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SURFACE WATER SUPPLY *of the* UNITED STATES 1929

PART II
SOUTH ATLANTIC SLOPE AND EASTERN GULF OF MEXICO BASINS

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CONTENTS

	Page
Authorization and scope of work	1
Definition of terms	2
Explanation of data	2
Accuracy of field data and computed results	4
Publications	5
Cooperation	10
Division of work	10
Gaging-station records	12
James River Basin	12
Jackson River at Barber, Va	12
James River at Lick Run, Va	13
James River at Buchanan, Va	14
James River at Salt Creek, Va	15
James River at Bent Creek, Va	16
James River at Scottsville, Va	17
James River at Cartersville, Va	18
Dunlap Creek near Covington, Va	19
Potts Creek near Covington, Va	20
Cowpasture River near Clifton Forge, Va	21
Craig Creek at Parr, Va	22
Johns Creek at Newcastle, Va	23
Catawba Creek near Fincastle, Va	24
North River at Goshen, Va	25
North River at Rockbridge Baths, Va	26
North River near Lexington, Va	27
Kerrs Creek near Lexington, Va	28
Tye River at Roseland, Va	29
Hardware River near Scottsville, Va	30
Slate River near Arvonia, Va	31
Rivanna River below Moores Creek, near Charlottesville, Va	32
Willis River at Flanagan Mills, Va	33
Appomattox River at Farmville, Va	34
Appomattox River at Mattoax, Va	35
Appomattox River near Petersburg, Va	36
Dismal Swamp Basin	37
Lake Drummond in Dismal Swamp, Va	37
Chowan River Basin	38
Meherrin River near Lawrenceville, Va	38
Roanoke River Basin	39
Roanoke River at Roanoke, Va	39
Roanoke River at Niagara, Va	40
Roanoke River near Toshes, Va	41
Roanoke River near Gretna, Va	42
Roanoke River at Brookneal, Va	43
Roanoke River at Randolph, Va	44
Roanoke River at Old Gaston, N. C	45
Blackwater River near Union Hall, Va	46

Roanoke River Basin—Continued. Page
Otter River near Altavista, Va 47
Falling River near Naruna, Va 47
Little Falling River at Hat Creek, Va 48
Dan River near Francisco, N. C 49
Dan River at Leaksville, N. C 50
Dan River at South Boston, Va 51
Mayo River near Price, N. C 52
Smith River at Martinsville, Va 52
Leatherwood Creek near Old Liberty, Va 53
Banister River at Halifax, Va 54
Hyco River at Denniston, Va 55
Tar River Basin 56
Tar River near Nashville, N. C 56
Fishing Creek near Enfield, N. C 57
Neuse River Basin 58
Eno River at Hillsboro, N. C 58
Neuse River near Northside, N. C 59
Neuse River near Clayton, N. C 60
Flat River at Bahama, N. C 61
Flat River at dam, near Bahama, N. C 62
Dial Creek at Bahama, N. C 63
Rocky Creek near Bahama, N. C 64
Contentnea Creek at Hookerton, N. C 65
Cape Fear River Basin 66
Haw River near Benaja, N. C 66
Haw River at Haw River, N. C 67
Haw River near Pittsboro, N. C 68
Cape Fear River at Lillington, N. C 69
Cape Fear River at Fayetteville, N. C 70
Reedy Fork near Gibsonville, N. C 71
Horsepen Creek at Battle Ground, N. C 72
Buffalo Creek near Greensboro, N. C 73
North Buffalo Creek near Greensboro, N. C 74
Morgan Creek near Chapel Hill, N. C 75
West Fork of Deep River near High Point, N. C 76
Deep River near Randleman, N. C 77
Deep River at Ramseur, N. C 78
East Fork of Deep River near High Point, N. C 79
Lower Little River at Linden, N. C 80
Rockfish Creek near Fayetteville, N. C 81
Pee Dee River Basin 82
Yadkin River at Wilkesboro, N. C 82
Yadkin River at Yadkin College, N. C 83
Pee Dee River near Rockingham, N. C 84
Fisher River near Dobson, N. C 85
South Yadkin River at Cooleemee, N. C 86
Lynches River at Effingham, S. C 87
Black River at Kingstree, S. C 87
Santee River Basin 88
Santee River at Ferguson, S. C 88
Linnville River at Branch, N. C 89
Henry Fork near Henry River, N. C 90
Catawba Creek at Gastonia, N. C 91

Gaging-station records—Continued.
Santee River Basin—Continued. Page
Little Sugar Creek near Charlotte, N. C 92
Broad River near Chimney Rock, N. C 93
Broad River near Boiling Springs, N. C 94
Broad River at Richtex, S. C 95
Second Broad River at Cliffside, N. C 96
Saluda River at Chappells, S. C 97
Saluda River near Silverstreet, S. C 98
Saluda River near Chapin, S. C 99
Saluda River near Columbia, S. C 100
Savannah River Basin 101
Savannah River at Augusta, Ga 101
Broad River at Bell, Ga 102
St. Marys River Basin 103
North Prong of St. Marys River at Moniac, Ga 103
St. Marys River near Macclenny, Fla 104
Withlacoochee River Basin 105
Withlacoochee River at Trilby, Fla 105
Withlacoochee River near Holder, Fla 106
Suwannee River Basin 107
Suwannee River at Fargo, Ga 107
Suwannee River at White Springs, Fla 108
Suwannee River at Ellaville, Fla 109
Suwannee River at Luraville, Fla 110
Alapaha River at Mayday, Ga 111
Withlacoochee River at Blue Springs, Ga 112
Santa Fe River near Fort White, Fla 113
Ochlockonee River Basin 114
Ochlockonee River near Havana, Fla 114
Ochlockonee River at Ochlockonee, Fla 115
Ochlockonee River near Bloxham, Fla 117
Apalachicola River Basin 118
Chattahoochee River near Vinings, Ga 118
Chattahoochee River at West Point, Ga 119
Chattahoochee River at Columbus, Ga 120
Chattahoochee River at Columbia, Ala 121
Apalachicola River near River Junction, Fla 122
Soque River near Demorest, Ga 123
Chestatee River near Dahlonega, Ga 124
Flint River near Culloden, Ga 125
Flint River near Vienna, Ga 126
Flint River at Bainbridge, Ga 127
Chipola River near Altha, Fla 128
Choctawhatchee River Basin 129
Choctawhatchee River at Caryville, Fla 129
Mobile River Basin 130
Coosawattee River near Carters, Ga 130
Oostanaula River at Resaca, Ga 131
Coosa River near Rome, Ga 132
Coosa River at Gadsden, Ala 133
Coosa River at Childersburg, Ala 134
Coosa River at Lock 18, near Wetumpka, Ala 135
Alabama River near Montgomery, Ala 136

Gaging-station records—Continued.
Mobile River Basin—Continued. Page
Alabama River at Selma, Ala 137
Alabama River near Coy, Ala 138
Conasauga River near Tennga, Ga 139
Etowah River near Kingston, Ga 140
Little River near Jamestown, Ala 141
Choccolocco Creek near Jenifer, Ala 142
Tallapoosa River near Cragford, Ala 143
Tallapoosa River at Wadley, Ala 144
Tallapoosa River below Tallassee, Ala 145
Cahaba River at Centerville, Ala 146
East Fork of Tombigbee River near Fulton, Miss 152
Tombigbee River at Aberdeen, Miss 153
Tombigbee River at Columbus, Miss 154
Tombigbee River near Coatopa, Ala 155
Tombigbee River near Leroy, Ala 156
Buttahatchie River near Caledonia, Miss 157
Tibbee River near Tibbee, Miss 158
Luxapalila Creek near Columbus, Miss 159
Sipsey River near Elrod, Ala 160
Noxubee River at Macon, Miss 161
Mulberry Fork of Black Warrior River near Garden City, Ala 162
Black Warrior River at Lock 17, near Bessemer, Ala 163
Black Warrior River at Tuscaloosa, Ala 164
Sipsey Fork of Mulberry Fork near Sipsey, Ala 165
Locust Fork of Black Warrior River near Warrior, Ala 166
Pearl River Basin 167
Pearl River at Edinburg, Miss 167
Pearl River at Jackson, Miss 168
Pearl River near Columbia, Miss 169
Strong River at Dlo, Miss 170
Bogue Chitto at Franklinton, La 171
Miscellaneous discharge measurements 172
Index 175

ILLUSTRATION

Page
FIGURE 1. Typical river-measurement station showing concrete well and house for water-stage recorder and staff gages, cable, and car 3

SURFACE WATER SUPPLY OF SOUTH ATLANTIC SLOPE AND EASTERN GULF OF MEXICO BASINS, 1927

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, 1929.

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, 1895–1930

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

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

Measurements of stream flow have been made at about 5,800 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July, 1929, 2,240 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-feet, gallons per minute, miner's inches, and discharge in second-feet per square mile, and (2) those that represent the actual quantity of water, as run-off in inches, acre-feet, and millions of cubic feet. The principal terms used in this series of reports are second-feet, second-feet per square mile, run-off in inches, and acre-feet. They may be defined as follows:

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

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

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

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

The following terms not in common use are here defined:

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

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

EXPLANATION OF DATA

The data presented in this report cover the year beginning October 1, 1928, and ending September 30, 1929. At the beginning of January in most parts of the United States much of the precipitation in the preceding three months is stored in the form of snow or ice, or in ponds,

lakes, and swamps, or as underground water, and this stored water passes off in the streams during the spring break-up. At the end of September, on the other hand, the only stored water available for run-off is possibly a small quantity in the ground; therefore the run-off for the year beginning October 1 is practically all derived from precipitation within that year.

The base data collected at gaging stations consist of records of stage, measurements of discharge, and general information used to

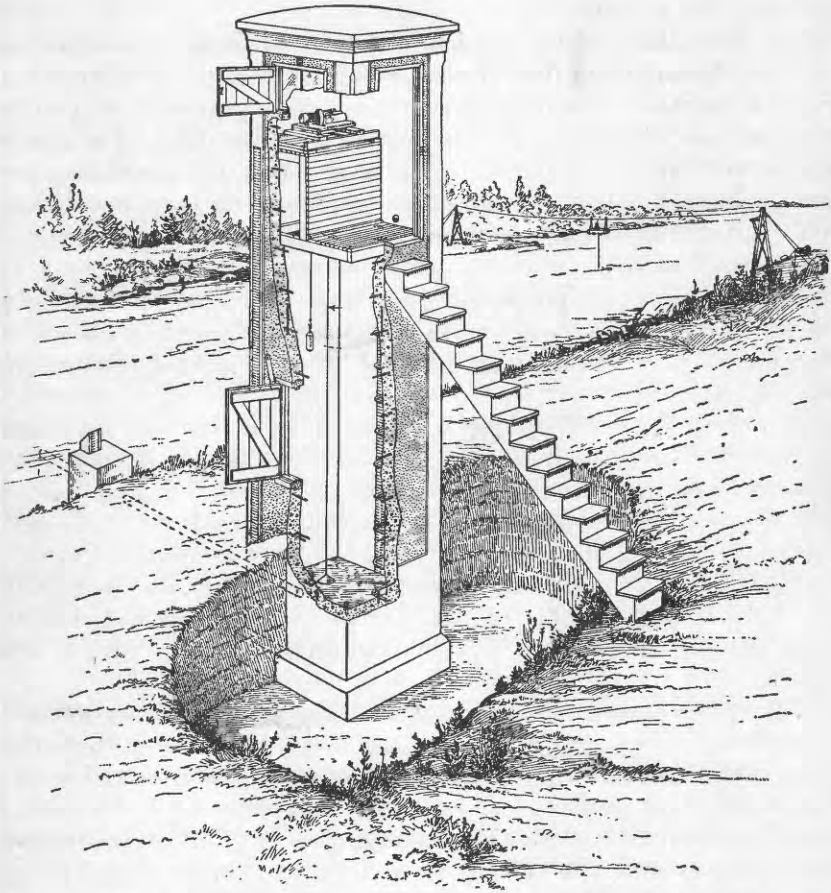

FIGURE 1.—Typical river-measurement station showing concrete well and house for water-stage recorder and staff gages, cable, and car

supplement the gage heights and discharge measurements in determining 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.

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

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

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

The table of daily discharge gives, in general, the discharge in second-feet corresponding to the daily gage height which may be a once daily reading or the mean of twice daily readings of a 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 this average flow are based computations recorded in the remaining columns, which are defined on page 2.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

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

The station description gives a statement in regard to the general accuracy of the records. "Excellent" indicates that records are

accurate within 5 per cent; "good," within 10 per cent; "fair," within 15 per cent; and "poor," 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 the natural drainage features as indicated below:

Part I. North Atlantic slope basins (St. John River to York River).
II. South Atlantic slope and eastern Gulf of Mexico basins (James River to the Mississippi).
III. Ohio River Basin.
IV. St. Lawrence River Basin.
V. Upper Mississippi River and Hudson Bay Basins.
VI. Missouri River Basin.
VII. Lower Mississippi River Basin.
VIII. Western Gulf of Mexico basins.
IX. Colorado River Basin.

X. The Great Basin.
XI. Pacific slope basins in California.
XII. North Pacific slope 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 in the principal cities in the United States.

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

Augusta, Me., Statehouse.
Boston, Mass., 2500 Customhouse.
Hartford, Conn., 318 State Office Building.
Albany, N. Y., 506 Broadway-Arcade Building.
Trenton, N. J., 710 Trenton Trust Building.
Harrisburg, Pa., Claster Building.
Charlottesville, Va., Brooks Museum, University of Virginia.
South Charleston, W. Va., Naval Ordnance Plant.
Asheville, N. C., 220 Post Office Building.
Columbia, S. C., 801 National Loan & Exchange Bank Building.
Ocala, Fla., Post Office Building.
Tuscaloosa, Ala., Post Office Building.
Chattanooga, Tenn., 630 Power Building.
Columbus, Ohio, Engineering Experiment Station, Ohio State University.
Indianapolis, Ind., 319 Federal Building.
Chicago, Ill., 1503 Consumers Building.
Madison, Wis., 337N State Capitol.
St. Paul, Minn., 202 Old State Capitol.
Topeka, Kans., 23 Federal Building.
Rolla, Mo., Rolla Building, School of Mines and Metallurgy.
Fort Smith, Ark., Post Office Building.
Austin, Tex., State Capitol.
Santa Fe, N. Mex., State Capitol.
Tucson, Ariz., 210 Post Office Building.
Denver, Colo., 403 Post Office Building.
Salt Lake City, Utah, 313 Federal Building.
Idaho Falls, Idaho, 228 Federal Building.
Boise, Idaho, Federal Building.
Helena, Mont., 416 Power Block.
Tacoma, Wash., 406 Federal Building.
Portland, Oreg., 606 Post Office Building.
San Francisco Calif., 303 Customhouse.
Los Angeles, Calif., 751 South Figueroa Street, Room 510.
Honolulu, Hawaii, Territorial Office Building.

A list of 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 5,830 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	1884 to June 30, 1891
13th A, pt. 3	Mean discharge in second-feet	1884 to Dec. 31, 1892.
14th A, pt. 2	Monthly discharge (long-time records, 1871 to 1893)	1888 to Dec. 31, 1893.
B 131	Descriptions, measurements, gage heights, and ratings	1893 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.	1897.
W 16	Descriptions, measurements, and gage heights, western Mississippi River below junction of Missouri and Platte, and western United States.	1897.
19th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also some long-time records).	1897.
W 27	Measurements, ratings, and gage heights, eastern United States, eastern Mississippi River, and Missouri River.	1898.
W 28	Measurements, ratings, and gage heights, Arkansas River, and western United States.	1898.
20th A, pt. 4	Monthly discharge (also for many earlier years)	1898.
W 35 to 39	Descriptions, measurements, gage heights, and ratings	1899.
21st A, pt. 4	Monthly discharge	1899.
W 47 to 52	Descriptions, measurements, gage heights, and ratings	1900.
22d A, pt. 4	Monthly discharge	1900.
W 65, 66	Descriptions, measurements, gage heights, and ratings	1901.
W 75	Monthly discharge	1901.
W 82 to 85	Complete data	1902.
W 97 to 100	do	1903.
W 124 to 135	do	1904.
W 165 to 178	do	1905.
W 201 to 214	do	1906.
W 241 to 252	do	1907–8.
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 261 to 634	do	1926.
W 641 to 654	do	1927.
W 661 to 674	do	1928.
W 681 to 694	do	1929.

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 1929. 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 III are published in Water-Supply Papers 283, 303, 323, 353, 383, 403, 433, 453, 473, and 503, which contain records for the Ohio River Basin for those years.

Numbers of water-supply papers containing results of stream measurements, 1899–1929

[For basins included see p. 5]

Year	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII-A	XII-B	XII-C
1899 [a]	35	[b] 35, 36	36	36	36	[c] 36, 37	37	37	[d] 37, 38	38, [e] 39	37, [f] 39	38	38	38
1900 [a]	47, [h] 48	48	48, [i] 49	49	49	49, [j] 50	50	50	50	51	51	51	51	51
1901	65, 75	65, 75	65, 75	65, 75	[k] 65, 66, 75	66, 75	[k] 65, 66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1902	82	[b] 82, 83	83	[l] 82, 83	[k] 83, 85	84	[k] 83, 84	84	85	85	85	85	85	85
1903	97	[b] 97, 98	98	97	[k] 98, 99, [m] 100	99	[k] 98, 99	99	100	100	100	100	100	100
1904	[n] 123, [o] 125, [p] 126	[p] 126, 127	128	129	[k] 128, 130	130, [q] 131	[k] 128, 131	132	133	133, [r] 134	134	135	135	135
1905	[n] 165, [o] 166, [p] 167	[p] 167, 168	169	170	171	172	[k] 169, 173	174	175, [s] 177	176, [r] 177	177	178	178	[t] 177, 178
1906	[n] 201, [o] 202, [p] 203	[p] 203, 204	205	206	207	208	[k] 205, 209	210	211, [s] 213	212, [r] 213	213	214	214	214
1907–8	241	242	243	244	245	246	247	248	249	250, [r] 251	251	252	252	252
1909	261	262	263	264	265	266	267	268	269	270, [r] 271	271	272	272	272
1910	281	282	283	284	285	286	287	288	289	290	291	292	292	292
1911	301	302	303	304	305	306	307	308	309	310	311	312	312	312
1912	321	322	323	324	325	326	327	328	329	330	331	332-A	332-B	332-C
1913	351	352	353	354	355	356	357	358	359	360	361	362-A	362-B	362-C
1914	381	382	383	384	385	386	387	388	389	390	391	392	393	394
1915	401	402	403	404	405	406	407	408	409	410	411	412	413	414
1916	431	432	433	434	435	436	437	438	439	440	441	442	443	444
1917	451	452	453	454	455	456	457	458	459	460	461	462	463	464
1918	471	472	473	474	475	476	477	478	479	480	481	482	483	484
1919–20	501	502	503	504	505	506	507	508	509	510	511	512	513	514
1921	521	522	523	524	525	526	527	528	529	530	531	532	533	534
1922	541	542	543	544	545	546	547	548	549	550	551	552	553	554
1923	561	562	563	564	565	566	567	568	569	570	571	572	573	574
1924	581	582	583	584	585	586	587	588	589	590	591	592	593	594
1925	601	602	603	604	605	606	607	608	609	610	611	612	613	614
1926	621	622	623	624	625	626	627	628	629	630	631	632	633	634
1927	641	642	643	644	645	646	647	648	649	650	651	652	653	654
1928	661	662	663	664	665	666	667	668	669	670	671	672	673	674
1929	681	682	683	684	685	686	687	688	689	690	691	692	693	694

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

COOPERATION

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DIVISION OF WORK

The data for the stations in Virginia were collected and prepared for publication under the direction of J. J. Dirzulaitis, district engineer, assisted by O. D. Mussey, M. T. Thomson, F. F. Schrader, R. W. Sundstrom, N. B. Usler, A. R. Green, T. F. Hanly, A. D. Ash, and Miss S. F. Norris.

The data for stations in North Carolina were collected and prepared for publication under the direction of E. D. Burchard, district engineer, assisted by A. E. Johnson, Karl Jetter, L. J. Hall, P. R. Speer, F. M. Bell, H. W. Palm, H. A. Taylor, R. W. Sundstrom, A. G. Hely, and Mrs. Effie T. Workman.

The data for stations in South Carolina were collected and prepared for publication under the direction of E. D. Burchard, district engineer, assisted by A. E. Johnson, Karl Jetter, L. J. Hall, P. R. Speer, F. M. Bell, H. W. Palm, H. A. Taylor, R. W. Sundstrom, and Mrs. Effie T. Workman.

The data for stations in Suwannee, St. Marys, and Withlacoochee River Basins in Georgia and Florida were collected and prepared for publication under the direction of W. R. King, district engineer,

assisted by Warren Withee, D. S. Wallace, P. R. Speer, Murray McGovern, W. R. Eaton, Duncan Charlton, Mrs. Mary H. Sitton, and Miss Gladys Boulton.

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The records were reviewed and the manuscript assembled by P. R. Speer.

50019—32——2

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, 1929.
EXTREMES.—Maximum discharge during year, 6,200 second-feet Feb. 28 (gage height, 10.36 feet); minimum, 92 second-feet Aug. 10 and Sept. 29 (gage height, 3.00 feet).

1925–1929: Maximum discharge, 6,850 second-feet Nov. 16, 1926 (gage height, 10.90 feet); minimum, 72 second-feet Aug. 28, 1925 (gage height, 2.80 feet).

Maximum stage known, about 25.6 feet March, 1913.
REMARKS.—Records good. Discharge estimated Feb. 3 and 4 because of ice.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	247	182	2,760	274	440	3,420	614	1,050	1,500	234	145	103
2	221	182	1,980	524	364	2,760	568	1,360	1,050	503	143	106
3	208	170	932	400	340	1,890	503	3,650	818	546	143	105
4	195	195	712	332	320	1,640	482	2,350	662	364	208	113
5	182	182	568	503	288	3,890	503	1,640	524	302	170	100
6	170	182	440	591	302	3,650	482	1,230	440	332	147	108
7	170	182	348	662	348	2,350	440	990	400	348	143	102
8	170	170	317	546	332	1,570	420	818	364	260	147	115
9	170	170	288	568	440	1,230	400	662	364	221	147	113
10	158	170	260	614	400	932	400	591	348	208	115	158
11	158	158	247	712	482	818	382	524	302	195	132	122
12	147	158	247	614	400	712	364	461	274	260	141	115
13	147	182	247	503	317	662	332	420	288	260	139	110
14	143	170	274	382	317	1,110	302	764	302	234	134	112
15	145	170	274	400	302	1,980	317	932	317	247	126	106
16	145	170	662	382	288	1,500	1,640	712	288	208	126	106
17	145	158	568	332	260	1,170	2,350	614	260	195	117	117
18	147	158	591	348	274	932	1,500	524	247	195	115	113
19	195	195	591	440	302	764	1,110	503	221	195	112	108
20	170	332	568	614	364	712	932	503	274	170	113	106
21	158	400	482	568	348	614	818	2,980	234	158	112	100
22	158	332	382	524	332	546	932	1,640	221	147	110	102
23	221	302	364	546	317	932	874	1,170	208	147	182	102
24	400	274	348	524	288	1,110	764	874	420	143	195	102
25	317	274	288	614	400	932	662	712	288	139	158	102
26	288	260	274	1,640	1,640	818	764	712	364	145	134	102
27	260	247	274	1,170	4,250	764	818	568	348	158	124	100
28	234	247	274	932	5,550	662	932	524	302	147	119	98
29	221	274	274	662	-------	568	1,500	990	288	145	117	94
30	208	288	260	568	-------	591	1,290	1,170	247	158	115	98
31	195	-------	234	482	-------	614	-------	1,500	-------	145	113	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	400	143	196	0.479	0.55
November	400	158	218	.533	.60
December	2,760	234	527	1.29	1.49
January	1,640	274	580	1.42	1.64
February	5,550	260	714	1.75	1.82
March	3,890	546	1,350	3.30	3.80
April	2,350	302	780	1.91	2.13
May	3,650	420	1,070	2.62	3.02
June	1,500	208	405	.990	1.10
July	546	139	229	.560	.65
August	208	110	137	.335	.39
September	158	94	108	.264	.29
The year	5,550	94	526	1.29	17.48

JAMES RIVER AT LICK RUN, VA.

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

DRAINAGE AREA.—1,370 square miles.

RECORDS AVAILABLE.—April, 1925, to September, 1929.

EXTREMES.—Maximum discharge during year, 21,800 second-feet Feb. 28 (gage height, 15.10 feet); minimum, 238 second-feet Sept. 30 (gage height, 1.78 feet).

1925–1929: Maximum discharge, 27,000 second-feet Dec. 26, 1926 (gage height, 17.70 feet); minimum, 192 second-feet Aug. 31, 1925 (gage height, 1.64 feet).

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

REMARKS.—Records excellent. Discharge Dec. 26 to Jan. 2 estimated because of missing record.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Ju'y	Aug.	Sept.
1	818	545	3,480	690	1,340	14,600	2,030	3,680	3,720	691	397	277
2	708	525	3,640	1,260	1,070	9,610	1,900	4,900	2,920	914	370	269
3	632	505	2,160	1,220	934	8,280	1,660	13,400	2,370	1,500	388	265
4	582	530	1,600	976	948	5,880	1,500	8,670	2,510	942	415	265
5	550	550	1,290	976	969	11,900	1,550	5,440	1,840	785	456	261
6	540	550	1,070	1,830	948	16,000	1,720	4,100	1,500	703	410	257
7	520	520	927	2,580	1,120	8,990	1,550	3,280	1,240	824	361	285
8	500	520	837	1,780	1,200	5,920	1,440	2,730	1,110	779	366	273
9	470	515	773	1,500	1,550	4,180	1,340	2,230	1,120	694	424	273
10	456	495	698	1,960	1,780	3,200	1,240	1,960	1,290	725	402	281
11	442	490	642	2,230	1,900	2,580	1,200	1,660	1,070	861	370	293
12	428	485	632	1,900	1,600	2,160	1,190	1,500	934	911	361	293
13	415	475	604	1,600	1,290	2,030	1,100	1,390	927	899	356	277
14	406	475	785	1,170	1,150	3,540	1,020	1,390	1,660	785	352	285
15	402	465	1,900	1,100	1,090	6,220	1,030	1,960	1,780	720	325	273
16	402	451	2,030	1,190	1,010	5,200	7,770	1,720	1,500	670	309	265
17	402	451	1,720	1,080	948	4,010	12,600	1,500	1,160	588	297	334
18	406	451	1,660	1,000	885	3,120	6,640	1,290	1,010	540	289	321
19	446	470	1,600	1,160	892	2,510	4,520	1,220	899	582	285	297
20	495	515	1,500	1,550	1,020	2,230	3,520	1,340	837	540	285	277
21	446	695	1,340	1,550	1,240	1,960	3,040	4,960	837	475	273	261
22	410	737	1,140	1,440	1,140	1,720	2,960	5,600	785	438	265	257
23	475	698	990	1,660	1,120	1,900	2,800	3,280	725	428	348	257
24	1,060	659	920	1,780	1,090	3,280	2,370	2,440	702	410	535	253
25	1,040	620	864	2,140	1,440	2,880	2,160	1,960	844	402	475	257
26	844	598	780	4,500	4,640	2,440	2,440	1,840	941	388	420	253
27	755	593	760	3,920	16,600	2,230	2,580	1,740	1,090	406	352	249
28	698	566	740	2,960	16,800	1,900	2,800	1,600	892	410	313	249
29	654	566	710	2,300	-------	1,720	5,580	1,990	798	446	301	249
30	615	620	700	1,780	-------	1,780	4,940	3,000	749	525	293	249
31	571	-------	680	1,500	-------	2,100	-------	2,880	-------	446	285	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,060	402	567	0.414	0.48
November	737	451	544	.397	.44
December	3,640	604	1,260	.920	1.06
January	4,500	690	1,750	1.28	1.48
February	16,800	885	2,420	1.77	1.84
March	16,000	1,720	4,710	3.44	3.97
April	12,600	1,020	2,940	2.15	2.40
May	13,400	1,220	3,120	2.28	2.63
June	3,720	702	1,330	.971	1.08
July	1,500	388	659	.481	.55
August	535	265	357	.261	.30
September	334	249	272	.199	.22
The year	16,800	249	1,660	1.21	16.45

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, 1929.

EXTREMES.—Maximum discharge during year, 30,000 second-feet Mar. 1 (gage height, 13.85 feet); minimum, 460 second-feet Sept. 30 (gage height, 1.92 feet).

1895–1929: Maximum gage height, 31 feet Mar. 27, 1913 (discharge not determined); minimum discharge, 275 second-feet Aug. 20–22 and Sept. 12–14, 1900 (gage height, 1.7 feet). A discharge of 260 second-feet reported on Apr. 17 and May 2, 1896, is subject to error, owing to unreliability of the record prior to 1898.

REMARKS.—Records excellent. Discharge estimated Nov. 19–22.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,540	856	1,540	932	2,080	24,600	3,810	5,580	5,260	1,160	704	500
2	1,440	822	4,580	1,190	1,740	13,800	3,440	6,750	4,810	1,150	634	485
3	1,260	806	2,750	1,670	1,410	13,200	3,080	18,100	4,100	1,910	627	480
4	1,150	814	2,080	1,370	1,380	9,050	2,730	14,000	5,660	1,630	662	475
5	1,070	814	1,670	1,280	1,380	14,200	2,640	8,440	4,100	1,340	648	470
6	1,070	814	1,440	1,870	1,430	24,100	2,820	6,210	3,080	1,270	683	470
7	1,010	798	1,240	3,080	1,870	14,300	2,560	5,080	2,480	1,260	627	480
8	957	790	1,130	2,520	2,300	8,940	2,400	4,380	2,160	1,320	614	584
9	906	774	1,040	2,010	2,670	6,650	2,240	3,720	2,920	1,130	627	500
10	864	766	975	2,300	2,910	5,380	2,090	3,260	4,780	1,150	662	530
11	822	750	906	2,750	3,240	4,380	2,020	2,820	3,080	1,360	641	512
12	806	736	864	2,670	2,910	3,720	1,950	2,560	2,320	1,450	602	518
13	782	722	856	2,300	2,440	3,440	1,880	2,480	2,320	2,090	584	506
14	766	715	906	1,870	2,080	4,940	1,740	2,320	3,170	1,880	590	495
15	750	708	1,740	1,460	1,940	8,810	1,680	2,730	3,530	1,560	566	506
16	736	694	2,600	1,660	1,800	8,050	8,440	2,820	3,170	1,320	536	485
17	729	680	2,300	1,640	1,670	6,210	20,200	2,400	2,480	1,150	518	524
18	729	680	2,150	1,530	1,530	5,080	11,100	2,160	2,020	1,020	518	614
19	736	710	2,080	1,620	1,470	4,280	7,330	2,160	1,810	929	506	572
20	758	790	2,010	2,010	1,550	3,720	5,580	2,240	1,600	983	548	542
21	798	1,040	1,800	2,300	1,940	3,350	4,780	5,160	1,580	872	506	500
22	736	1,120	1,630	2,150	1,870	2,990	4,380	8,650	1,580	792	495	480
23	814	941	1,400	2,300	1,870	3,780	4,190	5,380	1,340	760	530	470
24	1,160	915	1,230	2,520	1,870	6,110	3,620	4,000	1,250	732	683	470
25	1,740	872	1,190	2,990	2,150	5,180	3,260	3,260	1,330	711	792	475
26	1,420	822	1,130	4,890	4,450	4,380	3,440	2,900	1,510	774	711	475
27	1,210	822	1,080	5,600	21,900	3,900	3,720	2,640	1,680	753	634	485
28	1,100	806	1,040	4,400	22,300	3,440	3,600	2,560	1,540	704	578	475
29	1,020	798	1,030	3,510	-------	2,990	6,900	2,400	1,340	732	572	465
30	957	822	1,010	2,750	-------	3,260	7,100	4,800	1,240	816	542	517
31	906	-------	966	2,300	-------	3,900	-------	4,170	-------	808	512	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,740	729	992	0.477	0.55
November	1,120	680	807	.388	.43
December	4,580	856	1,560	.750	.86
January	5,600	932	2,370	1.14	1.31
February	22,300	1,380	3,510	1.69	1.76
March	24,600	2,990	7,420	3.57	4.12
April	20,200	1,680	4,490	2.16	2.41
May	18,100	2,160	4,710	2.26	2.61
June	5,660	1,240	2,640	1.27	1.42
July	2,090	704	1,150	.553	.64
August	792	495	602	.289	.33
September	614	465	502	.241	.27
The year	24,600	465	2,560	1.23	16.71

JAMES RIVER AT SALT CREEK, VA.

LOCATION.—Water-stage recorder at Bald Eagle dam site, three-fourths 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 September, 1929.

EXTREMES.—Maximum discharge during year, 37,300 second-feet Mar. 1 (gage height, 12.83 feet); minimum, 499 second-feet Sept. 30 (gage height, 1.77 feet).

1926–1929: Maximum discharge, 55,800 second-feet Aug. 16, 1928 (gage height, 16.8 feet); minimum, 460 second-feet Oct. 3, 1927 (gage height, 1.72 feet).

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

REMARKS.—Records excellent. Operations at numerous dams upstream cause diurnal fluctuations at gage.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,720	1,650	1,390	1,560	3,610	34,800	5,560	8,730	6,600	2,020	1,430	730
2	2,520	1,460	4,060	1,520	3,040	20,000	5,000	7,870	6,600	2,350	1,130	960
3	2,380	1,650	4,080	2,190	2,620	18,800	4,600	23,400	5,130	2,930	1,120	832
4	2,190	1,460	2,820	2,280	2,620	13,800	4,090	21,800	6,000	2,930	1,210	775
5	2,020	1,540	2,440	2,020	2,460	17,500	3,850	13,000	5,270	2,620	992	784
6	2,020	1,530	2,130	4,830	2,520	33,100	3,850	9,680	4,090	2,220	1,190	748
7	1,860	1,500	1,920	5,700	3,900	22,300	3,850	8,110	3,380	2,060	1,060	721
8	1,850	1,460	1,670	4,970	4,860	13,800	3,730	6,600	3,040	1,900	1,230	784
9	1,750	1,520	1,590	3,610	4,730	10,300	3,260	5,700	3,260	1,880	1,210	920
10	1,640	1,460	1,440	3,610	5,000	9,040	3,150	4,860	5,000	2,530	1,160	960
11	1,540	1,300	1,420	4,340	5,270	7,050	3,040	4,470	4,220	2,620	1,150	832
12	1,440	1,360	1,280	4,220	5,130	5,700	3,040	3,970	3,150	3,500	1,180	794
13	1,410	1,410	1,210	3,730	4,340	5,410	2,930	3,850	3,150	4,220	1,080	794
14	1,310	1,440	1,440	3,150	3,850	8,110	2,520	3,730	5,250	3,150	1,070	794
15	1,430	1,330	2,040	2,520	3,500	12,000	2,720	3,610	7,350	3,150	1,060	676
16	1,430	1,280	3,500	2,460	3,150	12,400	11,600	3,970	6,000	2,440	1,060	676
17	1,480	1,240	3,500	2,620	2,930	9,680	31,400	3,610	4,470	2,170	992	757
18	1,370	1,200	3,380	2,460	2,930	7,800	19,100	3,150	3,610	1,750	823	822
19	1,370	1,080	3,150	2,460	2,520	6,300	11,700	3,260	3,150	1,800	950	890
20	1,330	1,240	3,040	2,820	2,520	5,700	9,040	3,380	2,720	1,720	930	804
21	1,330	1,260	2,820	3,500	2,930	5,130	7,800	4,770	2,520	1,330	950	748
22	1,520	1,200	2,520	3,380	3,040	4,730	8,110	9,670	2,930	1,640	910	721
23	1,680	1,470	2,130	3,380	2,930	6,020	7,050	7,500	2,720	1,270	981	626
24	1,810	1,410	1,920	3,500	2,930	8,730	6,150	5,270	2,930	1,260	1,120	642
25	2,380	1,360	1,880	3,970	3,150	8,110	5,560	4,600	2,930	1,230	1,290	660
26	2,480	1,330	1,780	5,500	5,260	6,600	5,850	4,600	2,930	1,160	1,260	694
27	2,210	1,290	1,750	7,800	21,300	5,850	5,700	4,090	3,040	1,250	1,160	576
28	1,850	1,260	1,650	6,750	30,400	5,270	5,700	3,730	2,930	1,330	1,050	608
29	1,880	1,260	1,650	5,700	-------	4,600	8,020	3,850	2,520	1,180	900	552
30	1,720	1,150	1,540	4,600	-------	4,730	10,300	5,230	2,190	1,340	940	651
31	1,700	-------	1,470	3,970	-------	5,410	-------	5,410	-------	1,320	930	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,720	1,310	1,790	0.551	0.64
November	1,650	1,080	1,370	.422	.47
December	4,080	1,210	2,210	.680	.78
January	7,800	1,520	3,710	1.14	1.31
February	30,400	2,460	5,120	1.57	1.64
March	34,800	4,600	10,900	3.35	3.86
April	31,400	2,520	6,940	2.14	2.39
May	23,400	3,150	6,630	2.04	2.35
June	7,350	2,190	3,970	1.22	1.36
July	4,220	1,160	2,070	.637	.73
August	1,430	823	1,080	.332	.38
September	960	552	751	.231	.26
The year	34,800	552	3,880	1.19	16.17

JAMES RIVER AT BENT CREEK, VA.

LOCATION.—Chain gage at highway bridge at Bent Creek, Appomattox County, 50 feet below Bent Creek and 1 mile below Gladstone.

DRAINAGE AREA.—3,670 square miles.

RECORDS AVAILABLE.—March, 1925, to September, 1929.

EXTREMES.—Maximum discharge during year, 39,800 second-feet Feb. 28 (gage height, 13.08 feet); minimum, 694 second-feet Sept. 30 (gage height, 2.76 feet).

1925–1929: Maximum discharge, 74,000 second-feet Aug. 17, 1928 (gage height, 18.80 feet); minimum, 350 second-feet Aug. 31, 1925 (gage height, 2.35 feet).

REMARKS.—Records good above 1,200 second-feet and poor below, owing to regulation by power plant upstream. Discharge estimated Oct. 11–13.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,370	1,890	1,540	1,800	4,020	38,000	6,430	10,100	6,430	2,560	1,890	1,000
2	3,160	1,890	1,710	1,890	3,370	24,400	5,650	8,180	7,880	3,370	1,540	865
3	2,960	1,800	4,900	1,890	3,160	21,100	5,160	21,100	6,160	3,370	1,220	1,140
4	2,760	1,980	4,020	2,560	3,160	16,400	4,920	25,800	5,900	3,580	1,450	1,070
5	2,460	1,710	3,160	2,460	2,560	18,800	4,460	15,600	6,710	2,960	1,220	1,070
6	2,460	1,800	2,760	3,800	2,960	34,400	4,460	11,500	4,920	3,160	1,290	1,000
7	1,980	1,710	2,760	5,900	3,580	29,400	4,690	8,800	4,460	2,760	1,070	932
8	2,170	1,620	2,360	6,160	5,650	16,400	4,460	7,280	4,020	2,760	1,540	932
9	1,980	1,540	1,890	4,690	5,400	11,800	4,020	6,710	5,400	2,560	1,370	932
10	1,890	1,800	1,980	3,800	5,650	8,490	3,800	5,900	6,160	3,160	1,290	1,140
11	1,840	1,540	1,800	4,920	5,650	7,580	3,800	5,400	5,400	2,460	1,450	1,070
12	1,780	1,290	1,800	4,920	5,650	6,430	3,580	4,460	4,460	4,240	1,450	1,000
13	1,740	1,450	1,710	4,690	5,160	5,900	3,370	4,690	4,460	5,400	1,290	932
14	1,710	1,710	1,620	4,020	4,020	6,990	3,800	4,240	4,920	4,920	1,290	1,070
15	1,710	1,710	2,560	3,370	3,370	11,500	3,800	4,240	8,800	4,920	1,450	1,140
16	1,710	1,370	3,580	3,370	3,160	14,000	16,000	4,240	8,490	3,160	1,220	1,000
17	1,710	1,370	4,460	3,370	3,370	11,200	35,000	4,020	5,900	2,960	1,370	1,000
18	1,710	1,370	4,020	3,160	3,580	9,120	23,900	3,800	4,690	2,170	1,070	1,140
19	1,620	1,450	3,800	3,160	3,160	7,280	17,000	3,800	4,020	1,890	932	1,000
20	1,620	1,290	3,370	3,160	2,760	6,430	10,100	4,240	3,800	2,170	1,220	1,370
21	1,890	1,710	3,800	3,800	3,370	5,650	8,800	4,690	3,160	1,800	1,140	1,220
22	1,450	1,540	3,160	3,580	3,370	5,160	9,120	9,770	3,370	1,540	1,140	1,000
23	1,890	1,710	2,960	3,370	3,370	6,430	8,180	9,120	4,020	1,890	1,140	1,000
24	2,080	1,890	2,080	3,580	3,160	10,100	6,990	6,430	3,800	1,450	1,140	1,000
25	2,260	1,710	2,760	4,240	3,580	9,779	6,990	5,650	3,580	1,540	1,540	865
26	2,760	1,800	2,260	5,400	4,920	7,880	8,490	5,900	3,800	1,290	1,540	932
27	2,760	1,540	2,080	8,180	16,000	6,990	6,710	4,920	3,800	1,370	1,540	828
28	2,360	1,540	2,080	7,580	38,000	5,900	6,990	5,160	4,020	1,800	1,220	932
29	2,080	1,620	2,170	5,900	-------	5,400	9,440	4,690	3,370	1,450	1,290	1,000
30	1,980	1,620	1,980	5,160	-------	5,160	12,200	4,690	2,960	1,290	1,370	717
31	1,800	-------	1,800	4,690	-------	5,900	-------	5,650	-------	1,450	1,140	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,370	1,450	2,120	0.578	0.67
November	1,980	1,290	1,630	.444	.50
December	4,900	1,540	2,680	.730	.84
January	8,180	1,800	4,150	1.13	1.30
February	38,000	2,560	5,540	1.51	1.57
March	38,000	5,160	12,300	3.35	3.86
April	35,000	3,370	8,410	2.29	2.56
May	25,800	3,800	7,440	2.03	2.34
June	8,800	2,960	4,960	1.35	1.51
July	5,400	1,290	2,630	.717	.83
August	1,890	932	1,320	.360	.42
September	1,370	717	1,010	.275	.31
The year	38,000	717	4,510	1.23	16.71

JAMES RIVER AT SCOTTSVILLE, VA.

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

DRANAGE AREA.—4,570 square miles.

RECORDS AVAILABLE.—February, 1925, to September, 1929.

EXTREMES.—Maximum discharge during year, 44,700 second-feet Feb. 28 (gage height, 15.90 feet); minimum, 1,070 second-feet Aug. 23 and Sept 30 (gage height, 2.39 feet).

1925–1929: Maximum discharge, 75,600 second-feet Aug. 17, 1928 (gage height, 20.92 feet); minimum, 400 second-feet Sept. 30, 1925 (gage height, 1.62 feet).

REMARKS.—Records excellent. Discharge estimated Jan. 10–19, and May 13–19. Operations at numerous dams upstream cause diurnal fluctuations at gage.

Daily and monthly discharge, in second-feet, 1928-29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,550	2,420	2,280	2,280	4,910	37,200	7,350	12,500	7,980	3,860	2,420	1,460
2	4,200	2,280	2,280	2,710	4,370	32,500	7,150	10,400	8,410	4,370	2,280	1,400
3	4,030	2,420	3,740	2,560	4,080	22,700	6,750	18,400	8,190	4,200	2,280	1,240
4	3,860	2,420	5,090	3,030	3,690	20,400	6,180	28,800	6,750	4,730	1,890	1,460
5	3,690	2,560	4,030	3,350	3,690	19,900	5,990	21,200	7,350	4,200	1,890	1,400
6	3,520	2,280	3,520	5,430	3,520	31,300	5,450	14,500	6,750	4,370	2,020	1,400
7	3,190	2,280	3,190	7,730	4,780	33,800	5,630	11,300	5,630	4,200	1,760	1,290
8	3,350	2,280	3,030	7,560	6,560	21,100	5,270	9,670	5,090	3,350	2,020	1,340
9	2,870	2,420	2,560	6,370	6,750	14,700	5,090	8,410	6,480	3,190	2,560	1,400
10	3,190	2,280	2,280	6,300	6,560	11,300	4,910	7,560	6,560	4,200	2,150	1,290
11	2,560	2,280	2,420	6,000	6,560	9,350	4,910	6,750	6,750	4,370	2,020	1,520
12	2,870	2,020	2,280	6,000	6,560	7,980	4,910	6,180	5,810	7,020	1,890	1,460
13	2,560	2,020	2,150	5,450	6,180	7,560	4,550	5,990	5,270	10,900	2,020	1,290
14	2,560	2,020	2,380	4,550	5,630	8,770	4,200	5,700	7,740	7,150	1,760	1,290
15	2,420	2,280	3,360	4,350	4,910	12,600	4,200	5,400	10,600	7,150	1,640	1,460
16	2,560	2,020	3,280	3,950	4,730	15,800	22,000	5,400	12,200	5,450	1,640	1,400
17	2,560	2,020	4,910	3,830	4,200	13,800	33,200	5,250	8,630	4,370	1,640	1,290
18	2,560	2,020	4,910	3,900	4,030	11,000	32,700	5,100	6,950	3,860	1,520	1,760
19	2,560	2,020	4,730	3,900	3,860	9,100	19,400	4,910	5,810	3,690	1,400	1,760
20	2,280	2,150	4,200	3,690	3,690	7,770	13,700	4,910	5,270	3,190	1,460	1,400
21	2,280	2,020	4,200	4,030	3,690	7,150	11,000	5,990	4,910	3,030	1,640	1,520
22	2,280	2,280	3,860	4,370	4,200	6,750	11,600	7,100	4,030	2,870	1,460	1,400
23	2,420	2,020	3,520	4,370	4,200	8,480	10,400	11,200	4,550	2,710	1,340	1,240
24	3,030	2,280	3,350	4,370	4,200	14,100	8,860	8,190	9,870	2,710	1,640	1,290
25	2,710	2,420	2,710	4,910	4,370	11,900	8,410	6,750	7,350	2,420	1,760	1,290
26	2,870	2,150	3,190	5,990	5,690	10,100	12,200	7,350	6,180	2,280	2,020	1,180
27	3,350	2,280	2,710	7,320	11,100	8,630	9,100	6,750	5,990	2,420	1,890	1,240
28	3,190	2,150	2,870	8,410	36,500	7,770	8,630	6,560	5,630	2,280	1,760	1,290
29	2,710	2,150	2,870	7,350	-------	7,150	11,900	5,990	5,090	2,560	1,640	1,180
30	2,710	2,280	2,560	6,370	-------	6,750	12,500	6,180	4,370	2,150	1,760	1,180
31	2,710	-------	2,560	5,630	-------	7,150	-------	6,950	-------	2,280	1,640	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	4,550	2,280	2,970	0.650	0.75
November	2,560	2,020	2,220	.486	.54
December	5,090	2,150	3,260	.713	.82
January	8,410	2,280	5,030	1.10	1.27
February	36,500	3,520	6,190	1.35	1.41
March	37,200	6,750	14,300	3.13	3.61
April	33,200	4,200	10,300	2.25	2.51
May	28,800	4,910	8,950	1.96	2.26
June	12,200	4,030	6,740	1.48	1.65
July	10,900	2,150	4,050	.886	1.02
August	2,560	1,340	1,830	.400	.46
September	1,760	1,180	1,370	.300	.34
The year	37,200	1,180	5,600	1.23	16.64

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, 1929.
EXTREMES.—Maximum discharge during year, 56,600 second-feet Apr. 17 (gage height, 17.66 feet); minimum, 1,360 second-feet Sept. 30 (gage height, 0.99 foot).

1899–1929: Maximum discharge, about 106,000 second-feet Dec. 30, 1901 (gage height, 26.7 feet); minimum gage height, 0.33 foot Oct. 27, 1921 (discharge not determined).

REMARKS.—Records excellent.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,520	3,320	2,820	3,240	6,310	53,600	9,710	17,600	9,960	5,500	2,980	2,000
2	5,900	3,070	2,900	3,320	5,500	47,400	9,460	15,300	10,500	5,700	2,980	1,730
3	5,500	2,980	2,900	3,580	5,100	32,400	8,960	18,600	10,800	6,730	2,730	1,690
4	5,100	3,070	5,800	3,320	4,800	27,400	8,250	33,100	9,460	5,700	2,730	1,690
5	4,700	3,160	5,200	3,850	4,600	27,900	7,800	30,500	8,480	5,700	2,480	1,800
6	4,510	3,240	4,320	5,380	4,510	39,200	7,360	21,000	8,960	5,500	2,300	1,760
7	4,320	3,070	3,940	11,800	6,150	43,400	6,940	16,200	7,800	5,700	2,300	1,780
8	4,130	2,980	3,580	10,800	9,460	32,200	6,940	13,500	6,730	6,100	2,390	2,450
9	3,940	2,980	3,500	8,960	9,460	22,100	6,730	11,700	6,850	4,700	2,900	2,340
10	3,760	2,980	3,070	7,800	9,210	16,700	6,310	10,500	9,210	4,700	3,320	1,850
11	3,850	2,980	3,070	7,580	8,960	13,600	5,900	9,460	7,580	6,950	3,070	1,760
12	3,320	2,980	2,980	7,360	8,480	11,600	6,310	8,250	8,020	7,700	2,730	1,960
13	3,410	2,820	2,980	7,360	8,020	9,960	6,310	7,800	6,520	20,700	2,640	1,780
14	3,160	2,730	2,900	6,730	7,150	11,100	5,700	7,360	10,700	13,100	2,640	1,620
15	3,160	2,640	4,580	5,700	6,520	14,200	5,500	6,940	11,600	11,400	2,560	1,920
16	3,070	2,820	5,750	5,500	6,100	19,100	25,800	6,940	19,500	9,110	2,480	1,960
17	3,240	2,730	4,900	5,000	5,700	19,600	55,200	6,730	14,800	6,620	2,390	1,760
18	3,160	2,640	6,100	4,900	5,300	15,900	46,200	6,730	9,960	5,700	2,390	2,020
19	3,410	2,640	6,100	5,000	5,100	13,200	31,000	6,310	8,480	5,000	2,390	2,390
20	3,240	2,640	5,500	5,000	4,900	11,100	20,500	6,100	7,150	5,000	2,220	2,100
21	3,070	2,730	5,000	4,700	4,800	6,710	15,900	8,290	6,730	4,600	2,170	1,850
22	2,980	2,730	5,100	4,900	4,800	8,960	16,900	9,210	5,900	4,130	1,960	1,910
23	2,900	2,820	4,510	5,300	5,500	10,400	16,200	12,800	5,300	3,760	1,860	1,730
24	3,390	2,730	4,130	5,300	5,900	21,500	13,500	11,900	10,800	4,040	1,760	1,620
25	3,670	2,730	3,940	5,700	6,310	18,000	11,400	9,210	15,000	3,670	2,200	1,740
26	3,410	2,900	3,580	7,480	8,080	15,000	18,900	9,210	11,200	3,410	2,220	1,660
27	3,670	2,820	3,760	8,250	15,300	12,900	16,500	8,960	8,720	3,320	2,480	1,560
28	3,850	2,820	3,580	10,500	36,700	11,100	12,600	8,720	7,800	3,320	2,070	1,640
29	3,850	2,730	3,580	9,960	-------	9,710	16,700	8,250	7,360	3,070	2,170	1,520
30	3,320	2,730	3,580	8,480	-------	8,960	17,200	8,480	6,520	3,320	2,240	1,540
31	3,320	-------	3,320	7,150	-------	9,460	-------	8,480	-------	3,410	2,300	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	6,520	2,900	3,830	0.614	0.71
November	3,320	2,640	2,870	.460	.51
December	6,100	2,820	4,100	.657	.76
January	11,800	3,240	6,450	1.03	1.19
February	36,700	4,510	7,810	1.25	1.30
March	53,600	8,960	19,900	3.19	3.68
April	55,200	5,500	14,800	2.37	2.64
May	33,100	6,100	11,800	1.89	2.18
June	19,500	5,300	9,280	1.49	1.66
July	20,700	3,070	6,040	.968	1.12
August	3,320	1,760	2,450	.393	.45
September	2,450	1,520	1,830	.293	.33
The year	55,200	1,520	7,590	1.22	16.53

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, 1929.
EXTREMES.—Maximum discharge during period, 2,880 second-feet Feb. 28 (gage height, 6.85 feet); minimum, 31 second-feet Sept. 2 and 5 (gage height, 1.06 feet).
REMARKS.—Records good. Discharge interpolated June 17 and 18.

Daily and monthly discharge, in second-feet, 1928–29

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	------	88	160	1,550	213	492	256	58	40	35
2	------	104	129	1,180	186	1,180	199	60	39	33
3	------	104	110	770	160	1,940	213	66	41	34
4	------	73	127	1,180	170	825	186	60	42	33
5	------	104	96	2,200	213	428	136	57	40	32
6	------	104	89	1 620	256	320	119	53	40	36
7	------	104	96	825	256	287	104	50	39	36
8	------	134	77	585	213	227	94	49	42	36
9	------	170	147	354	199	199	116	47	40	36
10	------	170	242	227	186	172	108	47	40	35
11	------	157	242	199	199	147	84	51	43	36
12	------	104	172	172	134	152	76	54	40	34
13	------	123	167	162	119	138	110	53	40	35
14	------	110	136	227	108	134	152	49	36	37
15	------	104	119	390	108	121	132	47	34	36
16	227	104	110	354	1,810	117	164	47	34	35
17	199	104	99	287	1,180	108	139	46	34	37
18	170	104	96	227	585	104	114	46	34	40
19	170	134	99	186	390	99	89	45	34	38
20	157	213	134	167	304	172	94	42	33	36
21	88	213	147	136	272	470	76	42	34	36
22	213	213	138	129	242	304	91	40	34	36
23	60	287	110	372	213	227	78	42	49	36
24	60	272	138	537	186	172	65	39	46	36
25	33	304	320	354	227	140	132	40	55	34
26	73	660	1,620	272	304	134	94	42	52	34
27	73	409	2,070	227	242	114	84	46	46	35
28	73	320	2,810	199	635	172	73	42	40	33
29	73	213	------	172	1,120	304	80	42	37	33
30	60	186	------	213	585	186	64	41	36	39
31	60	162	------	213	------	186	------	40	36	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
December 16–31	227	33	112	0.675	0.40
January	660	73	182	1.10	1.27
February	2,810	77	357	2.15	2.24
March	2,200	129	506	3.05	3.52
April	1,810	108	367	2.21	2.47
May	1,940	99	315	1.90	2.19
June	256	64	117	.705	.79
July	66	39	47.8	.288	.33
August	55	33	39.7	.239	.28
September	40	32	35.4	.213	.24

POTTS CREEK NEAR COVINGTON, VA.

LOCATION.—Chain gage at highway bridge one-fourth mile above Hays Creek and 3 miles southwest of Covington, Alleghany County.
DRAINAGE AREA.—158 square miles.
RECORDS AVAILABLE.—December, 1928, to September, 1929.
EXTREMES.—Maximum discharge during period, 1,980 second-feet Apr. 16 (gage height, 4.64 feet); minimum, 30 second-feet Sept. 14 (gage height, 1.45 feet).
REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928–29

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-------	70	145	1,150	241	398	231	91	47	35
2	-------	81	120	1,070	291	920	195	117	49	35
3	-------	68	117	770	241	1,550	560	110	49	35
4	-------	67	110	630	199	882	595	89	47	35
5	-------	85	100	1,390	236	630	392	85	52	35
6	-------	122	89	1,310	231	495	291	95	47	36
7	-------	117	104	920	215	495	204	142	44	39
8	-------	93	122	665	195	385	168	93	47	35
9	-------	173	159	528	177	354	360	79	49	35
10	-------	186	231	385	177	302	349	100	45	34
11	-------	148	220	280	177	263	258	89	44	35
12	-------	120	173	263	210	226	164	91	45	33
13	67	107	142	241	168	210	199	132	45	34
14	77	81	148	354	173	195	630	107	42	32
15	138	97	142	462	168	186	495	102	36	34
16	122	100	122	462	1,470	168	372	95	35	35
17	114	107	125	385	1,070	152	302	85	37	45
18	129	95	122	308	735	138	252	77	36	49
19	129	117	125	269	595	145	210	72	38	42
20	117	152	168	231	495	177	195	65	35	38
21	112	145	168	204	417	349	177	60	35	36
22	102	159	177	186	372	286	135	59	35	35
23	89	220	142	210	320	231	114	59	44	34
24	85	236	122	291	263	210	122	56	57	35
25	81	331	199	241	247	159	152	54	70	35
26	77	392	1,150	241	314	159	152	52	57	36
27	83	343	1,390	231	263	142	135	60	46	36
28	81	297	1,720	204	343	132	117	57	43	35
29	81	199	-------	181	700	231	114	52	38	35
30	75	159	-------	302	528	177	97	49	37	36
31	70	155	-------	372	-------	148	-------	47	36	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
December 13–31	138	67	96.3	0.609	0.43
January	392	67	156	.987	1.14
February	1,720	89	280	1.77	1.84
March	1,390	181	475	3.01	3.47
April	1,470	168	374	2.37	2.64
May	1,550	132	339	2.15	2.48
June	630	97	258	1.63	1.82
July	142	47	81.3	.515	.59
August	70	35	44.1	.279	.32
September	49	32	36.1	.228	.25

COWPASTURE RIVER NEAR CLIFTON FORGE, VA.

LOCATION.—Chain gage at iron highway bridge 1½ 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, 1929.

EXTREMES.—Maximum discharge during year, 5,860 second-feet Feb. 27 and 28 (gage height, 9.00 feet); minimum, 67 second-feet Aug. 31, Sept. 2–12, 29 and 30 (gage height, 1.98 feet).

1907–8, 1925–1929: Maximum discharge, 6,960 second-feet Dec. 26, 1926 (gage height, 10.0 feet); minimum, 50 second-feet Aug. 14, 1926 (gage height, 1.82 feet).

A stage of 10.0 feet, original datum, was recorded on June 14, 1907, but the discharge was not computed. The flood of March, 1913, reached a stage of 20.8 feet.

REMARKS.—Records good. Discharge estimated Dec. 8, 23, and Feb. 3.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	260	99	960	210	476	4,100	638	960	824	243	120	74
2	223	88	1,580	582	451	3,080	555	1,740	960	451	97	67
3	210	106	638	476	400	2,480	476	4,100	698	476	108	67
4	194	140	528	336	336	1,740	426	2,280	555	297	145	67
5	185	90	476	336	297	4,540	402	2,100	426	278	132	67
6	200	140	379	379	260	4,870	402	1,340	379	207	127	67
7	210	134	260	1,100	528	2,280	379	857	336	200	122	67
8	179	124	240	610	451	1,580	358	729	297	188	112	67
9	156	114	226	502	582	1,180	358	582	226	185	97	67
10	127	110	216	698	610	960	316	528	207	188	86	67
11	110	108	207	824	610	760	297	476	260	220	99	67
12	101	145	194	698	502	638	278	426	260	426	94	72
13	94	130	185	698	402	582	278	379	260	402	86	72
14	88	112	210	451	358	1,500	297	358	638	336	82	68
15	105	101	960	358	336	2,380	316	426	528	260	78	68
16	112	99	1,180	379	358	2,190	2,880	426	451	228	74	68
17	124	134	792	358	316	960	4,980	379	358	176	70	108
18	122	145	502	358	297	857	2,010	336	316	159	70	108
19	105	142	502	402	260	824	1,500	358	260	150	76	108
20	117	134	476	476	278	698	1,260	402	226	137	84	103
21	101	127	402	426	336	668	960	1,740	220	132	86	97
22	88	122	358	476	379	555	960	1,740	207	124	104	92
23	122	114	340	476	402	668	890	960	200	117	159	86
24	150	110	316	528	336	824	698	698	194	112	148	84
25	170	105	297	555	451	729	638	610	213	106	145	82
26	200	101	278	1,180	1,100	638	638	555	316	90	101	74
27	179	97	260	1,100	5,310	582	760	582	451	103	86	72
28	132	90	243	960	5,200	528	960	528	297	99	82	70
29	124	86	243	729	-------	476	1,420	729	278	112	78	67
30	110	105	220	528	-------	528	1,180	960	278	159	74	67
31	105	-------	204	426	-------	638	-------	1,030	-------	148	67	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	260	88	145	0.318	0.37
November	145	86	115	.252	.28
December	1,580	185	447	.980	1.13
January	1,180	210	568	1.25	1.44
February	5,310	260	772	1.69	1.76
March	4,870	476	1,450	3.18	3.67
April	4,980	278	917	2.01	2.24
May	4,100	336	946	2.08	2.39
June	960	194	371	.814	.91
July	476	90	210	.461	.53
August	159	67	99.6	.218	.25
September	108	67	77.0	.169	.19
The year	5,310	67	509	1.12	15.16

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, 1929.
EXTREMES.—Maximum discharge during year, 4,650 second-feet Feb. 27 (gage height, 8.80 feet); minimum, 47 second-feet Sept. 6 (gage height, 3.59 feet).
1925–1929: Maximum discharge, 16,900 second-feet Aug. 17, 1928 (gage height, 15.60 feet); minimum, 36 second-feet Sept. 11, 1925 (gage height, 3.45 feet).
REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	291	119	110	121	344	2,760	677	771	1,040	140	70	52
2	229	117	114	143	247	1,850	586	900	557	137	70	50
3	209	112	112	140	229	1,750	500	3,020	1,200	137	68	49
4	189	114	105	117	193	1,290	472	1,470	1,650	132	68	48
5	168	114	105	121	197	1,950	446	1,040	900	121	65	48
6	168	110	101	182	209	3,020	419	771	646	124	65	47
7	154	110	98	178	291	1,750	368	708	500	264	64	48
8	146	110	96	229	368	1,200	344	616	419	132	65	52
9	132	114	94	213	472	900	319	528	1,380	112	69	70
10	124	110	90	264	616	708	301	472	1,750	121	68	70
11	121	105	85	247	740	586	291	419	900	161	66	60
12	112	101	84	213	586	528	264	368	677	238	66	56
13	108	101	85	189	472	500	247	344	677	646	65	54
14	105	98	105	134	446	771	247	394	586	419	59	52
5	103	98	178	154	394	1,560	273	394	586	278	58	52
16	103	96	221	209	344	1,120	1,380	368	528	229	58	51
17	103	94	193	182	319	900	2,890	344	419	186	56	68
18	103	94	201	189	291	708	1,470	305	344	158	56	68
19	105	98	197	238	287	586	970	344	301	134	54	70
20	108	105	186	319	344	500	803	319	273	117	53	63
21	103	114	182	368	446	472	677	1,290	251	108	52	56
22	96	110	168	344	419	419	586	900	221	96	52	54
23	105	105	337	368	394	528	500	646	189	96	58	53
24	251	103	92	419	394	1,200	419	500	178	92	63	53
25	260	101	103	528	528	771	394	419	213	85	73	53
26	205	98	132	771	1,560	616	472	394	238	80	64	53
27	175	96	129	708	4,330	557	472	319	217	79	60	53
28	158	90	132	616	3,720	472	446	310	182	76	58	53
29	146	94	132	500	-------	419	1,200	344	178	74	56	52
30	134	103	126	394	-------	500	970	740	161	73	52	51
31	124	-------	121	344	-------	803	-------	446	-------	70	52	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	291	96	150	0.453	0.52
November	119	90	104	.314	.35
December	221	84	129	.390	.45
January	771	117	295	.891	1.03
February	4,330	193	685	2.07	2.16
March	3,020	419	1,020	3.08	3.55
April	2,890	247	647	1.95	2.18
May	3,020	305	652	1.97	2.27
June	1,750	161	579	1.75	1.95
July	646	70	159	.480	.55
August	73	52	61.4	.185	.21
September	70	47	55.3	.167	.19
The year	4,330	47	376	1.14	15.41

JOHNS CREEK AT NEWCASTLE, VA.

LOCATION.—Chain gage at highway bridge 500 feet east of town limits of Newcastle, Craig County, and one-fourth mile above mouth.
DRAINAGE AREA.—106 square miles.
RECORDS AVAILABLE.—April, 1926, to September, 1929.
EXTREMES.—Maximum discharge during year, 1,560 second-feet Feb. 28 and Mar. 5 (gage height, 7.4 feet); minimum, 11 second-feet Sept. 6 (gage height, 2.43 feet).

1926–1929: Maximum discharge, 3,500 second-feet Aug. 16, 1928 (gage height, 9.10 feet); minimum, 8.1 second-feet Aug. 14–16 and 19, 1926 (gage height, 2.27 feet).

REMARKS.—Records good. Discharge estimated Jan. 14.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	68	48	43	55	132	1,020	208	252	199	45	24	12
2	68	46	42	48	125	840	191	291	138	59	21	12
3	59	43	40	44	112	523	160	645	690	5[illegible]	20	11
4	55	46	37	38	84	561	138	601	561	50	19	12
5	51	45	39	68	78	1,560	145	363	561	35	23	12
6	49	42	37	78	73	960	132	337	199	3[illegible]	17	11
7	43	40	36	84	89	487	118	313	152	3[illegible]	18	14
8	42	47	35	84	84	313	112	271	199	3[illegible]	22	14
9	40	44	34	89	100	313	100	199	601	2[illegible]	22	18
10	40	43	32	84	152	208	94	175	391	45	20	23
11	36	40	33	78	160	199	89	152	252	6[illegible]	19	19
12	35	40	34	64	132	167	78	132	191	9[illegible]	19	15
13	32	38	35	55	112	191	94	132	160	118	18	13
14	31	36	45	60	112	337	89	145	175	73	16	12
15	31	35	100	78	89	363	112	125	160	59	18	25
16	32	35	84	68	100	313	363	118	152	59	16	14
17	32	35	68	64	94	271	523	100	125	5[illegible]	15	26
18	32	34	64	68	94	252	391	100	112	3[illegible]	14	24
19	31	36	78	100	132	175	291	94	89	3[illegible]	14	21
20	31	51	73	132	183	160	252	145	100	30	13	18
21	31	43	68	78	225	145	208	363	78	23	13	15
22	31	42	68	78	145	132	199	252	68	23	12	15
23	55	40	68	175	138	199	175	199	64	2[illegible]	28	15
24	132	36	68	167	125	191	138	160	59	23	25	15
25	94	35	64	234	208	167	145	138	68	22	19	16
26	78	37	50	271	1,230	160	152	112	89	22	21	17
27	68	40	55	225	1,160	152	132	100	73	23	20	17
28	59	40	55	199	1,560	138	152	100	64	2[illegible]	18	14
29	59	38	49	160	-------	125	421	106	59	19	14	15
30	59	43	47	152	-------	234	313	112	50	18	15	16
31	50	-------	47	160	-------	252	-------	160	-------	18	13	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	132	31	50.1	0.473	0.55
November	51	34	40.6	.383	.43
December	100	32	52.5	.495	.57
January	271	38	108	1.02	1.18
February	1,560	73	251	2.37	2.47
March	1,560	125	358	3.38	3.90
April	523	78	190	1.79	2.00
May	645	94	209	1.97	2.27
June	690	50	196	1.85	2.06
July	118	18	41.5	.392	.45
August	28	12	18.3	.173	.20
September	26	11	16.0	.151	.17
The year	1,560	11	127	1.20	16.25

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, 1929.
EXTREMES.—Maximum discharge during period, 1,430 second-feet May 2 (gage height, 9.98 feet); minimum, 18 second-feet Sept. 6 (gage height, 2.36 feet).
REMARKS.—Records good. Discharge estimated Feb. 8–5 because of ice and Jan. 8 because gage reading was in error.

Daily and monthly discharge, in second-feet, 1928–29

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-------	38	54	504	173	131	180	61	31	21
2	-------	39	42	468	152	682	124	65	30	21
3	-------	32	40	346	138	562	542	56	33	19
4	-------	33	35	280	131	296	312	53	32	21
5	-------	33	35	1,210	124	218	203	68	28	20
6	-------	76	46	582	112	173	166	55	30	19
7	-------	51	170	397	105	173	131	54	28	22
8	-------	50	242	280	99	131	124	49	33	36
9	-------	49	225	233	93	131	920	49	34	23
10	-------	53	233	188	93	112	312	54	29	24
11	-------	51	180	166	88	99	203	54	27	20
12	30	42	138	152	82	93	159	71	33	21
13	30	39	118	166	82	118	159	124	26	27
14	39	33	99	450	76	105	188	99	26	20
15	44	42	88	380	93	93	312	76	27	20
16	35	42	88	280	1,010	93	166	62	26	21
17	33	45	88	218	504	88	166	54	25	24
18	34	53	76	188	280	82	124	50	26	23
19	32	61	76	166	203	99	105	48	26	21
20	32	56	76	145	173	188	93	48	40	20
21	31	51	82	138	152	329	363	44	22	19
22	30	59	76	124	131	188	93	39	38	19
23	30	69	93	602	124	138	82	46	30	19
24	26	76	99	504	105	112	82	41	36	20
25	30	162	145	329	105	99	88	40	27	20
26	30	119	582	264	118	105	82	38	26	20
27	30	100	562	218	99	93	71	38	23	19
28	31	87	1,120	180	159	88	71	37	23	19
29	31	70	-------	159	180	138	66	34	26	19
30	27	59	-------	296	145	203	60	37	25	19
31	27	59	-------	203	-------	218	-------	33	21	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
December 12-31	44	26	31.6	0.304	0.23
January	162	32	59.0	.567	.65
February	1,120	35	175	1.68	1.75
March	1,210	124	317	3.05	3.52
April	1,010	76	171	1.64	1.83
May	682	82	173	1.66	1.91
June	920	60	192	1.85	2.06
July	124	33	54.1	.520	.60
August	40	21	28.6	.275	.32
September	36	19	21.2	.204	.23

NORTH RIVER AT GOSHEN, VA.

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

DRAINAGE AREA.—190 square miles.

RECORDS AVAILABLE.—March, 1925, to September, 1929.

EXTREMES.—Maximum discharge during year, 5,620 second-feet Apr. 16 (gage height, 8.35 feet); minimum, 14 second-feet Sept. 6 and 7 (gage height, 1.80 feet).

1925–1929: Maximum discharge, 7,310 second-feet Nov. 16, 1926 (gage height, 9.70 feet); minimum, 8 second-feet July 22, 1926 (gage height, 1.79 feet).

REMARKS.—Records good. Discharge estimated Feb. 5 and 7.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	75	43	257	105	232	1,570	160	550	990	124	61	28
2	63	43	274	249	178	1,050	153	850	490	990	50	25
3	57	43	196	188	163	1,050	138	1,990	330	408	53	23
4	52	47	141	181	138	824	141	1,220	265	275	59	23
5	50	47	116	170	119	3,220	156	790	216	176	41	22
6	52	45	108	970	100	2,150	126	550	167	184	39	17
7	47	43	95	659	150	1,050	129	435	135	142	39	14
8	42	47	84	386	204	628	126	315	128	135	90	35
9	43	43	69	318	192	460	121	260	132	90	61	32
10	39	42	67	340	274	340	113	225	114	90	46	31
11	37	43	65	386	296	240	110	180	96	90	44	24
12	37	43	61	340	253	216	108	184	90	184	43	23
13	36	43	61	240	240	208	100	150	93	198	57	23
14	34	40	100	170	232	628	93	138	285	135	50	28
15	34	42	435	185	220	1,050	91	138	225	138	46	24
16	36	40	362	156	216	896	4,750	146	150	118	44	26
17	36	40	318	150	121	514	1,990	138	132	118	43	33
18	36	37	296	141	95	362	1,380	121	124	330	38	33
19	42	40	245	170	95	318	885	121	101	176	35	25
20	40	45	212	156	88	266	700	171	99	124	33	25
21	37	43	192	144	86	188	580	1,060	110	96	31	25
22	34	43	192	144	103	163	640	640	221	90	31	24
23	57	47	126	147	105	216	462	380	159	75	57	23
24	69	50	123	144	98	228	408	280	184	72	48	25
25	55	45	105	192	126	204	355	255	193	66	43	25
26	50	42	84	386	318	208	355	320	550	59	36	18
27	50	47	86	362	2,450	208	295	245	310	55	36	24
28	50	47	86	362	2,780	167	380	265	270	66	28	22
29	47	47	86	257	-------	150	790	275	198	61	31	23
30	45	65	84	216	-------	174	670	380	142	61	29	22
31	43	-------	71	178	-------	167	-------	330	-------	55	28	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	75	34	46.0	0.242	0.28
November	65	37	44.4	.234	.26
December	435	61	155	.816	.94
January	970	105	264	1.39	1.60
February	2,780	86	345	1.82	1.90
March	3,220	150	617	3.25	3.75
April	4,750	91	550	2.89	3.22
May	1,990	121	423	2.23	2.57
June	990	90	223	1.17	1.31
July	990	55	161	.847	.98
August	90	28	44.2	.233	.27
September	35	14	24.8	.131	.15
The year	4,750	14	241	1.27	17.23

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, 1929.

EXTREMES.—Maximum discharge during period, 6,070 second-feet Apr. 16 (gage height, 8.50 feet); minimum, 30 second-feet Sept. 11–13, 29, and 30 (gage height, 1.15 feet).

REMARKS.—Records excellent. Discharge estimated Nov. 13–15, Dec. 14–17, 19–21, Jan. 2, 4–10, Mar. 23 to Apr. 4, Apr. 10, 11, and 13.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-------	81	110	178	312	2,720	380	736	1,50[illegible]	187	73	35
2	-------	79	332	400	233	2,370	340	1,460	61[illegible]	1,380	61	32
3	-------	77	371	336	219	2,060	320	3,180	44[illegible]	616	60	32
4	-------	83	277	300	212	1,520	340	1,750	32[illegible]	336	77	31
5	-------	83	226	250	200	3,740	332	1,160	26[illegible]	244	58	31
6	-------	79	190	1,500	219	3,220	304	825	21[illegible]	244	52	31
7	-------	75	164	1,080	385	1,840	269	646	19[illegible]	176	49	33
8	-------	77	147	690	501	1,190	254	501	17[illegible]	150	90	61
9	-------	75	133	600	546	902	247	420	19[illegible]	128	102	40
10	-------	73	117	690	616	677	240	354	17[illegible]	117	71	35
11	-------	69	115	790	557	557	230	312	13[illegible]	268	60	33
12	-------	69	110	622	435	473	222	273	12[illegible]	477	60	30
13	-------	68	110	501	362	452	200	247	19[illegible]	463	63	31
14	-------	67	130	332	328	1,180	184	236	65[illegible]	251	63	40
15	-------	65	530	380	304	1,660	196	226	38[illegible]	236	55	39
16	-------	63	570	320	277	1,270	3,820	212	29[illegible]	181	47	35
17	-------	65	540	285	244	930	3,770	196	219	150	45	43
18	-------	65	495	281	226	703	1,930	184	22[illegible]	222	43	52
19	-------	69	420	336	212	575	1,270	181	190	219	42	41
20	-------	83	380	308	216	501	968	222	196	158	43	35
21	-------	83	320	277	206	425	783	780	28[illegible]	123	41	34
22	-------	79	258	269	212	380	839	696	59[illegible]	105	39	34
23	-------	83	233	296	209	430	658	441	354	95	52	32
24	-------	83	212	285	212	540	557	336	37[illegible]	85	67	34
25	-------	81	193	385	288	500	518	354	380	75	52	34
26	95	81	178	736	944	460	534	540	658	69	46	34
27	90	79	173	684	3,120	420	452	367	512	69	40	32
28	93	75	173	604	3,460	380	529	376	367	75	39	32
29	90	79	173	452	-------	340	1,040	534	300	69	36	31
30	88	79	158	371	-------	430	909	512	219	112	36	30
31	83	-------	136	332	-------	400	-------	547	-------	65	35	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
November	83	63	75.6	0.230	0.26
December	570	110	248	.754	.87
January	1,500	178	480	1.46	1.68
February	3,460	200	545	1.66	1.73
March	3,740	340	1,070	3.25	3.75
April	3,820	184	754	2.29	2.56
May	3,180	181	607	1.84	2.12
June	1,500	128	359	1.09	1.22
July	1,380	69	230	.699	.81
August	102	35	54.7	.166	.19
September	61	30	35.6	.108	.12

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, 1929.

EXTREMES.—Maximum discharge during year, 10,000 second-feet Apr. 16 (gage height, 11.95 feet); minimum, 80 second-feet Sept. 20 (gage height, 2.26 feet).

1925–1929: Maximum discharge, that of Apr. 16, 1929; minimum (estimated), 45 second-feet Sept. 25–30, 1925.

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

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	321	151	e 200	e 300	438	e 4,900	576	e 1,030	1,610	295	148	
2	274	156	e 450	e 550	343	e 3,600	521	e 1,850	880	1,090	146	
3	252	162	e 520	e 480	316	2,710	490	e 4,200	675	820	131	
4	237	154	325	e 430	316	2,040	505	2,710	526	465	156	e 115
5	226	e 154	267	e 380	291	4,760	475	1,730	428	343	143	
6	255	154	237	e 2,100	316	4,780	438	1,200	370	334	131	
7	222	146	208	e 1,600	598	2,600	406	970	325	248	126	e 125
8	202	146	195	e 940	820	1,690	397	790	316	212	156	e 140
9	182	146	179	e 820	820	1,260	288	680	334	226	208	e 120
10	165	141	159	e 940	880	970	379	609	299	255	154	
11	156	138	165	1,060	850	820	361	538	267	574	141	
12	154	136	159	880	702	702	348	480	248	767	129	
13	151	134	162	730	570	658	321	438	398	850	131	
14	165	134	189	480	516	e 1,770	299	415	1,100	526	138	e 115
15	162	131	680	538	475	e 2,040	304	392	850	526	131	
16	162	131	730	490	433	e 1,730	5,590	370	609	361	120	
17	159	129	592	424	397	1,200	5,550	338	470	291	116	
18	159	e 132	592	406	348	940	2,610	325	460	291	124	118
19	159	136	543	456	330	784	1,730	356	370	370	102	120
20	159		475	460	330	686	1,340	392	e 400	267	99	116
21	151		428	406	343	598	1,120	940	e 1,100	215	95	112
22	148		356	397	e 340	532	1,300	970	e 820	189	97	124
23	176		299	428	e 340	675	1,000	670	e 650	179	104	129
24	252		274	420	e 340	850	850	521	e 680	165	134	134
25	195	e 150	e 250	543	e 480	736	790	672	e 700	156	120	138
26	170		e 240	1,000	e 1,300	697	850	970	e 1,100	146	114	136
27	168		e 230	970	e 3,600	642	714	620	e 750	168	131	134
28	162		e 220	850	e 4,200	565	790	587	e 500	148	129	131
29	159		e 210	692	-------	631	1,340	820	e 410	151	143	122
30	156		e 210	e 550	-------	686	1,230	742	325	192	e 130	124
31	151	-------	e 200	451	-------	614	-------	664	-------	151	e 120	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	321	148	187	0.384	0.44
November	162	----------	145	.298	.33
December	730	159	321	.659	.76
January	2,100	300	683	1.40	1.61
February	4,200	291	751	1.54	1.60
March	4,900	532	1,540	3.16	3.64
April	5,590	299	1,100	2.26	2.52
May	4,200	325	903	1.85	2.13
June	1,610	248	599	1.23	1.37
July	1,090	146	354	.727	.84
August	208	95	131	.269	.31
September	140	----------	121	.248	.28
The year	5,590	95	569	1.17	15.83

e Estimated.

KERRS CREEK NEAR LEXINGTON, VA.

LOCATION.—Chain gage at highway bridge 3½ miles northwest of Lexington, Rockbridge County, one-fourth mile above mouth.
DRAINAGE AREA.—34 square miles.
RECORDS AVAILABLE.—January, 1927, to September, 1929, fragmentary.
EXTREMES.—Maximum discharge during year, 1,060 second-feet Apr. 16 (gage height, 7.40 feet); minimum, 8 second-feet Sept. 2 (gage height, 3.58 feet).
1927–1929: Maximum discharge, 1,560 second-feet Aug. 16, 1928 (gage height, 8.50 feet); minimum, 8 second-feet Jan. 28, 1928, and Sept. 2, 1929; minimum gage height, 3.45 feet, Jan. 28, 1928.
REMARKS.—Records fair. Gage not read on days for which no discharge is given.

Daily discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	18	19	46	28	146		50	30	20		
2	30		16				55	935	28	20	12	8
3	28	19	16		36	118	48	164	23			
4			16	34	32	101	36			17		
5						506	41	69			12	
6	25			93	28	188	36	50	21	17		
7	23		16	57	32		34	48	19	14		10
8	23	20			46		32	41			19	
9				32		70	32		25	72	14	
10		19	15	85	64	64	34					
11	22					52	32					
12			14	41	46	48		32			10	
13								30				
14	22		36			238	28	27		39		
15	21	18		34	32							8
16	22					110	1,060					
17				34	28	78	188		30	13	10	22
18		19				66	110	34	30		10	
19	20				28	60	79		34	39		
20				32			73					
21		19					62	62				
22			24	32	29			34	41	15		
23	48	14	22				39	39		15	22	
24	22	16			30	67	41	50	30	14	14	
25				73		66	39	56	30		14	
26					252		50	130				
27			18	52	156	49		39				10
28	22				506		130	69				
29		16	18	46					27		12	
30			16			79	57					
31										13	10	

TYE RIVER AT ROSELAND, VA.

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

DRAINAGE AREA.—68 square miles.

RECORDS AVAILABLE.—January, 1927, to September, 1929.

EXTREMES.—Maximum discharge during year, 1,100 second-feet May 3 (gage height, 6.30 feet); minimum, 17 second-feet Sept. 27 and 29 (gage height, 3.06 feet).

1927–1929: Maximum discharge, 2,240 second-feet Aug. 16, 1928 (gage height, 8.65 feet); minimum, 15 second-feet July 6, 1927 (gage height, 2.94 feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	116	42	50	69	98	409	165	226	269	132	56	24
2	108	45	37	65	108	390	154	594	226	132	53	22
3	102	42	36	48	100	316	154	952	213	108	56	21
4	94	50	35	45	88	300	143	594	165	100	56	22
5	92	48	32	50	90	552	143	428	154	100	48	22
6	94	42	32	680	96	510	132	352	143	112	45	21
7	85	40	30	334	188	428	120	284	132	96	45	30
8	79	41	32	226	154	334	116	240	200	85	108	48
9	74	40	29	200	154	284	112	226	165	78	61	24
10	70	40	30	213	154	226	110	188	130	85	50	26
11	65	38	30	165	132	200	102	176	120	154	45	20
12	63	37	30	154	122	188	104	165	108	213	42	20
13	63	37	31	132	112	226	96	165	128	200	40	19
14	60	37	96	112	108	636	92	154	200	154	38	48
15	63	37	124	120	104	552	108	143	390	154	35	27
16	60	37	88	110	102	409	860	132	200	128	32	22
17	56	37	78	108	94	316	636	120	254	116	32	69
18	56	36	112	108	85	269	448	118	226	108	31	35
19	56	37	100	116	85	240	352	120	176	100	30	25
20	53	60	96	104	85	213	284	154	176	88	29	23
21	50	38	85	98	81	188	254	176	154	85	28	20
22	50	35	76	102	83	176	284	143	132	87	28	20
23	67	35	67	104	78	334	254	132	254	87	31	22
24	63	35	63	100	74	284	213	124	284	79	40	22
25	53	34	60	126	85	254	240	143	240	74	32	21
26	50	32	60	132	240	240	269	143	226	69	28	20
27	49	32	56	132	240	213	226	594	188	143	26	18
28	48	32	56	132	552	200	254	352	176	78	24	18
29	48	35	56	116	------	176	254	254	154	70	32	18
30	45	41	50	108	------	213	240	269	132	67	32	31
31	45	------	48	104	------	188	------	390	------	58	28	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	116	45	67.0	0.985	1.14
November	60	32	39.1	.575	.64
December	124	29	58.2	.856	.99
January	680	45	142	2.09	2.41
February	552	74	132	1.94	2.02
March	636	176	305	4.49	5.18
April	860	92	231	3.40	3.79
May	952	118	266	3.91	4.51
June	390	108	190	2.79	3.11
July	213	58	108	1.59	1.83
August	108	24	40.7	.599	.69
September	69	18	25.9	.381	.43
The year	952	18	.134	1.97	26.74

HARDWARE RIVER NEAR SCOTTSVILLE, VA.

LOCATION.—Chain gage on 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, 1929.
EXTREMES.—Maximum discharge during year, 4,510 second-feet June 24 (gage height, 16.30 feet); minimum, 15 second-feet Feb. 4 (gage height, 2.46 feet).
1925–1929: Maximum discharge, 4,690 second-feet Aug. 26, 1928 (gage height, 16.62 feet); minimum, 6 second-feet Sept. 7, 1927 (gage height, 1.54 feet).
REMARKS.—Records fair. Low-water flow is regulated by dam and gristmill just above station. No record Oct. 1 to Nov. 15.

Daily and monthly discharge, in second-feet, 1928–29

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-------	43	33	23	322	54	188	85	214	144	60
2	-------	40	35	19	216	45	174	80	612	130	50
3	-------	42	27	20	160	41	402	85	256	117	53
4	-------	30	24	16	153	36	202	69	228	117	48
5	-------	33	25	30	714	38	174	60	214	111	48
6	-------	39	354	31	402	32	160	53	200	105	49
7	-------	38	108	146	188	30	153	50	214	111	87
8	-------	38	58	96	120	28	132	49	186	144	81
9	-------	47	41	69	96	20	132	74	172	130	61
10	-------	34	69	45	74	26	132	58	1,260	111	69
11	-------	38	58	48	56	40	120	46	900	111	66
12	-------	34	48	37	58	47	108	41	1,010	93	52
13	-------	29	42	31	80	28	108	53	1,320	93	55
14	-------	45	24	28	126	28	108	674	612	87	60
15	-------	146	30	29	96	26	108	634	327	81	54
16	52	64	31	28	74	3,850	108	1,310	284	76	52
17	52	48	29	26	50	822	85	23[illegible]	256	76	59
18	49	62	37	26	50	354	74	167	242	76	56
19	50	41	34	24	50	306	85	120	270	70	51
20	50	35	31	26	46	261	126	133	242	67	44
21	45	39	27	29	40	246	261	90	228	66	44
22	40	31	24	31	43	306	120	74	214	63	52
23	36	41	27	35	674	216	96	9[illegible]	200	65	49
24	40	37	37	49	160	202	85	4,330	186	68	44
25	40	39	69	96	74	276	80	1,710	158	64	41
26	43	35	53	202	114	474	49	387	158	57	42
27	42	33	43	306	90	261	96	319	200	55	41
28	45	34	39	1,500	58	291	114	298	165	55	39
29	36	34	34	-------	51	276	96	270	151	70	39
30	46	26	27	-------	64	202	132	229	214	69	40
31	-------	26	25	-------	62	-------	96	-------	144	76	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
November 16–30	52	36	44.4	0.427	0.24
December	146	26	42.0	.404	.47
January	354	24	49.8	.479	.55
February	1,500	16	109	1.05	1.09
March	674	40	147	1.41	1.63
April	3,850	20	295	2.84	3.17
May	402	49	132	1.27	1.46
June	4,330	41	396	3.81	4.25
July	1,320	144	356	3.42	3.94
August	144	55	89.0	.856	.99
September	87	39	52.9	.509	.57

SLATE RIVER NEAR ARVONIA, VA.

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

DRAINAGE AREA.—235 square miles.

RECORDS AVAILABLE.—April, 1926, to September, 1929.

EXTREMES.—Maximum discharge during year, 4,110 second-feet Apr. 17 (gage height, 12.12 feet); minimum, 39 second-feet Sept. 30 (gage height, 2.22 feet).

1926–1929: Maximum discharge, 5,300 second-feet Aug. 12, 1928 (gage height, 14.12 feet); minimum, 11 second-feet Aug. 5, 1926 (gage height, 1.70 feet).

REMARKS.—Records good. Discharge estimated May 20, July 4, and Sept. 7. Operation of gristmill 7½ miles upstream affects low-water flow.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	291	123	138	138	146	1,910	235	340	205	123	84	102
2	205	116	130	146	130	644	196	315	162	235	84	96
3	170	123	123	123	120	448	178	303	162	154	96	96
4	170	138	123	109	120	315	170	245	154	125	102	96
5	162	146	116	154	123	1,530	178	215	138	116	90	96
6	154	130	116	291	146	1,340	170	215	130	96	84	96
7	146	123	109	196	540	448	162	205	123	109	84	96
8	138	130	116	154	392	291	154	196	130	102	178	96
9	138	123	116	130	291	245	146	215	366	96	170	84
10	138	123	109	196	366	205	146	245	315	235	116	84
11	130	116	109	205	267	196	170	196	187	138	96	63
12	123	116	102	178	215	187	215	178	146	170	90	49
13	123	116	102	154	178	205	187	170	146	914	84	47
14	123	116	116	130	178	291	154	170	178	303	78	50
15	130	116	420	116	170	245	162	170	245	508	73	55
16	130	123	225	154	154	303	3,880	162	574	291	68	50
17	130	123	178	138	162	215	3,150	154	225	154	68	57
18	130	116	154	146	154	187	508	146	178	138	63	109
19	162	123	138	154	154	170	267	146	170	315	63	73
20	146	138	130	146	154	170	235	150	162	279	84	59
21	123	130	130	138	162	170	256	235	154	138	60	58
22	123	116	123	130	162	162	644	245	123	267	58	56
23	138	116	116	130	256	1,040	392	178	123	138	57	63
24	146	109	102	138	267	1,300	279	162	154	116	58	68
25	138	109	109	291	392	315	256	162	225	102	68	63
26	123	109	109	420	756	291	644	508	448	96	78	63
27	123	116	116	245	1,250	235	392	215	303	96	61	68
28	123	116	123	215	2,510	205	366	196	205	84	56	50
29	109	116	123	196	-------	187	954	187	187	84	78	54
30	109	123	116	162	-------	303	420	267	138	102	170	45
31	123	-------	116	154	-------	303	-------	170	-------	96	116	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	291	109	142	0.604	0.70
November	146	109	121	.515	.57
December	420	102	134	.570	.66
January	420	109	173	.736	.85
February	2,510	120	354	1.51	1.57
March	1,910	162	453	1.93	2.22
April	3,880	146	509	2.17	2.42
May	508	146	215	.915	1.06
June	574	123	205	.872	.97
July	914	84	191	.813	.94
August	178	56	87.6	.373	.43
September	109	45	71.4	.304	.34
The year	3,880	45	220	.936	12.73

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, 1929. February to August, 1925, at station half a mile upstream.

EXTREMES.—Maximum discharge during year, 11,200 second-feet Apr. 16 (gage height, 14.15 feet); minimum, 76 second-feet Sept. 7 (gage height, 1.70 feet).

1925–1929: Maximum discharge, that of Apr. 16, 1929; minimum, 21 second-feet Sept. 4, 1925 (gage height, 1.10 feet).

REMARKS.—Records good. Discharge estimated Oct. 6–19 and Apr. 7–10. No record June 11 to July 19.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	408	213	260	236	322	2,160	408	592	644	-------	240	94
2	343	209	213	260	322	1,670	386	865	452	-------	213	88
3	322	209	205	217	301	1,560	364	4,460	386	-------	201	99
4	301	260	193	213	301	1,090	364	1,760	343	-------	232	94
5	301	301	193	240	301	2,480	408	1,160	301	-------	190	97
6		240	186	3,050	301	2,570	386	886	301	-------	171	94
7		224	182	1,300	902	1,520		730	280	-------	174	92
8	270	228	174	822	886	1,090	365	592	386	-------	224	506
9		217	167	618	672	886		544	386	-------	260	193
10		201	171	700	592	700		498	408	-------	205	139
11		197	182	700	544	644	343	452	-------	-------	182	129
12		209	201	568	475	592	343	408	-------	-------	186	102
13	230	205	205	498	408	568	322	386	-------	-------	167	94
14		201	280	386	386	760	301	386	-------	-------	156	290
15		205	822	430	386	791	388	386	-------	-------	153	163
16		205	521	430	343	730	8,550	364	-------	-------	132	111
17	225	201	408	343	322	644	4,690	322	-------	-------	123	163
18		197	430	343	301	568	2,320	301	-------	-------	114	217
19		224	364	364	301	544	1,680	322	-------	-------	126	129
20	224	228	322	322	301	498	1,370	452	-------	343	120	108
21	217	220	301	301	280	475	1,300	1,020	-------	301	111	92
22	224	209	260	301	343	452	1,800	618	-------	343	108	90
23	236	201	236	301	343	568	1,090	475	-------	343	111	102
24	301	186	260	280	343	791	886	430	-------	280	111	108
25	240	182	260	343	430	568	822	386	-------	260	102	99
26	224	193	260	430	672	521	886	475	-------	232	102	99
27	213	190	260	386	1,160	475	672	386	-------	260	97	92
28	213	186	280	386	3,380	430	672	343	-------	224	102	85
29	220	174	260	343	-------	408	760	430	-------	236	111	83
30	217	228	240	322	-------	430	592	745	-------	734	105	92
31	217	-------	220	322	-------	452	-------	498	-------	240	99	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	408	----------	252	0.497	0.57
November	301	174	211	.416	.46
December	822	167	275	.542	.62
January	3,050	213	508	1.00	1.15
February	3,380	280	558	1.10	1.14
March	2,570	408	891	1.76	2.03
April	8,550	301	1,120	2.21	2.47
May	4,460	301	699	1.38	1.59
June 1–10	644	280	389	.767	.29
July 20–31	734	224	316	.623	.28
August	260	97	153	.302	.35
September	506	83	131	.258	.29

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, 1929.

EXTREMES.—Maximum discharge during year, 3,330 second-feet Mar. 7 (gage height, 19.95 feet); minimum not recorded.

1926–1929: Maximum discharge, that of Mar. 7, 1929; minimum, 30 second-feet July 23, 1926 (gage height, 2.74 feet).

REMARKS.—Records fair. Discharge estimated Dec. 26 to Jan. 2, Jan. 10, 11, Feb. 12–18, Mar. 23–26, Mar. 28 to Apr. 15, and May 1 to Sept. 30. 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, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
1	355	96	131	120	136	1,700	199
2	299	92	110	130	100	1,440	175
3	211	96	115	115	100	907	175
4	187	115	110	120	100	575	164
5	164	115	110	142	120	945	164
6	136	105	115	199	199	1,280	153
7	120	110	110	187	327	2,200	153
8	131	115	110	175	369	593	164
9	136	120	105	164	327	383	153
10	131	115	100	190	369	260	142
11	120	105	100	210	327	235	142
12	110	100	96	175	310	235	175
13	115	110	100	164	260	235	164
14	115	110	100	164	235	260	142
15	115	110	164	153	220	383	131
16	115	110	223	153	190	507	313
17	115	115	247	142	175	507	985
18	131	110	223	153	165	355	1,170
19	175	115	142	142	153	247	683
20	153	110	126	142	142	235	398
21	126	110	115	136	153	211	330
22	115	105	115	142	153	164	440
23	126	105	115	131	199	630	648
24	142	100	115	153	260	630	580
25	136	100	110	235	223	310	398
26	131	100	110	299	523	270	455
27	120	100	115	398	1,130	235	631
28	115	110	115	273	1,390	210	812
29	110	115	115	223	-------	200	793
30	110	115	115	187	-------	235	614
31	105	-------	115	175	-------	235	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	355	105	144	0.583	0.67
November	120	92	108	.437	.49
December	247	96	126	.510	.59
January	398	115	177	.717	.83
February	1,390	100	298	1.21	1.26
March	2,200	164	542	2.19	2.52
April	1,170	131	388	1.57	1.75
May	----------	----------	200	.810	.93
June	----------	----------	160	.648	.72
July	----------	----------	200	.810	.93
August	----------	----------	100	.405	.47
September	----------	----------	60	.242	.27
The year	----------	----------	208	.842	11.43

APPOMATTOX RIVER AT FARMVILLE, VA.

LOCATION.—Water-stage recorder at highway bridge 1,000 feet north of Farmville, Prince Edward County, and 1½ miles below Buffalo Creek, since Nov. 28, 1928. Prior to that date a chain gage at same site was used.

DRAINAGE AREA.—306 square miles.

RECORDS AVAILABLE.—March, 1926, to September, 1929.

EXTREMES.—Maximum discharge during year, 2,790 second-feet Apr. 17 (gage height, 16.46 feet); minimum, 33 second-feet Aug. 11, 17, and 29 (gage height, 3.14 feet).

1926–1929: Maximum discharge, 4,170 second-feet Aug. 12, 1928 (gage height, 21.10 feet); minimum, 9 second-feet Aug. 13, 1926 (gage height, 2.53 feet).

REMARKS.—Records fair Oct. 1 to Nov. 28 and good after that date. Low-water flow regulated by dam upstream. Discharge estimated because of missing record Feb. 1–25 and Oct. 21.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	287	144	168	160	170	1,940	262	432	189	111	72	55
2	228	144	180	177		828	225	356	155	210	79	53
3	198	150	166	160		509	201	536	150	155	68	50
4	186	150	144	150	160	384	195	443	150	114	77	53
5	168	150	144	160		1,230	195	288	138	106	67	56
6	162	144	138	225		1,930	189	256	125	113	59	66
7	174	144	135	262	320	822	183	294	121	128	57	51
8	162	156	135	177	450	406	177	262	123	109	157	50
9	150	150	134	150		321	172	285	639	101	166	50
10	168	144	120	213		282	179	321	683	95	100	50
11	162	144	119	231	360	256	636	243	250	272	82	53
12	144	137	150	201		262	468	213	177	1,000	76	47
13	137	137	155	183	230	237	321	195	213	420	72	47
14	162	131	177	160		308	225	189	207	222	67	53
15	144	131	301	150		444	239	201	298	943	91	60
16	137	144	275	189	190	586	1,870	183	342	306	91	56
17	144	137	207	177		398	2,250	166	195	150	64	54
18	144	144	207	177		294	1,050	155	166	217	64	95
19	137	137	207	183		262	467	155	144	218	82	80
20	162	156	183	177		237	342	204	128	237	97	56
21	150	174	172	166	170	225	308	413	119	116	72	51
22	137	150	166	166		219	440	268	113	108	57	50
23	144	144	155	166	220	440	401	183	109	106	117	57
24	156	137	150	177	290	494	294	166	196	95	104	61
25	162	144	160	267	410	328	276	160	166	89	81	57
26	150	137	155	398	691	288	908	183	201	77	69	53
27	137	131	166	294	1,490	288	462	166	231	75	60	53
28	144	131	160	256	1,850	243	489	202	160	73	56	51
29	150	135	160	237	-------	213	1,290	237	138	72	56	46
30	150	139	160	213	-------	243	755	189	121	68	72	86
31	137	-------	155	189	-------	308	-------	166	-------	70	65	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	287	137	160	0.523	0.60
November	174	131	143	.467	.52
December	301	119	168	.549	.63
January	398	150	200	.654	.75
February	1,850	----------	358	1.17	1.22
March	1,940	213	491	1.60	1.84
April	2,250	172	516	1.69	1.89
May	536	155	249	.814	.94
June	683	109	205	.670	.75
July	1,000	68	199	.650	.75
August	166	56	80.5	.263	.30
September	95	46	56.7	.185	.21
The year	2,250	46	234	.765	10.40

APPOMATTOX RIVER AT MATTOAX, VA.

LOCATION.—Chain gage on Southern Railway bridge at Mattoax, Amelia County, one-fourth mile above Skinquarter Creek.

DRAINAGE AREA.—745 square miles.

RECORDS AVAILABLE.—August, 1900, to December, 1905; March, 1926, to September, 1929.

EXTREMES.—Maximum discharge during year, 4,770 second-feet Apr. 20 (gage height, 20.10 feet); minimum, 64 second-feet Sept. 30 (gage height, 4.49 feet). 1900–1905, 1926–1929: Maximum discharge, 12,200 second-feet May 25, 1901 (gage height, 24.6 feet, old datum); minimum, 42 second-feet Sept. 28 and Oct. 13, 1926.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	794	254	286	254	286	4,010	684	1,790	476	222	134	122
2	684	254	304	270	286	4,410	576	936	396	222	141	110
3	496	270	322	286	270	4,570	516	1,160	358	238	134	105
4	436	270	286	270	238	3,890	456	1,400	340	322	134	85
5	396	270	270	238	304	2,500	456	962	322	206	134	85
6	358	270	254	322	286	3,530	436	662	286	340	134	85
7	358	254	254	456	556	3,570	416	618	254	222	122	95
8	340	270	254	456	962	3,810	396	662	238	222	148	105
9	322	270	238	304	910	2,680	376	596	496	190	772	90
10	286	270	238	304	816	838	358	750	1,370	176	596	85
11	286	270	206	416	838	706	358	662	2,080	358	222	80
12	322	254	222	416	684	640	816	516	1,100	556	254	76
13	286	254	254	358	536	596	816	456	456	1,850	169	85
14	270	254	270	304	456	684	596	416	416	1,520	155	72
15	286	238	396	254	436	910	476	416	1,760	640	148	105
16	286	254	556	254	436	1,580	1,520	416	728	1,100	206	116
17	286	254	496	322	436	1,430	2,640	358	618	576	304	116
18	286	254	396	322	456	886	2,970	340	436	322	162	105
19	270	254	376	304	436	684	3,890	304	358	286	141	95
20	286	286	358	286	396	596	4,730	322	304	416	176	134
21	270	322	322	286	396	556	1,070	556	270	396	176	110
22	270	322	286	270	376	536	838	816	238	340	162	105
23	254	286	270	270	516	576	962	576	238	222	128	85
24	286	254	222	286	728	962	862	416	222	222	116	95
25	304	254	238	340	1,020	962	662	358	304	198	183	100
26	304	254	254	618	1,400	706	1,190	376	322	169	162	105
27	270	254	254	728	2,750	640	1,550	476	358	162	134	90
28	254	238	286	556	3,610	618	988	456	396	148	116	95
29	254	238	270	496	-------	536	1,610	640	322	134	105	85
30	254	254	270	476	-------	516	2,080	1,340	254	141	128	64
31	254	-------	254	396	-------	640	-------	556	-------	134	128	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	794	254	333	0.447	0.52
November	322	238	263	.353	.39
December	556	206	296	.397	.46
January	728	238	359	.482	.56
February	3,610	238	744	.999	1.04
March	4,570	516	1,600	2.15	2.48
April	4,730	358	1,180	1.58	1.76
May	1,790	304	655	.879	1.01
June	2,080	222	524	.703	.78
July	1,850	134	395	.530	.61
August	772	105	194	.260	.30
September	134	64	96.2	.129	.14
The year	4,730	64	552	.741	10.05

APPOMATTOX RIVER NEAR PETERSBURG, VA.

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

DRAINAGE AREA.—1,340 square miles.

RECORDS AVAILABLE.—May, 1927, to September, 1929.

EXTREMES.—Maximum discharge during year, 7,380 second-feet Mar. 1 (gage height, 8.51 feet); minimum, 59 second-feet Sept. 15 (gage height, 1.37 feet).

1927–1929: Maximum discharge, 8,710 second-feet Apr. 30, 1928 (gage height, 9.53 feet); minimum, 38 second-feet Aug. 1, 1927 (gage height, 1.24 feet).

REMARKS.—Records excellent.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,100	411	447	435	621	7,380	1,420	2,610	1,820	388	221	254
2	1,290	435	491	447	575	7,250	1,340	2,080	947	376	211	221
3	1,040	459	510	472	478	6,730	1,120	1,380	646	394	188	193
4	749	478	504	453	509	6,080	960	1,610	595	382	179	166
5	629	465	465	441	479	6,660	901	1,670	560	436	175	146
6	582	472	429	478	515	7,120	867	1,220	518	365	166	134
7	530	447	405	645	782	6,990	808	965	460	448	158	128
8	511	459	411	725	1,290	6,250	733	875	442	394	175	112
9	497	472	411	605	1,560	4,930	693	893	1,230	348	306	106
10	459	478	394	498	1,600	2,800	677	947	3,490	321	1,180	109
11	447	472	394	575	1,600	1,340	653	1,020	3,610	466	902	109
12	435	435	356	677	1,470	1,170	669	947	3,050	694	742	109
13	453	435	388	621	1,120	1,120	1,340	766	1,340	1,070	382	102
14	560	423	459	545	901	1,340	1,150	662	718	2,310	280	95
15	383	417	605	465	757	1,740	944	616	1,080	1,760	274	98
16	417	423	833	441	757	2,720	1,880	595	2,710	1,090	254	120
17	435	429	901	453	842	2,830	4,210	581	1,520	1,340	290	154
18	441	429	749	504	876	2,180	3,970	532	1,010	750	406	146
19	447	441	621	510	833	1,560	3,850	497	726	478	295	142
20	441	465	590	498	757	1,290	4,210	490	609	442	245	138
21	545	498	545	465	741	1,180	4,400	798	504	595	259	162
22	441	510	510	459	701	1,120	1,810	1,240	412	511	254	123
23	400	491	472	441	960	1,370	1,620	1,290	365	418	250	130
24	400	447	441	459	1,340	2,210	1,570	956	338	354	202	162
25	435	417	429	504	1,830	2,410	1,230	654	348	316	188	150
26	453	405	417	749	2,560	1,860	1,170	938	412	285	221	150
27	453	405	423	1,080	4,980	1,470	1,910	1,380	497	264	240	154
28	417	405	453	1,100	6,500	1,340	1,810	1,140	546	245	221	146
29	405	405	465	969	-------	1,180	1,760	1,210	553	216	216	134
30	417	417	465	876	-------	1,080	2,460	2,710	472	207	211	130
31	411	-------	453	725	-------	1,290	-------	3,530	-------	207	240	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,290	383	536	0.400	0.46
November	510	405	445	.332	.37
December	901	356	498	.372	.43
January	1,100	435	591	.441	.51
February	6,500	478	1,350	1.01	1.05
March	7,380	1,080	3,100	2.31	2.66
April	4,400	653	1,740	1.30	1.45
May	3,530	490	1,190	.888	1.02
June	3,610	338	1,050	.784	.87
July	2,310	207	576	.430	.50
August	1,180	158	307	.229	.26
September	254	95	141	.105	.12
The year	7,380	95	958	.715	9.70

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, 1929.

EXTREMES.—Maximum stage during year, 4.35 feet Mar. 7; minimum, 2.88 feet Oct. 29 and 30.

1926–1929: Maximum stage, 5.90 feet May 11, 1927; minimum, 0.10 foot Dec. 9, 1926.

REMARKS.—Records good.

Daily gage height, in feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.10	2.96	3.72	3.83	3.68	3.92	3.87	3.76	3.77	3.79	4.05	3.89
2	4.15	3.00	3.76	3.84	3.61	3.94	3.86	3.76	3.76	3.79	3.99	3.89
3	4.11	3.09	3.80	3.82	3.60	3.97	3.80	3.77	3.77	3.77	4.02	3.87
4	4.12	3.08	3.79	3.83	3.63	4.02	3.77	3.76	3.74	3.73	4.00	3.87
5	4.12	3.12	3.76	3.80	3.62	4.14	3.73	3.72	3.72	3.72	3.96	4.02
6	4.08	3.15	3.74	3.96	3.64	4.22	3.83	3.74	3.76	3.66	3.91	3.97
7	4.02	3.17	3.77	3.90	3.68	4.34	3.82	3.76	3.74	3.66	3.87	3.95
8	3.97	3.24	3.77	3.80	3.67	4.21	3.82	3.72	3.74	3.68	3.87	3.90
9	3.89	3.22	3.81	3.76	3.67	4.18	3.80	3.81	3.76	3.64	3.91	3.85
10	3.95	3.24	3.78	3.78	3.70	4.15	3.78	3.82	3.86	3.62	3.89	3.83
11	3.82	3.37	3.76	3.75	3.67	4.09	3.75	3.80	3.88	3.57	3.98	3.86
12	3.68	3.39	3.74	3.83	3.68	4.04	3.78	3.80	3.88	3.58	3.96	3.81
13	3.60	3.44	3.72	3.81	3.68	3.94	3.77	3.78	3.86	3.60	3.87	3.81
14	3.52	3.44	3.74	3.70	3.69	3.87	3.74	3.80	3.86	3.56	3.82	3.87
15	3.49	3.46	3.79	3.67	3.70	3.86	3.72	3.78	3.86	3.64	3.77	3.91
16	3.50	3.49	3.80	3.64	3.77	3.90	3.78	3.77	3.91	3.64	3.73	3.87
17	3.42	3.52	3.80	3.76	3.81	3.80	3.77	3.70	3.90	3.64	3.77	3.90
18	3.36	3.50	3.82	3.74	3.82	3.72	3.77	3.67	3.90	3.60	3.77	3.91
19	3.29	3.64	3.81	3.76	3.75	3.77	3.74	3.72	3.90	3.64	3.78	3.81
20	3.22	3.58	3.83	3.76	3.76	3.82	3.74	3.70	3.82	3.60	3.80	3.83
21	3.20	3.59	3.88	3.75	3.80	3.76	3.70	3.80	3.78	3.63	3.77	3.83
22	3.22	3.62	3.86	3.72	3.80	3.94	3.72	3.80	3.77	3.67	3.76	3.85
23	3.18	3.60	3.86	3.72	3.83	3.94	3.72	3.77	3.76	3.72	3.76	3.84
24	3.15	3.62	3.82	3.70	3.86	3.96	3.72	3.75	3.75	3.72	3.77	3.79
25	3.10	3.64	3.82	3.68	3.88	3.94	3.71	3.73	3.76	3.74	3.77	3.81
26	3.06	3.64	3.82	3.70	3.98	3.92	3.71	3.79	3.76	3.72	3.74	3.83
27	3.00	3.60	3.82	3.68	3.96	3.85	3.72	3.80	3.76	3.76	3.75	3.81
28	2.94	3.64	3.83	3.72	3.98	3.82	3.70	3.80	3.78	3.76	3.71	3.82
29	2.89	3.66	3.87	3.72	-------	3.80	3.73	3.81	3.83	3.76	3.73	3.83
30	2.88	3.67	3.83	3.72	-------	3.82	3.72	3.82	3.81	3.93	3.86	3.91
31	2.94	-------	3.84	3.67	-------	3.88	-------	3.82	-------	4.02	3.84	------

CHOWAN RIVER BASIN

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, 1929.
EXTREMES.—Maximum discharge during period, 6,990 second-feet Mar. 6 (gage height, 22.10 feet); minimum, 41 second-feet Sept. 9 (gage height, 1.58 feet).
REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928–29

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	------	142	159	6,540	600	456	298	168	110	126
2	------	159	126	4,570	432	408	240	159	118	96
3	------	150	89	974	364	342	186	186	126	103
4	------	126	110	884	342	386	195	159	126	103
5	------	134	150	4,030	342	298	186	134	96	85
6	------	177	177	6,590	320	258	168	298	79	89
7	------	186	240	6,150	298	298	150	696	103	89
8	------	213	364	922	278	258	204	320	142	84
9	------	159	298	696	278	364	2,540	186	204	56
10	------	186	480	576	258	386	4,320	134	222	84
11	------	213	624	528	480	342	2,640	720	159	74
12	------	258	432	480	744	258	600	2,470	110	79
13	------	222	278	456	456	240	408	2,200	96	69
14	------	168	258	480	342	672	320	648	96	69
15	------	159	240	896	298	480	258	896	89	159
16	------	168	298	1,610	1,350	278	386	456	298	84
17	------	159	386	896	2,710	222	320	278	150	142
18	------	159	408	600	870	204	240	258	110	696
19	168	168	342	504	528	204	222	480	364	204
20	177	168	278	480	432	213	204	320	896	110
21	177	159	342	432	342	1,050	177	142	278	89
22	186	159	408	408	408	672	150	195	142	177
23	159	150	648	1,100	624	364	150	177	126	126
24	150	150	818	3,830	432	258	576	150	96	103
25	150	159	870	1,100	364	240	768	150	96	96
26	142	159	974	696	342	298	320	134	88	103
27	142	240	4,110	528	342	298	792	142	89	103
28	150	222	5,450	480	298	222	504	150	75	96
29	150	195	------	408	896	213	298	134	103	82
30	150	195	------	408	720	1,000	222	118	1,050	103
31	142	186	------	552	------	504	------	110	342	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
December 19–31	186	142	157	0.284	0.14
January	258	126	176	.318	.37
February	5,450	89	691	1.25	1.30
March	6,590	408	1,570	2.84	3.27
April	2,710	258	550	.995	1.11
May	1,050	204	377	.609	.70
June	4,320	150	601	1.09	1.22
July	2,470	110	412	.745	.86
August	1,050	75	199	.360	.42
September	696	56	123	.222	.25

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, 1929.

EXTREMES.—Maximum discharge during year, 5,260 second-feet Mar. 5 (gage height, 6.99 feet); minimum, 88 second-feet Sept. 25–28 and 30 (gage height, 0.78 foot).

1896–1929: 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, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	545	224	172	e 200	315	2,930	584	e 750	499	372	192	e 160
2	446	207	e 170	201	296	1,610	584	e 1,650	e 420	372	192	160
3	423	224	172	201	e 250	1,280	526	e 2,100	976	372	192	160
4	400	e 214	172	207	315	1,120	499	e 1,200	976	372	e 190	148
5	378	204	172	207	356	3,330	472	e 900	770	372	192	148
6	336	192	166	e 270	400	4,930	420	499	420	372	192	148
7	e 330	198		207	470	1,360	e 420	472	372	e 370	192	e 350
8	336	204		207	808	1,200	420	420	372	372	192	e 200
9	315	204		207	910	1,050	396	372	3,940	349	192	148
10	296	198	e 150	224	e 1,100	e 896	372	372	1,880	284	192	142
11	276	e 195		240	1,070	e 740	372	372	976	244	e 180	142
12	276	192		258	713	e 584	372	e 370	e 700	e 400	179	92
13	258	186	e 200	e 260	598	e 620	326	372	500	e 770	179	92
14	e 250	186	e 200	258	545	1,120	e 280	372	500	e 480	179	92
15	258	186	258	258	446	1,200	584	372	1,970	420	179	e 90
16	258	180		258	400	1,280	1,970	372	1,050	326	179	92
17	240	180		258	e 358	e 1,040	1,799	372	499	326	179	e 300
18	224	e 185	e 200	258	315	803	e 1,050	372	499	244	e 180	e 260
19	240	186		258	315	706	e 770	e 370	e 420	244	179	e 190
20	224	198			315	644	e 650	372	e 1,000	244	179	e 140
21	e 220	186		e 280	378	584	e 530	1,360	e 600	e 240	179	92
22	e 288	186			340	584	e 560	976	e 500	244	179	e 90
23	356	180	e 190		400	706	e 480	644	e 500	221	179	92
24	400	174		423	e 460	e 2,000	e 450	499	499	221	179	92
25	315	e 175		423	494	e 1,260	e 420	420	420	221	e 172	88
26	276	174	224	446	1,320	e 1,100	584	e 420	372	192	166	88
27	258	169	207	e 483	2,670	e 940	584	420	372	192	166	88
28	e 240	164	207	520	4,270	770	e 700	420	372	e 190	166	88
29	224	e 165	195	400	-------	706	e 1,320	372	372	192	160	e 90
30	224	169	e 190	400	-------	644	e 910	372	e 372	192	160	88
31	224	-------	e 190	356	-------	e 614	-------	372	-------	192	160	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	545	220	301	0.776	0.89
November	224	164	190	.490	.55
December	258	-------	185	.477	.55
January	520	200	291	.750	.86
February	4,270	250	737	1.90	1.98
March	4,930	584	1,240	3.20	3.69
April	1,970	280	646	1.66	1.85
May	2,100	370	604	1.56	1.80
June	3,940	372	771	1.99	2.22
July	770	190	310	.799	.92
August	192	160	180	.464	.53
September	350	88	138	.356	.40
The year	4,930	88	464	1.20	16.24

e 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, 1929.

EXTREMES.—Maximum discharge during year, 7,070 second-feet Feb. 28 (gage height, 10.51 feet); minimum, 55 second-feet Nov. 20 (gage height, 0.97 foot).

1926–1929: 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. Discharge estimated June 13–17, Sept. 3–10, and 17–23. Flow regulated at dam and water-power plant 20[illegible] feet upstream.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	878	329	235	265	387	3,270	810	948	902	538	238	174
2	787	326	263	291	366	2,140	743	2,150	637	787	239	184
3	679	326	260	265	291	1,770	658	2,790	1,730	538	225	180
4	637	321	255	238	335	1,440	658	1,560	1,480	483	233	180
5	557	321	250	282	300	4,170	616	1,170	972	431	213	180
6	538	316	238	360	420	3,720	576	972	743	483	221	210
7	520	289	208	384	778	2,120	557	878	616	465	203	470
8	483	308	212	272	925	1,470	520	743	703	384	244	330
9	431	305	226	283	1,100	1,220	501	700	3,150	360	223	200
10	448	265	174	340	1,300	996	501	637	2,240	363	266	190
11	448	278	160	283	1,200	902	483	596	1,300	378	205	171
12	415	305	226	324	925	787	501	538	972	488	261	184
13	376	255	233	321	765	810	448	520	880	1,020	254	160
14	327	255	270	260	679	1,350	409	637	740	637	191	175
15	290	242	294	263	616	1,940	465	520	3,200	576	216	136
16	360	286	276	297	557	1,500	1,660	501	1,200	465	227	160
17	346	226	263	340	520	1,220	2,130	483	870	409	203	390
18	354	286	260	270	465	1,020	1,350	448	722	381	234	340
19	326	235	268	337	448	902	1,020	448	540	360	200	250
20	340	241	258	360	483	810	855	662	1,400	326	240	230
21	294	276	250	366	557	765	700	1,500	787	308	188	210
22	294	354	242	369	483	700	743	1,040	667	302	191	190
23	396	297	240	375	576	1,660	637	810	657	297	215	170
24	700	190	238	396	557	2,740	596	637	1,050	265	197	150
25	460	190	245	465	637	1,660	557	596	765	279	198	152
26	375	235	248	557	1,660	1,300	787	557	878	330	207	148
27	363	281	245	557	2,880	1,120	700	520	878	255	195	142
28	363	263	248	538	5,110	972	878	465	658	240	188	142
29	357	242	250	465	-------	832	1,730	637	658	364	210	128
30	337	235	242	409	-------	902	1,200	557	520	282	174	182
31	318	-------	235	390	-------	878	-------	539	-------	276	190	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	878	294	448	0.877	1.01
November	354	190	276	.540	.60
December	294	160	242	.474	.55
January	557	238	352	.689	.79
February	5,110	291	904	1.77	1.84
March	4,170	700	1,520	2.97	3.42
April	2,130	409	800	1.57	1.75
May	2,790	448	831	1.63	1.88
June	3,200	520	1,080	2.11	2.35
July	1,020	240	422	.826	.95
August	266	174	216	.423	.49
September	470	128	204	.399	.45
The year	5,110	128	606	1.19	16.08

ROANOKE RIVER NEAR TOSHES, VA.

LOCATION.—Staff gage three-fourths 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, 1929.
EXTREMES.—Maximum discharge during year, 8,540 second-feet Feb. 28 (gage height, 9.08 feet); minimum, 328 second-feet Sept. 16 (gage height, 1.36 feet).

1925–1929: Maximum discharge, 25,200 second-feet Aug. 11, 1928; minimum, 150 second-feet Sept. 9, 10, and 13, 1925 (gage height, 1.00 foot).
REMARKS.—Records good. Discharge estimated Oct. 23–25 and Mar. 2–4.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,480	700	550	550	670	5,000	1,240	1,480	1,090	950	520	432
2	1,320	640	580	580	700	3,200	1,160	1,240	1,160	1,090	520	378
3	1,160	640	550	580	700	2,360	1,160	2,750	1,090	1,090	490	405
4	1,160	640	550	580	700	2,270	1,090	2,000	2,270	820	490	378
5	1,090	640	550	640	700	5,640	1,020	1,560	1,640	820	520	378
6	1,090	640	520	950	790	5,000	950	1,480	1,320	820	460	405
7	885	640	520	790	1,730	3,800	950	1,320	950	790	490	950
8	885	610	520	700	1,910	2,750	885	1,240	950	760	550	610
9	885	610	520	670	1,480	1,820	885	1,090	5,640	730	580	490
10	885	580	520	700	1,480	1,400	820	1,090	3,800	730	580	490
11	885	580	520	700	1,400	1,400	885	1,020	2,270	700	550	640
12	885	580	520	640	1,480	1,320	820	950	1,640	950	520	460
13	820	580	550	580	1,480	1,240	820	950	1,480	2,000	580	432
14	820	580	610	520	1,020	1,400	820	1,020	1,320	1,020	610	432
15	820	580	610	520	1,020	2,750	820	1,020	6,440	1,160	580	432
16	820	580	580	520	950	2,270	3,800	885	2,000	885	520	344
17	820	580	580	580	885	1,560	3,360	790	1,400	760	520	790
18	760	580	580	580	885	1,480	2,550	760	1,160	790	490	730
19	760	580	550	610	820	1,480	1,400	730	1,020	730	790	520
20	760	610	550	640	790	1,320	1,320	790	950	640	460	460
21	730	640	520	640	790	1,240	1,320	2,270	1,090	640	460	460
22	730	610	520	640	820	1,090	1,240	1,640	1,090	610	460	460
23	830	550	520	640	885	1,400	1,240	1,160	1,090	610	460	432
24	1,350	520	490	670	885	3,920	1,090	1,020	1,160	580	460	405
25	950	520	490	700	950	3,250	1,020	950	2,750	580	640	460
26	700	520	460	790	950	2,270	1,160	950	1,560	550	520	405
27	700	520	460	885	3,360	1,640	1,160	950	1,320	550	520	405
28	700	520	460	885	7,840	1,480	1,320	950	1,240	490	432	405
29	700	550	490	790	-------	1,400	2,270	1,020	1,160	490	432	432
30	700	550	490	700	-------	1,320	1,640	950	885	700	550	460
31	700	-------	520	670	-------	1,400	-------	1,020	-------	610	460	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,480	700	896	0.878	1.01
November	700	520	589	.577	.64
December	610	460	531	.521	.60
January	950	520	666	.653	.75
February	7,940	670	1,360	1.33	1.38
March	5,640	1,090	2,250	2.21	2.55
April	3,800	820	1,340	1.31	1.46
May	2,750	730	1,200	1.18	1.36
June	6,440	885	1,760	1.73	1.93
July	2,000	490	795	.773	.90
August	790	432	523	.513	.59
September	950	344	483	.474	.53
The year	7,840	344	1,030	1.01	13.70

ROANOKE RIVER NEAR GRETNA, VA.

LOCATION.—Chain gage at highway bridge at Tolers Ferry, seven-eighths mile below Pigg River and 8 miles northwest of Gretna, Pittsylvania County.

DRAINAGE AREA.—1,430 square miles.

RECORDS AVAILABLE.—March, 1925, to September, 1929.

EXTREMES.—Maximum discharge during year, 18,400 second-feet Feb. 28 (gage height, 18.48 feet); minimum, 445 second-feet Sept. 23 (gage height, 3.65 feet).

1925–1929: Maximum discharge, 35,700 second-feet Aug. 11, 1928; minimum, 170 second-feet July 23, 1926 (gage height, 290 feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,320	900	780	720	900	6,900	1,840	2,680	e 1,640	1,920	e 800	545
2	1,760	840	720	780	900	4,060	1,680	1,840	e 1,900	1,920	780	495
3	1,600	900	780	720	1,030	2,860	1,520	5,620	2,160	1,840	720	e 482
4	1,520	960	720	720	e 1,060	2,770	1,520	3,260	3,460	1,310	720	470
5	1,450	900	780	1,030	1,100	8,580	1,600	2,590	2,320	1,170	645	520
6	1,380	900	720	1,680	1,600	7,460	1,520	2,240	2,240	1,310	620	1,600
7	1,310	900	720	1,380	3,060	4,370	1,380	2,000	1,450	2,320	620	1,520
8	1,240	900	720	1,030	e 3,300	3,260	1,380	1,840	2,000	1,310	1,170	900
9	1,170	900	720	780	e 3,000	2,590	1,380	1,760	8,720	1,030	1,100	720
10	1,100	840	645	1,100	2,680	2,240	1,240	1,680	5,620	900	780	645
11	1,100	780	620	1,100	2,590	2,000	1,240	1,520	3,260	1,450	e 840	900
12	1,100	840	570	1,100	1,920	1,760	1,380	1,380	2,770	e 2,260	900	720
13	1,030	840	595	840	1,680	2,500	1,310	1,380	2,320	3,060	840	670
14	1,030	780	900	720	1,600	3,060	1,100	1,840	2,080	1,840	780	620
15	960	780	1,170	720	1,520	3,360	1,100	1,600	9,560	1,760	720	670
16	1,100	840	1,100	720	1,380	3,460	6,900	1,450	2,960	1,380	645	545
17	900	900	840	840	e 1,290	e 3,070	5,380	1,240	2,770	1,170	645	1,520
18	960	840	780	840	e 1,210	2,680	3,260	1,170	2,500	1,030	595	1,310
19	960	780	780	840	e 1,120	2,160	2,500	1,170	2,320	840	2,410	900
20	960	840	840	960	1,030	1,920	2,320	1 680	2,160	840	1,450	670
21	960	840	780	900	1,100	1,840	2,590	2,320	2,080	840	900	620
22	960	780	720	900	1,170	1,680	2,000	2,240	1,920	e 820	780	545
23	1,240	840	670	900	1,310	3,960	1,760	1,760	2,160	e 820	720	520
24	1,840	840	670	960	1,450	6,120	1,600	1,450	2,000	e 810	645	645
25	1,380	840	780	1,030	1,680	5,030	1,520	1,380	2,160	e 810	720	595
26	840	720	840	1,310	1,920	3,560	1,680	1,760	4,700	e 770	670	595
27	1,100	720	780	1,240	5,380	2,500	2,680	1,450	3,260	e 760	645	670
28	1,100	720	780	1,170	13,900	2,160	2,680	1,380	2,320	e 710	595	545
29	1,030	780	720	1,100	-------	1,920	3,760	1,760	1,920	e 710	570	595
30	900	840	670	960	-------	1,840	3,260	1,600	1,520	1,100	840	570
31	960	-------	670	960	-------	1,840	-------	1,380	-------	e 850	570	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,320	900	1,200	0.839	0.97
November	960	720	836	.585	.65
December	1,170	570	761	.532	.61
January	1,680	720	969	.678	.78
February	13,900	900	2,210	1.55	1.61
March	8,580	1,680	3,340	2.34	2.70
April	6,900	1,100	2,170	1.52	1.70
May	5,620	1,170	1,880	1.31	1.51
June	9,560	1,450	2,940	2.06	2.30
July	3,060	710	1,280	.895	1.03
August	2,410	570	820	.573	.66
September	1,600	470	744	.520	.58
The year	13,900	470	1,590	1.11	15.10

e Estimated.

ROANOKE RIVER AT BROOKNEAL, VA.

LOCATION.—Chain gage at highway bridge at Virginian Railway station at Brookneal, Campbell County, 2¾ miles above Falling River.
DRAINAGE AREA.—2,420 square miles.
RECORDS AVAILABLE.—April, 1923, to September, 1929.
EXTREMES.—Maximum discharge during year, 16,800 second-feet Apr. 16 (gage height, 19.92 feet); minimum, 728 second-feet Sept. 30 (gage height, 4.24 feet).
1923–1929: Maximum discharge, 39,000 second-feet Aug. 12, 1928 (gage height, 37.15 feet); minimum, 370 second-feet Sept. 28, 1926 (gage height, 2.78 feet).
Flood of November, 1877, reached stage of about 36 feet and flood of Mar. 15, 1923, reached stage of about 31 feet.
REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,070	1,610	1,390	1,280	1,650	14,700	3,370	4,370	2,440	2,710	1,530	960
2	2,980	1,610	e 1,390	1,280	1,610	9,650	3,070	3,770	e 2,600	2,620	1,390	900
3	2,710	1,690	1,390	1,280	e 1,610	e 7,120	2,890	7,780	2,710	2,260	1,110	840
4	2,530	e 1,690	1,420	1,280	1,610	4,580	2,890	7,340	3,970	2,260	e 1,060	870
5	2,350	1,690	1,390	1,320	1,570	8,880	2,800	4,680	3,670	1,930	1,020	930
6	2,260	1,650	1,360	e 1,840	1,730	13,300	2,620	4,270	2,980	1,850	990	900
7	e 2,180	1,610	1,320	e 2,370	3,770	8,990	e 2,530	3,570	2,440	e 3,000	960	900
8	2,090	1,610	1,280	e 2,250	6,050	6,050	2,440	3,170	2,440	2,260	1,500	1,610
9	2,010	1,570	e 1,260	1,610	5,210	4,480	2,350	2,980	e10,800	1,970	1,770	1,140
10	2,010	1,570	1,250	1,730	e 4,540	e 4,220	2,260	2,980	9,760	1,810	1,460	960
11	1,970	e 1,520	1,250	1,770	3,870	3,970	2,170	2,620	5,520	1,850	e 1,300	1,140
12	1,930	e 1,460	1,180	1,850	3,570	3,270	2,440	e 2,200	e 3,650	1,930	1,360	1,250
13	1,850	e 1,460	1,180	e 1,730	2,890	3,170	2,350	2,530	e 2,950	2,440	1,360	900
14	e 1,850	e 1,360	1,180	1,610	2,530	3,370	e 2,100	4,790	e 2,900	e 4,000	1,220	840
15	1,850	1,460	1,810	1,360	2,260	5,840	2,800	3,570	12,600	3,070	1,500	900
16	1,850	1,460	e 1,750	1,420	2,090	5,740	11,700	2,620	e 9,370	2,890	1,500	870
17	1,850	1,460	1,690	1,570	e 2,030	e 4,960	12,200	2,350	e 6,150	e 2,060	1,280	870
18	1,850	e 1,500	1,690	1,650	1,970	4,170	5,210	2,170	e 3,580	e 1,840	e 1,100	1,930
19	1,770	1,530	1,570	1,690	1,770	3,870	3,970	e 1,960	2,620	e 1,720	e 2,990	1,650
20	1,770	e 1,400	1,460	e 1,670	1,690	3,470	3,870	2,530	2,530	e 1,720	1,610	1,110
21	e 1,730	e 1,400	1,460	1,650	1,770	3,270	3,470	3,770	2,530	e 1,720	1,220	900
22	1,690	e 1,400	1,420	1,610	1,850	3,070	3,670	3,470	2,530	e 1,640	960	840
23	1,770	e 1,400	e 1,320	1,530	2,170	3,870	3,370	3,070	e 2,660	e 1,570	1,020	782
24	2,440	e 1,440	1,220	1,570	e 2,260	e 8,200	2,890	2,890	e 2,660	1,500	1,250	782
25	2,710	e 1,380	1,250	2,090	2,350	e 6,420	e 2,540	2,440	e 2,900	1,390	e 1,840	840
26	2,260	e 1,320	1,280	2,440	5,210	e 4,650	e 2,700	e 2,300	5,940	1,320	1,320	840
27	1,850	e 1,280	1,360	e 2,300	7,120	e 3,980	3,270	2,350	e 4,900	1,280	1,140	870
28	e 1,810	e 1,250	1,390	2,170	12,300	e 3,320	e 3,200	2,440	e 3,860	e 1,260	1,050	840
29	1,770	e 1,320	1,320	2,010	-------	e 3,050	7,340	4,170	e 2,830	1,250	1,460	810
30	1,770	1,390	e 1,280	2,090	-------	e 2,780	5,840	3,670	e 2,500	1,220	1,970	1,360
31	1,690	-------	1,250	1,650	-------	e 2,950	-------	2,530	-------	1,140	1,320	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,070	1,690	2,070	0.855	0.99
November	1,690	1,250	1,480	.612	.68
December	1,810	1,180	1,380	.570	.66
January	2,440	1,280	1,730	.715	.82
February	12,300	1,570	3,180	1.31	1.36
March	14,700	2,780	5,460	2.26	2.61
April	12,200	2,100	3,810	1.57	1.75
May	7,780	1,960	3,400	1.40	1.61
June	12,600	2,440	4,300	1.78	1.99
July	4,000	1,140	1,990	.822	.95
August	2,900	960	1,370	.563	.65
September	1,930	782	1,010	.417	.47
The year	14,700	782	2,590	1.07	14.54

e Estimated.

ROANOKE RIVER AT RANDOLPH, VA.

LOCATION.—Chain gage at Southern Railway bridge three-fourths mile southwest of Randolph station, Charlotte County, and 1 mile above Roanoke Creek.

DRAINAGE AREA.—3,080 square miles.

RECORDS AVAILABLE.—August, 1900, to August, 1906; October, 1927, to September, 1929.

EXTREMES.—Maximum discharge during year, 22,500 second-feet Apr. 17 (gage height, 22.08 feet); minimum, 1,110 second-feet Sept. 25 (gage height, 4.41 feet).

1900–1906, 1927–1929: Maximum discharge, about 80,000 second-feet Dec. 30, 1901 (gage height, 34.0 feet, old datum); minimum, 590 second-feet Oct. 18, 1904 (gage height, 2.5 feet, old datum).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,040	1,890	1,690	1,500	1,890	21,200	3,840	5,510	2,570	2,720	1,720	1,460
2	4,220	1,890	1,690	1,560	1,890	15,200	3,540	4,340	2,280	2,570	1,650	1,250
3	3,470	1,960	1,690	1,620	1,890	8,340	3,240	5,030	2,940	3,540	1,520	1,200
4	3,020	1,960	1,690	1,620	1,890	6,030	3,020	8,600	2,640	2,720	1,460	1,160
5	2,870	1,960	1,690	1,620	1,890	9,680	2,940	5,710	3,940	2,420	1,400	1,350
6	2,800	1,960	1,620	1,820	1,960	19,600	2,870	4,340	3,240	2,420	1,350	1,350
7	2,730	1,890	1,620	3,020	2,310	16,000	2,800	4,100	2,720	3,020	1,300	1,250
8	2,590	1,890	1,620	2,870	5,610	8,210	2,730	3,620	2,420	3,020	1,300	1,300
9	2,450	1,890	1,560	2,170	6,470	5,510	2,590	3,320	6,710	2,570	2,420	1,580
10	2,520	1,890	1,500	2,100	4,950	4,530	2,520	3,400	13,000	2,070	1,400	1,350
11	2,450	1,820	1,440	2,100	4,690	4,070	2,660	3,170	8,340	3,020	1,650	1,250
12	2,380	1,760	1,500	2,240	4,220	3,700	2,800	2,800	4,670	3,170	1,460	1,520
13	2,310	1,760	1,620	2,030	3,620	3,470	2,940	2,640	3,780	2,940	1,520	1,350
14	2,170	1,690	1,820	1,890	3,100	3,700	2,660	7,820	3,700	4,580	1,520	1,250
15	2,100	1,760	1,960	1,760	2,800	4,860	2,520	4,500	5,710	4,260	1,650	1,250
16	2,170	1,820	2,030	1,620	2,730	7,070	11,500	3,170	16,600	3,780	1,720	1,300
17	2,100	1,820	2,030	1,760	2,660	5,810	21,800	2,800	7,820	2,640	1,650	1,200
18	2,100	1,890	1,890	1,890	2,590	4,690	15,700	2,570	4,580	2,350	1,400	1,720
19	2,100	1,820	1,820	1,890	2,450	4,140	6,710	2,500	3,700	2,210	1,580	2,280
20	2,100	1,760	1,820	1,820	2,310	3,770	4,850	2,570	3,100	2,210	2,070	1,520
21	2,100	1,760	1,690	1,820	2,310	3,540	4,100	3,860	2,800	2,210	1,720	1,300
22	2,100	1,760	1,620	1,890	2,450	3,400	4,100	3,940	3,620	1,790	1,350	1,200
23	2,170	1,820	1,560	1,820	2,870	3,620	4,260	4,020	2,720	1,720	1,300	1,160
24	2,310	1,820	1,560	1,820	3,170	6,710	3,700	3,170	3,400	1,720	1,350	1,110
25	2,940	1,760	1,500	2,030	3,400	9,400	3,240	2,870	3,700	1,650	1,650	1,110
26	2,730	1,690	1,500	2,450	3,840	5,920	3,320	2,640	3,860	1,580	2,350	1,200
27	2,240	1,620	1,560	2,730	7,950	4,770	4,100	2,720	7,820	1,520	1,650	1,200
28	2,100	1,560	1,560	2,590	15,100	4,220	3,860	2,500	5,510	1,520	1,350	1,200
29	1,960	1,620	1,560	2,450	-------	3,840	8,990	5,610	3,620	1,650	1,300	1,200
30	1,960	1,690	1,560	2,240	-------	3,540	8,340	3,940	3,170	1,460	2,500	1,200
31	1,890	-------	1,560	2,030	-------	3,770	-------	3,020	-------	1,520	2,000	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	5,040	1,890	2,520	0.818	0.94
November	1,960	1,560	1,810	.588	.66
December	2,030	1,440	1,660	.539	.62
January	3,020	1,500	2,020	.656	.76
February	15,100	1,890	3,680	1.19	1.24
March	21,200	3,400	6,850	2.22	2.56
April	21,800	2,520	5,070	1.65	1.84
May	8,600	2,500	3,900	1.27	1.46
June	16,600	2,280	4,820	1.56	1.74
July	4,580	1,460	2,470	.802	.92
August	2,500	1,300	1,620	.526	.61
September	2,280	1,110	1,330	.432	.48
The year	21,800	1,110	3,140	1.02	13.83

ROANOKE RIVER AT OLD GASTON, N. C.

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

DRAINAGE AREA.—8,350 square miles.

RECORDS AVAILABLE.—December, 1911, to September, 1929.

EXTREMES.—Maximum discharge during year, 71,800 second-feet Mar. 1 (gage height, 10.5 feet); minimum, 2,760 second-feet Sept. 25 (gage height, 1.66 feet).

1911–1929: Maximum discharge, 210,000 second-feet Mar. 18 1912 (gage height, 16.6 feet); minimum discharge, 790 second-feet Oct. 1, 1914; minimum gage height, 0.80 foot Sept. 27, 1926.

REMARKS.—Records good. Slight diurnal fluctuation caused by operation of power plant several miles upstream.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11,000	4,690	4,040	3,740	5,030	69,000	8,590	20,000	7,720	7,720	4,700	7,300
2	12,700	4,690	4,360	4,040	4,690	61,300	8,590	13,200	7,300	6,500	10,000	5,030
3	11,600	4,690	4,360	4,360	4,040	54,200	8,150	11,000	6,120	5,740	5,740	3,740
4	8,150	4,690	4,360	4,360	4,040	24,700	7,300	13,200	6,120	6,120	5,030	3,590
5	7,300	4,360	4,360	4,360	3,740	35,400	6,900	15,600	6,120	5,740	3,890	3,020
6	6,500	4,360	4,360	4,360	4,360	58,900	6,500	11,600	6,500	5,030	3,400	3,160
7	6,500	4,690	4,040	4,040	4,690	51,000	6,500	9,040	6,500	7,300	3,590	4,360
8	5,740	4,690	4,040	5,030	5,380	39,000	6,120	9,040	5,740	6,900	3,440	3,890
9	6,120	4,690	4,040	6,500	12,000	20,600	5,740	9,040	8,590	6,900	3,590	3,300
10	5,380	4,360	3,740	6,120	13,800	13,200	5,740	8,590	15,000	6,500	6,500	3,740
11	5,030	4,690	3,440	5,380	12,100	10,500	5,740	7,720	22,800	6,120	6,120	3,300
12	5,380	4,360	3,890	5,740	11,000	9,520	8,150	7,300	22,100	9,520	4,690	3,300
13	5,030	3,890	3,590	6,120	9,520	8,590	9,040	6,500	10,000	12,100	4,040	3,590
14	5,030	4,690	4,040	5,380	8,150	8,150	9,040	7,720	7,720	12,700	6,120	3,740
15	5,030	4,690	4,360	5,030	6,900	9,520	7,300	15,000	7,300	19,300	6,470	3,440
16	4,690	4,360	4,360	5,030	6,900	15,600	13,100	10,500	9,520	15,600	12,100	3,740
17	5,030	4,360	5,030	4,690	7,300	17,400	45,800	7,300	18,600	13,200	8,590	3,020
18	4,690	4,360	5,380	4,690	7,720	14,400	54,200	6,500	12,700	8,590	6,120	3,300
19	4,690	4,040	5,030	4,690	7,720	11,600	34,900	5,740	9,520	6,500	10,500	5,380
20	4,690	4,360	4,690	5,030	6,900	9,520	17,400	5,740	7,720	7,300	8,590	6,120
21	4,690	4,690	5,030	4,690	6,900	8,590	11,000	8,590	6,120	11,000	7,720	5,030
22	4,690	5,030	4,690	4,360	6,900	8,150	9,520	10,500	5,380	8,590	6,900	3,890
23	4,360	5,030	4,690	5,030	8,150	8,590	10,000	9,520	5,380	5,740	4,690	3,300
24	5,030	4,690	4,360	4,690	10,000	15,600	10,000	8,590	5,380	5,030	3,590	2,890
25	5,030	4,360	3,740	4,690	11,000	19,300	9,040	7,300	5,740	4,690	3,740	3,020
26	7,300	4,040	3,890	4,690	12,100	20,600	7,720	6,500	9,520	4,690	5,740	3,590
27	6,900	3,890	3,740	5,380	28,200	14,400	7,720	5,740	13,200	4,360	8,150	3,590
28	5,740	4,360	4,040	5,740	47,300	11,000	8,590	5,740	16,800	4,360	6,900	3,300
29	4,690	4,040	4,360	5,740	-------	9,520	10,500	6,500	13,200	3,890	4,690	3,160
30	4,360	4,040	4,040	5,740	-------	8,590	22,100	10,000	11,600	4,360	4,360	3,160
31	5,030	-------	4,040	5,380	-------	8,590	-------	9,040	-------	4,040	6,900	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	12,700	4,360	6,070	0.727	0.84
November	5,030	3,890	4,460	.534	.60
December	5,380	3,440	4,260	.510	.59
January	6,500	3,740	4,990	.598	.69
February	47,300	3,740	9,880	1.18	1.23
March	69,000	8,150	21,800	2.61	3.01
April	54,200	5,740	12,700	1.52	1.70
May	20,000	5,740	9,300	1.11	1.28
June	22,800	5,380	9,870	1.18	1.32
July	19,300	3,890	7,620	.913	1.05
August	12,100	3,440	6,020	.721	.83
September	7,300	2,890	3,830	.459	.51
The year	69,000	2,890	8,390	1.00	13.65

BLACKWATER RIVER NEAR UNION HALL, VA.

LOCATION.—Chain gage on 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, 1929.

EXTREMES.—Maximum discharge during year, 1,980 second-feet June 9 (gage height, 5.30 feet); minimum, 57 second-feet Dec. 9 and Sept. 15 and 29 (gage height, 1.60 feet).

1925–1929: Maximum discharge, 10,800 second-feet Aug. 11, 1928; minimum, 16 second-feet Sept. 23, 1926 (gage height, 1.32 feet).

REMARKS.—Records fair. Discharge estimated July 26.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	254	119	152	119	96	680	298	484	280	254	106	90
2	254	106	119	132	119	680	189	680	189	212	106	85
3	250	106	132	167	106	580	212	680	204	174	138	75
4	246	132	138	204	138	344	189	413	298	189	160	71
5	204	152	80	220	167	436	174	298	298	167	145	93
6	204	167	85	178	197	732	212	254	344	220	125	132
7	212	160	149	229	484	580	189	254	212	367	101	138
8	189	132	116	174	436	390	167	254	212	212	182	167
9	197	119	57	160	460	344	204	280	1,980	189	204	132
10	167	152	125	132	344	254	174	280	189	204	138	174
11	152	132	132	112	167	246	272	246	204	212	174	106
12	101	152	119	90	189	272	212	212	390	890	138	138
13	119	106	152	101	193	212	152	189	298	298	119	66
14	132	174	174	96	189	298	119	289	254	298	106	75
15	174	212	189	167	229	413	189	254	1,350	204	167	57
16	174	119	189	138	167	390	605	229	197	212	160	75
17	212	132	189	132	152	413	784	229	321	167	138	152
18	212	174	132	128	197	390	436	189	390	174	119	212
19	138	189	152	106	204	174	321	237	246	212	344	119
20	152	197	125	138	167	189	272	272	197	138	138	101
21	167	167	119	167	138	204	254	484	237	160	106	119
22	174	132	101	152	246	152	298	321	732	212	125	75
23	174	106	90	182	152	508	254	254	189	208	145	80
24	174	119	96	189	167	580	204	254	182	152	106	101
25	189	119	138	197	182	390	229	220	254	167	272	90
26	138	125	119	174	220	344	237	298	298	150	132	88
27	212	125	125	138	229	189	298	272	1,200	280	106	80
28	212	119	119	152	237	298	532	289	413	160	145	96
29	182	138	101	106	-------	272	556	413	344	132	174	57
30	152	106	90	174	-------	229	484	280	344	212	101	101
31	132	-------	96	212	-------	229	-------	237	-------	174	106	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	254	101	182	0.875	1.01
November	212	106	140	.673	.75
December	189	57	126	.606	.70
January	229	90	154	.740	.85
February	484	96	213	1.02	1.06
March	732	152	368	1.77	2.04
April	784	119	291	1.40	1.56
May	680	189	308	1.48	1.71
June	1,980	182	411	1.98	2.21
July	890	132	226	1.09	1.26
August	344	101	146	.702	.81
September	212	57	105	.505	.56
The year	1,980	57	222	1.07	14.52

OTTER RIVER NEAR ALTAVISTA, VA.

LOCATION.—Staff gage 1¼ miles below Flat Creek and 6 miles north of Altavista, Campbell County.
DRAINAGE AREA.—372 square miles.
RECORDS AVAILABLE.—August to September, 1929.
EXTREMES.—Maximum discharge during the period, 848 second-feet Sept. 30 (gage height, 6.01 feet); minimum, 149 second-feet Sept. 2 (gage height, 2.80 feet).
REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1929

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1		164	11		245	21		540
2		149	12		196	22		317
3		156	13		262	23		317
4		156	14		337	24		317
5		164	15		298	25	317	317
6		156	16		317	26	212	317
7		280	17		298	27	298	337
8		400	18		337	28	262	280
9		245	19		400	29	228	796
10		317	20		692	30	298	848
						21	358	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
August 25–31	358	212	282	0.757	0.20
September	848	149	332	.893	1.00

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 to September, 1929.
EXTREMES.—Maximum discharge during period, 450 second-feet Sept. 5 (gage height, 4.18 feet); minimum, 38 second-feet Sept. 4 (gage height, 2.66 feet).
REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1929

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1		162	52	11		75	59	21	73	59	50
2		59	42	12	127	86	48	22	73	50	53
3		70	50	13	131	82	39	23	77	66	59
4		84	41	14	113	58	46	24	73	90	53
5		63	450	15	234	64	86	25	63	68	53
6		66	66	16	96	59	48	26	63	64	50
7		63	73	17	88	56	48	27	66	55	55
8		314	53	18	92	55	131	28	66	52	41
9		120	55	19	88	53	70	29	59	115	46
10		86	58	20	81	84	55	30	162	71	49
								31	63	52	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
July 12–31	234	59	94.4	0.549	0.41
August	314	50	80.7	.469	.54
September	450	39	69.3	.403	.45

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 to September, 1929.
EXTREMES.—Maximum discharge during period, 41 second-feet Aug. 8 (gage height, 2.72 feet); minimum, 11 second-feet Sept. 1, 2, and 29 (gage height, 2.26 feet).
REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1929

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1		18	11	11		15	23	21	18	14	15
2		15	11	12	38	12	18	22	18	15	17
3		14	12	13	32	12	18	23	18	25	17
4		15	12	14	30	22	18	24	17	23	15
5		14	34	15	30	12	20	25	15	15	15
6		12	23	16	23	12	18	26	15	14	15
7		12	27	17	20	20	18	27	17	12	13
8		41	23	18	20	12	20	28	14	12	17
9		20	23	19	20	27	20	29	14	32	11
10		17	20	20	20	22	20	30	14	14	13
								31	17	14	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
July 12–31	38	14	20.5	0.477	0.35
August	41	12	17.2	.400	.46
September	34	11	17.9	.416	.46

DAN RIVER NEAR FRANCISCO, N. C.

LOCATION.—Chain gage at county highway bridge just below Georges Mill, 3 miles east of Francisco, Stokes County, and 7.9 miles below Little Dan River.

DRAINAGE AREA.—119 square miles.

RECORDS AVAILABLE.—August, 1924, to September, 1929.

EXTREMES.—Maximum discharge during year, 3,140 second-feet Aug. 18 (gage height, 5.45 feet); minimum, 102 second-feet Sept. 23 and 30 (gage height, 1.26 feet).

1924–1929: Maximum discharge (estimated), 8,700 second-feet Dec. 8, 1924 (gage height, 10.0 feet); minimum, 27 second-feet July 25, 1926 (gage height, 0.78 foot).

REMARKS.—Records good below and fair above 1,500 second-feet. Slight diurnal fluctuation caused by operation of gristmills during low water.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	269	204	152	154	136	760	269	236	223	269	149	134
2	269	201	163	157	130	395	252	894	214	286	149	131
3	269	198	157	128	123	286	252	495	239	252	143	126
4	269	192	149	133	118	303	252	323	217	204	143	147
5	269	186	143	138	143	335	252	272	204	220	143	150
6	269	180	138	338	510	625	236	272	175	204	141	144
7	269	174	133	252	269	510	220	323	160	204	141	139
8	269	174	130	220	168	320	236	255	288	195	146	134
9	269	168	130	171	118	192	220	255	550	189	138	141
10	269	168	130	163	118	146	220	239	360	198	141	128
11	269	168	130	163	113	192	220	239	272	204	130	139
12	269	168	130	157	113	220	220	239	223	375	128	121
13	269	168	128	157	113	415	204	204	214	269	123	124
14	269	168	133	163	113	1,330	204	208	208	338	115	118
15	252	168	125	163	113	1,030	220	223	422	286	113	114
16	252	168	128	163	120	690	375	208	400	204	113	111
17	252	168	128	166	125	415	303	204	288	192	110	272
18	252	168	220	171	128	238	236	201	217	204	1,220	178
19	252	168	198	146	133	320	220	223	195	189	342	128
20	236	168	177	143	133	303	201	400	186	201	163	121
21	236	168	168	149	133	286	204	288	166	166	144	109
22	236	168	157	149	133	286	220	239	239	204	141	109
23	236	168	141	149	133	1,510	189	214	255	171	183	104
24	236	168	141	157	138	1,160	189	192	400	157	239	121
25	220	163	141	166	180	375	220	186	380	160	255	128
26	220	163	141	171	320	356	204	204	1,180	171	239	136
27	204	160	141	160	460	356	195	198	510	152	198	136
28	204	157	141	152	1,330	320	438	323	485	149	172	116
29	204	152	141	141	------	286	375	306	356	154	158	107
30	204	152	141	138	------	303	252	220	286	166	147	204
31	204	------	141	138	------	303	------	198	------	154	139	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	269	204	247	2.08	2.40
November	204	152	171	1.44	1.61
December	220	125	146	1.23	1.42
January	338	128	165	1.39	1.60
February	1,330	113	209	1.76	1.83
March	1,510	146	489	4.11	4.74
April	438	189	243	2.04	2.28
May	894	186	274	2.30	2.65
June	1,180	160	317	2.66	2.97
July	375	149	209	1.76	2.03
August	1,220	110	194	1.63	1.88
September	272	107	136	1.14	1.27
The year	1,510	107	234	1.97	26.68

DAN RIVER AT LEAKSVILLE, N. C.

LOCATION.—Staff gage at covered wagon bridge half a mile above Smith River at Leaksville, Rockingham County.
DRAINAGE AREA.—1,150 square miles.
RECORDS AVAILABLE.—July to September, 1929.
EXTREMES.—Maximum discharge during period, 7,500 second-feet July 13 (gage height, 9.00 feet); minimum, 462 second-feet several times during September (gage height, 1.36 feet).
REMARKS.—Records fair. Discharge estimated July 10 and 11. Some diurnal regulation caused by operation of power plants.

Daily and monthly discharge, in second-feet, 1929

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1	------	2,620	835	11	1,140	895	685	21	1,280	835	655
2	------	2,030	745	12	1,700	2,710	628	22	1,890	715	572
3	------	1,340	655	13	4,730	955	655	23	1,210	775	490
4	------	1,020	745	14	1,660	835	628	24	1,020	955	715
5	------	895	895	15	3,290	835	518	25	1,210	2,470	715
6	------	835	775	16	2,350	715	490	26	1,020	1,470	715
7	------	775	775	17	1,340	685	655	27	955	835	745
8	------	1,470	655	18	1,080	655	1,750	28	955	835	745
9	------	1,210	545	19	2,320	1,540	895	29	955	1,340	628
10	1,080	1,020	655	20	1,340	1,280	745	30	1,080	1,750	545
								31	2,030	835	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
July 10-31	4,730	955	1,620	1.41	1.15
August	2,710	655	1,200	1.04	1.20
September	1,750	490	715	.622	.69

DAN RIVER AT SOUTH BOSTON, VA.

LOCATION.—Water-stage recorder at Norfolk & Western Railway bridge at South Boston, Halifax County, 6 miles upstream from mouth of Banister River since Dec. 8, 1928. Prior to that date a chain gage at same site was used.

DRAINAGE AREA.—2,820 square miles.

RECORDS AVAILABLE.—August, 1900, to May, 1907; April, 1923, to September, 1929.

EXTREMES.—Maximum discharge during year, 25,000 second-feet Mar. 2 (gage height, 22.76 feet); minimum, 690 second-feet Sept. 23 (gage height, 4.26 feet).

1900–1907, 1923–1929: Maximum discharge, 52,600 second-feet Dec. 31, 1901 (gage height, 25.2 feet, old datum); minimum, 300 second-feet Sept. 11, 1925 (gage height, 3.12 feet).

REMARKS.—Records good. 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, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,000	1,790	1,580	1,310	1,510	20,400	3,040	4,440	2,640	2,880	8,150	1,790
2	4,800	1,720	1,250	1,440	1,370	24,600	2,880	4,080	2,160	2,320	3,200	1,510
3	3,120	1,650	1,650	1,370	1,310	7,250	2,560	4,440	2,320	2,320	2,400	1,370
4	2,400	1,650	1,720	1,650	1,370	5,100	2,400	6,050	1,930	2,160	1,790	1,070
5	2,320	1,440	1,650	1,250	1,440	11,200	2,480	3,990	2,320	1,930	1,650	1,510
6	2,880	1,860	1,650	1,310	1,440	16,700	2,160	3,200	1,790	3,630	1,510	1,860
7	2,240	1,860	1,510	1,930	1,650	18,200	2,080	2,960	1,650	3,630	1,370	1,720
8	2,400	1,790	1,580	2,400	6,880	6,050	2,480	2,880	1,510	2,720	1,310	1,370
9	2,240	1,580	1,310	1,930	5,400	3,900	2,560	2,880	1,930	2,160	2,400	1,130
10	2,080	1,860	1,310	1,720	4,350	3,540	2,560	2,480	8,010	2,000	2,240	1,370
11	1,650	1,510	1,510	1,720	4,260	3,280	2,480	2,400	5,430	2,080	1,720	1,070
12	1,930	1,250	1,310	2,080	3,360	2,960	3,200	2,160	3,200	2,480	1,720	1,510
13	1,930	1,790	1,440	1,790	2,880	2,720	3,200	2,240	2,320	5,690	3,720	1,370
14	1,310	1,370	1,370	1,790	2,230	2,800	2,400	2,480	2,080	8,660	2,160	1,310
15	1,650	1,310	1,510	1,510	2,240	4,260	4,170	1,930	2,640	5,100	5,240	1,010
16	1,860	1,310	1,720	1,650	2,160	6,170	13,800	1,860	2,400	7,490	2,780	910
17	1,860	1,650	1,930	1,510	2,480	5,720	19,100	1,860	3,200	4,180	1,790	1,070
18	1,860	1,510	1,790	1,510	3,040	4,170	10,800	1,930	3,280	2,560	1,370	1,440
19	1,930	1,510	1,720	1,790	2,640	3,200	9,600	1,720	2,240	2,720	1,310	2,880
20	1,720	1,720	1,580	1,580	2,800	3,360	3,990	2,080	2,080	9,140	3,120	2,160
21	1,650	1,580	1,580	1,650	2,160	2,720	3,040	2,560	1,580	4,650	2,880	1,310
22	1,650	2,240	1,510	1,720	2,320	2,960	3,360	2,880	1,510	2,640	1,930	1,070
23	1,930	1,720	1,250	1,720	2,800	3,320	3,280	2,480	1,440	2,240	1,510	860
24	1,860	1,860	1,370	1,440	3,630	6,070	3,040	1,790	1,440	2,080	1,790	1,130
25	4,080	1,440	1,370	1,650	3,450	7,980	2,560	1,720	5,300	1,930	3,280	1,130
26	2,720	1,250	1,510	1,440	3,990	4,590	2,560	1,650	7,130	1,930	4,530	1,310
27	1,930	1,720	1,310	1,440	11,300	3,720	2,640	1,930	7,370	1,930	3,040	1,250
28	1,790	1,310	1,510	1,930	19,600	3,360	2,800	2,320	7,010	2,240	2,160	1,310
29	1,930	1,250	1,720	1,650	-------	2,960	8,870	2,240	7,250	2,000	1,650	1,190
30	1,930	1,510	1,370	1,650	-------	2,800	8,630	2,320	6,050	1,690	2,640	1,070
31	1,930	-------	1,310	1,580	-------	2,880	-------	1,930	-------	1,930	3,990	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	5,000	1,310	2,280	0.809	0.93
November	2,240	1,250	1,600	.567	.63
December	1,930	1,250	1,510	.535	.62
January	2,400	1,250	1,650	.585	.67
February	19,600	1,310	3,720	1.32	1.38
March	24,600	2,720	6,420	2.28	2.63
April	19,100	2,080	4,630	1.64	1.83
May	6,050	1,650	2,640	.936	1.08
June	8,010	1,440	3,370	1.20	1.34
July	9,140	1,690	3,260	1.16	1.34
August	8,150	1,310	2,590	.918	1.06
September	2,880	860	1,370	.486	.54
The year	24,600	860	2,920	1.04	14.05

MAYO RIVER NEAR PRICE, N. C.

LOCATION.—Staff gage just Below Anglins Bridge, three-fourths mile below State line, and 4 miles west of Price, Rockingham County.
DRAINAGE AREA.—260 square miles.
RECORDS AVAILABLE.—July to September, 1929.
EXTREMES.—Maximum discharge during period, 2,770 second-feet July 13 (gage height, 4.56 feet); minimum, 190 second-feet Sept. 16 (gage height, 1.36 feet).
REMARKS.—Records good except those that are estimated, which are fair. No gage-height record on Sundays; discharge estimated.

Daily and monthly discharge, in second-feet, 1929

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1		435	230	11		320	234	21	400	242	214
2		358	220	12		396	200	22	410	238	215
3		323	217	13	1,180	318	210	23	367	293	217
4		290	217	14	1,000	264	214	24	336	264	224
5		261	245	15	859	257	200	25	323	290	231
6		261	224	16	538	231	192	26	332	314	227
7		261	276	17	425	234	554	27	310	261	231
8		400	240	18	565	750	297	28	300	242	214
9		306	220	19	504	372	227	29	285	306	203
10		280	234	20	386	276	217	30	306	249	194
								31	297	238	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
July 13–31	1,180	285	48	1.85	1.31
August	750	231	307	1.18	1.36
September	554	192	235	.904	1.01

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 to September, 1929.
EXTREMES.—Maximum discharge during period, 669 second-feet Sept. 17 (gage height, 3.07 feet); minimum, 14 second-feet Sept. 16 and 17 (gage height, 1.39 feet).
REMARKS.—Records excellent. Flow partly regulated by small dam and power plant 1,000 feet upstream.

Daily and monthly discharge, in second-feet, 1929

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1		212	11		378	21		167
2		238	12		236	22		245
3		204	13		238	23		213
4		209	14		223	24		227
5		240	15		197	25		251
6		239	16		202	26		260
7		251	17		389	27		277
8		197	18		375	28	260	244
9		238	19		282	29	231	205
10		234	20		218	30	288	257
						31	269	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
August 28–31	288	231	262	0.701	0.10
September	389	167	245	.655	.73

LEATHERWOOD CREEK NEAR OLD LIBERTY, VA.

LOCATION.—Chain gage on highway bridge 1½ miles above mouth and 3 miles from Old Liberty, Henry County.

DRAINAGE AREA.—68 square miles.

RECORDS AVAILABLE.—September, 1925, to September, 1929.

EXTREMES.—Maximum discharge during year, 617 second-feet July 13 (gage height, 5.74 feet); minimum, 20 second-feet Aug. 5, Sept. 1, 2, and 3 (gage height, 1.56 feet).

1925–1929: Maximum discharge, 2,970 second-feet Aug. 11, 1928 (gage height, 14.37 feet); minimum, 7 second-feet Sept. 25, 1926 (gage height, 1.52 feet).

REMARKS.—Records fair. Discharge estimated Dec. 24, 26, June 15 and 22.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	47	32	47	e 38	38	162	46	59	29	31	22	e 20
2	37	32	e 42	43	55	81	38	240	e 42	31	21	e 20
3	38	32	37	93	e 55	e 68	34	105	54	29	21	20
4	32	e 32	37	60	54	55	36	63	36	28	e 50	22
5	32	32	37	35	36	366	36	e 54	34	26	20	28
6	32	32	35	e 60	129	155	36	44	28	99	21	22
7	e 31	34	35	49	148	105	e 36	70	26	e 64	21	22
8	30	39	35	69	123	57	35	44	26	29	81	e 22
9	30	34	e 50	58	99	50	34	61	e 530	38	34	22
10	28	34	64	62	e 85	e 46	34	48	55	28	26	22
11	28	e 36	45	56	70	42	55	44	36	34	e 56	61
12	30	38	34	51	48	40	111	e 41	29	46	36	28
13	30	34	37	e 50	35	55	50	38	44	617	25	26
14	e 32	38	58	49	33	70	e 45	36	29	e 452	23	28
15	34	32	58	39	42	70	48	42	e 430	286	31	e 26
16	35	39	e 50	43	44	81	549	42	e 240	63	22	23
17	35	38	43	43	e 42	e 80	175	34	55	42	21	57
18	35	e 38	43	45	40	46	81	34	36	38	e 110	43
19	35	39	39	47	36	42	59	e 37	33	44	34	31
20	34	49	38	e 40	44	40	48	40	29	33	25	28
21	e 34	38	35	34	162	38	e 46	54	25	e 34	22	28
22	34	37	35	32	99	44	59	38	e 240	36	21	e 28
23	45	37		36	81	61	44	31	e 160	31	29	29
24	56	36		33	e 99	e 190	40	31	70	26	26	31
25	35	e 35	e 35	48	117	50	48	29	46	25	e 90	31
26	32	34		50	142	48	43	e 29	129	28	29	31
27	32	35	35	e 45	225	49	36	29	64	28	25	29
28	e 32	37	35	40	515	42	e 170	50	50	e 26	23	28
29	30	e 38	37	34	------	38	155	34	46	25	23	e 28
30	30	39	e 35	31	------	50	70	34	e 38	23	23	28
31	30	------	34	48	------	e 48	------	28	------	23	22	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	56	28	34.0	0.500	0.58
November	49	32	36.0	.529	.59
December	64	34	40.3	.593	.68
January	93	31	47.1	.693	.80
February	515	33	96.3	1.42	1.48
March	366	38	76.4	1.12	1.29
April	549	34	76.6	1.13	1.26
May	240	28	50.4	.741	.85
June	530	25	89.6	1.32	1.47
July	617	23	76.2	1.12	1.29
August	110	20	33.3	.490	.56
September	61	20	28.7	.422	.47
The year	617	20	56.8	.835	11.32

e Estimated or interpolated.

BANISTER RIVER AT HALIFAX, VA.

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

DRAINAGE AREA.—552 square miles.

RECORDS AVAILABLE.—December, 1928, to September, 1929.

EXTREMES.—Maximum discharge during period, 5,560 second-feet Apr. 17 (gage height, 19.36 feet); minimum, 43 second-feet Aug. 7 (gage height, 1.00 foot).

REMARKS.—Records good except those for estimated periods (Jan. 23, Aug. 19–24, Sept. 5–7, and 10–14), which are fair. Flow regulated except for high stages by power plant half a mile upstream.

Daily and monthly discharge, in second-feet, 1928–29

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-------	443	277	3,610	456	754	510	206	174	112
2	-------	359	239	1,960	437	645	80	257	184	162
3	-------	351	193	1,030	447	1,010	433	253	210	150
4	-------	343	286	860	218	756	218	138	59	155
5	-------	310	285	2,220	288	453	264	219	112	
6	-------	230	336	3,630	478	541	252	270	172	180
7	-------	319	435	1,910	94	720	237	212	152	
8	159	399	330	915	256	592	308	789	420	142
9	103	328	533	642	148	369	445	571	1,030	214
10	273	359	370	425	181	518	492	278	578	
11	76	340	628	621	652	516	432	270	60	150
12	124	223	504	538	1,380	106	379	431	535	
13	720	326	289	524	1,040	796	350	550	438	
14	390	504	290	524	484	2,910	288	222	310	
15	100	276	363	534	668	1,670	319	831	846	98
16	88	265	393	655	4,220	737	179	497	1,010	164
17	296	360	318	485	5,120	572	216	246	686	227
18	351	273	483	620	2,250	460	386	255	190	160
19	351	301	298	520	905	339	244	177		182
20	437	99	344	488	641	540	242	368		194
21	351	253	307	439	484	878	236	77	490	164
22	302	215	446	425	682	761	138	192		75
23	84	300	534	551	743	603	174	187		178
24	282	244	413	280	608	505	212	195		203
25	120	294	696	606	576	340	188	328	335	276
26	293	326	844	538	536	98	534	172	584	165
27	298	260	1,780	356	536	402	697	132	332	173
28	301	316	2,890	380	428	484	372	88	199	146
29	198	304	-------	342	2,260	584	194	124	424	73
30	110	306	-------	348	1,380	443	95	120	336	318
31	290	306	-------	141	-------	384	-------	191	110	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
December 8–31	437	76	254	0.460	0.41
January	443	99	307	.556	.64
February	2,890	193	539	.976	1.02
March	3,630	141	875	1.59	1.83
April	5,120	94	953	1.73	1.93
May	2,910	98	661	1.20	1.38
June	697	80	304	.551	.61
July	831	77	285	.516	.59
August	1,030	59	401	.726	.84
September	318	73	167	.303	.34

HYCO RIVER AT 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 to September, 1929.
EXTREMES.—Maximum discharge during period, 1,080 second-feet July 14 (gage height, 12.32 feet); minimum, 5 second-feet Aug. 6 (gage height, 4.76 feet).
REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1929

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1	------	68	95	11	157	52	105	21	157	221	44
2	------	22	72	12	263	135	179	22	95	77	37
3	------	52	56	13	940	72	60	23	105	60	43
4	------	23	45	14	896	33	42	24	82	110	40
5	------	17	37	15	750	19	125	25	52	377	60
6	------	9	48	16	239	86	60	26	68	730	60
7	------	12	41	17	125	135	191	27	60	351	60
8	------	14	35	18	82	68	416	28	48	110	52
9	------	31	35	19	543	56	135	29	39	135	34
10	39	203	30	20	215	299	60	30	31	528	34
								31	32	275	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
July 10–31	940	31	228	1.04	0.85
August	730	9	141	.644	.74
September	416	30	77.7	.355	.40

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, 1929.

EXTREMES.—Maximum discharge during year, 8,960 second-feet Mar. 4 (gage height, 14.72 feet); minimum, 172 second-feet Sept. 9 (gage height, 2.57 feet).

REMARKS.—Records good below 8,000 second-feet and fair above except those for estimated periods (Oct. 1–17 and Oct. 28 to Nov. 14), which are poor.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	900	420	281	281	298	5,150	890	845	620	1,440	1,020	620
2	900	420	298	281	281	6,340	800	534	401	1,640	1,470	383
3	900	420	331	264	264	8,210	665	576	348	2,050	1,690	331
4	900	420	298	264	264	8,880	576	1,020	348	1,340	620	331
5	900	320	281	264	248	6,000	534	576	348	665	438	1,120
6	900	320	264	514	264	4,920	514	419	298	456	348	475
7	900	320	264	514	383	5,770	494	475	281	401	298	383
8	400	320	264	456	494	7,510	438	755	248	348	494	298
9	400	320	248	348	494	8,660	401	1,070	605	331	845	216
10	400	320	264	348	620	2,990	419	1,780	1,890	314	1,160	232
11	400	320	248	419	800	1,020	366	2,050	1,480	314	576	232
12	400	260	248	665	755	890	665	935	890	1,930	1,710	201
13	400	350	248	710	534	800	1,200	665	620	2,430	1,810	186
14	400	330	264	665	456	800	755	494	419	3,140	1,340	281
15	320	281	348	494	438	1,440	534	438	514	3,280	1,070	348
16	320	264	366	419	1,070	2,160	1,200	438	980	1,480	576	383
17	320	298	331	401	1,680	2,740	2,160	383	1,020	890	620	348
18	314	281	314	383	1,880	2,320	2,980	348	980	620	366	456
19	314	298	314	383	1,380	1,070	2,740	366	980	1,590	348	248
20	298	331	298	348	935	890	935	534	935	2,030	438	264
21	264	419	383	331	1,020	800	710	1,440	514	1,250	845	281
22	264	331	401	314	1,640	980	665	2,500	383	890	620	232
23	281	298	348	298	2,000	1,070	620	1,880	383	710	331	216
24	331	281	348	298	2,100	1,300	620	935	348	576	314	264
25	298	264	348	298	1,740	1,640	534	576	314	438	2,090	348
26	314	281	348	314	1,160	1,200	494	475	494	534	1,390	366
27	281	264	314	298	2,040	935	475	419	534	401	1,850	298
28	290	264	298	331	4,130	755	438	401	2,000	366	665	248
29	290	248	298	438	------	665	494	494	3,410	348	456	232
30	290	264	281	331	------	665	1,020	755	3,220	298	1,070	248
31	290	------	281	314	------	800	------	665	------	475	890	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	----------	264	457	0.771	0.89
November	----------	----------	318	.536	.60
December	401	248	304	.513	.59
January	710	264	387	.653	.75
February	4,130	248	1,050	1.77	1.84
March	8,880	665	2,880	4.86	5.60
April	2,980	366	845	1.42	1.58
May	2,500	348	814	1.37	1.58
June	3,410	248	860	1.45	1.62
July	3,280	298	1,060	1.79	2.06
August	2,090	298	895	1.51	1.74
September	1,120	186	336	.567	.63
The year	8,880	186	852	1.44	19.48

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 4¾ miles downstream from mouth of Rocky Creek.

DRAINAGE AREA.—462 square miles.

RECORDS AVAILABLE.—October, 1923, to September, 1929.

EXTREMES.—Maximum discharge during year, 5,130 second-feet Mar. 8 (gage height, 15.02 feet); minimum, 94 second-feet Sept. 13 (gage height, 1.52 feet).

1923–1929: Maximum discharge, 12,300 second-feet Oct. 1 and 2, 1924 (gage height, 17.3 feet); minimum, 40 second-feet Sept. 2, 26, 27, and Oct. 2, 1926.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,060	270	240	286	286	3,670	766	430	478	544	318	382
2	1,610	318	286	270	270	4,240	629	366	366	414	318	240
3	820	350	302	270	240	4,240	510	366	334	398	318	195
4	646	414	318	255	225	3,220	462	414	302	382	350	188
5	478	382	270	255	225	2,690	446	478	302	318	334	165
6	398	334	255	430	225	3,670	430	446	302	255	318	210
7	398	286	240	697	414	4,510	398	446	286	240	225	195
8	462	270	240	663	527	5,130	366	446	286	210	150	165
9	478	270	255	462	527	3,380	350	561	574	188	210	158
10	382	255	255	398	595	1,520	334	1,750	2,600	188	210	150
11	318	270	255	414	802	892	318	1,920	4,380	210	350	143
12	318	225	240	612	680	714	318	1,350	4,120	486	318	129
13	318	225	240	892	527	680	318	714	1,960	2,380	350	115
14	318	302	240	802	462	680	382	820	784	2,860	366	101
15	286	286	286	544	414	1,060	366	629	494	2,930	255	129
16	286	270	366	462	646	1,850	629	561	766	3,000	350	172
17	286	255	366	446	1,580	2,490	1,330	430	982	1,880	366	188
18	286	255	366	382	1,550	1,760	1,260	334	784	1,200	286	165
19	286	270	318	366	1,100	1,060	928	318	1,160	646	379	136
20	270	302	302	366	766	784	595	494	1,180	856	2,430	129
21	255	350	350	350	838	697	462	1,450	1,120	838	2,520	122
22	255	366	446	318	1,580	731	430	2,580	646	595	1,350	129
23	240	334	398	302	1,920	928	414	2,640	544	462	561	158
24	240	318	350	286	1,730	928	414	1,820	398	398	430	172
25	286	270	350	286	1,300	928	382	784	350	350	318	210
26	270	255	366	286	1,160	748	366	478	478	318	350	286
27	240	240	350	286	1,370	646	382	414	462	302	350	302
28	240	240	318	286	2,490	544	350	366	697	302	318	286
29	240	240	302	366	-------	510	382	382	874	255	255	188
30	240	240	286	350	-------	510	446	595	802	240	286	150
31	255	-------	286	318	-------	646	-------	629	-------	240	350	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,610	240	402	0.870	1.00
November	414	225	289	.628	.70
December	446	240	305	.660	.76
January	892	255	410	.887	1.02
February	2,490	225	873	1.89	1.97
March	5,130	510	1,810	3.92	4.52
April	1,330	318	505	1.09	1.22
May	2,640	318	820	1.77	2.04
June	4,380	286	960	2.08	2.32
July	3,000	188	770	1.67	1.92
August	2,520	150	493	1.07	1.23
September	382	101	182	.39	.44
The year	5,130	101	651	1.41	19.14

NEUSE RIVER BASIN

ENO RIVER AT HILLSBORO, N. C.

LOCATION.—Staff gage 1,000 feet below State Highway No. 10 at Hillsboro, Orange County, and 2 miles below Sevenmile Creek.

DRAINAGE AREA.—66.5 square miles.

RECORDS AVAILABLE.—November, 1927, to September, 1929.

EXTREMES.—Maximum recorded discharge during year, 1,360 second-feet July 13 (gage height, 7.40 feet); minimum, 12 second-feet Sept. 14 (gage height, 0.88 foot).

1927–1929: Maximum discharge (estimated), 7,400 second-feet Sept. 19, 1928 (gage height, about 16.0 feet); minimum, 4.7 second-feet Aug. 5, 1928 (gage height, 0.66 foot).

REMARKS.—Records good below and fair above 500 second-feet. Slight diurnal regulation caused by operation of cotton mills. No record Jan. 6 to July 7.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	July	Aug.	Sept.
1	46	28	32	17	-------	21	20
2	44	26	32	19	-------	20	19
3	42	25	28	19	-------	19	16
4	38	24	25	18	-------	18	17
5	37	24	23	19	-------	16	16
6	35	24	22	-------	-------	15	15
7	50	23	21	-------	-------	15	14
8	39	23	20	-------	34	517	14
9	33	22	19	-------	37	124	13
10	32	22	19	-------	29	58	13
11	30	22	18	-------	24	44	14
12	29	22	18	-------	195	30	14
13	28	21	17	-------	633	27	13
14	27	20	28	-------	96	25	12
15	26	20	37	-------	130	23	28
16	23	21	32	-------	69	22	20
17	23	21	29	-------	50	20	16
18	22	20	25	-------	33	18	17
19	33	19	23	-------	38	17	19
20	32	33	32	-------	47	23	16
21	31	30	30	-------	43	21	16
22	31	28	27	-------	80	44	18
23	31	25	25	-------	47	108	19
24	30	23	23	-------	35	35	20
25	30	22	22	-------	30	91	19
26	28	20	21	-------	28	44	19
27	28	20	20	-------	25	31	17
28	27	19	19	-------	22	25	16
29	25	19	19	-------	21	26	15
30	24	18	18	-------	22	25	14
31	28	-------	18	-------	21	22	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	50	22	31.7	0.477	0.55
November	33	18	22.8	.343	.38
December	37	17	23.9	.359	.41
January 1–5	19	17	18.4	.279	.05
July 8–31	633	21	74.5	1.12	1.00
August	517	15	49.8	.749	.86
September	28	12	16.6	.250	.28

NEUSE RIVER NEAR NORTHSIDE, N. C.

LOCATION.—Water-stage recorder at Fishdam Bridge, 1½ miles below Seaboard Air Line Railway bridge and 2 miles south of Northside, Granville County.
DRAINAGE AREA.—574 square miles.
RECORDS AVAILABLE.—July, 1927, to September, 1929.
EXTREMES.—Maximum discharge during year, 12,600 second-feet Mar. 1 (gage height, 23.50 feet); minimum, 53 second-feet Jan. 5 (gage height, 1.49 feet).
1927–1929: Maximum discharge, 14,300 second-feet Apr. 28, 1928 (gage height, 24.4 feet); minimum, 24 second-feet Aug. 6, 1928 (gage height, 1.21 feet).
REMARKS.—Records good to 1,000 second-feet, fair to 4,000 second-feet, and poor beyond. Flow regulated by storage at Durham Reservoir.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	468	135	108	71	124	10,200	548	548	212	707	489	316
2	370	135	103	64	119	4,590	516	580	180	1,050	286	268
3	284	174	97	62	102	2,700	500	836	164	899	244	145
4	252	130	114	60	90	2,000	484	580	244	497	175	127
5	209	124	111	57	113	4,620	468	448	199	380	124	130
6	228	108	106	71	132	10,300	452	386	159	372	116	135
7	613	116	102	92	210	4,350	420	653	143	220	116	124
8	641	132	100	102	252	2,560	324	1,010	137	292	559	116
9	321	130	124	87	223	1,450	204	911	1,460	340	1,660	100
10	212	106	90	84	493	794	196	1,200	1,920	268	629	108
11	191	105	102	92	489	580	340	687	842	170	439	108
12	175	92	89	164	307	580	364	521	516	333	820	108
13	164	111	106	268	228	564	292	452	484	2,600	412	105
14	162	102	102	185	201	596	220	368	332	3,070	291	108
15	138	110	121	169	198	1,120	206	228	199	1,190	340	252
16	151	105	122	153	619	2,510	2,000	204	400	730	340	164
17	154	100	119	98	1,180	1,670	3,220	193	270	538	292	132
18	158	94	124	102	840	793	1,670	174	507	452	244	156
19	154	97	82	106	500	628	825	199	308	512	132	204
20	140	118	78	95	368	580	591	393	212	812	244	169
21	127	124	84	90	565	564	516	1,590	164	396	186	137
22	121	119	79	95	1,100	561	484	1,020	153	316	135	113
23	134	111	84	90	1,510	904	564	577	143	324	124	124
24	177	103	78	110	1,060	1,870	516	336	409	236	384	129
25	180	95	71	132	761	1,400	484	236	356	204	876	156
26	146	90	67	130	899	783	500	194	202	220	1,750	164
27	130	106	65	108	3,260	647	479	186	771	164	657	150
28	121	105	65	100	6,500	577	401	504	2,570	148	392	161
29	121	98	64	146	-------	532	1,090	415	2,780	132	348	116
30	126	90	64	143	-------	519	789	484	1,460	140	553	92
31	132	-------	64	132	-------	628	-------	316	-------	137	401	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	641	121	216	0.376	0.43
November	174	90	112	.195	.22
December	124	64	93.1	.162	.19
January	268	57	112	.195	.22
February	6,500	90	802	1.40	1.46
March	10,300	519	2,010	3.50	4.04
April	3,220	196	655	1.14	1.27
May	1,590	174	530	.923	1.06
June	2,780	137	597	1.04	1.16
July	3,070	132	576	1.00	1.15
August	1,750	116	444	.774	.89
September	316	92	147	.256	.29
The year	10,300	57	523	.911	12.38

NEUSE RIVER NEAR CLAYTON, N. C.

LOCATION.—Water-stage recorder at iron bridge 3 miles east of Clayton, Johnson County.

DRAINAGE AREA.—1,230 square miles.

RECORDS AVAILABLE.—July, 1927, to September, 1929.

EXTREMES.—Maximum discharge during year, 13,800 second-feet Mar. 6 (gage height, 16.22 feet); minimum, 229 second-feet Jan. 5.

1927–1929: Maximum discharge, 16,000 second-feet Sept. 20, 1928 (gage height, 17.5 feet); minimum discharge, 98 second-feet Aug. 4, 1928.

Maximum recorded discharge (estimated), 26,800 second-feet July 23, 1919 (gage height, 21.15 feet).

REMARKS.—Records good. Discharge estimated Nov. 19–21. There is small diurnal fluctuation.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,420	538	424	344	424	10,600	1,240	1,420	953	5,420	1,050	899
2	1,060	491	446	325	402	10,100	1,180	1,060	739	6,360	1,680	687
3	953	514	446	325	382	9,000	1,010	1,120	687	6,200	1,180	586
4	792	514	424	308	362	9,670	1,010	1,480	687	2,690	792	586
5	739	514	402	308	382	11,500	953	1,120	687	1,360	687	586
6	687	446	402	491	382	13,400	899	899	636	1,010	538	514
7	1,360	424	402	491	636	11,800	899	1,060	562	899	468	491
8	1,870	424	402	424	687	9,550	845	1,360	514	739	538	491
9	1,420	446	362	382	687	9,330	739	2,320	1,100	687	1,180	468
10	953	446	362	446	899	8,560	636	3,460	2,750	739	2,300	446
11	739	468	402	538	1,060	5,410	636	2,440	3,420	739	1,480	424
12	636	446	362	772	1,060	1,600	845	1,610	2,220	1,010	2,440	382
13	586	424	362	953	845	1,300	899	1,120	1,120	2,390	2,010	382
14	562	382	402	792	687	1,240	792	953	953	4,910	1,240	467
15	538	402	586	687	687	1,870	739	899	899	4,710	1,060	446
16	538	402	468	586	1,600	4,170	2,460	739	3,070	4,910	1,060	446
17	538	402	446	586	3,080	4,040	4,240	586	2,670	2,820	792	586
18	514	382	446	538	2,800	3,770	4,330	586	1,360	1,360	687	468
19	514	446	446	491	2,040	2,020	4,520	586	1,610	1,240	687	446
20	514	586	424	446	1,300	1,420	3,080	792	1,190	3,320	739	446
21	468	424	491	446	1,480	1,240	1,240	2,550	792	3,320	792	446
22	446	424	468	424	2,670	1,540	1,060	5,520	636	2,300	636	424
23	446	446	402	402	2,910	1,540	953	2,970	636	1,610	538	424
24	562	424	382	382	2,830	2,150	953	1,420	636	1,180	514	491
25	538	402	362	402	2,370	2,750	899	1,010	1,010	899	931	538
26	514	382	362	402	1,730	2,750	899	792	1,010	1,010	1,680	514
27	491	402	344	402	4,240	1,740	845	687	1,060	899	2,440	514
28	446	382	325	446	8,220	1,360	845	636	3,820	687	1,540	491
29	446	402	325	446	-------	1,120	953	792	4,910	636	899	446
30	424	402	325	424	-------	1,120	1,560	1,610	5,840	586	792	586
31	491	-------	325	446	-------	1,240	-------	1,120	-------	687	899	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,870	424	716	0.582	0.67
November	586	382	440	.358	.40
December	586	325	404	.328	.38
January	953	308	479	.389	.45
February	8,220	362	1,670	1.36	1.42
March	13,400	1,120	4,800	3.90	4.50
April	4,520	636	1,410	1.15	1.28
May	5,520	586	1,440	1.17	1.35
June	5,840	514	1,610	1.31	1.46
July	6,360	586	2,170	1.76	2.03
August	2,440	468	1,110	.902	1.04
September	899	382	504	.410	.46
The year	13,400	308	1,400	1.14	15.44

FLAT RIVER AT BAHAMA, N. C.

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.

DRAINAGE AREA.—150 square miles.

RECORDS AVAILABLE.—July, 1925, to September, 1929.

EXTREMES.—Maximum discharge during year, 7,300 second-feet Feb. 28 (gage height, 8.71 feet); minimum, 13.9 second-feet Feb. 6 (gage height, 1.40 feet). 1925–1929: Maximum discharge, that of Feb. 28, 1929; minimum, 0.5 second-foot Sept. 27 and 30 and Oct. 1, 1925 (gage height, 0.50 foot).

REMARKS.—Records good. Discharge estimated July 13–20, Aug. 3–5, 11–13, and 16–22. Slight diurnal fluctuation caused by operation of old gristmills.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	130	26	24	22	20	1,030	163	132	49	57	31	56
2	76	24	20	21	20	374	136	282	43	255	29	47
3	62	29	30	20	17	262	104	241	40	87	28	44
4	56	26	20	19	20	452	94	125	45	48	21	36
5	49	32	25	22	18	4,680	90	92	37	44	20	37
6	47	27	24	20	18	1,010	86	92	39	254	20	39
7	50	26	21	30	27	392	74	188	36	108	18	36
8	44	26	21	32	50	254	70	127	36	64	51	25
9	41	24	19	25	43	210	66	134	622	47	567	24
10	38	23	23	22	184	176	62	140	204	41	75	31
11	32	19	19	28	90	152	104	89	99	35	111	92
12	32	25	20	40	56	140	184	72	65	1,170	126	55
13	38	22	22	44	46	138	114	66	52	1,300	97	34
14	27	21	23	36	38	176	74	60	40	199	81	27
15	34	22	25	30	38	662	115	52	93	76	356	30
16	34	21	30	30	176	455	3,160	53	158	58	83	36
17	33	26	31	24	319	233	586	50	63	45	44	38
18	33	19	28	27	158	173	271	47	56	30	32	106
19	32	26	24	28	96	145	193	50	40	22	30	67
20	32	27	21	23	74	127	154	155	40	78	184	34
21	28	30	24	27	112	116	134	324	36	50	56	33
22	32	29	27	25	237	272	193	110	31	50	46	24
23	30	27	21	23	438	893	170	71	29	57	32	27
24	46	22	24	22	315	923	116	54	99	44	144	37
25	37	18	19	23	315	285	102	53	126	37	1,640	43
26	30	25	20	22	521	210	117	43	76	37	218	47
27	29	21	19	22	1,840	178	87	46	385	36	102	36
28	23	22	19	26	5,130	149	293	241	470	31	67	32
29	30	22	22	22	-------	121	598	132	163	30	101	29
30	30	22	22	22	-------	170	180	114	81	26	382	30
31	28	-------	20	23	-------	256	-------	65	-------	21	89	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	130	23	40.7	0.271	0.31
November	32	18	24.3	.162	.18
December	31	19	22.8	.152	.18
January	44	19	25.8	.172	.20
February	5,130	17	372	2.48	2.58
March	4,680	116	478	3.19	3.68
April	3,160	62	263	1.75	1.95
May	324	43	113	.753	.87
June	622	29	112	.747	.83
July	1,300	21	143	.953	1.10
August	1,640	18	157	1.05	1.21
September	106	24	41	.273	.30
The year	5,130	17	148	.987	13.39

FLAT RIVER AT DAM, NEAR BAHAMA, N. C.

LOCATION.—Water-stage recorder just below 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, 1929.

EXTREMES.—Maximum discharge during year, 6,140 second-feet Feb. 28 (gage height, 13.74 feet); minimum, 0.4 second-foot Dec. 21–24 (gage height, 0.91 foot).

1927–1929: Maximum discharge, 7,180 second-feet Apr. 28, 1928 (gage height, 14.6 feet); minimum, that of Dec. 21–24, 1928.

REMARKS.—Records excellent except those for estimated periods (Apr. 13–19 and Aug. 25–29), which are fair. Flow regulated by storage reservoir. Diversion for Durham water supply above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	65	65	38	0.5	51	1,720	181	239	58	198	62	156
2	80	57	29	.5	48	488	250	239	42	211	47	130
3	82	56	43	.5	30	319	267	244	35	214	54	54
4	82	47	43	.5	47	385	269	242	50	165	51	50
5	87	56	44	.5	64	4,010	266	167	46	204	48	59
6	80	53	40	.5	52	1,660	276	231	46	79	52	58
7	72	58	42	.5	52	511	197	254	47	47	56	53
8	86	57	37	.5	48	355	114	255	53	47	52	38
9	59	54	38	.5	44	284	55	260	131	57	53	53
10	59	40	47	.5	31	187	47	241	238	55	61	56
11	56	26	42	1.1	44	244	53	268	210	50	70	58
12	62	43	52	1.1	54	260	46	171	252	362	49	54
13	59	44	38	2.8	54	266	41	242	267	1,600	43	52
14	40	40	46	26	59	283	29	87	76	424	50	53
15	53	43	38	56	59	279	98	43	66	288	133	40
16	60	36	38	4.1	52	410	3,130	51	29	226	203	40
17	55	35	40	5.0	28	318	767	40	52	230	189	76
18	63	28	3.6	6.0	47	295	319	59	56	222	80	85
19	53	39	1.1	1.6	60	272	150	47	50	214	53	78
20	48	44	.5	2.4	39	259	238	47	57	207	51	63
21	43	40	.4	2.4	51	253	166	252	53	95	49	80
22	50	38	.4	2.4	51	262	220	261	69	55	48	58
23	57	42	.4	34	55	254	247	224	43	56	89	79
24	55	35	.5	44	91	841	247	48	51	60	129	75
25	48	33	.5	50	218	467	258	59	51	48	435	91
26	51	41	.5	54	236	348	243	38	43	49	435	68
27	49	48	.5	28	915	270	169	60	61	51	435	75
28	43	40	.5	51	4,110	254	172	44	248	47	435	80
29	53	37	.5	60	-------	250	223	46	241	51	435	27
30	53	38	.5	53	-------	255	240	50	168	62	250	61
31	50	-------	.5	61	-------	180	-------	45	-------	49	216	-------

Month	Maximum	Minimum	Mean
October	87	40	59.8
November	65	26	43.8
December	52	.4	22.8
January	61	.5	17.8
February	4,110	28	239
March	4,010	180	530
April	-------	-------	299
May	268	38	147
June	267	29	96.3
July	1,600	47	184
August	-------	43	142
September	156	27	66.7
The year	4,110	.4	154

DIAL CREEK AT BAHAMA, N. C.

LOCATION.—Water-stage recorder three-eighths 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, 1929.

EXTREMES.—Maximum discharge during year, 310 second-feet Mar. 5 (gage height, 4.40 feet); minimum, 0.55 second-foot Aug. 8 (gage height, 0.54 foot). 1925–1929: Maximum discharge, 575 second-feet Apr. 27, 1928 (gage height, 5.60 feet); no flow Sept. 16–30 and Oct. 6–12, 1926.

REMARKS.—Records good except those for estimated periods (Mar. 5–8, Apr. 14–19, and May 29–31), which are fair. Discharge determined by weir formulas.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.52	1.50	1.20	1.04	1.04	16.5	4.04	3.41	1.89	6.0	2.11	1.79
2	2.11	1.50	1.20	1.04	1.04	9.6	3.19	14.9	1.64	7.8	1.24	1.45
3	1.89	1.54	1.20	1.08	1.04	6.5	2.91	5.1	1.45	3.19	.84	1.32
4	1.74	1.54	1.16	1.04	1.04	18.5	2.84	3.64	1.36	2.40	.87	1.36
5	1.64	1.36	1.12	1.12	1.04	137	2.84	3.05	1.24	2.05	.60	1.64
6	1.64	1.24	1.04	2.22	1.50	20	2.78	4.20	1.12	2.11	.60	1.32
7	2.40	1.24	1.04	1.45	3.12	10.8	2.78	10.6	1.08	1.50	.58	1.16
8	1.79	1.24	1.04	1.24	1.94	8.0	2.52	4.37	1.04	2.28	22	1.12
9	1.59	1.16	1.04	1.04	3.05	6.9	2.34	10.5	1.04	1.84	3.95	1.08
10	1.45	1.08	1.04	1.45	4.82	6.3	2.52	5.9	18.6	1.28	2.11	.94
11	1.32	1.08	1.04	1.69	2.91	5.8	4.29	4.29	3.95	1.08	19	.87
12	1.24	1.08	1.04	2.84	2.22	5.7	4.04	3.56	2.91	13.4	8.0	.84
13	1.20	1.08	1.04	2.00	1.94	5.9	2.84	3.26	2.22	16.2	3.48	.84
14	1.20	1.08	1.36	1.50	1.89	6.8	2.71	3.12	1.79	4.73	2.78	1.12
15	1.20	1.08	1.89	1.41	2.11	33	3.56	2.91	3.36	3.19	2.05	1.94
16	1.20	1.08	1.45	1.41	9.6	12.7	70	2.78	3.05	2.58	1.45	1.04
17	1.16	1.08	1.36	1.32	7.8	8.0	12.0	2.52	2.16	2.00	1.32	.97
18	1.12	1.08	1.36	1.36	4.37	6.2	6.3	1.94	1.94	1.89	1.24	2.99
19	1.12	1.16	1.16	1.41	3.19	5.5	4.29	2.16	1.74	3.71	1.08	1.20
20	1.12	2.22	1.16	1.36	2.71	5.0	3.71	13.2	1.41	2.34	1.36	.90
21	1.08	1.45	1.79	1.24	8.1	5.0	3.56	8.0	1.28	1.79	.94	.80
22	1.04	1.32	1.36	1.20	11.5	6.0	4.12	4.04	.97	2.28	.87	.97
23	2.28	1.20	1.32	1.16	10.2	12.6	3.33	2.91	3.20	1.59	1.20	1.08
24	2.34	1.12	1.20	1.16	6.9	9.1	2.84	2.46	5.9	1.32	1.59	1.20
25	1.64	1.12	1.16	1.16	5.4	5.9	3.12	2.22	1.94	1.16	37	1.20
26	1.20	1.12	1.16	1.16	31	4.91	2.98	1.94	1.79	1.16	4.12	1.16
27	1.12	1.12	1.12	1.16	33	4.37	2.34	1.84	31	1.12	2.40	.97
28	1.12	1.12	1.12	1.41	126	3.87	8.8	1.74	11.4	1.01	1.74	.74
29	1.12	1.12	1.12	1.41	-------	3.48	5.9	10.8	5.7	.90	9.8	.74
30	1.12	1.12	1.12	1.24	-------	5.7	3.41	3.79	3.19	.97	5.5	1.88
31	1.32	-------	1.08	1.08	-------	4.46	-------	2.46	-------	1.16	2.40	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2.52	1.04	1.48	0.302	0.35
November	2.22	1.08	1.24	.253	.28
December	1.89	1.04	1.21	.247	.28
January	2.84	1.04	1.37	.280	.32
February	126	1.04	10.4	2.12	2.21
March	137	3.48	12.9	2.63	3.03
April	70	2.34	6.10	1.24	1.38
May	14.9	1.74	4.76	.971	1.12
June	31	.97	4.04	.824	.92
July	16.2	.90	3.10	.633	.73
August	32	.58	4.49	.916	1.06
September	2.99	.74	1.22	.249	.28
The year	137	.58	4.32	.882	11.96

ROCKY CREEK NEAR BAHAMA, N. C.

LOCATION.—Staff gage 1¼ miles upstream from confluence with Flat 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 September, 1929.

EXTREMES.—Maximum discharge during year, 170 second-feet Mar. 5 (gage height, 4.20 feet); minimum, 0.15 second-foot several times in January and February.

1925–1929: Maximum discharge, 186 second-feet Apr. 27, 1928 (gage height, 4.40 feet); no flow several times in August, September, and October, 1926 (gage height, 0.06 foot).

REMARKS.—Records fair, owing to theoretical determination of discharge by weir formula.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.60	0.75	0.20	0.15	0.20	5.80	1.00	0.65	0.70	0.70	0.85	0.35
2	.60	.70	.25	.15	.20	3.25	.75	1.55	.45	4.20	.40	.30
3	.60	.65	.25	.15	.15	2.10	.70	1.20	.50	.85	.35	.30
4	.60	.60	.25	.15	.15	9.6	.70	.60	.65	.55	.35	.30
5	.50	.50	.25	.20	.15	68	.65	.75	.40	.50	.30	.30
6	.50	.35	.25	.30	.25	5.9	.65	.70	.35	.40	.25	.30
7	.50	.30	.25	.20	.95	3.25	.65	7.3	.35	.40	.25	.25
8	.50	.25	.25	.20	.45	2.40	.60	1.10	.30	.30	4.65	.25
9	.45	.25	.25	.20	2.90	1.90	.60	3.95	9.80	.40	1.10	.25
10	.40	.20	.25	.25	2.05	1.40	.55	2.00	2.85	.30	.50	.25
11	.35	.20	.25	.25	.80	1.30	1.55	1.05	1.30	4.35	5.70	.25
12	.35	.20	.20	1.10	.55	1.25	1.10	.75	.85	12.6	1.35	.25
13	.35	.20	.20	.45	.45	1.30	.65	.65	.65	18	.50	.25
14	.30	.20	.25	.30	.45	1.55	.55	.50	.50	2.80	.40	.25
15	.30	.20	.25	.30	.45	6.80	.70	.50	.50	1.45	.35	.45
16	.30	.20	.25	.25	9.2	4.80	10.5	.45	.55	1.10	.30	.25
17	.30	.20	.25	.25	4.20	2.70	2.85	.40	.50	.85	.25	.25
18	.30	.20	.20	.25	1.65	1.80	1.70	.45	.40	.75	.25	.60
19	.25	.20	.20	.25	1.10	1.30	1.05	.40	.35	.70	.25	.25
20	.25	.20	.25	.25	.80	1.20	.85	5.30	.30	.75	.30	.25
21	.25	.20	.20	.20	10.6	1.05	.80	3.40	.30	.65	.25	.25
22	.20	.20	.20	.20	10.0	1.75	.85	.95	.30	.70	.25	.25
23	.80	.20	.20	.20	5.30	6.50	.70	.70	.25	.50	.30	.30
24	.95	.20	.20	.20	2.90	2.80	.65	.50	1.15	.45	.35	.30
25	.65	.20	.20	.20	2.15	1.50	.75	.45	.35	.45	7.20	.25
26	.50	.20	.20	.20	9.4	1.10	.65	.40	.30	.40	.70	.25
27	.45	.20	.20	.20	11.8	.95	.50	.35	6.10	.40	.40	.25
28	.45	.20	.20	.25	28	.85	4.35	.35	3.00	.35	.35	.25
29	.40	.20	.20	.25	-------	.75	1.85	10.2	3.95	.30	6.00	.25
30	.35	.20	.20	.20	-------	1.70	.75	3.95	.85	.35	1.45	.25
31	.85	-------	.20	.20	-------	1.30	-------	1.15	-------	.35	.60	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	0.95	0.20	0.456	0.169	0.19
November	.75	.20	.285	.106	.12
December	.25	.20	.224	.083	.10
January	1.10	.15	.255	.094	.11
February	28	.15	3.83	1.42	1.48
March	68	.75	4.77	1.77	2.04
April	10.5	.55	1.34	.496	.55
May	10.2	.35	1.70	.630	.73
June	9.8	.25	1.29	.477	.53
July	18.0	.30	1.83	.677	.78
August	7.2	.25	1.18	.437	.50
September	.60	.25	.283	.105	.12
The year	68	.15	1.44	.533	7.25

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, 1929.

EXTREMES.—Maximum discharge during period, 4,870 second-feet Mar. 9 (gage height, 14.80 feet); minimum, 286 second-feet June 14 (gage height, 4.12 feet).

REMARKS.—Records good except those for estimated periods (Dec. 25, Jan. 1, 6, 13–26, and Mar. 1–7), which are fair.

Daily and monthly discharge, in second-feet, 1928–29

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-------	318	1,560	1,050	3,200	1,720	497	1,600	1,270	715	1,360
2	-------	368	1,460	962	4,500	1,600	459	1,560	1,840	655	984
3	-------	404	1,140	856	4,600	1,430	795	1,500	2,230	675	775
4	-------	422	795	775	4,700	1,330	795	1,360	2,570	815	615
5	-------	404	735	715	4,700	1,140	775	940	2,850	1,010	516
6	-------	404	1,100	735	4,600	877	755	615	3,050	1,090	795
7	-------	386	1,880	835	4,800	735	735	422	3,190	1,010	1,120
8	-------	386	2,050	898	4,740	675	735	404	3,120	775	1,360
9	-------	334	2,100	984	4,870	635	735	302	2,920	695	1,680
10	-------	368	2,140	1,120	4,740	635	735	318	2,420	655	1,920
11	-------	386	2,180	1,240	4,390	595	1,010	350	1,560	575	2,050
12	-------	350	2,320	1,330	3,880	595	1,070	368	1,240	575	1,680
13	-------	318	3,200	1,360	3,420	575	1,070	334	1,270	635	1,010
14	-------	318	3,700	1,460	2,980	555	984	302	1,360	755	595
15	-------	334	3,800	1,530	2,570	535	898	302	1,640	835	655
16	-------	386	3,700	1,720	2,230	516	877	1,820	2,000	898	775
17	-------	459	3,500	1,960	2,050	655	877	2,420	2,320	962	856
18	-------	516	3,000	2,370	2,000	815	877	2,370	2,790	984	1,050
19	-------	535	1,800	2,520	2,050	835	1,140	2,320	3,340	795	1,270
20	-------	555	1,400	2,620	2,230	835	1,210	2,280	3,500	595	1,460
21	-------	615	1,100	2,730	2,230	1,300	1,360	2,320	3,420	478	1,210
22	-------	675	960	2,980	2,180	1,360	1,530	2,370	3,050	368	877
23	459	675	860	2,980	2,100	1,300	1,640	2,370	2,680	318	755
24	422	655	820	2,980	2,100	1,180	1,800	2,230	2,370	334	755
25	404	675	800	2,920	2,180	755	1,880	1,760	2,140	350	795
26	422	1,040	780	2,790	2,370	635	1,920	1,070	2,000	675	877
27	368	1,760	835	2,680	2,470	635	2,050	735	1,840	1,090	856
28	350	1,840	962	2,730	2,570	635	2,320	877	1,530	1,430	775
29	334	1,840	1,180	-------	2,570	595	2,420	919	1,210	1,680	695
30	318	1,800	1,120	-------	2,180	535	2,180	1,050	856	1,680	615
31	-------	1,680	1,090	-------	2,050	-------	1,840	-------	715	1,600	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
November 23–30	459	318	385	0.557	0.17
December	1,840	318	684	.990	1.14
January	3,800	735	1,740	2.52	2.90
February	2,980	715	1,780	2.58	2.69
March	4,870	2,000	3,170	4.59	5.29
April	1,720	516	874	1.26	1.41
May	2,420	459	1,220	1.77	2.04
June	2,420	302	1,250	1.81	2.02
July	3,500	715	2,200	3.18	3.67
August	1,680	318	829	1.20	1.38
September	2,050	516	1,020	1.48	1.65

CAPE FEAR RIVER BASIN

HAW RIVER NEAR BENAJA, N. C.

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

DRAINAGE AREA.—168 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1929.

EXTREMES.—Maximum discharge during year, 2,180 second-feet Mar. 1 (gage height, 9.29 feet); minimum, 50 second-feet several times in September (gage height, 1.49 feet).

REMARKS.—Slight daily regulation, owing to operation of gristmills. Records good except those for estimated periods (Oct. 1–4, Aug. 19–23, and Sept. 1), which are poor.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	200	74	92	74	65	2,090	163	320	86	471	136	120
2	150	78	104	92	62	1,460	141	276	120	364	152	82
3	130	82	89	82	61	790	120	222	141	246	159	70
4	120	82	82	74	61	520	109	161	172	134	84	76
5	98	77	78	73	61	784	106	128	174	92	61	120
6	96	78	74	123	77	1,020	106	123	118	103	56	141
7	88	74	71	139	137	876	101	188	80	120	54	109
8	80	77	74	106	159	583	91	197	69	114	230	77
9	78	80	66	77	180	434	89	193	178	123	298	65
10	82	76	62	106	203	331	86	159	240	125	331	71
11	74	74	68	137	201	234	91	130	266	104	256	65
12	74	66	68	123	189	174	123	108	203	206	174	62
13	68	78	65	99	143	161	116	98	106	386	182	60
14	68	73	89	88	114	167	101	89	78	309	252	62
15	70	73	103	82	104	186	139	88	89	410	331	65
16	74	76	94	84	148	201	500	86	118	470	353	64
17	74	76	82	83	195	197	1,010	76	174	364	168	64
18	73	78	86	94	201	163	935	74	298	210	145	106
19	76	74	80	94	189	143	558	76	276	298	200	84
20	74	101	77	89	146	128	386	106	99	446	180	64
21	69	108	74	82	134	128	309	184	86	238	130	58
22	64	92	73	77	143	132	230	174	92	168	130	54
23	89	80	64	74	193	203	193	109	61	159	130	55
24	134	83	61	71	322	224	159	88	106	123	127	73
25	130	76	68	76	242	224	148	74	462	92	400	84
26	103	68	64	89	384	205	157	70	1,120	92	320	92
27	84	73	68	82	876	168	143	68	1,230	103	240	88
28	80	74	69	78	1,750	145	168	114	1,400	91	200	74
29	74	74	71	84	-------	128	287	152	1,970	77	180	62
30	74	76	69	71	-------	143	342	116	1,020	70	200	59
31	76	-------	65	66	-------	168	-------	91	-------	103	174	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	200	64	91.1	0.542	0.62
November	108	66	78.4	.467	.52
December	104	61	75.8	.451	.52
January	139	66	89.3	.532	.61
February	1,750	61	237	1.41	1.47
March	2,090	128	404	2.40	2.77
April	1,010	86	240	1.43	1.60
May	320	68	133	.792	.91
June	1,970	61	354	2.11	2.35
July	471	70	207	1.23	1.42
August	400	54	195	1.16	1.34
September	141	54	77.5	.461	.51
The year	2,090	54	181	1.08	14.64

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, 1929.
EXTREMES.—Maximum discharge during year, 18,400 second-feet Feb. 28 (gage height, 23.96 feet); minimum, 87 second-feet Sept. 18.
REMARKS.—Daily regulation present. Records good except those for estimated periods (Oct. 1–7, 9–19, and Apr. 22–26), which are fair.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		267	217	208	205	9,710	554	772	229	1,130	294	307
2		217	242	267	194	4,000	521	734	229	1,200	307	254
3		205	280	250	194	1,730	488	890	294	811	521	242
4		229	229	238	205	1,550	394	594	554	488	394	177
5	450	267	267	207	217	7,100	335	394	425	425	254	202
6		229	226	307	242	3,980	321	379	321	460	217	267
7		205	194	373	377	2,490	321	720	307	554	174	254
8	280	182	194	346	425	1,510	307	811	374	379	1,160	254
9		194	182	361	450	1,060	294	696	570	536	976	307
10		182	229	295	772	772	307	488	734	364	588	240
11	280	194	208	316	659	623	254	379	623	479	521	557
12		217	242	307	554	488	321	307	488	2,650	488	307
13		194	194	267	488	554	350	307	350	3,950	425	294
14		229	205	280	425	696	280	294	254	1,360	521	229
15		217	293	256	425	865	442	362	270	972	554	217
16	260	205	294	253	702	1,010	3,530	267	488	972	554	242
17		194	280	232	1,100	623	2,990	267	572	772	364	213
18		205	265	252	746	488	2,200	229	521	554	364	215
19		229	254	241	588	456	1,320	217	643	2,040	379	294
20	217	296	253	254	554	425	890	317	425	931	425	217
21	182	307	242	267	554	394	734	793	267	554	350	150
22	194	294	217	267	631	488	660	562	229	521	350	135
23	205	267	205	327	1,150	2,300	600	350	217	456	350	205
24	375	205	217	267	1,100	2,240	540	267	254	379	321	217
25	321	205	254	224	1,010	1,110	470	242	826	307	1,100	208
26	280	229	242	230	2,340	811	390	217	1,430	294	623	225
27	217	205	229	242	5,770	696	364	229	4,630	350	554	229
28	217	229	218	254	14,100	554	887	541	5,940	294	521	217
29	242	205	198	253	-------	521	1,620	488	3,140	280	425	229
30	217	229	217	267	-------	582	1,010	350	2,060	280	456	280
31	307	-------	242	205	-------	696	-------	280	-------	280	425	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	----------	182	302	0.510	0.59
November	307	182	224	.378	.42
December	294	182	233	.394	.45
January	373	205	268	.453	.52
February	14,100	194	1,290	2.18	2.27
March	9,710	394	1,630	2.75	3.17
April	3,530	254	790	1.33	1.48
May	890	217	443	.748	.86
June	5,940	217	922	1.56	1.74
July	3,950	280	807	1.36	1.57
August	1,160	174	482	.814	.94
September	557	135	246	.416	.46
The year	14,100	135	632	1.07	14.47

HAW RIVER NEAR PITTSBORO, N. C.

LOCATION.—Staff gage 1,000 feet below State highway crossing, 100 feet above Robinsons Creek, and 5 miles east of Pittsboro, Chatham County.

DRAINAGE AREA.—1,340 square miles.

RECORDS AVAILABLE.—November, 1928, to September, 1929.

EXTREMES.—Maximum discharge during period, 29,700 second-feet Mar. 5 (gage height, 18.0 feet); minimum, 98 second-feet June 23 (gage height, 2.14 feet). Flood of September, 1928, reached a gage height of 20.3 feet (discharge, 39,200 second-feet); that of August, 1908, about 32.1 feet (discharge estimated, 98,000 second-feet). Flood of 1865 was about 1 foot higher than that of 1908.

REMARKS.—Small daily regulation present. Records good except those for estimated periods (Dec. 16–19, 21–31, Jan. 1–19, Apr. 7–12, 14, July 14–27), which are poor.

Daily and monthly discharge, in second-feet, 1928–29

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		276		440	19,200	1,020	1,620	540	1,810	5,200	505
2		380		347	8,580	1,270	1,020	472	2,810	540	472
3		440		230	4,690	1,020	2,000	369	1,810	610	472
4		540		380	4,150	940	1,540	1,270	1,020	790	440
5		472	370	505	22,600	902	980	865	790	505	410
6		440		410	15,200	940	865	715	1,020	575	286
7		380		575	4,730	950	2,700	610	1,180	472	330
8		352		940	3,140	930	2,700	540	902	1,020	336
9		352		790	2,100	900	2,500	1,900	575	3,720	235
10		325		1,810	1,900	880	1,810	2,000	575	940	330
11		505	460	1,360	1,720	840	1,540	1,360	645	940	410
12		410		980	1,270	800	940	980	3,040	865	505
13		342		790	1,270	750	790	790	12,700	865	540
14		336		715	1,540	700	752	645	4,500	645	410
15		347	380	715	5,270	645	715	610	1,800	902	472
16		450	360	2,100	4,080	9,670	828	1,100	1,400	790	410
17			340	3,720	2,100	5,950	540	1,020	1,200	472	440
18		500	320	2,200	1,540	3,480	575	1,020	1,100	540	440
19			320	1,360	1,180	2,500	505	980	3,800	472	472
20		440	314	1,100	1,100	1,720	1,240	790	2,400	752	505
21			472	1,810	1,020	1,360	3,170	610	1,200	680	472
22		420	540	2,500	1,720	1,360	1,620	308	740	575	440
23			472	2,920	4,080	1,180	1,020	190	690	540	250
24			505	2,700	4,490	1,020	715	610	650	1,020	410
25			505	2,300	7,090	940	610	715	600	680	410
26	440		472	3,120	2,100	1,020	610	1,440	560	1,440	410
27	472	360	292	15,800	1,720	980	575	3,810	620	865	358
28	410		440	22,000	1,540	929	680	9,640	645	790	308
29	364		505		1,180	4,750	1,020	4,470	292	1,100	450
30	410		472		1,360	2,600	1,270	3,250	575	1,020	590
31			472		1,270		715		1,300	610	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
November 26–30	472	364	419	0.313	0.06
December		276	401	.299	.34
January		292	419	.313	.36
February	22,000	230	2,660	1.99	2.07
March	22,600	1,020	4,350	3.25	3.75
April	9,670	645	1,760	1.31	1.46
May	3,170	505	1,230	.918	1.06
June	9,640	190	1,450	1.08	1.20
July	12,700	292	1,710	1.28	1.48
August	5,200	472	998	.745	.86
September	590	235	417	.311	.35

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.

DRAINAGE AREA.—3,530 square miles.

RECORDS AVAILABLE.—December, 1923, to September, 1929.

EXTREMES.—Maximum discharge during year, 67,700 second-feet Mar. 1 (gage height, 21.9 feet); minimum, 208 second-feet Nov. 13 (gage height, 1.06 feet).

1923–1929: Maximum discharge, 84,000 second-feet Sept. 20, 1928 (gage height, 24.8 feet); minimum, 8 second-feet Oct. 8, 1926 (gage height, 0.01 foot).

REMARKS.—Records good. Discharge estimated Jan. 11, 18, 19, Feb. 28 to Mar. 12, May 2, 3, and June 24–27. Large diurnal fluctuation caused by operation of Buckhorn power plant 14 miles upstream.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept
1	7,330	1,200	838	925	1,030	62,300	7,050	4,170	2,300	4,820	3,310	1,880
2	5,200	1,190	796	820	834	49,900	4,810	3,990	1,860	4,960	3,030	1,400
3	3,600	1,220	660	804	951	31,400	3,810	3,760	1,610	4,990	1,740	1,290
4	2,820	1,150	756	796	705	16,500	3,260	3,450	2,580	3,700	2,540	1,100
5	2,610	1,040	930	978	1,090	39,100	2,870	2,780	3,700	3,030	1,680	2,100
6	2,140	1,050	1,060	1,150	1,010	59,000	2,380	2,080	2,270	1,950	651	4,150
7	4,860	1,120	910	970	1,760	40,700	2,510	2,370	1,680	1,580	929	2,540
8	7,600	1,160	820	1,480	3,080	26,900	2,260	6,230	1,260	2,160	1,790	1,020
9	4,570	1,110	772	1,420	3,100	9,320	2,100	5,830	6,670	1,940	13,300	940
10	3,730	1,030	520	1,260	4,080	5,210	1,950	8,100	8,540	1,630	7,600	833
11	3,380	780	520	1,570	5,370	3,900	2,080	5,160	6,300	1,180	3,140	765
12	2,210	702	990	2,380	3,870	3,290	2,900	3,680	4,580	2,600	3,100	780
13	1,690	807	820	3,880	1,400	3,360	2,590	2,880	3,220	17,400	2,540	998
14	1,570	962	796	2,960	1,140	3,770	2,270	2,240	2,090	15,100	2,340	982
15	1,280	740	856	2,140	2,310	10,900	1,790	1,920	1,800	6,880	2,020	624
16	1,340	756	954	1,820	7,780	22,700	13,600	1,720	4,860	12,200	1,730	535
17	1,390	865	1,200	1,310	15,600	14,600	21,700	1,690	4,720	7,050	1,730	694
18	1,330	930	1,080	1,510	11,600	7,480	12,000	1,210	3,250	4,180	1,440	713
19	1,280	874	1,160	1,380	6,340	5,360	6,980	1,400	3,270	4,330	1,120	991
20	1,330	630	1,250	1,480	4,560	4,240	4,780	2,620	3,190	9,620	1,940	733
21	1,140	630	1,190	1,220	6,480	3,570	3,480	17,600	2,440	5,720	1,690	544
22	1,160	1,280	1,110	1,060	14,400	5,020	3,020	15,700	1,520	4,460	1,280	616
23	1,240	1,060	1,090	1,050	13,600	7,990	2,780	6,820	1,090	4,970	1,220	686
24	1,220	980	1,080	946	10,400	22,000	2,530	4,040	1,410	3,310	1,180	605
25	1,160	840	990	1,150	7,040	16,700	2,310	2,980	4,030	2,340	1,670	621
26	1,390	834	804	1,070	6,400	8,020	2,070	2,070	2,610	2,370	2,400	707
27	1,450	540	732	787	28,600	5,690	2,190	1,890	3,880	1,800	2,540	690
28	1,350	872	740	1,170	30,400	5,520	1,960	1,810	14,000	1,310	1,950	680
29	990	818	740	1,090	-------	4,550	5,900	2,500	10,300	1,240	1,340	598
30	1,060	615	708	1,150	-------	4,330	7,530	3,560	7,960	1,220	2,330	875
31	1,240	-------	716	1,380	-------	9,770	-------	3,160	-------	1,280	3,360	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	7,600	990	2,410	0.683	0.79
November	1,280	540	926	.262	.29
December	1,250	520	890	.252	.29
January	3,880	787	1,390	.394	.45
February	30,400	705	6,960	1.97	2.05
March	62,300	3,290	16,600	4.70	5.42
April	21,700	1,790	4,580	1.30	1.45
May	17,600	1,210	4,170	1.18	1.36
June	14,000	1,090	3,970	1.12	1.25
July	17,400	1,180	4,560	1.29	1.49
August	13,300	651	2,540	.720	.83
September	4,150	535	1,060	.300	.33
The year	62,300	520	4,160	1.18	16.00

CAPE FEAR RIVER AT FAYETTEVILLE, N. C.

LOCATION.—Water-stage recorder at highway bridge at Fayetteville, Cumberland County, just downstream from Cross Creek and just upstream from an unnamed creek entering from left.

DRAINAGE AREA.—4,290 square miles.

RECORDS AVAILABLE.—January, 1889, to December, 1903; September, 1928, to September, 1929.

EXTREMES.—Maximum discharge during period, 107,000 second-feet Sept. 21, 1928 (gage height, 63.4 feet); minimum, 960 second-feet Sept. 22, 1929 (gage height, 3.42 feet).

1889–1902, 1928–29: Maximum discharge, that of Sept. 21, 1928; minimum, 320 second-feet Oct. 8 and 9, 1897 (gage height, 0.2 foot).

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

REMARKS.—Records fair. Marked daily regulation during low-water periods from operation of Buckhorn Shoals power plant.

Daily and monthly discharge, in second-feet, 1928–29

Day	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,500	7,200	2,170	1,370	1,270	2,500	56,000	12,500	6,600	4,520	6,920	2,500	3,750
2	8,700	8,900	2,220	1,620	1,470	2,070	60,200	9,700	5,000	3,830	5,100	5,010	2,680
3	19,200	7,100	2,270	1,620	1,320	1,970	46,500	7,550	4,590	3,280	5,980	3,470	2,270
4	31,700	6,200	1,920	1,570	1,270	1,570	24,000	7,000	4,800	3,540	4,730	3,100	2,380
5	43,800	5,300	1,970	1,520	1,220	1,820	40,200	5,500	4,520	4,940	3,610	2,920	2,800
6	53,200	5,010	1,820	1,670	1,770	1,820	56,400	4,870	3,610	4,800	2,980	1,970	5,150
7	63,600	8,700	1,670	1,670	1,970	2,020	55,800	4,380	3,160	3,400	2,270	1,220	5,660
8	62,000	9,700	1,570	1,570	1,820	2,980	35,200	3,820	6,050	2,560	2,020	1,620	4,100
9	48,200	6,700	1,770	1,370	2,320	4,310	18,000	3,680	6,940	3,200	2,560	8,850	2,680
10	25,900	3,820	1,720	1,270	1,970	4,590	13,700	3,400	10,000	10,100	2,380	11,500	1,970
11	10,700	3,820	1,920	1,040	2,320	6,060	9,950	3,340	8,200	10,100	2,070	5,700	1,670
12	10,200	6,380	1,470	1,040	3,220	6,300	8,100	3,610	5,350	7,900	1,770	4,380	1,420
13	9,900	5,080	1,470	1,470	4,520	4,940	6,100	3,610	4,220	5,750	11,300	3,890	1,570
14	8,000	3,680	1,520	1,320	5,430	3,890	7,550	3,400	3,200	3,950	17,300	3,280	1,670
15	6,650	3,040	1,420	1,470	4,450	2,860	8,700	3,400	2,800	3,160	8,300	2,860	1,570
16	4,900	2,500	1,370	1,320	3,610	7,950	22,700	9,800	2,500	4,550	11,400	2,920	1,080
17	4,520	2,270	1,370	1,620	3,040	17,200	20,200	22,500	2,500	6,780	11,200	2,980	1,320
18	17,200	2,120	1,420	1,870	2,560	14,800	12,500	13,800	2,220	5,450	6,900	3,220	1,470
19	52,800	1,920	1,270	1,720	2,320	10,700	9,900	10,700	2,170	5,360	5,900	2,740	1,570
20	90,300	1,970	1,470	1,970	2,220	8,800	7,600	7,400	2,950	4,800	10,900	3,100	1,720
21	106,000	1,770	1,270	1,970	2,560	9,500	6,500	5,800	13,900	4,100	9,600	3,890	1,470
22	96,200	1,970	1,320	2,120	2,120	14,500	7,900	4,800	20,600	3,160	7,100	3,100	1,080
23	67,400	1,920	1,670	2,070	1,970	16,500	11,300	4,450	11,800	2,320	7,100	2,320	1,270
24	36,000	1,970	1,470	2,020	1,770	13,400	22,200	4,170	7,750	1,770	5,980	2,020	1,370
25	16,500	1,920	1,320	2,070	1,920	12,200	25,200	4,100	5,100	3,830	4,310	1,920	1,270
26	14,200	1,970	1,270	2,020	1,720	10,900	14,200	4,310	3,200	4,520	3,280	2,560	1,520
27	10,200	1,920	1,370	1,470	1,820	22,000	10,900	3,820	2,740	5,220	2,980	3,160	1,420
28	7,300	1,820	1,080	1,370	2,070	44,500	9,200	4,170	2,380	12,200	2,440	2,980	1,420
29	6,300	1,620	1,970	1,270	2,500	------	8,020	4,800	2,440	12,500	1,920	2,440	1,270
30	5,450	1,470	1,470	1,370	2,440	------	8,050	9,600	3,470	9,580	1,920	2,270	1,120
31	------	1,870	------	1,220	2,560	------	12,500	------	4,590	------	1,970	3,960	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
September 1928	106,000	3,500	31,400	7.32	8.17
1928–29					
October	9,700	1,470	3,920	.914	1.05
November	2,270	1,080	1,600	.373	.42
December	2,120	1,040	1,580	.363	.42
January	5,430	1,220	2,370	.552	.64
February	44,500	1,570	9,020	2.10	2.19
March	60,200	6,100	21,100	4.92	5.67
April	22,500	3,340	6,470	1.51	1.68
May	20,600	2,170	5,460	1.27	1.46
June	12,500	1,770	5,370	1.25	1.40
July	17,300	1,770	5,620	1.31	1.51
August	11,500	1,220	3,480	.811	.94
September	5,660	1,080	2,060	.480	.54
The year	60,200	1,040	5,670	1.32	17.92

REEDY FORK NEAR GIBSONVILLE, N. C.

LOCATION.—Water-stage recorder one-fourth 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, 1929.

EXTREMES.—Maximum discharge during period, 3,040 second-feet Mar. 1; maximum gage height, 10.20 feet Sept. 20, 1928; minimum discharge, 5 second-feet Sept. 22, 1929 (gage height, 0.64 foot).

Flood of July, 1916, reached a stage of 17.90 feet.

REMARKS.—Records good below and fair above 1,500 second-feet. Small daily regulation at low stages caused by operation of Huffine's mill. Storage and diversion due to Greensboro water supply at confluence of Horsepen Creek and Reedy Fork, 14 miles upstream.

Daily and monthly discharge, in second-feet, 1928–29

Day	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	------	134	56	49	104	38	2,800	114	205	37	246	34	156
2	------	174	46	42	59	38	794	174	214	32	158	96	36
3	------	198	45	50	44	38	340	140	220	81	185	164	19
4	------	154	45	106	42	53	306	64	106	134	134	98	25
5	------	62	42	49	42	98	719	53	59	48	170	34	30
6	------	54	38	42	74	58	696	50	73	95	77	27	26
7	454	49	38	40	77	94	743	43	154	160	43	36	28
8	379	63	43	42	154	86	429	54	154	110	57	189	115
9	266	119	40	37	144	86	274	96	146	158	85	96	43
10	146	56	38	49	70	136	203	47	69	160	40	45	33
11	179	45	36	98	70	196	150	44	53	154	38	102	61
12	198	46	47	49	57	166	144	61	46	126	246	150	30
13	145	42	106	42	48	200	207	51	63	42	194	122	24
14	52	43	58	50	59	205	218	38	150	34	203	172	68
15	42	61	48	59	104	156	227	151	120	120	306	113	25
16	37	118	48	49	52	129	191	610	45	180	225	34	21
17	38	56	44	56	47	158	94	716	39	124	179	34	30
18	74	46	43	110	53	128	89	632	34	164	144	48	75
19	1,540	46	74	52	48	189	120	384	34	172	110	34	24
20	2,060	46	144	43	47	214	68	263	95	118	43	29	18.3
21	1,800	38	71	45	54	171	61	203	158	40	35	94	20
22	613	48	110	110	149	107	74	136	64	42	58	97	9.5
23	328	115	74	104	142	142	171	192	43	31	50	38	19.8
24	211	84	45	70	53	140	209	200	35	70	38	84	21
25	196	58	40	122	47	162	189	203	36	266	34	151	22
26	145	48	54	51	47	504	214	110	30	226	36	161	23
27	200	46	106	44	38	763	209	59	65	700	38	144	24
28	149	43	51	45	56	2,400	160	132	185	1,050	31	160	21
29	59	57	42	43	102	------	194	198	151	594	80	128	66
30	121	148	46	39	47	------	170	211	56	399	103	152	42
31	------	151	------	50	43	------	154	------	40	------	45	140	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
1928					
September 7–30	2,060	37	393	2.95	2.63
1928–29					
October	198	38	79.0	.594	.68
November	144	36	57.3	.431	.48
December	122	37	59.3	.446	.51
January	154	38	70.1	.527	.61
February	2,400	38	245	1.84	1.92
March	2,800	61	342	2.57	2.96
April	716	38	181	1.36	1.52
May	220	30	94.9	.714	.82
June	1,050	31	189	1.42	1.58
July	306	31	111	.835	.96
August	189	27	97.0	.729	.84
September	156	9.5	38.5	.289	.32
The year	2,800	9.5	130	.977	13.20

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 2½ miles upstream from confluence with Reedy River.

DRAINAGE AREA.—15.9 square miles.

RECORDS AVAILABLE.—November, 1925, to September, 1929.

EXTREMES.—Maximum recorded discharge during year, 750 second-feet Feb. 28; minimum, 4.1 second-feet Aug. 4 and 6.

1925–1929: Maximum discharge, that of Feb. 2, 1929; minimum, 0.7 second-foot July 24, 1926.

REMARKS.—Records good for discharges between 3 and 50 second-feet, fair for those between 50 and 250 second-feet, and poor for those above 250 second-feet and for estimated periods. Slight diurnal fluctuation during dry periods caused by transpiration losses.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		9.2	9.2	7.3	6.3	57	13	14	7.6	11	6.3	5.2
2		9.2	7.9	7.3	6.3	28	11	24	6.0	12	5.4	5.0
3		9.2	7.3	6.3	5.8	18	9.7	32	30	8.2	5.2	4.9
4		9.7	a 6.6	6.0	5.8	46	9.7	16	12	7.3	4.9	6.6
5		9.2	a 6.6	a 5.8	6.3	241	9.7	14	9.7	7.0	4.3	7.3
6		8.9	a 6.6	a 5.8	18	51	8.6	15	8.2	6.6	4.3	6.0
7		8.6	a 6.6	a 5.8	24	24	8.2	44	7.3	8.6	6.4	5.6
8		8.6	6.3	a 5.8	15	17	7.6	15	13	a 7	38	5.2
9		8.6	6.3	a 6	31	16	7.3	14	26	a 6	7.9	5.6
10		8.2	6.3	a 12	24	14	7.3	12	15	a 7	a 6	5.4
11		7.9	6.0	a 9	15	13	8.6	10	9.7	a 15	a 6	7.6
12		7.9	6.0	7.9	11	13	10	a 8.2	8.2	a 50	a 6	5.4
13		8.2	6.3	7.6	9.7	14	7.9	a 8.2	7.0	20	a 6	5.6
14		5.8	9.7	7.0	8.9	14	7.6	a 8.2	6.0	12	a 5	5.8
15		6.3	7.9	7.0	13	24	140	a 8.2	8.0	a 10	a 5	5.6
16		6.6	7.3	7.0	38	17	a 210	a 8.2	7.3	a 9.2	a 5	5.2
17		6.6	7.3	7.3	32	14	a 41	a 8.2	6.6	a 8.2	a 15	6.0
18		6.6	7.3	7.6	17	13	a 23	a 7.3	5.6	a 7.8	6.6	6.3
19		7.3	6.6	7.6	14	12	a 18	a 7.9	5.0	a 6.6	9.0	5.4
20		8.6	6.6	7.0	12	12	15	a 10	4.7	5.8	23	5.2
21		7.6	7.0	7.0	14	11	15	a 38	7.9	5.6	6.0	5.2
22		7.6	6.0	7.0	29	16	14	a 13	5.4	8.9	5.6	5.8
23		7.6	5.8	7.0	34	83	12	a 8.2	a 5	a 7.3	16	5.4
24		8.2	5.8	6.6	29	35	11	a 7.6	a 8	a 6.6	18	5.0
25		7.6	5.8	8.2	28	19	16	7.3	a 30	a 6.3	28	5.2
26		7.0	5.8	7.3	103	16	14	6.6	a 25	a 5.8	9.2	5.8
27	8.9	7.0	6.0	6.6	194	14	12	33	a 80	a 5.6	6.6	5.4
28	8.9	7.0	6.0	7.6	426	12	56	16	a 50	a 5.2	5.6	5.2
29	8.9	7.0	6.0	7.0	-------	11	40	9.7	15	4.9	5.6	4.9
30	8.9	7.9	5.6	6.6	-------	20	16	8.9	9.7	8.5	5.8	5.9
31	9.2	-------	5.6	6.6	-------	15	-------	7.9	-------	6.3	5.4	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October 27–31	9.2	8.9	8.96	0.564	0.10
November	9.7	5.8	7.86	.494	.55
December	9.7	5.6	6.65	.418	.48
January	12	5.8	7.12	.448	.52
February	426	5.8	41.8	2.63	2.74
March	41	11	29.4	1.85	2.13
April	210	7.3	26.0	1.64	1.83
May	44	6.6	14.2	.893	1.03
June	80	4.7	14.6	.918	1.02
July	50	4.9	9.55	.601	.69
August	38	4.3	9.26	.582	.67
September	7.6	4.9	5.62	.353	.39

a 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 above confluence with North Buffalo Creek.

DRAINAGE AREA.—32.8 square miles.

RECORDS AVAILABLE.—August, 1928, to September, 1929.

EXTREMES.—Maximum discharge during year, 1,540 second-feet Feb. 28 (gage height, 8.74 feet); minimum, 2.0 second-feet Sept. 21.

1928–29: Maximum discharge, that of Feb. 28, 1929; minimum, 2.0 second-feet Aug. 31, 1928, and Sept. 21, 1929.

REMARKS.—Records fair below and poor above 700 second-feet. Sewage from Greensboro enters just above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	87	7.7	12	8.6	7.6	402	26	21	8.6	16	9.2	3.7
2	21	7.9	11	11	7.0	89	21	43	7.4	130	6.4	3.4
3	19	8.5	9.6	7.9	7.0	46	18	94	77	29	5.2	4.0
4	18	8.8	8.5	7.0	7.2	65	18	26	42	12	5.5	4.9
5	16	8.5	8.1	8.1	7.7	470	16	18	14	10	4.3	11
6	16	7.7	7.7	31	17	342	16	16	11	8.5	3.9	5.5
7	25	7.7	7.2	14	65	70	14	152	9.0	7.9	4.6	4.4
8	14	9.2	7.6	9.2	32	37	13	148	11	7.6	32	4.2
9	13	8.8	7.6	7.9	45	31	13	36	142	7.0	11	4.6
10	12	7.7	7.4	15	95	26	12	25	86	6.5	6.7	4.9
11	11	7.6	7.4	18	35	24	13	19	25	6.4	5.7	33
12	11	7.9	7.4	12	22	24	21	15	16	64	13	5.5
13	11	8.3	7.7	10	19	28	14	14	13	408	6.0	4.2
14	11	8.5	15	8.5	18	37	12	13	11	49	5.0	4.9
15	11	8.3	18	8.1	22	64	38	13	9.2	30	4.3	13
16	12	8.5	9.8	8.5	98	72	505	12	38	34	3.3	5.2
17	12	9.0	9.0	8.8	134	34	224	16	19	13	3.4	5.2
18	12	9.2	9.2	10	48	25	44	12	10	9.8	7.0	6.9
19	12	10	8.1	10	30	24	28	14	7.9	8.3	4.4	4.0
20	11	9.6	7.6	9.2	25	22	22	51	7.0	7.7	4.4	3.2
21	9.8	9.4	10	8.5	29	21	21	122	23	6.7	4.3	2.7
22	9.8	7.9	8.1	7.9	56	52	25	25	8.5	19	4.0	3.2
23	20	7.2	7.2	7.7	152	167	20	15	11	13	19	5.4
24	28	6.9	6.9	7.6	104	274	16	13	37	8.5	42	6.7
25	11	7.2	6.9	9.0	80	77	28	11	36	29	12	7.2
26	8.5	6.9	7.2	11	115	34	27	9.8	18	84	7.0	9.4
27	7.9	6.9	7.6	8.3	551	34	16	21	65	15	5.5	7.2
28	7.9	7.2	7.6	10	1,110	26	60	29	179	9.6	4.8	5.0
29	8.3	7.4	7.4	9.2	----	21	236	13	79	7.2	4.3	4.2
30	7.7	7.7	7.0	8.1	----	34	38	13	19	6.9	7.2	4.0
31	8.8	----	6.7	7.6	----	36	----	11	----	13	4.2	----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	87	7.7	15.6	0.476	0.55
November	10	6.9	8.14	.248	.28
December	18	6.7	8.66	.264	.30
January	31	7.0	10.2	.311	.36
February	1,110	7.0	105	3.20	3.33
March	470	21	87.4	2.66	3.07
April	505	12	52.5	1.60	1.78
May	152	9.8	33.6	1.02	1.18
June	179	7.0	34.7	1.06	1.18
July	408	6.4	34.7	1.06	1.22
August	42	3.3	8.37	.255	.29
September	33	2.7	6.36	.194	.22
The year	1,110	2.7	33.3	1.01	13.76

NORTH BUFFALO CREEK NEAR GREENSBORO, N. C.

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

DRAINAGE AREA.—36.4 square miles.

RECORDS AVAILABLE.—August, 1928, to September, 1929.

EXTREMES.—Maximum discharge during year, 1,620 second-feet Feb. 28 (gage height, 10.9 feet); minimum, 5.4 second-feet Sept. 21 (gage height, 0.99 foot).

1928–29: Maximum discharge, that of Feb. 28, 1929; minimum, that of Sept. 21, 1929.

REMARKS.—Records good below and fair above 1,200 second-feet except those for estimated period, Oct. 29 to Nov. 27, which are poor. Sewage from Greensboro and Proximity mills enters above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	14	21	21	18.8	184	35	36	22	35	18.8	9.2
2	28	15	17.2	22	16.4	90	31	64	18.0	63	16.0	9.0
3	26	15	16.0	20	14.2	59	28	71	113	23	13.6	10.9
4	24	16	17.2	17.6	15.4	142	26	29	32	44	11.5	18.6
5	19.6	16	18.0	18.0	17.2	672	26	23	25	14.5	9.2	17.6
6	18.4	15	14.8	44	41	182	24	26	22	13.6	9.5	11.2
7	18.4	15	16.4	22	59	79	21	178	19.6	13.0	16.7	11.5
8	17.2	17	16.0	20	34	54	21	45	30	13.6	107	8.8
9	19.2	16	13.6	18.4	77	50	22	47	155	17.2	21	8.0
10	18.4	16	14.5	28	90	30	22	31	54	16.4	15.4	16.3
11	17.2	15	17.6	24	43	29	23	26	31	76	13.3	16.8
12	16.8	14	15.4	21	31	30	34	21	26	176	23	12.4
13	15.1	15	14.2	20	25	36	21	21	23	329	17.6	11.5
14	13.6	15	33	16.0	24	38	18.8	24	19.2	34	16.0	11.2
15	14.2	15	24	19.6	28	84	132	24	53	24	16.8	10.9
16	18.0	15	17.2	20	129	54	600	22	71	23	14.2	8.2
17	18.0	16	17.2	21	102	34	137	19.2	50	20	15.4	11.8
18	17.6	17	22	19.6	47	30	64	18.0	24	20	16.8	12.4
19	15.1	20	19.6	17.6	37	31	42	16.8	20	18.0	14.8	10.6
20	13.6	23	18.8	15.1	33	29	34	104	18.0	14.8	22	8.8
21	12.4	21	21	15.1	38	28	33	53	30	13.3	16.0	7.5
22	13.3	20	18.0	16.8	111	63	41	26	15.1	34	14.5	10.0
23	32	17	15.1	17.6	122	246	30	23	13.9	20	26	11.5
24	29	17	14.5	17.6	79	130	26	20	31	18.0	43	16.0
25	19.2	16	15.1	21	79	59	49	18.0	61	29	57	15.1
26	15.7	15	14.8	19.6	350	47	31	15.1	30	29	18.0	20
27	14.8	15	16.0	15.1	543	45	24	171	278	15.1	15.4	11.2
28	13.6	19.6	17.6	20	1,210	35	202	74	193	11.5	15.4	9.5
29	13	15.4	17.2	22	------	30	128	35	50	11.8	15.4	8.0
30	13	14.8	13.6	20	------	62	43	32	23	20	14.2	8.8
31	14	------	14.2	17.2	------	41	------	26	------	18.0	12.1	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	38	12.4	18.6	0.511	0.59
November	23	14.8	16.4	.451	.50
December	33	13.6	17.4	.478	.55
January	44	15.1	20.2	.555	.64
February	1,210	14.2	122	3.35	3.49
March	672	28	87.8	2.41	2.78
April	600	18.8	65.6	1.80	2.01
May	178	15.1	43.2	1.19	1.37
June	278	13.9	51.7	1.42	1.58
July	329	11.5	39.0	1.07	1.23
August	107	9.2	21.1	.580	.67
September	20	7.5	11.8	.324	.36
The year	1,210	7.5	42.3	1.16	15.77

MORGAN CREEK NEAR CHAPEL HILL, N. C.

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

DRAINAGE AREA.—29 square miles.

RECORDS AVAILABLE.—January, 1923, to September, 1929.

EXTREMES.—Maximum discharge during year, 3,000 second-feet Mar. 5 (gage height, 10.96 feet); minimum, 6.5 second-feet Sept. 22.

1923–1929: 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 for estimated periods (Oct. 1–10 and 13–16), which are fair. Water diverted above station for water supply of Chapel Hill is included in tables of discharge.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	15.6	12.2	9.0	8.8	146	26	23	14.2	29	21	11.4
2	26	15.3	12.0	8.8	8.2	80	25	45	13.1	129	15.0	10.2
3	23	16.2	11.0	8.5	8.4	54	21	30	36	30	14.5	9.8
4	21	16.2	10.8	8.4	8.2	150	21	23	19.0	23	13.5	11.4
5	20	14.0	10.0	9.2	8.8	1,140	21	21	15.0	19.4	11.6	14.0
6	20	13.8	9.8	13.5	11.8	153	10	25	13.3	17.4	11.2	11.0
7	310	14.2	9.7	10.0	18.2	82	19.0	88	12.7	17.8	19.3	10.0
8	53	15.6	9.8	9.0	13.1	57	17.4	30	43	14.8	138	9.8
9	28	13.5	9.8	8.5	24	47	16.7	184	174	13.3	28	9.7
10	23	13.1	9.4	11.4	30	40	16.2	274	44	12.0	20	9.1
11	22	12.2	9.6	12.4	20	36	24	35	29	106	24	8.8
12	21	12.4	9.2	28	16.7	33	24	28	23	273	18.2	7.5
13	20	12.2	9.6	17.4	14.2	35	19.8	24	19.4	220	15.0	8.1
14	19.4	11.8	11.6	13.5	13.8	34	17.0	21	16.4	55	37	8.2
15	18.6	11.8	13.1	11.8	22	221	90	21	35	148	19.4	12.4
16	17.8	11.8	11.0	11.6	94	98	245	19.0	25	57	14.2	8.1
17	17.4	12.0	10.8	11.6	70	55	66	17.0	17.0	36	13.1	8.2
18	17.0	12.0	10.6	12.0	36	42	40	18.2	22	44	12.7	10.4
19	16.7	12.4	10.0	11.6	28	37	31	20	16.4	156	36	7.8
20	16.2	14.8	11.4	10.4	24	34	28	99	18.3	91	22	7.1
21	15.3	12.2	14.2	10.0	111	30	26	50	15.6	58	12.7	6.9
22	14.8	11.8	11.4	10.0	132	32	26	28	12.0	71	11.8	7.4
23	17.8	11.4	10.0	9.7	76	56	23	23	32	37	25	9.0
24	18.6	11.0	9.7	9.6	46	45	21	21	52	28	17.4	12.7
25	14.8	11.0	9.6	9.6	37	34	24	18.6	124	24	14.8	11.6
26	14.2	10.6	9.4	9.4	241	31	22	16.7	30	23	14.8	11.4
27	13.8	10.4	9.4	9.0	333	31	18.2	17.8	176	21	12.4	9.4
28	14.2	10.4	9.4	10.8	816	26	70	17.0	54	18.6	11.6	8.5
29	14.0	10.8	9.6	9.8	------	24	40	16.7	51	16.4	29	7.9
30	13.5	10.0	9.2	9.4	------	32	25	21	25	16.4	22	18.0
31	16.7	------	9.0	9.2	------	30	------	16.4	------	15.9	12.2	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	310	13.5	29.5	1.09	1.26
November	16.2	10.0	12.7	.470	.52
December	14.2	9.0	10.4	.385	.44
January	28	8.4	11.1	.411	.47
February	816	8.2	81.1	3.00	3.12
March	1,140	24	95.0	3.52	4.06
April	245	16.2	36.1	1.34	1.50
May	274	16.4	41.7	1.54	1.78
June	176	12.0	39.2	1.45	1.62
July	373	12.0	62.0	2.30	2.65
August	138	11.2	22.2	.822	.95
September	18.0	6.9	9.86	.365	.41
The year	1,140	6.9	37.3	1.38	18.78

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

LOCATION.—Water-stage recorder one-fourth 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, 192[illegible] to September, 1929.

EXTREMES.—Maximum discharge during year, 1,440 second-feet Feb. 28 (gage height, 12.35 feet); minimum, 2.0 second-feet Dec. 4.

1923–1926, 1928–29: Maximum discharge, that of Feb. 28, 1929; minimum, 2 second-feet July 28 to Aug. 3, 1925, Sept. 29 and 30, 1926, and Dec. 4, 1928.

REMARKS.—Records good except those for estimated period, Nov. 6–28, which are fair. Flow slightly regulated by gristmills 4 miles upstream.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	14.8	19.0	16.6	15.7	156	27	33	10.9	16.2	18.1	8.3
2	24	14.8	14.8	15.2	17.1	75	23	56	9.4	46	12.6	7.6
3	23	15.7	13.5	13.0	14.3	50	21	36	38	13.5	11.3	7.2
4	21	16.2	12.2	12.6	14.3	117	20	25	14.8	10.5	10.5	17.6
5	19	14.8	13.0	15.2	15.2	652	19.5	22	12.2	9.8	8.3	18.1
6	19	14.8	12.6	32	55	139	19.0	25	10.5	9.0	7.9	10.2
7	18.1	14.0	12.6	16.6	60	67	18.1	154	9.4	8.7	29	8.7
8	16.2	16	12.6	16.6	34	46	17.1	37	32	7.6	99	8.7
9	16.2	15	12.6	18.6	66	41	16.6	32	92	7.2	20	8.7
10	15.2	15	14.3	26	55	36	16.6	25	28	6.9	14.3	7.9
11	14.8	15.2	13.0	19.5	28	33	20	21	17.1	25	12.2	7.2
12	15.2	15	12.6	17.6	20	33	22	18.6	13.9	33	10.5	6.6
13	14.8	14	13.0	16.2	18.6	38	17.1	17.6	12.2	67	11.3	7.2
14	14.8	15	21	15.7	16.6	37	16.2	16.6	10.9	62	9.4	9.0
15	15.2	15	16.2	15.7	24	68	188	16.2	16.2	36	9.0	8.3
16	16.2	15	14.3	15.7	89	47	460	18.1	13.0	19.0	7.9	7.2
17	15.7	15	14.3	16.6	67	33	120	16.2	10.5	13.0	62	16.2
18	15.2	16.2	15.2	17.1	33	29	54	16.2	9.8	11.3	33	11.3
19	15.7	17	13.0	18.1	26	28	40	15.7	8.7	22	18	7.2
20	14.8	17	13.9	16.6	22	27	35	44	10.6	23	111	6.9
21	14.3	15	13.9	15.7	70	27	36	24	13.1	11.8	21	6.6
22	14.8	14	12.2	16.2	70	44	33	16.2	7.6	16.2	14.8	6.9
23	30	14	12.2	16.2	78	229	28	13.9	9.0	11.8	16.6	8.3
24	27	15	12.2	15.2	66	88	27	13.5	40	9.8	14.8	9.0
25	17.1	14	11.3	21	61	44	39	12.6	110	45	16.2	9.4
26	15.2	14	11.3	19.0	221	36	30	11.8	23	28	11.8	10.2
27	16.2	14	11.3	17.1	284	33	26	12.2	110	25	10.2	8.7
28	16.6	13.0	11.3	19.5	960	28	155	12.6	59	12.2	9.4	7.6
29	16.2	13.5	11.3	16.6	------	24	90	11.8	33	10.2	10.2	7.2
30	14.8	14.3	10.5	16.2	------	40	40	11.8	15.7	65	11.8	9.0
31	15.7	------	10.5	16.2	------	30	------	10.9	------	36	8.7	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	32	14.3	17.9	0.542	0.62
November	17	13	14.9	.452	.50
December	21	10.5	13.3	.403	.46
January	32	12.6	17.4	.527	.61
February	960	14.3	92.9	2.82	2.94
March	652	24	76.6	2.32	2.68
April	460	16.2	55.8	1.69	1.89
May	154	10.9	25.7	.779	.90
June	110	7.6	26.7	.809	.90
July	67	6.9	23.2	.703	.81
August	111	7.9	21.3	.645	.74
September	18.1	6.6	9.10	.276	.31
The year	960	6.6	32.5	.985	13.36

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.

DRAINAGE AREA.—124 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1929.

EXTREMES.—Maximum discharge during year, 5,790 second-feet Feb. 28 (gage height, 23. 9 feet); minimum, 2. 6 second-feet Oct. 28 (gage height, 1. 53 feet).

REMARKS.—Records good except those for estimated periods (Oct. 6–10, Jan. 4–7, Mar. 1–5, May 14–23, and July 19 to Aug. 3), which are poor. Flow regulated by Coltrane's mill and by storage in High Point municipal reservoir.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	214	33	97	33	48		143	116	65	77		14
2	102	20	103	21	34		104	378	24	192	53	15
3	98	58	110	42	21	1,230	89	319	516	86		29
4	82	51	22		55		78	127	174	37	21	22
5	77	77	19		29		80	99	84	25	35	40
6		25	31	50	74	717	82	143	61	43	19	33
7		17	22		255	291	44	580	38	28	39	29
8	129	68	22	51	165	200	81	224	82	54	258	23
9		64	18	40	165	130	72	168	591	26	95	31
10		67	28	70	328	116	50	105	247	32	50	26
11	45	61	23	72	174	124	68	75	108	18	29	41
12	27	83	20	57	84	97	84	66	81	808	54	35
13	46	23	31	35	84	105	66	82	68	470	31	27
14	46	21	24	69	77	141	37		66	196	33	14
15	46	41	106	43	76	302	536		62	383	28	41
16	57	25	105	36	341	315	1,970	120	110	186	54	42
17	49	24	110	54	421	83	554		78	62	36	25
18	40	22	29	56	214	97	175		55	63	33	37
19	34	29	37	29	132	78	156		50		52	24
20	44	77	32	40	113	90	107		36	110	261	20
21	20	26	29	68	151	87	100		68		72	31
22	58	21	24	42	230	224	137	196	45		36	12
23	63	33	19	38	445	859	80		31		50	40
24	135	24	24	48	346	693	75	67	150		40	23
25	52	16	16	32	324	272	123	59	249		36	17
26	34	38	26	61	806	199	109	31	124	62	43	15
27	58	22	30	26	1,720	174	72	53	237		29	19
28	13	21	23	73	4,650	129	638	207	264		30	26
29	62	18	29	53	-------	110	445	96	166		22	17
30	112	35	20	43	-------	137	186	148	65	53	29	12
31	70	-------	44	34	-------	150	-------	68	-------		32	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	214	13	75.1	0.606	0.70
November	83	16	38.0	.306	.34
December	110	16	41.1	.331	.38
January	73	21	47.3	.381	.44
February	4,650	21	413	3.33	3.47
March	----------	78	389	3.14	3.62
April	1,970	37	218	1.76	1.96
May	580	31	150	1.21	1.40
June	591	24	133	1.07	1.19
July	808	18	122	.984	1.13
August	261	19	55.0	.444	.51
September	42	12	26.0	.210	.23
The year	4,650	12	140	1.13	15.37

DEEP RIVER AT RAMSEUR, N. C.

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

DRAINAGE AREA.—343 square miles.

RECORDS AVAILABLE.—November, 1922, to September, 1929.

EXTREMES.—Maximum discharge during year (estimated), 18,800 second-feet Feb. 28 (gage height, 23.3 feet); minimum, 25 second-feet several times during December and February (gage height, 0.54 foot).

1922–1929: Maximum discharge (estimated), 21,100 second-feet Sept. 19, 1928 (gage height, 25.44 feet); minimum, 10 second-feet Aug. 4, 1925, and several times in October, 1925 (gage height, 0.37 foot).

REMARKS.—Records good below and fair above 6,000 second-feet. Discharge estimated Dec. 4 and Mar. 11–13.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	571	166	99	133	121	4,590	437	388	166	224	173	75
2	364	149	160	135	98	947	388	568	139	823	161	79
3	270	121	242	112	70	654	322	783	1,580	422	112	90
4	269	78	260	103	109	1,030	278	392	641	195	97	93
5	237	186	154	92	110	10,700	281	280	323	154	115	115
6	184	121	117	148	166	2,660	246	460	223	837	124	91
7	869	157	106	235	615	897	220	1,110	169	245	104	75
8	364	148	86	164	406	608	238	708	210	194	1,310	55
9	254	136	55	138	419	481	229	1,260	1,390	172	582	86
10	206	116	83	161	868	411	219	585	608	162	211	99
11	196	113	111	250	450	385	193	342	385	132	139	90
12	170	195	112	295	325	364	234	253	246	2,050	149	88
13	135	172	112	195	201	428	217	268	209	4,000	137	93
14	117	139	118	205	203	517	181	238	174	490	117	95
15	198	121	106	171	227	1,220	756	202	478	769	139	66
16	175	115	170	148	1,030	1,130	4,740	252	380	636	129	87
17	172	111	240	136	1,230	553	1,340	354	268	332	81	82
18	160	71	195	145	599	386	585	234	272	207	86	143
19	224	104	142	133	401	351	428	253	256	530	182	110
20	127	144	126	101	345	308	343	914	175	288	170	90
21	78	152	121	167	801	304	296	1,010	151	208	270	75
22	118	138	77	163	1,230	1,130	334	437	176	260	146	58
23	184	124	70	142	1,410	4,580	294	261	184	253	154	81
24	195	87	70	130	897	2,970	237	193	701	187	278	92
25	248	54	86	114	774	872	244	177	402	161	105	84
26	157	106	88	115	1,620	631	331	164	419	156	140	88
27	122	120	128	76	5,730	627	232	226	644	208	134	86
28	86	111	113	162	14,900	517	1,060	400	678	152	119	74
29	154	80	91	153	------	419	1,600	314	562	144	101	49
30	152	114	70	140	------	445	517	351	300	165	88	274
31	202	------	123	131	------	562	------	232	------	160	90	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	869	78	224	0.653	0.75
November	195	54	125	.364	.41
December	------	55	124	.362	.42
January	295	76	151	.440	.51
February	14,900	70	1,260	3.67	3.82
March	10,700	304	1,340	3.91	4.51
April	4,740	181	567	1.65	1.84
May	1,260	164	439	1.28	1.48
June	1,580	139	417	1.22	1.36
July	4,000	132	481	1.40	1.61
August	1,310	81	192	.560	.65
September	274	49	92.1	.269	.30
The year	14,900	49	447	1.30	17.66

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

LOCATION.—Water-stage recorder at county highway bridge one-fourth mile above High Point Reservoir and 6 miles northeast of High Point, Guilford County.

DRAINAGE AREA.—13.9 square miles.

RECORDS AVAILABLE.—July, 1928, to September, 1929.

EXTREMES.—Maximum discharge during year, 1,040 second-feet Apr. 15 (gage height, 5.45 feet); minimum, 2.8 second-feet Feb. 2 (gage height, 0.30 foot). 1928–29: Maximum discharge, that of Apr. 15, 1929; minimum, 2.3 second-feet Aug. 2, 1928 (gage height, 0.26 foot).

REMARKS.—Records good between 7 and 300 second-feet; fair beyond these limits and for estimated periods, Oct. 21–30 and Aug. 10 and 11.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	6.3	6.8	6.6	5.4	45	12	11	5.9	26	8.2	5.9
2	10	6.3	6.1	5.9	5.2	27	10	26	5.0	19	6.6	5.2
3	10	6.6	5.9	5.2	5.2	18	9.7	16	25	8.5	6.3	5.0
4	9.1	6.3	5.9	5.4	5.2	68	9.4	10	7.4	7.1	5.9	7.7
5	8.2	5.9	6.8	7.1	5.6	255	9.1	8.8	6.1	6.8	5.2	6.1
6	8.2	6.1	6.6	11	29	42	8.5	10	5.6	7.1	5.4	5.6
7	7.7	6.1	6.8	6.6	27	24	8.2	82	5.2	7.1	36	5.2
8	7.1	6.3	6.8	5.6	13	16	8.0	15	39	6.6	24	5.2
9	6.8	6.1	6.8	5.6	43	14	7.7	14	31	5.9	8.2	5.2
10	6.6	6.1	6.1	10	24	12	7.4	11	14	6.1	7.6	6.8
11	6.8	5.9	5.6	7.1	12	11	9.1	9.7	8.5	8.5	6.6	5.0
12	6.6	6.1	5.4	6.6	10	11	9.1	8.8	7.4	103	5.9	4.7
13	6.6	5.9	5.6	6.1	8.8	12	7.4	8.0	6.3	20	6.1	5.0
14	6.6	6.1	7.4	5.6	8.0	12	7.1	7.7	5.9	50	6.1	5.0
15	6.6	6.1	6.1	5.9	16	28	192	7.7	6.6	16	5.9	4.7
16	6.6	6.3	5.6	5.6	36	16	136	7.4	6.1	9.4	5.6	4.7
17	6.6	6.1	5.9	5.9	31	12	37	7.1	8.4	7.7	23	5.9
18	6.6	6.1	5.9	5.9	15	10	19	7.4	5.9	6.8	8.0	5.2
19	6.3	6.8	5.4	6.1	12	9.7	14	7.1	5.4	15	89	4.5
20	6.3	6.8	5.6	5.9	10	9.4	12	28	5.2	7.7	25	4.5
21	5.9	5.9	5.4	5.6	12	9.7	12	11	5.4	7.1	10	4.2
22	6	6.1	5.2	5.6	40	19	12	8.0	4.5	9.1	8.5	4.5
23	17	5.9	5.2	5.6	42	93	9.7	6.8	23	7.1	8.2	4.7
24	10	6.1	5.4	5.4	33	33	9.1	6.6	43	6.3	7.4	5.0
25	8	5.9	5.4	6.8	31	18	14	6.3	56	46	7.4	5.0
26	6.3	5.9	5.2	6.1	181	16	10	6.1	13	11	6.8	5.2
27	7	6.1	5.4	5.9	159	14	8.5	10	115	8.0	6.3	4.7
28	6.8	6.1	5.4	6.3	405	12	81	6.6	32	6.6	6.1	4.5
29	6	5.9	5.4	5.9	-------	11	25	6.3	18	6.1	6.3	4.3
30	6	6.3	5.4	5.6	-------	20	14	6.1	9.7	25	6.1	6.9
31	6.3	-------	5.2	5.6	-------	14	-------	6.1	-------	9.1	5.9	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	17	5.9	7.66	0.551	0.64
November	6.8	5.9	6.15	.443	.49
December	7.4	5.2	5.86	.422	.49
January	11	5.2	6.26	.450	.52
February	405	5.2	43.7	3.14	3.27
March	255	9.4	29.4	2.12	2.44
April	192	7.1	24.3	1.75	1.95
May	82	6.1	12.3	.885	1.02
June	115	4.5	17.6	1.27	1.42
July	103	5.9	15.7	1.13	1.30
August	89	5.2	12.1	.871	1.00
September	6.9	4.2	5.20	.374	.42
The year	405	4.2	15.3	1.10	14.96

LOWER LITTLE RIVER AT LINDEN, N. C.

LOCATION.—Chain gage at State highway crossing 1 mile west of Linden, Cumberland County, and three-fourths mile upstream from Stewart Creek.
DRAINAGE AREA.—450 square miles.
RECORDS AVAILABLE.—November, 1928, to September, 1929.
EXTREMES.—Maximum discharge during year (estimated), 6,160 second-feet Mar. 1; maximum gage height, 20.60 feet Mar. 2; minimum discharge, 72 second-feet July 12 (gage height, 2.64 feet).
REMARKS.—Records good except those for flood periods on Cape Fear River (Mar. 1–3, 6–8, and 25), which are poor.

Daily and monthly discharge, in second-feet, 1928–29

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	------	350	350	530	5,760	2,820	690	935	472	402	770
2	------	420	320	455	4,360	2,460	730	810	350	455	455
3	------	438	236	490	2,740	1,660	730	810	320	455	335
4	------	490	275	402	2,280	1,380	650	1,020	305	438	248
5	------	438	305	402	4,400	1,300	530	980	275	290	1,120
6	------	385	438	438	5,260	1,020	490	770	248	212	1,660
7	------	335	490	730	4,130	1,120	690	455	248	179	1,660
8	------	350	530	730	2,510	980	770	420	305	260	890
9	------	350	472	690	2,100	850	935	570	350	730	438
10	------	350	490	850	1,880	890	935	1,020	260	850	420
11	------	350	530	890	1,740	810	730	1,480	260	690	385
12	------	335	1,020	850	1,520	730	610	1,020	148	530	350
13	------	335	530	690	1,520	770	570	810	224	368	290
14	------	320	935	570	1,660	770	530	490	438	402	335
15	------	455	770	610	1,840	690	368	335	530	275	320
16	------	570	690	1,070	2,510	1,340	335	490	1,250	530	290
17	------	438	650	1,840	2,460	1,740	260	610	1,480	1,020	290
18	------	455	650	1,700	2,150	1,920	179	850	890	890	385
19	------	320	610	1,560	1,660	1,340	179	980	402	850	385
20	------	350	570	1,300	1,300	810	530	610	935	1,160	368
21	------	420	472	1,160	1,250	890	1,380	402	810	1,300	350
22	402	570	472	1,610	1,660	1,120	1,560	402	1,020	570	368
23	350	490	490	1,610	2,460	890	1,840	305	770	530	260
24	350	472	438	1,520	3,320	850	980	320	810	420	275
25	335	350	455	1,200	2,740	770	690	402	570	472	350
26	350	368	530	1,020	2,060	770	530	1,300	438	402	335
27	368	368	490	2,100	1,880	650	402	1,020	385	472	350
28	350	350	810	3,590	2,020	530	402	935	305	530	320
29	368	368	1,120	------	1,790	810	402	935	320	320	260
30	320	350	690	------	1,970	730	570	610	335	275	148
31	------	335	610	------	2,640	------	650	------	275	570	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
November 22–30	402	320	355	0.789	0.26
December	570	320	396	.880	1.01
January	1,120	236	563	1.25	1.44
February	3,590	402	1,090	2.42	2.52
March	5,760	1,250	2,500	5.56	6.41
April	2,820	530	1,110	2.47	2.76
May	1,840	179	672	1.49	1.72
June	1,480	305	737	1.64	1.83
July	1,480	148	507	1.13	1.30
August	1,300	179	543	1.21	1.40
September	1,660	148	480	1.07	1.19

ROCKFISH CREEK NEAR FAYETTEVILLE, N. C.

LOCATION.—Chain gage at State highway crossing 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 September, 1929.

EXTREMES.—Maximum discharge during year (estimated), 4,000 second-feet Mar. 1; maximum gage height, 40.77 feet Mar. 2; minimum, 174 second-feet Sept. 23 (gage height, 1.41 feet).

REMARKS.—Records fair except those for estimated periods, which are poor. Regulation present, owing to operation of large cotton mills on both forks of the creek.

Daily and monthly discharge, in second-feet, 1928–29

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		681	365	524		1,300	a 900	800	a 700	661	524
2		484	346	445	a2,600		820	642	642	960	583
3		445	306	198		a1,000	661	720	681	740	563
4		425	385	326			602	840	464	760	504
5		445	385	405			464	940	306	701	880
6		425	365	445		701	425	820	286	622	1,120
7		405	464	425	a2,100	445	583	701	326	543	1,020
8		425	464	484		524	622	563	543	405	740
9		405	464	602		524	920	425	602	780	681
10		425	504	622		563	a1,000		524	a1,500	583
11		a 420	563	800	940	563	a900	a 900	583	1,000	504
12		a 420	681	920		504	780		425	880	464
13		a 420	661	602	a 800	405	543		1,000	980	524
14		425	880	583		365	524		1,900	820	504
15		484	524	543		445	484	445	1,500	760	286
16		326	583	1,100			543	445		840	385
17		385	583	2,000	a1,800	a 900	642	840		602	524
18		484	563	1,700			484	880		602	543
19		484	425				385	980	a1,200	642	563
20	484	504	405			460	622	960		920	563
21	464	602	405	a1,300	a1,300	500		740		780	583
22	445	543	425			600		445		701	504
23	445	365	445			622	a1,000	543	960	681	346
24	425	385	405			583		504	880	602	524
25	346	425	425			701		464	780	405	464
26	425	405	425			900	484	661	701	622	484
27	405	405	326	a1,600		622	425	701	504	484	504
28	385	484	484			661	405		365	642	405
29	266	464	524		a1,300	720	405	a1,100	425	583	306
30	484	266	524			a1,000	681		504	661	365
31		286	524				800		622	583	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
November 20-30	484	266	416	1.42	0.58
December	681	266	437	1.50	1.73
January	880	306	478	1.64	1.89
February	2,000	198	951	3.26	3.40
March			1,590	5.45	6.28
April	1,300	365	710	2.43	2.71
May		385	681	2.33	2.69
June		425	762	2.61	2.91
July	1,900	286	794	2.72	3.14
August	1,500	405	725	2.48	2.86
September	1,120	286	551	1.89	2.11

a Estimated.

PEE DEE RIVER BASIN

YADKIN RIVER AT WILKESBORO, N. C.

LOCATION.—Chain gage on highway bridge connecting North Wilkesboro and Wilkesboro, Wilkes County, just below mouth of Reddies River.

DRAINAGE AREA.—480 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1929. April, 1903, to June, 1909; October, 1920, to September, 1928, at North Wilkesboro, 1 mile downstream.

EXTREMES.—Maximum discharge during year, 10,300 second-feet Feb. 28 (gage height, about 12.0 feet); minimum, 401 second-feet Aug. 22 and Sept. 2 (gage height, 1.95 feet).

1903–1909, 1920–1929: Maximum discharge, 22,300 second-feet Nov. 19, 1906 (gage height, 18.8 feet, old datum); minimum, 161 second-feet July 25, 1926.

REMARKS.—Records poor prior to Apr. 10 and good thereafter. Discharge estimated Oct. 1 to Nov. 30, Dec. 3 to Feb. 25, and Mar. 5–31. Low-water flow regulated by operation of municipal plant on Reddies River, 1 mile upstream.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			730			2,560	1,030	985	985	805	925	417
2			700			1,650	979	1,730	865	925	769	417
3		800			550	1,350	979	1,440	865	775	685	462
4				700		1,200	925	1,110	805	685	615	495
5	950						925	895	757	805	598	575
6			650				876	925	721	775	581	575
7							826	1,630	715	985	587	644
8		750			1,400	1,900	826	1,110	709	745	570	1,110
9							778	1,050	1,440	679	604	638
10							730	955	1,050	721	535	575
11	800			700			955	895	805	805	609	621
12							985	865	775	691	621	524
13			700				835	835	775	775	661	598
14							835	835	733	751	570	507
15		700			800	2,200	1,140	1,020	763	925	805	462
16							1,240	1,210	727	835	524	501
17							985	835	763	691	501	1,180
18	800			650			895	805	751	691	535	985
19							865	835	1,050	727	535	621
20			700				835	1,870	805	632	530	518
21		750			750	1,500	985	1,800	679	575	462	524
22							1,050	1,280	649	895	445	512
23							865	1,020	667	775	751	524
24							835	955	925	632	547	564
25	1,300			650			1,020	865	955	644	985	598
26					1,000		985	805	1,180	609	621	955
27			600		1,570		835	865	1,340	775	564	1,500
28		650			5,840	1,000	1,310	895	1,940	604	495	895
29					-------		1,370	865	1,110	604	467	775
30	850			600	-------		1,050	835	865	661	507	667
31	-------				-------		-------	1,110	-------	1,800	484	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	----------	----------	952	1.98	2.28
November	----------	----------	728	1.52	1.70
December	----------	----------	664	1.38	1.59
January	----------	----------	668	1.39	1.60
February	5,840	----------	1,120	2.33	2.43
March	----------	----------	1,680	3.50	4.04
April	1,370	730	958	2.00	2.23
May	1,870	805	1,070	2.23	2.57
June	1,940	649	906	1.89	2.11
July	1,800	575	774	1.61	1.86
August	985	445	603	1.26	1.45
September	1,500	417	665	1.39	1.55
The year	5,840	417	896	1.87	25.41

YADKIN RIVER AT YADKIN COLLEGE, N. C.

LOCATION.—Water-stage recorder at State highway bridge crossing 1 mile southwest of Yadkin College, Davidson County, since Nov. 15. Prior to that date a chain gage at same site was used.

DRAINAGE AREA.—2,250 square miles.

RECORDS AVAILABLE.—July, 1928, to September, 1929.

EXTREMES.—Maximum discharge during year, 24,600 second-feet Mar. 1 (gage height, 17.42 feet); minimum, 1,480 second-feet Sept. 22 (gage height, 1.23 feet).

1928–29: Maximum discharge, 50,200 second-feet Aug. 18, 1928 (gage height, 25.5 feet); minimum, 1,250 second-feet Aug. 3, 1928 (gage height, 1.01 feet).

REMARKS.—Records good except those for estimated periods (Oct. 1–7 and Jan. 29 to Feb. 4), which are poor. Slight regulation caused by operation of small power plant about 10 miles upstream.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,000	2,730	2,430	2,130	2,130	21,000	3,730	4,050	3,130	3,130	4,530	1,830
2	3,500	2,630	2,430	2,380	2,080	8,890	3,630	3,630	3,030	3,130	4,340	1,680
3	3,500	2,630	2,280	2,380	2,030	6,030	3,430	6,100	3,230	3,030	3,490	1,580
4	3,300	2,630	2,330	2,130	1,980	5,150	3,230	6,270	3,330	2,730	2,830	1,880
5	3,100	2,630	2,280	2,130	2,080	10,200	3,230	4,710	2,730	2,530	2,380	2,980
6	3,300	2,630	2,230	2,760	2,440	15,400	3,230	4,160	2,530	2,530	2,030	2,130
7	3,800	2,530	2,180	3,800	9,460	9,100	3,130	4,050	2,380	2,730	1,930	1,930
8	3,330	2,530	2,180	3,130	8,470	6,160	3,030	4,490	2,380	2,830	2,530	2,280
9	2,930	2,630	2,180	2,630	5,840	4,930	3,030	4,050	3,590	2,530	2,750	2,280
10	2,830	2,530	2,180	2,630	5,620	4,380	2,930	3,630	6,130	2,280	2,180	2,130
11	2,730	2,430	2,180	3,030	4,600	4,000	2,930	3,430	4,560	2,530	2,030	1,930
12	2,630	2,430	2,130	2,830	3,830	3,530	3,330	3,230	3,230	3,490	2,030	2,080
13	2,630	2,430	2,130	2,630	3,330	3,730	3,230	1,130	2,930	3,880	2,030	1,730
14	2,630	2,330	2,230	2,430	3,030	7,680	2,930	3,030	2,830	3,030	2,030	1,680
15	2,630	2,330	2,830	2,330	2,830	11,300	2,930	3,030	2,830	2,730	1,980	1,780
16	2,630	2,330	2,730	2,280	3,030	9,840	5,500	3,030	3,030	2,830	2,330	1,580
17	2,630	2,330	2,380	2,330	3,130	6,870	5,650	3,230	2,930	2,630	2,180	2,640
18	2,730	2,380	2,430	2,330	2,930	5,480	4,050	3,030	2,930	2,280	1,980	5,420
19	3,330	2,380	2,630	2,380	2,730	4,710	3,430	2,930	2,530	2,430	2,800	3,620
20	3,030	2,630	2,430	2,380	2,630	4,380	3,130	2,930	2,630	3,090	3,390	2,280
21	2,730	3,130	2,330	2,280	2,730	4,050	3,030	3,860	2,830	2,950	1,980	1,930
22	2,630	2,630	2,280	2,230	2,930	4,050	3,230	4,630	2,380	2,130	1,780	1,680
23	2,630	2,430	2,180	2,230	3,730	4,810	3,430	3,530	2,330	2,430	1,880	1,730
24	9,020	2,380	2,130	2,280	3,430	7,970	3,030	3,130	2,730	2,630	2,180	1,730
25	5,390	2,330	2,130	2,280	3,130	6,540	3,030	2,930	3,230	2,280	2,560	1,780
26	3,730	2,330	2,130	2,430	3,680	4,930	3,230	2,730	3,650	2,280	4,620	1,980
27	3,330	2,280	2,130	2,380	8,540	4,600	3,230	2,730	5,920	2,860	2,430	1,980
28	3,030	2,280	2,130	2,280	16,200	4,160	3,390	2,930	8,790	2,810	1,930	2,860
29	2,930	2,280	2,180	2,280	-------	3,830	6,840	3,030	5,450	2,730	2,080	2,530
30	2,830	2,280	2,130	2,230	-------	3,830	5,240	3,430	3,830	2,200	2,690	2,130
31	2,730	-------	2,080	2,180	-------	3,940	-------	3,030	-------	5,220	2,420	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	9,020	2,630	3,300	1.47	1.70
November	3,130	2,280	2,480	1.10	1.23
December	2,830	2,080	2,280	1.01	1.16
January	3,800	2,130	2,460	1.09	1.26
February	16,200	1,980	4,230	1.88	1.96
March	21,000	3,530	6,630	2.95	3.40
April	6,840	2,930	3,580	1.59	1.77
May	6,270	2,730	3,620	1.61	1.86
June	8,790	2,330	3,470	1.54	1.72
July	5,220	2,130	2,800	1.24	1.43
August	4,620	1,780	2,530	1.12	1.29
September	5,420	1,580	2,190	.973	1.09
The year	21,000	1,580	3,290	1.46	19.87

PEE DEE RIVER NEAR ROCKINGHAM, N. C.

LOCATION.—Water-stage recorder at State highway crossing 1 mile above 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, 1929.

EXTREMES.—Maximum discharge during year, 147,000 second-feet Mar. 1 (gage height, 18.95 feet); minimum, 430 second-feet Sept. 12 (gage height, 0.50 foot).

1927–1929: Maximum discharge, 212,000 second-feet Sept. 19, 1928 (gage height, 24.38 feet); minimum, that of Sept. 12, 1929.

REMARKS.—Records excellent except those for estimated periods, Oct. 1–5, June 26–28, and Aug. 21–31, which are fair. Flow is regulated by a series of storage basins extended from near station to above the forks of Yadkin River.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14,000	6,260	4,110	4,260	6,000	144,000	15,300	11,900	6,080	8,170	6,710	3,280
2	17,000	6,540	1,120	5,400	5,380	85,800	13,000	9,200	3,420	6,710	7,670	4,790
3	9,000	3,860	3,490	5,960	3,550	26,100	10,300	11,800	8,860	7,180	4,720	5,820
4	6,500	1,210	5,370	6,310	3,020	21,200	9,730	10,300	17,200	4,220	4,400	5,820
5	7,500	3,000	4,840	6,000	7,180	77,500	9,200	9,730	10,700	5,380	3,070	8,160
6	7,180	4,910	5,400	4,200	6,710	114,000	5,410	10,600	9,200	5,400	4,530	8,900
7	19,000	5,760	4,690	2,260	9,730	67,100	4,770	20,200	7,670	5,820	3,970	6,710
8	15,300	5,450	4,520	6,230	13,000	24,100	8,300	17,800	6,220	8,680	5,400	5,820
9	9,200	6,030	1,870	7,580	9,200	14,000	7,940	13,000	5,210	8,680	7,670	7,670
10	6,620	3,820	4,050	7,720	5,570	12,400	8,680	11,300	9,620	7,670	6,970	7,670
11	7,500	1,540	5,190	8,170	12,400	10,300	8,140	7,030	13,000	6,710	4,840	6,710
12	7,620	2,740	5,860	8,220	9,200	9,200	9,730	5,460	10,800	6,490	5,060	5,980
13	5,560	5,220	5,980	3,350	8,680	8,700	7,020	8,680	10,300	5,680	5,820	4,390
14	1,960	4,720	6,420	4,560	8,170	10,300	3,710	8,680	9,730	6,710	5,400	4,420
15	3,280	6,260	6,800	5,760	8,170	31,200	5,260	6,440	7,250	10,800	5,820	4,990
16	5,420	4,990	2,380	8,120	12,400	47,200	33,500	7,620	8,680	10,800	5,820	2,760
17	5,440	3,930	3,260	8,680	24,400	27,400	28,500	7,670	7,270	9,200	5,400	4,650
18	5,630	1,660	8,020	8,680	18,500	15,300	14,900	5,760	8,680	9,200	3,020	5,720
19	7,010	2,040	8,480	7,820	11,900	13,600	9,730	3,140	9,730	9,730	4,460	5,820
20	4,460	5,820	7,860	3,710	10,800	11,900	7,470	7,880	9,200	9,200	7,180	5,820
21	1,260	5,200	7,360	3,000	15,300	10,300	3,640	25,200	8,170	6,260	5,500	5,400
22	2,510	4,850	6,600	6,820	27,100	17,800	8,690	16,600	5,540	6,260	7,000	4,990
23	6,580	4,950	4,200	5,530	23,700	32,600	8,620	10,800	3,500	4,010	7,500	5,820
24	5,820	3,780	1,420	6,470	19,100	49,700	7,940	9,200	5,120	7,670	6,500	5,690
25	9,730	1,310	2,120	7,080	13,600	39,700	8,680	6,220	7,180	6,710	5,500	4,670
26	9,200	2,240	1,900	5,860	11,900	21,000	7,180	4,690	8,500	6,710	5,500	4,450
27	7,440	5,820	4,620	3,060	44,300	17,200	6,100	6,660	9,500	4,660	7,000	4,450
28	2,030	4,990	5,040	3,860	96,200	16,600	1,530	7,670	10,500	3,470	7,000	3,760
29	5,740	3,450	1,420	6,680	-------	13,000	13,600	8,170	11,300	5,200	6,500	3,610
30	6,660	4,450	1,630	6,150	-------	13,000	20,300	8,170	8,280	4,790	6,000	5,820
31	5,620	-------	3,320	6,690	-------	21,200	-------	9,200	-------	6,710	6,500	-------

Month	Maximum	Minimum	Mean	Per square mile	Run off in inches
October	19,000	1,260	7,350	1.06	1.22
November	6,540	1,210	4,230	.612	.68
December	8,480	1,120	4,490	.650	.75
January	8,680	2,260	5,940	.860	.99
February	96,200	3,020	15,900	2.30	2.40
March	144,000	8,700	33,000	4.78	5.51
April	33,500	1,530	10,200	1.48	1.65
May	25,200	3,140	9,900	1.43	1.65
June	17,200	3,420	8,550	1.24	1.38
July	10,800	3,470	6,930	1.00	1.15
August	7,670	3,020	5,760	.834	.96
September	8,900	2,760	5,490	.795	.89
The year	144,000	1,120	9,790	1.42	19.23

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, 1929.
EXTREMES.—Maximum discharge during year, 3,420 second-feet Feb. 28 (gage height, 5.89 feet); minimum, 83 second-feet Aug. 28 and several times in September (gage height, 0.42 foot).
1920–1929: Maximum discharge, 6,700 second-feet Mar. 16, 1923 (gage height, 10.1 feet); minimum, 16 second-feet Aug. 30, 1925 (gage height, 0.03 foot).
REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1928-29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	195	164	160	157	118	432	235	188	164	215	132	92
2	195	164	141	148	118	342	207	909	157	211	215	92
3	195	167	144	126	126	275	203	670	199	184	160	85
4	184	167	144	132	121	298	203	320	167	167	129	102
5	188	157	129	144	124	1,050	203	255	151	167	116	116
6	255	157	129	298	530	410	188	227	164	174	116	107
7	188	157	129	184	410	320	184	255	151	170	255	144
8	181	178	138	151	255	255	188	207	157	157	181	110
9	178	164	138	151	235	235	178	227	760	157	154	105
10	167	157	132	181	235	215	178	211	342	164	132	195
11	164	151	129	160	203	211	174	199	235	157	126	129
12	157	151	129	151	181	211	195	184	184	190	138	95
13	157	144	138	138	170	912	174	188	178	190	116	100
14	154	148	164	135	164	1,180	157	184	181	170	113	105
15	154	148	157	138	160	580	255	195	235	170	118	85
16	160	144	144	138	160	432	342	199	167	157	102	88
17	174	154	141	138	164	342	211	170	164	148	92	455
18	174	148	174	132	154	298	188	160	170	138	102	195
19	170	164	144	138	151	275	184	174	164	178	110	124
20	188	195	144	138	160	255	181	255	151	135	97	113
21	144	157	141	138	174	255	188	298	129	148	92	100
22	157	154	132	129	174	255	188	203	135	170	90	97
23	861	144	126	135	174	505	170	184	129	174	102	105
24	320	144	141	126	157	342	170	178	188	135	97	102
25	227	141	132	151	164	298	203	174	275	135	132	116
26	199	148	135	141	455	275	181	170	705	144	102	138
27	188	138	132	135	410	255	170	170	705	167	88	118
28	181	144	132	141	1,460	255	410	174	451	157	215	110
29	181	135	129	129	-------	227	235	178	255	118	455	100
30	178	144	124	124	-------	255	195	178	219	126	141	97
31	167	-------	124	124	-------	227	-------	530	-------	160	102	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	861	154	206	1.89	2.18
November	195	135	154	1.41	1.57
December	174	124	139	1.28	1.48
January	298	124	147	1.35	1.56
February	1,460	118	254	2.33	2.43
March	1,180	211	377	3.46	3.99
April	410	157	205	1.88	2.10
May	909	160	252	2.31	2.66
June	760	129	248	2.28	2.54
July	215	118	163	1.50	1.73
August	455	88	139	1.28	1.48
September	455	85	124	1.14	1.27
The year	1,460	85	200	1.83	24.99

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, 1929.

EXTREMES.—Maximum recorded discharge during year, 7,080 second-feet Mar. 1 (gage height, 15.45 feet); minimum, 16 second-feet during period of missing record (gage height, 0.56 foot).

1928–29: Maximum discharge, 12,700 second-feet Aug. 17, 1928 (gage height, 24.4 feet); minimum, 11 second-feet July 26, 1928 (gage height, 0.52 foot).

REMARKS.—Records fair below and poor above 1,500 second-feet. Flow heavily regulated by Erwin cotton mills. No records Aug. 14 to Sept. 30.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1	1,150	449	378	329	350	6,870	736	653	376	356	547
2	673	454	412	422	287	4,820	692	998	393	412	1,340
3	869	443	419	398	319	1,440	646	1,040	610	393	476
4	687	451	364	358	370	1,340	612	766	633	356	298
5	748	458	351	333	336	3,860	589	620	456	337	394
6	936	432	382	533	888	5,250	586	610	378	337	293
7	584	420	351	563	2,940	3,720	533	839	374	773	216
8	636	442	291	486	3,080	1,340	559	766	326	620	261
9	578	443	337	357	1,840	911	538	613	741	420	319
10	544	410	388	438	1,860	655	522	579	1,320	370	280
11	514	393	339	572	1,270	646	520	518	698	331	266
12	502	423	336	478	854	576	814	491	502	490	327
13	486	381	332	432	694	730	583	490	426	1,340	327
14	465	394	352	410	616	1,780	491	454	538	491	------
15	496	392	584	386	562	3,090	607	488	534	510	------
16	468	380	432	378	767	2,770	1,330	498	454	400	------
17	488	364	420	381	797	1,700	1,040	472	474	367	------
18	512	393	398	398	628	1,140	710	------	401	331	------
19	511	406	444	383	556	936	624	------	544	380	------
20	465	408	405	393	514	838	576	------	468	404	------
21	451	432	371	402	555	780	576	------	360	190	------
22	488	396	374	362	690	802	609	------	342	434	------
23	462	374	356	356	1,020	1,320	572	------	337	485	------
24	1,410	364	337	356	755	1,790	520	------	411	451	------
25	944	358	337	352	616	1,160	554	418	414	336	------
26	648	382	337	392	1,230	925	620	412	391	298	------
27	497	342	381	374	3,360	956	520	442	772	710	------
28	491	356	338	390	5,770	818	1,120	537	662	1,250	------
29	494	342	314	378	------	732	1,650	561	576	532	------
30	478	396	337	354	------	821	820	412	393	360	
31	463	------	378	342	------	869	------	437	------	323	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,410	451	617	1.10	1.27
November	458	342	403	.720	.80
December	584	291	373	.666	.77
January	572	329	403	.720	.83
February	5,770	287	1,200	2.14	2.23
March	6,870	576	1,790	3.20	3.69
April	1,650	491	696	1.24	1.38
June	1,320	326	510	.911	1.02
July	1,340	190	477	.852	.98
August 1–13	1,340	216	404	.721	.35

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 to September, 1929.
EXTREMES.—Maximum discharge during period, 1,240 second-feet Sept. 14 (gage height, 7.24 feet); minimum, 520 second-feet Aug. 12 (gage height, 4.40 feet). Maximum stage known, 20.0 feet Aug. 30, 1908.
REMARKS.—Record good for discharges between 500 and 10,000 second-feet, fair for those above and below.

Daily and monthly discharge, in second-feet, 1929

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1		869	11		895	21	650	1,040
2		895	12	562	976	22	605	1,240
3		843	13	605	1,120	23	720	1,160
4		793	14	720	1,240	24	793	1,180
5		843	15	793	1,040	25	895	1,160
6		921	16	895	696	26	869	1,040
7		976	17	948	673	27	768	843
8		948	18	895	768	28	650	720
9		869	19	768	921	29	605	673
10		843	20	720	1,000	30	744	673
						31	793	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
August 12–31	948	562	750	0.701	0.52
September	1,240	673	929	.868	.97

BLACK RIVER AT KINGSTREE, S. C.

LOCATION.—Tape gage at highway bridge at Kingstree, Williamston County.
DRAINAGE AREA.—1,240 square miles.
RECORDS AVAILABLE.—August to September, 1929.
EXTREMES.—Maximum discharge during period, 1,330 second-feet Aug. 11 (gage height, 8.0 feet); minimum, 182 second-feet Aug. 29 (gage height, 2.80 feet).
REMARKS.—Records good for discharges between 400 and 7,000 second-feet and fair for those above and below.

Daily and monthly discharge, in second-feet, 1929

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1		329	11	1,330	206	21	344	409
2		409	12	1,140	218	22	299	426
3		443	13	1,040	231	23	257	443
4		360	14	958	271	24	244	461
5		329	15	811	329	25	231	479
6		299	16	699	360	26	231	497
7		271	17	614	376	27	206	516
8		257	18	516	360	28	194	497
9		244	19	461	376	29	194	516
10		231	20	392	392	30	231	535
						31	285	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
August 11–31	1,330	194	508	0.410	0.32
September	535	206	369	.298	.33

SANTEE RIVER BASIN

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, 1929.

EXTREMES.—Maximum discharge during year, 160,000 second-feet Mar. 10 (gage height, 17.55 feet); minimum, 7,650 second-feet Sept. 18 (gage height, 5.39 feet).

1907–1929: 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 and Camden Reservoir on Wateree River.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32,500	17,400	15,700	9,790	18,900	38,000	44,000	25,000	24,100	27,200	19,800	16,100
2	30,500	18,400	16,300	9,490	18,600	41,000	41,000	26,000	25,000	30,500	20,500	14,400
3	27,200	18,600	16,100	11,600	18,400	50,000	38,000	28,800	24,100	30,500	20,900	9,630
4	26,000	18,900	13,300	13,300	17,200	89,000	38,000	32,500	23,400	27,200	21,300	8,610
5	25,000	18,100	13,800	14,000	13,100	137,000	38,000	41,000	22,800	24,100	21,300	10,300
6	24,100	14,800	15,000	14,600	12,700	131,000	35,000	47,000	21,700	21,700	19,200	10,800
7	23,400	14,400	15,900	14,200	14,600	110,000	32,500	47,000	21,300	19,500	17,800	10,900
8	23,400	15,700	16,500	10,800	17,000	110,000	32,500	47,000	20,900	18,100	17,400	11,300
9	23,400	17,000	17,000	11,400	19,200	143,000	30,500	47,000	20,500	16,300	17,000	10,800
10	22,800	17,600	16,300	13,800	20,500	155,000	27,200	41,000	20,100	16,700	17,000	9,040
11	22,800	18,100	12,000	15,000	21,700	134,000	25,000	41,000	19,200	17,800	17,000	9,340
12	22,200	17,600	11,100	16,700	23,400	101,000	24,100	38,000	19,800	18,400	15,500	11,400
13	21,700	14,200	13,800	18,400	26,000	71,000	24,100	38,000	20,500	18,600	12,700	11,600
14	22,200	13,800	15,300	19,500	30,500	50,000	24,100	35,000	20,500	18,600	14,200	11,600
15	20,500	15,300	15,900	19,500	32,500	44,000	25,000	32,500	20,500	18,100	16,300	11,800
16	17,800	16,500	16,300	19,200	35,000	41,000	25,000	28,800	20,500	16,300	17,400	11,300
17	17,400	17,200	15,500	19,200	32,500	38,000	24,100	27,200	20,900	16,500	17,600	8,750
18	17,600	17,400	11,400	19,200	30,500	38,000	24,100	26,000	21,300	17,400	17,600	8,750
19	18,900	17,200	11,300	19,200	30,500	38,000	25,000	25,000	21,300	17,600	17,400	10,400
20	19,200	13,800	13,800	19,200	32,500	47,000	26,000	26,000	21,700	17,800	16,300	15,000
21	19,200	13,100	15,500	18,100	41,000	47,000	28,800	27,200	21,700	18,100	16,700	16,700
22	19,200	15,000	16,700	14,600	41,000	47,000	30,500	26,000	22,200	18,100	17,400	16,700
23	17,800	16,100	17,200	14,400	41,000	47,000	28,800	26,000	22,200	18,400	17,600	15,700
24	17,400	16,300	16,500	16,100	38,000	44,000	26,000	27,200	22,200	19,200	17,400	11,300
25	18,100	16,700	12,300	16,700	35,000	41,000	25,000	28,800	21,300	20,100	16,700	8,470
26	19,200	16,100	9,640	17,200	38,000	44,000	24,100	30,500	21,300	20,900	15,500	10,300
27	19,800	12,200	9,340	17,800	41,000	47,000	23,400	30,500	21,700	20,900	12,000	11,100
28	19,800	11,600	11,300	17,600	41,000	53,000	23,400	28,800	22,200	20,900	10,400	14,400
29	19,200	14,400	13,800	15,700	-------	56,000	24,100	26,000	23,400	20,100	12,000	17,400
30	17,000	15,700	14,600	17,000	-------	53,000	24,100	25,000	25,000	19,200	14,200	19,200
31	16,300	-------	13,500	18,400	-------	47,000	-------	25,000	-------	19,200	15,500	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	32,500	16,300	21,300	1.44	1.66
November	18,900	11,600	16,000	1.08	1.20
December	17,200	9,340	14,300	.966	1.11
January	19,500	9,490	15,900	1.07	1.23
February	41,000	12,700	27,900	1.89	1.97
March	155,000	38,000	68,800	4.65	5.36
April	44,000	23,400	28,700	1.94	2.16
May	47,000	25,000	32,300	2.18	2.51
June	25,000	19,200	21,800	1.47	1.64
July	30,500	16,300	20,100	1.36	1.57
August	21,300	10,400	16,800	1.14	1.31
September	19,200	8,470	12,100	.818	.91
The year	155,000	8,470	24,700	1.67	22.63

LINNVILLE RIVER AT BRANCH, N. C.

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

DRAINAGE AREA.—65 square miles.

RECORDS AVAILABLE.—June, 1922, to September, 1929.

EXTREMES.—Maximum discharge during year (estimated), 5,050 second-feet Sept. 26 (gage height, 6.80 feet); minimum, 26 second-feet Sept. 3 (gage height, 1.66 feet).

1922–1929: 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 below and fair above 1,300 second-feet.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	94	128	84	70	77	545	161	158	228	100	154	36
2	72	119	87	68	59	398	154	161	184	105	92	31
3	122	119	82	55	84	298	144	370	158	100	151	28
4	102	132	75	60	77	275	138	241	165	92	87	50
5	94	122	72	82	84	1,020	125	195	138	92	72	105
6	92	111	72	425	119	545	125	176	125	92	64	66
7	97	105	68	203	169	425	122	302	119	111	62	122
8	89	114	68	122	154	311	114	191	144	94	64	148
9	89	119	64	108	165	258	111	216	245	80	60	116
10	87	105	57	158	241	224	111	191	187	84	70	89
11	102	92	59	154	216	203	114	172	138	70	97	68
12	77	94	62	128	172	187	135	165	119	70	68	59
13	70	89	68	102	144	578	111	151	119	94	68	51
14	68	92	84	84	132	1,870	100	128	122	75	70	55
15	72	92	89	92	125	980	119	135	144	105	51	50
16	87	87	77	97	122	610	161	161	125	82	50	51
17	316	87	77	97	119	455	135	138	114	75	46	184
18	298	82	87	116	114	345	116	128	111	75	50	151
19	284	97	77	125	111	298	105	122	132	122	48	89
20	180	154	72	105	119	262	102	345	125	108	46	80
21	138	122	70	102	132	236	100	320	102	80	45	64
22	92	92	64	111	141	245	125	249	92	125	42	59
23	710	94	59	125	128	306	116	203	94	161	40	62
24	370	92	57	119	119	345	102	184	102	108	44	135
25	320	92	50	125	114	262	128	165	116	89	87	169
26	249	82	72	119	398	245	135	151	141	77	53	2,620
27	199	77	72	114	642	236	128	135	228	80	44	1,880
28	187	82	70	114	1,160	216	135	132	203	70	48	545
29	165	80	70	105	-------	187	293	176	144	70	35	320
30	151	82	77	89	-------	187	191	199	116	66	40	241
31	132	-------	70	92	-------	180	-------	266	-------	80	38	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	710	68	168	2.58	2.97
November	154	77	101	1.55	1.73
December	89	50	71.4	1.10	1.27
January	425	55	118	1.82	2.10
February	1,160	59	194	2.98	3.10
March	1,870	180	411	6.32	7.29
April	293	100	132	2.03	2.26
May	370	122	194	2.98	3.44
June	245	92	143	2.20	2.46
July	161	66	91.4	1.41	1.63
August	154	35	64.1	.986	1.14
September	2,620	28	257	3.95	4.41
The year	2,620	28	162	2.49	33.80

HENRY FORK NEAR HENRY RIVER, N. C.

LOCATION.—Water-stage recorder at highway bridge at old Link Ford, Catawba County, 1½ miles below county line and 2 miles downstream from Henry River, Burke County.

DRAINAGE AREA.—80 square miles.

RECORDS AVAILABLE.—July, 1925, to September, 1929.

EXTREMES.—Maximum discharge during year, 5,850 second-feet Sept. 26 (gage height, 9.80 feet); minimum, 21 second-feet Sept. 3 (gage height, 0.85 foot).

1925–1929: Maximum discharge (estimated), 14,400 second-feet Aug. 16, 1928 (gage height, 15.30 feet); minimum, 4.1 second-feet July 19 and 20, 1926 (gage height, 0.49 foot).

REMARKS.—Records good except those for estimated periods, which are poor. Diurnal regulation caused by Henry River Manufacturing Co. 2 miles upstream. Diversions upstream for water supply for Morganton and State Hospital for the Insane estimated at 5 second-feet.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	116	86	74	78	76	562	116	136	a 160	a 95	a 260	58
2	106	84	76	88	61	348	116	189	a 130	a 85	a 180	66
3	125	82	77	71	68	258	106	363	a 120	a 80	78	51
4	116	82	73	71	78	258	106	159	a 110	a 75	78	122
5	125	74	73	76	74	988	106	116	a 95	a 70	77	137
6	231	83	74	197	354	532	103	125	a 90	65	62	84
7	226	83	68	147	563	334	101	147	a 85	150	70	101
8	136	88	69	106	329	258	99	106	84	98	88	136
9	116	82	70	91	276	197	96	116	a 210	91	94	95
10	116	71	74	125	384	184	96	103	a 140	84	65	74
11	104	76	69	125	226	171	98	89	a 120	91	70	94
12	98	82	69	106	184	147	116	a 90	a 110	124	74	89
13	89	74	69	98	136	941	89	a 80	a 100	136	65	71
14	89	74	103	96	116	758	101	a 75	a 100	92	64	61
15	103	74	106	88	116	460	136	a 90	98	98	62	65
16	98	74	86	89	125	384	197	a 100	a 95	88	62	74
17	147	71	83	89	125	293	171	a 90	a 90	78	47	307
18	147	73	80	86	116	226	147	82	91	78	59	125
19	125	86	76	77	106	212	147	82	80	153	66	94
20	103	89	73	77	106	197	136	164	78	293	53	78
21	103	88	73	83	125	197	136	184	78	136	53	65
22	103	74	62	74	147	197	147	125	73	197	54	65
23	106	74	68	73	159	285	136	92	77	159	57	74
24	125	69	68	74	147	329	125	89	125	136	114	86
25	106	71	68	84	136	258	136	76	171	106	159	125
26	94	76	68	80	228	212	136	a 70	116	125	86	1,510
27	86	71	74	77	550	197	125	a 65	258	94	65	862
28	88	71	68	89	2,030	184	171	a 65	159	a 90	60	293
29	89	73	61	80	-------	171	184	a 75	116	a 85	95	171
30	86	74	62	76	-------	a 150	147	a 110	a 100	a 85	65	178
31	88	-------	68	74	-------	a 130	-------	a 260	-------	a 110	56	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	231	86	116	1.45	1.67
November	89	69	77.6	.970	1.08
December	106	61	73.6	.920	1.06
January	197	71	91.8	1.15	1.33
February	2,030	61	255	3.19	3.32
March	988	130	323	4.04	4.66
April	197	89	128	1.60	1.78
May	363	65	120	1.50	1.73
June	210	73	115	1.44	1.61
July	293	65	111	1.39	1.60
August	260	47	81.9	1.02	1.18
September	1,510	51	180	2.25	2.51
The year	2,030	47	139	1.74	23.53

a Estimated.

CATAWBA CREEK AT GASTONIA, N. C.

LOCATION.—Staff gage just upstream from sewage disposal plant, 1 mile south of Gastonia, Gaston County.
DRAINAGE AREA.—2.4 square miles.
RECORDS AVAILABLE.—October, 1928, to February, 1929 (discontinued).
EXTREMES.—Maximum discharge during period (estimated), 109 second-feet Feb. 6 (gage height, 2.70 feet); minimum, 0.3 second-foot Nov. 7 and 30 (gage height, 0.14 foot).
REMARKS.—Records fair through Dec. 31; poor thereafter. Discharge interpolated Oct. 25–27. Most of drainage area within city of Gastonia and run-off partly diverted by storm sewers.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Day	Oct.	Nov.	Dec.	Jan.	Feb.
1	------	0.7	0.7	4.5	2.8	16	------	1.2	1.2	2.6	11
2	------	.7	.9	1.6	2.6	17	------	1.2	1.4	5.4	4.8
3	------	.9	.9	1.2	2.8	18	------	1.2	1.2	2.8	3.4
4	------	.7	1.0	1.4	3.0	19	------	1.6	1.2	2.8	3.2
5	------	3.2	.9	4.8	3.2	20	------	1.2	3.0	2.8	3.2
6	------	.6	.9	2.0	76	21	------	.9	1.2	2.8	23
7	------	.7	1.0	2.0	12	22	------	.7	1.2	2.8	7.9
8	------	1.2	.9	2.0	5.1	23	------	.8	1.0	2.4	2.2
9	------	.9	.8	2.4	6.4	24	------	.8	.9	3.2	2.4
10	------	1.0	.9	7.9	3.7	25	1.1	.7	.9	3.2	2.4
11	------	.9	.9	2.4	3.7	26	1.0	.7	.7	2.8	44
12	------	.9	1.0	2.4	2.6	27	.9	.7	1.6	4.5	69
13	------	.9	1.2	2.4	3.4	28	.8	.7	.7	2.8	40
14	------	.9	15	2.4	2.6	29	.6	.7	.7	2.8	------
15	------	1.0	1.6	2.6	7.9	30	.6	1.6	.7	2.6	------
						31	.7	------	.8	2.8	------

Month	Maximum	Minimum	Mean
October 25–31	1.1	0.6	0.814
November	3.2	.6	.997
December	15	.7	1.52
January	7.9	1.2	2.94
February	76	2.2	12.7

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LITTLE SUGAR CREEK NEAR CHARLOTTE, N. C.

LOCATION.—Water-stage recorder just upstream from sewage disposal plant of city of Charlotte, one-fourth 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, 1929.

EXTREMES.—Maximum discharge during year, 5,340 second-feet Feb. 28 (gage height, 13.40 feet); minimum, 6.9 second-feet several times in September. 1924–1929: Maximum discharge, about 7,030 second-feet Aug. 16, 1928 (gage height, 14.97 feet); minimum, 1.6 second-feet July 30 and Aug. 1, 1925.

REMARKS.—Records good below and fair above 2,000 second-feet. Discharge interpolated Oct. 12 and 13.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	17	18	34	16	131	64	31	21	18	16	11
2	31	16	16	20	16	83	52	52	19	26	13	11
3	30	17	15	16	15	60	44	37	20	19	11	11
4	29	17	15	15	14	420	41	27	19	16	11	66
5	26	16	14	25	18	1,520	41	23	17	16	10	33
6	63	16	13	36	232	250	39	177	16	19	10	19
7	103	17	13	18	100	153	34	115	16	22	9.4	17
8	27	22	13	17	46	106	33	37	44	15	25	25
9	26	17	13	16	90	92	30	30	72	14	47	22
10	26	16	13	54	62	75	30	27	41	13	13	16
11	25	16	14	34	41	67	41	24	22	12	10	15
12	23	15	14	63	34	79	39	22	18	12	10	16
13	21	14	15	27	31	97	29	20	16	11	18	15
14	19	14	41	22	29	86	27	20	197	70	10	14
15	19	14	19	20	132	308	115	82	346	36	9.4	10
16	19	15	16	19	197	122	118	68	33	16	8.4	8.9
17	19	15	16	26	115	81	40	34	26	13	20	20
18	18	15	17	23	54	67	34	28	24	13	19	12
19	18	17	15	21	42	62	30	25	44	63	69	8.9
20	18	18	22	18	44	58	28	248	25	24	30	7.9
21	16	14	21	16	428	71	31	61	20	18	12	7.9
22	16	14	16	16	139	384	35	31	18	29	10	8.4
23	31	14	14	16	71	493	28	25	18	16	16	10
24	23	13	12	16	52	140	26	22	23	13	52	12
25	18	13	11	18	47	79	33	21	25	12	27	11
26	17	13	11	17	177	75	29	20	239	11	13	96
27	16	12	12	23	944	84	26	251	62	25	11	18
28	16	13	12	27	1,860	64	142	61	37	12	10	13
29	16	13	12	18	-------	48	48	33	24	11	45	11
30	15	15	13	17	-------	237	33	26	19	36	13	26
31	18	-------	13	17	-------	81	-------	24	-------	53	10	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	103	15	25.9	0.626	0.72
November	22	12	15.3	.370	.41
December	41	11	15.5	.374	.43
January	63	15	23.4	.565	.65
February	1,860	14	180	4.35	4.53
March	1,520	48	183	4.42	5.10
April	142	26	44.7	1.08	1.20
May	251	20	54.9	1.33	1.53
June	346	16	50.7	1.22	1.36
July	70	11	22.1	.534	.62
August	69	8.4	19.0	.459	.53
September	96	7.9	19.1	.461	.51
The year	1,860	7.9	53.7	1.30	17.59

BROAD RIVER NEAR CHIMNEY ROCK, N. C.

LOCATION.—Water-stage recorder 1,000 feet downstream from Lake Lure dam, 1⅛ 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, 1929.

EXTREMES.—Maximum discharge during year, 6,930 second-feet Sept. 26 (gage height, 7.65 feet); minimum, 0.8 second-foot Nov. 22 (gage height, 0.28 foot; caused by regulation).

1927–1929: 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. Large diurnal fluctuation caused 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, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.1	1.2	164	142	124	642	315	233	190	218	358	6.3
2	203	1.2	108	140	58	436	373	420	76	225	234	160
3	220	143	68	142	5.5	355	70	386	202	72	188	78
4	92	68	163	141	112	420	246	126	221	3.3	5.5	368
5	1.1	223	186	141	122	538	249	86	237	244	232	313
6	1.1	173	170	283	94	578	215	359	233	187	152	76
7	1.1	168	71	152	232	506	125	350	148	72	148	186
8	339	168	104	152	402	401	264	294	110	234	148	177
9	360	167	5.1	152	233	280	230	233	93	228	152	274
10	343	170	70	150	196	134	225	264	259	148	112	230
11	143	93	152	162	250	266	266	190	216	65	7.5	78
12	156	77	151	208	227	290	310	74	236	144	234	156
13	223	173	148	148	228	428	158	228	108	268	152	73
14	1.1	132	139	60	122	560	108	226	228	198	150	157
15	146	122	140	186	197	790	394	220	182	281	148	7.1
16	217	159	82	162	156	704	332	260	71	236	74	301
17	396	161	68	242	138	578	150	319	220	152	107	496
18	501	95	150	106	243	479	232	195	147	234	5.5	306
19	398	133	143	140	130	472	190	67	146	478	236	154
20	170	162	144	6.3	128	396	257	320	140	536	148	148
21	1.0	163	144	200	118	258	160	341	144	280	72	188
22	218	136	144	198	226	344	230	232	131	232	70	7.5
23	312	104	9.4	202	194	334	232	222	3.5	233	82	259
24	465	159	126	128	73	488	210	251	215	234	108	350
25	121	28	1.1	126	222	503	148	149	220	142	5.9	356
26	92	51	117	123	306	428	264	61	218	214	244	1,950
27	222	158	117	59	477	344	194	248	227	203	156	1,660
28	1.3	158	117	236	712	284	173	262	230	4.3	74	876
29	175	137	183	206	-------	314	372	220	142	230	74	614
30	1.2	107	32	124	-------	264	280	226	5.1	236	152	520
31	1.2	-------	101	124	-------	128	-------	255	-------	126	75	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	501	1.0	178	1.84	2.12
November	223	1.2	126	1.30	1.45
December	186	1.1	113	1.16	1.34
January	283	6.3	153	1.58	1.82
February	712	5.5	204	2.10	2.19
March	790	128	417	4.30	4.96
April	394	70	232	2.39	2.67
May	420	61	236	2.43	2.80
June	259	3.5	167	1.72	1.92
July	536	3.3	205	2.11	2.43
August	358	5.5	132	1.36	1.57
September	1,950	6.3	351	3.62	4.04
The year	1,950	1.0	210	2.17	29.31

BROAD RIVER NEAR BOILING SPRINGS, N. C.

LOCATION.—Water-stage recorder half a mile upstream from mouth of Sandy Run Creek and 3½ miles southwest of Boiling Springs, Cleveland County.

DRAINAGE AREA.—815 square miles.

RECORDS AVAILABLE.—June, 1925, to September, 1929.

EXTREMES.—Maximum discharge during year, 24,500 second-feet Sept. 26 (gage height, 13.40 feet); minimum, 498 second-feet Aug. 7.

1925–1929: Maximum discharge, 56,800 second-feet Aug. 16, 1928 (gage height, 23.3 feet); minimum, 186 second-feet Sept. 21 and 22, 1925.

REMARKS.—Records good except those for estimated periods (May 31 to June 5, and June 28 to July 13), which are poor. Diurnal regulation caused by operation of power plants on Second Broad and Green Rivers.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,320	1,420	1,170	1,060	1,260	6,640	1,840	1,740	1,900	1,400	1,030	658
2	1,320	1,520	1,220	1,170	1,170	3,960	1,840	2,080	1,550	1,550	1,080	658
3	1,620	1,420	1,260	1,120	898	3,030	1,740	2,790	1,400	1,250	1,060	876
4	1,620	1,420	1,120	1,120	815	3,030	1,520	2,080	1,800	1,500	1,030	1,090
5	1,420	1,260	1,220	1,080	1,180	8,310	1,740	1,420	1,700	1,450	775	3,110
6	1,420	1,420	1,170	1,960	2,570	6,330	1,620	1,260	1,740	2,050	1,000	1,420
7	1,170	1,260	1,120	1,620	3,160	3,960	1,840	2,400	1,620	1,900	940	1,120
8	1,320	1,260	940	1,420	2,080	3,160	1,420	2,080	1,420	1,750	949	1,080
9	1,620	1,320	898	1,420	2,670	2,910	1,760	1,960	1,320	1,600	898	940
10	1,620	1,220	815	1,620	2,430	2,190	1,690	1,840	1,320	1,450	1,120	1,090
11	1,740	1,260	898	1,620	1,740	1,620	1,750	1,740	1,770	1,450	1,200	1,070
12	1,320	1,320	1,030	1,520	1,960	2,310	2,280	1,420	1,620	1,500	1,120	898
13	1,220	1,030	1,120	1,520	1,840	3,700	1,920	1,080	1,670	1,280	2,210	1,030
14	1,320	985	1,320	1,120	1,740	6,130	1,320	1,520	1,420	1,420	1,090	1,020
15	1,260	940	1,420	1,030	1,420	5,960	1,780	2,390	1,300	1,170	1,100	898
16	1,420	985	1,260	1,260	1,840	4,830	2,790	3,570	1,420	1,500	1,220	695
17	1,840	855	985	1,320	1,420	3,680	2,190	3,120	1,120	1,420	1,060	5,160
18	2,430	898	1,080	1,520	1,170	3,160	1,840	2,080	1,570	1,380	855	2,530
19	2,190	985	1,260	1,320	1,620	2,910	1,720	1,620	1,460	1,520	735	1,680
20	1,840	1,120	1,170	1,420	1,420	2,790	1,520	2,020	1,460	3,250	995	1,340
21	1,620	1,260	1,120	940	2,480	2,550	1,420	2,670	1,360	1,740	890	1,320
22	1,420	1,260	1,080	1,260	2,550	2,670	1,320	2,190	1,240	1,260	855	1,170
23	1,620	1,120	1,120	1,290	2,190	4,360	1,840	1,960	1,340	1,380	815	940
24	2,550	985	815	1,250	1,620	4,420	1,740	1,840	2,090	1,220	1,240	1,460
25	2,310	1,170	775	1,260	1,260	2,910	1,520	1,620	1,840	1,300	1,120	1,650
26	1,520	940	775	1,220	1,940	3,030	1,520	1,320	1,620	1,220	735	13,500
27	1,420	1,120	985	1,080	3,950	2,790	1,420	1,820	1,690	1,320	948	18,700
28	1,520	1,220	1,120	1,030	9,690	2,670	1,620	2,550	1,690	1,320	944	6,950
29	1,260	1,220	898	1,390	-------	2,550	1,960	2,930	1,750	855	855	3,680
30	1,420	1,220	940	1,310	-------	2,310	1,840	3,040	1,550	1,070	815	3,490
31	1,420	-------	815	1,220	-------	2,080	-------	2,310	-------	1,210	815	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,550	1,170	1,580	1.94	2.24
November	1,520	855	1,180	1.45	1.62
December	1,420	775	1,060	1.30	1.50
January	1,960	940	1,310	1.61	1.86
February	9,690	815	2,150	2.64	2.75
March	8,310	1,620	3,640	4.47	5.15
April	2,790	1,320	1,740	2.13	2.38
May	3,570	1,080	2,080	2.55	2.94
June	2,090	1,120	1,560	1.91	2.13
July	3,250	855	1,470	1.80	2.08
August	2,210	735	1,020	1.25	1.44
September	18,700	658	2,710	3.33	3.72
The year	18,700	658	1,790	2.20	29.81

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, 1929.

EXTREMES.—Maximum discharge during period (estimated), 75,900 second-feet Sept. 28 (gage height, 18.32 feet); minimum, 225 second-feet Sept. 17 (gage height, 0.40 foot).

1925–1929: Maximum discharge, that of Sept. 28, 1929; minimum, (estimated), 155 second-feet Oct. 2, 1927.

Highest flood known, 30.0 feet Aug. 17, 1928 (discharge, estimated, 222,000 second-feet).

REMARKS.—Records good. Complete regulation by operation of Parr Shoals hydroelectric plant 11 miles upstream. No record Oct. 1 to June 14.

Daily and monthly discharge, in second-feet, 1929

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1		4,980	9,510	1,660	16	3,890	5,050	5,390	4,270
2		4,290	7,670	3,340	17	5,070	5,210	8,590	1,800
3		5,120	5,070	2,520	18	5,430	5,250	8,490	15,600
4		3,040	3,880	2,680	19	5,920	5,060	5,740	12,400
5		5,280	4,610	4,150	20	5,870	3,690	5,800	8,760
6		5,420	3,420	4,930	21	6,000	9,030	5,090	6,620
7		4,070	3,860	3,360	22	4,600	14,100	8,910	2,120
8		6,440	3,910	3,130	23	3,110	9,660	8,460	3,320
9		6,450	4,690	4,430	24	6,380	6,320	8,050	4,040
10		5,610	2,650	5,250	25	7,050	5,560	1,720	4,040
11		5,860	2,130	3,390	26	11,000	5,270	2,610	5,540
12		5,370	4,190	4,260	27	16,500	3,940	2,430	30,300
13		3,980	6,480	3,690	28	18,000	3,970	8,880	66,300
14		3,020	7,740	3,530	29	10,500	5,880	4,060	54,700
15	3,980	5,100	5,900	2,390	30	6,280	5,440	4,360	24,400
					31		7,230	8,630	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
June 15–30	18,000	3,110	7,470	1.56	0.93
July	14,100	3,020	5,640	1.18	1.36
August	9,510	1,720	4,450	.927	1.07
September	66,300	1,660	9,900	2.06	2.30

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, 1929.

EXTREMES.—Maximum discharge during year, 7,590 second-feet Sept. 26 (gage height, 8.55 feet); minimum, 29 second-feet July 2 and 3.

1925–1929: 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 period, Nov. 29 to Dec. 10, which are fair. Large diurnal fluctuation caused by operation of Cliffside mills a quarter of a mile upstream.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	260	190	180	221	223	2,460	383	299	314	286	226	107
2	227	188	180	219	146	805	344	368	298	74	227	206
3	215	138	200	209	159	576	305	682	333	233	126	185
4	244	197	180	194	281	599	316	399	301	186	146	191
5	227	274	180	144	212	1,890	318	327	272	233	268	728
6	334	204	180	431	459	1,920	279	354	274	524	212	310
7	87	189	180	359	1,010	773	298	538	257	443	175	150
8	272	202	120	283	604	554	337	395	188	402	192	176
9	222	211	160	242	502	556	288	347	279	307	154	248
10	284	129	170	254	635	330	290	338	326	239	120	123
11	210	183	179	340	504	380	274	267	268	301	254	178
12	180	258	181	254	386	334	387	284	248	288	380	195
13	143	200	173	249	340	606	356	322	238	183	545	175
14	149	208	189	294	309	1,400	204	270	227	213	261	120
15	287	185	262	225	278	1,120	439	316	166	292	231	140
16	269	178	209	226	261	906	496	825	249	223	156	284
17	314	119	278	230	298	642	383	613	280	228	150	1,440
18	377	168	219	256	319	526	315	328	218	276	131	484
19	270	259	212	195	261	450	303	317	236	168	230	269
20	200	198	206	236	266	407	232	763	207	563	200	214
21	236	201	193	293	493	374	275	543	202	266	162	128
22	274	198	124	220	582	448	330	378	137	308	175	172
23	233	182	144	220	461	924	291	324	301	259	179	216
24	397	120	176	219	397	1,080	272	299	649	206	373	172
25	355	161	172	214	366	608	235	256	329	213	216	180
26	270	259	270	188	367	498	337	258	288	197	258	3,620
27	176	183	204	228	940	450	263	513	315	242	174	5,450
28	220	181	172	304	2,310	425	283	526	324	232	192	1,090
29	291	180	140	246	-------	396	505	629	328	278	172	658
30	241	180	151	215	-------	397	342	567	228	234	170	312
31	224	-------	267	218	-------	386	-------	395	-------	220	123	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	397	87	248	1.08	1.24
November	274	119	191	.830	.93
December	278	120	189	.822	.95
January	431	144	246	1.07	1.23
February	2,310	146	477	2.07	2.16
March	2,460	330	749	3.26	3.76
April	505	204	323	1.40	1.56
May	825	256	421	1.83	2.11
June	649	137	276	1.20	1.34
July	563	74	268	1.17	1.35
August	545	120	212	.922	1.06
September	5,450	107	614	2.67	2.98
The year	5,450	74	350	1.52	20.67

SALUDA RIVER AT CHAPPELLS, S. C.

LOCATION.—Water-stage recorder at steel highway bridge at Chappells, Newberry County, 8¼ 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, 1929.

EXTREMES.—Maximum discharge during year, 60,700 second-feet Sept. 28 (gage height, 30.9 feet); minimum, 450 second-feet Sept. 2 (gage height, 1.82 feet). 1927–1929: Maximum discharge, that of Sept. 28, 1929; minimum discharge, 220 second-feet Oct. 3, 1927.

REMARKS.—Records good. Discharge estimated Aug. 21–29. Diurnal regulation caused by operation of Ware Shoals power plant.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,430	1,350	1,230	1,310	1,550	26,600	3,500	9,460	1,790	1,750	1,910	676
2	1,630	1,350	1,310	1,310	1,470	20,100	3,180	16,500	2,070	1,750	1,310	512
3	1,630	1,390	1,430	1,270	1,080	12,700	2,910	14,200	1,870	1,630	1,150	852
4	1,550	1,080	1,470	1,350	968	8,200	2,820	7,760	1,830	1,590	999	852
5	1,510	1,200	1,160	1,310	1,590	20,500	2,730	3,090	1,710	1,470	1,040	1,310
6	1,390	1,430	1,120	1,160	2,260	30,200	2,640	2,680	1,670	1,710	1,270	1,110
7	1,160	1,160	1,040	1,040	4,780	21,400	2,190	4,910	1,630	1,990	962	1,310
8	1,390	1,160	968	1,510	4,640	12,400	2,190	6,840	1,590	2,640	888	962
9	1,590	1,270	862	1,310	3,770	6,220	1,370	5,660	1,310	1,950	816	962
10	1,430	1,200	896	1,510	4,480	3,490	2,500	3,510	1,630	1,790	1,310	1,230
11	1,160	1,040	1,270	1,940	3,280	3,090	2,420	2,910	1,830	1,590	1,230	1,080
12	932	1,120	1,040	2,520	2,570	3,000	3,830	2,500	1,630	1,670	888	925
13	932	1,430	1,040	1,980	2,030	3,140	3,280	2,320	1,590	1,550	1,430	1,150
14	932	1,200	968	1,510	1,940	3,760	2,370	2,370	1,590	1,230	1,550	1,510
15	1,010	1,010	1,160	1,550	2,330	7,560	3,100	2,190	1,670	1,430	1,190	1,080
16	1,580	1,010	1,080	1,390	5,400	10,800	6,760	2,420	1,270	1,750	888	999
17	1,270	1,160	1,350	1,470	6,160	11,200	6,540	2,460	1,190	1,390	745	2,190
18	1,590	1,040	1,510	1,510	3,820	8,030	2,340	2,370	1,870	1,310	816	2,550
19	2,050	1,270	1,310	1,670	2,660	4,100	2,820	1,990	1,630	1,310	1,230	2,500
20	2,120	1,510	1,160	1,230	2,210	3,460	2,500	2,720	1,830	1,510	1,350	2,190
21	1,850	1,160	1,310	1,350	5,080	3,270	1,950	3,300	1,390	1,590	1,200	1,670
22	1,510	1,200	1,310	1,590	7,700	7,230	2,550	2,460	1,350	1,190	1,000	1,110
23	1,960	1,230	969	1,310	8,100	9,950	2,820	2,110	1,150	1,470	850	1,080
24	2,400	1,160	862	1,350	4,200	10,200	2,370	2,070	1,790	1,190	800	1,430
25	2,030	932	1,040	1,470	2,750	9,230	2,240	1,990	2,500	1,190	750	1,430
26	1,670	932	862	1,670	2,820	7,500	2,860	1,710	3,410	1,230	650	10,100
27	1,630	1,430	1,450	1,590	6,680	4,130	2,860	2,020	4,720	1,230	1,000	49,200
28	1,120	1,120	1,040	2,440	21,100	3,360	2,260	2,550	5,520	1,510	900	56,200
29	1,230	1,080	968	2,390	-------	3,140	6,570	2,110	3,450	1,870	650	36,600
30	1,630	1,040	1,010	1,760	-------	3,940	7,600	1,990	2,190	1,470	544	16,500
31	1,470	-------	794	1,430	-------	4,420	-------	1,910	-------	2,350	888	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,400	932	1,510	1.17	1.35
November	1,510	932	1,190	.922	1.03
December	1,510	794	1,130	.876	1.01
January	2,520	1,040	1,550	1.20	1.38
February	21,100	968	4,190	3.25	3.38
March	30,200	3,000	9,240	7.16	8.26
April	7,600	1,950	3,300	2.56	2.86
May	16,500	1,710	3,970	3.08	3.55
June	5,520	1,150	2,020	1.57	1.75
July	2,640	1,190	1,590	1.23	1.42
August	1,910	544	1,040	.806	.93
September	56,200	512	6,710	5.20	5.80
The year	56,200	512	3,110	2.41	32.72

SALUDA RIVER NEAR SILVERSTREET, S. C.

LOCATION.—Staff gage 500 feet upstream from Higgins Ferry bridge, 1 mile downstream from mouth of Little River, and 2½ miles south of Silverstreet, Newberry County.

DRAINAGE AREA.—1,570 square miles.

RECORDS AVAILABLE.—January, 1927, to September, 1929.

EXTREMES.—Maximum discharge during year (estimated), 69,800 second-feet Sept. 28 (gage height, 32.05 feet); minimum, 510 second-feet Aug. 31 and Sept. 2.

1927–1929: Maximum discharge, that of Sept. 28, 1929; minimum, 248 second-feet Sept. 29, 1927 (gage height, 3.45 feet).

REMARKS.—Records good. Diurnal fluctuation caused by operation of power plants upstream.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,570	1,680	1,210	1,520	1,850	e35,000	3,760	11,800	2,090	1,910	2,450	612
2	1,460	1,520	1,300	1,620	1,620	e25,000	3,340	e22,000	2,330	1,740	1,620	550
3	1,520	1,520	1,400	1,460	1,520	e19,000	3,400	e18,000	2,270	1,970	1,380	775
4	1,680	1,520	1,680	1,570	1,520	12,200	3,480	12,000	1,850	1,740	1,080	1,130
5	1,740	1,350	1,210	1,460	1,520	e24,000	3,080	5,580	1,570	1,680	1,350	1,210
6	1,570	1,620	1,160	1,400	2,450	e41,000	2,820	3,820	1,850	1,970	1,620	925
7	1,570	1,350	e1,170	1,460	5,920	e30,000	2,390	5,580	1,570	1,910	1,350	1,080
8	1,520	1,460	e1,140	1,740	6,270	e18,000	2,390	7,300	1,620	2,950	1,000	1,130
9	1,850	1,460	e1,100	1,740	4,480	10,400	2,030	7,300	1,850	2,210	875	875
10	1,620	1,620	1,210	1,400	5,740	e6,000	2,090	4,340	2,030	1,970	1,300	1,270
11	1,300	1,320	1,680	2,330	4,410	e3,300	2,510	3,340	1,620	1,790	1,400	1,180
12	1,320	1,300	1,460	3,340	3,820	e3,200	2,330	3,340	1,620	1,850	975	950
13	1,020	1,460	1,270	2,510	2,330	e3,200	4,560	2,690	e1,580	1,740	1,460	900
14	1,020	1,790	1,160	1,790	2,090	3,620	2,630	2,760	e1,580	1,520	1,400	900
15	1,050	1,740	1,300	1,740	2,630	6,270	3,140	2,210	e1,730	1,400	1,350	1,380
16	1,680	1,130	1,460	1,620	6,660	13,100	6,970	2,210	e1,500	1,850	950	1,000
17	1,300	1,130	1,570	1,520	8,240	14,200	9,800	2,820	e1,420	1,520	825	2,270
18	1,680	1,210	1,740	2,030	5,920	10,600	4,480	2,330	2,330	1,400	1,100	3,400
19	2,210	1,910	1,400	1,740	3,480	5,330	3,340	1,970	2,090	1,350	1,210	3,900
20	2,210	1,740	1,570	1,240	2,820	e3,500	2,950	2,690	1,620	1,620	1,620	2,690
21	2,030	1,400	1,520	1,570	5,740	e3,500	1,850	6,270	e1,500	1,790	1,460	1,970
22	1,740	1,460	1,460	1,970	8,740	6,970	2,690	3,020	e1,400	1,320	1,160	1,460
23	2,210	1,520	1,350	1,570	9,660	12,800	3,480	2,210	e1,600	1,620	925	1,100
24	2,760	1,210	1,150	1,570	6,660	14,200	2,690	2,390	1,850	1,350	875	1,520
25	2,510	1,080	1,230	1,850	3,080	10,500	2,510	2,330	2,270	1,320	850	1,520
26	2,150	1,270	1,150	1,790	3,080	7,880	2,820	2,570	4,640	1,270	680	5,250
27	1,790	1,350	1,680	1,740	6,860	5,410	2,820	2,880	6,270	1,350	800	e54,000
28	1,400	1,460	1,380	3,340	e26,000	3,900	3,760	3,960	9,130	1,620	1,000	e65,000
29	1,520	1,380	1,080	3,480	----------	2,690	7,520	3,210	5,010	2,210	725	e48,000
30	1,740	1,210	1,300	2,390	----------	4,340	10,400	2,210	2,570	1,620	590	e34,000
31	1,620	----------	975	1,850	----------	5,580	----------	1,740	----------	1,970	550	----------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,760	1,020	1,690	1.08	1.24
November	1,910	1,080	1,440	.917	1.02
December	1,740	975	1,340	.854	.98
January	3,480	1,240	1,880	1.20	1.38
February	----------	1,520	5,180	3.30	3.44
March	----------	2,690	11,800	7.52	8.67
April	10,400	1,850	3,780	2.38	2.66
May	----------	1,740	5,060	3.22	3.71
June	9,130	----------	2,410	1.54	1.72
July	2,950	1,270	1,730	1.10	1.27
August	2,450	550	1,160	.739	.85
September	----------	550	8,030	5.11	5.70
The year	----------	550	3,770	2.40	32.64

e Estimated.

SALUDA RIVER NEAR CHAPIN, S. C.

LOCATION.—Water-stage recorder at Wise Ferry highway bridge, just downstream from mouth of Johns Creek and 7¾ miles southeast of Chapin, Lexington County.

DRAINAGE AREA.—2,320 square miles.

RECORDS AVAILABLE.—January, 1927, to September, 1929 (discontinued).

EXTREMES.—Maximum discharge during period, 64,400 second-feet Mar. 5 (gage height, 13.37 feet); minimum, 670 second-feet Sept. 3 (gage height, 1.40 feet).

1927–1929: Maximum discharge, that of Mar. 5, 1929; minimum, 239 second-feet Oct. 5, 1927 (gage height, 0.77 foot).

REMARKS.—Records good except those for July 20 to Aug. 2 and Aug. 10–16, which were estimated. Moderate diurnal regulation caused by operation of power plant at Ware Shoals.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,860	1,860	1,380	1,210	2,000	52,200	6,310	16,400	2,300	2,630	3,100	1,060
2	1,740	1,610	1,740	1,740	2,000	35,900	5,260	34,900	2,300	2,300	2,000	908
3	2,000	1,610	1,740	1,610	1,860	23,200	4,160	28,700	2,630	2,300	1,490	718
4	1,860	1,610	1,740	1,610	1,490	18,500	3,750	19,000	2,300	2,000	1,380	1,060
5	1,740	1,320	1,610	1,610	1,490	50,000	3,550	10,200	2,140	1,860	1,210	1,260
6	1,740	1,490	1,490	1,740	3,070	56,700	3,360	3,950	2,000	2,140	1,260	1,610
7	3,240	1,490	1,380	1,490	6,050	37,800	2,990	6,170	2,000	2,300	1,380	1,320
8	1,740	1,380	1,320	1,490	7,110	26,000	2,630	8,270	1,860	2,990	1,160	------
9	1,740	1,380	1,260	1,740	7,110	15,100	2,630	8,270	2,000	2,990	1,610	------
10	1,740	1,490	1,110	2,000	9,210	7,300	2,810	6,900	1,740	2,140	1,500	------
11	1,610	1,490	1,210	3,170	6,570	4,380	3,270	4,160	2,140	2,140	1,700	------
12	1,380	1,260	1,490	5,550	4,380	3,750	4,600	3,360	2,140	2,000	2,200	------
13	1,160	1,490	1,320	4,160	3,170	3,750	5,300	2,990	1,860	2,460	1,320	------
14	1,210	1,490	1,260	2,630	2,630	4,380	3,550	2,810	1,860	2,000	1,600	------
15	1,160	1,380	1,320	2,000	4,170	12,200	4,480	2,630	2,120	1,490	1,600	------
16	1,380	1,260	1,490	2,000	14,700	19,000	9,620	2,630	2,180	1,740	1,300	------
17	1,610	1,260	1,490	2,140	15,100	15,900	10,600	3,170	1,490	2,000	2,170	------
18	1,610	1,490	1,610	2,460	10,200	13,900	7,300	3,170	2,020	1,610	1,250	------
19	2,000	1,320	1,740	2,300	5,350	9,430	3,950	2,990	2,990	1,610	2,630	------
20	2,300	1,490	1,490	2,140	3,750	5,550	3,360	4,740	2,300	3,300	1,740	------
21	2,140	1,740	1,610	1,740	9,640	4,890	2,810	10,200	2,140	2,600	1,610	------
22	1,860	1,380	1,740	1,860	13,100	17,200	3,170	5,350	1,740	2,100	1,490	------
23	1,740	1,380	1,610	2,000	10,600	22,000	4,160	3,170	1,740	1,700	1,160	------
24	2,630	1,380	1,160	1,740	9,540	22,500	3,360	2,630	1,860	1,850	1,260	------
25	2,810	1,380	1,160	2,000	4,830	16,200	3,360	2,460	2,460	1,700	1,210	------
26	2,140	1,160	1,320	2,140	4,330	12,000	4,160	2,300	3,950	1,600	1,060	------
27	1,860	1,210	1,260	2,720	15,500	8,900	3,950	2,300	8,010	1,700	908	------
28	1,740	1,610	1,610	4,830	36,100	5,060	4,140	4,980	10,600	2,000	1,160	------
29	1,380	1,320	1,320	4,160	--------	4,380	10,900	1,210	8,270	2,600	1,290	------
30	1,490	1,320	1,320	2,990	--------	5,680	10,200	2,630	4,160	2,400	1,220	------
31	1,860	--------	1,260	2,300	--------	8,270	--------	2,460	--------	2,300	812	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,240	1,160	1,820	0.784	0.90
November	1,860	1,160	1,440	.621	.69
December	1,740	1,110	1,440	.621	.72
January	5,550	1,210	2,360	1.02	1.18
February	36,100	1,490	7,680	3.31	3.45
March	56,700	3,750	17,500	7.54	8.69
April	10,900	2,630	4,790	2.06	2.30
May	34,900	2,300	7,040	3.03	3.49
June	10,600	1,490	2,910	1.25	1.40
July	----------	1,490	2,150	.927	1.07
August	3,100	812	1,510	.651	.75
September 1–7	1,610	718	1,130	.485	.13

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 above mouth at Columbia, Richland County.

DRAINAGE AREA.—2,450 square miles.

RECORDS AVAILABLE.—August, 1925, to September, 1929.

EXTREMES.—Maximum discharge during year, 53,600 second-feet Mar. 6 (gage height, 12.43 feet); minimum, 40 second-feet Sept. 16 and 22.

1925–1929: Maximum discharge, 58,200 second-feet Aug. 18, 1928 (gage height, 13.04 feet); minimum, that of September 16 and 22, 1929.

REMARKS.—Records good except those for estimated periods (Dec. 1 to Jan. 1, Mar. 26–31, Apr. 2–10, 14, 19–22, 24–27, and Sept. 2–5), which are fair. Slight diurnal fluctuation produced by mills on headwaters. Gates at Lake Murray Dam upstream closed August 31 to impound water.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,210	2,210	1,700	1,450	2,490	49,400	7,870	15,700	2,590	2,790	3,220	209
2	2,120	2,040	2,050	2,040	2,490	46,900	6,500	35,100	2,400	2,400	2,400	148
3	2,300	2,040	2,050	2,040	2,400	29,400	5,500	34,500	2,790	2,490	1,700	118
4	2,210	2,040	2,050	1,950	1,860	20,400	4,700	23,000	2,590	2,210	1,410	106
5	2,210	1,700	1,900	2,040	1,780	44,200	4,500	11,600	2,400	2,120	1,210	84
6	2,120	1,780	1,700	2,040	3,580	52,200	4,200	4,740	2,210	2,300	1,280	79
7	3,840	1,950	1,600	1,950	7,870	49,000	4,000	6,910	2,210	2,590	1,480	76
8	2,300	1,780	1,500	1,780	8,200	32,800	3,500	8,880	2,120	2,790	1,210	75
9	2,210	1,780	1,420	2,210	8,200	17,700	3,300	8,880	2,120	3,220	1,700	73
10	2,210	1,860	1,300	2,400	10,300	8,880	3,500	7,220	1,950	2,400	1,560	73
11	2,040	1,700	1,400	3,580	7,870	6,260	3,920	4,740	2,210	2,210	1,700	73
12	1,700	1,560	1,650	6,520	5,330	5,330	5,030	3,920	2,400	2,120	2,490	70
13	1,560	1,630	1,500	5,240	3,920	4,740	5,940	3,220	2,120	2,590	1,480	76
14	1,480	1,950	1,450	3,220	3,220	4,460	4,500	3,220	2,120	2,210	1,780	105
15	1,410	1,700	1,550	2,490	4,030	9,430	4,740	3,000	2,210	1,700	1,860	82
16	1,560	1,560	1,700	2,490	14,800	15,700	8,880	3,000	4,420	1,860	1,480	62
17	2,040	1,560	1,700	2,590	16,700	13,500	11,500	3,440	2,210	2,040	2,480	76
18	1,860	1,630	1,800	3,000	11,500	11,500	9,590	4,050	2,040	1,700	2,180	84
19	2,300	1,560	1,900	2,790	6,580	8,880	5,940	3,920	3,440	1,780	2,840	70
20	2,590	1,780	1,700	2,790	4,460	5,640	4,000	5,380	3,000	3,480	1,860	69
21	2,590	2,120	1,800	2,120	10,400	4,740	3,600	10,700	2,590	2,790	1,780	68
22	2,210	1,700	2,000	2,210	14,300	12,600	3,700	6,580	1,950	2,400	1,560	62
23	1,950	1,700	1,900	2,490	11,500	22,400	4,740	3,680	1,860	1,780	1,340	63
24	3,000	1,700	1,400	2,210	10,700	27,700	4,100	3,000	2,400	1,950	1,280	69
25	3,440	1,630	1,400	2,400	5,940	19,400	4,000	2,790	2,790	1,780	1,340	92
26	2,790	1,480	1,500	2,590	5,170	13,300	4,700	2,790	3,920	1,630	1,150	90
27	2,300	1,410	1,450	3,070	15,700	10,000	4,500	2,590	8,200	1,700	972	94
28	2,210	1,860	1,850	5,640	31,600	6,000	4,670	5,200	10,700	2,040	1,150	87
29	1,700	1,630	1,600	5,030	-------	5,200	11,100	4,960	9,170	2,790	1,320	82
30	1,780	1,630	1,600	3,680	-------	5,400	10,700	3,000	4,740	2,590	2,100	5,840
31	2,300	-------	1,500	3,000	-------	9,000	-------	2,790	-------	2,400	915	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,840	1,410	2,210	0.902	1.04
November	2,210	1,410	1,760	.718	80
December	----------	----------	1,670	.682	.79
January	6,520	----------	2,870	1.17	1.35
February	31,600	1,780	8,320	3.40	3.54
March	52,200	4,460	18,500	7.55	8.70
April	11,500	----------	5,580	2.28	2.54
May	35,100	2,590	7,820	3.19	3.68
June	10,700	1,860	3,260	1.33	1.48
July	3,480	1,630	2,290	.935	1.08
August	3,220	915	1,680	.686	.79
September	5,820	62	278	.113	.13
The year	52,200	62	4,670	1.91	25.92

SAVANNAH RIVER BASIN

SAVANNAH RIVER AT AUGUSTA, GA.

LOCATION.—Water-stage recorder at Center Street Bridge in Augusta, Richmond County. 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, 1929.

EXTREMES.—Maximum discharge during year, 343,000 second-feet Sept. 27 (gage height, 46.3 feet); minimum, 1,820 second-feet Sept. 16 (gage height, 5.50 feet).

1884–1891, 1899–1906, 1927–1929: Maximum discharge, that of Sept. 27, 1929; minimum, 890 second-feet Oct. 3, 23, and 30, 1927 (gage height, 4.40 feet).

REMARKS.—Gage height is mean of two daily staff-gage readings Mar. 11–13, Mar. 30 to Apr. 6, and Apr. 20–22. Considerable regulation caused by operation of power plants upstream. Records collected by Allied Engineers (Inc.), under general supervision of the Geological Survey in connection with a Federal Power Commission project.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,620	7,680	7,710	5,000	7,310	162,000	18,600	32,300	11,400	11,600	13,800	3,640
2	5,740	8,930	3,940	5,820	7,140	113,000	17,200	70,300	11,200	6,580	11,700	3,760
3	4,990	8,240	6,700	7,010	6,730	50,400	17,500	76,200	11,200	9,300	8,610	4,610
4	7,340	3,780	5,250	8,430	6,420	30,600	15,000	48,500	10,000	10,600	4,020	4,620
5	8,100	5,430	5,240	7,470	5,700	123,000	14,800	24,400	10,000	9,160	7,220	7,140
6	7,320	5,410	5,700	4,020	7,620	185,000	13,500	16,500	9,610	9,940	5,080	7,310
7	4,010	5,510	7,760	4,500	17,100	130,000	13,500	18,300	9,370	8,660	4,580	7,610
8	5,960	6,110	7,370	7,520	23,500	59,700	13,600	30,900	9,290	11,400	5,340	3,980
9	5,460	8,930	3,760	6,740	19,100	27,300	11,900	24,200	7,680	9,250	7,240	4,510
10	6,040	8,340	4,480	8,190	25,100	18,400	12,100	19,000	9,520	8,420	6,730	5,090
11	6,420	3,810	4,450	9,200	24,100	16,600	12,300	15,800	8,420	8,100	4,160	6,350
12	7,730	5,510	4,580	12,000	17,000	13,500	13,100	14,700	8,770	9,400	6,480	6,680
13	7,310	5,130	5,550	14,100	13,100	12,800	13,900	13,100	9,270	8,630	6,680	6,990
14	4,070	6,050	6,990	10,800	10,500	14,700	13,600	11,000	8,390	6,720	5,520	7,260
15	4,960	6,820	6,350	7,240	10,600	47,600	13,000	11,400	7,670	8,160	6,870	4,070
16	5,040	7,770	3,600	6,840	23,200	87,200	17,600	11,500	7,850	7,020	6,310	4,020
17	6,140	7,310	5,900	8,710	36,700	72,000	28,700	13,300	8,350	8,120	5,350	8,960
18	10,700	3,660	5,140	7,740	27,200	39,600	19,700	13,100	7,100	7,760	4,100	30,100
19	13,800	5,460	4,670	7,780	16,900	24,500	15,200	12,800	10,000	8,090	5,760	23,100
20	12,600	5,990	6,340	7,280	13,300	19,800	12,300	12,400	9,730	10,000	5,500	12,800
21	10,700	6,560	8,210	7,150	21,500	17,900	11,200	13,600	9,230	7,630	4,880	9,080
22	7,830	8,230	7,510	6,830	46,000	37,300	11,700	17,200	9,090	8,210	5,040	3,820
23	6,620	8,600	3,900	7,120	39,800	69,200	9,420	14,200	6,560	6,350	4,760	4,980
24	9,320	7,540	3,800	6,830	24,200	72,900	10,500	12,400	8,340	6,180	6,040	5,200
25	12,000	3,580	4,780	7,360	15,500	57,300	10,200	10,900	8,320	6,180	4,130	5,920
26	11,200	5,020	4,830	8,160	14,000	32,900	11,700	10,700	9,800	6,620	4,010	65,900
27	9,680	5,820	4,700	9,060	36,100	22,100	16,400	12,400	14,300	6,470	4,380	282,000
28	4,240	4,860	6,980	11,300	120,000	18,300	13,400	14,900	22,700	7,360	3,770	304,000
29	6,810	5,320	6,510	12,900	-------	16,400	17,700	17,700	21,800	9,350	3,950	168,000
30	5,270	8,100	3,840	11,500	-------	14,800	26,700	14,300	15,600	5,690	4,210	64,000
31	7,320	-------	5,180	8,870	-------	18,800	-------	12,800	-------	10,900	5,760	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	13,800	4,010	7,490	1.03	1.18
November	8,930	3,580	6,320	.865	.97
December	8,210	3,600	5,540	.758	.87
January	14,100	4,020	8,180	1.12	1.29
February	120,000	5,700	22,700	3.11	3.24
March	185,000	12,800	52,400	7.17	8.27
April	28,700	9,420	14,900	2.04	2.28
May	76,200	10,700	20,700	2.83	3.27
June	22,700	6,560	10,400	1.42	1.59
July	11,600	5,690	8,320	1.14	1.31
August	13,800	3,770	5,870	.804	.93
September	304,000	3,640	35,800	4.90	5.47
The year	304,000	3,580	16,500	2.26	30.67

BROAD RIVER AT BELL, GA.

LOCATION.—Staff gage at bridge on Elberton-Washington highway half a mile below mouth of Long Creek and 1 mile south of Bell, Elbert County, used since Oct. 22, 1928. Zero of gage is 356.30 feet above mean sea level. Prior to Aug. 18, 1928, a staff gage at Elberton & Eastern Railroad bridge 1 mile downstream was used, the zero of which is 355.18 feet above mean sea level.

DRAINAGE AREA.—1,440 square miles.

RECORDS AVAILABLE.—November, 1926, to September, 1929.

EXTREMES.—Maximum discharge during year, about 36,500 second-feet Mar. 6 (gage height, 29.5 feet); minimum, 629 second-feet Aug. 2[illegible] to Sept. 4 (gage height, 3.6 feet).

1926–1929: Maximum discharge, that of Mar. 6, 192[illegible]; minimum, 325 second-feet Oct. 7 and 8, 1927 (gage height, 3.25 feet, old datum).

REMARKS.—Records collected by Allied Engineers (Inc.), under general supervision of the Geological Survey in connection with a Federal Power Commission project. Results of some discharge measurements furnished by U. S. Army engineers.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-------	1,070	1,010	902	1,230	24,200	3,100	17,200	1,700	1,290	1,820	629
2	-------	1,010	1,180	902	1,180	10,500	2,720	17,900	1,580	1,180	1,460	629
3	-------	1,010	1,070	902	1,130	3,400	2,520	14,000	1,950	1,520	1,180	629
4	-------	1,070	1,010	902	1,070	9,240	2,320	6,280	1,700	2,260	1,130	629
5	-------	1,010	958	902	1,070	33,400	2,200	2,960	1,580	4,820	1,010	958
6	-------	958	958	902	3,330	34,200	2,010	2,520	1,520	3,180	1,010	1,010
7	-------	958	958	902	5,630	22,600	1,880	3,100	1,400	1,880	958	902
8	-------	958	958	902	3,470	8,560	1,820	2,590	1,640	1,760	958	902
9	-------	958	958	902	3,100	4,400	1,820	2,800	3,770	1,950	902	1,070
10	-------	902	902	1,130	5,360	3,620	1,820	2,720	2,260	1,580	902	1,290
11	-------	902	902	1,760	3,470	2,880	1,760	2,200	1,820	2,010	1,010	1,350
12	-------	902	847	2,200	2,390	2,390	1,700	1,760	1,640	1,820	1,010	1,180
13	-------	902	847	1,460	1,400	2,720	1,640	1,760	1,580	1,460	958	1,350
14	-------	902	902	1,180	1,400	4,730	1,640	1,700	1,520	1,230	902	1,400
15	-------	902	902	1,070	2,010	17,900	2,010	1,640	1,400	1,070	847	1,130
16	-------	902	902	1,070	6,280	23,400	4,240	1,700	1,290	1,070	792	1,640
17	-------	902	902	1,130	5,270	11,200	3,250	1,700	1,230	1,010	737	7,060
18	-------	902	958	1,130	3,180	4,160	2,200	1,700	1,580	1,010	737	7,160
19	-------	958	958	1,130	2,390	3,020	1,760	1,640	1,700	1,010	792	2,880
20	-------	1,070	958	1,130	2,520	2,800	1,700	1,760	1,350	1,010	847	1,640
21	-------	958	1,010	1,130	8,900	2,590	1,640	2,590	1,230	1,010	737	1,230
22	958	902	958	1,290	12,200	13,000	1,580	2,200	1,130	958	737	1,070
23	1,580	902	958	1,640	5,450	19,000	1,640	1,880	1,070	958	737	1,130
24	1,950	902	958	1,460	3,020	15,100	1,640	1,580	1,070	902	683	1,070
25	1,130	902	958	1,520	2,390	7,480	2,140	1,460	1,130	902	683	1,950
26	1,010	902	958	1,700	3,470	4,000	2,650	1,400	1,700	902	683	19,100
27	958	902	958	1,950	12,400	3,250	2,260	1,760	3,400	958	629	31,500
28	958	902	958	2,720	24,400	2,260	2,590	4,160	4,640	1,130	629	23,800
29	958	902	958	2,140	-------	2,320	6,280	2,880	2,450	1,130	629	10,100
30	902	902	902	1,820	-------	3,470	6,090	2,140	1,460	1,400	629	5,270
31	1,070	-------	902	1,460	-------	3,920	-------	2,070	-------	2,010	629	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October 22-31	1,950	902	1,150	0.799	0.30
November	1,070	902	941	.653	.73
December	1,180	847	952	.661	.76
January	2,720	902	1,330	.924	1.07
February	24,400	1,070	4,610	3.20	3.33
March	34,200	2,260	9,860	6.85	7.90
April	6,280	1,580	2,420	1.68	1.87
May	17,900	1,400	3,670	2.55	2.94
June	4,640	1,070	1,780	1.24	1.38
July	4,820	902	1,500	1.04	1.20
August	1,820	629	883	.613	.71
September	31,500	629	4,390	3.05	3.40

ST. MARYS RIVER BASIN

NORTH PRONG OF ST. MARYS RIVER AT MONIAC, GA.

LOCATION.—Staff gage at highway bridge between Baxter, Fla., and Moniac, Charlton County, Ga., 150 feet upstream from Georgia Southern & Florida Railway trestle. Zero of gage is 92.51 feet above mean sea level.

DRAINAGE AREA.—240 square miles.

RECORDS AVAILABLE.—January, 1921, to December, 1923; January, 1927, to September, 1929.

EXTREMES.—Maximum discharge during year, 1,990 second-feet Sept. 30 (gage height, 10.2 feet); minimum, 21 second-feet June 8 (gage height, 2.00 feet). 1921–1923, 1927–1929: Maximum discharge, about 6,060 second-feet about Sept. 19, 1928 (gage height, 16.7 feet); no flow June 16–24 and 28, 1921, and May 19 to June 9, 1927.

REMARKS.—Records good except those for Dec. 23–29, Jan. 13, 28, 29, and Feb. 10–13, which were estimated. Small diversion by pumping just above control; during extremely low stages entire flow is diverted.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,610	118	33	33	465	310	156	86	53	295	390	575
2	1,300	111	48	31	390	330	140	118	53	250	350	545
3	1,060	104	71	31	350	350	125	240	50	210	330	545
4	840	104	74	31	295	310	111	230	43	210	280	840
5	635	97	71	83	265	295	97	265	36	220	240	805
6	490	90	68	265	230	280	86	295	33	190	200	665
7	440	80	65	350	220	240	90	265	27	172	172	605
8	440	77	68	280	210	210	65	440	21	390	180	545
9	665	71	65	250	190	190	50	1,100	31	700	220	490
10	605	65	65	230	475	172	48	875	40	735	200	415
11	575	62	59	250	800	164	59	700	43	665	180	370
12	490	56	53	545	750	156	111	605	46	575	172	350
13	440	53	53	700	625	140	74	490	38	465	295	310
14	465	50	53	545	515	125	62	390	31	440	310	295
15	490	48	53	490	440	156	125	330	62	465	465	280
16	490	46	48	440	465	1,560	310	295	310	415	465	250
17	490	43	40	390	945	1,610	370	265	265	415	390	230
18	465	43	40	350	945	1,480	350	230	265	390	415	240
19	415	40	40	310	805	1,180	310	350	310	350	440	230
20	390	38	38	265	665	910	265	295	295	440	390	210
21	350	36	43	240	605	700	230	265	265	770	370	190
22	310	38	40	230	770	515	200	230	240	635	350	172
23	295	36	39	190	665	465	200	210	220	515	330	156
24	250	33	38	172	575	440	200	180	180	490	310	156
25	230	38	37	164	490	370	180	156	156	415	310	180
26	210	36	36	200	440	310	156	140	190	350	515	250
27	190	33	36	210	390	295	140	125	310	310	1,020	415
28	172	33	35	425	350	250	118	111	310	280	1,140	1,100
29	156	33	34	650	------	220	104	97	310	295	910	1,380
30	140	33	33	575	------	190	90	74	295	350	665	1,940
31	125	------	33	515	------	172	------	56	------	390	490	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,610	125	491	2.05	2.36
November	118	33	58.2	.242	.27
December	74	33	48.7	.203	.23
January	700	31	305	1.27	1.46
February	945	190	512	2.13	2.22
March	1,610	125	455	1.90	2.19
April	370	48	154	.642	.72
May	1,100	56	307	1.28	1.48
June	310	21	151	.629	.70
July	770	172	413	1.72	1.98
August	1,140	172	403	1.68	1.94
September	1,940	156	491	2.05	2.29
The year	1,940	21	315	1.31	17.84

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, 1929.

EXTREMES.—Maximum discharge during year, 9,590 second-feet Sept. 30 (gage height, 17.2 feet); minimum discharge, 135 second-feet several days during year; minimum gage height, 2.56 feet Jan. 4

1926–1929: Maximum discharge, about 16,500 second-feet Sept. 20, 1928 (gage height, 21.9 feet); minimum, 14 second-feet June 4 and 5, 1927 (gage height, 0.04 foot).

REMARKS.—Records fair. Slight diversion at Moniac, Ga., during extremely low stages.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,070	415	135	135	1,130	1,060	575	395	255	780	1,080	1,920
2	5,650	375	145	135	1,000	1,030	515	345	240	635	980	2,000
3	4,990	375	195	135	905	1,300	455	345	225	755	905	2,580
4	4,380	345	255	135	805	1,390	455	515	210	780	755	2,990
5	3,820	330	255	155	705	1,270	345	495	195	905	655	3,150
6	3,330	315	240	555	635	1,100	330	555	195	980	555	2,770
7	3,070	285	225	1,100	595	1,000	315	655	240	1,000	475	2,770
8	2,580	285	210	1,360	575	880	255	635	285	1,270	515	2,370
9	2,580	300	195	1,360	575	780	240	1,450	435	1,270	555	2,200
10	2,370	285	185	930	535	680	185	2,240	595	1,710	680	2,120
11	2,160	255	175	855	1,080	615	185	2,320	435	1,880	855	1,920
12	1,960	255	175	855	1,270	575	240	1,920	315	1,850	830	1,680
13	1,880	225	175	1,920	1,210	535	255	1,570	225	1,510	1,130	1,390
14	1,920	225	165	2,160	1,100	495	225	1,100	185	1,480	1,540	1,360
15	1,920	195	165	1,960	1,000	455	455	930	175	1,300	1,600	1,270
16	2,000	195	165	1,780	880	1,100	1,480	730	1,030	1,270	1,850	1,270
17	1,880	195	155	1,640	1,570	3,420	2,280	595	1,680	1,450	2,160	1,100
18	1,680	185	155	1,510	2,160	4,990	2,240	535	1,420	1,820	1,710	1,210
19	1,510	185	155	1,360	2,370	4,620	1,920	455	1,390	1,850	1,640	1,210
20	1,330	175	155	1,160	2,200	2,990	1,330	395	1,390	2,080	2,420	980
21	1,160	175	155	1,080	1,960	3,240	1,420	375	1,270	2,520	3,070	955
22	1,130	175	155	955	1,820	2,640	1,210	555	1,210	3,520	3,070	655
23	1,000	155	165	855	1,880	2,160	1,100	930	955	3,420	2,470	615
24	905	155	155	755	2,080	1,820	1,100	905	805	3,330	2,040	575
25	805	155	155	680	1,850	1,570	1,080	880	655	2,160	1,680	615
26	705	145	155	655	1,600	1,360	1,060	495	575	1,920	1,450	905
27	615	145	155	705	1,390	1,160	1,030	415	705	1,640	1,600	2,120
28	535	145	145	755	1,180	1,000	535	375	930	1,390	2,000	3,620
29	515	145	145	1,130	-------	855	515	345	1,030	1,130	2,280	8,230
30	475	135	135	1,330	-------	755	495	285	930	1,030	2,320	9,590
31	435	-------	135	1,330	-------	655	-------	255	-------	1,080	2,280	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	6,070	435	2,110	2.93	3.38
November	415	135	231	.321	.36
December	255	135	172	.239	.28
January	2,160	135	1,010	1.40	1.61
February	2,370	535	1,290	1.79	1.86
March	4,990	455	1,530	2.12	2.44
April	2,280	185	794	1.10	1.23
May	2,320	255	774	1.08	1.24
June	1,680	175	673	.935	1.04
July	3,520	635	1,600	2.22	2.56
August	3,070	475	1,520	2.11	2.43
September	9,590	575	2,200	3.06	3.41
The year	9,590	135	1,160	1.61	21.84

WITHLACOOCHEE RIVER BASIN

WITHLACOOCHEE 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.
EXTREMES.—Maximum discharge during period, 3,340 second-feet Oct. 3 and 4 (gage height, 15.35 feet); minimum, 77 second-feet Jan. 4 (gage height, 1.38 feet).
REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928–29

Day	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
1	------	1,960	3,140	870	158	78	99
2	------	1,930	3,270	810	158	78	98
3	------	1,760	3,340	780	154	78	97
4	------	1,660	3,340	720	149	77	95
5	------	1,620	3,270	690	149	78	91
6	273	1,540	3,200	645	145	105	89
7	272	1,520	3,090	615	141	117	93
8	271	1,470	2,960	570	137	121	89
9	528	1,400	2,860	540	133	115	93
10	1,340	1,360	2,740	510	131	109	95
11	1,630	1,340	2,660	472	129	107	91
12	1,930	1,160	2,500	450	125	101	87
13	2,130	1,090	2,380	420	121	97	84
14	2,270	1,050	2,250	387	117	101	82
15	2,340	980	2,180	363	115	93	78
16	2,460	930	2,100	345	113	113	------
17	2,580	990	1,990	321	109	117	------
18	2,670	1,170	1,930	309	105	117	------
19	2,740	1,320	1,840	303	105	113	------
20	2,780	1,470	1,750	273	101	109	------
21	2,760	1,480	1,680	258	101	107	------
22	2,740	1,540	1,570	248	107	109	------
23	2,680	1,690	1,500	238	105	113	------
24	2,620	1,810	1,420	223	101	109	------
25	2,520	1,990	1,340	213	97	111	------
26	2,420	2,200	1,260	203	93	107	------
27	2,340	2,340	1,170	194	89	105	------
28	2,270	2,620	1,040	185	85	103	------
29	2,240	2,740	1,030	176	84	101	------
30	2,130	2,960	980	162	82	101	------
31	2,060	------	930	------	78	101	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
August 6–31	2,780	271	2,040	2.87	2.78
September	2,960	930	1,640	2.31	2.58
October	3,340	930	2,150	3.03	3.49
November	870	162	416	.586	.65
December	158	78	117	.165	.19
January	121	77	103	.145	.17
February 1–15	99	78	90.7	.128	.07

WITHLACOOCHEE RIVER NEAR HOLDER, FLA.

LOCATION.—Staff gage at highway bridge 3½ miles northeast of Holder, Citrus County.
DRAINAGE AREA.—1,580 square miles.
RECORDS AVAILABLE.—August, 1928, to February, 1929.
EXTREMES.—Maximum discharge during period, 5,830 second-feet Oct. 16 (gage height, 9.26 feet); minimum, 783 second-feet Feb. 15 (gage height, 0.88 foot).
REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928–29

Day	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
1	------	4,950	5,740	4,420	1,710	1,130	920
2	------	4,900	5,740	4,260	1,700	1,110	916
3	------	4,860	5,740	4,140	1,690	1,070	902
4	------	4,800	5,740	4,040	1,680	1,040	888
5	------	4,790	5,740	3,900	1,660	1,100	876
6	------	4,820	5,740	3,750	1,640	1,150	870
7	------	4,810	5,750	3,600	1,620	1,150	858
8	------	4,790	5,740	3,450	1,630	1,120	846
9	------	4,770	5,760	3,300	1,600	1,100	837
10	------	4,740	5,760	3,180	1,580	1,090	840
11	------	4,710	5,760	3,020	1,560	1,080	828
12	------	4,690	5,780	2,850	1,530	1,090	814
13	------	4,680	5,800	2,700	1,500	1,080	800
14	3,820	4,630	5,790	2,580	1,490	1,060	786
15	3,930	4,540	5,790	2,500	1,460	1,050	783
16	4,030	4,460	5,830	2,420	1,440	1,050	------
17	4,130	4,800	5,790	2,370	1,420	1,060	------
18	4,260	5,020	5,750	2,330	1,390	1,060	------
19	4,380	5,140	5,710	2,280	1,370	1,060	------
20	4,480	5,170	5,640	2,230	1,350	1,060	------
21	4,570	5,190	5,590	2,170	1,320	1,050	------
22	4,670	5,210	5,540	2,110	1,300	1,050	------
23	4,740	5,320	5,430	2,060	1,270	1,040	------
24	4,840	5,530	5,340	2,000	1,250	1,030	------
25	4,900	5,580	5,240	1,950	1,250	1,020	------
26	4,900	5,630	5,120	1,900	1,240	1,000	------
27	4,960	5,640	5,010	1,850	1,220	988	------
28	5,000	5,660	4,930	1,820	1,190	988	------
29	5,010	5,690	4,780	1,780	1,170	974	------
30	4,990	5,720	4,630	1,740	1,150	957	------
31	5,000	------	4,520	------	1,150	941	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
August 14–31	5,010	3,820	4,590	2.91	1.95
September	5,720	4,460	5,040	3.19	3.56
October	5,830	4,520	5,520	3.49	4.02
November	4,420	1,740	2,760	1.75	1.95
December	1,710	1,150	1,440	.911	1.05
January	1,150	941	1,060	.671	.77
February 1–15	920	783	851	.539	.30

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, 1929.

EXTREMES.—Maximum discharge during year, about 12,600 second-feet Oct. 1, 5, and 6 (gage height, 18.5 feet); minimum, 332 second-feet June 8 (gage height, 3.40 feet).

1927–1929: Maximum discharge, that of Oct. 1, 5, and 6, 1928; minimum, 2.1 second-feet Nov. 16, 1927 (gage height, −0.46 foot).

REMARKS.—Records fair. Discharge estimated Oct. 15–28 and Nov. 14–20.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12,600	4,900	627	459	2,400	2,710	3,060	868	459	559	2,400	2,400
2	12,400	4,670	614	449	2,400	2,710	2,880	838	422	559	2,320	2,250
3	12,200	4,340	614	440	2,400	2,630	2,710	838	404	559	2,250	2,250
4	12,400	3,240	614	440	2,400	2,550	2,550	838	395	539	2,250	2,250
5	12,600	2,880	602	449	2,400	2,550	2,320	782	377	529	2,250	2,250
6	12,600	2,800	602	539	2,320	2,470	2,180	782	359	529	2,250	2,320
7	12,400	2,630	579	549	2,320	2,400	2,040	732	350	519	2,180	2,320
8	12,200	2,550	579	549	2,320	2,320	1,980	782	332	529	2,180	2,400
9	12,100	2,400	579	539	2,250	2,320	1,790	1,030	422	559	2,250	2,470
10	12,000	2,250	579	539	2,250	2,250	1,730	1,110	519	602	2,400	2,470
11	11,800	2,110	569	559	2,250	2,110	1,610	1,150	499	690	2,400	2,400
12	11,600	1,980	559	838	2,250	1,980	1,500	1,200	489	898	2,320	2,400
13	11,500	1,850	549	996	2,180	2,110	1,390	1,240	489	1,030	2,320	2,320
14	11,200	1,750	539	1,200	2,110	2,250	1,290	1,240	479	1,390	2,400	2,250
15	10,800	1,630	529	1,290	2,110	2,470	1,390	1,200	962	1,500	2,550	2,180
16	10,300	1,500	519	1,390	2,250	3,430	1,730	1,110	838	1,110	2,710	2,110
17	9,900	1,400	509	1,440	2,400	3,620	1,980	962	1,110	1,200	2,800	2,040
18	9,500	1,300	509	1,500	2,630	4,230	2,040	838	1,290	1,290	2,800	1,980
19	9,000	1,220	499	1,500	2,710	4,780	1,980	732	1,290	1,340	2,800	1,920
20	8,700	1,130	499	1,500	2,800	5,140	1,980	656	1,290	1,340	2,880	1,920
21	8,300	1,070	509	1,440	2,800	5,380	1,920	614	1,240	1,340	2,880	1,850
22	7,900	1,030	519	1,390	2,880	5,500	1,790	614	1,290	1,390	2,970	1,730
23	7,600	962	519	1,340	2,880	5,380	1,670	489	930	1,500	3,060	1,730
24	7,300	898	519	1,240	2,880	5,260	1,610	459	732	1,500	3,060	1,730
25	7,000	838	519	1,200	2,880	5,140	1,560	459	614	1,560	3,060	1,730
26	6,700	782	509	1,150	2,880	4,780	1,390	614	602	1,730	3,060	2,400
27	6,300	732	509	1,200	2,800	4,450	1,290	898	602	1,730	3,060	4,020
28	6,000	690	499	1,850	2,800	4,230	1,070	782	614	1,790	2,880	6,360
29	5,740	656	489	2,250	-------	3,820	962	614	602	1,850	2,470	8,100
30	5,380	627	499	2,400	-------	3,620	898	519	590	2,110	2,710	10,000
31	5,140	-------	469	2,400	-------	3,340	-------	469	-------	2,320	2,550	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	12,600	5,140	9,720	9.26	10.68
November	4,900	627	1,890	1.80	2.01
December	627	469	543	.517	.60
January	2,400	440	1,130	1.08	1.24
February	2,880	2,110	2,500	2.38	2.48
March	5,500	1,980	3,480	3.31	3.82
April	3,060	898	1,810	1.72	1.92
May	1,240	459	821	.783	.90
June	1,290	332	686	.653	.73
July	2,320	519	1,160	1.10	1.27
August	3,060	2,180	2,600	2.48	2.86
September	10,000	1,730	2,820	2.69	3.00
The year	12,600	332	2,440	2.32	31.51

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, 1929.

EXTREMES.—Maximum discharge during year, 20,600 second-feet Oct. 1 (gage height, 33.9 feet); minimum, 520 second-feet June 8 (gage height, 4.40 feet): 1906–1908, 1927–1929: Maximum discharge, 20,600 second-feet Sept. 30 and Oct. 1, 1928 (gage height, 33.9 feet; minimum, 12 second-feet June 5–8, 1927.

REMARKS.—Records good except those for Nov. 10–25, Feb. 27 to Mar. 7, Apr. 18 and 19, which were estimated.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20,600	5,650	874	582	4,060	5,150	7,700	1,570	976	908	2,960	4,280
2	20,300	5,120	874	582	4,060	5,000	7,470	1,570	840	874	3,100	4,060
3	19,900	4,550	874	550	3,980	4,800	6,980	1,960	774	942	3,250	4,020
4	18,500	4,130	874	550	3,910	4,600	6,520	1,820	710	1,540	3,280	4,130
5	18,000	3,800	874	520	3,910	4,450	6,030	1,740	806	1,460	3,250	3,980
6	17,600	3,540	874	678	3,950	4,250	5,420	2,240	582	1,180	3,140	3,840
7	17,400	3,280	874	1,010	4,020	4,100	4,810	2,200	550	1,120	3,180	3,610
8	16,900	3,180	874	976	4,100	3,950	4,130	1,960	520	2,020	3,390	3,690
9	16,700	3,100	840	908	3,980	3,910	3,610	1,820	550	2,560	3,470	3,840
10	16,400	3,000	840	942	4,020	3,870	3,180	1,990	710	2,240	3,840	3,910
11	16,200	2,890	840	1,040	4,170	3,840	2,810	2,060	908	2,020	4,280	3,870
12	16,000	2,740	806	1,260	4,430	3,800	2,530	2,020	840	1,960	4,130	3,840
13	15,000	2,560	806	1,600	4,360	3,650	2,490	2,020	742	1,880	3,980	3,760
14	14,400	2,450	806	1,820	4,360	3,470	2,380	1,990	678	1,880	4,360	3,690
15	13,500	2,310	774	2,100	4,210	3,320	2,460	1,960	678	1,820	4,930	3,540
16	13,200	2,200	710	2,100	3,980	5,120	4,130	1,920	1,040	1,820	5,040	3,470
17	12,400	2,100	678	2,130	4,510	6,560	4,280	1,820	1,540	2,740	5,230	3,610
18	11,800	1,960	678	2,200	5,040	6,560	4,200	1,680	1,740	3,210	5,230	3,470
19	11,000	1,780	678	2,200	5,080	6,790	3,900	1,540	1,740	2,890	5,190	3,250
20	10,400	1,680	646	2,170	5,040	7,050	3,690	1,400	1,680	2,460	5,420	3,030
21	10,400	1,600	646	2,130	5,000	7,430	3,540	1,360	1,640	2,240	5,570	2,850
22	10,100	1,460	646	2,100	5,270	7,820	3,390	1,260	1,740	2,170	5,420	2,670
23	9,670	1,290	646	2,020	5,570	8,190	3,250	1,120	1,680	2,170	5,230	2,490
24	9,190	1,180	646	1,990	5,570	8,720	3,030	1,040	1,460	2,380	5,040	2,420
25	8,470	1,040	646	1,960	5,570	8,920	2,820	908	1,260	2,490	5,000	2,380
26	7,980	1,010	614	1,960	5,570	8,620	2,560	840	1,120	2,490	5,570	2,490
27	7,590	976	614	1,920	5,550	9,070	2,280	1,320	1,080	2,530	5,570	4,810
28	7,170	942	582	2,460	5,400	9,070	2,060	2,100	1,040	2,600	5,270	7,090
29	6,750	908	582	3,500	-------	8,970	1,850	1,820	1,010	2,710	5,040	7,620
30	6,370	908	582	3,870	-------	8,670	1,710	1,460	976	2,820	4,660	8,140
31	6,070	-------	582	4,060	-------	8,470	-------	1,180	-------	2,960	4,430	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	20,600	6,070	13,100	6.06	6.99
November	5,650	908	2,440	1.13	1.26
December	874	582	738	.342	.39
January	4,060	520	1,740	.806	.93
February	5,570	3,910	4,600	2.13	2.22
March	9,070	3,320	6,070	2.81	3.24
April	7,700	1,710	3,840	1.78	1.99
May	2,240	840	1,670	.773	.89
June	1,740	520	1,050	.486	.54
July	3,210	874	2,100	.972	1.12
August	5,570	2,960	4,430	2.05	2.36
September	8,140	2,380	3,930	1.82	2.03
The year	20,600	520	3,810	1.76	23.96

SUWANNEE RIVER AT ELLAVILLE, FLA.

LOCATION.—Staff gage at old highway bridge at Ellaville, Madison County, 200 feet above Seaboard Air Line Railway trestle and 200 feet below mouth of Withlacoochee River.

DRAINAGE AREA.—6,840 square miles.

RECORDS AVAILABLE.—January, 1927, to September, 1929.

EXTREMES.—Maximum discharge during year, 43,500 second-feet Oct. 5 and 6 (gage height, 31.4 feet); minimum, 4,320 second-feet June 15 (gage height, 4.90 feet).

1927–1929: Maximum discharge, 73,000 second-feet Aug. 20, 1928 (gage height, 37.1 feet); minimum, 1,120 second-feet Dec. 1, 1927 (gage height 2.29 feet).

REMARKS.—Records good. Discharge interpolated Jan. 7, 9, and 11–13.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40,500	15,900	6,100	5,360	12,200	17,300	28,000	8,300	5,470	6,000	7,660	10,400
2	41,500	14,900	6,000	5,140	12,600	16,900	26,200	8,060	5,250	6,000	7,820	10,300
3	42,500	14,200	6,000	5,030	13,100	16,000	24,200	8,060	5,140	6,000	7,980	10,000
4	43,000	13,500	6,000	4,920	13,300	15,900	22,500	8,060	5,030	6,300	8,060	9,730
5	43,500	12,700	6,000	4,800	13,600	15,800	20,800	8,780	4,920	6,780	8,220	9,460
6	43,200	12,200	5,900	4,800	13,500	15,600	19,200	8,780	4,800	6,780	8,220	9,280
7	43,000	11,600	5,900	4,970	13,200	15,600	17,600	8,460	4,800	6,600	8,140	9,190
8	42,500	11,000	5,800	5,140	12,700	15,600	16,300	8,460	4,800	6,500	8,060	9,100
9	41,800	10,600	5,690	5,200	12,200	15,300	15,100	8,380	4,680	6,870	8,060	8,940
10	41,000	10,400	5,580	5,250	11,900	15,200	13,800	8,380	4,680	7,140	8,220	8,860
11	39,800	10,000	5,470	5,700	12,000	15,100	12,800	8,380	4,680	7,320	8,620	8,780
12	38,800	9,640	5,470	6,200	12,200	14,900	11,900	8,380	4,680	7,500	8,700	8,620
13	37,200	9,370	5,470	6,600	12,200	14,600	11,200	8,300	4,560	7,660	8,860	8,460
14	36,500	9,100	5,360	7,050	12,000	14,400	10,600	8,220	4,440	7,660	9,020	8,380
15	35,700	8,780	5,250	7,410	11,900	14,200	10,600	8,140	4,320	7,580	9,640	8,220
16	34,600	8,460	5,140	7,580	12,000	15,900	11,800	8,060	4,440	7,500	10,100	8,140
17	33,600	8,300	5,030	7,740	12,500	19,000	12,600	7,900	4,680	7,500	10,400	8,060
18	32,300	8,220	5,030	7,820	13,300	20,800	12,800	7,660	4,920	7,660	10,800	7,980
19	31,200	8,140	4,920	7,980	14,900	22,400	12,800	7,320	5,140	8,060	11,000	7,900
20	30,000	7,820	4,800	8,140	15,600	23,800	12,500	7,140	5,140	8,220	11,200	7,740
21	28,500	7,660	4,800	8,140	16,000	26,400	12,200	6,960	5,360	8,220	11,400	7,660
22	27,400	7,410	5,030	8,380	16,500	28,000	12,000	6,780	5,580	8,220	11,400	7,320
23	26,200	7,230	5,140	8,460	16,700	29,800	11,600	6,600	5,800	8,220	11,200	7,230
24	24,900	7,050	5,250	8,460	16,900	30,900	11,200	6,400	6,000	8,220	11,200	7,050
25	23,800	6,960	5,360	8,460	17,200	31,800	10,800	6,300	5,900	8,140	11,200	7,140
26	22,500	6,690	5,470	8,460	17,400	32,700	10,300	5,800	5,900	8,060	11,200	7,820
27	21,400	6,600	5,470	8,620	17,600	33,200	9,730	5,800	5,900	7,980	11,900	8,300
28	20,200	6,400	5,580	8,940	17,600	32,900	9,280	6,000	6,000	7,740	12,100	9,820
29	19,000	6,300	5,580	9,910	-------	31,900	9,020	6,200	6,100	7,660	12,000	11,400
30	18,000	6,200	5,580	10,800	-------	31,000	8,620	6,100	6,000	7,580	11,400	12,600
31	16,900	-------	5,470	11,600	-------	29,600	-------	5,800	-------	7,580	11,000	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	43,500	16,900	32,900	4.81	5.54
November	15,900	6,200	9,440	1.38	1.54
December	6,100	4,800	5,470	.800	.92
January	11,600	4,800	7,200	1.05	1.21
February	17,600	11,900	14,000	2.05	2.14
March	33,200	14,200	21,700	3.17	3.66
April	28,000	8,620	14,300	2.09	2.33
May	8,780	5,800	7,480	1.09	1.26
June	6,100	4,320	5,170	.756	.84
July	8,220	6,000	7,400	1.08	1.24
August	12,100	7,660	9,830	1.44	1.66
September	12,600	7,050	8,800	1.29	1.44
The year	43,500	4,320	12,000	1.75	23.78

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 1929.

EXTREMES.—Maximum discharge during year, 39,800 second-feet Oct. 8 (gage height, 28.8 feet); minimum, 5,650 second-feet June 9–19 (gage height, 6.00 feet).

1927–1929: Maximum discharge, about 66,000 second-feet Aug. 24, 1928 (gage height, 33.7 feet); minimum, 1,630 second-feet Dec. 5, 1927 (gage height, 1.70 feet).

REMARKS.—Records good below 10,000 second-feet and fair above.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32,700	19,500	7,770	6,450	11,500	17,400	26,400	10,300	6,670	6,560	8,100	11,700
2	33,700	18,500	7,660	6,250	12,800	17,200	25,600	9,930	6,450	6,450	8,100	11,500
3	34,700	17,800	7,550	6,150	13,000	17,000	24,800	9,690	6,350	6,450	8,210	11,100
4	35,900	17,200	7,550	6,050	13,400	16,800	23,800	9,570	6,250	6,450	8,430	10,900
5	37,300	16,400	7,550	6,050	13,700	16,700	22,600	9,570	6,050	6 890	8,540	10,600
6	38,000	15,900	7,330	5,950	13,800	16,400	21,400	9,570	5,950	7.110	8,650	10,500
7	39,000	15,100	7,330	5,950	13,900	16,400	20,200	9,690	5,850	7.110	8,650	10,300
8	39,800	14,600	7,220	6,050	13,800	16,400	19,200	9,690	5,750	7.110	8,540	10,200
9	39,400	14,100	7,110	6,050	13,500	16,300	18,100	9,810	5,650	7.110	8,540	9,930
10	39,000	13,700	7,110	6,050	13,300	16,100	16,700	9,690	5,650	7.330	8,540	9,810
11	38,000	13.300	7,000	6,150	13,200	16,000	16,100	9,690	5,650	7.440	8,760	9,810
12	37,000	12,800	6,890	6,350	13,300	15,900	15,200	9,690	5,650	7,660	8,980	9,570
13	35,900	12,500	6,890	6,670	13,300	15,800	14,400	9,570	5,650	7,880	9,210	9,450
14	34,700	12,000	6,780	7,220	13,300	15,600	13,700	9,450	5,650	7,990	9,330	9,210
15	33,700	11,600	6,670	7,550	13,200	15,400	13,400	9,330	5,650	7,990	9,570	9,090
16	32,500	11,200	6,560	7,880	13,200	15,500	13,500	9,210	5,650	7,990	10,000	8,980
17	31,900	11,000	6,450	8,100	13,300	16,700	12,900	9,090	5,650	7,880	10,500	8,870
18	31,300	10,600	6,450	8,320	13,800	18,100	14,600	8,980	5,650	7,990	10,900	8,760
19	30,400	10,300	6,350	8,430	14,600	19,200	14,700	8,760	5,650	8,210	11,200	8,760
20	29,600	10,000	6,250	8,650	15,100	20,200	14,600	8,320	5,750	8,430	11,500	8,540
21	28,900	9,810	6,250	8,760	15,600	21,200	14,600	8,100	5,950	8,540	11,700	8,320
22	28,200	9,450	6,150	8,870	16,000	22,300	14,200	7,990	6,050	8,650	11,800	8,210
23	27,200	9,090	6,250	9,090	16,100	23,500	13,900	7,770	6,250	8,650	12,000	8,100
24	26,500	8,980	6,250	9,090	16,400	24,400	13,500	7,550	6,450	8,650	12,000	7,880
25	25,300	8,760	6,350	9,090	16,700	25,200	13,200	7,330	6,450	8,650	12,000	7,660
26	24,600	8,650	6,450	9,090	16,700	25,900	12,800	7,000	6,450	8,650	12,000	7,880
27	23,800	8,430	6,450	9,210	17,000	26,500	12,200	6,890	6,450	8,540	12,200	8,320
28	22,900	8,210	6,450	9,450	17,400	27,000	11,700	6,890	6,450	8,430	12,600	7,990
29	22,000	7,990	6,450	9,930	-------	27,200	11,200	7,000	6,450	8,210	12,600	10,300
30	21,200	7,990	6,450	9,570	-------	27,200	10,600	7,000	6,560	8,100	12,500	11,600
31	20,300	-------	6,450	10,300	-------	27,000	-------	6,890	-------	8,100	12,100	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	39,800	20,300	31,500	4.28	4.93
November	19,500	7,990	12,200	1.66	1.85
December	7,770	6,150	6,790	.923	1.06
January	10,300	5,950	7,700	1.05	1.21
February	17,400	11,500	14,300	1.94	2.02
March	27,200	15,400	19,800	2.69	3.10
April	26,400	10,600	16,300	2.21	2.47
May	10,300	6,890	8,710	1.18	1.36
June	6,670	5,650	6,020	.818	.91
July	8,650	6,450	7,780	1.06	1.22
August	12,600	8,100	10,200	1.39	1.60
September	11,700	7,660	9,460	1.29	1.44
The year	39,800	5,650	12,600	1.71	23.17

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, 1929.

EXTREMES.—Maximum discharge during year, 14,200 second-feet Mar. 22 (gage height, 28.68 feet); minimum, 245 second-feet Sept. 18 (gage height, 6.72 feet).

A stage of 29.12 feet occurred May 1, 1928 (discharge, 15,100 second-feet).

REMARKS.—Records good except those for Sept. 19–30, which are fair.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,970	630	330	580	4,010	3,810	3,260	605	330	420	680	470
2	5,970	580	360	530	3,730	3,730	2,860	710	360	450	680	470
3	5,490	555	345	490	3,490	3,730	2,520	800	330	510	630	470
4	4,980	510	345	470	3,260	3,810	2,290	655	420	530	710	450
5	4,690	490	375	470	3,020	3,930	2,110	630	470	470	770	390
6	4,610	490	390	510	2,830	3,930	1,970	655	420	420	800	375
7	4,690	470	375	470	2,630	3,850	1,820	800	345	530	770	375
8	4,810	530	390	435	2,480	3,850	1,720	920	300	580	800	375
9	5,020	510	405	470	2,370	3,930	1,580	1,180	285	630	800	360
10	5,150	490	420	580	2,480	4,170	1,440	1,140	300	740	800	330
11	5,060	530	435	680	2,440	4,330	1,310	1,270	315	890	770	300
12	4,810	510	450	984	2,290	4,330	1,140	1,440	300	952	770	285
13	4,370	470	470	1,110	2,180	4,570	1,080	1,510	285	860	830	275
14	3,850	450	470	1,140	2,180	3,930	1,080	1,580	275	655	952	275
15	3,370	450	450	1,180	2,330	3,970	1,210	1,550	275	605	1,050	275
16	2,940	450	450	1,180	2,940	5,290	1,310	1,480	285	555	1,050	420
17	2,630	435	435	1,240	3,610	5,340	1,340	1,020	300	860	1,080	265
18	2,330	420	420	1,310	3,730	5,340	1,440	770	330	1,380	1,110	245
19	2,040	405	405	1,410	3,690	5,290	1,480	630	375	1,790	1,020	255
20	1,790	375	390	1,480	3,610	5,200	1,380	555	470	1,550	1,050	315
21	1,580	360	435	1,620	3,450	6,380	1,310	510	530	1,140	1,210	300
22	1,410	345	450	1,720	3,450	13,400	1,210	490	605	952	1,380	315
23	1,310	330	510	1,790	3,530	13,800	1,110	450	580	770	1,550	375
24	1,270	330	580	1,900	3,650	12,600	1,020	435	510	740	1,550	435
25	1,180	330	655	2,000	3,810	10,600	920	495	450	740	1,580	470
26	1,080	330	680	2,290	3,850	9,130	800	390	450	630	1,970	490
27	952	315	680	2,670	3,890	7,850	680	375	405	555	1,380	830
28	860	330	710	3,410	3,890	6,620	630	360	420	580	1,140	1,860
29	770	330	680	3,890	------	5,540	580	360	405	510	860	2,110
30	710	330	655	4,130	------	4,450	555	330	405	555	630	2,370
31	655	------	630	4,170	------	3,850	------	345	------	580	530	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	5,970	655	3,110	2.39	2.76
November	630	315	436	.335	.37
December	710	330	477	.367	.42
January	4,170	435	1,490	1.15	1.33
February	4,010	2,180	3,170	2.44	2.54
March	13,800	3,730	5,820	4.48	5.16
April	3,260	555	1,440	1.11	1.24
May	1,580	330	785	.604	.70
June	605	275	384	.295	.33
July	1,790	420	746	.574	.66
August	1,970	530	997	.767	.88
September	2,370	245	551	.424	.47
The year	13,800	245	1,620	1.25	16.86

WITHLACOOCHEE RIVER AT BLUE SPRINGS, GA.

LOCATION.—Chain gage at highway bridge on Valdosta-Quitman road 500 feet downstream from Atlantic Coast Line Railroad bridge, a quarter of a mile east of Blue Springs, Brooks County, and 3 miles above mouth of Piscola Creek.

DRAINAGE AREA.—1,500 square miles.

RECORDS AVAILABLE.—October, 1920, to March, 1921[1]; September, 1928, to September, 1929.

EXTREMES.—Maximum discharge during year, 23,600 second-feet Mar. 20 (gage height, 29.8 feet); minimum, 45 second-feet June 2 (gage height, 7.02 feet). A stage of 33.34 feet occurred Aug. 17, 1928 (discharge, 42,200 second-feet).

REMARKS.—Records good below 10,000 second-feet and fair above.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8,700	390	225	765	3,940	2,820	1,770	255	55	1,400	905	975
2	8,500	360	420	660	4,210	2,450	1,570	240	45	1,400	1,040	905
3	7,670	330	420	555	4,400	2,290	1,400	360	96	1,430	1,290	695
4	7,060	315	390	485	4,260	2,330	1,220	450	90	1,400	1,460	625
5	6,540	300	450	450	3,850	2,490	1,080	555	85	1,290	1,400	555
6	6,030	300	485	555	3,130	2,610	905	765	300	1,150	1,150	590
7	5,450	255	485	555	2,450	2,770	870	835	420	1,040	870	625
8	4,850	485	485	625	1,970	2,860	765	870	420	1,010	695	590
9	4,120	625	520	835	1,570	2,860	730	1,120	375	1,120	590	555
10	3,180	520	485	1,010	1,970	2,820	660	1,040	360	1,360	625	555
11	2,410	590	520	1,040	2,210	2,690	590	1,080	300	1,570	660	520
12	1,930	485	485	1,360	2,210	2,530	590	870	270	1,730	835	390
13	1,650	485	450	1,610	2,130	2,290	555	730	315	1,610	660	300
14	1,460	390	450	1,810	2,090	2,050	555	695	345	1,460	975	255
15	1,400	420	390	1,890	2,290	1,850	625	730	270	1,430	1,460	270
16	1,400	390	345	1,930	2,900	4,450	1,290	730	198	1,290	1,930	300
17	1,460	360	390	2,010	4,260	4,450	1,360	590	162	1,180	2,050	330
18	1,320	315	315	2,130	4,450	4,850	1,460	420	162	1,010	2,050	300
19	1,150	285	285	2,290	4,500	10,800	1,540	300	330	1,120	2,010	390
20	1,010	270	285	2,370	4,400	23,600	1,570	240	555	1,360	1,850	520
21	905	204	520	2,410	4,260	18,600	1,570	300	800	1,690	1,500	420
22	835	240	730	2,370	4,450	12,800	1,500	255	1,080	1,850	1,430	420
23	905	225	835	2,290	4,600	9,460	1,320	210	975	1,610	1,540	555
24	1,080	225	905	2,250	4,800	7,930	1,120	162	835	1,180	1,650	590
25	1,040	255	975	2,210	4,850	6,780	905	132	870	940	1,650	1,540
26	905	240	1,040	2,290	4,650	5,760	730	120	940	835	2,650	1,650
27	765	240	1,080	2,330	4,160	4,700	555	108	1,040	695	2,210	1,610
28	660	225	1,120	3,260	3,490	3,670	420	102	1,180	625	1,810	3,760
29	555	225	1,080	3,310	-------	2,860	345	80	1,260	660	1,360	3,760
30	485	240	975	3,490	-------	2,410	300	65	1,360	695	1,120	3,940
31	390	-------	870	3,670	-------	2,010	-------	55	-------	800	940	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	8,700	390	2,770	1.85	2.13
November	625	204	340	.227	.25
December	1,120	225	594	.396	.46
January	3,670	450	1,770	1.18	1.36
February	4,850	1,570	3,520	2.35	2.45
March	23,600	1,850	5,250	3.50	4.04
April	1,770	300	996	.664	.74
May	1,120	55	467	.311	.36
June	1,360	45	516	.344	.38
July	1,850	625	1,220	.813	.94
August	2,650	590	1,370	.913	1.05
September	3,940	255	950	.633	.71
The year	23,600	45	1,640	1.09	14.87

[1] Published as Withlacoochee River near Ousley, Ga.

SANTA FE RIVER NEAR FORT WHITE, FLA.

LOCATION.—Staff gage 2 miles upstream from Willeford-Fort White highway bridge and 4 miles south of Fort White, Columbia County.

DRAINAGE AREA.—1,270 square miles.

RECORDS AVAILABLE.—October, 1927, to September, 1929.

EXTREMES.—Maximum discharge during year, about 4,530 second-feet Oct. 8–10 (gage height, 8.4 feet); minimum, 1,300 second-feet June 6–8 and 10–12 (gage height, 1.34 feet).

1927–1929: Maximum discharge, about 4,750 second-feet Aug. 27–29, 1928 (gage height, 9.5 feet); minimum, 900 second-feet Feb. 9–13 and 15–24, 1928 (gage height, 0.72 foot).

REMARKS.—Records good below 2,000 second-feet and fair above. Backwater effect from Suwannee River during high stages on that stream.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,450	3,300	1,700	1,450	1,960	1,960	2,860	1,620	1,370	1,530	2,140	2,520
2	4,450	3,200	1,700	1,450	1,880	2,050	2,860	1,620	1,370	1,450	2,140	2,440
3	4,470	3,100	1,700	1,450	1,880	2,050	2,800	1,620	1,370	1,530	2,140	2,370
4	4,490	2,980	1,700	1,450	1,880	2,140	2,730	1,620	1,370	1,530	2,050	2,370
5	4,490	2,860	1,700	1,530	1,880	2,220	2,590	1,620	1,370	1,530	2,050	2,300
6	4,490	2,730	1,700	1,530	1,880	2,220	2,520	1,530	1,300	1,530	1,960	2,300
7	4,510	2,660	1,700	1,530	1,790	2,300	2,300	1,620	1,300	1,530	1,880	2,300
8	4,530	2,590	1,700	1,700	1,790	2,220	2,140	1,620	1,300	1,530	1,880	2,370
9	4,530	2,520	1,700	1,790	1,790	2,220	2,050	1,620	1,370	1,530	1,790	2,440
10	4,530	2,440	1,700	1,880	1,790	2,220	1,880	1,620	1,300	1,530	1,790	2,520
11	4,510	2,370	1,620	2,050	1,700	2,140	1,700	1,620	1,300	1,530	1,880	2,660
12	4,470	2,300	1,620	2,140	1,700	2,140	1,620	1,530	1,300	1,530	1,960	2,800
13	4,470	2,300	1,620	2,300	1,700	2,050	1,620	1,530	1,370	1,530	2,050	2,920
14	4,420	2,220	1,620	2,370	1,700	2,050	1,530	1,530	1,450	1,530	2,220	2,920
15	4,380	2,140	1,620	2,590	1,620	1,960	1,700	1,450	1,370	1,530	2,370	2,920
16	4,320	2,140	1,620	2,660	1,790	1,960	1,620	1,450	1,370	1,530	2,520	2,920
17	4,280	2,050	1,620	2,660	1,700	1,960	1,620	1,450	1,370	1,530	2,660	2,800
18	4,250	2,050	1,620	2,660	1,700	1,960	1,790	1,450	1,370	1,530	2,920	2,730
19	4,200	1,960	1,620	2,660	1,700	2,050	1,880	1,450	1,370	1,530	3,040	2,660
20	4,150	1,960	1,530	2,590	1,790	2,140	1,960	1,450	1,450	1,530	3,100	2,660
21	4,100	1,880	1,530	2,520	1,880	2,220	2,050	1,450	1,450	1,530	3,040	2,590
22	4,020	1,880	1,530	2,440	1,880	2,300	2,050	1,450	1,450	1,620	3,040	2,590
23	4,000	1,880	1,530	2,370	1,880	2,370	2,050	1,370	1,450	1,790	3,040	2,520
24	3,920	1,880	1,530	2,300	1,960	2,440	1,960	1,370	1,370	1,880	3,040	2,440
25	3,830	1,790	1,530	2,220	2,050	2,520	1,960	1,370	1,370	2,050	3,100	2,660
26	3,770	1,790	1,530	2,220	2,050	2,590	1,960	1,370	1,450	2,140	3,160	2,660
27	3,740	1,790	1,530	2,140	2,050	2,660	1,880	1,370	1,450	2,220	3,040	2,800
28	3,650	1,700	1,530	2,050	2,050	2,730	1,790	1,370	1,530	2,300	2,980	2,920
29	3,540	1,700	1,530	2,050	-------	2,800	1,700	1,370	1,450	2,300	2,860	3,430
30	3,470	1,700	1,450	1,960	-------	2,860	1,700	1,370	1,530	2,220	2,730	3,770
31	3,390	-------	1,450	1,960	-------	2,860	-------	1,370	-------	2,220	2,660	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	4,530	3,390	4,190	3.30	3.80
November	3,300	1,700	2,260	1.78	1.99
December	1,700	1,450	1,610	1.27	1.46
January	2,660	1,450	2,090	1.65	1.90
February	2,050	1,620	1,840	1.45	1.51
March	2,860	1,960	2,270	1.79	2.06
April	2,860	1,530	2,030	1.60	1.78
May	1,620	1,370	1,490	1.17	1.35
June	1,530	1,300	1,390	1.09	1.22
July	2,300	1,450	1,700	1.34	1.54
August	3,160	1,790	2,490	1.96	2.26
September	3,770	2,300	2,680	2.11	2.35
The year	4,530	1,300	2,170	1.71	23.22

OCHLOCKONEE RIVER BASIN

OCHLOCKONEE RIVER NEAR HAVANA, FLA.

LOCATION.—Chain gage at bridge on State Highway No. 1 three-fourths 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, 1929.
EXTREMES.—Maximum discharge during period, 14,200 second-feet Mar. 19 (gage height, 30.3 feet); minimum, 175 second-feet June 12–15 (gage height, 12.8 feet).
REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928–29

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-------	618	2,500	1,380	1,440	485	225	1,650	618	1,010
2	-------	573	2,540	1,350	1,290	465	225	1,650	664	835
3	-------	529	2,540	1,470	1,160	425	225	1,650	687	860
4	-------	485	2,230	1,590	1,160	405	215	1,530	1,040	835
5	-------	485	1,950	1,710	1,080	835	205	1,350	985	835
6	-------	551	1,560	1,620	1,060	1,140	205	1,180	885	885
7	-------	760	1,380	1,530	985	1,410	205	960	687	835
8	-------	960	1,260	1,470	910	1,530	215	1,160	664	760
9	-------	1,080	1,210	1,410	860	1,320	255	1,350	664	885
10	-------	1,110	1,470	1,350	835	1,080	235	1,650	664	860
11	-------	1,080	1,620	1,260	760	910	195	1,860	1,010	835
12	485	1,160	1,680	1,210	710	1,010	175	2,120	1,680	664
13	465	1,320	1,620	1,160	710	1,010	175	2,340	1,980	507
14	465	1,500	1,560	1,180	810	910	175	2,230	2,260	465
15	445	1,620	1,530	1,530	1,410	785	175	1,860	2,300	465
16	445	1,680	1,710	2,300	1,710	664	255	1,530	2,260	445
17	445	1,770	1,860	2,940	1,650	551	255	1,590	2,230	465
18	445	1,740	1,980	5,580	1,680	465	235	1,160	2,230	465
19	445	1,740	2,120	12,700	1,680	465	255	1,240	2,120	507
20	445	1,740	2,160	12,700	1,620	445	465	1,260	2,420	760
21	641	1,680	2,200	7,440	1,500	425	573	1,240	2,540	687
22	710	1,650	2,160	6,120	1,320	445	810	1,080	2,710	735
23	910	1,560	2,230	5,580	1,080	425	810	960	2,940	664
24	960	1,470	2,200	4,530	960	365	687	860	3,040	595
25	1,010	1,380	2,060	3,960	860	345	735	710	2,980	551
26	1,010	1,240	1,890	3,460	760	330	1,010	618	2,460	445
27	985	1,180	1,590	2,800	641	285	1,140	551	2,260	664
28	960	1,380	1,260	2,300	618	285	1,500	595	1,590	885
29	785	1,860	-------	1,950	507	265	1,560	618	1,320	760
30	710	2,090	-------	1,800	485	255	1,560	573	1,050	1,290
31	664	2,300	-------	1,620	-------	225	-------	595	1,010	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
December 12–31	1,010	445	672	0.659	0.49
January	2,300	485	1,300	1.27	1.46
February	2,540	1,210	1,860	1.82	1.90
March	12,700	1,160	3,190	3.13	3.61
April	1,710	485	1,080	1.06	1.18
May	1,530	225	644	.631	.73
June	1,560	175	498	.488	.54
July	2,340	551	1,280	1.25	1.44
August	3,040	618	1,680	1.65	1.90
September	1,290	445	715	.701	.78

OCHLOCKONEE RIVER AT OCHLOCKONEE, FLA.

LOCATION.—Staff gage at highway bridge 100 feet upstream from Seaboard Air Line Railway bridge and half a mile west of Ochlockonee, Leon County.
DRAINAGE AREA.—1,050 square miles.
RECORDS AVAILABLE.—June, 1926, to December, 1929 (discontinued).
EXTREMES.—Maximum discharge during period, 12,900 second-feet Mar. 20 (gage height, 26.38 feet); minimum, 135 second-feet June 13 and 14 (gage height, 10.2 feet).
1926–1929: Maximum discharge, 18,800 second-feet Aug. 19, 1928 (gage height, 29.0 feet); minimum, 27 second-feet June 5, 1927 (gage height, 8.62 feet).
REMARKS.—Records good.

Daily discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1928-29												
1	2,720	596	359	558	2,350	1,380	1,440	429	189	1,640	596	999
2	3,080	577	393	520	2,500	1,310	1,240	411	177	1,680	596	799
3	3,510	539	465	465	2,550	1,340	1,210	429	189	1,740	596	799
4	4,130	520	520	447	2,500	1,460	1,160	465	165	1,560	736	842
5	4,550	520	558	429	1,970	1,560	1,070	501	155	1,210	930	799
6	4,330	520	615	501	1,800	1,580	1,020	1,020	145	1,310	886	864
7	3,760	501	635	596	1,480	1,510	886	1,260	155	976	715	778
8	3,360	635	615	778	1,340	1,460	799	1,380	165	1,120	715	757
9	2,550	695	577	953	1,160	1,410	799	1,380	177	1,310	635	736
10	2,130	715	520	1,020	1,260	1,360	715	1,160	189	1,640	778	799
11	2,220	695	483	999	1,460	1,260	655	842	177	1,860	976	799
12	2,450	695	483	1,040	1,580	1,190	615	908	155	2,170	1,380	736
13	2,500	675	447	1,210	1,620	1,090	558	908	135	2,350	1,740	539
14	2,090	615	411	1,340	1,540	1,120	520	864	135	2,450	1,800	465
15	1,860	558	393	1,460	1,460	1,560	1,160	736	155	2,220	2,350	447
16	1,540	483	375	1,560	1,560	2,220	2,450	615	189	2,170	2,500	447
17	1,860	483	359	1,640	1,740	2,770	1,800	501	189	1,410	2,500	447
18	1,700	447	359	1,740	1,860	3,360	1,680	429	189	1,260	2,500	375
19	1,540	429	359	1,940	2,010	10,200	1,620	411	201	1,260	2,400	447
20	1,540	429	375	1,760	2,130	12,900	1,560	411	327	1,280	2,500	539
21	1,440	411	447	1,640	2,220	10,500	1,440	411	465	1,240	2,550	558
22	1,410	393	558	1,560	2,300	8,570	1,310	393	558	1,140	2,660	635
23	1,460	411	715	1,480	2,260	7,130	1,120	375	655	976	3,210	558
24	1,410	447	799	1,440	2,260	5,990	930	343	736	842	3,510	465
25	1,260	501	864	1,340	2,220	5,090	799	311	799	757	3,510	483
26	1,090	483	886	1,280	2,010	4,130	655	295	908	675	3,680	483
27	976	429	864	1,190	1,700	3,360	596	281	1,020	596	2,720	596
28	930	411	799	1,680	1,480	2,720	520	253	1,140	655	2,350	757
29	842	393	715	1,760	-------	2,220	483	225	1,140	635	1,460	953
30	715	375	615	1,900	-------	1,860	447	213	1,380	465	1,310	1,120
31	655	-------	596	2,130	-------	1,620	-------	201	-------	558	999	-------

Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.
1929				1929				1929			
1	2,300	447	736	11	2,770	311	908	21	558	267	520
2	2,400	429	757	12	2,300	327	864	22	558	253	577
3	2,500	375	757	13	1,560	635	864	23	596	281	596
4	2,890	375	757	14	999	539	736	24	736	359	778
5	3,680	359	799	15	930	520	577	25	695	447	1,120
6	3,940	343	842	16	799	501	736	26	655	539	1,260
7	4,800	327	886	17	778	465	520	27	635	635	1,280
8	4,800	311	886	18	655	393	483	28	577	736	1,340
9	4,330	295	886	19	596	281	501	29	539	757	1,360
10	3,680	281	886	20	558	267	501	30	501	778	1,360
								31	465	-------	1,340

Monthly discharge, in second-feet, of Ochlockonee River at Ochlockonee, Fla., 1928–29

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
1928–29					
October	4,550	655	2,120	2.02	2.33
November	715	375	519	.494	.55
December	886	359	554	.528	.61
January	2,130	429	1,240	1.18	1.36
February	2,550	1,160	1,870	1.78	1.85
March	12,900	1,090	3,390	3.23	3.72
April	2,450	447	1,040	.99	1.10
May	1,380	201	592	.564	.65
June	1,380	135	412	.392	.44
July	2,450	465	1,330	1.27	1.46
August	3,680	596	1,800	1.71	1.97
September	1,120	375	667	.635	.71
The year	12,900	135	1,300	1.24	16.75
1929					
October	4,800	465	1,730	1.65	1.90
November	778	253	428	.408	.47
December	1,360	483	852	.811	.94

OCHLOCKONEE RIVER NEAR BLOXHAM, FLA.

LOCATION.—Staff gage at highway bridge on Tallahassee-Bristol highway 1 mile west of Bloxham, Leon County.

DRAINAGE AREA.—1,660 square miles.

RECORDS AVAILABLE.—June, 1926, to September, 1929.

EXTREMES.—Maximum discharge during year, 10,400 second-feet Mar. 22 (gage height, 17.61 feet); no flow Sept. 20–22.

1926–1929: Maximum discharge, 19,900 second-feet Aug. 19, 1928 (gage height, 21.4 feet); no flow Sept. 20–22, 1929.

REMARKS.—Records fair. Some regulation caused by construction of dam just above gage. Dam closed June 4–17 and Sept. 20–22, 1929.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,520	1,350	962	1,120	3,020	2,170	2,330	962	550	3,170	1,350	1,770
2	3,520	1,290	1,200	1,070	3,020	2,020	2,100	988	530	2,880	1,230	1,670
3	3,520	1,290	1,290	1,040	3,020	1,910	1,840	1,090	530	2,620	1,230	1,570
4	3,580	1,230	1,260	988	3,020	1,870	1,700	1,070	430	2,450	1,260	1,410
5	3,880	1,230	1,230	962	2,980	1,950	1,570	1,010	210	2,450	1,290	1,470
6	4,120	1,200	1,260	1,070	2,880	2,020	1,500	1,350	190	2,450	1,320	1,540
7	4,330	1,170	1,260	1,230	2,660	2,060	1,380	1,730	94	2,450	1,320	1,440
8	4,260	1,570	1,230	1,380	2,330	2,020	1,290	1,950	50	2,330	1,320	1,500
9	4,260	1,800	1,170	1,440	2,020	1,950	1,230	2,060	46	2,330	1,410	1,500
10	3,760	1,730	1,120	1,440	2,100	1,840	1,200	2,130	48	2,250	1,670	1,410
11	3,120	1,570	1,070	1,470	2,290	1,770	1,230	1,980	48	2,020	1,730	1,260
12	2,840	1,440	1,010	1,730	2,370	1,670	1,200	1,800	46	2,170	1,670	1,170
13	2,840	1,350	988	1,950	2,330	1,670	1,140	1,350	46	2,330	1,640	1,090
14	2,880	1,290	962	2,020	2,290	1,770	1,140	1,290	42	2,450	1,730	1,010
15	2,840	1,230	962	2,060	2,210	2,100	2,570	1,230	38	2,660	1,980	962
16	3,820	1,170	936	2,130	2,170	3,270	4,260	1,140	38	2,840	2,250	766
17	6,620	1,120	910	2,210	2,370	3,820	4,470	1,010	38	3,070	2,490	78
18	5,890	1,070	910	2,290	2,490	4,260	4,000	910	1,350	3,320	2,620	38
19	4,820	1,070	936	2,330	2,530	4,750	3,320	838	1,570	3,640	2,660	26
20	4,260	1,040	936	2,370	2,620	6,620	2,880	814	1,380	3,320	2,750	0
21	3,940	1,070	1,170	2,410	2,660	10,100	2,570	910	1,170	2,980	2,930	0
22	3,520	1,040	1,350	2,330	2,750	10,300	2,370	962	1,090	3,320	3,470	0
23	3,270	1,010	1,380	2,210	2,700	9,720	2,130	862	1,350	3,170	3,520	270
24	3,120	1,010	1,410	2,100	2,660	8,620	1,840	814	1,320	2,330	3,470	1,040
25	2,660	1,010	1,440	2,020	2,660	7,520	1,570	766	1,320	1,870	3,520	1,090
26	2,330	1,010	1,440	1,910	2,620	6,430	1,350	718	1,800	1,700	3,470	1,120
27	1,980	1,010	1,410	1,870	2,530	5,380	1,170	694	2,100	1,540	3,580	1,230
28	1,800	988	1,350	2,370	2,410	4,470	1,070	670	2,290	1,410	3,640	1,950
29	1,670	962	1,290	2,840	-------	3,760	1,010	630	2,490	1,570	3,120	2,100
30	1,540	962	1,230	3,020	-------	3,120	1,010	570	3,220	1,600	2,620	2,250
31	1,440	-------	1,170	3,020	-------	2,750	-------	550	-------	1,470	2,130	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	6,620	1,440	3,420	2.06	2.38
November	1,800	962	1,210	.729	.81
December	1,440	910	1,170	.705	.81
January	3,020	962	1,880	1.13	1.30
February	3,020	2,020	2,560	1.54	1.60
March	10,300	1,670	3,990	2.40	2.77
April	4,470	1,010	1,950	1.17	1.30
May	2,130	550	1,120	.675	.78
June	3,220	38	847	.510	.57
July	3,820	1,410	2,470	1.49	1.72
August	3,640	1,230	2,270	1.37	1.58
September	2,250	0	1,090	.657	.73
The year	10,300	0	2,000	1.20	16.35

APALACHICOLA RIVER BASIN

CHATTAHOOCHEE RIVER NEAR VININGS, GA.

LOCATION.—Water-stage recorder at highway bridge 1 mile southeast of Vinings, Cobb County, and 2½ miles above Peach Tree Creek.

DRAINAGE AREA.—1,450 square miles.

RECORDS AVAILABLE.—August, 1928, to September, 1929.

EXTREMES.—Maximum discharge during year, 28,700 second-feet Sept. 28 (gage height, 18.84 feet); minimum, 958 second-feet Aug. 29 (gage height, 2.48 feet).

1928–29: Maximum and minimum discharges, those of 1929.

REMARKS.—Records good except those for estimated periods, which are fair. Flow regulated by power plants upstream.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,590	a 1,650	1,530	1,260	a 2,300	20,300	5,400	a 15,000	5,580	4,440	13,300	1,300
2	1,590	a 1,680	1,960	1,420	a 2,200	12,800	5,230	a 17,000	6,630	4,000	6,630	1,290
3	1,650	a 1,700	1,590	1,840	a 2,150	5,230	4,530	a 15,000	6,460	3,920	3,830	1,260
4	1,840	a 1,500	1,430	1,450	1,960	10,700	4,270	6,460	4,880	3,830	2,940	1,340
5	1,650	a 1,400	1,420	1,460	1,900	22,700	4,090	5,400	4,530	3,830	2,630	1,650
6	1,650	a 1,350	1,400	1,590	2,560	23,300	3,920	5,060	4,270	3,830	2,480	1,590
7	1,530	a 1,400	1,390	1,590	4,090	17,300	3,500	8,030	4,090	3,500	2,260	1,530
8	a 1,490	a 1,470	1,430	a 1,550	5,060	6,280	3,830	7,500	4,530	3,500	2,330	1,590
9	a 1,440	a 1,550	1,340	a 1,600	3,740	5,230	3,660	6,100	4,700	3,340	2,260	4,000
10	a 1,400	a 1,630	1,360	a 2,500	3,500	4,440	3,660	5,230	5,230	3,580	2,630	5,400
11	a 1,380	a 1,550	1,260	3,660	3,260	4,090	3,580	4,700	4,180	4,090	3,260	3,260
12	a 1,350	a 1,400	1,260	3,580	2,780	4,090	3,740	4,090	a 4,000	3,500	3,100	3,830
13	a 1,330	a 1,300	a 1,300	2,330	2,400	4,880	3,500	4,440	a 3,800	3,020	2,940	2,480
14	a 1,320	a 1,260	a 1,350	2,100	2,260	15,400	3,340	3,830	a 3,600	2,940	2,400	2,560
15	a 1,300	a 1,250	a 1,380	1,840	2,940	25,500	4,700	3,660	3,500	3,100	1,900	2,630
16	a 1,290	a 1,250	1,390	1,840	4,360	25,900	6,800	4,360	3,260	3,500	1,840	2,700
17	2,180	a 1,330	1,340	1,900	3,500	15,400	5,760	4,700	3,340	3,500	1,710	8,730
18	3,020	1,410	1,400	2,040	2,940	7,500	4,180	4,880	4,000	2,860	1,710	8,730
19	3,500	1,530	1,400	2,040	2,630	6,280	3,830	4,360	3,500	4,700	1,840	5,400
20	3,180	1,840	1,530	2,180	2,560	5,580	3,580	5,060	3,260	5,580	1,770	3,020
21	2,100	1,960	1,390	2,100	8,380	7,500	3,580	6,100	3,260	3,500	1,710	2,560
22	1,840	1,770	1,360	2,040	8,200	19,600	4,360	5,930	3,180	2,860	1,460	2,400
23	1,840	1,450	a 1,360	1,900	5,230	20,500	4,180	4,880	3,500	2,700	1,530	2,260
24	2,630	1,450	a 1,360	1,840	3,580	15,700	3,420	4,360	3,420	2,630	1,480	2,630
25	2,630	1,390	a 1,360	1,960	3,100	12,400	5,230	4,180	3,660	2,700	1,400	8,900
26	1,960	1,310	a 1,360	2,180	4,180	6,980	6,630	4,530	5,230	2,630	1,530	14,900
27	1,770	1,310	1,360	3,020	9,430	5,930	5,760	5,230	7,860	2,560	1,460	20,800
28	1,480	1,260	1,360	3,340	21,300	5,580	a 4,600	9,080	8,030	2,940	1,390	27,500
29	1,590	1,360	1,260	3,020	-------	4,880	a 4,150	6,460	7,160	2,860	1,360	11,000
30	a 1,650	1,460	1,240	a 2,800	-------	5,580	a 5,000	5,230	5,400	3,020	1,350	5,230
31	a 1,680	-------	1,160	a 2,500	-------	5,580	-------	5,580	-------	3,830	1,390	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,500	1,290	1,820	1.26	1.45
November	1,960	1,250	1,470	1.01	1.13
December	1,960	1,160	1,390	.959	1.11
January	3,660	1,260	2,140	1.48	1.71
February	21,300	1,900	4,370	3.01	3.13
March	25,900	4,090	11,400	7.86	9.06
April	6,800	3,340	4,400	3.03	3.38
May	17,000	3,660	6,340	4.37	5.04
June	8,030	3,180	4,600	3.17	3.54
July	5,580	2,560	3,440	2.37	2.73
August	13,300	1,350	2,570	1.77	2.04
September	27,500	1,260	5,420	3.74	4.17
The year	27,500	1,160	4,110	2.83	38.49

a Estimated.

CHATTAHOOCHEE RIVER AT WEST POINT, GA.

LOCATION.—Water-stage recorder just below Oseligee Creek, 1 mile upstream from West Point, Troup County.
DRAINAGE AREA.—3,550 square miles.
RECORDS AVAILABLE.—July, 1896, to September, 1929.
EXTREMES.—Maximum discharge during year, 87,600 second-feet Mar. 15 (gage height, 25.45 feet); minimum not determined.
1896–1929: 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. Slight diurnal fluctuation by power plants upstream.

Daily discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,760	2,760	2,760	2,510	4,510	49,500	10,100	22,800	7,750	8,170		
2	3,210	2,680	3,120	2,510	4,040	37,300	9,910	26,700	8,170	6,490		
3	3,300	2,760	3,030	2,510	3,840	30,900	9,460	24,800	10,100	5,890		
4	2,940	2,850	3,030	2,680	3,570	32,000	8,590	25,800	10,800	5,890		
5	2,940	2,680	2,760	3,030	3,390	63,900	7,960	14,900	7,540	5,890	6,500	
6	2,940	2,600	2,680	3,390	3,570	58,400	7,960	10,400	6,490	5,690		
7	3,030	2,600	2,600	3,390	4,320	40,700	7,540	9,680	6,090	5,490		
8	2,850	2,680	2,600	3,210	5,290	34,300	7,330	9,020	6,090	5,090		
9	2,760	2,760	2,760	3,390	9,020	21,800	7,120	14,900	6,490	5,090		
10	2,760	2,760	2,600	4,470	12,300		7,120	12,300	7,750	5,090	4 700	4,900
11	2,680	2,850	2,510	6,290	9,020	12,000	7,120	9,460	7,330	4,890	4 420	
12	2,600	2,600	2,510	6,700	6,700		7,120	8,380	6,090	5,490	4 130	
13	2,600	2,510	2,510	7,330	5,490		7,120	7,540	5,490	5,090	4 510	
14	2,680	2,510	2,600	5,290	4,890	32,700	6,910	7,120	5,090	4,600	4 800	
15	2,510	2,420	2,600	4,130	5,690	75,500	6,910	6,910	5,090	4,220	4 220	
16	2,510	2,420	2,680	3,750	11,300	75,500	8,590	6,910	5,290	4,320	3 660	
17	2,600	2,510	2,600	4,510	14,100	51,500	11,800	7,750	5,090	4,800	3 120	
18	2,850	2,680	2,680	4,320	9,910	41,900	10,400	8,380	5,090	4,990	3 300	
19	3,840	2,760	2,680	4,220	7,750	26,400	7,750	9,460	6,090	7,830	3 480	15,400
20	3,940	3,390	2,760	4,420	6,700	12,600	6,910	22,200	6,090	9,470	3 390	8,800
21	4,800	3,120	3,210	4,040	13,800	11,800	7,120	18,500	4,990	9,460	3 120	5,290
22	3,480	3,030	3,210	3,840	21,300	41,000	6,910	13,300	4,990	5,890	2.850	3,940
23	4,130	3,030	3,030	3,750	17,100	48,600	6,910	10,600	5,690	4,320	2.850	3,570
24	5,090	2,760	2,850	3,570	11,800	48,600	7,330	8,590	6,290	4,040	2.600	4,420
25	4,220	2,760	2,760	3,840	7,960	41,100	9,910	7,540	6,910	3,940	3 120	11,100
26	4,220	2,600	2,510	5,290	12,300	31,200	13,800	7,330	7,330	3,840	3 210	14,400
27	3,570	2,510	2,510	4,890	39,500	17,400	11,300	7,960	8,380	4,130		22,800
28	3,120	2,510	2,510	7,330	50,500	11,800	9,680	9,680	10,800	4,130		22,800
29	2,850	2,600	2,510	7,330		10,600	9,020	11,800	11,600	4,420	2.460	23,100
30	2,600	2,510	2,680	6,090		9,680	11,600	10,400	10,600	4,220		25,200
31	2,680		2,510	5,090		9,910		8,170		3,940		

Monthly discharge, in second-feet, of Chattahoochee River at West Point, Ga., 1919–20 and 1928–29

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
1919–20					
October	11,800	1,420	3,340	0.941	1.08
November	5,250	2,240	2,980	.839	.94
December	134,000	2,560	17,500	4.93	5.68
January	45,700	2,580	10,700	3.01	3.47
February	27,400	6,250	10,300	2.90	3.13
March	53,600	5,750	17,600	4.96	5.72
April	30,800	9,250	16,600	4.68	5.22
May	47,900	6,250	12,600	3.55	4.09
June	14,800	3,800	6,580	1.85	2.06
July	23,800	3,580	7,460	2.10	2.42
August	24,500	3,580	10,200	2.87	3.31
September	11,000	2,760	4,600	1.30	1.45
The year	134,000	1,420	10,100	2.85	38.57
1928–29					
October	5,090	2,510	3,200	0.901	1.04
November	3,390	2,420	2,710	.763	.85
December	3,210	2,510	2,720	.766	.88
January	7,330	2,510	4,420	1.24	1.43
February	50,500	3,390	11,100	3.13	3.26
March	75,500	------	32,700	9.21	10.62
April	13,800	6,910	8,580	2.42	2.70
May	26,700	6,910	12,200	3.44	3.97
June	11,600	4,990	7,050	1.99	2.22
July	9,470	3,840	5,380	1.52	1.75
August	------	------	4,270	1.20	1.38
September	25,200	------	8,300	2.34	2.61
The year	75,500	------	8,550	2.41	32.71

NOTE.—Table of monthly discharge for 1919–20 supersedes that published in Water-Supply Paper 502. Revised mean daily discharge for Mar. 29, 1920, is 52,400 second-feet; no other changes.

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.

DRAINAGE AREA.—4,670 square miles.

RECORDS AVAILABLE.—December, 1912; August to September, 1929.

EXTREMES.—Maximum discharge during period, 28,500 second-feet Sept. 30 (gage height, 18.60 feet); minimum, 1,680 second-feet Sept. 8.

1912, 1929: Maximum and minimum discharges, those of 1929.

Maximum stage known, 53.2 feet Mar. 15, 1929.

REMARKS.—Records fair. Considerable diurnal fluctuation caused by operation of several power dams above station.

Daily and monthly discharge, in second-feet, 1929

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1	------	4,370	11	------	2,900	21	------	6,410
2	------	4,370	12	------	4,010	22	------	3,540
3	------	4,370	13	------	3,430	23	4,490	4,130
4	------	3,890	14	------	2,800	24	4,370	5,760
5	------	4,010	15	------	2,510	25	4,250	12,000
6	------	3,770	16	------	2,800	26	3,320	17,000
7	------	2,510	17	------	3,210	27	4,250	21,200
8	------	1,830	18	------	4,610	28	4,250	25,200
9	------	2,510	19	------	5,890	29	4,370	21,200
10	------	2,600	20	------	11,000	30	4,370	24,900
						31	4,370	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
August 23–31	4,490	3,320	4,230	0.906	0.30
September	25,200	1,830	7,290	1.56	1.74

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, 1929.

EXTREMES.—Maximum discharge during year, 203,000 second-feet Mar. 18 (gage height, 56.05 feet); minimum, 3,450 second-feet Sept. 11 (gage height, 4.50 feet).

1928–29: Maximum and minimum discharges, those of 1929.

REMARKS.—Records fair. Discharge estimated Aug. 24–31, Sept. 1, 2, and 6–19.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,710	5,710	5,270	4,390	9,750	114,000	21,800	32,200	14,800	12,200	8,070	6,270
2	5,050	5,050	6,630	5,380	8,790	124,000	21,000	31,200	10,800	12,900	6,870	5,930
3	6,270	4,610	6,630	5,710	7,950	117,000	20,300	37,000	11,800	13,600	7,950	6,390
4	6,040	4,500	5,490	5,490	7,950	100,000	20,000	35,800	12,200	13,000	9,750	6,270
5	5,820	4,610	6,390	5,380	6,990	110,000	19,800	32,400	13,600	11,000	11,300	6,390
6	5,490	4,280	6,750	5,820	7,590	132,000	16,200	30,200	13,300	9,150	8,190	5,820
7	5,050	4,940	5,930	5,710	8,190	147,000	15,100	21,800	12,100	7,350	8,310	5,270
8	4,720	5,270	5,600	5,490	8,670	147,000	16,400	16,400	10,800	5,050	8,550	4,940
9	4,280	5,160	5,380	7,830	8,910	129,000	15,100	15,900	9,630	8,670	8,190	4,720
10	4,390	4,940	4,830	7,950	13,600	94,600	14,400	15,700	8,550	8,550	8,790	3,650
11	4,940	4,830	4,500	11,000	20,300	58,900	12,400	21,200	10,100	8,190	8,670	3,550
12	5,160	4,500	5,160	14,600	18,800	32,400	12,000	17,500	11,000	7,830	7,950	4,060
13	5,160	3,950	4,940	18,400	15,000	27,800	11,600	13,500	9,510	7,470	8,070	4,720
14	4,940	4,390	4,720	15,400	8,430	47,100	14,400	12,900	8,550	7,230	9,030	5,320
15	6,510	5,160	4,720	13,900	12,200	152,000	13,600	12,100	7,110	6,270	8,670	5,600
16	5,820	4,830	4,720	10,500	24,200	185,000	13,500	12,900	5,490	8,670	8,430	5,270
17	4,940	4,720	4,390	11,300	36,000	196,000	15,400	15,600	5,710	7,710	8,070	4,940
18	5,820	4,610	4,060	12,500	38,100	202,000	16,200	13,500	9,270	8,070	7,590	5,050
19	6,270	4,390	4,940	11,600	31,400	190,000	18,400	13,500	8,550	9,630	7,230	5,600
20	5,710	4,390	5,820	11,600	27,300	146,000	15,900	13,600	7,350	9,030	6,630	6,750
21	4,830	5,160	6,870	11,200	28,800	102,000	14,400	25,200	6,150	9,880	6,870	10,400
22	4,940	5,710	7,710	9,750	33,600	64,000	13,000	35,400	8,310	11,600	7,230	10,900
23	6,040	5,710	7,350	9,150	31,800	65,200	15,200	28,600	8,550	11,200	6,750	7,230
24	6,510	5,600	6,510	8,670	30,000	79,800	12,600	16,700	7,350	10,000	6,630	6,990
25	7,590	5,380	5,490	8,790	24,800	76,600	12,600	14,200	12,100	6,630	6,390	6,870
26	8,310	4,610	5,710	9,510	19,700	65,200	16,200	13,500	17,200	7,230	6,990	11,600
27	6,270	4,170	5,600	10,000	49,300	57,400	24,600	12,600	18,100	6,390	6,040	19,600
28	6,150	4,610	5,710	11,200	84,500	47,100	27,600	12,900	17,000	7,350	5,930	21,200
29	5,710	5,380	5,490	10,900	------	31,800	33,800	13,600	15,200	9,510	6,040	25,200
30	4,610	4,940	5,380	12,800	------	24,800	34,600	12,200	13,500	8,070	6,150	23,600
31	6,040	------	4,830	10,400	------	23,000	------	14,000	------	7,830	6,150	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	8,310	4,280	5,650	0.703	0.81
November	5,710	3,950	4,870	.606	.68
December	7,710	4,060	5,600	.697	.80
January	18,400	4,390	9,750	1.21	1.40
February	84,500	6,990	22,200	2.76	2.87
March	202,000	23,000	99,600	12.4	14.30
April	34,600	11,600	17,600	2.19	2.44
May	37,000	12,100	19,800	2.46	2.84
June	18,100	5,490	10,800	1.34	1.50
July	13,600	5,050	8,940	1.11	1.28
August	11,300	5,930	7,660	.953	1.10
September	25,200	3,550	8,350	1.04	1.16
The year	202,000	3,550	18,500	2.30	31.18

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, 1929.

EXTREMES.—Maximum discharge during period, 293,000 second-feet Mar. 20 (gage height, 34.70 feet); minimum, 8,850 second-feet Sept. 11 (gage height, 1.51 feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928–29

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-------	12,900	27,100	84,100	60,700	34,600	30,500	27,100	16,700	12,400
2	-------	12,900	26,000	105,000	57,200	38,700	28,500	26,300	16,500	12,400
3	-------	13,400	24,300	130,000	55,200	46,300	26,300	27,100	15,400	11,700
4	-------	13,400	22,900	148,000	51,400	50,500	26,500	27,400	16,500	12,400
5	-------	13,400	22,100	154,000	48,300	52,700	27,100	26,300	18,600	12,400
6	-------	13,400	20,500	160,000	43,600	52,700	27,900	23,500	21,300	12,400
7	-------	13,600	20,700	173,000	40,700	48,300	27,700	20,700	18,800	11,900
8	-------	13,600	20,700	189,000	38,400	42,100	26,800	18,000	18,000	11,000
9	-------	13,600	21,100	203,000	37,700	38,100	24,900	17,000	17,500	10,500
10	-------	15,900	22,400	206,000	35,800	36,200	24,000	19,400	17,200	9,310
11	13,400	17,000	28,200	200,000	34,300	36,200	22,400	18,600	17,500	9,080
12	13,200	21,300	32,800	176,000	35,200	37,400	24,300	18,000	16,500	9,310
13	13,200	25,400	32,600	142,000	31,400	34,300	24,300	17,700	15,400	9,540
14	13,200	28,800	30,200	118,000	30,800	31,400	22,600	16,500	17,000	10,200
15	12,600	28,200	27,400	126,000	31,700	30,000	21,300	15,900	18,000	11,200
16	12,400	27,400	31,400	166,000	30,800	29,100	18,800	15,200	17,700	11,000
17	12,400	26,800	41,400	220,000	32,000	30,000	16,700	18,600	17,000	9,770
18	11,900	28,500	49,600	258,000	33,100	29,700	17,500	17,000	16,500	9,540
19	11,900	28,200	53,200	280,000	34,900	28,200	20,700	16,500	15,400	10,200
20	12,400	30,500	52,300	291,000	34,900	27,700	20,500	16,700	14,400	11,200
21	13,600	31,100	52,700	284,000	33,100	30,500	19,700	18,000	14,200	12,600
22	14,900	30,200	55,200	262,000	31,100	39,700	18,600	18,800	14,600	16,200
23	15,700	29,100	57,700	227,000	30,000	43,600	19,100	20,700	14,600	15,900
24	15,700	27,400	58,900	190,000	29,400	39,000	18,600	21,200	14,400	13,600
25	14,900	26,800	58,900	170,000	28,200	33,700	18,600	20,200	13,900	12,600
26	14,400	26,500	56,700	155,000	28,200	31,400	24,300	17,000	13,400	14,200
27	14,400	26,500	58,300	139,000	32,600	30,200	28,800	15,900	12,900	20,700
28	13,900	27,100	69,300	121,000	36,700	30,200	30,200	15,900	12,600	26,800
29	14,400	27,400	--------	98,800	35,800	30,800	29,700	16,200	12,600	30,200
30	14,200	27,400	--------	77,900	34,000	30,500	28,500	18,300	12,900	33,400
31	13,600	29,500	--------	65,800	--------	29,700	--------	17,000	12,400	--------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
December 11–31	15,700	11,900	13,600	0.795	0.62
January	31,100	12,900	22,800	1.33	1.53
February	69,300	20,500	38,400	2.25	2.34
March	291,000	65,800	172,000	10.1	11.64
April	60,700	28,200	37,200	2.18	2.43
May	52,700	27,700	36,200	2.12	2.44
June	30,500	16,700	23,800	1.39	1.55
July	27,400	15,200	19,400	1.13	1.30
August	21,300	12,400	15,800	.924	1.07
September	33,400	9,080	13,800	.807	.90

SOQUE RIVER NEAR DEMOREST, GA.

LOCATION.—Water-stage recorder at highway bridge 2½ miles northwest of Demorest, Habersham County, and 3 miles above mouth.

DRAINAGE AREA.—154 square miles (revised).

RECORDS AVAILABLE.—July, 1904, to June, 1909; May to September, 1929.

EXTREMES.—Maximum discharge during period, about 10,100 second-feet Sept. 26 (gage height, 15.10 feet); minimum, 28 second-feet Sept. 8 (gage height, 1.17 feet).

1904–1909; 1929: Maximum gage height, 17.0 feet Aug. 18, 1906 (discharge not determined). Minimum discharge, that of Sept. 8, 1929.

REMARKS.—Records good at low stages, fair at high stages. Flow regulated by power plants above station.

Daily and monthly discharge, in second-feet, 1929

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1	------	802	435	386	187	16	------	379	390	246	357
2	------	570	405	325	178	17	------	386	353	240	550
3	------	530	375	308	181	18	------	408	401	250	339
4	------	498	518	292	196	19	------	379	518	234	272
5	------	466	401	279	210	20	------	394	401	231	246
6	------	446	382	269	262	21	------	361	346	222	222
7	------	442	382	269	292	22	------	350	336	222	240
8	------	482	390	339	266	23	------	336	325	216	266
9	------	490	379	282	234	24	------	379	315	219	256
10	------	442	361	386	305	25	------	427	315	225	1,530
11	------	405	350	353	228	26	------	530	386	196	7,010
12	------	405	364	312	213	27	------	1,180	361	204	1,430
13	------	397	346	288	246	28	------	1,070	329	196	758
14	------	394	379	269	288	29	------	530	315	193	530
15	------	427	375	272	240	30	570	466	329	190	530
						31	522	------	490	196	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
June	1,180	336	492	3.19	3.56
July	518	315	379	2.46	2.84
August	386	190	262	1.70	1.96
September	7,020	178	602	3.91	4.36

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 to September, 1929.
EXTREMES.—Maximum discharge during period, 7,300 second-feet Sept. 25 (gage height, 12.64 feet); minimum, 150 second-feet Sept. 3 (gage height, 1.79 feet).
REMARKS.—Records good for low and medium stages and fair for high stages. Slight regulation by small dam above station.

Daily and monthly discharge, in second-feet, 1929

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1		534	180	11	380	401	280	21	324	226	305
2		370	178	12	356	366	243	22	314	221	295
3		311	178	13	353	336	257	23	308	210	370
4		302	192	14	353	298	443	24	308	216	311
5		286	223	15	360	280	286	25	327	221	3,350
6		277	221	16	349	268	443	26	305	210	4,110
7		271	308	17	343	260	958	27	324	203	1,360
8	380	394	443	18	474	263	695	28	320	195	902
9	377	314	539	19	645	295	422	29	311	192	720
10	387	474	366	20	363	243	349	30	311	185	588
								31	566	185	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
July 8–31	645	305	368	2.41	2.15
August	534	185	284	1.86	2.14
September	4,110	178	650	4.25	4.74

FLINT RIVER NEAR CULLODEN, GA.

LOCATION.—Chain gage at highway bridge 4 miles above Ulcohatchee (Auchumpkee) Creek and 11½ miles southwest of Culloden, Monroe County.

DRAINAGE AREA.—1,850 square miles.

RECORDS AVAILABLE.—July, 1928, to September, 1929. At site 2½ miles downstream from present station from June, 1911, to May, 1923.

EXTREMES.—Maximum discharge during year, 92,000 second-feet Mar. 15 (gage height, 38.40 feet); minimum, 575 second-feet Nov. 17 and Sept. 2. Minimum gage height, 1.85 feet Sept. 2.

1928–29: Maximum and minimum discharges, those of 1929.

REMARKS.—Records fair, October to February; good, March to September. Discharge estimated Nov. 6–12 and Jan. 4–15.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	680	1,190	1,130	890	2,030	38,900	3,470	5,080	1,810	1,810	1,250	625
2	625	1,070	1,670	890	1,740	24,800	3,550	8,150	2,190	1,460	1,600	575
3	710	950	1,670	830	1,600	15,800	3,390	6,070	2,750	1,320	1,460	600
4	680	1,010	1,390	890	1,530	17,900	3,230	4,630	3,730	1,190	1,250	680
5	710	1,010	1,190	890	1,460	60,700	3,070	3,640	3,230	1,530	1,070	830
6	830	830	1,130	1,010	3,070	63,100	2,910	2,990	2,270	1,530	1,010	770
7	890	830	1,010	1,070	3,070	45,000	2,750	3,070	1,740	1,250	890	770
8	770	890	950	1,130	2,670	28,100	2,590	3,230	2,910	1,070	770	710
9	740	890	890	1,190	3,910	12,900	2,510	4,720	2,910	1,070	830	680
10	710	950	830	2,430	5,350	6,650	2,430	3,730	2,750	1,010	890	680
11	625	890	890	2,990	5,440	4,900	2,350	3,150	2,510	950	1,320	1,010
12	600	770	830	3,640	5,440	4,450	2,430	2,830	2,030	1,130	1,070	1,320
13	600	890	770	3,230	4,180	4,900	2,350	2,350	1,600	1,190	950	1,320
14	625	710	770	2,910	3,150	8,490	2,350	2,030	1,390	1,070	1,010	1,010
15	650	680	770	2,670	3,640	69,300	2,430	1,880	1,190	1,010	1,070	890
16	1,190	625	890	2,430	7,950	78,900	3,230	2,110	1,130	1,250	950	770
17	1,390	575	950	2,670	8,370	53,200	3,070	1,880	890	1,070	830	1,010
18	1,460	650	1,010	2,590	6,750	31,300	2,510	1,880	1,250	1,010	740	2,270
19	1,670	890	1,190	2,670	5,440	15,500	2,430	1,950	1,250	1,390	950	3,310
20	1,320	1,250	1,880	2,670	4,450	7,350	2,270	3,730	1,390	2,670	1,390	2,750
21	1,250	1,130	2,190	2,270	6,250	5,710	2,110	7,850	1,530	3,150	1,070	1,880
22	1,010	1,130	1,950	2,110	5,530	9,330	1,950	7,250	1,390	2,830	830	1,390
23	1,010	1,010	1,740	1,880	5,440	16,700	1,880	6,650	1,600	1,950	770	1,130
24	1,250	890	1,390	1,740	5,530	17,300	1,740	5,080	2,510	1,530	710	950
25	1,530	890	1,250	1,950	4,360	14,800	4,360	3,390	2,670	1,130	680	2,430
26	1,530	890	1,130	2,510	5,440	10,600	7,650	2,590	3,150	1,010	710	11,800
27	1,530	890	1,070	2,670	32,100	7,050	4,990	2,670	4,270	1,320	950	11,200
28	1,530	830	1,010	3,550	33,000	5,260	3,390	2,270	4,090	1,250	1,070	9,210
29	1,530	830	1,010	2,990	-------	4,270	3,230	2,190	3,230	1,190	770	7,850
30	1,390	890	950	2,670	-------	4,000	2,830	2,030	2,350	1,250	625	5,800
31	1,250	-------	950	2,350	-------	3,730	-------	1,950	-------	1,130	625	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,670	600	1,040	0.562	0.65
November	1,250	575	898	.485	.54
December	2,190	770	1,180	.638	.74
January	3,640	830	2,140	1.16	1.34
February	33,000	1,460	6,390	3.45	3.59
March	78,900	3,730	22,300	12.0	13.83
April	7,650	1,740	2,980	1.61	1.80
May	8,150	1,880	3,650	1.97	2.27
June	4,270	890	2,260	1.22	1.36
July	3,150	950	1,410	.762	.88
August	1,600	625	971	.525	.61
September	11,800	575	2,540	1.37	1.53
The year	78,900	575	3,980	2.15	29.14

FLINT RIVER NEAR VIENNA, GA.

LOCATION.—Staff gage at bridge on Americus-Vienna Highway 300 feet below Lumpkins or Pennahatchie Creek, 12 miles west of Vienna, Dooly County.

DRAINAGE AREA.—3,400 square miles.

RECORDS AVAILABLE.—November, 1926, to September, 1929.

EXTREMES.—Maximum discharge during year, 85,500 second-feet Mar. 18 (gage height, 30.56 feet); minimum, 1,730 second-feet Sept. 2–4, 11, and 12 (gage height, 5.0 feet).

1926–1929: Maximum discharge, that of Mar. 18, 1929; minimum, 840 second-feet Oct. 8, 1927 (gage height, 2.90 feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,870	2,390	2,510	2,570	4,890	26,500	10,400	10,000	4,180	5,680	2,750	1,850
2	2,810	2,390	2,990	2,570	4,520	59,700	9,170	8,900	3,990	4,730	2,870	1,730
3	2,750	2,450	3,410	2,690	4,120	68,800	8,640	8,120	4,050	3,800	2,990	1,730
4	2,750	2,510	3,660	2,750	3,800	56,100	7,860	8,120	4,590	3,350	3,170	1,730
5	2,810	2,510	3,470	2,690	3,600	45,900	7,370	8,510	5,050	3,110	3,110	1,790
6	2,810	2,510	3,170	2,870	3,470	50,700	6,800	9,310	5,220	3,110	2,810	1,970
7	2,810	2,450	2,930	2,990	3,470	72,300	6,280	9,310	5,130	3,290	2,510	1,970
8	2,810	2,450	2,750	3,110	4,060	76,500	5,980	7,860	4,380	3,230	2,390	1,970
9	2,630	2,450	2,630	2,990	4,810	68,100	5,780	6,800	4,180	3,050	2,270	1,910
10	2,510	2,450	2,510	3,050	5,490	53,100	5,400	6,690	4,870	2,870	2,390	1,850
11	2,450	2,390	2,510	3,350	5,880	39,500	5,220	7,130	5,310	2,750	2,570	1,730
12	2,690	2,390	2,450	4,660	6,690	28,500	5,050	7,370	5,130	2,690	2,990	1,730
13	2,780	2,330	2,450	5,880	7,250	19,200	4,970	7,020	4,660	2,570	3,050	1,850
14	2,780	2,270	2,450	6,690	7,610	15,000	4,890	6,280	3,920	2,570	2,750	2,270
15	2,510	2,270	2,450	7,130	7,990	17,800	4,890	4,970	3,410	2,630	2,630	2,330
16	2,210	2,270	2,450	7,020	9,310	33,500	5,050	4,380	3,470	2,690	2,450	2,210
17	2,270	2,210	2,450	6,690	10,700	63,900	5,310	4,320	3,990	2,690	2,330	2,090
18	2,450	2,210	2,450	6,080	11,800	83,900	5,400	4,250	4,320	2,930	2,330	2,210
19	3,050	2,210	2,450	5,780	11,800	76,500	5,490	4,180	4,120	2,870	2,810	2,690
20	3,410	2,270	2,510	5,580	13,000	61,800	5,310	4,180	3,600	2,870	2,570	3,170
21	3,600	2,390	2,870	5,400	15,600	42,900	4,890	4,810	3,290	3,290	2,570	3,660
22	3,230	2,690	3,470	5,220	16,600	29,000	4,590	6,280	3,290	3,860	2,810	3,730
23	2,870	2,690	3,860	4,810	15,000	19,600	4,380	7,730	3,350	3,990	2,450	3,170
24	2,810	2,570	3,800	4,450	12,800	15,000	4,180	8,770	3,660	3,990	2,210	2,690
25	2,810	2,510	3,470	4,120	11,500	13,800	4,120	9,590	3,990	3,600	2,210	2,630
26	2,990	2,150	3,170	4,120	10,900	17,300	5,130	9,870	4,730	3,230	2,570	3,230
27	2,990	2,330	2,870	4,320	14,300	21,300	7,250	9,450	5,130	2,810	2,570	4,060
28	2,930	2,270	2,750	4,730	20,600	20,200	9,170	7,990	5,490	2,690	2,270	5,130
29	2,810	2,270	2,690	4,890	-------	17,300	10,400	6,380	5,680	2,930	2,150	6,580
30	2,630	2,330	2,630	5,310	-------	14,500	11,000	5,220	5,880	2,810	2,210	8,250
31	2,450	-------	2,570	5,310	-------	12,400	-------	4,590	-------	2,750	2,030	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,600	2,210	2,780	0.818	0.94
November	2,690	2,150	2,390	.703	.78
December	3,860	2,450	2,860	.841	.97
January	7,130	2,570	4,510	1.33	1.53
February	20,600	3,470	8,980	2.64	2.75
March	83,900	12,400	40,000	11.8	13.60
April	11,000	4,120	6,350	1.87	2.09
May	10,000	4,180	7,040	2.07	2.39
June	5,880	3,290	4,400	1.29	1.44
July	5,680	2,570	3,210	.944	1.09
August	3,170	2,030	2,570	.756	.87
September	8,250	1,730	2,800	.824	.92
The year	83,900	1,730	7,350	2.16	29.37

FLINT RIVER AT BAINBRIDGE, GA.

LOCATION.—Water-stage recorder at 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, 1929.

EXTREMES.—Maximum discharge during period, 83,200 second-feet Mar. 21 (gage height, 37.73 feet); minimum, 3,880 second-feet Sept. 16 (gage height, 6.41 feet).

1908–1913, 1928–29: Maximum discharge, that of Mar. 21, 1929; minimum, 2,740 second-feet Oct. 8–11, 1911.

Maximum discharge known, 101,000 second-feet Jan. 22, 1925 (gage height, 40.9 feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928–29

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		6,590	12,300	31,000	33,600	15,700	12,200	11,000	6,950	5,190
2		6,350	11,900	36,100	31,000	17,200	11,300	11,200	6,950	4,420
3		5,990	11,800	41,200	27,600	18,700	11,000	10,800	6,590	4,640
4		5,990	11,000	46,000	24,400	20,500	10,600	10,400	6,350	5,080
5		6,110	9,980	51,000	20,900	20,100	10,400	9,330	7,910	5,080
6		6,230	10,200	56,800	19,600	19,800	10,600	9,070	9,980	4,970
7		6,350	9,200	61,300	18,500	16,500	11,200	8,420	7,670	4,970
8		6,590	8,940	64,300	17,200	16,500	11,000	8,030	7,070	4,860
9		6,710	9,200	65,600	16,700	16,400	11,500	8,940	6,710	4,310
10		7,070	10,400	67,800	15,900	16,000	10,200	8,030	6,590	4,420
11		7,310	11,200	69,900	15,900	15,100	9,850	7,790	6,230	4,860
12		8,030	11,900	69,900	15,900	14,800	10,100	7,910	5,080	4,750
13		8,940	12,700	67,800	15,400	14,000	10,400	7,790	5,990	4,750
14		10,600	13,000	62,600	14,600	14,600	10,100	6,830	7,070	4,750
15	5,990	10,800	13,300	59,400	14,800	14,000	10,400	6,350	6,950	4,750
16	6,110	12,300	14,500	62,200	15,200	13,200	9,590	8,290	6,590	4,200
17	5,750	14,000	17,200	70,900	14,900	12,400	8,550	7,910	6,590	4,640
18	6,230	15,400	19,800	79,000	15,900	11,800	8,810	6,470	6,230	5,080
19	5,990	16,400	22,900	81,100	15,700	11,000	8,940	6,590	5,410	5,190
20	5,990	16,500	25,000	81,600	14,200	11,500	9,200	7,790	5,410	5,190
21	6,230	15,600	25,400	82,700	13,700	13,300	9,200	6,710	6,110	5,190
22	6,470	15,100	27,000	82,700	14,000	12,000	8,680	5,990	6,110	5,190
23	6,830	13,900	28,800	82,200	13,400	10,900	8,420	8,550	6,110	5,190
24	7,670	13,900	31,000	74,700	*12,900	11,800	8,030	8,290	5,990	5,750
25	8,030	13,400	32,200	65,600	12,300	12,700	8,550	8,810	5,750	5,750
26	7,910	12,900	31,900	55,200	12,000	13,600	8,680	8,420	4,860	5,520
27	7,070	12,200	30,300	46,600	11,800	14,600	9,330	8,420	5,190	5,750
28	7,070	12,700	29,200	39,800	12,000	14,600	9,850	7,190	5,750	6,710
29	6,830	11,500		36,100	13,200	14,900	10,600	6,350	5,870	7,070
30	6,710	12,300		34,800	14,500	14,800	11,000	7,910	5,750	8,290
31	6,110	12,600		33,800		13,000		7,070	5,410	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
December 15–31	8,030	5,750	6,650	0.912	0.58
January	16,500	5,990	10,700	1.47	1.70
February	32,200	8,940	17,900	2.46	2.56
March	82,700	31,000	60,000	8.23	9.49
April	33,600	11,800	16,900	2.32	2.59
May	20,500	10,900	14,700	2.02	2.33
June	12,200	8,030	9,940	1.36	1.52
July	11,200	5,990	8,150	1.12	1.29
August	9,980	4,860	6,360	.873	1.01
September	8,290	4,200	5,220	.716	.80

CHIPOLA RIVER NEAR ALTHA, FLA.

LOCATION.—Chain gage on Willis highway bridge, 3 miles above mouth of Ten-mile 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; and August to September, 1929.

EXTREMES.—1912–13, 1921–1927, 1929: Maximum discharge, 25,000 second-feet September, 1926 (gage height, 33.55 feet); minimum, 430 second-feet Oct. 20, 1925.

REMARKS.—Records good. Slight fluctuation during low water caused by operation of small power plant on Dry Creek.

Daily and monthly discharge, in second-feet, 1929

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1	------	1,110	943	11	------	1,280	860	21	------	1,160	860
2	------	1,110	977	12	------	1,400	910	22	------	1,110	860
3	------	1,110	1,010	13	------	1,400	910	23	------	1,060	860
4	------	1,110	960	14	------	1,360	910	24	------	1,060	810
5	------	1,110	960	15	------	1,560	885	25	------	1,060	860
6	------	1,010	1,010	16	------	1,920	860	26	------	1,060	860
7	------	1,010	960	17	------	1,740	860	27	------	1,060	860
8	------	1,010	985	18	------	1,630	910	28	------	1,060	860
9	------	1,010	1,010	19	------	1,520	910	29	------	1,010	900
10	------	1,160	910	20	------	1,360	860	30	1,160	1,010	2,000
								31	1,110	910	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
August	1,920	910	1,210	1.64	1.89
September	2,000	810	944	1.28	1.43

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 to September, 1929.
EXTREMES.—Maximum discharge during period, 7,160 second-feet Sept. 28 (gage height, 8.45 feet); minimum, 2,090 second-feet Sept. 15 and 23 (gage height, 3.00 feet).
REMARKS.—Records good except those for high stages, which are fair.

Daily and monthly discharge, in second-feet, 1929

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1	------	2,190	11	------	2,390	21	2,830	2,660
2	------	2,390	12	------	2,240	22	2,830	2,240
3	------	2,500	13	------	2,190	23	2,720	2,190
4	------	2,500	14	------	2,140	24	2,610	2,560
5	------	2,780	15	------	2,140	25	2,720	2,720
6	------	2,720	16	------	2,290	26	2,830	4,360
7	------	2,660	17	3,590	2,440	27	2,950	6,140
8	------	2,660	18	3,070	2,660	28	3,010	7,160
9	------	2,660	19	2,720	3,010	29	2,830	6,990
10	------	2,610	20	2,830	3,070	30	2,440	6,480
						31	2,190	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
August 17–31	3,590	2,190	2,810	0.805	0.45
September	7,160	2,140	3,120	.894	1.00

MOBILE RIVER BASIN

COOSAWATTEE RIVER NEAR CARTERS, GA.

LOCATION.—Water-stage recorder at highway bridge 1 mile above Talking Rock Creek and 1¼ miles northeast of Carters, Murray County.

DRAINAGE AREA.—376 square miles.

RECORDS AVAILABLE.—September, 1925, to September, 1929.

EXTREMES.—Maximum discharge during year, 20,700 second-feet July 31 (gage height, 16.2 feet); minimum, 396 second-feet Sept. 3 (gage height, 1.61 feet). 1925–1928: Maximum discharge, that of July 31, 1928; minimum, 59 second-feet Sept. 22, 1925 (gage height, 0.68 foot).

REMARKS.—Records fair. Discharge estimated May 29–31.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	755	505	898	493	934	2,290	1,470	3,060	1,470	1,230	3,180	407
2	721	505	690	636	952	1,740	1,370	3,180	1,370	1,130	1,030	407
3	705	518	593	525	872	1,470	1,320	2,520	1,580	1,170	864	396
4	698	585	551	481	847	1,910	1,320	2,020	1,370	1,100	788	402
5	690	571	538	469	830	4,030	1,320	1,910	1,270	1,100	698	423
6	674	558	518	755	1,140	2,640	1,270	3,000	1,250	1,070	651	518
7	674	538	505	705	1,250	2,020	1,250	5,760	1,180	1,040	629	512
8	666	531	505	585	1,050	1,690	1,220	3,000	1,170	997	585	396
9	651	538	487	531	1,030	1,580	1,170	2,940	1,190	961	571	487
10	643	531	475	1,220	1,100	1,420	1,170	2,400	1,120	1,060	607	600
11	621	525	469	1,220	979	1,320	1,260	2,130	1,080	1,080	755	445
12	558	505	463	979	907	1,270	1,270	1,960	1,070	1,050	797	499
13	558	499	457	813	855	1,470	1,220	1,850	1,070	961	585	531
14	558	481	451	729	830	3,180	1,190	1,740	1,070	889	551	600
15	558	475	445	690	797	3,420	1,520	1,690	1,070	797	690	451
16	585	469	434	682	872	2,940	2,130	1,740	1,060	738	551	643
17	805	457	429	674	881	2,130	1,520	1,740	1,040	729	512	1,960
18	674	463	564	1,420	830	1,800	1,320	1,690	1,070	738	518	961
19	721	1,370	551	1,630	788	1,630	1,270	3,300	1,080	881	481	614
20	571	1,180	493	1,250	788	1,520	1,250	3,780	1,050	721	481	512
21	531	763	487	1,100	1,250	1,470	1,250	2,820	1,050	651	457	469
22	531	666	469	1,140	1,220	1,850	1,270	2,240	1,120	636	457	445
23	1,100	600	469	1,100	1,060	3,780	1,250	2,020	1,100	636	475	531
24	855	558	457	1,320	988	3,180	1,220	1,850	1,080	629	481	551
25	636	545	451	1,850	943	2,180	2,180	1,690	1,230	643	487	1,800
26	578	525	445	1,630	1,120	1,910	1,800	1,690	1,910	614	457	2,940
27	545	512	440	1,420	1,520	1,740	1,380	1,800	2,580	674	440	1,470
28	538	512	440	1,370	4,160	1,630	2,460	1,690	2,130	755	434	1,100
29	518	505	434	1,170	-------	1,470	2,760	1,470	1,740	738	434	889
30	512	651	434	1,090	-------	1,520	1,850	1,470	1,420	651	413	763
31	512	-------	418	1,020	-------	1,470	-------	1,420	-------	8,100	413	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,100	512	643	1.71	1.97
November	1,370	457	588	1.56	1.74
December	898	418	499	1.33	1.53
January	1,850	469	990	2.63	3.03
February	4,160	788	1,100	2.93	3.05
March	4,030	1,270	2,050	5.45	6.28
April	2,760	1,170	1,480	3.94	4.40
May	5,760	1,420	2,310	6.14	7.08
June	2,580	1,040	1,300	3.46	3.86
July	8,100	614	1,100	2.93	3.38
August	3,180	413	660	1.76	2.03
September	2,940	396	757	2.01	2.24
The year	8,100	396	1,120	2.98	40.59

OOSTANAULA RIVER AT RESACA, GA.

LOCATION.—Chain gage at highway bridge 200 feet below Nashville, Chattanooga & St. Louis Railway in Resaca, Gordon County, 3½ 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, 1901; January, 1905, to September, 1923; July, 1928, to September, 1929.

EXTREMES.—Maximum discharge during year, 17,900 second-feet Mar. 25 (gage height, 22.10 feet); minimum, 815 second-feet Sept. 4 and 5 (gage height, 2.60 feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,240	1,140	1,880	1,100	2,700	15,400	3,900	8,900	4,000	3,340	9,410	860
2	1,200	1,100	1,820	1,580	2,500	14,500	3,840	11,600	3,260	2,640	9,240	815
3	1,200	1,100	1,640	1,640	2,210	11,300	3,400	11,500	3,840	2,420	2,780	815
4	1,140	1,300	1,460	1,410	2,140	7,680	3,200	9,920	4,070	2,280	1,950	815
5	1,200	1,360	1,360	1,300	2,080	11,600	3,120	8,820	2,840	2,140	1,640	815
6	1,360	1,100	1,300	1,950	3,120	14,100	2,980	6,800	2,640	2,020	1,520	860
7	1,360	1,100	1,240	2,360	5,600	12,800	2,840	12,100	2,560	1,880	1,410	950
8	1,200	1,140	1,200	2,080	4,370	10,900	2,700	14,400	2,420	1,820	1,360	950
9	1,140	1,200	1,140	1,700	3,620	6,320	2,560	15,200	2,500	1,700	1,300	905
10	1,100	1,100	1,140	3,700	4,740	4,600	2,560	15,200	2,420	1,760	1,300	1,240
11	1,100	1,100	1,100	5,040	3,920	3,920	2,700	13,100	2,220	2,020	1,760	1,040
12	1,100	1,040	1,100	3,770	3,120	3,540	3,480	8,320	2,140	1,880	2,220	995
13	1,040	1,040	1,100	2,560	2,780	3,770	3,060	4,440	2,080	1,700	1,950	1,040
14	1,040	1,040	1,140	2,080	2,560	9,580	2,640	4,140	2,280	1,880	1,520	1,880
15	995	995	1,140	1,820	2,420	14,500	3,200	3,840	2,140	1,760	2,080	1,640
16	1,040	995	1,100	1,700	3,260	16,900	8,000	4,300	2,140	1,640	2,420	1,520
17	2,360	995	1,100	1,880	3,620	17,600	7,520	5,680	1,950	1,520	1,460	6,320
18	2,280	995	1,240	2,920	3,120	15,200	6,960	5,840	2,020	1,460	1,410	4,900
19	3,120	1,640	1,520	5,840	2,780	9,580	4,220	7,520	2,080	2,140	1,240	2,280
20	1,640	4,900	1,520	6,560	2,780	4,670	3,260	13,400	1,950	1,880	1,200	1,460
21	1,300	4,220	1,360	5,760	6,240	4,140	2,980	15,100	1,880	1,460	1,140	1,200
22	1,100	2,280	1,240	4,000	7,920	7,440	4,900	14,000	2,420	1,410	1,100	1,100
23	2,020	1,640	1,200	3,540	6,480	12,500	4,220	11,700	3,260	1,300	995	1,140
24	2,980	1,520	1,140	3,770	4,000	16,200	3,060	6,800	2,980	1,300	995	1,200
25	2,020	1,410	1,100	5,200	3,340	17,900	6,560	4,300	2,980	1,300	1,100	2,640
26	1,520	1,300	1,100	6,640	3,920	16,600	8,730	3,920	3,700	1,300	1,100	7,280
27	1,300	1,240	1,100	6,000	8,000	13,000	4,970	4,600	5,760	1,640	995	6,560
28	1,240	1,200	1,140	5,680	12,200	6,320	4,900	4,970	5,600	1,240	950	3,620
29	1,200	1,200	1,140	4,670	-------	4,300	9,070	3,620	5,360	1,410	1,140	2,420
30	1,140	1,240	1,100	3,620	-------	4,370	7,440	3,620	4,370	1,640	1,200	1,880
31	1,140	-------	1,040	3,120	-------	4,520	-------	3,400	-------	2,280	905	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,120	955	1,450	0.900	1.04
November	4,900	995	1,450	.900	1.00
December	1,880	1,040	1,250	.776	.89
January	6,640	1,100	3,390	2.11	2.43
February	12,200	2,080	4,130	2.57	2.68
March	17,900	3,540	10,200	6.34	7.31
April	9,070	2,560	4,430	2.75	3.07
May	15,200	3,400	8,420	5.23	6.03
June	5,760	1,880	3,000	1.86	2.08
July	3,340	1,240	1,810	1.12	1.29
August	9,410	905	1,960	1.22	1.41
September	7,280	815	2,040	1.27	1.42
The year	17,900	815	3,630	2.25	30.65

COOSA RIVER NEAR ROME, GA.

LOCATION.—Water-stage recorder 7½ 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 September, 1929. At Rome from January, 1897, to December, 1903.

EXTREMES.—Maximum discharge during year, 43,000 second-feet Mar. 16 (gage height, 30.70 feet); minimum, 2,060 second-feet Sept. 3 (gage height, 0.88 foot).

1897–1903, 1928–29: Maximum discharge (estimated), 64,000 second-feet Dec. 31, 1901 (gage height, 32.6 feet, old datum); minimum, 990 second-feet Oct. 5, 1897 (gage height, −0.15 foot).

REMARKS.—Records good. Flow regulated by storage above Mayos Bar Dam.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,870	2,550	3,050	2,400	5,710	35,200	10,900	21,700	8,980	7,580	10,600	2,260
2	2,790	2,550	3,770	2,550	5,170	33,800	10,400	35,600	8,260	6,260	18,000	2,120
3	2,790	2,470	3,410	3,050	4,670	28,000	9,100	38,100	9,220	6,480	12,000	2,060
4	2,790	2,550	3,140	3,050	4,370	25,700	8,140	34,400	9,340	5,710	5,270	2,060
5	2,870	2,550	2,870	2,710	4,270	32,900	7,910	25,200	7,690	5,380	3,970	2,120
6	3,050	2,710	2,790	3,050	5,070	36,200	7,470	19,000	6,370	4,970	3,590	2,260
7	3,050	2,550	2,710	3,970	8,980	35,300	7,140	20,100	5,930	3,970	3,410	2,400
8	2,960	2,550	2,630	4,170	10,200	29,300	6,700	24,400	6,150	4,370	3,410	2,400
9	2,710	2,550	2,550	3,590	8,500	21,400	6,480	25,000	6,370	4,170	3,410	2,470
10	2,630	2,630	2,470	4,470	9,100	13,400	6,370	25,000	6,150	4,170	3,230	3,230
11	2,550	2,470	2,470	7,800	9,100	9,460	6,480	22,900	5,820	5,490	3,590	3,770
12	2,550	2,470	2,400	8,260	7,250	8,260	7,140	20,400	5,170	5,380	5,380	2,870
13	2,550	2,470	2,400	5,930	6,040	8,620	7,360	14,500	4,970	4,270	5,270	3,140
14	2,470	2,400	2,470	4,470	5,380	20,900	6,480	9,700	4,870	4,170	4,370	3,410
15	2,470	2,400	2,470	3,770	5,270	34,600	7,580	8,620	4,870	4,370	3,680	4,270
16	2,470	2,330	2,550	3,500	7,360	41,600	15,100	8,260	4,870	3,970	4,870	4,370
17	2,790	2,400	2,470	3,590	9,100	38,000	17,100	9,700	4,770	4,070	4,370	11,700
18	4,170	2,400	2,550	4,570	8,020	30,700	13,500	12,300	4,670	3,680	3,770	16,500
19	4,870	2,870	2,710	7,360	6,700	26,000	11,100	14,400	5,930	4,370	4,270	9,940
20	5,170	5,270	3,050	9,700	6,150	18,800	8,140	21,800	5,070	5,600	2,870	4,770
21	3,320	7,030	2,870	9,820	10,800	10,800	7,360	26,000	4,770	4,770	2,790	3,410
22	2,790	5,600	2,710	8,380	19,200	22,200	9,580	24,300	4,670	3,680	2,710	3,050
23	3,590	3,770	2,550	6,700	16,900	34,000	12,000	21,700	7,360	3,320	2,630	2,870
24	5,600	3,230	2,470	6,260	11,900	37,700	8,740	18,400	7,360	3,320	2,550	3,140
25	5,270	2,870	2,470	7,690	8,380	37,200	12,000	12,200	6,370	3,230	2,550	4,970
26	3,680	2,790	2,400	10,100	9,220	34,700	18,700	9,100	6,260	3,500	2,630	14,000
27	3,050	2,630	2,400	10,900	18,400	30,000	16,500	10,400	10,500	3,320	2,550	19,900
28	2,790	2,550	2,440	11,900	29,800	24,900	13,200	12,100	13,100	3,770	2,470	14,200
29	2,710	2,630	2,400	10,900	-------	15,100	18,000	11,100	11,000	4,070	2,400	7,360
30	2,630	2,630	2,400	8,380	-------	12,700	19,200	8,380	9,580	3,770	2,470	5,270
31	2,630	-------	2,400	6,700	-------	12,500	-------	8,260	-------	3,770	2,470	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	5,600	2,470	3,180	0.787	0.91
November	7,030	2,330	2,960	.733	.82
December	3,770	2,400	2,660	.658	.76
January	11,900	2,400	6,120	1.51	1.74
February	29,800	4,270	9,320	2.31	2.40
March	41,600	8,260	25,800	6.39	7.37
April	19,200	6,370	10,500	2.60	2.90
May	38,100	8,260	18,500	4.58	5.28
June	13,100	4,670	6,880	1.70	1.90
July	7,580	3,230	4,480	1.11	1.28
August	18,000	2,400	4,440	1.10	1.27
September	19,900	2,060	5,540	1.37	1.53
The year	41,600	2,060	8,380	2.07	28.16

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 (revised).

RECORDS AVAILABLE.—October, 1926, to September, 1929.

EXTREMES.—Maximum discharge during year, 53,500 second-feet Mar. 16 and 17 (gage height, 24.58 feet); minimum, 2,790 second-feet Sept. 6 and 7 (gage height, 1.8 feet).

1926–1929: Maximum discharge, that of Mar. 16 and 17, 1929; minimum, 1,540 second-feet Nov. 2, 1927 (gage height, 0.65 foot).

REMARKS.—Records good. No appreciable regulation.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,530	3,270	3,530	3,030	10,600	38,800	18,800	28,500	10,600	11,300	4,460	3,030
2	3,530	3,270	3,660	3,150	9,070	41,100	16,500	35,300	11,600	9,580	7,620	3,030
3	3,530	3,150	4,180	3,150	7,940	40,500	14,300	41,700	11,800	8,100	15,500	2,910
4	3,530	3,150	4,320	3,530	7,140	40,200	12,700	43,600	11,300	7,620	14,800	2,850
5	3,530	3,150	4,050	3,790	6,500	43,000	11,300	43,300	11,600	7,300	8,740	2,850
6	3,790	3,270	3,790	3,920	6,820	43,900	10,600	42,000	10,400	6,660	5,300	2,790
7	3,790	3,270	3,530	4,050	8,260	44,200	9,920	37,700	8,740	6,200	4,600	2,790
8	3,790	3,270	3,530	4,600	10,900	42,600	9,410	32,200	7,940	5,750	4,180	2,970
9	3,660	3,150	3,400	5,160	13,000	40,800	8,900	32,400	7,620	5,450	4,050	3,030
10	3,530	3,150	3,270	5,900	13,000	38,000	8,580	33,000	7,940	5,450	4,050	3,030
11	3,270	3,270	3,150	7,140	12,700	29,700	8,900	32,200	7,620	5,600	4,180	3,400
12	3,150	3,150	3,150	9,240	12,300	18,000	9,240	30,200	7,460	6,050	4,320	4,460
13	3,150	3,030	3,150	10,400	10,800	13,400	9,580	26,700	6,820	6,660	5,300	5,020
14	3,030	3,030	3,150	8,900	9,070	24,900	9,410	21,700	6,350	5,750	6,050	4,180
15	3,030	2,970	3,150	6,820	8,260	44,200	9,240	15,000	6,200	5,160	5,450	4,740
16	2,970	2,910	3,150	5,600	9,920	53,200	12,800	11,800	6,200	5,300	4,600	4,740
17	3,030	2,970	3,270	5,020	12,000	53,200	19,100	11,800	6,050	5,160	4,740	5,160
18	3,030	2,970	3,150	6,200	13,400	51,300	20,500	12,500	6,050	5,160	5,900	9,920
19	3,920	3,790	3,270	8,900	12,500	49,600	17,800	17,800	5,900	4,880	6,350	15,500
20	4,880	4,600	3,400	11,800	10,800	47,800	14,600	26,900	6,660	4,740	4,600	13,400
21	5,750	6,350	3,660	13,000	11,400	45,200	13,600	32,200	6,660	5,750	3,920	7,940
22	4,740	7,780	3,660	13,200	14,500	43,300	9,920	33,000	6,050	6,050	3,660	4,880
23	4,320	7,300	3,530	13,900	19,700	43,900	11,400	30,700	6,500	4,880	3,530	4,050
24	4,880	5,750	3,400	10,300	20,900	46,500	13,900	28,100	7,620	4,320	3,400	3,790
25	5,900	4,320	3,270	11,300	17,400	48,200	15,900	24,500	9,070	4,320	3,270	5,300
26	6,350	3,920	3,150	15,200	15,200	47,500	19,500	19,300	8,260	4,320	3,270	7,780
27	5,160	3,660	3,150	17,200	21,700	46,200	22,100	15,500	8,260	4,180	3,270	12,800
28	4,050	3,530	3,030	18,600	33,700	44,200	21,500	14,600	10,900	4,460	3,270	17,600
29	3,660	3,400	3,030	18,200	-------	41,100	20,300	15,200	13,900	4,600	3,150	17,200
30	3,400	3,400	3,150	16,300	-------	34,500	22,800	14,300	13,000	4,740	3,030	11,300
31	3,400	-------	3,150	13,400	-------	25,100	-------	11,800	-------	4,880	3,030	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	6,350	2,970	3,910	0.674	0.78
November	7,780	2,910	3,810	.657	.73
December	4,320	3,030	3,400	.586	.68
January	18,600	3,030	9,060	1.56	1.80
February	33,700	6,500	12,800	2.21	2.30
March	53,200	13,400	40,800	7.03	8.10
April	22,800	8,580	14,100	2.43	2.71
May	43,600	11,800	26,300	4.53	5.22
June	13,900	6,050	8,500	1.47	1.64
July	11,300	4,180	5,790	.998	1.15
August	15,500	3,030	5,210	.898	1.04
September	17,600	2,790	6,410	1.11	1.24
The year	53,200	2,790	11,700	2.02	27.39

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, 1929.

EXTREMES.—Maximum discharge during year, 114,000 second-feet Mar. 16 (gage height, 24.84 feet); minimum, 3,510 second-feet Nov. 18 (gage height, 1.87 feet).

1914–1929: Maximum discharge, 121,000 second-feet July 11, 1916; maximum gage height, that of Mar. 16, 1929; minimum discharge, 1,300 second-feet for ten days in September, 1925.

REMARKS.—Records good. Records collected by Alabama Power Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,400	4,160	4,280	4,040	16,100	67,800	31,900	46,700	14,600	15,000	6,250	3,800
2	4,520	4,040	4,280	3,920	13,000	61,500	24,600	60,900	13,900	13,200	6,250	3,800
3	4,520	4,160	4,640	3,920	11,100	57,200	21,300	60,900	15,400	11,800	9,100	3,800
4	4,640	4,040	5,000	3,920	9,900	62,500	19,300	58,300	15,000	10,100	17,700	3,800
5	4,520	4,040	5,360	4,160	9,100	77,200	17,300	58,300	14,300	9,420	16,100	3,690
6	5,000	3,920	5,120	4,760	8,800	73,400	15,400	61,500	13,900	8,950	10,200	3,690
7	7,320	4,040	4,760	5,240	10,100	65,100	14,300	64,600	12,500	8,200	6,900	3,690
8	5,600	4,160	4,520	5,240	11,300	58,900	13,500	54,600	11,400	7,750	5,860	3,580
9	5,000	4,160	4,400	5,480	15,000	54,100	12,800	52,600	10,400	7,320	5,480	3,690
10	4,760	4,040	4,280	7,320	18,900	50,600	12,500	50,600	10,100	6,900	5,480	3,800
11	4,520	4,160	4,160	8,800	17,700	46,000	12,500	45,700	10,100	7,600	5,480	3,800
12	4,280	3,920	4,160	9,580	16,100	35,600	13,500	42,200	9,580	7,320	5,480	4,160
13	4,160	4,040	4,040	10,900	15,000	25,900	13,200	38,200	9,260	7,320	5,480	5,120
14	4,040	3,920	4,040	11,600	13,200	57,300	12,800	33,700	9,740	7,750	6,120	6,120
15	4,040	3,800	4,040	9,900	12,300	103,000	12,800	27,000	8,800	7,320	6,900	5,600
16	3,920	3,800	3,920	8,050	17,700	112,000	17,300	19,700	8,200	6,900	6,510	5,600
17	3,920	3,800	4,040	7,040	21,300	95,200	21,300	16,900	8,050	7,320	5,730	6,380
18	3,920	3,690	4,160	6,640	20,900	75,400	24,600	17,300	7,900	7,900	5,600	6,640
19	4,040	4,400	4,160	9,260	19,700	65,800	25,000	24,200	8,200	7,600	6,640	11,400
20	4,400	5,860	4,160	13,200	17,300	61,200	21,700	43,700	7,600	6,640	7,180	17,300
21	5,480	6,120	4,280	15,000	18,100	61,500	18,900	46,200	8,350	6,250	5,860	14,300
22	6,510	7,040	4,400	15,800	19,700	84,000	15,400	45,700	8,350	6,770	5,000	9,100
23	6,640	8,200	4,640	15,400	22,100	93,300	13,200	42,700	7,900	7,320	4,640	6,510
24	6,250	7,900	4,520	13,900	26,200	92,100	14,300	38,600	8,200	6,510	4,520	5,600
25	6,120	6,640	4,400	13,000	25,800	76,600	29,200	35,000	9,420	5,990	4,400	10,800
26	6,640	5,480	4,160	16,500	26,600	66,800	38,600	30,100	11,100	5,860	4,280	11,900
27	7,320	4,760	4,040	21,700	41,300	60,900	32,800	24,200	11,100	5,730	4,160	10,900
28	6,380	4,520	4,040	28,300	64,100	57,200	32,300	20,500	11,900	5,860	4,160	15,400
29	5,360	4,280	4,040	26,600	-------	54,100	31,400	18,900	14,300	5,990	4,040	20,500
30	4,760	4,280	3,920	24,200	-------	50,100	30,100	18,900	16,500	5,990	4,040	18,900
31	4,280	-------	3,920	20,100	-------	42,700	-------	17,300	-------	6,120	3,920	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	7,320	3,920	5,070	0.604	0.70
November	8,200	3,690	4,710	.561	.63
December	5,360	3,920	4,320	.515	.59
January	28,300	3,920	11,400	1.36	1.57
February	64,100	8,800	19,200	2.29	2.39
March	112,000	25,900	66,000	7.87	9.07
April	38,600	12,500	20,500	2.44	2.72
May	64,600	16,900	39,200	4.67	5.38
June	16,500	7,600	10,900	1.30	1.45
July	15,000	5,730	7,760	.925	1.07
August	17,700	3,920	6,430	.766	.88
September	20,500	3,580	7,780	.927	1.03
The year	112,000	3,580	17,000	2.03	27.48

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, 1929.

EXTREMES.—Maximum discharge during year, 207,000 second-feet Mar. 15 (gage height, 38.6 feet); minimum 75 second-feet for several hours in October, November, December, and September (gage height, 2.0 feet).

1912–1914, 1925–1929: Maximum and minimum discharge, same as those for 1929.

REMARKS.—Records good. Flow almost completely regulated during low and medium stages by hydroelectric plants at Lock 12 and Mitchell Dam. 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, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,740	5,840	6,590	6,550	23,200	76,700	38,500	49,400	15,000	23,800	7,000	75
2	4,390	4,830	390	6,160	16,100	70,600	32,800	68,000	16,200	12,600	8,300	150
3	4,230	4,010	7,520	5,120	14,400	62,400	28,600	67,600	20,200	13,400	8,300	1,370
4	4,980	1,060	8,120	4,290	14,300	105,000	21,200	64,100	19,100	11,600	5,960	6,840
5	4,770	4,500	8,830	4,420	16,600	121,000	19,100	60,200	15,500	11,800	10,500	7,800
6	4,830	5,710	10,100	5,750	16,000	86,200	18,900	66,100	14,500	11,600	12,700	5,540
7	2,300	4,820	9,300	3,050	12,700	69,400	16,800	83,300	16,400	8,590	13,800	5,670
8	8,200	4,700	3,600	1,970	12,100	64,200	16,800	73,800	13,600	10,900	12,500	270
9	6,660	4,210	140	5,030	8,830	55,500	17,300	61,600	12,200	12,100	7,650	4,170
10	5,730	440	3,890	10,300	19,600	54,000	14,200	60,500	9,700	12,600	6,540	3,150
11	5,030	75	4,870	13,400	23,700	48,200	14,300	53,200	12,200	9,500	3,510	3,920
12	5,560	4,730	4,650	8,960	19,800	43,400	15,000	47,100	14,900	9,460	5,960	3,360
13	5,220	5,080	5,550	5,670	17,800	45,700	14,300	42,100	12,500	8,630	5,880	5,460
14	360	4,420	5,750	15,600	16,000	138,000	15,000	38,200	11,300	7,590	6,420	6,630
15	4,980	5,250	3,540	16,400	19,600	182,000	17,400	37,500	7,970	9,590	5,880	5,540
16	6,080	5,550	640	17,200	36,000	133,000	15,300	23,500	8,500	9,120	7,460	7,340
17	4,250	670	4,570	12,900	35,000	85,400	24,200	20,000	12,600	10,600	6,210	8,830
18	6,040	1,160	4,580	14,000	22,100	84,000	24,300	18,000	11,600	10,400	6,420	8,580
19	3,470	8,840	5,420	10,800	20,400	68,200	24,900	24,400	10,700	9,000	6,130	9,880
20	2,380	8,050	5,920	6,590	21,800	59,000	26,500	47,100	9,500	8,170	6,170	13,300
21	90	6,000	7,840	11,700	28,700	81,800	26,500	58,400	10,800	7,170	6,170	9,080
22	6,590	6,460	4,790	16,000	26,200	119,000	22,800	52,200	8,330	10,500	8,210	5,690
23	9,250	7,030	100	15,900	22,900	131,000	14,100	49,000	7,250	8,550	6,920	10,900
24	7,780	8,060	2,080	15,900	26,100	111,000	18,100	45,500	11,600	7,630	3,810	11,400
25	7,060	6,760	100	16,300	39,700	85,200	30,300	38,000	9,750	10,600	870	13,600
26	7,800	6,480	4,710	12,900	39,600	69,300	50,000	34,800	9,710	7,920	3,740	16,100
27	6,080	7,500	6,850	17,500	74,200	62,700	41,900	32,600	12,700	8,090	5,710	13,200
28	6,920	7,300	7,730	39,900	98,100	60,200	34,200	23,100	13,400	4,250	5,960	10,400
29	6,790	3,200	4,750	29,600	-------	62,800	39,600	23,300	15,600	4,880	4,540	13,000
30	7,210	4,930	2,110	31,200	-------	60,500	36,500	23,100	15,600	7,330	2,260	24,000
31	5,370	-------	5,780	26,900	-------	51,700	-------	18,900	-------	6,420	190	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	9,250	90	5,320	0.522	0.60
November	8,840	75	4,920	.482	.54
December	10,100	100	4,860	.476	.55
January	39,900	1,970	13,200	1.29	1.49
February	98,100	8,830	26,500	2.60	2.71
March	182,000	43,400	82,200	8.06	9.29
April	50,000	14,100	24,300	2.38	2.66
May	83,300	18,000	45,300	4.44	5.12
June	20,200	7,250	12,600	1.24	1.38
July	23,800	4,250	9,820	.963	1.11
August	13,800	190	6,510	.638	.74
September	24,000	75	7,840	.769	.86
The year	182,000	75	20,300	1.99	27.05

ALABAMA RIVER NEAR MONTGOMERY, ALA.

LOCATION.—Water-stage recorder in T. 17 N., R. 17 E., at highway bridge 4 miles above Autauga Creek and 6 miles northwest of Montgomery.

DRAINAGE AREA.—15,100 square miles.

RECORDS AVAILABLE.—October, 1927, to September, 1929. At Montgomery January, 1899, to December, 1903.

EXTREMES.—Maximum discharge during year, 209,000 second-feet Mar. 17 (gage height, 59.6 feet); minimum 5,550 second-feet Jan. 8 (gage height, 0.8 foot). 1927–1929: Maximum discharge, that of Mar. 17, 1929; minimum, 5,360 second-feet Oct. 30, 1927 (gage height, 0.65 foot).

REMARKS.—Records good. Flow regulated by hydroelectric plants on Tallapoosa and Coosa Rivers. 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, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8,410	12,900	14,200	13,700	27,400	114,000	73,300	53,900	28,300	25,800	15,200	7,800
2	12,400	13,600	13,700	14,400	23,900	116,000	57,800	69,100	24,000	25,800	13,800	7,250
3	13,300	12,400	11,300	13,600	16,700	113,000	49,900	79,200	25,300	18,400	14,000	7,250
4	13,600	9,400	16,800	12,400	14,600	107,000	41,700	82,700	27,900	17,700	11,700	9,830
5	14,400	7,690	17,200	11,000	17,500	118,000	36,800	82,200	26,300	16,000	9,790	13,100
6	14,000	13,400	18,400	10,600	20,100	130,000	34,900	79,200	23,500	14,900	13,000	13,200
7	10,900	14,700	18,400	7,940	19,300	132,000	31,600	82,300	23,600	14,900	15,800	13,300
8	10,700	14,200	16,900	6,500	15,300	125,000	28,500	91,800	23,300	13,700	17,500	11,400
9	13,600	14,000	11,600	8,060	15,600	115,000	27,800	93,300	20,000	16,000	15,400	8,710
10	13,500	11,400	9,560	11,800	12,600	104,000	23,600	90,700	16,400	16,300	17,100	10,700
11	13,500	8,520	13,100	15,100	25,800	92,400	22,100	85,800	18,000	14,800	12,300	10,900
12	14,000	8,900	14,500	19,500	24,500	78,700	22,500	76,700	20,000	15,600	9,980	11,800
13	14,100	11,800	14,800	13,900	22,400	70,100	21,700	63,100	18,600	15,400	13,400	11,600
14	11,700	13,300	15,500	12,600	19,500	85,800	20,800	51,500	17,300	12,900	15,500	13,700
15	8,510	12,900	15,500	20,100	20,500	125,000	21,600	45,800	15,900	10,800	16,100	10,200
16	13,500	13,800	12,600	21,000	29,800	179,000	23,300	38,000	14,100	12,100	14,700	7,840
17	13,600	13,100	11,100	21,400	43,200	204,000	28,100	29,100	14,100	14,900	14,700	10,600
18	14,000	9,050	13,900	21,900	38,600	176,000	30,600	26,600	15,600	16,700	10,400	11,200
19	11,900	11,100	13,900	20,600	34,000	153,000	31,200	27,400	15,900	16,700	10,400	11,100
20	12,400	13,200	14,900	15,100	32,100	138,000	34,700	42,500	14,600	15,400	10,600	13,200
21	8,920	13,000	16,200	11,800	33,200	126,000	33,400	63,100	14,800	13,800	11,500	13,300
22	9,030	12,400	17,400	17,400	36,500	123,000	31,800	72,500	15,600	10,700	11,700	9,380
23	13,700	12,600	13,100	19,400	29,900	128,000	26,200	71,100	13,100	13,200	12,700	8,200
24	14,300	12,600	10,200	18,400	28,100	136,000	25,500	67,200	13,100	14,800	10,100	13,000
25	12,600	11,000	10,200	18,500	34,300	139,000	29,200	57,700	14,900	18,000	8,480	13,500
26	12,300	9,390	8,910	18,800	37,400	134,000	49,000	45,500	19,000	19,900	8,240	17,400
27	12,500	10,600	12,800	17,200	68,200	126,000	57,900	40,100	21,400	17,400	12,100	16,100
28	10,200	16,000	13,800	26,400	98,800	118,000	50,900	37,000	24,900	14,200	11,800	15,100
29	9,140	14,100	14,900	36,300	-------	111,000	46,700	33,200	26,100	7,850	12,200	12,600
30	10,700	14,000	12,200	32,600	-------	102,000	47,000	32,600	25,700	15,100	9,530	17,600
31	12,000	-------	11,300	30,200	-------	89,800	-------	30,200	-------	15,000	8,070	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	14,400	8,410	12,200	0.808	0.93
November	16,000	7,690	12,200	.808	.90
December	18,400	8,910	13,800	.914	1.05
January	36,300	6,500	17,400	1.15	1.33
February	98,800	12,600	30,000	1.99	2.07
March	204,000	70,100	123,000	8.15	9.40
April	73,300	20,800	35,300	2.34	2.61
May	93,300	26,600	59,400	3.93	4.53
June	23,300	13,100	19,700	1.30	1.45
July	25,800	7,850	15,600	1.03	1.19
August	17,500	8,070	12,500	.828	.95
September	17,600	7,250	11,700	.775	.86
The year	204,000	6,500	30,300	2.01	27.27

ALABAMA RIVER AT SELMA, ALA.

LOCATION.—Water-stage recorder in T. 17 N., R. 10 E., in Selma, half a mile below Louisville & Nashville Railroad bridge.

DRAINAGE AREA.—17,100 square miles.

RECORDS AVAILABLE.—January, 1899, to December, 1913; June, 1928, to September, 1929.

EXTREMES.—Maximum discharge during year, 204,000 second-feet Mar. 19 (gage height, 55.52 feet); minimum, 6,240 second-feet Jan. 9 (gage height, 1.82 feet).

1899–1913, 1928–29: Maximum discharge, that of Mar. 19, 1929; minimum, 2,660 second-feet Nov. 1, 1904 (gage 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, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10,600	11,600	13,800	11,200	33,000	114,000	95,600	55,500	32,200	27,500	16,000	8,270
2	8,590	12,500	14,500	13,200	30,200	125,000	79,200	62,000	29,800	28,200	16,000	7,500
3	11,400	13,200	13,200	14,000	26,000	127,000	66,000	70,500	27,500	26,000	14,500	7,200
4	13,000	12,300	11,600	13,000	19,000	129,000	56,000	76,000	28,500	20,500	13,000	7,060
5	13,200	9,600	16,500	12,100	16,000	139,000	47,000	78,500	29,800	18,800	10,200	8,590
6	14,200	7,950	18,200	10,800	18,800	151,000	41,200	77,800	28,000	17,000	10,200	12,300
7	11,600	12,500	19,500	9,790	21,800	159,000	38,500	76,200	25,800	16,200	13,000	13,000
8	11,000	14,200	19,200	7,650	20,500	159,000	34,800	79,500	26,200	15,500	16,000	13,200
9	10,400	14,000	17,000	6,500	17,800	152,000	32,800	85,400	24,800	15,000	18,000	11,800
10	13,000	13,500	11,600	8,270	18,200	136,000	31,000	87,500	21,800	17,200	16,200	8,920
11	13,200	10,800	9,430	13,000	16,500	116,000	27,800	86,300	18,200	17,200	17,000	10,400
12	13,200	8,270	12,500	19,000	27,800	99,300	26,500	82,100	19,800	16,000	12,800	10,800
13	13,800	8,750	14,500	22,200	27,800	90,800	26,500	75,000	21,500	16,500	10,400	11,400
14	13,800	11,000	14,800	17,000	25,200	100,000	25,200	64,500	20,000	16,000	13,000	11,400
15	13,500	12,500	15,500	15,500	23,200	134,000	24,800	55,000	19,000	16,000	15,800	13,000
16	9,090	12,800	15,200	21,800	30,500	164,000	25,800	48,500	17,200	12,100	16,200	10,600
17	12,500	13,500	12,300	25,000	43,800	185,000	27,000	40,800	15,800	13,800	15,000	8,270
18	14,000	12,300	11,200	26,000	50,500	199,000	29,500	33,800	16,000	17,000	14,200	9,980
19	13,800	9,600	13,500	26,000	47,000	203,000	33,200	31,200	17,200	19,200	10,800	10,800
20	11,800	11,400	14,200	24,000	43,000	198,000	35,200	35,000	17,200	18,800	9,980	10,800
21	11,600	13,800	15,800	18,500	41,200	187,000	38,200	50,200	16,000	16,000	10,200	12,800
22	9,090	13,000	17,200	14,500	41,000	176,000	37,500	63,800	16,200	14,000	10,800	12,500
23	8,900	12,300	18,000	19,500	40,500	168,000	35,000	69,800	16,500	11,600	11,200	9,600
24	13,000	12,500	13,500	21,200	35,000	166,000	29,800	70,000	14,000	13,200	12,100	9,090
25	14,000	12,100	10,200	18,000	32,500	166,000	34,500	66,500	15,200	15,500	10,400	15,500
26	12,500	10,800	9,600	21,000	41,000	168,000	42,000	57,800	18,500	19,200	8,590	19,000
27	11,800	8,920	8,750	21,000	61,000	166,000	54,200	48,000	22,200	20,500	8,270	18,500
28	12,100	10,400	11,600	21,000	86,900	159,000	57,500	43,000	25,500	18,500	10,800	18,800
29	9,980	15,500	13,500	31,200	-------	148,000	53,500	38,800	28,000	15,000	11,200	16,000
30	9,090	14,200	14,200	37,500	-------	131,000	51,200	35,800	29,000	10,200	11,200	13,500
31	9,980	-------	11,800	35,800	-------	112,000	-------	34,800	-------	15,200	9,790	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	14,200	8,590	11,900	0.696	0.80
November	15,500	7,950	11,900	.696	.78
December	19,500	8,750	13,900	.813	.94
January	37,500	6,500	18,600	1.09	1.26
February	86,900	16,000	33,400	1.95	2.03
March	203,000	90,800	149,000	8.71	10.04
April	95,600	24,800	41,200	2.41	2.69
May	87,500	31,200	60,600	3.54	4.08
June	32,200	14,000	21,900	1.28	1.43
July	28,200	11,600	17,200	1.01	1.16
August	18,000	8,270	12,700	.743	.86
September	19,000	7,060	11,700	.684	.76
The year	203,000	6,500	33,800	1.98	26.83

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, 1929.

EXTREMES.—Maximum discharge during year, 269,000 second-feet Mar. 23 (gage height, 55.83 feet); minimum, 8,420 second-feet Sept. 5 (gage height, 3.81 feet).

1928–29: Maximum and minimum discharges, those of 1929.

REMARKS.—Records good. Flow regulated by power plants above.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15,900	11,500	16,500	15,700	43,200	120,000	174,000	73,800	42,000	31,400	15,100	12,300
2	14,300	12,900	15,900	14,300	40,400	128,000	156,000	76,100	38,400	30,400	17,100	10,500
3	11,700	14,100	16,100	15,100	36,200	133,000	139,000	81,100	34,900	30,100	16,300	9,370
4	11,900	14,700	16,300	16,100	31,400	140,000	124,000	87,000	31,700	29,200	16,900	8,800
5	13,900	14,700	14,700	16,300	24,700	155,000	101,000	92,300	31,700	23,400	16,300	8,420
6	14,900	13,300	16,300	16,500	20,900	166,000	90,000	95,900	32,700	20,900	15,100	9,180
7	15,700	10,900	18,300	15,900	20,900	174,000	72,200	96,600	31,400	19,300	13,300	12,300
8	15,900	12,100	19,500	14,500	23,000	179,000	58,000	96,300	28,500	18,100	13,700	14,500
9	14,700	15,100	20,100	12,900	25,200	179,000	48,400	97,900	27,900	17,500	16,100	14,900
10	12,700	15,900	19,300	12,500	29,800	179,000	42,300	102,000	27,000	18,700	18,100	14,500
11	13,500	15,700	16,500	15,500	28,200	175,000	39,100	105,000	24,000	17,700	18,300	12,500
12	14,700	14,700	13,500	20,100	25,500	168,000	34,900	106,000	20,900	19,300	18,500	12,100
13	15,100	12,300	13,700	24,700	30,100	164,000	31,700	105,000	20,500	17,900	17,100	12,700
14	15,300	10,700	15,500	26,400	32,400	178,000	30,400	99,900	21,700	17,700	14,500	13,300
15	15,500	11,900	16,300	22,700	34,600	208,000	29,200	90,700	21,500	17,900	14,300	13,900
16	14,900	13,700	16,900	20,300	53,500	221,000	27,600	79,100	20,300	18,700	16,300	14,500
17	13,100	14,500	17,100	24,200	68,900	226,000	28,200	67,900	19,100	15,500	17,300	14,100
18	14,500	15,100	15,900	29,200	72,800	231,000	29,500	56,400	17,900	17,100	17,100	11,900
19	17,700	15,500	14,300	29,800	73,500	239,000	32,400	47,400	17,500	18,700	16,500	11,100
20	17,700	13,900	14,900	31,100	69,200	249,000	36,500	45,200	17,900	20,100	14,700	12,700
21	16,700	13,500	16,700	29,200	67,200	261,000	41,300	50,900	18,300	20,100	12,900	13,100
22	15,100	15,300	18,100	24,700	64,600	266,000	47,400	63,600	17,700	18,700	12,300	13,900
23	13,500	15,900	19,100	21,100	59,600	269,000	47,100	77,100	17,500	17,100	12,500	14,700
24	11,700	15,300	19,700	21,100	55,400	260,000	43,600	85,700	17,900	14,700	12,900	13,300
25	13,300	14,900	17,900	23,200	49,300	248,000	38,800	88,700	18,300	14,500	13,500	11,900
26	13,700	14,700	15,100	24,400	57,000	236,000	44,500	86,400	18,300	18,100	13,300	15,100
27	15,300	14,100	13,500	24,700	93,300	226,000	53,800	78,400	20,500	14,300	11,500	19,900
28	14,700	12,700	12,300	26,100	109,000	218,000	64,600	67,600	21,100	20,500	10,300	22,100
29	14,500	12,100	13,300	27,600	-------	210,000	69,900	58,000	26,400	20,100	11,300	21,300
30	13,300	14,900	15,300	35,600	-------	201,000	69,900	50,900	29,800	18,500	12,700	19,100
31	11,900	-------	16,300	43,200	-------	190,000	-------	45,200	-------	14,900	13,100	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	17,700	11,700	14,400	0.679	0.78
November	15,900	10,700	13,900	.656	.73
December	20,100	12,300	16,300	.769	.89
January	43,200	12,500	22,400	1.06	1.22
February	109,000	20,900	47,800	2.25	2.34
March	269,000	120,000	200,000	9.43	10.87
April	174,000	27,600	61,500	2.90	3.24
May	106,000	45,200	79,200	3.74	4.31
June	42,000	17,500	24,400	1.15	1.28
July	31,400	14,300	19,500	.920	1.06
August	18,500	10,300	14,800	.698	.80
September	22,100	8,420	13,600	.642	.72
The year	269,000	8,420	44,100	2.08	28.24

CONASAUGA RIVER NEAR TENNGA, GA.

LOCATION.—Chain gage at highway bridge 600 feet below Southern Railway, 2 miles north of Tennga, Murray County.
DRAINAGE AREA.—105 square miles.
RECORDS AVAILABLE.—May to September, 1929.
EXTREMES.—Maximum discharge during period, 1,420 second-feet June 27 (gage height, 9.55 feet; minimum, 50 second-feet Sept. 2 and 3 (gage height, 5.70 feet).
REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1929

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1		250	413	468	54	16		145	130	90	172
2		280	311	236	50	17		141	124	84	328
3		328	265	163	50	18		167	120	84	196
4		250	222	138	54	19		265	126	80	132
5		222	196	118	59	20		170	115	73	99
6		209	250	102	70	21		165	97	71	86
7		196	184	100	64	22		172	99	69	77
8		196	160	97	54	23		222	94	66	83
9		209	165	90	54	24		236	89	69	92
10		184	196	84	115	25		250	94	102	396
11		170	196	138	78	26		644	89	71	938
12		170	311	147	59	27	328	1,380	145	63	449
13		167	196	100	100	28	361	810	109	63	311
14		163	158	143	113	29	296	895	94	55	222
15		163	136	134	73	30	280	563	89	55	184
						31	265		449	53	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
May 27–31	361	265	306	2.91	0.54
June	1,380	141	313	2.98	3.32
July	449	89	175	1.67	1.92
August	468	53	110	1.05	1.21
September	938	50	160	1.52	1.70

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ETOWAH RIVER NEAR KINGSTON, GA.

LOCATION.—Water-stage recorder at highway bridge half a mile above Two Run Creek and 2¾ 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 September, 1929.

EXTREMES.—Maximum discharge during year, 39,900 second-feet May 2 (gage height, 21.42 feet); minimum, 910 second-feet Sept. 3 (gage height, 4.00 feet).

1928–29: Maximum and minimum discharges, those of 1929.

REMARKS.—Records good except those for estimated periods (June 22–28 and Sept. 21–25), which are fair.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,310	1,150	1,440	1,050	1,830	16,500	5,140	15,500	4,500	2,870	10,100	1,070
2	1,310	1,230	1,610	1,230	1,650	6,680	5,140	37,200	3,680	2,740	5,300	1,050
3	1,350	1,110	1,310	1,270	1,610	4,970	4,040	15,300	5,450	3,530	2,340	974
4	1,400	1,230	1,270	1,190	1,560	8,100	3,900	6,160	3,680	2,870	1,970	1,020
5	1,310	1,230	1,190	1,150	1,560	24,000	3,750	5,450	3,190	2,740	1,780	1,110
6	1,150	1,230	1,190	1,520	2,070	21,600	3,600	4,970	2,990	2,390	1,650	1,270
7	1,110	1,150	1,150	1,690	3,750	7,940	3,390	6,680	2,800	2,180	1,650	1,150
8	1,150	1,230	1,150	1,480	3,120	5,450	3,260	5,980	3,750	2,120	1,690	1,190
9	1,230	1,190	1,110	1,310	2,740	4,340	3,190	6,060	3,320	2,070	1,600	1,230
10	1,270	1,190	1,110	1,690	3,680	3,900	3,120	5,450	3,260	2,390	1,560	2,510
11	1,270	1,110	1,110	3,060	2,800	3,460	3,260	4,180	2,800	3,900	2,390	2,120
12	1,400	1,110	1,110	2,390	2,280	3,320	3,600	3,900	2,510	2,510	3,060	1,480
13	1,230	1,110	1,150	1,780	2,020	4,180	3,190	3,600	2,450	2,450	2,450	1,740
14	1,110	998	1,110	1,560	1,920	11,300	2,930	3,390	2,340	2,070	1,780	1,830
15	1,150	1,110	1,110	1,480	1,920	26,600	3,600	3,260	2,340	2,020	2,230	1,780
16	1,150	1,070	1,070	1,440	4,180	24,000	7,190	3,260	2,390	1,880	2,230	1,780
17	1,440	1,150	1,110	1,480	4,040	8,440	5,450	3,750	2,280	1,740	1,560	8,440
18	1,560	1,110	1,190	1,650	2,990	5,900	3,750	5,450	2,740	1,830	1,440	6,920
19	2,180	1,650	1,230	1,920	2,450	5,140	3,260	4,800	3,190	3,190	1,400	3,530
20	1,650	2,230	1,190	2,120	2,340	4,650	3,060	8,440	2,390	3,260	1,350	1,880
21	1,270	1,830	1,110	1,970	7,330	5,140	3,750	7,330	2,620	2,280	1,310	
22	1,190	1,350	1,110	1,880	8,780	21,400	5,450	5,450		1,780	1,270	
23	1,650	1,230	1,050	1,830	5,140	23,400	5,300	4,180		1,690	1,270	2,300
24	2,870	1,270	1,070	1,740	3,390	20,800	3,460	3,750		1,650	1,230	
25	1,830	1,150	1,070	1,780	2,930	9,320	5,810	3,460	3,450	1,690	1,190	
26	1,400	1,190	1,060	2,120	4,180	6,250	7,620	3,530		1,880	1,190	10,900
27	1,310	1,110	1,070	2,450	10,300	5,580	4,970	4,800		1,740	1,150	11,300
28	1,270	1,110	1,070	4,040	20,500	4,970	4,650	5,810		1,970	1,150	4,800
29	1,270	1,150	1,110	3,120		4,500	8,780	4,800	4,340	2,340	1,150	3,060
30	1,190	1,150	1,070	2,280		6,060	6,250	3,530	3,460	1,880	1,110	2,450
31	1,230		1,070	2,020		5,700		4,340		2,020	1,070	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,870	1,110	1,390	0.853	0.98
November	2,230	998	1,240	.761	.85
December	1,610	1,050	1,150	.706	.81
January	4,040	1,050	1,860	1.14	1.31
February	20,500	1,560	4,040	2.48	2.58
March	26,600	3,320	10,100	6.20	7.15
April	8,780	2,930	4,460	2.74	3.06
May	37,200	3,260	6,570	4.03	4.65
June		2,280	3,220	1.98	2.21
July	3,900	1,650	2,310	1.42	1.64
August	10,100	1,070	2,020	1.24	1.43
September	11,300	974	2,940	1.80	2.01
The year	37,200	974	3,440	2.11	28.68

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, 1929.

EXTREMES.—Maximum discharge during year, 9,430 second-feet Mar. 14 (gage height, 10.40 feet); minimum, 0.1 second-foot Sept. 7 (gage height, 0.40 foot).

REMARKS.—Records fair between 20 and 6,000 second-feet, poor above and below. Discharge estimated Dec. 18–21.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.0	13	76	74	355	1,340	295	2,260	194	32	7.8	0.2
2	3.2	12	76	101	295	1,090	268	2,640	138	25	7.2	.2
3	2.4	14	70	89	264	818	234	1,560	190	21	7.8	.2
4	2.8	13	67	82	230	1,060	213	914	164	20	7.8	.2
5	5.2	11	67	103	217	2,690	182	620	125	18	4.8	.2
6	6.6	10	65	375	299	1,420	161	585	101	12	2.8	.2
7	8.4	10	61	326	400	898	123	2,640	80	9.6	1.7	.1
8	8.4	11	45	268	380	641	117	1,340	69	8.4	1.7	.2
9	12	11	48	242	405	538	111	1,860	53	6.6	1.0	1.2
10	11	14	50	842	454	454	120	1,020	45	5.6	1.0	3.2
11	9.0	16	50	714	405	380	230	676	40	4.4	1.2	2.0
12	9.6	16	48	514	345	330	330	466	30	2.8	1.2	1.6
13	6.0	16	48	385	299	866	255	355	23	4.0	1.2	4.0
14	6.0	15	47	317	268	6,180	222	273	21	4.8	.8	45
15	5.6	14	45	273	273	3,350	295	213	21	5.2	1.0	32
16	5.6	12	51	242	370	1,860	508	222	23	6.0	.8	23
17	5.6	12	45	246	380	1,200	436	201	23	9.0	.5	28
18	6.0	15	59	714	375	874	335	201	22	11	.5	26
19	6.6	400	66	1,380	330	683	282	1,560	18	12	.5	24
20	6.0	425	72	914	355	532	213	1,860	21	11	.5	21
21	6.6	260	74	676	676	520	197	1,110	20	6.0	.5	16
22	17	186	72	620	690	1,200	599	655	16	6.0	.5	9.0
23	138	148	72	544	514	4,230	484	490	65	6.0	.5	8.4
24	96	106	69	690	430	2,160	340	355	41	6.6	.5	11
25	56	103	67	1,860	375	1,240	1,000	286	31	7.2	.5	70
26	36	103	65	1,420	1,940	898	858	304	32	6.0	.5	380
27	21	103	67	1,060	2,360	669	520	321	82	9.0	.5	238
28	19	92	72	898	2,420	502	770	277	92	9.0	.5	138
29	17	80	61	669	-------	415	993	222	61	9.0	.4	98
30	17	80	56	550	-------	430	810	201	44	9.0	.4	70
31	16	-------	56	430	-------	345	-------	201	-------	7.8	.2	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	138	2.4	18.4	0.152	0.18
November	425	10	77.4	.640	.71
December	76	45	60.9	.503	.58
January	1,860	74	568	4.69	5.41
February	2,420	217	575	4.75	4.95
March	6,180	330	1,280	10.6	12.22
April	1,000	111	383	3.17	3.54
May	2,640	201	835	6.90	7.96
June	194	16	62.8	.519	.58
July	32	2.8	10.0	.083	.10
August	7.8	.2	1.83	.015	.02
September	380	.1	41.7	.345	.38
The year	6,180	.1	327	2.70	36.63

CHOCCOLOCCO CREEK NEAR JENIFER, ALA.

LOCATION.—Staff gage in T. 17 S., R. 7 E., at Louisville & Nashville Railroad bridge 1½ miles north of Jenifer.

DRAINAGE AREA.—274 square miles (revised).

RECORDS AVAILABLE.—August, 1903, to February, 1908; May to September, 1929.

EXTREMES.—Maximum discharge during period, 1,540 second-feet July 17 (gage height, 4.87 feet); minimum, 73 second-feet Sept. 10 (gage height, 1.76 feet). 1903–1908, 1929: Maximum gage height, 14.2 feet Mar. 20, 1906 (discharge not determined); minimum discharge, 62 second-feet Oct. 24–30 and Nov. 1–2, 1904 (gage height, 1.40 feet).

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1929

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1	------	321	208	181	85	16	------	237	168	118	161
2	------	340	222	208	85	17	------	222	699	114	222
3	------	471	252	181	85	18	------	208	495	109	569
4	------	495	360	149	93	19	------	208	268	114	194
5	------	340	237	149	83	20	------	208	222	95	135
6	------	303	194	131	99	21	------	208	181	83	105
7	------	268	181	131	97	22	------	208	168	97	101
8	------	285	181	124	99	23	471	208	168	95	107
9	------	285	168	126	91	24	447	194	168	105	109
10	------	268	181	135	81	25	447	208	168	101	424
11	------	252	208	149	149	26	402	222	168	101	285
12	------	237	208	140	120	27	519	285	168	105	208
13	------	237	168	140	131	28	471	303	168	99	161
14	------	222	168	126	103	29	381	285	168	97	137
15	------	237	181	122	105	30	340	222	168	85	140
						31	321	------	168	93	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
May 23–31	519	321	422	1.54	0.52
June	495	194	266	.971	1.08
July	699	168	220	.803	.93
August	208	83	123	.449	.52
September	569	81	152	.555	.62

TALLAPOOSA RIVER NEAR CRAGFORD, ALA.

LOCATION.—Water-stage recorder in sec. 28, T. 20 S., R. 10 E., 400 feet above Crooked Creek and 2½ miles east of Cragford. Zero of gage is 637.75 feet above mean sea level.

DRAINAGE AREA.—1,460 square miles.

RECORDS AVAILABLE.—October, 1922, to September, 1929.

EXTREMES.—Maximum discharge during year, 43,300 second-feet Mar. 15 (gage height, 18.60 feet); minimum, 260 second-feet Aug. 31 and Sept. 1 (gage height, 1.30 feet).

1922–1929: Maximum discharge, 46,300 second-feet Jan. 18, 1925 (gage height, 19.6 feet); minimum, 30 second-feet Sept. 11, 1925 (gage height, 0.65 foot).

REMARKS.—Records good. 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, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	655	705	1,010	905	1,530	15,500	3,690	9,370	3,870	1,730	1,010	330
2	855	705	1,060	905	1,410	11,400	3,690	12,500	3,690	1,520	830	330
3	1,170	705	1,010	960	1,290	6,220	3,520	11,600	4,250	1,390	670	330
4	905	755	905	960	1,290	15,000	3,180	7,950	3,870	1,320	620	370
5	855	755	855	960	1,230	24,000	3,020	6,020	3,020	1,250	530	570
6	1,170	755	855	1,170	1,290	17,000	2,860	5,620	2,550	1,070	490	570
7	960	755	855	1,290	1,530	12,400	2,700	5,020	2,240	1,010	490	490
8	805	805	705	1,350	1,660	6,420	2,550	3,870	2,400	1,320	450	450
9	705	805	705	1,290	2,670	4,250	2,550	7,050	2,550	1,130	410	450
10	655	805	655	2,830	3,310	3,690	2,550	5,220	2,240	1,070	2,160	1,320
11	610	755	655	2,830	2,520	3,350	2,550	4,250	2,090	1,660	1,660	2,240
12	570	655	705	2,220	1,940	3,180	2,550	3,350	1,950	1,460	950	1,520
13	570	655	705	1,660	1,660	4,830	2,550	3,020	1,800	1,320	770	1,010
14	570	655	755	1,410	1,470	20,600	2,550	2,860	1,660	1,130	770	770
15	570	655	755	1,350	2,220	37,600	3,520	2,700	1,660	1,010	770	770
16	570	655	755	1,350	6,450	27,700	5,220	2,550	1,660	1,250	620	1,070
17	570	655	755	1,350	6,230	21,700	4,640	2,550	1,660	1,070	670	3,350
18	655	705	755	1,350	4,360	11,600	3,180	2,860	1,660	1,390	830	4,250
19	805	2,650	755	1,410	3,150	5,620	2,700	4,250	1,660	1,800	1,070	2,400
20	755	3,660	755	1,530	2,670	4,640	2,860	5,820	1,660	1,390	620	1,250
21	655	2,080	905	1,530	6,450	7,950	5,220	6,020	1,660	1,190	530	890
22	570	1,350	1,010	1,410	5,360	22,000	4,060	5,020	1,660	1,010	490	670
23	2,550	1,060	1,060	1,410	4,180	20,900	3,350	4,060	1,520	770	490	620
24	1,800	960	960	1,350	3,310	19,200	2,860	3,350	1,520	720	490	770
25	1,110	905	905	1,800	2,670	14,400	9,040	2,860	1,800	890	490	2,550
26	855	855	905	2,220	5,150	7,270	9,130	2,860	2,550	830	570	3,870
27	755	855	905	2,990	16,500	5,420	6,020	3,870	2,700	1,070	490	4,830
28	755	855	960	4,950	22,300	4,830	3,870	5,220	3,020	1,130	490	2,550
29	755	805	905	3,650	------	4,250	5,420	8,190	2,860	2,240	490	1,950
30	705	855	905	2,370	------	3,870	5,220	6,840	2,240	1,390	450	1,390
31	705	------	905	1,940	------	3,870	------	4,450	------	1,070	295	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,550	570	845	0.578	0.67
November	3,660	655	994	.681	.76
December	1,060	655	848	.581	.67
January	4,950	905	1,760	1.20	1.38
February	22,300	1,230	4,140	2.84	2.96
March	37,600	3,180	12,000	8.22	9.48
April	9,130	2,550	3,890	2.66	2.97
May	12,500	2,550	5,200	3.56	4.10
June	4,250	1,520	2,320	1.59	1.77
July	2,240	720	1,250	.856	.99
August	2,160	295	699	.479	.55
September	4,830	330	1,460	1.00	1.12
The year	37,600	295	2,950	2.02	27.42

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, 1929.

EXTREMES.—Maximum discharge during year, 45,400 second-feet Mar. 15 (gage height, 25.60 feet); minimum, 350 second-feet Sept. 3 and 4 (gage height, 2.80 feet).

1923–1929: Maximum discharge, 46,900 second-feet Jan. 18, 1925 (gage height, 26.3 feet); minimum, 60 second-feet for eight days during September, 1925 (gage height, 2.2 feet).

REMARKS.—Records good. 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, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	580	760	1,070	950	1,760	17,800	3,960	12,400	3,960	1,780	1,520	460
2	820	700	1,070	820	1,450	13,600	3,960	13,600	3,800	1,520	1,070	400
3	1,380	700	1,010	820	1,380	7,250	3,960	13,800	4,620	1,520	1,010	350
4	950	700	950	820	1,320	17,800	3,500	9,770	4,280	1,450	1,010	350
5	880	700	880	880	1,260	31,000	3,350	5,710	3,210	1,380	820	700
6	1,130	700	820	1,070	1,320	17,800	3,210	6,470	2,510	1,320	760	820
7	1,130	700	820	1,200	1,570	13,000	3,060	6,860	2,100	1,260	700	580
8	950	820	820	1,200	2,080	8,070	2,920	4,450	2,920	1,450	700	520
9	880	820	820	1,010	3,350	4,800	2,920	9,350	2,510	1,320	820	520
10	820	820	820	3,480	4,300	3,960	2,920	6,090	2,100	1,200	2,510	1,130
11	760	760	820	3,090	2,960	3,500	2,920	4,450	1,850	1,970	1,850	2,780
12	700	700	820	2,590	2,210	3,350	3,060	3,500	1,780	1,650	1,010	1,450
13	640	700	820	1,950	1,820	6,280	2,780	3,350	1,650	1,380	820	880
14	580	700	820	1,510	1,640	25,300	2,780	2,920	1,590	1,260	950	880
15	580	700	820	1,260	2,210	44,400	2,780	2,780	1,780	1,200	880	880
16	580	700	820	1,200	7,650	31,200	6,650	2,510	1,650	1,520	760	950
17	640	700	820	1,320	7,450	24,000	5,520	2,920	1,590	1,200	700	3,350
18	820	760	950	1,320	4,750	14,000	3,650	3,500	1,780	1,720	1,320	4,800
19	950	1,820	950	1,380	3,480	6,650	2,920	3,500	1,780	2,240	1,780	2,920
20	820	3,870	1,010	1,570	3,090	5,160	2,650	6,650	1,850	1,590	760	1,320
21	820	2,340	1,070	1,380	8,880	8,070	6,470	7,250	1,650	1,450	700	1,010
22	700	1,380	1,070	1,320	6,870	30,300	4,620	6,090	2,240	1,130	580	880
23	3,740	1,130	950	1,320	4,750	24,200	3,500	4,280	1,650	1,010	580	760
24	2,080	950	950	1,200	3,350	23,600	3,060	3,210	1,720	950	580	1,070
25	1,380	880	880	1,760	2,840	17,200	8,920	2,780	2,100	1,130	580	2,100
26	1,010	820	820	2,590	4,150	8,920	11,200	2,920	3,060	950	580	5,160
27	820	820	820	2,710	19,700	6,090	7,650	4,800	3,060	1,010	580	6,280
28	760	820	820	6,300	28,200	5,340	5,900	5,520	3,500	1,070	580	2,920
29	700	820	820	4,150	------	4,800	5,900	9,770	2,920	3,500	460	2,100
30	700	820	820	2,840	------	4,280	6,090	8,920	1,850	1,380	460	1,380
31	760	------	820	2,080	------	4,980	------	5,160	------	1,260	460	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,740	580	970	0.584	0.67
November	3,870	700	987	.595	.66
December	1,070	820	889	.536	.62
January	6,300	820	1,840	1.11	1.28
February	28,200	1,260	4,850	2.92	3.04
March	44,400	3,350	14,100	8.49	9.78
April	11,200	2,650	4,430	2.67	2.98
May	13,800	2,510	5,980	3.60	4.15
June	4,620	1,590	2,440	1.47	1.64
July	3,500	950	1,440	.867	1.00
August	2,510	460	900	.542	.62
September	6,280	350	1,660	1.00	1.11
The year	44,400	350	3,370	2.03	27.55

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, 1929.

EXTREMES.—Maximum discharge during year, 115,000 second-feet Mar. 15 (gage height, 51.35 feet); minimum, 70 second-feet for several hours in January, February, March, July, and September (gage height, −0.50 foot). 1928–29: Maximum and minimum discharges, those for 1929.

REMARKS.—Records good below and poor above 25,000 second-feet. Considerable regulation by operation of power plants upstream. Records collected by Alabama Power Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,900	7,390	8,100	8,230	2,520	3,940	10,400	10,600	7,080	4,740	4,630	5,950
2	8,080	6,660	7,850	6,930	730	820	13,600	12,000	4,170	3,640	2,890	6,000
3	8,610	3,240	9,120	6,550	70	340	12,700	15,700	6,830	3,290	690	6,130
4	8,860	5,980	8,440	5,930	3,280	6,400	12,800	14,000	7,120	1,600	80	4,170
5	8,600	8,350	8,570	2,300	4,160	13,100	12,600	11,600	7,050	1,580	830	5,490
6	4,180	8,860	8,490	930	3,330	6,760	10,800	13,200	6,900	2,160	1,510	6,580
7	6,200	8,860	8,420	4,290	3,260	3,030	8,320	15,900	6,120	2,460	2,920	5,890
8	4,770	8,790	8,070	5,060	2,460	2,930	8,150	16,300	4,110	3,570	4,450	6,050
9	6,120	6,590	7,620	3,240	670	100	4,600	14,200	2,400	2,760	7,250	6,190
10	7,290	7,130	8,730	2,040	70	70	4,800	13,400	4,330	2,720	4,710	6,520
11	8,250	7,020	8,880	3,350	1,850	1,760	5,800	8,440	5,110	5,180	3,460	7,580
12	8,700	6,150	9,050	890	2,520	3,540	4,270	4,010	3,580	4,480	6,450	6,710
13	6,000	8,450	9,060	70	1,770	10,600	3,780	5,200	3,290	1,740	7,700	5,870
14	6,770	8,090	9,060	2,560	1,720	43,500	3,350	4,370	3,440	70	8,280	590
15	7,240	8,390	9,060	3,240	2,060	109,000	6,000	4,250	3,740	2,630	6,530	70
16	8,190	8,270	7,810	4,200	1,650	84,800	6,170	4,380	560	4,070	3,930	2,800
17	7,850	7,270	8,520	5,250	610	33,200	7,250	4,430	3,000	4,820	2,430	830
18	5,720	6,220	8,280	3,450	3,570	21,300	6,620	4,760	3,280	5,660	1,020	1,480
19	7,400	3,760	8,410	1,020	3,730	17,500	7,750	7,750	2,670	4,620	3,540	70
20	6,400	5,560	8,500	70	3,040	7,170	6,560	12,400	3,140	1,810	3,120	250
21	7,180	5,360	8,530	3,870	2,410	13,100	4,640	12,000	3,980	70	3,500	560
22	4,900	5,220	7,360	2,230	1,840	58,200	7,290	11,500	2,410	2,340	2,340	250
23	3,820	3,800	7,650	1,390	730	51,500	8,870	9,290	900	6,150	2,800	270
24	3,690	1,870	7,480	2,710	90	43,200	7,800	6,280	2,110	8,040	3,610	200
25	4,450	1,100	7,240	2,150	1,820	27,500	7,230	3,370	4,980	8,170	6,670	70
26	4,730	6,020	7,690	1,400	3,720	25,500	9,250	3,790	5,430	8,460	5,580	1,450
27	2,420	8,900	5,600	70	8,580	23,200	7,730	7,530	7,560	1,960	4,230	600
28	290	7,970	8,520	3,550	11,600	15,900	5,770	8,990	7,100	3,230	4,960	260
29	5,640	9,050	7,820	2,490	-------	5,350	7,690	7,610	5,409	7,140	3,380	80
30	5,390	8,230	7,610	2,360	-------	1,290	8,470	7,820	2,930	6,990	5,730	270
31	7,230	-------	8,000	2,110	-------	210	-------	8,150	-------	6,360	6,120	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	8,860	290	6,220	1.87	2.16
November	9,050	1,100	6,620	1.99	2.22
December	9,120	5,600	8,180	2.46	2.84
January	8,230	70	3,030	.913	1.05
February	11,600	70	2,640	.795	.83
March	109,000	70	20,500	6.17	7.11
April	13,600	3,350	7,700	2.32	2.59
May	16,300	3,370	9,140	2.75	3.17
June	7,560	560	4,360	1.31	1.46
July	8,460	70	3,950	1.19	1.37
August	8,280	80	4,040	1.22	1.41
September	7,580	70	2,970	.895	1.00
The year	109,000	70	6,660	2.01	27.21

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. The present gage is set to a datum 1.15 feet higher than that for the period August, 1901, to December, 1908.

DRAINAGE AREA.—1,030 square miles (revised).

RECORDS AVAILABLE.—August, 1901, to February, 1908; May to September, 1929.

EXTREMES.—Maximum discharge recorded during year, 19,800 second-feet May 19 (gage height, 25.33 feet); minimum, 188 second-feet Aug. 19-21 (gage height, 1.10 feet).

1901–1908, 1929: Maximum discharge, 70,100 second-feet Mar. 28, 1902 (gage height, 36.7 feet, old datum); minimum, 90 second-feet Oct. 24–29, 1904 (gage height, 0.8 foot).

Maximum known discharge, 74,200 second-feet July 8, 1916 (gage height, 36.20 feet, present datum).

REMARKS.—Records fair. Records for 1901–1908 supersede those published in previous reports, the discharge having been revised on the basis of more recent data.

Daily discharge, in second-feet, 1901–1908 and 1929

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1901			1901			1901		
1	------	625	11	380	400	21	6,660	565
2	------	565	12	380	400	22	4,190	540
3	------	540	13	400	400	23	2,990	515
4	------	515	14	440	745	24	1,940	465
5	------	465	15	595	685	25	1,580	440
6	------	440	16	2,990	565	26	1,280	420
7	400	420	17	2,890	595	27	1,200	420
8	400	420	18	3,090	745	28	1,000	420
9	380	420	19	3,590	1,200	29	865	745
10	380	420	20	4,340	1,280	30	805	625
						31	715	------

Daily discharge, in second-feet, of Cahaba River at Centerville, Ala., 1901–1908 and 1929—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1901–2												
1	595	380	420	6,000	8,100	15,200	7,120	1,100	355	225	200	225
2	565	380	400	3,540	16,200	9,100	4,900	940	355	225	355	225
3	515	380	465	2,520	11,700	5,820	4,450	740	325	200	275	505
4	420	380	540	1,980	7,960	3,940	4,130	635	300	200	275	475
5	655	380	515	1,620	4,340	5,040	3,830	600	300	200	250	385
6	1,480	360	465	1,440	3,190	5,100	2,840	565	275	200	250	250
7	900	360	490	1,280	2,700	3,390	2,640	600	275	200	225	225
8	745	360	465	1,200	2,430	3,190	5,880	565	250	200	225	225
9	655	380	490	1,120	2,020	2,990	4,970	535	225	225	225	200
10	540	380	595	1,000	1,840	2,840	3,350	535	225	275	225	200
11	465	380	565	935	1,710	2,250	2,540	505	250	385	225	200
12	420	400	515	865	1,580	2,160	2,140	505	250	565	200	175
13	420	420	540	835	1,360	2,070	1,990	535	225	505	175	175
14	420	400	835	775	1,980	1,760	1,790	565	225	475	175	150
15	400	400	9,740	745	2,070	2,200	1,610	780	225	300	175	150
16	400	400	6,840	685	2,250	13,000	1,380	2,740	225	250	175	150
17	400	400	5,220	655	1,940	12,900	1,520	2,740	225	200	175	150
18	400	400	1,400	900	1,800	8,450	1,430	1,260	200	200	175	150
19	400	490	1,080	1,080	1,620	4,590	1,380	860	225	200	175	150
20	400	465	900	1,200	1,580	3,340	1,220	820	275	225	175	175
21	400	465	835	1,480	1,710	3,490	1,100	820	250	250	175	175
22	400	440	745	2,520	1,710	3,590	980	705	300	225	175	150
23	400	465	715	2,020	1,660	2,700	940	600	275	200	175	150
24	380	465	745	1,710	1,710	2,940	940	565	250	200	175	150
25	380	440	775	1,660	2,070	6,000	900	505	250	200	175	150
26	380	440	775	1,620	2,340	4,990	860	475	250	175	175	150
27	380	440	775	2,200	3,090	26,800	820	415	250	175	200	175
28	380	420	2,120	2,560	22,900	59,900	780	385	225	175	225	225
29	400	420	15,200	3,190	-------	28,200	860	355	225	175	275	200
30	400	420	15,200	3,090	-------	17,200	1,100	355	225	200	300	415
31	400	-------	11,500	4,840	-------	15,200	-------	385	-------	200	275	-------
1902–3												
1	250	150	415	1,520	1,480	15,000	3,140	715	645	510	1,480	265
2	300	150	275	1,740	1,100	9,020	2,540	755	610	450	2,090	265
3	300	150	385	2,390	1,740	5,400	2,190	715	610	420	1,380	265
4	275	150	445	2,240	2,940	5,040	1,940	680	645	420	715	265
5	250	150	1,380	1,610	5,420	5,820	1,610	645	680	390	680	265
6	200	150	1,180	1,380	4,840	4,590	1,520	610	680	365	510	265
7	200	385	1,100	1,100	11,100	3,940	1,430	645	755	955	645	265
8	200	250	820	940	39,500	5,220	1,430	755	795	875	680	240
9	325	250	705	860	20,800	6,910	2,340	715	875	645	645	240
10	355	225	600	780	11,000	5,280	2,190	645	645	680	995	240
11	4,070	225	475	3,950	12,600	7,750	1,840	610	680	645	420	240
12	2,090	200	415	6,630	11,000	7,400	1,660	835	645	680	365	240
13	1,300	200	415	4,380	8,170	6,980	1,380	1,560	540	645	365	240
14	535	200	415	2,490	4,890	6,600	1,940	5,580	510	645	340	290
15	475	175	705	1,790	3,840	6,180	1,890	8,800	480	480	610	315
16	415	200	7,050	1,480	13,700	5,160	1,480	8,730	450	420	915	315
17	385	200	5,820	1,260	19,800	4,490	1,300	3,740	420	390	1,610	290
18	385	225	5,300	1,100	16,000	3,140	1,200	2,640	390	390	1,430	290
19	300	250	3,530	980	7,960	2,690	1,120	1,940	390	645	1,040	265
20	275	200	2,290	860	5,280	2,440	1,080	1,520	365	1,040	875	265
21	275	200	1,700	820	3,990	2,190	1,790	1,300	365	480	610	290
22	250	200	2,440	740	3,090	2,540	1,610	1,120	610	365	510	290
23	225	200	2,640	705	2,690	2,440	1,250	995	875	315	450	265
24	200	200	3,770	670	2,390	2,190	1,080	915	575	290	420	265
25	200	200	2,190	740	1,940	1,990	995	795	645	510	390	265
26	175	385	1,790	670	1,660	1,740	955	755	680	315	365	265
27	175	535	1,180	670	1,990	1,610	915	715	875	315	340	265
28	150	820	1,100	1,560	21,800	1,610	835	680	835	290	340	240
29	150	565	940	1,740	-------	2,190	795	645	755	290	290	215
30	150	475	780	1,660	-------	2,890	715	610	575	265	265	215
31	150	-------	1,100	1,520	-------	3,640	-------	680	-------	1,890	265	-------

Daily discharge, in second-feet, of Cahaba River at Centerville, Ala., 1901–1908 and 1929—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1903–4												
1	215	290	240	265	680	575	450	290	265	215	290	190
2	190	290	240	265	680	540	480	290	240	240	290	190
3	190	265	240	290	680	510	450	290	190	215	390	165
4	215	265	240	265	610	480	420	290	190	265	450	315
5	215	265	240	265	575	450	420	265	190	240	390	265
6	215	265	265	265	645	715	420	265	190	215	390	240
7	215	240	290	340	2,390	2,240	450	240	215	340	2,590	190
8	645	240	290	365	4,790	2,540	575	265	540	190	1,790	215
9	420	215	265	450	2,040	1,740	755	265	315	290	1,610	215
10	340	215	265	645	2,240	1,200	575	290	290	315	1,430	190
11	290	240	265	755	4,040	1,010	510	290	290	265	995	165
12	265	290	265	450	2,640	875	480	315	240	215	995	190
13	265	315	265	390	1,790	755	450	290	215	190	1,040	165
14	265	290	290	340	1,740	1,040	420	290	215	215	645	165
15	240	265	290	340	1,380	1,740	420	265	190	190	1,840	165
16	240	215	290	340	1,160	1,250	390	240	190	190	955	140
17	240	215	290	680	835	1,080	390	240	165	215	540	140
18	240	215	265	575	755	955	390	215	165	215	390	140
19	215	240	265	510	715	915	365	215	165	190	340	140
20	215	240	265	420	1,040	835	365	215	165	165	290	165
21	215	240	265	390	835	715	340	215	140	165	240	165
22	215	215	290	4,140	915	680	315	215	140	165	240	140
23	215	215	290	3,440	835	645	315	190	140	290	215	140
24	215	240	290	1,480	795	645	290	190	190	215	215	140
25	215	240	315	875	755	610	290	190	215	215	190	140
26	215	240	390	715	715	575	315	190	190	190	265	140
27	215	240	365	510	680	510	315	190	215	240	215	140
28	215	240	315	575	645	480	290	215	190	420	215	140
29	215	240	265	610	610	450	290	190	165	315	190	140
30	215	240	265	680	-------	420	290	240	140	315	265	140
21	265	-------	265	645	-------	390	-------	290	-------	290	215	-------
1904–5												
1	140	115	165	450	2,390	1,300	875	2,140	1,120	1,200	510	340
2	140	115	165	420	1,740	1,250	835	1,700	1,040	1,080	420	290
3	115	215	165	390	1,380	1,120	755	1,430	795	915	340	340
4	115	215	165	365	1,480	995	715	1,200	540	575	290	365
5	115	165	390	340	2,540	955	1,300	995	510	480	265	480
6	115	165	450	365	7,890	875	1,300	875	480	390	215	450
7	115	140	390	390	7,470	835	1,120	1,120	450	540	215	340
8	115	140	365	390	8,450	795	1,480	2,890	390	420	215	315
9	140	140	315	390	18,600	875	4,790	3,740	390	390	240	290
10	140	140	265	390	15,100	1,380	2,390	1,700	365	480	290	240
11	140	140	240	365	9,980	1,120	1,560	1,120	340	1,340	510	240
12	115	140	240	17,800	6,000	915	1,560	875	340	1,940	755	340
13	115	140	240	15,600	13,600	835	1,250	755	340	1,380	645	265
14	115	140	215	11,800	10,100	715	1,080	645	340	715	755	265
15	115	140	215	4,540	7,260	680	1,160	680	795	540	715	240
16	115	140	190	2,540	4,640	645	1,660	3,790	390	420	365	215
17	115	140	190	1,790	3,590	645	1,250	2,640	540	365	995	215
18	115	140	190	1,430	2,690	610	1,040	1,740	365	340	1,380	215
19	115	140	190	1,250	2,290	575	915	1,300	390	290	645	215
20	115	140	190	1,200	2,790	2,340	835	955	365	290	1,480	315
21	115	190	190	1,080	5,160	10,900	795	1,940	390	265	1,380	265
22	115	190	165	915	5,340	6,660	1,200	4,190	340	290	915	215
23	115	215	165	795	3,840	4,790	995	5,040	315	835	875	190
24	90	215	165	715	2,790	3,190	835	5,160	340	540	715	165
25	90	215	315	645	2,390	2,390	755	3,440	315	835	755	165
26	90	190	390	575	1,990	1,740	1,610	2,340	290	610	995	190
27	90	165	755	510	1,700	1,430	1,790	1,890	390	480	1,160	190
28	90	165	1,430	480	1,380	1,340	2,390	1,660	340	340	715	190
29	90	165	2,040	575	-------	1,250	2,390	1,300	450	315	510	190
30	115	165	1,610	2,290	-------	1,120	2,290	1,040	1,300	340	420	215
31	115	-------	575	3,290	-------	995	-------	1,040	-------	540	365	-------

Daily discharge, in second-feet, of Cahaba River at Centerville, Ala., 1901–1908 and 1929—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1905–6												
1	215	165	215	1,160	1,120	1,430	9,500	645	450	365	1,200	715
2	190	140	240	1,080	915	1,080	5,940	645	450	480	875	645
3	190	190	4,990	5,220	835	9,100	4,390	645	480	715	795	610
4	190	165	2,590	11,400	755	10,900	3,390	795	510	450	875	575
5	190	190	1,120	8,590	715	7,750	2,940	2,840	450	315	795	540
6	215	215	575	5,520	680	3,890	2,590	1,700	480	290	645	420
7	190	215	575	2,840	680	2,490	2,290	1,940	450	290	795	510
8	215	190	540	2,090	680	3,040	1,990	2,940	480	290	715	575
9	190	190	540	1,940	645	3,090	1,940	1,990	420	365	645	795
10	390	215	510	1,700	645	2,390	2,190	1,200	390	1,300	510	645
11	575	315	450	1,480	575	1,890	2,290	995	365	875	575	915
12	420	290	420	1,660	540	1,790	1,740	875	340	1,080	1,300	1,560
13	315	215	420	1,890	540	1,430	1,520	795	315	680	875	1,790
14	290	240	420	1,660	610	1,340	1,380	715	390	4,040	1,200	2,140
15	290	265	755	1,520	680	1,700	1,300	680	715	3,090	1,610	1,480
16	290	240	1,080	1,340	575	1,560	1,250	645	645	1,890	1,380	715
17	315	215	1,040	1,200	540	1,380	1,160	610	575	1,790	955	540
18	265	190	915	1,200	510	1,160	1,080	575	510	4,890	755	480
19	265	190	795	1,200	480	52,700	1,040	610	450	7,400	575	420
20	240	240	915	1,250	450	35,400	995	575	390	4,390	510	480
21	215	215	2,290	1,120	510	21,200	955	540	365	2,090	450	955
22	190	215	2,790	1,430	540	10,100	1,080	540	340	1,560	510	1,040
23	190	215	2,990	8,240	575	6,600	995	540	315	3,240	645	915
24	165	215	4,290	7,540	610	4,040	915	540	290	3,840	450	835
25	215	240	3,290	4,240	2,340	3,240	875	610	290	1,890	390	995
26	365	240	2,240	2,740	1,840	2,740	835	610	290	1,200	510	875
27	290	215	1,480	2,090	1,660	2,490	755	645	575	915	365	755
28	240	215	1,340	1,660	1,380	16,200	715	575	915	755	795	11,200
29	215	240	2,190	1,430	-------	16,000	715	540	680	1,250	540	52,100
30	190	265	1,740	1,120	-------	20,000	680	510	450	2,490	795	29,800
31	190	-------	1,380	1,160	-------	14,400	-------	480	-------	1,700	510	-------
1906–7												
1	13,700	645	680	9,180	3,790	8,660	715	3,790	4,840	610	480	265
2	11,700	610	645	6,240	12,600	13,200	610	3,340	4,290	995	365	290
3	11,800	575	645	3,690	15,000	10,700	610	2,790	2,690	915	315	540
4	7,680	540	610	2,740	7,960	7,890	610	2,690	2,040	875	365	390
5	4,440	610	645	2,390	12,000	4,390	2,740	2,490	1,480	645	390	365
6	12,200	610	645	1,890	9,580	3,290	1,700	2,090	1,430	540	365	265
7	8,800	575	680	1,700	5,940	2,640	1,380	4,090	1,120	480	480	240
8	5,340	575	610	1,480	4,040	2,190	1,120	6,780	1,040	450	390	240
9	3,740	575	680	1,430	3,140	1,890	915	5,340	915	315	510	390
10	2,740	540	715	1,340	2,640	1,660	835	4,340	1,120	390	480	390
11	2,190	510	1,840	1,300	2,140	1,480	715	4,290	795	390	480	365
12	1,840	540	2,640	1,200	1,740	1,250	715	2,790	1,120	755	610	365
13	1,610	540	1,660	1,120	1,700	1,250	715	2,640	875	610	680	340
14	1,380	510	1,300	1,040	1,430	1,200	715	2,190	1,040	510	450	340
15	1,300	680	1,120	995	1,200	1,890	715	17,200	1,480	835	420	365
16	1,160	680	955	915	1,200	1,660	645	14,300	1,040	680	390	340
17	1,120	610	1,080	915	1,120	1,340	4,790	9,020	875	540	715	290
18	1,160	755	1,560	915	1,120	1,250	4,290	5,760	795	510	340	265
19	1,380	3,840	1,520	715	1,120	1,040	8,800	3,490	715	365	290	265
20	1,480	3,940	1,480	1,940	1,040	995	6,720	3,290	680	215	265	240
21	1,120	2,190	1,430	2,590	955	995	3,390	3,140	510	390	575	240
22	995	1,610	1,340	1,840	795	915	3,890	2,540	510	510	365	1,560
23	915	1,250	1,200	1,430	915	915	9,180	1,990	915	510	315	2,990
24	835	1,080	1,080	1,300	915	835	5,940	1,160	835	510	315	5,040
25	795	995	995	1,120	2,690	835	4,040	2,790	680	510	290	4,790
26	755	835	915	1,120	1,890	835	3,790	2,990	510	365	240	2,740
27	755	795	915	1,120	1,740	795	3,190	3,290	510	390	240	680
28	715	795	1,080	955	2,540	715	2,490	2,940	480	1,200	240	570
29	645	715	2,290	875	-------	715	2,540	1,790	480	1,040	240	540
30	645	715	1,990	1,430	-------	715	2,840	1,610	540	995	240	510
31	680	-------	10,500	1,890	-------	715	-------	2,540	-------	915	240	-------

Daily discharge, in second-feet, of Cahaba River at Centerville, Ala., 1901–1908 and 1929—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Day	Oct.	Nov.	Dec.	Jan.	Feb.
1907–8						1907–8					
1	510	265	795	5,400	7,050	16	265	240	1,940	2,490	------
2	480	915	715	3,440	5,580	17	240	240	2,240	2,090	------
3	450	995	680	2,540	4,440	18	240	240	1,300	1,940	------
4	420	915	575	2,040	3,840	19	240	265	1,250	1,990	------
5	420	390	575	3,390	3,290	20	240	290	1,250	1,660	------
6	315	365	540	4,140	------	21	240	510	875	1,430	------
7	240	315	510	4,140	------	22	240	2,040	2,490	1,300	------
8	510	315	510	4,140	------	23	240	4,640	2,040	1,200	------
9	420	315	610	3,090	------	24	240	4,290	1,990	1,080	------
10	390	290	2,140	2,490	------	25	240	2,990	1,740	995	------
11	365	265	1,990	2,890	------	26	190	2,490	1,380	1,040	------
12	340	265	1,250	6,180	------	27	190	1,300	1,120	995	------
13	315	240	1,430	6,060	------	28	215	875	2,040	915	------
14	290	240	2,490	4,040	------	29	240	875	6,300	875	------
15	265	215	2,490	2,740	------	30	290	835	7,960	835	------
						31	315	------	7,540	995	------

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1929						1929					
1	------	888	574	370	206	16	1,330	778	370	282	304
2	------	814	482	348	206	17	1,540	574	370	271	606
3	------	1,370	574	282	215	18	2,660	482	888	233	606
4	------	964	426	282	224	19	11,900	454	482	206	426
5	------	778	426	282	271	20	17,400	454	510	188	326
6	3,780	670	542	260	326	21	11,400	426	370	188	271
7	5,980	638	542	260	260	22	6,260	426	326	260	233
8	10,100	888	454	260	282	23	3,600	398	304	224	233
9	7,240	1,040	370	260	282	24	2,610	370	304	206	326
10	5,340	814	542	304	260	25	2,150	606	348	398	1,880
11	3,200	670	542	370	326	26	1,790	850	370	304	1,970
12	2,280	542	370	482	398	27	1,710	1,120	510	251	850
13	1,880	510	326	426	282	28	1,540	1,290	542	233	542
14	1,620	606	426	348	271	29	1,370	1,040	1,120	206	426
15	1,410	670	542	326	260	30	1,120	706	742	206	370
						31	964	------	398	206	------

Monthly discharge, in second-feet, of Cahaba River at Centerville, Ala., 1901–1908 and 1929

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
1901					
August 7–31	6,660	380	1,760	1.71	1.59
September	1,280	400	567	.550	.61
1901–2					
October	1,480	380	500	.485	.56
November	490	360	410	.398	.44
December	15,200	400	2,640	2.56	2.95
January	6,000	655	1,850	1.80	2.08
February	22,900	1,360	4,130	4.01	4.18
March	59,900	1,760	9,040	8.78	10.12
April	7,120	780	2,350	2.28	2.54
May	2,740	355	764	.742	.86
June	355	200	257	.250	.28
July	565	175	246	.239	.28
August	355	175	215	.209	.24
September	505	150	216	.210	.23
The year	59,900	150	1,880	1.83	24.76
1902–3					
October	4,070	150	483	.469	.54
November	820	150	262	.254	.28
December	7,050	275	1,720	1.67	1.92
January	6,630	670	1,640	1.59	1.83
February	39,500	1,100	8,670	8.42	8.77
March	15,000	1,610	4,650	4.51	5.20
April	3,140	715	1,540	1.50	1.67
May	8,800	610	1,680	1.63	1.88
June	875	365	620	.602	.67
July	1,890	265	549	.533	.61
August	2,090	265	711	.690	.80
September	315	215	263	.255	.28
The year	39,500	150	1,860	1.81	24.45

Monthly discharge, in second-feet, of Cahaba River at Centerville, Ala., 1901–1908 and 1929—Continued

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
1903–4					
October	645	190	250	0.243	0.28
November	315	215	248	.241	.27
December	390	240	279	.271	.31
January	4,140	265	719	.698	.80
February	4,790	575	1,320	1.28	1.38
March	2,540	390	890	.864	1.00
April	755	290	408	.396	.44
May	315	190	246	.239	.28
June	540	140	212	.206	.23
July	420	165	239	.232	.27
August	2,590	190	649	.630	.73
September	315	140	172	.167	.19
The year	4,790	140	467	.453	6.18
1904–5					
October	140	90	114	.111	.13
November	215	115	161	.156	.17
December	2,040	165	411	.399	.46
January	17,800	340	2,390	2.32	2.68
February	18,600	1,380	5,520	5.36	5.58
March	10,900	575	1,780	1.73	1.99
April	4,790	715	1,430	1.39	1.55
May	5,160	645	1,980	1.92	2.21
June	1,300	290	492	.478	.53
July	1,940	265	628	.610	.70
August	1,480	215	647	.628	.72
September	480	165	265	.257	.29
The year	18,600	90	1,290	1.25	17.01
1905–6					
October	575	165	255	.248	.29
November	315	140	218	.212	.24
December	4,990	215	1,460	1.42	1.64
January	11,400	1,080	2,860	2.78	3.20
February	2,340	450	808	.784	.82
March	52,700	1,080	8,470	8.22	9.48
April	9,500	680	1,980	1.92	2.14
May	2,940	480	921	.894	1.03
June	915	290	459	.446	.50
July	7,400	290	1,800	1.75	2.02
August	1,610	390	760	.738	.85
September	52,100	420	3,870	3.76	4.20
The year	52,700	140	2,000	1.94	26.41
1906–7					
October	13,700	645	3,410	3.31	3.82
November	3,940	510	981	.952	1.06
December	10,500	610	1,470	1.43	1.65
January	9,180	715	1,900	1.84	2.12
February	15,000	795	3,680	3.57	3.72
March	13,200	715	2,540	2.47	2.85
April	9,180	610	2,710	2.63	2.93
May	17,200	1,160	4,180	4.06	4.68
June	4,840	480	1,210	1.17	1.30
July	1,200	215	612	.594	.68
August	715	240	390	.379	.44
September	5,040	240	874	.849	.95
The year	17,200	215	1,990	1.93	26.20
1907–8					
October	510	190	310	.301	.35
November	4,640	215	948	.920	1.03
December	7,960	510	1,960	1.90	2.19
January	6,180	835	2,530	2.46	2.84
February 1–5	7,050	3,290	4,850	4.71	.88
1929					
May 6–31	17,400	964	4,310	4.18	4.04
June	1,370	370	7,280	7.07	7.89
July	1,120	304	487	.473	.55
August	482	188	281	.273	.31
September	1,970	206	448	.435	.49

EAST FORK OF TOMBIGBEE RIVER NEAR FULTON, MISS

LOCATION.—Chain gage at highway bridge in T. 9 S., R. 8 E. Chickasaw meridian, 2 miles west of Fulton.
DRAINAGE AREA.—650 square miles.
RECORDS AVAILABLE.—August, 1928, to September, 1929.
EXTREMES.—Maximum discharge during year, 15,700 second-feet Mar. 15 (gage height, 17.54 feet); minimum, 45 second-feet Sept. 3, 1929 (gage height, 1.52 feet).
1928–29: Maximum and minimum discharges, those of 1929.
REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	51	92	170	188	423	2,040	e 835	1,310	e 555	233	320	48
2	51	99	206	e 310	370	1,860	805	1,490	e 434	224	340	48
3	54	106	215	280	360	1,750	777	1,540	e 360	242	280	48
4	57	106	242	e 310	350	1,750	880	1,370	e 350	260	233	51
5	78	106	215	e 380	340	1,800	1,150	1,370	e 310	270	154	51
6	78	106	188	522	340	e 2,100	1,120	1,420	242	456	106	51
7	78	106	e 170	544	330	1,800	805	1,420	224	566	188	48
8	74	114	e 154	511	330	1,690	622	1,560	260	e 423	e 300	51
9	57	122	e 146	511	360	1,540	696	1,800	370	467	e 401	85
10	57	130	e 146	544	390	1,420	1,120	3,450	390	300	e 533	280
11	57	122	e 138	500	370	1,310	e 1,610	2,900	370	280	670	330
12	57	114	138	434	330	1,250	e 1,830	2,040	340	260	670	e 260
13	54	106	146	e 360	310	1,330	1,800	1,750	e 242	224	610	e 350
14	51	106	170	e 260	290	2,400	1,640	e 1,980	e 106	206	555	658
15	51	99	215	e 197	380	15,700	1,490	1,590	85	206	622	577
16	57	99	215	e 170	e 533	14,300	1,510	1,420	82	206	423	511
17	64	99	215	e 170	e 511	4,500	1,400	1,190	82	e 251	224	622
18	99	114	233	215	445	e 2,240	1,460	1,030	78	e 280	146	912
19	170	138	251	588	401	e 1,900	1,830	994	85	777	99	e 1,060
20	114	154	233	880	390	1,690	1,170	1,120	106	763	74	e 749
21	99	154	224	577	e 805	e 1,350	820	1,100	78	646	68	e 599
22	74	138	170	500	e 2,040	1,560	735	777	78	360	64	478
23	78	122	170	658	e 1,140	e 4,500	588	683	92	188	57	e 360
24	92	122	170	977	e 599	9,400	555	610	e 206	162	51	e 260
25	92	122	162	1,310	e 994	4,500	683	634	e 260	154	51	300
26	92	122	146	1,590	e 2,400	2,240	1,660	880	e 646	e 170	48	500
27	92	114	146	1,660	e 9,400	e 1,690	2,160	1,080	e 791	e 206	51	478
28	88	122	146	1,510	2,500	e 1,400	e 1,590	e 1,030	e 588	e 170	51	300
29	85	130	146	1,230	-------	1,290	1,940	1,080	e 467	e 197	51	242
30	88	146	138	835	-------	1,060	1,610	1,010	e 320	224	48	206
31	92	-------	146	e 577	-------	e 912	-------	683	-------	251	48	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	170	51	76.8	0.118	0.14
November	154	92	118	.182	.20
December	251	138	180	.277	.32
January	1,660	170	623	.958	1.10
February	9,400	290	980	1.51	1.57
March	15,700	912	3,040	4.68	5.40
April	2,160	555	1,230	1.89	2.11
May	3,450	610	1,360	2.09	2.41
June	791	78	287	.442	.49
July	777	154	310	.477	.55
August	670	48	243	.374	.43
September	1,060	48	350	.538	.60
The year	15,700	48	734	1.13	15.32

e Estimated.

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, 1929.
EXTREMES.—Maximum discharge during year, 31,100 second-feet Mar. 25 (gage height, 39.18 feet); minimum, 162 second-feet Aug. 31 to Sept. 7 (gage height, 2.15 feet).
1928–29: Maximum and minimum discharges, those of 1929.
Maximum stage known, 44.0 feet Apr. 20, 1892.
REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	301	244	430	454	3,110	7,300	6,560	4,360	1,280	868	922	162
2	189	244	580	479	2,190	6,360	4,690	5,700	895	658	1,030	162
3	198	263	606	554	1,560	6,000	3,210	5,780	788	684	814	162
4	301	282	736	658	1,340	5,810	2,760	4,500	684	841	710	162
5	263	301	632	658	1,230	5,740	2,490	3,640	762	736	479	162
6	244	282	529	762	1,230	6,120	2,420	4,760	762	580	361	162
7	244	301	479	1,060	1,200	5,430	2,320	4,030	632	529	301	162
8	263	301	430	1,000	1,170	4,320	2,220	4,430	580	580	340	189
9	301	320	406	976	1,140	3,670	2,020	4,180	710	762	454	506
10	244	301	406	922	1,200	3,350	2,970	5,400	684	554	949	868
11	225	301	383	1,790	1,170	3,110	3,960	4,500	762	554	1,380	922
12	216	320	383	1,440	1,170	2,930	4,650	3,710	684	895	1,170	922
13	207	301	406	1,380	1,060	3,960	4,250	3,850	580	632	1,440	684
14	198	282	454	1,140	976	10,500	3,180	4,950	529	504	1,030	1,960
15	198	282	554	922	922	18,900	3,110	4,470	580	406	814	1,030
16	198	282	529	788	1,890	25,400	4,360	3,820	529	430	606	1,140
17	198	282	554	736	2,220	24,800	4,910	3,490	454	814	454	1,790
18	225	301	606	736	1,820	23,900	3,850	3,000	406	529	320	1,690
19	244	406	736	1,030	1,690	19,600	3,460	2,660	383	454	301	1,380
20	301	504	710	1,890	1,470	14,700	3,110	2,830	529	1,030	282	1,380
21	340	554	788	1,690	4,250	11,800	2,970	2,220	361	1,060	263	1,320
22	320	580	684	1,760	6,480	12,500	2,900	2,090	383	1,030	234	1,030
23	282	554	554	1,820	6,440	24,200	2,450	1,890	430	710	225	710
24	263	454	529	3,040	4,760	29,800	1,920	1,470	949	736	216	504
25	244	383	479	6,000	3,820	30,400	1,960	1,170	976	454	207	430
26	225	361	479	6,640	5,060	26,600	4,870	1,000	3,070	340	207	868
27	263	361	454	5,890	6,520	20,800	4,470	1,890	2,380	529	198	658
28	263	340	454	4,690	7,400	15,600	2,860	1,530	1,720	361	189	788
29	244	340	454	4,500	-------	12,000	3,570	1,600	1,440	684	180	580
30	234	361	430	4,500	-------	10,100	3,350	1,690	1,170	454	180	454
31	234	-------	430	3,960	-------	8,360	-------	1,630	-------	504	162	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	340	189	247	0.112	0.13
November	580	244	346	.157	.18
December	788	383	525	.238	.27
January	6,640	454	2,060	.932	1.07
February	7,400	922	2,660	1.20	1.25
March	30,400	2,930	13,000	5.88	6.78
April	6,560	1,920	3,390	1.53	1.71
May	5,780	1,000	3,300	1.49	1.72
June	3,070	361	870	.394	.44
July	1,060	340	642	.290	.33
August	1,440	162	530	.240	.28
September	1,960	162	764	.346	.39
The year	30,400	162	2,370	1.07	14.55

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, 1929.

EXTREMES.—Maximum discharge during year, 49,200 second-feet Mar. 25 (gage height, 29.6 feet); minimum, 305 second-feet Sept. 2–6 (gage height, —3.26 feet).

1900–1912, 1928–29: Maximum mean daily discharge, 50,400 second-feet Mar. 31, 1902 (gage height, 30.6 feet); minimum discharge not determined. Maximum stage known, 42.0 feet Apr. 8, 1892.

REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	525	750	1,020	960	8,460	13,900	17,000	7,670	2,740	4,280	1,680	320
2	e 525	750	960	900	6,570	13,200	12,600	9,300	1,920	1,680	1,920	305
3	525	750	900	1,020	4,740	10,600	8,220	10,400	1,760	1,270	1,840	305
4	610	e 655	850	1,080	3,740	10,300	6,240	10,300	1,540	1,610	1,400	305
5	750	610	1,080	1,200	3,280	10,400	5,800	10,600	1,400	1,540	1,020	305
6	750	610	1,200	1,680	3,190	10,600	4,940	11,000	1,470	1,920	750	305
7	e 610	610	1,140	2,160	3,010	10,800	4,840	11,300	1,400	1,610	655	365
8	610	610	1,020	2,240	3,010	9,420	4,540	9,540	1,200	1,270	700	415
9	e 565	750	960	2,240	2,830	7,670	4,340	8,220	1,140	1,270	610	485
10	525	750	900	3,010	2,830	7,120	3,940	9,060	1,200	1,340	565	1,020
11	525	e 750	850	3,740	2,920	6,020	5,800	9,540	1,200	1,020	1,400	1,140
12	525	750	850	4,340	2,830	5,470	6,020	7,780	1,270	1,200	2,660	1,270
13	525	750	850	3,550	2,570	7,670	7,120	7,670	1,140	1,760	2,480	1,270
14	e 525	655	960	3,280	2,400	18,800	5,360	8,460	1,020	1,400	2,160	1,270
15	525	610	1,020	2,570	3,940	26,500	5,040	8,820	960	1,080	1,470	2,660
16	525	655	1,200	2,160	5,250	33,900	5,800	7,010	1,140	1,080	1,020	2,160
17	525	655	1,340	1,920	5,470	39,400	7,230	6,790	1,140	1,080	850	2,240
18	655	850	1,340	2,480	5,800	41,300	6,680	6,020	960	1,400	e 700	2,570
19	1,270	1,080	1,470	2,740	4,540	38,700	5,910	5,580	850	1,400	655	2,160
20	1,140	1,610	1,610	3,010	4,240	34,900	5,040	7,120	800	1,200	655	2,240
21	e 1,020	3,010	1,760	3,280	9,060	30,500	4,940	8,000	1,020	1,400	485	2,000
22	1,020	2,660	1,680	4,240	12,700	29,600	4,840	6,680	960	1,470	485	1,400
23	1,020	2,160	1,470	3,940	13,500	33,700	4,440	5,580	900	1,340	450	1,200
24	900	1,610	1,340	5,580	12,400	41,300	3,940	4,440	1,080	1,020	415	900
25	1,340	1,200	1,200	10,600	11,300	47,900	4,540	3,460	1,400	900	365	750
26	1,140	1,080	1,080	14,000	9,180	49,000	8,460	2,920	1,760	850	365	525
27	1,020	1,020	1,080	15,100	10,600	45,700	10,100	2,830	4,840	800	365	1,020
28	e 1,020	850	1,020	14,500	13,200	41,300	8,460	3,100	4,240	900	365	1,020
29	1,020	1,020	1,020	14,300	-------	35,300	6,240	3,280	4,340	1,020	335	1,020
30	850	1,020	1,020	13,200	-------	29,400	6,130	3,280	3,740	1,270	335	800
31	750	-------	1,020	10,900	-------	22,400	-------	3,010	-------	1,340	320	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,340	525	769	0.171	0.20
November	3,010	610	1,030	.229	.26
December	1,760	850	1,140	.254	.29
January	15,100	900	5,030	1.12	1.29
February	13,500	2,400	6,200	e 1.38	1.44
March	49,000	5,470	24,600	5.48	6.32
April	17,000	3,940	6,480	1.44	1.61
May	11,300	2,830	7,060	1.57	1.81
June	4,840	800	1,680	.374	.42
July	4,280	800	1,380	.307	.35
August	2,660	320	951	.212	.24
September	2,660	305	1,120	.249	.28
The year	49,000	305	4,800	1.07	14.51

e Estimated.

TOMBIGBEE RIVER NEAR COATOPA, ALA.

LOCATION.—Chain gage in T. 17 N., R. 1 E., 2 miles above Sucarnoochee Creek and 5 miles southeast of Coatopa.
DRAINAGE AREA.—15,500 square miles.
RECORDS AVAILABLE.—August, 1928, to September, 1929.
EXTREMES.—Maximum discharge during year, 179,000 second-feet Mar. 29 (gage height, 51.44 feet); minimum, 970 second-feet Sept. 4 (gage height, 2.85 feet).
1928–29: Maximum and minimum discharges, those of 1929.
REMARKS.—Records good except those for estimated periods, which are fair.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,960	2,730			50,600	68,400	161,000	43,800	16,100	8,740	3,500	1,480
2	2,070	2,620			46,700	71,000	152,000	44,800	14,800	7,660	3,500	1,320
3	1,960	2,510			41,000	71,600	141,000	45,600	12,100	6,100	3,500	1,210
4	2,070	2,400			33,500	74,600	130,000	45,900	10,900	4,940	3,720	1,010
5	2,180	2,510			24,000	80,300	119,000	46,200	9,960	4,420	3,720	1,170
6	2,400	2,620			18,100	84,600	107,000	45,900	9,000	4,420	3,280	1,450
7	2,510	2,620			16,600	84,200	93,400	45,200	8,220	5,500	2,730	1,630
8	2,620	2,510			15,900	82,000	76,400	44,900	7,940	5,220	2,400	1,850
9	2,730	2,510			18,300	79,900	61,300	45,100	7,360	4,680	2,180	1,520
10	2,840	2,620		13,000	21,200	76,000	49,600	45,600	6,740	3,940	2,180	2,070
11	3,060	2,730			20,700	71,300	41,700	45,900	6,100	3,940	2,510	1,960
12	3,060	2,840			17,400	65,600	34,900	47,300	5,500	3,940	3,500	2,070
13	2,730	3,060			15,700	63,900	27,400	48,800	5,220	3,940	6,100	2,510
14	2,290	3,280			14,100	85,100	22,500	49,200	5,500	3,940	6,420	3,720
15	2,180	3,500			14,800	108,000	19,400	48,200	5,800	4,420	8,740	5,500
16	2,290	3,940	3,770		25,200	121,000	16,800	46,000	6,740	4,940	5,220	7,060
17	2,620	4,180			35,200	122,000	15,200	42,400	6,740	5,220	4,180	8,220
18	2,840				39,100	120,000	15,900	38,700	5,800	4,680	3,500	9,000
19	2,840			15,500	38,900	122,000	17,400	38,400	4,940	5,220	3,280	10,700
20				21,200	37,600	130,000	17,700	45,100	4,420	6,740	2,510	10,700
21	5,460			24,200	37,500	140,000	19,900	50,000	4,180	5,500	1,960	8,220
22				27,800	36,800	146,000	20,700	53,000	4,180	4,420	1,630	6,740
23				26,600	38,400	156,000	19,900	53,600	4,420	3,720	1,410	4,420
24		7,360		23,800	40,400	165,000	17,700	52,800	5,800	3,500	1,850	3,940
25	2,730			21,600	41,600	166,000	23,400	50,800	6,420	3,280	1,960	3,720
26	2,620			26,800	43,500	168,000	32,500	46,000	5,800	3,060	1,850	3,940
27	2,730			35,200	52,000	173,000	38,600	41,400	5,800	3,060	1,850	4,940
28	2,730			41,800	61,300	178,000	42,500	35,200	7,660	3,060	1,520	5,500
29	2,730			47,500	-------	179,000	44,900	26,600	9,000	3,500	1,390	4,940
30	2,840			50,400	-------	177,000	44,300	21,200	9,240	3,720	1,520	4,420
31	2,840	-------		51,600	-------	170,000	-------	18,500	-------	3,500	1,740	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	-------	1,960	3,020	0.195	0.22
November	-------	2,400	4,830	.312	.35
December	-------	-------	3,770	.243	.28
January	51,600	-------	20,900	1.35	1.56
February	61,300	14,100	32,000	2.06	2.14
March	179,000	63,900	116,000	7.48	8.62
April	161,000	15,200	54,100	3.49	3.89
May	53,600	18,500	43,600	2.81	3.24
June	16,100	4,180	7,410	.478	.53
July	8,740	3,060	4,610	.297	.34
August	8,740	1,390	3,080	.199	.23
September	10,700	1,010	4,230	.273	.30
The year	179,000	1,010	24,800	1.60	21.70

TOMBIGBEE RIVER NEAR LEROY, ALA.

LOCATION.—Staff gage just above Lock 1 in T. 7 N., R. 1 E., 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, 1929.
EXTREMES.—Maximum discharge during year, 190,000 second-feet Apr. 2 (gage height, 46.0 feet); minimum (estimated), 50 second-feet Sept. 2 (leakage through flashboards).
REMARKS.—Records good except those for Sept. 1–20, which are fair.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,790	3,400	5,630	5,220	50,800	75,800	188,000	47,400	30,400	11,400	5,220	1,000
2	2,790	3,400	5,630	5,220	52,600	77,700	190,000	49,900	26,200	10,900	4,830	50
3	2,790	3,400	5,630	5,220	52,600	79,100	187,000	50,800	22,100	9,850	4,830	292
4	2,940	3,400	6,050	5,220	49,900	82,100	183,000	51,200	17,600	7,870	4,830	800
5	3,560	3,240	6,490	6,050	45,100	90,000	176,000	51,700	14,400	7,400	4,830	1,150
6	3,900	3,240	6,490	8,840	36,800	94,000	167,000	52,100	12,600	6,940	4,830	1,150
7	4,080	3,560	6,050	12,000	29,800	94,000	154,000	52,600	10,900	6,050	4,450	1,150
8	4,450	3,560	6,050	12,600	25,600	93,000	141,000	52,600	10,400	6,490	4,080	1,240
9	4,260	3,730	5,630	13,100	23,400	90,000	129,000	52,600	9,850	6,940	4,080	1,550
10	4,080	3,560	5,220	15,400	25,100	89,000	113,000	52,600	9,850	6,940	3,730	1,770
11	4,080	3,730	5,220	19,600	26,700	89,000	99,300	53,500	8,840	5,630	3,400	2,250
12	3,730	3,730	4,830	22,100	25,600	87,200	87,200	53,500	8,350	5,220	3,560	2,790
13	3,400	3,730	4,450	24,500	23,700	91,000	73,200	54,400	7,870	4,830	5,220	3,400
14	3,090	3,730	5,220	25,600	21,400	107,000	58,200	55,300	6,940	4,830	7,870	4,640
15	3,240	3,900	5,630	24,200	21,000	132,000	47,400	55,800	6,490	4,830	8,840	6,490
16	3,900	3,400	5,220	22,100	34,600	144,000	38,800	56,300	6,940	5,220	7,870	8,840
17	4,450	3,400	5,220	19,100	45,100	144,000	31,900	56,300	7,870	6,050	6,940	10,400
18	6,050	3,560	5,220	17,600	50,800	141,000	26,700	54,400	7,870	6,940	6,050	12,000
19	7,870	3,900	5,220	17,000	52,600	138,000	23,100	53,500	7,870	6,940	5,220	13,100
20	7,870	4,640	5,630	20,500	50,800	136,000	22,800	55,300	6,940	6,940	4,260	16,000
21	10,400	7,400	6,940	23,100	49,900	136,000	24,500	57,200	6,050	7,870	3,730	15,400
22	10,900	12,000	9,850	25,400	49,100	128,000	25,400	59,200	5,220	6,940	3,400	12,600
23	9,850	15,400	9,850	26,700	47,400	138,000	25,600	60,300	5,220	6,050	3,090	10,400
24	7,870	16,500	8,840	26,700	46,600	146,000	24,500	60,800	6,050	5,220	2,790	8,840
25	6,490	13,700	7,870	26,200	47,000	157,000	22,800	61,300	6,940	4,830	2,510	7,870
26	5,630	10,900	7,400	25,600	50,800	166,000	25,600	60,300	7,870	4,450	2,510	7,400
27	4,830	8,840	6,490	27,800	60,300	172,000	29,800	59,200	8,840	4,450	2,510	7,400
28	4,450	7,870	6,050	31,900	72,000	176,000	35,500	56,300	9,340	4,450	2,510	7,870
29	4,080	6,940	5,630	38,100	-------	181,000	40,100	50,800	9,850	4,450	2,380	8,840
30	4,080	6,050	5,220	43,600	-------	184,000	44,000	43,600	11,400	5,220	2,250	8,840
31	3,730	-------	5,220	47,400	-------	187,000	-------	36,200	-------	6,050	2,250	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	10,900	2,790	5,020	0.263	0.30
November	16,500	3,240	5,930	.310	.35
December	9,850	4,450	6,130	.321	.37
January	47,400	5,220	20,800	1.09	1.26
February	72,000	21,000	41,700	2.18	2.27
March	137,000	75,800	124,000	6.49	7.48
April	190,000	22,800	81,100	4.25	4.74
May	61,300	36,200	53,800	2.82	3.25
June	30,400	5,220	10,600	.555	.62
July	11,400	4,450	6,390	.335	.39
August	8,840	2,250	4,350	.228	.26
September	16,000	50	6,180	.324	.36
The year	190,000	50	30,500	1.60	21.65

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, 1929.
EXTREMES.—Maximum discharge during year, 24,700 second-feet Mar. 25 (gage height, 16.90 feet); minimum, 115 second-feet Sept. 2 (gage height, 2.58 feet). 1928–29: Maximum and minimum discharges, those of 1929.
REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	272	360	490	435	2,220	2,280	1,920	1,320	580	460	435	121
2	285	385	670	435	1,600	2,420	1,650	1,500	520	385	298	119
3	310	385	800	490	1,280	2,280	1,450	1,700	490	360	335	127
4	285	385	640	460	1,160	1,980	1,280	1,450	490	765	260	127
5	322	385	580	490	1,080	1,800	1,240	1,400	490	1,200	225	131
6	385	385	520	580	1,040	1,980	1,240	1,320	435	800	205	165
7	435	385	490	800	1,040	2,160	1,120	1,750	410	520	195	195
8	385	385	490	870	975	2,040	1,040	2,100	385	490	195	235
9	335	410	460	640	905	1,750	1,010	1,920	385	385	360	185
10	322	435	435	765	905	1,450	975	2,040	385	335	490	195
11	310	410	435	1,040	975	1,320	1,010	2,490	385	520	550	225
12	298	385	435	1,400	905	1,200	1,120	3,250	335	1,010	550	410
13	285	385	460	1,240	800	1,400	1,280	4,050	335	640	435	322
14	272	360	460	870	730	3,010	1,120	2,850	335	435	410	410
15	272	360	490	730	765	4,650	1,040	1,600	410	335	310	975
16	272	360	520	700	940	10,200	1,120	1,240	520	310	235	670
17	310	360	490	670	1,280	13,100	1,500	1,200	410	360	215	410
18	385	435	550	670	1,360	8,690	1,400	1,160	335	550	195	460
19	670	580	700	870	1,160	6,320	1,160	1,320	285	460	185	835
20	1,010	1,080	835	1,240	1,120	4,650	1,010	1,750	285	335	175	435
21	610	1,320	670	1,550	1,550	3,770	975	2,220	410	298	165	322
22	460	1,040	580	1,320	2,040	3,590	940	2,100	335	260	155	272
23	435	670	550	1,200	2,560	4,650	905	1,450	335	235	145	248
24	640	610	490	1,600	3,170	18,800	835	1,080	385	225	145	235
25	800	550	490	2,160	3,410	17,400	1,010	905	360	260	145	235
26	550	490	460	2,700	2,850	9,590	1,320	800	435	335	135	322
27	460	490	460	4,250	2,220	6,590	1,600	765	765	310	131	335
28	410	460	435	8,490	2,220	4,870	1,240	800	940	520	129	322
29	410	460	435	6,590	-------	3,770	1,040	870	800	490	127	272
30	385	460	435	4,650	-------	3,010	1,120	765	640	385	127	248
31	385	-------	435	3,330	-------	2,350	-------	640	-------	310	125	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,010	272	418	0.504	0.58
November	1,320	360	506	.610	.68
December	835	435	529	.637	.73
January	8,490	435	1,720	2.07	2.39
February	3,410	730	1,510	1.82	1.90
March	18,800	1,200	4,940	5.95	6.86
April	1,920	835	1,190	1.43	1.60
May	4,050	640	1,610	1.94	2.24
June	940	285	454	547	.61
July	1,200	225	461	.555	.64
August	550	125	251	.302	.35
September	975	119	319	.384	.43
The year	18,800	119	1,160	1.40	19.01

TIBBEE RIVER NEAR TIBBEE, MISS.

LOCATION.—Chain gage at Mobile & Ohio Railroad bridge 1 mile north of Tibbee, Clay County.
DRAINAGE AREA.—943 square miles.
RECORDS AVAILABLE.—August, 1928, to September, 1929.
EXTREMES.—Maximum discharge during year, 25,000 second-feet Mar. 24 (gage height, 28.70 feet); No flow Oct. 1–16, 25–27, and Sept. 5–6.
1928–29: Maximum and minimum discharges, those of 1929.
REMARKS.—Records good except those for Mar. 14–29, which are fair.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	12	2.2	6.6	200	2,760	288	1,240	65	141	200	0.8
2	0	11	2.0	6.2	132	2,190	236	2,300	43	77	560	1.0
3	0	10	1.6	7.0	110	1,040	212	3,160	22	58	288	1.4
4	0	6.2	1.4	6.2	105	600	180	1,610	23	54	105	1.6
5	0	5.4	5.8	10	97	784	170	910	34	85	45	0
6	0	4.6	8.0	11	101	1,340	160	2,460	37	77	26	0
7	0	3.8	5.8	14	97	1,460	150	2,620	21	54	22	.3
8	0	4.2	5.8	58	93	784	132	1,200	20	37	302	.9
9	0	1.6	5.0	65	150	410	114	620	17	36	248	17
10	0	1.2	4.2	180	170	274	150	680	24	18	464	17
11	0	1.2	4.2	362	123	224	362	560	24	30	721	17
12	0	.9	7.5	248	97	190	410	362	19	23	620	19
13	0	1.0	10	105	77	1,510	260	346	20	18	302	33
14	0	.9	7.5	58	77	10,500	180	200	33	20	160	37
15	0	.9	6.6	48	200	19,800	141	224	22	114	97	62
16	0	.8	14	36	954	19,000	302	180	6.2	362	40	40
17	.7	.9	28	34	1,220	15,200	410	132	5.8	540	20	25
18	2.6	1.6	14	34	784	10,300	248	141	5.0	394	12	20
19	2.2	2.8	13	302	394	3,800	150	212	3.4	224	6.6	22
20	1.6	9.0	12	482	580	1,140	123	680	2.6	105	3.8	19
21	2.6	10	11	224	1,910	930	114	660	2.0	50	1.2	11
22	3.4	13	9.5	160	4,540	3,200	160	316	2.6	30	1.8	8.0
23	1.6	12	13	114	5,620	17,700	180	160	1.4	19	.7	6.2
24	.8	11	11	428	4,620	22,000	190	110	3.0	22	1.4	7.5
25	0	6.2	10	2,190	1,980	20,600	700	97	132	36	.8	2.6
26	0	5.4	7.0	4,040	784	10,700	2,220	69	394	22	.9	2.2
27	0	4.6	6.2	3,830	1,310	4,350	3,060	58	1,110	17	1.0	.8
28	1.0	3.4	5.4	2,120	2,340	1,330	1,610	150	1,640	26	.9	.6
29	5.4	2.0	3.0	640	-------	900	520	236	1,440	41	1.0	17
30	22	3.8	2.6	378	-------	520	464	123	394	160	.8	9.0
31	14	-------	6.6	316	-------	330	-------	65	---------	65	.8	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	22	0	1.87	0.0020	0.002
November	13	.8	5.05	.0054	.006
December	28	1.4	7.87	.0083	.01
January	4,040	6.2	533	.565	.65
February	5,620	77	1,030	1.09	1.14
March	22,000	190	5,670	6.01	6.93
April	3,060	114	453	.480	.54
May	2,620	58	706	.749	.86
June	1,640	1.4	186	.197	.22
July	540	17	95.3	.101	.12
August	721	.7	137	.145	.17
September	62	0	13.3	.014	.02
The year	22,000	0	741	.786	10.67

LUXAPALILA CREEK NEAR COLUMBUS, MISS.

LOCATION.—Chain gage at highway bridge 3½ miles northeast of Columbus, Lowndes County, and 6½ miles above mouth.
DRAINAGE AREA.—726 square miles.
RECORDS AVAILABLE.—August, 1928, to September, 1929.
EXTREMES.—Maximum discharge during year, 13,800 second-feet Mar. 24 (gage height, 20.98 feet); minimum, 14 second-feet Sept. 2 (gage height, 1.94 feet). 1928–29: Maximum and minimum discharges, those of 1929.
REMARKS.—Records good for low stages, fair for medium and high stages.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	93	218	363	313	1,370	3,130	1,370	1,080	414	301	253	17
2	89	218	466	313	1,160	2,280	1,200	1,240	363	230	363	16
3	91	218	466	338	925	1,680	1,040	1,040	289	173	218	26
4	103	218	440	338	820	1,640	890	820	289	136	145	34
5	184	218	440	363	785	2,000	820	1,550	277	143	99	29
6	493	218	388	631	750	2,280	785	3,530	253	151	99	47
7	265	218	363	890	750	1,820	750	2,680	241	241	95	57
8	173	230	338	720	720	1,420	660	1,420	230	253	80	107
9	113	277	313	602	690	1,200	631	1,240	206	184	70	128
10	87	277	414	785	690	1,120	631	2,680	195	162	338	149
11	115	289	313	2,040	820	965	660	1,820	195	136	301	218
12	103	265	313	1,640	690	890	631	1,320	195	120	184	214
13	89	230	313	1,080	631	1,080	660	1,120	173	151	162	253
14	93	230	313	855	602	4,090	547	1,000	151	130	151	388
15	93	206	363	785	660	8,750	547	750	173	95	132	547
16	97	218	363	720	1,120	11,800	660	602	313	80	105	414
17	136	206	363	631	1,960	10,900	690	1,040	253	101	91	277
18	466	218	414	631	1,460	6,110	602	965	206	218	76	253
19	1,320	440	547	820	1,160	4,200	547	820	162	151	59	230
20	750	1,820	547	1,370	1,160	3,080	520	2,730	466	136	66	162
21	493	1,500	493	1,280	2,140	2,330	660	3,000	549	117	56	140
22	440	890	414	1,000	2,980	4,530	660	1,910	338	95	57	128
23	363	690	388	925	2,580	11,600	631	1,370	289	95	38	107
24	388	631	363	1,080	2,000	13,800	520	1,160	289	95	34	162
25	414	547	338	2,280	1,680	12,200	1,040	925	253	162	26	105
26	338	440	338	3,980	1,550	8,430	2,330	690	338	173	44	162
27	289	388	338	4,860	1,680	5,410	1,820	631	241	162	35	184
28	253	363	313	4,040	2,180	3,930	1,120	750	277	277	28	184
29	230	338	313	3,280	-------	2,730	965	785	414	363	29	151
30	218	338	313	2,330	-------	1,960	1,040	631	313	313	22	138
31	218	-------	313	1,680	-------	1,500	-------	520	-------	253	19	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,320	87	277	0.382	0.44
November	1,820	206	419	.577	.64
December	547	313	379	.522	.60
January	4,860	313	1,370	1.89	2.18
February	2,980	602	1,280	1.76	1.83
March	13,800	890	4,480	6.17	7.11
April	2,330	520	854	1.18	1.32
May	3,530	520	1,350	1.86	2.14
June	549	151	278	.383	.43
July	363	80	174	.240	.28
August	363	19	112	.154	.18
September	547	16	168	.231	.26
The year	13,800	16	931	1.28	17.41

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, 1929.
EXTREMES.—Maximum discharge for period not determined; minimum, 30 second-feet Aug. 24 (gage height, 0.44 foot).
REMARKS.—Records prior to Mar. 31, poor; subsequent thereto, fair.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	76	156	548	244			1,450	1,450	1,060	296	164	32
2	76	156	503	252			1,450	1,450	955	287	156	30
3	92	156	458	252	1,530		1,320	1,450	845	236	124	30
4	140	164	431	260			1,150	1,450	845	220	104	32
5	180	172	413	296	1,450		1,020	1,530	650	188	84	37
6	220	172	395	431	1,320		1,060	1,450	512	188	76	40
7	196	172	377	476	1,200	1,790	1,060	1,450	467	204	64	45
8	156	172	350	566	1,060		870	1,450	413	228	68	51
9	132	188	332	635	955		780	1,450	377	236	51	54
10	108	188	314		870		720	1,450	341	204	54	104
11	96	204	296	700	800		683	1,450	323	164	51	124
12	88	212	278		760		635	1,450	287	156	64	132
13	80	204	260	683	683		608	1,380	260	212	96	140
14	80	204	269	760	650	2,810	585	1,450	252	204	108	228
15	80	172	278		650		575	1,450	244	212	96	287
16	72	164	260	890	720		539	1,450	220	260	116	341
17	68	172	287		760		521	1,450	228	269	108	395
18	72	172	314	925	800		521	1,450	296	164	76	494
19	80	220	359	990	845		494	1,450	287	156	51	521
20	244	368	404	955	895		539	1,450	269	156	45	359
21	494	467	386	870	955	2,830	596	1,380	269	148	51	269
22	548	521	395	895	1,200		608	1,450	260	156	54	244
23	548	548	386	925	1,320		596	1,450	287	164	40	204
24	512	575	359	955	1,260		635	1,450	332	124	30	140
25	386	650	332	1,020	1,200		701	1,450	269	124	32	156
26	305	701	305	1,100			895	1,450	252	108	37	148
27	269	760	278	1,260	1,610		1,450	1,450	252	116	32	140
28	196	870	269	1,380			1,450	1,450	377	124	37	140
29	172	845	260		-------		1,450	1,450	314	124	40	124
30	172	635	260	1,530	-------	1,930	1,380	1,320	296	140	34	124
31	164	-------	252		-------	1,710	-------	1,200	-------	140	37	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	548	68	197	0.383	0.44
November	870	156	345	.670	.75
December	548	252	342	.664	.77
January	----------	244	822	1.60	1.84
February	----------	650	1,120	2.17	2.26
March	----------	----------	2,330	4.52	5.21
April	1,450	494	878	1.70	1.90
May	1,530	1,200	1,440	2.80	3.23
June	1,060	220	401	.779	.87
July	296	108	184	.357	.41
August	164	30	70.3	.137	.16
September	521	30	172	.334	.37
The year	----------	30	690	1.34	18.21

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, 1929.
EXTREMES.—Maximum discharge during year, 6,720 second-feet Mar. 15 (gage height, 26.49 feet); minimum, 42 second-feet Oct. 30 to Sept. 2 (gage height, 2.45 feet).

1928–29: Maximum discharge, that of Mar. 15 1929; minimum, 40 second-feet Sept. 29 and 30, 1928 (gage height, 2.42 feet).

Maximum stage known, 31.5 feet July, 1892.
REMARKS.—Records fair for low stages, poor for medium and high stages.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	52	64		601	2,000	601	1,380	214	194	80	42
2	52	61	68		306	1,480	525	1,030	178	162	76	42
3	52	58	68	90	288	1,700	378	506	128	116	76	45
4	55	55	68		271	2,080	360	378	122	100	72	48
5	55	61	68		237	2,400	288	378	122	128	68	48
6	55	64	68	110	220	1,450	254	378	105	110	64	48
7	55	68	68	105	206	921	237	396	100	85	61	50
8	52	68	72	105	186	798	220	601	105	76	61	50
9	52	68	72	95	178	678	206	506	134	64	58	55
10	50	72	72	414	162	432	186	738	162	68	58	58
11	48	68	72	639	155	620	186	985	170	61	58	76
12	48	64	76	639	214	963	178	718	206	72	68	85
13	45	64	90	306	271	2,510	194	544	141	80	85	105
14	45	61	95	254	378	5,640	186	378	128	90	95	116
15	50	61	100	214	506	6,720	170	306	105	105	80	186
16	50	58	116	186	544	6,560	162	220	100	100	76	288
17	52	58	134	155	582	6,440	162	900	90	90	61	254
18	55	76	141	155	563	5,940	206	1,450	76	80	58	206
19	68	95	148	178	563	5,720	220	2,480	76	90	55	162
20	85	85	128		544	5,200	254	2,960	68	80	55	122
21	80	85	105		601	5,320	288	2,660	64	76	55	90
22	72	80	100	730	658	5,600	324	2,120	61	76	52	80
23	68	90	90		818	6,440	214	1,450	64	72	50	72
24	64	100	85		921	6,390	601	921	61	64	50	68
25	61	95	85		1,210	6,240	2,380	506	76	58	50	68
26	58	85	80	1,450	1,450	6,040	2,510	468	95	61	48	68
27	55	80	76	1,430	2,330	5,560	2,020	414	122	64	48	64
28	55	72	72	1,400	2,180	5,120	1,550	342	134	68	45	61
29	58	68	68	1,360	-------	2,510	1,450	288	194	90	45	58
30	61	68	68	879	-------	963	1,100	271	206	85	42	55
31	61	-------	68	758	-------	601	-------	237	-------	80	42	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	85	45	57.0	0.070	0.08
November	100	52	71.3	.088	.10
December	148	64	86.6	.107	.12
January	1,450	-------	505	.622	.72
February	2,330	155	612	.754	.79
March	6,720	432	3,580	4.41	5.08
April	2,510	162	587	.723	.81
May	2,960	220	868	1.07	1.23
June	214	61	120	.148	.17
July	194	58	88.5	.109	.13
August	95	42	61.0	.075	.09
September	288	42	92.3	.114	.13
The year	6,720	42	564	.695	9.45

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, 1929.
EXTREMES.—Maximum discharge during year, 26,000 second-feet Mar. 14 (gage height, 16.40 feet); minimum, 4.6 second-feet Sept. 2 and 3 (gage height, 1.98 feet).
1928–29: Maximum and minimum discharges, those of 1929.
REMARKS.—Records good except those for estimated periods, which are fair.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	29			825	2,890	1,410	3,730	691	62	22	5.0
2	28	29			756	2,310	898	3,730	370	50	16	4.6
3	40	29			691	1,690	691	1,890	307	71	13	4.6
4	64	29			630	2,310	936	1,320	236	60	10	5.3
5	55	29			630	5,480	724	1,990	204	140	8.0	5.6
6	59	29			756	2,650	630	1,320	168	92	8.6	5.6
7	55	29			660	1,990	544	2,860	174	54	7.7	5.6
8	44	28		500	544	1,500	491	3,980	174	105	7.4	5.6
9	34	25			601	1,320	491	4,790	137	66	6.8	6.8
10	30	23			660	1,060	691	1,890	125	44	8.0	13
11	28				572	898	1,500	1,410	116	86	8.6	341
12	23	26			517	825	1,140	1,060	103	80	107	73
13	20				517	1,050	517	825	88	69	46	1,340
14	18	28			491	16,300	465	724	118	82	20	523
15	18				544	10,200	724	660	125	29	66	142
16	16	30	80	348	1,060	3,890	898	756	90	157	69	67
17	19			348	825	2,420	517	1,060	73	174	33	895
18	2,530			572	756	1,890	440	601	174	69	19	240
19	287			3,020	691	1,410	370	3,930	177	40	13	105
20	142			1,410	825	1,230	370	2,890	109	27	11	62
21	86	420		1,140	1,500	1,940	572	1,990	75	21	7.7	46
22	77			1,500	1,410	6,510	440	1,320	127	15	42	36
23	77			1,320	1,060	15,700	348	1,060	116	19	23	34
24	73			2,530	1,060	5,650	327	862	127	200	12	130
25	62			7,340	936	2,650	4,780	691	165	107	7.7	517
26	54			3,150	1,790	1,990	1,580	630	114	69	6.5	393
27	48	80		2,420	3,180	1,690	1,060	630	160	38	5.9	179
28	42			1,890	7,560	1,320	1,060	491	163	77	5.6	120
29	37			1,410	-------	1,060	1,140	393	107	67	5.6	98
30	34			1,230	-------	1,500	1,060	327	78	54	5.6	75
31	30	-------		1,060	-------	898	-------	287	-------	32	5.3	--------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,530	16	134	0.367	0.42
November	----------	----------	104	.285	.32
December	----------	----------	80	.21	.25
January	7,340	----------	1,230	3.37	3.88
February	3,180	491	1,140	3.12	3.25
March	16,300	825	3,360	9.21	10.62
April	4,780	327	894	2.45	2.73
May	4,790	287	1,620	4.44	5.12
June	691	73	166	.455	.51
July	200	15	72.8	.199	.23
August	107	5.3	20.2	.055	.06
September	1,340	4.6	183	.501	.56
The year	16,300	4.6	752	2.06	27.95

BLACK WARRIOR RIVER AT LOCK 17, NEAR BESSEMER, ALA.

LOCATION.—Staff gage in T. 18 S., R. 8 W., 1½ 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, 1929.

EXTREMES.—1928–29, maximum discharge during year, 109,000 second-feet Mar. 15, 1929 (gage height, 78.60 feet); minimum not sufficiently accurate to warrant publication.

Maximum stage known, 80.3 feet July 9, 1916.

REMARKS.—Records poor. Daily discharge not sufficiently accurate to warrant publication. Flow regulated by storage above Lock and Dam 17. About 15 second-feet for lockages and leaks not included in records.

Monthly discharge, in second-feet, 1928–29

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
1928					
June 24-30	38,400	5,540	17,300	4.35	1.13
July	6,620	1,200	2,970	.746	.86
August	6,980	536	1,780	.447	.52
September	26,400	240	3,100	.779	.87
1928–29					
October	8,580	240	1,110	.279	.32
November	13,400	240	1,570	.394	.44
December	1,590	680	963	.242	.28
January	37,200	860	9,970	2.51	2.89
February	56,200	4,040	11,100	2.79	2.90
March	107,000	6,620	38,000	9.55	11.01
April	33,600	2,520	7,150	1.80	2.01
May	45,000	3,920	18,800	4.72	5.44
June	3,630	890	1,720	.432	.48
July	2,100	360	955	.240	.28
August	1,090	82	404	.102	.12
September	5,900	60	1,410	.354	.40
The year	107,000	60	7,790	1.96	26.57

NOTE.—Monthly discharge June 24 to Sept. 30, 1928, supersedes the figures published in Water-Supply Paper 662.

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, 1929.

EXTREMES.—Maximum discharge during year, 132,000 second-feet Mar. 15 (gage height, 62.2 feet); minimum (estimated), 50 second-feet Aug. 26 (gage height, 18.22 feet).

1889–1905, 1928–29: Maximum discharge, 215,000 second-feet Apr. 18, 1900 (gage height, 67.7 feet); minimum, that of Aug. 26, 1929.

REMARKS.—Monthly records good; daily records fair.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	487	655	1,700	1,210	10,200	60,800	9,500	32,700	5,110	1,500	890	255
2	546	630	1,700	1,210	7,760	31,500	8,700	35,300	4,600	1,210	876	264
3	525	742	1,810	1,300	7,010	20,200	7,700	32,300	4,420	1,210	822	272
4	567	692	1,810	1,400	6,510	34,200	7,510	25,300	4,000	1,120	718	289
5	1,500	630	1,600	1,810	6,260	46,500	8,010	24,300	3,250	1,940	630	314
6	1,600	630	1,400	3,800	6,510	43,500	7,510	25,900	2,610	2,310	588	430
7	1,210	692	1,400	5,730	7,010	35,200	6,510	35,300	2,310	1,810	516	376
8	950	692	1,210	5,110	6,760	27,100	6,000	42,600	2,060	1,300	496	478
9	782	718	1,120	4,420	6,760	21,300	5,430	46,000	2,060	1,120	525	630
10	718	730	1,120	10,000	7,260	19,000	5,430	50,800	2,060	1,120	630	578
11	655	668	1,120	12,500	7,260	14,300	5,730	40,400	1,810	1,300	1,400	692
12	588	620	1,040	10,700	6,760	9,700	6,000	27,600	1,700	1,500	1,600	1,040
13	588	588	1,040	7,760	6,260	26,800	6,000	21,700	1,600	1,400	1,700	1,400
14	567	588	1,040	6,510	6,000	101,000	5,430	16,200	2,920	1,210	1,300	5,110
15	609	588	1,120	5,430	6,260	131,000	4,780	12,300	5,430	1,120	1,120	5,430
16	588	609	1,040	4,780	15,600	121,000	5,430	6,760	3,420	1,040	1,040	3,800
17	609	598	1,120	4,420	21,000	87,200	6,760	8,500	2,180	1,500	822	5,110
18	4,420	668	1,500	9,200	15,100	50,000	6,510	10,500	1,700	2,310	692	7,260
19	8,720	6,510	2,920	17,000	11,900	26,700	5,730	27,400	1,400	1,810	567	6,510
20	6,260	11,100	3,800	20,000	9,830	16,600	5,430	42,100	1,500	1,500	468	3,600
21	2,920	9,500	2,060	15,500	17,500	33,800	6,760	42,600	1,500	1,120	458	1,400
22	1,810	6,510	1,810	11,000	23,500	84,100	6,000	32,400	1,400	863	440	1,040
23	1,300	4,600	1,700	10,000	20,400	122,000	5,110	22,500	3,250	730	421	935
24	1,210	3,250	1,600	9,400	15,000	124,000	4,420	17,500	2,310	730	403	1,400
25	1,040	2,310	1,500	25,000	11,000	98,000	34,300	11,700	1,700	768	430	2,060
26	950	1,940	1,400	36,300	20,600	63,800	34,800	8,500	1,600	876	183	3,800
27	822	1,700	1,400	36,400	35,700	33,100	22,800	7,260	2,060	1,010	403	4,210
28	1,210	1,600	1,300	33,300	65,700	19,600	16,700	8,500	2,180	965	367	2,920
29	705	1,400	1,210	25,500	------	14,000	12,400	8,720	2,060	1,210	385	2,060
30	692	1,400	1,210	19,600	------	11,400	11,400	7,510	1,940	1,400	340	1,500
31	680	------	1,210	15,500	------	10,300	------	2,610	------	1,010	272	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	8,720	487	1,480	0.306	0.35
November	11,100	588	2,120	.439	.49
December	3,800	1,040	1,520	.315	.36
January	36,400	1,210	12,000	2.48	2.86
February	65,700	6,000	13,800	2.86	2.98
March	131,000	9,700	49,600	10.3	11.87
April	34,800	4,420	9,490	1.96	2.19
May	50,800	2,610	23,700	4.91	5.66
June	5,430	1,400	2,540	.526	.59
July	2,310	730	1,290	.267	.31
August	1,700	183	694	.144	.17
September	7,260	255	2,170	.449	.50
The year	131,000	183	10,100	2.09	28.33

SIPSEY FORK OF MULBERRY FORK NEAR SIPSEY, ALA.

LOCATION.—Staff gage in T. 13 S., R. 5 W., 200 feet below Leith 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, 1929.
EXTREMES.—Maximum discharge during period, 50,300 second-feet Mar. 23 (gage height, 56.0 feet); minimum, 41 second-feet Sept. 3 (gage height, 3.71 feet).
REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1928-29

Day	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	------	340	320	555	340	1,980	10,000	1,980	3,950	1,180	280	242	44
2	------	340	197	510	380	1,560	5,300	2,620	4,560	1,020	260	222	43
3	------	208	184	465	340	2,210	3,560	1,840	3,660	1,370	260	178	41
4	------	300	214	465	300	1,120	3,690	2,880	2,960	1,020	242	157	46
5	------	242	172	800	380	1,070	6,800	3,060	3,420	700	750	133	46
6	------	242	166	380	1,560	1,070	5,600	2,540	5,480	600	340	127	45
7	------	211	166	380	1,500	1,020	3,870	1,980	12,000	532	300	124	51
8	------	260	184	340	960	905	3,180	1,560	10,500	465	260	100	103
9	------	225	194	380	1,120	850	2,800	1,370	18,500	465	225	300	78
10	------	190	190	340	2,920	1,240	2,360	1,300	10,000	800	197	510	380
11	------	160	184	320	3,180	960	1,700	1,240	5,400	510	960	190	222
12	------	181	163	320	2,620	905	1,560	1,780	3,250	420	600	133	190
13	------	130	160	320	1,560	800	2,880	1,300	2,820	400	420	112	222
14	225	103	160	380	1,300	850	28,000	1,070	2,280	380	300	112	2,210
15	190	100	160	360	1,020	960	35,200	960	1,840	300	225	124	510
16	190	380	160	340	905	2,280	19,600	1,560	1,560	400	214	109	340
17	225	905	160	320	850	2,660	9,200	1,640	3,830	380	625	160	2,700
18	225	3,800	300	510	1,640	1,980	5,350	1,370	3,180	380	380	78	675
19	225	2,360	4,320	800	4,320	1,640	3,360	1,020	1,980	360	280	76	850
20	190	905	4,670	625	3,360	1,560	3,080	905	4,720	600	225	73	675
21	160	850	2,280	578	2,760	3,660	2,880	905	4,170	340	208	68	578
22	130	850	1,120	555	2,960	5,800	19,300	905	3,150	300	181	66	280
23	130	800	905	465	3,060	3,990	50,300	800	2,480	260	157	64	118
24	115	800	700	400	3,380	3,600	26,500	850	1,700	340	200	61	154
25	109	800	600	400	13,600	2,660	13,000	3,180	1,180	420	280	61	260
26	100	850	510	420	10,000	3,040	7,800	3,660	1,980	360	218	60	1,300
27	124	850	850	380	4,460	5,680	4,780	1,980	3,280	340	200	56	420
28	124	750	420	420	3,540	17,000	3,180	1,300	3,120	555	187	53	300
29	115	700	420	400	3,360	------	2,860	1,780	3,180	420	280	49	225
30	340	650	380	380	2,860	------	2,760	2,760	2,360	360	420	48	420
31	------	600	------	340	2,280	------	2,580	------	1,560	------	300	45	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
1928					
September 14-30	340	100	172	0.169	0.11
1928-29					
October	3,800	100	648	.635	.73
November	4,670	160	687	.674	.75
December	800	320	440	.431	.50
January	13,600	300	2,670	2.62	3.02
February	17,000	800	2,610	2.56	2.67
March	50,300	1,560	9,450	9.26	10.68
April	3,660	800	1,740	1.71	1.91
May	18,500	1,180	4,320	4.24	4.89
June	1,370	260	533	.523	.58
July	960	157	322	.316	.36
August	510	45	126	.124	.14
September	2,700	41	451	.442	.49
The year	50,300	41	2,010	1.97	26.72

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, 1928, to September, 1929.
EXTREMES.—Maximum discharge during year, 36,700 second-feet Mar. 16 (gage height, 31.8 feet); minimum, 23 second-feet Sept. 2–4 (gage height, 2.16 feet). 1928–29: Maximum and minimum discharges, those of 1929.
REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	63	247	260	1,860	14,200	1,620	7,330	710	428	86	26
2	86	68	231	315	1,540	6,610	1,860	12,600	770	272	81	24
3	208	70	247	338	1,300	4,690	1,460	9,580	655	360	75	23
4	212	70	227	294	1,160	6,490	1,230	5,650	600	227	118	27
5	235	78	208	428	1,160	12,800	1,160	5,170	525	215	103	34
6	141	68	196	955	1,300	9,840	1,020	4,810	428	170	65	36
7	118	59	188	955	1,620	6,370	890	16,400	405	152	61	39
8	109	88	155	770	1,460	4,470	830	9,580	428	131	50	33
9	109	83	148	740	1,460	2,930	770	15,600	655	135	382	33
10	83	83	148	2,320	1,700	2,320	740	7,330	450	315	890	34
11	83	73	138	2,620	1,700	1,950	1,020	4,470	382	131	208	48
12	86	83	138	1,540	1,460	1,620	1,020	3,040	315	115	500	128
13	68	75	148	1,160	1,300	2,420	955	2,220	268	227	239	682
14	61	59	141	955	1,230	22,800	770	1,860	500	212	575	2,220
15	63	65	138	830	1,300	31,700	830	1,780	360	235	500	740
16	57	65	145	770	2,420	35,100	2,620	1,620	315	360	121	360
17	86	59	141	770	3,260	8,800	2,520	1,780	272	428	70	2,220
18	955	61	188	2,130	2,720	5,170	1,700	1,860	247	360	68	1,460
19	500	830	223	4,250	2,130	3,810	1,160	4,580	315	264	68	500
20	239	1,460	272	3,370	2,420	2,720	1,020	17,500	247	170	59	264
21	128	740	256	2,420	4,470	3,590	1,230	11,900	294	100	57	188
22	124	550	243	1,700	4,250	16,600	1,230	5,770	500	159	41	135
23	94	405	231	1,860	3,260	23,900	890	3,370	710	88	78	118
24	83	294	219	1,700	2,430	27,000	890	2,420	600	73	124	740
25	65	264	215	4,250	2,040	11,600	12,300	1,950	360	121	81	1,090
26	88	243	177	7,450	3,810	5,050	8,540	1,620	294	204	59	2,040
27	97	212	174	5,410	9,190	3,810	4,030	1,460	525	118	41	1,160
28	103	192	170	6,010	19,100	2,930	2,930	1,300	890	135	28	628
29	91	177	181	4,250	-------	2,220	3,370	1,020	500	112	28	405
30	78	196	177	3,150	-------	2,040	5,410	890	500	97	26	294
31	65	-------	170	2,320	-------	2,130	-------	500	-------	88	26	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	955	46	147	0.170	0.20
November	1,460	59	228	.264	.29
December	272	138	190	.220	.25
January	7,450	260	2,140	2.47	2.85
February	19,100	1,160	2,970	3.43	3.57
March	35,100	1,620	9,280	10.7	12.34
April	12,300	740	2,200	2.54	2.83
May	17,500	500	5,390	6.23	7.18
June	890	247	467	.540	.60
July	428	73	200	.231	.27
August	890	26	158	.183	.20
September	2,220	23	524	.606	.68
The year	35,100	23	1,990	2.30	31.26

PEARL RIVER BASIN

PEARL RIVER AT EDINBURG, MISS.

LOCATION.—Staff gage in T. 11 N., R. 9 E. Choctaw meridian, at old highway bridge in Edinburg.
DRAINAGE AREA.—898 square miles.
RECORDS AVAILABLE.—August, 1928, to September, 1929.
EXTREMES.—Maximum discharge during year, 10,500 second-feet Mar. 17 (gage height, 24.20 feet); minimum, 7 second-feet Sept. 8 (gage height, 1.63 feet).
1928–29: Maximum and minimum discharges, those of 1929.
Maximum stage known, 29.0 feet Mar. 1, 1902.
REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	30	50	79	963	2,190	2,320	2,070	925	95	427	10
2	19	28	44	60	811	2,190	1,820	2,190	754	113	374	9
3	16	28	44	54	661	1,790	1,540	2,350	625	122	357	13
4	14	28	44	54	697	1,640	1,240	2,070	463	113	340	13
5	13	28	44	79	735	1,870	1,040	1,790	357	164	306	10
6	13	28	44	188	944	2,190	868	1,570	201	122	274	8
7	13	50	44	306	887	2,320	792	1,390	142	118	188	7
8	13	60	44	188	925	2,160	697	1,320	340	113	188	7
9	13	64	44	142	887	1,840	535	1,240	445	113	164	22
10	13	44	44	517	849	1,790	517	1,160	258	132	113	32
11	13	41	41	535	792	1,690	517	1,180	176	127	188	132
12	13	38	41	481	625	1,570	409	1,180	132	118	201	290
13	13	35	64	409	517	2,180	340	1,120	113	113	201	340
14	13	34	113	306	409	4,720	258	944	95	87	188	323
15	13	33	104	274	463	5,900	228	1,000	87	57	164	201
16	13	33	87	274	849	9,060	258	1,000	87	44	153	374
17	13	33	79	274	1,000	10,500	228	1,640	79	50	142	643
18	33	38	122	274	1,080	10,200	201	1,430	71	47	127	463
19	33	44	113	323	1,120	8,420	176	1,640	57	44	113	445
20	20	57	104	323	1,020	7,120	274	1,870	50	38	95	391
21	18	87	104	323	1,080	5,720	517	1,790	47	35	87	243
22	18	95	104	258	1,180	6,920	697	1,500	47	34	79	243
23	23	50	104	243	1,120	8,420	625	1,280	44	34	64	258
24	23	33	104	499	1,060	8,740	517	1,160	44	33	36	214
25	23	34	104	982	982	9,180	1,300	1,060	44	34	27	164
26	23	34	104	1,220	1,040	9,400	1,620	1,320	57	36	28	113
27	22	33	104	1,430	1,300	8,420	1,950	1,740	71	323	26	83
28	20	33	100	1,500	1,900	7,120	1,740	1,640	71	391	25	75
29	26	33	95	1,500	-------	5,640	1,360	1,480	87	463	18	50
30	33	50	95	1,340	-------	4,400	1,260	1,300	79	517	15	38
31	38	-------	91	1,160	-------	3,120	-------	1,080	-------	445	10	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	38	13	19.1	0.021	0.02
November	95	28	41.9	.047	.05
December	122	41	78.2	.087	.10
January	1,500	54	503	.560	.65
February	1,900	409	925	1.03	1.07
March	10,500	1,570	5,110	5.69	6.56
April	2,320	176	861	.958	1.07
May	2,350	944	1,470	1.64	1.89
June	925	44	202	.225	.25
July	517	33	138	.154	.18
August	427	10	152	.169	.19
September	643	7	174	.194	.22
The year	10,500	7	810	.902	12.25

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, 1929.

EXTREMES.—Maximum discharge during period, 30,600 second-feet Mar. 24 (gage height, 32.30 feet); minimum, 134 second-feet Oct. 20 (gage height, 1.42 feet).

1901–1913, 1928–29: 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 fair.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	228	174	242	344	4,330	6,060	23,200	7,910	2,380	740	1,690	242
2	257	174	242	300	4,200	6,160	20,100	7,360	2,050	740	1,570	228
3	214	174	242	330	3,610	6,160	17,200	6,760	1,890	705	1,340	228
4	188	174	272	375	3,080	6,160	14,700	6,510	1,690	670	1,190	188
5	174	174	300	437	2,790	6,410	11,800	6,060	1,490	635	998	167
6	174	188	300	330	2,380	6,660	9,860	5,440	1,300	600	923	155
7	167	188	300	360	2,180	6,260	7,360	5,080	1,110	567	812	155
8	162	201	300	390	1,970	6,510	5,620	4,680	960	567	886	188
9	155	201	300	534	1,810	6,110	4,080	3,490	886	534	960	257
10	155	188	286	600	1,850	5,540	2,540	3,280	775	534	1,070	534
11	155	201	286	1,070	1,890	5,130	2,420	2,790	886	501	1,190	960
12	155	201	272	1,300	1,890	4,900	2,260	2,540	960	468	1,110	600
13	155	214	286	1,300	1,930	4,680	2,140	2,300	923	406	960	272
14	150	228	300	1,340	1,850	7,510	2,050	2,220	960	406	1,650	188
15	146	228	315	1,300	1,720	8,840	1,890	2,140	960	406	1,930	315
16	142	228	375	998	2,140	9,860	1,720	2,010	886	567	1,810	567
17	146	228	437	960	2,750	11,500	1,650	1,930	740	960	1,530	849
18	146	214	468	886	3,240	12,500	1,570	1,770	600	1,190	1,300	960
19	140	201	534	886	3,530	13,400	1,490	2,460	567	1,380	960	1,150
20	134	188	501	812	3,860	15,900	1,380	3,240	501	1,150	812	1,340
21	144	174	501	740	4,420	20,100	1,340	3,410	468	923	600	1,610
22	155	174	468	849	5,180	23,500	1,300	3,530	437	635	567	1,340
23	167	174	468	923	5,360	29,700	1,450	4,030	406	534	534	1,110
24	174	174	468	1,150	5,220	30,600	1,610	3,900	390	468	468	960
25	174	201	501	1,530	5,080	30,300	4,260	3,730	390	468	437	775
26	174	228	468	1,930	5,440	30,000	6,560	3,200	390	468	406	705
27	172	257	437	2,670	5,760	30,300	7,510	2,590	812	437	344	635
28	169	272	406	3,570	5,960	30,300	7,660	2,500	1,110	705	315	600
29	167	272	406	3,990	-------	29,400	8,320	2,420	1,490	960	300	501
30	172	257	375	4,460	-------	28,500	8,160	2,460	1,230	1,150	286	437
31	174	-------	360	4,380	-------	26,100	-------	2,500	-------	1,340	257	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	257	134	167	0.054	0.06
November	272	174	205	.066	.07
December	534	242	368	.119	.14
January	4,460	300	1,320	.426	.49
February	5,960	1,720	3,410	1.10	1.14
March	30,600	4,680	15,000	4.84	5.58
April	23,200	1,300	6,110	1.97	2.20
May	7,910	1,770	3,690	1.19	1.37
June	2,380	390	988	.319	.36
July	1,380	406	704	.227	.26
August	1,930	257	942	.304	.35
September	1,610	155	607	.196	.22
The year	30,600	134	2,800	.903	12.24

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, 1929.
EXTREMES.—Maximum discharge during year, 33,800 second-feet Mar. 17 (gage height, 19.72 feet); minimum, 1,010 second-feet Oct. 14 (gage height, 1.64 feet).
1928–29: Maximum and minimum discharges, those of 1929.
REMARKS.—Records good except those for estimated periods, which are fair.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,250	1,070	1,190		7,520	16,300	33,000	10,800	5,070	2,520	3,160	1,250
2	1,190	1,070	1,250		6,910	17,000	33,000	10,800	4,450	2,610	2,700	1,190
3	1,190	1,070	1,250		6,300	15,500	33,000	10,400	4,450	2,520	2,610	1,250
4	1,130	1,070	1,250	1,750	6,160	14,500	32,700	10,100	4,320	2,380	2,610	1,320
5	1,130	1,070	1,250		6,020	15,300	32,200	9,760	3,880	2,700	2,520	1,250
6	1,130	1,070	1,190		6,160	14,200	31,100	9,420	3,560	2,440	2,350	1,190
7	1,130	1,130	1,190	3,560	6,460	12,500	29,500	8,780	3,260	2,190	2,440	1,230
8	1,070	1,190	1,190	2,880	6,460	11,500	27,600	7,980	2,970	1,950	2,270	1,250
9	1,070	1,250	1,190	2,270	5,740	10,600	24,600	7,520	2,780	1,800	2,110	1,520
10	1,070	1,190	1,190	2,440	6,460	9,940	20,800	6,910	2,520	1,660	1,950	1,800
11	1,070	1,130	1,190	5,070	6,460	9,420	14,700	6,300	2,440	1,660	2,030	1,880
12	1,070	1,130	1,250	7,370	5,600	8,940	9,760	5,880	2,270	1,580	2,610	1,730
13	1,070	1,130	1,380	6,460	4,810	10,600	7,370	5,200	2,110	1,520	2,610	1,660
14	1,010	1,070	1,880	4,810	4,320	19,400	6,300	4,570	2,270	1,520	2,780	1,660
15	1,070	1,070	2,440	3,760	10,100	27,000	5,600	4,210	3,360	1,520	3,990	1,580
16	1,070	1,070	2,270	3,260	22,300	31,600	5,200	4,100	7,670	1,580	4,320	1,760
17	1,130	1,070	1,880	3,070	23,800	33,800	4,810	4,450	5,880	1,660	3,560	1,950
18	1,320	1,070	1,730	3,160	21,700	33,000	4,450	5,460	3,660	1,580	3,260	2,350
19	1,380	1,190	1,580	3,460	17,000	31,100	4,210	6,020	2,880	1,580	2,970	2,520
20	1,320	1,250	1,950	3,560	11,800	28,100	3,990	9,420	2,440	1,950	2,610	2,440
21	1,190	1,250	2,350	3,660	9,600	24,900	3,760	10,600	2,190	2,780	2,440	2,030
22	1,130	1,190	2,780	3,260	9,760	22,300		7,980	2,110	3,160	2,110	1,880
23	1,130	1,130	2,440	2,880	10,800	22,000	3,500	6,460	2,030	2,700	2,030	2,030
24	1,130	1,130	2,030	2,780	10,800	24,100		6,160	2,110	2,270	1,950	2,190
25	1,070	1,070	1,800	3,460	10,100	26,200		6,020	1,950	1,950	1,730	2,110
26	1,070	1,070	1,660	8,140	9,600	28,400	3,990	5,880	2,030	1,950	1,880	1,880
27	1,070	1,070	1,580	9,600	10,600	30,000	5,740	6,300	2,190	2,190	1,520	1,800
28	1,070	1,070	1,520	8,460	14,200	31,300	7,820	6,610	2,520	2,190	1,380	1,730
29	1,070	1,130	1,520	9,260	-------	32,400	8,780	7,670	4,100	2,610	1,320	1,520
30	1,070	1,130	1,520	9,420	-------	33,000	10,100	8,300	3,360	3,460	1,250	1,450
31	1,070	-------	1,450	8,300	-------	33,000	-------	6,610	-------	3,360	1,190	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,380	1,070	1,130	0.199	0.23
November	1,250	1,070	1,120	.197	.22
December	2,780	1,190	1,620	.285	.33
January	9,600	----------	4,350	.764	.88
February	23,800	4,320	9,910	1.74	1.81
March	33,800	8,940	21,900	3.85	4.44
April	33,000	----------	13,900	2.44	2.72
May	10,800	4,100	7,310	1.28	1.48
June	7,670	1,950	3,230	.568	.63
July	3,460	1,520	2,190	.385	.44
August	4,320	1,190	2,390	.420	.48
September	2,520	1,190	1,710	.301	.34
The year	33,800	1,070	5,870	1.03	14.00

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-fourths mile southeast of Dlo.
DRAINAGE AREA.—361 square miles.
RECORDS AVAILABLE.—August, 1928, to September, 1929.
EXTREMES.—Maximum discharge during year, 10,400 second-feet Mar. 15 (gage height, 21.20 feet); minimum, 27 second-feet Oct. 10–14 (gage height, 2.34 feet).
1928–29: Maximum and minimum discharges, those of 1929.
REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	34	75	57	411	3,020	307	238	123	107	148	29
2	31	35	78	52	290	2,270	295	191	107	85	123	29
3	31	35	59	52	249	1,640	284	148	91	78	88	57
4	31	35	59	52	233	1,030	238	115	75	52	75	61
5	29	35	52	261	255	1,410	207	107	6[illegible]	52	68	49
6	29	35	52	438	357	1,130	191	107	6[illegible]	52	64	45
7	29	35	50	207	397	930	186	91	5[illegible]	49	52	44
8	29	37	49	167	255	657	191	88	5[illegible]	45	81	233
9	28	35	44	132	511	467	212	75	5[illegible]	42	70	482
10	27	35	44	1,600	780	438	526	75	5[illegible]	42	59	196
11	27	35	45	1,030	751	438	332	75	5[illegible]	35	54	88
12	27	35	50	880	578	438	238	75	5[illegible]	35	50	75
13	27	34	182	571	370	2,090	217	75	4[illegible]	35	751	52
14	27	32	411	320	255	6,160	177	81	212	35	1,180	47
15	32	32	162	228	1,500	10,200	167	88	43[illegible]	34	278	45
16	42	32	132	191	3,170	9,550	158	94	33[illegible]	47	167	44
17	49	32	115	177	3,230	6,100	123	384	140	70	148	541
18	61	37	107	186	2,270	3,460	115	186	75	94	81	212
19	70	37	111	622	1,730	980	107	571	70	153	73	115
20	49	37	167	541	930	657	107	780	64	158	61	88
21	35	45	249	467	1,680	930	107	751	64	144	52	88
22	38	45	255	357	1,910	5,120	107	212	64	123	49	75
23	47	47	128	320	1,640	6,360	107	148	5[illegible]	81	49	73
24	52	47	107	526	1,180	7,560	107	107	5[illegible]	70	49	61
25	47	45	88	2,550	586	5,240	107	107	5[illegible]	212	40	42
26	40	45	70	2,670	830	2,980	107	101	177	284	35	40
27	35	45	70	1,680	1,680	830	482	104	930	172	32	37
28	35	49	70	2,630	3,110	548	930	690	453	196	32	35
29	35	54	70	2,000	-------	496	586	511	167	541	32	35
30	35	66	70	1,280	-------	438	238	438	115	370	32	35
31	34	-------	70	751	-------	351	-------	201	-------	217	31	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	70	27	36.8	0.102	0.12
November	66	32	39.4	.109	.12
December	411	44	106	.294	.34
January	2,670	52	742	2.06	2.38
February	3,230	233	1,110	3.07	3.20
March	10,200	351	2,710	7.51	8.66
April	930	107	242	.670	.75
May	780	75	226	.626	.72
June	930	49	145	.402	.45
July	541	34	120	.332	.38
August	1,180	31	132	.366	.42
September	541	29	102	.283	.32
The year	10,200	27	474	1.31	17.86

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, 1929.
EXTREMES.—Maximum discharge during year, 35,500 second-feet Feb. 17 (gage height, 16.85 feet); minimum, 515 second-feet Sept. 30 (gage height —.20 foot).
1928–29: Maximum and minimum discharges, those of 1929.
REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	700	620	660	830	1,580	3,800	1,280	875	920	1,020	2,260	550
2	700	620	660	830	1,400	3,910	1,230	830	920	875	1,460	585
3	660	620	660	740	1,230	3,390	1,230	830	875	740	1,120	550
4	660	620	660	740	1,230	3,210	1,120	830	970	740	970	1,460
5	660	620	700	970	1,520	5,140	1,070	830	1,120	740	830	1,020
6	620	620	700	3,210	1,840	4,880	1,070	830	970	875	1,230	785
7	620	620	700	2,710	2,180	3,910	1,020	830	920	875	920	660
8	620	620	700	2,330	2,480	2,870	970	830	785	875	830	700
9	620	620	660	1,640	2,560	2,480	970	785	740	875	830	1,020
10	620	660	660	1,230	2,710	1,980	1,020	785	740	875	785	830
11	620	660	660	2,330	2,950	1,580	1,180	830	740	830	1,120	740
12	620	660	660	3,590	2,480	1,520	1,020	830	740	785	1,840	700
13	620	660	920	3,390	1,900	4,880	970	830	700	740	1,580	660
14	620	585	1,340	2,870	1,710	14,000	1,120	785	740	785	1,580	660
15	660	585	1,230	2,400	7,620	22,700	1,340	740	970	830	1,580	785
16	660	585	1,120	1,840	23,800	22,700	1,070	740	1,180	970	1,580	660
17	920	585	970	1,710	35,500	15,500	1,020	740	1,460	1,020	1,020	785
18	970	620	920	1,840	22,300	10,500	1,020	970	1,640	875	920	660
19	970	660	920	2,400	14,500	5,270	970	1,840	2,040	875	875	660
20	740	660	1,230	2,330	6,200	3,390	970	3,300	1,580	1,780	785	660
21	740	660	2,040	2,260	3,690	2,400	1,230	2,040	1,070	1,180	700	620
22	740	660	2,180	2,180	2,870	1,840	1,020	1,780	830	1,020	785	660
23	660	660	1,460	1,840	2,560	3,590	970	1,460	740	785	660	660
24	660	660	1,230	1,640	2,180	3,390	970	1,230	740	785	620	660
25	660	660	1,070	2,630	1,900	2,950	970	1,230	920	920	785	660
26	660	660	920	4,620	2,040	2,560	970	1,120	1,020	970	785	620
27	660	660	920	5,790	2,400	2,330	970	1,120	1,900	620	740	620
28	660	660	875	4,140	3,210	1,710	920	1,340	2,330	2,870	700	585
29	660	660	875	2,870	-------	1,520	875	1,230	1,460	1,980	585	550
30	620	660	830	2,260	-------	1,520	875	1,340	1,180	3,030	585	515
31	620	-------	830	1,840	-------	1,400	-------	1,180	-------	4,620	585	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	970	620	685	0.714	0.82
November	660	585	637	.664	.74
December	2,180	660	966	1.01	1.16
January	5,790	740	2,320	2.42	2.79
February	35,500	1,230	5,660	5.90	6.14
March	22,700	1,400	5,250	5.47	6.31
April	1,340	875	1,050	1.09	1.22
May	3,300	740	1,130	1.18	1.36
June	2,330	700	1,100	1.15	1.28
July	4,620	620	1,190	1.24	1.43
August	2,260	585	1,020	1.06	1.22
September	1,460	515	709	.739	.82
The year	35,500	515	1,790	1.87	25.29

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, 1929

Streams draining south Atlantic slope

Date	Stream	Tributary to—	Locality	Gage height	Discharge
				Feet	*Sec.-ft.*
Sept. 23	Miller Run	Tygers Creek	1.5 miles from Alleghany, Va.		0.038
Aug. 21	Meadow Creek	Craig Creek	Newcastle, Va.		6.7
Feb. 12	Laurel Creek	North River	Near mouth, near Goshen, Va.		5.0
Apr. 1	Bailey Creek	James River	1 mile above mouth of Cattail Creek, near Hopewell, Va.		21.0
Feb. 9	Roanoke River	Albemarle Sound	Bridge on State Highway No 40, near Weldon, N. C.	52.2	8,160
Oct. 31	Murrays Run	Roanoke River	Woodlawn Park, near Roanoke, Va.		.61
31	Lower Spring	Murrays Run	do		.05
31	Upper and Lower Springs.	do	do		.09
31	Upper Spring	do	do		.04
31	Lukens Spring (Watts Spring).	Lick Creek	Roanoke, Va.		.16
31	Moorman Spring	do	do		.35
31	Little Back Creek	Back Creek	Ford on county road above Back Creek School, near Roanoke, Va.		.85
Aug. 13	Little Pee Dee River.	Pee Dee River	Sandy Bluff road crossing, 3 miles below mouth of Lumber River, S. C.		2,140
Apr. 24	Saluda River	Congaree River	3 miles from Waterloo and 1 mile below mouth of Reedy River, S. C.	4.04	1,400
Feb 11	Ponce de Leon Spring.	St. Johns River	Ponce De Leon Springs, Fla.		22.0
11	Juniper Springs Creek.	Lake George	Near Astor Park, Fla.		8.08
11	Saw Grass Run	Juniper Springs Creek.	Near Juniper Springs Fla.		1.43
9	Salt Springs Run	Lake George	Near Lake Kerr, Fla.		87.3
7	Silver Spring	Silver Springs River.	Silver Springs, near Ocala, Fla.		521
7	Silver Springs River.	Oklawaha River	Near Silver Springs, Fla.		843
12	Green Cove Spring	St. Johns River	Green Cove Spring, Fla.		2.2
12	do	do	do		5.4

Streams draining into eastern Gulf of Mexico

Feb. 5	Kissenger Spring	Peace Creek	Near Bartow, Fla.		34.7
6	Sulphur Springs	Hillsboro River	Near Tampa, Fla.		25.8
4	Weekiwachee Spring.	Weekiwachee River.	1,000 feet below spring, 12 miles west of Brookesville, Fla.		163
8	Weekiwachee River.	Gulf of Mexico	Military Landing, near Bayport, Fla.		177
8	do	do	do		179
1	Blue Springs Run	Withlacoochee River.	Dunnellon, Fla.		838
1	Wekiva Spring	Waccasassa River	Near Gulf Hammock, Fla.		100
May 29	Suwannee River	Gulf of Mexico	Branford, Fla.		7,230
30	Santa Fe River	Suwannee River	Near High Springs, Fla.		585
Jan. 31	Poe Spring	Santa Fe River	do		75
30	IchatucknecRiver.	do	Near Hildreth, Fla.		467
25	Hampton Spring	Fenholloway River.	Hampton Springs, Fla.		.116
23	Wakulla River	St. Marks River	Near Wakulla, Fla.		163
23	Lost Creek	Ochlockonee River.	Highway bridge half a mile north of Arran, Fla.		120
23	Posey Creek	do	Highway bridge 2 miles west of Arran, Fla.		8.2
July 15	Taluga River	do	Highway bridge 1 mile east and half a mile south of Greensboro, Fla.		40.6

Miscellaneous discharge measurements in south Atlantic slope and eastern Gulf of Mexico drainage basins during the year ending September 30, 1929—Continued

Streams draining into eastern Gulf of Mexico—Continued

Date	Stream	Tributary to—	Locality	Gage height	Discharge
				Feet	*Sec.-ft.*
Jan. 24	Blue Spring	Chipola River	5 miles above power plant near Marianna, Fla.		134
24	do	do	Dam of Blue Springs Power Co.'s plant near Marianna, Fla.		100
Oct. 19	Bull Mountain Creek.	East Fork of Tombigbee River.	Highway bridge near Tremont, Miss.		57.6
July 17	do	do	Highway bridge on Route 25, 1½ miles northwest of Smithville, Miss.		64.2
Oct. 2	Upper Little Creek.	Pearl River	Highway bridge on Route 13, half a mile south of Lampton, Miss.		51.2
July 25	do	do	do		63.8
Oct. 2	Lower Little Creek.	do	Highway bridge on Route 13 at Hub, Miss.		57.3
July 25	do	do	do		73.6

INDEX

A

Page

Aberdeen, Miss., Tombigbee River at 153
Accuracy of data and computed results 4-5
Acre-foot, definition of 2
Alabama River at Selma, Ala 137
near Coy, Ala 138
near Montgomery, Ala 136
Alapaha River at Mayday, Ga 111
Altavista, Va., Otter River near 47
Altha, Fla., Chipola River near 128
Apalachicola River near River Junction, Fla. 122
Apalachicola River Basin, Ga.-Fla., gaging-station records in 118-128
Appomattox River at Farmville, Va 34
at Mattoax, Va 35
near Petersburg, Va 36
Appropriations, record of 1
Arvonia, Va., Slate River near 31
Augusta, Ga., Savannah River at 101

B

Bahama, N. C., Dial Creek at 63
Flat River at 61
Flat River near 62
Rocky Creek near 64
Bailey Creek, Va., discharge measurement of 172
Bainbridge, Ga., Flint River at 127
Banister River at Halifax, Va 54
Barber, Va., Jackson River at 12
Battle Grounds, N. C., Horsepen Creek at 72
Bell, Ga., Broad River at 102
Benaja, N. C., Haw River near 66
Bent Creek, Va., James River at 16
Bessemer, Ala., Black Warrior River near 163
Black River at Kingstree, S. C 87
Black Warrior River at Lock 17, near Bessemer, Ala 163
at Tuscaloosa, Ala 164
Locust Fork of, near Warrior, Ala 166
Mulberry Fork of, near Garden City, Ala 162
Blackwater River near Union Hall, Va 46
Bloxham, Fla., Ochlockonee River near 117
Blue Spring, Fla., discharge measurements of 173
Blue Springs, Ga., Withlacoochee River at 112
Blue Springs Run, Fla., discharge measurement of 172
Bogue Chitto at Franklinton, La 171
Boiling Springs, N. C., Broad River near 94
Branch, N. C., Linnville River at 89
Broad River at Bell, Ga 102
at Richtex, S. C 95
near Boiling Springs, N. C 94
near Chimney Rock, N. C 93
Brookneal, Va., Roanoke River at 43
Buchanan, Va., James River at 14
Buffalo Creek near Greensboro, N. C 73
Bull Mountain Creek, Miss., discharge measurements of 173
Buttahatchie River near Caledonia, Miss. 157

C

Page

Cahaba River at Centerville, Ala 146-151
Caledonia, Miss., Buttahatchie River near 157
Cape Fear River at Fayetteville, N. C 70
at Lillington, N. C 69
Cape Fear River Basin, N. C., gaging-station records in 66-81
Carters, Ga., Coosawattee River near 130
Cartersville, Va., James River at 18
Caryville, Fla., Choctawhatchee River at 129
Catawba Creek (Santee River Basin) at Gastonia, N. C 91
Catawba Creek (James River Basin) near Fincastle, Va 24
Centerville, Ala., Cahaba River at 146-151
Chapel Hill, N. C., Morgan Creek near 75
Chapin, S. C., Saluda River near 99
Chappells, S. C., Saluda River at 97
Charlotte, N. C., Little Sugar Creek near 92
Charlottesville, Va., Rivanna River near 32
Chattahoochee River at Columbia, Ala 121
at Columbus, Ga 120
at West Point, Ga 119-120
near Vinings, Ga 118
Chestatee River near Dahlonega, Ga 124
Childersburg, Ala., Coosa River at 134
Chipola River near Altha, Fla 128
Chimney Rock, N. C., Broad River near 93
Choccolocco Creek near Jenifer, Ala 142
Choctawhatchee River at Caryville, Fla 129
Chowan River Basin, Va., gaging-station record in 38
Clayton, N. C., Neuse River near 60
Cliffside, N. C., Second Broad River at 96
Clifton Forge, Va., Cowpasture River near 21
Coatopa, Ala., Tombigbee River near 155
Columbia, Ala., Chattahoochee River at 121
Columbia, Miss., Pearl River near 169
Columbia, S. C., Saluda River near 100
Columbus, Ga., Chattahoochee River at 120
Columbus, Miss., Luxapalila Creek near 159
Tombigbee River at 154
Computations, results of, accuracy of 4-5
Conasauga River near Tennga, Ga 139
Contentnea Creek at Hookerton, N. C 65
Control, definition of 2
Cooleemee, N. C., South Yadkin River at 86
Cooperation, record of 10
Coosa River at Childersburg, Ala 134
at Gadsden, Ala 133
at Lock 18, near Wetumpka, Ala 135
near Rome, Ga 132
Coosawattee River near Carters, Ga 130
Covington, Va., Dunlap Creek near 19
Potts Creek near 20
Cowpasture River near Clifton Forge, Va 21
Coy, Ala., Alabama River near 138
Cragford, Ala., Tallapoosa River near 143
Craig Creek at Parr, Va 22
Culloden, Ga., Flint River near 125

D

Page

Dahlonega, Ga., Chestatee River near 124
Dan River at Leaksville, N. C 50
at South Boston, Va 51
near Francisco, N. C 49
Data, accuracy of 4–5
explanation of 2–4
Deep River at Ramseur, N. C 78
East Fork of, near High Point, N. C 79
near Randleman, N. C 77
West Fork of, near High Point, N. C 76
Demorest, Ga., Soque River near 123
Denniston, Va., Hyco River at 55
Dial Creek at Bahama, N. C 63
Dismal Swamp, Va., Lake Drummond in 37
Dlo, Miss., Strong River at 170
Dobson, N. C., Fisher River near 85
Dunlap Creek near Covington, Va 19

E

Edinburg, Miss., Pearl River at 167
Effingham, S. C., Lynches River at 87
Ellaville, Fla., Suwannee River at 109
Elrod, Ala., Sipsey River near 160
Enfield, N. C., Fishing Creek near 57
Eno River at Hillsboro, N. C 58
Etowah River near Kingston, Ga 140

F

Falling River near Naruna, Va 47
Fargo, Ga., Suwannee River at 107
Farmville, Va., Appomattox River at 34
Fayetteville, N. C., Cape Fear River at 70
Rockfish Creek near 81
Ferguson, S. C., Santee River at 88
Fincastle, Va., Catawba Creek near 24
Fisher River near Dobson, N. C 85
Fishing Creek near Enfield, N. C 57
Flanagan Mills, Va., Willis River at 33
Flat River at Bahama, N. C 61
at dam near Bahama, N. C 62
Flint River at Bainbridge, Ga 127
near Culloden, Ga 125
near Vienna, Ga 126
Fort White, Fla., Santa Fe River near 113
Francisco, N. C., Dan River near 49
Franklinton, La., Bogue Chitto at 171
Fulton, Miss., East Fork of Tombigbee River near 152

G

Gadsden, Ala., Coosa River at 133
Garden City, Ala., Mulberry Fork of Black Warrior River near 162
Gastonia, N. C., Catawba Creek at 91
Gibsonville, N. C., Reedy Fork near 71
Goshen, Va., North River at 25
Green Cove Spring, Fla., discharge measurements of 172
Greensboro, N. C., Buffalo Creek near 73
North Buffalo Creek near 74
Gretna, Va., Roanoke River near 42

H

Halifax, Va., Banister River at 54
Hampton Spring, Fla., discharge measurement of 172
Hardware River near Scottsville, Va 30
Hat Creek, Va., Little Falling River at 48
Havana, Fla., Ochlockonee River near 114
Haw River at Haw River, N. C 67
near Benaja, N. C 66
near Pittsboro, N. C 68
Henry Fork near Henry River, N. C 90
Henry River, N. C., Henry Fork near 90
High Point, N. C., East Fork of Deep River near 79
West Fork of Deep River near 76
Hillsboro, N. C., Eno River at 58
Holder, Fla., Withlacoochee River near 106
Hookerton, N. C., Contentnea Creek at 65
Horsepen Creek at Battle Grounds, N. C 72
Hyco River at Denniston, Va 55

I

Ichatucknee River, Fla., discharge measurement of 172

J

Jackson, Miss., Pearl River at 168
Jackson River at Barber, Va 12
James River at Bent Creek, Va 16
at Buchanan, Va 14
at Cartersville, Va 18
at Lick Run, Va 13
at Salt Creek, Va 15
at Scottsville, Va 17
James River Basin, Va., gaging-station records in 12–36
Jamestown, Ala., Little River near 141
Jenifer, Ala., Choccolocco Creek near 142
Johns Creek at Newcastle, Va 23
Juniper Springs Creek, Fla., discharge measurement of 172

K

Kerrs Creek near Lexington, Va 28
Kingston, Ga., Etowah River near 140
Kingstree, S. C., Black River at 87
Kissenger Spring, Fla., discharge measurement of 172

L

Lake Drummond in Dismal Swamp, Va 37
Laurel Creek, Va., discharge measurement of 172
Lawrenceville, Va., Meherrin River near 38
Leaksville, N. C., Dan River at 50
Leatherwood Creek near Old Liberty, Va 53
Leroy, Ala., Tombigbee River near 156
Lexington, Va., Kerrs Creek near 28
North River near 27
Lick Run, Va., James River at 13
Lillington, N. C., Cape Fear River at 69
Linden, N. C., Lower Little River at 80
Linnville River at Branch, N. C 89
Little Back Creek, Va., discharge measurement of 172
Little Falling River at Hat Creek, Va 48
Little Pee Dee River, S. C., discharge measurement of 172
Little River near Jamestown, Ala 141
Little Sugar Creek near Charlotte, N. C 92
Lost Creek, Fla., discharge measurement of 172

Page

Lower Little Creek, Miss., discharge measurements of 173
Lower Little River at Linden, N. C 80
Lower Spring, Va., discharge measurement of 172
Lukens Spring (Watts Spring), Va., discharge measurement of 172
Luraville, Fla., Suwannee River at 110
Luxapalila Creek near Columbus, Miss 159
Lynches River at Effingham, S. C 87

M

Macclenny, Fla., St. Marys River near 104
Macon, Miss., Noxubee River at 161
Martinsville, Va., Smith River at 52
Mattoax, Va., Appomattox River at 35
Mayday, Ga., Alapaha River at 111
Mayo River near Price, N. C 52
Meadow Creek, Va., discharge measurement of 172
Meherrin River near Lawrenceville, Va 38
Miller Run, Va., discharge measurement of 172
Mobile River Basin, Ga.-Ala.-Miss., gaging-station records in 130–166
Moniac, Ga., North Prong of St. Marys River at 103
Montgomery, Ala., Alabama River near 136
Moorman Spring, Va., discharge measurement of 172
Morgan Creek near Chapel Hill, N. C 75
Mulberry Fork, Sipsey Fork of, near Sipsey, Ala 165
Murray Run, Va., discharge measurement of 172

N

Naruna, Va., Falling River near 47
Nashville, N. C., Tar River near 56
Neuse River near Clayton, N. C 60
near Northside, N. C 59
Neuse River Basin, N. C., gaging-station records in 58–65
Newcastle, Va., Johns Creek at 23
Niagara, Va., Roanoke River at 40
North Buffalo Creek near Greensboro, N. C 74
North River at Goshen, Va 25
at Rockbridge Baths, Va 26
near Lexington, Va 27
Northside, N. C., Neuse River near 59
Noxubee River at Macon, Miss 161

O

Ochlockonee River at Ochlockonee, Fla 115–116
near Bloxham, Fla 117
near Havana, Fla 114
Old Gaston, N. C., Roanoke River at 45
Old Liberty, Va., Leatherwood Creek near 53
Oostanaula River at Resaca, Ga 131
Otter River near Altavista, Va 47

P

Parr, Va., Craig Creek at 22
Pearl River at Edinburg, Miss 167
at Jackson, Miss 168
near Columbia, Miss 169

Page

Pearl River Basin, Miss.-La., gaging-station records in 167–171
Pee Dee River near Rockingham, N. C 84
Pee Dee River Basin, N. C.-S. C., gaging-station records in 82–87
Petersburg, Va., Appomattox River near 36
Pittsboro, N. C., Haw River near 68
Poe Spring, Fla., discharge measurement of 172
Ponce de Leon Spring, Fla., discharge measurement of 172
Posey Creek, Fla., discharge measurement of 172
Potts Creek near Covington, Va 20
Price, N. C., Mayo River near 52
Publications, information concerning 5–9
obtaining or consulting 6–7
on stream flow, lists of 7, 9

R

Ramseur, N. C., Deep River at 78
Randleman, N. C., Deep River near 77
Randolph, Va., Roanoke River at 44
Reedy Fork near Gibsonville, N. C 71
Resaca, Ga., Oostanaula River at 131
Richtex, S. C., Broad River at 95
Rivanna River below Moores Creek, near Charlottesville, Va 32
River Junction, Fla., Apalachicola River near 122
Roanoke River at Brookneal, Va 43
at Niagara, Va 40
at Old Gaston, N. C 45
at Randolph, Va 44
at Roanoke, Va 39
discharge measurement of 172
near Gretna, Va 42
near Toshes, Va 41
Roanoke River Basin, Va.-N. C., gaging-station records in 39–55
Rockbridge Baths, Va., North River at 26
Rockfish Creek near Fayetteville, N. C 81
Rockingham, N. C., Pee Dee River near 84
Rocky Creek near Bahama, N. C 64
Rome, Ga., Coosa River near 132
Roseland, Va., Tye River at 29
Run-off in inches, definition of 2

S

St. Marys River near Macclenny, Fla 104
North Prong of, at Moniac, Ga 103
Salt Creek, Va., James River at 15
Salt Springs Run, Fla., discharge measurement of 172
Saluda River at Chappells, S. C 97
discharge measurement of 172
near Chapin, S. C 99
near Columbia, S. C 100
near Silverstreet, S. C 98
Santa Fe River, Fla., discharge measurement of 172
near Fort White, Fla 113
Santee River at Ferguson, S. C 88
Santee River Basin, S. C.-N. C., gaging-station records in 88–100
Savannah River at Augusta, Ga 101
Savannah River Basin, Ga., gaging-station records in 101–102