640 | 30 | 875 | 0.527 | 0.61 |
| November..... | 3,510 | 15 | 982 | .592 | .66 |
| December..... | 2,970 | 1,050 | 1,950 | 1.17 | 1.35 |
| January..... | 2,800 | 1,070 | 2,080 | 1.25 | 1.44 |
| February..... | 2,130 | 701 | 1,290 | .777 | .81 |
| March..... | 2,110 | 674 | 1,430 | .861 | .99 |
| April..... | 2,780 | 277 | 1,480 | .892 | 1.00 |
| May..... | 1,730 | 380 | 968 | .583 | .67 |
| June..... | 1,720 | 3.0 | 388 | .234 | .26 |
| July..... | 476 | 1.0 | 162 | .098 | .11 |
| August..... | 1,360 | 2.0 | 702 | .423 | .49 |
| September..... | 1,350 | 1.0 | 304 | .183 | .20 |
| The year..... | 3,510 | 1.0 | 1,050 | .633 | 8.59 |

APALACHICOLA RIVER BASIN

CHATTAHOOCHEE RIVER NEAR VININGS, GA.

LOCATION.—Water-stage recorder at highway bridge 1 mile southeast of Vining's, Cobb County, and 2¼ miles above Peach Tree Creek.

DRAINAGE AREA.—1,450 square miles.

RECORDS AVAILABLE.—August, 1928, to December, 1931 (discontinued).

EXTREMES.—Maximum discharge during period, 18,900 second-feet Dec. 16, 1931 (gage height, 13.18 feet); minimum, 372 second-feet Aug. 30 (gage height, 1.42 feet).

1928-1931: Maximum discharge, 28,700 second-feet Sept. 28 1929 (gage height, 18.84 feet); minimum, that of Aug. 30, 1931.

REMARKS.—Records good except those estimated for Dec. 19-25, 1931, which are fair. Flow regulated by power plants upstream.

Daily discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1930-31 | | | | | | | | | | | | |
| 1..... | 934 | 950 | 1,300 | 1,710 | 1,420 | 2,150 | 3,830 | 2,080 | 1,330 | 1,657 | 1,100 | 682 |
| 2..... | 910 | 910 | 1,480 | 1,650 | 1,410 | 2,350 | 3,920 | 2,080 | 1,340 | 1,170 | 1,020 | 650 |
| 3..... | 856 | 870 | 1,360 | 1,590 | 1,380 | 2,150 | 3,570 | 2,280 | 1,340 | 729 | 1,010 | 670 |
| 4..... | 886 | 842 | 1,290 | 1,480 | 1,340 | 2,020 | 3,480 | 2,220 | 1,300 | 919 | 884 | 1,010 |
| 5..... | 870 | 842 | 1,270 | 2,080 | 1,340 | 1,890 | 5,400 | 2,150 | 1,270 | 1,039 | 771 | 1,120 |
| 6..... | 814 | 886 | 2,420 | 3,000 | 1,300 | 1,770 | 5,230 | 3,080 | 1,200 | 2,220 | 702 | 808 |
| 7..... | 814 | 863 | 4,270 | 3,400 | 1,350 | 1,890 | 4,360 | 3,660 | 1,140 | 1,839 | 771 | 682 |
| 8..... | 835 | 821 | 3,320 | 2,560 | 1,250 | 1,960 | 3,660 | 4,270 | 1,120 | 1,289 | 1,120 | 620 |
| 9..... | 1,050 | 828 | 2,080 | 2,420 | 1,350 | 2,150 | 3,160 | 5,930 | 1,160 | 1,019 | 1,480 | 546 |
| 10..... | 1,390 | 842 | 1,890 | 2,280 | 1,420 | 1,890 | 2,630 | 5,060 | 1,120 | 949 | 991 | 584 |
| 11..... | 1,100 | 910 | 1,710 | 2,080 | 1,770 | 1,770 | 2,630 | 3,320 | 1,100 | 949 | 957 | 540 |
| 12..... | 1,210 | 1,210 | 1,590 | 2,220 | 1,480 | 1,650 | 2,560 | 2,560 | 1,100 | 876 | 916 | 525 |
| 13..... | 1,080 | 1,890 | 1,530 | 2,420 | 1,420 | 1,650 | 2,350 | 2,490 | 1,100 | 868 | 966 | 540 |
| 14..... | 934 | 2,490 | 1,420 | 2,560 | 1,890 | 1,590 | 2,220 | 2,280 | 1,070 | 868 | 1,020 | 520 |
| 15..... | 902 | 3,530 | 1,380 | 2,150 | 2,850 | 1,650 | 2,150 | 2,150 | 1,080 | 1,060 | 1,020 | 530 |
| 16..... | 870 | 6,280 | 1,360 | 1,960 | 2,560 | 1,590 | 2,080 | 2,020 | 1,110 | 1,530 | 1,000 | 515 |
| 17..... | 828 | 8,200 | 1,420 | 1,710 | 2,150 | 1,530 | 1,960 | 1,960 | 1,530 | 1,190 | 860 | 515 |
| 18..... | 849 | 6,630 | 1,530 | 1,890 | 2,560 | 1,530 | 1,960 | 1,770 | 1,120 | 974 | 924 | 535 |
| 19..... | 814 | 3,920 | 1,530 | 2,220 | 2,780 | 1,480 | 1,960 | 1,890 | 1,050 | 1,070 | 966 | 525 |
| 20..... | 821 | 2,700 | 1,420 | 2,020 | 2,150 | 1,480 | 1,960 | 1,770 | 1,020 | 1,129 | 1,390 | 500 |
| 21..... | 786 | 2,020 | 1,420 | 1,890 | 1,960 | 1,530 | 2,020 | 1,710 | 1,140 | 1,029 | 1,020 | 490 |
| 22..... | 772 | 1,770 | 1,410 | 1,770 | 1,770 | 1,650 | 3,160 | 1,830 | 1,120 | 1,770 | 940 | 515 |
| 23..... | 800 | 1,770 | 1,420 | 1,710 | 1,770 | 2,020 | 4,360 | 1,650 | 1,050 | 1,360 | 815 | 495 |
| 24..... | 786 | 1,300 | 1,400 | 1,650 | 1,770 | 2,080 | 4,090 | 1,650 | 1,010 | 1,319 | 845 | 562 |
| 25..... | 814 | 1,530 | 1,340 | 1,590 | 2,490 | 1,830 | 3,080 | 1,530 | 1,010 | 1,149 | 892 | 525 |
| 26..... | 814 | 1,340 | 1,530 | 1,590 | 2,780 | 1,770 | 2,280 | 1,590 | 1,270 | 982 | 715 | 614 |
| 27..... | 814 | 1,300 | 2,700 | 1,530 | 2,420 | 1,650 | 2,420 | 1,530 | 1,260 | 1,290 | 932 | 574 |
| 28..... | 828 | 1,250 | 4,180 | 1,530 | 2,150 | 1,890 | 2,280 | 1,420 | 1,030 | 1,020 | 708 | 505 |
| 29..... | 910 | 1,180 | 2,780 | 1,530 | ----- | 2,560 | 2,080 | 1,480 | 1,070 | 1,239 | 568 | 495 |
| 30..... | 1,060 | 1,230 | 2,150 | 1,480 | ----- | 3,160 | 1,960 | 1,340 | 1,330 | 969 | 432 | 467 |
| 31..... | 1,120 | ----- | 1,960 | 1,350 | ----- | 3,240 | ----- | 1,420 | ----- | 991 | 715 | ----- |

| Day | Oct. | Nov. | Dec. | Day | Oct. | Nov. | Dec. | Day | Oct. | Nov. | Dec. |
|---------|------|-------|--------|---------|------|-------|--------|---------|------|-------|--------|
| 1931 | | | | 1931 | | | | 1931 | | | |
| 1..... | 476 | 676 | 808 | 11..... | 490 | 574 | 6,100 | 21..... | 454 | 2,850 | 12,500 |
| 2..... | 467 | 1,420 | 860 | 12..... | 505 | 584 | 3,160 | 22..... | 458 | 1,530 | 9,600 |
| 3..... | 449 | 1,400 | 2,420 | 13..... | 505 | 568 | 2,420 | 23..... | 472 | 1,260 | 7,200 |
| 4..... | 476 | 1,360 | 10,800 | 14..... | 485 | 584 | 5,580 | 24..... | 462 | 1,050 | 5,400 |
| 5..... | 467 | 1,360 | 16,800 | 15..... | 467 | 584 | 13,100 | 25..... | 476 | 916 | 4,200 |
| 6..... | 467 | 1,350 | 10,100 | 16..... | 454 | 579 | 16,800 | 26..... | 458 | 876 | 3,320 |
| 7..... | 467 | 574 | 3,000 | 17..... | 449 | 608 | 9,260 | 27..... | 462 | 800 | 2,700 |
| 8..... | 440 | 584 | 2,350 | 18..... | 444 | 608 | 9,260 | 28..... | 476 | 750 | 2,490 |
| 9..... | 472 | 568 | 4,440 | 19..... | 449 | 736 | 12,500 | 29..... | 638 | 771 | 2,420 |
| 10..... | 467 | 590 | 8,200 | 20..... | 444 | 4,110 | 16,000 | 30..... | 838 | 743 | 2,280 |
| | | | | | | | | 31..... | 924 | ----- | 5,060 |

Monthly discharge, in second-feet, of Chattahoochee River near Vinings, Ga., 1930-31

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| 1930-31 | | | | | |
| October..... | 1,390 | 772 | 913 | 0.630 | 0.73 |
| November..... | 8,200 | 821 | 2,050 | 1.41 | 1.57 |
| December..... | 4,270 | 1,270 | 1,870 | 1.29 | 1.49 |
| January..... | 3,400 | 1,350 | 1,970 | 1.36 | 1.57 |
| February..... | 2,850 | 1,250 | 1,870 | 1.29 | 1.34 |
| March..... | 3,240 | 1,480 | 1,920 | 1.32 | 1.52 |
| April..... | 5,400 | 1,960 | 2,960 | 2.04 | 2.28 |
| May..... | 5,930 | 1,340 | 2,320 | 1.60 | 1.84 |
| June..... | 1,530 | 1,010 | 1,160 | .800 | .89 |
| July..... | 2,220 | 729 | 1,170 | .807 | .93 |
| August..... | 1,480 | 432 | 918 | .633 | .73 |
| September..... | 1,120 | 467 | 595 | .410 | .46 |
| The year..... | 8,200 | 432 | 1,640 | 1.13 | 15.35 |
| 1931 | | | | | |
| October..... | 924 | 440 | 499 | .344 | .40 |
| November..... | 4,110 | 568 | 1,030 | .710 | .79 |
| December..... | 16,800 | 808 | 6,800 | 4.69 | 5.41 |

CHATTahoochee RIVER AT FRANKLIN, GA.

LOCATION.—Staff gage at highway bridge a quarter of a mile southwest of Franklin, Heard County.

DRAINAGE AREA.—2,710 square miles.

RECORDS AVAILABLE.—October, 1929, to October, 1931 (discontinued).

EXTREMES.—Maximum discharge during period, 21,600 second-feet Nov. 16 (gage height, 13.46 feet); minimum, 448 second-feet Oct. 29, 1931 (gage height, 3.32 feet).

1929-1931: Maximum discharge, 24,500 second-feet Nov. 15, 1929 (gage height, 14.70 feet); minimum, that of Oct. 29, 1931.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. |
|---------|-------|--------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|------|
| 1----- | 1,260 | 1,400 | 2,520 | 3,030 | 2,350 | 3,540 | 7,790 | 2,890 | 1,900 | 2,550 | 1,420 | 655 | 475 |
| 2----- | 1,200 | 1,330 | 2,350 | 2,690 | 2,350 | 3,370 | 6,760 | 2,890 | 1,900 | 2,890 | 1,750 | 750 | 466 |
| 3----- | 1,140 | 1,260 | 2,260 | 2,520 | 2,260 | 3,370 | 5,480 | 3,570 | 1,750 | 1,820 | 1,480 | 750 | 484 |
| 4----- | 1,140 | 1,260 | 2,180 | 2,520 | 2,180 | 3,370 | 5,140 | 3,230 | 1,750 | 1,300 | 1,860 | 900 | 475 |
| 5----- | 1,080 | 1,200 | 2,180 | 3,030 | 2,180 | 3,030 | 5,840 | 3,060 | 1,680 | 1,120 | 1,800 | 1,120 | 475 |
| 6----- | 1,080 | 1,200 | 3,200 | 4,250 | 2,180 | 2,860 | 6,760 | 3,400 | 1,610 | 1,540 | 1,060 | 1,300 | 475 |
| 7----- | 1,080 | 1,200 | 4,250 | 4,970 | 2,100 | 2,860 | 7,580 | 3,740 | 1,540 | 1,980 | 1,060 | 1,060 | 466 |
| 8----- | 1,140 | 1,200 | 4,610 | 4,710 | 2,100 | 3,540 | 6,760 | 6,390 | 1,480 | 2,550 | 1,010 | 850 | 493 |
| 9----- | 1,400 | 1,200 | 3,890 | 3,890 | 2,100 | 3,370 | 4,610 | 6,390 | 1,480 | 1,540 | 1,800 | 700 | 484 |
| 10----- | 1,540 | 1,200 | 3,200 | 3,710 | 2,180 | 3,200 | 4,260 | 11,200 | 1,480 | 1,600 | 1,800 | 655 | 475 |
| 11----- | 1,700 | 1,260 | 2,860 | 3,540 | 2,260 | 3,030 | 3,740 | 9,560 | 1,480 | 1,180 | 1,900 | 601 | 493 |
| 12----- | 1,540 | 1,780 | 2,690 | 4,430 | 2,520 | 2,860 | 3,910 | 5,660 | 1,420 | 1,120 | 2,210 | 610 | 484 |
| 13----- | 1,540 | 3,200 | 2,520 | 5,330 | 2,520 | 2,690 | 3,740 | 4,440 | 1,360 | 1,180 | 1,860 | 583 | 475 |
| 14----- | 1,400 | 4,250 | 2,520 | 4,610 | 2,860 | 2,690 | 3,570 | 3,570 | 1,360 | 1,240 | 1,180 | 520 | 475 |
| 15----- | 1,330 | 10,600 | 2,350 | 4,250 | 3,200 | 2,690 | 3,230 | 3,060 | 1,480 | 1,680 | 1,240 | 529 | 466 |
| 16----- | 1,200 | 18,800 | 2,260 | 3,890 | 3,540 | 2,520 | 3,060 | 2,890 | 1,680 | 2,380 | 1,480 | 520 | 457 |
| 17----- | 1,140 | 18,100 | 2,520 | 3,030 | 3,710 | 2,350 | 2,890 | 2,720 | 1,610 | 1,750 | 1,240 | 502 | 475 |
| 18----- | 1,080 | 14,500 | 2,520 | 3,030 | 3,370 | 2,350 | 2,890 | 2,720 | 1,750 | 1,820 | 1,180 | 484 | 475 |
| 19----- | 1,080 | 9,590 | 2,520 | 3,200 | 3,370 | 2,350 | 2,890 | 2,720 | 1,540 | 1,750 | 1,060 | 502 | 475 |
| 20----- | 1,080 | 5,690 | 2,520 | 3,370 | 2,180 | 2,260 | 2,890 | 2,550 | 1,360 | 2,550 | 1,240 | 592 | 475 |
| 21----- | 1,080 | 3,890 | 2,520 | 3,030 | 3,370 | 2,350 | 2,890 | 2,380 | 1,360 | 2,210 | 1,750 | 529 | 475 |
| 22----- | 1,030 | 3,370 | 2,520 | 3,030 | 3,030 | 3,540 | 4,260 | 2,210 | 1,420 | 1,820 | 1,610 | 520 | 484 |
| 23----- | 1,030 | 2,860 | 2,520 | 2,860 | 2,860 | 3,370 | 5,140 | 2,380 | 1,540 | 2,210 | 1,240 | 502 | 475 |
| 24----- | 1,030 | 2,690 | 2,350 | 2,690 | 2,860 | 3,030 | 5,140 | 2,380 | 1,360 | 2,210 | 1,120 | 484 | 493 |
| 25----- | 980 | 2,690 | 2,350 | 2,690 | 3,540 | 2,860 | 5,310 | 2,210 | 1,420 | 1,820 | 1,010 | 475 | 493 |
| 26----- | 980 | 2,520 | 2,520 | 2,520 | 4,610 | 2,860 | 3,910 | 2,050 | 2,050 | 1,540 | 1,010 | 493 | 484 |
| 27----- | 980 | 2,260 | 3,370 | 2,520 | 4,430 | 2,690 | 3,570 | 1,980 | 2,380 | 1,360 | 955 | 547 | 475 |
| 28----- | 980 | 2,180 | 3,540 | 2,520 | 4,070 | 3,200 | 3,230 | 1,980 | 1,900 | 1,900 | 900 | 592 | 466 |
| 29----- | 1,330 | 2,100 | 4,250 | 2,520 | ----- | 3,710 | 3,060 | 1,980 | 1,480 | 2,210 | 900 | 511 | 457 |
| 30----- | 1,400 | 2,100 | 3,890 | 2,350 | ----- | 4,250 | 2,890 | 1,900 | 1,360 | 1,610 | 750 | 475 | 556 |
| 31----- | 1,400 | ----- | 3,200 | 2,350 | ----- | 5,690 | ----- | 1,900 | ----- | 1,420 | 655 | ----- | 860 |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| 1930-31 | | | | | |
| October----- | 1,700 | 980 | 1,210 | 0.446 | 0.51 |
| November----- | 18,800 | 1,200 | 4,230 | 1.56 | 1.74 |
| December----- | 4,610 | 2,180 | 2,870 | 1.06 | 1.22 |
| January----- | 5,330 | 2,350 | 3,320 | 1.23 | 1.42 |
| February----- | 4,610 | 2,100 | 2,920 | 1.08 | 1.12 |
| March----- | 5,690 | 2,260 | 3,090 | 1.14 | 1.31 |
| April----- | 7,790 | 2,890 | 4,440 | 1.64 | 1.83 |
| May----- | 11,200 | 1,900 | 3,550 | 1.31 | 1.51 |
| June----- | 2,380 | 1,360 | 1,600 | .590 | .66 |
| July----- | 2,890 | 1,120 | 1,790 | .661 | .76 |
| August----- | 2,210 | 655 | 1,280 | .472 | .54 |
| September----- | 1,300 | 475 | 644 | .238 | .27 |
| The year----- | 18,800 | 475 | 2,570 | .948 | 12.89 |
| 1931 | | | | | |
| October----- | 850 | 457 | 491 | .181 | .21 |

CHATTAHOOCHEE RIVER AT WEST POINT, GA.

LOCATION.—Water-stage recorder just below Oseligee Creek and 1 mile upstream from West Point, Troup County.

DRAINAGE AREA.—3,550 square miles.

RECORDS AVAILABLE.—July, 1896, to September, 1931.

EXTREMES.—Maximum discharge during year, 30,900 second-feet Nov. 17 (gage height, 14.35 feet); minimum, 301 second-feet Sept. 26 (gage height, 1.91 feet).

1896-1931: Maximum discharge, 134,000 second-feet Dec. 10, 1919 (gage height, 30.0 feet); minimum, 224 second-feet Sept. 12, 1925 (gage height, 1.64 feet).

REMARKS.—Records good. Some regulation from operation of power plant upstream.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|--------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|
| 1..... | 1,910 | 1,820 | 2,960 | 3,810 | 2,960 | 4,690 | 7,960 | 3,430 | 2,280 | 1,950 | 1,510 | 580 |
| 2..... | 1,770 | 1,790 | 2,960 | 3,430 | 2,860 | 4,400 | 9,460 | 3,620 | 2,490 | 2,580 | 1,710 | 532 |
| 3..... | 1,610 | 1,590 | 2,960 | 3,240 | 2,860 | 4,200 | 7,540 | 4,400 | 2,140 | 2,400 | 1,730 | 796 |
| 4..... | 1,540 | 1,560 | 2,860 | 3,140 | 2,860 | 4,200 | 6,910 | 4,500 | 2,060 | 1,710 | 1,460 | 822 |
| 5..... | 1,540 | 1,540 | 2,860 | 4,010 | 2,860 | 3,810 | 7,330 | 4,790 | 2,020 | 1,390 | 1,360 | 970 |
| 6..... | 1,440 | 1,520 | 4,010 | 5,290 | 2,760 | 3,620 | 8,170 | 4,500 | 1,950 | 1,540 | 1,270 | 1,150 |
| 7..... | 1,380 | 1,520 | 5,090 | 5,490 | 2,860 | 3,720 | 8,590 | 6,700 | 1,840 | 1,910 | 1,210 | 1,270 |
| 8..... | 1,410 | 1,520 | 5,690 | 5,890 | 2,670 | 4,790 | 7,120 | 7,750 | 1,730 | 2,760 | 1,430 | 984 |
| 9..... | 1,730 | 1,490 | 6,090 | 6,090 | 2,860 | 4,400 | 6,290 | 7,540 | 1,660 | 1,710 | 1,700 | 822 |
| 10..... | 1,950 | 1,490 | 4,400 | 5,290 | 2,860 | 3,910 | 5,490 | 10,100 | 1,660 | 2,490 | 2,280 | 692 |
| 11..... | 2,100 | 1,430 | 3,520 | 4,690 | 2,860 | 3,810 | 5,090 | 12,300 | 1,660 | 1,580 | 3,620 | 604 |
| 12..... | 2,250 | 2,280 | 3,340 | 6,910 | 2,860 | 3,520 | 4,990 | 7,750 | 1,660 | 1,330 | 2,760 | 568 |
| 13..... | 1,900 | 5,290 | 3,240 | 8,800 | 3,140 | 3,340 | 4,790 | 5,490 | 1,630 | 1,300 | 1,730 | 580 |
| 14..... | 1,880 | 5,690 | 3,140 | 7,120 | 3,910 | 3,240 | 4,400 | 4,500 | 1,610 | 1,320 | 1,360 | 592 |
| 15..... | 1,750 | 12,800 | 2,960 | 5,690 | 4,300 | 3,140 | 4,100 | 4,010 | 1,770 | 1,580 | 1,240 | 692 |
| 16..... | 1,660 | 23,400 | 2,960 | 4,990 | 4,400 | 3,140 | 3,910 | 3,720 | 2,140 | 2,100 | 1,560 | 616 |
| 17..... | 1,510 | 29,500 | 4,300 | 4,590 | 5,090 | 3,050 | 3,720 | 3,520 | 2,860 | 2,280 | 1,490 | 508 |
| 18..... | 1,470 | 27,800 | 4,100 | 4,400 | 4,590 | 2,960 | 3,620 | 3,240 | 2,100 | 2,150 | 1,270 | 508 |
| 19..... | 1,380 | 16,000 | 3,720 | 4,400 | 4,300 | 2,960 | 3,520 | 3,240 | 2,080 | 1,910 | 1,270 | 484 |
| 20..... | 1,360 | 8,800 | 3,520 | 4,500 | 4,500 | 2,960 | 3,810 | 3,050 | 1,710 | 2,670 | 1,470 | 496 |
| 21..... | 1,330 | 6,090 | 3,430 | 4,300 | 4,300 | 3,140 | 3,910 | 2,960 | 1,700 | 3,240 | 2,100 | 616 |
| 22..... | 1,330 | 4,890 | 3,140 | 4,010 | 3,620 | 4,790 | 6,290 | 2,960 | 1,660 | 2,580 | 2,250 | 568 |
| 23..... | 1,280 | 4,200 | 3,140 | 3,720 | 3,430 | 4,790 | 7,330 | 2,760 | 1,840 | 2,490 | 1,560 | 460 |
| 24..... | 1,300 | 3,720 | 2,960 | 3,620 | 3,620 | 4,200 | 6,490 | 2,760 | 1,710 | 3,050 | 1,330 | 424 |
| 25..... | 1,350 | 3,430 | 2,960 | 3,620 | 4,590 | 4,100 | 7,330 | 2,580 | 1,520 | 2,300 | 1,150 | 378 |
| 26..... | 1,300 | 3,050 | 3,620 | 3,430 | 5,690 | 3,810 | 5,690 | 2,490 | 1,800 | 1,970 | 1,040 | 345 |
| 27..... | 1,330 | 2,960 | 4,500 | 3,140 | 5,490 | 3,520 | 4,790 | 2,490 | 2,490 | 1,730 | 1,070 | 472 |
| 28..... | 1,390 | 2,760 | 4,590 | 3,140 | 5,090 | 4,010 | 4,010 | 2,400 | 2,320 | 1,590 | 1,050 | 460 |
| 29..... | 1,700 | 2,670 | 6,090 | 3,140 | ----- | 4,690 | 3,810 | 2,340 | 1,770 | 2,170 | 1,120 | 496 |
| 30..... | 1,900 | 2,580 | 5,290 | 3,140 | ----- | 4,890 | 3,710 | 2,270 | 1,490 | 2,040 | 914 | 424 |
| 31..... | 1,820 | ----- | 4,300 | 3,050 | ----- | 5,490 | ----- | 2,230 | ----- | 1,790 | 796 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 2,250 | 1,280 | 1,600 | 0.451 | 0.52 |
| November..... | 29,500 | 1,430 | 6,170 | 1.74 | 1.94 |
| December..... | 6,090 | 2,860 | 3,830 | 1.08 | 1.24 |
| January..... | 8,800 | 3,050 | 4,520 | 1.27 | 1.46 |
| February..... | 5,690 | 2,670 | 3,720 | 1.05 | 1.09 |
| March..... | 5,490 | 2,960 | 3,910 | 1.10 | 1.27 |
| April..... | 9,460 | 3,520 | 5,670 | 1.60 | 1.78 |
| May..... | 12,300 | 2,230 | 4,400 | 1.24 | 1.43 |
| June..... | 2,960 | 1,490 | 1,920 | .541 | .60 |
| July..... | 3,240 | 1,300 | 2,070 | .583 | .67 |
| August..... | 3,620 | 796 | 1,540 | .434 | .50 |
| September..... | 1,270 | 345 | 630 | .177 | .20 |
| The year..... | 29,500 | 345 | 3,320 | .935 | 12.70 |

CHATTAHOOCHEE RIVER AT COLUMBUS, GA.

LOCATION.—Water-stage recorder at Central of Georgia Railway bridge in Columbus, Muscogee County, half a mile below Eagle and Phoenix Dam and 1¼ miles below City Mills Dam. Zero of gage is 185.25 feet above mean sea level.

DRAINAGE AREA.—4,670 square miles.

RECORDS AVAILABLE.—December, 1912; August, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 46,000 second-feet Nov. 17 (gage height, 26.63 feet); minimum, 708 second-feet Sept. 30 (gage height, 0.93 foot).

1912; 1929–1931: Maximum and minimum discharges, those of 1931.

Maximum stage known, 53.2 feet Mar. 15, 1929 (discharge not determined).

REMARKS.—Records fair. Discharge estimated for May 31 and June 7. Some regulation from operations at several power dams above station.

Daily and monthly discharge, in second-feet, 1930–31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|--------|-------|--------|-------|-------|--------|--------|-------|-------|-------|-------|
| 1 | 4,240 | 2,160 | 5,720 | 5,840 | 4,460 | 2,080 | 4,790 | 6,210 | 2,800 | 2,300 | 2,450 | 1,620 |
| 2 | 4,240 | 1,720 | 6,740 | 5,120 | 4,460 | 3,400 | 4,790 | 5,960 | 2,800 | 2,350 | 1,800 | 1,760 |
| 3 | 4,240 | 2,700 | 6,470 | 5,720 | 6,470 | 4,680 | 5,960 | 3,600 | 2,700 | 1,850 | 2,600 | 1,760 |
| 4 | 2,900 | 2,700 | 6,600 | 4,570 | 6,740 | 5,360 | 7,930 | 5,010 | 2,900 | 1,340 | 2,800 | 1,720 |
| 5 | 1,940 | 2,600 | 6,340 | 4,460 | 6,600 | 5,840 | 12,900 | 6,600 | 2,800 | 1,180 | 2,800 | 1,300 |
| 6 | 2,800 | 2,700 | 5,840 | 4,460 | 6,600 | 5,960 | 11,000 | 6,470 | 1,670 | 2,120 | 2,700 | 1,020 |
| 7 | 4,130 | 2,600 | 3,300 | 4,350 | 4,570 | 5,010 | 7,470 | 6,740 | 1,340 | 2,120 | 2,800 | 922 |
| 8 | 3,000 | 2,300 | 3,400 | 4,460 | 4,350 | 2,350 | 9,070 | 6,740 | 2,120 | 2,120 | 2,450 | 1,760 |
| 9 | 2,700 | 1,620 | 4,240 | 4,350 | 4,350 | 4,130 | 8,250 | 8,250 | 2,290 | 2,160 | 1,800 | 1,760 |
| 10 | 2,700 | 2,600 | 4,240 | 3,910 | 4,240 | 5,360 | 7,470 | 10,800 | 2,350 | 2,080 | 2,800 | 1,720 |
| 11 | 2,260 | 2,700 | 4,460 | 3,200 | 3,800 | 6,740 | 7,020 | 14,600 | 2,350 | 1,580 | 2,900 | 1,720 |
| 12 | 1,500 | 2,800 | 4,790 | 5,720 | 3,200 | 6,740 | 4,460 | 9,070 | 2,350 | 1,220 | 2,800 | 1,300 |
| 13 | 2,700 | 3,000 | 5,480 | 4,900 | 3,000 | 6,740 | 5,600 | 7,770 | 1,760 | 2,160 | 2,800 | 950 |
| 14 | 2,800 | 3,910 | 4,020 | 11,200 | 3,100 | 6,080 | 7,020 | 6,880 | 1,220 | 2,800 | 2,700 | 1,670 |
| 15 | 2,700 | 5,240 | 4,130 | 7,320 | 2,030 | 3,600 | 6,880 | 6,740 | 2,030 | 2,800 | 2,500 | 1,670 |
| 16 | 2,700 | 16,000 | 5,840 | 7,320 | 4,240 | 3,700 | 6,880 | 6,210 | 2,350 | 2,600 | 2,260 | 1,670 |
| 17 | 2,700 | 43,600 | 7,170 | 6,080 | 5,010 | 6,600 | 6,880 | 4,240 | 2,260 | 1,980 | 2,600 | 1,620 |
| 18 | 2,210 | 37,500 | 6,880 | 4,350 | 6,080 | 6,740 | 6,340 | 3,600 | 2,300 | 1,460 | 2,800 | 1,540 |
| 19 | 1,900 | 23,300 | 6,600 | 7,320 | 5,360 | 6,740 | 2,900 | 6,210 | 2,260 | 1,340 | 3,000 | 1,300 |
| 20 | 2,450 | 12,800 | 6,600 | 7,320 | 5,480 | 6,600 | 3,800 | 6,600 | 1,670 | 2,300 | 2,800 | 1,180 |
| 21 | 2,600 | 8,090 | 5,120 | 6,340 | 4,020 | 7,170 | 7,320 | 6,470 | 1,180 | 2,800 | 3,200 | 1,580 |
| 22 | 2,550 | 7,320 | 5,360 | 6,740 | 1,720 | 4,680 | 8,090 | 6,600 | 2,030 | 2,800 | 2,600 | 1,540 |
| 23 | 2,550 | 5,600 | 6,470 | 6,600 | 3,200 | 4,130 | 5,360 | 5,480 | 2,260 | 2,800 | 1,850 | 1,670 |
| 24 | 2,550 | 5,840 | 5,840 | 6,340 | 5,720 | 5,960 | 6,740 | 3,300 | 2,500 | 2,700 | 2,600 | 1,540 |
| 25 | 1,980 | 5,840 | 4,240 | 4,240 | 6,740 | 6,880 | 6,740 | 4,130 | 2,500 | 2,400 | 2,800 | 1,500 |
| 26 | 1,540 | 6,880 | 4,570 | 4,020 | 5,360 | 6,740 | 5,120 | 4,130 | 2,260 | 1,800 | 2,800 | 1,220 |
| 27 | 2,350 | 6,600 | 2,800 | 6,340 | 5,240 | 6,740 | 8,090 | 4,130 | 1,620 | 2,350 | 2,550 | 880 |
| 28 | 2,600 | 6,600 | 2,300 | 6,880 | 4,790 | 4,350 | 6,470 | 4,130 | 1,100 | 2,800 | 1,670 | 1,420 |
| 29 | 3,500 | 6,080 | 3,400 | 6,740 | ----- | 2,300 | 5,840 | 3,600 | 1,980 | 2,700 | 1,420 | 1,340 |
| 30 | 2,700 | 4,680 | 4,350 | 6,880 | ----- | 3,400 | 5,840 | 2,350 | 2,080 | 2,600 | 1,340 | 1,420 |
| 31 | 2,600 | ----- | 5,960 | 5,120 | ----- | 4,240 | ----- | 1,460 | ----- | 2,600 | 1,580 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 4,240 | 1,500 | 2,720 | 0.582 | 0.67 |
| November | 43,600 | 1,620 | 7,940 | 1.70 | 1.90 |
| December | 7,170 | 2,300 | 5,140 | 1.10 | 1.27 |
| January | 11,200 | 3,200 | 5,750 | 1.23 | 1.42 |
| February | 6,740 | 1,720 | 4,080 | 1.00 | 1.04 |
| March | 7,170 | 2,080 | 5,190 | 1.11 | 1.28 |
| April | 12,900 | 2,900 | 6,770 | 1.45 | 1.62 |
| May | 14,600 | 1,460 | 5,940 | 1.27 | 1.46 |
| June | 2,900 | 1,100 | 2,130 | .456 | .61 |
| July | 2,800 | 1,180 | 2,200 | .47 | .64 |
| August | 3,200 | 1,340 | 2,470 | .529 | .61 |
| September | 1,760 | 880 | 1,470 | .315 | .35 |
| The year | 43,600 | 880 | 4,360 | .93 | 12.67 |

CHATTAHOOCHEE RIVER AT COLUMBIA, ALA.

LOCATION.—Water-stage recorder in T. 4 N., R. 29 E., at highway bridge a quarter of a mile below Central of Georgia Railway and half a mile east of Columbia.

DRAINAGE AREA.—8,040 square miles.

RECORDS AVAILABLE.—July, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 69,300 second-feet Nov. 18 (gage height, 38.94 feet); minimum, 1,670 second-feet Sept. 9 (gage height, 2.29 feet).

1928-1931: Maximum discharge, 203,000 second-feet Mar. 18, 1929 (gage height, 56.05 feet); minimum, that of Sept. 9, 1931.

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

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 1----- | 6,910 | 6,340 | 11,000 | 8,440 | 9,320 | 9,840 | 8,080 | 8,440 | 3,950 | 2,390 | 4,050 | 2,570 |
| 2----- | 6,340 | 5,130 | 10,600 | 9,320 | 7,840 | 8,560 | 9,580 | 8,560 | 2,950 | 3,050 | 3,850 | 2,660 |
| 3----- | 6,010 | 4,250 | 11,300 | 8,800 | 7,370 | 6,680 | 9,060 | 9,450 | 3,550 | 3,250 | 3,650 | 2,850 |
| 4----- | 5,900 | 3,750 | 11,200 | 8,560 | 8,080 | 7,600 | 8,680 | 8,800 | 4,050 | 3,350 | 3,250 | 2,950 |
| 5----- | 5,680 | 4,250 | 10,600 | 8,930 | 9,320 | 8,320 | 15,200 | 8,200 | 3,950 | 2,850 | 3,550 | 2,850 |
| 6----- | 4,580 | 4,360 | 11,300 | 8,680 | 9,320 | 8,560 | 23,500 | 13,100 | 4,150 | 2,390 | 3,950 | 2,750 |
| 7----- | 3,650 | 4,250 | 13,100 | 8,930 | 9,320 | 9,320 | 20,500 | 12,900 | 3,950 | 2,210 | 4,250 | 2,390 |
| 8----- | 4,050 | 4,250 | 11,000 | 8,440 | 8,680 | 11,000 | 15,300 | 13,100 | 3,050 | 2,950 | 4,910 | 2,120 |
| 9----- | 5,350 | 4,250 | 8,320 | 8,080 | 7,370 | 9,710 | 12,900 | 12,100 | 2,660 | 3,350 | 4,690 | 1,800 |
| 10----- | 4,800 | 3,950 | 8,200 | 8,200 | 7,140 | 7,600 | 12,400 | 11,300 | 2,750 | 3,450 | 6,450 | 2,120 |
| 11----- | 4,800 | 3,550 | 8,320 | 8,080 | 8,080 | 7,840 | 11,600 | 13,600 | 3,350 | 3,350 | 6,230 | 2,750 |
| 12----- | 5,020 | 4,470 | 8,200 | 8,320 | 7,600 | 9,060 | 10,900 | 14,100 | 3,450 | 3,250 | 6,120 | 2,850 |
| 13----- | 4,470 | 7,140 | 8,440 | 10,800 | 6,680 | 9,710 | 9,710 | 14,200 | 3,450 | 3,450 | 6,120 | 2,850 |
| 14----- | 3,450 | 11,200 | 9,060 | 18,900 | 7,720 | 9,580 | 7,840 | 10,500 | 3,350 | 2,950 | 5,900 | 2,480 |
| 15----- | 3,850 | 13,200 | 8,800 | 17,600 | 15,300 | 9,580 | 9,840 | 9,710 | 3,050 | 3,850 | | 2,120 |
| 16----- | 4,250 | 20,500 | 7,840 | 15,000 | 12,500 | 8,440 | 9,840 | 9,060 | 2,480 | 5,240 | | 2,300 |
| 17----- | 4,050 | 55,100 | 8,800 | 12,400 | 9,710 | 6,450 | 9,840 | 8,800 | 2,750 | 5,130 | | 2,660 |
| 18----- | | 68,400 | 12,500 | 12,500 | 10,600 | 7,370 | 9,840 | 7,840 | 3,650 | 4,580 | 6,670 | 2,660 |
| 19----- | | 65,800 | 13,400 | 12,100 | 11,200 | 9,190 | 9,840 | 6,010 | 3,750 | 3,750 | | 2,750 |
| 20----- | | 50,400 | 12,300 | 11,700 | 10,400 | 9,320 | 8,440 | 6,230 | 3,550 | 3,250 | | 2,570 |
| 21----- | 3,640 | 31,000 | 11,400 | 12,800 | 9,450 | 9,320 | 6,910 | 8,560 | 3,550 | 3,250 | | 2,300 |
| 22----- | | 18,400 | 10,500 | 11,600 | 9,060 | 10,800 | 10,400 | 9,320 | 3,150 | 4,580 | 6,910 | 2,950 |
| 23----- | | 15,300 | 9,190 | 10,800 | 7,020 | 13,900 | 15,900 | 9,060 | 2,480 | 5,350 | 6,560 | 3,150 |
| 24----- | | 13,900 | 9,710 | 10,600 | 5,570 | 10,200 | 14,500 | 8,440 | 2,850 | 5,080 | 5,020 | 2,480 |
| 25----- | 3,850 | 11,700 | 9,970 | 10,400 | 7,720 | 9,190 | 11,400 | 6,800 | 3,450 | 5,460 | 3,950 | 2,570 |
| 26----- | 3,750 | 11,600 | 8,930 | 9,580 | 11,200 | 9,970 | 10,800 | 5,240 | 3,750 | 5,130 | 3,950 | 2,660 |
| 27----- | 3,350 | 11,400 | 9,320 | 7,840 | 10,600 | 10,600 | 9,580 | 5,680 | 3,650 | 4,470 | 4,250 | 2,660 |
| 28----- | 2,850 | 11,400 | 9,970 | 8,320 | 9,710 | 11,300 | 9,190 | 5,790 | 3,350 | 4,250 | 4,250 | 2,390 |
| 29----- | 4,050 | 11,200 | 7,840 | 9,840 | | 10,900 | 10,100 | 5,790 | 2,950 | 4,250 | 3,950 | 2,080 |
| 30----- | 7,960 | 11,200 | 6,910 | 9,840 | | 8,800 | 9,060 | 5,570 | 2,210 | 4,690 | 3,150 | 1,900 |
| 31----- | 8,320 | | 7,720 | 9,840 | | 6,910 | | 5,130 | | 4,250 | 2,570 | |

| Month | Maximum | Minimum | Mean | Pe- square mile | Run-off in inches |
|----------------|---------|---------|--------|-----------------|-------------------|
| October----- | 8,320 | 2,850 | 4,610 | 0.573 | 0.66 |
| November----- | 68,400 | 3,550 | 16,400 | 2.04 | 2.28 |
| December----- | 13,400 | 6,910 | 9,860 | 1.23 | 1.42 |
| January----- | 18,900 | 7,840 | 10,700 | 1.33 | 1.53 |
| February----- | 15,300 | 5,570 | 9,070 | 1.13 | 1.18 |
| March----- | 13,900 | 6,450 | 9,210 | 1.15 | 1.33 |
| April----- | 26,500 | 6,910 | 11,400 | 1.42 | 1.58 |
| May----- | 14,200 | 5,130 | 9,080 | 1.13 | 1.30 |
| June----- | 4,150 | 2,210 | 3,310 | .412 | .46 |
| July----- | 5,680 | 2,210 | 3,850 | .479 | .55 |
| August----- | 6,910 | 2,570 | 5,100 | .634 | .73 |
| September----- | 3,150 | 1,800 | 2,540 | .316 | .35 |
| The year----- | 68,400 | 1,800 | 7,910 | .984 | 13.37 |

APALACHICOLA RIVER NEAR RIVER JUNCTION, FLA.

LOCATION.—Water-stage recorder at Louisville & Nashville Railroad bridge 1 mile below confluence of Flint and Chattahoochee Rivers and 1½ miles west of River Junction, Gadsden County.

DRAINAGE AREA.—17,100 square miles.

RECORDS AVAILABLE.—December, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 71,500 second-feet Nov. 21 (gage height, 19.10 feet); minimum 6,080 second-feet Sept. 23 (gage height, -1.14 feet).

1928-1931: Maximum discharge, 293,000 second-feet Mar. 20, 1929 (gage height, 34.70 feet); minimum, that of Sept. 23, 1931.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| 1..... | 20,200 | 13,800 | 30,900 | 19,600 | 21,200 | 21,700 | 17,700 | 17,900 | 11,600 | 7,400 | 10,300 | 8,260 |
| 2..... | 18,400 | 12,500 | 28,600 | 20,400 | 19,900 | 21,400 | 18,600 | 17,000 | 10,500 | 7,240 | 10,100 | 7,900 |
| 3..... | 17,400 | 11,600 | 27,300 | 21,200 | 18,400 | 20,200 | 19,900 | 17,000 | 9,340 | 7,900 | 9,900 | 8,080 |
| 4..... | 14,400 | 11,300 | 27,000 | 21,200 | 18,400 | 18,900 | 19,400 | 17,200 | 9,340 | 8,260 | 8,980 | 8,260 |
| 5..... | 14,200 | 10,700 | 26,500 | 20,600 | 18,900 | 19,400 | 19,900 | 17,000 | 9,900 | 8,440 | 8,260 | 8,440 |
| 6..... | 13,300 | 10,900 | 25,900 | 19,900 | 19,600 | 20,200 | 27,800 | 18,400 | 9,900 | 7,740 | 8,620 | 8,260 |
| 7..... | 11,600 | 10,900 | 26,500 | 19,600 | 19,400 | 20,400 | 32,600 | 23,800 | 9,900 | 7,240 | 8,980 | 7,900 |
| 8..... | 10,900 | 10,700 | 26,700 | 19,600 | 19,400 | 21,400 | 31,400 | 26,700 | 9,700 | 7,400 | 9,340 | 7,240 |
| 9..... | 11,300 | 10,500 | 24,300 | 18,900 | 18,400 | 22,500 | 28,100 | 28,600 | 8,800 | 8,080 | 9,520 | 6,910 |
| 10..... | 12,100 | 10,300 | 21,900 | 18,900 | 17,200 | 20,900 | 26,200 | 28,600 | 8,080 | 8,440 | 10,100 | 6,580 |
| 11..... | 11,900 | 9,700 | 21,400 | 18,900 | 17,700 | 19,200 | 25,700 | 26,500 | 8,260 | 8,620 | 12,900 | 6,910 |
| 12..... | 12,600 | 9,700 | 21,200 | 18,900 | 17,400 | 19,400 | 24,600 | 26,500 | 9,340 | 8,440 | 13,300 | 7,570 |
| 13..... | 12,100 | 10,900 | 21,200 | 21,400 | 17,400 | 20,400 | 23,500 | 27,000 | 9,160 | 8,260 | 13,800 | 7,740 |
| 14..... | 10,700 | 14,200 | 21,400 | 28,600 | 17,000 | 20,900 | 21,400 | 25,700 | 8,980 | 8,260 | 14,000 | 7,740 |
| 15..... | 10,100 | 18,400 | 21,700 | 29,700 | 19,600 | 20,900 | 19,400 | 23,800 | 8,980 | 8,620 | 13,100 | 7,240 |
| 16..... | 10,300 | 21,200 | 20,600 | 30,000 | 24,800 | 20,400 | 20,200 | 22,500 | 8,440 | 9,700 | 12,700 | 7,080 |
| 17..... | 10,500 | 35,200 | 20,200 | 28,400 | 23,000 | 18,600 | 19,900 | 21,400 | 8,080 | 10,700 | 12,700 | 6,910 |
| 18..... | 10,300 | 50,100 | 21,700 | 27,800 | 21,400 | 17,000 | 19,400 | 20,400 | 8,260 | 10,900 | 12,300 | 7,240 |
| 19..... | 10,100 | 59,500 | 24,800 | 28,100 | 22,500 | 17,700 | 19,200 | 18,900 | 8,620 | 10,300 | 12,300 | 7,240 |
| 20..... | 10,100 | 67,200 | 25,100 | 27,800 | 23,200 | 19,400 | 18,900 | 16,700 | 8,620 | 8,980 | 12,900 | 7,080 |
| 21..... | 9,520 | 70,700 | 24,300 | 28,100 | 23,000 | 18,900 | 17,700 | 16,500 | 8,260 | 8,260 | 14,600 | 6,910 |
| 22..... | 9,340 | 61,300 | 23,800 | 28,400 | 21,900 | 18,400 | 16,500 | 17,700 | 8,260 | 8,260 | 14,400 | 6,260 |
| 23..... | 9,340 | 51,800 | 23,000 | 27,000 | 20,900 | 20,400 | 20,200 | 17,700 | 8,620 | 8,600 | 14,200 | 6,080 |
| 24..... | 9,340 | 46,800 | 22,200 | 25,900 | 18,600 | 22,200 | 24,600 | 17,400 | 8,080 | 9,900 | 14,400 | 6,260 |
| 25..... | 9,520 | 43,800 | 22,500 | 25,100 | 17,200 | 19,900 | 23,200 | 16,500 | 8,260 | 11,300 | 13,100 | 6,910 |
| 26..... | 9,520 | 41,400 | 22,500 | 24,000 | 19,200 | 19,400 | 20,900 | 14,600 | 8,440 | 11,500 | 11,600 | 6,910 |
| 27..... | 9,160 | 39,400 | 21,400 | 22,700 | 21,900 | 20,400 | 20,200 | 13,300 | 8,440 | 11,100 | 11,500 | 7,240 |
| 28..... | 8,620 | 37,100 | 21,700 | 20,900 | 22,200 | 21,900 | 19,200 | 13,300 | 8,260 | 10,100 | 11,300 | 7,080 |
| 29..... | 8,620 | 35,200 | 21,400 | 21,200 | ----- | 22,500 | 18,900 | 13,100 | 8,080 | 9,340 | 10,900 | 6,580 |
| 30..... | 9,900 | 32,900 | 19,400 | 21,900 | ----- | 21,700 | 18,900 | 12,700 | 8,080 | 9,520 | 10,100 | 6,260 |
| 31..... | 13,100 | ----- | 18,900 | 21,700 | ----- | 19,900 | ----- | 12,700 | ----- | 10,300 | 9,160 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|--------|-------------------|-------------------|
| October..... | 20,200 | 8,620 | 11,600 | 0.67 ^f | 0.78 |
| November..... | 70,700 | 1,700 | 29,000 | 1.70 | 1.90 |
| December..... | 30,900 | 18,900 | 23,400 | 1.37 | 1.58 |
| January..... | 30,000 | 18,900 | 23,400 | 1.37 | 1.58 |
| February..... | 24,800 | 17,000 | 20,000 | 1.17 | 1.22 |
| March..... | 22,500 | 17,000 | 20,200 | 1.18 | 1.36 |
| April..... | 32,600 | 16,500 | 21,800 | 1.27 | 1.42 |
| May..... | 28,600 | 12,700 | 19,600 | 1.15 | 1.33 |
| June..... | 11,600 | 8,080 | 8,900 | .52 ^c | .58 |
| July..... | 11,500 | 7,240 | 9,010 | .52 ^c | .61 |
| August..... | 14,600 | 8,260 | 11,600 | .67 ^h | .78 |
| September..... | 8,440 | 6,080 | 7,230 | .42 ^c | .47 |
| The year..... | 70,700 | 6,080 | 17,100 | 1.00 | 13.61 |

SOQUE RIVER NEAR DEMOREST, GA.

LOCATION.—Water-stage recorder at highway bridge $2\frac{1}{2}$ miles northwest of Demorest, Habersham County, and 3 miles above mouth.

DRAINAGE AREA.—154 square miles.

RECORDS AVAILABLE.—July, 1904, to June, 1909; May, 1929, to December, 1931 (discontinued).

EXTREMES.—Maximum discharge during period, 5,310 second-feet Dec. 14, 1931 (gauge height, 10.66 feet); minimum, 7 second-feet Oct. 18, 1931 (gauge height, 0.70 foot).

1904-1909, 1929-1931: Maximum gauge height, 17.0 feet Aug. 18, 1906 (discharge not determined); minimum discharge, 4 second-feet Aug. 30, 1930 (gauge height, 0.68 foot).

REMARKS.—Records good except those below 90 second-feet and those estimated for Dec. 26-31, 1931, which are fair. Flow regulated by power plants above station.

Daily discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1930-31 | | | | | | | | | | | | |
| 1----- | 103 | 81 | 202 | 211 | 202 | 330 | 490 | 271 | 199 | 184 | 74 | 93 |
| 2----- | 99 | 56 | 164 | 202 | 217 | 274 | 354 | 320 | 190 | 155 | 115 | 85 |
| 3----- | 111 | 108 | 158 | 181 | 184 | 255 | 314 | 297 | 184 | 147 | 103 | 136 |
| 4----- | 97 | 95 | 147 | 181 | 184 | 230 | 570 | 307 | 181 | 187 | 93 | 128 |
| 5----- | 61 | 91 | 178 | 550 | 184 | 217 | 550 | 310 | 169 | 217 | 81 | 71 |
| 6----- | 118 | 99 | 848 | 347 | 158 | 202 | 530 | 392 | 153 | 208 | 89 | 85 |
| 7----- | 93 | 95 | 358 | 271 | 181 | 226 | 410 | 434 | 158 | 147 | 226 | 101 |
| 8----- | 97 | 64 | 264 | 271 | 178 | 274 | 354 | 375 | 175 | 123 | 120 | 81 |
| 9----- | 184 | 97 | 226 | 255 | 233 | 223 | 327 | 320 | 158 | 123 | 101 | 63 |
| 10----- | 141 | 128 | 205 | 242 | 211 | 208 | 294 | 324 | 158 | 147 | 106 | 69 |
| 11----- | 113 | 111 | 196 | 230 | 187 | 199 | 327 | 307 | 152 | 101 | 136 | 71 |
| 12----- | 115 | 236 | 181 | 297 | 161 | 196 | 294 | 294 | 149 | 115 | 190 | 51 |
| 13----- | 125 | 287 | 166 | 274 | 158 | 187 | 277 | 287 | 130 | 123 | 128 | 61 |
| 14----- | 111 | 184 | 169 | 248 | 375 | 187 | 261 | 274 | 202 | 141 | 111 | 74 |
| 15----- | 108 | 650 | 166 | 223 | 245 | 196 | 255 | 264 | 287 | 125 | 99 | 71 |
| 16----- | 101 | 982 | 155 | 205 | 217 | 205 | 248 | 245 | 184 | 123 | 136 | 63 |
| 17----- | 91 | 650 | 169 | 205 | 344 | 190 | 242 | 248 | 178 | 111 | 138 | 60 |
| 18----- | 76 | 442 | 172 | 226 | 290 | 184 | 271 | 245 | 164 | 79 | 118 | 64 |
| 19----- | 81 | 307 | 152 | 236 | 248 | 181 | 258 | 239 | 190 | 128 | 149 | 37 |
| 20----- | 93 | 233 | 138 | 211 | 211 | 181 | 361 | 242 | 181 | 155 | 138 | 60 |
| 21----- | 79 | 211 | 166 | 208 | 211 | 187 | 327 | 245 | 161 | 118 | 128 | 83 |
| 22----- | 76 | 202 | 166 | 187 | 205 | 314 | 870 | 223 | 187 | 147 | 144 | 66 |
| 23----- | 76 | 181 | 166 | 187 | 202 | 252 | 498 | 208 | 147 | 128 | 208 | 67 |
| 24----- | 79 | 190 | 158 | 187 | 199 | 226 | 389 | 208 | 144 | 95 | 120 | 56 |
| 25----- | 57 | 166 | 152 | 187 | 378 | 211 | 350 | 211 | 138 | 93 | 95 | 54 |
| 26----- | 87 | 175 | 570 | 205 | 294 | 199 | 337 | 205 | 161 | 125 | 91 | 43 |
| 27----- | 118 | 152 | 454 | 187 | 242 | 211 | 310 | 199 | 138 | 217 | 95 | 64 |
| 28----- | 97 | 130 | 314 | 190 | 274 | 375 | 294 | 196 | 155 | 113 | 91 | 66 |
| 29----- | 125 | 99 | 271 | 193 | ----- | 396 | 280 | 199 | 169 | 123 | 72 | 49 |
| 30----- | 125 | 158 | 248 | 184 | ----- | 280 | 274 | 181 | 178 | 99 | 106 | 57 |
| 31----- | 101 | ----- | 223 | 205 | ----- | 307 | ----- | 187 | ----- | 97 | 113 | ----- |

| Day | Oct. | Nov. | Dec. | Day | Oct. | Nov. | Dec. | Day | Oct. | Nov. | Dec. |
|---------|------|------|-------|---------|------|------|-------|---------|------|-------|------|
| 1931 | | | | 1931 | | | | 1931 | | | |
| 1----- | 49 | 35 | 149 | 11----- | 37 | 53 | 340 | 21----- | 40 | 181 | 430 |
| 2----- | 51 | 74 | 97 | 12----- | 69 | 56 | 274 | 22----- | 39 | 128 | 892 |
| 3----- | 50 | 71 | 558 | 13----- | 46 | 53 | 392 | 23----- | 40 | 138 | 530 |
| 4----- | 30 | 58 | 2,220 | 14----- | 43 | 78 | 4,280 | 24----- | 47 | 89 | 422 |
| 5----- | 63 | 71 | 506 | 15----- | 43 | 29 | 1,260 | 25----- | 20 | 91 | 396 |
| 6----- | 50 | 61 | 245 | 16----- | 46 | 66 | 506 | 26----- | 71 | 85 | 500 |
| 7----- | 50 | 78 | 220 | 17----- | 48 | 56 | 690 | 27----- | 44 | 79 | |
| 8----- | 50 | 30 | 211 | 18----- | 18 | 64 | 630 | 28----- | 61 | 97 | |
| 9----- | 54 | 63 | 1,330 | 19----- | 50 | 557 | 470 | 29----- | 169 | 48 | |
| 10----- | 56 | 57 | 500 | 20----- | 38 | 184 | 382 | 30----- | 67 | 99 | |
| | | | | | | | | 31----- | 93 | ----- | |

Monthly discharge, in second-feet, of Soque River near Demorest, Ga., 1930-31

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| 1930-31 | | | | | |
| October..... | 184 | 57 | 101 | 0.656 | 0.76 |
| November..... | 982 | 56 | 222 | 1.44 | 1.61 |
| December..... | 848 | 138 | 236 | 1.63 | 1.76 |
| January..... | 550 | 181 | 232 | 1.61 | 1.74 |
| February..... | 378 | 158 | 228 | 1.48 | 1.64 |
| March..... | 396 | 181 | 236 | 1.63 | 1.76 |
| April..... | 870 | 242 | 364 | 2.36 | 2.63 |
| May..... | 434 | 181 | 266 | 1.73 | 1.99 |
| June..... | 287 | 130 | 171 | 1.11 | 1.24 |
| July..... | 217 | 79 | 135 | .877 | 1.01 |
| August..... | 226 | 72 | 120 | .779 | .90 |
| September..... | 136 | 37 | 71.0 | .461 | .61 |
| The year..... | 982 | 37 | 198 | 1.29 | 17.45 |
| 1931 | | | | | |
| October..... | 169 | 18 | 52.6 | .342 | .39 |
| November..... | 557 | 29 | 94.3 | .612 | .68 |
| December..... | 4,280 | 97 | 678 | 4.40 | 5.07 |

CHESTATEE RIVER NEAR DAHLONEGA, GA.

LOCATION.—Water-stage recorder at Bearden Bridge, 2 miles below Ballplay Creek and 2½ miles east of Dahlonega, Lumpkin County.

DRAINAGE AREA.—153 square miles.

RECORDS AVAILABLE.—July, 1929, to December, 1931 (discontinued).

EXTREMES.—Maximum gage height during period, 14.55 feet Dec. 14, 1931 (discharge not determined); minimum discharge, 44 second-feet Oct. 2, 1931 (gage height, 0.86 foot).

1929-1931: Maximum gage height, that of Dec. 14, 1931; minimum discharge, that of Oct. 2, 1931.

REMARKS.—Records good except those for high stages, which are poor. Discharge estimated for Mar. 4-6. Slight regulation by small dam above station.

Daily and monthly discharge, in second-feet, of Chestatee River near Dahlonega, Ga., 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1930-31 | | | | | | | | | | | | |
| 1..... | 102 | 116 | 205 | 227 | 171 | 301 | 532 | 320 | 210 | 144 | 157 | 92 |
| 2..... | 97 | 116 | 155 | 221 | 168 | 261 | 439 | 397 | 185 | 118 | 140 | 92 |
| 3..... | 98 | 114 | 149 | 205 | 166 | 246 | 383 | 349 | 185 | 116 | 112 | 171 |
| 4..... | 98 | 114 | 144 | 200 | 164 | 242 | 788 | 356 | 178 | 157 | 102 | 142 |
| 5..... | 95 | 110 | 192 | 540 | 162 | 238 | 625 | 387 | 173 | 404 | 96 | 99 |
| 6..... | 95 | 109 | 695 | 425 | 157 | 235 | 560 | 492 | 166 | 244 | 109 | 91 |
| 7..... | 98 | 104 | 380 | 330 | 162 | 232 | 464 | 848 | 164 | 164 | 218 | 90 |
| 8..... | 147 | 103 | 291 | 323 | 157 | 285 | 411 | 580 | 168 | 138 | 198 | 83 |
| 9..... | 244 | 103 | 246 | 317 | 232 | 246 | 373 | 476 | 162 | 132 | 129 | 80 |
| 10..... | 166 | 106 | 221 | 285 | 218 | 227 | 346 | 439 | 159 | 136 | 123 | 76 |
| 11..... | 149 | 114 | 210 | 267 | 185 | 224 | 349 | 404 | 159 | 123 | 120 | 76 |
| 12..... | 123 | 266 | 200 | 333 | 178 | 213 | 326 | 387 | 155 | 120 | 104 | 82 |
| 13..... | 112 | 264 | 185 | 313 | 210 | 205 | 304 | 359 | 144 | 122 | 106 | 73 |
| 14..... | 109 | 185 | 175 | 279 | 560 | 205 | 291 | 343 | 166 | 129 | 103 | 79 |
| 15..... | 106 | 466 | 166 | 249 | 349 | 208 | 282 | 323 | 188 | 255 | 169 | 78 |
| 16..... | 104 | 956 | 162 | 241 | 294 | 195 | 273 | 304 | 155 | 162 | 120 | 82 |
| 17..... | 103 | 720 | 185 | 235 | 442 | 190 | 267 | 294 | 149 | 136 | 171 | 77 |
| 18..... | 98 | 540 | 171 | 276 | 394 | 185 | 267 | 285 | 136 | 153 | 224 | 72 |
| 19..... | 97 | 343 | 166 | 267 | 330 | 185 | 291 | 270 | 134 | 153 | 142 | 69 |
| 20..... | 98 | 273 | 180 | 246 | 297 | 182 | 273 | 279 | 180 | 136 | 131 | 70 |
| 21..... | 97 | 232 | 171 | 229 | 273 | 190 | 418 | 279 | 140 | 146 | 136 | 76 |
| 22..... | 97 | 210 | 173 | 224 | 268 | 380 | 1,420 | 258 | 146 | 190 | 109 | 76 |
| 23..... | 98 | 190 | 168 | 216 | 241 | 273 | 670 | 238 | 127 | 132 | 103 | 82 |
| 24..... | 109 | 178 | 162 | 210 | 241 | 267 | 500 | 232 | 125 | 123 | 101 | 77 |
| 25..... | 104 | 168 | 187 | 202 | 301 | 258 | 442 | 229 | 142 | 115 | 96 | 67 |
| 26..... | 101 | 159 | 642 | 202 | 255 | 244 | 408 | 227 | 151 | 136 | 97 | 70 |
| 27..... | 102 | 153 | 500 | 200 | 232 | 291 | 370 | 218 | 127 | 200 | 98 | 57 |
| 28..... | 112 | 149 | 359 | 192 | 244 | 476 | 349 | 210 | 120 | 149 | 99 | 70 |
| 29..... | 195 | 142 | 307 | 185 | ----- | 464 | 330 | 205 | 118 | 173 | 114 | 66 |
| 30..... | 136 | 166 | 270 | 180 | ----- | 366 | 317 | 198 | 159 | 127 | 120 | 65 |
| 31..... | 123 | ----- | 246 | 175 | ----- | 373 | ----- | 192 | ----- | 157 | 96 | ----- |

| Day | Oct. | Nov. | Dec. | Day | Oct. | Nov. | Dec. | Day | Oct. | Nov. | Dec. |
|---------|------|------|-------|---------|------|------|-------|---------|------|-------|-------|
| 1931 | | | | 1931 | | | | 1931 | | | |
| 1..... | 61 | 83 | 175 | 11..... | 69 | 79 | 383 | 21..... | 68 | 213 | 520 |
| 2..... | 61 | 84 | 122 | 12..... | 70 | 83 | 297 | 22..... | 69 | 159 | 1,390 |
| 3..... | 67 | 82 | 568 | 13..... | 63 | 82 | 556 | 23..... | 65 | 123 | 695 |
| 4..... | 49 | 85 | 2,170 | 14..... | 63 | 83 | 5,520 | 24..... | 68 | 112 | 540 |
| 5..... | 62 | 84 | 488 | 15..... | 63 | 83 | 1,240 | 25..... | 72 | 101 | 464 |
| 6..... | 63 | 85 | 276 | 16..... | 61 | 84 | 625 | 26..... | 65 | 93 | 397 |
| 7..... | 66 | 82 | 205 | 17..... | 64 | 79 | 985 | 27..... | 64 | 91 | 1,330 |
| 8..... | 74 | 82 | 192 | 18..... | 61 | 89 | 745 | 28..... | 149 | 89 | 349 |
| 9..... | 67 | 83 | 1,670 | 19..... | 63 | 996 | 516 | 29..... | 89 | 89 | 323 |
| 10..... | 68 | 81 | 670 | 20..... | 63 | 246 | 436 | 30..... | 72 | 108 | 301 |
| | | | | | | | | 31..... | 89 | ----- | 1,180 |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| 1930-31 | | | | | |
| October..... | 244 | 93 | 116 | 0.758 | 0.87 |
| November..... | 956 | 103 | 232 | 1.52 | 1.70 |
| December..... | 695 | 144 | 246 | 1.61 | 1.86 |
| January..... | 540 | 175 | 258 | 1.69 | 1.95 |
| February..... | 560 | 157 | 251 | 1.64 | 1.71 |
| March..... | 476 | 182 | 261 | 1.71 | 1.97 |
| April..... | 1,420 | 267 | 436 | 2.85 | 3.18 |
| May..... | 848 | 192 | 335 | 2.19 | 2.52 |
| June..... | 210 | 118 | 156 | 1.02 | 1.14 |
| July..... | 404 | 115 | 158 | 1.03 | 1.19 |
| August..... | 224 | 96 | 127 | .830 | .96 |
| September..... | 171 | 57 | 827 | .541 | .60 |
| The year..... | 1,420 | 57 | 221 | 1.44 | 19.65 |
| 1931 | | | | | |
| October..... | 149 | 49 | 69.3 | .453 | .52 |
| November..... | 996 | 79 | 130 | .850 | .95 |
| December..... | 5,520 | 122 | 817 | 5.34 | 6.16 |

FLINT RIVER NEAR CULLODEN, GA.

LOCATION.—Chain gage at highway bridge 4 miles above Ulcohatchee (Auchump-kee) Creek and $11\frac{1}{2}$ miles southwest of Culloden, Monroe County.

DRAINAGE AREA.—1,850 square miles.

RECORDS AVAILABLE.—July, 1928, to December, 1931 (discontinued). July, 1911, to May, 1923, at station $2\frac{1}{2}$ miles downstream.

EXTREMES.—Maximum discharge during period, 18,700 second-feet Nov. 17, 1930 (gage height, 17.88 feet); minimum, 92 second-feet Oct. 4, 6, 7, 1931 (gage height, 0.94 foot).

1911–1923, 1928–1931: Maximum discharge, 92,000 second-feet Mar. 15, 1929 (gage height, 38.40 feet); minimum, that of Oct. 4, 6, 7, 1931.

REMARKS.—Records fair.

Daily discharge, in second-feet, 1930–31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1930–31 | | | | | | | | | | | | |
| 1..... | 610 | 760 | 1,710 | 1,850 | 1,570 | 2,830 | 3,520 | 1,120 | 488 | 375 | 442 | 232 |
| 2..... | 585 | 710 | 1,710 | 1,710 | 1,500 | 2,830 | 3,520 | 1,120 | 488 | 335 | 465 | 255 |
| 3..... | 585 | 660 | 1,640 | 1,640 | 1,430 | 2,510 | 3,250 | 1,240 | 420 | 315 | 275 | 203 |
| 4..... | 535 | 660 | 1,570 | 1,570 | 1,430 | 2,270 | 3,430 | 1,500 | 488 | 335 | 375 | 232 |
| 5..... | 535 | 610 | 1,570 | 1,850 | 1,430 | 2,060 | 5,650 | 2,270 | 510 | 465 | 315 | 221 |
| 6..... | 488 | 635 | 3,430 | 2,350 | 1,430 | 1,920 | 4,250 | 2,270 | 488 | 442 | 355 | 232 |
| 7..... | 510 | 610 | 3,430 | 2,350 | 1,360 | 1,920 | 3,250 | 2,270 | 488 | 335 | 880 | 206 |
| 8..... | 488 | 610 | 3,070 | 2,510 | 1,360 | 2,270 | 2,750 | 2,270 | 420 | 335 | 820 | 199 |
| 9..... | 488 | 610 | 2,750 | 2,510 | 1,500 | 2,130 | 2,350 | 2,590 | 420 | 315 | 610 | 174 |
| 10..... | 560 | 610 | 2,350 | 2,350 | 1,640 | 2,060 | 2,130 | 2,910 | 420 | 465 | 488 | 181 |
| 11..... | 610 | 635 | 2,130 | 2,270 | 1,570 | 1,920 | 1,920 | 2,270 | 398 | 560 | 1,060 | 167 |
| 12..... | 610 | 880 | 1,920 | 3,970 | 1,500 | 1,710 | 1,850 | 1,850 | 398 | 710 | 710 | 142 |
| 13..... | 610 | 3,970 | 1,850 | 6,150 | 1,430 | 1,640 | 1,850 | 1,570 | 398 | 510 | 488 | 149 |
| 14..... | 585 | 4,250 | 1,710 | 5,350 | 2,750 | 1,570 | 1,780 | 1,360 | 375 | 488 | 335 | 145 |
| 15..... | 560 | 6,150 | 1,640 | 4,550 | 3,250 | 1,570 | 1,710 | 1,240 | 535 | 375 | 398 | 174 |
| 16..... | 535 | 10,400 | 1,570 | 3,610 | 2,670 | 1,570 | 1,500 | 1,120 | 585 | 420 | 465 | 335 |
| 17..... | 510 | 18,500 | 1,990 | 2,990 | 2,750 | 1,430 | 1,500 | 1,000 | 560 | 940 | 335 | 275 |
| 18..... | 510 | 15,800 | 2,510 | 3,070 | 2,590 | 1,430 | 1,430 | 940 | 510 | 880 | 375 | 185 |
| 19..... | 398 | 12,600 | 2,270 | 3,070 | 2,350 | 1,360 | 1,430 | 880 | 488 | 880 | 375 | 188 |
| 20..... | 420 | 8,970 | 2,270 | 2,830 | 2,130 | 1,360 | 1,500 | 820 | 510 | 1,300 | 255 | 760 |
| 21..... | 488 | 5,950 | 2,200 | 2,590 | 1,990 | 1,360 | 1,430 | 820 | 488 | 760 | 465 | 355 |
| 22..... | 442 | 3,790 | 2,060 | 2,270 | 1,850 | 2,590 | 2,430 | 760 | 535 | 760 | 442 | 255 |
| 23..... | 398 | 2,910 | 1,990 | 2,130 | 1,780 | 2,670 | 2,750 | 760 | 535 | 660 | 375 | 275 |
| 24..... | 420 | 2,430 | 1,780 | 1,990 | 1,710 | 2,430 | 2,350 | 710 | 465 | 1,000 | 355 | 247 |
| 25..... | 442 | 2,130 | 1,710 | 1,920 | 2,510 | 2,130 | 1,990 | 635 | 442 | 710 | 355 | 232 |
| 26..... | 442 | 1,920 | 2,060 | 1,780 | 3,430 | 1,850 | 1,710 | 560 | 465 | 585 | 315 | 199 |
| 27..... | 420 | 1,780 | 2,750 | 1,780 | 3,070 | 1,780 | 1,500 | 560 | 710 | 820 | 295 | 174 |
| 28..... | 465 | 1,640 | 2,590 | 1,710 | 2,430 | 1,920 | 1,360 | 488 | 660 | 1,120 | 295 | 163 |
| 29..... | 940 | 1,570 | 2,430 | 1,710 | ----- | 2,430 | 1,150 | 610 | 510 | 880 | 275 | 128 |
| 30..... | 1,000 | 1,500 | 2,200 | 1,640 | ----- | 2,510 | 1,180 | 560 | 465 | 535 | 315 | 118 |
| 31..... | 1,000 | ----- | 1,990 | 1,570 | ----- | 2,270 | ----- | 560 | ----- | 465 | 295 | ----- |

| Day | Oct. | Nov. | Dec. | Day | Oct. | Nov. | Dec. | Day | Oct. | Nov. | Dec. |
|-------------|------|------|-------|-------------|------|------|-------|-------------|------|-------|-------|
| 1931 | | | | 1931 | | | | 1931 | | | |
| 1..... | 125 | 159 | 315 | 11..... | 195 | 203 | 1,430 | 21..... | 131 | 295 | 1,780 |
| 2..... | 111 | 163 | 335 | 12..... | 156 | 203 | 1,120 | 22..... | 125 | 295 | 5,250 |
| 3..... | 105 | 159 | 355 | 13..... | 159 | 221 | 1,000 | 23..... | 125 | 355 | 7,150 |
| 4..... | 101 | 170 | 398 | 14..... | 145 | 244 | 880 | 24..... | 131 | 315 | 7,370 |
| 5..... | 101 | 174 | 610 | 15..... | 167 | 221 | 1,240 | 25..... | 121 | 315 | 5,850 |
| 6..... | 95 | 181 | 585 | 16..... | 159 | 228 | 1,120 | 26..... | 114 | 295 | 4,060 |
| 7..... | 98 | 177 | 535 | 17..... | 152 | 232 | 820 | 27..... | 118 | 355 | 2,590 |
| 8..... | 131 | 163 | 760 | 18..... | 149 | 247 | 1,180 | 28..... | 125 | 315 | 2,130 |
| 9..... | 181 | 188 | 940 | 19..... | 135 | 375 | 1,430 | 29..... | 138 | 315 | 1,780 |
| 10..... | 240 | 167 | 1,570 | 20..... | 125 | 335 | 1,500 | 30..... | 199 | 335 | 1,570 |
| | | | | | | | | 31..... | 159 | ----- | 3,430 |

Monthly discharge, in second-feet, of Flint River near Culloden, Ga., 1930-31

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------------|---------|---------|-------|-----------------|-------------------|
| 1930-31 | | | | | |
| October | 1,000 | 398 | 554 | 0.299 | 0.34 |
| November | 18,500 | 610 | 3,810 | 2.06 | 2.30 |
| December | 3,430 | 1,570 | 2,160 | 1.17 | 1.35 |
| January | 6,150 | 1,570 | 2,570 | 1.39 | 1.60 |
| February | 3,430 | 1,360 | 2,010 | 1.09 | 1.14 |
| March | 2,830 | 1,360 | 2,010 | 1.09 | 1.26 |
| April | 5,650 | 1,180 | 2,280 | 1.23 | 1.37 |
| May | 2,190 | 488 | 1,270 | .686 | .79 |
| June | 710 | 375 | 489 | .264 | .29 |
| July | 1,300 | 315 | 615 | .332 | .38 |
| August | 1,060 | 255 | 439 | .237 | .27 |
| September | 760 | 118 | 227 | .123 | .14 |
| The year | 18,500 | 118 | 1,530 | .827 | 11.23 |
| 1931 | | | | | |
| October | 240 | 95 | 139 | .075 | .09 |
| November | 375 | 159 | 247 | .133 | .15 |
| December | 7,370 | 315 | 1,970 | 1.06 | 1.22 |

FLINT RIVER AT MONTEZUMA, GA.

LOCATION.—Chain gage at highway bridge half a mile below Buck Creek and 1 mile northwest of Montezuma, Macon County. Zero of gage is 2.74 feet above mean sea level.

DRAINAGE AREA.—2,920 square miles.

RECORDS AVAILABLE.—July, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 23,100 second-feet Nov. 20 (gage height, 17.80 feet); minimum, 500 second-feet Sept. 16 (gage height, 0.62 foot).

1930-31: Maximum discharge, that of Nov. 20, 1930; minimum, that of Sept. 16, 1931.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 1,720 | 2,740 | 3,160 | 3,340 | 2,860 | 4,310 | 3,530 | 2,080 | 1,400 | 1,090 | 1,340 | 1,040 |
| 2..... | 1,560 | 2,260 | 3,340 | 3,160 | 2,800 | 4,160 | 4,020 | 2,200 | 1,340 | 1,040 | 1,140 | 950 |
| 3..... | 1,560 | 1,960 | 3,340 | 2,980 | 2,740 | 4,090 | 4,630 | 2,320 | 1,240 | 950 | 1,240 | 905 |
| 4..... | 1,400 | 1,670 | 3,220 | 2,920 | 2,680 | 3,810 | 4,790 | 3,100 | 1,190 | 860 | 1,090 | 905 |
| 5..... | 1,450 | 1,620 | 3,100 | 2,920 | 2,680 | 3,530 | 4,790 | 5,750 | 1,190 | 905 | 1,040 | 860 |
| 6..... | 1,290 | 1,560 | 3,100 | 3,040 | 2,620 | 3,220 | 5,350 | 4,390 | 1,140 | 1,040 | 1,040 | 995 |
| 7..... | 1,240 | 1,450 | 3,880 | 3,400 | 2,620 | 3,160 | 5,950 | 4,020 | 1,140 | 950 | 1,090 | 1,040 |
| 8..... | 1,190 | 1,500 | 4,790 | 3,600 | 2,560 | 3,400 | 5,950 | 3,950 | 1,290 | 950 | 1,560 | 860 |
| 9..... | 1,190 | 1,450 | 4,790 | 3,600 | 2,560 | 3,740 | 4,950 | 4,020 | 1,240 | 905 | 1,840 | 815 |
| 10..... | 1,290 | 1,400 | 4,470 | 3,740 | 2,800 | 3,600 | 4,020 | 3,850 | 1,190 | 1,240 | 1,900 | 770 |
| 11..... | 1,290 | 1,450 | 4,020 | 3,740 | 2,920 | 3,340 | 3,460 | 3,600 | 1,140 | 1,840 | 1,450 | 725 |
| 12..... | 1,290 | 1,560 | 3,740 | 4,090 | 2,920 | 3,040 | 3,220 | 3,460 | 1,090 | 1,450 | 1,450 | 725 |
| 13..... | 1,450 | 1,960 | 3,460 | 4,170 | 2,860 | 2,860 | 3,100 | 2,980 | 1,090 | 1,560 | 1,960 | 725 |
| 14..... | 1,400 | 3,280 | 3,340 | 6,150 | 3,040 | 2,740 | 2,980 | 2,620 | 1,140 | 1,340 | 1,500 | 860 |
| 15..... | 1,450 | 4,630 | 3,160 | 6,950 | 3,890 | 2,620 | 2,920 | 2,380 | 1,190 | 1,290 | 1,340 | 725 |
| 16..... | 1,290 | 5,950 | 3,100 | 7,370 | 4,630 | 2,620 | 3,400 | 2,260 | 1,140 | 1,290 | 1,670 | 725 |
| 17..... | 1,340 | 9,150 | 3,160 | 6,950 | 4,710 | 2,620 | 2,680 | 2,140 | 1,340 | 1,190 | 1,670 | 725 |
| 18..... | 1,240 | 12,400 | 3,400 | 5,950 | 4,310 | 2,440 | 2,560 | 2,080 | 1,400 | 1,140 | 1,290 | 770 |
| 19..... | 1,240 | 18,100 | 3,880 | 5,190 | 4,230 | 2,380 | 2,500 | 1,840 | 1,290 | 1,560 | 1,620 | 770 |
| 20..... | 1,190 | 22,300 | 4,230 | 5,030 | 3,950 | 2,310 | 2,440 | 1,780 | 1,240 | 1,670 | 2,500 | 1,340 |
| 21..... | 1,190 | 19,300 | 3,950 | 4,870 | 3,530 | 2,380 | 2,380 | 1,780 | 1,190 | 1,900 | 2,560 | 1,620 |
| 22..... | 1,140 | 15,900 | 3,810 | 4,550 | 3,280 | 3,100 | 2,680 | 1,780 | 1,140 | 1,900 | 2,860 | 1,450 |
| 23..... | 1,140 | 12,400 | 3,600 | 4,020 | 3,160 | 3,670 | 2,800 | 1,720 | 1,240 | 1,900 | 2,140 | 1,240 |
| 24..... | 1,090 | 9,150 | 3,280 | 3,600 | 3,040 | 4,230 | 3,280 | 1,670 | 1,240 | 1,720 | 1,670 | 1,040 |
| 25..... | 1,140 | 6,250 | 3,100 | 3,460 | 3,040 | 4,160 | 3,460 | 1,620 | 1,190 | 1,840 | 1,240 | 905 |
| 26..... | 1,140 | 4,470 | 3,160 | 3,280 | 3,340 | 3,600 | 3,100 | 1,500 | 1,140 | 1,780 | 1,190 | 860 |
| 27..... | 1,140 | 3,600 | 3,600 | 3,220 | 4,020 | 3,950 | 2,800 | 1,400 | 1,140 | 2,020 | 1,140 | 860 |
| 28..... | 1,140 | 3,460 | 4,160 | 3,040 | 4,310 | 3,100 | 2,500 | 1,400 | 1,240 | 2,140 | 1,040 | 905 |
| 29..... | 1,670 | 3,280 | 4,310 | 2,980 | ----- | 3,100 | 2,380 | 1,400 | 1,400 | 2,260 | 995 | 770 |
| 30..... | 2,860 | 3,160 | 4,160 | 2,980 | ----- | 3,340 | 2,200 | 1,340 | 1,190 | 2,080 | 950 | 725 |
| 31..... | 3,100 | ----- | 3,740 | 2,920 | ----- | 3,460 | ----- | 1,400 | ----- | 1,560 | 1,040 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 3,100 | 1,090 | 1,410 | 0.483 | 0.56 |
| November..... | 22,300 | 1,400 | 5,980 | 2.05 | 2.29 |
| December..... | 4,790 | 3,100 | 3,660 | 1.25 | 1.44 |
| January..... | 7,370 | 2,920 | 4,120 | 1.41 | 1.63 |
| February..... | 4,710 | 2,560 | 3,290 | 1.13 | 1.18 |
| March..... | 4,310 | 2,310 | 3,290 | 1.13 | 1.30 |
| April..... | 5,950 | 2,200 | 3,490 | 1.20 | 1.34 |
| May..... | 5,750 | 1,340 | 2,510 | .860 | .99 |
| June..... | 1,400 | 1,090 | 1,230 | .421 | .47 |
| July..... | 2,260 | 860 | 1,460 | .500 | .58 |
| August..... | 2,860 | 950 | 1,500 | .514 | .59 |
| September..... | 1,620 | 725 | 920 | .315 | .35 |
| The year..... | 22,300 | 725 | 2,730 | .935 | 12.72 |

FLINT RIVER AT OAKFIELD, GA.

LOCATION.—Water-stage recorder at Georgia Southwestern & Gulf Railroad bridge 1 mile southwest of Oakfield, Worth County.

DRAINAGE AREA.—3,840 square miles.

RECORDS AVAILABLE.—January, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 20,200 second-feet Nov. 23 (gage height, 16.33 feet); minimum, 592 second-feet Aug. 31 (gage height, 1.47 feet).

1930-31: Maximum discharge, that of Nov. 23, 1930; minimum, 320 second-feet July 14, 1930 (gage height, 0.98 foot).

REMARKS.—Records good. Some regulation from operations at Crisp County Power Co.'s dam 8 miles above station.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------------|---------|--------|---------|-------|-------|-------|-----------------|--------|-------------------|-------|-------|-------|
| 1..... | 2,440 | 3,720 | 5,900 | 6,160 | 4,340 | 5,770 | 4,600 | 2,720 | 1,631 | 1,500 | 2,440 | 1,680 |
| 2..... | 2,550 | 3,600 | 6,550 | 5,640 | 4,340 | 6,030 | 4,730 | 2,820 | 1,681 | 1,500 | 1,580 | 1,770 |
| 3..... | 1,820 | 2,880 | 6,420 | 4,600 | 4,080 | 6,030 | 4,860 | 3,180 | 1,681 | 1,500 | 1,630 | 1,630 |
| 4..... | 1,150 | 2,500 | 6,030 | 4,210 | 3,840 | 5,900 | 5,640 | 3,720 | 1,721 | 1,400 | 1,400 | 1,450 |
| 5..... | 1,820 | 2,600 | 5,510 | 4,470 | 3,960 | 5,640 | 6,550 | 9,840 | 1,721 | 1,360 | 838 | 1,110 |
| 6..... | 1,680 | 1,680 | 4,210 | 4,600 | 3,840 | 5,250 | 6,680 | 14,300 | 1,271 | 1,500 | 838 | 1,080 |
| 7..... | 1,920 | 1,580 | 4,990 | 4,860 | 3,600 | 5,120 | 6,810 | 14,000 | 1,320 | 1,540 | 1,360 | 1,150 |
| 8..... | 1,630 | 2,380 | 5,250 | 5,250 | 3,600 | 4,990 | 7,070 | 11,100 | 1,870 | 1,450 | 1,820 | 1,320 |
| 9..... | 2,720 | 2,170 | 5,510 | 5,250 | 3,960 | 5,120 | 7,460 | 2,660 | 1,820 | 1,630 | 1,820 | 1,500 |
| 10..... | 3,600 | 1,870 | 5,900 | 5,380 | 4,210 | 5,250 | 7,460 | 4,990 | 1,820 | 1,450 | 3,000 | 1,230 |
| 11..... | 1,920 | 1,920 | 6,290 | 5,640 | 4,080 | 5,510 | 6,680 | 3,600 | 1,720 | 1,110 | 4,080 | 824 |
| 12..... | 908 | 2,220 | 6,290 | 5,640 | 4,210 | 5,380 | 5,510 | 3,960 | 1,631 | 1,630 | 2,280 | 838 |
| 13..... | 1,150 | 2,770 | 5,380 | 6,420 | 4,210 | 4,860 | 4,860 | 8,370 | 1,500 | 2,720 | 1,270 | 1,100 |
| 14..... | 1,150 | 3,960 | 4,600 | 7,460 | 4,600 | 4,600 | 4,470 | 7,330 | 894 | 1,970 | 1,820 | 1,400 |
| 15..... | 1,190 | 4,860 | 5,120 | 8,240 | 4,860 | 4,340 | 3,960 | 7,070 | 691 | 1,970 | 2,500 | 1,080 |
| 16..... | 1,540 | 6,810 | 5,120 | 8,760 | 5,380 | 4,080 | 3,840 | 6,550 | 705 | 1,970 | 2,500 | 936 |
| 17..... | 2,120 | 8,500 | 4,730 | 9,280 | 6,420 | 3,840 | 3,600 | 6,550 | 691 | 1,920 | 2,500 | 1,190 |
| 18..... | 2,330 | 11,200 | 4,600 | 9,560 | 6,550 | 3,720 | 3,720 | 5,120 | 1,190 | 1,870 | 2,220 | 845 |
| 19..... | 1,450 | 13,200 | 5,380 | 9,560 | 6,810 | 3,720 | 3,600 | 4,080 | 2,551 | 1,190 | 2,220 | 880 |
| 20..... | 1,090 | 15,000 | 6,030 | 8,760 | 6,030 | 3,600 | 3,600 | 3,480 | 2,381 | 1,400 | 1,680 | 1,580 |
| 21..... | 1,500 | 17,000 | 6,550 | 8,110 | 5,120 | 3,480 | 3,600 | 3,360 | 2,170 | 2,380 | 2,600 | 1,630 |
| 22..... | 1,770 | 18,900 | 6,290 | 6,940 | 5,380 | 3,600 | 3,600 | 3,120 | 2,070 | 2,280 | 5,640 | 1,820 |
| 23..... | 1,500 | 20,000 | 5,900 | 7,460 | 5,120 | 4,210 | 3,720 | 2,770 | 1,501 | 2,770 | 4,470 | 1,580 |
| 24..... | 1,320 | 19,500 | 5,510 | 6,420 | 4,600 | 4,860 | 3,840 | 2,770 | 1,150 | 2,550 | 3,120 | 2,020 |
| 25..... | 1,360 | 15,500 | 5,120 | 6,030 | 5,380 | 5,640 | 4,470 | 2,660 | 1,150 | 2,380 | 2,500 | 1,720 |
| 26..... | 1,500 | 13,600 | 5,250 | 5,380 | 6,290 | 5,770 | 4,600 | 2,330 | 1,111 | 1,540 | 1,920 | 1,110 |
| 27..... | 1,720 | 13,900 | 5,120 | 5,120 | 5,900 | 5,640 | 4,600 | 2,280 | 1,320 | 1,630 | 1,320 | 1,450 |
| 28..... | 1,400 | 9,560 | 5,250 | 4,600 | 5,640 | 5,120 | 3,840 | 2,120 | 1,681 | 2,070 | 1,230 | 1,320 |
| 29..... | 1,680 | 6,550 | 6,160 | 4,730 | ----- | 4,600 | 3,480 | 1,920 | 1,360 | 3,240 | 1,230 | 852 |
| 30..... | 2,170 | 5,510 | 6,680 | 4,730 | ----- | 4,340 | 3,000 | 1,920 | 1,540 | 3,120 | 1,270 | 1,270 |
| 31..... | 3,180 | ----- | 6,420 | 4,340 | ----- | 4,340 | ----- | 1,630 | ----- | 2,600 | 943 | ----- |
| Month | Maximum | | Minimum | | Mean | | Per square mile | | Run-off in inches | | | |
| October..... | 3,600 | | 908 | | 1,780 | | 0.464 | | 0.53 | | | |
| November..... | 20,000 | | 1,580 | | 7,850 | | 2.04 | | 2.28 | | | |
| December..... | 6,680 | | 4,210 | | 5,610 | | 1.46 | | 1.68 | | | |
| January..... | 9,560 | | 4,210 | | 6,250 | | 1.63 | | 1.88 | | | |
| February..... | 6,810 | | 3,600 | | 4,870 | | 1.27 | | 1.32 | | | |
| March..... | 6,030 | | 3,480 | | 4,850 | | 1.26 | | 1.45 | | | |
| April..... | 7,460 | | 3,000 | | 4,820 | | 1.26 | | 1.41 | | | |
| May..... | 14,300 | | 1,630 | | 4,910 | | 1.28 | | 1.48 | | | |
| June..... | 2,550 | | 691 | | 1,520 | | .396 | | .44 | | | |
| July..... | 3,240 | | 1,110 | | 1,910 | | .497 | | .57 | | | |
| August..... | 5,640 | | 838 | | 2,130 | | .565 | | .64 | | | |
| September..... | 2,020 | | 824 | | 1,310 | | .341 | | .38 | | | |
| The year..... | 20,000 | | 691 | | 3,980 | | 1.04 | | 14.06 | | | |

FLINT RIVER AT ALBANY, GA.

LOCATION.—Water-stage recorder at Georgia Northern Railway bridge in Albany, Dougherty County.

DRAINAGE AREA.—5,160 square miles.

RECORDS AVAILABLE.—February, 1897, to June, 1921; September, 1922, to September, 1931.

EXTREMES.—Maximum discharge during year, 25,000 second-feet Nov. 21 (gage height, 19.17 feet); minimum, 327 second-feet Sept. 20 (gage height, 1.36 feet).

1897-1921, 1929-1931: Maximum gage height, 32.4 feet (United States Weather Bureau datum) Mar. 25, 1897 (discharge not determined); minimum discharge, 284 second-feet Sept. 7, 1930 (gage height, 1.26 feet).

Maximum stage known, 37.84 feet (present datum) Mar. 21, 1925, discharge 92,000 second-feet.

REMARKS.—Records good. Flow regulated by operation of plants above station.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|--------|-------|--------|-------|-------|-------|--------|-------|-------|-------|-------|
| 1 | 3,320 | 3,470 | 7,940 | 7,940 | 4,770 | 7,430 | 6,310 | 3,620 | 2,190 | 1,800 | 3,400 | 1,660 |
| 2 | 3,400 | 4,090 | 7,600 | 7,600 | 6,310 | 7,600 | 6,110 | 3,400 | 2,190 | 2,420 | 2,120 | 1,960 |
| 3 | 3,400 | 3,850 | 7,600 | 6,880 | 5,910 | 7,770 | 6,110 | 3,400 | 2,080 | 2,540 | 1,520 | 2,220 |
| 4 | 3,250 | 3,620 | 7,770 | 5,510 | 5,510 | 7,600 | 6,500 | 5,130 | 2,140 | 1,700 | 2,020 | 2,270 |
| 5 | 1,620 | 3,620 | 7,940 | 6,310 | 5,310 | 7,260 | 8,280 | 9,260 | 2,140 | 1,940 | 2,180 | 1,680 |
| 6 | 2,690 | 3,470 | 7,770 | 6,110 | 5,310 | 7,260 | 8,280 | 13,200 | 1,920 | 2,430 | 2,060 | 968 |
| 7 | 2,500 | 2,860 | 6,110 | 6,110 | 4,950 | 6,880 | 8,280 | 16,100 | 1,620 | 2,080 | 1,260 | 1,540 |
| 8 | 2,430 | 2,790 | 7,600 | 6,310 | 4,170 | 7,070 | 8,790 | 15,700 | 2,080 | 2,240 | 1,800 | 1,520 |
| 9 | 2,500 | 2,360 | 7,070 | 6,500 | 4,590 | 6,880 | 9,260 | 11,100 | 2,080 | 1,970 | 1,430 | 1,750 |
| 10 | 5,240 | 2,850 | 7,260 | 6,690 | 4,770 | 6,880 | 8,960 | 6,500 | 2,080 | 2,190 | 3,010 | 1,740 |
| 11 | 3,100 | 3,190 | 7,600 | 5,910 | 5,710 | 6,880 | 8,620 | 8,280 | 2,020 | 1,520 | 6,310 | 1,690 |
| 12 | 970 | 3,260 | 7,770 | 7,070 | 5,910 | 7,070 | 7,260 | 5,510 | 2,020 | 1,630 | 4,770 | 1,590 |
| 13 | 2,210 | 3,330 | 7,770 | 7,260 | 5,710 | 6,890 | 6,310 | 9,560 | 2,140 | 2,880 | 3,470 | 1,200 |
| 14 | 2,260 | 3,770 | 6,110 | 9,110 | 5,910 | 6,310 | 5,130 | 9,260 | 1,660 | 2,860 | 3,330 | 2,120 |
| 15 | 2,260 | 4,590 | 7,070 | 10,200 | 5,710 | 5,910 | 4,950 | 8,110 | 2,080 | 2,540 | 3,620 | 1,650 |
| 16 | 2,310 | 9,410 | 6,880 | 11,200 | 7,070 | 5,510 | 4,590 | 8,110 | 1,920 | 3,470 | 2,720 | 1,440 |
| 17 | 2,390 | 11,500 | 6,690 | 11,800 | 6,880 | 5,130 | 4,330 | 7,070 | 1,480 | 2,920 | 3,470 | 1,630 |
| 18 | 2,900 | 15,500 | 6,500 | 12,000 | 8,110 | 5,910 | 4,410 | 6,110 | 920 | 1,660 | 3,770 | 1,376 |
| 19 | 2,170 | 20,900 | 6,500 | 12,300 | 8,960 | 5,480 | 4,950 | 5,510 | 666 | 1,200 | 3,700 | 1,380 |
| 20 | 2,460 | 24,400 | 7,070 | 11,500 | 8,620 | 3,050 | 4,590 | 4,410 | 2,040 | 1,530 | 3,620 | 363 |
| 21 | 1,860 | 24,800 | 7,260 | 10,700 | 7,770 | 3,700 | 4,590 | 3,770 | 2,270 | 2,770 | 3,540 | 1,300 |
| 22 | 1,950 | 24,400 | 8,450 | 9,860 | 6,880 | 4,950 | 4,590 | 3,770 | 2,410 | 3,120 | 4,950 | 1,520 |
| 23 | 2,300 | 24,200 | 7,940 | 9,560 | 7,070 | 5,710 | 4,590 | 3,700 | 2,380 | 3,400 | 5,310 | 2,190 |
| 24 | 2,390 | 23,300 | 7,600 | 8,790 | 6,110 | 5,710 | 4,770 | 3,330 | 1,480 | 3,400 | 3,770 | 1,990 |
| 25 | 1,580 | 21,500 | 6,880 | 7,770 | 6,310 | 7,070 | 4,950 | 3,260 | 1,300 | 3,400 | 3,770 | 2,740 |
| 26 | 1,250 | 15,700 | 6,690 | 7,940 | 6,880 | 7,600 | 6,690 | 2,860 | 1,300 | 2,020 | 3,540 | 1,820 |
| 27 | 2,160 | 17,500 | 6,500 | 7,260 | 7,600 | 7,600 | 5,310 | 2,240 | 1,440 | 1,700 | 2,860 | 1,020 |
| 28 | 2,330 | 13,100 | 6,110 | 7,260 | 7,260 | 7,260 | 5,130 | 2,980 | 2,340 | 2,140 | 2,190 | 2,000 |
| 29 | 2,500 | 10,200 | 7,260 | 6,310 | ----- | 6,310 | 4,770 | 3,330 | 1,660 | 3,330 | 2,020 | 1,500 |
| 30 | 2,330 | 8,110 | 7,940 | 6,310 | ----- | 5,310 | 4,170 | 2,140 | 1,480 | 3,400 | 1,290 | 1,380 |
| 31 | 3,200 | ----- | 7,940 | 6,110 | ----- | 5,710 | ----- | 1,970 | ----- | 3,400 | 1,540 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|--------|-----------------|-------------------|
| October | 5,240 | 970 | 2,490 | 0.483 | 0.56 |
| November | 24,800 | 2,360 | 10,500 | 2.03 | 2.26 |
| December | 8,450 | 6,110 | 7,260 | 1.41 | 1.93 |
| January | 12,300 | 5,510 | 8,130 | 1.58 | 1.82 |
| February | 8,960 | 4,170 | 6,290 | 1.22 | 1.27 |
| March | 7,770 | 3,050 | 6,380 | 1.24 | 1.43 |
| April | 9,260 | 4,170 | 6,050 | 1.17 | 1.80 |
| May | 16,100 | 1,970 | 6,220 | 1.21 | 1.40 |
| June | 2,410 | 666 | 1,850 | .359 | .40 |
| July | 3,470 | 1,200 | 2,420 | .469 | .54 |
| August | 6,310 | 1,260 | 3,040 | .589 | .68 |
| September | 2,740 | 363 | 1,640 | .318 | .35 |
| The year | 24,800 | 363 | 5,180 | 1.00 | 13.64 |

FLINT RIVER AT BAINBRIDGE, GA.

LOCATION.—Water-stage recorder at Decatur County Memorial Highway Bridge, in Bainbridge, Decatur County. Zero of gage is 58.06 feet above mean sea level.

DRAINAGE AREA.—7,290 square miles.

RECORDS AVAILABLE.—January, 1908, to December, 1913; December, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 28,500 second-feet Nov. 22, 23 (gage height, 22.0 feet); minimum, 2,350 second-feet Sept. 29 (gage height, about 3.9 feet).

1908-1913, 1928-1931: Maximum discharge, 83,200 second-feet Mar. 21, 1929 (gage height, 37.73 feet); minimum, that of Sept. 29, 1931.

Maximum stage known, 40.9 feet (present datum) Jan. 24, 1924 (discharge, 101,000 second-feet).

REMARKS.—Records good. Discharge estimated for Dec. 26.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----------------|---------|--------|--------|---------|--------|-------|--------|--------|-------|-----------------|-------|-------------------|
| 1.----- | 7,480 | 4,430 | 13,400 | 10,400 | 8,270 | 9,230 | 8,150 | 6,270 | 4,330 | 3,030 | 4,830 | 3,260 |
| 2.----- | 6,490 | 4,930 | 12,500 | 10,100 | 7,590 | 9,360 | 8,030 | 5,830 | 4,230 | 3,030 | 4,830 | 3,430 |
| 3.----- | 6,270 | 5,430 | 12,200 | 10,400 | 8,270 | 9,490 | 8,030 | 5,530 | 4,230 | 3,260 | 4,330 | 3,630 |
| 4.----- | 6,050 | 5,430 | 12,200 | 10,000 | 8,270 | 9,620 | 8,030 | 5,630 | 4,030 | 3,930 | 3,260 | 3,530 |
| 5.----- | 5,730 | 5,330 | 12,100 | 8,870 | 8,030 | 9,490 | 8,270 | 6,600 | 4,030 | 3,180 | 3,430 | 3,830 |
| 6.----- | 4,730 | 5,230 | 11,800 | 8,870 | 7,810 | 9,360 | 9,110 | 8,750 | 3,930 | 2,960 | 3,430 | 3,430 |
| 7.----- | 4,830 | 5,130 | 11,400 | 8,750 | 7,810 | 9,230 | 9,620 | 12,500 | 3,830 | 3,100 | 3,530 | 3,030 |
| 8.----- | 5,030 | 4,730 | 10,300 | 8,630 | 7,590 | 9,230 | 10,000 | 15,600 | 3,530 | 3,530 | 3,180 | 2,840 |
| 9.----- | 4,830 | 4,530 | 10,400 | 8,750 | 7,040 | 9,110 | 10,400 | 16,500 | 3,530 | 3,430 | 3,180 | 2,960 |
| 10.----- | 4,730 | 4,330 | 10,400 | 8,870 | 7,150 | 8,990 | 10,500 | 13,600 | 4,130 | 3,340 | 3,180 | 3,030 |
| 11.----- | 5,830 | 4,230 | 10,300 | 8,990 | 7,150 | 8,990 | 10,500 | 10,100 | 4,430 | 3,430 | 3,830 | 3,030 |
| 12.----- | 5,630 | 4,730 | 10,500 | 8,990 | 7,590 | 9,110 | 10,300 | 10,400 | 4,030 | 3,260 | 6,160 | 3,100 |
| 13.----- | 4,230 | 4,530 | 10,700 | 9,360 | 7,920 | 8,990 | 9,360 | 9,230 | 3,830 | 2,900 | 7,150 | 3,100 |
| 14.----- | 4,230 | 5,130 | 10,400 | 9,360 | 8,030 | 8,990 | 8,630 | 10,400 | 3,830 | 3,430 | 6,930 | 2,840 |
| 15.----- | 4,530 | 5,430 | 9,230 | 10,400 | 8,030 | 8,630 | 7,920 | 10,700 | 3,530 | 4,230 | 6,490 | 3,180 |
| 16.----- | 4,530 | 5,830 | 9,490 | 11,500 | 8,150 | 8,270 | 7,590 | 10,000 | 3,430 | 3,730 | 6,270 | 3,100 |
| 17.----- | 4,430 | 9,230 | 9,620 | 12,500 | 8,870 | 7,920 | 7,040 | 9,830 | 3,630 | 4,430 | 5,830 | 2,900 |
| 18.----- | 4,430 | 12,800 | 9,230 | 13,400 | 9,230 | 7,590 | 6,820 | 8,990 | 3,340 | 4,530 | 5,730 | 2,900 |
| 19.----- | 4,630 | 17,800 | 9,230 | 13,900 | 9,750 | 7,810 | 6,710 | 8,510 | 3,050 | 3,530 | 6,270 | 2,900 |
| 20.----- | 4,330 | 23,500 | 9,230 | 14,200 | 10,300 | 7,920 | 6,710 | 7,920 | 2,780 | 3,100 | 6,380 | 2,780 |
| 21.----- | 4,230 | 27,200 | 9,750 | 13,700 | 10,300 | 6,050 | 6,820 | 7,260 | 2,900 | 3,030 | 6,380 | 2,550 |
| 22.----- | 4,030 | 28,500 | 9,750 | 13,300 | 9,620 | 6,380 | 6,820 | 6,490 | 3,830 | 3,530 | 6,050 | 2,450 |
| 23.----- | 3,830 | 28,500 | 10,400 | 12,700 | 9,230 | 6,710 | 6,820 | 6,270 | 3,630 | 4,230 | 6,380 | 2,660 |
| 24.----- | 3,930 | 23,100 | 10,100 | 12,100 | 8,990 | 7,480 | 6,710 | 6,160 | 3,830 | 4,430 | 7,150 | 2,960 |
| 25.----- | 4,030 | 27,600 | 9,880 | 11,400 | 8,510 | 7,590 | 6,820 | 5,730 | 3,340 | 4,630 | 6,050 | 2,960 |
| 26.----- | 3,830 | 26,800 | 9,560 | 10,700 | 8,390 | 8,150 | 6,930 | 5,630 | 3,030 | 4,730 | 5,730 | 3,340 |
| 27.----- | 3,430 | 23,100 | 9,230 | 10,500 | 8,630 | 8,750 | 7,590 | 5,530 | 2,960 | 4,430 | 5,530 | 3,180 |
| 28.----- | 3,530 | 21,300 | 9,110 | 10,000 | 9,110 | 8,750 | 7,150 | 4,930 | 2,960 | 3,340 | 5,130 | 2,840 |
| 29.----- | 4,030 | 19,000 | 9,110 | 9,750 | ----- | 8,750 | 7,040 | 5,030 | 3,150 | 3,630 | 4,430 | 2,660 |
| 30.----- | 4,030 | 15,600 | 9,360 | 9,110 | ----- | 8,390 | 6,600 | 5,530 | 3,430 | 4,330 | 4,130 | 2,780 |
| 31.----- | 4,030 | ----- | 10,000 | 8,750 | ----- | 8,030 | ----- | 4,530 | ----- | 4,730 | 3,630 | ----- |
| Month | Maximum | | | Minimum | | | Mean | | | Per square mile | | Run-off in inches |
| October.----- | 7,480 | | | 3,430 | | | 4,710 | | | 0.646 | | 0.74 |
| November.----- | 28,500 | | | 4,230 | | | 13,000 | | | 1.78 | | 1.99 |
| December.----- | 13,400 | | | 9,110 | | | 10,400 | | | 1.43 | | 1.65 |
| January.----- | 14,200 | | | 8,630 | | | 10,600 | | | 1.45 | | 1.67 |
| February.----- | 10,300 | | | 7,040 | | | 8,420 | | | 1.16 | | 1.21 |
| March.----- | 9,620 | | | 6,050 | | | 8,460 | | | 1.16 | | 1.34 |
| April.----- | 10,500 | | | 6,600 | | | 8,030 | | | 1.10 | | 1.23 |
| May.----- | 16,500 | | | 4,530 | | | 8,260 | | | 1.13 | | 1.30 |
| June.----- | 4,430 | | | 2,780 | | | 3,620 | | | .497 | | .55 |
| July.----- | 4,730 | | | 2,900 | | | 3,700 | | | .508 | | .59 |
| August.----- | 7,150 | | | 3,180 | | | 5,120 | | | .702 | | .81 |
| September.----- | 3,830 | | | 2,450 | | | 3,040 | | | .417 | | .47 |
| The year.----- | 28,500 | | | 2,450 | | | 7,270 | | | .997 | | 13.55 |

CHIPOLA RIVER NEAR ALTHA, FLA.

LOCATION.—Chain gage at Willis highway bridge 3 miles above mouth of Tenmile Creek and 4 miles southwest of Altha, Calhoun County.

DRAINAGE AREA.—740 square miles.

RECORDS AVAILABLE.—November, 1912, to December, 1913; September, 1921, to September, 1927; August, 1929, to September, 1931 (discontinued).

EXTREMES.—Maximum discharge during year, 4,880 second-feet Nov. 22 (gage height, 19.44 feet); minimum, 540 second-feet July 7, 13 (gage height, 8.72 feet).

1912-13, 1921-1927, 1929-1931: Maximum discharge, 25,000 second-feet September, 1926 (gage height, 33.55 feet); minimum, 430 second-feet Oct. 20, 1925.

REMARKS.—Records good except those estimated, which are fair. Slight fluctuation during low water caused by operation of small power plant on Dry Creek.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|--------|--------|
| 1..... | 1,600 | 910 | 2,380 | *1,560 | *1,280 | *1,360 | 1,280 | 910 | 710 | 660 | 910 | 1,110 |
| 2..... | 1,700 | *910 | 2,300 | 1,440 | 1,240 | 1,360 | 1,240 | 860 | 710 | 600 | *860 | 1,060 |
| 3..... | 1,640 | 910 | 2,200 | 1,400 | 1,240 | 1,320 | 1,200 | *885 | 710 | 600 | 810 | 1,110 |
| 4..... | 1,520 | 860 | 2,130 | *1,440 | 1,200 | 1,280 | 1,160 | 910 | 660 | *600 | 760 | 1,160 |
| 5..... | *1,360 | 860 | 2,130 | 1,480 | 1,200 | 1,280 | 1,320 | 960 | 710 | *600 | 760 | 1,160 |
| 6..... | 1,200 | 860 | 2,160 | 1,480 | 1,200 | 1,280 | 1,280 | 960 | 710 | 500 | 760 | *1,130 |
| 7..... | 1,110 | 810 | *2,130 | 1,360 | 1,160 | 1,280 | *1,280 | 1,010 | *710 | 540 | 810 | *1,090 |
| 8..... | 1,010 | 810 | 2,070 | 1,400 | *1,160 | *1,320 | 1,280 | 1,010 | 710 | 570 | 860 | 1,060 |
| 9..... | 1,010 | *810 | 1,950 | 1,320 | 1,200 | 1,360 | 1,320 | 960 | 660 | 570 | *1,130 | 1,060 |
| 10..... | 1,010 | *810 | 1,810 | 1,360 | 1,200 | 1,360 | 1,320 | *960 | 660 | 570 | 1,400 | 1,010 |
| 11..... | 1,060 | 760 | 1,780 | *1,440 | 1,200 | 1,280 | 1,240 | 960 | 660 | 570 | 2,710 | 1,010 |
| 12..... | *1,060 | 810 | 1,780 | 1,560 | 1,200 | 1,320 | *1,200 | 910 | 600 | *555 | 2,750 | 1,010 |
| 13..... | 1,060 | 810 | 1,700 | 1,600 | 1,160 | 1,280 | 1,160 | 860 | 600 | 540 | 2,790 | *1,060 |
| 14..... | 1,360 | 860 | *1,670 | 1,600 | 1,200 | 1,240 | 1,110 | 860 | *630 | 760 | 3,270 | 1,110 |
| 15..... | 1,670 | 1,010 | 1,560 | 1,520 | *1,240 | *1,240 | 1,060 | 860 | 660 | 710 | 3,760 | 1,110 |
| 16..... | 1,700 | *1,560 | 1,520 | 1,400 | 1,240 | 1,200 | 1,060 | 810 | 600 | 760 | *3,850 | 1,110 |
| 17..... | 1,520 | *2,270 | 1,670 | 1,440 | 1,280 | 1,160 | 1,060 | *810 | 570 | 810 | 3,960 | 1,110 |
| 18..... | 1,280 | 3,630 | 1,670 | *1,700 | 1,280 | 1,110 | 1,010 | 810 | 660 | 810 | 3,550 | 1,010 |
| 19..... | *1,110 | 4,620 | 1,740 | 1,840 | 1,360 | 1,110 | *1,010 | 810 | 660 | *810 | 3,030 | 1,010 |
| 20..... | 1,010 | 4,660 | 1,780 | 1,780 | 1,320 | 1,060 | 1,010 | 810 | 660 | 810 | 2,760 | *960 |
| 21..... | 960 | 4,800 | *1,780 | 1,740 | 1,280 | 1,060 | 960 | 760 | *630 | 760 | 2,410 | 910 |
| 22..... | 910 | 4,880 | 1,740 | 1,670 | *1,280 | *1,060 | 1,010 | 760 | 600 | 860 | 2,010 | 910 |
| 23..... | 910 | 4,750 | 1,810 | 1,670 | *1,240 | 1,010 | 1,010 | 760 | 600 | 760 | *1,820 | 910 |
| 24..... | 910 | 4,160 | 1,740 | 1,670 | 1,200 | 1,010 | 1,010 | *760 | 600 | 760 | 1,640 | 860 |
| 25..... | *1,060 | 3,630 | *1,700 | *1,600 | 1,200 | 1,010 | 1,010 | 760 | 570 | 760 | 1,480 | 860 |
| 26..... | *1,200 | 3,110 | 1,670 | 1,520 | 1,160 | 1,010 | *1,010 | 760 | 600 | *860 | 1,320 | 810 |
| 27..... | 1,110 | 2,630 | 1,640 | 1,520 | 1,160 | 1,010 | 1,010 | 710 | 570 | 960 | 1,280 | *835 |
| 28..... | 860 | 2,300 | *1,640 | 1,480 | 1,280 | 1,200 | 960 | 760 | *585 | 910 | 1,160 | 860 |
| 29..... | 860 | 2,130 | 1,640 | 1,360 | ----- | *1,200 | 910 | 710 | 600 | 1,010 | 1,160 | 810 |
| 30..... | 910 | 2,100 | 1,600 | 1,320 | ----- | 1,160 | 910 | *710 | 660 | 1,060 | *1,140 | 760 |
| 31..... | 910 | ----- | 1,600 | 1,280 | ----- | 1,240 | ----- | *710 | ----- | 960 | 1,110 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 1,700 | 860 | 1,180 | 1.59 | 1.83 |
| November..... | 4,880 | 760 | 2,130 | 2.88 | 3.21 |
| December..... | 2,380 | 1,520 | 1,830 | 2.47 | 2.85 |
| January..... | 1,840 | 1,280 | 1,510 | 2.04 | 2.35 |
| February..... | 1,360 | 1,160 | 1,230 | 1.66 | 1.73 |
| March..... | 1,360 | 1,010 | 1,200 | 1.62 | 1.87 |
| April..... | 1,320 | 910 | 1,110 | 1.50 | 1.67 |
| May..... | 1,010 | 710 | 841 | 1.14 | 1.31 |
| June..... | 710 | 570 | 642 | .868 | .97 |
| July..... | 1,060 | 540 | 732 | .989 | 1.14 |
| August..... | 3,960 | 760 | 1,870 | 2.53 | 2.92 |
| September..... | 1,160 | 760 | 999 | 1.35 | 1.51 |
| The year..... | 4,880 | 540 | 1,270 | 1.72 | 23.36 |

* Estimated.

CHOCTAWHATCHEE RIVER BASIN

CHOCTAWHATCHEE RIVER AT CARYVILLE, FLA.

LOCATION.—Water-stage recorder at highway bridge 300 feet below Louisville & Nashville Railroad bridge and three-fourths mile west of Caryville, Holmes County. Zero of gage is 39.03 feet above mean sea level.

DRAINAGE AREA.—3,490 square miles.

RECORDS AVAILABLE.—August, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 31,700 second-feet Nov. 19 (gage height, 13.17 feet); minimum, 955 second-feet Sept. 30 (gage height, 0.40 foot).

1929-1931: Maximum discharge, 49,100 second-feet Oct. 4, 1929 (gage height, 14.83 feet); minimum, that of Sept. 30, 1931.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 5,210 | 3,250 | 6,980 | 5,070 | 4,460 | 6,470 | 5,970 | 3,190 | 1,760 | 1,060 | 2,240 | 1,680 |
| 2..... | 4,940 | 3,010 | 8,040 | 4,600 | 4,350 | 7,150 | 5,350 | 2,950 | 1,680 | 1,020 | 1,990 | 1,540 |
| 3..... | 4,250 | 2,830 | 8,790 | 4,460 | 4,150 | 7,500 | 5,350 | 3,010 | 1,630 | 990 | 1,720 | 1,500 |
| 4..... | 3,660 | 2,660 | 8,980 | 4,350 | 4,060 | 6,980 | 5,070 | 3,190 | 1,580 | 955 | 1,630 | 1,540 |
| 5..... | 3,190 | 2,560 | 8,410 | 4,350 | 3,970 | 6,300 | 5,210 | 3,310 | 1,540 | 990 | 1,540 | 1,540 |
| 6..... | 2,830 | 2,390 | 7,860 | 4,600 | 3,890 | 5,650 | 6,130 | 3,590 | 1,540 | 1,020 | 1,400 | 1,450 |
| 7..... | 2,610 | 2,240 | 7,500 | 5,070 | 3,810 | 5,350 | 6,980 | 4,570 | 1,450 | 1,020 | 1,720 | 1,320 |
| 8..... | 2,390 | 2,140 | 8,040 | 5,210 | 3,810 | 5,810 | 7,500 | 5,350 | 1,400 | 990 | 1,990 | 1,270 |
| 9..... | 2,290 | 2,040 | 8,220 | 5,070 | 3,730 | 6,980 | 7,500 | 6,130 | 1,320 | 990 | 2,610 | 1,180 |
| 10..... | 2,340 | 1,990 | 7,860 | 4,940 | 3,890 | 7,680 | 7,150 | 6,640 | 1,270 | 1,100 | 4,060 | 1,180 |
| 11..... | 3,010 | 2,090 | 7,150 | 4,810 | 4,250 | 7,320 | 6,640 | 6,470 | 1,220 | 1,270 | 6,810 | 1,320 |
| 12..... | 3,590 | 2,390 | 6,640 | 4,570 | 4,350 | 6,300 | 6,130 | 5,650 | 1,180 | 1,400 | 8,600 | 1,540 |
| 13..... | 3,890 | 3,520 | 6,130 | 5,070 | 4,150 | 5,500 | 5,210 | 4,460 | 1,180 | 1,500 | 7,320 | 1,810 |
| 14..... | 3,730 | 6,980 | 5,970 | 5,070 | 4,150 | 4,940 | 4,570 | 3,730 | 1,180 | 1,900 | 5,210 | 1,760 |
| 15..... | 3,450 | 10,300 | 5,650 | 8,220 | 4,940 | 4,690 | 4,150 | 3,250 | 1,140 | 2,290 | 3,810 | 1,680 |
| 16..... | 3,190 | 16,100 | 5,350 | 8,980 | 6,300 | 4,460 | 3,890 | 2,950 | 1,180 | 2,390 | 3,520 | 1,500 |
| 17..... | 2,780 | 23,400 | 5,210 | 8,980 | 7,500 | 4,250 | 3,660 | 2,720 | 1,220 | 2,330 | 3,810 | 1,450 |
| 18..... | 2,440 | 28,200 | 5,350 | 8,600 | 7,860 | 4,060 | 3,520 | 2,500 | 1,270 | 2,610 | 3,590 | 1,360 |
| 19..... | 2,190 | 30,800 | 5,650 | 8,600 | 8,220 | 3,890 | 3,380 | 2,340 | 1,270 | 2,290 | 3,130 | 1,270 |
| 20..... | 2,040 | 30,800 | 5,810 | 9,180 | 8,220 | 3,730 | 3,380 | 2,240 | 1,180 | 2,440 | 2,720 | 1,140 |
| 21..... | 1,940 | 29,900 | 5,650 | 9,580 | 8,040 | 3,660 | 3,810 | 2,290 | 1,270 | 2,610 | 2,610 | 1,060 |
| 22..... | 1,860 | 29,000 | 5,500 | 9,380 | 7,150 | 3,730 | 4,460 | 2,890 | 1,400 | 3,070 | 3,130 | 1,020 |
| 23..... | 1,810 | 26,600 | 5,350 | 8,410 | 6,470 | 3,890 | 4,690 | 3,310 | 1,680 | 3,070 | 3,070 | 990 |
| 24..... | 1,760 | 22,600 | 5,210 | 7,320 | 5,500 | 4,150 | 4,690 | 3,010 | 1,940 | 3,070 | 2,610 | 990 |
| 25..... | 1,760 | 18,100 | 5,210 | 6,470 | 5,350 | 4,250 | 4,570 | 2,720 | 1,810 | 3,190 | 2,240 | 990 |
| 26..... | 1,720 | 19,600 | 4,940 | 5,810 | 5,650 | 4,150 | 4,570 | 2,500 | 1,540 | 3,520 | 2,040 | 990 |
| 27..... | 1,680 | 10,000 | 5,210 | 5,500 | 5,970 | 4,250 | 4,350 | 2,290 | 1,400 | 3,810 | 1,860 | 990 |
| 28..... | 1,720 | 8,410 | 5,810 | 5,210 | 5,810 | 4,940 | 3,890 | 2,140 | 1,320 | 3,730 | 1,810 | 1,020 |
| 29..... | 1,900 | 7,500 | 6,130 | 4,940 | ----- | 6,130 | 3,590 | 2,040 | 1,220 | 3,310 | 1,900 | 1,020 |
| 30..... | 2,610 | 6,810 | 5,810 | 4,690 | ----- | 6,980 | 3,380 | 1,940 | 1,140 | 3,010 | 1,940 | 990 |
| 31..... | 3,810 | ----- | 5,350 | 4,570 | ----- | 6,810 | ----- | 1,860 | ----- | 2,560 | 1,810 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|--------|-----------------|-------------------|
| October..... | 5,210 | 1,680 | 2,780 | 0.797 | 0.92 |
| November..... | 30,800 | 1,990 | 11,900 | 3.41 | 3.80 |
| December..... | 8,980 | 4,940 | 6,440 | 1.85 | 2.13 |
| January..... | 9,580 | 4,350 | 6,190 | 1.77 | 2.04 |
| February..... | 8,220 | 3,730 | 5,360 | 1.54 | 1.60 |
| March..... | 7,680 | 3,660 | 5,420 | 1.55 | 1.79 |
| April..... | 7,500 | 3,380 | 4,960 | 1.42 | 1.58 |
| May..... | 6,640 | 1,860 | 3,390 | .971 | 1.12 |
| June..... | 1,940 | 1,140 | 1,400 | .401 | .45 |
| July..... | 3,810 | 955 | 2,130 | .610 | .70 |
| August..... | 8,600 | 1,400 | 3,050 | .874 | 1.01 |
| September..... | 1,810 | 990 | 1,300 | .372 | .42 |
| The year..... | 30,800 | 955 | 4,520 | 1.30 | 17.56 |

ESCAMBIA RIVER BASIN

CONECUH RIVER NEAR ANDALUSIA, ALA.

LOCATION.—Water-stage recorder in T. 3 N., R. 15 E., at Simmons B-idge, 7½ miles southwest of Andalusia.

DRAINAGE AREA.—1,300 square miles.

RECORDS AVAILABLE.—August, 1904, to December, 1919; September, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 13,600 second-feet Nov. 20 (gauge height, 26.90 feet); minimum, 74 second-feet Sept. 23 (gauge height, 1.48 foot).

1904-1919, 1929-1931: Maximum discharge (estimated), 26,000 second-feet Mar. 18, 1913 (gauge height not determined); minimum, 61 second-feet July 7, 1930 (gauge height, 0.39 foot).

Maximum stage known, 47.64 feet Mar. 15, 1929 (discharge, 154,000 second-feet).

REMARKS.—Records good except those estimated, which are fair. Flow regulated by power plants above station.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 1,380 | 505 | 3,320 | 1,600 | 1,300 | 2,520 | 2,400 | 1,840 | 580 | 316 | 700 | 790 |
| 2 | 1,100 | 328 | 2,640 | | 1,480 | 2,920 | 2,760 | 1,410 | 715 | 382 | 445 | 775 |
| 3 | 790 | 415 | 2,520 | | 1,100 | 2,480 | 2,680 | 1,300 | 655 | 373 | 520 | 790 |
| 4 | 1,270 | 580 | 2,480 | | 1,160 | 2,160 | 3,640 | 1,480 | 535 | 430 | 535 | 820 |
| 5 | 790 | 595 | 2,320 | | 1,560 | 1,200 | 2,360 | 1,560 | 490 | 445 | 565 | 820 |
| 6 | 1,100 | 760 | 4,080 | 1,600 | 1,240 | 2,160 | 6,800 | 2,080 | 610 | 346 | 625 | 505 |
| 7 | 885 | 700 | 4,480 | 1,680 | 1,060 | 2,360 | 5,150 | 2,440 | 322 | 397 | 1,060 | 490 |
| 8 | 1,200 | 625 | 4,840 | 1,720 | 1,300 | 2,800 | 4,480 | 2,160 | 430 | 430 | 565 | 610 |
| 9 | 1,600 | 352 | 2,640 | 1,340 | 1,840 | 2,880 | 3,720 | 2,000 | 535 | 445 | 505 | 990 |
| 10 | 1,300 | 550 | 1,920 | 1,560 | 1,340 | 2,480 | 5,510 | 1,920 | 610 | 460 | 1,380 | 790 |
| 11 | 1,270 | 760 | 2,040 | 1,380 | 1,440 | 1,800 | 5,020 | 2,360 | 595 | 430 | 2,000 | 885 |
| 12 | 965 | 1,270 | 2,080 | 3,720 | 1,440 | 2,240 | 4,080 | 1,340 | 595 | 565 | 1,300 | 885 |
| 13 | 1,060 | 2,080 | 1,840 | 4,340 | 1,720 | 2,160 | 2,600 | 1,240 | 625 | 520 | 1,270 | 535 |
| 14 | 595 | 3,120 | 1,560 | 2,760 | 2,480 | 2,240 | 3,080 | 1,020 | 415 | 625 | 1,060 | 615 |
| 15 | 885 | 3,200 | 1,440 | 2,960 | 2,680 | 1,880 | 2,080 | 920 | 445 | 595 | 1,100 | 820 |
| 16 | 760 | 5,690 | 1,840 | 3,080 | 2,960 | 1,600 | 1,880 | 775 | 580 | 550 | 1,520 | 850 |
| 17 | 820 | 8,020 | 1,480 | 2,600 | 2,880 | 1,560 | 1,560 | 580 | 610 | 565 | 775 | 775 |
| 18 | 790 | 8,640 | 1,440 | 3,560 | 3,240 | 1,130 | 2,000 | 565 | 730 | 430 | 775 | 535 |
| 19 | 283 | 10,300 | 1,680 | 3,880 | 3,640 | 1,270 | 1,480 | 745 | 715 | 269 | 745 | 430 |
| 20 | 478 | 12,900 | 1,760 | 3,440 | 3,920 | 1,240 | 1,380 | 1,310 | 316 | 222 | 820 | 156 |
| 21 | 625 | 11,900 | 1,200 | 3,240 | 4,430 | 1,760 | 1,270 | 2,000 | 124 | 505 | 2,880 | 148 |
| 22 | 670 | 9,800 | 2,240 | 2,720 | 4,000 | 1,840 | 1,840 | 1,130 | 134 | 535 | 1,720 | 293 |
| 23 | 625 | 6,530 | 1,340 | 2,240 | 3,600 | 1,720 | 2,160 | 1,100 | 353 | 580 | 885 | 370 |
| 24 | 685 | 6,240 | 1,270 | 2,080 | 3,200 | 1,800 | 1,960 | 1,270 | 520 | 535 | 610 | 322 |
| 25 | 580 | 4,160 | 1,380 | 2,040 | 3,000 | 1,640 | 2,560 | 1,410 | 535 | 490 | 820 | 304 |
| 26 | 402 | 3,320 | 1,340 | 2,120 | 2,800 | 1,880 | 2,160 | 1,340 | 595 | 550 | 790 | 266 |
| 27 | 550 | 2,880 | 1,760 | 2,480 | 2,840 | 2,840 | 2,440 | 1,240 | 475 | 820 | 790 | 98 |
| 28 | 745 | 2,600 | 1,240 | 1,920 | 4,000 | 2,520 | 1,100 | 1,100 | 108 | 1,200 | 820 | 113 |
| 29 | 790 | 2,040 | 1,560 | 1,560 | 4,120 | 2,320 | 955 | 85 | 1,020 | 745 | 204 | 222 |
| 30 | 655 | 2,920 | 1,720 | 1,720 | 3,280 | 1,720 | 715 | 272 | 745 | 460 | 480 | 222 |
| 31 | 640 | | 1,300 | 3,360 | | | 565 | | 685 | 580 | | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 1,600 | 283 | 848 | 0.652 | 0.75 |
| November | 12,900 | 328 | 3,760 | 2.89 | 3.22 |
| December | 4,840 | 1,200 | 2,100 | 1.62 | 1.87 |
| January | 4,340 | 1,240 | 2,240 | 1.72 | 1.98 |
| February | 4,430 | 1,060 | 2,320 | 1.78 | 1.85 |
| March | 4,120 | 1,130 | 2,270 | 1.75 | 2.02 |
| April | 6,800 | 1,270 | 2,990 | 2.30 | 2.57 |
| May | 2,440 | 565 | 1,350 | 1.04 | 1.20 |
| June | 730 | 85 | 477 | .367 | .41 |
| July | 1,200 | 222 | 531 | .408 | .47 |
| August | 2,880 | 445 | 947 | .728 | .84 |
| September | 990 | 98 | 540 | .415 | .46 |
| The year | 12,900 | 85 | 1,690 | 1.30 | 17.64 |

MOBILE RIVER BASIN

COOSAWATTEE RIVER NEAR CARTERS, GA.

LOCATION.—Water-stage recorder at highway bridge 1 mile above Talking Rock Creek and $1\frac{1}{4}$ miles northeast of Carters, Murray County.

DRAINAGE AREA.—376 square miles.

RECORDS AVAILABLE.—September, 1925, to December, 1931 (discontinued).

EXTREMES.—Maximum discharge during period, 5,070 second-feet Apr. 4 (gage height, 5.90 feet); minimum, 145 second-feet Oct. 17-19, 1931 (gage height, 0.98 foot).

1925-1931: Maximum discharge, 20,700 second-feet July 31, 1929 (gage height, 16.2 feet); minimum, 59 second-feet Sept. 22, 1925 (gage height, 0.68 foot).

REMARKS.—Records fair. Discharge estimated for Mar. 25 to Apr. 1, Sept. 8-10.

Daily discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|-------|-------|-------|-------|------|------|-------|
| 1930-31 | | | | | | | | | | | | |
| 1----- | 241 | 246 | 411 | 411 | 377 | 591 | 1,400 | 750 | 591 | 366 | 440 | 260 |
| 2----- | 232 | 241 | 350 | 382 | 371 | 560 | 1,300 | 816 | 529 | 333 | 350 | 255 |
| 3----- | 228 | 232 | 323 | 377 | 371 | 560 | 1,040 | 750 | 498 | 323 | 303 | 888 |
| 4----- | 224 | 237 | 308 | 371 | 360 | 529 | 2,900 | 684 | 498 | 382 | 308 | 591 |
| 5----- | 219 | 237 | 328 | 684 | 355 | 498 | 2,300 | 684 | 498 | 622 | 293 | 360 |
| 6----- | 219 | 232 | 783 | 924 | 355 | 498 | 1,610 | 1,040 | 469 | 591 | 411 | 308 |
| 7----- | 219 | 228 | 622 | 717 | 344 | 529 | 1,210 | 2,900 | 469 | 382 | 382 | 283 |
| 8----- | 498 | 232 | 498 | 684 | 339 | 653 | 1,040 | 1,610 | 469 | 350 | 411 | 270 |
| 9----- | 717 | 224 | 411 | 684 | 498 | 560 | 960 | 1,120 | 440 | 333 | 328 | 256 |
| 10----- | 382 | 228 | 382 | 622 | 529 | 529 | 888 | 1,000 | 440 | 360 | 333 | 242 |
| 11----- | 355 | 250 | 411 | 591 | 411 | 498 | 924 | 960 | 440 | 313 | 411 | 228 |
| 12----- | 308 | 411 | 440 | 783 | 382 | 469 | 852 | 888 | 440 | 293 | 350 | 228 |
| 13----- | 278 | 560 | 382 | 783 | 469 | 469 | 783 | 852 | 440 | 323 | 308 | 219 |
| 14----- | 264 | 371 | 371 | 684 | 2,060 | 469 | 750 | 816 | 440 | 560 | 283 | 211 |
| 15----- | 250 | 750 | 355 | 591 | 1,120 | 469 | 717 | 783 | 440 | 440 | 278 | 207 |
| 16----- | 241 | 2,060 | 344 | 560 | 783 | 469 | 717 | 750 | 411 | 411 | 278 | 207 |
| 17----- | 232 | 1,400 | 382 | 529 | 852 | 440 | 684 | 717 | 411 | 344 | 283 | 203 |
| 18----- | 232 | 1,040 | 371 | 560 | 816 | 440 | 684 | 717 | 382 | 440 | 303 | 194 |
| 19----- | 224 | 684 | 371 | 591 | 783 | 440 | 783 | 684 | 382 | 377 | 411 | 190 |
| 20----- | 219 | 529 | 382 | 529 | 684 | 440 | 783 | 684 | 382 | 355 | 360 | 255 |
| 21----- | 219 | 469 | 371 | 498 | 622 | 440 | 717 | 816 | 382 | 498 | 411 | 232 |
| 22----- | 215 | 440 | 360 | 469 | 591 | 653 | 2,660 | 684 | 382 | 684 | 318 | 203 |
| 23----- | 215 | 411 | 350 | 440 | 560 | 560 | 1,400 | 622 | 371 | 411 | 293 | 203 |
| 24----- | 250 | 371 | 339 | 440 | 560 | 591 | 1,040 | 591 | 333 | 350 | 264 | 203 |
| 25----- | 260 | 360 | 328 | 440 | 783 | 816 | 960 | 591 | 498 | 318 | 260 | 190 |
| 26----- | 228 | 344 | 653 | 411 | 653 | 960 | 924 | 591 | 529 | 318 | 241 | 182 |
| 27----- | 224 | 323 | 816 | 411 | 622 | 1,120 | 852 | 591 | 382 | 750 | 288 | 186 |
| 28----- | 232 | 313 | 622 | 411 | 591 | 1,500 | 783 | 560 | 355 | 411 | 273 | 175 |
| 29----- | 350 | 308 | 529 | 382 | ----- | 1,120 | 750 | 529 | 344 | 360 | 591 | 175 |
| 30----- | 313 | 318 | 469 | 382 | ----- | 960 | 717 | 529 | 411 | 323 | 411 | 167 |
| 31----- | 250 | ----- | 440 | 382 | ----- | 1,120 | ----- | 529 | ----- | 308 | 288 | ----- |

| Day | Oct. | Nov. | Dec. | Day | Oct. | Nov. | Dec. | Day | Oct. | Nov. | Dec. |
|---------|------|------|-------|---------|------|------|-------|---------|------|-------|-------|
| 1931 | | | | 1931 | | | | 1931 | | | |
| 1----- | 167 | 190 | 591 | 11----- | 163 | 182 | ----- | 21----- | 152 | 260 | ----- |
| 2----- | 163 | 190 | 318 | 12----- | 160 | 186 | ----- | 22----- | 152 | 260 | ----- |
| 3----- | 163 | 190 | 411 | 13----- | 156 | 182 | ----- | 23----- | 152 | 232 | ----- |
| 4----- | 160 | 186 | 2,180 | 14----- | 152 | 179 | ----- | 24----- | 152 | 207 | ----- |
| 5----- | 160 | 190 | 783 | 15----- | 152 | 171 | ----- | 25----- | 156 | 198 | ----- |
| 6----- | 160 | 186 | 498 | 16----- | 152 | 167 | ----- | 26----- | 152 | 194 | ----- |
| 7----- | 156 | 179 | 382 | 17----- | 145 | 175 | ----- | 27----- | 152 | 190 | ----- |
| 8----- | 160 | 179 | 350 | 18----- | 145 | 207 | ----- | 28----- | 194 | 190 | ----- |
| 9----- | 171 | 182 | 924 | 19----- | 145 | 411 | ----- | 29----- | 591 | 198 | ----- |
| 10----- | 171 | 182 | 852 | 20----- | 152 | 371 | ----- | 30----- | 278 | 350 | ----- |
| | | | | | | | | 31----- | 215 | ----- | ----- |

Monthly discharge, in second-feet, of Coosawattee River near Carters, Ga., 1930-31

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|--------------------|---------|---------|-------|-----------------|-------------------|
| 1930-31 | | | | | |
| October..... | 717 | 215 | 275 | 0.731 | 0.84 |
| November..... | 2,060 | 224 | 468 | 1.24 | 1.38 |
| December..... | 816 | 308 | 436 | 1.16 | 1.34 |
| January..... | 924 | 371 | 539 | 1.43 | 1.65 |
| February..... | 2,060 | 339 | 616 | 1.64 | 1.71 |
| March..... | 1,500 | 440 | 644 | 1.71 | 1.97 |
| April..... | 2,900 | 684 | 1,100 | 2.93 | 3.27 |
| May..... | 2,900 | 529 | 833 | 2.22 | 2.56 |
| June..... | 591 | 333 | 435 | 1.16 | 1.29 |
| July..... | 750 | 293 | 407 | 1.08 | 1.24 |
| August..... | 591 | 241 | 337 | .896 | 1.03 |
| September..... | 888 | 167 | 259 | .689 | .77 |
| The year..... | 2,900 | 167 | 528 | 1.40 | 19.05 |
| 1931 | | | | | |
| October..... | 591 | 145 | 177 | .471 | .54 |
| November..... | 411 | 167 | 212 | .564 | .63 |
| December 1-10..... | 2,180 | 318 | 729 | 1.94 | .72 |

OOSTANAULA RIVER AT RESACA, GA.

LOCATION.—Chain gage at highway bridge 200 feet below Nashville, Chattanooga & St. Louis Railway in Resaca, Gordon County, and $3\frac{1}{2}$ miles below confluence of Conasauga and Coosawattee Rivers. Zero of gage is 617.30 feet above mean sea level.

DRAINAGE AREA.—1,610 square miles.

RECORDS AVAILABLE.—April, 1892, to December, 1931 (discontinued).

EXTREMES.—Maximum discharge during period, 19,800 second-feet Dec. 16, 1931 (gage height, 23.30 feet); minimum, 295 second-feet Oct. 19, 1931 (gage height, 1.12 feet).

1892-1931: Maximum discharge, 42,000 second-feet Feb. 11, 1921 (gage height, 33.0 feet); minimum, 180 second-feet Sept. 7, 8, 1925 (gage height, 0.5 foot).

Maximum stage known, 36.6 feet Apr. 1, 1886.

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, of Oostanaula River at Resaca, Ga., 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|--------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 1930-31 | | | | | | | | | | | | |
| 1..... | 630 | 630 | 1,020 | 1,380 | 1,120 | 2,120 | 5,680 | 2,120 | 1,330 | 1,170 | 710 | 710 |
| 2..... | 595 | 560 | 1,020 | 1,280 | 1,070 | 2,060 | 6,600 | 2,610 | 1,280 | 925 | 1,070 | 630 |
| 3..... | 560 | 560 | 970 | 1,220 | 1,070 | 1,920 | 5,680 | 3,270 | 1,120 | 710 | 670 | 1,380 |
| 4..... | 525 | 560 | 880 | 1,170 | 1,020 | 1,800 | 8,160 | 2,470 | 1,070 | 750 | 880 | 2,540 |
| 5..... | 490 | 560 | 1,020 | 2,970 | 1,020 | 1,680 | 12,700 | 2,120 | 1,020 | 925 | 790 | 1,170 |
| 6..... | 490 | 560 | 2,970 | 5,040 | 970 | 1,560 | 12,800 | 2,400 | 970 | 1,740 | 790 | 835 |
| 7..... | 490 | 560 | 4,100 | 4,640 | 970 | 1,560 | 11,100 | 5,760 | 970 | 1,070 | 1,020 | 710 |
| 8..... | 1,450 | 525 | 3,120 | 3,940 | 970 | 1,920 | 7,200 | 6,600 | 925 | 835 | 925 | 690 |
| 9..... | 3,040 | 525 | 1,920 | 4,100 | 1,170 | 1,800 | 4,100 | 4,480 | 925 | 710 | 750 | 595 |
| 10..... | 1,280 | 525 | 1,500 | 3,640 | 1,860 | 1,620 | 3,420 | 3,570 | 880 | 925 | 750 | 595 |
| 11..... | 880 | 560 | 1,440 | 2,820 | 1,680 | 1,500 | 3,340 | 3,040 | 880 | 750 | 2,820 | 560 |
| 12..... | 790 | 750 | 1,500 | 3,270 | 1,330 | 1,380 | 3,500 | 2,540 | 835 | 630 | 1,440 | 525 |
| 13..... | 710 | 1,440 | 1,380 | 4,400 | 1,280 | 1,330 | 2,900 | 2,330 | 880 | 630 | 970 | 490 |
| 14..... | 630 | 1,330 | 1,280 | 3,640 | 5,200 | 1,330 | 2,540 | 2,120 | 880 | 710 | 880 | 460 |
| 15..... | 595 | 2,470 | 1,170 | 2,750 | 6,770 | 1,330 | 2,330 | 1,990 | 880 | 1,070 | 750 | 460 |
| 16..... | 560 | 7,890 | 1,120 | 2,260 | 5,040 | 1,280 | 2,190 | 1,800 | 880 | 1,020 | 670 | 460 |
| 17..... | 560 | 11,500 | 1,120 | 1,990 | 3,720 | 1,220 | 2,060 | 1,740 | 835 | 790 | 630 | 430 |
| 18..... | 525 | 9,510 | 1,220 | 2,060 | 3,800 | 1,170 | 1,990 | 1,680 | 790 | 750 | 630 | 430 |
| 19..... | 525 | 4,960 | 1,280 | 2,260 | 3,340 | 1,170 | 1,860 | 1,560 | 790 | 790 | 925 | 430 |
| 20..... | 490 | 2,120 | 1,500 | 2,060 | 2,750 | 1,170 | 2,190 | 1,500 | 750 | 710 | 925 | 400 |
| 21..... | 490 | 1,680 | 1,500 | 1,860 | 2,330 | 1,170 | 2,470 | 1,800 | 750 | 710 | 880 | 490 |
| 22..... | 490 | 1,440 | 1,330 | 1,680 | 2,060 | 1,740 | 9,690 | 1,860 | 750 | 1,330 | 880 | 430 |
| 23..... | 490 | 1,330 | 1,220 | 1,620 | 1,860 | 2,100 | 11,600 | 1,560 | 750 | 1,220 | 710 | 400 |
| 24..... | 525 | 1,220 | 1,170 | 1,500 | 1,800 | 1,990 | 9,780 | 1,380 | 750 | 925 | 670 | 490 |
| 25..... | 560 | 1,120 | 1,070 | 1,440 | 2,470 | 2,120 | 6,860 | 1,330 | 750 | 750 | 595 | 460 |
| 26..... | 525 | 1,020 | 1,440 | 1,330 | 3,270 | 2,750 | 3,570 | 1,330 | 1,170 | 670 | 560 | 400 |
| 27..... | 525 | 970 | 3,120 | 1,330 | 2,680 | 3,200 | 3,120 | 1,280 | 970 | 1,920 | 560 | 385 |
| 28..... | 525 | 880 | 3,500 | 1,280 | 2,190 | 7,280 | 2,680 | 1,220 | 750 | 1,860 | 835 | 358 |
| 29..... | 595 | 835 | 2,400 | 1,220 | ----- | 9,060 | 2,400 | 1,170 | 710 | 970 | 1,170 | 358 |
| 30..... | 750 | 835 | 1,860 | 1,170 | ----- | 8,340 | 2,190 | 1,170 | 670 | 790 | 1,800 | 345 |
| 31..... | 670 | ----- | 1,560 | 1,170 | ----- | 7,110 | ----- | 1,120 | ----- | 710 | 925 | ----- |

| Day | Oct. | Nov. | Dec. | Day | Oct. | Nov. | Dec. | Day | Oct. | Nov. | Dec. |
|---------|------|------|-------|---------|------|-------|--------|---------|-------|-------|-------|
| 1931 | | | | 1931 | | | | 1931 | | | |
| 1..... | 345 | 525 | 1,500 | 11..... | 345 | 385 | 2,820 | 21..... | 308 | 630 | 4,640 |
| 2..... | 332 | 430 | 2,260 | 12..... | 332 | 400 | 1,800 | 22..... | 320 | 525 | 8,520 |
| 3..... | 345 | 400 | 1,220 | 13..... | 332 | 400 | 1,860 | 23..... | 320 | 490 | 8,430 |
| 4..... | 345 | 400 | 4,480 | 14..... | 320 | 400 | 13,600 | 24..... | 332 | 490 | 5,920 |
| 5..... | 332 | 400 | 6,770 | 15..... | 332 | 400 | 17,300 | 25..... | 332 | 430 | 4,020 |
| 6..... | 345 | 400 | 3,420 | 16..... | 320 | 385 | 19,500 | 26..... | 332 | 460 | 3,200 |
| 7..... | 332 | 385 | 1,500 | 17..... | 308 | 400 | 18,200 | 27..... | 332 | 430 | 2,610 |
| 8..... | 332 | 385 | 1,170 | 18..... | 308 | 430 | 16,400 | 28..... | 345 | 430 | 2,400 |
| 9..... | 332 | 385 | 2,060 | 19..... | 308 | 728 | 11,100 | 29..... | 1,280 | 430 | 2,190 |
| 10..... | 345 | 385 | ----- | 20..... | 308 | 1,170 | 5,120 | 30..... | 1,070 | 460 | 1,990 |
| | | | | | | | | 31..... | 710 | ----- | 2,260 |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| 1930-31 | | | | | |
| October..... | 3,040 | 490 | 708 | 0.440 | 0.51 |
| November..... | 11,500 | 525 | 1,980 | 1.23 | 1.37 |
| December..... | 4,100 | 880 | 1,670 | 1.04 | 1.20 |
| January..... | 5,040 | 1,170 | 2,340 | 1.45 | 1.67 |
| February..... | 6,770 | 970 | 2,310 | 1.43 | 1.49 |
| March..... | 9,060 | 1,170 | 2,510 | 1.56 | 1.80 |
| April..... | 12,800 | 1,860 | 5,220 | 3.24 | 3.62 |
| May..... | 6,600 | 1,120 | 2,290 | 1.42 | 1.64 |
| June..... | 1,330 | 670 | 897 | .557 | .62 |
| July..... | 1,920 | 630 | 950 | .590 | .68 |
| August..... | 2,820 | 560 | 922 | .573 | .66 |
| September..... | 2,540 | 345 | 619 | .384 | .43 |
| The year..... | 12,800 | 345 | 1,860 | 1.16 | 15.69 |
| 1931 | | | | | |
| October..... | 1,280 | 308 | 396 | .246 | .28 |
| November..... | 1,170 | 335 | 406 | .289 | .32 |
| December..... | 19,500 | 1,170 | 5,880 | 3.65 | 4.21 |

COOSA RIVER NEAR ROME, GA.

LOCATION.—Water-stage recorder $7\frac{1}{2}$ miles below confluence of Oostanaula and Etowah Rivers and 8 miles below Rome, Floyd County.

DRAINAGE AREA.—4,040 square miles.

RECORDS AVAILABLE.—June, 1928, to December, 1931 (discontinued). At Rome from January, 1897, to December, 1903.

EXTREMES.—Maximum discharge during period, 30,000 second-feet Nov. 17, 1930 (gage height, 24.88 feet); minimum, 870 second-feet Oct. 18–22, 1931 (gage height, -0.55 foot).

1897–1903; 1928–1931: Maximum discharge (estimated), 64,000 second-feet Dec. 31, 1901 (gage height, 32.6 feet, old datum); minimum, that of Oct. 18–22, 1931.

REMARKS.—Records good except those estimated for Dec. 5–11, 18, 21, 1931, which are fair. Flow regulated by storage above Mayos Bar Dam.

Daily discharge, in second-feet, 1930–31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|--------|-------|-------|--------|--------|--------|-------|-------|-------|-------|-------|
| 1930-31 | | | | | | | | | | | | |
| 1..... | 1,730 | 1,810 | 2,770 | 3,490 | 2,950 | 5,160 | 13,400 | 4,360 | 2,500 | 2,330 | 1,890 | 1,890 |
| 2..... | 1,650 | 1,650 | 2,860 | 3,220 | 2,860 | 4,960 | 14,100 | 4,560 | 2,590 | 2,680 | 2,170 | 1,530 |
| 3..... | 1,530 | 1,570 | 2,770 | 3,040 | 2,770 | 4,760 | 12,700 | 5,260 | 2,500 | 2,170 | 2,250 | 2,680 |
| 4..... | 1,460 | 1,570 | 2,500 | 2,950 | 2,680 | 4,460 | 16,400 | 5,360 | 2,330 | 2,090 | 1,890 | 4,460 |
| 5..... | 1,460 | 1,530 | 2,680 | 5,460 | 2,590 | 4,160 | 22,900 | 4,560 | 2,250 | 2,090 | 1,770 | 3,960 |
| 6..... | 1,390 | 1,570 | 5,360 | 8,840 | 2,590 | 3,860 | 23,600 | 4,360 | 2,170 | 2,680 | 1,890 | 2,330 |
| 7..... | 1,390 | 1,530 | 8,070 | 9,180 | 2,590 | 3,860 | 20,800 | 5,870 | 2,090 | 3,760 | 1,770 | 1,770 |
| 8..... | 4,060 | 1,500 | 7,630 | 8,510 | 2,500 | 4,360 | 16,900 | 9,900 | 2,090 | 2,590 | 2,060 | 1,570 |
| 9..... | 8,950 | 1,420 | 5,560 | 8,070 | 2,680 | 4,560 | 11,200 | 2,680 | 2,010 | 2,330 | 1,930 | 1,420 |
| 10..... | 4,960 | 1,460 | 4,160 | 7,520 | 3,040 | 4,160 | 7,850 | 7,190 | 2,010 | 2,170 | 1,930 | 1,320 |
| 11..... | 3,130 | 1,500 | 3,670 | 6,310 | 3,580 | 3,760 | 6,860 | 6,420 | 1,970 | 2,090 | 2,680 | 1,320 |
| 12..... | 2,410 | 1,890 | 3,490 | 7,080 | 3,220 | 3,490 | 6,750 | 5,360 | 1,970 | 1,850 | 3,670 | 1,250 |
| 13..... | 2,170 | 2,950 | 3,400 | 8,840 | 3,130 | 3,400 | 6,420 | 4,760 | 1,970 | 1,650 | 2,410 | 1,220 |
| 14..... | 1,930 | 3,960 | 3,220 | 8,510 | 5,870 | 3,310 | 5,560 | 4,360 | 2,010 | 1,570 | 1,890 | 1,180 |
| 15..... | 1,770 | 7,080 | 3,040 | 6,860 | 10,300 | 3,220 | 5,160 | 4,060 | 2,010 | 1,810 | 1,730 | 1,140 |
| 16..... | 1,690 | 19,400 | 2,860 | 5,560 | 10,300 | 3,220 | 4,860 | 3,860 | 2,010 | 2,330 | 1,530 | 1,140 |
| 17..... | 1,650 | 28,500 | 2,860 | 4,860 | 8,290 | 3,130 | 4,660 | 3,670 | 2,010 | 2,170 | 1,460 | 1,110 |
| 18..... | 1,610 | 22,000 | 2,950 | 4,960 | 7,410 | 3,040 | 4,460 | 3,490 | 1,890 | 1,890 | 1,360 | 1,110 |
| 19..... | 1,530 | 13,500 | 3,130 | 5,560 | 7,190 | 2,950 | 4,460 | 3,400 | 1,850 | 1,730 | 2,560 | 1,110 |
| 20..... | 1,500 | 8,510 | 3,220 | 5,460 | 6,090 | 2,860 | 4,260 | 3,220 | 1,810 | 1,650 | 3,760 | 1,250 |
| 21..... | 1,460 | 5,160 | 3,310 | 4,960 | 5,160 | 2,860 | 4,760 | 3,220 | 1,890 | 1,810 | 2,860 | 1,390 |
| 22..... | 1,420 | 4,260 | 3,220 | 4,460 | 4,560 | 3,490 | 10,400 | 3,400 | 1,890 | 2,330 | 2,410 | 1,140 |
| 23..... | 1,420 | 3,760 | 3,040 | 4,060 | 4,160 | 4,060 | 6,600 | 3,310 | 1,830 | 2,950 | 2,010 | 1,080 |
| 24..... | 1,420 | 3,490 | 2,950 | 3,860 | 4,160 | 4,360 | 16,100 | 3,040 | 1,850 | 2,860 | 1,650 | 1,040 |
| 25..... | 1,460 | 3,220 | 2,770 | 3,670 | 6,200 | 3,960 | 13,400 | 2,860 | 1,810 | 2,330 | 1,530 | 1,080 |
| 26..... | 1,530 | 2,950 | 3,310 | 3,490 | 7,850 | 3,960 | 9,060 | 2,860 | 2,500 | 1,890 | 1,420 | 1,180 |
| 27..... | 1,500 | 2,770 | 4,360 | 3,400 | 7,190 | 5,260 | 6,200 | 2,770 | 3,960 | 2,090 | 1,360 | 1,220 |
| 28..... | 1,500 | 2,590 | 6,420 | 3,310 | 5,760 | 10,900 | 5,460 | 2,680 | 2,590 | 3,580 | 1,360 | 1,180 |
| 29..... | 1,570 | 2,500 | 5,760 | 3,220 | 15,800 | 4,960 | 2,590 | 2,590 | 1,970 | 3,040 | 1,570 | 1,040 |
| 30..... | 1,730 | 2,500 | 4,560 | 3,040 | 15,100 | 4,560 | 2,590 | 1,850 | 2,330 | 2,010 | 1,000 | 1,000 |
| 31..... | 1,930 | ----- | 3,860 | 3,040 | 13,100 | ----- | 2,500 | ----- | 2,010 | 2,500 | ----- | ----- |

| Day | Oct. | Nov. | Dec. | Day | Oct. | Nov. | Dec. | Day | Oct. | Nov. | Dec. |
|---------|------|-------|--------|---------|------|-------|--------|---------|-------|-------|--------|
| 1931 | | | | | | | | | | | |
| 1..... | 970 | 1,500 | 1,460 | 11..... | 970 | 1,040 | 9,000 | 21..... | 870 | 3,490 | 11,800 |
| 2..... | 970 | 1,250 | 2,680 | 12..... | 940 | 1,040 | 5,560 | 22..... | 870 | 2,010 | 21,000 |
| 3..... | 940 | 1,140 | 3,040 | 13..... | 940 | 1,080 | 4,160 | 23..... | 900 | 1,570 | 22,600 |
| 4..... | 940 | 1,080 | 9,180 | 14..... | 940 | 1,040 | 14,600 | 24..... | 900 | 1,460 | 16,900 |
| 5..... | 940 | 1,040 | 19,000 | 15..... | 940 | 1,040 | 27,600 | 25..... | 940 | 1,390 | 11,200 |
| 6..... | 940 | 1,040 | 13,500 | 16..... | 940 | 1,040 | 28,300 | 26..... | 900 | 1,280 | 8,400 |
| 7..... | 940 | 1,040 | 6,300 | 17..... | 900 | 1,040 | 27,200 | 27..... | 900 | 1,220 | 6,530 |
| 8..... | 940 | 1,040 | 3,400 | 18..... | 870 | 1,110 | 28,000 | 28..... | 1,250 | 1,180 | 5,660 |
| 9..... | 970 | 1,000 | 3,800 | 19..... | 870 | 1,420 | 24,500 | 29..... | 1,970 | 1,140 | 5,160 |
| 10..... | 940 | 1,000 | 7,000 | 20..... | 870 | 2,330 | 17,500 | 30..... | 2,410 | 1,220 | 4,760 |
| | | | | | | | | 31..... | 2,010 | ----- | 6,860 |

Monthly discharge, in second-feet, of Coosa River near Rome, Ga., 1930-31

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|--------|-----------------|-------------------|
| 1930-31 | | | | | |
| October..... | 8,950 | 1,390 | 2,090 | 0.517 | 0.60 |
| November..... | 28,500 | 1,420 | 5,270 | 1.30 | 1.45 |
| December..... | 8,070 | 2,500 | 3,860 | .955 | 1.10 |
| January..... | 9,180 | 2,950 | 5,320 | 1.32 | 1.52 |
| February..... | 10,300 | 2,500 | 4,920 | 1.22 | 1.27 |
| March..... | 15,800 | 2,860 | 5,150 | 1.27 | 1.46 |
| April..... | 23,600 | 4,260 | 10,200 | 2.52 | 2.81 |
| May..... | 9,900 | 2,500 | 4,360 | 1.08 | 1.24 |
| June..... | 3,960 | 1,810 | 2,140 | .530 | .59 |
| July..... | 3,760 | 1,570 | 2,290 | .567 | .65 |
| August..... | 3,760 | 1,360 | 2,040 | .505 | .58 |
| September..... | 4,460 | 1,000 | 1,540 | .381 | .43 |
| The year..... | 28,500 | 1,000 | 4,080 | 1.01 | 13.70 |
| 1931 | | | | | |
| October..... | 2,410 | 870 | 1,050 | .260 | .30 |
| November..... | 3,490 | 1,000 | 1,310 | .324 | .36 |
| December..... | 28,300 | 1,460 | 12,200 | 3.02 | 3.48 |

COOSA RIVER AT GADSDEN, ALA.

LOCATION.—Water-stage recorder at highway bridge in Gadsden, Etowah County, 700 feet below Louisville & Nashville Railroad. Zero of gage is 485.16 feet above mean sea level.

DRAINAGE AREA.—5,800 square miles.

RECORDS AVAILABLE.—October, 1926, to September, 1931.

EXTREMES.—Maximum discharge during year, 39,500 second-feet Nov. 18 (gage height, 20.28 feet); minimum, 1,360 second-feet Sept. 27 (gage height, 0.41 foot).

1926-1931: Maximum discharge, 58,100 second-feet Nov. 17, 1929 (gage height, 25.76 feet); minimum, that of Sept. 27, 1931.

REMARKS.—Records good. No appreciable regulation.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 1----- | 3,030 | 2,330 | 4,180 | 5,930 | 4,440 | 10,900 | 20,100 | 6,200 | 3,270 | 2,500 | 2,850 | 2,670 |
| 2----- | 2,730 | 2,500 | 4,570 | 5,230 | 4,310 | 9,820 | 19,700 | 6,050 | 3,150 | 2,550 | 2,610 | 2,730 |
| 3----- | 2,500 | 2,330 | 4,440 | 4,830 | 4,180 | 8,860 | 19,100 | 6,200 | 3,150 | 3,030 | 2,730 | 2,380 |
| 4----- | 2,330 | 2,160 | 4,310 | 4,570 | 4,050 | 8,060 | 23,800 | 6,660 | 3,270 | 3,150 | 2,790 | 3,530 |
| 5----- | 2,220 | 2,110 | 4,440 | 7,420 | 4,050 | 7,420 | 29,700 | 6,980 | 3,150 | 3,270 | 2,670 | 4,740 |
| 6----- | 2,220 | 2,110 | 6,800 | 11,900 | 3,920 | 6,650 | 32,700 | 6,350 | 2,970 | 3,400 | 2,550 | 4,740 |
| 7----- | 2,220 | 2,060 | 10,500 | 14,000 | 3,790 | 6,500 | 32,000 | 6,350 | 2,850 | 3,030 | 2,670 | 3,530 |
| 8----- | 2,730 | 2,060 | 11,600 | 14,300 | 3,790 | 7,100 | 29,500 | 7,780 | 2,790 | 3,920 | 2,670 | 2,610 |
| 9----- | 8,860 | 2,000 | 10,900 | 14,300 | 3,790 | 7,100 | 24,900 | 11,100 | 2,670 | 3,790 | 2,670 | 2,160 |
| 10----- | 12,600 | 2,000 | 8,860 | 13,100 | 4,050 | 6,800 | 18,200 | 11,400 | 2,670 | 3,030 | 2,790 | 1,950 |
| 11----- | 8,380 | 2,060 | 6,950 | 11,600 | 4,310 | 6,350 | 13,400 | 9,580 | 2,670 | 2,910 | 2,500 | 1,800 |
| 12----- | 5,370 | 2,220 | 6,070 | 11,700 | 4,570 | 5,790 | 11,400 | 8,420 | 2,550 | 2,730 | 2,670 | 1,700 |
| 13----- | 3,920 | 2,730 | 5,510 | 13,600 | 4,830 | 5,370 | 10,100 | 7,140 | 2,610 | 2,550 | 3,790 | 1,700 |
| 14----- | 3,400 | 4,050 | 5,370 | 14,000 | 6,070 | 5,090 | 9,580 | 6,200 | 2,970 | 2,330 | 3,660 | 1,700 |
| 15----- | 3,030 | 7,260 | 4,960 | 12,800 | 9,500 | 4,830 | 8,420 | 5,750 | 3,030 | 2,280 | 2,790 | 1,610 |
| 16----- | 2,730 | 19,700 | 4,700 | 10,800 | 12,100 | 4,700 | 7,620 | 5,160 | 2,850 | 2,330 | 2,380 | 1,520 |
| 17----- | 2,550 | 33,100 | 4,440 | 9,020 | 13,600 | 4,570 | 7,140 | 4,880 | 2,790 | 2,550 | 2,220 | 1,520 |
| 18----- | 2,440 | 38,900 | 4,310 | 8,700 | 13,100 | 4,570 | 6,660 | 4,600 | 2,730 | 2,850 | 2,060 | 1,480 |
| 19----- | 2,330 | 38,900 | 4,440 | 9,340 | 11,400 | 4,310 | 6,660 | 4,460 | 2,550 | 2,790 | 2,000 | 1,480 |
| 20----- | 2,220 | 35,600 | 4,570 | 9,500 | 10,300 | 4,310 | 6,820 | 4,320 | 2,440 | 2,550 | 2,160 | 1,520 |
| 21----- | 2,110 | 23,700 | 4,700 | 9,020 | 9,180 | 4,180 | 6,660 | 4,180 | 2,380 | 2,670 | 3,530 | 1,520 |
| 22----- | 2,110 | 11,400 | 4,700 | 8,060 | 8,060 | 4,440 | 7,300 | 4,050 | 2,440 | 3,030 | 3,920 | 1,610 |
| 23----- | 2,110 | 7,580 | 4,700 | 7,260 | 7,100 | 4,960 | 13,400 | 4,050 | 2,380 | 3,150 | 3,030 | 1,750 |
| 24----- | 2,060 | 6,500 | 4,570 | 6,500 | 6,800 | 5,510 | 17,400 | 4,320 | 2,440 | 3,270 | 2,670 | 1,560 |
| 25----- | 2,000 | 5,760 | 4,310 | 6,070 | 11,100 | 6,070 | 18,200 | 4,050 | 2,380 | 3,530 | 2,330 | 1,480 |
| 26----- | 2,060 | 5,230 | 4,700 | 5,650 | 15,800 | 5,930 | 16,100 | 3,790 | 2,440 | 3,270 | 2,060 | 1,400 |
| 27----- | 2,000 | 4,830 | 5,790 | 5,370 | 15,600 | 5,790 | 12,300 | 3,660 | 2,730 | 2,790 | 1,950 | 1,400 |
| 28----- | 2,110 | 4,440 | 6,800 | 5,230 | 12,900 | 9,920 | 9,070 | 3,530 | 3,790 | 3,270 | 1,800 | 1,440 |
| 29----- | 2,110 | 4,180 | 8,060 | 4,960 | ----- | 17,800 | 7,460 | 3,400 | 3,790 | 3,660 | 1,800 | 1,520 |
| 30----- | 2,160 | 3,920 | 8,220 | 4,960 | ----- | 21,700 | 6,660 | 3,400 | 2,910 | 4,050 | 1,800 | 1,560 |
| 31----- | 2,220 | ----- | 6,950 | 4,570 | ----- | 21,100 | ----- | 3,270 | ----- | 3,270 | 2,000 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|--------|-----------------|-------------------|
| October | 12,600 | 2,000 | 3,250 | 0.530 | 0.65 |
| November | 38,900 | 2,000 | 9,460 | 1.63 | 1.82 |
| December | 11,600 | 4,180 | 5,980 | 1.07 | 1.19 |
| January | 14,300 | 4,570 | 8,850 | 1.53 | 1.76 |
| February | 15,800 | 3,790 | 7,740 | 1.33 | 1.38 |
| March | 21,700 | 4,180 | 7,630 | 1.32 | 1.52 |
| April | 32,700 | 6,660 | 15,100 | 2.60 | 2.90 |
| May | 11,400 | 3,270 | 5,720 | 0.97 | 1.14 |
| June | 3,790 | 2,380 | 2,830 | 0.48 | 0.54 |
| July | 4,050 | 2,280 | 3,020 | 0.52 | 0.60 |
| August | 3,920 | 1,800 | 2,580 | 0.44 | 0.51 |
| September | 4,740 | 1,400 | 2,080 | 0.35 | 0.40 |
| The year | 38,900 | 1,400 | 6,160 | 1.07 | 14.41 |

COOSA RIVER AT CHILDERSBURG, ALA.

LOCATION.—Water-stage recorder in T. 20 S., R. 3 E., at Central of Georgia Railway bridge 1 mile northwest of Childersburg. Zero of gage is 421.00 feet above mean sea level.

DRAINAGE AREA.—8,390 square miles.

RECORDS AVAILABLE.—February, 1914, to September, 1931.

EXTREMES.—Maximum discharge during year, 51,100 second-feet Nov. 19 (gage height, 13.94 feet); minimum, 1,770 second-feet Sept. 29, 30 (gage height, 1.1 feet).

1914-1931: Maximum discharge, 121,000 second-feet July 11, 1916; maximum gage height, 24.84 feet Mar. 16, 1929; minimum discharge, 1,300 second-feet for 10 days in September, 1925.

REMARKS.—Records good. Records collected by the Alabama Power Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 1----- | 5,010 | 2,660 | 5,650 | 8,350 | 6,480 | 17,300 | 26,600 | 8,350 | 4,170 | 4,050 | 4,530 | 2,360 |
| 2----- | 4,170 | 2,770 | 5,780 | 7,750 | 6,200 | 14,600 | 25,400 | 7,750 | 4,050 | 3,450 | 4,530 | 2,360 |
| 3----- | 3,690 | 2,770 | 6,060 | 6,900 | 6,060 | 13,000 | 24,600 | 7,600 | 4,050 | 3,220 | 3,930 | 2,890 |
| 4----- | 3,330 | 2,890 | 5,920 | 6,480 | 5,780 | 11,600 | 28,300 | 7,600 | 3,930 | 3,220 | 3,450 | 3,220 |
| 5----- | 3,110 | 2,890 | 5,920 | 9,260 | 5,650 | 10,800 | 44,700 | 8,050 | 3,930 | 3,810 | 3,330 | 3,220 |
| 6----- | 3,000 | 2,660 | 7,320 | 15,000 | 5,520 | 9,740 | 46,200 | 9,100 | 3,930 | 3,930 | 3,330 | 4,770 |
| 7----- | 2,890 | 2,660 | 11,100 | 18,100 | 5,390 | 9,580 | 44,700 | 9,580 | 3,810 | 4,050 | 3,450 | 5,390 |
| 8----- | 2,770 | 2,560 | 14,100 | 19,700 | 5,260 | 11,400 | 40,800 | 9,260 | 3,570 | 3,810 | 3,450 | 4,770 |
| 9----- | 3,000 | 2,560 | 14,600 | 20,400 | 5,260 | 11,100 | 36,400 | 10,100 | 3,450 | 3,810 | 3,810 | 3,810 |
| 10----- | 9,580 | 2,560 | 13,900 | 19,700 | 5,390 | 10,100 | 30,500 | 13,000 | 3,330 | 4,530 | 3,930 | 3,110 |
| 11----- | 14,100 | 2,660 | 11,400 | 17,700 | 5,390 | 9,420 | 22,800 | 13,500 | 3,330 | 4,050 | 4,170 | 2,770 |
| 12----- | 9,740 | 2,890 | 9,420 | 16,900 | 5,650 | 8,800 | 17,700 | 11,600 | 3,330 | 3,570 | 3,810 | 2,560 |
| 13----- | 6,760 | 3,220 | 8,200 | 18,900 | 6,060 | 8,050 | 15,000 | 10,100 | 3,220 | 3,450 | 3,330 | 2,360 |
| 14----- | 5,130 | 3,810 | 7,460 | 19,700 | 6,760 | 7,460 | 13,200 | 8,800 | 3,330 | 3,330 | 3,570 | 2,360 |
| 15----- | 4,410 | 6,620 | 7,040 | 18,900 | 9,420 | 7,180 | 12,100 | 7,900 | 3,570 | 3,330 | 4,410 | 2,260 |
| 16----- | 3,930 | 19,700 | 6,760 | 16,500 | 12,300 | 6,760 | 10,900 | 7,180 | 3,810 | 3,110 | 3,930 | 2,260 |
| 17----- | 3,570 | 44,200 | 6,480 | 14,300 | 15,800 | 6,480 | 9,900 | 6,760 | 3,690 | 3,110 | 3,330 | 2,160 |
| 18----- | 3,330 | 49,600 | 6,200 | 13,000 | 18,100 | 6,340 | 9,260 | 6,340 | 3,570 | 3,000 | 3,110 | 2,060 |
| 19----- | 3,110 | 50,600 | 5,920 | 13,400 | 16,500 | 6,200 | 8,650 | 6,060 | 3,450 | 3,570 | 3,110 | 2,060 |
| 20----- | 3,000 | 46,700 | 5,920 | 13,500 | 14,300 | 5,920 | 8,650 | 5,780 | 3,330 | 4,170 | 3,000 | 1,960 |
| 21----- | 2,890 | 41,300 | 5,920 | 13,000 | 13,000 | 5,920 | 8,800 | 5,650 | 3,450 | 3,690 | 3,220 | 1,960 |
| 22----- | 2,770 | 27,800 | 6,060 | 12,100 | 11,600 | 6,340 | 8,800 | 5,520 | 3,570 | 4,050 | 3,220 | 1,860 |
| 23----- | 2,660 | 14,600 | 6,060 | 11,100 | 10,100 | 6,620 | 10,100 | 5,260 | 3,220 | 4,290 | 4,410 | 1,860 |
| 24----- | 2,660 | 10,600 | 6,060 | 10,100 | 9,230 | 7,040 | 14,100 | 5,130 | 3,220 | 4,170 | 4,290 | 1,860 |
| 25----- | 2,560 | 8,800 | 5,780 | 9,230 | 11,900 | 7,460 | 20,000 | 5,260 | 3,110 | 4,050 | 3,570 | 1,960 |
| 26----- | 2,560 | 7,900 | 6,340 | 8,500 | 18,900 | 7,750 | 21,200 | 5,130 | 3,000 | 4,170 | 3,220 | 1,960 |
| 27----- | 2,560 | 7,180 | 7,900 | 8,050 | 22,000 | 7,750 | 18,900 | 4,770 | 3,000 | 4,290 | 3,000 | 1,860 |
| 28----- | 2,660 | 6,480 | 8,800 | 7,600 | 20,000 | 8,950 | 14,600 | 4,650 | 3,110 | 4,050 | 2,770 | 1,860 |
| 29----- | 2,770 | 6,060 | 9,260 | 7,320 | ----- | 15,800 | 11,100 | 4,410 | 3,570 | 3,690 | 2,660 | 1,770 |
| 30----- | 2,770 | 5,650 | 10,100 | 7,040 | ----- | 23,800 | 8,950 | 4,410 | 4,650 | 4,170 | 2,460 | 1,770 |
| 31----- | 2,660 | ----- | 10,200 | 6,760 | ----- | 26,600 | ----- | 4,290 | ----- | 4,650 | 2,360 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|--------|-----------------|-------------------|
| October----- | 14,100 | 2,560 | 4,100 | 0.489 | 0.56 |
| November----- | 50,600 | 2,560 | 13,100 | 1.56 | 1.74 |
| December----- | 14,600 | 5,650 | 7,990 | .952 | 1.10 |
| January----- | 20,400 | 6,480 | 12,800 | 1.53 | 1.76 |
| February----- | 22,000 | 5,260 | 10,100 | 1.20 | 1.25 |
| March----- | 26,600 | 5,920 | 10,200 | 1.22 | 1.41 |
| April----- | 46,200 | 8,650 | 20,400 | 2.43 | 2.71 |
| May----- | 13,500 | 4,290 | 7,380 | .880 | 1.01 |
| June----- | 4,650 | 3,000 | 3,560 | .424 | .47 |
| July----- | 4,650 | 3,000 | 3,800 | .453 | .52 |
| August----- | 4,530 | 2,360 | 3,510 | .418 | .48 |
| September----- | 5,390 | 1,770 | 2,580 | .308 | .34 |
| The year----- | 50,600 | 1,770 | 8,260 | .985 | 13.35 |

COOSA RIVER AT LOCK 18, NEAR WETUMPKA, ALA.

LOCATION.—Water-stage recorder in sec. 22, T. 19 N., R. 18 E., half a mile downstream from Lock 18 dam site and 7 miles above junction with Tallapoosa River at Wetumpka. Zero of gage is 179.65 feet above mean sea level.

DRAINAGE AREA.—10,200 square miles.

RECORDS AVAILABLE.—July, 1912, to September, 1914; December, 1925, to September, 1931.

EXTREMES.—Maximum discharge during year, 60,800 second-feet Apr. 6 (gage height, 18.7 feet); minimum, 70 second-feet at times (gage height, 1.95 feet). 1912-1914, 1925-1931: Maximum discharge, 207,000 second-feet Mar. 15, 1929 (gage height, 38.6 feet); minimum, 70 second-feet at times in 1930-31.

REMARKS.—Records good. Flow almost completely regulated during low and medium stages by hydroelectric plants at Lock 12 and Mitchell Dam. Records collected by the Alabama Power Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 1..... | 7,140 | 1,420 | 7,540 | 7,720 | 6,820 | 18,800 | 26,300 | 14,000 | 6,500 | 4,110 | 2,220 | 2,170 |
| 2..... | 6,030 | 144 | 6,030 | 9,230 | 11,000 | 24,500 | 27,100 | 11,300 | 3,690 | 3,206 | 3,640 | 1,900 |
| 3..... | 1,100 | 2,600 | 4,470 | 6,840 | 12,300 | 17,300 | 26,100 | 7,620 | 5,990 | 4,840 | 4,910 | 1,820 |
| 4..... | 229 | 3,290 | 4,600 | 5,970 | 10,600 | 15,400 | 27,200 | 10,700 | 3,570 | 6,410 | 2,960 | 1,810 |
| 5..... | 168 | 2,430 | 7,410 | 10,900 | 8,490 | 13,500 | 41,000 | 11,300 | 2,090 | 6,226 | 3,490 | 1,870 |
| 6..... | 4,280 | 2,010 | 7,820 | 13,000 | 8,770 | 12,400 | 54,000 | 13,400 | 93 | 6,406 | 3,210 | 684 |
| 7..... | 5,860 | 3,130 | 5,420 | 14,100 | 6,890 | 8,440 | 46,700 | 12,900 | 2,980 | 4,606 | 3,300 | 5,080 |
| 8..... | 5,920 | 2,050 | 11,400 | 20,100 | 5,960 | 7,780 | 47,300 | 11,800 | 7,010 | 4,330 | 3,290 | 3,420 |
| 9..... | 4,940 | 99 | 15,200 | 22,400 | 8,870 | 20,000 | 39,200 | 8,280 | 3,090 | 4,166 | 3,520 | 1,230 |
| 10..... | 2,230 | 1,540 | 14,400 | 16,600 | 8,780 | 14,600 | 35,800 | 6,410 | 2,420 | 4,496 | 5,770 | 1,320 |
| 11..... | 6,370 | 2,120 | 13,900 | 17,400 | 9,860 | 13,200 | 28,100 | 13,900 | 2,800 | 3,480 | 3,960 | 347 |
| 12..... | 9,820 | 2,580 | 9,810 | 22,900 | 9,780 | 13,900 | 21,800 | 14,100 | 2,750 | 4,630 | 4,820 | 747 |
| 13..... | 6,560 | 7,820 | 8,600 | 22,700 | 7,960 | 12,800 | 19,500 | 15,000 | 1,110 | 6,260 | 5,910 | 1,880 |
| 14..... | 6,680 | 8,210 | 5,970 | 21,700 | 4,700 | 9,150 | 18,200 | 12,900 | 2,720 | 2,480 | 4,470 | 6,100 |
| 15..... | 7,310 | 10,900 | 9,890 | 19,800 | 3,490 | 6,390 | 15,800 | 11,600 | 8,330 | 3,070 | 4,680 | 2,000 |
| 16..... | 6,270 | 6,740 | 11,100 | 20,700 | 11,200 | 12,400 | 15,400 | 7,890 | 3,890 | 3,780 | 6,370 | 3,360 |
| 17..... | 1,790 | 46,100 | 12,500 | 14,600 | 11,000 | 12,200 | 13,200 | 8,920 | 4,840 | 3,770 | 6,370 | 2,210 |
| 18..... | 87 | 55,000 | 12,100 | 14,000 | 12,800 | 9,500 | 7,990 | 11,000 | 4,070 | 3,726 | 4,290 | 2,190 |
| 19..... | 270 | 54,700 | 11,900 | 19,200 | 12,700 | 9,140 | 6,780 | 8,970 | 4,040 | 2,980 | 4,140 | 2,190 |
| 20..... | 6,900 | 51,400 | 9,900 | 19,200 | 11,500 | 7,900 | 14,000 | 10,100 | 1,000 | 6,370 | 5,280 | 4,110 |
| 21..... | 7,340 | 45,700 | 6,100 | 17,500 | 13,700 | 7,140 | 13,700 | 11,200 | 3,210 | 5,866 | 6,370 | 5,360 |
| 22..... | 6,270 | 36,500 | 7,190 | 15,400 | 10,000 | 7,120 | 12,500 | 6,770 | 7,750 | 4,620 | 7,780 | 1,820 |
| 23..... | 3,870 | 18,600 | 6,000 | 13,900 | 15,400 | 8,160 | 11,700 | 6,060 | 4,560 | 5,760 | 6,370 | 412 |
| 24..... | 3,100 | 16,800 | 6,520 | 8,340 | 14,200 | 9,560 | 11,100 | 5,730 | 3,190 | 3,810 | 6,370 | 670 |
| 25..... | 1,890 | 12,900 | 5,840 | 8,030 | 14,000 | 11,200 | 10,200 | 5,690 | 2,560 | 5,526 | 4,290 | 1,630 |
| 26..... | 119 | 11,600 | 6,070 | 17,400 | 14,000 | 11,500 | 14,900 | 2,580 | 1,370 | 6,370 | 3,970 | 1,350 |
| 27..... | 5,160 | 9,000 | 7,400 | 11,800 | 19,100 | 11,700 | 26,400 | 5,080 | 79 | 5,696 | 3,690 | 2,570 |
| 28..... | 4,460 | 8,930 | 5,540 | 12,900 | 21,700 | 8,800 | 20,100 | 6,820 | 2,820 | 3,346 | 3,660 | 5,460 |
| 29..... | 4,800 | 8,040 | 8,640 | 7,180 | ----- | 6,970 | 16,000 | 7,360 | 7,730 | 4,660 | 2,550 | 839 |
| 30..... | 5,000 | 5,970 | 7,850 | 9,600 | ----- | 14,400 | 16,100 | 3,980 | 3,140 | 3,950 | 1,980 | 1,510 |
| 31..... | 3,980 | ----- | 9,530 | 9,280 | ----- | 22,200 | ----- | 818 | ----- | 3,556 | 3,890 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|--------|-----------------|-------------------|
| October..... | 9,820 | 87 | 4,390 | 0.430 | 0.50 |
| November..... | 55,000 | 99 | 14,600 | 1.43 | 1.60 |
| December..... | 15,200 | 4,470 | 8,600 | .843 | .97 |
| January..... | 22,900 | 5,970 | 14,500 | 1.43 | 1.64 |
| February..... | 21,700 | 3,490 | 10,900 | 1.07 | 1.11 |
| March..... | 24,500 | 6,390 | 12,200 | 1.20 | 1.38 |
| April..... | 54,000 | 6,780 | 22,800 | 2.24 | 2.50 |
| May..... | 15,000 | 818 | 9,170 | .879 | 1.04 |
| June..... | 8,330 | 79 | 3,630 | .356 | .40 |
| July..... | 6,410 | 2,480 | 4,580 | .449 | .52 |
| August..... | 7,780 | 1,980 | 4,440 | .435 | .50 |
| September..... | 6,100 | 347 | 2,310 | .226 | .25 |
| The year..... | 55,000 | 79 | 9,320 | .914 | 12.41 |

ALABAMA RIVER NEAR MONTGOMERY, ALA.

LOCATION.—Water-stage recorder in T. 17 N., R. 17 E., at highway bridge 4 miles above Autaga Creek and 6 miles northwest of Montgomery.

DRAINAGE AREA.—15,100 square miles.

RECORDS AVAILABLE.—October, 1927, to September, 1931. At Montgomery January, 1899, to December, 1903.

EXTREMES.—Maximum discharge during year, 72,500 second-feet Nov. 19 (gage height, 26.2 feet); minimum, 5,720 second-feet Aug. 4 (gage height, 1.0 foot).

1899–1903, 1927–1931: Maximum discharge, 209,000 second-feet Mar. 17, 1929 (gage height, 59.6 feet); minimum, 5,360 second-feet Oct. 30, 1927 (gage height, 0.65 foot).

REMARKS.—Records good. Considerable regulation caused by operation of power plants upstream. Records collected by the Alabama Power Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

Daily and monthly discharge, in second-feet, 1930–31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| 1 | 14,600 | 13,000 | 9,030 | 11,000 | 11,900 | 23,200 | 27,000 | 17,500 | 9,220 | 10,600 | 6,870 | 7,210 |
| 2 | 14,400 | 10,600 | 10,600 | 10,400 | 9,600 | 22,700 | 28,800 | 13,500 | 12,500 | 10,400 | 7,040 | 7,040 |
| 3 | 12,300 | 8,650 | 11,200 | 10,600 | 15,600 | 24,900 | 28,300 | 9,600 | 12,100 | 9,410 | 7,740 | 6,870 |
| 4 | 9,600 | 11,000 | 11,400 | 8,280 | 18,000 | 19,700 | 27,000 | 10,200 | 13,000 | 8,650 | 6,360 | 6,700 |
| 5 | 8,280 | 11,700 | 11,700 | 9,030 | 16,100 | 17,300 | 35,000 | 13,200 | 11,000 | 8,280 | 6,870 | 6,530 |
| 6 | 8,840 | 11,000 | 14,900 | 14,400 | 15,600 | 15,800 | 51,300 | 15,100 | 9,600 | 7,040 | 7,040 | 6,700 |
| 7 | 13,500 | 10,600 | 11,000 | 16,100 | 15,400 | 14,400 | 59,300 | 16,800 | 8,100 | 6,700 | 7,380 | 6,200 |
| 8 | 14,200 | 11,200 | 9,220 | 19,200 | 13,200 | 11,200 | 57,800 | 16,800 | 8,840 | 7,210 | 8,460 | 7,210 |
| 9 | 15,100 | 10,400 | 15,800 | 24,400 | 10,400 | 16,800 | 52,300 | 13,200 | 10,400 | 7,740 | 8,650 | 8,650 |
| 10 | 13,000 | 8,280 | 17,500 | 21,700 | 14,200 | 22,200 | 42,400 | 9,800 | 10,800 | 7,740 | 8,460 | 8,100 |
| 11 | 11,900 | 9,410 | 16,300 | 19,200 | 17,300 | 18,300 | 35,000 | 10,000 | 10,000 | 7,380 | 8,840 | 7,740 |
| 12 | 15,100 | 10,600 | 15,600 | 24,400 | 19,000 | 17,000 | 29,000 | 15,800 | 10,200 | 7,040 | 9,600 | 7,560 |
| 13 | 13,200 | 12,800 | 12,300 | 29,600 | 18,700 | 16,600 | 23,200 | 15,400 | 10,200 | 7,560 | 10,400 | 7,560 |
| 14 | 10,400 | 15,800 | 10,400 | 30,400 | 18,700 | 13,500 | 22,700 | 16,300 | 8,280 | 7,040 | 9,220 | 7,740 |
| 15 | 13,500 | 19,500 | 9,030 | 29,300 | 13,500 | 10,200 | 20,200 | 15,400 | 8,460 | 7,040 | 8,460 | 8,100 |
| 16 | 14,900 | 16,100 | 14,900 | 28,000 | 13,500 | 9,600 | 19,000 | 11,700 | 10,800 | 7,380 | 8,460 | 9,030 |
| 17 | 13,000 | 31,700 | 16,100 | 24,600 | 19,500 | 15,800 | 18,000 | 9,220 | 11,200 | 7,560 | 7,740 | 8,200 |
| 18 | 10,400 | 58,500 | 17,000 | 19,700 | 20,200 | 15,400 | 14,400 | 11,000 | 11,900 | 7,380 | 7,380 | 6,870 |
| 19 | 8,840 | 70,800 | 16,600 | 21,200 | 19,500 | 15,100 | 9,800 | 11,200 | 11,700 | 7,560 | 7,560 | 6,530 |
| 20 | 9,410 | 70,500 | 14,600 | 23,400 | 17,500 | 15,600 | 11,000 | 12,500 | 11,000 | 7,210 | 8,280 | 6,530 |
| 21 | 15,400 | 63,500 | 12,300 | 22,900 | 16,300 | 14,600 | 19,000 | 15,600 | 8,840 | 7,210 | 9,600 | 7,560 |
| 22 | 15,800 | 54,000 | 9,220 | 19,700 | 15,400 | 12,500 | 18,700 | 12,500 | 8,460 | 6,870 | 10,400 | 6,870 |
| 23 | 14,000 | 38,700 | 10,400 | 17,300 | 14,000 | 11,400 | 18,300 | 11,200 | 9,800 | 7,560 | 9,030 | 7,210 |
| 24 | 12,500 | 22,400 | 11,500 | 14,400 | 18,700 | 15,800 | 16,300 | 10,200 | 11,700 | 6,700 | 7,210 | 7,040 |
| 25 | 11,400 | 21,200 | 11,400 | 10,200 | 19,200 | 18,500 | 15,800 | 8,840 | 10,600 | 7,210 | 7,040 | 7,040 |
| 26 | 10,600 | 16,800 | 9,410 | 12,300 | 19,700 | 19,000 | 14,900 | 10,200 | 10,400 | 7,380 | 7,210 | 6,870 |
| 27 | 10,000 | 15,800 | 8,650 | 18,500 | 20,200 | 17,300 | 22,200 | 11,200 | 9,410 | 7,040 | 7,210 | 6,360 |
| 28 | 13,200 | 12,500 | 9,600 | 14,200 | 22,900 | 15,600 | 23,900 | 13,700 | 8,100 | 6,530 | 7,040 | 6,530 |
| 29 | 13,500 | 12,100 | 8,840 | 12,800 | ----- | 12,500 | 20,500 | 14,000 | 8,460 | 6,870 | 7,210 | 7,560 |
| 30 | 14,200 | 10,400 | 12,300 | 13,500 | ----- | 11,400 | 18,300 | 13,500 | 10,400 | 6,870 | 7,380 | 8,280 |
| 31 | 13,700 | ----- | 11,400 | 14,600 | ----- | 14,600 | ----- | 11,200 | ----- | 6,870 | 7,210 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|--------|-----------------|-------------------|
| October | 15,800 | 8,280 | 12,500 | 0.828 | 0.95 |
| November | 70,800 | 8,280 | 23,000 | 1.52 | 1.70 |
| December | 17,500 | 8,650 | 12,300 | .815 | .94 |
| January | 30,400 | 8,280 | 18,200 | 1.21 | 1.40 |
| February | 22,900 | 9,600 | 16,600 | 1.10 | 1.14 |
| March | 24,900 | 9,600 | 16,100 | 1.07 | 1.23 |
| April | 59,300 | 9,800 | 26,600 | 1.76 | 1.96 |
| May | 17,500 | 8,840 | 12,800 | .848 | .98 |
| June | 13,000 | 8,100 | 10,200 | .675 | .75 |
| July | 10,600 | 6,530 | 7,550 | .500 | .58 |
| August | 10,400 | 6,360 | 7,980 | .528 | .61 |
| September | 9,030 | 6,200 | 7,280 | .482 | .54 |
| The year | 70,800 | 6,200 | 14,200 | .940 | 12.78 |

ALABAMA RIVER AT SELMA, ALA.

LOCATION.—Water-stage recorder in T. 17 N., R. 10 E., in Selma, 1 half a mile below Louisville & Nashville Railroad bridge.

DRAINAGE AREA.—17,100 square miles.

RECORDS AVAILABLE.—January, 1899, to December, 1913; June, 1923, to September, 1931.

EXTREMES.—Maximum discharge during year, 68,500 second-feet Nov. 20 (gauge height, 27.85 feet); minimum, 6,230 second-feet Sept. 28 (gauge height, 1.1 feet).

1899-1913, 1928-1931: Maximum discharge, 204,000 second-feet Mar. 19, 1929 (gauge height, 55.52 feet); minimum, 2,660 second-feet Nov. 1, 1904 (gauge height, -2.20 feet).

Maximum stage known, 57.0 feet Apr. 8, 1886 (discharge, 221,000 second-feet).

REMARKS.—Records good. Flow regulated by power plants on Coosa and Tallapoosa Rivers.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| 1..... | 12,600 | 14,200 | 11,800 | 12,400 | 15,100 | 26,800 | 22,500 | 20,000 | 12,000 | 10,100 | 7,500 | 7,360 |
| 2..... | 14,400 | 13,200 | 10,500 | 11,600 | 12,600 | 26,500 | 30,000 | 18,800 | 10,500 | 10,700 | 7,640 | 7,360 |
| 3..... | 14,600 | 10,900 | 11,400 | 11,000 | 10,900 | 27,000 | 32,200 | 15,100 | 12,600 | 10,600 | 7,500 | 7,500 |
| 4..... | 12,600 | 9,280 | 12,000 | 11,000 | 15,500 | 27,000 | 32,000 | 11,400 | 12,800 | 9,440 | 7,780 | 7,230 |
| 5..... | 10,100 | 10,700 | 12,000 | 9,960 | 18,300 | 22,500 | 34,500 | 11,400 | 13,400 | 8,800 | 7,100 | 7,100 |
| 6..... | 8,640 | 11,600 | 13,000 | 11,200 | 16,800 | 19,500 | 44,200 | 15,700 | 11,800 | 8,480 | 6,970 | 6,840 |
| 7..... | 8,960 | 11,200 | 15,700 | 15,700 | 16,200 | 18,300 | 55,800 | 21,500 | 10,100 | 7,640 | 7,230 | 6,970 |
| 8..... | 12,800 | 10,900 | 13,200 | 18,000 | 15,700 | 19,200 | 59,800 | 24,200 | 8,640 | 7,320 | 7,920 | 6,840 |
| 9..... | 14,400 | 11,200 | 11,200 | 22,000 | 13,800 | 16,600 | 58,000 | 23,200 | 8,960 | 7,500 | 8,640 | 7,100 |
| 10..... | 14,800 | 10,600 | 16,200 | 26,500 | 11,800 | 20,800 | 52,000 | 18,300 | 10,300 | 7,920 | 8,960 | 8,480 |
| 11..... | 13,600 | 9,120 | 18,000 | 24,000 | 15,100 | 24,800 | 44,200 | 13,600 | 10,900 | 7,920 | 9,120 | 8,640 |
| 12..... | 12,800 | 9,960 | 17,600 | 23,200 | 18,500 | 21,000 | 38,000 | 12,400 | 10,300 | 7,640 | 9,600 | 7,900 |
| 13..... | 14,800 | 11,400 | 16,600 | 31,200 | 20,200 | 19,000 | 32,000 | 16,600 | 10,300 | 7,360 | 10,300 | 7,780 |
| 14..... | 13,200 | 14,200 | 13,600 | 35,500 | 21,200 | 18,000 | 27,000 | 17,100 | 10,300 | 7,780 | 10,900 | 7,780 |
| 15..... | 10,900 | 18,300 | 11,400 | 36,000 | 24,200 | 15,100 | 25,000 | 17,100 | 8,800 | 7,500 | 9,960 | 7,780 |
| 16..... | 13,200 | 26,800 | 10,500 | 34,000 | 20,500 | 11,600 | 22,500 | 16,200 | 10,300 | 7,360 | 8,800 | 8,200 |
| 17..... | 14,600 | 30,000 | 15,300 | 32,000 | 21,500 | 10,900 | 20,800 | 13,000 | 10,700 | 7,500 | 8,640 | 8,800 |
| 18..... | 13,200 | 44,500 | 18,500 | 28,500 | 25,500 | 15,700 | 19,000 | 10,500 | 11,200 | 7,640 | 8,060 | 8,340 |
| 19..... | 10,700 | 61,200 | 19,500 | 24,500 | 25,000 | 16,200 | 15,300 | 11,400 | 12,000 | 7,640 | 7,640 | 7,230 |
| 20..... | 8,960 | 68,000 | 18,500 | 26,500 | 22,800 | 16,200 | 12,000 | 12,400 | 11,800 | 8,780 | 7,920 | 6,840 |
| 21..... | 9,780 | 66,800 | 16,400 | 26,500 | 19,800 | 16,400 | 14,600 | 14,400 | 11,200 | 7,500 | 9,280 | 6,710 |
| 22..... | 14,400 | 61,200 | 13,400 | 25,500 | 17,800 | 16,600 | 22,800 | 17,100 | 9,600 | 7,500 | 10,300 | 7,640 |
| 23..... | 15,700 | 53,000 | 10,700 | 22,200 | 16,200 | 15,500 | 23,200 | 15,300 | 8,800 | 7,500 | 10,900 | 7,230 |
| 24..... | 14,000 | 40,500 | 11,000 | 19,200 | 15,700 | 14,400 | 21,500 | 13,400 | 9,960 | 7,780 | 9,960 | 7,230 |
| 25..... | 12,800 | 28,000 | 12,400 | 15,700 | 22,000 | 17,600 | 19,000 | 11,400 | 11,400 | 7,500 | 8,060 | 7,100 |
| 26..... | 11,600 | 22,800 | 12,200 | 11,800 | 23,800 | 20,500 | 17,300 | 9,960 | 11,000 | 7,360 | 7,360 | 6,970 |
| 27..... | 10,500 | 18,500 | 11,000 | 13,600 | 23,500 | 20,500 | 16,600 | 10,700 | 10,500 | 7,640 | 7,360 | 6,470 |
| 28..... | 10,300 | 16,400 | 10,100 | 18,500 | 24,200 | 21,000 | 23,800 | 12,200 | 9,600 | 7,360 | 7,500 | 6,230 |
| 29..... | 13,000 | 13,600 | 10,500 | 15,700 | ----- | 20,000 | 25,200 | 14,200 | 8,480 | 7,230 | 7,360 | 6,350 |
| 30..... | 13,800 | 12,800 | 10,100 | 13,600 | ----- | 15,900 | 22,200 | 14,600 | 8,480 | 7,230 | 7,360 | 7,230 |
| 31..... | 14,400 | ----- | 12,800 | 14,200 | ----- | 15,300 | ----- | 13,800 | ----- | 7,500 | 7,500 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|--------|-----------------|-------------------|
| October..... | 15,700 | 8,640 | 12,600 | 0.737 | 0.85 |
| November..... | 68,000 | 9,120 | 24,700 | 1.44 | 1.61 |
| December..... | 19,500 | 10,100 | 13,500 | .789 | .91 |
| January..... | 36,000 | 9,960 | 20,600 | 1.30 | 1.38 |
| February..... | 25,500 | 10,900 | 18,700 | 1.09 | 1.14 |
| March..... | 27,000 | 10,900 | 18,900 | 1.11 | 1.28 |
| April..... | 59,800 | 12,000 | 29,400 | 1.72 | 1.92 |
| May..... | 24,200 | 9,960 | 15,100 | .883 | 1.02 |
| June..... | 13,400 | 8,480 | 10,600 | .620 | .69 |
| July..... | 10,700 | 7,230 | 7,950 | .465 | .54 |
| August..... | 10,900 | 6,970 | 8,420 | .492 | .57 |
| September..... | 8,800 | 6,230 | 7,380 | .432 | .48 |
| The year..... | 68,000 | 6,230 | 15,600 | .912 | 12.39 |

ALABAMA RIVER NEAR COY, ALA.

LOCATION.—Water-stage recorder in T. 11 N., R. 6 E., at St. Louis-San Francisco Railway bridge 3 miles north of Coy.

DRAINAGE AREA.—21,200 square miles.

RECORDS AVAILABLE.—July, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 72,100 second-feet Nov. 22 (gage height, 29.88 feet); minimum, 6,640 second-feet Sept. 30 (gage height, 2.56 feet).

1928-1931: Maximum discharge, 269,000 second-feet Mar. 23, 1929 (gage height, 55.83 feet); minimum, that of Sept. 30, 1931.

REMARKS.—Records good. Flow regulated by power plants upstream.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----------|---------|--------|--------|---------|--------|--------|--------|--------|--------|-----------------|--------|-------------------|
| 1 | 14,600 | 15,200 | 17,200 | 12,700 | 16,800 | 28,300 | 21,800 | 23,500 | 15,200 | 9,550 | 8,550 | 7,950 |
| 2 | 14,000 | 15,400 | 16,600 | 15,200 | 17,400 | 29,700 | 24,200 | 22,000 | 14,000 | 10,100 | 8,250 | 7,950 |
| 3 | 15,400 | 14,800 | 15,000 | 14,800 | 16,400 | 30,400 | 29,700 | 20,700 | 12,400 | 11,100 | 8,250 | 8,100 |
| 4 | 16,000 | 13,300 | 14,200 | 14,000 | 14,400 | 30,400 | 34,100 | 18,600 | 12,600 | 11,300 | 8,100 | 8,870 |
| 5 | 15,200 | 11,700 | 14,600 | 15,400 | 16,000 | 29,700 | 40,600 | 15,600 | 13,300 | 10,800 | 8,100 | 8,870 |
| 6 | 13,300 | 11,300 | 15,000 | 18,600 | 18,800 | 26,600 | 44,200 | 14,200 | 13,800 | 10,200 | 8,100 | 8,250 |
| 7 | 11,500 | 12,400 | 16,400 | 17,600 | 19,200 | 27,600 | 50,500 | 17,600 | 13,500 | 8,980 | 7,650 | 7,800 |
| 8 | 10,800 | 12,400 | 19,000 | 19,200 | 18,600 | 29,500 | 59,500 | 24,400 | 12,000 | 9,380 | 7,800 | 7,500 |
| 9 | 13,800 | 12,200 | 19,000 | 21,300 | 18,200 | 29,500 | 63,700 | 28,000 | 10,600 | 8,400 | 8,700 | 7,350 |
| 10 | 16,000 | 12,400 | 16,800 | 23,700 | 17,400 | 24,800 | 62,800 | 27,600 | 9,720 | 7,950 | 10,200 | 7,500 |
| 11 | 16,400 | 12,700 | 17,600 | 21,100 | 15,800 | 24,000 | 58,100 | 24,200 | 10,200 | 8,250 | 12,000 | 8,100 |
| 12 | 16,000 | 13,100 | 19,800 | 29,200 | 16,400 | 25,900 | 51,400 | 19,600 | 11,300 | 8,700 | 12,400 | 9,040 |
| 13 | 14,800 | 12,700 | 19,600 | 33,600 | 19,000 | 24,800 | 44,500 | 16,400 | 11,500 | 8,550 | 12,600 | 9,040 |
| 14 | 15,400 | 13,600 | 19,600 | 37,400 | 24,600 | 22,600 | 37,700 | 17,000 | 11,300 | 8,250 | 12,200 | 8,550 |
| 15 | 15,600 | 15,800 | 18,000 | 39,500 | 31,200 | 20,900 | 31,600 | 18,000 | 11,300 | 8,100 | 11,800 | 8,400 |
| 16 | 13,600 | 27,300 | 18,000 | 39,500 | 30,900 | 19,000 | 28,000 | 18,200 | 10,800 | 8,400 | 12,000 | 8,250 |
| 17 | 13,800 | 50,000 | 14,600 | 38,000 | 26,800 | 16,400 | 25,300 | 17,600 | 9,720 | 8,250 | 11,300 | 8,400 |
| 18 | 14,600 | 47,300 | 17,000 | 38,500 | 25,300 | 14,200 | 23,100 | 16,000 | 10,400 | 8,250 | 10,800 | 8,870 |
| 19 | 14,600 | 51,600 | 20,000 | 38,500 | 26,600 | 16,200 | 21,300 | 13,500 | 11,700 | 8,400 | 10,100 | 9,210 |
| 20 | 13,100 | 62,800 | 21,100 | 33,600 | 26,800 | 18,000 | 19,000 | 12,700 | 12,400 | 8,400 | 9,210 | 8,550 |
| 21 | 11,300 | 70,600 | 20,700 | 30,400 | 25,500 | 18,600 | 16,800 | 15,000 | 12,700 | 8,870 | 9,550 | 7,650 |
| 22 | 10,400 | 71,500 | 19,200 | 30,000 | 23,100 | 19,400 | 17,800 | 19,400 | 12,600 | 9,040 | 10,600 | 7,200 |
| 23 | 12,900 | 67,600 | 17,200 | 29,000 | 20,900 | 20,700 | 23,700 | 21,100 | 11,800 | 9,720 | 12,200 | 7,350 |
| 24 | 15,600 | 59,800 | 14,400 | 26,400 | 21,500 | 20,000 | 25,300 | 19,200 | 10,600 | 10,400 | 12,400 | 7,650 |
| 25 | 15,600 | 49,100 | 13,300 | 23,500 | 24,400 | 18,600 | 24,400 | 16,600 | 10,200 | 9,380 | 12,000 | 7,500 |
| 26 | 14,400 | 37,400 | 14,200 | 20,700 | 26,600 | 19,200 | 22,400 | 14,400 | 11,300 | 9,890 | 10,400 | 7,500 |
| 27 | 13,300 | 28,500 | 16,000 | 17,200 | 27,100 | 21,500 | 20,200 | 12,700 | 12,000 | 9,380 | 8,700 | 7,200 |
| 28 | 12,600 | 22,900 | 15,800 | 16,400 | 27,100 | 25,500 | 18,800 | 12,000 | 11,800 | 8,870 | 8,100 | 7,060 |
| 29 | 11,800 | 19,600 | 14,800 | 19,200 | ----- | 30,900 | 21,800 | 12,600 | 11,100 | 8,870 | 7,850 | 6,920 |
| 30 | 13,100 | 17,400 | 14,400 | 19,200 | ----- | 30,400 | 24,400 | 14,000 | 10,200 | 8,550 | 7,950 | 6,640 |
| 31 | 14,800 | ----- | 13,800 | 17,600 | ----- | 25,500 | ----- | 15,200 | ----- | 8,870 | 7,950 | ----- |
| Month | Maximum | | | Minimum | | | Mean | | | Per square mile | | Run-off in inches |
| October | 16,400 | | | 10,400 | | | 14,000 | | | 0.660 | | 0.76 |
| November | 71,500 | | | 11,300 | | | 29,400 | | | 1.39 | | 1.55 |
| December | 21,100 | | | 13,300 | | | 16,900 | | | .797 | | .92 |
| January | 39,500 | | | 12,700 | | | 25,100 | | | 1.18 | | 1.36 |
| February | 31,200 | | | 14,400 | | | 20,900 | | | 1.03 | | 1.07 |
| March | 30,900 | | | 14,200 | | | 23,800 | | | 1.12 | | 1.29 |
| April | 63,700 | | | 16,800 | | | 32,900 | | | 1.55 | | 1.73 |
| May | 28,000 | | | 12,000 | | | 18,000 | | | .849 | | .98 |
| June | 15,200 | | | 9,720 | | | 11,700 | | | .552 | | .62 |
| July | 11,300 | | | 8,100 | | | 9,160 | | | .432 | | .50 |
| August | 12,600 | | | 7,650 | | | 9,870 | | | .466 | | .54 |
| September | 9,210 | | | 6,640 | | | 7,970 | | | .376 | | .42 |
| The year | 71,500 | | | 6,640 | | | 18,300 | | | .863 | | 11.74 |

ALABAMA RIVER AT CLAIBORNE, ALA.

LOCATION.—Water-stage recorder at toll bridge in Claiborne, Monroe County.

Zero of gage is at mean sea level.

DRAINAGE AREA.—22,000 square miles.

RECORDS AVAILABLE.—April, 1930, to September, 1931.

EXTREMES.—Maximum discharge during period, 72,800 second-feet Nov. 22 (gage height, 33.02 feet); minimum, 6,850 second-feet Sept. 30, 1931 (gage height, 8.52 feet).

REMARKS.—Records good. Discharge estimated for Apr. 27, July 27 to Aug. 2, Sept. 12–22, 1930. Flow regulated by power plants on Coosa and Tallapoosa Rivers.

Daily discharge, in second-feet, 1930–31

| Day | Apr. | May | June | July | Aug. | Sept. | Day | Apr. | May | June | July | Aug. | Sept. |
|------|------|--------|--------|--------|--------|--------|------|--------|--------|--------|--------|--------|--------|
| 1930 | | | | | | | 1930 | | | | | | |
| 1 | | 14,700 | 19,400 | 11,100 | 11,500 | 11,600 | 16 | | 13,200 | 16,100 | 11,300 | 12,900 | 19,400 |
| 2 | | 15,000 | 17,800 | 11,100 | 11,100 | 10,600 | 17 | | 14,900 | 15,000 | 10,900 | 13,200 | 20,300 |
| 3 | | 15,400 | 16,500 | 10,600 | 11,400 | 10,100 | 18 | | 15,400 | 12,900 | 11,600 | 14,200 | 15,300 |
| 4 | | 14,700 | 15,400 | 10,400 | 12,000 | 9,920 | 19 | | 15,400 | 11,300 | 12,500 | 15,600 | 16,300 |
| 5 | | 14,000 | 14,500 | 11,400 | 12,700 | 9,920 | 20 | | 16,700 | 10,600 | 13,100 | 16,100 | 18,600 |
| 6 | | 14,200 | 14,200 | 12,700 | 12,000 | 10,300 | 21 | | 20,600 | 10,400 | 13,200 | 16,100 | 20,200 |
| 7 | | 13,800 | 13,600 | 13,200 | 10,400 | 11,100 | 22 | | 28,200 | 10,400 | 13,200 | 16,000 | 22,600 |
| 8 | | 12,700 | 13,200 | 12,400 | 9,750 | 11,300 | 23 | | 36,200 | 10,600 | 12,200 | 15,600 | 22,400 |
| 9 | | 11,600 | 14,500 | 10,900 | 10,600 | 10,800 | 24 | | 40,900 | 11,400 | 10,900 | 14,700 | 19,800 |
| 10 | | 11,600 | 15,400 | 10,400 | 11,800 | 10,400 | 25 | 16,500 | 40,900 | 12,000 | 10,400 | 13,600 | 17,100 |
| 11 | | 12,200 | 14,300 | 10,900 | 11,400 | 10,900 | 26 | 17,100 | 38,400 | 11,600 | 10,600 | 12,900 | 16,300 |
| 12 | | 12,500 | 12,700 | 11,600 | 11,300 | 12,200 | 27 | 17,100 | 35,100 | 11,100 | 12,400 | 12,500 | 16,700 |
| 13 | | 12,900 | 12,000 | 12,000 | 12,700 | 16,100 | 28 | 17,100 | 31,600 | 10,900 | 15,700 | 11,800 | 18,200 |
| 14 | | 12,400 | 13,200 | 12,000 | 12,700 | 21,300 | 29 | 16,500 | 28,400 | 11,100 | 13,200 | 11,100 | 19,600 |
| 15 | | 12,200 | 15,000 | 12,000 | 12,400 | 21,900 | 30 | 15,400 | 25,100 | 11,100 | 11,100 | 11,400 | 19,200 |
| | | | | | | | 31 | | 21,800 | | 10,700 | 12,000 | |

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| 1930-31 | | | | | | | | | | | | |
| 1 | 17,100 | 15,000 | 20,600 | 14,900 | 17,800 | 28,600 | 24,800 | 23,600 | 15,000 | 10,100 | 9,110 | 8,060 |
| 2 | 15,000 | 15,600 | 19,800 | 15,600 | 17,700 | 29,400 | 23,400 | 22,800 | 14,700 | 9,750 | 8,800 | 8,090 |
| 3 | 14,900 | 15,600 | 17,800 | 15,600 | 17,700 | 30,300 | 26,000 | 21,800 | 13,400 | 10,300 | 8,500 | 8,200 |
| 4 | 15,400 | 14,900 | 16,100 | 15,000 | 16,300 | 30,300 | 32,600 | 20,600 | 12,500 | 11,300 | 8,500 | 8,500 |
| 5 | 15,600 | 13,600 | 15,600 | 15,400 | 15,400 | 30,100 | 42,200 | 18,200 | 12,900 | 11,800 | 8,350 | 9,110 |
| 6 | 14,700 | 12,200 | 16,100 | 17,700 | 17,300 | 28,400 | 45,900 | 16,100 | 13,400 | 11,100 | 8,200 | 8,950 |
| 7 | 13,100 | 12,400 | 16,900 | 18,400 | 19,000 | 27,800 | 49,200 | 16,000 | 13,600 | 10,400 | 9,750 | 8,350 |
| 8 | 11,800 | 12,900 | 18,200 | 18,600 | 19,000 | 29,600 | 56,600 | 20,400 | 12,900 | 10,100 | 9,750 | 7,920 |
| 9 | 12,700 | 12,900 | 19,600 | 20,200 | 19,000 | 31,300 | 62,400 | 25,100 | 11,600 | 9,270 | 10,600 | 7,640 |
| 10 | 15,400 | 12,900 | 18,600 | 22,200 | 18,600 | 28,600 | 64,400 | 26,600 | 10,400 | 8,500 | 10,800 | 7,500 |
| 11 | 16,900 | 13,600 | 17,700 | 24,600 | 17,500 | 26,000 | 62,800 | 25,500 | 9,920 | 8,500 | 12,000 | 7,500 |
| 12 | 17,100 | 15,000 | 19,000 | 27,900 | 16,500 | 26,200 | 58,100 | 22,400 | 10,600 | 8,650 | 13,100 | 8,200 |
| 13 | 16,000 | 15,000 | 20,400 | 32,400 | 17,700 | 26,200 | 50,600 | 19,000 | 11,300 | 8,800 | 13,100 | 8,800 |
| 14 | 15,200 | 15,000 | 20,600 | 36,000 | 21,400 | 24,600 | 43,500 | 17,300 | 11,300 | 8,650 | 12,900 | 8,800 |
| 15 | 15,600 | 16,500 | 19,600 | 38,400 | 28,200 | 23,000 | 36,600 | 17,700 | 11,100 | 8,350 | 12,500 | 8,500 |
| 16 | 14,900 | 22,000 | 17,800 | 39,300 | 30,600 | 21,600 | 32,100 | 18,000 | 10,900 | 8,500 | 12,900 | 8,350 |
| 17 | 13,800 | 42,200 | 16,100 | 38,400 | 29,100 | 19,400 | 28,400 | 18,000 | 10,300 | 8,650 | 12,500 | 8,200 |
| 18 | 14,300 | 50,200 | 16,100 | 39,000 | 26,600 | 16,700 | 25,300 | 17,300 | 9,920 | 8,500 | 11,800 | 8,350 |
| 19 | 14,900 | 50,200 | 18,200 | 40,600 | 26,400 | 15,800 | 23,200 | 15,400 | 10,600 | 8,800 | 11,100 | 8,650 |
| 20 | 14,500 | 58,400 | 20,400 | 37,400 | 27,000 | 17,100 | 21,400 | 14,300 | 11,600 | 8,650 | 11,300 | 8,800 |
| 21 | 13,100 | 67,700 | 21,000 | 33,400 | 26,600 | 18,400 | 19,000 | 15,800 | 12,200 | 8,800 | 9,920 | 8,350 |
| 22 | 11,600 | 71,900 | 20,600 | 31,300 | 25,100 | 19,200 | 17,800 | 18,400 | 12,400 | 9,110 | 10,300 | 7,640 |
| 23 | 11,800 | 71,900 | 19,200 | 30,300 | 23,000 | 20,400 | 20,400 | 20,800 | 12,000 | 9,590 | 11,300 | 7,370 |
| 24 | 14,200 | 67,300 | 17,100 | 28,600 | 22,800 | 20,600 | 24,000 | 20,400 | 11,100 | 12,200 | 12,000 | 7,500 |
| 25 | 15,600 | 58,400 | 15,200 | 28,200 | 24,600 | 19,800 | 24,600 | 18,600 | 10,400 | 11,800 | 12,200 | 7,640 |
| 26 | 15,400 | 46,300 | 14,700 | 23,600 | 26,800 | 19,000 | 23,600 | 16,500 | 10,400 | 10,800 | 11,600 | 7,640 |
| 27 | 14,700 | 35,700 | 15,800 | 20,800 | 27,300 | 20,400 | 22,000 | 14,500 | 11,300 | 10,300 | 10,300 | 7,500 |
| 28 | 13,800 | 28,600 | 16,700 | 18,200 | 27,700 | 23,800 | 20,200 | 12,900 | 11,400 | 9,750 | 8,950 | 7,370 |
| 29 | 13,200 | 24,000 | 16,100 | 18,400 | | 28,400 | 20,200 | 12,500 | 11,300 | 9,920 | 8,350 | 7,240 |
| 30 | 13,100 | 21,400 | 15,600 | 19,600 | | 30,800 | 22,800 | 13,100 | 10,800 | 9,430 | 8,200 | 6,980 |
| 31 | 14,200 | | 15,000 | 19,000 | | 28,600 | | 14,300 | | 9,270 | 8,060 | |

Monthly discharge, in second-feet, of Alabama River at Claiborne, Ala., 1930-31

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|------------------|---------|---------|--------|-----------------|-------------------|
| 1930 | | | | | |
| April 25-30..... | 17,100 | 15,400 | 16,600 | 0.755 | 0.17 |
| May..... | 40,900 | 11,600 | 20,100 | .914 | 1.05 |
| June..... | 19,400 | 10,400 | 13,300 | .605 | .68 |
| July..... | 15,700 | 10,400 | 11,800 | .536 | .62 |
| August..... | 16,100 | 9,750 | 12,700 | .577 | .67 |
| September..... | 22,600 | 9,920 | 15,700 | .714 | .80 |
| 1930-31 | | | | | |
| October..... | 17,100 | 11,600 | 14,500 | .659 | .76 |
| November..... | 71,900 | 12,200 | 31,000 | 1.41 | 1.57 |
| December..... | 21,000 | 14,700 | 17,800 | .809 | .93 |
| January..... | 40,600 | 14,900 | 25,700 | 1.17 | 1.35 |
| February..... | 30,600 | 15,400 | 22,200 | 1.01 | 1.05 |
| March..... | 31,300 | 15,800 | 24,500 | 1.11 | 1.28 |
| April..... | 64,400 | 17,800 | 34,100 | 1.55 | 1.73 |
| May..... | 26,600 | 12,500 | 18,500 | .841 | .97 |
| June..... | 15,000 | 9,920 | 11,700 | .532 | .59 |
| July..... | 12,200 | 8,350 | 9,650 | .439 | .51 |
| August..... | 13,100 | 8,060 | 10,500 | .477 | .55 |
| September..... | 9,110 | 6,980 | 8,060 | .366 | .41 |
| The year..... | 71,900 | 6,980 | 19,000 | .864 | 11.70 |

CONASAUGA RIVER NEAR TENNGA, GA.

LOCATION.—Chain gage at highway bridge 600 feet below Southern Railway and 2 miles north of Tennega, Murray County.

DRAINAGE AREA.—105 square miles.

RECORDS AVAILABLE.—May, 1929, to December, 1931 (discontinued).

EXTREMES.—Maximum gage height during period, 13.95 feet Apr. 4 (discharge not determined); minimum discharge, 23 second-feet Nov. 5, 6, 1931 (gage height, 5.39 feet).

1929-1931: Maximum gage height, 14.39 feet Nov. 15, 1929 (discharge not determined); minimum discharge, 16 second-feet Sept. 5, 1930 (gage height, 5.27 feet).

REMARKS.—Records good except those for high stages, which are poor.

MOBILE RIVER BASIN

199

*Daily and monthly discharge, in second-feet, of Conasauga River near Tennega, Ga.,
1930-31*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|-------|-------|-----|-------|------|------|-------|
| 1930-31 | | | | | | | | | | | | |
| 1..... | 31 | 33 | 99 | 117 | 92 | 209 | 810 | 209 | 124 | 5' | 76 | 86 |
| 2..... | 29 | 32 | 97 | 104 | 89 | 196 | 768 | 296 | 90 | 44 | 71 | 83 |
| 3..... | 28 | 33 | 86 | 100 | 84 | 196 | 603 | 280 | 84 | 37 | 60 | 196 |
| 4..... | 28 | 31 | 83 | 95 | 80 | 184 | 2,480 | 250 | 78 | 32 | 48 | 184 |
| 5..... | 28 | 30 | 119 | 420 | 80 | 160 | 810 | 250 | 71 | 82 | 43 | 130 |
| 6..... | 28 | 30 | 768 | 810 | 80 | 147 | 852 | 236 | 69 | 70 | 55 | 102 |
| 7..... | 25 | 28 | 396 | 449 | 77 | 149 | 644 | 311 | 67 | 49 | 77 | 88 |
| 8..... | 28 | 28 | 265 | 413 | 77 | 196 | 486 | 449 | 69 | 39 | 99 | 77 |
| 9..... | 53 | 29 | 196 | 413 | 165 | 196 | 396 | 431 | 63 | 35 | 74 | 71 |
| 10..... | 53 | 28 | 149 | 328 | 184 | 170 | 328 | 344 | 62 | 5' | 184 | 64 |
| 11..... | 41 | 33 | 136 | 265 | 149 | 158 | 378 | 296 | 59 | 42 | 328 | 59 |
| 12..... | 34 | 64 | 130 | 378 | 132 | 141 | 296 | 250 | 60 | 100 | 196 | 58 |
| 13..... | 33 | 149 | 113 | 468 | 315 | 132 | 265 | 222 | 55 | 3' | 109 | 54 |
| 14..... | 30 | 86 | 107 | 344 | 1,470 | 130 | 236 | 196 | 63 | 84 | 80 | 50 |
| 15..... | 29 | 251 | 99 | 250 | 603 | 143 | 236 | 165 | 66 | 18' | 69 | 41 |
| 16..... | 28 | 1,460 | 92 | 222 | 378 | 124 | 209 | 151 | 56 | 10' | 58 | 43 |
| 17..... | 28 | 608 | 99 | 172 | 396 | 118 | 184 | 147 | 60 | 55 | 69 | 48 |
| 18..... | 28 | 328 | 92 | 184 | 413 | 117 | 172 | 138 | 53 | 55 | 60 | 43 |
| 19..... | 28 | 209 | 92 | 184 | 328 | 117 | 172 | 130 | 50 | 49 | 90 | 43 |
| 20..... | 25 | 145 | 89 | 196 | 280 | 117 | 167 | 132 | 50 | 43 | 90 | 46 |
| 21..... | 25 | 117 | 86 | 184 | 222 | 118 | 170 | 196 | 48 | 82 | 145 | 40 |
| 22..... | 25 | 107 | 88 | 158 | 196 | 439 | 1,850 | 143 | 48 | 192 | 117 | 39 |
| 23..... | 25 | 92 | 82 | 138 | 184 | 265 | 852 | 130 | 46 | 100 | 95 | 38 |
| 24..... | 35 | 86 | 69 | 128 | 167 | 280 | 524 | 117 | 56 | 7' | 82 | 37 |
| 25..... | 35 | 82 | 66 | 120 | 236 | 328 | 378 | 111 | 44 | 55 | 70 | 36 |
| 26..... | 33 | 71 | 350 | 113 | 222 | 265 | 344 | 111 | 59 | 50 | 66 | 32 |
| 27..... | 28 | 66 | 486 | 109 | 196 | 494 | 280 | 102 | 47 | 82 | 209 | 33 |
| 28..... | 31 | 64 | 280 | 107 | 184 | 1,420 | 250 | 95 | 41 | 67 | 132 | 31 |
| 29..... | 60 | 54 | 209 | 102 | ----- | 981 | 222 | 95 | 38 | 83 | 167 | 31 |
| 30..... | 53 | 59 | 163 | 99 | ----- | 524 | 209 | 90 | 38 | 67 | 132 | 31 |
| 31..... | 37 | ----- | 132 | 97 | ----- | 468 | ----- | 94 | ----- | 54 | 100 | ----- |

| Day | Oct. | Nov. | Dec. | Day | Oct. | Nov. | Dec. | Day | Oct. | Nov. | Dec. |
|---------|------|------|------|---------|------|------|-------|---------|------|-------|------|
| 1931 | | | | 1931 | | | | 1931 | | | |
| 1..... | 31 | 32 | 378 | 11..... | 28 | 30 | 250 | 21..... | 25 | 38 | 486 |
| 2..... | 30 | 32 | 163 | 12..... | 29 | 31 | 222 | 22..... | 25 | 36 | 981 |
| 3..... | 27 | 30 | 232 | 13..... | 28 | 31 | 513 | 23..... | 25 | 32 | 685 |
| 4..... | 28 | 26 | 726 | 14..... | 28 | 30 | 1,800 | 24..... | 25 | 32 | 431 |
| 5..... | 30 | 23 | 396 | 15..... | 28 | 30 | 1,160 | 25..... | 25 | 30 | 311 |
| 6..... | 30 | 23 | 196 | 16..... | 25 | 30 | 563 | 26..... | 23 | 32 | 250 |
| 7..... | 29 | 26 | 172 | 17..... | 26 | 30 | 524 | 27..... | 27 | 32 | 222 |
| 8..... | 28 | 30 | 236 | 18..... | 25 | 30 | 563 | 28..... | 42 | 33 | 196 |
| 9..... | 29 | 29 | 563 | 19..... | 25 | 32 | 449 | 29..... | 152 | 33 | 184 |
| 10..... | 30 | 29 | 431 | 20..... | 25 | 33 | 361 | 30..... | 74 | 422 | 167 |
| | | | | | | | | 31..... | 37 | ----- | 280 |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| 1930-31 | | | | | |
| October..... | 60 | 25 | 330 | 0.314 | 0.36 |
| November..... | 1,460 | 28 | 148 | 1.41 | 1.57 |
| December..... | 486 | 66 | 172 | 1.64 | 1.89 |
| January..... | 810 | 95 | 234 | 2.23 | 2.57 |
| February..... | 1,470 | 77 | 253 | 2.41 | 2.51 |
| March..... | 1,420 | 117 | 280 | 2.67 | 3.08 |
| April..... | 2,480 | 167 | 519 | 4.94 | 5.51 |
| May..... | 449 | 90 | 199 | 1.69 | 2.19 |
| June..... | 124 | 38 | 60.5 | .576 | .64 |
| July..... | 196 | 34 | 70.0 | .627 | .77 |
| August..... | 328 | 43 | 105 | 1.02 | 1.15 |
| September..... | 196 | 31 | 63.8 | .608 | .68 |
| The year..... | 2,480 | 25 | 177 | 1.69 | 22.92 |
| 1931 | | | | | |
| October..... | 158 | 25 | 33.8 | .322 | .37 |
| November..... | 422 | 23 | 43.6 | .415 | .46 |
| December..... | 1,800 | 163 | 455 | 4.33 | 4.99 |

ETOWAH RIVER NEAR KINGSTON, GA.

LOCATION.—Water-stage recorder at highway bridge half a mile above Two Run Creek and 2½ miles southwest of Kingston, Barton County. Zero of gage is 609.97 feet above mean sea level.

DRAINAGE AREA.—1,630 square miles.

RECORDS AVAILABLE.—July, 1928, to December, 1931 (discontinued).

EXTREMES.—Maximum discharge during period, 17,000 second-feet Dec. 4, 1931 (gage height, 14.15 feet); minimum, 201 second-feet Oct. 19, 1931 (gage height, 2.76 feet).

1928-1931: Maximum discharge, 40,200 second-feet Mar. 7, 1930 (gage height, 21.50 feet); minimum, that of Oct. 19, 1931.

REMARKS.—Records good except those estimated for Dec. 27-31, 1930, Jan. 1, 2, Apr. 11-17, 1931, which are fair.

Daily discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1930-31 | | | | | | | | | | | | |
| 1----- | 751 | 765 | 1,260 | 1,660 | 1,300 | 2,090 | 5,550 | 1,700 | 1,090 | 1,740 | 1,150 | 576 |
| 2----- | 730 | 702 | 1,340 | 1,430 | 1,260 | 2,140 | 5,980 | 1,840 | 1,040 | 1,080 | 1,040 | 484 |
| 3----- | 667 | 730 | 1,220 | 1,260 | 1,220 | 1,940 | 3,860 | 1,960 | 1,030 | 814 | 996 | 1,080 |
| 4----- | 660 | 730 | 1,100 | 1,220 | 1,220 | 1,790 | 5,800 | 1,790 | 1,000 | 849 | 786 | 1,940 |
| 5----- | 628 | 744 | 1,130 | 1,940 | 1,220 | 1,700 | 7,330 | 1,610 | 972 | 898 | 640 | 1,180 |
| 6----- | 608 | 751 | 1,990 | 3,080 | 1,180 | 1,610 | 5,680 | 1,890 | 926 | 2,190 | 628 | 730 |
| 7----- | 640 | 730 | 3,080 | 2,620 | 1,180 | 1,660 | 4,140 | 2,680 | 870 | 1,660 | 709 | 589 |
| 8----- | 828 | 702 | 2,190 | 2,140 | 1,180 | 2,090 | 3,260 | 3,080 | 891 | 1,080 | 730 | 517 |
| 9----- | 1,430 | 695 | 1,700 | 2,190 | 1,220 | 2,040 | 2,780 | 2,620 | 856 | 849 | 709 | 465 |
| 10----- | 1,300 | 702 | 1,480 | 1,990 | 1,300 | 1,790 | 2,620 | 2,780 | 849 | 1,100 | 786 | 478 |
| 11----- | 1,130 | 737 | 1,380 | 1,790 | 1,340 | 1,660 | 2,340 | 2,340 | 835 | 828 | 1,260 | 423 |
| 12----- | 933 | 980 | 1,340 | 2,140 | 1,220 | 1,610 | 2,400 | 1,990 | 835 | 765 | 800 | 388 |
| 13----- | 842 | 1,070 | 1,340 | 3,080 | 1,220 | 1,560 | 2,510 | 1,840 | 814 | 695 | 647 | 383 |
| 14----- | 786 | 1,100 | 1,260 | 2,560 | 1,990 | 1,520 | 2,290 | 1,740 | 856 | 660 | 608 | 394 |
| 15----- | 730 | 3,320 | 1,220 | 2,090 | 3,380 | 1,520 | 2,090 | 1,610 | 877 | 569 | 582 | 394 |
| 16----- | 709 | 7,190 | 1,160 | 1,790 | 2,290 | 1,480 | 1,990 | 1,560 | 905 | 1,040 | 582 | 361 |
| 17----- | 688 | 9,680 | 1,220 | 1,700 | 2,040 | 1,430 | 1,890 | 1,520 | 814 | 912 | 595 | 405 |
| 18----- | 681 | 5,260 | 1,300 | 1,840 | 2,340 | 1,380 | 1,790 | 1,480 | 772 | 758 | 647 | 394 |
| 19----- | 640 | 2,960 | 1,340 | 2,290 | 2,290 | 1,340 | 1,790 | 1,430 | 786 | 695 | 1,160 | 383 |
| 20----- | 647 | 2,090 | 1,340 | 2,190 | 1,890 | 1,300 | 1,790 | 1,340 | 758 | 674 | 2,460 | 1,000 |
| 21----- | 654 | 1,740 | 1,340 | 1,940 | 1,740 | 1,340 | 1,840 | 1,380 | 856 | 877 | 1,300 | 530 |
| 22----- | 640 | 1,560 | 1,260 | 1,740 | 1,610 | 1,520 | 4,140 | 1,430 | 870 | 1,220 | 1,040 | 350 |
| 23----- | 634 | 1,430 | 1,260 | 1,660 | 1,520 | 1,740 | 4,460 | 1,300 | 884 | 1,340 | 709 | 361 |
| 24----- | 640 | 1,340 | 1,220 | 1,610 | 1,520 | 1,610 | 2,900 | 1,220 | 786 | 1,520 | 608 | 366 |
| 25----- | 647 | 1,260 | 1,160 | 1,520 | 2,960 | 1,520 | 2,340 | 1,220 | 835 | 964 | 569 | 378 |
| 26----- | 660 | 1,180 | 1,260 | 1,480 | 3,260 | 1,520 | 2,140 | 1,220 | 2,560 | 765 | 498 | 543 |
| 27----- | 654 | 1,130 | 2,090 | 1,430 | 2,510 | 1,480 | 1,990 | 1,180 | 1,990 | 988 | 478 | 674 |
| 28----- | 660 | 1,100 | 2,680 | 1,380 | 2,140 | 2,290 | 1,840 | 1,150 | 1,080 | 1,100 | 465 | 405 |
| 29----- | 744 | 1,070 | 2,400 | 1,380 | ----- | 3,860 | 1,790 | 1,130 | 877 | 1,040 | 510 | 361 |
| 30----- | 884 | 1,080 | 2,140 | 1,840 | ----- | 3,080 | 1,700 | 1,120 | 856 | 1,140 | 517 | 340 |
| 31----- | 884 | ----- | 1,890 | 1,840 | ----- | 2,510 | ----- | 1,080 | ----- | 786 | 765 | ----- |

| Day | Oct. | Nov. | Dec. | Day | Oct. | Nov. | Dec. | Day | Oct. | Nov. | Dec. |
|---------|------|------|--------|---------|------|-------|-------|---------|------|-------|-------|
| 1931 | | | | 1931 | | | | 1931 | | | |
| 1----- | 325 | 484 | 702 | 11----- | 315 | 417 | 3,440 | 21----- | 282 | 1,610 | 3,510 |
| 2----- | 320 | 423 | 821 | 12----- | 350 | 423 | 2,090 | 22----- | 286 | 933 | 8,440 |
| 3----- | 310 | 423 | 996 | 13----- | 315 | 405 | 1,740 | 23----- | 310 | 779 | 7,060 |
| 4----- | 282 | 383 | 11,200 | 14----- | 330 | 435 | 4,820 | 24----- | 315 | 695 | 4,140 |
| 5----- | 335 | 405 | 13,700 | 15----- | 300 | 417 | 9,500 | 25----- | 300 | 647 | 3,320 |
| 6----- | 325 | 405 | 4,300 | 16----- | 300 | 447 | 5,680 | 26----- | 310 | 589 | 2,620 |
| 7----- | 296 | 411 | 1,940 | 17----- | 286 | 453 | 5,550 | 27----- | 325 | 562 | 2,190 |
| 8----- | 320 | 361 | 1,430 | 18----- | 291 | 478 | 9,320 | 28----- | 372 | 517 | 2,040 |
| 9----- | 325 | 405 | 2,840 | 19----- | 268 | 640 | 5,410 | 29----- | 660 | 504 | 1,890 |
| 10----- | 340 | 411 | 5,980 | 20----- | 278 | 2,400 | 3,260 | 30----- | 898 | 582 | 1,790 |
| | | | | | | | | 31----- | 654 | ----- | 4,620 |

Monthly discharge, in second-feet, of Etowah River near Kingston, Ga., 1930-31

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| 1930-31 | | | | | |
| October..... | 1,430 | 608 | 765 | 0.469 | 0.54 |
| November..... | 9,680 | 695 | 1,820 | 1.12 | 1.25 |
| December..... | 3,086 | 1,100 | 1,550 | .961 | 1.10 |
| January..... | 3,080 | 1,220 | 1,870 | 1.16 | 1.33 |
| February..... | 3,380 | 1,180 | 1,770 | 1.09 | 1.14 |
| March..... | 3,860 | 1,300 | 1,810 | 1.11 | 1.28 |
| April..... | 7,330 | 1,700 | 3,100 | 1.90 | 2.12 |
| May..... | 3,080 | 1,080 | 1,690 | 1.04 | 1.20 |
| June..... | 2,560 | 758 | 979 | .601 | .67 |
| July..... | 2,190 | 569 | 1,020 | .626 | .72 |
| August..... | 2,460 | 465 | 806 | .494 | .57 |
| September..... | 1,940 | 340 | 562 | .345 | .38 |
| The year..... | 9,680 | 340 | 1,470 | .902 | 12.30 |
| 1931 | | | | | |
| October..... | 898 | 268 | 352 | .216 | .25 |
| November..... | 2,400 | 361 | 601 | .365 | .41 |
| December..... | 13,700 | 702 | 4,400 | 2.70 | 3.11 |

LITTLE RIVER NEAR JAMESTOWN, ALA.

LOCATION.—Water-stage recorder in T. 7 S., R. 10 E., at highway bridge a quarter of a mile above Yellow Creek and 2½ miles west of Jamestown. Zero of gage is 1,177.4 feet above mean sea level.

DRAINAGE AREA.—121 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 4,450 second-feet Nov. 16 (gage height, 6.42 feet); no flow for several days during September.

1928-1931: Maximum discharge, 9,430 second-feet Mar. 14, 1929 (gage height, 10.40 feet); no flow for several days during 1930 and 1931.

REMARKS.—Records good except those above 6,000 second-feet, which are fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | Jun. | July | Aug. | Sept. |
|-----------|---------|-------|------|---------|-------|-------|-------|-----|-------|-----------------|------|-------------------|
| 1 | 12 | 14 | 168 | 171 | 92 | 706 | 1,090 | 111 | 8.4 | 0.5 | 1.8 | 0.5 |
| 2 | 9.6 | 12 | 154 | 141 | 80 | 550 | 834 | 264 | 7.2 | .5 | 1.7 | .5 |
| 3 | 7.2 | 11 | 134 | 131 | 76 | 448 | 590 | 290 | 6.0 | .4 | 1.8 | 1.0 |
| 4 | 6.0 | 10 | 128 | 123 | 67 | 355 | 1,380 | 217 | 5.6 | .4 | 1.9 | 1.0 |
| 5 | 5.2 | 10 | 226 | 1,050 | 65 | 286 | 1,420 | 182 | 4.8 | .4 | 1.8 | .8 |
| 6 | 4.4 | 10 | 975 | 1,080 | 61 | 230 | 922 | 217 | 4.4 | .8 | 2.0 | .7 |
| 7 | 3.6 | 9.6 | 662 | 706 | 58 | 242 | 662 | 317 | 4.0 | 4.0 | 1.9 | .6 |
| 8 | 21 | 8.4 | 466 | 794 | 55 | 251 | 502 | 360 | 3.2 | 7.2 | 1.8 | .6 |
| 9 | 85 | 7.8 | 345 | 764 | 85 | 209 | 390 | 350 | 2.4 | 7.2 | 1.6 | .6 |
| 10 | 76 | 8.4 | 277 | 564 | 96 | 194 | 317 | 335 | 1.9 | 3.6 | 1.3 | .4 |
| 11 | 53 | 11 | 242 | 442 | 94 | 179 | 490 | 260 | 1.8 | 2.0 | 1.3 | .4 |
| 12 | 38 | 58 | 250 | 592 | 85 | 161 | 385 | 209 | 1.6 | 1.7 | .9 | .4 |
| 13 | 31 | 226 | 194 | 606 | 106 | 141 | 317 | 168 | 1.6 | 1.4 | .8 | .3 |
| 14 | 23 | 213 | 168 | 478 | 690 | 128 | 268 | 134 | 1.5 | 1.5 | .7 | .2 |
| 15 | 19 | 930 | 138 | 360 | 578 | 128 | 222 | 111 | 1.4 | 3.2 | .6 | .1 |
| 16 | 14 | 3,020 | 125 | 308 | 442 | 114 | 182 | 89 | 1.2 | 1.5 | .6 | .1 |
| 17 | 12 | 1,710 | 123 | 273 | 502 | 103 | 148 | 76 | 1.3 | 1.4 | .6 | 0 |
| 18 | 11 | 939 | 120 | 330 | 502 | 92 | 128 | 63 | 1.4 | 1.1 | .6 | 0 |
| 19 | 8.4 | 557 | 125 | 395 | 430 | 89 | 222 | 51 | 1.4 | .9 | .6 | 0 |
| 20 | 7.2 | 390 | 157 | 375 | 355 | 80 | 186 | 44 | 1.2 | .9 | .5 | 0 |
| 21 | 6.0 | 295 | 157 | 326 | 286 | 80 | 201 | 41 | 1.4 | .9 | .5 | 0 |
| 22 | 5.6 | 277 | 154 | 273 | 242 | 194 | 375 | 38 | 1.6 | 1.0 | .4 | 0 |
| 23 | 5.2 | 255 | 141 | 277 | 209 | 197 | 400 | 31 | 1.2 | 1.9 | .4 | 0 |
| 24 | 5.2 | 209 | 125 | 201 | 340 | 213 | 312 | 26 | 1.1 | 8.4 | .3 | 0 |
| 25 | 4.8 | 175 | 109 | 179 | 1,810 | 238 | 255 | 21 | .9 | 4.8 | .2 | 0 |
| 26 | 4.4 | 157 | 222 | 161 | 957 | 205 | 217 | 19 | .8 | 3.2 | .4 | 0 |
| 27 | 4.4 | 120 | 365 | 144 | 613 | 430 | 190 | 16 | .8 | 2.0 | .9 | 0 |
| 28 | 5.6 | 103 | 317 | 131 | 627 | 2,010 | 151 | 14 | .7 | 1.6 | 1.1 | 0 |
| 29 | 9.0 | 89 | 277 | 117 | ----- | 1,420 | 131 | 12 | .6 | 1.5 | .9 | 0 |
| 30 | 19 | 103 | 234 | 103 | ----- | 834 | 114 | 11 | .6 | 2.4 | .7 | 0 |
| 31 | 19 | ----- | 194 | 103 | ----- | 730 | ----- | 9.6 | ----- | 2.0 | .6 | ----- |
| Month | Maximum | | | Minimum | | | Mean | | | Per square mile | | Run-off in inches |
| October | 85 | | | 3.6 | | | 17.3 | | | 0.143 | | 0.16 |
| November | 3,020 | | | 7.8 | | | 331 | | | 2.74 | | 3.06 |
| December | 975 | | | 109 | | | 240 | | | 1.98 | | 2.28 |
| January | 1,080 | | | 103 | | | 377 | | | 3.12 | | 3.60 |
| February | 1,810 | | | 55 | | | 343 | | | 2.83 | | 2.95 |
| March | 2,010 | | | 80 | | | 362 | | | 2.99 | | 3.45 |
| April | 1,420 | | | 114 | | | 434 | | | 3.59 | | 4.00 |
| May | 360 | | | 9.6 | | | 132 | | | 1.09 | | 1.26 |
| June | 8.4 | | | .6 | | | 2.40 | | | .020 | | .02 |
| July | 8.4 | | | .4 | | | 2.27 | | | .019 | | .02 |
| August | 2.0 | | | .2 | | | 1.01 | | | .0083 | | .01 |
| September | 1.0 | | | 0 | | | .27 | | | .0022 | | .003 |
| The year | 3,020 | | | 0 | | | 186 | | | 1.54 | | 20.81 |

CHOCOLOCCO CREEK NEAR JENIFER, ALA.

LOCATION.—Staff gage in T. 17 S., R. 7 E., at Louisville & Nashville Railroad bridge $1\frac{1}{2}$ miles north of Jenifer.

DRAINAGE AREA.—274 square miles.

RECORDS AVAILABLE.—August, 1903, to February, 1908; May, 1909, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,930 second-feet Nov. 18 (gage height, 5.75 feet); minimum, 34 second-feet Sept. 29 (gage height, 1.46 feet).
1903-1908, 1929-1931: Maximum gage height, 14.30 feet Mar. 7, 1930 (discharge not determined); minimum discharge, 26 second-feet (revised) Oct. 24-30, Nov. 1, 2, 1904 (gage height, 1.40 feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|------|------|-------|------|-------|-----|-------|------|------|-------|
| 1..... | 118 | 104 | 203 | 203 | 203 | 329 | 401 | 203 | 139 | 97 | 100 | 70 |
| 2..... | 110 | 95 | 218 | 190 | 190 | 296 | 401 | 233 | 139 | 102 | 99 | 63 |
| 3..... | 110 | 86 | 190 | 176 | 190 | 296 | 365 | 218 | 143 | 110 | 95 | 80 |
| 4..... | 106 | 84 | 176 | 190 | 190 | 263 | 401 | 203 | 143 | 110 | 99 | 93 |
| 5..... | 122 | 106 | 190 | 296 | 190 | 248 | 650 | 263 | 141 | 110 | 95 | 91 |
| 6..... | 114 | 102 | 218 | 542 | 190 | 233 | 695 | 329 | 128 | 106 | 89 | 84 |
| 7..... | 122 | 108 | 296 | 542 | 176 | 263 | 650 | 400 | 132 | 100 | 89 | 86 |
| 8..... | 126 | 97 | 280 | 440 | 176 | 365 | 401 | 440 | 130 | 99 | 89 | 71 |
| 9..... | 87 | 95 | 218 | 420 | 190 | 329 | 365 | 365 | 114 | 99 | 106 | 61 |
| 10..... | 97 | 104 | 203 | 401 | 176 | 280 | 347 | 329 | 110 | 87 | 137 | 58 |
| 11..... | 118 | 95 | 190 | 347 | 176 | 263 | 296 | 296 | 106 | 84 | 132 | 59 |
| 12..... | 116 | 100 | 190 | 479 | 176 | 248 | 280 | 248 | 106 | 87 | 102 | 59 |
| 13..... | 130 | 152 | 190 | 605 | 190 | 233 | 263 | 233 | 108 | 68 | 93 | 63 |
| 14..... | 108 | 218 | 176 | 500 | 248 | 233 | 248 | 218 | 104 | 93 | 100 | 102 |
| 15..... | 106 | 745 | 176 | 401 | 329 | 218 | 248 | 203 | 102 | 106 | 86 | 93 |
| 16..... | 108 | 1,140 | 164 | 329 | 296 | 203 | 248 | 203 | 106 | 120 | 73 | 71 |
| 17..... | 102 | 1,480 | 190 | 329 | 296 | 203 | 233 | 190 | 106 | 106 | 77 | 66 |
| 18..... | 102 | 1,770 | 203 | 347 | 280 | 203 | 233 | 190 | 104 | 100 | 80 | 63 |
| 19..... | 97 | 650 | 233 | 383 | 263 | 203 | 218 | 176 | 102 | 164 | 86 | 61 |
| 20..... | 87 | 401 | 218 | 383 | 248 | 203 | 263 | 176 | 106 | 176 | 137 | 63 |
| 21..... | 95 | 383 | 203 | 329 | 233 | 203 | 233 | 190 | 108 | 190 | 116 | 59 |
| 22..... | 80 | 347 | 190 | 296 | 218 | 263 | 263 | 190 | 110 | 218 | 86 | 59 |
| 23..... | 84 | 248 | 176 | 280 | 218 | 263 | 296 | 176 | 110 | 280 | 87 | 58 |
| 24..... | 106 | 233 | 176 | 280 | 218 | 248 | 263 | 164 | 95 | 190 | 86 | 61 |
| 25..... | 102 | 218 | 164 | 248 | 329 | 248 | 233 | 164 | 82 | 116 | 77 | 58 |
| 26..... | 106 | 203 | 190 | 248 | 420 | 203 | 218 | 152 | 80 | 116 | 77 | 59 |
| 27..... | 100 | 203 | 263 | 248 | 383 | 233 | 203 | 152 | 100 | 114 | 77 | 63 |
| 28..... | 100 | 176 | 280 | 233 | 347 | 280 | 203 | 152 | 110 | 122 | 77 | 71 |
| 29..... | 112 | 176 | 248 | 218 | ----- | 460 | 203 | 148 | 100 | 190 | 77 | 53 |
| 30..... | 126 | 176 | 233 | 203 | ----- | 479 | 203 | 148 | 78 | 116 | 70 | 73 |
| 31..... | 118 | ----- | 203 | 203 | ----- | 383 | ----- | 145 | ----- | 100 | 73 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|------|-----------------|-------------------|
| October..... | 130 | 80 | 107 | 0.371 | 0.45 |
| November..... | 1,770 | 84 | 336 | 1.23 | 1.37 |
| December..... | 206 | 164 | 208 | .759 | .88 |
| January..... | 605 | 176 | 332 | 1.23 | 1.40 |
| February..... | 420 | 176 | 241 | .830 | .92 |
| March..... | 479 | 203 | 270 | .935 | 1.14 |
| April..... | 695 | 203 | 317 | 1.13 | 1.20 |
| May..... | 460 | 145 | 224 | .818 | .94 |
| June..... | 143 | 78 | 111 | .475 | .45 |
| July..... | 280 | 68 | 125 | .436 | .53 |
| August..... | 137 | 70 | 92.5 | .338 | .39 |
| September..... | 102 | 53 | 69.0 | .252 | .28 |
| The year..... | 1,770 | 53 | 202 | .737 | 10.04 |

TALLAPOOSA RIVER AT WADLEY, ALA.

LOCATION.—Staff gage in sec. 12, T. 22 S., R. 10 E., in Wadley. Zero of gage is 600.78 feet above mean sea level.

DRAINAGE AREA.—1,660 square miles.

RECORDS AVAILABLE.—September, 1923, to September, 1931.

EXTREMES.—Maximum discharge during year, 20,900 second-feet Nov. 16 (gage height, 13.90 feet); minimum, 80 second-feet Sept. 23, 29, 30 (gage height, 2.3 feet).

1923-1931: Maximum discharge, 46,900 second-feet Jan. 18, 1925 (gage height, 26.3 feet); minimum, 60 second-feet for 8 days during September, 1925 (gage height, 2.2 feet).

REMARKS.—Records good. Slight diurnal fluctuation during extremely low water caused by operations at small mill dams. Records collected by Alabama Power Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 860 | 620 | 1,250 | 1,380 | 1,380 | 2,470 | 2,680 | 1,250 | 740 | 740 | 560 | 210 |
| 2..... | 740 | 620 | 1,250 | 1,320 | 1,380 | 2,130 | 2,960 | 1,380 | 740 | 1,320 | 1,120 | 150 |
| 3..... | 740 | 620 | 1,250 | 1,250 | 1,320 | 1,990 | 2,680 | 1,990 | 740 | 800 | 920 | 180 |
| 4..... | 620 | 620 | 1,250 | 1,250 | 1,250 | 1,860 | 2,400 | 2,130 | 740 | 620 | 860 | 250 |
| 5..... | 620 | 500 | 1,320 | 2,540 | 1,250 | 1,650 | 2,470 | 1,860 | 680 | 920 | 620 | 860 |
| 6..... | 620 | 500 | 2,540 | 4,360 | 1,250 | 1,590 | 2,750 | 1,930 | 620 | 620 | 440 | 440 |
| 7..... | 620 | 500 | 2,680 | 3,460 | 1,250 | 1,860 | 2,330 | 2,890 | 620 | 500 | 380 | 280 |
| 8..... | 620 | 500 | 2,200 | 3,240 | 1,250 | 3,170 | 2,130 | 3,460 | 620 | 500 | 440 | 210 |
| 9..... | 2,200 | 500 | 1,720 | 3,170 | 1,380 | 2,470 | 1,860 | 2,860 | 560 | 380 | 380 | 240 |
| 10..... | 1,120 | 500 | 1,520 | 2,680 | 1,520 | 1,990 | 1,720 | 4,200 | 500 | 380 | 620 | 150 |
| 11..... | 920 | 620 | 1,380 | 2,400 | 1,380 | 1,790 | 1,790 | 3,740 | 500 | 380 | 800 | 150 |
| 12..... | 860 | 1,050 | 1,380 | 4,200 | 1,320 | 1,650 | 1,790 | 2,610 | 500 | 380 | 500 | 150 |
| 13..... | 740 | 2,270 | 1,320 | 5,040 | 1,320 | 1,520 | 1,650 | 1,990 | 500 | 330 | 380 | 110 |
| 14..... | 740 | 2,200 | 1,250 | 3,740 | 1,990 | 1,590 | 1,590 | 1,590 | 620 | 440 | 440 | 150 |
| 15..... | 620 | 13,000 | 1,250 | 2,820 | 2,270 | 1,450 | 1,520 | 1,380 | 500 | 920 | 280 | 180 |
| 16..... | 620 | 19,300 | 1,380 | 2,270 | 2,060 | 1,380 | 1,380 | 1,250 | 680 | 800 | 280 | 180 |
| 17..... | 620 | 16,600 | 1,860 | 1,990 | 1,990 | 1,380 | 1,380 | 1,250 | 1,790 | 1,120 | 280 | 130 |
| 18..... | 620 | 12,400 | 1,950 | 2,130 | 1,860 | 1,380 | 1,380 | 1,120 | 1,380 | 800 | 440 | 110 |
| 19..... | 560 | 6,690 | 1,790 | 2,400 | 1,720 | 1,380 | 1,380 | 1,120 | 680 | 800 | 440 | 130 |
| 20..... | 500 | 3,890 | 1,720 | 2,270 | 1,650 | 1,320 | 1,450 | 1,120 | 1,120 | 680 | 380 | 110 |
| 21..... | 500 | 2,750 | 1,520 | 2,130 | 1,520 | 1,380 | 1,590 | 1,450 | 680 | 800 | 2,820 | 110 |
| 22..... | 500 | 1,990 | 1,380 | 1,860 | 1,450 | 1,990 | 5,210 | 1,250 | 620 | 860 | 920 | 110 |
| 23..... | 500 | 1,720 | 1,380 | 1,790 | 1,380 | 2,130 | 6,880 | 1,120 | 680 | 1,120 | 620 | 80 |
| 24..... | 500 | 1,520 | 1,320 | 1,650 | 1,720 | 1,930 | 3,240 | 1,050 | 620 | 800 | 440 | 110 |
| 25..... | 500 | 1,380 | 1,250 | 1,590 | 4,050 | 1,790 | 2,270 | 990 | 500 | 1,320 | 380 | 150 |
| 26..... | 500 | 1,380 | 1,930 | 1,520 | 3,890 | 1,650 | 1,860 | 920 | 920 | 990 | 330 | 110 |
| 27..... | 500 | 1,250 | 2,130 | 1,520 | 3,460 | 1,520 | 1,650 | 860 | 1,380 | 800 | 280 | 110 |
| 28..... | 560 | 1,250 | 1,990 | 1,520 | 2,820 | 2,060 | 1,520 | 860 | 680 | 620 | 280 | 110 |
| 29..... | 680 | 1,180 | 1,790 | 1,450 | ----- | 3,740 | 1,380 | 860 | 500 | 860 | 280 | 80 |
| 30..... | 740 | 1,120 | 1,590 | 1,380 | ----- | 3,170 | 1,380 | 740 | 500 | 680 | 280 | 80 |
| 31..... | 740 | ----- | 1,450 | 1,380 | ----- | 2,470 | ----- | 740 | ----- | 500 | 240 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 2,200 | 500 | 703 | 0.423 | 0.49 |
| November..... | 19,300 | 500 | 3,300 | 1.99 | 2.22 |
| December..... | 2,680 | 1,250 | 1,610 | .970 | 1.12 |
| January..... | 5,040 | 1,250 | 2,310 | 1.39 | 1.60 |
| February..... | 4,050 | 1,250 | 1,820 | 1.10 | 1.14 |
| March..... | 3,740 | 1,320 | 1,930 | 1.16 | 1.34 |
| April..... | 6,880 | 1,380 | 2,210 | 1.33 | 1.48 |
| May..... | 4,200 | 740 | 1,680 | 1.01 | 1.16 |
| June..... | 1,790 | 500 | 730 | .440 | .49 |
| July..... | 1,320 | 330 | 735 | .443 | .51 |
| August..... | 2,820 | 240 | 562 | .339 | .39 |
| September..... | 860 | 80 | 182 | .110 | .12 |
| The year..... | 19,300 | 80 | 1,480 | .892 | 12.06 |

TALLAPOOSA RIVER BELOW TALLASSEE, ALA.

LOCATION.—Water-stage recorder in T. 18 N., R. 22 E., 1½ miles below highway bridge at Tallassee.

DRAINAGE AREA.—3,320 square miles.

RECORDS AVAILABLE.—July, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 8,960 second-feet for several hours at times in October, November, February (gage height, 8.7 feet); minimum, 10 second-feet for several hours at times during year (gage height, -1.2 feet).

1928-1931: Maximum discharge, 115,000 second-feet Mar. 15, 1929 (gage height, 51.35 feet); minimum, 10 second-feet June 3, 4, 1930, and at times during 1931 (gage height, -1.2 feet).

REMARKS.—Records good. Considerable regulation caused by operation of power plants upstream. Records collected by the Alabama Power Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 6,280 | 8,110 | 2,160 | 45 | 20 | 19 | 956 | 316 | 7,450 | 6,560 | 4,370 | 4,570 |
| 2..... | 6,860 | 6,930 | 5,110 | 26 | 4,920 | 1,950 | 147 | 40 | 7,860 | 4,020 | 262 | 4,230 |
| 3..... | 7,800 | 7,690 | 5,110 | 296 | 6,150 | 1,140 | 34 | 12 | 7,490 | 1,970 | 3,480 | 4,350 |
| 4..... | 7,120 | 8,280 | 4,830 | 92 | 6,320 | 1,040 | 599 | 1,420 | 7,520 | 64 | 3,320 | 4,300 |
| 5..... | 7,120 | 8,000 | 3,120 | 1,340 | 6,800 | 1,410 | 839 | 1,170 | 7,310 | 17 | 3,750 | 4,760 |
| 6..... | 8,270 | 8,040 | 72 | 898 | 6,280 | 399 | 1,160 | 1,080 | 7,360 | 2,130 | 3,650 | 2,110 |
| 7..... | 8,060 | 7,690 | 37 | 1,280 | 5,570 | 1,080 | 1,150 | 935 | 1,220 | 3,130 | 3,680 | 3,040 |
| 8..... | 8,040 | 7,920 | 197 | 658 | 1,230 | 83 | 291 | 610 | 5,730 | 3,420 | 4,530 | 7,240 |
| 9..... | 8,120 | 6,740 | 56 | 555 | 5,690 | 2,070 | 527 | 20 | 7,610 | 2,710 | 103 | 6,380 |
| 10..... | 8,190 | 7,540 | 419 | 78 | 8,580 | 2,520 | 39 | 20 | 7,230 | 2,590 | 3,770 | 6,460 |
| 11..... | 5,990 | 7,880 | 93 | 48 | 8,950 | 1,340 | 1,020 | 208 | 7,170 | 3,630 | 3,560 | 6,870 |
| 12..... | 100 | 8,000 | 184 | 30 | 8,830 | 1,760 | 527 | 887 | 7,190 | 194 | 2,760 | 6,480 |
| 13..... | 4,620 | 7,780 | 205 | 726 | 7,830 | 758 | 1,470 | 948 | 6,770 | 3,720 | 2,950 | 1,950 |
| 14..... | 5,760 | 7,350 | 71 | 1,470 | 3,480 | 40 | 1,960 | 1,280 | 1,100 | 3,440 | 2,780 | 5,240 |
| 15..... | 6,870 | 409 | 2,940 | 90 | 675 | 13 | 1,210 | 65 | 5,550 | 3,060 | 1,460 | 6,290 |
| 16..... | 7,300 | 929 | 690 | 456 | 3,170 | 2,800 | 659 | 15 | 6,680 | 3,070 | 54 | 4,560 |
| 17..... | 7,790 | 4,760 | 425 | 820 | 1,930 | 4,360 | 208 | 10 | 6,800 | 2,810 | 3,130 | 3,980 |
| 18..... | 7,750 | 3,690 | 689 | 275 | 810 | 5,500 | 83 | 1,510 | 6,990 | 3,890 | 2,770 | 3,860 |
| 19..... | 7,470 | 1,440 | 72 | 917 | 1,540 | 5,950 | 37 | 3,400 | 7,400 | 75 | 3,190 | 4,320 |
| 20..... | 7,450 | 1,560 | 34 | 1,550 | 606 | 6,260 | 1,180 | 2,980 | 7,330 | 20 | 2,630 | 361 |
| 21..... | 7,760 | 169 | 14 | 961 | 388 | 3,110 | 1,860 | 2,670 | 522 | 2,720 | 2,950 | 4,490 |
| 22..... | 8,110 | 53 | 2,840 | 972 | 20 | 60 | 1,280 | 3,530 | 2,370 | 54 | 71 | 5,520 |
| 23..... | 8,170 | 24 | 4,570 | 241 | 2,480 | 5,650 | 1,160 | 3,010 | 6,820 | 2,800 | 19 | 6,110 |
| 24..... | 8,130 | 957 | 2,930 | 56 | 2,510 | 5,690 | 532 | 1,580 | 7,760 | 1,850 | 2,930 | 5,690 |
| 25..... | 8,230 | 1,190 | 94 | 23 | 2,710 | 4,670 | 54 | 6,470 | 7,520 | 191 | 2,760 | 4,460 |
| 26..... | 8,000 | 1,650 | 41 | 3,650 | 1,050 | 4,040 | 15 | 8,160 | 7,830 | 68 | 3,110 | 4,060 |
| 27..... | 7,770 | 74 | 17 | 142 | 307 | 1,980 | 375 | 7,370 | 7,120 | 3,240 | 3,120 | 195 |
| 28..... | 8,160 | 1,470 | 513 | 1,730 | 51 | 182 | 864 | 6,700 | 1,180 | 2,550 | 4,210 | 5,740 |
| 29..... | 8,440 | 57 | 3,490 | 6,090 | ----- | 32 | 889 | 6,670 | 5,450 | 2,690 | 4,780 | 7,220 |
| 30..... | 8,120 | 20 | 195 | 3,750 | ----- | 1,480 | 780 | 7,770 | 7,350 | 2,620 | 3,320 | 6,220 |
| 31..... | 8,250 | ----- | 80 | 931 | ----- | 1,120 | ----- | 5,530 | ----- | 4,100 | 4,420 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 8,440 | 100 | 7,290 | 2.20 | 2.54 |
| November..... | 8,280 | 20 | 4,210 | 1.27 | 1.42 |
| December..... | 5,110 | 14 | 1,330 | .40' | .46 |
| January..... | 6,090 | 23 | 974 | .293 | .34 |
| February..... | 8,950 | 20 | 3,530 | 1.06 | 1.10 |
| March..... | 6,260 | 13 | 2,210 | .663 | .77 |
| April..... | 1,960 | 15 | 730 | .223 | .25 |
| May..... | 8,160 | 10 | 2,460 | .741 | .85 |
| June..... | 7,860 | 272 | 6,210 | 1.87 | 2.09 |
| July..... | 6,560 | 17 | 2,370 | .714 | .82 |
| August..... | 4,830 | 19 | 2,840 | .855 | .99 |
| September..... | 7,240 | 195 | 4,710 | 1.42 | 1.58 |
| The year..... | 8,950 | 10 | 3,230 | .973 | 13.21 |

CAHABA RIVER AT CENTERVILLE, ALA.

LOCATION.—Staff gage in T. 23 N., R. 9 E., a quarter of a mile west of Centerville. Zero of gage is 181.6 feet above mean sea level.

DRAINAGE AREA.—1,030 square miles.

RECORDS AVAILABLE.—August, 1901, to February, 1908; May, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 13,800 second-feet Nov. 16 (gage height, 21.75 feet); minimum, 123 second-feet Sept. 18, 24-30 (gage height, 0.80 foot).

1901-1908, 1929-1931: Maximum discharge, 70,100 second-feet Mar. 28, 1902 (gage height, 35.55 feet, present datum); minimum, 90 second-feet Oct. 24-29, 1904 (gage height, -0.35 foot).

Maximum stage known, 36.2 feet (present datum) July 8, 1916, determined by levels (discharge, 74,200 second-feet).

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|--------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| 1 | 343 | 271 | 888 | 926 | 670 | 1,240 | 1,620 | 510 | 294 | 218 | 180 | 180 |
| 2 | 318 | 260 | 850 | 850 | 670 | 1,160 | 1,660 | 542 | 282 | 282 | 180 | 180 |
| 3 | 282 | 260 | 778 | 814 | 670 | 1,000 | 1,490 | 574 | 282 | 218 | 228 | 198 |
| 4 | 282 | 260 | 670 | 742 | 638 | 926 | 4,530 | 542 | 271 | 228 | 180 | 180 |
| 5 | 282 | 260 | 964 | 1,750 | 606 | 888 | 9,410 | 542 | 260 | 218 | 180 | 180 |
| 6 | 271 | 249 | 2,900 | 2,610 | 574 | 814 | 6,960 | 2,150 | 260 | 218 | 228 | 180 |
| 7 | 260 | 238 | 2,900 | 2,020 | 574 | 1,160 | 3,300 | 2,710 | 260 | 218 | 343 | 162 |
| 8 | 249 | 238 | 2,060 | 1,790 | 542 | 2,060 | 2,280 | 1,880 | 260 | 208 | 423 | 162 |
| 9 | 249 | 238 | 1,580 | 1,750 | 606 | 1,620 | 1,750 | 1,710 | 249 | 198 | 423 | 162 |
| 10 | 271 | 260 | 1,330 | 1,580 | 638 | 1,330 | 1,490 | 1,580 | 228 | 208 | 396 | 146 |
| 11 | 306 | 271 | 1,120 | 1,580 | 574 | 1,120 | 1,410 | 1,120 | 218 | 189 | 318 | 138 |
| 12 | 294 | 423 | 1,160 | 2,330 | 542 | 1,000 | 1,450 | 888 | 218 | 189 | 271 | 154 |
| 13 | 271 | 888 | 1,080 | 2,900 | 510 | 926 | 1,200 | 742 | 218 | 451 | 249 | 154 |
| 14 | 238 | 1,000 | 926 | 2,200 | 670 | 850 | 1,000 | 670 | 208 | 396 | 218 | 146 |
| 15 | 218 | 1,970 | 850 | 1,790 | 742 | 814 | 888 | 606 | 228 | 369 | 208 | 138 |
| 16 | 208 | 10,000 | 888 | 1,540 | 706 | 742 | 888 | 542 | 343 | 306 | 218 | 138 |
| 17 | 198 | 12,800 | 888 | 1,370 | 778 | 706 | 814 | 510 | 271 | 249 | 249 | 138 |
| 18 | 198 | 7,180 | 814 | 1,710 | 926 | 670 | 742 | 480 | 238 | 260 | 260 | 123 |
| 19 | 218 | 2,660 | 778 | 1,880 | 888 | 638 | 964 | 451 | 238 | 282 | 340 | 138 |
| 20 | 238 | 1,580 | 742 | 1,710 | 850 | 606 | 1,080 | 850 | 238 | 318 | 2,890 | 138 |
| 21 | 228 | 1,290 | 706 | 1,540 | 778 | 638 | 1,240 | 964 | 208 | 306 | 1,370 | 138 |
| 22 | 218 | 1,120 | 670 | 1,410 | 706 | 850 | 1,370 | 706 | 218 | 343 | 850 | 138 |
| 23 | 208 | 1,040 | 670 | 1,240 | 670 | 850 | 1,330 | 542 | 218 | 369 | 396 | 130 |
| 24 | 208 | 1,040 | 606 | 1,120 | 778 | 742 | 1,040 | 480 | 260 | 318 | 294 | 123 |
| 25 | 238 | 926 | 574 | 1,040 | 1,410 | 706 | 888 | 396 | 228 | 260 | 249 | 123 |
| 26 | 238 | 814 | 1,080 | 964 | 1,540 | 670 | 778 | 369 | 218 | 228 | 228 | 123 |
| 27 | 238 | 706 | 1,920 | 926 | 1,410 | 670 | 706 | 369 | 218 | 218 | 218 | 123 |
| 28 | 238 | 670 | 1,710 | 850 | 1,290 | 1,490 | 638 | 343 | 198 | 208 | 198 | 123 |
| 29 | 260 | 606 | 1,450 | 814 | ----- | 1,840 | 574 | 318 | 208 | 189 | 198 | 123 |
| 30 | 343 | 670 | 1,200 | 778 | ----- | 1,450 | 542 | 318 | 198 | 180 | 208 | 123 |
| 31 | 318 | ----- | 1,000 | 742 | ----- | 1,290 | ----- | 306 | ----- | 180 | 208 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 343 | 198 | 256 | 0.248 | 0.29 |
| November | 12,800 | 238 | 1,670 | 1.62 | 1.81 |
| December | 2,900 | 574 | 1,150 | 1.12 | 1.29 |
| January | 2,900 | 742 | 1,460 | 1.42 | 1.64 |
| February | 1,540 | 510 | 784 | .761 | .79 |
| March | 2,060 | 606 | 1,020 | .990 | 1.14 |
| April | 9,410 | 542 | 1,800 | 1.75 | 1.95 |
| May | 2,710 | 306 | 797 | .774 | .89 |
| June | 343 | 198 | 241 | .234 | .26 |
| July | 451 | 180 | 259 | .251 | .29 |
| August | 2,890 | 180 | 400 | .388 | .45 |
| September | 198 | 123 | 147 | .143 | .16 |
| The year | 12,800 | 123 | 831 | .807 | 10.96 |

EAST FORK OF TOBIGBEE RIVER NEAR FULTON, MISS.

LOCATION.—Chain gage in T. 9 S., R. 8 E. Chickasaw meridian, at highway bridge 2 miles west of Fulton.

DRAINAGE AREA.—650 square miles.

RECORDS AVAILABLE.—August, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 4,250 second-feet Feb. 26 (gage height, 15.87 feet); minimum, 26 second-feet Sept. 28 (gage height, 1.12 feet).
1928-1931: Maximum discharge, 15,700 second-feet Mar. 15, 1929 (gage height, 17.54 feet); minimum, 14 second-feet Aug. 12, 1930 (gage height, 0.87 foot).

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| 1..... | 51 | 88 | 423 | 412 | 280 | 2,160 | 1,350 | 280 | 130 | 71 | 82 | 82 |
| 2..... | 51 | 82 | 467 | 350 | 260 | 2,500 | 1,860 | 445 | 150 | 355 | 68 | 71 |
| 3..... | 48 | 82 | 360 | 320 | 251 | 2,240 | 2,160 | 401 | 114 | 360 | 60 | 68 |
| 4..... | 45 | 88 | 290 | 320 | 251 | 1,860 | 1,980 | 300 | 106 | 260 | 51 | 78 |
| 5..... | 45 | 92 | 360 | 613 | 242 | 1,590 | 1,660 | 424 | 92 | 544 | 48 | 82 |
| 6..... | 45 | 88 | 944 | 1,190 | 242 | 1,250 | 1,290 | 1,170 | 88 | 622 | 114 | 64 |
| 7..... | 51 | 85 | 1,120 | 1,370 | 242 | 1,170 | 896 | 1,590 | 85 | 300 | 731 | 57 |
| 8..... | 275 | 85 | 896 | 1,440 | 242 | 1,490 | 646 | 1,860 | 82 | 162 | 1,120 | 48 |
| 9..... | 577 | 92 | 566 | 1,540 | 330 | 1,750 | 522 | 1,940 | 74 | 122 | 1,370 | 48 |
| 10..... | 401 | 179 | 401 | 1,540 | 500 | 1,770 | 467 | 2,040 | 71 | 92 | 1,560 | 42 |
| 11..... | 197 | 522 | 340 | 1,330 | 412 | 1,660 | 434 | 2,500 | 71 | 82 | 1,270 | 42 |
| 12..... | 122 | 646 | 360 | 1,190 | 320 | 1,370 | 401 | 2,320 | 71 | 64 | 629 | 45 |
| 13..... | 99 | 544 | 360 | 1,290 | 350 | 1,010 | 380 | 1,980 | 99 | 68 | 251 | 42 |
| 14..... | 85 | 423 | 310 | 1,250 | 952 | 735 | 360 | 1,540 | 270 | 78 | 146 | 45 |
| 15..... | 78 | 850 | 280 | 960 | 1,310 | 599 | 340 | 1,010 | 270 | 88 | 114 | 64 |
| 16..... | 74 | 1,150 | 280 | 683 | 1,370 | 533 | 320 | 634 | 310 | 92 | 106 | 68 |
| 17..... | 85 | 1,210 | 290 | 555 | 1,250 | 467 | 300 | 423 | 206 | 74 | 99 | 51 |
| 18..... | 106 | 912 | 310 | 533 | 1,190 | 434 | 456 | 350 | 146 | 64 | 92 | 45 |
| 19..... | 114 | 544 | 340 | 566 | 1,080 | 412 | 370 | 300 | 114 | 64 | 114 | 40 |
| 20..... | 92 | 360 | 340 | 511 | 865 | 401 | 320 | 320 | 146 | 283 | 122 | 40 |
| 21..... | 74 | 300 | 310 | 445 | 658 | 370 | 340 | 588 | 215 | 370 | 138 | 38 |
| 22..... | 74 | 434 | 280 | 401 | 522 | 423 | 588 | 500 | 130 | 320 | 197 | 35 |
| 23..... | 71 | 467 | 251 | 370 | 456 | 445 | 850 | 350 | 224 | 242 | 122 | 35 |
| 24..... | 82 | 370 | 242 | 360 | 566 | 423 | 683 | 260 | 188 | 321 | 85 | 34 |
| 25..... | 99 | 300 | 224 | 340 | 1,350 | 478 | 522 | 233 | 122 | 735 | 74 | 31 |
| 26..... | 106 | 260 | 580 | 330 | 2,410 | 401 | 456 | 206 | 88 | 777 | 68 | 32 |
| 27..... | 88 | 224 | 1,140 | 330 | 2,900 | 517 | 390 | 197 | 85 | 522 | 224 | 30 |
| 28..... | 99 | 206 | 1,290 | 320 | 2,400 | 994 | 320 | 179 | 92 | 290 | 162 | 27 |
| 29..... | 99 | 188 | 1,120 | 310 | ----- | 1,210 | 280 | 162 | 92 | 179 | 122 | 30 |
| 30..... | 122 | 215 | 777 | 290 | ----- | 1,140 | 270 | 146 | 82 | 138 | 162 | 29 |
| 31..... | 106 | ----- | 533 | 280 | ----- | 928 | ----- | 138 | ----- | 99 | 114 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 577 | 45 | 118 | 0.182 | 0.21 |
| November..... | 1,210 | 82 | 370 | .569 | .63 |
| December..... | 1,290 | 224 | 509 | .783 | .90 |
| January..... | 1,540 | 280 | 701 | 1.08 | 1.24 |
| February..... | 2,900 | 242 | 829 | 1.28 | 1.33 |
| March..... | 2,500 | 370 | 1,060 | 1.63 | 1.88 |
| April..... | 2,180 | 270 | 707 | 1.09 | 1.22 |
| May..... | 2,500 | 138 | 800 | 1.23 | 1.42 |
| June..... | 310 | 71 | 133 | .205 | .23 |
| July..... | 777 | 64 | 263 | .389 | .45 |
| August..... | 1,580 | 48 | 310 | .477 | .55 |
| September..... | 82 | 27 | 47.8 | .074 | .08 |
| The year..... | 2,900 | 27 | 485 | .746 | 10.14 |

TOMBIGBEE RIVER AT ABERDEEN, MISS.

LOCATION.—Chain gage at St. Louis-San Francisco Railway bridge in Aberdeen, half a mile below Matubby Creek.

DRAINAGE AREA.—2,210 square miles.

RECORDS AVAILABLE.—August, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 9,780 second-feet Feb. 27 (gage height, 26.50 feet); minimum, 94 second-feet Sept. 27 (gage height, 1.64 feet). 1928-1931: Maximum discharge, 31,100 second-feet Mar. 25, 1929 (gage height, 39.18 feet); minimum discharge, 61 second-feet Aug. 8, 1930; minimum gage height, 1.64 feet Sept. 27, 1931.

Maximum stage known, 44.0 feet Apr. 20, 1892.

REMARKS.—Records good except those for low stages, which are fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1----- | 138 | 255 | 814 | 1,770 | 918 | 8,100 | 6,610 | 892 | 476 | 307 | 424 | 268 |
| 2----- | 103 | 242 | 996 | 1,420 | 892 | 8,260 | 7,510 | 970 | 450 | 996 | 372 | 268 |
| 3----- | 101 | 229 | 1,020 | 1,190 | 866 | 7,930 | 6,860 | 1,020 | 424 | 1,390 | 307 | 268 |
| 4----- | 97 | 203 | 1,020 | 1,100 | 814 | 6,810 | 5,640 | 1,020 | 398 | 1,240 | 268 | 281 |
| 5----- | 95 | 190 | 1,730 | 2,510 | 814 | 5,730 | 4,830 | 1,540 | 372 | 1,540 | 255 | 229 |
| 6----- | 95 | 203 | 4,130 | 5,770 | 788 | 4,750 | 4,320 | 6,420 | 346 | 2,090 | 372 | 203 |
| 7----- | 125 | 203 | 3,460 | 5,730 | 788 | 5,160 | 3,900 | 8,040 | 320 | 1,210 | 1,420 | 216 |
| 8----- | 1,240 | 216 | 2,360 | 4,870 | 788 | 7,930 | 3,500 | 8,560 | 307 | 918 | 3,460 | 216 |
| 9----- | 3,030 | 216 | 1,990 | 5,290 | 866 | 8,380 | 3,030 | 7,410 | 294 | 658 | 4,130 | 164 |
| 10----- | 1,700 | 255 | 1,670 | 4,360 | 1,100 | 7,310 | 2,190 | 7,060 | 281 | 450 | 3,500 | 161 |
| 11----- | 1,240 | 528 | 1,300 | 3,500 | 1,070 | 5,730 | 1,570 | 6,760 | 268 | 333 | 2,500 | 159 |
| 12----- | 814 | 918 | 1,130 | 4,510 | 1,160 | 4,550 | 1,540 | 5,080 | 255 | 281 | 1,990 | 151 |
| 13----- | 554 | 1,190 | 1,020 | 5,770 | 1,100 | 3,830 | 1,420 | 3,980 | 554 | 255 | 1,700 | 141 |
| 14----- | 398 | 1,510 | 970 | 4,550 | 3,710 | 3,320 | 1,300 | 3,530 | 1,300 | 398 | 1,190 | 141 |
| 15----- | 320 | 3,140 | 944 | 3,390 | 4,550 | 2,890 | 1,210 | 3,320 | 632 | 814 | 736 | 141 |
| 16----- | 268 | 4,830 | 918 | 2,810 | 3,320 | 2,400 | 1,160 | 3,070 | 528 | 684 | 502 | 129 |
| 17----- | 242 | 4,170 | 944 | 2,430 | 3,430 | 1,930 | 1,070 | 2,670 | 554 | 372 | 424 | 141 |
| 18----- | 242 | 2,600 | 918 | 2,190 | 3,750 | 1,670 | 1,070 | 1,930 | 502 | 294 | 372 | 141 |
| 19----- | 268 | 2,090 | 996 | 2,090 | 3,250 | 1,540 | 1,070 | 1,240 | 424 | 255 | 398 | 146 |
| 20----- | 268 | 1,730 | 1,130 | 1,890 | 2,810 | 1,420 | 1,190 | 1,130 | 580 | 229 | 632 | 131 |
| 21----- | 281 | 1,270 | 1,100 | 1,700 | 2,430 | 1,360 | 1,130 | 1,270 | 762 | 996 | 684 | 129 |
| 22----- | 268 | 1,190 | 1,020 | 1,510 | 2,060 | 1,420 | 1,390 | 1,300 | 476 | 3,320 | 840 | 127 |
| 23----- | 216 | 1,480 | 944 | 1,390 | 1,770 | 1,510 | 1,960 | 1,240 | 606 | 2,470 | 502 | 125 |
| 24----- | 203 | 1,240 | 866 | 1,270 | 3,150 | 1,420 | 1,770 | 1,020 | 606 | 3,030 | 424 | 116 |
| 25----- | 190 | 1,130 | 892 | 1,190 | 7,610 | 1,390 | 1,770 | 866 | 476 | 5,680 | 346 | 108 |
| 26----- | 203 | 1,240 | 2,640 | 1,130 | 8,980 | 1,360 | 1,570 | 762 | 450 | 4,950 | 307 | 105 |
| 27----- | 229 | 814 | 5,330 | 1,100 | 9,460 | 1,800 | 1,360 | 684 | 398 | 3,460 | 398 | 95 |
| 28----- | 255 | 736 | 4,360 | 1,070 | 8,200 | 5,080 | 1,190 | 632 | 346 | 1,670 | 528 | 103 |
| 29----- | 268 | 658 | 3,100 | 1,050 | ----- | 4,590 | 1,020 | 606 | 268 | 1,050 | 502 | 103 |
| 30----- | 268 | 684 | 2,570 | 996 | ----- | 3,530 | 918 | 554 | 255 | 762 | 424 | 95 |
| 31----- | 255 | ----- | 2,190 | 944 | ----- | 3,460 | ----- | 502 | ----- | 554 | 450 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October----- | 3,030 | 95 | 451 | 0.204 | 0.24 |
| November----- | 4,830 | 150 | 1,180 | .534 | .60 |
| December----- | 5,330 | 814 | 1,760 | .796 | .92 |
| January----- | 5,770 | 944 | 2,600 | 1.18 | 1.36 |
| February----- | 9,460 | 788 | 2,870 | 1.30 | 1.35 |
| March----- | 8,380 | 1,360 | 4,080 | 1.85 | 2.13 |
| April----- | 7,510 | 918 | 2,510 | 1.14 | 1.27 |
| May----- | 8,560 | 502 | 2,740 | 1.24 | 1.43 |
| June----- | 1,300 | 255 | 464 | .210 | .23 |
| July----- | 5,680 | 229 | 1,380 | .624 | .72 |
| August----- | 4,130 | 255 | 979 | .443 | .51 |
| September----- | 281 | 95 | 160 | .072 | .08 |
| The year----- | 9,460 | 95 | 1,760 | .796 | 10.84 |

TOMBIGBEE RIVER AT COLUMBUS, MISS.

LOCATION.—Staff gage at Mobile & Ohio Railroad bridge in Columbus. Lowndes County.

DRAINAGE AREA.—4,490 square miles.

RECORDS AVAILABLE.—January, 1900, to December, 1912; August, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 18,500 second-feet Mar. 1, Apr. 3 (gage height, 13.25 feet); minimum, 275 second-feet Sept. 28–30 (gage height, 3.5 feet).

1900–1912, 1928–1931: Maximum gage height recorded, 30.6 feet Mar. 31, 1902 (discharge not determined); minimum discharge not determined.

Maximum stage known, 38.6 feet (revised) Apr. 8, 1892.

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1930–31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|--------|--------|--------|--------|--------|--------|-------|--------|-------|-------|
| 1..... | 525 | 760 | 1,840 | 4,340 | 2,160 | 18,200 | 16,300 | 2,080 | 910 | 600 | 1,140 | 560 |
| 2..... | 525 | 680 | 2,080 | 3,740 | 2,160 | 16,600 | 18,200 | 2,000 | 860 | 680 | 910 | 525 |
| 3..... | 490 | 600 | 2,080 | 2,830 | 1,920 | 15,100 | 18,400 | 2,160 | 810 | 1,400 | 810 | 600 |
| 4..... | 490 | 560 | 1,340 | 2,570 | 1,840 | 13,600 | 17,400 | 2,240 | 810 | 1,540 | 680 | 1,140 |
| 5..... | 455 | 525 | 1,760 | 3,190 | 1,840 | 10,700 | 15,700 | 2,480 | 810 | 1,340 | 560 | 1,020 |
| 6..... | 438 | 490 | 6,020 | 7,120 | 1,760 | 8,460 | 13,200 | 6,130 | 760 | 2,000 | 525 | 1,020 |
| 7..... | 438 | 455 | 8,460 | 10,100 | 1,680 | 8,460 | 10,200 | 11,600 | 720 | 2,240 | 720 | 760 |
| 8..... | 525 | 8,110 | 11,300 | 1,680 | 12,900 | 8,940 | 13,500 | 680 | 1,840 | 2,660 | 690 | 600 |
| 9..... | 3,640 | 455 | 5,910 | 10,300 | 1,840 | 14,200 | 8,460 | 14,200 | 640 | 1,200 | 6,020 | 490 |
| 10..... | 5,040 | 455 | 4,940 | 8,000 | 2,320 | 15,400 | 6,900 | 12,900 | 600 | 960 | 6,680 | 438 |
| 11..... | 4,840 | 860 | 4,140 | 7,780 | 2,660 | 14,700 | 5,360 | 10,500 | 560 | 720 | 5,140 | 375 |
| 12..... | 3,640 | 1,470 | 3,460 | 7,450 | 2,830 | 11,600 | 4,340 | 8,940 | 560 | 600 | 3,010 | 345 |
| 13..... | 2,740 | 2,320 | 3,010 | 7,780 | 2,830 | 8,340 | 3,840 | 6,680 | 560 | 560 | 2,740 | 360 |
| 14..... | 1,470 | 3,190 | 2,680 | 9,060 | 6,130 | 6,680 | 3,370 | 5,360 | 860 | 600 | 1,840 | 375 |
| 15..... | 860 | 4,440 | 1,840 | 11,400 | 8,940 | 5,690 | 3,010 | 4,740 | 2,000 | 1,020 | 1,680 | 375 |
| 16..... | 810 | 7,780 | 1,680 | 10,700 | 9,300 | 4,940 | 2,740 | 4,340 | 1,400 | 1,920 | 1,470 | 375 |
| 17..... | 680 | 9,420 | 1,680 | 8,220 | 8,940 | 4,140 | 2,660 | 3,840 | 1,020 | 2,000 | 1,020 | 375 |
| 18..... | 600 | 8,820 | 2,000 | 6,460 | 8,700 | 3,550 | 2,480 | 3,280 | 960 | 1,760 | 810 | 375 |
| 19..... | 525 | 5,910 | 2,000 | 6,020 | 8,340 | 3,190 | 2,320 | 2,570 | 910 | 1,340 | 760 | 375 |
| 20..... | 490 | 4,140 | 2,320 | 5,360 | 7,120 | 3,010 | 2,480 | 2,160 | 2,240 | 910 | 860 | 375 |
| 21..... | 490 | 3,460 | 2,570 | 4,740 | 5,690 | 2,830 | 3,190 | 2,320 | 3,370 | 720 | 1,270 | 330 |
| 22..... | 490 | 3,010 | 2,920 | 3,940 | 4,740 | 2,740 | 4,240 | 2,830 | 2,920 | 1,270 | 2,080 | 330 |
| 23..... | 455 | 3,190 | 3,010 | 3,370 | 4,040 | 2,830 | 5,360 | 2,400 | 2,080 | 4,740 | 2,160 | 315 |
| 24..... | 455 | 3,460 | 2,160 | 3,190 | 4,940 | 3,010 | 5,580 | 1,920 | 1,540 | 6,460 | 1,400 | 315 |
| 25..... | 455 | 3,010 | 4,540 | 2,920 | 13,000 | 2,830 | 4,940 | 1,680 | 1,840 | 10,900 | 1,080 | 300 |
| 26..... | 438 | 3,190 | 6,900 | 2,480 | 15,600 | 2,660 | 4,540 | 1,470 | 1,470 | 15,600 | 680 | 300 |
| 27..... | 438 | 2,660 | 9,300 | 2,320 | 17,300 | 3,280 | 3,840 | 1,340 | 910 | 16,300 | 560 | 288 |
| 28..... | 438 | 2,160 | 10,400 | 2,660 | 18,400 | 9,550 | 3,190 | 1,270 | 760 | 13,900 | 560 | 275 |
| 29..... | 560 | 1,920 | 8,110 | 2,660 | ----- | 13,500 | 2,660 | 1,140 | 680 | 10,100 | 560 | 275 |
| 30..... | 720 | 1,400 | 6,020 | 2,160 | ----- | 14,200 | 2,240 | 1,080 | 600 | 6,350 | 560 | 275 |
| 31..... | 760 | ----- | 4,940 | 2,160 | ----- | 12,300 | ----- | 960 | ----- | 2,660 | 560 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 5,040 | 438 | 1,130 | 0.252 | 0.29 |
| November..... | 9,420 | 455 | 2,710 | .604 | 1.67 |
| December..... | 10,400 | 1,340 | 4,120 | .918 | 1.06 |
| January..... | 11,400 | 2,160 | 5,690 | 1.27 | 1.46 |
| February..... | 18,400 | 1,680 | 6,020 | 1.34 | 1.40 |
| March..... | 18,200 | 2,660 | 8,680 | 1.98 | 2.22 |
| April..... | 18,400 | 2,240 | 6,870 | 1.53 | 1.71 |
| May..... | 14,200 | 960 | 4,520 | 1.01 | 1.16 |
| June..... | 3,370 | 560 | 1,160 | .258 | .29 |
| July..... | 16,300 | 560 | 3,680 | .820 | .95 |
| August..... | 6,680 | 525 | 1,660 | .370 | .43 |
| September..... | 1,140 | 275 | 462 | .103 | .11 |
| The year..... | 18,400 | 275 | 3,890 | .866 | 11.75 |

TOMBIGBEE RIVER NEAR COATOPA, ALA.

LOCATION.—Chain gage in T. 17 N., R. 1 E., 2 miles above Suwannee Creek and 5 miles southeast of Coatopa.

DRAINAGE AREA.—15,500 square miles.

RECORDS AVAILABLE.—August, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 57,500 second-feet Apr. 8 (gage height, 32.11 feet); minimum, 750 second-feet Sept. 30 (gage height, 2.50 feet).

1928-1931: Maximum discharge, 179,000 second-feet Mar. 29, 1929 (gage height, 51.44 feet); minimum, that of Sept. 30, 1931.

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|-------|
| 1..... | 3,300 | 2,260 | 8,950 | 21,400 | 9,700 | 35,800 | 42,100 | 8,160 | 2,810 | 1,580 | 13,300 | 1,670 |
| 2..... | 2,930 | 2,360 | 9,950 | 16,900 | 9,200 | 36,600 | 43,100 | 7,350 | 2,700 | 1,580 | 9,700 | 1,580 |
| 3..... | 2,360 | 2,360 | 10,400 | 13,900 | 8,700 | 36,600 | 43,100 | 6,790 | 2,470 | 1,410 | 6,790 | 1,580 |
| 4..... | 1,860 | 2,050 | 10,700 | 11,700 | 8,160 | 36,100 | 45,700 | 6,790 | 2,470 | 1,670 | 4,870 | 1,410 |
| 5..... | 1,670 | 1,760 | 11,700 | 13,000 | 7,620 | 34,700 | 51,000 | 7,070 | 2,360 | 1,760 | 3,820 | 1,330 |
| 6..... | 1,580 | 1,760 | 18,900 | 17,700 | 7,350 | 31,900 | 54,000 | 7,890 | 2,260 | 2,470 | 2,810 | 1,580 |
| 7..... | 1,500 | 1,670 | 25,300 | 21,200 | 7,350 | 30,200 | 56,400 | 12,600 | 2,150 | 2,360 | 3,820 | 1,580 |
| 8..... | 1,580 | 1,760 | 30,900 | 24,700 | 6,790 | 31,100 | 67,500 | 19,500 | 2,050 | 2,930 | 4,340 | 1,580 |
| 9..... | 1,860 | 1,950 | 32,900 | 26,700 | 6,790 | 30,600 | 56,600 | 22,000 | 1,860 | 3,560 | 5,950 | 1,410 |
| 10..... | 2,930 | 1,860 | 31,100 | 28,200 | 7,070 | 30,400 | 52,600 | 22,200 | 1,760 | 2,930 | 9,200 | 1,250 |
| 11..... | 4,340 | 1,950 | 25,700 | 29,000 | 7,620 | 30,000 | 45,900 | 22,200 | 1,860 | 2,360 | 11,000 | 1,180 |
| 12..... | 6,790 | 2,360 | 17,900 | 31,500 | 8,160 | 29,200 | 39,300 | 21,000 | 1,760 | 1,950 | 11,200 | 1,100 |
| 13..... | 6,510 | 3,820 | 13,500 | 34,700 | 8,700 | 27,800 | 33,300 | 17,900 | 1,670 | 1,760 | 9,200 | 1,100 |
| 14..... | 5,140 | 7,070 | 13,000 | 36,600 | 9,200 | 24,900 | 26,300 | 15,000 | 1,580 | 1,760 | 7,070 | 1,100 |
| 15..... | 3,820 | 10,700 | 11,700 | 37,200 | 11,000 | 20,200 | 19,800 | 12,100 | 1,410 | 1,760 | 5,950 | 1,030 |
| 16..... | 2,930 | 21,400 | 10,700 | 36,600 | 16,100 | 15,900 | 13,700 | 10,200 | 1,580 | 1,670 | 5,410 | 1,100 |
| 17..... | 2,260 | 35,000 | 10,200 | 33,800 | 21,400 | 13,000 | 12,100 | 8,700 | 1,950 | 1,950 | 3,820 | 1,030 |
| 18..... | 1,950 | 42,000 | 9,450 | 30,000 | 23,400 | 11,700 | 10,700 | 7,890 | 2,580 | 2,360 | 3,180 | 879 |
| 19..... | 1,580 | 45,200 | 9,450 | 28,600 | 23,200 | 10,700 | 9,950 | 7,350 | 2,150 | 2,810 | 2,700 | 1,030 |
| 20..... | 1,580 | 47,500 | 9,450 | 29,000 | 21,800 | 9,950 | 9,200 | 7,890 | 2,050 | 3,180 | 2,700 | 1,030 |
| 21..... | 1,670 | 47,800 | 9,450 | 31,100 | 20,200 | 9,450 | 9,700 | 10,200 | 2,050 | 3,300 | 6,510 | 933 |
| 22..... | 1,580 | 45,400 | 9,950 | 31,100 | 17,500 | 10,200 | 11,000 | 10,400 | 2,470 | 2,580 | 5,680 | 852 |
| 23..... | 1,500 | 40,700 | 10,200 | 25,300 | 15,200 | 9,950 | 13,000 | 9,200 | 3,300 | 2,810 | 4,340 | 866 |
| 24..... | 1,500 | 32,600 | 9,700 | 20,400 | 13,900 | 9,950 | 16,100 | 8,160 | 3,560 | 3,300 | 4,080 | 852 |
| 25..... | 1,500 | 22,000 | 9,200 | 16,700 | 14,400 | 9,450 | 17,100 | 7,070 | 3,560 | 6,510 | 3,820 | 852 |
| 26..... | 1,410 | 15,600 | 9,200 | 14,600 | 19,100 | 9,200 | 15,600 | 5,950 | 3,300 | 10,700 | 3,050 | 812 |
| 27..... | 1,500 | 12,600 | 13,000 | 13,000 | 27,300 | 8,700 | 13,300 | 5,140 | 3,180 | 15,200 | 2,470 | 734 |
| 28..... | 1,500 | 10,700 | 19,800 | 12,100 | 32,900 | 16,100 | 11,400 | 4,600 | 2,580 | 17,300 | 1,950 | 670 |
| 29..... | 1,580 | 9,450 | 25,700 | 11,700 | ----- | 25,500 | 10,200 | 4,080 | 2,260 | 15,900 | 1,860 | 653 |
| 30..... | 1,860 | 8,950 | 27,600 | 11,000 | ----- | 34,200 | 9,200 | 3,180 | 1,950 | 19,100 | 1,670 | 582 |
| 31..... | 2,050 | ----- | 25,300 | 10,400 | ----- | 39,300 | ----- | 2,930 | ----- | 17,100 | 1,500 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|--------|-----------------|-------------------|
| October..... | 6,790 | 1,410 | 2,460 | 0.159 | 0.18 |
| November..... | 47,800 | 1,670 | 16,100 | 1.04 | 1.16 |
| December..... | 32,900 | 8,950 | 15,800 | 1.02 | 1.18 |
| January..... | 37,200 | 10,400 | 23,200 | 1.50 | 1.73 |
| February..... | 32,900 | 6,790 | 13,900 | .897 | .93 |
| March..... | 39,300 | 8,700 | 22,900 | 1.48 | 1.71 |
| April..... | 57,500 | 9,200 | 28,300 | 1.83 | 2.04 |
| May..... | 22,200 | 2,930 | 10,400 | .671 | .77 |
| June..... | 3,560 | 1,410 | 2,320 | .150 | .17 |
| July..... | 19,100 | 1,410 | 5,180 | .334 | .39 |
| August..... | 13,300 | 1,500 | 5,280 | .341 | .39 |
| September..... | 1,670 | 582 | 1,110 | .072 | .08 |
| The year..... | 57,500 | 582 | 12,200 | .787 | 10.73 |

TOMBIGBEE RIVER NEAR LEROY, ALA.

LOCATION.—Staff gage just above Lock 1 in T. 7 N., on St. Stephens meridian, 6 miles northwest of Leroy. Zero of gage is 4.69 feet below mean sea level.

DRAINAGE AREA.—19,100 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 62,500 second-feet Apr. 10, 11 (gage height, 33.9 feet); minimum not determined.

1928-1931: Maximum discharge, 190,000 second-feet Apr. 2, 1929 (gage height, 46.0 feet); minimum not determined.

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|-------|
| 1..... | 5,220 | 2,790 | 16,500 | 28,200 | 15,100 | 32,800 | 37,600 | 12,900 | 4,260 | 3,090 | 21,600 | 2,380 |
| 2..... | 5,020 | 3,090 | 17,800 | 26,200 | 13,600 | 36,100 | 41,600 | 11,600 | 3,730 | 2,790 | 18,400 | 2,380 |
| 3..... | 4,450 | 3,240 | 16,500 | 23,300 | 12,900 | 38,500 | 44,100 | 11,000 | 3,400 | 2,510 | 14,400 | 2,380 |
| 4..... | 3,730 | 3,240 | 15,100 | 20,100 | 12,300 | 39,900 | 46,300 | 9,910 | 3,400 | 2,250 | 9,910 | 2,380 |
| 5..... | 3,560 | 3,240 | 15,800 | 20,100 | 11,600 | 39,900 | 51,100 | 8,850 | 3,400 | 2,510 | 6,940 | 2,380 |
| 6..... | 3,240 | 2,790 | 20,100 | 22,500 | 11,000 | 38,800 | 54,400 | 9,910 | 2,940 | 2,940 | 5,020 | 2,380 |
| 7..... | 2,790 | 2,790 | 25,000 | 25,000 | 10,500 | 38,200 | 57,600 | 11,000 | 2,790 | 3,400 | 4,260 | 2,380 |
| 8..... | 2,650 | 2,650 | 27,400 | 26,200 | 9,910 | 39,900 | 60,000 | 16,500 | 2,650 | 3,730 | 4,830 | 2,510 |
| 9..... | 2,790 | 2,650 | 29,200 | 27,700 | 9,910 | 40,200 | 62,000 | 22,000 | 2,510 | 4,080 | 6,050 | 2,650 |
| 10..... | 3,900 | 2,650 | 31,500 | 28,800 | 9,910 | 38,800 | 62,500 | 24,400 | 2,510 | 4,260 | 8,850 | 2,510 |
| 11..... | 4,830 | 3,560 | 31,800 | 29,800 | 9,910 | 37,000 | 62,500 | 24,700 | 2,510 | 3,560 | 12,300 | 2,000 |
| 12..... | 5,630 | 6,940 | 30,000 | 32,500 | 10,500 | 35,500 | 60,500 | 24,700 | 2,510 | 3,240 | 14,400 | 1,880 |
| 13..... | 7,870 | 7,870 | 27,400 | 37,000 | 11,600 | 34,300 | 55,300 | 24,400 | 2,510 | 2,790 | 13,600 | 1,770 |
| 14..... | 7,870 | 9,910 | 23,300 | 39,200 | 14,400 | 32,500 | 47,900 | 22,900 | 2,380 | 2,510 | 11,000 | 1,660 |
| 15..... | 6,940 | 13,600 | 19,500 | 40,600 | 19,000 | 30,500 | 39,900 | 19,000 | 2,250 | 2,250 | 8,850 | 1,660 |
| 16..... | 5,630 | 24,000 | 17,800 | 41,000 | 20,100 | 28,000 | 32,200 | 15,800 | 2,250 | 2,380 | 8,350 | 1,660 |
| 17..... | 4,080 | 32,500 | 15,800 | 41,000 | 23,300 | 23,700 | 27,700 | 12,900 | 1,500 | 2,940 | 8,850 | 1,660 |
| 18..... | 3,400 | 39,200 | 15,100 | 41,000 | 25,900 | 20,100 | 23,700 | 11,000 | 1,500 | 3,560 | 7,870 | 1,660 |
| 19..... | 2,940 | 43,800 | 15,100 | 39,900 | 27,400 | 17,800 | 16,500 | 9,910 | 4,080 | 4,080 | 6,050 | 1,550 |
| 20..... | 2,940 | 46,700 | 14,400 | 38,200 | 27,400 | 15,100 | 15,100 | 12,300 | 2,250 | 4,080 | 4,830 | 1,440 |
| 21..... | 2,790 | 49,500 | 13,600 | 36,700 | 26,800 | 14,400 | 13,600 | 22,500 | 2,250 | 4,080 | 5,220 | 1,440 |
| 22..... | 2,650 | 50,700 | 12,900 | 36,100 | 25,600 | 15,800 | 14,400 | 23,700 | 2,380 | 4,080 | 7,870 | 1,440 |
| 23..... | 2,510 | 51,100 | 12,900 | 34,900 | 23,700 | 17,200 | 16,500 | 19,500 | 3,400 | 4,260 | 7,400 | 1,440 |
| 24..... | 2,250 | 49,500 | 12,900 | 32,000 | 22,900 | 16,500 | 19,000 | 13,600 | 3,900 | 5,020 | 6,050 | 1,440 |
| 25..... | 2,120 | 40,600 | 12,900 | 28,800 | 23,300 | 15,100 | 21,100 | 11,000 | 4,080 | 6,490 | 5,220 | 1,440 |
| 26..... | 2,120 | 36,100 | 13,600 | 25,600 | 23,700 | 13,600 | 21,600 | 9,910 | 4,450 | 8,850 | 5,020 | 1,440 |
| 27..... | 2,120 | 29,200 | 15,100 | 22,000 | 25,300 | 13,600 | 21,100 | 8,850 | 4,260 | 12,300 | 4,450 | 1,440 |
| 28..... | 2,250 | 24,000 | 19,500 | 19,500 | 28,800 | 17,800 | 19,000 | 7,870 | 3,900 | 17,200 | 3,400 | 1,440 |
| 29..... | 2,380 | 17,800 | 24,400 | 17,800 | ----- | 25,000 | 16,500 | 6,050 | 3,730 | 20,600 | 2,790 | 1,210 |
| 30..... | 2,380 | 15,100 | 26,800 | 16,500 | ----- | 28,800 | 15,100 | 5,220 | 3,400 | 22,900 | 2,650 | 1,080 |
| 31..... | 2,510 | ----- | 28,400 | 15,800 | ----- | 32,500 | ----- | 4,450 | ----- | 23,300 | 2,380 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|--------|------------------|-------------------|
| October..... | 7,870 | 2,120 | 3,730 | 0.195 | 0.22 |
| November..... | 51,100 | 2,650 | 20,700 | 1.0 ³ | 1.20 |
| December..... | 31,800 | 12,900 | 19,900 | 1.0 ⁴ | 1.20 |
| January..... | 41,000 | 15,800 | 29,500 | 1.5 ⁴ | 1.78 |
| February..... | 28,800 | 9,910 | 18,100 | .9 ⁴ | .99 |
| March..... | 40,200 | 13,600 | 28,000 | 1.4 ⁷ | 1.70 |
| April..... | 62,500 | 13,600 | 35,900 | 1.8 ³ | 2.10 |
| May..... | 24,700 | 4,450 | 14,500 | .759 | .88 |
| June..... | 4,450 | ----- | 2,950 | .154 | .17 |
| July..... | 23,300 | 2,250 | 6,190 | .324 | .37 |
| August..... | 21,600 | 2,380 | 8,030 | .420 | .48 |
| September..... | 2,650 | 1,080 | 1,840 | .076 | .11 |
| The year..... | 62,500 | ----- | 15,800 | .827 | 11.20 |

BUTTAHATCHIE RIVER NEAR CALEDONIA, MISS.

LOCATION.—Staff gage at highway bridge 2 miles northwest of Caledonia, Lowndes County, and 12 miles above mouth.

DRAINAGE AREA.—830 square miles.

RECORDS AVAILABLE.—August, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 7,350 second-feet Mar. 31 (gage height, 13.20 feet); minimum, 87 second-feet Sept. 30 (gage height, 2.42 feet).

1928-1931: Maximum discharge, 29,600 second-feet Nov. 15, 1929 (gage height, 17.36 feet); minimum, that of Sept. 30, 1931.

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 278 | 353 | 670 | 975 | 640 | 3,500 | 6,000 | 800 | 328 | 216 | 228 | 190 |
| 2..... | 240 | 303 | 940 | 870 | 610 | 2,680 | 4,590 | 765 | 340 | 203 | 203 | 160 |
| 3..... | 228 | 278 | 905 | 800 | 610 | 2,400 | 4,190 | 765 | 340 | 228 | 190 | 166 |
| 4..... | 203 | 290 | 730 | 765 | 580 | 2,040 | 4,590 | 730 | 316 | 240 | 178 | 153 |
| 5..... | 203 | 278 | 730 | 870 | 550 | 1,700 | 4,390 | 700 | 290 | 216 | 166 | 156 |
| 6..... | 190 | 290 | 940 | 1,120 | 550 | 1,450 | 3,830 | 1,120 | 278 | 203 | 160 | 150 |
| 7..... | 190 | 290 | 1,400 | 1,450 | 550 | 1,600 | 4,100 | 1,500 | 266 | 253 | 190 | 148 |
| 8..... | 290 | 290 | 1,500 | 1,400 | 550 | 1,920 | 4,290 | 2,100 | 253 | 290 | 550 | 136 |
| 9..... | 700 | 278 | 1,200 | 1,320 | 610 | 2,400 | 3,180 | 2,040 | 228 | 303 | 1,010 | 128 |
| 10..... | 1,400 | 290 | 940 | 1,500 | 905 | 3,030 | 2,160 | 1,500 | 228 | 240 | 1,160 | 123 |
| 11..... | 1,010 | 353 | 835 | 1,360 | 1,160 | 3,340 | 1,650 | 1,450 | 216 | 216 | 765 | 118 |
| 12..... | 550 | 520 | 765 | 1,360 | 905 | 2,610 | 1,450 | 1,160 | 216 | 178 | 580 | 116 |
| 13..... | 430 | 730 | 730 | 1,650 | 835 | 1,750 | 1,280 | 905 | 316 | 166 | 378 | 113 |
| 14..... | 366 | 800 | 670 | 2,040 | 1,120 | 1,400 | 1,160 | 800 | 835 | 156 | 290 | 120 |
| 15..... | 340 | 700 | 640 | 1,980 | 1,650 | 1,240 | 1,040 | 730 | 610 | 150 | 240 | 150 |
| 16..... | 316 | 1,040 | 640 | 1,500 | 2,220 | 1,120 | 1,010 | 670 | 378 | 148 | 228 | 190 |
| 17..... | 303 | 1,600 | 640 | 1,240 | 2,540 | 1,040 | 940 | 610 | 290 | 158 | 216 | 170 |
| 18..... | 290 | 2,040 | 640 | 1,200 | 2,280 | 940 | 870 | 550 | 266 | 178 | 216 | 133 |
| 19..... | 278 | 2,280 | 640 | 1,280 | 1,920 | 905 | 835 | 580 | 240 | 170 | 303 | 120 |
| 20..... | 278 | 1,600 | 670 | 1,320 | 1,550 | 870 | 800 | 610 | 253 | 178 | 290 | 113 |
| 21..... | 266 | 975 | 730 | 1,160 | 1,280 | 835 | 870 | 700 | 240 | 203 | 490 | 116 |
| 22..... | 253 | 835 | 730 | 1,010 | 1,160 | 800 | 1,320 | 765 | 216 | 278 | 550 | 113 |
| 23..... | 253 | 835 | 640 | 940 | 1,040 | 800 | 1,860 | 670 | 266 | 765 | 430 | 106 |
| 24..... | 253 | 1,010 | 610 | 870 | 1,160 | 800 | 2,220 | 550 | 290 | 670 | 303 | 99 |
| 25..... | 253 | 940 | 580 | 835 | 1,860 | 765 | 1,920 | 490 | 253 | 1,040 | 228 | 97 |
| 26..... | 266 | 730 | 765 | 765 | 2,400 | 730 | 1,400 | 430 | 253 | 670 | 190 | 95 |
| 27..... | 266 | 670 | 1,240 | 765 | 3,030 | 870 | 1,240 | 430 | 253 | 430 | 178 | 95 |
| 28..... | 290 | 610 | 1,800 | 730 | 3,660 | 1,920 | 1,080 | 390 | 266 | 403 | 178 | 93 |
| 29..... | 366 | 550 | 2,040 | 700 | ----- | 2,540 | 940 | 378 | 366 | 328 | 178 | 91 |
| 30..... | 430 | 550 | 1,550 | 670 | ----- | 3,260 | 835 | 353 | 253 | 290 | 190 | 87 |
| 31..... | 430 | ----- | 1,160 | 640 | ----- | 6,000 | ----- | 340 | ----- | 266 | 190 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 1,400 | 190 | 368 | 0.443 | 0.51 |
| November..... | 2,280 | 278 | 744 | .896 | 1.00 |
| December..... | 2,040 | 580 | 925 | 1.11 | 1.28 |
| January..... | 2,040 | 640 | 1,130 | 1.36 | 1.57 |
| February..... | 3,660 | 550 | 1,350 | 1.63 | 1.70 |
| March..... | 6,000 | 730 | 1,850 | 2.23 | 2.57 |
| April..... | 6,000 | 800 | 2,200 | 2.65 | 2.96 |
| May..... | 2,100 | 340 | 825 | .994 | 1.15 |
| June..... | 835 | 216 | 305 | .367 | .41 |
| July..... | 1,040 | 148 | 304 | .366 | .42 |
| August..... | 1,160 | 160 | 343 | .413 | .48 |
| September..... | 190 | 87 | 128 | .154 | .17 |
| The year..... | 6,000 | 87 | 869 | 1.05 | 14.22 |

SIPSEY RIVER NEAR ELROD, ALA.

LOCATION.—Chain gage in T. 21 S., R. 12 W., at Mobile & Ohio Railroad bridge 1½ miles east of Elrod.

DRAINAGE AREA.—515 square miles.

RECORDS AVAILABLE.—August, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 4,690 second-feet Apr. 5 (gage height, 11.74 feet); minimum discharge, 33 second-feet Sept. 28–30; minimum gage height, 0.34 foot Sept. 30.

1928–1931: Maximum discharge, 15,500 second-feet Nov. 17, 1929 (gage height, 14.10 feet); minimum discharge, 30 second-feet Aug. 24, 1929; minimum gage height, 0.34 foot Sept. 30, 1931.

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1930–31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|------|-------|------|-------|-------|------|-------|-----|-------|------|------|-------|
| 1 | 184 | 200 | 508 | 855 | 526 | 785 | 855 | 454 | 160 | 65 | 144 | 62 |
| 2 | 168 | 176 | 517 | 910 | 490 | 805 | 1,180 | 391 | 152 | 58 | 168 | 55 |
| 3 | 136 | 152 | 526 | 975 | 463 | 855 | 2,510 | 364 | 128 | 48 | 144 | 55 |
| 4 | 104 | 152 | 517 | 1,010 | 436 | 855 | 4,350 | 355 | 120 | 50 | 104 | 62 |
| 5 | 90 | 152 | 571 | 975 | 409 | 855 | 4,690 | 391 | 120 | 68 | 83 | 71 |
| 6 | 83 | 144 | 672 | 910 | 400 | 830 | 3,430 | 463 | 112 | 83 | 77 | 68 |
| 7 | 86 | 136 | 725 | 830 | 382 | 805 | 2,710 | 553 | 104 | 97 | 120 | 58 |
| 8 | 104 | 128 | 745 | 805 | 373 | 765 | 2,330 | 553 | 90 | 112 | 319 | 52 |
| 9 | 200 | 120 | 765 | 830 | 391 | 725 | 2,030 | 553 | 83 | 120 | 445 | 50 |
| 10 | 301 | 120 | 785 | 855 | 436 | 672 | 1,780 | 571 | 77 | 168 | 445 | 50 |
| 11 | 274 | 144 | 855 | 910 | 463 | 656 | 1,590 | 591 | 74 | 200 | 436 | 45 |
| 12 | 192 | 265 | 880 | 1,050 | 499 | 656 | 1,440 | 602 | 71 | 184 | 427 | 42 |
| 13 | 152 | 481 | 880 | 1,180 | 526 | 689 | 1,240 | 571 | 68 | 120 | 373 | 40 |
| 14 | 144 | 535 | 830 | 1,180 | 562 | 725 | 1,050 | 499 | 71 | 86 | 216 | 40 |
| 15 | 136 | 672 | 707 | 1,140 | 591 | 745 | 880 | 409 | 74 | 74 | 152 | 42 |
| 16 | 120 | 940 | 591 | 1,090 | 614 | 707 | 707 | 346 | 80 | 68 | 128 | 45 |
| 17 | 104 | 1,360 | 562 | 1,090 | 656 | 656 | 581 | 301 | 83 | 58 | 120 | 48 |
| 18 | 90 | 1,780 | 535 | 1,140 | 707 | 562 | 535 | 265 | 65 | 62 | 128 | 48 |
| 19 | 90 | 1,590 | 517 | 1,240 | 765 | 517 | 481 | 240 | 74 | 104 | 104 | 45 |
| 20 | 90 | 1,510 | 499 | 1,300 | 855 | 463 | 445 | 265 | 168 | 128 | 104 | 40 |
| 21 | 90 | 1,440 | 499 | 1,300 | 940 | 427 | 445 | 310 | 265 | 120 | 144 | 38 |
| 22 | 86 | 1,510 | 508 | 1,240 | 1,010 | 427 | 481 | 355 | 283 | 136 | 136 | 40 |
| 23 | 83 | 1,440 | 508 | 1,180 | 1,140 | 436 | 535 | 382 | 192 | 144 | 136 | 40 |
| 24 | 83 | 1,300 | 499 | 1,140 | 1,240 | 427 | 544 | 400 | 128 | 192 | 104 | 40 |
| 25 | 83 | 1,140 | 499 | 1,090 | 1,010 | 418 | 562 | 382 | 112 | 319 | 112 | 38 |
| 26 | 83 | 940 | 535 | 1,010 | 910 | 400 | 591 | 301 | 112 | 400 | 104 | 35 |
| 27 | 83 | 805 | 614 | 910 | 830 | 418 | 614 | 248 | 104 | 364 | 86 | 35 |
| 28 | 104 | 707 | 641 | 830 | 805 | 436 | 641 | 216 | 90 | 292 | 68 | 33 |
| 29 | 184 | 614 | 689 | 725 | ----- | 526 | 614 | 192 | 74 | 216 | 62 | 33 |
| 30 | 265 | 517 | 745 | 627 | ----- | 627 | 535 | 176 | 68 | 160 | 62 | 33 |
| 31 | 176 | ----- | 805 | 571 | ----- | 745 | ----- | 168 | ----- | 128 | 65 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------|---------|---------|-------|-----------------|-------------------|
| October | 301 | 83 | 134 | 0.260 | 0.30 |
| November | 1,780 | 120 | 706 | 1.37 | 1.53 |
| December | 880 | 499 | 636 | 1.23 | 1.42 |
| January | 1,300 | 571 | 997 | 1.94 | 2.24 |
| February | 1,240 | 373 | 658 | 1.28 | 1.33 |
| March | 855 | 400 | 633 | 1.23 | 1.42 |
| April | 4,690 | 445 | 1,350 | 2.62 | 2.92 |
| May | 602 | 168 | 383 | .744 | .86 |
| June | 283 | 65 | 113 | .219 | .24 |
| July | 400 | 48 | 143 | .278 | .32 |
| August | 445 | 62 | 171 | .332 | .38 |
| September | 71 | 33 | 46.1 | .090 | .10 |
| The year | 4,690 | 33 | 495 | .961 | 13.06 |

NOXUBEE RIVER AT MACON, MISS.

LOCATION.—Chain gage in T. 15 N., R. 17 E. Choctaw meridian, in Macon.

DRAINAGE AREA.—812 square miles.

RECORDS AVAILABLE.—August, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 4,670 second-feet Mar. 28 (gage height, 22.3 feet); minimum, 38 second-feet Sept. 29, 30 (gage height, 2.40 feet).

1928-1931: Maximum discharge, 10,200 second-feet May 20, 1929 (gage height, 29.58 feet); minimum, that of Sept. 30, 1931.

Maximum stage known, 31.5 feet July, 1892.

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|
| 1..... | 62 | 65 | 537 | 480 | 222 | 2,160 | 2,830 | 213 | 68 | 56 | 1,310 | 59 |
| 2..... | 59 | 65 | 537 | 371 | 213 | 2,300 | 2,850 | 188 | 65 | 89 | 389 | 59 |
| 3..... | 56 | 72 | 443 | 299 | 204 | 2,060 | 2,280 | 180 | 72 | 72 | 281 | 76 |
| 4..... | 56 | 80 | 389 | 299 | 188 | 1,440 | 3,080 | 180 | 68 | 80 | 230 | 65 |
| 5..... | 56 | 76 | 1,770 | 1,150 | 172 | 976 | 2,570 | 180 | 62 | 76 | 149 | 56 |
| 6..... | 56 | 72 | 2,420 | 1,490 | 164 | 632 | 2,410 | 892 | 65 | 84 | 122 | 53 |
| 7..... | 53 | 68 | 1,990 | 1,020 | 164 | 1,130 | 2,130 | 892 | 59 | 99 | 172 | 56 |
| 8..... | 56 | 68 | 1,170 | 1,130 | 164 | 2,300 | 1,880 | 518 | 56 | 99 | 188 | 56 |
| 9..... | 68 | 68 | 934 | 1,150 | 172 | 2,230 | 1,680 | 518 | 56 | 72 | 247 | 53 |
| 10..... | 142 | 68 | 690 | 934 | 172 | 1,730 | 1,150 | 443 | 53 | 65 | 204 | 50 |
| 11..... | 164 | 110 | 480 | 790 | 172 | 1,610 | 575 | 317 | 53 | 56 | 135 | 53 |
| 12..... | 222 | 149 | 389 | 2,250 | 172 | 1,580 | 443 | 196 | 50 | 48 | 122 | 50 |
| 13..... | 188 | 204 | 317 | 2,520 | 188 | 997 | 389 | 156 | 53 | 48 | 89 | 48 |
| 14..... | 128 | 230 | 299 | 2,060 | 371 | 556 | 353 | 135 | 59 | 48 | 72 | 48 |
| 15..... | 94 | 461 | 264 | 1,370 | 594 | 407 | 317 | 128 | 53 | 56 | 62 | 48 |
| 16..... | 84 | 1,500 | 264 | 913 | 710 | 353 | 281 | 110 | 53 | 135 | 72 | 50 |
| 17..... | 72 | | 281 | 770 | 770 | 317 | 281 | 104 | 59 | 110 | 62 | 43 |
| 18..... | 65 | | 264 | 1,630 | 670 | 281 | 247 | 99 | 68 | 99 | 72 | 48 |
| 19..... | 62 | | 281 | 2,350 | 575 | 264 | 230 | 89 | 72 | 72 | 68 | 48 |
| 20..... | 62 | | 407 | 1,650 | 518 | 247 | 264 | 128 | 264 | 68 | 68 | 48 |
| 21..... | 59 | 1,500 | 443 | 976 | 389 | 230 | 499 | 335 | 164 | 142 | 94 | 48 |
| 22..... | 59 | | 371 | 750 | 353 | 264 | 1,440 | 371 | 222 | 116 | 84 | 48 |
| 23..... | 56 | | 353 | 594 | 371 | 264 | 1,820 | 247 | 116 | 110 | 76 | 46 |
| 24..... | 56 | | 651 | 461 | 651 | 247 | 1,370 | 247 | 80 | 670 | 65 | 43 |
| 25..... | 56 | | 1,130 | 389 | 1,730 | 247 | 1,100 | 196 | 104 | 1,360 | 65 | 43 |
| 26..... | 59 | 353 | 1,650 | 353 | 1,680 | 247 | 871 | 142 | 122 | 1,890 | 76 | 40 |
| 27..... | 62 | 281 | 1,820 | 335 | 1,440 | 1,480 | 518 | 110 | 99 | 2,600 | 68 | 40 |
| 28..... | 62 | 213 | 1,490 | 299 | 1,440 | 4,030 | 371 | 94 | 80 | 3,240 | 62 | 40 |
| 29..... | 65 | 222 | 1,240 | 264 | ----- | 3,230 | 299 | 84 | 68 | 3,380 | 56 | 38 |
| 30..... | 80 | 480 | 997 | 247 | ----- | 1,770 | 264 | 76 | 65 | 3,580 | 59 | 38 |
| 31..... | 72 | ----- | 690 | 230 | ----- | 1,420 | ----- | 72 | ----- | 2,830 | 65 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 222 | 53 | 80.4 | 0.099 | 0.11 |
| November..... | ----- | 65 | 514 | .633 | .71 |
| December..... | 2,420 | 264 | 805 | .991 | 1.14 |
| January..... | 2,520 | 230 | 952 | 1.17 | 1.35 |
| February..... | 1,730 | 164 | 522 | .643 | .67 |
| March..... | 4,030 | 260 | 1,190 | 1.47 | 1.70 |
| April..... | 3,080 | 230 | 1,160 | 1.43 | 1.60 |
| May..... | 892 | 72 | 246 | .303 | .35 |
| June..... | 264 | 50 | 84.3 | .104 | .12 |
| July..... | 3,580 | 48 | 692 | .852 | .98 |
| August..... | 1,310 | 56 | 158 | .195 | .22 |
| September..... | 76 | 38 | 49.9 | .061 | .07 |
| The year..... | 4,030 | 38 | 539 | .664 | 9.02 |

MULBERRY FORK OF BLACK WARRIOR RIVER NEAR GARDEN CITY, ALA.

LOCATION.—Chain gage in T. 12 S., R. 2 W., 1,000 feet below Louisville & Nashville Railroad and 1 mile southwest of Garden City.

DRAINAGE AREA.—365 square miles.

RECORDS AVAILABLE.—June, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 6,250 second-feet Nov. 16 (gage height, 8.59 feet); minimum, 3 second-feet Sept. 28-30 (gage height, 1.88 feet).

1928-1931: Maximum discharge, 30,400 second-feet Nov. 14, 1929 (gage height, 17.96 feet); minimum, that of Sept. 28-30, 1931.

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------------|---------|-------|-------|-------|---------|-------|-------|-----|-------|------|-----------------|-------------------|
| 1..... | 23 | 18 | 180 | 380 | 312 | 1,230 | 1,500 | 177 | 31 | 14 | 52 | 6 |
| 2..... | 18 | 16 | 171 | 335 | 270 | 1,070 | 1,230 | 212 | 29 | 10 | 28 | 6 |
| 3..... | 15 | 15 | 141 | 335 | 250 | 850 | 1,030 | 187 | 28 | 20 | 18 | 6 |
| 4..... | 13 | 14 | 118 | 312 | 240 | 720 | 1,070 | 380 | 25 | 222 | 11 | 6 |
| 5..... | 11 | 12 | 460 | 752 | 226 | 600 | 1,680 | 485 | 22 | 215 | 10 | 5 |
| 6..... | 10 | 11 | 1,150 | 1,150 | 212 | 512 | 1,230 | 405 | 21 | 112 | 1,320 | 5 |
| 7..... | 9 | 11 | 690 | 785 | 198 | 690 | 1,070 | 335 | 18 | 62 | 1,340 | 6 |
| 8..... | 44 | 11 | 570 | 1,030 | 177 | 630 | 920 | 270 | 15 | 57 | 405 | 5 |
| 9..... | 98 | 11 | 458 | 955 | 290 | 485 | 785 | 240 | 15 | 37 | 232 | 5 |
| 10..... | 42 | 14 | 380 | 850 | 358 | 405 | 660 | 270 | 14 | 28 | 141 | 5 |
| 11..... | 32 | 18 | 405 | 785 | 246 | 380 | 600 | 201 | 13 | 20 | 82 | 5 |
| 12..... | 23 | 26 | 358 | 1,150 | 215 | 358 | 485 | 174 | 12 | 16 | 50 | 4 |
| 13..... | 19 | 37 | 312 | 1,070 | 260 | 312 | 430 | 150 | 11 | 11 | 38 | 5 |
| 14..... | 15 | 91 | 290 | 920 | 955 | 312 | 405 | 141 | 11 | 9 | 30 | 11 |
| 15..... | 14 | 490 | 270 | 752 | 600 | 290 | 358 | 138 | 15 | 7 | 24 | 9 |
| 16..... | 12 | 5,100 | 270 | 690 | 570 | 290 | 335 | 110 | 15 | 12 | 19 | 8 |
| 17..... | 11 | 818 | 270 | 690 | 660 | 246 | 312 | 93 | 13 | 11 | 22 | 7 |
| 18..... | 11 | 512 | 290 | 1,770 | 600 | 232 | 270 | 87 | 14 | 10 | 18 | 6 |
| 19..... | 11 | 358 | 290 | 1,320 | 540 | 229 | 290 | 93 | 12 | 31 | 15 | 6 |
| 20..... | 10 | 270 | 290 | 1,030 | 540 | 218 | 785 | 102 | 14 | 17 | 28 | 5 |
| 21..... | 10 | 218 | 270 | 885 | 512 | 226 | 405 | 110 | 12 | 15 | 29 | 5 |
| 22..... | 9 | 222 | 250 | 850 | 458 | 222 | 485 | 89 | 241 | 35 | 18 | 4 |
| 23..... | 9 | 201 | 246 | 720 | 405 | 222 | 380 | 72 | 132 | 123 | 15 | 5 |
| 24..... | 10 | 187 | 232 | 630 | 1,090 | 222 | 335 | 64 | 50 | 174 | 14 | 5 |
| 25..... | 9 | 174 | 222 | 540 | 3,290 | 215 | 290 | 56 | 33 | 57 | 13 | 5 |
| 26..... | 8 | 153 | 540 | 512 | 2,070 | 215 | 270 | 50 | 24 | 28 | 12 | 4 |
| 27..... | 8 | 132 | 660 | 458 | 1,500 | 270 | 232 | 49 | 18 | 22 | 10 | 4 |
| 28..... | 13 | 115 | 570 | 430 | 1,410 | 2,760 | 204 | 43 | 13 | 30 | 8 | 3 |
| 29..... | 22 | 105 | 512 | 380 | ----- | 1,770 | 187 | 38 | 11 | 66 | 7 | 3 |
| 30..... | 21 | 123 | 458 | 358 | ----- | 1,070 | 171 | 35 | 10 | 42 | 8 | 3 |
| 31..... | 19 | ----- | 405 | 335 | ----- | 990 | ----- | 33 | ----- | 22 | 7 | ----- |
| Month | Maximum | | | | Minimum | | | | Mean | | Per square mile | Run-off in inches |
| October..... | 98 | | | | 8 | | | | 18.7 | | 0.051 | 0.06 |
| November..... | 5,100 | | | | 11. | | | | 316 | | .866 | .97 |
| December..... | 1,150 | | | | 118 | | | | 378 | | 1.04 | 1.20 |
| January..... | 1,770 | | | | 312 | | | | 747 | | 2.05 | 2.36 |
| February..... | 3,290 | | | | 177 | | | | 659 | | 1.81 | 1.88 |
| March..... | 2,750 | | | | 215 | | | | 588 | | 1.61 | 1.86 |
| April..... | 2,070 | | | | 171 | | | | 647 | | 1.77 | 1.98 |
| May..... | 485 | | | | 33 | | | | 158 | | .433 | .50 |
| June..... | 241 | | | | 10 | | | | 29.7 | | .081 | .09 |
| July..... | 222 | | | | 7 | | | | 49.5 | | .136 | .16 |
| August..... | 1,340 | | | | 7 | | | | 130 | | .356 | .41 |
| September..... | 11 | | | | 3 | | | | 5.40 | | .015 | .02 |
| The year..... | 5,100 | | | | 3 | | | | 308 | | .844 | 11.49 |

BLACK WARRIOR RIVER AT LOCK 17, NEAR BESSEMER, ALA.

LOCATION.—Staff gage in T. 18 S., R. 8 W., $1\frac{1}{2}$ miles below Big Yellow Creek and 23 miles west of Bessemer. Zero of gage is 173.11 feet above mean sea level.

DRAINAGE AREA.—3,980 square miles.

RECORDS AVAILABLE.—June, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 54,800 second-feet Nov. 16 (gage height, 75.20 feet); minimum not determined.

1928-1931: Maximum discharge, 133,000 second-feet Nov. 15, 1929 (gage height, 79.94 feet); minimum not determined.

Maximum stage known, 80.3 feet July 9, 1916.

REMARKS.—Records poor. Daily discharge not sufficiently accurate for publication. Flow regulated by storage above Lock and Dam 17. Records do not include leaks and by-passed water which probably amounts to 15 second-feet Oct. 1 to Mar. 31, 20 second-feet Apr. 1 to Sept. 28, and 170 second-feet Sept. 29 and 30.

Monthly discharge, in second-feet, 1930-31

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|--------|-----------------|-------------------|
| October..... | 1, 120 | 82 | 355 | 0.089 | 0.10 |
| November..... | 50, 600 | 134 | 6, 270 | 1.58 | 1.76 |
| December..... | 14, 400 | 1, 760 | 3, 990 | 1.00 | 1.15 |
| January..... | 14, 400 | 2, 610 | 6, 880 | 1.73 | 1.90 |
| February..... | 17, 400 | 1, 510 | 4, 960 | 1.25 | 1.30 |
| March..... | 27, 600 | 1, 760 | 5, 650 | 1.42 | 1.64 |
| April..... | 33, 600 | 1, 630 | 7, 860 | 1.97 | 2.20 |
| May..... | 3, 190 | 440 | 1, 450 | .364 | .42 |
| June..... | 860 | 220 | 389 | .098 | .11 |
| July..... | 770 | 220 | 410 | .103 | .12 |
| August..... | 2, 280 | 166 | 666 | .167 | .19 |
| September..... | 150 | ----- | 65.4 | .016 | .02 |
| The year..... | 50, 600 | ----- | 3, 230 | .812 | 11.00 |

BLACK WARRIOR RIVER AT TUSCALOOSA, ALA.

LOCATION.—Staff gage in T. 21 S., R. 10 W., at Lock 10, in Tuscaloosa. Zero of gage is 82.97 feet above mean sea level.

DRAINAGE AREA.—4,830 square miles.

RECORDS AVAILABLE.—January, 1889, to December, 1905; August, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 55,500 second-feet Nov. 17 (gage height, 49.80 feet); minimum, 161 second-feet Sept. 30 (gage height, 18.40 feet).

1889–1905, 1928–1931: Maximum discharge, 215,000 second-feet Apr. 18, 1900 (gage height, 67.7 feet); minimum (estimated), 50 second-feet Aug. 26, 1929 (gage height, 18.22 feet).

REMARKS.—Records good except those for low stages, which are poor to fair.

Daily and monthly discharge, in second-feet, 1930–31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|
| 1. | 758 | 609 | 2,890 | 5,730 | 3,630 | 10,000 | 15,100 | 2,260 | 540 | 303 | 518 | 367 |
| 2. | 507 | 562 | 3,630 | 4,780 | 3,250 | 8,950 | 20,800 | 2,120 | 507 | 303 | 609 | 306 |
| 3. | 403 | 546 | 3,250 | 4,420 | 3,070 | 7,760 | 16,800 | 2,120 | 496 | 373 | 597 | 306 |
| 4. | 403 | 490 | 2,890 | 4,030 | 2,890 | 7,260 | 35,400 | 2,120 | 443 | 403 | 540 | 412 |
| 5. | 423 | 463 | 5,430 | 7,010 | 2,560 | 6,760 | 37,400 | 1,980 | 443 | 485 | 529 | 332 |
| 6. | 433 | 463 | 17,100 | 9,400 | 2,410 | 6,000 | 28,000 | 4,030 | 433 | 881 | 529 | 280 |
| 7. | 403 | 453 | 16,600 | 9,400 | 2,410 | 6,000 | 19,700 | 5,110 | 383 | 719 | 771 | 255 |
| 8. | 496 | 423 | 11,800 | 9,830 | 2,260 | 6,760 | 15,700 | 4,600 | 343 | 669 | 3,420 | 255 |
| 9. | 1,080 | 423 | 8,950 | 11,500 | 2,560 | 7,510 | 10,200 | 4,030 | 343 | 551 | 2,760 | 332 |
| 10. | 1,270 | 443 | 7,260 | 11,300 | 2,890 | 6,760 | 8,500 | 3,250 | 343 | 507 | 2,460 | 314 |
| 11. | 1,510 | 810 | 6,260 | 10,000 | 3,250 | 6,000 | 7,260 | 3,070 | 323 | 443 | 1,500 | 272 |
| 12. | 1,170 | 2,120 | 5,430 | 12,000 | 2,890 | 5,430 | 6,760 | 2,560 | 218 | 363 | 1,400 | 298 |
| 13. | 896 | 4,030 | 4,780 | 14,000 | 2,720 | 4,780 | 6,000 | 2,120 | 209 | 353 | 995 | 272 |
| 14. | 732 | 4,420 | 4,420 | 14,200 | 5,110 | 4,420 | 5,430 | 1,860 | 283 | 353 | 809 | 255 |
| 15. | 585 | 12,300 | 3,830 | 11,500 | 8,720 | 4,220 | 4,780 | 1,510 | 293 | 463 | 680 | 298 |
| 16. | 518 | 51,000 | 3,630 | 8,950 | 8,950 | 3,830 | 4,420 | 1,410 | 283 | 383 | 609 | 289 |
| 17. | 474 | 54,300 | 3,440 | 7,760 | 8,010 | 3,250 | 4,030 | 1,220 | 254 | 383 | 692 | 298 |
| 18. | 423 | 38,600 | 3,830 | 8,720 | 8,010 | 3,250 | 3,630 | 1,020 | 273 | 383 | 567 | 314 |
| 19. | 413 | 22,800 | 3,830 | 14,900 | 7,260 | 3,070 | 3,250 | 1,310 | 323 | 562 | 692 | 280 |
| 20. | 383 | 15,000 | 3,830 | 12,700 | 6,510 | 2,720 | 4,030 | 1,620 | 585 | 732 | 1,400 | 255 |
| 21. | 363 | 9,700 | 4,220 | 10,900 | 6,260 | 2,720 | 5,110 | 1,980 | 910 | 609 | 1,810 | 272 |
| 22. | 373 | 5,730 | 4,220 | 8,720 | 5,730 | 2,890 | 5,430 | 1,860 | 896 | 823 | 1,500 | 247 |
| 23. | 343 | 5,730 | 3,630 | 7,510 | 5,430 | 2,890 | 6,000 | 1,620 | 838 | 968 | 1,010 | 247 |
| 24. | 323 | 5,430 | 3,250 | 6,760 | 5,430 | 2,720 | 6,000 | 1,270 | 968 | 1,270 | 730 | 247 |
| 25. | 323 | 4,420 | 2,890 | 6,260 | 10,700 | 2,560 | 5,110 | 1,100 | 866 | 1,150 | 620 | 255 |
| 26. | 313 | 3,630 | 5,730 | 5,730 | 17,700 | 2,560 | 4,420 | 968 | 706 | 1,060 | 506 | 239 |
| 27. | 323 | 3,070 | 9,620 | 5,430 | 14,800 | 2,410 | 3,630 | 866 | 540 | 896 | 458 | 215 |
| 28. | 453 | 2,720 | 11,100 | 5,110 | 11,600 | 11,800 | 3,070 | 896 | 433 | 745 | 430 | 191 |
| 29. | 984 | 2,260 | 8,950 | 4,600 | ----- | 29,100 | 2,560 | 745 | 333 | 562 | 421 | 215 |
| 30. | 732 | 2,260 | 7,260 | 4,220 | ----- | 22,300 | 2,260 | 719 | 323 | 463 | 449 | 175 |
| 31. | 657 | ----- | 6,510 | 3,830 | ----- | 16,800 | ----- | 609 | ----- | 463 | 421 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------------|---------|---------|--------|-----------------|-------------------|
| October. | 1,510 | 313 | 596 | 0.123 | 0.14 |
| November. | 54,300 | 423 | 8,510 | 1.76 | 1.96 |
| December. | 17,100 | 2,890 | 6,140 | 1.27 | 1.46 |
| January. | 14,900 | 3,830 | 8,430 | 1.75 | 2.02 |
| February. | 17,700 | 2,260 | 5,960 | 1.23 | 1.28 |
| March. | 29,100 | 2,410 | 6,890 | 1.43 | 1.65 |
| April. | 37,400 | 2,260 | 10,000 | 2.07 | 2.31 |
| May. | 5,110 | 609 | 2,000 | .414 | .48 |
| June. | 968 | 209 | 471 | .093 | .11 |
| July. | 1,270 | 303 | 601 | .124 | .14 |
| August. | 3,420 | 421 | 982 | .203 | .23 |
| September. | 367 | 175 | 276 | .057 | .06 |
| The year. | 54,300 | 175 | 4,220 | .874 | 11.84 |

SIPSEY FORK OF MULBERRY FORK OF BLACK WARRIOR RIVER NEAR SIPSEY, ALA.

LOCATION.—Staff gage in T. 13 S., R. 5 W., 200 feet below Leth Creek, 3½ miles northeast of Sipsey, and 5 miles above junction with Mulberry Fork.

DRAINAGE AREA.—1,020 square miles.

RECORDS AVAILABLE.—September, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 19,200 second-feet Nov. 16 (gage height, 35.00 feet); minimum, 26 second-feet Sept. 13 (gage height, 3.52 feet).

1928-1931: Maximum discharge, 50,400 second-feet Nov. 14, 1929 (gage height, 56.30 feet); minimum, 5 second-feet June 30, 1930 (gage height, 2.99 feet).

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|--------|-------|-------|-------|--------|-------|-------|-------|------|------|-------|
| 1..... | 121 | 126 | 468 | 1,060 | 468 | 2,890 | 7,200 | 660 | 208 | 111 | 174 | 51 |
| 2..... | 116 | 111 | 468 | 880 | 632 | 2,570 | 7,500 | 770 | 208 | 128 | 198 | 49 |
| 3..... | 80 | 104 | 605 | 770 | 578 | 2,290 | 3,730 | 825 | 187 | 187 | 136 | 49 |
| 4..... | 116 | 97 | 550 | 770 | 550 | 2,050 | 4,200 | 715 | 165 | 272 | 104 | 48 |
| 5..... | 106 | 95 | 770 | 1,460 | 522 | 1,650 | 6,100 | 688 | 156 | 240 | 104 | 46 |
| 6..... | 97 | 95 | 2,650 | 2,570 | 522 | 1,390 | 3,650 | 825 | 142 | 180 | 272 | 46 |
| 7..... | 95 | 80 | 2,730 | 2,240 | 495 | 1,520 | 3,100 | 1,130 | 131 | 128 | 578 | 41 |
| 8..... | 113 | 93 | 2,340 | 2,290 | 468 | 2,690 | 2,650 | 1,000 | 121 | 180 | 522 | 37 |
| 9..... | 190 | 91 | 1,390 | 2,760 | 660 | 2,390 | 2,180 | 880 | 116 | 150 | 715 | 35 |
| 10..... | 240 | 88 | 1,000 | 2,480 | 940 | 1,780 | 1,780 | 1,060 | 113 | 123 | 365 | 38 |
| 11..... | 180 | 168 | 825 | 2,240 | 825 | 1,390 | 1,460 | 880 | 104 | 128 | 226 | 42 |
| 12..... | 145 | 318 | 825 | 2,520 | 715 | 1,260 | 1,200 | 770 | 99 | 106 | 165 | 34 |
| 13..... | 121 | 440 | 770 | 3,100 | 825 | 1,060 | 1,000 | 660 | 99 | 82 | 134 | 27 |
| 14..... | 109 | 578 | 660 | 2,800 | 2,720 | 1,000 | 940 | 578 | 111 | 66 | 106 | 99 |
| 15..... | 106 | 2,860 | 605 | 2,290 | 3,490 | 940 | 880 | 495 | 111 | 111 | 82 | 222 |
| 16..... | 97 | 12,300 | 578 | 1,720 | 2,860 | 860 | 825 | 440 | 111 | 264 | 73 | 131 |
| 17..... | 95 | 7,300 | 605 | 1,650 | 2,650 | 770 | 770 | 390 | 101 | 180 | 75 | 99 |
| 18..... | 91 | 3,160 | 632 | 2,610 | 2,480 | 770 | 688 | 390 | 99 | 150 | 123 | 88 |
| 19..... | 86 | 1,780 | 578 | 3,040 | 2,180 | 715 | 715 | 340 | 165 | 111 | 770 | 78 |
| 20..... | 80 | 1,200 | 688 | 2,440 | 1,780 | 688 | 1,260 | 495 | 415 | 118 | 440 | 61 |
| 21..... | 76 | 940 | 715 | 1,910 | 1,520 | 660 | 1,390 | 770 | 286 | 198 | 340 | 48 |
| 22..... | 75 | 880 | 715 | 1,580 | 1,260 | 688 | 1,910 | 688 | 254 | 340 | 190 | 45 |
| 23..... | 75 | 1,060 | 660 | 715 | 1,130 | 688 | 2,520 | 495 | 340 | 318 | 145 | 40 |
| 24..... | 73 | 880 | 632 | 1,130 | 1,910 | 660 | 1,650 | 390 | 165 | 250 | 113 | 40 |
| 25..... | 78 | 770 | 770 | 1,000 | 5,500 | 632 | 1,260 | 340 | 95 | 259 | 97 | 38 |
| 26..... | 80 | 715 | 1,720 | 825 | 4,600 | 578 | 1,130 | 318 | 113 | 174 | 88 | 36 |
| 27..... | 84 | 550 | 2,920 | 550 | 3,430 | 1,480 | 940 | 272 | 99 | 142 | 75 | 34 |
| 28..... | 82 | 440 | 2,440 | 825 | 2,980 | 11,500 | 825 | 259 | 99 | 139 | 71 | 29 |
| 29..... | 156 | 440 | 1,840 | 825 | ----- | 9,820 | 715 | 232 | 97 | 145 | 61 | 28 |
| 30..... | 218 | 440 | 1,390 | 770 | ----- | 5,300 | 660 | 229 | 98 | 162 | 57 | 27 |
| 31..... | 162 | ----- | 1,060 | 715 | ----- | 3,620 | ----- | 215 | ----- | 180 | 54 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 240 | 73 | 114 | 0.112 | 0.13 |
| November..... | 12,300 | 80 | 1,270 | 1.25 | 1.40 |
| December..... | 2,920 | 468 | 1,120 | 1.10 | 1.27 |
| January..... | 3,100 | 715 | 1,690 | 1.66 | 1.91 |
| February..... | 5,500 | 468 | 1,740 | 1.71 | 1.78 |
| March..... | 11,500 | 578 | 2,140 | 2.10 | 2.42 |
| April..... | 7,500 | 660 | 2,160 | 2.12 | 2.36 |
| May..... | 1,130 | 215 | 587 | .575 | .66 |
| June..... | 415 | 93 | 153 | .150 | .17 |
| July..... | 340 | 66 | 172 | .169 | .19 |
| August..... | 770 | 54 | 215 | .211 | .24 |
| September..... | 222 | 27 | 56.2 | .055 | .06 |
| The year..... | 12,300 | 27 | 946 | .927 | 12.59 |

LOCUST FORK OF BLACK WARRIOR RIVER AT TRAFFORD, ALA.

LOCATION.—Chain gage at highway bridge three-quarters of a mile northwest of Trafford and 1½ miles east of Coaldale, Jefferson County.

DRAINAGE AREA.—622 square miles.

RECORDS AVAILABLE.—September, 1930, to September, 1931.

EXTREMES.—Maximum discharge during period, 20,000 second-feet Nov. 17 (gage height, 31.50 feet); minimum, 12 second-feet Sept. 30, 1931 (gage height, 2.41 feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|-------|-------|--------|-------|-------|-------|-------|-------|-----|------|------|------|-------|
| 1 | | 112 | 78 | 412 | 573 | 508 | 1,440 | 1,980 | 221 | 66 | 34 | 81 | 48 |
| 2 | | 100 | 68 | 476 | 508 | 476 | 1,240 | 2,120 | 236 | 63 | 78 | 147 | 39 |
| 3 | | 95 | 60 | 396 | 476 | 412 | 1,090 | 1,720 | 236 | 60 | 39 | 53 | 39 |
| 4 | | 78 | 60 | 348 | 476 | 380 | 985 | 3,630 | 428 | 60 | 89 | 120 | 41 |
| 5 | | 68 | 60 | 810 | 845 | 348 | 880 | 5,110 | 316 | 58 | 153 | 117 | 165 |
| 6 | | 58 | 60 | 3,240 | 1,680 | 348 | 741 | 3,180 | 348 | 58 | 100 | 168 | 120 |
| 7 | | 56 | 58 | 2,480 | 1,640 | 332 | 880 | 2,300 | 300 | 58 | 68 | 880 | 89 |
| 8 | | 332 | 58 | 1,850 | 1,980 | 316 | 1,160 | 1,760 | 284 | 56 | 73 | 348 | 32 |
| 9 | | 1,060 | 58 | 1,400 | 2,210 | 332 | 1,060 | 1,440 | 268 | 53 | 56 | 268 | 24 |
| 10 | | 540 | 63 | 1,120 | 1,800 | 396 | 810 | 1,200 | 252 | 48 | 41 | 540 | 41 |
| 11 | | 268 | 84 | 985 | 1,560 | 380 | 673 | 1,120 | 221 | 41 | 41 | 412 | 30 |
| 12 | | 187 | 150 | 915 | 1,980 | 316 | 606 | 1,120 | 202 | 36 | 78 | 190 | 27 |
| 13 | | 141 | 221 | 810 | 2,440 | 348 | 573 | 915 | 184 | 34 | 68 | 120 | 24 |
| 14 | | 123 | 300 | 673 | 1,980 | 845 | 508 | 775 | 171 | 43 | 43 | 84 | 20 |
| 15 | | 106 | 852 | 606 | 1,560 | 1,090 | 476 | 707 | 159 | 73 | 68 | 73 | 22 |
| 16 | | 84 | 11,900 | 540 | 1,320 | 845 | 444 | 606 | 159 | 174 | 95 | 73 | 22 |
| 17 | | 84 | 12,800 | 508 | 1,160 | 915 | 412 | 540 | 147 | 126 | 66 | 68 | 22 |
| 18 | | 73 | 3,300 | 508 | 1,900 | 985 | 380 | 476 | 135 | 89 | 53 | 53 | 22 |
| 19 | | 66 | 1,800 | 508 | 2,300 | 845 | 348 | 476 | 135 | 63 | 46 | 50 | 27 |
| 20 | | 63 | 1,240 | 540 | 1,850 | 775 | 332 | 606 | 147 | 60 | 78 | 43 | 24 |
| 21 | | 60 | 985 | 508 | 1,600 | 707 | 316 | 476 | 129 | 46 | 76 | 50 | 25 |
| 22 | | 58 | 810 | 476 | 1,400 | 639 | 332 | 707 | 112 | 73 | 156 | 84 | 32 |
| 23 | | 56 | 741 | 412 | 1,200 | 573 | 316 | 606 | 100 | 112 | 215 | 89 | 27 |
| 24 | | 58 | 639 | 396 | 1,060 | 741 | 332 | 476 | 97 | 100 | 221 | 78 | 20 |
| 25 | | 56 | 540 | 380 | 950 | 2,340 | 316 | 396 | 95 | 73 | 187 | 60 | 16 |
| 26 | 184 | 53 | 476 | 707 | 845 | 2,440 | 284 | 348 | 92 | 53 | 123 | 63 | 25 |
| 27 | 206 | 53 | 412 | 1,160 | 775 | 1,940 | 412 | 316 | 86 | 41 | 78 | 53 | 22 |
| 28 | 221 | 68 | 380 | 1,020 | 707 | 1,600 | 2,160 | 284 | 84 | 36 | 112 | 46 | 16 |
| 29 | 171 | 95 | 348 | 880 | 639 | | 2,680 | 252 | 78 | 34 | 86 | 36 | 14 |
| 30 | 135 | 100 | 332 | 775 | 573 | | 1,900 | 236 | 73 | 25 | 58 | 39 | 12 |
| 31 | | 86 | | 639 | 540 | | 1,480 | | 68 | | 48 | 46 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|-----------------|---------|---------|-------|-----------------|-------------------|
| 1930 | | | | | |
| September 26-30 | 206 | 135 | 183 | 0.274 | 0.05 |
| 1930-31 | | | | | |
| October | 1,060 | 53 | 143 | 0.230 | 0.27 |
| November | 12,800 | 58 | 1,300 | 2.09 | 2.33 |
| December | 3,240 | 348 | 854 | 1.37 | 1.68 |
| January | 2,440 | 476 | 1,310 | 2.11 | 2.43 |
| February | 2,440 | 316 | 792 | 1.27 | 1.32 |
| March | 2,680 | 284 | 825 | 1.33 | 1.53 |
| April | 5,110 | 236 | 1,200 | 1.93 | 2.15 |
| May | 428 | 68 | 179 | .278 | .33 |
| June | 174 | 25 | 63.7 | .172 | .11 |
| July | 221 | 34 | 88.0 | .141 | .16 |
| August | 880 | 36 | 146 | .235 | .27 |
| September | 165 | 12 | 36.2 | .078 | .06 |
| The year | 12,800 | 12 | 575 | .934 | 12.54 |

LOCUST FORK OF BLACK WARRIOR RIVER NEAR WARRIOR, ALA.

LOCATION.—Chain gage in T. 15 S., R. 4 W., at Buck Short highway bridge 8 miles southwest of Warrior.

DRAINAGE AREA.—865 square miles.

RECORDS AVAILABLE.—July, 1923, to September, 1931.

EXTREMES.—Maximum discharge during year, 18,800 second-feet Nov. 17 (gage height, 18.15 feet); minimum, 17 second-feet Sept. 28 (gage height, 1.94 feet).

1928-1931: Maximum discharge, 53,300 second-feet Nov. 15, 1929 (gage height, 40.10 feet); minimum, that of Sept. 28, 1931.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|--------|-------|-------|-------|-------|-------|-----|-------|------|------|-------|
| 1..... | 128 | 93 | 550 | 770 | 655 | 1,700 | 1,950 | 379 | 103 | 51 | 136 | 46 |
| 2..... | 100 | 85 | 575 | 740 | 600 | 1,540 | 2,620 | 379 | 100 | 72 | 655 | 51 |
| 3..... | 85 | 82 | 550 | 982 | 575 | 1,300 | 2,040 | 356 | 93 | 105 | 182 | 48 |
| 4..... | 76 | 78 | 475 | 655 | 525 | 1,230 | 7,160 | 450 | 89 | 70 | 103 | 44 |
| 5..... | 72 | 76 | 830 | 1,020 | 500 | 1,090 | 8,100 | 770 | 85 | 115 | 179 | 46 |
| 6..... | 63 | 70 | 3,810 | 1,780 | 475 | 955 | 4,810 | 740 | 78 | 220 | 167 | 158 |
| 7..... | 54 | 70 | 3,480 | 2,040 | 450 | 1,020 | 3,370 | 710 | 56 | 133 | 770 | 105 |
| 8..... | 173 | 70 | 2,520 | 2,320 | 450 | 1,300 | 2,420 | 575 | 61 | 98 | 710 | 87 |
| 9..... | 1,090 | 68 | 1,780 | 2,930 | 475 | 1,300 | 1,950 | 525 | 68 | 103 | 356 | 68 |
| 10..... | 770 | 74 | 1,460 | 2,320 | 500 | 1,020 | 1,620 | 450 | 65 | 78 | 273 | 56 |
| 11..... | 426 | 110 | 1,230 | 1,860 | 525 | 890 | 1,540 | 402 | 61 | 65 | 830 | 51 |
| 12..... | 237 | 293 | 1,090 | 2,320 | 450 | 770 | 1,460 | 356 | 63 | 56 | 334 | 43 |
| 13..... | 176 | 356 | 1,020 | 3,260 | 450 | 740 | 1,160 | 293 | 63 | 67 | 201 | 41 |
| 14..... | 136 | 450 | 890 | 2,620 | 830 | 682 | 1,020 | 273 | 56 | 89 | 147 | 38 |
| 15..... | 117 | 1,140 | 770 | 1,950 | 1,230 | 655 | 890 | 255 | 58 | 80 | 115 | 35 |
| 16..... | 100 | 17,200 | 710 | 1,620 | 1,020 | 600 | 830 | 224 | 98 | 76 | 107 | 32 |
| 17..... | 91 | 12,500 | 682 | 1,460 | 1,090 | 550 | 740 | 211 | 185 | 85 | 110 | 27 |
| 18..... | 82 | 5,650 | 655 | 1,950 | 1,160 | 525 | 682 | 204 | 141 | 89 | 107 | 24 |
| 19..... | 78 | 2,620 | 655 | 2,930 | 1,090 | 525 | 655 | 214 | 98 | 89 | 82 | 28 |
| 20..... | 74 | 1,620 | 682 | 2,320 | 955 | 475 | 1,230 | 255 | 78 | 161 | 93 | 34 |
| 21..... | 67 | 1,230 | 655 | 1,950 | 890 | 450 | 770 | 227 | 72 | 141 | 117 | 37 |
| 22..... | 61 | 1,090 | 628 | 1,620 | 830 | 475 | 1,020 | 211 | 78 | 179 | 107 | 34 |
| 23..... | 65 | 955 | 575 | 1,460 | 740 | 475 | 955 | 188 | 68 | 204 | 112 | 32 |
| 24..... | 63 | 830 | 550 | 1,300 | 955 | 475 | 770 | 161 | 195 | 293 | 115 | 32 |
| 25..... | 61 | 740 | 525 | 1,160 | 2,620 | 450 | 655 | 150 | 156 | 273 | 91 | 30 |
| 26..... | 58 | 655 | 890 | 1,020 | 3,590 | 402 | 575 | 141 | 98 | 188 | 76 | 25 |
| 27..... | 58 | 575 | 1,460 | 955 | 2,520 | 475 | 525 | 136 | 78 | 195 | 72 | 22 |
| 28..... | 70 | 525 | 1,380 | 890 | 1,950 | 1,860 | 450 | 128 | 63 | 185 | 63 | 18 |
| 29..... | 117 | 475 | 1,160 | 830 | ----- | 3,590 | 402 | 122 | 56 | 139 | 51 | 23 |
| 30..... | 117 | 475 | 1,020 | 770 | ----- | 2,420 | 379 | 115 | 49 | 103 | 43 | 24 |
| 31..... | 107 | ----- | 890 | 710 | ----- | 1,780 | ----- | 107 | ----- | 87 | 48 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 1,090 | 51 | 160 | 0.185 | 0.021 |
| November..... | 17,200 | 68 | 1,680 | 1.94 | 2.16 |
| December..... | 3,810 | 475 | 1,100 | 1.27 | 1.46 |
| January..... | 3,260 | 655 | 1,620 | 1.87 | 2.16 |
| February..... | 3,590 | 450 | 1,000 | 1.16 | 1.21 |
| March..... | 3,590 | 402 | 1,020 | 1.18 | 1.36 |
| April..... | 8,100 | 379 | 1,760 | 2.03 | 2.26 |
| May..... | 770 | 107 | 313 | .362 | .42 |
| June..... | 195 | 49 | 87.1 | .101 | .11 |
| July..... | 293 | 51 | 125 | .145 | .17 |
| August..... | 830 | 43 | 211 | .244 | .28 |
| September..... | 158 | 18 | 44.6 | .052 | .06 |
| The year..... | 17,200 | 18 | 757 | .875 | 11.86 |

PASCAGOULA RIVER BASIN

PASCAGOULA RIVER AT MERRILL, MISS.

LOCATION.—Staff gage in T. 1 S., R. 7 W., St. Stephens base and meridian, at highway bridge half a mile below confluence of Leaf and Chickasawhay Rivers and half a mile west of Merrill. Zero of gage is 24.1 feet above mean sea level.

DRAINAGE AREA.—6,600 square miles.

RECORDS AVAILABLE.—December, 1930, to September, 1931.

EXTREMES.—Maximum discharge during period, 25,100 second-feet Dec. 9 (gage height, 18.96 feet); minimum, 1,180 second-feet Sept. 28-30 (gage height, 3.0 feet).

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|-----|--------|--------|--------|--------|--------|--------|-------|--------|--------|-------|
| 1. | | 9,840 | 6,480 | 9,600 | 10,100 | 4,110 | 2,940 | 1,520 | 18,100 | 2,250 |
| 2. | | 8,520 | 6,240 | 10,300 | 10,300 | 3,890 | 2,840 | 1,520 | 18,800 | 2,070 |
| 3. | | 7,320 | 6,000 | 10,700 | 10,200 | 3,560 | 2,640 | 1,450 | 19,200 | 1,980 |
| 4. | | 6,600 | 5,760 | 11,200 | 10,900 | 4,330 | 2,440 | 1,590 | 18,600 | 1,980 |
| 5. | | 6,960 | 5,520 | 10,800 | 15,200 | 4,440 | 2,250 | 1,980 | 17,300 | 1,900 |
| 6. | | 10,800 | 5,400 | 10,300 | 17,300 | 4,220 | 2,260 | 2,070 | 15,700 | 1,980 |
| 7. | 17,300 | 13,600 | 5,280 | 11,500 | 18,800 | 3,890 | 2,070 | 2,070 | 13,800 | 2,070 |
| 8. | 22,600 | 14,300 | 5,040 | 14,900 | 19,000 | 3,670 | 1,980 | 2,070 | 10,800 | 2,160 |
| 9. | 24,700 | 13,600 | 5,040 | 16,300 | 18,300 | 3,450 | 1,900 | 1,980 | 7,920 | 2,250 |
| 10. | 23,800 | 12,700 | 5,520 | 16,600 | 17,000 | 3,450 | 1,740 | 2,160 | 6,480 | 2,070 |
| 11. | 21,000 | 12,100 | 6,240 | 16,600 | 15,700 | 3,450 | 1,740 | 1,980 | 6,960 | 1,980 |
| 12. | 18,300 | 14,300 | 6,360 | 15,500 | 14,700 | 3,240 | 1,660 | 1,740 | 7,080 | 1,900 |
| 13. | 15,400 | 19,000 | 6,240 | 14,300 | 12,300 | 2,940 | 1,590 | 1,590 | 7,320 | 1,740 |
| 14. | 13,300 | 22,400 | 6,120 | 12,300 | 9,360 | 2,840 | 1,660 | 1,590 | 7,440 | 1,660 |
| 15. | 11,000 | 24,100 | 6,600 | 10,800 | 7,920 | 2,640 | 1,900 | 1,740 | 6,480 | 1,660 |
| 16. | 9,840 | 24,100 | 8,880 | 9,000 | 7,200 | 2,440 | 1,900 | 11,300 | 5,160 | 1,660 |
| 17. | 9,480 | 22,400 | 12,100 | 7,680 | 6,480 | 2,340 | 1,900 | 22,900 | 6,240 | 1,590 |
| 18. | 8,640 | 21,800 | 14,100 | 6,960 | 6,000 | 2,250 | 1,980 | 20,700 | 6,480 | 1,520 |
| 19. | 8,040 | 22,600 | 14,300 | 6,480 | 5,640 | 2,070 | 2,250 | 15,900 | 6,360 | 1,450 |
| 20. | 7,680 | 22,100 | 13,000 | 6,000 | 5,280 | 3,340 | 2,160 | 11,000 | 5,640 | 1,450 |
| 21. | 7,200 | 20,400 | 11,200 | 6,240 | 5,040 | 4,920 | 1,980 | 8,880 | 6,240 | 1,380 |
| 22. | 7,200 | 17,300 | 9,720 | 7,800 | 6,600 | 8,040 | 2,070 | 7,440 | 6,480 | 1,380 |
| 23. | 6,720 | 15,500 | 8,400 | 8,760 | 7,200 | 11,000 | 2,250 | 11,300 | 5,520 | 1,310 |
| 24. | 6,240 | 13,000 | 7,680 | 8,760 | 6,960 | 12,100 | 2,440 | 11,200 | 4,560 | 1,310 |
| 25. | 5,880 | 11,200 | 8,400 | 8,040 | 6,720 | 11,300 | 2,440 | 9,840 | 3,450 | 1,310 |
| 26. | 6,960 | 9,600 | 9,240 | 6,120 | 6,480 | 9,840 | 2,340 | 9,720 | 3,040 | 1,310 |
| 27. | 9,120 | 8,640 | 9,240 | 6,960 | 6,000 | 7,560 | 2,440 | 11,200 | 2,840 | 1,240 |
| 28. | 9,840 | 8,040 | 8,880 | 7,200 | 5,520 | 6,480 | 2,070 | 12,300 | 2,640 | 1,180 |
| 29. | 10,100 | 7,560 | | 7,920 | 4,920 | 4,800 | 2,640 | 13,900 | 2,440 | 1,180 |
| 30. | 10,200 | 7,200 | | 8,400 | 4,440 | 3,890 | 1,590 | 16,100 | 2,440 | 1,180 |
| 31. | 10,100 | 6,840 | | 9,360 | | 3,340 | | 17,500 | 2,340 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|---------------|---------|---------|--------|-----------------|-------------------|
| December 7-31 | 24,700 | 5,880 | 12,000 | 1.82 | 1.69 |
| January | 24,100 | 6,600 | 14,000 | 2.12 | 2.44 |
| February | 14,300 | 5,040 | 7,960 | 1.21 | 1.26 |
| March | 16,600 | 6,000 | 10,100 | 1.53 | 1.76 |
| April | 19,000 | 4,440 | 9,920 | 1.50 | 1.67 |
| May | 12,100 | 2,070 | 4,830 | .733 | .84 |
| June | 2,940 | 1,590 | 2,130 | .323 | .36 |
| July | 22,900 | 1,450 | 7,680 | 1.16 | 1.34 |
| August | 19,200 | 2,340 | 8,190 | 1.24 | 1.43 |
| September | 2,250 | 1,180 | 1,670 | .253 | .28 |

PEARL RIVER BASIN

PEARL RIVER AT EDINBURG, MISS.

LOCATION.—Staff gage in T. 11 N., R. 9 E. Choctaw meridian, at new highway bridge in Edinburg. Zero of gage is 341.57 feet above mean sea level.

RECORDS AVAILABLE.—August, 1923, to September, 1931.

EXTREMES.—Maximum discharge during year, 6,720 second-feet July 27 (gage height, 20.60 feet); minimum discharge, 8 second-feet Sept. 30; minimum gage height, 1.91 feet June 12.

1923-1931: Maximum discharge, 11,300 second-feet May 22, 1929 (gage height, 24.9 feet); minimum discharge, 7 second-feet Sept. 8, 1929, July 13, 1930.

Maximum stage known, 29.0 feet Mar. 1, 1902.

REMARKS.—Records good except those below 500 second-feet, which are fair.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|------|-------|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|
| 1..... | 27 | 42 | 850 | 743 | 778 | 850 | 1,330 | 242 | 72 | 88 | 3,180 | 58 |
| 2..... | 19 | 35 | 814 | 726 | 692 | 970 | 1,420 | 214 | 61 | 76 | 2,660 | 46 |
| 3..... | 18 | 32 | 658 | 709 | 558 | 970 | 1,350 | 200 | 54 | 61 | 2,150 | 46 |
| 4..... | 21 | 31 | 641 | 760 | 478 | 990 | 1,250 | 179 | 50 | 54 | 1,720 | 42 |
| 5..... | 21 | 31 | 990 | 1,130 | 414 | 970 | 1,350 | 128 | 39 | 214 | 1,400 | 38 |
| 6..... | 20 | 30 | 1,230 | 1,210 | 334 | 930 | 1,480 | 107 | 34 | 112 | 1,210 | 36 |
| 7..... | 90 | 29 | 1,310 | 1,190 | 302 | 1,250 | 1,500 | 102 | 31 | 61 | 1,850 | 35 |
| 8..... | 331 | 28 | 1,210 | 1,170 | 287 | 1,520 | 1,450 | 88 | 29 | 84 | 1,650 | 34 |
| 9..... | 194 | 29 | 1,030 | 1,090 | 302 | 1,420 | 1,350 | 84 | 17 | 76 | 1,330 | 31 |
| 10..... | 168 | 37 | 910 | 1,010 | 272 | 1,250 | 1,250 | 93 | 16 | 72 | 1,190 | 28 |
| 11..... | 120 | 60 | 814 | 970 | 257 | 1,110 | 1,260 | 84 | 15 | 68 | 850 | 24 |
| 12..... | 93 | 120 | 832 | 1,600 | 257 | 1,030 | 1,230 | 84 | 13 | 58 | 542 | 26 |
| 13..... | 75 | 194 | 832 | 1,680 | 287 | 1,010 | 1,130 | 117 | 18 | 44 | 350 | 28 |
| 14..... | 60 | 265 | 832 | 1,720 | 510 | 970 | 990 | 122 | 41 | 33 | 257 | 28 |
| 15..... | 68 | 624 | 814 | 1,520 | 607 | 970 | 850 | 122 | 54 | 26 | 228 | 31 |
| 16..... | 64 | 1,330 | 796 | 1,400 | 607 | 970 | 709 | 112 | 41 | 140 | 200 | 31 |
| 17..... | 60 | 1,290 | 760 | 1,380 | 641 | 910 | 641 | 93 | 76 | 228 | 200 | 22 |
| 18..... | 60 | 1,090 | 814 | 1,600 | 624 | 850 | 574 | 84 | 88 | 165 | 158 | 20 |
| 19..... | 60 | 814 | 832 | 1,780 | 607 | 796 | 446 | 98 | 76 | 112 | 158 | 18 |
| 20..... | 57 | 692 | 778 | 1,880 | 590 | 709 | 607 | 318 | 98 | 139 | 152 | 18 |
| 21..... | 57 | 641 | 675 | 1,750 | 574 | 590 | 494 | 462 | 93 | 122 | 214 | 16 |
| 22..... | 43 | 658 | 526 | 1,600 | 542 | 542 | 675 | 318 | 84 | 133 | 172 | 14 |
| 23..... | 38 | 850 | 350 | 1,480 | 510 | 478 | 675 | 242 | 93 | 558 | 139 | 14 |
| 24..... | 31 | 814 | 272 | 1,400 | 641 | 446 | 607 | 228 | 102 | 1,260 | 117 | 13 |
| 25..... | 27 | 743 | 366 | 1,330 | 778 | 366 | 494 | 214 | 93 | 3,240 | 107 | 12 |
| 26..... | 26 | 641 | 796 | 1,290 | 760 | 318 | 382 | 193 | 80 | 6,180 | 93 | 11 |
| 27..... | 25 | 624 | 832 | 1,230 | 675 | 302 | 350 | 172 | 122 | 6,620 | 88 | 10 |
| 28..... | 24 | 526 | 970 | 1,170 | 726 | 414 | 334 | 145 | 76 | 6,180 | 88 | 9 |
| 29..... | 57 | 430 | 890 | 1,090 | ----- | 930 | 318 | 122 | 61 | 5,720 | 80 | 9 |
| 30..... | 57 | 692 | 832 | 1,030 | ----- | 1,110 | 287 | 98 | 44 | 5,040 | 98 | 8 |
| 31..... | 49 | ----- | 760 | 890 | ----- | 1,030 | ----- | 84 | ----- | 4,120 | 68 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|--------------------|----------------------|
| October..... | 331 | 18 | 66.5 | 0.074 | 0.09 |
| November..... | 1,330 | 28 | 447 | .498 | .56 |
| December..... | 1,310 | 272 | 807 | .899 | 1.04 |
| January..... | 1,880 | 709 | 1,280 | 1.43 | 1.65 |
| February..... | 778 | 257 | 522 | .581 | .60 |
| March..... | 1,520 | 302 | 870 | .969 | 1.12 |
| April..... | 1,500 | 287 | 870 | .996 | 1.11 |
| May..... | 462 | 84 | 160 | .178 | .21 |
| June..... | 122 | 13 | 59.0 | .066 | .07 |
| July..... | 6,620 | 26 | 1,330 | 1.43 | 1.71 |
| August..... | 3,180 | 68 | 732 | .815 | .84 |
| September..... | 58 | 8 | 25.2 | .028 | .03 |
| The year..... | 6,620 | 8 | 602 | .670 | 9.13 |

PEARL RIVER AT JACKSON, MISS

LOCATION.—Staff gage in T. 5 N., R. 1 E. Choctaw meridian, at State highway bridge in Jackson.

DRAINAGE AREA.—3,100 square miles.

RECORDS AVAILABLE.—June, 1901, to December, 1913; August, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 15,100 second-feet Aug. 5 (gage height, 26.4 feet); minimum, 164 second-feet Sept. 30 (gage height, 1.56 feet). 1901-1913, 1928-1931: Maximum discharge, 36,500 second-feet May 30, 1909; maximum gage height, 37.20 feet Apr. 1, 1902; minimum discharge, 80 second-feet Oct. 26 to Nov. 2, 1904; minimum gage height, 0.20 foot Nov. 4-5, 1911.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| 1..... | 257 | 228 | 2,010 | 3,530 | 2,180 | 3,530 | 2,420 | 1,150 | 775 | 300 | 11,200 | 670 |
| 2..... | 257 | 228 | 2,380 | 3,040 | 2,050 | 3,780 | 3,280 | 1,070 | 635 | 300 | 13,100 | 600 |
| 3..... | 242 | 257 | 3,240 | 2,790 | 1,890 | 4,120 | 4,030 | 998 | 534 | 534 | 14,600 | 600 |
| 4..... | 228 | 272 | 3,490 | 2,960 | 1,720 | 4,380 | 4,250 | 849 | 468 | 375 | 14,900 | 567 |
| 5..... | 201 | 272 | 3,860 | 3,780 | 1,610 | 4,460 | 4,160 | 775 | 406 | 534 | 15,100 | 534 |
| 6..... | 188 | 272 | 4,160 | 4,120 | 1,450 | 4,460 | 4,120 | 670 | 360 | 360 | 14,700 | 635 |
| 7..... | 188 | 272 | 4,330 | 4,460 | 1,340 | 5,130 | 4,120 | 635 | 300 | 344 | 13,700 | 501 |
| 8..... | 300 | 257 | 4,590 | 4,820 | 1,300 | 5,810 | 4,160 | 600 | 300 | 534 | 12,500 | 406 |
| 9..... | 286 | 242 | 4,820 | 4,900 | 1,190 | 5,910 | 4,290 | 600 | 300 | 670 | 10,700 | 360 |
| 10..... | 960 | 228 | 4,820 | 4,640 | 1,110 | 5,910 | 4,420 | 600 | 272 | 705 | 8,630 | 330 |
| 11..... | 2,090 | 272 | 4,770 | 4,640 | 1,040 | 5,760 | 4,420 | 600 | 272 | 670 | 7,310 | 330 |
| 12..... | 1,690 | 272 | 4,460 | 5,180 | 998 | 5,440 | 4,330 | 567 | 242 | 635 | 5,360 | 330 |
| 13..... | 1,300 | 272 | 3,900 | 5,580 | 1,110 | 5,080 | 4,120 | 567 | 242 | 600 | 3,860 | 330 |
| 14..... | 1,040 | 286 | 3,200 | 5,910 | 1,570 | 4,640 | 3,730 | 567 | 242 | 468 | 2,750 | 300 |
| 15..... | 849 | 406 | 2,790 | 6,160 | 1,770 | 4,120 | 3,200 | 567 | 242 | 390 | 2,090 | 300 |
| 16..... | 740 | 812 | 2,420 | 6,210 | 2,140 | 3,730 | 2,630 | 567 | 242 | 406 | 1,660 | 330 |
| 17..... | 635 | 1,650 | 2,090 | 6,110 | 2,420 | 3,240 | 2,300 | 534 | 242 | 437 | 1,380 | 315 |
| 18..... | 534 | 2,540 | 1,890 | 6,010 | 2,460 | 2,790 | 2,010 | 501 | 242 | 390 | 1,230 | 300 |
| 19..... | 437 | 3,530 | 1,770 | 5,810 | 2,500 | 2,380 | 1,770 | 740 | 242 | 406 | 1,070 | 300 |
| 20..... | 390 | 3,950 | 1,720 | 5,620 | 2,540 | 2,140 | 1,650 | 1,650 | 330 | 567 | 998 | 300 |
| 21..... | 344 | 3,900 | 1,720 | 5,400 | 2,460 | 1,890 | 1,490 | 2,050 | 300 | 812 | 998 | 272 |
| 22..... | 300 | 3,690 | 1,720 | 5,130 | 2,220 | 1,770 | 1,490 | 2,420 | 534 | 886 | 960 | 242 |
| 23..... | 300 | 3,040 | 1,770 | 4,820 | 2,460 | 1,690 | 1,530 | 3,240 | 437 | 886 | 886 | 242 |
| 24..... | 300 | 2,630 | 1,770 | 4,510 | 2,140 | 1,570 | 1,720 | 3,610 | 360 | 1,450 | 849 | 242 |
| 25..... | 272 | 2,590 | 1,810 | 4,080 | 2,540 | 1,490 | 1,890 | 3,280 | 330 | 4,080 | 812 | 242 |
| 26..... | 272 | 2,630 | 2,010 | 3,610 | 2,910 | 1,420 | 1,930 | 2,710 | 330 | 5,130 | 812 | 228 |
| 27..... | 257 | 2,590 | 2,180 | 3,160 | 3,200 | 1,420 | 1,930 | 1,970 | 567 | 6,010 | 775 | 214 |
| 28..... | 272 | 2,340 | 2,960 | 2,830 | 3,280 | 1,340 | 1,770 | 1,300 | 360 | 7,260 | 775 | 214 |
| 29..... | 272 | 2,010 | 3,490 | 2,630 | ----- | 1,260 | 1,490 | 923 | 330 | 8,500 | 1,230 | 188 |
| 30..... | 242 | 2,010 | 3,650 | 2,460 | ----- | 1,260 | 1,300 | 775 | 300 | 9,150 | 849 | 174 |
| 31..... | 242 | ----- | 3,650 | 2,300 | ----- | 1,720 | ----- | 1,110 | ----- | 9,860 | 635 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 2,090 | 188 | 512 | 0.165 | 0.19 |
| November..... | 3,950 | 228 | 1,460 | .471 | .53 |
| December..... | 4,820 | 1,720 | 3,010 | .971 | 1.12 |
| January..... | 6,210 | 2,300 | 4,430 | 1.43 | 1.65 |
| February..... | 3,280 | 998 | 1,990 | .642 | .67 |
| March..... | 5,910 | 1,260 | 3,340 | 1.08 | 1.24 |
| April..... | 4,420 | 1,300 | 2,860 | .923 | 1.03 |
| May..... | 3,610 | 501 | 1,230 | .397 | .46 |
| June..... | 775 | 242 | 358 | .115 | .13 |
| July..... | 9,860 | 300 | 2,050 | .661 | .76 |
| August..... | 15,100 | 635 | 5,370 | 1.73 | 1.99 |
| September..... | 670 | 174 | 353 | .114 | .13 |
| The year..... | 15,100 | 174 | 2,260 | .729 | 9.90 |

PEARL RIVER NEAR COLUMBIA, MISS.

LOCATION.—Chain gage in T. 3 N., R. 13 E. Washington meridian, at highway bridge 2 miles southwest of Columbia.

DRAINAGE AREA.—5,690 square miles.

RECORDS AVAILABLE.—August, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 21,400 second-feet Dec. 7 (gage height, 14.87 feet); minimum, 820 second-feet Sept. 30 (gage height, 1.44 feet).

1928-1931: Maximum discharge, 36,700 second-feet Nov. 16, 1929 (gage height, 20.85 feet); minimum, that of Sept. 30, 1931.

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

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|--------|---------|--------|--------|-------|--------|--------|--------|-------|--------|--------|-------|
| 1..... | 1,160 | 1,310 | 13,500 | 5,690 | 4,680 | 6,300 | 3,660 | 2,880 | 2,430 | 1,310 | 13,900 | 1,930 |
| 2..... | 1,240 | 1,160 | 15,000 | 5,540 | 4,400 | 6,620 | 4,960 | 2,700 | 2,520 | 1,310 | 14,200 | 1,930 |
| 3..... | 1,160 | 1,160 | 12,800 | 5,260 | 4,140 | 7,420 | 5,690 | 2,600 | 2,430 | 1,240 | 13,900 | 1,690 |
| 4..... | 1,100 | 1,160 | 10,300 | 5,260 | 3,880 | 8,380 | 7,900 | 2,520 | 2,180 | 1,310 | 13,700 | 1,610 |
| 5..... | 1,100 | 1,020 | 10,700 | 7,420 | 3,770 | 8,700 | 10,700 | 2,520 | 1,850 | 1,380 | 13,300 | 1,540 |
| 6..... | 1,100 | *1,100 | 18,100 | 12,400 | 3,550 | 8,220 | 10,700 | 2,340 | 1,770 | 1,610 | 13,500 | 1,540 |
| 7..... | 1,160 | *1,160 | 21,200 | 14,400 | 3,340 | 8,220 | 9,020 | 2,180 | 1,610 | 1,770 | 13,500 | 1,540 |
| 8..... | 2,880 | *1,160 | 20,300 | 13,300 | 3,340 | 9,820 | 7,740 | 2,180 | 1,540 | 1,770 | 13,700 | 1,540 |
| 9..... | 8,220 | 1,160 | 15,000 | 11,000 | 3,340 | 11,400 | 6,940 | 2,090 | 1,460 | 1,850 | 13,700 | 1,770 |
| 10..... | 8,540 | 1,310 | 11,000 | 9,180 | 3,250 | 12,100 | 6,460 | 2,090 | 1,380 | 1,460 | 13,700 | 1,610 |
| 11..... | 5,690 | 2,010 | 9,340 | 8,540 | 3,060 | 10,700 | 6,300 | 2,180 | 1,380 | 1,310 | 13,500 | 1,690 |
| 12..... | 3,340 | 2,430 | 8,380 | 12,800 | 2,960 | 9,500 | 6,300 | 1,930 | 1,380 | 1,380 | 13,100 | 2,010 |
| 13..... | 2,880 | 2,340 | 8,090 | 17,500 | 2,780 | 8,700 | 6,300 | 1,770 | 1,380 | 1,380 | 12,100 | 1,690 |
| 14..... | 2,880 | *2,090 | 7,740 | 18,300 | 3,060 | 8,220 | 6,300 | 1,690 | 1,460 | 1,540 | 10,200 | 1,460 |
| 15..... | 2,700 | *3,160 | 6,940 | 16,700 | 6,620 | 7,900 | 5,980 | 1,610 | 1,610 | 2,090 | 8,060 | 1,310 |
| 16..... | 2,430 | 8,220 | 6,300 | 13,900 | 9,820 | 7,420 | 5,690 | 1,610 | 1,850 | 3,660 | 6,300 | 1,240 |
| 17..... | 2,090 | 15,800 | 5,840 | 11,700 | 8,540 | 6,780 | 5,260 | 1,610 | 2,090 | 3,250 | 4,680 | 1,310 |
| 18..... | *2,010 | 18,800 | 4,960 | 11,600 | 6,940 | 6,140 | 4,680 | 1,540 | 2,340 | 2,880 | 3,770 | 1,240 |
| 19..... | *1,850 | 15,400 | 4,530 | 13,000 | 6,140 | 5,540 | 4,010 | 1,460 | 2,090 | 3,060 | 3,250 | 1,240 |
| 20..... | *1,690 | 9,820 | 4,140 | 13,300 | 5,690 | 4,960 | 3,660 | 2,520 | 1,690 | 2,430 | 2,880 | 1,160 |
| 21..... | *1,690 | 8,380 | 4,010 | 12,300 | 5,260 | 4,530 | 3,770 | 9,820 | 1,460 | 1,930 | 2,700 | 1,100 |
| 22..... | *1,610 | 8,060 | *3,770 | 10,700 | 4,820 | 4,140 | 3,660 | 14,600 | 1,540 | 1,690 | 2,520 | 1,100 |
| 23..... | 1,540 | 9,500 | 3,440 | 9,500 | 4,530 | 3,770 | 3,440 | 15,600 | 2,010 | 1,690 | 2,430 | 1,100 |
| 24..... | 1,460 | *11,400 | 3,340 | 8,540 | 4,530 | 3,660 | 3,440 | 11,400 | 2,700 | 1,850 | 2,180 | 1,100 |
| 25..... | 1,460 | 9,980 | 3,340 | 8,060 | 4,530 | 3,440 | 3,250 | 7,420 | 2,430 | 3,770 | 2,010 | 1,100 |
| 26..... | 1,540 | *7,740 | 4,010 | 7,580 | 5,260 | 3,160 | 3,060 | 5,980 | 1,930 | 8,860 | 1,930 | 1,100 |
| 27..... | 1,380 | 5,840 | 4,960 | 7,100 | 5,260 | 3,160 | 3,060 | 5,260 | 1,610 | 11,000 | 2,010 | 1,020 |
| 28..... | 1,310 | 4,680 | 6,140 | 6,620 | 5,840 | 3,250 | 3,160 | 4,400 | 1,460 | 11,400 | 1,930 | 955 |
| 29..... | 1,310 | 4,680 | 6,140 | 6,140 | ----- | 3,340 | 3,160 | 4,010 | 1,310 | 12,100 | 1,930 | 955 |
| 30..... | 1,380 | 6,460 | *5,840 | 5,540 | ----- | 3,250 | 3,060 | 3,250 | 1,310 | 13,000 | 1,770 | 855 |
| 31..... | 1,540 | ----- | 5,980 | 4,960 | ----- | 3,340 | ----- | 2,880 | ----- | 13,700 | 1,850 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|--------|-----------------|-------------------|
| October..... | 8,540 | 1,100 | 2,300 | 0.404 | 0.47 |
| November..... | 18,800 | 1,020 | 5,620 | .998 | 1.10 |
| December..... | 21,200 | 3,340 | 8,550 | 1.50 | 1.73 |
| January..... | 18,300 | 4,960 | 10,100 | 1.78 | 2.05 |
| February..... | 9,820 | 2,780 | 4,760 | .837 | .87 |
| March..... | 12,100 | 3,160 | 6,520 | 1.15 | 1.33 |
| April..... | 10,700 | 3,060 | 5,380 | .946 | 1.06 |
| May..... | 15,600 | 1,460 | 4,090 | .719 | .83 |
| June..... | 2,700 | 1,310 | 1,810 | .318 | .35 |
| July..... | 13,700 | 1,240 | 3,840 | .675 | .78 |
| August..... | 14,200 | 1,770 | 7,680 | 1.35 | 1.56 |
| September..... | 2,010 | 885 | 1,380 | .243 | .27 |
| The year..... | 21,200 | 885 | 5,190 | .912 | 12.40 |

* Estimated.

STRONG RIVER AT DLO, MISS.

LOCATION.—Staff gage in T. 2 N., R. 4 E. Choctaw meridian, half a mile above Gulf & Ship Island Railroad bridge and three-quarters of a mile southeast of Dlo.

DRAINAGE AREA.—361 square miles.

RECORDS AVAILABLE.—August, 1928, to September, 1931.

EXTREMES.—Maximum discharge during year, 4,390 second-feet July 30 (gage height, 12.90 feet); minimum, 28 second-feet Sept. 29, 30 (gage height, 2.36 feet).

1928-1931: Maximum discharge, 8,180 second-feet Mar. 15, 1929 (gage height, 21.20 feet); minimum, 25 second-feet Oct. 11, 12, 17, 18, 1929 (gage height, 2.33 feet).

REMARKS.—Records good except those below 100 second-feet, which are fair. Discharge estimated for Nov. 29, July 4.

Daily and monthly discharge, in second-feet, 1930-31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|----------------|---------|-------|-------|---------|-------|-------|-------|-------|-------|-----------------|-------------------|-------|
| 1..... | 38 | 53 | 3,340 | 280 | 198 | 549 | 915 | 77 | 71 | 35 | 2,140 | 38 |
| 2..... | 35 | 46 | 2,580 | 254 | 193 | 644 | 915 | 106 | 71 | 32 | 1,300 | 36 |
| 3..... | 32 | 46 | 1,740 | 233 | 198 | 980 | 710 | 140 | 71 | 30 | 488 | 35 |
| 4..... | 31 | 45 | 1,040 | 848 | 198 | 915 | 710 | 101 | 71 | 32 | 301 | 35 |
| 5..... | 30 | 45 | 2,300 | 2,500 | 188 | 677 | 980 | 97 | 67 | 264 | 198 | 33 |
| 6..... | 30 | 43 | 3,310 | 2,700 | 164 | 458 | 915 | 106 | 60 | 118 | 178 | 33 |
| 7..... | 433 | 42 | 2,580 | 2,420 | 140 | 1,380 | 488 | 94 | 57 | 60 | 140 | 33 |
| 8..... | 2,730 | 40 | 1,790 | 1,880 | 140 | 2,060 | 333 | 84 | 53 | 50 | 131 | 32 |
| 9..... | 2,220 | 40 | 848 | 1,300 | 159 | 1,300 | 280 | 71 | 50 | 43 | 123 | 32 |
| 10..... | 1,300 | 40 | 549 | 458 | 159 | 778 | 243 | 64 | 46 | 40 | 101 | 32 |
| 11..... | 269 | 178 | 400 | 420 | 140 | 488 | 223 | 64 | 46 | 35 | 94 | 33 |
| 12..... | 159 | 159 | 458 | 2,700 | 140 | 355 | 208 | 60 | 43 | 32 | 77 | 35 |
| 13..... | 106 | 238 | 429 | 3,010 | 164 | 295 | 198 | 60 | 40 | 31 | 71 | 35 |
| 14..... | 77 | 518 | 328 | 2,340 | 1,920 | 259 | 193 | 64 | 42 | 30 | 64 | 33 |
| 15..... | 57 | 2,340 | 290 | 1,520 | 2,020 | 233 | 169 | 64 | 188 | 45 | 60 | 33 |
| 16..... | 50 | 3,840 | 259 | 644 | 980 | 218 | 159 | 59 | 80 | 744 | 57 | 32 |
| 17..... | 55 | 3,980 | 233 | 710 | 744 | 198 | 145 | 57 | 77 | 1,340 | 71 | 32 |
| 18..... | 84 | 3,340 | 213 | 1,380 | 677 | 178 | 118 | 53 | 71 | 518 | 81 | 31 |
| 19..... | 53 | 2,500 | 203 | 1,340 | 549 | 183 | 101 | 59 | 140 | 301 | 64 | 30 |
| 20..... | 50 | 1,790 | 233 | 1,100 | 394 | 169 | 145 | 1,820 | 198 | 94 | 53 | 32 |
| 21..... | 46 | 1,100 | 233 | 677 | 264 | 159 | 228 | 3,040 | 233 | 87 | 50 | 32 |
| 22..... | 45 | 1,560 | 213 | 458 | 233 | 169 | 389 | 2,220 | 400 | 106 | 45 | 32 |
| 23..... | 43 | 2,500 | 193 | 378 | 259 | 169 | 312 | 1,430 | 80 | 188 | 43 | 32 |
| 24..... | 43 | 2,100 | 159 | 322 | 389 | 178 | 218 | 1,040 | 55 | 1,040 | 43 | 30 |
| 25..... | 43 | 813 | 317 | 290 | 458 | 164 | 198 | 290 | 55 | 3,160 | 46 | 30 |
| 26..... | 42 | 488 | 290 | 259 | 518 | 140 | 174 | 178 | 53 | 3,250 | 43 | 30 |
| 27..... | 53 | 378 | 1,240 | 228 | 429 | 145 | 159 | 131 | 43 | 2,760 | 40 | 30 |
| 28..... | 123 | 290 | 1,100 | 218 | 429 | 280 | 114 | 106 | 39 | 3,700 | 40 | 29 |
| 29..... | 154 | 188 | 848 | 218 | ----- | 274 | 94 | 94 | 38 | 3,840 | 40 | 28 |
| 30..... | 97 | 1,520 | 488 | 208 | ----- | 301 | 80 | 77 | 39 | 4,220 | 39 | 28 |
| 31..... | 62 | ----- | 366 | 208 | ----- | 378 | ----- | 71 | ----- | 3,840 | 39 | ----- |
| Month | Maximum | | | Minimum | | | Mean | | | Per square mile | Run-off in inches | |
| October..... | 2,730 | | | 30 | | | 277 | | | 0.767 | 0.88 | |
| November..... | 3,980 | | | 40 | | | 1,010 | | | 2.80 | 3.12 | |
| December..... | 3,340 | | | 159 | | | 922 | | | 2.55 | 2.94 | |
| January..... | 3,010 | | | 208 | | | 1,020 | | | 2.83 | 3.26 | |
| February..... | 2,020 | | | 140 | | | 444 | | | 1.23 | 1.28 | |
| March..... | 2,060 | | | 140 | | | 473 | | | 1.31 | 1.51 | |
| April..... | 980 | | | 80 | | | 337 | | | .934 | 1.04 | |
| May..... | 3,040 | | | 53 | | | 386 | | | 1.07 | 1.23 | |
| June..... | 400 | | | 38 | | | 85.9 | | | .238 | .27 | |
| July..... | 4,220 | | | 30 | | | 970 | | | 2.69 | 3.10 | |
| August..... | 2,140 | | | 39 | | | 202 | | | .566 | .65 | |
| September..... | 38 | | | 28 | | | 32.2 | | | .086 | .10 | |
| The year..... | 4,220 | | | 28 | | | 515 | | | 1.43 | 19.38 | |

BOGUE CHITTO AT FRANKLINTON, LA.

LOCATION.—Staff gage in T. 2 S., R. 10 E., in Franklinton. Zero of gage is 125.4 feet above mean sea level.

DRAINAGE AREA.—959 square miles.

RECORDS AVAILABLE.—August, 1928, to September, 1931 (discontinued).

EXTREMES.—Maximum discharge during year, 10,300 second-feet Nov. 17 (gage height, 9.30 feet); minimum, 485 second-feet Sept. 23–30 (gage height, –0.30 foot).

1928–1931: Maximum discharge, 38,200 second-feet Nov. 15, 1929 (gage height, 17.32 feet); minimum, 485 second-feet Oct. 15–27, 1929, Sept. 23–30, 1931 (gage height, –0.3 foot).

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1930–31

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1..... | 785 | 700 | 4,750 | 970 | 1,020 | 1,340 | 1,180 | 875 | 660 | 585 | 1,580 | 585 |
| 2..... | 740 | 660 | 6,480 | 920 | 970 | 1,340 | 1,020 | 830 | 660 | 550 | 1,400 | 585 |
| 3..... | 700 | 620 | 5,790 | 920 | 970 | 1,640 | 1,070 | 830 | 660 | 550 | 1,120 | 550 |
| 4..... | 700 | 620 | 4,260 | 1,020 | 970 | 1,460 | 2,120 | 785 | 620 | 515 | 1,070 | 550 |
| 5..... | 700 | 620 | 4,260 | 2,180 | 920 | 1,400 | 3,590 | 785 | 585 | 515 | 1,020 | 515 |
| 6..... | 700 | 660 | 9,410 | 3,910 | 920 | 1,340 | 3,030 | 785 | 585 | 585 | 1,020 | 1,230 |
| 7..... | 830 | 660 | 8,870 | 4,020 | 920 | 1,580 | 2,710 | 740 | 585 | 585 | 970 | 830 |
| 8..... | 2,120 | 620 | 7,040 | 3,800 | 920 | 2,040 | 2,710 | 700 | 585 | 660 | 875 | 620 |
| 9..... | 4,880 | 660 | 4,260 | 3,300 | 1,020 | 2,180 | 1,460 | 700 | 585 | 585 | 785 | 585 |
| 10..... | 3,300 | 740 | 2,630 | 2,630 | 1,070 | 1,980 | 1,280 | 740 | 585 | 585 | 785 | 550 |
| 11..... | 1,840 | 970 | 2,120 | 2,950 | 970 | 1,460 | 1,120 | 740 | 585 | 585 | 740 | 550 |
| 12..... | 1,520 | 1,120 | 1,980 | 6,340 | 970 | 1,180 | 1,070 | 700 | 585 | 550 | 660 | 585 |
| 13..... | 1,230 | 1,020 | 1,710 | 9,050 | 920 | 1,070 | 1,020 | 660 | 585 | 550 | 585 | 585 |
| 14..... | 1,020 | 1,070 | 1,460 | 8,710 | 920 | 1,020 | 1,020 | 660 | 585 | 550 | 550 | 585 |
| 15..... | 1,020 | 1,400 | 1,400 | 6,060 | 920 | 1,020 | 920 | 660 | 660 | 740 | 585 | 585 |
| 16..... | 1,020 | 3,490 | 1,340 | 4,020 | 1,180 | 970 | 970 | 660 | 740 | 1,840 | 660 | 585 |
| 17..... | 1,020 | 8,710 | 1,230 | 2,950 | 1,580 | 920 | 920 | 620 | 785 | 1,230 | 830 | 585 |
| 18..... | 875 | 5,530 | 1,180 | 4,750 | 1,340 | 875 | 830 | 620 | 785 | 1,020 | 740 | 585 |
| 19..... | 785 | 3,800 | 1,180 | 4,140 | 1,230 | 830 | 830 | 660 | 700 | 920 | 660 | 585 |
| 20..... | 785 | 2,870 | 1,180 | 3,690 | 1,120 | 830 | 920 | 1,340 | 620 | 740 | 620 | 585 |
| 21..... | 740 | 2,560 | 1,120 | 2,870 | 1,020 | 1,020 | 875 | 3,300 | 620 | 660 | 740 | 585 |
| 22..... | 740 | 1,710 | 1,070 | 2,180 | 970 | 1,020 | 970 | 2,480 | 875 | 620 | 740 | 515 |
| 23..... | 700 | 2,400 | 1,020 | 1,640 | 1,020 | 1,020 | 875 | 1,900 | 830 | 620 | 660 | 485 |
| 24..... | 700 | 2,870 | 920 | 1,400 | 1,460 | 920 | 830 | 1,520 | 785 | 740 | 585 | 485 |
| 25..... | 700 | 2,400 | 1,020 | 1,340 | 1,340 | 830 | 830 | 1,120 | 740 | 875 | 585 | 485 |
| 26..... | 660 | 1,840 | 1,120 | 1,280 | 1,020 | 830 | 785 | 970 | 660 | 830 | 585 | 485 |
| 27..... | 660 | 1,340 | 1,180 | 1,230 | 970 | 970 | 785 | 830 | 740 | 830 | 585 | 485 |
| 28..... | 700 | 1,120 | 1,180 | 1,230 | 1,230 | 1,070 | 740 | 785 | 700 | 1,120 | 585 | 485 |
| 29..... | 740 | 1,120 | 1,180 | 1,180 | ----- | 970 | 700 | 740 | 620 | 1,460 | 585 | 485 |
| 30..... | 700 | 2,480 | 1,120 | 1,120 | ----- | 920 | 700 | 700 | 620 | 2,710 | 585 | 485 |
| 31..... | 700 | ----- | 1,020 | 1,070 | ----- | 1,020 | ----- | 700 | ----- | 1,840 | 585 | ----- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off in inches |
|----------------|---------|---------|-------|-----------------|-------------------|
| October..... | 4,880 | 660 | 1,110 | 1.16 | 1.34 |
| November..... | 8,710 | 620 | 1,880 | 1.96 | 2.19 |
| December..... | 9,410 | 920 | 2,730 | 2.85 | 3.29 |
| January..... | 9,050 | 920 | 3,000 | 3.13 | 3.61 |
| February..... | 1,580 | 920 | 1,070 | 1.12 | 1.17 |
| March..... | 2,180 | 830 | 1,200 | 1.25 | 1.44 |
| April..... | 3,590 | 700 | 1,260 | 1.31 | 1.46 |
| May..... | 3,300 | 620 | 972 | 1.01 | 1.16 |
| June..... | 875 | 585 | 664 | .692 | .77 |
| July..... | 2,710 | 515 | 863 | .900 | 1.04 |
| August..... | 1,580 | 550 | 777 | .810 | .98 |
| September..... | 1,230 | 485 | 580 | .605 | .68 |
| The year..... | 9,410 | 485 | 1,350 | 1.41 | 19.08 |

MISCELLANEOUS DISCHARGE MEASUREMENTS

In addition to the records of stream flow obtained at gaging stations and reported in the preceding pages, measurements of flow were made at a number of other points, as shown by the following table:

Miscellaneous discharge measurements in south Atlantic slope and eastern Gulf of Mexico drainage basins during the year ending September 30, 1931

Streams draining south Atlantic slope

| Date | Stream | Tributary to— | Locality | Gage height | Discharge |
|---------|----------------------|------------------------------|---|-------------|-----------|
| | | | | Feet | Sec.-ft. |
| Oct. 27 | Mechum River | South Fork of Rivanna River. | Highway bridge at Mechum River, Va. | | 5.4 |
| 27 | do. | do. | Bridge on Charlottesville-Whitehall road near Whitehall, Va. | | 6.3 |
| Feb. 4 | do. | do. | do. | | 9.0 |
| 14 | Moormans River | do. | 500 feet below junction with DoYLES River, near Whitehall, Va. | | 3.4 |
| Mar. 15 | Cape Fear River | Atlantic Ocean | 1 mile above Weather Bureau gage at Elizabethtown, N. C. | 25.02 | 2,470 |
| Apr. 4 | do. | do. | do. | 28.12 | 9,240 |
| 9 | do. | do. | do. | 37.4 | 24,200 |
| 12 | do. | do. | do. | 28.2 | 9,500 |
| 13 | do. | do. | do. | 27.85 | 6,460 |
| May 15 | do. | do. | do. | 26.41 | 5,340 |
| 4 | Abbotts Creek | Yadkin River | 100 feet above pump intake at Thomasville, N. C., and 500 feet below Brushy Fork Creek. | | 7.95 |
| Oct. 3 | Uharle River | do. | Highway bridge 3 miles east of El Dorado, N. C. | | 12.3 |
| 20 | Curtis Creek | Catawba River | 500 feet above Southern Railway bridge just above junction with Catawba River, at Old Fort, N. C. | | 4.47 |
| Nov. 14 | do. | do. | do. | | 7.91 |
| Feb. 4 | do. | do. | do. | | 11.6 |
| May 15 | do. | do. | do. | | 25.1 |
| June 15 | do. | do. | do. | | 14.5 |
| 23 | do. | do. | do. | | 11.6 |
| July 27 | do. | do. | do. | | 15.3 |
| May 7 | Horse Creek | Santee River | Bridge on State highway 4 near Farler, S. C. | | 154 |
| Aug. 26 | St. Johns River | Atlantic Ocean | Astor, Fla. | | 799 |
| Sept. 1 | do. | do. | do. | | 1,280 |
| Feb. 5 | Rock Springs | Wekiwa River | 7 miles north of Apopka, Fla. | | 55.9 |
| 5 | Seminole Springs | St. Johns River | Near Sorrento, Fla. | | 27.1 |
| 12 | Alexander Springs | do. | do. | | 112 |
| Mar. 17 | Silver Glen Spring | Lake George | do. | | 127 |
| Apr. 11 | do. | do. | do. | | 119 |
| Mar. 17 | Salt Springs | do. | Near Lake Kerr, Fla. | | 89.5 |
| Apr. 11 | do. | do. | do. | | 85.5 |
| Apr. 11 | do. | do. | do. | | 94.7 |
| May 5 | do. | do. | do. | | 105 |
| June 17 | do. | do. | do. | | 87.8 |
| Aug. 6 | Silver Springs River | Oklawaha River | Carmichael Landing, near Ocala, Fla. | | 826 |
| Sept. 8 | do. | do. | Outlet of main pool at Silver Springs, near Ocala, Fla. | | 587 |
| 23 | do. | do. | do. | | 510 |
| Apr. 21 | Kissimmee River | Lake Okeechobee | Vero Bridge, Fla. | | 190 |
| June 10 | do. | do. | Near Fort Bassenger, Fla. | | 2,190 |
| Sept. 3 | Taylor Creek | do. | Okeechobee, Fla. | | 21.7 |
| Apr. 1 | Threemile Canal | do. | Moore Haven, Fla. | | 98.4 |
| May 8 | do. | do. | do. | | 257 |
| June 4 | do. | do. | do. | | 291 |
| 24 | do. | do. | do. | | 18.6 |

Miscellaneous discharge measurements in south Atlantic slope and eastern Gulf of Mexico drainage basins during the year ending September 30, 1931—Continued

Streams draining into eastern Gulf of Mexico

| Date | Stream | Tributary to— | Locality | Gage height | Discharge |
|---------|---------------------------|--------------------------|---|-------------|-----------------|
| | | | | <i>Feet</i> | <i>Sec.-ft.</i> |
| May 18 | Peace Creek..... | Gulf of Mexico... | Fort Meade, Fla..... | ----- | 261 |
| 18 | do..... | do..... | Zolfo Springs, Fla..... | ----- | 315 |
| 28 | do..... | do..... | do..... | ----- | 635 |
| 28 | Kissengen Spring..... | Peace River..... | Near Bartow, Fla..... | ----- | 34.0 |
| 19 | Braden River..... | Gulf of Mexico..... | Near Bradenton, Fla..... | ----- | 23.8 |
| Oct. 9 | Chassahowitzka River..... | do..... | Near Homosassa, Fla..... | ----- | 101 |
| 9 | Homosassa Spring..... | do..... | do..... | ----- | 87.0 |
| 9 | Hunter Spring River..... | Crystal River..... | Crystal River, Fla..... | ----- | 86.0 |
| Sept. 2 | Withlacoochee River..... | Gulf of Mexico..... | Dunnellon, Fla..... | ----- | 1,320 |
| Oct. 9 | Blue Springs..... | Withlacoochee River..... | Juliette, Fla..... | ----- | 461 |
| 25 | Wekiva Spring..... | Waccasassa River..... | Near Gulf Hammock, Fla..... | ----- | 75.2 |
| Feb. 9 | do..... | do..... | do..... | ----- | 81.3 |
| Oct. 25 | Fannin Spring..... | Suwannee River..... | Near Wilcox, Fla..... | ----- | 109 |
| 10 | Chipola River..... | Apalachicola River..... | Highway bridge in Marianna, Fla..... | 32.21 | 467 |
| 10 | do..... | do..... | Merritt Highway bridge, 4 miles south of Marianna, Fla..... | 18.47 | 715 |

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